UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

EARTHQUAKE DATA REPORT

NOVEMBER 1993

by

U.S. Geological Survey

NATIONAL EARTHQUAKE INFORMATION CENTER[1]

Open-File Report 93-611

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U. S. DEPARTMENT OF THE INTERIOR

Geological Survey

EARTHQUAKE DATA REPORT

The Earthquake Data Report (EDR) is a bulletin of all seismic phase and amplitude data which were associated with events published in the Preliminary Determination of Epicenters (PDE) Monthly Listing. It also contains information about the hypocentral computations (such as standard errors) that are not included in the PDE Monthly Listing. A machine-readable version of this EDR is available from the Books and Open-File Reports Section of the U.S. Geological Survey.

All data in the EDR are grouped by event, with events listed by origin time in date/time order through the month. All times are in Coordinated Universal Time (UTC). Locations are in decimal degrees of geographic latitude and longitude. Depths are in kilometers below the free surface. Hypocentral coordinates are determined by a modified Geiger's method and may be constrained by reported first arriving P-waves, Pdiff, and the DF branch of PKP. Data are corrected for station elevation and for the ellipticity of the Earth. Outliers may be truncated (ie., removed from the calculation) either automatically or manually. The solution is allowed to converge between rounds of automatic truncation to insure a unique result. Convergence is aided by step length damping.

The error bars of the computed hypocentral coordinates are 90% marginal confidence intervals incorporating Baysian information to stabilize estimates derived from small samples (Jordan and Sverdrup, 1981). It is assumed that the travel-time errors *of the data used* are independent, unbiased, and have an expected standard deviation of 1 s. Monte Carlo experiments suggest that the error bars are accurate for events constrained by more than about 30 data. However, care should be exercised in interpreting these numbers in terms of absolute location accuracy because of unmodeled biases. Analysis of events with independently known coordinates indicates that most PDE determinations are accurate to a few tenths of a degree in epicentral position and 25 km in depth. For special studies, we urge that inquiry be made to this office for possible recomputation of hypocenters of interest, using more complete instrumental data.

Restricted focal depths occur in four instances. If at any point in the computation the depth becomes negative, the solution is automatically restricted at 33 km and indicated by "NORMAL DEPTH." If the unrestricted depth computation is unsatisfactory, and in the judgment of the reviewing geophysicist the earthquake probably has a shallow focus, a solution may be held at 33 km. These are also indicated by "NORMAL DEPTH." The geophysicist may restrain the depth at any value indicated by evidence from available seismograms. These are indicated by, for example, "DEPTH = 100 KM (GEOPHYSICIST)." If two or more pP phases are identified, and in general, yield depths within 10 km of the mean, then the depth is automatically restricted to this value and denoted by, for example, "DEPTH = 51 KM (5 DEPTH PHASES)." pP phases may also appear as unidentified second arrivals with associated travel-time residuals. Hypocentral coordinates derived from other sources, such as the California Institute of Technology, the University of California at Berkeley, and the U. S. Department of Energy are noted on the EDR.

Two types of magnitude are computed: body-wave magnitude (m_b) and surface-wave magnitude (M_{SZ}). Each is a 25% trimmed mean of individual station values. Station magnitudes not used in the trimmed mean are marked with an X. This includes station magnitudes of either type which deviate significantly from the mean and surface-wave magnitudes determined from horizontal amplitudes. Body-wave magnitudes are computed according to the formula $\log(A/T)+Q$, derived by Gutenberg and Richter (1956), where A is the P-wave amplitude in micrometers, T is the period in seconds, and Q is the depth-distance factor. Surface-wave magnitudes are computed from the formula $\log(A/T) + 1.66\log(\Delta) + 3.3$, where A is the maximum vertical surface-wave amplitude in micrometers, T is the period in seconds, and Δ is the epicentral distance in degrees. Surface-wave magnitudes are determined only for earthquakes whose focal depths (taking into account the computed standard deviations) are potentially less than 50 km, for stations having $20° \leq \Delta \leq 160°$, and for reported periods of $18 \leq T \leq 22$ s. No correction for focal depth is used in the M_S calculation. Body-wave magnitudes are not determined from PKP arrivals or for stations having $\Delta \leq 5°$. Amplitude values stated in this report are in nanometers (nm) for body-waves and micrometers (μm) for surface-waves.

The travel-time residual (observed – computed) is based on the 1940 Jeffreys-Bullen P and 1968 Bolt PKP travel-time tables. Phases not used in the computation are marked by an X. The azimuth from the epicenter to the station is measured clockwise from north. The epicentral distance is the central angle in degrees.

The pulse distortion of seismic phases that have ray paths that touch a single internal caustic (*e.g.*, PP, pPP, SS and PKPab) can be corrected using the method of Hilbert transformation described by Choy and Richards (1975). Arrival times that are read from the phases that are corrected for pulse distortion are identified by the symbol H preceding the phase identifier (*e.g.*, HPP, HpPP, HSS and HP′ab).

Hypocenter Symbols

& Indicates that parameters of the hypocenter were supplied or determined by a computational procedure not normally used by the National Earthquake Information Service (NEIS). The source or nature of the determination is indicated by a 2 to 5 letter code enclosed by angle brackets and appearing in the first line of comments. A "-P" appended to the code indicates that the computation is preliminary. These codes are included with the list of abbreviations in the PDE Monthly Listing.

% Indicates a single network solution. A non-furnished hypocenter has been computed using data reported by a single network of stations for which the date and/or origin time cannot be confirmed from seismograms available to a NEIS analyst. Also, if we define η to be the geometric mean of the semi-major and semi-minor axes of the horizontal 90% confidence ellipse, then $\eta \leq 16.0$ km.

* Indicates a less reliable solution. In general, $8.5 < \eta \leq 16.0$ km.

? Indicates a poor solution, published for completeness of the catalog. In general, $\eta > 16.0$ km. This includes poor solutions computed using data reported by a single network.

The lack of any symbol indicates that $\eta \leq 8.5$ km.

Note: On printers available to the NEIS for this publication, the symbol for degrees (°) appears as "`". Also note that certain phase codes are abbreviated because the data base and file format limit the length of the codes to five characters. Thus, PKP is occasionally abbreviated to P′ and the numbers 2 and 3 are sometimes used to represent the AB (AC for SKKS) and BC branches of core phases, respectively. In some codes, R is used to represent repetition; for example, pRPKP represents the phase pPKPPKP and RRPG represents PgPgPg.

References

Bolt, Bruce A. (1968), Estimation of PKP Travel Times, *Bull. Seis. Soc. Am.*, **58**, pp. 1305–1324.

Choy, George L. and P. G. Richards (1975), Pulse Distortion and Hilbert Transformation in Multiply Reflected and Refracted Body Waves, *Bull. Seis. Soc. Am.*, **65**, pp. 55–70.

Gutenberg, B. and C. F. Richter (1956), Magnitude and Energy of Earthquakes, *Ann. di Geofisica*, **9**, no. 1, pp. 1–15.

Jeffreys, Harold and K. E. Bullen (1940), *Seismological Tables*, British Assoc. for the Advancement of Science, Gray Milne Trust.

Jordan, Thomas H. and Keith A. Sverdrup (1981), Teleseismic Location Techniques and their Application to Earthquake Clusters in the South-Central Pacific, *Bull. Seis. Soc. Am.*, **71**, pp. 1105–1130.

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   NOV  01, 1993  00h 01m 19.65± 0.96s
    2.042 N ± 4.7km   98.121 E ± 5.4km
   DEPTH =  83.7 ±  8.3 km
   5.2mb ( 47 obs.)
 NORTHERN SUMATERA, INDONESIA     (706)
      Mw 5.3 (HRV).
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 28S, 37C
      Centroid Location:
      Origin Time        00:01:22.3 0.5
      Lat  1.73N 0.04 Lon  98.00E 0.05
      Dep  40.7 3.3 Half-duration  1.3
      Moment Tensor;   Scale 10**16 Nm
        Mrr= 6.70 0.49  Mtt=-6.72 0.41
        Mff= 0.03 0.60  Mrt= 5.13 1.05
        Mrf=-6.26 0.93  Mtf= 4.16 0.60
       Principal Axes:
        T  Val= 10.80  Plg=61  Azm= 72
        N        0.95      17      308
        P      -11.75      23      211
      Best Double Couple:Mo=1.1*10**17
       NP1:Strike=272 Dip=27 Slip=  51
       NP2:       135     69      108

IPM     3.84  49 ePd   02 18.80   1.2
                e     03 04.00
                eS    03 34.60
KGM     5.20  90 iPd   02 37.20   0.7
      0.7s   155.30nm          5.4mb
                i     03 13.00
                i     04 13.00
SNG     5.67  26 ePn   02 44.50   1.3
                eSg   03 37.50
KLI     9.61 136 eP    03 36.00  -1.2
                e     04 10.00
NST    13.69   8 eP    04 31.50   0.0
CHTO   16.69   3 iPc   05 09.10  -0.7
      0.9s    43.69nm          4.7mb
                eS    08 17.80
QIZ    20.42  33 P     05 53.00   0.6
KOD    22.07 292 eP    06 10.00   0.6
KMI    23.38  11 Pc    06 22.50   0.6
      1.0s   140.00nm          5.3mb
                pP    06 35.00  51kmX
GBA    23.46 300 P     06 24.00   1.5
SHL    24.15 346 iP    06 28.20  -1.2
      1.0s    92.50nm          5.2mb
                eS    10 46.00
HYB    24.56 310 iPc   06 33.50   0.3
      1.0s   320.00nm          5.7mb
                eS    10 48.00
GYA    25.63  18 Pd    06 43.00  -0.2
    Z  18s     3.00um          4.9Msz
PKI    28.15 336 P     07 05.80  -0.7
GUN    28.26 337 P     07 07.20  -0.3
LSA    28.29 347 iPc   07 07.60  -0.3
      1.2s    80.00nm          5.2mb
    Z  32s     3.12um          4.7MszX
DMN    28.31 335 P     07 06.40  -1.4
KKN    28.40 336 P     07 08.00  -0.5
GKN    28.85 335 P     07 12.20  -0.4
CD2    29.20  10 P     07 14.10  -1.5
    Z  18s     4.12um          5.1Msz
NDI    33.16 325 iPc   07 43.50  -6.7X
                eS    13 05.00
XAN    33.40  16 P     07 50.50  -1.8
      1.0s    37.00nm          5.2mb
    Z  20s     1.51um          4.7Msz
                pP    08 00.00  33kmX
                sP    08 03.50
LZH    34.29   8 eP    07 59.20  -0.9
      1.8s    71.00nm          5.3mb
    Z  20s     1.10um          4.6Msz
                pP    08 10.00  39kmX
                sP    08 13.50
GTA    37.22   2 eP    08 24.50  -0.3
      1.5s    80.00nm          5.4mb
                pP    08 36.00  41kmX
                sP    08 40.00
                PcP   10 44.00
                ScP   14 26.50
                PcS   14 30.00
                ScS   18 30.50
TIA    38.28  25 eP    08 32.70  -0.9
WARB   39.33 137 eP    08 42.00  -0.5
BTO    39.86  14 eP    08 47.00   0.2
HHC    40.50  16 Pc    08 53.00   1.0
      1.2s    24.00nm          4.9mb
QUE    40.70 317 eP    08 54.50   0.6
BJI    41.22  21 eP    08 59.00   1.2
      1.0s    11.00nm          4.6mb
WRA    41.71 123 P     09 01.50  -0.6
      0.8s    10.60nm          4.7mb
WR2    41.73 123 iPc   09 01.40  -0.9
      0.3s    48.70nm          5.8mb
                e     11 01.40
                eS    15 09.60
KSH    42.35 334 P     09 07.00  -0.2
      1.0s   140.00nm          5.7mb
    Z  24s     1.36um          4.8MszX
                pP    09 17.00  34kmX
                sP    09 24.00
WMQ    42.62 349 iPc   09 10.00   0.7
      1.0s   130.00nm          5.7mb
    Z  13s     0.58um          4.7MszX
                S     15 30.00
ASPA   43.18 128 iPd   09 13.30  -0.8
      1.0s    10.50nm          4.6mb
                e     09 24.50
                eS    15 29.70
FORT   43.34 141 iPc   09 11.20  -4.0X
      0.8s    58.00nm          5.5mb
FRU    45.72 336 iPc   09 34.80   0.6
      3.0s   670.00nm          6.0mb
    Z  24s     1.00um          4.7MszX
    N  24s     1.00um
    E  24s     1.00um
                e     09 57.20
                e     11 10.00
SNY    45.74  27 eP    09 34.20   0.0
    Z  16s     1.29um          5.0MszX
QIS    46.43 121 eP    09 39.50  -0.6
CN2    48.14  27 eP    09 51.60  -1.5
      1.2s    10.00nm          4.6mb
ZAK    48.36   4 iPc   09 55.00   0.3
      1.8s    71.00nm          5.3mb
IRK    50.32   5 ePc   10 09.30  -0.4
      1.3s    58.00nm          5.4mb
                e     10 25.00
ASH    51.03 319 P     10 15.00  -0.3
STK    53.24 133 iPd   10 31.30  -0.6
      0.6s     3.60nm          4.6mb
TOO    58.91 137 eP    11 24.50  12.0X
YSS    59.15  34 iPd   11 14.80   0.9
      1.1s   110.00nm          5.9mb
                e     11 30.20
ARMA   60.29 127 eP    11 23.20   1.0
      0.8s    14.00nm          5.1mb
CAN    60.31 133 e(P)  11 22.30   0.2
                i     11 40.00
GRO    62.05 319 iPc   11 33.00  -0.7
      1.0s   110.00nm          5.9mb
SVE    62.24 338 iPc   11 34.00  -0.7
      1.8s   140.00nm          5.7mb
    Z  22s     0.70um          4.8Msz
    N  22s     0.50um
    E  22s     0.70um
                i     11 49.70
ARU    62.74 337 iPc   11 37.00  -1.0
      1.4s   100.00nm          5.6mb
PYA    64.07 319 iPc   11 45.30  -1.7
      0.9s   100.00nm          5.7mb
                e     12 17.00
CSY    68.76 175 eP    12 28.20  12.0X
      0.7s     3.50nm
KAS    69.58 314 eP    12 20.50  -1.4
BUL    71.54 248 iPd   12 34.60   0.4
      1.0s    10.00nm          4.7mb
                i     12 48.00
                i     13 05.80
TIK    72.19  10 iPc   12 36.00  -1.0
      1.8s   115.00nm          5.5mb
    Z  18s     1.00um          5.1Msz
                i     12 51.00
                i     13 00.00
OBN    72.37 328 iPd   12 37.20  -1.1
      1.1s    70.00nm          5.5mb
                e     12 55.00
                e     15 15.00
VAY    77.81 312 eP    13 10.00   0.4
OHR    79.11 311 eP    13 13.50  -3.3X
UZH    79.11 319 eP    13 16.00  -0.5
                e     13 35.00
KAF    79.75 333 iP    13 19.70   0.0
      0.6s    15.20nm          5.1mb
NUR    80.13 331 iP    13 21.30  -0.4
      0.4s     5.30nm          4.8mb
SPC    80.54 319 eP    13 23.90  -0.5
OJC    80.96 320 eP    13 26.60   0.2
SRO    81.64 318 iP    13 30.20   0.3
ZST    82.49 318 iP    13 33.70  -0.6
PTJ    83.08 316 eP    13 37.50  -0.1
UPP    83.46 330 iP    13 39.10   0.1
LJU    84.08 316 eP    13 43.00   0.5
                e     13 54.50
                e(pP) 14 01.00  65kmX
PRU    84.31 320 iPc   13 43.90   0.3
                e     13 59.00
VOY    84.52 316 iPc   13 44.80  -0.1
                epP   14 00.70  56kmX
                eSP   14 10.20
BRG    84.74 321 iP    13 46.60   0.9
      1.6s    28.00nm          5.0mb
GEC2   84.79 319 P     13 46.30   0.2
      1.1s    13.30nm          4.8mb
                e     13 57.80
                e     14 01.80
                e     14 11.30
KHC    84.89 319 eP    13 46.50   0.0
      1.0s     5.70nm          4.5mb
                e     14 05.90
                e     17 15.50
BHG    85.29 318 iPd   13 48.60   0.0
WET    85.35 319 eP    13 49.00   0.2
      1.0s    16.00nm          5.0mb
CLL    85.36 321 eP    13 48.00  -0.8
ILT    85.55  22 eP    13 50.00   0.6
    Z  22s     0.40um          4.8Msz
    N  20s     0.40um
MOX    86.21 320 eP    13 53.40   0.4
SQTA   86.41 317 iPc   13 53.60  -0.6
      0.7s     6.50nm          4.8mb
                i     14 02.80
GRF    86.44 319 iPc   13 55.20   1.0
      1.3s    31.00nm          5.2mb
    Z  20s     0.10um          4.2Msz
                e     14 06.90
MOTA   86.48 317 iPc   13 53.70  -1.0
      0.9s    13.00nm          5.0mb
                i     14 05.20
OGA    86.53 317 eP    13 54.60  -0.4
NB2    86.72 331 P     13 55.50   0.1
      0.9s    19.80nm          5.2mb
NAO    86.90 331 P     13 47.52  -8.7X
MUD    87.73 326 ePd   14 00.00  -0.2
      1.0s    28.00nm          5.3mb
WTS    89.22 322 eP    14 08.00   0.6
      0.9s    10.40nm          5.0mb
                e     14 21.50
                e     14 25.50
WIT    89.27 323 eP    14 09.50   1.9
                e     14 22.00
WLF    89.74 320 iPc   14 10.73   0.9
      1.4s     7.80nm          4.7mb
ENN    89.83 321 eP    14 12.00   1.7
      0.9s     6.70nm          4.8mb
                e     14 29.00
DOU    90.72 320 Pc    14 15.70   1.3
SNF    90.89 320 Pc    14 15.80   0.7
DAG    94.00 348 iPc   14 28.80  -0.2
      0.8s     9.70nm          5.3mb
EKA    94.74 326 Pd    14 51.60  18.8X
      0.9s     6.80nm
IMA    95.45  23 eP    14 36.80   0.7
      0.8s     2.35nm          4.7mb
LRM   125.20  26 ePKP  20 12.90   0.3
DUG   129.34  31 ePKP  20 21.93   1.3
MSU   130.92  32 ePKP  20 24.88   1.1
PV09  132.47  29 ePKP  20 28.20   1.4
PV10  132.61  29 ePKP  20 28.31   1.3
PV08  132.64  29 ePKP  20 28.79   1.6
MIAR  141.98  16 ePKP  20 40.03  -4.1X
LTX   142.47  32 ePKP  20 44.45  -0.9
BAO   143.98 246 ePKP  20 46.90  -1.3
                e     20 58.00
PPD   144.25 234 ePKP  20 47.20  -1.2
RTCB  148.22 202 iPKPd 20 58.90   4.1X
RTLL  148.23 202 iPKPd 20 58.50   3.8X
SLA   152.45 214 ePKPd 21 09.50   8.1X
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01d 00h

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CNCB  159.94 222 ePKP  21 14.00   2.4X
LPB   160.22 222 ePKP  21 17.00   5.3X
LPAZ  160.41 223 PKP   21 13.70   1.5
     S.D. = 0.9  on  98 of 111 obs.
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&  NOV  01, 1993  00h 04m 45.00s
   37.630 N          118.847 W
   DEPTH =   4.5km
 CALIFORNIA-NEVADA BORDER REGION ( 40)
      <GM-P>. MD 2.9 (GM).

CLKR     0.04 155 P     04 46.40  -0.1
MEMM     0.08 296 P     04 47.13   0.3
HTCR     0.12 149 P     04 47.58  -0.1
MMPM     0.15 262 iPc   04 48.16   0.0
ORC      0.15  88 P     04 48.41   0.2
MRCM     0.27  81 eP    04 50.67   0.1
MTUM     0.36 141 eP    04 52.17   0.0
BHPR     0.44 139 P     04 53.75   0.0
CWCR     0.45 107 P     04 54.04   0.0
BONR     0.54  53 iPc   04 55.62  -0.2
CMB      1.28 289 eP    05 08.56  -0.8
                  eS    05 25.22
TNP      1.37  70 iPd   05 11.05   0.1
WLHM     1.54 164 P     05 13.42   0.0
PDRM     1.78 224 P     05 18.05   1.4
BMSM     1.83 239 P     05 19.30   1.8
WCHM     1.85 160 P     05 19.07   1.1
VPEM     1.87 153 P     05 20.13   2.0
RCWM     1.93 150 P     05 21.46   2.5
NMC      1.94 157 P     05 20.71   1.7
ISA      1.99 171 eP    05 21.32   1.6
                  eS    05 47.16
WORM     1.99 166 P     05 21.50   1.7
WOFM     2.09 177 P     05 23.43   2.1
EKH      2.09 243 P     05 23.44   2.2
LTR      2.10 250 P     05 22.70   1.4
HJSM     2.12 248 P     05 22.94   1.3
ARN      2.15 263 eP    05 22.27   0.1
WBSM     2.17 165 P     05 24.75   2.3
TPNV     2.18 107 eP    05 24.10   1.4
PHAM     2.18 215 eP    05 24.03   1.5
WJPM     2.23 172 P     05 25.98   2.6
JBZM     2.42 256 P     05 32.15   6.2
BCH      2.64 203 eP    05 29.87   0.8
ORV      2.83 314 eP    05 32.67   0.9
       33 obs. associated
-------------------------------------
   NOV  01, 1993  00h 27m 55.16± 0.86s
   13.863 N ± 6.7km   43.509 E ±12.2km
   DEPTH =  24.6 ±  8.0 km
   3.9mb (  1 obs.)
 WESTERN ARABIAN PENINSULA        (555)

MKL      2.16 189 eP    28 30.87   0.6
ARO      2.41 196 eP    28 33.41  -0.4
                  eS    29 09.24
ATA      2.41 187 eP    28 34.18   0.4
DAF      2.44 203 eP    28 33.74  -0.5
KSU      2.55 204 eP    28 35.14  -0.7
GBR      2.88 201 ePc   28 39.79  -0.7
KMSA     6.54   8 eP    29 30.67  -1.7
AAE      6.68 225 ePn   29 36.00   1.3
RYD     11.19  15 eP    30 38.50   1.8
                  eS    33 35.00
ZST     40.63 333 eP    35 34.80   0.1
GKN     40.70  63 P     35 36.00   0.2
KKN     41.22  64 P     35 39.60  -0.6
GUN     41.76  64 P     35 45.20   0.4
GEC2    42.65 331 P     35 51.20  -0.3
        0.7s     1.76nm         3.9mb
                  e     35 54.40
                  e     35 58.40
                  e     36 05.10
                  e     36 09.80
                  e     36 15.50
GRF     44.42 330 eP    36 01.00  -4.7X
     S.D. = 1.0  on  14 of  15 obs.
-------------------------------------
*  NOV  01, 1993  00h 28m 07.02± 0.86s
   5.809 S ± 7.3km  145.913 E ±12.8km
   DEPTH =  10.0km  (geophysicist)
   3.8mb (  2 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)

YYYY     0.43 173 iPd   28 15.90   0.0
MDG      0.57 347 ePc   28 18.60   0.0
LAT      1.38 128 eP    28 32.30   0.1
PMG      3.78 161 eP    28 51.00 -15.6X
WR2     17.99 218 iPc   32 19.50   0.5
        0.6s     4.00nm         3.7mb
ASPA    21.19 212 eP    32 54.50  -0.6
        1.3s     6.90nm         3.9mb
     S.D. = 0.6  on   5 of   6 obs.
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*  NOV  01, 1993  00h 33m 51.48± 0.57s
   17.884 S ±13.3km  173.077 W ±17.9km
   DEPTH =  33.0km  (normal)
   4.6mb (  3 obs.)
 TONGA ISLANDS                    (173)

BKM     17.79 268 iPc   38 14.80  16.5X
DZM     19.69 254 iPc   38 23.10   2.0
KUZ     21.23 206 eP    38 36.50  -0.3
PUZ     21.50 199 eP    38 38.80  -0.8
URZ     22.04 201 eP    38 44.10  -0.8
WLZ     22.25 204 eP    38 47.20   0.2
MOZ     23.11 205 eP    38 55.60   0.1
MNG     24.71 201 eP    39 11.90   0.9
LTZ     27.77 204 eP    39 43.10   3.8X
CNB     37.53 235 eP    41 04.30  -0.1
TOO     41.18 233 eP    41 35.10   0.4
STK     43.12 242 iPc   41 52.30   1.8
        2.2s     3.60nm         3.7mb
WR2     49.60 259 iPd   42 39.30  -2.6
        0.6s    13.70nm         5.2mb
WRA     49.62 259 P     42 39.80  -2.3
        0.7s     4.80nm         4.6mb
WARB    56.07 250 eP    43 27.50  -2.5
CSY     68.30 205 eP    45 01.50  10.4X
        1.0s     5.00nm
LEM     77.79 267 ePc   45 50.00   2.1
LRM     83.77  38 eP    46 16.40  -2.6
INK     90.59  14 eP    46 50.00  -1.2
WIT    145.14   0 ePKP  53 26.50  -0.5
WTS    145.96   0 ePKP  53 28.00  -0.4
        1.1s    31.00nm
OJC    146.13 345 ePKP  53 30.00   1.2
                  i     53 33.40
                  i     53 36.30
KSP    146.28 349 iPKP  53 29.00   0.0
CLL    146.30 353 ePKP  53 28.00  -1.0
        1.2s    79.00nm
                  i     53 55.90
BRG    146.61 352 iPKP  53 30.70   1.2
        1.3s    56.00nm
                  i     53 37.00
                  i     53 58.10
SPC    146.96 344 ePKP  53 33.30   2.9X
MOX    147.10 354 ePKP  53 31.70   1.4
        1.7s    33.00nm
ENN    147.18   1 ePKP  53 31.00   0.6
        1.0s    12.00nm
                  e     53 34.50
KAS    147.19 321 ePKP  53 35.50   4.6X
SNF    147.38   3 PKP   53 32.20   1.5
PRU    147.39 351 PKP   53 32.60   1.8
                  e     53 39.50
                  e     54 01.50
DOU    147.81   3 PKP   53 35.50   4.0X
GRF    148.08 355 ePKP  53 34.80   2.8X
WLF    148.29   1 PKP   53 37.00   4.8X
KHC    148.37 352 ePKP  53 33.00   0.5
        1.1s    16.50nm
                  i     53 37.00
                  e     54 04.50
                  e     54 28.50
ZST    148.64 347 ePKP  53 36.50   3.6X
SRO    148.73 345 ePKP  53 38.30   5.3X
OGA    150.90 354 iPKPc 53 43.80   7.2X
PTJ    151.07 347 ePKP  53 36.40  -0.3
LJU    151.22 349 ePKP  53 42.00   5.1X
                  epPKP 54 11.00
VOY    151.34 350 ePKP  53 41.00   3.8X
     S.D. = 1.5  on  28 of  41 obs.
-------------------------------------
&  NOV  01, 1993  00h 42m 30.00s
   59.092 N          154.118 W
   DEPTH = 121.2km
 SOUTHERN ALASKA                  (  2)
      <AEIC>.

MCNL     0.15 310 iP    42 46.11   0.8
                  eS    42 58.00
CDD      0.29 123 iP    42 46.35   0.5
                  eS    42 58.17
AUI      0.43  55 iP    42 47.01  -0.9
                  eS    42 59.89
AUW      0.43  50 iP    42 47.22  -0.7
                  eS    43 00.77
AUH      0.44  52 eP    42 47.29  -0.8
AGU      0.44  52 eP    42 47.31  -0.8
AUL      0.46  50 iP    42 47.31  -0.8
AUE      0.47  55 iP    42 47.47  -0.6
PDB      0.70 357 iP    42 48.68  -1.0
                  eS    43 02.98
OPT      0.72  39 iP    42 49.21  -0.8
                  eS    43 04.01
SYI      1.02 118 eP    42 51.45  -1.1
                  eS    43 07.48
INE      1.11  28 eP    42 52.77  -1.0
                  eS    43 10.15
ILIM     1.15  30 iP    42 53.01  -1.1
                  eS    43 11.41
XLV      1.28  73 eP    42 54.13  -1.3
                  eS    43 12.66
HOM      1.39  65 eP    42 56.13  -0.4
                  eS    43 15.23
RED      1.50  27 iP    42 56.66  -1.3
                  eS    43 17.34
RS2      1.54  26 iP    42 57.39  -1.2
                  eS    43 18.45
RSO      1.54  26 iP    42 57.40  -1.1
CNPM     1.54  72 iP    42 56.76  -1.6
                  eS    43 17.35
RDW      1.54  25 iP    42 57.39  -1.2
                  eS    43 19.33
REF      1.57  26 iP    42 57.67  -1.3
                  eS    43 18.85
NCT      1.59  22 iP    42 57.85  -1.2
                  eS    43 19.46
KDC      1.60 147 eP    42 58.04  -0.9
                  eS    43 18.40
DFR      1.67  25 iP    42 58.69  -1.3
                  eS    43 21.03
BRLK     1.78  66 eP    43 00.06  -1.3
                  eS    43 21.34
SVW      2.16 340 eP    43 04.72  -1.3
BKG      2.19  24 iP    43 05.05  -1.4
NKA      2.20  40 eP    43 07.55   1.1
CKL      2.29  22 eP    43 06.41  -1.4
CKT      2.32  24 eP    43 06.84  -1.3
SPU      2.34  25 iP    43 06.60  -1.7
BGL      2.34  21 iP    43 07.27  -1.2
CKN      2.35  24 eP    43 07.69  -0.8
CP2      2.37  22 eP    43 07.44  -1.5
CRP      2.39  23 eP    43 07.70  -1.5
SLKM     2.43  53 iP    43 07.75  -1.7
CGLM     2.46  24 eP    43 08.37  -1.6
NCG      2.52  22 iP    43 09.59  -1.1
SEW      2.58  65 eP    43 09.35  -2.1
MPA      2.78  58 eP    43 12.07  -2.0
SUA      2.91  34 eP    43 14.39  -1.6
PMS      3.14  45 P     43 16.70  -2.2
SKT      3.17  23 iP    43 17.54  -1.7
LTI      3.33  71 eP    43 20.51  -0.8
PWL      3.40  56 eP    43 19.54  -2.9
MTU      3.41  72 eP    43 20.38  -2.1
KNIM     3.47  66 eP    43 20.24  -3.0
KNK      3.66  48 eP    43 22.86  -3.0
                  eS    44 02.33
GHO      3.72  42 eP    43 23.58  -3.2
CFI      3.81  54 eP    43 25.71  -2.0
CUT      3.82  28 eP    43 25.54  -2.5
SML      3.95  44 eP    43 26.35  -3.5
TTA      3.96 347 eP    43 28.47  -1.5
HIN      4.07  68 eP    43 28.72  -2.7
FID      4.19  63 eP    43 29.37  -3.6
VZW      4.27  59 eP    43 31.54  -2.6
SCM      4.34  48 eP    43 32.50  -2.6
VLZ      4.40  59 eP    43 33.83  -2.0
SGAM     4.72  69 eP    43 37.40  -2.8
KTH      4.73  18 eP    43 38.29  -2.2
KLU      4.74  56 iP    43 37.37  -3.1
TRF      4.75  21 eP    43 38.53  -2.2
GLB      5.65  61 eP    43 49.98  -2.9
WRH      6.11  25 iP    43 55.04  -4.1
MLY      6.17  13 eP    43 56.63  -3.4
BALM     6.21  67 iP    43 57.90  -2.8
CCB      6.32  25 iP    43 57.80  -4.3
HDA      6.32  29 eP    43 57.93  -4.2
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MDM     6.50  23 eP    44 00.48  -4.1
FBA     6.54  24 P     44 01.50  -3.6
IL1     6.64  28 eP    44 02.05  -4.4
ILB     6.64  28 eP    44 02.04  -4.4
CTGM    6.68  68 eP    44 04.48  -2.6
GLM     6.71  25 eP    44 03.56  -3.8
IM3     6.92   1 eP    44 04.74  -5.5
BC3     7.18  51 eP    44 11.39  -2.4
PRP     7.58  28 eP    44 15.55  -3.8
BM3     9.38  23 eP    44 38.12  -5.3
        78 obs. associated
-------------------------------------
% NOV  01, 1993  01h 05m 39.75± 1.68s
   18.309 N ±11.1km  101.064 W ±15.1km
   DEPTH =  19.4 ±  8.6 km
 GUERRERO, MEXICO                ( 59)

MRX     1.39 355 iP    06 04.00  -0.1
                 iS    06 21.50
III     1.52  87 iP    06 05.75  -0.4
                 iS    06 24.00
CRX     1.71  50 eP    06 09.75   0.7
                 (S)   06 36.00
ACX     1.84 141 eP    06 10.75   0.1
                 iS    06 33.50
UNM     2.05  60 eP    06 13.50  -0.5
                 eS    06 39.00
PPM     2.43  72 iP    06 19.50  -0.1
IISM    3.56  78 (P)   06 35.50   0.3
     S.D. = 0.6  on   7 of   7 obs.
-------------------------------------
*  NOV  01, 1993  01h 13m 55.98± 0.92s
   38.357 N ± 8.4km   21.975 E ± 9.6km
   DEPTH =  10.0km  (geophysicist)
 GREECE                          (364)
      MD 3.1 (ATH).

VLS     1.11 261 ePb   14 15.00  -1.7
IGT     1.74 313 ePb   14 28.18   1.8
                 eSb   14 53.70
LIT     1.79  13 iPb   14 26.38  -0.7
                 eSb   14 50.50
VLI     1.81 155 ePn   14 28.30   0.9
KZN     1.95 355 ePn   14 33.00   3.4X
FNA     2.47 349 ePn   14 37.62   0.7
                 eSn   15 09.10
OUR     2.51  38 ePn   14 36.18  -1.3
GRG     2.62   7 ePn   14 39.49   0.5
SOH     2.68  23 ePn   14 39.62  -0.4
KNT     2.89  14 ePn   14 43.14   0.3
                 iSn   15 17.18
     S.D. = 1.3  on   9 of  10 obs.
-------------------------------------
   NOV  01, 1993  02h 08m 31.44± 0.71s
    5.952 S ± 7.2km  145.913 E ±11.2km
   DEPTH =  19.5 ±  7.2 km
   3.8mb (  1 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)
      ML 4.2 (PMG).

YYYY    0.29 169 iPc   08 38.30   0.2
                 eS    08 43.30
MDG     0.71 349 iPd   08 44.50  -0.5
LAT     1.29 123 eP    08 54.70   0.3
MNDI    2.25 265 eP    09 14.00   5.5X
PMG     3.65 160 eP    09 28.00  -0.1
JAY     6.22 303 ePc   10 05.30   0.8
                 eS    11 09.00
WR2    17.88 218 eP    12 40.20  -0.6
        0.4s     3.30nm          3.8mb
GUN    66.94 304 P     19 25.20  -0.4
PKI    67.21 303 P     19 28.60   1.3
KKN    67.39 303 P     19 27.60  -0.7
DMN    67.48 303 P     19 28.60  -0.3
KIC   150.82 272 PKP   28 25.00   5.6X
TIC   151.10 273 PKP   28 25.60   5.8X
LIC   151.10 272 PKP   28 25.60   5.8X
        0.7s    10.00nm
LKO   151.54 279 PKP   28 26.20   5.7X
        0.7s     9.50nm
     S.D. = 0.8  on  10 of  15 obs.
-------------------------------------
&  NOV  01, 1993  02h 43m 04.15s
   61.338 N          150.215 W
   DEPTH =  38.0km
 SOUTHERN ALASKA                 (  2)
      <AEIC>. ML 2.6 (AEIC).

SUA     0.28 297 iPd   43 12.33   0.1
                 eS    43 19.24
PMS     0.33 106 P     43 12.50  -0.2
                 S     43 19.70
PWA     0.35  27 P     43 12.50  -0.4
                 S     43 19.60
GHO     0.76  54 iPc   43 17.60  -0.9
                 eS    43 29.06
NKA     0.78 220 eP    43 19.39   0.7
SLKM    0.83 180 eP    43 18.17  -1.4
                 eS    43 31.00
KNK     0.85  84 ePc   43 18.87  -0.9
CGLM    0.86 269 ePc   43 19.27  -0.8
SKT     0.90 316 iPc   43 19.70  -0.8
                 eS    43 32.61
SPU     0.90 261 iPc   43 19.41  -1.1
                 eS    43 32.00
NCG     0.94 275 iPc   43 20.36  -0.7
CRP     0.94 266 iPc   43 19.94  -1.2
MPA     0.95 154 iPc   43 20.11  -1.0
                 eS    43 33.17
CKN     0.96 264 iPc   43 20.62  -0.7
CKT     0.97 263 iPc   43 20.60  -1.0
                 eS    43 34.04
CP2     0.98 267 iPc   43 20.82  -1.0
SML     1.02  62 iPc   43 21.08  -1.1
BKG     1.03 256 iPc   43 21.24  -1.1
                 eS    43 35.47
PWL     1.03 117 ePc   43 21.33  -1.0
CKL     1.04 263 iPc   43 21.43  -1.1
BGL     1.05 267 iPc   43 21.79  -0.9
CUT     1.07 359 eP    43 22.18  -0.7
CFI     1.19  96 ePc   43 23.68  -0.9
SEW     1.29 163 eP    43 25.38  -0.6
DFR     1.42 239 iPc   43 26.74  -1.2
                 eS    43 45.64
SCM     1.47  69 eP    43 27.50  -1.1
REF     1.48 236 iPc   43 27.81  -1.1
                 eS    43 46.71
RS2     1.52 236 ePc   43 28.35  -1.1
RDW     1.53 237 ePc   43 28.47  -1.1
NCT     1.54 241 ePc   43 28.52  -1.1
RED     1.55 235 eP    43 28.63  -1.2
HUR     1.67   9 P     43 32.20   0.8
LTI     1.74 137 eP    43 30.23  -2.3
VZW     1.79  97 eP    43 31.61  -1.7
HOM     1.83 203 eP    43 32.26  -1.4
ILIM    1.85 228 eP    43 33.12  -0.9
CNPM    1.89 196 eP    43 32.90  -1.7
FID     1.91 106 eP    43 32.54  -2.4
HIN     2.05 116 eP    43 35.82  -1.1
KLU     2.07  84 ePc   43 35.32  -2.0
TOA     2.07  66 P     43 36.70  -0.6
TRF     2.12 359 eP    43 38.25   0.2
KTH     2.25 352 eP    43 39.82   0.0
OPT     2.25 223 eP    43 39.92   0.1
CVA     2.32 108 P     43 42.70   2.0
TZL     2.39  71 eP    43 40.89  -0.8
PDB     2.51 233 eP    43 42.19  -1.1
SDG     2.51  60 eP    43 44.12   0.7
SGAM    2.59 107 eP    43 41.73  -2.8
SVW     2.63 267 eP    43 42.89  -2.2
CDD     2.96 217 eP    43 49.67  -0.2
GLB     3.08  85 eP    43 48.90  -2.7
        52 obs. associated
-------------------------------------
*  NOV  01, 1993  03h 19m 56.81± 0.54s
   56.898 S ±21.1km  147.392 W ± 8.9km
   DEPTH =  10.0km  (geophysicist)
   4.6mb (  4 obs.)
 PACIFIC-ANTARCTIC RIDGE         (691)

SBA    26.10 200 eP    25 32.50   0.7
DRV    33.68 223 eP    26 40.00   0.7
                 S     32 00.00
CSY    44.10 215 eP    28 16.10  10.0X
        0.9s     4.30nm          4.3mb
CNB    46.91 269 eP    28 29.90   0.9
CAN    47.11 269 eP    28 35.60   5.0X
TOO    47.38 264 eP    28 39.00   6.3X
BWA    48.09 269 eP    28 37.70  -0.6
DZM    48.33 296 iPc   28 43.00   2.7
STK    53.75 266 iPd   29 20.90  -0.2
        0.9s     5.40nm          4.6mb
RTCB   58.18 100 iPc   29 54.20   1.1
RTLL   58.48 100 iPc   29 55.20   0.0
WR2    67.13 268 eP    30 50.80  -1.9
        0.7s     5.70nm          4.9mb
WRA    67.14 268 P     30 51.80  -1.0
        0.9s     3.60nm          4.6mb
MOCB   68.00  95 P     30 59.50   0.8
ARE    68.67  87 e(P)  31 12.00   9.3X
CNCB   70.31  91 P     31 16.10   3.0X
LPB    70.48  90 P     31 13.00  -0.9
                 LR    50 40.00
LPAZ   70.66  90 P     31 16.90   1.6
                 LR    50 48.00
CCH    70.86  93 eP    31 15.00  -1.1
PPD    75.06 107 eP    31 39.80  -0.5
BAO    82.09 106 eP    32 18.20  -0.7
                 e     32 20.90
                 i     32 26.30
PLP    97.96 278 ePc   33 47.00  12.9X
XAN   125.00 280 ePKP  39 01.60   3.4X
     Z  22s     1.25um          5.5Msz
LZH   129.29 278 ePKP  39 05.00  -1.5
     Z  25s     1.55um          5.6MszX
WMQ   143.53 273 PKP   39 37.00   4.5X
     Z  28s     0.99um          5.4MszX
KSH   146.92 257 PKP   39 41.00   2.6X
     Z  20s     1.23um          5.7Msz
                 SKS   46 46.00
EPRU  147.96 112 ePKP  39 45.50   5.5X
ECOG  149.04 114 ePKP  39 46.00   4.2X
PAB   150.36 110 ePKP  39 50.00   6.3X
                 ePP   44 02.00
GUD   151.27 109 ePKP  39 54.20   9.1X
GEC2  166.06 117 ePKP  40 04.20   2.4X
        1.4s     3.03nm
                 e     40 10.10
                 e     40 15.30
                 e     40 20.70
                 e     40 23.30
     S.D. = 1.3  on  17 of  31 obs.
-------------------------------------
   NOV  01, 1993  03h 35m 43.92± 0.54s
   44.275 N ± 6.2km    9.959 E ± 4.4km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                  (545)
      ML 3.1 (GEN), 2.6 (VIE).

PCP     1.05 285 P     36 03.95   0.2
                 S     36 17.91
FIN     1.26 268 P     36 07.03  -0.3
                 S     36 22.77
ROB     1.50 271 P     36 10.58  -0.4
                 S     36 28.70
IMI     1.54 257 P     36 11.09  -0.4
                 S     36 29.28
SAOF    1.76 261 Pn    36 14.95   0.3
                 Sg    36 36.21
ENR     1.83 269 P     36 15.62  -0.1
AUTN    1.84 262 Pn    36 16.31   0.2
PGF     1.86 202 Pn    36 16.68   0.4
STV     1.89 270 P     36 16.10  -0.6
                 S     36 38.26
AURF    1.94 259 Pn    36 16.98  -0.3
ORX     1.95 315 P     36 16.84  -0.7
TOUF    1.97 263 Pn    36 17.50  -0.4
BHB     2.01 287 P     36 18.73   0.5
MVIF    2.06 260 Pn    36 19.75   0.6
PZZ     2.06 277 P     36 18.64  -0.5
RSP     2.12 295 P     36 19.89   0.0
CALN    2.28 258 Pn    36 22.18  -0.1
LSD     2.32 302 P     36 23.31   0.3
RRL     2.36 287 P     36 24.34   0.8
OGA     2.70  16 iPc   36 37.20   8.9X
TRI     3.06  61 e(Pn) 36 32.30  -0.8
                 e(Sg) 37 10.00
WTTA    3.21  21 iPn   36 36.90   1.4
                 i     36 38.10
                 iSg   37 19.20
KBA     3.67  39 iPnd  36 43.20   1.1
                 i     37 26.50
                 iSg   37 34.30
GEC2    5.25  28 Pn    37 02.80  -1.6
                 Sn    38 00.90
     S.D. = 0.7  on  23 of  24 obs.
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&  NOV  01, 1993  04h 25m 42.25s
   59.888 N          147.965 W
   DEPTH =  14.9km
 GULF OF ALASKA                  ( 15)
      <AEIC>. ML 3.3 (AEIC), 3.5
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01d 04h

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      (PMR).
LTI     0.16  20 iPc    25 46.42  -0.1
KNIM    0.48  14 eP     25 51.03  -0.8
                 eS     25 58.28
SEW     0.78 287 iPc    25 56.07  -0.8
                 eS     26 07.11
HIN     0.89  54 iPc    25 57.96  -1.0
                 eS     26 11.14
MPA     0.92 311 eP     25 58.45  -0.9
MID     0.95 119 P      25 58.50  -1.3
PWL     0.99 349 iPd    25 59.24  -1.4
                 eS     26 12.78
FID     1.14  40 iPd    26 00.78  -2.3
                 eS     26 15.38
SLKM    1.29 300 eP     26 03.70  -1.9
CVA     1.29  58 eP     26 03.52  -2.0
                 eS     26 20.35
CFI     1.30   4 iPd    26 03.79  -2.0
                 eS     26 21.44
VZW     1.37  30 iPd    26 04.80  -2.0
                 eS     26 23.41
BRLK    1.48 266 eP     26 07.27  -1.1
                 eS     26 25.29
VLZ     1.49  32 iPd    26 06.74  -1.6
                 eS     26 26.13
SGAM    1.51  65 eP     26 07.29  -1.4
KNK     1.55 351 iPd    26 07.35  -2.0
PMS     1.57 331 P      26 07.90  -1.8
NNL     1.68 277 eP     26 10.45  -0.8
CNPM    1.70 259 eP     26 10.53  -0.9
RAGM    1.72  72 eP     26 09.44  -2.4
PMR     1.80 342 eP     26 10.57  -2.4
NKA     1.84 299 eP     26 14.72   1.2
HOM     1.88 265 eP     26 13.68  -0.3
KLU     1.90  31 iPd    26 12.70  -1.8
                 eS     26 37.26
HMT     1.91  75 eP     26 12.31  -2.2
SML     1.94 355 iPd    26 13.28  -1.7
GHO     1.95 346 eP     26 13.38  -1.8
SCM     1.98   9 eP     26 14.38  -1.2
PWA     2.00 333 P      26 14.10  -1.7
SUA     2.09 320 eP     26 15.23  -2.0
TOA     2.39  21 P      26 21.00  -0.5
SPU     2.40 304 eP     26 19.38  -2.3
BKG     2.44 301 eP     26 19.86  -2.3
REF     2.44 286 eP     26 20.24  -2.1
CGLM    2.45 307 eP     26 20.30  -2.1
DFR     2.46 289 eP     26 20.33  -2.1
RED     2.46 285 eP     26 20.22  -2.3
RS2     2.46 286 eP     26 20.80  -1.9
CKT     2.48 304 eP     26 20.71  -2.0
CKN     2.48 305 eP     26 21.23  -1.5
CRP     2.49 306 eP     26 21.38  -1.6
RDW     2.49 286 eP     26 21.57  -1.5
TZL     2.49  29 eP     26 22.07  -0.8
ILIM    2.52 277 eP     26 22.61  -0.7
CP2     2.52 305 eP     26 21.75  -1.8
CKL     2.53 303 eP     26 21.55  -1.9
NCG     2.56 308 eP     26 22.23  -1.8
NCT     2.57 287 eP     26 22.29  -1.8
GLB     2.57  51 ePd    26 21.86  -2.2
BGL     2.58 304 eP     26 22.27  -2.0
SYI     2.61 242 eP     26 23.18  -1.4
OPT     2.67 267 eP     26 26.42   0.9
TGL     2.70  69 eP     26 23.23  -2.7
SKT     2.73 322 eP     26 24.27  -2.0
CUT     2.76 337 eP     26 25.85  -0.9
AUL     2.82 262 eP     26 29.01   1.4
AUI     2.83 261 eP     26 29.05   1.4
SDG     2.90  23 eP     26 27.06  -1.6
BALM    3.01  65 eP     26 27.58  -2.8
CDD     3.06 254 eP     26 29.46  -1.4
PDB     3.15 271 eP     26 32.62   0.5
HUR     3.20 346 eP     26 32.74  -0.3
PAX     3.32  20 eP     26 33.43  -1.3
MCNL    3.32 261 eP     26 33.94  -0.7
CTGM    3.46  69 eP     26 34.40  -2.4
RND     3.56 354 eP     26 37.38  -0.7
TRF     3.74 344 eP     26 38.75  -2.1
MCK     3.89 354 eP     26 38.98  -3.7
KTH     3.94 340 eP     26 41.47  -2.0
SVW     3.98 291 eP     26 41.60  -2.4
BC3     4.35  40 ePd    26 46.72  -2.6
BWN     4.36 351 eP     26 48.02  -1.3
HDA     4.56   6 eP     26 50.81  -1.4
WRH     4.60 359 eP     26 51.30  -1.5
NEA     4.74 354 eP     26 52.49  -2.3
TTA     4.92 312 eP     26 54.01  -3.4
IL1     4.93   5 eP     26 54.75  -2.7
ILB     4.93   5 eP     26 55.07  -2.4
FBA     5.03   1 eP     26 54.86  -4.0
:M3     6.66 339 eP     27 18.44  -3.4
IMA     6.72 340 (P)    27 19.02  -3.9
BM3     7.71  10 eP     27 32.77  -3.8
        82 obs. associated
-------------------------------------
   NOV  01, 1993  04h 26m 12.30± 0.92s
   38.314 N ± 9.4km   27.486 E ± 7.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
      ML 3.3 (ISK).

IZM     0.19 295 ePg    26 17.00   0.4
                 eSg    26 21.00
CIN     0.86 146 iPgc   26 28.00  -0.8
                 iSg    26 41.00
DST     1.57  34 iPn    26 38.80  -1.5
KHL     1.60  89 ePn    26 42.10   1.3
EZN     1.76 329 ePn    26 43.00   0.0
ALT     2.18  69 ePn    26 49.80   0.5
HRT     3.02  33 ePn    27 01.00   0.0
     S.D. = 1.1  on   7 of   7 obs.
-------------------------------------
   NOV  01, 1993  05h 01m 53.13± 0.23s
    5.806 S ± 3.9km  146.246 E ± 4.7km
   DEPTH =  17.9km  (  4 depth phases)
   5.0mb ( 25 obs.)  4.7Msz (  3 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)
      ML 5.4 (PMG).

YYYY    0.51 213 ePc    02 04.00   0.6
MDG     0.72 320 iPd    02 08.60   1.7
LAT     1.14 139 eP     02 13.90   0.0
MNDI    2.60 262 eP     02 41.00   5.7X
WWKK    3.40 310 eP     02 51.50   5.1X
PMG     3.69 166 iPd    02 51.50   0.9
KVG     5.56  55 eP     03 19.50   2.4
RAB     6.11  75 iPd    03 24.00  -0.8
        1.0s   240.00nm          5.9mb
                 eS     05 08.00
JAY     6.42 300 ePc    03 33.30   4.0X
                 eS     05 03.00
CTA    14.20 180 ePc+   05 20.00   4.5X
     Z  18s    19.24um
SWI    15.74 288 ePc    05 38.00   2.3
QIS    16.02 203 eP     05 39.50   0.3
MTN    16.47 244 eP     05 46.00   1.0
        0.7s    97.00nm          5.0mb
WR2    18.20 218 eP     06 06.20  -0.4
        0.8s    39.30nm          4.6mb
                 ipP    06 22.60
                 eS     09 23.70
KNA    19.79 239 eP     06 24.20  -1.4
BRS    22.35 165 iPc    06 50.00  -1.7
     Z  18s    30.00um          5.8MszX
                 i      06 59.00
                 eS     11 00.00
BKM    24.52 121 iPc    07 14.90   2.0
ARMA   25.00 169 eP     07 18.00   0.4
        0.7s    14.00nm          4.7mb
DZM    25.35 132 iPc    07 20.10  -0.9
STK    26.30 189 iPc    07 28.50  -1.1
        0.6s    13.80nm          4.8mb
WARB   27.59 221 eP     07 41.00  -0.5
        0.9s    54.00nm          5.3mb
BWA    28.55 176 eP     07 50.50   0.4
                 ipP    07 54.00  12km
CAN    29.48 175 eP     07 58.00  -0.4
                 ipP    08 02.30  15km
CNB    29.51 175 eP     07 59.00   0.3
TOO    31.63 181 iPc    08 17.30  -0.1
        0.6s    21.00nm          5.2mb
LEM    38.40 266 iPd    09 17.50   1.7
MNG    43.44 147 P      09 57.40   0.6
SSE    43.82 328 P      10 00.00   0.1
        1.0s    13.00nm          4.7mb
     Z  20s     0.90um          4.7Msz
PGZ    43.87 147 eP     10 00.60   0.4
NJ2    45.81 327 eP     10 16.00   0.2
LOE    49.65 299 eP     10 45.50  -0.6
TIA    49.92 329 eP     10 47.00  -0.9
GYA    49.99 312 P      10 50.00   1.3
NST    50.40 296 eP     10 52.00   0.2
SNY    51.73 338 eP     11 00.60  -0.9
     Z  22s     0.94um          4.8Msz
                 eS     18 20.00
KMI    52.29 308 eP     11 07.00   0.7
        1.6s    50.00nm          5.2mb
MDJ    52.38 345 eP     11 05.60  -0.8
        1.2s    33.00nm          5.1mb
     Z  24s     2.39um          5.2MszX
CHTO   52.64 299 eP     11 09.10   0.3
CN2    52.83 341 eP     11 11.20   1.4
        0.8s     7.00nm          4.6mb
XAN    53.06 321 P      11 10.00  -1.7
        1.0s     9.00nm          4.7mb
                 pP     11 15.70  19km
                 sP     11 18.50
BJI    53.37 331 eP     11 12.50  -1.3
        1.3s    10.00nm          4.6mb
     Z  22s     0.68um          4.7Msz
TIY    53.53 327 eP     11 12.30  -2.8
CD2    54.60 315 iPd    11 23.00  -0.1
HHC    56.28 329 P      11 34.40  -0.7
        0.8s     8.20nm          4.8mb
BTO    56.91 328 eP     11 38.50  -1.2
LZH    57.58 320 eP     11 44.00  -0.5
        1.5s    40.00nm          5.2mb
SHL    61.28 303 iP     12 09.80  -0.5
GTA    62.11 321 eP     12 15.00  -0.7
        1.0s     7.00nm          4.8mb
                 pP     12 23.00  26km
                 sP     12 26.60
LSA    63.53 307 P      12 25.80   0.2
        1.0s     9.00nm          4.9mb
CSY    65.26 195 iPd    12 47.00  11.4X
        0.8s    37.50nm
GUN    67.13 303 P      12 49.00   0.2
PKI    67.41 303 P      12 50.10  -0.4
KKN    67.59 303 P      12 51.20  -0.3
        0.8s    43.00nm          5.7mb
DMN    67.68 303 P      12 52.40   0.3
        0.8s    59.00nm          5.8mb
GKN    68.20 303 P      12 55.40   0.2
        0.7s    28.00nm          5.5mb
KOD    70.32 283 eP     13 10.00   1.4
HYB    70.69 291 ePd    13 09.80  -0.7
        0.8s    23.70nm          5.4mb
GBA    70.96 286 P      13 12.00  -0.1
SVW    80.37  25 eP     14 05.50   0.8
TTA    81.16  23 eP     14 10.60   1.7
MAW    82.14 203 eP     14 00.50 -13.3X
        0.6s    29.41nm
PMR    83.36  26 eP     14 20.10  -0.1
        1.0s    17.20nm          5.2mb
IMA    83.64  21 eP     14 21.90   0.1
        1.1s    13.70nm          5.1mb
TOA    84.85  26 eP     14 29.50   1.7
FBA    85.30  23 eP     14 29.00  -0.9
        1.0s    46.60nm          5.7mb
INK    91.75  22 eP     15 01.00   0.4
        1.0s     3.00nm          4.6mb
GEC2  121.32 325 ePKPc 20 45.40  -1.6
        0.5s     0.39nm
                 e      20 51.40
                 e      20 54.40
                 e      20 58.70
MOCB  138.75 132 PKP    21 11.50 -10.0X
CNCB  139.38 124 PKP    21 15.00  -7.9X
LPB   139.42 124 PKP    21 16.00  -6.8X
LPAZ  139.52 123 PKP    21 15.20  -8.0X
LPAZ  139.52 123 PKP    21 32.00   8.8X
CCH   140.58 126 PKP    21 18.50  -6.2X
SDV   143.31  83 ePKP   21 27.00  -2.4X
TOV   144.09  81 ePKP   21 28.30  -2.3X
MGP   145.28  67 PKP    21 31.50  -0.9
LRS   145.42  66 PKP    21 31.00  -1.7
PNP   145.63  66 PKP    21 31.80  -1.2
CLLP  145.72  66 PKP    21 32.00  -1.1
CPD   146.34  66 (PKP)  21 34.00  -0.2
PPD   147.42 149 ePKP   21 37.10   1.2
VAO   148.59 156 ePKP   21 41.60   3.8X
AGVB  149.88 148 ePKP   21 44.90   5.2X
                 i      21 49.60
KIC   151.15 273 PKP    21 48.20   6.4X
TIC   151.43 273 PKP    21 49.00   6.8X
        0.6s    11.00nm
LIC   151.43 272 PKP    21 49.00   6.8X
        0.6s    13.00nm
LKO   151.85 279 PKP    21 49.61   6.7X
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      0.5s     8.50nm
BAO   154.45 147 ePKP  21 47.60   1.1
                 i     21 55.30
                 e     22 08.00
                 i     22 20.80
                 i     22 25.20
     S.D. = 1.1  on  68 of  88 obs.
-----------------------------------
   NOV  01, 1993  06h 03m 00.29± 0.80s
   45.113 S ±11.3km  166.652 E ± 5.8km
   DEPTH =  30.9 ±  6.6 km
   4.2mb (  2 obs.)
 OFF W. COAST OF S. ISLAND, N.Z. (161)

MSZ     1.01  65 P     03 17.60  -0.7
                 S     03 33.10
TLC     1.71  93 Pc    03 29.00   0.4
MMCZ    1.76  87 Pc    03 30.10   0.9
CMCZ    1.86  92 Pc    03 31.20   0.6
MHZ     1.86  89 Pc    03 31.60   0.9
SBCZ    1.88  90 Pc    03 31.80   0.8
LRCZ    1.91  90 Pc    03 32.40   1.0
LSCZ    1.92  91 Pc    03 32.40   0.9
MSCZ    1.95  90 Pc    03 32.80   0.8
SIZ     2.04 150 P     03 32.10  -1.0
TUZ     2.26 113 Pc    03 35.60  -0.6
BWZ     2.37  77 P     03 38.60   0.8
ODZ     2.83  90 Pc    03 43.90  -0.4
WVZ     3.58  57 eP    03 53.10  -1.9
MQZ     4.52  74 P     04 06.20  -2.2
MRW     7.05  59 P     04 44.20   0.3
                 S     06 03.00
MOZ     8.98  45 eP    05 07.20  -3.5X
CNB    16.41 301 eP    06 55.50   5.7X
                 eTT   22 00.00
CAN    16.63 300 eP    06 58.80   6.2X
                 eTT   21 00.70
TOO    17.56 288 iPd   07 04.90   0.7
                 eTT   21 30.00
BWA    17.58 301 eP    07 05.50   1.0
DZM    22.98 360 iPc   08 14.30  11.0X
STK    23.53 296 eP    08 22.40  13.9X
       2.3s     2.40nm
ASPA   34.12 298 eP    09 48.30   3.9X
       0.8s     4.20nm          4.4mb
WR2    36.62 303 eP   10 04.30  -1.3
       1.2s     2.50nm          4.0mb
LKO   143.93 193 PKP   22 30.27  -4.2X
       0.8s     8.50nm
     S.D. = 1.1  on  19 of  26 obs.
-----------------------------------
   NOV  01, 1993  06h 14m 06.04± 1.07s
   45.752 N ± 9.9km  151.511 E ± 7.3km
   DEPTH =  52.6 ±  9.2 km
   4.5mb ( 12 obs.)
 KURIL ISLANDS                    (221)

KUR     2.61 260 iPnc  14 48.00   1.4
KUSJ    5.55 244 eP    15 25.60  -2.4
                 eS    16 26.50
SKR     5.80  30 ePn   15 31.00  -0.5
YSS     6.21 285 ePnd  15 37.80   0.4
     Z  18s     1.00um
ASAJ    6.50 259 eP    15 44.60   3.2X
HOOJ    6.81 243 eP    15 45.90   0.2
                 eS    16 58.30
MRRJ    8.22 250 eP    16 05.70   0.5
                 eS    17 33.60
OFUJ    9.86 231 eP    16 22.10  -5.8X
                 S     18 07.50
MDJ    15.49 274 eP    17 44.50   2.0
       1.2s    30.00nm          4.3mb
CN2    18.58 273 eP    18 19.60  -1.4
       0.7s    10.00nm          4.1mb
SNY    20.50 269 eP    18 40.50  -1.4
TIA    27.47 262 eP    19 54.80   5.8X
IMA    35.27  35 eP    20 56.86  -0.5
       0.7s     4.28nm          4.5mb
FBA    37.63  38 eP    21 17.26   0.2
       1.1s    10.61nm          4.7mb
GTA    38.03 279 eP    21 21.50   0.6
       1.0s     8.00nm          4.6mb
CD2    39.69 265 eP    21 35.20   0.5
INK    43.09  32 eP    22 06.00   4.0X
       0.9s     4.00nm          4.2mb
GUN    53.98 275 P     23 27.10  -0.1
KKN    54.47 275 P     23 31.40   0.7
DMN    54.70 275 P     23 32.70   0.3
GKN    54.79 276 P     23 33.00   0.1
LRM    62.69  52 eP    24 27.30  -0.4
NUR    65.63 334 eP    24 39.90  -6.3X
WR2    67.22 198 eP    24 55.70  -1.1
       0.8s     5.40nm          4.6mb
WRA    67.22 198 P     24 57.50   0.7
       0.8s     2.30nm          4.2mb
SRU    68.09  56 eP    25 03.09   0.6
RSSD   68.32  49 eP    25 04.00   0.2
       1.3s     9.29nm          4.6mb
NB2    68.81 341 P     25 25.04  18.7X
       0.5s     3.80nm
PV09   69.31  56 eP    25 11.50   1.4
KSP    76.29 333 eP    25 49.80  -0.7
CLL    76.90 335 iP    25 52.40  -1.5
PRU    77.59 333 eP    25 57.50  -0.2
ZST    78.30 331 eP    26 01.70   0.1
KHC    78.64 333 P     26 03.90   0.3
       1.0s     7.00nm          4.6mb
                 e     26 08.50
GEC2   78.85 333 ePc   26 04.00  -0.8
       0.5s     2.17nm          4.4mb
GRF    78.87 335 iPc   26 04.90   0.1
       1.0s    25.00nm          5.1mb
LTX    78.96  59 eP    26 06.30   0.6
     S.D. = 1.0  on  31 of  37 obs.
-----------------------------------
*  NOV  01, 1993  06h 25m 24.32± 0.73s
   45.683 N ±17.6km  151.572 E ±11.8km
   DEPTH =  33.0km  (normal)
   4.9mb (  8 obs.)
 KURIL ISLANDS                    (221)

KUSJ    5.55 245 eP    26 46.20  -0.6
                 eS    27 46.20
ASAJ    6.53 259 eP    27 01.60   1.0
HOOJ    6.82 244 eP    27 05.50   0.9
                 eS    28 18.00
MRRJ    8.23 250 eP    27 25.50   1.2
IMA    35.30  35 eP    32 18.39   0.5
       0.5s     2.07nm          4.3mb
FBA    37.66  37 eP    32 39.00   1.4
       0.8s     2.07nm          4.0mb
GUN    54.03 275 P     34 47.60  -0.4
       0.6s    23.00nm          5.4mb
KKN    54.52 275 P     34 51.20  -0.3
       0.6s    14.00nm          5.2mb
PKI    54.56 275 P     34 51.00  -1.0
DMN    54.75 275 P     34 52.80  -0.5
       0.6s    15.00nm          5.2mb
GKN    54.84 276 P     34 53.20  -0.6
       0.6s    16.00nm          5.2mb
LRM    62.70  52 eP    35 36.50 -11.8X
WR2    67.16 198 eP    36 16.20  -0.8
       0.8s     6.30nm          4.8mb
GEC2   78.94 333 ePc   37 24.70  -1.2
       0.5s     0.69nm          3.9mb
                 e     37 39.40
LTX    78.95  59 eP    37 26.53   0.2
     S.D. = 0.9  on  14 of  15 obs.
-----------------------------------
*  NOV  01, 1993  06h 31m 25.87± 1.61s
   40.443 N ± 8.5km   23.968 E ±21.9km
   DEPTH =  10.0km  (geophysicist)
   3.5mb (  1 obs.)
 GREECE                           (364)

OUR     0.11 174 iPg   31 28.90   0.2
                 eSg   31 30.70
PAIG    0.56 203 ePg   31 36.98  -0.3
                 eSg   31 44.66
SOH     0.60 309 ePg   31 37.66  -0.4
SRS     0.73 337 ePg   31 39.94  -0.3
KNT     1.08 312 ePg   31 46.98   0.7
                 eSg   32 02.58
NB2    22.07 343 P     36 24.90   2.6X
       0.5s     1.10nm          3.5mb
     S.D. = 0.7  on   5 of   6 obs.
-----------------------------------
   NOV  01, 1993  06h 39m 33.16± 0.51s
   40.464 N ± 5.1km   23.993 E ± 4.6km
   DEPTH =  10.0km  (geophysicist)
 GREECE                           (364)

OUR     0.13 184 iPg   39 36.34   0.1
PAIG    0.59 204 iPg   39 44.38  -0.7
                 eSg   39 52.82
SOH     0.60 307 iPg   39 45.10  -0.3
                 eSg   39 54.22
SRS     0.72 335 ePg   39 46.86  -0.5
                 eSg   39 56.14
THE     0.80 282 iPg   39 48.58  -0.1
                 eSg   39 59.38
LIT     1.21 253 iPb   39 55.94   0.3
                 eSb   40 12.98
GRG     1.31 293 iPb   39 58.02   0.7
                 eSb   40 17.62
VAY     1.38 309 iPn   39 58.50   0.1
                 iSn   40 19.30
                 Lg    40 22.50
ALN     1.62  74 ePb   40 01.66  -0.2
                 eSb   40 22.86
EZN     1.90 109 ePn   40 06.30   0.4
SKO     2.45 309 ePn   40 19.30   5.5X
OHR     2.51 286 ePn   40 18.50   3.8X
MLR     5.22  15 eP    41 45.00  51.7X
     S.D. = 0.5  on  10 of  13 obs.
-----------------------------------
   NOV  01, 1993  06h 42m 00.87± 0.45s
   27.888 N ±11.6km   57.415 E ± 5.1km
   DEPTH =  33.0km  (normal)
   4.3mb (  7 obs.)
 SOUTHERN IRAN                    (353)

DHR     6.67 258 eP    43 43.00   3.9X
                 eS    44 57.20
QUE     8.66  72 eP    44 07.80   0.8
                 eS    48 48.20
RYD    10.19 254 ePd   44 29.10   1.0
                 eS    46 17.50
KER    10.93 309 eP    44 39.00   0.8
UQSK   13.60 265 ePd   45 13.67  -0.3
                 eS    47 41.33
KMSA   13.96 240 iPd   45 17.47  -1.2
                 eS    47 44.67
NDI    17.46  83 eP    46 06.50   3.0X
GKN    24.03  83 P     47 14.40   0.4
DMN    24.49  84 P     47 20.20   1.6
KKN    24.62  84 P     47 19.60  -0.2
PKI    24.76  84 P     47 20.60  -0.7
GUN    25.14  83 P     47 22.60  -2.3
SKO    32.42 305 iP    48 30.30   0.4
GEC2   39.47 314 eP    49 29.70  -0.1
       0.7s     0.81nm          3.6mb
                 e     49 40.20
                 e     49 44.80
                 e     49 50.20
KHC    39.63 314 P     49 31.00  -0.1
       1.2s     7.50nm          4.3mb
                 e     49 41.00
CLL    40.62 318 eP    49 39.00  -0.1
       1.1s     8.00nm          4.4mb
NB2    45.20 330 P     50 14.70  -1.6
       1.0s     3.90nm          4.3mb
LKO    61.77 266 P     52 19.52   0.4
       0.7s     5.50nm          4.8mb
WRA    88.25 114 P     54 51.20   0.8
       0.7s     0.90nm          4.2mb
WR2    88.27 114 eP    54 50.80   0.3
       0.9s     2.50nm          4.5mb
     S.D. = 1.0  on  18 of  20 obs.
-----------------------------------
   NOV  01, 1993  06h 46m 31.82± 0.58s
   28.244 N ±14.7km   57.569 E ± 6.0km
   DEPTH =  10.0km  (geophysicist)
   4.7mb ( 10 obs.)
 SOUTHERN IRAN                    (353)

NDI    17.29  84 eP    50 34.50  -0.3
HYB    22.10 115 eP    51 29.00   0.0
GBA    23.54 124 P     51 35.00  -8.1X
GKN    23.86  84 P     51 47.40   1.0
DMN    24.32  85 P     51 52.60   1.6
KKN    24.45  84 P     51 52.80   0.6
PKI    24.59  85 P     51 53.60  -0.1
       0.8s    31.00nm          5.0mb
GUN    24.96  84 P     51 57.80   0.5
       0.6s    30.00nm          5.2mb
WMQ    28.70  49 P     52 31.00  -0.2
SKO    32.32 305 eP    53 03.30   0.1
OHR    32.61 303 eP    53 05.50  -0.3
OJC    36.02 318 eP    53 35.00   0.0
                 i     53 45.80
```

01d 06h

```
GTA     36.52  61 Pc     53 39.00  -0.5
        1.0s    12.00nm          4.7mb
                pP      53 45.40  22kmX
KSP     38.33 318 eP     54 04.80  10.5X
GEC2    39.32 314 eP     54 02.60  -0.2
        0.7s     1.51nm          3.8mb
                e       54 11.90
                e       54 15.40
                e       54 17.00
                e       54 19.00
                e       54 23.70
                e       54 28.70
                e       56 11.10
                ec      56 19.80
                e       56 22.10
KHC     39.48 314 P      54 04.50   0.5
        1.3s    12.00nm          4.4mb
                e       54 13.00
                e       54 17.40
CD2     40.04  75 eP     54 08.80  -0.1
KMI     40.31  84 eP     54 11.00  -0.4
        1.0s    50.00nm          5.2mb
CLL     40.45 317 e(P)   54 13.00   1.1
                i       54 22.40
XAN     43.96  69 P      54 39.20  -1.7
        0.6s     6.00nm          4.6mb
NB2     44.96 330 P      54 49.10   0.5
        0.6s     1.40nm          4.1mb
TIA     50.33  65 eP     55 29.60  -1.2
MDJ     58.40  53 eP     56 29.20  -0.5
LKO     61.93 266 P      56 53.30  -1.2
        0.6s     7.50nm          5.0mb
WRA     88.26 114 P      59 25.50   0.5
        0.8s     2.30nm          4.5mb
     S.D. = 0.8  on  23 of  25 obs.
-----------------------------------
&  NOV  01, 1993   06h 49m 49.64s
   34.459 N          116.503 W
   DEPTH =   1.3km
 SOUTHERN CALIFORNIA                ( 43)
      <PAS-P>. ML 2.9 (PAS).

PEC     0.79 224 ePd     50 04.31  -1.0
                eS      50 14.50
GSC     0.88 344 ePc     50 06.24  -0.9
                eS      50 17.67
SSK     1.02 256 ePd     50 08.52  -1.3
PLM     1.14 195 eP      50 11.01  -0.9
                eS      50 25.14
GLA     1.98 135 ePn     50 21.57  -3.1
                ePg     50 26.14
ISA     2.01 307 ePn     50 24.12  -1.1
ABL     2.27 281 ePn     50 27.73  -1.4
TPNV    2.49   5 ePn     50 30.15  -2.0
BONR    3.78 338 (Pn)    50 49.93  -0.7
                ePg     51 00.38
ARUT    4.14  36 (P)     50 53.86  -1.7
MSU     5.34  40 (Pn)    51 10.81  -1.9
       11 obs. associated
-----------------------------------
?  NOV  01, 1993   06h 50m 08.07± 1.43s
   40.464 N ± 8.7km   23.944 E ±21.4km
   DEPTH =  10.0km  (geophysicist)
 GREECE                             (364)

OUR     0.13 167 ePg     50 11.32   0.1
                eSg     50 13.20
PAIG    0.57 201 ePg     50 19.56  -0.1
                iSg     50 27.60
SOH     0.57 309 iPg     50 19.88   0.1
                eSg     50 29.60
SRS     0.71 338 ePg     50 21.88  -0.1
                eSg     50 33.24
     S.D. = 0.2  on   4 of   4 obs.
-----------------------------------
%  NOV  01, 1993   06h 59m 00.27± 0.81s
   40.760 N ± 6.8km   23.324 E ± 6.8km
   DEPTH =  10.0km  (geophysicist)
 GREECE                             (364)

SOH     0.07  21 iPg     59 03.16   0.5
                eSg     59 04.56
THE     0.30 245 ePg     59 06.52   0.0
                eSg     59 10.60
SRS     0.41  30 ePg     59 08.28  -0.4
KNT     0.51 321 iPg     59 10.60  -0.1
                eSg     59 18.56
OUR     0.66 130 ePg     59 13.33   0.0
     S.D. = 0.5  on   5 of   5 obs.
-----------------------------------
?  NOV  01, 1993   07h 07m 47.87± 1.32s
   40.457 N ±13.2km   23.932 E ±23.2km
   DEPTH =   5.0km  (geophysicist)
 GREECE                             (364)

OUR     0.13 163 iPg     07 50.52   0.0
                iSg     07 52.24
SOH     0.57 310 ePg     07 59.12  -0.2
SRS     0.71 339 ePg     08 02.00   0.0
                eSg     08 11.28
KNT     1.05 312 ePg     08 08.48   0.3
                eSg     08 24.00
     S.D. = 0.3  on   4 of   4 obs.
-----------------------------------
?  NOV  01, 1993   07h 12m 54.14± 1.27s
   40.435 N ± 7.6km   23.939 E ±18.5km
   DEPTH =  10.0km  (geophysicist)
 GREECE                             (364)

OUR     0.11 162 iPg     12 57.02   0.1
                eSg     12 58.90
PAIG    0.54 202 ePg     13 05.02  -0.1
                eSg     13 13.02
SRS     0.73 339 ePg     13 08.30  -0.2
                eSg     13 18.74
KNT     1.07 313 ePg     13 14.58   0.2
                eSg     13 30.34
     S.D. = 0.4  on   4 of   4 obs.
-----------------------------------
%  NOV  01, 1993   07h 13m 42.24± 1.96s
   29.672 S ±15.8km   68.991 W ±13.4km
   DEPTH =  10.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA       (137)

RTRS    0.64 219 iPd     13 56.00   0.9
                S       14 11.00
RTLL    1.71 165 iPc     14 12.70   0.4
                S       14 40.50
RTCB    1.82 175 ePc     14 12.70  -1.2
                S       14 41.00
CFA     2.03 162 iPc     14 17.00   0.0
                S       14 48.50
RTCV    2.22 170 eP      14 18.60  -1.0
                S       14 50.50
RTPR    2.24 107 eP      14 22.10   2.2
CYA     3.05  67 iPc     14 30.50  -1.0
MRA     3.92 135 eP      14 44.00   0.2
                (S)     15 35.00
TCA     4.14 115 i(P)    14 46.50  -0.5
     S.D. = 1.3  on   9 of   9 obs.
-----------------------------------
?  NOV  01, 1993   07h 18m 45.55± 2.35s
   40.509 N ± 8.1km   24.004 E ±25.6km
   DEPTH =   5.0km  (geophysicist)
 AEGEAN SEA                         (365)

OUR     0.18 186 iPg     18 49.54   0.4
                eSg     18 51.42
SOH     0.59 302 ePg     18 57.58   0.3
PAIG    0.63 203 ePg     18 57.74  -0.5
                eSg     19 05.62
SRS     0.68 333 ePg     18 58.98  -0.2
                eSg     19 09.50
     S.D. = 0.7  on   4 of   4 obs.
-----------------------------------
&  NOV  01, 1993   07h 30m 29.58s
   42.395 N          122.053 W
   DEPTH =   6.1km
 OREGON                             ( 32)
      <SEA-P>. MD 2.6 (SEA), 2.8 (GS).

BBOR    0.67 317 P       30 42.44  -0.7
                S       30 51.73
LGMM    0.81 168 P       30 45.13  -0.7
LASM    0.87 156 P       30 45.86  -1.0
LMPM    0.91 185 P       30 46.84  -0.7
LBFM    1.05 173 eP      30 48.89  -1.1
LGBM    1.05 186 P       30 49.49  -0.5
DBO     1.14 310 P       30 50.98  -0.3
                S       31 07.69
HSO     1.36 326 P       30 54.64  -0.5
                S       31 13.53
LBKM    1.39 199 P       30 55.00  -0.6
HBO     1.46 352 P       30 56.93   0.3
                S       31 16.85
LGPM    1.59 202 eP      30 57.53  -0.9
                eS      31 17.98
LMEM    1.89 169 (P)     31 04.11   1.2
FBO     1.95 349 P       31 04.19   0.5
VIPM    2.36  26 P       31 11.44   1.9
MPOR    2.37 333 P       31 11.01   1.2
SSOR    2.48 353 P       31 12.87   1.7
ORV     2.87 171 eP      31 17.39   0.7
BONR    5.28 146 (P)     31 51.78   0.5
       18 obs. associated
-----------------------------------
   NOV  01, 1993   07h 44m 51.52± 0.25s
    5.795 S ± 3.5km  146.195 E ± 5.3km
   DEPTH =  24.4km  (  7 depth phases)
   5.0mb ( 25 obs.)  4.5Msz (  4 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)
      ML 5.4 (PMG).

YYYY    0.50 207 ePd     45 01.20  -0.5
MDG     0.68 323 iPc     45 05.40   0.7
LAT     1.18 137 eP      45 12.00  -0.5
MNDI    2.55 262 eP      45 38.00   5.6X
WWKK    3.35 310 eP      45 49.00   5.4X
PMG     3.71 165 iPd     45 48.80   0.1
RAB     6.15  75 eP      46 21.00  -2.3
                eS      47 40.00
JAY     6.37 301 ePc     46 30.70   4.3X
                eS      48 09.50
CTA    14.21 180 iPd-    48 15.00   1.6
       1.5s   125.00nm          5.3mb
                i       48 21.00
                eS      50 42.00
SWI    15.69 288 ePc     48 36.50   3.8X
QIS    16.01 203 iPc     48 37.00   0.2
MTN    16.43 244 eP      48 42.50   0.3
       0.4s    52.00nm          5.0mb
WR2    18.17 218 eP      49 03.70  -0.3
       1.0s    46.60nm          4.6mb
                eS      52 02.00
GUA    19.25 356 eP      49 18.70   1.5
       1.2s   237.50nm          5.3mb
GUMO   19.30 356 eP      49 18.60   0.8
PJG    19.30 356 eP      49 19.00   1.2
KNA    19.75 239 eP      49 24.00   1.2
       0.8s    95.00nm          5.2mb
ASPA.  21.35 212 iPc     49 38.30  -1.0
       0.5s    14.50nm          4.7mb
     Z  20s     1.90um          4.5Msz
                i       49 45.20  25km
                eS      53 30.10
                iScS    01 06.90
BRS    22.37 164 iPc     49 50.00   0.5
                i       49 53.00  11kmX
BKM    24.57 121 iPc     50 12.50   1.6
ARMA   25.02 169 eP      50 16.00   0.6
       0.7s    13.00nm          4.7mb
DZM    25.40 132 iPd     50 20.80   1.9
STK    26.31 189 iPc     50 25.80  -1.4
       0.5s     7.60nm          4.6mb
WARB   27.56 221 eP      50 35.80  -3.0X
       0.8s    34.00nm          5.1mb
BWA    28.56 176 eP      50 47.40  -0.3
                epP     50 52.20  17km
CAN    29.50 175 eP      50 55.70  -0.4
                e       50 57.70   7kmX
                e       51 09.20
TOO    31.63 181 eP      51 14.80  -0.2
       0.8s    19.00nm          5.0mb
MEEK   33.48 229 eP      51 31.00  -0.2
LEM    38.35 266 ePd     52 19.00   6.1X
SSE    43.78 328 Pc      52 57.50   0.4
       1.0s    11.00nm          4.6mb
     Z  20s     0.70um          4.6Msz
NJ2    45.77 327 Pd      53 13.60   0.6
WHN    47.28 322 eP      53 24.00  -0.9
LOE    49.60 299 eP      53 47.00   3.8X
TIA    49.89 329 eP      53 44.40  -0.7
GYA    49.95 312 Pc      53 46.40   0.5
       1.0s    11.00nm          4.8mb
                pP      53 55.00  29km
NST    50.35 296 eP      53 48.80  -0.1
SNY    51.70 339 Pc      53 57.80  -1.0
KMI    52.24 308 eP      54 04.00   0.6
       1.5s    50.00nm          5.2mb
                pP      54 11.00  23km
CHTO   52.59 299 eP      54 06.00   0.1
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        1.4s    27.40nm          5.0mb
CN2    52.81 341 eP     54 06.50  -0.6
        0.8s     6.00nm          4.6mb
     Z  18s      0.30um          4.4Msz
                 pP     54 12.00  18km
XAN    53.02 321 P      54 07.00  -1.9
        1.0s    13.00nm          4.8mb
                 pP     54 16.40  31km
                 sP     54 20.40
BJI    53.34 331 eP     54 09.50  -1.5
        1.5s    25.00nm          5.0mb
     Z  20s      0.60um          4.6Msz
CD2    54.56 315 iPd    54 20.20  -0.1
HHC    56.24 329 P      54 32.40   0.1
        1.3s    14.00nm          4.8mb
BTO    56.87 328 eP     54 36.20  -0.7
LZH    57.53 320 Pc     54 41.30  -0.4
        1.6s    60.00nm          5.4mb
                 pP     54 50.00  29km
                 sP     54 53.00
SHL    61.24 303 iP     55 07.30  -0.2
GTA    62.07 321 eP     55 12.40  -0.4
        1.5s    19.00nm          5.0mb
                 sP     55 22.50
LSA    63.48 307 Pc     55 22.80   0.1
        1.2s    11.00nm          4.9mb
CSY    65.25 195 iPd    55 44.30  11.3X
        0.7s    13.90nm
GUN    67.09 303 P      55 32.20 -13.7X
PKI    67.36 303 P      55 33.20 -14.4X
KKN    67.54 303 P      55 34.60 -14.0X
DMN    67.63 303 P      55 35.60 -13.6X
GKN    68.15 303 P      55 38.60 -13.8X
KOD    70.27 283 eP     56 07.00   1.3
HYB    70.64 291 eP     56 06.50  -1.1
        1.2s    35.70nm          5.4mb
GBA    70.91 286 Pd     56 10.00   0.8
SVW    80.38  25 eP     57 02.20   0.0
PMR    83.37  26 eP     57 18.64   1.0
        0.8s    12.79nm          5.1mb
IMA    83.65  21 eP     57 19.54   0.3
        1.4s    12.65nm          4.9mb
KLU    84.74  27 eP     57 26.65   1.9
TOA    84.86  26 eP     57 27.90   2.6X
FBA    85.31  23 eP     57 25.98  -1.4
        0.8s     7.19nm          5.0mb
BALM   86.19  28 eP     57 32.95   0.9
GEC2  121.28 325 ePKP   03 55.80  11.5X
        0.6s     0.57nm
                 e      04 00.30
                 e      04 08.10
MOCB  138.80 132 PKP    04 13.30  -5.7X
LPB   139.47 124 PKP    04 15.10  -5.1X
                 e      07 54.00
LPAZ  139.57 123 PKP    04 11.50  -9.2X
                 i      07 55.90
CCH   140.63 126 PKP    04 20.90  -1.3
SDV   143.36  83 ePKP   04 24.40  -2.5X
TOV   144.14  81 ePKP   04 26.20  -1.9
PPD   147.46 149 ePKP   04 33.90   0.6
VAO   148.62 156 ePKP   04 37.90   2.7X
KIC   151.10 273 PKP    04 45.60   6.5X
TIC   151.37 273 PKP    04 46.20   6.7X
        0.6s    14.00nm
LIC   151.38 272 PKP    04 46.10   6.6X
        0.5s    12.00nm
LKO   151.80 279 PKP    04 46.68   6.5X
        0.6s     7.50nm
BAO   154.49 147 (PKP)  04 52.90   8.9X
                 i      04 58.00
                 i      05 03.00
     S.D. = 1.0  on  54 of  79 obs.
-----------------------------------
   NOV  01, 1993  08h 23m 36.48± 0.61s
   39.857 N ± 6.6km   21.597 E ± 4.5km
   DEPTH =  10.0km  (geophysicist)
 GREECE                            (364)
     ML 2.4 (TIR).

LIT     0.73  70 ePg    23 50.22  -0.6
                 eSg    24 02.70
LSK     0.82 291 ePg    23 50.50  -1.9
                 iSg    24 03.30
FNA     0.94 350 ePg    23 53.98  -0.5
                 eSg    24 08.18
KBN     0.99 321 ePg    23 56.00   0.8
                 iSg    24 11.50
AGG     1.01 146 ePg    23 55.54  -0.1
                 eSg    24 10.66
IGT     1.03 252 ePg    23 56.26   0.3
                 eSg    24 09.74
TPE     1.29 290 ePn    24 01.50   1.1
OHR     1.39 334 iPn    24 02.00   0.0
                 i      24 21.00
                 i      24 23.40
                 Lg     24 25.50
KNT     1.64  37 ePb    24 05.70   0.3
SOH     1.65  54 ePb    24 06.06   0.4
OUR     1.89  75 ePb    24 09.22   0.2
SKO     2.12 357 ePn    24 16.00   3.6X
     S.D. = 0.9  on  11 of  12 obs.
-----------------------------------
*  NOV  01, 1993  08h 28m 24.85± 1.07s
    5.823 S ± 8.7km  146.258 E ±10.4km
   DEPTH =  10.0km  (geophysicist)
   3.6mb (  2 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)
     ML 4.3 (PMG).

YYYY    0.51 215 iPc    28 35.00  -0.1
MDG     0.74 320 iPc    28 39.20  -0.2
LAT     1.12 139 eP     28 45.80   0.0
PMG     3.67 166 eP     29 22.50  -0.4
WR2    18.19 218 eP     32 38.70  -0.6
        1.0s     2.90nm          3.4mb
ASPA   21.36 213 eP     33 15.90   1.2
        1.2s     6.00nm          3.9mb
     S.D. = 0.8  on   6 of   6 obs.
-----------------------------------
?  NOV  01, 1993  08h 35m 28.06± 0.94s
   39.124 N ± 8.0km   27.577 E ± 9.5km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
     ML 2.7 (ISK).

IZM     0.77 199 ePg    35 43.00   0.0
                 eSg    35 54.50
DST     0.95  59 ePn    35 46.20   0.1
EZN     1.20 306 ePn    35 50.40   0.1
EDC     1.24  10 ePn    35 51.00  -0.1
     S.D. = 0.2  on   4 of   4 obs.
-----------------------------------
   NOV  01, 1993  08h 42m 01.49± 0.64s
   46.224 N ± 8.4km   13.688 E ± 8.6km
   DEPTH =  10.0km  (geophysicist)
 AUSTRIA                           (546)
     ML 2.1 (VIE). MD 2.6 (LJU), 2.2
     (TRI).

VOY     0.24 143 iPgc   42 07.10   0.4
                 eSg    42 13.50
TRI     0.52 174 ePg    42 11.70  -0.3
                 eSg    42 22.70
LJU     0.61 107 ePg    42 13.30  -0.6
                 eSg    42 23.50
CEY     0.71 133 ePg    42 15.10  -0.4
        0.4s    95.00nm
                 eSg    42 28.10
KBA     0.89 345 iPgc   42 13.60  -5.0X
                 iSg    42 23.30
RIY     1.01 151 eP     42 23.70   3.2X
                 iSg    42 41.30
VBY     1.31 123 iPn    42 26.40   0.7
                 iSn    42 47.20
WATA    1.83 308 iPnd   42 31.30  -2.0
                 iPg    42 33.80
                 iSg    42 57.00
SQTA    1.98 301 iPg    42 37.00   1.5
                 iSg    43 02.20
MOTA    2.10 303 iPnc   42 37.60   0.3
                 i      42 41.50
                 i      43 05.40
KHC     2.91 359 ePn    42 49.00   0.3
                 ePg    42 56.60
                 e      43 21.50
                 eSg    43 33.40
     S.D. = 1.2  on   9 of  11 obs.
-----------------------------------
%  NOV  01, 1993  10h 16m 16.39± 0.79s
   28.113 S ± 8.2km   26.791 E ± 8.1km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)
     ML 2.6 (PRE).

SEK     0.77 106 eP     16 32.32   0.5
                 S      16 41.30
BLF     1.13 208 eP     16 37.50  -0.5
                 S      16 53.90
BOSA    1.31 247 eP     16 44.00   2.9X
                 S      17 03.20
SWZ     1.60 305 iPc    16 46.00   0.5
                 S      17 06.50
FRS     2.08 218 eP     16 52.50   0.2
                 S      17 18.00
KSR     2.24   2 eP     16 51.00  -3.9X
SLR     2.72  30 eP     17 01.00  -0.6
                 S      17 31.60
     S.D. = 0.8  on   5 of   7 obs.
-----------------------------------
*  NOV  01, 1993  11h 13m 19.87± 0.96s
   38.884 N ± 7.8km   20.467 E ±15.9km
   DEPTH =  10.0km  (geophysicist)
 GREECE                            (364)
     MD 3.3 (ATH).

VLS     0.71 172 ePg    13 33.20  -0.7
KEK     0.98 328 ePb    13 36.90  -1.5
SRN     1.06 340 ePn    13 39.70  -0.1
LSK     1.27   5 iPnd   13 42.10  -1.4
                 iSn    14 01.50
TPE     1.45 346 ePn    13 47.00   0.9
KZN     1.74  35 ePb    13 48.50  -1.9
VLO     1.75 335 ePn    13 56.50   6.1X
KBN     1.75   8 ePn    13 51.10   0.5
                 iSn    14 12.50
OHR     2.24   6 iPnc   14 00.20   2.6X
                 i      14 25.50
                 S      14 29.50
                 Lg     14 32.00
TIR     2.50 350 ePn    14 03.30   2.1
VLI     2.92 137 ePn    14 08.00   0.9
VAY     2.92  33 ePn    14 02.00  -5.2X
SKO     3.17  13 ePn    14 12.00   1.2
     S.D. = 1.5  on  10 of  13 obs.
-----------------------------------
&  NOV  01, 1993  11h 24m 50.10s
   56.179 N          153.392 W
   DEPTH =  10.0km  (geophysicist)
   3.7mb (  2 obs.)
 KODIAK ISLAND REGION              ( 13)
     <AEIC>. ML 3.9 (AEIC), 3.5
     (PMR).

KDC     1.65  17 iP     25 17.09  -2.1
                 eS     25 36.79
SYI     2.50  12 eP     25 29.31  -2.1
CDD     2.76 357 eP     25 33.98  -1.3
MCNL    3.06 351 eP     25 37.29  -2.0
AUI     3.17 360 eP     25 39.30  -1.6
AUE     3.19   0 eP     25 40.10  -1.1
AGU     3.19 360 eP     25 39.65  -1.7
AUH     3.19 360 eP     25 40.07  -1.3
AUW     3.20 359 eP     25 39.09  -2.3
AUL     3.21 360 eP     25 39.96  -1.6
XLV     3.40  15 eP     25 42.50  -1.8
OPT     3.49   1 eP     25 43.92  -1.5
CNPM    3.55  18 eP     25 43.70  -2.6
                 eS     26 22.70
HOM     3.61  14 eP     25 45.12  -2.1
PDB     3.64 354 iP     25 45.12  -2.6
INE     3.90   2 eP     25 49.97  -1.5
ILIM    3.92   3 eP     25 49.41  -2.2
SDN     4.10 261 eP     25 51.07  -3.0
RED     4.27   4 eP     25 54.01  -2.6
RS2     4.31   4 eP     25 54.98  -2.4
RDW     4.33   4 iP     25 55.01  -2.6
REF     4.34   5 iP     25 55.16  -2.6
NCT     4.40   3 iP     25 55.96  -2.6
DFR     4.44   5 iP     25 56.42  -2.7
SEW     4.46  26 eP     25 55.62  -3.5
SLKM    4.65  20 eP     25 58.03  -4.0
NKA     4.72  13 P      26 02.00  -0.9
MPA     4.82  24 eP     26 00.14  -4.2
BKG     4.94   6 eP     26 02.93  -3.2
CKL     5.06   6 eP     26 05.24  -2.7
SPU     5.07   7 eP     26 05.10  -2.8
CKT     5.08   7 eP     26 05.04  -3.0
SVW     5.08 348 P      26 05.00  -3.1
BGL     5.13   5 eP     26 06.05  -2.8
CP2     5.14   6 eP     26 06.68  -2.4
CRP     5.14   7 eP     26 06.66  -2.5
```

01d 11h

```
CGLM     5.19   7 eP     26 06.51  -3.3
NCG      5.28   6 eP     26 08.13  -2.9
PWL      5.39  27 eP     26 07.80  -4.7
PMS      5.46  20 P      26 08.80  -4.7
SUA      5.48  13 eP     26 09.61  -4.2
PWA      5.78  17 P      26 14.10  -3.8
CFI      5.81  28 eP     26 13.24  -5.1
KNK      5.84  24 eP     26 13.99  -4.8
FID      5.84  35 eP     26 13.59  -5.2
PMR      5.86  20 eP     26 16.60  -2.4
VLZ      6.18  34 eP     26 18.74  -4.8
SML      6.22  23 eP     26 21.32  -2.8
SCM      6.48  26 eP     26 23.39  -4.5
KLU      6.59  33 eP     26 24.68  -4.7
TTA      6.90 350 eP     26 30.20  -3.6
IMA      9.93 359 eP     27 13.30  -2.6
INK     15.17  29 eP     28 30.00   4.3
        1.0s     3.00nm          3.6mb
MBC     23.67  19 eP     30 03.50   1.6
        1.0s     3.00nm          3.8mb
        54 obs. associated
-----------------------------------
&  NOV  01, 1993   11h 41m 36.26s
   60.587 N          151.742 W
   DEPTH =  70.4km
 KENAI PENINSULA, ALASKA          ( 14)
      <AEIC>.

NKA      0.29  58 iPc    41 48.97   1.4
DFR      0.47 271 iPd    41 48.42  -0.7
REF      0.48 259 iPd    41 48.82  -0.6
RSO      0.52 256 eP     41 49.11  -0.6
RS2      0.52 257 iPd    41 49.16  -0.5
RED      0.54 252 iPd    41 49.03  -0.7
                  eS     41 59.66
                  eS     41 59.70
RDW      0.54 259 iPd    41 49.27  -0.6
BKG      0.55 332 iPd    41 49.11  -0.8
                  eS     41 59.87
NCT      0.59 268 iPd    41 49.46  -0.8
                  eS     42 00.28
NNL      0.59 158 eP     41 54.02   3.8
SPU      0.62 346 iPc    41 49.76  -0.8
                  eS     42 01.15
CKT      0.66 340 iPd    41 50.32  -0.7
CKN      0.67 342 iPd    41 50.72  -0.4
CKL      0.68 335 iPd    41 50.56  -0.7
CRP      0.71 344 iPd    41 50.64  -1.1
CP2      0.72 340 iPd    41 51.33  -0.6
CGLM     0.73 350 iPc    41 51.17  -0.7
BGL      0.75 335 iPd    41 51.45  -0.6
SLKM     0.76  95 iPc    41 51.35  -0.7
                  eS     42 03.61
ILIM     0.79 231 ePc    41 51.72  -0.8
                  eS     42 04.32
INE      0.84 232 ePc    41 52.30  -1.0
                  eS     42 05.36
NCG      0.84 346 iPd    41 52.55  -0.7
                  eS     42 05.99
BRLK     0.93 152 eP     41 53.57  -0.6
                  eS     42 07.21
                  eS     42 07.35
HOM      0.93 177 eP     41 54.03  -0.1
SUA      1.01  28 iPc    41 54.64  -0.6
CNPM     1.09 166 iPd    41 55.62  -0.7
                  eS     42 10.74
XLV      1.14 179 eP     41 55.69  -1.1
MPA      1.18  94 iPc    41 56.32  -1.0
OPT      1.20 219 iPc    41 57.01  -0.6
                  eS     42 12.60
SEW      1.24 112 eP     41 56.42  -1.7
PMS      1.25  57 P      41 57.50  -0.9
PWA      1.40  39 P      41 59.50  -0.8
SKT      1.40   4 iPd    41 59.29  -1.1
                  eS     42 17.99
PDB      1.46 238 iPc    41 59.50  -1.6
                  eS     42 18.06
AUL      1.48 216 eP     42 00.69  -0.7
AUE      1.48 214 eP     42 00.35  -1.0
AGU      1.50 215 eP     42 01.08  -0.6
AUH      1.50 216 eP     42 00.89  -0.8
AUW      1.50 216 eP     42 01.01  -0.6
AUI      1.52 215 eP     42 01.20  -0.6
PMR      1.62  50 iPc    42 01.49  -1.8
PWL      1.70  79 eP     42 02.56  -1.8
KNK      1.80  61 iPc    42 04.28  -1.5
GHO      1.81  48 iPc    42 04.44  -1.5
```

```
CDD      1.92 211 ePc    42 06.25  -1.2
MCNL     1.92 224 iPc    42 05.96  -1.4
CUT      1.96  21 ePc    42 06.81  -1.0
SVW      1.97 287 iPd    42 05.34  -2.8
                  eS     42 26.90
LTI      2.01 104 eP     42 06.19  -2.4
SYI      2.01 190 eP     42 07.70  -0.9
CFI      2.03  71 iPc    42 06.68  -2.2
                  eS     42 32.18
SML      2.06  52 iPc    42 07.61  -1.7
SCM      2.48  58 iPc    42 13.21  -2.0
VZW      2.59  77 iPc    42 13.74  -2.9
FID      2.60  84 iPc    42 13.10  -3.7
HUR      2.60  22 eP     42 16.11  -0.7
HIN      2.60  92 eP     42 14.00  -2.9
VLZ      2.70  76 eP     42 15.66  -2.6
                  eS     42 46.19
KDC      2.87 188 eP     42 17.89  -2.7
TRF      2.96  13 eP     42 21.01  -1.0
CVA      2.96  88 eP     42 18.59  -3.2
KLU      2.97  70 iPc    42 19.52  -2.6
                  eS     42 53.46
KTH      3.00   7 eP     42 21.70  -0.8
TOA      3.09  58 P      42 22.00  -1.7
TTA      3.11 321 eP     42 21.63  -2.3
RND      3.14  24 eP     42 24.35  -0.1
TZL      3.38  62 eP     42 25.67  -2.0
MCK      3.42  21 P      42 29.30   1.0
RAGM     3.50  90 eP     42 25.71  -3.8
SDG      3.55  54 eP     42 28.15  -1.9
HMT      3.71  91 eP     42 28.66  -3.8
PAX      3.82  49 eP     42 32.00  -2.0
GLB      3.95  74 eP     42 32.62  -3.2
THY      4.00  42 eP     42 32.89  -3.6
WRH      4.25  22 eP     42 37.87  -2.1
TGL      4.39  84 eP     42 38.00  -4.0
WAX      4.40  88 eP     42 37.58  -4.5
HDA      4.43  28 eP     42 40.53  -1.9
CCB      4.46  22 eP     42 40.67  -2.2
DJE      4.46  37 eP     42 41.55  -1.4
MLY      4.48   5 eP     42 42.80  -0.5
BALM     4.62  80 eP     42 41.23  -4.1
MDM      4.68  19 eP     42 44.31  -1.6
FBA      4.69  21 eP     42 43.89  -2.3
DOT      4.74  46 eP     42 44.28  -2.5
IL1      4.76  26 eP     42 44.31  -2.8
ILB      4.76  26 eP     42 44.62  -2.4
GLM      4.85  22 eP     42 46.02  -2.3
TMW      4.96  53 eP     42 47.21  -2.7
CTGM     5.12  81 eP     42 49.24  -3.0
BC3      5.33  58 ePc    42 52.11  -3.1
IM3      5.49 351 eP     42 54.03  -3.3
IMA      5.57 352 eP     42 55.93  -2.6
PRP      5.70  27 eP     42 57.59  -2.7
BM3      7.54  21 eP     43 22.26  -3.4
        95 obs. associated
-----------------------------------
*  NOV  01, 1993  12h 00m 16.07± 0.19s
    5.854 S ± 9.6km  146.195 E ±12.2km
    DEPTH =  10.0km  (geophysicist)
 EASTERN NEW GUINEA REG., P.N.G. (207)

YYYY     0.45 210 iPd    00 26.30   1.1
MDG      0.73 325 iPc    00 30.70   0.3
LAT      1.14 135 eP     00 37.50   0.1
MNDI     2.54 263 eP     01 04.00   5.8X
WWKK     3.39 311 eP     01 18.80   8.7X
PMG      3.66 165 eP     01 13.90   0.0
WR2     18.13 218 eP     04 28.10  -1.6
     S.D. = 1.4  on   5 of   7 obs.
-----------------------------------
   NOV  01, 1993  12h 14m 11.67± 0.22s
   12.581 N ± 4.3km   87.770 W ± 4.0km
   DEPTH =  72.7km  ( 13 depth phases)
   4.9mb ( 32 obs.)
 NEAR COAST OF NICARAGUA          ( 74)
      Mw 5.4 (HRV). MD 5.2 (UPA).
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 42S, 65C
      Centroid Location:
      Origin Time        12:14:12.0 0.3
      Lat 12.40N 0.03 Lon  87.99W 0.03
      Dep  44.0 2.2 Half-duration  1.2
      Moment Tensor;    Scale 10**17 Nm
        Mrr= 1.44 0.04  Mtt=-1.08 0.06
        Mff=-0.36 0.08  Mrt= 0.22 0.08
```

```
        Mrf= 0.08 0.08  Mtf= 0.52 0.05
      Principal Axes:
       T  Val=  1.47  Plg=83  Azm=325
       N       -0.11       6       117
       P       -1.36       3       207
    Best Double Couple:Mo=1.4*10**17
     NP1:Strike=304 Dip=42 Slip=  99
     NP2:        111     49        82

PYN      0.76 105 iPd    14 28.01   0.4
PYT      1.67  92 iPd    14 40.70   1.3
SSN      2.27 124 eP     14 49.02   1.4
TPX      4.94 298 iP     15 26.75   1.7
                  iS     16 18.00
SCX      6.26 312 eP     15 55.50  12.0X
BRU      6.35 126 iPd    15 46.37   1.3
                  eS     16 53.94
DVD      6.66 128 iPd    15 49.72   0.8
                  eS     16 59.38
ECO      8.55 111 iP     16 15.59   0.5
                  eS     17 42.50
UPA      8.85 113 eP     16 19.87   0.7
OXX      9.74 298 eP     16 34.50   2.9X
IISM    11.23 306 (P)    16 56.00   4.6X
PPM     12.27 303 eP     17 06.50   0.6
ACX     12.44 291 (P)    17 12.50   4.8X
III     12.66 299 eP     17 11.50   0.8
UNM     12.86 303 (P)    17 08.00  -5.4X
CRX     13.31 302 (P)    17 16.00  -3.3X
MRX     14.70 301 eP     17 40.50   3.3X
CGX     16.65 297 (P)    18 07.00   4.9X
SDV     17.23 101 iPc    18 09.00  -0.3
TOV     17.85  97 ePc    18 17.80   0.9
                  iPP    18 18.30
CAR     20.52  94 eP     18 44.00  -2.6
MZX     20.63 303 (P)    18 51.50   4.0X
LLAV    20.64  94 eP     18 42.80  -5.0X
MGP     20.66  72 P      18 48.00   0.2
OLLA    20.72  95 iP     18 47.20  -1.3
LRS     20.95  72 P      18 50.60  -0.2
PNP     21.05  72 P      18 51.90   0.1
CLLP    21.15  72 (P)    18 53.00   0.2
HBF     21.36  17 (P)    18 58.17   3.4X
                  e      19 36.91
SGS     21.56  17 (P)    18 58.85   2.0
                  e      19 15.74  77km
CPD     21.76  73 P      19 00.00   1.1
LPR     21.85  72 P      19 00.80   0.9
OXF     21.88 356 eP     19 00.80   0.8
                  e      19 18.41  80km
PRM     21.96  12 eP     19 02.42   1.6
                  e      19 03.85   5kmX
                  e      19 20.22
UYO     22.33 345 iPc    19 05.70   1.2
JSC     22.40  14 eP     19 07.16   2.1
MYNC    22.64   8 ePc+   19 09.41   2.0
        1.8s   793.42nm          5.8mb
                  e      19 25.94  73km
                  S      23 17.68
LHS     22.70  15 eP     19 09.94   1.9
                  e      19 27.23  77km
TKL     23.26   8 (P)    19 13.16  -0.3
LST     23.90 356 eP     19 20.17   0.5
                  e      19 38.27  80km
MEO     24.18 338 iPd    19 23.10   0.6
FNO     24.20 340 iPc    19 23.30   0.7
OCO     24.47 341 iPd    19 24.80  -0.4
CEH     24.49  17 eP     19 26.65   1.3
        0.4s    60.53nm          5.4mb
ELC     24.63 357 eP     19 25.90  -0.8
                  e      19 56.08 148kmX
BLA     25.40  14 eP     19 34.88   0.9
        1.0s    54.35nm          5.0mb
PCO     25.40 343 iPd    19 14.20 -19.7X
FVM     25.41 355 eP     19 32.74  -1.3
        0.6s    14.64nm          4.6mb
      Z  18s     1.08um          4.4Msz
NAV     25.41  13 eP     19 34.93   0.8
                  e      19 51.45  72km
SLM     26.04 356 P      19 50.00  10.2X
      Z  21s     1.11um          4.4Msz
ACO     26.10 339 iPd    19 40.20  -0.2
CVL     26.62  17 ePc    19 45.08  -0.1
                  e      20 01.50  70km
NNA     26.71 156 eP     19 50.00   3.8X
        1.2s    31.25nm          4.7mb
ALQ     27.97 326 eP     19 57.70   0.0
```

```
        2.2s   125.83nm          5.2mb
                ePcP  23 11.31
TUC     28.83 317 eP    20 06.82   1.5
        1.0s    25.86nm          4.8mb
      Z  19s     0.94um          4.4Msz
                S     25 12.72
PAL     30.81  21 ePc   20 22.84   0.2
GLD     31.14 333 eP    20 26.16   0.3
        1.5s    56.66nm          5.1mb
      Z  21s     1.44um          4.6Msz
                ePP   20 41.17  61kmX
GOL     31.17 333 eP    20 25.92  -0.3
        1.7s   113.53nm          5.3mb
                ePP   20 41.25  63km
LSCT    31.65  21 (P)  20 30.23   0.2
        0.8s    30.04nm          5.1mb
PV08    31.85 328 iPc   20 32.55   0.3
                ePcP  23 21.47
PV10    31.91 327 ePc   20 32.28  -0.4
                ePcP  23 21.52
GLA     32.04 314 iPc   20 33.97   0.3
                iPcP  23 22.32
                epPcP 23 39.43
PV09    32.05 327 iPc   20 34.08   0.1
HRV     32.97  22 P     20 41.91   0.4
      Z  21s     4.26um          5.1Msz
SRU     33.24 327 ePc   20 44.18   0.0
PLM     33.64 313 (P)   20 48.44   0.7
                iPcP  23 27.15
                epPcP 23 44.24
MSU     33.73 324 iPc   20 49.00   0.5
EMUT    33.90 327 iPc   20 50.47   0.5
ARUT    33.98 322 iPc   20 51.49   0.9
PEC     34.14 313 eP    20 52.56   0.8
        0.4s     3.20nm          4.6mb
LBNH    34.36  20 P     20 55.37   1.9
      Z  21s     2.43um          4.9Msz
DAU     34.57 328 ePc   20 56.39   0.6
                ePcP  23 29.01
GAC     34.63  15 eP    20 55.00  -0.8
LPAZ    34.64 145 P     20 56.90   0.0
                LR    31 04.00
GSC     34.64 316 eP    20 56.75   0.6
                ePcP  23 29.68
                epPcP 23 46.30
LPB     34.86 146 P     20 59.00   0.5
                LR    30 46.00
CNCB    35.15 146 P     21 01.00  -0.2
TPNV    35.21 319 eP    21 02.01   0.9
        0.5s     3.58nm          4.6mb
      Z  21s     2.84um          5.0Msz
                ePcP  23 31.43
DUG     35.25 326 ePc   21 01.84   0.5
        1.2s    35.13nm          5.2mb
ISA     35.98 315 P+    21 06.79  -0.7
      Z  18s     0.81um          4.5Msz
HVU     36.35 328 ePc   21 10.94   0.3
TNP     36.50 319 eP    21 12.79   0.8
        0.8s     4.52nm          4.5mb
CCH     36.65 144 P     21 14.40   0.9
                i     23 36.20
BONR    37.13 318 eP    21 18.73   1.4
                iPcP  23 37.56
                epPcP 23 53.78
PHAM    37.41 314 iPc   21 20.74   1.3
CBM     38.03  22 eP    21 24.69   0.3
        1.2s    42.54nm          5.2mb
      Z  22s     2.71um          5.0Msz
                ePP   21 41.00  65km
                S     27 22.25
                SS    30 12.27
ULM     38.14 352 ePc   21 26.30   0.9
LMN     38.46  26 ePc   21 28.30   0.2
CMB     38.54 317 ePc   21 29.04   0.1
        0.8s     4.89nm          4.5mb
      Z  18s     0.46um          4.3Msz
SAO     38.61 314 P     21 40.00  10.5X
      Z  19s     1.14um          4.7Msz
ARN     38.96 315 eP    21 33.30   0.8
LRM     39.19 332 iPc   21 35.10   0.6
MOCB    40.04 147 P     21 43.60   1.7
ORV     40.09 318 eP    21 42.73   1.0
                ePcP  23 46.27
LBFM    41.33 320 (P)   21 52.06   0.0
LGPM    41.68 319 eP    21 54.24  -0.6
                iPcP  23 51.16
JAQ     42.22  11 eP    21 57.00  -2.0
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```
FHC     42.37 318 eP    22 01.52   1.1
        0.9s    70.96nm          5.5mb
CROR    42.93 325 P     22 05.08   0.1
SLA     42.99 150 ePc   22 07.00   1.3
NEW     43.14 331 iPc   22 05.59  -1.0
        0.7s    30.71nm          5.2mb
VGB     43.15 326 eP    22 06.73   0.0
WAH2    43.31 328 P     22 07.71  -0.2
VBEM    43.32 325 P     22 08.74   0.5
DPW     43.38 330 eP    22 08.45  -0.1
SSOR    43.69 324 P     22 10.53  -0.6
FSA     43.88 151 ePc   22 15.00   2.3
EBG     43.93 328 P     22 13.41   0.4
ASR     43.99 326 P     22 14.21   0.6
WTV     44.13 329 P     22 14.59  -0.1
SHW     44.37 326 eP    22 17.71   1.0
LON     44.48 327 eP    22 17.03  -0.5
                e     32 47.66
FMW     44.53 327 P     22 18.00   0.0
RMW     44.93 327 eP    22 19.97  -1.1
BMW     45.09 326 eP    22 21.99  -0.3
JCW     45.46 328 P     22 24.03  -1.2
GMW     45.50 327 iPc   22 24.39  -1.1
MCW     46.23 328 iPc   22 30.93  -0.4
STW     46.34 327 P     22 32.47   0.4
RTLL    47.43 157 iPc   22 41.20   0.3
RTCB    47.45 158 iPc   22 41.50   0.4
BAO     48.32 124 eP    22 47.30  -0.9
                e     22 54.90  25kmX
                e     22 58.80
TCA     49.01 154 iPc   22 53.00  -0.2
PPD     49.62 134 eP    22 56.30  -1.7
SOB1    51.36 113 eP    23 13.70   2.4
FRB     52.85  11 eP    23 20.00  -1.8
        0.8s    28.00nm          5.3mb
RSTA    52.90 134 (P)   23 20.00  -2.7
VAO     53.35 131 eP    23 24.70  -1.4
YKA     53.40 345 eP    23 23.70  -2.1
        0.7s    11.10nm          5.0mb
RES     62.22 358 ePc   24 25.40  -2.1
        0.5s     5.00nm          4.9mb
                pP    24 44.50  73km
BALM    62.32 333 (P)   24 26.96  -1.6
INK     62.99 343 eP    24 31.50  -1.2
        1.0s     8.00nm          4.7mb
                pP    24 52.00  79km
KLU     64.08 333 iPc   24 38.74  -1.4
                epP   24 54.69  59kmX
TOA     64.43 334 eP    24 41.40  -1.0
PMR     65.55 333 eP    24 47.50  -1.9
        0.8s     9.80nm          4.8mb
      Z  20s     1.00um          5.0Msz
MBC     65.85 352 eP    24 50.00  -1.1
        0.6s     5.00nm          4.6mb
SVW     68.41 331 eP    25 05.10  -2.5
IMA     68.89 336 eP    25 06.90  -3.7X
        1.2s     4.60nm          4.3mb
DAG     73.07  13 iPd   25 32.80  -2.5
        0.8s     8.21nm          4.7mb
EHOR    76.54  54 eP    26 15.00  19.1X
EKA     76.70  36 Pc    25 54.30  -2.1
        0.9s     3.30nm          4.3mb
GUD     77.11  51 iPd   26 16.50  17.3X
ECOG    77.93  54 eP    26 23.50  19.8X
EVIA    78.60  53 eP    26 26.50  19.1X
EHUE    78.63  54 iPd   26 28.00  20.4X
ETOR    78.68  51 eP    26 26.50  18.7X
ADK     79.55 321 iPd   26 11.79  -0.3
        0.5s     9.30nm          5.0mb
LKO     80.41  82 P     26 14.06  -3.4X
        0.3s     1.00nm          4.3mb
LIC     81.61  85 P     26 20.30  -3.4X
DOU     81.97  41 P     26 44.80  19.9X
ENN     82.69  40 eP    26 48.00  19.4X
        1.0s    10.00nm
                e     26 53.00  16kmX
WTS     83.00  38 eP    26 50.00  19.9X
        1.0s    15.40nm
                e     26 55.50  17kmX
VITF    83.21  42 PKP   26 51.29  19.9X
NB2     83.40  29 P     26 30.10  -2.0
        0.7s     2.60nm          4.3mb
LOMF    83.95  43 PKP   26 53.75  18.5X
ECH     83.98  42 P     26 50.34  15.0X
CDF     84.02  42 PKP   26 53.87  18.3X
MOF     84.04  42 PKP   26 50.79  15.1X
LANF    84.24  41 P     26 52.05  15.5X
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BBS     84.37  43 PKP   26 52.43  15.1X
FEL     84.62  42 PKP   26 53.87  15.3X
MOX     86.24  39 eP    27 01.90  15.4X
                e     27 11.60  30kmX
GRF     86.25  40 eP    26 44.60  -1.9
      Z  23s     0.80um          5.1MszX
                e     27 03.30  67km
CLL     86.91  38 i(P)  26 46.10  -3.6X
                e     27 05.00  68km
BRG     87.60  38 eP    27 08.50  15.5X
        2.0s    38.00nm
KHC     87.88  40 eP    26 52.00  -2.5
        1.0s    12.50nm          5.0mb
      Z  22s     0.70um          5.0Msz
                e     27 15.00  85kmX
                e     28 10.50
                e     30 35.00
                e     31 05.50
GEC2    88.04  40 ePKPd 26 52.90  -2.4
        0.9s     1.35nm          4.1mb
                e     26 55.20   7kmX
                e     26 57.50
                e     27 13.00
                e     27 20.30
BUL    118.80 106 iPKPc 32 54.00  -0.2
        1.0s     7.00nm
KRI    119.49 102 iPKPd 33 10.50  14.9X
HHC    123.91 342 ePKP  33 02.60  -0.8
TIA    126.08 335 ePKP  33 07.20  -0.4
TIY    126.50 340 ePKP  33 08.20  -0.3
      Z  24s     1.35um          5.5MszX
GTA    127.80 353 ePKP  33 09.80  -1.2
SSE    128.43 328 PKP   33 12.50   0.3
LZH    130.37 348 ePKP  33 12.00  -4.0X
      Z  24s     0.75um          5.3MszX
XAN    130.99 342 PKP   33 17.00  -0.1
GYA    138.74 340 PKP   33 31.60  -0.4
WRA    139.00 254 PKP   33 24.80  -7.7X
        0.6s     1.90nm
ASPA   139.03 248 ePKP  33 33.00   0.5
        1.6s    13.30nm
KNA    144.46 261 ePKP  33 41.50  -0.6
PPR    145.56 309 iPKPc 33 28.00 -16.1X
        1.0s   152.00nm
HYB    147.28  25 ePKP  33 46.80   0.0
CHTO   148.11 348 ePKP  33 47.30  -0.8
LOE    148.76 342 ePKP  33 51.90   2.7X
BDT    149.62 347 ePKP  33 49.50  -0.9
KKM    149.82 306 ePKPd 33 59.00   8.0X
GBA    150.14  30 PKP   33 55.00   3.7X
NST    150.86 344 ePKP  33 57.50   5.2X
      S.D. = 1.1  on 142 of 188 obs.
-----------------------------------
   NOV  01, 1993  12h 22m 27.48± 0.83s
   36.097 N ± 7.9km  140.298 E ± 7.8km
   DEPTH =  83.3 ±  5.9 km
   4.6mb ( 21 obs.)
 NEAR EAST COAST OF HONSHU, JAPAN(228)
KAKJ     0.15 317 iP+    22 39.50  -0.1
                iS    22 47.40
CHJJ     1.06 268 P     22 47.30  -0.4
                S     23 02.20
NIIJ     1.55 318 P     22 54.50   0.6
MAT      1.74 285 iPd   22 56.90   0.3
                eS    23 14.00
IIDJ     2.04 253 P     23 01.60   1.1
                S     23 26.40
MTMJ     2.07 284 iPd   23 01.90   0.8
                S     23 27.70
YAMJ     2.08 354 P     23 02.70   1.6
                S     23 28.60
OFUJ     3.17  20 P     23 16.20   0.1
                S     23 52.50
TSRJ     3.55 262 P     23 22.00   0.6
WKYJ     4.28 245 P     23 31.20  -0.5
AOMJ     4.46   1 P     23 34.90   0.9
TKSJ     5.54 249 P     23 48.70  -0.5
YONJ     5.64 263 P     23 50.50   0.0
MRRJ     6.35   5 eP    23 58.40  -1.8
                eS    25 08.90
SHK      6.42 258 eP    24 01.00  -0.3
HOOJ     6.69  19 P     24 02.70  -2.3
                eS    25 15.30
KUSJ     7.78  25 eP    24 15.80  -4.1X
                eS    25 39.20
SHNJ     7.78 258 eP    24 21.50   1.5
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01d 12h

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ASAJ    8.21  12 eP    24 23.20  -2.7
KUMJ    8.60 248 P     24 32.20   1.0
KAGJ    9.25 241 P     24 40.40   0.4
CN2    13.73 309 eP    25 40.40   0.7
        0.6s     8.00nm          4.3mb
     Z  20s     0.31um           4.7Msz
SNY    14.20 299 Pc    25 47.20   1.4
        0.8s    21.00nm          4.5mb
TIA    18.71 277 eP    26 39.10  -2.9
BJI    19.38 289 eP    26 46.50  -2.7
        1.5s    25.00nm          4.3mb
     Z  24s     0.97um
TIY    22.31 282 eP    27 18.40  -0.6
HHC    22.94 291 P     27 24.20  -1.0
        0.8s     9.10nm          4.2mb
BTO    24.11 290 eP    27 31.80  -4.7X
XAN    25.71 275 P     27 49.50  -2.1
        0.5s    22.00nm          4.9mb
GYA    30.18 261 P     28 33.00   0.9
        1.0s    18.00nm          4.8mb
CD2    30.78 271 eP    28 35.20  -2.0
GTA    31.99 288 eP    28 45.40  -2.4
        1.0s     4.00nm          4.2mb
LSA    41.40 276 Pc    30 08.80   1.1
        0.8s     7.00nm          4.5mb
GUN    46.36 276 P     30 48.60   1.2
        0.4s    19.00nm          5.3mb
PKI    46.88 276 P     30 51.80   0.3
        0.4s    12.00nm          5.1mb
KKN    46.89 276 P     30 52.20   0.7
        0.6s    26.00nm          5.3mb
DMN    47.10 276 P     30 54.20   0.9
GKN    47.32 277 P     30 55.40   0.6
KSH    49.98 294 eP    31 17.50   2.3
        1.0s    20.00nm          5.1mb
     Z  24s     0.82um           4.7MszX
INK    55.63  27 eP    31 57.00   0.5
        0.6s     5.00nm          4.7mb
                pP     32 15.00  70kmX
WRA    56.02 187 P     31 58.30  -1.5
        0.6s     5.80nm          4.8mb
WR2    56.02 187 iPd   31 58.10  -1.7
        0.4s    15.00nm          5.4mb
HYB    57.28 268 eP    32 08.70  -0.3
ASPA   59.75 187 eP    32 24.40  -1.4
        0.5s     8.90nm          5.2mb
GBA    60.25 265 P     32 29.00  -0.4
KAF    68.73 333 iP    33 23.10  -0.7
        0.4s     2.20nm          4.4mb
COOL   69.01 198 eP    33 50.20  24.3X
BAL    69.95 202 eP    33 58.50  26.9X
NUR    70.35 332 eP    33 33.10  -0.6
MUN    71.38 201 eP    33 52.20  11.9X
NWAO   71.98 200 eP    33 55.20  11.4X
NB2    74.70 337 P     33 59.20  -0.2
        0.8s     3.00nm          4.2mb
LRM    75.44  44 iPc   34 05.40   1.2
DUG    78.65  48 iPc   34 23.90   1.9
        0.8s     4.96nm          4.5mb
KHC    82.87 328 eP    34 46.00   2.1
                e      35 07.50
GEC2   83.03 328 ePd   34 45.00   0.2
        0.8s     0.84nm          3.7mb
                e      34 51.80
                e      34 58.20
                e      35 03.80
ALQ    85.88  49 iPd   35 01.91   2.4
        0.9s     5.28nm          4.6mb
LPAZ  147.94  59 PKP   42 04.30   1.7
LPB   148.13  60 (PKP) 42 05.00   2.4X
CNCB  148.40  60 PKP   42 06.00   2.8X
MOCB  152.97  64 PKP   42 18.70   8.9X
SOB1  153.21   3 ePKP  42 18.30   8.5X
     S.D. = 1.4  on  52 of  62 obs.
-----------------------------------
*  NOV  01, 1993  13h 48m 37.76± 1.03s
    4.455 S ± 9.5km  153.457 E ± 9.6km
   DEPTH = 102.9 ±  8.8 km
   4.8mb (  6 obs.)
 NEW IRELAND REGION, P.N.G.        (190)

RAB     1.32 281 iPd   49 02.00  -0.3
        0.3s  4675.33nm
                iS     49 20.50
KVG     3.23 305 ePd   49 28.00   0.6
LAT     6.79 251 iPc   50 15.20  -1.3
PMG     7.95 231 eP    50 32.80   0.4
HNR     8.12 128 eP    50 35.00   0.3
                eS     51 55.00
WWKK    9.84 274 e(P)  51 00.80   2.7X
DZM    21.57 145 iPc   53 20.00  -0.5
BRS    22.82 182 iPd   53 34.00   1.3
MTN    23.58 248 iPd   53 40.20   0.1
        0.7s    42.00nm          4.9mb
ARMA   25.88 184 eP    54 01.50  -0.4
        0.7s     9.00nm          4.4mb
ASPA   26.85 223 iPc   54 12.80   2.2
        0.6s    13.90nm          4.7mb
STK    29.47 201 eP    54 32.00  -2.1
MEEK   39.93 233 eP    56 06.80   3.2X
GUN    72.50 301 P     59 56.20   0.2
        0.8s    30.00nm          5.2mb
PKI    72.82 300 P     59 57.60  -0.2
KKN    72.99 301 P     59 58.80   0.1
        0.7s    14.00nm          4.9mb
DMN    73.09 300 P     59 59.70   0.4
GKN    73.59 301 P     00 02.10   0.0
        0.4s     7.00nm          4.8mb
GEC2  124.10 329 ePKP  07 25.00  -0.9
        0.5s     0.48nm
MRA   127.79 137 e(Pdif04 21.20   4.5X
     S.D. = 1.1  on  17 of  20 obs.
-----------------------------------
   NOV  01, 1993  13h 54m 18.70± 0.34s
    2.955 S ± 5.6km  126.250 E ± 7.7km
   DEPTH =  33.0km  (normal)
   4.8mb (  5 obs.)
 CERAM SEA                         (270)

MNI     4.59 342 ePd   55 27.00  -0.6
SWI     5.42  68 ePc   55 39.00  -0.3
                eS     56 39.50
BIP    11.11   0 eP    56 54.00  -4.4X
WR2    18.66 155 eP    58 33.00  -3.2X
        0.5s    34.60nm          4.8mb
                i      58 35.40
                e      58 46.20
                eS     02 05.10
QIS    21.81 144 eP    59 10.00   0.0
ASPA   21.88 161 iPc   59 10.00  -0.8
        0.8s    48.00nm          5.0mb
                eS     03 10.50
WARB   23.10 179 eP    59 23.50   0.7
        0.8s    37.00nm          4.9mb
MEEK   24.66 197 eP    59 37.70  -0.2
CTA    25.90 133 iP    59 51.00   1.3
FORT   27.73 177 iPd   00 05.10  -1.1
        0.4s     9.00nm          4.8mb
XAN    40.26 337 P     01 53.50  -0.9
                pP     01 57.00  12kmX
BJI    43.77 349 eP    02 09.00 -13.9X
LZH    44.12 334 eP    02 27.00   1.0
        1.2s    15.00nm          4.7mb
GTA    48.67 333 eP    03 02.00   0.1
GUN    49.50 311 P     03 09.30   0.6
PKI    49.68 310 P     03 09.80  -0.3
KKN    49.89 311 P     03 11.60   0.0
DMN    49.93 310 P     03 12.30   0.4
GKN    50.48 310 P     03 16.30   0.3
HYB    51.21 295 eP    03 21.00  -0.5
WMQ    58.00 328 P     04 11.00   0.3
CNCB  155.85 145 PKP   14 24.10  11.9X
LPB   156.00 144 ePKP  14 21.00   8.7X
LPAZ  156.18 144 PKP   14 25.50  12.7X
                i      14 41.70
     S.D. = 0.7  on  18 of  24 obs.
-----------------------------------
?  NOV  01, 1993  14h 18m 45.62± 3.64s
    61.152 N ± 9.3km    3.806 E ±35.8km
   DEPTH =  10.0km  (geophysicist)
 NORWEGIAN SEA                     (642)
      MD 2.2 (BER).

FOO     0.75  53 eP    18 59.34  -0.9
                eS     19 08.48
ASK     0.96 134 eP    19 03.91   0.1
                eS     19 17.55
EGD     1.13 141 eP    19 06.89   0.2
                eS     19 22.62
KMY     2.08 159 eP    19 20.49  -0.4
MOL     2.27  50 eP    19 24.63   0.9
                eSg    19 53.34
     S.D. = 0.9  on   5 of   5 obs.
-----------------------------------
   NOV  01, 1993  14h 50m 22.55± 0.45s
   51.541 N ± 3.7km   16.049 E ± 3.2km
   DEPTH =  22.0 ±  3.8 km
   4.5mb (  1 obs.)
 POLAND                            (548)
      ML 4.6 (GRF), 4.5 (WAR), 4.3
      (VIE).

KSP     0.71 168 iPd   50 35.60  -0.6
        0.3s   530.00nm
                i      50 36.20
                iS     50 43.80
BRG     1.48 244 iPn   50 49.80   1.8
                iPg    50 50.80
                iSg    51 10.60
PRU     1.83 212 iPnd  50 53.70   0.7
        0.5s   784.00nm
                Pg     50 56.10
                Sn     51 12.90
                Sg     51 17.10
                i      51 20.00
CLL     1.92 264 iPn   50 55.20   0.8
        1.1s   180.00nm
                iPg    50 58.10
                iSn    51 18.30
                iSg    51 24.50
BRN     1.97 298 eP    50 57.00   1.9
RAC     1.99 136 iPn   50 55.90   0.4
        1.0s     2.70nm
                iPg    50 59.30
                i      51 19.40
                iSg    51 26.00
OJC     2.72 118 eP    51 04.10  -1.7
                iPg    51 13.10
                eS     51 36.70
                iSg    51 48.60
KHC     2.89 214 Pn    51 08.60   0.4
        0.9s   370.00nm
                ePg    51 16.90
                eSn    51 41.50
                eSg    51 53.00
                e      52 21.50
HOF     2.91 247 ePn   51 09.40   0.9
MOX     2.94 254 iPn   51 09.80   1.0
                iPg    51 18.90
                iSg    51 58.60
GEC2    3.09 210 Pn    51 12.40   1.2
                Pg     51 19.30
                Sg     52 00.00
WET     3.14 221 iPnd  51 13.30   1.5
VKA     3.28 177 iPnc  51 14.90   1.1
                iPg    51 23.70
                iSg    52 07.40
ZST     3.42 168 ePn   51 15.90   0.2
                i      51 25.70
                i(Sn)  51 54.90
                i(Sb)  52 01.80
                Lg     52 23.00
SPC     3.57 130 ePn   51 17.20  -0.9
                i(Pg)  51 31.10
                i      52 09.60
GRF     3.59 241 ePn   51 19.40   1.2
                ePg    51 31.30
                e(Sn)  52 03.50
                eSg    52 17.70
BSD     3.64 350 iPc   51 19.30   0.4
        0.4s    26.00nm
                iS     52 03.00
KMR     3.70 200 iPn-  51 20.90   1.1
                iPg    51 32.60
                iSn    52 03.30
                iSg    52 17.40
SOP     3.88 175 eP    51 22.00  -0.2
SRO     4.01 158 e(Pn) 51 27.70   3.6X
                i      51 42.30
                i      52 18.70
                i      52 38.00
BHG     4.34 210 iPnd  51 30.40   1.6
FUR     4.58 224 iPnc  51 32.50   0.3
COP     4.68 334 eP    51 31.00  -2.5
                i      51 59.00
KBA     4.80 203 iPnd  51 35.70   0.2
                i      51 45.10
                i      52 35.60
                iSg    52 47.20
TNS     4.99 258 ePnd  51 37.80  -0.2
                ePgc   51 59.80
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                iSg   53 04.30
TOD     5.01 250 ePn   51 37.10  -1.2
MOTA    5.29 219 iPnc  51 42.10  -0.4
                i     52 05.60
                i     52 43.90
                iSg   53 03.50
SQTA    5.36 218 iPn   51 43.50   0.2
                iSn   52 36.80
                iSg   53 05.50
LVV     5.36 106 iP    51 52.00   8.8X
                iS    52 47.00
LJU     5.59 191 eP    51 47.00   0.5
                e(S)  53 03.00
BNS     5.60 268 iPnc  51 46.70   0.1
      1.4s   273.00nm          5.7mb X
                ePg   52 08.00
                (Sn)  53 14.00
                Sg    53 24.90
PTJ     5.65 181 iP    51 48.00   0.6
ABH     5.65 256 ePn   51 47.00  -0.4
OGA     5.72 217 eP    51 49.50   1.0
ZAG     5.73 180 i(P)  51 46.50  -1.9
WTS     5.76 278 ePn   51 49.50   0.8
      0.7s    27.40nm          5.0mb X
                eSn   53 39.00
LANF    5.87 247 P     51 49.45  -1.0
RUP     6.01 256 ePn   51 51.60  -0.8
TRI     6.03 195 e(Pn) 51 53.30   0.7
                e(Sn) 53 10.10
                e     53 34.20
VBY     6.06 185 eP    51 52.60  -0.5
                i(S)  53 49.70
RIY     6.30 191 eP    51 56.40  -0.1
FEL     6.37 238 ePn   51 55.90  -1.7
MUD     6.38 323 iP    52 02.90   5.3X
                i     52 30.00
ENN     6.42 267 ePn   51 59.50   1.4
      0.7s     7.90nm          4.7mb X
                eSn   53 49.00
WLS     6.42 244 P     51 56.46  -1.8
LIBD    6.43 241 P     51 55.19  -3.1X
CDF     6.47 244 P     51 57.39  -1.5
WLF     6.57 257 iPc   52 00.57   0.3
      1.1s    18.50nm          4.9mb X
                i     53 53.34
ECH     6.64 243 P     51 58.99  -2.3
MOF     6.86 241 P     52 01.23  -3.2X
BBS     6.90 237 P     52 00.52  -4.4X
BZS     6.98 146 eP    51 53.00 -13.0X
VITF    7.30 247 P     52 08.04  -2.5
LOMF    7.33 239 P     52 05.78  -5.2X
UCC     7.39 269 eP    52 41.00  29.3X
                i     54 20.00
DOU     7.40 263 P     52 12.40   0.5
                i     54 17.90
SNF     7.49 267 P     52 13.70   0.5
                e     54 18.30
ORX     7.97 225 P     52 22.74   2.8X
UPP     8.39   5 iP    52 28.00   2.4X
                i     53 56.50
                i     54 54.30
LSD     8.48 228 P     52 27.64   0.5
PCP     8.62 219 P     52 29.10   0.2
RSP     8.66 226 P     52 30.61   1.0
MLR     8.93 129 eP    52 38.50   5.3X
FIN     9.03 219 P     52 34.55   0.0
VRI     9.05 125 eP    52 34.00  -0.9
RRL     9.06 227 P     52 35.28   0.1
ROB     9.09 220 P     52 34.91  -0.5
PZZ     9.24 224 P     52 36.10  -1.5
ENR     9.33 222 P     52 37.66  -1.1
STV     9.36 222 P     52 38.07  -1.0
IMI     9.40 219 P     52 38.99  -0.8
NUR    10.19  25 iP    52 48.40  -2.0
      0.5s    12.00nm          5.5mb X
PUL    11.50  39 (P)   53 05.00  -3.4X
      1.0s   140.00nm          6.2mb X
KAF    11.97  24 eP    53 10.80  -3.9X
      0.3s     2.10nm          4.9mb X
OBN    12.78  66 iPd   53 21.00  -4.5X
      1.2s    31.00nm          5.3mb X
                iS    55 36.00
MOS    13.45  63 eP    53 50.00  15.6X
ARU    25.18  62 eP    55 47.00  -0.5
SVE    26.25  61 ePc   55 59.20   1.8
ZAK    51.74  55 eP    59 32.00   2.1
      1.4s     9.00nm          4.5mb
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GKN     55.50  87 P     59 59.00   0.8
KKN     56.05  87 P     00 03.40   1.1
DMN     56.07  87 P     00 02.60   0.1
PKI     56.29  87 P     00 03.60  -0.5
GUN     56.34  86 P     00 05.80   1.3
      S.D. = 1.2  on  68 of  84 obs.
-----------------------------------
*  NOV  01, 1993  16h 39m 16.34± 1.14s
   36.843 N ± 9.0km  142.031 E ±11.5km
   DEPTH =  10.0km  (geophysicist)
   3.8mb (  1 obs.)
 OFF EAST COAST OF HONSHU, JAPAN (229)

KAKJ     1.63 248 P     39 44.20  -0.9
                S     40 01.70
YAMJ     2.07 311 eP    39 51.00  -0.5
                eS    40 13.70
OFUJ     2.25 353 eP    39 54.10  -0.1
                eS    40 20.00
NIIJ     2.46 280 P     39 57.00  -0.1
                S     40 26.30
CHJJ     2.57 253 iPd   39 57.70  -1.0
                S     40 26.50
MAT      3.09 266 iPd   40 06.00   0.0
                eS    40 43.00
IIDJ     3.60 249 P     40 14.50   1.1
                S     40 55.00
AOMJ     3.93 341 eP    40 19.30   1.3
HOOJ     5.62  10 eP    40 41.30  -0.6
                eS    41 42.20
MRRJ     5.62 353 eP    40 43.40   1.4
KUSJ     6.58  17 eP    40 53.80  -1.6
                eS    42 03.50
WRA     56.94 189 P     49 04.90   0.8
      0.5s     0.50nm          3.8mb
      S.D. = 1.1  on  12 of  12 obs.
-----------------------------------
*  NOV  01, 1993  16h 50m 06.62± 1.52s
   19.919 N ±13.5km   71.148 W ±11.4km
   DEPTH =  10.0km  (geophysicist)
   3.8mb (  1 obs.)
 DOMINICAN REPUBLIC REGION       ( 88)

MGP      4.29 116 P     51 14.40   1.0
LRS      4.38 111 P     51 15.10   0.4
APR      4.42 109 P     51 16.10   0.8
PNP      4.61 113 (P)   51 18.10   0.1
CLLP     4.70 112 (P)   51 19.80   0.6
SJG      5.06 110 P     51 22.70  -1.7
LPR      5.24 107 P     51 25.00  -2.0
CPD      5.29 110 (P)   51 20.00  -7.7X
CANV     9.11 165 eP    52 22.00   0.8
MORO     9.40 163 eP    52 06.30 -18.9X
TOV     10.16 172 eP    52 37.40   1.7
LLAV    10.28 155 eP    52 38.30   0.9
OLLA    10.70 156 eP    52 43.00  -0.1
SDV     10.98 177 eP    52 45.00  -2.1
LPAZ    36.10 175 P     57 11.40  -0.1
LPB     36.35 175 P     57 13.00  -0.3
CNCB    36.63 175 P     57 14.90  -1.0
GEC2    71.94  44 eP    01 33.20   0.9
      1.0s     0.78nm          3.8mb
                e     01 38.20
                e     01 51.50
      S.D. = 1.2  on  16 of  18 obs.
-----------------------------------
   NOV  01, 1993  17h 09m 22.23± 1.15s
   46.214 N ± 5.8km   16.498 E ±11.0km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION      (383)
      ML 2.8 (VIE), 2.8 (ZAG). MD 2.8
      (TRI). Felt (IV) at Ludbreg,
      Croatia.

PTJ      0.49 230 iPgd  09 30.90  -1.3
                iSg   09 38.50
ZAG      0.54 222 iPg   09 31.80  -1.3
                iSg   09 39.60
VBY      1.12 231 iPgd  09 42.90  -0.3
                iSg   10 00.10
LJU      1.38 264 ePn   09 48.00   0.5
      1.4s   200.00nm
                eSg   10 05.50
SOP      1.47   2 ePn   09 49.00   0.2
CEY      1.52 253 ePn   09 49.70   0.2
      0.7s    90.00nm
                eSn   10 09.40
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RIY      1.71 240 ePn   09 53.40   1.1
                iSg   10 18.10
VOY      1.82 265 iPnc  09 55.20   1.3
                e     10 17.80
                eSn   10 22.60
TRI      1.97 256 e(Pg) 09 57.70   1.7
                e(PgPg10 05.10
                e(Sg) 10 22.50
ZST      2.03  12 eP    09 48.40  -8.4X
                i     10 01.30
                i(Sn) 10 18.30
                Lg    10 29.50
SRO      2.03  37 iPn   09 58.60   1.8X
                i(Sn) 10 23.70
VKA      2.06 357 ePg   10 00.00   2.8X
                iSg   10 27.20
HVAR     3.04 181 e(Pn) 10 11.40   0.2
GEC2     3.24 325 Pn    10 13.50  -0.7
                Sg    11 06.50
WTTA     3.50 289 iPnc  10 17.40  -0.6
                iPg   10 31.10
KHC      3.52 327 ePn   10 17.50  -0.6
                eSn   10 56.50
                eSg   11 16.00
SQTA     3.77 287 i(Pn) 10 21.30  -0.5
                i     10 33.00
PRU      4.00 342 Pg    10 53.10  28.3X
      0.6s    10.30nm
                Sn    11 19.70
                Sg    11 28.20
      S.D. = 1.0  on  14 of  18 obs.
-----------------------------------
   NOV  01, 1993  17h 19m 25.23± 0.76s
   10.065 S ± 3.0km  161.210 E ± 3.3km
   DEPTH = 117.6 ±  6.5 km
   5.8mb ( 73 obs.)
 SOLOMON ISLANDS                 (193)
      Mw 5.7 (GS), 5.6 (HRV).
      Mo=5.3*10**17 Nm (PPT). Felt
      (III) at Honiara.
      RADIATED ENERGY
       No. of sta:  11  Focal mech.  M
       Energy        3.6±1.0*10**12 Nm
      MOMENT TENSOR SOLUTION
      Dep  71            No. of sta: 11
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 2.09        Mtt=-3.47
        Mff= 1.39        Mrt= 0.35
        Mrf= 2.04        Mtf= 1.79
       Principal axes:
        T  Val=  4.09  Plg=46  Azm=286
        N       -0.01      44      112
        P       -4.08       3       19
      Best Double Couple:Mo=4.1*10**17
       NP1:Strike= 73 Dip=57 Slip=  34
       NP2:        323     62      142
      CENTROID, MOMENT TENSOR    (HRV)
      Data Used: GDSN
      L.P.B.: 35S, 60C
      Centroid Location:
      Origin Time       17:19:23.5 0.2
      Lat 10.17S 0.03 Lon 161.56E 0.03
      Dep  84.1 1.6 Half-duration  1.5
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 1.37 0.04  Mtt=-1.92 0.09
        Mff= 0.55 0.09  Mrt= 0.35 0.05
        Mrf= 1.06 0.05  Mtf= 2.21 0.06
       Principal Axes:
        T  Val=  2.73  Plg=39  Azm=299
        N        0.50      51      125
        P       -3.23       3       31
      Best Double Couple:Mo=3.0*10**17
       NP1:Strike= 82 Dip=61 Slip=  27
       NP2:        338     66      148

HNR      1.39 297 iPc   19 50.50  -1.1
BKM     10.18 139 iPc   21 43.50  -6.1X
                iS    23 31.00
PVC     10.28 139 iPc   21 46.50  -4.4X
RAB     10.70 302 e(P)  21 55.00  -1.5
                iS    24 20.00
KVG     12.72 305 eP    22 22.70  -0.3
DZM     12.95 158 iPc   22 23.20  -2.9X
                iS    24 42.00
PMG     13.87 272 iPc   22 41.30   3.4X
LAT     14.46 282 ePc   22 47.80   2.3
MDG     16.02 286 eP    23 07.60   2.4
```

01d 17h

CTA	17.53	234	P	23 26.89	3.1X
CTAO	17.53	234	eP	23 26.25	2.4
	1.4s	1315.95nm			6.0mb
MNDI	17.80	281	eP	23 30.00	2.6
VUN	18.49	117	eP	23 47.30	12.2X
SVA	18.53	117	eP	23 46.50	11.0X
WWKK	18.59	289	eP	23 36.60	0.4
BRS	18.98	204	iPd	23 40.00	-0.3
			ipP	23 50.00	
			i	24 33.00	
			iS	27 09.50	
JAY	21.70	289	ePc	24 06.70	-1.3
			eS	26 03.70	
YOMI	21.79	288	P	24 07.90	-1.0
ARMA	22.13	202	iPd	24 12.20	0.0
	0.9s	84.00nm			5.1mb
			epP	24 32.00	92kmX
QIS	23.27	241	eP	24 24.40	1.1
BWA	26.93	204	iPc	24 56.30	-1.1
			e	25 14.80	
			e	25 19.90	
			e	25 27.60	
CNB	27.36	201	eP	25 01.80	0.5
CAN	27.50	202	iPc	25 02.50	0.0
			ipP	25 18.70	69kmX
			i	25 28.50	
WB5	27.67	246	iPc	25 04.20	0.0
			ipP	25 27.50	106kmX
			ePcP	28 14.50	
			iS	29 40.00	
			iScP	31 43.70	
WR2	27.69	246	iPd	25 04.30	-0.1
	0.8s	22.60nm			4.9mb
			i	25 27.30	
			iPP	28 10.30	
STK	28.31	217	P	25 09.10	-0.7
GUA	28.49	325	eP	25 09.80	-1.7
	1.0s	264.00nm			5.9mb
GUMO	28.55	325	eP	25 10.77	-1.3
	0.9s	184.99nm			5.7mb
PJG	28.55	325	eP	25 10.80	-1.3
ASPA	29.35	239	iPc	25 18.10	-1.2
	1.1s	98.10nm			5.4mb
	Z 21s	3.50um			5.0Msz
MTN	29.60	262	eP	25 21.20	-0.3
	0.6s	176.00nm			5.9mb
TOO	30.83	205	iPd	25 32.60	0.4
	0.7s	30.00nm			5.1mb
URZ	31.50	156	eP	25 37.60	-0.3
KNA	32.10	256	eP	25 43.50	0.1
	1.0s	810.00nm			6.4mb
ADE	32.19	216	iPc	25 44.20	0.1
MNG	32.95	160	eP	25 47.70	-2.9X
WARB	36.40	239	eP	26 20.50	0.3
	0.6s	91.00nm			5.8mb
TUZ	36.48	170	eP	26 19.60	-0.9
			e	26 42.70	
FORT	37.06	231	eP	26 26.00	0.4
MNI	37.97	285	ePd	26 32.00	-1.4
RAR	39.07	111	eP	26 39.97	-2.5
BIP	39.26	296	ePd	26 43.50	-0.7
DAV	39.37	294	eP	26 43.50	-1.6
BUNI	41.06	276	P	26 59.00	0.0
MBL	41.23	249	iPc	27 00.20	-0.1
MKS	41.62	273	iPd	27 04.50	0.9
PLP	41.74	299	ePc	27 03.50	-1.0
TANI	42.02	276	P	27 06.20	-0.7
MAP	42.21	298	ePd	27 08.00	-0.4
COOL	42.55	235	iPc	27 11.00	-0.1
	0.8s	139.00nm			5.8mb
MEEK	43.42	242	eP	27 19.00	0.9
KEDI	44.59	269	P	27 25.80	-2.0
GQP	45.23	301	ePc	27 34.00	1.3
TSM	45.46	286	ePd	27 34.90	0.4
	0.8s	313.10nm			6.1mb
KLB	45.52	235	eP	27 34.50	-0.3
	0.8s	30.00nm			5.1mb
BAL	46.09	237	iPc	27 39.50	0.2
	0.7s	242.00nm			6.1mb
MRWA	46.31	239	iPc	27 41.30	0.2
	0.4s	39.00nm			5.5mb
PGP	46.31	300	ePc	27 41.20	0.0
NWAO	46.37	234	ePc	27 41.33	-0.2
	0.9s	125.00nm			5.7mb
SRDI	46.45	268	P	27 28.40	-14.0X
PPR	46.64	294	iPd	27 45.00	1.2
MUN	46.90	235	iPc	27 46.20	0.5
	0.7s	119.00nm			5.8mb
RKG	47.10	232	eP	27 47.50	0.2
	1.0s	65.00nm			5.3mb
KKM	47.59	288	iPc	27 53.00	1.6
	0.9s	357.20nm			6.1mb
CVP	47.70	305	iPd	27 52.00	-0.1
BAG	48.04	303	eP	27 54.50	-0.5
	0.7s	232.88nm			6.1mb
KAGJ	50.28	326	iP+	28 12.30	0.7
WKYJ	50.31	332	P	28 12.20	0.3
TKSJ	50.84	331	P	28 16.30	0.4
OPA	50.97	51	eP	28 16.14	-0.9
			epP	28 34.73	74kmX
MAJO	51.16	336	ePc	28 17.49	-0.8
	0.6s	176.44nm			6.2mb
MAT	51.16	336	iPc	28 17.30	-1.0
	0.7s	112.33nm			5.9mb
	Z 20s	0.35um			4.4Msz
			eS	35 30.00	
KUMJ	51.34	327	iP+	28 19.80	0.1
KKH	51.45	55	eP	28 20.08	-0.6
			epP	28 40.38	82kmX
HKL	51.80	54	eP	28 22.44	-1.4
			e	28 44.17	
YAMJ	51.91	339	eP	28 23.40	-0.5
SHK	51.95	330	eP	28 24.10	-0.2
	0.4s	305.08nm			6.6mb
TATO	52.08	313	eP	28 25.57	0.2
	0.7s	453.83nm			6.5mb
YONJ	52.10	331	P	28 25.40	0.0
OFUJ	52.17	341	eP	28 25.40	-0.4
SHNJ	52.42	328	P	28 27.20	-0.5
SINI	53.16	269	P	28 34.10	0.4
PACI	53.79	269	P	28 35.00	-3.4X
AOMJ	53.93	340	eP	28 39.20	0.5
KALI	53.97	269	P	28 39.00	-0.7
QZH	54.19	311	P	28 41.00	0.1
	1.0s	290.00nm			6.2mb
HOOJ	54.72	344	eP	28 45.20	0.8
KUSJ	55.01	345	eP	28 46.20	-0.4
MRRJ	55.40	342	eP	28 49.20	-0.1
KLI	56.06	271	eP	28 53.00	-1.7
SSE	56.10	318	Pc	28 53.50	-1.1
	1.0s	240.00nm			6.1mb
	Z 16s	0.40um			4.6MszX
			pP	29 16.50	93kmX
			sP	29 25.50	
			eS	36 40.00	
HKC	56.22	305	iP	28 56.40	0.8
ASAJ	56.50	344	eP	28 58.00	0.7
GZH	57.27	306	iPc	29 03.60	0.6
NJ2	58.24	318	Pc	29 10.00	0.3
	1.0s	140.00nm			5.9mb
	Z 20s	0.59um			4.7Msz
			S	37 08.00	
QIZ	58.31	300	Pc	29 10.40	0.0
KGM	58.86	279	ePc	29 14.00	-0.3
	0.8s	102.10nm			5.9mb
YSS	59.17	345	iPc	29 15.90	0.0
	0.9s	160.00nm			6.1mb
	Z 18s	1.30um			5.1Msz
VLA	59.30	335	iPd	29 17.00	0.2
	1.2s	220.00nm			6.1mb
			e	29 26.00	
			e	30 08.00	
WHN	60.45	314	iPc	29 25.00	0.2
	0.7s	120.00nm			6.0mb
KLM	60.74	279	ePc	29 26.00	-1.1
DL2	61.08	325	iPc	29 29.00	0.0
MDJ	61.48	335	ePc	29 31.76	0.1
	1.4s	510.00nm			6.3mb
			eS	37 47.00	
TIA	61.97	320	Pc	29 34.00	-1.0
	1.2s	160.00nm			5.9mb
	Z 30s	0.79um			4.7MszX
SNY	62.12	329	Pc	29 35.60	-0.3
	1.4s	200.00nm			5.9mb
	Z 40s	1.13um			4.7MszX
			S	37 50.00	
CN2	62.69	332	iPc	29 39.40	-0.2
	1.0s	390.00nm			6.3mb
			epP	30 07.00	112kmX
			S	38 03.00	
PET	62.87	358	eP	29 40.00	-0.6
	1.0s	115.00nm			5.8mb
			e	38 10.00	
GYA	64.21	306	Pc	29 50.00	-0.1
	1.0s	100.00nm			5.7mb
ADK	64.58	15	eP	29 51.90	0.1
	0.8s	94.60nm			5.8mb
LOE	64.79	295	iPc	29 53.00	-0.8
BJI	64.97	323	ePc	29 54.34	-0.2
	1.4s	170.00nm			5.8mb
	Z 20s	0.48um			4.7Msz
			eS	38 28.00	
			esS	39 04.00	
			eSS	42 44.00	
NST	65.66	292	iPc	29 59.00	-0.3
CSY	65.72	200	P	30 10.69	11.7X
TIY	65.86	319	eP	30 00.60	0.2
	1.4s	110.00nm			5.6mb
	Z 33s	1.34um			4.9MszX
XAN	66.20	314	Pc	30 02.00	-0.7
	0.9s	250.00nm			6.1mb
			pP	30 25.10	90kmX
			sP	30 37.50	
KHT	66.79	291	iPc	30 06.50	-0.1
KMI	66.83	303	ePc	30 07.50	0.5
	1.4s	230.00nm			5.9mb
	Z 22s	1.40um			5.1Msz
BDT	67.19	293	eP	30 08.00	-1.1
CHTO	67.76	295	ePc	30 12.67	0.0
	0.8s	37.34nm			5.3mb
SBA	67.83	179	eP	30 11.80	-0.3
HHC	68.25	322	iPc	30 16.00	0.5
	1.2s	220.00nm			5.9mb
			sP	30 48.00	
CD2	68.49	309	iPc	30 17.00	-0.1
	1.0s	270.00nm			6.1mb
BTO	69.06	321	P	30 21.00	0.6
	1.0s	170.00nm			5.8mb
	N 11s	0.31um			
	E 12s	0.32um			
LZH	70.83	314	ePc	30 32.23	0.8
	1.5s	330.00nm			5.9mb
	Z 22s	0.76um			4.9Msz
			ed	31 01.03	
			eS	39 40.00	
			SKS	40 22.00	
CIT	74.10	332	iP	30 51.50	1.4
GTA	75.20	315	iPc	30 57.50	0.7
	1.5s	170.00nm			5.6mb
	Z 28s	0.96um			4.9MszX
			pP	31 18.00	77kmX
			sP	31 27.50	
			eS	40 30.00	
			sS	41 11.00	
SHL	76.14	299	iP	31 02.40	-0.1
			eS	41 20.80	
KDC	77.39	23	eP	31 08.53	0.1
	0.5s	17.75nm			5.1mb
BOD	77.75	336	iPc	31 10.60	0.2
	1.2s	213.00nm			5.8mb
LSA	78.08	303	ePc	31 14.28	0.8
	1.2s	170.00nm			5.7mb
ZAK	78.38	326	iPc	31 14.60	0.6
	1.0s	323.00nm			6.1mb
			e	41 07.00	
SVW	78.63	20	ePc	31 16.16	0.8
	0.9s	514.89nm			6.3mb
IRK	78.84	328	ePc	31 16.00	-0.6
	1.2s	225.00nm			5.8mb
			e	31 27.00	
TLY	78.87	328	ePc	31 17.43	0.6
			e	31 39.61	
ILT	79.09	8	iPc	31 17.40	-0.1
	1.2s	178.00nm			5.7mb
			i	31 24.00	
			eS	41 12.00	
TTA	79.84	18	ePc	31 21.94	0.1
	0.9s	37.15nm			5.2mb
CP2	79.90	21	ePc	31 21.74	-0.6
CRP	79.93	21	eP	31 21.66	-0.8
SLKM	80.12	22	eP	31 23.26	-0.1
			e	31 45.32	
PMR	81.23	22	eP	31 28.05	-1.0
	1.2s	107.99nm			5.5mb
			e	31 52.07	
GUN	81.96	300	P	31 34.50	0.4
PKI	82.27	300	P	31 36.00	0.3
KLU	82.36	23	eP	31 35.28	0.2
			e	31 59.36	
KKN	82.44	300	P	31 36.80	0.4
DMN	82.54	300	P	31 37.80	0.8

TOA	82.65	22	eP	31 38.00	1.5
IMA	82.82	17	ePc	31 37.31	-0.1
	1.3s	69.44nm			5.4mb
			epP	32 01.20	90kmX
GKN	83.04	300	P	31 39.40	0.0
PAF	83.10	221	eP	31 56.00	17.0X
			eS	42 05.00	
			eSS	47 30.00	
BALM	83.49	24	(P)	31 40.68	-0.2
COL	83.84	19	ePc	31 42.09	-0.3
	0.8s	163.13nm			6.0mb
			e	32 04.36	
FBA	83.84	19	ePc	31 41.77	-0.7
	0.8s	99.23nm			5.8mb
			epP	32 03.77	82kmX
MAW	83.94	202	iPd	31 42.90	0.0
	1.3s	45.80nm			5.2mb
			ipP	32 04.20	79kmX
			iS	42 00.60	
			isS	42 38.70	
TIK	84.31	350	iPc+	31 45.00	0.4
	1.8s	396.00nm			6.0mb
	Z 18s	0.30um			4.7Msz
			ePPP	37 04.00	
			e	41 54.00	
			eS	42 06.00	
WMQ	85.27	316	ePc	31 50.58	0.5
	1.7s	84.00nm			5.4mb
			PP	35 07.00	
			SKS	42 04.00	
			S	42 15.00	
			sS	42 57.00	
KOD	85.70	281	eP	31 53.00	-0.1
COE	85.96	51	eP	31 52.67	-0.9
HYB	86.07	288	ePc	31 54.00	-0.5
			e	32 17.50	
ARN	86.09	51	eP	31 55.06	0.8
			e	32 18.50	
LGPM	86.11	47	eP	31 55.66	1.2
			epP	32 17.98	82kmX
GBA	86.37	284	P	31 56.00	0.1
BCH	86.65	54	eP	31 58.07	0.9
			epP	32 18.79	76kmX
ORV	86.71	49	eP	31 58.16	1.0
			epP	32 18.63	75kmX
CMB	87.15	51	eP	31 59.27	-0.1
	2.5s	89.85nm			5.3mb
			ipP	32 21.42	81kmX
ABL	87.26	54	eP	32 01.19	1.0
			ipPc	32 22.04	76kmX
ISA	88.04	53	eP	32 04.00	0.2
	1.8s	121.30nm			5.6mb
			epP	32 25.30	78kmX
GMW	88.07	41	eP	32 04.35	0.8
			epP	32 27.51	85kmX
MTUM	88.38	52	eP	32 06.54	1.0
			epP	32 30.22	88kmX
LON	88.48	42	eP	32 05.92	0.3
			epP	32 27.78	80kmX
RMW	88.68	41	eP	32 07.22	0.6
			epP	32 29.30	81kmX
PEC	88.69	55	eP	32 07.39	0.5
	1.5s	86.16nm			5.6mb
BONR	88.72	51	eP	32 08.40	1.1
PLM	88.81	56	eP	32 07.71	0.1
			epP	32 29.57	80kmX
GSC	89.29	54	eP	32 10.67	0.9
			epP	32 31.86	77kmX
TNP	89.58	51	ePd	32 12.45	1.2
			epP	32 34.42	80kmX
TPNV	90.08	53	eP	32 14.60	1.1
	1.1s	37.18nm			5.4mb
			epP	32 36.27	79kmX
GLA	90.42	57	eP	32 15.99	1.1
INK	90.46	20	eP	32 15.00	0.7
	1.0s	5.00nm			4.6mb X
POO	90.68	289	eP	32 19.00	2.6
DPW	91.14	42	eP	32 18.30	0.3
			epP	32 42.32	88kmX
NEW	91.94	41	eP	32 22.13	0.5
	1.0s	59.46nm			5.8mb
KSH	92.66	309	iPd	32 27.00	1.8
	1.0s	20.00nm			5.4mb
	Z 10s	1.27um			5.7MszX
			pP	32 52.50	95kmX
			sP	33 03.00	
NRI	93.50	340	iPc	32 26.20	-2.1

	1.4s	47.00nm			5.6mb
			e	36 10.00	
MSU	93.56	52	eP	32 30.74	1.2
TUC	93.63	58	eP	32 31.76	2.0
	0.7s	5.14nm			5.0mb
			epP	32 53.67	80kmX
HVU	93.67	48	eP	32 30.34	0.5
			epP	32 53.29	84kmX
FRU	94.28	313	eP	32 32.60	0.1
	2.0s	50.00nm			5.5mb
LRM	94.60	44	eP	32 34.60	0.4
			e	32 58.00	
SRU	94.93	51	eP	32 36.28	0.5
			epP	32 59.44	85kmX
YKA	96.17	28	eP	32 40.50	-0.1
	0.9s	16.20nm			5.5mb
MBC	97.20	14	eP	32 46.50	1.4
	0.8s	2.00nm			4.7mb X
			pP	33 13.50	101kmX
ALQ	97.58	56	eP	32 46.66	-1.2
	5.0s	229.94nm			5.9mb X
QUE	98.64	299	eP	32 52.50	-0.2
SVE	104.15	326	ePdiff	33 16.00	-0.5
OBN	117.62	328	iPKPd	37 58.00	-0.7
	1.2s	22.00nm			
	Z 28s	1.00um			5.3MszX
	N 28s	0.30um			
	E 28s	0.50um			
			e	38 05.00	
			i	39 11.00	
			i	44 53.00	
KAF	118.69	338	iPKP	37 59.40	-1.1
	0.7s	4.30nm			
NUR	120.31	337	iPKP	38 03.20	-0.4
	0.6s	8.90nm			
MTD	123.50	242	iPKPc	37 55.30	-15.9X
CNCB	124.51	118	PKPc	38 14.00	0.2
NB2	124.52	343	PKP	38 11.20	-0.6
	1.0s	12.40nm			
LPB	124.53	118	PKP	38 07.00	-6.6X
BUL	124.53	237	iPKPc	38 13.00	-0.2
	0.8s	14.93nm			
			i	38 35.00	
LPAZ	124.60	118	PKP	38 13.30	-0.7
NRA0	124.67	342	ePKPd	38 11.40	-0.6
KRI	125.18	241	iPKPd	38 28.00	13.5X
LSZ	127.09	242	iPKP	38 15.90	-2.3X
	1.2s	1.00nm			
			i	38 18.00	
			i	38 53.00	
			i	40 16.00	
UZH	128.48	326	ePKP	38 19.80	0.0
	1.3s	60.00nm			
			e	38 36.50	
SDV	128.89	87	iPKPd	38 21.10	-0.7
SPC	129.27	328	ePKP	38 20.60	-0.9
TOV	129.80	86	ePKP	38 22.90	-0.5
KSP	130.18	332	ePKP	38 23.50	0.6
			e	38 48.00	
			e	40 12.00	
			e	40 34.60	
			e	42 21.00	
SRO	131.12	327	ePKP	38 24.20	-0.6
BRG	131.24	333	iPKP	38 25.50	0.6
	1.8s	35.00nm			
			i	38 50.70	
			i	40 43.00	
CLL	131.34	334	iPKP	38 24.40	-0.7
			e	38 50.00	
ZST	131.52	328	ePKP	38 26.00	0.5
PRU	131.58	332	ePKP	38 25.00	-0.6
			e	38 50.40	
			e	40 25.50	
			ePP	40 38.50	
			ePKS	41 48.50	
			e	42 29.50	
WIN	132.16	227	iPKPc	38 28.50	0.7
	1.0s	40.00nm			
MOX	132.43	334	ePKP	38 27.10	-0.1
			e	40 40.80	
SKO	132.56	319	ePKP	38 08.00	-19.8X
	1.1s	50.00nm			
			i	38 27.00	
			i	38 53.00	
			i	41 48.50	
			i	42 34.40	
KHC	132.63	331	ePKP	38 22.00	-5.7X

	1.0s	12.50nm			
			e	38 28.00	
			e	38 48.50	
			PP	40 51.00	
			SKP	41 50.50	
			e	42 32.50	
			e	43 25.00	
GEC2	132.77	331	ePKPc	38 21.70	-6.4X
	0.9s	6.52nm			
			e	38 28.00	
			e	40 43.30	
			e	40 49.30	
			ePP	40 53.20	
			e	40 58.10	
			e	41 01.60	
			e	41 08.60	
			e	41 13.60	
			eSKP	41 49.50	
			(sSKP)	42 28.80	
EKA	133.19	348	PKPc	38 31.30	2.8X
	1.1s	7.70nm			
WTS	133.28	338	ePKP	38 29.00	0.3
	1.0s	15.40nm			
GRF	133.30	333	ePKP	38 29.00	0.1
	Z 20s	0.60um			5.3Msz
			e(PP)	40 56.20	
OHR	133.41	318	ePKP	38 18.00	-11.5X
	1.1s	70.00nm			
			i	38 29.50	
			i	41 51.00	
SJG	133.48	75	ePKP	38 30.36	0.2
PTJ	133.58	327	ePKP	38 19.00	-10.7X
LJU	134.25	328	ePKP	38 30.50	-0.3
			epPKP	38 56.80	
			e	42 00.00	
			e	42 26.00	
ENN	134.61	338	ePKP	38 33.00	1.7
	1.0s	14.00nm			
			e	41 06.00	
			e	41 29.00	
WTTA	134.87	331	i(PKP)	38 24.30	-7.9X
	0.9s	12.80nm			
			i	38 31.90	
LANF	135.30	335	PKP	38 32.00	-0.8
SNF	135.41	339	PKPc	38 34.00	1.2
WLF	135.42	337	iPKPc	38 34.19	1.3
	1.2s	10.90nm			
DOU	135.64	339	PKPc	38 35.10	1.8
			e	39 13.90	
			e	41 15.80	
			e	41 59.90	
WLS	135.93	335	PKP	38 33.25	-0.8
CDF	135.96	335	PKP	38 33.43	-0.7
FEL	136.07	334	PKP	38 33.64	-0.8
ECH	136.17	335	PKP	38 32.90	-1.5
MOF	136.46	335	PKP	38 33.53	-1.6
BBS	136.60	334	PKP	38 34.29	-1.0
VITF	136.64	336	PKP	38 34.47	-0.9
LOMF	136.98	334	PKP	38 34.59	-1.5
LESF	142.78	335	PKP	38 43.22	-3.4X
GRBF	142.83	335	PKP	38 42.96	-3.8X
TRGS	142.93	334	PKP	38 43.80	-3.3X
ENSF	143.35	336	PKP	38 46.08	-1.6
ELIZ	143.75	338	iPKPc	38 46.56	-1.7
EGRA	144.12	336	iPKPc	38 47.66	-1.1
ECRI	144.59	339	iPKPc	38 49.63	-0.1
ESEL	144.68	330	iPKPc	38 46.95	-2.9X
EROQ	144.97	334	iPKPc	38 50.35	0.0
EMON	145.29	345	iPKPc	38 51.39	0.5
ETOR	145.98	337	iPKPc	38 53.88	1.7
STS	146.10	346	iPKPd	38 54.11	1.9
ERUA	146.22	344	iPKPd	38 54.48	2.1X
ECHE	146.58	335	iPKPd	38 55.78	2.7X
EZAM	146.83	346	iPKPd	38 56.03	2.6X
GUD	146.90	339	iPKPc	38 56.72	3.0X
ACU	147.23	333	ePKP	38 51.81	-2.4X
PAB	147.94	339	ePKP	38 55.75	0.4
			ePKPbc	38 59.34	
PAB	147.94	339	iPKPc	38 58.90	3.6X
			ePP	42 23.00	
EVIA	148.02	335	iPKPc	38 59.60	4.1X
EPLA	148.06	341	iPKPc	38 58.96	3.5X
EALH	148.22	333	iPKPd	38 59.98	4.3X
EHUE	148.76	335	iPKPd	39 01.33	4.6X
ENIJ	149.30	333	iPKPd	39 02.07	4.6X
ECOG	149.62	336	iPKPc	39 02.64	4.6X
ELUQ	149.66	337	iPKPd	39 03.87	5.8X

01d 17h

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EHOR  149.79 338 iPKPc 39 03.27   5.1X
EGUA  150.00 335 iPKPc 39 03.00   4.5X
EVAL  150.53 340 iPKPd 39 06.14   6.9X
EPRU  150.55 338 iPKPd 39 06.17   6.8X
LIJA  150.67 338 iPKP  39 07.00   7.4X
SOB1  150.83 130 (PKP) 38 59.00  -1.4
                 e     39 05.00
                 e     39 26.40
SOB1  150.83 130 ePKP  39 05.10   4.7X
                 e     39 26.60
GIBL  150.93 338 iPKP  39 08.00   8.1X
ALJ   150.94 338 ePKP  39 07.00   6.9X
EJIF  151.09 337 iPKPc 39 06.38   6.2X
MOMI  151.30 338 iPKP  39 08.00   7.5X
CNIL  151.38 338 ePKP  39 09.00   8.5X
NKM   151.95 336 iPKP  39 08.60   7.2X
                 i     39 12.50
BMK   152.56 336 iPKP  39 08.50   6.2X
TGT   152.99 334 ePKP  39 11.00   8.1X
KIC   165.62 256 PKP   39 17.60  -0.1
       1.3s    25.50nm
LIC   165.85 255 PKP   39 17.80  -0.1
LKO   166.98 269 PKP   39 18.00  -0.8
     S.D. = 0.9  on 232 of 286 obs.
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& NOV  01, 1993  17h 28m 43.10s
   37.501 N          118.883 W
   DEPTH =   3.2km
 CALIFORNIA-NEVADA BORDER REGION ( 40)
      <GM-P>. MD 3.0 (GM). ML 3.0
      (BRK).

HTCR    0.09  72 P     28 45.31   0.1
MCSM    0.15 354 P     28 46.72   0.4
MMPM    0.16 313 iPc   28 46.61   0.2
MEMM    0.17 345 iPd   28 46.84   0.3
ORC     0.22  53 P     28 47.95   0.3
MTUM    0.29 120 iPc   28 49.12   0.1
MRCM    0.34  60 iPc   28 50.14   0.1
BHPR    0.37 122 P     28 50.75   0.1
CWCR    0.46  91 P     28 52.29   0.0
BONR    0.65  45 eP    28 55.78  -0.3
FRI     0.83 233 iP    29 01.45   1.8
                 iS    29 09.64
CMB     1.30 295 ePc   29 06.98  -0.9
                 eS    29 23.96
WLHM    1.42 161 P     29 09.69  -0.4
TNP     1.44  66 eP    29 10.65   0.4
MRFM    1.49 300 P     29 10.38  -0.5
MNHM    1.66 293 P     29 13.31   0.1
BRMM    1.69 247 P     29 14.69   1.1
BAVM    1.71 275 P     29 17.98   4.0
NMC     1.83 154 P     29 17.11   1.3
ISA     1.86 170 eP    29 17.48   1.2
                 eS    29 41.65
HVC     1.92 235 P     29 17.98   1.0
WOFM    1.97 176 P     29 19.22   1.4
PRI     1.97 227 iPd   29 18.85   1.0
EKH     2.01 246 P     29 20.02   1.7
LTR     2.03 253 P     29 19.65   1.1
WBSM    2.05 163 P     29 20.62   1.6
GHS     2.08 260 P     29 20.53   1.1
ARN     2.11 267 eP    29 20.60   0.8
HSPM    2.13 260 P     29 21.34   1.2
LRC     2.14 235 P     29 22.04   1.9
TPNV    2.17 104 (P)   29 22.01   1.2
SAO     2.18 251 eP    29 20.93   0.2
MHC     2.20 267 eP    29 22.11   0.9
CBO     2.27 261 P     29 23.17   1.1
PRS     2.31 240 iP    29 23.34   0.7
BCH     2.51 203 eP    29 26.07   0.5
ABL     2.66 186 eP    29 29.11   1.3
       37 obs. associated
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? NOV  01, 1993  17h 58m 25.57± 4.11s
   13.897 N ±25.5km   61.606 W ±31.7km
   DEPTH =  33.0km  (normal)
 WINDWARD ISLANDS                ( 95)
      MD 3.2 (TRN). ML 2.8 (FDF).

SLB     0.55  97 iP    58 36.78  -0.2
                 eS    58 46.81
SLW     0.66  79 eP    58 38.63   0.1
SVV     0.69 147 eP    58 38.79  -0.1
                 eS    58 49.49
SVB     0.71 151 iP    58 39.36   0.2
GRW     1.73 182 iP    58 53.74  -0.1
                 eS    59 16.54
     S.D. = 0.2  on   5 of   5 obs.
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   NOV  01, 1993  18h 17m 22.33± 0.33s
   38.950 N ± 3.0km   29.947 E ± 2.2km
   DEPTH =  13.0 ±  2.1 km
   4.7mb ( 30 obs.)
 TURKEY                          (366)
      ML 4.3 (ISK). Felt at Kutahya,
      Usak, Isparta, Afyon and
      Eskisehir.

ALT     0.16  51 iPg   17 24.20  -2.3
KHL     0.71 208 iPg   17 34.40  -1.7
                 eSg   17 44.40
DST     1.21 303 iPn   17 43.70  -1.0
GPA     1.37  12 iPn   17 47.30   0.3
IZI     1.43 345 ePn   17 48.80   0.8
BCK     1.57 161 iPn   17 51.30   1.3
EYL     1.62   6 iPn   17 51.60   0.8
NAL     1.63  40 iPc   17 52.60   1.6
                 eS    18 21.20
GBZT    1.88 348 ePn   17 55.20   0.9
                 iSg   17 58.20
                 iSg   18 25.60
HRT     1.88 354 iPn   17 55.30   0.8
CIN     1.99 228 iPnd  17 56.00   0.0
BNT     2.10 313 ePn   17 57.70   0.1
EDC     2.13 312 iPn   17 58.00   0.0
IZM     2.17 256 iPn   17 57.90  -0.8
ISK     2.22 342 ePn   17 59.30   0.0
ITU     2.27 342 iPnc  18 03.00   3.0X
                 iSg   18 35.00
SGKT    2.30  44 eP    18 03.00   2.4
                 eS    18 41.10
BBTK    2.35  67 eP    18 01.50   0.1
                 eS    18 38.20
CTT     2.48 333 iPn   18 03.50   0.4
DVR     2.72  35 eP    18 07.00   0.5
MFT     2.75 313 ePn   18 06.00  -1.0
PRK     2.87 277 eP    18 08.80   0.2
EZN     2.94 288 iPn   18 09.20  -0.3
DMK     3.32 330 iPn   18 14.60  -0.4
ALN     3.57 304 iP    18 18.86   0.3
KAS     3.80  49 ePn   18 22.00   0.2
                 iSg   19 28.00
RDO     4.03 304 eP    18 25.40   0.4
CTK     4.14  64 eP    18 25.70  -1.0
BZK     4.32  45 ePn   18 30.00   0.9
PPCY    4.49 154 eP    18 32.50   1.0
CSS     4.81 145 eP    18 35.00  -1.2
PAIG    4.95 283 iP    18 37.70  -0.4
NPS     5.05 225 eP    18 39.80   0.2
FAM     5.11 139 eP    18 37.00  -3.3X
KVT     5.14  64 ePn   18 41.00   0.1
SRS     5.34 296 eP    18 43.02  -0.6
SOH     5.40 292 eP    18 44.10  -0.5
VAM     5.79 234 eP    18 52.40   2.4
KNT     5.84 294 iP    18 50.53  -0.2
KNT     5.84 294 eP    18 59.30   8.6X
LIT     5.88 284 eP    18 51.10  -0.1
AGG     5.93 273 iP    18 51.86  -0.2
VLI     5.98 250 eP    18 53.00   0.4
VAY     6.13 295 iPn   18 54.80   0.1
GRG     6.13 291 eP    18 55.22   0.4
BUC1    6.14 333 eP    19 32.00  37.2X
BUC     6.17 333 ePc   19 20.00  24.8X
CFR     6.37 348 eP    18 54.20  -3.9X
KZN     6.46 285 eP    18 59.30  -0.2
ISR     6.68 339 eP    19 02.50   0.0
SIM     6.75  26 eP    19 03.00  -0.5
       0.4s    15.00nm          5.4mb
     Z  16s     2.00um
     N  16s     2.50um
     E  16s     2.00um
                 iS    20 18.00
DRA     7.13 325 ePc   19 21.00  12.3X
SKO     7.15 298 iPn   19 08.50  -0.7
                 i     19 16.00
MLR     7.18 337 iPc   19 07.00  -2.6
MTUR    7.25 332 eP    19 06.50  -4.0X
KBN     7.25 286 eP    19 08.50  -2.1
CMP     7.29 332 ePc   19 09.00  -2.0
VRI     7.31 342 iPc   19 08.00  -3.3X
LSK     7.32 282 eP    19 12.00   0.4
OHR     7.34 290 iPn   19 12.00   0.1
SRN     7.76 280 eP    19 19.80   2.2
TPE     7.79 283 eP    19 21.00   3.0X
CLI     7.84 346 ePd   19 17.00  -1.8
KEK     7.90 279 eP    19 21.70   2.0
TNR     7.91 330 ePc   19 20.00   0.4
TIR     8.08 290 eP    19 23.20   1.0
KIS     8.10 355 eP    19 26.00   3.7X
     Z  13s     2.20um
VLO     8.20 284 eP    19 25.30   1.5
BCI     8.25 298 eP    19 24.10  -0.4
LACI    8.27 292 eP    19 24.50  -0.3
SDA     8.54 295 eP    19 31.00   2.5
DEV     8.66 325 ePc   19 44.00  13.8X
BZS     9.08 320 ePc   19 24.50 -11.4X
UZH    11.14 333 eP    20 03.00  -1.1
     Z  12s     2.30um
     E  12s     1.50um
ERE    11.30  79 iP    20 08.00   1.4
LVV    11.65 341 eP    20 14.00   2.8X
     Z  16s     3.00um
     N  13s     2.00um
MTA    11.67  72 eP    20 15.00   3.6X
SRO    12.24 320 eP    20 24.00   4.9X
SPC    12.37 329 eP    20 18.70  -2.4
ZST    13.10 319 eP    20 34.80   4.2X
LJU    13.39 307 e(Pn) 20 45.00  10.6X
                 eSnSn 23 34.00
                 e     24 16.00
                 e     24 44.00
BHG    15.18 311 iPc   21 04.50   6.7X
       1.0s    35.00nm          4.7mb
GEC2   15.30 316 Pn    21 05.20   5.7X
KSP    15.30 325 eP    21 04.60   5.2X
KHC    15.53 316 P     21 07.90   5.5X
       0.9s     9.00nm          4.0mb
     Z  14s     1.00um
     N  16s     1.00um
     E  16s     0.80um
                 e     21 24.00
PRU    15.54 320 eP    21 07.00   4.4X
     Z  12s     1.60um
     N  13s     1.20um
     E  11s     0.90um
                 e     21 45.00
                 e     25 38.20
                 e     26 48.00
WET    15.91 315 iPd   21 12.00   4.6X
       0.8s    23.00nm          4.4mb
SQTA   15.96 307 iPc   21 13.40   5.2X
       0.8s    15.80nm          4.2mb
BRG    16.41 322 eP    21 18.20   4.6X
       1.6s    20.00nm          4.0mb
OBN    16.77  13 eP    21 16.00  -2.1
       1.5s    35.00nm          4.3mb
     Z  16s     1.00um
     N  16s     0.80um
     E  16s     0.40um
                 iS    24 17.00
GRF    17.12 315 iPd   21 25.40   2.7X
CLL    17.14 322 eP    21 25.00   2.1
       1.9s    42.00nm          4.2mb
MOX    17.44 318 eP    21 29.60   3.0X
MOS    17.56  15 eP    21 30.00   1.9
FEL    18.21 306 P     21 37.99   1.6
BBS    18.39 305 P     21 41.50   3.0X
STR    18.63 308 P     21 41.29  -0.1
SRBF   18.71 309 P     21 42.06  -0.3
MOF    18.76 306 P     21 43.26   0.2
LANF   18.77 309 P     21 42.49  -0.6
WLS    18.82 307 P     21 42.49  -1.3
CDF    18.87 307 P     21 44.03  -0.4
ECH    18.87 307 P     21 43.47  -0.9
BSD    19.07 333 iPc   21 45.00  -1.7
       0.8s    22.00nm          4.4mb
VITF   19.61 306 P     21 50.81  -2.4
WLF    20.03 310 iPc   21 57.03  -0.5
PLDF   20.59 298 P     22 04.11   0.5
ENN    20.62 313 eP    22 04.50   0.8
       1.0s    12.00nm          4.2mb
WTS    20.71 317 eP    22 05.00   0.4
       0.9s    23.60nm          4.6mb
LBL    20.73 296 P     22 06.45   1.4
AGO    20.94 298 P     22 06.12  -1.0
PYM    20.98 298 P     22 06.61  -0.9
DOU    21.13 310 P     22 08.20  -0.7
SNF    21.47 311 P     22 14.20   1.8
NUR    21.84 353 iP    22 16.40   0.4
       0.5s     3.90nm          4.1mb
```

```
UPP     22.34 344 iP     22 20.30  -0.6
KAF     23.30 356 iP     22 30.70   0.3
        0.6s     5.10nm          4.2mb
NB2     25.00 338 P      22 46.50  -0.4
        0.7s     4.20nm          4.2mb
ARU     25.73  38 eP     22 54.00   0.2
        1.8s   100.00nm          5.2mb
                  e     23 07.00
                  e     23 42.00
PAB     26.48 282 eP     23 00.80  -0.2
SVE     26.91  38 eP     23 04.00  -0.7
        1.2s    40.00nm          5.0mb
      Z  16s     0.50um          4.2MszX
      N  16s     0.30um
      E  16s     0.50um
                  e     24 03.80
FRU     33.69  69 eP     24 06.40   1.3
        2.0s    40.00nm          5.0mb
                  e     24 23.80
                  e     25 31.40
NRI     43.01  26 eP     25 24.00   1.4
        1.4s    15.00nm          4.5mb
TIC     45.03 234 P      25 39.00  -0.6
KIC     45.08 233 P      25 39.00  -0.9
        0.8s     5.50nm          4.5mb
LIC     45.36 233 P      25 41.30  -0.8
GKN     46.30  86 P      25 49.60  -0.1
        1.0s    46.00nm          5.4mb
DMN     46.85  87 P      25 54.20   0.1
        0.8s    27.00nm          5.4mb
KKN     46.90  86 P      25 54.20  -0.3
        0.6s    16.00nm          5.3mb
PKI     47.10  87 P      25 55.80  -0.4
HYB     47.27 103 eP     25 56.00  -1.3
GUN     47.31  86 P      25 57.70  -0.2
GBA     48.80 108 P      26 08.00  -1.1
LSA     50.55  81 Pc     26 23.40   0.4
        1.4s    41.00nm          5.2mb
ZAK     51.38  52 eP     26 28.50   0.0
        1.2s    10.00nm          4.6mb
GTA     52.86  66 eP     26 39.20  -0.8
        1.5s    19.00nm          4.8mb
LZH     57.16  68 Pc     27 11.00  -0.3
        1.5s    45.00nm          5.3mb
CD2     59.54  73 P      27 27.40  -0.5
HHC     60.39  60 P      27 33.60   0.0
        1.0s    19.00nm          5.2mb
KMI     61.74  79 Pc     27 42.00  -1.2
        1.4s    50.00nm          5.5mb
XAN     61.79  68 P      27 42.30  -0.9
        1.4s    25.00nm          5.2mb
TIY     62.47  62 eP     27 47.00  -0.7
BJI     63.86  59 eP     27 56.00  -0.7
        1.1s     8.00nm          4.8mb
TIA     66.47  62 eP     28 12.90  -0.7
     S.D. = 1.1  on 115 of 144 obs.
-----------------------------------
*  NOV  01, 1993  18h 21m 59.92± 2.06s
   15.131 N ±27.3km   95.105 W ±11.7km
   DEPTH =  33.0km  (normal)
 NEAR COAST OF OAXACA, MEXICO     ( 66)

OXX      2.49 321 iP     22 38.50  -0.7
                  iS     23 07.50
TPX      2.76  94 (P)    22 42.50  -0.3
SCX      2.86  56 iP     22 44.50   0.2
                  iS     23 14.50
IISM     4.41 331 (P)    23 13.00   6.7X
PPM      5.16 320 (P)    23 19.50   2.0X
III      5.28 308 (P)    23 19.50   0.7
LTX     16.19 332 eP     25 46.25  -0.5
ACO     21.78 351 iPc    26 51.30   0.4
SSK     27.85 317 (P)    27 44.22  -4.6X
     S.D. = 0.7  on   6 of   9 obs.
-----------------------------------
%  NOV  01, 1993  18h 23m 36.39± 1.44s
   38.841 N ±10.4km   30.037 E ±16.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 3.1 (ISK).

ALT      0.22  15 iPg    23 39.80  -1.4
KHL      0.66 218 ePg    23 49.40  -0.1
                  eSg    23 59.00
DST      1.33 305 ePn    24 00.70  -0.3
GPA      1.46   8 iPn    24 03.50   0.7
EYL      1.73   3 ePn    24 07.50   0.8
HRT      2.00 352 ePn    24 11.00   0.4
     S.D. = 1.1  on   6 of   6 obs.
-----------------------------------
   NOV  01, 1993  18h 53m 29.43± 0.64s
   38.908 N ± 6.1km   29.898 E ± 7.0km
   DEPTH =   5.0km  (geophysicist)
 TURKEY                           (366)
      ML 3.2 (ISK).

ALT      0.22  48 iPg    53 31.80  -2.2
KHL      0.65 207 ePg    53 41.90  -0.6
                  eSg    53 51.90
DST      1.21 306 ePn    53 52.70   0.3
GPA      1.41  13 iPn    53 55.80  -0.1
BCK      1.54 159 ePn    53 58.00   0.3
EYL      1.67   7 ePn    54 00.00   0.5
NAL      1.69  40 eP     54 00.20   0.3
                  eS     54 26.50
HRT      1.92 355 ePn    54 03.00  -0.1
CIN      1.93 228 ePn    54 07.00   3.7X
                  iSg    54 34.00
IZM      2.13 257 ePn    54 06.00  -0.1
SGKT     2.35  44 eP     54 14.00   4.5X
                  eS     54 52.50
BBTK     2.41  66 eP     54 12.00   1.8
     S.D. = 1.1  on  10 of  12 obs.
-----------------------------------
*  NOV  01, 1993  19h 10m 34.47± 0.38s
   51.785 N ±14.4km  157.426 E ± 9.7km
   DEPTH =  33.0km  (normal)
   4.9mb (  8 obs.)
 NEAR EAST COAST OF KAMCHATKA     (218)

KUSJ    12.22 230 eP     13 27.30  -1.6
                  eS     15 32.60
ASAJ    12.52 238 eP     13 38.70   5.8X
HOOJ    13.44 231 eP     13 44.50  -0.6
MRRJ    14.52 236 eP     14 00.80   1.5
AOMJ    16.25 233 eP     14 20.90  -0.7
MAT     20.45 229 eP     15 12.00   0.3
        0.7s    44.52nm          4.9mb
WKYJ    23.58 230 P      15 45.00   2.1
YONJ    23.86 235 P      15 47.50   2.0
TKSJ    24.52 233 P      15 53.80   1.9
LBFM    53.74  67 eP     19 56.90   1.3
ORV     55.14  69 eP     20 05.38  -0.3
LRM     56.00  58 eP     20 12.00  -0.1
GUN     57.39 275 P      20 21.60  -0.8
        0.4s     6.00nm          5.0mb
KKN     57.85 275 P      20 25.00  -0.4
        0.6s    16.00nm          5.3mb
PKI     57.92 275 P      20 26.30   0.2
DMN     58.08 275 P      20 27.00  -0.1
GKN     58.09 276 P      20 26.50  -0.5
TNP     58.60  67 eP     20 30.85   0.3
        0.8s     6.49nm          4.8mb
RSSD    61.49  54 eP     20 50.51   0.2
        0.6s     8.14nm          5.0mb
SRU     61.64  62 eP     20 51.59   0.3
PV10    62.97  62 eP     21 00.50   0.2
PV08    63.04  61 eP     21 00.90   0.1
HYB     69.66 272 eP     21 42.00  -0.8
WMOK    71.18  58 eP     21 51.53  -0.3
        0.7s     5.92nm          4.8mb
GBA     73.25 271 P      22 04.00  -0.2
ELC     73.96  50 eP     22 07.79  -0.2
WR2     74.22 203 eP     22 07.30  -2.3
        0.4s     2.50nm          4.6mb
WRA     74.22 203 P      22 08.10  -1.5
        0.8s     1.10nm          3.9mb
     S.D. = 1.1  on  27 of  28 obs.
-----------------------------------
*  NOV  01, 1993  19h 27m 39.29± 2.51s
   51.223 N ±20.8km   15.854 E ±13.0km
   DEPTH =  10.0km  (geophysicist)
 POLAND                           (548)
      ML 3.5 (VIE), 3.3 (GRF), 2.9
      (CLL).

KSP      0.47 144 iPc    27 48.70  -0.2
                  iS     27 58.10
                  eLR    28 05.00
BRG      1.25 255 iPg    28 02.60   0.0
                  iSg    28 22.50
PRU      1.49 215 Pn     28 06.40   0.3
        0.6s    44.00nm
                  Pg     28 08.30
                  i      28 10.20
                  Sn     28 25.20
                  Sg     28 29.50
CLL      1.79 274 (Pg)   28 11.00   0.5
                  iSn    28 30.10
                  iSg    28 36.40
KHC      2.55 216 Pn     28 22.00   0.5
                  ePg    28 28.00
                  eSn    28 56.00
                  eSg    29 06.60
                  e      29 10.00
OJC      2.70 110 eP     28 17.80  -5.7X
                  iPg    28 26.70
                  iS     28 50.00
                  iSg    29 02.00
MOX      2.74 259 ePg    28 30.40   6.3X
                  iSg    29 09.50
VKA      2.98 174 ePg    28 36.00   8.6X
                  eSg    29 22.00
ZST      3.14 165 eP     29 22.30  52.7X
GRF      3.33 244 e(Pn)  28 31.20  -1.3
                  e(Pg)  28 43.80
                  eSg    29 28.70
SPC      3.48 124 eP     29 29.80  55.1X
KBA      4.46 203 iPnd   28 48.80   0.1
                  i      28 57.50
                  i(Sg)  29 51.90
     S.D. = 0.8  on   7 of  12 obs.
-----------------------------------
*  NOV  01, 1993  19h 30m 33.31± 1.38s
   38.880 N ±10.5km   30.034 E ±15.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 3.0 (ISK).

ALT      0.19  19 iPg    30 36.40  -1.1
KHL      0.68 216 ePg    30 46.90   0.0
                  eSg    30 56.90
DST      1.31 304 ePn    30 57.20  -0.4
GPA      1.42   9 iPn    30 59.80   0.6
EYL      1.69   3 ePn    31 04.00   0.9
     S.D. = 1.1  on   5 of   5 obs.
-----------------------------------
%  NOV  01, 1993  20h 16m 42.36± 1.42s
   38.883 N ±11.0km   30.026 E ±16.0km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 3.0 (ISK).

ALT      0.18  21 iPg    16 45.10  -1.4
KHL      0.68 215 iPg    16 55.90  -0.1
                  eSg    17 05.90
DST      1.30 304 ePn    17 06.10  -0.4
GPA      1.42   9 iPn    17 09.00   0.8
EYL      1.68   3 ePn    17 13.00   0.9
     S.D. = 1.4  on   5 of   5 obs.
-----------------------------------
*  NOV  01, 1993  21h 50m 46.11± 0.47s
   45.802 N ± 9.0km  151.443 E ± 9.8km
   DEPTH =  33.0km  (normal)
   4.9mb (  9 obs.)
 KURIL ISLANDS                    (221)

MAT     13.58 232 eP     53 58.00  -0.7
GUN     53.93 275 P      00 09.50   0.5
        0.5s    21.00nm          5.4mb
KKN     54.42 275 P      00 13.30   0.8
PKI     54.46 275 P      00 13.10   0.1
        0.6s    13.00nm          5.1mb
DMN     54.65 275 P      00 14.20  -0.1
        0.7s    17.00nm          5.2mb
GKN     54.73 275 P      00 15.00   0.2
        0.6s    15.00nm          5.2mb
LRM     62.69  51 eP     01 10.80   0.7
WR2     67.25 197 iPd    01 39.00  -0.3
        0.8s     6.90nm          4.8mb
WRA     67.25 197 P      01 39.20  -0.1
        0.8s     4.10nm          4.6mb
NB2     68.74 340 P      01 47.40  -0.9
        0.6s     1.80nm          4.3mb
ASPA    70.95 197 eP     02 02.90   0.8
        0.8s     5.30nm          4.7mb
PRU     77.52 333 P      02 38.80  -0.9
KHC     78.58 333 eP     02 46.00   0.4
GEC2    78.79 333 eP     02 46.60  -0.3
        0.5s     0.85nm          4.0mb
                  e      03 01.40
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01d 22h

```
GRF     78.80 335 eP     02 47.40   0.6
LTX     78.97  59 eP     02 47.52  -0.7
     S.D. = 0.6  on  16 of  16 obs.
-------------------------------------
% NOV  01, 1993  22h 33m 16.90± 0.78s
   42.336 N ± 5.6km   18.712 E ± 5.6km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION       (383)

BDV      0.10 121 iPgc   33 19.73   0.1
                  iSg    33 21.49
HCY      0.19 305 iPgc   33 21.31   0.1
                  iSg    33 24.46
TTG      0.42  77 iPgc   33 25.10  -0.3
                  iSg    33 31.88
NKY      0.52  24 iPgd   33 27.20  -0.3
                  iSg    33 35.29
ULC      0.55 133 iPgd   33 27.78  -0.2
                  iSg    33 36.67
BRY      0.58 348 iPgd   33 28.31  -0.4
                  iSg    33 37.26
PVY      0.97  74 iPgc   33 35.64   0.2
                  iSg    33 50.87
IVA      1.03  58 iPgc   33 36.58   0.2
                  iSg    33 52.81
PLE      1.11  27 iPgd   33 38.25   0.4
                  iSg    33 55.58
     S.D. = 0.3  on   9 of   9 obs.
-------------------------------------
% NOV  01, 1993  22h 59m 41.72± 0.83s
   32.461 S ±12.4km   70.238 W ±11.0km
   DEPTH = 100.0km  (geophysicist)
 CHILE-ARGENTINA BORDER REGION    (127)
     MD 3.9 (SAN).

JACH     0.37 234 iPd    59 57.37   0.4
                  iS     00 09.27
PEL      0.78 209 iPd    00 00.21   0.0
                  iS     00 14.26
ROCH     0.83 232 iP+    00 01.01   0.2
                  iS     00 16.02
FCH      0.87 183 iP+    00 01.47   0.1
                  iS     00 16.85
SAN      1.05 200 iP     00 03.16   0.1
                  iS     00 19.02
PCH      1.18 191 iPd    00 04.64   0.1
                  iS     00 22.99
TACH     1.33 206 iP     00 06.15  -0.1
                  iS     00 24.75
LCCH     1.51 228 iPd    00 08.48   0.0
                  iS     00 29.93
RTCV     1.56  68 iPd    00 09.00  -0.2
                  S      00 29.50
CACH     1.68 190 iP+    00 11.07   0.3
                  iS     00 34.59
LNV      1.79 213 iP     00 11.03  -0.9
                  iS     00 33.37
     S.D. = 0.4  on  11 of  11 obs.
-------------------------------------
   NOV  01, 1993  23h 25m 45.71± 0.67s
   38.851 N ± 5.4km   27.412 E ± 7.8km
   DEPTH =   5.0km  (geophysicist)
 TURKEY                           (366)
     ML 3.2 (ISK).

IZM      0.47 195 iPg    25 55.20   0.1
                  eSg    26 02.20
DST      1.21  51 iPn    26 08.50  -0.2
EZN      1.29 319 iPn    26 09.90  -0.1
CIN      1.36 157 ePn    26 11.00  -0.2
                  iSg    26 31.00
EDC      1.53  13 ePn    26 14.00   0.2
KHL      1.74 107 ePn    26 17.00   0.2
     S.D. = 0.3  on   6 of   6 obs.
-------------------------------------
% NOV  01, 1993  23h 28m 53.73± 0.88s
   40.729 N ± 7.7km   29.965 E ± 7.3km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
     ML 2.9 (ISK).

EYL      0.22 138 iPg    28 58.70   0.2
HRT      0.24 292 iPg    28 58.70  -0.2
GPA      0.51 149 iPg    29 03.70  -0.4
IZI      0.54 224 iPg    29 04.20  -0.5
                  iSg    29 12.70
ISK      0.76 296 iPg    29 08.70   0.1
                  iSg    29 18.70
CTT      1.24 290 ePn    29 16.20  -0.5
DST      1.52 223 ePn    29 22.00   1.0
EDC      1.65 257 ePn    29 23.00   0.2
DMK      1.99 304 ePn    29 28.10   0.3
     S.D. = 0.6  on   9 of   9 obs.
-------------------------------------
% NOV  01, 1993  23h 31m 51.55± 2.33s
   39.657 N ± 7.9km   26.251 E ±24.3km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
     ML 3.2 (ISK).

EZN      0.18  19 iPg    31 55.40  -0.1
                  eSg    31 58.40
EDC      1.42  60 ePn    32 18.00   0.6
IZM      1.48 148 ePn    32 18.40   0.1
DST      1.84  91 ePn    32 23.00  -0.4
CTT      2.23  47 ePn    32 29.00  -0.1
DMK      2.45  27 ePn    32 32.10   0.0
     S.D. = 0.5  on   6 of   6 obs.
-------------------------------------
% NOV  01, 1993  23h 48m 29.77± 0.50s
   42.614 N ± 3.9km   18.853 E ± 4.4km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION       (383)

NKY      0.23  28 iPgc   48 35.16   0.5
                  iSg    48 39.09
HCY      0.31 238 iPgc   48 36.34   0.1
                  iSg    48 41.26
BDV      0.33 183 iPgd   48 36.79   0.2
                  iSg    48 42.26
TTG      0.35 121 iPgd   48 37.26   0.2
                  iSg    48 42.97
BRY      0.37 322 iPgc   48 37.20  -0.1
                  iSg    48 42.97
ULC      0.71 156 iPgd   48 43.49  -0.4
                  iSg    48 54.49
IVA      0.81  71 iPgd   48 45.50  -0.1
                  iSg    48 57.66
PLE      0.82  29 iPgc   48 45.43  -0.3
                  iSg    48 57.75
PVY      0.83  91 iPgc   48 45.73  -0.1
                  iSg    48 58.34
     S.D. = 0.3  on   9 of   9 obs.
-------------------------------------
? NOV  02, 1993  00h 21m 05.28± 2.05s
   39.678 N ± 9.2km   26.309 E ±24.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
     ML 2.8 (ISK).

EZN      0.15   5 iPg    21 08.40  -0.3
                  iSg    21 11.40
MFT      1.33  34 ePn    21 30.60   0.7
EDC      1.37  60 ePn    21 30.00  -0.4
IZM      1.48 150 ePn    21 32.00   0.0
     S.D. = 0.8  on   4 of   4 obs.
-------------------------------------
* NOV  02, 1993  00h 51m 50.28± 1.16s
   29.523 S ±12.4km   70.733 W ±15.8km
   DEPTH = 123.6 ± 36.1 km
 CENTRAL CHILE                    (136)

RTRS     1.28 121 e(P)   52 15.00  -0.8
RTCB     2.57 140 ePd    52 32.20   0.4
                  S      52 50.00
RTLL     2.66 133 iPd    52 33.50   0.6
                  S      52 51.50
ZON      2.68 139 eP     52 31.00  -2.2
CFA      2.99 135 iPc    52 37.90   0.6
                  S      52 56.00
IHA      3.58 192 e(P)   52 46.00   1.0
                  e(S)   53 22.00
RTPR     3.75 103 iPd    52 48.00   0.7
CYA      4.46  77 ePd    52 56.20  -0.8
                  S      53 55.50
FSA      5.41  52 eP     53 11.90   2.1
TCA      5.60 110 i(P)   53 12.00  -0.6
                  (S)    53 44.00
SLA      6.68  46 eP     53 27.80   0.4
CNCB    12.90  12 P      54 52.00   1.3
LPB     13.15  11 eP     54 52.00  -1.9
LPAZ    13.39  11 P      54 56.30  -0.8
     S.D. = 1.4  on  14 of  14 obs.
-------------------------------------
& NOV  02, 1993  01h 29m 16.86s
   62.355 N          148.840 W
   DEPTH =  43.7km
 CENTRAL ALASKA                   (  1)
     <AEIC>. ML 3.6 (AEIC), 3.6
     (PMR).

GHO      0.59 184 iPd    29 28.39  -0.6
                  eS     29 37.57
SML      0.60 156 iPd    29 28.33  -0.8
                  eS     29 37.90
CUT      0.67 275 iPd    29 29.37  -0.6
HUR      0.73 330 iPc    29 30.03  -0.8
                  eS     29 40.61
PMR      0.78 190 ePc    29 30.15  -1.4
PWA      0.86 215 P      29 32.20  -0.5
SCM      0.88 126 iPd    29 32.01  -1.1
                  eS     29 45.25
KNK      0.96 169 iPc    29 33.60  -0.6
                  eS     29 46.75
RND      1.06 360 iPc    29 34.62  -0.9
                  eS     29 48.39
PMS      1.17 197 P      29 36.40  -0.6
SUA      1.27 226 ePc    29 38.14  -0.4
TOA      1.27 100 P      29 38.40  -0.2
CFI      1.28 156 iPc    29 37.93  -0.7
TRF      1.28 330 iPc    29 37.75  -1.1
                  eS     29 53.20
SKT      1.32 255 iPd    29 38.24  -0.9
                  eS     29 56.24
MCK      1.38 358 iPc    29 39.52  -0.6
PWL      1.52 171 eP     29 41.46  -0.6
KTH      1.53 323 iPc    29 41.33  -0.9
                  eS     30 00.64
SDG      1.54  82 eP     29 42.44   0.1
                  eS     30 01.56
KLU      1.63 121 iPc    29 42.95  -0.7
                  eS     30 03.84
TZL      1.63  99 eP     29 43.56   0.0
PAX      1.67  67 eP     29 44.16  -0.1
                  eS     30 05.23
VLZ      1.71 135 ePc    29 43.45  -1.2
                  eS     30 05.74
THY      1.77  52 eP     29 45.31  -0.3
                  eS     30 07.30
CGLM     1.83 236 eP     29 46.07  -0.5
NCG      1.84 240 eP     29 45.83  -0.8
BWN      1.85 351 ePc    29 45.42  -1.2
MPA      1.89 188 eP     29 46.41  -0.8
CRP      1.92 237 eP     29 46.84  -0.9
                  eS     30 07.28
SPU      1.93 234 eP     29 47.60  -0.3
CP2      1.95 237 eP     29 45.92  -2.4
CKN      1.95 236 eP     29 48.43   0.3
FID      1.97 144 iPc    29 47.42  -0.9
                  eS     30 12.81
SLKM     1.97 200 eP     29 47.33  -1.1
CKT      1.98 236 eP     29 48.42  -0.1
BGL      2.01 239 eP     29 49.10   0.1
CKL      2.03 237 eP     29 49.13  -0.2
BKG      2.08 233 eP     29 49.69  -0.3
WRH      2.15   9 iPc    29 49.34  -1.6
DJE      2.21  39 eP     29 51.86   0.1
HDA      2.23  22 iPc    29 50.65  -1.4
NEA      2.23 357 iPc    29 50.28  -1.8
HIN      2.26 149 iPc    29 51.51  -1.1
SEW      2.28 188 eP     29 52.99   0.2
CVA      2.34 139 iPc    29 53.01  -0.7
CCB      2.35  11 iPc    29 51.84  -1.9
LTI      2.37 168 eP     29 52.57  -1.6
DOT      2.54  57 eP     29 56.23  -0.3
GLB      2.55 109 eP     29 55.62  -1.1
                  eS     30 25.61
DFR      2.56 228 eP     29 56.35  -0.5
IL1      2.58  19 iPc    29 55.08  -2.0
ILB      2.58  19 ePc    29 55.08  -2.0
                  eS     30 27.35
                  eS     30 27.54
FBA      2.60  10 ePc    29 55.18  -2.2
MDM      2.63   6 iPc    29 56.07  -1.8
REF      2.64 226 eP     29 57.49  -0.6
NCT      2.66 229 eP     29 57.99  -0.4
RDW      2.68 227 eP     29 58.04  -0.6
RED      2.71 226 eP     29 58.48  -0.6
                  eS     30 30.63
GLM      2.72  13 ePc    29 57.10  -2.0
                  eS     30 31.13
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BRLK    2.78 202 eP    29 59.04  -1.0
RAGM    2.81 133 eP    29 59.05  -1.4
MLY     2.82 343 ePc   29 58.64  -1.9
HMT     2.99 131 eP    30 01.34  -1.7
ILIM    3.03 223 eP    30 02.64  -0.9
CNPM    3.07 203 eP    30 02.91  -1.2
INE     3.08 223 eP    30 03.50  -0.8
TGL     3.29 116 eP    30 05.87  -1.5
BC3     3.33  75 eP    30 06.41  -1.4
TTA     3.36 283 ePd   30 06.47  -1.8
BALM    3.37 110 eP    30 06.73  -1.7
OPT     3.45 220 eP    30 08.98  -0.5
WAX     3.46 121 eP    30 08.72  -0.9
SVW     3.46 252 eP    30 06.66  -3.0
PRP     3.50  23 eP    30 08.29  -2.0
PDB     3.66 228 eP    30 12.25  -0.1
AUL     3.73 219 eP    30 13.37  -0.1
AUE     3.73 218 eP    30 12.64  -0.8
CTGM    3.84 108 eP    30 13.53  -1.6
SYI     4.15 207 eP    30 17.32  -2.0
CDD     4.17 217 eP    30 18.09  -1.6
IM3     4.23 332 ePc   30 18.13  -2.3
IMA     4.29 333 ePc   30 18.45  -3.0
FYU     4.51  19 eP    30 22.76  -1.6
KDC     4.97 203 eP    30 27.27  -3.6
BM3     5.39  18 ePc   30 33.91  -3.0
INK     8.74  40 eP    31 20.50  -2.9
      0.5s     2.00nm          4.4mb X
      86 obs. associated
-----------------------------------
% NOV  02, 1993  02h 00m 04.11± 2.02s
   45.391 S ± 7.5km  166.607 E ±18.6km
   DEPTH =  87.2 ± 17.4 km
 OFF W. COAST OF S. ISLAND, N.Z. (161)

MSZ     1.18  53 P     00 25.70  -0.3
TLC     1.75  84 P     00 33.40  -0.2
SIZ     1.82 145 eP    00 34.60   0.3
MMCZ    1.83  79 P     00 34.50   0.0
CMCZ    1.90  84 P     00 35.60   0.1
MHZ     1.92  81 P     00 36.10   0.4
SBCZ    1.93  82 P     00 36.20   0.3
LRCZ    1.96  81 P     00 36.80   0.4
LSCZ    1.97  83 P     00 36.60   0.2
MSCZ    2.00  82 P     00 37.00   0.1
TUZ     2.19 106 P     00 38.50  -0.8
BWZ     2.48  71 P     00 43.30   0.1
ODZ     2.87  85 P     00 48.00  -0.7
MQZ     4.64  71 P     01 13.50   0.4
LTZ     4.84  59 eP    01 15.90  -0.1
DSZ     5.24  48 eP    01 21.40  -0.2
THZ     5.84  54 eP    01 29.90   0.1
QRZ     6.29  46 eP    01 36.10   0.0
     S.D. = 0.4  on  18 of  18 obs.
-----------------------------------
   NOV  02, 1993  02h 44m 53.34± 0.49s
   38.973 N ± 4.8km   29.840 E ± 4.1km
   DEPTH =   5.0km  (geophysicist)
 TURKEY                          (366)
     ML 3.8 (ISK). Felt at Afyon.

ALT     0.23  69 iPg   44 55.30  -2.7
KHL     0.69 201 iPg   45 06.10  -1.1
                eSg    45 16.10
DST     1.13 304 iPn   45 15.80   0.7
GPA     1.36  15 iPn   45 18.30  -0.7
IZI     1.39 348 ePn   45 20.00   0.5
EYL     1.61   9 iPn   45 22.60   0.0
BCK     1.62 158 iPn   45 21.90  -0.8
NAL     1.67  42 iP    45 23.30  -0.2
                eS     45 47.00
GBZT    1.84 351 ePn   45 26.30   0.5
                eSg    45 59.10
HRT     1.85 356 ePn   45 25.60  -0.4
CIN     1.95 226 ePn   45 28.00   0.7
EDC     2.05 313 ePn   45 29.00   0.1
IZM     2.10 255 iPn   45 30.00   0.4
ISK     2.17 344 ePn   45 30.60   0.0
SGKT    2.34  46 eP    45 34.30   1.0
                eS     46 12.00
BBTK    2.42  68 eP    45 37.00   2.6
                eS     46 11.00
CTT     2.43 334 ePn   45 34.70   0.4
MFT     2.68 313 ePn   45 38.00   0.1
EZN     2.85 288 ePn   45 40.50   0.1
DMK     3.26 331 ePn   45 46.60   0.5
ALN     3.49 305 eP    45 49.96   0.6
KAS     3.85  50 ePn   46 04.00   9.5X
                iSg    47 02.00
CTK     4.20  64 eP    46 02.00   2.4
PAIG    4.86 283 eP    46 08.72  -0.2
SRS     5.25 296 eP    46 13.52  -0.9
SOH     5.32 292 eP    46 15.20  -0.2
KNT     5.76 295 eP    46 21.64   0.1
LIT     5.79 284 eP    46 22.44   0.4
VAY     6.04 295 iPn   46 26.00   0.5
GRG     6.05 291 eP    46 26.44   0.8
CFR     6.33 349 eP    46 27.00  -2.6
SKO     7.07 298 ePn   46 40.00   0.0
MLR     7.13 337 eP    46 38.50  -2.4
VRI     7.27 343 eP    46 39.50  -3.2X
     S.D. = 1.2  on  32 of  34 obs.
-----------------------------------
*  NOV  02, 1993  03h 21m 42.50± 2.07s
    5.637 S ±13.2km  146.142 E ±22.2km
   DEPTH =  10.0km  (geophysicist)
   3.8mb (  2 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)
      ML 3.8 (PMG).

MDG     0.53 317 iPd   21 52.60  -0.6
YYYY    0.62 196 iPd   21 53.90  -1.3
LAT     1.33 140 eP    22 11.40   4.3X
MNDI    2.52 258 eP    22 25.00   0.6
PMG     3.88 165 eP    22 43.60   0.1
WR2    18.26 218 eP    25 54.30  -3.5X
       0.6s     2.30nm          3.5mb
ASPA   21.45 212 eP    26 34.40   1.1
       1.1s     8.30nm          4.0mb
     S.D. = 1.3  on   5 of   7 obs.
-----------------------------------
*  NOV  02, 1993  03h 26m 42.48± 1.41s
   38.880 N ±10.5km   30.046 E ±15.9km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
      ML 3.0 (ISK).

ALT     0.18  16 iPg   26 45.50  -1.1
KHL     0.69 217 iPg   26 56.10  -0.1
                eSg    27 06.10
DST     1.32 304 ePn   27 06.70  -0.2
GPA     1.42   8 ePn   27 09.00   0.6
EYL     1.69   3 iPn   27 13.00   0.8
CIN     2.00 231 ePn   27 20.00   3.3X
                iSg    27 48.00
     S.D. = 1.1  on   5 of   6 obs.
-----------------------------------
*  NOV  02, 1993  03h 50m 39.43± 0.90s
    5.812 S ± 8.7km  145.912 E ±13.4km
   DEPTH =  10.0km  (geophysicist)
   3.7mb (  2 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)
      ML 3.9 (PMG).

MDG     0.57 347 eP    50 51.00   0.0
LAT     1.38 128 eP    51 04.50  -0.1
MNDI    2.27 261 eP    51 22.00   4.3X
WWKK    3.15 314 eP    51 35.70   5.6X
PMG     3.78 161 eP    51 39.00   0.0
WR2    17.99 218 eP    54 50.40  -0.9
       0.7s     3.10nm          3.5mb
ASPA   21.19 212 eP    55 28.60   1.1
       0.9s     5.20nm          3.9mb
     Z  23s     0.10um          3.1MszX
     S.D. = 1.0  on   5 of   7 obs.
-----------------------------------
?  NOV  02, 1993  05h 57m 23.29± 3.47s
    9.701 S ±21.3km  128.687 E ±40.5km
   DEPTH = 138.2 ± 37.4 km
 TIMOR SEA                       (290)

SLKI    3.09  57 iPc   58 12.00   0.0
MTN     3.94 143 eP    58 23.50   0.3
                eS     59 22.00
KNA     6.01 179 eP    58 51.00  -0.1
                eS     00 11.00
WR2    11.57 152 eP    00 04.50  -0.8
                eS     02 22.80
ASPA   14.76 161 eP    00 47.10   0.7
                eS     03 33.50
     S.D. = 1.1  on   5 of   5 obs.
-----------------------------------
   NOV  02, 1993  07h 14m 50.76± 0.25s
   42.812 N ± 3.9km  131.129 E ± 2.8km
   DEPTH = 546.3 ±  3.9 km
   4.9mb ( 69 obs.)
 E. RUSSIA-N.E. CHINA BORDER REG.(657)

VLA     0.64  61 iPd   15 58.00   2.1
       1.2s   375.00nm
                iS     16 52.00
MDJ     2.12 329 iPc   16 03.30   2.1
                iS     17 01.00
CN2     4.26 285 iPc   16 16.20   1.2
                S      17 20.00
SNY     5.68 263 iPc   16 29.00   2.0
       0.8s   220.00nm          5.2mb
AOMJ    7.28 105 P     16 41.70  -0.3
MRRJ    7.35  90 eP    16 41.50  -1.2
                eS     18 09.20
YONJ    7.83 166 P     16 48.80   1.3
MTMJ    8.07 138 P     16 49.80  -0.2
TSRJ    8.18 151 P     16 51.50   0.5
                S      18 29.30
NIIJ    8.21 130 P     16 50.10  -1.2
                S      18 26.80
YAMJ    8.22 121 P     16 50.30  -1.0
MAT     8.30 137 iPd   16 51.20  -1.0
                eS     18 28.00
ASAJ    8.48  77 eP    16 52.60  -1.3
OFUJ    8.80 112 P     16 54.50  -2.7
                S      18 34.00
HOOJ    8.98  89 eP    16 57.70  -1.3
                eS     18 36.80
IIDJ    9.02 142 P     16 58.00  -1.5
                S      18 40.40
CHJJ    9.09 135 P     16 57.90  -2.2
                S      18 39.30
TKSJ    9.11 164 P     17 00.70   0.4
YSS     9.23  59 eP    17 01.20  -0.4
       0.4s   160.00nm          5.6mb
                eS     18 46.00
WKYJ    9.26 156 P     17 01.80  -0.2
KAKJ    9.61 130 P     17 01.90  -3.5X
                S      18 45.50
KUSJ    9.96  84 eP    17 07.60  -1.4
                eS     18 55.80
KUMJ   10.26 181 P     17 13.30   1.2
BJI    11.56 261 Pd    17 25.50   0.2
       1.0s   160.00nm          5.4mb
                eS     19 32.00
KAGJ   11.61 181 eP    17 27.50   1.8
TIA    12.66 243 Pd    17 37.50   1.1
       1.0s   160.00nm          5.4mb
SSE    14.13 217 Pd    17 51.70   0.6
       1.0s    32.00nm          4.7mb
                S      20 24.00
NJ2    14.49 226 Pd    17 55.00   0.3
       1.0s    30.00nm          4.7mb
HHC    14.72 269 iPd   17 57.20   0.0
       1.0s   180.00nm          5.5mb
CIT    14.98 314 eP    18 00.50   0.9
                e      20 37.50
TIY    15.15 257 Pd    18 03.00   1.7
BTO    15.92 269 P     18 10.00   1.1
       0.7s   110.00nm          5.5mb
WHN    18.15 233 iPd   18 31.00   0.5
       0.6s   140.00nm          5.8mb
BOD    18.45 331 iP    18 32.80  -0.3
       1.3s    76.00nm          5.2mb
XAN    19.44 251 Pd    18 42.50  -0.2
       0.6s    39.00nm          5.2mb
                pP     18 48.00  20kmX
IRK    20.32 307 eP    18 50.00  -0.7
       1.0s    58.00nm          5.2mb
ZAK    20.49 301 iPd   18 52.00  -0.2
       1.0s   190.00nm          5.7mb
LZH    22.06 261 iPd   19 07.50   0.6
       1.2s   200.00nm          5.6mb
                ScP    25 27.30
GTA    23.77 272 iPd   19 22.10  -0.1
       1.0s    94.00nm          5.4mb
                ScP    25 30.00
                ScS    29 17.50
CD2    24.80 250 iPc   19 30.40  -1.0
       0.8s    65.00nm          5.3mb
GYA    25.78 239 Pd    19 38.80  -1.3
       0.8s    58.00nm          5.3mb
                S      23 26.00
                ScP    25 38.80
WMQ    31.35 287 iPd   20 28.40   0.3
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02d 07h

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LSA     34.47 261 Pd    20 55.80   0.9
        1.0s    27.00nm         4.8mb
NRI     34.54 335 iPd   20 51.40  -3.1X
        1.0s    24.00nm         4.8mb
                e       22 28.00
CHTO    36.20 239 iPd   21 08.90   0.2
        1.0s    65.00nm         5.2mb
SHL     36.36 255 iP    21 10.00  -0.1
                eS      26 10.50
ILT     36.38  29 iPc   21 08.80  -0.7
                e       23 18.00
GUN     39.31 263 P     21 34.60   0.2
KKN     39.81 263 P     21 38.40   0.0
PKI     39.84 263 P     21 38.40  -0.3
DMN     40.04 263 P     21 40.40   0.1
GKN     40.16 264 P     21 41.00  -0.1
FRU     40.77 290 iPd   21 46.00   0.3
        1.5s    60.00nm         4.9mb
                e       23 37.00
KSH     41.05 285 P     21 48.60   0.5
        1.0s    40.00nm         4.9mb
ANM     41.19  36 eP    21 49.23   0.5
SDN     44.71  49 (P)   22 14.44  -1.9
        0.6s    17.30nm         4.8mb
NDI     45.24 270 iPd   22 20.60  -0.2
        0.7s   164.38nm         5.7mb
                eS      28 18.00
TTA     45.47  38 eP    22 21.88  -0.4
        1.1s    10.92nm         4.3mb
SVE     45.52 313 iPd   22 22.00  -0.6
IMA     45.98  33 iPc   22 26.16   0.0
        0.5s    18.47nm         4.9mb
                iPcP    23 51.21
SVW     45.98  40 ePc   22 27.40   1.2
        0.8s    21.60nm         4.7mb
ARU     46.71 313 iPd   22 30.50  -1.2
        0.8s   120.00nm         5.5mb
CP2     47.54  40 iPc   22 38.92   0.7
CRP     47.58  40 eP    22 38.62   0.1
KDC     48.36  44 iPc   22 43.21  -0.9
        0.4s    18.61nm         5.0mb
FBA     48.61  34 iPc   22 45.91  -0.1
        0.6s    53.28nm         5.2mb
SLKM    48.69  40 eP    22 45.58  -1.1
                iPcP    24 00.27
PMR     48.90  39 iPc   22 47.12  -1.0
        0.8s    43.86nm         5.0mb
TOA     50.09  37 eP    22 57.60   0.6
KLU     50.40  38 iPc   22 58.96  -0.3
HYB     51.07 257 eP    23 03.50  -1.2
BALM    52.18  38 iPc   23 11.93  -0.4
INK     52.91  28 ePc   23 16.90  -0.4
        0.6s    14.00nm         4.5mb
MBC     53.23  16 ePc   23 19.60   0.0
        0.6s     4.00nm         3.9mb
POO     53.75 262 iPd   23 22.60  -1.4
        0.6s    30.67nm         4.8mb
ASH     54.06 291 eP    23 26.80   0.9
GBA     54.42 254 Pd    23 28.00  -0.6
KOD     56.72 252 eP    23 42.30  -2.7
OBN     58.62 318 eP    23 55.00  -2.0
        1.1s    53.00nm         4.8mb
RES     58.87  13 ePc   23 57.30  -1.2
        0.5s    20.00nm         4.7mb
DAG     59.18 352 eP    23 58.00  -2.5
        0.6s     5.33nm         4.1mb
KAF     59.40 328 iP    24 00.10  -2.0
        0.4s    14.20nm         4.7mb
NUR     60.98 327 iP    24 10.60  -1.9
        0.4s    17.90nm         4.8mb
WRA     62.51 177 P     24 21.50  -1.3
        0.8s    14.70nm         4.5mb
WR2     62.52 177 iPd   24 21.40  -1.4
        0.5s    31.50nm         5.0mb
YKA     62.66  28 eP    24 22.30  -1.0
        0.5s    23.50nm         4.9mb
QIS     63.53 171 iPc   24 28.20  -1.1
KER     63.66 293 eP    24 29.00  -1.4
HFS     65.38 331 eP    24 38.50  -2.1
        0.5s    21.40nm         5.0mb
NB2     65.61 332 P     24 40.40  -1.7
        0.8s    11.90nm         4.5mb
ASPA    66.19 177 iPc   24 45.20  -0.8
        0.6s    17.60nm         4.8mb
MCW     68.14  43 eP    24 57.96   0.2
WARB    68.78 184 eP    25 02.00   0.4
        0.5s    17.00nm         4.8mb
GMW     68.90  44 eP    25 02.91   0.6
VRI     69.11 314 eP    25 02.00  -1.6
BMW     69.37  45 iPc   25 05.67   0.5
RMW     69.46  44 iPc   25 06.26   0.5
OJC     69.70 320 iP    25 05.90  -1.1
MLR     69.78 314 eP    25 04.00  -3.7X
LON     69.93  44 iPc   25 08.50   0.0
SHW     70.08  45 iPc   25 10.23   0.8
KSP     70.87 322 iP    25 13.20  -0.6
DPW     70.99  42 ePd   25 14.73   0.1
NEW     71.24  41 iPc   25 16.05   0.0
        0.8s    48.96nm         5.1mb
VGB     71.29  45 iPc   25 16.94   0.6
BRG     71.89 324 iP    25 18.60  -1.1
PRU     72.27 323 P     25 21.40  -0.5
                PP      28 13.50
DZM     72.30 146 iPc   25 23.50   1.1
FRB     72.64   9 ePd   25 23.50  -0.3
        0.5s    30.00nm         5.1mb
BRS     72.65 160 iPc   25 25.00   0.7
YBH     72.80  49 ePd   25 25.16   0.0
        1.7s    60.00nm         4.9mb
KMPM    72.89  51 eP    25 26.71   1.0
FORT    73.28 183 eP    25 22.60  -5.1X
LGPM    73.28  50 iPc   25 28.93   0.9
KHC     73.32 323 eP    25 28.00   0.0
        0.9s     6.00nm         4.1mb
                e       25 38.50
                e       27 24.00
                PP      28 14.00
GEC2    73.48 322 ePd   25 28.00  -0.9
        0.5s     1.62nm         3.8mb X
                e       25 36.70
                e       27 15.10
                e       27 24.30
                e       27 30.10
                e       27 32.90
                e       28 23.60
WDC     73.67  50 ePd   25 30.10   0.1
        0.9s    20.00nm         4.6mb
GRF     73.94 324 ePd   25 31.60   0.2
        1.0s    27.00nm         4.7mb
LMEM    74.24  49 eP    25 34.29   0.8
MIN     74.35  49 ePd   25 33.29  -0.8
        1.0s    20.00nm         4.6mb
KBA     74.94 321 iPc   25 36.80  -0.4
        0.6s     6.10nm         4.2mb
STK     74.95 171 iPc   25 36.60  -0.4
        0.4s    17.00nm         4.8mb
ORV     74.95  50 ePd   25 36.24  -1.0
        0.8s    20.00nm         4.6mb
LRM     75.22  40 iPc   25 39.50   0.6
ARMA    75.27 162 iPc   25 39.60   0.6
        0.7s    19.00nm         4.6mb
BKS     75.68  51 ePd   25 41.54   0.3
        0.9s    30.00nm         4.8mb
MHC     76.39  52 eP    25 45.44   0.1
COE     76.43  52 eP    25 46.22   0.8
ARN     76.45  51 ePc   25 46.04   0.5
CMB     76.63  50 ePd   25 46.35  -0.1
        0.9s    30.00nm         4.7mb
MEMM    77.70  50 ePc   25 53.73   1.6
BONR    77.86  49 iPc   25 54.36   0.9
HVU     78.03  43 ePc   25 54.99   0.9
PHAM    78.16  52 eP    25 55.16   0.5
TNP     78.37  48 iPc   25 56.85   0.9
        0.6s    29.78nm         4.9mb
ULM     78.64  29 ePc   25 58.90   2.0
BCH     78.80  52 eP    25 58.77   0.6
DUG     79.18  44 iPc   26 01.23   1.1
        1.1s    36.94nm         4.7mb
ISA     79.39  51 iPc   26 00.84  -0.3
        0.7s    15.11nm         4.5mb
TPNV    79.72  49 eP    26 03.77   0.8
        0.4s    18.68nm         4.9mb
DAU     79.82  43 eP    26 04.62   1.0
RSSD    80.39  37 iPc   26 06.64   0.2
        0.8s    27.02nm         4.8mb
EMUT    80.49  44 iPc   26 07.85   0.8
GSC     80.59  50 eP    26 08.38   0.9
ARUT    80.63  46 eP    26 08.59   0.9
MSU     80.76  45 iPc   26 10.02   1.5
JAQ     81.04  16 ePd   26 08.10  -1.2
SRU     81.17  44 (P)   26 11.13   0.6
PEC     81.41  51 iPc   26 11.60   0.0
        0.4s    19.40nm         5.0mb
PLM     81.97  52 eP    26 15.23   0.6
PV09    82.34  43 eP    26 17.59   1.0
PV10    82.48  43 iPc   26 18.35   1.2
PV08    82.52  43 iPc   26 18.35   0.8
GOL     83.25  40 iPc   26 21.98   0.9
        0.8s    24.11nm         4.8mb
GLD     83.29  40 eP    26 22.35   1.2
        1.0s    27.86nm         4.8mb
GLA     83.35  51 (P)   26 22.67   1.3
ALQ     86.44  44 eP    26 37.89   1.3
        1.4s    26.92nm         4.8mb
ACO     88.57  38 iPd   26 47.80   1.5
GAC     88.74  18 eP    26 46.50  -0.4
WMOK    90.35  39 iPc   26 55.38   0.8
        1.0s    37.26nm         5.3mb
MEO     90.41  39 iPc   26 55.70   0.9
ELC     92.22  31 eP    27 03.09   0.0
LTX     92.32  46 eP    27 03.30  -0.5
TOV    124.27  25 ePKP  32 48.40  -0.8
SDV    124.85  27 ePKP  32 49.00  -1.5
SOB1   145.81 346 ePKP  33 24.60  -4.2X
                e       33 28.70
ARE    147.40  43 ePKP  33 35.00   3.4X
LPAZ   148.86  38 PKP   33 36.50   2.2
LPB    149.09  38 PKP   33 36.00   1.6
CNCB   149.38  38 PKP   33 35.60   0.6
                i       33 40.70
CCH    150.70  35 PKP   33 42.70   6.0X
                i       33 52.40
MOCB   154.32  38 PKP   33 42.00   0.2
     S.D. = 1.1  on 165 of 172 obs.
-----------------------------------
?  NOV  02, 1993  07h 15m 28.55± 1.28s
   45.126 S ±17.2km  166.840 E ±10.0km
   DEPTH =  33.0km  (normal)
   4.1mb (  1 obs.)
 OFF W. COAST OF S. ISLAND, N.Z. (161)

MSZ      0.90  60 P     15 44.80   0.1
                eS      16 00.30
TUZ      2.13 114 P     16 02.60   0.1
BWZ      2.25  76 P     16 05.20   1.1
ODZ      2.70  90 P     16 10.20  -0.3
MQZ      4.40  73 eP    16 33.60  -1.1
LTZ      4.57  61 eP    16 37.30   0.2
MRW      6.94  59 eP    17 17.00   6.5X
                S       18 31.70
WR2     36.74 302 eP    22 34.60   0.0
        1.0s     3.00nm         4.1mb
KAF    151.68 321 iPKP  35 19.30   6.0X
     S.D. = 0.8  on   7 of   9 obs.
-----------------------------------
%  NOV  02, 1993  08h 00m 55.83± 1.78s
   41.169 N ±14.6km   23.520 E ± 8.7km
   DEPTH =  10.0km  (geophysicist)
 GREECE-BULGARIA BORDER REGION   (363)

SRS      0.08 134 iPg   00 58.36   0.1
                iSg     01 00.32
SOH      0.37 200 ePg   01 03.72   0.3
KNT      0.47 269 ePg   01 05.04  -0.3
                eSg     01 12.88
GRG      0.87 256 ePg   01 13.00   0.4
                eSg     01 26.00
OUR      0.90 157 ePg   01 13.40   0.3
                eSg     01 26.28
PAIG     1.25 174 ePb   01 18.28  -0.7
                eSb     01 37.48
     S.D. = 0.5  on   6 of   6 obs.
-----------------------------------
&  NOV  02, 1993  08h 13m 12.45s
   63.255 N          151.181 W
   DEPTH =   4.4km
 CENTRAL ALASKA                    (  1)
      <AEIC>. ML 2.7 (AEIC), 2.9
      (PMR).

KTH      0.32  21 iP    13 18.41  -0.5
TRF      0.45  64 iP    13 21.14  -0.3
                eS      13 28.07
HUR      0.76 111 eP    13 26.86  -0.7
                eS      13 37.82
CUT      0.95 153 iP    13 30.73  -0.3
RND      1.06  81 eP    13 31.99  -1.0
                eS      13 46.88
MCK      1.12  64 eP    13 33.18  -0.7
                eS      13 49.13
BWN      1.20  39 eP    13 35.60   0.3
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                    eS    13 52.48
SKT     1.29 187 P     13 36.00  -0.9
                    S     13 52.50
NEA     1.62  34 eP    13 41.89   0.1
                    eS    14 02.88
PWA     1.72 159 P     13 42.70  -0.5
MLY     1.79   6 eP    13 41.91  -2.5
SUA     1.81 173 eP    13 44.40  -0.3
                    eS    14 08.97
GHO     1.82 144 P     13 43.70  -1.1
WRH     1.83  47 P     13 44.40  -0.5
                    S     14 09.70
NCG     1.91 194 P     13 45.00  -1.2
PMR     1.92 149 eP    13 45.01  -1.2
                    eS    14 13.80
SML     1.96 136 eP    13 45.41  -1.4
CGLM    1.99 192 eP    13 45.90  -1.4
CCB     2.04  45 P     13 48.50   0.6
                    S     14 15.30
CRP     2.05 193 eP    13 46.71  -1.5
                    eS    14 15.03
CP2     2.06 194 eP    13 45.49  -2.9
                    eS    14 16.33
BGL     2.08 196 eP    13 47.76  -0.8
CKN     2.09 193 eP    13 48.55  -0.2
CKT     2.12 194 P     13 48.50  -0.6
SPU     2.12 192 eP    13 48.31  -0.8
MDM     2.15  36 eP    13 49.93   0.5
PMS     2.16 159 P     13 50.70   1.1
HDA     2.20  56 eP    13 51.24   1.0
TTA     2.22 264 eP    13 48.24  -2.4
                    eS    14 19.61
FBA     2.22  41 eP    13 47.36  -3.2
                    eS    14 19.75
KNK     2.24 144 eP    13 50.50  -0.4
BKG     2.25 194 eP    13 50.03  -1.0
SCM     2.29 127 eP    13 52.75   1.2
GLM     2.41  42 eP    13 52.50  -0.8
IL1     2.43  49 eP    13 53.46   0.0
ILB     2.43  49 eP    13 53.94   0.4
                    eS    14 24.65
TOA     2.58 114 P     13 55.00  -0.7
PAX     2.61  94 eP    13 55.94  -0.2
CFI     2.62 141 eP    13 57.42   1.2
SDG     2.68 103 eP    13 56.68  -0.5
PWL     2.75 150 eP    13 58.12   0.0
DFR     2.77 196 eP    13 57.81  -0.6
SLKM    2.79 170 eP    13 58.22  -0.6
NCT     2.83 198 eP    13 58.95  -0.3
REF     2.87 195 eP    14 01.32   1.4
RDW     2.89 196 eP    14 01.27   1.1
RS2     2.90 196 eP    14 01.52   1.1
MPA     2.91 162 eP    14 00.07  -0.2
TZL     2.92 112 eP    14 00.98   0.5
IM3     2.95 339 eP    13 58.14  -2.8
SVW     3.00 226 (P)   13 59.49  -2.1
                    eS    14 44.94
IMA     3.02 340 eP    13 58.79  -3.2
KLU     3.02 123 eP    14 02.09   0.1
VLZ     3.12 131 eP    14 03.15   0.0
FID     3.35 136 eP    14 06.81   0.2
CNPM    3.74 180 eP    14 12.92   0.7
GLB     3.89 115 eP    14 14.31   0.0
BC3     4.27  88 eP    14 18.39  -1.2
BALM    4.70 114 eP    14 25.25  -0.7
BM3     5.00  30 P     14 25.70  -4.4
        60 obs. associated
-----------------------------------
*  NOV  02, 1993  08h 45m 38.95± 0.76s
   31.479 S ±15.5km   67.813 W ± 7.4km
   DEPTH =  33.0km  (normal)
 SAN JUAN PROVINCE, ARGENTINA     (137)

CFA     0.39 251 iPc   45 47.90   0.0
                    S     45 54.00
RTLL    0.58 285 iPd   45 50.00  -0.8
                    S     46 00.00
RTCV    0.73 238 eP    45 53.00   0.2
                    S     46 06.00
RTCB    0.84 269 iPd   45 55.00   0.5
                    S     46 06.20
RTPR    1.62  44 eP    46 06.00   0.4
                    S     46 25.00
TCA     2.76  88 e(P)  46 21.50  -0.4
     S.D. = 0.6  on   6 of   6 obs.
-----------------------------------
?  NOV  02, 1993  09h 05m 21.12± 1.41s
   38.895 N ± 9.7km   30.051 E ±15.4km
   DEPTH =   5.0km  (geophysicist)
 TURKEY                            (366)
      ML 3.1 (ISK).

ALT     0.17  16 iPg   05 24.40  -0.2
KHL     0.70 216 iPg   05 35.20   0.0
                iSg    05 45.20
DST     1.31 303 ePn   05 45.90   0.0
GPA     1.41   8 iPn   05 47.70   0.3
     S.D. = 0.3  on   4 of   4 obs.
-----------------------------------
   NOV  02, 1993  09h 34m 58.20± 1.26s
   49.251 N ± 9.5km  156.181 E ± 9.7km
   DEPTH =  41.0 ±  9.7 km
   4.7mb ( 15 obs.)
 KURIL ISLANDS                     (221)

SKR     1.42 358 iPnd  35 22.40   0.5
                e      35 32.00
PET     4.08  21 ePn   35 59.00  -0.6
                eS     36 51.00
YSS     9.28 261 ePn   37 14.20   1.9
     Z  16s     1.10um
                (S)    38 58.00
KUSJ   10.05 237 eP    37 18.20  -4.8X
                eS     39 04.40
ASAJ   10.62 246 eP    37 30.60  -0.1
HOOJ   11.31 237 eP    37 35.60  -4.5X
MAT    18.24 233 eP    39 09.00  -0.7
MDJ    18.70 266 eP    39 14.00  -1.3
WKYJ   21.38 233 P     39 44.10  -0.1
CN2    21.74 267 eP    39 43.80  -3.9X
       0.8s     6.00nm          4.1mb
YONJ   21.81 238 P     39 48.60   0.2
TKSJ   22.39 235 P     39 53.90  -0.3
ILT    22.52  25 eP    39 56.00   0.9
TIK    25.71 340 eP    40 24.00  -1.8
       0.8s    19.00nm          4.7mb
                e      40 37.00
FBA    32.92  41 eP    41 29.76  -0.5
       0.7s     2.59nm          4.2mb
ZAK    33.55 293 eP    41 34.50  -1.4
       1.0s     8.00nm          4.6mb
INK    38.43  34 eP    42 18.00   1.0
       0.9s     2.00nm          4.0mb
LZH    39.89 271 P     42 29.20  -0.6
       1.5s    32.00nm          4.9mb
MBC    41.53  21 eP    42 44.00   1.5
GYA    44.27 258 P     43 05.40  -0.1
       1.0s    18.00nm          4.8mb
RES    47.80  20 eP    43 31.00  -1.8
CHTO   54.69 257 eP    44 25.80   0.3
       1.1s    20.32nm          5.1mb
GUN    56.82 275 P     44 40.40  -0.8
KKN    57.30 276 P     44 45.00   0.6
PKI    57.36 276 P     44 45.00   0.0
DMN    57.53 276 P     44 46.80   0.7
GKN    57.57 276 P     44 46.60   0.3
HYB    68.98 272 eP    46 01.50   0.1
POO    71.24 277 iPd   46 16.00   0.8
       1.0s    10.00nm          4.8mb
WRA    71.57 202 P     46 16.50  -0.5
       0.8s     1.60nm          4.1mb
GBA    72.49 271 P     46 24.00   1.4
LTX    74.50  63 (P)   46 33.79  -0.5
CLL    75.00 337 e(P)  46 36.00  -0.6
PRU    75.80 336 eP    46 41.50   0.3
KHC    76.84 336 eP    46 45.00  -2.1
       1.0s     5.40nm          4.5mb
GRF    76.94 337 eP    46 48.70   1.1
GEC2   77.07 336 ePc   46 48.40  -0.1
       0.6s     2.23nm          4.4mb
                e      46 54.20
ENN    77.16 341 eP    46 49.00   0.2
       1.0s    12.00nm          4.9mb
KBA    78.78 335 iPd   46 59.20   1.2
       0.7s    17.50nm          5.1mb
WTTA   79.07 336 iPd   47 00.70   1.1
       1.0s    15.40nm          4.9mb
     S.D. = 1.0  on  37 of  40 obs.
-----------------------------------
%  NOV  02, 1993  09h 46m 48.61± 0.86s
   18.219 N ±12.6km   66.311 W ± 4.2km
   DEPTH =  10.0km  (geophysicist)
 PUERTO RICO REGION                ( 90)

SJG     0.19 125 P     46 53.40   0.6
                S     46 57.00
CLLP    0.29 241 P     46 55.00   0.4
                S     46 59.30
PNP     0.39 246 P     46 56.20  -0.4
CPD     0.42 115 P     46 56.40  -0.7
                S     47 01.80
LPR     0.43  78 P     46 57.50   0.1
                S     47 04.50
LRS     0.51 278 P     46 59.00   0.0
                S     47 06.50
     S.D. = 0.6  on   6 of   6 obs.
-----------------------------------
?  NOV  02, 1993  09h 54m 00.66± 0.98s
   39.129 N ± 8.3km   27.548 E ±10.0km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.7 (ISK).

IZM     0.76 197 iPg   54 15.40  -0.2
                eSg    54 26.50
DST     0.96  60 ePn   54 19.50   0.5
EZN     1.17 307 ePn   54 23.00   0.4
EDC     1.24  11 ePn   54 23.00  -0.7
     S.D. = 1.0  on   4 of   4 obs.
-----------------------------------
   NOV  02, 1993  09h 57m 33.04± 1.43s
   1.605 N ± 6.3km  128.890 E ± 8.5km
   DEPTH = 102.7 ± 14.1 km
   4.8mb ( 14 obs.)
 HALMAHERA, INDONESIA              (267)

DAV     6.37 329 ePc   59 07.00   1.0
CTB     7.26 320 ePc   59 17.00  -1.2
LAT    19.86 115 eP    01 58.00  -0.5
WR2    22.08 166 eP    02 19.80  -1.0
       0.6s    11.70nm          4.4mb
LEM    22.82 248 e(P)c 02 27.00  -1.2
QIS    24.40 155 iPd   02 44.40   1.1
KLI    24.86 255 eP    02 49.00   1.4
ASPA   25.59 169 iPc   02 54.10  -0.3
       0.7s     9.70nm          4.4mb
     Z  19s     0.50um          4.1Msz
                ePcS   06 33.10
                eS     07 35.00
FORT   32.21 181 eP    03 54.00   0.5
CHTO   33.97 302 eP    04 09.00   0.1
       1.1s    16.49nm          4.8mb
KMI    34.40 315 Pc    04 14.50   1.7
       1.8s     6.00nm          4.2mb
                pP     04 23.50  31kmX
STK    35.42 161 eP    04 20.30  -0.7
       0.5s     8.80nm          4.9mb
BRS    36.87 143 iPd   04 34.00   0.6
XAN    37.28 332 P     04 38.50   1.7
       1.1s    26.00nm          5.1mb
                pP     04 46.50  27kmX
                sP     04 50.60
CD2    37.62 323 P     04 44.20   4.5X
ARMA   38.52 148 eP    04 48.20   0.9
       0.8s    15.00nm          4.9mb
TIY    38.99 339 eP    04 53.40   2.3
     Z  14s     0.71um          4.6MszX
BJI    39.97 345 eP    04 58.00  -0.9
       1.0s     6.00nm          4.4mb
     Z  20s     0.30um          4.1Msz
                epP    05 04.50  22kmX
                eS     11 04.00
SNY    40.33 354 eP    05 00.60  -1.3
LZH    41.42 329 eP    05 16.00   4.8X
       1.3s    38.00nm          5.1mb
     Z  20s     0.45um          4.3Msz
                sP     05 29.50
CN2    42.13 356 eP    05 15.40  -1.2
MDJ    42.83   1 eP    05 22.00  -0.4
LSA    45.45 312 Pc    05 45.40   1.2
       1.0s     7.00nm          4.4mb
GTA    46.02 328 eP    05 47.60  -0.5
     Z  18s     0.46um          4.5Msz
GUN    48.71 307 P     06 09.20  -0.4
PKI    48.95 306 P     06 11.00  -0.5
       0.8s    19.00nm          5.1mb
KKN    49.15 306 P     06 12.60  -0.2
       0.8s    38.00nm          5.4mb
DMN    49.21 306 P     06 13.40   0.0
       0.8s    44.00nm          5.4mb
GKN    49.75 306 P     06 17.20  -0.2
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02d 10h

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        0.8s    26.00nm          5.3mb
HYB    51.87 291 eP     06 32.50  -0.9
GBA    52.25 286 P      06 35.00  -1.2
WMQ    55.69 325 P      07 01.20   0.1
CP2    83.25  29 (P)    09 48.16  -1.2
SLKM   84.12  29 eP     09 53.98   0.4
PMR    84.77  28 eP     09 57.42   0.7
     S.D. = 1.1  on  33 of  35 obs.
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%  NOV  02, 1993  10h 34m 01.89± 0.67s
   33.769 S ± 9.2km   70.600 W ±11.2km
   DEPTH = 90.0km  (geophysicist)
 CHILE-ARGENTINA BORDER REGION   (127)
      MD 3.6 (SAN).

PCH     0.16  26 iP     34 15.03  -0.2
                 iS     34 24.77
TACH    0.30 292 iPd    34 15.51   0.0
                 iS     34 26.26
CACH    0.35 180 iP+    34 16.18   0.2
                 iS     34 26.75
FCH     0.51  31 iP+    34 17.10  -0.2
                 iS     34 29.16
PEL     0.63 353 iP     34 18.26   0.2
                 iS     34 30.51
LNV     0.70 254 iPd    34 18.40  -0.2
                 iS     34 31.02
LCCH    0.86 290 iPd    34 20.35   0.1
                 iS     34 34.55
ROCH    0.87 337 iP     34 20.58   0.0
                 iS     34 34.61
JACH    1.08   0 iP     34 23.05   0.1
                 iS     34 38.98
     S.D. = 0.2  on   9 of   9 obs.
-------------------------------------
   NOV  02, 1993  11h 41m 01.64± 0.78s
   42.235 N ± 5.6km  122.132 W ± 7.9km
   DEPTH =   5.0km  (geophysicist)
 OREGON                          ( 32)
      ML 3.1 (GS).

LHEM    0.61 186 P      41 14.76   0.9
LGMM    0.67 161 P      41 15.64   0.5
LMPM    0.75 182 P      41 17.12   0.5
LASM    0.76 147 P      41 16.47  -0.5
LGBM    0.89 183 P      41 17.79  -1.6
LBFM    0.91 168 eP     41 19.67   0.1
LBKM    1.22 199 P      41 24.23  -0.6
KOMM    1.37 226 P      41 27.72   0.2
LGPM    1.42 202 eP     41 27.51  -0.8
                 eS     41 47.92
WDC     1.68 191 eP     41 31.47  -0.4
LMEM    1.75 166 (P)    41 33.91   0.9
FHC     2.00 225 eP     41 37.16   0.7
ORV     2.72 170 (P)    41 46.82   0.0
VGB     3.42  16 (P)    41 56.78   0.0
     S.D. = 0.8  on  14 of  14 obs.
-------------------------------------
%  NOV  02, 1993  12h 13m 40.86± 2.19s
   44.764 N ± 5.4km    6.668 E ±18.8km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                          (538)
      ML 2.1 (GEN).

RRL     0.18  28 P      13 45.24   0.3
                 S      13 47.21
PZZ     0.40 130 P      13 49.09  -0.1
                 S      13 54.61
BHB     0.43  79 P      13 49.73   0.1
                 S      13 55.77
RSP     0.57  47 P      13 52.38  -0.1
                 S      13 59.88
STV     0.70 138 P      13 54.96   0.2
                 S      14 04.34
ENR     0.76 135 P      13 55.64  -0.2
                 S      14 05.49
LSD     0.77  26 P      13 55.87  -0.3
                 S      14 06.00
     S.D. = 0.2  on   7 of   7 obs.
-------------------------------------
?  NOV  02, 1993  12h 33m 57.37± 1.09s
    5.473 S ±11.9km  101.907 E ±15.4km
   DEPTH =  33.0km  (normal)
   4.6mb (  4 obs.)
 SOUTHWEST OF SUMATERA, INDONESIA(273)

KLI     3.00  78 eP     34 42.40  -1.3
                 e(S)   35 02.00
                 e      35 41.00
LEM     5.84 104 iPd    35 25.00   0.9
KGM     7.57  11 ePd    35 49.10   0.8
CHTO   24.31 353 eP     39 13.80   0.6
        1.0s    13.25nm          4.4mb
SHL    32.35 343 iP     40 25.00  -1.3
                 eS     43 16.00
WRA    34.66 117 P      40 46.20   0.0
        1.0s     3.40nm          4.2mb
WR2    34.68 117 iPd    40 45.30  -1.1
        0.8s     7.40nm          4.7mb
                 eS     43 57.80
ASPA   35.72 124 eP     40 55.00  -0.2
        0.5s    11.30nm          5.1mb
     Z  19s     0.10um          3.6Msz
STK    45.45 130 iPd    42 15.70   0.5
CTA    45.46 113 P      42 16.29   0.8
     S.D. = 1.0  on  10 of  10 obs.
-------------------------------------
?  NOV  02, 1993  13h 28m 24.44± 2.30s
   40.665 N ±16.5km   30.121 E ±19.2km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
      ML 2.6 (ISK).

EYL     0.10 164 iPg    28 27.20  -0.1
HRT     0.38 295 ePg    28 31.40  -0.8
                 eSg    28 37.00
IZI     0.59 237 ePg    28 36.50   0.0
                 eSg    28 45.50
ISK     0.90 297 iPg    28 42.50   0.8
     S.D. = 1.2  on   4 of   4 obs.
-------------------------------------
&  NOV  02, 1993  13h 34m 05.39s
   37.581 N          118.699 W
   DEPTH =  11.1km
 CALIFORNIA-NEVADA BORDER REGION ( 40)
      <GM-P>. MD 3.1 (GM).

HTCR    0.08 228 P      34 08.02  -0.3
MRCM    0.18  59 iPc    34 09.31  -0.3
MCSM    0.18 294 P      34 09.61  -0.1
MEMM    0.21 294 iPc    34 10.10   0.1
MTUM    0.25 155 iPd    34 10.62  -0.3
MMPM    0.26 276 iPc    34 10.77  -0.4
BHPR    0.33 149 P      34 12.11  -0.2
BONR    0.49  40 ePc    34 14.88  -0.6
                 eS     34 23.11
TNP     1.27  66 ePc    34 28.85  -0.3
MSTM    1.39 284 P      34 30.69   0.0
CMB     1.41 289 ePc    34 30.90  -0.1
                 eS     34 48.16
MNHM    1.77 289 P      34 37.25   1.2
WCHM    1.77 163 P      34 37.80   1.4
VPEM    1.78 156 P      34 38.84   2.5
BAVM    1.85 273 P      34 42.15   4.8
BRMM    1.85 247 P      34 39.12   1.8
PARM    1.87 225 P      34 39.43   1.8
WORM    1.92 169 P      34 40.15   1.8
ISA     1.92 175 ePd    34 39.87   1.5
                 eS     35 04.63
WOFM    2.04 180 P      34 42.49   2.3
TPNV    2.05 107 ePn    34 40.82   0.4
WJPM    2.17 175 P      34 44.77   2.7
WSHM    2.17 153 P      34 46.02   4.0
LTR     2.20 252 P      34 43.93   1.6
HJSM    2.21 251 P      34 44.20   1.7
PHAM    2.21 219 (P)    34 43.33   0.8
ARN     2.27 265 eP     34 44.78   1.4
HSPM    2.29 259 P      34 45.59   1.8
BVYM    2.32 250 P      34 45.77   1.6
COE     2.39 263 (P)    34 45.31   0.2
CBO     2.43 260 P      34 48.11   2.5
BCH     2.64 205 eP     34 49.88   1.1
GSC     2.74 146 (P)    34 49.43  -0.7
BAPM    2.75 240 P      34 51.77   1.5
ORV     2.95 313 (Pn)   34 52.75  -0.3
ARUT    4.18  86 ePn    35 11.72   1.1
       36 obs. associated
-------------------------------------
?  NOV  02, 1993  15h 00m 02.63± 0.97s
   39.132 N ± 8.2km   27.561 E ± 9.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
      ML 2.6 (ISK).

IZM     0.77 198 ePg    00 17.50  -0.2
                 eSg    00 29.30
DST     0.95  60 ePn    00 21.20   0.4
EZN     1.18 306 ePn    00 25.00   0.4
EDC     1.24  11 ePn    00 25.00  -0.6
     S.D. = 0.8  on   4 of   4 obs.
-------------------------------------
*  NOV  02, 1993  15h 15m 31.75± 0.49s
   55.064 N ±13.2km  165.588 E ±10.5km
   DEPTH =  33.0km  (normal)
   4.2mb (  8 obs.)
 KOMANDORSKY ISLANDS REGION      (  4)

TTA    21.00  52 eP     20 14.55   0.2
        1.2s     9.58nm          4.1mb
IMA    22.39  44 eP     20 28.28   0.0
        1.1s     8.30nm          4.1mb
CP2    22.76  57 eP     20 33.53   1.5
CRP    22.80  57 eP     20 33.63   1.2
SLKM   23.81  59 eP     20 42.91   0.8
FBA    24.72  48 eP     20 50.54  -0.3
        1.1s    16.60nm          4.5mb
TOA    25.57  54 eP     20 58.80  -0.2
KLU    25.76  56 eP     20 59.94  -0.9
MAT    26.33 237 eP     21 07.00   0.9
INK    30.30  40 eP     21 41.50  -0.1
        0.6s     1.00nm          3.8mb
YKA    39.49  46 eP     23 00.20   0.0
        0.6s     2.90nm          4.2mb
BGMT   50.75  65 eP     24 30.10  -0.4
BONR   52.40  76 eP     24 43.38   0.2
TNP    52.91  75 eP     24 46.43  -0.4
        0.7s     6.39nm          4.7mb
GSC    55.14  77 eP     25 02.78  -0.3
MSU    55.38  71 eP     25 04.86  -0.1
SRU    55.84  69 ePd    25 07.83  -0.3
PV10   57.17  69 eP     25 17.58  -0.2
PV08   57.23  68 eP     25 17.76  -0.6
NB2    62.48 346 P      25 53.10  -0.5
        0.5s     0.50nm          3.9mb
WR2    79.32 210 eP     27 34.90  -0.4
        0.4s     4.70nm          4.8mb
     S.D. = 0.6  on  21 of  21 obs.
-------------------------------------
*  NOV  02, 1993  15h 40m 16.36± 1.19s
    5.231 S ±12.7km  134.727 E ±16.0km
   DEPTH =  33.0km  (normal)
   4.7mb (  4 obs.)
 ARU ISLANDS REGION, INDONESIA   (204)

SLKI    4.37 231 ePc    41 22.00  -0.1
MTN     8.36 205 iPd    42 19.20   1.0
        0.3s   325.00nm          7.0mb X
                 iS     43 59.00
KNA    11.98 209 eP     43 07.50  -0.4
        0.8s   189.00nm          6.3mb X
                 eS     45 25.50
WR2    14.63 181 eP     43 40.20  -2.8
        0.4s     8.30nm          4.5mb
                 ipP    43 49.50
                 eS     46 28.00
QIS    15.96 163 eP     44 04.00   3.9X
                 eS     46 47.70
ASPA   18.35 182 eP     44 30.70   0.6
        0.6s    33.10nm          4.7mb
     Z  19s     0.90um
                 iS     47 55.00
CTA    18.54 144 iPc    44 32.50   0.0
MBL    21.44 221 eP     45 03.50  -0.4
WARB   22.22 200 eP     45 13.50   1.7
        0.8s    43.00nm          4.9mb
BRS    27.95 144 iP     46 15.00   9.0X
BJI    48.18 341 eP     48 54.50  -1.0
        1.4s    12.00nm          4.7mb
CNCB  148.64 135 PKP    00 01.00   1.5
LPB   148.74 134 ePKP   00 08.00   8.5X
LPAZ  148.88 134 PKP    00 02.00   2.0X
     S.D. = 1.5  on  10 of  14 obs.
-------------------------------------
%  NOV  02, 1993  15h 46m 26.93± 0.75s
   26.897 S ± 7.4km   26.718 E ± 7.4km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA        (584)
      ML 2.7 (PRE).

BFS     0.06  91 eP     46 28.00  -0.6
                 S      46 28.40
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KSR      1.04   9 eP     46 46.50  -0.7
                 S      46 58.00
SWZ      1.27 257 iPd    46 51.40   0.3
                 S      47 09.30
SEK      1.63 151 iPd    46 57.00   0.4
                 S      47 17.00
SLR      1.82  51 eP     47 00.30   1.0
                 S      47 23.00
BLF      2.25 192 eP     47 05.00  -0.6
                 S      47 31.00
     S.D. = 0.9  on   6 of   6 obs.
-----------------------------------
%  NOV  02, 1993  16h 17m 18.54± 0.73s
   33.515 S ± 9.4km    70.417 W ±13.6km
   DEPTH = 100.0km  (geophysicist)
 CHILE-ARGENTINA BORDER REGION    (127)

PCH      0.13 217 iP     17 32.78  -0.2
                 iS     17 43.66
FCH      0.22  30 iPd    17 33.26  -0.3
                 iS     17 45.04
PEL      0.43 329 iP     17 34.21   0.1
                 iS     17 46.07
TACH     0.46 252 iP+    17 34.20  -0.1
                 iS     17 46.19
CACH     0.62 194 eP     17 36.15   0.5
                 iS     17 48.96
ROCH     0.74 317 iP     17 36.80   0.0
                 iS     17 50.57
JACH     0.84 350 iP     17 37.88   0.2
                 iS     17 52.25
LNV      0.94 242 iP     17 38.04  -0.5
                 iS     17 52.64
LCCH     0.96 272 iP+    17 39.10   0.3
                 iS     17 54.21
     S.D. = 0.3  on   9 of   9 obs.
-----------------------------------
%  NOV  02, 1993  16h 45m 43.01± 0.99s
   26.899 S ±11.5km    26.737 E ± 8.1km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA         (584)
      ML 2.3 (PRE).

BFS      0.04  89 iPc    45 43.70  -0.8
                 S      45 43.90
SWZ      1.29 257 eP     46 07.50   0.0
                 S      46 25.00
SEK      1.62 151 eP     46 13.50   1.0
                 S      46 35.00
SLR      1.81  50 eP     46 15.50   0.3
                 S      46 38.00
BLF      2.25 192 e(P)   46 21.00  -0.7
     S.D. = 1.0  on   5 of   5 obs.
-----------------------------------
*  NOV  02, 1993  17h 06m 49.90± 2.52s
   60.414 N ± 9.7km     4.962 E ±20.4km
   DEPTH =  10.0km  (geophysicist)
 SOUTHERN NORWAY                  (535)
      MD 1.8 (BER).

ASK      0.13  59 eP     06 53.30   0.2
EGD      0.19 137 eP     06 53.90  -0.3
0DD1     0.97 120 eP     07 08.72   0.3
KMY      1.21 173 eP     07 12.48   0.0
                 eS     07 28.72
BLS5     1.25 142 eP     07 13.22   0.1
                 eS     07 29.57
NRA0     3.26  81 ePn    07 41.75  -0.3
                 ePg    07 49.72
                 eSn    08 21.42
                 eLg    08 37.59
     S.D. = 0.3  on   6 of   6 obs.
-----------------------------------
*  NOV  02, 1993  17h 13m 09.42± 1.39s
   14.198 N ±13.4km    93.181 W ± 6.2km
   DEPTH =  42.2 ±  7.8 km
   4.6mb (  9 obs.)
 NEAR COAST OF CHIAPAS, MEXICO    ( 69)

TPX      1.13  52 iP     13 29.00  -0.1
                 iS     13 44.50
SCX      2.58  12 iP     13 50.50   0.9
                 iS     14 22.00
OXX      4.46 310 eP     14 15.50  -1.0
                 iS     15 08.50
IISM     6.23 320 eP     14 40.50  -0.8
                 (S)    15 48.00
LVVM     6.33 331 (P)    14 37.50  -5.2X
ACX      6.96 293 (P)    14 57.00   5.4X
PPM      7.12 314 eP     14 55.00   0.8
                 (S)    16 19.50
III      7.33 305 eP     14 56.50  -0.4
UNM      7.69 312 (P)    15 04.50   2.5X
CRX      8.10 311 (P)    15 09.00   1.3
MRX      9.42 307 eP     15 25.00  -0.6
LTX     17.92 329 eP     17 17.15  -0.1
WMOK    21.07 347 eP     17 52.38   0.0
         1.0s    18.18nm          4.4mb
MEO     21.07 348 iPd    17 50.60  -1.8
TUL     21.75 354 iPc    17 59.60   0.4
ACO     23.03 348 iPc    18 12.00   0.1
ALQ     23.88 332 eP     18 20.73   0.5
         0.8s    17.42nm          4.6mb
TUC     24.15 321 eP     18 25.53   2.7X
         1.1s    51.25nm          5.0mb
PV08    27.87 333 eP     18 58.14   0.5
SRU     29.15 332 (P)    19 09.22   0.2
ARUT    29.59 326 eP     19 13.37   0.4
EMUT    29.85 332 eP     19 15.67   0.3
DAU     30.53 332 eP     19 21.69   0.3
RSSD    31.23 345 eP     19 26.63  -0.8
         0.9s    10.89nm          4.6mb
HVU     32.31 332 eP     19 36.94   0.1
BONR    32.50 321 eP     19 40.09   1.4
LRM     35.47 337 eP     20 03.90  -0.2
LON     40.33 329 eP     20 45.07   0.5
YKA     50.58 347 eP     22 04.20  -1.5
         0.8s    14.10nm          5.0mb
SOB1    56.84 111 eP     22 52.40  -0.2
INK     59.93 344 eP     23 13.00  -0.3
         1.0s     4.00nm          4.5mb
KLU     60.29 334 eP     23 16.07   0.0
RES     60.49 359 eP     23 16.00  -1.0
         0.9s     4.00nm          4.5mb
MBC     63.58 353 eP     23 38.00   0.3
         1.0s     6.00nm          4.6mb
NB2     84.52  28 P      25 39.90   0.8
         0.8s     1.50nm          4.2mb
HYB    147.54  15 ePKP   32 51.50   2.6X
GBA    150.86  19 PKP    33 00.00   6.0X
     S.D. = 0.8  on  31 of  37 obs.
-----------------------------------
%  NOV  02, 1993  17h 37m 01.09± 0.86s
   15.298 N ± 6.8km    61.009 W ±24.5km
   DEPTH =  33.0km  (normal)
 LEEWARD ISLANDS                  ( 92)
      ML 2.6 (FDF).

CRM      0.55 170 iPd    37 13.47   1.1
                 S      37 28.00
FDF      0.58 194 iPd    37 13.74   0.9
                 S      37 27.00
MGG      0.68 334 eP     37 15.49   1.2
MVM      0.75 172 iPd    37 14.89  -0.3
BIM      0.78 184 iP     37 14.02  -1.6
                 S      37 31.11
SFG      0.97 349 eP     37 18.24  -0.1
PAG      0.97 318 eP     37 17.83  -0.7
DEG      1.01 357 ePc    37 18.52  -0.5
                 S      37 35.89
     S.D. = 1.2  on   8 of   8 obs.
-----------------------------------
*  NOV  02, 1993  18h 15m 15.71± 3.09s
   39.103 N ±19.8km    21.497 E ± 7.7km
   DEPTH =  85.1 ± 35.0 km
 GREECE                           (364)

AGG      0.65  97 ePg    15 31.92   0.3
                 eSg    15 42.24
IGT      1.00 296 ePg    15 35.08  -0.3
                 iSg    15 49.56
LIT      1.26  37 iPb    15 38.10  -0.4
                 eSb    15 54.00
FNA      1.68 357 ePb    15 44.28   0.2
                 eSb    16 04.76
PAIG     1.88  63 iPb    15 46.28  -0.4
                 eSb    16 07.28
GRG      1.98  20 ePb    15 47.76  -0.3
                 eSb    16 12.00
OHR      2.08 345 iPn    15 49.70   0.3
                 i      15 57.10
                 i      16 11.20
                 i      16 16.30
                 Lg     16 22.50
SOH      2.23  39 ePn    15 51.80   0.3
                 eSn    16 16.80
OUR      2.28  57 ePn    15 52.12   0.1
                 iSn    16 19.32
KNT      2.32  27 ePn    15 53.12   0.5
                 eSn    16 19.32
VAY      2.36  20 ePn    15 53.00  -0.2
SRS      2.57  38 ePn    15 55.96  -0.2
                 eSn    16 25.32
SKO      2.87 359 ePn    16 00.10   0.0
     S.D. = 0.4  on  13 of  13 obs.
-----------------------------------
%  NOV  02, 1993  18h 56m 37.26± 1.87s
   40.696 N ± 8.1km    30.283 E ±13.7km
   DEPTH =   5.0km  (geophysicist)
 TURKEY                           (366)
      ML 3.0 (ISK).

EYL      0.16 216 iPg    56 41.20   0.5
                 eSg    56 44.00
GPA      0.41 177 iPg    56 45.10  -0.3
                 iSg    56 50.10
HRT      0.48 285 iPg    56 46.80  -0.2
IZI      0.71 240 iPg    56 50.90  -0.7
ISK      1.00 292 iPg    56 56.40  -0.2
DST      1.67 230 ePn    57 07.50   0.1
EDC      1.88 260 ePn    57 11.00   0.7
DMK      2.21 301 ePn    57 15.20   0.0
     S.D. = 0.5  on   8 of   8 obs.
-----------------------------------
?  NOV  02, 1993  19h 37m 35.23± 6.70s
   49.134 N ±51.6km     6.947 E ±20.4km
   DEPTH =  10.0km  (geophysicist)
 GERMANY                          (543)
      ML 2.0 (UCC).

RUP      0.57   7 ePg    37 46.20  -0.7
WLF      0.74 316 iPd    37 49.21  -0.5
                 iS     37 58.70
ABH      0.85  27 ePg    37 51.40  -0.2
ENN      1.76 338 ePn    38 07.50   1.5
         0.7s     7.40nm
                 eSn    38 32.50
DOU      1.81 303 P      38 06.20  -0.4
                 i      38 08.30
     S.D. = 1.3  on   5 of   5 obs.
-----------------------------------
   NOV  02, 1993  19h 39m 34.90± 0.43s
   40.667 N ± 4.8km    22.596 E ± 4.0km
   DEPTH =  14.3 ±  3.4 km
 GREECE                           (364)
      ML 3.5 (TIR). MD 3.8 (ATH).

THE      0.28  97 iPg    39 42.00   0.9
                 eSg    39 47.80
GRG      0.32 333 ePg    39 41.08  -0.8
                 eSg    39 46.32
KNT      0.54  25 ePg    39 45.00  -0.7
LIT      0.57 188 iPg    39 44.00  -2.1
                 eSg    39 53.08
SOH      0.60  75 iPg    39 47.72   1.1
                 eSg    39 57.45
VAY      0.65 358 iPg    39 47.70   0.2
                 i      39 55.70
                 iSg    39 59.60
                 Lg     40 08.00
KZN      0.73 241 iPgc   39 45.40  -3.4X
SRS      0.88  59 ePg    39 52.44   1.1
FNA      0.93 278 ePg    39 50.28  -2.1
OUR      1.11 107 iPb    39 56.96   1.7
                 eSb    40 13.36
PAIG     1.11 131 ePg    39 55.84   0.5
OHR      1.43 289 iPn    39 59.20  -1.2
                 i      40 01.80
                 i      40 17.00
                 i      40 23.50
                 i      40 27.50
                 Lg     40 29.00
SKO      1.57 327 iPnc   40 02.50   0.2
                 i      40 06.20
                 i      40 09.80
                 i      40 12.50
                 iSn    40 23.50
                 i      40 26.00
                 Lg     40 32.00
LSK      1.61 252 ePn    40 01.10  -1.9
                 iSn    40 29.50
```

02d 19h

```
AGG      1.66 187 iPb   40 02.38  -1.2
TPE      2.01 260 ePn   40 10.50   1.8
IGT      2.07 238 ePb   40 11.32   1.7
SRN      2.14 249 eP    40 13.40   2.9X
TIR      2.18 289 ePn   40 13.50   2.4
                  iSn   40 45.50
RDO      2.28  77 ePn   40 13.20   0.6
KEK      2.35 247 ePn   40 16.50   3.0X
VLO      2.37 266 ePn   40 16.10   2.2
BCI      2.55 313 ePn   40 20.70   4.3X
SDA      2.71 302 ePn   40 20.50   1.8
PVY      2.75 315 iPnc  40 21.09   1.6
                  iSn   40 58.71
ULC      2.83 298 iPnc  40 19.32  -1.2
                  iSn   40 55.75
VLS      2.93 213 ePn   40 23.00   1.1
EZN      2.98 105 ePn   40 27.00   4.6X
IVA      2.99 318 iPnd  40 25.22   2.5
                  iSn   41 04.74
TTG      3.06 306 iPnd  40 24.04   0.4
                  iSn   41 03.01
PRK      3.16 115 ePn   40 26.50   1.4
BDV      3.26 301 iPnd  40 25.85  -0.7
                  iSn   41 06.53
NKY      3.44 310 iPnc  40 29.44   0.3
                  iSn   41 13.04
HCY      3.55 301 iPnc  40 29.95  -0.7
                  iSn   41 13.29
PLE      3.57 319 iPnc  40 33.10   2.0
                  iSn   41 18.95
BRY      3.76 308 iPnc  40 34.09   0.3
                  iSn   41 20.38
VLI      3.95 176 ePn   40 35.00  -1.3
EDC      4.03  93 eP    40 50.00  12.6X
DMK      4.06  72 eP    40 37.70  -0.1
DRA      4.19  16 eP    40 46.00   6.3X
BUC1     4.47  33 eP    41 08.00  24.4X
CMP      4.94  20 ePc   40 41.00  -9.3X
BZS      5.00 352 ePc   40 41.00 -10.1X
DEV      5.22   2 ePd   41 06.00  11.8X
ISR      5.33  32 eP    40 54.50  -1.4
MLR      5.41  26 iPc   40 55.00  -2.1
VRI      6.01  29 iPc   41 03.70  -1.7
CFR      6.08  40 eP    41 20.00  13.6X
NB2     21.56 345 P     44 24.00  -1.7
         7.0s      2.30nm          2.7mb X
     S.D. = 1.5  on  37 of  49 obs.
-----------------------------------
% NOV  02, 1993  20h 53m 12.45± 2.83s
  40.408 N ± 9.5km   25.974 E ±26.1km
  DEPTH =  10.0km  (geophysicist)
 AEGEAN SEA                        (365)
     ML 3.2 (ISK).

EZN      0.64 155 iPg   53 24.60  -0.7
                  iSg   53 34.10
EDC      1.44  92 ePn   53 39.00   0.4
BNT      1.49  91 ePn   53 39.00  -0.2
DMK      1.95  43 ePn   53 46.20   0.3
CTT      2.01  68 ePn   53 46.00  -0.7
DST      2.19 111 ePn   53 50.00   0.5
IZM      2.24 153 ePn   53 50.70   0.5
     S.D. = 0.7  on   7 of   7 obs.
-----------------------------------
% NOV  02, 1993  21h 19m 18.93± 1.89s
  38.245 S ±11.8km  175.930 E ± 9.7km
  DEPTH = 206.6 ± 17.2 km
 NORTH ISLAND, NEW ZEALAND         (159)

PATZ     0.29 118 P     19 46.10  -0.3
TAZ      0.46  89 P     19 46.60  -0.1
URZ      0.93  91 Pc    19 48.10  -1.0
                  S     20 06.10
PAHZ     1.07 125 Pc    19 49.90  -0.3
TTH      1.47 152 P     19 53.80   0.6
WAHZ     1.49 167 P     19 53.70   0.2
NOZ      1.70 103 P     19 55.60   0.3
BSZ      1.74 206 P     19 56.50   0.9
MAHZ     1.79 122 P     19 56.60   0.4
PUZ      1.84  85 P     19 56.50  -0.2
                  S     20 20.40
TEHZ     1.87 159 P     19 57.00   0.0
HBZ      1.98  72 P     19 58.60   0.5
PGZ      2.39 174 Pc    20 02.40   0.1
MNG      2.40 188 P     20 02.70   0.2
                  S     20 30.90
KIW      2.73 196 P     20 06.20   0.0
MTW      2.93 186 P     20 08.10  -0.4
CAW      2.94 193 P     20 08.40  -0.2
DIW      2.99 211 P     20 09.50   0.3
AMW      3.06 182 P     20 09.80  -0.2
MRW      3.13 197 P     20 10.50  -0.3
                  S     20 47.10
BLW      3.14 186 P     20 10.10  -0.9
TCW      3.23 203 P     20 12.20   0.2
     S.D. = 0.5  on  22 of  22 obs.
-----------------------------------
&  NOV  02, 1993  21h 24m 09.06s
   38.934 N          122.661 W
   DEPTH =   0.2km
 NORTHERN CALIFORNIA               ( 36)
      <GM-P>. MD 2.8 (GM). ML 2.5
      (BRK). Felt (IV) at Lower Lake
      and (III) at Clearlake.

NTYM     0.54 180 eP    24 20.40   0.5
ORV      1.09  55 (P)   24 30.06  -0.5
BKS      1.11 162 eP    24 30.72   0.0
                  eS    24 46.46
ARN      1.82 150 eP    24 40.30  -1.5
COE      1.85 155 eP    24 39.88  -2.4
KMPM     1.86 323 (P)   24 48.15   5.6
CMB      2.00 116 eP    24 42.89  -1.6
                  eS    25 07.63
FHC      2.13 332 (P)   24 51.74   5.4
MMPM     3.15 114 eP    25 00.48  -0.7
MEMM     3.19 112 (Pn)  25 00.60  -0.8
                  eS    25 41.77
BONR     3.56 105 (Pn)  25 05.61  -1.4
MTUM     3.60 115 (P)   25 08.08   0.7
       12 obs. associated
-----------------------------------
   NOV  02, 1993  21h 34m 28.80± 0.32s
   44.701 N ± 2.3km    7.391 E ± 3.7km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                    (545)
      ML 2.6 (GEN).

BHB      0.17 327 Pd    34 33.55   0.9
                  S     34 35.65
PZZ      0.28 227 Pc    34 35.02   0.2
                  S     34 38.30
STV      0.46 186 Pc    34 38.10  -0.1
                  S     34 43.88
RSP      0.46 348 Pd    34 38.21   0.0
                  S     34 44.02
ENR      0.47 177 Pc    34 38.48   0.0
                  S     34 44.53
RRL      0.48 297 Pd    34 38.89   0.2
ROB      0.53 140 Pd    34 39.99   0.4
                  S     34 46.81
TOUF     0.69 189 Pg    34 42.13  -0.6
                  Sg    34 50.75
AUTN     0.71 178 Pg    34 42.56  -0.3
                  Sg    34 51.76
SAOF     0.72 171 Pg    34 42.76  -0.3
                  Sg    34 52.25
FIN      0.76 130 P     34 44.13   0.4
                  S     34 53.59
LSD      0.78 348 P     34 43.71  -0.4
                  S     34 52.76
AURF     0.81 183 Pg    34 44.20  -0.5
MVIF     0.82 192 Pg    34 44.80   0.0
                  Sg    34 55.30
PCP      0.84 101 P     34 45.51   0.5
                  S     34 56.52
IMI      0.87 155 Pc    34 45.87   0.3
                  S     34 56.97
CALN     1.01 201 Pg    34 48.29   0.2
ORX      1.02  24 P     34 47.16  -1.0
                  S     34 59.72
     S.D. = 0.5  on  18 of  18 obs.
-----------------------------------
% NOV  02, 1993  21h 35m 20.04± 1.14s
  40.615 N ± 6.1km   22.444 E ±11.1km
  DEPTH =  10.0km  (geophysicist)
 GREECE                            (364)

GRG      0.34 355 ePg   35 27.36   0.2
                  eSg   35 33.28
LIT      0.51 176 ePg   35 30.32  -0.2
                  eSg   35 38.48
KNT      0.65  32 iPg   35 32.74  -0.2
                  eSg   35 42.60
SOH      0.72  73 ePg   35 33.88  -0.4
                  eSg   35 44.24
OUR      1.21 103 iPb   35 43.04   0.5
                  eSb   36 09.00
     S.D. = 0.5  on   5 of   5 obs.
-----------------------------------
*  NOV  02, 1993  21h 43m 10.20± 1.14s
   24.947 N ± 6.8km  122.900 E ±14.6km
   DEPTH = 172.4 ± 11.0 km
   4.4mb ( 14 obs.)
 TAIWAN REGION                     (243)

QZH      3.91 271 ePg   44 08.40  -2.1
                  Sn    44 44.50
SSE      6.31 347 Pc    44 40.50  -1.5
       1.0s     53.00nm          4.8mb
                  sP    44 47.70
CVP      7.28 188 ePc   44 55.40   0.5
NJ2      7.92 334 Pc    45 03.20  -0.2
                  pP    45 10.00
                  eS    46 35.00
TIA     12.28 337 eP    46 01.70   1.3
       0.8s     16.00nm          4.5mb
GYA     14.72 279 eP    46 35.00   3.6X
XAN     15.16 310 P     46 38.60   1.8
       1.2s     13.00nm          4.2mb
                  pP    46 43.50
TIY     15.54 327 eP    46 43.60   2.2
BJI     16.07 341 eP    46 48.50   0.6
       1.4s     12.00nm          4.1mb
MAT     17.49  45 eP    47 09.00   4.0X
CD2     17.92 294 eP    47 09.60  -0.1
LZH     19.78 309 Pc    47 29.50   0.3
       1.0s     37.00nm          4.8mb
WRA     45.99 165 P     51 18.50   0.6
       0.6s     12.20nm          4.6mb
WR2     46.00 165 iPc   51 17.90  -0.1
       0.5s     23.20nm          5.0mb
ASPA    49.49 167 iPc   51 45.60   0.6
       0.3s      9.30nm          4.9mb
WARB    50.96 176 eP    51 56.50   0.4
       0.5s      7.00nm          4.6mb
KAF     71.27 330 iP    54 10.90  -1.2
       0.5s      1.20nm          3.9mb
INK     71.93  22 eP    54 15.00  -1.0
MBC     72.17  13 eP    54 17.50   0.2
NUR     72.54 329 iP    54 19.00  -0.6
       0.6s      2.80nm          4.2mb
HFS     77.66 331 eP    54 47.50  -1.2
       0.4s      1.10nm          3.9mb
     Z  15s      0.04um          3.9MszX
                  LR    24 30.00
NB2     78.28 332 P     54 51.50  -0.6
       0.6s      2.40nm          4.1mb
KSP     80.80 322 eP    55 06.00   0.3
GEC2    83.24 321 eP    55 18.40  -0.1
       1.0s      4.21nm          4.2mb
     S.D. = 1.1  on  22 of  24 obs.
-----------------------------------
% NOV  02, 1993  22h 05m 44.05± 1.08s
  40.608 N ± 5.7km   22.432 E ± 9.3km
  DEPTH =  10.0km  (geophysicist)
 GREECE                            (364)

GRG      0.35 356 ePg   05 51.46   0.2
                  eSg   05 58.96
THE      0.41  86 ePg   05 52.76   0.4
                  eSg   05 59.88
LIT      0.51 175 ePg   05 54.32  -0.1
                  eSg   06 01.56
KNT      0.66  32 ePg   05 56.97  -0.2
                  eSg   06 07.60
SOH      0.73  73 iPg   05 58.32  -0.1
                  eSg   06 09.80
SRS      1.02  60 ePg   06 03.04  -0.2
                  eSg   06 17.04
     S.D. = 0.3  on   6 of   6 obs.
-----------------------------------
*  NOV  02, 1993  22h 18m 35.99± 1.25s
   6.727 S ± 8.8km  129.862 E ±17.6km
   DEPTH = 173.2 ± 16.1 km
   5.0mb (  7 obs.)
 BANDA SEA                         (280)

SLKI     1.89 131 iPc   19 13.30   1.5
                  iS    19 36.00
MTN      6.21 168 iPd   20 05.20  -1.3
```

```
        0.3s   386.00nm          6.1mb X
KNA      9.03 187 iPd   20 42.20  -1.7
        0.4s   237.00nm          6.0mb X
                 iS    22 19.00
WR2     13.85 162 iPc   21 42.40  -3.9X
        0.3s   122.50nm          5.8mb
                 eS    24 08.50
QIS     16.68 146 eP    22 21.00  -0.2
                 eS    25 14.00
ASPA    17.28 167 iPc   22 28.10  -0.5
        0.4s    49.50nm          5.2mb
                 eS    25 29.90
MBL     17.32 213 eP    22 29.00   0.0
        0.3s     9.00nm          4.7mb
                 eS    25 32.20
WARB    19.59 189 eP    22 54.20   1.2
        0.3s    10.00nm          4.7mb
FORT    23.99 184 eP    23 38.00   2.0X
BAL     26.77 206 eP    24 02.20   0.6
KLB     27.20 203 iPd   24 06.10   0.6
MUN     28.17 205 iPd   24 19.90   5.7X
        0.6s    30.00nm          5.2mb
NWAO    28.59 203 eP    24 18.60   0.6
CHTO    39.66 310 eP    25 59.20   6.5X
MAT     43.75  10 eP    26 25.00  -0.8
        0.8s     7.46nm          4.3mb
GUN     54.67 311 P     27 50.60   0.8
        0.4s    11.00nm          5.0mb
PKI     54.84 311 P     27 50.40  -0.7
GKN     55.65 311 P     27 56.40  -0.3
HYB     56.07 296 eP    28 03.00   3.3X
CNCB   150.70 143 PKPc  38 13.00   8.2X
LPAZ   151.02 142 PKP   38 13.30   8.0X
     S.D. = 1.1  on  14 of  21 obs.
-------------------------------------
%  NOV  02, 1993  23h 31m 25.49± 4.92s
   33.547 S ±10.5km   70.293 W ±23.7km
   DEPTH = 103.6 ± 39.3 km
 CHILE-ARGENTINA BORDER REGION    (127)
     MD 3.7 (SAN).

PCH      0.20 248 iPd   31 40.48  -0.1
                 iS    31 52.87
FCH      0.22   1 iP+   31 40.67  -0.3
                 iS    31 52.86
SAN      0.32 287 iP    31 40.91   0.1
                 iS    31 52.83
PEL      0.52 321 iPd   31 42.27   0.2
                 iS    31 55.17
TACH     0.55 259 iPd   31 42.26   0.0
                 iS    31 55.42
CACH     0.62 204 iPd   31 43.28   0.3
                 iS    31 57.93
ROCH     0.83 313 iP+   31 44.95   0.0
                 iS    32 00.42
JACH     0.90 344 iP    31 45.52   0.0
                 iS    32 00.90
LNV      1.02 246 iPd   31 46.17  -0.4
                 (S)   32 01.05
LCCH     1.07 273 iPd   31 47.39   0.2
                 iS    32 05.58
     S.D. = 0.3  on  10 of  10 obs.
-------------------------------------
   NOV  03, 1993  00h 10m 42.42± 0.59s
   11.457 S ± 8.0km  119.144 E ± 8.6km
   DEPTH =  33.0km  (normal)
   4.5mb (  5 obs.)
 SOUTH OF SUMBA, INDONESIA        (292)

KHKI     4.65 311 iPd   11 52.00  -0.1
                 iS    12 44.00
                 e     14 22.20
MBL      9.67 176 eP    13 01.00  -1.4
        0.2s    23.00nm          6.1mb X
                 eS    14 38.50
KNA     10.28 116 eP    13 10.20  -0.6
                 eS    14 56.30
MTN     11.80  98 eP    13 31.80   0.3
                 eS    15 34.00
MEEK    15.11 182 eP    14 15.00  -0.2
                 iS    16 47.00
WARB    16.27 155 iPd   14 29.60  -0.6
        0.4s    19.00nm          4.6mb
                 iS    17 24.00
WR2     16.90 122 eP    14 37.10  -1.1
                 eS    17 32.60
MRWA    17.91 189 eP    14 50.50  -0.3
        0.3s     6.00nm          4.2mb
                 eS    17 51.20
ASPA    18.56 133 iPc   15 01.00   2.2
        0.5s    16.90nm          4.5mb
                 eS    18 16.90
BAL     19.19 186 eP    15 08.20   1.9
        0.3s     8.00nm          4.4mb
                 eS    18 22.50
COOL    19.42 175 eP    15 12.20   3.2X
                 eS    18 29.50
KLB     20.08 183 eP    15 11.50  -4.5X
                 eS    18 43.00
MUN     20.60 187 eP    15 27.50   6.1X
        0.3s   100.00nm          5.7mb X
                 eS    18 56.50
NWAO    21.44 184 eP    15 37.50   7.5X
                 eS    19 16.90
RKG     23.09 184 eP    16 01.50  15.2X
                 eS    19 55.00
GBA     48.28 300 P     19 22.70   0.0
        0.7s     3.00nm          4.4mb
GUN     50.69 321 P     19 41.60   0.1
GKN     51.53 320 P     19 47.40  -0.2
     S.D. = 1.1  on  13 of  18 obs.
-------------------------------------
%  NOV  03, 1993  00h 23m 54.34± 0.90s
   45.054 N ± 4.4km    7.271 E ±10.9km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                   (545)
     ML 2.2 (GEN).

RSP      0.10 354 P     23 57.51   0.4
                 S     23 59.20
BHB      0.21 181 P     23 59.34   0.4
                 S     24 03.00
RRL      0.37 249 P     24 02.41   0.4
                 S     24 07.44
LSD      0.41 349 P     24 02.87   0.0
                 S     24 08.04
PZZ      0.56 192 P     24 05.25  -0.6
                 S     24 12.80
LPG      0.58 321 Pg    24 05.90  -0.3
                 Sg    24 13.20
LPL      0.60 321 Pg    24 06.40  -0.2
                 Sg    24 14.10
     S.D. = 0.5  on   7 of   7 obs.
-------------------------------------
&  NOV  03, 1993  00h 56m 58.26s
   32.622 N          115.803 W
   DEPTH =   6.0km  (geophysicist)
 CALIF.-BAJA CALIF. BORDER REGION( 45)
     <PAS-P>. ML 2.9 (PAS).

GLA      0.93  62 iPc   57 13.76  -2.6
PLM      1.15 310 ePn   57 18.54  -1.7
                 eS    57 35.07
PEC      1.70 318 ePn   57 26.06  -2.6
SSK      2.24 316 (Pn)  57 34.78  -1.8
                 ePg   57 38.63
GSC      2.80 343 (Pn)  57 42.05  -2.5
        5 obs. associated
-------------------------------------
   NOV  03, 1993  01h 19m 02.86± 0.51s
   24.255 S ± 5.0km   67.092 W ± 9.7km
   DEPTH = 195.3 ±  8.0 km
 CHILE-ARGENTINA BORDER REGION    (127)

SLA      1.53 108 iPc   19 37.50   0.6
                 (S)   20 02.00
FSA      2.07 152 ePd   19 42.90   0.9
YJA      2.54  35 iPd   19 48.30   0.5
                 S     20 21.50
MOCB     3.28  24 P     19 57.30   0.8
CYA      4.33 165 iPd   20 09.50   0.2
RTRS     6.26 199 eP    20 34.50   0.4
                 S     21 45.00
RTCB     7.36 191 ePc   20 47.80  -1.0
                 S     22 10.80
CFA      7.39 188 iPd   20 47.20  -2.0
                 S     21 06.80
TCA      7.40 163 iPd   20 47.90  -1.3
                 i     22 08.50
CNCB     7.45 353 iPd   20 51.00   0.5
LPB      7.74 353 P     20 55.20   1.0
                 S     22 25.80
LPAZ     7.99 353 P     20 57.20  -0.5
MDZ      8.73 190 e(P)  21 08.20   1.6
ARE      8.78 331 eP    21 06.00  -1.5
                 iS    22 39.00
SIV      9.98  36 P     21 20.80  -2.0
RSTA    16.45  95 eP    22 44.60   0.4
CACB    18.92  86 iPc   23 10.30  -1.1
                 i     23 11.90
                 i     23 15.20
LIC     67.60  72 P     29 40.80   0.1
KIC     67.91  72 P     29 43.00   0.3
WR2    131.35 207 ePKP  37 56.00   2.0
        0.3s     6.40nm
WRA    131.36 207 PKP   37 57.20   3.2X
        0.7s     1.30nm
     S.D. = 1.2  on  20 of  21 obs.
-------------------------------------
%  NOV  03, 1993  03h 58m 04.72± 0.87s
   39.323 N ± 7.2km   27.862 E ± 8.3km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
     ML 2.8 (ISK).

DST      0.66  64 iPg   58 18.00   0.2
                 iSg   58 27.60
EDC      1.02   0 iPn   58 24.00   0.0
BNT      1.03   2 ePn   58 24.00  -0.2
IZM      1.04 207 ePn   58 24.20  -0.1
EZN      1.29 293 ePn   58 28.80   0.2
     S.D. = 0.3  on   5 of   5 obs.
-------------------------------------
&  NOV  03, 1993  04h 27m 02.96s
   36.293 N          120.427 W
   DEPTH =   9.5km
 CENTRAL CALIFORNIA               ( 39)
     <GM-P>. MD 3.2 (GM). ML 3.2
     (PAS), 3.4 (GS).

PARM     0.08 122 P     27 06.15   0.7
PTV      0.30 232 P     27 10.10   0.9
PKEM     0.35 132 eP    27 11.05   1.0
CTM      0.37 169 P     27 11.32   0.8
PSAM     0.46 235 P     27 12.64   0.4
LRC      0.50 265 P     27 13.19   0.1
BRMM     0.63 330 P     27 16.22   0.6
BLRM     0.78 299 P     27 19.01   0.9
PAPM     0.85 244 P     27 19.54   0.1
BSLM     0.89 303 P     27 20.76   0.8
SAO      0.95 300 eP    27 20.87  -0.2
BAPM     0.99 264 P     27 21.75  -0.1
BPRM     1.06 277 P     27 22.79  -0.2
OCR      1.07 306 P     27 23.23   0.1
BCH      1.14 166 eP    27 24.12  -0.3
                 eS    27 39.80
CSR      1.14 306 P     27 26.20   1.8
HSPM     1.20 313 P     27 24.87  -0.5
ARN      1.38 320 eP    27 26.99  -1.3
                 eS    27 50.33
COE      1.39 314 eP    27 27.36  -1.1
JSTM     1.43 310 P     27 29.50   0.5
JUCM     1.48 299 P     27 29.02  -0.7
MOYM     1.61 356 P     27 30.69  -0.8
JSMM     1.67 304 P     27 31.64  -0.8
ISA      1.70 111 iPc   27 32.05  -1.0
                 eS    27 52.99
MMPM     1.73  40 eP    27 33.57   0.0
                 eS    27 55.97
CMB      1.74   1 eP    27 32.42  -1.1
ABL      1.74 145 eP    27 31.81  -1.9
                 eS    27 54.77
ARVC     1.74 131 P     27 33.09  -0.4
MEMM     1.82  41 eP    27 35.27   0.8
                 eS    27 58.52
MTUM     1.83  54 eP    27 35.28   0.3
                 eS    27 57.95
MRCM     2.06  48 eP    27 39.07   0.7
                 eS    28 06.04
BONR     2.37  45 ePn   27 43.49   0.6
                 eS    28 16.31
SSK      3.05 132 ePn   27 50.50  -1.9
GSC      3.11 108 eP    27 51.76  -1.3
TNP      3.12  54 ePn   27 53.38   0.0
ORV      3.37 346 ePn   27 56.40  -0.3
TPNV     3.42  78 ePn   27 57.37  -0.3
MSU      6.93  69 Pg    29 11.81  24.4
        38 obs. associated
-------------------------------------
?  NOV  03, 1993  04h 28m 38.17± 3.01s
     6.222 S ±23.3km  147.089 E ±35.3km
```

03d 04h

```
   DEPTH =  71.4 ± 13.0 km
   4.4mb (  2 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)

LAT     0.45 191 eP    28 50.50  -0.3
YYYY    1.11 269 ePc   28 58.70   0.1
PMG     3.16 179 eP    29 27.00   0.4
                 eS    30 08.00
WWKK    4.31 307 eP    29 42.90   0.1
WR2    18.41 221 eP    32 47.20  -3.0X
       0.3s     5.00nm          4.2mb
ASPA   21.49 215 eP    33 22.60  -0.2
       0.3s     6.90nm          4.5mb
                 eS    37 14.60
    S.D. = 0.5  on   5 of   6 obs.
-----------------------------------
   NOV  03, 1993  04h 29m 59.80± 0.39s
   40.962 N ± 3.9km   20.126 E ± 4.0km
   DEPTH =  10.0km  (geophysicist)
 GREECE-ALBANIA BORDER REGION     (392)
     ML 3.2 (TIR).

TIR     0.43 333 iPgc  30 07.20  -1.4
                 iSg   30 15.10
OHR     0.53  73 iPgc  30 09.30  -1.2
       0.5s  1120.00nm
                 i     30 14.50
                 iSg   30 18.20
                 i     30 22.70
KBN     0.61 124 iPgc  30 08.00  -4.1X
                 iSg   30 18.00
TPE     0.67 188 ePg   30 14.00   0.9
                 iSg   30 28.50
VLO     0.69 224 ePg   30 13.10  -0.3
                 iSg   30 25.80
LACI    0.74 335 iPgc  30 12.60  -1.7
                 iSg   30 24.50
LSK     0.89 156 ePg   30 14.40  -2.5
                 iSg   30 30.00
FNA     0.96 100 ePg   30 17.06  -1.1
                 eSg   30 32.74
SRN     1.09 185 ePg   30 21.60   1.4
                 iSg   30 36.10
SDA     1.19 337 ePn   30 25.50   3.6X
ULC     1.20 327 iPgd  30 21.43  -0.7
                 iSg   30 38.94
BCI     1.40 358 iPnd  30 26.20   0.8
                 iSn   30 47.70
SKO     1.41  44 iPnc  30 26.50   1.0
                 iSg   30 44.00
                 iSb   30 47.00
                 Lg    30 53.00
IGT     1.44 174 ePb   30 27.54   1.7
                 eSb   30 49.22
TTG     1.60 336 iPgc  30 28.76   0.6
                 iSg   30 51.93
PVY     1.64 356 iPnd  30 29.25   0.4
                 iSn   30 54.53
BDV     1.64 324 iPgc  30 29.13   0.4
                 iSg   30 51.41
GRG     1.72  89 iPb   30 29.82  -0.2
                 iSb   30 54.38
VAY     1.88  78 iPn   30 31.70  -0.5
IVA     1.92 355 iPnc  30 34.87   2.0
                 iSn   31 01.00
HCY     1.92 321 iPnc  30 32.64  -0.2
                 iSn   30 58.02
LIT     2.00 115 iPn   30 34.50   0.5
                 iSn   31 02.18
NKY     2.03 336 iPnd  30 35.31   0.8
                 iSn   31 02.28
KNT     2.11  84 ePn   30 34.62  -0.9
                 eSn   31 03.62
THE     2.18  98 ePn   30 37.62   1.0
                 eSn   31 05.94
BRY     2.27 329 iPnd  30 38.29   0.3
                 iSn   31 06.87
PLE     2.43 347 iPnd  30 41.37   1.1
                 iSn   31 12.79
SOH     2.45  92 iPn   30 40.94   0.4
                 iSn   31 12.90
BAI     2.47 275 e(Pn) 30 38.50  -2.2
AGG     2.57 138 iPn   30 44.98   2.7X
SRS     2.63  85 ePn   30 42.94   0.0
PAIG    2.90 110 iPn   30 46.17  -0.7
                 eSn   31 24.46
OUR     3.00 101 iPn   30 48.86   0.6
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                 eSn   31 25.14
BZS     4.78  13 eP    31 05.00  -8.5X
     S.D. = 1.2  on  30 of  34 obs.
-----------------------------------
   NOV  03, 1993  04h 39m 45.32± 0.70s
   57.090 N ± 6.1km  142.875 W ± 3.3km
   DEPTH =  10.0km  (geophysicist)
 GULF OF ALASKA                   ( 15)
     ML 3.5 (AEIC).

MID     2.97 323 P     40 33.50   0.2
YKU     2.98  33 P     40 34.70   1.3
                 S     41 06.90
CHX     3.12  16 iP    40 36.36   0.8
PNL     3.17  34 iP    40 36.54   0.4
PCA     3.31  23 iP    40 38.59   0.3
HMT     3.34 348 eP    40 38.52  -0.1
BCPM    3.34  29 iP    40 38.82   0.3
WAX     3.37   0 eP    40 39.05  -0.1
                 eS    41 14.86
RAGM    3.44 345 eP    40 40.54   0.5
                 eS    41 16.51
CVA     3.77 338 eP    40 45.26   0.5
HIN     3.82 332 eP    40 45.96   0.5
MTU     3.84 321 eP    40 45.16  -0.5
LTI     3.94 321 eP    40 46.60  -0.5
                 eS    41 28.74
CTGM    3.97  11 eP    40 47.59   0.0
BALM    3.97   4 iP    40 47.50  -0.1
                 eS    41 29.55
FID     4.12 335 eP    40 50.66   1.0
SIT     4.12  87 eP    40 48.16  -1.5
KNIM    4.13 324 eP    40 48.86  -1.0
                 eS    41 32.66
GLB     4.39 354 iP    40 52.85  -0.7
SEW     4.58 314 eP    40 55.92  -0.2
KLU     4.68 342 eP    40 56.65  -1.1
PWL     4.72 326 eP    40 57.16  -1.1
MPA     4.79 318 eP    40 58.62  -0.6
CFI     4.82 331 eP    40 58.82  -0.7
CNPM    5.04 302 eP    41 02.06  -0.7
SLKM    5.13 315 eP    41 03.02  -1.0
TZL     5.14 346 eP    41 05.34   1.3
KNK     5.19 329 eP    41 05.62   0.7
KDC     5.24 281 eP    41 05.61   0.1
SCM     5.27 336 eP    41 07.02   0.9
HOM     5.28 303 eP    41 06.67   0.5
TOA     5.30 343 eP    41 07.83   1.3
SYI     5.31 291 eP    41 06.91   0.4
SML     5.49 332 eP    41 09.00  -0.1
GHO     5.62 329 eP    41 11.81   0.8
SUA     5.96 321 eP    41 15.10  -0.6
AUE     5.99 297 P     41 17.50   1.4
CDD     6.01 292 eP    41 16.25  -0.2
BC3     6.02   5 eP    41 15.41  -1.2
AGU     6.02 297 P     41 17.60   0.9
OPT     6.02 300 eP    41 17.17   0.6
AUH     6.03 297 eP    41 18.35   1.6
AUL     6.03 297 eP    41 17.89   1.2
PAX     6.04 349 eP    41 16.66  -0.2
AUW     6.05 297 eP    41 17.97   1.1
ILIM    6.07 304 eP    41 16.53  -0.7
INE     6.10 303 eP    41 17.23  -0.6
RED     6.14 307 eP    41 17.74  -0.5
INW     6.14 303 eP    41 18.45   0.2
REF     6.14 308 eP    41 18.12  -0.3
RS2     6.15 307 eP    41 18.17  -0.4
RDW     6.18 308 eP    41 18.42  -0.6
DFR     6.18 309 eP    41 17.82  -1.1
SPU     6.25 315 eP    41 18.95  -1.0
BKG     6.27 313 eP    41 19.56  -0.6
NCT     6.27 308 eP    41 19.85  -0.4
CGLM    6.31 316 eP    41 20.64  -0.1
CKT     6.32 315 eP    41 21.07   0.1
CKN     6.33 315 eP    41 21.82   0.9
CRP     6.35 315 eP    41 21.15  -0.1
CKL     6.37 314 eP    41 21.11  -0.5
CP2     6.38 315 eP    41 21.64  -0.1
MCNL    6.42 294 eP    41 21.81  -0.4
NCG     6.43 316 eP    41 22.24  -0.2
BGL     6.43 315 eP    41 22.19  -0.3
CUT     6.51 328 eP    41 23.66   0.3
PDB     6.53 299 eP    41 23.55  -0.2
SKT     6.59 322 eP    41 23.67  -0.9
BGM     6.92 295 eP    41 28.13  -1.1X
SVW     7.70 307 eP    41 38.03  -2.1X
IL1     7.95 347 eP    41 41.55  -2.1X
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ILB     7.95 347 eP    41 41.66  -1.9X
SDN     9.97 267 eP    42 12.14   0.6
     S.D. = 0.7  on  69 of  73 obs.
-----------------------------------
*  NOV  03, 1993  05h 41m 49.64± 0.84s
    5.827 S ± 7.3km  145.940 E ±13.2km
   DEPTH =  10.0km  (geophysicist)
   4.0mb (  1 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)
     ML 4.1 (PMG).

YYYY    0.41 176 iPd   41 58.20   0.1
                 eS    42 05.00
MDG     0.59 344 ePd   42 01.70   0.1
LAT     1.34 128 eP    42 14.30  -0.1
MNDI    2.29 262 eP    42 34.00   5.7X
WWKK    3.18 313 eP    42 45.00   4.3X
PMG     3.76 161 eP    42 49.00   0.1
ASPA   21.19 212 eP    46 37.60  -0.1
       1.0s     6.90nm          4.0mb
     Z 20s      0.10um          3.2Msz
KIC   150.84 273 PKP   01 45.50   6.3X
TIC   151.12 273 PKP   01 46.20   6.6X
LIC   151.13 272 PKP   01 46.00   6.4X
     S.D. = 0.2  on   5 of  10 obs.
-----------------------------------
*  NOV  03, 1993  06h 32m 38.04± 3.26s
   45.240 N ±29.8km   14.866 E ± 7.0km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION       (383)
     MD 2.9 (LJU).

RIY     0.35 287 iPgd  32 44.50  -0.8
                 iSg   32 51.80
VBY     0.38  46 ePg   32 45.10  -0.8
                 iSg   32 51.60
CEY     0.59 328 ePg   32 49.50  -0.4
                 eSg   33 00.60
TRI     0.91 302 ePg   32 56.20   0.8
                 eSg   33 10.20
PTJ     1.01  49 iPg   32 57.80   0.5
                 iSg   33 10.50
VOY     1.05 320 ePn   32 57.50  -0.3
                 eSn   33 15.80
KBA     2.12 331 i(Pn) 33 15.20   1.0
       0.6s     3.70nm
                 i(S)  33 46.00
                 i     33 51.60
     S.D. = 1.0  on   7 of   7 obs.
-----------------------------------
   NOV  03, 1993  06h 45m 20.69± 0.80s
   37.853 N ± 7.2km   29.380 E ± 5.8km
   DEPTH =   5.0km  (geophysicist)
 TURKEY                           (366)
     ML 3.6 (ISK).

KHL     0.48  14 ePn   45 29.50  -0.9
                 eSg   45 37.00
BCK     1.04 112 iPn   45 40.90   0.1
CIN     1.06 257 ePg   45 41.00   0.0
                 iSg   45 56.00
IZM     1.76 289 iPn   45 51.70  -0.3
DST     1.85 342 iPn   45 53.00  -0.3
GPA     2.54  16 ePn   46 03.00  -0.2
BNT     2.75 336 ePn   46 06.00  -0.2
EDC     2.76 335 ePn   46 07.00   0.7
EYL     2.78  12 ePn   46 07.00   0.3
NAL     2.78  32 eP    46 13.50   6.6X
HRT     2.97   4 ePn   46 10.00   0.6
BBTK    3.30  52 eP    46 12.50  -1.7
CTT     3.37 348 ePn   46 15.00  -0.1
SGKT    3.42  37 eP    46 18.00   2.0
                 eS    47 18.00
     S.D. = 0.9  on  13 of  14 obs.
-----------------------------------
%  NOV  03, 1993  06h 45m 36.82± 0.94s
   42.243 N ± 6.5km   19.601 E ± 6.2km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION       (383)

TTG     0.31 307 iPgc  45 43.41   0.1
                 iSg   45 47.86
ULC     0.38 223 iPgd  45 44.79   0.1
                 iSg   45 50.45
PVY     0.45  38 ePg   45 46.06   0.1
                 iSg   45 52.62
BDV     0.58 274 iPgd  45 48.18  -0.3
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                iSg   45 56.58
IVA     0.67  19 iPgd  45 49.79   -0.3
                iSg   45 59.86
NKY     0.72 322 iPgd  45 50.79   -0.3
                iSg   46 01.45
HCY     0.84 284 iPgd  45 53.15    0.1
                iSg   46 05.26
BRY     1.02 310 iPgd  45 56.50    0.3
                iSg   46 11.24
PLE     1.10 352 iPgd  45 57.85    0.4
                iSg   46 13.98
     S.D. = 0.3  on   9 of   9 obs.
-----------------------------------
*  NOV  03, 1993  07h 52m 23.16± 2.04s
   31.327 S ±12.4km   68.596 W ±19.3km
   DEPTH = 106.5 ± 18.0 km
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTLL    0.11  92 iPd   52 38.00   -0.5
                (S)   52 48.50
ZON     0.23 198 eP    52 34.30   -4.5X
RTCB    0.24 228 iPd   52 39.00    0.2
                (S)   52 49.00
CFA     0.41 133 iPc   52 39.60    0.2
RTCV    0.53 175 iPd   52 40.00   -0.2
RTRS    1.37 327 iPc   53 10.10   21.5X
MDZ     1.57 188 iP    52 51.20    0.2
                iS    53 09.40
RTPR    2.06  61 eP    52 58.00    0.7
                S     53 24.00
TCA     3.43  91 iP    53 15.30   -0.4
                (S)   53 53.00
CYA     3.76  41 ePc   53 20.00   -0.3
                S     54 04.00
     S.D. = 0.5  on   8 of  10 obs.
-----------------------------------
%  NOV  03, 1993  08h 24m 38.39± 0.49s
   42.631 N ± 3.8km   18.871 E ± 4.3km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION       (383)

NKY     0.20  27 iPgc  24 43.37    0.4
                iSg   24 47.10
HCY     0.33 237 iPgd  24 45.22    0.0
                iSg   24 50.78
BDV     0.35 185 iPgd  24 45.80    0.2
                iSg   24 51.33
TTG     0.35 125 iPgd  24 45.63    0.0
                iSg   24 51.54
BRY     0.36 318 iPgd  24 45.70   -0.2
                iSg   24 51.48
ULC     0.72 157 iPgc  24 52.55   -0.1
                iSg   25 03.42
IVA     0.79  72 iPgd  24 53.74   -0.1
                iSg   25 06.02
PLE     0.80  29 iPgd  24 53.89   -0.1
                iSg   25 05.55
PVY     0.81  92 iPgc  24 54.10   -0.2
                iSg   25 06.63
     S.D. = 0.2  on   9 of   9 obs.
-----------------------------------
&  NOV  03, 1993  08h 37m 28.53s
   36.293 N          120.432 W
   DEPTH =   9.0km
 CENTRAL CALIFORNIA                ( 39)
      <GM-P>. MD 2.9 (GM). ML 3.0
      (GS), 2.9 (PAS).

PARM    0.08 121 P     37 31.69    0.7
PSMM    0.26 211 P     37 35.00    1.0
PKEM    0.35 131 eP    37 36.27    0.6
CTM     0.37 168 P     37 36.95    0.8
PSAM    0.46 234 P     37 38.15    0.4
WKR     0.48 188 P     37 39.13    0.8
PAGM    0.58 165 P     37 40.45    0.2
PADM    0.74 208 P     37 43.15    0.0
PHCM    0.84 224 P     37 45.50    0.6
PMGM    0.86 185 P     37 45.06   -0.2
YEG     0.94 156 P     37 46.58    0.0
SAO     0.94 300 eP    37 46.54   -0.1
SFL     1.04 312 P     37 48.38    0.1
BPOM    1.08 267 P     37 48.74   -0.2
DIL     1.12 299 P     37 49.59    0.0
BCH     1.14 166 eP    37 49.47   -0.6
                eS    38 05.51
HCOM    1.19 300 P     37 52.04    1.3
CBO     1.30 309 P     37 51.47   -1.2
JTGM    1.37 303 P     37 53.81    0.0
ARN     1.38 320 eP    37 52.54   -1.4
COE     1.39 314 eP    37 52.87   -1.1
WOFM    1.59 118 P     37 55.91   -1.1
MSTM    1.61   1 P     37 56.79   -0.4
ISA     1.71 111 ePc   37 57.60   -1.1
WLHM    1.72  94 P     37 58.54   -0.6
MMPM    1.73  40 eP    37 59.30    0.0
                eS    38 21.27
CMB     1.74   1 eP    37 58.33   -0.8
ABL     1.75 145 eP    37 56.88   -2.5
HTCR    1.82  47 P     38 00.89    0.4
MEMM    1.82  41 ePd   38 00.68    0.5
                eS    38 23.93
MTUM    1.84  54 eP    38 00.92    0.3
MRCM    2.07  48 eP    38 04.75    0.7
                eS    38 31.99
BONR    2.38  45 eP    38 09.52    0.9
                eS    38 41.94
GSC     3.11 107 ePn   38 17.89   -0.9
TNP     3.13  54 ePn   38 19.29    0.2
ORV     3.36 346 ePn   38 22.51    0.2
TPNV    3.43  78 ePn   38 22.38   -1.0
        37 obs. associated
-----------------------------------
   NOV  03, 1993  08h 44m 40.96± 0.99s
   40.954 N ± 7.8km   20.136 E ± 9.3km
   DEPTH =  10.0km  (geophysicist)
 GREECE-ALBANIA BORDER REGION     (392)
      ML 2.4 (TIR).

TIR     0.44 333 iPgd  44 49.60   -0.4
                iSg   44 57.60
OHR     0.53  72 iPg   44 51.50   -0.1
        0.5s   150.00nm
                iSg   45 00.40
KBN     0.59 123 ePg   44 51.50   -1.5
                iSg   44 58.00
TPE     0.66 188 ePg   44 55.10    0.9
LACI    0.75 335 ePg   44 55.00   -0.7
SKO     1.41  43 ePn   45 08.50    1.8
     S.D. = 1.5  on   6 of   6 obs.
-----------------------------------
%  NOV  03, 1993  09h 18m 25.19± 0.82s
   39.105 N ± 6.6km   27.601 E ± 8.5km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 2.7 (ISK).

IZM     0.75 201 ePg   18 39.90   -0.1
                eSg   18 51.90
DST     0.94  58 ePn   18 43.30    0.1
EZN     1.22 306 ePn   18 48.00    0.1
EDC     1.26   9 ePn   18 48.00   -0.5
BNT     1.27  11 ePn   18 49.00    0.2
KGT     1.36 350 iPn   18 50.40    0.2
     S.D. = 0.4  on   6 of   6 obs.
-----------------------------------
*  NOV  03, 1993  09h 48m 34.26± 2.86s
   39.727 N ±29.4km   32.960 E ± 8.7km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      MG 2.7 (DDA).

BBTK    0.19 307 iPg   48 38.00   -0.6
                iSg   48 42.00
SGKT    1.09 321 iP    48 54.50   -0.4
NAL     1.36 291 eP    49 00.00    0.7
CTK     1.72  55 eP    49 03.80   -0.8
KAS     1.75  20 eP    49 06.00    1.1
     S.D. = 1.1  on   5 of   5 obs.
-----------------------------------
%  NOV  03, 1993  10h 00m 29.48± 0.86s
   39.102 N ± 7.1km   27.513 E ± 9.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 2.7 (ISK).

IZM     0.73 196 ePg   00 43.90    0.1
                eSg   00 56.40
DST     1.00  59 ePn   00 48.30   -0.2
EZN     1.17 309 ePn   00 51.00   -0.3
EDC     1.27  12 ePn   00 53.00   -0.1
KGT     1.36 353 iPn   00 54.90    0.5
     S.D. = 0.4  on   5 of   5 obs.
-----------------------------------
   NOV  03, 1993  10h 02m 06.47± 0.83s
   42.272 N ± 5.8km  122.122 W ±11.4km
   DEPTH =   5.0km  (geophysicist)
 OREGON                           ( 32)
      ML 2.5 (GS).

LHEM    0.65 186 P     02 23.18    3.7X
LGMM    0.71 162 P     02 21.05    0.5
LMPM    0.78 182 P     02 22.80    0.5
LASM    0.79 149 P     02 21.97   -0.4
LGBM    0.93 183 P     02 25.40    0.6
LBFM    0.94 169 eP    02 25.10    0.1
LBKM    1.26 199 P     02 30.26   -0.1
LGPM    1.46 202 eP    02 33.88    0.3
                eS    02 53.27
WDC     1.72 191 eP    02 36.09   -1.1
LMEM    1.78 166 (P)   02 37.95   -0.4
VGB     3.38  16 (P)   03 01.26    0.2
     S.D. = 0.6  on  10 of  11 obs.
-----------------------------------
?  NOV  03, 1993  10h 37m 36.01± 4.24s
   14.185 N ±42.1km   93.021 W ±12.7km
   DEPTH =  57.0 ± 15.0 km
   3.9mb (  3 obs.)
 NEAR COAST OF CHIAPAS, MEXICO    ( 69)

TPX     1.03  46 iP    37 54.00   -0.4
SCX     2.56   8 eP    38 17.00    1.1
                eS    38 46.50
OXX     4.58 309 (P)   38 46.00    1.4
                (S)   39 44.00
IISM    6.34 319 (P)   39 16.00    6.9X
PPM     7.24 313 (P)   39 20.00   -2.2
LTX    18.01 329 eP    41 44.45    0.4
UYO    19.94 357 iPc   42 02.60   -3.4X
MIAR   20.28 359 eP    42 08.40   -1.1
        0.7s     4.13nm          3.9mb
MEO    21.12 347 iPc   42 18.20    0.1
TUL    21.78 354 iPd   42 22.90   -1.8
ACO    23.08 347 iPd   42 38.70    1.2
ALQ    23.96 332 eP    42 45.49   -0.8
        0.8s     1.66nm          3.6mb
PV08   27.95 333 eP    43 24.65    1.2
YKA    50.62 347 eP    46 30.60   -0.4
        0.8s     4.80nm          4.6mb
INK    59.98 344 eP    47 38.50   -0.1
MBC    63.61 353 eP    48 04.00    1.2
     S.D. = 1.3  on  14 of  16 obs.
-----------------------------------
%  NOV  03, 1993  10h 50m 27.51± 0.89s
   39.099 N ± 7.4km   27.546 E ±13.7km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 2.7 (ISK).

IZM     0.73 198 ePg   50 41.90   -0.1
                eSg   50 53.90
DST     0.98  59 iPn   50 46.30    0.2
EDC     1.27  11 ePn   50 51.00   -0.1
BNT     1.29  13 ePn   50 51.00   -0.4
KGT     1.36 352 iPn   50 52.90    0.4
     S.D. = 0.4  on   5 of   5 obs.
-----------------------------------
   NOV  03, 1993  12h 04m 10.63± 0.63s
   5.830 S ± 3.8km  146.166 E ± 5.7km
   DEPTH =  24.2 ±  4.9 km
   4.8mb ( 14 obs.)  4.4Msz (  3 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)

YYYY    0.45 206 iPd   04 19.60   -0.5
MDG     0.69 326 iPc   04 24.30    0.3
LAT     1.17 135 eP    04 31.00   -0.6
MNDI    2.52 263 eP    04 56.80    5.7X
WWKK    3.35 311 eP    05 06.50    3.8X
PMG     3.69 165 iPc   05 07.50    0.0
RAB     6.19  75 iPc   05 48.00    5.1X
JAY     6.36 301 ePd   05 50.00    4.6X
                eS    08 34.00
TLE    13.35 270 ePc   07 33.00   11.8X
HNR    14.12 106 eP    07 30.00   -1.4
CTA    14.17 180 iPc+  07 34.50    2.4
        2.0s   235.29nm          5.5mb
                eS    10 18.00
                i     10 35.00
                i     12 38.00
QIS    15.97 203 eP    07 56.00    0.6
KNA    19.71 239 eP    08 44.60    3.1X
        1.0s    83.00nm          5.0mb
```

03d 12h

```
ASPA    21.30 212 iPc    08 57.70  -0.3
         0.9s    18.60nm          4.5mb
      Z  22s     1.10um          4.2Msz
                  i      09 04.20
                  iS     12 55.70
BRS     22.35 164 iP     09 08.00  -0.4
                  i      09 18.00
BKM     24.57 120 iPc    09 31.50   1.3
ARMA    24.99 169 eP     09 34.20   0.0
         0.6s    10.00nm          4.6mb
DZM     25.40 131 iPc    09 39.10   1.0
STK     26.27 189 eP     09 44.70  -1.3
WARB    27.52 221 eP     09 57.00  -0.5
         0.8s    17.00nm          4.8mb
KUMJ    40.85 340 eP     11 53.30   1.1
TKSJ    41.22 345 eP     11 55.80   0.5
IIDJ    41.82 350 eP     12 00.50   0.3
CHJJ    42.20 351 eP     12 03.90   0.6
SHNJ    42.21 341 eP     12 03.80   0.4
TSRJ    42.25 348 eP     12 04.60   0.9
YONJ    42.52 345 eP     12 04.80  -1.1
MAT     42.80 351 eP     12 08.00  -0.2
         1.7s    26.92nm          4.7mb
                  eS     18 40.00
MTMJ    42.91 350 eP     12 09.40   0.2
NIIJ    43.37 352 eP     12 13.40   0.6
LOE     49.59 299 eP     13 01.00  -1.3
NST     50.34 296 eP     13 07.50  -0.5
KMI     52.24 308 eP     13 22.00  -0.6
         1.5s    60.00nm          5.3mb
                  pP     13 30.50  28kmX
CHTO    52.58 299 ePd    13 25.90   0.9
         1.4s    25.00nm          5.0mb
CN2     52.83 341 eP     13 26.00  -0.4
      Z  18s     0.36um          4.5Msz
XAN     53.03 321 P      13 27.50  -0.6
         1.0s     9.00nm          4.7mb
                  pP     13 32.50  16kmX
                  sP     13 35.00
BJI     53.35 331 eP     13 29.00  -1.3
         1.4s    12.00nm          4.7mb
      Z  20s     0.60um          4.6Msz
CD2     54.56 315 P      13 43.00   3.5X
HHC     56.26 329 Pc     13 52.40   0.8
LZH     57.54 320 eP     14 00.00  -0.9
         2.0s    40.00nm          5.1mb
SHL     61.23 303 iPd    14 26.60   0.0
GTA     62.08 321 eP     14 32.00  -0.1
         1.5s    13.00nm          4.8mb
                  pP     14 39.00  23kmX
LSA     63.48 307 P      14 41.40  -0.4
CSY     65.21 195 eP     15 00.80   8.9X
         1.1s     5.80nm          4.6mb
GUN     67.08 303 P      15 05.60   0.6
PKI     67.36 303 P      15 06.80   0.0
KKN     67.54 303 P      15 08.00   0.2
DMN     67.62 303 P      15 09.00   0.7
GKN     68.15 303 P      15 11.60   0.1
HYB     70.63 291 eP     15 27.00   0.3
GBA     70.89 286 P      15 28.70   0.4
         1.1s     4.00nm          4.5mb
WMQ     72.12 320 P      15 34.00  -1.3
POO     75.23 291 iPc    15 54.80   1.0
MOCB   138.80 132 PKP    23 34.80  -3.3X
CNCB   139.43 124 PKP    23 35.50  -4.0X
LPB    139.48 124 PKP    23 30.00  -9.4X
LPAZ   139.57 123 PKP    23 34.50  -5.3X
SIV    145.40 129 PKP    23 48.30  -0.9
RSTA   146.28 155 ePKP   23 49.30  -1.2
PPD    147.44 149 ePKP   24 00.10   7.7X
VAO    148.60 156 (PKP)  24 01.00   6.7X
KIC    151.07 273 PKP    24 04.30   6.1X
         0.8s    12.50nm
TIC    151.35 273 PKP    24 05.50   6.8X
LIC    151.35 272 PKP    24 05.40   6.8X
BAO    154.48 147 PKPc   24 10.00   6.9X
                  e      24 15.10
                  i      24 17.40
     S.D. = 0.9  on  47 of  65 obs.
-----------------------------------
   NOV  03, 1993  12h 14m 27.45± 0.40s
   35.859 N ± 4.4km  115.843 W ± 4.4km
   DEPTH =   5.0km  (geophysicist)
 CALIFORNIA-NEVADA BORDER REGION ( 40)
      ML 3.3 (GS), 3.1 (PAS).

GSC      0.96 235 ePd    14 46.84   0.6
TPNV     1.14 343 eP     14 49.78   0.5
ISA      2.15 266 ePc    15 04.27  -0.2
SSK      2.24 223 eP     15 08.21   2.3
PEC      2.24 209 eP     15 05.97   0.1
TNP      2.48 334 ePn    15 09.47   0.2
                  ePg    15 14.26
PLM      2.64 199 eP     15 11.29  -0.3
MTUM     2.65 305 (Pn)   15 10.77  -1.0
ARUT     2.72  44 eP     15 13.10   0.3
BONR     2.87 317 ePn    15 15.04   0.0
GLA      2.92 163 (Pn)   15 14.00  -1.5
ABL      2.94 251 (P)    15 20.56   4.7X
MMPM     3.10 305 (P)    15 16.84  -1.4
BCH      3.52 260 eP     15 23.82  -0.3
MSU      3.95  47 eP     15 30.75   0.5
CMB      4.24 302 eP     15 43.14   9.0X
DUG      4.94  28 ePn    15 44.69   0.4
                  ePg    15 59.11
SRU      5.33  51 (P)    15 49.80   0.0
DAU      5.81  37 (Pn)   15 57.48   0.9
                  ePg    16 16.22
PV09     5.97  62 (P)    15 58.53  -0.4
PV10     5.99  63 ePn    15 58.53  -0.6
PV08     6.35  63 ePg    16 22.19  17.8X
HVU      6.38  21 (P)    16 09.56   5.0X
     S.D. = 0.9  on  19 of  23 obs.
-----------------------------------
%  NOV  03, 1993  13h 06m 52.47± 1.06s
   39.276 N ±10.8km   22.562 E ±16.0km
   DEPTH =  10.0km  (geophysicist)
 GREECE                           (364)

AGG      0.31 215 iPg    06 59.00   0.0
                  iSg    07 05.24
LIT      0.83 356 ePg    07 09.36   0.9
                  eSg    07 23.20
PAIG     1.08  53 ePb    07 13.44   0.7
SOH      1.66  21 ePb    07 20.40  -1.4
                  eSb    07 43.56
KNT      1.90   8 ePn    07 24.96  -0.3
                  eSn    07 48.52
     S.D. = 1.3  on   5 of   5 obs.
-----------------------------------
%  NOV  03, 1993  13h 07m 15.47± 0.76s
   39.617 N ± 7.0km   29.515 E ± 6.3km
   DEPTH =   5.0km  (geophysicist)
 TURKEY                           (366)
      ML 2.8 (ISK).

DST      0.69 269 ePg    07 28.60  -0.6
                  eSg    07 39.60
ALT      0.73 140 ePg    07 30.00   0.0
EYL      1.07  27 ePn    07 36.30   0.2
HRT      1.21   6 ePn    07 37.90  -0.6
BNT      1.43 302 ePn    07 42.80   0.7
KGT      1.89 297 ePn    07 49.00   0.3
     S.D. = 0.6  on   6 of   6 obs.
-----------------------------------
?  NOV  03, 1993  13h 10m 33.77± 1.18s
   38.889 N ± 9.6km   29.973 E ±12.7km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 2.8 (ISK).

ALT      0.20  33 iPg    10 37.80  -0.4
KHL      0.67 212 iPg    10 47.10   0.0
                  eSg    10 57.10
DST      1.27 305 ePn    10 57.10  -0.2
EYL      1.68   5 ePn    11 04.00   0.6
     S.D. = 0.7  on   4 of   4 obs.
-----------------------------------
   NOV  03, 1993  13h 13m 13.82± 0.78s
   42.682 N ± 7.7km   23.985 E ±10.5km
   DEPTH =   5.0km  (geophysicist)
 BULGARIA                         (359)

SRS      1.59 191 ePb    13 42.36  -0.3
                  eSb    14 03.76
VAY      1.72 218 iPn    13 44.40  -0.2
KNT      1.72 208 ePb    13 44.28  -0.3
                  iSb    14 07.64
SOH      1.92 194 ePb    13 47.68   0.2
                  eSb    14 13.76
SKO      2.02 250 ePn    13 53.00   4.1X
GRG      2.09 215 ePn    13 50.60   0.6
                  iSn    14 18.00
OUR      2.35 180 ePn    13 53.56  -0.1
                  eSn    14 24.24
ALN      2.36 138 ePn    13 53.92   0.1
                  eSn    14 25.68
OHR      2.85 238 iPn    13 49.00 -11.9X
MLR      3.14  26 eP     14 05.00   0.0
     S.D. = 0.4  on   8 of  10 obs.
-----------------------------------
   NOV  03, 1993  13h 18m 10.80± 0.20s
   7.123 S ± 4.8km   67.916 E ± 3.2km
   DEPTH =  10.0km  (geophysicist)
   5.4mb ( 91 obs.)  5.4Msz ( 46 obs.)
 MID-INDIAN RIDGE                 (429)
      Mw 5.6 (HRV).
      CENTROID, MOMENT TENSOR    (HRV)
      Data Used: GDSN
      L.P.B.: 35S, 73C
      Centroid Location:
      Origin Time       13:18:16.6 0.2
      Lat  7.58S 0.04 Lon  68.16E 0.03
      Dep  15.0 FIX Half-duration  1.5
      Moment Tensor;   Scale 10**17 Nm
        Mrr=-2.01 0.07  Mtt= 0.87 0.07
        Mff= 1.14 0.08  Mrt= 1.27 0.25
        Mrf=-1.27 0.25  Mtf=-1.76 0.08
      Principal Axes:
       T  Val=  3.37  Plg=18  Azm= 47
       N       -0.76       2      316
       P       -2.61      71      220
      Best Double Couple:Mo=3.0*10**17
       NP1:Strike=140 Dip=27 Slip= -86
       NP2:        315     63      -92

GBA     22.66  25 Pc     23 15.00   1.4
POO     26.16  13 iPd    23 48.50   1.3
                  iS     28 24.00
HYB     26.55  23 eP     23 50.60  -0.3
         1.0s    30.00nm          4.9mb
                  eS     28 28.00
NAI     31.55 279 iPd    24 42.20   6.1X
AEKI    31.82  74 P      24 10.00 -28.3X
MRPI    32.51  76 P      24 46.00   1.6
KGM     36.48  77 eP     25 18.00  -0.3
NDI     36.71  14 ePd    25 21.00   1.0
                  eS     31 04.00
PENI    37.05  90 P      25 26.00   2.8
QUE     37.11 359 eP     25 25.60   2.0
                  eS     31 12.60
NNT     37.20  58 eP     25 24.60   0.3
DHR     37.44 333 eP     25 26.00  -0.2
DMN     38.32  25 P      25 35.60   1.7
PKI     38.42  25 P      25 35.80   1.0
GKN     38.48  24 P      25 36.40   1.3
KKN     38.55  25 P      25 37.00   1.2
PACI    38.71  92 P      25 31.40  -5.8X
GUN     38.92  26 P      25 40.60   1.6
NST     39.13  54 eP     25 41.00   0.5
SINI    39.27  92 P      25 44.00   2.1
LSZ     39.75 255 iPd    25 46.00   0.2
         1.2s     1.60nm          3.6mb X
                  i      26 08.00
SHL     39.99  35 iP     25 48.70   1.0
                  iPP    27 27.00
                  iS     31 54.00
CHTO    40.00  49 iPd    25 48.30   0.6
         1.1s    44.76nm          5.0mb
BUL     40.21 247 iPc    25 51.50   1.9
         1.5s    48.61nm          5.0mb
UQSK    41.08 324 eP     25 58.67   2.1
LOE     41.36  54 eP     26 00.00   1.2
CRZF    41.53 197 eP     26 18.00  18.1X
                  ePP    27 58.00
                  eS     32 23.00
                  eSS    34 30.00
SLR     42.05 239 iPc    26 04.40  -0.3
         1.2s    90.00nm          5.4mb
      Z  22s    34.40um          6.2Msz
LSA     42.89  30 P      26 12.40   0.6
         2.0s   320.00nm          5.7mb
      Z  22s    15.60um          5.9Msz
      N  17s     4.01um
KSR     43.28 240 e(P)   26 11.50  -3.3X
SEK     43.49 236 eP     26 16.50   0.1
         1.0s    50.00nm          5.2mb
BLF     44.95 236 eP     26 07.00 -21.2X
WAJH    44.97 319 eP     26 29.67   1.5
KER     45.71 336 iPd    26 35.00   0.9
ASH     45.72 349 eP     26 34.00   0.1
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                e     28 13.00
                e     28 26.00
                eS    33 21.00
                eSS   36 38.00
FRS    45.88 235 iPc   26 34.00   -1.4
       1.5s    40.00nm          5.2mb
HVD    46.05 234 iPc   26 45.50    8.6X
       0.9s    39.00nm          5.4mb
GRM    46.27 230 eP    26 40.50    2.0
       1.0s   120.00nm          5.9mb
KMI    46.65  45 eP    26 42.50    0.8
       2.0s   130.00nm          5.6mb
                pP    26 49.00   22kmX
                sP    26 54.00
KSH    46.94   9 P     26 45.00    1.3
       1.5s   130.00nm          5.8mb
     Z  20s     5.70um          5.5Msz
     N  14s     4.50um
     E  14s     4.60um
                pP    26 55.00   33kmX
                PcP   28 15.00
                PP    28 35.00
                PcS   32 10.00
                S     33 36.00
                SS    36 58.00
KEDI   47.73  94 P     26 48.20   -2.1
TAB    49.25 337 iP    27 02.00    0.2
KKM    49.93  76 eP    27 09.00    1.7
FRU    50.09   6 eP    27 05.00   -3.0X
                eS    34 26.00
BAK    50.10 342 iPc   27 07.00   -1.1
                eS    34 24.00
GYA    50.26  47 Pd    27 08.80   -0.9
       1.0s    27.00nm          5.2mb
     Z  20s     2.43um          5.2Msz
                pP    27 16.00   24kmX
                S     34 22.00
SUR    50.42 234 iPd   27 18.00    7.1X
       1.4s    80.00nm          5.5mb
CD2    51.06  40 iPd   27 15.00   -0.6
       1.0s    98.00nm          5.7mb
     Z  20s     4.69um          5.5Msz
                S     34 32.00
WIN    51.20 247 eP    27 24.00    7.0X
       1.5s    60.00nm          5.3mb
TANI   51.36  89 P     27 16.80   -1.3
ERE    51.79 337 iP-   27 21.00   -0.1
       2.5s    85.00nm          5.2mb
                eS    34 48.00
CER    51.95 233 eP    27 13.00   -9.3X
       1.0s    80.00nm          5.6mb
BUNI   52.27  89 P     27 24.00   -1.0
MAK    53.27 341 eP    27 20.00  -11.9X
                eS    35 08.00
WMQ    53.77  18 P     27 36.00    0.3
     Z  18s     9.69um          5.9Msz
     N  17s     3.07um
     E  17s     4.12um
                PcP   28 36.50
                PP    29 38.50
                PcS   32 33.60
                S     35 04.00
GRO    54.14 340 iPc+  27 39.00    0.8
       2.0s   480.00nm          6.2mb
LZH    54.64  36 eP    27 41.50   -0.9
       2.0s    90.00nm          5.5mb
     Z  24s     3.76um          5.4MszX
     E  18s     1.22um
                PP    29 47.00
                eS    35 22.00
GTA    54.91  30 eP    27 43.50   -0.7
       1.5s    71.00nm          5.5mb
     Z  20s     6.33um          5.7Msz
     E  16s     1.65um
                pP    27 54.50   37kmX
                PP    29 48.00
                eS    35 26.00
PYA    55.66 338 iPc   27 49.10   -0.3
XAN    56.41  41 P     27 53.20   -1.8
       1.1s    38.00nm          5.3mb
     Z  20s     4.54um          5.6Msz
                pP    27 59.60   21kmX
                ScS   37 44.00
SOC    56.57 336 eP    27 55.00   -0.9
       2.5s   200.00nm          5.7mb
BAG    57.11  65 eP    27 59.00   -1.4
                e     31 30.00
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                eS    35 59.80
KAS    57.52 330 eP    28 03.00    0.2
ALT    57.78 326 eP    28 02.40   -2.3
GPA    58.53 327 eP    28 07.90   -2.0
ANN    58.63 335 eP    28 09.00   -1.4
       2.3s   300.00nm          6.0mb
     Z  20s     0.50um          4.6Msz
     N  17s     0.90um
                e     36 18.00
EYL    58.81 327 eP    28 10.80   -1.1
DST    58.99 325 eP    28 11.10   -2.0
HRT    59.25 327 iP    28 13.90   -1.0
SIM    60.08 333 eP    28 20.00   -0.4
                e     30 36.00
TIY    60.91  40 eP    28 25.60   -0.8
     Z  24s     3.38um          5.4MszX
     E  20s     2.42um
                S     36 36.50
BTO    61.26  36 P     28 28.00   -0.7
     N  20s     2.59um
     E  20s     1.82um
                ePP   30 46.00
                eS    36 49.00
NJ2    62.23  48 Pc    28 34.50   -0.7
     Z  20s     1.48um          5.1Msz
                S     37 00.00
HHC    62.32  36 eP    28 35.40   -0.5
       1.8s    46.00nm          5.4mb
     Z  36s     2.91um          5.2MszX
     N  20s     1.41um
     E  18s     1.22um
                S     37 01.00
UER    62.63  18 eP    28 36.00   -1.5
       1.5s    70.00nm          5.6mb
                e     30 58.00
                eS    37 08.00
CFR    63.10 330 eP    28 37.50   -3.2X
TIA    63.14  43 eP    28 40.40   -0.8
     Z  21s     1.70um          5.2Msz
     N  18s     1.99um
VAY    63.62 323 iP    28 43.20   -1.1
BUC1   63.62 328 ePd   28 42.00   -2.2
ARU    63.76 354 eP    28 44.50   -0.4
       2.0s   200.00nm          6.0mb
     Z  16s     1.00um          5.1MszX
     N  16s     1.00um
                e     29 13.00
                e     31 09.00
                eS    37 22.00
SVE    63.99 356 iPd   28 46.50    0.1
       2.4s   200.00nm          5.9mb
     Z  19s     2.50um          5.4Msz
     N  19s     1.50um
     E  19s     1.00um
                e     31 04.90
                eS    37 27.00
                eSS   41 35.00
KIS    64.05 331 iP-   28 46.00   -1.0
                e     29 23.00
                e     31 08.00
                iPS   37 22.00
                esS   37 43.00
                e     38 44.00
VRI    64.30 329 eP    28 45.00   -3.7X
TLE    64.40  93 ePc   28 50.20    0.3
MLR    64.44 329 ePc   28 47.00   -2.8
CLI    64.49 330 eP    28 46.00   -3.9X
BJI    64.64  39 eP    28 50.50   -0.5
       2.0s    64.00nm          5.5mb
     Z  20s     1.51um          5.2Msz
     E  18s     2.16um
                esP   29 02.00
                ePP   31 16.00
                eS    37 30.00
                esS   37 41.00
                eSS   41 44.00
SKO    64.69 323 iPd   28 50.00   -1.3
       1.4s   130.00nm          5.9mb
                i     28 57.00
                i     29 12.00
CMP    64.76 328 ePc   28 50.00   -1.8
ZAK    64.95  24 iPd   28 52.30   -0.4
       2.5s   136.00nm          5.7mb
     Z  15s     1.96um          5.4MszX
     N  15s     1.82um
     E  15s     2.50um
                eS    37 30.00
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ASPA   65.20 113 eP    28 53.40   -1.6
       1.2s    15.30nm          5.1mb
     Z  23s     0.70um          4.8MszX
WRA    65.47 109 P     28 55.79   -1.0
       0.7s     8.20nm          5.0mb
WR2    65.49 109 iPc   28 55.40   -1.5
       0.7s    18.70nm          5.4mb
WB5    65.49 109 eP    28 55.20   -1.7
                e     31 44.20
CSY    65.92 163 eP    29 08.10    9.3X
       1.0s     8.00nm          4.9mb
DEV    66.30 327 ePc   29 04.00    2.5
IRK    66.81  23 eP+   29 00.00   -4.8X
     Z  17s     1.81um          5.4MszX
     N  16s     1.47um
     E  17s     0.99um
                e     29 00.50
                e     29 39.00
                eS    38 00.00
BZS    66.83 326 eP    29 01.00   -3.9X
OBN    67.27 341 iPc+  29 06.30   -1.2
       1.5s    35.00nm          5.3mb
     Z  16s     0.70um          5.0MszX
     N  16s     0.60um
     E  16s     1.00um
                i     29 17.00
                ePcP  29 29.00
                e     29 48.00
                ePP   31 34.00
                ePPP  33 22.00
                eS    38 02.00
                ePS   38 16.00
                eSS   42 28.00
                eSSS  46 00.00
MOS    67.48 342 iPd   29 09.00    0.2
       2.4s   760.00nm          6.5mb X
     Z  22s     1.70um          5.2Msz
                e     29 30.00
                e     31 41.00
UZH    68.39 329 ePd   29 14.00   -0.7
       2.4s   520.00nm          6.3mb
                e     29 39.00
MNK    69.62 336 eP    29 33.00   10.9X
SPC    69.79 329 eP    29 21.80   -1.7
SRO    69.97 327 iP    29 24.30   -0.1
PTJ    70.19 324 e(P)  29 22.40   -3.5X
SNY    70.33  41 Pd    29 25.40   -1.3
     Z  30s     1.40um          5.0MszX
                iS    38 42.00
MNS    70.34 320 P     29 26.62   -0.2
       2.1s   347.70nm          6.1mb
CIT    70.62  28 eP    29 29.00    0.6
OJC    70.66 330 eP    29 27.90   -0.7
                e     29 38.50
RIY    70.81 323 iPd   29 28.50   -1.1
ZST    70.85 327 iP    29 28.40   -1.4
                e     34 06.20
                e     34 38.90
LJU    71.10 324 eP    29 31.50    0.1
                ePcP  29 37.60
                e     30 32.50
                e(S)  38 40.00
                e(SKS)39 34.00
                e()   40 36.00
                e(SS) 43 39.00
                e()   44 33.00
TRI    71.38 323 eP    29 32.20   -0.8
VOY    71.47 324 eP    29 33.40   -0.3
                e     30 34.20
KUMJ   71.59  52 eP    29 35.10    0.5
SFI    71.63 321 P     29 35.25    0.7
       1.8s   153.10nm          5.8mb
SHNJ   72.39  51 P     29 39.60    0.3
KMR    72.42 325 iP-   29 39.40    0.2
FVI    72.42 324 P     29 39.40    0.2
       0.6s    19.50nm          5.4mb
MME    72.48 321 P     29 39.47   -0.5
       1.0s    36.20nm          5.4mb
BDI    72.49 320 P     29 38.58   -1.2
       1.0s     8.50nm          4.8mb
CN2    72.50  40 eP    29 38.60   -1.1
       1.0s     8.00nm          4.8mb
     Z  24s     1.07um          5.0MszX
     N  14s     0.63um
     E  14s     0.32um
                eS    39 06.00
PGF    72.81 319 eP    29 40.90   -0.8
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03d 13h

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KSP     72.82 329 ePd   29 41.40  -0.1
                e       32 18.00
BHG     72.96 325 iPd   29 42.00  -0.4
PUL     73.04 341 ePd   29 42.00  -0.6
        2.5s   330.00nm          6.0mb
      Z  24s     1.20um          5.1MszX
      N  20s     0.60um
      E  22s     1.10um
                e       29 52.00
                eS      39 11.00
GEC2    73.09 326 eP    29 42.00  -1.2
        0.8s     2.08nm          4.3mb X
                e       29 47.70
                e       29 51.60
                e       29 56.10
                e       30 10.00
                ePP     32 24.90
                e       32 33.80
PRU     73.26 327 P     29 43.80  -0.3
        2.5s   187.00nm          5.7mb
KHC     73.31 326 Pd    29 43.50  -1.0
        1.5s    49.10nm          5.4mb
                i       29 49.00
                e       30 42.50
WTTA    73.44 324 iPd   29 45.20  -0.2
        0.6s    35.60nm          5.6mb
                i       35 40.10
BOB     73.55 321 P     29 46.29   0.3
        1.0s    72.30nm          5.7mb
OGA     73.60 323 iPc   29 47.10   0.7
SQTA    73.67 324 iPd   29 46.50  -0.2
        0.6s    34.80nm          5.6mb
WET     73.71 326 iPc   29 46.40  -0.3
KIC     73.71 279 eP    29 47.40   0.0
        1.5s    85.00nm          5.6mb
MOTA    73.79 324 iPd   29 47.00  -0.4
        0.8s    38.00nm          5.5mb
MDI     73.86 322 P     29 48.40   0.8
        1.9s    89.10nm          5.5mb
LIC     73.97 279 P     29 48.40  -0.5
      Z  20s     1.15um          5.2Msz
TIC     74.03 279 P     29 49.00  -0.3
BRG     74.07 328 iPd   29 49.00   0.3
        2.5s   240.00nm          5.8mb
FUR     74.11 324 iPd   29 49.30   0.2
CKI     74.13 320 P     29 49.50   0.3
        1.5s   153.70nm          5.8mb
SBF     74.42 319 eP    29 51.00   0.0
YONJ    74.58  51 eP    29 50.60  -1.5
TKSJ    74.62  52 eP    29 52.20  -0.1
BOD     74.77  24 eP    29 48.60  -4.1X
        2.0s    64.00nm          5.3mb
LMR     74.79 318 eP    29 53.10   0.0
FRF     74.80 319 eP    29 53.20   0.0
        1.2s    41.05nm          5.3mb
CLL     74.80 328 iP    29 52.90  -0.1
        2.4s   250.00nm          5.8mb
                i       30 02.40
HOF     74.88 327 iPc   29 54.30   0.8
GRF     74.92 326 iPd   29 54.10   0.4
        2.7s   760.00nm          6.2mb
                ePcP    30 03.50
LRG     74.94 318 eP    29 54.10   0.2
      Z  23s     0.45um          4.7MszX
MOX     75.19 327 iPd   29 55.90   0.6
        2.5s   349.00nm          6.0mb
BNI     75.43 320 P     29 57.06   0.1
        1.8s    66.50nm          5.4mb
NUR     75.49 339 eP    29 56.00  -0.8
MDJ     75.52  40 Pd    29 57.30   0.1
        1.1s    39.00nm          5.4mb
                S       39 40.00
LPG     75.58 320 eP    29 57.10  -0.9
        0.9s    11.95nm          5.0mb
LPL     75.60 321 eP    29 57.20  -0.8
        0.7s     9.15nm          5.0mb
FEL     75.88 323 P     29 58.68  -0.7
WKYJ    75.91  52 eP    29 59.70  -0.1
BBS     75.99 323 P     29 59.55  -0.4
KAF     76.10 341 iP    30 00.10  -0.1
        0.6s    38.80nm          5.7mb
LIBD    76.25 323 P     30 00.76  -0.6
LOMF    76.35 322 P     30 01.03  -1.0
MOF     76.40 323 P     30 00.81  -1.5
VLA     76.41  43 iPc   30 03.00   0.7
        3.0s   199.00nm          5.7mb
      Z  20s     0.60um          4.9Msz
      N  18s     0.90um
      E  21s     1.00um
                i       30 16.00
                iS      39 49.00
                iPS     40 29.00
                i       40 47.00
WLS     76.52 323 P     30 02.11  -0.8
ECH     76.55 323 P     30 02.02  -1.0
CDF     76.57 323 eP    30 02.80  -0.4
        1.0s    20.40nm          5.2mb
BSF     76.59 323 eP    30 02.80  -0.6
        0.8s    14.65nm          5.1mb
CTA     76.67 109 iPc   30 03.50  -0.7
HAU     76.94 323 eP    30 04.70  -0.5
        0.7s     7.70nm          4.9mb
      Z  23s     0.25um          4.5MszX
VITF    77.25 323 P     30 07.22   0.3
NRI     77.62   7 iPd   30 08.30  -0.1
        1.4s    67.00nm          5.5mb
      Z  19s     5.90um          5.9Msz
                e       30 25.00
                i       33 05.00
                eS      40 06.00
UPP     77.66 337 iP    30 08.90   0.0
WLF     77.79 324 P     30 09.00  -0.8
SMF     77.90 321 eP    30 10.40  -0.1
        0.6s     6.95nm          4.9mb
LBF     77.95 321 eP    30 10.90   0.1
        0.8s    10.75nm          5.0mb
LOR     78.14 321 eP    30 11.90   0.0
        0.8s    11.55nm          5.0mb
      Z  22s     0.25um          4.5Msz
AVF     78.27 321 eP    30 12.40  -0.1
        0.8s     4.45nm          4.6mb
SSF     78.28 321 eP    30 12.80   0.2
        0.7s    21.50nm          5.3mb
CAF     78.36 319 eP    30 13.80   0.7
ENN     78.42 325 eP    30 14.00   0.8
        1.6s    91.70nm          5.6mb
WTS     78.48 326 eP    30 15.00   1.5
        1.0s    21.80nm          5.2mb
BGF     78.49 320 eP    30 14.50   0.7
        0.6s    24.60nm          5.4mb
MAF     78.54 320 eP    30 14.60   0.6
ECHE    78.58 313 eP    30 16.50   2.1
MAT     78.67  51 eP    30 14.00  -1.0
        1.6s    56.67nm          5.4mb
      Z  20s     1.06um          5.2Msz
                eS      40 14.00
TCF     78.79 320 eP    30 16.00   0.5
EPF     78.82 316 eP    30 16.50   0.8
LPO     78.85 318 eP    30 16.80   1.0
        0.9s    29.65nm          5.3mb
RJF     78.87 319 eP    30 16.70   0.8
        1.0s    31.20nm          5.3mb
      Z  21s     0.20um          4.4Msz
DOU     78.89 324 P     30 16.90   1.1
EGRA    78.99 315 iPd   30 15.00  -1.5
CHJJ    79.13  51 eP    30 17.10  -0.4
LSF     79.21 320 eP    30 18.40   0.7
LFF     79.24 318 eP    30 18.90   1.0
        0.8s    39.50nm          5.5mb
SNF     79.25 324 P     30 19.00   1.2
EVIA    79.40 311 eP    30 20.20   1.1
HFS     79.41 336 eP    30 18.20  -0.3
        0.8s    40.90nm          5.5mb
      Z  21s     0.69um          5.0Msz
                LR      02 39.00
NIIJ    79.48  50 eP    30 18.90  -0.5
ETOR    79.76 314 eP    30 22.00   1.1
ECOG    79.80 310 eP    30 21.00  -0.2
KAKJ    80.09  51 eP    30 23.50   0.9
MFF     80.42 320 eP    30 24.80   0.6
        0.8s    16.10nm          5.1mb
NRA0    80.63 336 iPc   30 25.40   0.4
NRE0    80.63 336 P     30 21.60  -3.4X
                PP      33 54.00
                S       40 38.00
                SS      45 47.60
ECRI    80.66 315 eP    30 27.00   1.4
KONO    80.88 334 eP    30 09.65 -16.6X
NB2     80.93 336 P     30 26.40  -0.3
        0.8s     8.20nm          4.8mb
EPRU    80.99 309 eP    30 28.00   0.6
PAB     81.05 312 eP    30 28.50   0.7
                eS      40 45.00
LDF     81.12 321 eP    30 28.40   0.5
        1.1s    32.00nm          5.3mb
GUD     81.22 313 eP    30 30.00   1.3
FLN     81.41 322 eP    30 30.00   0.7
      Z  21s     0.40um          4.8Msz
LPF     81.50 321 eP    30 30.50   0.7
        0.9s    20.00nm          5.2mb
GRR     81.51 321 eP    30 30.40   0.6
        0.8s    15.05nm          5.1mb
EPLA    82.47 312 eP    30 35.50   0.4
SPA     82.92 180 iPd   30 36.70  -0.4
        1.6s   111.11nm          5.8mb
                i       58 03.80
YAK     83.54  25 eP    30 40.00   0.0
        2.8s   285.00nm          6.0mb
      Z  17s     2.00um          5.6MszX
      N  17s     0.90um
      E  17s     1.00um
                eS      41 56.00
SBA     84.95 168 eP    30 50.60   3.6X
EKA     85.25 327 Pc    30 50.10   1.3
        0.6s     7.40nm          5.1mb
EDI     85.46 328 ePc   30 52.00   2.2
        1.6s   160.00nm          6.0mb
                ePP     32 50.80
TIK     87.94  16 iPd   31 01.00  -0.7
        1.8s    72.00nm          5.7mb
      Z  18s     3.00um          5.7Msz
                e       34 32.00
                ePPP    36 26.00
                e       41 24.00
                eS      41 47.00
SMY    105.43  37 Pdiff 32 30.00   8.3X
      Z  19s     1.56um          5.6Msz
MBC    110.81   2 ePKP  37 03.00  18.0X
INK    117.24   9 ePKP  36 57.00  -0.5
SDN    118.52  29 PKP   37 10.00   9.7X
      Z  21s     2.48um          5.8Msz
PMR    119.14  19 PKP   37 10.00   8.7X
      Z  21s     1.58um          5.6Msz
YKA    124.71   1 ePKP  37 10.80  -1.1
        0.8s     4.90nm
CBM    125.40 324 PKP   37 30.00  16.2X
      Z  18s     0.53um          5.3Msz
MOCB   126.40 237 PKP   37 16.80  -0.3
SIT    126.97  16 PKP   37 30.00  13.5X
      Z  20s     1.23um          5.6Msz
LBNH   129.11 323 PKP   37 30.00   9.0X
      Z  18s     0.61um          5.3Msz
HRV    129.85 321 PKP   37 30.00   7.6X
      Z  19s     0.42um          5.1Msz
CNCB   130.33 241 PKP   37 27.00   2.2X
LPB    130.55 241 ePKP  37 27.00   2.0
                LR      20 10.00
LPAZ   130.68 242 PKPc  37 25.50  -0.1
        1.0s     3.70nm
                PP      39 49.90
                i       40 51.10
                SKP     41 02.00
                SS      57 24.40
                LQ      15 44.80
                LR      20 25.60
LSCT   131.34 321 PKP   37 40.00  14.7X
      Z  20s     0.57um          5.3Msz
BINY   132.71 323 PKP   37 40.00  12.1X
      Z  19s     0.47um          5.2Msz
HON    133.49  67 PKP   37 40.00  10.0X
      Z  21s     0.61um          5.3Msz
YSNY   134.01 325 PKP   37 40.00   9.6X
      Z  19s     0.62um          5.3Msz
NEW    138.78   5 PKP   37 50.00  10.8X
      Z  21s     2.73um          6.0Msz
MYNC   142.14 321 PKP   38 00.00  14.3X
      Z  19s     0.60um          5.4Msz
RSSD   142.48 350 ePKP  37 41.57  -4.7X
FVM    143.54 331 ePKP  37 47.81  -0.1
      Z  20s     2.24um          5.9Msz
FHC    144.82  16 ePKP  37 49.54  -0.5
WDC    145.40  14 ePKP  37 50.50  -0.5
      Z  21s     0.56um          5.3Msz
HVU    145.48   1 ePKPd 37 51.35   0.0
OXF    145.65 326 PKP   37 51.55   0.0
LMEM   145.66  13 ePKP  37 52.16   0.4
MIN    145.84  13 ePKP  37 52.44   0.5
ORV    146.62  13 ePKP  37 54.64   1.6
DAU    146.85 359 ePKP  37 54.07   0.3
GLD    146.93 350 ePKP  37 55.54   1.7
      Z  19s     0.84um          5.5Msz
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GOL   147.01 350 ePKP  37 54.82   0.8
     Z  18s      0.43um          5.3Msz
DUG   147.06   1 ePKP  37 54.08   0.1
     Z  19s      0.49um          5.3Msz
                 ePKPbc37 56.63
                 ePP   41 19.99
                 SKKP  00 16.59
                 SS    09 59.50
EMUT  147.43 358 ePKP  37 54.84   0.2
                 ePKPbc37 57.38
NTYM  147.43  16 ePKP  37 57.75   3.4X
PCO   147.50 337 iPKPd 37 57.80   3.3X
TUL   147.69 335 iPKPd 37 57.90   3.0X
MIAR  147.82 331 ePKP  37 55.95   0.8
     Z  18s      0.51um          5.3Msz
                 ePKPab37 58.77
                 e     38 09.94
                 e     38 26.18
SRU   148.12 358 ePKP  37 55.83   0.1
                 ePKPbc37 59.26
ACO   148.28 340 iPKPc 37 58.90   3.1X
CMB   148.32  13 ePKP  37 58.25   2.4X
PV08  148.53 355 ePKP  37 56.93   0.3
                 ePKPbc38 00.88
UYO   148.55 331 iPKPd 37 59.90   3.6X
PV09  148.65 356 ePKP  38 01.11   4.4X
MSU   148.75   0 ePKP  37 57.57   0.7
                 ePKPbc38 02.05
COE   148.76  15 ePKP  38 00.29   3.7X
PV10  148.77 355 ePKP  37 57.29   0.4
                 iPKPbc38 01.19
                 e     41 28.21
BONR  148.79  10 ePKP  37 57.33   0.3
                 ePKPbc38 01.76
TNP   148.83   8 ePKP  37 55.98  -0.9
MEMM  148.96  11 ePKP  38 02.16   5.4X
SAO   149.28  15 PKP   38 00.90   3.5X
     Z  20s      0.77um          5.5Msz
MTUM  149.34  10 ePKP  38 03.38   5.7X
ARUT  149.45   2 ePKP  38 03.11   5.3X
MEO   149.79 338 iPKPc 38 02.20   4.0X
WMOK  149.91 338 ePKP  37 58.37   0.0
     Z  21s      1.17um          5.7Msz
                 ePKPbc38 03.30
                 e     41 34.98
BCH   151.12  14 ePKP  38 07.48   7.2X
GSC   151.62   8 ePKP  38 02.75   1.7
                 iPKPbc38 08.98
ABL   151.63  12 ePKP  38 08.77   7.5X
ALQ   151.83 350 ePKPd 38 02.60   1.1
     Z  21s      0.14um          4.7Msz
                 iPKPbc38 08.64
                 ePKPab38 14.06
                 ePP   41 41.90
PEC   152.95   9 ePKP  38 10.82   7.9X
TUC   154.91 357 PKP   38 08.20   2.5X
     Z  20s      0.63um          5.4Msz
                 PP    42 12.07
                 e     07 50.19
     S.D. = 1.0  on 228 of 285 obs.
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?  NOV  03, 1993  13h 32m 58.95± 1.09s
   50.262 N ±20.6km   18.882 E ± 8.7km
   DEPTH =  10.0km  (geophysicist)
 POLAND                            (548)
      ML 3.3 (WAR).

OJC     0.59  94 iPgc  33 10.40  -0.5
                 iSg   33 19.20
SPC     1.39 140 iPn   33 25.20   0.6
                 i(Sn) 33 46.40
KSP     1.75 290 iPg   33 30.20   0.7
       0.7s    72.00nm
                 iS    33 52.80
PRU     2.81 266 ePg   33 51.40   6.7X
       0.4s    10.20nm
                 Sn    34 16.90
                 Sg    34 25.40
KHC     3.62 254 ePn   33 55.50  -0.8
                 ePg   34 06.00
                 e     34 36.50
                 eSg   34 50.00
                 e     34 55.00
GEC2    3.66 249 Pg    34 06.20   9.3X
                 Sg    34 54.50
     S.D. = 1.3  on   4 of   6 obs.
-----------------------------------
%  NOV  03, 1993  13h 42m 30.74± 2.27s
   40.911 N ±12.4km   23.949 E ±18.2km
   DEPTH =  10.0km  (geophysicist)
 GREECE                            (364)

SRS     0.34 308 ePg   42 37.85   0.1
                 iSg   42 43.94
SOH     0.46 259 ePg   42 39.89  -0.2
                 eSg   42 46.94
OUR     0.58 177 ePg   42 41.86  -0.5
                 eSg   42 50.94
KNT     0.83 288 ePg   42 46.85   0.0
                 eSg   42 59.10
PAIG    1.00 192 ePg   42 50.38   0.6
                 eSg   43 04.62
     S.D. = 0.6  on   5 of   5 obs.
-----------------------------------
?  NOV  03, 1993  14h 54m 44.79± 5.13s
    5.667 S ±37.8km  134.038 E ±39.7km
   DEPTH =  33.0km  (normal)
   4.4mb (  1 obs.)
 ARU ISLANDS REGION, INDONESIA     (204)

TLE     1.28 271 ePc   55 06.30  -0.2
                 iS    55 12.50
MTN     7.69 202 iPd   56 38.10   0.8
                 eS    58 09.00
KNA    11.28 207 eP    57 26.00  -0.8
       0.2s    19.00nm          5.9mb X
WR2    14.20 179 eP    58 01.90  -3.8X
       0.4s     3.90nm          4.4mb
ASPA   17.90 180 eP    58 52.10  -0.9
                 i     58 54.50
                 eS    02 07.10
WARB   21.59 198 eP    59 35.00   1.1
     S.D. = 1.3  on   5 of   6 obs.
-----------------------------------
%  NOV  03, 1993  15h 10m 22.70± 0.87s
   39.108 N ± 7.2km   27.571 E ± 9.0km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.7 (ISK).

IZM     0.75 199 ePg   10 37.30  -0.1
                 eSg   10 49.80
DST     0.96  58 ePn   10 41.20   0.2
EZN     1.20 307 ePn   10 45.20   0.1
BNT     1.28  12 ePn   10 45.90  -0.5
KGT     1.36 351 iPn   10 47.80   0.2
     S.D. = 0.4  on   5 of   5 obs.
-----------------------------------
%  NOV  03, 1993  15h 24m 13.41± 0.82s
   39.226 N ± 6.3km   27.757 E ± 7.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.8 (ISK).

DST     0.77  60 iPg   24 28.70   0.2
                 eSg   24 40.00
IZM     0.91 205 ePg   24 30.80  -0.1
                 eSg   24 44.80
EDC     1.12   4 ePn   24 35.00   0.6
BNT     1.14   6 ePn   24 33.90  -0.8
EZN     1.26 299 ePn   24 37.00   0.2
KGT     1.27 344 iPn   24 36.80  -0.2
MFT     1.60 347 ePn   24 42.00   0.1
     S.D. = 0.5  on   7 of   7 obs.
-----------------------------------
*  NOV  03, 1993  15h 32m 56.42± 0.62s
   32.800 S ±13.8km   70.152 W ±13.1km
   DEPTH = 110.0km  (geophysicist)
 CHILE-ARGENTINA BORDER REGION     (127)
      MD 3.9 (SAN).

JACH    0.39 287 iP+   33 13.68   0.7
                 iS    33 26.38
FCH     0.54 192 iPd   33 14.56   0.4
                 iS    33 27.93
PEL     0.56 232 iP+   33 14.14   0.1
                 iS    33 27.26
ROCH    0.74 256 iP+   33 15.73   0.1
                 iS    33 30.29
SAN     0.78 213 (P)   33 17.83   2.1
                 iS    33 30.17
PCH     0.87 200 iP    33 16.60  -0.1
                 iS    33 31.75
TACH    1.08 218 iPd   33 18.13  -0.6
                 iS    33 34.74
CACH    1.37 196 iP    33 21.94  -0.2
                 iS    33 41.50
LCCH    1.37 240 iPd   33 21.33  -0.7
                 iS    33 39.90
LNV     1.56 222 iP    33 23.06  -1.3
                 iS    33 42.89
RTCV    1.66  56 iPd   33 26.50   0.9
                 S     33 49.00
RTPR    3.98  52 e(P)  33 55.00  -1.4
                 S     34 40.50
     S.D. = 1.1  on  12 of  12 obs.
-----------------------------------
%  NOV  03, 1993  15h 35m 32.59± 0.77s
   39.273 N ± 5.9km   27.740 E ± 7.4km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.9 (ISK).

DST     0.76  64 iPg   35 47.50   0.0
                 eSg   35 58.50
IZM     0.95 203 ePg   35 50.80   0.1
                 eSg   36 05.80
EDC     1.08   5 ePn   35 53.00   0.2
BNT     1.09   7 ePn   35 52.90  -0.2
KGT     1.22 344 iPn   35 55.80   0.5
EZN     1.22 297 iPn   35 55.20  -0.2
MFT     1.55 347 ePn   36 00.00  -0.4
     S.D. = 0.3  on   7 of   7 obs.
-----------------------------------
&  NOV  03, 1993  16h 36m 06.92s
   38.391 N          122.594 W
   DEPTH =   5.6km
 NORTHERN CALIFORNIA               ( 36)
      <GM-P>. MD 2.7 (GM).

NTYM    0.05 268 iPc   36 08.38  -0.1
HMR     0.67 110 eP    36 20.64   0.3
JEGM    0.88 173 eP    36 23.43  -0.8
ARN     1.34 141 eP    36 30.78  -1.3
                 eS    36 50.14
COE     1.35 147 eP    36 31.41  -0.8
ORV     1.44  36 (P)   36 26.90  -6.8
CMB     1.78 101 (P)   36 38.03  -0.4
MEMM    2.98 103 (Pn)  36 54.94  -0.6
                 ePg   36 59.06
       8 obs. associated
-----------------------------------
?  NOV  03, 1993  16h 42m 17.67± 3.21s
   28.759 N ±25.4km   51.990 E ±42.2km
   DEPTH =  33.0km  (normal)
   3.9mb (  4 obs.)
 SOUTHERN IRAN                     (353)

RYD     6.27 231 eP    43 50.50   0.2
UQSK    9.06 253 eP    44 29.00  -0.3
GEC2   35.45 315 eP    49 12.60  -0.3
       0.6s     0.81nm          3.8mb
KHC    35.63 316 eP    49 15.50   1.2
NUR    36.69 338 eP    49 23.00   0.0
KAF    37.39 340 iP    49 28.90   0.0
       0.4s     0.90nm          4.0mb
SLL    40.94 332 eP    49 58.00  -0.4
       0.5s     4.90nm          4.5mb
NB2    42.12 332 P     50 07.90  -0.2
       0.6s     0.90nm          3.7mb
     S.D. = 0.6  on   8 of   8 obs.
-----------------------------------
&  NOV  03, 1993  17h 18m 43.07s
   59.367 N          154.019 W
   DEPTH = 125.9km
 SOUTHERN ALASKA                   (  2)
      <AEIC>.

MCNL    0.24 222 eP    18 59.98   0.8
                 eS    19 12.54
AUW     0.28  89 eP    19 00.74   1.4
AUH     0.29  90 P     19 01.20   1.7
AUL     0.30  87 eP    19 00.67   1.3
AGU     0.30  91 eP    19 00.90   1.3
AUI     0.30  96 eP    19 00.38   1.0
                 eS    19 13.40
AUE     0.33  91 eP    19 00.91   1.4
PDB     0.43 348 iP    19 00.62  -0.9
                 eS    19 14.01
CDD     0.48 156 iP    19 00.87  -1.0
                 eS    19 14.91
```

03d 17h

```
OPT      0.49  54 iP    19 01.30  -0.6
                eS    19 15.30
INW      0.83  32 eP    19 03.43  -1.1
INE      0.85  34 eP    19 03.65  -1.1
ILIM     0.89  36 iP    19 04.14  -0.8
SYI      1.13 131 iP    19 06.15  -1.1
RED      1.23  30 iP    19 07.27  -1.1
RS2      1.27  29 iP    19 07.98  -0.9
                eS    19 27.79
RSO      1.27  30 eP    19 07.97  -0.9
RDW      1.27  28 P     19 07.93  -1.0
REF      1.31  30 iP    19 08.23  -1.1
NCT      1.32  24 iP    19 08.36  -1.0
DFR      1.40  28 iP    19 09.15  -1.1
CNPM     1.43  82 eP    19 09.43  -1.0
                eS    19 28.54
KDC      1.81 153 P     19 15.50   0.6
BKG      1.92  26 iP    19 15.37  -1.0
SVW      1.92 336 P     19 16.00  -0.3
NKA      1.96  44 eP    19 17.88   1.1
CKL      2.02  24 iP    19 16.73  -0.9
CKT      2.05  25 iP    19 16.95  -1.0
SPU      2.07  27 iP    19 17.00  -1.2
BGL      2.07  22 iP    19 17.57  -0.7
CKN      2.08  25 eP    19 17.57  -0.7
CP2      2.10  24 ePd   19 17.72  -1.0
CRP      2.12  25 eP    19 17.36  -1.6
CGLM     2.19  26 iP    19 18.73  -1.0
SLKM     2.23  57 eP    19 18.66  -1.5
NCG      2.24  24 iP    19 19.65  -0.8
SEW      2.43  70 eP    19 21.16  -1.5
MPA      2.60  62 eP    19 23.63  -1.3
SUA      2.66  36 eP    19 24.68  -1.1
SKT      2.89  24 eP    19 27.71  -1.1
PMS      2.91  48 P     19 27.30  -1.7
PWA      3.07  40 P     19 29.50  -1.6
LTI      3.20  75 eP    19 30.98  -1.8
PWL      3.22  60 eP    19 30.40  -2.7
KNIM     3.32  70 eP    19 31.89  -2.5
KNK      3.44  51 eP    19 33.29  -2.8
GHO      3.48  44 eP    19 33.93  -2.8
CUT      3.56  29 eP    19 34.94  -2.6
CFI      3.61  57 eP    19 35.74  -2.5
       49 obs. associated
-------------------------------------
*  NOV  03, 1993  18h 18m 27.15± 0.68s
   53.607 N ±10.5km  160.258 E ±17.7km
   DEPTH =  33.0km  (normal)
   4.5mb ( 13 obs.)
 NEAR EAST COAST OF KAMCHATKA     (218)

NIIJ    22.01 231 eP    23 15.80  -4.2X
MAT     22.95 231 eP    23 29.00  -0.3
        0.8s     8.96nm          4.3mb
CHJJ    23.00 229 eP    23 29.50  -0.3
MTMJ    23.10 232 eP    23 35.30   4.4X
WKYJ    26.07 232 eP    24 00.80   1.6
TKSJ    27.00 234 eP    24 10.60   2.9X
RSSD    59.04  57 eP    28 26.42   0.2
        0.6s     3.22nm          4.6mb
KAF     59.05 337 eP    28 24.40  -1.3
NB2     63.08 344 P     28 51.60  -1.4
        0.6s     1.40nm          4.3mb
HFS     63.49 342 eP    28 53.80  -1.9
        0.5s     0.90nm          4.2mb
GEC2    74.07 338 ePc   30 01.60   0.3
        1.0s     1.10nm          3.8mb
CDF     75.81 342 eP    30 11.20  -0.1
HAU     76.37 342 eP    30 14.20  -0.1
BSF     76.46 342 eP    30 14.80  -0.1
        0.6s     3.70nm          4.6mb
WRA     76.59 205 P     30 14.20  -1.6
        0.9s     0.80nm          3.7mb
FLN     76.71 347 eP    30 15.90  -0.3
GRR     77.13 347 eP    30 18.30  -0.2
        0.7s     4.30nm          4.6mb
LPF     77.50 347 eP    30 20.60   0.1
LOR     77.52 344 eP    30 20.60  -0.1
LBF     77.77 344 eP    30 21.80  -0.3
SSF     77.78 344 eP    30 22.10   0.0
AVF     78.06 344 eP    30 23.80   0.2
        1.0s     6.60nm          4.6mb
SMF     78.12 344 eP    30 24.20   0.2
BGF     78.37 344 eP    30 25.50   0.1
LPL     78.70 341 eP    30 28.50   1.0
        0.8s     7.10nm          4.7mb
LPG     78.71 341 eP    30 28.70   1.1
        1.0s    14.00nm          4.9mb
TCF     78.74 345 eP    30 27.70   0.3
        0.5s     2.40nm          4.5mb
MAF     78.75 344 eP    30 28.00   0.6
MFF     78.78 346 eP    30 28.00   0.4
LSF     78.88 345 eP    30 28.40   0.2
CAF     80.09 344 eP    30 35.70   1.0
LPO     80.46 345 eP    30 37.60   0.9
        0.8s     5.50nm          4.6mb
     S.D. = 0.8  on  29 of  32 obs.
-------------------------------------
   NOV  03, 1993  18h 37m 46.01± 0.20s
    5.793 S ± 3.3km  145.912 E ± 4.7km
   DEPTH =  10.0km  (geophysicist)
   5.3mb ( 35 obs.)  5.1Msz ( 30 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)
      Mw 5.6 (HRV). Ms 5.0 (BRK). ML
      5.5 (PMG).
      CENTROID, MOMENT TENSOR    (HRV)
      Data Used: GDSN
      L.P.B.: 25S, 36C
      Centroid Location:
      Origin Time        18:37:51.7 0.5
      Lat  5.83S 0.06 Lon 145.85E 0.05
      Dep  18.9 3.5 Half-duration  1.3
      Moment Tensor;   Scale 10**17 Nm
        Mrr=-1.03 0.07  Mtt= 0.74 0.08
        Mff= 0.29 0.11  Mrt= 1.57 0.33
        Mrf=-1.50 0.33  Mtf=-0.56 0.06
       Principal Axes:
        T  Val=  2.45  Plg=32  Azm= 39
        N       -0.05       4      132
        P       -2.40      58      228
      Best Double Couple:Mo=2.4*10**17
       NP1:Strike=114 Dip=14 Slip=-108
       NP2:        313     77      -86

YYYY     0.45 173 iPd   37 54.50  -0.7
MDG      0.55 346 ePc   37 57.30   0.0
LAT      1.39 129 eP    38 11.40   0.0
MNDI     2.27 261 eP    38 29.00   4.6X
WWKK     3.14 313 eP    38 41.10   4.6X
PMG      3.80 161 iPd   38 45.80   0.0
KVG      5.83  57 eP    39 15.70   1.1
JAY      6.13 302 ePd   39 24.50   5.6X
TLE     13.10 270 ePc   41 00.00   5.2X
CTA     14.21 179 iPc+  41 11.80   2.2
        2.0s   676.47nm          6.0mb
                i      41 19.00
                iS     44 00.00
                i      44 09.00
HNR     14.37 105 eP    41 13.00   1.4
                eS     44 05.00
QIS     15.90 202 eP    41 32.00   0.4
MTN     16.18 243 eP    41 35.40   0.3
WR2     18.00 218 eP    41 56.00  -2.1
        1.0s    77.80nm          4.8mb
                eS     45 31.90
WRA     18.01 218 P     41 58.20   0.0
        1.7s    52.30nm          4.4mb
KNA     19.52 238 eP    42 16.00  -0.6
        1.0s   357.00nm          5.6mb
ASPA    21.20 212 iPd   42 32.70  -1.6
        0.9s    95.00nm          5.2mb
     Z  21s    10.90um          5.2Msz
                eS     46 29.40
DAV     23.99 302 eP-   43 06.00   4.2X
BKM     24.81 120 iPc   43 10.50   0.7
PVC     24.90 120 iPc   43 13.50   2.9X
ARMA    25.08 168 eP    43 11.60  -0.8
        0.6s    28.00nm          5.1mb
CTB     25.22 301 ePd   43 13.00  -0.7
DZM     25.61 131 iPc   43 16.40  -1.0
STK     26.27 188 eP    43 20.90  -2.4
PCI     26.47 280 ePc   43 30.30   4.9X
MAP     27.08 306 eP    43 38.00   7.1X
WARB    27.38 220 eP    43 33.00  -0.7
        0.8s    58.00nm          5.4mb
BWA     28.59 176 eP    43 44.10  -0.4
                e      43 51.80
CAN     29.52 175 iPd   43 52.30  -0.6
                i      43 57.80
MBL     29.53 236 eP    43 53.80   0.7
TSM     29.74 289 ePc   43 56.60   1.6
ADE     29.78 192 e(P)  43 53.00  -2.3
PPR     31.19 300 ePd   44 09.00   1.2
KKM     31.89 291 ePd   44 17.00   2.9
BAG     33.39 312 eP    44 29.00   1.8
COOL    34.11 220 eP    44 31.50  -1.7
MRWA    36.62 227 eP    44 54.20  -0.4
LEM     38.07 266 ePd   45 04.00  -3.1X
OUZ     38.84 143 P     45 13.80   0.8
KUMJ    40.73 340 P     45 29.30   0.6
WKYJ    40.97 347 eP    45 30.20  -0.6
TKSJ    41.12 345 eP    45 31.60  -0.3
KUZ     41.14 143 P     45 32.90   0.9
IIDJ    41.74 350 eP    45 36.10  -0.9
SHNJ    42.10 342 P     45 38.90  -1.0
KAKJ    42.12 353 eP    45 45.50   5.5X
CHJJ    42.12 352 eP    45 39.40  -0.7
TSRJ    42.16 348 eP    45 39.40  -1.0
YONJ    42.41 345 eP    45 42.20  -0.3
CNZ     42.69 145 P     45 47.30   2.5
MAT     42.73 351 eP    45 43.00  -2.0
        1.5s   111.11nm          5.4mb
     Z  18s     1.37um          4.9Msz
                eS     52 04.00
MTMJ    42.83 350 eP    45 45.30  -0.7
URZ     42.96 143 P     45 48.80   1.9
KGM     43.24 279 ePc   45 51.00   1.4
NIIJ    43.29 352 eP    45 49.00  -0.6
PAHZ    43.32 144 eP    45 50.60   0.7
WAHZ    43.48 145 eP    45 51.60   0.4
PUZ     43.53 142 P     45 52.00   0.4
MNG     43.63 147 P     45 52.60   0.2
SSE     43.64 329 Pc    45 52.00  -0.5
        1.0s    11.00nm          4.6mb
     Z  20s     1.30um          4.8Msz
     N  14s     1.10um
     E  14s     1.20um
                pP     46 01.50  32kmX
MRW     43.66 148 P     45 53.00   0.4
BWZ     43.92 155 eP    45 53.90  -0.7
YAMJ    44.08 353 eP    45 56.80   0.8
OFUJ    44.82 355 eP    46 02.60   0.7
TUZ     44.98 157 eP    46 02.20  -1.0
NJ2     45.62 327 Pc    46 10.50   2.1
     Z  18s     0.88um          4.7Msz
                S      52 54.00
SNG     47.00 285 eP    46 19.50  -0.1
WHN     47.10 322 eP    46 21.50   1.4
                pP     46 30.50  30kmX
LOE     49.35 299 eP    46 40.00   2.1
NNT     49.39 292 eP    46 38.80   0.6
GYA     49.74 312 Pd    46 43.00   2.1
        1.2s    43.00nm          5.3mb
     Z  20s     0.90um          4.8Msz
                pP     46 51.00  27kmX
                S      53 54.00
NST     50.09 296 eP    46 45.00   1.4
VLA     50.32 347 iPc   46 44.00  -0.9
        2.0s   114.00nm          5.5mb
     Z  15s     0.50um          4.6MszX
     N  16s     0.70um
     E  15s     0.50um
                iPPP   49 43.00
                iS     53 58.00
SNY     51.59 339 iPc   46 54.00  -0.6
     Z  18s     2.37um          5.3Msz
                PcP    48 03.00
                S      54 08.00
BDT     51.68 297 eP    46 57.00   1.3
KMI     52.02 308 eP    47 00.00   1.6
        1.5s    90.00nm          5.5mb
                pP     47 07.00  23kmX
                sP     47 11.50
MDJ     52.28 345 eP    46 58.40  -1.4
                eS     54 24.00
CHTO    52.34 299 ePd   47 03.60   3.0X
        1.6s   150.26nm          5.7mb
CN2     52.71 341 eP    47 03.20   0.2
        1.4s    30.00nm          5.0mb
     N  13s     0.49um
     E  13s     0.60um
                epP    47 12.00  29kmX
                eS     54 27.00
                eSS    58 05.00
XAN     52.84 321 P     47 03.00  -1.2
        1.5s    53.00nm          5.2mb
     Z  18s     1.49um          5.1Msz
                pP     47 11.50  28kmX
                sP     47 15.70
                S      54 36.00
                sS     54 48.00
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                ScS   56 46.00
                SS    58 12.00
BJI    53.20 332 eP    47 06.00  -0.7
       1.5s    17.00nm          4.8mb
     Z 18s     1.77um           5.2Msz
     N 17s     1.23um
                esP   47 20.00
                ePcP  48 12.00
                eS    54 36.00
                esS   54 52.00
                eSS   58 16.00
TIY    53.34 327 eP    47 08.40   0.6
     Z 20s     1.25um           5.0Msz
     E 16s     1.52um
                S     54 42.00
CD2    54.36 315 P     47 15.80   0.4
       1.0s    26.00nm          5.2mb
     Z 16s     1.79um           5.2MszX
                S     54 52.00
HHC    56.09 329 eP    47 25.80  -2.1
       1.6s    58.00nm          5.4mb
BTO    56.72 328 eP    47 30.50  -1.9
     N 13s     0.77um
     E 13s     0.60um
                eS    55 24.00
LZH    57.35 320 Pd    47 36.50  -0.6
       2.0s   120.00nm          5.6mb
     Z 15s     0.97um           5.0MszX
     E 12s     0.52um
                pP    47 45.00  28kmX
                sP    47 49.50
                eS    55 30.00
                SS    59 20.00
PET    59.57   9 eP    47 48.00  -4.0X
     Z 20s     0.70um           4.8Msz
                eS    56 02.00
                e     00 00.00
DRV    60.91 183 eP    48 00.00  -0.9
                S     56 40.00
SHL    61.00 303 eP    48 02.50   0.0
                eS    56 21.00
HON    61.23  62 P     48 10.00   6.1X
     Z 20s     0.97um           4.9Msz
GTA    61.89 321 eP    48 07.40  -0.9
       1.5s    32.00nm          5.3mb
     Z 15s     1.09um           5.1MszX
     N 15s     0.42um
                pP    48 16.50  30kmX
                sP    48 20.00
                eS    56 33.00
SMY    63.02  19 P     48 20.00   4.7X
     Z 20s     1.63um           5.2Msz
LSA    63.25 307 Pc    48 17.80  -0.1
       1.2s    14.00nm          5.0mb
                pP    48 25.00  23kmX
                S     56 50.00
CSY    65.18 195 eP    48 33.60   4.3X
       0.5s    11.00nm          5.3mb
                i     48 37.40
ZAK    66.94 332 eP    48 38.00  -2.7
       1.9s    78.00nm          5.6mb
IRK    67.78 334 eP    48 52.00   5.9X
YAK    68.76 352 eP    48 51.30  -0.6
       1.6s   147.00nm          5.9mb
     Z 22s     0.50um           4.7Msz
     N 20s     0.80um
                eS    57 56.00
HYB    70.38 291 eP    49 02.50  -0.2
       1.0s    20.00nm          5.2mb
GBA    70.64 287 Pd    49 04.50   0.2
       0.5s     7.00nm          5.0mb
SBA    72.85 175 iPc   49 18.00   1.6
NDI    74.35 302 eP    49 26.00  -0.1
                eS    59 04.00
POO    74.99 291 iPc   49 31.20   1.3
                iS    59 12.00
POO    74.99 291 eP    49 28.00  -1.9
SDN    75.22  28 eP    49 28.09  -2.4
       0.9s    84.32nm          5.8mb
     Z 20s     0.79um           5.0Msz
ILT    77.64  13 iPc   49 44.70   0.9
       1.8s   154.00nm          5.8mb
                i     49 50.80
                ePS   00 32.00
KSH    78.41 312 P     49 51.00   2.1
     Z 75s     2.36um           4.9MszX
     N 12s     1.65um
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     E 12s     1.55um
                pP    49 58.00  22kmX
                sP    50 02.00
SVW    80.50  25 eP    50 00.08   0.5
       1.0s    45.39nm          5.4mb
TTA    81.28  23 eP    50 04.11   0.4
       1.1s    11.67nm          4.8mb
MAW    82.02 203 P     50 07.10  -0.3
       1.1s    33.33nm          5.3mb
SLKM   82.55  27 eP    50 09.81  -0.5
PMR    83.49  26 eP    50 14.70  -0.3
       1.2s    36.55nm          5.5mb
     Z 19s     0.76um           5.1Msz
IMA    83.75  21 eP    50 16.31  -0.2
KLU    84.86  27 eP    50 22.66   0.6
FBA    85.41  23 eP    50 23.51  -1.2
       0.8s    18.07nm          5.3mb
BALM   86.32  28 eP    50 29.45   0.0
INK    91.86  22 eP    50 56.00   0.7
       1.0s     4.00nm          4.7mb
YBH    94.84  49 eP    51 07.52  -2.1
     Z 17s     0.70um           5.2MszX
                eSKS  01 22.52
                iScS  02 32.52
                iPS   03 46.52
                iSS   08 28.52
                eLR   21 24.52
MBC    96.72  14 eP    51 11.00  -6.5X
       1.0s     4.00nm          4.9mb
DUG   102.32  50 Pdiff 51 50.00   6.4X
     Z 19s     0.49um           5.0Msz
ALQ   107.74  55 PKP   56 30.00  14.1X
     Z 18s     0.34um           4.9Msz
GOL   108.07  50 PKP   56 30.00  13.5X
     Z 19s     0.83um           5.3Msz
GLD   108.17  50 PKP   56 30.00  13.4X
     Z 18s     1.04um           5.4Msz
JRDJ  110.33 301 Pdiff 52 33.20  13.7X
LISJ  110.44 301 Pdiff 52 39.00  19.3X
SHWJ  110.51 300 Pdiff 52 28.00   7.7X
NAQJ  110.54 300 Pdiff 52 23.10   2.6X
DHLJ  110.55 301 Pdiff 52 36.80  16.6X
WMOK  114.03  55 PKP   56 40.00  12.3X
     Z 20s     0.64um           5.2Msz
HLW   114.15 300 ePdiff52 55.00  18.7X
MIAR  118.27  54 PKP   56 50.00  14.3X
     Z 20s     0.57um           5.2Msz
SLM   119.76  49 PKP   56 50.00  11.6X
     Z 20s     0.34um           5.0Msz
FVM   119.82  49 PKP   56 50.00  11.4X
     Z 19s     0.86um           5.4Msz
BRG   119.94 327 e(PKP)56 41.20   2.8X
PRU   120.07 326 ePKP  56 46.20   7.5X
CLL   120.21 328 ePKP  56 41.00   2.1X
KHC   121.05 325 ePKP  56 39.00  -1.6
GEC2  121.12 325 ePKP  56 40.40  -0.4
       1.3s     3.51nm
                e     56 48.60
                e     56 51.50
                e     56 59.90
MYNC  125.56  51 PKP   57 00.00  10.2X
     Z 20s     0.48um           5.2Msz
YSNY  126.37  40 PKP   57 00.00   8.9X
     Z 21s     0.50um           5.2Msz
BINY  128.13  39 PKP   57 00.00   5.5X
     Z 19s     0.52um           5.2Msz
LBNH  129.38  35 PKP   57 10.00  13.2X
     Z 20s     0.43um           5.1Msz
CBM   129.65  30 PKP   57 10.00  12.9X
     Z 21s     0.53um           5.2Msz
LSCT  130.13  38 PKP   57 10.00  11.7X
     Z 19s     0.69um           5.4Msz
MOCB  139.01 132 PKP   57 09.80  -6.4X
CNCB  139.66 124 PKP   57 11.20  -6.4X
LPB   139.71 124 ePKP  57 09.00  -8.5X
LPAZ  139.80 124 PKP   57 11.90  -6.0X
SDV   143.63  83 ePKP  57 21.20  -3.0X
RSTA  146.42 155 ePKP  57 29.30   0.9
CAR   147.17  80 ePKP  57 23.80  -6.2X
PPD   147.61 149 ePKP  57 32.70   2.3X
                e     57 41.00
VAO   148.73 157 ePKP  57 36.60   4.4X
KIC   150.81 273 PKP   57 36.40   0.9
TIC   151.09 273 PKP   57 36.80   0.8
LIC   151.10 272 PKP   57 36.80   0.9
     Z 21s     0.34um           5.1Msz
BAO   154.65 147 ePKP  57 42.20   1.2
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                i     57 54.00
                e     58 03.20
     S.D. = 1.2  on 108 of 156 obs.
-----------------------------------
   NOV  03, 1993   18h 39m 33.00± 0.72s
   28.654 N ± 3.8km   34.650 E ± 2.9km
   DEPTH =  13.0 ±  4.3 km
   4.9mb ( 49 obs.)  4.6Msz (  3 obs.)
 EGYPT                              (553)
     MD 4.6 (HLW).

SRFA     0.55  60 iPd   39 43.00  -0.9
HQL      0.71  30 iPd   39 46.93   0.3
AYN      1.20  79 iP    39 55.27   0.1
WAJH     3.00 145 iPd   40 18.80  -2.2
HLW      3.13 293 eP-   40 23.50   0.6
                e      40 29.50
                eSn    41 02.00
BHL      5.30   9 P     41 00.00   6.1X
                S      42 20.00
FAM      6.35 355 e(P)  41 04.00  -4.5X
CSS      6.39 350 eP    41 07.00  -2.1
PPCY     6.51 343 eP    41 10.00  -0.8
UQSK     7.43 111 ePc   41 21.60  -2.2
QASM     8.30 106 eP    41 35.07  -0.9
                iS     44 45.87
TAIF     8.97 144 iPc   41 44.67  -0.7
                eS     44 08.80
BCK      9.42 340 eP    41 49.60  -1.8
NPS     10.11 313 ePb   41 58.10  -2.8X
CIN     10.48 330 eP    42 02.00  -3.9X
VAM     11.13 310 ePn   42 11.20  -3.6X
RYD     11.39 107 eP    42 20.00   1.6
                eS     45 24.30
IZM     11.50 330 eP    42 15.40  -4.5X
KER     12.05  59 eP    42 29.00   1.6
PRK     12.64 329 ePn   42 31.70  -3.5X
VLI     12.72 312 ePn   42 31.00  -5.2X
ABHA    12.74 143 eP    42 38.47   1.6
                eS     46 00.00
BNT     12.92 336 eP    42 49.00  10.1X
ATH     13.03 318 ePn   42 37.00  -3.3X
EZN     13.09 331 eP    42 38.30  -2.8X
TAB     13.53  43 e(P)  42 48.00   0.9
ERE     14.07  33 eP    42 55.00   0.8
                eS     45 46.00
ALN     14.10 332 iP    43 03.08   8.6X
                iS     43 25.68
PAIG    14.43 324 eP    43 02.04   3.3X
RDO     14.52 332 ePn   43 00.20   0.3
OUR     14.58 326 iP    43 01.25   0.5
LIT     15.19 322 eP    43 07.32  -1.4
                eS     43 38.00
SOH     15.26 326 eP    43 09.92   0.2
                eS     43 31.72
THE     15.32 324 eP    43 10.92   0.5
                eS     43 35.52
SRS     15.37 327 eP    43 10.28  -0.9
                iS     43 33.76
MTA     15.42  30 iP    43 19.40   7.7X
                eS     46 23.40
SOC     15.44  14 eP    43 16.00   4.0X
     Z 11s     5.00um
     N 11s     2.00um
     E 11s     1.50um
                eS     46 35.00
KZN     15.72 321 ePn   43 14.00  -1.7
KNT     15.75 325 eP    43 15.72  -0.3
GRG     15.85 324 iP    43 16.48  -0.8
VAY     16.03 325 iP    43 20.00   0.4
ANN     16.33   7 eP    43 29.00   5.6X
     Z 14s     1.20um
     N 13s     1.00um
PYA     16.76  21 eP    43 30.00   1.1
     Z 14s     3.00um
OHR     16.81 321 iP    43 26.00  -3.6X
       1.5s   150.00nm          4.9mb
SKO     17.08 325 iPc   43 33.00   0.1
       1.7s   170.00nm          4.9mb
BAK     17.14  43 eP    43 16.00 -17.7X
     Z 12s     8.55um
GRO     17.14  28 eP    43 35.00   1.3
       2.0s   270.00nm          5.0mb
     Z 11s    10.50um
                iS     47 02.00
CFR     17.29 344 eP    43 35.00  -0.4
MAK     17.66  32 eP    43 53.00  13.0X
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03d 18h

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                 eS    47 10.00
MLR    18.16 340 eP    43 45.50  -1.0
CMP    18.25 338 ePc   43 48.00   0.5
VRI    18.29 342 eP    43 46.50  -1.4
KIS    18.88 348 eP    44 06.00  10.8X
     Z  14s     0.40um
                 i     44 25.00
ASH    21.82  59 eP    44 26.00  -0.8
                 e     44 36.00
                 e     48 50.00
                 e     49 06.00
UZH    22.10 338 eP    44 29.70   0.2
     Z  18s     0.70um          4.1Msz
                 i     44 34.50
PTJ    22.66 324 e(P)  44 33.60  -1.5
VBY    22.76 323 iPc   44 38.40   2.4
SRO    22.95 331 eP    44 37.10  -0.7
RIY    23.12 322 iPc   44 39.00  -0.5
SPC    23.29 336 iPd   44 41.60   0.2
                 e     56 33.90
LJU    23.49 323 eP    44 45.00   1.8
       1.5s   110.00nm          5.2mb
                 e     44 53.50
                 e(PnPn45 18.50
                 e()   49 02.00
TRI    23.69 322 eP    44 46.90   1.9
                 e     57 40.00
ZST    23.76 330 eP    44 45.00  -0.7
                 e     46 18.30
                 e     46 27.80
                 e     56 37.00
VOY    23.83 322 eP    44 47.40   0.9
VOY    23.83 322 eP    44 47.80   1.3
                 e(PnPn45 07.30
                 e     45 41.50
                 e     46 22.10
OJC    24.31 336 iPd   44 51.80   0.7
       1.2s   107.00nm          5.3mb
                 i     44 57.60
                 e     45 18.10
KBA    24.79 324 iPc   44 57.40   1.5
       0.9s    53.00nm          5.2mb
                 i     44 59.00
RAC    24.79 334 eP    44 56.00   0.3
PGF    24.92 311 iPc   44 58.10   0.9
       0.8s    16.80nm          4.8mb
BHG    25.45 324 iPc   45 02.40   0.4
GEC2   25.80 327 ePc   45 05.90   0.6
       1.4s    33.85nm          4.8mb
                 e     45 08.00
                 e     45 11.40
                 e     45 14.90
                 e     45 25.00
WTTA   25.81 322 iPc   45 06.50   0.9
       1.0s    53.90nm          5.2mb
                 i     45 08.60
OGA    25.90 321 iPc   45 08.10   1.6
SQTA   26.01 322 iPc   45 08.30   0.9
       0.7s    23.80nm          5.0mb
                 i     45 10.60
KHC    26.05 327 P     45 07.50  -0.1
       1.2s    12.00nm          4.4mb
                 e     45 24.50
                 e     45 52.50
                 e     46 42.30
                 e     47 13.50
KSP    26.13 333 eP    45 08.10  -0.2
                 e     45 36.70
MOTA   26.15 322 iPc   45 08.90   0.2
       1.0s    39.30nm          5.0mb
                 i     45 11.50
PRU    26.22 330 P     45 09.00  -0.1
       1.1s    31.90nm          4.9mb
                 e     45 15.00
                 eS    49 49.00
OSS    26.29 320 ePc   45 11.85   1.8
WET    26.40 327 iPc   45 10.60  -0.2
OBN    26.46   3 iPc   45 10.70  -0.6
       1.7s   180.00nm          5.5mb
SBF    26.52 312 eP    45 13.00   0.9
       0.8s    36.25nm          5.1mb
FUR    26.56 324 iPc   45 12.50   0.2
TMA    26.71 318 iPc   45 14.80   0.9
FRF    26.91 311 eP    45 16.80   1.2
       1.1s    66.65nm          5.2mb
LMR    26.91 311 eP    45 16.70   1.1
       1.2s    41.95nm          5.0mb
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LLS    27.05 319 ePc   45 17.54   0.5
LRG    27.06 311 eP    45 18.00   1.1
       0.8s    45.40nm          5.2mb
BRG    27.13 331 eP    45 16.00  -1.5
       1.2s    23.00nm          4.7mb
MOS    27.15   4 eP    45 16.00  -1.6
MMK    27.22 317 ePc   45 18.43  -0.2
GRF    27.57 326 eP    45 20.60  -0.9
DIX    27.57 317 ePc   45 22.54   0.7
LPG    27.70 315 eP    45 23.60   0.6
       0.6s     9.55nm          4.7mb
LPL    27.72 315 eP    45 23.80   0.6
       0.7s    15.00nm          4.9mb
CLL    27.86 330 iP    45 22.30  -1.8
       1.4s    31.00nm          4.9mb
                 e     45 32.00
EMS    27.86 316 ePc   45 24.15  -0.2
MOX    28.02 328 iPc   45 25.90   0.4
       1.4s    71.00nm          5.3mb
QUE    28.13  79 eP    45 29.20   2.2
                 ePP   50 16.70
LIBD   28.54 320 P     45 40.28  10.0X
LOMF   28.56 318 P     45 35.66   5.1X
MOF    28.65 320 P     45 35.66   4.3X
WLS    28.82 321 P     45 37.86   5.0X
ECH    28.83 320 P     45 37.64   4.8X
BSF    28.83 319 iPc   45 32.80  -0.2
       0.7s     9.70nm          4.7mb
CDF    28.87 321 P     45 36.66   3.3X
HAU    29.18 319 eP    45 35.90  -0.1
SMF    30.02 315 eP    45 43.80   0.2
LBF    30.09 316 iPc   45 43.90  -0.4
       0.8s     8.85nm          4.6mb
LOR    30.29 316 iPc   45 45.60  -0.4
       0.8s     4.85nm          4.4mb
AVF    30.39 315 eP    45 46.30  -0.5
SSF    30.41 316 iPc   45 46.70  -0.4
       1.0s     6.00nm          4.4mb
CAF    30.48 311 eP    45 48.10   0.4
BGF    30.61 314 iPc   45 49.00   0.2
       0.8s    11.80nm          4.8mb
RJF    30.98 311 iPc   45 52.90   0.9
       1.1s    12.70nm          4.7mb
LPO    30.98 310 eP    45 52.10   0.0
DOU    31.26 322 P     45 53.80  -0.6
LFF    31.37 310 eP    45 55.40   0.0
       0.7s    12.90nm          4.9mb
MFF    32.53 313 iPc   46 05.60   0.0
ARU    32.53  25 eP    46 10.00   4.5X
     Z  16s     1.00um          4.6MszX
     N  16s     1.00um
NUR    32.56 351 eP    46 10.30   4.6X
LDF    33.28 316 iPc   46 11.40  -0.7
       0.6s    10.30nm          4.9mb
UPP    33.29 344 iP    46 10.90  -1.1
FLN    33.56 316 iPc   46 14.00  -0.6
       0.7s    20.15nm          5.2mb
SVE    33.60  26 ePc   46 15.00   0.2
       1.3s   100.00nm          5.6mb
     Z  20s     1.00um          4.5Msz
     N  19s     0.50um
     E  19s     1.00um
                 e     47 31.00
LPF    33.62 315 iPc   46 14.50  -0.6
       1.0s    15.40nm          4.9mb
GRR    33.64 316 iPc   46 14.60  -0.7
       0.9s    18.20nm          5.0mb
KAF    33.91 353 eP    46 15.90  -1.5
HFS    34.54 342 eP    46 20.60  -2.2
       0.6s    15.00nm          5.1mb
     Z  16s     0.14um          3.8MszX
                 LR    00 33.00
NB2    35.98 341 P     46 33.40  -1.8
       1.0s    12.70nm          4.8mb
NDI    37.20  79 eP    46 46.20   0.4
HYB    41.71  96 ePc   47 24.00   0.6
       1.0s    25.00nm          4.9mb
GBA    42.39 102 Pd    47 29.30   0.5
       0.9s     3.00nm          4.0mb
KIC    43.31 247 P     47 35.60  -0.9
       1.2s    36.00nm          5.0mb
TIC    43.38 247 P     47 36.20  -0.8
LIC    43.62 247 P     47 37.40  -1.6
GKN    43.74  78 P     47 40.00   0.0
DMN    44.24  79 P     47 44.40   0.2
KKN    44.34  78 P     47 45.20   0.2
PKI    44.51  79 P     47 46.20  -0.3
```

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WMQ    44.64  55 P     47 47.60   0.6
       1.2s    41.00nm          5.2mb
     Z  16s     0.78um          4.7MszX
GUN    44.83  78 P     47 49.40   0.3
NRI    50.85  22 iPc   48 34.70  -0.2
       1.8s    25.00nm          4.9mb
                 e     49 29.00
                 i     50 20.00
WIN    53.66 200 iPd   48 56.00  -0.8
SUR    62.11 193 e(P)  49 56.50   0.4
HHC    62.50  56 Pc    49 59.20   0.6
       1.0s    23.00nm          5.3mb
     Z  18s     1.21um          5.1Msz
     N  18s     0.71um
     E  13s     0.53um
GYA    62.96  73 P     50 00.60  -1.2
       1.0s    31.00nm          5.4mb
                 pP    50 07.60  23kmX
BJI    66.10  56 eP    50 21.50  -0.4
       1.2s    10.00nm          4.9mb
NJ2    70.90  63 Pd    50 57.00   5.1X
       1.0s    13.00nm          5.0mb
SOB1   81.91 255 eP    51 55.60   1.6
MAT    83.29  52 eP    52 00.00  -0.9
GPD    84.60 314 eP    52 08.67   1.3
IMA    85.37   3 eP    52 11.24   0.3
       0.8s     4.09nm          4.7mb
YKA    85.88 346 eP    52 12.80  -0.6
       0.9s     6.20nm          4.8mb
PCI    86.20  93 ePd   52 11.20  -4.6X
FBA    86.74   1 (P)   52 17.83   0.3
       1.1s     8.19nm          4.9mb
     S.D. = 1.0  on 126 of 156 obs.
-----------------------------------
   NOV  03, 1993  19h 43m 10.46± 0.51s
   65.122 N ± 3.6km  141.435 W ± 4.9km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ALASKA                (676)
      ML 3.7 (AEIC).

DOT     1.87 219 eP    43 43.17   0.4
                 eS    44 08.77
TMW     1.93 201 eP    43 44.05   0.4
                 eS    44 10.76
BC3     2.07 184 eP    43 45.14  -0.6
                 eS    44 14.21
FYU     2.13 315 eP    43 47.56   1.0
DJE     2.14 241 eP    43 47.18   0.6
IL1     2.35 264 eP    43 49.24  -0.4
ILB     2.35 264 eP    43 49.24  -0.4
                 eS    44 23.13
HDA     2.47 256 eP    43 51.33  -0.1
GLM     2.53 270 eP    43 52.03  -0.2
BM3     2.64 332 eP    43 54.30   0.4
FBA     2.71 268 ePn   43 53.92  -0.9
                 eS    44 30.65
CCB     2.76 263 eP    43 54.87  -0.6
PAX     2.79 221 eP    43 57.00   0.9
MDM     2.89 270 eP    43 56.67  -0.7
WRH     2.92 260 eP    43 57.64  -0.1
SDG     3.18 217 eP    44 02.52   1.1
TOA     3.69 217 eP    44 17.90   9.0X
GLB     3.85 197 eP    44 10.71  -0.3
BALM    4.12 186 eP    44 14.68  -0.2
KLU     4.17 211 eP    44 14.38  -1.1
CTGM    4.17 179 eP    44 15.86   0.2
TRF     4.21 251 eP    44 16.02  -0.2
INK     4.48  41 eP    44 19.50  -0.4
PMR     4.95 228 (P)   44 26.71   0.1
PWA     5.15 231 eP    44 31.40   2.0X
IMA     5.17 286 eP    44 30.10   0.4
SLKM    6.13 225 (P)   44 44.00   0.7
     S.D. = 0.6  on  25 of  27 obs.
-----------------------------------
%  NOV  03, 1993  19h 52m 26.69± 0.82s
   26.927 S ± 9.4km   26.691 E ± 7.7km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA       (584)
      ML 2.9 (PRE).

BFS     0.09  71 eP    52 28.20  -0.6
                 S     52 28.40
KSR     1.07  10 eP    52 55.00   7.5X
SWZ     1.24 258 eP    52 50.40   0.0
                 S     53 07.30
SEK     1.62 149 iPd   52 56.50   0.4
                 S     53 17.20
```

```
SLR      1.86  51 iPd    53 00.10   0.5
                  S      53 25.10
BLF      2.22 191 eP     53 05.10   0.3
                  S      53 31.00
FRS      3.06 203 e(P)   53 16.00  -0.6
     S.D. = 0.6  on   6 of   7 obs.
-----------------------------------
   NOV  03, 1993  21h 31m 22.06± 0.57s
   37.749 N ± 5.6km    1.706 W ± 4.8km
   DEPTH =  10.0km  (geophysicist)
 SPAIN                              (377)
      mbLg 3.4 (MDD). Felt (III) in
      the Lorca area.

EALH     0.25  64 iPd    31 27.27  -0.1
                  e      31 32.10
EHUE     0.71 276 iPc    31 35.35  -0.7
                  e      31 45.80
ENIJ     0.87 207 iPd    31 38.08  -0.8
                  e      31 48.40
EVIA     1.09 325 iPc    31 43.01   0.4
                  e      31 58.20
ACU      1.27  53 iPd    31 45.95   0.2
                  e      32 03.80
ECOG     1.55 253 iPd    31 51.23   1.4
                  e      32 10.90
EGUA     1.74 239 iPc    31 53.42   0.9
                  e      32 15.30
ECHE     1.93  17 eP     31 55.17  -0.1
                  e      32 21.80
ELUQ     2.04 265 eP     31 57.90   1.0
                  e      32 23.40
PAB      2.74 312 ePn    32 06.50  -0.4
                  ePg    32 16.50
                  eSn    32 34.50
                  eSb    32 40.00
                  eSg    32 47.50
EHOR     2.81 273 eP     32 07.21  -0.6
                  e      32 41.50
EPRU     2.92 256 eP     32 10.26   0.9
                  e      32 43.50
ETOR     3.08 355 eP     32 12.55   0.9
                  e      32 49.00
GUD      3.46 327 iPc    32 17.72   0.6
                  e      32 59.30
EROQ     3.48  27 eP     32 17.00  -0.3
                  e      32 56.50
EVAL     4.00 269 eP     32 23.00  -1.8
                  e      33 11.00
EPLA     4.12 305 eP     32 25.00  -1.5
                  e      33 13.00
EGRA     4.57  13 eP     32 34.00   1.3
                  e      33 27.50
ECRI     4.89 353 eP     32 38.00   0.5
                  e      33 34.00
EPF      5.50  16 Pn     32 46.10   0.0
                  Sn     33 44.60
                  Sg     34 15.10
LPO      7.26  17 Pn     33 09.60  -1.1
CAF      7.71  20 Pn     33 16.30  -0.7
     S.D. = 0.9  on  22 of  22 obs.
-----------------------------------
*  NOV  03, 1993  21h 48m 11.33± 0.84s
    5.843 S ± 7.3km  145.764 E ±11.4km
   DEPTH =  10.0km  (geophysicist)
   3.8mb (  2 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)
      ML 4.0 (PMG).

YYYY     0.44 153 ePd    48 20.70   0.3
MDG      0.59   2 iPc    48 23.50   0.3
LAT      1.48 124 ePc    48 37.20  -0.7
PMG      3.80 159 eP     49 12.00   0.8
WR2     17.87 217 eP     52 22.20   0.4
         0.7s     5.30nm          3.8mb
ASPA    21.08 212 eP     52 57.40  -1.0
         1.3s     5.30nm          3.8mb
     S.D. = 0.9  on   6 of   6 obs.
-----------------------------------
*  NOV  03, 1993  22h 15m 02.35± 0.95s
    5.835 S ± 8.2km  145.801 E ±13.4km
   DEPTH =  10.0km  (geophysicist)
   3.9mb (  2 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)

YYYY     0.44 158 eP     15 11.70   0.4
                  eS     15 19.00
MDG      0.58 358 ePc    15 14.30   0.2
LAT      1.45 125 eP     15 28.50  -0.1
PMG      3.79 159 eP     16 02.00  -0.1
WR2     17.90 217 iPc    19 14.60   1.4
         0.7s     5.10nm          3.8mb
ASPA    21.11 212 eP     19 47.90  -1.7
         1.1s     7.70nm          4.0mb
     S.D. = 1.3  on   6 of   6 obs.
-----------------------------------
*  NOV  03, 1993  23h 14m 54.93± 1.12s
    5.851 S ± 9.2km  146.207 E ±11.4km
   DEPTH =  10.0km  (geophysicist)
   3.8mb (  2 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)

YYYY     0.45 211 eP     15 04.50   0.3
                  eS     15 11.00
MDG      0.73 325 ePc    15 09.20  -0.1
LAT      1.13 136 eP     15 16.40   0.3
MNDI     2.55 263 eP     15 46.50   9.2X
PMG      3.66 165 eP     15 52.00  -0.8
WR2     18.14 218 eP     19 07.50  -1.2
         0.9s     4.90nm          3.6mb
ASPA    21.31 213 eP     19 45.70   1.4
         1.2s     6.20nm          3.9mb
     S.D. = 1.2  on   6 of   7 obs.
-----------------------------------
   NOV  03, 1993  23h 32m 31.49± 0.33s
   42.621 S ± 4.7km  173.439 E ± 5.3km
   DEPTH =  44.5 ±  9.2 km
   4.5mb (  2 obs.)
 SOUTH ISLAND, NEW ZEALAND          (162)

LTZ      0.88 259 Pd     32 47.70   0.1
THZ      0.94 335 Pc     32 46.60  -2.0
                  S      32 56.00
CCW      1.04  34 Pc     32 51.30   1.4
MQZ      1.23 208 Pc     32 54.30   1.8
                  S      33 11.90
DSZ      1.50 305 Pd     32 56.20  -0.2
TCW      1.54  24 P      32 57.30   0.4
WEL      1.66  37 P      32 59.70   1.1
MRW      1.68  35 P      32 59.50   0.6
DIW      1.85  11 P      33 01.30  -0.1
QRZ      1.92 339 Pd     33 02.40   0.1
CAW      1.94  39 P      33 02.90   0.3
BLW      1.97  51 P      33 03.10   0.1
WVZ      2.04 256 P      33 05.00   1.0
KIW      2.07  33 P      33 05.00   0.5
MTW      2.12  47 P      33 05.10  -0.1
MNG      2.52  38 P      33 10.60  -0.3
PGZ      2.92  48 P      33 15.40  -1.1
BSZ      3.04  22 P      33 18.90   0.7
ODZ      3.16 219 Pc     33 20.60   0.7
BWZ      3.21 232 P      33 20.90   0.2
NRZ      3.30   7 eP     33 23.10   1.1
TEHZ     3.66  45 eP     33 24.90  -2.1
WAHZ     3.66  38 P      33 25.40  -1.6
NGZ      3.81  26 P      33 29.20  -0.1
MSCZ     3.82 228 P      33 28.70  -0.6
LSCZ     3.86 228 P      33 29.50  -0.4
MHZ      3.87 230 P      33 29.60  -0.6
SBCZ     3.87 229 P      33 29.50  -0.6
MMCZ     3.92 231 P      33 30.50  -0.4
CMCZ     3.93 229 P      33 30.70  -0.3
TLC      4.07 229 P      33 32.60  -0.4
TUZ      4.31 218 P      33 36.40   0.2
URZ      5.18  34 eP     33 44.90  -3.5X
SIZ      5.69 220 eP     33 54.90  -0.7
DZM     21.31 342 iPc    37 17.20   0.5
ASPA    37.70 287 eP     39 44.50   0.0
         0.7s     7.80nm          4.7mb
WR2     39.84 292 eP     40 02.60   0.3
         1.0s     4.80nm          4.3mb
OBN    149.49 309 ePKP   52 16.00   4.2X
                  e      52 40.00
                  e      52 57.00
     S.D. = 0.9  on  36 of  38 obs.
-----------------------------------
%  NOV  03, 1993  23h 32m 45.53± 0.87s
   44.331 N ± 7.4km    7.264 E ±10.2km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                     (545)
      ML 1.6 (GEN).

STV      0.10 154 P      32 48.21  -0.1
                  S      32 49.57
ENR      0.15 133 P      32 49.21   0.0
                  S      32 51.18
PZZ      0.21 326 P      32 50.32   0.1
                  S      32 53.46
ROB      0.44  95 P      32 54.56   0.1
                  S      33 00.46
BHB      0.51 360 P      32 55.71  -0.2
                  S      33 02.13
IMI      0.62 133 P      32 57.96   0.0
     S.D. = 0.2  on   6 of   6 obs.
-----------------------------------
   NOV  04, 1993  00h 32m 40.26± 0.38s
   31.985 N ±14.6km    59.969 E ± 6.9km
   DEPTH =  33.0km  (normal)
   4.5mb ( 20 obs.)
 NORTHERN IRAN                      (348)

QUE      6.25 105 eP     34 12.60  -0.2
                  eS     34 42.80
                  e      36 10.80
GKN     21.72  94 P      37 29.60  -1.1
HYB     22.21 126 eP     37 35.50   0.1
DMN     22.23  95 P      37 37.80   1.9
KKN     22.32  94 P      37 36.00  -0.8
PKI     22.50  95 P      37 38.00  -0.6
GUN     22.80  94 P      37 41.40  -0.2
OBN     28.39 331 ePc    38 38.00   4.6X
         1.2s    18.00nm          4.6mb
                  e      38 58.00
CHTO    37.37 101 eP     39 51.20  -0.6
GEC2    38.39 310 ePc    39 59.70  -0.5
         0.9s     2.97nm          4.1mb
                  e      40 06.70
KHC     38.51 310 eP     40 01.50   0.4
BRG     38.59 313 e(P)   40 02.20   0.6
MOX     40.00 312 eP     40 14.80   1.4
PGF     41.36 300 eP     40 26.00   1.2
HFS     41.38 327 eP     40 24.20  -0.4
         0.6s     0.90nm          3.7mb
SBF     42.45 302 eP     40 33.80   0.1
         0.9s    21.15nm          4.9mb
CDF     42.59 308 eP     40 32.90  -1.9
NB2     42.85 327 P      40 36.00  -0.7
         1.1s     3.40nm          4.0mb
LPG     42.90 304 eP     40 37.00  -0.6
         0.8s     4.45nm          4.2mb
LPL     42.91 304 eP     40 37.10  -0.5
LBF     44.80 306 eP     40 52.00  -0.7
         0.8s     3.35nm          4.3mb
LOR     44.87 307 eP     40 52.50  -0.7
         0.9s     5.90nm          4.5mb
SMF     44.90 306 eP     40 53.10  -0.3
         1.0s    16.60nm          4.9mb
SSF     45.12 306 eP     40 54.90  -0.3
         0.9s    10.50nm          4.7mb
AVF     45.23 306 eP     40 55.50  -0.5
         0.7s     2.20nm          4.2mb
BGF     45.59 306 eP     40 58.40  -0.5
MAF     45.80 305 eP     41 00.50   0.0
TCF     46.04 305 eP     41 02.40  -0.1
CAF     46.23 304 eP     41 03.90  -0.1
         0.9s     5.55nm          4.5mb
RJF     46.59 304 eP     41 06.90   0.1
         0.7s     3.10nm          4.4mb
LPO     46.87 303 eP     41 09.90   0.8
LFF     47.17 304 eP     41 11.70   0.3
         0.6s     3.95nm          4.6mb
MFF     47.64 306 eP     41 15.40   0.3
EPF     47.67 301 eP     41 17.30   1.9
         1.6s    31.10nm          5.1mb
FLN     47.74 309 eP     41 15.00  -0.8
         1.1s    11.00nm          4.8mb
KIC     65.24 262 P      43 20.90  -0.2
MBC     72.04 360 eP     44 03.00   0.8
         1.0s     3.00nm          4.2mb
IMA     78.89  13 e(P)   44 42.80   1.3
         0.9s     0.60nm          3.6mb
WRA     87.90 115 P      45 29.10   1.1
         1.0s     2.60nm          4.5mb
WR2     87.92 115 iPc    45 28.20   0.1
         0.8s     4.60nm          4.8mb
     S.D. = 0.8  on  39 of  40 obs.
-----------------------------------
&  NOV  04, 1993  00h 36m 53.75s
   33.824 N          115.657 W
   DEPTH =    0.0km
 SOUTHERN CALIFORNIA                ( 43)
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04d 00h

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      <PAS-P>. ML 3.5 (PAS).
GLA     1.04 138 iPc   37 13.08  -1.2
PLM     1.11 245 ePd   37 14.35  -1.3
PEC     1.25 274 ePd   37 16.53  -1.4
                 eS    37 32.97
SSK     1.73 283 eP    37 23.62  -1.9
GSC     1.75 328 eP    37 23.69  -2.0
ISA     2.96 309 ePn   37 40.33  -2.6
ABL     3.12 290 eP    37 41.80  -3.6
TPNV    3.16 351 ePn   37 44.16  -1.6
BCH     3.90 292 (P)   37 53.27  -3.1
ARUT    4.35  24 (Pn)  38 02.39  -0.4
                 ePg   38 17.17
TUC     4.36 109 eP    37 59.34  -3.6
TNP     4.43 344 (Pg)  38 16.90  12.8
BONR    4.65 333 eP    38 04.65  -2.5
MEMM    4.67 326 (Pn)  38 06.08  -1.1
MSU     5.46  30 (Pn)  38 17.96  -0.7
       15 obs. associated
-------------------------------------
&  NOV  04, 1993  00h 39m 43.12s
   62.963 N          150.942 W
   DEPTH = 109.7km
 CENTRAL ALASKA                    (  1)
      <AEIC>.

TRF     0.57  31 eP    40 00.46  -0.4
KTH     0.59   1 iPd   40 00.65  -0.3
                 eS    40 13.88
HUR     0.60  88 eP    40 00.44  -0.4
                 eS    40 14.16
CUT     0.64 151 iPc   40 01.01  -0.2
SKT     1.02 196 iPc   40 04.36  -0.5
                 eS    40 20.74
RND     1.05  64 ePd   40 04.64  -0.5
                 eS    40 21.09
MCK     1.19  49 eP    40 06.17  -0.5
BWN     1.38  28 iPd   40 08.69  -0.2
PWA     1.41 159 P     40 09.00  -0.1
                 S     40 31.50
SUA     1.51 176 eP    40 09.94  -0.6
GHO     1.52 141 ePc   40 10.23  -0.4
PMR     1.62 148 ePc   40 10.40  -1.3
NCG     1.67 201 eP    40 11.57  -0.9
SML     1.68 132 iPc   40 11.75  -0.8
CGLM    1.74 197 eP    40 12.82  -0.5
CRP     1.80 199 eP    40 13.05  -1.1
CP2     1.81 200 eP    40 13.68  -0.7
NEA     1.82  26 iPd   40 12.92  -1.3
BGL     1.84 202 eP    40 14.29  -0.3
CKN     1.84 199 eP    40 14.62   0.0
PMS     1.84 159 P     40 13.60  -1.0
SPU     1.86 197 eP    40 14.08  -0.8
CKT     1.87 199 eP    40 14.44  -0.5
CKL     1.89 201 eP    40 14.98  -0.3
KNK     1.94 142 ePc   40 14.73  -1.2
WRH     1.98  39 ePd   40 15.06  -1.2
BKG     2.00 199 eP    40 15.86  -0.8
                 eS    40 42.58
SCM     2.03 122 ePc   40 15.73  -1.3
                 eS    40 43.28
MLY     2.08   2 iPd   40 16.33  -1.3
CCB     2.19  38 ePd   40 17.66  -1.3
NKA     2.23 184 P     40 22.20   2.6
HDA     2.29  49 eP    40 19.18  -1.2
TTA     2.32 271 eP    40 18.93  -1.9
CFI     2.33 139 eP    40 19.30  -1.5
MDM     2.33  30 iPd   40 19.55  -1.4
TOA     2.37 109 P     40 20.80  -0.7
FBA     2.39  34 P     40 20.20  -1.5
THY     2.40  77 eP    40 22.55   0.7
PWL     2.45 149 ePc   40 20.81  -1.6
SLKM    2.49 172 eP    40 22.14  -0.9
PAX     2.50  87 eP    40 22.69  -0.5
                 eS    40 52.66
DFR     2.52 200 eP    40 22.63  -0.9
SDG     2.52  98 eP    40 22.84  -0.6
                 eS    40 54.48
IL1     2.55  43 iPd   40 22.26  -1.6
ILB     2.55  43 iPd   40 22.26  -1.6
                 eS    40 52.61
GLM     2.57  36 iPd   40 22.71  -1.4
NCT     2.59 202 eP    40 23.62  -0.8
DJE     2.59  63 eP    40 24.19  -0.1
MPA     2.59 162 eP    40 22.75  -1.6
REF     2.62 199 eP    40 24.59  -0.3
RDW     2.64 200 eP    40 24.98  -0.2
RS2     2.65 200 eP    40 24.95  -0.4
RED     2.70 200 eP    40 25.58  -0.3
TZL     2.72 107 eP    40 25.73  -0.3
KLU     2.78 120 eP    40 24.85  -2.0
                 eS    40 57.54
VZW     2.82 131 eP    40 25.26  -2.1
VLZ     2.84 128 eP    40 25.39  -2.3
                 eS    40 58.72
SVW     2.89 232 eP    40 26.52  -1.8
SEW     2.96 165 eP    40 27.87  -1.3
KNIM    3.04 148 ePc   40 27.58  -2.7
ILIM    3.05 199 eP    40 30.72   0.2
FID     3.07 134 eP    40 28.53  -2.2
INE     3.08 200 eP    40 31.28   0.2
DOT     3.18  74 eP    40 30.80  -1.5
IM3     3.27 339 ePc   40 31.52  -1.9
LTI     3.29 152 eP    40 31.05  -2.6
HIN     3.33 139 eP    40 32.20  -2.2
CNPM    3.45 182 eP    40 34.86  -1.1
CVA     3.46 132 eP    40 34.28  -1.7
GLB     3.67 111 ePd   40 37.13  -1.9
RAGM    3.95 128 eP    40 41.08  -1.7
HMT     4.13 127 eP    40 43.11  -2.1
MCNL    4.13 205 eP    40 45.90   0.7
BC3     4.18  85 eP    40 43.52  -2.3
CDD     4.26 199 eP    40 46.87   0.0
FYU     4.36  32 eP    40 47.01  -1.3
SYI     4.43 190 eP    40 47.82  -1.4
BALM    4.49 112 eP    40 47.56  -2.6
WAX     4.60 120 eP    40 49.62  -2.1
BM3     5.21  28 eP    40 57.49  -2.5
       80 obs. associated
-------------------------------------
   NOV  04, 1993  01h 47m 03.90± 0.28s
   22.002 N ± 6.8km  143.156 E ± 5.2km
   DEPTH =  33.0km  (normal)
   4.8mb ( 16 obs.)  4.1Msz (  3 obs.)
 VOLCANO ISLANDS REGION            (213)

MAT    15.11 345 (P)   50 31.00  -5.7X
        1.7s    19.23nm          4.1mb
     Z  20s     0.71um
                 eS    54 07.00
KUMJ   15.16 316 eP    50 39.50   2.3
CVP    20.51 262 eP    51 42.00   0.0
SSE    21.61 299 P     51 53.50   0.4
     Z  20s     0.60um          4.0Msz
BAG    22.02 259 eP    52 03.00   5.5X
TIA    26.69 308 eP    52 40.80  -1.1
BJI    29.12 314 eP    53 02.50  -1.3
        2.0s    38.00nm          4.8mb
BTO    33.57 311 eP    53 44.00   0.8
LZH    36.87 301 eP    54 11.50   0.2
        1.5s    32.00nm          5.0mb
     Z  22s     0.51um          4.3Msz
GTA    40.68 305 eP    54 43.80   0.8
        2.0s    33.00nm          4.7mb
                 pP    54 49.50  19kmX
CHTO   41.45 274 eP    54 51.30   1.8
CTA    41.94 176 ePc   54 53.50   0.2
WR2    42.57 192 iPc   54 57.80  -0.7
        0.5s    10.90nm          4.8mb
WRA    42.57 192 P     54 58.29  -0.2
        0.6s     3.20nm          4.2mb
ASPA   46.28 192 iPd   55 28.60   0.3
        0.5s     9.40nm          5.0mb
     Z  22s     0.20um          4.0Msz
WMQ    50.37 309 P     55 59.50  -0.5
        1.5s    18.00nm          4.9mb
                 pP    56 12.00  45kmX
GUN    51.87 289 P     56 12.70   0.7
PKI    52.33 288 P     56 14.20  -1.2
KKN    52.41 289 P     56 15.00  -0.9
DMN    52.59 289 P     56 16.60  -0.6
GKN    52.95 289 P     56 18.40  -1.4
INK    67.30  24 eP    57 56.00  -1.2
        1.0s     2.00nm          4.2mb
MBC    70.57  15 eP    58 17.00  -0.2
YKA    76.20  28 eP    58 49.50  -0.8
        0.7s     1.90nm          4.2mb
NEW    80.07  42 eP    59 11.91   0.0
        0.9s    10.57nm          4.8mb
ORV    80.25  51 eP    59 13.23   0.2
CMB    81.60  52 eP    59 20.20   0.0
        0.6s     5.25nm          4.7mb
BONR   83.16  52 eP    59 29.00   0.4
HVU    85.50  47 eP    59 40.45   0.3
DUG    86.15  48 eP    59 43.58   0.2
        0.5s     6.81nm          5.1mb
ARUT   86.74  51 eP    59 47.11   0.7
DAU    87.13  47 eP    59 48.46   0.1
MSU    87.33  49 eP    59 49.35   0.1
EMUT   87.70  48 eP    59 51.58   0.5
GLA    87.71  55 eP    59 51.46   0.5
SRU    88.22  48 eP    59 52.96  -0.5
NB2    88.65 339 P     59 53.70  -1.2
        1.4s     5.70nm          4.7mb
PV09   89.46  48 eP    59 59.91   0.4
PV10   89.59  48 eP    59 59.99  -0.1
RSSD   90.04  42 (P)   00 01.21  -0.8
        1.2s     6.45nm          4.8mb
GOL    91.44  46 eP    00 08.58   0.0
        0.8s     5.53nm          5.0mb
LPAZ  149.94  85 PKP   06 53.40   4.5X
LPB   150.03  85 PKP   06 53.80   5.0X
CNCB  150.21  86 PKP   06 54.80   5.6X
MOCB  153.24  94 PKP   06 55.00   1.6
     S.D. = 0.9  on  40 of  45 obs.
-------------------------------------
   NOV  04, 1993  02h 19m 01.44± 0.50s
   40.515 S ± 5.5km  174.462 E ± 5.0km
   DEPTH = 110.2 ±  7.4 km
   4.5mb (  1 obs.)
 COOK STRAIT, NEW ZEALAND          (163)

KIW     0.49 136 Pc    19 18.20  -0.3
DIW     0.50 235 P     19 17.80  -0.8
TCW     0.71 191 Pc    19 20.40   0.3
MRW     0.74 166 P     19 20.70   0.3
                 S     19 32.50
CAW     0.75 142 Pc    19 20.80   0.3
MNG     0.78  98 Pc    19 21.10   0.3
                 S     19 33.00
BSZ     0.80  27 P     19 21.50   0.6
WEL     0.80 163 P     19 21.30   0.3
                 S     19 34.00
MTW     1.02 130 Pc    19 23.40   0.3
BLW     1.15 138 P     19 25.20   0.7
NRZ     1.24 341 P     19 26.00   0.4
CCW     1.25 188 P     19 26.80   1.2
AMW     1.26 129 P     19 26.30   0.5
PGZ     1.38  95 P     19 27.40   0.2
QRZ     1.50 257 Pd    19 28.10  -0.6
                 eS    19 46.60
WAHZ    1.66  61 P     19 30.50  -0.2
THZ     1.72 223 P     19 31.90   0.5
                 S     19 53.20
TEHZ    1.87  74 P     19 33.20  -0.1
DSZ     2.36 238 P     19 39.20  -0.4
LTZ     2.80 215 P     19 45.00  -0.5
                 S     20 15.60
MAHZ    2.95  64 P     19 46.60  -0.9
NOZ     3.35  57 P     19 51.30  -1.6
MQZ     3.46 202 eP    19 53.10  -1.3
                 S     20 28.70
ODZ     5.33 211 P     20 18.70  -1.2
                 eS    21 13.10
WR2    39.82 289 iPc   26 27.30   1.9
        0.3s     2.70nm          4.5mb
     S.D. = 0.8  on  25 of  25 obs.
-------------------------------------
*  NOV  04, 1993  02h 31m 50.41± 0.86s
    5.808 S ± 7.3km  145.908 E ±13.6km
   DEPTH =  10.0km  (geophysicist)
   3.6mb (  1 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)

YYYY    0.43 172 ePd   31 58.80  -0.5
MDG     0.57 347 iPc   32 01.80  -0.1
LAT     1.38 128 eP    32 15.70   0.0
MNDI    2.26 261 eP    32 34.50   5.8X
PMG     3.78 161 eP    32 50.50   0.4
WR2    17.99 218 iPc   36 02.50   0.2
        0.5s     2.50nm          3.6mb
ASPA   21.19 212 eP    36 51.60  13.1X
        0.8s     4.60nm
     S.D. = 0.5  on   5 of   7 obs.
-------------------------------------
   NOV  04, 1993  02h 36m 46.30± 1.05s
    5.843 S ± 3.6km  145.964 E ± 4.6km
   DEPTH =  17.4 ±  7.9 km
   5.2mb ( 38 obs.)  4.9Msz ( 29 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)
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```
      ML 5.4 (PMG).
YYYY    0.40 179 ePd   36 54.00  -0.6
MDG     0.62 343 ePd   36 57.40  -0.8
LAT     1.32 128 iPd   37 10.30   0.5
MNDI    2.31 262 eP    37 30.00   5.6X
WWKK    3.21 313 eP    37 40.50   3.5X
PMG     3.73 162 eP    37 44.30  -0.1
JAY     6.20 302 ePc   38 24.40   5.1X
      1.0s    12.00nm          4.7mb
                eS     41 23.40
RAB     6.39  75 eP    38 22.00   0.0
                iS     39 52.00
HNR    14.31 105 eP    40 11.00   0.8
                eS     42 59.00
SWI    15.49 288 ePd   40 27.50   1.9
QIS    15.88 202 eP    40 32.00   1.4
WB5    17.94 218 iPd   40 56.70   0.0
                eS     44 23.50
                e      46 03.00
                e      46 31.90
                e      02 21.20
                e      08 00.00
WR2    17.99 218 iPc   40 57.30   0.0
      0.7s    85.60nm          5.0mb
                e      41 43.60
WRA    18.00 218 P     40 57.79   0.3
      1.5s    42.70nm          4.4mb
GUA    19.28 357 eP    41 14.30   1.1
GUMO   19.34 357 eP    41 15.20   1.4
      1.1s   317.50nm          5.5mb
KNA    19.53 238 eP    41 15.20  -0.9
      1.0s   238.00nm          5.4mb
ASPA   21.19 212 iPc   41 32.90  -0.4
      0.8s    67.10nm          5.1mb
    Z  20s     7.70um          5.1Msz
                eS     45 30.10
BRS    22.39 164 iPc   41 45.00  -0.3
    Z  18s    24.00um          5.7Msz
                i      41 53.00
                eS     45 57.00
DAV    24.06 302 eP    42 06.50   4.8X
BKM    24.74 120 iPc   42 09.50   1.2
PVC    24.83 120 iPc   42 10.10   1.0
CTB    25.29 301 ePd   42 12.00  -1.5
DZM    25.54 131 iPc   42 15.30  -0.7
STK    26.23 188 iPd   42 20.00  -2.1
      1.2s    11.90nm          4.4mb
MKS    26.38 270 iPc   42 30.00   6.3X
BWA    28.53 176 eP    42 43.10   0.0
                ipP    42 47.70  16kmX
CAN    29.47 175 eP    42 52.90   1.3
                i      43 05.20
MBL    29.54 236 eP    42 51.50  -0.9
      0.5s     6.00nm          4.6mb
KKM    31.96 291 ePc   43 16.00   2.1
MEEK   33.28 229 eP    43 24.00  -1.2
BAG    33.46 312 eP    43 28.00   1.0
TKSJ   41.18 345 P     44 31.10  -0.4
IIDJ   41.79 350 P     44 36.40  -0.2
CHJJ   42.18 352 P     44 39.80   0.1
TSRJ   42.22 348 P     44 39.50  -0.5
YONJ   42.48 345 P     44 41.80  -0.4
MAT    42.78 351 eP    44 43.00  -1.7
      1.3s    61.54nm          5.2mb
    Z  20s     0.35um          4.3Msz
                eS     51 02.00
MTMJ   42.89 350 P     44 47.10   1.4
KGM    43.30 279 ePd   44 49.50   0.3
      1.9s  2524.50nm          6.7mb X
NIIJ   43.35 352 P     44 48.90  -0.3
PUZ    43.46 142 eP    44 50.70   0.5
MNG    43.56 147 eP    44 50.70  -0.3
SSE    43.71 329 Pd    44 50.50  -1.7
      0.7s     7.00nm          4.6mb
    Z  20s     1.30um          4.8Msz
                pP     45 01.50  39kmX
                S      51 19.00
PGZ    44.00 146 eP    44 54.90   0.5
NJ2    45.69 327 Pc    45 09.00   0.9
    Z  20s     0.59um          4.5Msz
IPM    46.05 282 ePd   45 12.20   0.9
      1.5s   232.30nm          5.9mb
SNG    47.06 285 eP    45 19.00  -0.2
PCT    48.65 295 eP    45 32.40   0.8
GYA    49.81 312 P     45 41.00   0.4
TIA    49.81 329 eP    45 39.40  -0.9
    Z  26s     1.05um          4.7MszX
                eS     52 52.00
NST    50.16 296 eP    45 44.00   0.8
VLA    50.38 347 eP    45 46.00   1.6
                e      47 48.00
                iS     52 58.00
                iPS    53 11.00
                e      55 31.00
KHT    51.24 294 eP    45 53.40   2.0
SNY    51.66 339 Pc    45 53.10  -1.1
    Z  26s     1.48um          4.9MszX
                S      53 10.00
MDJ    52.34 345 eP    45 58.50  -0.9
CHTO   52.41 299 ePd   46 02.00   1.7
      1.1s    35.92nm          5.2mb
YSS    52.71 357 eP    46 04.00   2.0
    Z  17s     0.60um          4.7MszX
                e      53 34.50
                e      53 44.50
CN2    52.78 341 eP    46 03.90   1.3
      1.0s     8.00nm          4.6mb
    Z  20s     0.43um          4.5Msz
    N  14s     0.31um
    E  14s     0.32um
                pP     46 14.00  33kmX
                eS     53 28.00
XAN    52.91 321 P     46 02.00  -1.8
      1.3s    26.00nm          5.0mb
                pP     46 11.70  32kmX
                sP     46 17.00
BJI    53.27 332 eP    46 05.00  -1.3
      1.5s    14.00nm          4.7mb
    Z  20s     0.84um          4.8Msz
    N  16s     0.58um
                epP    46 13.00  26kmX
                eS     53 28.00
                eSS    57 08.00
TIY    53.41 327 eP    46 06.20  -1.3
    Z  22s     1.17um          4.9Msz
                S      53 42.00
CD2    54.43 315 P     46 15.10   0.0
HHC    56.16 329 eP    46 28.00   0.5
    Z  25s     1.38um          4.9MszX
BTO    56.79 328 eP    46 33.50   1.4
    N  13s     0.33um
    E  13s     0.30um
                ePP    48 44.00
                eS     54 24.50
LZH    57.42 320 eP    46 34.50  -2.2
      1.5s    40.00nm          5.2mb
    Z  26s     0.77um          4.7MszX
                pP     46 42.00  24kmX
                eS     54 34.00
DRV    60.86 183 eP    46 57.00  -2.7
HON    61.21  62 P     47 10.00   7.2X
    Z  20s     0.49um          4.6Msz
GTA    61.97 321 eP    47 07.30  -0.6
      1.8s    27.00nm          5.1mb
                pP     47 14.50  23kmX
                sP     47 18.00
LSA    63.32 307 P     47 17.00  -0.5
CIT    63.89 338 eP    47 20.00  -0.3
CSY    65.15 195 iPd   47 37.30   9.1X
      0.6s    29.70nm          5.6mb
GUN    66.92 304 P     47 41.00   0.4
ZAK    67.01 332 eP    47 39.00  -1.3
      1.2s    36.00nm          5.4mb
                eS     56 31.00
                eSS    00 50.00
PKI    67.20 303 P     47 41.60  -0.8
KKN    67.38 303 P     47 43.20  -0.2
DMN    67.46 303 P     47 44.20   0.2
GKN    67.98 303 P     47 47.00  -0.1
BOD    68.48 342 eP    47 47.40  -2.0
      1.3s    30.00nm          5.3mb
YAK    68.82 352 eP    47 50.10  -1.3
      1.5s   110.00nm          5.8mb
HYB    70.44 291 eP    48 01.50  -0.7
      1.0s    40.00nm          5.5mb
GBA    70.70 287 P     48 04.00   0.3
      1.0s    11.00nm          4.9mb
WMQ    72.00 320 P     48 11.00  -0.2
      1.5s    25.00nm          5.1mb
                pP     48 21.50  34kmX
                sP     48 27.50
NDI    74.42 302 ePc   48 25.50  -0.1
      1.0s    25.00nm          5.2mb
POO    75.05 291 iPc   48 47.00  17.6X
SDN    75.24  28 eP    48 30.20   0.5
      0.8s    72.90nm          5.8mb
ILT    77.67  13 iPd   48 43.80   0.7
      1.5s    75.00nm          5.5mb
                iS     58 40.00
                e      59 28.00
TIK    78.14 355 eP    48 45.00  -0.6
      1.6s    26.00nm          5.0mb
                e      48 49.00
KSH    78.48 312 P     48 49.60   1.3
      1.0s    20.00nm          5.1mb
    Z  16s     0.94um          5.2MszX
                pP     48 54.00  14kmX
                PP     51 50.00
                S      58 48.00
                sS     58 55.00
                SKS    59 00.00
                ScS    59 08.00
NIL    79.00 306 iPc   48 53.83   2.7
                iS     58 52.50
FRU    80.47 315 eP    49 06.00   7.1X
SVW    80.52  25 eP    48 59.72   0.9
      1.2s    37.71nm          5.3mb
TTA    81.31  23 eP    49 04.06   1.1
      1.6s    32.59nm          5.1mb
MAW    82.00 203 eP    49 05.60  -0.7
      0.7s     6.17nm          4.8mb
                i      49 07.90
SLKM   82.57  27 eP    49 09.91   0.5
QUE    83.48 301 eP    49 16.10   1.1
PMR    83.51  26 eP    49 13.41  -0.8
      1.4s    47.35nm          5.5mb
    Z  19s     0.41um          4.8Msz
IMA    83.78  21 eP    49 15.64  -0.1
      1.7s    53.17nm          5.5mb
SPA    84.19 180 iPc   49 18.00   0.1
      1.5s    85.23nm          5.8mb
NRI    84.68 342 eP    49 18.00  -2.0
      1.8s    39.00nm          5.3mb
                e      59 42.00
KLU    84.88  27 eP    49 21.09  -0.2
TOA    85.01  26 eP    49 22.00   0.2
FBA    85.44  23 eP    49 22.20  -1.7
      0.9s    16.81nm          5.3mb
BALM   86.34  28 eP    49 28.33  -0.2
INK    91.89  22 eP    49 54.50   0.1
      1.5s    12.00nm          5.1mb
WDC    94.89  50 P     50 20.00  11.1X
    Z  19s     0.41um          4.9Msz
SAO    95.53  54 P     50 20.00   8.1X
    Z  18s     0.42um          5.0Msz
CMB    96.44  52 P     50 30.00  13.9X
    Z  19s     0.46um          5.0Msz
MBC    96.75  14 eP    50 14.00  -2.7
ISA    97.89  55 P     50 30.00   7.3X
    Z  19s     0.44um          5.0Msz
DUG   102.32  50 Pdiff 50 50.00   7.3X
    Z  18s     0.31um          4.9Msz
TUC   104.29  58 Pdiff 51 00.00   8.4X
    Z  21s     0.45um          5.0Msz
ALQ   107.73  55 PKP   55 30.00  15.1X
    Z  19s     0.17um          4.6Msz
GOL   108.06  50 PKP   55 30.00  14.5X
    Z  18s     0.61um          5.2Msz
GLD   108.17  50 PKP   55 30.00  14.4X
    Z  21s     0.72um          5.2Msz
WMOK  114.01  55 PKP   55 40.00  13.3X
    Z  18s     0.34um          5.0Msz
MIAR  118.25  54 PKP   55 40.00   5.3X
    Z  18s     0.26um          4.9Msz
ZST   119.53 323 ePKP  55 37.70   1.0
FVM   119.81  49 PKP   55 50.00  12.4X
    Z  18s     0.54um          5.2Msz
GEC2  121.19 325 ePKP  55 41.20   1.2
      1.6s     3.51nm
                e      56 00.10
MYNC  125.55  51 PKP   56 00.00  11.2X
    Z  19s     0.22um          4.8Msz
YSNY  126.37  40 PKP   56 00.00   9.8X
    Z  18s     0.27um          5.0Msz
BINY  128.13  39 PKP   56 00.00   6.5X
    Z  20s     0.40um          5.1Msz
LBNH  129.39  35 PKP   56 10.00  14.2X
    Z  18s     0.27um          5.0Msz
CBM   129.67  30 PKP   56 10.00  13.8X
    Z  21s     0.39um          5.1Msz
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04d 02h

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LSCT  130.14  38 PKP   56 10.00  12.7X
     Z  18s     0.37um          5.1Msz
HRV   130.66  36 PKP   56 10.00  11.8X
     Z  20s     0.20um          4.8Msz
MOCB  138.94 132 PKP   56 06.50  -8.6X
CNCB  139.59 124 PKP   56 11.10  -5.4X
LPB   139.64 124 ePKP  56 17.00   0.6
LPAZ  139.73 124 PKP   56 08.30  -8.5X
SDV   143.59  83 ePKP  56 21.40  -1.8
RSTA  146.35 155 ePKP  56 29.20   1.9
CAR   147.13  80 ePKP  56 23.50  -5.4X
PPD   147.54 149 ePKP  56 32.10   2.8X
VAO   148.67 157 ePKP  56 35.80   4.6X
                 e     56 36.60
                 e     56 39.10
CACB  149.95 156 (PKP) 56 37.50   4.3X
AGVB  149.99 148 iPKPd 56 38.90   5.7X
KIC   150.87 273 ePKP  56 41.00   6.4X
      1.0s    56.50nm
TIC   151.15 273 PKP   56 41.50   6.4X
LIC   151.15 272 PKP   56 41.70   6.7X
BAO   154.58 147 ePKP  56 48.90   9.0X
                 e     56 50.60
BDF   154.60 147 ePKP  56 44.00   4.0X
                 i     56 51.00
SOB1  163.56 155 ePKP  56 52.20   2.1X
     S.D. = 1.1  on 102 of 144 obs.
-----------------------------------
   NOV  04, 1993  02h 58m 09.31± 0.66s
    5.842 S ± 6.5km  145.943 E ±10.0km
   DEPTH =  10.0km  (geophysicist)
   4.0mb (  3 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)

YYYY    0.40 176 eP    58 18.00   0.5
                 eS    58 25.00
MDG     0.61 345 eP    58 22.00   0.4
LAT     1.33 128 eP    58 34.00   0.1
MNDI    2.29 262 eP    58 54.00   6.0X
PMG     3.74 161 eP    59 08.00  -0.3
WR2    17.98 218 eP    02 21.20   0.1
       0.9s     5.30nm          3.7mb
ASPA   21.18 212 eP    03 01.30   4.0X
       1.6s    10.70nm          4.0mb
DZM    25.56 131 iPc   03 40.00  -0.2
GBA    70.68 287 P     09 27.30  -0.5
       0.3s     2.00nm          4.7mb
NB2   115.41 337 PKP   16 43.40  -9.4X
       0.5s     0.60nm
LIC   151.13 272 PKP   18 05.00   5.7X
     S.D. = 0.5  on   7 of  11 obs.
-----------------------------------
*  NOV  04, 1993  03h 22m 46.91± 0.80s
   18.242 S ±11.7km  175.556 W ±16.3km
   DEPTH = 270.0km  (geophysicist)
   4.9mb (  7 obs.)
 TONGA ISLANDS                     (173)

BKM    15.43 270 iPc   26 15.50   2.5X
DZM    17.32 254 iPd   26 34.40   0.9
KUZ    19.97 201 eP    27 02.10   1.9
PUZ    20.49 194 eP    27 08.40   3.1X
URZ    20.95 196 P     27 08.90  -0.9
NOZ    21.06 194 P     27 12.60   1.8
QRZ    24.73 202 P     27 45.70   0.1
THZ    25.44 200 eP    27 52.50   0.4
LTZ    26.56 200 eP    27 59.70  -2.5
BWZ    28.91 202 eP    28 20.80  -2.3
BRS    30.51 247 iPd   28 38.50   1.1
                 e     28 42.00
ARMA   32.15 242 iPd   28 52.30   0.6
       0.5s    10.00nm          4.7mb
STK    40.87 242 iPd   30 03.80  -0.6
       0.8s    13.80nm          4.4mb
WR2    47.22 259 iPc   30 54.40  -0.7
       0.4s    98.60nm          5.5mb
ASPA   47.32 254 iPd   30 56.20   0.4
       0.7s   250.50nm          5.7mb
                 iS    37 29.30
FORT   52.32 245 eP    31 33.00  -0.5
KNA    53.14 264 eP    31 39.00  -0.7
       0.8s    74.00nm          5.2mb
MAT    69.82 322 eP    33 29.00  -1.3
       1.0s     9.00nm          4.5mb
PV10   83.96  46 eP    34 48.26  -0.1
FBA    85.57  11 iPc   34 54.31  -1.2
       0.6s     7.29nm          4.7mb
                 pP    35 58.00 266kmX
LPAZ  100.75 111 Pdiff 36 23.20  15.8X
                 i     36 37.00
KSP   146.13 346 iPKP  41 57.00   1.8
CLL   146.31 350 iPKP  41 57.20   1.8
       0.8s    17.00nm
BRG   146.57 349 iPKP  41 58.40   2.5X
PRU   147.31 348 ePKP  42 00.00   2.9X
GRF   148.15 352 ePKP  42 03.10   4.6X
                 e     42 06.50
KHC   148.31 349 ePKP  42 03.50   4.7X
                 e     42 07.50
                 e     42 20.00
GEC2  148.56 348 ePKPd 42 03.20   3.9X
       0.8s     4.18nm
                 e     42 07.70
                 e     42 20.10
FLN   149.29   6 ePKP  42 04.80   4.6X
       0.8s    11.55nm
LDF   149.50   6 ePKP  42 05.20   4.7X
GRR   149.62   7 ePKP  42 05.90   5.2X
       1.0s    14.40nm
CDF   149.82 356 ePKP  42 06.60   5.4X
       0.9s     9.15nm
LPF   149.95   7 ePKP  42 06.60   5.4X
       0.5s     6.40nm
HAU   150.27 357 ePKP  42 07.60   5.8X
       0.7s     7.95nm
BSF   150.43 357 ePKP  42 07.90   5.8X
       0.7s     7.05nm
HYF   151.01   3 ePKP  42 09.70   6.8X
LOR   151.05   1 ePKP  42 09.50   6.6X
       0.5s     4.80nm
SSF   151.25   1 ePKP  42 10.00   6.8X
       0.9s    13.75nm
LBF   151.33   1 ePKP  42 10.00   6.6X
       0.7s     7.95nm
MFF   151.46   7 ePKP  42 10.00   6.5X
       0.6s     5.25nm
AVF   151.52   2 ePKP  42 10.30   6.7X
       0.5s     1.60nm
SMF   151.67   1 ePKP  42 10.50   6.6X
BGF   151.73   2 ePKP  42 10.90   6.9X
       0.6s    10.10nm
LSF   151.97   4 ePKP  42 11.10   6.8X
       0.7s     7.70nm
TCF   151.97   3 ePKP  42 11.30   6.9X
       0.5s     3.80nm
MAF   152.06   3 ePKP  42 11.90   7.4X
       0.6s     6.95nm
RJF   152.91   5 ePKP  42 13.20   7.5X
LPO   153.50   5 ePKP  42 14.70   8.2X
       0.6s     2.55nm
     S.D. = 1.4  on  20 of  48 obs.
-----------------------------------
*  NOV  04, 1993  04h 04m 26.15± 0.62s
    5.733 S ± 7.4km  146.018 E ±11.4km
   DEPTH =  10.0km  (geophysicist)
   4.2mb (  3 obs.)  3.9Msz (  1 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)

YYYY    0.51 186 ePd   04 35.70  -0.8
MDG     0.54 334 ePc   04 35.00  -2.0
LAT     1.35 133 eP    04 51.70   0.8
MNDI    2.38 260 eP    05 13.00   6.9X
WWKK    3.18 311 eP    05 24.00   6.8X
PMG     3.82 163 eP    05 27.00   0.7
JAY     6.19 301 ePd   05 52.00  -7.8X
                 eS    07 42.30
SWI    15.50 288 ePc   08 14.50   7.9X
WR2    18.11 218 eP    08 39.40  -0.2
       0.7s    12.10nm          4.1mb
                 eS    13 40.50
ASPA   21.31 212 iPc   09 14.30  -1.2
       1.1s    16.90nm          4.3mb
     Z  20s     0.50um          3.9Msz
BKM    24.75 121 iPc   09 48.20  -1.1
DZM    25.57 131 iPc   09 53.60  -3.6X
STK    26.34 189 eP    10 04.00  -0.1
       1.1s     3.80nm          4.0mb
GUN    66.91 303 P     15 22.60   1.0
KKN    67.36 303 P     15 26.10   1.8
DMN    67.45 303 P     15 26.80   1.9
GKN    67.97 303 P     15 28.70   0.6
LPB   139.65 124 PKP   23 56.60  -0.9
LPAZ  139.75 123 PKP   23 51.10  -6.9X
RSTA  146.43 155 ePKP  24 08.20  -0.3
PPD   147.60 149 ePKP  24 14.10   3.6X
VAO   148.75 156 ePKP  24 15.70   3.3X
KIC   150.92 273 PKP   24 23.00   7.2X
       0.8s    11.50nm
TIC   151.19 273 PKP   24 23.20   7.0X
LIC   151.20 272 PKP   24 23.60   7.4X
     S.D. = 1.3  on  14 of  25 obs.
-----------------------------------
*  NOV  04, 1993  05h 14m 49.30± 3.88s
   30.503 S ±22.4km   71.960 W ±26.5km
   DEPTH = 155.1 ± 28.0 km
 NEAR COAST OF CENTRAL CHILE       (135)
      MD 4.4 (SAN).

RTRS    2.19  82 iPd   15 28.20   0.9
                 S     15 51.00
JACH    2.47 152 eP    15 29.44  -1.4
IHA     2.53 174 eP    15 35.10   3.6X
                 eS    16 04.70
ROCH    2.59 162 eP    15 31.48  -1.0
                 iS    16 03.60
PEL     2.85 158 eP    15 35.04  -0.5
                 iS    16 10.72
RTCB    2.88 111 iPd   15 35.70  -0.3
                 S     16 08.00
LCCH    2.98 174 iP    15 37.09  -0.1
RTLL    3.11 106 iPd   15 38.00  -0.9
                 S     16 11.80
FCH     3.15 154 eP    15 39.93   0.2
                 iS    16 17.27
RTCV    3.23 116 e(P)  15 41.00   0.6
TACH    3.26 165 iP+   15 41.10   0.4
PCH     3.34 159 eP    15 42.16   0.3
CFA     3.38 110 iPc   15 42.20  -0.1
                 S     16 20.20
LNV     3.47 172 iP    15 43.36  -0.1
MDZ     3.56 133 eP    15 46.30   1.7
                 i     16 01.20
                 i(S)  16 25.40
CACH    3.78 163 iP    15 48.40   0.8
RTPR    4.71  89 e(P)  16 00.00   0.3
                 (S)   16 56.00
RFA     5.18 146 ePd   16 06.50   0.5
                 S     17 27.00
MRA     5.67 111 ePd   16 12.10  -0.4
TCA     6.39  99 iPc   16 21.10  -1.1
                 (S)   17 30.00
     S.D. = 0.8  on  19 of  20 obs.
-----------------------------------
   NOV  04, 1993  05h 15m 30.28± 0.59s
   38.341 N ± 5.8km   22.031 E ± 4.8km
   DEPTH =   5.0km  (geophysicist)
   4.2mb (  3 obs.)
 GREECE                            (364)
      MD 3.7 (ATH).

VLS     1.15 262 ePb   15 50.20  -2.0
ATH     1.38 105 ePb   15 57.50   1.4
VLI     1.77 156 ePg   16 04.50   2.7X
LIT     1.79  11 ePb   16 02.66   0.5
                 eSb   16 29.28
KZN     1.97 354 ePn   16 05.70   0.9
PAIG    2.04  38 iPn   16 04.88  -0.7
                 eSn   16 32.92
KEK     2.21 309 ePg   16 10.50   2.3X
FNA     2.49 348 ePn   16 13.17   1.0
OUR     2.50  37 iPn   16 12.22   0.0
GRG     2.63   6 ePn   16 14.61   0.5
                 iSn   16 49.72
SOH     2.68  22 iPn   16 15.06   0.2
                 iSn   16 50.84
KNT     2.90  13 iPn   16 18.25   0.3
OHR     2.93 341 iPn   16 20.50   2.1X
                 i     16 26.30
                 i     17 00.10
                 i     17 05.70
                 Lg    17 19.00
VAY     3.01   8 iPn   16 20.00   0.6
SRS     3.02  23 iPn   16 19.52  -0.2
VAM     3.41 149 ePn   16 25.70   0.5
SKO     3.66 353 iPn   16 30.50   1.8X
                 iSn   17 12.20
                 iSg   17 25.80
                 Lg    17 31.00
EZN     3.66  65 ePn   16 27.70  -1.0
RDO     3.89  43 ePn   16 30.70  -1.3
IZM     4.11  88 ePn   16 35.50   0.3
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```
KGT     4.60  61 eP    16 39.00  -3.0X
MLR     7.72  21 eP    17 24.50  -1.6
VRI     8.29  23 eP    17 33.00  -1.0
KHC    12.39 333 eP    18 33.50   3.4X
                e      19 20.00
LPG    13.43 307 eP    18 44.70   0.5
LPL    13.45 307 eP    18 44.80   0.4
BSF    14.60 315 eP    18 47.30 -12.2X
SMF    15.75 308 eP    19 15.60   1.2
SSF    16.14 309 eP    19 22.10   2.8X
       1.3s    15.90nm          4.0mb
HFS    22.45 349 eP    20 28.30  -3.0X
       0.5s     4.30nm          4.2mb
EKA    24.00 323 Pc    20 45.70  -0.7
       0.5s     3.30nm          4.2mb
     S.D. = 1.0  on  22 of  31 obs.
-------------------------------------
   NOV  04, 1993  05h 18m 37.46± 0.35s
   38.372 N ± 2.8km   22.002 E ± 1.7km
   DEPTH =  17.3 ±  2.5 km
   5.0mb ( 76 obs.)  5.2Msz ( 27 obs.)
 GREECE                            (364)
      Mw 5.3 (HRV). ML 4.8 (THE), 4.8
      (TIR), 4.5 (ATH). Felt at Patras
      and Aeghio.
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 24S, 41C
      Centroid Location:
      Origin Time        05:18:41.5 0.2
      Lat 38.12N 0.04 Lon  22.03E 0.05
      Dep  15.0 FIX Half-duration  1.1
      Moment Tensor;   Scale 10**17 Nm
        Mrr=-1.12 0.04  Mtt= 1.01 0.04
        Mff= 0.11 0.05  Mrt= 0.34 0.17
        Mrf=-0.21 0.14  Mtf= 0.02 0.04
       Principal Axes:
        T  Val=  1.06  Plg= 9  Azm=  0
        N        0.14       9       91
        P       -1.21      77      226
      Best Double Couple:Mo=1.1*10**17
       NP1:Strike= 79 Dip=37 Slip=-105
       NP2:        278     54      -79

VLS     1.13 261 ePg   18 56.00  -2.1
ATH     1.41 106 ePb   19 03.00   0.7
IGT     1.74 312 iPb   19 07.23   0.1
                 iSb   19 30.85
LIT     1.77  12 iPb   19 07.90   0.4
                 eSb   19 32.50
VLI     1.81 155 ePb   19 09.00   0.9
KZN     1.94 355 ePn   19 10.90   0.8
PAIG    2.03  40 ePn   19 10.58  -0.7
LSK     2.08 329 iPnd  19 14.00   1.9
SRN     2.17 315 iPn   19 15.30   2.1
                 iSn   19 45.40
KEK     2.18 309 ePn   19 14.50   1.1
THE     2.38  18 ePn   19 16.50   0.3
KBN     2.44 338 iPnc  19 19.00   1.9
FNA     2.46 349 ePn   19 19.02   1.6
TPE     2.46 322 iPnd  19 21.00   3.5X
                 iSn   19 58.00
OUR     2.49  37 ePn   19 17.82   0.0
GRG     2.60   7 ePn   19 19.98   0.5
SOH     2.66  23 iPn   19 21.02   0.7
VLO     2.85 318 ePn   19 24.60   1.6
                 iSn   20 03.10
KNT     2.87  14 ePn   19 23.66   0.4
                 eSn   19 58.50
OHR     2.89 342 iPn   19 26.20   2.7X
                 i     19 30.70
                 i     19 33.20
                 i     20 06.00
                 Lg    20 09.00
VAY     2.98   8 iPn   19 24.70   0.0
                 i     19 27.20
                 i     19 59.40
                 Lg    20 22.50
SRS     3.00  24 ePn   19 25.50   0.4
TIR     3.40 332 ePn   19 31.80   1.1
                 iSn   20 17.00
VAM     3.44 149 ePn   19 31.30  -0.1
PRK     3.45  74 ePn   19 33.00   1.6
MMB     3.48  22 iPc   19 31.00  -0.9
KKB     3.59  13 iP    19 33.00  -0.5
SKO     3.62 353 iPnc  19 36.00   2.1
                 iPg   19 48.00
                 i     20 11.00
                 iSn   20 22.00
EZN     3.66  65 iPn   19 33.70  -0.8
LCI     3.70 303 P     19 34.20  -0.8
LACI    3.71 332 iPnc  19 37.50   2.4
                 iSn   20 28.00
RDO     3.89  43 ePn   19 36.70  -0.9
RZN     3.91  31 iPc   19 38.00  -0.2
ALN     4.01  50 ePn   19 38.30  -1.1
IZM     4.13  88 ePn   19 41.20   0.0
SDA     4.14 333 ePn   19 45.20   3.9X
                 iSn   20 37.00
ULC     4.16 330 iPnc  19 41.68   0.1
                 iSn   20 31.88
KDZ     4.19  38 iP    19 40.00  -2.1
NPS     4.25 136 ePn   19 44.00   1.2
BCI     4.25 340 iPnd  19 44.90   2.0
                 iSn   20 35.80
PLD     4.26  28 iP    19 44.00   1.0
VTS     4.31  12 iP    19 45.00   1.1
GRI     4.40 278 P     19 45.10   0.2
BRT     4.47 306 P     19 46.30   0.3
PVY     4.49 341 iPnc  19 47.38   1.0
                 iSn   20 41.84
TTG     4.56 334 iPnc  19 47.46   0.2
                 iSn   20 42.21
BDV     4.60 329 iPnc  19 47.47  -0.3
                 iSn   20 42.14
KGT     4.60  62 iP    19 47.00  -0.9
ORI     4.63 293 P     19 48.70   0.4
SOI     4.69 268 P     19 49.20   0.1
MFT     4.74  58 eP    19 10.50 -39.4X
IVA     4.77 341 iPnc  19 51.25   0.9
                 iSn   20 48.68
BAI     4.82 306 ePn   19 49.50  -1.4
GMB     4.84 269 P     19 52.20   0.9
CIN     4.87  97 iPc   19 53.00   1.4
HCY     4.87 328 iPnc  19 50.65  -1.0
                 iSn   20 48.17
EDC     4.95  65 eP    19 52.00  -0.8
NKY     4.99 334 iPnc  19 53.47   0.1
                 iSn   20 52.25
BNT     5.00  65 eP    19 51.50  -1.9
MSI     5.07 270 P     19 55.60   1.1
ATN     5.15 270 P     19 55.10  -0.5
BRY     5.23 331 ePn   19 56.41  -0.4
                 iSn   20 57.49
MGR     5.31 291 P     19 58.10   0.3
DST     5.31  75 eP    19 57.90   0.0
PLE     5.33 339 ePn   19 58.58   0.3
                 iSn   21 01.68
DMK     5.60  50 iP    20 00.40  -1.5
SGO     5.62 295 P     20 02.40   0.2
CTT     5.68  59 eP    20 00.00  -3.0
MEU     5.75 259 P     20 02.20  -1.9
KHL     5.91  88 iP    20 07.20   0.8
ISK     6.07  61 eP    20 07.00  -1.5
HVAR    6.39 320 iPn   20 10.20  -2.8
HRT     6.41  65 eP    20 10.50  -2.9
DRA     6.52  14 ePd   20 19.00   4.1X
DUI     6.66 302 P     20 16.90   0.0
EYL     6.68  68 iP    20 16.50  -0.8
BUC1    6.69  26 eP    20 38.00  20.7X
BCK     6.85  95 iP    20 21.70   2.1
USI     6.93 276 P     20 18.77  -1.8
SDI     7.11 300 P     20 23.30   0.1
BZS     7.24 358 ePc   20 17.00  -8.0X
TNR     7.47  12 ePc   20 33.00   4.8X
DEV     7.54   5 iPd   20 33.00   3.9X
AQU     7.67 304 P     20 31.70   0.5
MLR     7.70  21 iPd   20 29.00  -2.5
MNS     8.16 302 P     20 38.50   0.5
CFR     8.21  32 eP    20 32.00  -6.5X
VRI     8.27  24 iPd   20 37.00  -2.4
BBTK    8.49  77 eP    20 42.00  -0.7
ZAG     8.68 331 eP    20 46.00   1.0
VBY     8.72 327 iPnc  20 44.30  -1.3
PTJ     8.76 331 eP    20 44.30  -1.9
RIY     8.99 323 e(Pn) 20 56.20   6.9X
PPCY    9.01 110 eP    20 51.50   1.8
CLI     9.05  24 eP    20 51.00   0.8
PTT     9.14  19 eP    20 52.00   0.5
LJU     9.45 327 eP    20 54.00  -1.8
                 eS    22 38.00
KAS     9.53  68 eP    20 59.00   2.1
TRI     9.55 323 ePn   20 53.50  -3.6X
                 eSn   22 40.40
                 e     23 52.40
CSS     9.72 107 eP    20 58.00  -1.4
VOY     9.73 324 eP    20 57.30  -2.4
                 e     20 58.30
                 e     22 45.00
SRO     9.81 345 eP    21 00.40  -0.3
                 LR    26 00.00
KIS    10.00  28 eP    21 04.00   0.7
     Z  16s    11.80um
     N  12s    16.00um
                 i     22 45.00
UZH    10.26   1 iPc+  21 08.00   1.2
       1.7s    95.00nm          5.9mb
     Z  11s    25.00um          5.0Msz
     N  11s    17.00um
     E  11s    11.50um
ZST    10.45 342 eP    21 07.70  -1.7
                 e     22 47.70
                 e     23 34.20
VKA    10.72 339 iPc   21 13.40   0.3
       4.0s   806.00nm          6.4mb X
                 i     24 22.40
PGF    10.75 297 eP    21 12.70  -1.0
       1.2s   144.60nm          6.2mb X
KBA    10.77 327 iP    21 11.50  -2.6
       0.6s    16.30nm          5.5mb X
                 i     21 21.30
                 i     21 43.90
                 i     21 54.80
                 iS    23 18.70
SPC    10.89 354 eP    21 14.90  -0.7
                 LR    26 00.00
SIM    11.19  50 eP    21 35.00  15.5X
     Z  20s     2.00um          5.0Msz
KMR    11.25 332 e(P)  21 23.00   2.7X
                 iPP   21 28.90
                 i(S)  23 24.50
BHG    11.47 327 eP    21 22.30  -1.1
LVV    11.53   7 iP    21 27.00   2.8X
     Z  17s    15.70um          4.6Msz
     N  17s    11.50um
     E  17s     6.00um
WTTA   11.69 323 iPc   21 24.70  -1.8
       1.1s    65.00nm          5.8mb X
                 i     21 35.50
                 i     21 45.50
                 i     21 47.30
                 i(S)  23 18.40
OGA    11.71 320 eP    21 25.10  -1.8
WATA   11.77 323 iPd   21 25.30  -2.3
                 i     21 27.30
                 iS    23 33.50
SQTA   11.87 322 iPd   21 28.10  -0.7
                 i     21 41.80
                 iS    23 31.60
BHL    11.90 108 P     21 30.00   0.6
                 S     24 16.00
OJC    11.95 353 eP    21 33.20   3.4X
     Z  12s    14.00um          5.2Msz
                 e     21 40.00
                 eS    23 47.50
MOTA   12.00 322 iPc   21 27.70  -3.0X
                 i     21 29.30
                 iS    23 39.70
RAC    12.02 348 eP    21 30.00  -0.8
                 e     24 02.00
OSS    12.05 317 ePd   21 30.21  -1.2
GEC2   12.06 333 Pn    21 31.20  -0.3
                 Sn    23 38.30
SBF    12.27 301 eP    21 33.40  -0.9
       1.1s   126.00nm          6.1mb X
VDL    12.30 315 ePd   21 33.66  -1.1
KHC    12.35 333 P     21 36.00   0.8
       1.0s    35.70nm          5.5mb X
     Z  18s    26.00um          5.1MszX
     N  20s    10.70um
     E  18s    16.50um
                 e     21 39.40
                 e     21 48.50
                 e     22 11.00
TMA    12.41 313 eP+   21 34.90  -1.4
FUR    12.51 325 eP    21 37.90   0.5
WET    12.62 332 eP    21 40.10   1.3
FRF    12.71 299 eP    21 38.60  -1.4
       1.1s    36.65nm          5.5mb
LMR    12.73 298 eP    21 40.50   0.2
       1.3s    60.30nm          5.6mb
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04d 05h

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PRU    12.78 338 eP    21 37.70  -3.2X
     E  10s     6.70um
                e     21 51.20
                eS    24 00.00
LLS    12.79 316 ePd   21 41.60   0.3
LRG    12.87 298 eP    21 42.00  -0.2
       1.3s    78.00nm          5.7mb
MMK    12.92 311 ePd   21 43.44   0.4
KSP    13.11 344 ePd   21 48.00   2.7X
                e     24 43.00
                e     25 43.00
ANN    13.15  56 eP    21 57.00  11.1X
DIX    13.26 310 ePd   21 48.20   0.5
LPG    13.39 307 eP    21 48.30  -1.1
       0.9s    41.10nm          5.4mb
LPL    13.41 307 eP    21 48.20  -1.4
       1.0s    49.40nm          5.5mb
ZLA    13.49 317 ePd   21 55.52   5.1X
EMS    13.55 309 ePd   21 51.60   0.3
SLE    13.61 318 ePd   21 52.66   0.7
GRF    13.70 329 eP    21 52.30  -0.8
     Z  20s    17.00um
                e     22 00.30
BRG    13.74 338 eP    21 54.60   1.0
       2.4s   140.00nm          5.4mb X
                eS    25 59.20
FEL    13.93 317 P     21 55.57  -0.7
BBS    13.96 315 P     21 55.34  -1.2
LOMF   14.27 314 P     21 56.22  -4.6X
MOX    14.32 332 eP    22 03.20   2.0
     Z  20s    17.00um
                e     24 47.00
                e     25 06.00
LIBD   14.32 318 P     22 00.61  -0.6
SOC    14.35  63 eP    21 56.00  -5.7X
     Z  12s     1.50um
     E  12s     1.70um
MOF    14.39 316 P     22 01.04  -1.2
CLL    14.41 337 eP    22 03.00   0.6
                i     22 09.60
                eS    25 02.00
BSF    14.57 315 eP    22 02.80  -1.8
       0.9s    39.15nm          5.0mb
ECH    14.59 317 P     22 04.09  -0.8
WLS    14.61 318 P     22 03.90  -1.2
CDF    14.65 318 eP    22 04.30  -1.4
       1.1s    38.85nm          4.8mb
LANF   14.74 321 P     22 06.27  -0.5
HAU    14.91 315 eP    22 07.70  -1.3
BRN    15.33 339 eP    22 21.00   6.7X
SMF    15.71 308 eP    22 17.90  -1.6
       0.9s    73.05nm          4.9mb
LBF    15.78 309 eP    22 18.70  -1.6
       1.0s   130.40nm          5.1mb
LOR    15.98 310 eP    22 21.70  -1.2
       1.1s    69.35nm          4.7mb
     Z  19s     3.33um
MNK    15.99  12 eP    22 29.00   6.1X
     Z  16s    10.50um
                e     25 34.00
WLF    16.01 320 iPd   22 26.42   3.3X
       1.3s    24.20nm          4.2mb
AVF    16.08 308 eP    22 24.00  -0.1
       1.1s   166.05nm          5.1mb
SSF    16.10 309 eP    22 24.00  -0.4
CAF    16.26 300 eP    22 24.70  -1.8
BGF    16.30 306 eP    22 25.50  -1.5
       1.0s   148.00nm          5.1mb
MAF    16.35 305 eP    22 27.60  -0.1
       1.2s    89.55nm          4.8mb
BNS    16.38 325 ePd   22 30.30   2.4
     Z  19s    17.60um
                iS    25 24.50
TCF    16.61 305 eP    22 31.50   0.6
       1.6s    70.90nm          4.5mb
RJF    16.74 301 eP    22 32.20  -0.4
       1.2s    62.20nm          4.6mb
     Z  18s     4.75um
LPO    16.79 299 eP    22 32.10  -1.1
PYA    16.81  64 eP    22 37.00   3.6X
     Z  16s     1.50um          5.3MszX
ENN    16.83 323 eP    22 36.00   2.4
       1.0s    45.00nm          4.6mb
LSF    17.04 304 eP    22 35.00  -1.3
       1.2s    50.30nm          4.5mb
EPF    17.06 293 eP    22 35.70  -0.9
       1.0s    23.20nm          4.3mb
DOU    17.07 319 P     22 37.10   0.5
       1.0s    80.50nm          4.8mb
LFF    17.17 299 eP    22 37.80  -0.1
       1.2s    84.50nm          4.7mb
WTS    17.28 327 eP    22 42.00   2.8X
       1.0s    29.50nm          4.4mb
BSD    17.42 346 iPc   22 41.00   0.1
       0.7s    22.00nm          4.4mb
EGRA   17.44 290 eP    22 36.20  -5.1X
SNF    17.48 320 P     22 47.20   5.5X
ERE    17.51  77 iP    22 45.00   2.7X
UCC    17.61 321 P+    22 45.00   1.6
                S     26 15.00
MTA    17.76  72 iPc+  22 47.40   2.1
DBN    18.07 325 iP+   22 52.00   3.0X
     Z  20s     6.50um
                eS    26 20.00
MFF    18.25 304 eP    22 51.50   0.2
       1.1s   162.15nm          5.1mb
ELIZ   18.43 293 iPc   22 53.48  -0.2
COP    18.47 343 iP+   22 56.00   2.0
                iS    26 24.00
GRO    18.57  67 iP+   22 59.00   3.7X
     Z  12s     3.50um
     N  16s     5.00um
     E  13s     3.00um
ETOR   18.69 285 iPc   22 57.04   0.1
LDF    18.96 310 eP    22 58.40  -1.7
ECRI   19.10 291 iPc   23 01.68  -0.1
TAB    19.11  83 iP-   23 02.00  -0.1
EVIA   19.17 278 iPc   23 02.21  -0.6
ENIJ   19.21 273 eP    23 01.47  -1.7
FLN    19.25 310 eP    23 02.90  -0.7
       0.9s    45.85nm          4.7mb
     Z  19s     2.72um
LPF    19.31 307 eP    23 02.60  -1.7
       0.9s    55.55nm          4.8mb
GRR    19.33 309 eP    23 02.90  -1.7
       1.0s    57.60nm          4.8mb
EHUE   19.36 276 P     23 05.77   0.7
OBN    19.43  26 eP    23 04.00  -1.6
       1.0s    42.00nm          4.7mb
     Z  15s     6.00um
     N  15s     4.20um
     E  15s     2.60um
                eS    26 40.00
MAK    19.80  68 eP    23 12.00   2.2
TAF    19.91 267 iP    23 14.00   2.9X
MUD    20.01 339 iP    23 12.80   1.0
       0.7s    30.00nm          4.7mb
ECOG   20.21 275 iPd   23 14.74   0.4
GUD    20.29 285 iPc   23 13.84  -1.2
MOS    20.29  26 iP    23 14.00  -0.8
       1.6s   350.00nm          5.5mb
     Z  11s     5.00um          5.1MszX
EGUA   20.30 274 eP    23 14.21  -0.9
PAB    20.50 282 iPd   23 16.40  -0.9
KER    20.59  94 eP    23 17.00  -1.3
EHOR   21.43 277 eP    23 26.82   0.2
EPRU   21.58 275 eP    23 29.54   1.3
BAK    21.63  76 iPc   23 37.00   8.4X
     N  12s     5.53um
UPP    21.69 354 iPc   23 27.50  -1.5
       1.0s   100.00nm          5.2mb
                iS    27 28.00
EPLA   21.79 283 iPd   23 30.82   0.5
HGH    21.86 315 ePc   23 29.80  -1.0
EJIF   21.88 273 P     23 36.15   5.0X
HAE    21.91 317 eP    23 30.00  -1.3
PUL    22.06  11 ePd   23 32.00  -0.7
       1.5s   220.00nm          5.4mb
     Z  16s     7.00um          5.2MszX
     N  16s     5.00um
     E  12s     5.50um
                eS    27 33.00
NUR    22.22   3 iP    23 32.90  -1.4
       0.7s    59.30nm          5.2mb
HTR    22.32 316 ePc   23 34.30  -1.1
HFS    22.41 349 eP    23 34.20  -2.0
       0.6s    71.30nm          5.3mb
     Z  16s     3.61um          4.9MszX
                LR    30 35.00
IFR    22.45 266 iP    23 38.00   0.9
                i     23 39.00
ERUA   22.51 290 eP    23 39.54   2.1
EVAL   22.64 277 eP    23 41.36   2.6
HCG    22.64 316 ePc   23 37.80  -0.8
KONO   22.72 344 eP    23 20.99 -18.3X
YRH    23.41 317 eP    23 45.30  -0.7
KMY    23.47 338 eP    23 46.58   0.1
NB2    23.68 347 P     23 47.50  -1.1
       7.0s   145.30nm          4.6mb X
KAF    23.92   5 iP    23 50.20  -0.7
       0.6s    38.00nm          5.1mb
EKA    23.96 323 Pc    23 51.30   0.0
       0.6s    45.90nm          5.2mb
ESK    23.97 323 eP    23 51.60   0.1
       1.0s   200.00nm          5.6mb
EBL    24.16 324 eP    23 52.90  -0.4
AVE    24.32 267 eP    23 58.50   3.4X
EAU    24.38 324 eP    23 56.00   0.5
EDU    24.60 326 ePc   23 57.40  -0.2
DLF    24.64 317 eP    23 58.00   0.0
       0.9s   144.00nm          5.6mb
EBH    24.65 325 ePc   23 58.00   0.0
EAB    24.99 324 ePc   24 01.10  -0.2
DCN    25.06 316 eP    24 02.50   0.5
       1.1s   102.00nm          5.4mb
MOL    25.79 345 eP    24 08.08  -0.7
NSS    26.86 350 eP    24 09.19  -9.4X
SDF    29.20   3 eP    24 42.00   2.2
ARU    30.15  41 eP    24 47.00  -1.4
     Z  14s     4.00um          5.2MszX
     E  16s     3.50um
SVE    31.35  41 iPc   24 58.50  -0.4
       1.8s    80.00nm          5.3mb
     Z  13s     3.50um          5.2MszX
     N  12s     2.00um
     E  12s     2.50um
                e     26 08.00
                e     27 52.00
FRU    39.66  66 iP    26 10.80   0.8
       2.0s    90.00nm          5.1mb
     Z  16s     1.00um          4.7MszX
     E  16s     1.50um
                e     26 22.50
                e     28 16.00
                e     32 07.00
TIC    39.95 225 P     26 13.00   0.4
KIC    40.03 224 P     26 12.60  -0.6
       1.0s    45.50nm          5.1mb
LIC    40.30 224 P     26 15.00  -0.4
     Z  21s     0.82um          4.6Msz
KBS    40.87 357 eP    26 19.60   0.2
KSH    41.48  71 P     26 25.50   0.4
       0.5s    30.00nm          5.3mb
     Z  20s     0.85um          4.6Msz
     N  10s     0.10um
     E  10s     0.89um
                pP    26 31.00  19kmX
                sP    26 36.00
                PP    28 08.00
DAG    42.38 347 iPd   26 31.70  -0.1
       0.7s     8.90nm          4.6mb
NRI    46.30  27 eP    27 04.00   0.6
       2.0s    57.00nm          5.2mb
     Z  23s    10.00um          5.7MszX
     E  24s     9.70um
WMQ    48.64  62 P     27 21.00  -1.3
       2.0s    25.00nm          4.9mb
     Z  16s     1.04um          4.9MszX
                S     34 23.00
GKN    52.54  82 P     27 49.80  -2.5
       0.6s    20.00nm          5.2mb
DMN    53.09  82 P     27 54.80  -1.7
KKN    53.14  82 P     27 55.00  -1.8
       0.6s    15.00nm          5.1mb
PKI    53.35  82 P     27 55.80  -2.6
GUN    53.55  81 P     27 57.80  -2.1
FRB    56.61 328 eP    28 23.00   1.8
       1.0s    24.00nm          5.2mb
GTA    58.70  62 eP    28 34.00  -2.5
       1.0s    16.00nm          5.1mb
     Z  24s     1.44um          5.0MszX
                pP    28 42.50  28kmX
                sP    28 45.50
                S     36 44.00
BOD    59.58  38 eP    28 38.70  -3.4X
       0.7s    21.00nm          5.4mb
RES    59.90 344 eP    28 44.00  -0.2
       1.0s     2.00nm          4.2mb
LMN    61.79 308 eP    28 57.00  -0.4
CIT    61.81  45 eP    28 55.00  -2.5
MBC    63.05 350 eP    29 06.00   0.7
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        0.7s     2.00nm          4.4mb
LZH     63.07  64 eP    29 06.50   0.3
      Z 17s     1.07um          5.1MszX
CBM     63.32 310 eP    29 05.55  -1.9
        1.8s   126.60nm          5.8mb
      Z 20s     0.92um          5.0Msz
JAQ     64.21 319 eP    29 13.50   0.2
BTO     65.07  57 eP    29 20.00   0.8
      N 13s     0.55um
      E 13s     0.48um
CD2     65.62  69 P     29 21.00  -1.7
HHC     65.96  56 P     29 23.80  -1.1
        0.9s    13.00nm          5.1mb
      Z 28s     1.48um          5.0MszX
      N 12s     0.39um
      E 12s     0.46um
LBNH    66.98 309 (P)   29 32.49   1.3
      Z 19s     0.85um          5.0Msz
XAN     67.70  64 P     29 36.00   0.1
        0.8s    8.00nm          4.9mb
      Z 20s     0.85um          5.0Msz
                 pP     29 42.00  19kmX
                 sP     29 45.20
TIY     68.17  59 eP    29 38.70  -0.2
      Z 15s     1.18um          5.2MszX
      E 17s     1.05um
GAC     68.33 312 eP    29 40.50   0.9
CHTO    68.51  83 eP    29 39.00  -2.1
BJI     69.38  55 eP    29 44.00  -2.1
        1.0s    6.00nm          4.7mb
      Z 20s     1.21um          5.1Msz
      N 15s     0.58um
BINY    70.58 309 P     30 00.00   6.5X
      Z 19s     0.92um          5.1Msz
YSNY    71.97 310 P     30 10.00   8.1X
      Z 20s     1.07um          5.1Msz
INK     72.07 351 eP    30 02.00   0.1
        1.0s    4.00nm          4.4mb
TIA     72.13  58 eP    30 00.80  -2.1
      Z 35s     0.81um          4.7MszX
CN2     72.90  47 eP    30 06.00  -1.3
        0.8s   18.00nm          5.2mb
      Z 13s     1.19um          5.4MszX
      N 13s     0.79um
      E 13s     0.44um
                 epP    30 14.00  26kmX
ILT     72.90   8 eP    30 06.00  -0.9
      Z 22s     1.40um          5.2Msz
      N 22s     0.80um
                 e      30 13.00
                 e      30 24.00
                 eS     39 36.00
                 e      40 16.00
SNY     72.97  50 eP    30 06.50  -1.2
      Z 16s     1.29um          5.3MszX
                 eS     39 29.00
YKA     73.60 341 eP    30 10.50  -0.5
        0.9s   12.00nm          4.9mb
SOB1    75.21 245 eP    30 22.00   0.9
IMA     75.84 358 eP    30 24.24   0.2
        1.0s   12.75nm          4.9mb
ULM     76.23 324 ePc   30 29.00   2.7
FBA     76.75 356 eP    30 28.87  -0.1
        1.5s   19.99nm          5.0mb
LHS     78.21 305 eP    30 38.39   0.8
JSC     78.62 305 ePc   30 40.72   0.9
SGS     78.81 303 (P)   30 43.18   2.3
TTA     79.03 359 eP    30 41.80   0.2
        1.2s   11.41nm          4.8mb
TOA     79.41 354 eP    30 44.50   0.8
PRM     79.46 305 eP    30 45.47   1.1
YSS     79.86  37 eP    30 48.00   1.7
        1.0s   30.00nm          5.3mb
      Z 17s     1.50um          5.4MszX
      N 17s     1.10um
      E 17s     0.80um
MYNC    79.95 307 eP    30 47.14   0.0
        1.0s   12.27nm          4.9mb
      Z 19s     0.59um          5.0Msz
KLU     80.00 354 eP    30 46.13  -0.8
BALM    80.12 352 eP    30 48.14   0.5
PMR     80.12 356 eP    30 47.80   0.4
        1.1s   17.10nm          5.0mb
PMR     80.12 356 P     31 00.00  12.6X
      Z 20s     0.50um          4.9Msz
PMS     80.50 356 eP    30 50.30   0.8
CRP     80.60 357 ePc   30 49.53  -0.6
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CP2     80.60 357 ePc   30 50.00  -0.3
SVW     80.85 359 eP    30 52.13   0.8
        1.8s  122.01nm          5.6mb
SLKM    81.27 356 eP    30 53.16  -0.4
ELC     81.61 311 eP    30 55.79   0.1
FVM     81.84 312 ePc   30 57.80   0.9
        1.2s   54.65nm          5.5mb
      Z 19s     0.57um          4.9Msz
                 e      31 03.63
SIT     83.02 348 P     31 10.00   7.3X
      Z 20s     1.23um          5.3Msz
OXF     83.59 309 eP    31 05.98   0.0
RSSD    84.50 324 eP    31 11.26   0.5
        0.7s   10.06nm          5.2mb
MAT     85.01  46 (P)   31 15.00   1.8
        1.0s    9.00nm          5.0mb
      Z 20s     0.71um          5.1Msz
                 eS     41 34.00
MIAR    86.05 312 iPc   31 19.70   1.3
        0.9s   24.77nm          5.4mb
      Z 20s     0.87um          5.2Msz
SMY     86.09  17 P     31 30.00  11.8X
      Z 19s     1.53um          5.4Msz
NEW     86.40 334 ePc   31 19.48  -0.5
        1.0s   40.27nm          5.6mb
PCO     86.47 315 iPd   31 21.80   1.4
LRM     86.74 330 iPc   31 22.80   0.9
UYO     86.84 312 iPc   31 23.60   1.4
DPW     87.11 334 iPc   31 24.50   1.1
ACO     87.65 316 iPd   31 27.20   1.1
GLD     88.44 322 P     31 40.00   9.9X
      Z 19s     1.34um          5.4Msz
GOL     88.56 322 ePc   31 31.22   0.4
        0.6s    3.41nm          4.8mb
      Z 19s     1.58um          5.5Msz
MEO     88.75 315 iPd   31 32.60   1.1
GMW     88.87 337 (P)   31 31.54  -0.3
WMOK    88.89 315 iPc   31 33.18   1.0
        0.7s   14.41nm          5.4mb
      Z 19s     1.16um          5.3Msz
VGB     90.03 335 (P)   31 35.81  -1.6
HVU     90.21 328 eP    31 38.90   0.5
EMUT    90.99 326 ePc   31 42.01  -0.1
PV08    91.00 324 ePc   31 42.75   0.4
PV09    91.29 324 ePc   31 44.20   0.6
PV10    91.34 324 iPc   31 44.64   0.8
SRU     91.43 325 eP    31 43.25  -0.9
DUG     91.55 327 eP    31 43.44  -1.1
        0.7s    6.32nm          5.1mb
      Z 21s     1.41um          5.4Msz
MSU     92.66 326 eP    31 49.71  -0.1
ALQ     92.82 320 P     32 00.00   9.4X
      Z 21s     0.80um          5.1Msz
WDC     95.00 334 P     32 10.00   9.8X
      Z 21s     1.42um          5.4Msz
LTX     95.68 315 ePc   32 04.34   0.7
BONR    95.71 330 eP    32 05.05   1.1
CMB     96.45 331 P     32 20.00  13.0X
      Z 21s     0.89um          5.2Msz
TUC     97.08 321 P     32 20.00  10.0X
      Z 19s     0.88um          5.3Msz
ISA     97.75 328 P     32 20.00   7.1X
      Z 22s     1.13um          5.3Msz
SAO     97.97 331 P     32 20.00   6.2X
      Z 20s     1.12um          5.4Msz
WRA    119.38  93 PKP   37 32.50   4.8X
        0.8s    1.00nm
HON    120.62   0 PKP   37 40.00  10.0X
      Z 19s     0.48um          5.1Msz
ASPA   121.03  97 iPdiff33 51.70  -5.1X
        0.8s    9.20nm
ASPA   121.03  97 ePKP  37 30.50  -0.3
        1.2s    7.20nm
DZM    145.50  72 iPKPc 38 17.00   0.5
      S.D. = 1.2  on 296 of 351 obs.
-----------------------------------
   NOV  04, 1993  05h 44m 57.05± 0.83s
   38.356 N ± 7.4km   21.890 E ± 8.8km
   DEPTH =   5.0km  (geophysicist)
   3.7mb (  1 obs.)
 GREECE                            (364)
      MD 3.7 (ATH).

VLS     1.04 261 ePg    45 17.10   0.0
ATH     1.49 104 ePb    45 24.50   0.0
LIT     1.80  15 iPb    45 29.72   0.7
                 eSb    45 52.96
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VLI     1.83 153 ePb    45 30.00   0.5
KZN     1.95 357 ePn    45 33.00   1.8
PAIG    2.10  41 ePb    45 32.12  -1.1
                 eSb    45 57.08
KEK     2.12 310 ePg    45 38.00   4.4X
FNA     2.46 351 ePn    45 39.28   0.8
                 eSn    46 12.20
OUR     2.56  39 ePn    45 38.96  -0.8
                 eSn    46 10.60
GRG     2.63   8 ePn    45 41.44   0.6
SOH     2.71  24 ePn    45 42.00  -0.1
                 iSn    46 15.80
KNT     2.91  15 ePn    45 45.84   1.0
                 eSn    46 21.08
VAY     3.01  10 iPn    45 47.40   1.2
VAM     3.48 147 ePb    45 56.00   3.1X
SKO     3.63 355 ePn    45 52.50  -2.6
HFS    22.41 349 eP     49 55.80  -1.9
        0.4s     1.10nm          3.7mb
      S.D. = 1.3  on  14 of  16 obs.
-----------------------------------
   NOV  04, 1993  07h 06m 02.96± 0.46s
   38.947 N ± 4.4km   29.824 E ± 3.9km
   DEPTH =   5.0km  (geophysicist)
 TURKEY                            (366)
      ML 3.7 (ISK). Felt at Afyon.

ALT     0.25  64 iPg    06 06.00  -2.0
KHL     0.67 201 iPg    06 14.90  -1.4
                 eSg    06 24.90
DST     1.14 306 iPn    06 25.50   0.7
GPA     1.39  15 iPn    06 28.10  -1.0
IZI     1.41 349 ePn    06 28.90  -0.5
BCK     1.60 158 iPn    06 31.30  -0.8
EYL     1.64   9 iPn    06 32.00  -0.6
NAL     1.70  42 eP     06 34.60   1.1
                 eS     07 02.00
GBZT    1.86 351 ePn    06 36.00   0.2
HRT     1.88 356 iPn    06 35.50  -0.5
CIN     1.92 226 eP     06 38.00   1.4
BNT     2.03 314 iPn    06 38.50   0.2
EDC     2.06 313 ePn    06 39.00   0.4
ISK     2.20 345 ePn    06 40.00  -0.6
SGKT    2.37  46 eP     06 44.80   1.5
                 eS     07 22.00
BBTK    2.44  68 eP     06 47.00   2.7
                 eS     07 22.60
CTT     2.44 334 ePn    06 44.00  -0.2
EZN     2.85 289 iPn    06 50.20   0.3
KART    4.09  56 eP     07 20.00  12.2X
KDZ     4.32 310 iP     07 11.00   0.2
OUR     4.72 289 eP     07 15.82  -0.6
RZN     4.77 307 iP     07 17.00  -0.4
PLD     5.02 311 iP     07 20.00  -0.7
SRS     5.25 296 eP     07 24.26   0.2
SOH     5.32 293 eP     07 25.50   0.5
MMB     5.36 301 iP     07 25.00  -0.6
KNT     5.76 295 eP     07 31.69   0.6
LIT     5.79 284 eP     07 32.14   0.6
GRG     6.05 292 eP     07 35.42   0.2
MLR     7.15 338 eP     07 50.00  -0.8
VRI     7.29 343 ePc    07 38.00 -14.6X
GEC2   15.23 316 ePKP   09 47.20   6.8X
        1.1s     1.67nm          3.3mb
      S.D. = 1.0  on  29 of  32 obs.
-----------------------------------
?  NOV  04, 1993  07h 07m 01.11± 4.33s
   38.699 N ±27.8km   30.143 E ±30.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 3.7 (ISK).

IZI     1.72 343 iPn    07 31.20  -0.1
                 eSg    07 53.70
EYL     1.86   0 iPn    07 34.20   0.8
HRT     2.15 350 iPn    07 37.20  -0.3
IZM     2.28 263 iPn    07 39.20  -0.2
BNT     2.39 315 ePn    07 40.20  -0.7
ISK     2.51 341 ePn    07 41.70  -0.8
KGT     2.81 309 ePn    07 48.20   1.3
      S.D. = 1.0  on   7 of   7 obs.
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&  NOV  04, 1993  07h 49m 28.81s
   63.298 N          151.124 W
   DEPTH =  13.3km
 CENTRAL ALASKA                    (  1)
      <AEIC>. ML 2.5 (AEIC).
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04d 07h

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KTH      0.27  19 iP    49 34.32  -0.5
TRF      0.41  67 iP    49 37.05  -0.3
                eS    49 43.69
HUR      0.75 115 eP    49 42.92  -0.2
                eS    49 53.89
CUT      0.98 156 iP    49 47.10   0.0
RND      1.03  83 eP    49 47.84  -0.2
                eS    50 02.16
MCK      1.07  65 eP    49 48.85   0.1
                eS    50 03.89
BWN      1.15  39 eP    49 51.09   1.1
                eS    50 07.31
SKT      1.34 188 eP    49 52.72  -0.4
                eS    50 10.35
NEA      1.57  34 eP    49 57.19   0.8
                eS    50 18.02
MLY      1.75   5 eP    49 58.91  -0.1
PWA      1.75 160 P     49 59.20   0.2
WRH      1.79  47 eP    50 00.86   1.4
GHO      1.84 145 eP    50 00.29  -0.1
SUA      1.85 174 eP    50 01.31   0.8
NCG      1.96 195 eP    50 01.72  -0.4
                eS    50 26.95
CCB      1.99  46 eP    50 02.87   0.4
CGLM     2.04 192 eP    50 03.18  -0.1
CRP      2.09 194 (P)   50 02.73  -1.4
MDM      2.10  36 eP    50 05.84   1.8
CP2      2.11 195 eP    50 03.61  -0.7
BGL      2.13 197 eP    50 05.33   0.8
CKN      2.14 194 eP    50 05.86   1.2
HDA      2.16  57 eP    50 05.23   0.4
CKT      2.17 194 eP    50 05.19   0.1
SPU      2.17 192 eP    50 05.31   0.2
FBA      2.17  41 eP    50 06.00   0.9
CKL      2.18 196 eP    50 06.14   0.7
PMS      2.19 160 P     50 07.00   1.6
TTA      2.25 263 eP    50 07.22   0.9
KNK      2.26 145 eP    50 07.37   0.9
BKG      2.30 194 eP    50 07.10   0.1
                eS    50 36.36
GLM      2.36  42 eP    50 11.00   3.2
IL1      2.38  50 eP    50 08.42   0.4
ILB      2.38  50 eP    50 09.33   1.3
TOA      2.58 115 P     50 13.60   2.7
PAX      2.59  95 eP    50 14.39   3.3
SDG      2.67 104 eP    50 15.49   3.3
PWL      2.78 151 eP    50 16.27   2.5
DFR      2.81 196 eP    50 16.42   2.1
SLKM     2.83 171 eP    50 16.54   2.0
REF      2.92 196 eP    50 18.00   2.2
IM3      2.92 338 eP    50 14.43  -1.3
KLU      3.03 124 eP    50 18.39   1.1
SVW      3.04 226 (P)   50 16.87  -0.6
       44 obs. associated
-------------------------------------
*  NOV  04, 1993  07h 55m 38.71± 1.57s
    9.776 S ±13.3km  123.071 E ±11.7km
   DEPTH =  62.3 ± 22.9 km
   4.7mb (  4 obs.)
 TIMOR REGION, INDONESIA          (289)

MKS      5.77 321 iPd   57 03.90   0.2
KNA      8.13 137 iPd   57 36.40  -0.1
       0.2s    23.00nm          5.6mb
                iS    59 03.80
MBL     11.74 195 eP    58 25.50  -0.2
                eS    00 23.50
WR2     14.87 134 iPd   59 05.20  -1.7
       0.6s    13.20nm          4.4mb
                eS    01 42.60
ASPA    17.26 144 iPd   59 38.40   1.3
       0.4s    44.10nm          5.0mb
                i     59 42.90
                eS    02 37.90
MEEK    17.29 194 eP    59 38.00   0.5
                eS    02 36.00
QIS     19.20 126 eP    00 03.20   2.6
                eS    03 26.10
MRWA    20.45 198 eP    00 12.90  -0.6
                eS    03 46.50
BAL     21.56 195 eP    00 24.00  -0.8
                eS    04 15.80
KLB     22.26 192 eP    00 32.00   0.3
MUN     22.99 195 eP    00 54.20  15.4X
                eS    04 48.00
NWAO    23.66 192 eP    00 46.20   0.9
STK     27.90 145 eP    01 25.40   0.6
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       0.5s     2.50nm          4.1mb
BRS     33.02 126 iP    02 08.00  -2.3
                i     02 14.50
MOCB   148.00 165 PKP   15 22.10   5.3X
CNCB   151.41 157 PKP   15 31.10   8.8X
LPB    151.62 157 PKP   15 31.80   9.4X
LPAZ   151.83 157 PKP   15 31.30   8.3X
     S.D. = 1.5  on  13 of  18 obs.
-------------------------------------
%  NOV  04, 1993  08h 02m 12.26± 1.30s
   38.866 N ± 9.8km   29.992 E ±14.3km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 3.0 (ISK).

ALT      0.21  26 iPg   02 16.00  -0.9
KHL      0.65 214 iPg   02 25.40   0.0
                eSg   02 34.90
DST      1.29 305 ePn   02 35.70  -0.5
EYL      1.70   4 ePn   02 43.20   1.0
HRT      1.97 353 ePn   02 46.50   0.5
     S.D. = 1.0  on   5 of   5 obs.
-------------------------------------
?  NOV  04, 1993  08h 07m 53.76± 8.45s
   38.476 N ±68.6km   22.244 E ±26.5km
   DEPTH =  33.0km  (normal)
 GREECE                           (364)

AGG      0.55   7 ePg   08 05.33   0.2
LIT      1.63   7 iPb   08 21.62   1.0
                eSb   08 44.26
IGT      1.82 306 iPn   08 23.82   0.5
FNA      2.40 344 iPn   08 31.82   0.2
                eSn   09 03.82
GRG      2.48   3 ePn   08 33.94   1.2
SOH      2.49  20 ePn   08 31.58  -1.4
KNT      2.73  10 ePn   08 36.30   0.1
                eSn   09 10.54
OHR      2.86 338 ePn   08 36.20  -1.9
     S.D. = 1.3  on   8 of   8 obs.
-------------------------------------
&  NOV  04, 1993  08h 44m 12.77s
   59.732 N          153.091 W
   DEPTH = 102.6km
 SOUTHERN ALASKA                  (  2)
      <AEIC>.

OPT      0.11 222 iPc   44 26.62   0.9
                eS    44 37.33
INE      0.33   2 iPc   44 27.69  -0.5
                eS    44 39.23
ILIM     0.36  11 eP    44 27.42  -0.8
                eS    44 39.40
AUL      0.39 207 eP    44 27.74  -0.6
                eS    44 39.47
AUE      0.40 201 eP    44 27.55  -0.8
                eS    44 39.35
AUH      0.41 206 eP    44 28.04  -0.5
AUW      0.41 208 iPc   44 27.84  -0.6
AUI      0.43 203 eP    44 27.77  -0.8
                eS    44 39.44
PDB      0.56 276 iPd   44 28.61  -0.9
RED      0.71  13 iPd   44 29.97  -0.9
                eS    44 43.37
HOM      0.74  95 ePc   44 30.30  -0.7
                eS    44 44.47
XLV      0.75 111 eP    44 30.27  -0.9
RS2      0.75  13 iPd   44 30.64  -0.8
                eS    44 44.35
RSO      0.75  13 eP    44 30.62  -0.8
RDW      0.77  10 iPd   44 30.68  -0.8
                eS    44 44.52
REF      0.78  14 iPd   44 30.88  -0.8
                eS    44 44.90
NCT      0.84   5 iPd   44 31.26  -0.8
                eS    44 45.62
MCNL     0.84 230 eP    44 30.76  -1.2
CDD      0.85 200 eP    44 31.11  -1.1
DFR      0.89  13 iPd   44 31.72  -0.9
                eS    44 46.58
CNPM     0.96 102 iPc   44 32.05  -1.3
                eS    44 48.21
BRLK     1.12  87 eP    44 33.64  -1.4
                eS    44 50.19
SYI      1.18 162 iPc   44 34.88  -0.8
                eS    44 51.98
NKA      1.37  42 eP    44 38.48   0.5
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BKG      1.40  17 iPd   44 37.59  -0.9
CKL      1.52  14 iPd   44 38.92  -0.9
CKT      1.54  16 iPd   44 39.04  -1.1
SPU      1.54  19 iPd   44 39.02  -1.1
                eS    45 00.21
CKN      1.56  16 iPd   44 39.55  -0.8
BGL      1.58  12 iPd   44 39.83  -0.8
CP2      1.59  15 eP    44 39.93  -1.0
CRP      1.61  16 eP    44 39.48  -1.6
                eS    45 01.99
SLKM     1.63  60 eP    44 39.66  -1.6
                eS    45 01.09
CGLM     1.67  18 iPd   44 40.77  -1.0
NCG      1.74  15 eP    44 41.46  -1.2
SVW      1.87 319 eP    44 42.43  -1.8
SEW      1.87  77 eP    44 42.61  -1.6
KDC      2.01 171 eP    44 43.15  -2.9
                eS    45 08.40
MPA      2.02  66 ePc   44 44.63  -1.5
SUA      2.09  33 ePd   44 46.39  -0.8
                eS    45 12.33
PMS      2.31  48 P     44 48.90  -1.2
SKT      2.38  18 eP    44 49.53  -1.5
PWA      2.49  38 P     44 51.20  -1.2
PWL      2.62  62 eP    44 51.74  -2.5
LTI      2.66  81 eP    44 52.50  -2.2
PMR      2.70  45 eP    44 53.16  -2.1
                eS    45 23.94
KNIM     2.76  75 eP    44 53.33  -2.7
KNK      2.84  52 eP    44 54.96  -2.3
                eS    45 27.00
GHO      2.89  43 eP    44 55.50  -2.5
CFI      3.01  59 eP    44 57.14  -2.3
CUT      3.01  26 eP    44 59.14  -0.3
SML      3.13  46 eP    44 58.86  -2.3
HIN      3.37  76 eP    45 01.91  -2.5
FID      3.45  70 eP    45 01.92  -3.6
TTA      3.50 338 eP    45 04.16  -2.1
SCM      3.53  51 eP    45 04.39  -2.2
VLZ      3.63  64 eP    45 05.62  -2.3
HUR      3.66  26 eP    45 07.13  -1.2
CVA      3.76  74 eP    45 06.84  -2.8
KLU      3.95  60 eP    45 09.69  -2.7
TRF      3.97  19 eP    45 10.98  -1.7
KTH      3.97  14 eP    45 11.11  -1.6
TOA      4.13  52 P     45 12.80  -2.1
RND      4.21  27 eP    45 14.04  -1.9
TZL      4.41  55 P     45 18.20  -0.4
GLB      4.89  65 eP    45 22.15  -3.1
PAX      4.90  45 eP    45 23.75  -1.7
WAX      5.18  78 eP    45 26.79  -2.5
NEA      5.21  19 eP    45 26.96  -2.7
TGL      5.22  74 eP    45 27.26  -2.6
WRH      5.30  24 eP    45 27.99  -3.0
MLY      5.43  11 eP    45 30.67  -2.1
BALM     5.49  72 eP    45 30.91  -2.7
HDA      5.50  29 eP    45 30.73  -3.0
CCB      5.52  24 eP    45 30.66  -3.2
FBA      5.74  23 eP    45 33.54  -3.5
IL1      5.83  27 eP    45 34.87  -3.3
ILB      5.83  27 eP    45 33.75  -4.4
CTGM     5.97  73 eP    45 38.48  -1.8
IM3      6.28 358 eP    45 42.23  -2.2
BC3      6.37  54 eP    45 44.07  -1.7
       81 obs. associated
-------------------------------------
*  NOV  04, 1993  09h 19m 44.65± 2.97s
   38.275 N ±23.9km   22.273 E ± 9.9km
   DEPTH =   5.0km  (geophysicist)
   3.7mb (  1 obs.)
 GREECE                           (364)
      MD 3.3 (ATH).

AGG      0.75   3 ePg   19 58.46  -1.1
                eSg   20 09.28
VLS      1.33 266 ePb   20 03.60  -6.1X
VLI      1.64 161 ePn   20 17.10   2.8X
LIT      1.83   5 ePb   20 17.60   0.6
                eSb   20 40.24
IGT      1.97 310 ePb   20 17.88  -1.1
                eSb   20 41.00
PAIG     1.98  33 ePn   20 18.68  -0.5
                eSn   20 45.56
KZN      2.07 349 ePn   20 21.40   0.9
LSK      2.28 326 iPd   20 23.70   0.1
SRN      2.39 313 eP    20 31.30   6.3X
THE      2.41  13 ePn   20 25.30  -0.1
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FNA     2.60 345 ePn   20 26.84  -1.3
KBN     2.61 334 eP    20 28.50   0.2
TPE     2.67 320 eP    20 30.00   0.9
SOH     2.68  18 ePn   20 28.36  -0.9
GRG     2.68   2 ePn   20 30.48   1.2
                eSn   21 04.20
KNT     2.92   9 ePn   20 32.28  -0.4
SRS     3.02  19 ePn   20 34.76   0.8
VAY     3.05   4 iPn   20 35.00   0.6
OHR     3.05 339 iPn   20 36.70   2.2X
      1.0s    60.00nm
TIR     3.59 330 eP    20 45.10   3.1X
SKO     3.75 350 ePn   20 39.00  -5.4X
NB2    23.82 347 P     24 55.20  -3.9X
      0.7s     1.50nm          3.7mb
    S.D. = 0.9  on  15 of  22 obs.
-------------------------------------
%  NOV  04, 1993  10h 10m 44.88± 0.98s
   39.109 N ± 8.0km   27.603 E ±10.2km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
     ML 2.7 (ISK).

IZM     0.76 201 ePg   10 59.40  -0.3
                eSg   11 11.40
DST     0.94  58 ePn   11 03.60   0.8
EZN     1.22 306 ePn   11 08.30   0.7
EDC     1.25   9 ePn   11 08.00  -0.2
BNT     1.27  11 ePn   11 07.40  -1.0
    S.D. = 1.1  on   5 of   5 obs.
-------------------------------------
*  NOV  04, 1993  10h 25m 04.62± 0.86s
   39.478 N ±10.1km   29.441 E ± 7.4km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
     ML 2.8 (ISK).

DST     0.64 282 ePg   25 17.60   0.1
                eSg   25 29.10
ALT     0.67 129 ePn   25 18.00   0.0
EYL     1.22  27 ePn   25 27.40   0.0
BNT     1.46 307 ePn   25 31.40   0.4
EDC     1.49 306 ePn   25 31.00  -0.5
CIN     2.15 210 eP    26 11.00  30.0X
    S.D. = 0.4  on   5 of   6 obs.
-------------------------------------
%  NOV  04, 1993  10h 34m 16.15± 0.94s
   39.102 N ± 7.6km   27.579 E ± 9.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
     ML 2.7 (ISK).

IZM     0.75 199 ePg   34 30.50  -0.3
                eSg   34 42.60
DST     0.96  58 ePn   34 35.10   0.7
EZN     1.21 307 ePn   34 39.30   0.6
EDC     1.26  10 ePn   34 39.00  -0.6
BNT     1.28  12 ePn   34 39.40  -0.5
    S.D. = 0.9  on   5 of   5 obs.
-------------------------------------
?  NOV  04, 1993  10h 50m 41.75± 5.91s
   38.799 N ±56.3km   28.924 E ±25.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
     ML 2.7 (ISK).

DST     0.84 344 ePg   50 58.00   0.0
                eSg   51 09.60
ALT     0.96  74 ePg   51 00.10   0.0
BNT     1.74 334 ePn   51 11.40  -0.7
EDC     1.75 332 ePn   51 13.00   0.7
    S.D. = 1.0  on   4 of   4 obs.
-------------------------------------
%  NOV  04, 1993  10h 52m 00.81± 0.87s
   39.100 N ± 7.1km   27.599 E ± 9.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
     ML 2.7 (ISK).

IZM     0.75 201 ePg   52 15.40  -0.1
                eSg   52 27.40
DST     0.94  57 ePn   52 19.10   0.3
EZN     1.22 307 iPn   52 23.80   0.2
EDC     1.26   9 ePn   52 24.00  -0.2
BNT     1.28  11 ePn   52 24.40  -0.1
    S.D. = 0.3  on   5 of   5 obs.
-------------------------------------
   NOV  04, 1993  10h 52m 50.38± 0.29s
   45.692 N ± 3.5km   26.620 E ± 3.4km
   DEPTH = 132.8 ±  4.3 km
   4.2mb ( 18 obs.)
 ROMANIA                         (358)
      Felt (IV) in the Vrancea region
      and (III) at Bucharest.

VRI     0.19  22 iPc   53 07.50  -0.6
MLR     0.52 247 iPc   53 08.60  -1.7
ISR     0.56 185 iPc   53 09.50  -0.9
CLI     0.97  28 iPd   53 12.60  -1.0
CFR     1.19 115 iPd   53 14.00  -1.7
PTT     1.25 353 iPc   53 18.00   1.7
BUC     1.33 196 iPc   53 18.20   1.1
BUC1    1.41 197 iPc   53 14.00  -4.0X
IAS     1.64  23 iPd   53 22.00   1.4
TNR     1.65 269 ePc   53 20.00  -0.7
DRA     1.95 240 iPc   53 26.00   1.6
KIS     2.04  49 iP-   53 26.00   0.6
                iS     53 51.50
PSN     2.30 150 iP    53 30.00   1.4
DEV     2.61 276 iPd   53 34.00   1.4
PVL     2.64 201 iP    53 35.00   2.0
JMB     3.22 180 iPc   53 41.00   0.3
BZS     3.51 271 ePc   53 36.00  -8.4X
PLD     3.84 202 iP    53 48.00  -0.9
VTS     3.95 220 iP    53 50.00  -0.5
DMK     3.96 168 iP    53 49.90  -0.5
KDZ     4.13 193 iPc   53 50.00  -2.8
UZH     4.16 317 iPd   53 54.00   0.8
      1.0s    72.00nm
                i      54 37.20
RZN     4.23 200 iPc   53 54.00  -0.3
KKB     4.60 215 iPd   53 59.00  -0.1
MMB     4.61 208 iP    54 00.00   0.8
ALN     4.81 185 ePn   54 02.02   0.1
MFT     4.93 174 eP    54 04.00   0.4
SRS     5.08 207 ePn   54 05.46   0.0
                eSn    54 38.34
VAY     5.27 215 iPn   54 09.00   1.0
KNT     5.28 212 iPn   54 08.42   0.2
                eSn    54 42.62
SKO     5.28 227 ePn   54 08.00  -0.2
SIM     5.34  95 eP    54 10.00   1.0
                eS     55 04.00
HRT     5.35 154 eP    54 09.40   0.2
BNT     5.42 169 iP    54 08.40  -1.7
EDC     5.42 170 eP    54 10.00  -0.1
SOH     5.42 207 ePn   54 10.10  -0.1
                eSn    54 46.10
GRG     5.64 215 ePn   54 13.62   0.4
                eSn    54 54.82
OUR     5.69 201 ePn   54 12.22  -1.6
                iSn    54 53.06
EZN     5.87 182 iP    54 15.30  -0.9
PAIG    6.15 202 ePn   54 20.82   0.7
OHR     6.24 225 iPn   54 22.00   0.6
KAS     6.75 127 iPc   54 27.80  -0.5
PTJ     7.46 275 eP    54 35.30  -2.6
ANN     7.58  92 eP    54 39.00  -0.4
CIN     8.16 172 ePg   54 16.00 -31.3X
                iSg    54 24.00
TRI     9.00 275 eP    55 00.00   1.5
KHC     9.49 296 Pc    55 06.00   0.9
      1.1s    10.50nm          4.5mb
                e      55 15.00
SOC     9.57  98 eP    55 07.00   0.9
OBN    11.36  30 (P)   55 28.00  -1.6
OSS    11.47 281 P     55 41.40  10.1X
VDL    11.94 280 ePc   55 46.70   9.2X
LLS    12.25 282 ePd   55 49.00   7.4X
TMA    12.37 278 ePc   55 51.10   8.0X
MMK    13.01 278 ePc   55 57.90   6.4X
PGF    13.04 262 eP    55 57.10   5.3X
      0.7s    10.70nm          4.4mb
DIX    13.39 279 ePc   56 02.20   5.8X
EMS    13.72 279 ePc   56 05.20   4.6X
LPG    13.92 276 eP    56 04.90   1.7
      0.9s    13.75nm          4.3mb
LPL    13.93 276 eP    56 05.30   2.1
      0.5s     9.75nm          4.4mb
FRF    14.38 269 eP    56 13.10   4.3X
      0.7s    11.25nm          4.3mb
LMR    14.54 268 eP    56 15.40   4.6X
LRG    14.61 268 eP    56 15.40   3.8X
NUR    14.89 356 iP    56 11.40  -3.6X
      0.4s    17.70nm          4.7mb
LBF    15.69 283 eP    56 25.50   0.3
LOR    15.75 284 eP    56 25.60  -0.3
      0.6s     3.45nm          3.8mb
SMF    15.80 282 eP    56 26.70   0.1
SSF    16.00 283 eP    56 29.10   0.1
      0.7s     5.85nm          4.0mb
AVF    16.13 282 eP    56 31.40   0.8
HFS    16.38 337 eP    56 30.90  -2.7
      0.9s    15.20nm          4.3mb
KAF    16.46 359 iP    56 30.70  -3.8X
      0.3s    22.00nm          4.9mb
BGF    16.50 282 eP    56 35.40   0.3
MAF    16.72 280 eP    56 38.80   0.9
      0.4s     2.40nm          3.8mb
LSF    17.44 281 eP    56 46.30  -0.3
      0.5s     5.05nm          4.1mb
RJF    17.59 278 eP    56 49.20   0.8
      0.5s     4.25nm          4.0mb
NB2    17.83 335 P     56 48.90  -2.4
      0.7s     3.70nm          3.8mb
LPO    17.94 276 eP    56 53.30   0.7
LFF    18.20 277 eP    56 56.00   0.5
LDF    18.39 289 eP    56 55.10  -2.4
      0.6s     6.05nm          4.1mb
MFF    18.54 282 eP    56 57.40  -1.8
FLN    18.62 289 eP    56 56.70  -3.3X
EPF    18.95 271 eP    57 04.30   0.7
LPF    19.02 287 eP    57 02.30  -1.9
      0.4s     2.85nm          4.0mb
SVE    23.76  50 eP    57 54.80   3.5X
TIC    47.56 225 P     01 14.00  -0.3
KIC    47.67 224 P     01 14.00  -1.1
      0.4s     5.00nm          4.6mb
LIC    47.93 225 P     01 16.00  -1.1
GKN    48.59  91 P     01 23.50   1.2
DMN    49.16  91 P     01 28.30   1.5
KKN    49.17  90 P     01 27.80   0.9
      0.6s    20.00nm          5.1mb
GUN    49.52  90 P     01 30.80   1.1
MBC    56.40 351 eP    02 20.50   1.1
INK    65.35 352 eP    03 19.00  -0.7
    S.D. = 1.2  on  74 of  92 obs.
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*  NOV  04, 1993  11h 11m 03.74± 1.19s
   34.486 S ±11.7km   70.701 W ± 8.0km
   DEPTH =  94.3 ±  7.2 km
 CHILE-ARGENTINA BORDER REGION   (127)
      MD 4.4 (SAN).

LNV     0.79 312 iPd   11 21.25  -0.5
TACH    0.85 347 iP+   11 22.25  -0.2
PCH     0.88  10 iP+   11 23.09   0.3
SAN     1.03   2 iP+   11 24.53   0.1
                iS     11 40.41
FCH     1.20  17 iP+   11 27.12   0.3
                iS     11 44.53
LCCH    1.24 324 iP+   11 26.25  -0.6
                iS     11 42.90
PEL     1.34   1 iP+   11 28.44   0.3
                iS     11 46.56
ROCH    1.53 350 iPd   11 30.47  -0.3
                iS     11 50.10
IHA     1.65 331 ePg   11 32.00   0.0
JACH    1.80   3 iP+   11 33.98  -0.1
                iS     11 56.90
RFA     1.86  99 iPc   11 36.40   1.5
                S      12 00.00
MDZ     2.22  45 iP    11 43.10   3.4X
                iS     12 03.50
RTCV    3.19  35 iPc   11 53.00   0.2
                S      12 31.00
RTCB    3.39  29 iPc   11 56.50   0.9
                S      12 36.50
CFA     3.54  36 iPd   11 57.90   0.3
                S      12 38.90
RTLL    3.66  31 iPc   11 59.70   0.3
                S      12 40.50
RTPR    5.47  41 eP    12 22.10  -2.2
                (S)    13 22.00
TCA     6.02  60 iP    12 30.00  -2.0
CYA     7.34  36 eP    12 45.70  -4.3X
CNCB   17.77   9 eP    15 08.00   1.0
LPB    18.03   8 eP    15 11.00   0.9
LPAZ   18.27   8 P     15 13.30   0.1
KIC    74.19  71 P     22 31.70  -0.4
    S.D. = 0.9  on  21 of  23 obs.
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   NOV  04, 1993  11h 20m 39.33± 0.84s
    5.853 S ± 5.4km  145.915 E ± 6.7km
   DEPTH =  12.0 ±  5.3 km
   4.4mb (  5 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)
      ML 4.8 (PMG).

YYYY     0.39 172 ePd    20 47.70    0.2
MDG      0.61 347 iPc    20 50.60   -0.9
LAT      1.35 127 eP     21 04.20    0.3
MNDI     2.26 262 eP     21 23.00    5.7X
WWKK     3.18 314 eP     21 33.50    3.3X
PMG      3.74 161 eP     21 38.90    0.8
RAB      6.44  75 e(P)   22 20.00    3.7X
HNR     14.35 105 eP     24 05.00    0.5
SWI     15.44 288 ePc    24 25.50    6.8X
QIS     15.85 202 eP     24 24.60    0.6
WR2     17.96 218 iPd    24 50.70    0.1
         0.7s    18.30nm          4.3mb
                  eS     30 22.30
ASPA    21.15 212 iPc    25 25.20   -1.6
         1.2s    22.20nm          4.4mb
      Z  20s   561.60um          6.9MszX
                  iS     29 29.80
BRS     22.39 164 iP     25 38.00   -1.2
BKM     24.78 120 iPc    26 03.10    0.6
ARMA    25.02 168 eP     26 04.60   -0.2
         0.9s     7.00nm          4.3mb
DZM     25.57 131 iPc    26 09.00   -1.1
STK     26.21 188 eP     26 14.50   -1.3
         0.9s     4.60nm          4.2mb
MAT     42.78 351 eP     28 37.00   -1.5
         1.5s    33.33nm          4.8mb
NST     50.12 296 eP     29 37.50    0.7
CHTO    52.37 299 eP     29 55.10    1.2
GUN     66.88 304 P      31 34.20   -0.1
PKI     67.16 303 P      31 36.40    0.4
KKN     67.34 303 P      31 37.80    0.8
DMN     67.42 303 P      31 37.40   -0.2
GKN     67.95 303 P      31 41.60    0.8
ULM    112.31  38 ePKP   39 17.50    0.7
CNCB   139.62 124 ePKP   40 06.00   -4.5X
LPB    139.67 124 (PKP)  40 05.00   -5.4X
LPAZ   139.77 124 PKP    40 05.90   -4.9X
RSTA   146.37 155 ePKP   40 21.50    0.2
PPD    147.55 149 ePKP   40 26.00    2.8X
KIC    150.82 273 PKP    40 34.90    6.4X
         1.3s    43.50nm
TIC    151.10 273 PKP    40 35.20    6.3X
LIC    151.10 272 PKP    40 34.90    6.0X
     S.D. = 0.9  on  23 of  34 obs.
-------------------------------------
%  NOV  04, 1993  11h 30m 08.62± 0.44s
   44.582 N ± 3.8km    7.420 E ± 4.4km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                    (545)
      ML 2.1 (GEN).

PZZ      0.24 251 P      30 13.74   -0.1
                  S      30 16.99
BHB      0.28 337 P      30 14.97    0.4
                  S      30 18.87
STV      0.34 192 P      30 15.67   -0.1
                  S      30 19.69
ENR      0.36 180 P      30 15.90   -0.1
                  S      30 20.29
ROB      0.43 132 P      30 17.38   -0.1
                  S      30 23.04
RRL      0.57 307 P      30 20.43    0.2
RSP      0.58 349 P      30 19.97   -0.5
                  S      30 27.70
FIN      0.68 123 P      30 22.52    0.4
                  S      30 31.27
IMI      0.75 153 P      30 23.45    0.1
                  S      30 33.20
PCP      0.81  92 P      30 24.04   -0.2
     S.D. = 0.3  on  10 of  10 obs.
-------------------------------------
*  NOV  04, 1993  11h 39m 23.77± 0.99s
    5.808 S ± 9.1km  145.952 E ±15.4km
   DEPTH =  10.0km  (geophysicist)
   3.7mb (  2 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)

YYYY     0.43 178 eP     39 31.50   -1.1
MDG      0.58 343 iPc    39 34.60   -0.9
LAT      1.35 129 eP     39 49.50    1.0
MNDI     2.31 261 eP     40 07.00    4.3X
PMG      3.77 162 eP     40 22.00   -1.2
WR2     18.01 218 eP     43 37.20    1.2
         1.0s     4.50nm          3.6mb
ASPA    21.21 212 eP     44 16.70    4.6X
         1.3s     6.30nm          3.8mb
BLF    112.56 235 e(PKP)58 04.00    1.1
     S.D. = 1.5  on   6 of   8 obs.
-------------------------------------
*  NOV  04, 1993  11h 53m 56.43± 0.87s
   38.400 N ± 8.2km   21.791 E ± 9.4km
   DEPTH =  10.0km  (geophysicist)
 GREECE                            (364)
      MD 3.4 (ATH).

AGG      0.75  34 iPg    54 10.98   -0.2
                  eSg    54 14.70
VLS      0.97 257 ePn    54 15.00    0.1
IGT      1.60 315 ePb    54 31.14    6.3X
LIT      1.78  17 ePb    54 26.58   -0.9
                  eSb    54 43.74
KZN      1.90 360 ePn    54 32.10    2.8X
VLI      1.91 151 ePn    54 29.20   -0.1
PAIG     2.12  43 ePb    54 31.69   -0.6
                  eSb    54 55.22
FNA      2.40 352 ePb    54 38.06    1.6
                  iSb    55 03.06
OUR      2.57  41 ePn    54 38.78    0.0
                  eSn    55 05.34
SOH      2.70  26 ePn    54 41.78    1.0
                  iSn    55 07.54
OHR      2.81 345 ePn    54 46.80    4.5X
KNT      2.89  17 iPn    54 42.82   -0.5
                  iSn    55 10.38
VAY      2.98  11 ePn    54 47.20    2.7X
SRS      3.05  27 ePn    54 47.14    1.6
SKO      3.58 356 ePn    54 51.00   -2.1
     S.D. = 1.2  on  11 of  15 obs.
-------------------------------------
*  NOV  04, 1993  12h 03m 42.54± 0.95s
   38.303 N ± 8.7km   21.953 E ±10.8km
   DEPTH =  10.0km  (geophysicist)
 GREECE                            (364)
      MD 3.1 (ATH).

AGG      0.78  22 ePg    03 56.88   -0.8
                  iSg    04 07.04
VLS      1.08 264 ePb    04 01.90   -1.0
VLI      1.76 153 ePn    04 14.10    0.8
LIT      1.84  13 ePb    04 15.16    0.7
                  eSb    04 41.40
KZN      2.01 356 ePn    04 18.00    1.1
PAIG     2.11  39 ePb    04 16.36   -1.9
                  eSb    04 42.32
GRG      2.67   7 ePn    04 28.20    1.8
SOH      2.74  23 ePn    04 26.96   -0.4
                  eSn    04 59.72
OHR      2.94 343 e(P)   04 36.00    5.8X
SRS      3.08  24 ePn    04 31.92   -0.2
     S.D. = 1.3  on   9 of  10 obs.
-------------------------------------
%  NOV  04, 1993  12h 12m 58.73± 0.57s
   33.190 S ± 8.9km   70.943 W ± 9.6km
   DEPTH =  70.0km  (geophysicist)
 CHILE-ARGENTINA BORDER REGION     (127)
      MD 3.4 (SAN).

PEL      0.22  78 iPd    13 09.91    0.3
                  iS     13 18.34
ROCH     0.22 345 iP+    13 09.77   -0.1
                  iS     13 18.47
TACH     0.46 179 iP+    13 11.36    0.0
                  iS     13 20.72
PCH      0.56 140 iP+    13 12.42    0.0
                  iS     13 23.17
FCH      0.56 104 iPd    13 12.85    0.1
                  iS     13 23.51
JACH     0.59  30 iPd    13 12.48   -0.2
                  iS     13 23.18
LCCH     0.60 241 iPd    13 13.08    0.4
                  iS     13 23.59
LNV      0.86 207 iP+    13 15.25   -0.4
                  iS     13 27.80
     S.D. = 0.3  on   8 of   8 obs.
-------------------------------------
%  NOV  04, 1993  12h 59m 50.25± 0.90s
   39.651 N ± 9.6km   29.524 E ± 8.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.8 (ISK).

DST      0.69 267 ePg    00 03.00   -1.0
                  eSg    00 14.00
ALT      0.75 142 ePg    00 05.20    0.2
                  eSg    00 17.20
EYL      1.04  28 ePn    00 09.40   -0.5
BNT      1.42 300 ePn    00 16.90    0.8
EDC      1.45 299 ePn    00 17.00    0.5
     S.D. = 1.0  on   5 of   5 obs.
-------------------------------------
   NOV  04, 1993  13h 09m 44.32± 0.22s
   11.345 N ± 3.4km  125.798 E ± 5.0km
   DEPTH =  31.5km  (  5 depth phases)
   4.8mb ( 33 obs.)
 SAMAR, PHILIPPINE ISLANDS         (251)

PLP      0.82 258 iPc    09 58.30   -1.3
MAP      2.05 241 eP     10 19.00    1.7
                  eS     10 43.00
BIP      3.13 172 iPd    10 34.00    1.3
                  iS     11 26.00
DAV      4.24 183 eP     10 51.00    2.7
TGY      5.48 301 iPc    11 13.00    7.0X
QCP      5.65 306 eP     10 40.50  -27.8X
PPR      7.12 258 ePd    11 33.00    4.0X
         1.0s    37.00nm          5.3mb
BAG      7.14 315 eP     11 30.00    0.5
CVP      7.40 329 eP     11 32.00   -1.0
         0.9s    51.00nm          5.5mb
PJG     18.75  81 eP     14 08.20    5.0X
SSE     20.11 348 Pc     14 18.50    0.1
         1.0s    53.00nm          4.8mb
      Z  20s     0.50um          3.9Msz
                  pP     14 28.50   41km
                  sP     14 31.00
                  S      18 01.00
NJ2     21.58 344 Pd     14 34.00    0.6
         1.0s    26.00nm          4.6mb
KUMJ    21.59  12 P      14 33.30   -0.3
WWKK    23.14 129 e(P)   14 41.00   -8.1X
GYA     23.48 312 Pc     14 54.60    2.2
         1.0s    29.00nm          4.7mb
TKSJ    23.76  17 P      14 55.50    0.6
KGM     24.15 249 eP     15 01.00    2.2
WKYJ    24.46  20 P      15 02.10    0.3
YONJ    24.74  15 P      15 04.50    0.2
IPM     25.42 257 ePd    15 12.50    1.5
LEM     25.56 226 ePc    15 18.80    6.4X
KMI     25.77 305 eP     15 15.00    0.5
TIA     25.97 344 eP     15 16.00    0.1
CHTO    26.95 289 eP     15 24.90   -0.2
XAN     27.35 328 P      15 28.30   -0.4
         1.0s    22.00nm          4.8mb
      Z  16s     0.59um          4.3MszX
                  pP     15 35.00   24km
MAT     27.48  22 eP     15 24.00   -5.7X
         1.5s    27.78nm          4.7mb
      Z  20s     0.71um          4.2Msz
                  eS     20 12.00
CD2     28.21 317 P      15 36.00   -0.5
TIY     28.86 338 eP     15 42.00   -0.3
      Z  22s     0.78um          4.3Msz
BJI     29.82 345 eP     15 50.50   -0.3
         1.5s    28.00nm          4.8mb
      Z  16s     0.29um          4.0MszX
                  eS     20 48.00
SNY     30.43 357 iPd    15 56.40    0.3
      Z  16s     0.35um          4.1MszX
                  eS     20 56.00
LZH     31.64 325 eP     16 07.50    0.4
         2.0s    50.00nm          5.0mb
      Z  14s     0.51um          4.4MszX
HHC     31.95 339 P      16 10.30    0.6
         1.2s    16.00nm          4.8mb
WRA     32.21 165 P      16 10.10   -1.9
WR2     32.22 165 iPc    16 09.70   -2.4
         0.7s     4.80nm          4.5mb
BTO     32.29 337 eP     16 12.00   -0.7
CN2     32.34 360 eP     16 12.50   -0.4
         1.0s     7.00nm          4.5mb
                  epP    16 26.50   56kmX
MDJ     33.31   5 eP     16 22.00    0.7
QIS     34.49 157 eP     16 30.50   -1.3
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ASPA    35.69 167 iPc   16 41.60  -0.4
        1.2s     6.80nm          4.5mb
      Z  22s     0.20um          3.8Msz
                  eS    22 15.90
GTA     36.24 325 eP    16 47.00   0.4
        1.0s    18.00nm          4.9mb
      Z  16s     0.57um          4.4MszX
                  pP    16 54.50  25km
                  PcP   19 11.00
                  ScP   22 55.00
                  ScS   27 00.00
LSA     37.03 305 P     16 53.00  -0.8
YSS     38.32  19 eP    17 06.50   2.6
GUN     40.83 300 P     17 25.50   0.2
PKI     41.14 299 P     17 27.20  -0.7
KKN     41.31 299 P     17 28.80  -0.3
        0.8s    47.00nm          5.3mb
DMN     41.41 299 P     17 29.30  -0.7
        0.8s    27.00nm          5.0mb
MRWA    41.42 193 eP    17 29.00  -0.7
CIT     41.73 349 eP    17 33.50   1.4
GKN     41.91 299 P     17 33.00  -1.0
        1.0s    30.00nm          5.0mb
COOL    42.22 186 eP    17 35.50  -0.7
ZAK     43.10 339 eP    17 43.30   0.1
        1.0s    10.00nm          4.5mb
                  e     19 33.00 643kmX
KLB     43.38 190 eP    17 44.20  -1.5
NWAO    44.77 190 eP    17 56.50  -0.4
STK     45.56 161 iPc   18 01.50  -1.7
HYB     46.07 283 eP    18 06.00  -1.5
WMQ     46.10 322 P     18 07.50   0.1
        1.2s     8.70nm          4.6mb
BRS     46.55 146 iP    18 11.00  -0.1
GBA     47.22 278 P     18 10.00  -6.5X
BOD     47.25 352 iPc   18 16.10  -0.1
        1.1s    26.00nm          5.2mb
ARMA    48.39 150 eP    18 26.10   0.5
BWA     50.33 156 iPc   18 42.00   1.6
                  e     18 53.50  41km
YAK     50.67   2 iPc   18 41.80  -0.7
        1.0s   131.00nm          5.9mb X
                  e     18 50.00  27km
CAN     51.34 156 eP    18 49.30   1.2
CNB     51.49 155 iPc   18 50.00   0.8
        1.0s    31.00nm          5.2mb
DZM     51.89 130 iPc   18 52.20  -0.2
KSH     52.15 311 eP    18 58.00   3.7X
        1.0s    10.00nm          4.7mb
      Z  20s     1.10um          4.9Msz
      N  18s     0.96um
      E  18s     0.90um
                  PcP   20 09.00
                  PcS   24 04.00
NRI     62.78 346 iPd   20 07.30  -1.4
        1.0s    20.00nm          5.2mb
ASH     65.35 307 eP    20 27.00   1.0
ILT     66.98  20 iPd   20 36.00   0.2
        1.3s    53.00nm          5.5mb
                  i     20 53.00  63kmX
SVE     67.06 327 ePd   20 37.00   0.5
        2.1s    40.00nm          5.2mb
ARU     68.05 326 eP    20 42.00  -0.8
TTA     74.60  28 eP    21 22.20   0.2
SVW     74.62  30 eP    21 23.00   0.8
IMA     75.86  25 eP    21 29.22  -0.1
        0.8s     6.43nm          4.7mb
CRP     76.31  30 eP    21 30.92  -1.0
PMR     77.76  29 eP    21 39.10  -0.6
        0.8s    11.80nm          5.0mb
CSY     78.24 186 iPc   21 51.80   9.7X
        0.9s     7.20nm          4.7mb
FBA     78.29  26 eP    21 41.86  -0.7
        0.9s     4.41nm          4.5mb
TOA     79.14  29 eP    21 48.00   0.6
OBN     80.34 324 eP    21 53.00  -0.8
ANN     81.04 314 eP    21 57.00  -0.7
INK     83.46  22 eP    22 10.50   0.6
KAF     84.47 332 iP    22 14.50  -0.5
        1.0s    24.30nm          5.3mb
MBC     84.77  13 eP    22 17.50   1.2
NUR     85.64 331 eP    22 20.40  -0.5
DAG     89.65 352 iPd   22 38.50  -1.5
        0.8s     2.99nm          4.6mb
HFS     90.89 332 eP    22 45.30  -0.7
        0.7s     1.50nm          4.5mb
GEC2    95.57 322 eP    23 07.80  -0.1
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        1.1s     1.71nm          4.4mb
                  e     23 10.80   9kmX
                  e     23 13.70
                  e     23 16.00
                  e     23 20.90
UYO    120.75  39 iPKPd 28 34.90  -0.4
LPB    165.56 112 (PKP) 29 54.00   5.9X
CNCB   165.57 114 PKP   29 50.80   2.5X
LPAZ   165.61 112 PKP   29 49.90   1.5
     S.D. = 1.0  on  80 of  92 obs.
-----------------------------------
%  NOV  04, 1993  13h 26m 03.38± 1.24s
   39.223 N ±12.4km   22.435 E ±21.1km
   DEPTH =  33.0km  (normal)
 GREECE                            (364)

AGG     0.22 202 ePg    26 10.22   0.0
                  eSg   26 16.82
LIT     0.88   3 iPg    26 20.94   1.6
                  eSg   26 35.02
PAIG    1.19  53 ePb    26 23.70  -0.1
                  eSb   26 40.58
GRG     1.73 359 ePb    26 30.18  -1.5
SOH     1.75  24 ePb    26 31.78  -0.1
                  eSb   26 55.78
     S.D. = 1.5  on   5 of   5 obs.
-----------------------------------
   NOV  04, 1993  13h 40m 37.20± 0.42s
    0.130 N ± 6.6km  126.121 E ± 8.5km
   DEPTH =  54.4km  (  2 depth phases)
   4.7mb ( 10 obs.)
 NORTHERN MOLUCCA SEA              (266)

MNI     1.83 316 ePd    41 06.90   0.2
                  eS    41 31.50
SWI     5.23 101 ePd    41 53.50  -1.3
BIP     8.04   1 eP     42 15.00 -19.0X
                  eS    43 08.00
MKS     8.51 231 ePc    42 37.70  -2.7
CVP    17.97 347 eP     44 45.00   0.1
LEM    19.71 249 ePc    45 10.00   4.7X
WR2    21.53 158 iPd    45 23.40  -0.4
        0.8s    42.90nm          4.9mb
QIS    24.43 148 iPc    45 54.10   1.9
ASPA   24.83 163 iPd    45 57.80   1.8
        0.9s    60.20nm          5.1mb
                  ipP   46 12.50  62km
                  eS    50 22.30
CHTO   32.50 306 eP     47 05.10   0.0
TKSJ   34.49  12 P      47 22.20   0.1
STK    35.04 157 iPc    47 26.80  -0.1
                  ipP   47 39.40  47km
WKYJ   35.05  14 P      47 26.60  -0.4
YONJ   35.54  10 P      47 31.20   0.1
TIA    36.86 348 eP     47 43.70   1.5
XAN    37.39 336 P      47 46.50  -0.2
        0.6s     6.00nm          4.7mb
                  pP    47 52.50  20kmX
BRS    37.47 139 iPc    47 47.50   0.0
MAT    37.92  16 eP     47 49.00  -2.1
        0.7s     5.48nm          4.6mb
ARMA   38.88 144 iPc    48 03.00   3.7X
        0.8s     6.00nm          4.5mb
TIY    39.47 343 eP     48 06.00   1.9
BJI    40.74 348 eP     48 15.00   0.6
        0.8s     6.00nm          4.4mb
SNY    41.57 357 eP     48 20.80  -0.3
        0.8s    13.00nm          4.7mb
HHC    42.63 344 eP     48 27.40  -2.7
CN2    43.48 359 eP     48 36.40  -0.3
        0.5s     3.40nm          4.4mb
GTA    45.90 331 eP     48 56.40   0.0
        1.0s     8.00nm          4.6mb
GUN    47.42 309 P      49 09.40   0.5
        0.4s    15.00nm          5.3mb
PKI    47.63 308 P      49 10.80   0.3
KKN    47.83 309 P      49 12.40   0.5
DMN    47.88 308 P      49 12.80   0.4
GKN    48.44 308 P      49 17.20   0.7
HYB    49.85 293 eP     49 29.40   2.1X
WMQ    55.35 327 P      50 08.00   0.0
     S.D. = 1.2  on  28 of  32 obs.
-----------------------------------
?  NOV  04, 1993  14h 12m 15.21± 7.42s
   57.832 N ±61.7km    6.188 E ±23.8km
   DEPTH =  10.0km  (geophysicist)
 NORTH SEA                         (534)
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      MD 2.6 (BER).

KMY     1.47 341 eP     12 42.03   0.3
                  eSg   12 58.92
BLS5    1.60   5 eP     12 43.19  -0.5
                  eS    12 58.30
ODD1    2.10   6 eP     12 51.65   0.8
                  eSg   13 12.43
EGD     2.50 349 eP     12 56.57   0.1
                  eSg   13 25.49
ASK     2.71 350 eP     12 58.81  -0.7
                  eS    13 26.47
NRA0    4.00  41 ePn    13 17.75  -0.1
                  ePg   13 24.43
                  eS    14 00.40
HFS     4.52  56 eP     13 25.20   0.0
        0.1s     0.40nm
     S.D. = 0.6  on   7 of   7 obs.
-----------------------------------
   NOV  04, 1993  15h 05m 30.35± 0.63s
   26.880 S ± 6.7km   26.635 E ± 6.9km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)
     ML 3.7 (PRE).

BFS     0.13  98 iPc    05 33.60   0.4
                  S     05 34.00
KSR     1.04  13 eP     05 50.70   0.2
                  S     06 04.70
SWZ     1.21 255 iPc    05 54.90   1.5
                  S     06 11.50
SEK     1.68 149 eP     06 02.40   1.7
                  S     06 29.00
SLR     1.87  53 iPc    06 03.70   0.3
                  S     06 26.70
BOSA    2.04 212 eP     06 08.00   2.3
                  S     06 33.90
BLF     2.26 190 iPc    06 09.30   0.3
                  S     06 37.30
FRS     3.09 202 iPc    06 22.10   1.5
                  S     06 58.00
BFT     3.28  70 iP     06 23.20  -0.5
                  S     07 01.40
HVD     3.84 195 iPd    06 32.00   0.4
                  S     07 25.00
KSD     4.38 147 eP     06 37.60  -1.7
                  S     07 25.40
PKA     4.41 230 eP     06 38.60  -0.9
                  S     07 29.70
UPI     5.00 252 eP     07 04.60  16.7X
                  S     07 55.30
POF     6.41 246 e(P)   07 06.00  -1.7
                  S     08 15.00
GRM     6.41 180 eP     07 06.00  -1.8
                  (S)   08 38.00
BEW     6.50 212 iPc    06 27.90 -41.3X
BUL     6.95  16 iPn    07 12.00  -3.5X
                  iSn   08 22.00
                  iSg   09 00.00
SUR     7.46 221 eP     07 21.00  -1.7
                  S     08 43.50
CVN     7.54 231 iPd    07 38.30  14.6X
SBO     8.21 248 iPd    07 38.10   5.1X
CER     9.06 223 iPd    07 41.50  -3.3X
                  S     09 26.00
TUH     9.10 224 e(P)   08 08.50  23.1X
                  S     11 02.00
KRI    10.38  16 iPn    08 03.00  -0.1
                  iSn   09 55.50
                  iSg   10 54.10
     S.D. = 1.4  on  16 of  23 obs.
-----------------------------------
%  NOV  04, 1993  15h 11m 29.97± 1.27s
   16.857 N ±13.9km   99.022 W ± 8.5km
   DEPTH =  33.0km  (normal)
 NEAR COAST OF GUERRERO, MEXICO  ( 58)

ACX     0.80 271 eP     11 45.00   0.2
                  iS    11 52.75
III     1.57 344 iP     11 55.50  -0.5
                  iS    12 18.00
OXX     2.21  84 iP     12 05.00  -0.3
                  (S)   12 24.50
PPM     2.23  10 eP     12 06.00   0.2
                  (S)   12 30.00
IISM    2.64  36 (P)    12 11.50   0.4
     S.D. = 0.6  on   5 of   5 obs.
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*  NOV  04, 1993  16h 26m 51.81± 1.05s
    1.331 N ± 8.0km  127.062 E ±11.7km
   DEPTH = 113.6 ± 10.4 km
   4.7mb (  3 obs.)
 HALMAHERA, INDONESIA              (267)

MNI     2.22 273 ePd   27 28.20  -0.2
                 eS    27 56.50
BIP     6.90 353 eP    28 32.00   0.1
                 eS    29 40.00
WR2    22.33 162 iPc   31 41.40   0.4
       0.7s    22.50nm         4.6mb
                 iS    35 40.30
QIS    24.98 151 iPc   32 07.10   0.6
ASPA   25.72 165 iPc   32 13.30  -0.1
       0.5s    10.90nm         4.6mb
                 iS    36 45.30
MRWA   32.17 198 eP    33 11.50   0.6
STK    35.79 159 eP    33 40.50  -1.4
GUN    47.42 308 P     35 17.40   0.1
       0.6s    14.00nm         4.9mb
KKN    47.84 307 P     35 20.40   0.0
DMN    47.90 307 P     35 21.00   0.1
GKN    48.45 307 P     35 25.00   0.0
HYB    50.27 292 eP    35 38.60  -0.3
     S.D. = 0.6  on  12 of  12 obs.
-------------------------------------
*  NOV  04, 1993  17h 02m 33.60± 2.58s
   39.137 N ±24.0km   21.880 E ± 8.9km
   DEPTH =   5.0km  (geophysicist)
 GREECE                            (364)

LIT     1.07  26 ePg   02 52.04  -2.2
                 eSg   03 07.52
IGT     1.26 289 iPb   02 56.84  -0.7
                 eSb   03 15.36
PAIG    1.60  60 ePb   03 02.32  -0.3
                 eSb   03 24.12
FNA     1.69 347 ePb   03 04.60   0.6
                 eSb   03 25.56
GRG     1.86  12 iPb   03 06.17  -0.3
SOH     2.03  33 ePb   03 09.44   0.6
OHR     2.14 338 ePn   03 11.20   0.7
KNT     2.17  21 ePn   03 11.00   0.1
                 eSn   03 38.64
SRS     2.37  33 ePn   03 15.16   1.3
                 eSn   03 42.48
     S.D. = 1.2  on   9 of   9 obs.
-------------------------------------
   NOV  04, 1993  17h 10m 59.37± 0.58s
   27.874 S ± 5.3km   26.610 E ± 7.4km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)
      ML 3.5 (PRE).

BFS     0.98   9 eP    11 17.70  -0.9
                 S     11 29.00
SEK     1.00 117 eP    11 17.90  -1.0
                 S     11 29.90
BLF     1.29 197 iPc   11 25.00   1.2
                 S     11 40.20
BOSA    1.29 235 iPd   11 27.00   3.4X
                 S     11 47.00
SWZ     1.33 301 iPc   11 24.90   0.3
                 S     11 41.00
KSR     2.02   7 eP    11 36.00   1.4
                 S     12 02.60
FRS     2.18 211 iPc   11 38.00   1.2
                 S     12 04.00
SLR     2.60  35 eP    11 43.00   0.1
                 S     12 13.00
HVD     2.89 199 eP    11 48.00   0.9
                 S     12 21.00
KSD     3.61 138 eP    11 57.60   0.3
                 S     12 39.00
GRM     5.42 180 eP    12 40.00  17.1X
                 S     13 44.00
BEW     5.67 217 eP    13 06.10  39.6X
                 S     14 12.80
SUR     6.74 227 eP    12 40.00  -1.6
                 S     13 57.00
BUL     7.91  14 iPn   12 58.00   0.0
                 iSg   15 03.00
CER     8.34 227 e(P)  13 02.00  -1.9
                 S     14 30.00
KRI    11.34  15 iPn   13 49.00   3.8X
                 iSn   15 50.00
                 iSg   16 55.50
     S.D. = 1.2  on  12 of  16 obs.
-------------------------------------
%  NOV  04, 1993  17h 27m 09.32± 1.09s
   32.149 S ± 9.1km   68.559 W ±16.3km
   DEPTH =  33.0km  (normal)
 MENDOZA PROVINCE, ARGENTINA       (139)

RTCV    0.29   4 iPc   27 16.50  -0.5
CFA     0.60  27 iPd   27 18.40  -3.1X
                 S     27 25.60
RTCB    0.69 343 ePc   27 24.00   1.3
                 S     27 33.50
RTLL    0.82   5 ePc   27 23.30  -1.2
                 S     27 33.00
RTPR    2.54  44 e(P)  27 51.00   1.9X
                 S     28 18.00
RFA     2.62 178 eP    27 50.00  -0.2
                 S     28 33.00
TCA     3.48  78 e(P)  28 03.00   0.5
                 (S)   29 44.00
     S.D. = 1.3  on   5 of   7 obs.
-------------------------------------
   NOV  04, 1993  18h 04m 17.88± 0.67s
   47.662 N ± 5.1km    7.418 E ± 6.3km
   DEPTH =  10.0km  (geophysicist)
 SWITZERLAND                       (544)
      ML 1.7 (STR).

BBS     0.21 163 Pg    04 22.61   0.2
MOF     0.27 315 Pg    04 23.47  -0.1
                 Sg    04 27.46
FEL     0.45  62 ePg   04 26.90  -0.3
LOMF    0.51 232 Pg    04 28.05  -0.1
                 Sg    04 35.06
WLS     0.75 357 Pg    04 32.82   0.2
CDF     0.76 353 Pg    04 32.91   0.2
     S.D. = 0.3  on   6 of   6 obs.
-------------------------------------
%  NOV  04, 1993  18h 27m 28.36± 0.76s
   40.245 N ± 7.3km   27.476 E ± 5.7km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.6 (ISK).

EDC     0.31  71 iPg   27 35.00   0.1
                 eSg   27 40.00
BNT     0.36  72 iPg   27 35.30  -0.4
                 iSg   27 41.30
MFT     0.56 345 ePg   27 39.70  -0.1
                 eSg   27 46.70
EZN     0.98 245 ePg   27 46.90   0.0
                 eSg   27 59.90
DST     1.09 125 ePn   27 49.00   0.1
CTT     1.16  38 iPn   27 50.30   0.3
     S.D. = 0.3  on   6 of   6 obs.
-------------------------------------
%  NOV  04, 1993  19h 12m 18.99± 0.67s
   43.457 N ± 4.7km    5.468 E ± 5.4km
   DEPTH =   5.0km  (geophysicist)
 NEAR SOUTH COAST OF FRANCE        (379)
      ML 2.8 (STR).

GELF    0.08 202 Pg    12 20.59  -0.3
TREF    0.18 340 Pg    12 22.47  -0.2
PUYF    0.18  66 Pg    12 22.47  -0.3
BERF    0.22 132 Pg    12 23.86   0.4
PRAF    0.41 328 Pg    12 27.65   0.4
VILF    0.43  24 Pg    12 27.65  -0.1
TAVF    0.46  69 Pg    12 28.25   0.1
     S.D. = 0.4  on   7 of   7 obs.
-------------------------------------
*  NOV  04, 1993  20h 09m 47.15± 1.32s
   54.285 N ±23.9km  162.471 W ±15.6km
   DEPTH =  33.0km  (normal)
   4.5mb (  8 obs.)
 ALASKA PENINSULA                  ( 12)

SDN     1.56  46 ePc   10 14.27   1.5
                 eS    10 31.01
SVW     7.76  25 eP    11 40.67   0.1
ADK     8.89 260 (P)   11 54.68  -1.5
CRP     8.90  34 eP    11 56.17  -0.3
TTA     9.30  19 eP    12 01.51  -0.4
KLU    11.36  44 ePc   12 26.98  -3.2X
BALM   12.68  50 eP    12 45.89  -2.0
FBA    12.94  29 (P)   12 52.91   1.8
INK    19.48  33 eP    14 12.50  -1.3
       0.7s    2.00nm         3.5mb
YKA    25.83  52 eP    15 17.20   0.5
       0.8s    3.00nm         3.9mb
MBC    27.26  21 eP    15 30.50   0.9
DAG    47.20  11 eP    18 16.50  -1.3
       0.7s    8.90nm         4.9mb
NB2    64.91   3 P     20 23.60  -1.4
       1.0s    4.80nm         4.5mb
HFS    65.89   2 eP    20 29.30  -1.8
       0.5s    3.20nm         4.7mb
MOX    75.32   4 eP    21 28.40   0.1
PRU    76.07   2 eP    21 32.50   0.0
GRF    76.26   4 ePc   21 34.30   0.6
       1.0s    8.00nm         4.7mb
KHC    76.91   3 eP    21 38.00   0.7
       1.0s    5.40nm         4.5mb
GEC2   77.19   3 ePc   21 38.80  -0.2
       0.6s    1.77nm         4.2mb
ZST    77.89   0 e(P)  21 42.40  -0.3
GUN    79.30 303 P     21 52.20   1.0
KKN    79.69 304 P     21 53.80   0.7
PKI    79.81 303 P     21 55.20   1.3
GKN    79.82 304 P     21 54.20   0.4
DMN    79.92 304 P     21 55.20   0.8
     S.D. = 1.1  on  24 of  25 obs.
-------------------------------------
%  NOV  04, 1993  20h 11m 51.85± 0.42s
   44.509 N ± 3.6km    7.278 E ± 4.7km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                    (545)
      ML 2.3 (GEN).

PZZ     0.13 268 P     11 55.53   0.5
                 S     11 57.73
STV     0.27 173 P     11 57.45  -0.1
                 S     12 00.84
ENR     0.30 160 P     11 58.05  -0.1
                 S     12 02.07
BHB     0.33 358 P     11 58.87   0.1
                 S     12 03.35
ROB     0.48 117 P     12 01.80   0.3
                 S     12 08.43
RRL     0.54 320 P     12 02.67  -0.2
RSP     0.64 359 P     12 04.44  -0.4
FIN     0.73 114 P     12 05.87  -0.4
                 S     12 15.14
IMI     0.74 143 P     12 06.22  -0.2
                 S     12 15.39
PCP     0.91  87 P     12 09.76   0.5
                 S     12 21.95
LSD     0.95 355 P     12 10.22   0.0
     S.D. = 0.3  on  11 of  11 obs.
-------------------------------------
%  NOV  04, 1993  20h 15m 08.67± 3.51s
   37.330 N ±15.0km    1.353 W ±26.7km
   DEPTH =  10.0km  (geophysicist)
 SPAIN                             (377)
      mbLg 2.9 (MDD).

EALH    0.53 354 iPc   15 19.59   0.2
                 e     15 26.50
ENIJ    0.77 243 iPc   15 24.15   0.4
                 e     15 33.50
EHUE    1.10 297 eP    15 29.68   0.3
                 e     15 44.80
EVIA    1.59 326 eP    15 36.70  -0.3
                 e     15 56.10
ECOG    1.77 269 eP    15 39.31  -0.3
                 e     16 01.00
EBAN    2.10 294 eP    15 44.71   0.4
                 e     16 08.50
ELUQ    2.33 277 eP    15 47.00  -0.7
                 e     16 14.50
     S.D. = 0.5  on   7 of   7 obs.
-------------------------------------
?  NOV  04, 1993  20h 59m 21.74± 3.35s
    7.507 S ±37.7km  128.709 E ±14.0km
   DEPTH = 150.0km  (geophysicist)
   4.6mb (  2 obs.)
 BANDA SEA                         (280)

KNA     8.19 180 iPd   01 19.00   0.1
       0.2s    64.00nm         5.9mb X
                 iS    02 47.00
WR2    13.53 157 iPd   02 26.70  -2.1
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        0.4s    48.30nm          5.2mb X
                ipP   02 34.40
                eS    04 50.20
MBL    16.06 211 eP   03 00.50    0.0
                eS    05 52.00
QIS    16.72 142 eP   03 10.00    1.3
                eS    06 06.50
ASPA   16.82 163 iPd  03 10.70    0.8
                eS    06 06.90
MEEK   21.31 206 eP   03 58.00    0.2
                eS    07 56.00
FORT   23.16 181 eP   04 17.50    1.7
COOL   24.31 196 eP   04 27.00    0.1
MRWA   24.69 207 eP   04 30.20   -0.2
        0.3s     6.00nm          4.6mb
                eS    09 11.00
BAL    25.58 205 eP   04 38.20   -0.4
KLB    26.05 202 eP   04 43.20    0.3
        0.3s     4.00nm          4.5mb
MUN    26.99 204 eP   04 50.80   -0.6
STK    27.06 155 iPd  04 50.90   -1.2
NWAO   27.44 201 eP   04 55.50    0.0
     S.D. = 1.0  on  14 of  14 obs.
-------------------------------------
%  NOV  04, 1993  21h 18m 40.91± 0.42s
   44.504 N ± 3.5km    7.298 E ± 4.7km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                    (545)
     ML 2.3 (GEN).

PZZ     0.14 270 P     18 44.65    0.3
                S     18 46.80
STV     0.26 176 P     18 46.57    0.1
                S     18 50.05
ENR     0.29 162 P     18 47.12    0.1
                S     18 51.15
BHB     0.34 356 P     18 47.85   -0.1
                S     18 52.57
ROB     0.46 117 P     18 50.31    0.0
                S     18 56.69
RRL     0.55 319 P     18 52.01   -0.3
RSP     0.65 357 P     18 53.61   -0.4
FIN     0.72 114 P     18 54.99   -0.1
IMI     0.73 144 P     18 54.80   -0.5
                S     19 04.22
PCP     0.89  87 P     18 58.45    0.4
LSD     0.96 354 P     18 59.73    0.4
     S.D. = 0.3  on  11 of  11 obs.
-------------------------------------
*  NOV  04, 1993  22h 17m 25.49± 0.90s
   37.968 N ±11.4km  103.964 E ±10.5km
   DEPTH =  10.0km  (geophysicist)
   4.0mb (  1 obs.)
 GANSU, CHINA                      (322)
     ML 3.6 (BJI).

LZH     1.88 183 Pn    17 59.00    0.9
GTA     3.55 295 Pn    18 22.00    0.1
                Pg    18 28.50
                Sn    19 05.00
                Sg    19 13.50
BTO     5.38  59 ePn   18 48.20    0.3
                Pg    19 05.50
                Sg    20 13.80
XAN     5.61 133 Pn    18 48.50   -2.6X
                Pg    19 08.50
                Sn    20 01.00
                Sg    20 19.00
HHC     6.55  62 Pn    19 04.60    0.2
                Pg    19 23.80
                Sg    20 53.80
TIY     6.71  90 ePg   19 27.40   20.8X
BJI     9.73  74 eP    20 27.00   38.5X
     N  10s     0.25um
WRA    64.30 148 P     28 01.80   -1.5
        0.6s     0.70nm          4.0mb
     S.D. = 1.3  on   5 of   8 obs.
-------------------------------------
&  NOV  04, 1993  22h 46m 01.81s
   40.189 N          121.014 W
   DEPTH =   1.4km
 NORTHERN CALIFORNIA               ( 36)
     <GM-P>. MD 2.9 (GM).

LCMM    0.39 264 P     46 09.73    0.1
LRDM    0.44 309 P     46 10.81    0.2
MIN     0.48 289 P     46 11.01   -0.4
LCFM    0.49 307 P     46 11.68    0.1
LMEM    0.55 310 eP    46 11.76   -1.0
MGL     0.56 228 P     46 12.50   -0.5
OBHM    0.64 213 P     46 13.85   -0.7
LHCM    0.72 328 P     46 16.18   -0.1
ORV     0.73 211 eP    46 15.38   -1.1
AARM    0.91 181 P     46 19.26   -0.7
OHCM    0.93 203 P     46 18.94   -1.3
AFHM    1.16 171 P     46 23.79   -0.5
WDC     1.23 289 eP    46 23.34   -2.1
ALNM    1.28 190 P     46 25.22   -1.0
APRM    1.32 187 P     46 25.72   -1.3
LBFM    1.33 330 eP    46 26.95   -0.5
                eS    46 43.25
ASMM    1.39 169 P     46 28.32    0.0
GAS     1.41 248 P     46 27.82   -0.9
ARJM    1.50 178 P     46 29.37   -0.5
LGMM    1.54 336 P     46 30.71    0.1
LGPM    1.56 298 eP    46 29.02   -1.8
LMPM    1.56 327 P     46 31.69    0.8
AASM    1.76 182 P     46 33.61    0.1
NBPM    1.77 211 P     46 35.41    1.7
NMHM    1.97 220 P     46 36.25   -0.5
CMB     2.21 167 eP    46 40.01   -0.1
FHC     2.35 286 eP    46 41.23   -0.9
ARN     2.86 188 eP    46 49.23   -0.3
MEMM    2.99 147 (Pn)  46 51.15   -0.1
MMPM    3.01 148 (Pn)  46 52.57    0.8
BONR    3.07 136 (Pn)  46 52.13   -0.5
MRCM    3.18 141 (Pn)  46 53.73   -0.4
        32 obs. associated
-------------------------------------
?  NOV  04, 1993  23h 05m 40.51± 1.53s
   28.952 S ±10.5km  178.790 W ±27.9km
   DEPTH = 509.1 ± 17.1 km
   4.9mb ( 11 obs.)
 KERMADEC ISLANDS REGION           (177)

HBZ     8.96 195 P     07 49.50    1.4
OUZ     8.99 224 Pd    07 46.80   -1.6
KUZ     9.04 209 Pc    07 49.80    0.8
WIZ     9.19 200 P     07 52.90    2.3
PUZ     9.42 194 eP    07 53.30    0.2
                S     09 31.40
URZ     9.89 199 P     07 57.20   -0.7
                S     09 42.20
NOZ     9.99 194 P     08 00.00    1.0
                S     09 47.70
TAZ    10.05 202 P     08 01.60    2.1
WLZ    10.05 206 Pc    08 01.20    1.6
UTU    10.11 203 P     08 03.50    3.3X
PATZ   10.27 202 P     08 03.10    1.2
PAHZ   10.47 198 P     08 03.60   -0.3
MAHZ   10.58 194 eP    08 07.50    2.5
SVA    11.08 346 eP    08 09.20   -1.1
NGZ    11.21 203 P     08 11.00   -0.8
CNZ    11.24 203 P     08 12.00   -0.2
WAHZ   11.44 199 P     08 12.30   -1.9
NRZ    11.98 208 P     08 22.10    2.4
PGZ    12.32 198 eP    08 22.60   -0.7
MNG    12.55 200 P     08 24.20   -1.5
                S     10 28.80
KIW    12.95 202 P     08 28.20   -1.6
                S     10 37.40
MTW    13.04 199 P     08 29.40   -1.3
AMW    13.11 198 P     08 31.30   -0.1
BLW    13.24 199 P     08 33.30    0.5
DIW    13.24 205 P     08 30.90   -1.9
MRW    13.35 202 P     08 32.70   -1.2
                S     10 43.90
TCW    13.48 203 P     08 33.10   -2.1
QRZ    13.81 209 P     08 37.40   -1.2
THZ    14.46 206 P     08 43.70   -1.5
                S     11 05.50
LTZ    15.57 205 P     08 55.30   -1.1
                S     11 28.50
MQZ    16.24 203 eP    09 02.90    0.0
WVZ    16.42 208 P     09 04.00   -0.7
BWZ    17.98 207 P     09 18.60   -1.2
ODZ    18.12 205 P     09 22.90    1.7
MSCZ   18.63 207 P     09 26.20    0.0
LSCZ   18.66 207 eP    09 26.10   -0.5
MMCZ   18.67 208 eP    09 26.20   -0.5
SBCZ   18.67 207 eP    09 26.10   -0.5
TLC    18.85 207 eP    09 27.90   -0.5
TUZ    19.27 205 eP    09 34.40    2.2
SIZ    20.60 206 eP    09 47.10    2.3
ARMA   25.71 259 iPc   10 31.30   -0.1
        0.6s    19.00nm          4.8mb
CNB    27.63 249 iPc   10 49.00    0.9
CAN    27.93 249 iPc   10 51.10    0.4
BWA    28.35 251 eP    10 52.60   -1.8
TOO    30.93 244 iPd   11 15.40   -1.2
        0.7s    47.00nm          5.1mb
ADE    36.35 249 iPc   12 03.10    1.1
ASPA   42.52 266 iPd   12 51.70   -0.4
        0.6s    26.50nm          4.9mb
                i     13 23.70
                eS    18 27.90
WR2    43.35 271 iPd   12 59.00    0.4
        0.7s    30.30nm          4.9mb
                i     14 31.90
                eS    18 42.30
WRA    43.37 271 P     12 59.50    0.7
        1.0s    10.30nm          4.3mb
MTN    49.09 278 eP    13 43.50    0.8
        0.8s    52.00nm          5.0mb
SBA    49.43 184 iPd   13 56.40   12.0X
KLB    54.17 250 eP    14 20.10    0.6
        1.0s    41.00nm          4.7mb
BAL    55.30 251 eP    14 27.30   -0.1
        1.0s    67.00nm          4.9mb
MBL    55.62 263 iPc   14 30.80    1.1
        0.7s    32.00nm          4.8mb
CSY    56.10 207 iPd   14 47.20   14.7X
        0.6s    39.30nm
MRWA   56.29 253 eP    14 34.80    0.6
        1.0s    69.00nm          4.9mb
SPA    61.21 180 iPc   15 18.10   11.0X
        0.9s    38.64nm
MAW    73.42 201 P     16 30.00    8.8X
        1.1s    22.22nm          4.6mb
SOB1  124.43 127 ePKP  23 58.20   14.9X
LMN   126.40  53 ePKP  24 02.00   15.8X
KAF   142.96 341 iPKP  24 25.80    9.4X
        0.6s     6.00nm
NSS   143.76 352 ePKP  24 20.34    2.7X
NUR   144.72 340 iPKP  24 31.50   12.1X
        0.7s    48.50nm
UPP   147.14 345 iPKP  24 38.60   15.2X
NB2   147.22 351 PKP   24 40.00   16.4X
        0.7s    19.30nm
HFS   147.69 348 ePKP  24 39.70   15.4X
        0.5s     5.90nm
KIC   156.84 165 PKP   24 53.00   14.3X
TIC   157.04 164 PKP   24 53.50   14.6X
     S.D. = 1.3  on  54 of  69 obs.
-------------------------------------
&  NOV  04, 1993  23h 15m 38.65s
   34.621 N          116.661 W
   DEPTH =   6.2km
 SOUTHERN CALIFORNIA               ( 43)
     <PAS-P>. ML 3.3 (PAS), 3.2 (GS).

GSC     0.69 350 iPd   15 51.52   -0.9
PEC     0.84 210 iPc   15 53.95   -1.3
SSK     0.95 245 ePc   15 56.01   -1.2
                eS    16 08.79
PLM     1.28 188 ePd   16 02.05   -0.7
                eS    16 18.78
ISA     1.81 306 ePn   16 10.00   -0.7
                eS    16 36.64
ABL     2.12 277 ePn   16 13.83   -1.5
GLA     2.19 135 (P)   16 15.33   -0.7
TPNV    2.35   8 ePn   16 17.10   -1.4
BCH     2.87 282 ePn   16 24.79   -1.1
                eS    17 07.79
MTUM    3.13 331 (Pn)  16 30.18    0.6
                ePg   16 37.34
TNP     3.48 353 ePn   16 33.57   -1.1
MMPM    3.55 328 ePg   16 44.68    9.0
MEMM    3.55 329 (Pn)  16 34.15   -1.3
BONR    3.58 339 ePn   16 36.12    0.0
                ePg   16 46.29
ARUT    4.09  39 ePn   16 41.18   -2.1
MSU     5.30  42 ePn   16 59.28   -1.2
        16 obs. associated
-------------------------------------
*  NOV  05, 1993  00h 08m 27.25± 0.83s
   9.225 N ±10.5km  127.309 E ±15.1km
   DEPTH =  33.0km  (normal)
   4.4mb (  4 obs.)
 PHILIPPINE ISLANDS REGION         (248)
```

05d 00h

```
BIP      1.44 227 iPc    08 52.00    0.7
                  iS     09 08.00
PLP      3.00 310 ePd    09 13.50    0.0
CTB      3.68 237 eP     09 30.00    6.8X
MTN     22.25 170 eP     13 23.60    0.6
WR2     29.81 167 eP     14 31.90   -1.7
        0.6s     3.10nm          4.3mb
ASPA    33.32 169 eP     15 05.00    0.6
        1.0s     4.50nm          4.3mb
GUN     43.18 301 P      16 27.50    0.2
PKI     43.48 301 P      16 31.00    1.3
DMN     43.75 300 P      16 30.40   -1.4
HYB     48.03 285 eP     17 05.50   -0.2
                  e      17 40.00
GBA     49.02 280 P      17 12.00   -1.2
DAG     91.93 353 iPd    21 33.60    0.3
        0.6s     3.33nm          4.9mb
GEC2    98.14 322 eP     22 03.30    1.0
        1.4s     2.45nm          4.5mb
                  e      22 15.20
     S.D. = 1.1  on  12 of  13 obs.
-------------------------------------
&  NOV  05, 1993   00h 42m 07.08s
   58.301 N          152.840 W
   DEPTH =  45.9km
   3.6mb (  2 obs.)
 KODIAK ISLAND REGION              ( 13)
      <AEIC>. ML 3.3 (AEIC).

SYI      0.39  37 iP     42 16.18   -0.6
KDC      0.58 161 eP     42 18.12   -1.1
                  eS     42 28.60
CDD      0.76 327 eP     42 19.98   -1.6
                  eS     42 32.07
AUI      1.08 344 eP     42 25.53   -0.5
                  eS     42 39.69
AUE      1.10 346 eP     42 26.23    0.0
AGU      1.11 344 eP     42 26.35   -0.2
AUW      1.12 343 eP     42 25.86   -0.7
AUL      1.13 344 eP     42 26.78    0.1
MCNL     1.18 319 eP     42 25.45   -2.0
XLV      1.29  26 eP     42 30.09    1.0
OPT      1.37 352 eP     42 29.24   -0.9
                  eS     42 47.50
CNPM     1.48  33 eP     42 31.37   -0.4
HOM      1.50  24 eP     42 31.88    0.0
PDB      1.65 335 eP     42 31.80   -2.2
                  eS     42 52.18
INE      1.77 356 eP     42 34.43   -1.5
INW      1.78 355 eP     42 34.62   -1.4
BRLK     1.78  34 eP     42 34.90   -1.1
                  eS     42 56.82
ILIM     1.79 358 iP     42 34.91   -1.1
RED      2.13   1 eP     42 39.65   -1.2
RS2      2.17   1 eP     42 40.88   -0.7
RDW      2.19   0 eP     42 40.99   -0.9
REF      2.20   2 eP     42 40.04   -2.0
RDN      2.22   1 eP     42 41.39   -0.9
NCT      2.27 359 eP     42 40.64   -2.3
DFR      2.30   2 eP     42 42.34   -1.0
SEW      2.51  43 iP     42 44.19   -2.1
                  eS     43 11.87
NKA      2.58  18 eP     42 47.79    0.5
SLKM     2.59  30 iP     42 45.54   -1.9
BKG      2.79   6 eP     42 49.18   -1.3
MPA      2.83  38 eP     42 48.90   -1.9
CKL      2.92   5 eP     42 50.67   -1.6
SPU      2.92   8 eP     42 50.50   -1.7
CKT      2.93   6 eP     42 50.59   -1.8
CKN      2.95   6 eP     42 51.26   -1.4
BGL      2.98   4 iP     42 51.44   -1.7
CP2      2.99   6 eP     42 51.45   -1.9
CRP      3.00   6 eP     42 51.20   -2.2
CGLM     3.05   8 iP     42 52.37   -1.7
LTI      3.10  54 eP     42 52.89   -1.9
NCG      3.13   6 iP     42 53.49   -1.8
SVW      3.15 335 eP     42 52.23   -3.2
SUA      3.34  18 eP     42 56.61   -1.7
PMS      3.39  28 P      42 55.40   -3.4
PWL      3.44  40 iP     42 57.16   -2.3
SKT      3.75  10 eP     43 01.50   -2.4
PLRM     3.79  28 eP     43 01.64   -2.8
KNK      3.82  33 eP     43 02.17   -2.8
CFI      3.87  39 eP     43 02.60   -2.9
GHO      4.00  28 eP     43 04.95   -2.6
FID      4.07  50 eP     43 04.95   -3.4
SML      4.18  31 eP     43 07.97   -2.1
VZW      4.22  46 eP     43 07.46   -3.1
CVA      4.26  55 eP     43 08.58   -2.6
CUT      4.31  16 eP     43 09.35   -2.4
VLZ      4.35  46 eP     43 09.53   -2.8
SCM      4.49  36 iP     43 12.00   -2.4
KLU      4.73  44 iP     43 15.10   -2.7
TOA      5.06  38 P      43 20.70   -1.7
TZL      5.27  41 eP     43 23.93   -1.4
TRF      5.32  12 eP     43 23.46   -2.7
KTH      5.35   9 eP     43 25.18   -1.4
RND      5.48  19 eP     43 26.37   -2.0
DHY      5.49  27 eP     43 25.73   -2.9
GLB      5.53  51 eP     43 25.84   -3.2
WAX      5.54  63 eP     43 26.40   -2.8
SDG      5.57  37 eP     43 27.99   -1.6
TGL      5.66  60 eP     43 28.58   -2.3
MCK      5.77  18 eP     43 31.52   -0.9
PAX      5.92  35 eP     43 32.02   -2.6
BALM     5.98  58 eP     43 32.01   -3.4
CTGM     6.42  61 eP     43 38.83   -2.7
WRH      6.60  18 eP     43 40.10   -3.8
CCB      6.81  19 eP     43 42.84   -4.0
IL1      7.09  21 eP     43 46.56   -4.2
ILB      7.09  21 eP     43 46.63   -4.1
BC3      7.23  44 eP     43 49.85   -2.9
IM3      7.72 357 eP     43 55.90   -3.8
IMA      7.81 357 eP     43 56.64   -4.3
YKA     19.14  61 eP     46 25.60   -3.3
        0.5s     0.80nm          3.2mb
MBC     21.57  21 eP     46 54.50    0.5
        0.5s     4.00nm          4.1mb
        80 obs. associated
-------------------------------------
*  NOV  05, 1993   01h 37m 07.75± 1.00s
   40.043 N ±14.3km   25.207 E ± 5.8km
   DEPTH =  10.0km  (geophysicist)
 AEGEAN SEA                        (365)

EZN      0.89 104 ePn    37 24.30   -0.4
OUR      0.98 288 iPg    37 25.62   -0.8
                  iSg    37 40.72
ALN      1.07  37 ePg    37 26.32   -1.5
                  iSg    37 40.64
PAIG     1.18 265 ePb    37 29.60   -0.1
                  eSb    37 45.24
SOH      1.61 299 ePb    37 35.80   -0.6
                  eSb    37 58.72
SRS      1.63 312 ePb    37 37.88    1.3
                  eSb    37 58.04
MFT      1.75  64 ePn    37 40.00    1.6
KNT      2.08 303 ePn    37 43.80    0.6
                  eSn    38 12.68
     S.D. = 1.3  on   8 of   8 obs.
-------------------------------------
?  NOV  05, 1993   01h 51m 23.91± 3.04s
   16.193 N ±27.0km   99.036 W ±12.2km
   DEPTH =  33.0km  (normal)
 NEAR COAST OF GUERRERO, MEXICO  ( 58)

ACX      1.04 311 iPd    51 41.96   -0.2
                  iS     51 52.11
III      2.21 349 iP     51 58.52   -0.7
                  (S)    52 22.98
OXX      2.39  68 iPc    52 02.24    0.5
                  iS     52 35.35
PPM      2.88   8 iP     52 09.41    0.4
IIA      2.96   7 iP     52 10.72    1.0
UNM      3.12 357 (P)    52 13.00    0.7
IISM     3.20  29 (P)    52 11.22   -1.8
CRX      3.25 349 (P)    52 16.50    2.4X
MRX      4.05 330 (P)    52 30.46    5.3X
LVVM     4.30  35 (P)    52 38.50    9.8X
     S.D. = 1.2  on   7 of  10 obs.
-------------------------------------
   NOV  05, 1993   01h 58m 05.93± 0.35s
   44.231 N ± 3.2km   12.176 E ± 3.3km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                    (545)
      ML 3.5 (LDG), 3.5 (VIE). MD 3.5
      (TRI), 3.4 (ROM).

RSM      0.36 147 P      58 13.73    0.3
SFI      0.39 217 P      58 13.27   -0.6
PGD      0.48 223 P      58 15.07   -0.7
CRE      0.62 195 P      58 17.18   -1.4
ARV      0.92 143 P      58 23.02   -0.5
MME      1.06 269 P      58 28.84    2.7
BDI      1.15 262 P      58 28.94    1.5
ASS      1.21 163 P      58 28.18   -0.4
PII      1.30 247 P      58 30.23    0.3
VVI      1.76   6 P      58 36.86    0.2
SAL      1.81 320 P      58 38.34    1.0
TRI      1.86  37 ePnd   58 37.40   -0.7
                  ePg    58 40.70
                  ePgPg  58 46.00
                  i      59 01.30
                  iSg    59 09.10
MNS      1.88 169 P      58 38.63    0.2
RIY      1.93  54 ePn    58 38.20   -0.8
                  iSn    59 03.50
AQU      2.08 154 P      58 42.25    0.9
VOY      2.17  33 iPnc   58 42.10   -0.6
                  eSn    59 09.70
CEY      2.20  46 ePn    58 42.70   -0.3
        0.7s   130.00nm
                  ePg    58 50.00
                  eSn    59 10.90
FVI      2.40  10 P      58 46.38    0.5
LJU      2.46  42 ePn    58 47.20    0.4
        0.5s   110.00nm
                  e      58 55.00
                  eSn    59 16.80
                  iSn    59 17.00
                  eSg    59 28.00
VBY      2.53  59 ePn    58 47.30   -0.5
                  i(Sn)  59 17.20
PCP      2.62 278 P      58 51.19    2.1
OGA      2.76 343 iPnc   58 52.40    1.2
SDI      2.80 154 P      58 53.13    1.6
CKI      2.80 275 P      58 53.68    2.1
OSS      2.84 331 ePd    58 54.30    2.0
FIN      2.85 271 P      58 52.66    0.3
PGF      2.86 235 Pn     58 52.10   -0.4
                  Sn     59 26.00
VAI      2.92 305 P      58 53.88    0.7
VDL      2.95 321 iPd    58 55.00    1.1
KBA      2.96  16 iPnc   58 54.60    0.6
                  iPg    59 03.80
                  iSn    59 30.70
                  iSg    59 43.90
TMA      3.00 310 ePd    58 54.60    0.1
WTTA     3.06 353 iPnd   58 56.90    1.6
                  iPg    59 07.20
                  iSn    59 37.20
                  iSg    59 50.90
SQTA     3.07 348 iPnc   58 57.00    1.6
                  iPg    59 06.90
                  iSg    59 48.70
                  i      59 48.90
ROB      3.09 273 P      58 55.77    0.0
IMI      3.11 266 P      58 58.47    2.5
ZAG      3.13  58 e(Pn)  59 04.00    7.8X
                  iS     59 54.50
WATA     3.13 353 iPnc   58 58.30    1.9
PTJ      3.16  57 iPn    59 05.10    8.4X
                  iSn    59 53.30
MOTA     3.20 347 iPnd   58 59.30    1.9
                  iSg    59 53.20
ORO      3.29 297 P      58 58.38   -0.3
ORX      3.29 297 P      58 57.83   -0.8
ENR      3.42 272 P      59 00.89    0.5
SBF      3.44 266 Pn     59 01.10    0.4
                  Sn     59 38.40
STV      3.49 272 P      59 02.31    0.9
MMK      3.49 303 P      59 01.20   -0.4
BHB      3.57 282 P      59 02.50    0.1
RSP      3.63 286 P      59 01.17   -2.2
PZZ      3.65 276 P      59 03.64   -0.1
LSD      3.78 291 P      59 03.82   -1.9
DIX      3.84 300 ePc    59 09.20    2.5
FUR      3.98 351 iPd    59 32.80   24.4X
FRF      4.05 262 Pn     59 08.40   -0.9
                  Sn     59 53.00
LPG      4.06 290 Pn     59 08.40   -1.3
                  Sn     59 54.40
LPL      4.08 290 Pn     59 08.40   -1.5
                  Sn     59 53.90
EMS      4.14 298 ePc    59 12.50    1.8
ZLA      4.19 322 ePd    59 11.30    0.0
LMR      4.20 260 Pn     59 11.60    0.2
                  Sn     59 57.50
LRG      4.28 262 Pn     59 12.50    0.0
                  Sn     59 59.50
SLE      4.37 325 ePd    59 13.50   -0.3
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GEC2	4.73	12	Pn	59	17.70	-1.4
			Sn	00	13.30	
VKA	4.95	34	eP	59	35.00	12.9X
			e	00	17.00	
			e	02	21.00	
			i	02	42.40	
KHC	5.00	11	Pn	59	21.50	-1.2
			e	59	41.50	
			e	00	04.00	
			Sn	00	19.50	
			e	00	34.50	
			eSg	00	57.00	
BSF	5.20	316	Pn	59	24.60	-1.1
			Sn	00	21.30	
ZST	5.24	39	e(Pn)	59	35.70	9.6X
CDF	5.39	323	Pn	59	27.10	-1.2
			Sn	00	26.00	
GRF	5.50	354	ePn	59	33.60	3.7X
			e(Pg)	59	52.20	
			e(Sg)	00	28.10	
HAU	5.54	315	Pn	59	29.10	-1.3
			Sn	00	29.00	
PRU	5.98	15	ePn	59	46.50	9.9X
			e	00	00.00	
			Sn	00	47.00	
			eSg	01	24.00	
SMF	6.34	295	Pn	59	40.10	-1.6
			Sn	00	48.20	
LBF	6.38	298	Pn	59	40.40	-1.9
			Sn	00	49.10	
MOX	6.43	357	ePn	59	41.80	-1.2
			ePg	00	16.70	
			eSn	00	51.40	
			eSg	01	43.30	
LOR	6.56	300	Pn	59	43.00	-1.9
			Sn	00	54.30	
SSF	6.70	298	Pn	59	44.60	-2.2
			Sn	00	56.80	
AVF	6.71	296	Pn	59	45.10	-1.8
BRG	6.75	10	ePn	00	14.70	27.2X
			e	00	58.40	
			eSg	01	51.10	
BGF	6.97	293	Pn	59	48.10	-2.4
			Sn	01	03.40	

S.D. = 1.3 on 68 of 76 obs.

NOV 05, 1993 02h 01m 04.37± 0.30s
44.228 N ± 2.9km 12.173 E ± 2.8km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 4.0 (VIE), 3.7 (LDG).

RSM	0.36	146	P	01	12.30	0.5
SFI	0.38	217	P	01	12.27	0.0
CRE	0.62	195	P	01	16.04	-0.9
ARV	0.92	142	P	01	21.37	-0.6
MME	1.06	269	P	01	26.97	2.5
BDI	1.15	262	P	01	27.23	1.4
ASS	1.21	163	P	01	26.70	-0.2
PII	1.29	248	P	01	28.54	0.2
VVI	1.76	6	P	01	35.81	0.6
SAL	1.81	320	P	01	37.18	1.4
TRI	1.86	37	ePnd	01	36.40	-0.1
			ePg	01	39.80	
			iPgPg	01	46.00	
			eRRPg	01	57.70	
			i	02	00.20	
			iSg	02	08.80	
			e	02	16.00	
MNS	1.88	168	P	01	37.36	0.5
RIY	1.93	54	iPn	01	37.50	0.0
			iSn	02	02.20	
BOB	2.02	286	P	01	41.72	2.7
AQU	2.08	154	P	01	42.90	3.2X
VOY	2.18	33	iPnc	01	41.10	-0.1
CEY	2.20	46	ePn	01	41.30	-0.2
	0.7s	450.00nm				
			e(Pg)	01	45.80	
			eSn	02	10.00	
			eSg	02	18.60	
MDI	2.33	312	P	01	43.88	0.5
FVI	2.40	10	P	01	45.40	1.1
LJU	2.47	42	ePn	01	45.90	0.6
	0.5s	490.00nm				
			ePg	01	51.50	
			eSn	02	16.00	
			iSn	02	16.20	
			eSg	02	28.00	
RDP	2.50	171	P	01	46.93	1.1
VBY	2.54	59	ePn	01	46.60	0.4
			iSn	02	17.30	
PCP	2.62	278	P	01	49.07	1.6
OGA	2.76	343	ePn	01	50.50	0.8
SDI	2.79	154	P	01	51.54	1.5
CKI	2.80	275	P	01	51.31	1.3
SCE	2.83	354	ePn	01	52.00	1.4
OSS	2.84	331	ePc	01	52.60	1.8
FIN	2.85	271	P	01	51.26	0.5
PGF	2.86	235	Pn	01	50.70	-0.2
			Sn	02	23.90	
VAI	2.92	305	P	01	52.38	0.8
VDL	2.96	321	iPc	01	53.80	1.4
KBA	2.97	16	iPnc	01	53.60	1.1
			iPg	02	03.10	
			iSn	02	30.20	
			iSg	02	45.40	
TMA	3.00	310	ePd	01	53.40	0.5
WTTA	3.06	353	iPnc	01	55.80	2.0
			iPg	02	04.80	
			iSn	02	35.00	
			iSg	02	49.30	
SQTA	3.07	348	iPnd	01	55.50	1.6
			iPg	02	04.80	
			iSn	02	35.40	
			iSg	02	47.80	
ROB	3.09	273	P	01	54.65	0.5
IMI	3.10	266	P	01	54.28	-0.1
ZAG	3.13	58	e(Pn)	02	01.50	6.8X
			iS	02	51.60	
WATA	3.14	353	iPn	01	56.90	2.0
			iPg	02	07.50	
			iSn	02	37.50	
PTJ	3.16	57	iPn	02	01.70	6.5X
			iSn	02	51.40	
MOTA	3.21	347	iPnd	01	57.70	1.8
			i	02	37.80	
			i	03	09.80	
			i	03	28.00	
			iSn	03	47.60	
			iSg	04	00.00	
ORO	3.29	297	P	01	57.00	-0.1
ORX	3.29	297	P	01	56.12	-1.0
ENR	3.42	272	P	01	59.78	0.9
SBF	3.44	266	Pn	01	59.60	0.5
			Sn	02	37.80	
STV	3.48	272	P	02	00.60	0.8
MMK	3.49	303	ePd	01	59.50	-0.5
BHG	3.53	8	iPnd	02	02.00	1.7
DOI	3.54	276	P	02	01.52	0.9
BHB	3.56	282	P	02	00.01	-0.9
RSP	3.63	286	P	01	59.91	-1.9
PZZ	3.65	276	P	02	01.56	-0.6
LSD	3.77	291	P	02	02.34	-1.8
DIX	3.84	300	ePd	02	05.90	0.8
RRL	3.91	282	P	02	05.82	-0.2
FUR	3.99	351	iPc	02	23.60	16.8X
FRF	4.05	262	Pn	02	07.90	0.2
			Sn	02	52.20	
LPG	4.06	290	Pn	02	07.00	-1.1
			Sn	02	52.70	
LPL	4.08	290	Pn	02	07.30	-1.0
			Sn	02	53.00	
EMS	4.14	298	ePc	02	11.00	1.8
ZLA	4.19	322	ePd	02	10.20	0.4
LMR	4.20	260	Pn	02	09.50	-0.3
			Sn	02	56.50	
LRG	4.28	262	Pn	02	11.20	0.3
			Sn	02	58.20	
SLE	4.37	325	ePc	02	12.20	-0.1
FEL	4.66	323	ePn	02	16.00	-0.5
GEC2	4.74	12	Pn	02	16.70	-0.9
			Sn	03	11.80	
WET	4.94	5	iPnc	02	19.50	-0.9
VKA	4.96	34	iPnc	03	16.40	55.8X
			i	03	50.00	
			i	04	28.60	
KHC	5.00	11	Pn	02	20.50	-0.7
			ePg	02	40.00	
			e	03	03.00	
			Sn	03	17.50	
			Sg	03	50.50	
			e	04	27.50	
BSF	5.20	316	Pn	02	23.30	-0.8
			Sn	03	19.10	
ZST	5.24	39	e(Pn)	02	34.10	9.5X
			i	03	40.70	
			i	03	44.80	
			Lg	04	11.00	
CDF	5.39	323	Pn	02	26.10	-0.7
			Sn	03	24.20	
GRF	5.50	354	ePn	02	27.30	-1.1
			ePg	02	51.70	
			eSn	03	26.90	
			e(Sg)	04	02.40	
HAU	5.54	315	Pn	02	28.00	-0.9
			Sn	03	27.40	
PRU	5.99	15	Pn	02	33.90	-1.2
	0.9s	40.00nm				5.1mb X
			iPg	02	58.30	
			Sn	03	38.50	
			e	04	00.00	
			Sg	04	27.60	
SMF	6.34	295	Pn	02	38.70	-1.5
LBF	6.38	298	Pn	02	39.20	-1.5
MOX	6.43	357	ePn	02	39.00	-2.4
			ePg	03	09.80	
			iSn	03	49.40	
RUP	6.50	329	ePn	02	42.10	-0.3
LOR	6.56	301	Pn	02	41.60	-1.7
SSF	6.70	298	Pn	02	43.50	-1.8
AVF	6.71	296	Pn	02	43.90	-1.4
BRG	6.76	10	ePn	02	43.50	-2.5
			e	03	13.70	
			e	03	57.50	
			e	04	56.80	
BGF	6.97	293	Pn	02	47.00	-2.0
MAF	7.07	290	Pn	02	48.40	-2.0
OHR	7.08	113	ePn	02	49.00	-1.6
SKO	7.15	105	ePn	02	50.00	-1.5
TCF	7.33	290	Pn	02	52.30	-1.7
HYF	7.33	298	Pn	02	53.00	-1.0

S.D. = 1.2 on 84 of 90 obs.

NOV 05, 1993 02h 02m 14.33± 0.76s
44.381 N ± 7.6km 12.139 E ± 5.8km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 4.1 (VIE), 3.8 (LDG), 3.5 (STR).

RIY	1.87	58	i(Pn)	02	47.50	0.9
			iSn	03	12.00	
CEY	2.11	49	e(Pn)	02	57.50	7.3X
			eSg	03	30.50	
VBY	2.48	62	iP	03	06.10	10.7X
			i(Sn)	03	23.10	
			i	03	40.00	
KBA	2.83	17	iPgc	03	14.70	14.2X
			iSn	03	42.10	
			iSg	03	55.60	
WTTA	2.90	353	iPg	03	16.70	15.1X
			iSg	03	57.70	
SQTA	2.91	347	iPg	03	16.10	14.4X
			iSn	03	43.00	
			iSg	03	57.40	
PGF	2.93	232	Pn	03	00.10	-1.8
			Sn	03	33.20	
WATA	2.98	353	iPgc	03	17.00	14.4X
			iSg	03	59.40	
SAOF	3.32	265	P	03	08.62	1.2
AUTN	3.41	265	P	03	09.54	0.7
SBF	3.43	263	Pn	03	08.60	-0.3
			Sn	03	47.00	
AURF	3.50	264	P	03	10.92	1.0
TOUF	3.54	266	P	03	11.56	1.0
MVIF	3.62	264	P	03	12.87	1.1
CALN	3.84	262	P	03	15.80	1.0
LPG	3.98	288	Pn	03	17.00	0.0
			Sn	04	01.60	
LPL	4.00	288	Pn	03	17.50	0.3
			Sn	04	02.00	
FRF	4.05	260	Pn	03	17.60	0.0
			Sn	04	02.20	
LMR	4.20	258	Pn	03	20.00	0.1
			Sn	04	06.20	
LRG	4.28	259	Pn	03	20.70	-0.2
			Sn	04	08.00	
BSF	5.07	315	Pn	03	33.10	0.8
			Sn	04	28.60	
CDF	5.25	322	Pn	03	36.00	1.2
			Sn	04	33.80	

05d 02h

HAU	5.41	314	Pn	03 37.90	0.9
			Sn	04 36.80	
SRO	5.50	49	eP	03 37.20	-1.0
			e	03 58.00	
SMF	6.25	294	Pn	03 48.00	-0.9
			Sn	04 55.20	
LBF	6.28	297	Pn	03 48.70	-0.6
			Sn	04 58.50	
LOR	6.47	299	Pn	03 51.20	-0.7
			Sn	05 01.50	
SSF	6.61	297	Pn	03 53.10	-0.8
			Sn	05 04.00	
AVF	6.62	294	Pn	03 53.30	-0.7
			Sn	05 05.30	
WLF	6.68	324	iP	03 58.00	3.1X
BGF	6.89	292	Pn	03 56.90	-0.9
			Sn	05 10.70	
MAF	7.00	289	Pn	03 58.00	-1.3
			Sn	05 12.70	
HYF	7.24	297	Pn	04 03.00	0.3
			Sn	05 20.10	
TCF	7.25	289	Pn	04 01.90	-1.0
			Sn	05 19.90	

S.D. = 0.9 on 27 of 34 obs.

NOV 05, 1993 02h 07m 05.58± 0.38s
19.020 N ± 3.1km 66.008 W ± 2.2km
DEPTH = 48.9 ± 4.5 km
4.9mb (54 obs.)
PUERTO RICO REGION (90)
Felt throughout Puerto Rico.

LPR	0.72	169	P	07 20.10	0.4
APR	0.89	231	P	07 22.50	0.6
SJG	0.91	188	eP	07 22.63	0.3
			eS	07 34.79	
CPD	0.98	175	P	07 23.70	0.5
LRS	1.07	228	P	07 24.60	0.1
CLLP	1.08	210	P	07 25.30	0.7
PNP	1.15	214	P	07 26.30	0.7
MGP	1.44	226	P	07 30.00	0.4
SKI	3.53	118	eP	08 00.41	1.0
			eS	08 47.89	
ANG	4.39	114	eP	08 11.75	0.4
			eS	08 59.35	
BPA	4.41	116	eP	08 11.90	0.2
			S	09 06.00	
PAG	5.09	125	eP	08 21.30	-0.1
SFG	5.35	120	eP	08 25.40	0.4
DEG	5.43	119	eP	08 25.58	-0.6
MGG	5.44	124	eP	08 26.64	0.4
FDF	6.31	132	eP	08 37.20	-1.3
CRM	6.46	130	eP	08 40.27	-0.3
BIM	6.51	133	eP	08 40.58	-0.7
MVM	6.61	131	eP	08 41.60	-1.1
SLW	6.95	135	eP	08 49.61	2.1
SLB	7.03	137	eP	08 47.70	-0.9
SVV	7.30	140	eP	08 51.02	-1.3
			eS	11 34.23	
SVB	7.32	141	eP	08 51.17	-1.4
GRW	8.00	148	eP	09 00.38	-1.8
CANV	8.39	199	eP	09 08.90	1.5
			eS	10 42.20	
MORO	8.40	196	iP	09 08.30	0.6
			iS	10 37.50	
CAR	8.51	186	iP	09 08.50	-0.7
LLAV	8.53	185	eP	09 07.90	-1.5
GUAC	8.86	188	eP	09 13.20	-0.9
OLLA	8.98	185	eP	09 15.70	0.0
			eS	10 48.70	
GUAN	9.02	178	eP	09 16.10	-0.1
TCE	9.24	153	eP	09 19.30	0.2
TPR	9.28	146	eP	09 22.28	2.6
TBH	9.74	150	eP	09 27.94	2.0
CEOS	10.18	193	eP	09 31.70	-0.4
SDV	11.03	205	eP	09 42.70	-1.0
			eS	11 43.50	
UPA	16.47	235	eP	10 54.86	-0.1
HBF	18.91	320	eP	11 23.25	-1.8
			e	11 29.56	
			eS	14 31.26	
SGS	19.17	320	eP	11 26.79	-1.3
			e	11 33.46	
			eS	14 36.96	
LHS	20.25	322	ePc	11 38.32	-1.2
			i	11 47.69	
			eS	15 02.07	
JSC	20.37	321	ePd	11 39.60	-1.2
			e	11 49.34	
			S	15 09.01	
CEH	20.39	328	eP	11 39.70	-1.2
	0.4s	215.23nm		5.8mb	
PRM	20.91	319	eP	11 45.28	-1.0
CBN	21.53	335	eP	11 52.00	-0.4
			e	15 34.00	
CVL	21.79	333	eP	11 54.62	-0.5
			e	12 09.67	
			eS	15 41.65	
BLA	22.09	328	ePd	11 58.38	0.3
	0.5s	154.87nm		5.7mb	
NAV	22.36	328	eP	12 01.32	0.6
MYNC	22.66	319	ePc	12 04.40	0.6
	0.5s	37.23nm		5.1mb	
PAL	22.93	345	eP	12 06.46	0.2
			e	12 24.34	
			eS	16 07.72	
GPD	23.09	344	eP	12 06.15	-1.7
			e	12 27.23	
			eS	16 10.09	
CRNY	23.14	345	(P)	12 08.40	0.1
			e	12 27.18	
			eS	16 15.78	
TBR	23.14	344	eP	12 06.02	-2.3
			i	12 27.95	
			eS	16 12.63	
LSCT	23.41	346	eP	12 11.95	1.0
	0.4s	66.11nm		5.5mb	
			e	12 31.71	
			eS	16 20.31	
MCWV	23.79	333	(P)	12 15.96	1.4
	0.6s	65.03nm		5.3mb	
			e	12 36.77	
			eS	16 26.95	
HRV	23.88	350	(P)	12 08.46	-7.0X
	0.7s	42.45nm		5.1mb	
			e	12 37.50	
			(S)	16 29.96	
BINY	24.61	342	(P)	12 22.70	0.1
	0.8s	58.89nm		5.2mb	
			eS	16 50.80	
LBNH	25.63	350	(P)	12 32.08	-0.1
	0.5s	35.85nm		5.2mb	
			e	13 03.79	
			eS	17 07.29	
YSNY	25.68	338	eP	12 33.20	0.5
	0.5s	30.51nm		5.1mb	
			e	13 00.72	
OXF	25.88	311	ePd	12 34.60	0.0
RSNY	26.43	346	eP	12 38.00	-1.6
	0.5s	19.67nm		4.9mb	
			e	13 14.90	
			eS	17 43.48	
LMN	26.78	2	eP	12 42.50	-0.2
ELC	27.27	317	eP	12 46.80	-0.5
			e	13 21.26	
			(S)	17 47.07	
GAC	27.74	346	eP	12 52.50	1.0
FVM	28.45	317	eP	12 57.38	-0.6
	0.6s	35.15nm		5.2mb	
			e	13 38.64	
			eS	18 21.81	
MIAR	28.94	308	(P)	13 02.83	0.4
	1.0s	6.08nm		4.2mb	
			i	13 34.74	
TUL	31.16	309	iPd	13 22.10	0.0
PCO	32.36	309	iPd	13 32.60	0.0
NNA	32.61	200	iPc	13 33.20	-1.7
MEO	32.84	305	iPd	13 36.00	-0.9
WMOK	32.98	305	ePd	13 36.80	-1.2
	0.7s	9.00nm		4.7mb	
LPAZ	35.15	184	P	13 50.80	-6.7X
			i	13 55.80	
LPB	35.39	183	P	13 58.00	-1.3
JAQ	35.52	350	eP	13 59.00	-0.6
CNCB	35.66	183	P	14 01.20	-0.6
LTX	35.72	294	eP	14 00.69	-1.1
			ePcP	16 29.57	
SOB1	37.42	136	eP	14 16.50	0.5
ALQ	39.09	302	ePd	14 30.28	0.2
	0.8s	4.84nm		4.4mb	
			ePcP	16 39.52	
ULM	39.19	330	eP	14 32.00	1.6
GLD	39.52	310	iPc	14 34.58	1.0
	1.5s	35.19nm		5.0mb	
RSSD	40.41	317	ePd	14 40.57	-0.3
	0.8s	6.02nm		4.4mb	
			ePcP	16 44.41	
PV08	41.70	307	eP	14 52.09	0.4
PV10	41.94	307	eP	14 53.58	0.0
PV09	42.04	307	ePd	14 54.93	0.4
TUC	42.18	297	ePc	14 57.81	2.4
	0.7s	6.21nm		4.4mb	
SRU	43.25	307	eP	15 04.32	0.1
			ePcP	16 53.07	
PPD	43.26	160	eP	15 02.60	-1.5
EMUT	43.65	308	eP	15 07.62	0.2
DAU	44.13	309	ePd	15 11.82	0.4
MSU	44.36	306	ePd	15 13.70	0.4
			ePcP	16 57.71	
FRB	44.73	358	eP	15 16.00	0.6
	0.9s	17.00nm		4.9mb	
ARUT	45.19	305	iPd	15 20.26	0.4
DUG	45.23	308	iPd	15 20.20	0.1
	0.6s	4.89nm		4.5mb	
			PcP	16 57.89	
MEMT	45.52	316	ePd	15 23.20	0.8
HVU	45.60	310	ePd	15 22.82	-0.1
GLA	45.65	298	ePd	15 24.54	1.2
TPMT	45.69	315	iPd	15 25.70	1.9
SXM	45.87	317	iPd	15 25.90	0.8
LTMT	45.92	314	ePd	15 27.30	1.6
BGMT	46.11	315	iPd	15 28.00	1.0
			e	17 03.80	
MCMT	46.52	314	iPd	15 31.50	1.2
LRM	46.57	316	iPd	15 31.50	0.8
			e	17 05.20	
HBMT	46.67	316	iPd	15 32.50	1.0
BUT	46.71	316	ePd	15 32.70	1.0
TPNV	47.26	303	eP	15 37.35	1.1
	0.8s	10.65nm		4.9mb	
PLM	47.38	298	eP	15 38.49	1.3
PEC	47.67	299	eP	15 40.10	0.8
	0.8s	19.81nm		5.2mb	
BONR	49.02	304	eP	15 50.42	0.4
NEW	50.37	318	iPd	15 59.63	-0.2
	0.8s	126.86nm		6.0mb X	
LNOR	50.49	314	P	16 00.61	-0.2
DPW	50.95	317	eP	16 03.59	-0.7
JBO	51.46	313	P	16 07.73	-0.4
SAW	51.69	316	P	16 09.40	-0.5
ORV	51.70	306	eP	16 10.72	0.7
VGB	52.12	313	eP	16 13.15	0.0
CROR	52.16	313	P	16 13.85	0.4
EBG	52.27	315	P	16 14.52	0.2
VBEM	52.59	313	P	16 17.30	0.5
FMW	53.01	315	P	16 19.32	-0.7
LON	53.07	315	eP	16 19.28	-1.0
SSOR	53.16	312	P	16 20.37	-0.6
RMW	53.21	316	eP	16 19.72	-1.6
JCW	53.46	316	P	16 20.95	-2.0
KMPM	53.79	307	eP	16 25.30	-0.3
RNO	53.92	311	P	16 26.57	0.1
KMOR	54.01	313	P	16 27.25	0.1
MCW	54.15	317	P	16 26.35	-1.7
STW	54.59	316	P	16 30.65	-0.6
YKA	54.73	335	eP	16 30.80	-1.3
	0.8s	16.50nm		5.1mb	
RES	57.83	351	eP	16 53.00	-1.1
	1.0s	5.00nm		4.6mb	
EKA	59.17	36	Pc	17 04.20	0.5
	1.0s	5.20nm		4.6mb	
GRR	59.57	45	eP	17 06.50	-0.1
FLN	59.85	44	eP	17 08.50	0.0
MFF	59.91	47	eP	17 09.20	0.3
LDF	60.08	44	eP	17 10.00	0.0
EPF	60.10	51	eP	17 10.90	0.6
	0.7s	7.95nm		5.0mb	
TIC	60.46	93	P	17 13.10	-0.1
LIC	60.58	94	P	17 14.00	0.0
LPO	60.75	49	eP	17 14.80	0.1
	0.9s	11.95nm		5.0mb	
KIC	60.81	93	P	17 15.80	0.3
	0.4s	3.00nm		4.8mb	
RJF	61.00	48	eP	17 16.30	-0.1
	0.8s	7.10nm		4.8mb	
CAF	61.38	49	eP	17 19.10	0.0
TCF	61.52	47	eP	17 19.70	-0.3
	0.7s	5.30nm		4.8mb	
MAF	61.77	47	eP	17 21.20	-0.4
BGF	61.97	47	eP	17 22.50	-0.4
	0.4s	2.50nm		4.7mb	

```
AVF    62.32  47 eP    17 24.80  -0.4
DAG    62.41  11 iPc   17 25.20  -0.1
       0.8s    24.63nm          5.4mb
SSF    62.43  46 eP    17 25.60  -0.4
SMF    62.66  47 eP    17 27.10  -0.4
       0.8s     4.45nm          4.6mb
LOR    62.68  46 eP    17 27.10  -0.5
       0.5s     3.00nm          4.7mb
MBC    63.28 348 eP    17 32.00   0.9
       0.8s    12.00nm          5.0mb
ENN    64.11  42 eP    17 37.00   0.1
       0.7s     3.70nm          4.5mb
INK    64.20 338 eP    17 36.50  -0.7
       1.0s    18.00nm          5.1mb
HAU    64.37  45 eP    17 38.40  -0.3
BSF    64.67  45 eP    17 39.90  -0.9
       0.8s     3.65nm          4.5mb
LPL    64.68  48 eP    17 41.50   0.5
       1.0s     8.20nm          4.7mb
LPG    64.69  48 eP    17 41.70   0.5
WTS    64.70  41 eP    17 41.00   0.3
       0.7s     9.60nm          4.9mb
CDF    64.98  45 eP    17 42.40  -0.4
BALM   66.94 329 (P)   17 55.17   0.1
NB2    67.37  31 P     17 57.80   0.1
       0.7s     4.40nm          4.6mb
GRF    67.53  43 ePd   17 58.60  -0.3
       1.9s    37.00nm          5.1mb
     Z 20s      0.10um          4.0Msz
SQTA   67.68  46 iPc   18 00.30   0.2
       0.9s    11.70nm          4.9mb
                i      18 18.80
WTTA   67.97  46 iPc   18 02.00   0.1
                i      18 18.90
CLL    68.57  41 eP    18 06.00   0.7
KLU    68.67 330 eP    18 05.66  -0.2
TOA    68.78 330 eP    18 07.00   0.5
KBA    69.15  46 iPc   18 09.20   0.0
       1.0s    10.60nm          4.7mb
BRG    69.20  42 eP    18 09.40   0.3
       1.3s    14.00nm          4.7mb
                e      18 30.00
GEC2   69.22  44 ePd   18 09.20  -0.3
       1.0s     3.16nm          4.2mb
                e      18 12.50
                e      18 16.40
                e      18 22.80
                e      18 25.20
                e      18 30.70
                e      18 34.20
FBA    69.47 333 ePd   18 09.82  -0.8
       0.9s    16.67nm          5.0mb
PRU    69.65  43 eP    18 00.00 -12.0X
PMR    70.20 330 ePc   18 14.77  -0.3
       1.2s    48.18nm          5.3mb
ZST    71.54  44 eP    18 23.50   0.1
CRP    71.68 329 eP    18 22.49  -1.7
IMA    71.85 335 iPd   18 24.78  -0.4
       1.1s    19.75nm          5.0mb
SRO    72.40  45 eP    18 28.70   0.2
OJC    72.98  42 eP    18 32.70   0.8
SVW    73.37 330 iPd   18 33.08  -0.9
       0.8s    36.35nm          5.4mb
PSZ    73.43  44 eP    18 35.60   0.9
SPC    73.44  43 eP    18 36.20   1.4
SDF    73.53  24 iP    18 35.50   0.7
KAF    74.46  29 eP    18 40.00  -0.2
UZH    74.88  43 eP    18 44.00   1.1
       1.2s    25.00nm          5.0mb
                e      19 03.20
OHR    75.40  51 eP    18 45.00  -1.2
SKO    75.69  50 eP    18 48.50   0.8
MLR    78.02  46 iPc   19 00.00  -0.8
ILT    80.69 339 iPd   19 15.00   0.5
       1.4s    27.00nm          5.0mb
OBN    81.58  35 eP    19 20.00   0.6
       1.4s    70.00nm          5.5mb
MOS    81.89  34 eP    19 23.00   2.0
       1.5s    60.00nm          5.4mb
TIK    89.01 355 iPc   19 57.00   0.9
       1.2s    22.00nm          5.4mb
NRI    89.90   9 iPc   20 01.70   1.4
GKN   125.30  32 PKP   26 03.00  -0.3
       0.6s    14.00nm
KKN   125.80  32 PKP   26 04.60   0.2
DMN   125.86  32 PKP   26 04.80   0.2
GUN   125.99  31 PKP   26 05.20   0.2
PKI   126.04  32 PKP   26 04.80  -0.3
GBA   131.55  51 PKP   26 15.00  -0.3
ARMA  144.13 244 ePKP  26 36.00  -2.2X
       0.7s    13.00nm
                e      26 51.50
CTA   149.60 263 ePKPc 26 48.00   0.8
                i      26 52.00
STK   152.07 237 ePKP  26 55.70   5.1X
       0.8s    10.00nm
WR2   160.77 264 iPKPd 27 01.80   0.0
       1.0s     5.50nm
     S.D. = 0.9  on 196 of 201 obs.
-----------------------------------
*  NOV  05, 1993  03h 38m 52.91± 0.94s
   38.087 S ±11.7km  177.164 E ± 9.7km
   DEPTH =  96.0 ± 10.6 km
   4.4mb (  1 obs.)
 NORTH ISLAND, NEW ZEALAND        (159)
URZ     0.18 194 Pc    39 06.20  -0.3
                S     39 13.30
TAZ     0.54 254 P     39 08.10  -0.6
PATZ    0.77 247 P     39 10.40  -0.6
PAHZ    0.78 186 P     39 12.60   1.6
PUZ     0.86  89 P     39 11.70  -0.1
                eS    39 26.70
NOZ     0.87 128 P     39 13.10   1.3
HBZ     1.02  62 P     39 12.80  -0.7
NGZ     1.64 228 P     39 22.30   1.0
CNZ     1.68 228 P     39 22.90   1.1
WAHZ    1.73 201 P     39 22.40   0.1
BSZ     2.44 225 P     39 31.80   0.1
PGZ     2.62 195 eP    39 32.20  -1.9
MNG     2.84 207 P     39 35.80  -1.4
                eS    40 09.40
QRZ     4.51 231 eP    39 56.60  -3.6X
WR2    41.15 284 eP    46 29.80   0.6
       0.3s     2.00nm          4.4mb
     S.D. = 1.2  on  14 of  15 obs.
-----------------------------------
   NOV  05, 1993  03h 50m 54.50± 0.24s
   46.397 N ± 2.6km    6.291 E ± 2.5km
   DEPTH =   4.6 ±  2.0 km
 SWITZERLAND                      (544)
     ML 3.2 (LDG), 3.0 (STR).
EMS     0.55 126 ePc   51 05.20  -0.4
RSL     0.75 162 Pg    51 08.49  -0.9
DIX     0.84 112 ePc   51 10.50  -0.9
LPG     0.96 160 Pg    51 12.50  -0.9
LOMF    1.02  21 Pg    51 16.07   1.7
                Sg    51 29.78
LSD     1.12 147 P     51 15.15  -1.0
                S     51 29.49
MMK     1.21 106 ePd   51 17.60  -0.1
BBS     1.36  38 Pg    51 21.75   1.7
                Sg    51 39.24
ORX     1.40 122 P     51 20.87  -0.1
                S     51 38.66
RSP     1.42 151 P     51 21.51   0.4
                S     51 39.48
BSF     1.48  13 Pn    51 21.70  -0.2
                Pg    51 23.70
                Sg    51 43.30
RRL     1.52 167 P     51 23.35   0.7
MOF     1.56  21 Pn    51 22.84  -0.3
                Sg    51 46.99
HAU     1.61   1 Pn    51 23.90   0.2
                Pg    51 26.40
                Sg    51 48.00
SSB     1.66 228 Pn    51 24.04  -0.4
                Pg    51 26.75
                Sg    51 47.64
LBF     1.70 291 Pn    51 25.90   0.9
                Pg    51 28.40
                Sg    51 50.60
BHB     1.70 156 P     51 26.00   1.0
SMF     1.71 279 Pn    51 25.80   0.6
                Pg    51 29.00
                Sg    51 50.20
ZLA     1.80  52 ePd   51 25.80  -0.7
TMA     1.82  98 eP    51 28.80   1.9
VITF    1.83 354 Pn    51 27.21   0.3
LOR     1.88 298 Pn    51 29.00   1.3
                Pg    51 31.90
                Sg    51 56.20
FEL     1.89  38 ePn   51 26.40  -1.5
PLDF    1.90 258 Pg    51 31.43   3.4X
                Sg    51 57.32
ECH     1.91  18 Pn    51 27.47  -0.6
PZZ     1.98 163 P     51 30.58   1.4
COLF    2.01 245 Pn    51 29.17  -0.4
                Pg    51 34.18
                Sg    52 01.13
SSF     2.03 290 Pn    51 30.40   0.6
                Pg    51 34.80
                Sg    52 00.60
SLE     2.03  47 ePd   51 28.40  -1.5
AVF     2.06 282 Pn    51 30.90   0.6
                Pg    51 35.70
                Sg    52 01.20
CDF     2.12  18 Pn    51 30.30  -0.9
                Pg    51 36.00
                Sg    52 02.00
WLS     2.14  19 Pn    51 30.51  -1.0
VDL     2.20  87 eP    51 36.10   3.6X
AGO     2.22 262 Pn    51 32.36  -0.2
                Pg    51 39.75
ENR     2.31 159 P     51 34.92   0.9
PYM     2.38 255 Pg    51 41.32   6.5X
                Sg    52 10.98
BGF     2.39 275 Pn    51 35.20   0.3
                Pg    51 42.00
                Sg    52 11.30
LBL     2.43 242 Pn    51 34.66  -0.9
                Pg    51 40.45
                Sg    52 12.85
PCP     2.44 139 P     51 34.65  -1.1
FIN     2.57 148 P     51 40.10   2.5
MAF     2.59 267 Pn    51 37.70  -0.1
                Pg    51 45.40
                Sg    52 17.60
SBF     2.66 162 Pg    51 44.50   5.6X
                Sg    52 17.60
OSS     2.67  82 eP    51 45.00   5.8X
IMI     2.73 155 P     51 40.92   1.0
TCF     2.83 269 Pn    51 41.20  -0.1
                Pg    51 49.50
                Sg    52 24.90
FRF     2.85 175 Pn    51 40.50  -1.0
                Pg    51 47.90
                Sn    52 14.10
                Sg    52 23.60
LRG     2.94 179 Pg    51 49.30   6.5X
                Sn    52 16.40
                Sg    52 28.40
LMR     3.07 177 Pn    51 42.80  -1.8
                Pg    51 53.00
                Sn    52 18.80
                Sg    52 29.10
LSF     3.30 269 Pn    51 47.80  -0.2
                Pg    51 58.00
                Sg    52 39.60
CAF     3.31 245 Pn    51 47.70  -0.4
                Pg    51 57.70
                Sg    52 39.00
RJF     3.51 254 Pn    51 50.80  -0.1
                Pg    52 01.50
                Sg    52 46.20
LPO     3.97 246 Pn    51 57.20  -0.3
                Pg    52 10.20
                Sg    53 00.90
LFF     4.16 251 Pg    52 13.10  13.1X
                Sg    53 08.30
MFF     4.45 275 Pn    52 04.30   0.1
FLN     5.16 300 Pn    52 13.90  -0.3
                Sg    53 36.80
GRR     5.25 295 Pn    52 14.80  -0.7
                Sg    53 41.80
LPF     5.26 291 Pn    52 14.10  -1.5
                Sg    53 41.40
GEC2    5.58  61 Pg    52 40.00  19.7X
                Sn    53 21.70
                Sg    53 49.90
KHC     5.62  58 ePn   52 40.00  19.1X
                e     53 19.00
                eSg   53 53.50
     S.D. = 1.0  on  50 of  59 obs.
-----------------------------------
?  NOV  05, 1993  04h 01m 19.27± 1.14s
   40.572 N ± 8.8km   23.327 E ±14.3km
   DEPTH =  10.0km  (geophysicist)
 GREECE                           (364)
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05d 04h

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OUR      0.55 115 ePg   01 30.37  -0.1
                  eSg   01 37.64
SRS      0.58  20 ePg   01 31.16   0.1
                  eSg   01 39.32
KNT      0.67 331 ePg   01 32.56  -0.1
                  eSg   01 41.36
PAIG     0.70 157 ePg   01 33.16   0.1
                  eSg   01 43.24
     S.D. = 0.2  on   4 of   4 obs.
-------------------------------------
   NOV  05, 1993  04h 01m 42.86± 0.43s
   24.199 S ± 4.5km   66.986 W ± 8.7km
   DEPTH = 188.8 ±  5.6 km
   4.5mb (  7 obs.)
 SALTA PROVINCE, ARGENTINA        (129)

SLA      1.46 111 iPd   02 17.00   1.3
                  (S)   02 43.00
HJA      1.75  56 iPd   02 19.90   1.6
                  S     02 43.90
FSA      2.07 155 iPd   02 23.50   1.9
YJA      2.44  34 ePd   02 26.90   0.7
MOCB     3.19  23 P     02 35.80   0.6
CYA      4.36 166 ePd   02 50.60   1.1
RTPR     6.09 176 eP    03 11.40  -0.5
                  S     03 19.00
RTLL     7.22 190 iPc   03 26.00  -0.9
CNCB     7.41 353 iPd   03 30.00   0.1
                  S     04 52.00
TCA      7.42 164 iPc   03 28.20  -1.4
                  (S)   04 48.00
RTCB     7.43 192 iPc   03 29.00  -0.8
CFA      7.46 188 iPc   03 29.60  -0.5
                  S     04 50.80
LPB      7.70 352 iPd   03 33.30  -0.3
                  S     05 00.20
LPAZ     7.94 352 iPd   03 35.70  -1.4
                  S     05 00.20
MRA      8.26 172 e(P)  03 39.60  -0.8
ARE      8.78 330 eP    03 45.00  -2.6
                  iS    05 18.00
MDZ      8.81 190 eP    03 49.20   1.6
RFA     10.61 187 ePc   04 09.00  -2.2
PPD     14.58  85 eP    05 01.30  -0.3
                  e     05 04.00
NNA     15.33 321 eP    05 09.77  -1.1
         0.6s     7.33nm          4.3mb
CACB    18.82  86 iPc   05 49.20  -1.6
                  i     05 53.80
BAO     19.77  68 eP    06 03.50   3.0X
                  e     06 07.30
                  e     06 14.40
                  i     06 21.90
SOB1    29.02  64 eP    07 25.20  -2.2
HBF     58.23 347 eP    11 17.71  -1.8
SGS     58.51 347 eP    11 20.93  -0.5
MIAR    63.64 336 eP    11 52.88  -3.0X
         0.6s     4.12nm          4.5mb
UYO     63.65 335 iPd   11 55.00  -0.9
LTX     63.85 324 eP    11 55.42  -2.0
LST     64.10 340 eP    11 58.52  -0.2
ELC     64.64 340 eP    12 00.39  -1.8
KIC     67.80  72 P     12 22.00  -0.7
ALQ     69.71 326 ePd   12 34.77   0.5
         0.8s     8.40nm          4.5mb
TUC     70.04 321 eP    12 37.79   1.6
         1.1s     5.99nm          4.3mb
GLA     72.93 319 eP    12 53.90   0.6
PV08    73.64 327 eP    12 58.47   0.8
PV09    73.83 327 eP    12 59.75   1.1
PEC     74.92 319 eP    13 05.99   1.3
         0.7s    12.75nm          4.8mb
MSU     75.40 325 eP    13 08.04   0.5
                  e     13 20.94
GSC     75.68 320 eP    13 10.42   1.4
RSSD    75.99 333 eP    13 09.42  -1.3
         0.6s     4.54nm          4.4mb
DAU     76.35 327 ePc   13 13.45   0.5
ULM     78.42 342 eP    13 26.00   2.3
KVN     79.01 322 eP    13 28.62   1.2
LRM     81.00 330 eP    13 39.10   1.3
NTYM    81.23 319 eP    13 40.29   1.5
DPW     85.20 328 eP    13 59.61   0.7
YKA     94.31 340 eP    14 41.50   0.2
         0.5s     3.20nm          4.8mb
WR2    131.44 207 ePKP  20 35.40   0.5
         0.4s     3.70nm
WRA    131.45 207 PKP   20 36.20   1.2
         0.6s     1.30nm
GBA    144.82 101 PKP   20 59.00  -0.4
     S.D. = 1.3  on  48 of  50 obs.
-------------------------------------
   NOV  05, 1993  04h 16m 23.59± 0.80s
   39.497 S ± 6.1km  174.275 E ± 6.0km
   DEPTH = 247.5 ±  8.3 km
 NORTH ISLAND, NEW ZEALAND        (159)

NRZ      0.31 301 Pd    16 56.10   0.4
BSZ      0.59 121 Pc    16 57.10   0.6
DRZ      1.02  78 P     16 59.00  -0.1
CNZ      1.03  74 P     16 58.70  -0.2
NGZ      1.08  73 P     16 59.00  -0.3
DIW      1.33 192 P     17 00.80   0.1
KIW      1.45 161 Pc    17 01.30  -0.3
MNG      1.45 141 Pc    17 01.60   0.0
                  S     17 26.90
WAHZ     1.62  98 Pc    17 03.00   0.0
TCW      1.71 180 P     17 03.80   0.2
CAW      1.72 160 P     17 03.60  -0.1
MRW      1.76 169 Pc    17 03.90  -0.2
                  S     17 31.70
WEL      1.83 168 P     17 04.50  -0.1
                  eS    17 33.00
QRZ      1.89 225 Pc    17 04.70  -0.4
                  S     17 33.00
PGZ      1.90 127 P     17 05.20   0.0
MTW      1.91 151 Pc    17 05.10  -0.2
TTH      1.97  92 P     17 06.50   0.6
TEHZ     2.02 105 P     17 06.70   0.4
BLW      2.08 154 P     17 06.80  -0.1
THZ      2.49 204 P     17 11.10   0.1
                  S     17 44.40
URZ      2.53  62 eP    17 10.70  -0.6
                  S     17 42.80
DSZ      2.93 219 P     17 15.60   0.0
NOZ      3.06  75 P     17 17.30   0.4
PUZ      3.42  67 eP    17 20.80  -0.2
LTZ      3.62 204 P     17 23.20  -0.1
                  eS    18 06.20
HBZ      3.68  60 eP    17 23.90  -0.1
MQZ      4.38 196 P     17 31.60  -0.6
                  eS    18 20.50
ODZ      6.16 205 eP    17 55.00   0.7
WR2     39.36 288 eP    23 43.80  13.1X
         0.7s     2.90nm
WRA     39.38 288 P     23 44.50  13.7X
         0.7s     1.60nm
     S.D. = 0.4  on  28 of  30 obs.
-------------------------------------
%  NOV  05, 1993  04h 39m 02.85± 0.92s
   37.362 N ± 7.4km    1.906 W ± 8.1km
   DEPTH =  10.0km  (geophysicist)
 SPAIN                            (377)
      mbLg 2.8 (MDD). Felt (III) in
      the Cuevas de Almanzora area.

ENIJ     0.46 212 iPc   39 11.92  -0.2
                  e     39 17.80
EALH     0.63  38 eP    39 14.73  -0.7
                  e     39 24.50
EHUE     0.71 310 iPd   39 16.10  -0.8
                  e     39 27.00
ECOG     1.33 267 eP    39 27.78   0.4
                  e     39 47.50
EVIA     1.36 340 eP    39 28.30   0.4
                  e     39 47.00
EGUA     1.43 249 eP    39 29.15   0.3
                  e     39 49.20
ELUQ     1.89 277 eP    39 36.11   0.6
                  e     40 01.60
ECHE     2.34  18 eP    39 43.00   0.9
                  e     40 11.50
EHOR     2.69 281 eP    39 46.17  -0.8
                  e     40 20.50
PAB      2.90 319 ePn   39 54.00   4.0X
                  ePb   39 58.50
                  ePg   40 05.00
                  eSn   40 23.00
                  eSg   40 37.00
ETOR     3.46 358 eP    40 08.92  11.1X
                  e     40 50.40
GUD      3.72 333 eP    40 14.52  12.9X
                  e     40 58.50
     S.D. = 0.8  on   9 of  12 obs.
-------------------------------------
   NOV  05, 1993  07h 02m 06.11± 0.97s
    7.033 S ± 4.2km  106.101 E ± 5.0km
   DEPTH =  74.8 ±  8.2 km
   5.4mb ( 56 obs.)
 JAWA, INDONESIA                  (277)
      Mw 5.2 (HRV). Felt (III) at
      Lembang. Also felt at Jakarta
      and Bandung.
      CENTROID, MOMENT TENSOR    (HRV)
      Data Used: GDSN
      L.P.B.: 17S, 25C
      Centroid Location:
      Origin Time        07:02:13.0 1.0
      Lat  7.45S 0.07 Lon 106.35E 0.07
      Dep  35.8 4.3 Half-duration  1.4
      Moment Tensor;   Scale 10**16 Nm
        Mrr= 6.30 0.92  Mtt=-6.05 0.60
        Mff=-0.25 1.47  Mrt= 4.94 1.26
        Mrf=-0.55 0.90  Mtf= 0.03 0.50
       Principal Axes:
        T  Val=  8.07  Plg=70  Azm= 11
        N       -0.27       3      273
        P       -7.79      19      182
      Best Double Couple:Mo=7.9*10**16
       NP1:Strike=267 Dip=26 Slip=  84
       NP2:         94      64       93

LEM      1.52  82 iPd   02 34.50   2.5
                  iS    02 55.00
TPI      4.52  20 iPd   03 16.00   2.4
KGM      9.41 343 ePd   04 22.40   1.2
IPM     12.60 336 ePc   05 01.90  -2.1
         0.6s    16.90nm          5.0mb
TSM     16.27  47 eP    06 00.50   9.1X
KKM     16.45  38 ePc   06 00.40   6.6X
MBL     19.33 138 eP    06 26.50  -1.8
PCT     22.07 348 eP    07 11.40  15.2X
MEEK    22.85 150 eP    07 02.00  -1.8
                  eS    11 07.00
CTB     22.93  52 eP    07 08.00   3.3X
NST     23.32 345 eP    07 08.50   0.1
MRWA    23.96 158 eP    07 13.00  -1.6
         0.7s    29.00nm          4.8mb
                  eS    11 32.00
MTN     25.31 105 eP    07 26.60  -0.9
         0.3s   179.00nm          6.0mb
PLP     26.07  46 ePc   07 36.00   1.4
QIZ     26.16   8 P     07 36.60   1.3
MUN     26.55 161 eP    07 36.50  -2.3
                  eS    12 35.00
CHTO    26.63 345 eP    07 39.30  -0.4
         0.8s    23.24nm          4.8mb
WRA     30.25 118 P     08 11.60  -0.6
         1.3s     7.80nm          4.3mb X
WR2     30.27 118 iPd   08 11.40  -1.0
         0.3s    35.00nm          5.6mb
ASPA    31.40 125 iPc   08 21.20  -1.2
         0.5s    18.20nm          5.1mb
      Z  23s     0.70um          4.3MszX
                  eS    13 22.60
KMI     32.13 354 Pc    08 29.00   0.1
         1.0s    60.00nm          5.4mb
      Z  20s     3.10um          5.0Msz
GYA     33.30   1 Pc    08 38.60  -0.3
         1.0s    33.00nm          5.1mb
      Z  16s     0.25um          4.0MszX
      N  16s     0.83um
GBA     35.08 306 P     08 54.00  -0.2
QIS     35.11 116 iPc   08 54.10  -0.4
HYB     36.48 312 iPc   09 06.30   0.2
         1.0s   140.00nm          5.8mb
                  e     09 27.50
CD2     37.79 357 iPc   09 16.00  -0.9
         1.0s    40.00nm          5.3mb
      Z  20s     1.41um          4.8Msz
LSA     39.25 339 P     09 28.00  -1.6
         0.8s    27.00nm          5.2mb
PKI     39.80 331 P     09 32.80  -1.2
GUN     39.86 331 P     09 33.80  -0.7
DMN     39.98 330 P     09 34.40  -1.0
KKN     40.04 331 P     09 34.80  -1.1
GKN     40.54 330 P     09 38.80  -1.1
SSE     40.57  20 Pc    09 41.00   1.1
         0.9s    15.00nm          4.9mb
      Z  20s     0.60um          4.4Msz
                  PcP   11 41.50
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                 eS    15 46.00
PMG    40.69  96 eP    09 41.00  -0.1
NJ2    40.73  17 Pd    09 42.50   1.4
       1.0s    26.00nm          5.0mb
ADE    40.88 137 eP    09 43.10   0.6
XAN    40.93   4 P     09 40.70  -2.2
       1.0s    26.00nm          5.0mb
     Z 20s      1.76um          4.9Msz
CTA    41.01 113 iPc   09 44.20   0.5
                 i     09 50.00
STK    41.28 132 iPc   09 44.10  -1.7
       0.5s    31.90nm          5.4mb
LZH    42.94 357 Pc    09 59.50   0.0
       1.5s    66.00nm          5.2mb
     Z 15s      0.63um          4.6MszX
     E 14s      0.41um
                 PcP   11 49.50
TIA    44.24  13 eP    10 09.30  -0.5
TIY    44.90   7 Pc    10 15.30   0.1
     Z 30s      1.09um          4.6MszX
     N 19s      0.99um
NDI    45.13 323 iPc   10 16.00  -1.0
                 eS    16 50.00
GTA    46.57 353 iPc   10 28.50   0.1
       1.0s    64.00nm          5.5mb
     Z 28s      1.93um          4.9MszX
     E 14s      0.35um
                 PcP   12 02.10
                 ScS   20 15.70
TOO    46.89 136 eP    10 31.70   0.8
       0.7s    13.00nm          5.0mb
                 iPcP  12 03.60
BTO    47.53   4 eP    10 35.50  -0.4
     N 16s      0.45um
     E 16s      0.49um
BWA    47.53 131 eP    10 37.80   1.7
                 i     10 56.40
BJI    47.75  10 eP    10 37.50   0.0
       1.0s    17.00nm          4.9mb
     Z 20s      0.60um          4.6Msz
     N 16s      0.58um
                 ePcP  12 06.50
                 eS    17 32.00
HHC    47.91   6 eP    10 38.00  -0.9
       0.8s    25.00nm          5.2mb
     Z 28s      1.19um          4.7MszX
CAN    48.35 132 iPd   10 44.30   2.0
                 i     11 05.60
SNY    51.19  17 Pc    11 04.80   1.0
QUE    52.73 317 eP    11 16.50   0.7
MAT    52.77  33 eP    11 14.00  -1.8
       1.3s    30.77nm          5.2mb
                 (S)   18 40.00
CHJJ   52.83  34 P     11 13.60  -2.6
WMQ    53.29 343 P     11 18.50  -1.1
       0.7s    50.00nm          5.7mb
CN2    53.54  17 eP    11 20.00  -1.3
       1.0s    40.00nm          5.4mb
     Z 20s      0.50um          4.6Msz
                 PcP   12 26.40
KSH    54.00 331 P     11 24.00  -0.9
       1.0s    70.00nm          5.6mb
     Z 20s      0.74um          4.7Msz
     N 10s      0.33um
     E 10s      0.31um
                 PP    13 23.00
MDJ    55.60  20 eP    11 34.90  -1.4
FRU    57.30 333 eP    11 47.60  -0.9
       1.6s    60.00nm          5.5mb
CIT    59.15   5 eP    12 00.50  -0.8
                 e     12 50.00
CSY    59.24 178 iPd   12 09.70   8.1X
       0.6s    10.90nm          5.2mb
DZM    59.93 111 iPc   12 06.80  -0.4
YSS    62.84  27 eP    12 25.00  -1.2
ASH    63.06 319 eP    12 27.00  -0.8
BOD    65.00   5 iPc   12 58.80  18.7X
MSZ    65.19 136 P     12 41.90   0.3
KMSA   66.37 296 PKP   12 48.30  -1.4
MAW    67.08 197 P     12 52.90  -0.4
       0.7s    11.11nm          4.9mb
LTZ    67.82 133 P     12 57.20  -1.2
THZ    68.09 132 P     12 59.20  -1.0
AFIF   68.68 299 PKP   13 05.80   1.6
KER    69.23 311 iPc   13 06.00  -1.4
KUZ    69.51 127 P     13 09.50   0.6
CNZ    69.68 129 P     13 10.30   0.3
NGZ    69.71 129 P     13 10.80   0.5
MNG    69.82 131 eP    13 09.60  -1.2
PGZ    70.42 131 P     13 14.40   0.0
       0.8s   133.00nm          5.9mb
URZ    70.78 128 P     13 17.20   0.6
YAK    71.23  12 iPc   13 17.00  -1.8
       1.0s    86.00nm          5.6mb
TAB    71.35 314 iPc   13 20.50   0.2
HBZ    71.65 127 P     13 21.60  -0.2
MTD    73.22 255 iPc   13 15.90 -15.7X
                 i     13 29.10
SVE    73.66 336 iPc   13 34.00   0.8
       2.0s   320.00nm          5.9mb
MTA    73.96 317 iPc+  13 35.20   0.0
       0.8s   130.00nm          5.9mb
GRO    74.08 319 eP    13 36.00   0.1
       1.5s   320.00nm          6.0mb
ARU    74.23 335 iPc   13 37.30   0.7
       1.2s   240.00nm          6.0mb
                 e     13 55.50
BFT    74.44 245 eP    13 40.00   1.3
       0.7s    11.00nm          4.9mb
PET    74.47  30 eP    13 38.00   0.1
       1.0s   100.00nm          5.7mb
KRI    75.10 254 iPd   13 49.80   7.3X
                 i     14 06.00
BUL    75.90 251 iP    13 47.40   0.4
       0.9s    31.93nm          5.2mb
                 i     14 00.60
                 i     14 06.40
SLR    76.03 245 iPc   13 47.00  -0.7
       0.8s    46.00nm          5.5mb
PYA    76.10 319 iPc   13 47.00  -0.5
       1.0s   150.00nm          5.9mb
                 i     14 09.00
SEK    76.57 243 eP    13 50.50  -0.2
       0.7s    27.00nm          5.3mb
SBA    77.18 169 eP    13 33.60 -19.3X
NRI    77.27 354 ePc   13 52.00  -1.4
       1.0s    88.00nm          5.6mb
                 e     14 10.00
GRM    77.43 238 eP    13 56.50   1.3
       0.7s    37.00nm          5.4mb
BLF    77.82 242 eP    13 57.00  -0.6
       0.7s    22.00nm          5.2mb
SOC    78.15 317 iP    13 59.00   0.2
       1.2s   100.00nm          5.6mb
                 e     14 09.00
BOSA   78.51 242 eP    14 02.00   0.9
FRS    78.56 241 eP    14 00.70  -0.7
       1.0s    20.00nm          5.0mb
TIK    79.93   7 iPc   14 07.00  -0.9
       1.2s    80.00nm          5.5mb
                 i     14 22.00
                 e     17 13.00
CSS    80.09 307 ePc   14 10.50   0.9
PPCY   80.85 307 eP    14 14.00   0.5
KAS    81.57 314 iPc   14 17.70   0.4
SUR    82.31 238 iPc   14 32.00  10.5X
       1.0s   120.00nm
SPA    83.01 180 iPd   14 24.40   0.0
       0.4s    65.79nm          5.9mb
GPA    83.80 312 eP    14 28.80   0.1
MOS    83.94 328 iPc   14 30.00   1.0
       1.0s   160.00nm          6.0mb
                 e     14 44.00
EYL    83.98 312 eP    14 29.90   0.2
OBN    84.25 327 iPc   14 31.50   1.0
       0.9s   108.00nm          5.9mb
                 i     14 45.20
HRT    84.40 312 iP    14 31.90   0.1
BNT    85.59 311 eP    14 37.90   0.3
CFR    86.53 316 ePc   14 40.50  -1.6
JMB    87.03 313 iP    14 46.00   1.4
CLI    87.43 317 iPc   14 45.50  -1.0
ISR    87.63 316 ePc   14 47.00  -0.5
VRI    87.66 317 iPc   14 46.50  -1.1
DIM    87.71 313 iP    14 49.00   1.1
KDZ    87.71 312 iP    14 49.00   1.0
PVL    88.08 314 iPc   14 52.00   2.4
MLR    88.11 316 iPc   14 38.50 -11.4X
RZN    88.24 312 iPc   14 52.00   1.3
PLD    88.32 313 iP    14 49.00  -1.8
MNK    88.93 325 eP    14 52.00  -1.4
MMB    88.95 312 iPc   14 54.00   0.1
VTS    89.50 313 iPc   14 57.00   0.4
VAY    89.76 312 iP    14 57.80   0.2
       1.2s    80.00nm          5.8mb
OHR    91.05 311 iP    15 03.70   0.0
       1.1s   100.00nm          6.1mb
KAF    91.41 332 iP    15 05.60   0.8
       0.7s    25.80nm          5.7mb
NUR    91.87 331 iP    15 07.70   0.8
       0.6s    20.50nm          5.7mb
BRG    96.76 320 eP    15 31.40   1.8
GEC2   96.82 318 ePc   15 30.30   0.3
       0.6s     1.81nm          4.8mb
                 e     15 34.10
                 e     15 39.50
                 e     15 43.70
                 e(PP) 19 25.60
                 e     19 33.40
                 e     19 39.40
NB2    98.48 331 P     15 38.60   1.5
       1.1s     6.70nm          5.1mb
SVW   100.12  29 ePdiff15 45.90   1.3
IMA   100.54  24 ePdiff15 47.30   0.8
       1.0s     6.82nm          5.2mb
DAG   104.42 349 iPdiff16 02.80  -0.6
       0.4s     4.24nm          5.8mb
YKA   117.20  20 ePKP  20 43.50  -0.4
       0.8s     2.50nm
GMW   122.11  37 ePKP  20 54.86   1.1
SHW   123.08  38 ePKP  20 56.16   0.3
NEW   125.02  34 ePKP  20 59.77   0.3
LRM   129.03  34 ePKP  21 08.90   1.4
                 e     24 23.90
HVU   131.20  39 ePKP  21 12.48   0.8
GSC   131.66  48 ePKP  21 14.59   2.0X
DUG   132.05  40 ePKP  21 13.37   0.1
                 eSKP  24 36.24
DAU   132.92  39 ePKP  21 16.12   0.9
ULM   133.17  19 ePKP  21 18.00   3.1X
JAQ   133.34   1 ePKP  21 15.50   0.4
MSU   133.37  42 ePKP  21 15.62  -0.4
                 eSKP  24 41.29
EMUT  133.54  40 ePKP  21 17.46   1.2
SRU   134.12  40 ePKP  21 18.11   0.8
                 eSKP  24 43.03
RSSD  134.64  31 ePKP  21 18.22   0.0
                 eSKP  24 44.07
PV10  135.49  40 ePKP  21 21.22   1.2
PV08  135.63  40 ePKP  21 22.78   2.4X
                 eSKP  24 48.19
ALQ   139.17  43 ePKP  21 19.53  -7.4X
LMN   140.53 350 ePKP  21 29.00   0.2
GAC   141.45   2 ePKP  21 24.00  -6.4X
RSNY  142.63   1 ePKP  21 28.11  -4.4X
SOB1  143.37 244 ePKP  21 31.90  -2.8X
PPD   143.61 217 ePKP  21 32.90  -2.0
WMOK  144.15  36 ePKPc 21 33.97  -1.5
LTX   144.25  48 ePKP  21 34.73  -1.1
                 iPKPbc21 35.71
YSNY  144.46   6 ePKP  21 34.08  -1.7
HRV   144.61 357 ePKP  21 34.22  -1.7
AGVB  144.64 221 iPKPc 21 36.50  -0.2
                 i     21 59.80
BINY  144.93   3 PKP   21 35.90  -0.6
TUL   144.95  32 iPKPd 21 36.70   0.0
LSCT  145.49 359 ePKP  21 37.07  -0.4
FVM   145.74  24 ePKP  21 37.91  -0.1
BAO   145.86 229 ePKP  21 39.10   0.1
                 e     21 44.10
                 i     21 56.60
                 i     22 00.60
                 i     22 16.40
TBR   146.03   0 ePKP  21 38.72   0.3
GPD   146.16   1 ePKP  21 39.17   0.6
                 ePKPbc21 39.93
PAL   146.17   0 ePKP  21 39.35   0.8
FSA   146.20 193 ePKPc 21 41.20   2.1X
GMTN  146.29   0 iPKP  21 39.00   0.2
ELC   146.81  23 ePKP  21 40.38   0.6
                 ePKPbc21 41.90
UYO   146.99  32 iPKPc 21 41.00   0.9
MCWV  147.08   8 ePKP  21 41.98   1.9
MIAR  147.15  31 ePKP  21 41.43   1.1
                 ePKPbc21 43.17
LST   147.28  24 ePKP  21 41.97   1.5
SLA   147.39 194 ePKP  21 42.60   1.3
CBN   148.81   5 e(PKP)21 44.00   1.1
CVL   148.91   7 ePKP  21 44.19   1.1
                 ePKPbc21 47.91
OXF   149.14  25 ePKP  21 48.20   4.7X
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05d 07h

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NAV   149.21  11 ePKP  21 47.96   4.3X
BLA   149.38  10 ePKP  21 48.76   4.9X
YJA   149.83 196 ePKPc 21 48.00   2.5X
MYNC  150.55  17 iPKP  21 52.07   6.4X
MRX   150.67  62 (PKP) 21 54.00   7.8X
MOCB  150.75 196 PKP   21 48.60   1.7
CEH   150.89   9 iPKP  21 52.48   6.4X
LHS   151.95  12 ePKP  21 48.05   0.3
                ePKPbc21 54.86
PRM   151.97  15 iPKP  21 55.42   7.6X
JSC   152.05  13 ePKP  21 48.67   0.8
                iPKPbc21 55.22
SGS   153.26  12 ePKP  21 58.50   8.9X
HBF   153.54  12 ePKP  22 00.58  10.6X
CNCB  155.60 194 PKP   21 56.20   2.2X
LPB   155.89 194 ePKP  21 44.00 -10.2X
LPAZ  156.14 194 PKP   21 56.80   2.0
     S.D. = 1.1  on 167 of 198 obs.
-----------------------------------
?  NOV  05, 1993  07h 39m 16.30± 8.78s
   32.483 S ±50.1km   72.013 W ±53.5km
   DEPTH =  33.0km  (normal)
 OFF COAST OF CENTRAL CHILE        (134)
      MD 3.8 (SAN).

ROCH    0.98 120 iPd   39 33.09  -0.8
                iS    39 42.36
LCCH    1.06 159 iP+   39 34.43  -0.4
                iS    39 44.70
JACH    1.22 100 iP+   39 37.47   0.3
                iS    39 50.10
PEL     1.30 121 iP+   39 38.24  -0.1
                iS    39 51.34
TACH    1.48 143 iP+   39 40.56  -0.3
                iS    39 55.12
LNV     1.55 161 eP    39 41.80  -0.1
                iS    39 58.10
FCH     1.68 121 iP+   39 44.07   0.0
                iS    40 01.81
PCH     1.70 132 iPd   39 44.20   0.1
                iS    40 03.16
CACH    2.01 144 eP    39 50.00   1.2
                iS    40 12.07
     S.D. = 0.7  on   9 of   9 obs.
-----------------------------------
%  NOV  05, 1993  07h 47m 11.70± 0.57s
   31.585 S ± 8.2km   67.997 W ± 5.3km
   DEPTH =  33.0km  (normal)
 SAN JUAN PROVINCE, ARGENTINA      (137)

CFA     0.21 264 iPc   47 18.50   0.1
RTLL    0.48 302 iPd   47 21.50  -0.5
RTCV    0.54 239 iPd   47 22.50  -0.4
RTCB    0.69 278 ePd   47 25.80   0.7
                S     47 36.60
RTPR    1.81  45 eP    47 41.50   0.5
                S     48 03.90
MRA     2.11 114 e(P)  47 45.90   0.5
                (S)   48 13.00
TCA     2.92  86 e(P)  47 56.00  -1.0
                (S)   48 41.00
RFA     3.20 187 e(P)  48 01.00   0.1
                S     48 51.50
     S.D. = 0.7  on   8 of   8 obs.
-----------------------------------
?  NOV  05, 1993  07h 49m 48.68± 2.40s
   55.211 N ±28.1km  159.652 W ±13.8km
   DEPTH =  62.4 ± 31.2 km
 ALASKA PENINSULA                  ( 12)
      ML 4.0 (PMR). Felt (III) at
      Perryville and Sand Point.

SPBA    0.49 287 P     50 00.60  -0.2
                S     50 08.40
SDN     0.50 285 iPd   50 01.26   0.4
                eS    50 09.31
KDC     4.71  54 (P)   50 58.31  -0.5
SVW     6.29  18 eP    51 20.20  -0.7
CP2     7.22  30 (P)   51 34.97   1.0
CRP     7.24  30 eP    51 35.08   0.8
SLKM    7.31  40 eP    51 34.90  -0.2
TTA     7.97  12 eP    51 42.70  -1.5
PMS     8.05  37 eP    51 46.20   0.9
PMR     8.44  36 eP    51 52.30   1.6
KLU     9.56  43 eP    52 04.57  -1.6
TOA     9.84  40 eP    52 10.40   0.6
BALM   10.83  50 eP    52 22.38  -1.0
IMA    11.27  13 eP    52 29.10  -0.2
INK    17.82  32 eP    53 54.00   0.6
     S.D. = 1.1  on  15 of  15 obs.
-----------------------------------
*  NOV  05, 1993  07h 53m 48.92± 1.00s
    5.717 S ± 6.8km  145.635 E ±12.6km
   DEPTH =  10.0km  (geophysicist)
   3.5mb (  1 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)

MDG     0.49  17 eP    53 58.70  -0.1
YYYY    0.62 147 eP    54 01.50   0.0
LAT     1.65 125 eP    54 18.50   0.4
MNDI    2.01 257 eP    54 33.00   9.5X
PMG     3.96 158 eP    54 50.50  -0.6
WR2    17.89 217 eP    57 59.90   0.2
        0.5s     2.00nm          3.5mb
     S.D. = 0.5  on   5 of   6 obs.
-----------------------------------
%  NOV  05, 1993  08h 35m 57.64± 0.89s
   39.153 N ± 7.1km   27.637 E ± 8.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.7 (ISK).

IZM     0.81 201 ePg   36 13.20  -0.2
                eSg   36 25.20
DST     0.89  59 ePn   36 15.10   0.3
EZN     1.22 304 iPn   36 20.60   0.3
BNT     1.22  10 ePn   36 19.90  -0.5
KGT     1.32 349 ePn   36 22.00   0.0
     S.D. = 0.5  on   5 of   5 obs.
-----------------------------------
   NOV  05, 1993  08h 39m 20.18± 1.06s
   42.216 N ±11.6km    2.084 E ± 4.9km
   DEPTH =  10.0km  (geophysicist)
 PYRENEES                          (378)
      ML 3.1 (LDG). MD 3.0 (BTH). mbLg
      3.3 (MDD).

PAND    0.50 308 Pg    39 31.44   1.0
ETER    0.58  81 iPd   39 33.32   1.4
                e     39 40.80
PERF    0.65  65 Pg    39 33.22   0.1
GRBF    0.74 327 Pg    39 34.43  -0.4
LSPF    0.74 350 Pg    39 33.84  -0.9
MTHF    0.80  25 Pg    39 34.09  -1.6
SALF    0.86 310 Pg    39 37.25   0.5
LESF    1.01 324 Pg    39 39.38   0.1
EPF     1.52 303 Pn    39 49.50   2.0
                Pg    39 51.90
                Sg    40 09.50
EGRA    1.78 270 eP    39 49.10  -2.1
                e     40 08.20
EROQ    1.88 223 iPnd  40 01.14   8.6X
                eSn   40 28.00
BTH     1.92 299 iPgc  40 01.20   8.0X
                iSg   40 25.00
LPO     2.55 345 Pg    40 07.20   4.9X
                Sg    40 36.70
CAF     2.71 360 Pn    40 04.40  -0.2
                Pg    40 09.50
                Sg    40 40.40
LFF     2.89 341 Pg    40 13.90   6.8X
                Sg    40 46.90
RJF     3.11 353 Pg    40 17.40   7.2X
                Sg    40 53.30
LRG     3.38  67 Pn    40 14.80   0.8
                Sn    40 52.70
ETOR    3.41 247 eP    40 19.82   5.3X
                e     41 01.20
ECRI    3.42 278 eP    40 19.32   4.6X
                e     40 59.80
LMR     3.44  70 Pn    40 15.30   0.4
                Sn    40 53.80
FRF     3.61  67 Pn    40 17.70   0.3
MAF     4.02   5 Pg    40 34.40  11.3X
                Sg    41 22.00
TCF     4.07   1 Pg    40 35.10  11.3X
                Sg    41 23.70
SBF     4.25  65 Pn    40 26.70   0.2
                Sn    41 08.40
BGF     4.38   7 Pg    40 40.30  12.1X
                Sg    41 33.20
SMF     4.60  15 Pg    40 44.80  13.4X
                Sg    41 40.90
AVF     4.66  11 Pg    40 45.40  13.2X
                Sg    41 41.60
SSF     4.95  11 Pg    40 50.30  14.0X
                Sg    41 50.80
PGF     5.13  84 Pn    40 37.30  -1.7
                Sn    41 31.20
     S.D. = 1.2  on  16 of  29 obs.
-----------------------------------
%  NOV  05, 1993  09h 21m 02.21± 0.86s
   39.250 N ± 7.1km   27.731 E ± 8.5km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.7 (ISK).

DST     0.78  63 ePg   21 17.50   0.0
                eSg   21 32.50
IZM     0.93 203 ePn   21 19.90   0.0
EDC     1.10   5 ePn   21 23.00   0.1
BNT     1.11   7 ePn   21 22.90  -0.2
EZN     1.23 298 iPn   21 25.10   0.0
     S.D. = 0.2  on   5 of   5 obs.
-----------------------------------
*  NOV  05, 1993  09h 23m 01.16± 2.07s
   11.313 N ± 7.8km  125.735 E ±12.9km
   DEPTH = 113.4 ± 20.3 km
   4.5mb ( 15 obs.)
 SAMAR, PHILIPPINE ISLANDS         (251)

DAV     4.20 182 ePc   24 06.20   1.9
                eS    24 52.00
BAG     7.12 316 ePc   24 39.00  -5.5X
                e(S)  25 58.80
SSE    20.13 349 Pc    27 26.80  -1.6
        1.3s    25.00nm          4.4mb
     Z  20s     0.50um          3.9Msz
                sP    27 36.00
                S     31 10.00
                sS    31 20.00
WHN    21.86 333 eP    27 48.00   2.3X
GYA    23.46 313 eP    28 03.80   2.4X
XAN    27.35 328 P     28 35.50  -2.0
                pP    28 44.00  30kmX
                sP    28 48.00
MAT    27.53  22 (P)   28 38.00  -1.1
BJI    29.84 345 eP    29 04.50   4.8X
SNY    30.46 357 eP    29 03.60  -1.4
LZH    31.63 325 eP    29 14.00  -1.6
        2.0s    43.00nm          4.8mb
     Z  16s     0.34um          4.1MszX
WRA    32.19 165 P     29 18.00  -2.5
        0.5s     1.90nm          4.1mb
WR2    32.20 165 eP    29 17.30  -3.3X
        0.6s     4.00nm          4.4mb
QIS    34.48 157 eP    29 39.00  -1.3
ASPA   35.67 167 eP    29 49.00  -1.3
        0.4s     7.40nm          4.9mb
GTA    36.23 325 eP    29 55.50   0.5
        1.5s    19.00nm          4.7mb
     Z  16s     0.34um          4.2MszX
                pP    30 03.00  25kmX
                ScP   36 03.00
CTA    37.17 147 eP    30 04.00   1.1
GUN    40.79 300 P     30 33.60   0.2
        0.8s    42.00nm          5.3mb
PKI    41.10 299 P     30 36.20   0.3
KKN    41.27 299 P     30 37.60   0.4
DMN    41.37 299 P     30 38.60   0.5
MRWA   41.38 193 iPc   30 37.20  -0.5
        0.4s     2.00nm          4.2mb
GKN    41.88 299 P     30 41.60  -0.5
KLB    43.34 190 eP    30 53.30  -0.3
        0.4s     8.00nm          4.8mb
NWAO   44.73 190 eP    31 05.00   0.2
        0.4s     3.00nm          4.4mb
STK    45.55 161 iPd   31 09.60  -1.7
        0.8s     4.50nm          4.3mb
WMQ    46.08 322 eP    31 16.50   1.0
BWA    50.33 156 eP    31 50.00   1.6
                i     32 10.40
CAN    51.34 156 eP    31 56.60   0.5
                e     32 22.10
DZM    51.91 130 iPc   32 00.30  -0.4
IMA    75.91  25 eP    34 38.70   1.9
        1.3s    15.09nm          4.6mb
FBA    78.34  26 eP    34 49.39  -0.7
        0.7s     2.10nm          4.1mb
INK    83.52  22 eP    35 18.50   1.3
KAF    84.47 332 eP    35 22.80   0.7
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        0.7s     3.40nm          4.4mb
MBC    84.81  13 eP    35 25.50   1.9
        1.0s     3.00nm          4.2mb
NUR    85.64 331 eP    35 29.30   1.4
RES    90.57  10 eP    35 53.00   1.7
LPB   165.61 113 ePKP  43 05.00  10.5X
CNCB  165.62 114 ePKP  43 06.00  11.3X
LPAZ  165.66 112 PKP   42 58.30   3.4X
     S.D. = 1.4  on  31 of  39 obs.
-------------------------------------
%  NOV  05, 1993  10h 42m 24.17± 0.98s
   39.088 N ± 8.0km   27.597 E ±10.3km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.8 (ISK).

IZM     0.74 201 ePg   42 38.40  -0.3
                 eSg   42 50.90
DST     0.95  57 ePn   42 43.00   0.7
EZN     1.23 307 iPn   42 47.60   0.6
EDC     1.27   9 ePn   42 48.00   0.2
BNT     1.29  11 iPn   42 46.90  -1.2
     S.D. = 1.1  on   5 of   5 obs.
-------------------------------------
%  NOV  05, 1993  12h 18m 25.92± 0.87s
   39.122 N ± 7.1km   27.605 E ± 9.0km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.6 (ISK).

IZM     0.77 200 ePg   18 40.90  -0.1
                 eSg   18 53.40
DST     0.93  58 ePn   18 43.90   0.2
EZN     1.21 306 ePn   18 48.70   0.2
EDC     1.24   9 ePn   18 49.00   0.1
BNT     1.26  11 ePn   18 48.90  -0.4
     S.D. = 0.3  on   5 of   5 obs.
-------------------------------------
?  NOV  05, 1993  12h 36m 42.80± 3.94s
   41.839 N ±36.8km   21.789 E ±10.5km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)
      ML 1.9 (SKO).

VAY     0.78 131 iPg   36 56.70  -1.3
                 iSg   37 02.40
GRG     0.99 152 ePg   37 02.98   1.3
                 eSg   37 14.16
OHR     1.04 226 ePn   37 02.20  -0.3
KNT     1.07 129 iPg   37 02.17  -0.8
                 eSg   37 13.60
SRS     1.53 117 ePg   37 11.42   1.2
                 eSg   37 26.08
SOH     1.56 130 ePb   37 10.56   0.0
                 eSb   37 27.28
     S.D. = 1.4  on   6 of   6 obs.
-------------------------------------
?  NOV  05, 1993  13h 04m 17.03± 5.25s
   10.424 N ±32.7km   60.783 W ±38.6km
   DEPTH = 102.8 ± 28.2 km
 TRINIDAD                          ( 98)
      MD 3.3 (TRN).

TBH     0.29 282 iP    04 32.46   0.4
                 eS    04 37.95
TRN     0.65 290 iPc   04 33.69  -0.8
                 iS    04 41.63
TPP     0.67 261 iPc   04 36.38   1.8
                 eS    04 45.53
PIG     0.73 356 eP    04 32.53  -2.7
                 eS    04 41.08
BOT     0.74   5 eP    04 35.30   0.0
TPR     0.76   0 eP    04 35.46   0.0
                 eS    04 43.88
TCE     0.99 286 eP    04 38.07   0.2
GRW     1.93 334 eP    04 49.16  -0.2
                 eS    05 06.71
SVB     2.87 351 eP    05 02.71   0.9
                 eS    05 32.48
SVV     2.91 352 eP    05 03.16   0.8
                 eS    05 33.41
OLLA    5.94 267 eP    05 42.80  -1.4
     S.D. = 1.4  on  11 of  11 obs.
-------------------------------------
&  NOV  05, 1993  13h 44m 51.90s
   62.906 N          149.094 W
   DEPTH =  72.2km

 CENTRAL ALASKA                    (  1)
      <AEIC>.

HUR     0.26 286 iPd   45 03.05  -0.2
                 eS    45 11.83
RND     0.51  12 ePd   45 05.14  -0.2
                 eS    45 15.58
CUT     0.74 228 iPd   45 07.44  -0.2
                 eS    45 18.86
TRF     0.77 316 ePd   45 07.93  -0.2
                 eS    45 20.22
DHY     0.80  77 eP    45 08.04  -0.5
                 eS    45 21.43
MCK     0.83   5 iPc   45 08.62  -0.1
                 eS    45 21.05
KTH     1.05 309 iPd   45 11.55   0.0
                 eS    45 26.39
GHO     1.14 176 ePc   45 12.46  -0.2
SML     1.16 162 iPc   45 12.66  -0.2
                 eS    45 29.28
BWN     1.28 353 ePc   45 13.83  -0.6
PWA     1.31 197 P     45 14.80   0.0
PLRM    1.32 181 iPc   45 14.87   0.0
PMR     1.32 181 iPc   45 14.42  -0.5
SCM     1.36 142 eP    45 15.48   0.0
                 eS    45 35.51
SKT     1.46 232 iPd   45 16.44  -0.4
                 eS    45 35.49
KNK     1.53 168 ePc   45 17.97   0.2
                 eS    45 39.22
TOA     1.58 119 P     45 19.30   0.9
THY     1.60  70 eP    45 19.67   0.9
WRH     1.63  15 ePc   45 18.28  -0.9
SUA     1.64 209 eP    45 20.07   0.7
PAX     1.66  86 ePd   45 19.94   0.3
                 eS    45 40.85
NEA     1.68   0 iPc   45 18.71  -1.0
SDG     1.68 102 eP    45 20.43   0.6
                 eS    45 42.09
PMS     1.68 188 P     45 20.10   0.3
HDA     1.78  31 eP    45 20.57  -0.6
                 eS    45 44.30
CCB     1.84  18 iPc   45 20.90  -1.0
                 eS    45 45.85
CFI     1.84 160 eP    45 21.74  -0.2
DJE     1.90  52 eP    45 23.94   1.1
                 eS    45 48.07
TZL     1.91 115 eP    45 23.92   1.0
                 eS    45 50.51
KLU     2.06 132 eP    45 24.56  -0.5
                 eS    45 50.71
FBA     2.08  15 iPc   45 24.15  -1.2
                 eS    45 47.56
NCG     2.08 225 eP    45 25.51   0.1
PWL     2.09 170 eP    45 25.15  -0.2
                 eS    45 51.24
MDM     2.10  10 iPc   45 24.65  -0.9
CGLM    2.11 222 eP    45 26.29   0.5
IL1     2.11  27 iPc   45 24.69  -1.0
ILB     2.11  27 iPc   45 24.67  -1.1
                 eS    45 51.86
CRP     2.19 223 eP    45 27.44   0.5
VLZ     2.21 143 eP    45 25.90  -1.1
VZW     2.21 146 eP    45 26.16  -0.9
GLM     2.22  19 eP    45 26.15  -1.1
SPU     2.22 220 eP    45 27.99   0.7
CKN     2.23 222 eP    45 28.15   0.8
CKT     2.25 222 eP    45 28.17   0.4
MLY     2.25 342 eP    45 26.54  -1.2
BGL     2.26 225 eP    45 28.81   0.9
CKL     2.30 223 eP    45 29.10   0.7
BKG     2.37 220 eP    45 30.09   0.7
DOT     2.39  70 eP    45 29.71   0.1
                 eS    46 00.16
SLKM    2.47 193 eP    45 31.73   1.1
FID     2.49 149 eP    45 29.99  -1.0
TMW     2.80  79 eP    45 35.08  -0.2
SEW     2.82 184 eP    45 35.96   0.5
CVA     2.85 145 eP    45 35.26  -0.7
DFR     2.88 218 eP    45 37.48   1.0
LTI     2.94 168 eP    45 36.09  -1.1
REF     2.97 217 eP    45 39.00   1.1
NCT     2.98 220 eP    45 39.08   1.2
RDW     3.01 218 eP    45 39.63   1.3
TTA     3.16 274 P     45 39.20  -1.2
BC3     3.34  84 eP    45 41.82  -1.0
ILIM    3.39 215 P     45 46.00   2.5

INE     3.43 215 P     45 47.40   3.2
SVW     3.57 243 (P)   45 44.43  -1.6
IM3     3.69 329 eP    45 46.15  -1.5
BALM    3.70 117 eP    45 47.50  -0.4
IMA     3.74 330 eP    45 46.84  -1.7
        67 obs. associated
-------------------------------------
*  NOV  05, 1993  14h 12m 17.11± 1.75s
   22.480 S ±16.5km  171.199 E ±10.6km
   DEPTH =  73.4 ± 23.9 km
   4.7mb (  6 obs.)
 LOYALTY ISLANDS REGION            (189)

DZM     4.42 274 iPd   13 22.00  -1.4
                 iS    14 12.00
BKM     5.53 329 iPd   13 40.30   1.5
                 iS    14 43.00
SVA     8.08  59 eP    14 13.50  -0.5
ARMA   19.21 242 iPc   16 39.90   1.7
        0.5s    20.00nm          4.6mb
LTZ    20.27 178 P     16 49.00  -0.1
CNB    22.94 231 iPc   17 19.10   3.3X
        1.0s    32.00nm          4.7mb
CAN    23.21 232 eP    17 18.70   0.4
                 e     17 28.90
                 e     17 39.70
BWA    23.24 234 eP    17 18.90   0.2
                 e     17 37.00
TOO    26.75 230 eP    17 53.10   1.4
STK    27.88 244 iPd   18 00.90  -1.1
        0.9s     5.00nm          4.1mb
ASPA   34.27 261 iPd   18 58.00  -0.4
        0.8s    33.00nm          5.3mb
WR2    34.38 267 iPc   18 57.90  -1.4
        0.5s     6.20nm          4.8mb
MRWA   49.76 250 eP    21 04.00  -0.3
        0.7s     8.00nm          4.9mb
BRG   146.57 334 ePKP  32 11.50  21.6X
GEC2  148.20 331 ePKP  31 55.60   2.9X
        0.7s     0.94nm
                 e     31 59.20
                 e     32 09.30
                 e     32 15.20
     S.D. = 1.3  on  12 of  15 obs.
-------------------------------------
?  NOV  05, 1993  14h 41m 56.21± 0.82s
   45.591 N ±16.7km   26.570 E ±17.0km
   DEPTH = 130.0km  (geophysicist)
 ROMANIA                           (358)

VRI     0.30  21 iPc   42 14.50   0.6
MLR     0.45 258 iPc   42 15.00  -0.4
ISR     0.45 182 iPc   42 15.60   0.3
CLI     1.08  27 eP    42 20.00  -0.2
CFR     1.19 109 iPd   42 21.00  -0.2
     S.D. = 0.6  on   5 of   5 obs.
-------------------------------------
   NOV  05, 1993  14h 48m 58.18± 0.83s
   20.096 N ± 3.2km  146.054 E ± 4.6km
   DEPTH =  57.2 ±  7.5 km
   4.8mb ( 35 obs.)  4.4Msz (  8 obs.)
 MARIANA ISLANDS REGION            (215)

PJG     6.57 190 eP    50 35.20   0.7
GUMO    6.57 190 eP    50 35.20   0.7
        0.9s   359.10nm          5.9mb X
                 eS    51 48.10
GUA     6.61 190 eP    50 35.20   0.1
                 eS    51 48.00
WKYJ   16.85 329 P     52 50.70  -1.0
KAKJ   16.86 343 eP    52 51.50  -0.2
IIDJ   16.92 337 P     52 51.00  -1.6
CHJJ   17.06 340 P     52 52.90  -1.4
TKSJ   17.46 325 eP    52 59.80   0.5
KAGJ   17.56 312 eP    53 04.60   4.1X
TSRJ   17.76 332 P     53 05.00   2.1
MAT    17.77 339 eP    53 02.00  -1.1
        1.5s    41.67nm          4.4mb
     Z  20s     0.35um          3.9Msz
                 eS    56 26.00
MTMJ   17.95 338 P     53 04.90  -0.5
NIIJ   18.16 342 P     53 06.70  -1.1
KUMJ   18.41 315 P     53 12.10   1.2
YONJ   18.69 326 P     53 14.00  -0.4
YAMJ   18.76 345 eP    53 16.10   0.9
SHNJ   19.26 320 P     53 20.20  -0.7
OFUJ   19.29 350 eP    53 21.30   0.1
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05d 14h

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AOMJ   20.97 348 eP    53 43.40   4.8X
HOOJ   22.34 355 eP    53 54.10   1.8
MRRJ   22.66 350 eP    53 56.00   0.6
KUSJ   22.96 357 eP    53 58.70   0.3
DAV    23.70 240 eP    54 04.50  -1.3
ASAJ   24.12 354 eP    54 11.40   1.8
BAG    24.46 266 ePc   54 17.00   3.7X
SSE    24.90 301 P     54 17.50   0.2
        1.0s    11.00nm          4.3mb
     Z  20s     0.90um          4.3Msz
     E  17s     0.60um
YSS    26.99 355 (P)   54 47.00  10.6X
MDJ    28.02 334 eP    54 46.00   0.2
        1.0s    19.00nm          4.7mb
SNY    28.84 324 eP    54 51.80  -1.3
CN2    29.24 329 eP    54 56.20  -0.6
        1.0s     5.60nm          4.2mb
     Z  20s     0.74um          4.3Msz
TIA    29.99 308 P     55 02.70  -0.8
TIY    34.03 308 eP    55 37.50  -1.4
     Z  21s     0.76um          4.4Msz
     E  20s     0.97um
XAN    35.66 301 P     55 52.30  -0.5
        0.5s     7.00nm          4.8mb
     Z  16s     0.60um          4.5MszX
                ScS    06 03.00
HHC    35.89 313 Pd    55 54.00  -0.7
        0.9s    14.00nm          4.9mb
     Z  30s     0.78um          4.3MszX
GYA    36.63 288 P     56 01.40   0.2
BTO    36.86 312 eP    56 02.00  -0.9
CD2    39.46 294 P     56 24.80   0.1
LZH    40.17 302 P     56 31.00   0.4
        1.5s    53.00nm          5.2mb
     Z  24s     0.58um          4.3MszX
                pP     56 42.00  39kmX
KMI    40.17 285 eP    56 33.00   2.1
        1.0s    30.00nm          5.1mb
CIT    40.64 329 eP    56 35.20   1.0
QIS    40.89 189 eP    56 37.00   0.5
LOE    41.97 274 eP    57 06.00  20.6X
NST    43.82 272 iPc   57 02.20   1.7
GTA    43.98 306 Pc    57 01.50  -0.2
        1.5s    19.00nm          4.6mb
     Z  22s     0.53um          4.4Msz
                pP     57 12.00  36kmX
CHTO   44.33 277 eP    57 05.20   0.6
ASPA   45.08 196 iPd   57 09.30  -1.2
        0.5s    11.60nm          5.0mb
                eS     03 43.80
ZAK    45.25 322 eP    57 11.00  -0.5
        1.0s    11.00nm          4.7mb
LEM    46.31 239 iPc   57 21.50   0.9
DZM    46.40 153 iPc   57 19.40  -1.6
IPM    46.43 257 ePd   57 23.50   2.1
MBL    48.36 213 iPd   57 35.80  -0.5
        0.3s     3.00nm          4.8mb
LSA    50.32 292 eP    57 52.20   0.3
        0.4s    14.00nm          5.3mb
ARMA   50.51 174 eP    57 53.20   0.4
        0.7s     8.00nm          4.9mb
STK    51.86 185 eP    57 59.20  -3.6X
        0.4s     1.20nm          4.3mb
TIK    52.51 353 eP    58 06.00  -1.3
        0.8s    13.00nm          5.0mb
     Z  18s     0.30um          4.4Msz
ILT    52.66  16 iPc   58 08.20  -0.2
        1.7s    40.00nm          5.2mb
WMQ    53.66 310 P     58 16.50   0.2
        1.5s    32.00nm          5.1mb
                pP     58 28.00  40kmX
                PcP    59 22.50
                S      05 46.20
BWA    54.26 178 eP    58 19.30  -1.3
GUN    55.06 291 P     58 28.00   0.9
CAN    55.18 177 eP    58 27.00  -0.3
PKI    55.51 290 P     58 30.60   0.2
KKN    55.60 290 P     58 31.60   0.7
DMN    55.77 290 P     58 32.60   0.4
GKN    56.14 291 P     58 35.00   0.3
MRWA   56.96 211 iPd   58 38.40  -1.7
        0.7s    10.00nm          5.0mb
SVW    57.43  29 eP    58 43.40   0.2
MUN    59.15 210 eP    58 54.00  -1.4
NWAO   59.48 208 eP    58 57.00  -0.7
        0.7s    10.00nm          5.1mb
SLKM   59.82  31 (P)   58 59.01  -0.8
IMA    59.87  24 eP    59 00.10  -0.1
        0.9s     5.40nm          4.7mb
NRI    60.27 340 iPc   59 01.50  -1.1
        1.8s    34.00nm          5.2mb
                e      59 51.00
PMR    60.58  30 eP    59 03.80  -1.0
KLU    62.07  30 eP    59 14.43  -0.6
KSH    62.34 305 eP    59 18.50   1.2
     Z  20s     0.50um          4.7Msz
     N  16s     0.72um
     E  16s     0.67um
NDI    62.53 293 iPc   59 18.80   0.2
HYB    63.58 280 eP    59 25.00  -0.6
BALM   63.72  31 (P)   59 24.85  -1.1
GBA    65.61 276 P     59 38.00  -0.7
POO    67.64 282 eP    59 56.00   4.3X
INK    67.96  23 eP    59 52.00  -0.8
        1.0s     2.00nm          4.1mb
SVE    70.94 325 ePc   00 11.00  -0.3
        1.9s    40.00nm          5.0mb
QUE    71.05 296 eP    00 14.10   1.4
MBC    71.72  15 eP    00 16.50   0.8
        0.9s     3.00nm          4.2mb
ARU    72.12 324 eP    00 17.00  -1.3
     Z  14s     1.00um          5.2MszX
ASH    76.18 306 eP    00 43.00   0.9
GMW    76.21  44 eP    00 42.70   0.5
YKA    76.60  28 eP    00 43.20  -0.8
        0.8s     4.60nm          4.5mb
RMW    76.88  44 eP    00 46.66   0.7
LON    77.06  45 (P)   00 47.89   0.9
RES    77.99  14 eP    00 52.00   0.5
        1.0s     4.00nm          4.4mb
VGB    78.09  46 eP    00 52.95   0.3
TEH    82.16 305 eP    01 12.00  -2.7
BONR   82.18  53 eP    01 15.18   0.3
MOS    83.48 327 eP    01 22.00   1.2
     Z  18s     0.72um          5.1Msz
LRM    83.50  44 eP    01 21.60   0.1
GRO    83.67 314 eP    01 23.00   0.9
        2.0s   120.00nm          5.6mb
     Z  12s     0.50um          5.1MszX
     N  14s     0.50um
     E  20s     0.60um
TPNV   84.05  53 eP    01 24.13  -0.3
        0.9s     4.98nm          4.5mb
OBN    84.28 327 iPc   01 25.00   0.1
     Z  24s     0.60um          4.9MszX
     N  20s     0.20um
     E  20s     0.20um
HVU    84.81  47 eP    01 28.56   0.5
KAF    85.29 336 iP    01 29.00  -0.8
        0.7s     5.70nm          4.8mb
DUG    85.38  49 eP    01 31.25   0.3
        1.1s    12.10nm          4.9mb
ARUT   85.83  51 eP    01 33.63   0.4
DAU    86.39  48 eP    01 36.52   0.4
MSU    86.48  50 eP    01 36.35  -0.2
NUR    86.88 335 eP    01 37.20  -0.4
SRU    87.43  49 eP    01 40.94  -0.1
PV10   88.79  49 eP    01 47.96   0.3
PV08   88.98  49 (P)   01 50.40   1.7
TUC    89.97  56 eP    01 55.04   1.9
        1.1s     5.61nm          4.8mb
UPP    90.00 337 iP    02 04.60  12.1X
GOL    90.78  47 eP    01 56.27  -0.7
        0.8s     4.16nm          4.9mb
HFS    91.22 338 eP    01 56.50  -1.7
        0.4s     1.40nm          4.7mb
     Z  18s     0.08um          4.2Msz
                LR     38 45.00
ALQ    92.14  52 eP    02 04.09   0.9
        1.0s     4.18nm          4.8mb
LBF   104.99 334 ePdiff07 21.30 260.6X
        1.2s    10.10nm
SSF   105.12 334 ePKP  07 21.00   5.5X
        1.1s    10.00nm
SMF   105.32 334 ePKP  07 19.80   3.8X
LPAZ  147.34  89 PKP   08 38.90   2.9X
LPB   147.42  89 ePKP  08 40.00   4.1X
CNCB  147.58  90 PKP   08 40.10   3.8X
MOCB  150.35  98 PKP   08 41.00   0.6
     S.D. = 1.0  on 106 of 120 obs.
-----------------------------------------
   NOV  05, 1993  16h 01m 38.01± 1.31s
   29.294 N ±11.3km  130.481 E ± 5.7km
   DEPTH =  42.1 ± 10.3 km
```

4.6mb (17 obs.) 4.5Msz (2 obs.)

RYUKYU ISLANDS (238)

```
KAGJ    1.92  10 P     02 09.80   1.0
                eS     02 35.90
KUMJ    3.24   5 P     02 28.70   1.0
SHNJ    4.85   6 P     02 50.30   0.0
TKSJ    5.58  32 P     02 59.90  -0.8
YONJ    6.40  22 P     03 11.50  -0.7
WKYJ    6.56  40 P     03 13.10  -1.4
TSRJ    7.77  35 P     03 30.60  -0.8
SSE     8.24 285 Pc    03 38.50   0.6
        1.0s    21.00nm          5.1mb
     Z  20s     1.40um          3.6Msz
     N  14s     0.70um
     E  14s     0.70um
IIDJ    8.80  44 P     03 46.30   0.6
MAT     9.71  40 iPd   03 57.30  -0.9
     Z  20s     0.71um
                (S)    04 21.00
CHJJ    9.84  45 P     04 00.90   1.0
NJ2    10.38 288 Pc    04 08.00   0.7
        1.0s    26.00nm          5.4mb
     N  12s     0.36um
     E  12s     0.36um
TIA    13.18 305 eP    04 48.20   3.2X
     Z  15s     1.52um
     N  13s     0.91um
     E  13s     1.10um
CN2    15.03 346 eP    05 13.60   4.5X
        1.1s    89.00nm          4.9mb
     Z  18s     0.84um          4.2Msz
                epP    05 27.60
TIY    17.22 304 eP    05 37.20   0.2
     Z  16s     1.78um
     N  14s     1.11um
     E  15s     0.86um
                pP     05 51.00
XAN    18.94 290 P     05 56.80  -1.5
        0.9s    11.00nm          4.1mb
     Z  12s     0.89um          4.7MszX
     N  10s     0.43um
     E  10s     0.61um
HHC    19.26 312 eP    06 06.00   4.0X
        0.8s    16.00nm          4.3mb
     Z  20s     1.49um          5.2Msz
BTO    20.16 309 eP    06 14.00   2.4
     N  15s     0.53um
     E  15s     0.41um
GYA    21.24 268 Pc    06 23.00   0.3
        1.0s    30.00nm          4.6mb
     Z  12s     0.51um          4.1MszX
     N  12s     0.62um
CD2    23.16 281 P     06 42.00   0.3
        1.0s    44.00nm          4.9mb
LZH    23.38 294 eP    06 43.00  -0.9
        1.5s    40.00nm          4.7mb
     Z  15s     0.97um          4.4MszX
     E  12s     0.57um
                pP     06 53.00  37kmX
KMI    24.99 267 eP    06 59.50  -0.2
        1.4s    50.00nm          4.9mb
     Z  14s     1.20um          4.6MszX
     N  10s     0.40um
     E  10s     0.60um
                pP     07 10.00  39kmX
GTA    27.14 300 eP    07 18.00  -1.3
     Z  18s     1.43um          4.6Msz
     E  14s     0.42um
WMQ    36.88 305 eP    08 43.00  -1.4
GUN    39.01 279 P     09 03.00   0.3
PKI    39.49 279 P     09 06.40  -0.3
KKN    39.55 279 P     09 07.00  -0.1
DMN    39.74 279 P     09 08.60  -0.1
GKN    40.06 280 P     09 10.80  -0.4
WRA    49.09 175 P     10 24.00   0.7
        0.7s     0.60nm          3.7mb
GBA    51.36 264 P     10 40.00  -0.8
INK    65.29  24 eP    12 18.00   0.6
MBC    66.38  14 eP    12 25.50   1.2
        1.0s     4.00nm          4.4mb
KAF    70.79 331 eP    12 48.00  -3.7X
RES    72.17  11 eP    13 00.50   0.7
        1.0s     6.00nm          4.5mb
NB2    77.44 334 P     13 28.70  -1.6
        1.0s     4.00nm          4.4mb
CLL    82.76 326 eP    13 58.00  -0.8
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       1.4s     11.00nm          4.7mb
KHC    83.83 324 eP    14 05.50   1.1
       1.1s      6.30nm          4.6mb
GEC2   83.95 324 ePc   14 05.10   0.1
       1.4s      5.80nm          4.5mb
GRF    84.67 325 ePc   14 09.60   1.1
       1.1s     12.00nm          4.9mb
     Z 20s      0.20um          4.5Msz
     S.D. = 1.0  on  36 of  40 obs.
-------------------------------------
? NOV  05, 1993  16h 14m 20.02± 4.41s
   41.120 N ±10.4km   28.873 E ±32.5km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
     ML 2.7 (ISK).

CTT     0.34 275 ePg   14 26.40  -0.6
                eSg    14 35.00
BNT     1.05 224 ePn   14 40.00   0.1
EDC     1.09 225 ePn   14 40.00  -0.5
DMK     1.09 310 ePn   14 40.60   0.0
MFT     1.25 255 ePn   14 44.00   0.7
     S.D. = 0.7  on   5 of   5 obs.
-------------------------------------
&  NOV  05, 1993  17h 41m 20.33s
   60.005 N          151.525 W
   DEPTH =  68.0km
 KENAI PENINSULA, ALASKA           ( 14)
     <AEIC>. ML 2.9 (AEIC).

HOM     0.35 190 iPd   41 31.68  -0.1
                eS     41 39.47
BRLK    0.40 127 eP    41 32.06  -0.2
                eS     41 40.54
CNPM    0.50 163 iPd   41 32.55  -0.7
                eS     41 41.98
XLV     0.56 190 eP    41 33.60  -0.2
RDT     0.72 323 iPc   41 34.84  -0.8
                eS     41 46.49
ILIM    0.72 277 iPc   41 34.73  -0.9
                eS     41 46.31
RED     0.75 304 iPc   41 35.27  -0.7
                eS     41 47.15
NKA     0.75  11 iPd   41 37.21   1.3
REF     0.76 310 iPc   41 35.57  -0.7
                eS     41 47.57
RS2     0.77 307 iPc   41 35.72  -0.6
INE     0.77 275 iPc   41 35.33  -1.0
                eS     41 47.35
RDW     0.80 307 iPc   41 36.00  -0.7
                eS     41 48.18
INW     0.81 275 iPc   41 35.82  -0.9
                eS     41 48.11
SLKM    0.82  52 iPd   41 35.94  -0.9
DFR     0.83 316 iPc   41 36.11  -0.8
NCT     0.90 309 iPc   41 37.13  -0.6
OPT     0.93 248 iPc   41 37.37  -0.8
                eS     41 49.83
SEW     1.05  84 eP    41 38.44  -1.1
BKG     1.13 341 ePd   41 40.23  -0.5
AUE     1.14 236 eP    41 40.33  -0.4
AUL     1.15 238 eP    41 40.56  -0.4
AUH     1.17 237 eP    41 40.78  -0.4
AUW     1.17 238 eP    41 40.89  -0.4
AUI     1.18 236 eP    41 40.73  -0.5
                eS     41 56.60
MPA     1.18  65 eP    41 40.65  -0.7
SPU     1.21 348 iPd   41 41.29  -0.5
                eS     41 58.00
CKT     1.25 345 iPd   41 41.86  -0.4
CKL     1.26 342 eP    41 42.10  -0.4
CKN     1.27 345 eP    41 42.42  -0.1
                eS     41 58.95
CRP     1.30 346 ePd   41 42.37  -0.8
                eS     41 58.79
CP2     1.31 345 eP    41 42.81  -0.5
CGLM    1.33 350 ePd   41 43.15  -0.3
BGL     1.33 342 eP    41 43.39  -0.1
PDB     1.36 262 iPc   41 42.54  -1.2
                eS     41 59.95
NCG     1.44 348 ePd   41 44.78  -0.1
SYI     1.47 198 eP    41 44.18  -1.0
SUA     1.51  14 ePd   41 45.63  -0.3
CDD     1.53 226 eP    41 45.07  -1.0
PMS     1.58  37 P     41 46.50  -0.2
MCNL    1.65 241 eP    41 46.17  -1.5
                eS     42 06.26
PWL     1.80  60 ePd   41 48.54  -1.2
PWA     1.84  25 P     41 50.20   0.0
LTI     1.84  87 eP    41 48.84  -1.5
PLRM    1.98  35 iPd   41 51.15  -1.0
PMR     1.98  35 iPd   41 50.84  -1.3
SKT     1.98 360 iPd   41 52.08  -0.2
KNK     2.07  46 eP    41 52.40  -1.1
                eS     42 17.09
GHO     2.18  35 eP    41 54.05  -1.1
CFI     2.20  56 eP    41 53.71  -1.5
SVW     2.31 300 P     41 55.20  -1.6
KDC     2.32 193 eP    41 53.71  -3.2
SML     2.39  39 eP    41 56.90  -1.1
CUT     2.48  14 eP    41 58.94  -0.3
FID     2.62  71 eP    41 58.18  -2.9
SCM     2.75  46 eP    42 02.01  -1.1
VLZ     2.80  64 eP    42 02.27  -1.4
HUR     3.12  16 eP    42 08.42   0.3
KLU     3.13  59 iPd   42 06.55  -1.8
TOA     3.35  49 P     42 10.50  -0.9
TRF     3.51   9 eP    42 12.64  -1.1
KTH     3.57   4 eP    42 13.94  -0.6
TZL     3.61  53 P     42 14.60  -0.3
RND     3.64  19 eP    42 15.02  -0.5
DHY     3.67  31 eP    42 15.06  -0.9
MCK     3.94  17 eP    42 19.28  -0.3
GLB     4.05  66 eP    42 18.73  -2.6
PAX     4.16  42 eP    42 21.40  -1.4
BWN     4.29  12 P     42 24.10  -0.5
WAX     4.35  80 P     42 24.20  -1.3
BALM    4.65  73 P     42 28.10  -1.7
WRH     4.76  18 eP    42 29.55  -1.6
DJE     4.89  32 P     42 28.60  -4.3
HDA     4.91  24 eP    42 32.06  -1.2
CCB     4.97  19 eP    42 32.35  -1.8
MDM     5.20  16 eP    42 35.60  -1.8
IL1     5.25  22 eP    42 36.07  -1.9
ILB     5.25  22 eP    42 36.10  -1.9
BC3     5.58  52 eP    42 41.00  -1.7
IM3     6.09 351 eP    42 46.88  -2.8
        79 obs. associated
-------------------------------------
*  NOV  05, 1993  18h 18m 30.48± 0.66s
    5.793 S ± 7.6km  146.013 E ±12.0km
   DEPTH =  10.0km  (geophysicist)
   3.9mb (  2 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)
      ML 4.3 (PMG).

YYYY    0.45 186 eP    18 39.20  -0.4
                eS     18 46.00
MDG     0.59 337 iPc   18 41.60  -0.8
LAT     1.31 131 eP    18 54.60  -0.1
MNDI    2.37 261 eP    19 14.30   4.1X
WWKK    3.21 312 eP    19 24.50   2.5
PMG     3.76 163 eP    19 29.00  -0.9
CTA    14.21 179 eP    21 56.00   2.0
WR2    18.06 218 iPc   22 42.60  -0.7
        0.7s     9.60nm          4.0mb
                eS     26 17.70
ASPA   21.25 212 eP    22 59.20 -20.1X
        1.0s     4.90nm
                i      23 22.80
DZM    25.54 131 iPc   24 02.10   0.9
STK    26.28 189 eP    24 04.10  -3.8X
        0.9s     1.80nm          3.8mb
GUN    66.93 303 P     29 25.80  -0.3
PKI    67.21 303 P     29 28.20   0.4
KKN    67.39 303 P     29 28.00  -0.8
DMN    67.48 303 P     29 28.80  -0.6
GKN    68.00 303 P     29 31.60  -1.0
KIC   150.91 273 PKP   38 25.00   4.9X
        0.9s     6.00nm
TIC   151.19 273 PKP   38 26.00   5.4X
LIC   151.20 272 PKP   38 26.00   5.4X
     S.D. = 1.2  on  13 of  19 obs.
-------------------------------------
   NOV  05, 1993  18h 53m 53.72± 0.58s
   38.835 N ± 4.6km   29.973 E ± 5.9km
   DEPTH =   5.0km  (geophysicist)
 TURKEY                            (366)
     ML 3.6 (ISK).

ALT     0.24  26 iPg   53 58.30  -0.4
KHL     0.62 215 iPg   54 06.50   0.3
                eSg    54 16.50
DST     1.30 307 iPn   54 18.00  -0.2
BCK     1.46 160 ePn   54 20.00  -0.8
GPA     1.47  10 iPn   54 20.00  -1.0
NAL     1.71  37 iP    54 26.60   2.1
                eS     54 53.30
EYL     1.73   5 ePn   54 24.70  -0.1
CIN     1.93 231 ePn   54 31.00   3.5X
GBZT    1.99 348 ePn   54 28.70   0.3
HRT     2.00 353 ePn   54 27.70  -0.8
IZM     2.17 259 ePn   54 31.00   0.0
BNT     2.20 314 ePn   54 31.70   0.3
EDC     2.22 313 ePn   54 32.00   0.3
ISK     2.34 343 ePn   54 33.00  -0.4
SGKT    2.37  42 eP    54 39.20   5.2X
                eS     55 11.60
ITU     2.38 342 ePn   54 42.00   7.9X
                iSg    55 09.00
DVR     2.80  33 eP    54 45.40   5.3X
EZN     3.00 290 ePn   54 43.00   0.3
DMK     3.43 331 ePn   54 49.00   0.1
     S.D. = 0.8  on  15 of  19 obs.
-------------------------------------
   NOV  05, 1993  19h 01m 46.32± 1.25s
   32.892 S ± 9.0km   70.956 W ± 8.6km
   DEPTH =  50.6 ± 17.6 km
 CHILE-ARGENTINA BORDER REGION    (127)
     Felt (III) in the Catemu area,
     Chile.

ROCH    0.09 210 iPd   01 55.22   0.5
                iS     02 03.39
JACH    0.37  56 iPd   01 55.67  -0.7
                iS     02 04.50
IHA     0.59 257 eP    01 59.20   0.4
                i(S)   02 09.40
SAN     0.61 156 iP+   01 59.05   0.0
                iS     02 10.22
FCH     0.71 128 iPd   02 00.23  -0.4
                iS     02 12.36
TACH    0.76 179 iP+   02 00.99   0.0
                iS     02 13.79
LCCH    0.78 221 iP+   02 01.52   0.3
                iS     02 14.23
PCH     0.82 153 iP+   02 01.33  -0.5
                iS     02 14.60
LNV     1.13 200 iP+   02 05.39  -0.6
                iS     02 22.44
CACH    1.26 166 iP+   02 07.71  -0.2
                iS     02 25.97
MDZ     1.77  90 eP    02 17.70   2.6
                e      02 35.20
                iS     02 42.20
ZON     2.35  56 eP    02 22.00  -1.3
                eS     02 50.00
     S.D. = 1.1  on  12 of  12 obs.
-------------------------------------
   NOV  05, 1993  19h 06m 34.00± 0.53s
    5.814 S ± 5.4km  145.923 E ± 9.7km
   DEPTH =  10.0km  (geophysicist)
   3.8mb (  3 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)
      ML 4.3 (PMG).

YYYY    0.43 174 eP    06 42.80   0.1
                eS     06 49.80
MDG     0.58 346 iPc   06 45.40  -0.3
LAT     1.37 128 eP    06 59.00   0.0
MNDI    2.28 261 eP    07 18.00   5.5X
WWKK    3.16 313 eP    07 28.50   3.7X
PMG     3.77 161 eP    07 33.50   0.0
WR2    17.99 218 iPc   10 45.80  -0.2
        0.7s     7.20nm          3.9mb
ASPA   21.19 212 eP    11 21.90  -0.2
        1.2s     7.60nm          4.0mb
STK    26.25 188 eP    12 13.90   2.8X
        2.0s     1.80nm          3.4mb
GUN    66.87 304 P     17 29.60   0.4
KKN    67.33 303 P     17 32.00   0.0
DMN    67.41 303 P     17 32.80   0.3
LIC   151.11 272 PKP   26 29.80   5.9X
     S.D. = 0.2  on   9 of  13 obs.
-------------------------------------
?  NOV  05, 1993  19h 07m 53.43± 5.08s
   31.104 S ±36.8km   68.384 W ±27.1km
   DEPTH = 126.5 ± 36.6 km
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTLL    0.24 198 iPd   08 10.90  -0.6
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05d 19h

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CFA      0.52 166 e(P)c 08 12.50   0.0
RTCB     0.52 223 ePd   08 13.20   0.6
                  S     08 25.70
MRA      2.63 120 e(P)  08 35.90   0.3
                  S     09 06.10
TCA      3.26  95 i(P)  08 44.00  -0.1
                  (S)   09 19.00
RFA      3.66 181 ePc   08 49.20  -0.2
     S.D. = 0.7  on   6 of   6 obs.
-----------------------------------
&  NOV  05, 1993  19h 19m 24.64s
   40.288 N          124.437 W
   DEPTH =  21.7km
 NEAR COAST OF NORTHERN CALIF.    ( 35)
      <GM-P>. MD 3.3 (GM). ML 3.5
      (BRK), 3.1 (GS).

KSMM     0.23 117 P     19 30.37  -0.1
KMPM     0.27  62 eP    19 31.12   0.0
KCRM     0.49  74 P     19 34.75   0.1
FHC      0.62  34 iPc   19 36.10  -0.6
KBSM     0.74 120 P     19 38.10  -0.8
KPPM     0.82  86 P     19 39.79  -0.5
KRPM     0.92  20 P     19 40.56  -1.4
KSPM     1.05 137 P     19 42.18  -1.9
KRKM     1.21 126 P     19 44.54  -1.8
KOMM     1.24  37 P     19 45.06  -1.8
LGPM     1.37  62 iPc   19 47.12  -1.6
GHOM     1.42 151 P     19 47.09  -2.3
WDC      1.48  78 ePc   19 48.31  -1.8
LBKM     1.56  59 P     19 49.80  -1.7
GHLM     1.66 138 P     19 50.54  -2.3
GMCM     1.80 145 P     19 52.36  -2.5
YBH      1.95  42 ePc   19 55.16  -1.8
                  eS    20 19.71
LGBM     2.00  57 P     19 57.27  -0.7
FTR      2.02 150 P     19 55.50  -2.5
LHEM     2.15  51 P     19 59.04  -1.0
LBFM     2.20  60 eP    19 59.63  -1.2
LMEM     2.20  83 eP    19 59.47  -1.3
LRDM     2.28  85 P     20 00.81  -0.9
NCFM     2.34 147 P     20 00.02  -2.5
NTYM     2.34 143 eP    20 00.60  -1.9
ORV      2.37 107 eP    20 01.15  -1.9
LHKM     2.42  85 P     20 02.86  -1.0
AARM     2.82 110 P     20 09.35   0.0
JEGM     3.17 150 (P)   20 11.61  -2.7
JBLM     3.62 150 P     20 17.71  -3.1
ARN      3.71 141 eP    20 19.43  -2.6
BONR     5.31 114 (P)   20 44.81  -0.2
       32 obs. associated
-----------------------------------
*  NOV  05, 1993  19h 45m 53.76± 2.32s
   37.300 N ±16.6km   72.035 E ± 9.4km
   DEPTH = 166.2 ± 29.3 km
   4.0mb (  4 obs.)
 TAJIKISTAN                        (715)

QUE      8.26 212 eP    47 51.60  -0.1
                  eS    49 22.90
NDI      9.63 152 iP    48 11.00   1.4
       0.6s    52.00nm          5.2mb X
                  eS    49 51.00
GKN     14.08 128 P     49 06.80  -0.4
KKN     14.64 127 P     49 13.40  -0.9
DMN     14.65 127 P     49 15.00   0.5
PKI     14.87 127 P     49 16.80  -0.5
GUN     14.94 125 P     49 18.00  -0.2
GBA     24.09 167 P     50 55.00  -0.2
HFS     42.96 321 eP    53 36.90  -0.5
       0.4s     1.80nm          4.0mb
NB2     44.25 322 P     53 47.20  -0.6
       0.7s     1.90nm          3.8mb
MBC     66.50   3 eP    56 28.00   1.2
       0.7s     3.00nm          4.2mb
INK     72.98  10 eP    57 06.50   0.3
       0.5s     2.00nm          4.1mb
     S.D. = 0.8  on  12 of  12 obs.
-----------------------------------
*  NOV  05, 1993  20h 03m 23.10± 0.31s
   58.871 S ± 9.8km   25.516 W ±10.5km
   DEPTH =  33.0km  (normal)
   4.6mb (  3 obs.)
 SOUTH SANDWICH ISLANDS REGION    (153)

PPD     41.18 322 eP    11 06.30   0.4
SOB1    50.92 340 eP    12 22.90  -0.1
CNCB    52.22 305 P     12 33.80   0.3
LPB     52.52 305 eP    12 35.00  -0.6
LPAZ    52.75 305 P     12 37.20  -0.4
LIC     66.93  22 P     14 14.10  -0.1
KIC     67.12  22 P     14 15.30  -0.1
       0.9s     9.50nm          4.9mb
TIC     67.34  22 P     14 17.00   0.2
STK     88.95 169 eP    16 14.70  -0.7
       0.8s     3.80nm          4.8mb
WRA     99.74 161 P     17 05.80   0.8
       0.8s     0.30nm          3.9mb
NB2    122.94  20 PKP   22 15.70  -0.2
       1.0s     3.90nm
DMN    123.80  92 PKP   22 19.20   0.3
GKN    123.87  91 PKP   22 18.60  -0.3
PKI    123.92  92 PKP   22 19.00  -0.3
KKN    124.03  92 PKP   22 18.80  -0.5
GUN    124.44  92 PKP   22 20.40   0.1
NUR    125.30  28 ePKP  22 21.00   0.6
LRM    126.25 300 ePKP  22 24.00   0.8
KAF    127.09  28 iPKP  22 23.60  -0.3
       0.6s     4.10nm
YKA    138.85 315 ePKP  22 46.20   0.1
       0.8s    13.20nm
MBC    146.93 334 ePKPd 23 03.60   3.9X
       1.0s    15.00nm
INK    148.53 317 ePKP  23 07.00   4.6X
       0.9s    16.00nm
BJI    149.37 111 ePKP  23 09.00   4.4X
       1.5s    14.00nm
     S.D. = 0.5  on  20 of  23 obs.
-----------------------------------
?  NOV  05, 1993  20h 35m 31.94± 4.15s
    6.800 S ±32.3km  147.985 E ±35.2km
   DEPTH =  10.0km  (geophysicist)
   4.3mb (  3 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)
      ML 4.2 (PMG).

LAT      0.99 278 iPd   35 51.10   0.5
YYYY     2.08 285 eP    36 07.00  -0.4
PMG      2.72 197 eP    36 43.00  26.6X
WR2     18.59 224 iPd   39 50.80  -0.5
       0.4s     8.60nm          4.3mb
ASPA    21.55 217 iPc   40 24.10   0.4
       0.4s    11.00nm          4.6mb
     Z  22s     0.10um          3.2Msz
STK     25.66 193 eP    41 03.70   0.1
       0.9s     2.40nm          3.9mb
     S.D. = 0.6  on   5 of   6 obs.
-----------------------------------
?  NOV  05, 1993  22h 08m 22.96± 2.34s
   42.752 N ±17.1km  139.540 E ±19.2km
   DEPTH = 215.3 ± 23.4 km
   4.0mb (  5 obs.)
 HOKKAIDO, JAPAN  REGION          (224)

MAT      6.29 190 iPc   09 54.80   0.0
       0.8s    22.39nm          4.4mb
GUN     45.48 269 P     16 23.20   0.5
       0.4s    16.00nm          4.8mb
KKN     45.98 269 P     16 27.00   0.4
PKI     46.01 269 P     16 26.20  -0.7
DMN     46.21 269 P     16 28.20  -0.2
GKN     46.34 270 P     16 29.40   0.1
WRA     62.56 186 P     18 26.00   0.0
       0.6s     0.90nm          3.7mb
HFS     68.31 334 eP    19 02.20   0.0
       0.3s     1.20nm          4.0mb
NB2     68.38 336 P     19 02.60  -0.1
       0.6s     0.70nm          3.6mb
     S.D. = 0.4  on   9 of   9 obs.
-----------------------------------
   NOV  05, 1993  22h 37m 20.18± 0.16s
    3.188 S ± 3.0km  148.339 E ± 3.8km
   DEPTH =  14.4km  (geophysicist)
   5.7mb ( 80 obs.)  6.2Msz ( 52 obs.)
 BISMARCK SEA                     (203)
      Mw 6.2 (GS), 6.2 (HRV). Ms 6.1
      (BRK). Mo=3.2*10**18 Nm (PPT).
      Depth from broadband
      displacement seismograms.
      FAULT PLANE SOLUTION: P-Waves
       NP1:Strike=102 Dip=80 Slip=   0
       NP2:        192     90       190
       Principal Axes:
        T                Plg= 7  Azm=327
        P                  7       57
      Comment: The focal mechanism is
        moderately well controlled
        and corresponds to strike-
        slip faulting. The preferred
        fault plane is not
        determined.
      RADIATED ENERGY
       No. of sta:  12  Focal mech.  F
       Energy        1.1±0.2*10**14 Nm
      MOMENT TENSOR SOLUTION
      Dep  21          No. of sta: 17
      Moment Tensor;   Scale 10**18 Nm
        Mrr= 0.12       Mtt= 1.44
        Mff=-1.56       Mrt= 0.44
        Mrf= 0.12       Mtf= 1.28
       Principal axes:
        T  Val=  2.02  Plg=14  Azm=340
        N        0.01      76      155
        P       -2.03       1      250
      Best Double Couple:Mo=2.0*10**18
       NP1:Strike= 24 Dip=80 Slip= 171
       NP2:        116     81       10
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 48S, **C  M.W.: 35S, 59C
      Centroid Location:
      Origin Time       22:37:24.8 0.1
      Lat  3.10S 0.01 Lon 148.55E 0.01
      Dep  15.0 FIX Half-duration  3.0
      Moment Tensor;   Scale 10**18 Nm
        Mrr= 0.03 0.01  Mtt= 1.35 0.01
        Mff=-1.38 0.02  Mrt=-0.31 0.06
        Mrf= 0.05 0.05  Mtf= 1.57 0.01
       Principal Axes:
        T  Val=  2.10  Plg= 7  Azm=156
        N        0.01      81      303
        P       -2.11       5       65
      Best Double Couple:Mo=2.1*10**18
       NP1:Strike=200 Dip=82 Slip= 178
       NP2:        291     88        8

KVG      2.54  76 iPd   37 55.10  -6.5X
MDG      3.27 231 eP    38 11.90  -0.1
LAT      3.70 201 eP    38 18.40   0.3
YYYY     3.84 218 eP    38 22.80   2.5
RAB      3.94 105 iP-   38 18.00  -3.5X
                  iS    39 04.00
WWKK     4.73 265 eP    38 34.00   1.3
MNDI     5.52 238 eP    38 46.50   2.4
PMG      6.29 191 eP    38 56.50   1.8
HNR     13.10 119 ePc   40 28.20  -0.2
                  eS    43 20.00
CTA     16.92 187 iPc+  41 18.20   0.1
       2.5s  3888.89nm          6.1mb
                  i     41 49.50
                  eS    44 12.00
CTAO    16.92 187 ePc   41 18.58   0.4
                  ec    41 20.98
GUA     16.96 349 eP+   41 18.20  -0.5
       1.5s  1222.22nm          5.8mb
     Z  22s    80.38um          6.9MszX
GUMO    17.02 348 eP+   41 18.00  -1.4
       1.6s   421.00nm          5.3mb
                  e     41 36.70
                  eS    44 38.10
PJG     17.02 348 eP    41 18.20  -1.2
                  TT    56 26.00
QIS     19.25 206 eP    41 57.00  10.1X
MTN     19.54 240 iPc   41 49.20  -1.2
       1.0s   975.00nm          6.0mb
WB5     21.48 218 iPd   42 09.90  -0.6
                  iS    46 28.00
WR2     21.53 218 iPc   42 10.10  -1.0
       0.8s   210.40nm          5.6mb
                  ipP   42 32.20 108kmX
WRA     21.54 218 P     42 10.89  -0.3
       0.9s   125.50nm          5.3mb
KNA     22.96 236 eP    42 31.50   6.3X
       1.0s   238.00nm          5.7mb
BKM     24.25 128 iPc   42 36.20  -1.6
PVC     24.34 128 iP    42 37.50  -1.2
ASPA    24.68 213 iPd   42 42.50   0.5
       1.2s   205.80nm          5.6mb
     Z  22s    49.50um          6.0Msz
                  eS    47 14.30
DAV     24.91 294 eP    42 46.00   1.8
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DZM    25.72 138 iPd   42 50.10  -1.8
CTB    26.21 293 ePd   43 01.00   4.6X
ARMA   27.26 174 iPd   43 05.00  -1.1
       1.1s   185.00nm          5.7mb
                ipP    43 19.00  57kmX
PLP    27.27 302 ePc   43 05.50  -0.6
BUNI   27.97 268 P     43 13.90   1.3
       1.3s    38.00nm          5.0mb
TANI   28.91 269 P     43 29.40   8.4X
       1.3s    32.00nm          4.9mb
STK    29.24 192 eP    43 19.80  -4.0X
       1.1s     9.60nm          4.5mb X
RIV    30.60 175 iPd   43 35.00  -0.8
       0.9s  3260.50nm          7.2mb X
                iPP    44 37.60
                iS     48 39.20
                iSS    50 38.00
GQP    30.79 304 eP    43 27.50 -10.2X
BWA    31.08 180 iPc   43 38.40  -1.7
                i      43 42.80  15kmX
TSM    31.34 284 ePc   43 46.00   3.4X
CAN    31.98 179 iPc   43 46.40  -1.6
                i      43 50.90  16kmX
CNB    31.98 178 iPd   43 47.00  -1.1
       1.1s   136.00nm          5.8mb
QVP    32.35 304 eP    43 53.00   1.6
KEDI   32.45 260 P     43 50.40  -2.0
       1.3s    20.00nm          4.9mb
ADE    32.86 195 iPd   43 55.00  -0.7
MBL    32.99 235 eP    43 56.00  -0.9
KKM    33.36 286 ePc   44 04.80   4.4X
       1.2s   137.40nm          5.8mb
CVP    33.39 309 eP    44 00.00  -0.5
BAG    33.64 306 ePc+  44 02.00  -0.9
                eS     49 26.00
TOO    34.32 184 iPc   44 07.10  -1.2
       0.9s   199.00nm          6.0mb
SRDI   34.41 260 P     44 06.30  -3.1X
MEEK   36.80 228 eP    44 28.00  -1.6
COOL   37.65 220 eP    44 35.00  -1.6
       1.0s    83.00nm          5.5mb
KAGJ   38.01 335 P     44 39.50  -0.1
WKYJ   39.10 343 P     44 47.70  -1.1
KUMJ   39.22 336 P     44 48.20  -1.5
TKSJ   39.35 341 P     44 50.10  -0.7
CHJJ   40.00 348 eP    44 53.80  -2.3
MRWA   40.16 226 iPc   44 56.70  -0.9
       0.8s    33.00nm          5.1mb
QZH    40.20 316 iPc   44 58.00   0.1
       1.0s   160.00nm          5.7mb
     Z  33s    27.80um          5.9MszX
     N  16s     5.98um
                S      51 08.00
TSRJ   40.22 344 P     44 56.90  -1.1
SHK    40.31 340 ePc   44 57.80  -0.9
KLB    40.33 222 iPc   44 57.70  -1.2
       1.0s    61.00nm          5.3mb
SHNJ   40.51 338 eP    44 59.50  -0.8
TPI    40.63 269 ePc   45 02.50   0.8
                e      48 00.00
MAJO   40.64 347 ePc   44 58.78  -2.6
MAT    40.64 347 (P)   44 59.00  -2.4
       0.8s     8.96nm          4.5mb X
     Z  20s    15.60um          5.9Msz
                eS     50 47.00
YONJ   40.65 341 P     45 00.90  -0.6
LEM    40.72 263 iPc   45 02.50   0.0
       2.0s   588.24nm          6.0mb
                iS     51 20.00
                eLR    54 24.00
NIIJ   41.15 349 eP    45 04.10  -1.4
PACI   41.41 264 P     45 08.00  -0.1
NWAO   41.51 221 (P)   45 05.52  -3.0X
       1.0s    65.00nm          5.3mb
                ed     45 08.75  11kmX
MUN    41.61 223 eP    45 10.00   0.6
       1.6s   189.00nm          5.6mb
     Z  20s    51.50um          6.4Msz
HKC    41.91 309 eP    45 14.00   2.0
                S      51 38.00
OFUJ   42.51 352 eP    45 15.00  -1.6
SSE    42.80 325 iPc   45 18.87  -0.3
       1.4s   110.00nm          5.4mb
     Z  20s    23.80um          6.1Msz
     N  20s    14.40um
     E  20s    17.10um
                ec     45 20.44
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                epPd   45 23.92  17kmX
                S      51 44.00
                sS     51 54.00
                SS     54 52.00
GZH    42.97 309 iPc   45 22.10   1.4
     Z  36s    16.80um          5.7MszX
     N  16s     5.60um
     E  19s    10.80um
                iS     51 48.00
PENI   43.10 265 P     45 21.00  -0.9
QIZ    43.83 302 ePc   45 28.67   0.9
       1.3s   340.00nm          6.0mb
     N  17s     8.29um
                epPc   45 33.06  15kmX
                esPd   45 34.88
                S      52 00.00
                ScS    55 21.00
TCW    44.46 152 P     45 30.50  -2.0
KIW    44.50 151 P     45 30.70  -2.1
MNG    44.59 150 P     45 30.40  -3.2X
MRW    44.68 152 P     45 31.40  -2.9
CAW    44.76 151 P     45 33.50  -1.5
NJ2    44.86 324 Pd    45 36.50   0.7
       1.0s    39.00nm          5.3mb
     N  21s    10.90um
     E  19s     6.71um
                sP     45 48.00
                S      52 17.00
MTW    45.01 151 P     45 35.70  -1.3
ERM    45.24 355 ePc   45 37.42  -1.3
                ec     45 44.79  25kmX
KGM    45.30 276 eP    45 40.00   0.3
BWZ    45.34 158 P     45 38.30  -1.2
HOOJ   45.59 355 eP    45 38.50  -3.0X
MRRJ   45.88 353 eP    45 35.40  -8.3X
KUSJ   46.19 356 eP    45 44.90  -1.3
TUZ    46.48 160 P     45 46.30  -2.2
WHN    46.66 318 Pc    45 50.70   0.6
       1.0s   120.00nm          5.9mb
     N  16s     9.40um
     E  21s    15.00um
ASAJ   47.37 354 eP    45 55.20  -0.3
IPM    47.90 279 eP    46 00.10  -0.1
       0.9s    30.40nm          5.4mb
KUR    48.21 360 iPc   46 05.00   3.0X
       1.0s   370.00nm          6.4mb
     Z  20s     9.50um          5.8Msz
     N  20s     6.30um
     E  20s     9.50um
                eS     53 01.00
                eSSS   57 44.00
VLA    48.43 344 iPd   46 03.00  -0.8
       1.6s   140.00nm          5.8mb
     N  16s     2.00um
     E  12s     1.00um
                i      47 28.00 430kmX
                i      47 50.00
                iPPP   48 48.00
                iS     53 06.00
DL2    48.60 332 Pc    46 05.00  -0.2
       1.0s   150.00nm          6.0mb
     Z  22s    11.00um          5.8Msz
     N  18s     8.92um
     E  20s    10.90um
                S      53 10.00
TIA    48.84 326 eP    46 06.10  -1.1
     Z  20s    11.40um          5.9Msz
     N  16s     4.96um
     E  19s    11.10um
                sP     46 23.00
                eS     53 12.00
MRPI   49.23 275 P     46 10.60  -0.1
GYA    49.90 309 Pc    46 16.20   0.6
       1.2s    75.00nm          5.6mb
     Z  20s     9.56um          5.8Msz
     N  18s     4.31um
     E  18s     5.76um
                pP     46 27.60  40kmX
                PP     48 15.00
SNY    50.14 336 iPc   46 15.80  -1.2
     Z  35s    24.40um          6.0MszX
     E  13s     2.43um
                PP     48 10.00
                S      53 20.00
AEKI   50.14 275 P     46 16.20  -1.4
YSS    50.24 355 ePc   46 15.52  -2.1
     N  17s     4.70um
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     E  17s     1.20um
                epPd   46 19.17  12kmX
LOE    50.32 296 eP    46 37.00  18.2X
MDJ    50.46 343 iPc   46 18.58  -0.8
       1.1s    36.00nm          5.2mb
     Z  40s    36.30um          6.1MszX
     N  16s     4.54um
     E  16s     3.73um
                epPd   46 23.22  16kmX
CN2    51.10 339 eP    46 22.00  -2.3
       1.0s    19.00nm          5.0mb
     Z  20s     3.72um          5.4Msz
     N  18s     3.69um
     E  18s     2.49um
                epP    46 28.00  20kmX
                eS     53 44.00
                eSS    57 06.00
NST    51.23 293 iPc   46 27.00   1.3
BJI    52.16 329 ePc   46 31.19  -1.1
       2.0s   130.00nm          5.5mb
     Z  28s    19.30um          6.0MszX
     N  20s    11.10um
                ec     46 32.68   5kmX
                ePP    48 31.00
                eS     53 56.00
                eSS    57 32.00
KHT    52.40 291 iPc   46 35.50   0.9
KMI    52.41 305 ePc   46 35.52   0.7
       1.5s   250.00nm          5.9mb
     Z  28s    17.70um          6.0MszX
     N  10s     1.60um
     E  10s     2.00um
                ec     46 36.76
                epPd   46 40.32  16kmX
                S      54 00.50
                sS     54 11.00
XAN    52.43 318 P     46 33.50  -1.1
       1.1s    32.00nm          5.2mb
     Z  20s    12.20um          5.9Msz
     N  16s     4.81um
     E  18s     5.12um
                pP     46 44.00  36kmX
                sP     46 48.00
                PcP    47 42.00
                PP     48 30.00
                S      54 00.00
TIY    52.57 324 eP    46 34.50  -1.1
     Z  25s    22.70um          6.1MszX
     N  16s     6.49um
                S      54 04.00
CHTO   53.28 296 iPc   46 41.62   0.5
       1.2s   156.50nm          5.8mb
                epP    46 45.93  14kmX
                esPd   46 47.58
CD2    54.34 312 iPc   46 48.60  -0.1
       1.2s   160.00nm          5.9mb
     Z  24s    16.30um          6.0MszX
     E  15s     7.12um
                S      54 29.00
HHC    55.20 326 Pd    46 54.00  -1.0
       1.0s    20.00nm          5.1mb
     Z  24s    18.90um          6.1MszX
     N  18s     7.35um
     E  19s     6.29um
                sP     47 08.00
                sS     54 45.50
BTO    55.90 325 P     46 59.00  -1.0
       1.0s    36.00nm          5.4mb
     N  20s     6.38um
     E  20s     8.21um
                pP     47 11.50  44kmX
                PP     49 04.00
                S      54 42.00
                eSS    58 24.00
PET    56.67   7 eP    47 05.00  -0.1
     Z  20s     6.90um          5.7Msz
     N  20s     5.20um
     E  20s     2.50um
                eS     54 58.00
LZH    57.01 317 iPc   47 07.69  -0.4
       2.0s   260.00nm          5.9mb
     Z  42s    19.70um          5.9MszX
     N  14s     3.13um
                ec     47 09.76
                epPd   47 12.91  17kmX
                esPd   47 14.15
                PP     49 14.00
```

05d 22h

```
                 eS    54 58.00
                 SS    58 50.00
HON    57.88  62 P     47 16.16   1.9
     Z  19s    11.17um          6.0Msz
                 S     55 24.34
SMY    59.80  18 P     47 40.00  12.9X
     Z  18s     6.45um          5.8Msz
GTA    61.49 319 Pc    47 38.50  -0.5
       1.5s    65.00nm          5.6mb
     Z  45s    24.40um          6.0MszX
     E  19s     5.57um
                 pP    47 48.00  31kmX
                 sP    47 52.00
                 eS    55 58.00
                 sS    56 16.00
                 SS    00 00.00
AFR    62.26 108 eP    47 41.50  -2.8X
       1.4s   355.50nm          6.3mb
CIT    62.36 337 eP    47 44.00  -0.6
                 e     56 14.00
ADK    62.37  24 eP    47 44.47   0.0
       1.1s    77.34nm          5.8mb
PPT    62.45 108 eP    47 43.20  -2.4X
       1.5s   507.70nm          6.5mb
PAE    62.46 108 eP    47 43.80  -1.8
TVO    62.78 108 eP    47 47.10  -0.8
       1.2s   210.60nm          6.2mb
DRV    63.63 184 iP    47 57.00   4.5X
                 S     56 35.00
                 SS    00 50.00
LSA    63.67 305 iPc   47 54.25   0.1
       1.6s    38.00nm          5.3mb
     Z  26s    17.40um          6.1MszX
     N  12s     1.03um
                 ec    47 55.57
                 epPd  47 59.13  16kmX
                 esPd  48 00.62
                 PP    50 19.00
                 S     56 30.00
PMO    63.85 105 eP    47 54.80   0.0
       1.6s   539.80nm          6.5mb
TPT    64.11 105 eP    47 58.60   2.0
       1.4s   277.90nm          6.2mb
VAH    64.12 105 eP    47 56.90   0.3
       1.2s   189.80nm          6.1mb
RUV    64.36 105 eP    48 00.20   2.0
ZAK    65.85 330 iPc   48 06.50  -0.7
       1.0s   105.00nm          6.0mb
     Z  15s     4.61um          5.8MszX
     N  17s     5.39um
     E  17s     5.05um
                 ePPP  52 15.00
                 eS    56 56.00
TLY    66.51 331 iPc   48 11.17  -0.3
                 ed    48 14.98  12kmX
YAK    66.57 351 iPc+  48 10.10  -1.5
       1.5s   160.00nm          6.0mb
                 e     50 45.00
                 iS    57 04.00
                 ePS   57 27.00
                 i     58 06.00
                 eSS   01 23.00
IRK    66.57 332 eP+   48 11.00  -0.9
                 e     48 38.00 108kmX
                 eS    57 06.00
                 e     58 12.00
                 e     01 24.00
BOD    66.73 341 iPc   48 12.20  -0.5
       1.1s    48.00nm          5.6mb
GUN    67.49 302 P     48 19.00   0.4
PKI    67.79 301 P     48 20.60   0.1
KKN    67.97 302 P     48 21.80   0.4
DMN    68.06 301 P     48 22.60   0.5
CSY    68.31 195 eP    48 30.50   7.9X
       1.9s    17.30nm          4.9mb
GKN    68.57 302 P     48 25.40   0.3
UER    71.28 328 iPc   48 40.00  -0.9
       1.5s   100.00nm          5.7mb
                 PPP   53 00.00
                 iS    58 00.00
WMQ    71.57 318 ePc   48 43.09   0.1
       1.0s    51.00nm          5.6mb
     E  17s     2.27um
                 ec    48 44.33
                 epPd  48 48.05  16kmX
                 PP    51 25.50
                 S     58 04.00
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                 SS    02 34.00
HYB    71.76 289 eP    48 44.50   0.0
       1.0s    95.00nm          5.8mb
                 eS    58 02.00
SDN    71.80  28 P     49 00.00  16.0X
     Z  20s     9.09um          6.0Msz
GBA    72.26 285 P     48 48.00   0.6
ILT    74.58  12 eP    49 01.00   1.0
       1.1s   130.00nm          5.9mb
                 i     49 12.70  39kmX
                 i     51 44.00
                 iS    58 32.00
                 iPS   59 12.00
NDI    75.08 301 eP    49 02.50  -1.2
                 eS    58 44.00
TIK    75.76 354 eP+   49 05.00  -1.7
       1.5s    19.00nm          4.9mb
                 i     49 24.00  70kmX
                 eS    58 51.00
                 ePS   59 28.00
POO    76.36 290 iPd   49 17.00   5.8X
       1.5s   111.11nm          5.7mb
                 iS    59 00.00
SVW    77.14  24 eP    49 16.56   1.8
       1.1s   107.98nm          5.8mb
BOM    77.38 290 iP    49 32.00  15.3X
                 iS    59 06.00
TTA    77.96  23 eP    49 21.20   1.9
       1.1s    93.70nm          5.8mb
KSH    78.50 311 P     49 24.60   1.8
     Z  20s     5.20um          5.9Msz
     N  10s     1.01um
     E  10s     0.95um
                 iPcP  49 32.00
                 pP    49 35.00  33kmX
                 sP    49 39.00
                 PP    52 26.00
                 iS    59 24.00
                 SKS   59 33.00
                 ScS   59 42.00
CP2    78.63  25 eP    49 23.20   0.0
CRP    78.67  25 eP    49 22.90  -0.4
SLKM   79.15  26 eP    49 26.04   0.2
PAF    79.85 221 eP    49 37.00   7.3X
                 eS    59 43.00
                 eSS   04 45.00
PMR    80.11  26 eP    49 30.75  -0.1
       1.1s    91.83nm          5.7mb
FRU    80.30 314 eP    49 35.00   2.6
       2.2s   120.00nm          5.5mb
     Z  24s     3.50um          5.6MszX
     E  24s     5.50um
                 e     52 31.00
                 eS    59 41.00
                 e     00 24.00
IMA    80.47  21 eP    49 32.47  -0.5
       1.2s    38.90nm          5.3mb
KLU    81.47  26 eP    49 39.29   1.1
TOA    81.60  26 eP    49 39.90   1.1
FBA    82.09  23 eP    49 41.13  -0.1
       1.1s    53.35nm          5.5mb
BRW    82.37  15 eP    49 42.89   0.4
NRI    82.89 342 iPc+  49 44.00  -1.3
       2.0s    87.00nm          5.6mb
     Z  19s    14.00um          6.4Msz
     E  18s     6.00um
                 iS    00 03.00
                 ePS   00 52.00
                 eSSS  08 50.00
BALM   82.91  27 eP    49 46.62   0.9
QUE    84.16 301 eP    49 54.70   1.9
                 eS    00 05.70
SIT    85.26  32 P     50 10.00  12.6X
     Z  21s     6.60um          6.0Msz
MAW    85.34 203 e(P)  49 58.00   0.3
       1.1s    33.33nm          5.5mb
     Z  14s     2.70um          5.8MszX
SPA    86.83 180 iPd   50 04.60  -0.7
       1.0s    75.00nm          5.9mb
                 i     18 42.00
INK    88.57  21 eP    50 13.00  -0.4
       1.1s    30.00nm          5.5mb
KMPM   90.17  50 (P)   50 24.07   2.4
STW    91.01  42 P     50 30.00   4.8X
LGPM   91.18  49 eP    50 29.50   3.2X
SVE    91.38 327 ePc   50 25.00  -1.7
       2.5s   180.00nm          6.0mb
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     Z  21s    15.50um          6.4Msz
     N  21s     2.00um
     E  21s    11.00um
                 e     54 11.30
                 eS    01 00.00
                 eSS   07 32.00
WDC    91.38  50 (P)   50 25.53  -1.6
       1.3s    35.60nm          5.6mb
     Z  19s    13.72um          6.4Msz
GMW    91.57  43 (P)   50 32.36   4.6X
MCW    91.60  42 (P)   50 31.87   3.9X
SHW    91.88  44 (P)   50 30.23   0.8
LBFM   91.91  49 eP    50 30.56   0.8
ASH    91.93 308 eP    50 33.00   3.3X
                 e     54 12.00
                 e     01 08.00
                 e     01 33.00
                 e     02 42.00
SAO    92.06  53 P     50 40.00   9.7X
     Z  20s     5.85um          6.0Msz
ORV    92.13  51 eP    50 32.21   1.6
LON    92.20  43 eP    50 32.50   1.7
FMW    92.30  43 P     50 35.06   3.6X
ARU    92.49 326 ePc   50 30.11  -1.7
       1.2s    60.00nm          5.9mb
     Z  22s    12.00um          6.3Msz
     N  16s     1.00um
     E  22s     8.50um
                 e     54 11.00
                 eS    01 06.00
                 e     01 40.00
                 e     07 50.00
CROR   92.71  45 P     50 36.65   3.4X
VGB    92.87  45 eP    50 36.69   2.8
CMB    92.95  52 (P)   50 37.63   3.2X
       1.1s    20.90nm          5.5mb
     Z  21s     7.93um          6.1Msz
BCH    93.11  55 eP    50 38.43   3.1X
WTV    93.49  43 P     50 40.27   3.6X
JBO    93.53  45 P     50 42.06   5.1X
MBC    93.63  14 eP    50 38.00   1.3
       1.5s    21.00nm          5.3mb
ABL    93.81  55 eP    50 40.22   1.6
SAW    93.86  43 P     50 41.89   3.5X
ISA    94.43  55 eP    50 42.04   0.7
       1.2s     8.20nm          5.0mb
     Z  18s     7.63um          6.2Msz
BONR   94.59  52 eP    50 45.30   3.0X
DPW    94.67  42 eP    50 45.15   3.0X
KVN    94.76  51 (P)   50 45.93   3.0X
NEW    95.39  42 eP    50 46.78   1.3
       1.3s    45.32nm          5.8mb
     Z  21s    14.69um          6.4Msz
PEC    95.50  56 (P)   50 49.02   2.8
       1.4s    30.60nm          5.6mb
PLM    95.75  57 eP    50 50.52   2.9X
YKA    96.08  28 eP    50 47.70  -0.5
       0.8s    17.70nm          5.6mb
TPNV   96.23  53 P     51 00.00  10.3X
     Z  19s     6.65um          6.1Msz
DUG    98.81  50 P     51 10.00   8.8X
     Z  20s     5.90um          6.1Msz
RES    99.95  14 eP    51 08.00   2.5
TUC   100.89  58 Pdiff 51 20.00   9.2X
     Z  20s    11.42um          6.4Msz
GRO   101.38 313 ePdiff51 14.00   1.5
     Z  18s     7.00um          6.2Msz
     N  18s     7.00um
     E  20s    12.50um
                 i     55 24.00
                 iSS   09 59.00
TAB   101.42 308 ePdiff51 17.00   3.9X
MTA   102.22 312 ePdiff51 20.00   3.7X
     N  20s     1.00um
     E  20s     2.00um
                 e     55 24.00
                 e     02 00.00
                 e     02 54.00
PYA   103.18 314 iPdiff51 21.00   0.4
     E  22s     4.80um
                 i     55 38.00
                 i     02 07.00
                 i     03 12.00
ALQ   104.28  55 Pdiff 51 40.00  14.1X
     Z  20s     5.61um          6.1Msz
GOL   104.55  50 Pdiff 51 40.00  12.9X
     Z  20s     8.48um          6.3Msz
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GLD   104.66  50 Pdiff 51 40.00  12.5X
      Z  20s     6.78um          6.2Msz
RSSD  104.84  45 (Pdiff55 45.63 257.4X
OBN   104.94 326 (Pdiff51 25.10  -3.0X
       2.0s    25.30nm          5.8mb
      Z  24s  *******um          9.4MszX
                  (pP)  51 36.50
                  (sP)  51 40.30
                  (PP)  55 32.10
                  (SKS) 02 00.30
                  (S)   03 27.30
                  (PS)  04 53.00
                  eSS   10 27.10
SIM   109.26 317 ePdiff52 04.00  16.4X
KIS   112.11 320 ePKP  55 48.00  -8.9X
      Z  20s     5.40um          6.1Msz
                  e     56 41.00
                  e     02 39.00
                  ePS   06 08.00
                  i     06 12.00
MLR   114.55 319 ePKP  55 56.00  -5.9X
MIAR  114.78  53 PKP   56 10.00   7.5X
      Z  21s     5.18um          6.1Msz
UZH   115.53 324 ePKP  56 06.00   2.5X
                  ePS   06 46.00
                  eSS   12 55.00
                  iSSS  17 15.00
SLM   116.24  48 PKP   56 20.00  14.9X
      Z  20s     5.80um          6.2Msz
FVM   116.29  49 PKP   56 20.00  14.7X
      Z  19s     8.03um          6.3Msz
BUL   116.50 246 iPKP  56 06.90   0.5
       1.0s    12.00nm
KSP   117.82 328 ePKP  56 09.20   1.4
LSZ   118.00 251 ePKP  56 09.00  -0.3
SRO   118.27 324 iPKP  56 11.30   2.6X
ZST   118.78 325 ePKP  56 08.40  -1.3
SKO   118.94 317 iPKP  56 11.00   0.8
       1.2s    50.00nm
BRG   119.03 329 ePKP  56 12.80   2.7X
       2.0s    44.00nm
      Z  22s     7.70um          6.3Msz
      N  22s     4.20um
      E  22s     4.20um
PRU   119.23 328 ePKP  56 18.00   7.5X
      Z  19s     6.20um          6.3Msz
      N  22s     3.80um
      E  21s     5.30um
                  ePP   57 30.00
                  e     57 54.00
                  PS    07 21.60
CLL   119.26 330 ePKP  56 13.00   2.5X
       1.7s    15.00nm
      Z  22s     7.50um          6.3Msz
OHR   119.73 316 ePKP  56 11.70  -0.1
KHC   120.23 327 ePKP  56 14.00   1.5
       1.2s    15.00nm
      Z  20s     8.40um          6.4Msz
      N  20s     3.50um
      E  20s     4.00um
                  e     56 30.50
                  e     57 41.50
                  e     57 55.50
GEC2  120.33 327 ePKP  56 10.50  -2.2X
       1.6s    16.24nm
                  e     56 13.40
                  e     56 17.50
                  e     56 21.60
                  e     56 26.60
                  e     56 32.00
                  e     56 36.00
MOX   120.36 330 ePKP  56 16.80   4.2X
      Z  22s     7.80um          6.3Msz
GRF   121.14 329 ePKP  56 15.70   1.6
                  e     56 17.90
                  epPKP 56 25.00
                  esPKP 56 31.00
LJU   121.40 324 ePKP  56 13.00  -1.7
                  e     56 38.50
                  (SKS) 03 22.00
                  (PKKP)06 55.00
                  (PS)  07 38.00
                  (SKKP)09 42.00
KBA   121.52 325 (PKP) 56 17.00   1.8
MYNC  122.04  50 PKP   56 30.00  13.7X
      Z  20s     4.87um          6.2Msz
YSNY  122.83  40 PKP   56 30.00  12.4X
      Z  20s     4.34um          6.1Msz
MCWV  123.30  44 PKP   56 30.00  11.4X
      Z  20s     7.17um          6.3Msz
BSF   124.59 329 ePKP  56 21.10   0.1
       1.3s    32.15nm
BINY  124.59  39 PKP   56 30.00   9.0X
      Z  20s     8.10um          6.4Msz
HAU   124.70 330 ePKP  56 21.40   0.3
       1.3s    26.00nm
      Z  23s    10.70um          6.4MszX
CEH   125.50  47 PKP   56 30.00   7.0X
      Z  21s     8.41um          6.4Msz
LBNH  125.88  35 PKP   56 30.00   6.5X
      Z  20s     6.08um          6.3Msz
LPL   126.12 327 ePKP  56 24.80   0.6
LPG   126.12 327 ePKP  56 24.90   0.6
       1.5s    21.95nm
CBM   126.20  30 PKP   56 30.00   6.0X
      Z  22s     5.65um          6.2Msz
LOR   126.43 331 ePKP  56 24.90   0.4
       1.5s    30.30nm
      Z  23s     7.57um          6.3MszX
LBF   126.57 330 ePKP  56 25.10   0.3
       1.6s    20.50nm
LSCT  126.60  38 PKP   56 40.00  15.1X
      Z  21s    10.36um          6.5Msz
PGF   126.65 323 ePKP  56 25.50   0.3
       1.5s   120.15nm
SSF   126.75 331 ePKP  56 25.60   0.5
       1.3s    25.25nm
SBF   126.77 325 ePKP  56 25.40   0.1
       1.1s    41.25nm
SMF   126.87 330 ePKP  56 25.80   0.5
       1.4s    27.90nm
HRV   127.13  37 PKP   56 40.00  14.1X
      Z  19s     3.83um          6.1Msz
LDF   127.32 334 ePKP  56 26.50   0.4
FLN   127.35 334 ePKP  56 26.60   0.5
       1.4s    35.30nm
      Z  23s     5.97um          6.2MszX
FRF   127.41 325 ePKP  56 26.90   0.5
       1.6s    62.20nm
BGF   127.43 331 ePKP  56 27.00   0.6
       1.5s    28.75nm
LMR   127.63 325 ePKP  56 27.40   0.6
LRG   127.64 325 ePKP  56 27.30   0.5
       1.5s    91.40nm
      Z  21s     5.50um          6.2Msz
GRR   127.80 334 ePKP  56 27.70   0.7
TCF   127.93 331 ePKP  56 28.10   0.7
       1.3s    23.85nm
LPF   128.15 334 ePKP  56 28.50   0.9
       1.3s    35.00nm
LSF   128.29 331 ePKP  56 28.50   0.5
       1.3s    20.20nm
MFF   128.82 332 ePKP  56 29.80   0.8
CAF   128.96 330 ePKP  56 29.20  -0.2
LPO   129.58 330 ePKP  56 30.50   0.0
MDZ   129.75 139 ePKP  56 32.40   1.1
NNA   132.63 109 ePKP  56 36.80  -0.4
       1.3s    38.46nm
TCA   133.51 140 ePKPd 56 39.30   0.8
MOCB  138.80 128 PKP   56 44.00  -5.2X
CNCB  138.99 120 PKP   56 42.20  -7.6X
LPB   139.01 120 PKP   56 43.20  -6.5X
      Z  20s     3.55um          6.1Msz
                  LR    35 38.00
LPAZ  139.09 119 PKP   56 41.60  -8.5X
                  LR    35 07.00
SDV   140.85  80 ePKP  56 48.80  -4.0X
CAR   144.27  76 iPKP  56 55.20  -3.4X
RSTA  147.58 150 ePKP  56 54.20  -9.4X
PPD   148.42 143 ePKP  57 06.50   1.4
                  e     57 14.20
TBH   149.94  75 ePKP  57 14.60   7.0X
VAO   149.99 151 ePKP  57 08.90   1.4
                  e     57 12.50
                  e     57 14.00
                  e     57 20.20
                  e     57 26.40
                  e     57 34.80
AGVB  150.81 142 ePKP  57 10.30   1.6
                  e     57 14.70
                  e     57 24.10
CACB  151.22 150 ePKP  57 15.70   6.2X
                  e     57 21.60
KIC   152.99 278 ePKP  57 13.90   1.8
       I.1s    67.50nm
TIC   153.24 278 PKP   57 14.20   1.8
LIC   153.29 277 PKP   57 14.00   1.5
      Z  22s     6.00um          6.4Msz
BAO   155.28 140 ePKP  57 16.60   1.4
                  i     57 23.90
                  e     57 34.30
BDF   155.32 140 ePKP  57 16.10   0.8
                  i     57 25.00
                  e     57 37.20
                  i     57 53.70
MBO   161.71 308 ePKP  57 29.90   7.4X
SOB1  164.63 143 ePKP  57 27.10   1.6
     S.D. = 1.2  on 208 of 294 obs.
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&  NOV  06, 1993  00h 22m 55.28s
   37.582 N          118.869 W
   DEPTH =   6.4km
 CALIFORNIA-NEVADA BORDER REGION ( 40)
      <GM-P>. MD 2.8 (GM). ML 2.7
      (GS).

CLKR     0.04  76 P     22 56.74  -0.3
MCSM     0.08 339 P     22 57.47   0.0
HTCR     0.09 124 P     22 57.59  -0.2
MEMM     0.10 327 iPc   22 57.83   0.2
MMPM     0.13 283 iPc   22 58.20  -0.1
ORC      0.18  72 P     22 59.16   0.0
MRCM     0.30  73 eP    23 01.39  -0.1
                  eS    23 06.58
MTUM     0.33 133 eP    23 01.80  -0.3
                  eS    23 06.76
BCKR     0.41  74 P     23 03.64   0.0
BHPR     0.41 133 P     23 03.65   0.0
CWCR     0.46 101 P     23 04.34  -0.1
BONR     0.58  50 eP    23 06.65  -0.4
MSTM     1.26 285 P     23 18.29  -0.7
CMB      1.28 291 P     23 18.95  -0.5
TNP      1.40  69 ePc   23 21.63   0.1
WLHM     1.50 162 P     23 22.97   0.0
KVN      1.59  22 eP    23 25.13   1.0
MNHM     1.64 291 P     23 25.84   1.2
BRMM     1.73 245 P     23 27.62   1.6
BMSM     1.79 240 P     23 28.79   1.8
VPEM     1.84 152 P     23 29.71   2.0
ISA      1.94 170 ePc   23 30.68   1.5
WOFM     2.05 176 P     23 32.68   2.0
WBSM     2.12 164 P     23 34.20   2.3
BLRM     2.13 245 P     23 34.04   2.3
ARN      2.13 265 eP    23 32.77   0.9
TPNV     2.18 106 eP    23 32.51  -0.2
LT15     2.55 261 P     23 34.84  -3.0
BCH      2.59 203 eP    23 38.48   0.1
ABL      2.74 186 (P)   23 41.52   0.8
GSC      2.82 143 (P)   23 41.31  -0.5
ORV      2.85 315 (P)   23 45.99   3.9
       32 obs. associated
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?  NOV  06, 1993  00h 23m 10.28± 3.73s
   48.645 S ±48.2km  163.865 E ± 5.4km
   DEPTH =  33.0km  (normal)
   4.3mb (  1 obs.)
 OFF W. COAST OF S. ISLAND, N.Z. (161)

SIZ      3.38  60 P     24 02.60   0.6
                  eS    24 42.90
TUZ      4.76  58 eP    24 20.80  -0.6
                  eS    25 16.90
TLC      4.97  48 eP    24 25.40   0.8
CMCZ     5.10  49 eP    24 26.60   0.2
                  eS    25 25.00
MMCZ     5.13  47 eP    24 27.40   0.5
SBCZ     5.15  48 eP    24 27.00  -0.2
LSCZ     5.17  49 eP    24 27.70   0.3
LRCZ     5.19  48 eP    24 27.60  -0.2
MSCZ     5.20  49 P     24 27.70  -0.2
BWZ      5.84  47 eP    24 35.60  -1.2
CAN     17.26 315 eP    27 10.60   0.3
                  i     27 18.80
TOO     17.34 303 eP    27 11.20  -0.1
        0.5s    14.00nm          4.3mb
BWA     18.27 315 eP    27 22.60  -0.2
     S.D. = 0.6  on  13 of  13 obs.
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&  NOV  06, 1993  00h 29m 34.52s
   37.582 N          118.869 W
   DEPTH =   6.3km
```

06d 00h

CALIFORNIA-NEVADA BORDER REGION (40)
<GM-P>. MD 3.7 (GM). ML 3.9 (GS), 3.8 (BRK). Felt (III) at Bass Lake, California.

MCSM	0.08	339	P	29 36.70	0.0
MEMM	0.10	327	iPd	29 37.02	0.2
MMPM	0.13	283	ePc	29 37.39	-0.1
MRCM	0.30	73	iPc	29 40.63	-0.1
MTUM	0.33	133	ePd	29 41.15	-0.2
BHPR	0.41	133	P	29 42.84	-0.1
BONR	0.58	50	iPc	29 45.84	-0.4
FRI	0.89	229	iP	29 51.24	-0.7
CMB	1.28	291	ePc	29 57.94	-0.8
			eS	30 14.89	
MOYM	1.38	284	P	29 59.97	-0.3
TNP	1.40	69	iPc	30 00.88	0.1
KVN	1.59	22	eP	30 03.77	0.4
			eS	30 21.84	
PHBM	1.65	217	P	30 05.51	1.5
ADWM	1.78	299	P	30 07.17	1.2
BMSM	1.79	240	P	30 07.25	1.0
PKEM	1.81	214	eP	30 07.89	1.4
			eS	30 28.52	
VPEM	1.84	152	P	30 08.59	1.6
ASMM	1.89	311	P	30 09.17	1.4
ALAM	1.92	301	P	30 08.48	0.5
ISA	1.94	170	ePd	30 09.85	1.5
			eS	30 34.36	
WORM	1.95	165	P	30 10.18	1.7
AASM	1.96	296	P	30 10.42	1.8
ARJM	1.98	304	P	30 10.67	1.7
WOFM	2.05	176	P	30 11.98	2.0
PSMM	2.05	223	P	30 11.14	1.2
HJSM	2.09	249	P	30 11.69	1.3
AFHM	2.10	315	P	30 15.47	4.7
SFL	2.11	254	P	30 12.47	1.7
ARN	2.13	265	ePnc	30 12.03	0.9
AFDM	2.14	310	P	30 13.28	2.0
AHRM	2.15	307	P	30 13.18	1.8
HSPM	2.16	258	P	30 13.03	1.5
TPNV	2.18	106	ePnc	30 11.67	-0.3
WJPM	2.19	172	P	30 14.32	2.3
BVYM	2.20	249	P	30 13.22	1.2
SAO	2.21	249	ePn	30 12.35	0.1
MHC	2.22	265	eP	30 13.70	1.2
			eS	30 41.85	
HSFM	2.24	251	P	30 14.09	1.5
COE	2.26	263	eP	30 14.33	1.4
			eS	30 42.74	
APRM	2.26	306	P	30 15.31	2.4
CVAL	2.29	272	P	30 15.36	1.9
AFRM	2.30	302	P	30 11.68	-1.8
PRS	2.36	239	iP	30 15.34	0.9
HMR	2.39	285	(P)	30 15.77	1.0
AMC	2.41	261	P	30 16.10	1.0
PMGM	2.53	212	P	30 17.65	0.9
BCH	2.59	203	ePnd	30 18.32	0.7
BAPM	2.63	239	P	30 19.05	0.7
NDHM	2.67	297	P	30 18.25	-0.6
BKS	2.68	277	eP	30 20.60	1.6
			eS	30 54.06	
BPOM	2.69	241	P	30 19.88	0.8
ABL	2.74	186	eP	30 21.04	1.0
GSC	2.82	143	ePn	30 21.05	0.0
ORV	2.85	315	eP	30 24.15	2.8
NTYM	3.10	286	P	30 27.98	3.1
SSK	3.50	164	ePn	30 32.31	1.6
PEC	3.94	159	ePn	30 37.65	0.9
ARUT	4.31	86	ePn	30 41.38	-0.9
			ePg	30 54.35	
LBFM	4.43	329	eP	30 45.44	1.5
PLM	4.53	158	ePn	30 46.25	1.0
MSU	5.37	78	(Pn)	30 58.01	0.7
			ePg	31 12.59	
DUG	5.40	59	ePn	30 58.48	0.8
			ePg	31 14.47	
HVU	6.30	46	(Pn)	31 12.55	2.2
			ePg	31 30.31	
DAU	6.57	62	(Pn)	31 17.00	2.7
			ePg	31 38.36	
EMUT	6.68	68	ePg	31 39.06	23.2

65 obs. associated

& NOV 06, 1993 00h 37m 18.77s
37.406 N 118.528 W
DEPTH = 6.9km

CALIFORNIA-NEVADA BORDER REGION (40)
<GM-P>. MD 2.9 (GM).

BHPR	0.11	163	P	37 21.42	-0.1
CWCR	0.20	63	P	37 23.00	0.0
HTCR	0.23	303	P	37 23.63	0.0
ORC	0.25	336	P	37 23.98	0.0
BCKR	0.32	23	P	37 25.02	-0.2
MCSM	0.39	310	P	37 26.78	0.1
TNP	1.24	57	eP	37 42.41	0.2
WLHM	1.26	172	P	37 42.25	-0.5
VPEM	1.56	158	P	37 48.18	1.0
WCHM	1.56	166	P	37 47.79	0.5
MSTM	1.57	289	P	37 47.40	0.3
CMB	1.60	294	ePc	37 47.81	0.2
NMC	1.64	162	P	37 49.11	0.9
ISA	1.74	179	eP	37 50.48	0.8
MRFM	1.79	299	P	37 51.27	0.9
WOFM	1.87	185	P	37 53.20	1.6
TPNV	1.88	103	ePn	37 51.77	0.0
WBSM	1.89	170	P	37 53.66	1.7
MNHM	1.96	293	P	37 54.11	1.4
WSHM	1.96	154	P	37 55.84	3.1
BMSM	1.96	248	P	37 54.47	1.6
WJPM	1.99	179	P	37 55.22	1.9
BMTC	2.27	181	P	37 59.81	2.5
GSC	2.52	146	(P)	38 01.18	0.3

24 obs. associated

NOV 06, 1993 00h 48m 27.89± 0.66s
13.138 N ± 6.7km 89.338 W ± 5.5km
DEPTH = 63.5 ± 4.9 km
4.7mb (18 obs.)

EL SALVADOR (73)
Felt (III) at San Salvador. Felt throughout much of El Salvador.

SJAS	0.55	18	iPd	48 40.70	-0.3
VSS	0.61	9	iPd	48 41.70	0.1
LFU	0.64	20	iPd	48 42.40	0.4
TME	0.87	359	iPd	48 45.00	0.3
CUSS	0.97	322	iP	48 43.40	-2.6
YPE	1.03	341	iPd	48 46.50	-0.4
VSM	1.08	74	eP	48 48.90	1.3
TPX	3.34	302	iP	49 18.00	-0.8
			iS	49 49.00	
SCX	4.79	319	iP	49 52.00	12.8X
			iS	50 36.50	
OXX	8.14	300	iP	50 28.00	1.9
PPM	10.69	305	iP	51 01.50	0.2
ACX	10.82	291	(P)	51 01.50	-1.0
CRX	11.72	303	(P)	51 28.00	13.1X
MRX	13.11	301	eP	51 34.00	1.0
SDV	18.84	101	eP	52 45.10	-0.7
LTX	20.89	323	eP	53 07.07	-0.2
OXF	21.28	360	eP	53 12.13	1.1
UYO	21.45	348	iPd	53 15.00	2.3
SGS	21.53	21	eP	53 16.64	3.2X
			e	53 32.54	
MIAR	21.66	350	eP	53 14.80	0.0
	0.6s	24.99nm		4.8mb	
PRM	21.79	16	eP	53 17.81	1.6
JSC	22.29	18	eP	53 22.60	1.5
MYNC	22.34	11	eP	53 22.93	1.3
	0.5s	15.76nm		4.7mb	
LHS	22.61	19	eP	53 25.97	1.8
MEO	23.12	340	iPd	53 27.70	-1.5
WMOK	23.14	340	eP	53 28.47	-1.0
	0.8s	60.62nm		5.1mb	
FNO	23.20	343	iPd	53 29.50	-0.4
TUL	23.41	347	iP	53 31.60	-0.3
ELC	24.05	0	eP	53 38.80	0.7
CEH	24.46	20	eP	53 41.97	-0.2
	0.6s	20.29nm		4.8mb	
FVM	24.76	358	eP	53 44.52	-0.5
	0.9s	19.09nm		4.6mb	
CBN	27.14	21	e(P)	54 07.00	0.0
TUC	27.39	318	eP	54 10.18	0.8
	0.9s	20.34nm		4.7mb	
GLA	30.56	315	eP	54 37.72	0.0
PV08	30.59	329	eP	54 37.55	-0.7
PV10	30.63	329	eP	54 37.37	-1.2
PLM	32.15	313	ePc	54 52.43	0.5
ARUT	32.61	323	eP	54 56.22	0.4
EMUT	32.62	328	(P)	54 55.93	0.0
GSC	33.18	316	eP	55 01.14	0.4
DAU	33.29	329	eP	55 01.45	-0.4
RSSD	33.35	341	eP	55 01.55	-0.7
	0.4s	6.79nm		4.9mb	
			ePcP	57 41.93	
TPNV	33.79	319	eP	55 07.52	1.4
	1.0s	12.05nm		4.8mb	
ISA	34.51	316	eP	55 12.48	0.3
	1.2s	17.70nm		4.9mb	
HVU	35.07	329	eP	55 16.95	-0.1
TNP	35.09	320	eP	55 16.97	-0.3
	0.7s	4.90nm		4.5mb	
BCH	35.38	314	eP	55 20.43	0.8
BONR	35.70	319	eP	55 23.36	0.8
			ePcP	57 50.77	
MMPM	35.97	318	(P)	55 26.44	1.6
LPAZ	35.98	144	P	55 25.30	-0.1
			i	55 32.20	
LPB	36.19	144	eP	55 35.00	8.0X
KVN	36.23	321	eP	55 28.46	1.6
CNCB	36.48	144	P	55 33.00	3.4X
ULM	37.39	353	ePc	55 37.00	0.8
ARN	37.50	316	eP	55 38.48	1.1
LRM	38.00	334	eP	55 41.40	-0.3
			e	57 57.00	
ORV	38.66	319	eP	55 48.48	1.4
MOCB	41.35	145	P	56 11.00	1.1
NEW	41.93	332	eP	56 11.89	-2.0
	0.7s	2.80nm		4.2mb	
JAQ	41.98	12	eP	56 12.50	-1.6
MCW	44.96	329	eP	56 37.63	-0.8
TCA	50.20	152	eP	57 19.00	-0.5
PPD	51.11	133	eP	57 25.50	-1.0
YKA	52.48	346	eP	57 34.40	-1.9
	0.8s	16.70nm		5.1mb	
FRB	52.60	11	eP	57 34.50	-2.6
	0.9s	17.00nm		5.1mb	
SOB1	52.98	112	eP	57 39.50	-1.2
VAO	54.87	131	eP	57 55.50	1.0
RES	61.61	358	eP	58 38.50	-2.2
	0.6s	4.00nm		4.7mb	
INK	62.00	343	eP	58 41.50	-2.0
	0.6s	3.00nm		4.6mb	
MBC	65.09	352	eP	59 02.50	-1.0
	0.8s	4.00nm		4.4mb	
NB2	83.66	29	P	00 49.80	-0.9
	0.6s	0.90nm		4.0mb	
GEC2	88.60	40	eP	01 15.40	0.0
	0.7s	0.53nm		3.9mb	
			e	01 18.80	
			e	01 21.20	
			e	01 27.10	
			e	01 32.80	
WR2	137.66	255	ePKP	07 46.00	-1.5
	0.6s	4.20nm			
WRA	137.68	255	PKP	07 48.50	1.0
	0.8s	1.40nm			
CHTO	147.22	345	ePKPc	08 05.90	1.8
	0.9s	8.53nm			
HYB	147.37	22	ePKP	08 04.50	0.1
NST	149.88	342	ePKP	08 09.00	0.8
GBA	150.37	27	PKP	08 14.00	5.0X

S.D. = 1.2 on 72 of 78 obs.

NOV 06, 1993 01h 52m 36.60± 0.76s
62.460 N ± 8.0km 147.495 W ± 7.1km
DEPTH = 33.0km (normal)

CENTRAL ALASKA (1)
ML 2.4 (AEIC), 2.1 (PMR).

TOA	0.71	119	iPc	52 51.20	0.9
PMR	1.16	222	iPd	52 55.74	-0.8
KLU	1.22	142	iPc	52 56.66	-0.9
PWA	1.39	235	iPd	53 00.40	0.6
PMS	1.56	220	eP	53 02.30	-0.1
SLKM	2.35	215	eP	53 14.10	0.3
FBA	2.45	357	eP	53 14.92	-0.3
CRP	2.51	244	eP	53 16.41	0.3
			eS	53 50.31	
CP2	2.55	244	eP	53 18.30	1.6X
BALM	2.84	118	eP	53 19.30	-1.3X
			eS	53 58.43	
IMA	4.51	326	eP	53 45.15	0.6X

S.D. = 0.8 on 8 of 11 obs.

& NOV 06, 1993 01h 52m 49.95s
37.405 N 118.527 W
DEPTH = 7.0km

CALIFORNIA-NEVADA BORDER REGION (40)

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      <GM-P>. MD 2.7 (GM).

MTUM     0.06 209 iPd    52 51.62  -0.3
MRCM     0.27   4 iPd    52 55.34  -0.2
MEMM     0.42 309 eP     52 58.30  -0.1
                  eS     53 04.08
MMPM     0.45 297 iPc    52 58.61  -0.4
                  eS     53 04.37
BONR     0.58  18 ePd    53 01.22  -0.4
TNP      1.24  57 eP     53 13.24  -0.2
CMB      1.60 294 eP     53 18.83   0.0
KVN      1.68  11 eP     53 21.45   1.4
ISA      1.74 179 ePd    53 21.71   0.9
TPNV     1.88 103 eP     53 22.91   0.0
ARN      2.39 270 eP     53 31.69   1.4
       11 obs. associated
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?  NOV  06, 1993  02h 15m 34.99± 1.70s
   44.382 N ±12.3km    7.425 E ±13.6km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                    (545)
      ML 1.6 (GEN).

ENR      0.16 181 P      15 38.98   0.3
                  S      15 41.41
STV      0.16 208 P      15 38.43  -0.2
                  S      15 40.41
PZZ      0.26 298 P      15 40.64   0.0
                  S      15 44.22
IMI      0.58 145 P      15 46.64  -0.1
     S.D. = 0.4  on   4 of   4 obs.
-------------------------------------
   NOV  06, 1993  02h 32m 34.64± 0.30s
    6.852 N ± 5.1km   73.024 W ± 4.0km
   DEPTH = 160.3km  (  2 depth phases)
   4.6mb ( 20 obs.)
 NORTHERN COLOMBIA                 ( 99)

BMG      0.22 347 iPc    32 57.00  -0.8
BOG      2.44 205 iPd    33 17.50   1.1
                  iS     33 48.00
SDV      3.11  49 iPnd   33 26.00   1.4
                  iSn    34 03.50
CANV     5.87  45 iPd    34 01.30   0.6
MORO     6.13  49 iPc    34 03.20  -1.0
UPA      6.79 289 iPd    34 09.36  -3.5X
                  eS     35 22.17
OLLA     6.91  62 iPd    34 13.60  -1.1
CAR      7.04  59 iPc    34 15.60  -0.8
ECO      7.06 291 ePd    34 13.78  -2.8
                  eS     35 28.32
PSO      7.07 218 eP     34 16.50  -0.6
LLAV     7.12  59 iPd    34 16.30  -1.2
GUAN     7.92  67 iPd    34 26.60  -1.6
DVD      9.47 280 eP     34 37.51 -11.1X
BRU      9.65 282 eP     34 48.40  -2.9
TRN     12.09  71 eP     35 25.03   2.2
SLB     13.67  59 eP     35 42.58  -0.6
LPAZ    23.50 168 P      37 31.50  -0.4
LPB     23.74 168 P      37 35.80   1.8
CNCB    24.04 168 P      37 39.00   2.0
JSC     28.33 346 eP     38 16.40   1.0
MYNC    29.89 342 ePc    38 30.46   1.2
        0.7s    22.31nm          5.0mb
MIAR    33.45 328 eP     38 59.58  -0.7
        0.7s     6.60nm          4.5mb
UYO     33.63 327 iPc    39 11.40   9.6X
ELC     33.69 336 ePd    39 02.23  -0.1
TBR     34.16 358 eP     39 07.76   1.5
FVM     34.78 336 iPc    39 12.18   0.6
        0.5s    52.80nm          5.5mb
TUL     35.66 327 iP     39 18.80  -0.2
SOB1    35.77 116 eP     39 20.40   0.1
YSNY    35.81 353 eP     39 19.06  -1.2
        0.4s    14.66nm          5.0mb
MEO     36.43 323 iPd    39 24.60  -0.9
WMOK    36.51 323 iPc    39 25.46  -0.8
        0.6s    14.95nm          4.9mb
LTX     36.51 312 eP     39 24.99  -1.4
                  iPcP   41 47.74
RSNY    37.57 358 eP     39 36.32   1.3
        0.5s     2.60nm          4.2mb
LMN     39.50   9 eP     39 52.00   1.0
CBM     40.15   5 eP     39 57.67   1.4
        0.6s    16.25nm          4.9mb
ALQ     41.55 317 eP     40 08.96   0.7
        0.8s     8.88nm          4.4mb
                  epP    40 44.00 159km
                  ePcP   42 03.44
TUC     43.30 311 iPc    40 23.98   1.7
        0.6s    15.05nm          4.8mb
GLD     43.67 323 eP     40 26.35   1.0
        1.0s    17.94nm          4.6mb
GOL     43.73 323 iPc    40 26.64   0.7
        0.5s    28.32nm          5.1mb
PV08    45.07 320 eP     40 37.46   0.8
PV10    45.21 319 eP     40 37.70   0.0
PV09    45.34 319 eP     40 39.19   0.4
RSSD    45.96 329 eP     40 43.67   0.2
        0.4s     4.07nm          4.4mb
JAQ     46.86 358 eP     40 50.00  -0.2
ULM     47.29 340 ePc    40 55.50   1.9
DAU     47.77 320 eP     40 58.16   0.3
ARUT    47.83 316 iPc    40 58.74   0.5
PLM     48.37 309 eP     41 02.79   0.4
DUG     48.65 319 eP     41 04.84   0.4
        0.8s    10.39nm          4.6mb
                  epP    41 41.42 162km
PEC     48.81 310 eP     41 05.91   0.3
        0.6s     6.54nm          4.5mb
GSC     49.11 312 eP     41 08.42   0.5
TPNV    49.42 314 eP     41 11.21   0.9
        0.8s     8.88nm          4.5mb
HVU     49.48 321 eP     41 10.59  -0.2
TNP     50.61 315 iPc    41 19.64   0.2
        0.7s     5.34nm          4.3mb
BONR    51.32 314 iPc    41 25.77   0.8
BCH     51.53 310 eP     41 26.34   0.0
LRM     51.60 325 iPc    41 27.00   0.1
KVN     51.66 315 eP     41 27.15  -0.2
ORV     54.26 315 ePc    41 46.34   0.1
LGPM    55.74 316 eP     41 55.47  -1.6
DPW     56.02 325 iPc    41 58.50  -0.4
VGB     56.38 321 ePc    42 01.92   0.5
RMW     57.92 323 eP     42 11.38  -0.9
MCW     59.11 324 eP     42 19.61  -0.8
YKA     63.27 340 eP     42 47.00  -1.0
        0.6s    22.60nm          5.3mb
TIC     67.48  86 P      43 14.30  -1.5
LIC     67.50  86 P      43 14.40  -1.6
KIC     67.78  86 P      43 16.00  -1.7
        0.6s     7.00nm          4.6mb
INK     73.03 340 eP     43 48.50   0.2
        0.6s     3.00nm          4.2mb
MBC     73.79 350 eP     43 53.50   0.9
        0.8s    10.00nm          4.6mb
BALM    74.08 332 eP     43 55.56   0.9
SLKM    77.77 330 eP     44 15.04  -0.2
CP2     78.84 331 eP     44 21.35   0.0
GEC2    82.74  42 ePKP   44 41.80  -0.1
        0.6s     0.69nm          3.6mb X
                  e      44 56.90
SHL    144.59  24 iPKP   51 53.00  -1.6
        0.6s    11.67nm
QIS    145.59 243 ePKP   51 56.00  -0.2
ASPA   149.21 234 iPKPc  52 05.30   3.4X
        0.6s    23.50nm
WR2    150.41 241 ePKP   52 03.70  -0.1
        0.4s    39.30nm
                  i      52 08.60
                  e      52 48.20
     S.D. = 1.1  on  74 of  78 obs.
-------------------------------------
&  NOV  06, 1993  02h 52m 12.71s
   41.305 N          123.578 W
   DEPTH =  36.6km
 NORTHERN CALIFORNIA               ( 36)
      <GM-P>. MD 3.2 (GM). ML 3.2
      (BRK).

KOMM     0.10 105 P      52 18.93  -0.2
KRMM     0.33 311 P      52 21.09  -0.1
KRPM     0.37 247 P      52 21.54  -0.1
KHMM     0.45 195 P      52 22.76   0.0
KGMM     0.55 188 P      52 24.13  -0.1
ARC      0.57 221 eP     52 24.32   0.0
                  eS     52 32.19
KSXM     0.57 337 P      52 24.55   0.1
FHC      0.59 212 eP     52 23.84  -0.8
                  eS     52 33.61
KBRM     0.64 207 P      52 25.29  -0.1
LGPM     0.69 124 ePc    52 26.06  -0.1
KHBM     0.70 157 P      52 26.61   0.3
LBKM     0.72 107 P      52 26.89   0.3
YBH      0.78  57 ePc    52 27.86   0.5
                  eS     52 38.33
KPPM     0.97 170 P      52 30.53   0.3
KMPM     0.98 205 ePc    52 29.83  -0.4
LGBM     1.04  87 P      52 32.43   1.1
WDC      1.07 132 ePd    52 32.00   0.6
LHEM     1.07  72 P      52 32.56   0.9
KJJM     1.19 208 P      52 32.81  -0.4
KSMM     1.21 202 P      52 33.20  -0.2
LBFM     1.27  88 eP     52 36.05   1.5
LGMM     1.34  77 P      52 37.65   2.2
KBSM     1.39 181 P      52 36.30   0.3
KIPM     1.50 177 P      52 37.68   0.0
LDBM     1.62 122 P      52 45.38   6.0
LMEM     1.70 116 (P)    52 42.52   1.8
BBOR     1.72  23 P      52 42.21   1.3
                  S      53 08.05
DBO      1.83   8 P      52 43.17   0.7
HSO      2.25   9 P      52 52.96   4.6
ORV      2.36 137 (P)    52 51.19   1.3
VGB      4.68  25 (P)    53 22.85   0.1
GMW      6.27   5 (P)    53 46.74   1.6
       32 obs. associated
-------------------------------------
?  NOV  06, 1993  03h 40m 04.40± 4.75s
   13.990 S ±42.8km  166.930 E ±16.6km
   DEPTH = 163.8 ± 44.5 km
   4.6mb (  6 obs.)
 VANUATU ISLANDS                   (186)

BKM      3.87 161 iPc    41 03.50  -0.5
                  iS     41 43.00
DZM      8.05 183 iPc    42 00.40   0.9
                  iS     43 27.00
STK     29.23 228 iPc    45 51.40  -1.6
        0.4s    14.80nm          5.1mb
WR2     31.67 255 iPc    46 14.30  -0.2
        0.5s     7.20nm          4.7mb
WRA     31.69 255 P      46 14.90   0.2
        0.8s     1.50nm          3.8mb
ASPA    32.64 248 iPc    46 22.50  -0.4
        0.4s    11.20nm          4.9mb
FORT    39.40 238 eP     47 20.10   0.4
        0.5s     7.00nm          4.6mb
WARB    39.58 246 eP     47 22.00   0.7
MEEK    46.77 247 eP     48 19.60   0.3
MRWA    49.35 243 eP     48 39.00  -0.1
        0.4s     2.00nm          4.1mb
BSF    142.44 338 ePKP   59 16.70  -2.7X
        0.8s     2.95nm
FLN    143.80 346 ePKP   59 19.20  -2.3X
LDF    143.87 345 ePKP   59 19.60  -2.1
LOR    143.94 340 ePKP   59 20.40  -1.5
        0.6s     1.55nm
LBF    144.14 340 ePKP   59 20.90  -1.4
        0.6s     3.00nm
SSF    144.23 341 ePKP   59 21.50  -0.8
        0.7s     9.50nm
GRR    144.24 346 ePKP   59 21.00  -1.3
        0.5s     4.25nm
HYF    144.32 342 ePKP   59 22.00  -0.5
LPL    144.39 336 ePKP   59 22.60  -0.4
        0.6s     4.25nm
LPG    144.40 336 ePKP   59 22.70  -0.4
        0.7s     6.50nm
SMF    144.49 340 ePKP   59 22.20  -0.6
        0.9s     7.70nm
AVF    144.52 340 ePKP   59 22.20  -0.6
        0.6s     2.45nm
LPF    144.62 346 ePKP   59 22.40  -0.5
        0.4s     5.25nm
BGF    144.89 341 ePKP   59 23.50   0.0
        0.5s     3.05nm
MAF    145.28 341 ePKP   59 24.70   0.5
TCF    145.33 341 ePKP   59 24.80   0.5
        0.6s     1.55nm
SBF    145.44 333 ePKP   59 25.00   0.4
        0.8s    15.05nm
LSF    145.57 342 ePKP   59 25.30   0.6
        0.6s     3.80nm
MFF    145.73 344 ePKP   59 25.80   0.9
        0.7s     7.05nm
PGF    145.75 330 ePKP   59 26.20   1.0
        0.9s    25.55nm
FRF    146.02 334 ePKP   59 26.80   1.3
        0.6s     6.60nm
LRG    146.23 334 ePKP   59 27.00   1.2
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06d 03h

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LMR   146.27 334 ePKP  59 27.40   1.5
RJF   146.43 341 ePKP  59 28.00   1.9
       0.5s     1.60nm
LFF   146.99 342 ePKP  59 29.70   2.7X
     S.D. = 1.0  on  32 of  35 obs.
-----------------------------------------
&  NOV  06, 1993   04h 03m 03.87s
   58.464 N          155.873 W
   DEPTH = 136.2km
 ALASKA PENINSULA                    ( 12)
      <AEIC>.

MCNL    1.08  47 iP    03 27.27  -1.1
                eS     03 45.82
CDD     1.25  67 iP    03 28.99  -1.2
                eS     03 49.84
AUI     1.54  54 eP    03 32.02  -1.2
AUW     1.54  53 iP    03 32.10  -1.1
AUH     1.55  53 iP    03 32.26  -1.1
AGU     1.55  54 eP    03 32.30  -1.2
AUL     1.56  53 eP    03 32.33  -1.1
PDB     1.59  32 eP    03 32.16  -1.5
                eS     03 54.52
SYI     1.83  84 eP    03 35.17  -1.4
                eS     03 58.92
ILIM    2.21  41 eP    03 40.68  -0.5
NCT     2.58  34 eP    03 43.83  -2.2
REF     2.60  37 eP    03 43.44  -2.8
                eS     04 16.91
CNPM    2.63  64 eP    03 44.29  -2.2
                eS     04 16.50
SVW     2.66   3 P     03 45.20  -1.7
DFR     2.68  36 eP    03 46.29  -1.0
RDT     2.76  38 eP    03 46.02  -2.2
BKG     3.19  33 eP    03 52.27  -1.6
CKL     3.27  32 eP    03 53.05  -1.9
BGL     3.31  31 eP    03 50.68  -4.8
SPU     3.34  34 eP    03 54.02  -1.8
                eS     04 34.51
CP2     3.35  32 eP    03 54.78  -1.4
CGLM    3.45  33 eP    03 55.02  -2.3
NCG     3.49  31 eP    03 57.73  -0.1
SLKM    3.54  52 eP    03 56.12  -2.3
                eS     04 33.95
SEW     3.68  61 eP    03 57.96  -2.3
MPA     3.89  56 eP    04 00.59  -2.5
SUA     3.96  38 eP    04 01.30  -2.8
SDN     4.03 221 P     04 05.30   0.5
SKT     4.14  30 eP    04 04.08  -2.3
PWA     4.39  41 P     04 06.30  -3.4
LTI     4.41  66 eP    04 06.79  -3.2
PWL     4.51  55 eP    04 07.88  -3.6
                eS     04 54.88
PLRM    4.61  44 eP    04 10.73  -2.0
KNK     4.76  48 eP    04 11.76  -3.0
                eS     05 00.94
GHO     4.80  43 eP    04 11.57  -3.8
                eS     05 01.20
CUT     4.83  33 eP    04 11.99  -3.6
CFI     4.92  53 eP    04 13.40  -3.4
                eS     05 06.03
SML     5.04  45 eP    04 15.20  -3.4
FID     5.29  60 iP    04 17.48  -4.4
SCM     5.44  48 eP    04 20.44  -3.6
VLZ     5.51  57 eP    04 21.34  -3.4
                eS     05 19.63
CVA     5.56  64 eP    04 21.72  -3.8
TRF     5.69  26 eP    04 23.72  -3.8
KLU     5.85  54 eP    04 25.57  -3.9
                eS     05 26.10
RND     6.02  32 eP    04 27.70  -4.2
TOA     6.05  49 P     04 28.80  -3.4
DHY     6.22  38 eP    04 29.41  -5.3
SDG     6.53  47 eP    04 34.98  -3.7
GLB     6.75  59 eP    04 37.78  -4.0
PAX     6.81  44 eP    04 38.18  -4.5
WRH     7.08  28 eP    04 41.07  -5.1
CCB     7.30  28 eP    04 43.16  -5.9
BALM    7.30  64 eP    04 45.64  -3.6
HDA     7.33  32 eP    04 44.21  -5.3
FBA     7.51  27 eP    04 45.24  -6.7
       55 obs. associated
-----------------------------------------
*  NOV  06, 1993   04h 18m 52.18± 4.29s
   14.994 S ±17.6km  176.721 W ±13.7km
   DEPTH = 127.4 ± 39.7 km
   4.4mb (  8 obs.)

 FIJI ISLANDS REGION                (181)

DZM     17.44 244 iPd   22 49.80   0.7
ARMA    32.84 237 eP    25 15.30  -0.6
WR2     46.79 257 eP    27 09.80  -1.2
        0.9s     4.50nm          4.2mb
WRA     46.81 257 P     27 10.89  -0.2
ASPA    47.19 252 iPc   27 13.40  -0.7
        0.7s    11.40nm          4.7mb
SBA     63.42 184 eP    29 11.00   1.2
GSC     75.62  47 (P)   30 25.05   0.0
BONR    75.96  44 eP    30 27.83   0.7
TUC     78.64  52 eP    30 41.90   0.1
        0.9s     3.54nm          4.1mb
RMW     79.16  34 eP    30 43.48  -0.8
TTA     79.34   9 eP    30 46.71   1.8
        1.3s    14.21nm          4.6mb
DUG     80.78  44 eP    30 52.24  -0.9
        1.0s     3.56nm          4.1mb
DAU     81.93  45 (P)   30 59.45   0.1
PV09    82.55  47 eP    31 02.91   0.3
PV10    82.56  47 (P)   31 02.10  -0.5
FBA     82.63  12 eP    31 01.26  -0.8
        0.8s     6.03nm          4.5mb
BJI     82.88 315 eP    31 05.00   1.2
        1.5s    14.00nm          4.6mb
PV08    82.92  47 eP    31 04.01  -0.5
ALQ     83.02  51 eP    31 04.19  -0.8
        1.3s     6.64nm          4.4mb
LTX     83.07  57 eP    31 04.50  -0.7
LRM     83.71  39 eP    31 08.90   0.7
                e       31 17.80
GRF    144.79 351 ePKP  38 20.20   4.8X
     Z  20s     0.20um          4.9Msz
                e       38 28.70
KHC    144.92 348 ePKP  38 18.00   2.3X
        1.0s     5.40nm
                e       38 29.00
ZST    144.98 344 ePKP  38 16.80   1.0
SRO    144.98 342 ePKP  38 18.00   2.2X
GEC2   145.17 348 ePKP  38 18.70   2.5X
        0.6s     0.80nm
                e       38 29.20
                e       38 39.80
CDF    146.51 355 ePKP  38 24.00   5.5X
        0.7s     3.95nm
LPF    146.86   5 ePKP  38 23.90   5.0X
SSF    148.03 360 ePKP  38 26.20   5.4X
BGF    148.53   1 ePKP  38 28.80   7.2X
MAF    148.86   1 ePKP  38 29.60   7.4X
LPG    149.45 355 ePKP  38 28.00   4.5X
     S.D. = 0.9  on  22 of  32 obs.
-----------------------------------------
*  NOV  06, 1993   04h 32m 01.56± 0.84s
    5.771 S ± 6.8km  145.857 E ±13.8km
   DEPTH =  10.0km  (geophysicist)
   3.6mb (  2 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)

YYYY     0.48 167 iPd   32 11.10  -0.3
                eS      32 18.00
MDG      0.52 352 eP    32 12.00  -0.1
LAT      1.44 128 eP    32 28.20   0.5
MNDI     2.22 260 eP    32 45.50   6.3X
WWKK     3.08 314 eP    32 55.00   3.8X
PMG      3.84 160 eP    33 01.50  -0.4
WR2     17.99 217 eP    36 13.80   0.3
        0.9s     2.60nm          3.4mb
ASPA    21.19 212 eP    36 53.60   3.9X
        1.0s     5.90nm          3.9mb
BIP     23.99 305 ePc   37 21.00   3.6X
KKM     31.83 291 ePd   38 25.90  -3.3X
     S.D. = 0.6  on   5 of  10 obs.
-----------------------------------------
   NOV  06, 1993   04h 35m 42.51± 1.50s
    1.464 N ± 5.6km  126.311 E ±10.3km
   DEPTH =  74.5 ± 15.3 km
   5.0mb ( 22 obs.)
 NORTHERN MOLUCCA SEA               (266)

DAV      5.63 353 eP    37 08.00   2.4
CTB      6.07 340 ePc   37 09.00  -2.7
TSM      8.88 289 eP    37 46.50  -3.9X
MTN     15.00 162 eP    39 08.50  -3.3X
BAG     15.89 340 eP    39 25.00   1.7
CVP     16.73 345 eP    39 32.00  -1.7
KNA     17.27 172 eP    39 45.20   4.8X
        1.0s    143.00nm          5.2mb
WRA     22.69 160 P     40 45.70   7.0X
        0.9s    12.20nm           4.3mb
WR2     22.70 160 iPc   40 37.70  -1.1
        0.9s    98.70nm           5.2mb
                eS      44 30.80
QIZ     23.77 318 eP    40 50.20   0.9
IPM     25.44 278 ePd   41 05.80   0.6
QIS     25.47 150 eP    41 06.00   0.6
ASPA    26.05 164 iPc   41 10.40  -0.4
        0.9s    51.90nm           5.1mb
                iS      45 45.50
WARB    27.49 179 eP    41 24.50   0.6
MEEK    28.91 194 iPc   41 36.50  -0.2
CTA     29.00 139 iPc   41 37.50  -0.1
        1.0s    15.00nm           4.6mb
NJ2     31.23 348 Pc    41 57.50   0.4
     Z  20s     0.30um           4.0Msz
CHTO    31.89 304 eP    42 03.00  -0.1
MRWA    32.07 197 iPc   42 04.70   0.2
        0.6s    15.00nm           5.0mb
FORT    32.11 177 eP    42 05.70   0.9
KMI     32.72 318 eP    42 11.50   1.0
        1.5s    50.00nm           5.1mb
     Z  20s     1.20um           4.6Msz
BAL     33.18 195 eP    42 14.00  -0.2
        0.6s    19.00nm           5.1mb
KLB     33.86 193 iPc   42 20.30   0.2
        0.8s    19.00nm           5.1mb
MUN     34.61 195 eP    42 27.00   0.5
NWAO    35.26 193 iPc   42 32.60   0.6
        0.7s    13.00nm           5.0mb
STK     36.19 158 iPc   42 37.70  -2.2
        0.7s    14.10nm           5.0mb
                e       44 01.10
CD2     36.25 326 eP    42 40.40   0.0
     Z  20s     0.84um           4.5Msz
                eS      48 11.00
XAN     36.26 335 P     42 40.00  -0.5
        0.7s     3.90nm           4.4mb
     Z  20s     0.61um           4.4Msz
MAT     36.60  16 (P)   42 42.00  -1.3
        1.7s    53.85nm           5.2mb
ADE     38.06 163 eP    42 57.60   2.0
BJI     39.49 348 eP    43 07.00  -0.3
        1.3s    12.00nm           4.7mb
     Z  24s     0.52um           4.3MszX
ARMA    39.84 145 iPc   43 10.80   0.3
        0.8s    15.00nm           5.0mb
LZH     40.26 331 eP    43 15.00   1.1
        1.4s    39.00nm           5.1mb
     Z  20s     0.60um           4.4Msz
     E  15s     0.40um
SNY     40.26 357 Pc    43 14.10   0.5
        1.0s    28.00nm           5.1mb
     Z  22s     0.50um           4.3Msz
CN2     42.16 359 eP    43 32.40   3.2X
        0.4s     3.40nm           4.5mb
     Z  20s     0.37um           4.3Msz
MDJ     43.07   3 eP    43 37.60   1.0
        1.0s    17.00nm           4.8mb
LSA     43.65 313 eP    43 43.20   1.1
GTA     44.83 331 eP    43 51.50   0.4
     Z  27s     0.88um           4.6MszX
                PcP     45 34.00
DZM     45.61 123 iPd   43 55.80  -1.7
GUN     46.75 308 P     44 06.50  -0.2
        0.4s    14.00nm           5.2mb
KKN     47.17 308 P     44 09.30  -0.6
DMN     47.22 307 P     44 09.60  -0.8
GKN     47.77 307 P     44 11.80  -2.8
HYB     49.52 292 eP    44 24.50  -3.5X
GBA     49.82 287 Pd    44 28.70  -1.5
        0.8s     5.00nm           4.6mb
WMQ     54.35 326 eP    45 03.50  -0.3
KSH     59.33 316 eP    45 40.50   1.2
INK     92.41  21 eP    48 47.50   1.7
NB2    100.61 333 Pdiff 49 22.20  -1.1
        0.8s     0.90nm           4.5mb
KIC    130.52 280 PKP   54 37.60  -9.8X
        0.6s    20.00nm
TIC    130.76 280 PKP   54 35.90 -12.0X
LIC    130.82 279 PKP   54 36.00 -12.0X
MDZ    145.65 157 ePKP  55 17.30   2.7X
RTCB   146.90 156 e(PKP)55 21.00   4.3X
RTLL   147.17 156 e(PKP)55 21.10   4.0X
TCA    148.55 162 ePKPc 55 25.00   5.7X
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     S.D. = 1.2  on  43 of  56 obs.
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   NOV  06, 1993  04h 43m 56.21± 0.25s
    6.773 N ± 4.0km   72.982 W ± 4.1km
   DEPTH = 159.8km  (  7 depth phases)
   4.2mb ( 13 obs.)
 NORTHERN COLOMBIA                ( 99)

BMG      0.31 343 iPc   44 18.00  -1.5
BOG      2.39 207 iPd   44 39.00   1.7
                  iS    45 10.00
SDV      3.13  48 iPnd  44 47.60   1.2
                  iSn   45 25.10
CANV     5.90  44 iPd   45 23.10   0.5
MORO     6.15  48 iPd   45 25.60  -0.4
UPA      6.85 289 iPd   45 31.02  -4.3X
                  iS    46 42.08
OLLA     6.91  62 iPd   45 35.30  -1.0
PSO      7.03 218 eP    45 38.00  -0.2
CAR      7.04  58 iPc   45 37.50  -0.6
ECO      7.13 292 iPd   45 35.46  -3.6X
                  iS    46 49.50
LLAV     7.13  59 iPc   45 38.30  -0.9
DVD      9.53 281 eP    46 11.32   0.4
                  eS    47 54.36
BRU      9.70 283 eP    46 14.81   1.2
PCJ     11.64 340 ePd   46 39.47   0.9
TCE     11.76  70 iP    46 49.10   8.9X
GWJ     11.82 342 ePd   46 42.08   1.1
STH     11.84 342 ePd   46 41.80   0.6
                  S     48 31.58
TPP     11.93  72 iP    46 52.57  10.2X
TRN     12.08  71 eP    46 46.88   2.7
TBH     12.34  72 iP    46 56.33   8.6X
LPAZ    23.41 168 iPc   48 52.40  -0.3
LPB     23.65 168 P     48 56.30   1.5
CNCB    23.95 168 iPc   48 58.10   0.3
MOCB    28.77 166 P     49 39.80  -1.8
BAO     33.29 132 eP    50 21.10   0.2
UYO     33.72 327 iPc   50 24.60   0.4
ELC     33.78 336 eP    50 24.12  -0.6
FVM     34.87 336 eP    50 33.70  -0.3
         0.5s    25.22nm         5.2mb
PPD     35.64 144 eP    50 39.90  -0.8
SOB1    35.70 116 eP    50 41.60   0.3
LTX     36.60 312 eP    50 47.59  -1.2
                  ePcP  53 08.26
WMOK    36.60 323 eP    50 47.16  -1.4
         0.6s     6.57nm         4.5mb
VAO     39.03 140 eP    51 09.30   0.2
LMN     39.57   9 eP    51 14.00   0.8
CBM     40.23   5 eP    51 19.82   1.3
         0.6s    14.52nm         4.8mb
ALQ     41.64 317 eP    51 30.45  -0.1
         0.8s     2.01nm         3.8mb
                  epP   52 05.23 157km
GOL     43.82 323 iPd   51 48.03  -0.2
         0.6s    10.07nm         4.6mb
                  epP   52 22.67 156km
PV08    45.16 320 eP    51 58.80  -0.2
                  epP   52 34.88 162km
PV10    45.29 319 eP    51 58.77  -1.2
                  epP   52 35.16 164km
JAQ     46.94 358 eP    52 12.00  -0.4
ULM     47.38 340 eP    52 17.00   1.1
DAU     47.86 320 eP    52 19.93  -0.2
                  epP   52 55.87 159km
ARUT    47.92 316 eP    52 20.29  -0.2
                  epP   52 56.49 161km
DUG     48.74 319 ePd   52 26.49  -0.2
         0.6s     2.27nm         4.0mb
                  e     53 03.14
GSC     49.20 312 eP    52 30.42   0.2
TPNV    49.50 314 (P)   52 32.76   0.1
         0.6s     5.19nm         4.4mb
TNP     50.69 315 eP    52 41.45  -0.3
         0.6s     2.02nm         4.0mb
BONR    51.41 314 eP    52 47.35   0.1
YKA     63.36 340 eP    54 08.60  -1.6
         0.5s     4.10nm         4.6mb
INK     73.12 340 eP    55 10.50   0.1
                  pP    55 49.50 160km
MBC     73.88 350 eP    55 16.00   1.3
         0.7s     2.00nm         4.0mb
NB2     81.30  29 P     55 56.20   0.5
         0.7s     2.50nm         4.1mb
HFS     82.52  30 eP    56 00.40  -1.6
         0.4s     0.90nm         3.9mb
GEC2    82.77  42 eP    56 03.10  -0.6
         0.6s     1.34nm         3.9mb
GKN    139.22  31 PKP   03 06.80   0.0
KKN    139.73  31 PKP   03 08.00   0.3
GUN    139.92  30 PKP   03 08.00  -0.3
GBA    144.33  55 PKP   03 14.00  -1.7
SHL    144.65  24 iPKP  03 14.00  -2.3X
ASPA   149.20 234 iPKPc 03 26.90   3.4X
         0.7s    18.70nm
WR2    150.41 241 ePKP  03 25.70   0.3
         0.4s    21.00nm
                  i     03 30.50
                  ipP   04 10.80
WRA    150.43 241 PKP   03 26.00   0.6
         0.6s     5.30nm
CHTO   153.36  17 ePKP  03 37.20   7.5X
     S.D. = 1.0  on  55 of  63 obs.
-----------------------------------
   NOV  06, 1993  04h 52m 54.35± 0.54s
   38.954 N ± 5.1km   27.980 E ± 6.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
     ML 3.2 (ISK).

IZM      0.79 226 iPg   53 08.70  -1.0
                  eSg   53 21.40
DST      0.82  37 iPg   53 09.80  -0.5
CIN      1.35 176 ePg   53 20.00   0.8
                  iSg   53 37.00
KHL      1.36 117 ePn   53 19.20  -0.2
EDC      1.39 356 iPn   53 20.50   0.7
BNT      1.40 358 iPn   53 19.50  -0.4
EZN      1.55 305 iPn   53 22.80   0.8
ALT      1.66  86 iPn   53 24.20   0.4
CTT      2.22   9 ePn   53 31.20  -0.5
GPA      2.24  53 ePn   53 32.00  -0.1
     S.D. = 0.7  on  10 of  10 obs.
-----------------------------------
%  NOV  06, 1993  05h 33m 47.36± 1.22s
   36.731 N ±12.8km    4.525 W ± 7.4km
   DEPTH =  10.0km  (geophysicist)
 STRAIT OF GIBRALTAR              (385)
     mbLg 2.9 (MDD).

EPRU     0.61 293 iPd   34 01.40   1.7
                  e     34 10.10
EGUA     0.78  82 eP    34 02.29  -0.2
                  e     34 13.40
EJIF     0.81 250 eP    34 02.50  -0.6
                  e     34 16.00
ELUQ     0.85  14 eP    34 04.50   0.7
                  e     34 12.50
ECOG     0.94  54 iPd   34 05.67   0.3
                  e     34 16.30
EHOR     1.23 332 eP    34 08.47  -1.8
                  e     34 22.30
EVIA     2.49  40 eP    34 25.45  -3.2X
                  e     34 52.70
     S.D. = 1.5  on   6 of   7 obs.
-----------------------------------
   NOV  06, 1993  05h 55m 16.85± 0.40s
   41.378 N ± 4.9km   20.811 E ± 4.2km
   DEPTH =  10.0km  (geophysicist)
 ALBANIA                          (391)
     ML 3.5 (SKO), 3.1 (TIR).

OHR      0.27 182 iPgc  55 21.40  -1.1
                  iSg   55 26.20
TIR      0.71 268 iPgd  55 28.60  -2.3
                  iSg   55 40.10
FNA      0.73 144 ePg   55 31.62   0.4
                  iSg   55 41.18
SKO      0.76  38 iPg   55 29.50  -2.2
         0.3s   180.00nm
                  iSg   55 40.10
                  i     55 40.70
LACI     0.87 288 ePg   55 31.40  -2.1
                  iSg   55 46.00
BCI      1.13 331 iPgd  55 38.60   0.5
                  iSg   55 54.60
LSK      1.24 188 ePn   55 39.10  -0.8
GRG      1.27 109 iPg   55 39.33  -1.2
                  eSg   55 56.58
ULC      1.31 297 iPgd  55 40.69  -0.4
                  iSg   56 02.38
VAY      1.33  92 iPn   55 40.00  -1.3
                  iSn   55 57.80
VLO      1.35 228 ePn   55 43.20   1.5
PVY      1.37 333 iPgc  55 42.00   0.0
                  iSg   56 02.85
TTG      1.56 313 iPnd  55 45.37   0.7
                  iSn   56 09.47
KNT      1.59  97 ePb   55 45.01  -0.1
                  eSb   56 06.26
SRN      1.62 203 ePn   55 50.20   4.7X
IVA      1.64 336 iPnd  55 46.58   0.7
                  iSn   56 10.11
BDV      1.74 302 iPnc  55 47.84   0.6
                  iSn   56 13.61
THE      1.79 114 ePb   55 48.06   0.0
                  eSb   56 11.54
LIT      1.80 134 ePb   55 50.38   2.1
NKY      1.97 317 iPnd  55 51.14   0.4
                  iSn   56 19.32
SOH      2.00 105 iPb   55 51.77   0.7
                  eSb   56 16.06
HCY      2.03 303 iPnc  55 52.73   1.2
                  iSn   56 20.90
SRS      2.11  96 iPb   55 52.41  -0.3
                  eSb   56 18.26
PLE      2.22 332 iPnd  55 54.73   0.5
                  iSn   56 24.25
BRY      2.27 313 iPnc  55 55.69   0.6
                  iSn   56 26.53
PAIG     2.62 123 ePn   56 01.58   1.7
MLR      5.55  41 eP    56 44.00   2.3X
     S.D. = 1.2  on  25 of  27 obs.
-----------------------------------
?  NOV  06, 1993  07h 06m 24.33± 2.40s
   38.768 N ±19.0km   28.164 E ±20.9km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
     ML 2.8 (ISK).

IZM      0.80 243 iPg   06 39.90   0.0
                  eSg   06 52.00
DST      0.91  23 iPg   06 41.60  -0.2
EDC      1.59 352 ePn   06 53.00   0.4
EZN      1.78 307 ePn   06 55.00  -0.2
     S.D. = 0.5  on   4 of   4 obs.
-----------------------------------
   NOV  06, 1993  07h 24m 36.06± 0.36s
   46.054 N ± 3.8km    6.575 E ± 3.8km
   DEPTH =   5.0km  (geophysicist)
 SWITZERLAND                      (544)
     ML 3.0 (LDG).

EMS      0.25  86 iPd   24 40.70  -0.5
LPL      0.55 168 Pg    24 46.10  -1.0
                  Sg    24 52.40
LPG      0.57 167 Pg    24 46.50  -1.0
                  Sg    24 53.60
DIX      0.58  87 iPd   24 47.10  -0.7
LSD      0.72 146 P     24 48.79  -1.7
RSP      1.02 152 P     24 55.52  -0.4
ORX      1.07 113 P     24 56.44  -0.3
RRL      1.14 173 P     24 57.44  -0.7
BHB      1.31 158 P     25 00.37  -0.3
PZZ      1.59 166 P     25 04.58  -0.5
TMA      1.60  87 eP    25 07.70   2.5
BSF      1.78   5 Pn    25 07.50  -0.4
                  Pg    25 10.20
                  Sg    25 33.70
LLS      1.86  63 ePd   25 12.00   2.9X
ENR      1.92 162 P     25 11.50   1.6
HAU      1.96 356 Pn    25 09.90  -0.4
                  Pg    25 13.90
                  Sg    25 39.90
SMF      1.98 288 Pn    25 11.40   0.8
                  Sg    25 39.40
LBF      2.02 298 Pn    25 11.10  -0.1
                  Pg    25 17.10
                  Sg    25 43.50
VDL      2.05  77 P     25 14.90   3.0X
PCP      2.05 137 P     25 13.26   1.5
SLE      2.16  37 P     25 17.20   4.0X
FIN      2.18 147 P     25 15.73   2.2
LOR      2.23 304 Pn    25 15.40   1.2
                  Pg    25 20.20
                  Sg    25 47.40
SBF      2.27 164 Pg    25 18.40   3.5X
                  Sg    25 48.10
IMI      2.34 156 P     25 17.14   1.3
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06d 07h

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SSF      2.34 297 Pn     25 17.00   1.1
                  Pg     25 23.10
                  Sg     25 50.20
AVF      2.35 289 Pn     25 15.70  -0.2
                  Pg     25 22.70
                  Sg     25 51.20
CDF      2.41  11 Pn     25 15.60  -1.2
                  Pg     25 23.20
                  Sg     25 56.20
FRF      2.49 179 Pg     25 22.70   4.7X
                  Sg     25 55.40
LRG      2.60 183 Pg     25 24.60   5.1X
BGF      2.63 282 Pn     25 19.60  -0.3
                  Pg     25 26.60
                  Sg     26 00.80
LMR      2.72 181 Pg     25 26.40   5.2X
                  Sg     26 00.80
MAF      2.79 275 Pn     25 21.60  -0.7
                  Pg     25 29.40
                  Sg     26 04.20
TCF      3.04 276 Pn     25 25.70  -0.1
                  Pg     25 34.20
                  Sn     25 58.20
                  Sg     26 12.30
CAF      3.37 252 Pn     25 29.50  -0.9
                  Sg     26 22.10
GRF      4.80  39 e(Pn)  25 49.80  -0.9
                  e(Pg)  26 13.90
                  eSg    27 13.10
     S.D. = 1.1  on  28 of  35 obs.
-------------------------------------
   NOV  06, 1993  07h 30m 03.44± 0.36s
   37.876 N ± 4.6km  112.812 W ± 3.5km
   DEPTH =   5.0km  (geophysicist)
 UTAH                                (478)
     ML 3.0 (GS).

ARUT     0.51 260 eP     30 14.16   0.6
MSU      0.81  38 eP     30 18.46  -1.3
SRU      2.18  55 eP     30 41.66   0.6
DUG      2.32 360 eP     30 43.73   0.8
EMUT     2.49  38 eP     30 45.62   0.2
DAU      2.81  25 eP     30 50.04  -0.1
TPNV     2.89 252 eP     30 51.09  -0.1
PV09     2.96  77 eP     30 55.72   3.4X
PV10     3.02  79 eP     30 53.55   0.5
PV08     3.35  77 (P)    30 59.54   1.6X
TNP      3.49 275 ePn    30 59.92   0.3
HVU      3.90   0 (Pn)   31 05.78   0.3
GSC      4.11 233 eP     31 08.13  -0.3
KVN      4.31 287 (Pn)   31 11.17  -0.2
BONR     4.34 273 (P)    31 11.14  -0.8
TUC      5.80 163 (Pn)   31 32.22   0.0
ALQ      5.90 118 ePn    31 33.87   0.0
RSSD     9.10  44 (P)    32 18.23  -0.4
     S.D. = 0.6  on  16 of  18 obs.
-------------------------------------
   NOV  06, 1993  07h 45m 17.31± 1.01s
   16.599 N ±11.0km   98.693 W ± 5.6km
   DEPTH =  12.4 ±  4.0 km
   4.3mb ( 11 obs.)
 NEAR COAST OF GUERRERO, MEXICO  ( 58)
      Felt in the states of Guerrero
      and Oaxaca and at Mexico City.

ACX      1.15 284 iP     45 36.50  -2.1
                  iS     45 48.50
OXX      1.95  75 iP     45 53.00   2.4
                  iS     46 21.00
PPM      2.45   1 iP     46 00.00   1.8
                  iS     46 32.00
UNM      2.76 350 iP     46 07.00   4.7X
                  iS     46 34.00
CRX      2.95 342 iP     46 06.00   1.0
                  (S)    46 49.00
LVVM     3.78  34 (P)    46 15.50  -1.1
MRX      3.90 323 iP     46 17.00  -1.2
SCX      5.81  88 (P)    47 10.00  24.7X
AGX      6.26 328 (P)    47 17.50  25.9X
TPX      6.42 104 (P)    46 54.00   0.1
LTX     13.47 341 eP     48 31.33   0.5
WMOK    18.06 360 eP     49 30.01   0.3
        1.0s    13.55nm          4.0mb
MEO     18.11   0 iPc    49 30.90   0.6
MIAR    18.45  13 eP     49 32.98  -1.5
        1.2s    29.24nm          4.3mb
TUC     19.10 327 eP     49 43.97   1.5
        1.5s    19.35nm          4.1mb
TUL     19.41   7 iP     49 44.10  -2.1
ALQ     19.54 341 iPc    49 46.99  -1.0
        0.8s     7.81nm          4.0mb
OXF     19.69  23 eP     49 47.57  -1.7
ELC     22.24  20 eP     50 15.43   0.0
FVM     22.51  17 (P)    50 16.88  -1.2
        0.6s     7.66nm          4.4mb
MYNC    22.54  33 eP     50 17.27  -1.2
        1.0s    37.26nm          4.8mb
PRM     22.77  37 eP     50 20.38  -0.3
PV10    23.52 339 eP     50 27.89  -0.4
JSC     23.55  38 (P)    50 28.82   0.5
PV08    23.57 340 eP     50 29.74   0.9
PV09    23.66 339 eP     50 30.39   0.7
GLD     23.76 347 eP     50 30.97   0.5
        0.9s    14.33nm          4.5mb
LHS     23.96  39 eP     50 32.73   0.5
GSC     24.66 322 eP     50 40.69   1.5
SRU     24.70 338 ePd    50 40.31   0.7
ARUT    24.79 331 eP     50 41.34   0.9
MSU     24.83 334 eP     50 42.12   1.2
EMUT    25.43 338 eP     50 47.48   0.9
CEH     25.95  38 (P)    50 50.44  -0.8
        0.7s     6.23nm          4.4mb
DAU     26.11 338 eP     50 53.59   0.5
DUG     26.52 335 eP     50 57.24   0.6
        1.3s     7.59nm          4.2mb
BCH     26.60 318 eP     50 57.40   0.0
BONR    27.39 325 eP     51 05.06   0.2
HVU     27.86 337 eP     51 09.32   0.4
LRM     31.32 341 eP     51 40.20   0.3
                  e      51 47.90
BMW     36.10 331 eP     52 21.53   0.7
RMW     36.20 333 eP     52 21.42  -0.3
GMW     36.70 332 eP     52 25.18  -0.6
                  e      52 32.26
JAQ     41.22  21 eP     53 02.50  -0.8
YKA     47.19 350 eP     53 49.90  -1.4
        0.8s     2.80nm          4.4mb
INK     56.21 345 eP     54 58.00  -1.1
MBC     60.63 354 eP     55 30.00   0.1
        1.0s     2.00nm          4.2mb
     S.D. = 1.1  on  44 of  47 obs.
-------------------------------------
%  NOV  06, 1993  08h 16m 09.65± 0.81s
   45.404 N ± 8.2km    2.384 E ±10.6km
   DEPTH =   5.0km  (geophysicist)
 FRANCE                              (538)
     ML 2.0 (LDG).

CAF      0.53 205 Pg     16 19.50  -0.7
                  Sg     16 26.30
RJF      0.62 261 Pg     16 22.30   0.2
                  Sg     16 32.00
MAF      0.83   9 Pg     16 25.20  -1.0
                  Sg     16 37.40
TCF      0.89 352 Pg     16 27.00  -0.3
                  Sg     16 39.20
LPO      1.11 230 Pg     16 31.50   0.5
                  Sg     16 47.00
BGF      1.20  15 Pg     16 31.60  -0.8
                  Sg     16 47.10
AVF      1.54  26 Pg     16 37.70  -0.1
                  Sg     16 57.50
SMF      1.60  39 Pg     16 37.80  -0.9
                  Sg     16 58.00
SSF      1.83  25 Pg     16 43.10   1.1
LOR      2.13  28 Pg     16 48.30   2.0
                  Sg     17 15.70
     S.D. = 1.1  on  10 of  10 obs.
-------------------------------------
*  NOV  06, 1993  09h 02m 31.89± 2.28s
   38.388 N ±14.1km   74.525 E ±14.2km
   DEPTH = 138.8 ± 20.8 km
   4.1mb (  3 obs.)
 TAJIKISTAN-XINJIANG BORDER REG. (719)

NDI      9.94 166 iP     04 57.90   5.6X
        0.6s    93.33nm          5.7mb X
                  eS     06 32.50
NDI      9.94 166 iPd    04 51.90  -0.4
                  eS     06 32.50
GKN     13.37 138 P      05 37.00  -0.4
KKN     13.88 136 P      05 44.00   0.0
DMN     13.93 137 P      05 45.00   0.3
GUN     14.12 134 P      05 47.00  -0.1
SHL     19.46 126 iP     06 51.20   1.0
POO     19.79 182 eP     06 55.00   1.4
HYB     21.19 169 eP     07 07.00  -0.6
                  eS     10 52.00
GBA     24.82 173 P      07 42.00  -0.6
HFS     43.36 320 eP     10 21.50   0.1
        0.4s     0.90nm          3.8mb
WRA     80.68 125 P      14 30.90   0.1
        0.6s     2.40nm          4.1mb
WR2     80.69 124 iPc    14 30.00  -0.9
        0.6s     6.90nm          4.6mb
     S.D. = 0.8  on  12 of  13 obs.
-------------------------------------
   NOV  06, 1993  09h 05m 23.87± 0.51s
   41.825 N ± 4.5km   20.118 E ± 5.1km
   DEPTH =  10.0km  (geophysicist)
 ALBANIA                             (391)
     ML 2.9 (TIR).

LACI     0.36 239 iPgc   05 31.10  -0.1
                  iSg    05 36.40
TIR      0.51 202 iPgd   05 33.10  -1.2
                  iSg    05 42.10
BCI      0.54 356 iPgd   05 38.60   3.7X
ULC      0.66 282 iPgc   05 36.00  -1.1
                  eSg    05 45.70
PVY      0.78 352 ePg    05 38.70  -0.4
                  eSg    05 51.00
OHR      0.88 144 iPn    05 39.60  -1.2
                  i      05 41.10
                  i      05 53.00
TTG      0.88 314 iPgc   05 39.90  -0.8
                  eSg    05 54.00
SKO      1.00  81 iPg    05 42.50  -0.3
IVA      1.06 351 iPgd   05 43.70  -0.2
                  eSg    06 00.50
BDV      1.06 296 ePg    05 43.50  -0.4
                  eSg    06 00.00
NKY      1.29 320 ePg    05 47.50  -0.4
                  eSg    06 07.50
HCY      1.36 298 ePg    05 48.40  -0.4
                  eSg    06 10.00
VLO      1.43 199 ePn    05 51.60   1.7
BRY      1.59 313 ePg    05 53.00   0.8
                  eSg    06 17.00
PLE      1.60 341 iPnd   05 54.50   2.2
                  eSn    06 17.40
LSK      1.71 168 ePn    05 55.80   1.8
VAY      1.91 104 iPn    05 56.00  -0.7
SRN      1.94 183 eP     06 00.20   3.0X
HVAR     3.03 298 iPn    06 13.40   0.6
     S.D. = 1.1  on  17 of  19 obs.
-------------------------------------
   NOV  06, 1993  09h 48m 12.34± 0.79s
   41.797 N ± 8.2km   20.057 E ± 6.5km
   DEPTH =  10.0km  (geophysicist)
 ALBANIA                             (391)

ULC      0.63 286 iPgd   48 24.65  -0.3
                  iSg    48 34.74
PVY      0.80 356 iPgc   48 26.86  -1.1
                  iSg    48 37.89
TTG      0.87 317 iPgc   48 28.21  -0.8
                  iSg    48 41.91
OHR      0.88 141 ePg    48 28.70  -0.6
                  eSg    48 42.70
BDV      1.04 298 iPgc   48 31.59  -0.3
                  iSg    48 48.26
SKO      1.05  80 iPg    48 32.90   0.8
                  iSg    48 44.60
IVA      1.08 354 iPgd   48 31.59  -1.1
                  iSg    48 47.35
NKY      1.28 323 iPgc   48 36.71   0.5
                  iSg    48 55.62
HCY      1.33 300 iPgc   48 36.91   0.1
                  iSg    48 57.39
BRY      1.57 315 iPnc   48 42.19   1.7
                  iSn    49 05.27
PLE      1.61 343 iPnd   48 42.10   1.2
                  iSn    49 05.47
     S.D. = 1.1  on  11 of  11 obs.
-------------------------------------
%  NOV  06, 1993  10h 16m 34.57± 0.89s
   39.079 N ± 7.2km   27.545 E ± 9.5km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                              (366)
     ML 2.7 (ISK).
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IZM      0.72 198 ePg    16 48.50  -0.2
                  eSg    17 00.30
DST      0.99  58 ePn    16 53.90   0.5
EZN      1.20 309 ePn    16 57.40   0.4
EDC      1.29  11 ePn    16 58.00  -0.5
BNT      1.31  13 ePn    16 58.50  -0.3
     S.D. = 0.6  on   5 of   5 obs.
-------------------------------------
   NOV  06, 1993  10h 32m 48.60± 0.47s
   54.793 N ± 5.6km  156.859 W ± 4.7km
   DEPTH =  10.0km  (geophysicist)
   4.4mb (  9 obs.)
 SOUTH OF ALASKA                  ( 17)
      ML 3.9 (AEIC).

SPBA     2.15 287 eP     33 24.08  -0.9
SDN      2.16 286 eP     33 24.88  -0.2
KDC      3.83  38 eP     33 48.25  -0.6
CDD      4.51  22 eP     33 59.61   1.2
SYI      4.55  31 eP     33 59.44   0.4
MCNL     4.61  16 eP     34 00.94   1.0
AUH      4.95  21 eP     34 07.00   2.3
OPT      5.26  21 eP     34 10.21   1.1
HOM      5.64  28 eP     34 15.06   0.6
CNPM     5.65  31 eP     34 14.50  -0.1
INE      5.67  20 eP     34 15.71   0.7
ILIM     5.70  20 eP     34 16.10   0.7
BRLK     5.94  31 eP     34 18.53  -0.2
                  eS     35 23.38
RED      6.05  20 eP     34 20.99   0.6
RS2      6.10  19 eP     34 21.61   0.5
RDW      6.11  19 eP     34 21.71   0.5
REF      6.13  20 eP     34 22.09   0.5
NCT      6.16  18 eP     34 22.49   0.7
DFR      6.23  19 eP     34 23.27   0.4
SVW      6.37   5 eP     34 25.56   0.8
SEW      6.66  34 eP     34 28.31  -0.4
SLKM     6.74  29 eP     34 28.79  -1.3
                  eS     35 42.92
BKG      6.75  19 eP     34 30.26   0.0
SPU      6.90  20 eP     34 32.03  -0.2
BGL      6.91  18 eP     34 32.79   0.4
CRP      6.95  19 eP     34 32.32  -0.8
MPA      6.98  32 eP     34 34.33   1.0
CGLM     7.02  20 eP     34 33.86  -0.1
NCG      7.08  19 eP     34 34.99   0.2
LTI      7.16  39 eP     34 35.55  -0.3
                  eS     35 55.24
SUA      7.43  23 eP     34 39.06  -0.7
PMS      7.54  28 eP     34 39.87  -1.3
PWL      7.59  33 eP     34 40.39  -1.5
                  eS     36 02.70
SKT      7.73  19 eP     34 44.08   0.2
PWA      7.80  25 eP     34 44.37  -0.4
PMR      7.94  28 eP     34 44.48  -2.3
KNK      7.99  30 eP     34 47.69   0.3
GHO      8.15  28 eP     34 49.93   0.2
TTA      8.17   3 eP     34 48.39  -1.7
CUT      8.37  22 eP     34 52.73   0.0
VLZ      8.46  37 eP     34 52.01  -2.0
SCM      8.65  31 eP     34 56.85   0.1
KLU      8.85  36 eP     34 57.69  -1.9
TOA      9.22  33 eP     35 04.49   0.0
GLB      9.58  41 eP     35 05.77  -3.8X
BALM     9.92  45 eP     35 12.23  -2.1
FBA     11.10  20 eP     35 26.78  -3.5X
ADK     12.20 264 (P)    35 44.24  -0.9
         0.5s     4.39nm          5.0mb X
INK     17.35  30 eP     36 53.00   1.0
         0.7s     5.00nm          3.8mb
NEW     25.30  88 eP     38 17.70   1.2
         0.7s     4.40nm          4.3mb
MBC     25.64  20 eP     38 22.50   3.1X
         0.6s     4.00nm          4.3mb
RSSD    35.15  85 eP     39 44.93   0.5
         0.7s     4.75nm          4.5mb
WMOK    44.39  92 eP     41 01.01   0.2
         0.7s     5.14nm          4.5mb
LTX     45.55 102 (P)    41 10.06  -0.1
MAT     47.09 275 eP     41 21.00  -1.2
SDF     58.08 359 iP     42 44.20   0.5
KAF     63.41 358 iP     43 20.00   0.1
         0.7s     5.10nm          4.8mb
NB2     64.13   6 P      43 24.80   0.1
         7.0s     1.60nm          3.3mb X
NUR     65.04 359 eP     43 30.40  -0.1
         0.8s     7.30nm          4.9mb
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```
GTA     65.66 304 eP     43 34.50  -0.6
         1.0s     4.00nm          4.6mb
CD2     70.39 296 eP     44 04.20  -0.4
GEC2    76.43   6 ePKP   44 40.20   0.5
         0.6s     0.58nm          3.9mb
                  e      44 43.50
GUN     81.67 307 P      45 09.60   0.9
KKN     82.05 308 P      45 11.80   1.3
GKN     82.16 308 P      45 11.50   0.5
DMN     82.28 308 P      45 12.70   0.9
     S.D. = 0.9  on  63 of  66 obs.
-------------------------------------
*  NOV  06, 1993  12h 48m 41.75± 0.71s
    9.578 N ±16.9km   72.893 W ± 6.2km
   DEPTH =  33.0km  (normal)
 VENEZUELA                        (101)

SDV      2.33 107 iPnd    49 19.90   1.1
                  iSn    49 47.90
CANV     4.26  70 iPd     49 46.70   0.8
                  iS     50 36.00
MORO     4.68  74 iPc     49 51.40  -0.7
                  iS     50 45.00
CAR      5.95  81 ePnc    49 29.80 -40.2X
                  ePP    49 30.00
                  iSn    50 08.80
OLLA     6.02  85 eP      50 10.10  -0.9
                  iS     21 20.30
UPA      6.58 265 iP      50 18.67  -0.1
ECO      6.71 269 eP      50 20.95   0.3
                  eS     51 36.16
LPAZ    26.13 170 eP      54 24.00   8.5X
LPB     26.37 170 eP      54 17.00  -0.5
CNCB    26.67 169 P       54 14.00  -6.4X
WR2    151.74 246 iPKPd   08 34.50   5.7X
         0.4s     8.80nm
WRA    151.77 246 PKP     08 34.80   6.0X
         0.5s     2.80nm
     S.D. = 0.9  on   7 of  12 obs.
-------------------------------------
   NOV  06, 1993  13h 46m 07.22± 0.58s
   39.363 N ± 5.7km   26.241 E ± 4.2km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 3.1 (ISK).

EZN      0.47   8 iPg     46 16.00  -0.7
                  iSg    46 23.50
IZM      1.25 140 ePn     46 30.30  -0.2
KGT      1.36  37 iPn     46 32.30   0.1
ALN      1.54 354 iPb     46 35.10   0.4
                  eSb    46 57.78
EDC      1.59  51 ePn     46 36.60   1.2
BNT      1.63  52 iPn     46 36.20   0.2
MFT      1.63  29 ePn     46 36.00  -0.1
DST      1.86  82 ePn     46 39.00  -0.5
PAIG     2.06 287 ePn     46 42.10  -0.1
                  eSn    47 10.62
CTT      2.45  43 ePn     46 48.00   0.2
SOH      2.65 304 ePn     46 51.02   0.2
                  eSn    47 28.06
SRS      2.68 312 ePn     46 50.42  -0.8
                  eSn    47 29.66
DMK      2.71  25 ePn     46 51.00  -0.6
KNT      3.13 306 ePn     46 58.22   0.8
     S.D. = 0.6  on  14 of  14 obs.
-------------------------------------
?  NOV  06, 1993  14h 03m 04.74± 0.88s
   16.406 N ±10.3km   61.628 W ±17.5km
   DEPTH =  60.0km  (geophysicist)
 LEEWARD ISLANDS                  ( 92)

DOG      0.37 178 eP      03 15.82   0.2
PAG      0.38 188 eP      03 15.84   0.2
                  S      03 33.50
SFG      0.44 110 eP      03 16.61   0.5
MGG      0.57 148 eP      03 16.78  -0.8
                  S      03 32.70
BPA      0.67 341 eP      03 18.64  -0.1
                  S      03 36.10
     S.D. = 0.7  on   5 of   5 obs.
-------------------------------------
%  NOV  06, 1993  14h 07m 02.44± 0.91s
   39.619 N ± 7.8km   29.471 E ± 8.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 2.8 (ISK).
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```
DST      0.65 269 iPg     07 14.70  -0.8
ALT      0.75 138 ePg     07 17.50   0.3
                  eSg    07 30.00
EYL      1.08  29 iPn     07 22.20  -0.7
HRT      1.21   7 ePn     07 24.30  -0.7
ISK      1.48 348 ePn     07 30.00   0.9
CTT      1.72 333 ePn     07 33.50   0.9
     S.D. = 1.1  on   6 of   6 obs.
-------------------------------------
   NOV  06, 1993  14h 45m 05.64± 1.52s
   58.005 N ±13.4km   142.801 W ± 4.5km
   DEPTH =  10.0km  (geophysicist)
 GULF OF ALASKA                   ( 15)
      ML 2.7 (AEIC).

CHX      2.24  22 eP      45 43.13  -0.3
PNL      2.43  45 eP      45 45.95  -0.1
WAX      2.45 359 eP      45 46.61   0.2
                  eS     46 13.82
PCA      2.48  31 eP      45 46.78   0.1
BCPM     2.55  39 eP      45 47.63  -0.1
RAGM     2.58 339 eP      45 48.36   0.2
TGL      2.76 360 eP      45 50.90   0.1
                  eS     46 21.48
CRQM     2.77 357 eP      45 50.89  -0.1
                  eS     46 21.50
CVA      2.96 331 eP      45 54.98   1.4
BALM     3.05   4 eP      45 55.24   0.4
                  eS     46 28.51
CTGM     3.06  14 eP      45 55.21   0.1
HIN      3.06 323 eP      45 55.47   0.5
MTU      3.20 310 eP      45 56.89  -0.1
LTI      3.32 310 eP      45 58.65   0.1
FID      3.34 327 eP      45 59.02   0.1
GLB      3.49 352 eP      46 00.78  -0.3
                  eS     46 39.17
VZW      3.61 330 eP      46 02.27  -0.6
KLU      3.84 337 eP      46 05.62  -0.5
                  eS     46 48.29
PWL      4.02 318 eP      46 07.77  -0.8
                  eS     46 52.36
SEW      4.03 304 eP      46 08.26  -0.3
                  eS     46 51.86
CFI      4.07 324 eP      46 08.71  -0.4
                  eS     46 54.44
MPA      4.19 309 eP      46 10.09  -0.8
TOA      4.45 339 P       46 15.60   0.9
KNK      4.46 322 eP      46 14.80   0.0
SCM      4.46 331 eP      46 14.34  -0.6
SLKM     4.56 307 eP      46 16.00  -0.3
                  eS     47 05.31
CNPM     4.65 293 eP      46 18.73   1.2
     S.D. = 0.6  on  27 of  27 obs.
-------------------------------------
   NOV  06, 1993  15h 12m 48.75± 0.31s
   44.737 N ± 3.2km   10.035 E ± 2.8km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                   (545)
      ML 3.4 (LDG), 3.3 (VIE). MD 3.4
      (TRI), 3.1 (ROM).

BOB      0.42 274 P       12 57.43   0.1
MME      0.72 139 P       13 02.66  -0.5
BDI      0.79 149 P       13 03.42  -0.7
SAL      0.94  22 P       13 08.42   1.8
MDI      1.06 348 P       13 10.07   1.3
PII      1.07 161 P       13 09.19   0.2
PCP      1.08 260 P       13 09.90   0.8
                  S      13 25.11
CKI      1.29 257 P       13 13.11   0.4
FIN      1.41 249 P       13 14.48   0.0
                  S      13 32.43
VAI      1.44 322 P       13 17.17   2.4
SFI      1.54 121 P       13 18.22   2.0
TMA      1.59 330 iPd     13 17.60   0.4
ROB      1.61 255 P       13 17.27  -0.1
                  S      13 38.06
ORX      1.71 302 P       13 18.33  -0.5
                  S      13 39.32
IMI      1.75 243 P       13 18.97  -0.4
                  S      13 40.31
CRE      1.77 128 P       13 20.75   1.0
VDL      1.79 347 iPd     13 20.90   0.8
SAOF     1.93 248 Pn      13 22.34   0.4
ENR      1.94 256 P       13 22.35   0.2
OSS      1.95   2 ePd     13 23.70   1.3
MMK      1.96 313 ePd     13 27.90   5.3X
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06d 15h

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BHB      1.98 274 P      13 22.99   0.4
STV      2.00 257 P      13 22.95  -0.1
DOI      2.01 264 P      13 26.44   3.3X
AUTN     2.01 249 Pn     13 23.85   0.5
                  Sg     13 49.14
RSP      2.02 283 P      13 21.30  -2.0
SBF      2.06 246 Pn     13 24.20   0.3
PZZ      2.11 265 P      13 25.24   0.6
AURF     2.12 247 Pn     13 25.55   0.8
                  Sg     13 53.27
TOUF     2.13 251 Pn     13 25.53   0.6
                  Sg     13 53.76
LSD      2.16 290 P      13 25.81   0.2
MVIF     2.23 249 Pn     13 26.75   0.3
LLS      2.25 342 ePd    13 28.40   1.6
DIX      2.28 307 ePd    13 29.10   1.8
PGF      2.31 199 Pn     13 26.00  -1.6
RRL      2.32 276 P      13 28.44   0.6
BNI      2.41 279 P      13 32.08   3.1X
LPG      2.45 289 Pn     13 28.90  -0.7
                  Sn     13 59.10
LPL      2.46 290 Pn     13 29.20  -0.6
                  Sn     13 59.40
CALN     2.47 248 Pn     13 30.74   1.0
ASS      2.53 130 P      13 31.48   1.0
EMS      2.56 302 iPc    13 32.60   1.4
FVI      2.67  45 P      13 35.90   3.3X
FRF      2.71 245 Pn     13 33.40   0.3
                  Sn     14 04.60
WTTA     2.76  23 iPnd   13 34.70   0.7
                  i      14 08.00
TRI      2.81  68 e(Pn)   13 32.20  -2.3
                  e(Pg)   13 38.70
                  e(Sn)   14 04.70
                  e(Sg)   14 16.90
LMR      2.90 242 Pn     13 34.60  -1.2
                  Sn     14 09.00
VOY      3.01  63 e(Pn)   13 35.90  -1.5
                  e      13 43.50
                  e(Sn)   14 10.70
                  e      14 23.00
SLE      3.21 341 ePc    13 51.10  10.8X
CEY      3.26  71 e(Pn)   13 48.40   7.4X
                  eSn    14 17.90
KBA      3.29  43 iPnd   13 41.80   0.3
                  iPg    13 54.00
                  iSn    14 20.50
                  iSg    14 38.30
LJU      3.43  66 ePn    13 50.50   7.2X
                  eSn    14 23.00
VBY      3.78  76 ePn    13 48.10  -0.1
                  i(Sn)  14 30.30
BSF      3.83 325 Pn     13 47.90  -1.2
                  Sn     14 31.70
CDF      4.14 334 Pn     13 51.80  -1.6
                  Sn     14 39.00
HAU      4.15 323 Pn     13 52.50  -1.0
                  Sn     14 39.50
PTJ      4.34  72 eP     14 07.00  10.7X
SMF      4.74 296 Pn     14 01.20  -0.8
                  Sn     14 54.50
LBF      4.79 300 Pn     14 01.50  -1.2
                  Sn     14 55.50
GEC2     4.82  30 Pn     14 00.70  -2.4
                  Sn     14 55.00
LOR      4.99 303 Pn     14 04.10  -1.4
                  Sn     15 00.30
KHC      5.02  28 Pn     14 03.20  -2.7X
                  ePg    14 27.00
                  eSn    14 58.00
                  eSg    15 30.00
GRF      5.02   9 e(Pg)  14 23.00  17.1X
AVF      5.11 296 Pn     14 06.20  -0.9
SSF      5.12 299 Pn     14 06.10  -1.1
                  Sn     15 03.80
BGF      5.36 292 Pn     14 09.50  -1.2
                  Sn     15 09.20
PRU      6.08  29 ePg    14 47.50  26.7X
                  Sn     15 24.50
                  eSg    16 04.50
     S.D. = 1.1  on  56 of  67 obs.
-----------------------------------
% NOV  06, 1993  15h 20m 28.04± 0.96s
  39.133 N ± 7.8km   27.546 E ±10.0km
  DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
     ML 2.7 (ISK).

IZM      0.77 197 ePg    20 42.70  -0.3
                  eSg    20 54.70
DST      0.96  60 ePn    20 47.20   0.8
EZN      1.17 307 ePn    20 50.60   0.7
EDC      1.24  11 ePn    20 50.00  -1.0
BNT      1.26  13 ePn    20 51.20  -0.2
     S.D. = 1.1  on   5 of   5 obs.
-----------------------------------
   NOV  06, 1993  16h 01m 59.85± 0.67s
   22.736 S ± 5.4km   68.289 W ± 9.0km
   DEPTH = 152.2 ±  8.7 km
 NORTHERN CHILE                  (123)

YJA      2.64  78 ePc    02 44.54   0.8
                  S      03 18.50
HJA      2.70 101 ePc    02 42.80  -1.2
MOCB     2.87  59 P      02 47.50   0.8
SLA      3.24 128 iPd    02 55.00   3.9X
FSA      3.93 149 ePc    03 04.00   4.2X
CNCB     5.90   3 P      03 26.40  -0.3
CYA      6.11 159 ePd    03 30.60   1.6
LPB      6.17   2 P      03 31.00   0.7
LPAZ     6.42   1 P      03 32.00  -1.8
ARE      6.93 334 eP     03 41.00   0.6
                  eS     04 51.00
CFA      8.84 180 e(P)c  04 05.20  -0.3
TCA      9.18 160 eP     04 09.60  -0.5
RFA     11.99 181 ePc    04 46.50  -0.5
PPD     15.72  91 eP     05 35.30   1.0
                  e      05 37.80
RSTA    17.74 100 (P)    05 57.00  -1.8
VAO     19.65  95 eP     06 19.10   0.0
                  e      06 22.80
BAO     20.42  73 eP     06 26.50  -0.5
                  e      06 29.10
                  i      06 35.30
SOB1    29.50  67 eP     07 51.50  -0.5
LIC     68.19  73 P      12 47.00   0.9
KIC     68.50  73 P      12 49.00   1.0
WR2    132.16 209 ePdiff17 57.60   5.3X
        0.5s     6.40nm
                  i      21 00.70
WRA    132.17 209 PKP    21 01.40   3.6X
        0.6s     3.00nm
     S.D. = 1.1  on  18 of  22 obs.
-----------------------------------
% NOV  06, 1993  16h 10m 25.38± 0.69s
  26.929 S ± 7.0km   26.731 E ± 7.7km
  DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA        (584)
     ML 2.7 (PRE).

BFS      0.06  58 iPd    10 26.40  -0.6
                  S      10 26.70
KSR      1.07   8 eP     10 46.50   0.4
                  S      11 02.50
SWZ      1.28 258 iPc    10 49.60  -0.1
                  S      11 06.10
SEK      1.60 150 iPc    10 55.20   0.7
                  S      11 15.90
SLR      1.83  50 eP     10 58.00   0.1
                  S      11 21.50
BLF      2.22 192 eP     11 03.10  -0.5
                  S      11 30.00
     S.D. = 0.6  on   6 of   6 obs.
-----------------------------------
? NOV  06, 1993  17h 13m 14.92± 5.80s
  32.499 S ±43.1km   71.433 W ±29.3km
  DEPTH =  33.0km  (normal)
 NEAR COAST OF CENTRAL CHILE     (135)
     MD 3.6 (SAN).

ROCH     0.59 143 iPd    13 27.57   0.5
JACH     0.73 105 iP+    13 28.87   0.0
                  iS     13 40.39
PEL      0.90 136 iP+    13 31.13  -0.1
                  iS     13 44.10
LCCH     0.98 187 iP     13 32.00  -0.4
                  iS     13 45.59
TACH     1.22 160 eP     13 35.08  -0.7
                  eS     13 51.31
LNV      1.45 179 eP     13 39.81   0.7
                  iS     13 58.08
     S.D. = 0.7  on   6 of   6 obs.
-----------------------------------
   NOV  06, 1993  17h 35m 00.80± 0.75s
   38.350 N ± 6.8km   22.009 E ± 6.5km
   DEPTH =  10.0km  (geophysicist)
   3.8mb (  2 obs.)
 GREECE                          (364)
     MD 3.5 (ATH).

AGG      0.72  20 ePg    35 13.62  -1.3
                  eSg    35 24.44
VLS      1.13 262 ePg    35 20.00  -2.0
ATH      1.40 105 ePb    35 27.00   0.7
LIT      1.79  12 iPb    35 31.94   0.0
                  eSb    35 54.04
VLI      1.79 155 ePb    35 33.00   1.1
KZN      1.96 355 ePn    35 35.00   0.5
PAIG     2.04  39 iPn    35 34.73  -0.8
                  eSn    36 01.00
SRN      2.19 315 ePn    35 39.80   2.1
KEK      2.19 309 ePn    35 37.00  -0.8
THE      2.40  18 ePn    35 40.32  -0.3
                  eSn    36 09.80
FNA      2.48 349 ePn    35 42.16   0.3
                  iSn    36 12.36
TPE      2.48 322 ePn    35 44.00   2.1
OUR      2.50  37 ePn    35 42.11   0.0
GRG      2.62   7 iPn    35 44.00   0.1
SOH      2.68  22 ePn    35 44.64  -0.1
                  eSn    36 17.24
KNT      2.89  13 ePn    35 47.76   0.0
                  eSn    36 22.32
OHR      2.91 342 iPn    35 49.10   1.1
                  i      35 53.70
                  i      36 23.20
VAY      3.00   8 iPn    35 49.30   0.1
SRS      3.02  23 ePn    35 49.00  -0.5
                  eSn    36 25.40
TIR      3.42 332 ePn    35 57.50   2.3X
SKO      3.64 353 iPn    35 59.50   1.1
LACI     3.73 332 ePn    36 02.20   2.6X
MLR      7.71  21 eP     36 57.00   1.1
HFS     22.43 349 eP     39 57.50  -3.4X
        0.5s     1.90nm          3.9mb
NB2     23.70 347 P      40 10.80  -2.5
        0.5s     1.30nm          3.8mb
KAF     23.94   5 eP     40 13.80  -1.7
     S.D. = 1.2  on  23 of  26 obs.
-----------------------------------
   NOV  06, 1993  18h 18m 12.14± 0.80s
    5.858 S ± 5.9km  145.869 E ±11.0km
   DEPTH =  23.0 ±  7.6 km
   3.9mb (  3 obs.)  3.7Msz (  1 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)

YYYY     0.39 165 iPc    18 20.80   0.2
MDG      0.61 352 iPd    18 23.80  -0.3
LAT      1.38 126 eP     18 36.50   0.4
MNDI     2.22 262 eP     18 53.50   5.1X
WWKK     3.15 315 eP     18 25.30 -36.2X
PMG      3.75 160 iPd    19 09.80  -0.2
WR2     17.92 218 iPd    22 21.60  -0.1
        0.6s     5.60nm          3.9mb
                  i      22 28.60
                  eS     25 37.10
ASPA    21.12 212 iPc    22 58.90   1.1
        1.0s    16.40nm          4.4mb
      Z  19s     0.30um          3.7Msz
ARMA    25.03 168 eP     23 33.00  -3.2X
STK     26.20 188 eP     23 45.40  -1.6
        1.4s     1.90nm          3.5mb
CHTO    52.33 299 eP     27 24.90   0.1
GUN     66.85 304 P      29 05.60   0.4
        0.6s    11.00nm          5.2mb X
PKI     67.12 303 P      29 06.60  -0.4
KKN     67.31 303 P      29 08.20   0.2
DMN     67.39 303 P      29 08.80   0.2
GKN     67.91 303 P      29 11.60  -0.1
KIC    150.77 273 PKP    38 04.00   4.5X
TIC    151.05 273 PKP    38 05.20   5.3X
LIC    151.06 272 PKP    38 05.00   5.1X
     S.D. = 0.7  on  13 of  19 obs.
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   NOV  06, 1993  18h 22m 57.66± 0.90s
   15.253 N ± 8.3km   93.587 W ± 7.4km
   DEPTH =  65.4 ±  8.0 km
   4.7mb ( 16 obs.)
 NEAR COAST OF CHIAPAS, MEXICO   ( 69)

TPX      1.33 105 iP     23 21.43   0.9
                  iS     23 40.00
```

SCX	1.74	32	iP	23 31.12	5.0X
			iS	23 54.20	
OXX	3.52	302	iP	23 49.61	-1.7
			iS	24 26.62	
LVVM	5.23	329	iP	24 11.20	-3.9X
			(S)	25 10.28	
PPM	6.13	309	iP	24 27.03	-1.2
			(S)	25 41.59	
ACX	6.24	286	iP	24 24.79	-4.5X
UNM	6.71	308	(P)	24 41.00	4.9X
CRX	7.13	306	(P)	24 43.00	1.0
MRX	8.50	302	(P)	25 01.52	1.0
LTX	16.82	328	eP	26 51.09	0.7
MIAR	19.21	0	eP	27 17.72	-1.5
	0.8s	23.18nm		4.5mb	
OXF	19.54	10	eP	27 21.65	-1.1
WMOK	19.96	347	eP	27 25.24	-1.9
	1.0s	27.95nm		4.5mb	
			eS	31 00.09	
MEO	19.96	348	iPc	27 26.40	-0.8
TUL	20.67	355	iPd	27 36.10	1.7
PRM	21.31	26	(P)	27 39.37	-1.6
ACO	21.92	348	iPd	27 47.10	0.0
ELC	22.28	9	eP	27 50.64	0.1
ALQ	22.76	332	eP	27 56.47	0.9
	1.1s	19.40nm		4.4mb	
TUC	23.09	320	eP	28 00.40	1.8
	1.1s	53.53nm		4.9mb	
GOL	26.45	339	eP	28 30.43	-0.2
	1.0s	24.27nm		4.7mb	
PV08	26.76	333	eP	28 34.54	1.0
PV10	26.77	332	eP	28 32.96	-0.5
PV09	26.91	332	eP	28 35.37	0.5
PLM	27.72	315	eP	28 42.69	0.5
PEC	28.24	315	eP	28 46.49	-0.1
	0.7s	6.66nm		4.4mb	
ARUT	28.50	326	eP	28 50.07	1.0
EMUT	28.74	332	eP	28 51.89	0.6
DAU	29.42	332	eP	28 58.08	0.6
BONR	31.43	321	eP	29 15.75	0.4
LRM	34.35	336	iPd	29 41.00	0.5
			e	29 56.50	
ULM	34.95	357	ePc	29 47.00	1.8
LBFM	35.72	322	eP	29 51.96	-0.2
NEW	38.20	334	eP	30 12.50	-0.2
	0.7s	6.80nm		4.7mb	
LON	39.23	329	ePd	30 21.44	0.1
LPAZ	40.17	140	eP	30 42.00	12.0X
LPB	40.38	140	(P)	30 36.00	4.5X
CNCB	40.66	141	eP	30 34.00	0.0
MCW	41.07	330	eP	30 36.24	-0.1
MOCB	45.48	142	P	31 12.50	-0.4
YKA	49.47	347	eP	31 42.20	-0.8
	0.9s	11.90nm		4.9mb	
SOB1	57.59	112	eP	32 42.60	-0.9
INK	58.81	344	eP	32 50.50	-0.7
	0.9s	5.00nm		4.6mb	
RES	59.44	360	eP	32 54.50	-1.0
	0.8s	2.00nm		4.3mb	
FBA	61.49	337	eP	33 07.49	-2.2
	0.8s	7.19nm		4.9mb	
CRP	61.83	332	eP	33 10.70	-1.5
MBC	62.49	353	ePd	33 17.00	0.9
	0.7s	6.00nm		4.8mb	
DAG	71.78	14	iPc	34 14.30	-0.3
	0.9s	18.49nm		5.0mb	
NB2	83.78	28	P	35 22.60	1.7
	0.9s	14.90nm		5.0mb	
HFS	85.25	29	eP	35 29.00	0.8
	0.8s	10.00nm		5.0mb	
GEC2	89.61	39	eP	35 50.60	0.9
	1.0s	2.11nm		4.3mb	
ZST	91.94	39	e(P)	36 01.90	1.6
			e	08 42.30	
YYYY	120.96	272	ePKP	41 39.80	-5.6X
WR2	134.17	257	ePKP	42 09.30	-1.0
	0.6s	2.10nm			
WRA	134.19	257	PKP	42 10.40	0.0
	0.7s	0.40nm			
BDT	145.40	338	ePKP	42 29.00	-1.6
	0.6s	25.00nm			
HYB	146.63	14	ePKP	42 33.00	0.3
	1.0s	25.00nm			
GBA	149.98	18	PKP	42 43.00	5.1X

S.D. = 1.1 on 50 of 58 obs.

% NOV 06, 1993 20h 54m 50.86± 0.92s
40.668 N ± 8.7km 29.144 E ± 6.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
ML 2.7 (ISK).

ISK	0.40	351	iPg	54 59.50	0.4
			eSg	55 05.00	
CTT	0.72	312	iPg	55 04.50	-0.6
			iSg	55 14.00	
EYL	0.78	97	ePn	55 06.00	-0.1
BNT	0.98	252	ePn	55 09.10	-0.4
EDC	1.03	252	ePn	55 11.00	0.7

S.D. = 0.8 on 5 of 5 obs.

& NOV 06, 1993 21h 07m 24.41s
59.950 N 152.761 W
DEPTH = 100.3km
SOUTHERN ALASKA (2)
<AEIC>.

ILIM	0.16	323	eP	07 38.00	0.8
			eS	07 49.25	
INE	0.19	306	eP	07 38.50	1.1
			eS	07 49.65	
INW	0.22	302	eP	07 38.37	0.9
			eS	07 50.24	
OPT	0.38	219	iP	07 39.06	-0.7
			eS	07 50.65	
RED	0.47	359	iP	07 39.54	-0.8
			eS	07 51.37	
RSO	0.51	0	eP	07 40.01	-0.8
RS2	0.51	0	eP	07 40.12	-0.7
			eS	07 52.51	
RDW	0.54	357	iP	07 40.23	-0.7
			eS	07 53.11	
REF	0.54	3	iP	07 40.26	-0.7
			eS	07 52.46	
NCT	0.62	352	eP	07 40.68	-0.8
			eS	07 53.14	
HOM	0.64	117	eP	07 41.19	-0.3
DFR	0.65	3	iP	07 40.98	-0.7
			eS	07 53.84	
AUL	0.66	211	eP	07 41.16	-0.6
AUE	0.67	208	eP	07 41.15	-0.6
AUH	0.68	211	eP	07 41.39	-0.6
AGU	0.68	210	eP	07 42.39	0.3
AUW	0.68	212	eP	07 41.34	-0.6
AUI	0.70	209	eP	07 41.61	-0.5
			eS	07 54.85	
NNL	0.74	82	eP	07 47.41	4.9
CNPM	0.88	118	iP	07 43.05	-0.9
NKA	1.10	43	eP	07 47.16	1.0
MCNL	1.11	227	eP	07 45.39	-1.0
			eS	08 01.38	
CDD	1.12	204	iP	07 45.31	-1.2
BKG	1.15	12	iP	07 46.20	-0.7
			eS	08 03.10	
CKL	1.27	9	iP	07 47.51	-0.8
SPU	1.28	15	iP	07 47.54	-0.9
			eS	08 05.39	
CKT	1.28	12	eP	07 47.55	-1.0
			eS	08 05.56	
CKN	1.31	12	eP	07 48.66	-0.1
BGL	1.33	8	eP	07 48.42	-0.7
CP2	1.34	11	eP	07 48.66	-0.7
CRP	1.35	12	eP	07 47.81	-1.6
SYI	1.36	172	eP	07 48.23	-1.0
SLKM	1.39	65	eP	07 48.19	-1.5
CGLM	1.41	15	iP	07 49.30	-0.8
NCG	1.49	11	eP	07 50.42	-0.6
SEW	1.67	83	eP	07 51.49	-1.7
MPA	1.78	71	eP	07 53.27	-1.3
SUA	1.81	32	eP	07 54.62	-0.6
SVW	1.83	311	eP	07 53.83	-1.5
PMS	2.04	49	eP	07 56.95	-1.2
SKT	2.12	16	eP	07 57.87	-1.3
PWA	2.22	38	eP	07 59.94	-0.4
PWL	2.38	66	iP	08 00.10	-2.4
PLRM	2.43	46	eP	08 01.45	-1.7
PMR	2.43	46	eP	08 01.26	-1.9
LTI	2.47	86	eP	08 01.82	-1.9
KNK	2.58	53	eP	08 02.91	-2.3
GHO	2.62	44	eP	08 04.45	-1.4
CUT	2.74	25	eP	08 07.05	-0.4
CFI	2.76	61	eP	08 05.70	-1.9
SML	2.86	47	eP	08 07.01	-2.0
HIN	3.16	79	eP	08 11.27	-1.9
FID	3.22	73	eP	08 11.63	-2.4
KLU	3.70	62	eP	08 17.26	-3.3
ILB	5.56	27	eP	08 42.95	-3.2
IL1	5.56	27	eP	08 43.06	-3.0
IM3	6.07	356	eP	08 51.37	-1.8

57 obs. associated

NOV 06, 1993 21h 07m 54.40± 0.26s
44.864 N ± 3.2km 17.154 E ± 2.8km
DEPTH = 10.0km (geophysicist)
NORTHWESTERN BALKAN REGION (383)
ML 4.4 (ZAG), 4.1 (VIE). MD 3.9 (SKO), 3.9 (TRI). Felt (VII) at Banja Luka, Bosnia and Herzegovina.

ZAG	1.26	320	iPnc	08 19.20	1.4
			i	08 39.00	
			iSn	08 40.00	
PTJ	1.34	321	iPnc	08 20.10	1.0
			iSn	08 41.00	
VBY	1.49	296	iPnc	08 22.80	1.6
HVAR	1.76	197	iPnc	08 26.50	1.4
			iSn	08 50.20	
UZD	2.00	30	e(Pn)	08 28.00	-0.5
RIY	2.02	285	iPnd	08 31.20	2.4
			iSn	08 59.20	
CEY	2.11	295	ePn	08 33.40	3.1X
			e	08 35.50	
			eSn	09 06.60	
LJU	2.19	304	ePn	08 32.50	1.1
	1.0s	790.00nm			
BRY	2.20	152	iPnd	08 32.29	0.6
			iSn	09 02.49	
PLE	2.23	133	iPnd	08 31.82	-0.2
			iSn	09 02.29	
BGY	2.40	90	iPn	08 33.50	-0.7
			i	08 40.00	
			i	08 59.80	
			i(Sn)	09 09.20	
NKY	2.45	146	iPnc	08 35.66	0.6
			iSn	09 08.17	
TRI	2.54	291	ePnc	08 39.20	2.9X
			e	08 41.30	
			iSn	09 10.00	
			i	09 14.40	
			iSg	09 18.50	
VOY	2.58	298	ePn	08 38.20	1.3
			ePg	08 43.50	
			eSn	09 15.00	
			eSg	09 20.50	
HCY	2.61	158	iPnc	08 38.28	1.0
			iSn	09 12.41	
IVA	2.81	134	iPnc	08 40.11	-0.2
			iSn	09 16.55	
BDV	2.85	154	iPnc	08 41.43	0.6
			iSn	09 18.38	
TTG	2.87	147	iPnc	08 41.99	0.9
			iSn	09 18.64	
PVY	3.05	137	iPnc	08 43.79	0.1
			iSn	09 22.58	
SRO	3.06	15	iPnd	08 44.40	0.8
			i(Pg)	09 01.70	
			i	09 24.50	
			i	09 48.60	
BCI	3.27	139	ePn	08 49.00	2.2
ULC	3.28	152	iPnc	08 47.37	0.5
			iSn	09 28.55	
ARV	3.32	247	P	08 48.50	1.0
ZST	3.33	359	iPnd	08 47.50	-0.1
			i(Pb)	08 58.10	
			iPg	09 03.70	
			iSn	09 28.70	
			i(Sb)	09 39.70	
			i(Sg)	09 47.80	
			Lg	09 59.00	
VKA	3.45	351	iPnc	08 50.10	0.9
			iSn	09 32.20	
			iSg	09 51.50	
KBA	3.46	311	iPnc	08 50.40	0.9
	0.5s	105.00nm			
			i	09 01.20	
			i	09 46.10	
FVI	3.52	301	P	08 51.84	1.7
LACI	3.73	149	ePn	08 55.50	2.3
KMR	3.82	328	iPn+	08 58.50	4.0X
			iSn	09 44.60	

06d 21h

SFI	3.92 258	P	08 57.79	2.0
CRE	3.94 254	P	08 58.25	2.0
SDI	3.99 219	P	08 58.68	1.8
TIR	4.04 150	ePn	09 00.50	3.0X
		iSn	09 51.00	
MNS	4.09 234	P	09 00.72	2.5
BHG	4.12 315	eP	09 00.70	2.0
SKO	4.25 131	ePn	09 01.50	0.8
		iSn	09 55.00	
SCE	4.38 302	ePn	09 04.50	1.9
SGO	4.51 198	P	09 05.11	0.8
WTTA	4.53 304	iPnd	09 06.90	2.2
		i	09 59.70	
GEC2	4.63 330	Pn	09 06.80	0.7
		Sn	09 59.80	
MME	4.66 264	P	09 08.18	1.4
OGA	4.73 297	ePn	09 11.10	3.5X
SAL	4.74 281	P	09 08.60	1.0
BDI	4.76 263	P	09 09.31	1.3
SPC	4.81 25	ePn	09 08.90	0.1
		i	09 25.10	
PII	4.90 259	P	09 10.02	0.3
KHC	4.92 331	Pn	09 10.90	0.8
		e	09 18.00	
TPE	5.03 154	ePn	09 16.00	4.4X
DRA	5.06 90	ePc	09 37.00	24.9X
FNA	5.12 141	ePb	09 14.00	0.9
		eSb	09 32.12	
WET	5.18 327	eP	09 15.00	1.1
BMR	5.22 55	ePd	09 45.00	30.7X
FUR	5.23 311	eP	09 14.90	0.4
OSS	5.23 293	ePd	09 18.60	3.9X
VAY	5.32 130	iPn	09 14.00	-1.7
MDI	5.33 282	P	09 16.02	0.2
LSK	5.35 150	ePn	09 18.00	1.6
PRU	5.42 342	ePn	09 17.80	0.6
	0.4s 49.20nm			5.5mb X
		i	09 24.40	
		Sn	10 16.20	
		e	10 28.20	
		eSg	10 46.90	
BOB	5.48 272	P	09 18.89	0.7
GRG	5.49 134	ePb	09 16.96	-1.2
CMP	5.60 83	ePc	09 40.00	20.2X
KNT	5.60 129	iPb	09 17.97	-1.8
		eSb	09 38.52	
VDL	5.62 289	ePc	09 22.20	1.9
OJC	5.65 18	eP	09 20.20	-0.2
TMA	5.95 285	ePd	09 28.10	3.2X
VAI	5.99 283	P	09 24.55	-0.6
KSP	6.01 355	ePn	09 25.00	-0.5
		iPg	09 45.00	
		eSn	10 32.00	
THE	6.01 133	ePn	09 24.96	-0.5
SRS	6.02 126	ePn	09 23.60	-2.1
		eSn	09 49.28	
LLS	6.04 292	iPd	09 29.00	2.9X
SOH	6.09 129	ePn	09 24.92	-1.7
PCP	6.14 270	P	09 26.94	-0.5
LIT	6.18 139	iPn	09 27.00	-0.9
		eSn	09 52.88	
MLR	6.25 81	eP	09 32.00	3.1X
GRF	6.29 322	e(Pn)	09 29.40	-0.1
		e(Sn)	10 37.60	
CKI	6.35 269	P	09 29.84	-0.4
PGF	6.35 251	Pn	09 30.20	-0.2
		Sn	10 36.20	
BRG	6.39 341	ePn	09 29.20	-1.6
		iPg	09 51.20	
		i	10 56.90	
		iSg	11 25.90	
FIN	6.43 267	P	09 29.82	-1.6
ORX	6.52 280	P	09 30.69	-2.2
ORO	6.52 280	P	09 33.95	1.1
MMK	6.57 284	ePc	09 36.60	2.9X
ZLA	6.63 296	ePc	09 34.50	0.2
ROB	6.66 268	P	09 32.71	-2.0
SLE	6.66 299	ePd	09 34.30	-0.5
IMI	6.71 265	P	09 33.35	-2.1
OUR	6.77 130	ePn	09 34.44	-1.8
VRI	6.82 78	eP	10 07.00	30.1X
MOX	6.88 329	ePn	09 38.00	0.2
		iSn	10 53.00	
PAIG	6.90 133	ePn	09 37.16	-0.9
DIX	6.96 284	ePd	09 40.20	1.1
ENR	6.99 268	P	09 37.69	-1.6
AGG	7.00 145	ePn	09 39.48	0.1
		eSn	10 17.52	
CLL	7.02 338	iPn	09 39.10	-0.6
		i	09 42.30	
		(Sg)	11 21.00	
RSP	7.02 276	P	09 36.32	-3.5X
BHB	7.03 273	P	09 36.96	-2.9X
SBF	7.04 265	Pn	09 38.20	-1.8
		Sn	10 54.10	
STV	7.05 268	P	09 38.33	-1.9
LSD	7.09 278	P	09 39.16	-1.8
PZZ	7.18 271	P	09 38.52	-3.5X
EMS	7.29 283	iPc	09 44.10	0.4
RRL	7.37 274	P	09 44.88	0.1
LPG	7.38 279	Pn	09 44.30	-0.7
		Sn	11 05.10	
LPL	7.39 279	Pn	09 44.70	-0.5
		Sn	11 04.30	
BNI	7.44 275	P	09 47.00	1.3
FRF	7.66 264	Pn	09 46.10	-2.6
		Sn	11 05.30	
CDF	7.67 301	Pn	09 47.50	-1.4
BSF	7.76 296	Pn	09 49.10	-1.1
LMR	7.81 262	Pn	09 48.80	-2.0
		Sn	11 09.40	
LRG	7.89 264	Pn	09 50.50	-1.4
		Sn	11 12.40	
TNS	7.96 315	iPnc	09 53.00	0.1
		eSn	11 15.90	
HAU	8.10 297	Pn	09 54.00	-0.8
LBF	9.43 288	Pn	10 11.80	-1.4
		Sn	11 55.00	
SMF	9.48 286	Pn	10 12.10	-1.8
		Sn	11 53.60	
LOR	9.55 289	Pn	10 13.80	-1.1
		Sn	11 58.00	
SSF	9.76 288	Pn	10 16.30	-1.5
AVF	9.83 286	Pn	10 17.20	-1.5
		Sn	12 03.00	
BGF	10.15 285	Pn	10 21.80	-1.4
		Sn	12 10.60	
MAF	10.33 283	Pn	10 24.20	-1.4
		Sn	12 15.90	
TCF	10.58 283	Pn	10 28.10	-0.9
		Sn	12 21.40	
CAF	10.71 276	Pn	10 28.60	-2.3
LSF	11.05 283	Pn	10 35.30	-0.1

S.D. = 1.3 on 104 of 122 obs.

NOV 06, 1993 21h 15m 06.09± 0.94s
41.250 N ±10.3km 20.319 E ± 5.7km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)
ML 3.2 (SKO), 2.9 (TIR).

TIR	0.36 286	iPgd	15 13.50	0.1
		iSg	15 19.50	
OHR	0.39 111	iPgc	15 14.50	0.4
		i	15 19.40	
		iSg	15 21.40	
LACI	0.60 310	ePg	15 16.50	-1.7
		iSg	15 25.00	
TPE	0.98 194	ePn	15 19.00	-5.7X
VLO	1.00 219	ePn	15 30.00	5.0X
ULC	1.07 312	iPgc	15 25.11	-1.2
		iSg	15 41.27	
SKO	1.11 49	iPg	15 25.60	-1.3
	0.7s 190.00nm			
		i	15 27.50	
		iSg	15 39.50	
BCI	1.13 351	iPn	15 28.50	1.2
		iSn	15 46.00	
PVY	1.37 349	iPgc	15 30.06	-1.2
		iSg	15 51.27	
TTG	1.42 326	iPgd	15 31.46	-0.4
		iSg	15 53.24	
BDV	1.52 313	iPgc	15 33.55	0.2
		iSg	15 56.20	
IVA	1.65 349	iPnc	15 36.59	1.3
		iSn	15 59.55	
VAY	1.70 87	iPn	15 35.70	-0.2
HCY	1.81 312	iPnc	15 38.47	0.9
		iSn	16 04.08	
NKY	1.85 328	iPnd	15 38.56	0.4
		iSn	16 04.47	
BRY	2.11 322	iPnd	15 42.73	0.7
		iSn	16 11.17	
PLE	2.19 342	iPnd	15 43.79	0.7
		iSn	16 13.14	

S.D. = 1.0 on 15 of 17 obs.

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* NOV 06, 1993 21h 20m 23.03± 1.05s
7.208 N ±13.4km 127.120 E ±20.2km
DEPTH = 10.0km (geophysicist)
4.7mb (3 obs.)
PHILIPPINE ISLANDS REGION (248)

BIP	1.33 320	iPd	20 45.00	-2.5
		iS	20 52.00	
CTB	2.90 270	eP	21 11.00	1.0
MAP	4.38 315	ePd	21 31.00	-0.2
PLP	4.46 332	ePd	21 34.70	2.4
MTN	20.32 169	eP	25 02.50	0.4
KNA	22.87 176	eP	25 33.80	5.9X
WR2	27.91 165	eP	26 14.50	-1.0
	0.4s 4.00nm			4.6mb
QIS	30.20 156	eP	26 36.00	0.0
ASPA	31.39 168	eP	26 46.80	0.3
	0.4s 5.00nm			4.8mb
WARB	33.19 181	eP	27 02.50	0.3
	0.5s 6.00nm			4.8mb
FORT	37.78 179	iPc	27 51.50	10.3X
	0.5s 12.00nm			
MUN	40.33 194	eP	28 02.00	-0.5

S.D. = 1.4 on 10 of 12 obs.

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* NOV 06, 1993 21h 29m 57.31± 1.22s
5.839 S ±11.5km 146.173 E ±14.9km
DEPTH = 33.0km (normal)
3.6mb (1 obs.)
EASTERN NEW GUINEA REG., P.N.G. (207)

YYYY	0.45 207	iPd	30 05.90	-1.4
		eS	30 14.00	
MDG	0.70 326	iPc	30 10.60	-0.2
LAT	1.16 135	eP	30 17.00	-0.3
WWKK	3.36 311	eP	30 54.00	5.2X
PMG	3.68 165	iPc	30 53.80	0.6
WR2	18.12 218	eP	34 09.60	1.3
	0.6s 3.00nm			3.6mb

S.D. = 1.4 on 5 of 6 obs.

NOV 06, 1993 22h 27m 42.66± 0.46s
44.050 N ± 3.8km 7.208 E ± 4.4km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.2 (GEN).

STV	0.21 23	P	27 46.67	-0.6
		S	27 49.23	
ENR	0.23 41	P	27 47.03	-0.7
		S	27 49.96	
SBF	0.25 139	Pg	27 47.40	-0.6
		Sg	27 51.60	
PZZ	0.46 350	P	27 52.43	0.3
		S	27 57.19	
IMI	0.51 106	P	27 53.81	0.8
		S	27 59.44	
ROB	0.54 63	P	27 54.08	0.6
		S	27 59.94	
FRF	0.64 220	Pg	27 55.20	-0.2
		Sg	28 06.00	
FIN	0.74 77	P	27 57.01	-0.2
BHB	0.79 3	P	27 58.47	0.4
LRG	0.85 226	Pg	27 59.00	-0.1
		Sg	28 12.20	
LMR	0.88 216	Pg	27 59.90	0.4
		Sg	28 12.00	

S.D. = 0.6 on 11 of 11 obs.

% NOV 06, 1993 23h 21m 13.01± 3.02s
44.349 N ± 7.4km 11.933 E ±25.4km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 3.8 (LDG).

PGF	2.79 231	Pn	21 58.00	-0.7
		Sn	22 31.00	
SBF	3.28 263	Pn	22 06.50	1.0
		Sn	22 42.80	
LPG	3.86 289	Pn	22 14.20	0.3
		Sn	22 57.60	
LPL	3.87 289	Pn	22 14.70	0.6
		Sn	22 59.60	
FRF	3.90 260	Pn	22 15.00	0.8

```
                Sn    22 58.80
LMR     4.05 257 Pn   22 16.60    0.2
                Sn    23 02.10
LRG     4.13 259 Pn   22 18.40    1.0
                Sn    23 03.70
BSF     4.99 316 Pn   22 30.20    0.4
                Sn    23 25.90
CDF     5.19 323 Pn   22 33.20    0.6
                Sn    23 29.80
HAU     5.33 315 Pn   22 34.80    0.2
                Sn    23 34.60
SMF     6.13 295 Pn   22 46.10    0.3
                Sn    23 52.90
LBF     6.17 298 Pn   22 46.30    0.0
                Sn    23 53.90
LOR     6.35 300 Pn   22 48.90   -0.1
                Sn    23 58.50
SSF     6.49 298 Pn   22 50.40   -0.6
                Sn    24 01.20
AVF     6.50 295 Pn   22 51.30    0.3
                Sn    24 02.20
BGF     6.76 292 Pn   22 54.20   -0.5
                Sn    24 08.00
MAF     6.87 289 Pn   22 55.90   -0.3
                Sn    24 10.10
HYF     7.12 297 Pn   22 59.40   -0.3
                Sn    24 17.10
TCF     7.12 289 Pn   22 59.20   -0.6
                Sn    24 16.30
EPF     8.51 265 Pn   23 17.80   -1.4
FLN     9.62 302 Pn   23 34.30   -0.2
GRR     9.72 299 Pn   23 35.70   -0.1
LPF     9.72 297 Pn   23 34.90   -0.9
     S.D. = 0.6  on  23 of  23 obs.
-------------------------------------
%  NOV  06, 1993  23h 28m 35.25± 2.12s
   37.257 S ±16.4km  176.213 E ±11.2km
   DEPTH = 351.7 ± 17.8 km
 NORTH ISLAND, NEW ZEALAND        (159)

URZ     1.23 145 P    29 21.40   -1.0
                eS    29 51.10
HBZ     1.70 102 P    29 25.30    0.3
PAHZ    1.73 158 P    29 25.30    0.0
PUZ     1.82 117 eP   29 25.30   -0.5
                S     29 57.90
NGZ     1.98 194 P    29 27.20    0.1
NOZ     1.98 134 P    29 27.70    0.8
CNZ     2.01 195 P    29 27.70    0.5
TTH     2.33 168 P    29 29.60    0.1
MAHZ    2.33 146 P    29 29.80    0.3
WAHZ    2.44 177 P    29 30.30   -0.1
BSZ     2.73 201 P    29 33.20    0.5
TEHZ    2.77 170 P    29 33.20    0.1
PGZ     3.36 179 P    29 38.30   -0.1
MNG     3.40 189 Pc   29 38.70   -0.2
                S     30 22.90
KIW     3.74 195 P    29 42.10   -0.1
MTW     3.94 188 P    29 43.70   -0.4
CAW     3.95 193 P    29 44.00   -0.3
DIW     3.96 206 P    29 44.60    0.2
AMW     4.06 185 eP   29 45.40    0.0
MRW     4.14 196 P    29 46.00   -0.2
                S     30 37.20
BLW     4.15 188 P    29 46.10   -0.2
WEL     4.18 195 P    29 46.50   -0.1
TCW     4.23 200 P    29 47.40    0.3
QRZ     4.58 218 P    29 50.50   -0.3
THZ     5.18 209 eP   29 57.60    0.2
                S     30 58.50
DSZ     5.63 216 eP   30 02.40   -0.1
LTZ     6.29 208 eP   30 10.50    0.4
                eS    31 21.00
MQZ     6.99 202 eP   30 18.10    0.0
                S     31 34.80
     S.D. = 0.4  on  28 of  28 obs.
-------------------------------------
%  NOV  07, 1993  00h 15m 31.35± 0.75s
   40.474 N ± 7.0km   23.723 E ±10.7km
   DEPTH =  10.0km  (geophysicist)
 GREECE                           (364)

OUR     0.24 125 iPg  15 36.53    0.0
                iSg   15 40.34
SOH     0.45 321 iPg  15 40.46    0.0
                iSg   15 46.90
PAIG    0.55 184 iPg  15 42.38    0.0
SRS     0.65 351 ePg  15 44.26   -0.1
                eSg   15 53.74
KNT     0.93 318 iPg  15 49.18    0.1
                eSg   16 01.18
     S.D. = 0.1  on   5 of   5 obs.
-------------------------------------
   NOV  07, 1993  01h 14m 06.10± 0.86s
   39.066 N ± 7.3km   21.909 E ± 6.9km
   DEPTH =  10.0km  (geophysicist)
 GREECE                           (364)
      MD 3.3 (ATH).

AGG     0.33  98 iPg  14 12.54   -0.4
                eSg   14 17.78
LIT     1.13  23 ePb  14 26.34   -0.9
                eSb   14 43.06
KZN     1.24 355 ePb  14 27.00   -2.2
VLS     1.36 230 ePb  14 31.00   -0.1
PAIG    1.62  57 ePb  14 34.90    0.2
                iSb   14 57.22
KEK     1.76 292 ePg  14 51.00   14.2X
THE     1.76  27 ePb  14 36.70   -0.1
                eSb   15 01.42
FNA     1.76 347 ePb  14 36.74   -0.2
                iSb   15 00.66
GRG     1.93  11 ePb  14 40.22    1.0
                eSb   15 05.94
OUR     2.04  51 ePn  14 40.90    0.1
SOH     2.08  32 ePn  14 41.62    0.2
                eSn   15 09.54
OHR     2.21 338 ePn  14 44.00    0.6
KNT     2.23  20 iPn  14 44.02    0.4
                eSn   15 12.70
VAY     2.31  12 iPn  14 46.60    1.9
SRS     2.42  32 iPn  14 46.10   -0.2
                eSn   15 17.26
VLI     2.48 161 ePg  14 58.00   10.8X
SKO     2.92 353 ePn  14 57.00    3.5X
     S.D. = 1.0  on  14 of  17 obs.
-------------------------------------
?  NOV  07, 1993  01h 14m 36.72± 2.26s
    8.424 N ±20.9km   82.601 W ±17.8km
   DEPTH =  26.4 ±  6.8 km
 PANAMA-COSTA RICA BORDER REGION ( 80)
      MD 3.7 (UPA).

DVD     0.15  86 iPc  14 41.88   -0.1
                eS    14 45.48
BRU     0.38   6 iPd  14 45.13   -0.3
                eS    14 49.73
ECO     3.02  72 eP   15 24.30    0.4
                eS    15 59.88
UPA     3.08  79 ePc  15 25.02    0.2
                eS    16 01.98
SDV    11.84  87 iPnd 17 26.50   -0.7
                eSn   18 04.20
OXF    26.71 347 eP   20 15.89    0.1
       0.3s      9.93nm          4.9mb X
     S.D. = 0.6  on   6 of   6 obs.
-------------------------------------
&  NOV  07, 1993  01h 36m 20.70s
   60.053 N          153.029 W
   DEPTH = 122.9km
   3.5mb (  1 obs.)
 SOUTHERN ALASKA                  (  2)
      <AEIC>.

INE     0.02 295 ePc  36 36.93    0.7
                eS    36 50.24
ILIM    0.04  52 iPc  36 36.78    0.6
                eS    36 50.15
INW     0.05 286 ePc  36 36.98    0.8
                eS    36 50.49
RED     0.39  19 ePc  36 37.81   -0.9
                eS    36 51.48
OPT     0.41 194 iPd  36 38.03   -0.7
                eS    36 50.87
RSO     0.43  18 eP   36 38.31   -0.8
RDW     0.44  14 eP   36 38.22   -0.9
NCT     0.51   5 iPc  36 38.65   -0.8
                eS    36 52.72
DFR     0.57  17 iPc  36 38.72   -1.0
PDB     0.64 246 iPd  36 39.25   -0.9
                eS    36 53.98
AUL     0.70 197 iPd  36 39.86   -0.8
AUE     0.72 194 ePd  36 39.80   -0.9
                eS    36 54.21
AUW     0.72 198 iPd  36 40.03   -0.7
AUH     0.72 197 ePd  36 40.05   -0.8
AGU     0.72 196 ePd  36 40.10   -0.8
AUI     0.75 196 ePd  36 39.98   -1.0
                eS    36 55.16
                eS    36 56.17
HOM     0.80 119 ePc  36 40.87   -0.6
                eS    36 56.55
NNL     0.87  90 eP   36 43.87    1.8
XLV     0.89 132 eP   36 41.06   -1.2
                eS    36 57.36
CNPM    1.05 119 iPc  36 42.80   -1.0
                eS    36 59.82
BKG     1.09  20 iPd  36 43.40   -0.9
                eS    37 01.32
MCNL    1.10 218 iPd  36 43.01   -1.2
                eS    37 00.57
BRLK    1.12 104 eP   36 43.72   -0.8
                eS    37 00.69
NKA     1.13  51 eP   36 45.14    0.6
CDD     1.17 196 iPd  36 43.57   -1.5
CKL     1.20  16 iPd  36 44.63   -0.8
CKT     1.22  19 iPd  36 44.67   -1.0
                eS    37 03.52
SPU     1.23  23 iPd  36 44.68   -1.0
                eS    37 03.36
CKN     1.25  19 eP   36 45.15   -0.7
BGL     1.25  14 ePd  36 45.37   -0.7
CP2     1.28  17 eP   36 44.29   -2.1
CRP     1.29  19 iPd  36 45.12   -1.4
                eS    37 04.12
CGLM    1.36  21 ePd  36 46.08   -1.1
NCG     1.42  17 eP   36 47.41   -0.5
SLKM    1.47  71 eP   36 46.65   -1.7
                eS    37 06.88
SYI     1.48 167 eP   36 46.90   -1.6
                eS    37 07.93
SVW     1.66 311 P    36 49.40   -1.2
                S     37 11.30
SEW     1.80  87 eP   36 50.49   -1.7
                eS    37 13.44
SUA     1.81  37 ePd  36 51.28   -1.2
MPA     1.88  75 eP   36 51.47   -1.8
SKT     2.07  20 ePd  36 54.10   -1.5
                eS    37 20.68
PMS     2.09  54 P    36 54.20   -1.7
PWA     2.22  43 P    36 55.50   -2.1
KDC     2.33 173 eP   36 55.48   -3.4
                eS    37 23.73
PLRM    2.46  49 eP   36 58.07   -2.5
PMR     2.46  49 (P)  36 59.65   -0.9
PWL     2.46  69 eP   36 57.97   -2.7
                eS    37 27.06
LTI     2.60  88 eP   37 00.38   -2.0
KNK     2.63  57 eP   37 00.14   -2.7
                eS    37 31.10
GHO     2.64  48 eP   37 00.38   -2.8
CUT     2.71  28 eP   37 02.07   -1.8
                eS    37 34.67
CFI     2.83  64 eP   37 03.68   -1.8
SML     2.89  50 eP   37 03.14   -3.2
                eS    37 36.24
TTA     3.22 335 eP   37 08.36   -2.4
SCM     3.31  55 eP   37 08.98   -2.9
FID     3.32  75 eP   37 09.19   -2.9
VZW     3.35  70 eP   37 10.70   -1.8
HUR     3.35  28 eP   37 10.83   -1.7
MID     3.44  98 P    37 11.60   -2.0
VLZ     3.48  69 eP   37 11.14   -2.9
                eS    37 50.27
TRF     3.65  20 eP   37 14.27   -2.3
KTH     3.65  15 eP   37 14.19   -2.3
CVA     3.66  79 eP   37 14.57   -1.9
KLU     3.77  64 ePc  37 15.20   -3.0
RND     3.91  29 eP   37 17.63   -2.3
TOA     3.91  55 P    37 17.80   -2.3
                S     38 04.10
DHY     4.06  39 eP   37 19.66   -2.5
MCK     4.17  26 eP   37 21.58   -1.9
RAGM    4.18  82 eP   37 21.85   -1.8
BWN     4.46  21 eP   37 25.39   -2.0
PAX     4.66  48 eP   37 27.62   -2.5
GLB     4.73  69 eP   37 29.21   -1.9
NEA     4.90  20 eP   37 30.40   -2.9
WRH     5.00  25 eP   37 31.67   -3.0
MLY     5.11  11 eP   37 33.66   -2.6
HDA     5.21  30 eP   37 34.41   -3.1
```

07d 01h

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CCB     5.21  26 eP    37 34.31  -3.2
BALM    5.37  75 eP    37 37.43  -2.4
MDM     5.40  22 eP    37 37.32  -2.9
FBA     5.44  24 iPc   37 37.44  -3.2
ILB     5.53  28 ePd   37 38.54  -3.3
IL1     5.53  28 ePd   37 38.54  -3.3
GLM     5.60  25 eP    37 39.55  -3.3
CTGM    5.85  76 eP    37 44.45  -2.0
IM3     5.96 357 eP    37 45.40  -2.5
IMA     6.05 357 eP    37 46.54  -2.6
BC3     6.16  56 eP    37 47.22  -3.4
YKA    18.44  66 eP    40 25.60  -3.4
       0.5s     1.40nm          3.5mb
       88 obs. associated
-------------------------------------
*  NOV  07, 1993  02h 08m 06.75± 1.18s
   38.857 N ± 8.8km   30.028 E ±13.3km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                              (366)
      ML 3.0 (ISK).

ALT     0.21  18 iPg   08 10.90  -0.4
KHL     0.66 217 iPg   08 20.00   0.0
                eSg    08 30.00
DST     1.32 305 ePn   08 31.00  -0.2
GPA     1.45   9 iPn   08 33.20   0.2
EYL     1.71   3 iPn   08 37.00   0.2
CIN     1.98 231 eP    08 45.00   4.4X
HRT     1.98 352 ePn   08 41.00   0.3
     S.D. = 0.4  on   6 of   7 obs.
-------------------------------------
&  NOV  07, 1993  02h 12m 40.44s
   60.498 N          151.544 W
   DEPTH =  59.8km
 KENAI PENINSULA, ALASKA             ( 14)
      <AEIC>. ML 2.8 (AEIC).

NKA     0.29  31 eP    12 51.77   1.3
NNL     0.47 165 eP    12 55.62   3.4
DFR     0.57 280 iP    12 52.62  -0.8
                eS    13 03.20
REF     0.57 270 eP    12 52.80  -0.7
RS2     0.60 267 iP    12 53.14  -0.7
RED     0.61 263 eP    12 53.01  -0.8
                eS    13 03.46
RDW     0.63 269 iP    12 53.35  -0.8
                eS    13 04.09
SLKM    0.65  89 eP    12 53.40  -0.9
NCT     0.69 276 eP    12 54.04  -0.7
                eS    13 04.81
CKT     0.78 336 iP    12 55.09  -0.7
CKN     0.79 337 eP    12 55.50  -0.5
CKL     0.80 331 eP    12 55.61  -0.5
BRLK    0.81 156 eP    12 55.66  -0.5
                eS    13 07.33
                eS    13 08.64
ILIM    0.82 240 eP    12 55.43  -0.9
CRP     0.83 339 iP    12 56.06  -0.5
CP2     0.84 336 eP    12 56.33  -0.4
CGLM    0.84 345 eP    12 56.19  -0.5
HOM     0.84 183 eP    12 56.15  -0.4
                eS    13 09.72
INE     0.87 241 eP    12 56.16  -1.0
                eS    13 08.11
INW     0.90 242 eP    12 56.58  -0.8
                eS    13 09.83
CNPM    0.99 171 eP    12 57.54  -0.9
SUA     1.04  22 eP    12 58.90  -0.4
MPA     1.08  90 eP    12 58.26  -1.4
SEW     1.12 110 eP    12 58.63  -1.5
OPT     1.20 226 eP    13 00.90  -0.4
                eS    13 17.00
PMS     1.23  51 P     13 01.20  -0.5
PWA     1.41  34 P     13 04.50   0.3
AUL     1.47 221 eP    13 04.34  -0.7
AGU     1.49 221 eP    13 04.34  -1.0
SKT     1.49   0 eP    13 04.64  -0.7
                eS    13 24.33
AUW     1.49 221 eP    13 04.96  -0.3
PDB     1.50 243 eP    13 05.70   0.2
PLRM    1.61  46 eP    13 05.83  -1.1
KNK     1.76  57 eP    13 07.85  -1.3
GHO     1.80  44 eP    13 08.18  -1.6
LTI     1.90 102 eP    13 08.32  -2.6
CDD     1.90 215 eP    13 10.33  -0.7
MCNL    1.93 228 eP    13 10.24  -1.2
SYI     1.94 193 eP    13 10.63  -0.9
CFI     1.97  68 eP    13 09.85  -2.1
CUT     2.01  17 eP    13 11.90  -0.6
SML     2.04  48 eP    13 12.11  -0.9
SVW     2.09 289 P     13 11.60  -2.1
VLZ     2.63  74 eP    13 18.58  -2.7
KLU     2.92  68 eP    13 22.97  -2.5
TRF     3.02  11 eP    13 27.80   0.8
TOA     3.05  56 P     13 26.20  -1.2
KTH     3.08   5 eP    13 27.27  -0.5
TTA     3.24 321 P     13 28.20  -1.8
GLB     3.89  73 eP    13 38.12  -0.9
IL1     4.80  25 eP    13 49.70  -2.1
ILB     4.80  25 eP    13 49.68  -2.1
BC3     5.30  57 eP    13 55.39  -3.5
IM3     5.60 351 eP    14 01.21  -1.8
       54 obs. associated
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*  NOV  07, 1993  02h 33m 38.30± 1.03s
    2.258 N ±13.7km  128.769 E ±16.3km
   DEPTH =  33.0km  (normal)
   4.4mb (  3 obs.)
 HALMAHERA, INDONESIA                (267)

MNI     4.01 258 eP    34 39.00   0.0
                eS    35 20.50
WR2    22.74 166 eP    38 38.90   0.0
       0.5s     5.90nm          4.3mb
ASPA   26.25 169 eP    39 18.10   5.7X
       0.8s     4.10nm          4.1mb
                i     39 34.20
GUN    48.23 306 P     42 19.00   0.4
       0.7s    21.00nm          5.3mb
PKI    48.48 306 P     42 20.50   0.0
KKN    48.67 306 P     42 21.20  -0.6
DMN    48.74 305 P     42 23.00   0.6
GKN    49.27 306 P     42 26.00  -0.4
     S.D. = 0.5  on   7 of   8 obs.
-------------------------------------
   NOV  07, 1993  03h 00m 56.58± 0.69s
   24.336 S ± 5.4km   67.190 W ±10.6km
   DEPTH = 202.7 ±  8.0 km
 CHILE-ARGENTINA BORDER REGION       (127)

SLA     1.59 105 iPd   01 31.60  -0.3
                (S)   01 56.50
HJA     1.98  56 ePd   01 35.30  -0.1
                S     01 39.10
FSA     2.04 149 ePc   01 37.00   1.0
YJA     2.66  36 iPd   01 42.80  -0.5
TCA     7.34 162 iPd   02 42.00  -0.3
CNCB    7.52 354 P     02 46.00   0.9
LPB     7.81 354 eP    02 49.00   0.2
LPAZ    8.06 354 P     02 51.40  -0.8
MRA     8.15 171 e(P)  02 52.30  -0.5
PPD    14.78  84 eP    04 17.30   0.0
VAO    18.57  90 eP    05 00.70  -0.1
BAO    19.99  68 Pc    05 15.80   0.4
                e     05 19.90
     S.D. = 0.6  on  12 of  12 obs.
-------------------------------------
   NOV  07, 1993  03h 05m 45.56± 0.66s
    6.447 S ± 3.3km  154.929 E ± 3.5km
   DEPTH =  95.0 ±  5.9 km
   5.2mb ( 37 obs.)
 SOLOMON ISLANDS                     (193)

RAB     3.55 309 eP    06 42.00   2.4
                iS    07 28.50
KVG     5.62 313 eP    07 07.40  -0.8
HNR     5.79 121 eP    07 09.00  -1.6
                eS    08 21.00
LAT     7.88 268 ePd   07 38.20  -1.1
PMG     8.24 249 eP    07 42.80  -1.4
YYYY    8.91 271 eP    07 54.20   0.7
CTA    15.96 211 iPc+  09 27.00   1.0
       1.0s    15.00nm          4.2mb X
     Z  21s     0.84um          3.2Msz
                e     09 37.00
                i     09 45.50
                iS    12 36.00
DZM    19.10 146 iPd   10 03.00  -0.8
QIS    20.43 225 eP    10 21.30   3.8X
WB5    24.02 234 iPc   10 54.50   1.6
                iPcP  14 33.90
                eS    15 07.40
                eS    15 11.80
ARMA   24.05 187 iPd   10 54.30   1.1
       0.7s    38.00nm          4.9mb
WR2    24.06 234 iPd   10 54.70   1.4
       0.6s    88.20nm          5.4mb
                iScP  14 33.70
                eS    15 09.30
WRA    24.08 234 P     10 54.79   1.4
       0.6s    37.40nm          5.0mb
MTN    24.30 253 iPd   10 56.60   1.1
       1.0s   238.00nm          5.6mb
ASPA   26.49 228 iPc   11 15.80  -0.1
       0.7s    21.40nm          4.8mb
     Z  20s     0.60um          4.1Msz
                i     11 25.60
                i     12 04.90
                iS    15 52.40
KNA    27.26 248 eP    11 30.60   7.7X
       0.7s    31.00nm          5.0mb
STK    28.21 205 iPd   11 28.90  -2.4
       0.9s     5.10nm          4.2mb X
BWA    28.48 191 eP    11 30.40  -3.5X
                i     11 40.50
CAN    29.25 190 eP    11 41.30   0.6
                e     12 26.20
WARB   33.35 231 iPc   12 17.00   0.2
       0.4s    13.00nm          5.1mb
FORT   34.94 223 iPd   12 30.60   0.3
       0.5s    15.00nm          5.2mb
MBL    36.97 243 eP    12 46.50  -1.0
       1.0s    51.00nm          5.4mb
URZ    37.51 151 P     12 51.80   0.0
PUZ    37.94 149 P     12 55.30  -0.2
NOZ    38.25 150 P     12 58.20   0.2
THZ    38.63 158 P     13 01.00  -0.3
KIW    38.64 155 eP    13 01.60   0.3
MNG    38.68 155 P     13 01.30  -0.3
TCW    38.68 156 P     13 01.70   0.1
MRW    38.87 156 eP    13 02.60  -0.6
MTW    39.14 155 Pc    13 04.70  -0.7
LTZ    39.30 160 P     13 07.10   0.3
       0.6s    42.00nm          5.5mb
COOL   39.91 228 eP    13 12.00   0.0
MEEK   39.96 236 iPc   13 12.90   0.4
       0.8s    60.00nm          5.5mb
BWZ    40.12 163 P     13 12.90  -0.6
       0.7s    36.00nm          5.3mb
KKM    40.58 287 ePc   13 20.90   3.2X
       0.9s    91.10nm          5.6mb
BAG    40.87 304 ePc   13 20.00  -0.2
       1.0s    46.00nm          5.3mb
KLB    42.78 229 iPc   13 35.10  -0.4
       0.6s    31.00nm          5.3mb
MRWA   43.12 233 iPc   13 38.20   0.0
       0.3s     8.00nm          5.0mb
BAL    43.14 231 iPc   13 38.20  -0.2
       0.6s    38.00nm          5.4mb
NWAO   43.81 228 eP    13 43.60  -0.2
MUN    44.13 230 eP    13 46.50   0.1
       0.6s    85.00nm          5.8mb
LEM    46.98 267 iPd   14 09.50   0.1
TPI    47.25 272 ePd   14 12.00   0.6
                e     15 00.00
KGM    52.20 278 ePc   14 49.30   0.0
       0.5s    62.30nm          5.9mb
IPM    54.92 280 ePc   15 08.00  -1.2
       0.7s    39.30nm          5.5mb
CN2    56.67 335 eP    15 19.80  -1.5
       0.8s     4.70nm          4.6mb
GYA    57.07 307 P     15 24.20  -0.3
                pP    15 39.40  56kmX
NST    58.54 293 eP    15 34.50  -0.3
XAN    59.27 316 P     15 38.00  -1.6
       0.5s    16.00nm          5.4mb
                pP    15 53.50  58kmX
KMI    59.66 304 PKPd  15 43.00   0.3
                pPKP  15 58.00
KHT    59.70 291 eP    15 42.70  -0.1
CHTO   60.60 296 iPc   15 49.00   0.1
       1.2s    58.68nm          5.5mb
LZH    63.88 315 eP    16 10.00  -0.7
       1.2s    37.00nm          5.2mb
                pP    16 28.00  68kmX
                sP    16 39.00
CSY    67.10 198 iPd   16 40.10   9.5X
       0.6s    13.40nm          5.0mb
GTA    68.30 317 Pc    16 38.50  -0.2
       1.0s    12.00nm          4.8mb
LSA    70.91 304 P     16 55.00  -0.3
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        0.6s     6.00nm          4.6mb
GUN     74.78 301 P     17 18.00   0.1
PKI     75.09 301 P     17 19.20  -0.5
KKN     75.26 301 P     17 20.40  -0.1
DMN     75.36 301 P     17 21.10   0.0
GKN     75.86 301 P     17 23.40  -0.4
SVW     77.51  22 eP    17 32.86   0.7
        0.8s    52.51nm          5.4mb
                  epP   17 48.85  57kmX
WMQ     78.38 317 eP    17 37.60   0.3
TTA     78.54  21 eP    17 38.05   0.2
        1.1s    14.68nm          4.7mb
                  epP   17 53.69  56kmX
                  esP   17 59.95
CP2     78.90  23 (P)   17 39.89  -0.1
SLKM    79.27  24 ePc   17 41.48  -0.3
                  epP   17 57.56  57kmX
GBA     79.44 285 P     17 43.70   0.2
        0.7s     6.00nm          4.6mb
PMR     80.32  24 eP    17 46.73  -0.5
        0.8s    21.17nm          5.0mb
                  epP   18 02.41  55kmX
IMA     81.31  19 ePc   17 52.82   0.2
        1.2s    14.69nm          4.7mb
                  epP   18 08.23  54kmX
KLU     81.57  25 ePc   17 54.44   0.5
                  epP   18 09.72  54kmX
TOA     81.78  24 eP    17 56.10   1.1
        0.9s    51.90nm          5.4mb
                  e     18 12.00
FBA     82.63  21 eP    17 58.12  -1.2
        0.5s     6.49nm          4.8mb
                  epP   18 13.48  54kmX
BALM    82.86  26 eP    18 00.92   0.2
                  epP   18 16.83  56kmX
SPA     83.59 180 iPc   18 05.40   1.0
        0.9s    59.09nm          5.5mb
MAW     84.87 203 P     18 12.30   1.7
INK     89.23  21 eP    18 32.00   0.3
RMW     90.16  42 eP    18 36.49  -0.1
BONR    91.38  52 eP    18 43.98   1.4
PEC     91.82  56 (P)   18 45.43   1.0
        0.7s     4.64nm          4.9mb
PLM     92.01  57 eP    18 46.95   1.5
GSC     92.27  55 eP    18 48.31   1.8
ARUT    95.19  53 (P)   19 01.63   1.6
MBC     95.19  14 iPc   18 59.50   0.5
                  PcP   18 59.90
                  PP    22 41.30
YKA     95.89  28 eP    19 02.20  -0.2
        0.5s     5.00nm          5.3mb
PV10    98.69  52 eP    19 16.93   1.0
JAQ    117.62  31 ePKP  24 19.50  -2.4X
HFS    118.97 339 ePKP  24 22.80  -1.5
        0.4s     0.80nm
NB2    119.16 341 PKP   24 23.30  -1.4
        0.6s     0.80nm
MTD    119.42 247 iPKPd 24 11.30 -15.3X
PRM    120.52  54 ePKP  24 28.19   0.1
BUL    120.98 242 iPKP  24 29.20  -0.3
GAC    121.56  39 ePKP  24 29.00  -0.6
HBF    122.41  55 ePKP  24 31.41  -0.3
CEH    122.63  51 ePKP  24 31.50  -0.5
                  epPKP 24 47.76
BRG    125.13 331 iPKP  24 37.00   0.6
CLL    125.30 332 iPKP  24 35.90  -0.8
                  i     24 52.40
GEC2   126.55 329 ePKPd 24 39.10  -0.3
        0.6s     2.41nm
                  e     24 42.90
                  e     24 50.60
                  ed    24 54.30
GRF    127.23 331 ePKP  24 40.40  -0.2
                  e     24 56.60
LMN    127.87  34 ePKP  24 42.00   0.1
CDF    129.98 332 ePKP  24 45.60  -0.3
BSF    130.63 332 ePKP  24 46.50  -0.7
        0.6s     2.25nm
HAU    130.70 332 ePKP  24 46.70  -0.5
        0.5s     2.60nm
PCP    132.05 328 ePdiff21 50.00   5.8X
                  eS    32 35.00
LPL    132.31 330 ePKP  24 50.40  -0.2
LPG    132.31 330 ePKP  24 50.60  -0.1
        0.7s     2.75nm
LOR    132.38 334 ePKP  24 50.20  -0.2
LBF    132.54 333 ePKP  24 50.30  -0.5
SSF    132.69 334 ePKP  24 50.90  -0.1
        0.7s     2.20nm
BGF    133.37 334 ePKP  24 52.30   0.0
LPF    133.78 338 ePKP  24 53.10   0.1
        0.6s     5.05nm
TCF    133.86 334 ePKP  24 53.30   0.0
        0.8s     3.65nm
VAO    143.74 144 e(PKP)25 10.00  -2.0X
BAO    148.43 134 ePKP  25 20.20   0.2
                  i     25 23.00
                  e     25 29.20
BDF    148.47 134 ePKP  25 20.50   0.4
        1.3s     0.75nm
                  i     25 27.30
                  i     25 37.10
SOB1   157.85 134 ePKP  25 30.90  -2.2X
                  e     26 06.20
KIC    159.80 271 PKP   25 53.00  17.7X
LIC    160.08 270 PKP   25 54.00  18.4X
TIC    160.08 272 PKP   25 54.00  18.4X
     S.D. = 0.8  on 106 of 119 obs.
-------------------------------------
*  NOV  07, 1993  03h 13m 23.07± 1.95s
   33.095 S ±19.9km   68.317 W ± 8.9km
   DEPTH =  33.0km  (normal)
 MENDOZA PROVINCE, ARGENTINA      (139)

MDZ      0.50 295 eP     13 33.60  -0.1
                  eS     13 45.50
CFA      1.49   3 ePc    13 47.00  -0.8
                  S      14 09.00
RTCB     1.66 346 ePd    13 51.00   0.7
RTLL     1.77 356 ePd    13 51.70  -0.1
                  S      14 16.00
MRA      2.30  73 ePd    13 58.80  -0.6
                  S      14 25.40
RTPR     3.18  29 e(P)   14 16.00   4.1X
                  (S)    14 55.00
TCA      3.61  62 e(P)   14 19.00   0.9
                  (S)    15 06.00
     S.D. = 0.9  on   6 of   7 obs.
-------------------------------------
?  NOV  07, 1993  03h 16m 17.63± 5.33s
   16.764 S ±73.5km   73.370 W ±38.5km
   DEPTH =  76.2 ± 31.0 km
 NEAR COAST OF PERU               (115)
      Felt (II) at Arequipa.

ARE      1.83  81 iPg    16 46.50  -1.4
                  iS     17 07.50
LPAZ     5.05  85 P      17 33.90   0.8
LPB      5.06  88 P      17 34.00   0.9
CNCB     5.16  91 iPc    17 35.80   1.2X
NNA      5.82 324 eP     17 43.50   0.2
        0.6s    30.00nm          4.8mb X
                  i      17 50.60
                  eS     18 54.00
MOCB     8.57 123 P      18 23.70   2.1X
PPD     21.45 108 eP     21 01.40   0.0
RSTA    24.05 113 eP     21 29.70   2.8X
BAO     24.39  91 eP     21 30.20  -0.2
                  e      21 32.40
KIC     71.61  77 eP     27 33.00  -0.3
        0.6s    16.00nm          5.1mb
WRA    134.48 218 PKP    35 33.70   4.2X
        0.5s     0.60nm
GBA    151.66  92 PKPc   36 07.90   8.9X
        0.5s     4.00nm
     S.D. = 1.1  on   7 of  12 obs.
-------------------------------------
&  NOV  07, 1993  03h 47m 51.66s
   41.652 N          124.693 W
   DEPTH =  12.4km
 NEAR COAST OF NORTHERN CALIF.    ( 35)
      <GM-P>. MD 2.8 (GM).

FHC      1.00 148 eP     48 08.87  -1.6
KMPM     1.31 160 (P)    48 13.23  -2.4
LGPM     1.59 117 eP     48 17.98  -1.7
LBFM     2.13  97 (P)    48 29.35   1.7
ORV      3.21 130 eP     48 41.77  -1.0
        5 obs. associated
-------------------------------------
&  NOV  07, 1993  04h 15m 59.55s
   63.220 N          145.149 W
   DEPTH =   1.8km
 CENTRAL ALASKA                   (  1)
      <AEIC>. ML 2.6 (AEIC).

PAX      0.29 210 P      16 05.10  -0.2
                  S      16 09.60
THY      0.34 306 P      16 05.90  -0.4
                  S      16 10.80
DOT      0.65  48 P      16 11.60  -0.9
                  S      16 19.70
SDG      0.72 195 P      16 12.80  -1.1
DJE      0.85 344 P      16 15.30  -1.1
                  S      16 27.40
TMW      0.98  83 P      16 18.50  -0.4
DHY      1.02 263 P      16 17.80  -1.9
TZL      1.19 186 P      16 21.70  -0.7
TOA      1.22 203 P      16 22.10  -0.9
                  S      16 39.90
HDA      1.43 327 P      16 26.10  -0.5
BC3      1.54  94 P      16 27.00  -1.1
                  S      16 49.30
RND      1.68 278 P      16 31.20   1.0
SCM      1.72 217 P      16 30.20  -0.6
IL1      1.74 335 P      16 31.00   0.1
                  S      16 54.10
ILB      1.74 335 P      16 30.00  -0.9
                  S      16 54.30
KLU      1.77 192 P      16 31.00  -0.5
WRH      1.81 315 P      16 32.90   0.9
CCB      1.85 322 P      16 33.40   0.8
GLB      1.89 160 P      16 31.80  -1.4
GLM      2.03 332 P      16 36.50   1.3
FBA      2.05 327 eP     16 35.57   0.1
VLZ      2.17 195 P      16 38.50   1.3
GHO      2.28 232 P      16 39.70   0.9
BALM     2.56 148 eP     16 43.72   0.9
       24 obs. associated
-------------------------------------
*  NOV  07, 1993  04h 21m 13.30± 0.84s
   5.791 S ± 7.1km  145.925 E ±13.3km
   DEPTH =  10.0km  (geophysicist)
   3.6mb (  1 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)

YYYY     0.45 174 eP     21 22.30  -0.2
                  eS     21 29.00
MDG      0.56 345 ePc    21 24.50  -0.1
LAT      1.38 129 eP     21 38.70   0.2
PMG      3.79 161 eP     22 13.00  -0.1
WR2     18.01 218 eP     25 25.70   0.2
        0.4s     2.10nm          3.6mb
     S.D. = 0.2  on   5 of   5 obs.
-------------------------------------
?  NOV  07, 1993  06h 11m 44.79± 2.51s
   21.983 S ±16.7km  177.506 W ±34.6km
   DEPTH = 117.9 ± 15.0 km
   5.5mb ( 15 obs.)
 FIJI ISLANDS REGION              (181)

SVA      5.40 315 eP     13 03.90  -0.4
DZM     14.89 267 iPd    15 28.20  17.7X
KUZ     15.84 200 eP     15 28.00   5.7X
HBZ     15.98 192 eP     15 28.00   4.0X
                  eS     17 55.20
WIZ     16.16 195 eP     15 31.60   5.4X
PUZ     16.45 192 eP     15 30.60   0.7
                  eS     18 05.70
URZ     16.87 195 eP     15 35.70   0.6
                  eS     18 14.10
NOZ     17.02 192 eP     15 38.90   2.1
MAHZ    17.60 192 eP     15 47.90   3.9X
WAHZ    18.42 195 eP     15 51.90  -1.8
                  eS     18 45.90
PGZ     19.31 194 eP     16 04.50   1.4
MNG     19.51 196 eP     16 02.70  -2.4
                  eS     19 02.50
KIW     19.89 197 eP     16 08.20  -0.9
AMW     20.09 195 eP     16 11.40   0.3
MRW     20.29 197 eP     16 12.00  -1.1
                  eS     19 17.70
QRZ     20.59 202 eP     16 17.00   0.8
THZ     21.31 200 eP     16 24.00   0.5
DSZ     21.66 202 eP     16 28.00   1.1
LTZ     22.43 200 eP     16 33.20  -1.2
MQZ     23.15 198 eP     16 41.10  -0.3
WVZ     23.21 202 eP     16 41.10  -0.8
ODZ     24.98 200 eP     16 57.30  -1.5
ARMA    28.87 247 iPd    17 37.20   2.7X
        0.7s    106.00nm          5.6mb
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07d 06h

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CNB     31.81 238 iPd   18 01.30   1.0
        0.9s    59.00nm          5.3mb
CAN     32.09 238 iPd   18 03.50   0.7
BWA     32.33 240 iPd   18 03.60  -1.2
CTA     33.83 266 iPd   18 24.50   6.6X
        1.0s   300.00nm          6.0mb
                  i     18 29.30
                  iS    23 09.00
TOO     35.42 236 iPd   18 31.40   0.1
        0.5s    81.00nm          5.8mb
STK     37.59 246 iPd   18 48.90  -0.6
        0.6s    32.80nm          5.4mb
QIS     39.90 264 eP    19 13.40   4.5X
ADE     40.30 241 iPd   19 12.80   0.8
ASPA    44.65 258 iPd   19 50.70   3.2X
        0.4s    95.70nm          5.9mb
                  iS    25 43.80
WR2     44.85 263 iPc   19 52.80   3.7X
        0.5s   150.60nm          6.0mb
                  iScP  24 48.30
WRA     44.87 263 P     19 53.00   3.7X
        0.4s    41.90nm          5.5mb
FORT    49.15 248 iPc   20 23.20   0.6
        0.5s    68.00nm          5.8mb
MTN     49.65 272 eP    20 31.50   4.9X
        0.5s    40.00nm          5.6mb
WARB    50.84 254 iPd   20 36.60   1.0
        0.3s    13.00nm          5.3mb
KNA     51.01 267 iPd   20 48.60  11.7X
        0.8s   135.00nm
COOL    55.06 247 eP    21 06.20  -0.6
        0.4s     9.00nm          5.1mb
SBA     56.43 184 iPc   21 20.40   4.5X
KLB     57.85 246 eP    21 26.10  -0.4
MBL     57.90 258 iPd   21 28.20   1.3
        0.3s    14.00nm          5.4mb
NWAO    58.13 244 eP    21 27.90  -0.5
BAL     58.89 247 eP    21 33.20  -0.5
MUN     59.11 245 eP    21 35.00  -0.3
MRWA    59.72 248 eP    21 39.20  -0.2
        0.4s    16.00nm          5.4mb
MAW     80.33 200 P     23 45.50   1.7
        0.6s    11.76nm          4.9mb
BALM    87.46  16 eP    24 42.70  22.8X
NB2    140.50 353 PKP   31 08.20   6.9X
        0.5s     0.70nm
HFS    141.07 351 ePKP  31 09.30   7.0X
        0.3s     2.60nm
KSP    149.24 343 ePKP  31 33.50  17.3X
CLL    149.60 347 ePKP  31 37.00  20.3X
        1.1s     8.00nm
                  e     33 16.00
BRG    149.80 346 iPKP  31 37.70  20.6X
     S.D. = 1.1  on  33 of  53 obs.
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&  NOV  07, 1993  06h 22m 04.37s
   65.556 N          151.319 W
   DEPTH =  81.1km
 NORTHERN ALASKA                (676)
      <AEIC>.

MLY      0.58 155 P     22 18.80  -0.4
                  S     22 30.80
IM3      1.09 294 P     22 24.50  -0.4
                  S     22 42.10
IMA      1.10 299 eP    22 23.91  -1.2
                  eS    22 40.45
NEA      1.37 135 P     22 30.20   1.8
MDM      1.43 113 P     22 26.80  -2.5
                  S     22 45.70
BWN      1.60 149 P     22 36.50   5.1
FBA      1.62 112 eP    22 28.73  -3.0
GLM      1.75 107 P     22 32.70  -0.8
                  S     22 53.90
WRH      1.75 127 P     22 35.50   2.0
IL1      2.03 111 P     22 37.70   0.4
                  S     23 02.20
ILB      2.03 111 P     22 37.70   0.4
                  S     23 01.80
HDA      2.19 120 P     22 36.20  -3.2
FYU      2.68  65 P     22 43.70  -2.5
       13 obs. associated
-----------------------------------
*  NOV  07, 1993  06h 31m 02.59± 0.84s
   17.239 S ± 9.5km   69.705 W ±10.9km
   DEPTH = 172.1 ±  9.6 km
 PERU-BOLIVIA BORDER REGION     (118)

LPB      1.69  66 iPd   31 36.80   0.2
         1.0s   400.00nm
CNCB     1.70  76 iPd   31 37.10   0.2
LPAZ     1.78  58 iPd   31 36.90  -0.9
YJA      6.30 142 e(P)  32 35.50   0.7
HJA      7.18 147 ePc   32 47.50   1.5
SLA      8.42 153 e(P)  33 02.00  -0.7
NNA      8.66 306 eP    33 06.00   0.3
         0.3s    11.69nm          4.8mb X
                  eS    34 38.00
TCA     14.79 163 e(P)  34 23.00  -1.6
PPD     17.97 108 eP    35 01.70  -1.0
RSTA    20.65 114 eP    35 30.60   0.3
BAO     20.89  89 eP    35 32.50  -0.3
VAO     22.09 109 eP    35 45.80   1.2
LIC     68.00  76 P     41 55.80  10.2X
KIC     68.31  76 P     41 58.00  10.5X
         0.5s    11.50nm
WRA    136.15 214 PKP   50 11.10   5.3X
         0.5s     0.30nm
     S.D. = 1.1  on  12 of  15 obs.
-----------------------------------
&  NOV  07, 1993  07h 15m 03.46s
   37.362 N          121.721 W
   DEPTH =   8.7km
 CENTRAL CALIFORNIA              ( 39)
      <GM-P>. MD 2.7 (GM). ML 2.7
      (GS).

COE      0.11 160 iPc   15 06.53   0.3
ARN      0.15  95 iPc   15 06.84  -0.1
JEGM     0.61 285 eP    15 14.80  -0.9
                  eS    15 24.55
SAO      0.64 160 eP    15 16.33   0.1
                  eS    15 25.45
HMR      0.79 355 eP    15 19.96   1.0
CMB      1.25  57 eP    15 26.37  -0.6
                  eS    15 42.98
NTYM     1.27 324 eP    15 25.67  -1.4
                  eS    15 46.03
MMPM     2.16  83 eP    15 40.36  -0.1
                  eS    16 07.80
ORV      2.20   4 eP    15 39.23  -1.5
MEMM     2.23  81 eP    15 42.27   1.1
                  eS    16 10.93
MTUM     2.52  89 eP    15 46.52   1.1
BONR     2.78  77 eP    15 50.60   1.3
ISA      3.12 122 eP    15 52.85  -0.9
       13 obs. associated
-----------------------------------
%  NOV  07, 1993  07h 17m 41.66± 0.82s
   44.512 N ± 5.3km    7.097 E ±12.5km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                  (545)
      ML 2.3 (GEN).

PZZ      0.01 154 P     17 43.59  -0.1
                  S     17 44.51
STV      0.31 149 P     17 47.87  -0.3
                  S     17 52.88
BHB      0.35  20 P     17 48.90   0.0
                  S     17 53.98
ENR      0.37 141 P     17 49.10  -0.1
                  S     17 54.25
RRL      0.47 332 P     17 51.23   0.1
RSP      0.65  10 P     17 54.48  -0.2
IMI      0.83 136 P     17 58.32   0.6
LSD      0.95   3 P     18 00.02   0.1
     S.D. = 0.3  on   8 of   8 obs.
-----------------------------------
   NOV  07, 1993  07h 34m 59.31± 0.82s
    5.805 S ± 5.0km  146.207 E ± 5.9km
   DEPTH =  20.8 ±  6.1 km
   5.0mb ( 19 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)
      ML 5.4 (PMG).

YYYY     0.49 209 eP    35 09.00  -0.3
MDG      0.70 322 iPc   35 13.60   1.0
LAT      1.16 137 iPc   35 20.10  -0.3
MNDI     2.56 262 eP    35 45.00   4.3X
WWKK     3.37 310 eP    35 56.00   4.1X
PMG      3.70 165 iPd   35 56.80   0.2
RAB      6.15  75 eP    36 30.00  -1.2
CTA     14.20 180 iPc   38 23.00   1.6
         1.0s    25.00nm          4.8mb
                  i     38 29.50
                  i     38 36.00
QIS     16.00 203 iPc   38 45.20   0.3
MTN     16.43 244 eP    38 51.00   0.6
        0.8s   116.00nm          5.1mb
WR2     18.17 218 eP    39 11.30  -0.9
                  i     39 14.40
                  eS    42 28.70
KNA     19.76 239 eP    39 37.50   6.4X
        0.8s    27.00nm          4.6mb
ASPA    21.35 212 iPc   39 46.40  -1.1
        0.6s    24.70nm          4.8mb
                  eS    43 47.30
BKM     24.55 121 iPc   40 21.50   2.5
ARMA    25.01 169 iPd   40 23.50   0.0
        0.4s     8.00nm          4.7mb
DZM     25.38 132 iPc   40 25.10  -2.0
STK     26.30 189 iPc   40 32.30  -3.1X
        1.1s     4.70nm          4.0mb
WARB    27.56 221 eP    40 46.20  -0.9
BWA     28.55 176 eP    40 55.70  -0.2
                  e     41 00.30
CAN     29.49 175 eP    41 03.50  -0.8
                  epP   41 08.90  19kmX
TOO     31.63 181 iPd   41 23.00  -0.2
        0.8s    38.00nm          5.3mb
MRWA    36.83 227 eP    42 08.50   0.5
NWAO    38.15 221 eP    42 29.70  10.7X
MAT     42.78 351 eP    43 01.00   3.8X
        0.7s     4.79nm          4.3mb
PUZ     43.34 142 eP    43 02.00   0.2
MNG     43.46 147 P     43 03.30   0.6
NOZ     43.56 143 P     43 04.00   0.5
TUZ     44.86 157 P     43 13.80  -0.1
IPM     46.28 282 ePd   43 27.20   1.5
NST     50.36 296 eP    43 57.00  -0.3
KHT     51.44 294 eP    44 03.00  -2.5
CHTO    52.60 299 eP    44 17.10   2.8
CN2     52.82 341 eP    44 16.00   0.5
XAN     53.03 321 eP    44 16.00  -1.3
        1.0s     4.50nm          4.4mb
      Z  15s     0.58um          4.8MszX
                  pP    44 28.00  42kmX
CD2     54.58 315 eP    44 28.30  -0.4
LZH     57.55 320 eP    44 45.00  -5.1X
        1.2s    25.00nm          5.1mb
                  pP    44 55.00  33kmX
GTA     62.09 321 eP    45 21.00  -0.3
        1.0s     4.00nm          4.5mb
CSY     65.25 195 iPc   45 50.30   9.0X
        0.8s    29.50nm          5.5mb
GUN     67.10 303 P     45 54.40   0.1
        0.7s    36.00nm          5.6mb
PKI     67.38 303 P     45 54.50  -1.6
        0.8s    13.00nm          5.1mb
KKN     67.56 303 P     45 56.80  -0.3
        0.8s    35.00nm          5.6mb
DMN     67.64 303 P     45 57.70   0.1
        0.8s    32.00nm          5.5mb
GKN     68.17 303 P     46 00.30  -0.5
        0.7s    19.00nm          5.4mb
GBA     70.93 286 P     46 18.00   0.4
WMQ     72.13 320 eP    46 23.50  -1.0
POO     75.26 291 eP    46 44.00   0.8
SLKM    82.43  27 (P)   47 22.09   0.8
SPA     84.23 180 iPd   47 30.10  -0.5
        0.8s     8.33nm          5.0mb
FBA     85.31  23 eP    47 35.06  -0.7
        0.7s     3.81nm          4.7mb
MOCB   138.78 132 PKP   54 21.50  -5.8X
CNCB   139.41 124 PKP   54 23.00  -5.7X
LPB    139.46 124 PKP   54 21.10  -7.5X
LPAZ   139.55 123 PKP   54 21.70  -7.3X
RSTA   146.29 154 (PKP) 54 41.00   1.3
PPD    147.44 149 ePKP  54 43.10   1.5
VAO    148.61 156 ePKP  54 46.30   2.7X
KIC    151.11 273 PKP   54 54.00   6.5X
TIC    151.39 273 PKP   54 54.80   6.9X
LIC    151.39 272 PKP   54 54.80   6.9X
     S.D. = 1.1  on  43 of  59 obs.
-----------------------------------
%  NOV  07, 1993  07h 55m 34.50± 0.98s
   39.138 N ± 8.0km   27.497 E ±10.3km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
      ML 2.7 (ISK).

IZM      0.76 194 iPg   55 49.00  -0.4
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```
                 eSg   56 00.80
DST     0.99  62 ePn   55 54.40   1.0
EZN     1.14 308 ePn   55 56.60   0.8
EDC     1.24  13 ePn   55 57.00  -0.5
BNT     1.26  15 ePn   55 57.00  -0.9
     S.D. = 1.2  on   5 of   5 obs.
-----------------------------------
   NOV  07, 1993  08h 29m 51.01± 0.30s
   34.494 N ± 6.5km   70.671 E ± 5.2km
   DEPTH =  33.0km  (normal)
   4.7mb ( 30 obs.)  3.9Msz (  1 obs.)
 AFGHANISTAN                      (709)

KSH     6.52  39 iPc   31 33.00   5.7X
       0.5s   400.00nm          6.5mb X
NDI     8.04 134 iPnd  31 50.00   1.6
       0.8s   145.52nm          6.1mb X
FRU     8.88  19 eP    32 01.40   1.4
       1.8s   170.00nm          5.9mb X
                e     33 39.00
ASH    10.53 293 eP    32 18.00  -4.7X
GKN    13.58 115 P     33 03.20  -0.6
DMN    14.14 115 P     33 10.20  -1.1
KKN    14.18 114 P     33 10.40  -1.3
PKI    14.39 115 P     33 13.00  -1.6
GUN    14.57 113 P     33 15.40  -1.6
WMQ    16.13  50 eP    33 37.50   0.6
                PP     33 51.50
                SS     36 48.50
POO    16.15 169 iPd   33 42.00   4.8X
       0.9s    16.81nm          4.2mb
                iS     38 30.00
HYB    18.41 156 eP    34 05.00  -0.4
       1.0s    25.00nm          4.3mb
                eS     37 40.00
GRO    21.30 302 iPd   34 38.00   1.2
       1.0s   110.00nm          5.2mb
     Z  14s     1.50um          4.5MszX
     N  16s     1.10um
     E  16s     1.50um
ERE    21.53 293 iP    34 41.00   1.6
GBA    21.68 162 Pd    34 43.10   2.2
       0.7s    16.00nm          4.5mb
PYA    23.31 302 eP    34 57.00   0.2
     Z  16s     1.00um          4.4MszX
SVE    23.35 346 ePd   34 57.90   0.9
       2.0s    60.00nm          4.8mb
ARU    23.42 343 eP    34 58.00   0.3
     Z  14s     1.50um          4.6MszX
     N  12s     1.00um
     E  15s     0.50um
KOD    24.94 164 eP    35 17.00   3.9X
LZH    27.05  77 eP    35 42.50  10.1X
       1.2s    25.00nm
     Z  18s     0.29um          3.9Msz
ZAK    28.54  46 iPc   35 46.30   0.8
       1.0s     8.00nm          4.4mb
CHTO   29.57 115 eP    36 01.80   6.7X
       0.9s    12.36nm          4.7mb
XAN    31.49  80 eP    36 17.50   5.5X
CIT    35.22  47 eP    36 45.50   1.4
MLR    35.56 302 ePc   36 46.00  -1.2
BJI    36.33  68 eP    37 02.50   9.0X
BOD    37.19  38 eP    36 57.80  -2.7X
KAF    39.18 329 iP    37 16.50  -0.7
NUR    39.31 326 iP    37 17.60  -0.7
SRO    40.85 305 eP    37 32.00   0.9
PRU    43.31 309 eP    37 58.50   7.3X
BRG    43.68 310 iP    37 55.40   1.2
                i      38 02.00
GEC2   43.89 307 eP    37 54.90  -1.2
       1.2s     3.42nm          4.0mb
                e      38 02.60
                e      38 14.40
                e      38 22.70
KHC    43.96 307 eP    38 04.00   7.4X
                e      38 19.00
                e      39 43.50
                e      39 49.00
CLL    44.27 311 eP    38 07.00   8.1X
                e      40 16.00
HFS    44.49 323 eP    37 59.30  -1.4
       0.8s    17.30nm          5.0mb
GRF    45.47 308 eP    38 07.50  -1.1
NB2    45.83 324 P     38 09.80  -1.6
       0.8s    12.50nm          4.9mb
TIK    47.73  21 eP    38 24.50  -1.6
       1.0s    16.00nm          5.0mb
BSF    48.58 306 eP    38 32.70  -0.5
       1.5s    24.55nm          5.0mb
LPG    49.00 303 eP    38 36.60  -0.1
       1.0s     9.40nm          4.8mb
LPL    49.01 303 eP    38 36.60  -0.1
       1.0s    11.60nm          4.9mb
SMF    50.77 305 eP    38 49.50  -0.3
       1.4s    31.35nm          5.1mb
SSF    50.91 306 eP    38 50.40  -0.5
AVF    51.07 305 eP    38 51.70  -0.4
       1.0s     7.20nm          4.6mb
MAF    51.72 305 eP    38 57.10   0.0
       1.3s    20.20nm          4.9mb
TCF    51.94 305 eP    38 58.80   0.0
       1.4s    27.00nm          5.0mb
CAF    52.35 303 eP    39 02.10   0.2
       1.0s     8.80nm          4.7mb
LSF    52.41 305 eP    39 01.60  -0.7
RJF    52.64 304 eP    39 04.20   0.2
       1.1s    15.15nm          4.9mb
LFF    53.26 304 eP    39 08.60   0.0
       0.8s    10.75nm          4.9mb
MAT    53.96  67 eP    39 20.00   6.2X
DAG    56.60 344 eP    39 30.50  -2.0
       0.5s     2.82nm          4.6mb
MTD    63.10 223 iPc   40 09.60  -8.2X
                i      40 14.80
MBC    69.35   3 eP    40 58.00   1.3
       0.9s     4.00nm          4.5mb
IMA    74.11  17 eP    41 25.90   0.4
       1.0s     1.20nm          3.8mb
INK    75.93   9 eP    41 35.50  -0.1
       0.8s     2.00nm          4.2mb
FBA    76.47  16 iPd   41 38.22  -0.5
       1.3s     9.35nm          4.6mb
WRA    81.17 121 P     42 06.20   1.2
       0.6s     4.00nm          4.6mb
WR2    81.19 121 iPc   42 05.80   0.7
       0.6s     6.50nm          4.8mb
YKA    83.26   2 eP    42 14.50  -0.6
       0.8s     3.50nm          4.5mb
ASPA   83.33 124 iPd   42 17.20   1.1
       0.6s     8.00nm          5.0mb
LRM   100.01   2 ePdiff43 35.80   1.5
                e      43 55.80
ORV   105.47  10 (Pdiff43 59.58   1.2
     S.D. = 1.1  on  50 of  64 obs.
-----------------------------------
*  NOV  07, 1993  08h 30m 16.77± 2.89s
   38.745 N ±16.9km   26.562 E ±27.6km
   DEPTH =  10.0km  (geophysicist)
 AEGEAN SEA                       (365)
     ML 3.2 (ISK).

IZM     0.65 122 iPg   30 29.80   0.0
                eSg    30 41.00
EZN     1.10 350 iPn   30 37.20  -0.1
CIN     1.66 133 ePg   30 57.00  11.0X
                iSg    31 13.00
EDC     1.89  32 ePn   30 49.00  -0.4
BNT     1.92  33 ePn   30 50.00   0.2
MFT     2.11  15 ePn   30 53.00   0.3
     S.D. = 0.4  on   5 of   6 obs.
-----------------------------------
*  NOV  07, 1993  08h 36m 41.45± 1.52s
   14.311 N ±20.1km   93.594 W ±11.8km
   DEPTH =  33.0km  (normal)
   4.1mb (  6 obs.)
 NEAR COAST OF CHIAPAS, MEXICO    ( 69)

TPX     1.42  65 iP    37 04.29  -0.9
                iS     37 15.63
SCX     2.58  21 iP    37 21.19  -0.6
                iS     37 45.26
OXX     4.08 313 iP    37 49.64   6.3X
                iS     38 39.62
LVVM    6.05 334 iP    38 14.22   3.3X
ACX     6.55 294 (P)   38 16.04  -2.0
PPM     6.75 315 iP    38 26.02   4.7X
UNM     7.32 314 (P)   38 41.00  11.9X
CRX     7.72 312 (P)   38 19.00 -15.7X
MRX     9.03 307 iP    39 02.14   9.6X
UYO    19.78 358 iPc   41 09.10  -2.8
MIAR   20.15   0 (P)   41 16.53   0.8
       0.9s    14.86nm          4.3mb
WMOK   20.87 348 (P)   41 27.28   4.1X
       0.4s     3.09nm          4.0mb
MEO    20.88 348 iPc   41 19.80  -3.5X
TUL    21.60 355 iPc   41 36.40   5.9X
PRM    22.16  25 (P)   41 37.10   1.0
ACO    22.84 348 iPc   41 43.90   1.0
ALQ    23.59 333 (P)   41 52.38   2.0
       0.9s     4.25nm          4.0mb
TUC    23.82 322 eP    41 57.99   5.5X
       1.1s     6.69nm          4.1mb
                epP    42 11.16  54kmX
PV08   27.59 334 eP    42 30.05   2.0
PV10   27.59 333 iPd   42 28.90   0.9
YKA    50.38 348 eP    45 36.00  -1.2
       0.5s     0.90nm          4.0mb
SOB1   57.25 111 eP    46 29.00   0.4
INK    59.71 344 eP    46 44.50  -0.4
MBC    63.42 353 eP    47 09.50  -0.2
       0.9s     2.00nm          4.2mb
     S.D. = 1.5  on  14 of  24 obs.
-----------------------------------
&  NOV  07, 1993  08h 55m 51.50s
   40.304 N          124.450 W
   DEPTH =  12.0km
 NEAR COAST OF NORTHERN CALIF.    ( 35)
     <GM-P>. MD 2.7 (GM).

KMPM    0.28  66 iPc   55 57.71   0.2
                eS     56 01.96
FHC     0.61  35 eP    56 03.72   0.1
LGPM    1.38  63 eP    56 14.83  -1.8
       3 obs. associated
-----------------------------------
%  NOV  07, 1993  09h 54m 53.49± 0.96s
   39.118 N ± 7.8km   27.568 E ±10.0km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
     ML 2.8 (ISK).

IZM     0.76 198 ePg   55 08.10  -0.2
                eSg    55 20.40
DST     0.96  59 iPn   55 12.30   0.6
EZN     1.19 307 iPn   55 16.20   0.5
EDC     1.25  10 ePn   55 17.00   0.3
BNT     1.27  12 ePn   55 15.80  -1.2
     S.D. = 1.0  on   5 of   5 obs.
-----------------------------------
   NOV  07, 1993  09h 55m 54.96± 1.18s
   12.500 N ± 6.9km   125.212 E ±12.2km
   DEPTH =  67.5 ± 11.4 km
   4.8mb ( 21 obs.)
 SAMAR, PHILIPPINE ISLANDS        (251)

PLP     1.35 190 ePd   56 17.50  -0.7
                eS     56 29.80
MAP     2.48 209 iPd   56 34.00   0.2
                iS     57 05.00
GQP     3.03 298 ePc   56 39.20  -2.4
                eS     57 10.00
BIP     4.37 166 eP    57 01.00   0.6
TGY     4.46 291 eP    57 04.00   2.3
QVP     4.60 298 ePc   57 06.00   2.3
DAV     5.39 176 ePc   57 23.00   8.3X
BAG     5.94 311 eP    57 20.50  -2.0
       0.7s   205.48nm          5.6mb
                e      58 25.10
CVP     6.12 328 ePc   57 20.90  -4.0X
SSE    18.88 349 Pc    00 14.50   1.8
       1.0s    11.00nm          4.0mb
     Z  20s     0.50um          4.1MszX
     E  14s     0.40um
                S      03 36.00
NJ2    20.32 344 eP    00 30.00   2.0
WHN    20.58 332 eP    00 29.50  -1.1
       0.1s    15.00nm          5.3mb
GYA    22.29 311 iPc   00 50.00   2.0
       1.0s    18.00nm          4.5mb
     Z  14s     1.05um          4.4MszX
KMI    24.65 304 eP    01 12.00   0.9
       1.5s    50.00nm          4.8mb
     Z  20s     1.20um          4.4Msz
     E  15s     0.90um
TIA    24.71 344 Pc    01 10.40  -0.8
     Z  18s     0.59um          4.1Msz
     E  12s     0.49um
XAN    26.07 328 P     01 22.50  -1.5
       1.0s    31.00nm          4.8mb
     Z  15s     0.58um          4.2MszX
```

07d 10h

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                 eS    05 48.00
MAT    26.64  24 eP    01 28.00   -1.2
     Z  20s     0.35um          3.9Msz
                 eS    06 06.00
CD2    26.98 316 Pd    01 31.70   -0.7
     Z  18s     0.82um          4.3Msz
     E  14s     0.67um
TIY    27.58 338 eP    01 37.00   -0.8
     Z  12s     0.72um          4.5MszX
     N  13s     0.22um
BJI    28.57 345 eP    01 48.00    1.5
     0.8s     4.00nm          4.1mb
     Z  20s     0.30um          3.9Msz
SNY    29.25 358 eP    01 50.00   -2.7
LZH    30.37 324 eP    02 02.50   -0.4
     1.2s    37.00nm          5.0mb
     Z  14s     0.63um          4.4MszX
     E  12s     0.31um
HHC    30.68 339 eP    02 04.40   -1.1
WRA    33.47 164 P     02 28.00   -1.9
     0.7s     4.00nm          4.4mb
GTA    34.97 325 Pc    02 42.50   -0.3
     1.0s    12.00nm          4.8mb
     Z  16s     0.57um          4.4MszX
     E  13s     0.24um
QIS    35.77 157 eP    02 48.20   -1.4
LSA    35.91 304 P     02 51.20   -0.1
     1.2s    22.00nm          5.0mb
ASPA   36.94 167 iPc   02 58.20   -1.2
     1.1s     9.10nm          4.6mb
                 iS    08 39.80
GUN    39.77 299 P     03 23.80    0.3
PKI    40.09 298 P     03 22.00   -4.1X
     0.8s    15.00nm          4.9mb
KKN    40.25 298 P     03 27.60    0.3
DMN    40.36 298 P     03 27.80   -0.4
GKN    40.86 298 P     03 31.80   -0.4
MRWA   42.42 192 eP    03 43.50   -1.2
     0.9s    21.00nm          4.9mb
FORT   43.11 176 iPd   03 50.80    0.5
     0.7s    21.00nm          5.0mb
WMQ    44.84 321 P     04 05.00    0.7
NWAO   45.81 189 eP    04 11.50   -0.4
GBA    46.50 277 P     04 25.00    7.4X
STK    46.84 161 eP    04 17.60   -2.4
     1.6s     2.70nm          3.9mb
                 i     04 25.60
ARMA   49.67 150 eP    04 43.50    1.3
     0.9s    15.00nm          5.0mb
BWA    51.61 155 eP    04 58.20    1.4
                 e     05 07.40
CAN    52.63 155 eP    05 05.40    1.0
                 i     05 15.10
CNB    52.77 155 eP    05 06.40    0.9
     1.1s    29.00nm          5.2mb
DZM    53.06 130 iPc   05 10.60    2.7
TOO    53.32 160 eP    05 09.70    0.3
     0.9s    18.00nm          5.1mb
OBN    79.07 324 eP    07 37.00  -16.3X
                 e     07 53.00
                 e     08 02.00
CSY    79.32 186 eP    08 03.90    9.6X
     0.7s     5.30nm          4.6mb
INK    82.61  22 eP    08 12.00    0.3
MBC    83.78  13 eP    08 18.50    0.9
SLL    89.63 333 eP    08 47.20    0.7
     0.5s     0.90nm          4.3mb
LPB   166.51 109 PKP   15 51.00   -3.8X
CNCB  166.53 110 ePKP  15 50.00   -5.0X
LPAZ  166.54 108 PKP   15 57.30    2.2X
     S.D. = 1.4  on  44 of  53 obs.
-----------------------------------
%  NOV  07, 1993  10h 29m 09.50± 0.68s
   27.983 S ± 6.2km   26.767 E ± 7.8km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)
      ML 3.0 (PRE).

SEK     0.83 114 iPc   29 26.30    0.1
                 S     29 36.80
BFS     1.08   1 iPd   29 29.30   -1.1
                 S     29 41.50
BLF     1.23 204 iPd   29 32.20   -0.8
                 S     29 49.30
BOSA    1.35 242 eP    29 36.50    1.7
                 S     29 56.70
SWZ     1.51 302 iPd   29 36.90   -0.4
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                 S     29 57.40
KSR     2.11   3 eP    29 46.50    0.4
                 S     30 12.00
FRS     2.17 215 eP    29 46.00   -0.8
                 S     30 12.20
SLR     2.62  31 eP    29 54.10    0.8
                 S     30 25.10
     S.D. = 1.1  on   8 of   8 obs.
-----------------------------------
&  NOV  07, 1993  10h 36m 01.51s
   36.634 N          121.250 W
   DEPTH =   9.1km
 CENTRAL CALIFORNIA                ( 39)
      <GM-P>. MD 2.9 (GM). ML 2.9
      (GS).

EKH     0.07  63 P     36 04.44    0.7
HJSM    0.19 348 P     36 06.34    0.8
SAO     0.20 310 iPc   36 05.74   -0.2
BSRM    0.22 279 P     36 05.93   -0.3
LRV     0.28 138 P     36 07.55    0.2
PRS     0.32 198 iP    36 07.77   -0.3
DIL     0.37 303 P     36 08.76   -0.4
LRC     0.42 157 P     36 09.63   -0.5
CDC     0.43 334 P     36 10.88    0.6
HVC     0.43 127 P     36 10.39    0.0
JELM    0.55 302 P     36 12.14   -0.4
BPOM    0.58 226 P     36 12.42   -0.8
ADR     0.61 330 P     36 13.76    0.0
JRGM    0.70 305 P     36 14.42   -1.0
COE     0.71 332 ePd   36 15.96    0.4
                 eS    36 28.63
GCC     0.72 304 iP    36 14.83   -0.9
PAPM    0.73 187 P     36 15.39   -0.5
ARN     0.75 342 iPd   36 16.33    0.0
                 eS    36 28.03
PDRM    0.77 112 P     36 17.12    0.5
MHC     0.77 336 ePd   36 16.68   -0.1
                 eS    36 28.06
COSM    0.88 354 P     36 19.27    0.7
PANM    0.90 162 P     36 18.29   -0.5
CDVM    0.99 340 P     36 20.04   -0.4
WKR     1.01 144 P     36 20.65   -0.1
STAN    1.07 316 eP    36 20.47   -1.2
                 eS    36 36.33
PKEM    1.08 121 eP    36 22.59    0.6
                 eS    36 39.48
PAGM    1.21 138 P     36 23.29   -0.9
JEGM    1.31 313 eP    36 23.64   -2.1
BKS     1.47 328 eP    36 26.50   -1.6
                 eS    36 48.52
ZSP     1.54 329 iP    36 26.96   -2.1
MNHM    1.55  13 P     36 28.10   -1.2
CMB     1.56  26 eP    36 28.61   -0.9
                 eS    36 47.81
HMR     1.58 344 (Pn)  36 29.53   -0.2
BCH     1.73 146 eP    36 29.88   -2.1
                 eS    36 56.04
MMPM    2.03  61 eP    36 36.82    0.3
NTYM    2.08 328 eP    36 34.83   -2.1
MEMM    2.11  60 eP    36 38.24    0.8
                 eS    37 06.85
MTUM    2.27  71 eP    36 39.96    0.1
MRCM    2.42  64 ePn   36 42.99    0.8
ABL     2.43 137 eP    36 40.49   -1.7
ISA     2.45 112 ePn   36 41.29   -1.0
BONR    2.70  60 ePn   36 46.73    0.6
ORV     2.92 356 ePn   36 47.86   -1.1
TNP     3.52  65 ePn   37 00.06    2.4
      44 obs. associated
-----------------------------------
%  NOV  07, 1993  11h 27m 23.24± 0.90s
   39.079 N ± 7.3km   27.573 E ± 9.5km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.7 (ISK).

IZM     0.72 200 ePg   27 37.30   -0.2
                 eSg   27 49.50
DST     0.97  57 iPn   27 42.20    0.4
EZN     1.22 308 iPn   27 46.30    0.4
EDC     1.29  10 ePn   27 47.00   -0.1
BNT     1.30  12 ePn   27 46.80   -0.6
     S.D. = 0.6  on   5 of   5 obs.
-----------------------------------
   NOV  07, 1993  11h 57m 12.23± 0.40s
   47.872 N ± 5.2km  146.923 E ± 3.7km
   DEPTH = 422.3 ±  4.8 km
   4.4mb ( 58 obs.)
 NORTHWEST OF KURIL ISLANDS        (220)

KUR     2.72 166 ePn   58 14.00   -1.4
                 eS    59 05.00
YSS     2.98 255 iPnc  58 19.50    2.1
                 iS    59 11.50
SKR     6.62  62 ePn   58 53.10    0.0
                 eS    00 12.40
MDJ    12.43 261 eP    59 57.70   -0.6
MAT    13.02 213 iPc   00 04.00   -0.7
     0.5s    17.61nm          4.7mb
                 eS    02 08.00
CN2    15.50 263 P     00 28.80   -2.0
     0.6s    51.00nm          5.2mb
YAK    17.19 332 eP    00 48.00    0.3
SNY    17.59 259 Pd    00 51.80    0.0
     1.0s    92.00nm          5.2mb
DL2    20.38 253 eP    01 20.00    1.0
     1.0s   260.00nm          5.7mb X
BOD    21.93 309 eP    01 32.20   -1.4
     0.9s     8.00nm          4.2mb
BJI    23.36 262 eP    01 48.00    1.2
     1.0s    17.00nm          4.5mb
TIA    24.85 253 eP    02 00.00   -0.4
HHC    26.07 268 Pd    02 11.80    0.4
     1.0s    54.00nm          4.9mb
NJ2    26.50 244 eP    02 15.00   -0.1
TIY    27.07 261 eP    02 20.60    0.4
ZAK    28.36 292 iPd   02 31.00   -0.4
     1.3s    15.00nm          4.2mb
                 e     05 31.00
WHN    30.30 247 Pc    02 48.20   -0.2
     0.5s    15.00nm          4.6mb
XAN    31.51 258 P     02 58.80   -0.1
     0.7s    16.00nm          4.5mb
                 ScP   08 41.00
LZH    33.70 266 iPd   03 18.40    0.8
     1.0s   130.00nm          5.3mb
GTA    34.66 274 eP    03 26.60    1.1
     1.0s    19.00nm          4.4mb
                 ScP   08 52.00
SVW    34.69  46 ePc   03 26.60    1.1
IMA    35.42  37 iPc   03 31.12   -0.5
     0.6s     5.04nm          4.1mb
CD2    36.87 259 iPd   03 44.30    0.4
     0.9s    44.00nm          4.8mb
PMR    37.74  45 eP    03 51.20    0.6
FBA    37.92  39 iPc   03 52.17    0.0
     0.6s     9.15nm          4.3mb
GYA    37.98 250 iPd   03 53.60    0.5
     0.8s    67.00nm          5.1mb
NVS    39.13 305 eP    04 01.50   -0.6
     1.0s    10.00nm          4.1mb
                 e     06 01.00
KLU    39.27  44 iPc   04 03.51    0.2
BALM   41.06  44 eP    04 18.20    0.3
KMI    41.42 253 Pd    04 21.50    0.1
     1.4s    70.00nm          4.8mb
INK    42.97  32 ePc   04 32.50   -0.4
     0.5s     7.00nm          4.3mb
LSA    46.05 268 iPd   04 58.70    0.6
     0.6s    33.00nm          4.9mb
CHTO   48.40 250 iPd   05 15.90    0.3
     0.6s    21.04nm          4.7mb
GUN    50.75 270 P     05 33.80    0.2
KKN    51.23 270 P     05 37.20    0.3
PKI    51.28 270 P     05 37.60    0.1
DMN    51.46 270 P     05 39.60    0.9
GKN    51.52 271 P     05 39.40    0.4
YKA    52.50  35 eP    05 44.00   -1.5
     0.5s     2.30nm          3.8mb
NDI    56.07 277 iPd   06 21.00    9.6X
     0.4s    93.22nm          5.5mb X
RMW    57.79  53 eP    06 23.59    0.4
NEW    59.77  50 eP    06 36.79    0.2
     0.7s     6.80nm          4.2mb
KAF    60.57 332 iP    06 40.10   -1.4
OBN    61.92 322 eP    06 48.00   -2.5
     0.9s    15.00nm          4.5mb
NUR    62.31 332 iP    06 51.50   -1.5
     0.4s    12.10nm          4.8mb
LRM    63.79  50 eP    07 03.30    0.3
POO    65.19 271 iPd   07 11.00   -1.0
KVN    65.26  59 iPc   07 13.12    0.7
NB2    65.71 338 P     07 13.70   -1.0
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        0.5s    10.50nm          4.8mb
HFS     65.84 336 eP     07 13.90  -1.6
        0.4s    24.10nm          5.2mb
NAO     65.99 338 P      07 13.10  -3.3X
GBA     66.28 264 P      07 18.00  -0.8
TNP     66.43  59 iPc    07 20.05   0.3
        0.7s     6.83nm          4.4mb
TPNV    67.76  59 eP     07 28.07   0.2
        0.3s     3.01nm          4.5mb
WRA     68.44 193 P      07 31.00  -0.8
        0.7s     2.10nm          3.9mb
WR2     68.44 193 iPc    07 30.60  -1.2
        0.7s     5.70nm          4.3mb
RSSD    69.22  47 eP     07 36.18  -0.5
        0.5s     3.59nm          4.3mb
ASPA    72.16 193 iPc    07 54.40   0.5
        0.5s     6.20nm          4.5mb
KSP     72.91 330 eP     07 57.40  -0.5
PRU     74.23 330 P      08 05.50   0.1
WTS     74.83 336 eP     08 08.50  -0.2
        0.5s     7.90nm          4.6mb
KHC     75.29 330 eP     08 11.50   0.1
        1.5s     5.70nm          4.0mb
GRF     75.56 332 iPd    08 13.40   0.5
        0.5s    16.00nm          5.0mb
ENN     76.18 336 e(P)   08 16.00  -0.2
        0.6s     4.70nm          4.3mb
KBA     77.14 329 iPc    08 22.50   0.7
WATA    77.51 331 iPd    08 23.90   0.1
WTTA    77.55 331 iPd    08 24.40   0.3
        0.4s    11.10nm          4.9mb
MOTA    77.66 331 iPd    08 24.70   0.1
SQTA    77.73 331 iPc    08 25.30   0.3
CDF     77.91 334 eP     08 25.50  -0.3
        0.5s     2.40nm          4.1mb
FLN     79.69 339 eP     08 34.80  -0.3
        0.5s     4.00nm          4.4mb
LDF     79.75 338 eP     08 35.10  -0.4
        0.4s     1.70nm          4.1mb
LOR     79.93 335 eP     08 36.00  -0.4
        0.5s     3.30nm          4.3mb
GRR     80.13 339 eP     08 37.50   0.1
        0.4s     4.10nm          4.5mb
LBF     80.15 335 eP     08 37.20  -0.5
        0.8s     3.10nm          4.0mb
SSF     80.21 336 eP     08 37.60  -0.3
        0.7s     3.10nm          4.1mb
SMF     80.50 335 eP     08 39.20  -0.2
        0.5s     3.65nm          4.3mb
AVF     80.50 336 eP     08 39.30  -0.1
        0.5s     3.20nm          4.3mb
LPF     80.50 339 eP     08 39.60   0.2
        0.6s     4.25nm          4.3mb
LTX     80.50  57 eP     08 40.11   0.2
LPL     80.67 333 eP     08 40.80   0.2
        0.4s     0.90nm          3.8mb
LPG     80.68 333 eP     08 41.00   0.3
        0.4s     0.95nm          3.8mb
BGF     80.86 336 eP     08 41.20  -0.1
        0.5s     2.25nm          4.1mb
MAF     81.24 336 eP     08 43.80   0.5
        0.6s     4.80nm          4.4mb
LSF     81.50 337 eP     08 45.40   0.8
        0.6s     4.70nm          4.3mb
MFF     81.61 338 eP     08 45.50   0.3
        0.6s     3.45nm          4.2mb
SBF     81.93 332 eP     08 46.70  -0.3
        0.4s     5.05nm          4.6mb
RJF     82.37 336 eP     08 50.20   1.1
FRF     82.46 332 eP     08 50.10   0.6
CAF     82.57 336 eP     08 51.00   0.9
        0.6s     3.00nm          4.2mb
LMN     82.61  22 eP     08 50.00  -0.3
LRG     82.64 332 eP     08 51.20   0.8
LMR     82.70 332 eP     08 51.30   0.6
        0.5s     4.90nm          4.5mb
LFF     82.92 337 eP     08 52.50   0.7
        0.4s     2.75nm          4.3mb
LPO     83.04 336 eP     08 53.00   0.6
        0.5s     4.30nm          4.4mb
TBR     84.16  30 eP     08 58.30   0.2
EPF     84.80 336 eP     09 02.20   0.9
     S.D. = 0.8  on  95 of  97 obs.
-----------------------------------------
*  NOV  07, 1993  12h 03m 37.20± 1.80s
   41.402 N ± 8.8km   20.844 E ±14.3km
   DEPTH =  10.0km  (geophysicist)
 ALBANIA                                (391)
      ML 2.1 (SKO).

OHR     0.29 187 iPg     03 43.60   0.3
                 iSg     03 48.30
SKO     0.72  38 ePg     03 51.00  -0.4
                 iSg     04 00.80
FNA     0.74 147 iPg     03 50.33  -1.4
                 iSg     04 00.50
GRG     1.26 110 ePg     03 59.90  -0.7
                 eSg     04 16.42
VAY     1.30  93 iPn     04 02.00   0.7
KNT     1.57  98 ePb     04 05.26   0.1
                 eSb     04 25.46
LIT     1.80 136 ePb     04 09.62   1.0
                 eSb     04 32.10
IGT     1.91 192 ePb     04 13.22   3.1X
                 eSb     04 38.82
SOH     1.98 106 ePb     04 11.54   0.3
                 eSb     04 37.46
     S.D. = 0.9  on   8 of   9 obs.
-----------------------------------------
?  NOV  07, 1993  12h 04m 53.85± 4.79s
   41.751 N ±26.7km   27.302 E ±30.3km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                                 (366)
      ML 3.1 (ISK).

DMK     0.35  78 iPg     05 00.80  -0.2
                 eSg     05 07.30
CTT     1.04 125 iPg     05 13.30  -0.2
                 iSg     05 26.80
EDC     1.47 163 ePn     05 21.00   0.7
BNT     1.47 161 ePn     05 19.80  -0.6
ISK     1.49 117 ePn     05 21.00   0.4
HRT     2.01 117 iPn     05 28.60   0.4
DST     2.37 154 ePn     05 33.00  -0.4
     S.D. = 0.6  on   7 of   7 obs.
-----------------------------------------
%  NOV  07, 1993  12h 29m 20.31± 0.95s
   39.117 N ± 7.7km   27.624 E ± 9.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                                 (366)
      ML 2.7 (ISK).

IZM     0.77 202 ePg     29 35.10  -0.3
                 eSg     29 47.30
DST     0.92  58 ePn     29 38.60   0.7
EZN     1.23 306 iPn     29 43.80   0.6
EDC     1.24   8 ePn     29 43.00  -0.4
BNT     1.26  10 ePn     29 43.00  -0.7
     S.D. = 0.9  on   5 of   5 obs.
-----------------------------------------
?  NOV  07, 1993  12h 55m 21.97± 2.08s
   34.534 S ±16.7km  179.917 E ±17.4km
   DEPTH = 209.2 ± 16.6 km
   4.6mb (  3 obs.)
 SOUTH OF KERMADEC ISLANDS              (179)

HBZ     3.33 203 eP      56 17.90   1.6
PUZ     3.78 200 eP      56 21.10  -0.8
                 S       57 26.40
NOZ     4.35 200 eP      56 29.20   0.3
URZ     4.35 211 eP      56 29.20   0.2
                 S       57 39.40
OUZ     5.24 261 P       56 39.40  -0.8
PGZ     6.73 204 eP      56 59.40   0.0
MNG     7.02 209 eP      57 02.80  -0.4
KIW     7.46 211 eP      57 09.20   0.2
MTW     7.48 207 eP      57 08.70  -0.6
AMW     7.52 205 eP      57 09.20  -0.6
CAW     7.60 209 eP      57 09.40  -1.5
BLW     7.67 206 eP      57 12.30   0.5
MRW     7.85 210 eP      57 14.50   0.2
DIW     7.86 215 eP      57 16.00   1.7
TCW     8.02 212 eP      57 15.90  -0.5
ASPA   41.33 273 iPc     02 50.30   1.5
        0.4s     8.10nm          4.6mb
WR2    42.68 278 iPc     02 59.40  -0.3
        0.4s    17.60nm          4.9mb
WRA    42.70 278 P       02 59.80  -0.1
        0.5s     4.60nm          4.2mb
KAF   147.75 337 ePKP    14 35.00  -4.2X
NUR   149.47 336 iPKP    14 40.50  -1.4
NB2   152.50 348 PKP     14 47.20   0.7
        0.7s     2.30nm
HFS   152.85 345 ePKP    14 47.10   0.2
        0.4s     1.40nm
     S.D. = 0.9  on  21 of  22 obs.
-----------------------------------------
   NOV  07, 1993  13h 01m 54.50± 1.17s
   34.337 N ± 9.8km    3.291 W ± 8.5km
   DEPTH =  10.0km  (geophysicist)
 MOROCCO                                (395)
      mbLg 2.9 (MDD).

TAF     0.87  56 iPg     02 12.00   0.8
                 iSg     02 22.00
                 i       02 24.00
EMEL    1.00  16 iPc     02 13.89   0.5
                 e       02 25.90
IFR     1.73 242 iPn     02 25.50   0.5
                 iSn     02 45.00
NKM     2.06 303 iPn     02 31.00   1.4
                 iSn     02 56.50
EGUA    2.50 355 iPd     02 33.77  -2.1
                 e       03 01.80
EJIF    2.76 320 eP      02 40.63   1.0
                 e       03 11.50
ENIJ    2.77  18 iPc     02 38.77  -1.0
                 e       03 09.60
ECOG    2.94 356 iPc     02 42.56   0.3
                 e       03 14.30
EPRU    3.06 329 eP      02 44.86   1.0
                 e       03 18.70
ELUQ    3.31 346 iPc     02 47.68   0.2
                 e       03 23.90
AVE     3.59 254 iPn     02 50.00  -1.3
                 eSn     03 31.00
                 i       03 42.00
EHOR    3.82 336 iPd     02 53.93  -0.7
                 e       03 37.00
EBAN    3.84 354 eP      02 55.36   0.4
                 e       03 36.70
EVAL    4.28 320 eP      03 00.28  -0.9
                 e       03 48.00
EVIA    4.34   8 eP      03 01.96  -0.1
                 e       03 47.70
     S.D. = 1.1  on  15 of  15 obs.
-----------------------------------------
*  NOV  07, 1993  13h 58m 24.83± 1.72s
   5.113 S ±14.4km  147.056 E ±14.4km
   DEPTH =  10.0km  (geophysicist)
   3.8mb (  2 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)
      ML 4.2 (PMG).

MDG     1.28 264 iPc     58 47.90  -0.6
LAT     1.54 182 eP      58 54.30   1.9X
YYYY    1.56 224 eP      58 53.20   0.4
MNDI    3.54 253 eP      59 21.70   0.6
WWKK    3.73 293 eP      59 33.80  10.1X
PMG     4.27 179 eP      59 31.20  -0.1
WR2    19.24 219 eP      02 46.40  -5.7X
        0.5s     3.00nm          3.8mb
ASPA   22.38 213 eP      03 24.50  -0.4
        1.0s     3.70nm          3.8mb
GUN    67.43 303 P       09 23.80   0.2
GKN    68.50 303 P       09 38.00   7.9X
     S.D. = 0.6  on   6 of  10 obs.
-----------------------------------------
   NOV  07, 1993  13h 58m 50.86± 0.89s
   40.660 S ± 6.8km  176.324 E ± 9.6km
   DEPTH =  76.2 ±  8.9 km
   4.2mb (  1 obs.)
 NORTH ISLAND, NEW ZEALAND              (159)

PGZ     0.06 317 Pd      59 00.00  -1.6
                 eS      59 04.00
MNG     0.64 273 P       59 04.00  -1.8
                 S       59 11.40
TEHZ    0.77  29 P       59 07.80   0.6
AMW     0.78 213 P       59 08.80   1.6
MTW     0.80 231 P       59 08.20   0.7
BLW     0.96 222 P       59 10.70   1.3
WAHZ    0.96   1 P       59 09.40  -0.1
CAW     1.05 244 Pd      59 11.00   0.4
KIW     1.09 259 Pd      59 11.30   0.2
MRW     1.35 244 Pd      59 14.90   0.4
                 S       59 31.60
BSZ     1.37 308 P       59 15.00   0.3
CNZ     1.58 337 P       59 18.00   0.4
TCW     1.65 250 P       59 18.40   0.0
DIW     1.83 265 P       59 21.00   0.1
```

07d 13h

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PAHZ     1.88  18 eP     59 22.10    0.4
NRZ      2.26 305 eP     59 27.60    0.8
URZ      2.47  14 eP     59 28.90   -0.8
THZ      2.81 246 P      59 34.00   -0.4
LTZ      3.70 234 eP     59 45.60   -1.3
                  S      00 25.90
MQZ      4.09 221 eP     59 51.10   -1.1
                  S      00 34.50
WR2     41.21 287 eP     06 29.70    0.0
         0.5s     2.10nm          4.2mb
     S.D. = 1.0  on  21 of  21 obs.
-------------------------------------
   NOV  07, 1993  14h 04m 56.13± 0.95s
    5.944 S ± 7.1km  146.180 E ±10.7km
   DEPTH =  14.4 ±  6.1 km
   4.5mb (  6 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)

YYYY     0.36 215 iPc    05 04.90    1.0
MDG      0.80 330 iPc    05 09.40   -1.8
LAT      1.09 131 ePc    05 16.30    0.2
MNDI     2.52 265 eP     05 41.50    4.1X
WWKK     3.44 312 eP     05 54.30    4.0X
PMG      3.57 164 iPd    05 52.90    0.7
WR2     18.05 218 eP     09 07.50   -0.7
         0.6s     8.80nm          4.1mb
                  i      09 12.90
                  eS     12 14.80
ASPA    21.22 213 iPd    09 43.40   -0.4
         0.5s    10.60nm          4.5mb
                  iS     13 41.60
ARMA    24.88 169 eP     10 19.50   -0.4
DZM     25.31 131 iPc    10 25.10    1.1
STK     26.16 189 eP     10 28.00   -3.7X
         0.6s     3.40nm          4.2mb
BWA     28.42 176 eP     10 51.00   -1.3
CAN     29.35 175 eP     10 59.60   -1.1
TOO     31.49 181 eP     11 19.10   -0.5
XAN     53.12 321 eP     14 16.20    0.5
CD2     54.65 315 eP     14 26.60   -0.4
GTA     62.18 321 eP     15 20.60    1.0
         1.5s     6.00nm          4.5mb
GUN     67.16 303 P      15 51.60   -0.8
PKI     67.43 303 P      15 56.60    2.5
KKN     67.61 303 P      15 57.00    1.9
DMN     67.70 303 P      15 57.20    1.5
GKN     68.22 303 P      15 56.40   -2.5
WMQ     72.22 320 eP     16 23.80    1.0
SPA     84.09 180 ePc    17 26.90   -0.7
         0.5s     9.26nm          5.3mb
FBA     85.45  23 eP     17 32.93   -1.3
         0.8s     4.20nm          4.7mb
CNCB   139.35 124 PKP    24 23.00   -3.4X
LPB    139.40 124 ePKP   24 27.00    0.7
LPAZ   139.50 124 PKP    24 21.10   -5.6X
VAO    148.49 156 (PKP)  24 45.00    3.8X
KIC    151.09 272 PKP    24 51.00    5.7X
     S.D. = 1.3  on  23 of  30 obs.
-------------------------------------
   NOV  07, 1993  15h 46m 48.47± 0.65s
   26.326 S ± 6.9km   27.426 E ± 7.1km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)
      ML 2.7 (PRE). mbLg 3.0 (BUL).

KSR      0.66 314 e(P)   47 02.50    0.8
                  S      47 11.00
BFS      0.81 225 eP     47 05.10    0.4
                  S      47 13.20
SLR      0.97  53 eP     47 07.40   -0.1
                  S      47 20.60
SEK      2.00 175 eP     47 02.00  -21.4X
                  S      47 24.00
SWZ      2.06 245 eP     47 24.60    0.3
                  S      47 49.60
BFT      2.44  75 eP     47 31.00    1.2
                  S      47 59.00
BOSA     2.89 218 eP     47 35.50   -0.6
                  S      48 09.00
BLF      2.98 201 eP     47 37.00   -0.4
                  S      48 11.00
BUL      6.25  10 ePn    48 22.30   -1.5
                  iSg    50 04.90
     S.D. = 1.0  on   8 of   9 obs.
-------------------------------------
   NOV  07, 1993  16h 36m 06.08± 0.37s
    5.769 S ± 5.5km  145.918 E ± 7.9km
   DEPTH =  19.6km  (  4 depth phases)
   4.9mb ( 16 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)
      ML 4.8 (PMG).

YYYY     0.47 174 iPd    36 14.30   -1.4
MDG      0.53 345 iPc    36 19.90    3.3X
LAT      1.40 130 ePd    36 31.10    0.6
MNDI     2.28 260 eP     36 47.50    4.0X
WWKK     3.13 313 eP     36 59.00    3.6X
PMG      3.82 161 eP     37 05.20    0.1
CTA     14.24 179 iPc    39 31.00    2.2
         1.5s    55.56nm          5.0mb
                  i      39 44.30
HNR     14.37 106 eP     39 37.00    6.4X
QIS     15.93 202 eP     39 51.00    0.2
MTN     16.19 243 eP     39 54.00   -0.2
         1.0s   225.00nm          5.3mb
WR2     18.02 218 eP     40 16.20   -1.1
         0.6s    17.30nm          4.4mb
                  eS     44 05.00
KNA     19.53 238 eP     40 42.50    6.9X
         1.0s    71.00nm          4.9mb
ASPA    21.23 212 iPd    40 51.70   -1.5
         1.5s    12.90nm          4.1mb
       Z  21s     0.20um          3.5Msz
                  eS     45 00.10
BKM     24.82 120 iPd    41 30.50    2.0
ARMA    25.10 168 eP     41 31.20   -0.1
         0.8s    12.00nm          4.6mb
DZM     25.62 131 iPc    41 35.60   -0.6
STK     26.29 188 eP     41 38.40   -3.8X
         0.9s     5.90nm          4.2mb
WARB    27.41 220 eP     41 51.50   -1.0
         0.8s    13.00nm          4.7mb
BWA     28.61 176 eP     42 03.00   -0.3
                  i      42 08.10   18km
                  i      42 11.80
CAN     29.55 175 e(P)   42 12.90    1.1
MAT     42.70 351 (P)    44 02.00   -1.5
         1.2s    17.19nm          4.7mb
SSE     43.62 329 P      44 13.20    2.3
         1.0s   110.00nm          5.6mb
IPM     45.99 282 ePd    44 31.70    1.4
NST     50.09 296 eP     45 03.00    0.8
KHT     51.17 294 eP     45 11.50    1.1
KMI     52.01 308 eP     45 20.50    3.6X
         1.6s    50.00nm          5.2mb
                  pP     45 25.00   15km
CHTO    52.33 299 eP     45 19.50    0.3
XAN     52.82 321 eP     45 22.00   -0.7
                  pP     45 30.00   26km
CD2     54.35 315 eP     45 34.40    0.5
HHC     56.08 329 eP     45 47.00    0.6
GTA     61.88 321 eP     46 28.00    1.2
                  pP     46 34.00   20km
GUN     66.84 303 P      47 00.70    1.1
         0.8s    43.00nm          5.7mb
PKI     67.12 303 P      46 59.30   -2.0
KKN     67.30 303 P      47 03.30    1.0
         0.6s    20.00nm          5.4mb
GKN     67.91 303 P      47 04.00   -2.1
         0.6s    14.00nm          5.3mb
WMQ     71.92 320 P      47 30.50    0.3
SVW     80.47  25 eP     48 17.21   -0.8
         0.8s    25.62nm          5.3mb
PMR     83.47  26 eP     48 31.20   -2.2
IMA     83.72  21 eP     48 34.36   -0.5
         1.0s     4.13nm          4.6mb
FBA     85.39  23 eP     48 41.60   -1.5
BALM    86.30  28 (P)    48 47.98    0.2
CNCB   139.67 124 PKP    55 38.10    2.0X
LPB    139.71 124 PKP    55 41.00    5.0X
LPAZ   139.81 124 PKP    55 36.00   -0.4
RSTA   146.44 155 (PKP)  55 48.00    1.1
VAO    148.75 157 ePKP   55 55.60    4.9X
KIC    150.82 273 PKP    55 59.90    5.9X
         0.9s    12.50nm
TIC    151.10 273 PKP    56 00.30    5.9X
LIC    151.10 272 PKP    56 00.40    6.0X
     S.D. = 1.2  on  36 of  49 obs.
-------------------------------------
   NOV  07, 1993  17h 41m 39.75± 0.49s
   39.153 S ± 5.9km  174.861 E ± 7.8km
   DEPTH = 245.0 ±  7.3 km
   4.1mb (  2 obs.)
 NORTH ISLAND, NEW ZEALAND         (159)

CNZ      0.54  95 Pd     42 12.60    0.3
DRZ      0.56 103 P      42 12.80    0.1
BSZ      0.65 175 P      42 13.50    1.0
NRZ      0.74 255 P      42 13.60    0.6
WAHZ     1.28 116 Pc     42 16.70    0.4
PATZ     1.34  55 P      42 16.50   -0.3
WLZ      1.40  24 P      42 17.00   -0.1
                  S      42 43.50
UTU      1.43  47 P      42 16.90   -0.4
MNG      1.54 162 Pc     42 18.80    0.6
                  S      42 45.30
TTH      1.57 105 P      42 19.30    0.9
TAZ      1.58  55 P      42 18.20   -0.3
KIW      1.71 179 Pc     42 20.00    0.5
TEHZ     1.72 120 P      42 20.40    0.7
PAHZ     1.73  81 P      42 19.70   -0.1
DIW      1.80 203 Pd     42 20.90    0.6
PGZ      1.82 144 Pd     42 21.00    0.5
CAW      1.96 175 Pc     42 22.30    0.6
URZ      1.97  64 Pd     42 20.60   -1.2
                  S      42 48.40
MTW      2.06 166 Pc     42 23.00    0.3
MRW      2.08 183 Pc     42 23.30    0.5
                  S      42 53.70
TCW      2.11 192 Pc     42 23.80    0.7
WEL      2.13 182 P      42 23.70    0.4
AMW      2.26 163 Pd     42 25.10    0.6
BLW      2.26 168 Pc     42 25.10    0.5
MAHZ     2.35  92 P      42 25.90    0.4
WIZ      2.45  49 P      42 25.00   -1.4
QRZ      2.45 226 P      42 26.20   -0.3
                  S      42 59.80
KUZ      2.50  16 Pd     42 26.40   -0.5
                  S      43 00.80
NOZ      2.54  79 P      42 27.30    0.0
CCW      2.64 191 P      42 29.60    1.2
PUZ      2.87  69 P      42 29.90   -1.0
                  S      43 05.80
THZ      3.01 209 P      42 32.70    0.3
                  S      43 11.70
HBZ      3.12  61 P      42 32.50   -1.1
DSZ      3.49 221 P      42 37.50   -0.3
LTZ      4.12 208 P      42 45.60    0.3
                  eS     43 33.50
MQZ      4.84 199 P      42 53.10   -0.8
                  S      43 48.40
WVZ      5.01 217 P      42 55.50   -0.4
                  eS     43 50.60
BWZ      6.53 213 eP     43 14.60   -0.4
ODZ      6.67 207 eP     43 16.10   -0.7
LRCZ     7.19 213 eP     43 21.60   -1.9
MHZ      7.22 213 eP     43 21.90   -1.9
LSCZ     7.22 213 eP     43 21.60   -2.2
MSZ      7.56 221 P      43 26.30   -1.7
TUZ      7.82 208 P      43 31.90    0.6
ASPA    37.87 282 eP     48 37.10    2.3
         0.5s     3.70nm          4.2mb
WR2     39.69 287 eP     48 52.00    2.2
         0.4s     2.10nm          4.0mb
KAF    150.10 331 ePKP   01 02.00    5.8X
NUR    151.68 329 ePKP   01 01.90    3.3X
     S.D. = 1.0  on  46 of  48 obs.
-------------------------------------
?  NOV  07, 1993  18h 16m 37.89± 1.70s
   33.014 S ± 7.2km   68.878 W ±54.4km
   DEPTH =  10.0km  (geophysicist)
 MENDOZA PROVINCE, ARGENTINA       (139)

MDZ      0.13  10 eP     16 40.00   -1.1
RTCV     1.19  14 eP     16 59.90   -0.1
                  S      17 16.20
CFA      1.50  21 ePc    17 05.10    0.2
                  S      17 26.00
RTCB     1.52   3 ePc    17 05.30    0.0
RTLL     1.71  12 ePc    17 08.60    0.6
                  S      17 32.00
RFA      1.79 169 ePc    17 09.00   -0.1
                  S      17 37.00
MRA      2.74  78 e(P)   17 30.60    7.9X
     S.D. = 0.7  on   6 of   7 obs.
-------------------------------------
*  NOV  07, 1993  19h 09m 42.33± 1.02s
   24.578 N ±12.3km  104.478 E ±12.3km
   DEPTH =  33.0km  (normal)
   3.7mb (  1 obs.)
 YUNNAN, CHINA                     (318)
      ML 3.7 (BJI).
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KMI      1.67 289 Pgd   10 10.00   0.1
                  Sg    10 31.00
GYA      2.72  46 Pn    10 28.60   3.8X
                  Pg    10 34.80
                  Sn    11 05.00
                  Sg    11 15.80
CD2      6.34 354 ePn   11 17.00   1.0
                  Sn    12 29.60
QIZ      7.44 137 eP    11 32.10   0.8
GZH      8.25  99 eP    11 43.60   0.9
                  eS    13 16.10
XAN     10.19  21 P     12 08.50  -1.0
MDG     49.94 121 iP    18 33.50  -1.9
WRA     52.95 144 P     19 03.20   5.3X
         0.6s     0.50nm          3.7mb
     S.D. = 1.5  on   6 of   8 obs.
-------------------------------------
*  NOV  07, 1993  20h 24m 21.73± 0.62s
   62.195 S ± 9.1km  154.361 E ±18.4km
   DEPTH =  10.0km  (geophysicist)
   4.6mb (  3 obs.)  4.9Msz (  2 obs.)
 BALLENY ISLANDS REGION          (702)
      Mw 5.4 (HRV).
      CENTROID, MOMENT TENSOR    (HRV)
      Data Used: GDSN
      L.P.B.: 18S, 29C
      Centroid Location:
      Origin Time       20:24:27.9 0.3
      Lat 62.18S 0.03 Lon 154.51E 0.07
      Dep  15.0 FIX Half-duration  1.0
      Moment Tensor;   Scale 10**16 Nm
        Mrr= 0.85 0.38  Mtt= 7.60 0.39
        Mff=-8.45 0.56  Mrt= 0.00 0.00
        Mrf= 0.00 0.00  Mtf=-8.65 0.41
       Principal Axes:
        T  Val= 11.37  Plg= 0  Azm=204
        N        0.85      90      180
        P      -12.22       0      114
      Best Double Couple:Mo=1.2*10**17
       NP1:Strike=249 Dip=90 Slip=-180
       NP2:       339     90        0

DRV      7.65 228 eP    26 15.00  -0.8
SBA     16.22 171 eP    28 09.30  -1.5
CSY     19.16 239 iPc   29 01.50  14.1X
         0.9s    15.70nm
SPA     27.96 180 iPc   30 15.10   1.0
         0.9s    27.27nm         5.0mb
                  i     39 54.10
ASPA    40.94 331 iPd   32 07.30   1.5
         1.1s     8.00nm         4.4mb
      Z  21s      1.70um         4.9Msz
DZM     40.95  17 iPd   32 04.80  -1.1
CTA     42.45 349 eP    32 17.00  -1.1
      Z  21s      1.52um         4.9Msz
                  e     32 27.00
WR2     44.43 333 eP    32 33.30  -0.9
         0.7s     6.40nm         4.6mb
MOCB    90.97 143 P     37 28.20   0.7
CNCB    94.48 140 P     37 47.00   3.1X
LPB     94.71 139 eP    37 50.00   5.2X
VAY    144.72 256 ePKP  44 01.50   2.3X
CFR    145.12 266 ePKP  44 02.00   2.2X
OHR    145.36 254 ePKP  44 07.00   6.6X
SKO    145.75 256 ePKP  44 01.50   0.5
VRI    146.30 266 ePKP  44 02.50   0.7
MLR    146.38 265 ePKP  44 01.50  -0.6
MBC    148.24  27 ePKP  44 08.00   4.0X
         1.0s     4.00nm
GEC2   154.51 257 ePKP  44 15.70   1.6
         1.2s     1.50nm
     S.D. = 1.2  on  12 of  19 obs.
-------------------------------------
*  NOV  07, 1993  21h 27m 25.62± 0.95s
   32.090 S ± 9.2km   68.093 W ±10.9km
   DEPTH =  33.0km  (normal)
 MENDOZA PROVINCE, ARGENTINA     (139)

RTCV     0.44 301 iPc   27 34.50  -0.9
RTLL     0.82 337 ePc   27 40.90   0.1
                  S     27 50.00
RTCB     0.85 315 ePc   27 41.50   0.2
                  S     27 52.00
MDZ      1.02 219 eP    27 45.50   1.8
MRA      2.05 100 e(P)  28 02.40   4.0X
                  S     28 30.40
RFA      2.69 187 ePd   28 06.00  -1.6
                  S     28 47.50
TCA      3.08  77 eP    28 13.50   0.4
     S.D. = 1.5  on   6 of   7 obs.
-------------------------------------
&  NOV  07, 1993  21h 43m 40.41s
   34.552 N          119.159 W
   DEPTH =  10.4km
 SOUTHERN CALIFORNIA              ( 43)
      <PAS-P>. ML 3.2 (PAS), 3.1 (GS).
      Felt.

ABL      0.30 350 iPd   43 46.10  -0.7
FTC      0.39  35 P     43 47.59  -0.8
MARC     0.47 342 P     43 49.36  -0.7
PKM      0.64 302 P     43 52.29  -1.1
SNDC     0.92  50 P     43 57.14  -0.9
BCH      0.99 310 iPd   43 58.24  -1.0
                  eS    44 13.02
WJPM     1.02  33 P     43 58.66  -1.1
ISA      1.24  27 ePd   44 02.10  -1.4
SSK      1.26 105 ePn   44 02.85  -1.1
WBSM     1.29  40 P     44 03.85  -0.6
WORM     1.37  33 P     44 05.01  -0.5
WCHM     1.60  33 P     44 09.14   0.2
PKEM     1.69 333 (P)   44 09.34  -0.8
TOW      1.70  42 P     44 12.72   2.5
WLHM     1.74  23 P     44 11.15   0.1
VPEM     1.78  38 P     44 13.35   1.9
PEC      1.78 111 eP    44 09.40  -2.0
RCWM     1.86  41 P     44 15.32   2.6
GSC      2.07  68 eP    44 14.28  -1.4
PLM      2.25 121 eP    44 16.24  -2.2
LRC      2.29 318 P     44 16.79  -1.9
FRI      2.48 350 P     44 20.53  -0.8
BMSM     2.49 328 P     44 20.75  -0.8
BRMM     2.65 330 P     44 23.32  -0.6
BPRM     2.80 312 P     44 23.80  -2.2
MTUM     2.84  10 ePn   44 27.53   0.8
                  eS    45 07.12
BVYM     2.86 321 P     44 26.44  -0.4
SAO      2.89 321 ePn   44 24.59  -2.7
LTR      2.91 324 P     44 27.69   0.1
MMPM     3.05   2 ePn   44 30.04   0.2
ORC      3.10   7 P     44 34.68   4.2
MEMM     3.11   3 ePn   44 30.50   0.1
TPNV     3.36  44 ePn   44 33.13  -1.0
COE      3.38 324 ePn   44 32.44  -1.9
ARN      3.39 326 eP    44 33.50  -0.9
BONR     3.47  11 ePn   44 36.76   1.0
CMB      3.61 344 ePn   44 36.58  -1.0
TNP      3.86  23 ePg   44 49.25   8.1
ORV      5.33 340 eP    45 02.47   0.5
       39 obs. associated
-------------------------------------
   NOV  07, 1993  22h 12m 19.96± 0.79s
   40.284 N ± 6.9km   23.071 E ± 6.2km
   DEPTH =  10.0km  (geophysicist)
 GREECE                          (364)

THE      0.36 347 iPg   12 26.78  -0.5
                  iSg   12 32.53
LIT      0.48 248 ePg   12 28.44  -1.3
                  iSg   12 34.84
SOH      0.58  22 iPg   12 31.29  -0.4
                  eSg   12 40.44
PAIG     0.59 127 ePg   12 31.24  -0.6
                  eSg   12 41.36
OUR      0.70  86 iPg   12 33.57  -0.2
                  iSg   12 45.34
GRG      0.84 323 iPg   12 35.02  -1.2
                  eSg   12 47.96
KNT      0.89 352 iPg   12 36.42  -0.6
                  eSg   12 51.40
SRS      0.92  25 ePg   12 39.36   1.8
                  eSg   12 51.72
VAY      1.10 340 iPn   12 39.70  -1.0
FNA      1.39 292 ePb   12 44.04  -1.3
                  eSb   13 04.68
OHR      1.92 296 ePn   12 54.20   1.2
SKO      2.09 324 ePn   12 57.50   2.1
                  i     13 26.00
IGT      2.24 251 ePn   12 59.68   2.1
                  eSn   13 27.32
     S.D. = 1.4  on  13 of  13 obs.
-------------------------------------
&  NOV  07, 1993  22h 14m 29.62s
   38.758 N          122.722 W
   DEPTH =   1.9km
 NORTHERN CALIFORNIA              ( 36)
      <GM-P>. MD 2.9 (GM). ML 2.8
      (GS).

GAXM     0.05 209 P     14 30.68  -0.2
GBGM     0.07  31 P     14 31.28   0.2
GSGM     0.11   5 P     14 32.43   0.6
GRTM     0.19  13 P     14 33.64   0.3
NMTM     0.22  77 P     14 34.20   0.2
SKG      0.23 256 P     14 34.65   0.3
GHVM     0.33 358 P     14 36.82   0.7
NTYM     0.37 173 ePc   14 37.18   0.1
GHGM     0.38 348 P     14 37.70   0.5
GDCM     0.40 271 P     14 38.22   0.5
FTR      0.42 236 P     14 38.31   0.4
NBPM     0.42 102 P     14 39.12   1.0
BBR      0.51 165 P     14 40.20   0.3
NTBM     0.54 198 P     14 40.86   0.6
GHOM     0.70 294 P     14 43.90   0.3
CPIM     0.87 152 P     14 47.13   0.2
GCBM     0.88 315 P     14 48.27   1.0
HMR      0.94 129 eP    14 48.13  -0.2
JPRM     0.98 168 P     14 48.72  -0.3
BGC      1.07 151 P     14 51.04   0.4
MGA      1.14 170 P     14 51.40  -0.2
ORV      1.24  50 eP    14 50.93  -2.5
ARJM     1.38  92 P     14 53.91  -2.0
ARN      1.69 146 eP    14 57.80  -2.6
COE      1.71 151 eP    14 58.75  -1.9
CMB      1.97 111 eP    15 03.17  -1.3
LGPM     2.15 358 (P)   15 09.34   2.2
MMPM     3.13 110 (Pn)  15 19.79  -1.4
MEMM     3.17 109 ePn   15 21.22  -0.3
BONR     3.57 102 (Pn)  15 27.46   0.0
MTUM     3.57 112 (P)   15 28.31   0.9
       31 obs. associated
-------------------------------------
%  NOV  07, 1993  22h 19m 51.08± 0.81s
   40.244 N ± 6.0km   23.007 E ± 6.4km
   DEPTH =   5.0km  (geophysicist)
 GREECE                          (364)

THE      0.39 355 iPg   19 58.42  -0.5
                  iSg   20 03.98
LIT      0.42 250 ePg   19 58.86  -0.7
PAIG     0.61 121 ePg   20 02.62  -0.6
                  eSg   20 13.42
SOH      0.63  25 ePg   20 03.38  -0.4
                  iSg   20 12.10
GRG      0.85 327 iPg   20 08.06   0.1
                  eSg   20 19.74
KNT      0.92 355 ePg   20 07.86  -1.3
                  eSg   20 22.58
     S.D. = 0.6  on   6 of   6 obs.
-------------------------------------
*  NOV  07, 1993  22h 29m 54.06± 0.68s
   6.545 S ±12.7km  145.883 E ± 8.0km
   DEPTH =  46.5 ± 10.3 km
   4.0mb (  3 obs.)
 NEW GUINEA, PAPUA NEW GUINEA    (202)

YYYY     0.31  16 iPd   30 03.90   0.7
LAT      1.12  96 eP    30 19.00   5.5X
MNDI     2.25 280 eP    30 28.80  -0.9
PMG      3.11 156 eP    30 41.40  -0.4
WWKK     3.67 322 eP    30 54.50   4.6X
CTA     13.47 179 iP    33 15.80  11.1X
                  i     33 36.50
WR2     17.40 219 iPc   33 57.90   2.7X
         0.6s    13.60nm         4.3mb
                  eS    37 13.30
ASPA    20.56 213 eP    34 32.50   1.0
         0.6s     4.00nm         3.9mb
                  iS    38 26.40
                  iScS  45 55.00
BKM     24.46 119 iPd   35 09.50  -0.7
DZM     25.15 130 iPc   35 16.00  -0.7
STK     25.52 188 eP    35 20.80   0.8
         0.6s     2.80nm         4.0mb
WARB    26.80 221 eP    35 31.50  -0.4
URZ     42.38 143 P     37 45.90   0.3
HBZ     42.69 141 P     37 48.30   0.2
PUZ     42.96 142 P     37 50.10  -0.3
MNG     43.02 147 P     37 51.30   0.5
RSTA   145.76 155 ePKP  49 25.60  -4.4X
KIC    150.81 271 PKP   49 36.00  -2.2X
```

07d 22h

```
LIC   151.09 271 PKP   49 36.00  -2.6X
TIC   151.10 272 PKP   49 35.80  -2.8X
     S.D. = 0.8  on  12 of  20 obs.
-------------------------------------
% NOV  07, 1993  22h 32m 21.82± 0.69s
   40.249 N ± 5.6km   23.038 E ± 5.3km
   DEPTH =  10.0km  (geophysicist)
 GREECE                            (364)

THE     0.39 352 iPg   32 29.29  -0.5
                 eSg   32 35.08
LIT     0.45 251 iPg   32 30.88   0.0
                 eSg   32 37.84
PAIG    0.59 123 ePg   32 33.60  -0.1
                 eSg   32 44.20
SOH     0.62  23 ePg   32 34.24  -0.1
                 eSg   32 42.84
OUR     0.73  83 iPg   32 36.08   0.0
                 eSg   32 48.00
GRG     0.86 326 ePg   32 38.92   0.6
                 iSg   32 51.48
KNT     0.92 353 iPg   32 38.85  -0.5
                 eSg   32 52.40
SRS     0.96  26 ePg   32 40.84   0.7
                 eSg   32 55.44
     S.D. = 0.5  on   8 of   8 obs.
-------------------------------------
*  NOV  07, 1993  23h 11m 25.89± 0.93s
    9.239 N ±26.0km   77.629 W ± 8.8km
   DEPTH =  10.0km  (geophysicist)
   4.2mb (  1 obs.)
 NEAR NORTH COAST OF COLOMBIA     ( 96)
      MD 4.4 (UPA).

UPA     1.90 262 iPd   11 58.77   0.2
ECO     2.04 274 iP    12 02.36   1.6
                 iS    12 28.06
DVD     4.83 261 eP    12 40.01  -0.4
                 eS    13 34.42
BRU     4.89 265 iP    12 41.21  -0.5
                 eS    13 36.32
SDV     6.92  92 ePn   13 10.30   0.3
                 eSn   14 26.50
MEMM   46.72 314 (P)   19 54.92  -2.1
YKA    59.51 341 eP    21 32.70   1.3
       0.8s     1.60nm          4.2mb
WRA   147.35 247 PKP   31 09.40  -0.4
       0.7s     1.30nm
     S.D. = 1.4  on   8 of   8 obs.
-------------------------------------
   NOV  07, 1993  23h 21m 12.44± 0.28s
   44.225 N ± 2.6km   12.227 E ± 2.4km
   DEPTH =  23.2 ±  2.8 km
 NORTHERN ITALY                    (545)
      ML 4.2 (VIE), 3.8 (STR). MD 3.8
      (TRI), 3.7 (ROM).

RSM     0.34 151 P     21 19.39  -0.5
SFI     0.41 222 P     21 19.47  -1.5
PGD     0.50 226 P     21 21.02  -1.7
CRE     0.63 199 P     21 22.70  -2.1
MME     1.10 269 P     21 32.63   0.0
BDI     1.18 263 P     21 34.27   0.6
ASS     1.20 165 P     21 33.91   0.1
PII     1.33 248 P     21 35.72   0.1
VVI     1.76   4 P     21 42.88   0.9
SAL     1.84 319 P     21 44.22   1.3
TRI     1.84  36 ePn   21 43.30   0.3
                 iPg   21 46.70
                 i     21 52.50
                 i     22 07.10
                 i     22 15.50
MNS     1.87 170 P     21 44.36   0.9
RIY     1.90  53 ePn   21 43.90   0.0
                 iSn   22 09.40
BOB     2.06 286 P     21 48.95   2.6
VOY     2.16  33 iPnc  21 48.00   0.3
                 ePg   21 53.90
                 eSn   22 15.10
                 eSg   22 25.00
CEY     2.17  45 ePn   21 48.20   0.3
                 e     21 53.30
                 eSg   22 24.90
MDI     2.37 312 P     21 51.25   0.7
FVI     2.40   9 P     21 52.31   1.3
RMP     2.44 172 P     21 54.15   2.5
LJU     2.44  41 iPnc  21 52.70   1.0
        1.0s    800.00nm
                 iPg   21 59.60
RDP     2.49 172 P     21 54.11   1.7
VBY     2.51  58 iPnc  21 53.40   0.8
                 i     22 15.10
                 i(Sn) 22 23.30
                 i     22 37.40
                 i     22 53.00
PCP     2.66 278 P     21 56.10   1.3
                 S     22 28.10
SDI     2.77 155 P     21 58.40   2.0
OGA     2.77 343 ePn   21 57.80   1.2
SCE     2.84 353 iPnc  21 59.10   1.7
CKI     2.84 275 P     21 58.18   0.9
OSS     2.87 330 iPd   22 00.00   2.2
PGF     2.89 236 P     21 57.99  -0.1
                 S     22 33.34
FIN     2.89 271 P     21 58.34   0.3
                 S     22 32.79
KBA     2.96  15 iPnc  22 00.50   1.4
                 iPg   22 09.90
                 iSn   22 38.50
                 iSg   22 52.90
VDL     2.98 320 iPd   22 01.00   1.5
TMA     3.03 310 iPd   22 00.50   0.4
ZAG     3.10  58 e(Pn) 22 02.50   1.5
                 iSg   22 57.50
PTJ     3.13  56 ePn   22 01.60   0.1
                 iSn   22 57.50
ROB     3.13 273 P     22 01.77   0.3
                 S     22 38.11
IMI     3.14 266 P     22 01.82   0.1
                 S     22 38.60
HVAR    3.23 107 iPn   22 02.70  -0.2
                 iSn   22 43.80
ORO     3.33 296 P     22 04.00  -0.3
ORX     3.33 297 P     22 03.38  -0.9
                 S     22 41.57
SAOF    3.37 268 P     22 05.50   0.6
ENR     3.46 272 P     22 07.13   1.0
AUTN    3.46 268 P     22 07.22   0.8
                 S     22 46.68
LLS     3.48 321 iPd   22 07.90   1.2
STV     3.52 272 P     22 07.82   0.7
MMK     3.53 303 eP    22 06.70  -0.6
BHG     3.53   7 iPnc  22 09.60   2.5
AURF    3.55 266 P     22 07.41  -0.1
DOI     3.58 276 P     22 08.73   0.7
TOUF    3.59 268 P     22 09.22   1.0
BHB     3.60 282 P     22 07.40  -0.8
RSP     3.66 286 P     22 06.81  -2.3
MVIF    3.67 267 P     22 10.99   1.7
PZZ     3.69 276 P     22 08.59  -0.9
LSD     3.81 291 P     22 09.78  -1.6
DIX     3.88 300 iPd   22 12.70   0.4
CALN    3.88 265 P     22 15.32   3.1X
RRL     3.95 282 P     22 13.12  -0.1
FUR     4.00 351 iPnc  22 14.30   0.6
BNI     4.05 284 P     22 15.06   0.5
EMS     4.18 298 iPd   22 18.30   1.8
ZLA     4.22 322 eP    22 17.20   0.3
RSL     4.24 292 P     22 16.91  -0.4
SLE     4.39 325 iPd   22 19.30  -0.1
BBS     4.62 316 P     22 22.14  -0.5
                 S     23 11.72
FEL     4.68 323 eP    22 23.10  -0.5
GEC2    4.73  12 Pn    22 23.50  -0.8
                 Sn    23 18.80
LOMF    4.90 312 P     22 26.01  -0.6
                 S     23 19.95
VKA     4.94  34 iPnd  22 27.30   0.3
                 iPg   22 49.40
                 iSn   23 23.30
                 iSg   23 54.80
WET     4.94   5 eP    22 26.90  -0.2
KHC     5.00  10 iPn   22 27.40  -0.5
                 Pg    22 46.50
                 e     23 10.00
                 eSn   23 23.00
                 e     24 06.00
UZD     5.06  60 e(P)  22 50.40  21.6X
MOF     5.07 317 P     22 28.42  -0.6
                 S     23 24.03
ZST     5.22  39 e(Pn) 22 31.10   0.1
                 iPg   22 52.90
                 Lg    24 10.00
ECH     5.32 320 P     22 31.93  -0.6
WLS     5.38 323 P     22 32.73  -0.6
CDF     5.41 322 P     22 33.30  -0.6
GRF     5.51 353 iPnc  22 34.50  -0.7
                 ePg   22 58.80
                 iSn   23 33.90
                 e(Sg) 23 57.70
SRO     5.55  48 eP    23 02.30  26.6X
SSB     5.57 284 P     22 34.63  -1.5
LANF    5.65 329 P     22 36.73  -0.4
VITF    5.89 315 P     22 39.96  -0.5
BGY     5.96  82 e(Pn) 22 04.70 -36.7X
                 i     22 12.50
                 i     22 33.80
                 eSn   22 39.70
PRU     5.98  14 Pn    22 39.80  -1.9
       1.4s    120.00nm          5.4mb X
                 Pg    23 04.90
                 Sn    23 43.00
                 Sg    24 19.50
HOF     6.10 358 eP    22 43.50   0.1
MOX     6.44 357 ePn   22 46.00  -2.2
                 iPg   23 14.70
                 iSg   24 49.80
ABH     6.50 332 eP    22 48.80  -0.3
RUP     6.52 329 eP    22 49.30  -0.1
TNS     6.53 338 ePnc  22 48.80  -0.7
BRG     6.75   9 ePn   22 51.10  -1.5
                 iPg   23 20.90
                 iSn   24 03.70
                 iSg   24 54.10
OHR     7.04 113 iPn   22 55.30  -1.5
CLL     7.11   4 iPn   22 56.10  -1.5
       0.3s      9.00nm          5.3mb X
                 (Sg)  25 09.00
SKO     7.11 105 ePn   22 56.00  -1.6
KSP     7.17  21 e(Pn) 23 07.00   8.5X
                 eS    24 09.00
SPC     7.42  45 eP    23 10.80   8.7X
ENN     7.81 329 eP    23 08.00   0.6
       0.6s      4.70nm          4.9mb X
OJC     7.90  38 e(P)  24 02.00  53.2X
VAY     8.14 107 ePn   22 46.00 -26.1X
NSD    21.33   8 eP    25 59.20  -0.4
       0.4s      0.60nm          3.4mb
     S.D. = 1.1  on  91 of  99 obs.
-------------------------------------
   NOV  07, 1993  23h 40m 40.38± 0.73s
   67.847 N ± 7.9km   20.225 E ± 9.9km
   DEPTH =  10.0km  (geophysicist)
 SWEDEN                            (536)
      MD 2.6 (BER).

KTK1    1.61  42 eP    41 08.25  -0.7
                 eSg   41 31.40
TRO     1.86 346 eP    41 12.84   0.4
                 eSg   41 38.29
LOF     2.53 280 eP    41 22.05  -0.1
ARA0    2.57  46 ePn   41 23.07   0.4
                 ePg   41 35.76
                 eS    41 56.46
NSD     2.72 193 eP    41 25.60   0.7
       0.1s      2.40nm
NRA0    8.07 212 ePn   42 39.58  -0.7
     S.D. = 0.8  on   6 of   6 obs.
-------------------------------------
*  NOV  07, 1993  23h 47m 35.42± 0.84s
   13.183 N ±11.3km  145.141 E ± 9.5km
   DEPTH =  74.7 ±  5.0 km
   4.7mb ( 12 obs.)
 MARIANA ISLANDS                   (216)
      Felt (III) at Merizo and Dededo,
      Guam.

GUA     0.42 328 iPd   47 47.80  -0.3
GUMO    0.48 326 iPd   47 48.70   0.0
                 iS    47 59.20
PJG     0.48 326 iP    47 48.80   0.1
MAT    24.08 346 eP    52 45.00   0.0
       0.8s      4.48nm          3.9mb
TIY    38.00 316 eP    54 49.60   1.6
ASPA   38.24 197 eP    54 50.50   0.5
       0.7s      4.40nm          4.5mb
GTA    47.64 312 eP    56 06.80   0.6
       1.5s      8.00nm          4.4mb
                 PcP   57 37.00
GUN    56.90 295 P     57 15.80   0.1
       0.6s     14.00nm          5.3mb
```

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PKI     57.31 294 P      57 18.60   0.0
KKN     57.43 295 P      57 18.60  -0.7
DMN     57.58 294 P      57 20.60   0.2
GKN     58.00 295 P      57 22.40  -0.8
SLKM    66.21  29 eP     58 16.24  -1.0
PMR     67.01  28 eP     58 21.27  -1.0
         0.8s    12.85nm          4.9mb
FBA     68.48  25 eP     58 30.69  -0.7
         0.7s     2.39nm          4.2mb
KLU     68.48  29 eP     58 31.57   0.0
INK     74.64  22 eP     59 08.00   0.0
         1.0s     3.00nm          4.2mb
MBC     78.60  14 eP     59 32.00   2.0
YKA     83.10  27 eP     59 53.90  -0.1
         0.6s     4.80nm          4.6mb
NEW     85.36  42 eP     00 06.76   1.0
         0.6s     9.77nm          5.0mb
LRM     89.10  43 ePd    00 25.50   1.3
                 e      00 37.70
DAG     89.72 356 iPc    00 25.90  -0.2
         0.7s     4.11nm          4.8mb
KAF     91.20 336 iP     00 32.70  -0.5
         0.5s     4.70nm          5.1mb
NB2     97.52 339 P      01 01.40  -0.9
         1.1s     4.60nm          4.9mb
KIC    144.33 301 PKP    07 05.00  -0.5
TIC    144.41 302 PKP    07 05.00  -0.7
         0.7s    18.50nm
LIC    144.65 301 PKP    07 06.00  -0.1
LPAZ   147.70 100 PKP    07 16.20   4.4X
LPB    147.72 100 ePKP   07 14.00   2.4X
CNCB   147.82 101 PKP    07 18.00   6.1X
MOCB   149.57 110 PKP    07 20.10   5.7X
     S.D. = 0.8  on  27 of  31 obs.
-----------------------------------
?  NOV  08, 1993  00h 20m 58.97± 2.13s
   10.393 N ±24.3km    69.880 W ±21.7km
   DEPTH =  10.0km  (geophysicist)
 VENEZUELA                          (101)

CANV     1.22  58 iPc    21 22.20   0.5
MORO     1.61  73 eP     21 26.60  -1.0
SDV      1.67 206 iPnd   21 28.60   0.0
                iSn     21 50.20
CAR      2.91  88 iPgd   21 10.20 -36.0X
                iSg     21 19.10
LLAV     3.02  88 eP     21 47.90   0.0
OLLA     3.05  97 eP     21 48.60   0.4
                iS      22 37.50
     S.D. = 0.8  on   5 of   6 obs.
-----------------------------------
   NOV  08, 1993  00h 38m 18.59± 1.04s
   31.844 S ±10.5km    68.176 W ± 6.5km
   DEPTH = 129.4 ± 14.2 km
 SAN JUAN PROVINCE, ARGENTINA      (137)
     MD 4.1 (SAN).

CFA      0.24 347 iPc    38 36.00  -1.0
RTCV     0.31 267 iPd    38 36.80  -0.4
RTLL     0.57 334 iPd    38 38.00  -0.3
RTCB     0.64 304 iPd    38 39.00   0.2
MDZ      1.18 209 iP     38 44.90   1.3
                i       39 00.90
RTRS     2.00 326 P      38 36.50 -16.4X
RTPR     2.10  43 iPc    38 55.00   0.9
MRA      2.17 106 iPc    38 55.40   0.4
                S       39 20.00
JACH     2.21 247 iP     38 56.59   0.9
                iS      39 26.45
FCH      2.32 230 iPd    38 58.32   1.0
                (S)     39 31.06
PEL      2.48 238 iPd    38 59.51   0.4
                iS      39 30.92
SAN      2.64 232 iP     39 01.83   0.7
ROCH     2.65 244 iP     39 01.17  -0.3
                iS      39 34.43
PCH      2.65 227 iP     39 01.90   0.6
RFA      2.93 185 iPd    39 04.00  -1.0
                S       39 44.70
TACH     2.94 231 iP     39 04.93  -0.2
                iS      39 40.99
TCA      3.10  82 iPc    39 06.80  -0.4
                (S)     39 36.00
LCCH     3.29 239 iP     39 08.53  -1.1
LNV      3.44 231 iP     39 10.13  -1.5
                (S)     39 49.63
     S.D. = 0.9  on  18 of  19 obs.
-----------------------------------
?  NOV  08, 1993  00h 40m 09.60± 3.04s
   21.957 S ±24.8km  169.612 E ±24.3km
   DEPTH = 126.1 ± 21.0 km
   4.0mb (  3 obs.)
 LOYALTY ISLANDS REGION            (189)

DZM      2.94 267 iPd    40 55.80  -0.3
                iS      41 44.80
BKM      4.46 343 iPc    41 16.50   0.2
                iS      42 35.50
STK     26.80 242 eP     45 40.40   0.7
         5.6s     1.40nm          2.8mb X
ASPA    32.91 260 iPd    46 34.20   0.2
         1.1s     7.40nm          4.4mb
WR2     32.94 267 eP     46 33.00  -1.2
         0.6s     1.40nm          3.9mb
WRA     32.96 267 P      46 35.00   0.6
         0.6s     0.90nm          3.7mb
CHTO    80.10 295 eP     52 08.10   0.8
SPC    143.57 326 ePKP   59 25.10  -6.0X
KSP    144.43 331 ePKP   59 27.00  -5.2X
SRO    145.43 325 iPKP   59 29.90  -4.1X
BRG    145.44 333 iPKPc  59 29.00  -4.9X
         1.0s    20.00nm
CLL    145.51 334 iPKP   59 28.80  -5.2X
         1.2s    20.00nm
ZST    145.82 327 ePKP   59 30.80  -3.8X
PRU    145.83 331 iPKPc  59 30.10  -4.5X
         0.7s    11.70nm
MOX    146.58 334 ePKPc  59 32.20  -3.6X
         1.2s    12.00nm
SKO    146.71 314 iPKPc  59 33.50  -2.8X
KHC    146.88 331 iPKPc  59 33.30  -3.1X
                e       59 40.00
                e       00 08.00
GEC2   147.03 330 e(PKP) 59 35.80  -0.9
         0.8s     7.50nm
WET    147.18 331 iPKPd  59 34.40  -2.5X
GRF    147.48 334 iPKPc  59 35.00  -2.3X
OHR    147.52 313 ePKP   59 33.20  -4.5X
BHG    148.22 330 iPKPd  59 36.90  -1.6
VBY    148.52 324 iPKPc  59 38.00  -1.1
LJU    148.56 326 ePKPc  59 38.00  -1.1
VOY    148.90 326 iPKPc  59 38.20  -1.6
RIY    149.09 325 ePKP   59 38.10  -1.8
CDF    150.06 336 ePKP   59 40.50  -1.0
         0.7s     7.30nm
OSS    150.24 331 ePKPd  59 41.90   0.0
LLS    150.61 332 ePKPd  59 42.50   0.0
BSF    150.73 336 ePKP   59 42.00  -0.5
         0.7s     5.30nm
HAU    150.75 337 ePKP   59 42.00  -0.4
         0.6s     5.05nm
TMA    151.25 331 ePKPd  59 43.70   0.3
FLN    152.11 346 ePKP   59 44.30  -0.1
         0.4s     2.40nm
LDF    152.19 345 ePKP   59 44.40  -0.1
         0.6s     2.55nm
LOR    152.25 339 ePKP   59 45.20   0.5
         0.5s     1.40nm
GRR    152.55 346 ePKP   59 45.40   0.4
         0.4s     1.45nm
SSF    152.55 339 ePKP   59 45.80   0.8
         0.5s     1.70nm
LPL    152.64 333 ePKP   59 46.90   1.4
         0.5s     0.85nm
LPG    152.65 333 ePKP   59 46.50   0.9
LPF    152.92 346 ePKP   59 46.20   0.7
BGF    153.21 339 ePKP   59 47.00   1.0
TCF    153.65 340 ePKP   59 48.10   1.5
         0.5s     1.40nm
LSF    153.90 341 ePKP   59 48.60   1.6
     S.D. = 1.0  on  30 of  43 obs.
-----------------------------------
   NOV  08, 1993  01h 06m 02.99± 0.30s
   28.698 N ± 4.8km   34.673 E ± 3.5km
   DEPTH =  13.8km  (  2 depth phases)
   4.9mb ( 50 obs.)  4.3Msz (  2 obs.)
 EGYPT                             (553)
     MD 4.6 (HLW).

SRFA     0.51  63 iP     06 12.73  -0.4
HQL      0.66  30 iPd    06 16.67   0.9
AYN      1.18  81 iP     06 25.67   1.1
WAJH     3.02 146 iPd    06 50.00  -1.3
HLW      3.13 292 ePn    06 53.50   0.7
                e       06 55.00
                e       06 56.00
                eSn     07 30.00
CSS      6.35 350 eP     07 36.50  -1.9
PPCY     6.48 343 eP     07 40.00  -0.2
UQSK     7.43 111 ePc    07 52.33  -1.3
QASM     8.29 106 eP     08 06.33   0.6
                eS      10 16.67
AFIF     8.89 119 eP     08 14.00  -0.1
                iS      10 28.00
TAIF     8.99 144 ePc    08 15.33  -0.2
                eS      10 16.67
CIN     10.45 330 eP     08 32.00  -3.4X
RYD     11.38 108 eP     09 06.33  18.1X
                eS      11 59.50
KER     12.01  59 eP     09 02.00   5.2X
TAB     13.48  43 eP     09 23.00   6.6X
ERE     14.02  33 eP     09 30.00   6.6X
KDZ     14.96 332 eP     09 35.00  -0.6
RZN     15.29 331 eP     09 39.00  -1.1
PLD     15.64 331 eP     09 44.00  -0.4
MMB     15.65 328 eP     09 44.00  -0.6
VAY     16.01 325 iP     09 48.60  -0.6
KKB     16.17 327 eP     09 50.00  -1.3
PGB     16.23 331 eP     09 56.00   3.9X
PVL     16.32 335 eP     09 57.00   3.8X
VTS     16.68 329 eP     09 58.00   0.1
PYA     16.71  21 eP     10 02.00   3.8X
     Z  16s     1.00um
OHR     16.79 321 iP     09 56.50  -2.7
         1.3s    50.00nm          4.5mb
SKO     17.06 324 iPd    10 01.70  -0.8
         1.6s   100.00nm          4.7mb
GRO     17.10  28 eP     10 08.00   5.1X
         2.0s   240.00nm          5.0mb
CFR     17.25 344 eP     10 04.50  -0.4
MAK     17.61  32 eP     10 13.00   3.7X
MLR     18.13 340 eP     10 15.00  -1.0
CMP     18.22 338 ePd    10 17.00   0.0
VRI     18.25 342 eP     10 16.00  -1.4
ASH     21.78  59 eP     10 54.50  -1.7
UZH     22.07 338 iPc    11 00.00   1.0
         1.0s    60.00nm          5.0mb
                e       11 28.20
                e       11 38.00
PTJ     22.63 324 eP     11 04.20  -0.5
VBY     22.73 323 eP     11 07.70   2.1
SRO     22.92 331 eP     11 08.10   0.7
RIY     23.10 321 e(P)   11 08.10  -1.1
SPC     23.26 336 iPd    11 12.20   1.3
LJU     23.47 323 eP     11 15.00   2.2
                e       11 37.00
TRI     23.67 321 eP     11 17.40   2.7
ZST     23.74 330 eP     11 14.20  -1.1
                i       11 17.50
OJC     24.28 336 iPd    11 21.50   0.9
         1.0s    90.00nm          5.3mb
                e       11 29.40
KBA     24.77 324 iPc    11 27.30   1.7
         0.9s    50.70nm          5.2mb
                i       11 33.00
PGF     24.91 311 eP     11 28.70   1.8
         1.2s    47.30nm          5.0mb
BHG     25.42 324 iPc    11 32.50   0.9
         1.3s    50.00nm          5.0mb
MNK     25.71 350 eP     11 38.00   3.8X
GEC2    25.77 327 ePd    11 35.40   0.4
         0.9s    13.32nm          4.6mb
                e       11 37.30
                e       11 40.70
                e       11 47.50
WTTA    25.79 322 iPc    11 36.30   1.1
         1.0s    56.10nm          5.2mb
                i       11 38.30
WATA    25.86 322 iPd    11 36.10   0.2
                i       11 38.60
OGA     25.88 321 iPc    11 38.00   1.8
SQTA    25.99 322 iPc    11 38.00   0.9
         0.9s    40.50nm          5.1mb
                i       11 40.10
KHC     26.03 327 eP     11 37.40   0.1
         1.0s     7.00nm          4.3mb
                e       12 30.50
KSP     26.10 333 eP     11 39.50   1.6
MOTA    26.13 322 iPc    11 38.70   0.4
         1.1s    48.40nm          5.1mb
                i       11 40.90
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08d 01h

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PRU     26.20 330 Pc    11 39.00   0.2
        1.1s    33.80nm         4.9mb
WET     26.37 327 iPc   11 40.60   0.2
        1.0s    18.00nm         4.7mb
OBN     26.42   2 iPd   11 40.50  -0.2
        0.9s    40.00nm         5.1mb
                  e     12 27.00
SBF     26.51 312 eP    11 42.00   0.2
        1.0s    33.80nm         5.0mb
FUR     26.54 323 iPc   11 42.20   0.2
FRF     26.90 311 eP    11 46.80   1.5
        1.3s    76.55nm         5.2mb
LMR     26.90 310 eP    11 46.50   1.2
        1.4s    55.75nm         5.0mb
LRG     27.05 311 eP    11 48.10   1.5
        1.2s    76.15nm         5.3mb
BRG     27.10 331 iPc   11 47.40   0.3
        1.0s    38.00nm         5.0mb
                  i     11 49.40
MOS     27.11   4 eP    11 47.00   0.0
GRF     27.54 326 ePd   11 50.70  -0.4
        1.1s    26.00nm         4.9mb
      Z 17s      0.10um         3.5MszX
                  e(pP) 11 53.40  10km
LPG     27.68 315 eP    11 52.90   0.1
        0.8s     9.25nm         4.6mb
LPL     27.70 315 eP    11 53.00   0.1
        1.3s    31.05nm         4.9mb
CLL     27.83 330 iPd   11 53.20  -0.5
        1.3s    30.00nm         4.9mb
                  i     11 56.10
                  i     12 21.50
MOX     27.99 328 ePd   11 55.30   0.1
        1.3s    72.00nm         5.3mb
FEL     28.14 320 P     12 09.50  12.8X
LOMF    28.54 318 P     12 06.11   5.8X
MOF     28.63 319 P     12 06.55   5.5X
WLS     28.80 321 P     12 08.41   5.8X
ECH     28.81 320 P     12 08.41   5.8X
BSF     28.81 319 eP    12 02.10  -0.6
        1.1s    16.85nm         4.7mb
CDF     28.85 321 eP    12 02.30  -0.7
        1.4s    22.65nm         4.8mb
LBF     30.07 316 eP    12 13.20  -0.8
        0.8s     6.30nm         4.5mb
LOR     30.27 316 eP    12 14.90  -0.8
        0.9s     4.60nm         4.3mb
AVF     30.37 315 eP    12 16.30  -0.3
        0.9s     1.95nm         4.0mb
SSF     30.40 316 eP    12 16.00  -0.8
        1.0s     5.40nm         4.4mb
BGF     30.59 314 eP    12 18.20  -0.3
        0.7s     8.80nm         4.7mb
RJF     30.96 311 eP    12 22.20   0.4
        1.1s    14.15nm         4.8mb
LPO     30.97 310 eP    12 22.30   0.5
        0.9s    10.95nm         4.7mb
LFF     31.35 310 eP    12 25.80   0.6
        0.8s    10.05nm         4.8mb
ARU     32.48  25 eP    12 34.00  -1.0
MFF     32.51 313 eP    12 34.90  -0.4
LDF     33.26 316 eP    12 40.70  -1.1
        1.0s    15.60nm         4.9mb
FLN     33.55 316 eP    12 43.20  -1.1
        0.9s    25.55nm         5.2mb
SVE     33.55  26 ePd   12 45.50   1.3
      Z 16s      0.50um         4.3MszX
      N 16s      0.40um
      E 16s      0.40um
LPF     33.60 315 eP    12 43.90  -0.9
        0.8s     7.80nm         4.7mb
GRR     33.63 316 eP    12 44.00  -1.0
        1.0s    21.60nm         5.0mb
KAF     33.87 353 eP    12 46.70  -0.2
HFS     34.50 342 eP    12 50.50  -1.9
        0.6s     5.80nm         4.6mb
KIC     43.35 247 P     14 05.90  -0.7
        1.0s    18.50nm         4.8mb
TIC     43.41 247 P     14 06.40  -0.7
LIC     43.66 247 P     14 08.60  -0.5
      Z 19s      0.31um         4.2Msz
GKN     43.71  78 P     14 10.60   0.9
DMN     44.21  79 P     14 14.80   1.0
KKN     44.32  79 P     14 16.00   1.4
PKI     44.48  79 P     14 16.60   0.5
WMQ     44.59  55 P     14 17.80   1.3
GUN     44.80  78 P     14 19.60   0.9
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GTA     53.97  60 eP    15 28.50  -0.3
        1.5s    13.00nm         4.7mb
                  pP    15 34.00  18km
                  sP    15 37.00
DAG     54.17 347 iPc   15 28.20  -1.3
        0.9s     6.72nm         4.7mb
ZAK     55.10  47 eP    15 37.00   0.3
        1.5s    15.00nm         4.8mb
LZH     57.78  63 eP    15 55.00  -1.2
        1.8s    30.00nm         5.0mb
      Z 20s      0.30um         4.4Msz
BOD     60.71  37 eP    16 14.70  -1.3
        1.5s    14.00nm         4.9mb
HHC     62.46  56 P     16 29.00   0.8
GYA     62.92  73 P     16 30.60  -0.9
        1.0s    13.00nm         5.1mb
TIY     63.98  60 eP    16 37.00  -1.2
RES     71.83 348 eP    17 27.00   0.3
MBC     74.05 354 eP    17 41.00   1.4
        1.0s     2.00nm         4.1mb
INK     82.89 356 eP    18 28.00   0.0
YKA     85.85 346 eP    18 42.80  -0.3
        0.9s     4.40nm         4.7mb
     S.D. = 1.0  on 101 of 117 obs.
-----------------------------------
   NOV  08, 1993  01h 25m 09.58± 0.37s
    5.923 S ± 5.7km  145.909 E ± 7.0km
   DEPTH =  19.3km  ( 3 depth phases)
   4.8mb ( 12 obs.)  4.4Msz (  1 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)
      ML 4.9 (PMG).

YYYY     0.32 169 iPd   25 16.40  -0.3
MDG      0.68 349 iPc   25 17.80  -4.8X
LAT      1.31 124 eP    25 33.30   0.4
MNDI     2.25 264 eP    25 50.50   3.9X
WWKK     3.23 315 eP    26 01.20   0.9
PMG      3.68 160 eP    26 07.00   0.3
RAB      6.46  75 e(P)  26 48.00   1.9
CTA     14.08 179 iP    28 32.00   1.6
        1.2s    19.53nm         4.7mb
                  i     28 39.00
                  eS    31 24.00
WR2     17.90 218 eP    29 18.70  -0.5
        1.2s    18.10nm         4.1mb
                  eS    31 33.50
WRA     17.91 218 P     29 19.20  -0.2
        1.6s     9.10nm         3.7mb X
KNA     19.45 238 eP    29 38.80   0.7
        1.0s    71.00nm         4.9mb
ASPA    21.09 212 iPc   29 54.20  -1.2
        1.1s    30.60nm         4.6mb
                  eS    33 53.90
BKM     24.75 120 iPc   30 31.90   0.5
DZM     25.53 131 iPc   30 37.10  -1.8
STK     26.14 188 eP    30 40.60  -3.8X
        1.4s     5.50nm         4.0mb
BWA     28.46 176 eP    31 04.40  -1.1
TOO     31.50 181 eP    31 33.00   0.4
        0.9s    15.00nm         4.9mb
GYA     49.82 312 P     34 05.40   1.7
KMI     52.09 308 eP    34 23.00   1.9
        1.6s    50.00nm         5.2mb
                  pP    34 28.00  17km
CHTO    52.40 299 eP    34 24.00   0.8
XAN     52.94 321 P     34 25.60  -1.5
        1.2s     9.20nm         4.6mb
                  pP    34 32.50  23km
                  sP    34 37.00
TIY     53.44 327 eP    34 31.80   1.1
CD2     54.45 315 eP    34 37.30  -0.9
LZH     57.45 320 eP    34 59.50  -0.4
        1.8s    35.00nm         5.1mb
      Z 20s      0.30um         4.4Msz
                  pP    35 10.00  35kmX
GTA     61.99 321 eP    35 30.80  -0.3
        2.0s    18.00nm         4.9mb
                  pP    35 36.50  19km
                  sP    35 40.50
GUN     66.92 304 P     36 02.10  -1.6
PKI     67.19 303 P     36 06.10   0.7
KKN     67.37 303 P     36 06.90   0.5
DMN     67.46 303 P     36 06.60  -0.4
GBA     70.67 287 P     36 32.00   5.4X
WMQ     72.03 320 P     36 34.00  -0.4
IMA     83.87  21 eP    37 38.90  -0.3
        1.2s    10.61nm         4.9mb
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KLU     84.98  27 eP    37 43.85  -0.9
FBA     85.54  23 eP    37 44.51  -2.9
        1.0s     7.73nm         4.9mb
INK     91.98  22 eP    38 17.00  -0.9
MOCB   138.92 132 PKP   44 32.60  -5.5X
CNCB   139.59 125 PKP   44 35.30  -4.2X
LPB    139.64 124 PKP   44 37.00  -2.4X
LPAZ   139.73 124 PKP   44 44.10   4.3X
PPD    147.50 149 ePKP  44 54.20   2.0
KIC    150.82 272 PKP   45 04.00   6.5X
        0.9s    16.00nm
TIC    151.10 273 PKP   45 02.80   4.8X
LIC    151.10 272 PKP   45 01.60   3.6X
     S.D. = 1.2  on  32 of  43 obs.
-----------------------------------
*  NOV  08, 1993  01h 40m 49.03± 0.80s
    9.537 S ±10.1km  119.168 E ±10.7km
   DEPTH =  33.0km  (normal)
   4.2mb (  1 obs.)
 SUMBA REGION, INDONESIA          (287)

KHKI     3.70 288 eP    41 45.70   0.4
                  eS    42 31.00
                  e     44 43.00
MKS      4.30   4 iPd   41 53.40  -0.4
                  iS    42 39.00
MBL     11.57 177 eP    43 34.00  -1.1
                  eS    45 35.00
MTN     12.19 107 eP    43 43.00  -0.3
                  eS    45 50.00
WR2     17.96 127 eP    44 58.00   0.0
                  eS    48 10.00
ASPA    19.89 137 eP    45 22.20   1.5
        0.5s     6.70nm         4.2mb
     S.D. = 1.1  on   6 of   6 obs.
-----------------------------------
   NOV  08, 1993  03h 38m 18.71± 0.37s
   19.058 N ± 5.3km   68.006 W ± 5.3km
   DEPTH =  33.0km  (normal)
 NORTH ATLANTIC OCEAN             (402)

LRS      1.34 124 P     38 41.00  -0.3
APR      1.35 116 P     38 41.70   0.3
MGP      1.36 140 P     38 41.10  -0.4
PNP      1.60 128 P     38 44.90  -0.2
CLLP     1.67 125 P     38 46.40   0.4
SJG      2.00 118 P     38 50.70  -0.1
LPR      2.16 110 P     38 52.20  -0.9
CPD      2.23 117 P     38 53.80  -0.3
BPA      6.18 108 eP    39 50.50   0.3
                  eS    40 58.00
CANV     8.01 186 iPd   40 16.30   0.5
                  iS    41 43.30
CAR      8.57 173 iP    40 23.90   0.3
LLAV     8.61 172 iPd   40 23.70  -0.5
OLLA     9.06 172 iPd   40 30.90   0.5
                  iS    42 05.90
PCRV     9.41 159 eP    40 35.00  -0.2
SDV     10.43 194 eP    40 48.70  -0.6
                  iS    42 42.20
TRN     10.52 142 eP    40 51.61   1.3
                  eS    42 41.50
LHS     19.12 326 (P)   42 39.62  -2.0
CEH     19.41 332 (P)   42 47.65   2.6
        0.1s    31.33nm         5.5mb
LTX     33.98 294 eP    44 53.75  -7.9X
CNCB    35.65 180 P     45 16.00  -0.4
PV08    40.17 308 eP    45 54.13   0.2
PV10    40.41 307 (P)   45 55.59  -0.2
PV09    40.51 307 eP    45 56.44  -0.3
GSC     45.87 301 (P)   46 39.36  -0.6
PEC     45.99 299 (P)   46 41.82   0.9
MBC     62.84 348 eP    48 55.00  11.9X
WRA    158.92 264 PKP   58 14.60  -0.4
        0.8s     0.30nm
     S.D. = 0.9  on  25 of  27 obs.
-----------------------------------
*  NOV  08, 1993  03h 45m 02.41± 1.11s
    5.982 S ±10.2km  146.240 E ± 9.0km
   DEPTH =  10.0km  (geophysicist)
   3.9mb (  2 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)

YYYY     0.37 226 eP    45 10.20   0.1
                  eS    45 18.00
LAT      1.02 132 eP    45 21.70   0.1
WWKK     3.51 312 eP    45 58.00  -0.1
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PMG      3.52 165 eP     45 58.00  -0.3
WR2     18.05 219 eP     49 14.40  -0.8
         0.7s     3.40nm          3.6mb
ASPA    21.22 213 eP     49 51.80   1.0
         0.3s     3.30nm          4.2mb
      S.D. = 0.7  on   6 of   6 obs.
-------------------------------------
   NOV  08, 1993  03h 45m 20.82± 0.55s
   19.198 N ± 7.1km   68.079 W ± 6.4km
   DEPTH =  10.0km  (geophysicist)
   4.6mb (  4 obs.)
 NORTH ATLANTIC OCEAN              (402)

LRS      1.48 127 P      45 46.70  -0.8
APR      1.48 120 P      45 47.70   0.3
MGP      1.51 141 P      45 47.30  -0.6
PNP      1.74 130 P      45 51.30   0.0
CLLP     1.81 128 P      45 52.50   0.3
SJG      2.12 120 P      45 56.60  -0.3
LPR      2.27 113 P      45 58.10  -0.9
CPD      2.35 119 P      45 59.70  -0.5
BPA      6.29 109 eP     46 57.50   1.5
                  eS     48 03.00
CANV     8.14 185 iPc    47 22.20   0.2
                  iS     48 49.40
CAR      8.71 173 iPd    47 29.40  -0.6
                  iS     48 58.90
LLAV     8.76 172 iPc    47 29.90  -0.7
OLLA     9.21 172 iPd    47 37.00   0.2
                  iS     49 10.60
PCRV     9.57 159 eP     47 42.60   0.9
SDV     10.55 194 eP     47 55.30   0.0
                  eS     49 47.10
TRN     10.67 142 eP     47 57.86   1.1
                  eS     49 46.77
JSC     19.05 325 eP     49 50.85   5.2X
NAV     21.20 331 (P)    50 17.61   8.7X
OXF     24.31 313 (P)    50 35.81  -3.8X
         0.9s    13.49nm          4.6mb
WMOK    31.28 306 (P)    51 42.58  -0.7
         0.8s     7.55nm          4.6mb
LTX     33.86 294 (P)    52 06.19   0.3
LPAZ    35.26 180 P      52 19.30   0.7
LPB     35.51 180 (P)    52 22.00   1.6
CNCB    35.78 180 eP     52 20.00  -2.9
MSU     42.68 306 eP     53 21.00   1.2
FHC     52.05 307 (P)    54 24.99  -8.0X
         1.1s    53.41nm          5.4mb
KMPM    52.11 307 P      54 27.17  -6.3X
YKA     53.74 335 eP     54 43.70  -1.4
         0.6s     1.30nm          4.1mb
WRA    158.86 264 PKP    05 21.80   1.1
         1.0s     0.60nm
      S.D. = 1.1  on  24 of  29 obs.
-------------------------------------
   NOV  08, 1993  03h 58m 58.39± 0.30s
   44.246 N ± 2.9km   12.170 E ± 2.8km
   DEPTH =  13.6 ±  2.1 km
 NORTHERN ITALY                    (545)
      ML 3.7 (VIE), 3.6 (STR), 3.5
      (LDG). MD 3.4 (TRI), 3.3 (ROM).

RSM      0.38 147 P      59 06.09  -0.2
PGD      0.49 221 P      59 07.74  -0.7
CRE      0.64 194 P      59 09.72  -1.2
ARV      0.93 143 P      59 15.06  -0.8
MME      1.06 268 P      59 20.13   2.0
BDI      1.15 261 P      59 20.94   1.4
ASS      1.23 163 P      59 20.92   0.0
PII      1.30 247 P      59 22.52   0.5
VVI      1.75   6 P      59 29.68   1.2
SAL      1.79 320 P      59 30.97   1.8
TRI      1.85  37 e(Pn)   59 30.00   0.1
                  e      59 33.60
                  e      59 53.70
                  i(Sg)  00 01.50
MNS      1.90 169 P      59 31.07   0.4
RIY      1.92  54 iPn    59 30.80  -0.2
                  iSn    59 56.30
BOB      2.02 286 P      59 35.58   3.1X
AQU      2.09 154 P      59 35.65   2.1
VOY      2.16  34 iPnc   59 34.80   0.2
                  eSn    00 02.80
                  eSg    00 11.90
CEY      2.19  46 e(Pn)   59 34.10  -0.8
                  e      59 39.80
                  eSg    00 12.30
MDI      2.32 312 P      59 39.38   2.6X
FVI      2.39  10 P      59 39.20   1.6
LJU      2.46  42 ePn    59 39.10   0.4
                  ePg    59 46.50
                  eSn    00 09.60
RDP      2.52 171 P      59 41.45   1.8
VBY      2.53  59 iPnd   59 40.00   0.3
                  i      59 48.40
                  iSg    00 24.00
PCP      2.62 278 P      59 43.17   2.1
OGA      2.74 343 iPnc   59 45.20   2.2
CKI      2.80 275 P      59 45.40   1.8
SDI      2.81 154 P      59 45.79   2.0
SCE      2.81 354 iPnd   59 46.00   2.1
OSS      2.83 330 eP     59 47.10   3.0X
FIN      2.85 271 P      59 45.00   0.7
PGF      2.87 235 Pn     59 44.30  -0.3
                  Sn     00 17.70
VDL      2.94 321 iPc    59 47.60   1.9
KBA      2.95  16 iPnc   59 47.30   1.5
                  i      59 56.60
                  iSn    00 23.00
                  i(Sg)  00 40.50
TMA      2.98 310 eP     59 47.20   0.9
WTTA     3.04 353 iPnc   59 49.30   2.2
                  i      00 28.70
                  i      00 42.80
ROB      3.09 272 P      59 48.66   1.0
IMI      3.10 265 P      59 48.52   0.6
ZAG      3.13  59 e(Pn)   59 51.50   3.3X
                  iSg    00 48.50
PTJ      3.15  57 iPn    59 52.70   4.1X
                  iSn    00 45.30
HVAR     3.28 108 e(Pn)   59 52.10   1.7
ORO      3.28 296 P      59 51.38   0.9
ORX      3.28 296 P      59 50.26  -0.3
ENR      3.41 271 P      59 53.42   1.1
SBF      3.43 265 Pn     59 52.80   0.2
                  Sn     00 30.60
LLS      3.44 321 eP     59 54.90   2.0
MMK      3.48 303 P      59 53.40   0.0
STV      3.48 272 P      59 54.33   1.0
DOI      3.54 276 P      59 55.84   1.7
BHB      3.56 281 P      59 54.01  -0.4
RSP      3.62 286 P      59 52.36  -3.0X
PZZ      3.64 276 P      59 55.43  -0.3
LSD      3.77 291 P      59 56.11  -1.5
RRL      3.91 282 P      59 58.32  -1.2
FUR      3.97 351 eP     00 17.50  17.3X
FRF      4.05 262 Pn     00 01.60   0.3
                  Sn     00 46.10
LPG      4.05 290 Pn     00 01.00  -0.6
                  Sn     00 44.80
LPL      4.07 290 Pn     00 01.50  -0.3
                  Sn     00 45.30
EMS      4.13 298 iPc    00 04.70   2.1
LMR      4.20 259 Pn     00 04.00   0.6
                  Sn     00 48.60
LRG      4.28 261 Pn     00 05.00   0.5
                  Sn     00 50.90
FEL      4.64 323 P      00 09.72  -0.1
GEC2     4.72  12 Pn     00 10.30  -0.7
                  Sn     01 05.80
LOMF     4.86 312 P      00 11.86  -1.0
                  S      01 06.31
WET      4.93   5 iPc    00 13.70   0.0
KHC      4.98  11 Pn     00 14.10  -0.4
                  Pg     00 34.50
                  Sn     01 11.40
                  e      01 41.50
MOF      5.03 318 P      00 15.54   0.3
                  S      01 11.51
BSF      5.18 316 Pn     00 17.40  -0.1
                  Sn     01 12.20
ZST      5.23  39 eP     00 30.10  12.1X
ECH      5.28 321 P      00 18.06  -0.7
WLS      5.34 323 P      00 20.57   1.0
CDF      5.37 323 Pn     00 19.90  -0.2
                  Sn     01 16.40
GRF      5.49 354 e(Pg)   00 44.80  23.1X
                  e(Sn)  01 20.70
                  e(Sg)  01 49.30
HAU      5.52 315 Pn     00 22.10  -0.1
                  Sn     01 20.50
VITF     5.85 315 P      00 26.72   0.0
PRU      5.97  15 eP     00 39.50  11.1X
                  ePg    00 51.50
                  eSn    01 35.00
                  e      02 18.00
SMF      6.33 295 Pn     00 32.50  -1.1
                  Sn     01 40.20
LBF      6.37 298 Pn     00 33.00  -1.1
                  Sn     01 40.70
MOX      6.42 357 ePn    00 32.70  -2.1
                  ePg    01 03.40
                  eSn    01 44.10
                  eSg    02 32.60
LOR      6.55 300 Pn     00 35.60  -1.1
                  Sn     01 44.70
SSF      6.69 298 Pn     00 37.20  -1.5
                  Sn     01 47.70
AVF      6.70 295 Pn     00 37.70  -1.0
                  Sn     01 48.80
BRG      6.74  10 ePn    00 38.50  -0.8
                  iPg    01 07.90
                  iSg    02 32.40
BGF      6.96 293 Pn     00 41.20  -1.2
                  Sn     01 54.70
CLL      7.09   4 iPn    00 42.40  -1.8
                  (Sg)   02 57.00
      S.D. = 1.2  on  73 of  83 obs.
-------------------------------------
   NOV  08, 1993  04h 17m 01.55± 0.70s
   47.719 N ± 6.2km   14.282 E ± 6.6km
   DEPTH =  10.0km  (geophysicist)
 AUSTRIA                           (546)
      ML 3.0 (GRF), 2.8 (VIE). Felt
      (IV) at Spital am Pyhrn.

KMR      0.35 343 iPg+   17 08.80   0.0
                  iSg    17 15.20
KBA      0.90 225 iPgc   17 14.70  -4.3X
                  iSg    17 25.70
BHG      0.95 271 iPgd   17 21.40   1.8
GEC2     1.19 341 Pg     17 23.10  -0.7
                  Sg     17 41.60
VKA      1.47  67 iPgc   17 27.60  -0.5
                  iSg    17 49.10
KHC      1.49 342 Pg     17 28.00  -0.4
                  eSg    17 48.50
WET      1.71 327 iPd    17 32.90   1.4
VOY      1.71 189 e(Pn)   17 29.80  -1.8
                  e      17 52.50
                  e(Sg)  17 55.70
WTTA     1.85 257 iPnc   17 33.40  -0.4
                  iPg    17 36.50
                  iSg    18 01.20
WATA     1.87 259 iPgd   17 35.60   1.5
                  iSg    18 00.80
SCE      1.88 250 iPd    17 34.40   0.3
ZST      1.95  75 eP     17 35.00  -0.1
                  i      18 00.50
SQTA     2.14 258 iPnc   17 38.20   0.3
                  iPg    17 40.00
                  iSg    18 08.40
MOTA     2.19 261 iPgc   17 40.60   2.0
                  iSg    18 09.10
PRU      2.28   4 Pg     17 42.10   2.3
       0.3s    31.90nm
                  e      18 07.80
                  Sg     18 11.70
                  eSg    23 10.00
VBY      2.32 163 e(Pn)   17 41.40   1.1
OGA      2.37 250 ePn    17 43.30   2.0
GRF      2.83 315 ePn    17 46.80  -0.8
                  ePg    17 54.30
                  e(Sn)  18 22.10
                  eSg    18 30.40
MOX      3.41 330 iPn    17 54.80  -1.1
                  iSg    18 49.50
CLL      3.69 347 (Pg)   18 40.30  40.5X
                  iSg    18 56.40
CDF      4.75 281 Pn     18 12.80  -2.2
                  Pg     18 31.80
                  Sg     19 30.50
BSF      5.05 274 Pn     18 15.60  -3.6X
                  Pg     18 35.10
                  Sn     19 12.70
                  Sg     19 44.20
HAU      5.35 276 Pn     18 20.50  -2.9
                  Sn     19 21.90
                  Sg     19 48.90
LPG      5.64 250 Pn     18 27.20  -0.6
LPL      5.65 250 Pn     18 26.40  -1.4
```

08d 04h

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     S.D. = 1.5  on  22 of  25 obs.
-------------------------------------
   NOV  08, 1993  04h 19m 38.70± 0.75s
    6.061 S ± 5.7km  146.687 E ± 6.0km
    DEPTH =  45.4 ±  7.5 km
    4.6mb (  8 obs.)  4.0Msz (  1 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)

LAT      0.68 152 iPd    19 50.30  -1.7
YYYY     0.74 256 ePc    19 52.50  -0.5
MDG      1.21 312 eP     20 00.30   0.9
MNDI     3.01 268 eP     20 31.00   5.6X
PMG      3.36 172 eP     20 29.00  -1.0
WWKK     3.90 308 eP     20 41.50   3.8X
KVG      5.37  50 e(P)   20 59.50   1.1
CTA     13.95 182 iP     22 56.50   0.8
                  eS     25 38.00
QIS     15.97 205 eP     23 23.20   1.3
MTN     16.75 245 eP     23 32.80   1.0
                  e      26 31.00
WR2     18.28 220 eP     23 51.30   0.6
        0.7s    12.90nm          4.2mb
                  i      23 58.40
                  eS     27 13.80
AAI     18.57 276 eP     23 56.00   1.6
KNA     20.04 240 eP     24 10.00  -0.9
ASPA    21.40 214 iPc    24 24.60  -0.2
        0.6s     6.90nm          4.2mb
      Z  22s     0.70um          4.0Msz
                  eS     24 36.00
                  iS     28 20.10
                  iScS   35 50.10
BKM     24.01 121 iPd    24 52.40   1.9
DZM     24.86 132 iPc    24 57.90  -0.8
STK     26.13 190 eP     25 06.70  -3.7X
        0.9s     2.90nm          3.8mb
MEEK    33.68 229 eP     26 16.50  -1.2
PUZ     42.85 143 P      27 34.10  -0.1
MNG     42.99 147 P      27 35.40   0.1
PGZ     43.42 147 eP     27 38.70   0.0
SSE     44.27 328 P      27 46.80   1.1
        1.0s    14.00nm          4.7mb
NJ2     46.26 327 eP     28 01.50   0.0
CHTO    53.14 299 eP     28 54.00  -0.6
XAN     53.53 321 P      28 56.00  -1.2
        0.7s    10.00nm          4.9mb
                  sP     29 14.50
TIY     53.98 327 eP     28 59.70  -0.8
LZH     58.05 320 eP     29 28.00  -1.9
        1.0s    15.00nm          5.1mb
GTA     62.59 320 eP     30 00.00  -0.8
        1.0s     4.00nm          4.5mb
GUN     67.64 303 P      30 33.60  -0.3
        0.6s    14.00nm          5.2mb
DMN     68.18 303 P      30 37.00  -0.2
GBA     71.45 286 P      30 58.00   1.0
INK     91.83  21 eP     32 41.50  -1.2
MOCB   138.26 131 PKP    38 56.60  -5.7X
CNCB   138.87 124 PKP    38 54.10  -9.5X
LPB    138.92 124 PKP    39 04.80   1.3
LPAZ   139.01 123 PKP    38 56.10  -7.9X
PPD    146.98 148 ePKP   39 18.00   1.2
KIC    151.60 272 PKP    39 31.00   6.9X
        0.7s    18.50nm
TIC    151.88 273 PKP    39 31.80   7.2X
LIC    151.88 272 PKP    39 31.20   6.6X
     S.D. = 1.1  on  31 of  40 obs.
-------------------------------------
   NOV  08, 1993  04h 19m 50.78± 0.77s
   44.341 N ± 9.5km   12.058 E ± 6.0km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                  (545)
     ML 2.8 (LDG). MD 3.0 (TRI).

TRI      1.83  41 e(Pn) 20 21.70  -0.7
                  e      20 45.50
                  e(Sg)  20 54.50
                  e      48 19.80
RIY      1.94  58 ePn   20 23.20  -0.8
                  iSn    20 47.80
VOY      2.13  37 ePn   20 26.50  -0.5
                  eSn    20 54.00
                  eSg    21 04.30
CEY      2.19  49 e(Pn) 20 33.30   5.6X
                  eSg    21 03.60
LJU      2.44  45 eP    20 36.00   4.7X
                  e      20 40.00
                  eSn    21 02.50
                  e      21 13.50
VBY      2.55  62 ePn   20 35.60   2.7
                  iSg    21 17.10
PGF      2.86 232 Pn    20 36.20  -1.1
                  Sn     21 10.00
SBF      3.36 263 Pn    20 44.50   0.0
                  Sn     21 23.50
LPG      3.94 289 Pn    20 54.00   1.1
LPL      3.96 289 Pn    20 53.30   0.2
FRF      3.98 261 Pn    20 52.90  -0.3
                  Sn     21 38.50
LMR      4.14 258 Pn    20 55.50   0.1
                  Sn     21 41.30
LRG      4.21 260 Pn    20 56.70   0.3
                  Sn     21 43.70
KHC      4.90  12 ePn   21 05.00  -1.3
                  e      21 15.50
                  e      21 27.00
                  eSn    22 03.00
                  e      22 36.00
BSF      5.06 315 Pn    21 08.60   0.0
                  Sn     22 05.20
CDF      5.25 323 Pn    21 11.50   0.3
HAU      5.40 315 Pn    21 13:30   0.0
                  Sn     22 13.40
     S.D. = 1.1  on  15 of  17 obs.
-------------------------------------
%  NOV  08, 1993  04h 38m 47.89± 3.85s
   44.479 N ±10.2km    6.868 E ±29.1km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                          (538)
     ML 2.4 (GEN).

PZZ      0.17  81 P     38 51.86   0.0
                  S      38 53.18
STV      0.40 125 P     38 56.20   0.0
                  S      39 01.15
BHB      0.46  38 P     38 57.21   0.0
                  S      39 02.84
ENR      0.47 122 P     38 57.39  -0.1
                  S      39 02.89
RSP      0.73  22 P     39 02.29   0.0
     S.D. = 0.1  on   5 of   5 obs.
-------------------------------------
%  NOV  08, 1993  04h 50m 47.32± 0.61s
   37.807 N ± 5.7km   14.881 E ± 5.3km
   DEPTH =  10.0km  (geophysicist)
 SICILY                          (398)
     MD 3.0 (ROM).

MNO      0.19 310 P     50 52.38   0.7
GIO      0.30 143 P     50 55.25   1.7
ATN      0.58  52 P     50 58.63  -0.4
MSI      0.66  53 P     51 00.58   0.1
GIB      0.70 285 P     51 00.42  -0.8
MEU      0.71 177 P     51 00.48  -0.8
PZI      0.78 178 P     51 01.38  -1.1
SOI      0.96  74 P     51 05.48  -0.2
FAI      1.10 241 P     51 08.81   0.9
     S.D. = 1.1  on   9 of   9 obs.
-------------------------------------
&  NOV  08, 1993  05h 52m 33.51s
   19.360 N          155.474 W
   DEPTH =  11.1km
 HAWAII                          (613)
     <HVO-P>. MD 3.9 (HVO).

AIN      0.02  41 P     52 35.79   0.0
                  S      52 37.52
KFH      0.08  41 P     52 36.38   0.1
TRH      0.09 308 P     52 36.54  -0.1
WOH      0.11 194 P     52 36.66   0.1
HTC      0.14 150 P     52 37.11   0.2
CPK      0.14  76 P     52 37.04   0.0
WIH      0.15 316 P     52 37.22  -0.2
                  S      52 39.99
SWH      0.16 307 P     52 37.09  -0.4
MLX      0.16  51 P     52 37.56   0.2
MLH      0.16  31 P     52 37.20  -0.2
                  S      52 39.84
HPO      0.28 196 eP    52 38.83  -0.6
KKU      0.54  13 (P)   52 43.68  -0.8
NGH      0.54  51 P     52 43.56  -0.9
KKH      0.59 300 eP    52 43.75  -1.6
KOH      0.82 339 P     52 46.93  -2.4
MHA      0.92 334 eP    52 48.36  -2.6
HKL      1.53 331 eP    52 56.87  -4.3
       17 obs. associated
-------------------------------------
   NOV  08, 1993  06h 12m 31.37± 0.51s
   45.103 N ± 3.9km    7.264 E ± 6.2km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                  (545)
     ML 2.6 (LDG), 2.6 (GEN).

RSP      0.05 354 P     12 34.32   0.7
BHB      0.26 180 P     12 37.27   0.4
                  S      12 41.01
LSD      0.36 348 P     12 39.03   0.1
                  S      12 43.70
RRL      0.39 242 P     12 38.78  -0.6
                  S      12 43.26
LPG      0.54 318 Pg    12 41.70  -0.6
                  Sg     12 47.80
LPL      0.56 318 Pg    12 42.10  -0.8
                  Sg     12 48.20
PZZ      0.61 191 P     12 43.04  -0.7
                  S      12 51.27
ORX      0.73  43 P     12 45.90   0.1
                  S      12 55.65
STV      0.86 177 P     12 46.63  -1.4
                  S      12 57.05
ENR      0.88 173 P     12 46.69  -1.7
                  S      12 57.22
ROB      0.92 152 P     12 49.40   0.5
PCP      1.07 121 P     12 52.07   0.5
FIN      1.12 143 P     12 52.06  -0.3
SBF      1.25 174 Pg    13 00.00   5.4X
                  Sg     13 18.10
IMI      1.27 159 P     12 53.78  -1.3
                  S      13 10.45
FRF      1.60 196 Pg    13 01.00   1.2
                  Sg     13 21.80
LRG      1.77 202 Pg    13 04.00   1.8
                  Sg     13 25.20
LMR      1.85 197 Pg    13 05.60   2.2
                  Sg     13 27.80
     S.D. = 1.2  on  17 of  18 obs.
-------------------------------------
&  NOV  08, 1993  08h 04m 14.66s
   36.474 N          120.464 W
   DEPTH =  10.7km
 CENTRAL CALIFORNIA              ( 39)
     <GM-P>. MD 2.8 (GM). ML 2.8
     (PAS), 2.8 (GS).

PDRM     0.16 151 P     04 19.36   1.0
HVC      0.30 251 P     04 21.61   0.6
PCRM     0.38 176 P     04 22.81   0.3
PHBM     0.38 126 P     04 23.67   1.2
PSMM     0.42 195 P     04 24.05   0.8
BRMM     0.46 321 P     04 25.20   1.1
PKEM     0.50 145 eP    04 25.30   0.4
PSAM     0.56 218 P     04 26.09   0.0
SHG      0.64 265 P     04 27.03  -0.4
GHC      0.65 172 P     04 27.70   0.1
BLRM     0.68 287 P     04 28.98   0.9
PANM     0.78 208 P     04 30.05   0.2
LTR      0.79 301 P     04 30.28   0.3
SAO      0.84 290 eP    04 30.06  -0.8
FRP      0.87 289 P     04 31.47   0.1
PAPM     0.92 233 P     04 32.65   0.5
BPRM     1.02 267 P     04 33.80  -0.2
BPOM     1.08 257 P     04 35.09   0.2
ARN      1.22 316 eP    04 36.96  -0.4
COE      1.25 309 eP    04 36.76  -1.0
BCH      1.32 166 eP    04 38.15  -0.9
                  eS     04 56.04
CMB      1.56   2 eP    04 41.72  -0.7
MMPM     1.61  45 eP    04 43.42  -0.1
                  eS     05 04.67
MNHM     1.69 351 P     04 43.43  -0.9
MEMM     1.70  45 eP    04 45.20   0.8
                  eS     05 06.93
HTCR     1.72  52 P     04 45.52   0.5
CLKR     1.72  49 P     04 45.52   0.5
MTUM     1.76  59 eP    04 45.61   0.2
BHPR     1.79  62 P     04 46.54   0.6
ISA      1.80 116 eP    04 44.77  -1.2
                  eS     05 08.06
ABL      1.91 148 eP    04 45.83  -1.9
MRCM     1.97  52 eP    04 49.56   1.0
BONR     2.27  49 eP    04 53.82   0.8
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TNP     3.05  57 (Pn)  05 04.21   0.3
GSC     3.19 110 (P)   05 06.25   0.4
      35 obs. associated
-------------------------------------
%  NOV  08, 1993  08h 07m 43.78± 0.85s
   39.175 N ± 7.0km   27.550 E ± 8.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.7 (ISK).

IZM     0.81 196 ePg   07 59.50   0.0
                 eSg   08 12.00
DST     0.94  62 ePn   08 01.70   0.0
EZN     1.15 305 ePn   08 05.20   0.0
EDC     1.20  12 ePn   08 06.50   0.4
BNT     1.21  13 ePn   08 06.00  -0.4
     S.D. = 0.4  on   5 of   5 obs.
-------------------------------------
%  NOV  08, 1993  09h 04m 23.57± 0.87s
   39.629 N ± 7.9km   29.483 E ± 7.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.8 (ISK).

DST     0.66 268 ePg   04 36.10  -0.7
                 eSg   04 46.10
ALT     0.75 139 ePn   04 38.50   0.1
EYL     1.07  29 ePn   04 43.40  -0.4
HRT     1.20   7 ePn   04 46.00   0.1
BNT     1.40 302 ePn   04 50.00   0.8
     S.D. = 0.8  on   5 of   5 obs.
-------------------------------------
?  NOV  08, 1993  09h 25m 52.70± 2.79s
   32.520 S ± 9.0km  176.857 W ±34.3km
   DEPTH =  33.0km  (normal)
 SOUTH OF KERMADEC ISLANDS         (179)

HBZ     6.44 217 eP    27 27.90   0.3
PUZ     6.83 214 eP    27 34.00   0.9
                 eS    28 47.90
URZ     7.55 219 eP    27 42.50  -0.7
                 S     29 04.60
OUZ     8.38 249 eP    27 54.70  -0.1
DZM    18.10 301 iPc   30 03.90   0.6
STK    35.01 260 eP    32 43.30  -0.9
       1.6s      2.50nm          3.9mb X
CTA    35.14 281 iP    32 46.00   0.6
       1.0s     15.00nm          4.9mb
ASPA   44.00 269 iPd   33 58.70  -0.3
       0.7s      6.80nm          4.6mb
WR2    45.16 274 iPc   34 08.50   0.3
       0.5s     28.80nm          5.4mb
                 e     34 19.20
WRA    45.18 274 P     34 30.00  21.6X
       0.9s      1.90nm
WRA    45.18 274 P     34 07.40  -1.0
       0.4s     19.40nm          5.4mb
FORT   46.48 257 eP    34 19.00   0.5
CSY    53.74 209 eP    35 30.80  17.3X
       0.6s     15.90nm
KAF   146.87 340 iPKP  45 38.20   7.8X
OBN   147.45 324 ePKP  45 40.00   8.4X
       1.8s     70.00nm
                 e     46 05.00
NUR   148.63 340 iPKP  45 43.20   9.9X
NB2   150.98 352 PKP   45 49.90  13.0X
       0.6s      0.90nm
HFS   151.51 349 ePKP  45 51.50  13.8X
       0.4s      1.90nm
     S.D. = 0.7  on  11 of  18 obs.
-------------------------------------
?  NOV  08, 1993  09h 47m 21.57± 0.98s
   39.177 N ± 8.4km   27.621 E ± 9.7km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.6 (ISK).

IZM     0.83 200 ePg   47 37.40  -0.2
                 eSg   47 50.20
DST     0.89  61 iPg   47 39.10   0.4
EDC     1.18   9 ePn   47 43.00  -0.6
EZN     1.19 303 ePn   47 44.20   0.4
     S.D. = 0.9  on   4 of   4 obs.
-------------------------------------
?  NOV  08, 1993  10h 33m 59.54± 0.96s
   39.106 N ± 8.1km   27.573 E ± 9.7km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.7 (ISK).

IZM     0.75 199 ePg   34 14.10  -0.1
                 eSg   34 26.20
DST     0.96  58 ePn   34 18.10   0.3
EZN     1.20 307 ePn   34 22.20   0.3
EDC     1.26  10 ePn   34 22.50  -0.4
     S.D. = 0.6  on   4 of   4 obs.
-------------------------------------
%  NOV  08, 1993  11h 30m 26.38± 0.79s
   40.795 N ± 6.2km   22.959 E ± 7.1km
   DEPTH =  10.0km  (geophysicist)
 GREECE                            (364)

THE     0.16 178 iPg   30 30.72   0.6
                 eSg   30 34.00
SOH     0.30  85 ePg   30 32.68   0.0
                 eSg   30 35.84
KNT     0.37 353 ePg   30 33.80  -0.2
                 eSg   30 38.12
GRG     0.45 291 ePg   30 35.98   0.4
                 iSg   30 43.76
LIT     0.78 207 ePg   30 40.80  -0.8
     S.D. = 0.8  on   5 of   5 obs.
-------------------------------------
?  NOV  08, 1993  11h 44m 05.37± 4.39s
   18.857 N ±35.1km   67.836 W ±21.1km
   DEPTH =  33.0km  (normal)
 MONA PASSAGE                      ( 89)

MGP     1.10 140 P     44 24.10  -0.4
APR     1.12 111 P     44 25.50   0.7
PNP     1.35 126 P     44 28.40   0.3
CLLP    1.42 123 P     44 30.30   1.2
SJG     1.76 115 P     44 34.00  -0.1
LPR     1.94 106 P     44 35.60  -1.1
LLAV    8.39 173 eP    46 07.30  -0.5
OLLA    8.84 173 iPd   46 14.20   0.2
                 iS    47 50.20
TRN    10.26 142 eP    46 33.00  -0.4
                 eS    48 27.00
SDV    10.28 196 eP    46 34.20   0.3
     S.D. = 0.8  on  10 of  10 obs.
-------------------------------------
*  NOV  08, 1993  11h 47m 30.16± 1.82s
   7.530 S ± 9.0km  128.278 E ±18.1km
   DEPTH = 132.4 ± 26.0 km
   4.3mb (  3 obs.)
 BANDA SEA                         (280)

SLKI    3.03  99 ePc   48 18.00   0.2
                 iS    48 49.30
TLE     4.82  67 iPd   48 42.20   0.3
MTN     5.98 152 eP    48 57.20  -0.4
                 eS    49 59.00
KNA     8.18 177 eP    49 27.10  -0.3
       0.2s     40.00nm          5.7mb X
                 eS    50 52.00
WR2    13.68 155 eP    50 37.20  -2.7
                 eS    53 00.10
MBL    15.82 210 eP    51 08.10   1.3
       0.8s     29.00nm          4.6mb
ASPA   16.93 162 iPc   51 20.50  -0.1
       0.8s     11.90nm          4.2mb
                 eS    54 16.40
QIS    16.97 141 eP    51 23.00   2.0
                 eS    54 16.00
WARB   18.62 185 eP    51 40.80   0.6
       0.3s      4.00nm          4.2mb
GUN    54.03 312 P     56 44.00   0.4
PKI    54.19 312 P     56 43.50  -1.2
KKN    54.40 312 P     56 46.20   0.1
GKN    55.00 312 P     56 50.20  -0.1
     S.D. = 1.3  on  13 of  13 obs.
-------------------------------------
*  NOV  08, 1993  11h 53m 09.75± 0.61s
   32.110 S ± 7.7km   68.231 W ± 9.8km
   DEPTH =  90.0km  (geophysicist)
 MENDOZA PROVINCE, ARGENTINA       (139)

RTCV    0.36 314 iPd   53 24.50   0.7
CFA     0.50 359 iPd   53 25.80   1.0
                 S     53 38.20
RTCB    0.79 322 ePc   53 26.60  -0.9
RTLL    0.80 345 iPc   53 27.20  -0.4
                 S     53 40.20
MDZ     0.93 214 iP    53 29.40   0.4
MRA     2.16  99 iPc   53 47.40   2.8X
                 S     54 15.90
RTPR    2.33  40 eP    53 46.50  -0.4
                 S     54 15.00
RFA     2.66 184 iPd   53 51.00  -0.5
                 S     54 23.00
TCA     3.20  77 iP    53 59.00   0.1
                 (S)   54 37.00
     S.D. = 0.8  on   8 of   9 obs.
-------------------------------------
%  NOV  08, 1993  11h 58m 59.09± 0.77s
   40.666 N ± 6.4km   23.007 E ± 6.5km
   DEPTH =  10.0km  (geophysicist)
 GREECE                            (364)

THE     0.05 223 iPg   59 00.26  -1.0
                 iSg   59 01.62
SOH     0.31  59 ePg   59 05.05  -0.4
                 iSg   59 10.08
KNT     0.50 351 iPg   59 09.69   0.4
                 eSg   59 18.08
GRG     0.54 302 ePg   59 10.52   0.4
                 iSg   59 18.96
SRS     0.63  44 iPg   59 11.42  -0.4
                 iSg   59 21.98
PAIG    0.90 145 ePg   59 17.26   0.9
                 eSg   59 27.33
     S.D. = 0.9  on   6 of   6 obs.
-------------------------------------
%  NOV  08, 1993  12h 28m 14.92± 0.85s
   39.097 N ± 6.9km   27.562 E ± 9.0km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.7 (ISK).

IZM     0.74 199 ePg   28 29.40   0.0
                 eSg   28 42.00
DST     0.97  58 ePn   28 33.40   0.0
EZN     1.20 308 ePn   28 37.30   0.0
EDC     1.27  10 ePn   28 38.50   0.0
BNT     1.29  12 ePn   28 38.80   0.0
     S.D. = 0.0  on   5 of   5 obs.
-------------------------------------
%  NOV  08, 1993  13h 14m 24.79± 0.82s
   39.123 N ± 6.6km   27.603 E ± 8.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.7 (ISK).

IZM     0.77 200 ePg   14 39.80  -0.1
                 eSg   14 52.80
DST     0.93  58 iPn   14 42.70   0.1
EZN     1.21 306 ePn   14 47.30   0.0
EDC     1.24   9 ePn   14 47.50  -0.3
BNT     1.26  11 ePn   14 47.80  -0.3
MFT     1.68 352 ePn   14 55.00   0.6
     S.D. = 0.4  on   6 of   6 obs.
-------------------------------------
%  NOV  08, 1993  13h 44m 47.19± 0.77s
   39.749 N ± 6.8km   29.512 E ± 7.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.8 (ISK).

DST     0.70 258 iPg   44 59.90  -1.1
                 eSg   45 11.40
ALT     0.83 146 ePg   45 03.60   0.2
                 eSg   45 15.60
HRT     1.08   6 ePn   45 07.00  -0.5
ISK     1.36 345 ePn   45 11.80  -0.3
BNT     1.36 297 ePn   45 13.00   0.8
EDC     1.40 296 ePn   45 13.00   0.3
CTT     1.62 330 ePn   45 16.00   0.1
MFT     2.00 302 ePn   45 22.00   0.6
     S.D. = 0.7  on   8 of   8 obs.
-------------------------------------
   NOV  08, 1993  14h 00m 26.43± 0.21s
    4.798 S ± 4.2km  153.060 E ± 5.3km
   DEPTH =  77.3km  (  2 depth phases)
   5.1mb ( 21 obs.)
 NEW IRELAND REGION, P.N.G.        (190)

RAB     1.08 304 iPc   00 46.00  -0.5
       0.5s  3154.93nm
                 iS    01 04.00
KVG     3.14 314 ePc   01 16.20   1.6
```

08d 14h

```
PMG      7.43 232 eP    02 12.00  -2.3
HNR      8.24 124 eP    02 27.00   1.5
                eS      03 55.00
CTA     16.58 203 iPc   04 15.50   0.0
        1.3s   100.96nm         4.9mb
GUA     19.93 336 eP    04 55.30   0.5
        1.0s   264.00nm         5.5mb
                e       05 10.80  77km
GUMO    20.00 336 eP    04 55.10  -0.3
        1.0s   113.60nm         5.2mb
                e       05 10.90  78km
PJG     20.00 336 eP    04 55.40   0.0
QIS     20.41 219 eP    04 58.50  -1.2
DZM     21.52 144 iPc   05 08.90  -2.0
MTN     23.08 248 eP    05 26.90   0.7
WR2     23.63 229 iPc   05 33.30   1.8
        0.4s    14.10nm         4.7mb
ARMA    25.52 183 eP    05 49.50  -0.1
        0.9s    20.00nm         4.6mb
KNA     26.23 244 iPd   05 55.80  -0.3
        0.8s   128.00nm         5.5mb
ASPA    26.33 223 eP    05 58.30   1.3
        0.9s    14.90nm         4.5mb
                eS      10 38.70
STK     29.01 200 eP    06 15.20  -6.0X
        0.9s     2.90nm         3.9mb X
WARB    33.03 227 eP    06 58.00   1.4
MBL     36.11 240 eP    07 22.00  -1.0
        0.9s    24.00nm         5.1mb
BAG     38.42 304 ePd   07 42.80   0.2
        1.3s    69.23nm         5.4mb
MRWA    42.65 231 eP    08 13.50  -3.6X
                e       08 21.00  25kmX
TIA     52.87 323 eP    09 35.30  -1.3
MDJ     53.51 339 eP    09 40.20  -0.9
CN2     54.40 336 eP    09 49.00   1.3
        1.0s     9.00nm         4.8mb
TIY     56.69 322 eP    10 04.00  -0.4
      Z  20s     0.37um         4.5Msz
XAN     56.80 316 P     10 04.20  -1.0
        0.7s     6.60nm         4.8mb
                pP      10 18.50  52kmX
KMI     57.20 304 Pd    10 09.00   0.6
        1.5s    40.00nm         5.3mb
CHTO    58.22 295 eP    10 15.00  -0.4
CD2     58.93 310 iPc   10 19.50  -0.7
        0.6s    31.00nm         5.6mb
LZH     61.41 316 eP    10 37.50   0.3
        1.3s    43.00nm         5.4mb
                pP      10 52.50  55kmX
                sP      11 00.00
LSA     68.45 304 P     11 22.60  -0.6
GUN     72.34 301 P     11 46.60   0.0
        0.7s    23.00nm         5.2mb
PKI     72.65 301 P     11 48.20  -0.3
KKN     72.82 301 P     11 49.00  -0.3
        0.8s    23.00nm         5.1mb
DMN     72.92 301 P     11 49.90   0.0
        0.8s    34.00nm         5.3mb
GKN     73.43 301 P     11 52.50  -0.2
WMQ     75.92 317 iPc   12 06.50  -0.1
        1.1s     9.00nm         4.6mb
GBA     77.22 285 P     12 14.00  -0.2
KLU     80.87  25 eP    12 31.64  -1.6
FBA     81.79  22 eP    12 35.06  -2.8
        1.3s    10.62nm         4.6mb
                e       12 59.00  90kmX
KSH     83.11 311 P     12 47.20   1.8
        0.9s    20.00nm         5.1mb
SPA     85.23 180 iPc   12 55.70   0.1
        1.2s    28.17nm         5.2mb
QUE     89.03 300 eP    13 14.60  -0.2
SPC    120.47 326 ePKP  19 11.40   0.5
ZST    122.75 326 ePKP  19 15.10   0.1
BRG    122.79 330 iPKP  19 16.20   1.2
        0.8s    20.00nm
CLL    122.97 331 iPKPd 19 15.10  -0.2
        0.8s    15.00nm
PRU    123.05 329 PKP   19 15.50   0.0
KHC    124.07 329 ePKP  19 17.50  -0.1
        1.0s     7.00nm
GEC2   124.19 329 ePKP  19 17.60  -0.3
        0.9s     7.49nm
                e       19 22.30
                e       19 35.20
GRF    124.89 331 iPKPd 19 19.60   0.5
BSF    128.30 332 ePKP  19 25.50  -0.4
        1.0s    20.00nm
HAU    128.39 332 ePKP  19 25.90   0.0
        0.9s    12.60nm
LPL    129.96 329 ePKP  19 29.30   0.0
        0.9s     5.55nm
LPG    129.96 329 ePKP  19 29.50   0.1
        0.7s     3.65nm
LOR    130.08 333 ePKP  19 29.20   0.0
        0.8s     5.25nm
LBF    130.23 333 ePKP  19 29.50   0.0
SSF    130.39 333 ePKP  19 29.90   0.2
        1.1s    16.35nm
SMF    130.55 332 ePKP  19 30.10   0.0
        1.0s    11.60nm
AVF    130.66 333 ePKP  19 30.10  -0.1
PGF    130.71 325 ePKP  19 30.60   0.0
        1.0s    13.80nm
SBF    130.72 327 ePKP  19 30.30  -0.2
LDF    130.74 337 ePKP  19 30.20  -0.1
        1.1s    13.45nm
FLN    130.74 337 ePKP  19 30.30   0.0
        0.9s    14.40nm
BGF    131.07 333 ePKP  19 31.30   0.3
        0.7s     8.25nm
GRR    131.19 337 ePKP  19 31.30   0.1
FRF    131.34 328 ePKP  19 31.20  -0.4
        1.0s    12.80nm
MAF    131.45 333 ePKP  19 32.10   0.3
        1.0s     4.00nm
LPF    131.55 337 ePKP  19 32.20   0.3
        1.0s    18.80nm
TCF    131.56 333 ePKP  19 32.40   0.4
        1.0s    11.20nm
LRG    131.57 328 ePKP  19 32.30   0.3
        0.9s    13.25nm
LMR    131.57 327 ePKP  19 32.10   0.0
        1.1s    14.15nm
LSF    131.89 334 ePKP  19 32.90   0.3
MFF    132.34 335 ePKP  19 33.90   0.5
RJF    132.62 333 ePKP  19 34.40   0.4
CAF    132.66 332 ePKP  19 34.80   0.6
        1.2s     8.05nm
LPO    133.25 333 ePKP  19 36.20   1.0
        0.6s     3.95nm
EPF    134.91 332 ePKP  19 39.40   0.9
        1.0s     6.80nm
PPD    144.22 139 (PKP) 19 55.00  -0.9
BAO    150.90 135 ePKP  20 07.50   0.6
                i       20 11.80
     S.D. = 0.8  on  77 of  79 obs.
-----------------------------------
&  NOV  08, 1993  14h 19m 17.18s
   63.259 N          151.060 W
   DEPTH =   6.3km
 CENTRAL ALASKA                  (  1)
      <AEIC>. ML 2.5 (AEIC), 2.9
      (PMR).

KTH      0.30  12 iP     19 22.88  -0.5
                eS      19 27.11
TRF      0.40  61 iP     19 25.07  -0.2
                eS      19 31.52
HUR      0.71 113 eP     19 30.70  -0.6
                eS      19 40.37
CUT      0.93 157 iP     19 34.98  -0.3
RND      1.01  81 eP     19 35.78  -0.9
                eS      19 49.09
MCK      1.07  63 eP     19 37.08  -0.5
BWN      1.16  37 eP     19 39.34   0.2
                eS      19 57.07
SKT      1.30 190 eP     19 40.86  -0.8
NEA      1.59  33 eP     19 45.87   0.0
                eS      20 07.09
PWA      1.71 161 eP     19 47.10  -0.4
MLY      1.78   4 eP     19 47.65  -1.1
GHO      1.79 145 eP     19 47.81  -1.1
WRH      1.79  46 eP     19 48.24  -0.6
SUA      1.81 175 eP     19 49.16   0.0
PLRM     1.90 151 eP     19 49.45  -0.9
PMR      1.90 151 eP     19 49.22  -1.1
SML      1.93 138 eP     19 49.77  -1.1
                eS      20 16.50
NCG      1.93 196 eP     19 50.13  -0.8
                eS      20 15.39
CCB      2.00  44 eP     19 49.46  -2.4
                eS      20 18.92
CGLM     2.01 193 eP     19 51.01  -1.0
CRP      2.06 195 eP     19 51.61  -1.3
                eS      20 20.04
CP2      2.08 196 eP     19 52.49  -0.7
MDM      2.11  35 eP     19 51.67  -1.8
SPU      2.14 193 eP     19 53.12  -0.7
PMS      2.14 160 eP     19 54.80   0.9
HDA      2.15  56 eP     19 55.26   1.2
FBA      2.19  40 eP     19 54.63   0.1
                eS      20 24.60
KNK      2.22 146 eP     19 54.28  -0.7
SCM      2.24 128 eP     19 55.09  -0.4
BKG      2.27 195 eP     19 54.75  -1.1
TTA      2.28 264 eP     19 55.52  -0.4
GLM      2.37  41 eP     19 56.32  -0.9
IL1      2.38  49 eP     19 55.06  -2.3
ILB      2.38  49 eP     19 56.71  -0.7
TOA      2.53 115 ePc    19 59.10  -0.4
PAX      2.56  94 eP     19 59.56  -0.3
CFI      2.59 142 eP     20 00.67   0.4
SDG      2.63 104 eP     20 00.63  -0.3
PWL      2.73 151 eP     20 02.40   0.1
DFR      2.79 197 eP     20 03.32   0.1
SLKM     2.79 171 eP     20 04.24   1.0
TZL      2.87 113 eP     20 05.29   1.0
RDW      2.91 197 eP     20 05.01   0.0
IM3      2.97 338 eP     20 03.04  -2.6
KLU      2.98 124 eP     20 05.98   0.1
IMA      3.04 339 eP     20 04.07  -2.7
SVW      3.04 227 (P)    20 04.67  -2.0
VLZ      3.08 132 eP     20 06.79  -0.3
FID      3.32 137 eP     20 10.80   0.2
LTI      3.57 153 eP     20 12.51  -1.7
CVA      3.70 135 eP     20 15.96  -0.1
GLB      3.84 115 eP     20 17.87  -0.2
BC3      4.21  89 eP     20 22.10  -1.2
BALM     4.66 115 eP     20 29.26  -0.5
BM3      4.97  30 eP     20 32.19  -1.9
CTGM     5.11 112 eP     20 35.33  -0.9
        56 obs. associated
-----------------------------------
*  NOV  08, 1993  14h 28m 15.31± 2.97s
   59.932 N ±10.7km     2.838 E ±23.8km
   DEPTH =  10.0km  (geophysicist)
 NORTH SEA                         (534)
      MD 2.4 (BER)

EGD      1.24  73 eP     28 38.59   0.2
                eS      28 54.90
ASK      1.30  64 eP     28 39.33   0.0
                eS      28 55.61
KMY      1.42 119 eP     28 41.01  -0.1
                eS      28 59.72
SUE      1.48  39 eP     28 42.10   0.2
                eS      29 00.62
BLS5     1.91 104 eP     28 48.33   0.2
                eSg     29 15.27
ODD1     1.91  89 eP     28 48.83   0.6
                eS      29 11.88
FOO      1.99  32 eP     28 49.36   0.0
                eS      29 13.15
NRA0     4.40  76 Pn     29 22.57  -1.1
                Sn      30 11.01
     S.D. = 0.6  on   8 of   8 obs.
-----------------------------------
%  NOV  08, 1993  15h 02m 27.20± 1.33s
   41.128 N ±15.5km    28.791 E ± 6.4km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.7 (ISK).

ISK      0.21 107 iPg    02 31.80   0.0
CTT      0.27 274 iPg    02 32.80  -0.2
BNT      1.02 221 ePg    02 46.80   0.4
                eSg     03 01.80
EDC      1.05 222 ePg    02 46.50  -0.5
MFT      1.19 254 ePn    02 49.80   0.3
     S.D. = 0.5  on   5 of   5 obs.
-----------------------------------
?  NOV  08, 1993  15h 46m 46.46± 4.17s
    9.285 S ±26.1km  128.545 E ±44.0km
   DEPTH = 115.5 ± 42.0 km
   3.6mb (  1 obs.)
 TIMOR SEA                         (290)

SLKI     3.01  65 eP     47 33.50   0.0
MTN      4.35 145 eP     47 52.00   0.3
                iS      48 50.00
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KNA      6.43 178 eP     48 20.00  -0.1
                  eS     49 38.50
WR2     12.00 153 iPd    49 34.10  -0.8
                  eS     51 48.60
ASPA    15.19 161 iPd    50 16.80   0.7
        1.2s      4.80nm          3.6mb
                  iS     53 04.90
     S.D. = 1.1  on   5 of   5 obs.
-----------------------------------
   NOV  08, 1993  15h 49m 52.84± 0.65s
   13.177 N ± 6.5km   89.402 W ± 5.1km
   DEPTH =  61.9 ±  5.0 km
   4.5mb ( 11 obs.)
 EL SALVADOR                        ( 73)
      Felt (III) at San Salvador.

SJAS     0.54  25 ePd    50 05.60   0.0
VSS      0.58  15 iPd    50 06.50   0.4
LFU      0.63  26 iPd    50 07.30   0.7
TME      0.84   3 iPd    50 09.70   0.7
CUSS     0.90 324 iPd    50 08.10  -1.8
YPE      0.98 344 iPd    50 11.20   0.2
VSM      1.13  77 eP     50 13.70   0.7
TPX      3.26 302 iP     50 41.00  -1.7
                  iS     51 18.00
SCX      4.72 319 iP     51 04.00   0.9
                  iS     52 00.00
OXX      8.06 300 iP     51 49.30  -0.7
PPM     10.62 305 iP     52 26.50   1.2
ACX     10.75 291 (P)    52 30.00   3.5X
UNM     11.21 304 (P)    52 33.00   0.0
CRX     11.65 303 (P)    52 39.00   0.1
MRX     13.04 301 (P)    52 56.00  -1.0
SDV     18.91 101 eP     54 10.00  -1.6
LTX     20.83 323 eP     54 31.52  -0.1
OXF     21.24 360 eP     54 36.75   1.1
UYO     21.39 348 iPd    54 37.20   0.0
MIAR    21.61 351 eP     54 39.61   0.2
        1.1s     22.27nm         4.5mb
MYNC    22.32  11 eP     54 47.69   1.2
        0.8s     13.39nm         4.4mb
MEO     23.06 340 iPc    54 53.00  -0.7
WMOK    23.09 340 eP     54 52.97  -1.0
        0.6s     22.91nm         4.8mb
FNO     23.14 343 iPc    54 54.60   0.1
TUL     23.36 347 iPc    54 58.30   1.8
PCO     24.38 345 iPc    55 06.50   0.0
ACO     25.00 341 iPd    55 12.70   0.3
TUC     27.31 318 eP     55 37.01   3.2X
        0.4s     3.19nm          4.3mb
GOL     29.94 335 eP     55 56.79  -0.8
        0.6s     4.26nm          4.3mb
                  ePcP   58 59.79
PV08    30.52 329 eP     56 03.10   0.3
SRU     31.88 328 eP     56 14.80   0.3
PLM     32.08 313 eP     56 17.51   1.2
PEC     32.58 314 eP     56 20.67   0.2
        0.7s     6.08nm          4.5mb
BONR    35.63 319 eP     56 48.62   1.6
                  ePcP   59 16.36
LPAZ    36.05 144 P      56 51.00  -0.1
LPB     36.26 144 (P)    56 53.00   0.4
CNCB    36.55 144 P      56 55.80   0.6
ULM     37.35 353 eP     57 02.00   1.1
ARN     37.42 316 eP     57 02.46   0.6
LMN     38.65  28 eP     57 12.00   0.1
MOCB    41.42 145 P      57 35.90   0.4
JAQ     41.95  12 eP     57 38.00  -1.0
MCW     44.90 329 eP     58 02.48  -0.6
YKA     52.42 346 eP     58 59.20  -1.8
        0.7s    11.10nm          5.0mb
FRB     52.58  11 eP     59 00.00  -2.0
        0.8s    10.00nm          4.9mb
SOB1    53.05 112 eP     59 04.40  -1.9
RES     61.57 358 eP     00 03.00  -2.6
        0.7s     3.00nm          4.5mb
MBC     65.05 352 eP     00 27.50  -0.8
        1.0s     7.00nm          4.6mb
LIC     83.15  85 P      02 14.10   0.0
GEC2    88.61  40 eP     02 40.60   0.1
        0.8s     0.93nm          4.1mb
WR2    137.61 255 ePKP   09 13.60   1.1
        0.8s     3.10nm
WRA    137.63 255 PKP    09 14.20   1.7
        0.8s     1.20nm
GKN    138.66   8 PKP    09 13.80  -0.6
GUN    138.90   6 PKP    09 15.00  -0.1
KKN    138.95   7 PKP    09 15.20   0.2
PKI    139.18   7 PKP    09 15.00  -0.6
CHTO   147.16 345 ePKP   09 30.30   1.2
HYB    147.36  22 ePKP   09 30.50   1.0
BDT    148.65 344 ePKP   09 34.00   2.5X
GBA    150.37  27 PKP    09 38.00   3.9X
     S.D. = 1.0  on  56 of  60 obs.
-----------------------------------
   NOV  08, 1993  16h 17m 37.09± 0.53s
   37.042 N ± 5.7km  139.341 E ± 6.5km
   DEPTH =    5.0km  (geophysicist)
   4.3mb (  2 obs.)
 EASTERN HONSHU, JAPAN              (227)

NIIJ     0.34 306 iPd     17 43.20  -0.6
                  S      17 47.30
CHJJ     1.03 196 iP+     17 57.00   0.0
                  S      18 10.70
MAT      1.04 242 iPd     17 56.60  -0.5
                  eS     18 15.00
KAKJ     1.07 141 iP+     17 57.60  -0.1
                  S      18 11.80
YAMJ     1.26  26 P       17 59.90  -1.0
                  S      18 16.50
MTMJ     1.31 250 iPd     18 01.60  -0.3
                  S      18 19.30
IIDJ     1.94 217 P       18 12.50   1.4
                  S      18 38.30
OFUJ     2.74  41 P       18 23.30   0.8
TSRJ     3.10 242 eP      18 28.70   1.1
AOMJ     3.60  13 eP      18 35.80   1.1
                  eS     19 18.80
WRA     56.87 186 P       27 23.50  -1.7
        0.6s     0.90nm          4.0mb
ASPA    60.60 186 eP      27 50.20  -0.9
        1.0s     4.50nm          4.6mb
LRM     75.29  43 eP      29 22.10  -1.1
LPAZ   148.10  57 PKP     37 25.20   1.8
LPB    148.29  57 (PKP)   37 30.00   6.6X
CNCB   148.57  57 PKP     37 27.10   3.1X
     S.D. = 1.2  on  14 of  16 obs.
-----------------------------------
% NOV  08, 1993  16h 20m 13.00± 3.87s
   41.260 S ±16.3km  172.469 E ±17.9km
   DEPTH = 228.6 ± 33.3 km
 SOUTH ISLAND, NEW ZEALAND          (162)

QRZ      0.43   6 P       20 43.30   0.2
                  S      21 03.10
THZ      0.60 147 P       20 44.00   0.3
                  S      21 04.30
DSZ      0.70 226 Pc      20 44.30  -0.2
DIW      1.19  68 P       20 47.10  -0.2
TCW      1.36  89 P       20 48.40  -0.1
LTZ      1.53 186 P       20 50.20   0.3
                  S      21 14.50
MRW      1.69  90 P       20 50.90  -0.3
                  S      21 16.50
KIW      1.89  79 P       20 52.90  -0.1
CAW      1.97  86 P       20 53.50  -0.2
BLW      2.27  94 P       20 56.80   0.1
MTW      2.29  88 P       20 56.90   0.0
MNG      2.37  75 P       20 57.60  -0.2
                  S      21 28.60
MQZ      2.45 177 P       20 58.20  -0.3
AMW      2.48  92 P       20 59.30   0.4
PGZ      2.95  79 P       21 04.30   0.3
     S.D. = 0.3  on  15 of  15 obs.
-----------------------------------
& NOV  08, 1993  16h 25m 51.31s
   60.371 N          152.695 W
   DEPTH = 115.3km
   3.4mb (  1 obs.)
 SOUTHERN ALASKA                    (  2)
      <AEIC>.

RED      0.06 322 eP      26 06.70   0.9
RS2      0.10 342 eP      26 06.91   0.9
REF      0.12 358 eP      26 06.78   0.7
                  eS     26 19.82
RDW      0.13 333 ePc     26 06.92   0.9
DFR      0.22   1 iPc     26 06.88   0.7
NCT      0.22 329 ePc     26 06.87   0.7
                  eS     26 20.07
ILIM     0.32 204 eP      26 07.33   0.8
                  eS     26 21.37
INE      0.36 211 eP      26 07.58  -0.8
INW      0.37 216 ePc     26 07.62  -0.8
                  eS     26 21.17
BKG      0.73  17 iPc     26 09.94  -0.9
                  eS     26 25.10
OPT      0.77 201 iPd     26 10.35  -0.7
                  eS     26 25.44
NKA      0.81  62 iPc     26 12.19   0.8
CKL      0.85  12 iPc     26 11.07  -0.8
CKT      0.87  16 iPc     26 11.00  -1.0
SPU      0.87  21 iPc     26 10.95  -1.1
                  eS     26 27.48
HOM      0.89 143 ePd     26 11.62  -0.5
                  eS     26 28.20
CKN      0.89  16 ePc     26 11.50  -0.7
BGL      0.91   9 iPc     26 11.77  -0.7
CP2      0.92  14 ePc     26 11.63  -1.1
CRP      0.94  16 iPc     26 11.36  -1.4
PDB      0.95 233 iPc     26 11.53  -1.2
                  eS     26 27.36
CGLM     1.00  19 iPc     26 12.23  -1.1
XLV      1.04 152 eP      26 12.55  -1.1
                  eS     26 30.51
AUL      1.06 201 eP      26 12.91  -0.9
NCG      1.07  14 iPc     26 13.12  -1.0
AUE      1.07 199 eP      26 12.69  -1.3
AUW      1.08 202 ePd     26 13.03  -1.0
AUH      1.08 201 eP      26 13.03  -1.1
BRLK     1.09 123 eP      26 13.43  -0.8
                  eS     26 30.23
AUI      1.10 200 eP      26 13.08  -1.2
                  eS     26 30.13
                  eS     26 30.42
CNPM     1.12 138 ePd     26 13.52  -1.0
SLKM     1.23  83 ePc     26 14.26  -1.5
                  eS     26 32.72
MCNL     1.45 216 eP      26 16.65  -1.6
SUA      1.45  40 iPc     26 17.41  -1.0
                  eS     26 39.21
CDD      1.52 199 ePd     26 17.26  -1.9
SVW      1.62 298 iPd     26 17.87  -2.4
SEW      1.64  98 ePc     26 18.71  -1.8
MPA      1.66  84 ePc     26 18.81  -1.9
SKT      1.71  19 ePc     26 19.89  -1.5
                  eS     26 43.31
PMS      1.77  59 ePc     26 20.35  -1.8
SYI      1.77 175 ePd     26 20.26  -1.9
                  eS     26 43.66
PWA      1.88  46 ePc     26 21.67  -1.8
                  eS     26 47.34
PLRM     2.13  53 eP      26 23.82  -2.8
PMR      2.13  53 (P)     26 25.93  -0.7
PWL      2.21  75 eP      26 24.63  -3.0
GHO      2.31  51 ePc     26 26.49  -2.6
KNK      2.32  61 ePc     26 26.39  -2.8
                  eS     26 55.28
CUT      2.35  29 eP      26 27.76  -1.8
                  eS     26 57.30
LTI      2.44  96 eP      26 27.86  -2.8
MTU      2.55  96 eP      26 29.77  -2.4
CFI      2.55  69 ePc     26 28.74  -3.4
SML      2.56  54 iPc     26 29.58  -2.8
KDC      2.63 178 ePd     26 28.88  -4.3
                  eS     26 59.91
SCM      2.99  58 ePc     26 35.21  -2.9
HUR      2.99  28 eP      26 36.06  -2.0
TTA      3.02 330 ePd     26 35.48  -3.0
HIN      3.08  87 eP      26 36.54  -2.6
FID      3.09  80 ePc     26 35.10  -4.3
                  eS     27 11.12
VZW      3.10  74 eP      26 35.86  -3.6
VLZ      3.22  74 eP      26 37.74  -3.2
TRF      3.29  19 eP      26 39.90  -2.4
                  eS     27 17.90
KTH      3.30  14 eP      26 39.82  -2.5
CVA      3.44  84 eP      26 40.70  -3.4
KLU      3.49  68 ePc     26 41.52  -3.3
                  eS     27 23.13
RND      3.55  29 eP      26 43.22  -2.4
TOA      3.60  58 ePc     26 43.75  -2.6
MCK      3.81  26 eP      26 46.84  -2.3
RAGM     3.98  86 eP      26 48.77  -2.7
SDG      4.06  55 eP      26 49.95  -2.5
BWN      4.10  20 eP      26 51.28  -1.8
PAX      4.32  50 ePc     26 53.51  -2.6
GLB      4.47  72 eP      26 54.60  -3.5
NEA      4.54  20 eP      26 56.48  -2.6
WRH      4.64  25 eP      26 57.45  -2.9
```

08d 16h

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HDA     4.85  31 ePc   27 00.30  -2.9
CCB     4.85  26 eP    27 00.18  -3.1
WAX     4.88  85 eP    27 01.27  -2.5
TGL     4.88  81 eP    27 00.95  -2.9
DJE     4.92  39 eP    27 01.68  -2.6
MDM     5.04  22 eP    27 02.94  -3.0
FBA     5.08  24 eP    27 03.61  -2.7
BALM    5.13  78 eP    27 03.50  -3.7
ILB     5.17  29 iPc   27 04.28  -3.3
                eS     27 57.88
IL1     5.17  29 ePc   27 04.26  -3.3
GLM     5.24  26 ePd   27 05.75  -2.8
YAH     5.44  85 eP    27 09.26  -2.2
CTGM    5.62  79 ePc   27 11.60  -2.3
IM3     5.65 356 eP    27 11.65  -2.6
BC3     5.85  58 eP    27 13.90  -3.1
YKA    18.16  67 eP    29 52.80  -4.2
       0.7s     1.50nm          3.4mb
       90 obs. associated
-----------------------------------
   NOV  08, 1993  16h 41m 06.15± 0.68s
   32.471 S ± 6.0km   68.271 W ± 5.3km
   DEPTH = 140.2 ± 11.1 km
 MENDOZA PROVINCE, ARGENTINA      (139)
      MD 4.1 (SAN).

MDZ     0.64 230 iP    41 26.60  -0.9
                iS     41 40.00
RTCV    0.65 340 iPd   41 27.50  -0.1
CFA     0.86   2 iPc   41 29.00  -0.1
RTCB    1.08 335 iPd   41 31.10   0.0
RTLL    1.15 352 iPd   41 31.90   0.2
FCH     1.90 243 iPd   41 41.05   0.8
                iS     42 08.45
JACH    1.97 263 iPd   41 41.38   0.5
                iS     42 09.28
PEL     2.14 251 iPd   41 43.17   0.3
                iS     42 11.37
MRA     2.17  89 iPc   41 43.80   0.7
PCH     2.21 238 iPd   41 44.35   0.6
                iS     42 13.80
SAN     2.24 243 iP    41 44.75   0.7
RFA     2.30 184 ePc   41 44.20  -0.6
                S      42 35.00
ROCH    2.36 257 iP    41 45.64  -0.2
                iS     42 15.71
RTRS    2.51 336 e(P)  41 27.50 -19.9X
TACH    2.53 242 iP    41 47.61  -0.1
                iS     42 19.46
CACH    2.55 229 iP    41 48.94   0.9
RTPR    2.63  35 eP    41 49.00   0.0
LCCH    2.95 249 iP    41 52.02  -1.0
LNV     3.02 240 iP    41 52.72  -1.2
                iS     42 28.95
TCA     3.33  71 iPc   41 58.00  -0.1
FSA     6.66  18 ePc   42 42.50  -0.3
     S.D. = 0.7  on  20 of  21 obs.
-----------------------------------
   NOV  08, 1993  16h 43m 08.10± 1.36s
    2.913 N ± 5.4km  125.412 E ± 7.3km
   DEPTH = 194.3 ± 13.6 km
   4.9mb ( 29 obs.)
 TALAUD ISLANDS, INDONESIA        (263)

TSM     7.65 281 ePd   44 58.90   1.1
TLE    11.22 139 eP    45 42.00  -2.2
KHKI   14.87 221 ePc   46 32.10   1.9
MTN    16.65 160 eP    46 50.00  -2.0
TPI    18.62 253 iPc   47 14.00   0.5
                e      48 00.00
KNA    18.84 170 iPc   47 14.80  -0.9
       0.6s    62.00nm          5.3mb
WWKK   19.32 110 eP    47 21.50   0.7
LEM    20.23 241 ePc   47 32.20   2.2
KGM    22.09 268 eP    47 50.50   2.3
LAT    23.56 114 eP    47 57.80  -4.6X
WR2    24.36 159 iPd   48 10.30   0.4
       0.6s   136.70nm          5.7mb
                eS     52 12.00
MBL    24.54 193 eP    48 11.00  -0.5
       0.7s    55.00nm          5.3mb
QIS    27.16 150 eP    48 37.00   1.5
ASPA   27.68 163 iPc   48 39.50  -0.7
       0.5s    18.20nm          5.1mb
                iS     53 06.50
WARB   28.95 178 iPc   48 51.10  -0.3
       0.3s    25.00nm          5.4mb
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MEEK   30.10 192 iPd   49 01.00  -0.6
       0.4s    41.00nm          5.5mb
CHTO   30.34 303 ePc   49 03.20  -0.6
       1.0s    10.75nm          4.5mb
MRWA   33.20 195 iPc   49 27.60  -0.9
       0.4s    13.00nm          4.9mb
FORT   33.60 176 iPc   49 32.00   0.1
       0.5s    60.00nm          5.5mb
COOL   33.85 187 eP    49 32.00  -2.1
BAL    34.35 193 eP    49 37.50  -0.8
       0.4s    18.00nm          5.1mb
CD2    34.55 326 eP    49 39.00  -1.1
XAN    34.58 335 P     49 39.00  -1.3
       1.0s    12.00nm          4.5mb
KLB    35.08 191 eP    49 43.50  -0.9
MUN    35.78 193 eP    49 50.00  -0.4
       0.6s   274.00nm          6.1mb X
NWAO   36.48 192 eP    49 55.90  -0.3
TIY    36.62 343 Pc    49 57.40  -0.1
     Z  22s     0.39um          4.1Msz
STK    37.86 157 iPc   50 05.50  -2.3
       0.5s    14.10nm          4.9mb
                iS     55 41.50
RKG    38.11 191 eP    50 10.50   0.6
LZH    38.56 331 eP    50 14.00   0.2
       1.0s    37.00nm          5.0mb
                PcP    52 23.00
ADE    39.70 163 iPc   50 24.20   1.2
CN2    40.71   0 eP    50 30.60  -0.5
       0.6s     5.70nm          4.3mb
ARMA   41.54 145 iPd   50 39.40   1.2
       0.4s     4.00nm          4.3mb
MDJ    41.69   4 eP    50 40.00   0.8
       0.8s    16.00nm          4.6mb
LSA    42.01 313 P     50 42.50   0.0
       0.6s    15.00nm          4.7mb
BWA    42.99 152 iPc   50 52.40   2.5
GTA    43.14 331 eP    50 50.60  -0.5
       1.0s     8.00nm          4.2mb
                PcP    52 38.00
CAN    43.99 152 iPc   50 59.50   1.5
TOO    44.38 157 iPc   51 03.00   2.0
       0.9s    29.00nm          4.8mb
GUN    45.16 307 P     51 07.60  -0.1
PKI    45.38 307 P     51 09.00  -0.4
KKN    45.58 307 P     51 10.40  -0.5
DMN    45.64 307 P     51 11.40   0.0
       0.9s    81.00nm          5.2mb
GKN    46.18 307 P     51 14.60  -1.0
GBA    48.56 286 P     51 33.00  -0.9
WMQ    52.65 326 P     52 04.00  -0.5
       1.0s    15.00nm          4.6mb
QUE    61.47 303 eP    53 07.60   0.7
CSY    69.87 186 iPd   54 09.20  10.0X
       0.6s    16.00nm          4.9mb
SVW    82.13  29 eP    55 10.20   2.1
TTA    82.22  27 eP    55 10.40   1.9
IMA    83.66  24 eP    55 17.42   1.5
       0.6s     4.86nm          4.4mb
                epP    55 57.82 162kmX
SLKM   84.70  30 eP    55 21.24   0.2
OBN    86.95 325 iPd   55 31.90  -0.2
       0.7s    29.00nm          5.2mb
KAF    91.71 332 iP    55 53.60  -0.7
       0.4s     8.80nm          5.2mb
NUR    92.77 331 iP    55 58.50  -0.7
       0.4s     6.60nm          5.1mb
HFS    98.12 332 eP    56 21.90  -1.7
       0.4s     2.40nm          5.0mb
NB2    98.92 333 P     56 26.00  -1.3
       0.7s     4.20nm          5.0mb
BRG   101.10 323 iPdiff56 37.40   0.2
GEC2  101.90 321 ePdiff56 40.90   0.0
       1.3s     3.22nm          4.8mb
                e      56 56.00
UYO   127.40  42 iPKPd 01 52.30   0.5
KIC   129.39 281 PKP   01 56.00  -0.1
TIC   129.62 281 PKP   01 56.10  -0.5
LIC   129.69 280 PKP   01 56.20  -0.5
     S.D. = 1.2  on  61 of  63 obs.
-----------------------------------
*  NOV  08, 1993  17h 21m 47.70± 0.89s
    5.779 S ± 7.5km  145.956 E ±13.8km
   DEPTH =  10.0km  (geophysicist)
   3.8mb (  1 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)
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YYYY    0.46 178 iPd   21 56.50  -0.6
                eS     22 04.00
MDG     0.55 342 eP    21 58.70  -0.2
LAT     1.36 130 eP    22 13.00   0.3
MNDI    2.32 261 eP    22 31.50   4.8X
PMG     3.80 162 eP    22 47.50   0.0
WR2    18.04 218 iPc   26 00.80   0.5
       0.6s     5.20nm          3.8mb
     S.D. = 0.6  on   5 of   6 obs.
-----------------------------------
   NOV  08, 1993  18h 10m 05.19± 0.59s
    0.707 S ± 8.2km   99.047 E ± 8.2km
   DEPTH =  33.0km  (normal)
   4.8mb (  6 obs.)
 SOUTHERN SUMATERA, INDONESIA     (274)

KLM     4.59  34 eP    11 14.00  -0.1
KGM     5.06  58 ePc   11 20.50  -0.2
                e      11 46.00
SNG     7.99  11 eP    12 03.00   1.1
CHTO   19.40 360 eP    14 27.80  -3.8X
KMI    25.92   8 eP    15 35.50  -1.0
GUN    31.14 337 P     16 23.80   0.2
       0.4s     9.00nm          4.9mb
KKN    31.27 336 P     16 24.40  -0.2
GKN    31.72 335 P     16 28.20  -0.3
WR2    39.49 121 iPc   17 34.90   0.2
       0.4s     9.20nm          4.9mb
ASPA   40.78 127 iPc   17 45.30   0.0
       0.4s     6.10nm          4.7mb
GEC2   87.46 319 ePKP  22 50.80   0.0
       0.9s     1.07nm          4.1mb
HFS    88.28 330 eP    23 07.20  12.8X
       0.4s     1.20nm
LPG    92.11 315 eP    23 13.20   0.2
       1.0s     4.40nm          4.8mb
LPL    92.13 315 eP    23 13.20   0.2
       0.6s     1.80nm          4.7mb
UYO   144.39  19 iPKPc 29 50.00   9.8X
     S.D. = 0.6  on  12 of  15 obs.
-----------------------------------
*  NOV  08, 1993  18h 59m 38.35± 1.20s
   51.496 N ± 8.2km   7.270 E ±13.7km
   DEPTH =  10.0km  (geophysicist)
 GERMANY                          (543)
      ML 2.8 (LDG), 2.5 (BNS). Felt
      (IV) in the Flierich area.

BNS     0.54 186 iP    59 53.70   4.5X
       0.4s   116.00nm
                id     59 54.00
                eSg    00 03.00
WTS     0.58 330 iPg   59 50.10   0.1
       0.7s    27.40nm
KLL     1.04 216 iPc   00 01.30   3.3X
       0.4s   *******nm
                iS     00 19.20
ENN     1.12 230 iPn   00 04.00   4.7X
       0.5s    12.80nm
                iPg    00 05.00
                iSg    00 22.40
MEM     1.19 222 iPc   00 24.33  23.8X
ABH     1.63 174 ePn   00 09.30   2.1X
RUP     1.80 184 ePn   00 11.60   1.9
WLF     1.97 202 iP    00 41.00  29.0X
TOD     2.13 152 ePn   00 14.00  -0.5
DOU     2.20 232 iP    00 20.30   4.8X
CDF     3.09 180 Pn    00 24.80  -3.3X
                Sg     01 20.10
HAU     3.54 190 Pn    00 34.80   0.2
                Sg     01 36.50
BSF     3.68 185 Pn    00 35.60  -1.0
                Sg     01 41.20
LOR     4.78 209 Pn    00 52.80   0.7
                Sn     01 47.70
                Sg     02 21.20
LBF     5.00 207 Pn    00 54.70  -0.6
SSF     5.08 210 Pn    00 55.50  -0.7
                Sn     01 55.80
                Sg     02 27.50
FLN     5.69 244 Pn    01 04.80  -0.1
     S.D. = 1.0  on   9 of  17 obs.
-----------------------------------
   NOV  08, 1993  19h 15m 49.76± 0.20s
   25.414 S ± 5.9km  176.607 W ± 4.3km
   DEPTH =  28.6km  ( 26 depth phases)
   5.3mb ( 38 obs.)  4.8Msz ( 26 obs.)
```

```
SOUTH OF FIJI ISLANDS                (171)
     Mw 5.1 (HRV). Ms 4.6 (BRK).
     CENTROID, MOMENT TENSOR     (HRV)
     Data Used: GDSN
     L.P.B.: 25S, 36C
     Centroid Location:
     Origin Time        19:15:51.7 0.8
     Lat 25.10S 0.08 Lon 176.23W 0.08
     Dep  29.0 FIX Half-duration  1.0
     Moment Tensor;   Scale 10**16 Nm
       Mrr= 4.82 0.34  Mtt=-4.43 0.44
       Mff=-0.39 0.65  Mrt= 0.87 0.93
       Mrf=-2.70 0.89  Mtf=-0.14 0.31
     Principal Axes:
       T  Val=  6.04  Plg=67  Azm= 78
       N        -1.52       23      274
       P        -4.52        6      182
     Best Double Couple:Mo=5.3*10**16
      NP1:Strike=249 Dip=44 Slip=  56
      NP2:        111     55      118

SVA     8.59 327 eP    17 55.50   0.4
URZ    13.87 201 eP    19 05.50  -1.1
DZM    15.87 279 iPc   19 38.90   6.0X
BKM    16.05 296 iPc   19 41.00   5.8X
AFR    26.13  78 iPd   21 23.20  -0.1
       1.2s   239.20nm          5.7mb
PAE    26.26  78 iPd   21 24.70   0.2
       1.5s   572.50nm          6.0mb
PPT    26.30  78 iPd   21 25.10   0.2
       1.5s   881.70nm          6.2mb
PPN    26.44  78 iPd   21 26.50   0.4
       1.2s   226.10nm          5.7mb
TVO    26.51  79 iPd   21 27.60   0.8
       1.4s   486.20nm          5.9mb
ARMA   28.45 253 eP    21 53.40   8.9X
       0.7s     5.00nm          4.3mb
PMO    28.80  74 iPd   21 49.50   1.9
       1.4s   243.10nm          5.7mb
CNB    30.85 243 eP    22 13.20   7.4X
       1.0s    20.00nm          4.9mb
CAN    31.14 243 eP    22 11.80   3.5X
                 i     22 18.30  23km
BWA    31.49 245 eP    22 09.10  -2.3
                 i     22 17.90  31km
TOO    34.30 240 eP    22 41.00   5.2X
       0.5s    14.00nm          5.1mb
CTA    34.58 271 iPd   22 39.00   0.6
                 i     22 46.00  24km
STK    37.07 250 eP    22 57.90  -1.4
       1.9s     6.40nm          4.1mb X
                 i     23 04.50  22km
                 iPcP  25 26.30
ASPA   44.85 261 iPd   24 04.50   1.0
       0.8s    16.40nm          5.0mb
     Z 21s     0.60um          4.5Msz
WR2    45.37 266 eP    24 07.30  -0.3
       0.4s     5.10nm          4.8mb
                 i     24 15.70  28km
                 i     25 55.90
WRA    45.39 266 P     24 07.59  -0.2
HON    49.85  23 P     24 50.00   7.5X
     Z 20s     0.49um          4.5Msz
WARB   50.74 256 eP    24 42.00  -7.4X
SBA    53.08 184 iPd   25 08.30   2.0
KLB    57.25 248 eP    25 42.00   4.8X
MRWA   59.26 250 eP    25 50.00  -1.2
CSY    60.13 206 eP    26 05.90   9.3X
       0.7s    19.10nm          5.3mb
SPA    64.73 180 iPc   26 27.40  -0.2
       1.1s    59.52nm          5.6mb
MAT    74.91 324 (P)   27 28.00  -1.8
       1.0s     9.00nm          4.7mb
MAW    77.40 200 P     27 44.20   0.9
       1.1s    55.56nm          5.5mb
BCH    80.57  44 eP    28 01.00  -0.2
SAO    80.76  42 P     28 10.00   7.9X
     Z 20s     0.61um          4.9Msz
SAO    80.76  42 ePc   28 01.68  -0.4
       1.3s    30.00nm          5.1mb
                 epP   28 11.48  31km
YSS    80.91 333 eP    28 03.00   0.5
     Z 19s     0.20um          4.5Msz
MHC    81.03  41 ePc   28 03.54  -0.1
       1.5s    50.00nm          5.3mb
                 ipP   28 13.29  31km
ARN    81.10  41 eP    28 04.05   0.2
PLM    81.50  47 eP    28 06.05  -0.2
KMPM   81.67  38 eP    28 07.01   0.2
                 epP   28 16.73  31km
ISA    81.89  44 eP    28 07.88  -0.2
       1.1s    15.96nm          5.0mb
     Z 22s     0.31um          4.6Msz
                 epP   28 17.14  29km
CMB    82.23  41 ePc   28 09.05  -0.7
       1.3s    20.00nm          5.0mb
     Z 19s     0.30um          4.7Msz
                 ipP   28 19.05  32km
                 eLR   52 52.31
ORV    82.57  40 ePc   28 10.94  -0.5
       1.7s    40.00nm          5.2mb
     Z 19s     0.30um          4.7Msz
                 epP   28 20.69  31km
                 eLQ   49 41.39
                 eLR   53 04.39
WDC    82.67  38 eP    28 11.43  -0.4
       1.2s    26.50nm          5.2mb
     Z 19s     0.34um          4.7Msz
                 epP   28 20.75  29km
LGPM   82.73  38 eP    28 12.32   0.0
                 epP   28 21.81  30km
GSC    82.73  45 eP    28 12.26  -0.2
                 epP   28 21.58  29km
MIN    83.04  39 ePc   28 12.65  -1.4
       1.2s    20.00nm          5.1mb
                 ipPc  28 23.00  33km
YBH    83.35  38 ePc   28 15.31  -0.2
       1.0s    10.00nm          4.9mb
     Z 19s     0.20um          4.5Msz
                 ipP   28 24.71  30km
                 eLR   53 49.52
BONR   83.44  43 eP    28 16.15  -0.2
LBFM   83.54  38 eP    28 16.57  -0.1
                 epP   28 25.67  29km
TPNV   84.10  44 eP    28 19.43  -0.1
       0.4s     3.18nm          4.9mb
TNP    84.19  43 ePc   28 19.73  -0.3
       1.0s    13.59nm          5.1mb
KVN    84.26  42 eP    28 19.83  -0.5
                 epP   28 29.28  30km
SNA    84.46 178 e(P)  28 21.10   0.6
       0.9s    35.00nm          5.6mb
TUC    85.03  51 eP    28 24.89   0.7
       0.8s    10.42nm          5.1mb
     Z 18s     0.40um          4.8Msz
MDJ    85.26 325 eP    28 25.00   0.1
       1.1s    20.00nm          5.2mb
BMW    86.31  34 eP    28 30.29   0.1
ARUT   86.39  45 eP    28 30.78  -0.1
                 epP   28 40.27  30km
SHW    86.62  34 (P)   28 31.72  -0.1
CN2    86.95 322 eP    28 33.00  -0.3
       1.2s    32.00nm          5.4mb
GMW    87.27  33 (P)   28 34.15  -0.6
TIA    87.52 312 eP    28 36.30   0.1
       1.2s    60.00nm          5.7mb
MSU    87.62  45 eP    28 36.94   0.0
                 epP   28 46.26  29km
RMW    87.69  34 eP    28 36.46  -0.4
MCW    88.02  32 (P)   28 39.18   0.9
DUG    88.19  43 P     28 50.00  10.5X
     Z 19s     0.25um          4.7Msz
HVU    89.14  42 eP    28 43.60  -0.4
                 epP   28 52.74  29km
DAU    89.29  44 eP    28 44.58  -0.4
ALQ    89.49  51 eP    28 45.36  -0.5
       0.9s    11.79nm          5.2mb
     Z 18s     0.41um          4.9Msz
                 epP   28 54.56  29km
PMR    89.49  13 P     28 50.00   5.0X
     Z 20s     0.42um          4.9Msz
PV09   89.58  46 eP    28 45.52  -0.9
DPW    89.80  35 eP    28 46.09  -0.8
                 epP   28 55.41  29km
GYA    90.17 299 eP    28 52.00   2.9
BJI    90.27 315 eP    28 49.00   0.0
       1.6s    34.00nm          5.4mb
     Z 24s     0.32um          4.7MszX
TIY    91.49 311 Pc    28 55.40   0.5
LRM    91.69  39 eP    28 55.00  -0.8
                 e     29 04.80  31km
XAN    92.11 307 P     28 58.00   0.2
       1.0s     8.90nm          5.1mb
                 pP    29 06.00  25km
KMI    92.70 296 Pd    29 02.50   1.6
       1.6s    50.00nm          5.7mb
                 pP    29 09.50  22km
GOL    92.70  47 P     29 10.00   9.3X
     Z 20s     0.76um          5.1Msz
GLD    92.82  47 P     29 10.00   8.9X
     Z 20s     0.77um          5.2Msz
ILT    93.04 359 eP    29 01.00  -0.2
                 e     39 48.00
                 eS    40 20.00
CHTO   93.09 289 eP    29 03.30   0.8
       1.1s    12.37nm          5.3mb
HHC    93.68 314 P     29 05.40   0.5
       1.2s    26.00nm          5.5mb
CD2    94.49 302 eP    29 10.20   1.4
BTO    94.57 313 eP    29 10.00   1.0
WMOK   94.88  54 P     29 20.00   9.5X
     Z 20s     0.47um          5.0Msz
MEO    95.04  54 iPc   29 10.00  -1.2
LZH    96.74 307 eP    29 19.50   0.4
       1.0s    25.00nm          5.7mb
MIAR   98.65  56 P     29 40.00  12.5X
     Z 20s     0.26um          4.7Msz
GTA   101.04 308 ePdiff29 38.00  -0.5
       1.5s    13.00nm          5.3mb
FVM   102.36  54 Pdiff 29 50.00   5.8X
     Z 18s     0.54um          5.1Msz
MYNC  106.04  58 PKP   34 20.00   7.1X
     Z 20s     0.30um          4.8Msz
YSNY  112.40  52 PKP   34 30.00   5.3X
     Z 21s     0.29um          4.8Msz
BINY  114.17  53 PKP   34 40.00  11.8X
     Z 19s     0.41um          5.0Msz
LSCT  116.07  54 PKP   34 40.00   8.2X
     Z 20s     0.28um          4.9Msz
HRV   117.45  54 PKP   34 40.00   5.6X
     Z 18s     0.39um          5.1Msz
LBNH  117.48  52 PKP   34 40.00   5.6X
     Z 19s     0.42um          5.1Msz
CBM   120.49  49 PKP   34 50.00  10.0X
     Z 19s     0.59um          5.2Msz
BUL   128.51 211 iPKPc 35 04.80   8.4X
KAF   140.21 343 ePKP  35 26.60   9.7X
OBN   141.64 330 ePKP  35 27.00   7.3X
       1.5s    30.00nm
NUR   141.99 343 ePKP  35 30.40  10.2X
AFIF  143.94 277 PKP   35 22.33  -2.5X
NB2   143.99 354 PKP   35 20.00  -3.7X
       1.0s    11.20nm
UPP   144.18 348 iPKP  35 20.00  -3.9X
HFS   144.57 351 ePKP  35 19.80  -4.8X
       0.6s    17.00nm
     Z 17s     0.10um          4.6MszX
                 LR    27 51.00
UQSK  144.94 279 PKP   35 25.53  -0.9
KONO  145.51 354 ePKP  35 07.00 -19.2X
MNK   146.33 334 ePKP  35 28.00   0.3
MUD   148.70 354 iPKP  35 33.70   2.3X
       0.7s    16.00nm
EKA   149.73   7 PKPc  35 45.70  12.6X
       1.1s    18.90nm
KAS   150.26 310 ePKP  35 40.50   6.1X
CLI   151.58 324 ePKP  35 48.50  12.3X
OJC   152.18 337 ePKP  35 43.00   6.1X
                 i     35 51.90
VRI   152.32 323 ePKP  35 40.00   2.7X
UZH   152.49 332 ePKP  35 45.50   8.1X
       1.1s    35.00nm
                 i     35 53.70
                 e     36 10.60
KSP   152.74 342 iPKPd 35 44.60   6.9X
       0.8s    27.00nm
                 i     35 53.30
SPC   152.87 335 ePKP  35 45.00   6.8X
MLR   152.98 324 ePKP  35 41.00   2.6X
BRG   153.32 345 iPKP  35 45.40   6.9X
       0.8s    20.00nm
                 i     35 54.60
WTS   153.33 355 ePKP  35 46.00   7.6X
       0.8s    10.60nm
                 e     35 54.50
PRU   153.99 343 PKP   35 56.00  16.6X
MOX   154.02 348 ePKP  35 56.30  16.8X
ENN   154.61 356 ePKP  35 49.00   8.8X
       0.8s     3.60nm
SRO   154.73 336 ePKP  35 50.00   9.6X
ZST   154.83 338 ePKP  35 48.00   7.4X
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08d 19h

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                e     36 04.20
GRF   155.01 348 ePKP  35 49.90   9.1X
     Z  22s     0.20um          4.9Msz
                e     35 58.80
                e     36 06.10
KHC   155.02 344 ePKP  35 41.50   0.6
      1.0s     8.90nm
                e     35 49.50
                e     35 58.00
                e     36 05.50
                e     36 16.00
GEC2  155.26 344 ePKP  35 50.20   8.9X
      0.7s     1.84nm
                e     35 58.30
                e     36 02.50
                e     36 07.10
                e     36 16.70
     S.D. = 0.9  on  73 of 126 obs.
-----------------------------------
?  NOV  08, 1993  19h 29m 54.04± 1.08s
   40.385 N ±13.0km   25.339 E ±12.3km
   DEPTH =  10.0km  (geophysicist)
 AEGEAN SEA                        (365)

EZN      0.94 126 iPn   30 12.00   0.1
KDZ      1.27   3 iP    30 18.00   0.5
RZN      1.38 340 iP    30 18.00  -1.5
MFT      1.53  74 ePn   30 25.70   4.2X
MMB      1.71 315 eP    30 25.00   0.9
PLD      1.78 345 iP    30 29.00   3.9X
EDC      1.93  90 ePn   30 31.00   3.8X
KKB      2.26 312 eP    30 33.00   1.0
JMB      2.28  24 eP    30 41.00   8.7X
VAY      2.30 295 ePn   30 31.70  -0.9
VTS      2.72 325 iP    30 44.00   5.2X
     S.D. = 1.3  on   6 of  11 obs.
-----------------------------------
*  NOV  08, 1993  20h 13m 32.12± 1.30s
   36.437 N ±14.2km   23.774 E ±22.3km
   DEPTH =  33.0km  (normal)
 SOUTHERN GREECE                   (368)
      MD 3.1 (ATH).

VLI      0.73 293 eP    13 46.50   0.5
VAM      1.08 161 eP    13 51.00   0.0
VLS      3.08 305 eP    14 19.00  -0.5
KZN      4.17 338 eP    14 36.50   1.4
OHR      5.21 334 ePn   14 48.50  -1.4
     S.D. = 1.5  on   5 of   5 obs.
-----------------------------------
&  NOV  08, 1993  20h 20m 42.37s
   38.402 N          122.577 W
   DEPTH =   7.8km
 NORTHERN CALIFORNIA               ( 36)
      <GM-P>. MD 3.5 (GM). ML 3.5
      (BRK), 3.3 (GS). Felt (IV) at
      Kenwood; (III) at Fairfield, St.
      Helena and Windsor; (II) at
      Oakville. Felt in Napa, Solano
      and Sonoma Counties.

NTYM     0.07 259 iPc   20 44.38   0.0
BBR      0.14 171 P     20 45.90   0.4
NCFM     0.19 245 P     20 46.80   0.4
NTBM     0.32 241 P     20 49.29   0.4
NBPM     0.40  48 P     20 51.10   0.6
GGPM     0.42 330 P     20 50.93   0.1
GSGM     0.48 347 P     20 52.36   0.4
GHCM     0.53 293 P     20 52.97   0.0
CVPM     0.59 151 P     20 54.20   0.0
BKS      0.59 153 eP    20 53.89  -0.3
                eS     21 02.65
GDCM     0.63 305 P     20 55.06  -0.1
HMR      0.66 112 iPc   20 56.07   0.5
CSVM     0.70 140 P     20 56.52   0.1
GSNM     0.72 318 P     20 56.68  -0.2
NFIM     0.78 206 P     20 57.34  -0.4
JCPM     0.84 166 P     20 58.50  -0.2
JEGM     0.89 174 eP    20 59.07  -0.6
CPLM     0.91 147 P     21 00.18   0.3
CVAL     1.02 140 P     21 01.69  -0.1
MNR      1.10 137 P     21 02.54  -0.6
JJRM     1.10 164 P     21 02.75  -0.4
CSTL     1.14 131 P     21 03.30  -0.7
APRM     1.17  66 P     21 02.51  -1.8
SEC      1.17 162 P     21 04.86   0.4
MHR      1.23 148 P     21 04.82  -0.6
JSMM     1.23 165 P     21 04.19  -1.3
ALAM     1.28  82 P     21 04.57  -1.8
MHC      1.29 145 eP    21 05.00  -1.6
                eS     21 22.38
JBLM     1.31 166 P     21 05.73  -1.2
ARN      1.34 141 ePc   21 05.58  -1.7
JSTM     1.34 152 P     21 06.13  -1.2
COE      1.35 148 eP    21 06.31  -1.1
AFDM     1.37  66 P     21 05.99  -1.8
MNHM     1.41 100 P     21 06.40  -2.0
JHLM     1.42 155 P     21 07.34  -1.2
ORV      1.43  36 ePd   21 05.90  -2.7
                eS     21 23.32
CBO      1.47 151 P     21 07.82  -1.3
EUC      1.48 155 P     21 09.31   0.0
JRRM     1.50 153 P     21 09.76   0.1
ASMM     1.54  74 P     21 09.44  -0.9
MGL      1.62  29 P     21 09.13  -2.2
CSR      1.64 151 P     21 11.47  -0.2
MOYM     1.66 107 P     21 10.68  -1.2
CMB      1.76 101 ePc   21 12.30  -1.2
                eS     21 33.29
FRP      1.86 152 P     21 12.75  -2.1
SAO      1.87 151 ePd   21 12.91  -2.0
BVYM     1.89 150 P     21 13.65  -1.7
BSRM     1.93 154 P     21 14.44  -1.3
WDC      2.18   1 eP    21 16.58  -2.8
KMPM     2.34 330 (P)   21 22.96   1.1
BAPM     2.34 161 P     21 20.28  -1.7
LGPM     2.51 356 (Pn)  21 23.82  -0.5
MMPM     2.91 105 eP    21 30.71   0.5
MEMM     2.96 103 eP    21 30.80   0.2
LBFM     2.99  10 eP    21 31.47   0.3
MRCM     3.30 102 eP    21 36.49   0.9
MTUM     3.34 107 eP    21 37.07   0.9
BONR     3.40  96 eP    21 36.33  -0.7
KVN      3.56  78 eP    21 37.97  -1.3
BCH      3.78 147 eP    21 39.97  -2.4
TNP      4.23  93 (Pn)  21 48.53  -0.3
ISA      4.27 129 eP    21 47.36  -1.9
ABL      4.45 142 (Pn)  21 52.44   0.5
TPNV     5.22 104 (Pn)  22 03.56   0.7
       0.5s     3.07nm          4.2mb X
GSC      5.57 122 (P)   22 07.74   0.1
SSK      5.75 135 eP    22 08.87  -1.4
MSU      8.16  86 (P)   22 46.96   2.7
     67 obs. associated
-----------------------------------
   NOV  08, 1993  20h 48m 54.75± 0.13s
   36.183 N ± 2.7km  141.669 E ± 2.2km
   DEPTH =  32.7km  ( 52 depth phases)
   5.4mb (131 obs.)  4.9Msz ( 35 obs.)
 NEAR EAST COAST OF HONSHU, JAPAN(228)
      Mw 5.4 (HRV).
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 19S, 23C
      Centroid Location:
      Origin Time        20:49: 0.8 1.1
      Lat 36.43N 0.09 Lon 141.50E 0.11
      Dep  32.7 5.3 Half-duration  1.3
      Moment Tensor;   Scale 10**16 Nm
        Mrr= 4.85 0.46  Mtt= 0.13 0.77
        Mff=-4.97 0.64  Mrt= 7.27 1.70
        Mrf= 7.57 1.92  Mtf=-3.27 0.64
       Principal Axes:
        T  Val= 11.45  Plg=57  Azm=328
        N        1.11      11      220
        P      -12.55      31      124
      Best Double Couple:Mo=1.2*10**17
       NP1:Strike=182 Dip=17 Slip=  51
       NP2:        43      77      101

KAKJ     1.21 271 iPd   49 16.30   0.9
                S      49 33.80
CHJJ     2.17 267 P     49 30.00   0.7
                S      49 58.60
YAMJ     2.38 327 P     49 33.10   0.9
                eS     50 04.60
NIIJ     2.39 297 iPd   49 34.10   1.7
                S      50 05.10
MAT      2.82 278 iPd   49 40.40   2.0
                (S)    50 18.00
OFUJ     2.89 360 P     49 37.60  -1.9
                eS     50 11.40
IIDJ     3.13 258 iP+   49 45.70   2.7
MTMJ     3.14 278 P     49 45.40   2.2
AOMJ     4.49 347 eP    50 01.70  -0.5
                S      50 54.10
TSRJ     4.66 264 P     50 06.50   1.8
WKYJ     5.35 250 P     50 15.60   1.2
MRRJ     6.25 356 eP    50 24.90  -2.1
HOOJ     6.32  11 eP    50 24.60  -3.4X
                eS     51 33.70
TKSJ     6.62 253 P     50 33.40   1.1
YONJ     6.75 264 P     50 35.10   1.0
KUSJ     7.29  18 eP    50 36.10  -5.5X
                eS     51 52.90
ASAJ     7.96   5 eP    50 46.90  -4.1X
SHNJ     8.89 260 eP    51 05.60   1.7
KUMJ     9.67 251 eP    51 15.80   1.1
KUR     10.19  26 (P)   51 18.50  -3.2X
     Z  14s      3.80um
     N  14s      5.40um
     E  14s      5.40um
                eS     53 03.80
VLA     10.23 316 iPd   51 22.00  -0.3
        2.0s   570.00nm          6.5mb X
KAGJ    10.27 244 eP    51 24.50   1.6
YSS     10.85   4 iPd   51 25.50  -5.3X
        1.0s   130.00nm          6.1mb
     Z  15s      3.30um          6.0Msz
     N  15s      3.10um
     E  15s      5.80um
                eS     53 21.00
MDJ     12.47 316 eP    51 51.00  -1.6
     Z  16s      9.43um          4.5Msz
     N  12s      4.88um
     E  10s      1.27um
CN2     14.56 306 Pc    52 19.00  -1.2
        1.2s    46.00nm          4.8mb
     Z  15s      4.14um          4.4MszX
     N  14s      4.72um
     E  14s      2.88um
                epP    52 28.00
                esP    52 35.00
SNY     15.14 297 iPc   52 27.00  -0.8
        1.0s    97.00nm          5.0mb
     Z  18s      8.35um          4.3Msz
     N  12s      2.38um
     E  15s      5.28um
                sP     52 37.00
DL2     16.13 286 Pc    52 41.00   0.5
        0.8s   180.00nm          5.3mb
     Z  14s      6.23um
     N  12s      4.88um
     E  13s      7.68um
                sP     52 53.00
SSE     17.79 259 Pc    53 00.00  -1.3
     Z  20s      2.30um
     N  14s      2.50um
     E  14s      2.30um
                pP     53 10.50
                sP     53 16.00
NJ2     19.32 264 Pd    53 17.00  -3.1X
        1.0s    26.00nm          4.4mb
     Z  18s      1.82um          4.0MszX
     N  13s      4.10um
                sP     53 29.00
TIA     19.80 277 Pd    53 22.50  -2.8
        0.7s   180.00nm          5.5mb
     Z  13s      1.92um          4.3Msz
     N  12s      1.27um
     E  12s      1.84um
BJI     20.40 289 eP    53 26.50  -5.0X
        1.4s    88.00nm          4.9mb
     Z  16s      2.34um          4.6MszX
     N  14s      2.54um
                epP    53 38.00  49kmX
                eS     57 12.00
                esS    57 29.00
                eSS    57 46.00
PET     20.63  30 eP    53 33.00  -0.7
        1.1s   100.00nm          5.1mb
     Z  20s      1.40um          4.3Msz
GUMO    22.68 172 eP    53 54.50  -0.1
        1.1s   272.80nm          5.6mb
                e      53 59.10  17kmX
PJG     22.68 172 eP    53 53.70  -0.9
GUA     22.74 172 eP    53 54.30  -0.8
        1.1s   202.53nm          5.5mb
QZH     22.75 247 P     53 52.70  -2.5
        0.8s    63.00nm          5.1mb
     Z  18s      3.63um          4.9Msz
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     E 18s     2.94um
TIY    23.38 283 Pc    53 59.50  -1.8
       0.8s    36.00nm          4.9mb
     Z 14s    11.90um          5.5MszX
     E 14s     6.54um
WHN    23.46 264 ePc   54 00.20  -1.9
       0.9s   130.00nm          5.4mb
     N 12s     2.77um
     E 15s     3.10um
               sP    54 11.00
HHC    23.95 290 Pd    54 04.50  -2.4
       1.4s    29.00nm          4.6mb
     Z 14s     4.73um          5.1MszX
     N 12s     1.16um
     E 12s     2.06um
               PP    54 44.00
BTO    25.12 290 eP    54 15.50  -2.7
       0.8s    69.00nm          5.3mb
     N 13s     1.27um
     E 13s     1.80um
               epP   54 25.00  34km
CIT    25.40 317 eP    54 19.00  -1.7
     Z 16s     6.80um          5.3MszX
     E 18s     9.09um
XAN    26.81 275 Pc    54 32.50  -1.3
       0.5s   110.00nm          5.7mb
     Z 15s     2.92um          5.0MszX
     N 13s     1.47um
     E 13s     1.47um
               pP    54 43.50  41km
               sP    54 49.00
               S     59 02.00
               sS    59 24.00
YAK    26.92 348 iPc   54 33.70  -0.8
       1.2s   627.00nm          6.1mb
     Z 15s     4.40um          5.1MszX
     N 14s     3.20um
     E 14s     1.00um
               e     55 19.00 230kmX
               ePPP  55 33.00
               eS    59 06.00
BAG    27.19 229 eP    54 33.80  -3.7X
GZH    27.75 250 Pc    54 42.80   0.4
     Z 18s     1.82um          4.7Msz
     E 15s     1.40um
               eS    59 22.00
GQP    28.09 223 eP    54 45.00  -0.5
SMY    28.13  44 P     55 00.00  14.4X
     Z 18s     0.51um          4.1Msz
BOD    28.30 329 iPc   54 45.80  -1.3
       1.5s   184.00nm          5.6mb
PLP    29.13 215 ePc   54 52.70  -2.2
LZH    30.42 281 eP    55 05.00  -1.5
       1.2s   200.00nm          5.8mb
     Z 16s     4.59um          5.2MszX
     E 12s     2.32um
               pP    55 15.50  38km
IRK    30.81 313 eP    55 09.00  -0.5
       1.2s    90.00nm          5.4mb
     Z 16s     3.27um          5.1MszX
     N 15s     0.83um
     E 15s     2.84um
               e     55 19.50  38km
               e     55 26.50
               e     01 46.00
ZAK    30.96 309 iPc   55 10.60  -0.2
       1.2s   170.00nm          5.7mb
     Z 14s     3.33um          5.2MszX
     N 13s     2.66um
     E 14s     3.17um
               e     56 32.00 456kmX
               eS    00 12.00
GYA    31.29 262 iPc   55 12.60  -1.6
       1.0s   160.00nm          5.8mb
     Z 16s     3.15um          5.1MszX
     N 14s     2.23um
     E 14s     1.82um
               pP    55 21.00  29km
               S     00 15.00
CD2    31.89 272 iPc   55 17.50  -1.8
       1.0s   110.00nm          5.7mb
     Z 19s     3.33um          5.0Msz
     N 12s     2.64um
QIZ    32.78 247 eP    55 26.60  -0.4
     N 16s     1.28um
     E 16s     1.29um
GTA    33.02 288 eP    55 28.30  -0.8
       1.2s   120.00nm          5.7mb
     Z 18s     4.57um          5.2Msz
     E 15s     3.28um
               pP    55 38.50  36km
               sP    55 44.00
               PP    56 42.00
               PcP   58 12.80
               eS    00 46.00
               sS    01 04.00
               ScS   05 52.00
KMI    35.05 263 Pc    55 46.00  -0.9
       1.5s   270.00nm          6.0mb
     Z 15s     3.60um          5.2MszX
     N 15s     1.90um
     E 15s     1.70um
               pP    55 57.00  39km
               sP    56 02.00
TIK    36.14 353 iPc   55 54.00  -1.3
       1.2s    50.00nm          5.3mb
     Z 16s     3.00um          5.2MszX
               i     56 06.00  44kmX
               ePPP  57 17.00
               e     06 03.00
UER    36.89 310 iPc   56 02.00   0.2
       1.3s   210.00nm          5.8mb
ILT    38.75  23 iPd   56 16.00  -1.3
       2.0s   222.00nm          5.6mb
     Z 18s     0.60um          4.5Msz
     N 16s     0.50um
               i     56 26.00  34km
CHTO   41.29 257 iPc   56 39.00   0.2
       1.2s    77.08nm          5.3mb
WMQ    41.41 298 iPc   56 40.00   0.3
       1.5s   240.00nm          5.7mb
     E 16s     2.14um
               pP    56 50.00  34km
               PP    58 22.00
               PcP   58 37.60
               PcS   02 25.50
               ScS   06 35.50
PCT    41.80 250 eP    56 38.50  -4.4X
BDT    42.13 255 eP    56 45.00  -0.6
       0.8s    77.90nm          5.5mb
NST    42.17 252 eP    56 46.00   0.0
LSA    42.50 276 Pc    56 49.40   0.2
       1.0s    72.00nm          5.4mb
     Z 16s     4.74um          5.5MszX
     N 15s     1.23um
     E 16s     1.51um
               sP    57 00.00
               S     03 12.00
               sS    03 30.00
NRI    43.96 336 iPc   56 57.30  -2.7
       1.4s    50.00nm          5.1mb
     E 15s     2.50um
               i     58 44.00 608kmX
TTA    46.01  34 eP    57 14.90  -1.6
SVW    46.06  37 ePc   57 16.83  -0.1
       0.9s    45.14nm          5.4mb
               e     57 27.18  35km
MKS    46.14 211 iPc   57 19.70   1.8
SNG    47.29 242 eP    57 28.10   1.0
IMA    47.32  30 ePc   57 26.07  -0.8
       1.1s     8.08nm          4.6mb
GUN    47.45 277 P     57 29.20   0.5
CP2    47.70  37 eP    57 30.49   0.4
CRP    47.74  37 ePc   57 29.92  -0.4
               e     57 39.24  31km
PKI    47.97 276 P     57 32.60  -0.2
KKN    47.98 277 P     57 32.80   0.1
DMN    48.20 277 P     57 34.60   0.1
GKN    48.41 277 P     57 35.80  -0.2
SLKM   48.70  38 (P)   57 38.39   0.8
KGM    49.11 235 ePc   57 41.80   0.6
       1.0s   160.70nm          6.0mb
PMR    49.19  36 ePd   57 40.01  -1.2
       1.0s    23.03nm          5.2mb
     Z 19s     0.49um          4.5Msz
FBA    49.71  32 eP    57 44.38  -0.9
       0.7s     6.89nm          4.8mb
MTN    49.77 194 eP    57 45.20  -1.0
TPI    50.08 227 ePc   57 48.50  -0.1
               e     59 00.00 345kmX
KHKI   50.64 214 ePd   57 51.50  -1.3
               e     59 58.50 755kmX
KLU    50.73  36 ePc   57 52.22  -1.0
FRU    50.94 299 iPc   57 55.20   0.2
       2.0s   200.00nm          5.7mb
     Z 20s     3.60um          5.4Msz
     N 20s     3.50um
     E 20s     4.00um
               e     58 06.20  38km
               e     05 24.00
KSH    50.96 295 P     57 56.50   1.2
       0.4s    60.00nm          5.9mb
     Z 20s     4.30um          5.5Msz
     N 14s     2.67um
     E 14s     2.41um
               pP    58 07.00  36km
               sP    58 10.00
               PcP   59 06.00
               sS    05 19.00
BALM   52.50  37 eP    58 05.87  -0.8
               e     58 15.46  32km
KNA    53.07 196 eP    58 10.20  -0.9
LEM    53.40 224 ePd   58 14.00   0.2
NDI    54.04 282 iPc   58 18.50   0.3
       1.5s   166.67nm          5.8mb
HON    54.14  89 P     58 30.00  11.0X
     Z 20s     0.49um          4.6Msz
INK    55.05  27 eP    58 25.00  -0.1
       0.7s     8.00nm          4.9mb
NIL    55.08 289 iPc   58 28.90   3.0X
SVE    55.93 319 iPc   58 31.00  -0.6
       1.2s   220.00nm          6.1mb
     Z 17s     4.00um          5.6MszX
     N 17s     0.60um
     E 17s     3.00um
               e     59 23.00 233kmX
               eS    06 36.00
CTA    56.13 175 iPc   58 32.00  -1.4
               i     58 44.00  42km
WB5    56.18 188 iPc   58 32.00  -1.8
               i     58 34.90  10kmX
               i     58 38.20
               eS    06 26.00
WRA    56.25 188 P     58 33.70  -0.5
WR2    56.25 188 iPc   58 33.60  -0.7
       0.9s    26.80nm          5.3mb
               i     58 40.50  23kmX
ARU    57.12 319 iPc+  58 39.50  -0.7
       1.2s   240.00nm          6.1mb
     Z 16s     3.00um          5.5MszX
     N 16s     1.00um
     E 15s     2.00um
               e     58 47.50  26km
               e     59 30.00
               eS    06 47.00
MBC    57.28  16 Pc    58 41.30   0.2
               PP    01 05.70
               PPP   02 19.60
               S     06 27.80
HYB    58.39 269 iPc   58 49.00  -0.6
       1.0s   100.00nm          5.9mb
               e     59 00.00  37km
ASPA   59.98 188 iPc   58 58.50  -1.8
       0.8s    20.20nm          5.3mb
MBL    60.66 203 eP    59 04.00  -0.9
       0.8s    21.00nm          5.3mb
GBA    61.36 266 Pc    59 09.00  -1.0
QUE    61.40 288 iPc   59 10.00  -0.3
               e     59 20.20  33km
POO    61.61 273 iPc   59 16.50   4.8X
       0.9s     3.36nm          4.5mb
DZM    62.50 154 iPc   59 17.50   0.0
RES    63.37  14 eP    59 22.00  -0.6
       1.0s    21.00nm          5.2mb
WARB   63.63 195 iPd   59 24.60  -0.2
       0.4s     7.00nm          5.1mb
ASH    64.26 299 eP    59 28.50  -0.4
YKA    64.44  30 eP    59 27.60  -2.1
       1.0s    10.60nm          4.9mb
TRO    66.59 341 iPc   59 43.00  -0.4
DAG    66.65 355 iPd   59 42.80  -0.9
       1.0s    46.00nm          5.5mb
ARMA   66.91 171 iPd   59 45.70  -0.3
       0.9s    12.00nm          5.0mb
               i     59 56.30  34km
MCW    67.12  46 eP    59 47.74   0.5
GMW    67.70  47 eP    59 51.34   0.5
               e     00 00.75  30km
STK    67.71 180 iPc   59 46.50  -4.3X
       0.9s     5.40nm          4.6mb
FORT   67.82 193 eP    59 51.30  -0.3
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08d 20h

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JCW     67.89  46 P      59 52.43   0.4
BMW     67.97  48 eP     59 52.68   0.1
                e       00 01.33  28km
MOS     68.06 324 iPc    59 52.00  -0.8
        1.5s   200.00nm          6.0mb
      Z  14s     1.80um          5.5MszX
KMOR    68.23  49 P      59 54.81   0.6
RMW     68.33  47 eP     59 55.17   0.4
                e       00 04.93  31km
FMW     68.67  47 P      59 57.24   0.1
LON     68.68  47 eP     59 56.67  -0.3
SHW     68.71  48 eP     59 58.15   0.9
OBN     68.89 323 iPc    59 57.60  -0.4
        1.4s   163.20nm          5.9mb
      Z  17s  2700.80um          8.5MszX
                (pP)     00 07.60  32km
                (sP)     00 12.70
                (PcP)    00 19.20
                ePP      02 38.00
                (S)      09 01.60
                (SS)     13 27.80
PUL     69.03 330 ePc    59 59.00   0.2
      Z  15s     1.40um          5.3MszX
      N  15s     1.00um
ASR     69.11  48 P      00 00.04   0.3
KAF     69.16 333 iP     59 58.80  -0.7
        0.6s    29.50nm          5.5mb
WTV     69.28  46 P      00 00.36  -0.3
EBG     69.33  47 P      00 01.59   0.6
MRWA    69.39 204 iPd    00 00.60  -0.7
        1.0s    43.00nm          5.5mb
SAW     69.60  45 P      00 02.34  -0.2
VBEM    69.68  49 P      00 03.83   0.6
VGB     69.93  48 eP     00 04.72   0.1
CROR    70.08  48 P      00 05.79   0.2
GRO     70.09 310 iPc    00 05.00  -0.6
        1.0s    50.00nm          5.5mb
      Z  15s     4.00um          5.8MszX
      E  15s     3.00um
DPW     70.20  45 eP     00 05.70  -0.5
                e       00 15.82  32km
BAL     70.45 203 eP     00 06.50  -1.3
KMPM    70.47  54 (P)    00 08.51   0.4
                e       00 18.27  31km
JBO     70.52  48 P      00 07.59  -0.6
BWA     70.53 174 iPd    00 08.60   0.4
                i       00 19.20  34km
NEW     70.60  44 eP     00 08.37  -0.3
        1.0s    51.61nm          5.6mb
                e       00 16.83  27km
NUR     70.80 332 iP     00 09.10  -0.4
        0.6s    40.10nm          5.7mb
LGPM    71.06  53 eP     00 11.89   0.2
                e       00 21.03  29km
LNOR    71.22  47 P      00 12.65   0.2
PYA     71.35 311 eP     00 17.50   4.2X
      Z  18s     0.80um          5.0Msz
      N  18s     0.70um
      E  18s     0.80um
WDC     71.42  53 eP     00 13.55  -0.1
        0.9s    13.00nm          5.0mb
                epP      00 23.50  32km
                esP      00 30.49
LBFM    71.43  52 eP     00 14.21   0.2
                e       00 23.08  28km
CAN     71.46 174 eP     00 13.70  -0.1
                i       00 23.60  32km
MTA     71.51 308 iPc    00 14.00  -0.2
        0.8s    50.00nm          5.6mb
      N  16s     1.00um
      E  16s     1.00um
                i       00 26.00  40km
TAB     72.46 304 eP     00 20.00  -0.1
ERE     72.52 307 iP+    00 21.00   0.6
      Z  19s     0.65um          4.9Msz
ORV     72.64  54 eP     00 20.82  -0.1
                e       00 29.37  27km
SOC     73.62 312 eP     00 25.00  -1.6
        1.6s   120.00nm          5.6mb
                e       00 35.00  32km
COE     73.77  56 (P)    00 27.01  -0.6
                e       00 36.48  30km
UPP     73.81 334 iP     00 27.20  -0.1
ARN     73.81  55 eP     00 29.45   1.6
MNK     73.84 326 eP     00 25.00  -2.6
      Z  18s     1.50um          5.3Msz
KER     73.93 301 ePc    00 28.50  -0.2
CMB     74.20  54 eP     00 30.22   0.1
        1.1s    21.14nm          5.1mb
                e       00 39.14  29km
ANN     74.30 314 eP     00 31.00   0.6
        1.0s    60.00nm          5.5mb
      Z  18s     1.00um          5.2Msz
      N  18s     1.00um
      E  18s     1.20um
LRM     74.61  44 iPc    00 12.60 -20.0X
                e       00 43.60 123kmX
HFS     74.95 336 eP     00 33.30  -0.7
        1.1s   104.80nm          5.7mb
      Z  18s     1.25um          5.3Msz
                LR      33 05.00
NB2     75.05 337 P      00 34.40  -0.2
        0.9s    60.80nm          5.6mb
KVN     75.11  52 eP     00 36.03   0.4
                e       00 44.99  29km
NRA0    75.18 337 iPd    00 35.10  -0.2
                PcP     00 47.40
NAO     75.34 337 P      00 33.80  -2.4
BONR    75.60  53 eP     00 38.78   0.2
                e       00 48.63  32km
BCH     75.99  57 (P)    00 39.20  -1.3
                e       00 49.33  32km
TNP     76.23  53 eP     00 42.28   0.3
        1.0s    25.39nm          5.2mb
                e       00 50.97  28km
KONO    76.64 337 eP     00 25.50 -18.0X
ISA     76.80  55 (P)    00 44.69  -0.3
        0.1s     4.68nm          5.5mb
HVU     76.83  48 eP     00 45.84   0.7
AKU     77.25 352 iPd    00 49.50   2.7
        1.0s    52.00nm          5.5mb
TPNV    77.52  53 (P)    00 48.68  -0.4
        0.8s    12.10nm          5.0mb
FRB     77.55  13 eP     00 48.50   0.0
        1.0s    26.00nm          5.2mb
DUG     77.76  49 ePd    00 50.85   0.6
        0.9s    26.34nm          5.3mb
      Z  19s     0.29um          4.6Msz
                e       01 00.79  32km
GSC     78.12  55 (P)    00 53.38   1.1
LVV     78.19 324 eP     00 51.00  -1.3
      Z  16s     2.60um          5.7MszX
      N  16s     2.00um
      E  16s     2.30um
KAS     78.47 313 eP     00 55.50   1.4
DAU     78.57  48 eP     00 55.69   0.7
PEC     78.70  56 eP     00 56.98   1.5
        0.8s     5.87nm          4.6mb
CLI     78.77 320 eP     00 53.50  -2.0
COP     78.78 333 iPc    00 56.00   0.7
        0.7s    46.58nm          5.6mb
ARUT    78.82  51 eP     00 56.61   0.4
GAZ     78.91 308 eP     00 57.00   0.5
PTT     78.97 321 eP     00 53.00  -3.6X
MSU     79.17  50 eP     00 58.81   0.6
EMUT    79.20  48 eP     00 58.84   0.5
                e       01 08.87  32km
CFR     79.21 319 eP     00 59.00   1.1
MUD     79.31 335 iPc    00 57.30  -0.9
        0.8s    16.00nm          5.1mb
VRI     79.51 320 eP     00 57.00  -2.6
UZH     79.83 324 eP     01 01.50   0.3
        1.0s    27.00nm          5.2mb
      Z  16s     2.50um          5.7MszX
      N  16s     1.00um
      E  16s     2.00um
OJC     79.86 326 iPd    01 01.40   0.0
        1.2s    77.00nm          5.6mb
                i       01 19.40  65kmX
ISR     80.09 319 eP     00 59.00  -3.8X
ULM     80.10  33 eP     01 05.00   2.4
MLR     80.17 320 eP     01 01.00  -2.3
PSN     80.18 318 eP     01 04.00   0.9
SPC     80.40 325 iPc    01 05.90   1.4
GLA     80.77  56 eP     01 07.05   0.5
                e       01 16.77  31km
CMP     80.79 320 ePd    01 08.00   1.6
KSP     80.93 328 iPc    01 07.60   0.6
        1.0s    56.00nm          5.5mb
                e       04 07.60
PV09    81.05  49 eP     01 08.89   0.6
                e       01 18.83  32km
EYL     81.10 314 eP     01 08.60   0.4
PV10    81.18  49 eP     01 09.82   0.9
HRT     81.21 315 iP     01 09.10   0.3
PV08    81.29  48 eP     01 09.92   0.3
                e       01 19.24  30km
JMB     81.86 317 iP     01 13.00   1.0
BRG     81.89 330 iPc    01 12.40   0.4
        1.0s    32.00nm          5.3mb
                i       01 23.80  37km
PVL     82.03 319 eP     01 13.00   0.1
ALT     82.10 313 eP     01 14.40   0.9
UQSK    82.16 296 iPc    01 14.53   0.5
SRO     82.28 325 iP     01 15.50   1.4
                e       04 20.30
PRU     82.32 329 iPc    01 14.70   0.5
        0.9s   207.00nm          6.2mb
                e       01 26.50  39km
GOL     82.50  46 P      01 30.00  14.2X
      Z  21s     0.38um          4.7Msz
BNT     82.52 315 iP     01 15.60   0.1
ZST     82.55 326 iP     01 16.10   0.6
                e       04 27.20
                e       04 38.90
AFIF    82.56 294 ePc    01 17.53   1.5
GLD     82.56  46 P      01 30.00  14.0X
      Z  21s     0.74um          5.0Msz
EDC     82.56 315 eP     01 14.50  -1.2
MFT     82.60 316 iP     01 17.10   1.1
DIM     82.72 318 eP     01 18.00   1.5
MOX     83.00 331 ePc    01 18.20   0.4
        1.8s    67.00nm          5.4mb
KDZ     83.05 317 iP     01 20.00   1.7
SALJ    83.06 305 P      01 19.10   0.5
WIT     83.12 334 eP     01 19.50   1.2
                e       01 36.00  59kmX
PLD     83.13 318 eP     01 20.00   1.4
HOF     83.16 330 iPc    01 18.90   0.3
        0.8s    27.00nm          5.4mb
SOP     83.17 326 eP     01 19.70   1.0
KHC     83.38 329 iPc    01 20.40   0.6
        1.0s    28.50nm          5.3mb
      Z  18s     1.50um          5.4Msz
                e       01 29.50  29km
                e       01 41.00
                e       01 51.50
                e       04 21.50
RZN     83.41 318 iPc    01 21.00   0.7
GEC2    83.54 328 ePc    01 20.70   0.0
        0.6s     9.73nm          5.1mb
                e       01 31.20  33km
                e       01 35.00
                e       01 42.00
                e       01 53.50
VTS     83.59 319 iPc    01 22.00   0.8
WET     83.66 329 eP     01 21.60   0.4
        1.3s    38.00nm          5.4mb
WTS     83.74 334 eP     01 21.50   0.0
        0.9s    22.60nm          5.3mb
                e       01 37.50  56kmX
EZN     83.79 316 iP     01 22.10   0.1
JRDJ    83.87 304 P      01 23.00   0.2
TUC     83.91  54 eP     01 24.42   1.5
        1.0s     7.69nm          4.8mb
      Z  21s     0.32um          4.7Msz
                e       01 32.79  26km
GRF     83.91 330 iPc    01 23.60   1.1
        1.3s   111.00nm          5.9mb
EKA     84.00 341 Pd     01 23.90   1.1
        0.7s     8.80nm          5.0mb
MMB     84.01 318 iPc    01 24.00   0.8
KKB     84.16 319 iPc    01 25.00   1.1
BHG     84.76 328 eP     01 27.60   0.8
        1.3s    52.00nm          5.6mb
PTJ     84.78 325 eP     01 26.80  -0.2
VAY     84.82 319 iPd    01 27.60   0.4
        1.3s   150.00nm          6.0mb
SKO     84.96 320 iPc    01 28.60   0.7
        1.3s   140.00nm          6.0mb
      Z  19s     1.71um          5.5Msz
                LR      42 37.00
ALQ     84.98  50 ePd    01 29.17   0.8
        1.0s    14.22nm          5.1mb
      Z  21s     0.19um          4.5Msz
                ipPc     01 39.73  33km
PLE     85.03 322 iPc    01 29.28   1.0
KBA     85.06 327 iPc    01 28.30  -0.2
        0.8s     8.30nm          5.0mb
                i       01 42.80  50kmX
                i       04 45.60
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                i     04 55.50
ENN    85.06 334 eP    01 28.50   0.3
       1.0s    34.00nm          5.5mb
FUR    85.09 329 iPc   01 29.10   0.7
       0.7s    49.00nm          5.8mb
     Z  13s     1.70um          5.6MszX
                ePcP  01 31.30
IVA    85.11 321 iPc   01 29.63   0.9
PVY    85.27 321 iPc   01 30.13   0.6
LJU    85.32 326 eP    01 29.00  -0.6
                epP   01 43.00  48kmX
NKY    85.60 322 iPc   01 31.28   0.1
WATA   85.61 329 iPd   01 31.50   0.3
VOY    85.62 326 eP    01 30.70  -0.5
WTTA   85.64 328 iPc   01 31.40   0.0
       0.8s     7.70nm          5.0mb
                i     01 47.10  55kmX
                i     04 44.80
TTG    85.75 321 iPc   01 32.01   0.2
BRY    85.77 322 iPc   01 31.67  -0.4
MOTA   85.81 329 iPc   01 32.20   0.0
       1.0s    14.10nm          5.1mb
                i     01 47.80  54kmX
LANF   85.82 332 P     01 32.06   0.0
SNF    85.86 334 Pc    01 32.20   0.0
SQTA   85.86 329 iPc   01 32.10  -0.3
WLF    85.89 333 iPd   01 33.34   1.0
       1.5s    12.20nm          4.9mb
BDV    86.08 321 iPc   01 32.80  -0.6
DOU    86.09 334 Pd    01 32.90  -0.5
                e     01 49.80  60kmX
ULC    86.10 321 iPc   01 33.30  -0.3
HCY    86.12 322 iPc   01 32.99  -0.7
WLS    86.46 331 P     01 35.22  -0.1
CDF    86.49 332 eP    01 35.50   0.0
       1.0s    38.40nm          5.6mb
SLE    86.54 330 ePd   01 35.80   0.2
FEL    86.64 331 P     01 36.05  -0.2
ECH    86.70 331 P     01 35.83  -0.6
DLF    86.71 342 eP    01 36.90   0.6
OSS    86.73 329 ePd   01 37.30   0.5
HAE    86.74 339 ePc   01 36.90   0.4
HCG    86.81 340 ePc   01 37.00   0.1
DCN    86.86 342 eP    01 37.70   0.7
HTR    86.92 339 ePc   01 37.50   0.1
MOF    87.00 331 P     01 37.64  -0.3
LLS    87.06 330 ePd   01 38.60   0.2
VITF   87.14 332 P     01 38.12  -0.4
BSF    87.15 331 eP    01 38.40  -0.3
       1.1s    17.85nm          5.2mb
VDL    87.17 329 ePd   01 39.30   0.4
BBS    87.17 331 P     01 38.61  -0.1
HGH    87.17 339 ePc   01 39.00   0.4
HAU    87.18 332 eP    01 38.50  -0.3
       0.9s    14.40nm          5.2mb
     Z  21s     0.57um          5.0Msz
LOMF   87.53 331 P     01 36.15  -4.4X
TMA    87.72 329 ePd   01 41.40  -0.2
ACO    88.13  45 e(P)  01 35.50  -8.0X
DIX    88.34 330 ePd   01 45.00   0.3
EMS    88.54 330 ePd   01 45.70   0.2
LOR    88.73 333 eP    01 46.20   0.0
       1.0s    16.00nm          5.3mb
     Z  18s     0.77um          5.2Msz
LBF    88.92 333 eP    01 47.00  -0.2
       1.2s    15.45nm          5.2mb
FLN    88.97 336 eP    01 47.40   0.1
       1.1s    26.35nm          5.5mb
     Z  20s     0.95um          5.2Msz
LDF    89.00 336 eP    01 47.40   0.0
       0.7s     8.95nm          5.2mb
SSF    89.03 333 eP    01 47.80   0.2
       1.0s    12.20nm          5.2mb
LPL    89.07 330 eP    01 48.00  -0.1
       0.7s    10.05nm          5.3mb
LPG    89.08 330 eP    01 48.20  -0.1
       0.7s     7.70nm          5.1mb
HYF    89.18 333 eP    01 49.00   0.7
SMF    89.26 332 eP    01 48.90   0.2
       1.2s    30.95nm          5.5mb
AVF    89.32 333 eP    01 49.20   0.2
       1.1s    38.85nm          5.6mb
GRR    89.42 336 eP    01 49.70   0.3
       1.0s    33.80nm          5.6mb
BGF    89.70 333 eP    01 50.90   0.1
       1.2s    16.65nm          5.2mb
WMOK   89.72  46 P     02 00.00   8.9X
     Z  21s     0.42um          4.8Msz
LPF    89.79 336 eP    01 51.60   0.5
       1.1s    46.65nm          5.7mb
PLDF   89.91 332 P     01 52.17   0.3
AGO    90.02 333 P     01 52.37   0.0
MAF    90.09 333 eP    01 53.20   0.6
       1.2s    30.65nm          5.4mb
SBF    90.14 329 eP    01 52.10  -0.8
       0.7s    11.35nm          5.3mb
TCF    90.16 333 eP    01 53.30   0.3
       0.9s    11.95nm          5.2mb
PYM    90.33 332 P     01 54.01   0.2
LSF    90.44 334 eP    01 54.40   0.2
       1.0s    35.00nm          5.6mb
LTX    90.48  53 eP    01 54.57  -0.2
PGF    90.53 327 eP    01 54.20  -0.6
       0.9s    14.90nm          5.3mb
LBL    90.67 332 P     01 55.69   0.3
FRF    90.71 329 eP    01 55.00  -0.5
       1.2s    27.05nm          5.5mb
MFF    90.73 335 eP    01 56.10   0.6
       1.0s    38.80nm          5.7mb
LRG    90.92 329 eP    01 56.20  -0.2
       1.1s    38.10nm          5.7mb
     Z  18s     0.70um          5.1Msz
LMR    90.95 329 eP    01 56.20  -0.4
       1.1s    34.45nm          5.6mb
RJF    91.26 333 eP    01 58.50   0.5
       1.0s    32.80nm          5.7mb
     Z  20s     0.50um          5.0Msz
CAF    91.38 333 eP    01 59.40   0.8
       1.0s    26.60nm          5.6mb
LFF    91.85 333 eP    02 01.50   0.8
       1.0s    34.40nm          5.7mb
GAC    91.87  25 eP    02 01.00   0.2
LPO    91.91 333 eP    02 01.60   0.6
       1.2s    29.15nm          5.6mb
UYO    92.60  44 iPc   02 07.40   3.1X
MIAR   92.80  43 eP    02 04.71  -0.6
       0.8s    12.47nm          5.4mb
     Z  20s     0.21um          4.6Msz
                epP   02 15.82  35km
                e     04 50.44
YSNY   93.54  29 P     02 20.00  11.4X
     Z  19s     0.18um          4.5Msz
EPF    93.64 333 eP    02 09.00  -0.1
LBNH   94.34  24 P     02 20.00   7.8X
     Z  19s     0.40um          4.9Msz
BINY   94.74  27 P     02 20.00   5.9X
     Z  19s     0.44um          4.9Msz
LMN    94.92  18 eP    02 15.50   0.6
MYNC   97.26  36 P     02 40.00  14.3X
     Z  20s     0.34um          4.8Msz
CEH    98.89  32 P     02 40.00   7.0X
     Z  20s     0.43um          4.9Msz
BFT   121.49 260 ePKP  07 48.00   1.1
SLR   122.92 260 iPKPd 07 49.00  -0.5
       0.8s    33.00nm
BLF   126.09 258 iPKPd 07 55.20  -0.5
       0.8s    26.00nm
BOSA  126.49 259 ePKP  07 57.60   1.4
LPAZ  146.94  61 iPKPc 08 35.40   0.7
LPB   147.12  61 PKP   08 36.00   1.3
CNCB  147.39  62 PKPc  08 36.20   0.9
MOCB  151.93  65 PKP   08 48.80   6.7X
YJA   152.58  67 e(PKP)08 51.00   8.1X
SOB1  153.05   6 ePKP  08 43.90   0.6
                e     08 50.90
     S.D. = 1.0  on 318 of 350 obs.
-----------------------------------
?  NOV  08, 1993  20h 48m 54.87± 0.87s
   44.368 N ± 8.6km    7.301 E ±16.7km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                  (545)
      ML 1.5 (GEN).

STV     0.13 172 P     48 57.89  -0.1
                S     48 59.88
ENR     0.17 149 P     48 58.83   0.1
                S     49 01.23
PZZ     0.20 314 P     48 59.38   0.1
                S     49 02.19
BHB     0.47 357 P     49 04.46   0.0
     S.D. = 0.2  on   4 of   4 obs.
-----------------------------------
   NOV  08, 1993  21h 14m 46.54± 0.57s
    5.709 S ± 4.3km  129.690 E ± 8.4km
   DEPTH = 198.6 ±  7.0 km
   4.8mb ( 18 obs.)
 BANDA SEA                       (280)

AAI      2.50 323 eP    15 32.30   1.6
                eS    16 01.60
SLKI     2.77 145 iPc   15 34.50   0.7
                iS    16 07.00
TLE      3.05  89 iPc   15 36.40  -0.7
                iS    16 04.00
MTN      7.23 169 eP    16 29.60  -1.1
KNA     10.02 185 eP    17 06.00  -1.0
       0.2s    63.00nm          5.6mb
                eS    18 50.80
WR2     14.87 163 eP    18 06.40  -2.1
       0.3s    74.00nm          5.6mb
                i     18 10.90
                eS    20 44.20
QIS     17.62 148 iPc   18 40.20  -0.9
                eS    21 52.00
KKM     17.81 311 ePc   18 47.30   4.1X
       0.8s    53.10nm          5.0mb
MBL     18.09 211 iPd   18 45.90  -0.1
       0.3s    10.00nm          4.7mb
ASPA    18.31 168 iPd   18 48.10  -0.3
       0.8s   213.80nm          5.7mb
                iS    22 04.10
                iScS  30 04.20
WARB    20.57 188 iPd   19 12.80   1.5
       0.3s    16.00nm          5.0mb
CTA     21.53 133 iP    19 22.50   1.7
MEEK    23.34 206 eP    19 38.50   0.2
COOL    26.30 197 eP    20 04.50  -1.2
BAL     27.61 205 eP    20 17.50   0.0
KLB     28.07 202 iPd   20 21.50  -0.1
MUN     29.02 204 eP    20 30.00   0.0
ADE     30.28 165 eP    20 42.30   1.1
BWA     33.42 151 iPc   21 10.50   2.0
CAN     34.43 151 iPc   21 18.40   1.4
CHTO    38.88 310 ePc   21 55.20   0.7
       0.9s    16.41nm          4.7mb
WHN     38.93 339 ePc   21 55.20   0.6
       0.7s    23.00nm          4.9mb
NJ2     38.94 345 Pd    21 55.50   0.7
       1.0s    18.00nm          4.7mb
GYA     39.00 326 P     21 56.00   0.6
       1.0s    13.00nm          4.5mb
MAT     42.78  10 iPc   22 24.40  -1.7
       0.7s    20.55nm          4.8mb
XAN     44.14 335 P     22 36.10  -1.1
       1.0s    18.00nm          4.5mb
TIY     46.09 341 Pc    22 52.30  -0.3
BJI     47.20 346 eP    23 00.50  -0.5
       1.0s    17.00nm          4.4mb
LZH     48.13 332 eP    23 09.00   0.5
       1.5s    40.00nm          4.6mb
HHC     49.23 342 P     23 17.20   0.4
       1.0s    11.00nm          4.3mb
CN2     49.43 356 eP    23 17.00  -1.1
LSA     51.06 316 Pc    23 31.40   0.1
GTA     52.70 331 Pc    23 42.60  -0.3
       1.0s    11.00nm          4.4mb
GUN     53.88 311 P     23 52.20   0.1
PKI     54.06 310 P     23 52.80  -0.6
KKN     54.27 310 P     23 54.40  -0.4
DMN     54.31 310 P     23 55.00  -0.1
GKN     54.87 310 P     23 58.60  -0.4
CSY     61.93 189 eP    24 56.50   9.5X
       0.7s    11.40nm          4.8mb
WMQ     62.15 327 P     24 49.00   0.1
       1.0s    17.00nm          4.8mb
MOCB   149.28 151 PKP   34 14.40   4.5X
CNCB   151.61 142 PKP   34 21.80   8.2X
LPB    151.75 142 ePKP  34 20.00   6.4X
LPAZ   151.92 141 PKP   34 22.00   7.9X
     S.D. = 1.0  on  38 of  44 obs.
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%  NOV  08, 1993  22h 15m 04.81± 0.79s
   26.362 S ± 6.6km   27.507 E ± 8.7km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA        (584)
      ML 2.3 (PRE).

KSR     0.74 312 eP    15 19.50  -0.1
                S     15 29.50
SLR     0.94  48 eP    15 23.30   0.1
                S     15 34.50
```

08d 22h

SEK	1.96	177	eP	15 39.00	-0.1
			S	16 04.00	
BOSA	2.91	219	eP	15 53.00	0.4
			S	16 28.20	
BLF	2.98	203	eP	15 53.50	-0.2
			S	16 27.00	

S.D. = 0.3 on 5 of 5 obs.

& NOV 08, 1993 23h 02m 10.98s
61.573 N 150.904 W
DEPTH = 61.8km
SOUTHERN ALASKA (2)
<AEIC>. ML 2.5 (AEIC).

SUA	0.13	145	iPc	02 20.60	1.7
			eS	02 28.78	
PWA	0.50	80	eP	02 23.07	0.0
			eS	02 32.78	
SKT	0.51	324	iPd	02 22.36	-0.9
			eS	02 31.90	
			eS	02 31.92	
CGLM	0.59	244	ePc	02 23.86	-0.4
NCG	0.62	255	iPd	02 24.05	-0.6
			eS	02 34.47	
CRP	0.68	244	eP	02 24.98	-0.3
			eS	02 36.10	
CRP	0.68	244	ePd	02 25.02	-0.3
			eS	02 35.34	
			eS	02 35.75	
			eS	02 35.80	
SPU	0.68	235	ePc	02 24.51	-0.7
			eS	02 35.37	
CKN	0.71	241	eP	02 25.31	-0.3
CP2	0.71	245	eP	02 25.28	-0.6
			eS	02 36.46	
PMS	0.73	116	eP	02 25.31	-0.5
			eS	02 37.33	
CKT	0.73	240	eP	02 25.17	-0.7
			eS	02 36.48	
BGL	0.78	247	eP	02 25.88	-0.6
CKL	0.79	242	eP	02 25.81	-0.8
BKG	0.83	233	eP	02 26.27	-0.8
			eS	02 38.64	
PLRM	0.85	88	eP	02 26.39	-0.8
			eS	02 39.19	
NKA	0.85	191	eP	02 28.50	1.3
CUT	0.89	19	iPd	02 27.06	-0.7
			eS	02 39.79	
GHO	0.97	77	eP	02 28.25	-0.6
			eS	02 42.41	
SLKM	1.12	162	eP	02 29.95	-0.9
KNK	1.19	97	ePd	02 30.93	-0.8
			eS	02 47.12	
SML	1.25	78	eP	02 31.45	-1.2
DFR	1.31	222	ePc	02 32.82	-0.7
			eS	02 50.50	
MPA	1.32	145	eP	02 32.80	-0.8
			eS	02 50.22	
REF	1.40	220	eP	02 34.26	-0.5
			eS	02 52.93	
NCT	1.41	225	eP	02 34.64	-0.3
RDW	1.43	221	eP	02 34.72	-0.6
RS2	1.43	220	eP	02 34.63	-0.7
PWL	1.43	119	eP	02 33.79	-1.4
RED	1.47	219	eP	02 35.08	-0.7
			eS	02 54.66	
HUR	1.53	22	eP	02 36.36	-0.1
			eS	02 56.37	
CFI	1.56	103	eP	02 35.45	-1.4
			eS	02 56.37	
SEW	1.64	154	eP	02 37.38	-0.5
SCM	1.72	80	eP	02 38.14	-1.1
ILIM	1.80	215	eP	02 39.95	-0.4
TRF	1.91	8	eP	02 40.79	-1.1
KTH	1.99	360	eP	02 42.22	-0.7
			eS	03 06.92	
CNPM	2.06	185	eP	02 42.54	-1.3
			eS	03 07.82	
VZW	2.16	102	eP	02 43.06	-2.2
OPT	2.24	212	eP	02 46.14	-0.3
MTU	2.25	133	eP	02 44.08	-2.4
TOA	2.31	75	eP	02 46.35	-1.0
KLU	2.39	90	eP	02 45.98	-2.5
TTA	2.75	302	eP	02 51.51	-2.1
CDD	2.98	208	eP	02 56.29	-0.6
IL1	3.69	28	eP	03 05.92	-0.9
CRQM	3.85	99	eP	03 06.35	-2.8
TGL	4.00	98	eP	03 09.79	-1.4
BALM	4.16	94	eP	03 10.96	-2.6
IM3	4.60	345	eP	03 17.10	-2.5

50 obs. associated

NOV 09, 1993 00h 22m 30.83± 0.38s
36.406 N ± 3.9km 4.443 W ± 3.8km
DEPTH = 98.9 ± 7.4 km
STRAIT OF GIBRALTAR (385)
mbLg 3.6 (MDD).

EGUA	0.83	59	iPd	22 48.35	-1.3
			e	23 00.70	
EJIF	0.83	273	iPd	22 48.77	-0.9
			e	22 59.00	
EPRU	0.84	312	iPd	22 49.61	-0.2
			e	22 59.20	
MOMI	1.03	266	iP	22 51.30	-0.5
PLAT	1.10	255	iP	22 52.60	0.0
CPS	1.10	236	iP	22 55.50	2.9
			iS	23 10.50	
ECOG	1.12	39	iPd	22 53.87	1.0
			e	23 07.00	
ELUQ	1.16	7	iPc	22 53.62	0.3
			e	23 08.80	
GIBL	1.28	290	iP	22 54.10	-0.7
BIT	1.29	234	iP	22 55.00	0.2
			iS	23 09.00	
CNIL	1.30	269	iP	22 55.45	0.6
RANB	1.38	280	iP	22 55.60	-0.3
SFS	1.42	273	iP	22 56.40	0.0
TOU	1.55	159	iP	22 58.00	0.0
			iS	23 15.50	
EHOR	1.55	336	iPd	22 57.59	-0.5
			e	23 17.40	
TSY	1.61	231	iP	22 59.00	0.2
			iS	23 17.50	
EMEL	1.64	132	iPd	22 58.54	-0.6
			e	23 17.10	
ENIJ	1.88	72	eP	23 02.76	0.4
			e	23 25.40	
RSA	1.89	217	iP	23 02.50	0.1
			iS	23 21.50	
EHUE	2.04	46	iPd	23 05.91	1.4
			e	23 30.70	
ZAI	2.11	139	iP	23 04.00	-1.4
			iS	23 27.00	
EVAL	2.19	303	iPd	23 05.17	-1.2
			e	23 29.00	
EVIA	2.71	34	eP	23 13.82	0.3
			e	23 44.10	
RTC	3.12	220	eP	23 19.00	0.0
			iS	23 52.50	
PAB	3.14	1	iPn	23 19.00	-0.3
			iPb	23 22.30	
			eSn	23 47.50	
			eSb	23 52.50	
EPLA	3.87	341	iPd	23 29.06	-0.3
			e	24 11.00	
ECHE	4.20	40	eP	23 34.00	0.2
			e	24 20.50	
GUD	4.24	3	iPd	23 34.56	0.1
			e	24 19.20	
ETOR	4.79	22	iPd	23 42.19	0.2
			e	24 33.20	
EROQ	5.82	39	eP	23 57.02	0.8
ERUA	6.33	342	eP	24 03.00	-0.2
			e	25 10.00	
ECRI	6.37	13	eP	24 04.00	0.2
			e	25 11.50	
ELIZ	7.11	17	eP	24 15.00	1.1
			e	25 29.00	
EPF	7.57	28	Pn	24 20.20	-0.1
			Sn	25 38.70	
LFF	9.39	23	Pn	24 45.10	0.2
			Sn	26 20.10	
CAF	9.84	28	Pn	24 50.30	-0.7
			Sn	26 31.90	
RJF	9.97	25	Pn	24 50.90	-1.8
			Sn	26 34.60	
MFF	10.68	16	Pn	25 02.10	-0.2
			Sn	26 50.60	
LSF	10.81	23	Pn	25 02.80	-1.2
TCF	11.06	25	Pn	25 06.40	-0.9
MAF	11.13	26	Pn	25 07.20	-1.0
BGF	11.52	26	Pn	25 13.20	-0.1
			Sn	27 13.40	
LPF	11.89	11	Pn	25 19.40	1.2
			Sn	27 18.80	
SSF	12.18	27	Pn	25 22.30	0.2
LDF	12.59	13	Pn	25 29.00	1.6
FLN	12.69	12	Pn	25 29.40	0.7

S.D. = 0.9 on 46 of 46 obs.

% NOV 09, 1993 00h 37m 21.43± 2.86s
43.289 N ±16.7km 18.626 E ±15.0km
DEPTH = 10.0km (geophysicist)
NORTHWESTERN BALKAN REGION (383)

BRY	0.39	189	iPgc	37 29.39	-0.1
			iSg	37 36.35	
NKY	0.55	150	iPgd	37 32.33	-0.2
			iSg	37 41.66	
PLE	0.56	86	iPgc	37 32.57	-0.3
			iSg	37 40.45	
HCY	0.85	186	iPgc	37 38.09	0.3
			iSg	37 51.27	
TTG	0.98	151	iPgc	37 39.47	-0.5
			iSg	37 55.45	
IVA	1.02	114	iPgc	37 41.15	0.4
			iSg	37 57.07	
PVY	1.21	125	iPgc	37 44.50	0.5
			iSg	38 02.94	

S.D. = 0.5 on 7 of 7 obs.

? NOV 09, 1993 01h 02m 32.17± 3.52s
32.512 S ±20.2km 71.742 W ±24.5km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)
MD 4.2 (SAN).

IHA	0.52	171	eP	02 42.90	-0.2
			iS	02 53.10	
ROCH	0.77	127	iPd	02 45.85	-0.9
			iS	02 59.67	
LCCH	0.97	171	iP+	02 49.21	-0.3
			iS	03 05.18	
JACH	0.98	100	iP+	02 48.34	-1.4
			iS	03 03.13	
PEL	1.09	126	iP+	02 51.04	-0.2
			iS	03 07.73	
SAN	1.31	136	iP	02 54.80	0.5
TACH	1.32	150	eP	02 55.06	0.6
			iS	03 14.93	
LNV	1.47	169	(P)	02 55.64	-0.9
FCH	1.47	124	eP	02 56.76	-0.1
			iS	03 18.38	
PCH	1.51	137	eP	02 57.74	0.4
CACH	1.86	149	iP	03 03.87	1.4
MDZ	2.47	99	iP	03 14.80	3.8X
			iS	03 47.60	
RTCV	2.79	77	e(P)	03 16.50	0.9

S.D. = 0.9 on 12 of 13 obs.

NOV 09, 1993 02h 11m 29.72± 0.38s
31.549 S ± 5.9km 69.379 W ± 6.6km
DEPTH = 108.1 ± 7.9 km
SAN JUAN PROVINCE, ARGENTINA (137)
MD 4.3 (SAN).

RTCB	0.50	83	iPd	11 47.40	0.7
RTCV	0.78	114	iPd	11 50.00	1.1
RTLL	0.81	75	iPd	11 49.40	0.2
CFA	0.97	94	iPc	11 51.40	0.6
RTRS	1.38	357	eP	11 49.50	-5.8X
MDZ	1.40	162	iP	11 55.60	-0.1
			iS	12 11.30	
JACH	1.53	222	iP	11 58.16	0.9
			iS	12 20.70	
FCH	1.93	203	iPd	12 03.81	1.2
			iS	12 30.17	
PEL	1.94	214	iP+	12 02.82	0.5
			iS	12 27.61	
ROCH	1.98	224	iP	12 02.99	-0.1
			iS	12 28.86	
SAN	2.19	209	iP	12 05.97	0.4
			iS	12 33.58	
PCH	2.28	205	iP	12 07.52	0.7
			iS	12 37.59	
IHA	2.42	232	iPd	12 07.50	-1.1
			iS	12 36.60	
TACH	2.48	212	iP+	12 08.85	-0.5
			iS	12 40.53	
LCCH	2.67	223	iP	12 11.04	-0.9

```
CACH    2.76 202 eP    12 13.68   0.4
LNV     2.95 215 iP+   12 13.84  -1.8
                 iS    12 48.55
MRA     3.24 106 iPd   12 19.00  -0.6
RFA     3.30 167 iPc   12 19.50  -1.1
                 S     13 10.50
TCA     4.10  88 iPd   12 29.70  -1.7
                 (S)   13 04.00
FSA     6.19  29 ePc   12 58.90  -1.2
SLA     7.61  28 eP    13 19.00  -0.7
CNCB   14.73   5 P     14 54.00  -0.3
LPB    15.00   5 P     15 00.20   2.6
ARE    15.14 352 eP    14 59.00  -0.3
LPAZ   15.24   5 P     15 00.30  -0.5
WIN    75.69 108 eP    23 12.50   7.1X
       0.5s    13.00nm          5.0mb
PV08   78.77 330 eP    23 21.77  -0.4
SEK    81.14 118 eP    23 37.00   2.1
       1.0s    40.00nm          5.2mb
     S.D. = 1.1  on  27 of  29 obs.
-----------------------------------------
   NOV  09, 1993  02h 14m 03.70± 0.36s
   14.353 N ± 6.7km   53.744 E ± 3.6km
   DEPTH =  10.0km  (geophysicist)
   5.3mb ( 73 obs.)  5.1Msz ( 42 obs.)
 ARABIAN SEA                      (417)
      Mw 5.6 (HRV).
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 36S, 68C
      Centroid Location:
      Origin Time        02:14:11.4 0.3
      Lat 14.94N 0.03 Lon  53.58E 0.02
      Dep  15.0 FIX Half-duration  1.6
      Moment Tensor;   Scale 10**17 Nm
        Mrr=-0.25 0.05  Mtt= 2.17 0.05
        Mff=-1.91 0.06  Mrt=-0.57 0.16
        Mrf=-0.59 0.19  Mtf= 1.91 0.05
      Principal Axes:
        T  Val=  3.09  P1g=13  Azm=158
        N       -0.37      75       11
        P       -2.72       8      250
      Best Double Couple:Mo=2.9*10**17
       NP1:Strike=294 Dip=75 Slip=   3
       NP2:        203     87      165

ARO    10.99 256 ePc   16 46.00   1.9
ABHA   11.24 292 eP    16 48.13   0.3
RYD    12.31 328 ePd   16 56.30  -5.7X
DHR    12.36 345 eP    17 02.00  -0.6
AFIF   13.90 316 eP    17 17.33  -5.9X
TAIF   14.49 300 eP    17 30.33  -0.8
QASM   15.09 322 eP    17 36.67  -2.1
AAE    15.59 252 P     17 46.00   0.4
UQSK   15.60 319 eP    17 42.67  -2.8X
QUE    19.91  36 eP    18 40.00   1.3
                 eS    22 23.80
WAJH   19.93 309 eP    18 37.67  -1.0
KER    20.80 344 iPc   18 46.00  -1.8
TEH    21.40 355 eP    18 54.00   0.0
GBA    23.00  89 Pc    19 11.60   1.7
       1.1s    11.00nm          4.3mb
ASH    23.86   9 P     19 19.50   1.5
       1.5s   310.00nm          5.7mb
                 e     19 46.00
                 e     20 03.00
                 iS    23 40.00
                 e     24 22.00
HYB    24.05  79 eP    19 20.50   0.4
       1.2s   128.60nm          5.4mb
                 eS    23 40.00
TAB    24.52 346 eP    19 26.00   1.4
                 i     19 29.30
BHL    25.44 323 P     19 34.00   0.6
                 S     24 08.00
HLW    25.79 310 eP    19 39.00   2.4
BAK    26.15 353 iPc   19 48.00   8.2X
     Z  11s     5.25um          5.3MszX
ERE    26.98 344 iP    19 48.50   0.9
     Z  14s     5.60um          5.3MszX
                 iS    24 30.00
GAZ    27.08 330 eP    19 50.50   2.1
MTA    28.33 346 eP    20 00.60   0.9
     N  14s     7.00um
     E  14s     7.50um
                 e     20 05.00
                 e     20 58.00
                 eS    24 53.00
MAK    29.08 350 eP    19 48.00 -18.4X
     Z  16s     5.20um          5.2MszX
     N  16s     7.20um
     E  16s    11.00um
GRO    29.71 348 eP    20 16.00   3.9X
       1.0s    50.00nm          5.3mb
     Z  14s     2.00um          4.9MszX
     N  20s     7.50um
     E  20s     5.00um
                 i     21 04.00
                 eS    25 08.00
PYA    30.96 345 eP    20 23.90   0.7
       1.8s    70.00nm          5.2mb
     Z  17s     3.90um          5.1MszX
     N  17s     4.00um
     E  17s     4.00um
                 e     21 20.00
                 iS    25 32.00
SOC    31.51 340 eP    20 25.00  -3.0X
     Z  15s     4.80um          5.3MszX
     N  14s     5.50um
     E  11s     2.20um
                 eS    25 38.00
KSH    31.74  34 eP    20 30.00  -0.2
     Z  18s     2.47um          4.9Msz
     N  10s     3.71um
     E  10s     2.66um
                 PP    21 30.00
                 PcP   23 27.00
GKN    31.74  60 P     20 29.80  -0.6
DMN    32.01  61 P     20 34.00   1.1
KKN    32.21  60 P     20 34.40  -0.2
PKI    32.25  61 P     20 34.20  -0.9
GUN    32.75  60 P     20 39.20  -0.3
ANN    33.48 339 eP    20 48.00   2.9X
     Z  16s     2.50um          5.0MszX
     N  16s     4.00um
                 eS    26 07.00
FRU    33.59  28 eP    20 50.00   3.8X
       2.0s    50.00nm          5.1mb
     Z  26s     2.00um          4.7MszX
     N  26s     2.40um
     E  26s     4.00um
                 eS    26 08.00
SIM    34.75 335 eP    20 56.00  -0.1
                 e     22 16.00
                 e     26 30.00
EZN    34.95 322 iP    20 57.80  -0.1
KDZ    36.63 323 eP    21 13.00   0.8
RZN    37.07 323 iP    21 16.00   0.0
SHL    37.42  67 iP    21 19.40   0.2
       1.0s    15.00nm          4.7mb
                 iS    27 06.00
MMB    37.59 322 iP    21 21.00   0.8
CFR    37.60 330 eP    21 20.00  -0.1
PVL    37.69 325 iP    21 22.00   1.0
LSA    37.70  60 P     21 20.70  -1.1
VAY    38.13 321 eP    21 23.00  -1.7
KKB    38.14 322 iP    21 26.00   1.2
ISR    38.36 329 eP    21 26.50  -0.2
VTS    38.51 323 iP    21 28.00  -0.1
KIS    38.62 333 iP+   21 15.00 -13.8X
     Z  16s     2.50um          5.1MszX
     N  17s     1.90um
                 ipP   23 02.00
                 e     23 46.00
                 iS    27 26.00
VRI    38.79 330 eP    21 25.00  -5.2X
MLR    38.91 329 ePc   21 30.00  -1.4
CLI    39.01 331 eP    21 31.00  -1.0
SKO    39.20 321 iP    21 33.60  -0.1
       0.9s    60.00nm          5.3mb
                 i     23 10.50
CMP    39.22 328 ePc   21 35.00   1.1
WMQ    41.25  38 P     21 51.50   0.9
       1.0s    14.00nm          4.6mb
     N  10s     0.86um
     E  17s     2.22um
                 pP    21 56.30  16kmX
                 sP    21 58.90
                 PP    23 28.00
                 S     28 07.50
                 sS    28 15.50
                 SS    31 03.00
BMR    41.63 329 ePc   21 57.00   3.4X
ARU    42.13   4 eP    21 59.00   1.5
     Z  18s     2.00um          5.0Msz
     N  16s     1.50um
     E  14s     1.50um
                 e     23 43.00
                 eS    28 19.00
                 eSS   31 24.00
BUL    42.26 216 eP    21 57.50  -1.7
SVE    42.70   6 ePd   21 59.00  -3.2X
       2.1s    60.00nm          5.0mb
     Z  18s     1.50um          4.9Msz
     N  18s     2.00um
     E  18s     1.50um
                 e     23 48.00
OBN    42.79 346 eP    22 02.00  -1.0
       0.9s    80.00nm          5.4mb
     Z  21s     5.00um          5.4Msz
     N  20s     4.00um
     E  20s     2.10um
                 e     23 44.00
                 e     23 54.00
                 ePPP  24 15.00
                 eS    28 28.00
                 eSS   31 39.00
LVV    42.87 332 eP    22 03.00  -0.7
     Z  18s     2.30um          5.1Msz
     N  18s     1.50um
     E  16s     1.50um
                 e     23 58.00
                 e     28 31.00
UZH    42.87 329 ePc   22 04.50   0.7
       1.1s    74.00nm          5.3mb
     Z  19s     2.00um          5.0Msz
     E  19s     2.20um
                 i     23 50.00
                 eS    28 34.00
                 iPS   28 38.00
                 eSS   32 00.00
MOS    43.14 347 eP    22 06.00   0.2
       1.5s   210.00nm          5.7mb
     Z  22s     4.00um          5.3Msz
UZD    43.55 325 eP    22 10.50   1.2
SPC    44.26 329 eP    22 15.10  -0.2
SRO    44.42 326 eP    22 17.30   1.0
MNK    44.50 338 eP    22 18.00   1.2
     Z  28s     2.70um          5.0MszX
PTJ    44.67 323 eP    22 19.70   1.2
VBY    44.88 322 eP    22 20.00  -0.1
                 i     22 24.00
OJC    45.15 330 eP    22 22.50   0.3
                 e     22 27.90
ZST    45.30 326 eP    22 22.90  -0.5
                 e     24 13.70
RIY    45.32 321 eP    22 24.00   0.4
LJU    45.59 322 eP    22 26.50   0.8
                 e     24 16.00
                 eS    29 04.00
                 e     37 08.00
TRI    45.88 321 eP    22 28.00   0.0
VOY    45.97 322 eP    22 29.70   0.9
                 ipP   22 32.90  11kmX
KBA    46.82 323 iPc   22 37.00   1.3
       0.9s    38.80nm          5.5mb
                 i     22 39.50
KMR    46.88 324 eP    22 35.00  -0.9
                 i     22 40.60
KMI    47.12  69 Pc    22 38.00  -0.4
       1.5s    50.00nm          5.4mb
     Z  20s     2.70um          5.2Msz
                 pP    22 46.50  28kmX
                 eS    29 28.00
                 sS    29 41.00
KSP    47.29 328 iP    22 38.60  -0.5
GTA    47.42  49 eP    22 40.40  -0.1
     Z  20s     4.43um          5.4Msz
     E  20s     1.85um
                 PP    24 32.00
                 eS    29 36.00
                 SS    33 00.00
BHG    47.42 323 eP    22 40.70   0.5
GEC2   47.54 325 eP    22 41.20   0.0
       0.8s    13.10nm          5.1mb
                 e     22 44.10
                 e     22 48.30
                 e     22 55.00
                 e     23 01.40
                 e     23 05.60
PGF    47.57 315 eP    22 40.80  -0.8
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09d 02h

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        0.9s    21.45nm          5.2mb
PRU    47.71 327 P      22 41.90  -0.5
        1.1s    29.90nm          5.3mb
     Z  17s     1.00um          4.9MszX
     N  16s     0.50um
     E  16s     0.90um
                pP       22 45.90  13kmX
                e        29 42.00
KHC    47.76 325 P      22 42.00  -0.9
        1.0s    17.90nm          5.1mb
     Z  22s     1.40um          4.9Msz
                e        22 45.40
WTTA   47.93 322 iPc    22 44.30  -0.1
        0.9s    62.40nm          5.7mb
                i        22 47.80
WATA   48.00 322 iPd    22 44.90   0.0
                i        22 48.00
OGA    48.11 321 iPc    22 47.40   1.6
WET    48.16 325 eP     22 49.00   3.0X
SQTA   48.16 322 iPc    22 46.80   0.6
        0.7s    56.20nm          5.8mb
                i        22 49.30
MOTA   48.28 322 iPd    22 46.70  -0.4
        0.8s    94.70nm          5.9mb
                i        22 50.10
BRG    48.52 327 eP     22 48.20  -0.5
        1.1s    21.00nm          5.1mb
     Z  20s     1.60um          5.0Msz
     N  20s     1.20um
     E  20s     0.40um
OSS    48.56 321 ePd    22 50.30   1.0
FUR    48.58 323 iPc    22 48.80  -0.4
                i        22 52.50
CD2    48.61  61 eP     22 46.80  -3.0X
     Z  22s     1.46um          4.9Msz
     N  11s     0.73um
                S        29 48.00
PCP    48.66 317 P      22 53.06   3.1X
FIN    48.75 317 P      22 54.07   3.5X
IMI    48.84 316 P      22 57.32   5.9X
VDL    48.89 320 ePd    22 53.10   1.3
ROB    49.00 317 P      22 56.86   4.2X
TMA    49.09 319 ePd    22 53.50   0.1
SBF    49.13 316 eP     22 53.20  -0.4
        0.8s    21.20nm          5.2mb
UER    49.19  32 eP     22 54.00   0.2
                eS       30 05.20
CLL    49.26 327 eP     22 52.00  -2.3
        2.0s    72.00nm          5.3mb
ENR    49.28 317 P      23 00.43   5.7X
LLS    49.35 320 ePd    22 55.20  -0.2
GRF    49.37 325 ePd    22 55.30   0.0
     Z  23s     1.00um          4.7MszX
                ic       22 58.60
ORX    49.46 319 P      22 58.19   2.0
FRF    49.55 316 eP     22 53.50  -3.3X
        1.0s    31.60nm          5.3mb
LMR    49.56 315 eP     22 56.20  -0.6
        1.0s    30.40nm          5.2mb
PZZ    49.59 317 P      23 00.57   3.3X
LZH    49.61  55 eP     22 56.50  -1.0
        1.8s    44.00nm          5.2mb
     Z  19s     1.52um          5.0Msz
     N  15s     1.57um
                PP       24 57.50
                eS       30 00.00
BHB    49.62 317 P      23 00.34   3.1X
MOX    49.64 326 eP     22 57.80   0.5
        2.0s    83.00nm          5.4mb
                i        23 01.40
                e        23 10.40
MMK    49.65 319 ePd    22 58.00   0.2
LRG    49.71 315 eP     22 57.30  -0.6
        1.0s    36.00nm          5.3mb
     Z  23s     0.75um          4.6MszX
RSP    49.74 318 P      22 59.74   1.4
LSD    49.93 318 P      23 03.36   3.4X
RRL    49.96 317 P      23 05.37   5.2X
ZLA    49.99 321 ePd    23 00.30   0.2
DIX    50.01 319 ePd    23 01.00   0.4
SLE    50.05 321 ePd    23 00.80   0.2
LPG    50.20 318 eP     23 01.10  -1.0
        0.9s    43.75nm          5.4mb
LPL    50.22 318 eP     23 01.10  -1.1
        1.1s    67.15nm          5.5mb
EMS    50.31 319 ePd    23 02.70  -0.1
FEL    50.39 321 P      23 03.26   0.0
NUR    50.72 342 iP     23 05.20  -0.2
        0.9s    48.20nm          5.4mb
                i        23 08.50
GYA    50.73  67 P      23 05.40  -0.7
        1.0s    58.00nm          5.5mb
     Z  20s     1.28um          4.9Msz
     N  18s     2.17um
     E  18s     2.36um
                S        30 22.00
                SS       33 54.00
LOMF   50.89 320 P      23 06.13  -0.9
MOF    50.91 321 P      23 07.22   0.0
WLS    51.02 322 P      23 08.07   0.1
ECH    51.05 321 P      23 08.28   0.1
CDF    51.06 322 eP     23 07.20  -1.1
        1.0s    66.80nm          5.5mb
BSF    51.11 321 eP     23 07.40  -1.4
        1.0s    33.40nm          5.2mb
HAU    51.46 321 eP     23 09.70  -1.6
        1.2s    20.85nm          4.9mb
     Z  22s     1.00um          4.8Msz
KAF    51.55 344 eP     23 12.60   0.9
VITF   51.77 321 P      23 12.38  -1.2
COP    52.02 332 iPd    23 20.00   4.7X
        1.1s   101.27nm          5.7mb
WLF    52.27 323 iPc    23 20.71   3.4X
        1.0s    25.40nm          5.1mb
SMF    52.51 318 eP     23 17.90  -1.3
        1.4s    43.55nm          5.2mb
LBF    52.55 319 eP     23 18.50  -1.0
        1.1s   116.25nm          5.7mb
UPP    52.57 338 iP     23 18.80  -0.6
                i        23 22.50
                i        23 26.20
LOR    52.72 319 eP     23 19.80  -1.0
        1.1s    87.40nm          5.6mb
     Z  23s     1.27um          4.9MszX
SSF    52.87 319 eP     23 20.80  -1.1
        1.0s    57.80nm          5.5mb
AVF    52.88 318 eP     23 20.60  -1.3
        1.0s    36.20nm          5.3mb
ENN    52.88 324 eP     23 25.50   3.7X
        0.8s    19.60nm          5.1mb
WTS    52.93 326 eP     23 26.50   4.3X
        1.0s    17.90nm          5.0mb
CAF    53.11 316 eP     23 22.60  -1.2
BGF    53.12 318 eP     23 23.10  -0.7
        1.0s    71.00nm          5.6mb
MAF    53.19 317 eP     23 23.30  -1.0
        1.2s    21.40nm          5.0mb
XAN    53.36  58 P      23 24.60  -1.1
        1.0s    11.00nm          4.8mb
     Z  28s     1.07um          4.7MszX
                pP       23 27.50  10kmX
                sP       23 30.50
                SS       34 40.00
DOU    53.36 323 P      23 26.00   0.5
                ic       23 29.00
WIT    53.39 326 eP     23 30.00   4.5X
TCF    53.45 317 eP     23 25.50  -0.7
        0.8s     6.05nm          4.6mb
HYF    53.50 319 eP     23 25.80  -0.7
RJF    53.60 316 eP     23 26.60  -0.7
     Z  22s     0.70um          4.7Msz
LPO    53.63 315 eP     23 25.50  -2.0
        0.7s     6.50nm          4.7mb
ZAK    53.71  37 eP     23 28.00   0.1
        1.0s    10.00nm          4.8mb
     Z  14s     0.98um          5.0MszX
     N  14s     0.57um
     E  15s     1.06um
                eS       31 00.00
SNF    53.72 323 P      23 30.50   2.5
UCC    53.79 323 P      23 33.00   4.5X
LSF    53.88 317 eP     23 28.50  -0.8
        1.1s    17.85nm          5.0mb
MUD    53.98 331 iP     23 32.30   2.5
        1.3s   122.00nm          5.8mb
LFF    54.01 315 eP     23 27.80  -2.5
        0.8s    13.15nm          5.0mb
HFS    54.23 337 eP     23 29.50  -2.1
        0.8s    35.80nm          5.4mb
     Z  18s     1.22um          5.0Msz
                LR       41 37.00
MFF    55.09 317 eP     23 38.60   0.4
        1.4s    27.90nm          5.1mb
BTO    55.29  50 eP     23 38.00  -1.9
     N  18s     0.75um
     E  20s     1.28um
KONO   55.57 335 eP     23 26.00 -15.5X
LDF    55.69 320 eP     23 41.10  -1.4
        1.2s    86.90nm          5.7mb
NB2    55.75 337 P      23 40.10  -2.7
        0.8s     0.90nm          3.9mb X
FLN    55.97 320 eP     23 42.90  -1.6
        1.2s    87.45nm          5.7mb
     Z  21s     1.50um          5.1Msz
GRR    56.09 319 eP     23 43.80  -1.6
        0.6s    12.55nm          5.1mb
LPF    56.10 319 eP     23 43.90  -1.5
        0.8s    25.25nm          5.3mb
SUR    56.15 214 eP     24 04.50  18.3X
        0.5s    76.00nm
PAB    56.47 308 eP     23 49.50   1.1
                eS       31 36.00
HHC    56.49  50 P      23 49.00   0.4
        1.0s    11.00nm          4.8mb
     Z  30s     3.11um          5.2MszX
     N  15s     0.61um
     E  14s     0.37um
                S        31 41.00
TIY    56.67  54 eP     23 50.00   0.2
     Z  20s     2.74um          5.3Msz
     N  20s     1.93um
                S        31 38.00
                sS       31 46.00
LEM    57.43 108 ePd    24 01.00   5.4X
CER    57.72 214 eP     23 50.00  -7.1X
        0.5s    25.00nm          5.5mb
TIC    58.16 269 P      23 57.40  -3.2X
LIC    58.26 268 P      23 58.00  -3.3X
     Z  21s     0.75um          4.8Msz
HAE    58.27 323 eP     24 03.30   2.6
HGH    58.29 322 eP     24 03.30   2.4
HTR    58.70 323 eP     24 06.10   2.3
HCG    59.00 323 eP     24 03.50  -2.4
NRI    59.10  13 ePd    24 04.00  -2.3
     E  22s     9.60um
                i        24 09.00
                e        24 57.00
                eS       32 17.00
                eSS      36 14.00
EKA    59.70 326 Pc     24 10.80   0.2
        0.6s    11.00nm          5.2mb
BJI    59.85  52 eP     24 11.50  -0.4
        1.5s    28.00nm          5.2mb
     Z  20s     1.39um          5.1Msz
                eS       32 24.00
TIA    60.26  56 Pd     24 14.30  -0.5
        1.0s    17.00nm          5.1mb
CIT    60.36  38 eP     24 15.50   0.2
DLF    60.96 323 eP     24 22.80   3.6X
DCN    61.40 323 eP     24 26.10   3.9X
NJ2    61.55  61 Pc     24 22.70  -0.9
BOD    62.37  32 eP     24 23.80  -4.9X
        1.3s    17.00nm          5.1mb
PAF    65.07 168 eP     24 48.00   1.6
                eS       33 41.00
CN2    67.03  48 eP     24 59.10  -0.1
        1.0s    59.00nm          5.7mb
                epP      25 08.00  28kmX
                eS       33 53.00
YAK    70.85  29 eP     25 24.60   2.2
        1.0s    86.00nm          5.8mb
                i        25 39.00
TIK    71.79  19 iPd    25 31.00   3.1X
        2.0s    41.00nm          5.2mb
                e        28 11.00
                eS       34 54.00
DAG    72.13 347 iPc    25 29.60  -0.3
        0.8s    13.43nm          5.1mb
WRA    86.25 112 P      26 41.00  -6.3X
WR2    86.27 112 iPKP   26 47.00  -0.4
ASPA   86.93 115 P      26 49.59  -1.1
        0.7s     3.90nm          4.7mb
RES    89.00 352 eP     26 59.50  -0.1
MBC    89.49 358 eP     27 04.00   2.1
        1.0s     5.00nm          4.7mb
SMY    95.88  32 P      27 20.00 -11.8X
     Z  20s     1.04um          5.3Msz
CBM    99.86 324 P      28 00.00  10.0X
     Z  18s     0.31um          4.8Msz
PMR   102.16  11 Pdiff  28 00.00   0.2
     Z  21s     0.90um          5.3Msz
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LBNH  103.59 323 Pdiff 28 20.00  13.4X
     Z  20s     0.32um          4.8Msz
HRV   104.38 321 Pdiff 28 20.00   9.9X
     Z  20s     0.31um          4.8Msz
LSCT  105.87 322 PKP   32 40.00  10.5X
     Z  21s     0.45um          5.0Msz
BINY  107.19 323 PKP   32 40.00   8.0X
     Z  18s     0.29um          4.9Msz
YSNY  108.46 325 PKP   32 50.00  15.6X
     Z  19s     0.35um          4.9Msz
MCWV  111.06 323 PKP   32 50.00  10.6X
     Z  18s     0.37um          5.0Msz
MYNC  116.66 322 PKP   33 00.00   9.7X
     Z  18s     0.30um          4.9Msz
FVM   118.03 328 PKP   33 00.00   7.2X
     Z  18s     0.54um          5.2Msz
MIAR  122.30 328 PKP   33 10.00   9.0X
     Z  21s     0.42um          5.0Msz
GLD   122.72 341 PKP   33 10.00   8.1X
     Z  22s     0.75um          5.3Msz
GOL   122.81 341 PKP   33 10.00   7.8X
     Z  21s     0.92um          5.4Msz
UYO   123.05 329 iPKPc 33 14.80  12.4X
DUG   124.31 348 PKP   33 10.00   5.0X
     Z  19s     0.88um          5.4Msz
MEO   124.51 332 iPKPc 33 10.30   5.0X
WMOK  124.64 332 ePKP  33 06.06   0.5
PV10  125.12 343 (PKP) 33 06.46  -0.2
WDC   125.24 357 PKP   33 10.00   3.5X
     Z  21s     0.57um          5.2Msz
ALQ   127.50 339 PKP   33 20.00   8.7X
     Z  20s     0.49um          5.2Msz
CMB   127.60 354 PKP   33 20.00   8.8X
     Z  20s     0.59um          5.3Msz
SAO   128.96 355 PKP   33 20.00   6.2X
     Z  22s     0.85um          5.4Msz
ISA   129.72 352 PKP   33 20.00   4.7X
     Z  21s     0.55um          5.2Msz
TUC   131.29 343 PKP   33 30.00  11.5X
     Z  18s     0.54um          5.3Msz
LTX   131.40 333 ePKP  33 19.73   1.0
     S.D. = 1.1  on 165 of 229 obs.
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   NOV  09, 1993  02h 44m 19.28± 0.28s
   36.215 N ± 5.0km  141.672 E ± 3.6km
   DEPTH =  30.9km  ( 22 depth phases)
   5.0mb ( 52 obs.)  5.0Msz ( 10 obs.)
 NEAR EAST COAST OF HONSHU, JAPAN(228)

KAKJ    1.21 270 P      44 40.20   0.1
                 S      44 57.50
CHJJ    2.17 266 P      44 54.90   0.9
                 S      45 22.20
YAMJ    2.35 327 eP     44 57.40   0.8
                 eS     45 29.30
NIIJ    2.38 296 P      44 58.50   1.6
                 S      45 30.70
MAT     2.81 278 eP     45 05.00   1.9
                 eS     45 41.00
OFUJ    2.86 360 P      45 02.30  -1.4
IIDJ    3.14 258 P      45 09.80   2.0
MTMJ    3.14 278 P      45 10.10   2.2
TSRJ    4.67 263 P      45 30.60   1.2
WKYJ    5.36 250 eP     45 40.40   1.1
MRRJ    6.22 356 eP     45 48.40  -2.9
HOOJ    6.29  11 eP     45 48.40  -3.8X
                 eS     46 58.40
TKSJ    6.63 253 P      45 57.80   0.6
YONJ    6.76 264 eP     46 00.70   1.8
KUSJ    7.26  18 eP     46 00.40  -5.5X
                 eS     47 17.40
SHK     7.54 260 eP     46 09.80   0.0
ASAJ    7.93   5 eP     46 11.40  -3.9X
KUMJ    9.68 251 eP     46 40.60   1.0
KUR    10.16  26 P      46 48.00   2.0
     Z  15s     3.30um
     N  15s     3.90um
     E  15s     3.90um
VLA    10.21 315 iPc+   46 48.00   1.2
       1.8s   229.00nm          6.1mb X
     Z  13s     1.60um          3.9Msz
     N  13s     3.60um
     E  11s     1.20um
KAGJ   10.28 244 eP     46 48.90   1.1
MDJ    12.45 316 eP     47 17.00   0.0
     Z  18s     6.59um
     N  12s     3.66um
     E  10s     0.80um
CN2    14.55 306 eP     47 43.50  -1.2
       1.0s    36.00nm          4.8mb
     Z  15s     2.96um          6.0Msz
     N  14s     3.40um
     E  14s     1.66um
                epP     47 52.00
SNY    15.13 297 Pc     47 51.50  -0.9
       1.4s    96.00nm          4.9mb
     Z  16s     5.63um          4.4Msz
     N  13s     2.05um
     E  16s     4.34um
DL2    16.12 286 eP     48 07.00   1.9
     Z  15s     4.45um
     N  13s     3.49um
     E  13s     5.38um
                sP      48 18.00
                eS      51 09.00
SSE    17.79 259 P      48 29.50   3.3X
       1.0s    11.00nm          3.9mb X
     Z  20s     1.40um          5.1MszX
     N  14s     1.80um
     E  14s     1.50um
                PP      48 46.20
NJ2    19.33 264 Pc     48 42.00  -2.9
     N  16s     1.44um
     E  15s     1.49um
TIA    19.80 277 Pd     48 46.90  -3.1X
       1.0s    60.00nm          4.9mb
     Z  16s     1.63um          4.4Msz
     N  12s     1.23um
     E  12s     1.46um
BJI    20.40 289 eP     48 53.00  -3.2X
       1.5s    42.00nm          4.6mb
     Z  16s     2.05um          4.6MszX
     N  15s     1.75um
     E  13s     1.44um
                esP     49 10.00
PET    20.61  30 eP     49 00.00   1.8
     Z  17s     1.00um          4.3MszX
GUMO   22.71 172 eP     49 23.40   3.8X
TIY    23.37 282 eP     49 24.00  -2.1
     Z  14s     8.92um          5.4MszX
     E  14s     4.55um
WHN    23.47 264 eP     49 25.50  -1.4
       1.0s   450.00nm          5.9mb
     N  15s     2.19um
     E  15s     2.33um
                S       53 31.00
HHC    23.94 290 P      49 27.80  -3.8X
     Z  16s     3.57um          4.9MszX
     N  12s     0.77um
     E  12s     1.15um
                pP      49 42.00  59kmX
BTO    25.11 290 eP     49 41.00  -1.9
       0.9s    25.00nm          4.8mb
     N  13s     0.72um
     E  15s     2.76um
CIT    25.38 317 eP     49 45.00  -0.2
XAN    26.81 275 Pd     49 57.80  -0.8
       0.7s    30.00nm          5.0mb
     Z  15s     2.05um          4.8MszX
     N  15s     1.63um
     E  15s     1.38um
                pP      50 07.50  35km
                sP      50 12.50
                eS      54 30.00
YAK    26.89 348 iPc+   49 58.20  -0.8
       1.2s   231.00nm          5.7mb
     Z  15s     2.70um          4.9MszX
     N  14s     2.00um
     E  17s     2.00um
                i       50 55.00 303kmX
                eS      54 33.00
BAG    27.21 229 eP     50 00.50  -2.0
BOD    28.28 329 iPc    50 10.80  -0.8
       1.3s    77.00nm          5.2mb
LZH    30.42 281 P      50 30.00  -1.2
       1.8s   100.00nm          5.3mb
     Z  17s     3.79um          5.1MszX
     E  15s     2.34um
                pP      50 41.00  40km
IRK    30.79 313 eP     50 34.00  -0.1
       1.4s    50.00nm          5.1mb
                e       50 44.00  36km
ZAK    30.94 309 eP     50 34.00  -1.4
       1.2s    80.00nm          5.4mb
     Z  13s     2.35um          5.0MszX
     E  13s     1.15um
                eS      55 29.00
GYA    31.30 262 iPc    50 37.00  -2.0
     Z  18s     2.18um          4.9Msz
     N  16s     1.88um
     E  16s     1.69um
                pP      50 47.00  36km
CD2    31.89 272 Pc     50 42.40  -1.7
     Z  19s     2.43um          4.9Msz
     N  14s     2.47um
GTA    33.01 288 P      50 53.20  -0.6
       1.2s    25.00nm          5.0mb
     E  15s     1.07um
                pP      50 59.00  20kmX
                sP      51 03.00
KMI    35.05 263 Pd     51 10.50  -1.2
       1.6s   140.00nm          5.6mb
     Z  15s     2.60um          5.1MszX
     N  13s     1.10um
     E  15s     1.60um
                pP      51 20.00  32km
TIK    36.11 353 eP     51 06.00 -13.8X
       1.2s    20.00nm
ILT    38.72  23 eP     51 40.00  -1.8
CHTO   41.30 257 iPc    52 03.40  -0.3
       1.5s    52.93nm          5.0mb
WMQ    41.40 298 P      52 05.00   0.7
       1.8s   120.00nm          5.3mb
     E  15s     1.24um
                pP      52 13.00  27km
                sP      52 16.10
NST    42.18 252 eP     52 11.00   0.1
LSA    42.50 276 Pd     52 14.60   0.6
       1.2s    28.00nm          4.9mb
     Z  15s     1.06um          4.9MszX
SHL    43.61 270 eP     52 22.00  -0.7
                eS      59 18.00
NRI    43.94 336 ePc    52 22.50  -2.1
                e       52 31.00  28km
                e       54 08.00
PKI    47.97 276 P      52 57.60   0.0
KKN    47.98 277 P      52 58.00   0.5
DMN    48.20 277 P      52 59.60   0.4
GKN    48.41 277 P      53 01.00   0.3
IPM    48.83 240 ePd    53 03.80  -0.1
       1.2s    52.80nm          5.4mb
KGM    49.13 235 eP     53 06.80   0.6
FBA    49.69  32 eP     53 09.69  -0.2
       0.5s     3.51nm          4.6mb
FRU    50.92 299 eP     53 20.20   0.6
       1.8s    90.00nm          5.4mb
     Z  20s     2.70um          5.3Msz
     N  17s     2.50um
     E  21s     3.40um
                e       53 30.80  36km
KSH    50.95 295 P      53 21.50   1.5
       1.0s    40.00nm          5.3mb
     Z  18s     3.09um          5.4Msz
     N  13s     1.87um
     E  13s     1.76um
                pP      53 29.00  25km
                sP      53 32.00
                ScS     03 05.00
LEM    53.42 224 iPd    53 38.00  -0.8
NDI    54.04 282 eP     53 43.00   0.0
INK    55.02  27 ePd    53 49.20  -0.5
       0.6s     2.00nm          4.3mb
WRA    56.28 188 P      53 52.50  -6.8X
       1.0s     7.40nm          4.7mb
WRA    56.28 188 P      54 08.90   9.6X
       1.0s     7.40nm          4.7mb
WR2    56.28 188 eP     53 51.70  -7.6X
       0.8s     4.80nm          4.6mb
                ipP     53 59.00  24km
ARU    57.10 319 iPc    54 04.00  -0.8
       1.3s   120.00nm          5.8mb
                e       54 13.00  29km
                e       54 18.00
MBC    57.25  16 eP     54 06.00   0.4
       1.0s     5.00nm          4.5mb
HYB    58.39 269 ePc    54 13.50  -0.9
                e       54 24.50  37km
ASPA   60.01 188 iPd    54 23.40  -1.9
       0.8s     6.00nm          4.8mb
                i       54 31.90  28km
GBA    61.36 266 Pc     54 35.00   0.2
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09d 02h

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QUE     61.39 288 eP     54 35.50   0.4
POO     61.61 273 iPd    54 43.00   6.5X
DZM     62.52 154 iPc    54 41.10  -1.3
RES     63.34  14 eP     54 46.00  -1.2
        1.0s     4.00nm          4.5mb
WARB    63.66 195 eP     54 48.60  -1.2
YKA     64.41  30 eP     54 56.00   1.7
        1.0s     3.80nm          4.5mb
DAG     66.62 355 iPd    55 07.30  -1.0
        0.9s     9.24nm          4.9mb
GMW     67.68  47 eP     55 17.80   2.3
STK     67.74 180 eP     55 11.50  -4.3X
        2.0s     1.20nm          3.7mb X
RMW     68.30  47 eP     55 20.49   1.0
SHW     68.68  48 eP     55 23.41   1.5
OBN     68.87 323 iPc    55 22.00  -0.7
        1.0s    39.00nm          5.4mb
      Z 16s     1.50um          5.3MszX
      N 14s     0.50um
      E 16s     1.20um
                e        55 31.00  29km
                e        55 51.00
KAF     69.13 333 iP     55 23.40  -0.8
        0.5s     5.80nm          4.9mb
DPW     70.17  45 eP     55 30.43  -0.5
NEW     70.57  44 eP     55 32.77  -0.5
        1.0s    18.13nm          5.1mb
                e        55 42.68  32km
NUR     70.77 332 iP     55 33.50  -0.7
        0.5s     9.30nm          5.1mb
LGPM    71.03  53 (P)    55 39.24   2.9X
PYA     71.33 311 eP     55 37.20  -0.7
LBFM    71.41  52 (P)    55 41.79   3.1X
ERE     72.50 307 iP     55 45.00   0.0
        1.5s    11.00nm          4.6mb
MNK     73.82 326 eP     55 50.00  -2.3
LRM     74.59  44 eP     55 57.20  -0.1
                e        56 07.30  32km
HFS     74.92 336 eP     55 58.10  -0.5
        0.4s     2.10nm          4.5mb
      Z 18s     0.89um          5.1Msz
                LR       28 02.00
NB2     75.02 337 P      55 59.00  -0.3
        0.9s    18.20nm          5.1mb
KVN     75.09  52 eP     56 03.13   2.9X
HVU     76.81  48 eP     56 10.18   0.3
DUG     77.73  49 eP     56 15.18   0.2
        1.4s    32.22nm          5.2mb
DAU     78.55  48 eP     56 20.24   0.6
ARUT    78.80  51 eP     56 23.18   2.3
MSU     79.15  50 eP     56 23.40   0.5
EMUT    79.18  48 eP     56 23.27   0.2
VRI     79.49 320 eP     56 22.00  -2.2
SRU     79.79  49 eP     56 26.18  -0.1
                e        56 35.86  31km
UZH     79.80 324 eP     56 22.20  -3.6X
      Z 16s     1.70um          5.5MszX
OJC     79.84 326 eP     56 26.80   0.8
MLR     80.15 320 eP     56 23.00  -4.9X
SPC     80.37 325 eP     56 30.40   1.3
                e        59 24.60
KSP     80.91 328 eP     56 32.40   0.7
PV09    81.02  49 eP     56 33.02   0.1
                e        56 43.41  33km
PV10    81.16  49 eP     56 34.00   0.4
                e        56 44.26  33km
PV08    81.27  48 eP     56 34.54   0.3
                e        56 44.26  31km
BRG     81.86 330 iP     56 36.20  -0.4
        1.3s    18.00nm          4.9mb
SRO     82.25 325 eP     56 39.70   1.0
PRU     82.29 329 eP     56 38.10  -0.8
      Z 14s     0.70um          5.2MszX
      N 14s     0.60um
      E 14s     0.40um
                e        56 52.00  48kmX
ZST     82.52 326 eP     56 40.60   0.5
MOX     82.98 331 e(P)   56 43.00   0.5
        1.6s    23.00nm          5.0mb
KHC     83.35 329 Pc     56 44.50   0.0
        1.0s     7.90nm          4.8mb
      Z 20s     1.20um          5.3Msz
                e        56 57.00  42kmX
                e        59 37.50
                e        00 43.00
RZN     83.39 318 iP     56 46.00   1.0
GEC2    83.52 328 ePc    56 45.30  -0.1
        0.6s     1.81nm          4.4mb
                e        56 53.30  25km
                e        56 57.30
                e        57 00.30
                e        57 07.10
GRF     83.88 330 iPc    56 48.00   0.9
        1.4s    35.00nm          5.3mb
      Z 18s     0.50um          4.9Msz
                e        57 00.60  42kmX
TUC     83.89  54 eP     56 51.24   3.7X
        1.2s     6.93nm          4.7mb
                e        56 58.36  22km
MMB     83.99 318 iP     56 48.00   0.1
KKB     84.14 319 iP     56 49.00   0.4
BHG     84.73 328 eP     56 52.40   1.0
VAY     84.80 319 iP     56 52.00   0.2
SKO     84.94 320 iPc    56 53.50   1.0
        1.3s    50.00nm          5.6mb
ALQ     84.96  50 eP     56 53.75   0.7
        1.2s     8.31nm          4.8mb
CDF     86.46 332 eP     57 00.00  -0.1
        0.8s     7.50nm          5.0mb
LOR     88.70 333 eP     57 10.70  -0.2
      Z 19s     0.52um          5.0Msz
FLN     88.94 336 eP     57 12.20   0.2
      Z 21s     0.68um          5.0Msz
SMF     89.23 332 eP     57 13.30  -0.1
AVF     89.29 333 eP     57 13.70   0.1
        0.9s     7.85nm          5.0mb
GRR     89.39 336 eP     57 14.20   0.1
LPF     89.76 336 eP     57 16.20   0.4
MAF     90.06 333 eP     57 17.70   0.4
TCF     90.14 333 eP     57 17.80   0.1
LSF     90.42 334 eP     57 18.80  -0.1
        1.1s    12.95nm          5.1mb
LTX     90.46  53 (P)    57 19.37  -0.1
MFF     90.70 335 eP     57 20.60   0.4
        0.9s     6.90nm          5.0mb
RJF     91.23 333 eP     57 22.90   0.2
        1.1s    10.25nm          5.1mb
      Z 19s     0.35um          4.8Msz
LPAZ   146.92  61 PKP    04 00.70   1.2
LPB    147.10  61 PKP    04 02.00   2.5X
                LR       14 30.00
CNCB   147.37  62 PKP    04 03.20   3.1X
MOCB   151.91  65 PKP    04 13.50   6.7X
YJA    152.57  67 ePKPd  04 15.00   7.3X
      S.D. = 1.1  on 126 of 150 obs.
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   NOV  09, 1993  02h 48m 17.23± 0.41s
   36.207 N ± 8.0km  141.772 E ± 4.9km
   DEPTH =  32.1km  (  6 depth phases)
   4.4mb ( 16 obs.)
 NEAR EAST COAST OF HONSHU, JAPAN(228)
KAKJ     1.29 270 P      48 39.10   0.0
                S        48 55.80
CHJJ     2.25 267 P      48 53.10   0.1
                S        49 22.90
YAMJ     2.40 325 P      48 55.50   0.3
                eS       49 30.00
NIIJ     2.45 296 P      48 56.70   0.8
OFUJ     2.87 358 eP     49 01.10  -0.6
MAT      2.89 278 eP     49 03.00   0.9
                eS       49 41.00
IIDJ     3.22 258 P      49 08.70   1.9
HHC     24.02 290 eP     53 26.60  -3.6X
GYA     31.38 262 P      54 35.60  -1.9
        1.0s    13.00nm          4.7mb
                pP       54 45.00  33km
GTA     33.09 288 eP     54 51.40  -0.9
        0.8s     3.00nm          4.2mb
                pP       55 01.00  33km
FBA     49.65  32 eP     57 08.39   1.0
        0.7s     2.33nm          4.3mb
INK     54.99  27 eP     57 47.00  -0.3
        0.7s     1.00nm          4.0mb
WRA     56.28 188 P      57 50.50  -6.6X
        0.5s     1.80nm          4.4mb
WR2     56.29 188 eP     57 49.50  -7.6X
        1.1s     4.20nm          4.4mb
                i        57 57.60  26km
MBC     57.24  16 eP     58 04.00   0.7
        1.0s     3.00nm          4.3mb
ASPA    60.01 188 P      58 22.39  -0.7
GBA     61.44 266 P      58 32.00  -1.1
RES     63.33  14 eP     58 44.50  -0.4
        1.0s     3.00nm          4.4mb
KAF     69.17 333 iP     59 21.50  -0.7
        0.5s     4.50nm          4.8mb
NEW     70.52  44 eP     59 30.69  -0.1
        0.7s     4.64nm          4.7mb
NUR     70.81 332 iP     59 31.40  -0.8
        0.4s     5.40nm          5.0mb
LRM     74.54  44 eP     59 54.50  -0.3
                e        00 05.20  35km
HFS     74.96 336 eP     59 55.60  -1.0
        0.4s     1.20nm          4.2mb
NB2     75.06 337 P      59 56.90  -0.4
        0.9s     6.60nm          4.6mb
DUG     77.68  49 eP     00 12.82   0.4
        0.8s     3.83nm          4.5mb
SRU     79.74  49 eP     00 24.03   0.3
                e        00 34.47  33km
PV09    80.97  49 eP     00 31.38   0.9
                e        00 41.63  33km
PV10    81.10  49 eP     00 31.63   0.5
PV08    81.21  48 eP     00 31.65  -0.1
GEC2    83.57 328 ePc    00 43.20  -0.2
        0.7s     1.66nm          4.3mb
ALQ     84.90  50 (P)    00 50.86   0.3
        0.9s     1.91nm          4.3mb
LPAZ   146.85  61 PKP    07 58.60   1.5
LPB    147.04  61 ePKP   07 57.00  -0.1
CNCB   147.31  62 PKP    08 01.20   3.4X
MOCB   151.84  66 PKP    08 11.30   6.8X
      S.D. = 0.9  on  30 of  35 obs.
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   NOV  09, 1993  03h 40m 48.10± 0.22s
   36.253 N ± 4.2km  141.647 E ± 3.1km
   DEPTH =  38.8km  ( 13 depth phases)
   4.9mb ( 61 obs.)  5.2Msz ( 15 obs.)
 NEAR EAST COAST OF HONSHU, JAPAN(228)
KAKJ     1.19 268 P      41 08.30  -0.2
                S        41 25.50
CHJJ     2.16 265 P      41 22.20  -0.1
                S        41 48.10
YAMJ     2.31 327 P      41 25.00   0.5
                eS       41 55.30
NIIJ     2.34 296 P      41 26.10   1.1
MAT      2.79 277 eP     41 33.00   1.6
                eS       42 10.00
OFUJ     2.82   0 P      41 29.70  -2.1
MTMJ     3.12 277 P      41 37.60   1.5
IIDJ     3.13 257 P      41 38.00   1.8
AOMJ     4.41 347 eP     41 55.00   0.6
TSRJ     4.65 263 P      41 59.10   1.3
WKYJ     5.35 249 P      42 08.00   0.3
MRRJ     6.18 356 eP     42 17.20  -2.0
HOOJ     6.25  11 eP     42 15.90  -4.4X
                eS       43 23.10
TKSJ     6.63 252 P      42 25.60   0.1
YONJ     6.74 263 eP     42 27.70   0.5
KUSJ     7.23  18 eP     42 27.60  -6.4X
                eS       43 47.00
SHK      7.52 259 eP     42 40.90   2.8
ASAJ     7.89   5 eP     42 39.00  -4.2X
SHNJ     8.88 259 eP     42 59.40   2.5
KUMJ     9.68 251 eP     43 08.70   0.8
KUR     10.13  26 P      43 15.00   1.0
      Z 16s     4.50um
      N 16s     5.60um
      E 16s     5.10um
VLA     10.17 315 iPc+   43 15.00   0.4
        2.0s   182.00nm          5.9mb X
      Z 13s     2.50um          4.4MszX
      N 14s     7.20um
      E 17s     4.90um
KAGJ    10.28 244 eP     43 17.70   1.5
YSS     10.78   4 eP     43 19.00  -4.0X
        0.7s    60.00nm          5.9mb
                eS       45 11.00
MDJ     12.40 316 eP     43 49.50   4.7X
      Z 18s     9.58um
      N 12s     5.06um
      E 10s     0.80um
CN2     14.51 306 eP     44 10.40  -2.1
        1.0s    32.00nm          4.8mb
      Z 15s     4.49um          5.1MszX
      N 14s     5.04um
      E 14s     1.41um
SNY     15.10 297 Pc     44 19.40  -0.8
        1.2s    32.00nm          4.5mb
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     Z  17s     8.94um
     N  13s     3.01um
     E  15s     6.40um
DL2    16.09 285 eP    44 33.00   0.0
     Z  13s     8.01um
     N  12s     4.40um
     E  12s     6.70um
                sP    44 50.00
SSE    17.78 259 Pc    44 47.50  -6.7X
       1.0s    13.00nm          4.0mb
     Z  20s     2.30um          4.6MszX
     N  14s     2.50um
     E  12s     2.00um
                PP    45 07.00
                S     48 20.00
                esS   48 36.00
                SS    48 48.00
NJ2    19.31 264 Pc    45 11.40  -1.4
     Z  20s     1.78um
     N  13s     4.48um
BJI    20.36 288 eP    45 19.00  -4.9X
       1.5s    17.00nm          4.2mb
     Z  16s     2.63um          4.7MszX
     N  14s     2.54um
TIY    23.34 282 eP    45 54.20   0.4
TIY    23.34 282 Pd    45 55.00   1.2
     Z  14s    13.80um          5.6MszX
     E  14s     6.64um
                sP    46 10.00
HHC    23.91 290 eP    46 01.00   1.7
       0.8s    13.00nm          4.5mb
     Z  16s     4.74um          5.1MszX
     N  13s     1.51um
     E  12s     1.83um
BTO    25.08 290 eP    46 10.00  -0.6
       0.8s    18.00nm          4.7mb
     N  13s     1.93um
     E  13s     2.99um
                epP   46 20.00  37km
                ePP   46 52.00
                eS    50 34.00
CIT    25.34 317 eP    46 11.50  -1.3
XAN    26.78 275 Pc    46 25.30  -1.1
       0.5s    19.00nm          5.0mb
     Z  15s     2.92um          5.0MszX
     E  13s     2.06um
                pP    46 36.80  44km
                sP    46 42.00
                eS    50 56.00
                sS    51 18.00
YAK    26.85 348 iPc   46 25.60  -1.0
       1.1s   190.00nm          5.6mb
     Z  15s     4.50um          5.1MszX
     N  14s     3.20um
     E  17s     2.80um
                e     47 30.00 355kmX
BAG    27.22 229 eP    46 27.00  -3.6X
GZH    27.76 250 eP    46 35.00  -0.2
     Z  18s     1.45um          4.6Msz
BOD    28.23 329 eP    46 38.20  -1.0
       1.5s    71.00nm          5.1mb
LZH    30.39 281 eP    46 57.50  -1.4
       2.0s    66.00nm          5.1mb
     Z  16s     4.90um          5.2MszX
     E  15s     3.07um
                pP    47 09.00  43km
                sP    47 15.00
ZAK    30.90 309 iPc   47 02.90  -0.1
       1.3s    48.00nm          5.1mb
     Z  13s     3.43um          5.2MszX
     N  14s     1.80um
     E  13s     1.44um
                eS    52 10.00
GYA    31.29 262 iPc   47 04.80  -2.0
       1.0s    33.00nm          5.1mb
     N  16s     3.44um
     E  16s     2.20um
                pP    47 15.60  40km
CD2    31.87 271 eP    47 09.40  -2.5
     Z  18s     3.66um          5.1Msz
     N  14s     7.36um
GTA    32.98 288 eP    47 21.00  -0.5
       1.4s    29.00nm          5.0mb
     Z  18s     4.85um          5.3Msz
     E  16s     1.75um
                pP    47 31.00  35km
                sP    47 35.00
KMI    35.04 263 eP    47 37.00  -2.5
       1.5s    70.00nm          5.4mb
     Z  15s     3.80um          5.3MszX
     N  13s     1.60um
     E  15s     2.20um
                pP    47 49.50  46km
                sP    47 54.50
                eS    53 03.00
                sS    53 23.00
TIK    36.07 353 eP    47 47.00  -0.4
       1.0s    19.00nm          5.0mb
     Z  17s     3.00um          5.1MszX
UER    36.83 310 iPc   47 53.00  -1.0
       1.8s    80.00nm          5.3mb
ILT    38.70  23 iPd   48 21.00  11.5X
       2.0s   231.00nm
     Z  18s     0.80um          4.6Msz
     N  14s     0.70um
     E  14s     0.70um
CHTO   41.29 257 eP    48 31.00  -0.5
WMQ    41.36 298 P     48 32.50   0.5
       1.2s    51.00nm          5.1mb
     E  15s     2.26um
                pP    48 44.00  41km
NST    42.18 252 eP    48 38.50  -0.2
LSA    42.47 276 Pc    48 41.80   0.1
       1.0s    18.00nm          4.8mb
     N  14s     1.24um
     E  13s     0.97um
                pP    48 51.00  31km
SHL    43.59 270 eP    48 52.20   1.7
                eS    55 28.00
NRI    43.89 336 eP    48 50.00  -2.1
       2.6s   101.00nm          5.1mb
     Z  18s     5.00um          5.5Msz
     E  16s     1.40um
                e     50 41.00 650kmX
SVW    46.01  37 eP    49 09.40   0.2
MKS    46.19 211 iPc   49 12.00   1.0
IMA    47.27  30 (P)   49 19.57   0.4
       0.8s     3.10nm          4.3mb
GUN    47.42 276 P     49 21.60   0.4
CRP    47.69  37 eP    49 22.82   0.1
PKI    47.95 276 P     49 25.20  -0.1
KKN    47.96 277 P     49 25.40   0.2
DMN    48.17 277 P     49 26.80  -0.2
GKN    48.38 277 P     49 28.40   0.0
IPM    48.83 240 ePc   49 31.40  -0.4
       0.8s    20.80nm          5.2mb
KGM    49.13 235 eP    49 33.00  -1.1
FBA    49.66  32 eP    49 37.59   0.0
       0.9s     4.62nm          4.5mb
MTN    49.83 193 eP    49 38.00  -1.4
FRU    50.89 299 eP    49 47.40   0.1
       2.0s    60.00nm          5.2mb
     Z  19s     4.20um          5.5Msz
     N  18s     3.80um
     E  18s     4.20um
                e     49 58.00  36km
KSH    50.91 295 P     49 48.40   0.8
       0.8s    50.00nm          5.6mb
     Z  20s     4.32um          5.5Msz
     N  14s     2.67um
     E  14s     2.01um
                pP    49 58.00  32km
                sP    50 02.00
                ScS   59 31.00
LEM    53.44 224 ePd   50 06.00  -0.7
NDI    54.01 282 eP    50 10.50  -0.2
INK    55.00  27 eP    50 17.00  -0.4
       0.7s     3.00nm          4.4mb
SVE    55.86 319 ePc   50 23.00  -0.8
       2.0s   100.00nm          5.5mb
     Z  17s     4.00um          5.6MszX
     N  17s     0.50um
     E  17s     3.00um
                eS    58 09.00
WRA    56.32 188 P     50 24.90  -2.5
       0.7s     6.10nm          4.7mb
WR2    56.32 188 eP    50 24.60  -2.8
       0.6s    11.20nm          5.1mb
                i     50 32.90  27kmX
ARU    57.06 319 iPc   50 31.20  -1.2
       1.7s   100.00nm          5.6mb
                e     50 43.00  41km
MBC    57.22  16 eP    50 33.50   0.2
       0.9s     6.00nm          4.6mb
HYB    58.37 269 eP    50 41.50  -0.7
ASPA   60.04 188 iPc   50 51.50  -1.9
       0.9s    12.10nm          5.0mb
GBA    61.35 266 P     51 03.00   0.5
POO    61.59 273 eP    51 09.50   5.3X
DZM    62.57 154 iPc   51 10.60   0.0
RES    63.31  14 eP    51 14.00  -0.8
       1.0s     6.00nm          4.7mb
WARB   63.69 195 eP    51 16.50  -1.4
YKA    64.39  30 eP    51 20.80  -1.2
       1.0s     4.90nm          4.5mb
DAG    66.58 355 iPd   51 34.60  -1.3
       0.8s     5.97nm          4.7mb
GMW    67.67  47 eP    51 44.12   0.8
STK    67.78 180 eP    51 39.40  -4.5X
       1.1s     3.00nm          4.3mb
MOS    67.99 324 eP    51 44.00  -1.1
     Z  14s     2.00um          5.5MszX
RMW    68.29  47 eP    51 47.91   0.7
OBN    68.83 323 iPc   51 49.80  -0.5
       1.2s    31.00nm          5.2mb
     Z  16s     2.80um          5.6MszX
     N  16s     0.50um
     E  16s     1.60um
                e     52 02.00  41km
                (PS)  01 35.00
                (SS)  05 24.00
KAF    69.09 333 iP    51 50.40  -1.4
       0.6s     8.80nm          5.0mb
DPW    70.16  45 eP    51 58.53  -0.1
NEW    70.56  44 eP    52 00.59  -0.5
       0.8s    14.80nm          5.1mb
NUR    70.73 332 iP    52 01.10  -0.6
       0.5s     9.70nm          5.1mb
LGPM   71.03  53 eP    52 04.45   0.3
LBFM   71.40  52 eP    52 06.82   0.3
MTA    71.46 308 eP    52 06.00  -0.5
     N  16s     0.50um
     E  16s     1.00um
ERE    72.46 307 iP    52 13.00   0.3
     Z  17s     0.70um          5.0MszX
ORV    72.61  54 eP    52 12.92  -0.5
MNK    73.77 326 eP    52 16.00  -3.9X
     Z  14s     2.20um          5.6MszX
CMB    74.17  54 eP    52 23.57   1.0
       1.1s     7.36nm          4.6mb
ANN    74.24 314 eP    52 21.00  -1.7
     Z  18s     1.00um          5.1Msz
LRM    74.57  44 eP    52 24.60  -0.5
HFS    74.88 336 eP    52 25.80  -0.4
       0.4s     3.10nm          4.6mb
     Z  18s     1.44um          5.3Msz
                LR    24 38.00
NB2    74.98 337 P     52 26.60  -0.2
       0.7s     9.70nm          4.9mb
KVN    75.09  52 eP    52 28.36   0.3
BONR   75.58  53 eP    52 31.70   0.7
TNP    76.21  53 eP    52 34.67   0.2
       1.6s    40.01nm          5.2mb
HVU    76.79  48 eP    52 38.32   0.7
DUG    77.72  49 eP    52 43.15   0.4
       1.1s    13.61nm          4.9mb
GSC    78.09  55 eP    52 45.84   1.1
DAU    78.54  48 eP    52 48.32   0.9
ARUT   78.79  51 eP    52 49.95   1.3
MSU    79.14  50 eP    52 51.56   0.9
EMUT   79.17  48 eP    52 51.12   0.3
UZH    79.76 324 eP    52 52.00  -1.4
     Z  16s     2.70um          5.7MszX
     N  16s     1.30um
     E  16s     2.50um
SRU    79.78  49 eP    52 53.92  -0.1
OJC    79.79 326 eP    52 54.00   0.4
                e     53 10.50  59kmX
ULM    80.05  33 eP    52 57.50   2.5
SPC    80.33 325 eP    52 58.00   1.3
PV09   81.01  49 eP    53 01.48   0.8
PV10   81.15  49 eP    53 02.39   1.0
PV08   81.26  48 eP    53 02.63   0.6
BRG    81.82 330 iP    53 04.40   0.2
SRO    82.21 325 eP    53 09.20   2.9
                e     53 43.90 137kmX
PRU    82.25 329 Pc    53 06.90   0.4
     Z  14s     1.30um          5.4MszX
     N  14s     1.40um
     E  15s     1.00um
ZST    82.48 326 eP    53 12.20   4.5X
```

09d 03h

```
MOX     82.93 331 e(P)  53 09.00  -1.1
KHC     83.31 329 P     53 12.40   0.3
        0.8s     4.10nm          4.6mb
      Z  18s     1.50um          5.4Msz
                 e      53 29.00  59kmX
GEC2    83.47 328 eP    53 12.90  -0.1
        0.6s     2.65nm          4.5mb
                 e      53 24.30  37km
                 e      53 26.20
                 e      53 29.50
                 ePP    56 25.80
                 e      56 37.10
                 e      56 43.50
                 e      56 48.50
GRF     83.84 330 iPc   53 15.60   0.9
        1.3s    28.00nm          5.2mb
      Z  19s     0.70um          5.1Msz
                 e(pP)  53 32.40  60kmX
TUC     83.88  54 eP    53 16.85   1.5
        1.0s     4.05nm          4.5mb
VAY     84.76 319 iP    53 19.00  -0.4
SKO     84.89 320 iP    53 20.80   0.7
      Z  19s     1.55um          5.4Msz
                 LR     34 20.00
CDF     86.42 331 eP    53 27.70   0.0
        0.7s     4.95nm          4.8mb
HAU     87.11 332 eP    53 30.70  -0.3
        0.4s     2.05nm          4.7mb
      Z  21s     0.70um          5.0Msz
FLN     88.90 336 eP    53 40.10   0.5
        0.6s     3.25nm          4.8mb
      Z  21s     1.05um          5.2Msz
LDF     88.93 336 eP    53 40.30   0.6
SSF     88.96 333 eP    53 40.00   0.1
        0.8s     3.35nm          4.7mb
LPL     89.00 330 eP    53 40.70   0.3
LPG     89.01 330 eP    53 40.50   0.0
        0.9s     4.10nm          4.8mb
SMF     89.19 332 eP    53 41.30   0.3
        0.8s     6.45nm          5.0mb
AVF     89.25 333 eP    53 41.50   0.3
        1.0s    12.40nm          5.2mb
GRR     89.35 336 eP    53 41.90   0.2
LPF     89.72 336 eP    53 43.60   0.2
        0.7s     4.85nm          4.9mb
MAF     90.02 333 eP    53 45.30   0.4
LSF     90.37 334 eP    53 46.60   0.1
        0.8s     6.30nm          5.0mb
LTX     90.45  53 eP    53 47.48   0.2
MFF     90.66 335 eP    53 48.20   0.4
        1.3s    20.95nm          5.3mb
RJF     91.19 333 eP    53 50.60   0.3
        0.7s     5.20nm          5.0mb
      Z  20s     0.57um          5.0Msz
CAF     91.31 333 eP    53 51.60   0.7
        1.0s     6.00nm          4.9mb
LFF     91.78 333 eP    53 53.60   0.6
LPO     91.84 333 eP    53 53.80   0.5
LPAZ   146.92  61 iPKPc 00 27.40   0.2
LPB    147.10  61 PKP   00 30.00   2.8X
CNCB   147.37  61 PKP   00 28.80   0.9
MOCB   151.92  65 PKP   00 41.10   6.5X
YJA    152.57  67 ePKPd 00 42.50   7.0X
     S.D. = 1.1  on 145 of 161 obs.
-----------------------------------
   NOV  09, 1993  03h 58m 51.53± 1.33s
   31.113 S ±10.2km   69.177 W ± 6.8km
   DEPTH = 134.7 ± 14.5 km
 SAN JUAN PROVINCE, ARGENTINA     (137)
      MD 4.2 (SAN).

RTCB    0.49 139 iPd    59 11.60   0.2
RTLL    0.64 110 iPd    59 12.60   0.3
RTCV    0.92 144 iPd    59 14.00  -0.5
CFA     0.94 122 iPc    59 14.90   0.2
RTRS    0.97 345 eP     59 14.00  -0.8
MDZ     1.79 171 iP     59 22.60  -1.1
                 iS     59 40.50
JACH    1.97 217 iP+    59 27.03   1.1
                 iS     59 51.56
PEL     2.39 212 iPd    59 31.81   0.7
                 iS     59 59.39
FCH     2.40 203 eP     59 32.53   1.0
                 iS     00 01.49
ROCH    2.42 220 iPd    59 31.93   0.3
                 iS     00 00.49
SAN     2.65 208 (P)    59 41.06   6.7X
                 iS     00 04.88
PCH     2.74 204 iP     59 36.27   0.6
                 iS     00 07.82
TACH    2.94 210 iP     59 37.93  -0.2
LCCH    3.11 220 iP+    59 40.33   0.0
MRA     3.23 115 iPc    59 42.50   0.7
CACH    3.23 201 iP     59 42.45   0.4
                 iS     00 20.57
LNV     3.40 213 iP     59 42.71  -1.5
                 iS     00 22.24
RFA     3.70 171 iPc    59 46.50  -1.7
                 S      00 25.00
TCA     3.94  94 iPc    59 51.90   0.5
                 (S)    00 25.00
     S.D. = 0.9  on  18 of  19 obs.
-----------------------------------
   NOV  09, 1993  04h 27m 16.63± 0.60s
   13.065 N ± 5.4km  144.735 E ± 5.3km
   DEPTH =  65.8 ±  4.6 km
   4.9mb ( 21 obs.)
 MARIANA ISLANDS                  (216)
      Felt (IV) in the Merizo-Dededo
      area, Guam.

GUA     0.50  20 iPd    27 29.10  -0.2
GUMO    0.54  14 iPd    27 29.60   0.0
                 iS     27 39.60
PJG     0.54  14 iP     27 29.70   0.1
IIDJ   23.15 346 P      32 19.10   1.0
KAKJ   23.40 351 P      32 21.60   1.2
CHJJ   23.46 348 P      32 20.80  -0.2
TSRJ   23.73 342 P      32 13.60 -10.0X
MTMJ   24.23 346 P      32 28.70   0.1
NIIJ   24.61 349 P      32 31.50  -0.6
WR2    34.36 197 eP     33 58.20  -1.2
        0.7s    24.70nm          5.2mb
                 eS     39 02.40
WRA    34.36 198 P      33 58.79  -0.6
        0.6s    10.70nm          5.0mb
BJI    36.77 322 eP     34 17.50  -2.1
ASPA   38.01 196 eP     34 29.70  -0.6
        0.6s     7.20nm          4.8mb
XAN    38.62 309 P      34 36.30   1.0
        0.6s     6.50nm          4.7mb
DZM    40.90 148 iPc    34 52.60  -1.6
CD2    41.66 302 eP     35 01.60   1.2
MBL    41.89 216 iPd    35 03.40   1.1
        0.3s     4.00nm          4.7mb
WARB   42.80 204 eP     35 11.00   1.3
LZH    43.25 309 eP     35 15.00   1.5
        1.5s    27.00nm          4.8mb
                 pP     35 31.50  66kmX
STK    44.79 184 eP     35 21.20  -4.5X
        0.6s     2.30nm          4.2mb
GUN    56.59 295 P      36 56.40   0.7
PKI    57.00 294 P      36 58.70   0.1
KKN    57.12 295 P      36 59.60   0.3
DMN    57.27 294 P      37 00.60   0.2
GKN    57.69 295 P      37 03.20   0.0
TTA    64.68  26 eP     37 47.69  -2.0
        0.8s     4.99nm          4.5mb
SLKM   66.51  29 eP     37 58.66  -2.7
FBA    68.75  25 eP     38 12.54  -2.8
        0.5s     6.53nm          4.8mb
KLU    68.78  29 eP     38 14.07  -1.6
BALM   70.40  30 eP     38 23.82  -1.7
INK    74.90  22 eP     38 50.50  -1.3
        0.7s     5.00nm          4.6mb
MBC    78.81  14 eP     39 13.50   0.0
        0.5s     2.00nm          4.3mb
OTR    81.02  43 P      39 26.85   1.0
OOW    81.18  43 P      39 27.54   0.9
OBC    81.20  43 P      39 27.59   0.8
OSR    81.37  43 P      39 28.72   1.0
STW    81.45  43 P      39 28.57   0.6
OSD    81.49  43 P      39 29.23   0.7
SMW    81.82  43 P      39 30.87   0.9
MCW    81.91  42 eP     39 31.03   0.6
BLN    81.94  43 P      39 31.86   1.3
HDW    81.95  43 P      39 31.45   0.7
CPW    82.02  44 P      39 31.75   0.7
BMW    82.04  44 eP     39 31.49   0.3
GMW    82.14  43 eP     39 31.98   0.3
OHW    82.17  42 P      39 32.29   0.6
CMW    82.42  42 P      39 33.58   0.4
MBW    82.49  42 P      39 33.68   0.0
JCW    82.59  42 P      39 34.20   0.2
LMW    82.64  44 P      39 35.33   0.9
ERK    82.68  44 P      39 35.33   0.7
TDL    82.76  44 P      39 35.58   0.6
SHW    82.77  44 eP     39 35.82   0.7
YEL    82.80  44 P      39 36.09   0.8
RVC    82.81  44 P      39 35.62   0.4
REMW   82.81  44 P      39 36.08   0.7
RPW    82.81  42 P      39 35.06  -0.1
RMW    82.81  43 (P)    39 34.34  -0.9
GSM    82.87  43 P      39 35.84   0.3
FMW    83.01  44 P      39 36.47   0.1
GLK    83.13  44 P      39 36.88   0.0
WPW    83.14  44 P      39 36.64  -0.3
ASR    83.22  44 P      39 37.56   0.2
VLL    83.30  45 P      39 38.22   0.4
YKA    83.38  27 eP     39 36.70  -1.0
        0.4s     6.70nm          5.0mb
LGPM   83.39  50 eP     39 38.65   0.3
NAC    83.62  44 P      39 39.72   0.4
NLW    83.66  42 P      39 39.63   0.0
TBM    83.68  43 P      39 39.87   0.2
EBG    83.75  43 P      39 40.30   0.3
ETW    83.76  43 P      39 39.88  -0.3
CROR   83.88  45 P      39 40.55  -0.2
VGB    83.91  45 eP     39 40.68  -0.1
WTV    83.99  43 P      39 40.91  -0.3
LBFM   83.99  49 eP     39 41.48  -0.1
ORV    84.66  51 eP     39 44.65   0.0
OD2    84.88  43 P      39 45.54  -0.1
RES    85.09  13 eP     39 46.00  -0.1
        0.7s     5.00nm          4.7mb
DPW    85.10  42 eP     39 46.76   0.0
ARN    85.12  53 eP     39 47.02   0.0
NEW    85.71  42 ePc    39 49.62  -0.1
        0.9s    46.68nm          5.6mb
BONR   87.47  52 eP     39 59.10   0.2
GSC    89.32  54 eP     40 07.91   0.4
PEC    89.40  55 eP     40 07.46  -0.4
        0.9s     9.86nm          5.1mb
OBN    89.46 327 iPd    40 07.60   0.0
        1.0s    21.00nm          5.4mb
LRM    89.46  43 eP     40 08.00  -0.2
DAG    89.81 356 iPc    40 07.80  -1.0
        0.8s    11.94nm          5.2mb
HVU    90.49  47 eP     40 13.47   0.6
DUG    90.95  48 eP     40 14.86  -0.1
        1.0s     8.24nm          5.0mb
KAF    91.14 336 eP     40 14.20  -1.0
        0.5s     7.80nm          5.3mb
ARUT   91.21  51 eP     40 16.81   0.5
MSU    91.94  50 eP     40 19.99   0.3
DAU    92.01  48 eP     40 19.81  -0.3
SRU    92.97  49 eP     40 24.11  -0.3
PV10   94.31  49 eP     40 30.21  -0.5
PV08   94.53  49 eP     40 31.54  -0.2
HFS    97.23 338 eP     40 41.80  -1.4
        0.7s     7.80nm          5.4mb
NB2    97.49 339 P      40 43.50  -0.9
        0.7s     4.50nm          5.1mb
KIC   144.06 301 PKP    46 45.50  -1.9
TIC   144.14 301 PKP    46 45.30  -2.3X
LIC   144.37 301 PKP    46 46.10  -1.8
        0.5s    19.50nm
      Z  21s     0.35um          5.1Msz
LPAZ  148.07 100 PKP    46 55.70   1.0
LPB   148.09 100 (PKP)  46 58.00   3.5X
CNCB  148.19 101 PKP    46 56.70   1.9
     S.D. = 0.9  on 100 of 104 obs.
-----------------------------------
? NOV  09, 1993  05h 01m 34.83± 2.51s
   36.534 N ±16.1km  141.511 E ±22.3km
   DEPTH =  46.0 ± 20.7 km
   4.3mb (  3 obs.)
 NEAR EAST COAST OF HONSHU, JAPAN(228)

KAKJ    1.13 253 P      01 52.90  -1.5
                 S      02 09.60
YAMJ    2.01 325 P      02 09.60   2.6X
                 eS     02 41.40
CHJJ    2.09 257 P      02 06.70  -1.4
                 S      02 34.10
NIIJ    2.13 290 P      02 10.60   2.0
OFUJ    2.55   3 eP     02 14.30  -0.3
                 eS     02 51.50
MAT     2.66 271 eP     02 17.00   0.7
                 eS     02 55.00
MTMJ    2.98 272 P      02 21.70   0.8
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IIDJ    3.10 251 P     02 22.50   0.0
WRA    56.58 188 P     11 17.50   2.3X
        0.8s     1.30nm          4.0mb
WR2    56.58 188 eP    11 15.90   0.7
        0.3s     3.80nm          4.9mb
NB2    74.68 337 P     13 08.80  -2.2
        0.9s     3.00nm          4.2mb
GEC2   83.18 328 eP    13 56.90  -0.5
LPAZ  146.88  60 PKP   21 12.40  -0.6
LPB   147.06  61 PKP   21 14.00   1.0
CNCB  147.34  61 PKP   21 14.80   1.2
     S.D. = 1.4  on  13 of  15 obs.
-------------------------------------
*  NOV  09, 1993  06h 23m 17.65± 0.85s
   57.459 S ±16.7km   27.082 W ±14.2km
   DEPTH =  33.0km  (normal)
   5.0mb (  3 obs.)
 SOUTH SANDWICH ISLANDS REGION    (153)

SNA    16.69 150 e(P)  27 21.20  11.1X
        0.8s    80.00nm
SPA    32.72 180 iPc   29 50.00   1.0
        1.0s    50.00nm         5.4mb
VAO    37.32 329 (P)   30 31.00   2.5X
CER    39.41  73 eP    30 43.50  -2.4
        0.5s    11.00nm         4.9mb
PPD    39.55 323 eP    30 48.70   1.6
BAO    44.62 331 eP    31 30.70   2.1X
MOCB   45.78 306 P     31 37.20  -1.0
SOB1   49.31 342 eP    32 05.80   0.5
CNCB   50.72 306 P     32 17.00   0.3
LPB    51.02 306 P     32 18.30  -0.5
LPAZ   51.25 306 Pc    32 19.30  -1.5
ARE    52.60 302 eP    32 30.00  -0.6
LIC    65.96  24 P     34 03.60   1.1
        0.5s     7.00nm         5.0mb
KIC    66.15  24 P     34 04.40   0.6
TIC    66.37  24 P     34 06.00   0.9
GKN   124.74  92 PKP   42 08.60  -6.6X
KKN   124.92  92 PKP   42 09.20  -6.4X
GUN   125.33  93 PKP   42 10.40  -6.2X
KAF   126.23  28 iPKP  42 11.50  -5.3X
YKA   137.25 317 ePKP  42 30.70  -7.0X
        0.7s     3.40nm
MBC   145.29 335 ePKP  42 47.50  -4.1X
        1.0s     4.00nm
INK   146.92 319 ePKP  42 50.50  -4.0X
        0.7s     2.00nm
     S.D. = 1.3  on  12 of  22 obs.
-------------------------------------
&  NOV  09, 1993  06h 43m 26.12s
   35.022 N          116.971 W
   DEPTH =   5.1km
 CENTRAL CALIFORNIA                ( 39)
     <PAS-P>. ML 2.7 (PAS).

ISA     1.38 298 iPc   43 50.94  -1.2
ABL     1.86 265 eP    44 00.15   1.1
TPNV    2.01  17 eP    44 03.97   2.7
BCH     2.56 275 eP    44 11.23   2.2
BONR    3.12 340 eP    44 23.03   5.9
        5 obs. associated
-------------------------------------
&  NOV  09, 1993  07h 24m 19.18s
   60.052 N          152.558 W
   DEPTH =  92.1km
 SOUTHERN ALASKA                   (  2)
     <AEIC>.

ILIM    0.20 278 iPc   24 32.10   1.0
                eS     24 43.10
INE     0.25 272 eP    24 32.48  -0.6
                eS     24 43.27
INW     0.29 273 eP    24 32.57  -0.6
                eS     24 43.65
RED     0.38 344 eP    24 32.91  -0.7
                eS     24 44.22
RS2     0.42 347 eP    24 33.30  -0.8
REF     0.44 351 iPc   24 33.51  -0.7
                eS     24 44.80
                eS     24 44.94
RDW     0.45 344 ePc   24 33.43  -0.8
OPT     0.52 221 eP    24 33.96  -0.6
NCT     0.54 340 eP    24 34.13  -0.7
DFR     0.55 353 iPc   24 34.05  -0.8
                S      24 45.81
HOM     0.61 130 eP    24 34.91  -0.3
AUL     0.81 214 eP    24 36.66  -0.5
AUE     0.81 211 eP    24 36.30  -0.9
AGU     0.82 213 eP    24 37.33  -0.2
AUH     0.82 213 eP    24 36.80  -0.6
AUW     0.83 214 eP    24 36.71  -0.7
AUI     0.84 212 eP    24 36.75  -0.8
                eS     24 50.59
CNPM    0.85 128 eP    24 36.88  -0.8
PDB     0.86 253 iPd   24 37.02  -0.8
                eS     24 51.14
NKA     0.95  43 eP    24 39.61   0.9
BKG     1.03   8 iPd   24 38.95  -0.8
                eS     24 54.45
CKL     1.15   5 iPd   24 40.32  -0.9
SPU     1.16  12 iPd   24 40.30  -1.0
CKT     1.17   8 eP    24 40.36  -1.0
CKN     1.19   9 eP    24 40.94  -0.7
BGL     1.22   4 ePd   24 41.20  -0.8
CP2     1.23   7 eP    24 41.09  -1.1
                eS     24 57.87
CRP     1.24   9 eP    24 40.68  -1.6
                eS     24 57.78
SLKM    1.25  68 eP    24 40.86  -1.5
                eS     24 58.11
MCNL    1.25 227 iPd   24 41.12  -1.2
CDD     1.25 207 iPd   24 40.99  -1.4
                eS     24 57.98
NCG     1.37   8 eP    24 43.01  -0.9
SYI     1.45 177 eP    24 43.71  -1.0
SEW     1.56  87 eP    24 44.58  -1.6
MPA     1.65  73 eP    24 45.92  -1.4
SUA     1.67  31 eP    24 46.94  -0.9
PMS     1.90  50 P     24 49.40  -1.3
SKT     2.00  14 eP    24 50.96  -1.0
PWA     2.07  38 P     24 51.90  -1.0
PWL     2.24  67 eP    24 52.57  -2.7
PLRM    2.28  46 eP    24 54.35  -1.4
LTI     2.36  88 eP    24 54.64  -2.2
KNK     2.43  54 eP    24 56.30  -1.6
MTU     2.46  89 eP    24 56.47  -1.8
GHO     2.48  44 eP    24 56.24  -2.2
CUT     2.61  24 eP    24 58.14  -2.0
SML     2.71  48 eP    24 59.10  -2.6
SCM     3.12  53 eP    25 04.83  -2.4
KLU     3.56  63 eP    25 10.13  -3.2
TRF     3.58  17 eP    25 12.71  -1.0
IL1     5.42  27 eP    25 35.58  -3.5
ILB     5.42  27 eP    25 35.53  -3.5
IM3     5.98 355 eP    25 43.92  -2.8
        53 obs. associated
-------------------------------------
?  NOV  09, 1993  09h 52m 07.74± 0.93s
   45.397 N ±12.9km   25.139 E ± 7.0km
   DEPTH =  10.0km  (geophysicist)
 ROMANIA                           (358)

CMP     0.15 209 iPc   52 11.00  -0.2
MLR     0.57  80 iPc   52 18.00  -1.5
TNR     0.66 293 ePc   52 21.00   0.1
ISR     1.03 104 eP    52 28.00   0.8
VRI     1.21  66 iPd   52 31.00   0.7
                e      22 39.50
     S.D. = 1.3  on   5 of   5 obs.
-------------------------------------
   NOV  09, 1993  09h 56m 33.29± 1.00s
   39.766 N ± 9.4km   29.340 E ± 6.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
     ML 2.8 (ISK).

DST     0.57 254 iPg   56 43.50  -1.4
                eSg    56 54.00
EYL     1.02  38 iPn   56 51.80  -0.8
HRT     1.08  13 ePn   56 53.00  -0.7
BNT     1.24 299 ePn   56 57.30   1.0
EDC     1.27 298 ePn   56 57.50   0.6
ISK     1.32 351 ePn   56 58.00   0.4
GAZ     6.70 110 iPg   58 15.00   0.9
     S.D. = 1.2  on   7 of   7 obs.
-------------------------------------
&  NOV  09, 1993  10h 00m 22.96s
   34.558 N          116.556 W
   DEPTH =   6.1km
 SOUTHERN CALIFORNIA               ( 43)
     <PAS-P>. ML 2.8 (PAS).

GSC     0.77 345 ePd   00 37.11  -1.3
PEC     0.83 217 eP    00 38.05  -1.4
SSK     1.00 250 eP    00 41.22  -1.2
                eS     00 55.10
ISA     1.92 306 eP    00 55.68  -0.9
GLA     2.08 136 ePn   00 55.89  -3.0
TPNV    2.40   6 eP    01 02.04  -1.5
        6 obs. associated
-------------------------------------
%  NOV  09, 1993  10h 01m 30.46± 0.91s
   39.113 N ± 7.5km   27.593 E ± 9.5km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
     ML 2.7 (ISK).

IZM     0.76 200 ePg   01 45.10  -0.2
                eSg    01 57.00
DST     0.94  58 ePn   01 49.00   0.6
EZN     1.21 306 iPn   01 53.50   0.5
EDC     1.25  10 ePn   01 53.50  -0.2
BNT     1.27  11 ePn   01 53.30  -0.7
     S.D. = 0.7  on   5 of   5 obs.
-------------------------------------
%  NOV  09, 1993  10h 03m 15.00± 0.85s
   39.138 N ± 7.0km   27.547 E ± 8.9km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
     ML 2.7 (ISK).

IZM     0.77 197 ePg   03 30.00  -0.1
                eSg    03 41.00
DST     0.96  61 ePn   03 33.50   0.2
EZN     1.17 306 iPn   03 37.00   0.2
EDC     1.23  11 ePn   03 37.50  -0.4
BNT     1.25  13 ePn   03 38.30   0.1
     S.D. = 0.4  on   5 of   5 obs.
-------------------------------------
?  NOV  09, 1993  10h 18m 17.54± 5.69s
   40.760 N ±51.5km   29.606 E ±13.4km
   DEPTH =   5.0km  (geophysicist)
 TURKEY                            (366)
     ML 2.8 (ISK).

HRT     0.08  37 ePg   18 19.40   0.0
                eSg    18 21.40
ISK     0.51 307 ePg   18 27.80  -0.1
                eSg    18 35.30
CTT     0.97 294 iPg   18 36.30  -0.2
                eSg    18 51.30
DMK     1.75 308 ePn   18 49.00   0.3
     S.D. = 0.3  on   4 of   4 obs.
-------------------------------------
*  NOV  09, 1993  10h 24m 54.20± 1.14s
   34.321 N ± 9.4km    3.495 W ± 9.8km
   DEPTH =  10.0km  (geophysicist)
 MOROCCO                           (395)
     mbLg 2.9 (MDD).

TOU     0.67 342 iP    25 09.00   1.4
                iS     25 19.50
ZAI     0.78  52 iP    25 10.50   1.1
                iS     25 19.00
EMEL    1.07  24 iPd   25 14.06  -0.3
                e      25 29.30
ZER     1.35 262 iP    25 27.00   8.0X
                eS     25 45.00
BMK     2.03 288 iP    25 04.50 -24.3X
                iS     25 11.50
TNF     2.35 221 eP    25 33.50   0.1
                iS     26 01.00
EGUA    2.51 359 eP    25 34.18  -1.5
                e      26 05.50
ENIJ    2.85  21 iPd   25 38.59  -1.9
                e      26 12.80
ECOG    2.95 359 iPc   25 42.54   0.5
                e      26 16.10
EPRU    2.99 332 eP    25 42.06  -0.5
                e      26 17.60
EHOR    3.77 338 iPd   25 53.97   0.3
                e      26 37.20
EBAN    3.84 357 eP    25 56.00   1.3
                e      26 41.50
EVAL    4.19 322 eP    25 59.00  -0.6
                e      26 48.00
EVIA    4.38  10 eP    26 02.50   0.1
                e      26 51.50
     S.D. = 1.2  on  12 of  14 obs.
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```

09d 10h

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%  NOV  09, 1993  10h 44m 44.22± 0.85s
   39.128 N ± 6.9km   27.525 E ± 8.9km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                                (366)
      ML 2.7 (ISK).

IZM      0.76 196 ePg    44 59.00  -0.1
                  eSg    45 10.80
DST      0.98  61 ePn    45 03.00   0.2
EZN      1.16 307 ePn    45 06.00   0.1
EDC      1.24  12 ePn    45 07.50   0.2
BNT      1.26  14 ePn    45 07.30  -0.4
     S.D. = 0.3  on   5 of   5 obs.
-------------------------------------
&  NOV  09, 1993  11h 57m 11.07s
   61.282 N          150.704 W
   DEPTH =  42.8km
 SOUTHERN ALASKA                       (  2)
      <AEIC>. ML 2.5 (AEIC).

SUA      0.18 354 iP     57 18.76   0.0
                  eS     57 26.03
PWA      0.54  47 P      57 21.70  -0.8
PMS      0.55  93 P      57 22.10  -0.6
                  S      57 32.10
NKA      0.60 206 iP     57 24.58   1.3
CGLM     0.63 273 eP     57 23.14  -0.6
SPU      0.66 262 iP     57 23.53  -0.6
                  eS     57 33.89
CRP      0.70 269 eP     57 24.20  -0.6
                  eS     57 34.74
                  eS     57 34.81
NCG      0.71 281 iP     57 24.13  -0.8
CKN      0.72 266 eP     57 24.35  -0.6
CKT      0.73 264 iP     57 24.32  -0.8
CP2      0.74 269 iP     57 24.71  -0.7
BKG      0.78 255 iP     57 25.25  -0.7
CKL      0.79 265 iP     57 25.19  -0.9
SKT      0.80 331 eP     57 25.07  -1.1
SLKM     0.81 163 eP     57 25.18  -1.1
BGL      0.81 269 iP     57 25.48  -0.9
PLRM     0.82  67 eP     57 24.97  -1.3
GHO      0.98  59 eP     57 27.55  -1.2
MPA      1.03 140 eP     57 28.58  -0.7
KNK      1.09  82 eP     57 29.43  -0.7
DFR      1.19 235 iP     57 30.79  -0.8
                  eS     57 46.82
PWL      1.23 109 eP     57 31.05  -1.0
                  eS     57 47.50
SML      1.25  64 eP     57 31.11  -1.3
REF      1.26 232 eP     57 31.89  -0.8
                  eS     57 49.27
RS2      1.30 232 eP     57 32.51  -0.7
RDW      1.31 233 eP     57 32.60  -0.7
NCT      1.31 237 eP     57 32.54  -0.7
RED      1.33 230 eP     57 32.80  -0.8
SEW      1.33 152 eP     57 33.78   0.3
CFI      1.42  93 eP     57 33.59  -1.2
ILIM     1.64 224 eP     57 37.24  -0.7
INE      1.69 224 eP     57 38.02  -0.7
SCM      1.71  70 eP     57 37.27  -1.7
CNPM     1.78 189 eP     57 39.11  -0.8
LTI      1.88 130 eP     57 39.32  -1.9
VZW      2.02  95 eP     57 41.50  -1.9
OPT      2.06 219 P      57 44.00   0.1
VLZ      2.12  92 eP     57 43.01  -1.7
FID      2.13 103 eP     57 42.12  -2.7
KLU      2.31  83 eP     57 45.07  -2.5
TOA      2.31  67 P      57 45.40  -2.1
IL1      3.91  25 eP     58 08.56  -1.6
IM3      4.91 345 eP     58 21.51  -2.8
        43 obs. associated
-------------------------------------
%  NOV  09, 1993  12h 18m 09.04± 0.87s
   39.241 N ± 6.9km   27.824 E ± 8.3km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                                (366)
      ML 2.7 (ISK).

DST      0.72  59 ePg    18 23.00  -0.3
                  eSg    18 34.50
IZM      0.95 208 ePn    18 27.30   0.1
                  eSg    18 42.60
EDC      1.11   2 ePn    18 29.50  -0.3
BNT      1.12   4 ePn    18 30.30   0.3
EZN      1.30 297 ePn    18 32.60  -0.5
MFT      1.60 345 ePn    18 38.00   0.5
     S.D. = 0.5  on   6 of   6 obs.
-------------------------------------
   NOV  09, 1993  13h 20m 44.13± 0.57s
   42.678 N ± 7.2km   23.988 E ± 9.4km
   DEPTH =  18.0 ±  7.4 km
 BULGARIA                              (359)

SRS      1.59 191 ePb    21 10.36  -1.1
                  eSb    21 31.04
KNT      1.72 209 ePb    21 13.56   0.2
                  eSb    21 36.32
VAY      1.72 218 iPn    21 13.70   0.3
SOH      1.91 195 ePb    21 15.24  -1.0
                  eSb    21 40.24
SKO      2.02 250 ePn    21 17.70   0.0
GRG      2.09 215 ePb    21 19.36   0.6
                  eSb    21 46.80
THE      2.18 201 ePn    21 20.52   0.4
                  eSn    21 48.76
OUR      2.34 180 ePn    21 22.36   0.0
                  eSn    21 50.88
ALN      2.35 138 ePn    21 23.36   0.9
                  eSn    21 51.08
FNA      2.72 227 ePn    21 30.84   3.0X
PAIG     2.76 185 ePn    21 27.68  -0.6
                  eSn    22 01.52
LIT      2.81 204 ePn    21 29.64   0.6
ISR      3.08  36 eP     21 27.00  -5.8X
MLR      3.15  26 eP     21 34.00   0.1
VRI      3.75  31 eP     21 42.00  -0.3
     S.D. = 0.7  on  13 of  15 obs.
-------------------------------------
   NOV  09, 1993  13h 32m 50.55± 0.51s
   43.905 N ± 7.9km    7.198 E ± 4.9km
   DEPTH =  10.0km  (geophysicist)
 NEAR SOUTH COAST OF FRANCE            (379)
      ML 1.0 (STR).

MVIF     0.03 255 Pg     32 51.52  -1.2
AURF     0.10 101 Pg     32 53.12  -0.2
                  Sg     32 56.31
TOUF     0.11  19 Pg     32 53.47  -0.2
SBF      0.18 104 Pg     32 54.30  -0.3
                  Sg     32 58.30
AUTN     0.19  61 Pg     32 55.04   0.2
CALN     0.27 236 Pg     32 56.60   0.3
SAOF     0.27  72 Pg     32 56.55   0.3
                  Sg     33 01.36
FRF      0.53 229 Pg     33 00.90  -0.3
                  Sg     33 07.80
LRG      0.76 234 Pg     33 06.20   0.9
                  Sg     33 17.40
LMR      0.76 221 Pg     33 05.40   0.0
                  Sg     33 15.10
     S.D. = 0.6  on  10 of  10 obs.
-------------------------------------
*  NOV  09, 1993  13h 35m 40.48± 0.99s
    5.791 S ± 8.2km  146.017 E ±13.1km
   DEPTH =  10.0km  (geophysicist)
 EASTERN NEW GUINEA REG., P.N.G. (207)

YYYY     0.45 186 eP     35 48.70  -1.0
MDG      0.59 336 eP     35 52.00  -0.3
LAT      1.31 132 eP     36 04.90   0.2
PMG      3.77 163 eP     36 40.00   0.1
WRA     18.08 218 P      39 54.50   1.0
         1.3s     0.60nm          2.6mb
     S.D. = 1.0  on   5 of   5 obs.
-------------------------------------
?  NOV  09, 1993  13h 37m 45.33± 5.43s
   40.658 N ±43.5km   29.497 E ±10.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                                (366)
      ML 2.7 (ISK).

GBZT     0.14 343 ePg    37 48.20  -0.4
HRT      0.21  39 iPg    37 50.00   0.1
                  eSg    37 52.00
ISK      0.53 321 ePg    37 56.20   0.2
                  eSg    38 02.00
CTT      0.94 301 iPg    38 03.30   0.0
                  eSg    38 17.30
     S.D. = 0.4  on   4 of   4 obs.
-------------------------------------
?  NOV  09, 1993  13h 40m 05.61± 7.44s
    4.201 S ±72.8km  139.455 E ±23.5km
   DEPTH =  33.0km  (normal)
    4.7mb (  1 obs.)
 IRIAN JAYA, INDONESIA                 (201)

MTN     11.89 223 eP     42 56.00   0.1
                  eS     45 20.00
KNA     15.56 222 eP     43 46.00   1.7
QIS     16.26 179 eP     43 52.50  -0.7
                  eS     47 19.00
WR2     16.42 197 iPd    43 54.70  -0.6
                  iS     47 05.50
CTA     17.12 158 iPc    44 05.50   1.3
ASPA    20.08 195 iPd    44 38.70  -0.6
         0.8s    29.80nm          4.7mb
                  iS     48 36.10
WARB    25.07 208 eP     45 27.60  -1.1
STK     27.61 176 eP     46 18.10  26.1X
         2.3s     1.80nm
CNCB   145.78 128 PKP    59 36.00  -8.2X
LPB    145.85 128 ePKP   59 38.00  -6.1X
LPAZ   145.96 127 PKP    59 35.50  -9.1X
     S.D. = 1.3  on   7 of  11 obs.
-------------------------------------
   NOV  09, 1993  13h 45m 21.29± 0.65s
   39.228 N ± 5.7km   21.734 E ± 6.3km
   DEPTH =  10.0km  (geophysicist)
 GREECE                                (364)
      MD 2.9 (ATH).

AGG      0.51 114 iPg    45 31.30  -0.3
                  eSg    45 38.66
LIT      1.05  34 iPg    45 40.85  -0.2
                  eSg    45 58.26
KZN      1.08   2 ePb    45 40.00  -1.6
IGT      1.13 286 iPg    45 42.10  -0.3
                  eSg    45 58.62
VLS      1.38 221 ePb    45 45.00  -1.6
KEK      1.57 289 ePg    45 52.00   2.7X
FNA      1.58 350 iPb    45 49.86   0.4
                  eSb    46 09.50
PAIG     1.66  64 ePb    45 49.86  -0.7
                  eSb    46 10.50
GRG      1.80  16 iPb    45 52.50  -0.1
OHR      2.01 339 ePn    45 58.00   2.3
SOH      2.02  37 iPn    45 56.02   0.2
                  iSn    46 23.06
OUR      2.05  57 ePn    45 55.94  -0.3
                  iSn    46 21.85
KNT      2.13  24 ePn    45 57.98   0.6
VAY      2.19  17 ePn    45 58.00  -0.2
VLI      2.68 159 ePb    46 07.00   1.8
SKO      2.75 355 ePn    46 10.00   3.8X
     S.D. = 1.2  on  14 of  16 obs.
-------------------------------------
   NOV  09, 1993  13h 46m 25.80± 0.28s
   44.217 N ± 2.8km   12.196 E ± 2.6km
   DEPTH =  21.1 ±  2.7 km
 NORTHERN ITALY                        (545)
      ML 4.1 (VIE), 3.8 (LDG), 3.7
      (STR). MD 3.8 (TRI), 3.6 (ROM).

RSM      0.34 147 P      46 32.77  -0.4
SFI      0.39 220 P      46 32.88  -1.0
PGD      0.48 225 P      46 34.41  -1.3
CRE      0.61 197 P      46 36.54  -1.3
ARV      0.90 143 P      46 41.90  -0.7
MME      1.08 269 P      46 45.79   0.0
BDI      1.16 263 P      46 47.34   0.4
ASS      1.19 163 P      46 46.90  -0.5
PII      1.30 248 P      46 49.04   0.2
VVI      1.77   5 P      46 56.47   0.9
SAL      1.83 320 P      46 57.77   1.4
TRI      1.86  36 ePnc    46 56.70  -0.1
                  iSg    47 28.10
MNS      1.87 169 P      46 57.72   0.7
CTI      1.87 348 P      46 57.90   0.8
RIY      1.92  53 iPnc    46 57.50  -0.3
                  iSn    47 22.50
BOB      2.04 287 P      47 02.29   2.7
AQU      2.06 154 P      47 02.09   2.3
VOY      2.18  33 iPnc    47 01.40  -0.1
                  eSn    47 29.40
                  eSg    47 38.80
CEY      2.20  45 ePn    47 01.40  -0.4
                  e      47 06.50
                  eSg    47 38.30
MDI      2.35 312 P      47 04.55   0.7
FVI      2.41  10 P      47 05.86   1.2
```

LJU	2.46	41	iPnc	47	06.00	0.5
	0.5s	440.00nm				
			ePg	47	12.00	
			eSn	47	36.50	
RDP	2.49	171	P	47	07.55	1.6
VBY	2.53	58	iPnc	47	06.50	0.1
			i	47	15.10	
			iSg	47	50.60	
PCP	2.64	278	P	47	09.72	1.6
			S	47	42.29	
OGA	2.78	343	ePn	47	11.60	1.5
SDI	2.78	154	P	47	10.81	0.8
CKI	2.82	276	P	47	11.50	1.0
SCE	2.84	353	ePn	47	12.40	1.4
OSS	2.86	330	ePd	47	13.60	2.3
PGF	2.87	236	Pn	47	11.20	-0.1
			Sn	47	46.00	
FIN	2.87	271	P	47	11.92	0.7
			S	47	45.75	
KBA	2.97	15	iPnc	47	14.10	1.2
			iPg	47	23.30	
			iSn	47	50.50	
			iSg	48	05.60	
VDL	2.97	321	iPd	47	14.50	1.6
TMA	3.02	310	ePd	47	14.00	0.5
WTTA	3.07	353	iPnc	47	16.40	2.1
			iPg	47	26.20	
			iSn	47	55.70	
			iSg	48	10.20	
ROB	3.11	273	P	47	15.17	0.4
IMI	3.12	266	P	47	14.71	-0.2
			S	47	50.26	
ZAG	3.13	58	e(Pn)	47	14.50	-0.4
PTJ	3.15	56	i(Pn)	47	15.00	-0.4
			iSn	47	56.40	
HVAR	3.25	107	ePn	47	15.70	-1.0
ORO	3.31	297	P	47	18.02	0.4
ORX	3.31	297	P	47	16.95	-0.7
SAOF	3.35	268	Pn	47	19.09	1.0
ENR	3.43	272	P	47	19.93	0.6
AUTN	3.44	268	Pn	47	20.94	1.3
SBF	3.45	266	Pn	47	19.80	0.2
			Sn	47	59.70	
LLS	3.48	321	ePd	47	21.80	1.7
STV	3.50	272	P	47	20.57	0.2
AURF	3.53	266	Pn	47	21.28	0.6
BHG	3.54	7	ePn	47	22.40	1.6
DOI	3.56	276	P	47	22.19	1.0
TOUF	3.57	268	Pn	47	22.13	0.7
BHB	3.58	282	P	47	20.70	-0.7
RSP	3.64	287	P	47	19.51	-2.9
MVIF	3.65	267	Pn	47	24.08	1.6
PZZ	3.66	276	P	47	22.08	-0.6
LSD	3.79	291	P	47	22.85	-1.8
CALN	3.86	265	Pn	47	26.03	0.6
DIX	3.86	301	ePd	47	28.40	2.8
RRL	3.93	282	P	47	26.15	-0.4
FUR	4.00	351	iPnc	47	41.80	14.5X
BNI	4.03	284	P	47	28.62	0.8
FRF	4.06	263	Pn	47	28.20	0.0
			Sn	48	14.70	
KMR	4.07	19	iPn+	47	44.30	16.0X
			i(Sn)	48	33.30	
LPG	4.08	290	Pn	47	28.00	-0.7
			Sn	48	13.40	
LPL	4.10	290	Pn	47	28.10	-0.8
			Sn	48	14.10	
EMS	4.16	298	iPc	47	31.50	1.7
LMR	4.21	260	Pn	47	29.60	-0.7
			Sn	48	17.70	
RSL	4.22	292	Pn	47	30.98	0.4
LRG	4.29	262	Pn	47	31.70	0.3
			Sn	48	19.40	
SLE	4.39	325	ePc	47	33.20	0.4
SOP	4.61	40	e(P)	47	44.00	8.0X
FEL	4.68	323	ePn	47	36.70	-0.3
GEC2	4.74	12	Pn	47	37.10	-0.9
			Sn	48	32.40	
LOMF	4.89	312	Pn	47	39.72	-0.3
WET	4.95	5	iPnd	47	40.30	-0.5
KHC	5.01	10	Pn	47	40.00	-1.6
			Pg	48	02.00	
			e	48	22.50	
			Sn	48	36.50	
			e	49	15.50	
MOF	5.06	318	Pn	47	41.83	-0.6
BSF	5.22	316	Pn	47	43.70	-1.0
			Sn	48	41.10	
ZST	5.24	39	eP	47	38.90	-5.9X
			i	48	09.00	
			i	48	25.70	
ECH	5.31	321	Pn	47	45.36	-0.6
WLS	5.37	323	Pn	47	46.11	-0.7
CDF	5.40	323	Pn	47	46.80	-0.5
			Sn	48	45.60	
GRF	5.52	353	ePn	47	48.60	-0.2
			ePg	48	11.50	
			iSn	48	47.50	
			eSg	49	11.20	
HAU	5.56	315	Pn	47	48.50	-0.9
			Sn	48	49.50	
SRO	5.58	48	eP	48	19.60	30.0X
VITF	5.88	315	Pn	47	53.64	-0.2
PRU	5.99	15	Pn	47	54.00	-1.4
			e	48	03.80	
HOF	6.10	358	iPc	48	22.30	25.3X
SMF	6.36	295	Pn	47	59.30	-1.4
			Sn	49	08.90	
LBF	6.40	299	Pn	48	00.00	-1.2
			Sn	49	08.90	
MOX	6.44	357	ePn	48	01.60	-0.3
			ePg	48	30.20	
			eSn	49	10.00	
PSZ	6.51	53	eP	48	53.60	50.7X
LOR	6.58	301	Pn	48	02.50	-1.4
			Sn	49	14.10	
SSF	6.72	298	Pn	48	04.20	-1.6
			Sn	49	16.90	
AVF	6.73	296	Pn	48	04.40	-1.4
			Sn	49	17.80	
BRG	6.76	9	iPg	48	04.80	-1.5
			iSg	48	34.20	
BGF	6.99	293	Pn	48	07.30	-2.2
			Sn	49	24.30	
MAF	7.09	290	Pn	48	08.90	-2.0
			Sn	49	25.30	
CLL	7.12	4	iPn	48	09.30	-2.0
			i	49	23.60	
			e(Sg)	50	22.00	
			e(Sg)	56	53.00	
KSP	7.19	21	eP	48	30.00	17.8X
			eS	49	30.00	
			e	50	13.80	
CAF	7.27	279	Pn	48	12.50	-1.0
TCF	7.35	290	Pn	48	12.60	-1.9
			Sn	49	32.20	

S.D. = 1.2 on 96 of 104 obs.

NOV 09, 1993 13h 52m 52.29± 0.44s
44.169 N ± 4.2km 12.246 E ± 3.8km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 3.5 (VIE), 3.4 (LDG). MD 3.5 (TRI), 3.2 (ROM).

RSM	0.28	148	P	52	55.97	-2.3
SFI	0.38	229	P	53	00.79	0.8
PGD	0.48	232	P	53	02.32	0.3
CRE	0.58	202	P	53	03.84	-0.3
MME	1.11	272	P	53	14.73	1.4
BDI	1.19	265	P	53	15.52	0.9
PII	1.32	251	P	53	17.19	0.5
TRI	1.88	34	ePn	53	24.70	0.0
			iSg	53	56.00	
SAL	1.89	320	P	53	25.73	0.9
RIY	1.92	52	ePn	53	25.00	-0.4
			iSn	53	50.70	
CTI	1.93	348	P	53	25.81	0.3
BOB	2.09	288	P	53	30.53	2.7
CEY	2.20	44	ePn	53	29.50	0.0
			e	53	34.90	
			eSg	54	07.10	
MDI	2.41	313	P	53	33.50	1.1
FVI	2.45	9	P	53	33.50	0.6
LJU	2.48	40	ePn	53	33.80	0.5
	0.5s	120.00nm				
			e	53	42.00	
			eSn	54	04.50	
			eSg	54	16.50	
VBY	2.52	57	iPn	53	34.60	0.6
			eSn	54	05.00	
			iSg	54	18.40	
OGA	2.83	343	ePn	53	39.70	1.1
CKI	2.86	277	P	53	39.56	0.8
PGF	2.87	237	Pn	53	39.40	0.4
			Sn	54	13.90	
SCE	2.89	353	ePn	53	40.60	1.2
KBA	3.01	14	iPnc	53	42.00	1.0
			iPg	53	51.20	
			iSn	54	17.80	
			iSg	54	31.40	
ZAG	3.12	57	e(Pn)	53	51.00	8.6X
WTTA	3.12	352	iPnd	53	44.30	1.6
			iSn	54	23.30	
			iSg	54	37.60	
PTJ	3.15	55	iPn	53	50.30	7.4X
			iSn	54	32.60	
HVAR	3.21	107	ePn	53	45.00	1.3
SBF	3.48	267	Pn	53	48.80	1.1
			Sn	54	27.60	
FRF	4.09	263	Pn	53	56.00	-0.3
			Sn	54	42.60	
LPG	4.13	291	Pn	53	56.30	-0.7
			Sn	54	41.40	
LPL	4.15	291	Pn	53	56.20	-1.0
			Sn	54	41.80	
LMR	4.24	261	Pn	53	58.60	0.3
			Sn	54	45.10	
LRG	4.32	263	Pn	53	59.40	-0.1
			Sn	54	48.30	
GEC2	4.78	12	Pn	54	04.90	-1.3
			Sn	54	59.70	
KHC	5.05	10	ePn	54	08.50	-1.3
			eSn	55	06.00	
			e	55	34.50	
BSF	5.28	316	Pn	54	12.30	-0.9
			Sn	55	09.00	
CDF	5.46	323	Pn	54	14.60	-1.2
			Sn	55	13.40	
HAU	5.62	315	Pn	54	16.50	-1.4
			Sn	55	16.00	
PRU	6.03	14	ePn	54	35.50	11.9X
			e	55	28.50	
			Sn	55	47.10	
			eSg	56	17.50	
SMF	6.41	296	Pn	54	27.40	-1.7
LBF	6.45	299	Pn	54	28.20	-1.5
			Sn	55	36.80	
MOX	6.49	356	e(P)	55	03.80	33.6X
			e	56	33.50	
LOR	6.64	301	Pn	54	30.50	-1.8
			Sn	55	41.90	
SSF	6.78	298	Pn	54	31.80	-2.4
			Sn	55	45.70	
AVF	6.78	296	Pn	54	33.30	-0.9

S.D. = 1.2 on 40 of 44 obs.

% NOV 09, 1993 14h 18m 56.75± 0.87s
28.033 S ± 9.2km 26.803 E ± 8.5km
DEPTH = 5.0km (geophysicist)
REPUBLIC OF SOUTH AFRICA (584)
ML 2.7 (PRE).

SEK	0.78	112	eP	19	12.90	0.4
			S	19	23.00	
BLF	1.20	207	eP	19	18.90	-0.8
			S	19	35.20	
BOSA	1.35	244	eP	19	24.00	1.8
			S	19	43.00	
SWZ	1.56	303	eP	19	24.60	-0.8
			S	19	43.70	
FRS	2.15	217	eP	19	32.90	-0.8
			S	19	58.70	
SLR	2.64	30	e(P)	19	41.00	0.1
			S	20	12.00	

S.D. = 1.3 on 6 of 6 obs.

? NOV 09, 1993 14h 34m 25.16± 8.22s
32.090 S ±59.9km 71.762 W ±28.0km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF CENTRAL CHILE (135)
MD 3.8 (SAN).

ROCH	1.08	144	iP+	34	45.30	-0.4
			iS	35	00.47	
JACH	1.15	121	iP	34	46.56	-0.2
			iS	35	02.09	
PEL	1.39	139	iPd	34	50.22	-0.4
			iS	35	08.46	
LCCH	1.39	173	iP	34	49.40	-1.2
			iS	35	08.92	

09d 14h

TACH	1.71	156	iP	34 55.38	0.3
			iS	35 18.55	
FCH	1.75	135	iP	34 55.77	-0.3
			iS	35 19.60	
PCH	1.85	146	iP	34 58.07	0.8
			iS	35 23.13	
LNV	1.88	171	iP	34 57.86	0.2
CACH	2.24	155	iP	35 04.21	1.2
			iS	35 35.21	

S.D. = 0.8 on 9 of 9 obs.

% NOV 09, 1993 14h 46m 42.30± 1.05s
33.978 S ±12.5km 70.434 W ±14.8km
DEPTH = 110.0km (geophysicist)
CHILE-ARGENTINA BORDER REGION (127)
MD 3.4 (SAN).

CACH	0.20	225	iP+	46 58.22	0.1
			iS	47 10.28	
PCH	0.36	349	iP+	46 58.60	-0.1
			iS	47 10.46	
TACH	0.53	308	iP+	46 59.58	0.0
			iS	47 12.40	
FCH	0.66	11	iP+	47 00.80	-0.2
			iS	47 15.42	
LNV	0.81	271	iPd	47 01.96	0.1
			iS	47 16.27	
PEL	0.86	346	iP	47 02.58	0.2
			iS	47 17.32	
LCCH	1.07	298	iP	47 04.32	-0.2
			iS	47 20.49	
ROCH	1.11	334	iP	47 05.25	0.0
			iS	47 21.71	
JACH	1.30	354	iP	47 07.30	0.1
			iS	47 25.89	

S.D. = 0.1 on 9 of 9 obs.

? NOV 09, 1993 15h 14m 47.89± 3.20s
36.389 S ±28.5km 70.670 W ±19.0km
DEPTH = 107.9 ± 16.0 km
4.5mb (1 obs.)
CHILE-ARGENTINA BORDER REGION (127)
MD 4.3 (SAN).

CACH	2.27	1	iP	15 26.53	1.6
			iS	15 52.21	
LNV	2.50	346	iP+	15 27.93	0.1
			iS	15 55.20	
TACH	2.74	355	iP+	15 31.19	0.1
			iS	16 01.42	
PCH	2.77	3	iP+	15 32.42	0.9
			iS	16 03.68	
SAN	2.93	0	iP+	15 33.93	0.3
			iS	16 06.99	
LCCH	3.00	345	iP+	15 33.48	-1.1
			iS	16 06.47	
FCH	3.07	6	iP	15 36.51	0.7
			(S)	16 13.22	
PEL	3.24	360	iP+	15 37.92	0.1
			iS	16 13.52	
ROCH	3.42	355	iP+	15 39.95	-0.6
			iS	16 17.33	
IHA	3.45	346	eP	15 40.00	-0.6
			e(S)	16 11.50	
JACH	3.70	1	iP+	15 43.42	-0.8
			iS	16 24.00	
MDZ	3.81	24	eP	15 44.80	-0.8
			iS	15 57.80	
MOCB	15.71	18	P	18 23.70	-1.1
CNCB	19.64	8	P	19 12.00	0.8
LPAZ	20.15	7	P	19 17.10	0.7
PPD	22.08	55	(P)	19 35.00	0.0
KIC	74.80	70	P	26 18.00	-0.2

0.6s 5.00nm 4.5mb

S.D. = 0.9 on 17 of 17 obs.

% NOV 09, 1993 17h 16m 47.43± 0.61s
31.559 S ±10.8km 68.027 W ± 5.4km
DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)

CFA	0.19	255	iPc	16 53.40	-0.6
			S	16 58.20	
RTLL	0.44	301	iPd	16 56.90	-0.3
			S	17 04.00	
RTCV	0.53	235	iPd	16 58.50	0.0
			S	17 08.50	
RTCB	0.66	276	ePd	17 01.20	0.8
			S	17 11.20	
RTPR	1.81	46	eP	17 17.00	0.3
			S	17 39.00	
MRA	2.15	114	ePc	17 22.00	0.4
TCA	2.94	87	eP	17 32.50	-0.5
			(S)	18 14.00	

S.D. = 0.6 on 7 of 7 obs.

& NOV 09, 1993 17h 34m 22.86s
61.923 N 150.870 W
DEPTH = 67.3km
SOUTHERN ALASKA (2)
<AEIC>. ML 2.8 (AEIC), 3.2 (PMR).

SKT	0.32	281	eP	34 33.43	-0.6
			eS	34 41.99	
SUA	0.46	172	eP	34 35.28	-0.1
			eS	34 45.38	
PWA	0.54	120	P	34 35.70	-0.3
			S	34 46.40	
CUT	0.56	30	eP	34 35.53	-0.7
			eS	34 45.66	
NCG	0.81	230	eP	34 38.45	-0.7
			eS	34 50.92	
CGLM	0.82	222	eP	34 38.57	-0.8
PLRM	0.89	111	eP	34 39.02	-1.0
			eS	34 52.47	
PMR	0.89	111	iPc	34 38.86	-1.2
CRP	0.90	224	eP	34 39.49	-0.9
			eS	34 53.06	
PMS	0.93	137	P	34 40.00	-0.6
CP2	0.93	225	eP	34 40.01	-0.8
GHO	0.94	98	iP	34 40.09	-0.7
SPU	0.94	218	iP	34 40.08	-0.6
			eS	34 53.74	
CKN	0.94	222	eP	34 40.37	-0.4
CKT	0.97	222	eP	34 40.41	-0.7
BGL	0.98	228	eP	34 40.92	-0.5
BKG	1.09	219	iP	34 41.89	-0.8
NKA	1.20	189	eP	34 44.36	0.3
HUR	1.20	28	eP	34 43.13	-1.0
SML	1.21	94	iP	34 43.30	-1.0
KNK	1.26	113	eP	34 43.99	-1.0
			eS	35 00.92	
SLKM	1.45	167	eP	34 46.77	-0.8
TRF	1.56	10	eP	34 47.66	-1.4
DFR	1.60	214	eP	34 48.90	-0.7
MPA	1.61	152	eP	34 48.32	-1.4
			eS	35 08.41	
PWL	1.62	130	eP	34 48.18	-1.6
			eS	35 08.56	
KTH	1.64	359	eP	34 48.99	-1.1
			eS	35 09.59	
SCM	1.68	92	eP	34 49.44	-1.3
REF	1.69	212	eP	34 50.17	-0.8
NCT	1.69	217	eP	34 50.34	-0.5
RDW	1.72	214	eP	34 50.65	-0.7
RS2	1.73	213	eP	34 50.64	-0.8
RND	1.76	31	eP	34 50.40	-1.3
RED	1.77	212	eP	34 51.01	-0.9
SEW	1.95	159	eP	34 53.21	-1.1
ILIM	2.11	210	eP	34 55.40	-1.2
INE	2.15	211	eP	34 56.27	-1.0
INW	2.16	212	P	34 53.40	-4.0
TOA	2.22	83	P	34 57.50	-0.7
LTI	2.39	141	eP	34 57.42	-3.1
KLU	2.40	98	eP	34 58.48	-2.2
CNPM	2.41	184	eP	34 59.83	-1.0
SVW	2.42	252	eP	34 58.77	-2.2
FID	2.42	117	eP	34 58.45	-2.5
SDG	2.57	74	eP	35 02.08	-0.9
TTA	2.60	295	eP	35 00.83	-2.6
HIN	2.61	124	eP	35 01.39	-2.2
PAX	2.72	65	eP	35 04.05	-1.1
WRH	2.85	25	eP	35 04.85	-2.1
CCB	3.06	26	eP	35 07.59	-2.3
MLY	3.12	1	eP	35 08.46	-2.3
MDM	3.27	20	eP	35 10.52	-2.3
FBA	3.29	23	eP	35 10.33	-2.8
CDD	3.30	206	eP	35 11.62	-1.7
IL1	3.38	30	eP	35 11.86	-2.4
ILB	3.38	30	eP	35 11.91	-2.4
BALM	4.18	99	eP	35 22.71	-3.0
IMA	4.34	345	eP	35 24.46	-3.5
BC3	4.37	71	eP	35 25.49	-2.8

59 obs. associated

NOV 09, 1993 17h 53m 59.81± 0.66s
26.625 S ± 6.4km 26.618 E ± 6.8km
DEPTH = 5.0km (geophysicist)
REPUBLIC OF SOUTH AFRICA (584)
ML 3.6 (PRE). mbLg 3.3 (BUL).

BFS	0.31	151	iPc	54 06.90	0.8
			S	54 09.20	
KSR	0.80	18	iPc	54 20.00	4.1X
			S	54 31.00	
SWZ	1.28	244	eP	54 27.60	3.5X
			S	54 50.70	
SLR	1.74	60	eP	54 32.60	1.6
			S	54 54.30	
SEK	1.91	152	eP	54 33.90	0.4
			S	54 55.70	
BOSA	2.25	208	iPd	54 52.00	13.8X
			S	55 09.20	
BLF	2.50	189	eP	54 43.00	1.0
			S	55 12.10	
BFT	3.22	74	eP	54 51.50	-0.7
			S	55 27.00	
FRS	3.32	200	iPc	54 55.00	1.6
			S	55 28.00	
HVD	4.09	194	e(P)	55 05.00	0.6
			S	55 49.90	
PKA	4.56	227	eP	55 12.00	0.8
			S	56 03.00	
KSD	4.61	148	eP	55 10.40	-1.4
			S	56 01.20	
GRM	6.67	180	eP	55 39.00	-1.9
			S	56 48.00	
BUL	6.71	16	iPn	55 40.60	-1.0
			eSn	56 56.60	
			iSg	57 32.90	
SUR	7.65	220	e(P)	55 54.00	-0.7
			S	57 16.00	
CVN	7.69	230	eP	55 55.20	-0.1
			S	56 58.00	
CER	9.24	222	e(P)	56 15.00	-1.7
			S	58 01.00	
WIN	9.56	293	e(P)	56 22.00	0.7
			S	58 14.00	

S.D. = 1.3 on 15 of 18 obs.

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* NOV 09, 1993 18h 11m 07.35± 3.25s
35.169 S ±22.9km 70.102 W ±11.7km
DEPTH = 166.8 ± 25.5 km
CHILE-ARGENTINA BORDER REGION (127)
MD 3.9 (SAN).

CACH	1.13	338	iPd	11 35.14	-0.1
			iS	11 55.09	
RFA	1.40	74	iPd	11 38.00	0.3
PCH	1.58	347	iPd	11 39.79	0.3
			iS	12 02.02	
LNV	1.62	318	iPd	11 39.46	-0.3
			iS	12 02.00	
TACH	1.66	335	iPd	11 39.96	-0.3
			iS	12 03.74	
FCH	1.84	355	iP	11 43.08	0.5
			iS	12 08.09	
PEL	2.08	346	iP+	11 45.41	0.6
			iS	12 11.32	
LCCH	2.08	324	iPd	11 44.52	-0.3
ROCH	2.32	341	iP	11 47.72	-0.1
			iS	12 16.08	
MDZ	2.51	25	eP	11 48.00	-1.9
			iS	12 19.30	
JACH	2.51	351	iP	11 50.34	0.3
			iS	12 20.38	
RTCV	3.55	22	eP	12 03.00	0.1
RTCB	3.83	17	ePd	12 07.10	0.5
CFA	3.88	24	ePc	12 07.30	0.1
RTLL	4.07	20	ePd	12 09.70	0.1
MRA	4.58	54	ePd	12 16.70	0.5
TCA	5.99	52	iP	12 34.50	-0.5

S.D. = 0.7 on 17 of 17 obs.

NOV 09, 1993 19h 08m 14.05± 0.30s
44.201 N ± 2.9km 12.213 E ± 3.0km
DEPTH = 21.6 ± 3.1 km
NORTHERN ITALY (545)
ML 3.4 (VIE), 3.3 (LDG). MD 3.4 (TRI), 3.3 (ROM).

```
RSM     0.32 148 P      08 20.54  -0.6
SFI     0.38 223 P      08 20.95  -1.2
PGD     0.48 228 P      08 22.45  -1.5
CRE     0.60 198 P      08 24.86  -1.1
ARV     0.88 143 P      08 30.34  -0.2
MME     1.09 270 P      08 35.56   1.3
BDI     1.17 264 P      08 36.29   1.0
ASS     1.18 164 P      08 35.43   0.1
PII     1.31 249 P      08 37.58   0.5
VVI     1.79   5 P      08 44.27   0.2
MNS     1.85 169 P      08 46.06   1.1
SAL     1.85 320 P      08 45.63   0.8
TRI     1.87  36 e(Pn)   08 45.10   0.0
                e       08 49.30
                e       09 07.90
                e(Sg)   09 16.70
CTI     1.89 348 P      08 45.81   0.2
RIY     1.92  53 iPnc   08 45.70  -0.3
                iSn     09 10.70
AQU     2.04 154 P      08 51.45   3.7X
VOY     2.18  32 ePn    08 49.50  -0.3
                eSn     09 16.40
                e       09 26.80
CEY     2.20  45 ePn    08 49.80  -0.2
      1.0s   130.00nm
                e       08 55.00
                eSg     09 26.80
MDI     2.37 312 P      08 53.54   1.2
FVI     2.43   9 P      08 53.88   0.8
LJU     2.47  41 ePn    08 53.90   0.1
      1.0s   130.00nm
                e       09 02.50
                eSn     09 24.50
                eSg     09 35.00
VBY     2.53  58 ePn    08 54.90   0.3
                eSn     09 26.30
PCP     2.65 279 P      08 58.52   2.0
SDI     2.76 154 P      09 00.06   2.1
OGA     2.80 343 ePn    08 59.80   1.2
CKI     2.83 276 P      09 00.64   1.7
SCE     2.86 353 ePn    09 00.50   1.0
PGF     2.87 236 Pn     08 59.40  -0.1
                Sn      09 33.70
FIN     2.88 272 P      08 59.85   0.2
OSS     2.88 330 ePd    09 02.30   2.5
KBA     2.99  15 iPnc   09 01.90   0.7
                iPg     09 11.80
                iSn     09 38.50
                iSg     09 53.80
VDL     2.99 321 iPd    09 02.40   1.0
TMA     3.04 310 ePd    09 02.30   0.3
WTTA    3.09 353 iPnd   09 04.30   1.5
                iPg     09 14.60
                iSn     09 43.10
                iSg     09 59.00
ROB     3.12 273 P      09 03.14   0.0
ZAG     3.12  58 e(Pn)   09 09.50   6.4X
IMI     3.13 266 P      09 04.06   0.8
PTJ     3.15  56 e(Pn)   09 09.00   5.4X
HVAR    3.24 107 e(Pn)   09 03.70  -1.0
ORO     3.33 297 P      09 05.61  -0.5
ORX     3.33 297 P      09 05.39  -0.7
ENR     3.45 272 P      09 08.31   0.6
SBF     3.46 266 Pn     09 08.50   0.5
                Sn      09 47.60
LLS     3.50 321 ePd    09 09.70   1.1
STV     3.51 272 P      09 09.41   0.7
MMK     3.53 303 P      09 08.20  -0.9
BHB     3.60 282 P      09 09.28  -0.6
RSP     3.66 287 P      09 09.78  -1.1
PZZ     3.68 277 P      09 10.47  -0.7
LSD     3.81 291 P      09 11.56  -1.5
DIX     3.88 301 ePd    09 15.40   1.3
FRF     4.07 263 Pn     09 16.80   0.2
                Sn      10 02.70
LPG     4.09 290 Pn     09 17.40   0.2
                Sn      10 02.50
LPL     4.11 291 Pn     09 17.10  -0.3
                Sn      10 02.30
EMS     4.18 298 ePd    09 19.60   1.3
LMR     4.22 260 Pn     09 19.20   0.5
                Sn      10 05.20
LRG     4.30 262 Pn     09 19.80   0.1
                Sn      10 07.70
SLE     4.41 325 ePd    09 20.70  -0.6
GEC2    4.76  12 Pn     09 25.00  -1.4
                Sn      10 20.10
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KHC     5.02  10 Pn     09 29.00  -1.0
                Pg      09 49.00
                eSn     10 26.50
                e       11 07.50
BSF     5.24 316 Pn     09 31.60  -1.5
                Sn      10 28.30
ZST     5.24  39 eP     09 56.00  22.9X
CDF     5.43 323 Pn     09 34.60  -1.2
                Sn      10 33.40
GRF     5.54 353 ePg    09 59.50  22.2X
                eSn     10 36.00
                e(Sg)   11 00.30
HAU     5.58 315 Pn     09 36.30  -1.6
                Sn      10 36.20
PRU     6.00  15 Pn     09 42.40  -1.4
      1.1s    16.30nm          4.7mb
                Pg      10 05.20
                Sn      10 46.80
                e       11 04.80
                Sg      11 23.50
                e       11 29.30
SMF     6.38 295 Pn     09 47.10  -2.1
                Sn      10 56.60
LBF     6.41 299 Pn     09 47.90  -1.8
                Sn      10 57.40
MOX     6.46 357 (Pn)   09 50.00  -0.3
                (Pg)    10 21.10
LOR     6.60 301 Pn     09 50.80  -1.5
                Sn      11 02.20
SSF     6.74 298 Pn     09 52.90  -1.4
                Sn      11 04.70
BGF     7.00 293 Pn     09 56.60  -1.3
                Sn      11 10.90
      S.D. = 1.1  on  67 of  72 obs.
-----------------------------------
   NOV  09, 1993  19h 13m 14.77± 0.54s
   36.417 N ± 5.3km   28.284 E ± 4.7km
   DEPTH =  11.1 ±  3.8 km
 DODECANESE ISLANDS                (369)
      ML 3.8 (CSS), 3.5 (ISK). MD 3.8
      (ATH).

CIN     1.19 352 ePg    13 39.00   2.1
                iSg     13 51.00
BCK     2.12  60 iPn    13 51.20   0.5
IZM     2.14 338 iPn    13 50.80  -0.1
KHL     2.14  27 iPn    13 50.70  -0.3
NPS     2.46 243 ePn    13 55.50   0.1
ALT     3.01  28 ePn    14 03.01  -0.2
DST     3.20   5 ePn    14 05.50  -0.4
PRK     3.24 331 ePn    14 06.00  -0.5
VAM     3.46 254 ePn    14 10.00   0.3
PPCY    3.64 114 eP     14 12.00  -0.2
                eS      14 49.50
EZN     3.74 336 ePn    14 13.00  -0.6
VLI     4.31 276 ePn    14 22.00   0.2
CSS     4.36 108 eP     14 22.50   0.1
                eS      15 09.00
FAM     4.86 105 e(P)   14 29.50  -0.1
                e(S)    15 20.00
RDO     5.19 336 ePn    14 33.50  -0.6
      S.D. = 0.8  on  15 of  15 obs.
-----------------------------------
*  NOV  09, 1993  20h 15m 30.09± 1.02s
   39.283 N ± 8.3km   20.452 E ±13.1km
   DEPTH =  10.0km  (geophysicist)
 GREECE-ALBANIA BORDER REGION      (392)
      MD 2.9 (ATH).

KEK     0.66 311 ePb    15 43.00  -0.3
VLS     1.11 174 ePb    15 51.00   0.1
KZN     1.44  44 ePb    15 56.00  -0.3
OHR     1.85   8 ePn    16 03.70   1.6
SKO     2.79  15 ePn    16 14.50  -1.1
      S.D. = 1.4  on   5 of   5 obs.
-----------------------------------
&  NOV  09, 1993  20h 33m 51.88s
   62.896 N          143.917 W
   DEPTH =   4.9km
 CENTRAL ALASKA                    (  1)
      <AEIC>. ML 2.9 (AEIC).

TMW     0.60  44 iP     34 03.32  -0.6
                eS      34 10.60
PAX     0.71 277 iP     34 05.36  -0.8
                eS      34 15.00
DOT     0.76 355 iP     34 06.21  -0.9
```

```
SDG     0.84 244 eP     34 07.92  -0.6
                eS      34 19.42
THY     0.98 303 eP     34 10.41  -0.6
                eS      34 24.45
BC3     0.99  79 eP     34 09.70  -1.4
                eS      34 23.96
TZL     1.10 220 eP     34 13.34   0.3
DDM     1.25 316 eP     34 13.11  -2.6
TOA     1.31 234 P      34 16.60  -0.1
DJE     1.38 326 eP     34 17.45  -0.4
                eS      34 36.22
GLB     1.46 178 eP     34 18.59  -0.4
                eS      34 38.72
KLU     1.69 215 eP     34 22.26  -0.1
SCM     1.91 238 eP     34 25.68   0.1
BALM    2.01 158 eP     34 27.13   0.2
HDA     2.03 320 eP     34 26.62  -0.6
VLZ     2.11 214 eP     34 29.97   1.8
TGL     2.21 166 eP     34 31.76   1.9
VZW     2.22 215 eP     34 29.32  -0.7
CTGM    2.29 147 eP     34 33.45   2.4
IL1     2.30 326 eP     34 29.02  -2.0
ILB     2.30 326 eP     34 29.04  -2.0
RND     2.30 285 eP     34 31.63   0.5
SML     2.33 244 eP     34 32.31   0.8
WRH     2.44 312 eP     34 33.35   0.3
GHO     2.59 246 eP     34 37.54   2.3
FBA     2.64 321 (P)    34 33.05  -2.8
PLRM    2.77 244 eP     34 39.71   2.0
BM3     4.55 357 eP     35 01.04  -2.0
      28 obs. associated
-----------------------------------
%  NOV  09, 1993  21h 20m 00.60± 0.87s
   39.612 S ± 5.1km   177.520 E ± 7.4km
   DEPTH =  92.5 ± 14.3 km
 OFF E. COAST OF N. ISLAND, N.Z. (160)

MAHZ    0.51  34 P      20 15.70  -0.2
TAHZ    0.77 308 P      20 17.00  -1.4
                eS      20 27.20
PAHZ    0.83 334 P      20 17.70  -1.3
NOZ     1.07  22 P      20 22.10   0.6
PGZ     1.39 223 P      20 26.00   0.6
URZ     1.39 347 Pc     20 25.40   0.0
                eS      20 40.90
NGZ     1.55 286 Pc     20 28.30   0.6
PATZ    1.57 321 P      20 28.10   0.2
CNZ     1.58 284 P      20 28.60   0.6
TAZ     1.59 330 P      20 28.10   0.2
PUZ     1.64  21 P      20 29.00   0.3
                S       20 48.40
MNG     1.86 237 P      20 32.00   0.4
                S       20 53.50
BSZ     2.01 264 eP     20 35.00   1.5
HBZ     2.10  17 eP     20 35.00   0.3
AMW     2.16 218 P      20 35.80   0.3
MTW     2.18 224 P      20 35.80  -0.1
BLW     2.35 221 eP     20 38.20   0.1
MOZ     2.39 297 eP     20 38.20  -0.4
CAW     2.40 231 P      20 39.20   0.4
MRW     2.69 232 P      20 42.90   0.2
                S       21 13.40
QRZ     4.01 251 P      21 00.00  -0.9
                S       21 42.10
LTZ     5.07 230 eP     21 15.00  -0.7
MQZ     5.48 220 eP     21 20.10  -1.2
                S       22 17.10
      S.D. = 0.8  on  23 of  23 obs.
-----------------------------------
%  NOV  09, 1993  21h 55m 07.01± 1.01s
   38.863 N ± 8.9km   29.862 E ±10.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 3.0 (ISK).

ALT     0.27  45 iPg    55 12.00  -0.8
KHL     0.60 206 iPg    55 19.30   0.1
                eSg     55 28.80
DST     1.21 308 ePn    55 29.00  -0.6
GPA     1.47  14 iPn    55 34.00   0.5
EYL     1.72   8 iPn    55 38.00   0.8
      S.D. = 1.0  on   5 of   5 obs.
-----------------------------------
   NOV  09, 1993  21h 57m 48.10± 0.62s
   36.313 N ± 8.0km  141.812 E ± 6.9km
   DEPTH =  32.6km  (  7 depth phases)
   4.5mb ( 17 obs.)  4.3Msz (  1 obs.)
```

09d 21h

NEAR EAST COAST OF HONSHU, JAPAN(228)

```
KAKJ     1.33 266 iP+    58 10.40  -0.1
                  S      58 28.00
CHJJ     2.29 264 iP+    58 24.10  -0.3
                  S      58 55.10
YAMJ     2.34 323 iP+    58 26.30   1.3
                  eS     59 02.60
NIIJ     2.44 293 iP+    58 27.90   1.4
                  S      59 03.00
OFUJ     2.77 358 eP     58 30.50  -0.5
                  eS     59 06.20
MAT      2.92 276 eP     58 34.00   0.8
                  eS     59 14.00
MTMJ     3.24 276 iP+    58 39.30   1.3
IIDJ     3.27 256 iP+    58 39.60   1.2
TSRJ     4.79 262 eP     59 01.00   1.2
WKYJ     5.50 250 P      59 09.30  -0.6
MRRJ     6.13 355 eP     59 18.70   0.0
                  eS     00 29.30
HOOJ     6.17  10 eP     59 16.80  -2.5
                  eS     00 27.70
TKSJ     6.77 252 eP     59 27.20  -0.5
YONJ     6.88 263 P      59 30.70   1.4
KUSJ     7.14  17 eP     59 28.70  -4.1X
                  eS     00 45.90
ASAJ     7.82   4 eP     59 40.80  -1.6
MDJ     12.45 315 eP     00 43.50  -2.3
      Z  18s     1.44um
CN2     14.58 306 eP     01 18.00   4.2X
        1.0s    11.00nm          4.3mb
      Z  15s     0.59um          4.5Msz
                  esP    01 26.00
SNY     15.19 297 Pc     01 21.60  -0.2
      Z  18s     1.18um
      E  14s     0.68um
                  eS     04 06.00
BJI     20.47 288 eP     02 22.50  -3.1X
        1.5s    14.00nm          4.1mb
      Z  16s     0.35um          3.8MszX
TIY     23.46 282 eP     02 56.00   0.5
      Z  14s     1.55um          4.6MszX
      E  15s     0.86um
BTO     25.19 289 eP     03 11.00  -1.2
      N  13s     0.28um
      E  15s     0.41um
                  eS     07 28.00
XAN     26.91 275 P      03 26.50  -1.6
        0.5s    10.00nm          4.7mb
      Z  15s     0.58um          4.3MszX
                  pP     03 36.30  35km
LZH     30.51 281 eP     03 57.50  -3.1X
        2.0s    50.00nm          5.0mb
      Z  16s     0.54um          4.3MszX
      E  14s     0.41um
                  pP     04 07.50  35km
GYA     31.43 262 iPd    04 06.40  -2.3
        1.2s    33.00nm          5.1mb
CD2     32.00 271 eP     04 11.60  -2.1
GTA     33.09 288 eP     04 22.60  -0.5
        1.4s    19.00nm          4.8mb
      Z  18s     0.57um          4.3Msz
                  pP     04 32.50  35km
                  sP     04 36.50
KMI     35.18 263 Pd     04 40.00  -1.4
        1.4s    40.00nm          5.2mb
                  pP     04 49.00  30km
WMQ     41.45 298 eP     05 34.30   0.9
        1.0s    20.00nm          4.8mb
LSA     42.60 276 P      05 43.30  -0.1
        1.0s     7.00nm          4.3mb
SHL     43.72 270 eP     05 54.00   1.8
GUN     47.55 277 P      06 23.00   0.1
KKN     48.08 277 P      06 26.40  -0.5
DMN     48.30 277 P      06 29.00   0.4
GKN     48.51 277 P      06 29.80  -0.3
FBA     49.54  32 eP     06 39.00   1.7
        1.2s     9.85nm          4.7mb
WRA     56.39 188 P      07 26.00  -2.7
        0.9s     1.60nm          4.0mb
WR2     56.40 188 iPc    07 25.60  -3.1X
        1.1s     3.40nm          4.3mb
GBA     61.48 266 P      08 03.00  -1.2
KAF     69.10 333 iP     08 52.20  -0.3
LRM     74.44  44 eP     09 25.40   0.4
                  e      09 35.10  31km
HFS     74.88 336 eP     09 27.00   0.1
        0.4s     0.50nm          3.9mb
NB2     74.98 338 P      09 29.90   2.3
        0.9s     6.60nm          4.6mb
DUG     77.58  49 eP     09 43.87   1.2
        0.8s     4.54nm          4.6mb
KSP     80.88 328 eP     10 01.00   0.9
PV10    81.01  49 eP     10 02.35   1.0
                  e      10 12.34  32km
KHC     83.33 329 eP     10 13.50   0.6
        1.0s     3.40nm          4.4mb
                  e      10 34.00  75kmX
GEC2    83.49 328 eP     10 13.80  -0.1
        0.8s     1.42nm          4.2mb
                  e      10 23.40  30km
                  e      10 31.50
GRF     83.86 330 eP     10 16.60   1.0
SKO     84.93 320 eP     10 21.50   0.4
LPAZ   146.77  61 PKP    17 29.00   1.2
LPB    146.96  61 PKP    17 31.00   3.2X
CNCB   147.23  62 PKP    17 31.30   2.9X
     S.D. = 1.3  on  46 of  53 obs.
-----------------------------------
   NOV  09, 1993  22h 01m 14.13± 0.81s
   36.648 N ± 3.5km    7.695 W ± 7.0km
   DEPTH =  28.9 ±  4.1 km
   4.3mb (  4 obs.)
 STRAIT OF GIBRALTAR              (385)
      mbLg 4.1 (MDD). Felt.
EVAL     1.20  39 iPc     01 37.32   2.3
                  eS     01 50.00
SFS      1.21  98 iP      01 36.20   1.0
RANB     1.25  90 iP      01 38.40   2.7
CNIL     1.35 101 iP      01 38.30   1.1
GIBL     1.41  82 iP      01 38.80   0.7
MOMI     1.62 101 iP      01 41.90   0.7
PLAT     1.65 108 iP      01 42.00   0.5
ALJ      1.68  88 iP      01 42.50   0.4
EJIF     1.80  96 iPnc    01 44.91   1.2
                  eSn    02 03.30
BIT      1.88 122 iP      01 45.50   0.7
                  iS     02 05.50
TSY      1.89 132 iP      01 45.50   0.5
                  iS     02 05.50
CPS      1.92 116 iP      01 42.50  -2.8X
                  iS     02 01.00
EPRU     2.00  80 iPc     01 47.70   1.0
                  e      02 09.40
EHOR     2.28  58 iPc     01 51.19   0.7
                  e      02 17.50
RSA      2.32 139 iP      01 51.00  -0.2
                  iS     02 16.50
LIS      2.37 331 eP      01 56.00   4.2X
                  eS     02 25.00
RTC      2.77 165 iP      01 56.00  -1.4
                  iS     02 25.00
ELUQ     2.89  71 iPnc    01 59.73   0.5
                  eSn    02 30.40
EGUA     3.32  86 iPc     02 05.49   0.1
                  e      02 40.00
ECOG     3.37  78 iPd     02 06.60   0.5
                  e      02 42.60
EBAN     3.46  63 iPc     02 07.56   0.2
                  e      02 43.60
TOU      3.62 117 iP      02 08.00  -1.6
                  iS     02 48.00
EPLA     3.64  20 iPnd    02 11.29   1.4
                  eSn    02 51.30
PAB      3.92  41 iPnc    02 14.90   1.1
                  eSn    02 55.00
                  iSb    03 10.50
                  eSg    03 24.50
EHUE     4.24  73 iPc     02 17.80  -0.6
                  e      03 03.40
ENIJ     4.42  84 iPd     02 20.19  -0.7
                  e      03 08.80
ZAI      4.43 113 iP      02 18.50  -2.5
                  iS     03 06.50
TNF      4.55 154 iP      02 22.00  -0.8
                  iS     03 09.50
EVIA     4.58  63 iPnc    02 22.26  -1.0
                  eSn    03 11.00
GUD      4.86  34 iPc     02 28.23   1.0
                  e      03 20.80
EALH     5.15  75 iPd     02 31.28   0.0
                  e      03 25.00
CIA      5.16 190 iP      02 30.50  -0.9
                  iS     03 24.50
EZAM     5.55 352 eP      02 38.45   1.6
                  e      03 38.50
ERUA     5.75   4 ePn     02 40.26   0.5
ECHE     6.06  59 iPd     02 43.30  -0.9
                  e      03 47.20
ETOR     6.06  45 iPc     02 44.36   0.1
                  e      03 48.70
ACU      6.08  70 iPc     02 42.48  -1.9
                  e      03 47.00
STS      6.27 354 eP      02 48.28   1.3
                  e      03 55.00
EMON     6.79   2 eP      02 54.99   0.7
                  e      04 08.50
ECRI     7.17  32 ePn     03 00.06   0.3
EROQ     7.58  54 eP      03 04.80  -0.7
                  e      04 23.50
EGRA     7.95  44 iPd     03 14.37   3.7X
                  e      04 40.00
ELIZ     8.05  34 iPc     03 11.61  -0.4
                  e      04 36.00
BTH      8.65  39 iPnd    03 21.00   0.6
                  i      03 21.60
ENSF     8.72  43 P       03 21.31  -0.1
EPF      8.88  42 Pn      03 22.90  -0.6
                  Sn     04 54.30
SALF     9.17  46 P       03 26.61  -0.9
GRBF     9.42  46 P       03 30.41  -0.6
LFF     10.46  35 Pn      03 45.10  -0.1
                  Sn     05 31.00
LPO     10.48  37 Pn      03 44.80  -0.7
                  Sn     05 32.10
CAF     11.09  39 Pn      03 52.60  -1.2
                  Sn     05 45.30
RJF     11.09  36 Pn      03 52.60  -1.3
                  Sn     05 46.10
MFF     11.43  27 Pn      03 58.00  -0.4
                  Sn     05 55.20
LSF     11.82  33 Pn      04 02.10  -1.6
                  Sn     06 02.20
TCF     12.15  35 Pn      04 06.90  -1.3
                  Sn     06 10.10
MAF     12.27  36 Pn      04 07.80  -1.9
                  Sn     06 13.80
LPF     12.39  21 Pn      04 09.70  -1.6
                  Sn     06 16.80
BGF     12.65  35 Pn      04 13.30  -1.5
                  Sn     06 22.20
GRR     12.76  21 Pn      04 16.70   0.4
                  Sn     06 27.10
AVF     13.05  36 Pn      04 18.90  -1.3
                  Sn     06 33.20
HYF     13.09  33 Pn      04 20.10  -0.6
                  Sn     06 34.60
LDF     13.17  23 Pn      04 20.80  -0.8
                  Sn     06 36.20
SMF     13.18  37 Pn      04 20.30  -1.6
                  Sn     06 36.60
FLN     13.21  21 Pn      04 21.10  -1.1
                  Sn     06 37.00
SSF     13.32  35 Pn      04 22.10  -1.6
                  Sn     06 38.40
LOR     13.64  35 Pn      04 26.90  -1.0
LPG     14.02  46 Pn      04 32.40  -0.7
DOU     16.11  30 iPc     05 00.90   0.9
                  iS     07 48.60
SNF     16.32  28 P       05 03.70   1.1
GEC2    19.81  45 ePc     05 46.10   0.9
        0.5s     1.92nm          3.6mb
                  e      05 50.80
                  e      05 54.20
                  e      06 00.10
KHC     19.88  44 Pd      05 47.10   1.2
        1.0s    14.00nm          4.2mb
                  e      06 10.00
CLL     20.79  39 e(P)    05 57.00   1.7
PRU     20.86  43 Pd      05 57.00   1.0
        1.4s    23.30nm          4.4mb
                  e      06 10.00
BRG     21.02  41 e(P)    05 58.20   0.5
        2.2s    56.00nm          4.6mb
ZST     21.54  50 eP      06 03.00   0.1
                  i      06 05.30
SRO     22.15  52 iP      06 10.00   1.0
SKO     23.10  68 e(P)    06 19.50   1.1
SPC     23.84  50 eP      06 26.90   1.1
GKN     75.60  66 P       12 59.20   0.8
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```
DMN    76.17  66 P     13 03.20   1.4
KKN    76.19  66 P     13 03.00   1.2
TIA    91.25  42 eP    14 16.50  -1.6
     S.D. = 1.1  on  79 of  82 obs.
-----------------------------------
   NOV  09, 1993  22h 01m 40.78± 0.78s
   36.172 N ± 8.7km  142.102 E ± 8.9km
   DEPTH =  10.0km  (geophysicist)
   4.2mb (  8 obs.)
 OFF EAST COAST OF HONSHU, JAPAN (229)

KAKJ    1.56 272 iPd   02 07.70  -0.9
                S     02 26.30
CHJJ    2.52 268 iP+   02 21.80  -0.6
                S     02 52.40
YAMJ    2.59 321 P     02 23.90   0.5
NIIJ    2.71 294 iP+   02 25.60   0.4
                S     03 00.40
OFUJ    2.92 353 P     02 28.60   0.5
                eS    03 00.20
MAT     3.16 278 eP    02 32.00   0.4
IIDJ    3.47 260 P     02 37.20   1.2
MTMJ    3.49 278 iP+   02 37.00   0.7
HOOJ    6.27   8 eP    03 14.20  -1.3
                eS    04 23.80
MRRJ    6.30 353 eP    03 16.10   0.2
                eS    04 24.30
KUSJ    7.20  15 eP    03 26.60  -2.0
                eS    04 43.90
CN2    14.85 306 eP    05 17.80   5.3X
       1.0s     5.60nm          4.0mb
     Z  15s     0.41um          6.9MszX
                esP   05 26.50
TIY    23.72 283 eP    06 56.00   2.3
     Z  14s     0.83um          4.4MszX
     E  15s     0.64um
XAN    27.16 275 P     07 24.50  -1.7
       0.6s     5.80nm          4.5mb
                pP    07 34.50  36kmX
WMQ    41.73 298 eP    09 31.50   0.0
GUN    47.80 277 P     10 21.20   0.4
KKN    48.33 277 P     10 23.80  -0.9
DMN    48.55 277 P     10 24.00  -2.5
GKN    48.76 278 P     10 27.20  -0.7
WRA    56.29 189 P     11 24.00   0.1
       0.5s     0.80nm          4.0mb
WR2    56.29 189 eP    11 23.20  -0.7
       0.5s     2.10nm          4.4mb
                i     11 29.90
GBA    61.71 266 P     12 01.00  -0.7
KAF    69.33 333 iP    12 49.80  -0.2
       0.4s     2.40nm          4.7mb
LRM    74.38  44 eP    13 23.30   2.6
                e     13 33.10
HFS    75.10 336 eP    13 24.10  -0.2
       0.4s     0.70nm          4.0mb
NB2    75.19 338 P     13 27.50   2.6
       0.7s     2.10nm          4.3mb
GEC2   83.74 329 eP    14 11.80   0.6
       0.6s     0.74nm          4.1mb
                e     14 23.30
                e     14 28.40
LPAZ  146.63  62 PKP   21 26.80   3.0X
LPB   146.82  62 (PKP) 21 32.00   8.1X
CNCB  147.09  62 PKP   21 29.20   4.7X
     S.D. = 1.3  on  26 of  30 obs.
-----------------------------------
   NOV  09, 1993  22h 09m 49.02± 0.65s
   36.283 N ± 8.4km  141.846 E ± 7.4km
   DEPTH =  33.5km  (  4 depth phases)
   4.4mb ( 17 obs.)  4.8Msz (  1 obs.)
 NEAR EAST COAST OF HONSHU, JAPAN(228)

KAKJ    1.35 267 P     10 11.20  -0.6
                S     10 29.10
CHJJ    2.32 265 P     10 25.10  -0.6
                S     10 52.80
YAMJ    2.38 323 P     10 27.20   0.7
NIIJ    2.48 294 P     10 28.90   1.0
OFUJ    2.80 357 P     10 32.10  -0.3
                eS    11 05.30
MAT     2.95 276 eP    10 35.00   0.4
                eS    11 11.00
MTMJ    3.27 276 P     10 40.30   1.0
IIDJ    3.29 257 P     10 40.80   1.2
AOMJ    4.42 345 eP    10 59.30   3.8X
TSRJ    4.82 263 P     11 03.50   2.4
WKYJ    5.51 250 P     11 11.70   0.7
MRRJ    6.16 355 eP    11 19.50  -0.6
HOOJ    6.19  10 eP    11 18.00  -2.5
                eS    12 27.00
TKSJ    6.79 253 P     11 28.80  -0.1
YONJ    6.90 263 P     11 32.00   1.5
KUSJ    7.16  17 eP    11 29.60  -4.3X
                eS    12 46.80
ASAJ    7.85   4 eP    11 42.20  -1.5
MDJ    12.49 316 eP    12 43.00  -4.2X
     Z  18s     1.56um
SNY    15.23 297 eP    13 21.60  -1.5
     Z  16s     1.17um
     E  14s     0.95um
HHC    24.05 290 eP    14 59.40  -2.7
BTO    25.22 290 eP    15 13.00  -0.3
     N  13s     0.28um
     E  12s     0.26um
                eS    19 29.00
XAN    26.94 275 P     15 27.80  -1.4
       0.7s     5.90nm          4.3mb
LZH    30.54 281 eP    16 00.00  -1.7
       1.4s    26.00nm          4.8mb
     Z  15s     0.73um          4.5MszX
     E  11s     0.28um
                pP    16 10.00  35km
CD2    32.03 272 eP    16 13.00  -1.7
GTA    33.12 288 eP    16 23.80  -0.4
       1.5s    18.00nm          4.7mb
     Z  15s     0.69um          4.5MszX
CHTO   41.45 257 eP    17 34.00  -0.3
WMQ    41.49 298 P     17 35.00   0.5
       1.5s    38.00nm          4.9mb
                pP    17 46.00  39km
LSA    42.63 276 P     17 44.40   0.0
       1.0s     5.00nm          4.2mb
SHL    43.75 270 eP    17 55.00   1.7
GUN    47.58 277 P     18 23.70  -0.2
KKN    48.11 277 P     18 27.60  -0.3
       1.0s    28.00nm          5.2mb
GKN    48.54 277 P     18 30.60  -0.5
FBA    49.55  32 eP    18 40.40   2.2
       0.9s     0.40nm          3.4mb
INK    54.90  27 eP    19 19.00   0.8
       1.0s     2.00nm          4.1mb
WRA    56.37 188 P     19 27.50  -1.8
       1.1s     0.80nm          3.7mb
WR2    56.37 188 eP    19 26.90  -2.4
       0.6s     1.80nm          4.3mb
                i     19 34.90  26km
MBC    57.15  16 eP    19 36.00   1.7
       1.0s     3.00nm          4.3mb
ASPA   60.10 188 eP    20 01.30   6.0X
       0.5s     4.80nm          4.9mb
QUE    61.51 288 eP    20 05.60   0.4
GBA    61.51 266 P     20 04.00  -1.1
RES    63.24  14 eP    20 16.00   0.1
       1.0s     3.00nm          4.4mb
OBN    68.90 324 (P)   20 47.00  -5.2X
     Z  20s     0.60um          4.8Msz
LRM    74.44  44 eP    21 26.80   1.0
                e     21 37.30  34km
HFS    74.91 336 eP    21 28.00   0.1
       0.3s     0.40nm          3.8mb
NB2    75.01 338 P     21 31.50   2.9
       0.8s     5.40nm          4.6mb
KHC    83.37 329 eP    22 14.50   0.6
       1.0s     5.40nm          4.6mb
                e     22 32.00  63kmX
GEC2   83.53 328 ePc   22 15.00   0.1
       0.9s     1.95nm          4.2mb
SKO    84.98 320 eP    22 30.00   7.9X
LPAZ  146.76  61 PKP   29 30.40   1.8
LPB   146.95  61 PKP   29 32.00   3.4X
MOCB  151.76  65 PKP   29 43.20   7.2X
     S.D. = 1.4  on  43 of  51 obs.
-----------------------------------
?  NOV  09, 1993  23h 17m 11.46± 7.66s
   28.587 N ±33.7km   34.427 E ±48.3km
   DEPTH =  10.0km  (geophysicist)
 EGYPT                            (553)

BADA    0.51  97 iPd   17 21.27  -0.5
SRFA    0.75  63 iPd   17 27.00   0.9
HQL     0.87  39 iPd   17 27.07  -1.1
MRSJ    1.35  35 P     17 52.51  16.2X
AYN     1.41  78 iPc   17 37.07  -0.1
                iS    17 52.67
MDRJ    1.49  55 P     17 56.86  18.5X
HITJ    1.69  47 P     17 42.24   1.0
NAQJ    1.69  34 P     17 41.19  -0.2
HLW     2.98 296 eP    18 53.50  53.9X
     S.D. = 1.0  on   6 of   9 obs.
-----------------------------------
   NOV  09, 1993  23h 44m 26.24± 0.68s
   28.764 S ± 6.1km  178.396 W ± 6.1km
   DEPTH = 268.0 ±  6.8 km
   5.0mb ( 21 obs.)
 KERMADEC ISLANDS REGION          (177)
      Mw 5.3 (HRV). Felt (III) on
      Raoul Island.
      CENTROID, MOMENT TENSOR    (HRV)
      Data Used: GDSN
      L.P.B.: 29S, 40C
      Centroid Location:
      Origin Time        23:44:33.0 0.6
      Lat 28.21S 0.06 Lon 178.19W 0.05
      Dep 273.5 2.0 Half-duration  1.2
      Moment Tensor;   Scale 10**16 Nm
        Mrr= 7.90 0.35  Mtt=-0.83 0.60
        Mff=-7.07 0.59  Mrt=-6.53 0.52
        Mrf=-1.59 0.47  Mtf=-4.02 0.48
       Principal Axes:
        T  Val= 11.40  Plg=61  Azm=183
        N       -1.19      24       40
        P      -10.21      15      303
      Best Double Couple:Mo=1.1*10**17
       NP1:Strike=  3 Dip=36 Slip=  47
       NP2:       232     64       116

RAO     0.64 139 iPd   45 04.50   2.2
                S     45 17.60
PUZ     9.70 196 eP    46 40.10  -1.6
                S     48 29.60
URZ    10.18 200 eP    46 46.60  -1.2
                S     48 40.10
NOZ    10.27 196 eP    46 44.90  -3.9X
SVA    10.98 344 eP    46 53.30  -4.5X
WAHZ   11.74 200 eP    47 07.60   0.4
PGZ    12.61 199 eP    47 16.00  -1.9
MNG    12.85 201 eP    47 17.20  -3.7X
                S     49 37.60
AMW    13.39 199 eP    47 24.20  -3.3X
CAW    13.43 202 eP    47 24.10  -3.8X
MRW    13.66 203 P     47 32.00   1.3
                S     50 58.50
THZ    14.78 206 eP    47 44.10  -0.3
DSZ    15.21 209 eP    47 48.60  -1.0
DZM    15.22 293 iPd   47 51.00   1.1
LTZ    15.89 206 P     47 56.00  -1.5
                S     50 45.60
BKM    16.50 309 iPc   48 02.50  -1.6
MQZ    16.55 203 eP    48 03.80  -0.7
ODZ    18.43 205 eP    48 25.90   1.8
TUZ    19.58 206 eP    48 43.60   7.9X
CAN    28.32 248 iPd   50 01.20   3.7X
TOO    31.33 244 iPd   50 27.10   3.3X
       0.6s    23.00nm          4.9mb
CTA    33.23 277 iPc   50 41.50   1.2
       0.9s    21.01nm          4.7mb
STK    34.54 255 iPd   50 50.60  -0.8
       0.3s     9.30nm          4.8mb
                e     51 54.90
KVG    39.20 306 eP    51 26.50  -3.8X
ASPA   42.88 265 iPc   52 00.90   0.6
       1.3s    54.00nm          4.7mb
                e     53 05.90
                iS    58 03.50
WR2    43.69 271 iPd   52 07.00   0.2
       0.4s    32.70nm          5.0mb
                e     53 15.20
WB5    43.71 271 iPc   52 07.10   0.1
                iS    58 14.00
WRA    43.71 271 P     52 07.59   0.6
WARB   48.47 259 eP    52 48.50   4.4X
       1.0s    77.00nm          5.0mb
SBA    49.64 184 iPc   52 59.40   7.2X
       1.0s   162.00nm          5.4mb
MBL    55.98 263 eP    53 38.60  -0.9
       0.3s     7.00nm          4.6mb
CSY    56.43 207 iPd   53 53.80  11.8X
       0.6s   121.20nm
                e     54 53.30
SPA    61.40 180 iPc   54 20.30   4.1X
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09d 23h

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        1.0s   175.00nm          5.6mb
MAT     76.70 325 eP    55 47.00  -2.3
        1.0s    23.00nm          4.9mb
KGM     80.71 277 ePc   56 12.10   0.8
SNA     81.17 179 iPc   56 16.60   4.0X
        1.2s   130.00nm          5.6mb
IPM     83.96 279 ePd   56 28.20   0.3
BCH     84.08  44 ePc   56 28.28   0.1
                  epP   57 29.65 256kmX
ABL     84.39  45 eP    56 29.92   0.0
                  epP   57 31.13 255kmX
COE     84.50  42 eP    56 30.19   0.0
ARN     84.65  42 eP    56 30.72  -0.2
                  epP   57 32.20 256kmX
PLM     84.93  48 eP    56 32.70   0.1
                  epP   57 34.20 256kmX
PEC     85.08  47 eP    56 32.78  -0.4
        1.1s    25.76nm          5.0mb
                  epP   57 34.38 256kmX
ISA     85.39  45 eP    56 34.43  -0.2
        1.2s    43.15nm          5.2mb
                  epP   57 36.04 256kmX
CMB     85.78  42 eP    56 35.80  -0.7
        1.0s    29.22nm          5.1mb
                  epP   57 37.37 256kmX
GLA     86.08  49 ePc   56 38.47   0.4
                  epP   57 40.39 257kmX
ORV     86.15  40 eP    56 38.50   0.3
                  epP   57 40.29 257kmX
LGPM    86.33  39 eP    56 38.88  -0.3
                  epP   57 41.86 262kmX
BONR    86.97  43 (P)   56 42.26  -0.3
MDJ     87.08 326 eP    56 42.50   0.0
TNP     87.71  44 iPc   56 45.36  -0.6
        0.8s    12.64nm          4.8mb
                  epPd  57 47.43 257kmX
TUC     88.37  52 eP    56 50.88   1.8
        1.4s    65.81nm          5.3mb
                  epP   57 53.08 257kmX
TIA     88.60 313 eP    56 49.60  -0.4
CN2     88.63 323 eP    56 49.30  -0.6
        1.2s    32.00nm          5.1mb
      Z 16s      0.47um          5.0MszX
                  epP   57 55.70 276kmX
MDZ     89.34 128 i(P)  56 52.70  -1.1
BMW     89.97  35 eP    56 56.05  -0.1
                  epP   57 59.26 261kmX
GMW     90.93  34 eP    57 00.42  -0.1
BJI     91.52 316 eP    57 03.00  -0.3
        1.0s     6.00nm          4.5mb
                  eS    07 40.00
LTX     91.80  57 eP    57 04.29  -0.7
SRU     92.49  46 ePc   57 07.51  -0.6
                  epP   58 10.11 258kmX
TIY     92.52 312 eP    57 07.00  -1.1
HVU     92.68  43 ePc   57 08.23  -0.6
                  epP   58 11.62 262kmX
DAU     92.79  45 eP    57 09.66   0.0
                  epP   58 12.42 259kmX
XAN     92.85 307 P     57 10.50   0.8
        0.6s     6.50nm          4.8mb
PV09    93.03  47 eP    57 11.00   0.2
                  epP   58 14.00 260kmX
CD2     94.92 303 eP    57 20.20   0.9
FBA     96.35  13 eP    57 22.46  -2.5
        0.5s     1.84nm          4.6mb
RSSD    99.30  45 eP    57 37.95  -1.1
        1.3s    11.19nm          5.1mb
                  epP   58 41.43 262kmX
MBC    110.90  13 ePKP  02 27.50  -0.3
FRS    117.56 203 iPKPc 02 42.50   0.6
        0.5s     8.00nm
BOSA   118.57 204 iPKPd 02 46.40   2.5X
KSR    120.50 207 ePKP  02 49.00   1.1
QUE    123.82 289 ePKP  02 56.50   2.3X
BUL    124.83 211 iPKP  02 57.70   1.4
LMN    126.01  52 ePKP  02 56.50  -1.2
MTD    126.24 216 iPKPc 02 45.40 -13.7X
WIN    126.83 198 ePKP  03 02.00   1.8
        0.6s    18.00nm
                  e     04 55.00
KRI    127.20 214 iPKPd 03 07.10   6.1X
LSZ    129.23 214 iPKPc 03 06.00   1.2
        1.0s     1.00nm
                  i     05 20.00
                  i     06 03.00
KAF    142.90 341 iPKP  03 21.90  -6.7X
OBN    143.62 326 ePKP  03 27.60  -2.5X
        1.7s    45.90nm
                  e     03 31.00
                  epPKP 04 40.20
                  esPKP 05 08.00
NUR    144.66 340 iPKP  03 29.60  -2.1X
UPP    147.05 345 iPKP  03 36.50   0.9
NB2    147.09 351 PKP   03 39.80   4.1X
        0.7s    27.30nm
HFS    147.58 349 ePKP  03 37.20   0.7
        0.7s    41.10nm
KAS    151.00 304 iPKPc 03 49.60   7.2X
EDR    151.71   5 ePKP  03 48.50   5.6X
COP    152.00 347 iPKP  03 50.40   7.1X
        0.7s    54.79nm
EDU    152.04   5 ePKP  03 49.50   6.1X
ELO    152.05   6 ePKP  03 49.50   6.1X
EAB    152.27   7 ePKP  03 50.00   6.3X
EBH    152.29   6 ePKP  03 50.10   6.3X
EAU    152.69   6 ePKP  03 51.20   6.9X
ESY    152.70   5 ePKP  03 50.90   6.6X
EBL    152.80   6 ePKP  03 50.80   6.3X
SPC    155.11 330 e(PKP)03 47.00  -1.1
KSP    155.32 337 ePKP  03 48.30   0.3
                  e     03 57.60
                  i     04 14.40
                  e     05 03.70
                  e     05 20.50
CLL    155.91 342 ePKP  03 49.00   0.2
                  i     03 57.90
                  i     04 14.70
BRG    156.03 341 ePKP  03 49.40   0.4
                  i     03 59.00
LIC    156.72 163 PKP   03 52.60   1.6
KIC    156.92 164 PKP   03 52.60   1.3
TIC    157.13 163 PKP   03 53.00   1.5
ZST    157.20 333 ePKP  03 50.30  -0.3
KHC    157.68 339 ePKP  03 50.50  -0.7
        1.5s    12.50nm
GEC2   157.90 338 ePKP  03 51.30  -0.2
        1.4s     3.31nm
                  e     04 02.90
OHR    160.07 313 ePKP  04 07.00  12.9X
PAB    168.17  23 ePKPc 04 02.80   1.4
      S.D. = 1.0  on  74 of 107 obs.
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   NOV  10, 1993  00h 03m 23.41± 0.08s
    4.676 S ± 2.2km  151.927 E ± 2.4km
   DEPTH =  95.9km  ( 10 depth phases)
   5.6mb ( 72 obs.)
 NEW BRITAIN REGION, P.N.G.       (192)
      Mw 5.4 (HRV). Felt (III) at
      Rabaul.
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 40S, 54C
      Centroid Location:
      Origin Time        00:03:27.9 0.5
      Lat  4.72S 0.04 Lon 152.06E 0.03
      Dep 102.8 1.8 Half-duration  1.2
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 1.20 0.04  Mtt=-1.21 0.07
        Mff= 0.01 0.08  Mrt=-0.61 0.04
        Mrf= 0.31 0.05  Mtf= 0.00 0.05
       Principal Axes:
        T  Val=  1.41  Plg=72  Azm=224
        N       -0.05      11       96
        P       -1.36      14        3
      Best Double Couple:Mo=1.4*10**17
       NP1:Strike= 78 Dip=33 Slip=  69
       NP2:        283     60      103
RAB      0.53  26 iPc+  03 41.50   2.3
KVG      2.35 332 iPd   03 05.40 -55.7X
LAT      5.28 248 eP    04 45.50   4.1X
MDG      6.15 264 eP    04 59.00   5.6X
PMG      6.67 225 eP    05 02.00   1.5
WWKK     8.35 277 ePc   05 27.40   3.8X
HNR      9.26 121 eP    05 40.00   4.1X
                  eS    07 30.00
CTA     16.28 199 iPd   07 10.20   2.4
        1.5s   291.67nm          5.3mb
      Z 21s     2.19um          3.7Msz
                  ipP   07 29.00
                  ePP   07 36.00
                  i     07 42.00
                  eS    10 10.00
                  e     10 26.00
QIS     19.82 216 iPc   07 48.60  -0.4
BKM     20.54 130 iPd   07 56.40   0.0
SWI     20.98 280 ePc   08 02.50   1.6
MTN     22.08 247 iPd   08 12.20   0.4
        0.8s   209.00nm          5.5mb
DZM     22.29 142 iPc   08 14.50   0.6
WB5     22.82 227 iPc   08 19.80   0.8
                  iS    12 20.70
                  i     12 25.30
WR2     22.87 227 iPd   08 20.00   0.5
        0.7s   324.70nm          5.8mb
                  eS    12 22.30
WRA     22.88 227 P     08 20.50   0.9
        0.7s   110.10nm          5.3mb
KNA     25.28 242 eP    08 42.80   0.3
        0.8s   257.00nm          5.7mb
ARMA    25.61 181 iPd   08 45.80   0.2
        0.9s    87.00nm          5.2mb
ASPA    25.67 221 iPc   08 45.70  -0.4
        0.8s   223.00nm          5.7mb
                  iS    13 18.00
                  iScS  20 21.80
BIP     28.64 297 ePd   09 13.50   0.3
STK     28.75 199 iPd   09 09.20  -4.8X
        0.6s    19.60nm          4.9mb
BWA     29.78 186 iPc   09 22.40  -0.8
CNB     30.58 184 iPd   09 30.80   0.5
        0.9s    83.00nm          5.5mb
CAN     30.61 185 iPc   09 30.40  -0.1
                  i     09 38.60  28kmX
                  e     09 50.10
PLP     31.09 301 ePd   09 34.00  -0.9
WARB    32.29 226 iPc   09 45.20  -0.1
        0.4s    28.00nm          5.4mb
ADE     32.53 200 eP    09 47.00  -0.3
TOO     33.27 189 iPc   09 53.80   0.1
FORT    34.34 218 iPc   10 02.20  -0.8
        0.6s    66.00nm          5.7mb
GQP     34.59 303 iPd   10 07.00   1.8
TSM     35.17 284 ePc   10 11.00   0.8
MBL     35.19 239 iPc   10 09.20  -1.2
        0.8s   115.00nm          5.9mb
PPR     36.06 294 iPd   10 18.00   0.3
CVP     37.11 308 eP    10 28.00   1.5
KKM     37.21 286 ePc   10 31.00   3.5X
BAG     37.42 305 ePc+  10 30.00   0.7
        1.1s   179.75nm          5.9mb
MEEK    38.59 232 iPc   10 38.00  -0.9
        0.6s   168.00nm          6.1mb
COOL    38.96 224 eP    10 41.00  -0.9
URZ     40.54 149 P     10 54.90   0.2
HBZ     40.67 147 P     10 56.60   0.8
KAGJ    40.93 332 P     10 59.60   1.6
PUZ     41.00 148 P     10 58.80   0.3
NOZ     41.28 148 P     11 01.10   0.3
THZ     41.41 156 P     11 02.10   0.2
MNG     41.58 153 P     11 03.20  -0.1
WKYJ    41.65 339 eP    11 03.70  -0.2
MRW     41.73 154 eP    11 04.00  -0.5
KLB     41.76 226 iPc   11 04.20  -0.7
        0.8s    53.00nm          5.4mb
CAW     41.79 154 P     11 04.70  -0.3
MRWA    41.86 230 iPc   11 05.00  -0.7
        0.8s   176.00nm          5.9mb
TKSJ    42.00 338 P     11 07.00   0.3
BAL     42.01 228 iPc   11 05.80  -1.1
        0.8s   110.00nm          5.7mb
MTW     42.02 153 P     11 06.20  -0.7
IIDJ    42.06 343 eP    11 06.30  -1.0
KUMJ    42.09 333 P     11 08.50   1.0
BLW     42.18 153 P     11 07.60  -0.6
AMW     42.26 153 P     11 08.20  -0.6
CHJJ    42.28 344 P     11 05.80  -3.3X
TSRJ    42.71 341 eP    11 12.20  -0.3
BWZ     42.71 161 P     11 12.10  -0.3
MAT     42.96 344 eP    11 12.00  -2.6
        0.9s    28.57nm          5.1mb
                  eS    17 20.00
MUN     43.08 227 eP    11 15.00  -0.6
        1.0s   120.00nm          5.7mb
MTMJ    43.12 343 P     11 14.90  -1.1
YONJ    43.29 338 P     11 17.40   0.2
SHNJ    43.31 335 P     11 17.40   0.0
NIIJ    43.41 345 P     11 17.40  -0.7
QZH     43.78 314 eP    11 23.00   1.7
        1.0s   140.00nm          5.7mb
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RKG	43.93	223	eP	11	22.00	-0.5
	0.6s	27.00nm				5.3mb
YAMJ	44.04	346	eP	11	23.30	0.0
OFUJ	44.56	349	P	11	26.50	-0.9
SSE	46.11	323	Pc	11	41.00	1.2
	1.2s	120.00nm				5.6mb
QIZ	47.66	301	Pc	11	54.30	2.1
NJ2	48.20	322	Pc	11	57.60	1.4
	1.0s	39.00nm				5.2mb
	Z 20s	0.30um				4.3Msz
KGM	49.02	277	ePd	12	03.30	0.5
IPM	51.67	280	ePd	12	22.50	-0.5
	0.3s	80.10nm				6.2mb
TIA	52.10	324	P	12	26.20	0.3
	1.0s	60.00nm				5.6mb
SNY	53.00	334	eP	12	31.90	-0.5
MDJ	53.00	340	eP	12	28.70	-3.7X
	1.2s	46.00nm				5.4mb
GYA	53.63	308	iPd	12	39.00	1.6
	1.2s	59.00nm				5.5mb
			pP	13	03.80	102km
CN2	53.83	336	eP	12	37.70	-0.8
	1.2s	44.00nm				5.4mb
			epP	13	03.50	107kmX
NST	55.10	293	eP	12	48.00	-0.2
BJI	55.31	327	eP	12	49.00	-0.3
	1.5s	42.00nm				5.2mb
	Z 20s	0.42um				4.5Msz
			epP	13	12.00	93km
TIY	55.90	322	eP	12	53.70	0.0
	Z 16s	1.19um				5.1MszX
			pP	13	18.00	99km
XAN	55.93	317	Pc	12	53.70	-0.3
	0.8s	90.00nm				5.9mb
	Z 20s	0.61um				4.7Msz
			pP	13	20.00	109kmX
KMI	56.20	304	Pd	12	58.00	1.7
HKL	56.74	62	(P)	12	59.62	-0.8
CHTO	57.15	296	iPd	13	04.00	1.2
	1.1s	92.17nm				5.7mb
CD2	58.00	311	iPd	13	09.40	0.8
	0.6s	180.00nm				6.3mb
			ipP	13	32.20	91km
AFR	58.40	108	iPc	13	12.00	0.5
	1.3s	316.30nm				6.2mb
HHC	58.44	325	Pc	13	11.80	0.2
	1.2s	190.00nm				6.1mb
	Z 25s	0.69um				4.7MszX
PPT	58.59	108	iPc	13	13.30	0.4
	1.4s	423.50nm				6.3mb
PAE	58.60	108	iPc	13	13.20	0.3
	1.6s	604.50nm				6.4mb
PPN	58.73	108	iPc	13	14.30	0.5
	1.0s	196.80nm				6.2mb
TVO	58.92	108	iPc	13	15.80	0.5
	0.9s	229.30nm				6.3mb
BTO	59.18	324	P	13	17.00	0.2
	1.0s	86.00nm				5.8mb
	N 13s	0.28um				
	E 13s	0.36um				
			pP	13	41.00	96km
PMO	60.01	105	iPc	13	22.80	0.1
	1.3s	547.20nm				6.5mb
TPT	60.28	105	iPc	13	24.60	0.1
	1.7s	435.30nm				6.3mb
VAH	60.28	105	iPc	13	24.50	0.0
	1.4s	216.10nm				6.1mb
RUV	60.52	105	iPc	13	26.30	0.2
	1.5s	397.00nm				6.3mb
LZH	60.54	316	Pc	13	27.50	1.3
	1.5s	210.00nm				6.0mb
	Z 15s	0.53um				4.8MszX
	E 12s	0.26um				
			pP	13	52.00	98km
GTA	64.98	318	iPc	13	56.00	0.5
	1.5s	140.00nm				5.7mb
	Z 16s	0.51um				4.8MszX
			pP	14	22.00	104km
CIT	65.18	335	eP	13	57.00	0.6
SHL	65.49	301	iP	13	59.00	-0.1
	1.1s	132.91nm				5.8mb
			eS	23	24.00	
LSA	67.45	305	Pd	14	12.00	0.2
	1.0s	50.00nm				5.4mb
CSY	67.89	197	eP	14	19.70	6.4X
	0.8s	55.40nm				5.5mb
			i	14	22.70	10kmX
ZAK	68.94	329	iPc	14	20.00	0.0
	1.2s	20.00nm				4.8mb
			e	14	43.50	91km
SBA	73.55	177	iPc	14	48.50	1.4
WMQ	75.06	318	P	14	56.50	-0.1
	1.5s	100.00nm				5.4mb
			pP	15	25.00	112kmX
			PP	17	44.70	
HYB	75.63	289	ePc	14	59.00	-1.2
GBA	76.10	285	P	15	02.00	-0.8
KDC	76.48	27	(P)	14	58.40	-5.8X
	0.9s	11.93nm				4.7mb
SVW	77.04	23	eP	15	07.70	0.4
TIK	77.65	353	eP	15	09.00	-1.4
	1.8s	33.00nm				4.9mb
			e	15	21.00	40kmX
TTA	77.97	22	ePc	15	11.92	-0.6
	1.2s	17.34nm				4.8mb
NDI	78.91	300	iPc	15	18.00	-0.2
SLKM	78.93	25	eP	15	16.70	-1.0
PMS	79.58	25	eP	15	20.40	-0.8
	1.2s	87.70nm				5.5mb
PMR	79.93	25	P	15	30.00	7.0X
	Z 20s	0.25um				4.6Msz
POO	80.22	290	eP	15	35.50	10.1X
IMA	80.63	20	eP	15	26.20	-0.6
	1.2s	22.60nm				4.9mb
TOA	81.41	25	eP	15	31.20	0.3
FBA	82.09	22	eP	15	32.35	-1.9
	0.7s	11.73nm				4.8mb
KSH	82.18	311	Pd	15	37.50	2.1
	1.2s	270.00nm				6.0mb
	Z 20s	0.62um				5.0Msz
	N 16s	0.57um				
	E 16s	0.40um				
			pP	16	01.00	88km
			sP	16	20.00	
			PP	18	47.00	
BALM	82.61	27	eP	15	37.07	-0.1
NIL	83.19	305	iPc	15	43.70	3.1X
			iS	25	54.66	
FRU	83.90	314	iPc	15	44.20	0.2
	1.8s	270.00nm				5.9mb
MAW	85.35	203	iPd	15	50.60	-0.1
	1.4s	55.14nm				5.3mb
			i	16	16.20	96km
			iS	26	51.30	
SPA	85.35	180	iPc	15	50.90	-0.1
	1.0s	225.00nm				6.1mb
QUE	87.99	300	iPc	16	04.50	-0.1
KMPM	88.40	49	eP	16	06.92	0.7
INK	88.65	21	eP	16	06.00	-0.7
	1.0s	5.00nm				4.6mb X
RNO	89.13	46	P	16	10.53	1.0
DBO	89.39	47	P	16	11.27	0.4
LGPM	89.44	49	ePc	16	11.75	0.6
WDC	89.62	49	P	16	20.00	8.2X
	Z 20s	0.26um				4.7Msz
STW	89.72	42	Pd	16	12.82	0.7
BMW	89.81	43	eP	16	12.47	-0.2
COE	89.94	53	eP	16	15.13	1.7
ARN	90.06	53	eP	16	14.52	0.5
SSOR	90.15	45	P	16	14.32	0.0
LBFM	90.19	49	eP	16	15.19	0.4
ORV	90.30	51	eP	16	14.85	-0.2
MCW	90.33	41	Pd	16	15.57	0.6
SHW	90.46	44	eP	16	16.17	0.4
VBEM	90.79	45	P	16	17.28	-0.1
LON	90.81	43	eP	16	16.56	-0.7
JCW	90.88	42	Pc	16	17.33	-0.2
RMW	90.89	43	eP	16	17.29	-0.3
ASR	90.90	44	P	16	17.85	0.1
FMW	90.92	43	P	16	18.02	0.1
BCH	91.02	55	ePc	16	19.47	0.9
CMB	91.03	52	eP	16	18.45	0.0
	1.3s	30.58nm				5.4mb
	Z 20s	0.23um				4.6Msz
CROR	91.21	45	P	16	19.41	0.2
VGB	91.40	45	eP	16	19.93	-0.1
EBG	91.67	43	Pd	16	21.68	0.5
ABL	91.70	55	eP	16	22.55	0.7
JBO	92.06	45	P	16	23.05	0.0
MMPM	92.06	53	(P)	16	24.63	1.0
MEMM	92.14	53	ePc	16	24.66	1.2
WTV	92.16	43	P	16	23.24	-0.2
WAH2	92.35	43	P	16	24.53	0.3
ISA	92.37	55	ePc	16	24.59	-0.1
	1.3s	34.47nm				5.5mb
	Z 20s	0.31um				4.8Msz
MTUM	92.41	53	(P)	16	25.79	0.8
SAW	92.53	43	P	16	24.77	-0.4
BONR	92.66	52	eP	16	26.61	0.3
KVN	92.89	51	ePc	16	27.60	0.4
SSK	92.91	56	eP	16	28.07	0.7
LNOR	93.17	44	P	16	28.10	-0.1
PEC	93.33	56	ePc	16	29.70	0.6
	1.1s	56.50nm				5.9mb
DPW	93.35	42	eP	16	28.51	-0.4
PLM	93.55	57	iPd	16	31.64	1.3
GSC	93.71	55	eP	16	31.48	0.6
NEW	94.09	42	ePc	16	31.93	-0.4
	1.0s	49.20nm				5.9mb
MBC	94.20	14	eP	16	32.30	0.1
			PcP	16	33.50	
			S	27	39.40	
			SS	27	58.60	
			SKKP	36	50.80	
TPNV	94.24	53	eP	16	33.71	0.3
	0.7s	28.67nm				5.8mb
SVE	94.59	327	ePd	16	34.00	-0.3
	2.0s	60.00nm				5.7mb
GLA	95.24	57	eP	16	39.36	1.4
ARU	95.71	326	iPd	16	38.30	-1.2
	1.0s	50.00nm				6.0mb
YKA	95.72	28	eP	16	38.90	-0.5
	0.8s	5.70nm				5.1mb
ARUT	96.50	53	ePd	16	44.84	1.1
DUG	97.01	50	eP	16	45.88	-0.1
	1.0s	9.27nm				5.3mb
	Z 21s	0.22um				4.6Msz
HVU	97.04	49	ePc	16	46.05	0.0
LRM	97.25	45	eP	16	45.50	-1.5
DAU	98.20	50	eP	16	51.11	-0.4
EMUT	98.55	51	eP	16	53.24	0.2
TUC	98.64	58	ePDIF	16	55.24	1.9
	1.1s	5.51nm				5.1mb
	Z 20s	0.26um				4.7Msz
SRU	98.79	51	eP	16	53.08	-0.9
PV09	99.89	52	ePDIF	16	58.86	-0.4
PV10	99.97	52	ePDIFc	16	59.48	-0.1
PV08	100.27	52	ePdiff	17	00.77	-0.3
ALQ	102.18	55	ePdiff	17	10.96	1.5
	1.0s	5.14nm				5.2mb
	Z 20s	0.18um				4.6Msz
			e	18	46.68	
GOL	102.74	51	ePdiff	17	12.09	0.2
	Z 20s	0.13um				4.5Msz
RSSD	103.31	46	ePdiff	17	12.38	-1.9
	0.7s	5.39nm				5.5mb
OBN	108.14	327	iPdiff	17	35.30	0.1
OBN	108.14	327	ePKP	21	50.70	9.2X
	Z 17s	181.90um				7.7MszX
			(pPKP)	22	02.40	
			esPKP	22	07.20	
WMOK	108.49	55	PKP	21	50.00	7.1X
	Z 19s	0.31um				4.9Msz
UYO	112.11	55	iPKPd	21	49.10	-0.6
MIAR	112.76	55	PKP	22	00.00	9.0X
	Z 20s	0.19um				4.7Msz
FRB	114.19	18	ePKP	21	53.00	0.2
FVM	114.52	50	PKP	22	10.00	15.7X
	Z 18s	0.57um				5.2Msz
HFS	116.24	338	ePKP	21	54.20	-2.7X
	0.4s	1.40nm				
NB2	116.50	340	PKP	21	59.10	1.7
	0.7s	3.50nm				
NRA0	116.60	339	PKPd	21	56.40	-1.1
MTD	117.33	249	iPKPc	21	44.20	-16.2X
			i	22	55.50	
SLR	117.59	238	ePKP	22	00.50	-0.2
	0.5s	12.00nm				
BUL	119.12	244	iPKP	22	02.50	-1.3
SPC	119.73	326	iPKP	22	04.20	0.1
PSZ	120.59	325	ePKP	22	04.80	-0.8
KSP	120.96	329	ePKP	22	06.00	-0.1
			e	22	32.70	
SRO	121.55	325	ePKP	22	07.20	-0.1
YSNY	121.59	42	PKP	22	20.00	12.3X
	Z 22s	0.30um				4.9Msz
PRM	121.87	53	ePKP	22	08.19	-0.2
VAY	121.96	317	ePKP	22	06.70	-1.6
ZST	122.02	326	iPKP	22	08.00	-0.2
GAC	122.04	37	ePKP	22	07.50	-0.8
BRG	122.13	330	iPKP	22	08.00	-0.3

10d 00h

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      1.0s    30.00nm
                i     22 35.10
CLL   122.32 331 iPKP  22 07.60  -1.1
      1.6s    29.00nm
                i     22 34.00
PRU   122.37 329 PKPd  22 08.50  -0.3
                e     22 35.50
SKO   122.45 318 iPKPc 22 08.00  -1.3
      1.5s    94.00nm
JSC   122.68  52 ePKP  22 09.86  -0.1
POF   122.84 231 iPKPc 22 12.00   1.6
      0.5s     7.00nm
RSNY  123.20  38 ePKP  22 10.13  -0.5
OHR   123.26 317 iPKPd 22 09.70  -1.2
      1.2s    70.00nm
KHC   123.38 328 PKP   22 10.90   0.0
      1.0s    14.00nm
                e     22 33.00
                e     24 44.50
BINY  123.41  41 ePKP  22 10.33  -0.8
    Z  19s     0.28um          4.9Msz
MOX   123.42 331 ePKP  22 10.70  -0.2
      1.6s    25.00nm
                e     22 37.10
GEC2  123.49 328 e(PKP)22 10.80  -0.4
      0.6s     5.60nm
GEC2  123.49 328 e(PKP)22 15.90   4.7X
      0.5s     1.80nm
WIT   124.16 335 ePKP  22 13.50   1.3
                e     22 40.50
GRF   124.23 330 iPKPc 22 12.40  -0.1
                e     22 38.70
                ePP   24 00.00
BHG   124.61 327 iPKPd 22 12.90  -0.4
LJU   124.69 325 ePKP  22 13.00  -0.5
WTS   124.69 335 ePKP  22 13.00  -0.2
      1.2s    45.50nm
                e     22 40.00
KBA   124.75 327 i(PKP)22 13.00  -0.8
LBNH  124.95  37 PKP   22 20.00   5.9X
    Z  18s     0.16um          4.7Msz
VOY   125.06 325 ePKP  22 12.50  -1.8
                epPKP 22 39.30
TBR   125.07  42 ePKP  22 13.73  -0.6
EDI   125.16 343 ePKP  22 12.50  -1.5
RIY   125.17 324 ePKP  22 12.90  -1.5
TRI   125.32 325 ePKP  22 14.00  -0.7
LSCT  125.47  41 PKP   22 30.00  14.9X
    Z  19s     0.33um          5.0Msz
WATA  125.55 328 iPKPc 22 14.20  -1.1
WTTA  125.56 328 iPKPc 22 14.40  -1.0
      1.0s    28.80nm
CBM   125.58  33 PKP   22 30.00  14.8X
    Z  22s     0.51um          5.1Msz
EKA   125.66 343 PKPc  22 15.10   0.0
      1.8s    78.60nm
MOTA  125.79 328 iPKPc 22 14.50  -1.3
      1.1s    28.60nm
                i     22 24.60
SQTA  125.81 328 iPKPc 22 14.70  -1.1
      1.2s    28.20nm
                i     22 28.10
ENN   125.97 334 ePKP  22 16.00   0.2
      1.0s    21.00nm
                e     22 43.00
HRV   126.11  39 PKP   22 30.00  13.6X
    Z  21s     0.43um          5.1Msz
WLF   126.66 333 iPKPd 22 17.64   0.5
      1.4s    16.80nm
OSS   126.72 328 ePKPd 22 17.30  -0.4
SLE   126.86 330 ePKPd 22 16.90  -0.8
SNF   126.86 335 PKPd  22 17.70   0.2
CDF   127.02 331 ePKP  22 17.20  -0.9
      1.3s    24.90nm
DOU   127.04 334 PKPd  22 24.80   6.9X
ZLA   127.10 330 ePKPd 22 17.40  -0.8
LLS   127.20 329 ePKPd 22 18.10  -0.5
BSF   127.65 331 ePKP  22 18.60  -0.7
      1.3s    62.45nm
HAU   127.74 331 ePKP  22 18.80  -0.6
      1.2s    38.40nm
TMA   127.76 328 ePKPd 22 19.00  -0.7
LMN   128.04  32 ePKP  22 19.50  -0.5
                pP    22 46.00
WIN   128.21 237 ePKP  22 22.00   0.8
      0.5s    30.00nm
MMK   128.27 329 ePKPd 22 20.80   0.1
DIX   128.54 329 ePKPd 22 21.20  -0.1
NNA   128.76 109 iPKPc 22 22.00  -0.3
      1.1s    37.97nm
EMS   128.79 329 ePKPd 22 21.40  -0.2
LPL   129.27 329 ePKP  22 22.40  -0.2
      1.1s    11.70nm
LPG   129.27 329 ePKP  22 22.50  -0.2
      0.7s     5.20nm
LOR   129.45 332 ePKP  22 22.50  -0.1
      1.2s    34.80nm
LBF   129.60 332 ePKP  22 22.70  -0.3
      1.4s    32.65nm
SSF   129.76 332 ePKP  22 23.10  -0.1
      1.3s    40.45nm
SMF   129.91 332 ePKP  22 23.10  -0.4
      1.4s    57.95nm
PGF   129.96 324 ePKP  22 23.40  -0.5
      1.2s    52.95nm
SBF   130.00 327 ePKP  22 23.20  -0.6
      0.9s    28.15nm
HYF   130.01 333 ePKP  22 24.00   0.3
AVF   130.03 332 ePKP  22 23.10  -0.6
TCA   130.05 138 ePKPd 22 24.00  -0.4
LDF   130.17 336 ePKP  22 23.50  -0.4
      1.4s    36.60nm
FLN   130.18 336 ePKP  22 23.60  -0.3
      1.4s   100.20nm
BGF   130.44 332 ePKP  22 24.50   0.0
      0.9s    15.40nm
FRF   130.63 327 ePKP  22 24.60  -0.4
      1.5s    55.35nm
GRR   130.63 336 ePKP  22 24.90   0.1
      1.1s    32.50nm
MAF   130.82 332 ePKP  22 25.30   0.0
      1.4s    30.05nm
LMR   130.85 327 ePKP  22 25.00  -0.4
      1.3s    31.75nm
LRG   130.86 327 ePKP  22 25.30  -0.1
      1.3s    54.90nm
TCF   130.94 332 ePKP  22 25.50   0.0
      1.0s    20.00nm
LPF   130.99 336 ePKP  22 25.60   0.1
      1.2s    56.85nm
LSF   131.28 333 ePKP  22 25.90  -0.2
      1.5s    55.35nm
MFF   131.75 334 ePKP  22 27.00   0.0
      1.6s    58.45nm
RJF   131.99 332 ePKP  22 27.70   0.2
      1.6s    28.00nm
CAF   132.02 331 ePKP  22 27.80   0.2
      1.5s    24.55nm
FSA   132.18 132 ePKPd 22 29.90   1.5
ARE   132.21 117 ePKP  22 30.00   0.9
LPO   132.61 332 ePKP  22 28.70   0.0
      1.1s    13.45nm
EPF   134.26 331 ePKP  22 31.70  -0.2
      1.4s    20.50nm
MOCB  135.06 126 PKP   22 34.90   0.3
CNCB  135.15 119 PKP   22 20.50 -14.5X
                i     22 36.00
                i     23 02.00
                i     26 00.00
LPB   135.17 119 ePKP  22 18.00 -16.9X
                i     22 36.00
                e     25 59.00
LPAZ  135.24 119 PKPc  22 14.40 -20.9X
      1.0s    28.80nm
    Z  22s     0.01um          3.4MszX
                i     22 35.90
                SKP   25 59.30
                SS    44 01.60
                LQ    04 25.70
                LR    11 39.50
CCH   136.50 121 ePKP  22 24.00 -13.3X
                i     22 38.30
                i     23 03.60
TOV   138.33  81 ePKP  22 30.00 -10.5X
PAB   139.19 332 ePKP  22 44.00   2.7X
CAR   141.08  79 ePKPd 22 38.60  -6.9X
RSTA  144.42 146 ePKP  22 48.60  -2.2X
PPD   145.04 140 iPKPc 22 51.10  -0.9
                e     23 16.90
FDF   145.95  71 ePKP  22 54.59   0.9
BIM   146.07  71 ePKP  22 54.20   0.3
TCE   146.11  78 iPKPc 22 52.86  -1.1
TCE   146.11  78 ePKPc 22 53.01  -0.9
SVB   146.17  73 ePKP  22 53.52  -0.5
MVM   146.23  71 ePKP  22 54.58   0.5
SLB   146.26  72 ePKP  22 54.96   0.8
TPP   146.45  78 ePKPc 22 56.23   1.8
TRN   146.46  78 ePKPc 22 55.16   0.7
TBH   146.81  78 ePKPd 22 57.20   2.2X
VAO   146.87 147 ePKP  22 55.40   0.4
                e     22 57.00
                e     22 58.00
                e     23 02.40
                e     23 04.00
                e     23 22.00
TPR   146.99  77 iPKP  22 56.93   1.6
AGVB  147.39 139 iPKPc 22 56.10   0.2
                i     22 58.10
                e     23 23.30
                e     23 29.00
BDFB  151.76 136 ePKP  23 03.06   0.3
                iPKPbc23 09.06
BAO   151.78 136 PKPd  23 03.20   0.4
                i     23 08.80
                i     23 24.50
                i     23 34.80
                i     23 48.90
                i     23 56.90
BDF   151.82 136 PKPd  23 03.00   0.1
      1.1s     2.20nm
                i     23 09.10
                i     23 18.80
                i     23 34.60
KIC   156.72 275 ePKP  23 08.60  -0.9
TIC   156.98 276 PKP   23 08.80  -1.0
LIC   157.01 275 PKP   23 09.40  -0.4
SOB1  161.20 137 ePKP  23 15.30   0.8
                e     23 58.70
     S.D. = 0.8  on 288 of 325 obs.
-----------------------------------
*  NOV  10, 1993  00h 19m 19.57± 0.97s
   5.853 S ± 7.2km  145.613 E ±11.0km
   DEPTH =  10.0km  (geophysicist)
   3.9mb (  2 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)

YYYY    0.52 138 iPd   19 30.10  -0.1
                eS    19 38.00
MDG     0.62  16 eP    19 32.00  -0.1
LAT     1.60 120 eP    19 48.20   0.3
MNDI    1.97 261 eP    20 05.50  12.0X
PMG     3.85 157 eP    20 20.00  -0.1
WR2    17.77 217 eP    23 28.90   0.1
       0.6s     3.60nm          3.7mb
ASPA   21.00 211 eP    24 10.70   5.0X
       0.8s     8.10nm          4.1mb
     S.D. = 0.2  on   5 of   7 obs.
-----------------------------------
   NOV  10, 1993  00h 19m 22.19± 0.49s
   36.165 N ± 8.2km  141.760 E ± 5.5km
   DEPTH =  33.2km  ( 10 depth phases)
   4.5mb ( 17 obs.)
 NEAR EAST COAST OF HONSHU, JAPAN(228)

KAKJ    1.28 272 P     19 43.90   0.0
                eS    20 00.80
CHJJ    2.24 268 P     19 57.80   0.1
                eS    20 27.60
YAMJ    2.43 326 eP    20 01.20   0.8
                eS    20 34.30
NIIJ    2.46 297 P     20 02.00   1.1
MAT     2.89 279 eP    20 08.00   1.0
                eS    20 44.00
OFUJ    2.91 359 eP    20 06.00  -1.2
                eS    20 41.10
IIDJ    3.20 259 P     20 13.10   1.7
MTMJ    3.22 279 P     20 13.00   1.3
TSRJ    4.73 264 eP    20 34.10   1.0
WKYJ    5.41 251 eP    20 42.50  -0.2
TKSJ    6.69 253 eP    21 01.10   0.5
YONJ    6.82 264 P     21 04.90   2.4
MDJ    12.53 316 eP    22 21.00   0.1
CN2    14.63 306 eP    22 54.00   5.5X
       0.8s    12.00nm          4.4mb
                esP   23 04.00
SNY    15.22 297 Pc    22 54.90  -1.3
TIA    19.88 277 eP    23 51.50  -2.0
BJI    20.48 289 eP    23 58.00  -1.7
TIY    23.45 283 eP    24 27.20  -2.3
HHC    24.02 290 P     24 35.50   0.5
       0.8s     9.10nm          4.4mb
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BTO    25.20 290 eP    24 45.40  -0.9
XAN    26.88 275 Pc    25 00.60  -1.3
       0.5s    16.00nm          4.9mb
LZH    30.50 281 eP    25 30.00  -4.5X
       1.4s    40.00nm          5.0mb
GTA    33.09 288 eP    25 56.50  -0.7
       1.2s    14.00nm          4.7mb
                pP     26 06.50  35km
CHTO   41.36 257 eP    27 06.30  -0.4
WMQ    41.49 298 P     27 08.00   0.4
       1.0s    24.00nm          4.9mb
                pP     27 19.00  39km
LSA    42.57 276 P     27 17.20   0.0
INK    55.03  27 eP    28 53.00   0.6
       0.7s     1.00nm          4.0mb
                pP     29 03.50  35km
WRA    56.24 188 P     29 00.50  -1.1
       0.8s     1.40nm          4.0mb
WR2    56.24 188 eP    29 00.10  -1.5
       0.9s     3.80nm          4.4mb
MBC    57.28  16 eP    29 09.50   1.1
       1.0s     3.00nm          4.3mb
HYB    58.46 269 eP    29 17.00  -0.5
ASPA   59.97 188 eP    29 35.80   8.1X
       0.7s     4.80nm          4.7mb
GBA    61.43 266 P     29 48.00  10.2X
QUE    61.48 288 eP    29 37.50  -0.7
RES    63.37  14 eP    29 50.00   0.0
       1.0s     3.00nm          4.4mb
                pP     30 04.00  50kmX
KAF    69.21 333 iP    30 26.60  -0.6
       0.4s     4.00nm          4.8mb
LRM    74.57  44 eP    31 00.80   1.0
                e      31 11.00  33km
HFS    74.99 336 eP    31 01.00  -0.6
       0.5s     1.50nm          4.3mb
NB2    75.09 337 P     31 05.20   2.9X
       0.8s     5.50nm          4.6mb
SRU    79.77  49 (P)   31 29.32   0.6
                epP    31 39.85  34km
PV10   81.14  49 eP    31 37.41   1.3
                epP    31 48.07  34km
PV08   81.25  48 eP    31 38.32   1.6
                epP    31 48.68  33km
KHC    83.43 329 eP    31 45.50  -2.0
                e      32 00.00  50kmX
GEC2   83.60 328 eP    31 48.60   0.2
       0.6s     1.31nm          4.3mb
                e      31 59.60  35km
SKO    85.02 320 eP    31 56.00   0.5
                i      32 04.00  25km
FVM    91.83  39 eP    32 28.81   0.7
       0.8s    15.36nm          5.5mb
                epP    32 38.40  30km
ELC    92.98  38 eP    32 31.60  -1.8
LPAZ  146.88  61 PKP   39 04.00   2.0
LPB   147.07  61 ePKP  39 07.00   5.0X
CNCB  147.34  62 PKP   39 06.90   4.3X
     S.D. = 1.2  on  43 of  50 obs.
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   NOV  10, 1993  00h 54m 10.51± 0.38s
   12.623 N ± 6.0km   88.128 W ± 5.9km
   DEPTH =  60.6km  ( 11 depth phases)
   4.7mb ( 21 obs.)
 OFF COAST OF CENTRAL AMERICA     ( 76)
      MD 4.9 (UPA). Felt (II) at San
      Salvador, El Salvador.

VSM     0.81 350 iPc   54 27.10   0.6
SJAS    1.45 316 iPd   54 34.60  -0.4
LFU     1.47 319 iPd   54 35.40   0.1
VSS     1.55 316 iPd   54 36.70   0.3
TME     1.83 319 iPd   54 40.30   0.1
YPE     2.12 315 ePd   54 44.80   0.4
CUSS    2.18 306 iPd   54 44.70  -0.4
BRU     6.66 124 eP    55 50.26   1.9
                iS     57 01.03
DVD     6.96 126 eP    55 53.26   1.1
                eS     57 08.13
ECO     8.89 111 eP    56 18.10  -0.8
UPA     9.19 112 eP    56 27.08   4.2X
TOV    18.21  97 eP    58 20.30  -0.4
HBF    21.42  18 eP    58 57.93   2.6
OXF    21.82 357 P     59 00.02   0.8
PRM    22.00  13 eP    59 02.51   1.5
LTX    22.02 321 ePc   59 00.97  -0.5
UYO    22.21 346 iPc   59 03.70   0.6
MIAR   22.38 348 eP    59 05.90   1.1
       0.7s    23.50nm          4.7mb
JSC    22.45  15 eP    59 07.06   1.6
MYNC   22.64   9 eP    59 08.93   1.5
       0.7s    13.23nm          4.5mb
LHS    22.75  16 eP    59 10.22   1.8
MEO    24.02 338 iPd   59 21.10   0.4
WMOK   24.05 338 eP    59 21.06   0.0
       0.7s    12.49nm          4.5mb
FNO    24.05 341 iPc   59 22.00   1.0
TUL    24.20 345 iPd   59 23.60   1.1
OCO    24.32 341 iPc   59 23.10  -0.5
CEH    24.56  18 eP    59 26.65   0.7
       0.6s    52.46nm          5.2mb
                e      59 41.93  65km
ELC    24.58 358 eP    59 25.43  -0.7
                e      59 40.84  66km
FVM    25.34 356 eP    59 32.05  -1.3
NAV    25.45  14 eP    59 34.69   0.3
ACO    25.94 339 iPd   59 37.60  -1.3
CVL    26.69  17 eP    59 45.92   0.2
ALQ    27.74 326 eP    59 56.60   1.0
       0.9s     4.79nm          4.1mb
MCWV   27.91  14 eP    59 56.52  -0.3
       0.5s     2.27nm          4.1mb
TUC    28.56 317 (P)   00 04.44   1.5
       1.0s     7.16nm          4.3mb
YSNY   30.89  14 eP    00 22.81  -0.6
       0.6s    23.53nm          5.1mb
PAL    30.90  21 eP    00 22.82  -0.6
TBR    30.91  21 eP    00 22.73  -0.9
                e      00 38.50  65km
GOL    30.97 334 eP    00 24.22  -0.3
       0.7s    15.38nm          4.8mb
                e      00 38.56  58km
BINY   31.30  18 eP    00 26.70  -0.4
       0.7s    11.34nm          4.7mb
                e      00 41.75  61km
PV08   31.63 328 eP    00 30.40   0.0
PV10   31.69 328 eP    00 29.05  -1.7
LSCT   31.74  21 ePc   00 30.30  -0.5
       0.7s    15.57nm          4.9mb
                e      00 45.93  64km
PV09   31.83 328 eP    00 32.20   0.2
SRU    33.01 327 eP    00 42.37   0.2
ARUT   33.73 322 eP    00 49.16   0.7
RSNY   33.88  18 eP    00 48.39  -1.1
       0.8s     5.93nm          4.6mb
                ePP    01 55.22
RSSD   34.23 339 eP    00 52.88   0.1
       0.4s     9.62nm          5.1mb
                e      01 08.15  61km
DAU    34.35 328 eP    00 54.21   0.3
GAC    34.68  16 eP    00 56.00  -0.2
LPAZ   34.87 145 P     00 59.40   0.5
                LR     07 13.00
DUG    35.02 326 eP    00 59.20  -0.2
       1.0s     2.92nm          4.2mb
LPB    35.09 145 eP    01 04.00   3.5X
CNCB   35.38 145 P     01 04.00   0.8
HVU    36.13 328 eP    01 08.97   0.2
BONR   36.86 319 eP    01 16.76   1.6
ULM    38.05 352 eP    01 25.50   0.8
LMN    38.57  26 ePd   01 29.00  -0.1
                pP     01 44.50  61km
LRM    38.99 333 iPc   01 33.40   0.5
                e      01 39.80  22kmX
                e      01 47.80
                e      03 42.90
SIV    39.05 136 P     01 33.50   0.1
JAQ    42.24  11 eP    01 57.50  -1.7
NEW    42.94 332 ePc   02 04.38  -0.6
       0.6s    14.41nm          4.9mb
DPW    43.17 330 eP    02 06.57  -0.4
                e      02 21.26  57km
                e      03 55.20
GMW    45.28 327 (P)   02 22.64  -1.2
PPD    49.90 133 eP    02 59.00  -1.2
FRB    52.88  11 eP    03 19.50  -2.6
       0.5s    16.00nm          5.3mb
YKA    53.27 345 eP    03 24.30  -0.7
       0.6s     7.30nm          4.9mb
VAO    53.64 131 (P)   03 26.00  -2.3
BALM   62.13 333 eP    04 26.30  -1.2
RES    62.16 358 eP    04 25.00  -2.3
       0.6s     3.00nm          4.6mb
INK    62.84 343 eP    04 30.50  -1.4
       1.0s     5.00nm          4.6mb
                pP     04 46.00  57km
MBC    65.76 352 eP    04 50.00  -0.7
       0.9s     2.00nm          4.1mb
FBA    66.00 336 eP    04 50.33  -2.1
       1.5s    61.10nm          5.4mb
                e      05 04.89  52km
CTA   127.48 254 ePdiff09 55.00   1.6
GTA   127.71 352 Pdiffc09 47.50  -6.7X
       1.0s    22.00nm
     Z  16s     0.46um          5.3MszX
                PcP    12 12.50
CHTO  147.99 347 ePKP  13 50.10   1.8
     S.D. = 1.1  on  73 of  76 obs.
-------------------------------------
   NOV  10, 1993  01h 02m 46.93± 1.59s
   11.415 N ± 5.3km  125.730 E ± 9.7km
   DEPTH =  42.6 ± 14.2 km
   4.8mb ( 25 obs.)
 SAMAR, PHILIPPINE ISLANDS        (251)

DAV     4.30 182 eP    03 53.50   1.8
QCP     5.55 306 eP    04 14.50   5.2X
BAG     7.05 315 ePd   04 30.00  -0.4
       0.9s    65.55nm          5.5mb
SSE    20.03 349 Pc    07 19.50   0.4
       1.0s    21.00nm          4.4mb
     Z  20s     0.50um          3.9Msz
                eS     11 00.00
NJ2    21.49 344 eP    07 34.00  -0.1
GYA    23.38 312 iPc   07 54.60   1.7
       1.0s    29.00nm          4.7mb
     Z  18s     0.65um          4.1Msz
KGM    24.11 249 ePc   08 02.90   2.9
MTN    24.69 167 eP    08 05.50   0.0
NST    25.23 283 eP    08 10.00  -0.7
IPM    25.37 256 ePd   08 12.90   0.8
       0.7s    77.60nm          5.4mb
LEM    25.56 226 iPd   08 06.00  -7.9X
KMI    25.68 305 Pd    08 15.50   0.4
       1.0s    30.00nm          4.8mb
                pP     08 24.50  32kmX
CHTO   26.86 289 eP    08 25.20  -0.6
XAN    27.26 328 P     08 28.00  -1.3
       1.0s    15.00nm          4.6mb
     Z  16s     0.29um          3.9MszX
CD2    28.11 317 Pd    08 36.60  -0.5
     Z  18s     1.01um          4.5Msz
                eS     13 10.00
TIY    28.77 338 eP    08 42.80  -0.2
     Z  18s     0.36um          4.0Msz
BJI    29.74 345 eP    08 50.00  -1.5
       1.0s     6.00nm          4.3mb
     Z  20s     0.30um          3.9Msz
LZH    31.54 325 eP    09 07.00  -0.6
       1.2s    25.00nm          4.9mb
HHC    31.86 339 Pd    09 10.20  -0.2
       1.0s    11.00nm          4.7mb
QIS    34.58 157 iPc   09 32.20  -1.8
SHL    34.93 299 iPc   09 35.60  -1.6
ASPA   35.77 167 eP    09 42.70  -1.4
       0.5s    15.10nm          5.2mb
WARB   37.38 179 eP    09 58.00   0.4
       0.6s    19.00nm          5.2mb
MRWA   41.47 193 eP    10 29.50  -2.0
FORT   42.01 177 eP    10 35.50  -0.3
       0.7s    28.00nm          5.1mb
COOL   42.28 186 eP    10 37.00  -1.1
       1.0s    49.00nm          5.2mb
BAL    42.67 192 eP    10 39.50  -1.8
KLB    43.44 190 iPd   10 46.80  -0.7
       0.3s     9.00nm          5.0mb
STK    45.65 161 iPc   11 01.40  -3.9X
       1.0s    15.00nm          4.9mb
WMQ    46.00 322 P     11 08.50   0.5
RKG    46.47 190 eP    11 11.80   0.1
       0.2s     3.00nm          4.9mb
BWA    50.42 156 eP    11 43.40   1.0
CAN    51.44 156 eP    11 50.30   0.2
DZM    51.98 130 iPc   11 53.90  -0.6
QUE    57.42 299 eP    12 34.20  -0.1
IMA    75.82  25 eP    14 30.10  -0.2
       0.9s     4.20nm          4.4mb
FBA    78.25  26 eP    14 43.90   0.3
       1.0s     6.00nm          4.6mb
CSY    78.30 186 eP    14 52.70   9.0X
       0.6s    10.70nm          5.0mb
```

10d 01h

```
INK     83.42  22 eP     15 11.00   0.1
KAF     84.37 332 iP     15 15.60  -0.2
        0.8s     28.80nm          5.4mb
MBC     84.72  13 eP     15 18.50   1.2
        0.6s      2.00nm          4.4mb
RES     90.47  10 eP     15 45.50   0.4
        0.9s      2.00nm          4.5mb
HFS     90.79 332 eP     15 45.30  -1.5
        0.9s     17.70nm          5.5mb
NB2     91.50 334 P      15 51.00   0.9
        0.8s      2.30nm          4.6mb
GEC2    95.47 322 eP     16 08.40  -0.3
        0.9s      1.03nm          4.3mb
                  e      16 17.10
                  e      16 25.50
MOCB   165.36 133 PKP    22 50.40   1.4
LPB    165.65 112 PKP    22 50.00   0.7
CNCB   165.66 114 ePKP   22 51.00   1.5
LPAZ   165.70 111 PKP    22 51.40   1.8
SIV    171.98 125 PKP    22 53.50   0.8
     S.D. = 1.1  on  46 of  50 obs.
-------------------------------------
   NOV  10, 1993  01h 57m 14.93± 0.63s
   44.294 N ± 7.2km   12.139 E ± 4.7km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                    (545)
      ML 3.0 (LDG). MD 3.1 (TRI).

TRI      1.83  39 e(Pn) 57 46.50  -0.1
                  e     57 52.10
                  e     58 18.70
RIY      1.91  56 ePn   57 47.20  -0.6
                  iSn   58 12.60
VOY      2.14  35 iPnc  57 51.20   0.0
                  eSn   58 19.00
                  eSg   58 28.50
CEY      2.17  48 ePn   57 56.50   4.8X
                  eSg   58 30.70
VBY      2.52  60 ePn   57 58.10   1.5
                  iSg   58 40.50
PGF      2.88 234 Pn    58 01.10  -0.7
                  Sn    58 35.50
PTJ      3.15  58 eP    58 20.50  15.0X
SBF      3.42 264 Pn    58 09.80   0.4
                  Sn    58 49.50
LPG      4.01 289 Pn    58 19.00   1.0
LPL      4.03 290 Pn    58 18.40   0.2
FRF      4.03 261 Pn    58 18.10   0.0
                  Sn    59 03.90
LMR      4.19 259 Pn    58 20.00  -0.2
                  Sn    59 07.10
LRG      4.26 261 Pn    58 21.10  -0.2
GEC2     4.68  13 Pn    58 26.90  -0.4
                  Sn    59 22.40
KHC      4.94  11 ePn   58 30.00  -0.9
                  e     58 52.50
                  eSn   59 28.50
BSF      5.13 315 Pn    58 34.30   0.5
                  Sn    59 31.20
CDF      5.32 322 Pn    58 36.40   0.0
                  Sn    59 34.80
HAU      5.47 315 Pn    58 38.80   0.3
                  Sn    59 39.10
LBF      6.32 298 Pn    58 49.60  -0.9
                  Sn    59 59.30
     S.D. = 0.7  on  17 of  19 obs.
-------------------------------------
*  NOV  10, 1993  02h 40m 06.87± 2.69s
   32.785 S ±16.4km   71.690 W ±20.1km
   DEPTH =  33.0km  (normal)
 NEAR COAST OF CENTRAL CHILE       (135)
      MD 4.1 (SAN).

IHA      0.24 170 iPd   40 13.30  -0.6
                  iS    40 18.60
ROCH     0.60 108 iP    40 18.07  -1.1
                  iS    40 27.62
LCCH     0.70 172 iP+   40 19.89  -0.3
                  iS    40 30.64
PEL      0.92 113 iP    40 23.17  -0.3
                  iS    40 37.55
JACH     0.93  84 iP    40 22.02  -1.7
                  iS    40 35.38
TACH     1.07 144 iP+   40 25.88   0.3
                  iS    40 43.37
SAN      1.09 128 iP+   40 26.08   0.2
                  iS    40 42.93
LNV      1.19 169 iP    40 27.03  -0.2
                  iS    40 44.53
PCH      1.29 131 iP+   40 29.18   0.4
                  iS    40 49.94
FCH      1.29 115 iP+   40 29.00  -0.1
                  iS    40 47.28
CACH     1.61 146 iPd   40 35.10   1.6
                  iS    40 59.75
MDZ      2.39  93 eP    40 50.80   6.1X
                  iS    41 20.80
RTCV     2.82  72 eP    40 52.50   1.8
                  S     41 33.50
     S.D. = 1.1  on  12 of  13 obs.
-------------------------------------
   NOV  10, 1993  03h 11m 35.34± 0.23s
   40.568 N ± 5.4km   29.330 W ± 2.9km
   DEPTH =  10.0km  (geophysicist)
   5.1mb ( 63 obs.)  4.5Msz ( 24 obs.)
 AZORES ISLANDS REGION             (404)

FAC      3.99 133 eP    12 36.84  -1.1
                  eS    13 23.70
CML      4.06 132 eP    12 37.54  -1.2
                  eS    13 24.50
LFA      4.09 132 eP    12 38.08  -1.2
                  eS    13 25.25
SDCA     4.17 130 eP    12 39.25  -1.2
                  eS    13 28.37
FRA      4.17 131 eP    12 39.75  -0.7
EHOR    18.85  91 eP    16 02.00   4.4X
GUD     19.10  82 eP    16 03.00   2.2
PAB     19.14  85 eP    16 03.00   1.8
                  eS    19 52.00
DCN     19.64  42 eP    16 14.00   7.1X
EBAN    19.88  89 eP    16 14.00   4.4X
DLF     20.00  43 eP    16 14.40   3.7X
ECOG    20.29  91 eP    16 19.00   5.0X
ETOR    20.66  80 eP    16 17.70  -0.1
EVIA    20.74  87 eP    16 23.00   4.4X
EHUE    20.88  89 eP    16 25.00   4.9X
LPF     21.49  60 eP    16 24.70  -1.4
        1.1s     76.70nm          5.0mb
GRR     21.68  59 eP    16 26.90  -1.1
        1.4s     99.35nm          5.0mb
ECHE    21.69  83 eP    16 30.50   2.2
EGRA    21.79  76 eP    16 37.00   7.9X
MFF     21.91  64 eP    16 29.30  -1.0
        1.4s     98.45nm          5.0mb
FLN     21.99  58 eP    16 29.80  -1.3
        1.9s    224.45nm          5.3mb
      Z  23s      1.85um          4.4MszX
LDF     22.19  59 eP    16 31.80  -1.3
        1.4s    118.95nm          5.1mb
EPF     22.20  74 eP    16 34.00   0.6
        1.4s     89.30nm          5.0mb
LFF     22.44  69 eP    16 35.60   0.0
        1.2s     55.95nm          4.9mb
LPO     22.76  69 eP    16 38.60  -0.2
        1.4s     94.55nm          5.1mb
RJF     22.99  68 eP    16 40.60  -0.5
        1.6s     86.45nm          5.0mb
      Z  21s      0.82um          4.2Msz
LSF     23.04  65 eP    16 41.50   0.0
        1.2s     74.70nm          5.1mb
CAF     23.38  69 eP    16 44.30  -0.6
        1.4s     70.60nm          5.0mb
TCF     23.51  65 eP    16 46.10   0.0
        1.8s    182.15nm          5.3mb
MAF     23.75  66 eP    16 48.50   0.0
        0.9s     30.15nm          4.9mb
HYF     23.87  63 eP    16 49.70   0.2
BGF     23.96  65 eP    16 50.40  -0.1
        1.0s     60.00nm          5.1mb
AVF     24.32  64 eP    16 53.60  -0.3
        1.7s     96.30nm          5.1mb
SSF     24.44  64 eP    16 54.50  -0.6
        1.7s    111.75nm          5.2mb
SMF     24.65  65 eP    16 57.30   0.1
        1.1s     40.55nm          5.0mb
LOR     24.70  63 eP    16 57.40  -0.2
        1.9s    128.85nm          5.3mb
      Z  21s      1.23um          4.4Msz
LBF     24.76  64 eP    16 57.80  -0.4
        1.6s     39.80nm          4.8mb
SNF     25.36  56 P     17 07.70   3.9X
DOU     25.49  57 P     17 07.40   2.4
VITF    26.19  61 P     17 00.15 -11.5X
LMN     26.25 293 eP    17 14.50   2.3
HAU     26.42  62 eP    17 14.20   0.4
        1.8s    126.90nm          5.3mb
      Z  23s      1.02um          4.3MszX
WLF     26.43  58 iPc   17 15.39   1.7
ENN     26.43  55 eP    17 16.00   2.2
        0.9s     22.40nm          4.9mb
LRG     26.55  72 eP    17 16.20   1.3
        1.7s    114.70nm          5.3mb
      Z  23s      1.02um          4.3MszX
LPL     26.67  67 eP    17 18.10   1.8
        1.1s     12.70nm          4.5mb
LMR     26.67  72 eP    17 17.20   1.1
        1.6s     76.50nm          5.1mb
LPG     26.68  67 eP    17 18.40   1.9
        1.5s     39.15nm          4.9mb
BSF     26.71  62 eP    17 17.30   0.8
        1.5s     84.10nm          5.2mb
LOMF    26.72  63 P     17 03.10 -13.5X
FRF     26.75  72 eP    17 18.00   1.2
        1.5s     66.85nm          5.1mb
MOF     26.94  62 P     17 10.99  -7.6X
ECH     26.97  61 P     17 08.36 -10.5X
CDF     27.06  61 eP    17 21.00   1.3
        1.7s    118.35nm          5.3mb
WLS     27.11  61 P     17 10.34  -9.8X
BBS     27.18  63 P     17 04.86 -15.9X
WTS     27.19  53 eP    17 28.00   7.3X
        0.8s     15.20nm          4.8mb
FEL     27.53  62 P     17 09.02 -15.0X
CBM     28.52 296 P     17 40.00   7.2X
      Z  19s      0.61um          4.2Msz
GRF     29.71  58 ePd   17 42.80  -0.7
        1.8s     74.00nm          5.2mb
      Z  18s      1.40um          4.6Msz
                   e     17 47.70
                   e     17 51.60
WTTA    29.99  63 iPd   17 45.20  -1.1
        1.4s     28.70nm          4.9mb
                   i     17 50.80
MOX     30.01  57 e(P)  17 35.70 -10.5X
                   e     17 45.80
KBA     31.16  64 iPd   17 55.80  -0.8
        1.1s     41.50nm          5.2mb
                   i     18 00.60
KHC     31.24  60 P     18 01.00   3.9X
        1.1s     12.20nm          4.7mb
                   e     18 19.50
                   e     19 07.00
LBNH    31.41 291 P     18 10.00  11.4X
      Z  18s      1.12um          4.6Msz
HRV     31.44 288 P     18 10.00  11.2X
      Z  21s      0.46um          4.1Msz
BRG     31.50  56 eP    18 03.80   4.5X
        1.4s     19.00nm          4.8mb
PRU     31.87  58 P     18 02.00  -0.5
        1.6s     55.80nm          5.2mb
NB2     32.04  37 P     18 11.50   7.5X
        1.1s     10.10nm          4.7mb
LSCT    32.82 287 P     18 20.00   9.1X
      Z  20s      0.75um          4.4Msz
KSP     32.99  56 eP    18 15.50   3.2X
ZST     33.62  61 eP    18 17.30  -0.5
GAC     33.70 294 eP    18 21.00   2.5
SRO     34.46  62 eP    18 24.40  -0.7
BINY    34.71 288 P     18 40.00  12.7X
      Z  18s      0.57um          4.3Msz
OJC     35.24  57 eP    18 32.50   0.7
                   e     18 36.00
PSZ     35.51  61 e(P)  18 37.80   3.7X
SPC     35.61  59 eP    18 35.20   0.1
YSNY    36.48 290 P     18 50.00   7.7X
      Z  21s      0.55um          4.3Msz
NSD     36.70  32 eP    18 42.90  -0.9
        1.6s     80.30nm          5.3mb
UZH     37.02  60 eP    18 49.50   2.8X
        1.0s     40.00nm          5.1mb
SKO     37.73  71 eP    18 52.00  -0.8
                   i     18 56.50
MCWV    38.21 286 eP    18 57.43   0.6
        1.1s     24.51nm          4.9mb
VAY     38.72  71 eP    19 05.80   4.7X
CMP     39.46  65 ePc   19 16.00   8.7X
MNK     39.79  51 eP    19 08.00  -1.8
MLR     40.03  64 eP    19 05.00  -7.1X
VRI     40.48  63 eP    19 14.50  -1.1
MYNC    43.05 281 P     19 50.00  13.1X
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     Z  19s     0.50um          4.4Msz
OBN    44.87  48 eP    19 49.00  -2.3
       2.0s   160.00nm          5.6mb
     Z  17s     1.00um          4.8MszX
     E  20s     0.60um
                e      21 31.00
                eSSS   30 30.00
RES    44.91 340 eP    19 51.50   0.1
ELC    45.93 286 eP    20 00.19   0.3
SLM    46.14 288 P     20 10.00   8.5X
     Z  18s     0.54um          4.5Msz
FVM    46.53 288 eP    20 04.94   0.3
       0.9s    15.27nm          5.0mb
     Z  20s     0.92um          4.7Msz
OXF    47.22 283 eP    20 10.94   0.8
MIAR   50.29 285 eP    20 33.60  -0.3
       1.6s    92.27nm          5.5mb
     Z  18s     0.34um          4.4Msz
MBC    51.03 342 ePc   20 39.50   0.5
       0.8s     4.00nm          4.4mb
UYO    51.11 285 iPc   20 40.60   0.4
TUL    51.30 288 iPd   20 41.20  -0.4
PYA    52.05  61 eP    20 48.00   0.8
       2.0s   220.00nm          5.7mb
YKA    52.92 325 eP    20 51.40  -2.0
       1.0s     4.80nm          4.4mb
ACO    53.37 290 e(P)  20 55.10  -2.0
MEO    53.84 288 iPc   21 00.00  -0.6
WMOK   54.01 288 eP    21 00.66  -1.1
       2.5s   119.79nm          5.5mb
     Z  21s     0.84um          4.8Msz
                e      22 07.63
ERE    54.63  64 iP    21 07.00   0.6
       2.4s    19.00nm          4.7mb
                e      28 48.00
GLD    56.24 296 eP    21 18.90   0.7
       1.8s    58.72nm          5.3mb
     Z  19s     0.82um          4.8Msz
GOL    56.36 296 P     21 30.00  10.8X
     Z  19s     0.97um          4.9Msz
ARU    56.37  42 iPc   21 18.00  -0.7
       2.0s   200.00nm          5.8mb
                e      21 22.00
SVE    57.23  41 ePd   21 24.00  -0.8
       2.0s   100.00nm          5.5mb
     Z  15s     1.00um          5.0MszX
     N  15s     0.10um
     E  15s     0.50um
INK    57.86 335 eP    21 27.50  -1.6
       1.0s     3.00nm          4.3mb
LRM    58.21 305 eP    21 31.40  -0.7
BDFB   58.55 201 eP    21 35.57   1.0
       1.5s    19.82nm          5.0mb
ALQ    59.42 292 eP    21 41.21   0.6
       2.0s    36.94nm          5.2mb
     Z  20s     0.47um          4.6Msz
PV10   59.50 296 eP    21 41.39   0.1
PV09   59.51 296 eP    21 41.14  -0.2
NEW    59.90 309 eP    21 42.66  -0.9
       1.0s    23.04nm          5.3mb
DAU    60.00 299 eP    21 43.86  -0.9
EMUT   60.00 298 eP    21 44.22  -0.4
SRU    60.15 298 eP    21 45.64   0.0
LTX    60.31 285 eP    21 45.75  -0.9
HVU    60.33 301 eP    21 45.86  -0.9
DUG    61.14 300 eP    21 51.49  -0.8
       1.8s    54.70nm          5.4mb
NRI    61.21  21 eP    21 52.50   0.4
       2.0s    72.00nm          5.5mb
                e      22 34.00
ARUT   62.79 298 eP    22 03.40   0.0
SIV    63.53 214 P     22 07.00  -1.2
TUC    63.87 291 eP    22 11.83   1.4
       2.1s    38.91nm          5.2mb
     Z  19s     0.78um          4.9Msz
IMA    65.41 338 eP    22 19.33  -0.7
       1.7s    26.24nm          5.1mb
BONR   65.95 300 eP    22 23.37  -0.8
GLA    66.30 294 eP    22 26.59   0.5
GSC    66.41 297 eP    22 27.48   0.6
CCH    67.04 218 eP    22 33.00   1.8
LPAZ   67.07 221 P     22 32.50   0.7
                LR     43 14.00
PMR    67.18 333 P     22 40.00   8.8X
     Z  18s     0.16um          4.3Msz
WDC    67.22 304 P     22 40.00   8.2X
     Z  20s     0.68um          4.9Msz
LPB    67.26 221 P     22 34.20   1.5
                LR     44 40.00
CMB    67.27 301 P     22 40.00   7.8X
     Z  19s     0.25um          4.5Msz
ISA    67.34 298 P     22 40.00   7.3X
     Z  19s     0.46um          4.7Msz
PEC    67.45 296 eP    22 34.86   1.5
       1.0s     7.91nm          4.9mb
MOCB   70.17 216 P     22 50.00  -0.7
FRU    72.32  49 eP    23 04.00   1.0
QUE    75.41  63 eP    23 22.50   1.2
YAK    76.37  10 eP    23 25.20  -0.7
       1.0s    50.00nm          5.6mb
BOD    77.30  19 eP    23 29.00  -2.2
       1.3s    43.00nm          5.4mb
WMQ    78.67  41 P     23 40.00   0.9
ZAK    80.36  29 eP    23 48.00   0.1
       2.0s    44.00nm          5.1mb
BTO    91.16  30 eP    24 42.00   0.2
LZH    92.43  36 eP    24 48.00   0.2
       2.0s    53.00nm          5.6mb
     Z  20s     0.30um          4.7Msz
                pP     24 57.00  28kmX
BJI    93.84  26 eP    24 53.00  -0.9
HON   102.10 312 Pdiff 25 40.00   8.5X
     Z  20s     0.12um          4.4Msz
     S.D. = 1.1  on 108 of 149 obs.
-------------------------------------
%  NOV  10, 1993  03h 19m 01.84± 1.77s
   38.285 S ±14.8km  175.825 E ±17.5km
   DEPTH = 207.4 ± 25.0 km
 NORTH ISLAND, NEW ZEALAND        (159)

URZ     1.01  89 P     19 31.80  -0.9
                S      19 50.30
WAHZ    1.47 164 Pc    19 36.50   0.2
                S      19 58.40
TTH     1.48 148 P     19 36.80   0.5
NOZ     1.77 102 P     19 39.40   0.5
TEHZ    1.87 156 P     19 39.70  -0.2
PUZ     1.93  84 eP    19 40.30  -0.2
                S      20 05.10
HBZ     2.07  71 P     19 42.30   0.3
MNG     2.35 186 Pc    19 45.10   0.2
                S      20 13.30
PGZ     2.36 172 P     19 45.00   0.1
KIW     2.67 195 P     19 48.40  -0.1
CAW     2.88 191 P     19 50.90   0.0
MTW     2.88 185 P     19 50.40  -0.5
DIW     2.91 210 P     19 51.90   0.6
MRW     3.07 196 P     19 52.90  -0.2
                eS     20 28.60
BLW     3.09 185 P     19 53.00  -0.4
LTZ     5.25 210 P     20 20.10  -0.1
     S.D. = 0.4  on  16 of  16 obs.
-------------------------------------
&  NOV  10, 1993  03h 47m 01.54s
   34.012 N          117.223 W
   DEPTH =  11.5km
 SOUTHERN CALIFORNIA              ( 43)
      <PAS-P>. ML 2.9 (PAS), 2.8 (GS).
      Felt.

PEC     0.13 157 iPc   47 04.67  -0.2
SSK     0.44 297 iPc   47 09.82  -0.8
PLM     0.72 155 ePd   47 14.70  -1.0
                eS     47 23.88
GSC     1.33  15 eP    47 25.55  -0.5
                eS     47 42.35
ABL     1.85 297 eP    47 32.98  -0.6
ISA     1.94 328 eP    47 33.88  -0.9
GLA     2.22 115 eP    47 37.47  -1.3
BCH     2.63 297 eP    47 44.50  -0.3
TPNV    3.04  15 ePn   47 50.52   0.1
        9 obs. associated
-------------------------------------
&  NOV  10, 1993  04h 53m 43.31s
   63.372 N          151.110 W
   DEPTH =   9.4km
 CENTRAL ALASKA                   (  1)
      <AEIC>. ML 2.5 (AEIC), 2.8
      (PMR).

KTH     0.20  25 iP    53 47.28  -0.4
TRF     0.38  78 eP    53 50.72  -0.4
                eS     53 56.44
HUR     0.78 120 eP    53 58.12  -0.4
                eS     54 08.53
RND     1.02  87 eP    54 01.94  -0.7
                eS     54 15.21
MCK     1.04  69 eP    54 02.35  -0.6
CUT     1.04 158 eP    54 03.31   0.3
                eS     54 18.51
BWN     1.09  42 eP    54 03.86   0.1
SKT     1.41 188 eP    54 09.10   0.0
                eS     54 27.86
                eS     54 28.23
NEA     1.51  36 eP    54 10.88   0.5
MLY     1.67   5 eP    54 11.53  -1.4
WRH     1.73  49 eP    54 13.53  -0.2
PWA     1.82 161 P     54 15.10   0.2
GHO     1.90 147 eP    54 16.07  -0.1
SUA     1.92 175 eP    54 17.37   0.8
CCB     1.94  47 eP    54 14.29  -2.4
PLRM    2.01 152 eP    54 17.71   0.0
PMR     2.01 152 eP    54 17.50  -0.2
SML     2.03 139 eP    54 17.15  -0.9
MDM     2.03  37 eP    54 15.73  -2.3
NCG     2.04 194 eP    54 18.29   0.1
HDA     2.11  59 eP    54 17.76  -1.4
CGLM    2.11 192 eP    54 19.62   0.3
FBA     2.11  42 eP    54 20.55   1.3
                eS     54 47.72
CRP     2.17 193 eP    54 21.95   1.8
                eS     54 48.05
SPU     2.24 192 eP    54 21.12   0.0
PMS     2.25 161 P     54 21.50   0.2
TTA     2.27 261 eP    54 23.33   1.8
GLM     2.30  43 eP    54 25.05   3.1
KNK     2.32 147 eP    54 22.60   0.3
IL1     2.33  51 eP    54 20.71  -1.6
                eS     54 54.13
SCM     2.33 130 eP    54 21.69  -0.8
TOA     2.60 117 P     54 25.70  -0.6
PWL     2.84 151 eP    54 29.52  -0.1
IM3     2.86 338 eP    54 27.58  -2.2
IMA     2.92 339 (P)   54 36.45   5.6
                eS     55 11.99
KLU     3.06 126 eP    54 33.19   0.4
SVW     3.10 225 (P)   54 36.95   3.7
        37 obs. associated
-------------------------------------
?  NOV  10, 1993  05h 21m 32.13± 5.65s
   17.214 S ±26.6km   69.456 W ±50.1km
   DEPTH = 193.7 ± 35.0 km
 PERU-BOLIVIA BORDER REGION       (118)

CNCB    1.47  74 P     22 06.00   0.1
LPB     1.47  63 P     22 06.00   0.2
                S      22 30.00
LPAZ    1.57  54 P     22 06.70  -0.2
                S      22 31.30
CCH     3.18  94 P     22 24.30  -0.1
HJA     7.08 148 ePd   23 14.10   0.0
SIV     8.13  83 P     23 28.30   0.1
     S.D. = 0.3  on   6 of   6 obs.
-------------------------------------
*  NOV  10, 1993  05h 37m 20.89± 0.84s
   8.943 N ±12.8km   73.505 W ± 6.9km
   DEPTH = 121.6 ± 14.2 km
   4.5mb (  1 obs.)
 NORTHERN COLOMBIA                ( 99)

TOV     3.76  77 ePnc  38 18.40   0.2
                iPP    38 19.10
                eSn    39 08.80
CANV    5.06  65 iP    38 38.70   2.9X
CEOS    5.11  89 iP    38 27.60  -8.9X
MORO    5.46  69 iP    38 41.00  -0.3
UPA     5.96 271 iPc   38 47.28  -0.8
                i      39 58.70
                iS     39 58.71
ECO     6.12 274 ePc   38 51.28   0.9
                iS     40 06.07
CAR     6.67  76 iPnd  38 03.60 -54.3X
                iSn    38 41.40
OLLA    6.70  80 iP    38 51.00  -7.3X
LLAV    6.78  76 iP    38 54.30  -5.0X
LPAZ   25.63 168 P     42 41.30  -0.3
LPB    25.87 168 eP    42 43.00  -0.6
SIV    27.66 154 P     43 00.30   0.9
YKA    61.15 340 eP    47 24.40   0.0
       0.4s     2.20nm          4.5mb
     S.D. = 0.8  on   8 of  13 obs.
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   NOV  10, 1993  06h 48m 52.35± 0.44s
   37.451 N ± 5.3km  115.482 W ± 4.3km
   DEPTH =   5.0km  (geophysicist)
 SOUTHERN NEVADA                  ( 41)
      ML 3.2 (GS).

TPNV     0.79 231 eP    49 07.00  -1.3
TNP      1.51 295 eP    49 19.74  -0.6
ARUT     1.66  78 eP    49 22.17  -0.2
                  eS    49 46.31
BONR     2.29 284 eP    49 33.22   1.5
                  eS    50 04.60
GSC      2.40 207 (P)   49 34.14   1.2
MTUM     2.46 269 (P)   49 34.14   0.2
KVN      2.61 309 (P)   49 35.36  -0.7
MEMM     2.76 276 (P)   49 40.69   2.7X
MMPM     2.82 274 (Pn)  49 39.09  -0.2
ISA      3.00 234 ePn   49 42.18   0.7
DUG      3.44  36 ePn   49 48.20   0.3
SSK      3.70 210 (P)   49 59.71   8.1X
PEC      3.80 202 (Pn)  49 52.04  -0.9
SRU      4.24  65 (Pn)  50 00.94   1.7X
PLM      4.24 196 (Pn)  49 59.04  -0.2
BCH      4.35 240 (Pn)  50 04.17   3.4X
GLA      4.42 173 (Pn)  50 02.08   0.4
DAU      4.43  47 (Pn)  50 03.56   1.5X
PV09     5.12  76 (Pn)  50 13.82   1.9X
PV10     5.18  78 (Pn)  50 13.09   0.5
PV08     5.51  76 (Pn)  50 16.79  -0.7
     S.D. = 0.9  on  15 of  21 obs.
-------------------------------------
% NOV  10, 1993  07h 56m 08.09± 0.89s
   39.096 N ± 7.0km   27.376 E ± 9.4km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 2.7 (ISK).

IZM      0.70 187 ePg   56 21.80  -0.2
                  eSg   56 33.30
EZN      1.09 312 ePn   56 29.00   0.4
DST      1.10  62 ePn   56 29.30   0.6
EDC      1.30  17 ePn   56 32.00  -0.2
BNT      1.33  18 ePn   56 32.00  -0.6
     S.D. = 0.7  on   5 of   5 obs.
-------------------------------------
? NOV  10, 1993  08h 32m 29.93± 0.92s
   26.355 S ± 8.4km   27.525 E ± 8.6km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA         (584)

KSR      0.75 311 eP    32 45.00   0.1
                  S     32 55.00
SLR      0.92  48 eP    32 48.00  -0.1
                  S     33 00.50
SEK      1.96 177 eP    33 04.50   0.1
                  S     33 28.70
SWZ      2.13 247 eP    33 06.60  -0.2
                  S     33 32.00
BLF      2.99 203 eP    33 24.00   5.0X
                  S     34 01.00
     S.D. = 0.3  on   4 of   5 obs.
-------------------------------------
% NOV  10, 1993  09h 04m 28.87± 0.91s
   39.113 N ± 7.3km   27.481 E ± 9.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 2.8 (ISK).

IZM      0.73 194 ePg   04 43.10  -0.2
                  eSg   04 55.30
DST      1.02  61 ePn   04 48.70   0.6
EZN      1.14 309 iPn   04 50.70   0.5
EDC      1.27  13 ePn   04 51.50  -0.9
BNT      1.29  15 ePn   04 52.80   0.1
     S.D. = 0.8  on   5 of   5 obs.
-------------------------------------
   NOV  10, 1993  09h 55m 12.19± 0.67s
   44.245 N ± 7.1km   12.171 E ± 4.5km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                   (545)
      ML 3.5 (VIE), 3.4 (LDG). MD 3.4
      (TRI).

TRI      1.85  37 e(Pn) 55 43.40  -0.8
                  e     55 49.70
                  e     56 07.30
                  e(Sg) 56 15.50
RIY      1.92  54 iPnc  55 44.80  -0.4
                  iSn   56 09.80
VOY      2.16  34 iPnc  55 48.80   0.0
                  eSn   56 16.30
                  eSg   56 26.20
CEY      2.19  46 ePn   55 48.90  -0.3
       1.0s   110.00nm
                  e     55 54.30
                  eSg   56 26.30
LJU      2.46  42 e(Pn) 55 52.70  -0.2
                  eSn   56 24.00
                  eSg   56 34.00
VBY      2.53  59 ePn   55 53.80  -0.2
                  iSg   56 36.00
PCP      2.62 278 P     55 58.65   3.4X
OGA      2.74 343 ePn   55 58.70   1.5
SCE      2.81 354 ePn   56 00.00   1.8
FIN      2.85 271 P     55 59.33   0.8
PGF      2.87 235 Pn    55 58.60  -0.3
                  Sn    56 32.90
WTTA     3.04 353 iPnc  56 03.50   2.1
                  iPg   56 13.80
                  iSn   56 40.70
                  iSg   56 56.70
ROB      3.09 272 P     56 03.27   1.3
PTJ      3.15  57 eP    56 13.60  10.7X
ORX      3.28 296 P     56 03.50  -1.3
ENR      3.41 271 P     56 07.98   1.4
SBF      3.44 265 Pn    56 07.50   0.6
                  Sn    56 47.30
STV      3.48 272 P     56 08.58   1.0
BHG      3.51   8 ePn   56 09.30   1.4
BHB      3.56 281 P     56 08.53  -0.1
PZZ      3.64 276 P     56 10.04   0.1
LSD      3.77 291 P     56 54.15  42.3X
FRF      4.05 262 Pn    56 15.80   0.3
                  Sn    57 02.10
LPG      4.05 290 Pn    56 16.10   0.3
                  Sn    57 01.40
LPL      4.07 290 Pn    56 16.00   0.0
                  Sn    57 01.30
LMR      4.20 259 Pn    56 17.30  -0.4
                  Sn    57 04.50
LRG      4.28 261 Pn    56 19.00   0.2
                  Sn    57 07.50
GEC2     4.72  12 Pn    56 24.40  -0.8
                  Sn    57 19.00
KHC      4.98  11 ePn   56 28.50  -0.3
                  e     56 36.00
                  eSn   57 24.00
                  e     58 03.50
BSF      5.19 316 Pn    56 31.20  -0.5
                  Sn    57 28.40
CDF      5.37 323 Pn    56 34.00  -0.4
                  Sn    57 32.60
GRF      5.49 354 e(Pg) 57 01.00  25.1X
                  e(Sg) 57 58.00
HAU      5.52 315 Pn    56 35.50  -1.0
                  Sn    57 36.20
SMF      6.33 295 Pn    56 46.00  -1.9
                  Sn    57 55.70
LBF      6.37 298 Pn    56 47.70  -0.7
                  Sn    57 57.50
LOR      6.55 300 Pn    56 49.70  -1.3
                  Sn    58 00.90
SSF      6.69 298 Pn    56 51.70  -1.3
                  Sn    58 04.50
AVF      6.70 295 Pn    56 52.50  -0.5
     S.D. = 1.0  on  34 of  38 obs.
-------------------------------------
? NOV  10, 1993  10h 30m 37.63± 0.95s
   39.119 N ± 8.1km   27.631 E ± 9.5km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 2.7 (ISK).

IZM      0.78 202 ePg   30 52.80   0.0
                  eSg   31 04.80
DST      0.91  58 ePg   30 55.10   0.0
EZN      1.23 305 ePn   31 00.50   0.0
BNT      1.26  10 ePn   31 01.00   0.0
     S.D. = 0.1  on   4 of   4 obs.
-------------------------------------
* NOV  10, 1993  10h 46m 28.69± 1.41s
   36.179 N ±13.1km   29.072 E ±10.6km
   DEPTH =  33.0km  (normal)
 TURKEY                           (366)
      ML 3.7 (ISK), 3.5 (CSS).

BCK      1.77  43 iPn   46 58.00   0.5
                  eSg   47 20.00
KHL      2.17   9 ePn   47 02.60  -0.7
IZM      2.64 327 iPn   47 10.00   0.0
ALT      2.99  16 ePn   47 14.80  -0.1
DST      3.44 354 ePn   47 21.60   0.3
CSS      3.68 108 eP    47 24.50  -0.1
                  eS    48 07.00
GEC2    16.95 323 ePn   50 24.90   0.1
       0.5s     0.51nm          2.9mb
                  e     50 32.10
     S.D. = 0.5  on   7 of   7 obs.
-------------------------------------
% NOV  10, 1993  10h 48m 06.68± 3.26s
   42.901 N ±11.2km   18.285 E ±21.5km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION       (383)

BRY      0.19  90 iPgc  48 11.40   0.4
                  iSg   48 13.93
HCY      0.48 161 iPgc  48 16.32  -0.1
                  iSg   48 23.40
NKY      0.53  99 iPgd  48 17.02  -0.5
                  iSg   48 24.76
BDV      0.74 147 iPgd  48 20.88  -0.2
                  iSg   48 31.66
TTG      0.86 123 iPgc  48 23.08  -0.1
                  iSg   48 35.54
PLE      0.92  62 iPgc  48 24.17  -0.2
                  iSg   48 37.61
ULC      1.18 142 iPgd  48 29.10   0.4
                  iSg   48 46.13
PVY      1.28 103 iPgc  48 30.76   0.2
                  iSg   48 49.35
     S.D. = 0.4  on   8 of   8 obs.
-------------------------------------
   NOV  10, 1993  10h 57m 22.70± 0.31s
   37.448 N ± 3.8km  115.547 W ± 3.2km
   DEPTH =   5.0km  (geophysicist)
 SOUTHERN NEVADA                  ( 41)
      ML 3.4 (GS).

TPNV     0.75 229 eP    57 37.48  -0.4
TNP      1.47 296 eP    57 49.80  -0.3
ARUT     1.71  78 eP    57 52.52  -0.9
                  eS    58 15.06
BONR     2.24 284 eP    58 01.24  -0.1
                  eS    58 35.61
GSC      2.37 206 eP    58 02.80  -0.2
MTUM     2.40 269 (P)   58 04.10   0.5
KVN      2.57 309 eP    58 05.21  -0.7
MEMM     2.70 276 (P)   58 07.99   0.4
MMPM     2.77 274 (P)   58 09.41   0.5
ISA      2.95 234 eP    58 10.95  -0.3
DUG      3.48  37 ePn   58 18.82   0.1
SSK      3.67 209 (Pn)  58 21.41  -0.1
PEC      3.78 201 ePn   58 23.14   0.1
CMB      3.88 280 ePg   58 36.13  11.8X
SRU      4.29  66 ePn   58 30.12  -0.2
EMUT     4.39  56 (Pn)  58 34.15   2.3X
GLA      4.42 172 (Pn)  58 32.41   0.3
HVU      4.83  25 (Pn)  58 38.15   0.2
PV10     5.23  78 (Pn)  58 44.47   0.8
     S.D. = 0.5  on  17 of  19 obs.
-------------------------------------
   NOV  10, 1993  11h 13m 37.91± 0.67s
   15.344 S ± 3.5km  177.029 W ± 3.2km
   DEPTH = 381.3 ±  7.1 km
   5.3mb ( 70 obs.)
 FIJI ISLANDS REGION              (181)
      Mw 5.9 (HRV). mb 5.2 (BRK).
      Mo=3.7*10**17 Nm (PPT).
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 43S, 90C
      Centroid Location:
      Origin Time        11:13:44.6 0.2
      Lat 14.64S 0.02 Lon 176.89W 0.01
      Dep 387.2 0.9 Half-duration  2.2
      Moment Tensor;   Scale 10**17 Nm
        Mrr=-0.70 0.06  Mtt=-6.28 0.11
        Mff= 6.98 0.11  Mrt= 0.37 0.09
        Mrf=-1.24 0.10  Mtf= 1.80 0.09
       Principal Axes:
```

```
        T  Val=  7.39  Plg= 8  Azm= 97
        N       -0.82      80      310
        P       -6.57       5      188
      Best Double Couple:Mo=7.0*10**17
       NP1:Strike=233 Dip=80 Slip=   2
       NP2:       142      88      170

MBU     4.39 248 eP    14 55.00   1.7
VUN     5.07 238 eP    15 02.10   1.8
                 eS    15 57.30
PVC    14.26 258 iPc   16 47.00   1.4
BKM    14.31 259 iPc   16 47.30   1.1
                 iS    19 27.00
DZM    17.02 244 iPc   17 15.80   1.2
                 iS    20 14.30
RAR    17.39 112 eP    17 19.16   1.0
       2.5s  2905.43nm         6.2mb
OUZ    21.51 201 P     18 02.10   3.7X
                 e     19 00.90
KUZ    22.27 196 P     18 06.80   1.2
                 e     19 12.70
HBZ    22.55 190 P     18 08.60   0.5
PUZ    23.02 190 eP    18 12.30  -0.2
HNR    23.23 282 ePc   18 14.00  -0.6
                 eS    22 07.00
WLZ    23.37 195 P     18 17.60   1.9
URZ    23.41 192 P     18 14.60  -1.4
NOZ    23.59 190 P     18 17.50  -0.2
MOZ    24.17 196 P     18 24.70   1.7
                 e     19 30.30
CNZ    24.64 194 eP    18 27.30  -0.1
TTH    24.70 191 eP    18 28.10   0.3
WAHZ   24.95 192 eP    18 27.90  -2.2
PGZ    25.85 192 P     18 36.10  -2.0
MNG    26.01 193 P     18 37.00  -2.7
AFR    26.22  99 iPc   18 41.20  -0.5
       1.2s   213.00nm         5.4mb
PAE    26.41  99 iPc   18 43.10  -0.3
       1.3s   332.10nm         5.6mb
PPT    26.41  99 iPc   18 43.20  -0.3
       1.3s   501.10nm         5.7mb
MTW    26.53 193 P     18 42.60  -1.7
PPN    26.55  99 iPc   18 44.60  -0.1
       1.0s   136.00nm         5.3mb
CAW    26.57 193 P     18 43.20  -1.5
AMW    26.62 192 P     18 43.70  -1.3
TVO    26.73  99 iPc   18 46.30   0.0
       1.2s   526.00nm         5.8mb
BLW    26.73 193 P     18 45.20  -0.9
MRW    26.77 194 eP    18 44.80  -1.6
SNZO   26.85 194 P     18 47.00  -0.1
                 e     20 29.00
QRZ    26.97 198 P     18 47.40  -0.8
                 e     20 00.80
THZ    27.73 196 P     18 55.00   0.1
DSZ    28.02 198 eP    18 57.20  -0.3
                 e     20 07.90
PMO    28.11  93 iPc   18 58.40   0.0
       1.6s  2039.80nm         6.2mb
VAH    28.35  94 iPc   19 00.30  -0.2
       1.6s  1069.60nm         5.9mb
TPT    28.38  93 iPc   19 00.80   0.0
       1.6s  1228.90nm         6.0mb
RUV    28.59  94 iPc   19 02.50  -0.2
       1.2s   795.00nm         5.9mb
LTZ    28.85 196 P     19 03.40  -1.4
                 e     20 25.60
WVZ    29.56 198 eP    19 09.60  -1.3
MQZ    29.61 195 eP    19 10.00  -1.3
BRS    30.48 242 iP    19 18.00  -1.2
       0.9s    34.00nm         4.7mb
                 i     19 30.00
                 i     19 40.00
BWZ    31.14 198 P     19 22.80  -1.8
                 e     19 40.70
ODZ    31.39 197 P     19 27.40   0.7
LRCZ   31.79 198 P     19 29.40  -1.0
MSCZ   31.79 198 P     19 29.40  -0.9
MHZ    31.80 199 P     19 29.50  -0.9
LSCZ   31.82 198 P     19 29.90  -0.7
MSZ    31.89 201 P     19 31.80   0.7
ARMA   32.41 237 iPc   19 36.90   1.1
       1.0s   101.00nm         5.1mb
TUZ    32.51 197 P     19 36.60   0.3
       0.9s   347.00nm         5.7mb
SIZ    33.78 198 P     19 48.00   1.0
RIV    34.09 232 iPd   19 52.10   2.4
CTA    35.24 257 iPc   20 00.20   0.5
       1.5s   277.78nm         5.4mb
                 i     20 05.00
                 i     20 24.00
                 e     21 10.00
                 e     21 30.00
                 eS    25 05.00
                 iScP  29 41.00
PMG    35.44 275 ePc   20 01.79   0.4
                 e     21 11.16
CNB    36.05 230 iPc   20 07.60   1.2
       0.3s    63.00nm         5.4mb
                 e     25 22.30
LAT    36.30 280 eP    20 08.00  -0.5
CAN    36.33 230 eP    20 09.50   0.9
                 i     20 28.90
                 e     25 01.00
BWA    36.41 232 eP    20 07.50  -1.8
                 i     20 32.70
YYYY   37.40 280 eP    20 18.10   0.2
MDG    37.88 281 ePd   20 23.10   1.5
TOO    39.82 229 iPc   20 38.90   1.5
       0.9s   467.00nm         5.8mb
                 i     26 19.60
MHA    40.96  31 eP    20 46.28  -0.4
DHH    40.99  28 ePc   20 45.34  -1.5
STK    41.05 239 iPd   20 45.40  -2.0
       1.1s    37.50nm         4.6mb
                 eS    26 31.10
HKL    41.23  30 eP    20 48.10  -1.2
QIS    41.49 256 eP    20 51.50   0.4
ADE    44.15 235 eP    21 11.80  -0.4
WR2    46.43 257 iPd   21 29.30  -0.7
       0.3s    68.30nm         5.4mb
                 ePP   23 26.80
                 eScP  26 22.30
                 eS    27 47.30
WRA    46.45 257 P     21 29.60  -0.6
ASPA   46.80 252 iPc   21 33.30   0.3
       0.5s   318.10nm         5.9mb
                 i     21 35.30
                 epP   22 47.30 366kmX
                 iScP  26 46.30
                 iS    27 53.30
                 iScS  30 49.70
GUMO   47.40 305 (P)   21 35.75  -1.8
       1.8s   721.96nm         5.7mb
MTN    50.25 266 eP    21 58.00  -1.2
       1.0s   513.00nm         5.8mb
KNA    52.10 262 eP    22 13.20   0.4
FORT   52.32 243 eP    22 14.80   0.5
       0.5s    50.00nm         5.1mb
WARB   53.41 249 iPd   22 22.80   0.5
       0.4s    45.00nm         5.2mb
COOL   58.27 243 eP    22 50.50  -5.9X
MBL    59.92 254 eP    23 07.20  -0.4
       0.8s    81.00nm         5.2mb
MEEK   60.59 248 iPd   23 11.80  -0.3
KLB    61.16 242 eP    23 15.50  -0.3
       0.8s   106.00nm         5.4mb
BAL    62.09 243 iPd   23 21.80  -0.1
MUN    62.48 242 eP    23 24.50   0.1
       0.8s    76.00nm         5.3mb
MRWA   62.77 245 iPd   23 26.60   0.3
       0.8s    71.00nm         5.3mb
SBA    63.05 184 iPd   23 31.60   4.3X
       1.0s   218.00nm         5.7mb
KAKJ   65.30 323 P     23 40.90  -1.3
CHJJ   65.88 322 P     23 43.30  -2.7
IIDJ   66.15 321 P     23 46.30  -1.5
NIIJ   66.69 323 eP    23 49.50  -1.5
WKYJ   66.79 318 P     23 50.90  -0.8
ADK    66.94   0 eP    23 49.61  -2.6
       1.3s   119.10nm         5.5mb
MTMJ   66.95 322 P     23 51.20  -1.6
TSRJ   67.38 320 P     23 54.50  -0.8
TKSJ   67.64 317 P     23 56.30  -0.6
KUSJ   67.92 331 eP    23 56.70  -1.7
HOOJ   68.07 329 eP    23 58.70  -0.6
SMY    68.22 354 eP    23 57.00  -3.0X
       0.9s   307.90nm         6.0mb
YONJ   68.76 318 P     24 03.40  -0.3
CSY    69.01 204 iPc   24 16.50  11.7X
       1.1s   140.20nm
BAG    69.19 295 eP    24 05.00  -1.9
KKM    69.44 283 eP    24 12.00   3.6X
ASAJ   69.68 330 eP    24 09.20   0.1
SDN    71.79  10 eP    24 18.17  -3.1X
       1.1s   232.51nm         5.8mb
YSS    71.82 332 eP    24 20.00  -1.6
       1.0s    80.00nm         5.3mb
                 e     33 12.00
SAO    73.67  44 eP    24 32.50  -0.1
       1.6s    99.49nm         5.2mb
                 epP   25 53.96 361kmX
BCH    73.73  46 eP    24 33.51   0.4
BKS    73.78  42 eP    24 33.54   0.3
       1.1s  *******nm         8.2mb X
COE    73.79  43 eP    24 34.42   1.1
MHC    73.86  43 eP    24 34.34   0.5
       1.4s  *******nm         8.2mb X
PHAM   73.86  45 (P)   24 34.20   0.4
ARN    73.94  43 P     24 34.67   0.5
KMPM   74.07  39 eP    24 36.17   1.2
LEM    74.14 267 ePd   24 37.00   1.0
       1.0s    34.00nm         5.0mb
                 eS    33 44.00
HMR    74.22  42 eP    24 35.91   0.3
SPA    74.75 180 iPd   24 41.50   3.0
       1.0s    50.00nm         5.2mb
PLM    75.06  49 eP    24 40.65  -0.1
                 epP   26 00.65 352kmX
CMB    75.08  43 eP    24 40.50  -0.1
       1.1s  *******nm         8.0mb X
                 e     24 50.31
                 eS    33 51.31
                 esS   36 18.31
                 eSS   38 49.31
                 iLQ   44 20.31
ISA    75.09  46 eP    24 40.63  -0.2
       1.4s    59.20nm         5.1mb
                 epP   26 01.44 356kmX
PEC    75.11  48 eP    24 40.45  -0.4
       0.8s    15.69nm         4.8mb
WDC    75.14  40 eP    24 40.62  -0.2
       1.3s    93.34nm         5.4mb
LGPM   75.16  39 ePc   24 41.17   0.1
ORV    75.20  41 eP    24 41.34   0.1
       1.1s  *******nm         7.9mb X
                 iS    33 54.39
                 isS   36 17.39
                 eSS   38 46.39
                 eLQ   44 31.39
MIN    75.59  41 eP    24 43.20  -0.3
       1.0s  *******nm         8.0mb X
KDC    75.60  13 ePd   24 41.59  -1.4
       1.0s   104.63nm         5.5mb
YBH    75.71  39 eP    24 44.81   0.7
       1.1s  *******nm         8.4mb X
                 iS    34 01.52
                 isS   36 24.52
                 eSS   38 45.52
                 esSS  40 47.52
                 eLQ   44 42.52
MMPM   75.75  44 eP    24 45.46   0.8
MEMM   75.84  44 (P)   24 45.31   0.6
MTUM   75.92  44 eP    24 45.81   0.3
LBFM   75.99  40 eP    24 45.85   0.1
GSC    76.08  47 eP    24 46.05  -0.2
DBO    76.21  37 P     24 47.51   0.7
GLA    76.40  50 ePc   24 48.33   0.3
                 epP   26 08.63 353kmX
RNO    76.40  37 P     24 48.84   1.0
BONR   76.42  44 ePd   24 48.75   0.4
MDJ    76.88 324 eP    24 50.40   0.1
       1.0s    29.00nm         5.0mb
KVN    77.13  43 eP    24 52.33   0.2
TNP    77.21  44 ePc   24 52.43  -0.2
       1.1s    30.51nm         5.0mb
TPNV   77.29  46 eP    24 53.01   0.0
       0.8s    17.75nm         4.9mb
KMOR   77.59  35 P     24 54.90   0.6
SSOR   77.70  36 P     24 55.02   0.0
SVW    78.09  10 eP    24 54.53  -2.1
       0.9s   142.75nm         5.7mb
ONR    78.19  34 P     24 58.31   0.9
BMW    78.24  35 eP    24 57.76  -0.1
                 epP   26 19.57 358kmX
VBEM   78.32  37 P     24 58.67   0.3
SLKM   78.60  13 eP    24 57.81  -1.6
SHW    78.62  35 eP    24 59.93   0.0
CROR   78.63  37 P     25 00.22   0.3
CN2    78.83 321 eP    25 00.80  -0.1
       1.0s    25.00nm         4.9mb
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10d 11h

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                 epP   26 25.00 369kmX
                 eS    34 28.00
CP2    78.87  12 eP    24 59.43  -1.6
SNY    78.91 319 eP    25 00.80  -0.5
       1.2s    32.00nm          5.0mb
                 iS    34 30.00
ASR    78.96  36 P     25 02.17   0.5
STW    79.03  33 P     25 02.68   0.8
VGB    79.05  37 eP    25 02.30   0.2
TUC    79.09  52 ePc   25 04.61   1.9
       1.6s    79.58nm          5.2mb
                 epP   26 26.27 356kmX
GMW    79.13  34 eP    25 02.17  -0.3
LON    79.19  35 eP    25 02.30  -0.6
FMW    79.38  35 P     25 04.42   0.4
JBO    79.57  37 P     25 05.27   0.4
RMW    79.61  35 eP    25 04.84  -0.3
                 epP   26 28.68 366kmX
ARUT   79.66  46 eP    25 06.06   0.4
TTA    79.73  10 iPd   25 04.70  -0.7
       1.2s   148.32nm          5.6mb
                 epP   26 26.56 357kmX
MCW    79.79  33 eP    25 06.05   0.1
PMR    79.81  13 eP    25 04.28  -1.4
       1.4s   226.77nm          5.7mb
EBG    79.98  35 P     25 07.51   0.6
JCW    79.98  34 P     25 07.34   0.4
WAH2   80.46  36 P     25 09.85   0.5
TIA    80.53 312 eP    25 10.10   0.1
LNOR   80.70  37 P     25 10.95   0.2
WTV    80.77  35 P     25 11.26   0.2
TOA    80.94  14 eP    25 10.80  -0.9
BALM   81.00  16 eP    25 11.00  -1.1
SAW    81.08  35 P     25 12.85   0.2
DUG    81.23  44 eP    25 13.86   0.1
       1.5s    31.48nm          4.9mb
DPW    81.85  36 eP    25 16.39  -0.2
HVU    82.02  43 eP    25 17.78   0.0
SRU    82.30  46 eP    25 19.38   0.1
DAU    82.39  45 eP    25 19.20  -0.7
EMUT   82.41  45 eP    25 19.82  -0.1
NEW    82.67  36 eP    25 20.26  -0.5
       1.0s    24.38nm          4.9mb
BJI    82.92 315 eP    25 22.00  -0.1
       1.2s    21.00nm          4.8mb
     Z 20s      0.36um          4.7Msz
                 eS    35 12.00
PV09   83.00  47 ePc   25 23.53   0.5
PV10   83.01  47 ePc   25 23.04   0.0
ILT    83.02 359 iPc   25 22.00   0.1
       1.7s   315.00nm          5.8mb
FBA    83.03  12 ePd   25 20.61  -1.6
                 epP   26 45.39 368kmX
IMA    83.04   9 iPd   25 21.35  -1.0
       1.3s    84.35nm          5.3mb
                 epP   26 45.99 367kmX
PV08   83.38  47 eP    25 25.37   0.4
IPM    83.46 277 ePd   25 27.00   1.6
ALQ    83.47  51 ePc   25 25.75   0.5
       1.2s    34.19nm          5.0mb
                 epP   26 49.45 362kmX
LTX    83.51  57 ePc   25 26.36   0.9
LRM    84.17  39 ePc   25 28.60   0.0
                 e     28 46.50
TIY    84.56 311 Pc    25 32.00   1.5
     N 24s      2.10um
GYA    84.94 299 P     25 34.00   1.3
                 S     35 24.00
XAN    85.78 307 P     25 37.10   0.6
       0.8s    12.00nm          4.8mb
     Z 20s      0.48um          4.9Msz
GOL    86.16  47 eP    25 38.53   0.0
       1.0s     8.59nm          4.6mb
                 epP   27 02.32 360kmX
GLD    86.29  47 eP    25 40.17   1.2
       1.3s    16.52nm          4.7mb
HHC    86.44 314 Pc    25 41.20   1.6
       1.4s    49.00nm          5.2mb
     Z 24s      0.67um          5.0MszX
     N 20s      0.70um
MAW    86.71 199 iPd   25 43.40   3.1X
       1.0s   187.50nm          5.9mb
NST    87.41 287 eP    25 47.00   2.5
BTO    87.43 313 eP    25 45.50   1.2
     N 11s      0.31um
     E 11s      0.29um
YAK    87.69 338 eP    25 42.80  -2.1
       1.2s    65.00nm          5.4mb
     Z 16s      0.50um          5.0MszX
     N 16s      0.60um
KMI    87.86 297 Pd    25 49.00   2.1
       1.0s    40.00nm          5.2mb
RSSD   88.81  44 eP    25 50.63  -0.3
       1.0s    29.56nm          5.1mb
CD2    88.81 302 eP    25 52.50   1.5
                 S     36 09.80
INK    89.08  15 ePc   25 50.50  -0.8
       1.0s     5.00nm          4.3mb
CHTO   89.38 290 eP    25 55.70   1.9
MEO    89.44  54 iPc   25 54.00   0.2
CIT    89.80 325 eP    25 56.50   1.4
LZH    90.39 307 eP    25 59.50   1.2
       1.0s    27.00nm          5.1mb
     Z 15s      0.39um          5.0MszX
YKA    91.46  24 P     26 01.60  -0.8
       1.2s    11.00nm          4.7mb
TUL    91.96  53 iPd   26 06.60   1.3
BOD    92.04 330 eP    26 03.90  -1.2
       1.2s    18.00nm          4.9mb
UYO    92.50  55 iPd   26 08.00   0.2
TIK    94.02 345 iPd   26 12.00  -2.0
       1.4s    37.00nm          5.3mb
                 i     27 35.00
                 i     30 00.00
GTA    94.43 310 eP    26 17.50   0.7
       1.5s    14.00nm          4.9mb
SNA    94.48 178 iPd   26 29.10  12.8X
       0.9s    83.00nm
ZAK    95.25 321 eP    26 19.00  -1.0
       1.5s    13.00nm          4.8mb
MBC    97.57  12 ePc   26 30.10   0.1
       1.0s     4.00nm          4.7mb
GUN   103.17 296 Pdiff 27 00.00   3.3X
GRM   126.62 205 e(PKP)32 02.00   3.6X
NSD   129.05 351 ePKP  32 01.00  -0.9
       0.4s     1.10nm
SUR   129.57 200 ePKP  32 17.50  13.3X
       0.8s    61.00nm
SOB1  130.16 116 ePKP  32 06.80   1.2
FRS   130.25 206 ePKP  32 07.50   2.2X
NUR   132.23 346 iPKP  32 06.00  -2.1X
OBN   132.60 334 ePKP  32 10.00   1.0
       1.8s    84.00nm
NB2   133.98 354 PKP   32 13.80   2.3X
       1.0s     7.00nm
BUL   136.65 216 ePKP  32 09.00  -9.0X
                 i     32 18.50
                 i     35 02.00
MTD   137.39 223 iPKPd 32 05.00 -14.3X
                 i     32 07.10
WIN   139.86 200 ePKP  32 18.00  -5.8X
       0.7s    15.00nm
                 e     35 17.50
UZH   143.20 338 iPKPc 32 27.00  -1.6
       1.0s    75.00nm
CLL   143.23 349 iPKPc 32 25.30  -3.3X
       1.2s    21.00nm
                 i     33 17.90
                 e     33 27.00
WTS   143.31 356 e(PKP)32 26.00  -2.6X
       0.7s    22.60nm
SPC   143.41 341 ePKP  32 26.00  -3.2X
BRG   143.47 348 iPKP  32 26.50  -2.5X
       1.4s    24.00nm
MOX   144.10 351 ePKPc 32 28.70  -1.4
       1.6s    28.00nm
                 e     33 32.20
PRU   144.19 347 iPKPd 32 28.70  -1.6
       1.1s    72.00nm
MLR   144.27 332 iPKPd 32 45.50  14.8X
BNS   144.31 355 iPKPc 32 30.00  -0.4
BBTK  144.34 319 ePKP  32 30.00  -1.0
SGKT  144.35 321 ePKP  32 30.50  -0.6
HOF   144.38 350 iPKPc 32 29.90  -0.7
ENN   144.59 357 ePKP  32 30.50  -0.4
       1.0s    70.00nm
UCC   144.62 358 PKPc  32 30.20  -0.7
PSZ   144.63 340 iPKPd 32 30.80  -0.4
MEM   144.74 357 iPKPd 32 30.57  -0.6
       1.3s    30.00nm
CMP   144.85 333 ePKPd 32 30.00  -1.6
SNF   144.91 359 iPKPc 32 31.75   0.3
TNS   144.93 354 ePKPd 32 31.70   0.1
GRF   145.09 351 iPKPd 32 32.50   0.7
     Z 21s      0.10um          4.6Msz
KHC   145.20 348 iPKPd 32 32.40   0.3
       1.1s   102.60nm
                 e     32 42.00
                 e     33 08.00
SRO   145.22 342 iPKPd 32 32.40   0.3
ZST   145.23 343 iPKPd 32 33.00   0.9
                 e     47 52.80
DOU   145.32 358 PKP   32 32.90   0.8
WET   145.33 349 ePKP  32 32.80   0.5
       1.6s   197.00nm
GEC2  145.45 347 e(PKP)32 33.60   1.0
       0.9s    31.80nm
WLF   145.67 356 iPKPd 32 34.40   1.7
       1.4s    87.50nm
SOP   145.85 344 iPKP  32 33.90   0.8
FLN   146.55   4 ePKP  32 34.90   0.7
       0.9s    95.65nm
FUR   146.56 350 ePKP  32 37.10   2.8X
       1.1s   124.00nm
BHG   146.69 348 ePKP  32 37.70   3.2X
LDF   146.75   4 ePKP  32 35.50   1.0
       0.8s    34.65nm
WLS   146.83 355 PKP   32 37.22   2.5X
CDF   146.84 355 ePKP  32 36.20   1.4
       1.1s    90.10nm
GRR   146.90   5 ePKP  32 36.20   1.4
       0.6s    26.85nm
ECH   147.04 355 PKP   32 37.55   2.5X
LIBD  147.06 354 PKP   32 37.88   2.8X
VITF  147.13 356 PKP   32 37.88   2.7X
LPF   147.24   5 ePKP  32 37.30   2.0
       1.1s   184.60nm
FEL   147.30 354 PKP   32 38.32   2.7X
WATA  147.31 349 iPKPc 32 35.90   0.2
                 i     32 38.50
                 i     32 51.30
HAU   147.31 356 ePKP  32 37.50   2.0
       0.9s    54.20nm
SLE   147.35 353 ePKPd 32 38.40   2.8X
MOF   147.40 355 PKP   32 37.55   1.8
BSF   147.45 355 ePKP  32 37.70   1.9
       1.2s    80.95nm
SQTA  147.49 350 iPKPc 32 36.40   0.5
                 i     32 39.10
ZLA   147.64 353 ePKPd 32 39.30   3.2X
PTJ   147.64 343 ePKP  32 38.40   2.2X
ZAG   147.71 343 iPKP  32 40.00   3.9X
BBS   147.75 354 PKP   32 39.41   3.2X
LJU   147.89 345 ePKP  32 37.40   0.9
LJU   147.89 345 ePKP  32 43.00   6.5X
                 e     33 11.00
                 e(pP'b34 09.00
VOY   148.06 346 ePKP  32 36.60  -0.3
LOR   148.16 359 ePKP  32 39.80   2.9X
       1.5s    97.15nm
HYF   148.17   0 ePKP  32 40.20   3.3X
LLS   148.17 352 ePKPd 32 40.90   3.8X
OSS   148.18 351 ePKPd 32 41.30   4.2X
VBY   148.20 344 ePKP  32 37.90   0.9
SSF   148.37 359 ePKP  32 40.50   3.3X
       1.4s   117.20nm
TRI   148.40 345 ePKP  32 40.70   3.5X
                 e     34 14.50
LBF   148.44 359 ePKP  32 40.50   3.1X
       1.1s    57.15nm
VDL   148.48 351 ePKPd 32 41.80   4.2X
AVF   148.65 359 ePKP  32 40.70   3.1X
       1.2s    56.85nm
MFF   148.73   4 ePKP  32 41.10   3.4X
       1.1s    87.65nm
PLE   148.77 337 iPKPd 32 42.82   4.7X
SMF   148.79 359 ePKP  32 41.20   3.3X
       1.0s    59.00nm
BGF   148.88   0 ePKP  32 41.70   3.7X
       0.9s    43.25nm
TMA   148.94 352 ePKPd 32 42.70   4.4X
IVA   148.96 335 iPKPd 32 43.10   4.8X
VAY   149.05 331 iPKP  32 42.50   4.1X
SKO   149.05 333 ePKP  32 30.00  -8.4X
MMK   149.10 353 ePKPd 32 44.00   5.3X
DIX   149.13 354 ePKPd 32 44.10   5.3X
TCF   149.14   1 ePKP  32 42.20   3.8X
       1.1s    39.55nm
PVY   149.16 335 iPKPd 32 43.39   4.7X
LSF   149.17   2 ePKP  32 42.00   3.6X
       0.9s    67.80nm
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EMS   149.19 355 ePKPd 32 43.90   5.2X
MAF   149.22   1 ePKP  32 42.60   4.1X
       0.9s    75.35nm
NKY   149.36 337 iPKPd 32 43.69   4.7X
BRY   149.46 337 iPKPd 32 43.83   4.7X
ORX   149.51 353 PKP   32 43.92   4.8X
TTG   149.59 336 iPKPd 32 44.10   5.0X
RSL   149.59 355 PKP   32 44.93   5.6X
LPL   149.76 355 ePKP  32 44.80   5.2X
       1.2s    54.75nm
LPG   149.77 355 ePKP  32 44.90   5.1X
       1.1s    66.40nm
LSD   149.78 354 PKP   32 45.89   6.2X
HCY   149.87 337 iPKPd 32 44.44   4.8X
BDV   149.88 336 iPKPd 32 44.48   4.8X
ULC   149.98 335 iPKPd 32 44.75   4.9X
OHR   150.03 332 iPKP  32 40.30   0.3
       1.2s   180.00nm
                i      32 45.60
RSP   150.07 354 PKP   32 44.93   4.9X
RJF   150.11   2 ePKP  32 44.80   4.9X
       1.0s    51.00nm
SSB   150.13 358 PKP   32 46.25   6.3X
RRL   150.34 355 PKP   32 47.08   6.5X
BHB   150.37 354 PKP   32 45.11   4.8X
LFF   150.44   3 ePKP  32 45.50   5.1X
       0.8s    37.35nm
CAF   150.50   1 ePKP  32 45.80   5.3X
       1.0s    29.60nm
PCP   150.52 352 PKP   32 46.12   5.5X
LPO   150.72   3 ePKP  32 46.20   5.4X
       1.2s    64.25nm
PZZ   150.72 354 PKP   32 46.30   5.3X
ROB   150.85 353 PKP   32 46.99   5.9X
FIN   150.89 352 PKP   32 46.85   5.7X
ENR   150.96 353 PKP   32 46.12   4.8X
SAOF  151.19 353 PKP   32 45.91   4.3X
AUTN  151.19 353 PKP   32 45.02   3.2X
TOUF  151.19 354 PKP   32 46.99   5.2X
IMI   151.22 353 PKP   32 47.99   6.3X
AURF  151.31 353 PKP   32 46.56   4.7X
SBF   151.32 353 ePKP  32 47.20   5.4X
       0.9s    49.95nm
FRF   151.70 354 ePKP  32 48.20   5.9X
       0.9s    28.35nm
LRG   151.83 355 ePKP  32 48.70   6.2X
       0.9s    22.60nm
LMR   151.94 355 ePKP  32 48.80   6.2X
       1.3s    54.15nm
PGF   152.40 350 ePKP  32 49.70   6.2X
       1.6s   179.10nm
LKO   169.85 124 PKP   33 02.41   0.5
       1.0s    11.00nm
     S.D. = 1.1  on 248 of 342 obs.
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*  NOV  10, 1993  11h 29m 13.82± 0.83s
   37.782 N ±13.8km  140.159 E ±21.8km
   DEPTH =  10.0km  (geophysicist)
   4.6mb (  1 obs.)
 EASTERN HONSHU, JAPAN            (227)

MAT     1.99 232 iPc   29 47.90   0.0
                iS     30 13.50
MRRJ    4.69   8 eP    30 26.00  -0.3
HOOJ    5.18  27 eP    30 34.50   1.3
KUSJ    6.34  32 eP    30 48.80  -0.8
ASAJ    6.60  16 eP    30 53.40   0.1
INK    54.18  27 eP    38 40.50  -0.6
WR2    57.68 186 eP    39 06.90   0.1
       0.7s     4.20nm          4.6mb
     S.D. = 0.8  on   7 of   7 obs.
-----------------------------------
?  NOV  10, 1993  11h 45m 49.75± 3.67s
   40.855 N ±22.4km   28.167 E ±19.4km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
     ML 2.7 (ISK).

BNT     0.53 201 iPg   46 00.70   0.2
                eSg    46 07.70
EDC     0.56 205 iPg   46 00.50  -0.6
                iSg    46 07.50
MFT     0.68 265 ePg   46 03.00  -0.2
DST     1.30 164 ePn   46 13.60  -0.2
     S.D. = 0.5  on   4 of   4 obs.
-----------------------------------
*  NOV  10, 1993  11h 58m 18.28± 1.32s
   31.837 S ± 6.9km   72.340 W ±13.0km
   DEPTH =  10.0km  (geophysicist)
   4.9mb (  1 obs.)
 OFF COAST OF CENTRAL CHILE       (134)
     MD 4.5 (SAN).

ROCH    1.60 136 iP    58 46.18  -0.6
                iS     59 07.62
JACH    1.70 120 iPd   58 47.42  -0.9
                iS     59 08.94
LCCH    1.76 159 eP    58 49.05   0.1
PEL     1.91 133 eP    58 50.77  -0.5
                iS     59 16.64
TACH    2.16 147 eP    58 55.51   0.6
FCH     2.28 131 eP    58 56.30  -0.6
                iS     59 27.25
PCH     2.35 140 iP    58 57.82   0.2
CACH    2.70 148 iP    59 03.99   1.3
RTCB    3.04  84 ePc   59 07.80   0.4
                S      59 48.00
MDZ     3.13 110 iP    59 11.20   2.5X
                i      59 14.20
                iS     59 47.70
RTCV    3.24  91 e(P)  59 11.00   0.8
                S      59 53.00
RTLL    3.34  82 e(P)  59 12.00   0.3
                S      59 52.30
CFA     3.50  87 ePd   59 13.60  -0.3
                S      59 55.00
RFA     4.37 133 ePd   59 26.10  -0.2
                S      00 35.50
TCA     6.63  88 eP    59 54.50  -3.8X
                (S)    01 08.00
FSA     7.97  46 e(P)  00 17.50   0.6
SLA     9.30  42 ePd   00 40.00   4.5X
LKO    75.82  69 P     10 04.57  -2.2
       1.0s    11.00nm          4.9mb
GBA   146.90 116 PKP   18 02.00   0.9
     S.D. = 0.9  on  16 of  19 obs.
-----------------------------------
%  NOV  10, 1993  12h 17m 34.93± 0.88s
   39.110 N ± 7.2km   27.591 E ± 9.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
     ML 2.8 (ISK).

IZM     0.76 200 ePg   17 49.70  -0.1
                eSg    18 02.40
DST     0.94  58 ePn   17 53.10   0.1
EZN     1.21 306 iPn   17 57.60   0.1
EDC     1.25  10 ePn   17 58.50   0.3
BNT     1.27  11 ePn   17 58.00  -0.5
     S.D. = 0.4  on   5 of   5 obs.
-----------------------------------
?  NOV  10, 1993  12h 32m 37.72± 0.95s
   39.119 N ± 8.1km   27.613 E ± 9.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
     ML 2.7 (ISK).

IZM     0.77 201 ePg   32 52.70  -0.1
                eSg    33 04.70
DST     0.92  58 ePn   32 55.60   0.2
EZN     1.22 306 iPn   33 00.60   0.2
EDC     1.24   9 ePn   33 00.50  -0.3
     S.D. = 0.4  on   4 of   4 obs.
-----------------------------------
*  NOV  10, 1993  12h 58m 18.83± 2.84s
   17.569 N ±16.0km   93.838 W ±14.7km
   DEPTH = 175.3 ± 24.4 km
   4.2mb (  8 obs.)
 CHIAPAS, MEXICO                  ( 61)
     Felt at Mexico City.

LTX    14.77 324 eP    01 40.13  -0.4
UYO    16.54 358 iPc   02 03.00   0.9
MIAR   16.91   1 eP    02 07.03   0.4
       0.5s    12.88nm          4.6mb
WMOK   17.66 346 eP    02 14.05  -1.3
       0.7s     9.48nm          4.3mb
MEO    17.66 347 iPd   02 14.80  -0.6
TUL    18.35 355 iPc   02 22.10  -0.6
ACO    19.62 347 iPc   02 36.10   0.2
ALQ    20.64 329 eP    02 46.38   0.1
       0.9s     6.31nm          4.1mb
TUC    21.20 317 eP    02 53.03   1.2
       0.8s     4.41nm          4.0mb
GOL    24.22 338 eP    03 21.46   0.4
       0.8s     5.42nm          4.2mb
PV08   24.61 331 eP    03 24.96   0.2
PV10   24.63 330 eP    03 24.37  -0.5
PV09   24.77 330 eP    03 26.53   0.3
RSSD   27.83 344 eP    03 54.45   0.5
       0.5s     1.84nm          4.1mb
LRM    32.15 335 eP    04 32.20   0.2
YKA    47.17 347 eP    06 33.90  -1.2
       0.7s     3.20nm          4.0mb
INK    56.53 343 eP    07 44.00  -0.7
PPD    57.29 132 (P)   07 50.00  -0.6
MBC    60.18 353 eP    08 10.50   0.7
LKO    85.52  81 P     10 39.74   0.9
       0.8s     8.00nm          4.6mb
     S.D. = 0.8  on  20 of  20 obs.
-----------------------------------
&  NOV  10, 1993  13h 17m 06.29s
   34.627 N          116.627 W
   DEPTH =   8.1km
 SOUTHERN CALIFORNIA              ( 43)
     <PAS-P>. ML 2.8 (PAS), 2.7 (GS).

GSC     0.69 348 ePd   17 19.05  -1.1
PEC     0.86 211 iPd   17 21.81  -1.2
                eS     17 34.04
SSK     0.97 245 eP    17 24.06  -1.0
                eS     17 37.68
PLM     1.29 189 ePd   17 29.41  -1.0
                eS     17 47.56
ISA     1.83 305 ePn   17 36.15  -2.2
ABL     2.15 277 (Pn)  17 42.59  -0.5
GLA     2.17 136 ePn   17 43.10  -0.2
                eS     18 15.58
TPNV    2.34   7 ePn   17 44.48  -1.3
BCH     2.90 282 (Pn)  17 51.89  -1.7
BONR    3.59 338 (Pn)  18 03.78   0.2
                ePg    18 13.98
       10 obs. associated
-----------------------------------
%  NOV  10, 1993  13h 22m 04.18± 1.05s
   44.550 N ±10.6km   8.438 E ± 7.0km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                   (545)
     ML 2.5 (GEN).

PCP     0.08  96 P     22 06.57  -0.1
                S      22 08.45
FIN     0.38 206 P     22 12.34   0.4
                S      22 18.24
ROB     0.48 238 P     22 13.43  -0.5
                S      22 19.75
ENR     0.80 246 P     22 19.75   0.0
BHB     0.89 290 P     22 21.44   0.2
     S.D. = 0.5  on   5 of   5 obs.
-----------------------------------
   NOV  10, 1993  13h 34m 02.91± 0.70s
   30.094 S ± 4.8km   70.332 W ± 9.0km
   DEPTH =  30.9 ±  5.6 km
 CHILE-ARGENTINA BORDER REGION    (127)
     MD 4.5 (SAN).

RTCB    1.91 137 iPc   34 34.20   0.1
RTLL    2.02 128 iPc   34 35.50  -0.1
ZON     2.03 136 iPc   34 36.00   0.3
                eS     34 58.00
CFA     2.35 130 ePc   34 39.90  -0.3
JACH    2.59 185 iP+   34 45.56   1.9
                iS     35 16.44
ROCH    2.93 191 iPd   34 49.01   0.4
                iS     35 23.66
MDZ     3.06 156 iP    34 50.10  -0.2
                iS     35 14.80
PEL     3.06 186 iP+   34 50.83   0.6
                iS     35 25.81
IHA     3.13 201 eP    34 51.20   0.0
                eS     35 22.60
FCH     3.22 179 iP+   34 53.96   1.1
                iS     35 31.15
SAN     3.36 185 iP+   34 54.66   0.1
PCH     3.52 182 iP+   34 56.73  -0.2
                iS     35 37.49
LCCH    3.53 197 iP+   34 56.43  -0.5
                iS     35 37.26
TACH    3.59 188 iP+   34 56.98  -0.8
                iS     35 38.04
LNV     3.96 193 iP+   35 01.23  -1.7
```

10d 13h

```
CACH     4.02 183 iPd    35 03.44  -0.6
RFA      4.92 162 iPd    35 13.20  -3.6X
                  S      36 03.30
TCA      5.10 106 iPc    35 14.50  -4.8X
SLA      6.86  40 iPc    35 43.00  -1.1
MOCB     9.77  27 P      36 21.40  -3.4X
CCH     13.22  18 (P)    37 13.00   1.6
CNCB    13.39  10 P      37 12.50  -1.4
LPB     13.65   9 eP     37 10.00  -7.2X
LPAZ    13.89   9 P      37 21.40   0.9
     S.D. = 1.0  on  20 of  24 obs.
-----------------------------------
?  NOV  10, 1993  14h 28m 04.99± 2.18s
   44.640 N ±14.6km     8.483 E ±13.8km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                    (545)
      ML 2.0 (GEN).

PCP      0.11 156 P      28 07.87   0.0
                  S      28 10.20
FIN      0.47 205 P      28 14.23  -0.4
ROB      0.56 232 P      28 16.70   0.3
BHB      0.89 283 P      28 21.97  -0.1
     S.D. = 0.5  on   4 of   4 obs.
-----------------------------------
?  NOV  10, 1993  14h 35m 21.21± 2.71s
   27.818 N ±22.4km  128.327 E ±25.3km
   DEPTH =  33.0km  (normal)
   4.2mb (  3 obs.)
 RYUKYU ISLANDS                    (238)

SSE      7.03 299 ePn    37 04.50   0.1
     Z  12s      0.50um
     N  10s      1.10um
                  Sn     38 27.50
BJI     15.80 324 eP     39 05.50   2.7
CN2     16.12 352 eP     39 10.30   3.5X
        1.0s      7.00nm          3.7mb
TIY     16.59 310 eP     39 11.60  -1.4
     Z  16s      0.48um
     N  15s      0.71um
MDJ     16.80   3 eP     39 14.50  -0.9
XAN     17.76 295 eP     39 26.10  -1.4
                  pP     39 31.00
CD2     21.62 284 eP     40 10.40  -0.2
LZH     22.31 298 eP     40 17.50   0.0
        1.4s     18.00nm          4.3mb
GTA     26.30 303 eP     40 52.00  -3.7X
        1.0s      9.00nm          4.3mb
                  pP     40 57.50  20kmX
KKN     37.93 280 P      42 38.20   0.5
DMN     38.12 280 P      42 39.60   0.3
GKN     38.45 281 P      42 42.20   0.2
     S.D. = 1.3  on  10 of  12 obs.
-----------------------------------
   NOV  10, 1993  14h 54m 24.93± 0.16s
   44.430 N ± 1.9km  114.845 W ± 1.7km
   DEPTH =  10.0km  (geophysicist)
   3.6mb (  2 obs.)
 WESTERN IDAHO                      ( 33)
      ML 4.3 (GS), 4.6 (BUT). Felt at
      Challis, Stanley and Sunbeam.

PCID     0.52 175 iP     54 35.55   0.0
                  iS     54 43.38
CPI      1.19 242 iPc    54 48.54   1.5
LVRI     1.26 295 iPd    54 49.76   1.3
SPVI     1.39 277 iPd    54 51.17   0.8
MCMT     1.48  74 iPnc   54 51.62  -0.2
BDID     1.50 285 eP     54 53.60   1.5
TPOR     1.70 291 iP     54 56.04   1.0
LIME     1.72 271 eP     54 55.98   0.7
WPI      1.79 231 iPc    54 56.90   0.9
BMO      1.81 284 iP     54 57.37   0.9
LTMT     1.96  86 ePnc   54 58.88   0.0
HBMT     2.09  49 iPnc   54 59.94  -0.8
BGMT     2.15  67 ePnc   55 00.90  -0.7
LRM      2.19  50 iPnc   55 01.38  -0.8
BUT      2.26  45 iPnc   55 02.40  -0.7
                  iPgc   55 06.60
                  iSg    55 34.50
TPMT     2.29  81 ePn    55 03.89   0.3
LGOR     2.38 290 iP     55 05.64   0.9
PTI      2.38 130 (P)    55 05.46   0.7
EBI      2.57 340 iPn    55 07.84   0.4
LNOR     2.83 302 Pd     55 12.31   1.3
HVU      3.05 150 eP     55 14.75   0.5
                  eS     56 01.06
SXM      3.09  55 ePnc   55 13.45  -1.4
HRY      3.11  42 ePnc   55 13.51  -1.6
ET3      3.59 308 P      55 22.07   0.3
JBO      3.69 288 P      55 23.90   0.6
WIW      3.71 304 P      55 24.25   0.7
PATW     3.77 294 P      55 24.99   0.7
MJ2      3.82 305 P      55 25.68   0.6
PRW      3.85 299 P      55 25.80   0.3
RSW      3.87 302 P      55 26.37   0.5
GBL      3.90 305 P      55 26.78   0.6
WRD      3.94 312 P      55 26.93   0.2
LOCW     3.95 307 P      55 27.57   0.7
CRF      3.99 309 P      55 27.61   0.3
OD2      4.01 319 P      55 27.53  -0.1
WAH2     4.05 307 P      55 28.65   0.4
MDW      4.09 304 P      55 29.18   0.4
VTHM     4.14 282 P      55 29.71   0.2
NEW      4.15 338 eP     55 29.13  -0.5
DPW      4.16 327 eP     55 29.41  -0.4
BRVW     4.16 301 P      55 30.42   0.4
BVW      4.26 306 P      55 31.61   0.3
VGB      4.35 287 eP     55 32.27  -0.3
GMO      4.38 272 P      55 33.41   0.3
MXC      4.39 301 P      55 33.79   0.6
CROR     4.41 279 P      55 33.74   0.2
EPH      4.42 313 P      55 34.30   0.7
DUG      4.49 160 ePnd   55 34.68   0.0
GL2      4.49 292 P      55 34.51  -0.2
YAKW     4.51 300 P      55 35.98   1.1
SAW      4.56 318 P      55 35.51   0.0
EBG      4.72 304 P      55 38.41   0.6
NAC      4.79 301 P      55 39.53   0.7
VFP      4.79 283 P      55 39.23   0.2
DAU      4.81 145 eP     55 41.67   2.2X
VBEM     4.84 280 P      55 39.95   0.2
TBM      4.87 306 P      55 40.18   0.2
BPO      4.90 275 P      55 39.99  -0.6
DHW2     4.93 318 P      55 40.36  -0.5
CBSW     4.94 315 P      55 40.53  -0.5
VLL      4.96 284 P      55 41.63   0.3
ETW      4.97 312 P      55 40.55  -0.9
GULW     5.00 290 P      55 41.73  -0.2
TDH      5.01 282 P      55 42.47   0.4
APM      5.01 287 P      55 42.08   0.0
ASR      5.06 292 P      55 42.68  -0.1
GLK      5.21 297 P      55 44.71  -0.2
WPW      5.22 298 P      55 45.25   0.2
NLW      5.27 316 P      55 45.25  -0.6
GT2      5.33 280 P      55 46.98   0.4
FMW      5.40 300 P      55 47.75   0.1
RCS      5.41 299 P      55 48.07   0.2
LON      5.41 298 ePnd   55 47.07  -0.6
MTMW     5.44 290 P      55 47.52  -0.6
SSOR     5.45 277 P      55 48.72   0.4
REMR     5.46 298 P      55 48.56   0.1
YEL      5.48 292 P      55 48.42  -0.3
EMUT     5.50 146 ePn    55 50.13   1.0
SHW      5.50 291 ePn    55 48.20  -0.9
TDL      5.54 293 P      55 49.18  -0.3
FL2      5.58 291 P      55 49.32  -0.8
LVP      5.59 290 P      55 49.49  -0.7
RVC      5.59 299 P      55 50.34   0.1
GSM      5.59 302 P      55 49.86  -0.4
ERK      5.60 292 P      55 49.46  -1.0
LMW      5.69 296 P      55 51.20  -0.4
RMW      5.72 304 eP     55 51.15  -0.9
GHW      5.82 299 P      55 53.48   0.2
HTW      5.88 307 P      55 53.69  -0.5
KVN      5.90 205 ePn    55 54.06  -0.6
LBFM     6.02 242 (P)    55 54.22  -2.2
SPW      6.03 304 P      55 56.65   0.4
JCW      6.18 310 P      55 58.05  -0.4
TKO      6.19 282 P      55 59.29   0.7
SRU      6.22 147 eP     56 00.96   1.8
BMW      6.24 292 (P)    55 57.20  -2.1
KMOR     6.24 284 P      56 00.57   1.2
LMEM     6.31 234 (P)    55 59.68  -0.8
CPW      6.34 297 P      56 00.48  -0.3
GMW      6.35 302 ePn    55 59.85  -1.0
YBH      6.36 248 eP     56 00.96  -0.1
                  iPgc   56 26.71
CMW      6.42 311 P      56 01.83  -0.1
MIN      6.46 233 ePc    56 05.35   2.8X
                  iSg    56 26.35
HDW      6.56 302 P      56 03.17  -0.7
OHW      6.59 309 P      56 03.85  -0.3
TNP      6.59 197 eP     56 01.59  -2.8X
BLN      6.68 305 P      56 04.98  -0.5
ARUT     6.72 170 (P)    56 06.10  -0.1
LGPM     6.85 242 (P)    56 08.02   0.0
WDC      6.86 239 (Pn)   56 05.97  -2.1
ORV      6.95 228 eP     56 07.65  -1.6
MCW      6.95 310 eP     56 08.63  -0.7
BONR     6.97 203 (P)    56 08.60  -1.3
PV09     7.31 142 eP     56 14.46  -0.2
MEMM     7.43 206 (P)    56 16.23   0.3
PV10     7.46 142 eP     56 18.31   1.7
PV08     7.47 139 eP     56 17.37   0.5
MMPM     7.51 206 (P)    56 16.44  -1.0
MTUM     7.61 203 (Pn)   56 17.50  -1.2
CMB      7.63 215 (Pn)   56 16.39  -2.4X
RSSD     7.77  89 eP     56 23.01   2.1
GOL      8.48 121 eP     56 30.72  -0.2
GLD      8.55 120 (Pn)   56 33.13   1.4
GSC      9.24 190 (P)    56 39.43  -1.8
TUC     12.51 164 (P)    57 25.53  -0.3
ULM     14.10  59 eP     58 01.50  14.7X
WMOK    15.69 123 (P)    58 07.79   0.2
        0.8s      3.11nm          3.6mb
LTX     17.49 146 (P)    58 27.94  -2.6X
YKA     18.10   0 eP     58 34.20  -3.5X
        0.7s      3.00nm          3.5mb
     S.D. = 0.8  on 122 of 129 obs.
-----------------------------------
?  NOV  10, 1993  15h 17m 26.81± 4.73s
   28.714 N ±12.7km   34.677 E ±33.0km
   DEPTH =  10.0km  (geophysicist)
 EGYPT                             (553)

BADA     0.34 124 iP     17 33.67  -0.2
SRFA     0.50  64 iPc    17 36.47  -0.4
HQL      0.64  30 iPc    17 39.67   0.0
AYN      1.17  82 iPd    17 49.33   0.7
                  iS     18 05.00
HLW      3.13 292 eP     19 06.50  49.4X
     S.D. = 0.8  on   4 of   5 obs.
-----------------------------------
?  NOV  10, 1993  15h 30m 57.25± 4.22s
   10.850 N ±16.9km   62.224 W ±38.6km
   DEPTH =  33.0km  (normal)
 NEAR COAST OF VENEZUELA           ( 97)
      MD 3.1 (TRN).

TCE      0.49 108 eP     31 08.61   0.9
                  eS     31 19.91
TRN      0.83 104 eP     31 12.48   0.0
                  eS     31 25.40
TPP      0.93 125 eP     31 13.96   0.1
                  eS     31 27.79
TBH      1.19 108 eP     31 16.78  -0.9
                  eS     31 30.70
GRW      1.41  23 eP     31 21.05   0.1
                  eS     31 37.82
TPR      1.46  77 eP     31 21.43  -0.1
                  eS     31 42.17
     S.D. = 0.8  on   6 of   6 obs.
-----------------------------------
*  NOV  10, 1993  15h 35m 37.07± 1.20s
   28.491 N ±11.4km  128.465 E ±15.1km
   DEPTH =  33.0km  (normal)
   4.2mb (  7 obs.)
 RYUKYU ISLANDS                    (238)

SSE      6.84 294 eP     37 18.20   0.6
                  S      38 41.00
BJI     15.34 322 eP     39 15.00   2.3
CN2     15.47 352 eP     39 21.60   7.2X
        1.0s      8.40nm          3.9mb
                  epP    39 26.00
MDJ     16.12   3 eP     39 23.00   0.3
TIY     16.26 309 eP     39 30.00   5.4X
     Z  16s      0.48um
     N  13s      0.73um
XAN     17.59 293 eP     39 40.00  -1.3
        0.8s      3.40nm          3.5mb
                  pP     39 47.00
HHC     18.54 316 eP     39 52.40  -0.7
        1.2s     13.00nm          4.0mb
BTO     19.37 313 eP     40 02.00  -0.9
     N  12s      0.29um
     E  12s      0.32um
GYA     19.45 269 P      40 04.20   0.2
        1.0s     11.00nm          4.1mb
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LZH    22.11 296 eP    40 30.00  -1.4
       1.4s    26.00nm          4.5mb
                pP    40 42.50  51kmX
KMI    23.19 268 eP    40 44.00   1.8
GTA    26.04 302 eP    41 07.70  -1.5
       1.0s    12.00nm          4.4mb
GUN    37.39 280 P     42 49.60   0.4
KKN    37.94 280 P     42 53.80   0.2
DMN    38.12 279 P     42 55.40   0.2
GKN    38.45 280 P     42 57.80  -0.1
WR2    48.49 173 eP    44 18.50  -0.2
       0.7s     3.00nm          4.4mb
     S.D. = 1.2  on  15 of  17 obs.
-----------------------------------
*  NOV  10, 1993  16h 32m 57.09± 0.62s
   28.709 N ±10.4km  128.575 E ± 8.2km
   DEPTH =  33.0km  (normal)
   4.4mb ( 17 obs.)
 RYUKYU ISLANDS                   (238)

SSE     6.84 292 eP    34 35.00  -2.7
     N  12s     1.60um
     E  12s     2.00um
NJ2     9.03 294 eP    35 06.00  -2.2
     Z  10s     0.64um
     N  11s     2.37um
     E  10s     0.81um
                eS    36 50.00
MAT    11.26  44 eP    35 40.00   1.2
SNY    13.71 344 eP    36 20.00   8.7X
     Z  14s     1.06um
     E  10s     0.77um
BJI    15.23 321 eP    36 36.00   4.7X
       1.5s    14.00nm          4.0mb
     Z  18s     0.35um          4.9Msz
                pP    36 42.00
CN2    15.27 351 eP    36 38.40   6.6X
       1.0s    17.00nm          4.3mb
     Z  10s     1.40um          4.1Msz
                epP   36 46.00
MDJ    15.90   3 eP    36 45.00   5.1X
TIY    16.20 308 eP    36 46.00   2.1
     Z  15s     1.18um
     N  14s     1.37um
XAN    17.60 293 eP    37 01.00  -0.4
       1.0s     8.90nm          3.8mb
     Z  12s     0.50um          4.3Msz
     N  10s     0.86um
     E  10s     0.43um
HHC    18.45 315 Pc    37 13.50   1.5
       1.2s    49.00nm          4.6mb
     Z  19s     0.61um          4.1MszX
     E  12s     0.55um
BTO    19.29 313 P     37 22.00  -0.1
       0.9s    12.00nm          4.2mb
     N  12s     0.53um
     E  12s     0.53um
                PP    37 45.00
GYA    19.55 269 iPc   37 25.00  -0.2
       1.2s    27.00nm          4.4mb
LZH    22.10 296 eP    37 51.50   0.2
       1.5s    40.00nm          4.6mb
     Z  12s     0.41um          4.1MszX
     E  12s     0.31um
KMI    23.30 267 Pd    38 05.00   1.8
       1.4s    60.00nm          4.9mb
                sP    38 18.50
GTA    26.01 302 eP    38 29.00   0.1
       1.0s    34.00nm          4.9mb
     Z  14s     0.64um          4.3MszX
     N  13s     0.71um
                pP    38 38.00  32kmX
GUN    37.45 279 P     40 10.40   0.7
KKN    38.00 279 P     40 14.60   0.5
       1.0s    48.00nm          5.3mb
DMN    38.18 279 P     40 16.20   0.5
GKN    38.51 280 P     40 18.60   0.2
       0.8s    35.00nm          5.2mb
WRA    48.69 173 P     41 40.00  -0.2
       0.8s     3.00nm          4.4mb
WR2    48.69 173 eP    41 39.20  -1.1
       0.8s     8.70nm          4.8mb
QUE    53.09 288 eP    42 15.60   1.7
WARB   54.61 182 eP    42 25.50   0.8
INK    66.50  24 eP    43 44.50  -0.8
MBC    67.36  14 eP    43 50.00  -0.6
       1.0s     2.00nm          4.2mb
RES    73.07  11 eP    44 18.50  -6.7X
       0.8s     2.00nm          4.2mb
YKA    76.16  25 eP    44 42.20  -1.0
       1.1s     4.20nm          4.4mb
NB2    77.23 334 P     44 46.60  -2.7
       0.9s     3.30nm          4.4mb
LRM    87.48  38 eP    45 43.50   0.6
LPAZ  160.26  55 PKP   52 57.70   2.2X
LPB   160.44  55 ePKP  52 58.00   2.6X
CNCB  160.71  56 ePKP  52 53.00  -2.8X
     S.D. = 1.4  on  24 of  32 obs.
-----------------------------------
*  NOV  10, 1993  17h 09m 50.36± 0.71s
   15.486 S ±11.8km  168.176 E ±18.2km
   DEPTH =  33.0km  (normal)
   4.7mb (  2 obs.)  4.6Msz (  1 obs.)
 VANUATU ISLANDS                  (186)

BKM     2.17 178 iP    10 26.00   1.1
                iS    10 57.50
DZM     6.75 194 iPc   11 28.90  -0.9
                iS    12 44.80
CTA    21.36 254 eP    14 40.00   2.8
WR2    32.48 257 eP    16 18.10  -2.1X
       0.9s     4.60nm          4.4mb
ASPA   33.24 250 iPc   16 25.50  -1.3
       0.8s    21.00nm          5.1mb
     Z  23s     0.10um          3.5MszX
COOL   45.53 242 eP    18 08.00  -0.9
MRWA   49.78 245 eP    18 41.20  -0.9
FLN   145.53 347 ePKP  29 25.70  -1.1
       0.7s     8.05nm
     Z  23s     0.22um          4.9MszX
LDF   145.61 346 ePKP  29 25.90  -1.0
LOR   145.74 341 ePKP  29 26.90  -0.3
     Z  22s     0.13um          4.6Msz
GRR   145.97 347 ePKP  29 27.70   0.2
SSF   146.03 341 ePKP  29 27.20  -0.5
       1.0s    13.80nm
LPL   146.24 336 ePKP  29 29.60   1.2
       0.7s     3.10nm
LPG   146.24 336 ePKP  29 29.10   0.6
       0.5s     1.70nm
LPF   146.35 347 ePKP  29 29.10   1.0
       1.3s    51.25nm
     S.D. = 1.3  on  14 of  15 obs.
-----------------------------------
   NOV  10, 1993  17h 13m 03.64± 0.40s
   28.685 N ± 6.2km  128.607 E ± 4.7km
   DEPTH =  38.1km  (  3 depth phases)
   4.5mb ( 25 obs.)  4.8Msz (  2 obs.)
 RYUKYU ISLANDS                   (238)

KAGJ    3.18  38 eP    13 53.10   0.6
                eS    14 37.50
KUMJ    4.29  26 P     14 11.20   3.0X
SHNJ    5.83  21 eP    14 37.00   7.1X
SSE     6.87 292 eP    14 40.70  -3.9X
     Z  12s     1.80um
     N  12s     3.80um
TKSJ    7.04  40 P     14 46.40  -0.5
YONJ    7.68  31 P     14 56.20   0.3
WKYJ    8.13  45 P     15 03.70   1.6
NJ2     9.07 294 eP    15 11.00  -4.1X
     Z  10s     1.28um          4.9MszX
     N  10s     4.42um
                S     16 55.50
TSRJ    9.26  41 P     15 17.20  -0.5
MAT    11.26  43 eP    15 45.00  -0.1
CHJJ   11.44  47 eP    15 46.80  -0.7
SNY    13.74 344 Pc    16 16.00  -2.0
       1.2s    29.00nm          5.0mb
     Z  14s     2.36um          6.9MszX
     E  10s     1.70um
VLA    14.65  10 iPc   16 33.00   3.1X
       1.6s    42.00nm          4.6mb
     E  12s     1.00um
GZH    14.82 251 eP    16 35.00   2.7X
     N  10s     1.26um
     E  11s     1.08um
                eS    19 18.00
OFUJ   14.99  43 eP    16 34.60   0.2
BJI    15.27 321 eP    16 40.00   2.0
       1.5s    25.00nm          4.2mb
     Z  16s     0.88um          4.2MszX
     N  14s     0.66um
                ePP   16 53.00
AOMJ   15.28  36 eP    16 40.30   2.1
MDJ    15.92   3 eP    16 49.50   3.1X
     E  10s     0.80um
TIY    16.24 308 eP    16 54.00   3.4X
     Z  15s     2.36um
     N  14s     2.14um
XAN    17.63 293 eP    17 07.20  -0.9
       1.5s    43.00nm          4.4mb
     Z  12s     0.94um          3.8MszX
     N  10s     1.50um
     E  10s     0.87um
                pP    17 14.00
HHC    18.49 315 Pc    17 20.00   1.3
       1.4s    44.00nm          4.4mb
     Z  19s     1.23um          4.4MszX
     N  14s     0.52um
     E  15s     0.73um
                sP    17 30.00
                PP    17 37.50
BTO    19.32 313 P     17 28.00  -0.6
       1.0s    15.00nm          4.2mb
     N  12s     1.94um
     E  12s     1.01um
                pP    17 33.00  19kmX
GYA    19.58 269 iPc   17 31.60   0.0
       1.2s    33.00nm          4.5mb
     N  10s     1.39um
     E  10s     0.77um
                pP    17 42.00  46km
                sP    17 48.00
CD2    21.67 282 eP    17 51.60  -1.4
       0.8s    42.00nm          4.9mb
     Z  12s     1.75um          4.7MszX
     N  11s     2.31um
LZH    22.14 296 eP    17 56.00  -1.8
       1.6s    33.00nm          4.5mb
     Z  12s     0.86um          4.4MszX
     N  12s     1.57um
                pP    18 09.50  57kmX
KMI    23.32 267 Pc    18 10.50   1.0
       1.5s   100.00nm          5.1mb
     Z  10s     1.30um          4.7MszX
     N  10s     1.00um
                pP    18 19.00  30km
                sP    18 24.50
GTA    26.04 302 Pd    18 34.80  -0.5
       1.5s    71.00nm          5.0mb
     Z  14s     1.39um          4.6MszX
     N  13s     1.79um
                pP    18 45.00  38km
                sP    18 49.00
ZAK    28.92 326 eP    19 00.50  -0.6
       1.6s    17.00nm          4.5mb
IRK    29.68 329 eP    19 07.50  -0.4
       1.3s    29.00nm          4.9mb
                e     19 19.50
GUN    37.48 279 P     20 16.60   0.6
KKN    38.03 279 P     20 20.80   0.4
DMN    38.22 279 P     20 22.60   0.6
GKN    38.54 280 P     20 24.80   0.2
TIK    42.99   0 eP    21 08.00   7.5X
       2.0s    21.00nm          4.5mb
                e     21 22.00
KSH    44.35 298 P     21 13.90   1.8
       1.0s    10.00nm          4.6mb
     Z  20s     0.62um          4.5Msz
     N  10s     1.01um
     E  10s     0.89um
NDI    44.79 283 eP    21 15.50  -0.1
FRU    45.29 303 eP    21 20.00   0.5
NRI    46.92 342 eP    21 28.50  -3.4X
       3.0s    94.00nm          5.2mb
     Z  20s     1.60um          5.0Msz
     E  20s     1.60um
WRA    48.66 173 P     21 46.20   0.2
       1.0s     3.50nm          4.3mb
WR2    48.67 173 eP    21 45.50  -0.6
       0.7s     7.00nm          4.8mb
GBA    49.67 264 P     22 03.00   9.1X
CTA    51.40 159 eP    22 08.00   1.0
ASPA   52.30 174 eP    22 12.90  -0.8
       1.2s     4.40nm          4.3mb
QUE    53.12 288 eP    22 21.70   1.5
SVE    54.55 321 ePd   22 31.00   1.0
     Z  13s     0.50um          4.8MszX
     N  13s     0.50um
     E  13s     0.50um
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10d 17h

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FBA     61.73  29 (P)   23 18.81  -1.4
        1.2s     6.62nm          4.6mb
INK     66.51  24 eP    23 51.00  -0.3
        1.0s     2.00nm          4.1mb
MBC     67.37  14 eP    23 56.00  -0.7
        1.0s     3.00nm          4.3mb
RES     73.08  11 eP    24 30.50  -0.8
        1.0s     2.00nm          4.0mb
YKA     76.17  25 eP    24 48.60  -0.6
        1.1s     7.60nm          4.6mb
NB2     77.27 334 P     24 53.40  -2.0
        1.0s     4.90nm          4.5mb
LRM     87.48  38 eP    25 49.20   0.3
LPAZ   160.25  55 PKP   33 03.70   2.4X
LPB    160.43  55 (PKP) 33 09.00   7.7X
CNCB   160.70  56 PKP   33 08.00   6.3X
     S.D. = 1.1  on  41 of  55 obs.
-------------------------------------
   NOV  10, 1993  17h 21m 11.85± 0.49s
   47.424 N ± 5.1km    9.068 E ± 4.4km
   DEPTH =  10.0km  (geophysicist)
 GERMANY                          (543)
      ML 3.0 (GRF), 2.9 (LDG), 2.8
      (FUR), 2.7 (STR), 2.7 (VIE).

ZLA      0.46 277 ePc   21 21.10  -0.2
SLE      0.52 312 iPd   21 22.10  -0.3
LLS      0.56 185 ePc   21 22.40  -0.9
FEL      0.84 303 ePn   21 28.00  -0.2
VDL      0.98 164 ePd   21 29.70  -0.9
OSS      1.04 135 ePc   21 30.80  -0.8
BBS      1.06 273 Pg    21 32.25   0.4
                  Sg    21 47.08
TMA      1.33 186 ePd   21 36.30  -0.1
MOF      1.38 289 Pn    21 36.80  -0.4
                  Sg    21 56.76
OGA      1.45 112 iPgc  21 42.00   3.7X
WLS      1.52 311 Pn    21 39.84   0.7
                  Pg    21 40.95
                  Sg    22 00.81
LOMF     1.52 268 Pg    21 40.86   1.6
                  Sg    22 00.73
CDF      1.56 310 Pn    21 39.60  -0.1
                  Pg    21 40.90
                  Sg    22 01.10
MMK      1.57 209 ePd   21 40.80   0.8
BSF      1.59 286 Pn    21 39.30  -0.9
                  Pg    21 40.90
                  Sn    21 59.00
                  Sg    22 02.70
FUR      1.66  63 ePn   21 42.70   1.5
WTTA     1.75  94 iPgc  21 44.20   1.5
                  iSg   22 07.80
DIX      1.76 221 ePc   21 44.80   1.9
HAU      1.93 289 Pn    21 44.10  -0.9
                  Pg    21 47.90
                  Sg    22 11.70
ORX      1.94 203 P     21 48.65   3.3X
LSD      2.37 215 P     21 55.93   4.3X
LPL      2.50 221 Pg    21 58.00   4.6X
LPG      2.51 221 Pg    21 58.00   4.4X
                  Sg    22 30.00
RSP      2.60 210 P     21 58.54   3.8X
GRF      2.68  31 ePg   22 02.40   6.5X
                  eSn   22 24.10
                  eSg   22 35.40
KBA      2.93  95 iPgc  22 05.70   6.2X
                  iSg   22 42.20
PZZ      3.23 206 P     22 40.60  36.9X
GEC2     3.41  64 Pn    22 04.40  -1.9
                  Pg    22 14.20
                  Sn    22 43.80
                  Sg    22 57.50
KHC      3.46  59 Pn    22 11.40   4.5X
                  Pg    22 15.00
                  e     22 40.00
                  eSg   23 00.00
LBF      3.50 265 Pg    22 17.50  10.1X
                  Sg    23 00.30
LOR      3.55 269 Pg    22 18.00   9.9X
                  Sg    23 01.40
SMF      3.66 260 Pn    22 08.70  -1.0
                  Pg    22 20.10
                  Sg    23 05.20
     S.D. = 1.1  on  20 of  32 obs.
-------------------------------------
*  NOV  10, 1993  17h 33m 39.82± 3.79s
   58.037 N ±29.0km  142.587 W ±15.1km
   DEPTH =  10.0km  (geophysicist)
 GULF OF ALASKA                   ( 15)
      ML 2.7 (AEIC).

YAH      2.37  10 eP    34 19.79   0.2
                  eS    34 45.05
HMT      2.46 340 eP    34 20.90   0.2
RAGM     2.59 336 eP    34 22.71   0.2
TGL      2.73 357 eP    34 24.44  -0.2
                  eS    34 52.78
CVA      2.99 329 eP    34 28.66   0.5
CTGM     3.01  12 eP    34 28.36  -0.1
BALM     3.01   2 eP    34 28.49   0.0
                  eS    35 00.78
HIN      3.11 321 eP    34 30.18   0.4
MTU      3.27 309 eP    34 30.49  -1.6
GLB      3.47 350 eP    34 34.71  -0.3
KLU      3.85 335 eP    34 40.16  -0.3
                  eS    35 21.66
PWL      4.08 316 eP    34 43.20  -0.3
SEW      4.10 303 eP    34 43.62  -0.2
KNK      4.50 321 eP    34 49.71   0.1
                  eS    35 38.80
SLKM     4.63 306 eP    34 51.34  -0.2
CNPM     4.74 292 eP    34 53.92   0.9
SML      4.76 325 eP    34 54.25   0.9
     S.D. = 0.6  on  17 of  17 obs.
-------------------------------------
?  NOV  10, 1993  17h 35m 30.04± 0.68s
    2.903 N ±10.2km  128.665 E ±18.0km
   DEPTH =  33.0km  (normal)
   4.9mb (  6 obs.)
 HALMAHERA, INDONESIA             (267)

KNA     18.53 180 eP    39 49.60   3.5X
WR2     23.39 166 eP    40 37.40   0.5
        0.2s    14.30nm         5.1mb
                  e     41 42.30
ASPA    26.90 169 iPd   41 09.50  -0.6
        0.7s     8.80nm         4.5mb
                  i     41 57.40
WARB    28.98 184 eP    41 29.20   0.3
CHTO    33.10 301 eP    42 06.20   0.8
MAT     34.61  14 iPc   42 18.00  -0.2
        0.9s    13.45nm         4.9mb
STK     36.71 161 iPc   42 31.80  -4.2X
        0.3s     2.40nm         4.6mb
LZH     40.20 328 eP    43 06.50   1.1
        1.5s    40.00nm         5.0mb
GUN     47.77 306 P     44 06.60  -0.2
        0.6s    22.00nm         5.4mb
KKN     48.21 305 P     44 09.60  -0.4
DMN     48.28 305 P     44 10.20  -0.4
GKN     48.82 305 P     44 13.80  -0.8
     S.D. = 0.7  on  10 of  12 obs.
-------------------------------------
   NOV  10, 1993  19h 13m 17.95± 0.37s
   44.787 N ± 2.4km    6.726 E ± 3.8km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                           (538)
      ML 2.6 (LDG), 2.6 (GEN).

RRL      0.14  17 Pc    13 21.93   0.5
                  S     13 24.61
BHB      0.39  82 Pc    13 26.48   0.6
                  S     13 32.85
PZZ      0.39 136 P     13 25.54  -0.4
                  S     13 31.53
RSP      0.52  46 Pc    13 29.13   0.5
                  S     13 36.92
STV      0.69 142 P     13 31.50  -0.2
                  S     13 40.87
LPG      0.71   1 Pg    13 32.00  -0.2
                  Sg    13 42.40
LPL      0.73   0 Pg    13 32.40   0.0
                  Sg    13 43.30
LSD      0.74  24 Pc    13 32.47  -0.1
                  S     13 42.41
ENR      0.75 138 P     13 32.54  -0.1
                  S     13 42.52
ROB      0.95 121 P     13 36.04  -0.1
                  S     13 49.11
SBF      1.05 151 Pg    13 38.70   0.8
                  Sg    13 53.60
FIN      1.21 118 P     13 39.96  -0.5
                  S     13 55.04
IMI      1.21 136 P     13 39.66  -0.9
                  S     13 54.17
ORX      1.23  46 P     13 40.29  -0.5
                  S     13 55.92
FRF      1.23 183 Pg    13 41.10   0.3
                  Sg    13 56.30
PCP      1.32 100 P     13 42.69   0.3
LRG      1.36 191 Pg    13 43.10   0.2
                  Sg    14 00.10
LMR      1.46 186 Pg    13 44.60   0.3
                  Sg    14 03.40
SMF      2.75 314 Pg    14 08.30   5.4X
                  Sg    14 41.40
BGF      3.25 304 Pn    14 09.50  -0.4
     S.D. = 0.5  on  19 of  20 obs.
-------------------------------------
?  NOV  10, 1993  19h 54m 28.56± 4.45s
   37.626 S ±13.1km  179.537 E ±48.9km
   DEPTH =  97.1 ± 21.7 km
 OFF E. COAST OF N. ISLAND, N.Z. (160)

HBZ      0.98 271 eP    54 47.50  -1.3
PUZ      1.11 246 P     54 50.40   0.1
                  eS    55 09.20
NOZ      1.54 230 P     54 56.80   1.2
URZ      2.02 251 P     55 03.00   1.2
                  eS    55 29.70
MAHZ     2.03 219 eP    55 02.90   1.0
PAHZ     2.31 237 eP    55 07.10   1.4
KUZ      3.17 285 P     55 16.50  -0.9
TEHZ     3.18 221 eP    55 16.00  -1.5
WAHZ     3.24 229 P     55 18.60   0.3
PGZ      3.92 219 P     55 26.60  -1.0
MNG      4.34 225 eP    55 32.40  -1.1
                  S     56 25.20
DZM     19.18 320 iPd   58 47.90   0.6
                  iS    59 23.50
     S.D. = 1.3  on  12 of  12 obs.
-------------------------------------
?  NOV  10, 1993  20h 06m 39.05± 1.47s
   51.185 N ±18.6km   15.800 E ± 8.7km
   DEPTH =  10.0km  (geophysicist)
 POLAND                           (548)

BRG      1.21 256 iPg   07 01.30  -0.3
                  iSg   07 21.30
PRU      1.44 214 Pg    07 06.30   1.1
                  eSn   07 24.20
                  Sg    07 30.50
CLL      1.76 275 e(Pg) 07 10.00   0.2
                  eSg   07 36.00
KHC      2.50 216 ePn   07 19.50  -1.0
                  ePg   07 25.50
                  eSn   07 54.30
                  eSg   08 03.00
MOX      2.70 260 ePg   07 29.10   5.8X
                  iSg   08 09.30
OJC      2.72 109 eP    07 23.50  -0.1
                  eS    07 57.70
     S.D. = 1.1  on   5 of   6 obs.
-------------------------------------
*  NOV  10, 1993  20h 10m 43.01± 0.71s
   29.051 S ±16.5km   61.840 E ±11.4km
   DEPTH =  10.0km  (geophysicist)
   5.1mb ( 12 obs.)  4.8Msz (  2 obs.)
 SOUTHWEST INDIAN RIDGE           (428)

WIN     40.61 269 iPd   18 25.00   0.0
        0.5s    29.00nm         5.2mb
QUE     59.11   5 eP    20 47.90   1.7
CHTO    59.56  42 eP    20 49.10  -0.2
DMN     60.59  24 P     20 56.20  -0.3
GKN     60.78  23 P     20 57.00  -0.7
        1.0s    48.00nm         5.6mb
KKN     60.81  24 P     20 57.40  -0.5
        1.0s    26.00nm         5.3mb
GUN     61.14  24 P     21 00.20  -0.1
ASPA    63.89 104 eP    21 19.40   0.9
        1.0s     7.70nm         4.8mb
WR2     65.72 100 eP    21 29.00  -1.3
        1.2s     2.60nm         4.3mb
KMI     66.67  40 eP    21 36.50   0.0
KSH     69.42  12 eP    21 53.20   0.0
      Z 20s     0.37um         4.6Msz
CD2     71.76  37 Pc    22 07.00  -0.5
GTA     76.75  29 eP    22 37.00   0.7
        1.5s    21.00nm         5.0mb
```

```
                 pP    22 43.50  21kmX
XAN    76.94  39 eP    22 37.00  -0.4
       0.6s     3.20nm          4.6mb
                 pP    22 44.60  24kmX
BTO    82.45  35 eP    23 08.00   1.1
HHC    83.42  36 eP    23 12.00   0.1
       1.2s    13.00nm          5.0mb
OBN    86.57 346 iPd   23 27.50   0.3
       1.0s    32.00nm          5.5mb
     Z  20s     0.60um          5.0Msz
     E  28s     0.40um
                  i    23 35.00
                 ePP   27 00.00
                  e    27 28.00
                 ePSP  28 21.00
                 ePPP  29 30.00
                  e    31 31.00
                  e    32 08.00
                 eS    34 16.00
                 ePS   35 26.00
                 eSS   40 26.00
                 LQ    03 00.00
ZST    86.73 332 eP    23 26.50  -1.6
GEC2   88.66 331 ePKP  23 35.90  -1.6
       1.6s     4.74nm          4.5mb
                  e    23 42.20
FUR    89.23 329 eP    23 40.70   0.6
       1.1s    47.00nm          5.7mb
BRG    90.10 332 iP    23 44.60   0.5
       1.2s    19.00nm          5.2mb
INK   139.67   9 ePKP  30 14.00   2.1X
YKA   146.47 357 ePKP  30 25.10   1.2
       1.0s     7.10nm
ULM   152.94 328 ePKP  30 43.50   9.4X
     S.D. = 0.9  on  22 of  24 obs.
-----------------------------------
*  NOV  10, 1993  20h 26m 37.25± 0.84s
   28.658 N ±10.7km  128.465 E ± 9.9km
   DEPTH =  23.7km  (  3 depth phases)
   4.4mb ( 15 obs.)  4.3Msz (  1 obs.)
 RYUKYU ISLANDS                    (238)

KAGJ    3.28  39 eP    27 27.40  -0.9
KUMJ    4.37  27 eP    27 45.80   2.0
SSE     6.77 293 eP    28 16.00  -1.7
     Z  16s     1.30um
     N  16s     4.00um
     E  16s     4.20um
                 sP    28 22.00
NJ2     8.96 295 eP    28 45.50  -2.8
     Z  10s     0.96um
     N  10s     3.31um
                  S    30 29.50
MAT    11.36  44 (P)   29 28.00   6.8X
SNY    13.73 344 Pc    29 54.00   1.3
     Z  14s     2.47um
     N  11s     1.44um
                 eS    32 30.00
BJI    15.21 321 eP    30 16.00   3.9X
       1.2s    11.00nm          4.0mb
     Z  18s     0.83um          3.2Msz
     N  14s     0.57um
CN2    15.31 352 eP    30 19.80   6.5X
       1.3s    47.00nm          4.6mb
     Z  13s     1.67um          3.7Msz
     N  11s     1.28um
     E  11s     1.12um
                epP    30 26.00
MDJ    15.95   3 eP    30 27.70   6.0X
       1.5s    45.00nm          4.4mb
     E  12s     0.94um
TIY    16.16 308 eP    30 30.00   5.6X
     Z  16s     1.90um          4.6Msz
     E  14s     1.64um
                  S    33 25.00
XAN    17.53 293 eP    30 42.00   0.3
       1.0s     8.90nm          3.8mb
     Z  10s     0.96um          3.9Msz
     N  12s     1.54um
     E  10s     0.87um
                 pP    30 48.00
HHC    18.42 316 Pc    30 54.20   1.4
       1.2s    49.00nm          4.6mb
     Z  18s     1.21um          6.9MszX
     N  14s     0.52um
     E  13s     0.57um
BTO    19.25 313 eP    31 02.00  -0.9
       0.8s    12.00nm          4.2mb
     N  11s     0.79um
     E  12s     0.53um
                 pP    31 07.00  19km
GYA    19.45 269 P     31 06.40   1.1
       1.0s    27.00nm          4.5mb
     Z  14s     0.59um          3.9MszX
CD2    21.55 282 Pd    31 27.30   0.3
       0.6s    34.00nm          5.0mb
     Z  11s     1.22um          4.6MszX
     N  12s     1.79um
LZH    22.04 296 eP    31 32.00   0.0
       1.4s    28.00nm          4.5mb
     Z  12s     0.76um          4.3MszX
     N  12s     1.15um
                 pP    31 42.50  40kmX
KMI    23.20 267 Pd    31 45.50   1.9
       1.2s    50.00nm          4.9mb
     Z  10s     1.30um          4.7MszX
     N  10s     0.80um
                 pP    31 53.50  29km
GTA    25.95 302 Pd    32 08.80  -0.9
       1.0s    22.00nm          4.7mb
     Z  14s     1.51um          4.7MszX
     N  14s     1.49um
                 pP    32 15.50  24km
                 sP    32 18.00
CHTO   28.68 257 eP    32 35.00   0.4
GUN    37.36 279 P     33 50.20  -0.2
KKN    37.91 279 P     33 55.20   0.4
DMN    38.10 279 P     33 57.00   0.6
GKN    38.42 280 P     33 59.20   0.2
KSH    44.25 298 eP    34 48.50   1.8
     Z  20s     0.37um          4.3Msz
WRA    48.65 173 P     35 21.40   0.0
       0.8s     3.00nm          4.4mb
WR2    48.66 173 eP    35 20.90  -0.5
       0.8s     7.00nm          4.7mb
QUE    53.01 288 eP    35 56.40   1.6
NB2    77.24 334 P     38 28.00  -2.8
       0.8s     1.70nm          4.1mb
GEC2   83.40 323 eP    39 01.20  -2.7
       1.5s     2.70nm          4.2mb
                  e    39 14.00
     S.D. = 1.5  on  24 of  29 obs.
-----------------------------------
&  NOV  10, 1993  20h 28m 31.26s
   63.906 N          148.868 W
   DEPTH =   0.0km  (geophysicist)
 CENTRAL ALASKA                  (  1)
     <AEIC>. ML 2.7 (AEIC), 3.0
     (PMR).

MCK     0.18 190 eP    28 34.60  -0.2
BWN     0.37 316 eP    28 37.34  -1.4
                 eS    28 44.42
RND     0.50 179 eP    28 40.87  -0.4
WRH     0.66  31 eP    28 44.01  -0.5
NEA     0.68 352 eP    28 44.08  -0.8
TRF     0.78 235 eP    28 45.72  -1.1
CCB     0.88  31 eP    28 47.97  -0.8
HDA     0.98  58 eP    28 50.19  -0.5
                 eS    29 03.53
KTH     0.98 250 eP    28 49.34  -1.5
MDM     1.09  14 eP    28 51.95  -0.8
FBA     1.10  25 eP    28 51.59  -1.3
                 eS    29 07.78
ILB     1.22  44 eP    28 54.13  -0.8
                 eS    29 11.54
IL1     1.22  44 eP    28 54.41  -0.6
GLM     1.26  30 eP    28 55.11  -0.5
                 eS    29 12.87
DDM     1.34  94 eP    28 57.19   0.3
MLY     1.39 325 eP    28 56.83  -1.0
DJE     1.41  84 eP    28 58.17   0.0
CUT     1.64 204 eP    29 01.56   0.2
                 eS    29 23.33
PAX     1.79 120 eP    29 04.75   1.0
SDG     2.05 131 eP    29 08.90   1.5
SML     2.12 173 eP    29 08.57   0.1
GHO     2.14 181 eP    29 08.82   0.0
DOT     2.15  95 eP    29 09.21   0.3
TOA     2.19 145 P     29 10.60   1.1
SCM     2.20 161 eP    29 09.24  -0.4
SKT     2.28 213 eP    29 10.79   0.0
PWA     2.31 192 P     29 11.00  -0.2
PLRM    2.33 183 eP    29 11.05  -0.3
PMR     2.33 183 eP    29 09.15  -2.2
                 eS    29 41.47
KNK     2.51 175 eP    29 14.37   0.3
SUA     2.60 200 eP    29 16.17   0.8
PMS     2.69 187 P     29 17.30   0.7
KLU     2.78 149 eP    29 18.26   0.3
CFI     2.78 169 eP    29 19.14   1.3
NCG     2.93 213 eP    29 20.08  -0.1
IM3     2.94 317 eP    29 17.99  -2.2
IMA     2.98 319 eP    29 19.08  -1.8
CGLM    2.98 210 eP    29 20.84   0.0
CRP     3.05 211 eP    29 19.97  -1.9
PWL     3.07 175 eP    29 23.13   1.2
SPU     3.11 210 eP    29 22.02  -0.5
BGL     3.11 213 eP    29 21.54  -1.1
CKL     3.16 212 eP    29 23.59   0.3
BKG     3.25 210 eP    29 24.33  -0.3
BC3     3.29 102 eP    29 24.97  -0.1
FID     3.36 160 eP    29 28.09   2.0
TTA     3.36 256 eP    29 26.19   0.0
SLKM    3.47 191 (P)   29 26.24  -1.4
BM3     3.94  25 eP    29 32.50  -1.9
SVW     4.20 231 (P)   29 37.93  -0.1
       50 obs. associated
-----------------------------------
   NOV  10, 1993  21h 00m 01.10± 0.40s
   51.571 N ± 3.3km   16.078 E ± 4.0km
   DEPTH =  10.0km  (geophysicist)
 POLAND                            (548)
      ML 4.5 (VIE), 4.5 (GRF).

KSP     0.74 169 iPd   00 15.40  -0.2
                 iS    00 24.20
BRG     1.51 243 iPn   00 29.70   1.5
                 iPg   00 31.30
                 iSg   00 51.30
PRU     1.86 212 Pn    00 33.90   0.6
                  e    00 35.50
BRN     1.97 297 eP    00 37.00   2.2
RAC     2.00 137 iPn   00 35.70   0.4
       0.8s     1.30nm
                 iPg+  00 39.30
                 iSg   01 03.50
                  i    01 07.20
OJC     2.72 118 iP    00 46.10   0.5
                 iPg   00 51.70
                 iS    01 14.60
                 iSg   01 28.10
KHC     2.92 214 Pn    00 48.60   0.1
                 Pg    00 55.00
                 eSn   01 14.00
                 eSg   01 30.00
                  e    01 32.00
HOF     2.94 246 iPnc  00 50.00   1.3
MOX     2.96 254 iPn   00 50.40   1.4
                 iPg   00 58.40
                 iSg   01 38.30
GEC2    3.13 210 Pn    00 51.90   0.5
                 Pg    00 58.90
                 Sg    01 38.20
WET     3.18 221 iPnd  00 52.90   0.8
VKA     3.31 177 iPg   01 03.30   9.3X
                 iSn   01 30.40
                 iSg   01 46.60
ZST     3.44 169 ePn   00 56.60   0.8
                 iPg   01 06.80
                 i(Sn) 01 34.20
                 i(Sb) 01 42.10
                 i(Sg) 01 48.30
                 Lg    02 07.00
SPC     3.58 130 ePn   00 57.40  -0.5
                 i(Pg) 01 09.70
                 i(Sn) 01 45.50
                 i(Sg) 01 52.90
                 Lg    02 04.00
BSD     3.61 349 iP    00 59.30   1.1
                  i    01 18.00
                  i    01 37.00
GRF     3.62 241 ePnd  00 59.60   1.2
                 ePg   01 11.70
                 e(Sn) 01 43.40
                 eSg   01 57.10
KMR     3.74 200 iPn-  01 01.10   1.0
                 iSg   01 59.80
SOP     3.90 175 eP    01 02.40   0.0
SRO     4.03 158 ePn   01 12.90   8.8X
                  i    01 18.70
```

10d 21h

```
                 i      01 32.60
                 e      02 10.00
                 Lg     02 39.00
BHG     4.38 210 iPnc   01 09.80    0.7
PSZ     4.41 144 ePnc   01 09.80    0.1
FUR     4.61 224 ePn    01 12.90    0.5
COP     4.66 334 eP     01 13.50    0.5
                 i      01 39.00
                 i      02 12.20
TNS     5.01 257 iPnc   01 19.30    1.1
                 ePgc   01 41.50
                 eSn    02 18.20
                 iSb    02 41.20
                 iSg    02 50.70
UZD     5.25 161 e(P)   01 22.50    1.1
BNS     5.62 267 ePnd   01 27.70    1.0
      1.1s   181.00nm          5.7mb
                 iSg    03 02.50
LJU     5.63 191 ePn    01 26.80    0.0
                 eSn    02 46.00
ABH     5.68 256 ePn    01 27.70    0.2
PTJ     5.68 181 iPn    01 27.90    0.3
VOY     5.73 195 ePn    01 28.70    0.4
                 e      01 49.50
                 e      02 01.70
                 eSg    02 07.70
OGA     5.75 217 eP     01 29.60    0.9
ZAG     5.76 181 e(Pn)  01 28.00   -0.6
WTS     5.77 278 ePn    01 30.00    1.3
      0.7s    15.10nm          4.8mb
                 e      03 25.00
RUP     6.03 255 ePn    01 32.30   -0.2
VBY     6.10 185 iPnc   01 33.30   -0.1
                 i(Sg)  03 21.00
SLE     6.22 235 ePc    01 42.30    7.1X
OSS     6.25 221 ePc    01 35.70    0.0
RIY     6.33 191 e(Pn)  01 36.80    0.1
MUD     6.37 323 iP     01 36.80   -0.4
                 i      02 13.00
                 i      02 34.00
FEL     6.40 238 ePn    01 35.90   -2.0
ENN     6.44 267 ePn    01 38.50    0.3
      0.6s     6.30nm          4.7mb
                 e      03 27.00
CDF     6.50 244 Pn     01 37.50   -1.6
                 Sg     03 14.10
WLF     6.60 257 iPd    01 42.30    1.9
      1.3s     8.40nm          4.6mb
                 i      03 35.14
LLS     6.61 227 ePd    01 41.50    0.7
VDL     6.69 223 ePc    01 42.90    1.0
BSF     7.09 242 Pn     01 45.50   -1.9
                 Sg     03 32.50
HAU     7.24 244 Pn     01 48.20   -1.3
                 Pg     02 10.80
                 Sg     03 36.60
TMA     7.24 224 ePd    01 52.30    2.6
DOU     7.42 263 iP     01 53.50    1.5
UPP     8.35   5 iPn    02 06.20    1.2
                 i      03 37.60
PCP     8.65 219 P      02 09.30    0.1
LPL     8.66 229 Pn     02 08.90   -0.7
LPG     8.67 229 Pn     02 08.90   -0.8
HFS     8.69 352 eP     02 08.70   -1.0
      0.4s     5.20nm          5.2mb X
LOR     9.05 246 Pn     02 12.30   -2.4
                 Sg     04 33.00
FIN     9.06 219 P      02 14.89    0.1
RRL     9.09 227 P      02 15.39    0.0
ROB     9.12 220 P      02 14.84   -0.9
PZZ     9.27 224 P      02 16.90   -1.0
ENR     9.36 222 P      02 17.45   -1.6
SSF     9.37 246 Pn     02 16.50   -2.5
IMI     9.44 219 P      02 18.41   -1.6
SBF     9.66 220 Pn     02 21.60   -1.5
NB2     9.87 346 P      02 23.50   -2.5
      0.5s     2.60nm          4.9mb
FRF    10.23 222 Pn     02 29.90   -1.0
LRG    10.44 223 Pn     02 32.80   -0.9
LMR    10.47 222 Pn     02 32.80   -1.4
KAF    11.94  24 eP     02 53.10   -1.0
      0.4s     4.10nm          5.1mb X
EKA    12.06 296 Pc     02 54.90   -0.9
      1.3s    10.10nm          4.9mb X
OBN    12.75  66 eP     02 57.00   -8.0X
      1.1s    35.00nm          5.5mb
                 e      04 01.50
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      S.D. = 1.2  on  66 of  70 obs.
-----------------------------------
&  NOV  10, 1993  21h 27m 12.85s
   34.181 N          116.440 W
   DEPTH =   4.3km
 SOUTHERN CALIFORNIA              ( 43)
      <PAS-P>. ML 2.6 (PAS). Felt.

PEC      0.66 244 eP     27 25.23   -0.9
PLM      0.90 203 iPc    27 29.49   -1.2
                  eS     27 41.30
SSK      1.04 272 eP     27 31.96   -1.2
                  eS     27 46.04
GSC      1.16 345 eP     27 33.86   -1.2
GLA      1.75 129 ePn    27 41.64   -2.6
ISA      2.23 312 ePn    27 50.58   -0.6
TPNV     2.77   3 ePn    27 56.11   -2.8
BONR     4.06 339 (Pn)   28 14.63   -2.7
                  ePg    28 27.86
         8 obs. associated
-----------------------------------
   NOV  10, 1993  21h 45m 01.62± 0.50s
   22.583 S ± 4.2km  179.169 E ± 6.1km
   DEPTH = 613.4 ±  6.6 km
   5.2mb ( 27 obs.)
 SOUTH OF FIJI ISLANDS            (171)

VUN      4.60 352 eP     46 32.20   -0.5
MBU      5.60 356 eP     46 40.60    0.0
BKM     11.37 294 iPc    47 35.50    1.3
DZM     11.79 270 iPc    47 42.90    4.5X
OUZ     13.50 200 P      47 59.60    4.9X
KUZ     14.43 191 P      48 07.60    3.9X
HBZ     14.98 183 P      48 07.90   -1.2
PUZ     15.46 183 P      48 13.20   -0.6
WLZ     15.54 191 P      48 18.50    4.0X
URZ     15.73 186 P      48 15.00   -1.3
TAZ     15.77 188 P      48 18.80    2.2
PATZ    15.94 188 P      48 20.90    2.4
NOZ     16.01 183 eP     48 18.90   -0.1
MOZ     16.31 192 P      48 25.20    3.3X
NGZ     16.82 190 P      48 28.10    1.2
WAHZ    17.23 187 eP     48 30.60   -0.1
BSZ     17.54 191 eP     48 34.60    1.1
PGZ     18.15 187 P      48 39.20    0.1
MNG     18.25 189 P      48 39.20   -0.9
KIW     18.58 190 eP     48 42.30   -0.8
DIW     18.70 193 eP     48 44.20   -0.1
CAW     18.79 190 eP     48 44.80   -0.3
AMW     18.89 188 eP     48 45.70   -0.3
MRW     18.97 190 eP     48 46.60   -0.2
BLW     18.99 189 P      48 46.60   -0.3
QRZ     19.03 196 P      48 48.90    1.6
MOW     19.07 189 P      48 47.70    0.0
THZ     19.84 194 P      48 54.90    0.1
                  S      51 59.50
LTZ     20.95 194 P      49 03.20   -1.6
WVZ     21.61 197 eP     49 10.70    0.0
MQZ     21.75 193 P      49 10.90   -1.1
BWZ     23.19 197 P      49 23.70   -1.2
LRCZ    23.83 197 P      49 30.10   -0.7
MMCZ    23.83 198 P      49 30.30   -0.4
MSCZ    23.83 197 eP     49 30.20   -0.5
MHZ     23.84 198 P      49 30.10   -0.7
LSCZ    23.87 197 eP     49 30.30   -0.7
CMCZ    23.92 197 P      49 31.30   -0.2
TLC     24.02 198 P      49 32.30   -0.1
BRS     24.38 253 iPd    49 37.00    1.4
      0.9s    38.00nm          5.0mb
TUZ     24.57 196 P      49 37.70    0.6
ARMA    25.81 247 iPd    49 50.00    1.7
      0.2s    30.00nm          5.6mb
SIZ     25.82 198 eP     49 48.80    0.8
CNB     28.88 237 iPd    50 17.00    2.2
      0.4s    81.00nm          5.7mb
CAN     29.17 237 iPd    50 18.80    1.6
CTA     30.73 268 iPd    50 31.00    0.5
      0.9s   180.67nm          5.7mb
                  e      53 09.00
                  eS     54 53.00
TOO     32.55 235 iPd    50 47.50    1.8
      0.9s   243.00nm          5.8mb
PMG     33.35 288 iPd    50 52.00   -0.5
      0.9s   134.45nm          5.6mb
STK     34.53 246 iPd    51 00.20   -2.0
      0.4s    47.30nm          5.5mb
QIS     36.78 266 iPd    51 20.60   -0.1
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ADE     37.31 242 iPd    51 26.00    1.0
ASPA    41.51 259 iPd    51 58.90    0.1
      0.7s   182.20nm          5.7mb
                 iPcP   53 41.20
                 eScP   56 36.00
                 iS     57 29.80
                 eScS   00 52.60
WR2     41.72 265 iPc    51 59.90   -0.6
      0.3s   146.70nm          6.0mb
                 eS     57 34.20
WRA     41.74 265 P      52 00.40   -0.3
      0.6s    35.40nm          5.0mb
FORT    46.07 248 iPd    52 34.20    0.2
      0.6s    68.00nm          5.3mb
MTN     46.60 274 iPd    52 37.10   -1.1
      0.3s    96.00nm          5.8mb
WARB    47.71 255 iPd    52 46.60    0.0
      0.2s    21.00nm          5.3mb
KNA     47.91 269 eP     52 49.00    0.9
      0.2s    85.00nm          5.9mb
SWI     51.31 288 ePd    53 12.00   -1.0
COOL    51.99 248 iPd    53 16.60   -1.2
MBL     54.76 259 iPd    53 37.00   -0.4
      0.3s    35.00nm          5.1mb
MEEK    54.76 253 iPd    53 35.80   -1.6
      0.6s    30.00nm          4.8mb
KLB     54.80 246 iPd    53 36.70   -0.9
      0.3s     9.00nm          4.6mb
BAL     55.82 248 iPd    53 43.80   -0.8
      0.3s    31.00nm          5.1mb
MUN     56.06 246 iPd    53 45.80   -0.5
      0.3s   238.00nm          6.0mb
MRWA    56.63 249 iPd    53 49.20   -1.0
      0.3s    14.00nm          4.7mb
CSY     60.97 206 iPc    54 28.10    9.7X
      0.7s    12.30nm          4.3mb
WKYJ    70.06 323 P      55 15.00    0.0
MAT     70.38 326 iPd    55 15.40   -1.4
      0.8s     9.70nm          4.4mb
LEM     70.40 271 ePd    55 17.20   -0.4
OFUJ    70.67 330 P      55 17.50   -0.9
TKSJ    70.76 321 P      55 18.90   -0.2
YONJ    71.96 322 P      55 25.50   -0.5
NJ2     79.22 311 Pc     56 06.00    0.3
MDJ     80.75 327 eP     56 13.50    0.2
CN2     82.38 324 Pd     56 21.60    0.1
      0.8s    21.00nm          4.7mb
TNP     84.86  45 eP     56 35.29    1.1
      0.7s     2.67nm          4.0mb X
SLKM    86.46  15 eP     56 39.71   -1.4
XAN     87.33 309 P      56 46.00    0.2
      0.7s    11.00nm          4.7mb
RMW     87.57  36 eP     56 46.72    0.0
KMI     87.97 298 eP     56 50.00    0.8
KLU     88.36  16 (P)    56 48.96   -1.1
CHTO    88.50 291 ePd    56 52.10    0.7
      1.1s    17.67nm          4.8mb
HVU     89.72  44 eP     56 57.06    0.2
SRU     89.86  47 eP     56 57.81    0.2
LTX     90.39  58 eP     57 00.85    0.7
FBA     90.85  13 eP     57 00.40   -0.9
      0.8s     4.14nm          4.5mb
LZH     91.96 308 eP     57 07.50    0.2
      1.0s    24.00nm          5.2mb
LMN    123.81  49 ePKP   02 51.00   -1.3
BUL    128.72 216 iPKP   03 02.00   -0.6
                 i      05 27.80
KAF    136.36 342 ePKP   03 04.30  -11.4X
NUR    138.13 341 ePKP   03 18.00   -0.9
NB2    140.67 351 PKP    03 16.40   -7.2X
      0.5s     1.30nm
HFS    141.11 348 ePKP   03 17.40   -6.9X
      0.3s     6.20nm
EDU    146.04   2 ePKPd 03 33.80    1.0
ELO    146.09   3 ePKPd 03 33.90    1.0
EBH    146.32   3 ePKPd 03 34.70    1.5
EAB    146.34   4 ePKPd 03 34.60    1.4
ESY    146.68   2 ePKPd 03 35.50    1.7
EAU    146.72   3 ePKPd 03 35.90    2.0
EBL    146.81   2 ePKPd 03 36.10    2.1X
EKA    147.25   2 PKPc  03 37.10    2.4X
      0.9s    14.80nm
OJC    148.02 335 iPKPc 03 39.50    3.3X
WIM    148.35   4 ePKP  03 40.00    3.5X
KSP    148.79 339 iPKPd 03 42.00    4.7X
      0.7s    35.00nm
DCN    148.90   7 ePKP  03 41.20    3.9X
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DLF   149.03   7 ePKP  03 41.50   4.0X
WME   149.12   4 ePKP  03 41.70   4.0X
WIT   149.28 351 ePKP  03 44.00   6.1X
CLL   149.38 343 iPKPd 03 42.60   4.5X
       1.0s    52.00nm
                 i     03 49.80
BRG   149.50 341 iPKPd 03 43.80   5.4X
       0.8s    50.00nm
PSZ   149.77 332 e(PKP)03 43.90   4.9X
WTS   150.05 351 ePKP  03 44.50   5.4X
       0.7s    67.80nm
PRU   150.10 340 PKPd  03 44.70   5.4X
       0.7s    27.70nm
HCG   150.23   3 ePKPd 03 44.40   5.0X
MOX   150.35 344 ePKP  03 45.40   5.7X
       1.6s    40.00nm
                eSg    33 03.60
SRO   150.52 333 iPKP  03 46.10   6.1X
HAE   150.57   2 ePKP  03 45.10   5.2X
HOF   150.58 343 iPKPc 03 46.10   6.0X
ZST   150.70 335 iPKP  03 46.00   5.7X
HGH   150.96   3 ePKPd 03 46.00   5.5X
KHC   151.15 340 PKP   03 47.30   6.3X
       0.6s     8.50nm
                 e     03 58.00
                 e     32 14.50
                 e     32 25.00
                 eSn   32 48.90
                 eSg   33 02.50
GRF   151.32 344 ePKPd 03 47.90   6.7X
     Z 17s     0.30um          5.2MszX
                 e     03 59.00
GEC2  151.36 340 ePKP  03 47.60   6.2X
       0.9s    10.72nm
                 e     03 52.40
                 e     03 59.00
                 e     06 08.90
                 e     06 14.50
                 e     06 17.70
ENN   151.38 351 ePKP  03 48.00   6.9X
       0.8s    12.50nm
                 e     03 58.50
TNS   151.47 347 ePKPd 03 47.90   6.5X
SNF   151.84 353 PKP   04 00.40  18.6X
DOU   152.21 352 PKPd  03 49.60   7.3X
                ec     04 01.70
FUR   152.70 342 ePKP  03 42.60  -0.6
                 i     03 50.70
                 i     04 05.00
SKO   153.15 321 ePKP  03 51.50   7.5X
                 i     04 07.00
CDF   153.43 348 ePKP  03 51.80   7.6X
       0.8s     6.45nm
LJU   153.47 336 ePKP  03 44.00  -0.3
FLN   153.87 359 ePKP  03 52.40   7.7X
       0.5s     7.75nm
HAU   153.99 349 ePKP  03 52.80   7.9X
       0.5s     2.50nm
LDF   154.04 359 ePKP  03 52.70   7.8X
       0.6s     7.50nm
OHR   154.07 320 ePKP  03 52.50   7.2X
       0.7s    60.00nm
                 i     04 10.80
BSF   154.08 348 ePKP  03 53.00   7.9X
       0.5s     2.40nm
LPF   154.61   0 ePKP  03 54.10   8.4X
       0.6s     4.50nm
LOR   155.08 352 ePKP  03 55.30   8.9X
       0.6s     2.80nm
SSF   155.33 353 ePKP  03 55.90   9.2X
       0.7s     4.65nm
LBF   155.35 352 ePKP  03 55.80   9.0X
SMF   155.70 352 ePKP  03 56.40   9.1X
MFF   156.03 359 ePKP  03 57.20   9.5X
       0.9s     7.85nm
RJF   157.25 356 ePKP  03 59.10   9.9X
       0.7s     2.75nm
     S.D. = 1.0  on  93 of 144 obs.
-----------------------------------
*  NOV  10, 1993  21h 58m 58.43± 0.85s
   28.539 N ±10.4km  128.400 E ± 8.6km
   DEPTH =  10.0km  (geophysicist)
   4.5mb ( 13 obs.)
 RYUKYU ISLANDS                    (238)

KAGJ    3.41  39 eP    59 50.30  -2.4
KUMJ    4.50  27 eP    00 08.30   0.1
SSE     6.76 294 ePn   00 38.00  -2.2
     Z  12s     1.40um
     N  16s     5.00um
     E  16s     4.20um
                sP     00 45.50
NJ2     8.96 295 eP    01 08.00  -2.8
     Z  10s     0.96um
                eS     02 50.00
MAT    11.49  44 (P)   01 47.00   1.4
SNY    13.83 345 eP    02 22.40   5.7X
     Z  13s     2.50um
     N  11s     1.44um
GZH    14.60 252 eP    02 31.00   4.1X
     E  10s     1.01um
BJI    15.27 322 eP    02 36.00   0.4
       1.5s    17.00nm         4.2mb
     Z  18s     0.89um         3.7Msz
     N  14s     0.57um
                ePP    02 49.00
CN2    15.41 352 eP    02 43.00   5.5X
       1.2s    38.00nm         4.6mb
     Z  13s     1.55um         4.3Msz
     N  11s     1.11um
     E  18s     1.04um
                esP    02 51.00
MDJ    16.07   3 eP    02 47.00   1.0
     E  10s     0.80um
TIY    16.19 309 eP    02 52.40   4.8X
     Z  15s     2.13um
     N  14s     1.64um
                S      05 44.00
XAN    17.52 293 eP    03 05.00   0.6
       1.0s     8.90nm         3.8mb
     Z  12s     1.00um         6.9MszX
     N  12s     1.54um
     E  12s     1.03um
                pP     03 12.00
HHC    18.47 316 eP    03 17.90   1.8
       1.2s    16.00nm         4.1mb
     Z  20s     1.25um         4.1MszX
     N  15s     0.37um
     E  15s     0.73um
                sP     03 27.50
                PP     03 36.00
BTO    19.29 313 eP    03 26.50   0.2
       0.8s    13.00nm         4.2mb
     N  11s     0.87um
     E  11s     0.57um
                sP     03 31.00
GYA    19.39 269 P     03 29.00   1.4
       1.0s    22.00nm         4.4mb
     N  12s     1.25um
     E  12s     0.73um
CD2    21.52 282 eP    03 49.00  -0.8
       0.6s    27.00nm         4.8mb
     Z  12s     1.38um         4.6MszX
     N  14s     2.24um
LZH    22.04 296 eP    03 55.00  -0.1
       1.0s    27.00nm         4.6mb
     Z  12s     0.81um         4.4MszX
     N  12s     1.31um
                pP     04 06.00  43kmX
                PP     04 27.50
KMI    23.13 268 Pd    04 09.00   3.0X
       1.4s    50.00nm         4.9mb
     Z  10s     1.30um         4.7MszX
     N  10s     0.90um
     E  10s     0.50um
GTA    25.97 302 eP    04 32.50  -0.5
       1.5s    41.00nm         4.9mb
     Z  12s     1.50um         4.7MszX
     N  13s     1.53um
                pP     04 39.00  23kmX
                sP     04 42.00
                sS     09 10.00
CHTO   28.59 257 eP    04 58.50   1.6
WRA    48.54 173 P     07 44.20   0.5
       0.7s     2.40nm         4.4mb
WR2    48.55 173 eP    07 42.30  -1.5
       0.7s     4.90nm         4.7mb
ASPA   52.17 174 eP    08 17.60   6.1X
       1.2s     6.90nm         4.5mb
QUE    53.00 288 eP    08 19.20   1.3
     S.D. = 1.5  on  18 of  24 obs.
-----------------------------------
*  NOV  10, 1993  22h 05m 17.43± 0.92s
   28.648 N ±13.2km  128.649 E ±11.3km
   DEPTH =  19.5km  (  3 depth phases)
   4.3mb (  6 obs.)
 RYUKYU ISLANDS                    (238)

KAGJ    3.19  37 eP    06 08.30   0.7
KUMJ    4.31  25 eP    06 27.60   4.2X
SSE     6.92 292 eP    07 01.20   0.8
                pP     07 07.00
BJI    15.32 321 eP    09 00.00   5.9X
XAN    17.68 293 eP    09 24.80   0.6
       1.0s     4.50nm         3.6mb
                pP     09 29.50
GYA    19.61 269 P     09 48.20   0.4
                pP     09 53.60  21km
LZH    22.19 296 eP    10 12.00  -2.2
       1.4s    26.00nm         4.5mb
                pP     10 22.00  37kmX
                sP     10 24.00
KMI    23.36 267 Pd    10 27.50   1.7
       1.0s    30.00nm         4.8mb
                pP     10 32.00  16km
GTA    26.09 302 eP    10 50.20  -1.6
       1.0s    16.00nm         4.6mb
                pP     10 56.20  21km
WRA    48.62 173 P     14 02.20   0.3
       0.9s     0.90nm         3.8mb
WR2    48.63 173 eP    14 01.30  -0.7
       0.9s     2.90nm         4.3mb
     S.D. = 1.4  on   9 of  11 obs.
-----------------------------------
?  NOV  10, 1993  22h 27m 55.73± 7.34s
   18.992 N ±31.6km   67.951 W ±50.8km
   DEPTH =  10.0km  (geophysicist)
 MONA PASSAGE                      ( 89)

LRS     1.26 123 P     28 18.60  -0.5
APR     1.28 115 P     28 20.00   0.6
MGP     1.28 140 P     28 19.20  -0.2
PNP     1.52 127 P     28 23.00   0.0
CLLP    1.59 125 P     28 24.40   0.5
SJG     1.92 117 P     28 29.30   0.5
                S      28 58.60
LPR     2.09 109 P     28 30.40  -0.9
     S.D. = 0.7  on   7 of   7 obs.
-----------------------------------
   NOV  10, 1993  22h 47m 05.51± 0.40s
   27.958 S ± 4.5km   66.818 W ± 8.2km
   DEPTH = 182.0 ±  7.8 km
 CATAMARCA PROVINCE, ARGENTINA   (130)

CYA     1.03 118 iPd   47 33.30  -0.6
                S      47 52.50
FSA     2.00  21 iPd   47 43.70   0.7
RTPR    2.35 174 iPc   47 47.30   0.3
SLA     3.43  21 iP    48 00.80   0.6
RTLL    3.65 203 iPc   48 03.00   0.1
                S      48 45.20
CFA     3.84 198 iPd   48 05.70   0.4
                S      48 50.00
TCA     3.89 151 iPd   48 05.50  -0.4
                (S)    48 45.00
RTCB    3.92 206 iPc   48 06.70   0.4
                S      48 50.00
ZON     3.92 204 iPc   48 06.20  -0.2
                eS     48 51.20
RTCV    4.17 201 iPc   48 09.50   0.1
                S      48 58.50
MRA     4.54 168 ePc   48 14.00  -0.2
                S      49 06.00
MDZ     5.21 199 iP    48 23.50   0.5
                i(S)   49 02.10
YJA     5.89  12 ePc   48 33.20   1.0
RFA     6.94 191 iPc   48 44.00  -1.7
                S      49 58.50
CNCB   11.14 354 P     49 41.00  -0.4
LPB    11.43 354 (P)   49 46.00   1.0
LPAZ   11.68 354 iPc   49 46.80  -1.6
SIV    13.04  25 P     50 03.10  -2.1
PPD    15.24  71 eP    50 33.60   0.9
RSTA   16.28  82 eP    50 46.90   1.5
VAO    18.58  79 eP    51 10.20  -1.2
BAO    21.32  59 eP    51 38.50  -0.6
                i      51 45.90
WR2   128.15 206 ePKP  05 53.50   1.4
       0.3s     3.70nm
WRA   128.17 206 PKP   05 54.50   2.4X
       0.7s     1.20nm
```

10d 23h

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     S.D. = 1.0  on  23 of  24 obs.
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? NOV  10, 1993  23h 06m 31.62± 2.12s
   50.821 N ±18.8km  144.047 E ±22.7km
   DEPTH = 474.4 ± 31.2 km
   4.1mb ( 18 obs.)
 SAKHALIN ISLAND                  (662)

KUSJ    7.74 176 eP    08 25.90   0.0
                eS    10 07.60
HOOJ    8.46 184 eP    08 39.10   5.6X
                eS    10 30.30
GUN    49.00 265 P     14 36.00   0.2
KKN    49.46 265 P     14 38.60  -0.5
DMN    49.70 265 P     14 39.40  -1.5
GKN    49.72 266 P     14 41.80   0.9
NB2    62.26 336 P     16 07.50   0.0
       0.5s     1.70nm         3.8mb
HFS    62.37 334 eP    16 08.30   0.1
       0.3s     5.00nm         4.5mb
PRU    70.73 328 eP    17 03.30   3.5X
WRA    70.97 190 P     17 01.80   0.3
       0.7s     1.00nm         3.5mb
KHC    71.79 328 eP    17 09.50   3.4X
                e     17 19.00
GEC2   71.99 328 ePd   17 10.30   3.0X
       0.6s     1.46nm         3.8mb
GRF    72.07 330 eP    17 10.30   2.7
KBA    73.64 327 iPd   17 20.60   3.7X
       0.7s     6.60nm         4.3mb
MOTA   74.16 329 iPd   17 22.40   2.6
       0.6s     3.20nm         4.1mb
CDF    74.42 332 eP    17 21.70   0.5
       0.5s     2.40nm         4.0mb
HAU    75.06 332 eP    17 24.30  -0.4
FLN    76.24 337 eP    17 29.30  -1.8
       0.4s     2.25nm         4.1mb
LDF    76.31 336 eP    17 29.70  -1.8
LOR    76.45 333 eP    17 31.90  -0.4
       0.6s     3.70nm         4.1mb
LBF    76.68 333 eP    17 33.00  -0.6
       0.7s     2.75nm         3.9mb
GRR    76.68 337 eP    17 31.80  -1.7
SSF    76.74 333 eP    17 33.40  -0.5
       0.5s     2.25nm         4.0mb
SMF    77.02 333 eP    17 35.40   0.0
       0.6s     4.50nm         4.2mb
AVF    77.03 333 eP    17 35.10  -0.3
       0.6s     2.45nm         3.9mb
LPL    77.18 331 eP    17 37.90   1.3
       0.5s     4.65nm         4.3mb
LPG    77.19 331 eP    17 38.10   1.4
       0.5s     5.05nm         4.3mb
MAF    77.77 334 eP    17 39.50   0.0
       0.5s     5.05nm         4.3mb
TCF    77.81 334 eP    17 38.70  -1.0
LSF    78.03 334 eP    17 40.40  -0.5
LRG    79.15 330 eP    17 47.80   1.0
       0.6s     4.05nm         4.1mb
LFF    79.46 334 eP    17 48.20  -0.1
LPO    79.57 334 eP    17 48.90  -0.1
       0.6s     3.45nm         4.1mb
     S.D. = 1.2  on  28 of  33 obs.
-------------------------------------
& NOV  10, 1993   23h 19m 41.59s
   65.590 N          148.350 W
   DEPTH =   6.7km
 NORTHERN ALASKA                  (676)
     <AEIC>. ML 3.0 (AEIC).

MDM     0.64 175 iP    19 53.65  -0.7
GLM     0.73 146 iP    19 55.35  -0.8
FBA     0.73 161 ePd   19 55.27  -0.9
                eS    20 06.33
CCB     0.98 166 eP    19 59.86  -0.5
                eS    20 14.19
IL1     1.03 142 eP    20 00.84  -0.5
ILB     1.03 142 eP    20 00.88  -0.4
                eS    20 15.95
                eS    20 16.25
NEA     1.06 197 eP    20 01.80  -0.1
                eS    20 16.21
WRH     1.13 174 eP    20 02.96  -0.1
MLY     1.15 242 eP    20 03.18  -0.3
HDA     1.33 153 eP    20 05.77  -0.7
BWN     1.50 199 eP    20 08.09  -0.9
FYU     1.61  51 eP    20 10.93   0.5
MCK     1.88 188 P     20 16.20   1.7
DJE     1.94 143 eP    20 15.95   0.6
DDM     2.10 148 eP    20 16.80  -0.9
RND     2.20 186 eP    20 22.53   3.3
IMA     2.25 285 eP    20 21.61   1.7
                eS    20 52.24
IM3     2.26 283 eP    20 20.35   0.4
TRF     2.31 202 eP    20 20.72  -0.1
BM3     2.37  38 eP    20 21.02  -0.6
PAX     2.91 153 eP    20 29.13  -0.2
SDG     3.31 157 P     20 36.40   1.4
TOA     3.63 164 P     20 40.00   0.5
BC3     3.82 129 eP    20 40.19  -2.0
                eS    21 24.36
GHO     3.84 184 eP    20 41.44  -1.1
PMR     4.03 185 (P)   20 43.53  -1.5
KLU     4.25 164 eP    20 48.67   0.3
PMS     4.40 188 P     20 50.90   0.6
NCG     4.54 204 eP    20 51.41  -0.9
        29 obs. associated
-------------------------------------
   NOV  10, 1993  23h 26m 00.03± 1.01s
   41.782 N ±10.1km   22.095 E ± 5.7km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION       (383)
     ML 2.0 (SKO).

SKO     0.52 291 ePg   26 10.60  -0.1
                i     26 14.00
                iSg   26 20.00
VAY     0.58 142 iPg   26 11.60  -0.2
                iSg   26 20.00
GRG     0.86 164 ePg   26 16.62   0.1
                eSg   26 30.06
KNT     0.86 135 ePg   26 15.94  -0.7
                eSg   26 27.94
FNA     1.13 209 ePg   26 21.50   0.2
                eSg   26 38.62
OHR     1.18 236 ePn   26 22.00  -0.1
SRS     1.31 120 ePb   26 24.34   0.1
                eSb   26 42.18
SOH     1.35 135 ePb   26 25.62   0.7
                eSb   26 42.26
     S.D. = 0.5  on   8 of   8 obs.
-------------------------------------
% NOV  10, 1993  23h 26m 08.99± 3.33s
   33.739 S ± 9.3km   71.764 W ±25.9km
   DEPTH =  25.9 ±  9.3 km
 NEAR COAST OF CENTRAL CHILE      (135)
     MD 3.8 (SAN).

LCCH    0.31  32 iP+   26 16.38   0.2
                iS    26 23.46
LNV     0.36 126 iP+   26 16.99  -0.1
                iS    26 24.66
TACH    0.69  83 iP+   26 22.27  -0.2
                iS    26 34.16
SAN     0.96  73 iP+   26 26.73  -0.1
                iS    26 41.54
ROCH    0.99  40 iP+   26 26.89  -0.5
                iS    26 41.89
CACH    1.04 112 iP+   26 28.09   0.1
                iS    26 45.44
PCH     1.05  84 iP    26 27.96  -0.1
PEL     1.08  57 iP    26 28.84   0.3
                iS    26 45.10
FCH     1.30  72 iP+   26 32.13   0.3
                iS    26 51.91
JACH    1.44  43 iP    26 33.71   0.0
                iS    26 55.02
     S.D. = 0.3  on  10 of  10 obs.
-------------------------------------
* NOV  10, 1993  23h 47m 56.60± 1.03s
   30.412 S ± 8.4km   71.860 W ±12.5km
   DEPTH =  74.7 ± 25.5 km
 NEAR COAST OF CENTRAL CHILE      (135)

JACH    2.51 155 eP    48 36.15   0.1
                iS    49 12.24
IHA     2.61 176 e(P)  48 42.00   4.6X
                e(S)  49 17.00
ROCH    2.65 164 eP    48 38.14   0.0
                iS    49 15.99
PEL     2.90 160 eP    48 41.27  -0.2
                iS    49 25.14
ZON     2.96 113 eP    48 41.20  -1.1
LCCH    3.06 175 eP    48 42.79  -0.9
                iS    49 29.39
RTCV    3.19 118 e(P)  48 46.00   0.4
SAN     3.20 162 eP    48 44.22  -1.4
                iS    49 34.59
FCH     3.20 156 eP    48 47.06   1.2
                iS    49 29.41
TACH    3.32 167 eP    48 47.71   0.4
PCH     3.40 161 eP    48 49.45   1.0
                iS    49 39.32
LNV     3.55 174 eP    48 49.70  -0.8
MDZ     3.56 135 iP    48 51.10   0.5
                iS    49 26.10
CACH    3.85 164 eP    48 55.37   0.7
CYA     5.64  71 ePc   49 46.00  26.2X
                (S)   50 24.00
CNCB   13.99  16 P     51 14.50   1.2
LPB    14.24  15 P     51 16.00  -0.3
LPAZ   14.47  14 P     51 19.70   0.2
SIV    17.43  37 P     51 55.10  -1.2
PPD    20.21  70 eP    52 28.10   0.2
     S.D. = 0.9  on  18 of  20 obs.
-------------------------------------
   NOV  11, 1993  00h 03m 40.04± 0.33s
   42.257 N ± 2.2km  122.079 W ± 4.7km
   DEPTH =   5.0km  (geophysicist)
 OREGON                           ( 32)
     ML 3.1 (GS), 3.1 (BRK). MD 2.8
     (SEA).

LHEM    0.64 189 P     03 53.16   0.4
LGMM    0.68 164 P     03 53.72   0.0
YBH     0.70 222 iPc   03 53.75  -0.4
                iS    04 04.08
LASM    0.76 150 P     03 54.58  -0.8
BBOR    0.77 325 P     03 54.83  -0.8
LMPM    0.77 185 P     03 55.50  -0.1
LGBM    0.91 185 P     03 58.09  -0.1
LBFM    0.92 171 ePc   03 57.93  -0.3
                eS    04 11.91
DBO     1.22 316 P     04 03.37   0.2
LBKM    1.25 201 P     04 03.21  -0.6
KSXM    1.40 253 P     04 06.25  -0.2
KOMM    1.42 227 P     04 06.71   0.1
LGPM    1.46 203 eP    04 06.34  -0.8
                eS    04 25.61
HSO     1.47 330 P     04 07.12  -0.2
                S     04 27.76
HBO     1.60 354 P     04 09.03  -0.1
WDC     1.71 192 eP    04 10.36  -0.3
KRPM    1.82 234 P     04 14.67   2.3X
MIN     1.94 169 eP    04 15.31   1.1
                eS    04 41.73
FHC     2.04 225 eP    04 16.45   1.0
RNO     2.05 324 P     04 17.53   1.8X
FBO     2.08 350 P     04 17.02   0.9
KMPM    2.40 221 eP    04 21.15   0.5
VIPM    2.49  25 P     04 23.62   1.6X
                S     04 56.76
SSOR    2.61 354 P     04 23.89   0.2
                S     05 00.57
ORV     2.73 171 eP    04 26.03   0.6
VGB     3.39  16 eP    04 34.42  -0.3
GL2     3.81  13 P     04 42.33   1.6X
     S.D. = 0.6  on  23 of  27 obs.
-------------------------------------
   NOV  11, 1993  00h 06m 07.23± 0.13s
   39.032 N ± 2.7km  142.270 E ± 2.6km
   DEPTH =  29.6km  ( 17 depth phases)
   5.2mb ( 89 obs.)  4.7Msz (  2 obs.)
 NEAR EAST COAST OF HONSHU, JAPAN(228)
     Felt (IV JMA) at Ofunato; (III
     JMA) at Miyako, Morioka and
     Sendai.

OFUJ    0.47 276 iPd   06 19.10   1.9
YAMJ    1.95 245 iP+   06 40.90   2.0
                S     07 05.70
AOMJ    2.11 317 P     06 43.40   2.2
NIIJ    3.14 236 P     06 57.60   1.8
                S     07 38.80
KAKJ    3.28 211 P     06 57.40  -0.3
                S     07 36.10
HOOJ    3.44  13 P     06 59.90  -0.1
                eS    07 39.20
MRRJ    3.51 345 eP    07 01.70   0.7
                eS    07 43.20
CHJJ    3.95 222 P     07 08.50   1.1
```

```
MAT     4.06 234 iPd   07 12.00   3.0
                eS     08 02.00
MTMJ    4.30 237 P     07 15.00   2.7
KUSJ    4.46  24 P     07 12.70  -1.9
                eS     08 00.80
IIDJ    4.96 226 P     07 24.30   2.5
ASAJ    5.09   3 eP    07 23.10  -0.4
TSRJ    6.11 237 P     07 41.50   3.7X
WKYJ    7.20 230 P     07 52.50  -0.7
KUR     7.46  32 iPd   07 53.50  -3.2X
      0.7s   770.00nm          6.9mb X
    Z 16s      2.80um          4.6MszX
    N 16s      5.60um
    E 16s      2.80um
                iS     09 12.00
YSS     7.99   2 ePd   08 01.90  -2.2
      0.9s   120.00nm          6.0mb
    Z 19s      2.60um          4.4MszX
    N 19s      2.30um
    E 19s      2.60um
                eS     09 28.00
YONJ    8.01 244 P     08 07.20   2.7
TKSJ    8.32 235 P     08 09.70   0.9
VLA     8.84 301 iPc   08 15.00  -0.9
      2.0s   410.00nm          6.3mb X
    Z 14s      1.00um          3.8MszX
    N 15s      2.00um
    E 12s      1.50um
                i      10 02.00
SHK     8.91 243 eP    08 09.00  -7.9X
SHNJ   10.22 245 eP    08 37.60   2.6
MDJ    10.98 305 iPc   08 47.70   2.4
      1.1s   110.00nm          6.0mb
    Z 16s      3.54um          4.5MszX
    N 12s      1.52um
    E 12s      1.89um
KUMJ   11.32 239 P     08 51.70   1.6
KAGJ   12.16 233 P     09 01.50   0.1
CN2    13.49 296 eP    09 19.00   0.0
      1.0s    14.00nm          4.8mb
    Z 14s      0.89um          4.7MszX
    N 14s      0.94um
    E 14s      0.64um
                epP    09 26.00
                eS     11 50.00
DL2    16.06 276 eP    09 53.20   0.8
      1.0s   200.00nm          5.2mb
    Z 18s      1.35um          4.6MszX
    N 13s      0.78um
    E 13s      1.15um
PET    17.96  34 eP    10 20.00   3.8X
    Z 24s      2.40um
SSE    18.96 252 P     10 28.00  -0.6
      1.0s   450.00nm          5.6mb
    Z 20s      1.40um          4.6MszX
                eS     13 48.00
TIA    20.10 270 eP    10 39.20  -2.1
      1.4s   180.00nm          5.2mb
BJI    20.13 281 eP    10 39.00  -2.6
      1.5s    71.00nm          4.8mb
    Z 16s      1.52um          4.4MszX
    E 14s      1.22um
                epP    10 46.00  26km
NJ2    20.26 257 Pd    10 40.40  -2.5
      1.0s    78.00nm          5.0mb
    N 12s      1.31um
    E 11s      0.43um
                eS     14 25.00
TIY    23.38 276 eP    11 11.80  -2.5
    Z 18s      2.67um          4.7Msz
    E 15s      1.50um
HHC    23.56 284 eP    11 14.80  -1.2
      1.0s    30.00nm          4.8mb
CIT    23.73 313 eP    11 14.00  -3.5X
YAK    24.27 346 iPd   11 23.20   0.7
      1.0s   101.00nm          5.3mb
    N 18s      0.80um
    E 18s      1.80um
WHN    24.37 258 Pd    11 23.50  -0.3
      1.0s    74.00nm          5.2mb
    N 12s      1.06um
BTO    24.75 284 eP    11 27.00  -0.6
    N 16s      1.08um
    E 17s      1.82um
                eS     15 46.00
GUMO   25.45 174 eP    11 39.80   5.7X
PJG    25.45 174 eP    11 40.00   5.9X
BOD    26.18 325 eP    11 39.20  -1.4
      0.6s    15.00nm          4.8mb
XAN    27.16 270 P     11 50.00   0.1
      0.8s     6.90nm          4.3mb
                pP     11 56.00  21km
CVP    27.72 226 eP    11 53.80  -1.2
HKC    29.20 243 iP    12 09.30   1.0
GZH    29.27 246 Pc    12 09.20   0.2
BAG    29.46 226 ePc   12 09.00  -1.9
      1.4s   130.23nm          5.5mb
ZAK    29.61 305 iPc   12 11.00  -0.8
      1.0s    30.00nm          5.0mb
    Z 14s      1.57um          4.8MszX
    E 14s      1.54um
LZH    30.45 277 eP    12 18.00  -1.6
      1.4s    44.00nm          5.1mb
    Z 18s      1.14um          4.6Msz
    E 12s      0.72um
                pP     12 22.00  14kmX
                PP     13 14.00
                eS     17 15.00
QCP    30.64 223 e(P)  12 23.50   2.4
PLP    31.74 214 ePc   12 29.70  -1.2
GYA    32.26 258 iPc   12 34.20  -1.3
      1.0s   190.00nm          6.0mb
                S      17 44.00
CD2    32.39 267 iPd   12 35.00  -1.5
      1.0s    55.00nm          5.4mb
    Z 14s      1.70um          4.9MszX
    N 13s      1.45um
GTA    32.67 284 eP    12 38.00  -1.0
      1.0s    22.00nm          5.0mb
    Z 16s      3.14um          5.1MszX
    E 14s      0.68um
                pP     12 51.50  53kmX
QIZ    34.39 244 eP    12 55.00   1.1
KMI    35.96 259 Pc    13 06.50  -1.0
      1.0s   300.00nm          6.2mb
    Z 16s      1.80um          4.9MszX
    N 13s      0.60um
    E 13s      0.70um
                pP     13 14.50  27km
WMQ    40.58 295 iPd   13 46.70   1.0
      1.0s    50.00nm          5.2mb
TSM    41.06 219 eP    13 50.50   0.7
YOMI   41.50 183 P     13 54.00   0.7
CHTO   42.46 254 iPc   14 01.50   0.2
      1.0s    35.00nm          5.0mb
WWKK   42.46 178 eP    14 00.50  -0.8
LSA    42.73 273 P     14 03.10  -0.9
      1.2s    23.00nm          4.8mb
BDT    43.38 252 eP    14 10.00   1.2
SVW    43.51  39 eP    14 09.93   0.5
      1.0s   108.35nm          5.6mb
NST    43.55 250 eP    14 01.00  -9.1X
IMA    44.63  31 eP    14 18.59   0.1
      0.8s    12.51nm          4.8mb
CRP    45.19  38 eP    14 23.31   0.2
KDC    45.23  43 eP    14 22.16  -1.0
      1.1s    37.17nm          5.2mb
KHT    45.26 250 iPc   14 23.50  -0.4
PMR    46.63  38 eP    14 33.79  -0.4
      0.6s    21.61nm          5.3mb
FBA    47.06  33 ePd   14 37.54   0.0
      0.7s    15.10nm          5.1mb
GUN    47.66 274 P     14 43.40   0.2
TOA    47.98  37 eP    14 45.50   0.5
KLU    48.17  38 ePd   14 46.33  -0.1
KKN    48.18 275 P     14 47.00  -0.1
PMG    48.40 174 eP    14 47.00  -1.5
DMN    48.40 274 P     14 48.80  -0.1
GKN    48.58 275 P     14 50.00  -0.1
MKS    48.82 211 iPd   14 52.60   0.8
BALM   49.94  38 eP    14 59.66  -0.5
FRU    50.01 297 eP    15 00.00  -0.8
      1.8s    50.00nm          5.2mb
KSH    50.25 293 P     15 03.00   0.2
      1.0s    20.00nm          5.1mb
IPM    50.69 238 ePc   15 06.20   0.0
KGM    51.15 234 iPc   15 10.10   0.4
INK    52.31  28 eP    15 18.00   0.2
      0.6s     5.00nm          4.6mb
TPI    52.39 226 ePc   15 18.50  -0.5
                e      17 00.00 526kmX
MTN    52.64 194 eP    15 19.50  -1.3
      0.6s    83.00nm          5.9mb
KEDI   52.75 213 P     15 23.40   1.6
KHKI   53.26 214 ePd   15 24.00  -1.4
                e      17 54.00
SIMI   53.47 239 P     15 44.00  16.7X
NDI    53.98 280 iPc   15 30.00  -0.7
SRDI   54.01 215 P     15 29.40  -1.6
MRPI   54.03 237 P     15 30.00  -1.3
AEKI   54.23 239 P     15 31.40  -1.4
MBC    54.42  17 eP    15 34.50   1.2
      0.9s     6.00nm          4.6mb
SJI    54.46 218 ePd   15 33.00  -1.3
ARU    55.32 318 iPc   15 41.00   0.9
      0.7s    80.00nm          5.9mb
                e      15 49.00  26km
                eS     23 21.00
                ePS    23 36.00
KNA    55.94 196 eP    15 44.10  -0.8
PACI   55.98 224 P     15 46.00   0.6
CTA    58.93 176 iP    16 04.50  -1.5
HYB    58.95 268 eP    16 05.00  -1.4
WRA    59.13 189 P     16 05.90  -1.5
WRA    59.13 189 P     16 27.00  19.6X
      0.8s     7.70nm
WR2    59.13 189 iPd   16 05.70  -1.7
      0.8s   118.50nm          6.1mb
                eS     24 01.30
QIS    59.33 183 iPc   16 07.00  -1.7
RES    60.50  15 eP    16 15.50  -0.8
      0.8s     6.00nm          4.8mb
QUE    61.01 287 eP    16 20.70   0.1
YKA    61.75  31 eP    16 33.70   8.8X
      0.6s     4.00nm          4.7mb
POO    61.97 272 iPc   16 28.50   1.5
      1.0s    16.00nm          5.1mb
GBA    62.05 265 Pc    16 27.00  -0.5
ASPA   62.86 189 iPc   16 31.30  -1.3
      0.8s    58.70nm          5.8mb
ASH    63.30 298 eP    16 34.50  -1.0
SDF    63.43 337 iP    16 36.10   0.1
MBL    63.46 203 iPc   16 35.80  -0.8
      0.3s     6.00nm          5.2mb
DAG    63.85 355 iPc   16 37.00  -1.6
      0.8s    13.43nm          5.1mb
DZM    64.86 155 iPc   16 46.10   0.3
GMW    65.43  48 eP    16 49.84   0.6
JCW    65.58  47 P     16 50.23   0.0
BMW    65.73  49 P     16 51.20  -0.1
RMW    66.04  48 eP    16 53.22   0.0
MOS    66.05 323 eP    16 43.00 -10.1X
      1.9s   210.00nm
                e      17 27.00 187kmX
FMW    66.40  48 P     16 55.65  -0.1
LON    66.41  48 eP    16 54.84  -0.8
SHW    66.46  49 eP    16 57.25   1.2
WARB   66.50 195 iPc   16 56.20   0.0
      0.8s    91.00nm          5.9mb
BRS    66.80 170 iP    16 57.50  -0.6
      1.0s    17.00nm          5.1mb
KAF    66.85 333 iP    16 56.80  -1.2
      0.6s    13.20nm          5.2mb
ASR    66.86  49 P     16 58.71   0.1
OBN    66.90 323 iPd   16 57.50  -1.0
      1.6s   112.00nm          5.7mb
                e      17 05.00  24km
                e      17 21.00
WTV    66.97  47 P     16 58.52  -0.6
EBG    67.05  48 P     16 59.82   0.2
SSOR   67.05  50 P     16 59.99   0.2
SAW    67.28  46 P     17 00.46  -0.6
VBEM   67.46  50 P     17 03.05   0.6
VGB    67.69  49 (P)   17 03.86   0.2
CROR   67.85  50 P     17 05.01   0.2
DPW    67.86  46 eP    17 04.31  -0.5
JBO    68.27  49 P     17 07.81   0.5
VIPM   68.34  50 P     17 08.11   0.2
NUR    68.51 332 iP    17 07.30  -1.2
      0.6s    14.00nm          5.2mb
LNOR   68.94  48 P     17 11.47   0.0
LGPM   68.98  54 eP    17 12.14   0.2
LBFM   69.32  53 eP    17 14.46   0.3
ARMA   69.64 171 iPd   17 15.50  -0.3
      1.0s    43.00nm          5.5mb
STK    70.55 181 iPc   17 16.90  -4.3X
      0.9s     9.60nm          4.9mb
ORV    70.58  55 eP    17 20.71  -0.8
MNK    71.76 326 eP    17 25.00  -3.3X
MRWA   72.18 204 eP    17 29.50  -1.6
      1.0s    74.00nm          5.7mb
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11d 00h

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LRM    72.25  45 iPd   17 31.70  -0.1
                e      17 42.30  34km
COOL   72.28 199 iPd   17 30.20  -1.5
       1.0s     42.00nm          5.4mb
HFS    72.55 336 eP    17 31.30  -1.6
       0.4s      4.50nm          4.8mb
NB2    72.61 337 P     17 32.40  -1.0
       0.7s      8.70nm          4.9mb
KER    72.89 300 ePc   17 35.50  -0.1
KVN    73.02  53 eP    17 36.99   0.6
BAL    73.26 203 eP    17 31.00  -6.4X
BWA    73.31 175 iPc   17 37.70   0.1
                i      17 49.10  38km
MEMM   73.31  55 (P)   17 39.16   1.4
BONR   73.54  54 (P)   17 40.24   0.7
KLB    73.87 202 eP    17 40.00  -0.9
TNP    74.15  54 eP    17 43.49   0.5
       0.9s     16.53nm          5.0mb
CAN    74.24 174 iPc   17 42.80  -0.2
                i      17 51.30  27km
HVU    74.58  49 eP    17 45.77   0.5
                e      17 56.12  33km
FRB    74.68  14 eP    17 45.50   0.3
       1.0s     16.00nm          5.0mb
TPNV   75.45  54 eP    17 50.58   0.2
       0.8s     17.76nm          5.1mb
GSC    76.11  56 eP    17 54.77   0.7
                e      18 06.02  37km
DAU    76.33  49 eP    17 56.80   1.3
ARUT   76.68  52 eP    17 57.93   0.6
                e      18 09.31  38km
PEC    76.75  57 eP    17 57.45  -0.1
       1.2s     18.28nm          5.0mb
EMUT   76.97  49 eP    17 59.58   0.6
MSU    76.99  51 eP    17 59.80   0.7
ULM    77.47  34 eP    18 04.00   2.8
SRU    77.60  50 eP    18 02.48   0.1
OJC    77.76 326 e(P)  18 02.40  -0.4
       1.2s     71.00nm          5.6mb
                e      18 18.20  56kmX
UZH    77.81 324 eP    17 59.50  -3.6X
SPC    78.33 325 eP    18 06.60   0.4
KSP    78.76 328 eP    18 08.10  -0.2
GLA    78.79  57 eP    18 09.04   0.2
PV09   78.82  49 eP    18 09.55   0.3
PV10   78.96  49 eP    18 10.81   0.9
PV08   79.05  49 eP    18 11.52   0.9
BRG    79.68 330 iP    18 12.80  -0.4
CLL    79.70 330 iP    18 12.40  -0.9
       1.2s     26.00nm          5.1mb
PRU    80.13 329 P     18 15.60  -0.1
                e      18 25.20  31km
SRO    80.21 325 iPc   18 17.00   0.9
GLD    80.24  46 ePc   18 18.35   1.6
       1.6s     44.29nm          5.2mb
ZST    80.45 326 eP    18 17.80   0.4
MOX    80.76 331 eP    18 19.40   0.4
       1.6s     36.00nm          5.1mb
KHC    81.19 329 P     18 22.00   0.6
       0.9s     14.20nm          5.0mb
                e      18 30.00  25km
GEC2   81.37 329 eP    18 22.00  -0.4
       0.6s      3.74nm          4.6mb
                e      18 31.00  29km
                e      18 33.70
                e      18 36.00
                e      18 41.60
                e      18 49.70
WET    81.46 329 eP    18 23.60   0.8
GRF    81.68 330 ePc   18 24.40   0.5
       0.9s     26.00nm          5.3mb
                e      18 34.00  30km
                e      18 44.00
JAQ    81.90  22 eP    18 24.50  -0.4
BHG    82.60 328 iPd   18 29.70   1.0
       1.0s     32.00nm          5.4mb
ALQ    82.79  51 ePc   18 31.26   1.1
       1.0s     18.64nm          5.1mb
FUR    82.89 329 eP    18 30.50   0.3
                e      18 40.10  30km
VAY    83.00 319 iP    18 31.00   0.2
PLE    83.09 322 iPc   18 32.01   0.6
SKO    83.10 320 iPc   18 31.50   0.1
       1.2s     50.00nm          5.5mb
                i      18 40.00  27km
                i      18 50.50
IVA    83.19 321 iPc   18 32.30   0.4
PVY    83.36 321 iPc   18 32.84   0.0
WTTA   83.47 329 iPc   18 33.20  -0.2
       0.8s      8.40nm          4.9mb
NKY    83.67 322 iPc   18 33.83  -0.6
BRY    83.82 322 iPc   18 34.54  -0.7
TTG    83.83 321 iPc   18 34.99  -0.1
OHR    84.06 320 eP    18 31.00  -5.3X
       0.8s     30.00nm          5.5mb
                i      18 36.00  16kmX
                i      18 45.20
BDV    84.15 322 iPc   18 36.42  -0.3
DLF    84.16 342 eP    18 37.50   1.0
HCY    84.19 322 iPc   18 36.02  -0.9
ULC    84.19 321 iPc   18 36.69  -0.2
CDF    84.22 332 eP    18 36.80  -0.2
       1.2s     19.65nm          5.2mb
DCN    84.30 342 eP    18 38.40   1.2
BSF    84.88 332 eP    18 40.00  -0.4
HAU    84.90 332 eP    18 40.10  -0.3
ACO    85.77  45 iPc   18 46.10   1.1
LOR    86.41 333 eP    18 47.50  -0.4
       1.2s     40.45nm          5.5mb
FLN    86.56 336 eP    18 49.30   0.7
       0.9s     16.85nm          5.3mb
LDF    86.60 336 eP    18 49.60   0.8
       0.8s     11.15nm          5.1mb
LBF    86.62 333 eP    18 48.40  -0.6
       0.9s     15.05nm          5.2mb
SSF    86.72 333 eP    18 49.00  -0.4
       1.0s     17.60nm          5.2mb
HYF    86.84 334 eP    18 50.30   0.3
LPL    86.84 330 eP    18 50.00  -0.3
       1.1s     15.15nm          5.1mb
LPG    86.85 330 eP    18 50.30  -0.1
       0.7s      8.05nm          5.1mb
SMF    86.95 333 eP    18 50.30  -0.3
       1.4s     51.85nm          5.6mb
AVF    87.00 333 eP    18 50.70  -0.1
       1.2s     44.65nm          5.6mb
GRR    87.01 336 eP    18 50.80   0.0
       1.0s     22.80nm          5.4mb
BGF    87.38 333 eP    18 52.60   0.0
LPF    87.38 336 eP    18 52.70   0.1
       1.3s     59.95nm          5.7mb
WMOK   87.41  46 eP    18 53.24   0.3
       1.0s      8.95nm          5.0mb
MAF    87.77 333 eP    18 54.90   0.4
TCF    87.84 334 eP    18 55.00   0.2
       1.4s     25.70nm          5.3mb
LSF    88.10 334 eP    18 56.00  -0.1
MFF    88.36 335 eP    18 57.50   0.2
       1.0s     18.80nm          5.4mb
FRF    88.51 329 eP    18 56.80  -1.3
LMR    88.76 329 eP    18 58.20  -1.0
       0.9s      6.90nm          5.0mb
RJF    88.93 333 eP    19 00.30   0.2
       1.1s     12.70nm          5.2mb
CAF    89.07 333 eP    19 00.20  -0.6
       0.7s      4.95nm          4.9mb
GAC    89.09  25 eP    19 01.00   0.2
FVM    89.35  39 eP    19 02.78   0.6
       0.8s     11.09nm          5.2mb
LFF    89.52 334 eP    19 03.30   0.5
       0.7s      7.70nm          5.1mb
LPO    89.59 333 eP    19 03.40   0.2
UYO    90.21  44 iPd   19 06.80   0.5
ELC    90.48  39 (P)   19 08.15   0.7
YSNY   90.81  29 P     19 09.64   0.7
       1.0s     21.09nm          5.4mb
OXF    92.58  40 eP    19 17.97   0.8
CAR   123.71  35 ePKP  25 03.00  -1.2
LPAZ  145.08  58 PKP   25 44.60   0.1
                LR     58 01.00
LPB   145.28  58 PKP   25 46.00   1.4
                LR     57 52.00
CNCB  145.56  59 PKP   25 45.30   0.1
CCH   147.19  57 PKP   25 51.00   3.5X
SIV   149.26  48 PKP   25 50.70   0.2
YJA   150.94  63 e(PKP)25 55.00   1.6
FSA   153.01  70 ePKPc 25 57.50   1.8
      S.D. = 1.0  on 233 of 251 obs.
-----------------------------------
   NOV  11, 1993  00h 28m 33.54± 0.09s
   50.200 N ± 2.3km  177.446 W ± 1.6km
   DEPTH =  18.8km  (geophysicist)
   6.3mb (180 obs.)  5.6Msz ( 61 obs.)
 ANDREANOF ISLANDS, ALEUTIAN IS. (  7)
      Mw 6.0 (GS), 6.0 (HRV). ML 5.9
      (PMR). Ms 5.5 (BRK).
      Mo=9.4*10**17 Nm (PPT). Felt
      (IV) on Adak. Depth from
      broadband displacement
      seismograms.
      FAULT PLANE SOLUTION: P-Waves
       NP1:Strike= 75 Dip=50 Slip=-115
       NP2:       291     46       -63
       Principal Axes:
        T                Plg= 2  Azm=182
        P                   71      278
      Comment: The focal mechanism is
        poorly controlled and
        corresponds to normal
        faulting with a moderate
        strike-slip component. The
        preferred fault plane is not
        determined.
      RADIATED ENERGY
       No. of sta:  23  Focal mech.  F
       Energy        2.3±0.4*10**13 Nm
      MOMENT TENSOR SOLUTION
      Dep  30            No. of sta: 32
      Moment Tensor;    Scale 10**18 Nm
        Mrr=-1.01        Mtt= 1.16
        Mff=-0.14        Mrt= 0.23
        Mrf=-0.04        Mtf= 0.33
       Principal axes:
        T  Val=  1.25  Plg= 5  Azm=347
        N       -0.21       6       78
        P       -1.04      82      218
      Best Double Couple:Mo=1.1*10**18
       NP1:Strike= 70 Dip=40 Slip=-100
       NP2:       263     51       -82
      CENTROID, MOMENT TENSOR    (HRV)
      Data Used: GDSN
      L.P.B.: 46S, **C  M.W.: 14S, 19C
      Centroid Location:
      Origin Time       00:28:37.9 0.1
      Lat 50.41N 0.01 Lon 177.31W 0.02
      Dep  28.1 0.7 Half-duration  2.4
      Moment Tensor;    Scale 10**18 Nm
        Mrr=-0.93 0.01  Mtt= 1.06 0.01
        Mff=-0.13 0.01  Mrt=-0.46 0.03
        Mrf=-0.12 0.03  Mtf=-0.09 0.01
       Principal Axes:
        T  Val=  1.16  Plg=12  Azm=183
        N       -0.12       9       91
        P       -1.05      75      326
      Best Double Couple:Mo=1.1*10**18
       NP1:Strike=285 Dip=34 Slip= -74
       NP2:        85     58      -100
ADK     1.75  16 iPc   29 03.80   0.6
SMY     5.86 299 P     30 03.41   2.0
SDN    11.47  57 iPc   31 16.28  -3.0
PET    15.10 290 iPc-  32 08.00   0.8
       1.5s    980.00nm          5.9mb
     Z 20s      15.00um          3.9Msz
                  eS   34 49.00
ANM    15.76  19 eP    32 14.27  -1.5
SVW    16.37  40 ePc   32 23.34  -0.3
       1.1s   2315.15nm          6.2mb
KDC    16.44  53 eP    32 19.91  -4.5X
       0.4s    197.86nm          5.6mb
                  eS   35 27.57
SKR    16.84 282 iPd   32 29.00  -0.5
       0.8s    190.00nm          5.3mb X
     Z 18s      4.60um          3.7Msz
     N 18s      8.00um
     E 18s      7.50um
                  eS   35 42.00
TTA    17.26  34 iPc   32 34.77  -0.1
       1.5s   1210.52nm          5.8mb
ILT    17.77 358 iPc   32 41.50   0.5
       1.4s   1694.00nm          6.0mb
     Z 16s     16.00um          4.1MszX
     N 16s      6.90um
     E 16s      4.40um
                  iS   36 00.00
CP2    17.87  42 eP    32 44.08   1.5
CRP    17.91  42 ePd   32 43.54   0.5
SLKM   18.46  46 ePc   32 47.38  -2.3
PMS    19.04  44 eP    32 55.60  -1.1
PWA    19.06  43 eP    32 57.80   0.9
PMR    19.36  43 eP    32 59.55  -1.0
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        1.3s   753.06nm          5.8mb
                   eS    36 30.77
MID     19.99  51 eP    33 07.40   0.1
IMA     20.04  29 eP    33 06.55  -1.5
KLU     20.77  45 eP    33 14.03  -1.5
TOA     20.86  43 eP    33 16.20  -0.3
COL     21.38  35 eP    33 21.01  -0.7
        0.7s   308.56nm          5.8mb
FBA     21.38  35 ePd   33 19.71  -2.0
                   eS    37 11.39
BALM    22.30  48 eP    33 30.48  -0.6
                   eS    37 25.07
BRW     23.21  17 eP    33 38.63  -1.0
SIT     25.56  58 eP    34 03.99   1.5
        1.0s   805.70nm          6.3mb
      Z  20s    11.04um          5.4Msz
                   S     38 34.69
YSS     26.31 279 iPd   34 10.27   0.7
        1.6s   880.00nm          6.2mb
      Z  17s     3.90um          5.0MszX
      N  17s     2.50um
      E  17s     3.00um
                   e     34 25.00  62kmX
                   e     34 30.50
                   e     37 35.00
                   eS    38 41.00
KUSJ    26.71 269 eP    34 11.60  -1.6
ASAJ    27.56 273 eP    34 21.60   0.6
INK     27.95  33 eP    34 23.50  -0.8
        0.9s    37.00nm          5.1mb X
HOOJ    27.97 269 eP    34 24.40  -0.3
ERM     28.24 268 (P)   34 27.08   0.0
OFUJ    30.77 265 P     34 49.70  -0.1
AOMJ    30.79 268 eP    34 51.00   1.1
YAK     30.83 313 iPd-  34 49.20  -0.8
        1.8s   844.00nm          6.3mb
                   ePPP  35 57.00
                   i     37 46.00
                   iS    39 49.00
TIK     32.08 331 iPd   34 59.50  -1.4
        2.0s   370.00nm          6.0mb
      Z  17s    12.40um          5.7MszX
                   i     35 09.00  33kmX
                   i     36 18.00
                   i     37 48.00
                   eS    40 08.00
HON     32.65 145 P     35 12.77   6.4X
      Z  21s    15.83um          5.7Msz
                   S     40 35.35
DHH     32.77 145 (P)   35 08.52   1.1
KAKJ    33.43 262 P     35 13.10   0.1
NIIJ    33.55 264 P     35 14.40   0.3
CHJJ    34.28 263 P     35 20.70   0.3
MBC     34.39  21 eP    35 22.50   1.6
        1.0s    71.00nm          5.5mb
MAJO    34.48 264 iPd   35 22.41   0.3
        1.7s   916.33nm          6.4mb
                   ed    35 24.72   8kmX
                   iPcP  37 57.67
MAT     34.48 264 iPd   35 22.20   0.0
        1.7s   738.46nm          6.3mb
      Z  20s     7.45um          5.4Msz
                   eS    40 50.00
STW     34.58  72 P     35 23.89   1.0
MTMJ    34.71 264 P     35 24.40   0.2
MCW     34.88  71 ePd   35 26.13   0.7
                   e     37 10.08
                   ePcP  37 59.36
                   e     41 11.94
VLA     34.91 278 iPc   35 25.00  -0.7
        4.0s     9.00nm          4.0mb X
      Z  12s     1.10um          4.8MszX
      N  16s     1.50um
      E  14s     4.60um
                   i     35 40.00  60kmX
                   i     35 44.00
                   i     36 46.00
                   iPPP  37 59.00
KKH     34.92 143 (P)   35 28.13   2.2
ONR     35.05  74 P     35 28.20   1.3
IIDJ    35.32 263 P     35 30.80   1.4
GMW     35.37  73 ePd   35 30.61   0.9
                   e     36 27.25 276kmX
                   ePcP  38 00.48
                   e     38 14.32
                   e     41 54.53
YKA     35.44  45 P     35 31.20   1.2
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        1.0s   221.00nm          6.0mb
BMW     35.57  75 eP    35 31.40   0.0
JCW     35.63  71 P     35 32.59   0.8
MDJ     35.64 282 iPd   35 30.92  -1.0
                   epPc  35 36.96  20kmX
KMOR    35.78  76 P     35 34.15   0.9
RMW     36.01  72 ePd   35 35.66   0.5
                   e     37 36.74
                   ePcP  38 01.66
                   eScP  41 55.32
SHW     36.31  74 ePc   35 39.42   1.7
                   e     35 56.34  68kmX
                   ePcP  38 02.57
                   eScP  41 58.15
LON     36.32  73 iPd   35 37.96   0.2
                   S     41 01.50
FMW     36.33  73 P     35 38.76   0.8
COR     36.39  77 iPd   35 39.74   1.5
                   ec    35 42.55   9kmX
RNO     36.44  79 P     35 39.94   1.1
TSRJ    36.52 264 P     35 39.70   0.3
ASR     36.73  74 P     35 41.99   0.8
SSOR    36.79  77 P     35 42.96   1.2
EBG     37.01  73 P     35 44.42   0.9
WTV     37.04  71 P     35 43.95   0.2
DBO     37.15  80 P     35 46.23   1.5
VBEM    37.24  76 P     35 46.48   0.9
SAW     37.37  71 P     35 46.56   0.0
VGB     37.53  75 ePd   35 48.36   0.5
                   ePcP  38 05.15
                   eScP  42 02.02
WKYJ    37.60 263 P     35 49.40   0.8
CROR    37.65  76 P     35 49.85   0.9
WAH2    37.70  72 P     35 50.14   0.9
FHC     37.89  83 eP    35 52.14   1.2
        1.5s  1242.31nm          6.5mb
                   e     36 45.22 259kmX
KMPM    38.01  84 ePd   35 53.65   1.6
DPW     38.02  70 iPd   35 52.02   0.0
                   ePcP  38 05.51
                   eScP  42 00.35
VIPM    38.11  76 P     35 53.74   0.8
JBO     38.13  74 P     35 53.48   0.5
YBH     38.21  81 eP    35 51.52  -2.1
      Z  20s     7.54um          5.5Msz
                   iS    41 47.52
                   eLQ   44 35.52
                   eLR   46 07.52
YONJ    38.35 266 P     35 55.70   0.9
LGPM    38.57  82 iPd   35 58.32   1.6
                   ePcP  38 17.71
CN2     38.63 283 iPd   35 56.20  -0.9
      Z  16s     2.96um          5.2MszX
      N  14s     0.63um
      E  14s     1.92um
                   pP    36 07.00  38kmX
                   ePP   37 28.00
                   eS    41 50.00
TKSJ    38.73 264 P     35 59.10   1.1
LNOR    38.89  73 P     35 59.69   0.4
LBFM    38.93  81 iPd   36 01.38   1.5
                   ePcP  38 10.30
WDC     38.93  83 eP    35 54.21  -5.5X
      Z  20s     5.57um          5.4Msz
                   eS    41 57.21
                   iLQ   45 04.21
                   eLR   48 32.21
SHK     39.26 266 eP    36 02.80   0.3
BOD     39.28 308 iPd   36 02.20  -0.1
        1.9s  1331.00nm          6.3mb
LMEM    39.58  82 ePd   36 06.33   1.1
NTYM    40.09  86 eP    36 09.87   0.7
                   e     37 33.13 439kmX
                   ePcP  37 56.01
ORV     40.17  83 eP    36 06.39  -3.5X
      Z  20s     4.38um          5.3Msz
                   i     42 16.39
                   eLQ   45 27.39
ORV     40.17  83 iPd   36 10.31   0.4
RES     40.47  24 eP    36 13.00   1.1
        1.0s    17.00nm          4.7mb X
SHNJ    40.53 267 P     36 13.80   0.9
HMR     40.78  85 (P)   36 16.25   1.4
SNY     40.84 282 iPd   36 15.80   0.5
        1.6s  1160.00nm          6.4mb
      Z  24s     4.72um          5.3MszX
      N  14s     2.11um
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      E  13s     0.93um
                   S     42 24.00
MHC     41.36  86 eP    36 19.19  -0.6
      Z  20s     8.18um          5.6Msz
                   eS    42 37.19
                   eLQ   45 54.19
                   eLR   47 00.19
COE     41.39  86 iPd   36 21.11   1.2
ARN     41.42  86 iPd   36 21.14   0.9
                   e     36 27.72  22kmX
KUMJ    41.73 265 P     36 23.90   1.2
CMB     41.75  84 ePd   36 23.98   1.0
      Z  20s     7.18um          5.5Msz
                   ec    36 26.38
                   epPc  36 29.69  19kmX
                   iS    42 39.31
                   eLQ   45 55.31
                   eLR   48 19.31
SAO     41.83  87 P     36 30.00   6.5X
      Z  18s     6.19um          5.5Msz
CIT     41.85 300 eP    36 24.00   0.4
      Z  20s     6.92um          5.5Msz
                   e     38 06.00 577kmX
                   eS    42 46.00
LRM     42.47  70 eP    36 27.90  -1.1
KAGJ    42.57 264 P     36 30.60   0.9
KVN     42.62  82 iPd   36 30.97   0.7
                   ePcP  38 22.79
MMPM    42.87  84 eP    36 33.18   0.7
MEMM    42.89  84 eP    36 32.44   0.2
PHAM    43.06  87 eP    36 34.32   0.6
BONR    43.13  83 iPd   36 35.79   1.2
                   e     38 19.92 590kmX
MTUM    43.32  84 iPd   36 37.10   1.1
                   e     38 24.66 620kmX
ALE     43.64  10 (P)   36 37.77   0.0
BCH     43.66  87 iPd   36 39.65   1.0
DL2     43.71 279 Pd    36 38.00  -0.8
        1.2s   470.00nm          6.2mb
      Z  18s     1.84um          5.0Msz
      N  12s     1.02um
      E  12s     1.34um
                   S     43 06.00
TNP     43.75  82 iPd   36 40.04   0.6
        1.4s   312.08nm          5.9mb
                   e     36 46.27  21kmX
                   e     38 26.47
ISA     44.40  86 P     36 50.00   5.4X
      Z  18s     7.05um          5.6Msz
HVU     44.42  75 iPd   36 44.92   0.1
                   i     38 28.37 577kmX
ABL     44.43  87 iPd   36 45.46   0.4
TPNV    45.04  83 ePd   36 50.07   0.2
        1.4s   427.42nm          6.2mb
      Z  19s     9.20um          5.7Msz
GSC     45.69  85 iPd   36 55.26   0.3
                   epPc  37 00.97  19kmX
                   e     42 34.21
                   e     42 49.57
SSK     45.81  87 ePd   36 56.13   0.2
DAU     46.14  76 iPd   36 59.14   0.4
                   ePcP  38 34.90
                   eS    43 54.35
ARUT    46.32  80 iPd   36 59.99   0.0
PEC     46.35  87 iPd   36 59.75  -0.3
        1.3s   174.45nm          5.9mb
BJI     46.48 284 Pd    37 00.00  -0.9
        1.5s   280.00nm          6.0mb
      Z  22s     4.17um          5.3Msz
      N  17s     3.56um
                   epP   37 10.00  33kmX
                   eS    43 46.00
                   esS   44 02.00
                   eScS  46 50.00
                   eSS   47 05.00
MSU     46.68  78 iPd   37 03.25   0.3
                   ePcP  38 37.19
                   eScP  42 39.32
EMUT    46.77  76 iPd   37 03.47  -0.1
IRK     46.77 304 iPd   37 03.00  -0.1
        2.0s   615.00nm          6.3mb
      Z  19s     8.19um          5.7Msz
      N  18s     5.22um
      E  18s     5.72um
                   e     37 20.00  67kmX
                   e     38 36.00
                   e     38 53.00
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11d 00h

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                eS    43 48.00
                e     44 00.00
                eSS   47 06.00
PLM    46.89  87 iPd  37 04.69   0.2
PFO    46.98  87 ePd  37 05.18   0.0
                ec    37 08.08
                ePc   37 11.06  20kmX
SRU    47.36  77 iPd  37 07.91  -0.3
GUMO   47.67 234 eP   37 09.47  -1.1
       1.1s   316.66nm        6.3mb
PJG    47.67 234 eP   37 10.00  -0.6
GUA    47.69 233 eP   37 09.80  -0.9
       1.0s   184.00nm        6.1mb
TIA    48.18 279 Pd   37 13.70  -0.7
       1.4s   630.00nm        6.5mb
     Z  25s     2.45um        5.1MszX
     E  14s     1.30um
                PP    39 12.00
                S     44 11.00
ZAK    48.31 303 iPd  37 15.20   0.1
       1.3s   803.00nm        6.6mb
     Z  17s     5.94um        5.6MszX
     N  18s     7.00um
     E  18s     8.58um
                e     37 31.00  61kmX
                e     39 09.00
                eS    44 07.00
GLA    48.39  86 iPd  37 15.94  -0.2
PV09   48.60  76 iPd  37 17.13  -0.9
PV10   48.73  76 iPd  37 18.48  -0.5
HHC    48.85 288 Pd   37 20.00   0.3
       1.8s  1710.00nm        6.8mb
     Z  21s     6.62um        5.6Msz
     N  17s     4.53um
     E  16s     4.35um
                sP    37 34.00
                PP    39 12.00
                PcS   42 33.50
                S     44 26.00
                ScS   47 08.00
PV08   48.86  76 ePd  37 19.20  -0.8
SSE    48.86 271 (P)  37 19.64   0.0
       1.8s  1200.00nm        6.6mb
     Z  20s     1.80um        5.1Msz
     N  18s     6.10um
                ed    37 22.29   9kmX
                sP    37 32.00
                PP    39 12.00
                S     44 20.00
ULM    49.62  56 ePd  37 27.00   1.7
NJ2    49.73 274 Pd   37 25.60  -0.7
       0.8s    96.00nm        5.9mb
     Z  22s     2.13um        5.1Msz
     N  12s     1.31um
     E  12s     0.72um
                pP    37 33.00  25kmX
                S     44 30.00
BTO    49.95 288 iPc  37 28.50   0.4
       1.6s   930.00nm        6.5mb
     N  18s     4.39um
     E  15s     2.44um
                sP    37 38.00
                PP    39 24.00
                S     44 39.00
                sS    44 49.00
                eSS   48 10.00
TIY    50.21 284 iPd  37 30.30   0.2
       1.0s   190.00nm        6.0mb
     Z  24s     4.86um        5.4MszX
     N  14s     1.88um
                pP    37 40.00  32kmX
                PP    39 29.00
                sS    44 53.00
GLD    50.27  73 iPd  37 30.92   0.3
       1.6s   548.25nm        6.3mb
     Z  19s     4.71um        5.5Msz
                S     44 54.96
                SS    48 53.77
KBS    51.02 358 eP   37 35.50  -0.1
TUC    51.46  84 P    37 50.00  10.4X
     Z  18s     4.16um        5.5Msz
ANMO   52.49  78 ePd  37 46.76  -0.8
     Z  21s     0.84um        4.8Msz
                ed    37 48.74
                epPc  37 52.88  20kmX
                ec    37 54.79
ALQ    52.50  78 P-   37 43.29  -4.3X
     Z  21s     0.84um        4.8Msz
                S     45 07.52
DAG    52.58   6 iPc+ 37 45.80  -1.6
       1.1s   244.30nm        6.0mb
     Z  18s     8.80um        5.8Msz
TATO   52.85 265 (P)  37 47.46  -2.6
FRB    53.58  32 ePd  37 54.90   0.0
       0.6s   103.00nm        6.0mb
WHN    53.61 276 Pd   37 54.00  -1.6
       1.5s   530.00nm        6.3mb
     N  14s     2.84um
                pP    38 06.00  42kmX
                S     45 27.00
GDH    53.98  21 ePc  37 58.00   0.2
       1.4s   813.95nm        6.6mb
                i     45 33.00
QZH    54.73 267 Pd   38 03.00  -0.9
       1.5s   610.00nm        6.4mb
     Z  16s     1.18um        5.1MszX
     E  16s     1.60um
                S     45 40.00
XAN    54.74 283 Pd   38 02.50  -1.5
       1.6s   140.00nm        5.7mb
     Z  20s     7.88um        5.8Msz
     N  15s     1.63um
     E  14s     1.72um
                pP    38 10.00  25kmX
                PP    40 04.00
                S     45 41.00
                sS    45 53.00
ACO    55.90  72 iPc  38 10.50  -1.8
LZH    56.55 288 iPd  38 16.92  -0.2
       1.5s   930.00nm        6.6mb
     Z  20s     4.36um        5.5Msz
     N  14s     2.57um
                ed    38 19.24
                epPc  38 22.47  18kmX
                PcP   39 13.00
                PP    40 25.00
                PcS   43 14.00
                S     46 07.00
                sS    46 20.00
                SS    49 54.00
GTA    56.81 293 Pd   38 18.20  -0.8
       1.8s   280.00nm        6.0mb
     Z  20s     8.64um        5.8Msz
     E  16s     3.32um
                pP    38 28.00  32kmX
                sP    38 31.00
                PcP   39 14.00
                PP    40 24.00
                S     46 02.00
PCO    57.22  71 iPd  38 20.80  -0.9
JAQ    57.36  44 ePd  38 20.90  -1.6
WMOK   57.41  73 P-   38 18.42  -4.7X
     Z  19s     5.81um        5.7Msz
                S     46 20.57
MEO    57.50  73 iPc  38 22.10  -1.6
OCO    57.69  72 iPd  38 23.60  -1.4
FNO    57.91  72 iPc  38 25.30  -1.3
CVP    57.92 259 eP   38 26.00  -0.8
TUL    58.46  70 iPc  38 28.60  -1.8
KEV    59.03 350 ePd  38 32.41  -1.5
       1.4s   316.16nm        6.3mb
                epPc  38 38.37  20kmX
KVG    59.23 218 eP   38 35.00  -0.8
HKC    59.45 269 iP   38 36.90  -0.5
                S     46 47.00
BAG    59.67 259 ePc+ 38 37.00  -2.2
       1.3s   115.38nm        5.8mb
                eS    46 47.00
CCM    59.74  66 iPd  38 36.75  -2.5
                ed    38 38.41   5kmX
LVZ    59.79 347 eP   38 37.86  -1.4
                epPc  38 43.74  19kmX
TRO    59.88 353 eP   38 38.90  -0.9
SLM    59.94  65 P-   38 39.59  -1.0
     Z  20s    25.59um        6.4Msz
                S     46 49.55
CD2    60.07 283 iPd  38 40.00  -1.6
       1.8s   780.00nm        6.5mb
     Z  30s     3.04um        5.3MszX
     N  15s     2.51um
                pP    38 49.90  32kmX
                sP    38 55.00
                eS    46 47.80
                sS    47 05.00
                SS    50 44.20
KTK1   60.13 352 eP   38 38.32  -3.2X
FVM    60.27  65 eP   38 39.92  -2.9
       0.5s   173.37nm        6.4mb
     Z  19s     8.27um        5.9Msz
                S     46 55.12
GQP    60.40 256 eP   38 44.00   0.1
WMQ    60.71 304 iPd  38 45.56  -0.3
       1.5s   160.00nm        5.9mb
     Z  20s    13.40um        6.1Msz
     E  18s     6.54um
                epPc  38 51.60  20kmX
                sP    38 55.00
                ScP   43 26.00
                S     47 00.00
                sS    47 10.50
MIAR   60.72  70 P-   38 44.43  -1.5
     Z  20s     2.91um        5.4Msz
                S     47 04.97
PLP    60.95 251 ePc  38 46.30  -1.4
TGY    61.19 257 eP   38 49.00  -0.4
GYA    61.32 278 iPd  38 49.00  -1.3
       1.4s   420.00nm        6.4mb
     Z  20s     2.07um        5.3Msz
     N  20s     3.42um
     E  20s     1.61um
                pP    38 57.00  26kmX
                PP    41 06.00
                S     47 06.00
                sS    47 17.00
SDF    61.33 350 iP   38 49.00  -0.7
ELC    61.44  65 iPc  38 48.54  -2.3
PGP    61.64 257 ePc  38 51.60  -0.8
ELF    61.81  56 P    38 52.55  -0.8
DLA    61.91  56 P    38 53.95   0.0
LDN    61.99  56 P    38 53.85  -0.6
ACTO   62.19  55 P    38 55.15  -0.7
MAP    62.22 252 iPc  38 56.00  -0.3
HNR    62.57 205 eP   39 05.00   6.5X
TYNO   62.65  55 P    38 58.00  -0.8
WLVO   62.83  53 P    38 59.40  -0.6
STCO   62.93  54 P    38 59.90  -0.8
GAC    63.05  50 ePd  38 59.80  -1.6
SVE    63.06 328 iPd- 39 01.00  -0.4
       1.2s  1320.00nm        7.0mb
     Z  20s    10.00um        6.0Msz
     N  18s     4.50um
     E  18s     5.50um
WWKK   63.20 225 eP   39 02.00  -0.7
OXF    63.24  68 iPd  39 00.90  -1.9
                ed    39 02.64
                epPc  39 06.86  19kmX
AKU    63.36   9 iP   39 03.70   0.6
       1.1s   283.54nm        6.3mb
                i     39 19.80  59kmX
YSNY   63.78  55 ePd  39 05.67  -0.7
       0.9s   239.73nm        6.4mb
     Z  20s     5.47um        5.7Msz
                S     47 43.52
DAV    63.80 248 ePc+ 39 06.00  -0.7
ARU    64.07 329 ePd  39 07.51  -0.5
       1.8s  1708.63nm        6.9mb
                ed    39 09.58   7kmX
AGX    64.09  86 (P)  39 09.00   0.4
REY    64.41  12 iP   39 11.90   1.9
                i     39 28.20  60kmX
CTB    64.54 249 ePd  39 11.00  -0.5
QIZ    64.60 270 iPd  39 12.00   0.1
       1.5s   400.00nm        6.4mb
     E  17s     2.15um
                ed    39 14.15
                epPc  39 18.13  20kmX
                S     47 54.00
KMI    64.75 279 Pd-  39 12.00  -1.1
       1.5s    60.00nm        5.5mb
     Z  18s     2.90um        5.5Msz
     N  14s     1.20um
     E  14s     1.40um
                sP    39 25.00
                S     47 51.00
                sS    48 00.00
MCWV   65.08  58 iPd  39 13.90  -0.9
       1.0s   226.90nm        6.3mb
                epPc  39 20.02  20kmX
LBNH   65.85  49 P-   39 10.53  -9.1X
     Z  19s    10.29um        6.0Msz
                S     47 51.42
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                SS    52 49.99
PPR    65.88 256 ePd   39 21.00   0.9
MYNC   65.94  64 P-    39 19.42  -0.9
     Z  20s     7.05um          5.9Msz
                S     48 09.03
NAV    66.23  60 iPd   39 21.32  -0.9
KAF    66.45 348 iP    39 22.40  -0.8
       0.9s   344.10nm          6.5mb
BLA    66.51  60 iPd   39 23.33  -0.7
       0.9s   209.61nm          6.3mb
PMG    66.89 218 (P)   39 25.82  -0.7
       1.3s   213.28nm          6.1mb
                ipPc  39 31.78  19kmX
                ePcP  39 52.08
GPD    66.94  53 ePd   39 25.70  -1.0
TBR    66.98  53 iPd   39 25.97  -0.9
SWI    67.02 238 iPd   39 26.50  -0.9
CVL    67.03  58 iPd   39 26.86  -0.4
PNJ    67.18  53 iP    39 27.65  -0.5
                pP    39 37.45  31kmX
GMTN   67.19  53 iP    39 27.50  -0.7
CRNY   67.20  52 iPd   39 27.18  -1.0
PAL    67.24  53 iPd   39 27.63  -0.9
HRV    67.31  50 iPd   39 27.93  -1.0
     Z  20s     3.65um          5.6Msz
                ed    39 29.92
                epPc  39 34.30  20kmX
CBN    67.46  57 iPd   39 29.30  -0.6
       1.1s   136.20nm          6.0mb
                e     39 36.00  21kmX
MOL    67.51 357 eP    39 28.38  -1.5
CRX    67.57  86 (P)   39 31.00  -0.3
PRM    67.66  63 eP    39 29.81  -1.5
UNM    67.94  86 (P)   39 40.00   6.4X
LMN    67.97  44 ePd   39 32.00  -1.1
FRU    68.08 311 iPd   39 34.00   0.2
       2.1s  1200.00nm          6.7mb
PUL    68.10 345 ePd   39 33.00  -0.6
       1.9s   930.00nm          6.6mb
     Z  20s     5.80um          5.8Msz
     N  20s     4.90um
     E  20s     3.30um
                e     39 50.00  63kmX
                e     39 58.00
                eS    48 29.00
JSC    68.15  62 iPd   39 33.32  -1.0
CEH    68.20  60 ePd   39 33.56  -1.1
       1.4s   549.32nm          6.5mb
NUR    68.21 348 iP    39 33.40  -0.9
     Z  19s     5.00um          5.8Msz
                e     48 32.00
                LR    10 40.00
LHS    68.26  62 iPd   39 34.06  -1.0
PPM    68.49  86 (P)   39 35.00  -2.3
FOO    68.54 359 eP    39 36.04  -0.2
LSA    68.66 291 iPd   39 38.69   0.6
       1.0s   120.00nm          6.0mb
     N  16s     1.26um
     E  18s     1.41um
                S     48 40.00
                SS    53 07.00
BKM    68.74 195 iP    39 57.50  19.5X
NB2    68.90 355 P     39 38.40  -0.2
       1.0s   370.00nm          6.5mb
SUE    69.08 359 eP    39 39.74   0.1
NAO    69.13 356 P     39 35.18  -4.8X
NRA0   69.18 355 iPd   39 39.00  -1.3
NRE0   69.18 355 P     39 40.30   0.0
                PP    42 05.40
ACX    69.31  88 (P)   39 30.00 -11.8X
SGS    69.37  63 eP    39 41.21  -0.6
UPP    69.62 352 iPd   39 42.60  -0.3
       1.5s  4100.00nm          7.3mb X
                iPP   39 48.30
                iS    48 48.00
                iP'P' 07 51.70
HBF    69.63  63 ePd   39 42.96  -0.5
ASK    69.65 359 eP    39 42.45  -0.6
HFS    69.65 354 eP    39 42.20  -0.9
       1.0s   435.90nm          6.6mb
     Z  21s     4.10um          5.6Msz
                LR    04 09.00
BER    69.75 359 eP    39 43.18  -0.5
EGD    69.86 359 eP    39 43.72  -0.6
PMO    69.93 150 iPd   39 45.80   0.5
       1.6s  1213.90nm          6.8mb
KSH    69.94 308 iPd   39 45.70   0.3
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       1.4s   400.00nm          6.4mb
     Z  24s     9.54um          6.0MszX
     N  16s     3.58um
     E  16s     4.04um
                pP    39 58.00  42kmX
                PcP   40 06.00
                PP    42 20.00
                iS    48 56.00
                eSKS  49 39.00
ODD1   70.20 358 eP    39 46.47   0.0
VAH    70.24 149 iPd   39 47.60   0.4
       1.5s  1015.40nm          6.7mb
RUV    70.27 149 iPd   39 47.80   0.4
       1.6s  1865.70nm          7.0mb
KKM    70.33 255 ePd   39 51.80   3.8X
       1.2s   152.20nm          6.0mb
MOS    70.47 340 iPd   39 49.00   0.8
       2.0s  3300.00nm          7.1mb
     Z  23s     8.00um          5.9MszX
     N  24s     5.40um
     E  24s     7.70um
                e     40 05.00  58kmX
                e     42 23.00
                eS    49 01.00
TSM    70.67 253 eP    39 51.00   1.0
KMY    70.93 359 eP    39 51.11   0.2
OXX    71.17  86 (P)   39 54.00   0.7
OBN    71.28 340 iPd   39 52.70  -0.4
       1.6s  3032.00nm          7.2mb
                ed    39 54.85
                epPc  39 59.07  20kmX
AFR    71.72 152 iPd   39 56.30   0.1
       1.5s  1378.90nm          6.8mb
CHTO   71.74 278 iPd   39 55.24  -1.2
       1.2s   170.14nm          6.0mb
                ed    39 57.39
                epPc  40 01.86  21kmX
                eS    49 09.60
PPT    71.81 152 iPd   39 56.90   0.2
       1.7s  1482.20nm          6.8mb
PPN    71.82 152 iPd   39 56.90   0.2
       1.7s   923.40nm          6.6mb
PAE    71.90 152 iPd   39 57.50   0.3
       1.6s   793.50nm          6.5mb
TVO    72.11 152 iPd   39 58.70   0.1
       1.4s   808.60nm          6.6mb
RAR    72.80 163 (P)   40 01.53  -0.9
       1.7s   139.63nm          5.7mb
BDT    72.86 276 eP    40 04.00   1.0
       1.0s   172.50nm          6.1mb
GUN    73.10 293 P     40 05.60   0.8
EDR    73.17   3 eP    40 04.10  -0.2
PCT    73.22 273 eP    40 05.00  -0.2
NST    73.30 275 iPd   40 04.50  -1.1
DZM    73.35 196 iPc   40 06.60   0.8
EDU    73.52   3 ePd   40 06.30   0.0
KKN    73.55 294 P     40 07.80   0.6
MUD    73.57 356 iPd   40 07.00   0.5
       1.3s   722.00nm          6.6mb
ELO    73.57   4 ePd   40 06.70   0.1
GKN    73.77 294 P     40 08.60   0.2
DMN    73.78 294 P     40 09.20   0.5
EBH    73.80   4 ePd   40 08.10   0.2
EAB    73.83   4 ePd   40 08.50   0.4
EDI    74.14   3 ePd   40 09.20  -0.7
       2.0s  1067.00nm          6.5mb
     Z  20s     2.00um          5.4Msz
     N  20s     2.00um
     E  20s     1.00um
                e     41 48.80 455kmX
                e     42 01.80
                ePPP  43 19.40
                e     44 48.00
                eS    49 44.00
MNK    74.16 345 eP    40 06.00  -4.0X
       1.5s  1029.00nm          6.6mb
     Z  17s     3.80um          5.8MszX
     N  18s     4.00um
     E  18s     3.00um
                eS    49 32.00
ESY    74.16   3 ePd   40 10.10   0.1
COP    74.17 354 iPd-  40 10.20   0.2
       1.3s   923.08nm          6.7mb
                iS    49 43.00
EAU    74.21   4 ePd   40 10.80   0.5
EBL    74.29   3 ePd   40 11.10   0.3
BSD    74.55 353 iPd   40 12.00  -0.3
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       1.0s   128.00nm          5.9mb
EKA    74.73   3 Pc    40 17.90   4.6X
       0.8s    31.40nm          5.4mb
ESK    74.74   3 iPd   40 14.10   0.7
       1.4s   600.00nm          6.4mb
KHT    74.95 275 iPd   40 13.60  -1.6
TPX    75.64  84 (P)   40 19.00  -0.1
NIL    75.80 306 iPd   40 23.10   3.2X
       1.0s     0.39nm          3.4mb X
                iS    50 05.10
WIM    75.85   4 ePd   40 20.00   0.2
DCN    76.50   6 iPd   40 23.90   0.5
       1.3s   902.00nm          6.7mb
DCN    76.50   6 eP    40 30.10   6.7X
DLF    76.60   6 iPd   40 24.50   0.6
       1.4s  1070.00nm          6.7mb
DLF    76.60   6 eP    40 30.60   6.7X
WME    76.62   4 eP    40 24.20   0.1
YRC    76.75   4 eP    40 25.00   0.2
CTA    76.98 215 iPd-  40 26.30  -0.2
       1.3s   163.46nm          5.9mb
                i     40 32.00  18kmX
                eS    50 13.00
                e     51 00.00
CTAO   76.98 215 (P)   40 26.17  -0.3
       1.5s   383.00nm          6.2mb
                ipPc  40 32.54  20kmX
YRH    77.16   4 eP    40 27.20   0.1
MKS    77.26 246 iPd   40 30.00   1.8
WIT    77.30 357 iPd   40 29.30   1.5
BRN    77.36 353 ePd   40 29.00   0.8
NDI    77.50 300 iPd   40 29.30  -0.1
       1.8s   727.27nm          6.4mb
VAL    77.66   8 iP    40 41.20  11.4X
       1.7s     3.20nm
ECP    77.72   6 iPd   40 30.80   0.7
ECP    77.72   6 iPd   40 38.00   7.9X
HCG    77.72   4 ePd   40 30.40   0.2
HTR    77.98   4 ePd   40 32.10   0.5
HAE    78.05   3 ePd   40 32.70   0.7
DBN    78.05 358 eP    40 40.00   8.0X
     Z  22s     1.70um          5.3Msz
                ePS   51 04.00
                eSS   55 45.00
WTS    78.12 357 iPd   40 33.00   0.7
       1.0s   173.10nm          6.1mb
HGH    78.44   3 ePd   40 34.50   0.4
KSP    78.66 351 iPd   40 35.30  -0.1
       1.6s   214.00nm          5.9mb
                ePP   43 22.00
LVV    78.68 346 iP    40 37.00   1.5
                i     40 53.00  57kmX
                i     43 41.00
                iS    51 05.00
BRG    78.84 353 iPd   40 35.90  -0.5
       1.5s   320.00nm          6.1mb
                i     40 43.00  23kmX
                iS    50 33.00
OJC    78.88 349 iPc   40 36.70   0.1
       1.5s   316.00nm          6.1mb
                i     40 45.70  29kmX
                i     40 54.00
BNS    79.14 357 iPd   40 38.30   0.3
       1.4s   456.00nm          6.3mb
                ipPc  40 56.40  66kmX
RAC    79.20 350 iP-   40 39.30   0.9
       1.5s     1.00nm          3.6mb X
                i     40 48.00  28kmX
MOX    79.24 354 iPd   40 39.00   0.4
       1.8s   509.00nm          6.2mb
     Z  21s     1.10um          5.2Msz
                eS    50 40.00
SNG    79.37 268 eP    40 40.00   0.2
       0.8s    82.09nm          5.8mb
UCC    79.37 359 Pd-   40 40.10   0.9
ENN    79.37 358 iPd   40 39.90   0.7
       0.8s   111.90nm          5.9mb
                e     40 45.00  16kmX
ASH    79.42 318 P     40 41.00   1.3
       1.5s   470.00nm          6.3mb
                i     40 53.00  40kmX
                e     41 01.00
                e     43 39.00
                eS    50 41.00
                e     50 54.00
                ePS   51 29.00
GRO    79.52 330 iPd-  40 42.00   1.9
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11d 00h

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        1.5s   800.00nm          6.5mb
    Z  20s     1.50um          5.3Msz
    N  20s     2.00um
    E  22s     2.40um
                   i    43 48.00
                   iS   50 41.00
MEM    79.53 358 iPd   40 40.47   0.4
       1.3s    98.00nm          5.7mb
HOF    79.55 354 iPd   40 40.40   0.1
       1.6s   270.00nm          6.0mb
SNF    79.66 359 iPd   40 41.23   0.5
PRU    79.67 352 iPd   40 40.80  -0.1
       1.7s   834.00nm          6.5mb
                   PcP  40 46.70
                   S    50 39.80
                   SKS  50 54.60
PYA    79.73 332 iPc+  40 41.50   0.1
       1.5s   970.00nm          6.6mb
    Z  20s     7.00um          6.0Msz
    N  20s     6.00um
    E  20s     2.50um
                   i    40 50.00  27kmX
                   e    43 50.00
                   ePPP 45 40.00
                   iS   50 42.00
TNS    79.83 356 iPd   40 41.80   0.0
                   ePcPc 40 47.30 41kmX
                   e    40 54.10
                   i    40 58.40
                   e    41 50.60
                   e    42 13.10
                   e    42 25.70
SPC    79.83 348 iPd   40 42.30   0.3
QIS    80.02 220 eP    40 42.00  -1.1
DOU    80.07 359 P     40 41.00  -2.0
UZH    80.09 347 iPd-  40 43.50   0.3
       1.5s   420.00nm          6.2mb
    Z  20s     5.30um          5.9Msz
    N  20s     5.30um
                   i    40 55.00  38kmX
                   i    41 01.00
                   e    43 40.00
                   eS   50 33.00
                   eSSS 59 10.00
GRF    80.21 354 iPd   40 44.80   1.0
       2.0s  1429.00nm          6.6mb
                   ePcP 40 51.70
                   epP  40 54.50  31kmX
                   esP  41 03.40
                   eS   50 50.00
                   eSS  56 08.00
WSI    80.39 242 ePd   40 44.90  -0.3
WLF    80.47 358 iPd   40 45.90   0.8
       1.4s    75.00nm          5.5mb
KIS    80.53 342 iP-   40 46.00   0.5
    Z  21s     6.00um          5.9Msz
                   eS   50 52.00
KHC    80.60 353 iPd   40 46.40   0.5
       1.5s   357.00nm          6.2mb
                   e    40 56.00  30kmX
WET    80.64 353 iPd   40 36.80  -9.3X
       1.7s   427.00nm          6.2mb
BMR    80.85 346 ePc   40 50.00   2.8
KNA    80.86 232 eP    40 47.50  -0.1
GEC2   80.87 353 e(P)  40 47.60   0.1
       1.0s    71.60nm          5.7mb
IPM    81.08 266 ePd   40 48.40  -0.5
       1.6s   297.30nm          6.1mb
PTT    81.08 344 eP    40 43.00  -5.4X
LANF   81.10 357 P     40 49.08   0.6
PSZ    81.13 348 iPd   40 49.70   0.9
HOFF   81.13 356 P     40 49.51   0.9
SOC    81.13 334 iPc+  40 49.00   0.3
       2.0s   575.00nm          6.3mb
    Z  20s     8.00um          6.1Msz
    N  20s     3.50um
    E  18s     2.60um
                   e    43 50.00
                   ePPP 45 50.00
                   eS   50 56.00
SRBF   81.16 356 P     40 49.51   0.7
ZST    81.19 350 iPd   40 49.80   0.8
                   eScS 51 17.80
                   i    51 37.20
VKA    81.20 351 iPd   40 48.60  -0.5
       2.8s   899.00nm          6.3mb
MTA    81.29 329 iPd   40 50.00   0.5
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        0.8s   220.00nm          6.2mb
                   iS   51 01.00
                   e    51 49.00
                   ePPS 52 12.00
SIM    81.34 338 eP    40 50.00   0.2
    Z  20s     7.00um          6.0Msz
                   e    51 00.00
                   e    51 36.00
FLN    81.38   2 eP    40 50.20   0.2
       1.1s   264.70nm          6.2mb
    Z  22s     2.97um          5.6Msz
SRO    81.43 349 iPd   40 51.40   1.2
                   i    41 15.30  90kmX
                   i    44 16.10
                   e    51 37.90
STR    81.50 357 P     40 51.16   0.6
LDF    81.56   2 eP    40 51.10   0.2
       1.0s   184.00nm          6.1mb
KGM    81.56 263 ePd   40 51.90   0.5
KMR    81.62 352 iP+   40 50.40  -0.8
BRS    81.64 207 iPc   40 52.00   0.5
       1.5s    23.00nm          5.0mb X
    Z  18s    22.00um          6.6Msz
                   i    40 59.00  22kmX
                   eS   51 06.00
BUD    81.66 349 eP    40 51.50   0.0
WLS    81.68 357 P     40 51.93   0.3
CDF    81.69 357 P     40 51.93   0.2
FUR    81.73 354 iPd   40 52.40   0.6
       1.3s   335.00nm          6.2mb
    Z  18s     3.00um          5.7Msz
                   iPcP 40 59.10
                   e    50 58.50
                   e    51 05.50
                   e    51 19.60
GRR    81.75   2 eP    40 52.40   0.5
       0.9s   184.10nm          6.1mb
SOP    81.75 350 iPc   40 53.00   1.1
WR2    81.77 225 iPc   40 51.30  -1.0
       1.6s    25.50nm          5.0mb X
                   ipP  40 58.10  22kmX
WRA    81.77 225 P     40 51.79  -0.5
QUE    81.79 308 iPd-  40 54.50   1.8
                   eS   51 08.20
ECH    81.89 357 P     40 52.92   0.3
VITF   81.92 358 P     40 53.47   0.7
LIBD   81.94 357 P     40 53.36   0.5
BHG    82.06 353 iPd   40 54.30   0.8
       1.7s   361.00nm          6.2mb
LPF    82.10   2 eP    40 54.40   0.7
       1.2s   316.55nm          6.3mb
HAU    82.12 357 eP    40 54.20   0.3
       0.9s    73.05nm          5.7mb
    Z  19s     2.25um          5.6Msz
FEL    82.19 356 P     40 54.56   0.2
MOF    82.25 357 P     40 54.78   0.1
BSF    82.28 357 eP    40 54.90   0.1
       0.8s    55.05nm          5.7mb
SLE    82.28 356 iPd   40 54.90   0.2
CFR    82.43 342 eP    40 56.00   0.6
TPI    82.50 257 ePc   40 56.00  -0.2
                   e    44 00.00
MLR    82.55 344 ePd   40 54.00  -2.3
ZLA    82.57 356 iPd   40 56.70   0.4
UZD    82.60 349 iP    40 56.90   0.6
WTTA   82.60 354 iPd   40 57.20   0.6
       1.4s   492.00nm          6.4mb
                   i    41 06.00  28kmX
                   i    41 16.30
BBS    82.62 357 P     40 56.86   0.3
DEV    82.68 346 ePc   40 58.50   1.7
ERE    82.75 329 iP-   40 59.00   1.6
       1.8s    10.00nm          4.6mb X
                   i    44 14.00
                   i    51 18.00
LOMF   82.76 357 P     40 57.97   0.7
ISR    82.78 343 ePd   40 54.50  -2.9
STH    82.91  70 Pd    41 10.34  12.0X
LOR    82.91 359 eP    40 58.40   0.4
       0.9s   125.45nm          6.1mb
    Z  20s     2.10um          5.5Msz
HYF    82.91 360 eP    40 58.90   0.9
CMP    82.93 344 iPc   41 01.00   2.9
PCJ    82.95  71 Pd    41 10.01  11.4X
GWJ    82.95  70 Pd    41 10.40  11.6X
HOJ    83.00  70 Pd    41 10.31  11.5X
OGA    83.04 354 iPd   40 59.80   0.9
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        0.8s    66.00nm          5.8mb
SSF    83.12 359 eP    40 59.60   0.6
       1.0s   201.60nm          6.2mb
LLS    83.15 356 iPd   41 00.10   0.6
GZR    83.18 346 iPc   41 00.00   0.5
LBF    83.19 359 eP    40 59.70   0.2
       1.0s   100.40nm          5.9mb
OSS    83.27 355 iPd   41 00.80   0.7
TRT    83.30 250 ePd   41 05.20   4.9X
       1.7s     8.20nm          4.6mb X
AVF    83.39 359 eP    41 00.90   0.5
       1.3s   350.90nm          6.4mb
VDL    83.51 355 iPd   41 02.20   0.9
SMF    83.53 359 eP    41 01.60   0.4
       1.4s   787.65nm          6.7mb
MFF    83.55   2 eP    41 01.90   0.7
       1.3s   872.25nm          6.8mb
LJU    83.58 352 eP    41 01.00  -0.4
       2.0s   180.00nm          5.9mb
                   e    41 02.50
                   epP  41 10.60  30kmX
                   e    41 38.00
                   e    42 14.00
                   ePP  44 12.00
                   eSKS 51 18.00
                   eS   51 21.50
                   e    52 06.00
                   e    52 48.00
PTJ    83.58 351 iP    41 02.30   0.8
BGF    83.63 360 eP    41 02.20   0.6
       1.1s   266.65nm          6.4mb
DRA    83.63 345 ePc   41 04.00   2.3
VOY    83.65 352 eP    41 01.10  -0.8
                   epP  41 12.60  37kmX
                   e    41 18.00
                   e    41 54.60
ZAG    83.66 351 iPd   41 02.80   1.0
SJI    83.85 250 ePd   41 03.00  -0.1
TCF    83.89   0 eP    41 03.50   0.5
       1.2s   226.70nm          6.3mb
TMA    83.92 356 iPd   41 03.80   0.4
LSF    83.93   1 eP    41 03.70   0.5
       1.0s   556.80nm          6.7mb
MAF    83.96 360 eP    41 04.20   0.8
       1.4s   860.85nm          6.8mb
TRI    83.98 352 e(P)  41 02.90  -0.5
                   e(S) 51 20.00
                   e(SP) 52 16.00
                   e(SSS)00 52.00
DIX    84.01 357 iPd   41 05.30   1.4
MMK    84.02 356 iPd   41 05.30   1.4
TAB    84.02 327 iP    41 05.00   1.0
EMS    84.04 357 iPd   41 04.80   0.8
VBY    84.04 351 iPd   41 04.10   0.3
                   ipP  41 13.90  31kmX
                   i    41 35.50
                   i    41 45.60
RIY    84.29 352 iPd   41 04.90  -0.1
ORX    84.43 356 P     41 06.16   0.3
ORO    84.44 356 P     41 06.28   0.4
KVT    84.47 335 iP    41 06.00   0.0
AKKT   84.49 334 eP    41 07.10   0.8
LPL    84.60 357 eP    41 08.20   1.4
       1.0s   106.40nm          6.0mb
LPG    84.62 357 eP    41 08.40   1.4
       1.4s   359.00nm          6.4mb
LSD    84.64 357 P     41 08.64   1.5
KAS    84.79 337 iPd   41 08.80   1.1
ARMA   84.82 206 iPc   41 10.50   2.7
       1.0s   121.00nm          6.1mb
KART   84.84 336 eP    41 09.60   1.5
PVL    84.86 343 iP    41 09.00   1.1
RJF    84.87   1 eP    41 08.20   0.3
       1.4s   583.75nm          6.6mb
    Z  22s     2.78um          5.6Msz
SSB    84.89 359 P     41 08.78   0.7
RSP    84.94 357 P     41 09.09   0.7
BNI    85.06 357 P     41 10.72   1.7
TRHT   85.12 335 eP    41 10.40   1.0
CTK    85.16 336 eP    41 11.10   1.5
RRL    85.19 357 P     41 11.52   1.7
ASPA   85.21 224 iPd   41 09.60  -0.2
       1.4s    59.00nm          5.6mb
    Z  18s     0.90um          5.2Msz
                   i    41 17.50  25kmX
                   iS   51 29.70
BOB    85.23 355 P     41 11.00   1.2
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LPF     85.23   1 eP    41 10.10   0.4
        1.4s   791.15nm          6.7mb
BHB     85.25 357 P     41 09.23  -0.6
CAF     85.26   0 eP    41 10.50   0.6
        1.4s   561.10nm          6.6mb
JMB     85.35 342 eP    41 11.00   0.6
HYB     85.44 292 ePd   41 10.80  -0.4
        1.0s   420.00nm          6.6mb
                eS      51 40.00
LPO     85.49   1 eP    41 11.30   0.3
        1.3s   372.55nm          6.4mb
PCP     85.50 356 P     41 11.20   0.1
DOI     85.59 357 P     41 10.96  -0.7
PZZ     85.60 357 P     41 11.52  -0.2
CKI     85.63 356 P     41 11.68   0.0
LEM     85.68 254 ePd   41 11.50  -1.0
MRFT    85.69 337 eP    41 13.70   1.4
PLE     85.70 348 iPd   41 12.99   0.7
PGB     85.72 344 eP    41 13.00   0.7
MME     85.72 354 P     41 13.72   1.2
        1.2s   821.40nm          6.8mb
ROB     85.77 356 P     41 12.16  -0.4
VTS     85.84 345 eP    41 14.00   1.0
FIN     85.85 356 P     41 12.30  -0.6
STV     85.85 357 P     41 11.89  -1.0
BDI     85.86 354 P     41 12.77  -0.2
RSM     85.86 353 P     41 14.22   1.4
ENR     85.86 356 P     41 11.93  -1.1
SFI     85.91 353 P     41 14.56   1.5
        1.0s   395.60nm          6.6mb
DIM     85.95 343 eP    41 15.00   1.6
PGD     85.97 353 P     41 15.00   1.3
        1.3s  1200.60nm          6.9mb
SGKT    85.97 338 eP    41 13.40  -0.4
PLD     86.05 344 iP    41 15.00   1.1
IVA     86.08 347 iPd   41 14.20   0.1
TOUF    86.08 357 P     41 13.35  -0.9
AUTN    86.09 356 P     41 15.54   1.2
SAOF    86.10 356 P     41 13.57  -0.5
IMI     86.16 356 P     41 14.27  -0.2
ITU     86.16 340 eP    41 12.00  -2.4
CRE     86.20 353 P     41 15.18   0.5
MVIF    86.20 357 P     41 15.76   1.0
AURF    86.20 357 P     41 14.89   0.2
PII     86.20 354 P     41 14.02  -0.5
        1.3s   554.30nm          6.6mb
HVAR    86.22 350 iPd   41 14.20  -0.5
SBF     86.22 356 eP    41 14.70  -0.1
        1.2s   283.25nm          6.4mb
BRY     86.23 348 iPd   41 14.35  -0.6
ARV     86.24 352 P     41 15.57   0.7
NKY     86.26 348 iPd   41 14.53  -0.5
PVY     86.34 347 iPd   41 15.15  -0.3
EMON    86.35   7 iPd   41 15.05  -0.3
REVF    86.35 357 P     41 15.54   0.2
CALN    86.35 357 P     41 15.54   0.0
RZN     86.45 344 iP    41 16.00  -0.1
NAL     86.50 338 eP    41 14.90  -1.4
BCI     86.55 347 eP    41 17.50   1.1
FRF     86.55 357 eP    41 16.40   0.1
        1.4s   244.85nm          6.2mb
KKB     86.57 345 iP    41 17.00   0.5
TTG     86.60 348 iPd   41 16.11  -0.4
GPA     86.65 339 iP    41 17.00   0.1
LRG     86.67 357 eP    41 17.30   0.5
        1.5s   284.15nm          6.3mb
      Z 23s      4.20um          5.8MszX
HCY     86.69 348 iPd   41 16.17  -0.8
ASS     86.69 353 P     41 17.26   0.2
        1.4s   466.50nm          6.5mb
MMB     86.73 344 iP    41 18.00   0.7
SKO     86.73 346 iPd   41 15.00  -2.2
                iS      51 49.00
DVD     86.77  81 eP    41 13.22  -4.5X
LMR     86.79 357 eP    41 17.60   0.2
        1.4s   236.10nm          6.2mb
STS     86.79   8 iPd   41 16.85  -0.6
BDV     86.80 348 iPd   41 16.64  -0.9
ELIZ    86.95   3 iPc   41 18.91   0.6
ALN     86.97 342 eP    41 17.90  -0.5
KER     87.05 324 iPd   41 18.40  -0.7
ULC     87.06 348 iPd   41 17.56  -1.3
EPF     87.13   2 eP    41 18.50  -0.7
        0.9s    23.60nm          5.4mb
LESF    87.15   1 P     41 19.46   0.2
VAY     87.18 345 iPc   41 19.30  -0.1
        1.6s   210.00nm          6.1mb
                i       41 38.00  67kmX
SRS     87.21 344 iP    41 19.21  -0.4
MTHF    87.24   0 P     41 20.16   0.4
KNT     87.28 345 eP    41 20.06   0.1
LACI    87.32 347 eP    41 19.50  -0.5
POO     87.33 296 iPd   41 22.80   2.3
        1.0s   252.00nm          6.4mb
AQU     87.34 352 P     41 20.70   0.5
        1.2s   528.40nm          6.7mb
ENSF    87.36   2 P     41 20.85   0.5
MNS     87.37 353 P     41 19.84  -0.5
        1.1s   490.00nm          6.7mb
ERUA    87.40   7 iPd   41 20.52   0.0
PGF     87.46 355 eP    41 20.70  -0.2
        1.4s   390.35nm          6.5mb
ECRI    87.47   4 iPd   41 20.87   0.0
EZAM    87.51   8 iPc   41 21.15   0.2
SOH     87.54 344 eP    41 20.89  -0.3
GRG     87.57 345 iP    41 21.10  -0.2
TIR     87.58 347 eP    41 20.60  -0.7
PAND    87.66   1 P     41 21.98   0.1
FG2     87.71 351 P     41 22.14   0.2
        1.4s   646.20nm          6.7mb
FG3     87.73 350 P     41 23.12   1.0
        0.9s   139.90nm          6.3mb
ECO     87.81  78 eP    41 22.48  -0.3
ALT     87.87 339 eP    41 22.80  -0.1
ETER    87.88 360 iPc   41 22.80   0.1
FNA     87.90 346 eP    41 22.14  -0.8
DUI     87.93 351 P     41 23.38   0.3
        1.3s   319.40nm          6.5mb
RMP     87.94 352 P     41 23.45   0.4
        1.4s   620.50nm          6.7mb
SDI     87.95 352 P     41 22.72  -0.4
        1.3s   328.30nm          6.5mb
EGRA    87.95   2 iPd   41 23.24   0.2
RDP     87.99 352 P     41 23.87   0.5
        1.4s   609.80nm          6.7mb
RIV     88.16 206 eP    41 24.60   0.7
BERA    88.20 347 eP    41 23.60  -0.7
PAIG    88.35 344 iP    41 23.66  -1.4
LIT     88.39 345 eP    41 24.06  -1.2
BRT     88.40 349 P     41 25.44   0.2
        1.2s   557.70nm          6.8mb
VLO     88.49 347 eP    41 25.80   0.1
TPE     88.59 347 eP    41 26.60   0.4
LRS     88.61  63 P     41 26.80   0.1
LSK     88.64 346 eP    41 26.10  -0.5
MGP     88.70  63 P     41 27.30   0.3
KHL     88.71 339 eP    41 25.30  -1.6
LCI     88.84 348 P     41 27.28  -0.1
        1.4s   852.20nm          6.9mb
PNP     88.89  63 P     41 28.40   0.4
SGO     88.93 350 P     41 27.31  -0.5
CLLP    88.94  63 P     41 28.60   0.5
SRN     89.00 347 eP    41 27.00  -1.1
GBA     89.08 290 Pc    41 28.00  -0.8
SJG     89.16  62 ePd   41 28.68  -0.6
        1.4s   175.07nm          6.2mb
                ePPc    41 34.64  19kmX
ETOR    89.27   3 iPd   41 29.04  -0.5
BCK     89.28 338 iP    41 28.70  -0.9
IGT     89.29 346 eP    41 28.90  -0.7
ORI     89.29 349 P     41 30.14   0.6
        1.2s   904.50nm          6.9mb
MGR     89.32 350 P     41 28.92  -0.8
        1.0s   479.10nm          6.7mb
EROQ    89.34   2 iPd   41 28.61  -1.1
EBR     89.34   2 eP    41 29.00  -0.7
GUD     89.35   5 iPd   41 29.49  -0.5
STK     89.42 214 iPd   41 27.00  -2.9
        1.4s    50.00nm          5.6mb
                eS      51 50.00
AGG     89.47 345 eP    41 27.78  -2.7
BWA     89.51 208 iPc   41 31.80   1.4
                ipP     41 38.00  19kmX
CIN     89.72 340 iPd   41 30.00  -1.6
EPLA    89.80   7 iPd   41 31.80  -0.2
MBL     90.00 236 eP    41 33.60   0.7
CNB     90.06 207 iPc   41 34.30   1.3
        1.5s   298.00nm          6.3mb
CAN     90.17 207 eP    41 34.90   1.5
                ipP     41 41.30  20kmX
                i       42 15.20
                i       42 34.60
                ePP     45 12.20
ESEL    90.41 360 iPd   41 34.52  -0.2
PAB     90.43   5 eP    41 33.59  -1.4
        1.4s   144.28nm          6.1mb
GRI     90.52 349 P     41 34.97  -0.4
        0.8s   184.20nm          6.4mb
ECHE    90.54   3 iPc   41 35.71   0.3
WARB    90.72 228 eP    41 37.50   1.3
FAM     90.73 335 eP    41 36.50   0.2
LIS     90.86   9 iPd   41 36.10  -0.7
CSS     90.94 335 eP    41 37.00  -0.3
GMB     91.23 350 P     41 37.74  -1.0
PPCY    91.28 336 eP    41 39.00   0.2
BHL     91.28 333 P     41 37.00  -2.0
                PP      45 05.00
                SKS     52 04.00
SOI     91.30 349 P     41 37.65  -1.2
        1.0s    64.40nm          5.9mb
EVIA    91.43   4 iPd   41 39.44  -0.2
ACU     91.63   2 iPd   41 39.89  -0.5
EBAN    91.84   5 iPd   41 41.15  -0.2
CVT     92.03 352 P     41 42.29   0.1
        1.3s   569.70nm          6.8mb
EHOR    92.08   6 iPd   41 42.23  -0.3
EVAL    92.21   7 eP    41 41.98  -1.1
EHUE    92.24   4 iPc   41 43.71   0.3
EALH    92.25   3 iPd   41 44.03   0.8
ELUQ    92.41   5 iPc   41 44.50   0.4
BPA     92.43  60 eP    41 40.00  -4.4X
PZI     92.46 350 P     41 44.00  -0.3
        0.9s   101.80nm          6.2mb
ECOG    92.73   5 iPc   41 45.33  -0.3
EPRU    92.94   6 iPc   41 46.86   0.4
SALJ    93.04 332 P     41 46.60  -0.5
ENIJ    93.10   4 iPd   41 46.90  -0.3
EGUA    93.17   5 iPd   41 46.87  -0.7
TOO     93.31 209 eP    41 50.00   2.2
        1.1s    66.00nm          6.0mb
PAG     93.35  60 eP    41 47.00  -1.7
EJIF    93.43   6 iPd   41 49.02   0.3
TOV     93.60  70 eP    41 50.80   1.0
BMG     93.70  74 iPKP  41 50.00  -0.4
BIT     94.21   7 iP    41 54.00   1.7
TSY     94.47   7 iP    41 55.00   1.5
FUQ     94.53  76 eP    41 54.00  -0.5
CAR     94.75  68 eP    41 50.70  -4.5X
BOG     94.99  77 ePKP  42 02.00   5.4X
PSO     95.57  81 ePKP  42 00.00   0.7
TNF     97.34   7 eP    42 07.00   0.4
TNF     97.34   7 iP    42 09.00   2.4
LPAZ   114.69  86 PKPd  47 15.20   0.0
        0.8s     2.10nm
                i       50 32.20
                SKP     55 04.30
                SKS     58 00.10
                SS      08 36.20
LPB    114.89  86 PKP   47 11.00  -4.3X
      Z 18s      2.75um          5.9Msz
                LR      24 34.00
CNCB   115.17  86 PKP   47 16.10   0.1
SIV    118.97  80 PKP   47 21.30  -1.2
YJA    120.67  88 ePKPd 47 26.00  -0.2
TIC    123.01   9 PKP   47 27.40  -2.9
        1.0s    49.50nm
FSA    123.11  92 ePKPc 47 30.50   0.4
NAI    123.23 318 iPKP  47 32.00   1.0
      Z 24s      1.78um          5.6MszX
KIC    123.32   9 ePKP  47 28.00  -2.9
LIC    123.42   9 PKP   47 28.00  -3.1X
        1.1s    53.50nm
      Z 18s      2.50um          5.9Msz
RTCB   125.01  99 e(PKP)47 33.20  -0.6
RTLL   125.12  98 e(PKP)47 33.00  -1.0
CFA    125.45  98 ePKPc 47 33.50  -1.1
MDZ    125.90 100 i(PKP)47 34.30  -1.2
BDFB   126.77  68 ePKP  47 37.09  -0.6
                i       47 45.33
                ePP     49 43.39
BAO    126.77  68 ePKP  47 37.10  -0.6
                i       47 45.30
                e       47 50.70
BDF    126.85  68 PKPc  47 36.90  -0.9
        1.4s     2.25nm
                i       47 42.20
                i       47 52.20
                i       48 04.00
RFA    127.37 102 ePKPd 47 37.50  -0.8
TCA    127.60  96 ePKP  47 37.80  -1.0
SBA    128.15 184 ePKP  47 39.00   0.6
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11d 00h

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CACB  132.17  72 iPKPd 47 47.30  -0.5
                 e     47 56.40
                 e     48 03.00
RSTA  132.93  77 ePKP  47 29.70 -19.3X
                 e     47 48.40
                 e     48 04.20
VAO   133.01  73 ePKP  47 49.60   0
                 e     47 50.00
LSZ   139.45 320 ePKP  47 46.00 -15.6X
                 i     48 02.50
                 i     51 42.90
                 i     55 18.50
SPA   140.01 180 iPKPd 47 53.40  -7.7X
       0.6s   109.76nm
BUL   143.58 316 iPKP  48 04.90  -3.9X
                 i     48 15.10
MAW   146.06 217 iPKPc 48 10.20  -1.2
       1.6s   445.20nm
     Z  22s     1.60um          5.7MszX
                 i     48 18.80
                 ePP   51 32.30
                 i     58 29.00
                 iSS   10 26.00
CRZF  147.47 257 iPKP  48 18.00   3.7X
                 ePP   51 25.00
BFT   147.64 309 ePKP  48 17.20   1.7
       1.2s   520.00nm
SLR   148.54 311 iPKPc 48 16.50  -0.4
       1.1s   797.47nm
     Z  22s     4.44um          6.2Msz
SLR   148.54 311 iPKPc 48 20.60   3.7X
       1.9s     1.60nm
     Z  22s     7.93um          6.5Msz
KSR   149.31 313 ePKP  48 21.50   3.4X
       1.5s   810.00nm
WIN   150.15 332 iPKPc 48 19.40  -0.1
       1.4s   210.00nm
                 e     51 56.00
SEK   151.02 310 iPKPc 48 26.20   5.6X
       0.7s   277.00nm
KSD   151.88 304 ePKP  48 28.10   6.3X
       1.5s   100.00nm
BOSA  152.33 313 ePKP  48 20.65  -1.6
                 ePKPbc48 29.17
                 ePKPab48 36.83
BLF   152.38 311 ePKP  48 20.50  -2.1
       1.5s   520.00nm
FRS   153.33 311 iPKPd 48 22.50  -1.1
       1.5s   170.00nm
HVD   153.95 310 iPKPd 48 33.00   8.3X
       1.5s   160.00nm
POF   155.40 321 ePKP  48 27.00   0.6
       1.5s   140.00nm
SUR   157.63 316 ePKP  48 39.10   9.5X
       1.5s   100.00nm
     Z  18s    18.30um          7.0MszX
CER   159.13 317 ePKP  48 19.50 -11.5X
       0.9s   166.00nm
BLE   159.87 318 ePKP  48 46.00  14.3X
       1.0s    70.00nm
     S.D. = 1.0  on 623 of 674 obs.
-----------------------------------
%  NOV  11, 1993  00h 45m 59.66± 0.76s
   37.928 N ± 8.4km   14.765 E ± 6.4km
   DEPTH =  10.0km  (geophysicist)
 SICILY                            (398)
      MD 2.6 (ROM).

MNO     0.06 273 P     46 00.82  -1.2
ATN     0.60  67 P     46 11.73   0.0
MSI     0.68  66 P     46 13.34   0.2
MEU     0.84 171 P     46 15.35  -0.5
GMB     0.90  74 P     46 16.86  -0.1
PZI     0.90 172 P     46 16.70  -0.3
SOI     1.03  82 P     46 19.44   0.4
FAI     1.08 233 P     46 21.60   1.6
     S.D. = 1.0  on   8 of   8 obs.
-----------------------------------
   NOV  11, 1993  01h 36m 35.34± 0.39s
   47.269 N ± 5.7km   10.684 E ± 3.3km
   DEPTH =  10.0km  (geophysicist)
 AUSTRIA                           (546)
      ML 3.0 (LDG), 2.8 (GRF), 2.6
      (VIE), 2.6 (FUR).

MOTA    0.30  75 iPgc  36 41.20  -0.4
                 iSg   36 46.70
OGA     0.46 150 iPgd  36 44.80   0.0
WATA    0.61  83 iPgd  36 46.80  -1.0
                 iSg   36 55.90
WTTA    0.65  90 iPgc  36 47.70  -0.8
                 iSg   36 57.10
OSS     0.69 213 iPc   36 48.30  -0.8
SCE     0.74 108 iPgd  36 49.60  -0.3
FUR     0.98  24 ePg   36 55.10   1.1
                 eSg   37 08.90
VDL     1.14 227 ePc   36 56.90   0.0
LLS     1.22 251 eP    36 59.30   1.1
BHG     1.56  72 ePg   37 05.80   2.7
SLE     1.57 289 eP    37 03.40   0.1
ZLA     1.57 279 eP    37 05.40   2.0
TMA     1.70 228 eP    37 08.80   3.4X
KBA     1.83  95 iPgd  37 10.70   3.5X
                 iSg   37 36.60
WET     2.38  37 iPnc  37 14.80  -0.3
GRF     2.45   8 ePg   37 22.30   6.3X
                 eSg   37 53.40
CDF     2.56 298 Pg    37 24.10   6.4X
                 Sg    37 56.10
KHC     2.69  45 eP    37 19.50   0.1
                 ePg   37 27.00
                 e     37 50.50
                 eSg   38 00.00
BSF     2.70 283 Pn    37 19.70   0.1
                 Pg    37 26.50
                 Sg    38 00.20
HAU     3.02 286 Pn    37 22.80  -1.3
                 Pg    37 32.20
                 Sg    38 11.50
LPG     3.25 238 Pn    37 29.40   1.8
                 Pg    37 40.00
LPL     3.25 239 Pn    37 29.20   1.7
MOX     3.44  10 (Pg)  37 43.20  13.2X
                 iSn   38 10.20
                 iSg   38 24.80
PRU     3.74  42 ePg   37 33.60  -0.7
                 Sg    38 35.50
SBF     4.10 215 Pn    37 42.50   3.1X
BRG     4.20  30 iPg   37 51.50  10.7X
                 iSg   38 50.50
LBF     4.59 269 Pn    37 45.80  -0.6
LOR     4.65 272 Pn    37 46.50  -0.7
                 Sg    39 02.80
SMF     4.73 265 Pn    37 47.40  -1.0
SSF     4.90 270 Pn    37 50.00  -0.8
AVF     5.04 267 Pn    37 51.70  -1.0
BGF     5.42 265 Pn    37 57.00  -1.1
     S.D. = 1.1  on  25 of  32 obs.
-----------------------------------
   NOV  11, 1993  02h 05m 58.07± 0.55s
   38.296 N ± 6.5km    0.845 W ± 5.3km
   DEPTH =  10.7 ±  4.0 km
 SPAIN                             (377)
      mbLg 3.2 (MDD). Felt (III) in
      the Hondon de las Nieves area.

ACU     0.40  58 iPd   06 07.01   0.6
                 e     06 14.10
EALH    0.63 226 iPc   06 10.22  -0.4
                 e     06 20.40
ECHE    1.30 356 iPc   06 22.38   0.3
                 e     06 40.30
EVIA    1.35 285 iPc   06 22.92   0.1
                 e     06 39.60
EHUE    1.46 251 eP    06 26.06   1.6
                 e     06 42.80
ENIJ    1.71 220 iPd   06 27.99   0.0
                 e     06 48.10
EBAN    2.32 268 eP    06 36.51  -0.3
                 e     07 04.90
ECOG    2.38 246 eP    06 37.66  -0.2
                 e     07 06.40
EGUA    2.61 237 eP    06 42.47   1.6
                 e     07 11.00
ETOR    2.69 340 eP    06 46.89   4.8X
                 e     07 17.50
EROQ    2.70  21 iPc   06 42.74   0.5
                 e     07 15.80
EBR     2.72  22 (P)   06 54.00  11.5X
ELUQ    2.80 256 eP    06 44.21   0.5
ESEL    3.26  62 eP    06 50.69   0.5
GUD     3.47 313 eP    06 54.74   1.5
EHOR    3.51 264 eP    06 52.73  -0.9
EPRU    3.73 250 eP    06 56.24  -0.6
EPLA    4.43 295 eP    07 05.20  -1.7
ECRI    4.49 344 eP    07 08.26   0.6
EPF     4.81  10 Pn    07 13.20   0.9
                 Sn    08 07.40
                 Sg    08 33.00
LPO     6.56  13 Pn    07 36.00  -0.8
                 Sn    08 48.20
LFF     6.74  10 Pn    07 38.80  -0.6
CAF     6.97  17 Pn    07 41.80  -0.8
PGF     8.62  57 Pn    08 04.50  -1.4
     S.D. = 1.0  on  22 of  24 obs.
-----------------------------------
?  NOV  11, 1993  02h 59m 18.41± 3.16s
   61.641 N ±15.2km    4.374 E ±25.0km
   DEPTH =  10.0km  (geophysicist)
 SOUTHERN NORWAY                   (535)
      MD 2.2 (BER).

FOO     0.32  97 eP    59 26.25   1.2
                 eS    59 30.96
SUE     0.61 162 eP    59 31.01   0.2
                 eS    59 40.51
ASK     1.23 161 eP    59 40.99  -0.2
                 eS    59 57.93
EGD     1.44 163 eP    59 44.92   0.5
                 eS    00 03.83
MOL     1.76  57 eP    59 49.55   0.5
                 eS    00 11.49
NRA0    3.59 102 Pn    00 13.08  -2.1
                 Pg    00 19.88
                 Lg    01 10.85
     S.D. = 1.5  on   6 of   6 obs.
-----------------------------------
&  NOV  11, 1993  03h 07m 39.98s
   63.005 N          151.016 W
   DEPTH = 114.0km
 CENTRAL ALASKA                    (  1)
      <AEIC>. Felt (V) at Skwentna.

KTH     0.55   4 iPc   07 57.80  -0.2
                 eS    08 11.19
TRF     0.56  36 iPc   07 57.76  -0.4
                 eS    08 12.00
HUR     0.63  92 ePc   07 57.96  -0.5
                 eS    08 12.08
CUT     0.69 150 iPc   07 58.75  -0.2
SKT     1.06 193 ePc   08 02.09  -0.3
                 eS    08 19.14
RND     1.06  67 iPd   08 01.88  -0.6
                 eS    08 18.43
BWN     1.36  30 ePd   08 05.68  -0.1
                 eS    08 25.06
PWA     1.46 158 P     08 06.80  -0.1
SUA     1.55 175 eP    08 07.80  -0.4
GHO     1.58 141 ePd   08 08.09  -0.3
PLRM    1.67 147 eP    08 08.67  -0.8
PMR     1.67 147 eP    08 08.46  -1.0
NCG     1.69 199 ePd   08 09.33  -0.6
SML     1.73 133 eP    08 09.58  -0.7
CGLM    1.77 196 ePd   08 10.12  -0.6
NEA     1.80  28 iPd   08 09.83  -1.2
                 eS    08 31.85
CRP     1.82 198 ePd   08 10.45  -1.1
                 eS    08 35.54
CP2     1.84 199 ePd   08 11.16  -0.7
                 eS    08 35.71
BGL     1.86 201 eP    08 12.05   0.1
CKN     1.87 198 eP    08 11.78  -0.2
SPU     1.89 195 eP    08 11.57  -0.8
CKT     1.90 198 eP    08 12.01  -0.4
PMS     1.89 158 P     08 11.60  -0.7
CKL     1.92 199 eP    08 12.31  -0.4
WRH     1.96  40 eP    08 11.82  -1.3
KNK     2.00 142 ePd   08 12.63  -1.0
BKG     2.03 197 eP    08 13.33  -0.8
MLY     2.04   3 eP    08 12.93  -1.2
                 eS    08 38.56
SCM     2.08 123 ePd   08 13.42  -1.3
                 eS    08 40.15
CCB     2.18  39 iPd   08 14.59  -1.3
                 eS    08 41.28
NKA     2.27 183 eP    08 19.79   2.7
TTA     2.28 270 ePd   08 16.25  -1.1
HDA     2.29  50 ePd   08 15.95  -1.4
MDM     2.31  31 ePd   08 16.36  -1.4
FBA     2.38  35 iPd   08 16.91  -1.6
CFI     2.38 139 eP    08 17.27  -1.3
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TOA      2.42 110 P      08 18.30  -0.8
THY      2.42  78 eP     08 19.22   0.1
DDM      2.45  69 eP     08 19.02  -0.5
PWL      2.50 148 eP     08 18.67  -1.5
                  eS     08 49.03
PAX      2.53  88 ePd    08 19.78  -0.9
SLKM     2.53 171 ePc    08 19.62  -1.0
IL1      2.55  44 ePd    08 19.15  -1.6
ILB      2.55  44 ePd    08 19.14  -1.6
                  eS     08 50.03
DFR      2.55 199 eP     08 20.30  -0.6
GLM      2.55  37 ePd    08 19.58  -1.3
SDG      2.56  98 eP     08 19.99  -1.0
DJE      2.60  64 eP     08 20.19  -1.3
NCT      2.62 201 eP     08 21.73   0.0
MPA      2.64 162 eP     08 20.53  -1.5
REF      2.65 198 eP     08 21.66  -0.6
RS2      2.68 199 eP     08 22.12  -0.6
TZL      2.77 108 eP     08 22.57  -1.1
KLU      2.83 120 eP     08 22.39  -2.2
VZW      2.87 131 eP     08 22.91  -2.2
SVW      2.89 231 eP     08 24.05  -1.2
VLZ      2.90 128 eP     08 23.18  -2.2
                  eS     08 58.62
SEW      3.01 165 eP     08 25.61  -1.2
ILIM     3.08 198 eP     08 28.35   0.4
INE      3.11 199 eP     08 28.53   0.1
FID      3.12 134 eP     08 26.31  -2.1
DOT      3.20  75 ePd    08 27.94  -1.6
BRLK     3.25 179 eP     08 29.51  -0.7
IMA      3.28 341 ePd    08 29.00  -1.7
LTI      3.34 152 eP     08 28.99  -2.3
HOM      3.37 185 eP     08 31.68  -0.1
HIN      3.39 139 eP     08 30.26  -1.8
MTU      3.43 150 eP     08 30.42  -2.2
CNPM     3.49 182 eP     08 31.45  -2.0
CVA      3.51 132 eP     08 32.07  -1.6
OPT      3.53 199 eP     08 33.62  -0.3
PDB      3.57 207 eP     08 33.31  -1.2
TMW      3.65  81 eP     08 33.13  -2.5
GLB      3.72 112 eP     08 34.49  -2.1
AUL      3.82 199 eP     08 39.58   1.7
AUH      3.84 199 P      08 40.40   2.2
RAGM     4.00 128 eP     08 39.13  -1.2
BC3      4.20  85 eP     08 40.56  -2.6
CDD      4.28 199 eP     08 43.60  -0.6
SYI      4.46 189 eP     08 45.53  -1.0
BALM     4.54 112 eP     08 45.12  -2.6
WAX      4.65 120 eP     08 47.64  -1.6
CTGM     5.00 110 eP     08 52.33  -1.8
YAH      5.15 117 eP     08 53.72  -2.5
BM3      5.19  28 ePd    08 54.19  -2.4
INK      8.95  46 eP     09 45.50  -2.2
       1.0s     2.00nm          3.8mb X
       86 obs. associated
-----------------------------------
*  NOV  11, 1993  03h 54m 24.37± 0.55s
    5.089 N ± 6.7km   82.593 W ±11.4km
   DEPTH =  33.0km  (normal)
   4.2mb (  4 obs.)
 SOUTH OF PANAMA                  ( 83)
      MD 4.3 (UPA).

DVD      3.33   2 iPc   55 14.34  -1.0
                  eS     55 47.40
BRU      3.69   0 iPd   55 19.88  -1.1
                  eS     56 06.20
UPA      4.92  38 iPd   55 38.44   0.5
                  iS     56 30.58
ECO      5.13  34 ePc   55 41.68   0.7
                  eS     56 37.03
TOV     13.52  69 eP     57 36.70   0.3
NNA     17.90 161 eP     58 32.50  -0.2
       0.9s    12.60nm          4.0mb
ARE     24.06 153 eP     59 39.00   0.8
LPAZ    25.61 146 P      59 52.70  -0.6
LPB     25.83 147 P      59 56.00   0.9
CNCB    26.12 147 P      59 57.20  -0.8
ALQ     37.00 326 eP     01 35.34   2.3
       1.2s     9.33nm          4.5mb
PV10    40.93 328 eP     02 04.28  -1.5
GSC     43.57 318 (P)    02 28.03   0.8
INK     71.63 342 eP     05 46.00   1.7
       1.0s     2.00nm          4.1mb
MBC     73.95 351 eP     06 02.50   4.8X
       1.0s     3.00nm          4.2mb
GKN    144.87  20 PKP    13 58.80  -1.8
KKN    145.28  19 PKP    13 59.80  -1.6
GUN    145.36  18 PKP    14 01.60  -0.1
DMN    145.39  19 PKP    14 02.20   0.5
      S.D. = 1.2  on  18 of  19 obs.
-----------------------------------
?  NOV  11, 1993  04h 10m 54.24± 1.73s
   31.512 S ±11.6km  178.037 W ±26.9km
   DEPTH =  33.0km  (normal)
   4.8mb (  2 obs.)
 KERMADEC ISLANDS REGION          (177)

PUZ      7.22 204 eP     12 40.50   0.3
                  S      14 00.00
URZ      7.82 209 eP     12 48.30  -0.3
                  S      14 13.20
OUZ      7.91 240 eP     12 55.10   5.2X
CTA     33.96 281 iP     17 38.00   1.2
ASPA    43.03 268 iPd    18 52.60   0.0
       0.6s    12.70nm          4.8mb
WR2     44.09 273 iPd    19 00.40  -0.8
       0.4s    35.10nm          5.5mb X
                  ipP    19 10.80  35kmX
WRA     44.12 273 P      19 01.00  -0.4
       0.7s    10.20nm          4.7mb
KAF    145.58 340 iPKP   30 29.90   0.0
NB2    149.84 351 PKP    30 42.60   5.8X
       0.7s     1.70nm
HFS    150.32 348 ePKP   30 42.60   5.1X
       0.4s     1.20nm
      S.D. = 0.8  on   7 of  10 obs.
-----------------------------------
*  NOV  11, 1993  04h 31m 28.57± 0.91s
   31.610 S ±12.2km   69.987 W ±13.8km
   DEPTH = 130.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA     (137)
      MD 4.3 (SAN).

ZON      1.12  87 iPc    31 55.00   2.0
                  eS     32 10.00
JACH     1.19 206 iPd    31 55.14   1.4
                  iS     32 12.37
RTCV     1.26 102 iPc    31 54.50   0.1
RTRS     1.51  18 eP     31 54.00  -3.0
MDZ      1.59 143 iP     31 56.10  -2.1
                  iS     32 10.60
ROCH     1.61 212 iP+    31 59.46   0.9
                  iS     32 20.44
PEL      1.64 201 iPd    31 58.89   0.2
                  iS     32 18.82
FCH      1.73 188 iP+    31 59.90  -0.2
                  iS     32 21.45
SAN      1.92 197 iPd    32 01.91  -0.2
                  iS     32 23.75
IHA      1.99 224 eP     32 04.20   1.4
                  iS     32 28.00
PCH      2.05 192 iP     32 03.30  -0.4
                  iS     32 27.38
TACH     2.19 201 eP     32 04.76  -0.6
                  iS     32 29.56
LCCH     2.29 215 iP     32 07.10   0.5
                  iS     32 33.21
CACH     2.55 191 iP     32 09.45  -0.7
                  iS     32 38.62
LNV      2.63 207 iP     32 09.72  -1.2
                  iS     32 39.04
CYA      4.81  50 iPc    32 42.00   1.8
                  S      33 35.50
      S.D. = 1.5  on  16 of  16 obs.
-----------------------------------
*  NOV  11, 1993  04h 49m 08.47± 2.01s
   51.135 N ±22.8km   15.834 E ± 7.3km
   DEPTH =  10.0km  (geophysicist)
 POLAND                           (548)
      MG 2.8 (WAR).

KSP      0.41 135 iP     49 15.60  -1.3
       0.4s    66.00nm
                  iS     49 24.80
                  e      49 30.50
BRG      1.22 258 iPn    49 30.60  -0.6
                  iPg    49 31.60
                  iSg    49 51.60
PRU      1.41 216 Pg     49 35.90   1.7
       0.3s    25.90nm
                  Sn     49 54.00
                  Sg     49 59.80
KHC      2.48 217 Pn     49 49.50   0.0
                  ePg    49 55.50
                  e      50 25.00
                  eSg    50 35.00
OJC      2.68 108 ePg    49 53.40   0.9
                  iSg    50 26.70
MOX      2.72 261 iPg    49 58.90   6.0X
                  iSg    50 39.10
WET      2.75 225 iPnc   49 53.60   0.1
GRF      3.29 246 ePn    50 00.20  -0.8
                  ePg    50 11.80
                  eSg    50 57.90
SPC      3.44 123 eP     50 10.90   7.6X
      S.D. = 1.3  on   7 of   9 obs.
-----------------------------------
%  NOV  11, 1993  06h 06m 47.76± 0.84s
   44.355 N ± 8.9km    7.340 E ± 7.4km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                   (545)
      ML 1.9 (GEN).

STV      0.11 186 P      06 50.99   0.3
                  S      06 52.72
ENR      0.14 156 P      06 51.58   0.4
                  S      06 53.87
PZZ      0.23 311 P      06 52.63  -0.1
                  S      06 55.75
ROB      0.39  99 P      06 56.16   0.5
                  S      07 02.29
IMI      0.60 138 P      06 58.90  -0.9
FIN      0.64 103 P      07 00.20  -0.1
      S.D. = 0.7  on   6 of   6 obs.
-----------------------------------
%  NOV  11, 1993  06h 35m 30.70± 0.86s
   38.452 N ± 9.3km   27.341 E ± 8.9km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 3.3 (ISK).

IZM      0.08 229 iPg    35 33.30   0.1
                  eSg    35 37.00
DST      1.53  41 ePn    35 57.80  -0.3
EZN      1.58 330 iPn    35 58.50  -0.3
KHL      1.72  94 ePn    36 00.90   0.0
EDC      1.94  12 ePn    36 04.50   0.5
      S.D. = 0.5  on   5 of   5 obs.
-----------------------------------
   NOV  11, 1993  06h 41m 59.25± 0.34s
   40.902 S ± 9.0km   43.297 E ± 8.0km
   DEPTH =  10.0km  (geophysicist)
   4.8mb ( 19 obs.)
 SOUTHWEST INDIAN RIDGE           (428)

GRM     15.33 294 eP     45 35.00  -2.3
       1.0s   100.00nm          5.1mb
HVD     17.70 300 eP     46 06.00  -1.5
       1.1s    70.00nm          4.7mb
BLF     18.26 305 eP     46 15.50   1.0
FRS     18.37 302 eP     46 16.50   0.9
       0.6s    23.00nm          4.5mb
BFT     18.75 320 eP     46 22.00   1.4
       1.0s    40.00nm          4.6mb
BOSA    19.09 304 eP     46 26.05   1.6
       0.9s    27.76nm          4.5mb
SLR     19.61 316 iPc    46 31.00   0.2
       0.9s    33.00nm          4.6mb
     Z  20s     6.66um          3.2Msz
SUR     19.91 288 eP     46 34.10   0.1
KSR     20.26 313 iPd    46 37.00  -0.7
       1.5s   170.00nm          5.2mb
CER     20.52 284 iPc    46 37.50  -2.8
       1.0s   240.00nm          5.5mb
POF     22.21 294 eP     47 01.50   4.2X
       0.6s    14.00nm          4.6mb
BUL     24.18 324 iP     47 16.40  -0.5
       0.9s    13.87nm          4.6mb
WIN     28.65 302 eP     47 50.00  -8.4X
       1.0s    40.00nm          5.2mb
MAW     28.82 165 e(P)   48 01.00   1.8
       0.8s    11.76nm          4.7mb
SPA     49.29 180 iPd    50 49.70  -0.3
       1.5s    79.55nm          5.5mb
SBA     56.71 168 eP     51 44.20  -0.6
GBA     62.77  38 P      52 41.00  14.0X
TIC     64.80 305 P      52 41.00   0.5
LKO     67.41 306 P      52 57.16   0.0
       1.1s    13.50nm          5.0mb
STK     75.54 120 iPd    53 40.40  -5.3X
```

11d 06h

```
        1.0s     9.30nm          4.8mb
WRA    77.99 106 P     53 58.50  -1.0
        0.8s     3.50nm          4.5mb
WR2    78.00 106 eP    53 58.00  -1.6
        1.0s    12.50nm          5.0mb
CAN    78.02 126 eP    53 59.00  -0.5
DMN    78.42  37 P     54 02.60   0.7
GKN    78.55  37 P     54 01.60  -0.9
        0.8s    17.00nm          5.2mb
KKN    78.66  37 P     54 04.90   1.7
GUN    79.03  38 P     54 05.20  -0.2
BAO    80.89 257 eP    54 16.30   0.9
                 e     54 23.90
                 e     54 31.30
BDFB   80.91 257 eP    54 15.77   0.3
        1.1s    14.92nm          4.9mb
MDZ    83.57 232 e(P)  54 27.80  -1.2
CTA    86.39 113 iPc   54 42.50  -0.7
SIV    90.13 249 P     55 00.60  -0.6
CCH    92.70 244 P     55 13.80   0.4
CNCB   94.36 244 P     55 23.00   1.7
LPB    94.63 244 eP    55 23.00   0.6
LPAZ   94.83 244 P     55 24.20   0.7
MBC   143.75 353 ePKP  01 33.00  -1.8
MIAR  145.57 274 ePKP  01 38.54  -0.6
                 e     01 44.46
UYO   146.09 272 iPKPd 01 39.80  -0.2
TUL   147.77 275 iPKPc 01 45.50   2.8X
OCO   148.90 273 iPKPc 01 47.60   3.1X
MEO   149.46 271 iPKPd 01 46.20   0.8
WMOK  149.59 271 ePKP  01 46.08   0.5
                 PKPbc 01 49.76
                 PKPab 01 56.48
ULM   150.26 302 ePKP  01 53.00   7.0X
ACO   150.58 274 iPKPd 01 52.30   5.3X
LTX   150.78 257 ePKP  01 47.33  -0.3
                 PKPbc 01 52.84
                 PKPab 01 58.58
INK   152.48 357 ePKP  01 55.00   6.2X
        1.0s     3.00nm
ALQ   155.48 266 (PKP) 01 53.95  -0.3
                 PKPab 02 03.47
SRU   159.89 273 (PKP) 02 01.79   2.4
MSU   160.99 271 ePKP  02 01.31   0.7
LRM   161.72 294 ePKP  02 00.40  -0.7
     S.D. = 1.2  on  42 of  51 obs.
-----------------------------------
   NOV  11, 1993  07h 01m 47.20± 0.28s
   37.263 N ± 3.7km  115.228 W ± 2.7km
   DEPTH =   5.0km  (geophysicist)
 SOUTHERN NEVADA                    ( 41)
      ML 3.5 (GS).

TPNV    0.87 249 eP    02 04.26  -0.3
                 eS    02 17.48
ARUT    1.51  69 ePc   02 15.37   0.2
TNP     1.78 298 ePc   02 19.05   0.0
GSC     2.34 214 eP    02 26.91  -0.1
BONR    2.54 287 eP    02 29.75  -0.3
MRCM    2.64 280 eP    02 31.57   0.2
MTUM    2.66 273 eP    02 31.85   0.2
MSU     2.72  62 eP    02 32.50  -0.1
KVN     2.88 309 eP    02 34.41  -0.4
MEMM    2.98 279 eP    02 36.61   0.6
MMPM    3.04 278 (P)   02 36.39  -0.8
ISA     3.06 240 eP    02 37.65   0.4
DUG     3.48  32 ePn   02 42.95  -0.3
SSK     3.65 214 eP    02 46.77   1.1
PEC     3.71 206 eP    02 46.60   0.1
PLM     4.12 199 eP    02 52.59   0.2
SRU     4.14  62 ePn   02 54.29   1.6
CMB     4.16 282 ePn   02 52.65  -0.2
GLA     4.21 175 eP    02 52.54  -1.0
EMUT    4.30  52 (P)   02 57.31   2.3X
DAU     4.42  43 (Pn)  02 58.92   2.2X
HVU     4.89  22 eP    03 03.98   0.6
PV09    4.98  74 (P)   03 04.41  -0.3
PV10    5.02  75 (P)   03 03.79  -1.5
PV08    5.37  74 (Pn)  03 10.30   0.1
TUC     6.15 142 eP    03 21.08   0.1
     S.D. = 0.7  on  24 of  26 obs.
-----------------------------------
? NOV  11, 1993  07h 33m 03.92± 5.09s
   34.223 S ±32.4km   70.359 W ±20.7km
   DEPTH =  10.0km  (geophysicist)
 CHILE-ARGENTINA BORDER REGION   (127)
      MD 3.4 (SAN).

CACH    0.23 298 iPd   33 09.16   0.3
                 iS    33 10.74
PCH     0.61 348 iP    33 16.09  -0.3
                 iS    33 23.42
TACH    0.74 320 iP    33 17.74  -0.8
                 iS    33 26.38
FCH     0.89   4 iP+   33 21.29   0.0
                 iS    33 32.54
LNV     0.91 287 iP+   33 20.90  -0.5
                 iS    33 31.74
PEL     1.11 346 (P)   33 24.74   0.0
                 iS    33 38.33
LCCH    1.25 306 (P)   33 27.55   0.3
                 iS    33 41.93
ROCH    1.36 336 (P)   33 29.77   0.6
                 iS    33 45.33
JACH    1.55 353 (P)   33 31.64   0.0
                 iS    33 51.39
     S.D. = 0.5  on   9 of   9 obs.
-----------------------------------
   NOV  11, 1993  07h 33m 22.10± 0.50s
   38.186 N ± 5.0km    0.022 W ± 3.6km
   DEPTH =  10.0km  (geophysicist)
   4.1mb (  2 obs.)
 SPAIN                              (377)
      ML 4.2 (LDG), 4.0 (STR). mbLg
      3.7 (MDD). Felt (III) in the
      Alicante area.

ACU     0.45 317 iPd   33 33.14   1.9
                 e     33 39.00
EALH    1.15 254 iPc   33 44.61   1.0
                 e     33 59.90
ECHE    1.59 333 iPc   33 51.81   1.5
                 e     34 11.70
EVIA    2.00 284 iPc   33 57.51   1.1
                 e     34 21.40
EHUE    2.06 260 eP    33 58.84   1.5
                 e     34 23.90
ENIJ    2.12 236 iPd   33 57.46  -0.6
                 e     34 24.70
EROQ    2.65   7 iPc   34 06.06   0.4
                 e     34 37.70
ESEL    2.77  54 iPc   34 07.79   0.5
                 e     34 39.30
ECOG    2.95 253 eP    34 11.32   1.3
                 e     34 45.80
EBAN    2.97 271 iPc   34 10.21   0.1
                 e     34 45.50
ETOR    3.06 330 eP    34 13.25   1.7
                 e     34 49.80
EGUA    3.12 245 iPd   34 13.09   0.8
                 e     34 49.60
ELUQ    3.42 261 iPc   34 16.60   0.1
                 e     34 57.70
PAB     3.64 293 iPnc  34 19.80   0.0
                 iPg   34 35.50
                 iSn   35 11.00
                 eSb   35 19.30
                 iSg   35 30.80
EGRA    4.01 357 eP    34 25.15   0.3
                 e     35 11.30
GUD     4.03 309 iPc   34 25.35   0.0
                 e     35 10.50
EHOR    4.14 267 iPc   34 25.46  -1.3
                 e     35 14.90
EPRU    4.31 255 eP    34 28.87  -0.4
                 e     35 18.00
TRGS    4.57  19 P     34 33.24   0.2
ENSF    4.62   3 P     34 34.71   1.0
SALF    4.66  11 P     34 34.63   0.4
ETER    4.66  27 P     34 34.11  -0.1
EJIF    4.67 250 eP    34 32.71  -1.7
                 e     35 25.80
LHE     4.74 355 P     34 36.22   0.8
GRBF    4.80  14 P     34 36.98   0.8
ECRI    4.81 338 eP    34 38.35   2.0
                 e     35 32.70
PERF    4.83  26 P     34 36.29  -0.3
EPF     4.85   3 Pn    34 37.60   0.8
                 Sn    35 31.30
                 Sg    35 58.30
ISSF    4.87 353 P     34 38.06   0.8
ESCF    4.91 355 P     34 38.09   0.5
ATE     4.92 354 P     34 38.24   0.4
BOH     4.97 352 P     34 39.78   1.2
LSPF    4.98  17 P     34 39.70   1.1

OGE     4.99 356 P     34 39.73   1.0
MADF    4.99 353 P     34 39.68   0.9
ELYF    5.03 352 P     34 40.12   0.7
EPLA    5.07 294 iPc   34 39.15  -0.8
                 e     35 37.40
ELIZ    5.10 348 P     34 42.00   1.6
EVAL    5.35 266 eP    34 41.83  -2.2
                 e     35 41.90
LPO     6.55   8 Pn    34 59.80  -1.1
                 Sn    36 12.60
LFF     6.77   5 Pn    35 03.60  -0.3
                 Sn    36 18.20
ERUA    6.88 310 P     35 04.63  -0.8
CAF     6.91  12 Pn    35 05.10  -0.8
                 Sn    36 21.60
LMR     7.14  42 Pn    35 08.80  -0.3
                 Sn    36 24.00
LRG     7.15  41 Pn    35 09.70   0.5
                 Sn    36 24.80
RJF     7.20   9 Pn    35 09.20  -0.8
                 Sn    36 28.40
FRF     7.37  41 Pn    35 12.90   0.6
                 Sn    36 32.40
EMON    7.63 316 eP    35 14.31  -1.7
EZAM    7.73 304 P     35 16.70  -0.7
SBF     7.99  42 Pn    35 20.80  -0.3
                 Sn    36 47.30
STS     8.01 309 P     35 20.39  -0.9
LSF     8.14   8 Pn    35 22.40  -0.7
PGF     8.15  55 Pn    35 23.10  -0.2
STV     8.20  40 P     35 25.18   1.2
ENR     8.24  41 P     35 25.13   0.6
MAF     8.26  13 Pn    35 22.50  -2.2
TCF     8.26  11 Pn    35 22.80  -2.0
                 Sn    36 50.00
IMI     8.27  44 P     35 24.90  -0.1
PZZ     8.28  38 P     35 26.18   1.0
MFF     8.41 359 Pn    35 25.70  -1.1
ROB     8.52  42 P     35 29.11   0.7
BHB     8.60  37 P     35 30.35   0.8
BGF     8.63  13 Pn    35 28.00  -1.9
FIN     8.64  43 P     35 30.67   0.6
LPG     8.88  33 Pn    35 32.90  -0.7
LPL     8.89  32 Pn    35 33.30  -0.3
SMF     8.92  17 Pn    35 33.60  -0.3
AVF     8.95  15 Pn    35 33.20  -1.1
LSD     9.02  34 P     35 36.44   0.9
PCP     9.04  43 P     35 36.66   1.0
SSF     9.24  15 Pn    35 36.40  -1.9
LBF     9.27  17 Pn    35 37.80  -1.0
HYF     9.29  11 Pn    35 38.30  -0.6
LOR     9.51  16 Pn    35 40.40  -1.7
LPF     9.87 356 Pn    35 45.50  -1.4
                 Sn    37 31.40
GRR    10.22 357 Pn    35 50.00  -1.7
LDF    10.40 360 Pn    35 51.60  -2.7
FLN    10.58 358 Pn    35 55.80  -0.9
BSF    10.85  25 Pn    35 59.40  -1.1
GEC2   14.56  39 ePn   36 50.50   0.5
        1.4s     5.72nm          4.0mb
                 e     36 57.40
                 e     37 07.50
KHC    14.69  38 eP    36 59.00   7.3X
        1.0s     7.00nm          4.2mb
PRU    15.73  37 eP    37 11.00   5.8X
DLF    15.77 345 eP    37 08.10   2.5
CLL    16.02  31 e(P)  37 17.00   8.1X
MLR    20.62  61 eP    38 05.00   0.8
     S.D. = 1.1  on  82 of  85 obs.
-----------------------------------
   NOV  11, 1993  07h 57m 23.97± 0.76s
   28.539 N ± 8.8km  128.483 E ± 8.2km
   DEPTH =  10.0km  (geophysicist)
   4.4mb ( 11 obs.)
 RYUKYU ISLANDS                     (238)

KAGJ    3.37  38 P     58 15.10  -2.5
KUMJ    4.47  26 eP    58 34.30   1.0
SSE     6.83 294 ePn   59 05.00  -1.6
     Z  10s      1.00um
     N  12s      2.20um
NJ2     9.03 295 Pd    59 34.40  -2.9
     N  11s      3.55um
TIA    12.27 311 eP    00 22.90   1.3
     Z  15s      0.76um
     N  15s      1.63um
     E  15s      1.68um
```

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BJI     15.31 322 eP    01 03.00   1.3
         1.0s     7.00nm          4.0mb
      Z  16s     0.58um          4.1Msz
      N  12s     0.37um
CN2     15.43 352 eP    01 08.00   4.8X
         1.0s    14.00nm          4.2mb
      Z  10s     1.27um          3.2Msz
      N  10s     1.35um
      E  10s     0.48um
MDJ     16.07   3 eP    01 13.00   1.5
TIY     16.24 308 eP    01 18.80   5.0X
      Z  16s     1.66um
      N  14s     1.71um
XAN     17.59 293 P     01 30.50  -0.3
         1.4s    21.00nm          4.1mb
      Z  10s     0.70um          4.1MszX
      N  11s     1.38um
      E  10s     0.65um
                  pP    01 33.00
HHC     18.52 316 P     01 43.40   1.1
         1.4s    34.00nm          4.3mb
      Z  18s     0.73um          3.9Msz
      N  11s     0.29um
      E  13s     0.53um
BTO     19.34 313 eP    01 52.00  -0.4
      N  12s     0.73um
      E  12s     0.53um
GYA     19.47 269 iPc   01 55.40   1.4
         1.0s    24.00nm          4.4mb
      Z  14s     0.76um          4.1MszX
CD2     21.59 282 eP    02 16.00   0.0
      Z  10s     1.23um          4.6MszX
LZH     22.10 296 Pc    02 21.20   0.0
         1.5s    34.00nm          4.6mb
      Z  12s     0.53um          4.2MszX
      N  11s     0.71um
                  pP    02 25.00  14kmX
KMI     23.21 268 eP    02 32.50   0.2
         1.4s    60.00nm          4.9mb
                  sP    02 43.00
GTA     26.03 302 eP    02 58.00  -1.1
         1.2s    29.00nm          4.8mb
      Z  14s     0.87um          4.4MszX
      N  13s     1.14um
                  pP    03 08.00  37kmX
WMQ     35.89 306 P     04 26.00  -0.2
GUN     37.40 279 P     04 40.00   0.6
KKN     37.94 279 P     04 44.00   0.2
DMN     38.13 279 P     04 45.60   0.2
GKN     38.46 280 P     04 48.00   0.0
         0.8s    24.00nm          5.0mb
WRA     48.53 173 P     06 09.60   0.4
         0.8s     1.80nm          4.2mb
WR2     48.54 173 eP    06 09.10  -0.2
         0.8s     4.50nm          4.6mb
     S.D. = 1.2  on  22 of  24 obs.
-----------------------------------
?  NOV  11, 1993  08h 04m 47.52± 0.96s
   39.156 N ± 8.2km   27.606 E ± 9.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.7 (ISK).

IZM      0.80 200 ePg   05 03.00  -0.1
                  eSg   05 15.30
DST      0.91  60 ePn   05 05.30   0.3
EZN      1.20 304 ePn   05 10.10   0.3
EDC      1.21   9 ePn   05 09.50  -0.5
     S.D. = 0.7  on   4 of   4 obs.
-----------------------------------
   NOV  11, 1993  08h 23m 25.27± 0.34s
   19.413 N ± 4.5km   64.397 W ± 4.6km
   DEPTH =  33.0km  (normal)
   4.3mb (  8 obs.)
 VIRGIN ISLANDS                    ( 91)
      ML 4.7 (FDF).

LPR      1.78 232 P     23 54.40   0.2
SJG      2.11 232 P     23 58.80  -0.1
APR      2.41 247 P     24 03.50   0.3
CLLP     2.45 238 P     24 03.90   0.0
PNP      2.55 238 P     24 05.10  -0.1
LRS      2.57 245 P     24 05.00  -0.6
MGP      2.91 242 P     24 10.40   0.1
BPA      3.37 134 eP    24 15.50  -1.4
PAG      4.25 142 eP    24 29.50   0.1
                  S     25 20.00
DEG      4.43 134 eP    24 33.00   1.0
MGG      4.55 139 eP    24 33.50  -0.1
FDF      5.59 146 eP    24 49.58   1.2
BIM      5.82 146 eP    24 51.42  -0.2
CAR      9.19 196 iPc   26 21.00  42.3X
CANV     9.36 208 eP    25 41.80   0.8
TOV     10.90 209 eP    26 06.60   4.4X
CEH     20.91 325 eP    28 06.26  -1.1
         0.9s    17.96nm          4.5mb
CBN     21.86 332 eP    28 17.00   0.1
MYNC    23.41 316 (P)   28 32.63   0.4
         0.8s     5.32nm          4.1mb
MCWV    24.17 330 (P)   28 41.08   1.5
         0.9s    10.19nm          4.4mb
SIV     35.33 174 P     30 17.80  -1.9
LTX     36.96 293 eP    30 32.88  -0.6
ULM     39.64 328 eP    30 57.00   1.5
ALQ     40.18 301 eP    30 59.65  -0.8
         0.9s     3.59nm          4.1mb
LRM     47.36 315 eP    31 58.40   0.0
TNP     49.23 304 (P)   32 12.91   0.0
ABL     50.57 300 eP    32 25.11   1.9
YKA     55.03 334 eP    32 53.80  -2.0
         0.7s     2.80nm          4.4mb
LKO     57.55  91 P     33 15.38   0.9
         1.4s    19.50nm          5.0mb
DAG     61.74  11 iPd   33 42.10  -0.3
         0.9s     5.04nm          4.6mb
MBC     63.23 347 eP    33 52.50   0.3
INK     64.42 337 eP    33 59.00  -1.2
         1.0s     2.00nm          4.2mb
     S.D. = 1.0  on  30 of  32 obs.
-----------------------------------
*  NOV  11, 1993  08h 23m 53.13± 0.60s
   13.730 N ± 7.8km  123.203 E ± 9.9km
   DEPTH =  14.5km  (  3 depth phases)
   4.5mb ( 16 obs.)  4.3Msz (  4 obs.)
 LUZON, PHILIPPINE ISLANDS         (249)
      Felt (III RF) in southern
      Luzon.

QCP      2.25 294 eP    24 31.00   0.6
BAG      3.68 317 ePc+  24 49.00  -1.9
         0.7s   246.58nm
                  eS    25 32.40
DAV      7.00 160 eP    25 38.00   0.3
WHN     18.62 335 eP    28 13.00   0.9
         1.0s    30.00nm          4.4mb
NJ2     18.67 348 Pc    28 13.00   0.3
      N  12s     1.31um
GYA     20.01 312 P     28 27.80  -0.6
         1.0s    22.00nm          4.4mb
      Z  16s     1.18um          4.3MszX
KMI     22.35 304 eP    28 55.00   2.6
         1.8s   100.00nm          5.0mb
                  sP    29 03.00
NST     22.40 278 eP    28 53.00   0.4
TIA     23.04 347 eP    29 00.00   1.1
IPM     23.69 250 eP    29 06.20   0.9
CHTO    23.82 285 eP    29 07.70   1.1
XAN     24.02 330 P     29 07.50  -0.9
         1.0s    13.00nm          4.5mb
      Z  15s     0.89um          4.4MszX
      E  13s     0.59um
                  pP    29 11.40  14km
CD2     24.75 317 iPd   29 14.00  -1.5
         0.8s    44.00nm          5.2mb
      Z  14s     1.44um          4.6MszX
      E  14s     1.12um
TIY     25.74 340 eP    29 20.00  -4.9X
      Z  18s     0.97um          4.4Msz
      N  14s     0.86um
BJI     26.93 348 eP    29 35.00  -0.7
         1.0s    11.00nm          4.5mb
      Z  20s     0.36um          3.9Msz
SNY     28.00   1 eP    29 44.60  -0.8
      Z  14s     0.71um          4.4MszX
LZH     28.24 325 eP    29 47.00  -0.9
         1.5s    32.00nm          4.9mb
      Z  20s     0.74um          4.3Msz
      N  14s     0.69um
                  pP    29 51.00  14km
                  PP    30 38.50
HHC     28.87 342 eP    29 52.90  -0.5
CN2     30.03   3 eP    30 06.00   2.3
MDJ     31.26   9 eP    30 10.00  -4.5X
GTA     32.85 325 eP    30 27.50  -1.1
         1.5s     8.00nm          4.4mb
      Z  18s     1.20um          4.6Msz
      N  13s     0.47um
                  pP    30 32.00  16km
                  sP    30 34.00
WRA     35.21 162 P     30 43.30  -5.7X
         0.6s     1.90nm          4.2mb
WR2     35.22 162 eP    30 42.70  -6.4X
         0.5s     6.30nm          4.8mb
GUN     37.47 298 P     31 06.80  -1.7
KKN     37.95 298 P     31 11.00  -1.4
DMN     38.06 297 P     31 08.00  -5.3X
GKN     38.55 298 P     31 14.20  -3.2X
WARB    39.81 175 eP    31 25.50  -2.1
HYB     43.10 281 eP    31 55.50   0.7
GBA     44.42 276 Pd    32 06.60   1.2
         1.1s     9.00nm          4.6mb
INK     82.19  21 eP    36 14.50  -0.1
         1.0s     3.00nm          4.3mb
MBC     83.00  12 eP    36 19.50   0.8
         1.0s     2.00nm          4.2mb
HFS     87.61 332 eP    36 42.50   0.6
         0.3s     0.60nm          4.3mb
NB2     88.34 333 P     36 45.10  -0.4
         0.9s     2.80nm          4.6mb
RES     88.62   9 eP    36 47.00   0.5
         1.0s     3.00nm          4.6mb
     S.D. = 1.2  on  29 of  35 obs.
-----------------------------------
*  NOV  11, 1993  08h 34m 41.09± 1.11s
   28.537 N ±14.9km  128.408 E ±10.9km
   DEPTH =  33.0km  (normal)
   4.0mb (  6 obs.)
 RYUKYU ISLANDS                    (238)

KAGJ     3.41  39 P     35 33.70   0.5
KUMJ     4.50  27 eP    35 49.90   1.2
SSE      6.77 294 Pn    36 22.60   1.9
      N  12s     1.40um
NJ2      8.97 295 eP    36 49.40  -1.9
BJI     15.27 322 eP    38 22.50   6.7X
         1.2s     8.00nm          3.8mb
MDJ     16.08   3 eP    38 21.50  -4.7X
XAN     17.53 293 P     38 46.50   1.9
         1.0s     4.50nm          3.6mb
                  pP    38 51.50
HHC     18.47 316 eP    38 55.20  -1.0
BTO     19.30 313 eP    39 06.40   0.2
GYA     19.40 269 P     39 09.20   1.7
         1.0s    11.00nm          4.1mb
CD2     21.53 282 eP    39 30.60   1.1
GTA     25.97 302 eP    40 12.00  -0.6
         1.0s    16.00nm          4.6mb
                  pP    40 18.00  21kmX
                  sP    40 20.50
GUN     37.33 279 P     41 52.00  -0.7
KKN     37.88 279 P     41 54.60  -2.5
DMN     38.07 279 P     42 00.00   1.2
GKN     38.39 280 P     41 59.80  -1.6
WRA     48.54 173 P     43 23.60   0.5
         0.6s     1.90nm          4.3mb
WRA     48.54 173 P     43 32.80   9.7X
         0.7s     0.60nm          3.7mb
MBC     67.56  14 eP    45 34.00  -1.9
     S.D. = 1.6  on  16 of  19 obs.
-----------------------------------
*  NOV  11, 1993  08h 38m 04.61± 1.25s
   20.464 S ±11.2km   68.796 W ±16.8km
   DEPTH = 152.5 ± 11.4 km
   4.4mb (  2 obs.)
 CHILE-BOLIVIA BORDER REGION       (124)

YJA      3.51 120 iPc   38 59.50  -0.1
                  (S)   39 43.00
CNCB     3.71  12 Pc    39 02.80   0.4
CCH      3.97  40 P     39 05.60   0.1
LPB      3.97  10 P     39 07.10   1.5
HJA      4.17 132 iPc   39 08.90   1.0
LPAZ     4.20   9 P     39 08.80  -0.1
ARE      4.73 327 eP    39 13.00  -2.6
                  iS    40 04.00
SLA      5.23 145 iPc   39 22.60   0.5
RSTA    18.72 107 eP    42 12.70  -1.4
BDFB    20.33  80 eP    42 29.92  -0.9
         0.6s     6.39nm          4.2mb
VAO     20.43 101 eP    42 30.70  -1.1
UYO     59.57 335 iPc   47 56.50   2.2
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11d 08h

```
LKO     68.92  71 P     48 55.98   0.6
         0.5s     4.00nm          4.5mb
WRA    133.89 211 PKP   57 10.10   4.3X
         0.6s     0.50nm
      S.D. = 1.5  on  13 of  14 obs.
-----------------------------------
?  NOV  11, 1993  08h 49m 47.29± 1.09s
   18.026 N ±13.7km   66.984 W ± 7.3km
   DEPTH =  10.0km  (geophysicist)
 PUERTO RICO REGION                ( 90)

MGP      0.10 260 P     49 50.00   0.0
                  S     49 53.00
PNP      0.29  84 P     49 53.50   0.2
                  S     49 58.10
LRS      0.30  26 P     49 53.50   0.0
                  S     49 58.00
CLLP     0.39  82 P     49 55.10  -0.2
                  S     50 00.90
      S.D. = 0.3  on   4 of   4 obs.
-----------------------------------
?  NOV  11, 1993  09h 02m 48.22± 1.05s
   39.080 N ± 8.9km   27.630 E ±10.7km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.7 (ISK).

IZM      0.74 203 ePg   03 02.50  -0.2
                  eSg   03 15.00
DST      0.94  56 iPn   03 06.70   0.6
EZN      1.25 307 ePn   03 12.10   0.6
EDC      1.28   8 ePn   03 11.00  -0.9
      S.D. = 1.3  on   4 of   4 obs.
-----------------------------------
   NOV  11, 1993  09h 10m 23.28± 0.54s
   36.171 N ± 6.7km  141.743 E ± 6.2km
   DEPTH =  37.0km  (  2 depth phases)
   4.5mb ( 18 obs.)
 NEAR EAST COAST OF HONSHU, JAPAN(228)

KAKJ     1.27 272 iPd   10 44.40  -0.4
                  eS    11 02.80
CHJJ     2.23 268 P     10 58.10  -0.5
                  eS    11 26.60
YAMJ     2.42 326 P     11 01.60   0.3
NIIJ     2.45 297 iP+   11 02.50   0.8
MAT      2.88 278 iPc   11 08.60   0.8
                  eS    11 47.00
OFUJ     2.90 359 P     11 06.90  -1.3
IIDJ     3.19 259 P     11 13.70   1.4
MTMJ     3.20 279 iPd   11 13.50   1.0
AOMJ     4.51 347 P     11 32.60   1.7
TSRJ     4.72 264 P     11 35.50   1.5
WKYJ     5.40 251 P     11 43.40  -0.1
MRRJ     6.27 355 eP    11 54.80  -0.9
                  eS    13 04.10
HOOJ     6.32  10 eP    11 53.60  -2.8
                  eS    13 04.10
TKSJ     6.68 253 P     12 01.40  -0.1
YONJ     6.81 264 P     12 03.20  -0.2
KUSJ     7.29  17 eP    12 05.10  -4.9X
                  eS    13 22.50
ASAJ     7.97   5 eP    12 16.60  -2.9
MDJ     12.52 316 eP    13 23.50   1.9
CN2     14.62 306 P     13 54.30   5.0X
         0.8s     3.50nm          3.9mb
                  esP   14 06.80
SNY     15.20 297 Pd    13 55.80  -1.1
TIA     19.86 277 eP    14 50.60  -3.5X
TIY     23.44 283 eP    15 29.70  -0.4
      Z  15s     1.65um          4.6MszX
      E  14s     0.91um
WHN     23.52 264 eP    15 30.50  -0.3
HHC     24.01 290 P     15 36.80   1.2
         1.0s    11.00nm          4.3mb
BTO     25.18 290 eP    15 46.20  -0.7
XAN     26.87 275 P     16 01.50  -1.0
         0.6s    19.00nm          4.9mb
LZH     30.48 281 eP    16 34.00  -1.1
         1.6s    30.00nm          4.8mb
GYA     31.35 262 iPd   16 41.40  -1.4
         1.0s    22.00nm          4.9mb
CD2     31.95 272 eP    16 45.80  -2.1
GTA     33.08 288 P     16 57.00  -0.7
         1.2s    12.00nm          4.7mb
                  pP    17 08.00  40km
                  sP    17 12.00
WMQ     41.47 298 P     18 09.10   0.9
LSA     42.56 276 P     18 17.30  -0.5
FBA     49.69  32 (P)   19 15.50   2.3
         1.0s     7.50nm          4.7mb
INK     55.04  27 eP    19 53.50   0.4
WRA     56.25 188 P     20 02.00  -0.3
         1.0s     1.20nm          3.9mb
WR2     56.25 188 iPd   20 00.50  -1.8
         0.5s     2.30nm          4.5mb
                   i    20 07.10  22kmX
MBC     57.28  16 eP    20 10.50   1.4
         1.0s     2.00nm          4.1mb
ASPA    59.97 188 eP    20 27.10  -1.2
         1.0s     3.60nm          4.5mb
GBA     61.42 266 Pc    20 38.30  -0.1
         0.9s     7.00nm          4.8mb
RES     63.37  14 eP    20 50.50  -0.1
         1.0s     2.00nm          4.2mb
KAF     69.20 333 iP    21 27.60  -0.2
         0.4s     3.20nm          4.7mb
LRM     74.58  44 eP    22 01.20   0.7
                   e    22 11.70  34km
HFS     74.98 336 eP    22 02.50   0.3
         0.6s     2.20nm          4.3mb
NB2     75.08 337 P     22 02.60  -0.2
         0.9s     6.90nm          4.6mb
KHC     83.42 329 eP    22 49.00   1.0
GEC2    83.58 328 ePd   22 49.50   0.5
         0.6s     1.44nm          4.2mb
ALQ     84.94  50 eP    22 58.15   2.0
         1.3s     5.07nm          4.5mb
LPAZ   146.89  61 PKP   30 04.70   2.1
LPB    147.08  61 ePKP  30 12.00   9.4X
CNCB   147.34  62 PKP   30 07.20   4.0X
SIV    151.43  51 PKP   30 15.40   6.6X
      S.D. = 1.3  on  45 of  51 obs.
-----------------------------------
?  NOV  11, 1993  09h 18m 43.38± 0.96s
   39.256 N ± 8.5km   27.742 E ± 9.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.8 (ISK).

DST      0.77  63 ePg   18 58.70   0.3
IZM      0.94 204 ePn   19 01.10  -0.2
                  eSg   19 16.30
EDC      1.09   5 ePn   19 03.50  -0.4
EZN      1.23 298 iPn   19 06.60   0.3
      S.D. = 0.6  on   4 of   4 obs.
-----------------------------------
   NOV  11, 1993  09h 29m 24.45± 0.67s
   41.966 N ± 5.2km   23.167 E ± 6.0km
   DEPTH =  10.0km  (geophysicist)
 GREECE-BULGARIA BORDER REGION   (363)
      ML 2.0 (SKO).

KKB      0.12 212 iPgc  29 28.00   0.6
MMB      0.56 132 iPgc  29 36.00   0.1
VTS      0.63   3 iPgc  29 37.00  -0.1
VAY      0.78 215 iPg   29 39.40  -0.3
                  iSg   29 49.40
KNT      0.83 194 ePg   29 39.96  -0.5
                  eSg   29 50.20
SRS      0.91 159 iPg   29 41.56  -0.2
                  eSg   29 53.92
SOH      1.15 173 ePg   29 46.00   0.0
                  eSg   30 01.00
GRG      1.16 210 ePg   29 46.60   0.4
                  eSg   30 01.24
RZN      1.19 103 iPg   29 47.00   0.2
      S.D. = 0.4  on   9 of   9 obs.
-----------------------------------
?  NOV  11, 1993  09h 45m 01.97± 0.93s
   39.130 N ± 7.8km   27.519 E ± 9.4km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.7 (ISK).

IZM      0.76 195 ePg   45 16.80   0.0
                  eSg   45 29.30
DST      0.98  61 ePn   45 20.70   0.0
EZN      1.16 307 ePn   45 23.60   0.0
EDC      1.24  12 ePn   45 25.00  -0.1
      S.D. = 0.1  on   4 of   4 obs.
-----------------------------------
   NOV  11, 1993  10h 13m 55.32± 0.10s
    4.543 S ± 2.3km  153.147 E ± 2.9km
   DEPTH =  45.8km  (geophysicist)
   5.7mb ( 76 obs.)  5.5Msz ( 50 obs.)
 NEW IRELAND REGION, P.N.G.        (190)
      Mw 5.9 (GS), 6.0 (HRV). Ms 5.5
      (BRK). Mo=1.0*10**18 Nm (PPT).
      Felt (IV) at Rabaul, New
      Britain. Depth from broadband
      displacement seismograms.
      FAULT PLANE SOLUTION: P-Waves
       NP1:Strike= 80 Dip=75 Slip=  90
       NP2:       260     15        90
       Principal Axes:
        T              Plg=60  Azm=350
        P                 30      170
      Comment: The focal mechanism is
        poorly controlled and
        corresponds to reverse
        faulting. The preferred fault
        plane is NP2.
      RADIATED ENERGY
       No. of sta:  11  Focal mech.  M
       Energy        9.3±2.6*10**11 Nm
      MOMENT TENSOR SOLUTION
      Dep  41            No. of sta: 16
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 3.78       Mtt=-3.09
        Mff=-0.68       Mrt= 7.52
        Mrf=-0.32       Mtf=-4.01
       Principal axes:
        T  Val=  9.24  Plg=52  Azm= 24
        N       -0.07     24      259
        P       -9.17     27      156
      Best Double Couple:Mo=9.2*10**17
       NP1:Strike=202 Dip=28 Slip=  29
       NP2:        85     77       115
      CENTROID, MOMENT TENSOR    (HRV)
      Data Used: GDSN
      L.P.B.: 50S, **C
      Centroid Location:
      Origin Time       10:14: 2.8 0.2
      Lat  4.59S 0.02 Lon 153.22E 0.02
      Dep  46.2 1.2 Half-duration  2.3
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 6.65 0.10  Mtt=-5.63 0.15
        Mff=-1.02 0.17  Mrt= 7.43 0.22
        Mrf= 2.16 0.16  Mtf=-0.90 0.12
       Principal Axes:
        T  Val= 10.37  Plg=64  Azm=341
        N       -0.88      2       76
        P       -9.49     26      167
      Best Double Couple:Mo=9.9*10**17
       NP1:Strike=262 Dip=20 Slip=  97
       NP2:        75     71        88

RAB      1.04 289 iPd-  14 18.70   5.0X
KVG      3.03 310 ePd   14 47.50   5.5X
PMG      7.66 231 ePd   15 48.41   1.3
HNR      8.31 126 eP    15 58.00   1.8
                  eS    17 33.00
WWKK     9.54 275 e(P)  16 15.50   2.3
CTA     16.85 203 iPd   17 50.30   0.7
         1.9s  1473.68nm          5.8mb
                   i    18 04.00
                   i    18 30.50
                   i    19 35.00
                   e    20 24.00
                   iS   20 48.00
                   i    21 02.00
                   e    26 07.00
                   e    29 49.00
CTAO    16.85 203 iPd   17 50.44   0.8
         1.6s   486.14nm          5.4mb
BKM     19.71 133 iPd   18 25.00   0.9
GUA     19.74 336 eP    18 25.40   1.1
         1.1s  3139.24nm          6.5mb
                   e    18 29.50  16kmX
GUMO    19.80 336 ePc   18 26.93   2.0
         1.0s  2001.29nm          6.4mb
PJG     19.80 336 eP    18 24.50  -0.5
QIS     20.66 218 eP    18 33.80  -0.1
DZM     21.67 145 iPc   18 43.00  -1.2
SWI     22.16 279 ePc   18 49.50   0.5
BRS     22.72 181 iPc   18 53.70  -0.8
         1.0s    55.00nm          5.0mb
                   i    18 58.00
                   epP  19 16.00 105kmX
                   iS   22 50.00
```

```
                i     23 00.00
                i     26 22.00
MTN    23.26 248 eP    19 01.20   1.5
       0.3s   313.00nm          6.3mb
WR2    23.86 229 iPd   19 05.30  -0.3
       0.4s   159.10nm          5.9mb
                i     19 22.30  74kmX
                eS    23 19.30
WRA    23.87 229 P     18 53.80 -11.9X
       0.8s     0.30nm
WRA    23.87 229 P     19 05.90   0.2
       0.6s    57.40nm          5.3mb
ARMA   25.78 183 iPd   19 23.90   0.0
       0.7s    50.00nm          5.2mb
                e     26 30.50
KNA    26.42 243 eP    19 29.80   0.0
       0.4s   254.00nm          6.2mb
ASPA   26.57 223 P     19 31.20   0.0
RIV    29.20 183 eP    19 57.60   2.9X
     Z  18s     0.48um          4.2MszX
                eS    24 40.00
BIP    29.67 295 eP    20 03.00   3.7X
DAV    29.85 293 eP    19 46.00 -14.8X
BWA    30.05 188 eP    20 03.70   1.2
                epP   20 08.90  18kmX
                i     20 23.20
                i     20 57.30
                i     21 16.30
                ePcP  23 04.40
                eScP  26 43.20
CNB    30.82 186 eP    20 10.00   0.7
       1.0s    76.00nm          5.4mb
CAN    30.87 187 eP    20 10.80   1.2
                i     20 23.30
                i     20 30.80
                ipP   21 12.70 323kmX
                iPP   21 45.60
                i     21 52.50
                iPcP  23 10.10
                eScP  26 45.60
CTB    31.15 292 iPd   20 14.00   1.7
PLP    32.08 299 ePd   20 19.00  -1.5
WSI    32.98 259 ePc   20 27.80  -0.5
ADE    33.09 202 eP    20 28.60  -0.5
WARB   33.26 227 eP    20 30.50  -0.2
       0.2s    28.00nm          5.8mb
TOO    33.61 191 eP    20 34.80   1.2
       0.6s    11.00nm          4.9mb
                ePcP  23 14.40
                eScP  26 55.90
GQP    35.55 301 iPc   20 52.00   1.6
MBL    36.31 240 iPc   20 55.50  -1.3
       0.2s    39.00nm          6.0mb
TSM    36.32 283 eP    20 57.00   0.1
QCP    37.06 301 eP    20 55.00  -8.1X
KHKI   37.48 262 eP    21 05.20  -1.5
                e     24 30.00
CVP    38.00 306 eP    21 11.00   0.0
BCP    38.33 304 eP    21 18.20   4.3X
BAG    38.35 304 ePc+  21 14.00  -0.1
       1.3s   307.69nm          6.0mb
KKM    38.35 286 ePc   21 17.30   3.2X
MEEK   39.63 233 eP    21 23.00  -1.6
       0.5s   122.00nm          6.0mb
URZ    40.03 150 eP    21 29.00   1.4
QRZ    40.10 157 P     21 28.10  -0.1
HBZ    40.14 148 eP    21 29.90   1.4
TRT    40.39 263 ePc   21 29.40  -1.5
PUZ    40.47 149 eP    21 30.30  -1.0
                e     21 54.60 104kmX
NOZ    40.77 150 eP    21 33.70   0.0
THZ    41.05 157 eP    21 35.20  -0.9
KIW    41.11 155 P     21 36.30  -0.2
TCW    41.13 156 P     21 36.30  -0.3
MNG    41.15 154 P     21 35.60  -1.2
                e     21 51.80  64kmX
SJI    41.25 263 ePc   21 41.00   3.0X
MRW    41.33 155 eP    21 37.70  -0.5
CAW    41.38 155 P     21 38.00  -0.7
SNZO   41.39 155 eP    21 38.67   0.0
       0.8s    95.57nm          5.6mb
KAGJ   41.40 331 P     21 39.10   0.2
WVZ    41.42 160 eP    21 39.50   0.5
PGZ    41.50 153 eP    21 38.70  -1.0
MTW    41.60 154 P     21 38.90  -1.6
LTZ    41.70 159 P     21 41.50   0.2
       0.6s    30.00nm          5.2mb
BLW    41.76 155 eP    21 41.00  -0.8
WKYJ   41.96 338 P     21 42.30  -1.3
MSZ    42.02 164 P     21 44.60   0.7
       0.6s   184.00nm          6.0mb
IIDJ   42.30 341 eP    21 45.90  -0.5
KAKJ   42.32 344 eP    21 46.10  -0.3
TKSJ   42.35 336 P     21 46.60  -0.1
BWZ    42.46 162 P     21 46.10  -1.3
CHJJ   42.50 343 P     21 46.60  -1.3
TATO   42.52 315 (P)   21 48.04  -0.1
       0.6s   125.93nm          5.8mb
                ed    22 02.11  54kmX
KUMJ   42.53 332 P     21 48.70   0.5
KLB    42.73 227 eP    21 48.00  -1.9
                e     21 53.50  18kmX
MRWA   42.88 231 iPd   21 50.00  -1.2
       0.3s     4.00nm          4.7mb X
                e     21 53.50  12kmX
TSRJ   43.00 339 P     21 53.70   1.7
BAL    43.00 229 eP    21 50.50  -1.6
                e     21 55.00  15kmX
MAJO   43.19 342 ePc   21 52.37  -1.2
       0.5s    30.58nm          5.3mb
                isPd  22 10.49
MAT    43.19 342 eP    21 51.00  -2.6
       1.0s    45.00nm          5.2mb
     Z  20s     2.48um          5.1Msz
                eS    28 50.00
MTMJ   43.35 342 eP    21 53.90  -1.1
NIIJ   43.61 344 P     21 56.30  -0.6
YONJ   43.64 336 P     21 58.90   1.7
TUZ    43.68 163 P     21 56.70  -0.6
SHNJ   43.73 333 P     21 57.30  -0.6
MUN    44.06 227 eP    22 00.20  -0.5
                e     22 05.00  16kmX
YAMJ   44.21 345 P     22 01.80   0.0
QZH    44.57 313 eP    22 04.00  -0.9
       1.2s   180.00nm          5.8mb
     Z  35s     7.08um          5.3MszX
     E  20s     2.99um
OFUJ   44.68 347 P     22 04.80  -0.8
RKG    44.86 224 eP    22 07.50   0.4
LEM    45.35 265 eP    22 12.90   1.4
       1.0s     8.00nm          4.5mb X
                eS    29 18.00
TPI    45.43 271 ePd   22 11.50  -0.4
                e     26 00.00
AOMJ   46.39 347 P     22 20.80   1.8
HKC    46.53 307 eP    22 22.80   2.4
SSE    46.76 321 ePc   22 22.84   0.8
       1.5s   140.00nm          5.7mb
                ec    22 39.56  66kmX
                eS    29 04.00
ERM    47.22 350 iPc   22 25.74   0.2
HOOJ   47.56 350 eP    22 30.40   2.2
GZH    47.58 307 Pc    22 30.00   1.3
     Z  22s     7.12um          5.6Msz
     E  20s    12.50um
MRRJ   48.02 348 eP    22 31.50  -0.3
KUSJ   48.03 352 eP    22 31.40  -0.5
QIZ    48.64 300 P     22 38.40   1.4
       0.8s    40.00nm          5.5mb
     N  20s     2.41um
     E  22s     4.82um
NJ2    48.86 321 Pc    22 39.00   0.5
       1.2s    36.00nm          5.3mb
     Z  25s     3.82um          5.3MszX
     N  20s     3.47um
                S     29 40.00
                sS    30 07.00
ASAJ   49.35 350 P     22 42.60   0.5
KUR    49.78 355 eP    22 46.00   0.7
       1.0s   190.00nm          6.1mb
     Z  16s     2.80um          5.4MszX
     N  16s     2.80um
     E  16s     2.80um
                eS    29 50.00
MCQ    50.03 176 eP    22 48.70   1.6
KGM    50.21 276 ePd   22 48.60  -0.6
WHN    50.91 316 Pd    22 55.00   0.8
       1.5s    82.00nm          5.5mb
     N  18s     2.08um
                pP    23 14.00  76kmX
VLA    51.19 340 iPd   22 56.00  -0.1
                ipP   23 10.00  52kmX
                i     23 15.00
                i     24 08.00
                i     24 50.00
                iPPP  25 52.00
                iS    30 16.00
                iPS   30 32.00
                i     30 44.00
DL2    52.13 329 eP    23 04.60   1.3
       1.0s   120.00nm          5.9mb
     Z  30s     3.50um          5.2MszX
YSS    52.16 351 eP    23 02.20  -1.2
       1.1s    60.00nm          5.5mb
     Z  18s     0.90um          4.8Msz
     E  18s     0.50um
                esP   23 19.80 343kmX
                e     24 14.10
                (S)   30 23.00
                ePS   30 50.00
TIA    52.71 323 Pc    23 07.40  -0.4
       1.3s   210.00nm          6.0mb
     Z  28s     3.24um          5.2MszX
     E  14s     0.97um
                pP    23 30.00  92kmX
                PcP   24 21.00
                S     30 30.00
IPM    52.85 279 ePd   23 07.90  -1.2
MDJ    53.30 339 ePc   23 11.53  -0.4
       1.0s   100.00nm          5.8mb
     Z  32s     5.11um          5.4MszX
                esPd  23 30.65
SNY    53.43 333 Pc    23 12.00  -0.9
     Z  26s     4.91um          5.4MszX
                eS    30 43.00
SNG    53.70 282 eP    23 15.00  -0.3
CN2    54.21 335 Pc    23 17.80  -0.8
       1.0s    90.00nm          5.8mb
     Z  38s     4.70um          5.3MszX
     N  15s     0.74um
     E  15s     0.38um
                epP   23 34.00  62kmX
                PcP   24 23.60
                eScP  28 15.50
                eS    30 45.00
HON    54.33  60 P     23 21.00   1.2
     Z  21s     1.60um          5.1Msz
                S     31 06.34
OPA    54.46  59 eP    23 21.23   0.4
DHH    54.48  60 eP    23 21.23   0.3
GYA    54.52 307 iPc   23 21.60   0.3
       1.2s   100.00nm          5.7mb
     Z  24s     5.17um          5.5MszX
     N  20s     2.85um
     E  20s     2.25um
PCT    54.71 291 eP    23 25.00   2.3
KKH    55.45  63 eP    23 29.20   1.1
BJI    55.87 326 iPc   23 30.01  -0.7
       1.8s    48.00nm          5.2mb
     Z  24s     4.83um          5.5MszX
     E  18s     2.37um
                ec    23 32.65   9kmX
                esPc  23 47.30
                ePcP  24 28.00
                ePP   25 36.00
                eS    31 12.00
                eSS   34 56.00
NST    56.18 292 eP    23 33.00  -0.3
TIY    56.54 322 Pd    23 35.70   0.0
     Z  26s     5.09um          5.5MszX
     N  27s     8.00um
                pP    23 56.00  80kmX
                S     31 22.00
                sS    31 53.00
XAN    56.68 316 P     23 36.00  -0.7
       1.4s    73.00nm          5.5mb
     Z  20s     4.24um          5.5Msz
     N  22s     2.46um
     E  22s     3.69um
                pP    23 54.00  69kmX
                S     31 25.00
KMI    57.13 304 iPc   23 40.74   0.4
       1.8s   100.00nm          5.6mb
     Z  24s     8.00um          5.7MszX
     N  21s     2.30um
     E  21s     3.50um
                ec    23 42.81   7kmX
                esPc  23 59.11
                eS    31 34.00
                sS    32 02.00
AFR    57.28 108 iPd   23 40.70  -0.4
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11d 10h

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        0.8s   147.20nm          6.1mb
KHT     57.37 291 eP    23 27.00 -14.8X
PPT     57.47 108 iPd   23 42.20  -0.3
        0.9s   113.00nm          5.9mb
PAE     57.48 108 iPd   23 42.40  -0.1
        1.1s   190.00nm          6.1mb
PET     57.53   4 eP    23 40.00  -2.3
                  eS    31 40.00
BDT     57.67 294 eP    23 45.00   1.2
        0.5s    20.90nm          5.5mb
TVO     57.80 108 iPd   23 44.70  -0.2
        0.9s   252.20nm          6.3mb
CHTO    58.19 295 iPc   23 47.40  -0.1
        1.2s    65.97nm          5.6mb
                  ec    23 49.47   7kmX
CD2     58.83 310 eP    23 51.40  -0.5
        0.8s   150.00nm          6.2mb
      Z  28s     7.47um          5.7MszX
      E  25s     8.09um
                  pP    24 10.00  72kmX
                  eS    31 50.00
                  sS    32 20.00
PMO     58.87 105 iPd   23 51.80  -0.5
        0.9s   121.90nm          6.0mb
HHC     59.04 324 P     23 53.00  -0.3
        1.4s    49.00nm          5.4mb
      Z  28s     6.83um          5.6MszX
      N  14s     0.52um
      E  18s     1.59um
                  PP    26 05.00
                  S     31 56.00
TPT     59.13 105 iPd   23 53.50  -0.6
        1.0s   176.80nm          6.1mb
VAH     59.14 105 iPd   23 53.70  -0.4
        1.4s   308.40nm          6.2mb
RUV     59.37 105 iPd   23 55.20  -0.6
        1.0s   109.60nm          5.9mb
SMY     59.75  15 P     24 10.00  12.2X
      Z  20s     6.25um          5.7Msz
BTO     59.80 323 iPd   23 58.00  -0.5
        0.9s    64.00nm          5.8mb
      N  12s     0.49um
      E  12s     0.26um
LZH     61.29 316 iPc   24 09.34   0.5
        1.6s   350.00nm          6.2mb
      Z  24s     4.02um          5.5MszX
      E  22s     2.65um
                  ec    24 11.49   7kmX
                  S     32 25.00
                  sS    32 52.00
                  eSS   36 28.00
DRV     62.68 186 iP    24 16.00  -1.4
                  PP    27 04.00
                  S     32 45.00
                  SS    36 48.00
CIT     65.58 334 eP    24 37.00   0.4
GTA     65.70 317 Pc    24 38.00   0.3
        1.0s   150.00nm          6.0mb
      Z  26s     5.02um          5.6MszX
      E  18s     1.32um
                  pP    24 54.00  59kmX
CSY     68.37 197 eP    25 03.00   9.1X
        0.6s    25.50nm          5.4mb
LSA     68.38 304 iPc   24 55.35   0.1
        1.0s    29.00nm          5.2mb
YAK     68.77 348 iPc-  24 56.60   0.2
        1.5s   304.00nm          6.1mb
ZAK     69.45 328 eP    25 00.50  -0.3
        1.6s   112.00nm          5.6mb
                  e     25 23.50  89kmX
                  eS    34 08.00
BOD     69.64 339 eP    25 01.30  -0.5
        1.2s    96.00nm          5.6mb
IRK     70.05 331 eP    24 49.00 -15.5X
        1.5s    44.00nm
                  e     25 30.50 173kmX
                  e     27 46.00
                  e     34 38.00
SDN     70.82  26 P     25 20.00  11.0X
      Z  21s     7.44um          5.9Msz
GUN     72.28 301 P     25 18.60  -0.3
PKI     72.60 301 P     25 20.00  -0.7
KKN     72.77 301 P     25 21.00  -0.5
DMN     72.87 301 P     25 22.00  -0.2
GKN     73.37 301 P     25 24.20  -0.8
SBA     73.61 177 eP    25 27.00   1.8
UER     75.02 326 eP    25 33.00  -0.8
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        2.0s   110.00nm          5.5mb
                  eS    35 09.60
WMQ     75.79 317 iPc   25 38.89   0.4
        1.0s   130.00nm          5.8mb
      Z  30s     3.31um          5.5MszX
                  ec    25 41.45   8kmX
                  esPc  25 58.00
                  PP    28 30.50
                  S     35 16.50
KDC     75.81  27 eP    25 38.30   0.1
SVW     76.44  23 eP    25 42.30   0.5
HYB     76.74 289 ePc   25 43.00  -1.2
        1.0s   200.00nm          6.1mb
                  eS    36 52.00
GBA     77.24 285 Pc    25 47.00   0.1
        0.9s   999.90nm          6.8mb X
TTA     77.41  21 eP    25 47.80   0.7
CP2     77.87  24 eP    25 48.62  -1.2
CRP     77.91  24 ePc   25 49.31  -0.7
SLKM    78.29  25 ePc   25 51.17  -0.8
PMR     79.31  24 eP    25 57.20  -0.2
        0.7s    20.60nm          5.2mb
NDI     79.90 300 eP    26 01.00  -0.3
IMA     80.10  19 eP    26 02.00   0.2
        1.0s    25.10nm          5.1mb
KLU     80.60  25 eP    26 04.20  -0.3
TOA     80.78  25 eP    26 05.70   0.3
POO     81.33 289 iPc   26 12.00   3.0X
        1.0s     9.00nm          4.7mb X
                  iS    36 44.00
COL     81.52  22 ePc   26 07.52  -1.6
FBA     81.52  22 eP    26 08.20  -0.9
        1.2s   105.60nm          5.7mb
BALM    81.95  26 eP    26 11.04  -0.5
KSH     83.01 310 P     26 19.60   2.0
        0.8s   240.00nm          6.3mb
      Z  24s     3.41um          5.6MszX
      N  14s     1.07um
      E  14s     1.01um
SIT     83.88  31 (P)   26 22.39   1.1
        1.4s    47.85nm          5.4mb
      Z  20s     2.45um          5.6Msz
FRU     84.69 314 iPc   26 26.80   1.0
        2.0s   430.00nm          6.2mb
                  i     26 40.80  48kmX
                  i     26 51.20
                  e     38 16.00
SPA     85.48 180 iPc   26 29.30  -0.2
        0.9s   227.27nm          6.4mb
NRIL    85.62 341 iPc   26 28.72  -1.2
                  ec    26 31.62   9kmX
                  ed    26 51.40
NRI     85.68 341 iPc   26 28.70  -1.5
        2.0s   165.00nm          5.9mb
      Z  21s     7.40um          6.1Msz
      E  22s     6.10um
                  e     26 42.00  45kmX
                  e     26 53.00
                  e     36 49.00
                  e     42 30.00
MAW     85.94 203 iP    26 31.70   0.2
        0.9s    32.89nm          5.6mb
ARC     87.49  49 ePc   26 42.42   2.9X
      Z  21s     1.60um          5.4Msz
                  iSKS  36 12.42
                  iScS  37 29.42
                  eSS   43 38.42
                  iLQ   50 23.42
                  eLR   53 48.42
INK     88.09  21 eP    26 42.00   0.1
        1.0s    14.00nm          5.2mb
LGPM    88.43  49 eP    26 44.34   0.0
STAN    88.51  52 ePc   26 49.84   5.3X
      Z  21s     2.10um          5.5Msz
                  eLR   54 20.84
BKS     88.52  52 ePc   26 47.09   2.5
      Z  21s     2.50um          5.6Msz
                  iSKS  36 10.09
                  eS    37 11.09
                  iScS  37 38.09
                  iSP   38 37.09
                  iPS   38 41.09
                  eSS   43 27.09
                  iLQ   50 35.09
                  eLR   54 06.09
COR     88.57  45 ePc   26 47.93   3.3X
                  epPd  26 59.76  38kmX
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WDC     88.61  49 eP    26 51.21   6.2X
      Z  21s     2.70um          5.6Msz
                  eS    37 11.21
                  iScS  37 38.21
                  eSP   38 56.21
                  iPS   39 03.21
                  eLR   54 21.21
WDC     88.61  49 P     27 00.00  15.0X
      Z  21s     2.25um          5.6Msz
YBH     88.63  48 ePc   26 47.52   2.4
      Z  22s     2.30um          5.6Msz
                  eSKS  36 46.52
                  eS    37 24.52
                  eScS  37 40.52
                  eSP   39 15.52
                  ePS   39 55.52
                  eSS   43 43.52
                  eLQ   50 47.52
                  eLR   54 28.52
MHC     88.92  53 ePc   26 48.19   1.5
      Z  22s     2.20um          5.5Msz
                  eSKS  36 39.19
                  iScS  37 41.19
                  eSP   38 43.19
                  iPS   39 03.19
                  e     40 18.19
                  eSS   43 45.19
                  eLQ   50 48.19
                  eLR   54 22.19
SAO     89.01  53 ePc   26 54.00   7.0X
      Z  22s     1.70um          5.4Msz
                  eSKS  37 06.00
                  eS    37 42.00
                  iScS  37 45.00
                  iPS   38 36.00
                  iSS   43 49.00
                  iLQ   50 55.00
                  eLR   54 24.00
SAO     89.01  53 P     27 00.00  13.0X
      Z  21s     1.98um          5.5Msz
ORV     89.28  50 iPc   26 54.39   6.2X
      Z  21s     2.20um          5.6Msz
                  eSKS  36 38.39
                  eS    37 29.39
                  iScS  37 43.39
                  eSP   38 47.39
                  iPS   38 51.39
                  eSS   43 51.39
                  eLQ   50 53.39
                  eLR   54 42.39
MIN     89.29  50 ePc   26 52.71   4.3X
      Z  21s     2.00um          5.5Msz
                  eSKS  37 05.71
                  iScS  37 43.71
                  eSP   38 47.71
                  iPS   38 50.71
                  i     39 46.71
                  eSS   43 50.71
                  eLQ   50 49.71
                  eLR   54 40.71
GMW     89.32  42 eP    26 47.94  -0.3
MCW     89.43  41 eP    26 47.35  -1.4
RMW     89.97  43 eP    26 51.97   0.6
CMB     89.99  52 ePc   26 49.31  -2.3
      Z  21s     2.60um          5.6Msz
                  ePP   30 22.31
                  eSKS  37 24.31
                  eS    37 44.31
                  iScS  37 49.31
                  eSP   38 55.31
                  iPS   39 02.31
                  eSS   43 59.31
                  eLQ   51 02.31
                  eLR   54 50.31
CMB     89.99  52 P     27 00.00   8.4X
      Z  21s     2.24um          5.6Msz
ISA     91.30  55 ePc   26 56.19  -1.5
      Z  21s     1.18um          5.3Msz
ISA     91.30  55 P     27 10.00  12.3X
      Z  21s     1.18um          5.3Msz
BONR    91.62  52 eP    27 00.79   1.4
GSC     92.63  55 eP    27 05.77   1.9
TPNV    93.18  53 P     27 20.00  13.5X
      Z  20s     2.46um          5.7Msz
MBC     93.78  14 eP    27 09.50   1.3
        1.0s     8.00nm          5.1mb
GLA     94.15  57 (P)   27 12.38   1.5
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CRZF   94.48 223 eP    27 28.00   16.0X
                eS     38 13.00
YKA    95.04  28 eP    27 14.50    0.3
       1.1s     6.80nm          5.0mb
SVE    95.15 327 ePc   27 13.00   -1.8
       2.0s   140.00nm          6.1mb
     Z  20s     1.50um          5.5Msz
     N  19s     0.40um
     E  19s     1.00um
                eS     38 13.00
                e      40 20.00
ARUT   95.45  53 eP    27 17.44    0.5
DUG    95.99  50 P     27 30.00   10.7X
     Z  21s     1.51um          5.4Msz
ARU    96.28 326 ePc   27 18.00   -2.0
       1.0s   100.00nm          6.3mb
     Z  20s     1.50um          5.5Msz
                e      31 08.00
                e      37 51.00
                eS     38 21.00
LRM    96.30  45 eP    27 21.60    0.9
MSU    96.46  52 eP    27 22.68    1.1
TUC    97.53  58 P     27 40.00   13.7X
     Z  19s     1.10um          5.4Msz
RES   100.07  14 ePdiff27 40.00    3.2X
       1.0s     3.00nm          4.8mb
ALQ   101.11  55 Pdiff 27 50.00    7.4X
     Z  20s     0.81um          5.2Msz
GOL   101.72  51 Pdiff 28 00.00   14.7X
     Z  21s     1.82um          5.6Msz
GLD   101.83  50 Pdiff 28 00.00   14.3X
     Z  21s     2.18um          5.6Msz
WMOK  107.42  55 PKP   32 30.00   10.9X
     Z  19s     0.99um          5.4Msz
SDF   107.63 341 ePdiff28 09.00   -1.6
DAG   107.69 358 iPdiff28 09.90   -0.8
       1.0s    10.00nm          5.9mb
OBN   108.69 327 ePKP  32 23.00    2.2
     Z  22s     2.10um          5.7Msz
     N  20s     1.10um
     E  20s     1.30um
                ePP    32 47.00
                ePKS   36 10.00
                (SKKS)39 00.00
                iPS    42 14.00
                iPPS   43 40.00
                iSS    48 10.00
                eSSS   52 28.00
                LQ     01 40.00
                LR     07 10.00
OBN   108.69 327 ePdiff28 15.00   -0.6
KAF   110.52 336 ePdiff28 24.00    0.5
KAF   110.52 336 ePKP  32 25.40    1.3
       0.7s    13.90nm
MIAR  111.69  55 PKP   32 40.00   12.8X
     Z  19s     0.64um          5.2Msz
NUR   112.05 335 iPKP  32 26.80   -0.2
FVM   113.50  51 PKP   32 40.00    9.4X
     Z  21s     1.97um          5.7Msz
HFS   116.57 339 ePdiff28 50.60    0.1
       0.4s     1.10nm
HFS   116.57 339 ePKP  32 34.20   -1.5
       0.3s     2.10nm
     Z  21s     1.13um          5.5Msz
                LR     12 24.00
NB2   116.79 340 Pdiff 28 52.30    0.7
       1.0s     4.80nm
GRM   117.03 229 e(PKP)32 39.50    2.0
       1.0s    80.00nm
NAO   117.08 340 PKP   32 36.20   -0.5
BFT   117.22 238 ePKP  32 42.50    4.2X
MTD   118.51 248 iPKPc 32 26.00  -14.8X
                i      32 28.50
AKU   118.66 356 iPKP  32 43.20    3.7X
       0.9s    40.34nm
MLR   118.68 320 ePKP  32 40.00   -0.4
SLR   118.69 238 ePKP  32 41.50    0.5
       1.5s    40.00nm
     Z  22s     6.61um          6.2Msz
MYNC  119.15  52 PKP   32 50.00    8.5X
     Z  21s     1.02um          5.4Msz
FRS   119.53 232 ePKP  32 42.00   -0.3
       0.6s    22.00nm
KSR   119.80 237 ePKP  32 45.50    2.3
BOSA  119.93 233 ePdiff29 10.30    4.1X
OJC   119.99 327 ePKP  32 41.50   -1.1
BUL   120.27 244 iPKP  32 43.50   -0.7
       0.6s    11.00nm
SPC   120.31 326 ePKP  32 43.50    0.1
MCWV  120.88  46 PKP   33 00.00   15.4X
     Z  20s     1.27um          5.6Msz
PSZ   121.18 325 e(PKP)32 45.40    0.4
SRO   122.13 326 iPKP  32 47.70    1.0
CER   122.34 226 ePKP  32 43.00   -4.6X
       0.5s    58.00nm
BINY  122.50  42 PKP   33 00.00   12.4X
     Z  19s     1.17um          5.6Msz
ZST   122.59 327 ePKP  32 47.10   -0.4
BRG   122.62 331 ePKP  32 47.60    0.1
       1.2s    42.00nm
VAY   122.70 317 iPKP  32 47.00   -0.9
CLL   122.79 331 iPKPd 32 48.40    0.6
       0.9s    75.00nm
                i      33 14.80
PRU   122.88 329 iPKPd 32 48.50    0.5
       0.9s    28.70nm
     Z  22s     1.60um          5.6Msz
                i      33 15.00
SKO   123.16 318 iPKPd 32 48.50   -0.4
       1.0s    70.00nm
POF   123.86 230 ePKP  32 55.00    4.4X
       1.0s    50.00nm
KHC   123.90 329 iPKPd 32 50.50    0.3
       1.0s    35.50nm
     Z  20s     1.60um          5.7Msz
                e      33 01.50
                e      33 31.50
OHR   123.98 318 iPKP  32 50.00   -0.6
       0.5s    50.00nm
                i      32 54.50
GEC2  124.02 329 ePdiff29 26.20    2.1
       0.8s     1.27nm
GEC2  124.02 329 e(PKP)32 51.00    0.5
       0.8s    13.90nm
GEC2  124.02 329 e(PKP)32 57.90    7.4X
       0.5s     8.10nm
WIT   124.54 336 ePKP  32 54.50    3.4X
PTJ   124.54 325 ePKP  32 52.00    0.5
GRF   124.71 331 iPKPc 32 51.50   -0.2
     Z  22s     0.80um          5.3Msz
EDU   124.79 344 ePKP  32 51.10   -0.4
CBM   124.81  33 PKP   33 00.00    8.1X
     Z  21s     1.70um          5.7Msz
WTS   125.09 335 ePKP  32 53.50    1.3
       1.0s    78.20nm
ESY   125.22 344 ePKP  32 52.80    0.4
HRV   125.23  40 PKP   33 00.00    7.1X
     Z  20s     1.17um          5.5Msz
LJU   125.27 326 ePKP  32 53.00    0.2
                (PP)   34 48.00
                (SKKP)46 20.00
EAB   125.46 345 ePKP  32 54.30    1.4
EBL   125.47 344 ePKP  32 53.30    0.4
VOY   125.63 326 ePKP  32 54.00    0.3
TNS   125.65 333 ePKPd 32 54.00    0.4
                i      32 56.00
FUR   125.69 329 ePKP  32 54.20    0.5
HVAR  125.76 322 e(PKP)32 53.30   -0.6
RIY   125.76 325 ePKP  32 53.00   -0.8
EKA   125.89 344 PKPc  32 54.30    0.5
       0.7s    10.10nm
TRI   125.90 326 ePKP  32 54.50    0.4
                e      46 32.00
SQTA  126.34 329 iPKPc 32 54.30   -0.8
                i      32 55.60
ENN   126.37 335 ePKP  32 55.50    0.7
       1.0s   108.00nm
MEM   126.46 335 iPKPc 32 55.91    0.9
       0.9s    43.00nm
LANF  126.83 332 PKP   32 56.38    0.6
WLF   127.09 334 iPKPc 32 57.87    1.7
OSS   127.24 329 iPKPd 32 57.00    0.1
SNF   127.25 335 iPKPc 32 57.67    1.2
SLE   127.35 331 iPKPd 32 56.50   -0.4
DOU   127.44 335 PKP   32 57.60    0.7
WLS   127.44 332 PKP   32 57.04    0.0
CDF   127.48 332 ePKP  32 56.70   -0.5
       1.1s    37.35nm
FEL   127.51 331 PKP   32 57.26    0.0
ZLA   127.59 330 iPKPd 32 57.10   -0.3
ECH   127.67 332 PKP   32 57.04   -0.4
LLS   127.71 329 iPKPd 32 57.60   -0.2
VDL   127.72 329 iPKPd 32 57.60   -0.2
MOF   127.94 331 PKP   32 57.92   -0.2
BBS   128.04 331 PKP   32 58.03   -0.2
BSF   128.12 332 ePKP  32 57.80   -0.6
       1.0s    76.20nm
HAU   128.20 332 ePKP  32 58.00   -0.5
       0.8s    49.30nm
     Z  22s     1.23um          5.5Msz
VITF  128.22 333 PKP   32 58.58    0.1
TMA   128.29 329 iPKPd 32 58.60   -0.3
LOMF  128.45 331 PKP   32 59.12    0.1
DLF   128.62 345 ePKP  32 59.50    0.5
DCN   128.77 345 ePKP  32 58.20   -1.1
       1.1s   232.00nm
DIX   129.05 330 iPKPd 33 00.90    0.4
EMS   129.30 330 iPKPd 33 01.00    0.2
WIN   129.30 236 ePKP  32 58.00   -3.5X
       1.4s    50.00nm
                e      36 19.00
LPL   129.78 330 ePKP  33 01.70   -0.1
       0.6s    19.55nm
LPG   129.78 330 ePKP  33 01.90    0.0
       0.6s    24.35nm
LOR   129.89 333 ePKP  33 01.60   -0.1
       1.2s    60.40nm
     Z  22s     0.90um          5.4Msz
LBF   130.05 333 ePKP  33 01.90   -0.1
       0.9s    21.15nm
SSF   130.20 333 ePKP  33 02.30    0.0
       1.1s    72.05nm
SMF   130.36 333 ePKP  33 02.40   -0.2
       1.1s    54.95nm
SAOF  130.40 328 PKP   33 02.47   -0.3
HYF   130.43 334 ePKP  33 03.10    0.4
AUTN  130.46 328 PKP   33 02.02   -1.1
AVF   130.48 333 ePKP  33 02.40   -0.4
       0.8s    12.75nm
LDF   130.54 337 ePKP  33 02.80    0.0
       1.4s    85.80nm
FLN   130.54 337 ePKP  33 02.70   -0.1
       0.9s    48.30nm
     Z  23s     0.75um          5.3MszX
SBF   130.55 328 PKP   33 02.90   -0.2
PGF   130.55 325 PKP   33 02.02   -1.2
AURF  130.59 328 PKP   33 03.12   -0.1
MVIF  130.68 328 PKP   33 02.90   -0.6
BGF   130.88 333 ePKP  33 03.00   -0.6
       0.7s    24.25nm
CALN  130.91 328 PKP   33 03.77   -0.1
GRR   130.99 337 ePKP  33 03.70    0.0
       0.7s    27.35nm
FRF   131.17 328 ePKP  33 04.20    0.0
       1.0s    36.20nm
ARE   131.18 116 ePKP  33 06.00    0.6
MAF   131.26 333 ePKP  33 03.70   -0.6
       0.9s    13.60nm
LPF   131.35 337 ePKP  33 04.50    0.1
       0.9s    76.65nm
FSA   131.36 131 e(PKP)33 07.40    2.4
TCF   131.37 333 ePKP  33 04.80    0.3
       1.2s    95.80nm
LRG   131.40 328 ePKP  33 04.80    0.2
       0.9s    60.60nm
     Z  23s     1.30um          5.6MszX
LMR   131.40 328 ePKP  33 04.70    0.1
       1.0s    59.60nm
LSF   131.70 334 ePKP  33 05.20    0.0
       0.8s    19.75nm
MFF   132.15 335 ePKP  33 05.30   -0.6
       0.9s    31.95nm
RJF   132.44 333 ePKP  33 06.10   -0.5
       0.9s    16.70nm
     Z  22s     0.75um          5.4Msz
CAF   132.48 332 ePKP  33 06.50   -0.2
       0.6s     4.95nm
LPO   133.06 333 ePKP  33 07.70   -0.1
       0.9s    34.25nm
LFF   133.07 333 ePKP  33 07.60   -0.1
       0.9s    26.05nm
YJA   133.80 127 e(PKP)33 05.00   -5.4X
CNCB  134.15 119 PKP   32 58.00  -13.3X
                i      33 13.70
LPB   134.16 118 PKP   32 57.00  -14.2X
LPAZ  134.23 118 PKP   33 02.50   -9.1X
EPF   134.72 332 ePKP  33 10.70   -0.4
       1.2s    35.40nm
EGRA  135.68 332 ePKP  33 15.90    3.1X
ESEL  135.83 327 ePKP  33 10.42   -2.7
ECRI  136.35 334 ePKP  33 15.48    1.3
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11d 10h

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ETOR   137.57 332 ePKP   33 06.28 -10.3X
ECHE   137.99 330 ePKP   33 16.06  -1.3
ERUA   138.42 338 ePKP   33 11.94  -6.1X
ACU    138.51 328 ePKP   33 14.31  -4.0X
GUD    138.67 334 ePKP   33 10.93  -7.7X
EVIA   139.48 330 ePKP   33 13.77  -6.4X
PAB    139.64 333 ePKP   33 17.90  -2.5
                  iPP    36 19.70
CAR    139.86  79 ePKP   33 14.70  -6.8X
EPLA   139.98 335 ePKP   33 19.52  -1.4
SIV    140.47 122 PKP    33 13.20  -9.2X
EBAN   140.48 331 ePKP   33 18.02  -3.8X
ENIJ   140.60 328 ePKP   33 18.47  -3.6X
EGUA   141.41 329 ePKP   33 08.31 -15.2X
EHOR   141.45 332 ePKP   33 18.21  -5.3X
EPRU   142.13 331 ePKP   33 21.58  -3.3X
EVAL   142.33 333 ePKP   33 20.55  -4.6X
ALJ    142.54 331 ePKP   33 24.50  -1.2
GIBL   142.58 332 ePKP   33 24.00  -1.6
EJIF   142.65 331 ePKP   33 23.79  -1.9
CNIL   143.00 332 ePKP   33 25.50  -0.8
PLAT   143.06 331 ePKP   33 26.00  -0.4
TSY    143.76 330 iPKP   33 27.00  -0.6
RSTA   143.84 144 ePKP   33 26.10  -2.0
TRN    145.24  78 ePKP   33 30.00  -0.7
RTC    145.31 330 iPKP   33 30.80   0.5
TBH    145.59  78 ePKP   33 31.00  -0.3
TNF    145.63 327 iPKP   33 32.50   1.6
AGVB   146.67 137 ePKP   33 33.90   1.0
                  e      33 36.80
                  e      33 54.30
OUK    148.03 328 iPKP   33 40.00   5.2X
BDFB   151.00 134 ePKP   33 40.80   0.9
BAO    151.02 134 ePKP   33 40.80   0.9
                  i      33 42.90
                  e      33 45.00
                  i      33 47.70
                  i      34 06.40
                  e      34 27.20
KIC    157.91 276 PKP    33 49.80   0.6
TIC    158.17 276 PKP    33 50.60   1.1
        0.8s     6.50nm
LIC    158.21 275 PKP    33 50.30   0.8
     Z  22s     1.56um          5.8Msz
LKO    158.33 284 PKP    33 51.14   1.4
        0.9s    20.00nm
     S.D. = 1.0  on 319 of 390 obs.
-----------------------------------
?  NOV  11, 1993  10h 30m 53.14± 0.95s
   39.089 N ± 8.0km   27.540 E ± 9.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                              (366)
      ML 2.8 (ISK).

IZM      0.72 198 ePg    31 07.30  -0.1
                  eSg    31 19.30
DST      0.99  58 iPn    31 12.20   0.3
EZN      1.19 308 iPn    31 15.60   0.2
EDC      1.28  11 ePn    31 16.50  -0.4
     S.D. = 0.5  on   4 of   4 obs.
-----------------------------------
&  NOV  11, 1993  10h 53m 12.76s
   38.754 N          122.738 W
   DEPTH =   3.0km
 NORTHERN CALIFORNIA                 ( 36)
      <GM-P>. MD 2.9 (GM).

GAXM     0.05 197 P      53 13.72  -0.2
GGPM     0.08 277 P      53 14.63   0.0
GSGM     0.12  11 P      53 15.71   0.6
GPMM     0.19 300 P      53 16.84   0.3
MAC      0.20 177 P      53 17.17   0.3
GMKM     0.22 350 P      53 17.71   0.5
SKG      0.22 257 P      53 17.61   0.4
GHLM     0.36 323 P      53 20.34   0.4
NTYM     0.37 171 eP     53 20.26   0.1
GDCM     0.39 272 P      53 21.04   0.4
GSNM     0.40 298 P      53 21.26   0.5
GBMM     0.43  26 P      53 22.85   1.5
NCFM     0.43 186 P      53 21.96   0.5
NTBM     0.53 197 P      53 23.80   0.5
GGUM     0.60 280 P      53 25.02   0.2
CSPM     0.86 157 P      53 30.04   0.1
CPIM     0.87 152 P      53 30.03   0.0
HMR      0.95 129 eP     53 31.40  -0.1
BGC      1.08 150 P      53 34.09   0.4
SAC      1.20 168 P      53 36.56   0.9
ORV      1.25  50 eP     53 34.34  -2.3
AFHM     1.55  79 P      53 39.97  -1.4
ARN      1.69 145 eP     53 42.00  -1.4
COE      1.71 150 eP     53 42.27  -1.4
CMB      1.98 110 (P)    53 46.08  -1.6
LGPM     2.16 358 (P)    53 50.62   0.4
LBFM     2.67  14 eP     53 56.32  -1.3
MMPM     3.14 110 eP     54 04.32  -0.1
MEMM     3.18 109 eP     54 04.56  -0.1
BONR     3.58 102 eP     54 10.42  -0.2
MTUM     3.58 112 (Pn)   54 10.40  -0.1
        31 obs. associated
-----------------------------------
?  NOV  11, 1993  11h 16m 27.32± 2.51s
   11.043 N ±12.3km   62.204 W ±26.7km
   DEPTH =  80.0km  (geophysicist)
 WINDWARD ISLANDS                    ( 95)
      MD 2.9 (TRN).

TCE      0.56 128 ePc    16 41.61  -0.2
                  eS     16 51.92
TRN      0.88 116 ePd    16 45.20   0.0
                  eS     16 57.89
GRW      1.23  26 eP     16 49.66   0.1
                  eS     17 07.63
TBH      1.25 116 eP     16 49.98   0.2
                  eS     17 07.92
TPR      1.41  84 eP     16 51.86   0.0
                  eS     17 11.00
BOT      1.46  85 eP     16 52.32  -0.2
     S.D. = 0.2  on   6 of   6 obs.
-----------------------------------
*  NOV  11, 1993  12h 12m 32.48± 1.57s
   39.075 N ±15.4km   21.853 E ± 7.1km
   DEPTH =  33.0km  (normal)
 GREECE                              (364)

AGG      0.38  98 iPg    12 41.22  -0.1
                  eSg    12 49.70
LIT      1.14  25 ePg    12 51.18  -1.0
                  eSg    13 06.90
IGT      1.26 292 ePb    12 52.62  -1.3
                  eSb    13 09.42
LSK      1.45 318 ePn    12 54.50  -2.1
SRN      1.64 300 ePn    13 01.50   2.1
PAIG     1.65  58 ePb    12 59.54   0.0
                  eSb    13 21.00
FNA      1.75 348 iPb    12 59.66  -1.3
                  eSb    13 22.82
TPE      1.87 311 ePn    13 04.50   1.8
OUR      2.07  52 ePn    13 05.00  -0.5
                  eSn    13 29.00
SOH      2.09  33 ePn    13 06.06   0.1
                  eSn    13 30.06
BERA     2.19 319 eP     13 13.40   6.2X
OHR      2.19 339 iPn    13 07.80   0.5
                  i      13 34.00
                  i      13 38.50
KNT      2.23  21 ePn    13 07.40  -0.5
VAY      2.31  14 ePn    13 11.00   2.0
SRS      2.44  33 ePn    13 10.20  -0.6
                  iSn    13 38.42
TIR      2.73 327 ePn    13 27.20  12.3X
MMB      2.89  29 eP     13 19.00   1.8
SKO      2.91 354 ePn    13 15.30  -2.2
KKB      2.94  18 eP     13 20.00   2.0
RZN      3.40  39 eP     13 24.00  -0.7
VTS      3.66  16 eP     13 32.00   3.7X
     S.D. = 1.5  on  18 of  21 obs.
-----------------------------------
   NOV  11, 1993  12h 15m 59.40± 0.18s
   47.692 N ± 5.3km  146.945 E ± 3.0km
   DEPTH = 440.1km  (  2 depth phases)
   4.5mb ( 42 obs.)
 NORTHWEST OF KURIL ISLANDS          (220)

KUR      2.54 165 ePn    17 00.50  -2.4
                  iS     17 48.50
YSS      2.95 258 iPnc+  17 05.50  -0.3
                  iS     17 57.70
SKR      6.70  60 ePn    17 39.80  -1.8
                  eS     18 59.00
VLA     11.52 252 iPnc   18 31.50  -3.5X
                  eS     20 39.00
MDJ     12.42 262 eP     18 43.20  -1.5
        0.8s   160.00nm          5.5mb
                  S      20 54.00
                  ScP    26 38.00
MGD     12.64   9 ePn    18 48.00   1.1
MAT     12.88 213 iPd    18 48.50  -1.2
        0.8s    13.43nm          4.4mb
                  eS     21 07.00
CN2     15.49 263 iPd    19 15.20  -1.8
        0.8s   380.00nm          6.0mb X
YAK     17.36 332 eP     19 35.30  -0.3
     Z  21s     0.50um
     N  21s     0.40um
                  i      22 33.00
SNY     17.57 259 Pd     19 38.00   0.1
        0.6s    63.00nm          5.3mb
CIT     21.81 294 eP     20 19.00   0.4
BOD     22.06 310 iPc    20 20.00  -0.8
        0.9s    30.00nm          4.8mb
BJI     23.35 262 eP     20 34.50   1.7
        1.0s    28.00nm          4.7mb
TIA     24.81 253 eP     20 46.20   0.2
HHC     26.07 268 Pd     20 57.80   0.3
        0.8s    72.00nm          5.2mb
NJ2     26.43 244 Pc     21 00.50   0.0
TIY     27.05 261 eP     21 07.00   1.0
BTO     27.23 269 eP     21 07.50  -0.2
ZAK     28.45 292 iPd    21 18.00   0.0
        1.0s    40.00nm          4.8mb
XAN     31.49 258 Pd     21 44.50  -0.1
        1.0s    38.00nm          4.8mb
LZH     33.70 266 iPd    22 04.30   0.9
        1.0s    71.00nm          5.0mb
                  ScP    27 32.00
TTA     34.54  43 eP     22 09.73  -0.4
        1.2s    14.60nm          4.3mb
GTA     34.69 274 Pd     22 12.50   0.9
        1.5s    58.00nm          4.8mb
                  ScP    27 38.00
SVW     34.80  46 eP     22 13.00   0.7
IMA     35.56  37 ePc    22 17.84  -0.8
        0.7s     6.16nm          4.1mb
NRI     35.58 329 iPc    22 18.00  -0.6
        1.0s    12.00nm          4.3mb
CRP     36.46  45 eP     22 24.86  -1.4
KDC     36.84  51 ePc    22 28.18  -0.9
        0.6s     8.68nm          4.3mb
CD2     36.85 259 iPd    22 29.80   0.2
        1.0s    68.00nm          5.0mb
SLKM    37.50  46 eP     22 33.52  -1.1
PMR     37.86  44 eP     22 36.47  -1.0
        0.8s    11.34nm          4.3mb
GYA     37.93 251 iPd    22 38.80   0.2
        1.0s    58.00nm          4.9mb
                  S      27 58.00
FBA     38.05  39 ePc    22 38.86  -0.2
        0.6s     9.44nm          4.4mb
TOA     39.16  43 eP     22 48.60   0.4
NVS     39.24 305 iPd    22 48.50  -0.4
KLU     39.39  44 eP     22 49.76  -0.4
WMQ     40.65 287 P      23 01.50   0.9
BALM    41.18  44 ePc    23 04.68   0.0
KMI     41.38 253 Pd     23 07.00   0.1
        1.4s    70.00nm          4.9mb
INK     43.11  32 ePc    23 19.30  -0.5
        0.5s     8.00nm          4.4mb
MBC     45.14  20 eP     23 36.00   0.3
LSA     46.06 268 iPd    23 44.60   0.6
        0.8s    34.00nm          4.8mb
FRU     49.44 293 eP     24 09.00   0.0
        1.8s    40.00nm          4.5mb
KSH     50.41 288 eP     24 12.70  -3.7X
GUN     50.76 270 P      24 19.80   0.4
RES     51.24  17 ePc    24 20.50  -1.3
        0.5s    11.00nm          4.4mb
KKN     51.24 270 P      24 23.20   0.5
        0.6s    34.00nm          4.9mb
PKI     51.30 270 P      24 25.00   1.7
        0.8s    74.00nm          5.1mb
GKN     51.54 271 P      24 25.20   0.3
YKA     52.63  35 eP     24 30.60  -1.6
        0.5s     3.30nm          3.9mb
STW     56.47  53 P      24 59.67   0.1
GMW     57.30  54 ePc    25 05.46   0.1
JCW     57.38  53 P      25 06.06   0.1
BMW     57.71  55 P      25 08.67   0.5
RMW     57.89  53 ePc    25 09.37  -0.1
FMW     58.28  54 P      25 12.52   0.2
LON     58.32  54 eP     25 11.99  -0.4
WTV     58.74  52 P      25 14.89  -0.3
```

```
ASR     58.80  54 P      25 16.10   0.4
EBG     58.89  53 P      25 16.70   0.4
RNO     58.98  57 P      25 18.02   1.1
SAW     59.03  52 P      25 16.95  -0.2
SSOR    59.12  56 P      25 18.73   0.8
VBEM    59.48  55 P      25 21.00   0.6
WAH2    59.53  53 P      25 20.63   0.1
DPW     59.56  51 ePc    25 20.27  -0.5
CROR    59.86  55 P      25 23.50   0.7
JBO     60.19  54 P      25 25.35   0.4
VIPM    60.36  55 P      25 26.73   0.5
KAF     60.74 332 iP     25 27.10  -1.1
        0.3s     3.10nm          4.3mb
LNOR    60.78  53 P      25 29.27   0.4
NUR     62.48 332 iP     25 38.70  -0.9
HYB     62.82 266 eP     25 42.00  -0.4
ORV     63.03  60 ePc    25 43.09  -0.5
LRM     63.89  50 iPc    25 49.50   0.2
KVN     65.34  59 eP     25 58.89   0.4
FRB     65.44  16 eP     25 56.50  -1.9
        0.5s     4.00nm          4.3mb
NB2     65.88 338 P      26 00.90  -0.5
        0.6s     3.30nm          4.2mb
BONR    65.96  60 eP     26 02.34  -0.2
HFS     66.01 336 eP     26 00.60  -1.5
        0.6s     6.40nm          4.5mb
GBA     66.28 264 Pd     26 04.00  -0.3
        0.4s     4.00nm          4.4mb
HVU     66.47  53 eP     26 05.83   0.4
TNP     66.51  59 ePc    26 06.17   0.4
        0.6s    10.05nm          4.6mb
DUG     67.55  55 ePc    26 12.72   0.7
        0.6s    14.97nm          4.8mb
                  epP    27 47.31 439km
TPNV    67.84  59 eP     26 14.27   0.3
        0.7s     8.03nm          4.5mb
DAU     68.25  54 eP     26 17.09   0.6
WRA     68.27 193 P      26 15.90  -0.4
        0.5s     1.80nm          4.0mb
WR2     68.27 193 iPd    26 15.50  -0.8
        0.6s     4.00nm          4.2mb
ULM     68.46  38 ePc    26 19.00   1.8
GSC     68.66  61 eP     26 18.52  -0.3
ARUT    68.87  57 ePc    26 20.10  -0.1
MSU     69.07  56 iPc    26 22.36   0.9
RSSD    69.33  47 ePc    26 22.69  -0.2
        0.7s    16.32nm          4.8mb
SRU     69.56  54 eP     26 24.57   0.2
PV09    70.76  54 eP     26 31.72   0.1
PV10    70.90  54 ePc    26 32.75   0.4
                  epP    28 08.79 441km
PV08    70.97  53 ePc    26 33.21   0.4
GOL     71.90  51 eP     26 38.86   0.7
        0.8s     6.07nm          4.3mb
GLD     71.94  51 eP     26 39.13   0.9
        1.2s    18.25nm          4.6mb
ALQ     74.82  55 ePc    26 55.63   0.8
        0.8s     4.38nm          4.2mb
GEC2    75.66 330 ePd    26 59.00   0.0
        0.5s     0.94nm          3.7mb
                  e      27 11.10
ACO     77.37  49 iPd    27 08.50  -0.1
TUL     79.67  47 iPc    27 21.50   0.8
GAC     79.84  29 eP     27 21.00  -0.4
LTX     80.59  57 ePc    27 26.34   0.6
UYO     81.72  47 iPd    27 31.90   0.5
MIAR    81.85  47 ePc    27 32.33   0.3
        0.7s     6.42nm          4.4mb
LMN     82.78  22 eP     27 37.00   0.5
BDFB   145.73  26 ePKP   34 48.47   0.4
     S.D. = 0.8  on 107 of 109 obs.
-----------------------------------
?  NOV  11, 1993  12h 23m 20.71± 1.18s
   39.147 N ±12.5km   28.216 E ±15.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.9 (ISK).

DST      0.56  35 ePg    23 32.60   0.5
IZM      1.06 225 ePg    23 40.70   0.1
                  eSg    23 55.20
EDC      1.23 347 ePn    23 43.50  -0.1
IZI      1.53  39 ePn    23 47.70  -0.5
     S.D. = 0.7  on   4 of   4 obs.
-----------------------------------
%  NOV  11, 1993  13h 32m 14.58± 0.85s
   42.124 N ± 6.7km   19.023 E ± 5.5km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)

BDV      0.22 318 iPgc   32 19.55   0.3
                  iSg    32 24.12
ULC      0.23 134 iPgd   32 19.59   0.0
                  iSg    32 23.56
TTG      0.35  30 iPgd   32 21.96   0.1
                  iSg    32 28.85
HCY      0.51 310 iPgd   32 24.67  -0.2
                  iSg    32 32.94
NKY      0.69 358 iPgd   32 28.02  -0.3
                  iSg    32 39.53
PVY      0.85  56 iPgc   32 30.82  -0.2
                  iSg    32 44.61
BRY      0.85 336 iPgd   32 31.12   0.0
                  iSg    32 44.73
IVA      0.99  41 iPgc   32 33.58   0.2
                  iSg    32 48.56
     S.D. = 0.2  on   8 of   8 obs.
-----------------------------------
%  NOV  11, 1993  13h 36m 37.61± 0.62s
   39.210 N ± 6.3km   28.060 E ± 6.0km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 3.2 (ISK).

DST      0.59  48 iPg    36 48.80  -0.8
IZM      1.02 218 ePg    36 56.40  -0.6
                  eSg    37 10.90
EDC      1.15 352 iPg    36 59.00   0.0
KHL      1.45 127 ePn    37 04.00   0.1
EZN      1.48 295 iPn    37 04.80   0.6
IZI      1.57  44 ePn    37 05.20  -0.4
ALT      1.60  95 ePn    37 06.70   0.6
GPA      2.04  57 ePn    37 13.00   0.5
     S.D. = 0.7  on   8 of   8 obs.
-----------------------------------
%  NOV  11, 1993  13h 49m 58.90± 0.95s
   26.323 S ± 8.8km   27.716 E ±10.4km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)
      ML 2.5 (PRE).

SLR      0.78  41 eP     50 14.50   0.0
                  S      50 25.50
KSR      0.87 302 eP     50 16.00  -0.2
                  S      50 26.90
SEK      1.99 182 eP     50 34.60   0.8
                  S      50 58.00
SWZ      2.30 248 eP     50 39.00   0.7
                  S      51 07.00
BLF      3.09 206 eP     50 48.00  -1.4
     S.D. = 1.2  on   5 of   5 obs.
-----------------------------------
*  NOV  11, 1993  13h 59m 44.40± 1.52s
   30.954 S ± 9.4km  177.371 W ±22.8km
   DEPTH =  33.0km  (normal)
   5.1mb (  7 obs.)
 KERMADEC ISLANDS, NEW ZEALAND     (178)

RAO      1.76 344 eP     00 12.00  -1.1
                  S      00 26.50
HBZ      7.53 207 eP     01 35.40   0.7
PUZ      7.96 206 eP     01 39.90  -0.9
                  eS     03 08.50
NOZ      8.53 205 eP     01 49.10   0.6
URZ      8.59 210 eP     01 48.00  -1.4
                  eS     03 25.20
OUZ      8.69 238 eP     01 55.30   4.5X
MNG     11.25 209 eP     02 21.30  -4.6X
MTW     11.70 208 eP     02 25.20  -6.7X
CAW     11.83 209 eP     02 27.90  -5.9X
DZM     16.96 298 iPd    03 42.60   1.8
ARMA    26.63 263 eP     05 24.00   2.1
CNB     28.12 252 eP     05 37.00   1.6
CAN     28.41 252 iPd    05 39.50   1.5
BWA     28.92 254 iPd    05 41.30  -1.3
TOO     31.25 248 eP     06 04.00   0.8
        0.4s     7.00nm          4.8mb
CTA     34.42 280 iPc    06 30.00  -1.0
        1.0s    30.00nm          5.2mb
STK     34.89 258 iPc    06 31.30  -3.6X
        1.0s    26.30nm          5.1mb
ASPA    43.62 267 iPd    07 46.30  -1.3
        0.3s    11.90nm          5.1mb
      Z  21s     0.30um          4.2Msz
WR2     44.64 272 iPc    07 53.60  -2.2
        0.4s    29.80nm          5.5mb
FORT    46.43 255 eP     08 09.20  -0.7
        0.5s     8.00nm          4.9mb
WARB    48.97 261 eP     08 28.60  -1.2
CSY     54.91 208 eP     09 25.50  11.7X
        0.6s    18.90nm
SPA     59.21 180 iPc    09 50.90   6.3X
        1.1s    35.71nm          5.4mb
BONR    87.96  43 eP     12 37.60   5.1X
KAF    145.25 341 iPKP   19 18.90  -0.6
        0.4s     2.70nm
OBN    145.93 325 ePKP   19 16.00  -4.9X
                  i      19 21.00
                  e      19 34.00
NUR    147.02 340 iPKP   19 25.00   2.6
                  i      19 28.50
NB2    149.38 352 PKP    19 32.60   6.3X
        0.9s    14.60nm
HFS    149.89 349 ePKP   19 31.70   4.7X
        0.6s     7.90nm
     S.D. = 1.5  on  18 of  29 obs.
-----------------------------------
   NOV  11, 1993  14h 16m 44.81± 0.48s
   41.035 N ± 4.6km   22.340 E ± 4.0km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)
      ML 2.1 (SKO).

VAY      0.33  31 iPg    16 51.50  -0.2
                  iSg    16 56.60
KNT      0.44  73 iPg    16 53.52  -0.3
                  eSg    16 59.24
THE      0.62 130 ePg    16 56.16  -1.2
                  eSg    17 04.24
FNA      0.77 251 ePg    16 59.64  -0.3
SOH      0.80 105 ePg    16 59.96  -0.4
                  iSg    17 11.24
LIT      0.94 173 ePg    17 03.00   0.2
SRS      0.95  85 ePg    17 02.40  -0.5
                  eSg    17 15.76
KKB      1.00  34 ePg    17 03.00  -0.8
SKO      1.15 324 ePg    17 05.80  -0.6
                  iSg    17 21.50
OHR      1.17 274 iPn    17 06.80   0.1
MMB      1.18  62 iPgc   17 07.00   0.1
PAIG     1.51 137 ePb    17 13.00   1.2
VTS      1.69  22 eP     17 16.00   1.4
RZN      1.90  69 iP     17 19.00   1.2
PGB      2.04  41 ePg    17 28.00   8.4X
KDZ      2.40  74 ePg    17 29.00   4.3X
     S.D. = 0.8  on  14 of  16 obs.
-----------------------------------
%  NOV  11, 1993  14h 49m 44.76± 1.27s
   44.248 N ± 8.7km    1.744 E ±11.7km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                            (538)
      ML 2.5 (LDG).

LPO      0.59 318 Pg     49 56.10  -0.6
                  Sg     50 04.20
CAF      0.72  19 Pg     49 59.20   0.3
                  Sg     50 09.00
LFF      1.00 314 Pn     50 04.50   0.9
                  Pg     50 05.40
                  Sg     50 18.70
RJF      1.07 351 Pn     50 04.50  -0.4
                  Pg     50 06.30
                  Sg     50 20.10
EPF      1.59 220 Pn     50 12.90  -0.1
                  Pg     50 16.00
                  Sg     50 36.00
MAF      2.06  16 Pn     50 19.60  -0.2
                  Pg     50 23.60
                  Sg     50 49.10
TCF      2.07   9 Pg     50 24.00   4.1X
                  Sg     50 50.70
BGF      2.44  18 Pg     50 30.90   5.7X
                  Sg     51 02.30
     S.D. = 0.7  on   6 of   8 obs.
-----------------------------------
*  NOV  11, 1993  14h 53m 37.79± 0.44s
   19.882 S ± 8.1km  163.450 E ± 7.7km
   DEPTH =  32.0km  (  3 depth phases)
   4.6mb ( 10 obs.)  4.0Msz (  1 obs.)
 NEW CALEDONIA                     (187)
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11d 14h

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DZM     3.55 128 iPd   54 32.10   0.0
                iS     55 38.00
BKM     5.05  65 iPd   54 51.90  -1.4
                iS     55 50.00
HNR    10.93 341 eP    56 14.00  -1.1
                eS     58 07.00
BRS    12.31 231 iPd   56 30.00  -3.8X
       0.7s     8.00nm          5.0mb
                i      56 38.50
                i      58 40.00
ARMA   14.98 223 iPd   57 08.90  -0.1
       0.2s     3.00nm          4.3mb
CTA    16.17 266 iPc   57 24.50   0.2
       0.6s    10.00nm          4.1mb
                e      57 29.00
BWA    19.68 220 iPd   58 05.70  -1.6
                e      58 13.70  31km
CNB    19.77 216 iPc   58 09.90   1.7
       1.0s    26.00nm          4.5mb
CAN    19.98 217 iPd   58 11.10   0.7
                e      58 20.30  36km
STK    22.96 234 iPd   58 37.70  -2.8
       0.7s     7.30nm          4.3mb
WR2    27.33 265 iPc   59 21.10  -0.9
       0.7s     5.20nm          4.3mb
ASPA   27.67 257 iPc   59 24.50  -0.6
       0.8s    13.70nm          4.7mb
     Z  21s     0.40um          4.0Msz
MEEK   41.57 252 eP    01 24.20  -0.2
KMI    74.06 305 Pc    05 13.50   0.5
       1.4s    50.00nm          5.3mb
                pP     05 22.50  29km
BJI    74.12 324 eP    05 12.50  -0.2
       1.2s    10.00nm          4.7mb
LZH    79.20 315 eP    05 42.60   1.0
       1.6s    38.00nm          5.1mb
     Z  12s     0.27um          4.8MszX
     E  11s     0.33um
KKN    89.19 300 P     06 33.20   0.9
DMN    89.26 300 P     06 33.60   0.9
GKN    89.80 300 P     06 35.40   0.3
FBA    92.36  19 eP    06 44.40  -1.4
KHC   142.15 328 ePKP  12 56.00 -12.6X
                e      13 08.00
GEC2  142.26 327 ePKP  13 09.10   0.3
       0.7s     1.02nm
                e      13 12.00
                e      13 16.60
                e      13 25.50
WLF   145.20 334 PKP   13 13.00  -0.6
DOU   145.48 336 PKP   13 15.00   0.9
CDF   145.66 332 ePKP  13 15.20   0.6
       1.1s    40.05nm
BSF   146.31 331 ePKP  13 17.20   1.5
HAU   146.38 332 ePKP  13 17.30   1.6
       0.7s     7.40nm
LPL   148.02 328 ePKP  13 22.40   3.7X
       0.7s     4.65nm
LOR   148.02 333 ePKP  13 22.10   3.7X
       0.8s     7.80nm
LPG   148.02 328 ePKP  13 22.50   3.7X
       0.7s     4.50nm
LBF   148.19 333 ePKP  13 22.40   3.7X
       1.2s     9.20nm
SSF   148.33 333 ePKP  13 23.10   4.3X
       0.9s    11.95nm
FLN   148.42 340 ePKP  13 22.90   4.0X
       1.4s    59.25nm
LDF   148.44 339 ePKP  13 22.90   4.0X
       1.2s    28.25nm
SMF   148.52 333 ePKP  13 23.30   4.1X
       1.2s    14.30nm
PGF   148.78 322 ePKP  13 24.00   4.1X
       0.6s     7.60nm
SBF   148.80 325 ePKP  13 23.90   4.1X
       0.6s     8.55nm
GRR   148.87 340 ePKP  13 24.40   4.8X
       0.8s    16.50nm
BGF   149.01 334 ePKP  13 24.70   4.8X
       0.6s     5.30nm
LPF   149.24 339 ePKP  13 25.30   5.1X
       0.6s    14.95nm
MAF   149.39 333 ePKP  13 24.90   4.3X
       0.7s     4.85nm
FRF   149.43 326 ePKP  13 25.40   4.7X
       0.8s     8.20nm
TCF   149.49 334 ePKP  13 26.00   5.3X
       0.8s    10.05nm
LRG   149.65 326 ePKP  13 26.20   5.2X
       1.1s    21.50nm
LMR   149.66 326 ePKP  13 26.10   5.1X
       1.2s    20.55nm
LSF   149.80 335 ePKP  13 26.50   5.4X
       1.2s    25.00nm
MFF   150.15 337 ePKP  13 27.50   5.9X
       0.8s    11.55nm
RJF   150.57 334 ePKP  13 28.60   6.3X
       1.1s    12.20nm
CAF   150.64 332 ePKP  13 29.00   6.5X
       1.1s    11.00nm
LFF   151.19 334 ePKP  13 30.10   6.9X
LPO   151.21 333 ePKP  13 30.30   7.0X
       0.7s     6.85nm
     S.D. = 1.2  on  25 of  51 obs.
-------------------------------------
&  NOV  11, 1993  15h 16m 09.30s
   37.477 N          118.800 W
   DEPTH =   9.5km
 CALIFORNIA-NEVADA BORDER REGION ( 40)
      <GM-P>. MD 3.2 (GM). ML 3.2
      (GS), 3.1 (BRK).

HTCR    0.06  24 P     16 11.40  -0.4
ORC     0.20  36 P     16 13.63  -0.1
MEMM    0.22 330 iPd   16 14.10   0.1
MMPM    0.22 306 iPd   16 14.04  -0.3
MTUM    0.23 123 iPd   16 13.95  -0.3
MRCM    0.30  50 iPc   16 15.47  -0.2
CWCR    0.39  87 P     16 17.22  -0.2
BONR    0.62  39 ePc   16 21.27  -0.7
FRI     0.87 237 iP    16 25.61  -0.5
                iS     16 37.10
CMB     1.37 294 iPc   16 34.21  -0.4
                eS     16 52.34
WLHM    1.38 163 P     16 34.68  -0.2
TNP     1.39  64 ePc   16 35.22   0.2
KVN     1.67  19 eP    16 40.30   1.4
WCHM    1.69 160 P     16 40.34   0.9
MNHM    1.73 293 P     16 41.15   1.5
WASM    1.75 173 P     16 41.38   1.3
NMC     1.78 156 P     16 41.95   1.5
ISA     1.83 172 eP    16 42.44   1.3
                eS     17 04.87
WORM    1.83 166 P     16 42.77   1.6
HVC     1.96 236 P     16 44.36   1.4
PRI     2.00 229 iP    16 44.70   1.0
                iS     17 12.02
WBSM    2.01 164 P     16 45.95   2.1
EKH     2.06 248 P     16 46.60   2.1
PHAM    2.08 219 eP    16 45.26   0.5
LTR     2.09 254 P     16 46.13   1.3
WSHM    2.12 150 P     16 48.93   3.6
BLRM    2.14 248 P     16 48.06   2.5
CSTL    2.15 275 P     16 47.70   2.0
LRC     2.18 236 P     16 47.97   1.8
ARN     2.18 267 eP    16 47.41   1.2
BVYM    2.21 252 P     16 48.08   1.4
SAO     2.23 252 ePc   16 48.00   1.1
                eS     17 16.52
MHC     2.27 267 eP    16 49.21   1.6
                iS     17 18.21
COE     2.30 265 eP    16 49.13   1.2
PRS     2.36 242 iP    16 49.57   0.9
JRRM    2.37 261 P     16 50.14   1.2
BCH     2.51 205 eP    16 51.35   0.4
GSC     2.70 143 eP    16 55.49   1.7
PKM     2.70 198 P     16 55.43   1.6
ORV     2.97 315 eP    16 57.82   0.5
                eS     17 39.95
       40 obs. associated
-------------------------------------
   NOV  11, 1993  15h 17m 37.73± 0.70s
   45.646 N ± 5.7km   14.254 E ± 5.5km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION       (383)
      MD 2.5 (LJU), 2.2 (TRI).

CEY     0.15  52 iPgd  17 41.40   0.1
                eSg    17 44.00
RIY     0.32 163 iPgc  17 44.50   0.2
                iSg    17 49.50
TRI     0.35 281 ePg   17 44.90   0.0
                iSg    17 50.40
LJU     0.44  26 ePg   17 47.00   0.2
                eSg    17 53.10
VOY     0.46 327 iPgc  17 47.00  -0.1
                eSg    17 54.20
VBY     0.72 101 ePg   17 51.50  -0.4
                iSg    18 01.00
PTJ     1.22  77 eP    18 14.50  14.0X
     S.D. = 0.3  on   6 of   7 obs.
-------------------------------------
?  NOV  11, 1993  15h 24m 34.02± 1.13s
   38.846 N ± 8.9km   29.904 E ±11.5km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.9 (ISK).

ALT     0.26  38 iPg   24 39.80   0.2
KHL     0.60 210 iPg   24 46.20   0.0
                eSg    24 56.70
DST     1.25 308 ePn   24 57.50   0.3
IZI     1.53 348 ePn   25 01.00  -0.4
     S.D. = 0.5  on   4 of   4 obs.
-------------------------------------
&  NOV  11, 1993  15h 26m 51.89s
   63.101 N          150.963 W
   DEPTH = 133.6km
 CENTRAL ALASKA                    (  1)
      <AEIC>.

KTH     0.45   2 iP    27 11.12  -0.3
                eS     27 25.30
TRF     0.47  41 iP    27 11.22  -0.4
                eS     27 26.29
HUR     0.62 101 eP    27 11.63  -0.7
                eS     27 27.23
CUT     0.77 155 eP    27 13.09  -0.3
                eS     27 29.61
RND     1.00  71 eP    27 14.72  -0.8
                eS     27 32.91
MCK     1.11  54 eP    27 15.94  -0.6
SKT     1.16 193 iP    27 16.52  -0.4
                eS     27 35.45
                eS     27 35.49
BWN     1.27  31 eP    27 17.75  -0.3
PWA     1.54 160 P     27 20.70  -0.3
GHO     1.64 144 eP    27 21.57  -0.7
                S      27 44.55
SUA     1.65 176 eP    27 22.12  -0.3
NEA     1.70  29 eP    27 21.47  -1.4
PLRM    1.74 150 eP    27 22.20  -1.1
PMR     1.74 150 eP    27 21.53  -1.8
                eS     27 46.04
SML     1.78 136 eP    27 22.66  -1.2
                eS     27 47.40
NCG     1.79 199 eP    27 23.38  -0.7
CGLM    1.87 196 eP    27 24.05  -0.9
WRH     1.88  42 eP    27 23.72  -1.2
CRP     1.92 197 eP    27 24.35  -1.4
CP2     1.94 199 eP    27 25.10  -0.9
MLY     1.94   3 eP    27 24.67  -1.1
BGL     1.96 201 eP    27 26.16   0.0
CKN     1.97 197 eP    27 25.90  -0.2
PMS     1.98 160 P     27 25.70  -0.5
SPU     1.99 195 eP    27 25.49  -1.0
CKT     1.99 198 eP    27 25.88  -0.6
CKL     2.02 199 eP    27 26.30  -0.5
KNK     2.06 144 eP    27 25.99  -1.3
                eS     27 53.52
CCB     2.09  41 iP    27 26.17  -1.4
SCM     2.11 125 eP    27 26.62  -1.4
BKG     2.13 197 eP    27 27.14  -1.0
HDA     2.21  52 eP    27 27.59  -1.5
MDM     2.22  32 eP    27 27.91  -1.3
                eS     27 56.21
FBA     2.28  36 ePc   27 28.39  -1.6
TTA     2.31 268 ePc   27 29.22  -1.2
DDM     2.39  71 eP    27 30.94  -0.5
TOA     2.43 112 P     27 31.00  -0.9
CFI     2.44 141 eP    27 30.63  -1.3
                eS     28 02.38
IL1     2.46  45 iP    27 30.59  -1.7
ILB     2.46  45 iP    27 30.61  -1.6
                eS     27 59.64
GLM     2.46  38 eP    27 31.05  -1.3
PAX     2.51  91 eP    27 31.86  -1.1
SDG     2.55 101 eP    27 32.42  -1.1
PWL     2.57 150 eP    27 32.17  -1.5
SLKM    2.63 172 eP    27 33.36  -1.0
DFR     2.65 199 eP    27 34.07  -0.7
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KLU      2.86 122 eP    27 35.37  -2.1
                  eS    28 09.56
VLZ      2.94 130 eP    27 36.78  -1.6
IM3      3.13 339 eP    27 39.61  -1.4
DOT      3.16  77 eP    27 39.21  -2.1
FID      3.17 136 eP    27 39.17  -2.3
IMA      3.20 340 eP    27 40.20  -1.8
LTI      3.41 153 eP    27 42.41  -2.2
HIN      3.44 140 eP    27 43.36  -1.8
GLB      3.73 113 eP    27 47.37  -1.6
BC3      4.17  86 eP    27 52.35  -2.5
BALM     4.55 113 eP    27 57.62  -2.4
BM3      5.09  29 eP    28 04.94  -2.3
        58 obs. associated
-------------------------------------
*  NOV  11, 1993  15h 38m 24.44± 0.82s
    6.052 S ±16.1km  146.713 E ±18.1km
    DEPTH =  33.0km  (normal)
    3.9mb (  2 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)
      ML 4.0 (PMG).

LAT      0.67 155 ePd   38 38.20   0.7
YYYY     0.76 256 ePc   38 40.40   1.5
MDG      1.22 311 eP    38 45.00  -0.3
PMG      3.36 172 eP    39 16.00   0.1
WWKK     3.91 308 eP    39 27.50   3.8X
WR2     18.30 220 iPd   42 36.80  -0.8
         0.6s     3.30nm          3.7mb
ASPA    21.42 214 eP    43 10.60  -1.3
         0.5s     3.70nm          4.1mb
      S.D. = 1.3  on   6 of   7 obs.
-------------------------------------
?  NOV  11, 1993  15h 41m 57.88± 3.67s
    14.908 N ±15.2km   60.556 W ±41.1km
    DEPTH =  33.0km  (normal)
 WINDWARD ISLANDS                  ( 95)
      ML 2.6 (FDF).

CRM      0.38 246 iPd   42 06.82   0.1
                  S     42 14.80
MVM      0.48 223 iPd   42 08.21   0.0
                  S     42 17.30
FDF      0.60 253 iPd   42 09.89  -0.1
                  S     42 20.40
BIM      0.63 232 eP    42 10.44   0.0
DEG      1.48 341 eP    42 22.50   0.0
                  S     42 35.50
      S.D. = 0.1  on   5 of   5 obs.
-------------------------------------
    NOV  11, 1993  16h 14m 26.30± 0.78s
    44.366 N ± 4.7km    7.300 E ± 7.9km
    DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                    (545)
      ML 2.2 (LDG).

TOUF     0.35 186 Pg    14 33.71   0.0
AUTN     0.38 166 Pg    14 34.25   0.1
SAOF     0.42 154 Pg    14 35.05   0.1
                  Sg    14 40.40
AURF     0.48 178 Pg    14 35.83  -0.2
                  Sg    14 42.48
MVIF     0.48 193 Pg    14 35.88  -0.2
                  Sg    14 42.45
SBF      0.51 169 Pg    14 36.70   0.0
                  Sg    14 43.60
FRF      0.93 211 Pg    14 44.00  -0.1
                  Sg    14 55.60
LRG      1.14 217 Pg    14 47.70   0.2
                  Sg    15 02.10
LMR      1.18 209 Pg    14 48.50   0.2
                  Sg    15 02.90
LPL      1.22 341 Pg    14 49.10   0.0
                  Sg    15 04.50
      S.D. = 0.2  on  10 of  10 obs.
-------------------------------------
%  NOV  11, 1993  16h 30m 11.41± 0.62s
    26.816 S ± 5.5km   26.719 E ± 7.1km
    DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)
      ML 2.8 (PRE).

BFS      0.10 144 iPd   30 14.30   0.6
                  S     30 15.60
KSR      0.96  10 eP    30 30.00  -0.3
                  S     30 41.50
SWZ      1.30 253 eP    30 36.30   0.3
                  S     30 55.70
SEK      1.70 152 eP    30 41.60  -0.5
                  S     31 03.00
SLR      1.77  53 eP    30 43.30   0.3
                  S     31 05.90
BLF      2.33 191 eP    30 50.40  -0.8
                  S     31 17.70
FRS      3.17 203 iP    31 03.50   0.6
                  S     31 43.00
HVD      3.92 196 eP    31 13.50  -0.3
                  S     31 57.50
      S.D. = 0.6  on   8 of   8 obs.
-------------------------------------
    NOV  11, 1993  16h 46m 42.35± 0.18s
    13.813 N ± 4.0km   90.437 W ± 3.8km
    DEPTH =  70.5km  ( 37 depth phases)
    5.5mb ( 26 obs.)
 NEAR COAST OF GUATEMALA           ( 71)
      Mw 5.6 (GS), 5.6 (HRV). Felt
      (IV) at San Salvador, El
      Salvador.
      FAULT PLANE SOLUTION: P-Waves
       NP1:Strike=290 Dip=75 Slip= -52
       NP2:        38     40      -156
       Principal Axes:
        T                Plg=21  Azm=352
        P                    46      239
      Comment: The focal mechanism is
        poorly controlled and
        corresponds to normal
        faulting with a large strike-
        slip component. The preferred
        fault plane is not
        determined.
      MOMENT TENSOR SOLUTION
      Dep  41            No. of sta:  4
      Moment Tensor;   Scale 10**17 Nm
        Mrr=-1.48        Mtt= 2.05
        Mff=-0.57        Mrt= 1.97
        Mrf=-1.50        Mtf=-0.06
       Principal axes:
        T  Val=  3.06  Plg=26  Azm= 13
        N        0.04      21      114
        P       -3.10      55      237
      Best Double Couple:Mo=3.1*10**17
       NP1:Strike= 64 Dip=27 Slip=-143
       NP2:       300     75       -68
      CENTROID, MOMENT TENSOR    (HRV)
      Data Used: GDSN
      L.P.B.: 42S, 71C
      Centroid Location:
      Origin Time       16:46:44.6 0.3
      Lat 13.69N 0.02 Lon  90.86W 0.02
      Dep  56.5 1.9 Half-duration  1.5
      Moment Tensor;   Scale 10**17 Nm
        Mrr=-1.55 0.05  Mtt= 1.42 0.06
        Mff= 0.13 0.09  Mrt= 1.43 0.06
        Mrf=-1.22 0.07  Mtf=-0.56 0.05
       Principal Axes:
        T  Val=  2.44  Plg=25  Azm= 27
        N        0.04      10      122
        P       -2.48      63      233
      Best Double Couple:Mo=2.5*10**17
       NP1:Strike= 96 Dip=22 Slip=-118
       NP2:       306     70       -79

YPE      0.80  67 eP    47 04.40   5.6X
TME      1.07  79 iPc   47 07.70   5.6X
SJAS     1.24  97 iP    47 09.50   5.1X
TPX      2.07 302 iP    47 13.50  -2.1
                  iS    47 33.00
VSM      2.14 100 iPd   47 21.80   5.0X
OXX      6.88 299 iP    48 23.00   0.1
                  (S)   49 34.00
LVVM     8.24 316 (P)   48 38.50  -3.0X
IISM     8.41 309 iP    48 41.50  -2.4
BRU      9.19 122 eP    48 59.51   4.5X
PPM      9.43 305 iP    48 59.30   0.9
DVD      9.48 123 eP    49 00.57   2.0
                  iS    49 40.34
ACX      9.58 290 (P)   48 58.00  -2.0
UNM     10.02 304 iP    49 07.00   0.8
TAC     10.07 305 (P)   49 08.00   1.2
CRX     10.46 303 iP    49 14.00   1.8
ECO     11.42 112 eP    49 27.23   2.4
UPA     11.72 113 iPd   49 34.14   5.4X
                  iS    50 36.88
SPJ     13.07  70 iPd   49 51.18   4.5X
PCJ     13.35  71 iPd   49 50.78   0.4
BBJ     13.45  69 iPd   49 53.45   1.8
STH     13.77  70 iPd   50 04.91   9.1X
CGX     13.78 297 iP    49 56.50   0.4
GWJ     13.84  70 iPd   50 04.73   7.9X
PSO     18.04 133 eP    50 54.00   3.6X
BMG     18.33 110 eP    50 55.00   1.4
BOG     18.55 118 eP    51 02.50   6.0X
                  iS    54 32.50
UYO     20.59 350 iPc   51 17.10  -0.8
TOV     20.60  99 eP    51 22.30   4.1X
MEO     22.14 342 iPd   51 31.90  -1.6
FNO     22.26 345 iPd   51 35.20   0.6
TUL     22.52 349 iPc   51 36.90  -0.3
OCO     22.53 345 iPd   51 36.80  -0.4
CAR     23.21  96 iPd   51 44.00  -0.2
PCO     23.53 347 iPc   51 46.50  -0.4
ACO     24.09 343 iPd   51 53.40   1.0
CCM     24.15 358 ePc   51 53.51   0.5
                  ec    52 10.73  76km
TUC     26.17 318 ePc   52 10.20  -1.9
                  ec    52 28.41  80km
CBN     26.92  23 e(P)  52 20.00   1.2
                  i     52 38.00  78km
GOL     28.94 336 P     52 50.00  12.6X
      Z  22s     1.14um          4.4Msz
NNA     28.96 152 eP    52 22.00 -15.5X
         0.6s    10.00nm
GLA     29.33 315 eP    52 40.93   0.3
                  e     52 57.82  71km
PV08    29.47 330 eP    52 42.48   0.3
PV10    29.50 329 ePc   52 42.17  -0.3
PV09    29.64 329 eP    52 44.18   0.4
TYNO    30.57  15 P     52 52.68   1.3
SRU     30.81 329 ePc   52 54.30   0.5
PLM     30.91 314 (P)   52 54.42  -0.4
BINY    30.93  21 P     53 10.00  15.3X
      Z  22s     2.88um          4.9Msz
ACTO    31.00  15 P     52 55.00  -0.2
MSU     31.24 326 eP    52 58.07   0.4
                  ePcP  55 51.54
PEC     31.41 314 eP    52 59.43   0.4
         1.4s   105.93nm          5.4mb
ARUT    31.44 324 eP    53 00.26   0.9
WLVO    31.73  17 P     53 01.38  -0.2
SSK     31.96 314 eP    53 04.18   0.2
GSC     31.96 317 eP    53 04.75   0.9
                  epP   53 20.87  67km
DAU     32.16 329 eP    53 06.61   0.8
                  epP   53 23.43  70km
HRV     32.92  26 P     53 30.00  18.0X
      Z  21s     2.68um          4.9Msz
ABL     33.36 314 eP    53 16.87   0.6
TNP     33.89 320 eP    53 21.52   0.8
         1.2s    34.31nm          5.1mb
HVU     33.95 329 eP    53 20.82  -0.3
BCH     34.14 314 eP    53 23.63   0.8
GAC     34.21  19 eP    53 23.00  -0.1
                  pP    53 41.50  78km
MTUM    34.31 318 eP    53 25.30   1.0
BONR    34.49 319 eP    53 27.55   1.5
PHAM    34.70 315 eP    53 27.57   0.1
MEMM    34.73 318 eP    53 29.17   1.5
MMPM    34.76 318 eP    53 29.54   1.2
KVN     35.03 321 eP    53 31.09   0.6
ARE     35.43 147 eP    53 36.00   1.8
CMB     35.88 318 ePd   53 37.85   0.3
         2.0s   130.00nm          5.5mb
      Z  20s     0.50um          4.3Msz
                  ipP   53 54.80  68km
                  ePP   56 22.15
                  iS    59 14.31
                  eLQ   01 51.31
                  eLR   02 09.31
SAO     35.90 315 ePd   53 37.49  -0.2
         1.6s   100.00nm          5.5mb
                  epP   53 53.64  64km
                  ePP   56 22.34
ARN     36.27 316 eP    53 41.91   1.1
                  epP   53 58.48  66km
COE     36.32 316 eP    53 41.66   0.5
ULM     36.61 354 eP    53 44.00   0.6
                  pP    54 02.50  75km
STAN    36.73 316 iPd   53 47.03   2.4
         1.6s   510.00nm          6.2mb
                  epP   54 03.08  63km
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11d 16h

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LRM    36.93 334 eP    53 46.00  -0.4
                 e     54 05.60  81kmX
                 e     56 07.70
                 e     56 26.10
                 e     59 48.40
BKS    37.02 316 ePd   53 47.74   0.7
       1.9s   290.00nm          5.9mb
                 ipP   54 05.14  70km
LPAZ   37.15 143 iPd   53 49.40   0.4
                 LR    01 42.00
LPB    37.37 143 P     53 52.00   1.4
     Z  25s     2.81um          5.0MszX
                 LR    02 28.00
ORV    37.46 319 ePd   53 51.59   0.9
       1.5s   120.00nm          5.6mb
     Z  21s     0.80um          4.5Msz
                 epP   54 08.84  69km
                 ePPc  56 26.74
                 iS    59 42.39
                 eLQ   02 31.39
                 eLR   02 46.39
NTYM   37.58 317 eP    53 53.27   1.6
                 epP   54 09.48  65km
CNCB   37.66 143 P     53 54.30   1.1
                 i     56 11.20
CBM    37.94  25 P     54 10.00  15.4X
     Z  21s     1.97um          4.9Msz
MIN    37.97 320 eP    53 55.45   0.3
       0.2s   230.00nm          6.9mb X
     Z  20s     1.50um          4.8Msz
                 ipP   54 12.45  69km
                 eS    59 43.71
                 eLQ   02 44.71
                 iLR   03 04.71
LMN    38.57  29 eP    53 59.00  -0.9
                 pP    54 18.00  79km
WDC    38.69 320 eP    53 59.25  -1.8
       1.5s    40.00nm          5.1mb
                 ePP   56 29.40
LBFM   38.73 321 eP    54 01.67   0.1
                 epP   54 18.52  68km
LGPM   39.06 320 eP    54 03.39  -0.9
                 ePcP  56 13.79
                 epPcP 56 32.79
CCH    39.20 142 eP    54 05.00  -0.8
YBH    39.46 321 ePc   54 05.52  -1.9
       1.8s    80.00nm          5.3mb
     Z  21s     1.40um          4.8Msz
                 epP   54 21.66  64km
                 eS    00 06.52
                 eLQ   02 50.52
                 iLR   03 12.52
KMPM   39.61 318 (P)   54 09.59   0.8
FHC    39.73 319 eP    54 10.66   1.0
       1.4s   456.40nm          6.2mb
                 epP   54 28.00  70km
VIPM   39.95 326 P     54 12.28   0.7
CROR   40.46 326 P     54 17.47   1.8
VBEM   40.83 326 P     54 20.20   1.4
DPW    41.05 331 eP    54 20.31  -0.1
                 epP   54 38.16  72km
SSOR   41.19 325 P     54 22.17   0.5
RNO    41.34 323 P     54 24.28   1.4
SIV    41.47 135 P     54 24.20   0.1
SAW    41.49 330 P     54 24.41   0.4
EBG    41.52 329 P     54 25.58   1.3
ASR    41.54 327 P     54 26.19   1.6
JAQ    41.55  13 eP    54 23.00  -1.4
                 pP    54 41.50  76km
LON    42.05 328 eP    54 28.27  -0.4
                 epP   54 46.33  73km
FMW    42.10 328 P     54 30.23   1.0
KMOR   42.24 325 P     54 31.64   1.4
MOCB   42.51 145 P     54 33.80   0.6
RMW    42.51 328 (P)   54 32.15  -0.3
BMW    42.62 326 (P)   54 33.28   0.0
                 epP   54 50.49  69km
JCW    43.06 329 P     54 36.78  -0.1
GMW    43.07 328 eP    54 36.12  -0.8
                 epP   54 53.23  69km
YJA    43.32 145 ePd   54 40.00   0.3
MCW    43.84 329 eP    54 42.63  -0.5
                 epP   54 59.39  67km
STW    43.92 328 P     54 44.76   1.0
HJA    44.21 146 ePc   54 48.20   1.9
SLA    45.39 147 iPc   54 57.10   1.2
FSA    46.23 149 ePd   55 03.50   1.1
BDFB   51.15 123 eP    55 40.49  -0.2
       1.3s    34.38nm          5.2mb
                 epP   55 57.61  67km
                 ePcP  56 56.91
                 epPcP 57 15.46
BAO    51.16 123 eP    55 40.50  -0.3
                 i     55 43.00   8kmX
                 i     55 58.80
                 i     56 56.50
                 i     57 15.50
TCA    51.30 151 iP    55 40.60  -0.9
YKA    51.56 346 eP    55 41.20  -1.9
       0.6s     3.30nm          4.5mb
AGVB   51.74 129 eP    55 44.30  -0.7
                 i     56 02.90  74km
FRB    52.17  12 eP    55 46.00  -1.6
       0.6s     5.00nm          4.7mb X
                 pP    56 04.50  73km
PPD    52.35 132 eP    55 48.90  -0.7
SIT    54.92 332 P     56 20.00  12.1X
     Z  20s     1.23um          5.0Msz
CACB   55.52 129 iPd   56 12.30  -0.7
                 i     56 30.00  68km
RSTA   55.62 133 eP    56 12.60  -0.9
VAO    56.12 130 eP    56 16.50  -0.7
RES    60.92 359 eP    56 47.50  -2.2
       0.9s    11.00nm          5.0mb
                 pP    57 05.50  69km
INK    61.05 343 eP    56 48.50  -2.2
       0.8s     4.00nm          4.6mb X
                 pP    57 08.00  75km
KLU    61.82 333 eP    56 54.84  -1.3
                 epP   57 13.75  73km
RUV    63.27 245 iPc   57 05.40  -0.8
       1.8s   939.10nm          6.5mb X
PMR    63.27 333 P     57 20.00  14.4X
     Z  19s     0.66um          4.8Msz
TPT    63.39 245 iPc   57 06.20  -0.8
       1.8s   586.90nm          6.3mb
VAH    63.51 245 iPc   57 07.00  -0.8
       1.5s   379.20nm          6.2mb
PMO    63.65 245 iPc   57 07.90  -0.8
       1.9s  1014.60nm          6.5mb
MBC    64.29 353 eP    57 11.00  -1.0
       1.0s     6.00nm          4.5mb
                 pP    57 29.50  70km
HON    64.44 287 P     57 20.00   6.1X
     Z  21s     0.37um          4.5Msz
TVO    65.97 243 iPc   57 22.60  -1.2
       1.3s   284.50nm          6.1mb
PPT    66.16 244 iPc   57 23.60  -1.3
       1.5s   442.90nm          6.2mb
PAE    66.20 243 iPc   57 23.80  -1.4
       1.6s   417.90nm          6.1mb
AFR    66.32 244 iPc   57 24.50  -1.5
       1.4s   196.90nm          5.9mb
DAG    72.47  13 iPc   58 01.20  -1.5
       0.5s    11.97nm          5.1mb
PAB    78.36  52 eP    58 48.00  11.0X
                 eS    08 04.00
GRR    79.54  43 eP    58 43.00   0.0
FLN    79.72  42 eP    58 43.00  -1.0
       0.7s     4.65nm          4.5mb
     Z  23s     0.68um          4.9MszX
LDF    79.99  42 eP    58 45.50   0.0
       1.5s    41.80nm          5.1mb
LFF    81.21  46 eP    58 52.20   0.2
AVF    82.63  44 eP    58 59.20  -0.1
SSF    82.68  43 eP    58 59.40  -0.2
       0.7s     2.75nm          4.3mb X
LKO    82.81  82 P     58 59.15  -1.7
LOR    82.87  43 eP    59 00.60   0.0
       0.8s     3.65nm          4.4mb X
     Z  22s     0.45um          4.8Msz
NB2    83.58  29 P     59 07.40   3.4X
       0.8s     4.40nm          4.5mb
TIC    84.01  85 P     59 05.00  -2.0
LIC    84.10  85 P     59 06.00  -1.4
     Z  21s     0.15um          4.3Msz
KIC    84.34  85 P     59 06.20  -2.4
       0.7s    18.50nm          5.2mb
BSF    84.67  42 eP    59 08.80  -1.0
MOX    86.92  39 ePd   59 39.00  18.3X
       1.8s    35.00nm
GRF    86.97  40 iPc   59 19.80  -1.2
       1.1s     7.00nm          4.7mb X
     Z  21s     0.40um          4.8Msz
                 e     59 37.90  65km
CLL    87.54  38 eP    59 22.00  -1.7
                 e     59 41.00  68km
WET    88.17  40 iPc   59 45.80  19.0X
       1.5s    38.00nm
BRG    88.24  38 eP    59 45.80  18.7X
       1.3s    13.00nm
KHC    88.60  40 eP    59 28.00  -0.9
       1.5s     8.50nm          4.7mb X
                 e     59 48.00  72km
                 e     59 58.00
GEC2   88.78  40 ePKP  59 29.10  -0.7
       0.8s     1.31nm          4.2mb X
                 e     59 36.20  22kmX
                 e     59 40.80
                 e     00 04.20
                 e     00 09.00
                 e     00 19.70
FRS   118.96 116 ePKP  05 25.00   0.0
       0.5s    12.00nm
GRM   119.94 121 ePKP  05 28.50   1.6
       0.6s    37.00nm
HHC   121.92 340 PKP   05 30.40  -0.1
TIY   124.43 338 ePKP  05 35.00  -0.4
     Z  28s     1.48um          5.5MszX
KSH   125.52  13 ePKP  05 39.00   1.5
     Z  24s     1.36um          5.5MszX
     N  14s     1.07um
     E  14s     1.01um
                 PP    07 30.00
GTA   126.20 350 ePKP  05 39.00   0.1
     Z  30s     1.34um          5.4MszX
                 sPKP  06 03.50
NJ2   126.45 329 PKPc  05 39.00  -0.4
LZH   128.57 345 ePKP  05 42.50  -1.0
     Z  25s     0.27um          4.8MszX
                 sPKP  06 03.00
                 ePP   08 59.00
XAN   128.97 339 PKP   05 44.00  -0.2
     Z  25s     0.99um          5.4MszX
STK   129.28 240 ePKP  05 40.40  -4.4X
STK   129.28 240 ePKP  06 01.40  16.6X
                 ePKS  09 01.90
WHN   129.86 332 ePKP  05 45.50  -0.4
QUE   131.13  26 ePKP  05 50.40   1.8
CD2   133.49 343 ePKP  05 52.80  -0.1
GYA   136.65 337 PKP   05 58.80  -0.3
     Z  30s     0.74um          5.2MszX
LSA   136.71 358 PKP   06 00.50   0.9
WR2   136.80 256 ePKP  05 58.20  -1.2
       1.4s     4.80nm
WRA   136.82 256 PKP   05 47.20 -12.2X
       0.7s     1.10nm
GKN   138.16   7 PKP   06 01.60  -0.4
       0.6s    13.00nm
GUN   138.37   5 PKP   06 00.20  -2.4
       0.6s    16.00nm
DMN   138.60   6 PKP   06 00.60  -2.3
PKI   138.67   6 PKP   06 01.20  -1.9
       0.6s    15.00nm
POO   144.32  26 ePKP  06 12.50  -0.4
CHTO  146.29 344 ePKPc 06 14.82  -1.3
       1.4s    68.27nm
                 e     06 34.35
COOL  146.37 234 ePKP  06 15.50  -0.5
TSM   146.64 301 ePKP  06 17.50   0.7
HYB   147.12  20 ePKP  06 18.00   0.5
                 e     06 37.00
BDT   147.76 343 ePKP  06 21.00   2.5
KLB   148.68 231 ePKP  06 20.50   0.8
NST   148.89 340 ePKP  06 24.00   3.7X
MUN   149.65 229 ePKP  06 21.50   0.4
BAL   149.94 232 ePKP  06 25.20   3.6X
MEEK  149.99 240 ePKP  06 21.50  -0.3
KHT   150.21 342 ePKP  06 22.80   0.5
                 e     06 46.00
GBA   150.23  24 PKP   06 23.00   0.6
MBL   150.26 252 iPKPd 06 26.50   4.2X
       0.5s    13.00nm
MRWA  151.12 234 ePKP  06 24.00   0.6
LEM   160.94 290 ePKPc 06 37.50   1.1
     S.D. = 1.1  on 170 of 202 obs.
-----------------------------------
   NOV  11, 1993  17h 50m 47.41± 0.75s
   41.965 N ± 6.2km   19.364 E ± 5.3km
   DEPTH =  10.0km  (geophysicist)
 ALBANIA                          (391)
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```
ULC      0.09 269 iPgd  50 50.74   0.8
                iSg   50 52.80
TTG      0.47 351 iPgc  50 56.82  -0.2
                iSg   51 04.08
BDV      0.51 309 iPgc  50 57.35  -0.4
                iSg   51 04.96
PVY      0.78  35 iPgc  51 02.46  -0.1
                iSg   51 14.38
HCY      0.80 307 iPgc  51 02.53  -0.5
                iSg   51 14.47
NKY      0.89 342 iPgd  51 04.38  -0.2
                iSg   51 17.70
IVA      0.99  23 iPgc  51 06.39   0.2
                iSg   51 21.30
BRY      1.12 327 ePg   51 08.33  -0.1
                iSg   51 24.91
PLE      1.36   1 iPgc  51 13.42   0.9
                iSg   51 33.55
OHR      1.37 128 ePn   51 12.30  -0.3
     S.D. = 0.5  on  10 of  10 obs.
-----------------------------------
%  NOV  11, 1993  17h 52m 46.35± 0.62s
   53.334 N ± 4.1km    1.022 W ± 6.6km
   DEPTH =   5.0km  (geophysicist)
 UNITED KINGDOM                    (533)
      ML 2.2 (BGS). Felt (IV) at
      Ranskill.

KSY      0.45 145 ePg   52 55.40   0.0
KWE      0.59 238 ePg   52 57.70  -0.4
HPK      0.72 330 ePg   53 00.60  -0.2
LWH      1.02  12 ePn   53 06.00  -0.1
LRN      1.18 338 ePn   53 08.80   0.1
HAE      1.60 216 ePnd  53 15.60   0.3
LMI      1.62 304 ePn   53 16.00   0.4
                eSn   53 36.40
HTR      1.86 228 ePn   53 19.10   0.0
                eSn   53 44.60
     S.D. = 0.3  on   8 of   8 obs.
-----------------------------------
?  NOV  11, 1993  18h 21m 35.70± 1.19s
   20.892 S ± 9.8km   68.895 W ±14.4km
   DEPTH = 147.3 ±  8.7 km
   4.6mb (  3 obs.)
 CHILE-BOLIVIA BORDER REGION       (124)

MOCB     3.06  97 P     22 25.50   0.7
YJA      3.40 113 iPc   22 28.70  -0.5
HJA      3.98 126 ePc   22 37.10   0.8
                S     22 43.00
CNCB     4.15  12 iPc   22 39.50   0.4
CCH      4.36  37 P     22 41.90   0.2
LPB      4.40  10 iPc   22 44.40   2.0X
LPAZ     4.64   9 iPc   22 45.70   0.0
SLA      4.94 141 iPc   22 49.50   0.2
ARE      5.05 330 eP    22 50.00  -0.9
SIV      8.88  58 P     23 37.90  -4.2X
PPD     16.41  97 eP    25 17.90  -1.0
RSTA    18.69 105 eP    25 43.50  -1.8
BDFB    20.50  79 ePc   26 03.76  -0.3
        0.5s    13.97nm          4.6mb
                e     26 07.34
BAO     20.52  79 eP    26 04.00  -0.3
                i     26 07.00
KIC     68.52  74 P     32 25.50   0.9
        0.4s     4.00nm          4.6mb
LKO     69.15  71 P     32 29.93   1.5
        0.4s     4.50nm          4.6mb
     S.D. = 1.0  on  14 of  16 obs.
-----------------------------------
%  NOV  11, 1993  18h 26m 43.47± 0.86s
   38.543 S ±10.9km  175.622 E ± 9.8km
   DEPTH = 200.0km  (geophysicist)
 NORTH ISLAND, NEW ZEALAND         (159)

MOZ      0.64 273 P     27 12.40   1.0
PAHZ     1.16 106 P     27 14.80   0.1
URZ      1.20  77 Pc    27 13.90  -1.0
                S     27 35.70
WAHZ     1.29 154 Pc    27 16.60   0.9
BSZ      1.36 203 P     27 17.50   1.3
TTH      1.37 137 P     27 17.30   1.0
MAHZ     1.88 111 P     27 21.70   0.6
NOZ      1.89  93 P     27 21.00  -0.2
MNG      2.08 183 Pc    27 23.60   0.5
                S     27 52.40
PUZ      2.13  78 eP    27 22.40  -1.3
                S     27 50.00
PGZ      2.13 167 P     27 24.00   0.3
KIW      2.38 193 P     27 26.60   0.2
CAW      2.60 189 P     27 29.00   0.2
DIW      2.61 210 P     27 29.00   0.0
MTW      2.61 182 Pc    27 28.80  -0.2
AMW      2.76 178 P     27 30.70   0.0
MRW      2.78 194 P     27 30.90   0.0
                S     28 06.10
BLW      2.82 182 P     27 31.00  -0.5
TCW      2.86 201 P     27 32.00   0.1
LTZ      4.94 210 P     27 56.80  -1.0
MQZ      5.63 203 P     28 04.40  -2.1
                S     29 06.20
     S.D. = 0.9  on  21 of  21 obs.
-----------------------------------
%  NOV  11, 1993  18h 28m 35.87± 1.30s
   39.144 N ±12.2km   28.222 E ±12.7km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.8 (ISK).

DST      0.56  34 ePg   28 48.50   1.3
IZM      1.06 225 ePg   28 56.10   0.3
                eSg   29 11.10
EDC      1.23 347 ePn   28 58.50  -0.3
IZI      1.53  39 ePn   29 02.00  -1.4
EZN      1.62 295 ePn   29 04.50   0.0
     S.D. = 1.3  on   5 of   5 obs.
-----------------------------------
%  NOV  11, 1993  18h 39m 47.30± 0.78s
   26.347 S ± 6.9km   27.473 E ± 8.0km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)
      ML 2.8 (PRE).

KSR      0.71 313 eP    40 01.50   0.1
                S     40 10.00
SLR      0.95  50 eP    40 05.90   0.0
                S     40 18.00
SEK      1.97 176 eP    40 22.10   0.2
                S     40 46.10
SWZ      2.09 246 eP    40 23.60   0.0
                S     40 49.00
BLF      2.98 202 eP    40 36.00  -0.2
                S     41 12.00
     S.D. = 0.2  on   5 of   5 obs.
-----------------------------------
   NOV  11, 1993  18h 48m 07.10± 0.42s
   41.474 N ± 3.9km   23.816 E ± 4.0km
   DEPTH =   5.0km  (geophysicist)
 GREECE-BULGARIA BORDER REGION     (363)

MMB      0.13 330 iPgd  48 10.00   0.1
SRS      0.39 205 iPg   48 14.98   0.0
                eSg   48 20.54
RZN      0.71  72 iPgd  48 21.00  -0.3
SOH      0.74 208 ePg   48 22.00   0.1
                iSg   48 30.86
KNT      0.76 246 ePg   48 21.78  -0.5
                eSg   48 31.78
PLD      0.92  46 ePg   48 25.00  -0.1
VAY      0.95 261 ePn   48 26.30   0.7
THE      1.06 218 ePg   48 27.29  -0.2
                eSg   48 41.75
VTS      1.21 338 iP    48 30.00  -0.1
LIT      1.70 217 ePb   48 37.50  -0.1
ALN      1.78 108 ePb   48 39.18   0.5
     S.D. = 0.4  on  11 of  11 obs.
-----------------------------------
&  NOV  11, 1993  18h 59m 38.52s
   62.752 N          149.532 W
   DEPTH =  13.2km
 CENTRAL ALASKA                    (  1)
      <AEIC>. ML 2.9 (AEIC), 3.1
      (PMR).

HUR      0.23 348 iP    59 43.50  -0.2
                eS    59 47.27
CUT      0.49 225 eP    59 48.00  -0.4
RND      0.73  25 eP    59 52.02  -0.5
TRF      0.78 334 eP    59 53.35  -0.2
MCK      1.02  15 eP    59 57.60   0.1
KTH      1.02 322 eP    59 57.67   0.1
                eS    00 12.12
GHO      1.02 164 eP    59 57.07  -0.6
SML      1.10 149 eP    59 58.58  -0.3
PWA      1.12 189 P     59 59.40   0.3
PLRM     1.18 171 eP    59 59.87  -0.3
                eS    00 16.30
PMR      1.18 171 eP    59 59.74  -0.5
                eS    00 16.31
SKT      1.21 231 eP    00 00.47  -0.3
                eS    00 17.39
SCM      1.38 131 eP    00 03.27  -0.2
SUA      1.41 204 eP    00 03.83  -0.1
BWN      1.43   1 eP    00 05.28   1.3
KNK      1.44 159 eP    00 04.41   0.2
PMS      1.51 181 P     00 05.30   0.0
TOA      1.69 111 P     00 08.30   0.4
CFI      1.78 151 eP    00 10.28   1.2
NCG      1.83 224 eP    00 11.17   1.2
WRH      1.84  20 eP    00 10.85   0.8
SDG      1.86  95 eP    00 11.09   0.8
PAX      1.88  81 eP    00 11.48   0.9
                eS    00 35.16
CRP      1.94 221 eP    00 12.62   1.1
CP2      1.97 222 eP    00 13.08   1.1
SPU      1.98 218 eP    00 13.48   1.5
BGL      2.01 223 P     00 15.00   2.4
HDA      2.02  34 eP    00 12.50  -0.1
TZL      2.04 109 eP    00 14.52   1.6
CCB      2.05  21 eP    00 12.20  -0.8
KLU      2.12 125 eP    00 14.72   0.6
DJE      2.16  52 eP    00 16.68   2.1
VZW      2.21 139 eP    00 16.73   1.3
SLKM     2.28 189 eP    00 17.82   1.5
FBA      2.29  19 eP    00 16.96   0.5
MDM      2.29  14 eP    00 16.87   0.3
MLY      2.35 347 eP    00 16.87  -0.5
GLM      2.44  22 eP    00 19.02   0.4
FID      2.48 143 eP    00 20.38   1.2
SEW      2.66 179 eP    00 24.67   3.0
RDW      2.76 216 eP    00 25.70   2.3
HIN      2.77 147 eP    00 24.54   1.1
TTA      2.98 276 (P)   00 31.28   5.0
GLB      2.99 113 eP    00 28.69   2.2
BC3      3.56  81 eP    00 35.56   1.0
IM3      3.73 332 eP    00 36.14  -0.8
TGL      3.76 119 P     00 40.20   2.7
IMA      3.78 333 eP    00 38.11   0.3
BALM     3.81 114 eP    00 38.57   0.3
CDD      4.33 210 P     00 47.50   2.0
BM3      5.13  22 eP    00 55.82  -0.9
        51 obs. associated
-----------------------------------
&  NOV  11, 1993  19h 17m 36.95s
   59.707 N          153.541 W
   DEPTH = 132.8km
 SOUTHERN ALASKA                   (  2)
      <AEIC>.

OPT      0.17 109 eP    17 54.45   0.7
                eS    18 08.50
AUL      0.33 171 eP    17 55.02   0.8
AUW      0.34 174 eP    17 55.06   0.8
PDB      0.34 284 eP    17 54.90   0.7
AUE      0.36 166 eP    17 55.05   0.8
INW      0.42  29 eP    17 55.21  -1.1
                eS    18 10.05
INE      0.43  34 eP    17 55.39  -1.0
ILIM     0.48  38 eP    17 55.41  -1.1
                eS    18 10.86
CDD      0.78 184 eP    17 57.42  -1.1
RED      0.81  28 eP    17 57.84  -1.0
                eS    18 13.83
RS2      0.85  27 eP    17 58.59  -0.8
                eS    18 14.96
HOM      0.96  92 P     17 59.50  -0.5
DFR      0.99  25 eP    17 59.42  -1.0
                eS    18 16.54
CNPM     1.19  98 eP    18 00.86  -1.4
                eS    18 18.97
BKG      1.51  24 eP    18 04.83  -0.9
                eS    18 25.90
NKA      1.55  47 eP    18 06.77   0.7
CKT      1.64  23 eP    18 06.21  -1.1
SPU      1.65  26 eP    18 06.21  -1.2
                eS    18 28.83
BGL      1.66  20 eP    18 06.85  -0.7
CP2      1.69  22 iPd   18 06.98  -1.0
CRP      1.71  23 eP    18 06.67  -1.5
                eS    18 29.54
CGLM     1.78  25 eP    18 07.88  -1.0
```

11d 19h

```
SLKM     1.85  63 eP    18 08.32  -1.4
KDC      2.04 164 (P)   18 08.66  -3.3
SEW      2.10  77 eP    18 10.75  -1.9
MPA      2.24  68 eP    18 13.11  -1.3
PMS      2.50  50 P     18 16.00  -1.9
PWA      2.66  41 P     18 19.00  -0.7
PWL      2.84  64 eP    18 20.75  -1.4
LTI      2.89  81 eP    18 20.79  -2.0
CUT      3.14  29 eP    18 24.68  -1.4
FID      3.67  70 P     18 30.30  -2.9
SCM      3.72  52 P     18 31.50  -2.4
TRF      4.07  21 P     18 35.50  -3.1
KLU      4.16  61 P     18 34.90  -4.9
SDG      4.80  50 eP    18 46.52  -1.8
CCB      5.64  26 eP    18 56.21  -3.4
BALM     5.71  72 eP    18 58.48  -2.3
        38 obs. associated
-------------------------------------
*  NOV  11, 1993  19h 36m 24.88± 1.33s
   14.448 N ± 8.7km  119.891 E ±14.1km
   DEPTH =  33.0km  (normal)
 LUZON, PHILIPPINE ISLANDS        (249)

TGY      1.07 109 iPc   36 44.00   0.4
QVP      1.09  81 eP    36 43.20  -0.7
                  eS    36 57.50
PGP      1.40 132 eP    36 49.00   0.7
                  eS    37 02.00
BCP      2.08  19 eP    37 00.00   1.7
                  eS    37 24.00
GQP      2.54 102 eP    37 04.50  -0.1
CVP      3.73  30 eP    37 20.00  -1.6
PPR      4.78 194 ePc   37 36.00  -0.4
WR2     37.02 157 iPc   43 26.90  -6.7X
         0.3s     3.70nm          4.7mb
     S.D. = 1.3  on   7 of   8 obs.
-------------------------------------
?  NOV  11, 1993  20h 03m 30.36± 1.11s
   39.233 N ±12.2km   28.046 E ±15.3km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 2.8 (ISK).

DST      0.58  50 iPg   03 43.20   1.0
                  eSg   03 53.20
IZM      1.03 217 ePg   03 50.00   0.1
                  eSg   04 04.00
EDC      1.12 353 ePn   03 51.50   0.1
IZI      1.56  44 ePn   03 57.00  -1.2
     S.D. = 1.6  on   4 of   4 obs.
-------------------------------------
   NOV  11, 1993  21h 00m 51.06± 0.31s
   40.052 N ± 3.3km   28.312 E ± 2.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 3.5 (ISK).

BNT      0.43 315 iPg   01 00.20   0.4
                  iSg   01 06.20
EDC      0.45 311 iPg   00 59.50  -0.8
                  iSg   01 06.50
DST      0.51 151 iPg   01 01.20  -0.2
IZI      0.93  72 iPg   01 09.00   0.1
MFT      1.08 313 iPg   01 11.00  -0.4
CTT      1.10   5 iPg   01 12.00   0.3
ISK      1.16  29 iPn   01 13.00   0.3
HRT      1.29  53 iPn   01 15.00   0.0
EYL      1.50  69 ePn   01 18.00  -0.2
EZN      1.54 262 iPn   01 18.70   0.1
GPA      1.55  81 iPn   01 18.50  -0.2
ALT      1.71 125 ePn   01 21.00  -0.2
DMK      1.82 347 iPn   01 22.10  -0.5
IZM      1.84 207 ePn   01 23.00   0.0
KHL      1.97 151 ePn   01 25.30   0.4
KDZ      2.71 307 eP    01 35.00  -0.5
DIM      2.90 314 ePg   01 46.00   7.9X
RZN      3.18 302 eP    01 42.00  -0.2
MMB      3.80 295 eP    01 50.00  -1.0
PVL      3.87 326 eP    01 52.00   0.2
PGB      4.00 310 eP    01 55.00   1.3
KKB      4.35 296 eP    02 00.00   1.2
VAY      4.55 288 ePn   02 17.00  15.5X
VTS      4.60 305 eP    02 05.00   2.5X
MLR      5.71 343 eP    02 02.00 -16.0X
     S.D. = 0.6  on  21 of  25 obs.
-------------------------------------
?  NOV  11, 1993  21h 26m 46.20± 0.75s
   17.404 S ±43.0km  179.931 E ±29.1km
   DEPTH = 550.0km  (geophysicist)
   4.5mb (  6 obs.)
 FIJI ISLANDS                     (182)

DZM     13.52 248 iPc   29 42.10   1.4
CTA     31.97 260 iP    32 30.00   1.1
CNB     32.50 231 iPd   32 34.00   0.7
         0.5s    16.00nm         4.9mb
TOO     36.28 229 eP    33 05.20   0.6
         0.7s    14.00nm         4.7mb
STK     37.50 240 iPd   33 11.70  -3.0
         0.6s     5.40nm         4.4mb
WR2     43.15 259 iPc   33 59.00  -1.2
         0.7s     7.10nm         4.3mb
WRA     43.17 259 P     33 59.90  -0.4
         0.7s     2.30nm         3.8mb
WARB    49.96 250 iPd   34 52.10   0.2
         0.5s    15.00nm         4.8mb
KSP    144.17 342 ePKPc 45 14.80  -5.9X
CLL    144.61 346 iPKPd 45 15.10  -6.3X
BRG    144.78 345 ePKP  45 16.20  -5.5X
         1.4s    22.00nm
GEC2   146.70 343 ePKP  45 21.10  -4.0X
         0.5s     0.81nm
                    e   45 24.60
FLN    148.72   1 ePKP  45 26.00  -2.1
         0.5s     5.90nm
LDF    148.89   0 ePKP  45 26.10  -2.3
         0.4s     3.15nm
GRR    149.09   1 ePKP  45 26.90  -1.8
         0.6s     7.30nm
LPF    149.44   1 ePKP  45 27.90  -1.3
         0.5s     4.10nm
LOR    150.04 355 ePKP  45 29.70  -0.5
         0.7s     5.50nm
SSF    150.28 355 ePKP  45 30.30  -0.2
         0.5s     4.10nm
LBF    150.31 354 ePKP  45 30.20  -0.4
         0.4s     1.10nm
AVF    150.56 355 ePKP  45 30.50  -0.5
         0.5s     1.40nm
BGF    150.83 356 ePKP  45 31.40   0.0
         0.6s     4.35nm
MFF    150.89   0 ePKP  45 31.20  -0.2
         0.6s     3.45nm
TCF    151.14 357 ePKP  45 32.00   0.1
         0.6s     2.25nm
MAF    151.18 356 ePKP  45 32.50   0.6
         0.7s     3.00nm
LSF    151.21 358 ePKP  45 31.90  -0.1
         0.5s     3.30nm
LPL    151.40 350 ePKP  45 33.80   1.2
         0.5s     1.25nm
LPG    151.42 350 ePKP  45 33.80   1.1
         0.6s     2.45nm
RJF    152.15 358 ePKP  45 34.20   0.9
         0.4s     1.45nm
CAF    152.50 357 ePKP  45 35.20   1.3
         0.6s     1.70nm
LFF    152.54 359 ePKP  45 35.50   1.6
         0.5s     2.40nm
SBF    152.87 348 ePKP  45 36.30   1.8
         0.6s     7.20nm
PGF    153.77 345 ePKP  45 37.00   1.2
     S.D. = 1.3  on  28 of  32 obs.
-------------------------------------
%  NOV  11, 1993  21h 32m 37.46± 0.69s
   26.390 S ± 6.8km   27.382 E ± 7.0km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA         (584)
      ML 2.8 (PRE).

KSR      0.68 320 eP    32 51.00  -0.1
SLR      1.04  51 eP    32 57.30  -0.4
SEK      1.94 174 eP    33 11.90   0.4
                  S     33 35.70
SWZ      2.00 246 eP    33 13.00   0.6
                  S     33 38.00
BFT      2.49  74 eP    33 20.00   0.4
                  S     33 50.00
BLF      2.91 201 eP    33 24.50  -0.9
                  S     33 58.70
     S.D. = 0.7  on   6 of   6 obs.
-------------------------------------
?  NOV  11, 1993  23h 02m 53.05± 5.24s
   19.849 N ±56.9km   64.272 W ±10.6km
   DEPTH =  33.0km  (normal)
 VIRGIN ISLANDS                   ( 91)
      ML 4.0 (FDF).

LPR      2.15 225 P     03 27.00  -0.4
SJG      2.48 226 P     03 31.70  -0.3
APR      2.71 240 P     03 35.30   0.1
CLLP     2.80 231 P     03 36.50   0.0
PORP     2.86 232 P     03 37.20  -0.2
MCP      3.04 243 P     03 40.00   0.1
MGP      3.24 236 P     03 43.00   0.3
BPA      3.61 140 eP    03 47.00  -1.1
                  S     04 28.00
PAG      4.53 147 eP    04 02.50   1.3
                  S     04 52.00
MGG      4.82 144 eP    04 05.00  -0.1
TOV     11.34 209 eP    05 42.20   6.3X
     S.D. = 0.7  on  10 of  11 obs.
-------------------------------------
%  NOV  11, 1993  23h 28m 11.67± 0.95s
   32.078 S ±11.8km   66.986 W ± 9.5km
   DEPTH = 100.0km  (geophysicist)
 SAN LUIS PROVINCE, ARGENTINA     (140)

CFA      1.17 293 iPc   28 35.00   0.7
                  S     28 52.40
RTCV     1.34 279 iPd   28 37.00   0.7
RTLL     1.47 300 iPd   28 38.00   0.0
RTCB     1.65 290 iPd   28 40.30  -0.1
                  S     29 02.00
TCA      2.17  71 iPc   28 48.40   1.3
                  (S)   29 15.00
RFA      2.96 204 iPd   28 56.70  -1.0
                  (S)   29 55.80
CYA      3.77  16 ePd   29 07.00  -1.7
                  S     29 50.00
     S.D. = 1.3  on   7 of   7 obs.
-------------------------------------
*  NOV  11, 1993  23h 46m 04.16± 0.71s
   51.594 N ±12.7km  170.477 W ±10.4km
   DEPTH =  33.0km  (normal)
   4.3mb (  8 obs.)
 FOX ISLANDS, ALEUTIAN ISLANDS    (  9)

SVW     12.57  35 (P)   49 02.85  -0.4
CP2     13.93  39 (P)   49 23.10   1.6
INK     24.37  33 eP    51 19.00  -0.8
         0.6s     2.00nm          3.8mb
MBC     31.51  21 eP    52 24.00  -0.6
PV10    44.14  82 eP    54 12.14   0.8
PV08    44.26  82 (P)   54 11.89  -0.6
FRB     50.01  35 eP    54 56.00  -0.7
         1.0s     7.00nm          4.6mb
LTX     53.46  87 eP    55 23.04  -0.2
LMN     63.82  49 eP    56 34.50  -0.6
NB2     67.71 359 P     56 58.30  -1.5
         0.9s     2.70nm          4.3mb
GEC2    79.88 357 eP    58 10.80   0.1
         0.8s     0.89nm          3.8mb
LOR     81.40   4 eP    58 18.70   0.1
         0.8s     2.70nm          4.3mb
SSF     81.59   4 eP    58 19.90   0.3
         0.7s     2.45nm          4.3mb
AVF     81.85   4 eP    58 21.20   0.3
SMF     82.02   4 eP    58 22.00   0.1
         0.7s     3.30nm          4.5mb
BGF     82.06   5 eP    58 22.20   0.1
         0.4s     1.10nm          4.2mb
LSF     82.29   6 eP    58 23.50   0.2
MAF     82.38   5 eP    58 24.20   0.4
LFF     83.55   6 eP    58 30.70   0.9
LPO     83.83   6 eP    58 31.60   0.4
BUL    145.23 327 iPKP  05 40.00   0.0
         0.9s     8.40nm
     S.D. = 0.7  on  21 of  21 obs.
-------------------------------------
*  NOV  12, 1993  00h 27m 54.35± 1.49s
   12.042 N ± 9.2km  120.561 E ±18.6km
   DEPTH =  33.0km  (normal)
 MINDORO, PHILIPPINE ISLANDS      (250)

PGP      1.50  15 iPc   28 18.00  -1.3
                  iS    28 37.00
TGY      2.08  10 eP    28 28.00   0.3
QVP      2.60  10 eP    28 35.00   0.0
GQP      2.61  45 eP    28 35.00  -0.1
                  eS    29 04.00
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PLP     4.42 101 ePc   29 01.00   0.2
CVP     5.76  12 eP    29 20.80   1.0
WR2    34.57 157 eP    34 42.20  -0.1
       0.5s      6.00nm          4.8mb
     S.D. = 0.8  on   7 of   7 obs.
-------------------------------------
?  NOV  12, 1993  00h 38m 05.31± 6.63s
   32.438 S ±47.7km   71.565 W ±32.1km
   DEPTH =  33.0km  (normal)
 NEAR COAST OF CENTRAL CHILE      (135)
      MD 3.3 (SAN).

ROCH    0.71 139 iP+   38 18.26  -0.8
                iS     38 27.14
JACH    0.86 107 iP+   38 21.14   0.1
                iS     38 32.59
PEL     1.02 134 iP+   38 23.34  -0.1
                iS     38 35.84
LCCH    1.03 180 iPd   38 23.47   0.0
                iS     38 33.82
FCH     1.39 130 iP+   38 28.90   0.0
                iS     38 45.77
PCH     1.47 143 iP    38 30.76   0.9
LNV     1.52 175 eP    38 30.39   0.0
                iS     38 48.23
     S.D. = 0.6  on   7 of   7 obs.
-------------------------------------
?  NOV  12, 1993  01h 42m 33.16± 1.48s
   31.510 S ±17.3km   68.780 W ±21.7km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTCB    0.03 324 ePd   42 47.00  -0.6
                S      42 58.20
RTLL    0.32  56 ePd   42 48.20   0.1
                S      42 59.30
RTCV    0.41 149 iPc   42 50.00   1.4
CFA     0.47 102 iPd   42 50.80   1.8
                S      43 05.80
RTPR    2.29  59 iPc   43 08.90  -1.2
RFA     3.26 175 ePc   43 22.00  -1.3
TCA     3.59  88 iP    43 27.60  -0.2
                (S)    44 11.00
     S.D. = 1.5  on   7 of   7 obs.
-------------------------------------
&  NOV  12, 1993  03h 16m 39.78s
   63.285 N          148.949 W
   DEPTH =  79.5km
 CENTRAL ALASKA                   (  1)
     <AEIC>.

RND     0.13  20 iPd   16 51.76   2.0
HUR     0.44 226 iPd   16 52.87  -0.3
                eS     17 02.88
MCK     0.45   1 iPd   16 53.48   0.2
                eS     17 03.74
TRF     0.63 286 iPd   16 55.38   0.3
                eS     17 07.11
BWN     0.92 346 iPc   16 57.92  -0.2
                eS     17 11.58
KTH     0.93 288 iPd   16 58.24   0.0
                eS     17 12.45
CUT     1.07 215 iPd   16 59.42  -0.5
WRH     1.25  17 iPc   17 01.72  -0.5
                eS     17 18.06
NEA     1.30 358 iPc   17 02.31  -0.5
HDA     1.43  37 iPc   17 04.17  -0.4
THY     1.45  83 eP    17 05.75   0.9
CCB     1.46  20 iPc   17 04.22  -0.7
                eS     17 22.03
DDM     1.47  69 eP    17 05.44   0.3
SML     1.51 169 eP    17 04.90  -0.8
                eS     17 25.97
GHO     1.52 180 eP    17 05.25  -0.6
                eS     17 25.09
PAX     1.61 100 eP    17 07.38   0.3
                eS     17 27.73
DJE     1.64  61 eP    17 06.85  -0.5
                eS     17 27.19
SCM     1.64 152 eP    17 06.88  -0.5
                eS     17 30.06
PWA     1.70 195 P     17 08.10   0.0
FBA     1.70  17 iPc   17 07.29  -0.8
                eS     17 27.96
PLRM    1.70 183 eP    17 07.88  -0.2
                eS     17 31.19
PMR     1.70 183 eP    17 07.56  -0.6
MDM     1.71  10 ePc   17 07.83  -0.5
SDG     1.73 114 eP    17 08.98   0.3
TOA     1.74 132 P     17 09.10   0.3
IL1     1.75  30 iPc   17 08.09  -0.7
                eS     17 29.15
ILB     1.75  30 iPc   17 08.10  -0.7
                eS     17 28.74
SKT     1.77 223 iPd   17 08.24  -0.9
                eS     17 30.19
GLM     1.84  21 ePc   17 09.37  -0.7
KNK     1.89 173 ePc   17 10.60  -0.2
MLY     1.92 337 ePc   17 10.68  -0.5
SUA     2.01 205 eP    17 12.09  -0.4
                eS     17 39.41
TZL     2.05 126 eP    17 12.60  -0.3
PMS     2.07 188 P     17 13.00  -0.2
CFI     2.18 165 eP    17 13.97  -0.7
DOT     2.22  78 eP    17 14.80  -0.5
KLU     2.29 141 ePc   17 15.32  -0.9
NCG     2.41 220 ePc   17 17.27  -0.7
CGLM    2.45 217 P     17 19.50   1.1
PWL     2.45 173 eP    17 17.76  -0.7
VLZ     2.49 149 eP    17 17.32  -1.5
                eS     17 46.49
VZW     2.50 152 eP    17 17.76  -1.4
CRP     2.52 218 eP    17 18.73  -0.8
CP2     2.55 219 eP    17 20.14   0.2
CKN     2.56 218 eP    17 20.51   0.5
SPU     2.56 216 eP    17 19.40  -0.6
                eS     17 51.65
CKT     2.59 218 eP    17 20.39   0.0
                eS     17 52.85
BGL     2.59 220 eP    17 20.10  -0.3
CKL     2.63 219 eP    17 20.21  -0.8
TMW     2.69  86 P     17 18.50  -3.2
BKG     2.71 216 eP    17 21.52  -0.6
NKA     2.77 204 eP    17 25.58   2.8
FID     2.80 154 eP    17 21.90  -1.3
MPA     2.81 184 eP    17 22.74  -0.6
SLKM    2.85 193 eP    17 23.54  -0.4
GLB     3.03 125 eP    17 25.61  -0.8
                eS     18 00.44
HIN     3.12 157 P     17 31.80   4.1
CVA     3.14 150 eP    17 26.62  -1.2
SEW     3.20 184 eP    17 28.29  -0.5
DFR     3.23 215 eP    17 29.59   0.3
TTA     3.23 267 eP    17 27.79  -1.5
BC3     3.26  91 eP    17 28.17  -1.4
                eS     18 07.20
LTI     3.30 170 eP    17 29.21  -0.9
NCT     3.32 216 eP    17 30.42  -0.1
REF     3.32 214 eP    17 30.15  -0.5
RDW     3.35 215 P     17 32.00   0.9
RS2     3.36 214 P     17 32.50   1.3
RED     3.40 214 P     17 32.20   0.6
IM3     3.41 325 ePc   17 30.54  -1.1
IMA     3.46 326 eP    17 30.95  -1.5
FYU     3.65  24 eP    17 33.94  -1.1
ILIM    3.74 213 eP    17 35.40  -0.9
SVW     3.81 238 eP    17 35.21  -2.1
BALM    3.83 123 eP    17 35.93  -1.7
TGL     3.84 129 eP    17 35.47  -2.3
HOM     3.86 201 P     17 38.00   0.1
CNPM    3.93 197 eP    17 37.90  -1.0
CTGM    4.27 120 P     17 43.00  -0.8
BM3     4.53  22 ePc   17 45.63  -1.8
CDD     4.93 210 P     17 47.70  -5.2
INK     8.08  45 eP    18 35.00  -1.4
       81 obs. associated
-------------------------------------
?  NOV  12, 1993  03h 27m 45.97± 1.23s
   31.811 S ± 8.0km   72.111 W ±12.8km
   DEPTH =  27.0 ±  6.8 km
   4.8mb (  1 obs.)
 OFF COAST OF CENTRAL CHILE       (134)
      MD 4.4 (SAN).

IHA     1.27 162 eP    28 08.00   0.0
                iS     28 29.20
ROCH    1.48 142 iP+   28 11.06  -0.3
                iS     28 31.90
JACH    1.55 124 eP    28 11.09  -1.1
                iS     28 32.21
LCCH    1.72 165 iPd   28 14.18  -0.3
                iS     28 39.14
PEL     1.79 138 iPd   28 15.71   0.1
                iS     28 40.38
SAN     2.04 144 eP    28 18.92  -0.3
TACH    2.09 152 eP    28 20.13   0.3
FCH     2.16 135 eP    28 21.06  -0.1
LNV     2.22 165 eP    28 21.57  -0.1
PCH     2.25 144 eP    28 22.61   0.4
CACH    2.63 151 iP+   28 28.61   1.0
RTCB    2.84  84 ePc   28 32.90   2.3
ZON     2.94  86 eP    28 29.20  -2.7
                eS     28 57.20
MDZ     2.96 112 iP    28 35.80   3.5X
                i      28 39.40
                iS     29 09.70
RTCV    3.04  92 eP    28 35.00   1.6
RTLL    3.14  82 e(P)  28 37.00   2.1
CFA     3.31  87 ePc   28 38.80   1.6
RFA     4.25 135 ePc   28 51.00   0.5
                S      30 00.00
RTPR    5.03  74 e(P)  29 03.00   1.4
CYA     6.42  60 ePd   29 19.50  -1.7
                S      30 40.00
TCA     6.43  88 e(P)  29 19.00  -2.5
                (S)    30 33.00
FSA     7.82  45 e(P)c 29 43.50   2.8X
SLA     9.15  41 e(P)  30 04.20   4.8X
CNCB   15.40  15 P     31 25.00   1.4
LPB    15.64  14 eP    31 28.00   1.4
LPAZ   15.87  14 P     31 28.50  -1.3
BAO    27.23  59 eP    33 27.10  -2.8
LKO    75.63  69 P     39 29.44  -1.3
       1.1s     10.50nm          4.8mb
GBA   146.74 116 PKP   47 27.00   1.2
     S.D. = 1.5  on  26 of  29 obs.
-------------------------------------
*  NOV  12, 1993  03h 29m 09.06± 1.62s
   22.069 N ± 7.3km  142.731 E ±12.5km
   DEPTH = 256.2 ± 15.9 km
   4.5mb ( 13 obs.)
 VOLCANO ISLANDS REGION           (213)

WKYJ   13.64 334 P     32 16.00   2.2
IIDJ   14.01 344 P     32 18.70   0.4
TKSJ   14.12 329 P     32 24.50   4.9X
KAKJ   14.26 352 P     32 19.40  -1.9
                eS     34 50.50
CHJJ   14.31 348 P     32 20.30  -1.6
TSRJ   14.66 338 P     32 26.70   0.6
MAT    14.95 346 eP    32 28.00  -1.7
       0.7s      9.59nm          4.3mb
                eS     35 18.00
MTMJ   15.09 345 P     32 31.70   0.3
YONJ   15.38 330 P     32 36.90   2.0
NIIJ   15.46 349 P     32 33.80  -2.0
YAMJ   16.22 352 P     32 44.70   0.0
                eS     35 39.60
OFUJ   16.98 357 P     32 53.10   0.4
                eS     35 56.90
HOOJ   20.26   1 eP    33 28.30   2.1
KUSJ   21.04   4 eP    33 35.30   1.5
SSE    21.23 300 Pn    33 35.50  -0.3
ASAJ   21.99 360 eP    33 45.80   2.8X
KHKI   40.27 224 ePc   36 23.70   0.7
                e      37 22.60
WR2    42.55 192 iPc   36 41.00  -0.5
       0.4s      7.30nm          4.4mb
                iPcP   37 29.30
                eS     41 53.30
WRA    42.55 192 P     36 41.80   0.3
       0.6s      9.00nm          4.3mb
SNG    43.19 256 eP    36 49.00   2.2
ASPA   46.26 191 eP    37 10.10  -0.9
       0.7s     12.90nm          4.4mb
                eS     43 36.90
MBL    48.43 209 eP    37 27.50  -0.2
WARB   50.44 199 eP    37 43.50   0.6
GUN    51.48 289 P     37 50.80  -0.4
       0.4s     17.00nm          4.8mb
KKN    52.02 289 P     37 55.00   0.0
DMN    52.20 288 P     37 56.00  -0.4
GKN    52.56 289 P     37 58.40  -0.5
FORT   54.40 196 eP    38 12.00   0.0
       0.5s     12.00nm          4.7mb
MRWA   57.13 208 iPc   38 30.50  -0.8
       0.3s      8.00nm          4.8mb
BAL    58.03 206 iPc   38 37.00  -0.6
       0.4s     35.00nm          5.3mb
FBA    61.54  27 (P)   39 01.40   0.4
KLU    61.96  31 eP    39 03.68  -0.2
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12d 03h

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GBA     62.34 274 Pd    39 06.90  -0.1
        0.7s     5.00nm          4.3mb
MBC     70.60  15 eP    39 58.50   0.6
KAF     82.21 335 iP    41 01.60  -0.8
        0.5s     3.60nm          4.4mb
NUR     83.77 334 iP    41 09.60  -0.7
        0.4s     7.00nm          4.8mb
HFS     88.22 337 eP    41 30.20  -2.0
        0.4s     3.50nm          4.6mb
NB2     88.45 339 P     41 32.40  -0.9
        0.7s     1.80nm          4.1mb
LPAZ   150.32  84 PKP   48 28.50   1.3
LPB    150.42  85 PKP   48 31.00   3.9X
CNCB   150.60  85 PKP   48 28.50   1.0
     S.D. = 1.2  on  38 of  41 obs.
-----------------------------------
%  NOV  12, 1993  03h 59m 05.08± 0.60s
   43.066 N ± 6.4km     0.641 W ± 4.7km
   DEPTH =  10.0km  (geophysicist)
 PYRENEES                          (378)
      ML 1.0 (STR).

ATE      0.05 295 Pg    59 07.16  -0.1
                  Sg    59 08.57
ESCF     0.05  76 Pg    59 07.33   0.0
                  Sg    59 08.70
ISSF     0.12 251 Pg    59 08.45   0.3
                  Sg    59 10.76
MADF     0.15 301 Pg    59 08.43  -0.2
                  Sg    59 11.02
LHE      0.15 175 Pg    59 08.57  -0.2
                  Sg    59 11.67
OGE      0.16  50 Pg    59 08.83   0.0
ELYF     0.28 292 Pg    59 11.04   0.1
                  Sg    59 15.16
     S.D. = 0.2  on   7 of   7 obs.
-----------------------------------
?  NOV  12, 1993  04h 28m 25.74± 2.60s
   31.997 S ±11.6km   72.067 W ±21.3km
   DEPTH =  33.0km  (normal)
 OFF COAST OF CENTRAL CHILE        (134)
      MD 4.1 (SAN).

IHA      1.09 161 eP    28 45.00   0.3
                  eS    29 06.50
ROCH     1.32 138 iP+   28 47.85  -0.4
                  iS    29 08.73
JACH     1.42 119 iPd   28 49.16  -0.4
                  iS    29 10.65
LCCH     1.53 164 iPd   28 50.78  -0.3
                  iS    29 11.81
PEL      1.63 135 iPd   28 52.42  -0.2
                  iS    29 17.05
SAN      1.87 141 eP    28 56.80   0.7
TACH     1.91 150 eP    28 56.88   0.4
                  iS    29 23.51
FCH      2.00 132 iP    28 57.78  -0.4
LNV      2.03 164 iP    28 57.21  -1.0
PCH      2.08 142 eP    28 59.27   0.2
CACH     2.45 150 eP    29 05.21   0.8
                  iS    29 38.41
RTCB     2.83  80 ePc   29 09.30  -0.4
                  S     29 49.00
MDZ      2.86 109 iP    29 15.90   5.8X
                  i     29 18.40
                  iS    29 54.30
RTCV     3.00  88 e(P)  29 12.00  -0.2
RTLL     3.14  79 e(P)  29 14.00  -0.1
CFA      3.28  84 ePc   29 15.80  -0.3
RFA      4.09 134 ePc   29 28.00   0.4
RTPR     5.05  72 e(P)  29 42.00   0.8
TCA      6.41  86 e(P)  29 56.00  -4.4X
                  (S)   31 18.00
     S.D. = 0.6  on  17 of  19 obs.
-----------------------------------
*  NOV  12, 1993  04h 46m 43.54± 2.05s
   39.355 N ±17.8km   20.567 E ±11.4km
   DEPTH =  10.0km  (geophysicist)
 GREECE-ALBANIA BORDER REGION      (392)

IGT      0.25 314 iPg   46 47.58  -1.4
                  eSg   46 51.48
SRN      0.68 320 ePg   47 00.30   3.2X
LSK      0.79   2 ePg   46 57.30  -1.7
TPE      1.03 336 ePn   47 03.50   0.5
VLO      1.38 324 ePn   47 12.30   3.5X
AGG      1.41 103 iPb   47 09.00  -0.3
                  iSb   47 32.48
BERA     1.43 341 ePn   47 11.30   1.8
FNA      1.56  23 ePb   47 10.24  -1.1
                  eSb   47 35.20
LIT      1.66  63 ePb   47 13.28   0.5
                  iSb   47 37.08
OHR      1.76   6 ePn   47 16.50   2.1
TIR      2.06 345 ePn   47 23.70   5.1X
GRG      2.13  41 ePn   47 19.60   0.0
PAIG     2.47  76 ePn   47 24.52   0.1
SOH      2.59  55 ePn   47 25.84  -0.4
                  eSn   47 59.15
SKO      2.70  14 ePn   47 32.00   4.3X
     S.D. = 1.4  on  11 of  15 obs.
-----------------------------------
?  NOV  12, 1993  05h 17m 23.90± 4.08s
   5.185 S ±39.5km  138.848 E ±17.3km
   DEPTH =  33.0km  (normal)
   4.3mb (  2 obs.)
 NEAR SOUTH COAST OF IRIAN JAYA    (205)

MTN     10.77 225 iPc   19 59.30   0.3
        0.4s   138.00nm          6.5mb X
                  eS    22 02.00
KNA     14.43 223 eP    20 48.50   0.7
        0.3s    20.00nm          5.1mb X
                  eS    23 28.80
QIS     15.30 177 eP    20 58.30  -0.9
WR2     15.31 196 eP    20 58.60  -0.8
        0.4s     4.00nm          4.0mb
                  i     21 04.60
                  eS    23 48.90
CTA     16.47 155 eP    21 15.00   0.7
ASPA    18.98 194 iPc   21 46.20   0.8
        0.4s    17.10nm          4.6mb
                  eS    25 15.30
WARB    23.92 208 eP    22 35.50  -0.4
MBL     24.34 228 eP    22 39.50  -0.5
KIC    143.76 274 PKP   36 47.20 -11.2X
TIC    144.04 274 PKP   36 48.30 -10.6X
LKO    144.48 279 PKP   36 49.37 -10.3X
        0.7s    13.50nm
CNCB   145.63 130 PKPc  36 55.00  -7.2X
LPB    145.71 130 PKP   36 51.00 -11.2X
LPAZ   145.83 129 iPKPd 36 55.10  -7.6X
     S.D. = 0.8  on   8 of  14 obs.
-----------------------------------
&  NOV  12, 1993  05h 31m 09.56s
   35.677 N          118.324 W
   DEPTH =  10.8km
 CENTRAL CALIFORNIA                ( 39)
      <PAS-P>. ML 3.5 (PAS), 3.5
      (BRK). MD 3.5 (GM). Felt (IV) at
      Wofford Heights. Felt (III) at
      Kernville and Lake Isabella.

ISA      0.12 264 iPd   31 12.53  -0.2
                  eS    31 14.86
WBSM     0.21 133 P     31 14.00  -0.2
WJPM     0.29 206 P     31 15.27  -0.5
TOW      0.47  74 P     31 18.94  -0.3
WLHM     0.47   1 P     31 18.38  -0.9
WSHM     0.68  93 P     31 21.95  -1.1
FTC      0.93 210 P     31 26.70  -0.6
MARC     1.07 231 P     31 29.23  -0.4
ABL      1.10 222 eP    31 29.42  -0.9
GSC      1.30 106 iPc   31 32.35  -1.2
RYS      1.33 220 P     31 33.54  -0.6
YEG      1.35 260 P     31 33.91  -0.5
BCH      1.52 252 iPc   31 36.04  -0.8
SSK      1.55 160 eP    31 36.56  -0.8
PMRM     1.56 275 P     31 36.80  -0.5
PAGM     1.57 273 P     31 36.58  -0.8
PSRM     1.60 277 P     31 37.24  -0.7
BHPR     1.62 355 P     31 38.70   0.3
CTM      1.66 279 P     31 39.18   0.4
GHC      1.66 276 P     31 37.80  -0.9
PMCM     1.67 272 P     31 38.41  -0.4
MTUM     1.68 353 eP    31 39.52   0.3
                  eS    32 02.46
PHAM     1.69 276 eP    31 38.75  -0.5
FRI      1.72 320 iP    31 37.73  -1.9
                  iS    32 00.65
PARM     1.73 290 P     31 41.22   1.4
PCRM     1.76 284 P     31 41.52   1.3
PDRM     1.78 292 P     31 40.90   0.4
WKR      1.78 275 P     31 39.97  -0.6
PSTM     1.79 279 P     31 40.18  -0.5
PMGM     1.81 263 P     31 40.40  -0.5
HTCR     1.88 349 P     31 43.70   1.4
PSMM     1.89 283 P     31 41.84  -0.3
PRCM     1.95 288 P     31 42.59  -0.4
PRI      1.96 284 iP    31 42.53  -0.6
ORC      1.97 352 P     31 45.04   1.5
PTV      1.99 283 P     31 43.00  -0.6
MRCM     2.00 356 eP    31 45.45   1.6
MMPM     2.01 344 ePc   31 45.20   1.1
PEC      2.02 151 iPc   31 42.86  -1.2
                  eS    32 13.40
MEMM     2.05 346 eP    31 45.80   1.5
                  eS    32 12.78
PADM     2.07 270 P     31 43.66  -1.0
MOP      2.08 286 P     31 44.45  -0.4
TPNV     2.10  52 iPc   31 44.40  -0.9
PANM     2.10 274 P     31 44.59  -0.6
PSAM     2.11 280 P     31 44.66  -0.6
BONR     2.27   0 eP    31 48.85   0.9
LRC      2.28 285 P     31 46.86  -0.8
LRV      2.31 290 P     31 48.00  -0.2
BRMM     2.33 300 P     31 49.18   0.8
SHG      2.49 288 P     31 50.10  -0.5
PRS      2.55 286 iP    31 50.47  -1.1
TNP      2.56  20 ePn   31 51.01  -0.8
                  ePg   31 56.03
PLM      2.61 152 eP    31 51.37  -1.3
BSLM     2.68 295 P     31 54.38   1.0
LTR      2.70 297 P     31 53.12  -0.5
SAO      2.75 294 iPd   31 53.56  -0.8
BPOM     2.85 282 P     31 54.14  -1.6
BPRM     2.85 286 P     31 54.58  -1.4
CMB      2.88 326 ePc   31 56.61   0.4
                  eS    32 33.56
ARN      3.08 304 eP    31 59.90   0.9
KVN      3.37   3 (P)   32 05.25   1.8
GLA      3.90 131 (P)   32 11.16   0.4
ORV      4.62 328 eP    32 22.03   1.1
DUG      6.27  42 (P)   32 45.34   1.0
FHC      6.78 321 eP    32 52.39   0.9
     65 obs. associated
-----------------------------------
?  NOV  12, 1993  05h 34m 56.64± 3.24s
   15.083 N ± 8.3km   60.513 W ±38.0km
   DEPTH =  33.0km  (normal)
 LEEWARD ISLANDS                   ( 92)
      ML 2.6 (FDF).

CRM      0.51 230 iPd   35 07.37   0.0
                  S     35 16.20
MVM      0.64 215 iPd   35 09.06  -0.2
                  S     35 18.00
FDF      0.71 241 iPd   35 10.38   0.2
                  S     35 21.70
BIM      0.78 224 eP    35 11.36   0.1
                  S     35 23.10
MGG      1.14 317 eP    35 16.00  -0.3
DEG      1.33 337 eP    35 19.30   0.2
     S.D. = 0.3  on   6 of   6 obs.
-----------------------------------
   NOV  12, 1993  06h 17m 16.19± 0.40s
   21.253 N ± 6.2km  119.662 E ± 6.8km
   DEPTH =  29.9km  (  6 depth phases)
   4.6mb ( 25 obs.)
 TAIWAN REGION                     (243)
      ML 4.2 (BJI).

QZH      3.80 345 Pnd   18 10.30  -3.8X
     Z  12s      3.61um
     N  10s      2.55um
                  Sn    18 50.50
CVP      4.08 150 ePd   18 18.00  -0.1
                  eS    19 01.00
HKC      5.21 283 eP    18 32.90  -1.2
MCO      5.74 280 eP    18 39.30  -2.4
GZH      6.13 288 Pn    18 44.40  -2.8
GQP      7.77 160 eP    19 12.00   1.8
                  eS    19 45.00
QIZ      9.48 258 Pd    19 32.50  -1.4
     N  11s      2.21um
     E  11s      2.62um
SSE      9.90   8 ePn   19 53.00  13.5X
     Z  15s      1.30um
     N  10s      1.10um
     E  10s      0.70um
                  Sn    21 18.00
```

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WHN     10.41 334 eP    19 41.50  -5.0X
     N  12s     3.12um
                 S     21 45.50
NJ2     10.78 356 eP    19 47.00  -4.6X
     Z  12s     1.23um
     N  10s     1.38um
                 S     21 44.00
GYA     12.97 296 iPd   20 21.20  -0.1
     1.0s    33.00nm          5.4mb
     Z  14s     2.29um          3.9Msz
     N  10s     1.25um
     E  10s     0.92um
                PP     20 30.00
                 S     22 49.40
XAN     15.88 326 Pd    21 03.70   4.4X
     1.0s    13.00nm          4.0mb
     Z  10s     2.55um          4.0Msz
     N  11s     1.47um
                sP     21 12.00
KMI     16.03 287 Pc    21 07.00   5.6X
     1.5s    50.00nm          4.4mb
     Z  12s     1.90um          4.6MszX
     N  10s     0.60um
                sP     21 16.00
CD2     17.20 307 iPc   21 18.00   2.0
     1.0s   120.00nm          5.0mb
     Z  10s     2.94um          3.9MszX
TIY     17.56 341 Pd    21 21.30   0.9
     Z  16s     1.90um
     N  11s     1.75um
                 S     24 33.00
BJI     18.96 352 eP    21 37.00  -0.6
     1.0s    11.00nm          4.0mb
     Z  14s     1.18um          4.8MszX
     N  13s     0.70um
                esP    21 45.50
                ePP    21 59.00
CHTO    19.62 267 eP    21 47.90   2.6X
LZH     20.23 320 Pc    21 52.20   0.3
     1.6s    46.00nm          4.6mb
     Z  12s     1.42um          4.5MszX
     E  10s     0.92um
                pP     22 01.00  33km
                sP     22 05.00
MNI     20.33 165 ePd   21 52.80   0.0
HHC     20.71 342 P     21 57.70   1.0
     1.0s    14.00nm          4.3mb
     Z  16s     1.78um          4.5MszX
     N  14s     1.04um
     E  12s     0.46um
                eS     25 47.00
SNY     20.78   8 eP    21 55.00  -2.2
     Z  12s     0.60um          4.2MszX
     E  12s     1.01um
                pP     22 05.60  43kmX
BTO     20.96 339 eP    22 01.00   1.8
     N  12s     0.73um
     E  13s     0.60um
                ePP    22 26.00
MAT     22.20  43 eP    22 11.00  -0.7
                eS     26 04.00
CN2     23.00  11 eP    22 16.50  -2.9
     1.0s     7.00nm          4.1mb
     Z  12s     0.42um          4.1MszX
     N  10s     0.20um
     E  10s     0.28um
                epP    22 26.00  35km
MDJ     24.71  17 eP    22 35.50  -0.5
     1.4s    41.00nm          4.8mb
GTA     24.82 321 eP    22 38.00   0.6
     1.5s    12.00nm          4.3mb
     Z  12s     1.50um          4.7MszX
     N  11s     0.41um
                pP     22 44.50  23km
                sP     22 47.50
                sS     27 14.00
LSA     27.02 294 P     23 00.60   2.3X
     N  10s     0.22um
GUN     31.36 289 P     23 38.80   1.8
     1.0s    54.00nm          5.3mb
KKN     31.88 289 P     23 43.20   1.8
DMN     32.02 288 P     23 44.40   1.7
GKN     32.46 289 P     23 47.20   0.8
     1.0s    40.00nm          5.3mb
WRA     43.39 160 P     25 17.40  -0.5
     1.0s     5.60nm          4.3mb
WR2     43.40 160 iPc   25 16.80  -1.2
     0.7s    15.60nm          4.9mb
                 i     25 25.60  29km
                eS     32 00.50
ASPA    46.75 162 eP    25 44.20  -0.5
     0.5s    16.00nm          5.3mb
                 e     25 53.10  30km
                eS     32 48.40
QUE     47.96 292 eP    25 57.50   3.0X
CTA     48.63 146 iPc   25 58.00  -1.4
                 i     26 10.50  46kmX
STK     56.86 158 iPc   26 56.20  -4.3X
     1.0s     3.70nm          4.4mb
TOO     63.36 157 eP    27 46.00   1.0
                epP    27 55.20  30km
FBA     72.04  27 eP    28 39.80   0.8
     1.0s    13.00nm          4.9mb
MBC     76.41  12 eP    29 04.50   0.4
     1.0s     2.00nm          4.1mb
INK     76.46  21 eP    29 04.00  -0.4
     1.0s     3.00nm          4.3mb
DAG     79.05 351 iPd   29 18.20  -0.4
     0.7s    12.33nm          5.0mb
NB2     80.15 332 P     29 24.30  -0.5
     1.4s    13.30nm          4.8mb
RES     81.76   9 eP    29 33.00   0.0
     1.0s     4.00nm          4.4mb
SKO     81.92 312 eP    29 34.40   0.0
GEC2    84.20 320 ePKP  29 46.80   0.7
     1.3s     3.47nm          4.4mb
                 e     29 51.70  15kmX
                 e     29 56.90
                 e     30 02.90
GRF     85.27 322 eP    29 53.00   1.6
LPG     89.96 320 eP    30 06.40  -8.1X
     1.2s    12.20nm          5.0mb
LPL     89.96 320 eP    30 07.30  -7.1X
     1.1s     7.55nm          4.9mb
RMW     92.16  37 (P)   30 25.06   0.8
     S.D. = 1.4  on  38 of  50 obs.
-----------------------------------
?  NOV  12, 1993  07h 16m 24.93± 3.79s
    7.917 S ±43.4km  127.639 E ±19.5km
   DEPTH = 115.6 ± 35.2 km
   4.5mb (  1 obs.)
 BANDA SEA                        (280)

MTN      5.98 145 eP    17 52.50   0.0
     0.3s    61.00nm          5.3mb X
                eS     19 00.00
WSI      7.47 256 ePd   18 12.80   0.0
KNA      7.86 172 iPd   18 18.20   0.1
     0.3s    19.00nm          5.3mb X
                iS     19 44.50
WR2     13.62 152 eP    19 30.60  -3.9X
                 i     19 31.80
MBL     15.17 209 eP    19 54.00  -0.3
                eS     22 39.00
ASPA    16.77 160 iPd   20 14.00  -0.3
     0.6s    19.60nm          4.5mb
                eS     23 13.30
WARB    18.19 183 eP    20 32.00   0.5
     S.D. = 0.5  on   6 of   7 obs.
-----------------------------------
?  NOV  12, 1993  07h 58m 26.75± 0.97s
   39.112 N ± 8.2km   27.538 E ± 9.9km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 2.6 (ISK).

IZM      0.74 197 ePg   58 41.20  -0.2
                eSg    58 53.70
DST      0.98  59 ePn   58 45.80   0.4
EZN      1.18 308 ePn   58 49.10   0.4
EDC      1.26  11 ePn   58 49.50  -0.6
     S.D. = 0.9  on   4 of   4 obs.
-----------------------------------
?  NOV  12, 1993  08h 10m 16.97± 1.15s
   51.814 N ±23.8km  170.443 W ±12.1km
   DEPTH =  33.0km  (normal)
   4.4mb (  5 obs.)
 FOX ISLANDS, ALEUTIAN ISLANDS    (  9)

SDN      6.89  55 (P)   12 00.05   1.8
KLU     16.50  45 (P)   14 03.38  -3.9X
FBA     17.55  33 (P)   14 16.74  -3.6X
INK     24.18  33 eP    15 31.00   0.3
     0.8s     2.00nm          3.7mb
MBC     31.29  21 eP    16 36.00   0.5
MSU     42.07  85 (P)   18 08.04   0.7
FRB     49.81  35 eP    19 07.50  -0.5
     0.5s     3.00nm          4.6mb
JAQ     53.07  48 eP    19 31.50  -1.3
LTX     53.43  88 (P)   19 34.58  -1.3
KAF     65.64 351 eP    20 58.00  -1.4
NB2     67.49 359 P     21 30.40  19.2X
     0.7s     1.30nm
HFS     68.36 358 eP    21 14.80  -1.8
     0.4s     2.80nm          4.7mb
GUN     76.40 298 P     22 06.00   0.9
     0.4s     9.00nm          5.1mb
GKN     77.01 299 P     22 08.60   0.4
DMN     77.06 298 P     22 10.00   1.3
GEC2    79.66 357 eP    22 22.60   0.3
     0.4s     0.54nm          3.8mb
                 e     22 28.40
                 e     22 30.80
                 e     22 33.60
     S.D. = 1.2  on  13 of  16 obs.
-----------------------------------
&  NOV  12, 1993  09h 01m 45.98s
   40.367 N          124.562 W
   DEPTH =  17.7km
 NEAR COAST OF NORTHERN CALIF.    ( 35)
      <GM-P>. MD 3.0 (GM). ML 2.8
      (GS).

KCTM     0.20  58 P     01 51.65   0.6
KJJM     0.23 121 P     01 51.64   0.2
KMPM     0.34  81 iPc   01 53.48   0.2
                eS     01 59.06
KSMM     0.35 121 P     01 53.47   0.0
KBBM     0.57 107 P     01 54.61  -2.6
KBRM     0.59  52 P     01 57.38  -0.1
FHC      0.62  45 ePd   01 57.41  -0.6
KGMM     0.78  60 P     02 00.50  -0.4
KHMM     0.81  51 P     02 00.71  -0.6
KBSM     0.87 121 P     02 01.68  -0.6
KRPM     0.89  27 P     02 01.65  -1.0
KKPM     0.96 103 P     02 02.84  -1.1
KIPM     1.00 124 P     02 03.87  -0.7
KCPM     1.01 132 P     02 04.09  -0.7
KSPM     1.18 136 P     02 08.69   1.1
KOMM     1.24  42 P     02 06.67  -1.9
KRMM     1.26  23 P     02 06.80  -2.0
GNAM     1.37 148 P     02 08.31  -1.9
LGPM     1.43  67 eP    02 09.30  -1.9
KSXM     1.55  19 P     02 10.71  -2.2
LBKM     1.61  63 P     02 12.31  -1.5
MGL      2.37 103 P     02 23.44  -1.3
ORV      2.49 108 eP    02 23.27  -3.1
       23 obs. associated
-----------------------------------
?  NOV  12, 1993  09h 21m 46.77± 3.36s
   41.978 N ±30.0km    7.630 W ±11.9km
   DEPTH =  10.0km  (geophysicist)
 PORTUGAL                         (376)
      mbLg 2.3 (MDD).

ERUA     0.55  41 eP    21 58.00   0.0
                e     22 03.50
EZAM     0.81 283 eP    22 02.50   0.0
                e     22 12.00
STS      1.13 323 eP    22 08.10   0.1
                e     22 21.00
EMON     1.47   9 eP    22 13.20  -0.2
                e     22 32.00
     S.D. = 0.2  on   4 of   4 obs.
-----------------------------------
&  NOV  12, 1993  09h 23m 05.16s
   61.765 N          150.436 W
   DEPTH =  39.1km
 SOUTHERN ALASKA                  (  2)
      <AEIC>. ML 2.8 (AEIC).

PWA      0.29 113 P     23 13.30   0.1
                S     23 20.50
SUA      0.34 206 iPc   23 14.02   0.1
                eS     23 21.65
SKT      0.56 293 iPc   23 15.92  -0.8
                eS     23 24.95
                eS     23 24.97
PLRM     0.65 105 eP    23 16.70  -1.2
                eS     23 27.11
PMR      0.65 105 eP    23 16.47  -1.4
```

12d 09h

		eS	23	25.86	
CUT	0.65	7	iPd	23 17.08	-0.8
PMS	0.67	141	P	23 17.10	-1.2
GHO	0.72	89	eP	23 18.34	-0.7
CGLM	0.88	239	ePc	23 20.51	-0.8
NCG	0.90	247	eP	23 20.27	-1.3
CRP	0.96	240	eP	23 21.05	-1.5
			eS	23 33.87	
SPU	0.97	234	eP	23 21.60	-1.0
			eS	23 34.98	
CKN	1.00	238	eP	23 22.34	-0.6
SML	1.00	87	iPc	23 21.92	-1.0
CP2	1.00	241	eP	23 21.82	-1.3
KNK	1.01	110	eP	23 22.34	-0.7
CKT	1.02	237	eP	23 22.36	-0.9
BGL	1.06	243	eP	23 23.12	-0.8
CKL	1.08	239	eP	23 23.15	-0.9
NKA	1.10	201	eP	23 25.42	1.2
BKG	1.12	232	iPc	23 23.75	-0.9
SLKM	1.27	175	ePd	23 25.14	-1.6
HUR	1.27	17	eP	23 26.45	-0.3
PWL	1.36	131	eP	23 27.15	-0.9
MPA	1.38	157	eP	23 27.43	-0.9
CFI	1.41	113	iPc	23 27.83	-0.8
SCM	1.48	86	iPc	23 29.15	-0.6
DFR	1.60	224	eP	23 30.85	-0.7
REF	1.69	222	eP	23 32.41	-0.4
			eS	23 53.70	
			S	23 53.88	
TRF	1.69	2	eP	23 32.19	-0.7
NCT	1.71	226	eP	23 32.59	-0.5
RS2	1.73	222	eP	23 33.05	-0.4
RSO	1.72	222	eP	23 33.05	-0.3
RDW	1.73	223	eP	23 32.79	-0.6
SEW	1.74	163	eP	23 32.36	-0.9
RED	1.76	221	eP	23 33.11	-0.8
			S	23 55.47	
			S	23 55.74	
RND	1.80	23	eP	23 33.93	-0.5
KTH	1.81	353	ePd	23 33.93	-0.6
			eS	23 57.13	
VZW	2.00	109	eP	23 35.72	-1.5
TOA	2.04	79	P	23 35.70	-2.2
VLZ	2.07	106	eP	23 36.31	-1.8
ILIM	2.09	217	eP	23 37.95	-0.6
MCK	2.09	19	eP	23 38.14	-0.4
INE	2.14	218	eP	23 38.96	-0.3
LTI	2.14	143	eP	23 36.14	-3.0
FID	2.17	116	eP	23 37.18	-2.4
			eS	24 04.24	
KLU	2.17	95	iPc	23 38.06	-1.7
CNPM	2.28	190	eP	23 39.25	-1.9
HIN	2.35	124	eP	23 42.71	0.5
TZL	2.39	81	eP	23 42.30	-0.4
SDG	2.42	69	eP	23 43.11	-0.1
BWN	2.46	10	P	23 44.00	0.3
OPT	2.53	214	P	23 45.00	0.3
SVW	2.58	257	eP	23 42.90	-2.6
CVA	2.58	116	P	23 45.90	0.5
PAX	2.61	60	eP	23 45.21	-0.8
WRH	2.92	20	eP	23 49.10	-1.1
DDM	2.92	44	eP	23 52.13	1.8
HDA	3.09	29	eP	23 51.60	-1.0
MID	3.10	137	P	23 52.50	-0.2
CCB	3.13	21	eP	23 51.67	-1.5
DJE	3.15	42	P	23 54.70	1.3
GLB	3.18	93	eP	23 52.03	-2.0
MLY	3.28	358	eP	23 53.70	-1.7
SYI	3.31	198	eP	23 56.03	0.2
HMT	3.33	113	eP	23 54.82	-1.2
MDM	3.36	16	eP	23 55.16	-1.3
FBA	3.37	20	eP	23 54.56	-2.0
IL1	3.42	26	eP	23 55.76	-1.6
ILB	3.42	26	eP	23 55.67	-1.7
GLM	3.51	22	eP	23 57.11	-1.6
TGL	3.81	102	eP	24 02.41	-0.6
BC3	4.23	68	eP	24 06.77	-2.1
IM3	4.48	342	eP	24 09.92	-2.5
IMA	4.55	343	eP	24 10.73	-2.8
BM3	6.20	21	eP	24 34.17	-2.5

76 obs. associated

% NOV 12, 1993 09h 23m 35.60± 0.89s
40.460 N ± 5.7km 23.534 E ± 9.4km
DEPTH = 5.0km (geophysicist)
GREECE (364)

SOH	0.39	339	iPg	23 43.73	0.3
			iSg	23 49.12	
THE	0.47	292	ePg	23 45.00	0.0
			eSg	23 51.44	
PAIG	0.54	168	iPg	23 46.50	0.0
SRS	0.66	4	ePg	23 48.72	-0.1
			eSg	23 58.56	
KNT	0.85	326	ePg	23 52.10	-0.4
			eSg	24 03.92	
GRG	0.99	300	ePg	23 55.00	0.1
			eSg	24 09.60	

S.D. = 0.3 on 6 of 6 obs.

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* NOV 12, 1993 09h 27m 17.24± 3.56s
31.268 S ±19.6km 71.981 W ±26.5km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)
MD 3.9 (SAN).

JACH	1.84	140	iP	27 46.59	-0.5
			iS	28 08.84	
ROCH	1.89	154	iP+	27 47.60	-0.4
			iS	28 12.02	
PEL	2.17	150	iP+	27 51.99	0.2
			iS	28 17.83	
LCCH	2.23	171	iP+	27 52.74	0.2
FCH	2.50	146	iPd	27 56.42	-0.4
TACH	2.54	160	iP	27 57.01	0.0
			iS	28 26.77	
LNV	2.72	170	iP	28 00.04	0.5
RTCB	2.73	95	ePc	28 00.70	0.9
			S	28 33.60	
RTCV	3.00	102	eP	28 04.00	0.4
RTLL	3.01	92	ePc	28 03.80	0.1
			S	28 42.00	
MDZ	3.11	122	iP	27 52.20	-13.0X
			iS	28 18.80	
CFA	3.22	97	ePd	28 07.00	0.4
			S	28 44.20	
RFA	4.57	141	ePc	28 25.70	-0.3
RTPR	4.80	80	e(P)	28 28.00	-1.1
TCA	6.33	93	e(P)	28 47.00	-3.7X

S.D. = 0.6 on 13 of 15 obs.

NOV 12, 1993 09h 27m 49.18± 1.26s
37.761 N ±10.1km 21.010 E ± 8.7km
DEPTH = 30.8 ± 4.8 km
SOUTHERN GREECE (368)
MD 3.3 (ATH).

VLS	0.53	321	ePg	28 00.00	-0.2
			eSg	28 10.00	
AGG	1.63	39	ePn	28 17.50	1.3
			eSn	28 42.48	
VLI	1.86	124	ePg	28 20.00	0.6
ATH	2.15	84	ePn	28 22.00	-1.6
KEK	2.17	334	ePb	28 28.00	4.2X
SRN	2.26	340	ePn	28 31.30	6.2X
LIT	2.61	26	ePn	28 30.52	0.4
			eSn	29 07.50	
KZN	2.61	13	ePb	28 34.00	3.8X
TPE	2.65	343	ePn	28 30.50	-0.1
PAIG	3.00	43	ePn	28 35.00	-0.7
			iSn	29 15.96	
FNA	3.03	5	ePn	28 36.50	0.3
BERA	3.05	345	ePn	28 37.90	1.5
THE	3.24	27	ePn	28 39.00	-0.1
OHR	3.35	357	ePn	28 41.20	0.5
GRG	3.37	18	ePn	28 40.96	0.0
SOH	3.56	30	ePn	28 43.40	-0.2
			eSn	29 27.50	
TIR	3.69	346	ePn	28 44.20	-1.2
KNT	3.70	23	iPn	28 44.52	-1.0
			eSn	29 30.50	
VAY	3.75	18	iPn	28 46.00	-0.3
SRS	3.90	30	ePn	28 48.08	-0.4
LACI	4.00	346	ePn	28 48.10	-1.7
SKO	4.22	4	ePn	28 56.00	3.0X
BCI	4.66	351	ePn	28 56.20	-3.0X

S.D. = 1.0 on 18 of 23 obs.

% NOV 12, 1993 09h 28m 03.80± 0.70s
42.018 N ± 7.7km 7.687 W ± 6.7km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
mbLg 3.3 (MDD). Felt (IV) in the Ginzo de Limia area.

ERUA	0.55	47	iPc	28 14.97	0.0
			e	28 21.40	
EZAM	0.76	280	eP	28 18.52	-0.2
			e	28 28.30	
STS	1.08	324	iPc	28 23.76	-0.3
			e	28 36.30	
EMON	1.44	10	iPc	28 30.73	0.8
			e	28 47.30	
EPLA	2.30	148	eP	28 43.02	0.6
			e	29 11.10	
GUD	2.99	116	iPc	28 52.47	0.2
			e	29 29.30	
ETOR	4.40	104	eP	29 11.20	-1.1

S.D. = 0.7 on 7 of 7 obs.

? NOV 12, 1993 09h 33m 24.12± 0.96s
39.091 N ± 8.1km 27.612 E ± 9.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
ML 2.8 (ISK).

IZM	0.74	202	ePg	33 38.70	0.0
			eSg	33 51.20	
DST	0.94	57	iPg	33 42.20	0.1
EZN	1.24	307	iPn	33 47.20	0.1
EDC	1.27	9	ePn	33 47.50	-0.2

S.D. = 0.2 on 4 of 4 obs.

% NOV 12, 1993 09h 42m 37.91± 0.61s
44.442 N ± 5.5km 7.305 E ± 6.3km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.9 (GEN).

PZZ	0.16	293	P	42 41.74	0.1
			S	42 44.17	
STV	0.20	176	P	42 42.20	-0.1
			S	42 44.90	
ENR	0.23	159	P	42 43.02	0.1
			S	42 45.95	
BHB	0.40	356	P	42 46.04	-0.1
			S	42 51.35	
ROB	0.43	110	P	42 46.79	0.1
			S	42 53.48	
IMI	0.68	141	P	42 51.32	-0.1
FIN	0.69	109	P	42 51.60	0.0

S.D. = 0.1 on 7 of 7 obs.

% NOV 12, 1993 09h 50m 10.90± 3.02s
33.997 S ±17.4km 71.253 W ±13.2km
DEPTH = 54.8 ± 27.1 km
NEAR COAST OF CENTRAL CHILE (135)
MD 3.4 (SAN).

LNV	0.14	287	iP+	50 19.61	0.0
			iS	50 27.23	
TACH	0.43	38	iP+	50 21.71	-0.1
			iS	50 30.92	
CACH	0.56	103	iP	50 23.32	0.0
			iS	50 33.77	
LCCH	0.58	333	iP+	50 23.50	0.0
			iS	50 33.68	
PCH	0.72	59	iP	50 25.55	0.2
			iS	50 36.17	
PEL	0.97	29	iPd	50 28.90	0.3
			iS	50 42.81	
ROCH	1.04	11	iPd	50 29.69	0.0
			iS	50 44.44	
FCH	1.04	51	eP	50 29.59	-0.3
			iS	50 44.73	
JACH	1.42	23	iP	50 34.80	-0.1
			iS	50 53.73	

S.D. = 0.2 on 9 of 9 obs.

% NOV 12, 1993 09h 58m 11.33± 0.83s
39.250 N ± 7.9km 27.701 E ± 7.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
ML 2.7 (ISK).

DST	0.80	63	ePg	58 27.20	0.3
			eSg	58 40.20	
IZM	0.92	202	ePg	58 28.70	-0.2
EDC	1.10	6	ePn	58 31.50	-0.5
EZN	1.21	299	ePn	58 34.20	0.4
IZI	1.74	51	ePn	58 42.00	0.1

S.D. = 0.5 on 5 of 5 obs.

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   NOV  12, 1993  10h 11m 37.61± 0.58s
   54.828 N ± 8.8km  160.266 W ± 7.8km
   DEPTH =  33.0km  (normal)
   4.9mb ( 20 obs.)
 ALASKA PENINSULA                  ( 12)

SDN      0.53 346 iPd   11 50.94   2.3
KDC      5.23  53 eP    12 50.27  -5.2X
SVW      6.76  20 eP    13 18.15   1.0
CP2      7.73  30 eP    13 31.43   0.7
CRP      7.75  30 eP    13 31.05  -0.1
TTA      8.42  13 eP    13 39.24  -1.0
PMS      8.57  37 eP    13 45.50   3.1X
PWA      8.75  34 eP    13 48.50   3.7X
PMR      8.96  36 eP    13 50.80   3.1X
       0.8s    27.90nm          5.5mb X
KLU     10.09  43 eP    14 02.16  -1.1
ANM     10.10 347 eP    14 02.35  -1.0
ADK     10.25 260 eP    14 06.20   0.9
TOA     10.36  40 eP    14 08.30   1.4
IMA     11.73  13 (P)   14 25.31  -0.3
        1.1s    8.08nm          4.8mb X
FBA     11.86  27 eP    14 25.33  -1.9
        0.9s    7.07nm          4.8mb X
INK     18.33  32 eP    15 50.00  -0.5
        0.5s    2.00nm          3.5mb X
YKA     24.48  53 eP    16 56.00   1.6
        0.6s    1.00nm          3.6mb X
MBC     26.29  21 eP    17 12.50   1.2
        0.6s    1.00nm          3.6mb X
FRB     43.72  40 eP    19 41.50   0.9
        0.9s    7.00nm          4.4mb
MAT     45.12 272 eP    19 52.00  -0.4
        1.0s   15.00nm          4.8mb
DAG     46.42  11 iPc   20 02.30   0.2
        0.8s    9.70nm          4.8mb
CN2     47.47 289 eP    20 10.50  -0.3
        0.6s    6.80nm          4.8mb
                 epP    20 24.50  53kmX
SDF     57.97 357 iP    21 27.80  -0.7
KAF     63.29 357 iP    22 03.60  -1.1
        0.4s   11.20nm          5.3mb
XAN     63.41 292 P     22 05.00  -1.0
        1.0s    8.90nm          4.8mb
GTA     63.99 302 eP    22 08.50  -1.4
        1.5s   10.00nm          4.7mb
                 sP     22 24.00
NB2     64.28   5 P     22 10.90  -0.4
        0.8s    5.10nm          4.7mb
NUR     64.94 357 iP    22 14.50  -1.0
        0.3s    5.50nm          5.1mb
HFS     65.29   3 eP    22 16.50  -1.2
        0.4s    4.30nm          4.9mb
CD2     68.59 293 iPd   22 39.40   0.3
EKA     68.61  14 Pd    22 38.30  -0.5
        0.7s    6.00nm          4.8mb
GYA     70.51 288 P     22 51.00   0.0
        1.0s   11.00nm          4.9mb
                 pP     23 06.40  55kmX
KHC     76.29   4 eP    23 25.50   1.2
        1.0s    5.40nm          4.5mb
                 e      23 36.50
GEC2    76.58   4 eP    23 26.50   0.5
        1.2s    3.20nm          4.2mb
                 e      23 29.60
                 e      23 37.80
GUN     80.06 305 P     23 46.40   0.7
        0.4s   19.00nm          5.4mb
KKN     80.44 305 P     23 48.00   0.4
        0.6s   24.00nm          5.4mb
GKN     80.57 306 P     23 48.60   0.4
        0.6s   19.00nm          5.3mb
PKI     80.57 305 P     23 48.60   0.2
        0.6s   22.00nm          5.3mb
DMN     80.68 305 P     23 49.60   0.7
        0.4s   23.00nm          5.5mb
WRA     92.86 239 P     24 48.80   0.8
        0.7s    0.60nm          4.1mb
SPA    144.65 180 iPKPd 31 10.50  -0.5
        0.9s    9.09nm
BUL    144.72 345 iPKPc 31 11.20  -1.3
     S.D. = 1.0  on  38 of  42 obs.
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*  NOV  12, 1993  10h 39m 16.85± 0.48s
   19.869 S ± 9.4km  163.399 E ± 8.3km
   DEPTH =  33.0km  (normal)
   4.5mb (  6 obs.)  4.1Msz (  1 obs.)
 NEW CALEDONIA                     (187)

DZM      3.59 128 iPd   40 10.70  -1.0
                iS     41 21.10
BKM      5.08  65 iP    40 32.00  -0.8
                iS     41 28.00
HNR     10.90 342 eP    41 52.00  -1.7
BRS     12.28 230 iPd   42 08.50  -3.9X
                i      44 21.50
ARMA    14.95 223 eP    42 48.00   0.3
        0.2s    2.00nm          4.1mb
CTA     16.12 266 iP    43 03.00   0.3
CNB     19.75 216 eP    43 48.00   1.0
CAN     19.96 217 eP    43 49.50   0.3
STK     22.93 234 iPc   44 16.20  -3.0
        0.9s   10.80nm          4.3mb
WR2     27.29 265 eP    45 00.00  -0.5
        0.4s    5.10nm          4.5mb
ASPA    27.63 257 iPc   45 02.60  -1.0
        0.6s    7.20nm          4.5mb
     Z  21s     0.60um          4.1Msz
MEEK    41.53 252 iPc   47 02.80  -0.2
MRWA    43.87 248 eP    47 21.80  -0.2
CHTO    73.97 297 eP    50 52.10   0.8
BJI     74.08 324 eP    50 51.50   0.1
        1.0s    7.00nm          4.6mb
LZH     79.15 315 eP    51 21.00   0.8
        1.5s   16.00nm          4.8mb
                sP     51 34.00
GEC2   142.23 327 ePKP  58 44.70  -3.0
        0.8s    1.20nm
                e      58 47.90
                e      58 53.60
                e      58 57.00
                e      59 06.50
WLF    145.16 334 iPKPd 58 53.45   1.0
        1.2s   12.30nm
DOU    145.45 336 PKP   58 53.90   0.9
WLS    145.59 331 PKP   58 53.90   0.5
CDF    145.63 331 ePKP  58 54.10   0.6
        1.0s   23.40nm
ECH    145.82 331 PKP   58 54.23   0.5
BBS    146.21 330 PKP   58 55.33   0.9
BSF    146.27 331 ePKP  58 56.10   1.5
HAU    146.34 332 ePKP  58 56.20   1.6
        0.7s    6.40nm
LOMF   146.61 331 PKP   58 57.08   2.0X
LPL    147.98 328 ePKP  59 01.30   3.7X
        1.1s    6.10nm
LPG    147.99 328 ePKP  59 01.40   3.8X
        0.8s    4.45nm
LOR    147.99 333 ePKP  59 01.00   3.8X
        1.3s   20.95nm
LBF    148.16 333 ePKP  59 01.30   3.8X
SSF    148.30 333 ePKP  59 02.00   4.3X
        1.0s   14.40nm
FLN    148.39 339 ePKP  59 01.70   3.9X
        1.1s   22.20nm
LDF    148.41 339 ePKP  59 01.70   3.9X
        1.2s   25.60nm
SMF    148.48 333 ePKP  59 02.10   4.1X
AVF    148.58 333 ePKP  59 02.20   4.1X
PGF    148.75 322 ePKP  59 02.80   4.1X
SBF    148.77 325 ePKP  59 03.50   4.9X
        0.6s    7.50nm
GRR    148.84 340 ePKP  59 03.20   4.7X
BGF    148.98 334 ePKP  59 03.50   4.7X
LPF    149.21 339 ePKP  59 04.20   5.1X
        1.1s   38.60nm
MAF    149.36 333 ePKP  59 04.70   5.3X
FRF    149.39 326 ePKP  59 04.30   4.8X
TCF    149.46 334 ePKP  59 04.90   5.3X
        1.0s   13.80nm
LRG    149.62 326 ePKP  59 05.20   5.4X
LMR    149.62 326 ePKP  59 05.00   5.2X
        1.2s   17.55nm
LSF    149.77 335 ePKP  59 05.30   5.3X
MFF    150.12 337 ePKP  59 06.30   5.8X
        0.8s    9.80nm
RJF    150.54 334 ePKP  59 07.50   6.3X
CAF    150.60 332 ePKP  59 07.80   6.5X
LPO    151.17 333 ePKP  59 09.20   7.0X
        0.9s    8.70nm
EPF    152.86 332 ePKP  59 13.80   9.1X
     S.D. = 1.3  on  24 of  51 obs.
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?  NOV  12, 1993  10h 50m 27.73± 0.91s
   39.702 N ± 7.8km   29.413 E ± 8.7km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.7 (ISK).

DST      0.61 261 ePg   50 40.10   0.0
                eSg    50 51.10
IZI      0.64   4 iPg   50 40.70   0.2
ALT      0.84 140 ePg   50 44.10   0.0
                eSg    50 56.10
EYL      1.03  33 ePn   50 47.20  -0.1
     S.D. = 0.2  on   4 of   4 obs.
-------------------------------------
?  NOV  12, 1993  11h 02m 18.15± 0.98s
   39.127 N ± 8.3km   27.579 E ± 9.9km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.7 (ISK).

IZM      0.77 199 ePg   02 33.00  -0.2
                eSg    02 44.70
DST      0.94  59 iPn   02 36.60   0.4
EZN      1.20 306 iPn   02 40.80   0.4
EDC      1.24  10 ePn   02 40.50  -0.6
     S.D. = 0.9  on   4 of   4 obs.
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   NOV  12, 1993  11h 16m 33.67± 0.18s
   51.414 N ± 5.0km  177.976 W ± 2.5km
   DEPTH =  33.0km  (normal)
   5.2mb (101 obs.)  5.1Msz ( 50 obs.)
 ANDREANOF ISLANDS, ALEUTIAN IS. (  7)
      Mw 5.6 (HRV). ML 5.2 (PMR).
      Mo=2.1*10**17 Nm (PPT). Felt
      (III) on Adak.
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 33S, 55C
      Centroid Location:
      Origin Time        11:16:38.2 0.4
      Lat 51.52N 0.04 Lon 177.63W 0.07
      Dep  25.2 2.1 Half-duration  1.5
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 1.30 0.05  Mtt=-1.27 0.05
        Mff=-0.03 0.05  Mrt= 2.21 0.23
        Mrf= 1.48 0.17  Mtf=-0.65 0.09
       Principal Axes:
        T  Val=  2.91  Plg=58  Azm=319
        N        0.20       6       58
        P       -3.11      31      152
      Best Double Couple:Mo=3.0*10**17
       NP1:Strike=260 Dip=15 Slip= 113
       NP2:         57     76       84

ADK      0.93  59 iPd   16 52.30   1.9
SMY      5.06 288 eP    17 51.18   2.0
SDN     11.15  63 eP    19 12.90  -0.8
PET     14.41 286 eP    19 58.00   1.1
     Z  18s     3.40um
     N  18s     2.40um
     E  18s     3.00um
SVW     15.68  43 (P)   20 14.36   0.8
        0.8s   269.60nm          5.5mb
KDC     16.01  57 eP    20 16.78  -0.9
        0.5s    60.07nm          5.0mb
SKR     16.30 278 eP    20 08.00 -13.4X
     Z  20s     2.90um
     N  14s     2.10um
     E  20s     2.40um
TTA     16.47  37 eP    20 23.65   0.0
        0.9s   30.87nm          4.4mb
ILT     16.54 359 iPc   20 30.00   5.6X
        1.4s  144.00nm          4.9mb
     Z  18s     4.20um          4.3Msz
     N  16s     2.70um
     E  16s     1.80um
CP2     17.22  45 eP    20 36.48   3.3X
CRP     17.26  45 (P)   20 35.85   2.2
SLKM    17.88  49 (P)   20 40.98  -0.2
PWA     18.42  45 eP    20 49.50   1.8
        0.7s   52.90nm          4.8mb
PMS     18.42  47 eP    20 50.10   2.3
        0.4s   44.20nm          5.0mb
PMR     18.73  46 eP    20 51.73   0.2
        0.6s   30.25nm          4.7mb
                S      24 34.09
IMA     19.15  31 eP    20 56.87   0.1
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12d 11h

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        0.9s    38.15nm          4.6mb
KLU    20.17  48 eP    21 07.82   0.0
TOA    20.23  46 eP    21 10.40   2.0
FBA    20.60  38 eP    21 11.57  -0.5
        0.6s    26.04nm          4.8mb
BALM   21.75  50 eP    21 25.12   1.1
KUR    23.39 268 eP    21 37.40  -2.6
        0.8s   130.00nm          5.5mb
     Z  18s     2.90um          4.8Msz
     N  16s     2.80um
     E  18s     2.90um
SIT    25.23  60 (P)   21 56.26  -1.4
        0.9s    14.62nm          4.6mb
YSS    25.83 276 iPd   22 04.00   0.7
        1.0s   140.00nm          5.5mb
                  e    22 21.00
                  e    26 32.00
                  e    26 47.00
                  e    27 38.00
                  e    27 49.00
KUSJ   26.42 266 eP    22 07.10  -1.7
INK    27.14  35 eP    22 14.50  -0.6
        0.9s     5.00nm          4.2mb X
ASAJ   27.19 270 eP    22 16.90   1.0
HOOJ   27.68 266 eP    22 19.70  -0.6
YAK    29.77 311 eP    22 39.70   0.8
     Z  19s     5.50um          5.2Msz
     N  18s     1.00um
     E  19s     3.60um
                  e    23 50.00
                  e    27 39.00
AOMJ   30.52 266 eP    22 48.70   3.0
OFUJ   30.58 262 eP    22 47.50   1.2
TIK    30.86 330 eP    22 48.00  -0.4
        1.2s    10.00nm          4.5mb
     Z  18s     7.00um          5.4Msz
                  i    23 02.00
                  e    24 04.00
                  i    25 42.00
                  e    33 18.00
YAMJ   32.14 262 eP    23 00.10   0.0
KAKJ   33.30 259 P     23 10.90   0.8
NIIJ   33.37 262 P     23 10.30  -0.4
MBC    33.38  22 eP    23 11.50   1.1
        0.5s     6.00nm          4.8mb
HON    33.84 145 P     23 30.00  15.1X
     Z  20s     3.89um          5.1Msz
CHJJ   34.13 260 P     23 16.50  -0.8
MAT    34.30 262 eP    23 18.00  -0.8
        1.2s    90.63nm          5.6mb
     Z  22s     2.59um          4.9Msz
                  eS   28 30.00
VLA    34.42 276 iPd   23 18.00  -1.7
        1.6s    35.00nm          5.0mb
                  e    23 34.00
                  i    24 35.00
                  i    24 54.00
                  e    33 43.00
MTMJ   34.52 262 P     23 22.00   1.2
MDJ    35.08 280 eP    23 24.00  -1.4
        1.0s    39.00nm          5.3mb
     N  18s     2.37um
                  PP   24 48.00
IIDJ   35.17 261 P     23 27.90   1.6
GMW    35.35  74 ePc   23 28.24   0.6
BMW    35.58  76 eP    23 30.57   0.8
RMW    35.98  74 eP    23 33.81   0.7
LON    36.31  75 eP    23 36.08   0.2
SHW    36.32  76 eP    23 37.29   1.2
WKYJ   37.43 261 P     23 47.30   1.9
VGB    37.54  76 eP    23 46.77   0.6
DPW    37.94  71 eP    23 49.17  -0.3
CN2    38.05 281 Pc    23 50.00  -0.4
        1.0s    15.00nm          4.8mb
     Z  24s     1.67um          4.8MszX
     N  15s     0.89um
     E  15s     0.38um
                  epP  24 02.00  44kmX
                  ePP  25 18.00
YONJ   38.12 264 P     23 52.70   1.6
BOD    38.27 307 eP    23 50.00  -2.1
        0.7s    11.00nm          4.8mb
NEW    38.39  70 eP    23 53.06  -0.2
TKSJ   38.55 262 P     23 54.90   0.2
LGPM   38.75  83 eP    23 57.51   1.0
LBFM   39.09  82 eP    24 00.33   0.9
WDC    39.12  84 P     24 10.00  10.5X
     Z  22s     1.39um          4.7MszX
RES    39.50  25 eP    24 03.00   0.9
SNY    40.28 280 Pc    24 09.00   0.1
        1.0s    76.00nm          5.4mb
     Z  22s     2.24um          5.0Msz
     N  18s     1.67um
     E  18s     1.33um
                  sP   24 25.50
SHNJ   40.28 265 eP    24 11.20   2.2
ORV    40.37  84 eP    24 09.72   0.0
CIT    40.96 299 eP    24 17.00   2.5
HMR    41.02  86 (P)   24 16.23   1.2
COE    41.65  87 eP    24 20.20  -0.1
CMB    41.98  85 P     24 30.00   7.0X
     Z  20s     1.85um          5.0Msz
SAO    42.10  88 P     24 30.00   6.0X
     Z  18s     0.89um          4.7Msz
LRM    42.38  71 eP    24 26.00  -0.5
KVN    42.79  83 eP    24 31.58   1.8
MMPM   43.09  85 eP    24 33.54   1.1
MEMM   43.11  85 (P)   24 33.37   1.2
BONR   43.33  84 eP    24 35.20   0.9
MTUM   43.54  85 eP    24 37.10   1.2
TNP    43.92  83 eP    24 38.36  -0.7
        0.8s    19.39nm          4.9mb
BCH    43.96  88 eP    24 39.58   0.3
NRI    44.44 330 eP    24 41.00  -1.5
        1.2s    30.00nm          5.0mb
     Z  19s     5.60um          5.5Msz
                  i    24 54.00
                  e    26 26.00
                  ePPP 27 04.00
                  e    34 37.00
HVU    44.44  76 eP    24 43.15   0.0
ISA    44.66  87 P     24 50.00   5.1X
     Z  20s     1.09um          4.8Msz
ABL    44.71  88 eP    24 46.15   0.6
TPNV   45.23  84 eP    24 49.60   0.0
        0.6s    21.39nm          5.2mb
DUG    45.36  78 eP    24 50.46   0.0
        0.8s    43.67nm          5.4mb
     Z  22s     1.50um          4.9Msz
                  S    31 30.25
IRK    45.82 303 eP    24 51.00  -2.8
     Z  20s     1.41um          4.9Msz
     N  18s     0.87um
     E  18s     1.31um
                  e    26 44.00
BJI    45.87 283 eP    24 54.50   0.2
        1.0s    24.00nm          5.1mb
     Z  24s     2.00um          5.0MszX
     N  17s     1.09um
                  ePP  26 37.00
                  eS   31 42.00
                  sS   31 54.00
GSC    45.93  86 eP    24 55.00   0.0
SSK    46.09  88 eP    24 57.75   1.4
DAU    46.18  76 eP    24 57.42   0.3
ARUT   46.45  81 eP    24 59.32   0.2
PEC    46.63  88 (P)   25 00.86   0.4
        0.9s    13.45nm          4.9mb
MSU    46.78  79 eP    25 02.01   0.2
EMUT   46.81  77 eP    25 02.10   0.0
ZAK    47.38 301 eP    25 07.00   1.0
        1.0s    50.00nm          5.5mb
     Z  20s     1.66um          5.0Msz
     N  16s     1.55um
     E  20s     3.24um
                  e    27 00.00
                  eS   31 48.00
                  eSS  35 00.00
SRU    47.42  77 eP    25 06.41  -0.4
TIA    47.67 278 eP    25 08.00  -0.6
        1.0s    63.00nm          5.6mb
     Z  24s     1.14um          4.8MszX
PJG    48.14 232 eP    25 07.20  -5.2X
HHC    48.18 286 eP    25 12.00  -0.6
        1.0s   110.00nm          5.8mb
     Z  22s     4.44um          5.4Msz
     N  20s     1.69um
     E  21s     2.42um
                  pP   25 25.00  48kmX
                  PP   27 09.00
                  S    32 11.00
                  sS   32 28.00
RSSD   48.27  68 ePd   25 12.39  -1.1
        0.4s    10.21nm          5.2mb
SSE    48.51 270 Pc    25 15.00  -0.2
        1.0s    42.00nm          5.4mb
     Z  20s     1.40um          4.9Msz
                  eS   32 16.00
GLA    48.64  87 eP    25 16.56   0.3
PV09   48.65  77 ePc   25 15.96  -0.6
PV10   48.78  77 ePd   25 17.48   0.0
PV08   48.90  77 eP    25 18.70   0.2
ULM    49.23  57 eP    25 22.00   1.5
BTO    49.26 287 P     25 21.50   0.6
        1.0s   110.00nm          5.8mb
     N  17s     1.07um
     E  21s     2.97um
                  epP  25 32.00  36kmX
                  PP   27 18.50
                  eS   32 27.00
NJ2    49.33 272 Pd    25 20.00  -1.4
     Z  24s     0.94um          4.7MszX
TIY    49.60 283 eP    25 23.30  -0.3
        0.9s    47.00nm          5.5mb
     Z  27s     2.32um          5.0MszX
     N  18s     2.35um
                  sS   32 49.00
GOL    50.17  73 ePc   25 28.12  -0.1
        0.7s    44.39nm          5.6mb
     Z  21s     2.65um          5.2Msz
GLD    50.23  73 eP    25 28.90   0.4
        1.3s    51.04nm          5.4mb
     Z  21s     3.26um          5.3Msz
DAG    51.41   6 eP    25 33.00  -3.7X
        0.7s     4.11nm          4.5mb
TUC    51.66  84 eP    25 39.64   0.3
        0.7s    10.84nm          4.9mb
     Z  19s     0.63um          4.7Msz
ALQ    52.58  79 ePd   25 45.80  -0.6
        0.9s    10.39nm          4.8mb
     Z  19s     1.36um          5.0Msz
                  ePcP 27 01.51
                  SS   36 43.38
FRB    52.73  32 eP    25 46.00  -0.8
        0.6s    10.00nm          5.0mb
XAN    54.16 281 P     25 56.70  -1.1
        1.2s    22.00nm          5.1mb
     Z  15s     1.46um          5.2MszX
     N  16s     0.96um
     E  16s     1.15um
LZH    55.87 287 iPc   26 10.20  -0.2
        1.2s   190.00nm          6.0mb
     Z  20s     3.57um          5.5Msz
     E  18s     1.99um
                  pP   26 23.00  46kmX
                  sP   26 28.50
                  ePP  28 18.00
                  ScS  35 55.00
GTA    56.03 292 eP    26 10.50  -1.0
        1.0s    80.00nm          5.7mb
     Z  20s     4.89um          5.6Msz
     N  16s     1.27um
                  sP   26 20.00
                  PcP  27 03.50
                  eS   34 02.00
                  sS   34 10.00
JAQ    56.72  44 eP    26 14.00  -2.0
WMOK   57.39  74 eP    26 19.93  -1.1
        0.7s    21.42nm          5.3mb
     Z  22s     1.98um          5.2Msz
                  e    27 48.16
                  S    34 05.61
MEO    57.48  74 iPc   26 22.20   0.5
CVP    57.84 258 eP    26 25.80   1.5
LTX    58.14  82 eP    26 24.11  -2.3
TUL    58.37  71 iPc   26 26.70  -1.2
CD2    59.47 282 eP    26 34.90  -0.8
     Z  19s     1.87um          5.2Msz
     N  15s     1.32um
BAG    59.59 258 eP    26 36.00  -0.7
SLM    59.73  65 P     26 50.00  12.8X
     Z  21s     0.74um          4.8Msz
WMQ    59.75 303 eP    26 36.50  -1.0
        1.0s    21.00nm          5.2mb
     Z  12s     2.67um          5.6MszX
     E  15s     1.69um
FVM    60.07  66 eP    26 37.34  -2.3
        0.4s    43.24nm          5.9mb
     Z  18s     1.35um          5.1Msz
GQP    60.39 254 eP    26 43.50   1.6
MIAR   60.63  71 eP    26 42.11  -1.3
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        0.7s    25.34nm          5.5mb
      Z  20s     0.65um          4.8Msz
                   e     26 54.29
                   e     32 18.95
                   S     35 02.76
ELC    61.24  65 eP     26 45.45  -2.1
ACTO   61.76  55 P      26 51.32   0.3
SVE    61.85 328 eP     26 50.00  -1.5
        2.5s    70.00nm          5.3mb
      Z  21s     3.00um          5.4Msz
      N  21s     1.50um
      E  21s     2.00um
                  eS     35 12.00
TYNO   62.22  55 P      26 54.63   0.5
STCO   62.50  55 P      26 56.44   0.5
GAC    62.54  50 eP     26 54.00  -2.1
ARU    62.86 329 eP     26 57.00  -1.1
      Z  18s     1.40um          5.2Msz
      N  18s     1.00um
      E  18s     1.00um
                   e     27 29.00
OXF    63.09  68 ePd    26 58.69  -1.2
RSNY   63.84  51 eP     27 03.13  -1.6
        1.0s    10.72nm          4.9mb
KMI    64.23 278 Pd     27 06.60  -1.2
        1.0s    50.00nm          5.6mb
      Z  20s     1.60um          5.2Msz
      E  15s     0.90um
                  sP     27 20.00
MCWV   64.71  58 eP     27 09.88  -0.6
        0.9s    23.00nm          5.3mb
      Z  19s     1.43um          5.2Msz
BINY   64.85  53 (P)    27 10.96  -0.4
        0.9s    27.53nm          5.4mb
      Z  20s     1.11um          5.1Msz
                   S     35 52.33
CBM    65.04  45 eP     27 10.75  -1.7
        0.7s    10.90nm          5.1mb
      Z  20s     2.10um          5.3Msz
KAF    65.19 348 iP     27 12.60  -0.6
        0.4s     5.40nm          5.0mb
LBNH   65.32  49 eP     27 13.41  -0.9
        0.4s     5.74nm          5.0mb
      Z  21s     1.42um          5.1Msz
MYNC   65.70  64 eP     27 15.36  -1.6
        0.8s    85.64nm          5.9mb
      Z  21s     1.14um          5.1Msz
                   S     36 02.89
NAV    65.91  60 eP     27 17.39  -0.9
BLA    66.19  60 eP     27 18.88  -1.2
        0.7s    16.10nm          5.2mb
LSCT   66.61  52 P      27 30.00   7.4X
      Z  18s     1.08um          5.1Msz
CVL    66.67  58 eP     27 22.81  -0.3
PAL    66.77  53 (P)    27 23.63   0.0
HRV    66.80  51 P      27 30.00   6.2X
      Z  19s     1.11um          5.1Msz
NUR    66.95 348 eP     27 24.00  -0.5
FRU    67.03 310 eP     27 27.00   1.7
        1.2s    40.00nm          5.4mb
      Z  20s     1.50um          5.2Msz
      N  20s     1.50um
                   e     27 56.00
LMN    67.33  44 eP     27 26.00  -1.2
PRM    67.42  63 eP     27 26.88  -1.0
NB2    67.66 355 P      27 28.50  -0.5
        0.7s     5.20nm          4.7mb
CEH    67.88  60 P      27 40.00   9.3X
      Z  20s     0.42um          4.7Msz
JSC    67.89  63 eP     27 29.82  -1.0
LSA    67.91 290 iPc    27 31.70   0.1
        1.0s   130.00nm          6.0mb
                   S     36 30.00
NRA0   67.94 355 eP     27 25.80  -4.9X
NRE0   67.94 355 P      27 13.40 -17.3X
                  PP     30 03.30
                  PPP    31 55.40
                   S     36 00.40
                  ScS    37 22.10
                  SS     40 49.50
                  ScS    40 50.90
                  SSS    44 19.10
LHS    67.99  62 eP     27 30.79  -0.6
UPP    68.37 352 eP     27 34.20   0.9
KSH    68.93 307 eP     27 39.00   1.6
        0.9s    20.00nm          5.2mb
      Z  20s     2.47um          5.4Msz
      N  14s     1.93um
      E  14s     2.11um
                 eScS     37 27.00
SGS    69.11  63 eP     27 38.45   0.1
MOS    69.21 339 eP     27 41.00   2.4
      Z  18s     1.20um          5.2Msz
HBF    69.38  63 eP     27 40.38   0.4
OBN    70.02 340 eP     27 43.00  -0.5
        0.9s    46.00nm          5.5mb
                   e     28 07.00
                  ePS    37 40.00
CHTO   71.25 277 eP     27 50.30  -1.3
        1.0s    25.75nm          5.2mb
GUN    72.32 293 P      27 59.00   0.7
BDT    72.40 276 eP     28 01.00   2.6
        0.7s    25.80nm          5.3mb
KKN    72.76 293 P      28 01.40   0.7
PKI    72.85 293 P      28 01.60   0.2
NST    72.88 274 eP     28 01.30   0.1
GKN    72.97 293 P      28 02.40   0.6
DMN    73.00 293 P      28 03.00   0.9
EKA    73.54   3 Pc     28 06.30   1.8
        0.9s    15.10nm          5.0mb
DZM    74.44 195 iPc    28 11.90   1.8
NIL    74.82 305 iPc    28 15.70   3.4X
        0.5s     0.02nm          2.4mb X
DCN    75.32   6 eP     28 16.10   1.3
NNT    75.47 272 eP     28 17.00   0.8
                   e     37 31.30
CLL    77.23 353 e(P)   28 29.00   3.4X
BRG    77.59 352 eP     28 27.20  -0.3
MTN    77.70 231 eP     28 27.00  -1.5
        0.6s    26.00nm          5.4mb
CTA    77.79 214 iPd    28 30.00   1.0
        1.0s    25.00nm          5.2mb
MOX    77.99 354 eP     28 32.70   2.9
        1.2s    11.00nm          4.8mb
      Z  20s     0.50um          4.8Msz
                  eS     39 24.00
ENN    78.14 357 eP     28 32.50   2.0
        1.0s    18.00nm          5.1mb
ASH    78.29 318 eP     28 18.60 -13.0X
GRO    78.30 329 eP     28 32.00   0.5
PRU    78.42 352 eP     28 34.50   2.4
      Z  18s     0.50um          4.9Msz
      N  18s     0.80um
      E  18s     0.30um
SNF    78.43 359 P      28 34.40   2.3
PYA    78.51 331 iPc    28 33.00   0.3
        1.0s   100.00nm          5.8mb
      Z  20s     2.50um          5.5Msz
                   i     28 49.00
SPC    78.58 348 eP     28 33.60   0.4
DOU    78.85 358 Pc     28 35.80   1.4
GRF    78.97 354 eP     28 36.00   0.8
      Z  22s     0.60um          4.9Msz
KHC    79.35 352 eP     28 38.30   1.0
        1.0s     7.00nm          4.6mb
      Z  22s     1.20um          5.2Msz
                   e     28 51.50
                   e     29 43.00
GEC2   79.62 352 eP     28 39.00   0.2
        0.9s     4.95nm          4.5mb
                   e     28 43.00
                   e     28 46.90
                   e     28 50.90
                   e     28 53.60
                   e     28 55.20
ZST    79.93 350 eP     28 41.10   0.7
CLI    80.02 343 ePc    28 39.00  -1.9
MTA    80.07 329 eP     28 41.00  -0.1
        0.8s   130.00nm          6.0mb
      N  18s     1.00um
      E  18s     1.00um
SRO    80.17 349 eP     28 46.40   4.8X
FLN    80.18   2 eP     28 41.20  -0.4
        1.0s    45.00nm          5.4mb
      Z  21s     0.77um          5.0Msz
LDF    80.36   1 eP     28 42.20  -0.4
        0.6s    22.55nm          5.3mb
CDF    80.45 356 eP     28 43.00  -0.2
GRR    80.55   2 eP     28 43.40  -0.2
        0.8s    28.50nm          5.3mb
QUE    80.78 307 eP     28 41.80  -3.6X
VRI    80.78 343 ePc    28 43.00  -1.9
IPM    80.82 266 ePc    28 44.90  -0.7
HAU    80.89 357 eP     28 45.00  -0.5
        0.9s     9.65nm          4.8mb
      Z  23s     0.88um          5.0MszX
LPF    80.90   2 eP     28 44.80  -0.7
        0.8s    17.05nm          5.1mb
BSF    81.05 357 eP     28 45.70  -0.7
CFR    81.17 342 eP     28 46.00  -0.9
MLR    81.29 343 ePc    28 46.00  -1.8
ERE    81.54 328 iP-    28 50.00   0.9
CMP    81.67 344 ePd    28 55.00   5.4X
LOR    81.69 359 eP     28 48.70  -0.9
        0.7s     7.60nm          4.8mb
      Z  21s     0.82um          5.1Msz
HYF    81.70 360 eP     28 49.10  -0.6
SSF    81.90 359 eP     28 49.90  -0.8
        1.0s    26.80nm          5.2mb
GZR    81.92 345 ePd    28 52.00   1.0
LBF    81.97 359 eP     28 50.90  -0.2
        0.9s    12.60nm          4.9mb
AVF    82.17 359 eP     28 52.10   0.0
        1.0s    28.20nm          5.3mb
SMF    82.31 359 eP     28 52.90   0.0
        1.0s    40.20nm          5.4mb
PTJ    82.32 350 eP     28 54.50   1.4
WB5    82.33 225 eP     28 52.20  -1.0
                   i     28 53.90
                   i     29 04.40
                   i     29 08.10
MFF    82.35   2 eP     28 53.20   0.2
        0.9s    37.35nm          5.4mb
WR2    82.39 225 eP     28 52.20  -1.3
        0.8s     9.90nm          4.9mb
WRA    82.40 225 P      28 52.70  -0.9
BGF    82.41 359 eP     28 53.40   0.0
        0.6s    10.75nm          5.1mb
BRS    82.58 206 iP     28 56.00   1.6
TCF    82.68 360 eP     28 54.50  -0.3
        0.9s    17.70nm          5.1mb
LSF    82.72   0 eP     28 54.90  -0.1
        0.6s    25.05nm          5.5mb
MAF    82.75 360 eP     28 55.20   0.1
        0.8s    17.05nm          5.2mb
ORX    83.20 356 P      29 00.10   2.5
LPL    83.37 357 eP     28 58.10  -0.5
        0.6s     3.45nm          4.7mb
LPG    83.38 357 eP     28 58.90   0.1
        0.7s     5.30nm          4.8mb
LSD    83.41 356 P      29 00.10   1.2
RJF    83.66   0 eP     28 59.20  -0.7
        1.0s    25.60nm          5.3mb
      Z  22s     0.70um          5.0Msz
RSP    83.71 356 P      28 59.75  -0.5
RRL    83.96 357 P      29 03.46   1.8
BHB    84.02 356 P      29 04.36   2.7
LFF    84.02   1 eP     29 01.70   0.0
        0.7s    38.35nm          5.7mb
CAF    84.04 360 eP     29 01.30  -0.5
        1.0s    28.80nm          5.4mb
PCP    84.26 355 P      29 01.83  -1.1
LPO    84.28   1 eP     29 02.30  -0.7
        0.9s    48.30nm          5.7mb
PZZ    84.36 356 P      29 04.30   0.7
PLE    84.44 347 iPd    29 04.87   0.9
PGB    84.46 344 iPc    29 05.00   1.0
ROB    84.54 356 P      29 03.97  -0.4
VTS    84.58 344 eP     29 04.00  -0.7
FIN    84.61 356 P      29 04.13  -0.6
STV    84.61 356 P      29 03.68  -1.1
ENR    84.63 356 P      29 03.91  -0.9
HYB    84.68 291 eP     29 04.50  -0.9
IVA    84.82 347 iPd    29 06.09   0.3
IMI    84.92 356 P      29 05.14  -1.2
HVAR   84.96 349 iP     29 05.90  -0.5
BRY    84.97 348 iPd    29 06.05  -0.6
SBF    84.99 356 eP     29 05.70  -0.9
        0.8s    39.20nm          5.7mb
NKY    85.00 348 iPd    29 06.24  -0.5
PVY    85.08 347 iPd    29 06.64  -0.6
RZN    85.19 343 eP     29 09.00   1.1
KKB    85.31 344 iP     29 02.00  -6.2X
FRF    85.32 357 eP     29 07.40  -0.8
        1.0s    21.60nm          5.3mb
TTG    85.34 347 iPd    29 07.35  -1.0
HCY    85.43 348 iPd    29 06.94  -1.8
MMB    85.47 344 eP     29 11.00   2.0
SKO    85.47 346 eP     29 07.00  -2.0
BDV    85.54 348 iPd    29 07.53  -1.8
LMR    85.55 357 eP     29 08.70  -0.7
```

12d 11h

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        0.7s    11.90nm          5.2mb
LEM    85.69 254 ePd   29 10.00  -0.6
ARMA   85.76 206 eP    29 11.10   0.6
        1.0s    16.00nm          5.2mb
ULC    85.80 347 iPd   29 07.99  -2.7
ASPA   85.86 223 iPc   29 10.50  -0.6
        1.0s    18.50nm          5.3mb
      Z  21s     0.70um          5.0Msz
EPF    85.93   1 eP    29 10.70  -0.6
PGF    86.22 355 eP    29 12.70  -0.2
        1.0s    66.60nm          5.8mb
POO    86.50 295 iPd   29 22.20   7.7X
        0.6s   226.67nm          6.6mb X
BOM    86.80 296 ePd   29 14.30  -1.5
GBA    88.35 290 Pd    29 24.00   0.7
STK    90.24 213 eP    29 29.20  -2.6
        0.7s     8.10nm          5.1mb
KOD    90.99 288 eP    29 36.80   0.7
LKO   118.94   9 PKP   35 19.08  -1.4
        0.4s     5.50nm
TIC   121.86   8 PKP   35 25.00  -1.0
KIC   122.16   8 ePKP  35 25.40  -1.2
        0.5s     5.00nm
LIC   122.27   8 PKP   35 25.80  -1.0
        0.5s     9.00nm
      Z  21s     0.59um          5.2Msz
SOB1  125.22  55 (PKP) 35 43.00  10.5X
LSZ   138.30 320 ePKP  35 49.00  -8.5X
SPA   141.22 180 ePKPd 36 00.00  -1.2
        0.9s     9.09nm
BUL   142.47 316 iPKPd 36 02.10  -2.8
BFT   146.61 310 ePKP  36 14.00   2.2
        0.7s    28.00nm
MAW   146.83 218 iPKPd 36 12.10   1.6
        1.1s    36.07nm
                 ipPKP 36 25.80
SLR   147.48 312 iPKPd 36 15.40   2.3
        1.0s   220.00nm
KSR   148.23 314 ePKP  36 17.00   2.7
        1.0s    60.00nm
WIN   148.92 332 ePKP  36 18.50   3.0
        1.0s    60.00nm
SEK   149.98 310 iPKPd 36 20.90   3.9X
        0.6s    76.00nm
SWZ   150.07 315 iPKPc 36 22.00   4.9X
        1.3s    80.00nm
BOSA  151.26 313 (PKP) 36 16.05  -2.5
                ePKPbc36 24.57
                ePKPab36 33.63
BLF   151.32 312 iPKPd 36 25.00   6.1X
        0.8s    80.00nm
FRS   152.26 312 ePKP  36 25.00   5.0X
        0.9s    33.00nm
HVD   152.90 311 ePKP  36 32.00  10.8X
        1.0s    40.00nm
GRM   154.58 306 ePKP  36 43.00  19.8X
        0.7s    32.00nm
     S.D. = 1.2  on 266 of 298 obs.
-----------------------------------
%  NOV  12, 1993  11h 28m 43.72± 0.77s
   44.282 N ± 7.1km    7.408 E ± 7.3km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                   (545)
      ML 2.0 (GEN).

ENR     0.06 171 P      28 45.75  -0.3
                 S      28 47.22
STV     0.07 238 P      28 46.30   0.1
                 S      28 47.98
PZZ     0.31 315 P      28 50.75   0.5
                 S      28 55.06
ROB     0.33  88 P      28 50.96   0.3
                 S      28 55.35
BHB     0.57 350 P      28 54.67  -0.6
                 S      29 02.12
     S.D. = 0.6  on   5 of   5 obs.
-----------------------------------
?  NOV  12, 1993  11h 32m 11.77± 4.04s
   28.784 N ±10.3km   34.692 E ±29.3km
   DEPTH =  10.0km  (geophysicist)
 EGYPT                            (553)

BADA    0.38 134 iPd    32 19.33  -0.2
SRFA    0.46  71 iPc    32 20.66  -0.4
HQL     0.58  33 iPc    32 23.40   0.0
                 iS     32 31.67
AYN     1.15  85 iPd    32 33.87   0.6
                 iS     32 51.20
     S.D. = 0.8  on   4 of   4 obs.
-----------------------------------
?  NOV  12, 1993  11h 58m 58.54± 1.03s
   39.049 N ± 8.6km   27.597 E ±10.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 2.6 (ISK).

IZM     0.70 202 ePg    59 12.20  -0.2
                 eSg    59 24.20
DST     0.97  55 ePn    59 17.60   0.5
EZN     1.25 309 iPn    59 22.30   0.5
EDC     1.31   9 ePn    59 22.00  -0.8
     S.D. = 1.1  on   4 of   4 obs.
-----------------------------------
%  NOV  12, 1993  12h 03m 12.93± 0.80s
   39.690 N ± 7.3km   29.466 E ± 7.4km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 2.7 (ISK).

IZI     0.65   0 iPg    03 25.60  -0.3
DST     0.65 263 ePg    03 26.00   0.0
                 eSg    03 36.00
ALT     0.81 142 ePg    03 28.60  -0.1
                 eSg    03 41.10
EYL     1.02  31 ePn    03 32.60   0.3
EDC     1.39 299 ePn    03 38.50   0.1
     S.D. = 0.3  on   5 of   5 obs.
-----------------------------------
?  NOV  12, 1993  12h 26m 37.63± 1.32s
   31.822 S ± 5.7km   72.396 W ±13.2km
   DEPTH =  33.0km  (normal)
   4.8mb (  1 obs.)
 OFF COAST OF CENTRAL CHILE       (134)
      MD 4.2 (SAN).

IHA     1.36 152 eP     27 01.00   0.6
                 i(S)   27 20.00
ROCH    1.64 135 iP+    27 04.11  -0.6
                 iS     27 28.69
JACH    1.75 120 iP     27 05.43  -0.8
                 iS     27 29.49
LCCH    1.79 157 iPd    27 06.99   0.3
PEL     1.96 133 iPd    27 08.75  -0.4
                 iS     27 35.47
TACH    2.20 146 iP     27 13.25   0.6
LNV     2.28 159 eP     27 13.46  -0.3
FCH     2.33 131 iP+    27 14.28  -0.4
                 iS     27 45.49
PCH     2.39 139 eP     27 15.74   0.3
RTCB    3.09  85 ePc    27 25.60   0.3
                 S      28 03.70
ZON     3.18  86 eP     27 23.40  -3.2X
MDZ     3.18 110 eP     27 28.40   1.8
                 i      27 31.20
                 iS     28 09.10
RTCV    3.28  92 e(P)   27 29.00   1.0
RTLL    3.39  83 e(P)   27 24.00  -5.5X
CFA     3.55  88 iPc    27 32.00   0.2
                 S      28 21.00
RFA     4.41 133 ePc    27 43.70  -0.4
RTPR    5.27  75 e(P)   27 57.00   0.9
CYA     6.63  61 e(P)   28 14.00  -1.4
                 S      29 35.00
TCA     6.68  88 e(P)   28 13.50  -2.5
                 (S)    29 33.00
FSA     8.00  46 e(P)   28 36.00   1.6
SLA     9.32  42 e(P)   28 58.30   5.4X
CNCB   15.47  16 P      30 21.20   5.6X
LPB    15.71  15 eP     30 29.00  10.4X
LPAZ   15.94  15 P      30 21.30  -0.5
LKO    75.86  69 P      38 22.67  -0.2
        1.0s    11.00nm          4.8mb
     S.D. = 1.1  on  20 of  25 obs.
-----------------------------------
   NOV  12, 1993  13h 08m 45.52± 0.99s
   41.627 N ± 8.6km   22.295 E ± 7.6km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION       (383)
      ML 2.2 (SKO).

VAY     0.37 146 iPg    08 53.30   0.2
                 iSg    08 58.70
KKB     0.64  68 iPg    08 57.00  -1.3
SKO     0.73 299 ePn    08 59.50  -0.3
MMB     1.07  92 iPg    09 05.00  -0.8
VTS     1.18  35 iP     09 08.00   0.4
PGB     1.67  56 ePg    09 16.00   1.0
RZN     1.81  87 iP     09 18.00   0.8
     S.D. = 1.0  on   7 of   7 obs.
-----------------------------------
?  NOV  12, 1993  13h 13m 23.78± 1.11s
   39.263 N ±10.0km   27.619 E ±15.3km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 2.8 (ISK).

DST     0.85  66 ePg    13 40.50   0.2
                 eSg    13 52.00
IZM     0.91 198 ePg    13 41.20   0.0
                 eSg    13 56.00
EDC     1.10  10 ePn    13 44.50   0.1
IZI     1.79  53 ePn    13 54.60  -0.4
     S.D. = 0.4  on   4 of   4 obs.
-----------------------------------
*  NOV  12, 1993  13h 14m 16.24± 1.81s
   17.051 N ±15.6km   61.494 W ±16.1km
   DEPTH =  32.0 ±  5.3 km
 LEEWARD ISLANDS                  ( 92)
      ML 3.5 (FDF). MD 3.3 (TRN).

ANG     0.34 288 eP     14 23.84  -0.5
                 eS     14 29.34
BPA     0.35 269 iPc    14 24.11  -0.5
                 S      14 29.60
SFG     0.84 160 eP     14 31.11  -0.6
DOG     1.02 187 eP     14 34.60   0.2
PAG     1.03 190 eP     14 34.77   0.2
                 S      14 48.75
MGG     1.14 171 eP     14 36.20   0.2
SKI     1.22 283 eP     14 38.15   1.0
                 eS     14 53.35
FDF     2.33 172 eP     14 52.90  -0.2
                 S      15 20.60
CRM     2.35 166 eP     14 53.10  -0.3
MVM     2.55 167 ePd    14 56.18  -0.1
                 S      15 26.20
SLB     3.24 172 eP     15 07.11   1.1
                 eS     15 44.06
CEOS   10.39 221 eP     16 45.80  -0.5
     S.D. = 0.7  on  12 of  12 obs.
-----------------------------------
   NOV  12, 1993  13h 19m 50.39± 0.45s
   44.214 N ± 4.7km   12.214 E ± 3.0km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                   (545)
      ML 4.1 (VIE), 3.9 (LDG), 3.6
      (STR). MD 3.7 (TRI).

TRI     1.86  36 e(Pn)c20 22.70   0.2
                 i      20 27.50
                 i      20 46.40
                 i(Sg)  20 54.10
RIY     1.92  53 iPnc   20 23.70   0.4
                 iSn    20 48.70
VOY     2.17  33 iPnc   20 27.60   0.4
                 eSn    20 55.00
                 eSg    21 04.20
CEY     2.19  45 ePnc   20 27.40   0.0
                 e      20 32.90
                 eSg    21 04.90
LJU     2.46  41 iPnc   20 31.90   0.8
        0.7s   470.00nm
                 iPg    20 40.90
                 iSn    21 02.90
                 iSg    21 16.30
VBY     2.52  58 iPnc   20 32.50   0.5
                 i      20 40.20
                 iSg    21 16.50
PCP     2.65 278 P      20 35.07   1.1
                 S      21 05.72
OGA     2.78 343 ePn    20 37.10   1.1
SCE     2.85 353 ePn    20 37.30   0.4
OSS     2.87 330 eP     20 39.80   2.6
PGF     2.87 236 Pn     20 37.40   0.2
                 Sn     21 11.70
FIN     2.88 271 P      20 37.66   0.5
                 S      21 10.94
VDL     2.98 321 eP     20 40.40   1.6
TMA     3.03 310 eP     20 40.10   0.7
WTTA    3.08 353 iPnd   20 42.20   2.1
                 iPg    20 52.80
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                iSn   21 21.30
                iSg   21 35.80
SQTA    3.09 347 iPnd 20 42.50   2.3
                iPg   20 52.40
                iSn   21 22.10
                iSg   21 34.40
ZAG     3.12  58 i(Pn) 20 40.50  0.0
ROB     3.12 273 P    20 41.21   0.6
IMI     3.13 266 P    20 40.70  -0.1
PTJ     3.14  56 iPn  20 41.60   0.7
                iSn   21 23.60
HVAR    3.24 107 ePn  20 41.40  -0.9
ORX     3.32 297 P    20 40.81  -2.8
                S     21 16.23
SAOF    3.36 268 P    20 44.99   0.9
ENR     3.45 272 P    20 44.91  -0.4
                S     21 22.49
AUTN    3.45 268 P    20 46.68   1.2
SBF     3.46 266 Pn   20 46.00   0.5
                Sn    21 24.50
LLS     3.49 321 eP   20 47.90   2.0
STV     3.51 272 P    20 47.41   1.2
                S     21 26.90
MMK     3.52 303 eP   20 46.20  -0.3
AURF    3.54 266 P    20 48.07   1.5
BHG     3.54   7 ePn  20 48.70   2.2
TOUF    3.58 269 P    20 48.89   1.6
BHB     3.60 282 P    20 45.46  -1.9
                S     21 25.19
RSP     3.66 287 P    20 47.49  -0.8
                S     21 26.78
PZZ     3.68 276 P    20 47.82  -0.8
                S     21 28.37
LSD     3.81 291 P    20 49.33  -1.3
                S     21 29.47
CALN    3.87 265 P    20 52.23   0.9
DIX     3.88 300 eP   20 52.50   0.9
RRL     3.94 282 P    20 53.32   0.8
FRF     4.08 263 Pn   20 54.50   0.4
                Sn    21 41.00
LPG     4.09 290 Pn   20 53.80  -0.8
                Sn    21 40.30
LPL     4.11 290 Pn   20 54.40  -0.4
                Sn    21 40.10
EMS     4.17 298 eP   20 57.70   2.0
ZLA     4.22 322 ePd  20 57.00   0.8
LMR     4.22 260 Pn   20 56.10  -0.1
                Sn    21 43.70
LRG     4.30 262 Pn   20 58.00   0.7
                Sn    21 45.80
SOP     4.61  40 e(P) 21 11.50   9.9X
FEL     4.69 323 eP   21 02.70  -0.2
GEC2    4.74  12 Pn   21 03.10  -0.6
                Sn    21 56.20
LOMF    4.90 312 P    21 05.01  -0.9
VKA     4.95  34 iPnd 21 06.70   0.2
                iPg   21 28.70
                iSn   22 05.40
                iSg   22 37.80
WET     4.95   5 iPnc 21 06.60   0.0
KHC     5.01  10 Pn   21 07.00  -0.3
                e     21 14.50
                e     21 26.50
                eSn   21 59.50
                e     22 42.50
MOF     5.07 318 P    21 08.07  -0.3
                S     22 05.44
UZD     5.08  60 e(P) 21 35.00  26.7X
BSF     5.23 316 Pn   21 10.00  -0.6
                Sn    22 07.00
ZST     5.23  39 ePn  21 09.20  -1.3
ECH     5.32 321 P    21 10.55  -1.3
WLS     5.38 323 P    21 11.27  -1.4
CDF     5.42 323 Pn   21 12.90  -0.3
GRF     5.52 353 iPnd 21 13.70  -0.9
                ePg   21 37.40
                eSn   22 13.80
                eSg   22 48.60
SRO     5.57  48 eP   21 10.40  -4.8X
                e     21 40.20
HAU     5.57 315 Pn   21 14.60  -0.7
                Sn    22 14.80
VITF    5.89 315 P    21 19.56  -0.2
PRU     5.99  15 Pn   21 19.70  -1.5
      1.1s    49.80nm         5.2mb
                i     21 44.60
                Sn    22 22.40
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                e     22 43.20
                eSg   23 09.70
SMF     6.37 295 Pn   21 25.70  -1.0
                Sn    22 34.80
LBF     6.41 298 Pn   21 25.90  -1.3
                Sn    22 35.40
MOX     6.45 357 ePn  21 27.50  -0.2
                iPg   21 55.30
                iSn   22 36.50
LOR     6.60 301 Pn   21 28.50  -1.3
                Sn    22 40.40
SSF     6.74 298 Pn   21 30.40  -1.3
                Sn    22 43.50
AVF     6.74 296 Pn   21 30.10  -1.7
BRG     6.77   9 ePn  21 31.00  -1.1
                e     22 00.80
                e     22 53.00
                iSg   23 32.50
BGF     7.00 293 Pn   21 34.90  -0.5
                Sn    22 49.80
MAF     7.10 290 Pn   21 35.90  -1.0
SKO     7.12 105 ePn  21 36.00  -1.0
CLL     7.12   4 iPn  21 35.50  -1.6
                (Sg)  23 51.00
                eSg   42 58.00
KSP     7.18  21 eP   22 06.00  28.0X
                eS    23 05.00
                e     23 40.00
CAF     7.28 279 Pn   21 38.50  -0.9
     S.D. = 1.1  on  74 of  78 obs.
-----------------------------------
   NOV  12, 1993  13h 27m 28.13± 0.30s
   18.120 N ± 4.7km   76.533 E ± 4.3km
   DEPTH =  10.0km  (geophysicist)
   4.6mb ( 19 obs.)
 SOUTHERN INDIA                  (314)
      At least 25 people injured and
      more than 100 houses damaged in
      the Latur area. Felt in the
      Osmanabad-Sholapur-Gulbarga
      area.

HYB     2.05 110 iPn  28 04.50   1.4
                iSn   28 30.50
POO     2.58 280 iPc  28 12.80   2.1
      0.6s   226.67nm
                iS    28 50.50
BOM     3.61 283 ePn  28 24.80  -0.5
                eSn   29 11.80
GBA     4.57 169 P    28 37.70  -1.3
      0.2s     2.00nm
KOD     7.89 173 ePn  29 25.00  -1.0
                eSn   30 46.00
NDI    10.53   3 eP   30 01.20  -1.0
DMN    12.31  38 P    30 26.80   0.2
GKN    12.34  36 P    30 26.80  -0.1
PKI    12.46  39 P    30 28.60  -0.1
KKN    12.55  38 P    30 29.60  -0.2
GUN    12.99  40 P    30 35.20  -0.7
QUE    14.85 326 eP   31 05.50   5.4X
                eS    35 07.50
LSA    17.63  46 P    31 39.80   3.8X
      0.8s     7.00nm         3.8mb
CHTO   21.27  85 eP   32 22.80   5.8X
WMQ    27.30  18 eP   33 18.00   3.1X
NUR    56.01 332 eP   37 14.20   5.2X
KAF    56.02 334 iP   37 10.40   1.3
      0.7s     6.90nm         4.8mb
GEC2   58.74 317 eP   37 29.30   0.6
      0.7s     1.19nm         4.1mb
HFS    60.99 329 eP   37 44.30   0.5
      0.4s     1.50nm         4.5mb
NB2    62.40 330 P    37 53.20  -0.1
      0.7s     2.00nm         4.4mb
LPG    63.20 312 eP   37 58.30  -0.9
LPL    63.21 312 eP   37 58.40  -0.8
      0.5s     3.05nm         4.7mb
BSF    63.24 315 eP   37 59.00  -0.2
LBF    65.13 314 eP   38 10.90  -0.6
LOR    65.21 314 eP   38 12.50   0.5
      0.7s     2.45nm         4.5mb
SMF    65.23 314 eP   38 11.50  -0.6
      0.5s     2.05nm         4.6mb
SSF    65.46 314 eP   38 13.20  -0.3
      0.7s     4.85nm         4.8mb
AVF    65.56 314 eP   38 13.70  -0.5
      0.5s     1.70nm         4.5mb
```

```
MAF    66.12 313 eP   38 17.90   0.1
TCF    66.36 313 eP   38 19.40   0.0
      0.9s     5.55nm         4.8mb
CAF    66.52 312 eP   38 20.50   0.1
      0.7s     3.10nm         4.6mb
LSF    66.84 313 eP   38 22.30  -0.1
RJF    66.89 312 eP   38 23.10   0.4
      0.9s     7.20nm         4.9mb
LPO    67.15 312 eP   38 24.70   0.3
      0.5s     2.85nm         4.7mb
LFF    67.46 312 eP   38 26.70   0.4
      0.6s     8.50nm         5.1mb
EPF    67.88 310 eP   38 27.90  -1.2
      0.4s     1.30nm         4.5mb
MFF    67.98 314 eP   38 29.60   0.1
      0.7s     3.65nm         4.7mb
WRA    68.17 121 P    38 32.20   1.1
      1.0s     4.10nm         4.6mb
WR2    68.19 121 iPd  38 32.10   0.8
      0.7s    12.20nm         5.2mb
CNCB  146.16 267 PKPc 47 14.00   3.2X
LPAZ  146.23 268 iPKPc 47 13.80  2.8X
LPB   146.23 267 PKP  47 21.50  10.7X
     S.D. = 0.8  on  34 of  42 obs.
-----------------------------------
   NOV  12, 1993  13h 45m 12.08± 0.62s
   42.714 N ± 6.6km   24.114 E ± 9.2km
   DEPTH =  10.0km  (geophysicist)
 BULGARIA                        (359)

SRS     1.64 194 ePb  45 40.40  -0.7
                iSb   46 00.54
KNT     1.80 211 ePb  45 43.00  -0.3
                eSb   46 04.74
VAY     1.81 220 iPn  45 42.00  -1.4
SOH     1.97 197 ePb  45 45.90  -0.1
                iSb   46 11.02
SKO     2.12 250 ePn  45 49.00   1.0
GRG     2.17 217 ePn  45 49.46   0.6
                eSn   46 17.86
ALN     2.32 141 ePn  45 51.18   0.3
                eSn   46 22.14
OUR     2.38 182 ePn  45 52.58   0.9
                eSn   46 22.25
MLR     3.07  25 ePd  46 01.50  -0.2
VRI     3.67  30 eP   46 10.00  -0.1
     S.D. = 0.8  on  10 of  10 obs.
-----------------------------------
*  NOV  12, 1993  13h 49m 23.64± 0.59s
   40.929 N ± 7.7km   51.907 E ± 7.4km
   DEPTH =  33.0km  (normal)
   4.4mb (  4 obs.)
 CASPIAN SEA                     (338)

BAK     1.62 251 eP   50 03.00  12.8X
                iS    50 33.00
TAB     5.18 238 eP   50 41.00   0.0
TEH     5.20 185 iPc  50 40.00  -1.3
GRO     5.22 300 iPd  50 47.50   6.1X
                iS    51 48.00
ERE     5.69 265 eP   50 54.00   5.8X
ASH     5.81 119 P    50 51.00   1.3
      0.3s   320.00nm         6.4mb X
                iS    51 52.40
PYA     7.24 298 iP   51 10.00   0.2
      1.0s   100.00nm         5.7mb X
                i     52 42.00
ARU    16.09  14 eP   53 08.00  -0.7
                eS    55 55.00
FRU    17.01  76 eP   53 21.00   0.4
      2.0s    90.00nm         4.6mb
MOS    17.54 332 eP   53 26.00  -1.0
      1.5s    70.00nm         4.6mb
SPC    23.70 301 eP   54 40.60   7.2X
NUR    25.79 329 eP   54 53.40   0.5
GEC2   27.96 299 eP   55 13.70   0.6
      0.5s     0.55nm         3.5mb X
                e     55 18.70
                e     55 21.40
                e     55 27.30
                e     55 31.20
HFS    30.35 322 eP   55 35.60   1.4
      0.4s     1.80nm         4.2mb
NB2    31.82 323 P    56 00.70  13.5X
      0.7s     4.90nm
BOD    42.27  45 eP   57 13.80  -1.4
      1.0s     6.00nm         4.3mb
```

12d 13h

```
KIC     60.93 252 P      59 48.00   12.2X
LIC     61.23 252 P      59 50.00   12.1X
        0.4s     4.00nm
     S.D. = 1.1  on  11 of  18 obs.
-----------------------------------
   NOV  12, 1993  14h 16m 29.99± 0.22s
   22.054 N ± 3.2km  121.983 E ± 4.4km
   DEPTH = 179.8km  (  5 depth phases)
   5.1mb ( 44 obs.)
 TAIWAN REGION                     (243)

PIP      3.92 199 iPc    17 32.00    1.3
                  iS     18 20.00
QZH      4.24 313 iPd    17 35.40    0.7
                  S      18 21.50
CVP      4.33 182 iPc    17 38.20    2.2
                  eS     18 15.00
BCP      5.75 193 eP     18 00.00    5.3X
                  eS     19 03.00
BAG      5.77 194 ePd    17 56.00    1.1
        1.0s   756.00nm          5.9mb
HKC      7.24 273 iP     18 15.10    0.9
                  S      19 33.00
QCP      7.43 187 eP     18 37.00   20.3X
QVP      7.45 187 eP     18 18.00    1.0
MCO      7.81 272 iPc    18 22.30    0.5
TGY      7.97 187 iP     18 25.00    1.0
GZH      8.05 279 iPc    18 25.00    0.1
        1.2s   350.00nm          5.6mb
     Z  14s     1.78um          4.1Msz
                  S      19 50.00
GQP      8.12 177 iPd    18 27.00    1.2
                  eS     19 10.00
SSE      9.03 356 iPc    18 38.40    0.7
        1.0s   160.00nm          5.4mb
     N  10s     1.10um
     E  10s     1.00um
                  pP     18 43.50
NJ2     10.34 345 Pc     18 54.60   -0.2
     Z  12s     0.62um
                  S      20 43.00
WHN     10.87 323 eP     19 02.60    0.8
        0.7s   120.00nm          5.5mb
                  S      21 01.00
PLP     11.20 165 eP     19 07.50    1.4
QIZ     11.76 257 Pc     19 14.00    0.6
        1.0s   120.00nm          5.3mb
     N  14s     1.31um
                  S      21 22.50
PPR     12.60 195 iPd    19 24.50    0.3
GYA     14.64 290 iPc    19 51.00    1.0
        1.0s   140.00nm          5.3mb
     Z  14s     1.43um          4.7MszX
     N  10s     1.39um
     E  10s     1.00um
CTB     14.92 171 ePc    19 55.00    1.6
DAV     15.28 166 eP     19 59.00    1.2
XAN     16.58 319 P      20 13.50   -0.1
        0.8s    24.00nm          4.6mb
     Z  15s     0.58um          4.4MszX
                  S      23 14.00
KKM     16.86 200 ePd    20 21.50    4.2X
TIY     17.65 334 Pd     20 25.60   -0.5
        0.9s    51.00nm          4.9mb
     Z  15s     1.18um          4.1MszX
     E  10s     0.80um
                  S      23 37.00
KMI     17.90 284 Pc     20 29.00    0.0
        1.9s   190.00nm          5.2mb
     Z  12s     2.00um          5.4Msz
                  S      23 46.00
TSM     18.10 193 ePc    20 30.50   -0.4
        0.2s    68.50nm          5.7mb
CD2     18.53 302 iPc    20 33.30   -2.1
        1.0s   170.00nm          5.4mb
                  eS     23 47.00
BJI     18.60 346 eP     20 34.50   -1.5
        1.4s    24.00nm          4.4mb
     Z  14s     0.59um          4.4Msz
     N  10s     0.36um
SNY     19.76   4 Pc     20 51.40    3.4X
     E  20s     2.55um
                  pP     21 10.00   99kmX
                  S      24 18.00
MAT     20.17  41 iPd    20 53.10    0.9
        1.3s    96.15nm          5.1mb
                  eS     24 23.00
HHC     20.71 337 P      20 58.00    0.4
        1.0s    20.00nm          4.6mb
     Z  12s     0.72um          4.3MszX
     N  13s     0.44um
                  PP     21 29.00
                  S      24 30.00
BTO     21.08 334 eP     21 01.00   -0.3
     N  12s     0.53um
     E  12s     0.53um
                  S      24 45.00
                  sS     25 21.00
LZH     21.09 316 P      21 02.00    0.5
        1.2s    52.00nm          4.9mb
                  S      24 45.00
NST     21.62 257 eP     21 08.00    1.4
CHTO    21.82 266 ePc    21 09.40    0.8
        1.0s    17.50nm          4.5mb
CN2     21.88   7 eP     21 10.00    1.1
        0.5s     5.80nm          4.3mb
     Z  10s     0.32um          4.0MszX
     N  10s     0.28um
     E  10s     0.20um
                  eS     25 02.00
VLA     22.57  19 iPc    21 18.00    2.4
        2.0s   108.00nm          5.0mb
                  e      21 27.00   32kmX
                  i      21 50.00
                  i      21 55.00
                  iS     25 12.00
                  iSS    25 30.00
PCI     22.91 186 ePc    21 21.50    2.3
NNT     23.20 250 eP     21 23.00    1.0
GUMO    23.33 107 eP     21 24.90    1.7
        0.9s   127.40nm          5.5mb
PJG     23.33 107 eP     21 25.00    1.7
                  TT     46 00.80
MDJ     23.36  14 eP     21 28.00    4.7X
        1.0s    39.00nm          4.9mb
     E  15s     1.18um
                  pP     22 03.40 182km
GUA     23.39 107 eP     21 24.80    0.9
        0.8s    83.58nm          5.4mb
GTA     25.63 317 eP     21 45.80    1.1
        1.5s    11.00nm          4.3mb
     Z  10s     0.32um          4.1MszX
     N  10s     0.31um
                  pP     22 20.50 172km
MRRJ    25.84  34 eP     21 48.60    2.3
IPM     26.72 232 ePc    21 54.10   -0.6
KGM     26.95 225 ePc    21 56.00   -0.7
        0.7s   208.80nm          5.9mb
HOOJ    26.99  36 eP     22 00.50    3.7X
ASAJ    27.85  33 eP     22 08.70    4.2X
KUSJ    28.25  37 eP     22 08.90    0.8
LSA     28.71 292 P      22 12.90   -0.1
        1.0s    18.00nm          4.8mb
                  S      26 45.00
YSS     30.01  29 iPd    22 23.60   -0.1
     Z  16s     0.60um          4.3MszX
KHKI    30.87 192 ePc    22 31.10   -0.4
                  e      24 49.30
LEM     31.97 208 iPc    22 42.40    1.2
WWKK    33.16 138 eP     22 51.50    0.0
GUN     33.16 288 P      22 51.60   -0.2
PKI     33.57 287 P      22 54.60   -0.7
KKN     33.69 287 P      22 55.40   -0.8
        0.8s    20.00nm          4.8mb
DMN     33.84 287 P      22 57.20   -0.3
        0.8s    21.00nm          4.9mb
GKN     34.26 288 P      23 00.20   -0.8
WMQ     35.67 316 eP     23 14.80    2.2
                  eS     28 38.00
MTN     35.83 165 iPc    23 11.10   -2.9
        0.4s    56.00nm          5.6mb
BOD     36.20 353 eP     23 19.80    3.0X
UER     36.54 331 eP     23 21.00    1.3
KNA     38.15 169 eP     23 31.50   -2.0
        0.2s    23.00nm          5.5mb
PET     41.66  33 eP     24 03.00    1.0
KSH     42.68 305 P      24 14.00    3.4X
        1.0s    10.00nm          4.3mb
     Z  16s     1.18um          4.9MszX
     N  10s     0.68um
     E  10s     0.63um
                  PP     25 56.00
                  ePcS   29 52.00
MBL     43.00 183 iPd    24 10.80   -2.4
        1.0s    92.00nm          5.3mb
MGD     43.09  21 eP     24 11.00   -2.5
GBA     43.11 266 P      24 16.00    1.8
KOD     44.19 262 eP     24 24.00    0.7
QIS     45.71 157 iPd    24 34.40   -0.4
ASPA    46.90 165 iPd    24 43.00   -1.2
        1.0s    74.60nm          5.2mb
                  i      26 12.60 464kmX
                  iS     31 17.90
CTA     48.13 149 iPd    24 54.00    0.3
        1.0s   135.00nm          5.5mb
                  i      25 11.00   67kmX
                  i      26 17.00
WARB    48.16 174 iPd    24 53.60   -0.3
MEEK    48.51 184 iPd    24 54.00   -2.6
        1.0s   164.00nm          5.5mb
QUE     49.68 291 eP     25 06.50    0.7
TIK     49.76   3 iPd    25 04.00   -1.5
        1.2s    20.00nm          4.6mb
                  e      32 10.00
MRWA    51.30 187 eP     25 15.20   -2.5
NRI     51.56 345 eP     25 17.00   -2.2
BAL     52.60 186 eP     25 25.00   -2.3
                  e      26 34.00 326kmX
COOL    52.64 181 eP     25 25.00   -2.6
FORT    52.85 173 iPd    25 28.20   -0.9
        0.8s    81.00nm          5.5mb
KLB     53.49 184 eP     25 31.40   -2.5
MUN     54.01 186 eP     25 35.20   -2.5
                  e      26 39.20 296kmX
ASH     56.34 302 eP     25 41.50  -13.0X
ARU     57.22 324 eP     26 00.00   -0.4
BRS     57.47 147 iPd    26 02.00   -0.4
        1.0s    18.00nm          4.8mb
                  i      26 04.00    7kmX
ILT     58.35  22 iPd    26 06.40   -1.7
                  i      26 56.40 220kmX
ARMA    59.44 150 iPc    26 16.20    0.1
        0.8s    67.00nm          5.5mb
                  ePP    28 27.30
BWA     61.54 155 iPd    26 30.90    0.7
DZM     61.66 132 iPc    26 31.90    0.7
CAN     62.55 155 iPd    26 36.80    0.0
CNB     62.69 155 iPd    26 38.00    0.2
        0.8s   123.00nm          5.8mb
TOO     63.30 159 iPd    26 42.00    0.3
        0.4s   176.00nm          6.3mb X
IMA     67.78  26 eP     27 11.10    1.0
        0.9s     5.83nm          4.4mb
                  e      27 53.00 176km
FBA     70.36  27 eP     27 24.96   -0.7
        0.6s     4.68nm          4.4mb
                  e      28 08.66 183km
TOA     71.61  30 eP     27 33.60    0.3
INK     74.92  22 eP     27 52.00   -0.3
        1.0s     3.00nm          4.0mb X
MBC     75.17  13 eP     27 53.50   -0.1
DAG     78.59 351 iPc    28 11.20   -1.3
        0.8s     3.73nm          4.2mb
BWZ     79.40 147 P      28 17.30    0.1
        0.9s    98.00nm          5.5mb
MNG     79.75 142 P      28 18.40   -0.9
HFS     79.78 331 eP     28 19.30    0.2
        0.3s     2.80nm          4.4mb
NB2     80.44 333 P      28 21.80   -0.9
        0.5s     1.60nm          4.0mb X
RES     80.64   9 eP     28 23.00   -0.4
        1.0s     3.00nm          4.0mb X
SKO     82.98 312 eP     28 35.00   -1.2
PRU     83.94 322 eP     28 34.50   -6.3X
CLL     84.19 323 e(P)   28 41.00   -1.1
                  e      29 27.00 186km
KHC     84.89 321 eP     28 45.00   -0.7
        1.1s     4.00nm          4.1mb
                  e      29 33.00 195kmX
                  e      29 36.00
GEC2    84.95 321 eP     28 46.00   -0.1
        1.0s     2.18nm          3.9mb X
                  e      28 48.20    7kmX
                  e      28 52.50
                  e      28 58.90
                  e      29 03.10
                  e      29 30.30
                  e      29 40.30
                  e      29 43.80
                  e      29 49.60
                  e      29 54.00
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                e      29 58.80
KIC   120.68 292 PKP   35 01.00   -1.7
       0.6s     4.50nm
TOV   146.31  21 ePKP  35 52.00    1.7
CAR   146.48  16 ePKP  35 51.20    0.5
LPAZ  168.86  61 PKP   36 20.50    2.9X
LPB   169.01  62 ePKP  36 17.00   -0.4
CNCB  169.25  63 ePKP  36 19.00    1.3
MOCB  172.87  85 PKP   36 19.50    0.3
     S.D. = 1.3  on 106 of 118 obs.
-------------------------------------
?  NOV  12, 1993  14h 20m 11.29± 3.49s
   12.612 S ±25.2km  166.064 E ±24.1km
   DEPTH = 272.9 ± 33.4 km
   5.0mb (  2 obs.)
 SANTA CRUZ ISLANDS                (184)

DZM     9.41 178 iPc   22 24.10    0.8
                iS     24 17.20
CTA    20.40 246 iP    24 27.30   -1.5
STK    29.55 226 iPd   25 52.50   -0.6
       0.7s    34.80nm          5.1mb
MAT    55.50 333 eP    29 22.00    1.5
BALM   83.93  23 eP    32 09.89   -1.9
FBA    84.71  18 iPc   32 13.31   -2.1
       0.7s    12.46nm          4.9mb
FLN   142.27 345 ePKP  39 10.30   -2.5X
LDF   142.33 345 ePKP  39 10.40   -2.6X
SSF   142.66 340 ePKP  39 12.00   -1.6
       0.6s     2.55nm
GRR   142.71 346 ePKP  39 12.40   -1.2
LPL   142.79 336 ePKP  39 13.10   -1.1
       0.5s     2.25nm
LPG   142.80 336 ePKP  39 13.20   -1.1
       0.7s     2.45nm
AVF   142.95 340 ePKP  39 12.90   -1.1
       0.4s     0.90nm
LPF   143.08 346 ePKP  39 13.70   -0.5
BGF   143.32 341 ePKP  39 14.10   -0.6
       0.7s     4.65nm
MAF   143.71 341 ePKP  39 15.50    0.1
       0.5s     3.00nm
TCF   143.76 341 ePKP  39 15.50    0.0
       0.8s     9.65nm
SBF   143.84 333 ePKP  39 15.80    0.0
       0.8s    29.95nm
LSF   144.01 342 ePKP  39 16.10    0.2
       0.6s    12.10nm
PGF   144.15 331 ePKP  39 17.20    0.8
       0.7s     9.50nm
MFF   144.18 344 ePKP  39 16.70    0.6
       0.8s    31.95nm
FRF   144.42 334 ePKP  39 17.90    1.2
       0.9s    22.30nm
LRG   144.63 334 ePKP  39 18.00    1.0
       0.6s     6.05nm
LMR   144.66 334 ePKP  39 18.60    1.5
       0.6s     8.20nm
RJF   144.86 341 ePKP  39 19.30    1.9
       0.5s     3.00nm
CAF   145.02 340 ePKP  39 20.10    2.4
       0.7s     4.65nm
LFF   145.43 342 ePKP  39 20.80    2.5
       0.5s     7.75nm
LPO   145.52 341 ePKP  39 21.30    2.8X
       0.7s     8.80nm
SOB1  145.54 128 ePKP  39 17.90   -1.5
EPF   147.27 340 ePKP  39 28.60    7.1X
     S.D. = 1.4  on  26 of  30 obs.
-------------------------------------
%  NOV  12, 1993  15h 08m 19.65± 2.20s
   61.594 N ±11.2km    4.993 E ±19.3km
   DEPTH =  10.0km  (geophysicist)
 SOUTHERN NORWAY                   (535)
     MD 1.6 (BER).

FOO     0.02  80 iPc   08 21.00   -0.6
HYA     0.72 126 eP    08 34.12    0.4
                eS     08 43.30
ASK     1.12 175 eP    08 41.07    0.5
                eS     08 56.13
EGD     1.33 175 eP    08 43.72   -0.5
                eS     09 03.06
MOL     1.55  50 eP    08 48.06    0.8
                eS     09 09.21
NRA0    3.29 102 ePn   09 11.60   -0.6
                ePg    09 16.93
                eSn    09 52.13
                eLg    10 02.45
     S.D. = 0.8  on   6 of   6 obs.
-------------------------------------
*  NOV  12, 1993  15h 24m 34.62± 2.32s
   13.485 N ±35.5km   91.322 W ±13.0km
   DEPTH =  33.0km  (normal)
   3.9mb (  2 obs.)
 NEAR COAST OF GUATEMALA           ( 71)
     Felt (II) at Ahuachapan, El
     Salvador.

YPE     1.72  68 iPd   25 03.00    0.2
TME     1.98  74 iPd   25 06.70    0.1
VSS     2.04  83 eP    25 07.40    0.0
LFU     2.16  83 eP    25 09.20    0.1
                eS     25 35.30
VSM     2.97  91 eP    25 20.60   -0.1
LTX    19.49 326 eP    29 01.81   -0.2
UYO    20.79 353 iPd   29 15.20   -0.3
ALQ    25.37 330 ePc   30 02.30    1.6
       0.9s     5.25nm          4.1mb
ARUT   31.20 325 (P)   30 53.24   -0.1
YKA    51.68 346 eP    33 39.00   -1.3
       0.8s     0.80nm          3.7mb
     S.D. = 0.8  on  10 of  10 obs.
-------------------------------------
   NOV  12, 1993  15h 28m 12.10± 0.39s
   23.969 N ± 3.1km  142.369 E ± 3.8km
   DEPTH = 656.9 ±  5.7 km
   4.6mb ( 44 obs.)
 VOLCANO ISLANDS REGION            (213)

GUMO   10.59 167 ePd   30 38.70    1.2
       0.5s   135.20nm          5.2mb
                eS     32 37.10
PJG    10.59 167 eP    30 38.60    1.1
GUA    10.65 166 eP    30 38.70    0.6
       0.5s   185.92nm          5.4mb
WKYJ   11.80 331 P     30 49.00    0.0
IIDJ   12.10 342 P     30 51.80    0.0
KAKJ   12.34 352 P     30 53.90   -0.1
                S      33 07.10
TKSJ   12.35 326 P     30 54.50    0.4
MAT    13.03 345 iPc   31 00.50   -0.1
                eS     33 17.00
HOOJ   18.38   2 eP    31 51.20    0.7
MRRJ   18.44 357 eP    31 50.80   -0.2
KUSJ   19.18   5 eP    31 56.40   -1.4
SSE    20.06 295 Pd    32 05.00   -0.9
       1.2s    30.00nm          4.6mb
ASAJ   20.10   1 eP    32 06.20    0.1
CVP    20.18 256 eP    32 07.00    0.0
NJ2    22.24 296 Pd    32 24.80   -0.6
MDJ    23.09 336 eP    32 32.80    0.0
CTB    24.12 229 ePd   32 46.00    3.9X
CN2    24.17 329 eP    32 42.00   -0.4
       1.0s    14.00nm          4.5mb
BJI    27.25 312 eP    33 08.50   -0.7
       1.4s    24.00nm          4.6mb
                S      37 05.00
TIY    28.98 305 eP    33 23.50   -0.7
HHC    30.77 311 eP    33 38.00   -1.2
       1.2s    19.00nm          4.6mb
XAN    30.81 297 P     33 39.40   -0.1
       1.4s    31.00nm          4.7mb
BTO    31.76 309 eP    33 47.50    0.0
GYA    32.34 282 iPc   33 53.00    0.5
       1.0s    24.00nm          4.8mb
                PcP    36 20.20
                S      38 23.40
CD2    34.83 290 iPc   34 13.00    0.0
LZH    35.26 299 iPc   34 17.40    0.8
       1.5s    66.00nm          4.9mb
                pP     34 35.00   71kmX
                ePP    36 01.00
                PcP    36 28.00
KMI    35.98 280 Pc    34 23.00    0.3
       1.0s    50.00nm          5.0mb
MTN    38.20 198 iPd   34 39.80   -0.7
       0.4s    92.00nm          5.7mb X
GTA    38.97 304 eP    34 47.00    0.3
       1.5s    19.00nm          4.4mb
                PcP    36 39.70
                ScP    39 27.00
CHTO   40.64 271 ePc   35 00.20    0.2
       0.9s    11.30nm          4.3mb
BDT    41.02 269 eP    35 05.00    2.1
       0.6s    39.30nm          5.0mb
KNA    41.65 200 iPc   35 07.90    0.0
       0.8s    68.00nm          5.1mb
CTA    43.95 175 iPd   35 25.50   -0.2
       0.6s    13.33nm          4.5mb
QIS    44.34 184 iPc   35 48.00   19.3X
WRA    44.34 191 P     35 28.20   -0.5
       0.6s   151.30nm          5.6mb
WR2    44.34 191 iPc   35 28.00   -0.7
       0.5s   336.40nm          6.0mb X
                iScP   39 49.30
                iS     41 15.10
LEM    45.68 232 ePd   35 40.00    0.8
LSA    45.76 289 P     35 41.40    1.3
       1.0s    18.00nm          4.5mb
ASPA   48.06 190 iPd   35 55.50   -1.3
       0.4s    21.90nm          4.9mb
                ipP    36 13.30   71kmX
                iS     42 06.30
WMQ    48.58 308 P     36 01.00    0.4
       1.0s    42.00nm          4.8mb
                S      42 17.00
MBL    49.93 208 eP    36 09.00   -1.6
GUN    50.58 287 P     36 16.60    0.8
PKI    51.04 287 P     36 19.00   -0.1
KKN    51.12 287 P     36 19.80    0.3
DMN    51.30 287 P     36 21.20    0.3
DZM    51.40 151 iPd   36 21.30    0.0
GKN    51.65 288 P     36 23.40    0.2
BRS    52.04 168 iPd   36 25.50   -0.2
       0.9s    28.00nm          4.6mb
WARB   52.13 198 iPd   36 26.20   -0.2
       0.4s    12.00nm          4.6mb
ARMA   54.80 170 eP    36 44.00   -1.1
       0.7s    12.00nm          4.3mb
STK    55.54 181 iPd   36 44.70   -5.3X
       0.6s    14.70nm          4.4mb
FORT   56.14 195 iPc   36 53.70   -0.4
       0.5s    23.00nm          4.7mb
KSH    57.36 303 iPd   37 04.30    1.6
       0.5s    20.00nm          4.6mb
NDI    57.95 290 iPd   37 06.00   -0.6
MRWA   58.65 207 eP    37 10.00   -1.1
       0.3s     3.00nm          4.0mb
BAL    59.58 206 eP    37 16.40   -0.8
       0.5s    25.00nm          4.7mb
HYB    59.63 277 ePd   37 17.50   -0.4
       1.0s    40.00nm          4.6mb
FBA    60.01  28 ePc   37 17.93   -1.7
       0.5s     4.24nm          3.9mb
KLU    60.52  32 ePc   37 21.89   -1.2
TOO    61.28 177 iPd   37 28.30    0.2
       0.5s    21.00nm          4.6mb
GBA    61.88 273 Pd    37 32.60    0.2
       0.7s     8.00nm          4.1mb
KOD    63.05 270 eP    37 40.60    0.3
INK    65.80  24 eP    37 55.00   -1.2
QUE    66.33 294 eP    38 02.50    2.2
MBC    68.86  15 eP    38 14.50    0.0
       0.5s     6.00nm          4.3mb
MNG    71.26 154 eP    38 27.50   -1.5
RES    75.05  13 eP    38 49.00   -0.8
       0.9s     6.00nm          4.1mb
GMW    75.83  44 eP    38 55.29    0.7
JCW    76.15  43 P     38 56.82    0.5
FMW    76.76  44 P     38 59.93    0.1
SSOR   76.98  47 P     39 01.38    0.4
ASR    77.09  45 P     39 01.75    0.2
SDF    77.41 339 iP    39 02.20   -0.5
EBG    77.47  44 P     39 03.91    0.5
VBEM   77.48  46 P     39 04.17    0.5
WTV    77.57  43 P     39 03.78   -0.2
VGB    77.85  46 eP    39 05.50    0.0
CROR   77.91  46 P     39 06.03    0.2
SAW    77.91  43 P     39 05.84    0.1
VIPM   78.33  46 P     39 08.35    0.2
JBO    78.48  45 P     39 08.98    0.2
DPW    78.59  43 eP    39 08.93   -0.4
NEW    79.10  42 eP    39 12.34    0.4
LNOR   79.33  45 P     39 13.73    0.6
ORV    79.59  51 eP    39 14.37   -0.2
KAF    80.36 335 iP    39 17.00   -1.0
       0.6s    15.30nm          4.7mb
CMB    80.98  52 eP    39 22.06    0.2
       0.7s    10.50nm          4.5mb
NUR    81.92 334 iP    39 25.00   -0.9
```

12d 15h

```
        0.3s    17.30nm          5.1mb
MEMM    82.18   52 eP    39 28.86   1.2
BONR    82.52   52 eP    39 29.59  -0.3
TPNV    84.42   52 eP    39 39.33   0.3
        0.6s    11.43nm          4.7mb
GSC     84.73   54 eP    39 41.20   0.7
DUG     85.38   48 eP    39 43.51  -0.1
        1.2s    19.17nm          4.6mb
DAU     86.33   47 eP    39 48.13  -0.2
HFS     86.35  337 eP    39 45.60  -2.0
        0.4s    12.50nm          5.0mb
NB2     86.57  338 P     39 47.90  -0.8
        0.8s    10.00nm          4.6mb
MSU     86.60   49 eP    39 49.62   0.0
GLA     87.19   55 eP    39 51.49  -0.7
SRU     87.45   48 eP    39 53.19  -0.3
PV09    88.70   48 eP    39 59.97   0.6
PV10    88.83   48 eP    39 59.92   0.0
RSSD    89.05   41 eP    40 00.68  -0.1
        0.6s     5.70nm          4.6mb
GOL     90.59   46 eP    40 09.20   1.2
        1.1s    13.35nm          4.8mb
GEC2    94.26  329 eP    40 20.90  -3.5X
        0.8s     1.55nm          4.2mb
GEC2    94.26  329 eP    40 22.70  -1.7
        0.8s     1.55nm          4.2mb
                 e       40 26.40
                 e       40 33.00
                 e       40 39.10
LKO    134.29  313 PKP   46 19.21  -0.3
        0.5s     7.00nm
KIC    135.97  309 PKP   46 23.80   1.1
        0.5s     5.50nm
LIC    136.27  309 PKP   46 24.20   0.9
LPAZ   150.41   81 PKP   46 49.00   1.2
LPB    150.52   81 ePKP  46 44.00  -3.7X
CNCB   150.72   82 PKP   46 49.80   1.6
MOCB   154.02   90 PKP   46 54.20   1.6
     S.D. = 0.8  on 107 of 112 obs.
-------------------------------------
%  NOV  12, 1993  15h 34m 40.48± 0.71s
   26.882 S ± 6.9km   26.672 E ± 6.9km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)
      ML 2.3 (PRE).

BFS      0.10   99 iPc   34 42.20  -0.6
                 S      34 42.80
KSR      1.03   11 eP    35 00.50  -0.1
SWZ      1.24  256 eP    35 04.00  -0.1
                 S      35 19.00
SEK      1.67  150 iPc   35 11.30   0.7
                 S      35 32.10
SLR      1.84   52 eP    35 13.50   0.4
                 S      35 36.50
BLF      2.26  191 eP    35 18.90  -0.3
                 S      35 45.00
     S.D. = 0.6  on   6 of   6 obs.
-------------------------------------
%  NOV  12, 1993  15h 57m 17.76± 0.80s
   42.477 N ± 7.1km    6.988 W ± 7.1km
   DEPTH =   5.0km  (geophysicist)
 SPAIN                             (377)
      mbLg 2.4 (MDD).

ERUA     0.14  234 iPc   57 20.43  -0.3
                 e      57 24.80
EMON     0.99  345 eP    57 37.20   0.2
                 e      57 48.80
STS      1.22  290 eP    57 40.50  -0.5
                 e      57 59.50
EZAM     1.31  256 eP    57 43.00   0.6
                 e      58 02.00
EPLA     2.51  164 eP    58 00.04   0.2
                 e      58 29.00
GUD      2.81  130 eP    58 04.11  -0.2
                 e      58 36.90
ECRI     3.31   86 eP    58 17.50   6.1X
                 e      58 56.00
     S.D. = 0.5  on   6 of   7 obs.
-------------------------------------
*  NOV  12, 1993  16h 51m 58.73± 1.19s
   44.218 N ± 9.4km   16.305 E ±20.1km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)
      MD 2.9 (TRI). ML 2.5 (LJU).

HVAR     1.04  174 iPg   52 18.40   0.0
                 iSg    52 35.60
VBY      1.49  330 iPgd  52 25.30  -0.2
                 iSg    52 44.20
ZAG      1.61  352 e(Pn) 52 29.30   2.0
                 iSg    52 50.70
PTJ      1.70  352 ePn   52 28.00  -0.7
                 iSn    52 51.00
RIY      1.77  310 ePn   52 28.30  -1.3
                 iSn    52 51.00
CEY      2.02  319 ePn   52 33.50   0.2
                 eSn    52 59.00
LJU      2.21  326 e(Pn) 52 35.50  -0.5
                 e(Sn)  53 04.50
TRI      2.34  310 e(Pn) 52 39.30   1.5
                 e      53 07.10
                 e(Sg)  53 09.50
VOY      2.49  318 iPn   52 40.80   0.8
                 e      52 44.90
                 eSn    53 08.80
                 i      53 14.00
GEC2     4.96  340 Pn    53 13.40  -1.7
                 Sn     54 07.40
     S.D. = 1.3  on  10 of  10 obs.
-------------------------------------
%  NOV  12, 1993  17h 06m 34.33± 0.61s
   40.779 S ± 9.6km  172.776 E ± 9.1km
   DEPTH = 250.0km  (geophysicist)
 OFF W. COAST OF S. ISLAND, N.Z. (161)

QRZ      0.19  256 Pc    07 07.10   0.6
                 S      07 30.60
DIW      0.87   92 P     07 09.40   0.4
THZ      0.99  174 Pc    07 09.90   0.3
                 eS     07 35.30
DSZ      1.21  217 Pc    07 10.60  -0.4
TCW      1.22  111 P     07 11.20   0.3
MRW      1.53  108 P     07 13.00  -0.1
                 eS     07 41.40
WEL      1.59  109 eP    07 13.20  -0.4
KIW      1.62   94 Pc    07 14.10   0.2
CAW      1.77  101 P     07 15.10   0.0
BSZ      1.92   60 P     07 17.10   0.8
LTZ      2.04  191 P     07 16.70  -0.8
                 S      07 47.30
MNG      2.06   86 Pc    07 18.00   0.3
                 S      07 49.20
MTW      2.10  101 P     07 18.00   0.0
BLW      2.12  107 P     07 18.40   0.1
AMW      2.32  104 eP    07 20.30   0.2
CNZ      2.65   54 eP    07 23.50  -0.1
WAHZ     2.94   70 eP    07 26.70   0.1
URZ      4.19   55 eP    07 39.80  -1.0
NOZ      4.60   64 eP    07 45.10  -0.6
     S.D. = 0.5  on  19 of  19 obs.
-------------------------------------
&  NOV  12, 1993  17h 37m 30.34s
   63.332 N          149.243 W
   DEPTH = 101.8km
 CENTRAL ALASKA                    (  1)
      <AEIC>.

RND      0.19   67 iPc   37 44.80   1.5
HUR      0.40  207 iPc   37 45.39  -0.5
                 eS     37 56.74
MCK      0.42   19 ePd   37 45.87  -0.2
                 eS     37 57.20
TRF      0.49  285 iPc   37 46.53  -0.1
                 eS     37 58.83
KTH      0.79  287 ePc   37 48.75  -0.3
                 eS     38 02.40
BWN      0.85  353 iPd   37 49.22  -0.4
                 eS     38 03.43
CUT      1.04  207 ePd   37 51.20  -0.4
NEA      1.25    3 ePd   37 53.48  -0.6
WRH      1.25   24 iPd   37 53.58  -0.5
CCB      1.46   25 iPd   37 56.05  -0.6
                 eS     38 15.26
HDA      1.48   42 iPd   37 56.44  -0.4
                 eS     38 16.12
GHO      1.57  174 ePc   37 57.76  -0.3
THY      1.57   85 eP    37 58.97   0.9
DDM      1.58   72 eP    37 58.33   0.2
SML      1.59  164 ePc   37 57.63  -0.6
                 eS     38 18.97
MDM      1.69   15 iPd   37 59.19  -0.3
FBA      1.70   21 iPd   37 58.84  -0.7

PWA      1.71  190 P     37 59.90   0.2
SKT      1.72  219 iPd   37 58.99  -0.9
                 eS     38 21.02
DJE      1.74   65 ePd   37 59.53  -0.5
                 eS     38 21.77
SCM      1.75  149 ePc   37 59.57  -0.7
PLRM     1.75  178 eP    37 58.99  -1.2
PMR      1.75  178 eP    37 58.40  -1.8
PAX      1.75  100 eP    38 00.56   0.2
                 eS     38 23.71
ILB      1.78   35 eP    37 59.62  -1.0
                 iS     38 22.33
IL1      1.78   35 eP    37 59.73  -0.9
MLY      1.83  340 ePd   38 00.79  -0.5
GLM      1.85   25 iPd   38 01.04  -0.5
SDG      1.88  114 eP    38 01.72  -0.2
TOA      1.88  130 P     38 02.00   0.1
KNK      1.96  169 eP    38 02.49  -0.5
                 eS     38 26.81
SUA      2.00  201 eP    38 03.65   0.0
PMS      2.10  184 P     38 05.00   0.2
TZL      2.18  125 eP    38 05.79  -0.1
CFI      2.27  162 eP    38 05.93  -1.0
DOT      2.35   80 eP    38 07.18  -0.9
NCG      2.36  216 eP    38 07.38  -1.0
CGLM     2.41  214 eP    38 08.82  -0.1
KLU      2.41  139 ePc   38 07.63  -1.3
CRP      2.48  215 eP    38 08.76  -1.2
CP2      2.50  215 eP    38 09.58  -0.8
PWL      2.52  170 eP    38 09.52  -0.9
CKN      2.52  214 eP    38 10.57   0.1
SPU      2.53  213 eP    38 09.88  -0.7
BGL      2.54  217 eP    38 10.82   0.0
CKT      2.55  214 eP    38 10.48  -0.4
CKL      2.59  215 eP    38 11.09  -0.3
VLZ      2.60  147 eP    38 09.76  -1.6
                 eS     38 39.73
VZW      2.61  150 eP    38 09.99  -1.6
BKG      2.68  213 eP    38 11.56  -1.0
TMW      2.82   87 eP    38 13.06  -1.4
MPA      2.85  181 eP    38 14.79  -0.1
SLKM     2.87  190 eP    38 14.67  -0.5
FID      2.90  152 eP    38 14.09  -1.4
TTA      3.10  266 P     38 17.20  -1.1
GLB      3.16  124 eP    38 18.12  -1.0
                 eS     38 54.49
DFR      3.19  212 eP    38 19.73   0.1
HIN      3.22  155 eP    38 18.28  -1.6
SEW      3.24  182 eP    38 19.55  -0.6
CVA      3.25  148 eP    38 16.79  -3.4
NCT      3.28  214 eP    38 21.54   0.7
IM3      3.29  326 eP    38 20.17  -0.7
RDW      3.32  212 eP    38 21.69   0.3
RS2      3.32  212 P     38 22.20   0.7
IMA      3.34  327 eP    38 20.29  -1.4
RED      3.37  211 eP    38 22.62   0.6
LTI      3.37  168 eP    38 20.23  -1.7
BC3      3.39   91 ePd   38 20.61  -1.6
FYU      3.67   26 eP    38 25.16  -0.8
ILIM     3.71  210 eP    38 25.67  -1.0
SVW      3.73  236 P     38 26.30  -0.6
HMT      3.82  140 eP    38 26.84  -1.3
CNPM     3.94  195 eP    38 28.47  -1.3
BALM     3.97  122 eP    38 28.64  -1.6
TGL      3.97  128 eP    38 28.49  -1.8
        75 obs. associated
-------------------------------------
%  NOV  12, 1993  18h 43m 54.39± 0.73s
   31.835 S ± 9.8km   68.114 W ±13.9km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA      (137)

CFA      0.25  335 iPc   44 09.70   0.4
                 S      44 20.00
RTCV     0.36  266 iPd   44 10.00   0.4
RTLL     0.59  329 iPd   44 10.80  -0.3
                 S      44 23.00
RTCB     0.68  301 iPd   44 11.70  -0.3
                 S      44 24.00
RTPR     2.06   42 e(P)  44 28.10  -0.1
RFA      2.94  186 ePc   44 40.00  -0.2
     S.D. = 0.5  on   6 of   6 obs.
-------------------------------------
   NOV  12, 1993  19h 19m 07.49± 0.19s
    4.773 N ± 3.0km  127.558 E ± 4.5km
   DEPTH = 107.0km  (  2 depth phases)
   5.0mb ( 30 obs.)
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TALAUD ISLANDS, INDONESIA (263)

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DAV     3.03 319 ePc+  19 55.00   0.4
                 eS    20 32.10
MNI     4.28 219 ePd   20 11.50  -0.1
                 eS    20 59.50
SWI     6.71 146 ePd   20 45.00   0.0
                 eS    21 55.50
TSM     9.67 268 ePc   21 25.30   0.0
KKM    11.36 277 ePc   21 52.30   4.3X
MTN    17.86 169 eP    23 19.00   8.3X
       0.3s    33.00nm          5.1mb
GUMO   19.19  62 eP    23 31.60   6.0X
       0.6s    97.20nm          5.3mb
PJG    19.19  62 eP    23 31.70   6.1X
GUA    19.21  62 eP    23 31.20   5.4X
       0.6s    85.33nm          5.3mb
KNA    20.43 177 iPc   23 38.20  -0.2
       0.8s    81.00nm          5.1mb
QIZ    22.35 311 eP    23 58.00   0.5
LEM    23.00 240 ePd   24 06.00   2.0
KGM    24.35 264 eP    24 17.50   0.6
WR2    25.46 165 iPd   24 26.60  -0.7
       0.5s    67.00nm          5.4mb
                 eS    29 24.10
IPM    26.44 271 ePc   24 35.10  -1.3
       0.9s    25.50nm          4.8mb
MBL    26.86 196 eP    24 39.50  -0.6
SNG    26.90 276 eP    24 40.00  -0.5
NJ2    28.34 344 Pd    24 57.50   4.2X
ASPA   28.94 168 iPc   24 58.10  -0.7
       0.5s    28.30nm          5.2mb
NST    29.04 294 eP    24 58.50  -1.3
GYA    29.39 319 P     25 03.00   0.0
WKYJ   30.24  13 P     25 10.00  -0.2
YONJ   30.75   9 P     25 15.10   0.4
WARB   30.78 182 iPc   25 15.20   0.1
       0.5s    14.00nm          4.9mb
CHTO   31.22 299 ePd   25 17.50  -1.6
       1.0s    15.25nm          4.7mb
KMI    31.26 313 Pc    25 19.50  -0.1
       1.6s    50.00nm          5.0mb
MEEK   32.40 195 iPc   25 28.70  -0.6
       1.0s   114.00nm          5.6mb
TIA    32.73 344 eP    25 31.70  -0.3
MAT    33.10  16 eP    25 33.00  -2.2
XAN    33.88 332 P     25 41.50  -0.5
       1.0s    40.00nm          5.2mb
CD2    34.31 322 iPc   25 45.40  -0.4
YAMJ   35.14  17 eP    25 51.90  -0.7
FORT   35.35 179 iPc   25 54.90   0.4
       0.4s    27.00nm          5.5mb
MRWA   35.57 198 eP    25 56.30  -0.1
TIY    35.58 339 Pd    25 56.80   0.3
COOL   35.98 189 iPc   25 59.30  -0.5
OFUJ   36.47  19 eP    26 03.80   0.0
BJI    36.58 345 eP    26 05.00   0.3
       1.2s    20.00nm          4.9mb
                 pP    26 29.50 105km
BAL    36.68 196 iPc   26 05.60  -0.1
       0.6s    38.00nm          5.5mb
KLB    37.35 194 eP    26 11.30   0.0
AOMJ   37.45  16 eP    26 13.00   1.0
LZH    38.04 328 Pd    26 18.00   0.7
       1.2s    29.00nm          5.1mb
     Z 25s     0.27um          4.0MszX
     E 16s     0.29um
                 pP    26 43.00 109km
                 ePP   27 42.00
                 eS    32 01.50
                 ScP   32 11.20
MUN    38.11 196 iPc   26 17.90   0.2
HHC    38.68 340 Pd    26 24.10   1.5
       1.4s    29.00nm          4.9mb
STK    38.82 161 iPc   26 19.40  -4.2X
       0.5s    20.50nm          5.2mb
MDJ    39.72   2 eP    26 31.50   0.6
BRS    40.20 144 iPc   26 34.50  -0.6
       0.7s    65.00nm          5.6mb
ADE    40.90 166 eP    26 41.80   1.1
ARMA   41.89 148 iPc   26 49.20   0.1
       0.6s    21.00nm          5.1mb
LSA    42.39 310 P     26 53.70   0.1
       0.7s    16.00nm          4.9mb
GTA    42.65 328 eP    26 55.50   0.4
       1.0s    10.00nm          4.6mb
BWA    43.67 155 iPc   27 04.90   1.5
CAN    44.68 155 iPc   27 11.80   0.3
TOO    45.32 160 iPc   27 17.30   0.9
       0.4s     9.00nm          4.9mb
DZM    46.47 127 iPc   27 25.00  -0.9
HYB    49.55 289 eP    27 49.00  -0.8
GBA    50.17 284 P     27 54.00  -0.4
WMQ    52.36 324 P     28 11.50   0.8
       0.6s     6.90nm          4.8mb
NDI    53.25 302 iP    28 28.00  10.6X
QUE    62.30 302 eP    29 22.90   1.8
CSY    71.96 187 iPc   30 31.30  10.5X
       0.6s    28.80nm
SDN    75.86  34 eP    30 43.19  -0.4
       0.5s    34.44nm          5.4mb
TTA    79.60  27 eP    31 04.39   0.2
       0.6s     5.43nm          4.5mb
KDC    80.62  32 eP    31 09.81   0.4
       0.5s    13.65nm          5.0mb
IMA    81.10  24 eP    31 12.83   0.7
       0.5s     7.79nm          4.8mb
FBA    83.43  25 eP    31 23.45  -0.5
       0.6s     3.44nm          4.4mb
OBN    86.67 325 eP    31 41.00   0.8
                 e     32 02.00
HFS    97.48 333 eP    32 28.00  -2.2
       0.4s     1.20nm          4.7mb
KIC   131.11 283 PKP   38 09.50   0.1
LKO   131.19 287 PKP   38 09.78   0.2
       0.6s     4.50nm
TIC   131.32 283 PKP   38 10.00   0.2
LIC   131.42 283 PKP   38 10.00   0.0
     S.D. = 0.8  on  63 of  72 obs.
-----------------------------------
   NOV  12, 1993  19h 23m 44.66± 0.45s
   49.152 N ± 3.6km    6.810 E ± 5.1km
   DEPTH =   5.0km  (geophysicist)
 GERMANY                          (543)
      ML 2.5 (STR), 2.0 (UCC).

RUP     0.57  16 ePg   23 55.80  -0.4
WLF     0.67 320 iPd   23 58.21   0.2
                 iS    24 07.32
LANF    0.68 104 Pg    23 58.30   0.1
HOFF    0.79 105 Pg    24 01.13   0.7
CDF     0.80 157 Pg    24 00.88   0.1
                 Sg    24 10.58
WLS     0.82 154 Pg    24 00.77  -0.3
                 Sg    24 11.43
ABH     0.87  33 ePg   24 00.70  -1.3
ECH     0.97 166 Pg    24 03.30  -0.2
                 Sg    24 16.15
VITF    1.08 211 Pg    24 05.15  -0.4
                 Sg    24 19.52
MOF     1.32 171 Pg    24 09.68   0.1
                 Sg    24 27.11
FEL     1.51 148 Pg    24 12.67   0.2
ENN     1.72 341 ePn   24 17.00   1.7
       0.6s     5.20nm
                 eSn   24 42.00
DOU     1.72 304 P     24 14.80  -0.6
                 iS    24 39.40
LOMF    1.80 180 Pg    24 18.64   1.9X
     S.D. = 0.8  on  13 of  14 obs.
-----------------------------------
   NOV  12, 1993  19h 48m 37.78± 0.93s
   15.881 N ± 5.4km   60.796 W ±11.5km
   DEPTH =  33.0km  (normal)
 LEEWARD ISLANDS                  ( 92)
      MD 3.7 (TRN). ML 3.4 (FDF).

DEG     0.50 330 iPc   48 47.92  -0.5
MGG     0.50 274 iPd   48 48.40   0.0
SFG     0.53 314 iPc   48 48.68  -0.2
DOG     0.80 281 ePc   48 52.81   0.1
PAG     0.86 280 ePc   48 53.55   0.0
                 S     49 04.68
CRM     1.13 186 iPc   48 57.12  -0.2
                 S     49 10.48
FDF     1.19 197 eP    48 57.91  -0.3
                 S     49 12.10
MVM     1.32 184 iPc   49 00.25   0.2
                 S     49 16.20
BIM     1.38 191 iPc   49 01.12   0.1
                 S     49 18.10
BPA     1.54 319 eP    49 04.00   0.7
                 eS    49 20.00
SLB     2.06 187 eP    49 11.09   0.3
                 eS    49 35.85
SVV     2.58 189 eP    49 18.51   0.3
                 eS    49 46.21
SVB     2.63 190 eP    49 18.80  -0.1
GRW     3.79 193 eP    49 34.99  -0.4
                 eS    50 18.80
     S.D. = 0.4  on  14 of  14 obs.
-----------------------------------
* NOV  12, 1993  19h 54m 35.76± 0.91s
   59.749 N ± 8.4km   12.392 E ± 7.5km
   DEPTH =  10.0km  (geophysicist)
 SWEDEN                           (536)
      MD 3.4 (BER). ML 3.0 (UPP). Felt
      in Varmland.

HFS     0.76  59 eP    54 50.40  -0.2
       0.1s   364.60nm
NRA0    1.08 337 Pg    54 57.34   1.3
                 Sg    55 11.84
KONO    1.42 267 eP    54 44.74 -16.8X
                 eS    55 04.63
UPP     2.65  85 iPn   55 24.00   4.8X
                 iSn   55 51.50
                 iSg   55 56.00
ODD1    2.92 276 eP    55 24.11   1.1
                 eSg   56 09.15
EGD     3.64 281 eP    55 32.30  -0.9
                 eSg   56 30.83
ASK     3.68 285 eP    55 33.81   0.0
                 eSg   56 30.60
MOL     3.68 322 eP    55 33.05  -0.8
                 eSg   56 30.17
KMY     3.68 265 eP    55 33.79  -0.1
                 eSg   56 32.35
MUD     3.71 209 iP    55 34.70   0.4
                 iS    56 16.50
                 e     56 38.00
FOO     4.06 300 eP    55 38.56  -0.6
                 eSg   56 45.62
ARA0   11.28  24 Pn    57 13.64  -6.2X
                 Sn    59 12.82
                 Lg    00 24.12
     S.D. = 0.9  on   9 of  12 obs.
-----------------------------------
   NOV  12, 1993  20h 34m 54.34± 0.43s
   33.758 N ± 3.9km   35.628 E ± 6.7km
   DEPTH =  10.0km  (geophysicist)
   4.2mb (  4 obs.)
 JORDAN - SYRIA REGION            (374)
      ML 4.0 (BHL). Slight damage in
      Lebanon. Felt in northern Israel
      and as far south as Zikhron
      Yaaqov.

BHL     0.15   8 Pgd   34 56.00  -1.8
                 Sg    35 00.00
SHMJ    1.03 174 P     35 13.59  -0.3
BURJ    1.52 174 P     35 21.39  -0.3
SALJ    1.74 178 P     35 25.27   0.4
FAM     1.83 313 eP    35 27.00   1.0
                 eS    35 51.00
KFNJ    1.89 179 P     35 27.26   0.3
MASJ    2.02 178 P     35 29.25   0.3
MDSJ    2.18 166 P     35 31.70   0.4
MKRJ    2.20 180 P     35 32.18   0.7
CSS     2.25 303 eP    35 33.50   1.3
                 eS    36 02.00
SHBJ    2.35 128 P     35 32.00  -1.7
LISJ    2.51 183 P     35 36.61   0.8
RUWJ    2.66 118 P     35 38.56   0.5
DHLJ    2.94 184 P     35 43.19   1.3
PPCY    2.94 293 eP    35 42.00   0.1
JRDJ    3.02 179 P     35 43.56   0.3
SHWJ    3.37 182 P     35 47.93  -0.3
JRSJ    3.50 186 P     35 27.32 -22.6X
GAZ     3.64  20 eP    35 53.50   1.6
NAQJ    3.75 182 P     35 54.29   0.6
AQBJ    4.05 187 P     35 57.14  -0.5
MRSJ    4.07 184 P     35 58.36   0.3
HQL     4.50 186 eP    36 02.80  -1.3
                 eS    37 13.30
AYN     4.88 176 iPd   36 42.20  32.7X
HLW     5.33 224 eP    36 13.50  -2.4
BCK     5.52 313 eP    36 13.00  -5.7X
WAJH    7.60 174 iPc   37 44.70  56.9X
UQSK    9.86 142 eP    37 23.33   4.1X
RYD    13.15 130 eP    38 09.50   5.8X
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12d 20h

```
LPG     25.00 307 eP     40 20.10   0.2
        0.7s     3.95nm          4.2mb
LPL     25.02 307 eP     40 20.40   0.4
        0.8s     2.70nm          4.0mb
CDF     25.72 313 eP     40 25.20  -1.2
        0.9s     6.70nm          4.3mb
BSF     25.78 312 eP     40 26.20  -0.8
        0.7s     4.20nm          4.2mb
     S.D. = 1.0  on  27 of  33 obs.
-------------------------------------
*  NOV  12, 1993  21h 22m 05.30± 0.65s
   6.028 S ± 7.8km  146.106 E ±11.0km
   DEPTH =  33.0km  (normal)
   3.9mb (  2 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)
      ML 4.3 (PMG).

YYYY     0.25 213 iPc    22 11.60  -1.0
MDG      0.84 337 eP     22 19.60  -1.0
LAT      1.09 125 ePc    22 24.30   0.0
MNDI     2.44 267 eP     22 51.00   7.1X
WWKK     3.44 314 eP     23 02.30   4.4X
PMG      3.52 163 eP     22 59.00   0.0
WR2     17.94 218 iPc    26 14.30   0.3
        0.7s     5.40nm          3.8mb
ASPA    21.11 213 iPd    26 56.20   6.6X
        1.1s     9.50nm          4.1mb
GUN     67.14 304 P      32 59.00   0.2
KKN     67.60 303 P      33 02.80   1.3
DMN     67.68 303 P      33 02.00  -0.1
GKN     68.20 303 P      33 05.60   0.4
LIC    151.30 272 PKP    41 58.80   6.9X
     S.D. = 0.8  on   9 of  13 obs.
-------------------------------------
?  NOV  12, 1993  21h 46m 23.35± 6.36s
   41.709 N ±43.2km   22.971 E ±14.2km
   DEPTH =   5.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION       (383)

KNT      0.55 186 ePg    46 34.29  -0.1
                 eSg    46 41.64
SRS      0.75 141 ePg    46 38.40  -0.1
                 eSg    46 50.28
GRG      0.87 210 ePg    46 40.50   0.0
                 iSg    46 51.96
SOH      0.93 162 ePg    46 41.80   0.2
                 eSg    46 55.00
     S.D. = 0.2  on   4 of   4 obs.
-------------------------------------
?  NOV  12, 1993  22h 17m 14.27± 4.50s
   41.505 N ±30.9km   22.999 E ± 9.1km
   DEPTH =   5.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION       (383)

KNT      0.35 193 ePg    17 21.48   0.1
                 eSg    17 29.16
SRS      0.59 131 ePg    17 25.80  -0.3
                 eSg    17 38.00
GRG      0.71 220 ePg    17 28.28  -0.2
                 eSg    17 38.76
SOH      0.73 158 ePg    17 28.92   0.0
                 eSg    17 42.60
OUR      1.39 147 ePb    17 40.60   0.4
     S.D. = 0.4  on   5 of   5 obs.
-------------------------------------
%  NOV  12, 1993  22h 43m 27.78± 0.81s
   39.264 N ± 8.1km   22.657 E ± 9.3km
   DEPTH =  10.0km  (geophysicist)
 GREECE                           (364)

AGG      0.35 227 iPg    43 35.02   0.0
LIT      0.85 351 ePg    43 43.96  -0.1
                 eSg    43 56.00
PAIG     1.03  50 ePg    43 47.04  -0.2
                 eSg    44 02.72
THE      1.39  10 ePb    43 53.04  -0.1
OUR      1.48  43 ePb    43 54.28  -0.1
                 iSb    44 15.44
SOH      1.65  19 iPb    43 57.36   0.5
                 iSb    44 18.96
GRG      1.70 353 ePb    43 57.50  -0.2
                 eSb    44 19.00
SRS      1.99  21 ePn    44 01.96   0.2
                 iSn    44 26.72
     S.D. = 0.3  on   8 of   8 obs.
-------------------------------------
   NOV  13, 1993  00h 16m 49.01± 0.20s
   16.288 N ± 3.4km   98.638 W ± 3.4km
   DEPTH =  19.6km  (geophysicist)
   5.7mb ( 72 obs.)  5.3Msz ( 28 obs.)
 NEAR COAST OF GUERRERO, MEXICO  ( 58)
      Mw 6.0 (GS), 5.7 (HRV).
      Mo=4.7*10**17 Nm (PPT). Depth
      from broadband displacement
      seismograms.
      FAULT PLANE SOLUTION: P-Waves
       NP1:Strike=115 Dip=80 Slip=  90
       NP2:       295     10        90
       Principal Axes:
        T                Plg=55  Azm= 25
        P                   35      205
      Comment: The focal mechanism is
        poorly controlled and
        corresponds to reverse
        faulting. The preferred fault
        plane is NP2.
      RADIATED ENERGY
       No. of sta:   9  Focal mech.  F
       Energy        2.3±0.7*10**12 Nm
      MOMENT TENSOR SOLUTION
      Dep   3            No. of sta:  6
      Moment Tensor;   Scale 10**18 Nm
        Mrr= 0.78        Mtt=-0.78
        Mff= 0.00        Mrt= 0.83
        Mrf=-0.43        Mtf= 0.22
       Principal axes:
        T  Val=  1.22  Plg=65  Azm= 37
        N        0.03       7      292
        P       -1.26      24      199
      Best Double Couple:Mo=1.2*10**18
       NP1:Strike=274 Dip=22 Slip=  71
       NP2:       115     70        97
      CENTROID, MOMENT TENSOR    (HRV)
      Data Used: GDSN
      L.P.B.: 24S, 39C
      Centroid Location:
      Origin Time       00:16:53.8 0.9
      Lat 16.28N  FIX;Lon  98.61W  FIX
      Dep  16.9 4.8 Half-duration  1.8
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 1.76 0.24  Mtt=-2.30 0.21
        Mff= 0.54 0.35  Mrt= 3.39 1.28
        Mrf=-1.04 0.63  Mtf= 0.35 0.19
       Principal Axes:
        T  Val=  3.85  Plg=59  Azm= 26
        N        0.51       6      285
        P       -4.36      30      191
      Best Double Couple:Mo=4.1*10**17
       NP1:Strike=262 Dip=16 Slip=  66
       NP2:       106     75        97

ACX      1.31 296 iPd    17 07.60  -4.6X
                 (S)    17 30.00
OXX      2.00  66 eP     17 24.18   1.8
                 (S)    17 55.00
III      2.22 339 iP     17 26.20   0.6
                 iS     17 58.80
PPM      2.76   0 iP     17 35.33   1.7
                 (S)    18 13.30
IIA      2.85 360 iP     17 35.48   1.2
IISM     2.94  24 (P)    17 37.19   1.6
UNM      3.07 350 iP     17 37.50  -0.2
CRX      3.26 342 (P)    17 42.50   2.1
LVVM     4.01  31 (P)    17 50.50  -0.3
                 (S)    18 58.00
MRX      4.18 325 iP     17 51.70  -1.5
CGX      5.71 307 (P)    18 50.50  35.4X
AGX      6.55 329 (P)    18 38.00  11.3X
LTX     13.78 341 ePc    20 04.70  -1.1
UYO     18.20  11 iPc    20 59.90  -2.3
WMOK    18.37 360 ePc    21 02.90  -1.5
        2.3s  2377.99nm          6.0mb
                 S      24 30.91
MEO     18.42   0 iPc    21 04.60  -0.4
MIAR    18.74  13 iPc    21 07.10  -1.8
        2.3s  1228.19nm          5.7mb
                 S      24 46.57
FNO     18.92   3 iPc    21 10.70  -0.4
OCO     19.19   3 iPd    21 13.40  -0.9
TUC     19.39 328 iPc    21 17.42   0.6
                 ec     21 23.71  23kmX
                 S      25 05.30
ECO     19.70 108 ePd    21 21.57   1.2
TUL     19.71   7 iPd    21 18.80  -1.5

ALQ     19.85 341 ePc    21 21.44  -0.6
        1.3s   214.35nm          5.3mb
ANMO    19.86 341 iPc    21 21.24  -0.8
                 ed     21 28.36  27kmX
OXF     19.95  23 eP     21 21.87  -0.9
UPA     19.99 109 ePd    21 21.24  -2.1
SPJ     20.21  82 iPd    21 28.44   2.7
ACO     20.33 359 iPd    21 25.50  -1.4
BBJ     20.51  81 iPd    21 28.76   0.0
PCJ     20.58  83 iPd    21 28.86  -0.6
STH     20.93  82 iPd    21 35.49   2.4
GWJ     21.00  82 iPd    21 36.32   2.4
GLA     22.20 322 iPc    21 46.14   0.3
ELC     22.51  20 eP     21 48.61  -0.2
CCM     22.64  15 iPc    21 49.86  -0.3
        1.8s   873.56nm          6.0mb
                 ed     21 57.39  27kmX
MYNC    22.77  32 iPc    21 51.51   0.0
        1.8s  1476.14nm          6.2mb
                 eS     26 07.68
FVM     22.79  17 eP+    21 50.18  -1.4
        1.7s  1020.18nm          6.1mb
                 S      26 06.97
PRM     22.98  37 ePc    21 53.16  -0.4
HBF     23.40  42 eP     21 58.45   1.0
SLM     23.45  17 P+     21 56.93  -1.1
                 S      26 18.54
SGS     23.48  41 eP     21 58.99   0.7
PFO     23.57 320 ePc    22 00.26   0.9
PLM     23.65 319 eP     22 00.38   0.2
JSC     23.77  38 ePc    22 01.50   0.4
PV10    23.83 339 ePc    22 01.75  -0.3
PV08    23.88 340 ePc    22 03.82   1.2
PV09    23.97 339 ePc    22 04.16   0.7
GOL     24.06 347 ePc    22 05.10   0.9
        2.2s  2123.53nm          6.3mb
                 S      26 33.30
GLD     24.07 347 ePc    22 05.10   0.8
        1.6s   536.71nm          5.9mb
LHS     24.17  38 ePc    22 05.78   0.8
PEC     24.19 320 eP     22 05.91   0.6
        2.0s   743.88nm          5.9mb
SSK     24.73 320 eP     22 12.29   1.6
GSC     24.94 323 ePc    22 13.42   0.8
SRU     25.01 338 ePc    22 13.23  -0.1
ARUT    25.08 331 ePc    22 15.03   1.0
MSU     25.13 334 ePc    22 14.89   0.3
EMUT    25.73 338 ePc    22 20.41   0.2
PSO     25.81 123 eP     22 25.00   3.7X
TPNV    25.83 326 eP     22 21.48   0.5
        1.9s  1075.81nm          6.2mb
ABL     26.11 319 ePd    22 24.01   0.3
CEH     26.16  38 ePc    22 23.84   0.0
        1.8s  1000.50nm          6.2mb
      Z  19s      2.73um          4.8Msz
                 S      26 52.40
ISA     26.18 321 (P)    22 25.09   0.9
        2.9s  1272.69nm          6.1mb
                 S      26 53.00
NAV     26.22  34 eP     22 23.89  -0.6
BLA     26.34  34 eP     22 25.86   0.2
        0.4s     3.32nm          4.3mb X
DAU     26.42 338 ePc    22 26.52  -0.1
BMG     26.63 107 iPc    22 27.00  -1.5
DUG     26.82 335 iPd    22 30.60   0.5
        2.0s   595.67nm          5.9mb
BCH     26.87 318 (P)    22 30.01  -0.5
TNP     27.18 327 ePc    22 33.59   0.1
        1.3s    71.36nm          5.2mb
MTUM    27.39 324 (P)    22 36.10   0.7
PHAM    27.47 319 eP     22 36.27   0.3
BONR    27.67 325 eP     22 38.29   0.2
MEMM    27.83 324 eP     22 39.43   0.4
MMPM    27.84 324 eP     22 40.87   1.3
CVL     27.98  36 eP     22 40.18  -0.3
RSSD    28.12 352 iPd    22 48.36   6.4X
        1.6s   206.12nm          5.6mb
HVU     28.17 337 ePc    22 42.40   0.0
KVN     28.36 327 ePd    22 45.06   0.9
MCWV    28.47  31 ePc    22 44.96   0.0
        2.8s  1316.37nm          6.2mb
SAO     28.72 320 P      22 49.24   2.1
      Z  18s      7.80um          5.3Msz
                 S      28 07.74
CBN     28.75  36 eP     22 47.00  -0.4
TOV     28.81  99 eP     22 49.50   1.2
CMB     28.91 323 ePd    22 44.31  -4.6X
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	2.2s	190.00nm			5.5mb	
	Z 18s	2.70um			4.9Msz	
		eS	27	35.31		
		i	27	47.31		
		eLQ	30	13.31		
		eLR	33	26.31		
CMB	28.91	323 ePc	22	47.65	-1.3	
	2.2s	190.00nm			5.5mb	
	Z 18s	2.70um			4.9Msz	
		eS	27	35.31		
		SP	27	56.44		
		eLQ	30	13.31		
		eLR	33	26.31		
MHC	29.20	320 eP	22	35.19	-16.5X	
	2.3s	380.00nm				
	Z 17s	5.00um			5.2MszX	
		eS	27	47.19		
		eLQ	30	50.19		
		eLR	33	35.19		
ORV	30.58	324 eP	23	03.39	-0.4	
ORV	30.58	324 ePd	22	58.39	-5.4X	
	2.1s	290.00nm			5.8mb	
	Z 18s	3.60um			5.1Msz	
		eS	28	12.39		
		eLQ	30	29.39		
		eLR	33	22.39		
SJG	31.07	82 ePc	23	06.66	-1.6	
	1.3s	275.37nm			6.0mb	
		ed	23	11.05		
		epPc	23	13.29	23kmX	
MIN	31.18	325 ePd	23	03.71	-5.5X	
	2.5s	280.00nm			5.7mb	
	Z 19s	2.60um			4.9Msz	
		e	28	09.71		
		eLQ	31	41.71		
		eLR	34	35.71		
YSNY	31.27	29 ePc	23	09.44	-0.4	
	2.1s	608.42nm			6.1mb	
		epPd	23	16.14	23kmX	
CAR	31.35	97 iPd	23	08.00	-2.9	
WDC	31.86	324 ePc	23	13.95	-1.1	
LBFM	32.03	326 ePc	23	16.24	-0.5	
LGPM	32.25	324 eP	23	17.13	-1.4	
YBH	32.74	326 iPc	23	20.61	-2.1	
	1.6s	60.00nm			5.3mb	
ULM	33.95	3 eP	23	34.50	1.5	
VGB	34.55	332 (P)	23	37.31	-1.0	
VBEM	34.57	331 P	23	38.93	0.2	
RSNY	34.75	31 eP	23	39.86	-0.2	
	1.3s	89.60nm			5.5mb	
RNO	34.80	328 P	23	39.33	-1.2	
SSOR	34.84	330 P	23	40.19	-0.7	
HRV	34.92	36 ePc	23	40.67	-0.8	
		ed	23	44.98	15kmX	
GAC	35.15	29 eP	23	43.50	0.1	
NEW	35.31	339 (P)	23	41.08	-3.8X	
		ed	23	50.85	33kmX	
DPW	35.38	337 ePc	23	44.66	-0.8	
ASR	35.40	332 P	23	46.12	0.4	
NNA	35.41	141 eP	23	39.70	-6.3X	
	1.5s	61.11nm			5.3mb	
EBG	35.54	334 P	23	47.10	0.3	
SAW	35.70	336 P	23	47.89	-0.2	
SHW	35.72	332 ePd	23	49.26	0.8	
		e	24	01.72	46kmX	
LBNH	35.87	33 P+	23	49.99	0.5	
	Z 18s	2.94um			5.1Msz	
WTV	35.92	335 P	23	49.92	-0.1	
LON	35.96	333 eP	23	49.88	-0.5	
		PP	25	20.92		
		S	29	35.05		
FMW	36.03	333 P	23	50.78	-0.4	
RMW	36.50	333 eP	23	54.30	-0.6	
GMW	37.00	333 ePd	23	58.76	-0.2	
		e	24	05.17	22kmX	
JCW	37.12	334 P	23	59.65	-0.4	
STW	37.84	332 P	24	06.68	0.6	
MCW	37.88	334 eP	24	05.75	-0.7	
		e	24	12.26	22kmX	
CBM	39.65	33 P+	24	20.37	-0.8	
	Z 18s	4.52um			5.3Msz	
LMN	40.81	37 eP	24	34.00	3.2X	
JAQ	41.49	20 eP	24	36.00	-0.2	
ARE	42.14	139 eP	24	48.00	5.7X	
LPAZ	44.20	136 Pc	24	57.90	-1.6	
	0.7s	17.30nm			5.0mb	
	Z 19s	0.11um			3.8MszX	
		i	25	09.60	42kmX	
		PcP	26	44.00		
		S	31	33.70		
		LQ	34	55.60		
		LR	38	32.10		
LPB	44.39	136 P	25	04.20	3.4X	
	Z 18s	5.50um			5.5Msz	
		S	31	36.00		
		LR	40	56.00		
CNCB	44.67	136 P	25	02.60	-0.6	
CCH	46.32	135 P	25	14.00	-2.0	
YKA	47.50	350 P	25	23.40	-1.0	
	1.1s	21.00nm			5.1mb	
SIV	49.02	129 P	25	34.50	-2.3	
SIT	49.14	334 P	25	50.00	12.8X	
	Z 18s	5.84um			5.6Msz	
MOCB	49.39	138 P	25	38.80	-1.3	
YJA	50.14	139 e(P)	25	43.00	-2.9	
FRB	51.74	16 eP	25	57.00	0.0	
	1.0s	13.00nm			4.8mb	
SLA	52.03	141 e(P)	26	02.00	2.2	
FSA	52.73	142 ePc	26	06.90	2.0	
BALM	54.45	336 eP	26	16.78	-0.5	
KLU	56.14	335 eP	26	29.13	-0.4	
HON	56.15	285 P	26	40.00	10.0X	
	Z 19s	1.19um			5.0Msz	
HON	56.15	285 P+	26	23.49	-6.5X	
	Z 19s	1.19um			5.0Msz	
		S	34	32.09		
INK	56.52	345 eP	26	31.50	-0.5	
	1.0s	17.00nm			5.0mb	
MDZ	56.58	150 i(P)	26	36.90	3.9X	
RUV	57.39	240 iPd	26	39.60	0.7	
	1.8s	459.20nm			6.2mb	
TPT	57.49	240 iPd	26	40.20	0.7	
	1.3s	163.20nm			5.9mb	
PMR	57.52	334 eP	26	38.20	-1.0	
	1.0s	42.76nm			5.4mb	
	Z 20s	5.04um			5.6Msz	
		SP	34	54.12		
TCA	57.54	145 ePd	26	36.00	-3.8X	
VAH	57.62	240 iPd	26	41.20	0.7	
	2.0s	566.80nm			6.3mb	
PMO	57.73	240 iPd	26	41.80	0.6	
	1.5s	217.30nm			6.0mb	
RES	58.44	1 eP	26	44.00	-1.4	
	1.5s	26.00nm			5.1mb	
COL	58.67	338 ePc	26	45.51	-1.7	
	1.4s	183.81nm			6.0mb	
		epPc	26	51.64	20kmX	
FBA	58.67	338 ePc	26	45.59	-1.6	
	1.0s	21.09nm			5.2mb	
CRP	58.67	333 eP	26	45.74	-1.7	
BDFB	59.18	120 eP	26	50.04	-1.5	
	1.8s	318.96nm			6.1mb	
BAO	59.20	120 eP	26	50.20	-1.5	
		i	26	56.50	21kmX	
BDF	59.29	120 eP	26	51.00	-1.3	
		i	26	54.10	10kmX	
		i	28	08.80		
AGVB	59.54	125 eP	26	51.70	-2.1	
		e	26	55.60	13kmX	
		eS	35	00.80		
GDH	59.87	17 eP	26	59.00	3.6X	
		e	35	12.00		
		e	58	26.00		
SVW	60.15	332 ePc	26	55.42	-2.1	
	0.8s	85.41nm			5.9mb	
TVO	60.26	238 iPd	26	59.20	0.3	
	1.1s	164.10nm			6.1mb	
PPN	60.28	238 iPd	26	59.30	0.4	
	1.9s	712.60nm			6.5mb	
PPT	60.42	238 iPd	27	00.20	0.4	
	1.4s	227.40nm			6.1mb	
PAE	60.47	238 iPd	27	00.60	0.4	
	1.3s	143.70nm			5.9mb	
AFR	60.57	239 iPd	27	01.20	0.4	
	1.5s	333.20nm			6.2mb	
SDN	60.82	325 P	27	10.00	7.9X	
	Z 20s	3.97um			5.6Msz	
MBC	60.95	354 ePc	27	03.30	0.7	
	0.8s	11.00nm			5.0mb	
TTA	61.00	334 ePc	27	01.44	-1.9	
	1.8s	117.14nm			5.7mb	
IMA	61.38	338 (P)	27	06.12	0.2	
	1.0s	4.85nm			4.6mb X	
SOB1	62.50	110 eP	27	14.80	0.8	
VAO	63.86	126 eP	27	21.00	-1.9	
LPA	63.92	143 eP-	27	23.00	0.0	
	Z 20s	1.42um			5.1Msz	
		eS	35	58.00		
ALE	67.79	5 ePc	27	45.68	-1.5	
ILT	71.29	337 iPd	28	09.00	0.2	
	1.4s	48.00nm			5.4mb	
	Z 16s	8.90um			6.1MszX	
	N 12s	5.20um				
	E 12s	7.30um				
		i	30	44.00		
		iS	37	28.00		
		iPS	38	06.00		
DAG	71.93	14 iPd	28	11.70	-0.8	
	1.3s	98.08nm			5.7mb	
TBT	74.39	64 ePc	28	27.82	0.1	
		epPc	28	34.28	21kmX	
SMY	75.57	321 P	28	40.00	6.0X	
	Z 19s	3.06um			5.6Msz	
EDI	79.69	35 eP	28	43.20	-13.5X	
	2.0s	167.00nm				
		ePcP	29	04.00		
EKA	79.84	35 Pc	29	01.60	4.0X	
	1.2s	35.70nm			5.3mb	
EPLA	81.62	51 iPd	29	07.55	0.2	
EHOR	82.81	53 iPc	29	15.48	2.0	
GUD	82.89	50 iPd	29	14.27	0.2	
EJIF	82.99	54 iPd	29	15.98	1.5	
LPF	83.03	42 eP	29	14.50	0.1	
	1.1s	34.45nm			5.4mb	
PAB	83.04	51 ePc	29	14.92	0.1	
		epPc	29	21.13	20kmX	
		iS	39	44.00		
GRR	83.04	42 eP	29	14.70	0.2	
	1.3s	59.20nm			5.6mb	
FLN	83.18	41 eP	29	15.60	0.4	
	1.3s	45.15nm			5.5mb	
	Z 20s	2.25um			5.5Msz	
LDF	83.45	41 eP	29	17.00	0.4	
ECRI	83.55	48 eP	29	20.54	3.2X	
MFF	84.03	43 eP	29	19.80	0.3	
ECOG	84.24	53 iPc	29	22.45	1.5	
PET	84.58	324 eP	29	23.00	0.8	
	Z 15s	2.00um			5.6MszX	
		e	32	36.00		
		eS	39	52.00		
EVIA	84.67	51 iPd	29	24.46	1.4	
EHUE	84.83	52 iPd	29	25.43	1.5	
LFF	85.12	45 eP	29	25.40	0.3	
EGRA	85.23	48 iPd	29	29.54	3.9X	
LSF	85.24	43 eP	29	25.70	0.1	
NRA0	85.41	28 eP	29	31.50	5.3X	
		ePP	32	41.90		
NRE0	85.41	28 P	29	27.60	1.4	
		PP	32	28.10		
		PPP	34	38.70		
		S	39	57.80		
		SS	45	34.30		
		SSS	49	17.50		
EPF	85.43	47 eP	29	27.20	0.4	
	1.3s	63.55nm			5.7mb	
LPO	85.50	45 eP	29	27.20	0.2	
	1.2s	30.35nm			5.4mb	
UCC	85.51	38 P	29	30.00	3.2X	
RJF	85.53	44 eP	29	27.20	0.1	
	1.2s	53.55nm			5.6mb	
	Z 20s	1.13um			5.3Msz	
SNF	85.56	39 P	29	28.80	1.7	
HYF	85.63	42 eP	29	28.00	0.4	
TCF	85.67	43 eP	29	27.90	0.0	
	1.3s	67.15nm			5.7mb	
DOU	85.89	39 Pc	29	35.30	6.5X	
MAF	85.93	43 eP	29	29.20	0.1	
	1.2s	54.75nm			5.6mb	
BGF	86.00	43 eP	29	29.30	-0.1	
	1.2s	51.15nm			5.6mb	
CAF	86.02	44 eP	29	29.50	-0.1	
AVF	86.25	42 eP	29	30.30	-0.3	
	1.1s	17.60nm			5.2mb	
SSF	86.26	42 eP	29	30.60	-0.1	
	1.5s	71.05nm			5.7mb	
LOR	86.41	42 eP	29	31.50	0.0	
	1.3s	59.20nm			5.6mb	
	Z 21s	1.92um			5.5Msz	
ENN	86.45	38 eP	29	33.00	1.5	
	0.9s	13.40nm			5.2mb	
LBF	86.59	42 eP	29	32.00	-0.4	

13d 00h

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        1.3s    28.90nm          5.3mb
SMF     86.61  42 eP    29 32.00  -0.5
TIK     86.64 346 iPc+  29 39.00   6.9X
      Z  18s     2.50um          5.7Msz
                  e     32 58.00
                  eS    40 03.00
HFS     86.64  28 eP    29 22.30 -10.0X
        0.4s     0.80nm          4.3mb X
WLF     86.99  39 P     29 31.00  -3.1X
HAU     87.72  40 eP    29 37.90   0.1
COP     88.04  32 eP    29 41.00   1.9
                  e     32 30.00
                  eS    40 14.00
BSF     88.06  41 eP    29 39.00  -0.6
MOX     89.81  37 eP    29 51.00   3.3X
        2.0s    31.00nm          5.2mb
      Z  20s     1.50um          5.4Msz
                  eS    40 30.00
GRF     90.00  38 eP    29 48.60   0.0
        1.7s    27.00nm          5.2mb
      Z  21s     1.00um          5.2Msz
LKO     90.26  80 P     29 53.23   2.8
        1.6s    91.50nm          5.8mb
CLL     90.31  36 eP    29 43.00  -6.9X
        1.9s    40.00nm          5.4mb
BRG     91.03  36 eP    29 57.00   3.7X
        1.3s    18.00nm          5.2mb
      Z  17s     1.70um          5.6MszX
      N  17s     1.10um
      E  17s     0.32um
                  e     40 29.00
                  e     42 03.00
KHC     91.62  37 eP    30 01.00   4.9X
        1.5s     9.80nm          5.0mb
      Z  20s     2.20um          5.6Msz
                  e     31 14.00 305kmX
                  e     33 23.00
                  ePP   33 33.50
LIC     91.72  83 P     29 55.40  -1.7
        1.5s    74.00nm          5.8mb
PRU     91.78  36 eP    29 56.90   0.1
                  e     30 05.90  28kmX
                  PP    33 41.30
                  eSKS  40 37.00
                  PS    42 12.10
GEC2    91.83  38 eP    29 58.30   1.2
        1.0s     3.02nm          4.6mb X
                  e     30 02.20  12kmX
                  e     30 05.50
                  e     30 13.40
                  e     30 20.40
                  ePP   33 34.00
                  e     33 37.70
                  e     33 41.30
                  e     33 54.10
KIC     91.96  83 eP    29 58.00  -0.2
KSP     92.36  35 eP    30 05.00   5.6X
                  e     33 39.50
YAK     93.17 339 eP    30 05.10   2.2
        1.8s    77.00nm          5.8mb
      Z  16s     2.50um          5.8MszX
      N  16s     1.50um
      E  20s     1.20um
LJU     93.62  40 (P)   30 10.00   4.7X
                  (SKS) 40 44.00
                  (S)   41 40.00
                  (SS)  47 56.00
ZST     94.12  37 e(P)  30 08.10   0.5
                  e     33 52.40
NRIL    94.29 358 iPc   30 07.16  -0.8
                  epPc  30 12.96  18kmX
NRI     94.41 358 ePc   30 08.00  -0.5
        2.0s    39.00nm          5.5mb
      Z  19s     5.70um          6.1Msz
      E  19s     2.60um
                  e     30 21.00  43kmX
                  e     33 54.00
                  e     36 08.00
                  e     40 47.00
                  ePS   42 44.00
SRO     95.02  37 eP    30 16.20   4.5X
SPC     95.39  35 eP    30 15.10   1.4
                  e     34 04.30
YSS     96.42 323 eP    30 36.00  17.9X
                  e     34 19.00
                  e     40 56.00
                  e     41 33.00
UZH     96.83  35 eP    30 19.50  -0.4
OBN     99.43  24 (P)   30 35.00   3.4X
      Z  20s     1.70um          5.5Msz
      N  21s     1.40um
      E  21s     0.60um
                  e     34 36.00
                  e     41 12.00
MAJO   104.94 316 (Pdiff30 53.68  -2.8
GUMO   110.58 292 (PKP) 35 29.29   6.5X
BJI    115.26 331 ePKP  35 35.00   3.9X
      Z  20s     0.91um          5.4Msz
                  ePP   36 32.00
CER    121.94 119 ePKP  35 47.00   2.9
        0.6s    28.00nm
GTA    121.97 343 ePKP  35 45.70   1.6
      Z  14s     0.58um          5.4MszX
XAN    123.48 333 PKP   35 45.50  -1.5
KSH    124.32   5 ePKP  35 50.00   1.3
      Z  28s     2.16um          5.7MszX
      N  14s     1.07um
      E  14s     1.00um
                  SKS   42 57.00
MAW    127.33 171 ePKP  35 51.40  -2.0
        1.2s    17.97nm
      Z  19s     0.83um          5.4Msz
                  ePP   37 53.60
                  iSKKP 49 26.70
LSZ    128.94  97 iPKP  36 01.00   2.9
        1.0s     1.50nm
WB5    129.65 257 ePKP  36 01.50   2.3
WR2    129.66 257 ePKP  35 57.40  -1.9
        1.2s     3.00nm
                  i     36 01.80
WRA    129.68 257 PKP   35 47.00 -12.3X
        0.8s     0.30nm
WRA    129.68 257 PKP   35 58.20  -1.1
        0.7s     2.90nm
SLR    129.84 110 e(PKP)35 56.00  -3.6X
BUL    129.91 103 ePKP  36 04.50   4.6X
ASPA   130.30 253 ePKP  36 01.30   0.9
      Z  22s     0.40um          5.1Msz
                  iPKS  39 24.00
GYA    130.91 330 PKP   36 03.80   2.2
QUE    131.75  17 ePKP  36 03.60   0.4
MTD    132.38  98 iPKPd 35 56.30  -8.3X
LSA    133.32 348 PKP   36 06.50  -0.1
                  PP    38 31.50
NAI    133.65  76 PKP   36 16.00   8.7X
      Z  24s     2.98um          5.9MszX
                  PP    39 40.00
                  SS    50 52.00
                  LQ    55 52.00
                  LR    32 40.00
GKN    135.86 356 PKP   36 13.20   2.2
KHT    144.75 330 ePKP  36 23.00  -4.0X
HYB    146.40   5 ePKP  36 28.40  -1.4
        1.0s    50.00nm
GBA    150.05   8 PKP   36 39.00   3.5X
LEM    152.65 287 ePKPc 36 52.00  12.3X
      S.D. = 1.2  on 215 of 266 obs.
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*  NOV  13, 1993  01h 05m 45.63± 1.27s
    9.829 N ±12.0km  126.880 E ±15.9km
    DEPTH =  33.0km  (normal)
    4.2mb (  1 obs.)
 MINDANAO, PHILIPPINE ISLANDS     (259)

BIP      1.71 201 iPc   06 14.80   1.2
                  iS    06 33.00
PLP      2.29 306 ePc   06 22.00   0.1
                  eS    06 29.50
CGP      2.55 238 eP    06 24.00  -1.6
                  eS    06 49.00
MAP      2.90 280 eP    06 32.00   1.5
WR2     30.49 166 eP    11 57.40  -0.7
        0.4s     1.70nm          4.2mb
MRWA    40.21 195 iPd   13 21.10   0.2
        0.6s    25.00nm          5.1mb X
MUN     42.81 193 iPd   13 42.60   0.5
        0.6s    22.00nm          5.1mb X
GBA     48.50 279 P     14 26.00  -1.6
KAF     86.29 332 eP    18 25.60   0.4
      S.D. = 1.3  on   9 of   9 obs.
-----------------------------------
    NOV  13, 1993  01h 18m 04.18± 0.08s
    51.934 N ± 1.9km  158.647 E ± 1.6km
    DEPTH =  34.0km  (geophysicist)
    6.5mb (189 obs.)  7.0Msz ( 59 obs.)
 NEAR EAST COAST OF KAMCHATKA     (218)
      Mw 7.0 (GS), 7.0 (HRV). Ms 6.7
      (BRK). Mo=3.9*10**19 Nm (PPT).
      Felt (VI) at
      Petropavlovsk-Kamchatskiy and
      (IV) at Severo-Kurilsk. Two
      events about 5.5 seconds apart.
      Depth from broadband
      displacement seismograms, based
      on first event.
      FAULT PLANE SOLUTION: P-Waves
       NP1:Strike= 25 Dip=60 Slip=  90
       NP2:        205    30        90
       Principal Axes:
        T                Plg=75  Azm=295
        P                  15       115
      Comment: The focal mechanism is
        poorly controlled and
        corresponds to reverse
        faulting. The preferred fault
        plane is NP2.
      RADIATED ENERGY
       No. of sta:  30  Focal mech.  F
       Energy         9.8±1.3*10**13 Nm
      MOMENT TENSOR SOLUTION
      Dep  44            No. of sta: 34
      Moment Tensor;   Scale 10**19 Nm
        Mrr= 3.27        Mtt=-0.15
        Mff=-3.12        Mrt= 0.12
        Mrf= 1.30        Mtf=-1.61
       Principal axes:
        T  Val=  3.54  Plg=78  Azm=254
        N        0.50       7       22
        P       -4.04      10      113
      Best Double Couple:Mo=3.8*10**19
       NP1:Strike=212 Dip=36 Slip= 103
       NP2:        16     55       81
      CENTROID, MOMENT TENSOR    (HRV)
      Data Used: GDSN
      L.P.B.: 49S, **C  M.W.: 46S, **C
      Centroid Location:
      Origin Time        01:18:16.3 0.1
      Lat 52.00N 0.01 Lon 159.27E 0.01
      Dep  54.2 0.3 Half-duration  8.1
      Moment Tensor;   Scale 10**19 Nm
        Mrr= 3.56 0.02  Mtt=-0.89 0.02
        Mff=-2.67 0.01  Mrt= 1.19 0.03
        Mrf= 1.49 0.02  Mtf=-1.54 0.01
       Principal Axes:
        T  Val=  4.05  Plg=76  Azm=316
        N       -0.02       4      212
        P       -4.02      14      121
      Best Double Couple:Mo=4.0*10**19
       NP1:Strike=206 Dip=31 Slip=  83
       NP2:         34     59       94

PET      1.08   0 iPnd- 18 27.50   4.4X
                  eS    18 44.00
SKR      2.04 233 iPnc- 18 38.70   1.9
                  iS    19 02.00
SMY      9.50  79 ePd-  20 19.12  -2.5
                  eS    21 59.62
OKH      9.67 286 iPnc  20 27.60   3.7X
KUR      9.79 231 iPnd  20 26.00   0.4
      Z  16s   162.00um
      N  16s   185.00um
      E  16s   358.00um
                  eS    22 20.00
YSS     11.47 251 iPnc+ 20 52.00   3.5X
      Z  20s   290.00um
      N  17s   245.00um
      E  19s   267.80um
                  iS    23 04.00
KUSJ    12.90 232 eP    21 04.40  -3.2X
                  eS    23 29.70
ASAJ    13.24 240 eP    21 14.20   2.0
HOOJ    14.13 234 eP    21 21.20  -2.6
                  eS    24 01.40
ADK     15.21  80 ePd   21 36.60  -1.3
        1.2s   894.89nm          5.9mb
MRRJ    15.24 238 eP    21 35.40  -2.9
AOMJ    16.95 235 eP    22 00.40   0.3
                  eS    25 03.80
OFUJ    17.46 229 eP    22 02.30  -4.2X
                  eS    25 18.70
YAK     18.55 314 iPc+  22 19.50  -0.3
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        1.2s  1957.00nm          6.2mb
    N  16s   284.20um
YAMJ   18.95 231 eP    22 21.30  -3.6X
ILT    19.42  26 iPc   22 29.00  -1.0
        1.0s  1312.00nm          6.2mb
    Z  16s   294.00um          4.8MszX
    N  16s   110.00um
    E  16s   120.00um
                iS     26 06.00
VLA    20.01 254 iPc-  22 33.00  -3.5X
        0.8s   350.00nm          5.7mb
                i      23 04.00
                iS     26 07.00
                iSS    26 40.00
                iSSS   27 00.00
NIIJ   20.19 231 P     22 38.10  -0.4
KAKJ   20.48 227 P     22 40.40  -1.1
MDJ    20.58 261 ePc   22 40.70  -1.8
    N  26s   717.00um
                S      26 25.00
MAJO   21.13 231 ePc   22 48.80   0.6
        1.3s  4551.48nm          6.7mb
MAT    21.13 231 iPc   22 48.80   0.6
                eS     26 45.00
CHJJ   21.16 229 P     22 48.50   0.0
MTMJ   21.29 232 P     22 50.50   0.5
IIDJ   22.13 230 P     22 58.70   0.4
ANM    22.39  42 ePc   23 00.83   0.3
TSRJ   23.02 233 P     23 07.90   0.9
CN2    23.54 263 eP    23 09.00  -3.0
        1.0s   260.00nm          5.7mb
    Z  20s   136.00um          6.4Msz
    N  20s   113.00um
    E  20s   115.00um
                esP    23 19.00
TIK    23.78 337 iPc+  23 13.50  -0.4
SDN    24.21  66 eP    23 18.78   0.5
        1.3s  1389.82nm          6.3mb
    Z  19s   289.68um          6.8Msz
                S      27 34.40
WKYJ   24.26 232 P     23 20.80   1.7
YONJ   24.57 237 P     23 23.40   1.3
TKSJ   25.22 234 P     23 29.50   1.3
SHK    25.49 237 iPc   23 31.60   0.8
        1.0s   600.00nm          6.1mb
SNY    25.78 261 iPc   23 32.00  -1.3
        1.1s   130.00nm          5.4mb X
    E  26s   371.00um
                iS     27 55.00
BOD    25.86 301 iPc   23 32.30  -1.7
        1.3s   630.00nm          6.0mb
TTA    26.18  48 ePc   23 37.26   0.2
        1.6s  1881.30nm          6.4mb
SVW    26.32  52 ePc   23 38.26   0.0
        1.4s   728.74nm          6.1mb
SHNJ   26.63 239 P     23 41.80   0.6
CIT    27.42 288 eP    23 48.00  -0.4
    Z  30s   239.00um          6.6MszX
IMA    27.50  41 ePc   23 48.59  -0.5
BRW    27.69  29 eP    23 49.97  -0.6
CP2    27.95  51 ePc   23 53.27   0.0
CRP    27.99  51 ePc   23 53.42  -0.2
KUMJ   28.01 237 P     23 54.40   0.6
KDC    28.21  59 eP    23 53.12  -2.2
        1.3s   494.56nm          6.0mb
DL2    28.73 258 P     23 59.00  -1.2
        1.0s   400.00nm          6.1mb
    N  21s   181.00um
    E  21s   146.00um
                S      28 50.00
SLKM   29.00  53 eP    24 01.36  -1.1
KAGJ   29.05 235 P     24 04.10   0.9
PMR    29.42  50 eP+   24 04.19  -2.0
        1.0s   360.75nm          6.1mb
                PP     25 02.84
                S      28 59.08
COL    29.87  44 iPc   24 10.14  -0.1
        1.7s  2617.08nm          6.7mb
FBA    29.87  44 ePc   24 09.87  -0.4
TOA    30.76  49 iPc   24 18.40   0.2
KLU    30.96  50 ePc   24 18.75  -1.2
BJI    31.37 265 iPc   24 22.10  -1.6
        1.5s    99.00nm          5.4mb X
    N  17s   103.00um
                ic     24 28.39
                epPd   24 33.93  45kmX
                ePP    25 20.00
IRK    32.72 293 iP+   24 34.00  -1.4
        1.5s   230.00nm          5.8mb
    Z  16s    93.74um          6.6MszX
    N  14s    79.36um
    E  18s    37.34um
                e      24 54.80
                e      25 53.00
BALM   32.74  50 ePc   24 35.21  -0.4
TIA    33.20 258 Pc    24 38.80  -0.9
        1.0s   160.00nm          5.9mb
    N  23s    89.30um
    E  23s   257.00um
                pP     24 48.00  32kmX
                S      29 52.50
HHC    33.75 270 Pd    24 43.00  -1.6
        1.8s   350.00nm          6.0mb
    Z  29s   363.00um          6.9MszX
    N  14s    18.00um
    E  17s    99.00um
                S      29 58.00
ZAK    34.05 290 iPc   24 45.70  -1.2
        2.4s  1237.00nm          6.4mb
    N  14s    70.67um
    E  13s   141.48um
                eS     30 05.00
                eSS    32 48.00
SSE    34.40 247 iPc   24 50.20   0.2
        1.0s   370.00nm          6.3mb
    Z  20s    41.30um          6.2Msz
    N  12s   276.60um
    E  12s    18.50um
                ic     24 56.82
                iS     30 08.00
                PcS    31 10.00
                ScS    35 10.00
BTO    34.85 271 iPd   24 50.50  -3.5X
        1.4s   110.00nm          5.6mb
    N  15s    55.00um
    E  15s    61.80um
                PP     26 14.00
                S      30 17.00
NJ2    35.05 251 Pd    24 55.60   0.0
        1.0s   210.00nm          6.0mb
    N  13s    38.40um
    E  18s    32.10um
                S      30 19.00
TIY    35.10 265 Pc    24 55.00  -1.2
        1.1s   200.00nm          6.0mb
    N  15s    60.40um
                S      30 20.50
INK    35.33  37 ePc   24 58.30   0.7
        1.0s   152.00nm          5.9mb
NRI    36.15 326 iPc+  25 02.20  -2.4
                i      30 35.00
SIT    37.33  55 eP+   25 13.81  -0.8
        1.2s   386.76nm          6.1mb
    Z  21s    72.56um          6.4Msz
                PP     26 54.08
                S      31 01.35
MBC    38.46  22 ePc   25 25.60   1.8
        1.0s   187.00nm          5.9mb
UER    38.78 296 iPc   25 25.00  -1.8
                e      27 04.00
                PPP    27 20.00
                SS     35 31.00
WHN    38.80 254 Pc    25 26.00  -1.2
        1.0s   130.00nm          5.7mb
    N  12s    18.90um
    E  13s    29.70um
                pP     25 34.00  27kmX
                PcP    27 41.00
TATO   38.96 241 ePc   25 28.85   0.2
        2.2s  3054.35nm          6.7mb
                ec     25 36.13
XAN    39.66 263 P     25 33.00  -1.4
        1.4s    96.00nm          5.4mb X
    Z  30s   175.00um          6.7MszX
    N  22s   176.00um
    E  24s   135.00um
                pP     25 40.20  24kmX
                PP     27 11.00
                PcP    27 40.00
GUMO   39.82 201 eP    25 32.20  -3.6X
        1.4s   190.20nm          5.7mb
    Z  31s    96.70um          6.5MszX
                e      25 43.00
                eS     31 44.20
PJG    39.82 201 eP    25 32.20  -3.6X
GUA    39.86 201 eP    25 32.00  -4.1X
        0.8s   161.19nm          5.8mb
    Z  22s    29.55um          6.1Msz
                eS     31 43.50
QZH    40.58 244 iPc   25 42.00   0.1
        1.6s  1030.00nm          6.3mb
                S      31 42.00
LZH    41.45 270 iPc   25 49.48   0.3
        1.8s   750.00nm          6.1mb
    Z  25s   187.00um          6.9MszX
    E  22s   183.00um
                ic     25 55.03
                ed     26 08.27
                PP     27 26.00
                ScP    31 34.50
                sS     32 20.00
                ScS    35 47.00
GTA    41.86 277 iPc   25 52.20  -0.3
        1.6s   240.00nm          5.7mb
    Z  20s   115.00um          6.8Msz
    E  16s    81.70um
                PP     27 31.00
                sS     32 17.00
                ScS    35 50.00
ALE    44.18   7 iPc   26 11.50   0.7
                ic     26 16.06
                esPd   26 25.99
YKA    44.62  41 P     26 14.80   0.3
        1.3s   319.00nm          6.0mb
RES    44.73  21 ePc   26 15.50   0.3
        1.0s   196.00nm          5.9mb
CVP    44.78 234 ePd   26 17.00   0.7
CD2    44.97 264 iPc   26 16.90  -0.9
    N  25s   277.00um
OPA    44.98 115 eP    26 17.71  -0.1
GZH    44.99 248 iPc   26 18.00   0.1
        1.0s   290.00nm          6.1mb
    Z  40s    80.80um          6.3MszX
    N  14s    22.40um
    E  12s    20.50um
                PP     28 02.00
                iS     32 52.00
HKC    45.13 246 iP    26 20.30   1.2
                iS     33 08.00
HON    45.28 116 P     26 26.87   6.7X
    Z  22s   120.37um          6.8Msz
                S      33 08.13
DHH    45.43 116 P     26 31.20   9.8X
MCO    45.63 247 eP    26 23.30   0.3
GYA    46.38 257 iPc   26 28.40  -0.7
        1.0s   750.00nm          6.6mb
    Z  32s   114.00um          6.6MszX
    N  16s    40.60um
    E  16s    23.70um
                PP     28 19.00
                S      33 08.00
BCP    46.48 235 eP    26 30.00   0.0
BAG    46.50 235 ePc+  26 29.50  -0.6
        1.5s   727.78nm          6.4mb
                eS     33 10.00
WMQ    46.52 289 iPc   26 29.74  -0.2
        1.0s   310.00nm          6.2mb
    N  14s   115.00um
    E  14s   108.00um
                ec     26 35.53
                esPd   26 44.06
                PcS    31 56.00
HKL    46.74 114 (P)   26 32.35   0.1
MHA    47.36 115 eP    26 36.41  -0.2
KKH    47.72 115 (P)   26 40.36   0.9
GQP    47.73 231 ePc   26 40.50   0.9
QCP    47.76 233 eP    26 40.00   0.1
QVP    47.81 233 eP    26 43.50   3.3X
KBS    47.91 352 ePc   26 40.50   0.2
MCW    47.96  61 ePc   26 41.54   0.4
TGY    48.29 233 iPc   26 44.00   0.0
ONR    48.49  63 P     26 46.27   1.0
GMW    48.64  62 ePc   26 46.50   0.1
JCW    48.73  61 P     26 47.44   0.4
PGP    48.80 232 ePd   26 47.80  -0.1
BMW    49.03  64 ePc   26 49.73   0.2
RMW    49.23  62 ePc   26 51.31   0.3
KMOR   49.39  65 P     26 52.61   0.3
FMW    49.62  62 P     26 54.31   0.2
LON    49.65  63 ePc   26 53.88  -0.4
                S      34 07.57
```

13d 01h

KMI	49.75	260	iPc	26	55.15	-0.3
	1.5s	1190.00nm				6.7mb
	N 21s	156.00um				
			ic	27	01.11	
			esPd	27	13.69	
			ScS	36	41.00	
SHW	49.75	63	eP	26	55.54	0.4
WTV	50.09	61	P	26	57.33	-0.3
ASR	50.13	63	P	26	58.08	0.1
COR	50.14	66	(P)	26	58.59	0.7
			esP	27	12.91	
MAP	50.14	227	iPd	26	58.00	-0.2
QIZ	50.19	248	iPc	27	00.28	1.8
	1.2s	840.00nm				6.6mb
	N 15s	17.40um				
	E 18s	19.60um				
			ec	27	06.41	
			esPd	27	15.68	
			S	34	05.00	
EBG	50.23	62	P	26	58.99	0.3
RNO	50.30	67	P	26	59.98	0.7
SAW	50.39	60	P	26	59.50	-0.3
SSOR	50.44	65	P	27	00.79	0.4
VBEM	50.81	64	P	27	03.37	0.2
WAH2	50.88	61	P	27	03.35	-0.1
DPW	50.93	59	eP	27	03.41	-0.5
BJO	50.96	347	eP	27	03.64	-0.1
VGB	50.97	63	ePc	27	04.15	-0.2
CROR	51.19	64	P	27	06.24	0.3
NEW	51.26	58	iPc	27	06.09	-0.4
			ec	27	08.41	
			ec	27	11.39	
			epPd	27	16.44	35kmX
			esPd	27	21.24	
CGP	51.48	225	ePd	27	09.00	0.6
JBO	51.53	63	P	27	08.34	-0.2
DAG	51.56	359	iPd+	27	07.70	-0.5
	Z 18s	126.19um				7.0Msz
	N 19s	81.39um				
VIPM	51.69	64	P	27	10.05	0.1
ARC	52.02	70	ePc	27	12.42	0.2
	Z 21s	57.00um				6.6Msz
			iS	34	38.42	
			eScS	36	50.42	
			eSS	38	10.42	
			eLQ	40	12.42	
			eLR	42	31.42	
LNOR	52.12	61	P	27	12.90	-0.1
FHC	52.13	70	eP	27	11.97	-1.1
	1.0s	383.76nm				6.3mb
YBH	52.26	68	iPc	27	15.06	0.9
	1.5s	820.00nm				6.5mb
	Z 22s	89.00um				6.8Msz
			iS	34	38.52	
			eSS	38	14.52	
			eLQ	39	57.52	
			eLR	42	43.52	
KMPM	52.29	70	eP	27	15.30	0.9
DAV	52.33	223	ePc+	27	15.00	0.3
	1.7s	1169.23nm				6.6mb
LGPM	52.72	69	ePc	27	18.21	0.5
CTB	52.82	225	ePc	27	20.00	1.6
LBFM	52.98	68	ePc	27	20.12	0.4
WDC	53.11	69	ePc	27	20.96	0.6
	2.0s	1144.55nm				6.5mb
			ec	27	26.26	
			ed	27	33.29	
			S	34	46.62	
			SS	38	40.17	
LSA	53.61	273	iPc	27	24.50	-0.2
	0.8s	80.00nm				5.8mb
	Z 21s	73.10um				6.7Msz
	N 21s	71.70um				
			ec	27	30.46	
			ScS	37	02.00	
KEV	53.63	341	iPc	27	22.34	-1.4
			ic	27	27.63	
ARU	53.65	317	iPc	27	21.61	-2.5
			ec	27	26.33	
			epPd	27	32.37	36kmX
LMEM	53.69	69	eP	27	25.10	0.2
MIN	53.80	69	iPc	27	24.71	-0.9
	1.6s	1170.00nm				6.6mb
	Z 20s	36.00um				6.4Msz
			iS	34	59.71	
			eSS	37	11.71	
			eLQ	39	55.71	
			eLR	42	54.71	
ORV	54.38	69	eP	27	29.06	-0.7
ORV	54.38	69	ePd	27	24.39	-5.3X
	1.3s	510.00nm				6.4mb
	Z 22s	65.00um				6.7Msz
			iS	35	07.39	
			eSS	38	27.39	
			eLQ	40	53.39	
			eLR	43	43.39	
NTYM	54.48	71	eP	27	29.46	-0.9
FRU	54.60	296	iPc	27	30.00	-1.3
	2.0s	460.00nm				6.2mb
	Z 16s	62.00um				6.8MszX
			e	29	40.00	
			iS	35	08.00	
			eSS	38	54.00	
KVG	54.72	190	eP	27	31.00	-1.4
KTK1	54.99	342	eP	27	27.27	-6.6X
ZSP	55.01	71	iP	27	34.11	-0.2
BKS	55.07	71	iPc	27	34.09	-0.7
	1.6s	1110.00nm				6.6mb
	Z 22s	107.00um				6.9Msz
			iS	35	17.09	
			eScS	37	44.09	
			eSS	39	02.09	
			eLQ	40	58.09	
			eLR	43	32.09	
HMR	55.14	71	eP	27	36.22	1.0
TRO	55.24	344	eP	27	34.52	-1.0
STAN	55.42	72	ePc	27	34.83	-2.5
	1.3s	1140.00nm				6.7mb
	Z 22s	97.00um				6.8Msz
			iS	35	20.84	
			eLQ	41	04.84	
			iLR	43	58.84	
SDF	55.70	340	iP	27	37.10	-1.8
MHC	55.78	72	ePc	27	39.89	-0.1
	1.7s	1240.00nm				6.7mb
	Z 21s	97.00um				6.9Msz
			eS	35	27.19	
			eSS	39	20.19	
			eLQ	41	22.19	
			eLR	43	56.19	
COE	55.81	72	ePc	27	39.93	-0.2
ARN	55.83	71	ePc	27	40.05	-0.3
CMB	56.04	70	ePc	27	41.90	0.0
	1.7s	1290.00nm				6.7mb
	Z 22s	112.00um				6.9Msz
			esPd	27	55.89	
			iS	35	30.31	
			i	36	41.31	
			eScS	37	28.31	
			iSS	39	13.31	
			eLQ	41	31.31	
			eLR	44	21.31	
KSH	56.07	292	iPc	27	41.00	-1.1
	1.0s	80.00nm				5.7mb
	Z 24s	88.70um				6.8MszX
	N 18s	99.80um				
	E 18s	90.40um				
			pP	27	49.00	26kmX
			sP	27	51.00	
			PcP	28	40.00	
			PP	29	45.00	
			ePcS	32	39.00	
			iS	35	23.00	
			sS	35	37.00	
			ScS	37	24.00	
			SS	39	08.00	
SAO	56.28	72	eP	27	42.40	-1.1
	2.7s	2126.84nm				6.7mb
	Z 22s	154.59um				7.1Msz
			S	35	28.33	
			SS	39	19.76	
YOMI	56.50	202	P	27	45.20	0.0
PRS	56.62	72	iP	27	45.86	-0.1
KVN	56.68	68	ePc	27	47.01	0.4
CHTO	56.80	258	iPc	27	47.47	0.1
			ec	27	53.43	
			epPd	27	58.40	37kmX
			eS	35	36.10	
WWKK	56.80	198	ePc	27	47.50	0.1
GDH	56.84	13	iPc	27	39.80	-7.3X
	1.0s	400.00nm				6.4mb
			i	35	35.00	
JNW	56.99	355	eP	27	48.72	0.6
JNE	57.03	355	eP	27	48.97	0.6
JMI	57.11	355	eP	27	50.01	1.0
MMPM	57.12	70	eP	27	49.82	-0.1
MEMM	57.13	69	ePc	27	50.48	0.9
FRI	57.15	71	iP	27	49.40	-0.3
PRI	57.17	72	iP	27	49.90	-0.1
BONR	57.30	69	eP	27	51.11	-0.1
LOF	57.46	345	eP	27	49.97	-1.5
KKM	57.55	233	ePc	27	57.50	4.7X
	1.9s	1287.50nm				6.7mb
MTUM	57.56	70	ePc	27	52.78	-0.1
HVU	57.81	62	ePc	27	54.70	0.2
TNP	57.84	68	eP	27	54.28	-0.5
BDT	57.97	257	iPc	27	57.00	1.4
	1.0s	324.30nm				6.3mb
GUN	58.13	276	P	27	56.00	-1.1
BCH	58.17	72	ePc	27	56.82	-0.2
TSM	58.27	230	ePd	27	58.00	0.3
NST	58.51	254	iPd	27	59.50	0.1
PCT	58.53	253	eP	28	01.00	1.5
KKN	58.59	276	P	27	59.20	-1.0
PKI	58.66	276	P	27	59.60	-1.2
ISA	58.78	71	(P)	28	00.26	-1.0
	2.3s	1312.29nm				6.6mb
	Z 22s	111.65um				6.9Msz
			ec	28	05.56	
			epPd	28	10.44	33kmX
			S	35	59.27	
			SS	39	54.25	
DMN	58.82	276	P	28	01.00	-0.9
GKN	58.83	277	P	28	00.60	-1.2
DUG	58.88	63	iPc-	28	02.22	0.3
	2.1s	1247.51nm				6.7mb
ABL	58.91	72	eP	28	01.78	-0.5
FRB	58.92	22	ePc	28	00.20	-1.5
	1.0s	297.00nm				6.4mb
TPNV	59.18	68	ePc	28	03.84	-0.3
	2.0s	3052.56nm				7.1mb
	Z 21s	113.62um				7.0Msz
			S	36	07.88	
LAT	59.22	193	eP	28	04.20	0.0
DAU	59.58	62	ePc	28	07.40	0.3
			e	57	15.57	
			e	57	29.18	
			eP'P'	57	38.32	
GSC	60.01	70	ePc	28	09.17	-0.6
			ec	28	14.96	
			epPd	28	18.44	30kmX
			esPd	28	22.17	
			eP'P'	57	35.41	
KHT	60.13	255	iPc	28	10.10	-0.5
KBR	60.17	254	iPd	28	17.00	6.2X
ARUT	60.20	66	ePc	28	10.90	-0.2
			e	57	07.13	
			e	57	24.92	
			eP'P'	57	37.63	
KAF	60.20	336	iP	28	09.40	-1.2
	0.7s	137.70nm				6.2mb
EMUT	60.24	63	ePc	28	11.45	0.0
SSK	60.26	72	ePc	28	10.78	-0.8
MSU	60.40	64	ePc	28	12.91	0.3
RSSD	60.79	55	eP	28	14.80	-0.3
	1.4s	1766.98nm				7.0mb
			e	57	15.58	
			eP'P'	57	35.84	
PEC	60.79	71	ePc	28	14.08	-0.9
	1.2s	454.47nm				6.5mb
SRU	60.90	63	ePc	28	15.76	-0.1
NSS	61.03	344	eP	28	14.96	-1.2
PUL	61.12	333	ePc	28	12.00	-4.8X
	3.5s	2200.00nm				6.7mb X
	Z 18s	280.00um				7.5Msz
	N 19s	210.00um				
	E 18s	160.00um				
			e	28	29.00	
			e	28	55.00	
			e	30	34.00	
			ePPP	32	05.00	
			eS	36	22.00	
HNR	61.13	179	eP	28	16.00	-1.2
			eS	36	33.00	
PLM	61.35	72	eP	28	18.18	-0.8
PFO	61.41	71	ePc	28	18.51	-0.8
			ec	28	23.89	
			esPd	28	32.50	
PMG	61.89	193	ePc	28	21.65	-0.8
			ec	28	28.60	
			esPd	28	35.89	

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NUR     61.99 336 iP    28 21.50  -1.2
         0.8s   157.90nm          6.2mb
                   ePPP  32 32.00
                   eS    36 36.00
PV09    62.10  63 ePc   28 23.72  -0.4
                   e     57 21.74
                   eP'P' 57 39.22
MOS     62.15 327 iPc   28 22.00  -1.8
      Z  19s   200.00um          7.3Msz
      N  19s   138.00um
      E  19s   160.00um
                   i     28 58.00
                   e     30 47.00
                   i     32 15.00
                   eS    36 39.00
                   eSS   40 42.00
PV10    62.23  63 ePc   28 25.03   0.0
                   e     57 20.55
                   eP'P' 57 38.38
PV08    62.31  62 ePc   28 25.33  -0.2
                   eP'P' 57 33.77
AKU     62.69 358 iPc   28 28.30   1.1
         1.2s   518.75nm          6.5mb
GLA     62.76  71 ePc   28 27.89  -0.3
                   eP'P' 57 33.17
NDI     62.87 283 iP    28 28.00  -0.9
                   eS    36 52.00
OBN     63.01 327 eP    28 27.20  -2.3
         0.8s   135.83nm          6.1mb
GOL     63.27  59 iPc   28 32.13   0.3
         1.9s  2416.59nm          7.0mb
      Z  21s   151.43um          7.1Msz
                   ec    28 37.67
                   esPd  28 45.79
                   S     36 55.16
GLD     63.31  59 iPc+  28 32.88   0.9
         1.6s   852.42nm          6.6mb
      Z  21s   129.07um          7.1Msz
                   S     36 54.52
MOL     63.58 346 eP    28 32.08  -1.1
UPP     64.21 339 iP    28 36.00  -1.3
         1.2s  1600.00nm          7.0mb
                   iS    37 07.00
BUNI    64.22 223 P     28 37.00  -0.9
REY     64.27   0 iP    28 40.30   2.7
TANI    64.42 224 P     28 37.70  -1.5
HFS     64.78 341 eP    28 39.80  -1.2
         0.5s   227.20nm          6.5mb
      Z  20s   198.96um          7.3Msz
                   LR    51 12.00
FOO     64.88 346 eP    28 41.00  -0.6
SNG     64.99 248 iPc   28 45.50   2.6
         1.0s   580.00nm          6.6mb
HYA     65.12 346 eP    28 43.01  -0.1
JAQ     65.28  32 ePc   28 42.30  -2.0
TUC     65.64  68 ePc   28 48.00   1.0
         2.2s  1068.05nm          6.6mb
      Z  20s    38.47um          6.6Msz
                   ec    28 53.38
                   esPd  29 01.82
                   S     37 31.72
ASK     65.92 346 iPc   28 47.48  -0.8
BER     66.00 346 iPc   28 47.93  -0.8
EGD     66.12 346 eP    28 48.74  -0.8
ANMO    66.15  63 iPc   28 50.67   0.3
                   ic    28 56.05
                   esPd  29 04.41
ALQ     66.15  64 iPc+  28 50.60   0.2
         2.4s  1226.55nm          6.6mb
      Z  21s    83.97um          6.9Msz
                   S     37 36.89
                   SS    41 58.22
ODD1    66.25 345 iPc   28 50.30  -0.2
ASH     66.83 302 P     28 53.00  -1.5
         1.4s   710.00nm          6.6mb
      Z  16s   144.89um          7.3MszX
      N  16s   139.14um
      E  16s   127.80um
                   i     29 24.00
                   e     31 20.00
                   PS    37 46.00
                   e     38 41.00
IPM     66.87 246 ePc   28 54.70  -0.3
         1.6s   952.40nm          6.6mb
MNK     66.91 331 iP    28 50.00  -4.6X
         1.2s  1722.00nm          7.0mb
                   e     31 16.00
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                   ePPP  32 56.00
KMY     67.13 346 iPc   28 55.90  -0.1
KGM     67.70 243 ePc   29 01.20   1.0
         1.3s   715.70nm          6.6mb
                   e     29 18.10
QUE     67.85 291 eP    29 02.80   1.6
                   ePcP  29 22.20
                   eS    36 06.10
MAK     68.32 313 eP    29 02.00  -1.7
      Z  24s    53.00um          6.7MszX
      E  24s    33.00um
MTN     68.77 209 iPc   29 06.40  -0.3
         0.8s   465.00nm          6.6mb
ACO     68.77  57 iPd   29 05.60  -1.1
GRO     68.84 314 eP+   29 02.00  -4.9X
                   i     29 33.00
                   i     31 38.00
                   iS    38 04.00
                   iPS   38 52.00
MUD     69.08 342 iPc   29 07.90  -0.2
         1.0s  1200.00nm          6.9mb
                   i     30 48.40
BSD     69.15 339 iPc   29 07.60  -1.0
         0.7s   165.00nm          6.2mb
COP     69.16 340 iPc+  29 08.50  -0.1
         0.9s   554.62nm          6.6mb
                   i     31 48.00
BAK     69.22 309 iPc   29 08.00  -1.3
      Z  20s   377.00um          7.6Msz
      N  20s   436.00um
      E  20s   425.00um
                   iS    38 10.00
TPI     69.41 236 ePc   29 11.50   0.8
                   e     35 00.00
PYA     69.45 316 iPc+  29 08.00  -2.7
         1.0s   250.00nm          6.2mb
      Z  18s    50.00um          6.8Msz
                   e     29 38.00
                   e     31 44.00
                   iPPP  33 30.00
                   iS    38 08.00
                   iPS   39 04.00
                   iSSS  45 44.00
KIV     69.67 316 eP    29 10.95  -1.2
         2.4s  2427.70nm          6.8mb
BKM     69.81 170 iPc   29 28.50  15.5X
PVC     69.89 170 iPc   29 29.80  16.4X
KEDI    69.95 225 P     29 15.00   0.9
MRPI    70.27 246 P     29 16.00  -0.1
AEKI    70.36 247 P     29 17.00   0.3
HYB     70.41 273 ePc   29 15.50  -1.4
         1.0s   440.00nm          6.5mb
                   eS    38 24.00
                   eP'P' 57 19.00
WMOK    70.46  59 iPc   29 16.57  -0.4
         1.8s  2103.27nm          6.9mb
      Z  19s   128.70um          7.2Msz
                   ec    29 21.87
                   esPd  29 30.06
                   S     38 26.67
MEO     70.53  58 iPd   29 16.60  -0.8
OCO     70.54  57 iPd   29 17.10  -0.4
MTA     70.55 313 iPc   29 16.00  -1.3
         0.8s   220.00nm          6.3mb
      N  20s    61.00um
      E  19s    75.00um
                   i     29 41.00
                   e     31 52.00
                   ePPP  33 34.00
                   eS    38 29.00
                   iPS   38 49.00
                   ePPS  39 14.00
                   eSSS  46 08.00
FNO     70.79  57 iPd   29 18.60  -0.3
EDU     70.83 349 iPc   29 18.30  -0.5
ELO     70.98 350 iPc   29 19.40  -0.4
TUL     71.11  56 iPd   29 20.20  -0.7
                   e     56 53.60
ANN     71.14 320 eP+   29 18.00  -2.8
      Z  22s    72.50um          6.9Msz
      N  22s    73.00um
      E  22s    40.00um
                   i     29 41.00
                   e     31 56.00
                   ePPP  33 49.00
                   eS    38 25.00
                   eSS   43 11.00
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EBH     71.18 350 iPc   29 20.70  -0.3
SOC     71.23 318 eP    29 18.00  -3.4X
         4.0s  1740.00nm          6.5mb X
      Z  19s   120.00um          7.2Msz
      N  19s    57.50um
      E  19s    41.00um
                   e     29 48.00
                   ePPP  33 50.00
                   eS    38 27.00
                   e     38 58.00
                   ePS   39 29.00
EAB     71.33 350 iPc   29 21.80  -0.1
ESY     71.40 349 iPc   29 22.10  -0.2
EDI     71.46 349 iPc   29 22.30  -0.3
LVV     71.54 331 iP+   29 24.00   0.8
      N  20s   434.50um
      E  20s   242.00um
                   iS    38 33.00
                   i     39 29.00
EAU     71.57 349 iPc   29 23.30   0.0
EBL     71.59 349 iPc   29 23.30  -0.2
CCM     71.70  51 iPc   29 23.77  -0.6
         1.3s  1235.52nm          6.8mb
                   ic    29 29.15
                   epPd  29 35.11  38kmX
                   esPd  29 39.09
SLM     71.72  50 P+    29 22.01  -2.5
      Z  21s   916.53um          8.0Msz
                   S     38 36.45
ERE     71.90 313 iP+   29 25.00  -0.7
                   i     32 03.00
                   iPPP  33 56.00
                   iS    38 41.00
                   iPS   39 14.00
                   iSS   43 24.00
LTX     71.91  66 ePc   29 25.44  -0.5
BRNL    71.99 338 ePc   29 26.00   0.2
BRN     72.03 339 iPc   29 26.50   0.4
EKA     72.04 349 Pc    29 26.00  -0.1
         0.9s   639.50nm          6.6mb
ESK     72.06 349 iPc   29 26.30   0.1
         0.7s   658.00nm          6.7mb
TEH     72.11 305 eP    29 28.00   0.9
FVM     72.15  51 ePc+  29 26.16  -0.9
         1.3s   871.27nm          6.6mb
      Z  21s   215.49um          7.4Msz
                   S     38 49.02
                   eP'P' 57 06.13
ACTO    72.17  41 P     29 26.03  -1.1
GAC     72.19  37 ePc   29 25.60  -1.5
KNA     72.24 210 iPc   29 27.20  -0.4
         1.0s   143.00nm          5.9mb
SIM     72.32 322 iP+   29 26.00  -1.9
      Z  22s   388.60um          7.6Msz
      N  22s   378.00um
      E  22s   243.00um
                   e     32 08.00
                   ePPP  33 52.00
                   eS    38 40.00
                   ePS   39 12.00
OJC     72.40 334 iPd   29 27.90  -0.4
         1.5s   658.00nm          6.4mb
                   i     29 50.90
                   i     30 08.80
                   iS    38 44.40
KIS     72.45 327 iP+   29 28.00  -0.6
      Z  22s   324.00um          7.6Msz
                   i     29 48.00
                   i     32 11.00
                   e     33 58.00
                   iPS   38 52.00
POO     72.46 278 iPc   29 30.00   0.8
         1.5s     3.61nm          4.1mb X
CTA     72.53 192 Pc    29 28.50  -0.8
         1.5s   430.56nm          6.2mb
                   i     29 39.00
                   eS    38 36.00
                   e     38 53.00
CTAO    72.53 192 ePc   29 28.51  -0.8
         1.7s  1172.99nm          6.6mb
                   ec    29 35.38
                   epPd  29 40.02  38kmX
                   esPd  29 43.08
WLVO    72.58  39 P     29 28.41  -1.0
TYNO    72.68  41 P     29 29.15  -0.9
IAS     72.73 327 eP    29 30.00  -0.3
TAB     72.75 310 iP+   29 30.00  -0.8
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13d 01h

KSP	72.75	336	eP	29	28.90	-1.5
	1.1s	340.00nm				6.3mb
BOM	72.82	279	iPc	29	28.60	-2.6
			eS	38	32.00	
STCO	72.87	40	P	29	30.25	-0.9
LEM	72.91	234	ePc	29	31.20	-0.7
	1.8s	1227.27nm				6.6mb
	Z 20s	7.09um				5.9MszX
			eS	39	03.00	
			eLR	42	02.00	
RAC	72.96	335	iP	29	32.00	0.4
			i	29	43.00	
			e	38	37.00	
			eS	38	53.00	
WIT	73.00	343	iPc	29	33.50	1.7
PACI	73.06	235	P	29	33.20	0.5
CLL	73.11	338	iPc	29	32.00	-0.5
	1.1s	770.00nm				6.6mb
	Z 22s	120.00um				7.1Msz
			eS	38	52.00	
			P'P'	57	15.00	
UZH	73.12	331	iPc+	29	32.30	-0.2
	1.3s	484.00nm				6.3mb
	Z 19s	540.00um				7.8Msz
			i	32	14.00	
			iPPP	34	03.00	
			iS	38	54.00	
			iPS	39	26.00	
SINI	73.13	234	P	29	33.00	-0.1
SPC	73.21	333	iPc	29	33.80	0.5
ELC	73.28	50	ePd	29	33.16	-0.5
			eP'P'	57	08.48	
BRG	73.30	338	iPc	29	33.10	-0.5
	1.2s	320.00nm				6.2mb
			eS	38	59.00	
			eP'P'	57	03.00	
MIAR	73.31	55	P	29	33.31	-0.6
	1.3s	333.80nm				6.2mb
PTT	73.35	328	eP	29	27.00	-6.9X
WIM	73.38	350	iPc	29	33.90	-0.1
BIR	73.52	327	eP	29	40.00	5.1X
BMR	73.61	330	ePd	29	36.00	0.6
LST	73.65	51	eP	29	35.63	-0.2
CBM	73.67	31	P	29	50.00	14.3X
	Z 21s	107.49um				7.1Msz
CBM	73.67	31	iPc	29	35.29	-0.4
	Z 21s	107.49um				7.1Msz
			ec	29	40.18	
			esPd	29	49.28	
			S	39	00.06	
YSNY	73.73	40	iPc	29	35.41	-0.9
	2.0s	3516.41nm				7.0mb
	Z 22s	89.77um				7.0Msz
			ec	29	40.46	
			epPd	29	46.09	35kmX
			esPd	29	49.98	
			PP	32	24.83	
			e	34	19.82	
			S	39	03.76	
			e	48	05.01	
WTS	73.76	342	iPc	29	36.90	0.7
	1.0s	1025.60nm				6.8mb
			e	39	04.00	
DBN	73.96	343	iP+	29	39.00	1.7
	Z 20s	105.80um				7.1Msz
			ePcP	29	50.00	
			ePP	32	24.00	
			ePPP	34	08.00	
			iS	39	00.00	
			eSS	43	44.00	
			ePKKP	49	00.00	
PRU	73.98	337	iPc	29	37.30	-0.2
	1.1s	393.00nm				6.3mb
	Z 18s	188.00um				7.4Msz
	N 17s	146.00um				
	E 15s	56.10um				
			e	30	07.00	
			ePP	32	29.00	
			eS	39	03.00	
			e	39	32.00	
			P'P'	57	13.00	
DZM	74.00	172	iPc	29	38.90	0.9
GBA	74.01	272	P	29	38.00	-0.2
MOX	74.05	339	iPc+	29	37.90	0.0
	1.4s	549.00nm				6.4mb
	Z 18s	100.00um				7.1Msz
			eS	39	00.00	
WME	74.07	349	iPc	29	37.70	-0.3
QIS	74.08	199	iPc	29	37.10	-1.3
VRI	74.17	327	iPc	29	35.50	-3.2X
YRC	74.25	350	eP	29	38.70	-0.3
CFR	74.28	326	ePc	29	36.00	-3.3X
HOF	74.30	339	iPc	29	39.40	0.0
	1.3s	500.00nm				6.3mb
DLF	74.41	351	iPc	29	40.20	0.3
DCN	74.43	351	iPc	29	40.30	0.2
	1.1s	1668.00nm				6.9mb
PSZ	74.46	333	iPc	29	40.60	0.2
WR2	74.66	204	iP	29	41.20	-0.5
	0.7s	144.50nm				6.1mb
			i	29	44.20	
			ipP	30	51.10	303kmX
WRA	74.66	204	P	29	41.70	0.0
YRH	74.66	350	iPc	29	41.40	0.0
BNS	74.67	342	iPc	29	41.60	0.1
	3.1s	3180.00nm				6.8mb X
	Z 23s	256.00um				7.4MszX
			ePP	32	18.00	
			eS	39	11.00	
			eSS	44	12.00	
LBNH	74.73	35	ePc+	29	41.83	-0.2
	2.5s	3362.50nm				6.9mb
	Z 21s	99.39um				7.1Msz
			PP	32	30.41	
			S	39	15.97	
MLR	74.76	328	iPc	29	39.00	-3.3X
KVT	74.82	319	iP	29	42.00	-0.6
ISR	74.88	327	ePc	29	40.00	-2.9
BINY	74.98	39	P	29	50.00	6.5X
	Z 21s	79.27um				7.0Msz
ZST	74.98	334	iPc	29	42.90	-0.4
	1.2s	367.50nm				6.3mb
			LR	06	00.00	
SRO	75.00	334	iPc	29	44.30	0.9
KHC	75.01	337	iPc	29	44.10	0.5
	1.0s	671.00nm				6.6mb
			e	30	18.50	
			S	39	12.00	
GRF	75.03	339	iPc	29	44.40	0.8
	1.1s	952.00nm				6.7mb
	Z 22s	128.00um				7.2Msz
			e(pP)	29	52.80	27kmX
			eS	39	19.20	
HCG	75.05	349	iPc	29	43.70	0.0
KOE	75.08	341	iPc	29	44.40	0.6
	1.2s	903.00nm				6.6mb
ENN	75.10	342	iPc	29	44.40	0.4
	1.0s	800.00nm				6.7mb
			e	39	21.00	
VKA	75.12	335	iPc	29	44.00	-0.2
	4.0s	6269.00nm				7.0mb X
	Z 19s	105.00um				7.2Msz
			i	30	19.10	
			i	32	42.70	
			e	39	17.00	
			LR	07	05.00	
TNS	75.12	341	iPc	29	44.30	0.1
			eS	39	19.80	
WET	75.16	338	iPc	29	45.00	0.6
			eS	39	19.20	
TNR	75.17	329	ePd	29	46.00	1.5
HAE	75.20	348	iPc	29	44.70	0.2
MEM	75.23	342	iPc	29	45.11	0.4
	1.1s	800.00nm				6.6mb
GEC2	75.24	337	e(P)	29	45.00	0.0
	0.7s	31.10nm				5.4mb X
GEC2	75.24	337	e(P)	29	54.90	9.9X
	0.3s	4.90nm				5.0mb X
HTR	75.25	349	iPc	29	45.10	0.3
CMP	75.26	328	ePc	29	47.00	2.0
KER	75.35	307	iPc	29	44.20	-1.7
UCC	75.35	343	iPd+	29	45.80	0.4
			S	39	20.00	
TRHT	75.38	318	eP	29	46.80	0.9
OXF	75.41	52	iPc	29	45.47	-0.6
			ec	29	50.51	
			epPd	29	56.72	37kmX
			esPd	30	00.94	
			S	39	23.57	
KART	75.45	320	eP	29	47.50	1.1
ECP	75.50	351	iPc	29	46.60	0.4
	1.0s	1856.00nm				7.0mb
MCWV	75.56	43	iPc	29	46.65	-0.1
	1.9s	3754.15nm				7.1mb
	Z 20s	100.07um				7.1Msz
			ec	29	51.70	
			esPd	30	00.97	
SOP	75.59	335	iPd	29	47.70	0.9
HGH	75.62	348	iPc	29	47.00	0.1
SNF	75.64	343	iPc	29	47.33	0.3
CTK	75.64	319	eP	29	48.30	0.9
BUC	75.66	327	iPc	29	45.00	-2.3
LMN	75.67	30	ePc	29	47.00	-0.3
BUC1	75.75	327	iPc	29	44.00	-3.7X
KMR	75.87	336	iP+	29	48.90	0.5
GZR	75.87	330	iPd	29	48.00	-0.6
MENF	75.96	345	P	29	49.13	0.3
DOU	75.99	343	iPc	29	49.20	0.2
			S	39	30.50	
			e	57	17.90	
BZS	76.03	330	iPd	29	39.50	-9.8X
UZD	76.04	333	iPd	29	49.10	-0.3
DRA	76.04	328	ePd	29	52.00	2.6
VAL	76.08	353	iP	29	50.30	0.8
	1.0s	8.60nm				4.7mb X
			S	39	30.00	
DOMF	76.08	344	P	29	50.27	0.7
WLF	76.11	342	iPc	29	50.17	0.5
	1.2s	278.50nm				6.1mb
			id	29	53.45	
MRFT	76.35	320	eP	29	52.50	1.0
HRV	76.37	36	iPc	29	51.18	-0.1
			ic	29	56.32	
			esPd	30	05.25	
LANF	76.44	341	P	29	52.12	0.5
HOFF	76.44	341	P	29	52.33	0.8
FUR	76.45	338	iPc	29	52.20	0.5
	1.1s	1030.00nm				6.8mb
	Z 18s	130.00um				7.3Msz
LSCT	76.48	37	eP	29	50.07	-1.9
	2.2s	2314.60nm				6.8mb
	Z 21s	99.42um				7.1Msz
			PP	32	44.58	
			S	39	25.90	
SRBF	76.49	341	P	29	52.44	0.6
BHG	76.49	337	iPc	29	52.60	0.7
	1.4s	875.00nm				6.6mb
TBR	76.56	38	ePc	29	51.28	-1.1
GPD	76.58	38	ePc	29	51.43	-1.1
CRNY	76.67	38	ePc	29	51.57	-1.4
BNN	76.78	318	iP	29	53.00	-0.8
PNJ	76.79	38	iP	29	53.38	-0.3
GMTN	76.80	38	iP	29	52.60	-1.1
PAL	76.80	38	ePc	29	53.01	-0.7
STR	76.83	341	P	29	54.63	0.9
SGKT	76.84	321	eP	29	57.00	2.7
WLS	77.07	341	P	29	55.73	0.5
CDF	77.08	341	P	29	55.73	0.4
NAV	77.11	45	eP	29	54.98	-0.6
WATA	77.16	338	iPc	29	56.40	0.6
LIBD	77.27	341	P	29	56.72	0.5
ECH	77.30	341	P	29	56.83	0.4
CME	77.35	349	eP	29	56.90	0.3
SQTA	77.36	338	iPc	29	57.60	0.7
	1.2s	1348.00nm				6.9mb
BLA	77.36	45	ePc	29	56.65	-0.3
	1.0s	264.49nm				6.2mb
DMK	77.37	325	iP	29	56.40	-0.4
PTJ	77.40	334	iPc	29	57.10	0.0
CPZ	77.41	350	iPc	29	57.10	0.2
FEL	77.44	340	P	29	57.48	0.1
SLE	77.45	340	ePc	29	57.29	0.0
NAL	77.45	321	eP	29	57.10	-0.4
ZAG	77.47	334	iPc	29	57.80	0.5
			iS	39	43.50	
MYNC	77.47	48	iPc	29	57.15	-0.5
	2.3s	1867.93nm				6.7mb
			ic	30	02.44	
			epPd	30	08.82	39kmX
			esPd	30	12.04	
VITF	77.53	342	P	29	58.25	0.6
HRT	77.54	323	iP	29	57.40	-0.5
CVL	77.55	43	ePc	29	57.93	0.0
ISK	77.55	323	iP	29	57.30	-0.6
FVI	77.57	337	P	29	57.81	0.0
	1.4s	753.40nm				6.5mb
EYL	77.58	322	iP	29	56.80	-1.4
GAZ	77.61	316	iP	29	58.10	-0.2
LJU	77.64	335	eP	29	56.00	-2.3
MOF	77.65	341	P	29	58.59	0.2
GBZT	77.65	323	eP	30	06.60	8.2X

13d 01h

HAU	77.66	341	iPc	29	58.90	0.5
	1.1s	1015.85nm				6.8mb
	Z 23s	147.00um				7.2MszX
CTT	77.71	324	iP	29	57.30	-1.5
OGA	77.73	338	iPc	30	00.10	1.0
BSF	77.74	341	iPc	29	59.20	0.3
	1.1s	824.40nm				6.7mb
ZLA	77.74	340	ePc	29	59.29	0.4
GPA	77.76	322	iP	29	57.00	-2.1
VOY	77.81	336	iPc	29	58.70	-0.7
			iPcP	30	04.40	
CBN	77.82	42	iPc	30	00.00	0.6
BBS	77.94	340	P	30	00.45	0.5
DIM	77.95	326	iP	30	00.00	0.0
VBY	77.95	335	iPc	30	00.10	0.1
			iPcP	30	07.00	
IZI	78.03	323	eP	30	00.30	-0.3
OSS	78.10	338	ePc	30	01.89	0.8
FLN	78.11	346	iPc	30	01.30	0.5
	1.2s	1204.35nm				6.8mb
	Z 22s	57.00um				6.9Msz
TRI	78.15	336	e(P)c	30	00.50	-0.5
			e	32	36.00	
			e(PPP)	34	56.00	
			e(S)	39	48.00	
			e	41	00.00	
			e	44	32.00	
			e(SS)	45	08.00	
PLD	78.18	327	iPc	30	01.00	-0.3
LLS	78.19	339	P	30	02.23	0.7
LOMF	78.19	341	P	30	01.87	0.5
LDF	78.22	346	iPc	30	02.00	0.5
	1.2s	875.90nm				6.7mb
VVI	78.23	337	P	30	01.62	0.1
	1.0s	411.20nm				6.4mb
VTS	78.24	328	iPc	30	00.00	-1.9
RIY	78.33	335	iPc	30	01.70	-0.3
ASPA	78.34	203	iPd	30	02.70	0.4
	1.9s	171.60nm				5.7mb
	Z 22s	21.30um				6.4Msz
			iS	39	56.00	
			iP'P'	57	08.30	
			pRPKP	00	34.20	
KDZ	78.34	326	iPc	30	01.00	-1.2
MFT	78.45	324	iP	30	01.80	-1.1
VDL	78.45	339	ePc	30	04.01	1.0
GRR	78.53	346	iPc	30	04.00	0.8
BNT	78.59	324	iP	30	03.30	-0.3
EDC	78.62	324	iP	30	02.50	-1.3
PLE	78.78	331	iPc	30	04.92	0.2
ALN	78.79	325	eP	30	04.34	-0.3
LOR	78.84	343	iPc	30	05.50	0.6
	1.0s	1657.70nm				7.0mb
	Z 22s	185.00um				7.4Msz
ALT	78.91	322	eP	30	05.60	0.1
LPF	78.91	346	iPc	30	06.20	1.0
	1.2s	1094.90nm				6.7mb
TMA	78.94	339	ePc	30	06.01	0.3
DST	78.99	323	eP	30	05.00	-0.9
SAL	79.04	338	P	30	06.13	0.2
IVA	79.04	330	iPc	30	06.12	0.0
CEH	79.05	44	ePc	30	05.78	-0.4
	1.5s	1656.35nm				6.8mb
	Z 19s	80.89um				7.1Msz
			ec	30	10.83	
			esPd	30	20.27	
			S	39	59.63	
HYF	79.06	344	iPc	30	07.20	1.1
MDI	79.06	338	P	30	05.96	-0.1
	1.1s	442.60nm				6.4mb
LBF	79.09	343	iPc	30	06.80	0.5
	1.0s	659.20nm				6.6mb
SSF	79.10	343	iPc	30	07.00	0.7
PRM	79.11	48	P	30	06.33	-0.2
BRS	79.15	185	iPc	30	07.00	0.3
	1.5s	22.00nm				4.9mb X
			i	30	14.00	
			eS	40	00.00	
			e	40	22.00	
			e	44	52.00	
MMK	79.19	340	ePc	30	08.15	1.0
PVY	79.27	330	iPc	30	06.91	-0.5
DIX	79.28	340	ePc	30	08.80	1.2
NKY	79.37	331	iPc	30	07.18	-0.7
SKO	79.37	329	iPc	30	15.50	7.7X
			iS	40	18.00	
EMS	79.39	340	ePc	30	08.92	0.8
AVF	79.39	343	iPc	30	08.70	0.8
BRY	79.42	331	iPc	30	07.30	-1.0
SRS	79.44	327	eP	30	07.82	-0.4
SMF	79.44	343	iPc	30	09.10	0.9
	1.2s	1385.25nm				6.8mb
JSC	79.45	47	ePc	30	07.80	-0.5
LHS	79.48	46	ePc	30	08.07	-0.5
ORX	79.58	340	Pc	30	08.73	-0.3
ORO	79.59	340	P	30	09.06	0.0
	0.9s	281.30nm				6.3mb
KNT	79.63	328	iP	30	09.30	0.1
EZN	79.64	325	iP	30	08.40	-0.8
TTG	79.64	331	iPc	30	08.65	-0.5
BGF	79.71	343	iPc	30	10.50	0.9
	1.1s	902.55nm				6.7mb
KHL	79.77	322	iP	30	08.70	-1.4
HVAR	79.77	333	iPc	30	09.20	-0.8
SOH	79.78	327	eP	30	09.42	-0.7
RSL	79.82	340	P	30	11.37	1.0
HCY	79.85	331	iPc	30	09.48	-0.9
BDV	79.90	331	iPc	30	09.77	-0.9
SDA	79.91	330	iPd	30	10.40	-0.3
LSD	79.93	340	Pc	30	12.32	1.2
LPL	79.96	340	iPc	30	12.70	1.5
	0.9s	626.35nm				6.6mb
LPG	79.97	340	iPc	30	13.00	1.6
	1.2s	1528.10nm				6.9mb
GRG	79.98	328	iP	30	11.10	0.0
OUR	80.00	326	eP	30	10.34	-0.9
ULC	80.07	330	iPc	30	10.51	-1.1
BOB	80.08	338	P	30	12.77	1.1
	1.0s	1141.90nm				6.8mb
THE	80.08	327	eP	30	10.98	-0.6
TCF	80.08	344	iPc	30	12.70	1.1
	1.0s	928.00nm				6.7mb
MAF	80.08	343	iPc	30	13.10	1.5
BCK	80.10	321	iP	30	09.40	-2.5
PLDF	80.14	343	P	30	13.33	1.4
RSM	80.15	336	P	30	13.47	1.6
AGO	80.15	343	P	30	13.57	1.6
MFF	80.17	345	iPc	30	13.30	1.3
RSP	80.20	340	Pc	30	12.32	-0.1
LACI	80.22	330	iPc	30	11.50	-0.8
DHR	80.23	300	ePc	30	11.00	-1.7
LSF	80.24	344	iPc	30	13.50	1.1
MBL	80.30	216	iPc	30	12.90	0.0
	0.8s	131.00nm				6.0mb
SFI	80.30	336	P	30	14.42	1.7
	1.2s	1718.10nm				6.9mb
MME	80.33	337	P	30	14.80	1.6
PGD	80.38	336	P	30	15.00	1.6
BNI	80.42	340	P	30	14.92	1.4
ARV	80.42	335	P	30	13.92	0.5
TIR	80.44	330	iPc	30	12.70	-0.8
			iS	40	13.00	
PYM	80.46	343	P	30	15.02	1.3
FNA	80.47	329	eP	30	13.18	-0.6
PAIG	80.47	327	eP	30	12.86	-0.9
BDI	80.48	337	P	30	13.96	0.2
	0.9s	321.10nm				6.3mb
BHB	80.49	340	Pc	30	13.06	-0.8
PCP	80.50	339	Pc	30	13.88	0.0
RRL	80.52	340	Pc	30	15.44	1.2
CRE	80.55	336	P	30	15.18	0.9
	1.4s	1108.90nm				6.7mb
IZM	80.55	323	eP	30	08.00	-6.3X
SSB	80.63	342	P	30	15.64	1.1
CKI	80.67	339	P	30	14.92	0.2
SGS	80.69	47	eP	30	15.23	0.2
MRX	80.78	70	iP	30	18.38	2.8X
KBN	80.80	329	iPc	30	15.00	-0.6
PII	80.81	337	P	30	15.18	-0.3
	1.1s	545.20nm				6.5mb
DOI	80.82	340	P	30	14.77	-0.9
	1.0s	479.80nm				6.4mb
FAM	80.83	317	eP	30	17.00	1.3
PZZ	80.85	340	Pc	30	15.34	-0.5
ROB	80.88	339	Pc	30	15.83	-0.1
FIN	80.89	339	Pd	30	15.59	-0.3
ASS	80.89	335	P	30	16.76	0.8
	1.1s	768.60nm				6.6mb
LBL	80.92	343	P	30	17.45	1.3
HBF	80.97	47	ePc	30	16.76	0.3
BERA	81.00	329	eP	30	15.00	-1.4
ENR	81.04	339	Pc	30	15.77	-1.1
STV	81.05	340	Pc	30	15.65	-1.2
PMO	81.13	128	iPc	30	17.40	0.0
	2.1s	2976.00nm				6.9mb
CSS	81.14	317	eP	30	17.00	-0.4
RJF	81.16	344	iPc	30	18.70	1.4
	1.0s	886.40nm				6.7mb
	Z 22s	168.00um				7.4Msz
IMI	81.24	339	Pc	30	18.13	0.3
TPT	81.25	128	iPc	30	18.10	0.1
	2.0s	2556.30nm				6.9mb
LSK	81.29	329	iPc	30	18.20	0.1
TPE	81.35	329	iPd	30	19.00	0.7
VLO	81.35	330	iPc	30	18.20	-0.1
AQU	81.37	335	P	30	19.54	1.0
SBF	81.39	339	iPc	30	19.20	0.6
	0.9s	731.20nm				6.7mb
RAR	81.39	141	P	30	32.00	13.4X
			S	40	32.00	
RAR	81.39	141	(P)	30	20.75	2.1
CAF	81.43	343	iPc	30	20.60	1.9
VAH	81.46	128	iPc	30	19.20	0.1
	1.4s	531.50nm				6.4mb
MNS	81.53	335	P	30	19.54	0.2
RUV	81.54	128	iPc	30	19.60	0.1
	1.7s	1658.70nm				6.8mb
BAI	81.55	332	iPc	30	19.00	-0.3
GANF	81.58	340	P	30	20.50	0.9
PPCY	81.62	318	eP	30	19.00	-0.8
LFF	81.64	344	iPc	30	21.50	1.7
SRN	81.73	329	iPc	30	20.20	-0.1
VILF	81.76	341	P	30	21.71	1.2
LPO	81.82	344	iPc	30	22.40	1.7
FRF	81.85	340	iPc	30	21.70	0.8
	0.8s	199.35nm				6.2mb
SDI	81.87	334	P	30	21.22	0.1
	1.0s	1064.50nm				6.8mb
CRX	81.89	69	(P)	30	23.40	1.5
TAVF	81.92	340	P	30	22.45	1.1
PRAF	81.92	341	P	30	22.91	1.6
IGT	81.94	329	iP	30	21.62	0.2
LRG	82.01	340	iPc	30	22.80	1.1
	1.2s	768.80nm				6.6mb
TREF	82.05	341	P	30	23.51	1.5
RMP	82.06	335	P	30	22.44	0.4
	1.1s	4080.70nm				7.4mb
PUYF	82.07	340	P	30	23.43	1.3
LMR	82.09	340	iPc	30	23.20	1.0
	1.1s	681.80nm				6.6mb
RDP	82.11	335	P	30	22.72	0.4
	1.2s	3376.30nm				7.3mb
ARMA	82.23	186	iPc	30	24.30	1.3
	1.1s	142.00nm				5.9mb
UNM	82.23	69	iP	30	24.50	0.9
GELF	82.27	341	P	30	24.49	1.3
BERF	82.28	340	P	30	24.49	1.2
PGF	82.28	338	iPc	30	23.90	0.6
	0.8s	265.40nm				6.3mb
AFR	82.42	131	iPc	30	24.30	0.2
	1.1s	707.20nm				6.6mb
SGO	82.52	333	P	30	24.34	0.0
	1.6s	961.00nm				6.6mb
PPT	82.54	131	iPc	30	25.10	0.4
	1.3s	1548.10nm				6.9mb
PPN	82.57	131	iPc	30	25.20	0.3
	1.2s	423.70nm				6.4mb
PAE	82.62	131	iPc	30	25.30	0.2
	1.3s	794.20nm				6.6mb
SALJ	82.64	314	P	30	14.70	-10.6X
ORI	82.65	332	P	30	26.22	1.1
IIA	82.68	68	iP	30	28.21	2.7
WARB	82.69	209	eP	30	26.50	1.1
	1.0s	345.00nm				6.4mb
PPM	82.76	68	iP	30	28.40	1.7
TVO	82.88	131	iPc	30	26.80	0.3
	1.8s	1926.60nm				6.9mb
TDS	83.05	332	P	30	28.26	1.1
MTHF	83.27	343	P	30	29.89	1.6
RYD	83.38	302	iPc	30	30.00	0.8
LISJ	83.39	314	P	30	29.00	0.0
LESF	83.40	343	P	30	30.60	1.6
LVVM	83.48	66	(P)	30	30.30	0.7
GRBF	83.54	343	P	30	30.97	1.2
IISM	83.54	68	(P)	30	17.41	-12.6X
EPF	83.56	344	iPc	30	30.90	1.0
	1.1s	638.80nm				6.7mb
OGE	83.57	345	P	30	30.39	0.6
PERF	83.64	342	P	30	31.19	1.0
MADF	83.64	345	P	30	30.55	0.3
ELYF	83.65	345	P	30	30.46	0.2

13d 01h

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ESCF   83.67 345 P      30 31.11   0.7
ATE    83.68 345 P      30 31.11   0.7
BOH    83.72 345 P      30 31.20   0.5
ELIZ   83.74 346 iPd    30 31.61   0.9
JRDJ   83.74 313 P      30 30.00  -1.1
ISSF   83.75 345 P      30 32.16   1.2
ACX    83.78  71 iP     30 23.66  -7.6X
DHLJ   83.78 314 P      30 31.40   0.4
ENSF   83.79 344 P      30 32.97   1.9
TRGS   83.79 343 P      30 32.50   1.3
ETER   83.82 342 iPd    30 32.61   1.5
LHE    83.84 345 P      30 32.56   1.2
PAND   83.85 343 P      30 33.00   1.5
QASM   83.85 305 eP     30 30.33  -1.2
SHWJ   84.11 313 P      30 31.50  -1.5
EMON   84.24 350 iPd    30 33.30   0.1
ECRI   84.43 346 iPc    30 35.02   0.8
NAQJ   84.43 313 P      30 34.00  -0.6
EGRA   84.49 344 iPc    30 35.21   0.8
MSI    84.63 332 P      30 33.75  -1.4
       0.7s   347.10nm          6.6mb
ATN    84.70 332 P      30 33.95  -1.6
       1.2s   174.00nm          6.1mb
STK    84.79 195 iPc    30 31.90  -3.9X
       1.0s    52.70nm          5.7mb
                iS      40 47.90
STS    84.91 351 iPc    30 37.16   0.6
MNO    85.13 332 P      30 37.70  -0.3
       1.6s  1732.50nm          7.0mb
AYN    85.17 312 iPc    30 38.00   0.0
ERUA   85.25 349 iPc    30 38.85   0.6
HQL    85.26 313 iPc    30 38.67   0.2
GIB    85.27 333 P      30 38.90   0.4
       1.1s   424.30nm          6.6mb
OXX    85.43  68 iP     30 42.95   3.2X
SRFA   85.49 313 iPc    30 39.53  -0.1
RIV    85.65 186 iPc+   30 42.90   2.9X
                iSKS    41 02.00
                iS      41 12.00
                eSS     46 58.00
                eLQ     53 12.00
EZAM   85.65 351 iPc    30 40.89   0.6
EROQ   85.70 344 iPc    30 40.59   0.0
MCT    85.72 333 P      30 41.34   0.5
       1.2s   469.20nm          6.6mb
MEEK   85.75 215 iPc    30 40.40  -0.4
       1.0s   336.00nm          6.5mb
MEU    85.84 332 P      30 41.50   0.1
       1.2s   572.70nm          6.7mb
PZI    85.90 332 P      30 41.68   0.0
       1.2s  1597.40nm          7.1mb
CVT    85.91 333 P      30 42.45   0.9
FAI    86.04 333 P      30 42.40   0.2
       1.3s   550.50nm          6.6mb
ETOR   86.11 345 iPc    30 42.98   0.3
ESEL   86.26 342 iPc    30 43.66   0.3
HLW    86.39 316 eP+    30 44.00  -0.1
BWA    86.46 188 iPc    30 44.90   0.8
                ipP     30 51.00  19kmX
GUD    86.59 347 iPc    30 44.97  -0.2
FORT   86.62 206 iPc    30 45.60   0.7
       0.9s   241.00nm          6.4mb
PTS    86.94 334 P      30 47.93   1.2
       1.4s  2143.40nm          7.2mb
ECHE   87.13 344 iPc    30 47.76   0.1
WAJH   87.19 310 iPc    30 47.33  -0.7
CNB    87.26 188 eP     30 49.00   1.0
       1.5s    90.00nm          5.8mb
CAN    87.30 188 iPc    30 48.80   0.6
                i       30 55.30
EPLA   87.42 348 iPc    30 49.22   0.2
PAB    87.70 347 ePc    30 50.52   0.1
       1.0s   543.88nm          6.8mb
                ec      30 56.48
                esPd    31 04.84
ACU    88.09 344 iPc    30 53.58   1.3
ADE    88.28 196 iPc    30 53.20   0.3
EVIA   88.31 345 iPc    30 53.58   0.1
WCZ    88.58 167 eP     30 54.90   0.7
                e       31 12.50
COOL   88.79 212 iPc    30 54.90  -0.5
EALH   88.90 344 iPd    30 56.24   0.1
MRWA   89.04 216 eP     30 56.00  -0.6
LIS    89.10 350 eP     30 58.00   1.0
                iS      41 44.00
EHUE   89.13 345 iPc    30 57.43   0.1
TAIF   89.44 305 eP     30 59.00  -0.2
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EHOR   89.52 347 iPc    30 58.90  -0.1
KUZ    89.56 166 eP     30 58.70  -0.1
                e       31 19.00
ELUQ   89.64 346 iPc    30 59.50  -0.2
ECOG   89.81 346 iPd    31 00.10  -0.5
TOO    89.87 190 iPc    31 01.60   1.2
       0.8s   128.00nm          6.2mb
ENIJ   89.90 345 iPd    31 00.04  -0.8
EVAL   89.95 348 iPc    31 00.83  -0.2
BAL    90.04 215 iPc    31 00.70  -0.6
EGUA   90.24 346 iPc    31 01.68  -0.8
EPRU   90.36 347 iPc    31 03.18   0.2
KLB    90.57 214 iPc    31 03.20  -0.5
SDCA   90.58   3 eP     31 03.23  -0.8
GIBL   90.59 348 iP     31 06.00   1.9
CML    90.59   3 eP     31 06.00   2.0
LFA    90.59   3 eP     31 04.70   0.6
FRA    90.61   3 e(P)   31 03.75  -0.4
PDA    90.61   3 eP     31 05.20   1.1
ALJ    90.69 347 iP     31 07.00   2.3
ABHA   90.72 301 iPc    31 05.70   0.5
EJIF   90.89 347 iPc    31 05.84   0.4
CNIL   91.05 348 iP     31 10.00   3.9X
MOMI   91.06 347 iP     31 08.00   1.8
PLAT   91.26 347 iP     31 08.50   1.4
MUN    91.46 215 iPc    31 07.50  -0.3
       0.9s    48.00nm          5.9mb
     Z  22s    11.70um          6.3Msz
CPS    91.56 347 iP     31 09.90   1.4
BIT    91.72 347 iP     31 10.50   1.3
TSY    92.02 347 iP     31 11.00   0.4
TGT    93.18 347 iP     31 11.00  -4.9X
RTC    93.52 348 iP     31 19.50   2.0
TNF    94.73 346 iP     31 24.00   0.9
MKL    95.89 297 ePd    31 29.69   1.0
ATA    96.07 297 ePd    31 29.29  -0.2
ARO    96.21 297 ePd    31 31.02   0.8
DAF    96.32 298 ePd    31 30.96   0.3
KSU    96.44 298 ePd    31 31.46   0.2
TBT    99.68 357 ePc    31 45.60  -0.1
                ec      31 50.98
                epPd    31 57.60  39kmX
                ed      32 02.90
SJG   100.09  43 ePdiff31 47.59   0.0X
                ec      31 52.31
                epPd    31 58.93
                esPd    32 02.24
AAE   100.50 299 ePdiff31 50.50   0.6
TOV   105.80  50 ePdiff32 31.30  18.2X
CAR   106.50  47 iPdiff32 20.00   3.7X
CAR   106.50  47 ePdiff32 20.30   4.0X
BOG   108.12  57 ePKP   36 47.00  16.3X
LKO   117.28 342 Pdiff  33 13.05   8.9X
       1.0s     6.00nm
LKO   117.28 342 PKPc   36 47.11  -0.6
       0.9s    61.00nm
DRV   119.12 188 ePdiff33 27.00  15.9X
                PP      38 24.00
                SP      48 10.00
                SS      54 37.00
TIC   120.00 341 PKP    36 52.40  -0.4
KIC   120.22 341 PKP    36 52.60  -0.6
NNA   120.35  69 ePKP   36 52.00  -1.5
       1.6s    66.67nm
LIC   120.41 341 PKP    36 53.30  -0.3
     Z  20s    50.00um          7.2Msz
CSY   123.44 201 iPKPc  37 06.90   9.1X
       1.1s    20.50nm
MTD   125.65 290 iPKPc  36 48.50 -15.2X
ARE   127.01  67 ePKP   37 07.00   0.4
LPAZ  128.76  64 PKP    37 09.50  -0.9
LPB   128.98  64 PKPc   37 11.00   0.5
                PS      49 40.00
                SS      56 39.00
                LR      21 04.00
CNCB  129.27  64 PKP    36 58.00 -13.2X
                i       37 11.50
SBA   129.61 178 iPKPd  37 09.90   0.4
BUL   130.02 290 iPKPc  37 12.40   0.3
CCH   130.76  63 PKP    37 13.70  -0.1
BFT   133.40 284 ePKP   37 07.00 -11.5X
       1.0s    70.00nm
MOCB  134.14  65 PKP    37 09.60 -10.7X
SLR   134.49 286 ePKP   37 08.90 -11.5X
       0.9s   500.00nm
SOB1  134.50  28 ePKP   37 05.50 -15.1X
                e       37 22.80
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YJA   134.94  66 e(PKP)37 13.50  -8.3X
KSR   135.41 287 ePKP  37 14.50  -7.7X
       1.5s   260.00nm
SEK   136.79 284 iPKPd 37 15.80  -9.0X
       1.0s   500.00nm
SLA   136.95  68 e(PKP)37 18.00  -7.2X
FSA   137.69  70 ePKPc 37 26.90   0.6
BDFB  138.03  40 ePKP  37 28.65   1.3
                iPP    40 13.31
BLF   138.23 284 ePKP  37 13.00 -14.4X
       0.8s    26.00nm
BOSA  138.33 286 ePKP  37 28.86   1.5
WIN   138.40 300 iPKPc 37 19.00  -9.0X
       1.5s   150.00nm
FRS   139.21 284 ePKP  37 18.00 -10.9X
       1.7s   240.00nm
CYA   139.58  72 e(PKP)37 19.50 -10.2X
HVD   139.72 283 iPKPc 37 21.00  -9.1X
       1.5s   160.00nm
RTCB  139.98  78 e(PKP)37 24.00  -6.5X
RTLL  140.07  78 e(PKP)37 23.00  -7.6X
RTCV  140.40  78 e(PKP)37 18.00 -13.1X
CFA   140.41  78 e(PKP)37 23.40  -7.7X
AGVB  140.74  46 ePKP  37 27.20  -4.8X
                e      37 35.30
                e      38 02.70
                e      40 30.30
                e      58 50.60
MDZ   140.92  80 e(PKP)37 25.40  -6.7X
                i      37 34.40
GRM   140.96 279 ePKP  37 23.40  -8.7X
       1.4s   520.00nm
SPA   141.74 180 iPKPd 37 24.80  -7.8X
       1.2s   492.96nm
POF   142.12 290 iPKPc 37 31.00  -3.2X
       0.9s   266.00nm
TCA   142.41  74 ePKPc 37 30.60  -4.2X
RFA   142.44  82 ePKPd 37 29.00  -5.7X
BEW   142.72 284 iPKPc 37 29.90  -5.3X
       1.2s   180.00nm
CVN   143.74 288 iPKPd 37 35.20  -1.8
       1.2s   380.00nm
SUR   143.79 286 iPKPd 37 47.00   9.8X
       0.8s   569.00nm
CACB  143.97  43 iPKPc 37 34.80  -2.9
                e      40 51.20
                e      59 29.80
VAO   145.04  44 ePKP  37 38.90  -0.5
                e      37 52.90
                e      40 48.50
CER   145.38 286 iPKPc 37 33.50  -6.2X
       1.0s     2.32nm
RSTA  145.55  48 iPKPc 37 39.70  -0.5
                i      37 54.80
BLE   146.15 286 iPKPc 37 41.00   0.1
LPA   148.87  71 ePKP+ 37 45.00  -0.2
     Z  20s    56.74um          7.4Msz
SNA   159.58 198 ePKP  37 57.60  -1.0
       1.2s    60.00nm
     S.D. = 1.0  on 699 of 784 obs.
-----------------------------------
?  NOV  13, 1993  01h 20m 36.77± 4.17s
   14.852 N ±14.6km   60.470 W ±40.0km
   DEPTH =  33.0km  (normal)
 WINDWARD ISLANDS                  ( 95)
      ML 2.8 (FDF).

CRM     0.44 257 iPd   20 46.51   0.0
MVM     0.51 234 iPc   20 47.40  -0.1
                S      20 57.40
FDF     0.67 260 ePc   20 49.66  -0.1
                S      21 01.00
BIM     0.67 240 iPc   20 50.00   0.2
                S      21 02.00
DEG     1.56 339 eP    21 02.50  -0.1
PAG     1.65 315 eP    21 04.00   0.1
                S      21 23.00
     S.D. = 0.2  on   6 of   6 obs.
-----------------------------------
*  NOV  13, 1993  01h 40m 30.41± 0.79s
   51.986 N ±14.7km  158.890 E ±17.4km
   DEPTH =  33.0km  (normal)
   4.5mb ( 16 obs.)
 NEAR EAST COAST OF KAMCHATKA     (218)

MAT    21.28 232 eP    45 16.00  -0.1
       0.8s     9.70nm          4.3mb
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FBA     29.73  44 (P)   46 33.20  -2.1
        1.0s     1.90nm          3.8mb
INK     35.20  37 eP    47 23.50   0.7
        0.9s     2.00nm          4.0mb
MBC     38.35  22 eP    47 51.00   1.7
HFS     64.77 342 eP    51 04.90  -2.4
        0.3s     2.10nm          4.7mb
GBA     74.16 272 P     52 05.00  -0.4
WRA     74.77 204 P     52 08.90   0.2
        0.7s     0.60nm          3.7mb
GEC2    75.25 337 eP    52 10.50  -0.9
        0.9s     1.45nm          4.0mb
                  e     52 15.30
                  e     52 19.70
                  e     52 21.60
CDF     77.08 341 eP    52 21.30  -0.4
        1.0s     5.40nm          4.5mb
HAU     77.66 342 eP    52 24.40  -0.3
BSF     77.74 341 eP    52 24.50  -0.8
LOR     78.84 343 eP    52 31.00  -0.2
        0.8s     4.55nm          4.5mb
LBF     79.09 343 eP    52 32.20  -0.4
        0.9s     3.75nm          4.4mb
SSF     79.10 343 eP    52 32.50  -0.1
        0.8s     4.55nm          4.5mb
AVF     79.39 343 eP    52 34.20   0.0
        0.8s     5.25nm          4.6mb
SMF     79.44 343 eP    52 34.50   0.0
LPL     79.96 341 eP    52 38.10   0.5
        0.8s     5.25nm          4.6mb
LPG     79.98 341 eP    52 38.50   0.7
        0.8s     4.15nm          4.5mb
TCF     80.07 344 eP    52 38.30   0.4
MAF     80.08 344 eP    52 38.50   0.6
        0.8s     4.55nm          4.5mb
LSF     80.23 344 eP    52 38.90   0.2
RJF     81.15 344 eP    52 44.10   0.5
CAF     81.42 344 eP    52 46.00   0.9
        0.9s     5.90nm          4.6mb
LFF     81.63 345 eP    52 47.00   0.9
LPO     81.81 344 eP    52 47.80   0.8
        0.8s     7.00nm          4.7mb
     S.D. = 1.0  on  25 of  25 obs.
-----------------------------------
   NOV  13, 1993  02h 08m 26.44± 0.22s
   51.990 N ± 4.7km  158.759 E ± 3.8km
   DEPTH =  62.3km  (  4 depth phases)
   5.1mb ( 74 obs.)
 NEAR EAST COAST OF KAMCHATKA     (218)

SKR      2.13 233 iPnc  08 58.90  -1.3
                iS      09 23.90
KUR      9.88 231 (Pn)  10 46.00  -2.1
YSS     11.55 251 iPnc  11 12.20   1.5
OFUJ    17.55 229 eP    12 28.90   0.8
ILT     19.34  26 iPc   12 47.00  -2.1
        1.8s    77.00nm         4.7mb
KAKJ    20.57 227 P     13 00.10  -2.1
MDJ     20.66 261 eP    13 00.80  -2.2
MAT     21.22 231 iPc   13 08.50  -0.3
        0.7s   110.96nm         5.3mb
CHJJ    21.25 229 P     13 11.50   2.5
MTMJ    21.38 232 P     13 14.90   4.4X
IIDJ    22.22 230 P     13 19.70   0.9
CN2     23.62 263 eP    13 30.00  -2.3
        1.0s    14.00nm         4.4mb
TIK     23.75 337 eP    13 33.00  -0.3
        1.0s    80.00nm         5.1mb
                  e     13 48.00  64km
WKYJ    24.35 232 eP    13 41.60   2.0
YONJ    24.66 237 eP    14 00.00  17.5X
TKSJ    25.31 234 P     13 51.10   2.6
TKSJ    25.31 234 eP    13 59.90  11.4X
TTA     26.10  48 eP    13 55.51  -0.2
        1.3s    19.89nm         4.5mb
                  e     14 10.74  64km
IMA     27.41  41 eP    14 06.41  -1.3
        0.8s     8.30nm         4.4mb
PMR     29.33  50 eP    14 23.21  -1.6
        0.6s     8.10nm         4.6mb
FBA     29.79  44 ePc   14 27.99  -0.9
        0.8s    13.85nm         4.7mb
                  e     14 43.62  64km
ZAK     34.10 290 eP    15 07.00   0.4
        1.0s    12.00nm         4.8mb
SSE     34.48 248 eP    15 09.20  -0.9
        1.1s    25.00nm         5.1mb
TIY     35.18 265 eP    15 15.50  -0.6
INK     35.24  37 ePc   15 16.30   0.1
        0.6s    14.00nm         5.1mb
NRI     36.15 326 iPc   15 22.10  -1.7
        1.0s    12.00nm         4.8mb
                  i     17 48.00
MBC     38.38  22 ePc   15 43.70   1.2
        0.9s     5.00nm         4.4mb
LZH     41.52 270 Pd    16 06.00  -3.1X
        1.5s    40.00nm         5.0mb
RES     44.65  21 eP    16 34.00   0.1
        0.8s     7.00nm         4.5mb
GYA     46.46 257 iPd   16 48.40  -0.5
        0.8s    25.00nm         5.2mb
                 pP     17 03.20  57km
WMQ     46.57 289 eP    16 48.50  -1.0
        1.0s    15.00nm         4.9mb
QIZ     50.27 248 P     17 19.60   1.3
DAG     51.50 359 iPd   17 26.00  -1.0
        0.8s    58.21nm         5.7mb
                 ipP    18 39.90 356kmX
ORV     54.30  70 eP    17 47.60  -0.6
KVN     56.59  68 eP    18 05.19   0.1
BONR    57.22  69 eP    18 08.53  -1.1
HVU     57.72  62 eP    18 13.76   0.8
TNP     57.76  68 eP    18 13.33   0.0
        0.8s    12.38nm         5.1mb
GUN     58.20 276 P     18 15.20  -1.4
        0.4s    16.00nm         5.5mb
KKN     58.65 276 P     18 18.60  -1.1
        0.4s    22.00nm         5.6mb
PKI     58.73 276 P     18 19.00  -1.4
FRB     58.84  22 eP    18 19.00  -1.2
        0.5s     8.00nm         5.1mb
DMN     58.89 276 P     18 20.40  -1.0
        0.4s    23.00nm         5.7mb
GKN     58.89 277 P     18 20.00  -1.3
TPNV    59.10  68 eP    18 22.71   0.1
        0.8s    12.10nm         5.1mb
                 epP    18 35.63  46kmX
                  e     18 39.43
DAU     59.50  62 eP    18 25.76   0.2
GSC     59.92  70 eP    18 28.05  -0.2
EMUT    60.15  63 eP    18 30.03   0.1
ULM     60.17  46 ePc   18 31.50   1.9
KAF     60.18 336 iP    18 28.00  -1.4
        0.3s     2.40nm         4.8mb
MSU     60.31  65 eP    18 31.19   0.2
RSSD    60.70  55 ePc   18 33.37  -0.2
        0.8s    33.04nm         5.5mb
                 epP    18 46.67  47kmX
SRU     60.81  63 eP    18 34.27  -0.1
NUR     61.97 336 iP    18 40.00  -1.6
PV09    62.01  63 eP    18 41.96  -0.6
PV10    62.15  63 ePc   18 43.30  -0.1
PV08    62.22  62 eP    18 43.75  -0.3
GLD     63.22  59 eP    18 51.33   0.9
        1.0s    11.20nm         4.9mb
MOL     63.54 346 eP    18 50.46  -1.5
HFS     64.74 342 eP    18 58.20  -1.6
        0.4s    20.60nm         5.5mb
JAQ     65.19  32 eP    19 02.50  -0.2
MUD     69.04 342 iPd   19 26.40  -0.5
        0.7s    31.00nm         5.3mb
MEO     70.44  58 iPd   19 35.40  -0.4
TUL     71.02  56 iPc   19 38.80  -0.5
EKA     72.00 349 Pc    19 44.40  -0.4
        1.2s    42.30nm         5.2mb
FVM     72.06  51 eP    19 44.74  -0.7
        0.6s    14.64nm         5.1mb
GAC     72.10  37 eP    19 44.00  -1.5
KSP     72.73 336 eP    19 48.60  -0.6
WIT     72.97 343 eP    19 51.50   1.0
UYO     73.07  56 iPc   19 50.40  -1.0
CLL     73.09 338 iP    19 50.30  -0.9
        1.1s    29.00nm         5.1mb
ELC     73.19  51 ePd   19 51.54  -0.5
                 epP    20 04.62  45kmX
SPC     73.19 333 eP    19 50.70  -1.4
BRG     73.27 338 eP    19 51.80  -0.5
        1.2s    15.00nm         4.8mb
WTS     73.73 342 iPc   19 55.40   0.5
        0.7s    50.70nm         5.6mb
PRU     73.95 337 iPc   19 56.00  -0.3
MOX     74.02 339 iP    19 56.90   0.2
        1.1s    22.00nm         5.0mb
GBA     74.07 272 Pc    19 56.80  -0.7
        0.9s    23.00nm         5.1mb
DLF     74.36 351 eP    19 59.20   0.6
DCN     74.39 351 eP    19 58.90   0.2
WRA     74.74 204 P     20 02.00   0.9
        1.5s     4.30nm         4.2mb
WRA     74.74 204 P     20 14.10  13.0X
        0.9s     2.10nm
WRA     74.74 204 P     20 20.20  19.1X
        1.7s     1.20nm
ZST     74.96 335 i(P)  20 02.30   0.2
SRO     74.98 334 i(P)  20 02.50   0.3
KHC     74.98 337 iPc   20 02.50   0.2
        1.0s    17.90nm         5.0mb
                  e     20 09.50  22kmX
                  e     20 32.50
GRF     75.00 339 iPc   20 02.80   0.4
        1.1s    43.00nm         5.3mb
ENN     75.07 343 iPc   20 03.00   0.3
        0.9s    65.70nm         5.6mb
WET     75.14 338 iPc   20 03.50   0.3
        0.9s    24.00nm         5.1mb
MEM     75.20 342 iPc   20 03.55   0.1
        1.1s    38.60nm         5.2mb
GEC2    75.22 337 ePc   20 03.40  -0.4
        0.8s     6.31nm         4.6mb
                  e     20 06.00   8kmX
                  e     20 14.10
SNF     75.61 343 iPc   20 05.80   0.0
DOU     75.95 343 Pd    20 08.10   0.4
FUR     76.43 338 eP    20 10.60   0.1
        1.0s    31.00nm         5.2mb
BHG     76.47 337 eP    20 11.10   0.4
CDF     77.05 341 iPc   20 14.20   0.1
        0.9s    33.75nm         5.3mb
SLE     77.42 340 eP    20 15.20  -0.8
SLE     77.42 340 ePd   20 15.50  -0.5
CVL     77.46  43 eP    20 16.66   0.3
HAU     77.63 341 iPc   20 17.30   0.2
        0.9s    34.25nm         5.3mb
BSF     77.71 341 iPc   20 17.50  -0.2
        0.9s    20.45nm         5.1mb
OGA     77.71 338 iPc   20 18.40   0.6
        0.8s    11.00nm         4.9mb
ZLA     77.71 340 ePc   20 17.90   0.3
FLN     78.08 346 eP    20 19.50   0.0
OSS     78.08 339 iPc   20 20.40   0.6
OSS     78.08 339 ePc   20 20.50   0.7
LLS     78.16 339 ePd   20 21.00   0.7
LDF     78.19 346 eP    20 21.20   1.1
        0.8s     8.35nm         4.8mb
ASPA    78.42 203 iPc   20 22.10   0.4
        0.5s    14.60nm         5.2mb
VDL     78.42 339 iPc   20 22.50   0.8
VDL     78.42 339 ePd   20 22.70   1.0
GRR     78.50 346 eP    20 22.30   0.5
        1.1s    51.75nm         5.4mb
LOR     78.81 343 iPc   20 23.80   0.2
        1.0s    60.00nm         5.5mb
LPF     78.87 346 eP    20 24.40   0.5
        0.8s    17.60nm         5.0mb
TMA     78.91 339 iPc   20 24.40   0.0
TMA     78.91 339 ePd   20 24.80   0.4
HYF     79.02 344 iPc   20 25.60   0.8
        0.7s    62.85nm         5.7mb
LBF     79.06 343 iPc   20 25.10   0.1
        0.7s    15.30nm         5.0mb
SSF     79.07 343 iPc   20 25.40   0.4
        0.8s    31.30nm         5.3mb
MMK     79.16 340 iPc   20 26.60   0.8
MMK     79.16 340 ePc   20 26.80   1.0
DIX     79.25 340 iPc   20 27.20   0.9
DIX     79.25 340 ePc   20 27.30   1.0
AVF     79.36 343 iPc   20 27.10   0.5
        0.9s    57.35nm         5.5mb
EMS     79.36 340 ePc   20 28.10   1.3
SKO     79.36 329 eP    20 25.50  -1.1
SMF     79.41 343 iPc   20 27.30   0.4
        1.0s    32.40nm         5.2mb
ORX     79.56 340 P     20 28.13   0.3
BGF     79.68 343 iPc   20 28.90   0.6
        0.6s    14.60nm         5.1mb
RSL     79.79 341 P     20 29.72   0.6
LSD     79.90 340 P     20 30.51   0.7
LPL     79.93 340 iPc   20 31.10   1.1
        0.8s    30.35nm         5.3mb
LPG     79.94 340 iPc   20 31.30   1.2
        0.7s    23.90nm         5.2mb
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13d 02h

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TCF     80.05 344 iPc   20 31.10   0.8
        0.8s    31.45nm          5.3mb
MAF     80.05 343 iPc   20 31.40   1.1
        0.6s    31.75nm          5.4mb
MFF     80.13 345 iPc   20 31.60   0.9
        0.9s    20.95nm          5.1mb
RSP     80.17 340 P     20 31.24   0.2
LSF     80.20 344 iPc   20 31.90   0.8
        0.8s    32.50nm          5.3mb
OHR     80.34 329 eP    20 31.20  -0.8
BHB     80.46 340 P     20 31.79  -0.7
PCP     80.47 339 P     20 32.53  -0.1
RRL     80.49 340 P     20 33.85   0.9
COLF    80.53 343 P     20 33.91   1.0
SSB     80.60 342 P     20 34.13   0.9
PZZ     80.82 340 P     20 33.58  -1.0
ROB     80.85 339 P     20 34.40  -0.2
FIN     80.86 339 P     20 33.94  -0.7
ENR     81.02 340 P     20 34.13  -1.4
STV     81.02 340 P     20 34.31  -1.2
RJF     81.12 344 eP    20 37.10   1.1
        0.8s    21.75nm          5.1mb
SBF     81.36 339 eP    20 37.60   0.3
        1.0s    40.60nm          5.3mb
CAF     81.39 343 iPc   20 38.80   1.4
        0.9s    44.55nm          5.4mb
LFF     81.61 344 iPc   20 39.80   1.3
        0.9s    33.60nm          5.3mb
LPO     81.78 344 iPc   20 40.70   1.3
        0.9s    55.55nm          5.5mb
FRF     81.82 340 eP    20 39.90   0.3
LRG     81.98 340 eP    20 41.20   0.8
        0.8s    13.85nm          5.0mb
LMR     82.06 340 eP    20 41.50   0.6
PGF     82.26 338 eP    20 42.90   0.8
        0.9s    27.35nm          5.2mb
EPF     83.53 344 eP    20 49.40   0.9
        0.5s     6.70nm          4.9mb
STK     84.86 195 eP    20 51.20  -3.8X
        0.8s     2.40nm          4.3mb
VAO    144.95  44 ePKP  27 57.10  -0.8
CER    145.43 287 iPKPc 27 52.30  -6.1X
        0.8s    93.00nm
     S.D. = 1.0  on 154 of 162 obs.
-----------------------------------
?  NOV  13, 1993  02h 21m 18.35± 5.37s
   15.563 N ±49.6km   98.676 W ±14.3km
   DEPTH =  33.0km  (normal)
 OFF COAST OF GUERRERO, MEXICO    ( 65)

ACX      1.73 319 iP    21 46.50   0.0
                  iS    22 06.00
OXX      2.41  51 iP    21 56.50   0.0
                  iS    22 25.56
III      2.90 345 (P)   22 03.50   0.1
PPM      3.48   1 iP    22 12.00  -0.1
                  (S)   22 56.11
IIA      3.57   0 iP    22 16.01   3.3X
IISM     3.63  20 (P)   22 10.33  -3.2X
MRX      4.77 330 (P)   22 32.89   3.2X
                  (S)   23 40.52
     S.D. = 0.1  on   4 of   7 obs.
-----------------------------------
?  NOV  13, 1993  02h 24m 26.12± 2.47s
   31.209 S ±40.4km   68.797 W ±40.4km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTCB     0.28 181 iPd   24 41.00   0.1
                  S     24 52.10
RTLL     0.31 113 ePd   24 41.10   0.1
                  S     24 52.00
CFA      0.62 130 ePc   24 43.00  -0.1
                  S     24 56.00
RTCV     0.69 161 iPd   24 43.80   0.1
                  S     24 57.50
     S.D. = 0.2  on   4 of   4 obs.
-----------------------------------
?  NOV  13, 1993  02h 29m 34.42± 3.86s
   31.681 S ±23.9km   71.510 W ±27.3km
   DEPTH =  33.0km  (normal)
 NEAR COAST OF CENTRAL CHILE      (135)
      MD 3.6 (SAN).

JACH     1.27 142 iP+   29 55.68  -0.3
                  iS    30 11.32
ROCH     1.36 162 iP    29 57.24  -0.2
                  iS    30 14.53
PEL      1.62 155 iP    30 00.91  -0.1
                  iS    30 20.95
LCCH     1.79 182 iP    30 03.11  -0.4
FCH      1.94 148 iP    30 05.69  -0.3
                  iS    30 29.61
TACH     2.03 166 iP    30 06.98   0.0
PCH      2.11 157 iP    30 08.41   0.2
CACH     2.55 163 iP    30 15.15   0.7
CFA      2.79  89 e(P)  30 22.00   4.2X
TCA      5.92  89 ePd   31 02.20   0.0
                  (S)   32 06.00
     S.D. = 0.4  on   9 of  10 obs.
-----------------------------------
   NOV  13, 1993  04h 00m 30.77± 1.53s
   43.738 N ± 8.0km    7.396 E ±10.7km
   DEPTH =   5.0km  (geophysicist)
 NEAR SOUTH COAST OF FRANCE       (379)
      ML 2.4 (LDG).

REVF     0.02 276 Pg    00 31.83  -0.1
SBF      0.13  13 Pg    00 33.20  -0.3
                  Sg    00 35.00
AURF     0.16 342 Pg    00 33.80  -0.3
                  Sg    00 36.11
MVIF     0.24 312 Pg    00 35.58  -0.1
AUTN     0.26   5 Pg    00 35.62  -0.4
                  Sg    00 40.12
TOUF     0.30 339 Pg    00 36.25  -0.5
                  Sg    00 40.59
CALN     0.37 272 Pg    00 38.43   0.2
                  Sg    00 43.89
FRF      0.57 252 Pg    00 42.30   0.1
                  Sg    00 49.70
LMR      0.76 238 Pg    00 45.70  -0.3
                  Sg    00 56.40
LRG      0.80 250 Pg    00 46.70  -0.1
                  Sg    00 56.70
LPG      1.82 346 Pg    01 05.90   2.7X
                  Sg    01 29.00
LPL      1.84 345 Pg    01 05.40   1.9
     S.D. = 0.8  on  11 of  12 obs.
-----------------------------------
?  NOV  13, 1993  04h 08m 04.27± 1.14s
   44.408 N ±22.1km  150.205 E ±15.3km
   DEPTH =  33.0km  (normal)
   3.9mb (  3 obs.)
 EAST OF KURIL ISLANDS            (222)

KUSJ     4.19 254 P     09 04.80  -2.6
                  S     09 48.80
HOOJ     5.43 251 eP    09 24.00  -1.0
                  eS    10 21.80
ASAJ     5.44 270 P     09 27.30   2.2
MRRJ     6.94 257 eP    09 45.80  -0.4
                  eS    10 53.00
MAT     12.04 233 eP    10 49.00  -7.4X
FBA     39.26  37 (P)   15 29.00  -2.0
                  e     15 47.00
GUN     53.16 275 P     17 21.80   0.1
KKN     53.66 275 P     17 26.20   1.0
RES     53.69  17 eP    17 25.00   0.5
        1.0s     4.00nm          4.4mb
PKI     53.70 275 P     17 26.00   0.4
DMN     53.89 275 P     17 27.00   0.1
GKN     54.00 276 P     17 27.40  -0.1
WRA     65.66 196 P     18 48.80   1.4
        0.7s     0.60nm          3.8mb
MSU     69.03  56 (P)   19 04.36  -4.5X
CLL     77.71 334 e(P)  19 59.00   0.0
                  eSg   28 12.00
GEC2    79.63 332 eP    20 09.80   0.2
        0.5s     0.52nm          3.8mb
                  e     20 13.20
                  e     20 15.00
                  e     20 16.90
                  e     20 22.40
                  e     20 25.40
     S.D. = 1.4  on  14 of  16 obs.
-----------------------------------
?  NOV  13, 1993  05h 11m 05.91± 2.66s
   16.188 N ±27.6km   98.742 W ±11.2km
   DEPTH =  33.0km  (normal)
   4.2mb (  3 obs.)
 NEAR COAST OF GUERRERO, MEXICO   ( 58)

ACX      1.27 302 iP    11 24.46  -3.0
                  iS    11 42.80
OXX      2.13  65 iPd   11 40.15   0.1
                  iS    12 08.50
III      2.28 342 iP    11 43.00   0.8
                  (S)   12 18.68
PPM      2.87   2 eP    11 51.50   0.7
                  (S)   12 36.30
IIA      2.95   2 iP    11 52.45   1.0
                  (S)   12 41.49
IISM     3.07  25 iP    11 53.10  -0.2
                  (S)   12 45.15
UNM      3.15 352 (P)   12 04.30   9.6X
CRX      3.32 345 (P)   12 06.80   9.7X
LVVM     4.15  31 (P)   12 06.30  -2.2
MRX      4.20 327 iP    12 09.70   0.4
                  (S)   13 15.62
UYO     18.31  11 iPc   15 17.10  -2.0
TUL     19.82   7 iPc   15 34.40  -2.3
ALQ     19.92 341 eP    15 37.00  -1.0
        1.0s     8.25nm          4.0mb
FVM     22.92  17 eP    16 09.33   1.3
        0.9s    11.45nm          4.4mb
PRM     23.12  37 eP    16 11.00   0.9
PV10    23.89 340 eP    16 18.69   0.9
GOL     24.13 347 eP    16 21.52   1.4
        0.7s     4.86nm          4.2mb
SRU     25.06 338 (P)   16 30.19   1.2
ARUT    25.12 332 eP    16 31.80   2.2X
MSU     25.18 335 (P)   16 32.07   1.9
     S.D. = 1.6  on  17 of  20 obs.
-----------------------------------
?  NOV  13, 1993  05h 44m 43.45± 1.32s
   30.743 S ±12.1km  117.141 E ±14.1km
   DEPTH =  10.0km  (geophysicist)
 WESTERN AUSTRALIA                (590)

BAL      0.40 290 eP    44 51.00  -0.6
                  iS    44 56.10
KLB      1.00 148 eP    45 02.00  -0.4
                  eS    45 14.30
MUN      1.47 213 eP    45 10.50   0.6
                  eS    45 29.60
MRWA     1.82 327 eP    45 15.40   0.4
                  iS    45 38.20
     S.D. = 1.0  on   4 of   4 obs.
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*  NOV  13, 1993  05h 45m 51.43± 2.05s
   32.334 S ±17.4km   71.086 W ±17.0km
   DEPTH =  80.0km  (geophysicist)
 NEAR COAST OF CENTRAL CHILE      (135)
      MD 3.4 (SAN).

JACH     0.54 130 iP    46 05.93   0.1
                  iS    46 17.20
ROCH     0.64 174 iP    46 06.95   0.0
                  iS    46 18.69
PEL      0.87 157 iP    46 09.33   0.0
                  iS    46 22.40
FCH      1.20 146 iP    46 13.33  -0.2
                  iS    46 29.14
LCCH     1.21 200 iP    46 13.31   0.0
                  iS    46 30.18
TACH     1.32 175 iP    46 14.39  -0.4
                  iS    46 31.67
PCH      1.37 160 iP    46 14.99  -0.5
                  iS    46 33.14
LNV      1.64 189 iP    46 18.95   0.0
                  iS    46 38.78
CACH     1.82 167 iP    46 22.69   1.1
                  iS    46 44.31
RTCV     2.21  78 eP    46 26.90   0.0
                  S     46 54.40
     S.D. = 0.5  on  10 of  10 obs.
-----------------------------------
?  NOV  13, 1993  06h 13m 09.15± 1.18s
   37.893 N ±11.6km   29.506 E ±11.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 3.1 (ISK).

KHL      0.43   2 iPg   13 17.40  -0.5
                  eSg   13 24.40
BCK      0.96 116 ePn   13 27.50   0.0
IZM      1.84 287 ePn   13 40.70  -0.4
DST      1.84 338 ePn   13 42.00   0.9
     S.D. = 1.1  on   4 of   4 obs.
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? NOV 13, 1993  06h 21m 32.95± 1.05s
   38.021 N ± 9.9km   29.409 E ± 9.5km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                                (366)
      ML 3.1 (ISK).

KHL      0.32  17 iPg    21 39.40  -0.1
                  eSg    21 46.40
BCK      1.09 120 ePn    21 53.50   0.0
DST      1.70 339 ePn    22 03.00   0.2
IZM      1.73 283 ePn    22 03.20  -0.1
     S.D. = 0.3  on   4 of   4 obs.
-----------------------------------------
   NOV 13, 1993  06h 52m 12.91± 0.60s
   50.148 N ±13.6km  179.769 E ± 5.7km
   DEPTH =  33.0km  (normal)
   4.5mb ( 11 obs.)
 RAT ISLANDS, ALEUTIAN ISLANDS    (  6)

ADK      2.83  51 eP     52 57.08   0.3
SMY      4.39 308 eP     53 19.79   0.9
SDN     13.02  59 (P)    55 16.02  -1.9
CRP     19.17  44 eP     56 33.87  -2.4
PMR     20.64  44 (P)    56 52.49   0.7
        0.6s    11.34nm          4.4mb
IMA     20.97  31 eP     56 54.02  -1.3
        0.7s     5.43nm          4.1mb
FBA     22.48  37 eP     57 08.77  -1.4
        0.7s     4.05nm          4.0mb
INK     28.99  34 eP     58 11.00  -0.1
MBC     35.09  21 eP     59 07.00   2.6
        1.0s     3.00nm          4.2mb
NEW     40.18  67 P      59 51.79   4.4X
BONR    44.91  81 eP     00 27.31   0.9
TIA     46.42 277 Pc     00 37.70  -0.3
DAU     47.89  74 eP     00 51.04   1.1
ARUT    48.09  78 (P)    00 52.45   1.1
BTO     48.26 287 eP     00 53.00   0.5
MSU     48.44  77 eP     00 54.85   0.7
TIY     48.48 282 eP     00 53.50  -0.7
PV09    50.35  75 eP     01 08.61  -0.2
ULM     51.13  55 eP     01 18.50   4.3X
XAN     53.00 281 P      01 27.50  -1.1
        1.2s     9.20nm          4.6mb
FRB     54.55  30 eP     01 40.50   1.0
        0.5s     3.00nm          4.6mb
LZH     54.85 286 eP     01 41.60  -0.7
        1.6s    27.00nm          5.0mb
GTA     55.18 292 eP     01 44.00  -0.6
        1.5s     6.00nm          4.4mb
JAQ     58.62  42 eP     02 08.00  -0.7
LTX     59.76  79 ePc    02 16.09  -0.9
KAF     66.11 347 iP     02 58.30   0.0
        0.4s     5.20nm          5.0mb
NUR     67.88 347 eP     03 10.10   0.5
HFS     69.50 353 eP     03 19.20  -0.3
        0.4s     3.70nm          4.8mb
SHL     69.51 286 iP     03 19.20  -1.2
JSC     69.75  61 (P)    03 21.83   0.3
GUN     71.47 291 P      03 32.80   0.3
KKN     71.91 292 P      03 35.00   0.0
PKI     72.00 291 P      03 35.00  -0.6
GKN     72.14 292 P      03 35.80  -0.4
DMN     72.15 292 P      03 36.60   0.2
KHC     80.39 351 eP     04 24.50   2.4
                  e      04 34.00
GEC2    80.66 351 ePKP   04 24.80   1.2
        1.8s     6.80nm          4.3mb
     S.D. = 1.1  on  35 of  37 obs.
-----------------------------------------
   NOV 13, 1993  07h 01m 11.09± 0.64s
   50.308 N ± 5.8km   7.329 E ± 5.6km
   DEPTH =  10.0km  (geophysicist)
 GERMANY                               (543)
      ML 3.0 (LDG), 2.4 (UCC). Felt at
      Brohl and Vallendar.

BGG      0.10 177 iPgc   01 15.20   1.4
        0.1s  1200.00nm
                  i      01 15.50
                  iSg    01 17.60
KOE      0.28  65 iPgd   01 16.20  -0.8
                  iSg    01 19.30
ABH      0.45 162 ePn    01 21.30   1.0
RUP      0.63 196 ePn    01 24.30   0.5
MEM      0.90 290 iPd    01 28.15  -0.1
                  iS     01 41.36
WLF      1.00 230 iPc    01 30.15   0.2
                  iS     01 45.07
ENN      1.01 298 iPgd   01 30.40   0.2
        0.4s    43.80nm
                  eSg    01 44.50
TOD      1.18 126 ePn    01 33.70   0.5
WTS      1.72 349 iPn    01 41.50   0.3
        0.4s    10.20nm
                  iS     02 04.00
DOU      1.77 264 iP     01 43.40   1.5
CDF      1.90 181 Pn     01 45.80   1.9
                  Pg     01 47.20
                  Sn     02 05.40
                  Sg     02 11.80
SNF      1.96 277 iP     01 46.10   1.4
HAU      2.39 196 Pn     01 51.90   0.9
                  Pg     01 56.20
                  Sg     02 27.80
FEL      2.48 169 ePn    01 58.60   6.4X
BSF      2.50 188 Pn     01 52.50  -0.1
                  Pg     01 57.80
                  Sn     02 19.60
                  Sg     02 31.10
LOR      3.81 218 Pn     02 09.30  -1.8
                  Pg     02 23.50
                  Sn     02 52.10
                  Sg     03 13.10
LBF      4.00 215 Pn     02 11.90  -1.9
                  Pg     02 26.20
                  Sn     02 56.10
                  Sg     03 20.00
SSF      4.12 219 Pn     02 13.20  -2.2
                  Pg     02 28.40
                  Sn     02 59.80
                  Sg     03 23.20
SMF      4.34 214 Pn     02 16.40  -2.2
                  Pg     02 32.00
                  Sn     03 04.70
                  Sg     03 30.30
GEC2     4.40 107 Pn     02 18.50  -1.0
                  Sn     03 05.90
AVF      4.40 218 Pg     02 34.40  15.0X
                  Sn     03 06.40
                  Sg     03 31.80
     S.D. = 1.4  on  19 of  21 obs.
-----------------------------------------
? NOV 13, 1993  07h 57m 18.50± 5.68s
   38.005 N ±48.7km   29.358 E ±28.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                                (366)
      ML 3.0 (ISK).

KHL      0.34  22 iPg    57 24.50  -1.1
                  eSg    57 32.00
ALT      1.20  29 ePn    57 41.80   0.8
DST      1.70 341 ePn    57 49.00   0.7
IZM      1.70 284 ePn    57 48.00  -0.3
     S.D. = 1.6  on   4 of   4 obs.
-----------------------------------------
? NOV 13, 1993  08h 11m 04.70± 0.98s
   39.082 N ± 8.3km   27.638 E ± 9.9km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                                (366)
      ML 2.7 (ISK).

IZM      0.74 203 ePg    11 19.20  -0.1
                  eSg    11 31.70
DST      0.93  55 ePg    11 22.70   0.2
                  eSg    11 37.70
EZN      1.26 307 iPn    11 28.30   0.2
EDC      1.28   8 ePn    11 28.00  -0.4
     S.D. = 0.5  on   4 of   4 obs.
-----------------------------------------
% NOV 13, 1993  08h 25m 56.24± 1.20s
   40.503 N ±10.4km   21.799 E ± 7.6km
   DEPTH =  10.0km  (geophysicist)
 GREECE                                (364)

FNA      0.43 311 ePg    26 05.04   0.1
                  eSg    26 12.08
GRG      0.64  45 iPg    26 08.32  -0.9
                  eSg    26 18.00
LIT      0.66 127 ePg    26 09.32  -0.1
                  eSg    26 19.08
THE      0.90  81 ePg    26 13.50   0.1
KNT      1.06  51 ePg    26 16.88   0.6
SOH      1.22  74 ePb    26 19.28   0.2
                  eSb    26 37.50
     S.D. = 0.6  on   6 of   6 obs.
-----------------------------------------
% NOV 13, 1993  08h 26m 04.58± 0.94s
   39.140 N ± 7.7km   27.620 E ± 9.7km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                                (366)
      ML 2.7 (ISK).

IZM      0.79 201 ePg    26 19.70  -0.3
                  eSg    26 32.20
DST      0.91  59 ePn    26 22.70   0.7
EZN      1.21 305 iPn    26 27.80   0.6
EDC      1.22   9 ePn    26 26.50  -0.8
BNT      1.24  11 ePn    26 27.30  -0.3
     S.D. = 0.9  on   5 of   5 obs.
-----------------------------------------
* NOV 13, 1993  08h 32m 40.77± 0.50s
   31.782 S ± 7.6km   68.187 W ± 8.7km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA      (137)

CFA      0.18 346 iP     32 55.50   0.1
RTCV     0.31 255 iPd    32 56.00   0.3
ZON      0.48 299 iPd    32 48.30  -8.4X
                  eS     32 57.30
RTLL     0.51 332 iPd    32 57.00   0.1
RTCB     0.60 299 iPd    32 57.60  -0.1
MDZ      1.23 207 iP     33 04.60   0.4
                  iS     33 22.60
RTRS     1.94 325 eP     32 56.00 -17.1X
                  S      33 07.00
RTPR     2.06  45 iPc    33 15.00   0.4
                  S      33 40.00
RFA      2.99 184 iPd    33 26.50  -0.7
                  S      34 01.00
TCA      3.10  83 iPc    33 29.20   0.4
                  (S)    33 55.50
CYA      3.92  33 ePd    33 39.00  -0.9
     S.D. = 0.6  on   9 of  11 obs.
-----------------------------------------
? NOV 13, 1993  08h 55m 30.49± 4.41s
   15.919 N ±41.2km   98.813 W ±13.2km
   DEPTH =  33.0km  (normal)
 OFF COAST OF GUERRERO, MEXICO     ( 65)

ACX      1.38 313 iP     55 52.98  -0.6
                  (S)    56 04.81
OXX      2.31  60 eP     56 07.97   0.7
                  iS     56 39.39
III      2.52 346 iP     56 11.50   1.3
PPM      3.14   3 eP     56 20.00   0.8
IIA      3.22   3 (P)    56 27.75   7.9X
IISM     3.35  24 (P)    56 19.68  -2.0
CRX      3.57 347 (P)    56 13.20 -12.0X
                  (S)    57 42.66
MRX      4.39 329 (P)    56 36.30  -0.3
                  (S)    57 42.66
     S.D. = 1.6  on   6 of   8 obs.
-----------------------------------------
? NOV 13, 1993  08h 56m 29.83± 1.18s
   52.379 N ±22.5km  158.042 E ±19.7km
   DEPTH =  33.0km  (normal)
   4.4mb (  7 obs.)
 NEAR EAST COAST OF KAMCHATKA      (218)

MAT     21.13 229 iPc    01 14.40   0.5
        1.0s    12.00nm          4.3mb
FBA     29.81  44 (P)    02 35.00  -0.5
        1.0s     8.50nm          4.5mb
INK     35.20  37 eP     03 22.00  -0.2
        0.8s     1.00nm          3.8mb
DAG     51.11 359 eP     05 30.00  -0.6
        0.6s     4.00nm          4.6mb
GUN     57.72 275 P      06 19.60  -0.4
KKN     58.17 275 P      06 22.80  -0.2
DMN     58.41 275 P      06 22.60  -2.1
GKN     58.41 276 P      06 24.40  -0.2
NAO     64.14 343 P      07 03.30   0.7
        0.7s     3.50nm          4.6mb
HFS     64.23 341 eP     07 03.60   0.4
        0.4s     3.20nm          4.8mb
GBA     73.62 271 P      08 03.00   1.3
GEC2    74.69 336 ePd    08 08.90   1.4
        0.8s     1.00nm          3.9mb
BRS     79.56 185 eP     08 44.00   9.4X
     S.D. = 1.0  on  12 of  13 obs.
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   NOV  13, 1993  09h 23m 46.52± 0.42s
   44.233 N ± 3.7km   12.181 E ± 4.6km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                    (545)
      MD 3.1 (TRI), 2.7 (ROM). ML 3.1
      (VIE), 2.9 (LDG).

RSM     0.36 147 P      23 54.59   0.6
SFI     0.39 217 P      23 54.38  -0.2
PGD     0.49 223 P      23 55.91  -0.6
ARV     0.92 143 P      24 03.98  -0.1
MME     1.07 268 P      24 10.61   3.9X
BDI     1.15 262 P      24 10.35   2.2
ASS     1.21 163 P      24 09.43   0.3
VVI     1.76   6 P      24 17.70   0.5
CTI     1.85 348 P      24 19.34   0.7
TRI     1.85  37 ePn    24 18.10  -0.5
                 e      24 23.80
                 eSg    24 49.70
MNS     1.88 169 P      24 19.63   0.6
RIY     1.92  54 iPn    24 18.80  -0.8
                 iSn    24 44.10
CEY     2.19  46 e(Pn)  24 30.00   6.5X
                 eSg    25 02.50
FVI     2.40  10 P      24 27.37   1.0
LJU     2.46  42 e(Pn)  24 36.50   9.2X
                 eSn    25 04.50
VBY     2.53  59 ePn    24 33.20   4.9X
                 i      24 48.40
                 i(Sn)  25 12.50
OGA     2.76 343 iPc    24 34.40   2.6
PGF     2.87 235 Pn     24 32.30  -0.9
                 Sn     25 05.60
WTTA    3.05 353 iPnc   24 37.80   1.9
                 iPg    24 47.80
                 iSn    25 16.20
                 iSg    25 30.70
PTJ     3.15  57 eP     24 52.90  15.7X
SBF     3.44 265 Pn     24 41.00  -0.3
                 Sn     25 21.50
FRF     4.06 262 Pn     24 49.90   0.0
                 Sn     25 36.00
LPG     4.06 290 Pn     24 50.80   0.5
                 Sn     25 36.50
LPL     4.08 290 Pn     24 50.60   0.1
                 Sn     25 35.90
LRG     4.28 262 Pn     24 52.50  -0.7
                 Sn     25 40.40
GEC2    4.73  12 Pn     24 57.20  -2.5
                 Sn     25 55.80
KHC     4.99  11 ePn    25 02.50  -0.8
                 e      25 23.50
                 eSn    26 00.00
                 e      26 32.00
BSF     5.20 316 Pn     25 06.00  -0.3
                 Sn     26 04.00
CDF     5.39 323 Pn     25 08.00  -0.9
                 Sn     26 07.20
HAU     5.54 315 Pn     25 10.10  -0.9
                 Sn     26 11.30
LBF     6.38 298 Pn     25 21.40  -1.5
                 Sn     26 30.90
     S.D. = 1.2  on  26 of  31 obs.
-------------------------------------
*  NOV  13, 1993  09h 31m 09.11± 0.59s
   15.313 N ±10.3km   94.649 W ±11.1km
   DEPTH =  33.0km  (normal)
   4.3mb (  8 obs.)
 NEAR COAST OF OAXACA, MEXICO     ( 66)

TPX     2.34 100 iP     31 46.50   0.4
ACX     5.24 288 (P)    33 14.50  47.2X
PPM     5.33 315 iP     32 29.00   0.1
III     5.53 304 iP     32 29.50  -2.0
MRX     7.62 306 iP     33 01.30   0.7
LTX    16.24 331 eP     34 57.15   0.6
UYO    18.77   0 iPc    35 27.00  -1.0
MIAR   19.17   3 eP     35 30.96  -1.8
        1.0s   12.75nm          4.1mb
                 e      35 38.57
WMOK   19.70 350 eP     35 36.81  -1.9
        0.9s   10.73nm          4.1mb
MEO    19.71 350 iPc    35 38.00  -0.8
TUL    20.54 357 iPd    35 49.70   2.3
ACO    21.67 350 e(P)   35 58.10  -0.9
MYNC   21.83  24 (P)    35 50.52 -10.0X
        0.8s    8.57nm
                 e      35 59.39
ALQ    22.24 334 eP     36 05.69   0.8
        0.8s    4.06nm          3.9mb
JSC    22.41  30 (P)    35 56.49  -9.8X
ARUT   27.88 327 eP     37 00.12   1.9
EMUT   28.21 333 eP     37 01.88   0.7
LPAZ   40.88 139 P      38 49.00  -1.7
LPB    41.09 139 P      38 55.00   2.9
CNCB   41.37 139 P      38 54.00  -0.6
SIV    45.46 132 P      39 25.20  -2.0
MOCB   46.16 141 P      39 32.30  -0.9
INK    58.47 344 eP     41 03.50  -0.4
        0.9s    2.00nm          4.2mb
MBC    62.31 354 eP     41 30.50   0.4
DAG    71.96  14 iPc    42 30.30  -0.6
        0.8s    5.22nm          4.6mb
EKA    78.40  36 Pd     43 08.20   0.3
        0.8s   10.20nm          4.9mb
PAB    80.65  52 eP     43 21.20   0.7
NAO    84.11  28 P      43 39.10   1.3
        0.9s    2.60nm          4.4mb
LKO    86.63  81 P      43 51.13  -0.1
GEC2   90.21  39 ePKP   44 08.40   0.6
        1.0s    1.57nm          4.2mb
                 e      44 17.30
HYB   146.79  12 ePKP   50 49.00   0.5
GBA   150.22  16 PKP    50 59.00   5.1X
     S.D. = 1.3  on  28 of  32 obs.
-------------------------------------
%  NOV  13, 1993  09h 43m 05.40± 0.72s
   31.595 S ± 9.6km   68.096 W ± 7.5km
   DEPTH =  33.0km  (normal)
 SAN JUAN PROVINCE, ARGENTINA     (137)

CFA     0.12 264 iP     43 10.50  -0.9
                 S      43 15.60
RTLL    0.41 310 iPd    43 15.00   0.2
                 S      43 24.30
RTCV    0.46 235 iPd    43 14.40  -1.1
RTCB    0.61 280 ePd    43 18.90   1.2
                 S      43 29.70
RTPR    1.87  47 e(P)   43 35.00  -0.7
                 S      43 57.60
TCA     3.01  86 eP     43 52.50   0.6
                 S      44 27.50
RFA     3.18 185 e(P)   43 55.00   0.6
                 S      44 40.50
     S.D. = 1.1  on   7 of   7 obs.
-------------------------------------
   NOV  13, 1993  10h 31m 30.92± 0.17s
   22.428 S ± 3.6km  169.725 E ± 4.5km
   DEPTH =  36.0km  ( 12 depth phases)
   5.5mb ( 51 obs.)  5.1Msz ( 26 obs.)
 LOYALTY ISLANDS REGION           (189)

DZM     3.06 276 iPd    32 17.10  -1.1
                 iS     32 52.10
BKM     4.94 343 iPc    32 42.00  -2.7
                 iS     33 35.50
KUZ    15.19 161 eP     35 07.20   2.8
HNR    15.97 322 eP     35 16.00   1.4
BRS    16.15 249 iP+    35 17.00   0.1
        2.0s    7.00nm          3.4mb X
     Z  18s    21.00um          3.5MszX
                 i      35 22.50
                 e      35 28.00
                 i      35 40.00
                 iS     38 36.00
URZ    17.01 160 eP     35 28.90   1.3
NOZ    17.64 158 eP     35 36.90   1.4
                 e      35 45.20
ARMA   18.04 240 iPc    35 42.30   1.6
        0.9s   65.00nm          4.8mb
MNG    18.78 166 eP     35 48.70  -0.9
KIW    18.90 168 eP     35 49.60  -1.4
PGZ    18.96 165 eP     35 50.10  -1.7
TCW    19.12 169 eP     35 53.00  -0.6
CAW    19.16 168 eP     35 52.00  -2.1
MRW    19.21 169 eP     35 54.20  -0.5
MTW    19.30 167 eP     35 51.40  -4.3X
                 e      36 03.10  51kmX
AMW    19.50 166 eP     35 57.60  -0.3
RIV    19.89 231 iPd    36 03.40   1.2
        1.0s  *******nm          7.3mb X
                 eS     40 00.00
LTZ    20.41 175 eP     36 06.80  -0.8
CNB    21.92 230 iPd    36 24.60   1.6
        1.0s  237.00nm          5.6mb
                 i      36 34.20  35km
CTA    21.99 272 iPd-   36 24.00   0.2
        1.0s   80.00nm          5.1mb
                 i      36 27.30  12kmX
                 i      36 30.50
                 iS     40 30.00
BWA    22.17 233 iPd    36 24.70  -0.8
                 i      36 26.50   6kmX
                 i      36 36.10
CAN    22.18 230 iPd    36 27.10   1.5
                 i      36 28.50
                 ipP    36 32.70  20kmX
                 i      36 37.70
                 i      36 54.40
MSZ    22.24 183 eP     36 26.80   0.8
                 e      36 36.60  36km
TUZ    23.47 180 eP     36 39.30   1.3
PMG    25.22 297 eP     36 54.00  -1.2
        1.0s   80.00nm          5.3mb
TOO    25.75 229 iPd    37 00.70   0.7
        0.6s   75.00nm          5.5mb
                 ePcP   39 30.30
ADE    29.81 238 eP     37 36.60  -0.3
ASPA   32.94 261 iPd    38 03.10  -1.3
        0.8s  118.00nm          5.8mb
     Z  20s    1.50um          4.7Msz
                 eS     43 49.60
                 iPcS   44 30.50
MTN    37.90 278 iPd    38 46.00  -0.7
        0.6s  385.00nm          6.5mb
FORT   38.00 248 iPd    38 47.30  -0.1
        0.8s  128.00nm          5.8mb
KNA    39.18 272 iPd    38 56.80  -0.6
        0.8s  196.00nm          5.9mb
WARB   39.31 256 eP     38 58.00  -0.5
GUA    43.23 323 eP     39 30.70   0.1
        1.0s   96.00nm          5.5mb
GUMO   43.30 323 eP     39 31.00  -0.1
PJG    43.30 323 eP     39 31.30   0.1
COOL   43.95 248 iPd    39 32.20  -4.2X
        0.9s   70.00nm          5.4mb
MBL    46.17 262 iPd    39 53.60  -0.6
        0.9s  163.00nm          6.0mb
MEEK   46.44 254 iPd    39 55.20  -1.1
        0.9s  154.00nm          6.0mb
KLB    46.82 247 iPd    39 58.10  -1.2
        0.7s   57.00nm          5.7mb
BAL    47.77 248 iPd    40 05.30  -1.5
        0.8s  183.00nm          6.1mb
DRV    48.08 195 eP     40 07.00  -1.6
                 S      47 30.00
MUN    48.13 247 iPd    40 08.80  -0.7
HON    53.68  38 P      41 00.00   8.5X
     Z  21s    0.37um          4.4Msz
SBA    55.50 181 iPd    41 04.50   0.3
CSY    57.42 204 iPc    41 25.90   7.9X
        0.7s   27.10nm          5.4mb
                 ipP    41 36.70  36km
KKM    59.50 292 ePd    41 37.60   4.2X
LEM    61.67 274 iPd    41 48.00  -0.3
BAG    61.68 304 eP     41 46.00  -2.3
TPI    63.19 279 ePc    41 58.00  -0.2
                 e      43 00.00 273kmX
MAT    65.77 333 iPd    42 13.30  -1.2
        0.8s   14.93nm          5.1mb
                 (S)    51 03.00
OFUJ   66.59 336 eP     42 19.30  -0.3
SPA    67.71 180 iPd    42 25.40  -1.3
        1.0s  150.00nm          6.0mb
KGM    69.09 281 iPd    42 35.90   0.0
        0.9s  216.30nm          6.2mb
KUSJ   69.15 341 eP     42 34.80  -0.8
SSE    70.69 317 Pd     42 45.00  -0.3
        1.0s   21.00nm          5.1mb
ASAJ   70.72 340 eP     42 45.90   0.7
QIZ    71.56 300 eP     42 51.20   0.4
IPM    72.24 283 ePd    42 54.10  -0.9
NJ2    72.81 316 Pc     42 58.00   0.1
YSS    73.30 341 ePc    43 00.00  -0.4
        1.0s   40.00nm          5.4mb
     Z  18s    0.40um          4.7Msz
     N  18s    0.40um
                 i      43 14.00  49kmX
                 (S)    52 32.00
SNG    73.72 285 eP     43 04.00   0.5
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WHN    74.83 313 P     43 09.50  -0.1
        1.2s    44.00nm          5.3mb
                pP      43 24.00  51kmX
ADK    74.94   9 (P)   43 05.77  -4.1X
        1.1s    28.13nm          5.2mb
MAW    75.67 202 iP    43 13.70  -0.2
        0.9s    32.89nm          5.3mb
MDJ    76.13 332 eP    43 17.00   0.2
TIA    76.62 319 Pd    43 19.70   0.0
        1.0s   110.00nm          5.8mb
CN2    77.41 329 Pd    43 23.80  -0.1
        0.8s    26.00nm          5.3mb
                epP     43 38.40  51kmX
GYA    78.01 305 iPd   43 28.00   0.2
                sP      43 42.60
KHT    78.86 291 iPd   43 32.70   0.3
BDT    79.62 294 eP    43 39.00   2.5
BJI    79.69 321 eP    43 37.00   0.6
        1.0s     8.00nm          4.7mb
     Z  20s     0.30um          4.6Msz
                eS      53 40.00
KMI    80.34 302 Pd    43 42.00   1.4
        1.5s   210.00nm          5.9mb
                pP      43 53.00  36km
                sP      43 56.60
CHTO   80.39 295 iPd   43 42.00   1.3
        1.0s    55.00nm          5.5mb
TIY    80.48 317 Pd    43 41.50   0.7
     Z  18s     0.73um          5.1Msz
                pP      43 54.00  42km
                S       53 49.00
XAN    80.59 313 iPd   43 42.00   0.5
        1.0s    67.00nm          5.6mb
                sP      43 57.00
CD2    82.53 308 iPd   43 52.20   0.5
HHC    82.93 320 Pd    43 54.00   0.4
        1.2s    53.00nm          5.5mb
                eS      54 12.00
BTO    83.71 319 eP    44 02.00   4.4X
LZH    85.19 312 iPd   44 06.70   1.5
        1.4s   130.00nm          5.9mb
     Z  25s     0.27um          4.5MszX
                pP      44 18.00  36km
SNA    87.34 183 iPd   44 14.50  -0.5
        0.8s   192.00nm          6.4mb
SAO    87.58  49 P     44 30.00  13.3X
     Z  18s     0.57um          5.0Msz
ABL    88.21  51 eP    44 19.57  -0.4
WDC    88.78  45 P     44 30.00   7.7X
     Z  19s     0.41um          4.9Msz
CIT    88.81 329 eP    44 23.00   0.7
CMB    88.94  48 ePc   44 22.69  -0.5
        1.0s    11.93nm          5.2mb
ORV    88.95  46 eP    44 22.04  -1.1
ISA    89.13  51 eP    44 23.48  -0.7
        1.2s    30.00nm          5.5mb
     Z  20s     0.63um          5.0Msz
SHL    89.24 298 iP    44 25.60   0.5
        1.1s    50.63nm          5.7mb
PEC    89.25  53 eP    44 24.06  -0.7
        0.8s    11.37nm          5.2mb
GTA    89.64 313 eP    44 26.50  -0.1
        1.5s    27.00nm          5.3mb
MEMM   89.76  49 (P)   44 28.08   1.1
PMR    90.00  18 P     44 30.00   2.5
     Z  19s     0.34um          4.8Msz
YAK    90.01 342 eP    44 32.00   4.4X
        1.4s    53.00nm          5.6mb
     Z  19s     0.50um          5.0Msz
     N  18s     0.30um
BONR   90.34  49 eP    44 29.69  -0.4
ILT    90.46   4 iPc   44 29.40  -0.1
        1.4s   138.00nm          6.1mb
                i       44 40.00  33km
                eS      55 16.00
                ePS     56 28.00
GLA    90.61  54 eP    44 31.36   0.2
KVN    91.00  48 eP    44 33.12   0.2
TNP    91.16  49 eP    44 33.15  -0.6
        1.3s    25.91nm          5.5mb
TPNV   91.32  50 eP    44 34.37  -0.1
        0.8s    12.10nm          5.3mb
BMW    91.42  40 eP    44 34.37  -0.2
SIT    91.57  27 P     44 40.00   5.2X
     Z  21s     1.28um          5.3Msz
LSA    91.58 301 P     44 36.00  -0.2
        1.2s    20.00nm          5.4mb
SHW    91.86  40 eP    44 36.77   0.1
                e       44 48.15  36km
GMW    92.24  39 eP    44 37.93  -0.3
                e       44 49.13  35km
RMW    92.76  39 eP    44 41.14   0.4
                e       44 51.36  32km
FBA    92.98  17 eP    44 38.39  -2.9
        0.9s    13.53nm          5.4mb
                e       44 49.28  34km
ZAK    93.13 324 eP    44 43.00   0.8
        1.2s    30.00nm          5.6mb
TUC    93.37  57 P     44 50.00   6.1X
     Z  19s     0.92um          5.3Msz
ARUT   93.70  51 eP    44 45.17  -0.2
                e       44 57.60  41km
MSU    94.91  50 eP    44 51.18   0.2
GUN    95.10 298 PKP   44 52.60   0.3
        0.6s    12.00nm          5.5mb
DUG    95.16  49 P     45 00.00   8.0X
     Z  19s     0.59um          5.1Msz
PKI    95.35 297 PKP   44 53.80   0.4
KKN    95.54 298 PKP   44 54.20   0.1
        0.6s    24.00nm          5.8mb
DMN    95.62 297 PKP   44 54.60   0.1
        0.8s    44.00nm          6.0mb
GKN    96.15 298 PKP   44 56.20  -0.6
        0.8s    24.00nm          5.7mb
GBA    97.16 282 P     45 01.60   0.3
        0.9s     5.00nm          5.0mb
HYB    97.52 286 eP    45 03.00   0.0
ALQ    97.72  56 P     45 10.00   6.2X
     Z  19s     0.51um          5.0Msz
INK    99.41  18 eP    45 09.50  -0.9
        1.0s     2.00nm          4.6mb
WMOK  103.59  58 Pdiff 45 40.00  10.0X
     Z  19s     0.79um          5.3Msz
MIAR  107.65  59 PKP   50 00.00   3.9X
     Z  19s     0.49um          5.1Msz
FVM   110.95  56 PKP   50 10.00   7.7X
     Z  18s     0.81um          5.3Msz
MYNC  115.34  61 PKP   50 20.00   9.2X
     Z  20s     0.67um          5.2Msz
SVE   118.90 324 ePKPc 50 16.00  -0.8
MCWV  119.37  56 PKP   50 30.00  11.7X
     Z  18s     0.58um          5.2Msz
YSNY  120.58  53 PKP   50 30.00   9.4X
     Z  20s     0.36um          5.0Msz
BINY  122.46  53 PKP   50 30.00   5.9X
     Z  19s     0.56um          5.2Msz
BUL   123.15 225 iPKPc 50 25.00  -1.2
LSCT  124.51  54 PKP   50 40.00  11.9X
     Z  18s     0.56um          5.3Msz
LBNH  125.42  51 PKP   50 40.00  10.2X
     Z  19s     0.70um          5.3Msz
DAG   125.44   2 ePKP  50 23.00  -5.9X
        0.6s     3.33nm
HRV   125.74  53 PKP   50 40.00   9.5X
     Z  19s     0.46um          5.2Msz
BDFB  127.11 132 ePKP  50 32.04  -1.9
CBM   127.86  47 PKP   50 40.00   5.6X
     Z  21s     0.64um          5.3Msz
KER   128.73 297 ePKP  50 36.00  -0.6
SOB1  136.54 133 ePKP  50 45.30  -6.6X
MLR   142.63 317 ePKP  50 55.00  -7.1X
UZH   143.23 323 iPKPc 51 01.20  -1.7
        1.0s    58.00nm
                e       51 14.00
CMP   143.30 317 ePKPc 51 02.00  -1.2
SPC   144.02 325 ePKP  51 04.30  -0.2
DIM   144.29 312 iPKP  51 03.00  -1.9
ALN   144.34 310 ePKP  51 02.92  -2.1
EZN   144.49 308 iPKP  51 02.90  -2.4
KSP   144.89 330 iPKPd 51 04.50  -1.1
        1.1s    65.00nm
                i       51 19.20
PSZ   144.96 324 iPKPd 51 05.30  -0.7
PGB   145.03 313 iPKP  51 06.00  -0.2
BZS   145.24 319 ePKP  50 57.00  -9.4X
EDU   145.50 353 ePKP  51 05.70  -0.8
ELO   145.66 354 ePKP  51 05.70  -1.1
VTS   145.66 314 iPKP  51 08.00   0.6
MMB   145.71 312 iPKP  51 08.00   0.6
EBH   145.85 353 ePKP  51 06.90  -0.2
SRO   145.88 325 i(PKP)51 07.20  -0.2
BRG   145.90 332 iPKPd 51 07.80   0.4
        1.3s   160.00nm
                i       51 22.50
CLL   145.97 334 ePKP  51 07.00  -0.4
        1.3s    50.00nm
                i       51 22.20
SRS   145.99 311 ePKP  51 07.68  -0.2
EAB   146.00 354 ePKP  51 07.30   0.0
OUR   146.01 310 iPKP  51 07.98   0.1
KKB   146.04 313 iPKP  51 05.00  -2.9
ESY   146.07 352 ePKP  51 07.40  -0.1
EAU   146.24 353 ePKP  51 08.20   0.4
EBL   146.27 353 ePKP  51 08.10   0.3
ZST   146.27 326 ePKP  51 07.50  -0.5
SOH   146.27 311 ePKP  51 07.72  -0.6
PRU   146.29 331 PKP   51 08.80   0.8
        0.8s    22.70nm
                i       51 23.50
PAIG  146.37 309 ePKP  51 08.64   0.2
KNT   146.46 312 ePKP  51 09.32   0.7
UZD   146.47 323 ePKP  51 09.70   1.3
VAY   146.62 312 iPKP  51 09.70   0.9
        0.8s   130.00nm
EKA   146.71 353 PKPc  51 09.20   0.7
        0.5s    12.40nm
ESK   146.73 353 ePKP  51 11.00   2.5
GRG   146.88 312 ePKP  51 10.28   1.0
WIT   147.00 341 ePKP  51 13.00   4.0X
MOX   147.05 334 ePKP  51 11.30   2.1
        1.3s    46.00nm
SKO   147.11 314 iPKPd 51 12.00   2.4
        0.8s   250.00nm
HOF   147.20 333 iPKPc 51 11.80   2.3
KHC   147.34 331 PKP   51 09.00  -0.8
        1.0s    46.00nm
                i       51 12.60
                e       51 22.00
                e       51 27.50
                e       52 45.00
                e       53 12.00
GEC2  147.49 330 e(PKP)51 23.70  13.6X
        0.6s    13.70nm
GEC2  147.49 330 e(PKP)51 27.60  17.5X
        0.7s    20.50nm
GEC2  147.49 330 e(PKP)51 16.50   6.4X
        0.6s     5.40nm
GEC2  147.49 330 e(PKP)51 11.10   1.0
        0.6s    14.90nm
WET   147.64 331 ePKP  51 13.00   2.8
FNA   147.66 312 ePKP  51 13.04   2.5
WTS   147.67 340 ePKP  51 13.00   2.9
        0.7s    20.50nm
AGG   147.67 308 ePKP  51 12.12   1.5
OHR   147.92 313 iPKPd 51 13.80   2.8
        0.8s   240.00nm
GRF   147.95 333 iPKPd 51 14.00   3.3X
     Z  18s     0.20um          4.9Msz
                e       51 16.80
                e       51 25.30
TNS   148.61 337 ePKPc 51 15.80   4.0X
                e       51 32.00
IGT   148.91 310 ePKP  51 16.76   4.2X
LJU   149.00 325 ePKP  51 12.50   0.0
LJU   149.00 325 ePKP  51 16.00   3.5X
                epP     51 28.00
                e       51 53.50
                SKS     58 24.00
ENN   149.01 340 ePKP  51 15.50   3.2X
        0.9s    32.80nm
FUR   149.08 331 ePKP  51 17.60   5.0X
WTTA  149.59 330 iPKPc 51 13.30  -0.3
        1.4s    73.80nm
SNF   149.74 341 PKP   51 18.50   5.1X
MOTA  149.77 330 iPKP  51 18.00   4.2X
        0.9s    36.90nm
                i       51 33.40
SQTA  149.82 330 iPKP  51 18.40   4.6X
        0.7s    21.70nm
                i       51 30.20
WLF   149.88 339 iPKPc 51 19.28   5.7X
DOU   150.01 341 PKPc  51 18.80   5.0X
SLE   150.58 334 ePKPd 51 19.70   4.9X
OSS   150.70 331 ePKPd 51 20.90   5.7X
VDL   151.16 331 ePKPd 51 21.80   5.8X
BSF   151.20 336 ePKP  51 15.70  -0.2
        1.2s    37.20nm
HAU   151.22 336 ePKP  51 15.90   0.1
        0.7s    15.55nm
TMA   151.71 331 ePKPd 51 22.70   5.9X
FLN   152.59 346 ePKP  51 23.40   5.7X
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13d 10h

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        0.7s    14.10nm
LDF   152.66 345 ePKP  51 23.30   5.5X
GRR   153.03 346 ePKP  51 24.30   6.0X
LPL   153.11 333 ePKP  51 25.80   7.0X
        1.2s    14.90nm
LPG   153.11 333 ePKP  51 25.90   7.0X
        1.1s    10.00nm
LPF   153.40 346 ePKP  51 25.40   6.6X
        0.6s     5.25nm
LKO   166.42 200 PKP   51 34.47   0.3
        0.8s     9.00nm
     S.D. = 1.1  on 159 of 213 obs.
-----------------------------------
?  NOV  13, 1993  11h 32m 54.07± 0.95s
   39.087 N ± 8.0km   27.580 E ± 9.7km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.7 (ISK).

IZM     0.73 200 ePg   33 08.40  -0.1
                eSg   33 20.10
DST     0.96  57 ePn   33 12.60   0.2
EZN     1.22 308 iPn   33 16.90   0.2
EDC     1.28  10 ePn   33 17.50  -0.3
     S.D. = 0.3  on   4 of   4 obs.
-----------------------------------
?  NOV  13, 1993  11h 38m 23.36± 1.45s
   39.263 N ± 8.4km   27.840 E ±16.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.8 (ISK).

IZM     0.97 208 ePn   38 41.90   0.0
                eSg   38 57.60
EDC     1.08   1 ePn   38 43.50  -0.2
BNT     1.09   3 ePn   38 44.10   0.2
EZN     1.30 296 ePn   38 47.40   0.0
     S.D. = 0.3  on   4 of   4 obs.
-----------------------------------
*  NOV  13, 1993  12h 05m 39.64± 1.86s
   36.548 N ±13.1km   70.883 E ± 9.5km
   DEPTH = 173.5 ± 22.0 km
   4.3mb (  4 obs.)
 HINDU KUSH REGION, AFGHANISTAN  (718)

QUE     7.14 209 eP    07 23.00   0.3
                eS    08 40.50
NDI     9.49 144 iPc   07 54.00   0.6
        0.6s    38.67nm         5.1mb
GKN    14.41 122 P     08 57.00   0.1
DMN    14.98 122 P     09 03.80  -0.3
KKN    14.98 122 P     09 03.00  -1.1
GUN    15.32 120 P     09 09.00   0.5
HYB    20.23 158 eP    10 02.50  -0.5
GBA    23.59 164 P     10 36.00   0.2
HFS    42.97 322 eP    13 21.40  -1.3
        0.4s     2.30nm         4.1mb
MBC    67.29   3 eP   16 18.00   1.1
        0.8s     3.00nm         4.1mb
INK    73.87   9 eP   16 56.50   0.1
FBA    74.45  16 eP   17 00.20   0.3
        0.9s     8.33nm         4.5mb
     S.D. = 0.8  on  12 of  12 obs.
-----------------------------------
   NOV  13, 1993  12h 30m 54.73± 0.18s
   16.370 S ± 4.4km   70.733 W ± 4.2km
   DEPTH = 123.4km  ( 27 depth phases)
   5.3mb ( 73 obs.)
 SOUTHERN PERU                     (117)
      Felt (II) at Arequipa.

ARE     0.73 263 iPd   31 12.80  -2.5
LPAZ    2.50  89 Pc    31 40.10   4.2X
        0.5s     5.17nm
LPB     2.53  94 iPc   31 41.00   4.9X
                S     32 13.00
CNCB    2.67 100 iPc   31 42.80   4.7X
CCH     4.52 104 iPd   32 05.20   2.6
MOCB    6.84 136 P     32 34.70   0.3
NNA     7.35 306 iPd   32 37.50  -3.5X
        0.6s    80.00nm         5.4mb
                eS    33 54.00
YJA     7.59 140 ePd   32 41.60  -3.0
HJA     8.46 144 ePd   32 53.80  -2.0
SIV     9.29  89 P     33 06.00  -1.1
SLA     9.65 150 iP    33 07.90  -4.1X
FSA    10.62 156 ePd   33 21.20  -3.4X
RTPR   14.40 165 e(P)  34 08.00  -5.9X
RTLL   15.04 173 e(P)  34 15.60  -6.4X
RTCB   15.15 174 e(P)  34 18.00  -5.5X
RTCV   15.55 173 e(P)  34 24.00  -4.5X
TCA    15.92 160 ePc   34 21.20 -11.9X
MDZ    16.53 174 iP    34 39.50  -1.2
                iS    35 08.60
AGVB   19.78 103 ePc   35 16.80  -0.8
                e     35 19.80
                e     35 35.50
                e     35 43.20
BDFB   21.85  91 ePc   35 38.07  -0.5
        0.8s   145.16nm         5.4mb
BAO    21.87  91 Pd    35 37.90  -0.9
                e     35 48.30
                i     36 10.40
                e     36 48.90
RSTA   21.91 116 eP    35 37.40  -1.6
                e     36 18.60
                e     39 31.70
CACB   23.28 107 eP    35 52.00  -0.5
                e     36 03.30
                e     36 19.00
                e     36 34.00
                eS    39 55.90
VAO    23.31 110 eP    35 51.60  -1.1
TOV    26.00   2 eP    36 16.80  -1.2
CAR    26.97   8 eP    36 08.80 -18.1X
CANV   27.30   4 iPd   36 28.70  -1.1
SOB1   29.93  80 eP    36 51.90  -1.5
SGS    50.16 349 eP    39 39.58   0.1
                esP   40 23.20
JSC    51.35 349 eP    39 48.35  -0.2
PRM    51.38 348 iPd   39 48.63  -0.2
LHS    51.47 349 ePc   39 49.19  -0.2
                epP   40 20.10 133km
                esP   40 32.96
CEH    52.57 351 eP    39 56.64  -1.0
        0.9s    24.76nm         5.1mb
                esP   40 41.65
MYNC   52.72 346 ePd   39 57.96  -0.8
        0.8s   152.98nm         6.0mb
                epP   40 27.18 124km
OXF    53.63 341 eP    40 03.44  -2.0
BLA    54.07 350 eP    40 08.53  -0.2
        0.7s    24.16nm         5.2mb
                epP   40 37.63 123km
                esP   40 52.53
NAV    54.23 350 ePc   40 09.85  -0.1
                epP   40 39.96 128km
                esP   40 53.04
CVL    54.55 353 eP    40 11.35  -0.8
                epP   40 42.09 130km
CBN    54.64 354 eP    40 10.00  -2.8
MIAR   55.10 337 eP    40 14.33  -1.8
        0.7s    86.25nm         5.8mb
                epP   40 44.32 127km
                esP   40 59.34
UYO    55.10 336 iPd   40 15.60  -0.6
LTX    55.46 325 eP    40 16.49  -2.5
LST    55.58 341 eP    40 18.40  -1.2
ELC    56.14 342 ePc   40 21.85  -1.8
MCWV   56.38 352 ePc   40 25.18  -0.1
        0.6s    70.12nm         5.8mb
                epP   40 55.35 127km
                esP   41 09.33
PNJ    57.07 357 iP    40 29.33  -0.7
FVM    57.14 342 eP    40 29.33  -1.4
        0.7s   258.93nm         6.3mb X
TUL    57.15 336 iPd   40 30.10  -0.7
PAL    57.15 357 eP    40 29.59  -1.1
GPD    57.20 357 eP    40 29.68  -1.3
FNO    57.24 334 iPd   40 30.70  -0.7
MEO    57.35 333 iPc   40 30.60  -1.6
WMOK   57.39 333 ePd   40 30.82  -1.7
        0.7s    48.76nm         5.6mb
OCO    57.50 334 iPc   40 31.70  -1.5
LSCT   57.80 358 ePd   40 34.38  -0.8
        0.6s    36.49nm         5.5mb
                epP   41 04.89 128km
BINY   58.47 355 ePc   40 39.28  -0.7
        0.7s    71.14nm         5.8mb
HRV    58.58 359 eP    40 39.89  -0.7
        0.8s    33.52nm         5.4mb
                epP   41 08.41 118km
YSNY   58.99 353 ePc   40 43.08  -0.5
        0.4s    77.74nm         6.1mb
                epP   41 14.91 133km
ACO    59.21 334 iPd   40 44.20  -0.9
TYNO   59.76 352 P     40 48.07  -0.7
DLA    59.77 351 P     40 47.50  -1.3
STCO   59.79 353 P     40 48.31  -0.6
LDN    59.89 351 P     40 48.55  -1.1
ELF    60.06 351 P     40 49.25  -1.5
ACTO   60.29 352 P     40 52.17  -0.2
LBNH   60.32 359 ePc   40 51.74  -0.8
        0.8s    43.13nm         5.5mb
WLVO   60.40 354 P     40 52.52  -0.6
RSNY   60.72 357 P     40 54.74  -0.5
        0.7s    17.43nm         5.2mb
ALQ    61.28 327 ePd   40 58.83  -0.7
        0.6s    29.56nm         5.4mb
                ePcP  41 41.52
TUC    61.75 322 eP    41 02.29  -0.3
                esP   41 42.32
GAC    61.93 356 eP    41 02.50  -0.8
                pP    41 34.00 130km
LMN    62.16   5 eP    41 04.00  -0.9
                pP    41 34.50 126km
CBM    63.05   2 ePc   41 10.01  -0.7
        0.9s    51.67nm         5.5mb
                epP   41 41.66 131km
GLD    64.43 331 ePd   41 20.12   0.0
        1.0s    68.83nm         5.5mb
                epP   41 50.29 123km
                esP   42 02.52
GOL    64.46 331 ePd   41 19.62  -0.8
        1.1s    89.34nm         5.6mb
GLA    64.72 320 eP    41 21.90  -0.1
PV08   65.18 328 eP    41 24.93  -0.3
PV10   65.23 328 ePd   41 24.39  -1.0
PV09   65.37 328 eP    41 25.74  -0.6
PLM    66.20 319 ePd   41 31.41  -0.2
SRU    66.55 327 iPd   41 33.47  -0.3
                epP   42 00.48 108km
                esP   42 16.59
PEC    66.74 319 ePd   41 34.51  -0.3
        0.8s    22.75nm         5.1mb
                epP   42 02.22 111km
MSU    66.99 326 iPd   41 36.92   0.3
                epP   42 08.08 127km
                esP   42 19.77
ARUT   67.17 324 ePd   41 38.22   0.6
                epP   42 07.84 120km
                esP   42 20.69
EMUT   67.22 327 ePd   41 37.82  -0.2
SSK    67.28 319 eP    41 38.52   0.1
                esP   42 21.61
GSC    67.44 320 eP    41 39.73   0.4
                esP   42 21.82
RSSD   67.45 335 ePd   41 42.89   3.5X
        0.8s    37.90nm         5.3mb
                epP   42 14.55 129km
SNA    67.47 160 iPd   41 37.20  -1.6
        0.8s     4.60nm         4.4mb
DAU    67.89 328 ePd   41 42.37   0.0
                esP   42 24.86
TPNV   68.21 322 ePd   41 44.82   0.7
        0.8s    63.56nm         5.5mb
                epP   42 12.22 109km
DUG    68.55 327 ePd   41 46.05  -0.1
        1.1s    85.39nm         5.5mb
                epP   42 17.28 127km
                esP   42 30.08
ABL    68.66 319 eP    41 46.71  -0.3
                esP   42 30.28
ISA    68.71 320 ePd   41 47.56   0.4
        1.2s   162.26nm         5.7mb
                esP   42 30.15
LIC    68.75  76 P     41 46.40  -1.3
TIC    68.90  76 P     41 47.70  -0.9
        1.1s    58.50nm         5.3mb
KIC    69.06  76 P     41 48.60  -1.0
LKO    69.40  73 P     41 51.22  -0.5
        0.6s    75.50nm         5.7mb
TNP    69.54 322 ePd   41 52.57   0.2
        0.8s    34.98nm         5.2mb
                esP   42 34.75
HVU    69.68 328 ePd   41 52.71  -0.3
ULM    69.93 343 ePd   41 56.00   1.8
JAQ    70.01 357 eP    41 53.50  -1.1
                pP    42 25.50 129km
PHAM   70.02 319 eP    41 55.43   0.3
BONR   70.09 322 ePd   41 56.27   0.4
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MEMM   70.29 321 eP    41 57.45   0.9
                esP    42 38.50
KVN    70.70 323 eP    41 59.46   0.1
                esP    42 43.20
CMB    71.40 321 P     42 03.50   0.1
       1.4s    38.42nm          5.0mb
ARN    71.68 319 ePd   42 05.36   0.3
                esP    42 48.06
COE    71.71 319 eP    42 06.12   0.9
HMR    72.35 320 eP    42 09.85   1.0
                esP    42 53.86
NTYM   73.02 320 eP    42 13.18   0.3
ORV    73.04 321 ePd   42 13.76   0.8
                epP    42 44.17 121km
                esP    42 57.21
RUV    73.33 259 iPc   42 05.00 -10.0X
       1.5s   300.90nm
VAH    73.55 259 iPc   42 06.50  -9.8X
       1.1s   207.10nm          5.8mb
TPT    73.59 259 iPc   42 06.80  -9.8X
       1.5s   434.60nm          6.0mb
SPA    73.74 180 iPd   42 15.60  -1.2
       1.0s   125.00nm          5.7mb
PMO    73.85 259 iPc   42 08.30  -9.8X
       1.4s   335.50nm          5.9mb
LBFM   74.40 322 ePd   42 21.18   0.1
                esP    43 04.12
TVO    74.51 256 iPc   42 12.10  -9.9X
       1.2s   216.00nm          5.8mb
LGPM   74.68 322 ePd   42 22.36  -0.2
                esP    43 05.07
PPN    74.73 256 iPc   42 13.20 -10.0X
       1.1s    75.70nm          5.4mb
PAE    74.84 256 iPc   42 13.90  -9.9X
       1.5s   379.20nm          6.0mb
PPT    74.86 256 iPc   42 14.00  -9.9X
       1.5s   207.90nm          5.7mb
AFR    75.05 256 iPc   42 15.30  -9.7X
       1.4s   200.40nm          5.7mb
VIPM   75.71 326 P     42 29.59   1.2
JBO    75.92 327 P     42 30.40   1.0
CROR   76.22 326 P     42 32.15   1.0
DBO    76.29 323 P     42 32.52   0.9
VGB    76.45 326 eP    42 32.94   0.6
NEW    76.46 330 eP    42 31.62  -0.8
VBEM   76.59 326 P     42 34.33   1.0
WAH2   76.64 328 P     42 34.21   0.9
DPW    76.71 329 eP    42 34.44   0.6
                epP    43 04.84 120km
                esP    43 17.74
SSOR   76.94 325 Pd    42 35.36   0.2
RNO    77.06 324 P     42 37.00   1.2
SAW    77.19 329 P     42 37.62   1.2
EBG    77.25 328 P     42 37.99   1.2
ASR    77.30 326 P     42 38.29   1.2
WTV    77.47 328 P     42 38.85   0.9
SHW    77.67 326 eP    42 39.36   0.2
LON    77.80 327 eP    42 39.85   0.0
FMW    77.84 327 P     42 40.83   0.6
KMOR   77.99 325 P     42 42.48   1.5
RMW    78.25 327 ePd   42 42.34   0.0
                epP    43 11.96 116km
                esP    43 25.11
BMW    78.38 326 ePd   42 44.01   1.0
                epP    43 14.23 119km
                esP    43 27.75
JCW    78.79 328 Pd    42 45.29   0.1
GMW    78.82 327 eP    42 45.57   0.2
ONR    78.92 326 P     42 47.69   1.8
MCW    79.57 328 eP    42 49.67   0.3
STW    79.66 327 P     42 51.30   1.5
FRB    79.88   1 ePc   42 50.50   0.0
       0.6s    17.00nm          5.0mb
SBA    80.54 190 eP    42 54.60   0.5
EVAL   80.54  46 eP    42 56.36   1.6
CER    81.20 122 iPc   42 53.00  -5.4X
       0.6s    32.00nm          5.3mb
EHOR   81.70  47 eP    43 01.99   1.3
WIN    81.93 111 eP    43 03.00   0.4
       1.0s    60.00nm          5.3mb
EPLA   82.19  44 eP    43 04.46   1.1
ELUQ   82.27  47 eP    43 05.42   1.6
ERUA   82.64  42 eP    43 06.84   1.3
POF    82.72 118 iPc   43 08.00   1.7
       0.4s     6.00nm          4.8mb
EBAN   82.88  47 eP    43 09.13   2.2
PAB    83.12  46 iPc   43 09.10   0.9
EHUE   83.56  48 eP    43 11.28   0.8
GUD    83.76  45 eP    43 12.72   1.3
EVIA   83.99  47 eP    43 14.06   1.4
ETOR   85.27  45 eP    43 20.52   1.6
ECHE   85.48  47 eP    43 21.95   2.0
EGRA   87.04  45 eP    43 30.88   3.5X
FRS    87.12 120 eP    43 28.00  -0.2
ENSF   87.73  44 P     43 31.90   1.0
EPF    87.83  44 eP    43 32.20   0.9
       1.0s    14.60nm          5.0mb
BLF    88.03 120 eP    43 30.50  -2.3
SALF   88.29  44 P     43 34.49   1.0
LFF    88.88  42 eP    43 36.50   0.3
       0.9s    27.85nm          5.3mb
MFF    89.02  41 eP    43 36.80   0.0
       1.0s    24.00nm          5.2mb
LPO    89.07  43 eP    43 37.40   0.3
       0.8s     9.80nm          4.9mb
LPF    89.08  39 eP    43 36.80  -0.2
       0.8s    18.95nm          5.2mb
GRR    89.35  39 eP    43 38.10  -0.2
       0.7s    20.85nm          5.3mb
RJF    89.54  42 eP    43 39.30   0.0
       1.0s    17.80nm          5.1mb
KSR    89.62 117 eP    43 40.00  -0.4
MAW    89.71 164 iP+   43 39.60  -0.2
       1.0s    50.00nm          5.6mb
FLN    89.73  39 eP    43 39.90  -0.2
       0.8s    17.05nm          5.2mb
CAF    89.74  43 eP    43 40.50   0.2
       0.9s    15.40nm          5.1mb
LDF    89.88  39 eP    43 40.60  -0.2
       0.8s    23.65nm          5.3mb
LSF    89.93  41 eP    43 41.00  -0.1
       0.9s    16.70nm          5.1mb
TCF    90.37  42 eP    43 43.00  -0.2
       0.6s     5.30nm          4.8mb
MAF    90.58  42 eP    43 44.10   0.0
       0.8s    10.90nm          5.0mb
BGF    90.89  41 eP    43 45.50   0.0
       0.7s    19.40nm          5.4mb
AVF    91.30  41 eP    43 47.00  -0.3
       0.9s    10.00nm          5.0mb
SSF    91.50  41 eP    43 47.80  -0.5
       1.0s    12.40nm          5.1mb
SMF    91.55  42 eP    43 48.60   0.1
       0.9s    19.50nm          5.3mb
LBF    91.77  41 eP    43 49.10  -0.5
LOR    91.80  41 eP    43 49.20  -0.5
       0.7s     3.95nm          4.7mb
LRG    92.05  45 eP    43 51.70   0.8
       0.8s    11.95nm          5.2mb
LMR    92.11  45 eP    43 51.80   0.7
       0.8s    13.70nm          5.2mb
RES    92.13 354 eP    43 51.50   0.9
       0.6s     2.00nm          4.5mb
LPL    93.02  43 eP    43 56.60   1.0
       0.8s     7.10nm          5.0mb
LPG    93.03  43 eP    43 56.80   1.1
       0.8s     7.50nm          5.0mb
BSF    93.86  41 eP    43 58.90  -0.3
       0.6s     3.50nm          4.9mb
CDF    94.36  41 eP    44 01.40  -0.1
       0.7s     3.10nm          4.8mb
INK    95.55 341 eP    44 06.50   0.0
       1.0s     6.00nm          5.0mb
MBC    96.90 350 eP    44 14.50   2.1
       0.6s     2.00nm          4.8mb
GRF    97.22  40 ePc   44 15.20   0.8
       1.4s    18.00nm          5.4mb
DAG    97.83  11 iPc   44 17.50   0.9
       0.8s     2.99nm          4.9mb
KHC    98.55  41 ePDIF 44 20.00  -0.4
GEC2   98.56  42 ePd   44 20.70   0.2
       0.7s     1.50nm          4.6mb
FBA    99.30 335 eP    44 22.69  -0.8
       0.9s     7.84nm          5.3mb
                epP    44 53.81 119km
PRU    99.37  41 ePDIF 44 24.50   0.4
NRI   125.37   9 iPKPc 49 42.20   0.4
       1.2s    11.00nm
CTA   128.69 226 iPKPd 49 49.00  -0.7
BOD   138.43 356 ePKP  49 55.10 -11.9X
YSS   138.79 325 ePKP  50 08.00   0.0
KSH   142.99  45 ePKP  50 11.00  -4.9X
OFUJ  143.78 315 ePKP  50 14.60  -2.4
MTN   143.81 218 iPKPd 50 14.30  -3.4X
       0.8s    93.00nm
CIT   144.29 355 ePKP  50 18.00   0.4
YAMJ  145.33 315 ePKP  50 19.70   0.0
GUA   145.47 270 ePKP  50 19.20  -1.4
       0.9s   235.29nm
GUMO  145.52 270 ePKP  50 19.80  -0.8
       1.0s   260.30nm
PJG   145.52 270 ePKP  50 19.90  -0.8
ZAK   145.73   7 ePKP  50 21.20   1.2
       1.8s    99.00nm
POO   146.18  81 ePKP  50 26.00   4.3X
MDJ   147.03 333 ePKP  50 24.00   1.7
WMQ   147.08  29 PKP   50 23.50   1.0
CHJJ  147.11 312 PKP   50 25.60   2.9X
MAT   147.41 314 ePKP  50 23.00  -0.2
MTMJ  147.67 314 PKP   50 27.20   3.5X
KOD   148.48  97 ePKP  50 27.00   1.1
GBA   149.15  91 PKPd  50 28.00   1.6
CN2   149.40 337 PKPd  50 29.30   3.2X
WKYJ  150.43 312 PKP   50 34.30   6.3X
HYB   150.61  83 ePKP  50 29.00   0.3
       1.0s    70.00nm
                e      50 34.50
YONJ  151.39 315 PKP   50 35.90   6.6X
SNY   151.80 337 iPKPc 50 36.60   6.9X
GKN   154.48  59 PKP   50 34.40   0.3
DMN   155.01  59 PKP   50 35.00   0.1
KKN   155.09  59 PKP   50 35.10   0.1
HHC   155.53 356 PKPc  50 37.00   1.9
GUN   155.53  58 PKP   50 36.20   0.4
GTA   155.60  18 ePKP  50 36.00   0.8
BJI   155.66 347 ePKP  50 36.00   0.9
LEM   156.90 176 iPKPc 50 38.70   1.0
TIY   158.56 353 ePKP  50 40.00   1.2
     Z  20s     0.50um          5.4Msz
                pPKP   51 15.00
TIA   159.04 342 PKP   50 40.50   1.2
XAN   162.40   1 PKP   50 44.00   1.1
CD2   164.68  18 ePKP  50 46.20   1.0
WHN   165.14 343 ePKP  50 46.50   1.0
KMI   169.37  34 PKPc 50 50.00   1.0
GYA   169.67  13 PKP   50 49.80   0.8
CHTO  169.86  75 ePKP  50 49.50   0.4
     S.D. = 1.0  on 216 of 250 obs.
-------------------------------------
%  NOV  13, 1993  12h 32m 10.78± 0.89s
   39.117 N ± 7.3km   27.570 E ± 9.3km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
     ML 2.8 (ISK).

IZM     0.76 199 ePg   32 25.40  -0.2
                eSg    32 38.10
DST     0.95  59 iPn   32 29.50   0.5
EZN     1.20 307 ePn   32 33.50   0.5
EDC     1.25  10 ePn   32 33.50  -0.5
BNT     1.27  12 ePn   32 34.00  -0.3
     S.D. = 0.6  on   5 of   5 obs.
-------------------------------------
%  NOV  13, 1993  12h 42m 55.14± 0.82s
   39.666 N ± 7.7km   29.440 E ± 7.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
     ML 2.8 (ISK).

DST     0.63 265 ePg   43 07.00  -0.8
                eSg    43 18.00
IZI     0.67   2 iPg   43 08.60   0.1
ALT     0.80 139 ePg   43 11.00   0.2
                eSg    43 22.50
EYL     1.05  31 ePn   43 14.60  -0.5
BNT     1.36 301 ePn   43 21.10   1.0
EDC     1.39 300 ePn   43 20.50   0.0
     S.D. = 0.8  on   6 of   6 obs.
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&  NOV  13, 1993  12h 45m 15.41s
   60.190 N          153.105 W
   DEPTH = 117.7km
 SOUTHERN ALASKA                   (  2)
     <AEIC>.

INW     0.12 186 eP    45 31.20   0.8
                eS     45 44.30
INE     0.13 171 eP    45 31.24   0.8
                eS     45 44.40
ILIM    0.13 146 eP    45 31.10   0.8
                eS     45 44.03
```

13d 12h

RED	0.28	36	P	45 31.50	0.7
RS2	0.32	32	eP	45 31.82	0.7
REF	0.36	34	eP	45 31.99	-0.8
OPT	0.54	187	eP	45 32.91	-0.8
			eS	45 46.81	
PDB	0.68	234	eP	45 33.70	-0.9
			eS	45 48.79	
AUL	0.83	192	eP	45 35.13	-0.8
AUI	0.87	191	eP	45 35.19	-1.1
HOM	0.91	125	eP	45 35.87	-0.8
			eS	45 52.66	
BKG	0.98	25	eP	45 36.43	-1.0
			eS	45 53.64	
CKL	1.08	20	iP	45 37.61	-0.9
NKA	1.08	58	eP	45 38.78	0.5
CKT	1.11	23	eP	45 37.65	-1.1
SPU	1.12	27	iP	45 37.71	-1.1
BGL	1.13	18	eP	45 38.37	-0.7
CNPM	1.15	124	iP	45 37.93	-1.3
			eS	45 55.87	
CP2	1.16	21	eP	45 38.39	-1.0
CRP	1.18	23	iPc	45 38.09	-1.5
MCNL	1.19	212	eP	45 38.20	-1.3
BRLK	1.20	110	eP	45 39.85	0.2
			eS	45 56.53	
CGLM	1.24	25	eP	45 39.14	-1.1
CDD	1.29	192	eP	45 39.17	-1.5
SLKM	1.47	76	eP	45 41.15	-1.6
SVW	1.54	308	eP	45 41.63	-2.0
SYI	1.63	167	eP	45 42.64	-1.9
			eS	46 04.58	
SUA	1.72	41	eP	45 44.66	-1.2
			eS	46 08.45	
SEW	1.83	91	eP	45 44.82	-2.2
MPA	1.89	79	eP	45 46.22	-1.5
SKT	1.95	22	eP	45 47.01	-1.6
PMS	2.04	57	eP	45 47.83	-1.9
			eS	46 13.41	
PWA	2.15	46	P	45 50.20	-0.9
			S	46 28.10	
PLRM	2.40	52	eP	45 51.90	-2.4
PMR	2.40	52	(P)	45 51.44	-2.9
PWL	2.45	72	eP	45 51.73	-3.4
KDC	2.47	172	eP	45 51.42	-3.8
GHO	2.58	50	eP	45 53.90	-3.0
CUT	2.61	30	eP	45 55.35	-1.7
			eS	46 26.49	
LTI	2.63	91	eP	45 54.23	-3.2
FID	3.33	77	eP	46 04.11	-2.6
VLZ	3.47	71	eP	46 05.58	-2.9
CVA	3.67	81	eP	46 11.29	0.0
IMA	5.91	358	(P)	46 38.45	-3.5

44 obs. associated

? NOV 13, 1993 12h 49m 44.57± 2.09s
39.148 N ±11.4km 22.153 E ±25.5km
DEPTH = 33.0km (normal)
GREECE (364)

AGG	0.19	132	iPg	49 51.12	0.0
			eSg	49 57.00	
LIT	0.99	15	ePb	50 02.30	0.2
			iSb	50 18.28	
PAIG	1.41	56	ePb	50 08.10	-0.1
GRG	1.82	6	ePn	50 13.88	-0.2
SOH	1.91	29	ePn	50 15.50	0.1
			eSn	50 42.32	

S.D. = 0.2 on 5 of 5 obs.

% NOV 13, 1993 12h 58m 21.26± 0.45s
41.295 S ± 7.1km 172.728 E ± 6.7km
DEPTH = 140.0km (geophysicist)
SOUTH ISLAND, NEW ZEALAND (162)

THZ	0.49	164	Pc	58 43.60	1.9
			eS	58 58.70	
QRZ	0.49	342	Pc	58 43.20	1.6
			eS	58 57.40	
DSZ	0.83	237	Pc	58 45.60	1.6
DIW	1.03	62	P	58 46.80	1.2
TCW	1.17	87	Pc	58 48.10	1.2
CCW	1.21	113	P	58 48.60	1.3
MRW	1.49	88	Pc	58 50.80	0.5
			S	59 11.10	
LTZ	1.53	193	P	58 52.50	1.8
			eS	59 12.70	
WEL	1.54	90	Pc	58 51.30	0.5
			S	59 12.20	
KIW	1.71	76	Pc	58 53.10	0.4
CAW	1.78	85	Pc	58 53.60	0.1
MOW	1.90	95	Pc	58 55.10	0.0
BLW	2.07	93	P	58 57.00	-0.1
MTW	2.10	87	Pc	58 57.10	-0.3
NRZ	2.16	26	P	58 59.10	0.9
MNG	2.19	73	Pc	58 58.10	-0.5
			S	59 25.10	
BSZ	2.25	49	P	59 00.10	0.9
AMW	2.29	91	P	58 59.60	-0.1
WVZ	2.32	219	P	59 00.90	0.9
MQZ	2.41	181	Pd	59 01.80	0.6
			S	59 29.40	
PGZ	2.77	77	P	59 04.80	-1.0
CNZ	3.01	47	eP	59 08.20	-0.8
NGZ	3.05	47	eP	59 08.70	-0.9
WAHZ	3.19	61	P	59 10.20	-1.2
MOZ	3.21	30	P	59 10.90	-0.6
BWZ	3.85	212	eP	59 19.50	-0.4
ODZ	4.05	201	P	59 22.60	0.0
MSCZ	4.50	211	P	59 27.70	-1.1
MHZ	4.53	213	eP	59 28.00	-1.2
LSCZ	4.54	212	eP	59 28.00	-1.2
CMCZ	4.60	212	eP	59 29.20	-1.0
TLC	4.72	213	eP	59 30.10	-1.7
NOZ	4.88	58	eP	59 30.90	-2.8
MSZ	4.88	225	eP	59 33.60	-0.1
TUZ	5.17	205	eP	59 37.30	-0.3

S.D. = 1.1 on 35 of 35 obs.

% NOV 13, 1993 14h 38m 21.14± 1.48s
37.129 S ±11.7km 178.038 E ±12.1km
DEPTH = 33.0km (normal)
OFF E. COAST OF N. ISLAND, N.Z. (160)
ML 3.8 (WEL).

HBZ	0.51	156	Pd	38 32.00	0.1
			eS	38 40.20	
PUZ	0.96	170	Pd	38 38.60	0.3
			S	38 51.70	
URZ	1.35	213	eP	38 43.30	-0.5
			S	39 00.20	
NOZ	1.49	180	P	38 45.40	-0.4
KUZ	1.90	281	Pd	38 51.40	-0.3
			S	39 13.60	
CNZ	2.85	223	P	39 05.70	0.3
MOZ	2.91	241	eP	39 06.50	0.4
PGZ	3.75	201	P	39 13.80	-4.2X
MNG	4.01	209	eP	39 16.80	-5.1X
			eS	40 03.20	
OUZ	4.07	297	eP	39 22.70	0.1

S.D. = 0.4 on 8 of 10 obs.

NOV 13, 1993 16h 11m 56.48± 0.37s
44.216 N ± 3.3km 12.165 E ± 3.4km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 3.5 (VIE), 3.3 (LDG). MD 3.4
(TRI), 3.2 (ROM).

RSM	0.35	144	P	12 04.40	0.6
SFI	0.37	218	P	12 04.30	0.2
PGD	0.47	223	P	12 05.84	-0.2
CRE	0.61	195	P	12 08.02	-0.8
ARV	0.91	142	P	12 13.65	-0.3
MME	1.05	269	P	12 18.70	2.2
BDI	1.14	263	P	12 19.45	1.6
ASS	1.20	162	P	12 18.52	-0.4
PII	1.28	248	P	12 20.73	0.5
VVI	1.78	6	P	12 27.84	0.4
SAL	1.81	321	P	12 29.21	1.3
CTI	1.87	349	P	12 29.42	0.6
MNS	1.87	168	P	12 29.28	0.5
TRI	1.88	37	ePnd	12 28.30	-0.5
			ePg	12 30.30	
			e	12 51.70	
			iSg	12 59.70	
RIY	1.94	54	iPn	12 29.10	-0.7
			iSn	12 54.10	
BOB	2.02	287	P	12 33.72	2.7
VOY	2.19	33	iPn	12 33.10	-0.4
			eSn	13 00.70	
			eSg	13 10.50	
CEY	2.21	46	ePn	12 37.70	3.9X
			eSn	13 11.10	
MDI	2.34	313	P	12 37.08	1.6
FVI	2.42	10	P	12 37.47	0.9
LJU	2.48	42	e(Pn)	12 40.00	2.4
	1.0s	160.00nm			
			e	12 45.40	
			eSn	13 08.00	
VBY	2.55	59	ePn	12 38.00	-0.5
			i	13 05.30	
			i(Sn)	13 09.00	
			i	13 21.70	
PCP	2.62	278	P	12 42.51	3.0X
CKI	2.80	276	P	12 43.70	1.6
SCE	2.84	354	iPnc	12 44.20	1.3
FIN	2.84	271	P	12 43.20	0.4
PGF	2.85	235	Pn	12 42.30	-0.6
			Sn	13 14.20	
OSS	2.85	331	P	12 45.00	2.0
VDL	2.96	321	iPc	12 45.80	1.2
TMA	3.00	310	P	12 45.70	0.6
WTTA	3.07	353	iPnc	12 47.80	1.7
			iSn	13 26.10	
			i	13 42.40	
ROB	3.09	273	P	12 46.59	0.4
IMI	3.10	266	P	12 46.82	0.5
ZAG	3.15	58	e(Pn)	13 02.30	15.3X
PTJ	3.17	57	ePn	13 02.50	15.0X
			iSg	13 32.80	
ORX	3.29	297	P	12 47.23	-2.0
ENR	3.41	272	P	12 51.49	0.6
SBF	3.43	266	Pn	12 50.80	-0.3
			Sn	13 27.20	
LLS	3.46	321	P	12 53.10	1.4
STV	3.48	272	P	12 52.95	1.1
BHG	3.54	8	iPnc	12 56.00	3.4X
BHB	3.56	282	P	12 52.54	-0.4
PZZ	3.64	276	P	12 53.59	-0.6
LSD	3.77	291	P	12 54.64	-1.6
FRF	4.04	263	Pn	12 59.50	-0.2
			Sn	13 41.80	
LPG	4.06	290	Pn	12 59.20	-1.0
			Sn	13 43.60	
LPL	4.08	291	Pn	12 59.50	-0.9
			Sn	13 43.60	
EMS	4.14	298	eP	13 02.80	1.5
LMR	4.19	260	Pn	13 01.20	-0.6
			Sn	13 46.60	
LRG	4.27	262	Pn	13 02.90	0.0
			Sn	13 48.20	
FEL	4.66	323	eP	13 08.00	-0.7
GEC2	4.75	12	Pn	13 08.70	-1.2
			Sn	14 04.20	
KHC	5.01	11	Pn	13 12.40	-1.1
			Pg	13 34.50	
			Sn	14 09.50	
			e	14 45.00	
BSF	5.20	316	Pn	13 15.70	-0.6
			Sn	14 10.60	
ZST	5.25	39	e(P)	13 40.50	23.6X
CDF	5.39	323	Pn	13 18.10	-0.9
			Sn	14 16.10	
GRF	5.52	354	ePn	13 19.00	-1.6
			ePg	13 44.60	
			eSn	14 18.70	
			e(Sg)	14 54.60	
HAU	5.54	315	Pn	13 20.00	-1.0
			Sn	14 19.20	
PRU	6.00	15	ePn	13 48.00	20.6X
	1.3s	22.80nm			
			Pg	14 10.50	
			e	14 33.50	
			Sn	14 45.90	
			Sg	15 19.60	
SMF	6.34	295	Pn	13 30.80	-1.5
			Sn	14 37.90	
LBF	6.38	299	Pn	13 31.40	-1.4
			Sn	14 39.00	
MOX	6.44	357	(Pn)	14 02.00	28.3X
			(Sg)	15 30.80	
LOR	6.56	301	Pn	13 33.30	-2.1
			Sn	14 44.10	
SSF	6.70	298	Pn	13 35.80	-1.6
			Sn	14 46.30	
AVF	6.71	296	Pn	13 35.70	-1.7
BRG	6.77	10	eP	13 37.90	-0.4
	0.9s	20.00nm		5.2mb	
BGF	6.97	293	Pn	13 39.10	-2.0
			Sn	14 52.70	
CLL	7.12	4	iPn	13 39.40	-3.8X

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                iPg   13 40.90
                iSg   13 54.00
                e     14 01.00
                e     16 06.00
     S.D. = 1.2  on  59 of  68 obs.
-----------------------------------
*  NOV  13, 1993  17h 30m 24.49± 0.78s
   18.068 S ±15.5km  167.667 E ±12.4km
   DEPTH =  33.0km  (normal)
   4.4mb (  1 obs.)
 VANUATU ISLANDS                  (186)

BKM      0.68  54 iPc   30 37.50  -0.1
                iS    30 47.50
PVC      0.70  62 iPc   30 38.00   0.2
                iS    30 50.00
DZM      4.14 196 iPd   31 27.20   0.1
                iS    32 15.10
CTA     20.34 261 eP    35 01.50   0.7
ASPA    31.99 254 eP    36 49.30  -0.8
       0.9s     4.50nm          4.4mb
                eS    42 10.10
     S.D. = 0.8  on   5 of   5 obs.
-----------------------------------
?  NOV  13, 1993  18h 21m 01.50± 6.69s
   36.512 N ±47.4km    3.705 W ±25.9km
   DEPTH =  10.0km  (geophysicist)
 STRAIT OF GIBRALTAR              (385)
      mbLg 2.5 (MDD).

EGUA     0.34  19 iPc   21 08.18  -0.4
                e     21 13.60
ECOG     0.77   8 eP   21 16.00  -0.6
                e     21 28.30
ELUQ     1.14 337 eP   21 22.85   0.0
                e     21 40.50
EPRU     1.31 291 eP   21 25.19  -0.5
                e     21 43.50
EBAN     1.65 358 eP   21 31.61   1.0
                e     21 54.20
EHOR     1.80 317 eP   21 33.25   0.5
                e     21 56.50
     S.D. = 0.8  on   6 of   6 obs.
-----------------------------------
%  NOV  13, 1993  18h 50m 30.17± 0.99s
   31.312 S ±15.7km   68.160 W ±10.3km
   DEPTH =  33.0km  (normal)
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTLL     0.27 266 iPd   50 37.70   0.1
                S     50 43.70
CFA      0.30 193 iP    50 36.90  -1.1
                S     50 42.00
RTCB     0.57 252 ePd   50 42.80   0.9
                S     50 52.30
RTCV     0.63 210 iPd   50 42.50  -0.2
                S     50 53.00
RTPR     1.74  55 eP    50 57.00  -1.5
                S     51 18.00
TCA      3.05  91 e(P)  51 19.20   1.8
                S     51 50.00
     S.D. = 1.6  on   6 of   6 obs.
-----------------------------------
   NOV  13, 1993  19h 36m 56.93± 0.40s
   41.894 N ± 3.6km   22.634 E ± 3.7km
   DEPTH =  13.0 ±  2.6 km
 NORTHWESTERN BALKAN REGION       (383)
      ML 3.0 (SKO).

KKB      0.34  94 iPc   37 04.00  -0.1
VAY      0.57 185 iPg   37 07.40  -0.9
                iSg   37 14.00
KNT      0.76 165 ePg   37 11.50   0.0
                eSg   37 20.00
VTS      0.82  31 iPc   37 12.00  -0.6
MMB      0.87 110 iPgd  37 14.00   0.5
SKO      0.89 275 iPg   37 13.50  -0.3
       0.4s   210.00nm
                i     37 15.40
                iSg   37 24.80
                i     37 27.80
                Lg    37 31.00
SRS      1.06 137 ePg   37 15.80  -0.8
                eSg   37 30.60
SOH      1.20 153 ePg   37 18.88  -0.2
                eSg   37 34.84
THE      1.28 169 ePb   37 20.08  -0.4
                eSb   37 37.48
PGB      1.31  60 iPgc  37 22.00   1.0
FNA      1.46 221 ePb   37 23.48   0.5
                eSb   37 43.16
PLD      1.56  82 iPgd  37 25.00   0.7
RZN      1.57  97 iPd   37 25.00   0.3
OHR      1.58 241 iPn   37 25.60   0.8
       0.7s   250.00nm
                iSn   37 47.00
                Lg    37 50.00
LIT      1.79 184 ePb   37 28.68   0.9
KDZ      2.10  96 iP    37 32.00  -0.2
PAIG     2.12 158 ePn   37 32.36  -0.1
                eSn   37 57.50
DIM      2.17  85 iPg   37 38.00   4.8X
ALN      2.75 110 ePn   37 41.60   0.1
AGG      2.88 185 ePn   37 42.92  -0.4
JMB      2.99  78 eP    37 45.00   0.2
GZR      3.50   2 ePd   38 00.00   7.8X
BZS      3.79 349 ePc   37 47.00  -9.3X
ISR      4.31  40 eP    38 14.00  10.3X
MLR      4.32  33 ePd   38 04.50   0.6
VRI      4.95  35 ePd   38 11.00  -1.7
     S.D. = 0.7  on  22 of  26 obs.
-----------------------------------
%  NOV  13, 1993  19h 44m 34.42± 0.78s
   31.653 S ±20.4km   68.406 W ±11.1km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA     (137)

CFA      0.15  72 iP    44 49.00   0.0
                S     45 01.20
RTCV     0.24 208 iPd   44 49.50   0.3
                S     45 01.00
RTLL     0.33 350 iPd   44 49.30  -0.1
                S     45 01.00
RTCB     0.37 296 ePd   44 49.50  -0.2
                S     45 01.20
RTPR     2.11  51 e(P)  45 09.20   0.3
                S     45 35.20
TCA      3.27  86 ePd   45 24.50  -0.3
                (S)   46 02.00
     S.D. = 0.3  on   6 of   6 obs.
-----------------------------------
*  NOV  13, 1993  20h 30m 06.92± 0.70s
    9.843 N ±12.0km  126.225 E ±15.7km
   DEPTH =  33.0km  (normal)
   4.5mb (  9 obs.)
 MINDANAO, PHILIPPINE ISLANDS     (259)

SSE     21.66 348 eP    34 57.00   0.4
XAN     28.85 329 P     36 01.70  -2.9
        0.6s     5.20nm          4.4mb
TIY     30.40 338 eP    36 21.00   2.5
WARB    35.81 179 eP    37 05.50   0.1
        0.3s     4.00nm          4.8mb
GTA     37.71 326 eP    37 20.00  -1.4
FORT    40.43 178 eP    37 44.00   0.1
GUN     41.95 301 P     37 57.20   0.3
PKI     42.25 300 P     38 00.80   1.4
KKN     42.42 301 P     38 02.20   1.6
DMN     42.51 300 P     38 02.40   0.9
HYB     46.84 285 eP    38 34.00  -2.0
GBA     47.86 279 P     38 44.00   0.0
IMA     77.04  24 eP    41 59.00   0.7
        0.9s     4.17nm          4.5mb
INK     84.70  22 eP    42 38.00  -0.4
KAF     85.98 332 iP    42 43.80  -1.2
        0.5s     1.80nm          4.6mb
MBC     86.13  13 eP    42 46.50   1.0
        0.8s     2.00nm          4.4mb
NUR     87.15 331 iP    42 50.80   0.1
        0.6s     6.60nm          5.1mb
NAO     93.38 334 P     43 19.60  -0.3
        0.6s     1.00nm          4.4mb
YKA     94.16  24 eP    43 22.60  -0.8
        0.8s     1.50nm          4.5mb
GEC2    97.00 322 eP    43 36.50  -0.3
        0.6s     0.47nm          4.2mb
                e     43 43.80
     S.D. = 1.3  on  20 of  20 obs.
-----------------------------------
%  NOV  13, 1993  20h 37m 16.93± 1.05s
   39.031 N ± 9.2km   29.917 E ± 9.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 2.8 (ISK).
ALT      0.15  81 iPg   37 20.40  -0.2
KHL      0.77 204 ePg   37 32.00   0.0
                eSg   37 41.50
DST      1.15 300 ePn   37 39.00   0.5
IZI      1.35 345 ePn   37 40.00  -1.8
EYL      1.54   7 ePn   37 46.10   1.5
     S.D. = 1.7  on   5 of   5 obs.
-----------------------------------
&  NOV  13, 1993  21h 14m 05.86s
   35.951 N          120.498 W
   DEPTH =  11.3km
 CENTRAL CALIFORNIA               ( 39)
      <GM-P>. MD 3.1 (GM). ML 3.0
      (PAS), 3.0 (GS).

PSTM     0.02 201 P     14 08.00  -0.1
WKR      0.14 184 P     14 09.68   0.4
PHAM     0.14 145 iPd   14 09.56   0.2
PSMM     0.14 327 P     14 09.97   0.6
PCRM     0.15  20 P     14 10.31   0.8
GHC      0.17 135 P     14 09.85   0.0
PSRM     0.20 118 P     14 10.60   0.2
PTV      0.24 311 P     14 11.19   0.1
PMCM     0.25 155 P     14 11.60   0.4
PMRM     0.27 128 P     14 11.72   0.1
PAGM     0.30 137 P     14 12.22   0.1
PRCM     0.32 342 P     14 13.36   0.8
PARM     0.32  23 P     14 14.10   1.5
PSAM     0.33 283 P     14 12.51  -0.2
PKEM     0.33  71 ePc   14 14.41   1.6
MOP      0.36 318 P     14 13.39   0.1
PANM     0.37 243 P     14 13.42  -0.2
PTRM     0.38 142 P     14 13.81   0.1
PDRM     0.40  15 P     14 15.39   1.3
PADM     0.43 224 P     14 14.42  -0.3
PHBM     0.45  48 P     14 17.09   2.0
LRC      0.53 304 P     14 16.11  -0.5
PHCM     0.60 243 P     14 17.44  -0.4
YEG      0.68 139 P     14 19.27   0.1
SHG      0.77 307 P     14 20.19  -0.5
BCH      0.84 156 iPd   14 21.66  -0.3
                eS    14 33.62
EKH      0.90 323 P     14 23.51   0.6
CRGC     0.95 138 P     14 24.14   0.3
BAPM     0.95 284 P     14 23.55  -0.4
BHRM     0.99 322 P     14 25.22   0.7
SCCM     1.04 165 P     14 25.53   0.1
BSLM     1.07 320 P     14 26.56   0.7
BSRM     1.09 311 P     14 25.86  -0.4
SAO      1.12 317 eP    14 25.95  -0.7
TMB      1.17 137 P     14 27.72   0.1
PKM      1.19 152 P     14 27.87  -0.2
HJGM     1.21 315 P     14 27.62  -0.7
DIL      1.28 314 P     14 28.34  -1.1
MARC     1.34 135 P     14 29.77  -0.6
CBC      1.35 317 P     14 32.25   1.7
GHS      1.37 326 P     14 30.48  -0.5
SYP      1.48 163 P     14 32.08  -0.5
PEV      1.48 314 P     14 33.62   1.2
ABL      1.51 136 eP    14 31.73  -1.3
                eS    14 52.45
COE      1.61 324 eP    14 33.92  -0.3
ARN      1.62 330 eP    14 35.60   1.1
JUCM     1.63 310 P     14 33.30  -1.2
ISA      1.67  99 ePc   14 33.99  -1.2
                eS    14 53.84
WLHM     1.78  83 P     14 36.88  -0.2
WCHM     1.97  91 P     14 39.88   0.2
MMPM     2.03  35 eP    14 41.32   0.6
CMB      2.08   2 eP    14 41.09   0.0
MTUM     2.09  47 eP    14 41.61   0.2
MEMM     2.12  36 eP    14 42.53   0.9
TOW      2.22  93 P     14 43.31   0.1
ORC      2.24  41 P     14 45.29   1.7
BONR     2.66  41 eP    14 50.36   0.6
SSK      2.88 126 eP    14 51.68  -1.0
GSC      3.08 101 eP    14 53.72  -1.6
PEC      3.43 126 (Pn)  14 59.48  -0.8
TPNV     3.57  73 ePn   15 02.12  -0.3
       61 obs. associated
-----------------------------------
*  NOV  13, 1993  22h 42m 10.55± 0.25s
    7.608 S ± 5.5km  127.650 E ± 7.5km
   DEPTH =  33.0km  (normal)
   5.1mb ( 24 obs.)
 BANDA SEA                        (280)
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13d 22h

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MTN      6.23 147 iPd   43 45.00   2.3
KNA      8.17 172 iPd   44 11.20   1.5
                  iS    45 34.00
WR2     13.89 153 iPc   45 24.00  -3.4X
MBL     15.45 208 eP    45 48.20   0.5
         0.3s    36.00nm          5.2mb
                  eS    48 31.00
WWKK    16.38  77 eP    46 02.50   2.7
ASPA    17.06 160 eP    46 06.20  -2.1
      Z  22s     0.10um
                  eS    49 02.70
QIS     17.31 139 iPc   46 10.00  -1.4
                  eS    49 08.00
MDG     18.17  84 eP    46 24.80   2.7
WARB    18.50 183 eP    46 26.50   0.4
         0.4s    59.00nm          5.1mb
                  eS    49 42.50
LAT     19.22  88 e(P)  46 44.00   9.1X
PMG     19.38  97 eP    46 36.00  -0.7
MEEK    20.78 203 iPd   46 52.20   0.7
         0.3s    39.00nm          5.3mb
                  iS    50 33.00
CTA     21.88 126 iPc   47 04.00   1.4
         1.3s    57.69nm          4.8mb
                  e     47 09.00
                  iS    51 00.00
FORT    23.06 179 iPd   47 15.80   1.7
         0.5s    71.00nm          5.4mb
COOL    23.94 194 iPd   47 24.10   1.3
         0.6s    52.00nm          5.2mb
KLB     25.58 200 eP    47 40.00   1.6
                  e     48 03.00
                  eS    52 26.00
MUN     26.49 202 eP    47 47.80   1.0
                  i     48 17.00
                  eS    52 46.00
ADE     29.06 161 e(P)  48 12.00   1.8
BRS     30.88 133 iP    48 22.50  -3.9X
                  i     48 25.50
                  i     48 28.20
                  i     48 51.00
                  e     49 18.00
ARMA    31.93 138 eP    48 35.50  -0.2
         0.6s     8.00nm          4.8mb
CAN     33.83 148 eP    48 52.90   0.9
CAN     33.83 148 iPd   48 53.30   1.3
TOO     33.94 154 iPc   48 54.20   1.3
         0.7s    17.00nm          5.1mb
CNB     34.02 147 iPc   48 54.20   0.5
         0.7s    17.00nm          5.1mb
CHTO    38.61 313 eP    49 34.70   2.1
GYA     39.52 330 iPc   49 42.40   2.1
         1.2s    36.00nm          5.0mb
                  PcP   51 47.20
DZM     40.02 115 iPc   49 44.80   0.3
WHN     40.02 342 eP    49 47.00   2.8
         1.0s    45.00nm          5.2mb
NJ2     40.32 348 Pd    49 49.00   2.4
         1.0s    39.00nm          5.1mb
KMI     40.58 324 Pc    49 51.50   2.3
         1.2s    40.00nm          5.0mb
CD2     44.62 330 iPc   50 23.00   1.2
         1.0s    26.00nm          5.0mb
TIA     44.69 348 Pd    50 23.00   0.7
MAT     45.02  12 eP    50 23.00  -1.9
         1.0s    15.00nm          4.8mb
XAN     45.06 338 P     50 25.50   0.2
         0.6s    16.00nm          5.1mb
TIY     47.27 344 eP    50 43.10   0.3
BJI     48.58 348 eP    50 55.00   2.2
LZH     48.89 334 eP    50 57.00   1.5
         1.6s    41.00nm          5.2mb
HHC     50.44 344 eP    51 08.90   1.7
         1.2s     9.70nm          4.7mb
MSZ     50.82 143 eP    51 10.90   1.0
         0.7s    51.00nm          5.6mb
LSA     51.06 318 P     51 13.20   0.6
         0.8s     8.00nm          4.7mb
QRZ     51.78 137 eP    51 17.90   0.6
         0.7s    80.00nm          5.8mb
BWZ     51.91 142 eP    51 17.60  -0.6
THZ     52.46 138 eP    51 22.20  -0.3
LTZ     52.52 139 P     51 22.80  -0.1
TUZ     52.53 144 eP    51 22.20  -0.7
         0.5s    14.00nm          5.2mb
ODZ     52.64 143 eP    51 22.70  -1.1
BSZ     52.99 135 eP    51 27.10   0.7
TCW     53.13 137 P     51 26.60  -0.8
KIW     53.42 136 P     51 29.00  -0.5
GTA     53.42 333 eP    51 30.00   0.3
         1.2s    19.00nm          5.0mb
                  pP    51 41.00  37kmX
MRW     53.43 137 P     51 28.50  -1.1
GUN     53.63 313 P     51 32.00   0.4
MNG     53.71 136 eP    51 30.50  -1.2
PKI     53.78 312 P     51 32.40  -0.3
URZ     53.96 132 eP    51 32.40  -1.1
KKN     53.99 312 P     51 34.30   0.1
DMN     54.02 312 P     51 34.40   0.0
PGZ     54.26 135 eP    51 34.70  -1.0
GKN     54.58 312 P     51 38.40  -0.1
HBZ     54.61 131 eP    51 37.30  -1.0
NDI     60.53 309 eP    52 18.00  -2.2
WMQ     62.66 328 P     52 34.80   0.4
         0.6s    12.00nm          5.2mb
QUE     69.25 306 eP    53 18.50   1.5
YKA    109.31  26 ePKP  00 36.40  -2.2
         0.6s     1.20nm
GEC2   111.38 320 ePKPc 00 41.10  -2.0
         0.6s     1.53nm
                  e     00 44.50
GRF    112.74 321 ePKP  00 44.30  -1.2
BSF    116.09 320 ePKP  00 50.10  -2.1
         0.6s     3.95nm
LPG    116.84 317 ePKP  00 52.30  -1.7
         0.7s     2.45nm
LPL    116.85 317 ePKP  00 52.20  -1.7
         0.5s     2.20nm
LOR    118.15 320 ePKP  00 54.20  -1.8
LBF    118.18 320 ePKP  00 54.40  -1.7
         0.6s     3.45nm
MSU    118.19  50 ePKP  00 56.40  -0.3
SSF    118.45 320 ePKP  00 55.10  -1.5
         0.6s     4.50nm
AVF    118.64 320 ePKP  00 55.10  -1.8
BGF    119.05 320 ePKP  00 56.40  -1.3
         0.6s    12.00nm
SRU    119.30  49 ePKP  00 56.82  -1.9
MAF    119.36 319 ePKP  00 56.80  -1.5
CAF    120.16 318 ePKP  00 58.90  -1.0
         0.7s     3.40nm
PV10   120.61  50 ePKP  01 00.38  -0.9
LPO    120.83 318 ePKP  01 00.20  -1.0
PV08   120.85  49 ePKP  01 01.14  -0.7
LPF    120.89 322 ePKP  00 59.80  -1.3
MFF    120.94 321 ePKP  00 59.70  -1.6
         0.6s     7.95nm
LFF    121.03 318 ePKP  01 00.60  -0.9
EPF    122.01 317 ePKP  01 02.20  -1.3
         0.5s     1.80nm
UYO    133.10  50 iPKPc 01 23.60  -1.4
LKO    133.75 276 PKP   01 25.71  -1.1
         0.4s     2.50nm
SLA    145.40 159 iPKPc 01 47.00  -0.8
YJA    147.72 157 iPKPc 01 54.50   2.5
RSTA   147.78 186 ePKP  01 54.30   2.9X
NNA    148.82 128 iPKPc 01 56.00   2.6
         1.0s    25.00nm
VAO    149.13 190 ePKP  01 56.90   3.2X
CNCB   151.23 148 iPKPc 02 04.60   7.0X
LPB    151.40 147 PKPc  02 04.00   6.3X
CCH    151.68 151 PKP   02 04.50   6.5X
SIV    155.01 160 PKP   02 01.70  -0.5
      S.D. = 1.4  on  88 of  96 obs.
-----------------------------------
   NOV  13, 1993  23h 44m 22.86± 0.27s
    3.211 N ± 4.8km  128.151 E ± 5.8km
   DEPTH =  33.0km  (normal)
   5.2mb ( 26 obs.)
 NORTH OF HALMAHERA, INDONESIA   (264)

MTN     16.22 170 eP    48 11.50   1.4
         0.4s    54.00nm          5.0mb
GUMO    19.47  57 eP    48 52.00   2.0
PJG     19.47  57 eP    48 52.10   2.0
GUA     19.48  57 eP    48 52.70   2.5
LEM     22.79 244 iPd   49 26.20   2.0
QZH     23.49 338 eP    49 31.90   1.3
WR2     23.81 165 iPd   49 33.80   0.0
         0.5s     7.90nm          4.5mb
                  ePcP  53 16.70
                  eS    53 38.70
QIZ     23.83 313 eP    49 35.80   1.8
ASPA    27.30 168 iPc   50 06.00  -0.6
         0.5s    40.20nm          5.3mb
      Z  20s     0.20um          3.7Msz
                  iPcP  53 24.70
                  iS    54 37.10
                  iPcS  57 03.70
SSE     28.50 347 P     50 17.00  -0.4
NJ2     29.99 344 Pd    50 30.60  -0.1
WHN     30.16 336 P     50 33.00   0.8
         1.0s    30.00nm          5.0mb
NST     30.23 296 eP    50 33.50   0.5
GYA     30.96 320 P     50 39.80   0.3
TKSJ    31.11  10 P     50 40.00  -0.5
WKYJ    31.62  12 P     50 44.70  -0.4
YONJ    32.20   8 P     50 49.80  -0.3
CHTO    32.50 301 iPc   50 53.50   0.5
         0.9s    46.89nm          5.4mb
KMI     32.75 314 Pc    50 56.00   0.7
         1.0s    60.00nm          5.4mb
TSRJ    32.97  12 eP    50 56.20  -0.6
FORT    33.80 180 eP    51 03.00  -1.0
CHJJ    34.18  16 eP    51 05.30  -2.0
MTMJ    34.38  14 eP    51 07.80  -1.4
MAT     34.44  14 iPd   51 07.90  -1.7
         0.8s    26.87nm          5.2mb
XAN     35.53 332 iPd   51 18.50  -0.4
         1.0s    54.00nm          5.4mb
                  pP    51 24.50  20kmX
CD2     35.90 323 Pd    51 22.00  -0.2
STK     37.16 161 iPc   51 27.10  -5.5X
         0.5s    27.20nm          5.4mb
                  ipP   51 49.80  96kmX
                  iPcP  53 46.40
                  eS    57 04.60
TIY     37.24 339 eP    51 32.90  -0.4
      Z  15s     0.47um          4.4MszX
BJI     38.23 345 eP    51 40.50  -1.0
         1.2s    18.00nm          4.8mb
BRS     38.59 144 iP    51 44.00  -0.8
LZH     39.67 329 iPc   51 55.00   1.2
         1.2s    62.00nm          5.2mb
                  sP    52 04.00
ARMA    40.27 148 iPd   51 58.20  -0.5
         0.6s     9.00nm          4.7mb
HHC     40.34 340 Pc    51 59.00  -0.2
         0.8s    22.00nm          5.0mb
CN2     40.49 357 eP    52 01.20   1.0
BTO     40.66 339 eP    52 04.20   2.4
MDJ     41.25   2 eP    52 06.50   0.0
SHL     41.33 306 iP    52 08.00   0.4
         1.0s    22.50nm          4.9mb
ASAJ    42.71  15 eP    52 18.90   0.5
TOO     43.65 160 eP    52 27.20   1.0
         0.6s    12.00nm          4.8mb
LSA     43.85 311 P     52 28.80   0.4
         0.8s    13.00nm          4.8mb
GTA     44.27 328 eP    52 31.50   0.1
         1.2s    10.00nm          4.5mb
GUN     47.18 306 P     52 55.20   0.3
         0.6s    27.00nm          5.4mb
PKI     47.43 305 P     52 56.60  -0.2
KKN     47.62 305 P     52 58.20   0.0
         0.7s    17.00nm          5.2mb
DMN     47.69 305 P     52 58.80   0.0
         0.6s    15.00nm          5.2mb
GKN     48.22 305 P     53 02.40  -0.5
HYB     50.63 290 iPc   53 21.50   0.2
         1.0s    70.00nm          5.6mb
GBA     51.12 285 Pc    53 25.00   0.0
WMQ     53.96 324 iPd   53 46.00   0.1
         1.0s    38.00nm          5.4mb
NDI     54.59 303 iPc   53 49.50  -1.2
POO     55.23 290 iPc   54 00.00   4.5X
KSH     59.38 315 P     54 26.00   1.3
         0.8s    30.00nm          5.5mb
SVW     80.56  29 eP    56 33.50   0.2
TTA     80.72  27 eP    56 33.80  -0.4
IMA     82.28  24 eP    56 42.20  -0.1
         0.6s     6.30nm          4.8mb
SLKM    83.09  30 eP    56 45.21  -1.3
PMR     83.72  29 eP    56 48.70  -0.9
         0.8s    24.70nm          5.4mb
FBA     84.58  25 eP    56 54.00   0.1
TOA     85.15  28 eP    56 57.20   0.3
KLU     85.25  29 eP    56 57.28  -0.1
OBN     88.28 325 iPd   57 10.20  -2.0
         1.3s    26.00nm          5.4mb
                  e     57 45.00
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KAF    92.71 333 eP    57 29.90  -2.8
KIC   132.01 281 PKP   03 34.00  -1.9
       0.7s    11.00nm
LKO   132.20 286 PKP   03 34.80  -1.4
       0.5s     8.00nm
TIC   132.24 282 PKP   03 35.10  -1.2
LIC   132.32 281 PKP   03 35.20  -1.2
TCA   149.55 158 iPKPc 04 10.30   3.8X
MOCB  157.61 144 PKP   04 18.10  -0.3
CNCB  159.17 132 PKP   04 22.00   1.6
LPB   159.26 131 PKP   04 21.00   0.7
PPD   161.28 182 ePKP  04 21.90   0.1
SIV   164.39 145 PKP   04 24.60  -0.4
SOB1  167.59 241 (PKP) 04 28.00   0.4
     S.D. = 1.1  on  70 of  73 obs.
-------------------------------------
   NOV  14, 1993  00h 42m 00.40± 0.68s
   32.883 S ± 5.9km   68.381 W ± 6.5km
   DEPTH =   5.0km  (geophysicist)
 MENDOZA PROVINCE, ARGENTINA      (139)
      MD 3.5 (SAN).

MDZ     0.40 270 iP    42 08.20  -0.2
                 iS    42 11.10
RTCV    1.03 353 eP    42 20.00  -0.3
CFA     1.28   5 iP    42 24.80   0.2
                 S     42 42.70
RTCB    1.44 346 ePc   42 27.00  -0.2
                 S     42 46.00
RTLL    1.55 357 ePc   42 29.00   0.2
                 S     42 49.00
FCH     1.66 254 (P)   42 29.14  -1.5
                 iS    42 50.76
JACH    1.87 276 iP+   42 32.45  -1.0
                 iS    42 56.11
RFA     1.88 182 iPc   42 32.50  -1.1
                 S     43 00.50
PCH     1.93 247 iP+   42 34.05  -0.3
                 iS    42 59.63
PEL     1.95 262 iP+   42 33.95  -0.6
                 iS    42 58.03
ROCH    2.21 267 iPd   42 38.36  -0.2
                 iS    43 06.00
CACH    2.23 236 iPd   42 39.18   0.6
                 iS    43 08.11
TACH    2.28 250 iP+   42 39.89   0.6
                 (S)   43 09.43
LCCH    2.74 257 iPd   42 47.44   1.6
                 (S)   43 22.53
LNV     2.75 246 iPd   42 47.83   1.9
                 iS    43 21.56
RTPR    3.03  32 e(P)  42 56.00   6.2X
                 S     43 36.00
TCA     3.57  65 ePc   42 58.00   0.4
                 (S)   43 52.00
     S.D. = 1.0  on  16 of  17 obs.
-------------------------------------
%  NOV  14, 1993  00h 51m 03.82± 1.34s
   31.775 S ±20.1km   67.955 W ± 8.4km
   DEPTH =  33.0km  (normal)
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTCV    0.50 260 iPd   51 15.00   0.5
RTLL    0.62 315 ePd   51 15.00  -1.2
                 S     51 23.20
RTCB    0.78 292 ePd   51 18.80   0.4
                 (S)   51 30.00
RTPR    1.92  41 eP    51 36.00   1.2
TCA     2.90  82 e(P)  51 48.00  -0.8
                 (S)   52 31.50
     S.D. = 1.4  on   5 of   5 obs.
-------------------------------------
   NOV  14, 1993  01h 59m 20.24± 0.15s
   22.572 S ± 3.9km   68.571 W ± 3.4km
   DEPTH = 112.2km  (geophysicist)
   5.8mb ( 86 obs.)
 NORTHERN CHILE                   (123)
      Mw 5.8 (GS), 5.8 (HRV). mb 5.8
      (BRK). Mo=1.1*10**18 Nm (PPT).
      Felt (IV) at Antofagasta and
      Calama. Also felt (II) at
      Arequipa, Peru. Depth from
      broadband displacement
      seismograms.
      FAULT PLANE SOLUTION: P-Waves
       NP1:Strike= 12 Dip=75 Slip=-100
       NP2:        226     18       -57
       Principal Axes:
        T                Plg=29  Azm=110
        P                   59      268
      Comment: The focal mechanism is
        poorly controlled and
        corresponds to normal
        faulting with a small right-
        lateral strike-slip
        component. The preferred
        fault plane is NP1.
      RADIATED ENERGY
       No. of sta:  13  Focal mech.  F
       Energy        1.6±0.3*10**12 Nm
      MOMENT TENSOR SOLUTION
      Dep 117            No. of sta: 20
      Moment Tensor;   Scale 10**17 Nm
        Mrr=-2.16       Mtt= 0.74
        Mff= 1.41       Mrt=-0.60
        Mrf=-5.59       Mtf= 2.03
       Principal axes:
        T  Val=  6.22  Plg=33  Azm=114
        N        0.10      17       13
        P       -6.32      52      260
      Best Double Couple:Mo=6.3*10**17
       NP1:Strike=249 Dip=20 Slip= -32
       NP2:          10     80     -107
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 49S, **C
      Centroid Location:
      Origin Time        01:59:26.8 0.1
      Lat 22.63S 0.01 Lon  68.74W 0.02
      Dep 117.1 1.1 Half-duration  2.0
      Moment Tensor;   Scale 10**17 Nm
        Mrr=-2.53 0.08  Mtt=-0.26 0.12
        Mff= 2.79 0.13  Mrt=-0.10 0.07
        Mrf=-5.16 0.09  Mtf=-0.65 0.12
       Principal Axes:
        T  Val=  5.98  Plg=31  Azm= 85
        N       -0.27       6      178
        P       -5.71      58      279
      Best Double Couple:Mo=5.8*10**17
       NP1:Strike=155 Dip=15 Slip=-115
       NP2:          0     76      -84

YJA     2.87  83 iPc   00 09.10   3.4X
HJA     2.99 103 iPc   00 10.30   3.5X
MOCB    3.02  65 P     00 12.70   4.9X
SLA     3.54 128 iPc   00 16.30   1.7
FSA     4.20 147 iPc   00 23.20  -0.1
CCH     5.65  24 Pc    00 47.00   3.5X
CNCB    5.76   6 iPc   00 48.00   2.8X
LPB     6.02   4 iPc   00 51.30   2.5
                 S     02 30.00
LPAZ    6.26   4 Pnd   00 54.20   1.9
       2.2s  1594.00nm          5.9mb
                 i     00 56.70
                 i     01 05.20
                 i     01 12.40
                 i     01 20.00
                 i     01 27.40
                 S     01 46.40
                 e     01 55.00
ARE     6.67 335 eP    00 55.00  -2.5
                 iS    01 09.00
RTPR    7.92 167 eP    01 09.00  -5.1X
RTLL    8.72 179 ePc   01 18.70  -6.4X
RTCB    8.88 181 ePc   01 20.40  -6.9X
ZON     8.94 181 e(P)  01 19.40  -8.7X
CFA     9.00 178 eP    01 22.00  -6.9X
RTCV    9.25 180 eP    01 25.50  -6.8X
TCA     9.42 159 iPc   01 28.50  -6.1X
SIV     9.64  49 P     01 36.10  -1.5
MDZ    10.27 181 eP    01 39.20  -6.8X
                 iPP   01 44.10
                 iS    03 35.00
                 LR    04 23.00
IHA    10.76 194 e(P)  01 55.50   3.1X
                 e(S)  03 51.50
RFA    12.15 180 ePc   02 02.00  -8.8X
NNA    13.15 322 eP    02 25.00   1.1
       1.0s   145.00nm          5.5mb
                 i     02 31.20
                 eS    04 48.50
LPA    15.42 145 eP+   02 48.00  -4.7X
PPD    15.98  91 eP    02 58.80  -1.2
AGVB   17.34  84 iPc   03 15.80  -0.9
                 e     03 32.50
                 e     03 41.70
RSTA   18.03 100 eP    03 23.00  -2.0
                 i     04 14.50
                 e     07 14.20
VAO    19.92  95 eP    03 43.10  -2.4
                 e     03 46.00
                 e     03 47.00
                 epP   04 12.40
                 e     04 13.20
                 esP   04 31.00
                 eS    07 22.00
                 e(PcP)07 45.00
CACB   20.25  92 ePc   03 47.40  -1.6
                 e     03 48.60   5kmX
                 e     03 53.40
                 e     04 12.70
                 e     04 22.80
                 eS    07 25.90
                 e     08 17.20
BDFB   20.60  74 ePc   03 54.28   1.8
       0.7s  1210.80nm          6.4mb
BAO    20.62  74 eP    03 51.40  -1.3
                 i     04 18.00 145kmX
                 i     04 22.90
                 i     04 31.10
                 i     05 03.00
                 i     05 14.90
                 i     05 28.10
                 i     05 41.40
                 i     09 11.20
                 i     09 48.80
BDF    20.69  74 eP    03 52.00  -1.4
       1.0s     9.45nm          4.1mb X
                 e     05 42.10
                 i     05 48.20
PSO    25.11 339 eP    04 38.50   1.8
BOG    27.56 348 eP    05 01.00   2.0
                 iS    09 35.00
TOV    32.18 358 eP    05 39.80   0.2
CAR    32.91   3 eP    05 31.00 -15.0X
TRN    33.75  13 eP    05 57.00   3.9X
SVB    36.34  12 eP    06 18.86   3.8X
SVV    36.39  12 eP    06 19.81   4.3X
SLB    36.92  12 eP    06 19.94  -0.1
MVM    37.65  12 iPd   06 26.00  -0.2
FDF    37.78  12 eP    06 26.90  -0.3
CRM    37.84  12 eP    06 27.90   0.2
SJG    40.50   4 eP    06 47.42  -2.3
       0.8s   133.39nm          5.8mb
TPX    43.88 326 (P)   07 19.00   1.7
MRX    52.73 320 iP    08 26.70   1.0
CEH    58.99 350 iPd   09 08.61  -1.6
       0.7s    32.35nm          5.5mb
                 epPc  09 36.42 114kmX
                 esPc  09 48.67
MYNC   59.20 345 eP    09 10.03  -1.7
       1.9s   339.42nm          6.1mb
                 (pP)  09 37.51 113kmX
                 esPc  09 48.93
OXF    60.12 340 eP    09 15.75  -2.2
       1.1s   153.47nm          6.0mb
SNA    60.97 159 eP    09 21.10  -2.3
       0.8s    33.00nm          5.4mb
CBN    61.02 352 eP    09 24.10   0.1
                 e     09 52.00 114kmX
UYO    61.57 336 iPd   09 26.70  -1.1
MIAR   61.57 337 (P)   09 25.62  -2.2
       1.4s   136.35nm          5.8mb
                 (pP)  09 53.43 113kmX
                 esPc  10 04.19
                 eP'P' 39 06.30
LTX    61.68 325 ePd   09 26.06  -2.7
MBO    62.49  59 iPc   09 36.00   1.8
ELC    62.64 342 ePc   09 33.02  -1.8
MCWV   62.79 350 ePd   09 35.71  -0.1
       2.0s   375.52nm          6.0mb
                 (pP)  10 03.52 113kmX
GMTN   63.34 355 eP    09 40.30   0.9
PNJ    63.36 355 iP    09 39.75   0.2
GPD    63.50 355 eP    09 40.38  -0.1
TBR    63.60 355 eP    09 39.90  -1.2
TUL    63.61 336 iPd   09 40.40  -0.9
FVM    63.64 341 ePd   09 39.85  -1.6
       0.7s   104.95nm          5.9mb
                 epP   10 05.86 104kmX
                 esP   10 19.43
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14d 02h

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FNO     63.68 334 iPd   09 40.30  -1.5
MEO     63.76 333 iPc   09 40.00  -2.3
WMOK    63.81 332 eP    09 39.77  -2.9X
        2.2s   289.02nm          5.8mb
                  epPd  10 07.42 112kmX
                  esPc  10 19.01
OCO     63.94 334 iPc   09 41.60  -1.9
CCM     63.96 340 (P)   09 41.96  -1.6
        1.4s   184.97nm          5.8mb
                  esPc  10 20.37
LSCT    64.07 356 eP    09 43.32  -0.8
        2.1s   565.64nm          6.1mb
                  epP   10 11.52 114kmX
BINY    64.81 354 ePd   09 48.60  -0.3
        2.2s   650.22nm          6.2mb
                  epPc  10 14.75 105kmX
                  esPc  10 28.66
HRV     64.81 358 eP    09 47.94  -0.9
                  epPc  10 14.43 106kmX
                  esPc  10 28.66
YSNY    65.37 352 ePd   09 51.56  -1.0
        2.1s   574.75nm          6.1mb
                  (pP)  10 20.04 115kmX
                  esPc  10 31.96
ACO     65.64 333 iPd   09 53.80  -0.6
ELF     66.48 350 P     09 54.50  -5.1X
LBNH    66.55 357 eP    09 59.06  -1.0
        1.7s   178.16nm          5.7mb
                  epP   10 27.15 113kmX
RSNY    67.01 355 ePd   10 02.76  -0.2
        1.1s   102.26nm          5.6mb
                  epP   10 31.28 115kmX
ANMO    67.56 327 ePd   10 06.58  -0.3
                  (pP)  10 33.89 109kmX
                  esPc  10 45.15
TUC     67.87 322 eP    10 09.22   0.5
        2.4s   599.94nm          6.1mb
                  epP   10 35.23 103kmX
LMN     68.18   3 eP    10 10.00  -0.2
LIC     68.39  73 P     10 11.20  -0.9
TIC     68.59  73 P     10 12.30  -1.1
KIC     68.70  73 eP    10 12.00  -2.1
CBM     69.18   0 ePd   10 16.20  -0.1
        1.6s   292.41nm          5.9mb
                  epP   10 43.73 109kmX
LKO     69.43  70 Pc    10 17.99  -0.6
        1.3s   303.00nm          6.0mb
TBT     70.57  46 eP    10 24.25  -0.9
GLA     70.76 320 ePd   10 26.44   0.1
                  epP   10 53.31 106kmX
                  esP   11 05.85
GLD     70.81 331 ePd   10 26.58  -0.1
        1.9s   252.52nm          5.7mb
                  epP   10 54.20 109kmX
GOL     70.84 331 ePd   10 26.60  -0.3
        1.6s   200.49nm          5.7mb
                  epP   10 52.25 100kmX
PV08    71.50 328 ePd   10 31.01   0.0
                  epP   10 58.15 107kmX
PV10    71.53 327 ePd   10 30.28  -0.8
                  epP   10 57.74 108kmX
PV09    71.68 327 eP    10 31.95  -0.1
PEC     72.74 319 eP    10 38.18   0.1
        0.9s    52.91nm          5.3mb
                  epP   11 05.64 108kmX
                  esP   11 18.18
SRU     72.84 327 ePd   10 38.58  -0.1
                  epP   11 06.40 109kmX
MSU     73.24 326 iPd   10 41.61   0.5
                  epP   11 08.91 107kmX
SSK     73.28 319 eP    10 41.49   0.1
                  epP   11 10.14 113kmX
                  esP   11 22.33
ARUT    73.37 324 ePd   10 42.68   0.9
                  epP   11 10.39 109kmX
GSC     73.50 320 ePd   10 42.89   0.4
                  epP   11 10.58 108kmX
                  esP   11 23.70
EMUT    73.52 327 ePd   10 42.61  -0.1
                  epP   11 10.70 110kmX
RSSD    73.89 334 ePd   10 44.45  -0.3
        1.1s    87.86nm          5.5mb
                  e     11 12.85 112kmX
RUV     74.19 260 iPd   10 46.70  -0.1
        1.7s   533.80nm          6.1mb
DAU     74.20 327 ePd   10 46.99   0.3
                  epP   11 14.70 108kmX
TPNV    74.33 322 (P)   10 48.33   1.0
        1.0s    33.87nm          5.1mb
                  e     11 16.28 109kmX
VAH     74.39 260 iPd   10 47.70  -0.3
        1.5s   499.30nm          6.1mb
TPT     74.47 260 iPd   10 48.10  -0.3
        1.8s   925.30nm          6.3mb
ABL     74.64 319 eP    10 49.07  -0.2
                  epP   11 15.99 105kmX
                  esP   11 29.48
PMO     74.72 260 iPd   10 49.50  -0.3
        1.6s   522.40nm          6.1mb
ISA     74.74 320 ePd   10 49.93   0.3
        2.1s   396.86nm          5.9mb
                  epPd  11 17.74 109kmX
                  esPc  11 29.49
DUG     74.82 326 ePc   10 50.54   0.4
        2.0s   341.47nm          5.8mb
                  epPc  11 18.02 107kmX
TVO     75.02 257 iPd   10 51.50  -0.1
        1.3s   398.60nm          6.1mb
PPN     75.27 257 iPd   10 52.80  -0.1
        1.0s    54.80nm          5.3mb
PAE     75.36 257 iPd   10 53.30  -0.1
        1.6s   417.90nm          6.0mb
PPT     75.38 257 iPd   10 53.50  -0.1
        1.6s  1014.90nm          6.4mb
BCH     75.39 319 eP    10 53.19  -0.2
                  epP   11 22.07 113kmX
                  esP   11 34.43
BLE     75.57 121 iPd   10 54.50   0.0
        1.0s   140.00nm          5.7mb
AFR     75.57 257 iPd   10 54.80   0.1
        1.1s   231.50nm          5.9mb
TNP     75.67 322 eP    10 54.93  -0.2
        1.4s    85.47nm          5.4mb
                  epP   11 22.21 106kmX
HVU     75.98 327 ePd   10 56.43  -0.2
                  epP   11 24.55 110kmX
                  esP   11 36.74
PHAM    76.01 319 eP    10 57.07   0.3
                  epP   11 25.90 113kmX
                  esP   11 39.12
BONR    76.20 322 eP    10 58.49   0.3
                  epP   11 26.95 111kmX
CER     76.25 121 iPd   10 52.50  -5.9X
        1.5s   300.00nm          5.9mb
                  i     11 21.50 114kmX
JAQ     76.30 356 eP    10 56.50  -1.5
MEMM    76.37 321 eP    10 59.10   0.4
                  epP   11 28.25 114kmX
MMPM    76.38 321 (P)   10 59.41   0.1
                  epP   11 27.96 112kmX
                  esP   11 39.29
ULM     76.43 342 eP    11 00.50   1.7
                  pP    11 27.00 102kmX
KVN     76.84 323 eP    11 01.49  -0.1
                  epP   11 30.27 112kmX
                  esP   11 42.77
SAO     77.26 319 ePd   11 03.58  -0.1
        2.3s   400.00nm          5.8mb
CMB     77.46 321 ePd   11 04.75  -0.1
        2.3s   260.00nm          5.6mb
                  epPd  11 32.56 108kmX
                  esPc  11 44.15
                  iS    20 53.31
                  e     21 13.31
                  eSS   25 55.31
ARN     77.69 319 eP    11 05.89  -0.2
                  epP   11 35.13 114kmX
                  esP   11 47.27
COE     77.72 319 eP    11 06.84   0.6
                  epP   11 34.92 109kmX
MHC     77.75 319 iPd   11 07.29   0.7
        2.0s   400.00nm          5.9mb
                  ipPc  11 35.69 111kmX
                  esPd  11 48.14
SUR     77.77 120 ePc   11 07.92   0.9
        1.0s   360.00nm          6.1mb
SUR     77.77 120 iPc   11 20.00  13.0X
        1.0s   360.00nm
WIN     77.87 109 iPc   11 07.50  -0.2
        1.3s   200.00nm          5.8mb
                  i     11 36.50 113kmX
POF     78.05 117 iPd   11 09.00   0.7
        1.0s   180.00nm          5.8mb
                  i     11 38.00 113kmX
HMR     78.38 320 eP    11 11.13   1.4
                  epP   11 39.34 110kmX
BKS     78.46 319 iPd   11 08.74  -1.5
        2.0s   440.00nm          5.9mb
                  ic    11 39.69
                  esPd  11 50.64
                  ipPd  11 55.09 191kmX
                  iS    21 13.09
                  i     21 25.09
                  e     21 34.09
                  esSKS 21 51.09
NTYM    79.05 320 eP    11 13.22  -0.2
                  epP   11 40.98 108kmX
ORV     79.12 321 ePd   11 13.39  -0.5
        1.9s   550.00nm          6.0mb
                  ipPc  11 43.54 118kmX
                  esPd  11 55.49
                  ipPd  12 02.39
                  iS    21 12.39
                  i     21 41.39
                  i     21 56.39
                  eSS   26 38.39
                  eLQ   33 17.39
                  eLR   37 45.39
MIN     79.70 322 iPc   11 16.35  -0.8
        0.2s   380.00nm          6.9mb X
WDC     80.40 321 iPd   11 19.35  -1.3
        1.2s    80.00nm          5.4mb
                  ipPc  11 48.55 114kmX
                  isPd  12 00.30
                  ipPd  12 07.21
                  esP   12 32.21
                  iS    21 21.21
                  i     21 52.21
                  i     22 09.21
                  esSKS 22 26.21
                  eSS   31 35.21
                  eLQ   33 50.21
                  eLR   39 07.21
YBH     81.24 322 iPd   11 24.16  -1.0
        1.2s    30.00nm          5.0mb
                  iPPc  11 53.41
                  isPd  12 05.16
                  ipPd  12 12.52 198kmX
                  i     21 31.52
                  i     21 56.52
                  i     22 16.52
                  esSKS 22 54.52
                  eSS   26 49.52
                  eLQ   33 17.52
                  eLR   38 53.52
VIPM    81.95 325 P     11 29.59   0.8
JBO     82.19 326 P     11 30.86   1.0
FRS     82.31 119 iPc   11 31.00   0.1
        1.4s   230.00nm          5.8mb
                  i     12 11.00 161kmX
DBO     82.45 323 P     11 32.98   1.6
CROR    82.46 325 P     11 32.27   0.9
VGB     82.71 326 eP    11 32.89   0.3
                  epP   12 02.57 115kmX
BOSA    82.80 118 ePc   11 32.44  -1.0
                  epPc  12 01.24 111kmX
                  esPd  12 12.33
NEW     82.82 330 eP    11 31.46  -1.6
        1.6s    65.87nm          5.3mb
                  (pP)  12 00.43 112kmX
                  esPc  12 12.35
VBEM    82.83 325 P     11 33.87   0.5
WAH2    82.94 327 P     11 34.03   0.4
DPW     83.06 329 ePd   11 34.63   0.3
                  epP   12 03.65 112kmX
SSOR    83.16 325 P     11 35.52   0.5
MAW     83.22 163 iP    11 34.70  -0.2
        0.9s    78.95nm          5.6mb
RNO     83.24 323 P     11 35.72   0.4
BLF     83.25 119 iPc   11 35.40  -0.6
        0.8s   253.00nm          6.2mb
EVAL    83.40  45 eP    11 37.66   1.4
SAW     83.52 328 P     11 36.77   0.1
EBG     83.55 327 P     11 37.40   0.6
ASR     83.56 326 P     11 37.56   0.6
EJIF    83.60  46 eP    11 39.36   2.1
WTV     83.78 328 P     11 38.25   0.2
SHW     83.92 326 (P)   11 39.84   1.0
LON     84.07 326 eP    11 37.98  -1.5
                  epP   12 06.69 110kmX
                  esP   12 19.07
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FMW    84.12 327 P     11 39.84  -0.1
EHOR   84.52  45 P     11 35.11  -6.7X
EHOR   84.52  45 eP    11 43.63   1.8
RMW    84.54 327 eP    11 40.90  -0.9
                eP     12 10.12 112kmX
BMW    84.62 326 eP    11 42.51   0.3
                eP     12 11.03 109kmX
ELUQ   85.02  46 eP    11 45.75   1.3
KSR    85.05 116 iPc   11 45.00  -0.1
       1.0s   230.00nm          6.0mb
                i      12 13.50 109kmX
JCW    85.10 327 P     11 43.88  -0.6
EPLA   85.24  43 eP    11 46.84   1.4
ECOG   85.33  47 eP    11 47.04   1.0
EBAN   85.67  46 eP    11 48.90   1.3
MCW    85.87 327 eP    11 48.06  -0.3
                eP     12 18.06 115kmX
STW    85.94 327 P     11 49.33   0.6
FRB    86.03   0 eP    11 49.00   0.3
       1.0s    12.00nm          4.8mb
                pP     12 10.50  79kmX
PAB    86.06  44 ePd   11 50.84   1.3
       1.0s    85.41nm          5.7mb
                ipP    12 20.17 112kmX
ENIJ   86.09  47 eP    11 50.29   0.6
SLR    86.25 116 eP    11 49.20  -1.8
       1.4s   110.00nm          5.7mb
EHUE   86.27  46 eP    11 51.13   0.5
EVIA   86.77  46 eP    11 54.13   1.0
GUD    86.78  43 eP    11 54.61   1.5
ETOR   88.22  44 eP    12 01.08   1.1
ECHE   88.29  46 eP    12 01.10   0.8
BUL    88.74 111 iPd   12 02.90  -0.1
                i      12 12.50  30kmX
                i      12 32.40
                i      12 44.00
                i      15 28.70
EBR    89.88  45 eP    12 09.00   1.4
                e      22 56.00
EGRA   90.05  44 eP    12 11.27   2.9X
LSZ    90.29 107 iPc   12 11.00   0.7
       2.0s     2.10nm          3.9mb X
                i      12 15.00  12kmX
                i      12 20.00
                i      12 25.00
                i      12 39.00
                i      13 18.00
                i      15 41.00
EPF    90.89  43 eP    12 12.40   0.0
       1.0s    14.00nm          5.1mb
SALF   91.30  44 P     12 15.71   1.5
PAND   91.41  44 P     12 16.05   1.1
VDCF   91.97  44 P     12 18.37   1.1
LFF    92.11  42 eP    12 17.60  -0.2
       1.0s    32.80nm          5.6mb
LPO    92.25  42 eP    12 18.00  -0.5
YKA    92.30 340 P     12 18.10  -0.2
       1.0s    20.00nm          5.4mb
MFF    92.41  40 eP    12 18.70  -0.5
       1.5s    84.10nm          5.8mb
LPF    92.62  38 eP    12 20.50   0.4
       1.6s   124.40nm          6.0mb
MTD    92.67 109 iPc   12 07.60 -13.6X
                i      12 12.90  17kmX
                i      12 32.30
                iPP    16 10.00
RJF    92.76  42 eP    12 20.20  -0.6
     Z  20s     0.50um          5.0Msz
GRR    92.91  38 eP    12 21.70   0.3
       1.2s    47.30nm          5.7mb
CAF    92.92  42 eP    12 21.20  -0.4
       0.8s     6.05nm          5.0mb
LSF    93.24  41 eP    12 23.50   0.5
       1.4s    44.45nm          5.6mb
FLN    93.32  38 eP    12 23.40   0.1
     Z  23s     0.55um          4.9MszX
LDF    93.44  38 eP    12 24.00   0.2
       1.8s   158.80nm          6.1mb
TCF    93.67  41 eP    12 25.50   0.5
       1.1s    22.45nm          5.4mb
MAF    93.85  41 eP    12 25.30  -0.5
       1.3s    28.90nm          5.5mb
BGF    94.18  41 eP    12 26.70  -0.6
       1.2s    36.60nm          5.6mb
AVF    94.60  41 eP    12 29.70   0.5
       1.6s    60.30nm          5.7mb
SSF    94.82  41 eP    12 30.30   0.0
       1.0s    10.60nm          5.2mb
SMF    94.83  41 eP    12 29.90  -0.4
       1.4s    46.20nm          5.7mb
LRG    94.97  45 eP    12 30.00  -1.0
       1.1s    44.70nm          5.8mb
     Z  20s     0.52um          5.0Msz
LMR    95.01  45 eP    12 31.10  -0.1
       1.4s    56.20nm          5.8mb
LBF    95.07  41 eP    12 31.70   0.2
       1.3s    25.25nm          5.5mb
LOR    95.13  41 eP    12 31.80   0.1
       1.3s    26.00nm          5.5mb
     Z  21s     0.38um          4.8Msz
FRF    95.20  45 eP    12 32.00  -0.1
       1.5s    65.30nm          5.8mb
SBF    95.85  45 eP    12 35.10   0.0
       1.4s    94.10nm          6.1mb
LPL    96.11  43 eP    12 35.80  -0.7
       1.2s    24.10nm          5.6mb
LPG    96.12  43 eP    12 35.30  -1.3
       1.2s    21.70nm          5.5mb
PGF    96.32  47 eP    12 36.70  -0.7
HAU    96.97  41 eP    12 40.10   0.1
       1.1s    11.50nm          5.3mb
     Z  23s     0.45um          4.9MszX
BSF    97.16  41 eP    12 41.10   0.1
CDF    97.70  41 eP    12 43.70   0.3
       1.2s    14.90nm          5.4mb
SQTA   99.64  43 iPd   12 52.80   0.5
       1.0s    24.70nm          5.8mb
                i      13 01.40  27kmX
WTTA   99.93  43 iPd   12 54.30   0.6
       1.0s    25.00nm          5.8mb
GRA1  100.59  41 ePdiff12 57.20   0.7
                eSKS   23 26.00
                eSDIF  24 22.00
                eSS    31 19.00
GRF   100.59  41 ePdiff12 57.20   0.7
     Z  19s     0.20um          4.6Msz
GEC2  101.79  42 ePdiff13 01.90   0.0
       0.9s     1.03nm          4.5mb X
                e      13 05.70
                e      13 13.30
                e      13 19.30
                e(pP)  13 32.40
                ePP    17 12.70
                e      17 15.80
                e      17 17.50
                e      17 20.60
INK   102.05 340 ePdiff13 03.00   0.6
       1.0s     2.00nm          4.8mb
PRU   102.71  41 ePdiff13 07.30   1.5
                e      13 14.00
                epP    13 19.50
                ePP    17 19.00
MBC   103.34 349 ePdiff13 11.00   3.0X
SPC   105.99  43 ePKP  17 41.60   9.1X
MLR   108.81  48 ePKP  17 43.00   5.1X
OBN   116.83  38 (Pdiff14 04.70  -3.8X
       4.9s   428.00nm
OBN   116.83  38 (PKP) 17 53.40   0.7
     Z  21s   644.90um          8.2MszX
                (pPKP)18 20.90
                (sPKP)18 32.10
                (SKS) 24 36.80
                e      25 24.70
                (SDIF)26 36.50
                (PS)  28 34.10
CTAO  125.65 221 (PKP) 18 10.21  -0.5
ARU   128.88  35 ePKP  18 15.71   0.0
ASPA  129.11 207 iPKPc 18 16.10  -1.1
SVE   129.80  34 iPKPc 18 17.00  -0.5
       2.0s    70.00nm
     Z  20s     0.50um          5.2Msz
     N  20s     0.30um
     E  20s     0.50um
                e      20 35.00
                e      30 41.00
                e      37 47.00
TIK   129.90 353 iPKP  18 17.00  -0.2
       1.5s    24.00nm
WR2   132.17 210 iPKP  18 21.90  -1.2
WRA   132.19 210 PKP   18 07.30 -15.8X
       0.6s     0.70nm
WRA   132.19 210 PKP   18 16.90  -6.2X
       0.8s     0.60nm
WRA   132.19 210 PKP   18 23.00  -0.1
       0.8s     5.70nm
WRA   132.19 210 PKP   18 39.00  15.9X
       1.7s     2.60nm
WB5   132.23 210 iPKPd 18 22.00  -1.2
WB5   132.23 210 iPKP  18 23.20   0.0
                ipPKP  18 53.00
                isPKP  19 06.00
                i      19 19.60
                eSKP   22 39.80
                i      23 30.20
YAK   138.63 347 ePKP  18 26.00  -8.0X
       1.8s    42.00nm
FRU   143.41  48 ePKP  18 42.00  -1.1
       1.9s    80.00nm
BOD   144.70 357 iPKPd 18 42.70  -2.1
       1.7s   300.00nm
NIL   144.74  63 iPKPc 18 47.60   1.9
       0.9s     0.09nm
                (SKS) 28 46.00
YSS   144.96 322 ePKPd 18 44.93  -0.6
       1.0s   320.00nm
                e      18 56.00
TLE   145.05 219 ePKPc 18 47.90   1.2
       1.7s     2.00nm
KSH   145.54  53 PKP   18 48.50   1.5
     Z  16s     1.18um          5.8MszX
     N  10s     0.80um
     E  10s     0.63um
                pPKP   19 13.00
                esPKP  19 25.00
KUSJ  145.67 315 ePKP  18 45.70  -1.2
ASAJ  146.52 317 ePKP  18 48.40   0.1
GBA   146.55 100 PKPd  18 49.80   0.7
       0.9s    25.00nm
GUA   146.99 260 ePKP  18 49.70  -0.1
       1.1s   486.08nm
GUMO  147.04 260 (PKP) 18 48.34  -1.5
PJG   147.04 260 ePKP  18 50.20   0.3
UER   148.09  21 iPKP  18 50.20  -0.3
       1.5s    82.00nm
NDI   148.63  72 iPKPc 18 51.50  -0.6
       1.0s   105.00nm
IRK   149.85   9 ePKP  18 57.00   3.7X
CIT   150.58 357 ePKP  18 57.00   2.6X
WMQ   151.14  37 ePKP  18 56.50   0.9
ZAK   151.52  11 iPKPc 18 57.40   1.7
       1.7s    77.00nm
KAKJ  151.63 305 ePKP  19 02.90   6.5X
NIIJ  152.11 308 ePKP  19 04.10   7.0X
CHJJ  152.58 305 ePKP  19 05.70   7.9X
MAJO  152.97 307 ePKP  19 04.92   6.6X
                iPKPab19 18.24
TPI   154.56 171 ePKPc 19 05.50   4.4X
                e      21 00.00
GKN   155.20  72 PKP   19 02.40   0.6
DMN   155.66  73 PKP   19 03.00   0.4
KKN   155.79  72 PKP   19 03.60   0.9
PKI   155.93  73 PKP   19 03.20   0.1
GUN   156.31  72 PKP   19 04.40   0.8
LSA   160.47  64 PKP   19 10.10   1.7
GTA   160.52  28 ePKP  19 08.00   0.3
                pPKP   19 38.50
                sPKP   19 51.00
SNG   161.49 144 ePKP  19 10.80   1.6
HHC   161.78 360 ePKP  19 11.00   2.1
BTO   161.99   3 PKP   19 10.00   0.9
     N  14s     0.32um
     E  16s     0.78um
BJI   162.13 348 ePKPd 19 10.07   1.0
     Z  24s     0.45um          5.2Msz
                pPKP   19 38.00
                ePKKP219 52.00
TIY   164.88 357 PKPc  19 13.60   1.6
     Z  30s     1.25um          5.1Msz
                PP     23 54.50
                SS     44 14.50
LZH   165.01  24 PKPd  19 13.00   0.7
     Z  40s     1.22um
                pPKP   19 44.00
                sPKP   19 55.50
                PKPab  20 10.50
                ePP    24 02.00
                SKKS   30 35.00
                SS     44 22.00
TIA   165.54 341 ePKP  19 13.10   0.6
     Z  21s     0.48um
                pPKP   19 43.00
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14d 02h

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                    PP     23 56.00
KHT    165.59 120 ePKP   19 13.40    0.4
CHTO   167.73 105 ePKP   19 14.40   -0.2
                  epP'df19 44.36
                  ePKPab20 21.77
                  e      24 12.00
SSE    167.84 316 ePKP   19 15.20    0.9
     Z  20s     0.50um
                  pPKP   19 45.00
XAN    168.36  10 PKP    19 15.00    0.3
CD2    169.24  38 ePKP   19 16.30    1.0
BAG    169.42 236 ePKP+  19 16.00    0.1
KMI    171.65  71 PKP    19 17.00    0.1
     Z  50s     3.10um
                  pPKP   19 47.00
                  PKPab  20 40.00
                  PP     24 32.00
                  SKKS   31 06.00
                  SS     45 28.00
ENH    172.14  12 ePKP   19 15.85   -0.7
                  epP'df19 45.64
                  ePKPab20 40.60
GYA    174.19  47 PKP    19 18.00    0.3
                  pPKP   19 49.00
                  PP     24 45.00
                  SKKS   31 18.00
                  SS     45 54.00
     S.D. = 1.0  on 252 of 294 obs.
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   NOV  14, 1993  02h 13m 01.04± 0.54s
   42.070 N ± 4.8km   20.147 E ± 5.5km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)
      ML 2.8 (TIR).

BCI      0.30 349 iPgc  13 08.00    0.6
                  iSg   13 14.50
SDA      0.48 268 ePg   13 10.60   -0.2
                  iSg   13 19.60
PVY      0.54 346 iPgd  13 11.88   -0.1
                  iSg   13 21.30
LACI     0.54 217 iPgc  13 11.50   -0.5
                  iSg   13 19.00
ULC      0.68 261 iPgd  13 13.22   -1.3
                  iSg   13 23.72
TTG      0.75 299 iPgc  13 14.83   -0.9
                  iSg   13 27.44
IVA      0.82 347 iPgc  13 16.98    0.0
                  iSg   13 30.47
SKO      0.97  95 iPg   13 17.50   -2.0
       0.4s   390.00nm
                  iSg   13 30.50
                  Lg    13 33.50
BDV      1.00 283 iPgd  13 19.53   -0.5
                  iSg   13 35.18
OHR      1.08 153 iPg   13 18.70   -2.6
       0.5s   210.00nm
                  i     13 21.50
                  iSg   13 31.00
                  i     13 33.20
                  Lg    13 37.00
NKY      1.13 312 iPgc  13 22.15   -0.1
                  iSg   13 40.22
HCY      1.28 288 iPgd  13 24.42   -0.4
                  iSg   13 44.57
PLE      1.38 336 iPgc  13 26.72    0.4
                  iSg   13 48.66
BRY      1.45 306 iPgc  13 27.72    0.3
                  iSg   13 50.41
KBN      1.52 161 ePn   13 29.00    0.6
                  iSn   13 51.50
TPE      1.78 183 ePn   13 34.50    2.5
LSK      1.95 170 ePn   13 36.50    1.9
VAY      1.96 112 iPn   13 35.40    0.7
HVAR     2.95 293 i(Pn) 13 57.00    8.3X
VBY      4.93 316 ePn   14 18.40    1.5
     S.D. = 1.3  on  19 of  20 obs.
-----------------------------------
?  NOV  14, 1993  02h 14m 23.11± 6.97s
   43.089 N ±48.9km    6.904 E ±11.8km
   DEPTH =  10.0km  (geophysicist)
 NEAR SOUTH COAST OF FRANCE        (379)
      ML 2.0 (LDG).

LMR      0.38 310 Pg    14 30.90    0.0
                  Sg    14 36.60
FRF      0.51 338 Pg    14 33.40    0.0
                  Sg    14 41.10
LRG      0.54 313 Pg    14 34.00    0.0
                  Sg    14 41.10
SBF      0.87  26 Pg    14 39.80    0.0
                  Sg    14 51.60
     S.D. = 0.0  on   4 of   4 obs.
-----------------------------------
%  NOV  14, 1993  02h 52m 41.61± 0.67s
   28.034 S ± 6.5km   26.772 E ± 7.8km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)
      ML 2.9 (PRE).

SEK      0.81 111 eP    52 57.50   -0.3
BLF      1.19 205 iPd   53 04.00   -0.3
                  S     53 21.00
SWZ      1.54 303 iPc   53 09.40   -0.5
                  S     53 29.30
FRS      2.13 216 eP    53 19.00    0.7
                  S     53 45.00
KSR      2.16   3 eP    53 18.90   -0.1
                  S     53 45.90
SLR      2.66  31 eP    53 26.50    0.5
                  S     53 58.00
     S.D. = 0.6  on   6 of   6 obs.
-----------------------------------
?  NOV  14, 1993  03h 19m 36.46± 3.86s
   15.713 N ±36.1km   98.826 W ±15.4km
   DEPTH =  33.0km  (normal)
   4.5mb (  2 obs.)
 OFF COAST OF GUERRERO, MEXICO     ( 65)

ACX      1.52 319 iPd   20 00.74   -0.9
OXX      2.43  56 iP    20 15.64    0.7
                  iS    20 47.53
III      2.72 347 iP    20 19.23    0.3
PPM      3.34   3 iP    20 30.00    1.9
IIA      3.42   3 iP    20 35.46    6.7X
IISM     3.54  23 (P)   20 29.88   -0.6
CRX      3.76 348 (P)   20 43.00    9.1X
MRX      4.57 331 iP    20 50.50    5.5X
LVVM     4.60  29 (P)   20 43.00   -2.5
UYO     18.79  11 iPc   23 56.00    0.5
MIAR    19.34  13 eP    24 04.46    2.4X
                  pP    24 09.66   19kmX
MYNC    23.36  32 eP    24 44.21    1.3
       0.9s    18.16nm          4.6mb
                  e     24 52.20
CEH     26.72  38 (P)   25 14.06   -0.7
       1.0s    11.27nm          4.4mb
                  e     25 19.21
                  e     25 26.10
WRA    129.38 257 PKP   38 55.00   10.9X
       0.7s     0.30nm
     S.D. = 1.5  on   9 of  14 obs.
-----------------------------------
?  NOV  14, 1993  04h 02m 28.99± 2.06s
   31.303 S ±36.0km   68.848 W ±22.2km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA      (137)

RTCB     0.19 167 ePd   02 43.10   -0.6
                  S     02 55.00
RTLL     0.32  95 ePc   02 44.60    0.6
                  (S)   02 58.00
CFA      0.60 120 eP    02 46.20    0.4
                  S     03 18.00
RTCV     0.62 155 iPc   02 46.00    0.0
TCA      3.64  92 iP    03 24.00   -0.4
     S.D. = 0.7  on   5 of   5 obs.
-----------------------------------
%  NOV  14, 1993  04h 54m 13.89± 1.27s
   38.833 N ± 9.5km   29.959 E ±13.5km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 3.0 (ISK).

ALT      0.25  28 iPg   54 18.50   -0.8
                  eSg   54 22.00
KHL      0.61 214 iPg   54 26.30    0.0
                  eSg   54 35.80
DST      1.29 307 ePn   54 37.30   -0.5
IZI      1.55 346 ePn   54 42.00    0.4
EYL      1.74   5 iPn   54 45.30    0.9
     S.D. = 1.0  on   5 of   5 obs.
-----------------------------------
%  NOV  14, 1993  05h 14m 19.67± 1.20s
   38.434 S ±15.0km  176.034 E ±14.9km
   DEPTH = 160.0km  (geophysicist)
 NORTH ISLAND, NEW ZEALAND         (159)

MGZ      0.69 214 P     14 44.80    1.3
NGZ      0.82 204 P     14 45.70    1.3
CNZ      0.85 206 P     14 45.80    1.1
URZ      0.86  79 P     14 44.30   -0.3
                  S     15 02.90
TTH      1.27 151 P     14 49.90    1.9
WAHZ     1.29 169 Pc    14 49.80    1.5
NOZ      1.58  97 eP    14 52.10    1.0
BSZ      1.61 212 P     14 52.00    0.6
TEHZ     1.67 159 P     14 52.80    0.7
PUZ      1.79  79 eP    14 51.00   -2.4
                  eS    15 17.60
HBZ      1.98  66 P     14 54.90   -0.6
PGZ      2.19 175 P     14 58.50    0.6
MNG      2.22 191 Pc    14 58.50    0.1
KIW      2.58 199 P     15 01.90   -0.8
MTW      2.75 188 P     15 04.00   -0.8
CAW      2.77 195 P     15 04.40   -0.7
AMW      2.88 184 P     15 05.80   -0.6
BLW      2.96 188 P     15 06.50   -1.0
MRW      2.98 200 P     15 06.30   -1.3
                  S     15 42.80
TCW      3.09 205 eP    15 07.30   -1.7
     S.D. = 1.2  on  20 of  20 obs.
-----------------------------------
?  NOV  14, 1993  05h 55m 36.65± 1.10s
    8.151 S ±17.7km  123.428 E ±18.0km
   DEPTH =  33.0km  (normal)
   4.0mb (  1 obs.)
 FLORES REGION, INDONESIA          (286)

MTN      8.89 122 iPc   57 47.70    1.8
       0.3s   195.00nm          6.7mb X
                  eS    59 18.00
KNA      9.18 146 eP    57 51.20    1.3
                  eS    59 26.50
WR2     15.80 139 eP    59 16.10   -2.4
                  eS    02 00.40
ASPA    18.41 148 eP    59 49.60   -1.5
                  eS    03 05.80
MRWA    22.09 197 iPc   00 31.40    0.7
       0.3s     2.00nm          4.0mb
BAL     23.21 195 eP    00 42.00    0.3
GUN     51.02 316 P     04 38.40    0.2
GKN     51.94 315 P     04 44.60   -0.4
     S.D. = 1.6  on   8 of   8 obs.
-----------------------------------
*  NOV  14, 1993  07h 08m 51.75± 1.10s
   43.509 N ±19.3km  146.930 E ±18.3km
   DEPTH =  33.0km  (normal)
   4.7mb (  8 obs.)
 KURIL ISLANDS                     (221)

KUSJ     1.67 257 P     09 19.00   -0.1
                  eS    09 38.60
HOOJ     2.90 248 eP    09 38.50    1.9
                  eS    10 13.70
ASAJ     3.16 283 eP    09 44.50    4.1X
MRRJ     4.43 258 eP    10 00.50    2.1
                  eS    10 49.60
AOMJ     5.70 241 eP    10 15.30   -1.0
                  eS    11 20.20
OFUJ     5.94 224 P     10 18.30   -1.4
                  eS    11 23.90
YAMJ     7.46 227 eP    10 41.00    0.0
IMA     38.97  34 eP    16 17.10    0.9
       0.6s    10.70nm          4.8mb
FBA     41.39  36 eP    16 37.90    2.0
       1.1s    12.50nm          4.6mb
INK     46.69  30 eP    17 19.50    0.9
       0.5s     2.00nm          4.3mb
KAF     64.46 333 iP    19 24.10   -2.6
       0.6s     5.50nm          4.8mb
NUR     66.18 333 iP    19 36.80   -0.9
       0.6s     5.60nm          4.8mb
FRB     69.46  16 eP    19 57.00   -1.2
HFS     69.85 337 eP    19 59.80   -0.9
       0.7s    13.10nm          5.1mb
NAO     70.05 339 P     20 01.40   -0.5
       0.7s     6.70nm          4.8mb
GEC2    79.29 331 eP    20 55.20   -0.1
       0.8s     0.89nm          3.8mb
                  e     21 09.60
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GRF    79.43 333 eP    20 56.80   0.9
     S.D. = 1.4  on  16 of  17 obs.
-----------------------------------
*  NOV  14, 1993  07h 10m 24.04± 0.36s
   11.517 S ± 6.0km  116.891 E ± 8.6km
   DEPTH =  33.0km  (normal)
   5.0mb ( 18 obs.)
 SOUTH OF SUMBAWA, INDONESIA      (291)

MBL    10.00 164 eP    12 46.40  -2.1
       0.3s    42.00nm          6.2mb X
               eS    14 29.50
LEM    10.27 296 iPd   12 58.50   6.1X
KNA    12.28 111 eP    13 18.80  -0.8
               eS    15 29.50
MTN    13.98  97 iPd   13 43.80   1.7
       0.4s    19.00nm          5.2mb
               eS    16 07.00
MEEK   15.13 174 iPc   13 56.40  -0.7
       0.3s    69.00nm          5.4mb
               iS    16 30.20
MRWA   17.63 183 eP    14 28.50  -0.4
       0.3s    16.00nm          4.6mb
               eS    17 29.50
WR2    18.78 119 eP    14 44.00   0.9
       0.4s    13.00nm          4.5mb
               i     14 45.70
               iS    17 59.70
BAL    19.00 180 eP    14 47.00   1.4
       0.6s   115.00nm          5.3mb
               eS    18 05.20
COOL   19.67 169 eP    14 54.60   1.2
       0.3s    25.00nm          5.0mb
               eS    18 14.50
KLB    19.99 178 eP    14 59.80   3.0X
       0.5s    44.00nm          5.0mb
               eS    18 24.00
ASPA   20.19 129 eP    15 02.10   3.2X
     Z  20s     0.20um          3.5Msz
               i     15 06.60
               iPcP  43 44.00
MUN    20.37 182 eP    15 05.00   4.3X
       1.0s    80.00nm          5.0mb
               eS    18 35.50
FORT   21.78 153 eP    15 18.80   3.8X
               eS    19 11.50
IPM    22.47 315 ePc   15 25.00   3.0X
SNG    24.64 318 eP    15 47.00   4.0X
CTA    29.47 110 eP    16 35.50   8.1X
STK    30.48 136 iPc   16 35.10  -1.2
       0.7s     2.60nm          4.1mb
               i     17 07.90
               eS    22 30.30
BRS    37.17 120 eP    17 42.00   8.0X
GYA    39.03 345 P     17 50.40   0.7
CD2    44.03 344 iPd   18 30.20  -0.3
SHL    44.18 327 iP    18 32.00   0.0
XAN    45.93 351 P     18 44.70  -0.9
       0.6s     2.60nm          4.3mb
               pP    18 53.00  28kmX
GBA    46.41 301 Pd    18 50.30   0.7
       0.7s     7.00nm          4.7mb
TIA    47.47   0 eP    18 56.50  -1.2
HYB    47.55 307 eP    18 59.00   0.3
LZH    48.92 346 eP    19 17.00   7.8X
       1.5s    29.00nm          5.1mb
TIY    49.15 355 iPd   19 09.70  -1.1
GUN    49.38 323 P     19 14.00   0.9
PKI    49.41 322 P     19 13.60   0.3
       0.6s    31.00nm          5.5mb
DMN    49.62 322 P     19 15.40   0.6
       0.6s    43.00nm          5.7mb
KKN    49.65 322 P     19 15.40   0.4
       0.6s    27.00nm          5.5mb
GKN    50.19 322 P     19 19.20   0.2
BJI    51.30 359 eP    19 26.00  -1.0
       1.0s    17.00nm          5.0mb
POO    51.90 305 eP    19 39.00   6.9X
GTA    53.10 343 eP    19 41.00   0.2
       1.5s    13.00nm          4.7mb
NDI    55.38 317 iPd   19 55.70  -1.8
       0.8s    44.78nm          5.5mb
MDJ    57.04  11 eP    20 08.90  -0.3
QUE    63.45 312 eP    21 11.00  17.5X
RSNY  145.65  15 ePKPd 30 03.01   2.1
OXF   146.87  42 ePKP  30 06.91   3.8X
MOCB  147.34 176 PKP   30 10.80   5.9X
CCH   151.13 174 PKP   30 20.00   9.4X
CNCB  151.44 170 iPKPd 30 22.80  11.4X
LPB   151.70 170 PKPc  30 23.00  11.4X
     S.D. = 1.1  on  27 of  44 obs.
-----------------------------------
&  NOV  14, 1993  08h 00m 53.76s
   62.945 N          148.734 W
   DEPTH =  69.0km
 CENTRAL ALASKA                  (  1)
      <AEIC>. ML 3.1 (AEIC), 3.4
      (PMR).

HUR     0.41 275 iPd   01 05.67  -0.2
               eS    01 15.18
RND     0.47 353 iPd   01 06.23  -0.2
               eS    01 15.66
MCK     0.80 354 iPc   01 09.83  -0.1
               eS    01 21.94
TRF     0.87 306 iPd   01 10.88  -0.1
CUT     0.89 233 iPc   01 10.89  -0.2
SML     1.16 171 iPc   01 14.16  -0.4
               eS    01 31.07
KTH     1.16 303 eP    01 14.68   0.0
               eS    01 30.70
GHO     1.18 184 iPc   01 14.64  -0.3
               eS    01 30.37
BWN     1.27 345 iPc   01 15.33  -0.7
               eS    01 32.29
SCM     1.29 149 eP    01 15.97  -0.4
               eS    01 34.56
PLRM    1.37 188 ePc   01 17.22  -0.1
PMR     1.37 188 iPc   01 16.97  -0.3
PWA     1.40 203 P     01 17.80   0.0
THY     1.43  69 ePd   01 18.54   0.3
               eS    01 36.71
TOA     1.46 124 P     01 19.20   0.6
PAX     1.49  88 ePd   01 19.01  -0.1
               eS    01 38.47
SDG     1.53 105 eP    01 19.68   0.2
               eS    01 39.41
KNK     1.54 175 eP    01 19.86   0.1
               eS    01 41.28
DDM     1.55  56 eP    01 20.45   0.7
               eS    01 42.47
WRH     1.56  10 iPc   01 18.83  -1.1
NEA     1.65 355 iPc   01 19.89  -1.2
HDA     1.67  28 iPc   01 20.48  -0.9
DJE     1.75  50 eP    01 21.88  -0.6
PMS     1.75 193 P     01 22.50  -0.1
CCB     1.76  13 iPc   01 21.30  -1.3
               eS    01 45.74
SUA     1.76 213 eP    01 23.07   0.3
TZL     1.78 119 eP    01 23.55   0.6
CFI     1.83 165 eP    01 23.17  -0.4
KLU     1.97 137 eP    01 24.96  -0.6
               eS    01 49.95
FBA     2.01  12 iPc   01 24.72  -1.3
               eS    01 47.30
IL1     2.01  23 ePc   01 24.81  -1.3
ILB     2.01  23 iPc   01 24.78  -1.3
               eS    01 47.52
               eS    01 47.92
MDM     2.03   6 ePc   01 25.33  -1.1
PWL     2.10 175 eP    01 27.21  -0.2
GLM     2.13  16 ePc   01 26.57  -1.3
               eS    01 55.31
VLZ     2.14 147 eP    01 26.67  -1.2
               eS    01 54.46
DOT     2.23  69 eP    01 28.84  -0.3
               eS    01 56.63
NCG     2.23 228 eP    01 29.46   0.2
CGLM    2.25 225 eP    01 30.10   0.6
MLY     2.27 338 ePc   01 28.71  -1.1
               eS    01 55.09
CRP     2.33 225 eP    01 31.11   0.4
CP2     2.36 226 eP    01 31.70   0.5
SPU     2.36 223 eP    01 31.51   0.5
BGL     2.41 227 eP    01 33.08   1.3
MPA     2.48 187 eP    01 32.52  -0.1
BKG     2.51 223 eP    01 33.52   0.4
SLKM    2.55 197 eP    01 33.43  -0.2
TMW     2.63  79 eP    01 34.27  -0.5
GLB     2.76 121 eP    01 36.22  -0.3
               eS    02 07.84
HIN     2.77 156 eP    01 36.07  -0.6
CVA     2.79 148 eP    01 36.16  -0.8
SEW     2.87 187 eP    01 37.66  -0.4
DFR     3.02 220 eP    01 41.32   1.1
REF     3.10 219 eP    01 42.48   0.9
BC3     3.17  85 eP    01 41.09  -1.3
RAGM    3.21 141 eP    01 42.71  -0.2
TTA     3.33 273 P     01 43.20  -1.4
HMT     3.38 139 eP    01 43.95  -1.3
TGL     3.56 125 eP    01 46.12  -1.7
BALM    3.57 120 eP    01 46.43  -1.6
CNPM    3.64 201 eP    01 48.31  -0.5
SVW     3.73 243 eP    01 49.58  -0.6
IM3     3.74 327 eP    01 48.60  -1.7
IMA     3.79 328 eP    01 49.36  -1.8
FYU     3.93  21 eP    01 51.48  -1.4
CTGM    4.02 116 eP    01 53.55  -0.8
YAH     4.22 125 eP    01 55.39  -1.9
CDD     4.69 213 P     02 03.20  -0.4
SYI     4.70 204 eP    02 04.38   0.6
      69 obs. associated
-----------------------------------
   NOV  14, 1993  08h 24m 38.59± 1.10s
   36.306 N ± 7.4km   71.310 E ± 6.8km
   DEPTH = 111.1 ± 11.8 km
   4.5mb ( 23 obs.)
 AFGHANISTAN-TAJIKISTAN BORD REG.(717)

KSH     4.85  48 P     25 53.00   2.3
               S     26 46.00
FRU     7.00  20 iPnd  26 19.00  -1.1
QUE     7.11 212 eP    26 35.70  14.0X
               eS    27 46.50
NDI     9.09 145 iPc   26 19.50 -28.9X
       0.5s    34.51nm
ASH    10.48 283 eP    27 06.50  -0.5
               eS    28 57.50
GKN    13.99 123 P     27 52.60  -0.6
DMN    14.56 123 P     28 00.80   0.2
KKN    14.56 122 P     28 00.00  -0.6
WMQ    14.61  54 eP    27 58.50  -2.4
PKI    14.79 122 P     28 02.80  -0.8
GUN    14.90 120 P     28 04.20  -0.8
POO    17.85 172 eP    28 54.00  12.7X
               iS    32 06.80
LSA    17.88 106 P     28 44.00   1.9
       1.1s    16.00nm          4.2mb
HYB    19.88 159 eP    29 09.50   6.1X
SHL    20.60 116 iP    29 13.00   2.2
       1.0s    15.00nm          4.3mb
               iS    32 48.00
SVE    21.73 344 ePc   29 21.00  -0.7
       1.7s    60.00nm          4.7mb
ARU    21.86 341 eP    29 23.00   0.0
       1.7s   150.00nm          5.1mb
GBA    23.26 165 Pd    29 41.20   4.3X
       0.8s     4.00nm          3.8mb
KOD    26.55 166 eP    30 12.00   3.9X
OBN    30.23 319 iPc   30 40.80   0.4
       0.8s    26.00nm          5.0mb
               e     32 00.00
KAF    37.92 327 eP    31 46.40   0.1
       0.4s     1.90nm          4.3mb
NUR    38.13 324 iP    31 48.20   0.2
       0.5s    10.70nm          5.0mb
PRU    42.61 307 eP    32 27.00   2.0
GEC2   43.25 305 eP    32 31.30   1.0
       0.7s     0.73nm          3.6mb
               e     32 36.00
               e     32 44.20
HFS    43.37 322 eP    32 30.90  -0.2
       0.5s    33.90nm          5.4mb
NAO    44.85 323 P     32 33.87  -9.1X
NAO    44.85 323 P     32 42.50  -0.5
       0.7s     8.60nm          4.6mb
BSF    47.95 305 eP    33 07.80   0.2
       0.6s     6.20nm          4.6mb
HAU    48.21 305 eP    33 09.80   0.3
       0.6s     4.95nm          4.5mb
LPG    48.46 302 eP    33 12.50   0.7
       0.6s     3.00nm          4.3mb
LPL    48.47 302 eP    33 12.40   0.6
       0.8s     5.65nm          4.5mb
SMF    50.17 304 eP    33 24.60   0.1
       0.8s     9.65nm          4.8mb
AVF    50.46 304 eP    33 26.80   0.1
       0.7s     7.60nm          4.8mb
CAF    51.81 302 eP    33 36.80  -0.2
       0.7s     7.70nm          4.8mb
MBC    67.52   3 eP    35 24.50   0.4
```

14d 08h

```
        0.8s     3.00nm          4.3mb
BUL     69.15 223 iPd   35 35.40   0.4
FBA     74.58  16 eP    36 05.39  -1.2
        0.8s     3.92nm          4.3mb
KIC     75.02 267 P     36 08.80  -1.1
TIC     75.08 267 P     36 09.30  -1.0
LIC     75.33 267 P     36 10.60  -1.1
WRA     81.68 122 P     36 46.20   0.3
        0.9s     1.20nm          3.7mb
WR2     81.70 122 eP    36 45.10  -0.9
        0.4s     4.90nm          4.7mb
ASPA    83.94 125 iPc   36 57.90   0.4
        0.8s     4.00nm          4.4mb
     S.D. = 1.1  on  36 of  43 obs.
-----------------------------------
   NOV  14, 1993  08h 43m 27.88± 0.42s
   44.227 N ± 3.6km   12.299 E ± 5.3km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                    (545)
      MD 2.8 (ROM), 2.8 (TRI).

RSM     0.32 160 P      43 35.31   0.8
SFI     0.44 227 P      43 35.50  -1.4
CRE     0.65 203 P      43 39.34  -1.6
ARV     0.86 147 P      43 44.90   0.4
MME     1.15 269 P      43 51.34   1.8
ASS     1.19 167 P      43 50.02   0.0
BDI     1.24 263 P      43 51.47   0.6
VVI     1.76   3 P      43 58.70   0.1
TRI     1.81  35 e(Pn)  44 00.10   0.8
                 e      44 04.90
                 e      44 22.70
                 e(Sg)  44 32.00
RIY     1.86  52 e(Pn)  44 00.10   0.1
                 iSn    44 25.20
MNS     1.86 171 P      44 00.68   0.6
CTI     1.88 346 P      44 00.36   0.0
VOY     2.13  31 ePn    44 04.00   0.0
                 eSn    44 31.60
                 e      44 40.80
CEY     2.14  44 e(Pn)  44 10.50   6.4X
                 eSg    44 44.50
FVI     2.39   8 P      44 08.52   0.9
LJU     2.41  40 e(Pn)  44 07.50  -0.4
                 eSn    44 39.00
                 eSg    44 49.20
VBY     2.46  58 ePn    44 18.00   9.3X
                 i      44 54.10
OGA     2.79 342 iPc    44 23.60  10.0X
GEC2    4.72  11 Pn     44 39.50  -1.4
                 Sn     45 35.40
KHC     4.98  10 ePn    44 43.50  -1.0
                 e      45 27.50
                 eSn    45 41.00
                 e      46 19.00
                 e      46 30.00
     S.D. = 1.0  on  17 of  20 obs.
-----------------------------------
%  NOV  14, 1993  08h 44m 47.17± 0.46s
   38.427 S ± 6.1km  176.291 E ± 6.7km
   DEPTH = 120.0km  (geophysicist)
 NORTH ISLAND, NEW ZEALAND         (159)

PATZ    0.05 331 P      45 04.00   0.3
TAZ     0.26  41 P      45 04.00   0.0
UTU     0.26 343 P      45 04.10   0.1
URZ     0.67  76 Pd     45 05.70  -0.8
                 S      45 18.80
PAHZ    0.74 126 P      45 08.00   0.9
WLZ     0.78 315 Pc     45 07.50   0.1
MGZ     0.82 225 P      45 09.60   1.7
NGZ     0.92 216 P      45 10.70   1.8
CNZ     0.97 217 P      45 10.90   1.6
MOZ     1.17 266 eP     45 12.10   0.9
                 S      45 30.70
TTH     1.19 160 P      45 13.40   2.0
WAHZ    1.27 178 P      45 13.90   1.5
NOZ     1.38  98 P      45 13.80   0.2
PUZ     1.59  78 P      45 15.20  -0.8
                 S      45 35.10
BSZ     1.73 217 P      45 19.60   1.9
KUZ     1.74 345 Pc     45 16.60  -1.2
HBZ     1.79  63 P      45 17.80  -0.6
NRZ     2.05 243 P      45 23.70   1.9
PGZ     2.19 180 eP     45 23.80   0.3
MNG     2.28 196 P      45 24.70   0.1
                 eS     45 52.30
KIW     2.66 203 P      45 29.10  -0.5
MTW     2.80 192 P      45 30.60  -0.8
CAW     2.84 199 P      45 31.30  -0.7
AMW     2.91 188 P      45 32.40  -0.5
DIW     3.00 217 eP     45 33.30  -0.8
BLW     3.00 192 P      45 33.40  -0.8
MRW     3.06 203 P      45 33.80  -1.1
                 eS     46 09.90
WEL     3.09 202 P      45 34.20  -1.1
TCW     3.19 209 P      45 35.30  -1.3
QRZ     3.77 229 P      45 43.40  -1.0
                 eS     46 27.10
THZ     4.23 217 eP     45 49.80  -0.9
DSZ     4.78 225 eP     45 55.70  -2.5
LTZ     5.32 214 eP     46 02.10  -3.5X
MQZ     5.95 206 P      46 09.50  -4.6X
ODZ     7.84 211 eP     46 35.80  -4.1X
     S.D. = 1.2  on  32 of  35 obs.
-----------------------------------
?  NOV  14, 1993  09h 22m 00.47± 1.48s
   52.125 N ±28.6km  171.316 W ±19.1km
   DEPTH =  33.0km  (normal)
   4.4mb (  6 obs.)
 FOX ISLANDS, ALEUTIAN ISLANDS     (  9)

ADK     3.33 268 eP     22 52.36   1.0
                 eS     23 31.42
SVW    12.44  38 (P)    24 59.99   2.0
FBA    17.59  34 (P)    26 02.90  -1.4
INK    24.21  34 eP     27 15.00   0.4
MBC    31.20  21 eP     28 19.00   0.8
SSE    52.62 274 P      31 12.60  -0.6
        1.0s    11.00nm          4.8mb
KAF    65.25 351 eP     32 38.90  -1.5
        0.4s     1.80nm          4.5mb
HFS    68.02 357 eP     32 56.10  -1.9
        0.4s     1.50nm          4.5mb
GUN    75.78 297 P      33 45.80   0.7
        0.4s     8.00nm          5.1mb
KKN    76.20 297 P      33 47.80   0.5
PKI    76.30 297 P      33 48.00   0.0
GKN    76.38 298 P      33 48.20  -0.1
DMN    76.44 297 P      33 48.60  -0.1
GEC2   79.32 357 eP     34 04.30   0.3
        1.0s     0.99nm          3.8mb
WRA    85.92 230 P      34 38.00  -0.2
        0.6s     0.30nm          3.7mb
     S.D. = 1.1  on  15 of  15 obs.
-----------------------------------
   NOV  14, 1993  09h 52m 50.44± 0.54s
   37.986 N ± 5.5km   20.111 E ± 3.6km
   DEPTH =  50.6 ± 14.0 km
   4.3mb (  2 obs.)
 IONIAN SEA                        (399)
      MD 4.2 (ATH).

SRN     1.89 357 ePn    53 21.90   1.0
                 iSn    53 45.40
AGG     2.03  59 ePb    53 22.50  -0.3
LSK     2.19  10 iPnc   53 26.00   0.8
                 iSn    53 54.00
TPE     2.31 358 iPnd   53 28.00   1.3
VLO     2.52 349 ePn    53 30.50   0.7
VLI     2.58 118 eP     53 32.00   1.4
                 eS     54 02.00
VLI     2.58 118 ePn    53 38.00   7.4X
KZN     2.65  29 eP     53 31.00  -0.7
KBN     2.69  11 iPnc   53 35.50   3.3X
BERA    2.72 357 iPnd   53 32.80   0.3
                 iSn    54 04.00
LIT     2.81  41 ePn    53 34.30   0.4
                 eSn    54 06.50
ATH     2.85  89 eP     53 36.00   1.5
                 eS     54 07.50
LCI     2.88 325 P      53 34.41  -0.5
FNA     2.96  19 ePn    53 36.90   0.8
GRI     3.02 287 P      53 38.13   1.2
OHR     3.17   9 iPn    53 39.90   0.8
       1.1s   360.00nm
                 i      53 50.50
                 i      54 22.10
                 i      54 30.10
                 i      54 36.80
                 Lg     54 48.00
SOI     3.20 273 P      53 40.11   0.6
GMB     3.36 274 P      53 42.56   0.7
TIR     3.36 357 ePn    53 41.70  -0.1
                 iSn    54 23.00
PAIG    3.39  54 ePn    53 42.20   0.0
THE     3.45  39 ePn    53 43.30   0.4
                 eSn    54 22.90
ORI     3.53 307 P      53 45.56   1.5
LACI    3.66 355 iPnd   53 46.00   0.1
                 iSn    54 26.00
BRT     3.66 323 P      53 46.65   0.7
ATN     3.67 274 P      53 46.52   0.4
VAY     3.83  29 iPn    53 49.50   1.1
SDA     4.09 354 ePn    53 52.40   0.5
                 iSn    54 39.40
SKO     4.11  14 iPn    53 51.50  -0.8
SRS     4.13  40 ePn    53 52.30  -0.2
VAM     4.17 127 eP     53 51.80  -1.4
MEU     4.21 259 P      53 52.90  -0.9
PZI     4.24 259 P      53 52.18  -2.0
BCI     4.38 360 ePn    53 55.60  -0.4
                 iSn    54 46.00
KKB     4.50  30 iP     53 57.00  -0.7
MMB     4.55  37 iP     54 00.00   1.5
RZN     5.12  42 iP     54 06.00  -0.8
VTS     5.17  26 iP     54 06.00  -1.4
RDO     5.25  51 eP     54 06.80  -1.5
ALN     5.44  56 ePn    54 11.50   0.5
PGB     5.51  33 eP     54 11.00  -1.1
DUI     5.69 312 P      54 16.07   1.4
HVAR    5.89 333 iPnc   54 14.80  -2.5
                 iSn    55 22.60
SDI     6.10 309 P      54 22.20   1.8
RIY     8.51 332 ePn    54 51.70  -2.0
MLR     8.67  28 eP     54 53.50  -2.6X
TRI     9.05 331 e(Pn)  54 55.70  -5.5X
                 e(Sn)  56 37.70
LJU     9.06 335 ePn    54 59.50  -1.8
                 eSn    56 37.50
VOY     9.27 332 eP     55 02.70  -1.6
                 e      56 03.20
                 eS     56 42.00
WTTA   11.17 329 iPd    55 29.40  -0.9
                 i      55 36.20
                 iS     57 31.40
GEC2   11.81 339 Pn     55 36.10  -2.7X
                 Sn     57 41.40
KHC    12.10 339 eP     55 39.50  -3.1X
                 e      55 50.50
                 e      58 28.00
HFS    22.54 352 eP     57 47.60   0.7
        0.4s    10.40nm          4.6mb
NAO    23.60 349 P      57 59.20   2.0
        0.6s     3.20nm          4.0mb
     S.D. = 1.2  on  47 of  53 obs.
-----------------------------------
?  NOV  14, 1993  10h 13m 54.65± 0.96s
   39.110 N ± 8.1km   27.542 E ± 9.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.6 (ISK).

IZM     0.74 197 ePg    14 09.10  -0.2
                 eSg    14 22.60
DST     0.98  59 ePn    14 13.60   0.4
EZN     1.18 308 ePn    14 17.00   0.3
EDC     1.26  11 ePn    14 17.50  -0.6
     S.D. = 0.7  on   4 of   4 obs.
-----------------------------------
?  NOV  14, 1993  10h 30m 06.57± 4.38s
   28.692 N ±12.4km   34.712 E ±30.8km
   DEPTH =  10.0km  (geophysicist)
 EGYPT                             (553)

BADA    0.31 123 iPc    30 12.80  -0.1
                 iS     30 15.67
SRFA    0.48  60 iPd    30 16.07  -0.3
                 iS     30 21.67
HQL     0.65  27 iPc    30 19.53   0.0
                 iS     30 29.07
AYN     1.14  81 iPc    30 28.33   0.4
                 iS     30 43.80
     S.D. = 0.5  on   4 of   4 obs.
-----------------------------------
?  NOV  14, 1993  10h 35m 35.80± 1.45s
    5.349 S ±15.7km  145.472 E ±29.5km
   DEPTH =  33.0km  (normal)
   4.0mb (  3 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)
      ML 4.3 (PMG).
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YYYY    1.02 151 ePc   36 15.80  21.9X
MNDI    1.97 246 eP    36 39.50  31.7X
PMG     4.36 158 iPd   36 41.70   0.2
CTA    14.67 177 iPc   39 03.50   0.6
       1.0s    15.00nm          4.4mb
WR2    18.09 216 iPc   39 50.80   4.4X
       0.4s    87.30nm          5.2mb X
                eS     43 13.80
ASPA   21.35 210 eP    40 23.40   0.8
       0.5s    44.60nm          5.1mb X
                eS     44 13.40
STK    26.64 187 eP    41 11.50  -1.9
       1.2s     2.70nm          3.7mb
FBA    85.18  23 (P)   48 09.98   0.2
       1.0s     1.01nm          4.0mb
     S.D. = 1.6  on   5 of   8 obs.
-------------------------------------
?  NOV  14, 1993  12h 23m 44.55± 1.21s
   10.175 N ±10.4km  125.283 E ±16.2km
   DEPTH =  33.0km  (normal)
 LEYTE, PHILIPPINE ISLANDS        (256)

PLP     1.03 343 ePc   24 02.30  -0.4
                eS     24 17.50
MAP     1.29 277 ePc   24 07.00   0.6
CGP     1.81 199 eP    24 13.00  -0.8
BIP     2.16 154 iPd   24 19.50   0.6
                iS     25 49.50
     S.D. = 1.3  on   4 of   4 obs.
-------------------------------------
&  NOV  14, 1993  12h 25m 34.89s
   35.953 N          120.494 W
   DEPTH =  11.5km
   4.1mb (  7 obs.)
 CENTRAL CALIFORNIA                ( 39)
      <GM-P>. MD 4.8 (GM). ML 4.9
      (BRK), 4.6 (PAS). Felt (IV) at
      Bradley, Cholame, Coalinga,
      Creston, Parkfield, Paso Robles,
      Salinas, San Ardo and San
      Miguel; (III) at Atascadero,
      Avenal, Cayucos, Five Points,
      Greenfield, Santa Margarita,
      Shandon and Soledad.

PSTM    0.03 206 P     25 37.06  -0.1
CTM     0.13  99 P     25 39.20   0.9
WKR     0.14 186 P     25 38.75   0.4
PHAM    0.14 146 eP    25 38.62   0.2
PSMM    0.14 325 P     25 39.00   0.5
PCRM    0.15  19 P     25 39.36   0.9
PSRM    0.20 119 P     25 39.68   0.3
PRI     0.23 324 iP    25 40.51   0.4
PTV     0.24 310 P     25 40.22   0.1
PMCM    0.25 156 P     25 40.70   0.4
PMRM    0.27 129 P     25 40.79   0.1
PAGM    0.30 138 P     25 41.30   0.1
PARM    0.32  23 P     25 43.59   2.0
PSAM    0.33 283 P     25 41.54  -0.2
PKEM    0.33  71 iPc   25 43.58   1.8
MOP     0.36 317 P     25 42.41   0.1
PANM    0.38 243 P     25 42.47  -0.3
PADM    0.43 224 P     25 43.47  -0.3
PHBM    0.45  48 P     25 46.06   2.0
PMGM    0.52 182 P     25 44.90  -0.6
PWMM    0.53  25 P     25 47.24   1.6
LRC     0.53 304 P     25 45.12  -0.6
PHCM    0.60 243 P     25 46.47  -0.4
YEG     0.67 140 P     25 48.29   0.1
PAPM    0.71 267 P     25 48.06  -0.7
SHG     0.77 307 P     25 49.02  -0.7
PRS     0.80 298 iP    25 49.86  -0.5
BCH     0.84 156 iPd   25 50.72  -0.3
CRGC    0.95 138 P     25 53.02   0.1
BLRM    0.95 319 P     25 52.75  -0.1
BHRM    0.99 321 P     25 53.93   0.4
BSLM    1.07 320 P     25 55.40   0.5
BSRM    1.09 311 P     25 54.60  -0.7
SAO     1.12 317 ePc   25 54.76  -0.9
TMB     1.17 138 P     25 56.84   0.2
PKM     1.19 152 P     25 56.88  -0.2
HJGM    1.21 314 P     25 56.22  -1.1
FRI     1.21  31 iPd   25 56.55  -0.8
PCL     1.27 330 P     25 57.97  -0.4
ANZ     1.28 317 P     25 57.12  -1.4
MARC    1.34 135 P     25 58.25  -1.1
WOFM    1.51 106 P     26 00.18  -1.7
ABL     1.51 136 eP    26 00.25  -1.8
EUC     1.52 316 P     26 00.68  -1.3
JTGM    1.55 314 P     26 01.22  -1.1
RYS     1.61 144 P     26 03.43   0.0
COE     1.61 324 ePd   26 02.40  -0.9
GCC     1.62 312 iPd   26 01.81  -1.5
ARN     1.62 329 ePd   26 02.23  -1.3
JUCM    1.63 310 P     26 02.04  -1.5
JNAM    1.64 319 P     26 02.99  -0.6
MHC     1.67 327 eP    26 04.40   0.2
                iS     26 24.03
ISA     1.67  99 iPc   26 03.07  -1.1
                eS     26 24.63
MHR     1.73 325 P     26 04.32  -0.7
WLHM    1.78  83 P     26 05.97   0.0
CVR     1.83 325 P     26 05.36  -1.0
STAN    1.98 317 ePc   26 07.29  -1.3
                eS     26 33.24
MMPM    2.03  35 eP    26 09.92   0.3
CMB     2.08   2 ePd   26 09.41  -0.7
                eS     26 35.76
MTUM    2.09  47 ePc   26 10.81   0.4
MEMM    2.12  36 eP    26 11.34   0.8
MRCM    2.34  42 eP    26 14.82   0.8
BKS     2.37 325 iP    26 12.84  -1.4
                iS     26 42.07
HMR     2.43 335 eP    26 14.96  -0.1
ZSP     2.44 325 iP    26 13.94  -1.2
BONR    2.66  41 eP    26 18.56  -0.1
SSK     2.88 126 ePc   26 20.38  -1.3
NTYM    2.99 325 eP    26 20.85  -2.0
GSC     3.07 101 ePc   26 22.69  -1.6
TNP     3.37  50 eP    26 28.28  -0.4
PEC     3.42 126 ePc   26 27.08  -2.2
TPNV    3.56  73 eP    26 30.81  -0.5
KVN     3.63  31 (Pn)  26 33.02   0.7
ORV     3.68 348 ePd   26 32.48  -0.4
                iS     27 15.01
PLM     3.96 130 eP    26 34.52  -2.5
LMEM    4.66 350 (P)   26 46.66  -0.2
WDC     4.89 341 eP    26 48.06  -2.0
LGPM    5.28 340 (P)   26 54.70  -0.9
KMPM    5.29 328 eP    26 56.35   0.6
FOX     5.33 330 iP    26 56.01  -0.1
LBFM    5.50 349 (P)   26 59.41   0.6
GLA     5.50 120 eP    26 56.25  -2.5
FHC     5.56 332 iP    26 59.09  -0.5
ARUT    5.94  70 ePn   27 05.68   0.6
YBH     6.02 344 eP    27 07.40   1.4
                eSg    28 32.63
MSU     7.11  66 eP    27 21.71   0.2
DUG     7.39  53 eP    27 25.23  -0.1
SRU     8.52  65 eP    27 42.35   1.1
DAU     8.53  56 eP    27 41.19  -0.2
PV09    9.41  71 (P)   27 53.38  -0.2
PV10    9.46  72 eP    27 54.38   0.2
VGB     9.56 359 (P)   27 56.36   1.1
PV08    9.80  71 eP    27 59.52   0.5
SHW    10.31 353 (P)   28 08.12   2.3
LON    10.83 355 (P)   28 12.38  -0.5
ALQ    11.49  91 eP    28 23.03   0.9
RMW    11.54 356 eP    28 21.23  -1.3
GMW    11.71 352 (P)   28 26.53   1.8
DPW    12.03   7 (P)   28 30.68   1.6
NEW    12.55  10 eP    28 35.04  -1.1
GLD    12.65  68 (P)   28 39.47   1.8
RSSD   15.00  52 (P)   29 10.04   1.5
       0.9s     6.66nm          4.1mb
LTX    15.63 110 eP    29 16.70   0.0
MEO    17.91  87 iPc   29 46.00   0.6
TUL    19.99  83 iPd   30 08.80  -1.3
UYO    21.37  87 iPc   30 21.70  -2.6
MIAR   22.01  86 eP    30 29.59  -1.1
       0.8s    13.24nm          4.4mb
ULM    22.82  44 eP    30 42.00   3.3
INK    33.22 351 eP    32 14.00   0.6
       1.0s     3.00nm          4.2mb
IMA    35.84 338 eP    32 37.08   1.0
       0.9s     3.59nm          4.2mb
MBC    40.39   0 eP    33 16.00   2.2
       1.0s     3.00nm          3.9mb
RES    40.71  10 eP    33 17.50   1.0
       1.0s     3.00nm          4.0mb
FRB    41.76  32 eP    33 27.50   2.3
       0.9s     4.00nm          4.1mb
     113 obs. associated
-------------------------------------
&  NOV  14, 1993  12h 29m 14.50s
   35.955 N          120.508 W
   DEPTH =  11.1km
 CENTRAL CALIFORNIA                ( 39)
      <GM-P>. MD 2.6 (GM).

PHAM    0.15 143 ePc   29 18.18   0.1
PKEM    0.34  72 eP    29 23.04   1.4
BCH     0.84 156 eP    29 30.28  -0.5
       3 obs. associated
-------------------------------------
*  NOV  14, 1993  12h 29m 18.52± 0.71s
   46.583 N ±14.6km  153.548 E ±11.7km
   DEPTH =  33.0km  (normal)
   4.6mb (  6 obs.)  4.4Msz (  1 obs.)
 KURIL ISLANDS                     (221)

IMA    33.77  36 (P)   35 59.50   0.5
FBA    36.11  38 eP    36 19.00   0.2
       1.0s     6.50nm          4.5mb
LZH    38.19 272 eP    36 37.20   0.4
       1.0s    15.00nm          4.8mb
     Z  25s     0.21um          3.9MszX
CHTO   52.37 257 eP    38 29.70   0.1
SHL    52.67 269 eP    38 31.50  -0.5
GUN    55.31 275 P     38 52.00   0.4
KKN    55.80 276 P     38 55.60   0.6
PKI    55.85 275 P     38 55.40  -0.1
DMN    56.04 276 P     38 57.00   0.3
GKN    56.11 276 P     38 57.00  -0.1
       0.6s    11.00nm          5.1mb
WRA    68.45 199 P     40 18.90  -0.4
       0.8s     0.30nm          3.4mb X
HFS    68.72 340 eP    40 19.30  -1.2
       0.4s     2.20nm          4.6mb
     Z  18s     0.22um          4.4Msz
                 LR     06 53.00
NAO    68.76 341 P     40 20.20  -0.5
       1.1s     3.90nm          4.4mb
GEC2   78.74 334 eP    41 19.40   0.4
       0.6s     0.78nm          3.9mb
                 e     41 23.80
     S.D. = 0.5  on  14 of  14 obs.
-------------------------------------
&  NOV  14, 1993  12h 34m 53.87s
   35.956 N          120.506 W
   DEPTH =  10.9km
 CENTRAL CALIFORNIA                ( 39)
      <GM-P>. MD 2.7 (GM).

PHAM    0.15 144 iPd   34 57.65   0.2
PKEM    0.34  72 eP    35 02.59   1.7
BCH     0.84 156 eP    35 09.71  -0.4
ARN     1.62 330 eP    35 21.95  -0.5
MMPM    2.03  35 (P)   35 28.18  -0.6
MTUM    2.09  48 eP    35 29.77   0.3
MEMM    2.12  36 (P)   35 29.87   0.2
TNP     3.38  50 (P)   35 49.28   1.4
       8 obs. associated
-------------------------------------
&  NOV  14, 1993  12h 52m 59.29s
   35.944 N          120.493 W
   DEPTH =  11.3km
 CENTRAL CALIFORNIA                ( 39)
      <GM-P>. MD 2.7 (GM).

PHAM    0.13 145 eP    53 02.96   0.3
PKEM    0.33  69 eP    53 07.80   1.6
BCH     0.83 156 eP    53 14.98  -0.3
ABL     1.51 136 eP    53 25.06  -1.3
BONR    2.67  41 (P)   53 45.51   2.3
GSC     3.07 101 (P)   53 50.20   1.5
       6 obs. associated
-------------------------------------
?  NOV  14, 1993  13h 20m 37.67± 0.56s
   30.658 N ±12.8km   80.356 E ± 8.4km
   DEPTH =  33.0km  (normal)
   4.4mb (  6 obs.)
 XIZANG-INDIA BORDER REGION       (305)
      ML 3.9 (NDI).

NDI     3.37 235 iPnd  21 29.50   0.3
       0.8s    29.85nm
GKN     4.58 124 P     21 46.40  -0.2
DMN     5.15 125 P     21 54.60  -0.1
KKN     5.17 122 P     21 54.40  -0.5
PKI     5.39 124 P     21 59.00   0.9
```

14d 13h

```
GUN      5.55 118 P      22 01.20   0.8
SHL     11.37 114 eP     23 18.00  -3.0X
                  eS     25 17.60
QUE     11.58 271 eP     23 19.50  -4.4X
                  eS     25 40.60
HYB     13.28 188 eP     23 36.50 -10.0X
POO     13.44 208 eP     23 54.00   5.5X
                  iS     26 10.00
GBA     17.19 190 Pd     24 29.60  -7.3X
        0.6s      2.50nm          3.5mb
HFS     52.40 325 eP     29 49.50   0.8
        0.5s      2.10nm          4.3mb
GEC2    52.66 310 eP     29 52.00   1.0
        0.6s      0.32nm          3.4mb
                  e      29 54.00
                  e      30 00.30
LPG     57.88 307 eP     30 28.10  -0.8
        0.9s      6.40nm          4.7mb
LPL     57.89 307 eP     30 28.00  -0.8
        0.7s      6.40nm          4.8mb
WR2     72.28 127 eP     32 00.60  -1.4
        0.6s      5.80nm          4.8mb
     S.D. = 0.9  on  11 of  16 obs.
-----------------------------------
%  NOV  14, 1993  14h 39m 33.59± 1.52s
   30.873 S ±13.8km   68.730 W ±18.3km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTLL     0.51 154 ePd    39 49.90   0.2
                  S      40 01.80
RTCB     0.61 186 iPc    39 50.70   0.1
                  S      40 02.20
CFA      0.84 150 eP     39 52.80   0.1
                  S      40 07.00
RTCV     1.00 171 iPc    39 54.00  -0.3
                  S      40 09.50
RTPR     2.00  74 eP     40 07.00   0.4
                  S      40 34.00
CYA      3.52  47 iPc    40 27.00  -0.3
TCA      3.58  99 iPd    40 27.90  -0.2
                  (S)    41 07.00
     S.D. = 0.3  on   7 of   7 obs.
-----------------------------------
%  NOV  14, 1993  15h 10m 39.96± 1.01s
   44.427 N ±10.6km    7.294 E ± 9.1km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                   (545)
      ML 1.9 (GEN).

PZZ      0.16 300 P      10 43.72   0.0
                  S      10 46.00
STV      0.18 173 P      10 44.17   0.0
                  S      10 46.87
ENR      0.22 156 P      10 45.09   0.3
                  S      10 48.06
ROB      0.43 108 P      10 49.02   0.2
                  S      10 55.61
IMI      0.67 140 P      10 52.78  -0.6
     S.D. = 0.5  on   5 of   5 obs.
-----------------------------------
%  NOV  14, 1993  15h 11m 00.37± 2.14s
   37.462 N ±12.7km    1.409 W ±19.9km
   DEPTH =  10.0km  (geophysicist)
 SPAIN                            (377)
      mbLg 2.7 (MDD). Felt (III) in
      the Mazarron area.

EALH     0.40 359 iPd    11 08.28  -0.2
                  e      11 13.60
ENIJ     0.80 233 eP     11 15.44  -0.5
                  e      11 27.40
EVIA     1.46 324 eP     11 25.93  -0.9
                  e      11 43.70
ECOG     1.73 265 eP     11 31.72   1.0
                  e      11 52.00
EGUA     1.83 251 eP     11 32.02  -0.2
EBAN     2.01 291 eP     11 34.95   0.2
                  e      11 59.20
ECHE     2.15   9 eP     11 37.30   0.5
                  e      12 02.00
     S.D. = 0.8  on   7 of   7 obs.
-----------------------------------
   NOV  14, 1993  16h 27m 05.28± 0.56s
   31.530 S ± 8.7km   69.303 W ± 7.5km
   DEPTH = 130.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA     (137)
      MD 3.8 (SAN).

RTCB     0.43  84 ePd    27 24.00  -0.3
                  S      27 37.70
RTCV     0.73 117 iPc    27 26.40   0.2
RTLL     0.74  75 iPd    27 26.00  -0.3
                  S      27 40.00
CFA      0.91  95 eP     27 27.80   0.1
                  S      27 43.50
MDZ      1.40 164 iP     27 32.60  -0.1
                  iS     27 53.10
JACH     1.59 223 iP+    27 35.27   0.4
                  iS     27 58.88
FCH      1.98 205 iP     27 41.05   1.3
                  iS     28 07.13
PEL      1.99 216 iPd    27 40.17   0.6
                  iS     28 05.21
ROCH     2.04 225 iP+    27 40.20  -0.2
                  iS     28 06.11
PCH      2.32 206 iP+    27 44.61   0.8
                  iS     28 14.01
TACH     2.53 213 iP     27 46.14  -0.2
                  iS     28 17.13
RTPR     2.69  64 eP     27 49.00   0.5
                  S      28 20.00
LCCH     2.73 224 iP     27 48.64  -0.3
                  iS     28 21.09
CACH     2.80 203 iP     27 49.88  -0.2
                  iS     28 25.66
LNV      3.00 216 iP     27 51.16  -1.3
                  iS     28 26.70
RFA      3.31 168 iPc    27 56.00  -0.7
                  (S)    28 52.50
TCA      4.03  89 eP     28 06.50   0.1
                  S      28 50.10
CYA      4.33  46 iPc    28 10.00  -0.3
                  (S)    28 58.00
     S.D. = 0.6  on  18 of  18 obs.
-----------------------------------
   NOV  14, 1993  16h 44m 51.06± 0.50s
   40.713 N ± 4.5km   22.756 E ± 4.7km
   DEPTH =  10.0km  (geophysicist)
 GREECE                           (364)
      ML 3.0 (SKO).

THE      0.18 117 iPg    44 54.82  -0.2
                  iSg    44 57.78
KNT      0.46  13 ePg    44 59.89  -0.5
                  iSg    45 06.38
SOH      0.47  76 iPg    45 00.21  -0.4
                  eSg    45 07.10
VAY      0.62 347 iPg    45 02.50  -1.1
                  iSg    45 11.30
LIT      0.64 198 iPg    45 03.10  -0.9
                  eSg    45 12.46
SRS      0.75  57 iPg    45 05.05  -0.7
                  eSg    45 15.34
OUR      1.01 112 iPg    45 09.98  -0.1
                  eSg    45 23.66
FNA      1.05 274 ePg    45 09.46  -1.5
                  iSg    45 24.58
PAIG     1.06 138 iPg    45 10.30  -0.6
                  eSg    45 26.22
AGG      1.72 191 ePb    45 22.46   1.2
                  eSb    45 46.02
RZN      1.77  56 iP     45 22.00  -0.1
VTS      1.91  10 iP     45 25.00   0.9
PLD      2.02  46 iP     45 26.00   0.5
PGB      2.12  29 eP     45 29.00   2.0
IGT      2.20 238 ePn    45 29.70   1.5
ALN      2.50  85 iPn    45 32.54   0.1
     S.D. = 1.1  on  16 of  16 obs.
-----------------------------------
%  NOV  14, 1993  17h 03m 46.22± 0.99s
   38.282 N ± 9.4km    0.860 W ± 8.8km
   DEPTH =  10.0km  (geophysicist)
 SPAIN                            (377)
      mbLg 2.5 (MDD).

ACU      0.42  57 iPd    03 54.18  -0.7
                  e      04 00.30
EALH     0.61 226 iPc    03 58.54   0.0
                  e      04 07.80
ECHE     1.31 356 eP     04 11.60   1.1
                  e      04 29.30
EVIA     1.34 286 eP     04 11.85   0.9
                  e      04 30.70
ENIJ     1.69 220 eP     04 16.50   0.6
                  e      04 39.30
EBAN     2.31 268 eP     04 24.40  -0.5
                  e      04 53.70
ECOG     2.37 246 eP     04 29.50   3.7X
                  e      04 58.50
ETOR     2.70 340 eP     04 37.00   6.5X
                  e      05 09.00
PAB      3.00 296 ePn    04 33.00  -1.7
                  iSg    05 23.00
GUD      3.47 314 eP     04 52.00  10.5X
                  e      05 33.00
     S.D. = 1.2  on   7 of  10 obs.
-----------------------------------
?  NOV  14, 1993  18h 22m 53.19± 2.45s
   13.481 S ±20.9km  167.271 E ±21.0km
   DEPTH = 253.6 ± 23.3 km
   4.2mb (  2 obs.)
 VANUATU ISLANDS                  (186)

BKM      4.27 167 iP     24 01.50   0.7
DZM      8.58 185 iPc    24 53.10  -1.6
MNG     27.98 167 eP     28 22.80   0.2
LTZ     29.52 173 eP     28 37.10   0.9
WR2     32.13 254 eP     28 58.10  -1.1
        0.3s      1.60nm          4.1mb
                  i      29 52.90 276kmX
ASPA    33.14 247 eP     29 09.90   2.0
        0.6s      3.70nm          4.2mb
KLU     83.33  21 (P)    34 53.67   1.0
FBA     85.17  18 ePd    35 02.10   0.4
                  pP     35 57.00 226kmX
APO    129.13 343 ePKP   41 31.60  -0.6
        0.4s      1.10nm
GEC2   138.54 334 ePKP   41 52.40   1.9
        0.7s      0.67nm
                  e      42 02.80
FLN    143.39 346 ePKP   41 56.00  -2.9
        0.5s      3.65nm
LDF    143.47 346 ePKP   41 56.30  -2.7
GRR    143.83 347 ePKP   41 57.90  -1.7
SSF    143.86 341 ePKP   41 58.70  -1.1
        0.5s      2.60nm
LPL    144.06 336 ePKP   41 59.70  -0.8
LPG    144.07 336 ePKP   41 59.80  -0.8
SMF    144.12 340 ePKP   41 59.20  -1.0
AVF    144.15 341 ePKP   41 59.10  -1.1
        0.4s      2.60nm
LPF    144.21 347 ePKP   41 59.40  -0.9
        0.4s      5.55nm
BGF    144.52 341 ePKP   42 00.60  -0.3
        0.7s     13.45nm
MAF    144.90 341 ePKP   42 02.10   0.5
        0.6s      7.60nm
TCF    144.95 342 ePKP   42 02.10   0.4
        0.9s     16.05nm
SBF    145.13 334 ePKP   42 02.50   0.4
        0.8s     26.45nm
LSF    145.19 343 ePKP   42 02.60   0.5
        0.7s     11.00nm
MFF    145.33 345 ePKP   42 03.20   1.0
        0.6s     14.60nm
PGF    145.47 331 ePKP   42 02.90   0.1
        0.7s     14.20nm
FRF    145.71 335 ePKP   42 04.20   1.2
        0.6s     10.45nm
LRG    145.92 335 ePKP   42 05.00   1.7
        0.4s      5.95nm
LMR    145.95 335 ePKP   42 05.00   1.6
        0.5s     12.40nm
RJF    146.05 342 ePKP   42 05.50   2.0
CAF    146.22 341 ePKP   42 06.10   2.3X
LFF    146.61 343 ePKP   42 07.10   2.7X
        0.6s      9.40nm
LPO    146.71 342 ePKP   42 07.50   2.9X
        0.5s      4.45nm
     S.D. = 1.4  on  30 of  33 obs.
-----------------------------------
&  NOV  14, 1993  19h 42m 38.92s
   61.072 N          151.094 W
   DEPTH =  54.0km
 SOUTHERN ALASKA                  (  2)
      <AEIC>. ML 2.8 (AEIC), 3.1
      (PMR).

NKA      0.34 192 eP     42 50.54   1.7
SUA      0.43  23 iPd    42 49.58  -0.3
```

		eS	42	58.75	
SPU	0.48	284	ePc	42 49.88	-0.5
		eS	42	59.07	
CGLM	0.50	299	ePc	42 50.10	-0.5
CKN	0.55	287	eP	42 50.76	-0.4
CRP	0.55	291	ePc	42 50.75	-0.5
			eS	43 00.73	
CKT	0.55	284	iPc	42 50.61	-0.7
BKG	0.57	270	iPc	42 50.85	-0.6
			eS	43 01.12	
CP2	0.59	290	iPc	42 51.23	-0.6
NCG	0.61	303	iPc	42 51.43	-0.6
			eS	43 01.63	
CKL	0.62	282	eP	42 51.31	-0.7
BGL	0.66	288	iPc	42 51.79	-0.7
SLKM	0.71	143	eP	42 52.28	-0.8
			eS	43 03.74	
PMS	0.76	76	P	42 53.40	-0.4
PWA	0.82	45	P	42 54.20	-0.3
DFR	0.92	239	ePc	42 54.99	-0.9
SKT	0.94	347	eP	42 55.40	-0.7
			eS	43 08.84	
REF	0.98	234	ePc	42 56.05	-0.8
			eS	43 09.83	
			eS	43 09.99	
RS2	1.02	234	eP	42 56.59	-0.8
			eS	43 10.51	
RDW	1.03	236	ePc	42 56.65	-0.9
			eS	43 10.67	
MPA	1.03	124	ePd	42 56.64	-0.7
NCT	1.04	241	eP	42 56.72	-0.8
			eS	43 11.30	
RED	1.05	232	eP	42 56.90	-0.8
			eS	43 11.26	
			eS	43 11.52	
PLRM	1.08	60	eP	42 57.21	-0.8
			eS	43 12.55	
PMR	1.08	60	eP	42 57.30	-0.7
GHO	1.26	55	ePc	42 59.89	-0.7
			eS	43 16.76	
SEW	1.27	139	eP	42 58.93	-1.6
BRLK	1.32	175	eP	43 00.22	-1.1
			eS	43 18.00	
KNK	1.32	74	ePc	43 00.46	-0.9
			eS	43 18.08	
ILIM	1.36	224	eP	43 01.05	-0.9
			eS	43 18.98	
CUT	1.39	16	ePd	43 01.64	-0.7
INE	1.41	225	eP	43 01.76	-0.9
			eS	43 20.44	
INW	1.42	226	eP	43 01.90	-1.0
			eS	43 20.78	
HOM	1.44	191	eP	43 03.27	0.2
SML	1.52	60	ePc	43 03.03	-1.1
			eS	43 22.77	
CNPM	1.55	183	eP	43 04.00	-0.6
			eS	43 22.91	
CFI	1.62	85	ePc	43 03.76	-1.7
OPT	1.78	218	eP	43 07.41	-0.3
SCM	1.96	65	eP	43 09.13	-1.3
PDB	2.01	231	eP	43 09.46	-1.5
			eS	43 33.23	
MTU	2.02	121	eP	43 09.05	-2.1
HUR	2.03	19	eP	43 11.46	0.1
AUE	2.06	214	eP	43 11.41	-0.3
AUW	2.08	216	eP	43 11.08	-0.9
SVW	2.20	273	P	43 11.80	-1.9
VLZ	2.31	86	eP	43 12.98	-2.3
HIN	2.36	105	eP	43 12.83	-3.1
TRF	2.42	9	eP	43 16.52	-0.4
KTH	2.49	2	eP	43 17.51	-0.4
			eS	43 47.91	
CDD	2.50	212	eP	43 16.04	-1.9
KLU	2.53	78	eP	43 16.00	-2.5
TOA	2.57	64	P	43 18.10	-0.9
CVA	2.67	99	eP	43 17.08	-3.2
HMT	3.44	99	eP	43 27.03	-4.3
GLB	3.54	81	P	43 27.80	-4.9
HDA	3.85	28	eP	43 36.03	-1.0
MDM	4.11	17	P	43 39.90	-0.9
FBA	4.13	20	eP	43 40.30	-0.6
ILB	4.18	26	eP	43 40.51	-1.2
IL1	4.18	26	eP	43 39.56	-2.1
BALM	4.25	87	eP	43 39.13	-3.7
IM3	5.07	348	eP	43 50.54	-3.7
IMA	5.15	348	eP	43 54.00	-1.4
BM3	6.97	21	eP	44 17.11	-3.7

64 obs. associated

NOV 14, 1993 19h 49m 31.60± 1.22s
5.938 S ± 4.9km 104.188 E ± 6.0km
DEPTH = 86.0 ± 10.7 km
5.1mb (32 obs.)
SOUTHERN SUMATERA, INDONESIA (274)

LEM	3.52	105	iPc	50 26.00	0.7
			iS	51 10.00	
TPI	4.68	48	eP	50 41.00	-0.3
			eS	51 59.50	
KGM	7.95	354	ePd	51 27.90	1.5
			e	54 07.50	
IPM	10.91	343	ePc	52 20.00	13.3X
KKM	16.91	45	eP	53 31.00	6.6X
KHT	21.32	345	eP	54 18.00	4.7X
MBL	21.42	136	eP	54 12.00	-2.3
	1.0s	96.00nm		5.1mb	
NST	21.84	349	eP	54 16.50	-2.0
BDT	23.60	348	eP	54 36.00	0.5
DAV	24.96	59	eP	54 51.30	2.6
CHTO	25.13	348	eP	54 48.80	-1.5
	1.0s	15.75nm		4.4mb	
QIZ	25.43	13	P	54 54.70	1.7
N	14s	0.56um			
E	15s	0.66um			
KNA	26.00	114	eP	54 57.50	-0.9
	1.0s	298.00nm		5.8mb	
MTN	27.43	106	eP	55 10.60	-0.8
			i	55 16.60	
BAG	27.50	36	eP	55 12.00	-0.2
KMI	30.91	357	eP	55 43.00	0.4
	0.8s	30.00nm		5.1mb	
Z	16s	1.70um		4.8MszX	
N	12s	0.70um			
E	12s	0.50um			
GYA	32.29	4	P	55 53.60	-0.9
	1.0s	13.00nm		4.7mb	
WR2	32.46	118	iPd	55 55.20	-0.8
	0.6s	31.30nm		5.3mb	
			i	56 48.30	
			i	58 42.70	
GBA	32.90	306	P	56 00.00	0.2
	0.7s	2.50nm		4.1mb	
ASPA	33.58	125	iPc	56 05.60	-0.1
	0.9s	70.40nm		5.5mb	
			ePP	58 56.90	
CD2	36.64	359	iPd	56 30.00	-1.6
Z	15s	0.88um		4.7MszX	
QIS	37.30	116	eP	56 37.00	-0.2
PKI	37.94	332	P	56 41.80	-1.1
GUN	38.01	333	P	56 43.20	-0.3
DMN	38.11	332	P	56 43.40	-0.9
KKN	38.18	332	P	56 44.00	-0.8
	0.6s	27.00nm		5.3mb	
POO	38.55	310	eP	56 58.00	10.2X
GKN	38.66	332	P	56 47.80	-1.0
XAN	40.01	6	P	56 59.60	-0.1
	0.6s	16.00nm		5.1mb	
NJ2	40.28	19	Pc	57 04.00	2.2
Z	12s	0.31um		4.4MszX	
N	12s	0.39um			
E	12s	0.24um			
LZH	41.80	360	eP	57 14.00	-0.5
	0.8s	14.00nm		4.8mb	
Z	16s	0.49um		4.5MszX	
ADE	42.97	137	iPc	57 24.90	0.9
NDI	43.13	324	iPc	57 24.50	-0.7
	1.0s	115.00nm		5.7mb	
STK	43.43	131	iPc	57 23.40	-4.3X
	0.6s	41.90nm		5.4mb	
			i	57 34.50	
			i	59 24.80	
TIA	43.65	15	eP	57 28.60	-0.7
TIY	44.10	9	eP	57 33.30	0.2
Z	21s	1.02um		4.7Msz	
N	15s	0.81um			
KAGJ	44.88	33	P	57 39.30	0.0
GTA	45.30	355	eP	57 43.50	0.8
Z	14s	0.47um		4.6MszX	
KUMJ	45.89	32	P	57 48.00	0.7
HHC	47.05	8	eP	57 56.00	-0.4
	1.2s	19.00nm		4.9mb	
BJI	47.07	13	eP	57 55.50	-0.9
	1.0s	11.00nm		4.7mb	
Z	14s	0.29um		4.4MszX	

SHNJ	47.28	31	P	57 59.00	0.8
TKSJ	48.73	33	P	58 10.20	0.8
TOO	48.99	136	eP	58 13.00	1.4
	0.7s	15.00nm		5.1mb	
YONJ	49.33	32	P	58 13.60	-0.5
WKYJ	49.76	34	P	58 17.50	0.0
WKYJ	49.76	34	P	58 17.70	0.2
CAN	50.49	132	eP	58 24.00	1.0
			i	58 34.90	
			i	58 38.10	
QUE	50.63	317	eP	58 26.50	2.2
SNY	50.73	19	eP	58 24.00	-0.6
CNB	50.76	131	eP	58 26.40	1.3
BRS	50.80	121	iPc	58 25.00	-0.5
	0.5s	6.00nm		4.9mb	
			i	58 34.00	
WMQ	51.72	345	P	58 32.00	-0.2
	2.0s	45.00nm		5.2mb	
KSH	52.15	332	P	58 35.50	-0.1
CHJJ	53.01	35	P	58 40.50	-1.3
CN2	53.11	19	eP	58 41.40	-1.0
	0.8s	33.00nm		5.4mb	
			esP	59 12.00	
YAMJ	55.09	34	eP	58 56.70	-0.4
MDJ	55.26	22	eP	58 57.80	-0.4
HNR	55.32	97	eP	58 58.00	-1.1
FRU	55.47	334	eP	59 00.00	0.2
ZAK	56.10	359	eP	59 04.00	0.0
	0.9s	15.00nm		5.0mb	
OFUJ	56.64	35	eP	59 07.40	-0.8
ASAJ	60.68	31	P	59 35.90	-0.1
KUSJ	61.06	33	eP	59 38.40	-0.2
DZM	62.10	112	iPc	59 46.10	-0.1
YSS	62.77	29	iPd	59 50.00	0.0
			e	00 03.50	
BOD	64.09	6	iPc	59 57.20	-1.3
	1.0s	35.00nm		5.2mb	
MAW	67.59	196	e(P)	00 20.00	-0.7
	0.9s	13.16nm		4.9mb	
YAK	70.56	12	iPc	00 37.80	-1.2
	0.9s	143.00nm		5.9mb	
SVE	71.90	337	ePc	00 47.80	0.7
	1.7s	60.00nm		5.2mb	
			e	01 07.10	
ARU	72.45	335	eP	00 51.00	0.6
			e	01 02.00	
			e	01 15.00	
BFT	73.17	245	eP	00 56.50	1.0
PYA	74.02	319	iP	01 02.00	2.2
BUL	74.45	251	iPc	01 02.30	-0.6
			i	01 15.20	
SLR	74.76	245	iPd	01 03.50	-1.2
	0.7s	16.00nm		5.0mb	
BLF	76.66	242	eP	01 14.00	-1.4
FRS	77.42	241	eP	01 19.00	-0.3
	0.5s	12.00nm		5.0mb	
TIK	79.10	8	iPc	01 27.00	-0.6
	1.2s	26.00nm		5.0mb	
			i	01 38.00	
SUR	81.27	238	iPc	01 53.50	13.2X
	0.9s	74.00nm			
MOS	82.01	328	eP	02 02.00	18.7X
			e	02 13.00	
OBN	82.31	328	iPd	01 46.30	1.5
	1.2s	35.00nm		5.1mb	
Z	16s	0.80um		5.2MszX	
E	14s	0.60um			
			i	01 58.00	
			e	12 06.00	
CER	82.51	237	e(P)	01 51.00	4.5X
MLR	86.01	316	eP	02 02.50	-1.5
OHR	88.90	311	eP	02 19.30	1.4
KAF	89.57	333	iP	02 21.80	1.3
	0.8s	16.20nm		5.3mb	
NUR	90.00	331	iP	02 23.30	0.9
	0.8s	8.70nm		5.0mb	
GEC2	94.75	318	eP	02 49.70	5.0X
	1.0s	1.94nm		4.5mb	
HFS	95.35	330	eP	02 48.70	1.6
	0.9s	27.60nm		5.7mb	
SHW	123.38	37	(PKP)	08 24.08	3.5X
MEO	144.42	33	iPKPc	08 59.20	-0.8
OCO	144.44	31	iPKPc	09 00.00	0.0
FNO	144.69	31	iPKPc	09 00.80	0.4
TUL	144.98	29	iPKPc	09 01.70	0.8
UYO	147.03	29	iPKPc	09 07.00	2.7

S.D. = 1.1 on 84 of 94 obs.

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? NOV  14, 1993  20h 15m 42.45± 7.58s
   15.922 N ±62.5km   98.550 W ±26.2km
   DEPTH =  33.0km  (normal)
 OFF COAST OF GUERRERO, MEXICO    ( 65)

ACX      1.57 307 (P)    16 01.50  -6.9X
                  (S)    16 21.00
OXX      2.10  56 iP     16 16.15   0.0
                  iS     16 42.49
III      2.59 340 iP     16 23.20   0.0
PPM      3.13 359 iP     16 31.00  -0.1
                  (S)    17 15.43
IIA      3.21 358 iP     16 31.77   0.0
                  (S)    17 17.39
IISM     3.25  20 (P)    16 32.26   0.0
MRX      4.53 327 iP     16 54.97   4.5X
     S.D. = 0.1  on   5 of   7 obs.
-------------------------------------
   NOV  14, 1993  20h 53m 57.27± 0.57s
   26.015 N ± 7.9km  128.444 E ± 7.2km
   DEPTH =  23.7km  (  6 depth phases)
   4.4mb ( 16 obs.)
 RYUKYU ISLANDS                    (238)

NAH      0.71 287 P      54 12.50   1.6
                  S      54 24.50
KAGJ     5.58  22 eP     55 19.20  -1.8
KUMJ     6.82  17 P      55 37.30  -1.1
SSE      8.14 310 eP     55 57.20   0.3
     Z  12s      5.40um
     N  12s      2.40um
     E  12s      2.80um
NJ2     10.32 308 Pc     56 27.50   0.5
     Z  12s      2.78um
     N  12s      2.61um
     E  12s      2.15um
SNY     16.28 347 eP     57 48.00   2.2
     Z  14s      1.53um
BJI     17.34 327 eP     58 01.50   2.3
      1.0s      6.00nm          3.7mb
     Z  16s      1.52um          3.2Msz
     N  13s      2.10um
                 epP     58 08.50
TIY     17.89 315 eP     58 06.00  -0.2
     Z  12s      2.89um
     N  13s      1.68um
CN2     17.91 353 eP     58 06.50   0.1
     Z  18s      1.21um
     N  12s      1.61um
     E  12s      0.96um
XAN     18.68 300 P      58 15.50  -0.5
      1.0s     15.00nm          4.1mb
     Z  15s      1.46um          4.1MszX
     N  13s      0.88um
     E  13s      1.18um
GYA     19.54 276 P      58 28.00   1.6
      1.2s     16.00nm          4.2mb
     Z  16s      1.18um          4.1Msz
GUMO    19.76 126 eP     58 30.50   1.9
HHC     20.38 321 Pd     58 34.00  -1.0
      1.0s     11.00nm          4.2mb
     Z  12s      2.17um          4.7MszX
     N  11s      0.94um
     E  11s      1.03um
BTO     21.12 318 eP     58 40.50  -2.2
     N  13s      1.33um
     E  13s      0.96um
CD2     22.23 288 eP     58 51.80  -2.0
     Z  14s      2.42um          4.8MszX
     E  13s      2.42um
KMI     23.20 273 Pd     59 04.50   0.9
      1.5s     80.00nm          5.0mb
     Z  16s      1.40um          4.5MszX
     N  10s      0.70um
     E  10s      0.70um
                 pP      59 13.50  32km
                 sS      03 28.00
LZH     23.29 301 eP     59 03.00  -1.3
      1.5s     45.00nm          4.8mb
     Z  14s      0.92um          4.4MszX
     N  11s      0.52um
                 pP      59 09.00  22km
GTA     27.41 306 eP     59 41.00  -2.2
      1.0s      8.00nm          4.3mb
     Z  14s      1.45um          4.7MszX
     N  12s      0.63um
                 pP      59 49.00  28km
                 eS      04 27.50
CHTO    28.15 261 eP     59 50.20   0.3
SHL     32.86 277 iP     00 31.00  -0.7
WMQ     37.40 309 iPd    01 08.00  -2.2
     Z  14s      0.83um          4.7MszX
     E  13s      1.05um
                 ScS     11 13.50
GUN     37.85 283 P      01 14.80   0.3
PKI     38.31 282 P      01 18.00  -0.3
      0.8s     40.00nm          5.3mb
KKN     38.39 283 P      01 19.00   0.1
      0.8s     47.00nm          5.3mb
DMN     38.57 282 P      01 20.60   0.2
      0.8s     36.00nm          5.2mb
GKN     38.93 283 P      01 23.20  -0.1
KSH     45.53 301 eP     02 19.00   2.0
WRA     46.04 172 P      02 20.20  -0.8
      0.6s      1.60nm          4.1mb
WR2     46.05 172 eP     02 19.30  -1.7
      0.8s      2.90nm          4.3mb
QUE     53.84 290 eP     03 21.60   0.7
IMA     61.62  27 (P)    04 15.60   0.5
                 pP      04 20.90  17km
FBA     64.13  28 (P)    04 34.00   2.4
                 pP      04 39.00  16km
INK     69.01  23 eP     05 02.50   0.0
MBC     69.99  14 eP     05 09.00   0.6
      0.6s      2.00nm          4.4mb
RES     75.72  11 eP     05 46.00   3.9X
      0.9s      3.00nm          4.3mb
NAO     79.87 334 P      06 04.10  -1.1
      1.0s      8.10nm          4.7mb
OJC     81.40 322 eP     06 12.80  -0.7
KSP     82.98 324 eP     06 24.50   2.8X
SKO     84.58 314 eP     06 30.50   0.5
GEC2    85.49 323 eP     06 35.50   1.0
      0.7s      0.81nm          4.1mb
                 e       06 44.20  27km
                 e       06 49.70
     S.D. = 1.4  on  38 of  40 obs.
-------------------------------------
   NOV  14, 1993  21h 09m 48.94± 0.42s
   26.075 N ± 5.8km  128.460 E ± 6.1km
   DEPTH =  29.5km  (  8 depth phases)
   4.8mb ( 26 obs.)  4.7Msz (  1 obs.)
 RYUKYU ISLANDS                    (238)

KAGJ     5.52  22 P      11 10.70  -0.6
KUMJ     6.76  17 P      11 27.90  -0.8
SSE      8.12 310 Pc     11 47.00  -0.7
      1.0s     13.00nm          5.0mb
     Z  12s      6.30um          3.9MszX
     N  10s      2.70um
     E  10s      3.10um
SHNJ     8.34  15 eP     11 49.10  -1.7
NJ2     10.30 308 eP     12 18.50   0.7
     Z  12s      3.40um
     N  12s      3.27um
     E  11s      2.60um
SNY     16.22 347 eP     13 36.20   0.0
     Z  12s      1.81um
BJI     17.29 327 eP     13 51.50   1.8
      1.0s     22.00nm          4.2mb
     Z  14s      1.76um          3.2Msz
     N  13s      2.45um
                 esP     14 01.00
TIY     17.85 314 Pc     13 57.00   0.2
     Z  14s      3.33um
     N  13s      1.90um
CN2     17.85 353 eP     13 57.00   0.3
      1.0s      4.20nm          3.5mb X
     Z  18s      1.51um          3.7Msz
     N  11s      1.28um
     E  11s      0.78um
QIZ     18.56 252 eP     14 06.60   1.1
     N  19s      2.05um
XAN     18.66 300 P      14 06.30  -0.5
      0.8s     34.00nm          4.6mb
     Z  15s      1.75um          4.1Msz
     N  13s      1.06um
     E  12s      0.88um
                 pP      14 11.60
GYA     19.55 276 P      14 16.80  -0.7
     Z  16s      1.53um
     N  10s      0.69um
     E  10s      0.46um
HHC     20.34 321 Pc     14 24.80  -0.8
      1.4s     51.00nm          4.7mb
     Z  12s      2.89um          4.9MszX
     N  11s      1.12um
     E  12s      1.19um
BTO     21.08 318 eP     14 32.00  -1.3
     N  12s      1.26um
     E  15s      1.22um
CD2     22.22 288 eP     14 42.80  -1.9
     Z  14s      3.05um          4.9MszX
KMI     23.21 273 Pd     14 55.50   0.9
      1.5s    110.00nm          5.2mb
     Z  14s      1.80um          4.7MszX
     N  10s      0.80um
     E  10s      1.00um
                 sS      19 19.00
LZH     23.27 301 Pc     14 54.80  -0.3
      1.5s     70.00nm          5.0mb
     Z  15s      1.02um          4.4MszX
     E  11s      0.66um
                 pP      15 04.00  33km
                 sP      15 06.50
YSS     23.76  25 eP     15 00.00   0.5
      0.8s     80.00nm          5.3mb
                 e       15 08.20  29km
GTA     27.39 306 eP     15 32.00  -1.9
      1.2s     19.00nm          4.6mb
     Z  14s      2.03um          4.8MszX
     N  11s      0.61um
                 pP      15 40.00  28km
CHTO    28.18 261 ePc    15 41.10   0.1
      0.9s     13.43nm          4.7mb
SHL     32.86 277 iP     16 22.50  -0.2
      1.1s     22.15nm          5.0mb
WMQ     37.37 309 iPd    17 00.00  -0.9
      1.5s     25.00nm          4.8mb
     Z  14s      0.99um          4.8MszX
                 pP      17 08.00  27km
GUN     37.85 283 P      17 05.60   0.2
PKI     38.31 282 P      17 08.80  -0.4
KKN     38.39 283 P      17 09.80   0.0
DMN     38.57 282 P      17 11.20  -0.1
GKN     38.93 283 P      17 13.80  -0.4
NDI     45.30 285 eP     18 05.50  -0.5
KSH     45.51 301 eP     18 10.00   2.2
TIK     45.59   0 iPd    18 07.00  -0.7
      2.0s     70.00nm          5.2mb
                 i       18 17.00  34km
WRA     46.10 172 P      18 11.40  -0.9
      0.7s      7.00nm          4.7mb
WR2     46.11 172 iPc    18 11.10  -1.3
      0.8s     12.80nm          4.9mb
HYB     46.92 270 eP     18 19.00   0.0
CTA     49.03 158 iPc    18 35.00  -0.3
GBA     49.29 266 P      18 39.00   1.6
ASPA    49.73 173 iPd    18 39.70  -0.9
      0.9s      9.00nm          4.8mb
QUE     53.83 289 eP     19 12.60   0.9
SVE     56.51 322 ePd    19 30.00  -0.5
      2.0s     40.00nm          5.1mb
     Z  13s      1.00um          5.1MszX
     N  13s      0.30um
     E  13s      0.70um
ARU     57.62 322 eP     19 37.00  -1.4
                 e       19 46.00  30km
IMA     61.56  27 (P)    20 07.21   1.6
      0.8s      2.97nm          4.5mb
                 e       20 10.53  11kmX
FBA     64.08  28 eP     20 23.00   0.9
      1.0s      9.00nm          4.8mb
INK     68.95  23 eP     20 53.50   0.5
      1.0s      2.00nm          4.2mb
MBC     69.93  14 eP     21 00.50   1.7
      0.6s      3.00nm          4.6mb
OBN     70.06 322 eP     20 59.70  -0.3
     Z  14s      0.80um          5.1MszX
     E  14s      0.80um
                 e       21 30.00 122kmX
KAF     72.73 331 iP     21 15.30  -0.6
      0.6s      7.30nm          4.9mb
NUR     74.12 330 eP     21 23.70  -0.2
MNK     75.42 323 eP     21 29.00  -2.5
RES     75.66  11 eP     21 37.50   4.9X
      0.9s     10.00nm          4.8mb
HFS     79.05 332 eP     21 50.60  -1.0
      0.4s      1.50nm          4.3mb
     Z  14s      0.21um          4.6MszX
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                LR     57 40.00
NAO    79.82 334 P     21 55.40   -0.3
       0.8s     8.40nm          4.8mb
MLR    80.00 316 eP    21 56.00   -1.2
KSP    82.94 324 eP    22 13.40    1.1
BRG    84.16 325 eP    22 21.10    2.6
PRU    84.35 324 eP    22 20.50    1.1
CLL    84.39 325 iPd   22 21.10    1.5
       0.8s    14.00nm          5.2mb
SKO    84.55 314 iP    22 22.20    1.5
                i      22 32.00   31km
GEC2   85.45 323 ePc   22 26.10    1.0
       0.8s     2.36nm          4.5mb
                e      22 28.90   9kmX
                e      22 35.20
                e      22 36.90
                e      22 40.40
                e      22 44.20
GRF    86.27 325 eP    22 30.80    1.7
     Z  18s     0.30um          4.7Msz
                e      22 34.10
                e(pP)  22 38.90   25km
                e      22 41.40
     S.D. = 1.1  on  57 of  58 obs.
-----------------------------------
   NOV  14, 1993  21h 26m 02.23± 0.72s
   57.759 N ± 7.1km  155.594 W ± 7.6km
   DEPTH =  10.0km  (geophysicist)
 ALASKA PENINSULA                ( 12)
      ML 3.2 (AEIC).

CDD     1.56  40 eP    26 29.64   -0.4
                eS     26 52.11
MCNL    1.58  24 eP    26 29.43   -0.8
                eS     26 53.04
BGM     1.65   6 eP    26 31.38    0.0
KDC     1.66  89 eP    26 31.70    0.2
                eS     26 52.65
SYI     1.90  62 eP    26 34.48   -0.5
                eS     26 59.46
AUI     1.95  35 eP    26 36.65    1.0
AUW     1.96  34 eP    26 36.61    0.8
AUH     1.97  34 eP    26 36.20    0.2
PDB     2.16  19 eP    26 37.84   -0.9
                S      27 06.98
OPT     2.27  32 eP    26 39.75   -0.6
INE     2.66  29 eP    26 45.05   -0.9
ILIM    2.70  29 eP    26 46.09   -0.4
CNPM    2.89  50 eP    26 49.41    0.3
REF     3.12  27 eP    26 52.51    0.0
DFR     3.21  27 eP    26 53.41   -0.4
SVW     3.36 360 eP    26 58.30    2.4X
                eS     27 40.79
SDN     3.64 230 eP    26 59.59   -0.1
SLKM    3.91  43 eP    27 03.57    0.0
CP2     3.91  24 eP    27 03.36   -0.4
CRP     3.93  25 eP    27 03.89   -0.2
PMR     5.05  38 eP    27 21.18    1.5
KLU     6.17  49 eP    27 32.86   -2.8X
IMA     8.39   5 eP    28 08.48    1.7
     S.D. = 0.8  on  21 of  23 obs.
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?  NOV  14, 1993  22h 07m 08.81± 0.64s
    6.727 S ± 8.0km  130.185 E ±11.4km
   DEPTH =  33.0km  (normal)
   4.5mb (  2 obs.)
 BANDA SEA                       (280)

TLE     2.77  67 ePc   07 52.00    0.2
                iS     08 16.20
MTN     6.15 171 eP    08 41.00    1.2
       0.3s    41.00nm          5.6mb X
                eS     09 46.00
KNA     9.07 189 eP    09 21.00    0.4
                eS     10 57.00
WR2    13.76 163 iPc   10 18.50   -5.4X
                iS     12 42.50
ASPA   17.22 168 iPd   11 06.80   -1.8
       0.8s     8.60nm          3.9mb
                eS     14 04.30
GUN    54.91 311 P     16 39.60    0.2
       0.4s     6.00nm          5.0mb
KKN    55.30 310 P     16 42.00    0.0
DMN    55.34 310 P     16 42.40    0.0
GKN    55.90 310 P     16 46.00   -0.3
CNCB  150.51 143 PKP   27 01.00    6.2X
LPB   150.65 142 (PKP) 27 03.00    8.2X
LPAZ  150.82 142 PKP   27 00.90    5.5X
     S.D. = 1.0  on   8 of  12 obs.
-----------------------------------
%  NOV  14, 1993  23h 06m 03.36± 0.61s
   31.771 S ± 9.7km   68.225 W ± 8.5km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA    (137)

CFA     0.16 356 iP    06 18.00    0.1
RTCV    0.28 251 iPd   06 18.60    0.5
RTLL    0.49 335 iPc   06 19.40    0.1
RTCB    0.57 300 iPc   06 20.00    0.0
                S      06 32.10
MDZ     1.23 205 eP    06 44.50   17.7X
RTPR    2.08  46 eP    06 37.00   -0.4
                S      07 03.00
MRA     2.23 107 iPd   06 40.70    1.3
                S      07 08.40
RFA     3.00 184 ePd   06 49.20   -0.7
                S      07 19.30
TCA     3.13  83 iPd   06 51.00   -0.8
                S      07 27.00
     S.D. = 0.8  on   8 of   9 obs.
-----------------------------------
   NOV  14, 1993  23h 55m 06.51± 0.72s
   41.867 N ± 7.7km   21.104 E ± 6.3km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION      (383)
      ML 3.0 (SKO). Felt (IV) at
      Gostivar.

SKO     0.27  67 iPgc  55 12.70    0.5
       0.2s   210.00nm
                iSg    55 17.20
OHR     0.79 197 iPg   55 20.20   -1.7
       0.5s   320.00nm
                i      55 24.50
                iSg    55 31.10
BCI     0.92 303 ePg   55 21.50   -2.6
                iSg    55 35.70
TIR     1.06 241 ePg   55 29.50    3.0X
                iSg    55 41.10
PVY     1.11 311 iPgc  55 25.86   -1.6
                iSg    55 40.98
SDA     1.21 279 ePg   55 31.30    2.3
                iSg    55 46.30
VAY     1.23 116 iPg   55 29.50    0.2
       0.4s    60.00nm
                iSg    55 48.00
                Lg     55 50.50
IVA     1.34 319 iPgd  55 30.15   -1.2
                iSg    55 48.62
ULC     1.39 275 iPgc  55 31.87    0.0
                iSg    55 51.81
BERA    1.45 217 ePn   55 33.00    0.2
TTG     1.48 293 iPgc  55 33.01   -0.2
                iSg    55 54.04
BDV     1.74 285 iPnc  55 38.22    1.2
                iSn    56 02.31
NKY     1.82 302 iPnc  55 39.01    0.7
                iSn    56 03.63
PLE     1.93 320 iPnc  55 40.28    0.5
                iSn    56 05.99
HCY     2.02 288 iPnd  55 42.04    1.0
                iSn    56 08.95
BRY     2.16 299 iPnc  55 43.87    0.7
                iSn    56 11.89
     S.D. = 1.4  on  15 of  16 obs.
-----------------------------------
%  NOV  15, 1993  00h 13m 30.42± 1.36s
   32.022 S ±10.5km   68.552 W ±15.4km
   DEPTH =  33.0km  (normal)
 MENDOZA PROVINCE, ARGENTINA     (139)

RTCV    0.16   4 e(P)  13 36.00   -0.7
CFA     0.49  33 e(P)  13 34.00   -7.0X
MRA     2.44 100 e(P)  14 08.00   -0.8
                S      14 37.50
RTPR    2.45  46 e(P)  14 10.00    1.1
                S      14 38.00
RFA     2.74 179 ePd   14 13.50    0.4
                S      14 56.00
TCA     3.44  80 eP    14 23.20    0.0
     S.D. = 1.1  on   5 of   6 obs.
-----------------------------------
   NOV  15, 1993  00h 19m 59.70± 0.31s
   44.812 N ± 2.2km    7.919 E ± 3.4km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                  (545)
      ML 3.5 (GEN), 3.4 (STR), 3.3
      (LDG), 3.2 (VIE).

BHB     0.47 274 Pd    20 11.70    2.5
ROB     0.52 184 Pc    20 12.43    2.2
                S      20 19.78
PCP     0.52 121 Pc    20 12.91    2.6
                S      20 20.47
RSP     0.58 306 Pd    20 13.30    1.8
                S      20 20.98
FIN     0.64 161 Pc    20 13.74    1.2
                S      20 22.01
PZZ     0.66 243 Pd    20 13.42    0.5
                S      20 21.73
ENR     0.69 212 Pd    20 14.17    0.8
                S      20 22.53
STV     0.71 217 P     20 14.19    0.4
                S      20 22.81
RRL     0.81 278 Pd    20 17.03    1.4
                S      20 27.51
ORX     0.82   3 Pc    20 17.08    1.4
                S      20 27.74
LSD     0.84 320 Pc    20 17.60    1.5
                S      20 28.25
AUTN    0.89 204 P     20 16.27   -0.7
                S      20 27.57
IMI     0.90 181 Pc    20 17.44    0.4
                S      20 28.02
TOUF    0.93 211 P     20 16.46   -1.2
                S      20 27.65
SBF     1.01 200 Pg    20 19.30    0.4
                Sg     20 31.20
AURF    1.02 205 P     20 17.98   -1.0
MVIF    1.07 211 P     20 18.71   -1.2
                S      20 32.00
LPG     1.07 310 Pn    20 21.50    1.4
                Sn     20 35.50
LPL     1.10 310 Pn    20 21.80    1.4
                Sn     20 35.30
REVF    1.14 200 P     20 20.16   -1.0
                S      20 35.14
MMK     1.24   1 iPc   20 23.10    0.2
RSL     1.27 314 P     20 25.07    1.7
CALN    1.29 215 P     20 22.78   -1.0
                S      20 40.05
DIX     1.32 344 iPc   20 24.80    0.6
EMS     1.44 331 P     20 27.70    1.7
TMA     1.46  27 iPc   20 26.50    0.3
FRF     1.55 217 Pn    20 26.60   -0.8
                Pg     20 28.80
                Sg     20 45.80
GANF    1.65 241 P     20 31.13    2.2
                S      20 51.11
LRG     1.76 220 Pn    20 29.50   -0.9
                Pg     20 32.30
                Sn     20 49.70
                Sg     20 51.80
LMR     1.79 215 Pn    20 29.80   -1.1
                Pg     20 31.10
                Sn     20 49.60
                Sg     20 52.60
TAVF    1.79 229 P     20 30.53   -0.4
                S      20 51.41
VDL     2.00  32 iPc   20 34.70    0.7
PUYF    2.05 232 P     20 33.68   -0.9
TREF    2.18 238 P     20 36.91    0.4
LLS     2.19  20 eP    20 36.50   -0.4
PRAF    2.22 244 P     20 36.93   -0.2
GELF    2.29 232 P     20 37.12   -1.1
PGF     2.39 161 Pn    20 36.70   -3.0X
                Sn     21 02.00
OSS     2.44  39 P     20 40.70    0.4
LOMF    2.65 344 P     20 43.69    0.4
SLE     2.98   7 eP    20 47.50   -0.4
FEL     3.07   1 eP    20 48.50   -0.7
MOF     3.09 350 P     20 48.13   -1.3
BSF     3.12 346 Pn    20 49.50   -0.4
                Sn     21 25.60
HAU     3.37 342 Pn    20 53.10   -0.4
                Sn     21 30.90
SMF     3.39 304 Pn    20 53.80    0.0
                Sn     21 30.30
                Sg     21 49.20
ECH     3.45 352 P     20 53.95   -0.5
                S      21 33.16
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15d 00h

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LBF      3.51 310 Pn    20 55.40   0.0
                  Sn    21 33.40
                  Sg    21 52.00
WTTA     3.57  45 iPgd  20 57.40   1.0
                  iSg   21 38.80
WLS      3.62 354 P     20 56.21  -0.8
CDF      3.63 353 Pn    20 56.30  -0.9
                  Sn    21 37.20
VITF     3.66 339 P     20 57.09  -0.5
LOR      3.75 312 Pn    20 58.40  -0.4
                  Sn    21 39.70
AVF      3.76 303 Pn    20 58.90   0.0
                  Sn    21 39.00
SSF      3.81 308 Pn    20 58.30  -1.4
                  Sn    21 40.30
                  Sg    22 03.00
BGF      3.96 298 Pn    21 01.50  -0.3
                  Sn    21 44.30
                  Sg    22 05.30
MAF      4.02 292 Pn    21 01.90  -0.7
                  Sn    21 44.10
                  Sg    22 09.00
CAF      4.16 274 Pn    21 04.00  -0.7
                  Sn    21 49.40
TRI      4.22  76 eP    21 47.70  42.2X
TCF      4.27 292 Pn    21 06.20  -0.1
                  Sn    21 52.60
HYF      4.42 306 Pn    21 08.20  -0.1
                  Sn    21 55.30
RJF      4.56 278 Pn    21 10.20  -0.2
LSF      4.71 290 Pn    21 12.30  -0.3
                  Sn    22 02.80
GEC2     5.66  42 Pn    21 23.80  -2.1
                  Sn    22 24.00
KHC      5.80  40 ePn   21 26.00  -1.9
                  e     21 38.50
                  e     22 27.00
                  eSg   22 30.40
MFF      5.92 290 Pn    21 29.00  -0.6
                  Sn    22 29.70
LPF      6.98 301 Pn    21 42.90  -1.5
FLN      6.99 307 Pn    21 42.80  -1.8
                  Sn    22 56.00
     S.D. = 1.1  on  66 of  68 obs.
-----------------------------------
*  NOV  15, 1993  01h 03m 00.22± 0.54s
   22.337 S ± 7.7km  170.360 E ±10.4km
   DEPTH =  17.5km  (  6 depth phases)
   5.1mb ( 21 obs.)  4.9Msz (  5 obs.)
 LOYALTY ISLANDS REGION          (189)

DZM      3.64 273 iPc   03 58.90   1.8
                  iS    04 44.40
BKM      5.05 336 iPd   04 14.50  -2.5
                  iS    05 29.00
HNR     16.26 320 eP    06 50.00   0.5
ARMA    18.60 240 iPd   07 23.90   5.2X
        1.1s    80.00nm         4.8mb
                  e     10 11.00
MNG     18.73 168 eP    07 19.80  -0.4
CAW     19.13 169 eP    07 24.20  -0.8
MRW     19.19 170 eP    07 26.10   0.4
BLW     19.46 168 P     07 26.90  -2.0
THZ     19.49 174 eP    07 31.80   2.5
RIV     20.41 232 eP    07 43.10   4.1X
                  iS    11 42.00
LTZ     20.45 176 eP    07 39.60   0.1
        1.3s   215.00nm         5.3mb
CNB     22.43 230 eP    08 03.90   4.3X
        1.3s   187.00nm         5.4mb
CTA     22.58 271 iPc   08 03.20   2.1
        1.5s    34.72nm         4.6mb
     Z  18s     4.54um         4.9Msz
                  i     08 09.00  21km
                  i     08 23.50
                  eS    12 19.50
CAN     22.69 231 iPc   08 06.30   4.2X
                  i     08 10.40  15km
                  i     08 12.50
                  e     08 43.40
BWA     22.70 233 iPc   08 04.30   2.1
                  i     08 09.20  18km
                  i     08 11.90
TOO     26.25 229 eP    08 43.10   6.9X
        1.2s    69.00nm         5.2mb
STK     27.25 243 iPc   08 42.40  -3.0
        1.6s     4.60nm         3.9mb X
ASPA    33.53 261 iPc   09 41.20  -0.1
        1.2s    13.50nm         4.8mb
     Z  22s     3.20um         5.0Msz
                  ipP   09 47.70  22km
WR2     33.61 267 iPd   09 41.10  -0.8
        1.2s    11.70nm         4.7mb
                  id    09 47.40  22km
WRA     33.63 267 P     09 41.50  -0.6
        0.6s     3.20nm         4.4mb
MTN     38.47 277 iPd   10 22.90  -0.3
        0.6s    90.00nm         5.7mb
KNA     39.76 272 iPd   10 34.30   0.3
        1.0s   257.00nm         5.9mb
WARB    39.90 255 iPd   10 36.10   1.0
        0.5s    14.00nm         4.9mb
MBL     46.77 261 eP    11 28.50  -2.2
MEEK    47.03 254 eP    11 32.50  -0.3
KLB     47.40 247 eP    11 35.50  -0.1
BAL     48.35 248 eP    11 43.00   0.0
MUN     48.70 246 eP    11 46.20   0.5
        1.0s    40.00nm         5.4mb
MRWA    49.08 250 eP    11 46.00  -2.6
SBA     55.60 181 eP    12 37.70   1.0
LEM     62.25 274 ePc   13 24.00   0.0
MAT     65.97 332 eP    13 48.00   0.4
        1.1s    12.66nm         5.0mb
SPA     67.80 180 ePc   14 06.40   7.3X
        1.0s    50.00nm         5.6mb
KGM     69.65 281 eP    14 16.50   5.3X
IPM     72.80 282 ePd   14 34.90   4.8X
SNG     74.27 285 eP    14 45.30   6.7X
TIA     76.94 318 eP    14 53.80   0.3
CN2     77.64 328 eP    14 56.00  -1.1
     Z  20s     0.50um         4.8Msz
GYA     78.44 305 P     15 04.40   2.3
NST     78.45 292 eP    15 08.00   5.9X
KHT     79.37 291 eP    15 04.80  -2.4
BJI     79.99 321 eP    15 13.00   3.0X
        1.5s    17.00nm         4.8mb
     Z  20s     0.60um         4.9Msz
KMI     80.79 302 eP    15 17.50   2.6
        1.5s   100.00nm         5.6mb
CHTO    80.89 295 eP    15 14.30  -0.9
        1.0s    19.25nm         5.1mb
XAN     80.96 312 P     15 16.50   1.1
        1.0s     6.30nm         4.6mb
                  pP    15 19.00   8km
LZH     85.57 312 eP    15 39.00   0.0
        1.5s    48.00nm         5.5mb
     Z  25s     0.32um         4.6MszX
                  sP    15 53.00
SNA     87.46 182 e(P)  15 46.50  -1.0
        0.8s    33.00nm         5.7mb
SHL     89.72 298 iP    16 03.00   3.7X
GTA     90.00 313 eP    16 04.60   4.3X
        1.2s     4.00nm         4.5mb
FBA     92.73  17 eP    16 13.20   1.1
                  e     16 23.50  32kmX
SPC    144.28 326 ePKP  22 36.00  -1.0
KSP    145.10 331 ePKP  22 34.00  -4.1X
        1.0s    43.00nm
                  i     22 39.80
PSZ    145.23 324 ePKP  22 38.20  -0.3
BZS    145.55 320 ePKP  22 28.00 -11.0X
BRG    146.09 333 iPKP  22 38.40  -1.3
        1.4s    48.00nm
                  i     22 42.10
SRO    146.14 325 ePKP  22 27.30 -12.6X
                  e     22 40.70
CLL    146.15 334 ePKP  22 42.00   2.2
        1.6s    59.00nm
PRU    146.49 331 PKP   22 44.80   4.4X
                  i     22 54.90
ZST    146.52 327 i(PKP)22 38.80  -1.7
MOX    147.22 335 ePKP  22 48.00   6.4X
        1.4s    25.00nm
SKO    147.47 314 iPKP  22 44.00   1.8
                  i     22 47.00
                  i     23 08.00
KHC    147.55 331 ePKP  22 43.10   0.9
        1.0s    16.10nm
                  e     22 48.40
                  e     22 55.50
                  e     23 07.50
GEC2   147.70 331 e(PKP)22 43.00   0.5
        0.7s     1.40nm
GEC2   147.70 331 e(PKP)22 48.80   6.3X
        0.8s     8.80nm
GRF    148.13 334 ePKP  22 47.20   4.1X
     Z  18s     0.20um         4.9Msz
OHR    148.29 313 ePKP  22 50.00   6.4X
LJU    149.26 326 ePKP  22 49.50   4.5X
LJU    149.26 326 ePKP  22 53.50   8.5X
                  e     23 21.50
MOTA   149.98 331 iPKPd 22 51.80   5.6X
     S.D. = 1.5  on  45 of  69 obs.
-----------------------------------
?  NOV  15, 1993  01h 18m 50.96± 1.91s
   11.882 S ±15.5km  165.376 E ±16.5km
   DEPTH = 138.5 ± 17.2 km
   4.4mb (  5 obs.)
 SANTA CRUZ ISLANDS              (184)

HNR      5.86 294 eP    20 17.00   0.2
                  eS    21 19.00
BKM      6.39 155 iPc   20 23.00  -0.9
                  iS    21 43.50
DZM     10.18 174 iPc   21 06.60  -8.3X
                  iS    23 02.60
CTA     20.10 244 iPd   23 17.50   1.6
        1.5s    69.44nm         4.8mb
ARMA    22.42 213 eP    23 40.70   1.7
        0.9s    13.00nm         4.3mb
STK     29.60 224 eP    24 40.70  -4.4X
        3.0s     1.40nm         3.2mb X
WR2     30.84 251 eP    24 55.30  -0.9
        1.0s     7.30nm         4.4mb
ASPA    32.10 244 iPd   25 06.60  -0.6
        1.3s    10.10nm         4.5mb
     Z  22s     0.50um         4.2Msz
TTA     80.33  17 (P)   30 50.34   2.6
        0.5s     1.62nm         4.0mb
GUN     86.41 299 P     31 19.20  -0.5
PKI     86.72 299 P     31 20.80  -0.4
KKN     86.89 299 P     31 21.00  -0.9
DMN     86.99 299 P     31 22.00  -0.4
GKN     87.49 299 P     31 23.20  -1.5
     S.D. = 1.5  on  12 of  14 obs.
-----------------------------------
*  NOV  15, 1993  02h 01m 44.26± 1.54s
   17.325 S ±15.7km   71.826 W ±12.5km
   DEPTH =  33.0km  (normal)
 NEAR COAST OF PERU              (115)
      Felt (II) at Arequipa.

ARE      0.92  21 iPd   01 59.70  -1.4
                  iS    02 10.70
LPB      3.65  78 P     02 41.00   0.7
LPAZ     3.69  74 P     02 41.00   0.1
CNCB     3.71  83 P     02 42.10   0.9
MOCB     7.03 125 P     03 27.00  -1.0
NNA      7.19 317 eP    03 30.50   0.6
        0.4s     8.47nm         5.1mb
                  eS    04 48.80
     S.D. = 1.2  on   6 of   6 obs.
-----------------------------------
?  NOV  15, 1993  02h 15m 13.47± 4.44s
   15.920 N ±43.2km   98.958 W ±14.5km
   DEPTH =  33.0km  (normal)
   3.5mb (  1 obs.)
 OFF COAST OF GUERRERO, MEXICO   ( 65)

ACX      1.28 318 iPd   15 33.77  -1.4
OXX      2.43  61 iPc   15 51.71  -0.3
                  iS    16 29.05
III      2.49 349 iP    15 56.75   4.0X
                  (S)   16 27.00
PPM      3.15   6 iP    16 03.00   0.7
                  (S)   16 50.94
IIA      3.22   5 (P)   16 09.15   6.2X
IISM     3.40  26 (P)   16 05.30  -0.2
                  (S)   16 59.29
MRX      4.32 331 (P)   16 29.92  11.3X
                  (S)   17 21.91
UYO     18.62  12 iPc   19 29.50  -0.9
ALQ     20.10 342 eP    19 49.60   2.1
        1.0s     2.50nm         3.5mb
     S.D. = 1.6  on   6 of   9 obs.
-----------------------------------
?  NOV  15, 1993  02h 22m 54.52± 2.49s
   16.055 N ±24.7km   98.862 W ±11.5km
   DEPTH =  33.0km  (normal)
   4.1mb (  3 obs.)
 NEAR COAST OF GUERRERO, MEXICO  ( 58)
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ACX     1.25 310 iPc    23 13.20  -2.6
OXX     2.29  63 iPc    23 30.99   0.0
                iS      23 58.04
III     2.38 346 iP     23 32.50   0.2
                (S)     24 05.50
PPM     3.00   4 eP     23 41.50   0.1
                iS      24 28.05
IIA     3.08   4 (P)    23 41.97   0.0
IISM    3.24  26 (P)    23 43.48  -0.8
                (S)     24 36.97
UNM     3.27 355 (P)    23 53.30   8.3X
CRX     3.42 347 (P)    23 49.00   1.8
MRX     4.25 329 (P)    24 08.99  10.4X
                (S)     25 04.95
LVVM    4.32  32 (P)    24 02.50   2.9X
LTX    13.94 342 (P)    26 15.98   4.0X
UYO    18.47  12 iPc    27 05.60  -4.0X
MEO    18.65   1 e(P)   27 11.10  -0.8
MIAR   19.02  13 eP     27 14.70  -1.6
       0.7s     3.63nm          3.7mb
TUL    19.96   7 iPc    27 13.30 -13.5X
MYNC   23.08  32 (P)    27 58.13  -0.2
       0.8s     8.38nm          4.3mb
PV10   23.97 340 eP     28 07.01  -0.2
PV08   24.03 341 eP     28 09.62   1.8
GOL    24.23 348 eP     28 10.82   1.1
       0.7s     4.21nm          4.1mb
MSU    25.25 335 (P)    28 20.60   1.1
     S.D. = 1.3  on  14 of  20 obs.
-------------------------------------
% NOV  15, 1993  02h 41m 05.21± 0.63s
  28.014 S ± 6.4km   26.832 E ± 7.2km
  DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)
     ML 3.0 (PRE).

SEK     0.76 114 iPc    41 21.30   0.6
                S       41 30.40
BLF     1.23 207 eP     41 28.00  -0.6
                S       41 45.00
SWZ     1.57 301 iPc    41 34.00   0.0
                S       41 54.60
KSR     2.14   2 eP     41 43.00   0.8
                S       42 09.50
FRS     2.18 217 eP     41 43.00   0.4
                S       42 09.00
SLR     2.61  30 eP     41 48.60  -0.3
                S       42 19.50
BFT     3.69  52 eP     42 03.50  -0.8
                S       42 45.50
     S.D. = 0.8  on   7 of   7 obs.
-------------------------------------
% NOV  15, 1993  02h 48m 10.61± 0.52s
  41.781 S ± 5.4km  172.248 E ± 4.6km
  DEPTH =   5.0km  (geophysicist)
 SOUTH ISLAND, NEW ZEALAND         (162)
     ML 3.7 (WEL).

DSZ     0.34 276 Pc     48 18.20   0.8
THZ     0.49  88 Pc     48 20.50   0.0
                S       48 27.30
QRZ     0.98  13 P      48 29.20  -0.4
LTZ     1.00 179 P      48 30.60   0.5
KHZ     1.15 124 P      48 33.60   1.0
CCW     1.47  89 P      48 39.50   1.7
DIW     1.60  53 P      48 39.70   0.1
TCW     1.63  70 P      48 40.30   0.3
WVZ     1.71 220 eP     48 40.50  -0.7
MRW     1.92  74 eP     48 44.50   0.2
MQZ     1.95 171 P      48 43.40  -1.2
KIW     2.21  66 P      48 49.30   0.9
CAW     2.22  73 P      48 48.80   0.1
BLW     2.46  81 P      48 50.90  -1.1
MTW     2.52  77 P      48 51.80  -1.1
AMW     2.68  81 P      48 54.40  -0.7
MNG     2.70  66 P      48 55.10  -0.4
     S.D. = 0.9  on  17 of  17 obs.
-------------------------------------
? NOV  15, 1993  02h 55m 54.68± 1.44s
  31.695 S ±26.1km   68.869 W ±17.7km
  DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA      (137)

RTCB    0.22  16 iPd    56 09.30  -0.2
                S       56 22.00
RTCV    0.33 120 iPd    56 09.50  -0.2
                S       56 21.90
RTLL    0.50  43 iPd    56 11.10   0.4
                S       56 53.20
CFA     0.54  81 eP     56 11.20   0.1
                S       56 21.00
MRA     2.78 106 ePd    56 38.50   0.4
                S       57 13.70
TCA     3.67  86 e(P)   56 50.00  -0.5
     S.D. = 0.4  on   6 of   6 obs.
-------------------------------------
? NOV  15, 1993  03h 09m 34.87± 1.18s
  16.783 S ±31.6km  179.499 W ±25.6km
  DEPTH = 500.0km  (geophysicist)
  4.5mb (  9 obs.)
 FIJI ISLANDS REGION               (181)

DZM    14.26 246 iPc    12 39.70   1.6
ARMA   29.63 238 eP     15 01.00   0.3
       0.7s     4.00nm          4.1mb
PMG    33.25 278 eP     15 33.00   1.6
CNB    33.31 230 iPd    15 32.10   0.3
       0.6s    17.00nm          4.8mb
TOO    37.09 229 iPc    16 03.70   0.6
       0.6s    17.00nm          4.8mb
STK    38.28 240 iPd    16 08.20  -4.7X
       0.6s     7.10nm          4.4mb
WR2    43.80 259 iPd    16 55.80  -1.5
       0.4s     5.20nm          4.4mb
WRA    43.82 259 P      16 56.50  -1.0
       0.6s     2.70nm          4.0mb
ASPA   44.11 253 iPd    16 59.10  -0.6
       0.5s    66.70nm          5.4mb
                ipP     18 55.70 707kmX
                eS      22 50.70
MTN    47.80 268 iPc    17 27.70  -0.4
       0.4s    27.00nm          5.0mb
FORT   49.56 244 eP     17 39.80  -1.4
       0.4s     5.00nm          4.3mb
CLL   144.14 347 iPKP   28 12.50  -1.8
       0.8s    15.00nm
BRG   144.32 345 iPKP   28 13.80  -0.9
       0.8s    12.00nm
GRF   146.05 348 ePKP   28 19.60   2.0
GEC2  146.26 344 ePKPc  28 19.30   1.2
       1.0s     2.73nm
CDF   147.97 351 ePKP   28 24.00   3.2X
       0.8s     5.10nm
FLN   148.10   1 ePKP   28 23.80   2.9X
       0.4s     5.05nm
LDF   148.27   1 ePKP   28 24.10   2.9X
       0.3s     3.90nm
GRR   148.46   2 ePKP   28 24.90   3.5X
       0.4s     8.15nm
HAU   148.49 352 ePKP   28 25.00   3.4X
       0.4s     2.05nm
BSF   148.61 352 ePKP   28 25.20   3.3X
LPF   148.81   2 ePKP   28 25.90   3.9X
       0.5s     8.90nm
LOR   149.47 355 ePKP   28 27.70   4.6X
       0.8s    10.50nm
SSF   149.71 356 ePKP   28 28.40   5.0X
       0.7s     6.50nm
LBF   149.75 355 ePKP   28 28.40   4.9X
       0.6s     3.50nm
AVF   149.99 356 ePKP   28 28.60   4.8X
       0.3s     1.55nm
BGF   150.25 357 ePKP   28 29.50   5.3X
       0.5s     4.25nm
MFF   150.26   1 ePKP   28 29.50   5.3X
       0.7s     9.50nm
TCF   150.55 358 ePKP   28 30.10   5.4X
       0.7s     6.15nm
MAF   150.60 357 ePKP   28 30.50   5.7X
       0.8s     8.85nm
LSF   150.61 359 ePKP   28 30.00   5.2X
       0.8s     8.60nm
LPL   150.88 351 ePKP   28 31.90   6.4X
       0.5s     4.00nm
LPG   150.90 351 ePKP   28 31.90   6.3X
       0.5s     1.80nm
RJF   151.55 358 ePKP   28 32.40   6.2X
       0.7s     4.95nm
CAF   151.91 358 ePKP   28 33.40   6.6X
       0.4s     1.60nm
LFF   151.93 360 ePKP   28 33.80   7.1X
LPO   152.18 359 ePKP   28 33.80   6.7X
       0.6s     2.45nm
EPF   153.84   0 ePKP   28 38.20   8.7X
       0.9s     6.90nm
     S.D. = 1.4  on  14 of  38 obs.
-------------------------------------
  NOV  15, 1993  05h 03m 46.19± 0.61s
  39.368 N ± 6.5km    0.765 W ± 8.8km
  DEPTH =  10.0km  (geophysicist)
 SPAIN                             (377)
     mbLg 3.1 (MDD).

ACU     0.90 162 eP     04 03.57   0.1
                e       04 14.50
EVIA    1.54 242 eP     04 14.60   0.8
                e       04 34.60
EALH    1.59 199 eP     04 13.76  -0.7
                e       04 32.70
EROQ    1.71  31 eP     04 17.44   1.3
                e       04 40.60
ETOR    1.76 326 eP     04 21.65   4.7X
                e       04 42.50
EBAN    2.65 244 eP     04 29.56  -0.2
                e       05 00.50
PAB     2.78 275 ePn    04 24.00  -7.7X
                ePb     04 29.20
                eSn     05 06.00
                eSg     05 18.00
ESEL    2.86  81 eP     04 32.75   0.1
                e       05 03.50
EPF     3.75  12 Pn     04 46.40   1.0
                Sn      05 42.40
LPO     5.51  15 Pn     05 08.90  -1.3
CAF     5.94  20 Pn     05 15.10  -1.2
     S.D. = 1.1  on   9 of  11 obs.
-------------------------------------
? NOV  15, 1993  05h 17m 51.11± 5.07s
  28.764 N ±12.6km   34.657 E ±35.7km
  DEPTH =  10.0km  (geophysicist)
 EGYPT                             (553)

BADA    0.39 128 iPd    17 58.67  -0.4
                iS      18 02.33
SRFA    0.49  70 iPc    18 00.33  -0.8
HQL     0.61  34 iPc    18 03.33  -0.1
                iS      18 09.33
AYN     1.18  85 iP     18 14.40   1.2
                iS      18 28.53
     S.D. = 1.5  on   4 of   4 obs.
-------------------------------------
? NOV  15, 1993  05h 35m 13.69± 3.70s
  28.766 N ±10.0km   34.730 E ±27.6km
  DEPTH =  10.0km  (geophysicist)
 EGYPT                             (553)

BADA    0.34 135 iPd    35 20.53  -0.2
                iS      35 25.33
SRFA    0.43  68 iPc    35 22.00  -0.5
HQL     0.57  29 iPc    35 25.33   0.0
AYN     1.12  84 iPc    35 35.33   0.7
     S.D. = 0.9  on   4 of   4 obs.
-------------------------------------
  NOV  15, 1993  06h 13m 46.57± 0.31s
  33.690 N ± 4.9km  137.029 E ± 3.6km
  DEPTH = 365.0 ±  2.8 km
  4.6mb ( 38 obs.)
 NEAR S. COAST OF HONSHU, JAPAN    (230)

WKYJ    1.30 294 P      14 36.60   1.0
                S       15 14.70
IIDJ    1.93  22 iPd    14 39.40   0.2
TSRJ    2.03 335 P      14 40.80   1.0
                eS      15 22.30
TKSJ    2.50 278 iP     14 44.40   1.1
                eS      15 28.80
CHJJ    2.85  34 iPd    14 46.40   0.2
                S       15 33.60
MTMJ    2.96  12 iPd    14 47.60   0.4
MAT     3.00  18 iPd    14 47.40  -0.1
                iS      15 34.80
YONJ    3.30 298 P      14 51.40   1.2
                S       15 42.90
KAKJ    3.60  45 iPd    14 50.80  -2.2
                S       15 39.30
SHK     3.71 284 iP     14 54.90   0.9
       0.8s   328.36nm
NIIJ    3.89  24 iP+    14 55.30  -0.5
                eS      15 49.70
SHNJ    4.94 277 P      15 08.00   1.3
                eS      16 12.80
```

15d 06h

```
YAMJ    5.10  28 P     15 07.50  -0.9
                eS     16 10.10
KUMJ    5.33 259 P     15 12.50   1.5
                eS     16 19.00
KAGJ    5.76 246 P     15 17.30   1.5
                eS     16 28.90
OFUJ    6.55  33 P     15 23.10  -1.6
                eS     16 37.40
AOMJ    7.36  20 eP    15 34.00  -0.1
MRRJ    9.28  19 eP    15 55.50  -1.3
                eS     17 38.70
HOOJ    9.98  28 eP    16 04.40  -0.7
                eS     17 52.70
KUSJ   11.15  30 P     16 18.10  -1.1
                eS     18 17.20
ASAJ   11.29  21 eP    16 19.20  -1.6
                eS     18 20.30
MDJ    12.34 334 eP    16 32.70  -0.6
       1.1s    36.00nm          4.7mb
SNY    13.38 311 Pd    16 44.20  -1.1
       1.0s    32.00nm          4.7mb
CN2    13.54 322 eP    16 45.80  -1.2
       1.0s    23.00nm          4.6mb
SSE    13.64 263 Pd    16 46.50  -1.6
       1.0s    21.00nm          4.5mb
NJ2    15.36 269 Pc    17 06.40  -0.3
       1.0s   100.00nm          5.1mb
TIA    16.51 284 P     17 18.20  -0.5
       0.8s   150.00nm          5.4mb
BJI    17.83 297 eP    17 32.00  -0.1
       1.0s    17.00nm          4.3mb
                eS     20 40.00
WHN    19.46 267 Pd    17 49.80   1.6
       0.5s   200.00nm          5.7mb X
                S      21 10.00
TIY    20.36 288 eP    17 57.80   0.8
HHC    21.44 297 P     18 08.00   0.4
       1.0s    40.00nm          4.7mb
XAN    23.32 279 P     18 24.00  -1.0
       0.7s    24.00nm          4.7mb
                pP     18 27.50  13kmX
GYA    27.18 263 iPd   18 59.40  -0.7
       1.0s   110.00nm          5.2mb
                S      23 10.00
CD2    28.19 274 iPd   19 07.50  -1.4
       0.6s   100.00nm          5.3mb
GTA    30.29 292 eP    19 26.80  -0.4
       1.2s     9.00nm          4.0mb
CHTO   37.00 256 iPd   20 24.30   0.1
       0.7s    25.57nm          4.7mb
LSA    39.00 277 P     20 42.10   1.1
       1.0s     7.00nm          3.9mb
NNT    39.90 247 iPc   20 48.50   0.5
SNG    42.75 240 eP    21 12.00   1.0
GUN    43.95 277 P     21 21.20   0.3
       0.6s    31.00nm          4.7mb
IPM    44.26 237 ePd   21 22.30  -0.7
       0.8s    67.70nm          5.0mb
PKI    44.46 277 P     21 24.60  -0.3
KKN    44.49 277 P     21 25.20   0.2
       0.6s    31.00nm          4.7mb
DMN    44.70 277 P     21 26.40  -0.3
GKN    44.95 277 P     21 28.40  -0.1
KNA    49.79 190 eP    22 04.30  -1.1
       1.0s    48.00nm          4.8mb
TTA    50.19  33 eP    22 08.30   0.1
SVW    50.31  36 eP    22 09.60   0.5
NDI    50.80 281 iPd   22 12.00  -1.1
BRW    50.87  22 eP    22 13.60   0.6
IMA    51.37  29 ePc   22 16.27  -0.6
       0.9s     6.43nm          4.0mb
WRA    53.39 183 P     22 30.50  -1.5
WR2    53.40 183 iPc   22 30.10  -1.9
       0.3s   107.50nm          5.7mb X
                epP    23 05.90 155kmX
PMR    53.43  35 ePc   22 30.22  -1.6
       0.9s    60.31nm          4.9mb
FBA    53.82  31 eP    22 33.94  -0.7
       0.8s     8.52nm          4.1mb
CTA    54.20 169 iPc   22 36.50  -1.3
HYB    54.52 268 iPd   22 39.50  -0.8
       1.0s    40.00nm          4.7mb
TOA    54.77  34 eP    22 41.70   0.1
BALM   56.74  35 eP    22 54.21  -1.3
ASPA   57.12 183 iPd   22 56.60  -1.7
       0.6s    49.20nm          5.1mb
GBA    57.36 265 Pd    22 59.70  -0.5
       0.8s     6.00nm          4.1mb
INK    58.97  26 ePc   23 10.00  -0.5
       0.6s     5.00nm          4.1mb
MBC    60.72  15 eP    23 22.50   0.3
       0.6s     5.00nm          4.2mb
DZM    62.13 149 iPc   23 32.20   0.0
FORT   64.68 189 iPd   23 47.20  -1.1
       0.5s    25.00nm          5.1mb
STK    65.36 176 iPd   23 46.60  -6.0X
       0.5s     6.90nm          4.6mb
RES    66.69  13 ePc   24 00.50  -0.1
       0.8s     7.00nm          4.4mb
YKA    68.47  28 eP    24 11.00  -0.6
       1.1s    10.30nm          4.5mb
DAG    68.77 354 iPd   24 12.90  -0.3
       0.7s     9.59nm          4.6mb
KMOR   72.72  46 P     24 38.18   1.0
RMW    72.78  44 eP    24 37.51  -0.1
FMW    73.13  45 P     24 40.50   0.7
LON    73.15  45 P     24 40.64   1.0
WTV    73.73  43 P     24 43.00   0.0
SSOR   73.74  47 P     24 43.96   0.8
EBG    73.79  44 P     24 44.11   0.8
SAW    74.04  43 P     24 44.98   0.2
DBO    74.17  49 P     24 46.47   0.9
VBEM   74.17  46 P     24 46.46   0.8
WAH2   74.46  44 P     24 47.80   0.8
CROR   74.57  46 P     24 48.51   0.7
DPW    74.63  42 eP    24 48.41   0.3
NEW    75.01  42 eP    24 50.32   0.1
VIPM   75.04  46 P     24 51.33   0.7
LGPM   75.59  50 eP    24 54.12   0.5
HFS    75.60 334 eP    24 51.80  -1.4
       0.4s     1.50nm          4.1mb
LBFM   75.95  50 eP    24 56.04   0.3
NAO    76.11 336 P     24 55.40  -0.6
       0.9s     4.50nm          4.2mb
ORV    77.17  51 ePc   25 02.39   0.1
                e      25 22.93
KVN    79.64  50 eP    25 16.30   0.6
FRB    80.79  11 eP    25 21.50   0.6
       0.7s     6.00nm          4.5mb
HVU    81.30  45 eP    25 25.40   1.1
TPNV   82.05  51 ePc   25 28.97   0.7
       0.9s    24.89nm          5.0mb
DUG    82.25  47 eP    25 30.15   1.0
       0.6s     7.32nm          4.7mb
GSC    82.66  52 eP    25 31.73   0.5
DAU    83.05  46 ePc   25 34.38   1.0
ARUT   83.34  49 eP    25 35.24   0.5
MSU    83.68  48 ePc   25 37.96   1.5
EMUT   83.69  46 eP    25 37.61   1.1
ULM    84.23  31 eP    25 42.00   3.3X
SRU    84.31  46 ePc   25 40.48   0.9
RSSD   84.69  39 eP    25 41.47   0.0
       0.7s     4.90nm          4.4mb
PV09   85.53  46 ePc   25 46.72   0.9
PV10   85.67  46 ePc   25 47.19   0.8
                e      27 07.99
PV08   85.78  46 ePc   25 47.59   0.6
GLD    87.00  43 ePc   25 54.08   1.4
       1.3s    17.26nm          4.8mb
JAQ    88.36  19 eP    25 58.00  -0.7
LTX    95.00  50 ePc   26 29.87   0.1
LPAZ  151.48  59 PKP   32 52.00  -1.6
                i      33 00.40
LPB   151.67  59 PKP   33 01.00   7.4X
CNCB  151.93  59 PKPc  33 02.40   8.3X
     S.D. = 0.9  on 107 of 111 obs.
-----------------------------------
?  NOV  15, 1993  06h 17m 54.72± 3.78s
   28.817 N ± 8.9km   34.754 E ±28.4km
   DEPTH =  10.0km  (geophysicist)
 EGYPT                            (553)

BADA    0.36 143 iP    18 02.00  -0.2
                iS     18 06.66
SRFA    0.40  73 iP    18 02.10  -0.7
                eS     18 14.13
HQL     0.52  30 iPc   18 05.26   0.0
                iS     18 14.13
AYN     1.09  87 iPd   18 16.20   0.9
                iS     18 31.33
     S.D. = 1.2  on   4 of   4 obs.
-----------------------------------
*  NOV  15, 1993  07h 18m 44.30± 0.35s
   52.187 N ±17.4km  157.910 E ±14.2km
   DEPTH =  33.0km  (normal)
   4.6mb (  8 obs.)
 KAMCHATKA                        (217)

NIIJ   20.01 229 eP    23 16.70  -0.1
KAKJ   20.33 225 eP    23 19.60  -0.6
MAT    20.94 229 iPc   23 26.60   0.1
       0.7s    26.03nm          4.7mb
CHJJ   20.99 227 eP    23 27.30   0.4
MTMJ   21.10 230 eP    23 28.00  -0.2
IIDJ   21.95 228 eP    23 37.60   0.9
WKYJ   24.07 230 eP    23 59.90   2.5
YONJ   24.34 235 eP    24 00.20   0.2
TKSJ   25.00 233 P     24 08.30   1.9
TTA    26.35  48 eP    24 19.50   0.7
IMA    27.60  41 eP    24 29.07  -1.2
       0.6s     3.63nm          4.2mb
FBA    30.01  44 eP    24 51.90   0.2
       0.8s    17.90nm          4.9mb
INK    35.40  37 eP    25 39.00   0.6
       1.0s     2.00nm          4.0mb
MBC    38.40  22 eP    26 04.50   0.9
LBFM   53.31  68 ePc   28 03.54   1.2
ORV    54.72  69 ePc   28 12.56   0.1
KVN    57.00  67 eP    28 29.94   0.8
MEMM   57.47  69 eP    28 33.32   1.2
BONR   57.64  68 eP    28 33.60  -0.1
DUG    59.17  63 eP    28 44.74   0.5
       0.9s     8.61nm          4.9mb
DAU    59.87  62 eP    28 49.61   0.4
MSU    60.70  64 ePc   28 55.20   0.4
RSSD   61.02  55 ePc   28 56.15  -0.7
       0.8s    25.69nm          5.4mb
SRU    61.19  63 ePc   28 58.12   0.1
PV09   62.38  62 eP    29 05.38  -0.9
PV10   62.52  62 ePc   29 07.19   0.1
PV08   62.59  62 eP    29 07.36  -0.3
LTX    72.22  65 ePc   30 07.41  -0.6
                e      30 22.74
UYO    73.39  56 iPd   30 13.10  -1.5
GBA    73.55 271 P     30 13.00  -2.7
WR2    74.71 203 eP    30 19.50  -2.8
       0.7s     2.40nm          4.3mb
WRA    74.71 203 P     30 21.39  -0.9
ASPA   78.40 202 eP    30 42.30  -0.6
       1.2s     4.50nm          4.4mb
     S.D. = 1.1  on  33 of  33 obs.
-----------------------------------
%  NOV  15, 1993  07h 26m 12.72± 0.49s
   40.199 S ± 6.3km  173.470 E ± 7.4km
   DEPTH = 200.0km  (geophysicist)
 COOK STRAIT, NEW ZEALAND         (163)

DIW     0.69 150 Pd    26 41.50   0.6
NRZ     0.93  23 P     26 43.40   1.1
QRZ     0.95 229 Pc    26 42.90   0.5
                S      27 03.30
TCW     1.18 149 P     26 44.70   0.7
BSZ     1.19  71 P     26 45.20   1.1
KIW     1.28 122 eP    26 45.00   0.1
MRW     1.39 138 Pc    26 46.40   0.6
                eS     27 08.30
WEL     1.47 138 P     26 46.80   0.4
                eS     27 09.50
CAW     1.52 127 Pc    26 47.40   0.5
MNG     1.59 106 P     26 48.20   0.6
                S      27 11.60
THZ     1.62 195 Pc    26 48.20   0.3
                eS     27 11.70
MTW     1.82 122 P     26 49.90   0.2
CNZ     1.89  59 eP    26 50.70   0.1
BLW     1.92 128 P     26 50.20  -0.5
NGZ     1.94  59 P     26 51.30   0.2
MOZ     1.98  32 P     26 51.70   0.3
DSZ     2.00 219 P     26 51.90   0.3
MGZ     2.00  54 P     26 52.00   0.4
AMW     2.06 123 P     26 52.50   0.3
KHZ     2.22 179 P     26 53.80   0.0
WAHZ    2.27  78 P     26 54.50   0.0
LTZ     2.73 199 P     26 59.60  -0.1
                S      27 31.70
URZ     3.43  57 eP    27 07.10  -0.8
WVZ     3.53 215 eP    27 07.50  -1.6
MQZ     3.56 190 eP    27 07.90  -1.6
NOZ     3.87  67 eP    27 12.90  -0.5
PUZ     4.28  62 eP    27 17.40  -1.2
HBZ     4.58  57 eP    27 20.40  -1.9
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     S.D. = 0.8  on  28 of  28 obs.
-------------------------------------
?  NOV  15, 1993  07h 56m 46.22± 4.93s
   28.711 N ±13.3km   34.674 E ±34.3km
   DEPTH =  10.0km  (geophysicist)
 EGYPT                              (553)

BADA     0.34 123 iPc    56 53.00  -0.3
                  iS     56 55.67
SRFA     0.50  64 iPc    56 55.80  -0.6
                  iS     57 02.80
HQL      0.65  30 iPc    56 59.13   0.0
AYN      1.17  82 iPc    57 09.00   0.9
                  iS     57 24.33
     S.D. = 1.1  on   4 of   4 obs.
-------------------------------------
%  NOV  15, 1993  08h 15m 04.55± 1.06s
   43.048 N ± 7.0km   18.743 E ± 6.1km
   DEPTH =   5.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION         (383)

BRY      0.21 225 iPgd   15 09.03   0.2
                  iSg    15 12.05
NKY      0.30 141 iPgd   15 11.03   0.4
                  iSg    15 15.91
PLE      0.55  59 iPgd   15 15.65   0.0
                  iSg    15 23.99
HCY      0.63 197 iPgd   15 16.94  -0.2
                  iSg    15 26.15
TTG      0.73 148 iPgc   15 18.93  -0.1
                  iSg    15 30.06
BDV      0.77 175 iPgd   15 19.64  -0.3
                  iSg    15 31.12
IVA      0.87 101 iPgd   15 21.55  -0.2
                  iSg    15 34.68
PVY      1.01 116 iPgc   15 24.37   0.1
ULC      1.15 161 iPgc   15 26.59   0.1
                  iSg    15 43.87
     S.D. = 0.2  on   9 of   9 obs.
-------------------------------------
?  NOV  15, 1993  08h 25m 38.52± 0.97s
   39.084 N ± 8.2km   27.629 E ± 9.9km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)
      ML 2.7 (ISK).

IZM      0.74 203 ePg    25 53.00  -0.1
                  eSg    26 04.80
DST      0.93  56 ePn    25 56.60   0.2
EZN      1.25 307 ePn    26 02.00   0.2
EDC      1.27   8 ePn    26 01.80  -0.4
     S.D. = 0.5  on   4 of   4 obs.
-------------------------------------
?  NOV  15, 1993  08h 37m 48.82± 0.97s
   39.090 N ± 8.2km   27.608 E ± 9.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)
      ML 2.7 (ISK).

IZM      0.74 201 ePg    38 03.30  -0.1
                  eSg    38 15.80
DST      0.94  57 ePn    38 07.10   0.3
EZN      1.24 307 iPn    38 12.00   0.2
EDC      1.27   9 ePn    38 12.00  -0.4
     S.D. = 0.5  on   4 of   4 obs.
-------------------------------------
?  NOV  15, 1993  08h 48m 37.72± 1.09s
   31.301 S ±24.9km   68.498 W ±23.2km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA       (137)

RTLL     0.04 139 iPd    48 52.00  -0.1
                  S      49 03.00
RTCB     0.32 234 iPd    48 52.80   0.1
                  S      49 04.00
CFA      0.38 144 eP     48 53.00   0.0
RTCV     0.56 183 iPd    48 54.20   0.0
                  S      49 07.00
RTPR     1.98  60 eP     49 10.50   0.0
                  S      49 36.00
     S.D. = 0.1  on   5 of   5 obs.
-------------------------------------
?  NOV  15, 1993  08h 58m 17.68± 0.96s
   39.113 N ± 8.1km   27.631 E ± 9.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)
      ML 2.7 (ISK).

IZM      0.77 202 ePg    58 32.80   0.1
                  eSg    58 44.80
DST      0.92  57 ePn    58 35.10  -0.1
EZN      1.24 306 ePn    58 40.50  -0.1
EDC      1.24   8 ePn    58 41.00   0.2
     S.D. = 0.3  on   4 of   4 obs.
-------------------------------------
%  NOV  15, 1993  09h 22m 08.57± 0.73s
   40.339 N ± 5.6km   23.190 E ± 6.0km
   DEPTH =   5.0km  (geophysicist)
 GREECE                             (364)

SOH      0.50  14 ePg    22 18.14  -0.4
                  eSg    22 24.42
PAIG     0.56 137 ePg    22 20.14   0.4
                  eSg    22 29.18
LIT      0.59 246 ePg    22 20.02  -0.3
OUR      0.61  90 ePg    22 20.26  -0.4
                  eSg    22 28.66
SRS      0.84  21 ePg    22 25.50   0.3
KNT      0.85 345 ePg    22 25.90   0.4
                  eSg    22 38.50
     S.D. = 0.5  on   6 of   6 obs.
-------------------------------------
*  NOV  15, 1993  10h 08m 59.34± 2.59s
   42.194 N ±11.5km  125.726 W ±21.5km
   DEPTH =  10.0km  (geophysicist)
 OFF COAST OF OREGON                ( 30)

DBO      2.05  62 P      09 34.17  -0.2
                  S      10 00.60
RNO      2.25  40 P      09 36.80  -0.5
HSO      2.35  55 P      09 38.30  -0.4
                  S      10 06.84
BBOR     2.36  72 P      09 38.87   0.0
LGPM     2.52 120 eP     09 41.11   0.0
                  eS     10 08.60
MPOR     2.80  34 P      09 44.15  -1.0
HBO      2.99  55 P      09 48.25   0.4
SSOR     3.57  41 P      09 56.48   0.5
KMOR     3.80  24 P      09 59.59   0.3
BPO      3.83  49 P      10 00.80   1.0
NLO      4.22  22 P      10 05.86   0.6
LVP      4.55  31 P      10 09.80  -0.1
MTMW     4.59  32 P      10 09.78  -0.7
BMW      4.64  22 (P)    10 11.09  -0.1
     S.D. = 0.6  on  14 of  14 obs.
-------------------------------------
?  NOV  15, 1993  10h 16m 10.72± 1.03s
   39.116 N ± 8.7km   27.574 E ±10.4km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)
      ML 2.8 (ISK).

IZM      0.76 199 ePg    16 25.30  -0.3
                  eSg    16 37.30
DST      0.95  59 ePn    16 29.50   0.6
EZN      1.20 307 iPn    16 33.60   0.6
EDC      1.25  10 ePn    16 33.00  -0.9
     S.D. = 1.3  on   4 of   4 obs.
-------------------------------------
?  NOV  15, 1993  10h 48m 57.49± 0.94s
   39.108 N ± 8.0km   27.594 E ± 9.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)
      ML 2.8 (ISK).

IZM      0.76 200 ePg    49 12.30   0.0
                  eSg    49 24.30
DST      0.94  58 ePn    49 15.50   0.0
EZN      1.22 307 iPn    49 20.10   0.0
EDC      1.25   9 ePn    49 20.80   0.0
     S.D. = 0.0  on   4 of   4 obs.
-------------------------------------
?  NOV  15, 1993  11h 31m 47.31± 0.98s
   39.122 N ± 8.3km   27.601 E ± 9.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)
      ML 2.7 (ISK).

IZM      0.77 200 ePg    32 02.20  -0.2
                  eSg    32 14.20
DST      0.93  58 ePn    32 05.50   0.4
EZN      1.21 306 ePn    32 10.20   0.3
EDC      1.24   9 ePn    32 09.80  -0.5
     S.D. = 0.8  on   4 of   4 obs.
-------------------------------------
%  NOV  15, 1993  11h 32m 32.48± 2.73s
   38.248 N ±21.1km   27.079 E ±14.9km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)
      ML 3.2 (ISK).

IZM      0.21  44 iPg    32 36.70  -0.3
                  eSg    32 40.70
EZN      1.68 340 ePn    33 01.70  -0.3
DST      1.82  41 ePn    33 04.00  -0.1
KHL      1.92  87 ePn    33 05.70   0.0
EDC      2.18  16 ePn    33 10.00   0.7
     S.D. = 0.6  on   5 of   5 obs.
-------------------------------------
?  NOV  15, 1993  12h 01m 32.89± 1.01s
   39.138 N ± 8.7km   27.650 E ±10.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)
      ML 2.7 (ISK).

IZM      0.80 202 ePg    01 48.20  -0.2
                  eSg    01 58.20
DST      0.89  58 ePn    01 50.50   0.5
EDC      1.22   8 ePn    01 54.80  -0.8
EZN      1.23 304 ePn    01 56.30   0.5
     S.D. = 1.1  on   4 of   4 obs.
-------------------------------------
%  NOV  15, 1993  12h 12m 08.11± 1.27s
   39.480 N ±10.1km    0.211 W ±12.9km
   DEPTH =  10.0km  (geophysicist)
 SPAIN                              (377)
      mbLg 2.7 (MDD).

ECHE     0.60 281 iPc    12 18.93  -1.2
                  e      12 29.20
ACU      0.98 189 eP     12 25.93  -0.8
                  e      12 38.80
EROQ     1.42  19 eP     12 34.15   0.2
                  e      12 53.00
ETOR     1.95 314 eP     12 45.01   3.4X
EVIA     1.97 246 eP     12 43.13   1.1
                  e      13 07.10
EBAN     3.09 246 eP     12 58.46   0.7
                  e      13 36.00
     S.D. = 1.4  on   5 of   6 obs.
-------------------------------------
?  NOV  15, 1993  12h 20m 12.74± 1.05s
   39.140 N ± 8.6km   27.505 E ±17.0km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)
      ML 2.6 (ISK).

IZM      0.76 194 ePg    20 27.70   0.0
                  eSg    20 41.70
DST      0.99  62 ePn    20 31.50   0.0
EDC      1.24  13 ePn    20 35.80   0.1
BNT      1.26  15 ePn    20 36.00  -0.1
     S.D. = 0.1  on   4 of   4 obs.
-------------------------------------
?  NOV  15, 1993  12h 22m 24.36± 6.92s
   33.886 S ±19.3km   71.937 W ±56.4km
   DEPTH =  33.0km  (normal)
 NEAR COAST OF CENTRAL CHILE        (135)
      MD 3.9 (SAN).

LNV      0.44  99 iP+    22 33.06  -1.0
                  iS     22 41.23
LCCH     0.51  37 iP+    22 34.29  -0.8
                  iS     22 43.12
TACH     0.86  75 iP+    22 39.41  -0.7
                  iS     22 53.85
CACH     1.13 102 iP+    22 44.07   0.0
                  iS     23 01.48
ROCH     1.20  41 eP     22 45.06   0.0
PCH      1.21  78 iP     22 45.69   0.5
                  iS     23 04.03
PEL      1.28  55 iP     22 46.63   0.5
                  iS     23 06.80
FCH      1.48  68 iPd    22 49.79   0.5
                  iS     23 11.38
JACH     1.65  44 eP     22 51.97   0.5
                  iS     23 16.03
RFA      3.01 108 ePd    23 11.50   0.7
     S.D. = 0.7  on  10 of  10 obs.
-------------------------------------
?  NOV  15, 1993  12h 34m 40.74± 0.75s
   10.761 S ±22.8km  110.804 E ±27.4km
```

15d 12h

```
   DEPTH =  33.0km  (normal)
   4.6mb (  4 obs.)
 SOUTH OF JAWA, INDONESIA          (282)

LEM      5.02 321 ePc    36 02.60    6.7X
                  eS     36 47.10
MBL     13.49 141 eP     37 44.00   -8.4X
        0.3s     6.00nm          5.1mb
                  eS     40 03.50
MEEK    17.43 156 eP     38 36.50   -6.6X
                  eS     41 34.50
MRWA    18.99 166 eP     38 57.50   -4.8X
                  eS     42 09.00
BAL     20.50 165 eP     39 18.50   -0.2
WR2     24.46 115 iPc    39 57.60   -0.4
        0.5s     7.50nm          4.5mb
ASPA    25.47 123 iPc    40 06.80   -0.9
        0.7s    12.50nm          4.6mb
STK     35.35 131 eP     41 28.70   -6.6X
        0.8s     3.10nm          4.3mb
GUN     45.39 328 P      42 58.20   -0.4
DMN     45.55 327 P      42 59.00   -0.7
KKN     45.61 328 P      43 00.00   -0.1
GKN     46.12 327 P      43 03.40   -0.6
TUL    145.25  40 iPKPd  54 17.80    0.7
UYO    147.20  41 iPKPc  54 23.10    2.7
CCH    151.87 186 ePKP   54 35.00    6.6X
SIV    152.23 197 PKP    54 34.80    6.2X
CNCB   152.58 183 PKP    54 38.00    8.3X
LPAZ   153.10 182 PKP    54 37.30    6.7X
     S.D. = 1.3  on   9 of  18 obs.
-----------------------------------
%  NOV  15, 1993  12h 39m 43.91± 1.68s
   32.631 S ±15.9km   70.660 W ±13.8km
   DEPTH =  60.0km  (geophysicist)
 CHILE-ARGENTINA BORDER REGION   (127)
      MD 3.4 (SAN).

JACH     0.08 132 iP      39 53.26   -0.1
                  iS     40 00.19
ROCH     0.45 221 iP+     39 56.09    0.4
                  iS     40 05.32
PEL      0.51 182 iP      39 55.92   -0.2
                  iS     40 05.09
FCH      0.76 156 iPd     39 59.32    0.0
                  iS     40 10.78
PCH      0.99 173 iP+     40 01.98   -0.1
                  iS     40 16.08
TACH     1.05 193 iP      40 02.66   -0.1
LNV      1.46 205 eP      40 07.96   -0.4
CACH     1.48 178 iP      40 09.51    0.7
                  eS     40 28.95
     S.D. = 0.4  on   8 of   8 obs.
-----------------------------------
?  NOV  15, 1993  13h 22m 10.01± 0.98s
   39.073 N ± 8.3km   27.675 E ± 9.9km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.6 (ISK).

IZM      0.75 206 ePg     22 24.70    0.0
                  eSg    22 37.70
DST      0.91  54 ePn     22 27.40   -0.1
EZN      1.29 306 ePn     22 33.80   -0.1
BNT      1.30   8 ePn     22 34.10    0.1
     S.D. = 0.1  on   4 of   4 obs.
-----------------------------------
%  NOV  15, 1993  13h 27m 59.55± 0.58s
   38.253 S ± 7.3km  176.436 E ± 7.3km
   DEPTH = 130.0km  (geophysicist)
 NORTH ISLAND, NEW ZEALAND         (159)

TAZ      0.06  71 P       28 17.70    0.5
PATZ     0.19 227 P       28 18.40    0.9
UTU      0.21 291 P       28 18.00    0.5
URZ      0.53  91 Pc      28 18.30   -0.7
                  S      28 32.10
WLZ      0.77 300 P       28 20.70    0.0
PAHZ     0.78 142 P       28 21.80    1.0
MGZ      1.03 223 P       28 25.00    1.9
NGZ      1.13 215 P       28 26.10    1.9
CNZ      1.17 216 P       28 26.40    1.8
DRZ      1.23 213 P       28 27.30    1.9
MOZ      1.31 258 Pd      28 27.20    1.4
                  S      28 48.10
NOZ      1.31 107 P       28 26.00    0.2
TTH      1.32 167 P       28 27.70    1.7
WAHZ     1.45 182 P       28 28.70    1.3
PUZ      1.45  83 P       28 26.10   -1.3
                  S      28 45.40
MAHZ     1.47 130 P       28 28.60    1.0
KUZ      1.61 339 P       28 27.50   -1.7
HBZ      1.61  67 P       28 27.90   -1.4
TEHZ     1.76 171 P       28 32.20    1.2
BSZ      1.94 217 P       28 34.70    1.5
NRZ      2.24 240 P       28 39.20    2.3
PGZ      2.37 183 P       28 38.80    0.3
MNG      2.48 197 P       28 40.00    0.0
                  S      29 10.50
KIW      2.86 204 P       28 44.40   -0.6
MTW      2.99 194 P       28 45.80   -0.9
CAW      3.04 200 P       28 46.40   -0.9
AMW      3.10 189 P       28 47.40   -0.6
BLW      3.20 193 P       28 48.50   -0.9
DIW      3.20 217 P       28 48.50   -1.0
MRW      3.26 204 P       28 48.90   -1.3
                  S      29 28.00
WEL      3.29 202 P       28 49.50   -1.1
                  S      29 28.80
MOW      3.29 196 P       28 49.30   -1.4
TCW      3.39 209 P       28 50.50   -1.5
QRZ      3.97 228 P       28 58.20   -1.5
                  S      29 45.10
THZ      4.43 217 P       29 04.00   -2.0
                  S      29 55.50
DSZ      4.98 224 P       29 10.70   -2.7
LTZ      5.53 214 P       29 17.20   -3.6X
                  S      30 18.20
MQZ      6.16 207 P       29 24.40   -4.9X
                  eS     30 31.90
ODZ      8.05 211 eP      29 50.70   -4.3X
TUZ      9.21 211 eP      30 06.90   -3.5X
     S.D. = 1.4  on  36 of  40 obs.
-----------------------------------
%  NOV  15, 1993  14h 49m 41.21± 0.77s
   39.650 N ± 6.9km   29.502 E ± 7.0km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.8 (ISK).

DST      0.68 267 ePg     49 53.70   -1.0
                  eSg    50 04.40
IZI      0.69 358 iPg     49 54.60   -0.3
ALT      0.76 141 ePg     49 56.30    0.2
                  eSg    50 08.80
EYL      1.04  29 ePn     50 00.60   -0.4
BNT      1.41 301 ePn     50 07.60    0.7
EDC      1.44 299 ePn     50 07.80    0.5
ISK      1.45 347 ePn     50 07.70    0.2
     S.D. = 0.7  on   7 of   7 obs.
-----------------------------------
*  NOV  15, 1993  14h 56m 59.89± 0.55s
   30.971 N ± 9.2km  100.761 E ± 6.3km
   DEPTH =  10.0km  (geophysicist)
   4.3mb (  2 obs.)
 SICHUAN, CHINA                    (307)
      ML 4.1 (BJI).

CD2      2.58  91 iPnd    57 44.00    1.6
                  ePg    57 46.50
                  Sg     58 17.40
LZH      5.71  26 eP      58 27.50    0.5
     Z  10s      1.33um
                  eS     59 23.50
KMI      6.08 163 Pnc     58 34.00    1.8
        1.0s    70.00nm          5.4mb X
                  pP     58 43.50
GYA      6.86 129 Pn      58 43.00   -0.1
                  Pg     59 05.00
                  Sg     00 39.00
XAN      7.54  64 Pn      58 48.30   -4.3X
     Z  10s      0.64um
                  Pg     59 14.60
                  Sg     00 51.20
LSA      8.40 264 P       59 08.20    3.2X
                  eS     00 45.00
WHN     11.70  89 eP      59 48.50   -1.3
TIY     11.75  52 eP      59 52.00    1.3
     Z  14s      1.07um
     N  14s      0.51um
HHC     13.17  39 eP      00 13.20    3.5X
     N  10s      0.30um
GUN     13.32 261 P       00 12.00    0.1
PKI     13.82 260 P       00 18.60    0.1
KKN     13.87 261 P       00 18.40   -0.6
DMN     14.07 260 P       00 21.40   -0.3
GKN     14.35 262 P       00 23.40   -1.9
WMQ     16.47 325 P       00 55.00    2.4
CN2     23.32  50 eP      02 07.60   -1.3
        0.8s     5.90nm          4.2mb
HYB     24.28 241 eP      02 21.00    2.6
WRA     60.03 143 P       07 08.40   -0.9
        0.8s     2.60nm          4.4mb
WR2     60.04 143 eP      07 08.00   -1.4
        0.4s    12.40nm          5.4mb X
MBC     70.13   9 eP      08 13.00   -0.9
INK     73.21  18 eP      08 30.50   -1.9
     S.D. = 1.5  on  18 of  21 obs.
-----------------------------------
?  NOV  15, 1993  15h 04m 21.20± 5.11s
   62.190 N ±22.1km   2.984 E ±38.3km
   DEPTH =  10.0km  (geophysicist)
 NORWEGIAN SEA                     (642)
      MD 2.7 (BER).

FOO      1.14 120 iPd     04 43.30    0.8
                  eSg    04 55.07
ASK      2.02 147 eP      04 55.90    0.3
                  eSg    05 22.87
MOL      2.16  78 eP      04 58.43    0.7
                  eSg    05 25.37
EGD      2.21 150 eP      04 58.30   -0.1
                  eSg    05 28.94
NRA0     4.36 106 Pn      05 27.75   -1.2
                  Pg     05 36.52
                  Sg     06 31.67
HFS      5.58 107 eP      05 45.70   -0.5
        0.1s     2.20nm
     S.D. = 1.0  on   6 of   6 obs.
-----------------------------------
?  NOV  15, 1993  15h 53m 17.97± 1.02s
   26.387 S ± 9.1km   27.349 E ±10.0km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)

KSR      0.66 322 eP      53 30.50   -0.7
                  S      53 39.50
SLR      1.06  53 eP      53 39.00    0.5
                  S      53 51.60
SEK      1.94 173 iPc     53 51.30   -0.8
                  S      54 15.20
SWZ      1.97 246 iPd     53 53.60    1.0
                  S      54 16.60
     S.D. = 1.6  on   4 of   4 obs.
-----------------------------------
%  NOV  15, 1993  16h 39m 00.62± 1.09s
   38.943 N ±10.6km   27.998 E ±13.0km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.9 (ISK).

IZM      0.79 227 ePg     39 16.00   -0.1
                  eSg    39 28.60
DST      0.82  36 ePg     39 16.10   -0.5
                  eSg    39 28.30
EDC      1.41 356 ePn     39 25.80   -0.5
BNT      1.41 358 ePn     39 26.60    0.2
IZI      1.80  39 ePn     39 32.50    0.5
MFT      1.92 344 ePn     39 34.00    0.2
     S.D. = 0.5  on   6 of   6 obs.
-----------------------------------
?  NOV  15, 1993  17h 14m 54.84± 1.14s
   38.076 N ±11.5km   29.145 E ± 8.3km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.9 (ISK).

KHL      0.39  50 iPg     15 02.30   -0.5
                  eSg    15 10.80
ALT      1.24  37 ePn     15 18.40    0.5
BCK      1.30 118 ePn     15 19.00    0.1
IZM      1.52 283 ePn     15 22.00   -0.1
     S.D. = 0.7  on   4 of   4 obs.
-----------------------------------
   NOV  15, 1993  17h 18m 59.54± 0.53s
   14.846 N ± 7.3km  119.967 E ± 9.5km
   DEPTH =  33.0km  (normal)
   4.6mb ( 10 obs.)  4.2Msz (  2 obs.)
 LUZON, PHILIPPINE ISLANDS         (249)

QCP      1.09 101 eP      20 02.50   43.9X
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```
BAG     1.66  21 eP     19 28.00   1.0
QIZ    10.54 295 eP     21 26.00  -5.5X
GYA    16.97 315 P      22 56.80   0.6
     Z  18s     0.65um
NNT    19.78 266 eP     23 29.70  -0.4
SNG    20.45 250 eP     23 38.00   0.9
CHTO   20.50 284 eP     23 36.00  -1.6
TIA    21.43 354 eP     23 48.00   1.1
XAN    21.56 334 P      23 49.00   0.7
       1.2s     7.90nm          4.0mb
     Z  15s     0.35um          3.9MszX
CD2    21.83 320 eP     23 51.00  -0.1
TIY    23.74 345 eP     24 10.40   0.7
     Z  22s     0.52um          4.0Msz
BJI    25.32 353 eP     24 30.00   5.2X
       1.3s    10.00nm          4.3mb
     Z  16s     0.35um          4.0MszX
LZH    25.60 329 eP     24 32.50   4.8X
       1.2s    21.00nm          4.6mb
     Z  15s     0.53um          4.2MszX
SNY    27.07   6 eP     24 39.40  -1.5
GTA    30.20 328 eP     25 07.50  -1.8
     Z  18s     0.86um          4.4Msz
WR2    37.36 157 iPd    26 10.50  -0.6
       0.4s    20.70nm          5.3mb
WMQ    39.87 323 eP     26 28.00  -3.9X
     Z  16s     0.73um          4.6MszX
ASPA   40.63 160 iPd    26 38.60   0.3
       0.9s    12.70nm          4.7mb
GBA    41.20 274 P      26 45.00   1.9
TOO    57.40 156 eP     28 47.70   0.4
       0.7s     4.00nm          4.6mb
HFS    85.13 331 eP     31 32.50  -0.9
       0.5s     1.80nm          4.6mb
DAG    85.39 351 iPc    31 33.90  -0.5
       0.7s     3.42nm          4.7mb
NAO    86.18 332 P      31 37.90  -0.7
       0.9s    11.60nm          5.1mb
KSP    87.02 322 eP     31 43.00   0.1
GEC2   89.30 321 ePKP   31 54.20   0.2
       0.9s     1.21nm          4.2mb
                e      32 05.60
     S.D. = 1.0  on  20 of  25 obs.
-----------------------------------
%  NOV  15, 1993  17h 30m 10.85± 0.53s
   38.937 N ± 4.9km   28.030 E ± 4.7km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 3.3 (ISK).

IZM     0.81 228 ePg    30 26.20  -0.3
                 eSg    30 39.00
DST     0.81  35 iPg    30 26.20  -0.4
                 eSg    30 38.20
KHL     1.32 117 ePn    30 35.30   0.0
EDC     1.41 355 iPn    30 36.80   0.2
BNT     1.42 357 iPn    30 37.60   0.9
EZN     1.59 304 iPn    30 39.50   0.4
ALT     1.63  85 ePn    30 40.40   0.7
IZI     1.79  38 iPn    30 41.50  -0.5
MFT     1.93 343 ePn    30 43.50  -0.7
GPA     2.22  52 ePn    30 48.20  -0.1
CTT     2.23   8 ePn    30 48.50   0.1
HRT     2.26  33 ePn    30 48.70  -0.2
DMK     2.89 356 ePn    30 57.60  -0.1
     S.D. = 0.5  on  13 of  13 obs.
-----------------------------------
%  NOV  15, 1993  17h 49m 39.40± 0.78s
   38.957 N ± 7.6km   28.069 E ± 7.4km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.8 (ISK).

DST     0.78  34 iPg    49 55.00   0.4
                 eSg    50 07.70
IZM     0.84 229 iPg    49 56.00   0.3
KHL     1.30 119 ePn    50 03.30  -0.3
EDC     1.40 354 ePn    50 04.80  -0.1
EZN     1.61 303 iPn    50 07.50  -0.3
     S.D. = 0.5  on   5 of   5 obs.
-----------------------------------
%  NOV  15, 1993  17h 54m 02.63± 2.60s
   34.171 N ±18.0km  140.227 E ±18.1km
   DEPTH =  33.0km  (normal)
 NEAR EAST COAST OF HONSHU, JAPAN(228)

KAKJ    2.03 359 P      54 37.00   1.9
                 eS     55 00.30
CHJJ    2.13 332 P      54 37.30   0.8
IIDJ    2.31 305 eP     54 40.10   0.9
                 S      55 04.20
MAT     2.88 326 iPc    54 47.00  -0.3
                 eS     55 16.00
MTMJ    3.12 321 P      54 50.40  -0.3
NIIJ    3.22 342 P      54 51.50  -0.5
TSRJ    3.75 293 eP     54 58.10  -1.4
WKYJ    3.84 272 P      55 01.10   0.2
YAMJ    4.00 358 P      55 02.70  -0.4
OFUJ    5.03  13 eP     55 16.70  -1.1
                 eS     56 09.60
TKSJ    5.13 270 P      55 20.00   0.8
YONJ    5.66 282 P      55 25.80  -0.9
KUMJ    8.03 261 eP     56 00.00   0.1
     S.D. = 1.0  on  13 of  13 obs.
-----------------------------------
*  NOV  15, 1993  18h 49m 10.11± 0.50s
   52.126 N ± 9.9km  158.458 E ± 9.6km
   DEPTH =  33.0km  (normal)
   4.7mb ( 22 obs.)
 NEAR EAST COAST OF KAMCHATKA      (218)

MAT    21.16 231 (P)    53 55.00   0.4
       0.8s     9.70nm          4.3mb
FBA    29.82  44 eP     55 15.50  -0.3
       1.0s     7.00nm          4.4mb
DAG    51.37 359 iPd    58 12.10  -0.7
       0.7s     8.22nm          4.8mb
CHTO   56.73 258 eP     58 53.20   0.3
KKN    58.45 276 P      59 04.80  -0.4
DMN    58.69 276 P      59 06.20  -0.8
GKN    58.69 276 P      59 06.00  -0.9
RSSD   60.78  55 eP     59 20.20  -0.9
       0.7s     3.91nm          4.6mb
PV10   62.25  63 eP     59 31.06  -0.1
NAO    64.46 343 P      59 43.50  -1.5
       0.8s     2.50nm          4.4mb
HFS    64.56 341 eP     59 44.00  -1.6
       0.5s     1.30nm          4.3mb
GBA    73.89 271 P      00 43.00  -0.5
       0.9s     2.00nm          4.1mb
WRA    74.79 203 P      00 48.50   0.0
       0.5s     0.60nm          3.8mb
CDF    76.86 341 eP     01 00.00  -0.2
FLN    77.90 346 eP     01 05.50  -0.2
       1.0s    16.80nm          5.0mb
LDF    78.01 346 eP     01 06.10  -0.2
       1.0s    10.40nm          4.8mb
GRR    78.32 346 eP     01 07.30  -0.7
       0.7s     6.70nm          4.8mb
LOR    78.62 343 eP     01 09.60  -0.2
       0.8s     5.10nm          4.6mb
LPF    78.69 346 eP     01 10.40   0.3
       1.1s    15.65nm          4.9mb
SSF    78.89 343 eP     01 11.20   0.0
       0.7s     3.75nm          4.5mb
AVF    79.18 343 eP     01 13.10   0.4
       1.0s    10.40nm          4.8mb
SMF    79.23 343 eP     01 13.40   0.4
BGF    79.49 343 eP     01 14.60   0.1
       0.6s     3.95nm          4.6mb
LPL    79.74 340 eP     01 16.90   0.8
LPG    79.75 340 eP     01 17.00   0.7
TCF    79.86 344 eP     01 16.90   0.4
       1.1s    11.50nm          4.8mb
MAF    79.87 343 eP     01 17.20   0.7
       0.8s     5.90nm          4.6mb
LSF    80.02 344 eP     01 17.70   0.4
       0.9s     7.85nm          4.7mb
RJF    80.94 344 eP     01 22.90   0.7
CAF    81.21 343 eP     01 24.80   1.1
       1.1s    12.20nm          4.8mb
LFF    81.42 344 eP     01 25.80   1.1
       0.9s    10.95nm          4.9mb
LPO    81.60 344 eP     01 26.60   1.0
       1.0s    11.20nm          4.8mb
     S.D. = 0.7  on  32 of  32 obs.
-----------------------------------
&  NOV  15, 1993  21h 01m 28.49s
   63.522 N          151.041 W
   DEPTH =   5.0km
 CENTRAL ALASKA                    (  1)
      <AEIC>. ML 2.9 (AEIC).

KTH     0.06  60 P      01 30.10  -0.1
TRF     0.35 102 P      01 35.00  -0.5
                 S      01 40.10
BWN     0.96  46 P      01 47.00  -0.1
                 S      02 00.70
MCK     0.96  76 P      01 46.70  -0.6
RND     0.99  96 P      01 46.40  -1.4
CUT     1.18 162 P      01 50.70  -0.2
SKT     1.56 188 P      01 57.00   0.0
WRH     1.61  52 P      01 57.70   0.0
PWA     1.95 164 P      02 03.00   0.4
FBA     1.98  44 (P)    02 02.31  -0.7
GHO     2.01 150 P      02 03.00  -0.5
IL1     2.21  54 P      02 03.00  -3.4
ILB     2.21  54 P      02 01.60  -4.8
TTA     2.33 257 (P)    02 08.48   0.4
IM3     2.73 336 P      02 11.60  -2.2
BC3     4.20  92 P      02 34.20  -0.5
       16 obs. associated
-----------------------------------
%  NOV  15, 1993  21h 08m 17.73± 0.34s
   38.401 S ± 4.8km  175.789 E ± 5.3km
   DEPTH = 200.0km  (geophysicist)
 NORTH ISLAND, NEW ZEALAND         (159)

PATZ    0.37  87 P      08 44.40  -0.2
UTU     0.39  55 P      08 44.20  -0.4
WLZ     0.55 344 P      08 45.50   0.4
MGZ     0.63 198 P      08 46.60   0.9
MOZ     0.78 262 P      08 47.50   1.1
NGZ     0.79 191 eP     08 47.10   0.5
CNZ     0.82 193 P      08 47.60   0.8
DRZ     0.89 191 P      08 48.40   1.0
URZ     1.05  83 Pc     08 46.60  -1.4
                 S      09 06.10
PAHZ    1.09 115 Pc     08 48.20  -0.2
WAHZ    1.37 161 Pc     08 51.30   0.7
TTH     1.40 145 P      08 51.50   0.7
BSZ     1.55 205 P      08 53.50   1.4
KUZ     1.65 358 Pd     08 52.80  -0.3
TEHZ    1.77 154 P      08 55.00   0.7
NOZ     1.78  98 P      08 54.10  -0.2
MAHZ    1.81 116 P      08 55.00   0.3
PUZ     1.97  81 P      08 55.10  -1.2
HBZ     2.14  69 eP     08 56.90  -1.1
MNG     2.23 186 Pc     08 59.70   0.7
                 S      09 28.70
PGZ     2.25 171 P      08 59.60   0.5
KIW     2.55 195 Pc     09 03.00   0.4
WCZ     2.71 334 P      09 05.30   0.9
CAW     2.76 191 P      09 05.50   0.5
MTW     2.76 185 Pc     09 05.00   0.0
DIW     2.80 210 P      09 05.90   0.5
                 eS     09 42.70
MRW     2.95 196 P      09 07.40   0.2
                 S      09 43.50
BLW     2.97 185 P      09 07.40  -0.1
WEL     2.99 195 P      09 07.90   0.3
                 S      09 44.50
TCW     3.04 202 P      09 08.70   0.5
QRZ     3.49 225 P      09 13.70  -0.1
CCW     3.56 199 P      09 15.60   1.1
THZ     4.02 212 P      09 20.50   0.1
                 S      10 09.10
DSZ     4.53 221 P      09 26.20  -0.6
LTZ     5.13 210 eP     09 34.00  -0.5
                 eS     10 31.00
MQZ     5.81 203 P      09 41.70  -1.4
                 eS     10 45.10
WVZ     6.04 218 P      09 46.50   0.3
BWZ     7.56 214 eP     10 05.00  -1.1
ODZ     7.67 208 P      10 07.10  -0.5
MSCZ    8.21 213 P      10 13.60  -1.1
LRCZ    8.22 214 P      10 13.50  -1.4
LSCZ    8.25 214 eP     10 13.60  -1.6
SBCZ    8.25 214 P      10 13.50  -1.7
TUZ     8.82 209 P      10 23.10   0.7
     S.D. = 0.8  on  44 of  44 obs.
-----------------------------------
?  NOV  15, 1993  22h 09m 38.94± 1.69s
   38.896 N ±14.5km   28.078 E ±16.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.7 (ISK).

IZM     0.81 232 ePg    09 54.60  -0.1
                 eSg    10 06.40
DST     0.83  31 ePg    09 55.20   0.2
```

15d 22h

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                    eSg   10 08.70
EDC      1.46 354 ePn   10 04.80  -0.5
EZN      1.65 305 ePn   10 08.30   0.3
     S.D. = 0.6  on   4 of   4 obs.
-----------------------------------------
?  NOV  15, 1993  22h 36m 39.90± 3.80s
   59.046 N ±34.6km    5.698 E ± 8.3km
   DEPTH =  10.0km  (geophysicist)
 SOUTHERN NORWAY                   (535)
      MD 1.9 (BER).

KMY      0.29 306 eP    36 45.96   0.1
                  eS    36 48.86
BLS5     0.54  46 eP    36 51.25   0.4
                  eSg   36 58.42
ODD1     0.99  28 eP    36 58.37  -0.3
                  eS    37 10.55
NRA0     3.40  58 ePn   37 33.88  -0.1
                  ePg   37 42.91
                  eSg   38 21.90
     S.D. = 0.5  on   4 of   4 obs.
-----------------------------------------
%  NOV  15, 1993  22h 42m 25.54± 1.08s
   43.024 N ± 7.8km   18.722 E ± 6.5km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)

BRY      0.18 227 iPgd  42 29.87   0.2
                  iSg   42 32.81
NKY      0.29 136 iPgd  42 31.85   0.1
                  iSg   42 36.28
PLE      0.58  58 iPgc  42 37.10  -0.3
                  iSg   42 46.07
HCY      0.60 196 iPgd  42 37.54  -0.1
                  iSg   42 46.23
TTG      0.71 146 iPgc  42 38.70  -0.9
                  iSg   42 49.78
BDV      0.74 174 iPgd  42 39.93  -0.2
                  iSg   42 50.96
IVA      0.88 100 iPgd  42 42.69   0.2
                  iSg   42 55.69
PVY      1.02 115 iPgc  42 45.23   0.4
                  iSg   43 00.10
ULC      1.13 160 iPgc  42 47.17   0.5
                  iSg   43 03.72
     S.D. = 0.5  on   9 of   9 obs.
-----------------------------------------
   NOV  15, 1993  22h 45m 19.35± 0.23s
   18.559 S ± 5.8km  167.637 E ± 5.7km
   DEPTH =  48.1km  ( 13 depth phases)
   5.2mb ( 31 obs.)  4.8Msz ( 14 obs.)
 VANUATU ISLANDS                   (186)

PVC      1.04  38 iPd   45 35.50  -2.2
                  iS    45 48.00
BKM      1.06  33 iPd   45 35.60  -2.4
                  iS    45 49.00
DZM      3.67 198 iPd   46 12.60  -2.5
                  iS    46 52.10
HNR     11.74 320 eP    48 03.00  -4.0X
ARMA    18.73 228 iPc   49 48.30  11.5X
        0.9s    28.00nm
CTA     20.24 262 iPc   49 54.20   0.9
        1.0s    75.00nm          5.0mb
      Z  18s    10.31um          5.2Msz
                  i     49 59.00
                  i     50 07.20
                  iS    53 42.00
                  isS   53 54.50
RIV     21.17 221 iPc   50 08.90   6.2X
PUZ     21.54 157 eP    50 06.50   0.0
PMG     21.83 292 iPc   50 08.90  -0.6
        1.3s   115.38nm          5.1mb
KVG     22.88 312 eP    50 19.00  -0.9
MNG     23.00 165 P     50 21.10   0.3
CNB     23.26 221 iPc   50 26.30   2.8X
        0.7s    74.00nm          5.3mb
BWA     23.29 223 iPc   50 24.70   0.9
                  i     50 30.80
                  i     50 44.90
CAN     23.49 221 iPc   50 28.00   2.3X
                  e     50 33.60
                  e     50 49.90
                  i     50 57.10
THZ     23.56 170 eP    50 28.00   1.6
MDG     25.10 299 eP    50 42.70   1.4
STK     26.96 235 iPc   50 53.70  -4.7X
        0.9s    28.70nm          4.9mb
                  ipP   51 05.20  44km
                  iPcP  54 14.10
                  iS    55 35.10
TOO     27.10 221 iPd   51 01.00   1.4
        0.9s    35.00nm          5.0mb
WR2     31.42 262 eP    51 35.40  -3.0
        1.1s     8.60nm          4.4mb
                  i     51 54.90
WRA     31.44 262 P     51 37.00  -1.6
        1.0s     3.20nm          4.1mb X
ASPA    31.83 255 iPc   51 40.40  -1.6
        0.7s    37.80nm          5.3mb
      Z  21s     1.70um          4.7Msz
                  ipP   51 54.60  57km
KNA     37.20 268 eP    52 27.40  -0.6
        1.0s   119.00nm          5.8mb
FORT    37.78 244 eP    52 33.00   0.2
        0.6s    20.00nm          5.2mb
MBL     44.91 258 iPc   53 31.20  -0.2
        1.0s    44.00nm          5.2mb
MEEK    45.74 251 iPc   53 37.80  -0.2
        0.9s   149.00nm          5.9mb
KLB     46.64 244 eP    53 44.00  -1.0
BAL     47.49 245 eP    53 50.50  -1.2
MUN     47.98 243 eP    53 54.00  -1.5
        1.0s    50.00nm          5.5mb
MRWA    48.07 247 eP    53 55.50  -0.7
        0.8s    21.00nm          5.2mb
HON     51.99  42 P     54 40.00  13.8X
      Z  21s     0.49um          4.5Msz
KKM     56.27 291 ePd   55 02.60   4.7X
LEM     59.46 273 iPc   55 20.50   0.1
MAT     61.45 333 eP    55 30.00  -3.3X
        0.8s     7.46nm          4.9mb
KGM     66.43 281 eP    56 06.50   0.2
SSE     66.54 317 eP    56 05.40  -1.2
NJ2     68.67 317 Pd    56 20.00   0.0
IPM     69.49 282 ePc   56 24.50  -0.9
        0.9s    30.40nm          5.2mb
WHN     70.77 313 Pc    56 32.50  -0.4
        1.0s    30.00nm          5.2mb
SNG     70.84 285 eP    56 34.00   0.4
SPA     71.55 180 iPc   56 36.70  -0.6
        1.0s    50.00nm          5.4mb
MDJ     71.81 332 eP    56 39.10   0.3
CN2     73.10 329 P     56 46.20  -0.2
        0.8s     5.90nm          4.6mb
NNT     73.75 290 eP    56 51.40   0.7
GYA     74.19 305 iPc   56 53.60   0.3
        1.0s    51.00nm          5.4mb
NST     74.65 293 eP    56 56.50   0.6
BJI     75.46 322 eP    57 00.50   0.4
        1.0s     6.00nm          4.5mb
      Z  20s     0.30um          4.6Msz
TIY     76.31 318 Pc    57 05.00  -0.1
      Z  30s     0.47um          4.6MszX
XAN     76.54 313 P     57 06.50   0.0
        1.0s    30.00nm          5.2mb
KMI     76.63 302 Pc    57 08.50   1.1
        1.5s   190.00nm          5.9mb
                  pP    57 24.00  55km
CHTO    76.99 295 iPc   57 10.10   0.9
        1.0s    21.00nm          5.1mb
MAW     78.49 202 P     57 17.80   1.2
        0.8s    17.65nm          5.1mb
CD2     78.62 308 iPc   57 18.70   0.7
        1.2s   110.00nm          5.7mb
HHC     78.72 320 eP    57 19.50   1.1
LZH     81.15 313 iPc   57 33.20   1.6
        1.6s   130.00nm          5.6mb
                  pP    57 49.00  56km
                  sP    57 56.00
GTA     85.56 314 eP    57 54.00   0.0
        1.2s    53.00nm          5.6mb
                  pP    58 10.50  58km
                  sP    58 20.50
BCH     86.84  51 eP    58 00.61   0.3
                  pP    58 14.14  46km
PMR     86.98  19 P     58 10.00   9.8X
      Z  21s     0.17um          4.4Msz
LGPM    87.42  45 ePd   58 03.37   0.4
WDC     87.47  46 P     58 10.00   6.9X
      Z  21s     0.54um          4.9Msz
ORV     87.72  47 eP    58 04.23  -0.1
                  pP    58 16.45  40km
CMB     87.84  49 ePc   58 05.01   0.0
        1.0s    25.31nm          5.4mb
                  pP    58 18.06  43km
LSA     87.88 302 P     58 07.50   1.6
        1.2s    23.00nm          5.3mb
ISA     88.24  52 (P)   58 06.93  -0.1
                  pP    58 19.88  43km
LBFM    88.25  45 eP    58 06.96  -0.1
                  pP    58 20.09  44km
BONR    89.30  49 eP    58 12.11  -0.2
                  pP    58 25.11  43km
FBA     89.88  17 eP    58 12.16  -1.9
        0.9s     9.17nm          5.1mb
                  pP    58 27.74  54km
KVN     89.89  49 eP    58 15.27   0.4
                  pP    58 28.44  44km
GUN     91.54 299 PKP   58 23.80   0.9
PKI     91.82 298 PKP   58 24.60   0.4
KKN     92.00 299 PKP   58 25.60   0.7
DMN     92.09 298 PKP   58 26.20   0.9
GKN     92.61 299 PKP   58 27.60   0.0
DUG     94.10  49 P     58 40.00   5.8X
      Z  18s     0.22um          4.7Msz
GBA     94.43 283 P     58 37.00   1.1
HYB     94.57 287 eP    58 36.00  -0.6
WMQ     95.64 314 iPc   58 41.50   0.4
        1.5s    11.00nm          5.1mb
                  PP    02 31.50
INK     96.38  19 eP    58 45.50   1.7
ALQ     97.17  56 P     59 00.00  11.7X
      Z  21s     0.17um          4.5Msz
GOL     99.37  51 P     59 10.00  11.7X
      Z  21s     0.48um          5.0Msz
MIAR   107.35  59 PKP   03 50.00   7.5X
      Z  18s     0.18um          4.7Msz
BINY   121.66  51 PKP   04 20.00  10.4X
      Z  18s     0.26um          4.9Msz
DAG    121.67   2 iPKPc 04 07.30  -1.2
        0.7s     4.11nm
LSCT   123.75  52 PKP   04 20.00   6.4X
      Z  18s     0.29um          5.0Msz
BUL    124.38 228 iPKPc 04 15.20  -0.4
LBNH   124.43  49 PKP   04 20.00   5.2X
      Z  19s     0.42um          5.1Msz
HRV    124.90  51 PKP   04 30.00  14.2X
      Z  18s     0.17um          4.7Msz
VAO    126.62 139 (PKP) 04 19.00  -0.8
OBN    128.09 327 iPKPd 04 22.00   0.5
        1.4s    48.00nm
                  i     04 38.00
KAF    128.86 338 iPKP  04 21.50  -1.3
        0.6s     5.10nm
NUR    130.52 337 ePKP  04 25.00  -0.9
SPC    139.73 327 ePKP  04 43.50  -0.4
KSP    140.57 331 ePKP  04 39.50  -5.6X
BRG    141.59 333 ePKP  04 47.20   0.2
        1.4s    29.00nm
CLL    141.66 334 e(PKP)04 46.00  -1.1
                  i     05 05.00
PRU    141.97 332 ePKP  04 40.00  -7.7X
ZST    141.97 328 iPKP  04 48.00   0.3
MOX    142.73 335 ePKP  04 48.20  -0.8
SKO    143.00 316 ePKP  04 46.80  -2.9
KHC    143.02 331 PKP   04 47.40  -2.1
        1.0s     7.00nm
                  e     05 03.00
                  e     05 43.00
                  e     06 15.50
                  e     06 47.00
GEC2   143.17 331 ePKPc 04 47.00  -2.9
        1.2s     8.59nm
                  e     04 51.90
                  e     05 04.90
                  e     05 08.20
                  e     05 16.00
WTS    143.38 340 ePKP  04 49.00  -0.9
        0.7s     7.50nm
GRF    143.63 334 ePKP  04 48.40  -2.1
PTJ    144.06 326 ePKP  04 37.20 -14.3X
BHG    144.36 330 ePKP  04 51.10  -0.7
ENN    144.72 340 ePKP  04 51.00  -1.3
        1.0s    51.00nm
                  e     05 07.50
FUR    144.77 332 iPKPc 04 52.10  -0.4
MEM    144.83 340 iPKPc 04 51.40  -1.1
        1.0s    39.10nm
                  ic    05 07.70
UCC    145.19 341 PKP   04 53.00  -0.1
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                 e     05 09.00
WATA  145.25 331 iPKPc 04 53.30  -0.2
                 i     05 09.50
WTTA  145.27 331 iPKPc 04 53.60   0.0
       1.2s    58.30nm
                 i     05 09.60
MOTA  145.46 331 iPKPc 04 53.80  -0.1
       1.1s    91.70nm
                 i     05 10.00
SNF   145.46 341 iPKPc 04 53.53   0.0
                 id    05 09.70
SQTA  145.50 331 iPKPc 04 54.10   0.2
       0.8s    41.00nm
                 i     05 10.30
LANF  145.55 336 PKP   04 54.73   0.9
WLF   145.59 339 iPKPc 04 55.00   1.2
       1.4s    64.50nm
                 ic    05 11.28
SRBF  145.59 336 PKP   04 54.99   1.1
HCG   145.62 351 ePKP  04 53.80   0.0
HAE   145.71 349 ePKP  04 54.30   0.4
DOU   145.73 341 PKPc  04 54.60   0.6
                 ec    05 10.90
HTR   145.79 350 ePKP  04 54.40   0.3
OGA   145.85 331 iPKPc 04 56.00   1.3
STR   145.90 336 PKP   04 55.87   1.5
HGH   146.14 349 ePKP  04 55.50   0.8
WLS   146.19 336 PKP   04 56.31   1.4
CDF   146.22 336 iPKPc 04 56.50   1.4
       0.8s    43.65nm
SLE   146.26 334 ePKPc 04 56.30   1.2
LIBD  146.31 336 PKP   04 56.67   1.6
FEL   146.37 335 PKP   04 56.57   1.2
OSS   146.39 332 ePKPc 04 57.40   1.9
ECH   146.43 336 PKP   04 56.93   1.6
ZLA   146.53 334 ePKPc 04 57.10   1.6
MOF   146.74 336 PKP   04 57.72   1.8
LLS   146.75 333 ePKPc 04 58.20   2.1X
VDL   146.84 332 ePKPc 04 58.50   2.2X
VITF  146.87 337 PKP   04 58.15   2.2X
BSF   146.88 336 iPKPc 04 58.20   2.0X
       1.2s    45.50nm
BBS   146.90 335 PKP   04 57.89   1.8
HAU   146.91 337 iPKPc 04 58.40   2.3X
       1.1s    58.10nm
LOMF  147.26 336 PKP   04 59.56   2.8X
TMA   147.40 332 ePKPc 04 59.80   2.7X
MMK   147.84 333 ePKPc 05 01.70   3.8X
DIX   148.05 334 ePKPc 05 02.30   4.0X
EMS   148.26 334 ePKPc 05 02.40   3.9X
FLN   148.37 345 iPKPc 05 02.00   3.7X
       0.9s    70.75nm
LOR   148.43 339 iPKPc 05 02.60   4.1X
       1.0s    66.20nm
LDF   148.44 344 iPKPc 05 02.20   3.8X
       0.8s    31.70nm
LBF   148.63 338 iPKPc 05 03.20   4.3X
       1.0s    25.80nm
SSF   148.73 339 iPKPc 05 03.50   4.5X
       0.9s    78.60nm
LPL   148.79 334 iPKPc 05 04.10   4.7X
       1.3s    62.45nm
LPG   148.79 334 iPKPc 05 04.20   4.7X
       1.3s    58.50nm
GRR   148.81 345 iPKPc 05 03.40   4.4X
       1.0s    84.40nm
HYF   148.84 340 iPKPc 05 04.00   4.8X
SMF   148.97 338 iPKPc 05 03.80   4.4X
       1.2s    47.30nm
AVF   149.02 339 iPKPc 05 03.80   4.4X
       1.1s    24.40nm
LPF   149.19 345 iPKPc 05 04.50   4.9X
       0.9s   127.10nm
BGF   149.39 339 iPKPc 05 05.00   5.0X
       0.9s    46.50nm
PLDF  149.63 338 PKP   05 05.80   5.3X
AUTN  149.68 331 PKP   05 05.22   4.4X
AGO   149.73 338 PKP   05 05.95   5.4X
TOUF  149.75 331 PKP   05 04.69   3.8X
SBF   149.78 331 ePKP  05 05.80   5.0X
       1.4s   201.25nm
MAF   149.78 339 iPKPc 05 06.10   5.5X
       1.0s    36.00nm
AURF  149.81 331 PKP   05 04.69   3.8X
TCF   149.84 340 iPKPc 05 06.20   5.5X
       1.1s    73.50nm
SSB   149.87 336 PKP   05 06.33   5.5X
MVIF  149.88 331 PKP   05 04.33   3.3X
PGF   150.00 327 PKP   05 05.22   4.0X
PYM   150.04 338 PKP   05 06.81   5.7X
LSF   150.09 340 iPKPc 05 06.50   5.4X
       0.9s    59.80nm
CALN  150.11 331 PKP   05 04.88   3.5X
MFF   150.27 343 iPKPc 05 07.10   5.8X
       0.9s    67.50nm
FRF   150.37 331 iPKPc 05 07.30   5.7X
       1.2s    85.10nm
LBL   150.40 337 PKP   05 07.94   6.3X
LRG   150.58 332 ePKP  05 08.00   6.1X
       1.3s   142.25nm
LMR   150.61 331 iPKPc 05 07.90   6.0X
       1.2s    86.90nm
RJF   150.94 340 iPKPc 05 08.70   6.3X
       1.0s    36.80nm
CAF   151.08 339 iPKPc 05 09.30   6.6X
       1.1s    25.15nm
LFF   151.51 340 iPKPc 05 10.20   7.0X
       0.8s    33.60nm
LPO   151.59 339 iPKPc 05 10.40   7.0X
       0.8s    24.20nm
EPF   153.34 339 ePKP  05 14.50   8.5X
     S.D. = 1.1  on 111 of 180 obs.
-----------------------------------
*  NOV  16, 1993  00h 53m 09.76± 0.48s
   24.368 S ±14.6km  175.835 W ± 9.4km
   DEPTH =  33.0km  (normal)
   5.3mb ( 25 obs.)  5.1Msz (  2 obs.)
 SOUTH OF TONGA ISLANDS          (175)

AFI    11.09  21 eP    55 42.00  -7.2X
                eS    58 00.00
BKM    16.28 291 iP    57 01.90   4.2X
DZM    16.45 274 iPc   56 59.30  -0.5
CNB    31.95 242 eP    59 34.40  -0.5
CTA    35.28 269 iPc   00 02.50  -1.3
       1.0s    20.00nm         5.0mb
                ePP   01 30.00
                eS    05 45.00
TOO    35.43 239 eP    00 04.60  -0.3
PMG    38.26 286 iPc   00 27.00  -1.9
       1.0s    90.00nm         5.6mb
ASPA   45.71 260 iPd   01 28.70  -1.1
       1.1s    25.70nm         5.1mb
     Z  18s     1.90um         5.1Msz
                eS    08 08.80
WR2    46.14 265 iPd   01 30.30  -2.9
       1.2s     5.00nm         4.3mb
                ipP   02 04.20 151kmX
                ePP   03 07.60
WRA    46.16 265 P     01 31.10  -2.2
       1.1s     6.90nm         4.5mb
DRV    50.43 201 eP    02 05.00  -0.8
SBA    54.18 184 eP    02 36.20   2.5
SWI    56.21 286 ePc   02 48.50  -0.8
CSY    61.37 206 eP    03 33.60   9.1X
       0.6s    21.20nm         5.4mb
MAT    74.49 323 eP    04 44.00  -2.8
       1.3s    17.31nm         4.9mb
KUSJ   76.32 331 eP    04 50.20  -6.8X
HOOJ   76.39 330 eP    04 51.90  -5.5X
ASAJ   78.05 331 eP    05 08.30   1.8
ARN    79.85  41 (P)   05 16.11  -0.5
ISA    80.65  44 eP    05 20.86  -0.1
       1.8s    49.41nm         5.2mb
CMB    80.99  41 eP    05 22.19  -0.5
       1.0s     6.20nm         4.6mb
BONR   82.20  42 eP    05 29.06  -0.2
NJ2    83.87 309 Pd    05 39.00   1.4
       1.0s    26.00nm         5.3mb
MDJ    84.82 324 eP    05 43.40   1.4
       1.0s    23.00nm         5.3mb
ARUT   85.15  45 eP    05 44.70   0.6
WHN    86.33 306 eP    05 51.00   1.1
       1.0s    36.00nm         5.6mb
MSU    86.39  45 eP    05 50.86   0.5
CN2    86.57 322 Pd    05 52.00   1.3
       1.2s    40.00nm         5.5mb
SNG    87.09 279 eP    05 56.20   2.3
TIA    87.34 312 P     05 55.20   0.5
CP2    87.44  11 eP    05 52.08  -2.8
SRU    87.79  45 ePd   05 57.18   0.2
DAU    88.05  44 eP    05 57.75  -0.7
ALQ    88.28  50 eP    05 58.91  -0.6
       1.8s    34.50nm         5.4mb
PV10   88.35  46 eP    05 58.90  -0.9
PV09   88.36  46 eP    05 59.58  -0.3
TTA    88.41   9 eP    05 59.65   0.3
       1.1s     7.15nm         4.9mb
PV08   88.72  46 (P)   05 59.86  -1.8
BJI    90.03 315 eP    06 08.00   0.7
       1.8s    48.00nm         5.5mb
GYA    90.28 299 P     06 10.20   1.2
       1.4s    41.00nm         5.5mb
TIY    91.33 311 eP    06 14.60   1.1
     Z  20s     0.62um         5.0Msz
FBA    91.59  12 eP    06 12.84  -1.2
       0.9s     5.11nm         4.9mb
XAN    92.05 307 P     06 18.50   1.6
       1.0s    13.00nm         5.3mb
                sP    06 28.50
KMI    92.86 296 Pd    06 23.50   2.5
       1.8s   100.00nm         5.9mb
                sP    06 34.50
CHTO   93.41 289 ePc   06 25.00   1.6
       1.1s    40.93nm         5.8mb
HHC    93.47 314 P     06 24.80   1.5
       1.4s    24.00nm         5.4mb
MEO    93.86  54 iPc   06 24.50  -0.7
BTO    94.37 313 eP    06 27.00  -0.5
CD2    94.54 302 P     06 31.00   2.6X
RSSD   94.56  43 eP    06 27.88  -0.5
       1.0s     9.18nm         5.2mb
LZH    96.68 306 eP    06 39.00   0.8
       1.5s    27.00nm         5.5mb
                sP    06 51.00
GTA   100.95 308 ePdiff06 59.00   1.5
       1.0s     5.00nm         5.0mb
OBN   141.09 331 ePKP  12 36.00  -2.1
       1.0s    14.00nm
                e     12 50.00
NAO   143.27 355 PKP   12 37.60  -4.2X
       1.0s     6.50nm
HFS   143.64 352 ePKP  12 37.20  -5.2X
       0.7s     6.80nm
EKA   148.60   8 PKPd  12 54.30   3.6X
       1.1s    19.70nm
KAS   150.10 312 ePKP  13 00.00   6.4X
OJC   151.47 339 iPKPc 13 01.80   6.6X
                i     13 08.80
VRI   151.88 325 ePKP  13 09.00  13.0X
KSP   151.95 344 iPKPc 13 02.70   6.8X
       1.0s    25.00nm
                i     13 14.30
SPC   152.20 337 ePKP  13 03.30   6.7X
CLL   152.25 348 iPKPc 13 02.90   6.6X
       1.1s    26.00nm
BRG   152.48 347 iPKP  13 03.80   7.1X
       1.0s    20.00nm
                i     13 11.20
MLR   152.54 326 ePKP  13 04.00   6.9X
PRU   153.18 345 ePKP  13 05.80   8.1X
                e     13 17.50
GRF   154.13 349 e(PKP)13 08.30   9.3X
KHC   154.20 346 ePKP  13 01.50   2.3
       1.0s     7.00nm
                e     13 08.00
                e     13 15.60
                e     14 14.00
GEC2  154.44 345 ePKP  12 59.80   0.2
       1.1s     1.97nm
                e     13 08.00
                e     13 14.90
                e     13 20.00
LKO   162.57 146 PKP   13 09.83   0.0
       1.3s    10.50nm
     S.D. = 1.4  on  50 of  69 obs.
-----------------------------------
   NOV  16, 1993  01h 13m 14.57± 0.37s
    0.082 N ± 5.9km  123.752 E ± 6.7km
   DEPTH = 153.1km  (  2 depth phases)
   4.7mb ( 11 obs.)
 MINAHASSA PENINSULA, SULAWESI   (265)

TNE      3.65  79 eP    14 11.00   0.0
PCI      4.04 256 ePc   14 15.40  -0.7
MKS      6.78 219 ePd   14 53.20   0.4
                iS    16 07.00
SWI      7.57  97 ePd   15 03.00  -0.3
KKM      9.57 308 ePc   15 38.00   7.9X
       0.8s    93.80nm         5.5mb
KNA     16.49 163 eP    16 58.80   0.3
```

16d 01h

```
        0.5s    23.00nm          4.8mb
BAG     16.52 349 ePc   17 00.30   1.2
WR2     22.46 153 eP    18 01.60   0.0
        0.5s    29.40nm          5.0mb
ASPA    25.58 158 eP    18 32.10   0.8
        0.5s    18.30nm          4.9mb
                  epP   19 03.00 150km
WARB    26.26 174 iPd   18 37.60   0.2
        0.3s     2.00nm          4.2mb
FORT    30.96 173 eP    19 18.80  -0.5
        0.6s    25.00nm          5.1mb
STK     35.99 154 iPc   19 58.00  -4.5X
        0.4s     4.60nm          4.6mb
                  i     20 32.50 156km
CD2     36.06 330 iPc   20 04.20   1.1
XAN     36.53 339 eP    20 07.00  -0.1
MAT     38.68  19 eP    20 23.00  -2.0
        1.0s     8.00nm          4.4mb
GTA     44.85 334 eP    21 16.00   0.7
        1.5s    13.00nm          4.3mb
GUN     45.63 311 P     21 22.20   0.2
        0.4s     9.00nm          4.7mb
PKI     45.82 310 P     21 23.20  -0.2
KKN     46.03 310 P     21 24.80  -0.1
DMN     46.07 310 P     21 25.40   0.1
GKN     46.63 310 P     21 29.40  -0.2
IMA     86.90  24 eP    25 44.80   1.7
INK     94.62  21 eP    26 19.00   0.2
HFS     99.81 332 eP    26 39.70  -2.8
        0.5s     1.20nm          4.7mb
     S.D. = 1.0  on  22 of  24 obs.
-------------------------------------
*  NOV  16, 1993  01h 32m 28.64± 1.04s
   26.470 N ±17.3km   55.037 E ±10.1km
   DEPTH =  33.0km  (normal)
   4.3mb (  4 obs.)
 SOUTHERN IRAN                     (353)

RYD      7.81 259 eP    34 24.00   1.2
                  eS    35 49.50
QASM    10.33 270 ePd   34 57.33  -0.4
AFIF    10.99 260 eP    35 10.00   3.3X
QUE     11.13  68 eP    35 08.30  -0.4
                  eS    37 14.60
UQSK    11.41 269 ePd   35 12.53   0.0
                  eS    37 31.67
KMSA    11.42 240 ePd   35 11.87  -0.7
GEC2    38.97 316 eP    39 53.70   0.2
        0.4s     0.52nm          3.6mb
                  e     39 57.10
                  e     40 00.10
                  e     40 10.50
APO     44.01 332 eP    40 33.20  -1.2
        0.4s     2.20nm          4.3mb
SMF     44.90 310 eP    40 41.90   0.0
        0.8s     5.50nm          4.5mb
LOR     44.98 311 eP    40 42.10  -0.5
SSF     45.19 311 eP    40 43.50  -0.7
TCF     45.97 310 eP    40 50.80   0.4
        0.7s     3.30nm          4.4mb
MBC     77.47 359 eP    44 24.00   2.2
     S.D. = 1.0  on  12 of  13 obs.
-------------------------------------
%  NOV  16, 1993  01h 46m 58.86± 0.50s
   39.526 N ± 4.9km   28.834 E ± 4.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 3.1 (ISK).

DST      0.18 296 iPg   47 02.40  -0.5
IZI      0.95  31 iPg   47 16.30  -0.7
                  eSg   47 31.30
BNT      1.09 320 iPn   47 18.30  -1.0
ALT      1.10 115 iPn   47 19.20  -0.3
EDC      1.11 318 iPn   47 18.80  -0.8
KHL      1.32 156 ePn   47 23.00  -0.2
GPA      1.37  56 iPn   47 23.40  -0.6
EYL      1.45  44 ePn   47 25.90   0.6
ISK      1.55   6 ePn   47 27.80   1.3
CTT      1.65 349 ePn   47 28.30   0.4
IZM      1.66 228 ePn   47 28.80   0.6
EZN      1.96 280 ePn   47 32.90   0.5
DMK      2.43 341 ePn   47 40.00   0.7
     S.D. = 0.8  on  13 of  13 obs.
-------------------------------------
?  NOV  16, 1993  01h 53m 27.18± 1.18s
   39.526 N ±13.2km   28.866 E ± 8.3km
   DEPTH =   5.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.6 (ISK).

DST      0.20 293 iPg   53 30.90  -0.4
                  eSg   53 33.40
IZI      0.93  30 ePg   53 45.30  -0.2
                  eSg   53 58.30
ALT      1.07 116 ePn   53 48.00   0.1
EDC      1.13 317 ePn   53 49.30   0.6
     S.D. = 0.7  on   4 of   4 obs.
-------------------------------------
?  NOV  16, 1993  02h 10m 12.06± 3.29s
   31.856 S ±19.1km   71.748 W ±24.3km
   DEPTH =  33.0km  (normal)
 NEAR COAST OF CENTRAL CHILE       (135)
      MD 4.0 (SAN).

ROCH     1.28 151 iP+   10 33.48  -0.4
                  iS    10 50.50
JACH     1.28 130 iPd   10 33.35  -0.5
                  iS    10 50.04
PEL      1.57 145 iPd   10 38.20   0.2
                  iS    10 58.16
LCCH     1.62 175 iP+   10 38.94   0.2
                  iS    10 59.14
FCH      1.92 140 iP+   10 43.32   0.0
                  iS    11 08.12
TACH     1.92 159 iP+   10 43.37   0.3
PCH      2.04 150 eP    10 44.93   0.0
LNV      2.11 172 eP    10 44.96  -0.8
CACH     2.45 157 eP    10 51.45   0.7
RTLL     2.85  80 e(P)  10 56.30   0.1
CFA      3.00  86 ePd   11 09.00  10.6X
     S.D. = 0.5  on  10 of  11 obs.
-------------------------------------
   NOV  16, 1993  03h 00m 32.58± 0.37s
   49.178 N ± 3.2km    6.906 E ± 4.4km
   DEPTH =  10.0km  (geophysicist)
 GERMANY                           (543)
      ML 3.0 (STR), 2.7 (UCC), 2.6
      (BNS).

RUP      0.53  11 ePg   00 43.20  -0.2
LANF     0.62 108 Pg    00 44.54  -0.6
SRBF     0.68 113 Pg    00 45.91  -0.1
WLF      0.69 315 iPd   00 46.25   0.0
                  iS    00 55.80
CDF      0.80 162 Pg    00 47.60  -0.7
                  Sg    00 57.79
ABH      0.82  30 ePg   00 48.00  -0.5
WLS      0.82 159 Pg    00 47.86  -0.7
                  Sg    00 58.83
STR      0.82 136 Pg    00 49.46   1.0
ECH      0.98 170 Pg    00 50.70  -0.5
                  Sg    01 04.30
VITF     1.14 213 Pg    00 53.36  -0.6
                  Sg    01 07.38
MOF      1.34 173 Pg    00 57.70   0.4
                  Sg    01 13.88
TNS      1.45  43 ePnc  00 58.50  -0.4
                  eSn   01 17.80
                  iSb   01 19.60
FEL      1.50 150 Pn    00 58.58  -1.0
                  Pg    01 00.72
                  Sg    01 20.29
MEM      1.55 338 iPd   00 59.75  -0.4
                  id    01 02.05
                  iS    01 23.75
ENN      1.71 339 ePn   01 02.50  -0.1
        0.7s    47.40nm
                  iPg   01 05.00
                  eS    01 29.00
DOU      1.76 302 iP    01 03.20  -0.1
                  i     01 05.60
                  iS    01 23.30
BBS      1.76 167 Pg    01 06.27   2.9
BNS      1.80   5 iPnc  01 05.70   1.9
        0.4s    53.00nm
                  Pg    01 07.60
                  iSn   01 26.00
                  iSg   01 30.30
LOMF     1.83 182 Pn    01 03.54  -0.9
                  Pg    01 06.93
SUF      2.16 309 iPc   01 09.01  -0.1
                  i     01 12.87
WTS      2.82 359 ePn   01 28.00   9.5X
        0.7s     8.20nm
                  eSn   02 08.00
GRF      2.86  78 e(Pn) 01 25.20   6.1X
                  ePgc  01 27.40
                  eSg   02 03.80
MOX      3.38  62 (Pg)  01 37.90  11.4X
                  eSg   02 21.00
SQTA     3.48 123 iPnd  01 28.70   0.7
                  iSn   02 23.30
WTTA     3.70 119 iPnd  01 32.00   0.9
                  i(Sn) 02 32.50
KHC      4.38  88 Pn    01 40.00  -0.7
                  e     01 54.90
                  eSn   02 29.00
                  eSg   02 51.50
CLL      4.46  59 ePg   01 59.00  17.3X
                  eSg   02 58.00
GEC2     4.49  92 Pn    01 41.60  -0.6
                  Pg    02 02.70
                  Sn    02 33.00
                  Sg    02 54.80
BRG      4.85  67 e(P)  02 03.90  16.7X
                  eSg   03 07.10
PRU      5.03  78 ePg   02 07.00  17.1X
                  eSn   03 10.50
                  e     03 20.70
     S.D. = 1.0  on  24 of  30 obs.
-------------------------------------
   NOV  16, 1993  03h 43m 50.69± 0.32s
   44.403 N ± 2.3km    7.302 E ± 3.3km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                    (545)
      ML 2.3 (LDG), 2.2 (GEN).

STV      0.16 174 P     43 54.82   0.4
                  S     43 57.00
PZZ      0.18 305 P     43 55.63   0.9
                  S     43 58.35
ENR      0.20 154 P     43 55.41   0.3
                  S     43 58.11
TOUF     0.39 186 Pg    43 58.87   0.1
AUTN     0.42 167 Pg    43 59.24  -0.1
ROB      0.42 105 P     43 59.87   0.5
                  S     44 05.97
BHB      0.44 356 P     43 59.61   0.0
                  S     44 05.51
SAOF     0.46 156 Pg    43 59.73  -0.2
                  Sg    44 05.52
AURF     0.52 178 Pg    44 00.18  -1.0
                  Sg    44 07.32
MVIF     0.52 192 Pg    44 01.27   0.0
                  Sg    44 07.87
SBF      0.55 170 Pg    44 01.60  -0.2
                  Sg    44 08.00
RRL      0.63 325 P     44 03.09  -0.5
IMI      0.65 139 P     44 03.27  -0.5
                  S     44 11.88
FIN      0.68 106 P     44 04.16   0.0
                  S     44 13.30
RSP      0.75 358 P     44 04.69  -0.7
PCP      0.90  81 P     44 08.49   0.5
FRF      0.97 210 Pg    44 09.40   0.3
                  Sg    44 20.40
LRG      1.17 216 Pg    44 12.70   0.2
                  Sg    44 27.70
LMR      1.21 208 Pg    44 13.20  -0.1
                  Sg    44 28.50
     S.D. = 0.5  on  19 of  19 obs.
-------------------------------------
*  NOV  16, 1993  03h 47m 35.46± 1.16s
   7.424 N ±12.4km  126.439 E ±12.7km
   DEPTH = 150.0 ±  7.1 km
   4.9mb ( 18 obs.)
 MINDANAO, PHILIPPINE ISLANDS      (259)

BIP      0.82 347 iPc   48 01.00   2.0
                  iS    48 16.00
CGP      2.01 301 eP    48 11.00  -0.1
                  eS    48 39.00
MAP      3.77 320 iPc   48 33.50   0.1
                  iS    49 06.00
PLP      3.99 339 ePd   48 38.70   2.4
                  eS    49 01.20
QIZ     19.83 307 eP    51 57.60   0.9
NJ2     25.50 345 Pc    52 52.50   1.0
GYA     26.69 318 P     53 03.20   0.6
        0.8s    14.00nm          4.6mb
```

```
WR2     28.30 164 eP    53 27.40  10.4X
        0.4s     2.80nm
KMI     28.67 311 Pc    53 21.00   0.3
        1.0s    30.00nm          5.0mb
XAN     31.04 331 Pc    53 39.50  -1.7
        0.6s    17.00nm          5.0mb
                  pP    53 47.40  27kmX
CD2     31.56 321 iPd   53 45.90   0.1
        1.0s    74.00nm          5.4mb
WARB    33.41 180 eP    54 03.50   1.7
        0.5s     8.00nm          4.7mb
BJI     33.75 346 eP    54 03.00  -1.6
        1.2s    24.00nm          4.8mb
LZH     35.22 327 Pc    54 17.00  -0.4
        1.5s    42.00nm          4.9mb
HHC     35.83 341 iPd   54 22.50   0.1
        1.0s    26.00nm          4.9mb
GTA     39.83 327 eP    54 56.40   0.7
        1.0s    21.00nm          4.8mb
GUN     43.40 303 P     55 25.80   0.4
        0.8s    46.00nm          5.2mb
PKI     43.68 302 P     55 27.40  -0.2
KKN     43.86 303 P     55 28.80  -0.1
        0.8s    32.00nm          5.0mb
DMN     43.95 302 P     55 29.80   0.1
        0.8s    30.00nm          5.0mb
GKN     44.47 303 P     55 33.20  -0.5
GBA     48.50 282 Pc    56 06.00   0.8
WMQ     49.58 323 P     56 12.50  -0.7
NDI     50.92 301 iPc   56 22.00  -1.6
        0.6s    56.67nm          5.5mb
FBA     81.53  25 e(P)  59 37.00  -0.2
OBN     83.88 325 eP    59 49.00  -0.3
        1.0s    35.00nm          5.1mb
INK     86.85  22 eP    00 03.50  -0.3
KAF     88.21 332 iP    00 09.70  -0.8
        0.5s     2.00nm          4.4mb
MBC     88.43  13 eP    00 12.50   1.2
NUR     89.35 331 eP    00 14.40  -1.5
DAG     93.59 352 iPc   00 33.90  -1.3
        0.6s     6.67nm          5.0mb
RES     94.25  10 eP    00 39.50   1.2
HFS     94.63 332 eP    00 37.60  -2.6
        0.4s     0.80nm          4.3mb
GEC2    99.03 322 eP    01 00.60   0.1
        0.9s     1.50nm          4.5mb
                   e    01 03.10
                   e    01 09.50
     S.D. = 1.2  on  33 of  34 obs.
-----------------------------------
? NOV  16, 1993  05h 46m 02.15± 0.88s
  15.464 N ± 9.5km   60.996 W ±44.1km
  DEPTH = 100.0km  (geophysicist)
 LEEWARD ISLANDS                  ( 92)

MGG     0.55 326 eP    46 18.42   0.0
                S     46 30.60
CRM     0.71 174 iPc   46 19.92   0.0
                S     46 34.10
FDF     0.74 192 ePc   46 20.25   0.0
                S     46 34.90
DEG     0.85 356 eP    46 21.30   0.0
                S     46 36.43
MVM     0.91 174 iPd   46 21.79  -0.1
BIM     0.94 184 iPd   46 22.33   0.1
                S     46 40.30
     S.D. = 0.1  on   6 of   6 obs.
-----------------------------------
&  NOV  16, 1993  06h 20m 09.70s
  60.027 N          153.721 W
  DEPTH = 165.8km
 SOUTHERN ALASKA                  (  2)
     <AEIC>.

INW     0.30  82 eP    20 31.83   0.9
INE     0.33  84 eP    20 32.01   0.9
                eS    20 49.04
PDB     0.34 225 eP    20 31.48   0.6
ILIM    0.39  82 eP    20 32.02   0.9
                eS    20 49.23
OPT     0.45 146 eP    20 32.43   1.1
                eS    20 49.54
RDW     0.64  44 eP    20 33.70  -0.4
                eS    20 51.30
RS2     0.65  47 eP    20 35.14   1.0
AUL     0.66 167 eP    20 33.49  -0.5
NCT     0.67  36 eP    20 33.82  -0.3
AUW     0.67 169 eP    20 33.50  -0.5
AUH     0.68 168 eP    20 34.25   0.1
AGU     0.69 167 eP    20 31.60  -2.6
REF     0.69  47 eP    20 33.96  -0.4
AUE     0.69 165 eP    20 33.64  -0.4
MCNL    0.90 201 eP    20 34.49  -1.0
CDD     1.10 178 eP    20 36.08  -1.1
HOM     1.11 109 eP    20 34.60  -2.6
BKG     1.27  34 eP    20 38.78   0.1
CNPM    1.35 111 eP    20 38.85  -0.6
CKL     1.36  30 eP    20 36.88  -2.7
CKT     1.39  32 eP    20 40.01   0.1
BGL     1.40  27 eP    20 40.71   0.7
SPU     1.42  35 eP    20 40.06   0.0
CGLM    1.54  33 eP    20 41.43   0.1
SYI     1.58 154 eP    20 40.36  -1.2
                eS    21 03.18
NCG     1.58  28 eP    20 42.54   0.8
SLKM    1.81  73 iP    20 43.54  -0.6
                eS    21 08.80
SUA     2.05  44 eP    20 46.66  -0.3
                eS    21 14.85
SEW     2.14  86 eP    20 47.27  -0.5
SKT     2.23  28 eP    20 49.32   0.4
                eS    21 19.32
PMS     2.39  57 eP    20 49.97  -0.8
PLRM    2.74  53 eP    20 54.70  -0.3
PWL     2.80  70 eP    20 54.64  -1.1
CUT     2.91  33 eP    20 57.04   0.0
GHO     2.93  51 eP    20 55.90  -1.5
                eS    21 30.99
KNK     2.94  59 eP    20 55.82  -1.6
LTI     2.94  87 eP    20 57.08  -0.4
KNIM    3.01  81 eP    20 57.39  -0.9
                eS    21 32.02
MTU     3.05  88 eP    20 58.57  -0.2
CFI     3.16  66 eP    20 59.11  -1.0
SML     3.18  53 eP    20 58.93  -1.6
SCM     3.61  57 eP    21 05.07  -0.9
HIN     3.62  81 eP    21 05.40  -0.7
FID     3.67  75 eP    21 05.60  -1.1
VLZ     3.81  70 eP    21 08.53   0.1
     45 obs. associated
-----------------------------------
   NOV  16, 1993  07h 26m 04.03± 0.64s
  43.884 N ± 5.8km  107.384 W ± 5.8km
  DEPTH =   5.0km  (geophysicist)
 WYOMING                          (460)
     ML 3.5 (GS).

RSSD    2.43  83 eP    26 45.62   0.4
                eS    27 17.84
MEMT    3.08 305 ePn   26 57.10   2.7X
LTMT    3.46 282 ePn   27 01.00   1.1
SXM     3.53 311 ePn   26 59.20  -1.7
BGMT    3.59 294 ePn   27 02.70   1.0
GLD     4.44 158 (Pn)  27 13.39  -0.3
                eS    28 21.86
GOL     4.44 160 ePn   27 13.64  -0.2
HVU     4.49 244 eP    27 13.96  -0.4
DAU     4.51 221 eP    27 15.15   0.3
EMUT    4.81 213 (Pn)  27 18.97  -0.1
SRU     5.32 207 eP    27 25.72  -0.5
PV08    5.39 191 eP    27 27.39   0.0
DUG     5.47 229 ePn   27 28.09  -0.3
PV09    5.54 194 eP    27 29.55   0.1
PV10    5.64 193 eP    27 31.53   0.6
MSU     6.47 216 ePn   27 39.83  -2.7X
ULM    10.10  47 eP    28 29.50  -3.3X
     S.D. = 0.8  on  14 of  17 obs.
-----------------------------------
&  NOV  16, 1993  08h 18m 47.27s
  59.282 N          136.355 W
  DEPTH =   0.0km
 SOUTHEASTERN ALASKA              ( 19)
     <AEIC>. ML 2.6 (AEIC).

PNL     1.60 285 eP    19 14.89  -2.0
BCPM    1.80 293 eP    19 18.34  -1.4
PCA     2.14 294 eP    19 22.75  -2.1
SIT     2.30 166 eP    19 25.42  -1.6
                eS    19 54.97
CHX     2.54 290 eP    19 30.76   0.2
YAH     2.93 294 eP    19 34.55  -1.7
CTGM    3.01 306 eP    19 36.62  -0.6
                eS    20 16.08
BALM    3.47 303 eP    19 41.36  -2.5
KLU     5.24 299 eP    20 06.19  -2.6
        9 obs. associated
-----------------------------------
?  NOV  16, 1993  08h 36m 19.16± 0.95s
  39.085 N ± 8.0km   27.579 E ± 9.7km
  DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
     ML 2.6 (ISK).

IZM     0.73 200 ePg   36 33.50   0.0
                eSg   36 45.50
DST     0.97  57 ePn   36 37.60   0.1
EZN     1.22 308 ePn   36 41.90   0.0
EDC     1.28  10 ePn   36 42.80  -0.1
     S.D. = 0.1  on   4 of   4 obs.
-----------------------------------
?  NOV  16, 1993  09h 11m 38.14± 0.97s
  39.107 N ± 8.2km   27.631 E ± 9.8km
  DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
     ML 2.7 (ISK).

IZM     0.76 202 ePg   11 53.00  -0.1
                eSg   12 05.00
DST     0.92  57 iPn   11 56.00   0.3
EZN     1.24 306 iPn   12 01.40   0.2
EDC     1.25   8 ePn   12 01.00  -0.4
     S.D. = 0.5  on   4 of   4 obs.
-----------------------------------
&  NOV  16, 1993  09h 31m 44.20s
  45.182 N          73.495 W
  DEPTH =  17.1km
  3.8mb (  2 obs.)
 SOUTHERN QUEBEC, CANADA          (447)
     <OTT-P>. mbLg 4.4 (OTT), 4.1
     (GS). Felt strongly at
     Napierville. Felt in the
     Montreal area and by a few
     people in the Ottawa area. Felt
     (V) at Mooers, New York and (IV)
     at Altona, Chazy, Dannemora,
     Ellenburg, Ellenburg Depot,
     Malone, Rouses Point, Schuyler
     Falls and West Chazy, New York.
     Also felt (IV) at Albany,
     Bakersfield, Burlington,
     Fairfield, Franklin, Guildhall,
     Jeffersonville, Milton,
     Richford, Saint Albans and
     Stowe, Vermont.

MNT     0.33 344 P     31 51.27   0.0
MOQ     0.89  81 P     32 00.29  -0.5
RSNY    0.97 230 ePd   32 02.45   0.2
                eS    32 15.75
WBO     1.27 262 Pd    32 07.31   0.2
TRQ     1.28 325 P     32 06.69  -0.6
LBNH    1.46 130 ePc   32 10.42   0.6
                eS    32 26.09
GAC     1.49 291 ePd   32 11.00   0.8
CKO     2.89 288 P     32 30.46   0.2
HRV     3.02 152 eP    32 32.00  -0.1
DAQ     3.19  28 Pd    32 33.49  -1.1
BINY    3.49 212 ePn   32 39.73   1.0
LSCT    3.51 177 eP    32 39.76   0.7
WLVO    3.72 252 P     32 43.40   1.3
CBM     4.13  63 eP    32 47.00  -0.9
PNJ     4.30 187 Pn    32 51.41   1.1
                pP    32 54.55
STCO    4.53 246 P     32 52.32  -1.3
YSNY    4.54 235 eP    32 53.50  -0.3
ACTO    4.96 254 P     32 58.90  -0.8
TYNO    5.04 248 P     32 59.25  -1.5
LMN     6.14  81 eP    33 14.50  -1.8
MCWV    7.25 223 (P)   33 31.27  -0.6
CBN     7.55 204 eP    33 38.00   1.9
                e     35 11.00
                e     35 31.00
JAQ     8.75 351 eP    33 48.50  -4.3
CEH    10.21 207 (P)   34 10.20  -2.7
MYNC   12.95 222 eP    34 48.78  -1.3
ULM    15.87 297 eP    35 27.00  -1.2
MIAR   18.67 242 eP    36 04.34   1.0
        0.8s     3.58nm          3.6mb
FRB    18.81   7 eP    36 05.50   0.7
TUL    19.26 249 iPd   36 14.60   4.1
UYO    19.47 243 iPc   36 17.20   4.2
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16d 09h

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MEO     21.77 250 iPc    36 40.50    3.7
WMOK    21.93 250 eP     36 38.39    0.0
        0.6s      4.52nm          4.1mb
        32 obs. associated
-------------------------------------
*  NOV  16, 1993  11h 18m 45.64± 3.61s
   18.566 N ±46.3km   63.141 W ±22.8km
   DEPTH =  30.8 ±  4.5 km
 LEEWARD ISLANDS                    ( 92)
      ML 4.0 (FDF).

BPA      1.94 141 eP     19 17.50    0.3
                  S      19 39.60
LPR      2.60 265 P      19 26.00   -0.6
CPD      2.69 259 P      19 27.70    0.0
PAG      2.88 151 eP     19 30.60    0.1
                  S      20 04.60
SJG      2.89 261 P      19 31.00    0.4
MGG      3.16 146 eP     19 34.60    0.2
CLLP     3.30 262 P      19 37.00    0.6
PORP     3.36 262 P      19 37.70    0.4
APR      3.41 269 P      19 37.60   -0.3
MGP      3.79 262 P      19 42.90   -0.5
FDF      4.26 153 eP     19 50.12    0.0
CRM      4.35 150 eP     19 50.84   -0.5
BIM      4.49 153 eP     19 53.40    0.0
MVM      4.53 151 eP     19 53.75   -0.2
     S.D. = 0.4  on  14 of  14 obs.
-------------------------------------
   NOV  16, 1993  11h 54m 53.77± 0.60s
   39.700 N ± 5.3km   20.450 E ± 5.1km
   DEPTH =  10.0km  (geophysicist)
 GREECE-ALBANIA BORDER REGION     (392)

IGT      0.19 209 iPg    54 57.76   -0.2
                  eSg    55 01.60
SRN      0.39 298 iPgc   55 01.70   -0.1
                  iSg    55 08.50
LSK      0.46  14 ePg    55 02.50   -0.7
TPE      0.68 331 iPgd   55 08.00    0.7
FNA      1.29  33 ePb    55 18.50    0.7
                  eSb    55 38.80
OHR      1.43  11 iPn    55 20.80    0.9
       0.5s     60.00nm
                  i      55 22.10
                  i      55 42.50
                  i      55 43.70
                  Lg     55 46.00
AGG      1.61 114 ePb    55 22.40    0.1
                  eSb    55 45.12
LIT      1.62  75 iPb    55 23.44    1.0
                  iSb    55 45.64
GRG      1.95  49 ePn    55 26.92   -0.3
                  iSn    55 53.76
VAY      2.29  44 ePn    55 39.40    7.3X
SKO      2.39  18 ePn    55 32.00   -1.6
SOH      2.49  62 ePn    55 34.84   -0.2
PAIG     2.50  84 ePn    55 34.76   -0.3
     S.D. = 0.8  on  12 of  13 obs.
-------------------------------------
   NOV  16, 1993  11h 59m 57.51± 0.30s
    8.679 S ± 5.6km  111.439 E ± 7.4km
   DEPTH =  33.0km  (normal)
   4.8mb ( 22 obs.)  4.8Msz (  4 obs.)
 JAWA, INDONESIA                    (277)

LEM      4.21 296 iPc    01 07.50    6.3X
                  iS     01 59.00
KGM     13.36 322 eP     03 13.00    5.7X
MBL     14.82 148 eP     03 22.50   -4.0X
        0.3s      8.00nm          4.7mb
                  eS     05 49.20
KNA     18.33 114 eP     04 11.50    0.5
MEEK    19.11 160 eP     04 18.50   -2.1
        0.3s     12.00nm          4.6mb
                  eS     07 33.50
MTN     19.78 104 iPd    04 27.80   -0.2
        0.4s     83.00nm          5.4mb
SWI     21.21  70 ePd    04 43.00    0.2
BAL     22.36 168 eP     04 54.80    0.5
MUN     23.60 170 eP     05 21.00   14.6X
                  eS     09 22.50
COOL    23.88 159 eP     05 09.20    0.1
                  eS     09 23.00
WR2     24.84 119 iPd    05 18.80    0.3
        0.5s     27.70nm          5.1mb
                  epP    05 34.30   66kmX
                  iScP   08 54.90
                  eS     10 02.30
ASPA    26.16 127 iPd    05 31.20    0.4
        0.4s     12.30nm          4.9mb
                  iS     10 23.80
FORT    26.91 147 eP     05 37.80    0.2
CTA     35.50 112 iPc    06 54.00    0.5
        1.0s     15.00nm          4.9mb
                  e(TT)  18 00.00
STK     36.28 134 iPd    06 54.70   -5.2X
        0.5s      5.90nm          4.8mb
                  i      07 10.80
                  i      09 19.00
GBA     40.37 303 Pd     07 33.90   -0.3
        0.5s      4.00nm          4.4mb
SSE     40.64  13 Pc     07 38.00    1.8
        0.9s      9.00nm          4.5mb
NJ2     41.11  10 Pd     07 42.40    2.3
        0.8s     13.00nm          4.7mb
XAN     42.55 357 P      07 52.50    0.6
        0.8s      7.00nm          4.4mb
BRS     43.22 121 iPc    08 00.00    2.4X
        1.0s      4.00nm          4.1mb
                  i      08 10.00
PKI     43.98 326 P      08 04.40    0.4
GUN     43.98 327 P      08 04.00    0.0
        0.4s     17.00nm          5.2mb
DMN     44.17 326 P      08 04.80   -0.7
        0.6s     23.00nm          5.2mb
KKN     44.22 326 P      08 06.00    0.2
GKN     44.74 325 P      08 09.20   -0.7
TIA     44.97   7 Pd     08 11.70    0.3
LZH     45.10 351 Pc     08 13.80    1.1
        1.4s     28.00nm          5.0mb
      Z  18s      0.30um          4.3Msz
                  ePP    09 53.50
POO     45.90 306 iPd    08 08.70  -10.4X
TIY     46.16   1 eP     08 21.60    0.7
BJI     48.67   5 eP     08 40.00   -0.4
        1.0s     11.00nm          4.8mb
GTA     49.05 348 eP     08 44.50    1.0
        1.0s      8.00nm          4.7mb
                  PcP    10 07.00
BTO     49.05 359 eP     08 43.80    0.3
HHC     49.28   0 P      08 45.60    0.3
        1.0s     19.00nm          5.1mb
MAT     51.53  28 eP     09 01.00   -1.5
        0.8s      5.97nm          4.6mb
YAMJ    53.71  28 eP     09 17.90   -0.7
CN2     53.76  13 P      09 17.80   -1.0
        0.8s      8.30nm          4.8mb
DZM     54.41 111 iPc    09 24.90    0.7
OFUJ    55.19  29 eP     09 28.50   -1.0
MDJ     55.52  16 eP     09 31.00   -0.8
WMQ     56.52 340 P      09 38.00   -1.1
HOOJ    58.56  27 eP     09 53.30    0.0
ASAJ    59.66  26 eP     10 00.10   -0.8
KUSJ    59.77  28 eP     10 00.80   -0.9
BUL     80.37 251 iPc    12 09.30    1.5
ADK     85.81  36 eP     12 34.47   -0.4
        0.6s     11.39nm          5.3mb
KAF     95.33 332 iP     13 19.60    0.4
        0.4s      2.20nm          5.0mb
NUR     95.90 330 eP     13 20.00   -1.9
YKA    116.83  22 ePKP   18 39.40   -0.5
        0.7s      1.50nm
LKO    117.89 276 PKP    18 43.09   -0.4
        0.6s      4.50nm
WDC    122.68  47 PKP    19 00.00    8.2X
      Z  18s      0.19um          4.8Msz
NEW    123.28  37 PKP    19 00.00    7.2X
      Z  19s      0.20um          4.8Msz
PV10   133.14  44 ePKP   19 13.93    1.7
WMOK   142.06  42 (PKP)  19 22.62   -6.0X
TUL    143.25  38 iPKPc  19 28.10   -2.4
PPD    145.11 209 (PKP)  19 34.00   -0.1
UYO    145.21  39 iPKPc  19 33.50   -0.4
YSNY   145.21  13 ePKPc  19 33.48   -0.2
      Z  19s      0.16um          4.8Msz
MIAR   145.51  38 iPKPc  19 34.85    0.4
                  e      19 51.66
BINY   145.98  10 ePKP   19 35.62    0.6
                  e      19 47.93
BAO    148.40 220 PKPd   19 44.20    4.5X
                  e      20 05.30
MYNC   150.11  26 ePKP   19 40.85   -0.9
                  PKPbcc19 47.39
CEH    151.26  18 PKP    19 49.80    6.4X
                  PKPab  19 57.55
CNCB   154.67 181 PKP    19 51.80    2.4X
LPB    154.95 181 ePKP   19 55.00    5.4X
LPAZ   155.19 181 PKP    19 52.40    2.2
     S.D. = 1.0  on  51 of  65 obs.
-------------------------------------
?  NOV  16, 1993  12h 11m 35.60± 1.47s
   40.720 N ±11.8km   22.735 E ± 9.2km
   DEPTH =   5.0km  (geophysicist)
 GREECE                             (364)

THE      0.20 117 ePg    11 39.56   -0.1
                  eSg    11 42.44
GRG      0.35 313 iPg    11 42.60    0.0
                  eSg    11 47.32
KNT      0.46  16 ePg    11 44.72   -0.1
                  eSg    11 51.16
SOH      0.48  78 ePg    11 45.34    0.1
     S.D. = 0.1  on   4 of   4 obs.
-------------------------------------
*  NOV  16, 1993  13h 18m 36.40± 0.62s
   10.260 S ±10.2km   75.592 W ±14.0km
   DEPTH =  33.0km  (normal)
   4.3mb (  3 obs.)
 CENTRAL PERU                       (116)

NNA      2.11 215 iPd    19 10.30    0.2
        0.4s    271.19nm
                  e      19 36.50
LPAZ     9.41 130 P      20 51.40   -2.1
LPB      9.59 131 P      21 04.00    8.3X
CNCB     9.86 132 P      21 01.00    1.5
CCH     11.59 129 eP     21 34.00   11.0X
SDV     19.65  15 eP     23 06.40    0.6
TOV     20.73  16 eP     23 15.80   -1.1
UYO     47.68 339 iPc    27 12.20    0.4
LTX     47.78 326 eP     27 12.33   -0.4
ALQ     53.62 328 eP     27 56.80   -0.3
        1.0s      2.75nm          4.2mb
TUC     54.06 323 eP     27 58.44   -1.8
                  e      28 01.66
YKA     78.56 343 eP     30 35.30   -0.6
        1.0s      3.00nm          4.3mb
INK     88.28 342 eP     31 25.50    0.1
        0.7s      2.00nm          4.5mb
MBC     90.10 350 eP     31 36.00    2.2
WR2    137.92 224 ePKP   37 59.00   -1.4
        0.8s      2.50nm
WRA    137.94 224 PKP    38 00.10   -0.3
        0.7s      1.20nm
BJI    148.55 343 ePKP   38 21.00    3.0
        1.0s      6.00nm
GBA    153.41  80 PKP    38 33.00    7.2X
     S.D. = 1.5  on  15 of  18 obs.
-------------------------------------
*  NOV  16, 1993  14h 11m 59.19± 1.43s
   12.523 N ±14.9km  124.839 E ±25.2km
   DEPTH =  33.0km  (normal)
 SAMAR, PHILIPPINE ISLANDS          (251)

PLP      1.36 174 ePc    12 21.80   -0.2
                  eS     12 34.00
MAP      2.34 201 ePd    12 37.00    0.8
GQP      2.70 301 ePd    12 44.00    2.7
CGP      4.05 182 eP     13 00.00   -0.4
TGY      4.11 293 eP     13 08.00    6.6X
QCP      4.22 300 eP     13 22.00   19.2X
QVP      4.27 300 eP     13 22.00   18.4X
BIP      4.49 162 eP     13 06.00   -0.7
DAV      5.45 172 eP     13 35.00   14.7X
BAG      5.65 314 ePd    13 24.40    1.1
GUN     39.44 299 P      19 28.00   -0.6
PKI     39.76 298 P      19 29.80   -1.4
KKN     39.92 298 P      19 31.40   -1.0
DMN     40.03 298 P      19 32.00   -1.3
GKN     40.53 299 P      19 35.80   -1.5
BRS     48.05 146 iP     20 40.00    2.4
     S.D. = 1.6  on  12 of  16 obs.
-------------------------------------
   NOV  16, 1993  15h 02m 16.78± 0.32s
   14.616 N ± 5.4km  144.195 E ± 7.6km
   DEPTH =  19.3km  (  2 depth phases)
   4.8mb ( 17 obs.)  4.4Msz (  3 obs.)
 MARIANA ISLANDS                    (216)

GUMO     1.21 147 ePc    02 38.10   -0.6
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Part 2 of 2
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U. S. DEPARTMENT OF THE INTERIOR

Geological Survey

EARTHQUAKE DATA REPORT

The Earthquake Data Report (EDR) is a bulletin of all seismic phase and amplitude data which were associated with events published in the Preliminary Determination of Epicenters (PDE) Monthly Listing. It also contains information about the hypocentral computations (such as standard errors) that are not included in the PDE Monthly Listing. A machine-readable version of this EDR is available from the Books and Open-File Reports Section of the U.S. Geological Survey.

All data in the EDR are grouped by event, with events listed by origin time in date/time order through the month. All times are in Coordinated Universal Time (UTC). Locations are in decimal degrees of geographic latitude and longitude. Depths are in kilometers below the free surface. Hypocentral coordinates are determined by a modified Geiger's method and may be constrained by reported first arriving P-waves, Pdiff, and the DF branch of PKP. Data are corrected for station elevation and for the ellipticity of the Earth. Outliers may be truncated (ie., removed from the calculation) either automatically or manually. The solution is allowed to converge between rounds of automatic truncation to insure a unique result. Convergence is aided by step length damping.

The error bars of the computed hypocentral coordinates are 90% marginal confidence intervals incorporating Baysian information to stabilize estimates derived from small samples (Jordan and Sverdrup, 1981). It is assumed that the travel-time errors *of the data used* are independent, unbiased, and have an expected standard deviation of 1 s. Monte Carlo experiments suggest that the error bars are accurate for events constrained by more than about 30 data. However, care should be exercised in interpreting these numbers in terms of absolute location accuracy because of unmodeled biases. Analysis of events with independently known coordinates indicates that most PDE determinations are accurate to a few tenths of a degree in epicentral position and 25 km in depth. For special studies, we urge that inquiry be made to this office for possible recomputation of hypocenters of interest, using more complete instrumental data.

Restricted focal depths occur in four instances. If at any point in the computation the depth becomes negative, the solution is automatically restricted at 33 km and indicated by "NORMAL DEPTH." If the unrestricted depth computation is unsatisfactory, and in the judgment of the reviewing geophysicist the earthquake probably has a shallow focus, a solution may be held at 33 km. These are also indicated by "NORMAL DEPTH." The geophysicist may restrain the depth at any value indicated by evidence from available seismograms. These are indicated by, for example, "DEPTH = 100 KM (GEOPHYSICIST)." If two or more pP phases are identified, and in general, yield depths within 10 km of the mean, then the depth is automatically restricted to this value and denoted by, for example, "DEPTH = 51 KM (5 DEPTH PHASES)." pP phases may also appear as unidentified second arrivals with associated travel-time residuals. Hypocentral coordinates derived from other sources, such as the California Institute of Technology, the University of California at Berkeley, and the U. S. Department of Energy are noted on the EDR.

Two types of magnitude are computed: body-wave magnitude (m_b) and surface-wave magnitude (M_{SZ}). Each is a 25% trimmed mean of individual station values. Station magnitudes not used in the trimmed mean are marked with an X. This includes station magnitudes of either type which deviate significantly from the mean and surface-wave magnitudes determined from horizontal amplitudes. Body-wave magnitudes are computed according to the formula $\log(A/T)+Q$, derived by Gutenberg and Richter (1956), where A is the P-wave amplitude in micrometers, T is the period in seconds, and Q is the depth-distance factor. Surface-wave magnitudes are computed from the formula $\log(A/T) + 1.66\log(\Delta) + 3.3$, where A is the maximum vertical surface-wave amplitude in micrometers, T is the period in seconds, and Δ is the epicentral distance in degrees. Surface-wave magnitudes are determined only for earthquakes whose focal depths (taking into account the computed standard deviations) are potentially less than 50 km, for stations having $20° \leq \Delta \leq 160°$, and for reported periods of $18 \leq T \leq 22$ s. No correction for focal depth is used in the M_s calculation. Body-wave magnitudes are not determined from PKP arrivals or for stations having $\Delta \leq 5°$. Amplitude values stated in this report are in nanometers (nm) for body-waves and micrometers (μm) for surface-waves.

The travel-time residual (observed – computed) is based on the 1940 Jeffreys-Bullen P and 1968 Bolt PKP travel-time tables. Phases not used in the computation are marked by an X. The azimuth from the epicenter to the station is measured clockwise from north. The epicentral distance is the central angle in degrees.

The pulse distortion of seismic phases that have ray paths that touch a single internal caustic (*e.g.*, PP, pPP, SS and PKPab) can be corrected using the method of Hilbert transformation described by Choy and Richards (1975). Arrival times that are read from the phases that are corrected for pulse distortion are identified by the symbol H preceding the phase identifier (*e.g.*, HPP, HpPP, HSS and HP′ab).

Hypocenter Symbols

& Indicates that parameters of the hypocenter were supplied or determined by a computational procedure not normally used by the National Earthquake Information Service (NEIS). The source or nature of the determination is indicated by a 2 to 5 letter code enclosed by angle brackets and appearing in the first line of comments. A "-P" appended to the code indicates that the computation is preliminary. These codes are included with the list of abbreviations in the PDE Monthly Listing.

% Indicates a single network solution. A non-furnished hypocenter has been computed using data reported by a single network of stations for which the date and/or origin time cannot be confirmed from seismograms available to a NEIS analyst. Also, if we define η to be the geometric mean of the semi-major and semi-minor axes of the horizontal 90% confidence ellipse, then $\eta \leq 16.0$ km.

* Indicates a less reliable solution. In general, $8.5 < \eta \leq 16.0$ km.

? Indicates a poor solution, published for completeness of the catalog. In general, $\eta > 16.0$ km. This includes poor solutions computed using data reported by a single network.

The lack of any symbol indicates that $\eta \leq 8.5$ km.

Note: On printers available to the NEIS for this publication, the symbol for degrees (°) appears as "`". Also note that certain phase codes are abbreviated because the data base and file format limit the length of the codes to five characters. Thus, PKP is occasionally abbreviated to P′ and the numbers 2 and 3 are sometimes used to represent the AB (AC for SKKS) and BC branches of core phases, respectively. In some codes, R is used to represent repetition; for example, pRPKP represents the phase pPKPPKP and RRPG represents PgPgPg.

References

Bolt, Bruce A. (1968), Estimation of PKP Travel Times, *Bull. Seis. Soc. Am.*, **58**, pp. 1305–1324.

Choy, George L. and P. G. Richards (1975), Pulse Distortion and Hilbert Transformation in Multiply Reflected and Refracted Body Waves, *Bull. Seis. Soc. Am.*, **65**, pp. 55–70.

Gutenberg, B. and C. F. Richter (1956), Magnitude and Energy of Earthquakes, *Ann. di Geofisica*, **9**, no. 1, pp. 1–15.

Jeffreys, Harold and K. E. Bullen (1940), *Seismological Tables*, British Assoc. for the Advancement of Science, Gray Milne Trust.

Jordan, Thomas H. and Keith A. Sverdrup (1981), Teleseismic Location Techniques and their Application to Earthquake Clusters in the South-Central Pacific, *Bull. Seis. Soc. Am.*, **71**, pp. 1105–1130.

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                 eS    02 52.90
PJG     1.21 147 eP    02 38.10   -0.6
GUA     1.28 147 ePc   02 38.80   -0.8
                 eS    02 54.50
WWKK   18.13 182 eP    06 33.00    3.7X
KVG    18.31 159 eP    06 33.50    2.0
DAV    19.75 250 eP+   06 50.00    1.3
SWI    20.01 221 ePc   06 55.00    3.6X
KAGJ   20.52 326 P     06 57.50    0.9
KUMJ   21.60 328 P     07 09.30    1.7
CHJJ   21.85 349 P     07 06.90   -3.2X
QCP    22.37 273 eP    07 32.50   17.1X
MAT    22.48 347 eP    07 16.00   -0.4
       1.3s    25.00nm          4.5mb
                 eS    11 26.00
MTMJ   22.61 347 P     07 19.10    1.3
BAG    22.82 278 ePc+  07 20.50    0.4
                 eS    11 38.00
NIIJ   23.00 349 P     07 22.00    0.5
PMG    24.05 173 eP    07 32.00    0.3
       1.1s    50.63nm          5.0mb
SSE    26.72 312 eP    07 48.00   -8.9X
     Z  20s     0.90um          4.3Msz
     N  11s     0.40um
     E  12s     0.30um
                 S     12 36.00
CTA    34.55 177 iPc   09 06.00   -0.3
       1.0s    20.00nm          5.0mb
BJI    35.24 321 eP    09 08.50   -3.5X
     Z  24s     0.97um          4.5MszX
     N  17s     0.96um
                 eS    14 40.00
WR2    35.68 196 eP    09 14.80   -1.2
       0.8s    14.80nm          4.9mb
                 eS    14 56.80
GYA    36.94 295 P     09 28.00    1.3
     Z  36s     1.25um          4.4MszX
                 PP    10 54.00
                 S     15 14.00
XAN    37.25 308 eP    09 30.20    1.0
HHC    38.57 319 eP    09 39.00   -1.3
ASPA   39.36 195 iPd   09 45.90   -1.0
       1.0s     4.80nm          4.2mb
     Z  22s     0.30um          4.1Msz
                 ePP   11 28.00
BTO    39.43 318 eP    09 47.00   -0.5
     N  15s     0.38um
     E  15s     0.49um
KMI    40.22 292 eP    09 53.50   -0.8
       1.5s    40.00nm          4.9mb
     Z  22s     1.90um          4.9Msz
                 sP    10 08.00
CD2    40.41 301 eP    09 55.60    0.0
LZH    41.87 308 Pc    10 07.50   -0.2
       1.8s    53.00nm          5.0mb
     Z  26s     0.61um          4.4MszX
     E  15s     0.48um
                 pP    10 13.00   18km
                 ePP   11 47.00
                 eS    16 22.50
DZM    42.49 149 iPc   10 14.10    1.4
BRS    42.58 169 iPc   10 14.00    0.7
                 i     10 20.00   20km
MBL    42.85 214 iPc   10 15.30   -0.3
       0.6s    10.00nm          4.7mb
SNG    43.37 265 eP    10 21.00    1.1
                 e     32 23.90
ARMA   45.34 171 eP    10 36.10    0.4
       1.1s    15.00nm          4.8mb
GTA    46.01 311 eP    10 40.50   -0.5
       2.0s    33.00nm          4.9mb
STK    46.30 183 iPd   10 36.40   -6.7X
       1.7s     5.20nm          4.2mb
LSA    50.95 296 eP    11 20.40    0.5
TOO    51.92 179 eP    11 27.20    0.7
GUN    55.48 294 P     11 52.60   -0.8
       0.8s    44.00nm          5.5mb
PKI    55.89 294 P     11 56.40    0.1
WMQ    55.96 313 P     11 55.00   -1.3
       2.0s    22.00nm          4.8mb
KKN    56.01 294 P     11 55.60   -1.4
DMN    56.16 294 P     11 57.40   -0.8
GKN    56.58 294 P     11 59.60   -1.5
       0.8s    24.00nm          5.3mb
HYB    62.89 282 eP    12 43.70   -0.7
NDI    63.10 295 eP    12 34.50  -11.2X
INK    73.67  23 eP    13 50.00   -0.7
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MBC    77.44  14 ePc   14 12.50    0.5
       1.0s     3.00nm          4.3mb
YKA    82.25  27 eP    14 35.70   -2.2
       0.8s     2.60nm          4.4mb
RES    83.71  13 eP    14 47.00    1.7
       1.0s     4.00nm          4.6mb
LPAZ  148.81  97 PKP   22 02.10   -0.2
                 i     22 07.10
LPB   148.85  98 PKP   22 07.00    4.9X
CNCB  148.97  98 PKPc  22 07.30    4.8X
     S.D. = 1.0  on  42 of  52 obs.
-----------------------------------
   NOV  16, 1993  15h 27m 55.23± 0.40s
    9.223 N ± 5.7km  124.127 E ± 7.1km
   DEPTH = 541.9 ±  5.5 km
   4.7mb ( 21 obs.)
 MINDANAO, PHILIPPINE ISLANDS     (259)

CTB     2.01 178 iPd   29 05.00    0.3
PLP     2.10  23 ePd   29 05.00   -0.2
BIP     2.32 115 iPc   29 07.00    0.7
                 eS    29 56.00
BAG     7.94 335 ePd   29 52.20   -1.0
       1.0s   380.00nm          5.5mb
                 e     31 22.00
KKM     8.45 249 ePc   30 03.00    4.7X
       0.6s    76.70nm          5.1mb
CVP     8.72 345 ePc   30 00.90    0.0
HKC    16.14 325 iP    31 16.70    0.9
QZH    16.50 342 Pc    31 19.60    0.4
       0.7s    84.00nm          5.4mb
QIZ    16.92 307 eP    31 24.60    1.2
WHN    23.09 338 Pc    32 21.50    0.6
       1.0s    30.00nm          4.9mb
NJ2    23.24 349 Pc    32 22.50    0.3
       0.8s    21.00nm          4.8mb
KMI    25.77 311 Pc    32 45.50    0.3
       1.0s    30.00nm          4.9mb
TKSJ   26.28  19 P     32 48.60   -0.6
WKYJ   27.02  21 P     32 55.30   -0.5
YONJ   27.22  17 P     32 57.10   -0.4
XAN    28.38 333 Pd    33 06.90   -0.7
       0.7s    49.00nm          5.2mb
                 pP    33 13.00   21kmX
CD2    28.73 322 P     33 10.60   -0.2
MAT    30.05  23 eP    33 20.00   -2.0
       1.0s     8.00nm          4.3mb
WR2    30.69 161 iPc   33 26.70   -0.9
       0.6s    11.40nm          4.7mb
                 epP   34 55.00  520kmX
BJI    31.50 348 eP    33 34.00   -0.2
       1.0s    33.00nm          4.9mb
YAMJ   32.19  24 eP    33 39.80   -0.2
LZH    32.49 328 iPd   33 43.80    1.0
       1.2s    67.00nm          5.1mb
                 ePP   35 13.00
HHC    33.41 343 P     33 50.80    0.4
       1.2s    32.00nm          4.8mb
OFUJ   33.63  25 eP    33 52.20    0.1
ASPA   34.06 164 iPd   33 56.30    0.4
       0.6s     5.70nm          4.4mb
                 eS    38 41.50
CN2    34.47   2 eP    33 58.00   -1.1
MDJ    35.58   7 eP    34 08.80    0.5
       0.8s    22.00nm          4.8mb
GTA    37.09 328 eP    34 21.00    0.1
       1.2s    17.00nm          4.5mb
MRWA   39.01 191 eP    34 36.00   -0.6
       0.3s     2.00nm          4.2mb
GUN    40.51 302 P     34 49.40    0.2
       0.4s     9.00nm          4.7mb
PKI    40.79 302 P     34 50.80   -0.6
KKN    40.97 302 P     34 52.40   -0.3
DMN    41.06 302 P     34 53.00   -0.5
GKN    41.58 302 P     34 56.80   -0.6
GBA    45.92 280 P     35 31.00   -0.3
IMA    78.46  24 eP    39 03.70    2.6
       1.0s     7.50nm          4.1mb
KAF    85.56 332 iP    39 36.30   -0.5
       0.5s     4.80nm          4.4mb
INK    86.03  21 eP    39 39.50    0.5
NUR    86.68 331 iP    39 41.60   -0.6
       0.6s     4.10nm          4.3mb
MBC    87.18  12 ePd   39 46.00    1.6
       0.9s     4.00nm          4.2mb
     S.D. = 0.9  on  39 of  40 obs.
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&  NOV  16, 1993  15h 34m 04.43s
   60.596 N          149.264 W
   DEPTH =  29.2km
 KENAI PENINSULA, ALASKA          ( 14)
      <AEIC>. ML 2.7 (AEIC).

MPA     0.12 204 ePd   34 09.48   -0.3
                 eS    34 13.43
PTE     0.29  24 eP    34 11.12   -0.6
SLKM    0.48 260 iPc   34 13.98   -0.6
                 eS    34 21.12
SEW     0.50 191 ePd   34 13.91   -0.9
                 eS    34 21.13
PWL     0.53  60 iPd   34 14.36   -0.9
                 eS    34 22.26
PMS     0.67 348 P     34 16.50   -1.1
KNIM    0.80 107 ePc   34 18.09   -1.5
                 eS    34 29.97
LTI     0.90 128 eP    34 19.84   -1.1
KNK     0.91  25 iPd   34 20.09   -1.1
CFI     0.94  51 eP    34 20.49   -1.1
NKA     0.98 279 eP    34 23.02    0.8
PLRM    1.00   4 eP    34 21.31   -1.2
PMR     1.00   4 iPc   34 21.37   -1.1
MTU     1.01 127 eP    34 21.57   -1.0
PWA     1.10 345 P     34 23.80   -0.1
SUA     1.13 321 ePc   34 23.57   -0.9
BRLK    1.16 225 eP    34 24.45   -0.4
                 eS    34 39.68
GHO     1.19   8 eP    34 24.68   -0.6
                 eS    34 40.89
SML     1.30  20 eP    34 26.03   -0.7
FID     1.38  82 eP    34 26.13   -1.7
                 eS    34 43.77
HIN     1.38  97 eP    34 26.91   -1.0
VZW     1.41  70 eP    34 27.45   -0.9
CNPM    1.46 224 eP    34 28.09   -1.0
                 eS    34 47.65
SPU     1.49 295 iPc   34 28.95   -0.5
                 eS    34 48.66
CGLM    1.52 299 ePc   34 29.55   -0.4
HOM     1.52 233 P     34 26.50   -3.3
VLZ     1.53  68 eP    34 29.54   -0.5
                 eS    34 49.51
BKG     1.54 289 ePc   34 29.83   -0.5
                 eS    34 50.20
SCM     1.56  36 eP    34 30.51    0.0
CKN     1.56 295 eP    34 30.30   -0.2
CKT     1.56 294 ePc   34 30.12   -0.5
                 eS    34 50.56
CRP     1.56 297 iPc   34 29.95   -0.8
CP2     1.60 296 iPc   34 30.94   -0.3
CKL     1.62 293 ePc   34 31.07   -0.4
NCG     1.63 301 eP    34 31.26   -0.3
BGL     1.67 295 eP    34 31.86   -0.3
DFR     1.69 271 eP    34 32.10   -0.3
REF     1.70 268 eP    34 32.33   -0.4
RSO     1.73 267 eP    34 33.29    0.1
RS2     1.73 267 eP    34 32.87   -0.3
RED     1.74 266 eP    34 33.18   -0.1
RDW     1.76 268 eP    34 33.01   -0.5
SKT     1.77 323 eP    34 32.90   -0.6
                 eS    34 56.52
NCT     1.81 271 eP    34 33.76   -0.4
KLU     1.86  60 eP    34 34.19   -0.7
CUT     1.88 346 eP    34 34.48   -0.6
ILIM    1.91 256 eP    34 34.96   -0.6
                 eS    34 58.78
INE     1.96 256 eP    34 36.24   -0.3
INW     2.00 256 eP    34 36.75   -0.2
TOA     2.12  43 P     34 39.70    1.0
OPT     2.20 246 eP    34 39.66    0.0
RAGM    2.28  93 eP    34 39.39   -1.5
TZL     2.35  50 eP    34 43.15    1.3
HUR     2.40 356 eP    34 44.01    1.5
AUL     2.42 242 P     34 43.90    1.0
AUH     2.44 241 P     34 43.70    0.5
AUW     2.45 242 P     34 43.70    0.5
HMT     2.49  94 eP    34 42.06   -1.8
SYI     2.55 220 eP    34 44.00   -0.6
PDB     2.59 254 eP    34 44.62   -0.6
SDG     2.63  41 eP    34 47.65    1.8
CDD     2.78 235 eP    34 47.39   -0.5
GLB     2.79  70 eP    34 46.89   -1.2
RND     2.83   4 P     34 51.00    2.4
TRF     2.91 351 eP    34 51.53    1.7
PAX     2.99  35 eP    34 53.18    2.2
```

16d 15h

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KTH     3.07 346 eP    34 54.17   2.1
SVW     3.15 282 eP    34 57.46   4.2
WAX     3.17  90 eP    34 51.41  -2.2
BALM    3.42  80 eP    34 55.12  -2.0
BC3     4.32  52 eP    35 09.25  -0.6
IL1     4.33  14 eP    35 11.11   1.2
ILB     4.33  14 eP    35 10.51   0.6
FBA     4.37   8 eP    35 11.80   1.3
IM3     5.77 341 eP    35 29.92  -0.4
        75 obs. associated
-------------------------------------
   NOV  16, 1993  15h 45m 49.77± 0.42s
   48.352 N ± 3.4km    7.737 E ± 4.2km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                            (538)
      ML 3.3 (LDG), 3.1 (GRF), 2.7
      (STR).

LIBD    0.22 204 Pg    45 55.64   1.1
WLS     0.26 284 Pg    45 55.85   0.5
CDF     0.31 281 Pg    45 56.90   0.6
                 Sg    46 00.80
ECH     0.41 251 Pg    45 58.71   0.6
                 Sg    46 04.41
FEL     0.51 159 ePg   46 00.40   0.2
CHAF    0.56 194 Pg    46 01.78   0.8
                 Sg    46 09.56
SRBF    0.57   8 Pg    46 00.80  -0.5
MOF     0.64 219 Pg    46 03.09   0.4
SLE     0.78 139 iPd   46 05.20   0.3
BSF     0.82 231 Pn    46 05.70   0.0
                 Pg    46 06.40
                 Sg    46 17.30
BBS     0.90 190 Pg    46 06.71  -0.4
ZLA     0.97 153 ePd   46 09.00   0.7
HAU     0.99 250 Pn    46 08.30  -0.3
                 Pg    46 09.50
                 Sg    46 22.50
LOMF    1.17 212 Pg    46 11.69  -0.1
                 Sg    46 28.64
VITF    1.18 264 Pg    46 10.88  -0.9
                 Sg    46 27.98
RUP     1.42 342 ePg   46 15.00  -0.7
TOD     1.44  29 ePg   46 14.00  -1.9
ABH     1.54 355 ePg   46 15.80  -1.5
WLF     1.68 322 iPd   46 21.40   2.2
                 iS    46 42.66
LLS     1.71 150 eP    46 20.40   0.4
TNS     1.93  14 ePnd  46 24.60   1.6
                 ePgd  46 30.50
                 eSn   46 49.90
EMS     2.35 194 P     46 27.70  -1.5
GRF     2.66  58 ePn   46 39.30   5.9X
                 ePg   46 40.20
                 eSg   47 12.10
LOR     2.83 249 Pg    46 43.70   7.8X
                 Sg    47 19.10
LBF     2.89 243 Pg    46 44.70   8.0X
                 Sg    47 21.90
LPL     2.92 194 Pn    46 35.80  -1.5
                 Pg    46 46.40
                 Sg    47 23.50
LPG     2.93 194 Pn    46 36.20  -1.4
                 Pg    46 46.30
                 Sg    47 24.00
SSF     3.13 247 Pg    46 49.10   9.0X
                 Sg    47 28.30
SMF     3.14 239 Pg    46 49.50   9.2X
                 Sg    47 29.70
HOF     3.35  53 iPd   46 52.40   9.2X
AVF     3.35 244 Pg    46 53.00   9.8X
                 Sg    47 35.50
MOX     3.42  46 ePg   46 53.90   9.8X
                 iSg   47 36.50
BGF     3.77 243 Pg    47 01.10  11.9X
                 Sg    47 49.00
KHC     3.94  76 ePn   46 53.00   1.3
                 ePg   47 03.00
                 eSn   47 33.40
                 eSg   48 54.00
GEC2    3.99  81 Pg    47 03.60  11.3X
                 Sg    47 54.70
MAF     4.11 241 Pg    47 07.40  13.4X
                 Sg    47 59.20
TCF     4.29 243 Pg    47 10.30  13.7X
                 Sg    48 04.40
LSF     4.72 246 Pg    47 17.90  15.3X
```

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     S.D. = 1.1  on  25 of  38 obs.
-------------------------------------
   NOV  16, 1993  15h 52m 48.52± 0.17s
   30.798 N ± 4.1km   67.219 E ± 2.3km
   DEPTH =  26.5km  ( 12 depth phases)
   5.4mb (125 obs.)  5.6Msz ( 47 obs.)
 PAKISTAN                          (710)
      Mw 5.6 (HRV). At least 150
      houses destroyed in the Pishin
      area. Felt at Quetta.
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 39S, 71C
      Centroid Location:
      Origin Time        15:52:47.3 0.6
      Lat 30.54N 0.04 Lon  66.88E 0.04
      Dep  33.0 FIX Half-duration  1.5
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 0.13 0.06  Mtt=-2.32 0.08
        Mff= 2.19 0.08  Mrt=-0.39 0.17
        Mrf=-0.62 0.20  Mtf=-2.08 0.09
       Principal Axes:
        T  Val=  3.07  Plg= 9  Azm= 69
        N        0.16      77      200
        P       -3.24      10      338
      Best Double Couple:Mo=3.2*10**17
       NP1:Strike=114 Dip=77 Slip=-179
       NP2:        24      89      -13

NIL      5.85  59 iPc   54 18.50   2.7
        0.4s     0.37nm          3.4mb X
                  iS    55 28.50
MAIO     8.46 312 iPc   54 52.50   0.0
        1.1s   147.23nm          6.1mb
                  eS    56 41.00
NDI      8.94 101 ePc   54 55.00  -4.0X
        0.6s   250.00nm          6.6mb X
                  eS    56 34.00
ASH     10.22 317 eP    55 16.00  -0.6
                  S     57 07.00
KSH     11.22  37 iPd   55 30.00  -0.4
        0.4s   320.00nm          6.9mb X
     Z  10s    35.20um          3.5MszX
     N  10s    12.20um
     E  10s    10.80um
                  sP    55 44.00
                  iS    57 37.00
FRU     13.39  24 iPc   55 57.00  -2.2
        3.0s  1500.00nm          6.4mb
                  eS    58 22.00
POO     13.61 152 iPc   56 00.30  -2.0
        1.0s    95.00nm          5.6mb
                  iS    58 32.00
TEH     14.13 295 eP    56 10.00   0.8
TLG     14.84  30 iP    56 14.50  -3.8X
                  eS    59 00.00
GKN     15.44  96 P     56 21.40  -4.9X
DHR     15.66 258 eP    56 24.50  -4.5X
DMN     15.94  97 P     56 28.40  -4.5X
KKN     16.04  96 P     56 29.60  -4.5X
PKI     16.21  97 P     56 31.80  -4.6X
GUN     16.52  95 P     56 35.80  -4.6X
HYB     16.85 140 ePd   56 41.70  -2.5
        1.0s   955.00nm          5.9mb
BAK     17.00 309 eP    56 54.00   8.1X
KER     17.32 287 iPc   56 51.00   0.9
TAB     18.68 298 iPc+  57 09.30   2.4
RYD     19.21 257 ePd   57 09.10  -4.2X
                  eS    00 40.00
GBA     19.53 149 Pd    57 15.90  -1.1
        1.3s   999.90nm          5.9mb
MAK     19.92 313 iP+   57 20.00  -0.9
ERE     20.69 303 iP    57 28.00  -1.1
                  i     57 56.00 154kmX
                  iS    01 21.00
LSA     20.70  87 Pc    57 30.40   0.7
        1.4s   310.00nm          5.5mb
     E  18s    35.30um
                  pP    57 33.00  10kmX
WMQ     20.77  46 iPc   57 29.50  -0.4
        1.5s   480.00nm          5.7mb
     E  10s     7.27um
                  PP    57 56.00
                  sS    01 32.50
                  ScP   05 12.50
                  PcS   05 18.00
MTA     21.04 307 iPc   57 17.20 -15.4X
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        0.8s   180.00nm
                  iPPP  57 52.00
                  iSS   01 42.00
                  eSSS  02 06.00
GRO     21.19 312 iPc+  57 37.00   2.9X
        1.0s   270.00nm          5.6mb
                  i     57 59.00 108kmX
                  iS    01 30.00
QASM    21.34 263 ePd   57 32.33  -3.5X
AFIF    22.33 258 ePd   57 56.67  10.9X
UQSK    22.43 263 ePd   57 45.00  -1.8
KMSA    22.93 248 iPd   57 49.93  -1.8
PYA     23.20 311 iPd   57 55.80   1.8
                  iS    02 06.50
SOC     25.23 308 eP    58 15.00   1.4
        1.5s   450.00nm          5.9mb
     Z  11s     5.50um          5.3MszX
     N  15s     3.00um
     E  12s     4.70um
                  e     58 24.50  34km
                  e     58 31.00
                  e     02 42.00
ABHA    25.46 246 ePd   58 18.10   1.8
GAZ     25.62 292 iP    58 19.40   2.1
ARU     26.30 349 ePc   58 25.00   1.5
        2.0s   200.00nm          5.4mb
     Z  12s    17.50um          5.8MszX
     N  12s    13.00um
                  e     58 40.50  66kmX
                  e     59 05.00
                  e     59 21.00
                  e     02 45.00
SVE     26.41 352 iPd   58 25.50   1.0
        1.9s   120.00nm          5.2mb
     Z  13s    24.00um          5.9MszX
     N  13s    16.00um
     E  13s     4.00um
                  e     59 05.00 198kmX
                  iS    03 00.00
                  eSS   04 05.00
BHL     26.79 285 P     58 26.00  -2.3
                  S     03 12.00
BNN     26.86 296 eP    58 31.00   2.0
SALJ    26.90 281 P     58 30.30   1.0
JRDJ    27.07 278 P     58 43.00  12.0X
AYN     27.11 274 ePd   58 31.30   0.2
LISJ    27.16 279 P     58 33.00   1.5
SHWJ    27.26 277 P     58 43.80  11.0X
ANN     27.31 309 eP    58 34.00   1.2
     Z  13s     4.50um          5.2MszX
     N  17s     4.50um
     E  13s     5.30um
                  e     58 47.00  52kmX
GTA     27.90  63 iPc   58 39.00   0.6
        1.5s   190.00nm          5.6mb
     Z  20s    10.60um          5.4Msz
     N  13s     7.50um
CSS     28.68 287 eP    58 45.00  -0.4
UER     28.70  36 iPc   58 45.00  -0.3
        1.4s    65.00nm          5.2mb
                  e     05 00.00
KAS     28.86 301 eP    58 49.00   2.0
SIM     29.47 308 eP    58 57.00   4.6X
                  e     03 48.00
LZH     30.89  70 Pc    59 05.50   0.3
        1.8s   230.00nm          5.7mb
     Z  18s     6.78um          5.3Msz
     E  10s     6.32um
                  pP    59 14.50  31km
                  sP    59 20.00
                  PP    00 05.00
                  S     04 05.00
                  sS    04 22.00
                  PcS   05 41.00
                  SS    05 43.00
                  ScS   09 32.00
CHTO    31.06 105 ePc   59 06.00  -0.7
        1.2s   147.57nm          5.7mb
                  eS    04 08.20
CD2     31.28  80 iPd   59 09.00   0.4
        1.0s    74.00nm          5.5mb
     Z  16s    34.00um          6.1MszX
     E  13s    13.10um
                  S     04 10.00
KMI     31.79  91 Pc    59 13.50   0.2
        1.4s   880.00nm          6.5mb X
     Z  16s     9.50um          5.6MszX
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     N  14s     5.80um
     E  12s     3.40um
                pP     59 23.00   33km
                S      04 22.00
                SS     06 12.00
BDT    31.89 108 eP     59 15.00    1.1
       1.1s    49.90nm          5.3mb
MOS    32.51 329 eP     59 05.00 -13.9X
       2.0s   240.00nm
     Z  17s     8.00um          5.5MszX
                eS     04 26.00
OBN    32.59 327 eP     59 19.00   -0.7
       1.3s   140.00nm          5.7mb
                e      00 42.00 461kmX
                eS     04 36.00
                eSS    06 27.00
KHT    32.88 112 eP     59 22.40   -0.1
ZAK    33.21  43 iPc    59 25.00   -0.1
       1.6s   115.00nm          5.6mb
     Z  13s    10.14um          5.7MszX
     E  12s     5.47um
                e      00 39.00 393kmX
                eS     04 42.00
                eSS    06 47.00
AAE    34.24 237 P      59 36.50    1.8
IRK    34.54  41 eP+    59 35.00   -1.7
       1.6s   123.00nm          5.6mb
     Z  14s     9.96um          5.7MszX
     N  14s     6.64um
     E  14s     8.71um
                e      59 42.20   25km
                eS     05 06.00
                e      07 16.00
GYA    34.77  87 iPc    59 39.00    0.0
       1.0s   350.00nm          6.2mb
     Z  16s     5.24um          5.4MszX
     N  11s     2.24um
     E  11s     2.31um
                PP     00 56.00
                S      05 03.00
                SS     07 24.00
XAN    35.18  74 P      59 42.00   -0.4
       1.0s    68.00nm          5.5mb
     Z  24s    15.20um          5.7MszX
     N  12s     3.33um
     E  12s     5.46um
                pP     59 52.00   34km
                sP     59 56.00
                PP     01 02.00
                S      05 10.00
                sS     05 26.00
                SS     07 24.00
                ScS    09 58.00
MLR    35.21 306 ePd    59 44.00    1.4
RZN    35.64 300 iP     59 47.00    0.6
PLD    35.68 300 eP     59 46.00   -0.4
CMP    35.80 306 ePd    59 49.00    1.5
BTO    35.81  62 iPd    59 48.50    0.8
       1.0s   110.00nm          5.7mb
     N  11s     3.10um
     E  11s     4.52um
                pP     59 56.50   27km
                PP     01 13.00
PAIG   36.36 297 eP     59 52.20    0.0
MMB    36.37 299 eP     59 54.00    1.6
SRS    36.45 299 eP     59 53.44    0.4
MNK    36.61 321 eP     59 57.00    2.9X
     Z  16s     6.20um          5.5MszX
SOH    36.62 298 eP     59 55.16    0.7
VTS    36.82 301 iPd    59 57.00    0.8
KNT    36.98 299 eP     59 57.68    0.3
HHC    36.99  62 iPd    59 59.00    1.4
       1.4s    97.00nm          5.4mb
     Z  13s     8.33um          5.7MszX
     N  11s     3.83um
     E  12s     3.72um
                S      05 45.00
VAY    37.23 299 eP     00 01.00    1.5
LIT    37.27 297 eP     00 00.00    0.1
GRG    37.35 298 eP     00 00.12   -0.4
DEV    37.38 307 iPc    00 00.00   -0.7
AGG    37.41 295 eP     59 59.16   -1.9
TIY    37.71  67 Pc     00 04.50    0.8
     Z  20s    21.20um          5.9Msz
     E  16s    10.60um
                PP     01 37.00
                S      05 50.00
PUL    38.03 330 eP     00 11.00    5.0X
     Z  18s    16.00um          5.9Msz
     N  18s     9.40um
     E  18s    15.00um
                ePPP   01 40.00
                e      01 54.00
                eS     05 58.00
                e      10 12.00
SKO    38.10 300 iP     00 08.00    1.2
     Z  15s     4.11um          5.4MszX
                LR     17 36.00
BZS    38.24 306 eP     00 00.00   -7.9X
UZH    38.24 311 iPd    00 09.80    1.9
                i      00 22.50   48kmX
OHR    38.56 299 eP     00 07.00   -3.8X
IGT    38.94 296 eP     00 12.88   -1.0
SPC    39.67 311 iP     00 22.20    2.1
PSZ    39.71 309 iP     00 21.10    0.8
CIT    39.88  44 eP     00 22.00    0.4
                e      00 39.50   71kmX
OJC    40.14 313 eP     00 24.10    0.4
       1.1s    52.00nm          5.2mb
                i      00 30.30   21km
QIZ    40.17  97 eP     00 24.60    0.3
     N  18s     4.25um
     E  15s     2.84um
                PP     01 58.00
                S      06 27.00
                SS     09 19.00
WHN    40.30  78 Pc     00 26.50    1.3
       1.0s    39.00nm          5.1mb
     Z  22s    10.90um          5.7Msz
     E  12s     6.91um
                PP     02 04.00
                S      06 30.00
UZD    40.44 307 eP     00 28.60    2.4
BJI    40.51  63 eP     00 28.00    1.1
       1.5s    99.00nm          5.3mb
     Z  16s     5.85um          5.5MszX
     N  14s     6.96um
                ePP    02 00.00
SRO    40.75 309 eP     00 28.80    0.1
NUR    40.86 329 iP     00 29.10   -0.3
       0.5s     6.20nm          4.6mb
KAF    40.94 332 iP     00 29.80   -0.3
       0.5s    17.40nm          5.0mb
TIA    41.60  69 P      00 37.10    1.3
     Z  18s     4.35um          5.4Msz
     E  11s     3.44um
                S      06 50.50
GZH    41.60  89 iPd    00 36.80    0.9
     Z  12s     4.22um          5.5MszX
     N  11s     3.66um
     E  19s     2.69um
                eS     06 51.00
ZST    41.60 309 iP     00 35.90    0.2
BOD    41.88  36 iPc    00 36.60   -1.3
       1.5s   129.00nm          5.4mb
VKA    42.13 309 iPc    00 40.40    0.4
                i      00 48.40   27km
                i      00 55.00
PTJ    42.21 306 e(P)   00 32.70   -8.1X
KSP    42.45 313 eP     00 43.20    0.5
                i      00 45.10   6kmX
HKC    42.59  90 eP     00 45.30    1.2
NAI    43.06 228 eP     00 54.00    5.8X
                PP     04 22.00
                S      07 28.00
                SS     10 48.00
LJU    43.21 306 eP     00 49.60    0.7
       1.4s   150.00nm          5.5mb
                e      01 03.50   53kmX
                ePcP   01 40.70
                e(S)   07 26.00
                e      13 11.00
                e      14 28.00
                e      15 44.00
PRU    43.46 312 iP     00 52.50    1.6
       2.0s    66.80nm          5.1mb
                i      01 04.20   42kmX
NJ2    43.73  74 Pd     00 54.20    0.9
       1.2s    54.00nm          5.2mb
     Z  21s     6.30um          5.5Msz
     N  13s     5.60um
     E  11s     2.60um
TRI    43.74 305 iP     00 55.00    1.8
UPP    43.84 326 iP     00 53.30   -0.4
GEC2   43.91 310 e(P)   01 03.50    8.8X
       0.8s     7.00nm          4.5mb
GEC2   43.91 310 ePd    00 54.80    0.1
       1.1s    27.97nm          5.0mb
                e      01 02.60   26km
                e      01 08.70
                e      01 12.50
BRG    43.93 313 iP     00 57.40    2.7
BSD    44.01 319 eP     00 53.00   -2.2
       0.8s    62.00nm          5.5mb
                i      01 40.00 219kmX
KHC    44.01 310 P      00 55.50    0.1
       1.2s    22.50nm          4.9mb
     Z  14s     4.00um          5.5MszX
                e      01 40.00 207kmX
                e      02 42.50
                e      11 00.00
KBA    44.06 307 iPc    00 57.10    1.1
       0.7s    28.00nm          5.2mb
                i      01 03.10   20km
                i      01 12.20
BHG    44.40 308 eP     00 58.70    0.2
KGM    44.55 123 ePd    01 01.20    1.1
CLL    44.57 313 iPd    01 00.30    0.5
       1.4s    42.00nm          5.1mb
                e      01 23.00   96kmX
WTTA   45.23 308 iPc    01 04.70   -0.7
       0.9s    43.50nm          5.4mb
                i      01 11.50   23km
                i      01 20.70
WATA   45.27 308 iPd    01 04.90   -0.8
                i      01 18.10   49kmX
MOX    45.38 312 eP     01 07.10    0.7
       1.5s   114.00nm          5.6mb
     Z  19s     3.60um          5.3Msz
QZH    45.47  84 eP     01 07.00   -0.3
     Z  18s     9.67um          5.8Msz
     N  17s     8.47um
                S      07 40.00
FUR    45.49 309 ePc    01 08.80    1.5
       0.8s    42.00nm          5.4mb
     Z  14s     3.40um          5.4MszX
COP    45.50 320 iPc    01 09.60    2.5
       0.7s    35.62nm          5.4mb
                e      11 22.00
SQTA   45.52 308 iPc    01 06.80   -0.8
       1.1s    68.30nm          5.5mb
GRA1   45.58 311 ePc    01 09.20    1.3
       1.3s    75.00nm          5.5mb
GRF    45.58 311 ePc    01 09.20    1.3
       1.3s    75.00nm          5.5mb
     Z  19s     2.00um          5.1Msz
MOTA   45.59 308 iPd    01 07.20   -1.1
       0.9s    50.00nm          5.4mb
OGA    45.64 307 eP     01 08.00   -0.7
HFS    45.81 326 eP     01 08.60   -0.9
       0.4s     6.10nm          4.9mb
     Z  18s     5.47um          5.5Msz
                LR     19 38.00
SSE    45.89  75 Pc     01 12.00    1.4
       1.4s   130.00nm          5.7mb
     Z  19s    13.50um          5.9Msz
     N  12s     3.40um
     E  14s     8.30um
                sP     01 21.00
                S      07 50.00
SNY    45.99  60 Pc     01 10.00   -1.2
       1.0s    71.00nm          5.6mb
     Z  15s     6.33um          5.7MszX
     N  13s     6.63um
                sP     01 23.20
                PP     03 00.00
                S      07 48.00
OSS    46.25 307 ePd    01 13.40   -0.1
VDL    46.72 307 ePd    01 16.90   -0.3
NRA0   46.99 326 iPc    01 17.30   -1.6
LLS    47.03 307 ePd    01 18.90   -0.8
TMA    47.15 306 ePd    01 20.00   -0.6
CN2    47.20  57 Pc     01 20.60   -0.2
       1.2s    40.00nm          5.3mb
     Z  16s     7.71um          5.8MszX
     N  14s     5.98um
     E  14s     4.54um
                esP    01 37.00
                PP     03 14.00
                eS     08 10.00
NB2    47.22 327 P      01 19.40   -1.3
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16d 16h

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        0.8s    15.10nm          5.1mb
SLE     47.36 308 ePd    01 21.30  -0.7
TNS     47.39 312 ePd    01 25.10   2.8
                ePcP     02 52.30
                e        03 32.70
MUD     47.43 320 iP     01 22.50   0.1
        0.9s    28.00nm          5.3mb
ZLA     47.43 308 ePd    01 22.10  -0.6
PCP     47.46 304 P      01 22.71  -0.3
FEL     47.68 309 P      01 21.79  -2.9
FIN     47.73 304 P      01 22.76  -2.3
MMK     47.78 306 ePd    01 25.10  -0.6
ORX     47.79 306 P      01 24.45  -1.2
LANF    47.80 310 P      01 24.75  -0.7
LIBD    47.95 309 P      01 24.64  -2.0
ROB     47.96 304 P      01 28.06   1.2
IMI     47.98 303 P      01 26.55  -0.5
CDF     48.16 309 eP     01 27.60  -0.8
        1.0s    17.20nm          5.0mb
DIX     48.16 306 ePd    01 28.40  -0.3
MOF     48.27 309 P      01 26.29  -3.0
ENR     48.29 304 P      01 28.89  -0.6
SBF     48.32 303 eP     01 29.10  -0.5
        0.9s   108.45nm          5.9mb
RSP     48.33 305 P      01 27.70  -2.1
BHB     48.35 304 P      01 27.74  -2.1
STV     48.36 304 P      01 30.63   0.6
LSD     48.38 305 P      01 30.17  -0.2
WTS     48.46 314 eP     01 32.00   1.5
        1.0s    38.50nm          5.4mb
PZZ     48.50 304 P      01 30.58  -0.5
EMS     48.50 306 ePd    01 30.60  -0.6
LOMF    48.50 308 P      01 29.46  -1.5
BSF     48.50 309 eP     01 30.30  -0.8
        0.8s    29.55nm          5.4mb
LPG     48.66 305 eP     01 32.00  -0.6
        0.9s    46.35nm          5.5mb
LPL     48.68 305 eP     01 32.10  -0.5
        0.8s    41.35nm          5.5mb
RRL     48.69 305 P      01 32.50  -0.2
RSL     48.74 306 P      01 31.90  -1.1
HAU     48.79 309 eP     01 32.80  -0.4
        1.1s    56.90nm          5.5mb
      Z 19s      2.10um          5.1Msz
WLF     48.87 311 iPc    01 35.40   1.7
        1.2s    20.00nm          5.0mb
FRF     48.91 303 eP     01 33.40  -0.7
        1.2s    52.05nm          5.4mb
ENN     49.00 312 eP     01 38.00   3.3X
        0.9s    12.70nm          4.9mb
VITF    49.03 309 P      01 34.04  -0.9
LMR     49.04 303 eP     01 34.20  -0.9
LRG     49.13 303 eP     01 35.10  -0.7
        1.2s    48.80nm          5.4mb
      Z 23s      3.30um          5.3MszX
DOU     49.87 312 P      01 42.50   1.1
SNF     50.05 312 P      01 44.70   1.9
MDJ     50.09  56 eP     01 43.30   0.1
        1.7s   110.00nm          5.6mb
      Z 14s      8.25um          5.9MszX
      N 17s     15.40um
                eS       08 48.00
SSB     50.23 305 P      01 43.48  -0.8
YAK     50.46  33 iPc+   01 44.00  -1.6
        1.2s   376.00nm          6.3mb
      Z 15s      7.80um          5.8MszX
      N 12s      2.60um
      E 16s      5.50um
                i        03 06.00 406kmX
                e        03 46.00
                eS       08 57.00
                e        11 32.00
LBF     50.46 308 eP     01 45.40  -0.6
        1.1s    50.80nm          5.4mb
BAG     50.51  94 eP     01 48.00   1.1
                eS       09 05.00
LOR     50.52 308 eP     01 45.80  -0.6
        1.0s    30.40nm          5.2mb
      Z 23s      2.38um          5.1MszX
SMF     50.59 307 eP     01 46.70  -0.2
        0.8s    81.95nm          5.8mb
SSF     50.78 308 eP     01 48.00  -0.3
        0.9s    57.35nm          5.5mb
COLF    50.80 306 P      01 48.03  -0.6
AVF     50.91 307 eP     01 48.90  -0.4
        1.0s    42.40nm          5.3mb
CVP     51.02  92 ePc    01 52.00   1.5
BGF     51.28 307 eP     01 51.80  -0.4
        1.0s    26.20nm          5.1mb
HYF     51.35 308 eP     01 52.80   0.1
MAF     51.51 307 eP     01 53.80  -0.1
        1.2s    53.55nm          5.4mb
TCF     51.74 307 eP     01 55.60  -0.1
        1.1s    51.05nm          5.4mb
VLA     51.94  57 iPc    01 54.00  -3.2X
        2.0s   300.00nm          5.9mb
      E 11s      3.90um
                e        02 05.00  38kmX
                i        02 11.00
                e        03 53.00
CAF     52.02 305 eP     01 57.80   0.0
        1.1s    98.15nm          5.7mb
KKM     52.06 108 ePd    02 04.80   6.2X
        1.5s   192.80nm          5.8mb
PPR     52.14 102 ePd    01 59.00   0.0
TIK     52.21  21 iPc+   01 58.00  -0.9
        2.0s   410.00nm          6.0mb
      Z 12s      5.00um          5.8MszX
                i        02 15.00  66kmX
                e        03 05.00
                iS       09 23.00
LSF     52.22 307 eP     01 58.80  -0.5
        0.8s    32.50nm          5.3mb
RJF     52.35 306 eP     02 00.20  -0.1
        1.2s    69.30nm          5.5mb
LPO     52.67 305 eP     02 02.40  -0.3
        1.0s    45.00nm          5.4mb
LFF     52.95 305 eP     02 04.60  -0.1
        1.1s    76.70nm          5.5mb
LDF     53.05 310 eP     02 04.70  -0.7
        0.6s    23.35nm          5.3mb
SHNJ    53.23  68 eP     02 07.30   0.4
GQP     53.26  95 ePd    02 07.50   0.2
FLN     53.27 310 eP     02 06.30  -0.7
        0.9s    38.35nm          5.4mb
      Z 21s      3.75um          5.4Msz
MFF     53.32 307 eP     02 06.70  -0.7
        1.1s    38.10nm          5.3mb
KUMJ    53.43  70 P      02 08.70   0.3
EPF     53.55 303 eP     02 07.50  -1.7
        0.8s    13.15nm          5.0mb
GRR     53.56 310 eP     02 08.60  -0.6
        1.0s    47.20nm          5.4mb
LPF     53.73 309 eP     02 10.50   0.1
        0.6s     8.30nm          4.9mb
KAGJ    53.87  72 eP     02 13.30   1.7
EGRA    54.18 302 eP     02 11.06  -2.6
HAE     54.23 314 eP     02 10.50  -3.5X
EKA     54.32 319 Pc     02 08.70  -5.9X
        0.9s    25.10nm          5.2mb
HGH     54.44 314 eP     02 15.00  -0.5
HTR     54.67 315 eP     02 16.90  -0.4
YONJ    54.82  67 P      02 16.40  -2.2
ELIZ    54.87 304 eP     02 18.95   0.1
HCG     54.88 315 eP     02 17.10  -1.8
ECHE    55.22 299 eP     02 22.64   1.2
TKSJ    55.61  68 P      02 24.90   0.6
ECRI    55.69 303 eP     02 25.30   0.5
MAP     56.30  98 eP     02 29.00  -0.6
EVIA    56.61 298 eP     02 32.20   0.7
TSRJ    56.70  65 P      02 32.20   0.1
WKYJ    56.77  67 P      02 31.10  -1.6
WKYJ    56.77  67 P      02 33.40   0.7
EHUE    56.89 297 eP     02 34.31   0.8
GUD     57.34 301 eP     02 36.15  -0.5
TAF     57.59 294 iPd    02 46.00   7.5X
EBAN    57.71 298 eP     02 38.70  -0.5
PAB     57.76 300 iPd    02 39.00  -0.6
                eS       10 33.00
MTMJ    57.82  64 P      02 39.90  -0.2
CTB     58.08 101 iPd    02 43.00   0.9
MAT     58.15  64 eP     02 41.00  -1.3
        1.2s    65.63nm          5.6mb
      Z 20s      1.77um          5.2Msz
                eS       10 41.00
IIDJ    58.23  65 P      02 41.30  -1.6
MTD     58.41 221 iPd    02 29.00 -15.4X
                i        02 47.50  71kmX
                i        02 56.30
NIIJ    58.56  63 P      02 44.30  -0.8
AOMJ    58.67  59 eP     02 45.90   0.1
MRRJ    58.69  56 eP     02 44.90  -1.0
YSS     58.74  51 iPd    02 45.50  -0.7
        1.0s    90.00nm          5.8mb
      Z 15s      7.20um          5.9MszX
      E 15s      6.20um
CHJJ    58.90  64 P      02 46.70  -0.8
EPLA    58.91 301 eP     02 47.77   0.2
EHOR    58.91 298 eP     02 46.88  -0.6
ERUA    59.07 304 eP     02 47.56  -1.0
YAMJ    59.08  61 P      02 47.90  -0.8
DAV     59.30 101 eP     02 52.40   1.8
DAG     59.36 345 iPd    02 49.70  -0.5
        0.7s    17.81nm          5.3mb
                ipP      02 53.40  12kmX
ASAJ    59.38  54 eP     02 49.70  -1.0
KRI     59.58 223 iPc    02 41.80 -10.8X
                i        02 47.40  18km
KAKJ    59.76  64 P      02 52.50  -0.9
OFUJ    60.04  60 P      02 54.80  -0.5
IFR     60.13 293 eP     02 48.00  -8.2X
                i        03 01.00  46kmX
HOOJ    60.29  56 eP     02 56.70  -0.2
KUSJ    61.10  55 eP     02 59.60  -2.8
TIO     62.72 291 iP     03 13.80   0.1
BUL     62.78 221 iPc    03 13.20  -1.0
BFT     66.48 216 eP     03 39.50   1.3
        1.0s    30.00nm          5.4mb
SLR     67.44 218 iPc    03 55.00  10.8X
        1.0s    30.00nm
      Z 20s      9.33um          6.0Msz
KSR     68.28 219 e(P)   03 49.50  -0.1
LBTB    68.32 220 eP     03 50.20   0.5
        1.3s   156.41nm          6.0mb
SWI     68.35 105 ePd    03 50.50   0.5
SEK     69.87 217 eP     04 08.00   8.7X
        1.0s    80.00nm          5.8mb
ILT     70.20  22 iPd    03 58.00  -2.5
        1.4s    64.00nm          5.5mb
      Z 16s      5.00um          5.9MszX
      N 17s      1.00um
      E 17s      3.00um
                i        04 25.00 106kmX
                iS       13 12.00
                eSS      17 32.00
LKO     70.44 270 P      04 01.41  -1.5
        1.1s    68.00nm          5.7mb
BLF     71.25 217 eP     04 06.00  -1.6
        0.5s    33.00nm          5.7mb
BOSA    71.26 218 ePc    04 08.30   0.8
        0.7s    37.73nm          5.6mb
KIC     71.28 266 eP     04 06.95  -1.0
        1.1s    63.00nm          5.6mb
TIC     71.38 267 P      04 07.63  -1.0
        1.0s    41.50nm          5.4mb
LIC     71.60 266 P      04 08.71  -1.2
        1.2s    55.50nm          5.5mb
      Z 20s      8.00um          6.0Msz
WIN     71.60 228 iPc    04 11.16   1.2
        0.6s    25.00nm          5.5mb
FRS     72.21 218 eP     04 12.00  -1.1
        0.7s    33.00nm          5.5mb
GUMO    72.67  84 eP     04 13.10  -3.1X
PJG     72.67  84 eP     04 13.50  -2.7
GUA     72.73  84 eP     04 14.20  -2.4
HVD     72.80 217 eP     04 23.00   6.2X
        1.0s    30.00nm          5.3mb
MBC     73.14   2 iPc    04 19.10   1.2
        0.5s    71.00nm          5.9mb
                PcP      04 34.90
                PPP      08 57.10
MBC     73.14   2 eP     04 19.50   1.6
        1.0s    24.00nm          5.2mb
BRW     73.59  13 eP     04 19.97  -0.7
RES     74.13 355 eP     04 26.00   2.3
        1.0s     3.00nm          4.3mb X
GRM     74.44 214 eP     04 27.00   0.9
        0.6s    57.00nm          5.8mb
POF     74.87 222 iPd    04 31.00   2.4
        0.4s    10.00nm          5.2mb
SMY     75.38  37 P      04 40.00   8.7X
      Z 20s      3.13um          5.6Msz
SUR     76.67 219 iPc    04 53.50  14.4X
        0.7s    75.00nm
MUN     77.80 139 eP     04 44.00  -1.0
MBO     77.85 280 eP     04 46.00   0.3
CER     78.25 219 eP     04 42.50  -5.0X
        0.6s    57.00nm          5.8mb
IMA     78.47  16 eP     04 49.00   0.5
        0.7s    19.20nm          5.2mb
FRB     79.51 342 eP     04 54.50   0.6
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      1.0s     9.00nm          4.7mb
INK   79.99   8 eP    04 57.50   1.1
      0.9s    20.00nm          5.1mb
TTA   80.43  19 ePc   04 59.06   0.0
      0.9s     6.78nm          4.7mb
FBA   80.78  14 eP    05 00.84   0.1
      0.9s    31.86nm          5.3mb
WB5   81.82 119 eP    05 07.20   0.3
                e     05 37.30 117kmX
                e     08 15.10
WRA   81.84 119 P     05 07.80   0.8
      0.9s    16.40nm          5.1mb
WR2   81.86 119 iPc   05 07.80   0.7
      1.0s    39.20nm          5.4mb
SVW   82.01  19 eP    05 08.09   0.8
                e     05 21.62  46kmX
PMR   83.34  17 ePc   05 13.67  -0.4
      1.2s    49.84nm          5.5mb
    Z 20s      2.61um          5.6Msz
TOA   83.59  15 eP    05 17.10   1.6
ASPA  83.75 122 iPd   05 17.70   0.9
      0.8s    47.00nm          5.7mb
    Z 21s      2.20um          5.5Msz
SLKM  83.99  18 eP    05 17.16  -0.3
KLU   84.18  15 eP    05 19.67   1.2
                e     05 31.63  39kmX
SDN   84.99  25 P     05 30.00   7.6X
    Z 18s      4.53um          5.9Msz
BALM  85.37  14 eP    05 25.26   0.8
KDC   85.69  20 eP    05 26.24   0.3
      0.8s    18.99nm          5.4mb
PMG   86.24 103 eP    05 30.50   1.2
      1.8s   163.64nm          6.0mb
YKA   87.03   1 eP    05 33.40   1.0
      0.9s    24.50nm          5.4mb
SIT   90.43  12 P     06 00.00  11.3X
    Z 19s      1.80um          5.5Msz
CTA   91.15 113 iPc   05 53.00   0.5
      1.0s    20.00nm          5.4mb
    Z 18s      3.09um          5.8Msz
                iSKS  16 49.00
                e     22 12.00
CBM   92.78 331 P     06 10.00  10.3X
    Z 19s      1.43um          5.4Msz
STK   94.05 125 eP    06 00.40  -5.2X
      0.9s     3.40nm          4.8mb
LBNH  96.52 332 P     06 30.00  13.0X
    Z 19s      1.61um          5.5Msz
HRV   97.79 331 P     06 30.00   7.3X
    Z 20s      1.81um          5.6Msz
MAW   98.15 182 P     06 27.00   3.6X
      1.0s    16.67nm          5.5mb
LSCT  99.18 331 P     06 40.00  11.0X
    Z 19s      1.04um          5.3Msz
BINY  99.85 333 P     06 40.00   7.9X
    Z 19s      2.31um          5.7Msz
YSNY 100.57 335 Pdiff 06 50.00  14.8X
    Z 20s      2.87um          5.8Msz
MCWV 103.51 334 Pdiff 07 00.00  11.7X
    Z 20s      2.13um          5.7Msz
CEH  106.50 332 PKP   11 20.00   7.3X
    Z 21s      1.08um          5.4Msz
SLM  107.80 342 PKP   11 30.00  15.0X
    Z 19s      2.39um          5.8Msz
WDC  108.41   8 PKP   11 30.00  13.9X
    Z 18s      0.97um          5.4Msz
FVM  108.46 342 PKP   11 30.00  13.7X
    Z 19s      4.01um          6.0Msz
MYNC 109.14 335 PKP   11 30.00  12.3X
    Z 21s      2.97um          5.8Msz
DUG  109.37   0 PKP   11 30.00  11.8X
    Z 20s      1.49um          5.6Msz
GLD  109.46 354 PKP   11 30.00  11.6X
    Z 19s      1.72um          5.6Msz
GOL  109.52 354 PKP   11 30.00  11.4X
    Z 21s      2.12um          5.7Msz
CMB  111.16   6 PKP   11 30.00   8.5X
    Z 21s      1.54um          5.6Msz
SAO  112.30   8 PKP   11 30.00   6.4X
    Z 21s      1.50um          5.6Msz
HON  112.39  46 PKP   11 30.00   5.8X
    Z 20s      0.73um          5.3Msz
MIAR 112.53 343 PKP   11 30.00   5.9X
    Z 20s      2.31um          5.8Msz
WMOK 113.49 347 PKP   11 40.00  14.0X
    Z 20s      3.59um          6.0Msz
ISA  113.67   5 PKP   11 40.00  13.6X
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    Z 20s      1.26um          5.5Msz
ALQ  114.34 354 PKP   11 40.00  12.1X
    Z 20s      1.65um          5.6Msz
TUC  117.21 358 PKP   11 40.00   6.7X
    Z 21s      2.10um          5.7Msz
LPAZ 136.88 279 PKP   12 05.80  -6.1X
                i     12 12.90
                LR    01 47.00
LPAZ 136.88 279 PKPd  12 12.90   1.0
      1.1s     4.90nm
                PP    14 57.20
                PKKP  22 33.30
LPB  136.96 279 PKP   12 16.10   4.3X
    Z 22s      2.59um          5.9Msz
                LR    01 32.00
CNCB 136.99 278 PKP   12 14.00   1.9
    S.D. = 1.2  on 273 of 343 obs.
-----------------------------------
&  NOV  16, 1993  16h 14m 06.81s
   61.391 N          151.584 W
   DEPTH =  77.5km
 SOUTHERN ALASKA                  (  2)
      <AEIC>.

CGLM    0.22 248 eP    14 18.03  -0.6
NCG     0.28 273 iP    14 18.37  -0.6
                eS    14 27.29
CRP     0.30 246 eP    14 18.69  -0.5
SPU     0.31 227 eP    14 18.53  -0.6
                eS    14 27.70
CKN     0.33 240 eP    14 18.84  -0.4
CP2     0.34 248 eP    14 18.84  -0.7
CKT     0.36 238 eP    14 18.81  -0.7
BGL     0.41 252 eP    14 19.32  -0.6
SUA     0.41  79 iP    14 19.70  -0.2
                eS    14 30.33
CKL     0.41 242 eP    14 19.23  -0.7
BKG     0.46 226 eP    14 19.66  -0.6
                eS    14 30.04
SKT     0.59   2 iP    14 20.68  -0.7
                iS    14 31.62
NKA     0.67 165 eP    14 23.31   1.2
PWA     0.86  72 eP    14 24.26   0.0
                eS    14 38.38
PMS     0.99  98 eP    14 25.99   0.1
                eS    14 40.68
REF     1.06 212 eP    14 26.30  -0.6
RDW     1.09 214 eP    14 26.82  -0.5
SLKM    1.11 143 eP    14 26.40  -1.0
                eS    14 43.77
CUT     1.19  31 eP    14 27.96  -0.4
PLRM    1.19  79 eP    14 27.56  -0.8
PMR     1.19  79 eP    14 27.40  -1.0
                eS    14 44.11
GHO     1.33  72 eP    14 29.56  -0.7
                eS    14 47.52
MPA     1.41 129 eP    14 30.74  -0.5
ILIM    1.48 208 eP    14 31.50  -0.7
KNK     1.51  88 eP    14 31.65  -0.9
SML     1.61  73 eP    14 32.80  -1.1
SEW     1.66 140 eP    14 32.74  -1.8
PWL     1.66 107 eP    14 33.12  -1.5
CFI     1.86  95 eP    14 35.71  -1.5
CNPM    1.88 175 eP    14 37.58   0.0
OPT     1.92 206 eP    14 38.43   0.2
KNIM    2.15 117 eP    14 38.26  -3.0
TRF     2.15  16 eP    14 40.91  -0.6
KTH     2.19   8 eP    14 41.65  -0.3
LTI     2.28 125 eP    14 40.52  -2.5
MTU     2.39 124 eP    14 42.41  -2.2
FID     2.56 102 eP    14 44.02  -2.9
TTA     2.59 309 eP    14 46.13  -1.3
KLU     2.72  85 eP    14 46.81  -2.4
IL1     4.01  30 eP    15 06.38  -0.7
IM3     4.71 349 eP    15 14.85  -2.0
      41 obs. associated
-----------------------------------
   NOV  16, 1993  16h 22m 35.81± 0.35s
   39.959 S ± 3.6km  176.200 E ± 4.6km
   DEPTH =  33.0km  (normal)
   4.7mb (  3 obs.)
 NORTH ISLAND, NEW ZEALAND        (159)
      ML 4.6 (WEL).

WAHZ    0.29  25 Pd    22 43.10  -0.4
                S     22 49.10
TEHZ    0.47  94 Pd    22 47.00   1.0
```

```
TTH     0.64  49 Pc    22 49.40   1.0
PGZ     0.66 175 Pd    22 50.00   1.3
DRZ     0.84 324 Pd    22 52.40   0.9
MNG     0.86 220 Pd    22 52.70   1.2
                eS    23 05.40
NGZ     0.91 329 P     22 53.00   0.6
CNZ     0.91 326 P     22 53.50   1.1
TAHZ    0.92  27 P     22 53.90   1.4
BSZ     0.99 279 P     22 55.40   2.0
PAHZ    1.28  31 Pd    22 57.80   0.2
MTW     1.31 204 Pd    22 57.90   0.0
KIW     1.34 227 Pd    22 59.10   0.8
AMW     1.39 194 Pc    22 59.20   0.2
CAW     1.44 217 P     22 59.90   0.1
MAHZ    1.51  60 P     23 00.40  -0.4
PATZ    1.58   2 P     23 02.30   0.4
MOW     1.63 206 P     23 02.10  -0.5
MRW     1.71 221 P     23 03.30  -0.4
                e     23 08.20
                eS    23 24.50
WEL     1.72 219 P     23 03.70  -0.1
TAZ     1.74   8 P     23 04.30   0.2
UTU     1.78 360 eP    23 05.20   0.4
MOZ     1.81 323 P     23 05.40   0.2
                eS    23 25.50
URZ     1.84  23 Pd    23 04.60  -1.0
NRZ     1.86 289 P     23 08.00   2.1
TCW     1.93 229 P     23 06.30  -0.6
DIW     1.93 243 eP    23 06.80  -0.2
NOZ     1.96  47 P     23 05.90  -1.4
WLZ     2.14 347 eP    23 09.80  -0.1
PUZ     2.47  41 eP    23 12.30  -2.4
QRZ     2.93 252 P     23 19.90  -1.3
THZ     3.08 233 P     23 22.00  -1.3
KUZ     3.23 353 P     23 24.60  -0.7
DSZ     3.78 240 P     23 31.50  -1.7
WCZ     4.27 339 P     23 40.30   0.2
MQZ     4.59 214 P     23 39.70  -4.9X
                eS    24 29.00
OUZ     5.16 336 eP    23 51.60  -1.2
ODZ     6.53 217 eP    24 06.40  -5.6X
                eS    25 16.60
TUZ     7.69 217 eP    24 22.40  -5.8X
DZM    19.67 332 iPc   27 18.10  13.0X
BRS    23.10 296 iPc   27 41.00   1.3
                e     31 38.00
ASPA   39.05 282 iPd   29 59.20  -2.1
        0.8s    13.70nm          4.8mb
WR2    40.92 287 iPd   30 14.80  -1.9
        0.6s    12.40nm          4.8mb
                e     30 23.20
WRA    40.93 287 P     30 15.20  -1.7
        0.7s     4.40nm          4.3mb
LIC   146.40 178 PKP   42 15.12   1.1
        0.8s     7.50nm
KIC   146.54 178 PKP   42 15.84   1.6
        0.8s    16.00nm
TIC   146.81 178 PKP   42 22.73   8.0X
        0.7s     5.00nm
    S.D. = 1.2  on  42 of  47 obs.
-----------------------------------
%  NOV  16, 1993  16h 29m 09.20± 0.67s
   42.550 N ± 4.1km   18.604 E ± 5.7km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION       (383)

HCY     0.13 217 iPgc  29 12.40   0.1
                iSg   29 14.71
BDV     0.31 148 iPgd  29 15.78   0.0
                iSg   29 20.75
BRY     0.35 353 iPgd  29 16.34  -0.2
                iSg   29 21.74
NKY     0.39  48 iPgd  29 17.01  -0.3
                iSg   29 23.27
TTG     0.50 104 iPgd  29 19.07  -0.3
                iSg   29 26.94
ULC     0.76 141 iPgd  29 23.90  -0.1
                iSg   29 35.01
PLE     0.97  36 iPgc  29 28.04   0.3
                iSg   29 42.54
IVA     1.01  71 iPgc  29 28.47   0.1
                iSg   29 43.87
PVY     1.01  87 iPgc  29 28.75   0.3
                iSg   29 44.00
    S.D. = 0.3  on   9 of   9 obs.
-----------------------------------
%  NOV  16, 1993  17h 00m 25.75± 0.75s
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16d 17h

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   60.979 N ±13.0km    9.514 E ± 6.5km
   DEPTH =  10.0km  (geophysicist)
 SOUTHERN NORWAY                    (535)
      MD 1.8 (BER).

NRA0     1.02 103 ePg   00 44.81  -0.3
                  eLg   01 01.63
MOL      1.85 331 eP    00 57.78   0.0
                  eS    01 22.10
ASK      2.18 259 eP    01 02.20  -0.3
                  eS    01 30.80
EGD      2.23 253 eP    01 03.50   0.3
                  eS    01 31.70
HFS      2.23 110 eP    01 03.60   0.3
       0.1s     0.70nm
     S.D. = 0.4  on   5 of   5 obs.
-------------------------------------
?  NOV  16, 1993  17h 09m 37.24± 1.02s
   27.466 N ±18.1km  140.019 E ±45.0km
   DEPTH =  33.0km  (normal)
   4.1mb (  6 obs.)
 BONIN ISLANDS REGION               (212)

WRA     47.45 187 P     18 10.90   0.1
       0.5s     0.50nm          3.8mb
YKA     72.73  28 eP    21 03.70   0.1
       0.7s     2.00nm          4.2mb
KAF     76.30 334 iP    21 25.30   1.2
       0.4s     2.70nm          4.6mb
NUR     77.86 333 eP    21 34.00   1.2
HFS     82.31 336 eP    21 55.30  -1.3
       0.4s     0.70nm          4.1mb
NB2     82.54 338 P     21 57.50  -0.4
       0.7s     1.90nm          4.3mb
GEC2    90.18 328 eP    22 34.80  -0.9
       0.9s     0.87nm          4.0mb
     S.D. = 1.2  on   7 of   7 obs.
-------------------------------------
%  NOV  16, 1993  18h 29m 59.80± 0.63s
   28.069 S ± 6.2km   26.696 E ± 7.9km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA           (584)
      ML 3.3 (PRE).

SEK      0.86 107 iPd   30 17.20   0.3
                  S     30 27.50
BLF      1.13 203 iPd   30 23.20   1.7
                  S     30 39.00
BFS      1.17   4 iPc   30 22.00  -0.2
                  S     30 35.40
SWZ      1.50 306 iPd   30 29.60   2.0
                  S     30 49.40
KSR      2.20   5 eP    30 38.00   0.3
                  S     31 07.00
SLR      2.72  32 eP    30 44.00  -1.1
                  S     31 15.00
HVD      2.74 202 eP    30 46.00   0.7
                  S     31 18.00
BFT      3.82  52 eP    31 01.00   0.3
                  S     31 45.50
GRM      5.23 181 eP    31 20.00  -0.6
                  S     32 17.00
POF      6.07 256 e(P)  31 31.00  -1.3
                  S     32 30.00
SUR      6.66 228 eP    31 39.00  -2.0
                  S     32 53.00
     S.D. = 1.4  on  11 of  11 obs.
-------------------------------------
?  NOV  16, 1993  18h 30m 20.77± 8.70s
   41.458 N ±51.6km   23.482 E ±28.8km
   DEPTH =   5.0km  (geophysicist)
 GREECE-BULGARIA BORDER REGION      (363)

SRS      0.35 166 ePg   30 27.25  -0.6
                  iSg   30 35.98
KNT      0.53 236 iPg   30 30.29  -1.1
                  eSg   30 40.98
SOH      0.64 189 ePg   30 33.90   0.3
                  eSg   30 46.74
THE      0.91 206 ePg   30 39.50   0.8
GRG      0.96 239 ePg   30 40.06   0.6
                  eSg   30 55.10
     S.D. = 1.1  on   5 of   5 obs.
-------------------------------------
?  NOV  16, 1993  19h 47m 38.04± 1.66s
   33.012 S ± 8.7km   68.988 W ±28.1km
   DEPTH =   5.0km  (geophysicist)
 MENDOZA PROVINCE, ARGENTINA        (139)
      Felt (II) at Mendoza.

MDZ      0.17  42 iP    47 41.60   0.0
                  iS    47 43.50
RTCV     1.21  18 e(P)  48 00.00  -1.1
                  S     48 16.80
CFA      1.54  25 ePc   48 07.10   0.9
                  S     48 16.50
RTLL     1.73  15 ePc   48 09.30   0.3
                  S     48 31.40
RFA      1.81 166 ePc   48 10.00  -0.1
                  S     48 36.80
RTPR     3.43  39 e(P)  48 40.00   6.8X
     S.D. = 1.0  on   5 of   6 obs.
-------------------------------------
?  NOV  16, 1993  20h 05m 39.65± 1.91s
   36.847 N ± 8.3km   8.837 W ±19.8km
   DEPTH =  10.0km  (geophysicist)
 WEST OF GIBRALTAR                  (384)
      MD 3.1 (RBA). mbLg 3.0 (MDD).

EVAL     1.82  66 iPd   06 12.02   0.7
                  e     06 30.90
EPRU     2.89  87 eP    06 27.20   0.6
                  e     06 58.50
EHOR     3.02  70 iPd   06 28.54   0.1
                  e     06 59.50
AVE      3.73 161 iPn   06 39.50   1.0
                  iSn   07 18.00
EPLA     3.87  33 iPd   06 41.18   0.6
                  e     07 22.10
EBAN     4.23  70 iPd   06 44.93  -0.6
                  e     07 27.30
ECOG     4.24  83 iPd   06 47.27   1.5
                  e     07 30.30
PAB      4.45  51 ePn   06 48.50  -0.2
                  ePb   06 55.00
                  eSn   07 36.00
                  eSb   07 48.00
                  eSg   08 15.00
IFR      4.50 136 iPn   06 48.50  -1.1
                  iSn   07 34.00
EVIA     5.33  68 eP    06 59.99  -1.3
                  e     07 54.20
TIO      6.05 167 iPn   07 11.00  -0.4
                  iSn   08 14.00
ETOR     6.61  51 eP    07 18.54  -0.9
                  e     08 27.30
     S.D. = 1.0  on  12 of  12 obs.
-------------------------------------
*  NOV  16, 1993  20h 13m 25.43± 0.94s
   43.556 N ±11.1km   5.252 W ± 8.5km
   DEPTH =  10.0km  (geophysicist)
 SPAIN                              (377)
      mbLg 2.8 (MDD).

EMON     1.52 266 iPd   13 52.09  -0.6
                  e     14 10.30
ERUA     1.81 231 iPd   13 52.84  -4.1X
                  e     14 13.80
ECRI     2.22 114 eP    14 01.19  -1.7
                  e     14 31.20
GUD      3.02 164 eP    14 14.69   0.4
                  e     14 46.90
EPLA     3.54 190 eP    14 22.48   0.8
                  e     14 59.60
LPO      4.77  74 Pn    14 39.30   0.2
                  Sn    15 30.70
RJF      5.15  68 Pn    14 45.40   1.0
                  Sn    15 41.30
CAF      5.43  73 Pn    14 48.40   0.0
                  Sn    15 45.60
     S.D. = 1.1  on   7 of   8 obs.
-------------------------------------
?  NOV  16, 1993  22h 47m 46.74± 3.55s
   28.693 N ±10.3km   34.777 E ±26.6km
   DEPTH =  10.0km  (geophysicist)
 EGYPT                              (553)

BADA     0.26 131 iPc   47 52.20   0.0
                  iS    47 56.67
SRFA     0.43  57 iPc   47 55.40  -0.1
                  iS    48 02.00
HQL      0.62  23 iPd   47 59.27   0.0
                  iS    48 08.40
AYN      1.09  80 eP    48 07.33   0.2
                  eS    48 23.00
     S.D. = 0.2  on   4 of   4 obs.
-------------------------------------
?  NOV  16, 1993  23h 17m 04.18± 1.66s
   28.223 N ±15.3km  139.199 E ±18.5km
   DEPTH = 530.5 ± 20.5 km
   4.1mb (  4 obs.)
 BONIN ISLANDS REGION               (212)

MAT      8.34 354 iPc   19 05.60  -0.1
       0.6s    63.33nm          5.0mb X
                  eS    20 38.00
CHTO    37.93 265 eP    23 37.40  -0.1
GUN     46.72 283 P     24 48.00   0.7
PKI     47.21 283 P     24 50.80  -0.2
KKN     47.27 283 P     24 51.80   0.5
       0.4s     7.00nm          4.5mb
DMN     47.46 283 P     24 53.00   0.2
GKN     47.77 283 P     24 55.20   0.2
ASPA    51.84 186 eP    25 25.10   0.2
       0.4s     7.90nm          4.5mb
GBA     58.94 269 P     26 13.00  -1.6
HFS     81.33 336 eP    28 25.40  -0.3
       0.3s     1.00nm          3.8mb
NB2     81.57 337 P     28 27.30   0.3
       0.6s     1.50nm          3.7mb
     S.D. = 0.7  on  11 of  11 obs.
-------------------------------------
?  NOV  16, 1993  23h 38m 18.65± 1.96s
   46.845 N ±21.8km  150.064 E ±30.1km
   DEPTH = 178.4 ± 23.5 km
   4.2mb (  3 obs.)
 KURIL ISLANDS                      (221)

KUSJ     5.33 227 eP    39 36.60  -1.0
                  eS    40 34.00
ASAJ     5.89 245 eP    39 50.10   5.2X
HOOJ     6.58 230 eP    39 55.00   1.1
                  eS    41 05.50
BRW     34.82  27 (P)   44 53.48   0.0
IMA     34.97  36 (P)   44 54.98  -0.1
FBA     37.39  38 eP    45 15.48   0.3
       0.6s     3.39nm          4.2mb
HFS     67.61 338 eP    48 57.30  -0.2
       0.4s     1.20nm          4.1mb
ASPA    71.69 196 eP    49 22.50  -0.1
       0.5s     3.20nm          4.3mb
     S.D. = 0.9  on   7 of   8 obs.
-------------------------------------
%  NOV  17, 1993  00h 17m 05.91± 0.56s
   39.462 N ± 5.1km   29.056 E ± 5.4km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)
      ML 3.0 (ISK).

DST      0.36 294 iPg   17 13.00  -0.4
                  eSg   17 17.90
ALT      0.91 116 ePn   17 23.60   0.1
IZI      0.93  20 iPg   17 23.40  -0.3
                  iSg   17 37.40
KHL      1.19 162 ePn   17 27.80  -0.4
BNT      1.25 316 iPn   17 30.40   1.3
EDC      1.27 314 ePn   17 29.00  -0.5
EYL      1.39  37 ePn   17 32.40   1.0
HRT      1.44  19 ePn   17 31.50  -0.5
CTT      1.75 344 ePn   17 35.90  -0.6
IZM      1.76 233 ePn   17 37.00   0.4
     S.D. = 0.8  on  10 of  10 obs.
-------------------------------------
   NOV  17, 1993  00h 19m 39.91± 0.19s
   52.630 N ± 4.6km  168.068 W ± 2.4km
   DEPTH =  33.0km  (normal)
   5.4mb (104 obs.)  4.6Msz ( 27 obs.)
 FOX ISLANDS, ALEUTIAN ISLANDS      (  9)
      Mw 5.2 (HRV).
      CENTROID, MOMENT TENSOR       (HRV)
      Data Used: GDSN
      L.P.B.: 17S, 24C
      Centroid Location:
      Origin Time        00:19:37.1 1.2
      Lat 52.11N 0.09 Lon 168.19W 0.14
      Dep  42.0 5.7 Half-duration  1.0
      Moment Tensor;   Scale 10**16 Nm
        Mrr= 3.46 0.31  Mtt=-4.28 0.37
        Mff= 0.82 0.35  Mrt= 4.28 0.71
        Mrf= 3.51 0.78  Mtf=-1.48 0.58
      Principal Axes:
```

```
        T  Val=  6.66  Plg=58  Azm=301
        N       0.55      16       59
        P      -7.22      26      157
     Best Double Couple:Mo=6.9*10**16
      NP1:Strike=280 Dip=23 Slip= 134
      NP2:        54      73      73

SDN     5.23  56 ePc   20 57.24  -0.5
                eS     21 54.67
ADK     5.35 265 ePc   20 58.13  -1.3
                eS     21 59.43
KDC    10.27  54 eP    22 05.06  -2.8
SVW    10.87  34 (P)   22 16.56   0.4
ANM    12.05   6 (P)   22 29.27  -2.8
TTA    12.14  27 (P)   22 32.70  -0.6
CP2    12.19  39 (P)   22 34.73   0.5
CRP    12.23  39 eP    22 32.06  -2.6
SLKM   12.58  44 eP    22 37.45  -1.7
PMS    13.24  42 eP    22 45.20  -2.7
PMR    13.60  41 eP    22 50.62  -2.0
KLU    14.89  45 ePc   23 05.98  -3.6X
TOA    15.07  42 eP    23 09.60  -2.3
       0.7s   719.60nm          6.1mb
IMA    15.28  23 eP    23 14.42  -0.3
       0.9s    36.80nm          4.6mb
FBA    16.07  32 eP    23 23.00  -1.7
       0.8s    88.79nm          4.9mb
ILT    16.16 345 iPc   23 30.00   4.3X
       1.4s    69.00nm          4.6mb
     Z  16s     6.90um          4.7MszX
     N  16s     4.80um
     E  18s     1.90um
BALM   16.30  49 eP    23 26.27  -1.5
SIT    19.25  64 eP    24 03.92  -0.1
       0.9s    41.30nm          4.7mb
PET    20.02 284 eP    24 11.50  -0.9
       1.0s   100.00nm          5.1mb
     Z  20s     1.40um          4.3Msz
INK    22.69  33 ePd   24 38.50  -0.8
       0.9s    67.00nm          5.1mb
GMW    29.11  82 eP    25 39.99   0.5
YKA    29.47  49 eP    25 42.70   0.2
       0.7s     6.50nm          4.5mb
RMW    29.74  81 (P)   25 45.98   0.8
MBC    30.00  21 ePc   25 48.30   1.2
       0.9s    11.00nm          4.7mb
FMW    30.07  82 P     25 49.08   0.8
SHW    30.08  84 (P)   25 49.55   1.2
RNO    30.34  89 P     25 51.06   0.6
ASR    30.50  83 P     25 52.47   0.6
SSOR   30.62  86 P     25 53.78   0.7
EBG    30.75  81 P     25 54.94   0.9
WTV    30.75  80 P     25 54.10   0.1
VBEM   31.05  85 P     25 57.40   0.6
SAW    31.08  79 P     25 56.86   0.0
DBO    31.08  90 P     25 57.98   1.0
VGB    31.31  84 eP    25 59.11   0.2
CROR   31.45  85 P     26 00.81   0.5
DPW    31.71  78 eP    26 02.32  -0.2
YSS    31.73 280 (P)   26 00.00  -2.5
     Z  18s     1.00um          4.5Msz
     E  18s     0.90um
                e      26 19.00
JBO    31.90  83 P     26 04.64   0.5
VIPM   31.92  85 P     26 04.98   0.4
FHC    31.96  94 eP    26 05.96   1.2
       0.9s    42.58nm          5.3mb
KMPM   32.11  95 eP    26 06.83   0.7
NEW    32.18  77 iPd   26 06.38  -0.2
     Z  18s    10.56um          5.6Msz
YBH    32.19  91 ePd   26 07.52   0.8
       0.9s    20.00nm          5.0mb
     Z  19s     0.40um          4.1Msz
                eS     30 57.52
                eLQ    33 29.52
                eLR    34 57.52
HON    32.20 162 P     26 20.00  13.1X
     Z  18s     0.71um          4.4Msz
KUSJ   32.55 272 eP    26 07.10  -2.6
LGPM   32.60  93 eP    26 11.22   0.8
LNOR   32.63  82 P     26 10.44  -0.1
LBFM   32.91  91 eP    26 14.02   0.8
TIK    32.92 329 iPc   26 12.00  -0.7
     Z  14s     1.50um          4.8MszX
                e      31 22.00
WDC    32.97  93 eP    26 13.79   0.3
       0.8s    35.47nm          5.3mb
     Z  18s     0.40um          4.2Msz
ASAJ   33.25 275 eP    26 15.30  -0.5
YAK    33.59 311 iPd   26 16.80  -1.8
       1.0s    96.00nm          5.7mb
                i      26 38.00
MIN    33.68  93 ePc   26 19.80  -0.1
ORV    34.23  94 ePc   26 24.09  -0.3
       1.0s    20.00nm          5.0mb
     Z  20s     0.20um          3.8Msz
                eS     31 34.39
                iLQ    34 26.39
ZSP    34.78  96 iP    26 29.47   0.3
BKS    34.84  96 ePc   26 29.79   0.1
       0.8s    60.00nm          5.6mb
     Z  19s     0.50um          4.3Msz
                eS     32 11.09
                eLQ    34 14.09
                iLQ    34 49.09
                eLR    35 54.09
STAN   35.18  97 ePc   26 32.64   0.1
       1.0s    90.00nm          5.7mb
MHC    35.54  97 ePc   26 35.94   0.1
       1.1s    30.00nm          5.1mb
COE    35.58  97 eP    26 36.13   0.2
ARN    35.61  97 eP    26 35.44  -0.8
RES    35.79  26 eP    26 38.50   1.2
       1.0s     4.00nm          4.3mb X
CMB    35.86  95 ePc   26 38.74   0.4
       0.9s    19.48nm          5.0mb
     Z  20s     0.54um          4.3Msz
SAO    36.04  97 ePc   26 39.54  -0.3
       0.8s    19.85nm          5.1mb
PRS    36.37  98 iP    26 42.90   0.3
KVN    36.61  91 eP    26 45.12   0.2
PRI    36.92  97 iP    26 48.27   0.9
FRI    36.94  95 iP    26 47.84   0.4
MMPM   36.96  94 eP    26 48.86   0.9
MEMM   36.98  94 eP    26 49.06   1.4
BONR   37.18  93 eP    26 50.56   0.8
PHAM   37.29  97 eP    26 50.72   0.4
MTUM   37.40  94 eP    26 52.39   0.8
TNP    37.76  92 eP    26 54.87   0.3
       1.0s    18.60nm          4.9mb
BCH    37.91  98 eP    26 56.28   0.5
ISA    38.57  96 iPc   27 00.81  -0.4
       0.7s    25.34nm          5.1mb
     Z  20s     0.55um          4.4Msz
ABL    38.66  98 eP    27 02.17   0.0
TPNV   39.07  93 eP    27 05.78   0.3
       0.7s    20.48nm          5.0mb
DUG    39.13  86 eP    27 06.13   0.2
       1.2s    50.93nm          5.2mb
NIIJ   39.56 269 P     27 08.60  -0.7
GSC    39.82  95 eP    27 11.81   0.2
DAU    39.94  84 ePc   27 13.24   0.4
SSK    40.02  97 eP    27 13.44   0.1
ARUT   40.25  89 eP    27 15.35   0.1
MAT    40.50 269 eP    27 16.00  -1.1
       1.0s    22.00nm          4.9mb
     Z  20s     0.71um          4.5Msz
                eS     33 08.00
MSU    40.56  87 ePc   27 18.13   0.3
PEC    40.56  97 eP    27 16.85  -0.8
       0.7s     8.40nm          4.6mb
EMUT   40.58  85 eP    27 18.30   0.3
MDJ    40.80 285 eP    27 18.00  -1.4
PLM    41.11  97 eP    27 22.67   0.3
SRU    41.19  85 eP    27 23.12   0.2
RSSD   42.08  75 eP    27 29.44  -0.8
       0.9s    12.65nm          4.6mb
                ePcP   29 22.67
BOD    42.35 309 iPc   27 31.10  -0.9
       1.0s    48.00nm          5.2mb
PV09   42.42  85 eP    27 32.93  -0.2
TSRJ   42.52 269 eP    27 32.70  -0.9
PV10   42.55  85 eP    27 34.10  -0.1
PV08   42.66  85 eP    27 34.73  -0.5
ULM    43.32  63 eP    27 42.50   2.5
WKYJ   43.64 268 P     27 42.40  -0.4
CN2    43.71 286 Pc    27 42.40  -0.8
       0.8s    41.00nm          5.3mb
     Z  18s     0.72um          4.6Msz
GOL    43.94  81 iPc   27 45.60   0.1
       0.8s    39.87nm          5.3mb
                ePcP   29 30.08
GLD    44.00  81 eP    27 46.40   0.6
       1.1s    43.06nm          5.2mb
YONJ   44.28 271 eP    27 48.00   0.0
TKSJ   44.74 269 eP    27 47.00  -4.7X
TUC    45.52  93 iPc   27 58.89   0.9
       1.1s    18.64nm          4.9mb
     Z  19s     0.34um          4.3Msz
SNY    45.99 285 Pc    28 00.40  -1.1
       1.7s  1330.00nm          6.6mb X
     Z  18s     1.13um          4.9Msz
SHNJ   46.43 272 P     28 05.20   0.2
KUMJ   47.69 270 P     28 15.00   0.0
FRB    48.30  36 eP    28 19.50   0.2
       0.6s     8.00nm          4.9mb
DAG    49.40   9 iPd   28 27.00  -0.7
       0.7s    37.67nm          5.5mb
                ipP    28 46.40  78kmX
ACO    49.62  80 iPc   28 29.10  -0.8
WMOK   51.15  82 ePc   28 40.40  -1.2
       0.8s    43.29nm          5.5mb
     Z  21s     0.42um          4.4Msz
MEO    51.24  81 iPd   28 41.10  -1.2
JAQ    51.43  49 eP    28 42.00  -1.5
BJI    51.46 288 eP    28 42.50  -1.3
       1.0s    14.00nm          4.9mb
     Z  18s     0.89um          4.8Msz
     N  15s     0.48um
ZAK    51.81 305 iPc   28 45.50  -0.8
       1.6s    55.00nm          5.3mb
TUL    52.15  78 iPc   28 47.70  -1.4
HHC    53.57 292 P     28 59.60  -0.1
       1.2s    61.00nm          5.5mb
     Z  24s     1.35um          4.9MszX
UYO    54.14  79 iPc   29 01.90  -1.9
MIAR   54.41  78 ePc   29 04.05  -1.7
       1.2s    32.18nm          5.2mb
     Z  22s     0.26um          4.3Msz
SSE    54.56 276 Pd    29 06.20  -0.7
       1.4s   180.00nm          5.9mb
     Z  20s     0.50um          4.6Msz
                pP     29 13.20  23kmX
BTO    54.61 292 P     29 07.00  -0.3
ELC    55.09  73 eP    29 08.14  -2.6
NJ2    55.30 279 Pd    29 11.00  -1.3
       1.0s    26.00nm          5.2mb
GAC    56.89  57 eP    29 22.50  -1.1
OXF    56.90  75 eP    29 21.65  -2.1
YSNY   57.52  61 ePc   29 26.83  -1.3
       0.8s    44.32nm          5.6mb
     Z  21s     0.85um          4.8Msz
RSNY   58.18  57 eP    29 31.16  -1.5
       0.9s    35.67nm          5.4mb
MCWV   58.77  64 eP    29 35.06  -1.8
       0.9s    36.72nm          5.5mb
BINY   59.06  60 eP    29 37.89  -1.0
       0.8s    25.24nm          5.4mb
     Z  20s     0.63um          4.7Msz
WHN    59.07 281 ePc   29 38.00  -1.0
       1.0s    45.00nm          5.6mb
MYNC   59.58  71 eP    29 40.19  -2.4
       0.8s    12.00nm          5.1mb
     Z  19s     0.58um          4.7Msz
CBM    59.66  51 P     29 50.00   7.1X
     Z  21s     0.50um          4.6Msz
XAN    59.78 287 Pc    29 42.80  -1.2
       1.0s    46.00nm          5.6mb
     Z  20s     0.97um          4.9Msz
                pP     29 48.50  19kmX
                sP     29 52.50
NAV    59.89  67 eP    29 42.99  -1.7
BLA    60.18  67 eP    29 44.99  -1.6
       0.9s    41.92nm          5.6mb
CVL    60.72  65 eP    29 49.25  -1.0
GTA    61.06 298 P     29 51.00  -1.8
       1.4s    53.00nm          5.5mb
     Z  20s     1.73um          5.2Msz
                pP     30 02.50  39kmX
                sP     30 05.50
HRV    61.15  57 P     30 00.00   6.9X
     Z  19s     0.79um          4.9Msz
CBN    61.16  64 eP    29 52.00  -1.2
LZH    61.23 293 iPc   29 53.20  -0.7
       1.5s   150.00nm          5.9mb
     Z  18s     1.09um          5.0Msz
     N  15s     0.82um
                pP     30 05.00  41kmX
JSC    61.80  70 (P)   29 55.24  -2.4
CEH    61.87  67 P     30 10.00  12.0X
     Z  19s     0.84um          4.9Msz
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17d 00h

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LHS     61.91  69 eP    29 56.57  -1.8
LMN     62.02  50 ePc   29 58.00  -0.9
SGS     63.02  70 eP    30 04.44  -1.2
HBF     63.28  70 eP    30 06.14  -1.3
SVE     63.84 333 ePd   30 09.00  -1.8
        1.1s   100.00nm          5.8mb
      Z 13s      1.50um          5.4MszX
      N 13s      0.80um
      E 13s      0.80um
                  e     30 42.20
WMQ     63.99 309 Pc    30 11.20  -0.9
        1.0s    30.00nm          5.3mb
ARU     64.76 333 iPc   30 18.00   1.2
        1.3s   100.00nm          5.8mb
CD2     65.05 289 iPc   30 19.00   0.0
        1.2s   170.00nm          6.0mb
GYA     66.65 283 iPc   30 28.60  -0.8
        1.0s    67.00nm          5.7mb
                  sP    30 43.00
NB2     66.68   0 P     30 28.80  -0.2
        0.8s    30.30nm          5.4mb
NAO     66.89   1 P     30 23.02  -7.3X
HFS     67.58 359 eP    30 33.60  -1.0
        0.5s    35.20nm          5.7mb
UPP     67.77 357 iP    30 35.20  -0.6
KMI     69.97 285 Pc    30 49.50  -0.7
        1.6s   140.00nm          5.8mb
                  pP    30 57.50  26kmX
                  sP    31 03.00
FRU     70.66 316 iP    30 54.80   0.9
        2.0s   100.00nm          5.5mb
OBN     70.71 345 iPc   30 53.70  -0.2
        0.9s    60.00nm          5.7mb
                  e     31 20.00
                  e     33 42.00
MUD     71.25   2 iPc   30 56.60  -0.5
        0.7s    20.00nm          5.3mb
EKA     71.68   9 Pc    31 00.20   0.4
        0.9s    27.80nm          5.3mb
KSH     72.83 313 P     31 07.50   0.5
        1.0s    20.00nm          5.1mb
      Z 12s      2.44um          5.7MszX
      N 10s      0.67um
      E 10s      0.63um
                  pP    31 15.00  24kmX
                  sP    31 20.00
LSA     73.05 297 Pc    31 10.00   1.1
        1.0s    67.00nm          5.6mb
WIT     74.84   3 eP    31 20.00   1.8
WTS     75.66   3 eP    31 23.50   0.6
        0.9s    18.90nm          5.1mb
                  e     31 36.00
CLL     76.43 359 eP    31 14.00 -13.3X
        1.6s    45.00nm
                  i     31 27.50
KSP     76.84 357 iPc   31 30.20   0.6
        0.9s    27.00nm          5.3mb
ENN     76.85   4 eP    31 30.50   0.8
        1.0s    43.00nm          5.4mb
BRG     76.86 359 iPc   31 30.50   0.8
        1.0s    30.00nm          5.3mb
CHTO    77.05 284 iPc   31 32.60   1.3
        1.0s    18.50nm          5.1mb
MOX     77.10   0 iPc   31 32.10   1.0
        1.5s    65.00nm          5.4mb
GUN     77.29 299 P     31 33.40   0.4
OJC     77.31 355 eP    31 32.30   0.1
        1.0s    45.00nm          5.5mb
DZM     77.63 204 iPd   31 33.00  -1.4
KKN     77.71 300 P     31 35.20   0.1
PRU     77.73 358 P     31 35.70   1.1
        1.6s    37.60nm          5.2mb
PKI     77.81 299 P     31 35.80   0.0
GKN     77.88 300 P     31 36.00   0.1
DMN     77.94 300 P     31 36.60   0.2
WLF     77.96   4 eP    31 37.00   1.2
GRF     78.05   0 iPc   31 38.20   1.9
        1.3s    93.00nm          5.7mb
BDT     78.24 283 eP    31 39.00   1.2
SPC     78.31 354 iP    31 39.40   1.4
FLN     78.43   8 eP    31 39.20   0.8
        1.3s    54.15nm          5.4mb
KHC     78.61 359 iP    31 41.50   2.1
LDF     78.63   8 eP    31 40.30   0.8
        1.1s    47.60nm          5.4mb
UZH     78.73 353 eP    31 41.30   1.3
        1.2s    35.00nm          5.2mb
                  i     31 58.20
GRR     78.77   9 eP    31 41.30   1.0
        1.2s    71.10nm          5.5mb
NST     78.79 281 eP    31 41.00   0.2
GEC2    78.89 359 ePKP  31 41.70   0.6
        0.9s     7.50nm          4.7mb
                  e     31 47.00
                  e     31 51.00
                  e     31 54.30
LPF     79.11   9 eP    31 43.40   1.3
        1.4s    78.85nm          5.5mb
CDF     79.26   3 eP    31 44.30   1.2
        1.4s    56.20nm          5.4mb
ZST     79.46 356 i(P)  31 45.00   1.0
PSZ     79.60 355 iP    31 46.30   1.4
SRO     79.79 356 iP    31 47.90   2.1
BSF     79.82   4 eP    31 47.20   1.1
PYA     80.05 338 iPd   31 48.60   1.3
        1.0s   120.00nm          5.8mb
GRO     80.06 336 eP    31 49.00   1.7
        2.0s   240.00nm          5.8mb
HYF     80.16   6 eP    31 49.40   1.6
LOR     80.24   6 eP    31 49.50   1.2
        1.3s    76.55nm          5.5mb
SSF     80.43   6 eP    31 50.60   1.4
        1.0s    46.00nm          5.4mb
LBF     80.53   6 eP    31 50.90   1.1
        1.2s    39.85nm          5.3mb
MFF     80.61   8 eP    31 51.60   1.4
        1.1s   109.90nm          5.8mb
AVF     80.69   6 eP    31 51.80   1.2
        1.2s    66.95nm          5.5mb
SMF     80.86   6 eP    31 52.80   1.2
        1.1s    79.85nm          5.6mb
BGF     80.89   6 eP    31 52.90   1.2
        0.8s    18.95nm          5.1mb
LSF     81.10   7 eP    31 54.10   1.3
        1.0s    75.60nm          5.6mb
NDI     81.11 306 iP    31 53.00  -0.1
        1.2s    85.94nm          5.6mb
TCF     81.11   7 eP    31 54.10   1.2
        1.1s    30.50nm          5.2mb
ASH     81.18 325 eP    31 54.50   1.2
        1.0s   150.00nm          5.9mb
MAF     81.20   7 eP    31 54.80   1.5
        0.9s    24.25nm          5.2mb
RJF     82.04   7 eP    31 58.90   1.2
        1.0s    34.00nm          5.3mb
MAIO    82.24 323 iPc   32 00.20   1.2
        0.9s    14.92nm          5.0mb
LFF     82.33   8 eP    32 00.80   1.6
        0.9s    70.75nm          5.7mb
CAF     82.45   7 eP    32 01.50   1.6
        0.9s    32.90nm          5.4mb
LPO     82.63   8 eP    32 02.20   1.4
        0.9s    37.35nm          5.5mb
ERE     83.34 335 iP    32 06.00   1.4
EPF     84.19   9 eP    32 10.00   1.1
        0.9s    37.00nm          5.6mb
KVT     84.36 342 iP    32 11.00   1.3
KAS     84.48 344 eP    32 13.20   2.8X
VTS     84.66 352 iP    32 12.00   0.7
TAB     84.85 333 eP    32 13.00   0.6
PGF     85.17   2 eP    32 15.70   1.9
        1.1s   176.30nm          6.2mb
RZN     85.41 350 iPc   32 17.00   1.8
SKO     85.42 353 iPd   32 16.40   1.4
        1.2s   120.00nm          6.0mb
MMB     85.60 351 iPc   32 18.00   2.1
EYL     85.84 346 eP    32 18.40   1.1
VAY     85.97 352 iP    32 18.70   1.0
OHR     86.32 353 iP    32 20.80   1.3
        1.3s   140.00nm          6.0mb
PAB     87.12  13 eP    32 22.50  -1.0
HYB     89.72 299 ePc   32 35.50  -0.6
                  e     32 50.00
ASPA    91.18 231 iPc   32 41.50  -1.0
        1.0s    13.00nm          5.3mb
                  epP   32 53.20  38kmX
                  eS    43 19.20
POO     91.25 303 eP    32 46.00   2.8X
GBA     93.47 298 P     32 53.00  -0.3
KRI    141.65 332 iPKPd 38 59.00 -10.7X
BUL    145.08 332 iPKPd 39 14.90  -0.6
WIN    149.72 350 ePKP  39 27.60   4.6X
        0.6s    37.00nm
BFT    149.82 326 iPKPc 39 29.50   6.4X
        1.0s    30.00nm
SLR    150.45 329 iPKPc 39 39.20  15.3X
        0.8s    86.00nm
LBTB   150.54 334 ePKP  39 22.40  -1.6
                  ePKPbc39 29.93
KSR    150.99 331 ePKP  39 30.00   5.2X
        1.0s    70.00nm
MAW    151.57 219 PKP   39 30.00   5.9X
        1.0s    20.83nm
SEK    153.06 328 ePKP  39 45.00  17.3X
        0.7s    55.00nm
BOSA   154.00 332 (PKP) 39 26.98  -1.7
                  ePKPbc39 37.44
                  ePKPab39 50.80
BLF    154.24 330 ePKP  39 35.50   6.2X
        0.5s    25.00nm
      S.D. = 1.2  on 226 of 245 obs.
-----------------------------------------
   NOV  17, 1993  00h 29m 03.92± 0.33s
   42.602 N ± 3.2km   10.737 E ± 2.2km
   DEPTH =  10.0km  (geophysicist)
 CENTRAL ITALY                      (381)
      ML 4.0 (VIE), 3.9 (LDG), 3.6
      (ROM). MD 3.8 (TRI).

PII     1.13 352 P      29 25.37   0.3
PGF     1.28 268 Pn     29 30.20   2.4
                 Sn     29 46.70
CRE     1.36  41 P      29 28.12  -0.8
MNS     1.45  98 P      29 29.79  -0.5
PGD     1.46  29 P      29 30.37  -0.1
BDI     1.46 356 P      29 30.23  -0.2
SFI     1.55  31 P      29 31.70   0.2
MME     1.59 359 P      29 34.08   1.7
RMP     1.66 118 P      29 33.34   0.1
RDP     1.70 119 P      29 33.93   0.2
ARV     1.85  60 P      29 35.61  -0.3
AQU     1.99  96 P      29 38.65   0.7
BOB     2.36 337 P      29 44.41   1.1
FIN     2.44 312 P      29 44.01  -0.5
                 S      30 07.59
IMI     2.46 303 P      29 44.47  -0.3
                 S      30 08.31
SDI     2.46 110 P      29 44.90   0.2
PCP     2.51 321 P      29 45.11  -0.3
                 S      30 09.34
CKI     2.55 316 P      29 45.90  -0.1
ROB     2.69 310 P      29 47.99   0.0
                 S      30 15.32
SAOF    2.70 302 P      29 48.20  -0.1
REVF    2.71 296 Pn     29 48.17  -0.3
                 Sg     30 18.95
SBF     2.72 299 Pn     29 48.50  -0.1
                 Sn     30 19.40
AUTN    2.79 301 P      29 49.71   0.1
AURF    2.80 298 P      29 49.06  -0.6
ENR     2.91 305 P      29 51.66   0.4
                 S      30 20.67
TOUF    2.91 300 P      29 51.47   0.2
MVIF    2.92 298 P      29 51.47   0.1
STV     2.98 305 P      29 52.80   0.6
                 S      30 22.63
CALN    3.04 294 P      29 53.22   0.2
DOI     3.17 308 P      29 55.52   0.6
LMR     3.19 285 Pn     29 55.20   0.2
                 Sn     30 30.70
PZZ     3.26 307 P      29 55.87  -0.3
MDI     3.26 347 P      29 56.91   0.9
LRG     3.32 286 Pn     29 57.30   0.4
                 Sn     30 34.70
BHB     3.37 313 P      29 57.24  -0.4
CTI     3.51  10 P      29 59.61   0.0
RSP     3.58 317 P      30 00.17  -0.6
ORO     3.62 328 P      30 01.94   0.7
ORX     3.62 328 P      30 01.95   0.6
RRL     3.68 310 P      30 02.32   0.0
TMA     3.75 340 iPd    30 03.90   0.7
TRI     3.79  34 e(Pn)  30 03.50  -0.1
                 e(Sn)  30 46.70
                 e(Sg)  31 05.00
RIY     3.80  43 ePn    30 02.80  -0.9
                 iSn    30 46.00
BNI     3.83 311 P      30 04.84   0.6
LSD     3.85 319 P      30 04.01  -0.7
MMK     3.98 331 ePd    30 07.70   1.2
VDL     3.99 347 iPd    30 07.60   1.0
LPG     4.08 317 Pn     30 08.70   0.8
```

		Sn	30	52.60	
LPL	4.10	317	Pn	30	09.20	1.0
			Sn	30	55.00	
OSS	4.11	354	ePd	30	09.50	1.3
DIX	4.22	327	ePd	30	11.50	1.6
FVI	4.25	19	P	30	10.00	-0.1
OGA	4.27	3	eP	30	11.30	0.7
VBY	4.36	47	ePn	30	09.50	-2.2
LJU	4.39	37	e(Pn)	30	19.00	6.9X
			eSn	30	59.00	
EMS	4.41	323	iPd	30	14.90	2.3
LLS	4.44	344	eP	30	13.50	0.5
SQTA	4.63	4	iPnc	30	16.60	1.0
			i	30	18.20	
			iSn	31	10.40	
WTTA	4.71	7	iPnd	30	19.00	2.2
			iSn	31	16.50	
			iSg	31	47.20	
MOTA	4.75	3	iPnc	30	18.50	1.1
			iSn	31	15.70	
WATA	4.77	7	iPnc	30	19.70	2.0
			i(Sn)	31	18.60	
KBA	4.84	22	iPnd	30	17.90	-0.8
			iPg	30	43.70	
			iSn	31	15.80	
			i	31	52.50	
ZAG	4.95	48	e(P)	30	34.00	13.9X
PTJ	4.99	47	i(P)	30	40.00	19.3X
ZLA	5.16	342	ePd	30	22.90	-0.1
BHG	5.34	16	iPc	30	26.90	1.3
SLE	5.40	344	ePd	30	25.70	-0.8
LOMF	5.50	331	P	30	27.83	-0.1
FEL	5.61	341	P	30	28.45	-1.1
FEL	5.61	341	eP	30	28.50	-1.0
MOF	5.83	335	P	30	32.34	-0.2
ETER	5.84	270	eP	30	31.87	-0.7
			e	31	35.50	
BSF	5.92	333	Pn	30	33.10	-0.8
			Sn	31	37.90	
MTHF	6.05	276	P	30	34.26	-1.3
ECH	6.15	337	Pn	30	36.33	-0.7
VDCF	6.18	273	P	30	36.22	-1.2
HAU	6.23	332	Pn	30	37.40	-0.6
			Sn	31	45.70	
WLS	6.28	339	P	30	37.72	-1.1
CDF	6.30	338	Pn	30	38.00	-1.2
			Sn	31	46.90	
SMF	6.37	312	Pn	30	39.80	-0.3
			Sn	31	48.80	
LBF	6.50	315	Pn	30	41.90	-0.2
			Sn	31	52.80	
ESEL	6.56	247	eP	30	44.58	1.8
GEC2	6.58	17	Pn	30	40.50	-2.6X
			Sn	31	37.40	
CAF	6.69	293	Pn	30	44.20	-0.5
AVF	6.72	311	Pn	30	44.40	-0.7
LOR	6.75	316	Pn	30	45.10	-0.4
			Sn	31	57.30	
GRBF	6.78	275	P	30	44.86	-1.1
SSF	6.80	313	Pn	30	45.70	-0.5
			Sn	31	59.00	
KHC	6.82	16	Pn	30	44.30	-2.2
			e	31	03.50	
			e	31	48.00	
			e	32	01.00	
			e	33	24.50	
MAF	6.88	305	Pn	30	46.70	-0.6
BGF	6.88	308	Pn	30	46.70	-0.6
GRF	7.10	3	e(Pn)	30	51.30	1.0
			e	31	03.60	
			e(Sg)	32	17.20	
TCF	7.13	304	Pn	30	50.70	-0.1
ZST	7.16	36	eP	31	37.00	45.8X
RJF	7.18	295	Pn	30	50.90	-0.6
			Sn	32	08.00	
LPO	7.23	290	Pn	30	51.60	-0.6
LSF	7.53	302	Pn	30	56.20	-0.2
RUP	7.54	342	eP	30	55.50	-1.1
LFF	7.60	291	Pn	30	56.70	-0.7
ABH	7.61	344	eP	30	56.00	-1.5
EPF	7.66	277	Pn	30	58.20	0.0
EROQ	7.93	261	eP	31	01.74	-0.2
			e	32	26.00	
EGRA	8.19	271	eP	30	58.65	-6.9X
BZS	8.39	65	eP	30	59.00	-9.4X
DOU	8.61	333	P	31	03.20	-8.2X
			i	31	23.10	

MFF	8.73	301	Pn	31	12.70	-0.5
ECHE	9.33	255	eP	31	20.95	-0.6
ACU	9.42	248	eP	31	22.88	0.3
LDF	9.68	312	Pn	31	25.10	-1.1
ETOR	9.73	264	eP	31	30.00	3.0
			e	33	11.00	
LPF	9.91	307	Pn	31	30.00	0.6
GRR	9.98	309	Pn	31	28.50	-1.9

S.D. = 1.0 on 104 of 112 obs.

% NOV 17, 1993 01h 24m 59.00± 0.72s
40.279 N ± 6.5km 27.460 E ± 5.2km
DEPTH = 5.0km (geophysicist)
TURKEY (366)
ML 2.7 (ISK).

EDC	0.32	77	iPg	25	05.80	0.4
			iSg	25	09.80	
BNT	0.36	77	iPg	25	06.40	0.1
			iSg	25	10.40	
MFT	0.53	345	iPg	25	09.40	-0.1
			iSg	25	16.40	
EZN	0.98	243	iPn	25	18.30	0.2
DST	1.12	126	ePn	25	20.00	-0.5
CTT	1.14	40	iPn	25	20.50	-0.3
IZI	1.54	87	ePn	25	27.40	0.2

S.D. = 0.4 on 7 of 7 obs.

NOV 17, 1993 02h 11m 30.49± 0.43s
49.124 N ± 3.6km 6.879 E ± 5.3km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
ML 2.7 (STR), 2.3 (UCC).

RUP	0.59	12	ePg	11	41.40	-1.1
SRBF	0.67	108	Pg	11	44.49	0.6
WLF	0.72	319	iPd	11	44.14	-0.5
			iS	11	53.44	
CDF	0.76	160	Pg	11	44.93	-0.5
WLS	0.78	156	Pg	11	45.48	-0.2
			Sg	11	57.01	
ABH	0.88	30	ePg	11	46.60	-0.7
ECH	0.93	168	Pg	11	48.32	0.1
VITF	1.08	214	Pg	11	50.30	-0.6
MOF	1.28	172	Pg	11	54.68	0.3
			Sg	12	12.44	
FEL	1.46	148	Pg	11	58.16	1.2
			Sg	12	18.23	
TNS	1.50	42	ePnd	11	59.00	1.5
			eSn	12	16.30	
			eSg	12	17.70	
MEM	1.59	340	iPc	11	59.47	0.8
			iS	12	19.76	
ENN	1.76	340	eP	12	02.50	1.4
	0.6s		7.30nm			
			eS	12	22.50	
DOU	1.78	304	P	12	01.00	-0.4
			i	12	03.80	
			iS	12	23.00	
SNF	2.18	311	P	12	11.90	4.6X
GRF	2.89	77	ePg	12	25.80	8.4X
			eSg	13	01.70	
KHC	4.40	87	ePn	12	38.00	-0.9
			e	12	59.00	
			e	13	28.40	
			eSg	13	52.40	
GEC2	4.50	91	Pn	12	39.40	-0.9
			Sn	13	30.40	
			Sg	13	54.00	

S.D. = 0.9 on 16 of 18 obs.

& NOV 17, 1993 02h 11m 58.79s
59.807 N 153.756 W
DEPTH = 134.7km
SOUTHERN ALASKA (2)
<AEIC>.

PDB	0.22	265	iPc	12	16.53	0.6
			eS	12	30.63	
OPT	0.31	120	iPc	12	17.05	0.8
			eS	12	30.78	
INW	0.41	50	iPc	12	17.27	-1.0
INE	0.43	54	iPc	12	17.50	-1.0
AUL	0.46	159	ePc	12	17.64	-0.8
AUW	0.46	162	iPc	12	17.67	-0.7
			eS	12	32.80	
AUH	0.47	160	eP	12	17.72	-0.9

AGU	0.48	160	eP	12	18.50	-0.2
ILIM	0.49	55	iPc	12	17.61	-1.0
AUE	0.49	156	ePc	12	17.70	-0.8
AUI	0.50	160	ePc	12	17.67	-1.0
			eS	12	32.54	
MCNL	0.69	206	ePd	12	18.79	-1.1
			eS	12	34.07	
RED	0.79	38	iPc	12	19.76	-0.9
			eS	12	36.35	
RS2	0.83	37	ePc	12	20.26	-0.9
RDW	0.83	35	ePc	12	20.20	-0.9
NCT	0.86	28	iPc	12	20.48	-0.8
REF	0.86	37	iPc	12	20.50	-0.9
			eS	12	37.81	
CDD	0.88	176	ePd	12	20.23	-1.2
			eS	12	36.83	
DFR	0.95	34	ePc	12	21.24	-0.8
HOM	1.08	97	eP	12	22.00	-1.1
XLV	1.09	108	eP	12	22.10	-1.2
CNPM	1.31	101	iPc	12	23.71	-1.8
			eS	12	43.23	
SYI	1.39	149	eP	12	24.83	-1.5
BRLK	1.45	90	eP	12	25.97	-1.1
			eS	12	45.36	
BKG	1.47	30	iPc	12	26.63	-0.7
CKL	1.56	26	iPc	12	27.85	-0.5
NKA	1.57	52	eP	12	28.73	0.5
CKT	1.60	28	iPc	12	28.04	-0.7
SVW	1.60	326	eP	12	27.83	-0.9
BGL	1.61	24	eP	12	28.58	-0.3
SPU	1.62	31	iPc	12	28.10	-0.8
			eS	12	51.58	
CKN	1.62	28	ePc	12	28.58	-0.4
CP2	1.64	26	ePc	12	28.76	-0.7
CRP	1.66	28	ePd	12	28.42	-1.2
CGLM	1.74	29	eP	12	29.47	-0.9
NCG	1.79	26	eP	12	30.51	-0.5
SLKM	1.90	67	eP	12	30.47	-1.8
KDC	2.17	162	ePd	12	31.95	-3.5
SEW	2.19	80	ePc	12	33.79	-1.9
SUA	2.23	40	eP	12	35.53	-0.9
MPA	2.30	71	ePc	12	35.46	-1.7
SKT	2.44	26	iPd	12	38.16	-0.8
			eS	13	08.41	
PMS	2.53	53	P	12	38.00	-2.1
PWA	2.66	44	P	12	40.40	-1.3
PLRM	2.89	50	eP	12	43.31	-1.4
PMR	2.89	50	eP	12	43.34	-1.4
			eS	13	13.15	
PWL	2.90	66	eP	12	41.95	-2.9
LTI	2.98	83	iPc	12	44.01	-1.9
KNIM	3.07	77	eP	12	44.15	-2.9
KNK	3.07	56	eP	12	44.58	-2.5
MTU	3.08	84	ePc	12	45.34	-1.9
GHO	3.08	48	eP	12	44.90	-2.4
CUT	3.11	31	eP	12	46.02	-1.5
CFI	3.27	62	eP	12	46.45	-3.2
TTA	3.32	342	ePd	12	48.67	-1.7
SML	3.33	51	eP	12	47.89	-2.7
HIN	3.68	78	eP	12	52.62	-2.6
FID	3.75	72	eP	12	52.92	-3.1
SCM	3.75	54	eP	12	53.42	-2.7
HUR	3.75	30	eP	12	54.28	-1.8
MID	3.79	93	P	12	54.50	-2.0
VLZ	3.91	67	eP	12	56.24	-1.9
KTH	3.99	19	eP	12	57.62	-1.8
TRF	4.01	23	eP	12	58.16	-1.6
CVA	4.07	76	eP	12	57.75	-2.5
KLU	4.21	63	eP	12	59.34	-3.0
RND	4.30	31	eP	13	01.57	-2.0
TOA	4.36	55	P	13	02.20	-2.1
MCK	4.56	28	eP	13	05.52	-1.4
RAGM	4.58	79	eP	13	04.87	-2.4
TZL	4.64	58	eP	13	07.48	-0.6
HMT	4.79	80	eP	13	07.61	-2.4
SDG	4.82	52	eP	13	08.25	-2.2
BWN	4.82	23	eP	13	08.88	-1.6
PAX	5.09	48	eP	13	11.70	-2.5
GLB	5.16	67	eP	13	12.29	-2.8
NEA	5.26	23	eP	13	13.98	-2.4
WRH	5.38	27	eP	13	15.37	-2.6
WAX	5.49	79	eP	13	17.20	-2.3
CCB	5.60	27	eP	13	18.09	-2.8
HDA	5.61	32	eP	13	18.34	-2.8
DJE	5.70	39	eP	13	20.69	-1.6
SDN	5.76	222	eP	13	20.10	-3.0
MDM	5.77	24	eP	13	20.95	-2.4

17d 02h

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BALM     5.79  73 eP    13 21.33  -2.3
FBA      5.81  26 eP    13 20.70  -3.2
IL1      5.92  30 eP    13 22.34  -3.0
IM3      6.20   0 eP    13 27.77  -1.4
CTGM     6.27  74 eP    13 28.20  -2.0
IMA      6.29   0 ePd   13 28.65  -1.8
CHX      6.36  82 eP    13 29.74  -1.7
BC3      6.60  55 eP    13 32.76  -1.9
PCA      6.79  82 eP    13 35.30  -1.9
BCPM     7.11  83 eP    13 40.25  -1.2
PNL      7.26  85 eP    13 40.73  -2.8
BM3      8.65  24 eP    13 57.68  -4.5
INK     12.22  37 eP    14 47.00  -2.2
         0.6s     3.00nm          4.0mb X
MBC     20.35  23 eP    16 27.00   1.3
        98 obs. associated
-----------------------------------------
%  NOV  17, 1993  02h 19m 08.29± 0.52s
   40.303 N ± 5.4km   29.122 E ± 4.2km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                              (366)
      ML 3.1 (ISK).

IZI      0.27  83 iPg   19 14.10   0.1
HRT      0.66  39 iPg   19 20.50  -1.0
                eSg    19 31.50
ISK      0.76 356 iPg   19 23.30   0.1
                iSg    19 33.60
DST      0.79 209 iPg   19 23.80   0.0
                eSg    19 36.80
EYL      0.83  71 iPg   19 25.30   0.8
BNT      0.92 274 iPn   19 26.30   0.4
EDC      0.96 273 iPn   19 26.80   0.2
CTT      0.99 328 iPn   19 27.80   0.7
ALT      1.46 148 ePn   19 34.60  -0.2
MFT      1.48 290 ePn   19 34.00  -1.1
     S.D. = 0.7  on  10 of  10 obs.
-----------------------------------------
*  NOV  17, 1993  02h 42m 29.67± 0.11s
   1.577 N ± 2.8km  124.033 E ± 3.3km
   DEPTH = 239.5km  (  6 depth phases)
   5.6mb ( 91 obs.)
 MINAHASSA PENINSULA, SULAWESI     (265)
      Mw 5.5 (HRV).
      CENTROID, MOMENT TENSOR      (HRV)
      Data Used: GDSN
      L.P.B.: 32S, 52C
      Centroid Location:
      Origin Time        02:42:35.6 0.5
      Lat  1.85N 0.04 Lon 124.34E 0.04
      Dep 242.4 1.9 Half-duration  1.3
      Moment Tensor;   Scale 10**17 Nm
        Mrr=-1.12 0.05  Mtt= 0.14 0.07
        Mff= 0.98 0.10  Mrt= 0.20 0.07
        Mrf=-1.27 0.05  Mtf= 0.25 0.06
       Principal Axes:
        T  Val=  1.59  Plg=25  Azm= 96
        N        0.17      10       2
        P       -1.76      63     251
      Best Double Couple:Mo=1.7*10**17
       NP1:Strike=208 Dip=22 Slip= -62
       NP2:        358     70     -101

DAV      5.69  16 ePc   43 58.40   4.1X
                eS     45 06.10
TSM      6.72 294 ePd   44 11.90   4.6X
SWI      7.62 108 ePc   44 20.00   1.2
KKM      8.97 300 ePc   44 46.50  10.1X
KHKI    12.96 220 ePc   45 28.90   2.3
                eS     48 11.50
                e      52 07.50
MTN     15.97 154 eP    46 02.50  -0.9
         0.5s   575.00nm          6.3mb
                eS     48 50.20
KNA     17.84 165 iPd   46 23.10  -0.6
         0.8s   338.00nm          5.9mb
LEM     18.39 243 ePc   46 29.50  -0.1
                e(S)   47 43.00
KLI     20.20 251 eP    46 48.20   0.5
                eS     50 10.60
                e      50 54.00
WWKK    20.25 105 iPc   46 49.50   1.3
KGM     20.71 272 ePd   46 55.90   3.2X
         0.9s   651.40nm          6.2mb
                e      47 07.00  46kmX
MNDI    21.05 112 eP    46 58.00   1.7
QIZ     22.23 322 Pd    47 09.00   1.5
         0.8s    60.00nm          5.2mb
                S      50 57.00
HKC     22.73 336 iP    47 14.40   2.2
MDG     22.76 107 eP    47 13.80   1.2
MBL     22.97 190 iPd   47 14.30  -0.3
         0.5s    82.00nm          5.5mb
IPM     23.16 278 ePd   47 18.10   1.5
YYYY    23.24 110 eP    47 18.10   0.7
GZH     23.77 335 iPc   47 23.60   1.5
         1.2s   300.00nm          5.7mb
                iS     51 18.00
QZH     23.82 348 Pc    47 23.50   1.0
         1.2s   140.00nm          5.4mb
       Z  21s     3.55um          4.8Msz
       N  14s     1.68um
                S      51 18.00
GUMO    23.82  59 eP    47 21.70  -1.0
         1.0s   443.10nm          6.0mb
                e      47 23.80   8kmX
PJG     23.82  59 eP    47 21.00  -1.7
LAT     24.34 110 iPc   47 28.30   0.8
PMG     25.49 116 iPc   47 37.20  -0.8
         1.0s   360.00nm          5.9mb
PCT     25.86 301 eP    47 43.50   2.1
         0.8s     9.50nm          4.5mb X
NNT     26.44 296 iPd   47 47.80   1.1
QIS     26.77 146 iPc   47 49.00  -0.6
                eS     52 01.40
ASPA    26.86 160 iPd   47 49.70  -0.8
         0.5s   114.10nm          5.8mb
                ipP    48 42.80 279kmX
                esP    49 06.30
                iPcP   51 06.10
                eS     52 03.70
                ePcS   54 46.90
                iScS   58 09.50
                i      59 10.50
                i      00 14.90
                i      04 13.10
KVG     27.09  99 eP    47 53.00   0.5
NST     27.41 302 iPc   47 56.50   1.1
KHT     28.34 299 eP    48 05.50   1.7
MEEK    28.53 190 iPd   48 04.60  -0.8
         0.3s    74.00nm          5.8mb
RAB     28.69 102 eP    48 07.00   0.1
BDT     29.12 304 eP    48 13.00   2.4
         0.8s   145.40nm          5.7mb
SSE     29.48 355 Pc    48 14.50   0.9
         1.2s    75.00nm          5.2mb
       Z  16s     0.50um          4.2MszX
                PcP    51 12.50
                S      52 48.00
                ScP    54 28.00
GYA     29.85 327 iPc   48 18.60   1.5
         1.0s   310.00nm          5.9mb
                PcP    51 14.00
                S      52 55.00
                ScP    54 30.60
                ScS    58 25.00
KAGJ    30.16  12 P     48 18.90  -0.7
WHN     30.24 343 Pd    48 21.50   1.2
         1.0s   160.00nm          5.6mb
                PcP    51 14.50
                S      53 04.00
                ScP    54 31.70
CTA     30.63 136 iPc   48 23.00  -0.9
         1.3s    96.15nm          5.3mb
       Z  21s     1.79um          4.7Msz
                e      49 24.00 318kmX
                i      49 38.00
                iS     53 06.00
                i      54 24.00
NJ2     30.70 351 Pc    48 25.00   0.7
         1.0s    78.00nm          5.3mb
                PcP    51 16.00
                S      53 06.00
                ScP    54 33.50
KMI     31.15 320 Pc    48 31.00   2.4
         1.4s   480.00nm          6.0mb
       Z  15s     0.90um          4.6MszX
                S      53 17.00
KUMJ    31.45  11 P     48 31.20   0.4
MRWA    31.57 193 iPd   48 31.20  -0.7
         0.2s    36.00nm          5.7mb
COOL    32.40 185 iPd   48 37.80  -1.3
         0.5s    32.00nm          5.2mb
BAL     32.76 192 iPd   48 41.50  -0.7
         0.4s   105.00nm          5.8mb
SHNJ    33.05  11 P     48 44.60   0.0
KLB     33.52 190 iPd   48 48.10  -0.6
         0.6s   160.00nm          5.8mb
TKSJ    33.57  15 P     48 49.70   0.6
SHK     33.77  13 iP    48 51.00   0.2
         0.9s   100.84nm          5.4mb
MUN     34.19 192 iPd   48 53.90  -0.5
         0.8s   403.00nm          6.1mb
WKYJ    34.23  17 P     48 55.30   0.5
YONJ    34.57  14 P     48 58.30   0.7
CD2     34.92 329 iPc   49 02.20   1.5
         1.2s   530.00nm          6.0mb
TIA     35.05 350 Pc    49 01.50  -0.1
         0.9s   220.00nm          5.7mb
                PcP    51 27.70
                ScP    54 48.00
XAN     35.25 338 Pd    49 03.10  -0.3
         0.9s    62.00nm          5.2mb
                S      54 17.00
TSRJ    35.57  17 P     49 06.50   0.6
IIDJ    36.12  19 P     49 10.50  -0.1
RKG     36.55 190 iPd   49 15.20   0.9
         1.0s   370.00nm          5.9mb
CHJJ    37.00  20 P     49 16.60  -1.4
MTMJ    37.09  19 P     49 10.60  -8.3X
MAT     37.18  19 eP    49 19.00  -0.5
         1.0s    82.00nm          5.2mb
                eS     54 41.00
STK     37.21 155 iPd   49 14.10  -5.7X
         0.5s    41.20nm          5.2mb
                ipP    50 00.80 219kmX
                iPP    50 42.10
                iPcP   51 27.90
                iScP   53 35.70
                iS     54 38.50
                iScS   58 54.30
TIY     37.51 345 eP    49 22.00  -0.3
KAKJ    37.56  22 P     49 20.90  -1.7
NIIJ    38.08  20 P     49 24.00  -2.9X
BJI     38.95 350 eP    49 33.50  -0.5
         1.2s   160.00nm          5.4mb
       Z  20s     0.60um          4.4Msz
                ePP    51 15.00
                eScP   55 02.50
                eS     55 12.00
                esS    56 44.00
                eSS    58 08.00
                eScS   59 14.00
LZH     39.11 334 iPd   49 36.80   1.2
         1.8s   640.00nm          5.9mb
                pP     50 30.50 261kmX
                sP     50 56.00
                PcP    51 40.50
                ScP    55 03.80
                S      55 16.00
                PcS    55 27.00
                SS     58 13.00
                ScS    59 14.50
YAMJ    39.27  20 eP    49 37.40   0.6
BRS     39.93 138 iPc   49 41.50  -0.9
         0.8s    35.00nm          4.9mb
                i      50 16.00 157kmX
                i      51 15.00
                i      52 05.00
                iS     55 24.00
SNY     40.07 359 iPc   49 42.00  -1.2
         0.8s    49.00nm          5.0mb
OFUJ    40.66  21 eP    49 49.00   0.9
HHC     40.69 345 Pd    49 47.80  -0.7
         1.0s   130.00nm          5.3mb
BTO     40.87 344 P     49 51.00   1.0
ARMA    41.28 143 iPd   49 54.30   0.8
         0.6s    40.00nm          5.0mb
                ipP    51 07.40 371kmX
                isP    51 35.10
                iPP    52 33.90
LSA     41.94 315 eP    50 01.60   2.3
         1.0s   220.00nm          5.6mb
                S      56 01.00
CN2     42.06   2 eP    49 58.00  -1.5
         0.8s    12.00nm          4.4mb X
                PcP    51 49.50
BWA     42.50 150 iPd   50 05.70   2.4
                i      50 59.00 255kmX
                i      51 48.50
                iScP   55 18.30
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                e     56 25.50
MDJ    43.14   6 iPd  50 08.30   0.1
       0.7s   110.00nm          5.3mb
MRRJ   43.45  18 eP   50 11.40   0.7
CAN    43.50 150 iPd  50 12.60   1.3
                i     50 20.80  27kmX
                i     50 58.10
                i     51 06.00
                i     51 49.90
                iPcP  51 55.10
                iScP  55 21.90
                i     56 38.50
GTA    43.65 333 iPd  50 13.50   0.9
       1.2s   250.00nm          5.5mb
                pP    51 02.50 231km
                sP    51 35.50
                PcP   51 55.50
                ScP   55 21.00
                eS    56 24.00
                ScS   59 41.50
CNB    43.68 150 eP   50 13.50   0.7
       0.8s    43.00nm          4.9mb
HOOJ   44.15  21 eP   50 17.80   1.6
GUN    44.90 309 P    50 23.40   0.5
PKI    45.10 309 P    50 24.80   0.3
KUSJ   45.28  21 eP   50 25.90   0.7
KKN    45.31 309 P    50 26.60   0.6
DMN    45.36 308 P    50 26.60   0.2
ASAJ   45.47  19 eP   50 27.30   0.6
GKN    45.91 309 P    50 30.60   0.0
HYB    47.37 292 iP   50 42.00   0.0
       1.2s   514.30nm          5.8mb
                i     51 42.50 288kmX
                e     52 08.00
                e     52 40.50
GBA    47.61 287 Pd   50 43.60  -0.2
       0.8s   999.90nm          6.2mb
YSS    48.10  17 eP   50 45.70  -1.4
       1.0s    60.00nm          4.9mb
                e     52 10.60 430kmX
CIT    51.00 352 eP   51 10.00   0.8
ZAK    51.72 343 iPd  51 13.70  -0.8
       1.4s    62.00nm          4.9mb
                e     52 24.20 336kmX
NDI    52.11 306 iPc  51 16.00  -1.8
       0.7s   472.60nm          6.1mb
WMQ    53.01 328 Pd   51 24.00  -0.2
       1.0s   140.00nm          5.4mb
BOM    53.02 292 iPc  51 23.00  -1.5
                eS    58 26.00
IRK    53.14 345 eP   51 24.00  -1.0
       1.4s    72.00nm          5.0mb
BOD    56.65 354 iPd  51 48.20  -1.8
       0.7s   100.00nm          5.5mb
KSH    57.68 317 P    51 59.20   1.5
       0.5s   120.00nm          5.8mb
     Z  20s     1.10um          5.0Msz
     N  10s     0.67um
     E  10s     0.63um
PET    58.75  24 eP   52 05.00   0.4
       1.0s   100.00nm          5.4mb
FRU    60.21 320 eP   52 14.40  -0.4
       2.5s   290.00nm          5.5mb
                e     52 56.80 183kmX
YAK    60.44   3 iPd- 52 15.10  -0.9
       0.8s  1383.00nm          6.7mb X
                e     52 55.00 170kmX
                e     54 33.00
THZ    61.72 140 P    52 24.60  -0.4
MNG    62.84 138 P    52 31.00  -1.3
NOZ    63.69 135 eP   52 37.60  -0.2
SMY    65.68  31 eP   52 51.40   1.1
CSY    68.40 186 iPc  53 16.60   9.5X
       0.7s   214.30nm          6.0mb
ASH    69.99 310 eP   53 17.00  -0.4
ADK    70.25  34 eP   53 18.20  -0.4
       0.8s    23.28nm          5.0mb
SVE    74.39 329 iPd  53 42.00  -0.8
       1.1s   160.00nm          5.7mb
ARU    75.30 328 iPd  53 47.50  -0.4
       1.0s   150.00nm          5.7mb
                i     56 45.30
ILT    76.71  19 iPd  53 55.20  -0.4
       1.2s    88.00nm          5.4mb
                i     54 08.00  44kmX
KER    78.32 305 eP   54 02.00  -3.3X
TAB    79.35 308 eP   54 11.00   0.2
KMSA   79.64 290 iPd  54 10.70  -1.8
ANM    80.32  24 eP   54 15.80   0.6
GRO    80.45 314 iPd  54 16.50   0.3
       1.0s   220.00nm          5.8mb
SDN    80.46  34 ePd  54 16.03   0.1
       0.5s   236.13nm          6.2mb
                epP   55 15.48 249km
                esP   55 42.20
MAW    80.82 200 iP+  54 18.40   0.8
       1.2s   264.71nm          5.8mb
MTA    80.91 312 iPd  54 19.60   1.0
       0.8s   280.00nm          6.0mb
ERE    80.99 310 iP   54 19.00  -0.2
AFIF   81.01 294 iPd  54 20.40   0.8
ABHA   81.23 288 ePd  54 22.00   0.9
UQSK   81.82 296 iPd  54 24.17   0.4
PYA    82.41 314 iPd  54 26.00  -0.4
       0.9s   300.00nm          6.0mb
                e     57 44.20
SBA    82.60 172 iPd  54 28.00   1.3
TAIF   83.54 291 iPd  54 33.40   0.6
SVW    83.96  29 iPd  54 35.04   1.2
       0.7s    88.53nm          5.7mb
                ipP   55 32.73 239km
                e     55 37.70
                e     55 54.23
TTA    84.03  27 ePd  54 35.03   0.8
       0.6s    12.91nm          4.9mb
                epP   55 29.63 225kmX
                esP   56 01.78
SOC    84.80 313 iPc  54 38.00  -0.4
       1.0s   110.00nm          5.6mb
BRW    85.06  19 ePc  54 40.52   1.4
                epP   55 36.58 231km
                e     55 59.75
KDC    85.18  32 ePd  54 40.47   0.5
       0.8s    46.33nm          5.3mb
                epP   55 39.22 243km
IMA    85.43  24 iPd  54 41.87   0.6
       0.7s    29.23nm          5.2mb
                epP   55 40.81 244km
CRP    85.64  29 eP   54 41.22  -1.2
                e     55 59.92 336kmX
                isP   56 10.78
GAZ    86.52 307 iP   54 47.60   0.6
SLKM   86.53  30 eP   54 45.73  -0.9
MOS    86.68 326 iPd  54 49.00   1.7
       1.5s   330.00nm          5.9mb
PMR    87.11  29 eP   54 48.34  -0.9
       0.3s     3.40nm          4.7mb
                e     56 08.16 340kmX
                esP   56 18.96
OBN    87.24 325 iPd  54 49.00  -1.0
       0.8s   100.00nm          5.7mb
                e     58 23.00
NAI    87.27 269 iPd  54 56.00   4.7X
AYN    87.52 299 iPd  54 52.00   0.1
BHL    87.78 304 P    54 53.00  -0.3
FBA    87.80  25 eP   54 51.41  -1.2
       0.5s     7.40nm          4.8mb
TOA    88.52  28 eP   54 56.60   0.5
KLU    88.65  29 eP   54 56.44  -0.3
CSS    89.68 305 eP   55 01.50  -0.6
BALM   90.39  29 iPd  55 05.09   0.2
                esP   56 33.50
PPCY   90.50 305 eP   55 05.00  -0.7
SPA    91.56 180 iPd  55 10.60   0.4
       0.8s    33.33nm          5.4mb
MNK    92.56 324 iP   55 13.00  -1.8
       1.0s   330.00nm          6.3mb
INK    93.14  21 ePd  55 17.00  -0.2
       0.9s     9.00nm          4.8mb
VRI    93.97 316 ePc  55 20.00  -1.6
BFT    94.27 245 eP   55 24.60   1.0
       0.6s    14.00nm          5.3mb
MLR    94.56 316 eP   55 22.00  -2.4
MBC    94.62  12 eP   55 25.00   1.0
       1.0s     6.00nm          4.7mb
BUL    95.63 250 iPc  55 29.00  -0.8
SLR    95.86 244 iPd  55 40.00   9.2X
       0.8s    53.00nm          5.8mb
SEK    96.39 242 iPc  55 42.50   9.4X
       0.8s    46.00nm          5.8mb
UZH    96.57 319 iPd  55 32.80  -0.5
       1.0s   150.00nm          6.2mb
UPP    96.83 331 eP   55 31.50  -2.7
GRM    97.10 237 iPc  55 36.00  -0.1
       0.9s    96.00nm          6.1mb
KSR    97.11 244 eP   55 35.50  -0.9
       1.0s    60.00nm          5.9mb
VAY    97.57 312 iP   55 36.20  -1.7
BLF    97.62 241 eP   55 38.00  -0.6
       0.5s    25.00nm          5.8mb
SPC    97.80 320 eP   55 39.20   0.1
                e     59 44.50
OJC    97.87 321 eP   55 38.50  -0.6
       1.3s    38.00nm          5.6mb
                e     55 50.70  40kmX
PSZ    98.28 319 eP   55 41.00  -0.1
LBTB   98.31 245 eP   55 41.19  -0.5
       0.6s     9.40nm          5.3mb
FRS    98.35 240 e(P) 55 41.50  -0.2
HFS    98.64 332 eP   55 39.90  -2.5
       0.5s     9.00nm          5.4mb
DAG    99.02 352 iPc  55 42.80  -1.1
       0.4s    31.36nm          6.1mb
                ipP   55 45.20   8kmX
SRO    99.34 319 eP   55 44.20  -1.7
NB2    99.49 333 P    55 44.20  -2.2
       1.0s    17.30nm          5.4mb
KSP    99.90 322 iP   55 48.00  -0.4
                e     59 49.50
                e     00 09.70
ZST   100.05 319 e(Pdif55 48.00  -1.0
                e     00 11.00
RES   100.39  10 ePdiff55 52.00   2.1
       1.0s     9.00nm          5.2mb
PRU   101.21 322 ePdiff55 53.60  -0.5
BRG   101.33 323 iPdiff55 54.30  -0.3
       1.0s    30.00nm          5.8mb
                e     56 00.80
CLL   101.76 323 iPdiff55 55.70  -0.9
       1.8s    36.00nm          5.6mb
SUR   102.01 237 iPdiff56 13.00  14.6X
       0.5s    61.00nm
KHC   102.06 321 ePdiff55 58.00   0.0
                e     57 06.00
                e     58 40.00
GEC2  102.06 321 ePdiff55 57.50  -0.6
       1.0s     3.78nm          4.9mb
MOX   102.80 323 ePdiff56 00.80  -0.4
       2.5s   131.00nm          6.1mb
CER   103.17 236 ePdiff55 57.00  -6.3X
       0.2s    33.00nm          6.7mb X
GRF   103.35 322 ePdiff56 03.90   0.2
BSF   106.74 321 ePKP  00 27.40  -0.8
       0.8s     8.20nm
LBFM  106.80  46 ePKP  00 28.17  -0.5
HAU   106.96 322 ePKP  00 28.10  -0.4
LPG   107.63 319 ePKP  00 29.00  -1.2
       0.8s     6.70nm
LPL   107.63 319 ePKP  00 28.90  -1.2
       0.7s     5.75nm
SBF   107.75 317 ePKP  00 28.50  -1.6
COE   108.16  50 (Pdiff56 23.89  -1.5
FRF   108.39 317 ePKP  00 29.90  -1.4
LMR   108.57 317 ePKP  00 30.20  -1.4
LRG   108.62 317 ePKP  00 30.50  -1.2
LOR   108.79 322 ePKP  00 30.60  -1.3
       0.6s     2.25nm
LBF   108.84 321 ePKP  00 30.70  -1.4
       0.7s     3.95nm
SMF   109.06 321 ePKP  00 32.00  -0.5
       0.6s     2.05nm
SSF   109.10 321 ePKP  00 31.40  -1.1
       0.8s     7.10nm
AVF   109.31 321 ePKP  00 32.50  -0.4
BGF   109.72 321 ePKP  00 32.60  -1.1
       0.6s     6.20nm
TCF   110.23 321 ePKP  00 33.60  -1.1
       0.8s     8.35nm
LDF   110.62 324 ePKP  00 34.70  -0.6
LSF   110.68 321 ePKP  00 34.10  -1.4
FLN   110.75 324 ePKP  00 34.90  -0.6
       0.7s     6.85nm
CAF   110.90 320 ePKP  00 35.30  -0.7
       1.0s    14.00nm
RJF   111.09 320 ePKP  00 35.40  -0.9
GRR   111.15 324 ePKP  00 35.50  -0.8
LPF   111.43 324 ePKP  00 36.30  -0.5
       0.5s     7.45nm
MFF   111.56 322 ePKP  00 35.90  -1.2
       0.5s     7.30nm
LPO   111.57 320 ePKP  00 36.50  -0.7
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17d 03h

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        0.9s    11.95nm
LFF   111.75 320 ePKP  00 36.80   -0.7
        0.8s    11.80nm
GSC   112.50  51 ePKP  00 40.39    1.0
PEC   112.67  52 iPKP  00 40.30    0.5
EPF   112.83 319 ePKP  00 38.50   -1.3
        0.5s     3.20nm
HVU   113.03  43 iPKP  00 40.83    0.5
PLM   113.08  53 (PKP) 00 40.80    0.0
DUG   113.65  44 ePKPd 00 42.05    0.4
FRB   114.17   6 ePKP  00 41.00   -0.6
        1.0s     9.00nm
DAU   114.64  44 ePKP  00 43.74    0.0
MSU   114.79  46 iPKPd 00 44.84    0.9
EMUT  115.21  44 ePKPd 00 45.20    0.4
SRU   115.71  45 iPKPd 00 45.51   -0.1
EVIA  116.68 315 ePKP  00 47.16   -0.2
PV09  116.95  45 ePKP  00 48.78    0.6
PV10  117.07  45 iPKP  00 48.82    0.5
ENIJ  117.19 313 ePKP  00 47.84   -0.5
PV08  117.26  45 ePKP  00 49.48    0.7
RSSD  117.52  37 ePKPd 00 48.10   -0.9
PAB   117.55 317 iPKPc 00 49.20    0.2
ULM   118.12  28 ePKP  00 51.00    1.4
EGUA  118.23 314 ePKP  00 49.45   -0.8
TUC   118.24  52 iPKPc 00 52.34    1.8
ELUQ  118.41 315 ePKP  00 50.15   -0.5
GOL   118.98  42 ePKPd 00 52.07    0.1
                 epPKP 01 55.50
EHOR  118.98 316 ePKP  00 51.36   -0.3
GLD   119.05  42 ePKP  00 51.85   -0.1
EPRU  119.36 315 ePKP  00 52.09   -0.4
JAQ   122.42  14 ePKP  00 56.50   -1.2
ACO   124.72  42 e(PKP)01 01.00   -1.7
LTX   125.04  52 iPKP  01 03.17   -0.5
WMOK  126.04  44 ePKP  01 05.17   -0.2
                 e     01 08.89
                 e     03 59.61
MEO   126.15  44 iPKPd 01 05.10   -0.5
OCO   126.50  42 iPKPc 01 07.10    0.9
TUL   127.39  41 iPKPd 01 07.90    0.0
KIC   128.26 279 PKP   01 09.64   -0.5
        0.7s    52.00nm
TIC   128.50 280 PKP   01 10.00   -0.6
        0.6s    33.00nm
LIC   128.56 279 PKP   01 10.12   -0.6
        0.7s    57.00nm
LKO   128.63 283 PKP   01 10.21   -0.7
        0.7s    66.50nm
UYO   129.31  42 iPKPc 01 11.40   -0.2
MIAR  129.66  41 iPKP  01 15.89    3.7X
                 ePP   02 19.46
                 iSKP  04 25.31
GAC   129.85  18 ePKPc 01 11.50   -0.7
ELC   130.56  35 ePKP  01 13.65   -0.2
                 iSKP  04 11.73
RSNY  131.18  18 ePKP  01 14.18   -0.6
                 e     03 44.50
                 iSKP  04 13.92
LMN   132.13   8 ePKP  01 16.50   -0.1
BINY  132.81  20 ePKPc 01 17.86   -0.2
                 iSKP  04 20.28
MCWV  133.49  26 ePKP  01 19.99    0.6
                 iSKP  04 22.72
NAV   134.98  28 ePKP  01 07.93  -14.4X
NAV   134.98  28 ePKP  01 22.10   -0.2
                 iSKP  04 26.36
MYNC  135.01  33 ePKP  01 08.05  -14.4X
MYNC  135.01  33 iPKPc 01 22.43    0.0
                 iSKP  04 27.29
BLA   135.24  28 ePKP  01 22.32   -0.5
CVL   135.49  26 ePKP  01 23.82    0.6
                 eSKP  04 28.68
PRM   136.71  33 iPKP  01 15.36  -10.3X
PRM   136.71  33 (PKP) 01 26.47    0.8
CEH   136.93  28 ePKP  01 13.73  -12.3X
CEH   136.93  28 ePKP  01 27.08    1.1
                 e     01 56.48
JSC   137.15  31 ePKP  01 15.18  -11.3X
JSC   137.15  31 (PKP) 01 25.97   -0.5
                 iSKP  04 34.11
LHS   137.22  31 ePKP  01 14.51  -12.1X
LHS   137.22  31 ePKP  01 25.98   -0.6
SGS   138.38  32 ePKP  01 19.42   -9.3X
SGS   138.38  32 ePKP  01 29.10    0.4
                 iSKP  04 38.10
HBF   138.65  32 ePKPc 01 29.56    0.3
RFA   144.98 162 iPKPd 01 40.50    0.1
MDZ   146.59 160 iPKP  01 44.70    1.6
                 i     01 46.50
RTCB  147.87 159 ePKPd 01 46.00    0.8
CFA   147.96 160 ePKPc 01 44.52   -0.8
MRA   147.99 164 ePKPd 01 45.80    0.6
RTLL  148.13 159 ePKPd 01 46.00    0.4
CYA   151.68 162 ePKPd 01 51.50    0.5
FSA   153.79 159 ePKPc 01 56.00    2.1
SLA   155.21 159 ePKPc 01 57.20    1.1
RSTA  156.10 196 ePKP  01 58.20    1.1
                 e     02 08.00
                 e     02 26.30
VAO   156.98 202 ePKP  02 00.50    2.1
                 e     02 10.00
                 e     02 30.30
YJA   157.53 156 ePKPd 02 02.00    2.4
ARE   158.73 135 ePKP  02 04.00    3.1X
CNCB  160.79 143 PKP   02 05.00    1.7
LPB   160.93 142 PKP   02 05.90    2.6
LPAZ  161.10 141 PKP   02 05.10    1.4
CCH   161.38 148 PKP   02 06.00    2.4
SDV   162.06  54 ePKP  02 04.50    0.3
TOV   162.20  50 ePKP  02 04.70    0.5
BAO   163.97 209 ePKP  02 06.30    0.3
                 e     02 10.80
BDFB  163.97 209 iPKP  02 06.78    0.8
                 iPKPab03 01.46
                 ePP   06 42.85
SIV   164.82 161 PKP   02 07.60    1.0
     S.D. = 1.0  on 275 of 298 obs.
-----------------------------------
?  NOV  17, 1993  02h 47m 55.88± 2.05s
   13.681 S ±20.4km  167.347 E ±21.0km
   DEPTH = 241.2 ± 19.7 km
   4.8mb (  5 obs.)
 VANUATU ISLANDS                (186)

BKM     4.06 168 iP    49 01.50    1.0
                 iS    49 47.50
DZM     8.39 186 iPd   49 53.40   -1.6
                 iS    51 35.90
BJI    71.50 321 eP    58 51.50   -0.7
        1.2s    16.00nm        4.6mb
KMI    73.82 301 Pd-   59 07.50    1.1
        1.4s    70.00nm        5.2mb
MAW    82.88 202 P     59 56.00    1.7
        1.0s    16.67nm        4.7mb
COL    85.34  18 ePc   00 07.35    0.8
        0.7s     5.54nm        4.5mb
FBA    85.34  18 eP    00 06.68    0.1
GUN    88.96 299 P     00 25.00   -0.2
PKI    89.27 298 P     00 27.10    0.5
KKN    89.44 299 P     00 27.60    0.4
DMN    89.54 298 P     00 28.40    0.7
        0.8s    25.00nm        5.2mb
GKN    90.04 299 P     00 28.80   -1.1
NB2   129.64 345 PKP   06 38.40    1.1
        0.9s     4.20nm
HFS   129.75 343 ePKP  06 37.80    0.3
        0.4s     0.70nm
GEC2  138.75 334 ePKP  06 56.10    1.1
        0.7s     1.32nm
                 e     07 08.70
CDF   141.64 339 ePKP  06 55.50   -4.7X
HAU   142.31 339 ePKP  06 57.90   -3.4X
FLN   143.60 346 ePKP  07 01.70   -1.7
        0.7s     7.40nm
LDF   143.68 346 ePKP  07 02.10   -1.4
        0.8s     8.35nm
ORX   143.68 335 PKP   07 01.80   -2.0
LOR   143.78 341 ePKP  07 02.60   -1.2
        1.0s     7.60nm
LBF   143.99 341 ePKP  07 03.00   -1.2
        0.5s     3.00nm
GRR   144.04 347 ePKP  07 03.10   -1.0
        0.5s     8.45nm
SSF   144.07 341 ePKP  07 03.50   -0.8
        1.2s    42.85nm
LSD   144.15 336 PKP   07 04.22   -0.6
HYF   144.16 342 ePKP  07 04.00   -0.4
LPL   144.27 336 ePKP  07 04.70   -0.3
        0.9s    12.60nm
LPG   144.28 336 ePKP  07 04.90   -0.2
        0.9s    14.10nm
PCP   144.32 334 PKP   07 02.53   -2.3
SMF   144.34 340 ePKP  07 04.20   -0.5
        1.2s    45.50nm
AVF   144.36 341 ePKP  07 04.30   -0.4
        0.9s    28.35nm
RSP   144.37 336 PKP   07 04.27   -0.7
LPF   144.42 347 ePKP  07 04.60   -0.2
        0.8s    30.90nm
BHB   144.62 335 PKP   07 03.49   -1.8
BGF   144.73 341 ePKP  07 05.70    0.3
        0.7s    37.05nm
FIN   144.73 334 PKP   07 04.31   -1.2
RRL   144.75 336 PKP   07 06.05    0.3
ROB   144.81 334 PKP   07 05.04   -0.7
PZZ   144.96 335 PKP   07 06.37    0.3
ENR   145.05 334 PKP   07 05.55   -0.6
STV   145.08 335 PKP   07 05.69   -0.5
IMI   145.11 334 PKP   07 06.46    0.2
MAF   145.12 341 ePKP  07 07.20    1.1
        0.9s    33.75nm
TCF   145.17 342 ePKP  07 07.20    1.0
        1.0s    41.20nm
SAOF  145.19 334 PKP   07 06.62    0.3
AUTN  145.24 334 PKP   07 05.95   -0.7
TOUF  145.30 334 PKP   07 06.62   -0.1
SBF   145.34 334 PKP   07 07.48    0.9
AURF  145.37 334 PKP   07 07.48    0.8
LSF   145.40 343 ePKP  07 07.70    1.1
        0.8s    27.65nm
MVIF  145.44 334 PKP   07 06.83    0.0
REVF  145.47 334 PKP   07 07.92    1.1
MFF   145.54 345 ePKP  07 08.30    1.6
        1.0s    56.00nm
PGF   145.68 331 ePKP  07 08.70    1.4
        0.9s    56.85nm
FRF   145.92 335 ePKP  07 09.30    1.8
        0.8s    44.45nm
LRG   146.13 335 ePKP  07 10.10    2.3
        0.9s    36.85nm
LMR   146.16 335 ePKP  07 10.00    2.1
        0.9s    46.50nm
RJF   146.26 342 ePKP  07 10.70    2.7X
        1.1s    31.50nm
CAF   146.43 341 ePKP  07 11.30    3.0X
        1.1s    24.40nm
LFF   146.83 343 ePKP  07 12.30    3.4X
        0.6s    15.25nm
LPO   146.92 342 ePKP  07 12.60    3.5X
        0.8s    18.95nm
EPF   148.68 342 ePKP  07 17.00    5.0X
EGRA  149.64 342 ePKP  07 20.00    6.7X
ECRI  149.87 345 ePKP  07 21.00    7.2X
EROQ  150.65 340 ePKP  07 22.00    7.0X
ETOR  151.42 343 ePKP  07 14.20   -2.0
GUD   152.13 346 ePKP  07 26.00    8.7X
EVIA  153.56 342 ePKP  07 29.00    9.6X
EBAN  154.37 344 ePKP  07 31.00   10.6X
LKO   171.95 240 PKP   07 37.80    0.7
        0.9s    13.50nm
     S.D. = 1.1  on  57 of  70 obs.
-----------------------------------
%  NOV  17, 1993  03h 51m 50.24± 1.38s
   40.278 N ±14.9km   29.173 E ± 6.0km
   DEPTH =   5.0km  (geophysicist)
 TURKEY                         (366)

IZI      0.24  76 iPg   51 55.30    0.2
                iSg   51 58.80
HRT      0.66  35 ePg   52 04.00    0.5
EYL      0.80  69 ePg   52 05.80   -0.6
EDC      1.00 274 ePn   52 10.00    0.3
CTT      1.04 327 ePn   52 09.80   -0.5
     S.D. = 0.7  on   5 of   5 obs.
-----------------------------------
?  NOV  17, 1993  03h 54m 43.82± 5.56s
   48.395 N ±36.1km    7.818 E ±28.0km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                         (538)
     ML 2.2 (LDG).

CDF      0.36 273 Pg    54 51.20   -0.1
                Sg    54 55.20
FEL      0.54 166 ePg   54 54.70    0.0
BSF      0.89 231 Pg    55 00.80   -0.1
                Sg    55 12.10
HAU      1.06 249 Pg    55 04.00    0.2
                Sg    55 16.80
LOR      2.90 249 Pg    55 38.00    7.2X
                Sg    56 13.10
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LBF      2.95 243 Pg    55 39.20   7.6X
                  Sg    56 15.20
     S.D. = 0.3  on   4 of   6 obs.
-------------------------------------
?  NOV  17, 1993  04h 04m 28.18± 0.85s
   6.790 S ±11.4km   147.925 E ±10.1km
   DEPTH =  33.0km  (normal)
   4.1mb (  4 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)
      ML 4.8 (PMG).

LAT      0.93 278 iPc   04 43.20  -1.6
YYYY     2.02 286 eP    05 02.00   1.3
MDG      2.62 306 eP    05 09.00  -0.2
PMG      2.71 196 eP    05 13.00   2.7
MNDI     4.29 278 eP    05 33.00   0.0
RAB      4.95  59 eP    05 43.00   0.8
WWKK     5.31 306 eP    05 49.50   2.1
CTA     13.32 187 e(P)  07 43.00   5.5X
WR2     18.56 224 eP    08 42.70  -1.8
         0.4s     5.20nm          4.1mb
ASPA    21.52 217 iPd   09 15.70  -0.9
         0.4s     5.80nm          4.3mb
                   iS    13 19.50
ARMA    23.76 172 eP    09 40.30   1.6
         0.9s     7.00nm          4.2mb
STK     25.65 193 eP    09 49.90  -6.8X
         0.8s     2.10nm          3.8mb
GEC2   123.07 326 ePKP  23 19.80  -3.3X
         0.9s     0.74nm
CNCB   137.45 124 ePKP  23 51.00  -1.1
LPB    137.49 123 ePKP  23 57.00   5.0X
LPAZ   137.59 123 PKP   23 50.00  -2.4
SIV    143.44 128 PKP   24 01.70  -0.4
     S.D. = 1.7  on  13 of  17 obs.
-------------------------------------
%  NOV  17, 1993  04h 34m 52.62± 0.74s
   40.294 N ± 8.3km   29.198 E ± 5.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.6 (ISK).

IZI      0.21  78 iPg   34 58.10   0.8
                  iSg   35 01.80
HRT      0.64  34 ePg   35 05.50   0.1
EYL      0.78  69 ePn   35 07.00  -0.9
DST      0.82 213 ePn   35 08.50   0.0
EDC      1.02 273 ePn   35 11.80  -0.1
CTT      1.03 326 iPn   35 12.30   0.2
     S.D. = 0.7  on   6 of   6 obs.
-------------------------------------
*  NOV  17, 1993  04h 38m 39.79± 0.92s
   42.981 N ±12.3km   17.746 E ± 7.1km
   DEPTH =  10.0km  (geophysicist)
 ADRIATIC SEA                      (382)

BRY      0.59  98 iPgc  38 50.84  -1.0
                  iSg   38 57.65
HCY      0.77 134 iPgc  38 54.93   0.1
                  iSg   39 04.93
NKY      0.94 100 iPgc  38 57.06  -0.7
                  iSg   39 09.07
HVAR     0.97 282 e(Pg) 38 57.90  -0.3
                  iSg   39 10.40
BDV      1.06 131 iPgc  38 58.09  -1.7
                  iSg   39 14.31
TTG      1.25 116 iPgc  39 02.93   0.0
                  iSg   39 19.56
PLE      1.26  73 iPgd  39 02.93  -0.3
                  iSg   39 19.71
ULC      1.51 132 iPgc  39 08.21   1.3
                  iSg   39 28.98
IVA      1.58  93 iPgd  39 08.95   0.9
                  iSg   39 30.36
PVY      1.68 102 iPgd  39 10.63   1.1
                  iSg   39 32.90
     S.D. = 1.1  on  10 of  10 obs.
-------------------------------------
?  NOV  17, 1993  05h 15m 53.66± 2.16s
   34.551 N ±36.4km   26.102 E ±13.3km
   DEPTH =  33.0km  (normal)
 CRETE                             (370)
      MD 4.2 (ATH).

NPS      0.82 331 ePn   16 09.00   0.3
                  eSn   16 22.80
VAM      1.78 299 ePn   16 23.00   0.4
                  eSn   16 48.00
VLI      3.36 311 ePn   16 44.50  -0.7
PPCY     5.15  85 eP    17 10.50   0.0
CSS      5.96  84 eP    17 22.00   0.0
                  eS    18 33.50
QUE     34.61  86 eP    22 44.00   2.0X
     S.D. = 0.6  on   5 of   6 obs.
-------------------------------------
*  NOV  17, 1993  06h 33m 27.29± 1.40s
   34.178 N ±15.4km   25.742 E ± 8.0km
   DEPTH =  33.0km  (normal)
   4.0mb (  8 obs.)
 CRETE                             (370)
      MD 4.3 (ATH).

NPS      1.09 354 eP    33 47.90   1.6
                  eS    34 01.50
VAM      1.76 314 eP    33 53.20  -2.8
VLI      3.42 319 eP    34 20.00   0.5
                  eS    34 59.00
ATH      4.13 337 eP    34 31.50   1.9
IZM      4.39  16 eP    34 32.20  -1.2
KHL      5.14  35 iP    34 44.00  -0.1
PPCY     5.50  81 e(P)  34 55.00   6.1X
EZN      5.66   5 iP    34 50.10  -1.1
VLS      5.77 315 eP    34 52.00  -0.9
CSS      6.31  81 eP    35 00.50   0.0
                  eS    36 10.00
OHR      7.95 332 ePn   35 23.00  -0.5
SKO      8.49 338 ePn   35 41.20  10.3X
GEC2    17.17 332 ePn   37 27.90   1.7
         0.5s     1.30nm          3.3mb
                  e     37 34.90
                  e     37 37.20
                  e     37 40.00
                  e     37 43.50
                  e     37 47.90
                  e     37 51.20
                  e     40 58.20
KHC     17.45 333 eP    37 31.00   1.3
                  e     37 39.50
                  e     38 15.50
                  e     38 23.00
LPG     18.40 314 eP    37 45.60   3.9X
LPL     18.42 314 eP    37 45.20   3.3X
GRF     18.84 330 eP    37 45.00  -1.7
BSF     19.69 320 eP    37 56.10  -0.6
CDF     19.79 321 eP    37 57.20  -0.5
         0.9s     6.40nm          3.9mb
HAU     20.04 319 eP    37 59.10  -1.1
         0.8s     8.20nm          4.1mb
SMF     20.73 313 eP    38 08.00   0.6
LBF     20.82 314 eP    38 09.40   1.1
         0.9s     8.70nm          4.1mb
SSF     21.14 314 eP    38 12.40   0.9
         1.1s    17.85nm          4.4mb
BGF     21.29 312 eP    38 14.40   1.3
         0.4s     3.05nm          4.1mb
LPO     21.60 306 eP    38 16.10  -0.1
         0.7s     4.20nm          4.0mb
DOU     22.22 322 P     38 28.40   6.1X
MFF     23.18 310 eP    38 32.40   0.6
         0.7s     3.10nm          3.9mb
LDF     24.02 315 eP    38 40.00   0.1
LPF     24.32 313 eP    38 41.60  -1.2
     S.D. = 1.3  on  24 of  29 obs.
-------------------------------------
*  NOV  17, 1993  06h 57m 37.04± 2.39s
   41.796 N ± 6.8km  126.221 W ±22.4km
   DEPTH =  10.0km  (geophysicist)
 OFF COAST OF NORTHERN CALIFORNIA( 34)

KMPM     2.10 130 eP    58 12.52  -0.3
DBO      2.57  58 P     58 18.86  -0.6
LGPM     2.70 108 eP    58 21.59   0.1
                  eS    58 51.50
RNO      2.79  40 P     58 22.21  -0.4
BBOR     2.84  66 P     58 23.41  -0.1
HSO      2.88  52 P     58 23.21  -0.8
LBFM     3.28  96 eP    58 30.48   0.8
MPOR     3.34  35 P     58 30.03  -0.4
SSOR     4.11  41 P     58 41.43   0.1
ORV      4.23 120 (P)   58 42.87  -0.1
BPO      4.37  48 P     58 46.14   0.9
WPO      4.52  32 P     58 47.90   0.8
VBEM     4.69  44 P     58 49.14  -0.6
VLMM     4.82  38 P     58 52.32   0.9
VLL      4.93  40 P     58 52.74  -0.2
CROR     4.97  48 P     58 53.73   0.2
LVP      5.08  32 P     58 55.22   0.1
MTMW     5.12  33 P     58 55.41  -0.3
CDFW     5.26  33 P     58 57.55  -0.1
     S.D. = 0.6  on  19 of  19 obs.
-------------------------------------
?  NOV  17, 1993  07h 06m 41.43± 1.17s
   31.431 S ±32.8km   68.642 W ±36.0km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA      (137)

RTCB     0.15 248 iPd   06 56.10   0.1
                  S     07 07.20
RTLL     0.18  56 iPd   06 56.00  -0.1
                  S     07 06.00
CFA      0.39 117 ePd   06 56.80   0.1
                  S     07 08.20
RTCV     0.44 168 iPd   06 57.00  -0.1
                  S     07 09.00
     S.D. = 0.1  on   4 of   4 obs.
-------------------------------------
*  NOV  17, 1993  08h 04m 59.32± 1.00s
   37.666 N ± 8.0km   21.950 E ± 8.7km
   DEPTH =  20.0 ±  8.0 km
 SOUTHERN GREECE                   (368)
      MD 3.3 (ATH).

VLS      1.19 296 ePb   05 21.50   0.6
VLI      1.23 140 ePb   05 21.00  -0.4
                  eSb   05 40.00
AGG      1.39  12 ePb   05 24.00   0.4
                  eSb   05 47.00
ATH      1.43  77 ePb   05 24.80   0.6
LIT      2.47  10 ePn   05 39.00  -0.2
                  eSn   06 13.00
PAIG     2.63  30 ePn   05 41.50   0.0
                  eSn   06 17.00
KZN      2.64 357 ePn   05 42.00   0.3
FNA      3.15 352 ePn   05 48.50  -0.3
                  eSn   06 26.50
OHR      3.55 346 ePn   05 53.80  -0.9
KNT      3.57  12 ePn   05 42.00 -12.8X
SKO      4.32 355 ePn   06 16.00  10.6X
     S.D. = 0.6  on   9 of  11 obs.
-------------------------------------
?  NOV  17, 1993  08h 45m 35.02± 0.99s
   39.091 N ± 8.3km   27.577 E ±10.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.7 (ISK).

IZM      0.73 200 ePg   45 49.30  -0.2
                  eSg   46 01.00
DST      0.96  57 iPn   45 53.80   0.4
EZN      1.22 308 ePn   45 58.00   0.4
EDC      1.27  10 ePn   45 58.00  -0.6
     S.D. = 0.9  on   4 of   4 obs.
-------------------------------------
?  NOV  17, 1993  08h 51m 49.96± 0.96s
   39.107 N ± 8.2km   27.640 E ± 9.7km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.7 (ISK).

IZM      0.77 203 ePg   52 04.90  -0.1
                  eSg   52 16.10
DST      0.91  57 ePn   52 07.60   0.1
EZN      1.25 306 ePn   52 13.20   0.1
EDC      1.25   8 ePn   52 13.00  -0.2
     S.D. = 0.3  on   4 of   4 obs.
-------------------------------------
   NOV  17, 1993  08h 59m 39.49± 0.63s
   57.377 N ± 5.4km  157.179 W ± 7.0km
   DEPTH =  33.0km  (normal)
   4.3mb (  3 obs.)
 ALASKA PENINSULA                  ( 12)
      ML 4.2 (AEIC), 4.0 (PMR). Felt
      (IV) at Pilot Point.

MCNL     2.35  38 eP    00 17.48   0.8
                  eS    00 48.09
CDD      2.44  49 eP    00 17.82   0.0
KDC      2.55  80 ePc   00 17.81  -1.6
                  eS    00 51.06
SDN      2.75 224 ePc   00 22.74   0.6
AUW      2.79  43 eP    00 24.53   1.7
```

17d 09h

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SYI      2.83  62 eP     00 24.06   0.7
PDB      2.88  32 eP     00 24.39   0.3
OPT      3.08  41 eP     00 30.39   3.4X
INE      3.44  37 eP     00 33.33   1.1
ILIM     3.49  37 eP     00 33.55   0.7
CNPM     3.79  53 eP     00 35.64  -1.4
SVW      3.83  11 ePn    00 38.41   0.9
                  ePg    00 48.02
REF      3.89  35 eP     00 38.24  -0.3
BKG      4.48  32 eP     00 47.45   0.5
SPU      4.63  32 eP     00 49.31   0.3
CP2      4.65  31 eP     00 49.50   0.2
                  eS     01 55.00
CGLM     4.75  32 eP     00 51.11   0.5
SLKM     4.78  46 eP     00 52.33   1.3
MPA      5.11  49 eP     00 56.67   0.9
SKT      5.43  29 eP     01 00.78   0.5
PMS      5.50  42 eP     00 59.10  -2.1
TTA      5.60   5 eP     01 02.62  -0.1
PWA      5.67  38 eP     00 59.90  -3.7X
PMR      5.89  41 (P)    01 05.80  -0.8
KLU      7.07  50 eP     01 20.71  -2.6X
TOA      7.30  45 eP     01 26.60   0.0
ANM      8.23 335 eP     01 38.38  -1.1
BALM     8.44  58 eP     01 39.55  -3.0X
IM3      8.79   9 eP     01 47.54   0.4
FBA      8.80  27 eP     01 44.60  -2.7X
IMA      8.88   9 eP     01 47.41  -1.1
IL1      8.93  30 eP     01 47.31  -1.8
YKA     21.61  59 eP     04 26.60  -1.6
         0.5s     3.30nm          4.0mb
MSU     34.74 103 eP     06 29.40   0.8
GSC     34.80 112 (P)    06 29.15   0.2
SRU     35.18 101 eP     06 32.44   0.2
RSSD    35.20  89 eP     06 31.57  -0.9
         0.6s     3.64nm          4.5mb
MIAR    47.68  90 eP     08 13.87  -0.5
         0.8s     2.92nm          4.4mb
OXF     49.96  87 (P)    08 32.87   0.9
     S.D. = 1.0  on  34 of  39 obs.
-----------------------------------------
?  NOV  17, 1993  09h 04m 11.83± 1.02s
   40.621 N ± 7.0km   29.430 E ± 9.4km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                              (366)
      ML 2.5 (ISK).

HRT      0.27  42 ePg    04 17.20  -0.3
                  eSg    04 22.70
IZI      0.29 173 iPg    04 17.70  -0.2
                  eSg    04 23.60
ISK      0.53 328 ePg    04 22.60   0.1
EYL      0.56  95 ePn    04 23.60   0.4
     S.D. = 0.6  on   4 of   4 obs.
-----------------------------------------
   NOV  17, 1993  09h 12m 38.07± 1.05s
   31.509 S ± 6.1km   71.597 W ±10.2km
   DEPTH =  57.8 ± 10.8 km
   4.8mb (  1 obs.)
 NEAR COAST OF CENTRAL CHILE        (135)
      MD 4.6 (SAN). Felt (IV) at
      Canela Baja, Los Vilos and
      Petorca.

JACH     1.45 144 iPd    13 02.27  -0.1
                  iS     13 19.71
IHA      1.51 181 iPd    13 03.20   0.0
                  iS     13 15.20
ROCH     1.54 161 iP+    13 03.78   0.0
PEL      1.80 155 iPd    13 07.54   0.2
LCCH     1.96 179 ePd    13 09.09  -0.4
SAN      2.09 158 eP     13 11.28  -0.1
                  iS     13 34.34
FCH      2.12 149 iPd    13 12.17   0.1
                  iS     13 36.88
TACH     2.21 166 iP+    13 12.99   0.0
PCH      2.30 157 eP     13 14.09  -0.2
RTCB     2.39  90 ePd    13 17.60   2.0
LNV      2.44 176 iP     13 15.32  -0.9
ZON      2.49  92 eP     13 18.20   1.2
                  eS     13 48.20
RTCV     2.63  98 eP     13 20.90   1.9
RTLL     2.68  87 ePd    13 20.80   1.1
MDZ      2.70 121 iP     13 23.60   3.6X
                  i      13 29.20
                  iS     13 56.40
CACH     2.73 162 iPd    13 20.86   0.4
CFA      2.87  93 iPc    13 23.40   1.0
RFA      4.18 142 iPc    13 40.50  -0.4
                  S      14 46.50
RTPR     4.53  76 eP     13 45.00  -0.7
MRA      5.08 102 ePd    13 52.00  -1.5
                  S      14 48.50
CYA      5.89  60 ePc    14 02.50  -2.3
                  S      15 07.00
SLA      8.64  40 eP     14 41.90  -1.2
CCH     14.91  21 (P)    16 15.00   7.8X
CNCB    15.00  13 P      16 10.00   1.4
LPB     15.25  13 P      16 16.00   4.3X
LPAZ    15.48  13 iPc    16 14.90   0.0
SIV     18.19  34 P      16 46.60  -1.5
LIC     73.64  72 P      24 06.80  -0.7
TIC     73.89  72 P      24 09.00   0.0
KIC     73.95  72 P      24 08.50  -0.8
LKO     75.12  69 P      24 15.38  -0.7
         0.7s     9.50nm          4.8mb
SRU     79.03 330 (P)    24 39.37   1.8
GBA    146.48 115 PKP    32 15.00   1.6
     S.D. = 1.2  on  30 of  33 obs.
-----------------------------------------
?  NOV  17, 1993  11h 01m 40.72± 0.90s
   27.811 S ± 8.6km   26.982 E ±11.6km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA            (584)

SEK      0.76 132 eP     01 56.00  -0.2
                  S      02 08.50
BLF      1.47 208 eP     02 11.00   3.0X
KSR      1.94 358 eP     02 15.00   0.2
                  S      02 35.50
SLR      2.37  30 eP     02 21.00  -0.1
FRS      2.42 217 eP     02 23.00   1.4
                  S      02 33.50
SUR      7.02 228 eP     03 25.50  -1.4
                  S      04 56.50
     S.D. = 1.4  on   5 of   6 obs.
-----------------------------------------
?  NOV  17, 1993  11h 15m 39.01± 2.84s
    6.740 S ±22.0km  147.869 E ±30.3km
   DEPTH =  33.0km  (normal)
   4.2mb (  3 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)
      ML 4.6 (PMG).

LAT      0.86 275 eP     15 53.40  -1.4
YYYY     1.95 285 eP     16 12.00   1.4
MDG      2.55 305 eP     16 19.20   0.2
PMG      2.74 195 eP     16 23.00   1.4
ASPA    21.53 217 iPc    20 26.20  -1.3
         0.6s     8.30nm          4.3mb
                  eS     24 24.10
ARMA    23.82 172 eP     20 49.80  -0.3
         0.7s    14.00nm          4.6mb
STK     25.69 192 eP     21 00.50  -7.4X
         2.4s     2.20nm          3.3mb
     S.D. = 1.6  on   6 of   7 obs.
-----------------------------------------
   NOV  17, 1993  11h 18m 51.62± 0.09s
   51.816 N ± 2.1km  158.659 E ± 1.6km
   DEPTH =  33.2km  (geophysicist)
   6.1mb (189 obs.)  5.6Msz ( 60 obs.)
 NEAR EAST COAST OF KAMCHATKA        (218)
      Mw 6.0 (GS), 6.0 (HRV). Ms 5.4
      (BRK). Felt (V) at
      Petropavlovsk-Kamchatskiy and
      (III) at Severo-Kurilsk. Depth
      from broadband displacement
      seismograms.
      FAULT PLANE SOLUTION: P-Waves
       NP1:Strike= 65 Dip=60 Slip=  90
       NP2:        245     30        90
       Principal Axes:
        T                Plg=75  Azm=335
        P                   15       155
      Comment: The focal mechanism is
        poorly controlled and
        corresponds to normal
        faulting. The preferred fault
        plane is NP2.
      RADIATED ENERGY
       No. of sta:  31  Focal mech.  F
       Energy        5.3±0.6*10**12 Nm
      MOMENT TENSOR SOLUTION
      Dep  33            No. of sta: 38
      Moment Tensor;   Scale 10**18 Nm
        Mrr= 1.25        Mtt=-0.77
        Mff=-0.47        Mrt= 0.30
        Mrf= 0.15        Mtf=-0.44
       Principal axes:
        T  Val=  1.30  Plg=82  Azm=340
        N       -0.16       2       235
        P       -1.14       8       145
      Best Double Couple:Mo=1.2*10**18
       NP1:Strike=232 Dip=37 Slip=  87
       NP2:         57     53        93
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 50S, **C
      Centroid Location:
      Origin Time        11:18:57.6 0.1
      Lat 51.72N 0.01 Lon 159.27E 0.02
      Dep  40.0 BDY Half-duration  2.4
      Moment Tensor;   Scale 10**18 Nm
        Mrr= 1.03 0.01  Mtt=-0.38 0.02
        Mff=-0.65 0.01  Mrt= 0.39 0.02
        Mrf= 0.17 0.03  Mtf=-0.60 0.02
       Principal Axes:
        T  Val=  1.13  Plg=76  Azm=357
        N        0.07      10       222
        P       -1.20      10       130
      Best Double Couple:Mo=1.2*10**18
       NP1:Strike=208 Dip=36 Slip=  73
       NP2:         49     56       102

PET      1.20 360 iPnd-  19 16.00   3.8X
                  iS     19 30.00
SKR      1.98 235 iPnc   19 25.00   1.6
                  iS     19 47.00
MGD      9.39 335 iPnc   21 10.00   2.4
                  iS     23 00.00
SMY      9.52  78 eP     21 07.45  -1.8
                  eS     22 46.19
OKH      9.71 286 ePn    21 12.00   0.1
     Z  19s    35.40um
                  iS     23 12.00
KUR      9.72 232 ePn    21 13.00   0.9
     Z  16s    30.90um
     N  15s    27.60um
     E  16s    30.90um
                  eS     23 13.00
YSS     11.44 251 iPnc+  21 39.80   4.3X
     Z  18s    25.20um
     N  17s    16.40um
     E  17s    24.20um
                  iS     23 50.00
KUSJ    12.83 233 eP     21 49.70  -4.5X
                  eS     24 04.80
ASAJ    13.19 241 P      22 01.60   2.6
HOOJ    14.07 234 eP     22 09.00  -1.5
                  eS     24 47.90
SAP     14.61 240 eP     22 23.00   5.5X
                  eS     25 15.00
MRRJ    15.18 239 eP     22 26.70   1.7
ADK     15.22  80 (P)    22 24.08  -1.4
         1.2s   191.29nm          5.2mb
AOMJ    16.89 235 eP     22 43.50  -3.3X
OFUJ    17.39 230 eP     22 48.90  -4.2X
                  eS     25 51.50
YAK     18.64 314 iPc+   23 08.10  -0.3
         1.2s  1004.00nm          5.9mb
     Z  13s    24.50um          4.7MszX
     N  14s     5.70um
     E  13s    15.40um
                  eS     26 41.00
YAMJ    18.88 231 eP     23 07.50  -4.1X
ILT     19.52  26 iPc    23 18.00  -0.7
         1.6s   924.00nm          5.8mb
     Z  16s    16.00um          5.0Msz
     N  16s     7.50um
     E  14s     3.80um
                  iS     26 53.00
VLA     19.98 255 eP     23 21.00  -2.8
         2.0s   125.00nm          4.9mb X
     Z  12s     3.00um          4.3Msz
     N  13s     7.60um
                  iS     27 08.00
NIIJ    20.12 231 P      23 24.40  -0.9
KAKJ    20.41 227 P      23 27.60  -0.7
MDJ     20.57 261 ePc    23 27.96  -1.9
     Z  20s    17.80um          5.4Msz
     N  16s     7.38um
```

```
     E  16s    14.00um
                S     27 04.00
                PcP   27 39.20
MAJO   21.06 232 iPc   23 35.53   0.5
       1.2s  1373.96nm          6.2mb
MAT    21.06 232 iPc+  23 35.60   0.6
     Z  20s    13.12um          5.3Msz
                eS    27 22.00
CHJJ   21.08 229 P     23 35.10  -0.1
MTMJ   21.23 232 P     23 37.20   0.4
IIDJ   22.06 230 P     23 46.40   1.3
ANM    22.47  42 ePc   23 49.95   1.1
TSRJ   22.96 234 P     23 54.90   1.0
CN2    23.54 263 eP    23 58.00  -1.4
       0.8s    35.00nm          4.9mb X
     N  13s     5.07um
     E  13s     5.15um
                epP   24 11.00  53kmX
                eS    27 59.00
TIK    23.89 337 iPd+  24 03.00   0.5
       1.0s   480.00nm          6.0mb
     Z  17s    32.00um          5.9MszX
                i     24 21.00  80kmX
                i     24 37.00
                iPPP  24 48.00
                i     27 45.00
                iS    28 12.00
WKYJ   24.20 232 P     24 07.80   1.8
SDN    24.25  65 eP    24 06.74   0.5
     Z  20s    11.90um          5.4Msz
                S     28 28.25
YONJ   24.52 237 P     24 10.40   1.4
TKSJ   25.16 234 P     24 16.50   1.4
SHK    25.43 237 iPc   24 18.80   1.1
       1.0s   200.00nm          5.7mb
SNY    25.77 261 iPc   24 20.00  -0.8
       1.0s    53.00nm          5.1mb
     Z  20s    15.10um          5.5Msz
     N  14s     3.10um
     E  15s     9.60um
                sP    24 31.50
                iS    28 42.00
BOD    25.93 301 iPc   24 21.20  -0.9
       0.7s   161.00nm          5.7mb
TTA    26.26  47 iPc   24 25.33   0.1
       1.2s    90.36nm          5.3mb
SVW    26.39  51 ePc   24 26.63   0.3
       1.1s   351.39nm          5.9mb
                e     25 22.94 302kmX
SHNJ   26.57 239 P     24 29.30   1.1
CIT    27.46 288 eP    24 36.00  -0.3
     Z  20s    15.60um          5.6Msz
     E  22s    28.30um
                eS    29 07.00
IMA    27.58  41 iPc   24 36.82  -0.5
       0.8s    51.76nm          5.3mb
BRW    27.79  29 iPd   24 39.05   0.1
KUMJ   27.95 237 eP    24 41.30   0.5
CP2    28.02  51 iPc   24 41.64   0.2
KDC    28.26  59 ePc   24 41.64  -1.7
       1.6s   158.88nm          5.5mb
                e     24 55.40  56kmX
DL2    28.71 258 eP    24 47.00  -0.6
       1.0s   100.00nm          5.5mb
     N  15s     8.06um
                eS    29 28.00
KAGJ   28.99 235 P     24 51.30   1.1
SLKM   29.06  52 eP    24 49.48  -1.1
PMS    29.31  51 eP    24 51.30  -1.6
PMR    29.49  50 ePc   24 52.06  -2.3
       0.7s    49.09nm          5.4mb
     Z  21s     7.00um          5.3Msz
                S     29 29.56
COL    29.95  43 iPc   24 58.46  -0.1
       1.3s   288.80nm          5.9mb
                epP   25 11.81  53kmX
FBA    29.95  43 iPc   24 58.12  -0.4
       1.2s   136.49nm          5.6mb
                e     25 13.40  63kmX
TOA    30.84  49 ePc   25 06.50   0.1
KLU    31.03  50 iPc   25 07.41  -0.7
BJI    31.37 265 iPc   25 09.60  -1.6
       1.6s    34.00nm          4.9mb X
     Z  20s    13.00um          5.6Msz
     N  19s     7.60um
                ec    25 13.41
                epPd  25 18.79  32kmX
                esPd  25 24.50
IRK    32.77 293 eP    25 22.00  -1.3
       1.1s    44.00nm          5.3mb
     Z  14s     8.15um          5.6MszX
     N  14s     5.15um
     E  14s     6.16um
                e     26 40.00 422kmX
                e     26 55.20
                e     28 08.00
BALM   32.81  50 iPc   25 23.29  -0.4
TIA    33.18 258 eP    25 26.60  -0.5
     Z  25s    11.90um          5.5MszX
     N  15s     2.67um
     E  17s     6.55um
                eS    30 42.00
HHC    33.76 270 Pd    25 31.80  -0.3
       1.8s    97.00nm          5.4mb
     Z  20s    17.80um          5.8Msz
     N  13s     3.33um
     E  13s     6.65um
                sP    25 50.50
ZAK    34.10 290 iPc   25 34.00  -0.8
       1.8s    72.00nm          5.3mb
     Z  13s    10.58um          5.8MszX
     N  15s     7.68um
     E  15s     9.12um
                e     26 56.00 447kmX
                e     27 08.70
                e     28 11.60
SSE    34.36 248 P     25 37.00  -0.2
SSE    34.36 248 iP+   25 38.00   0.8
       1.0s   106.00nm          5.7mb
     Z  20s     4.90um          5.2Msz
     N  20s     3.50um
     E  20s     3.70um
                pP    25 54.50  67kmX
                sP    26 03.00
                PcP   28 12.50
                S     30 56.00
                sS    31 24.00
BTO    34.86 271 P     25 40.50  -1.1
       1.0s    22.00nm          5.0mb
     N  17s     8.85um
     E  17s    11.40um
                epP   25 50.00  32kmX
                PP    27 04.00
NJ2    35.02 251 Pc    25 43.00   0.1
       0.8s    64.00nm          5.6mb
     Z  24s     5.95um          5.3MszX
     N  16s     4.81um
     E  16s     2.07um
                S     31 10.00
TIY    35.10 265 Pc    25 43.50  -0.2
       1.0s    62.00nm          5.5mb
     Z  23s    10.60um          5.5MszX
     N  16s     6.01um
SIT    37.39  55 eP    26 04.27   1.7
       1.3s   126.61nm          5.6mb
     Z  20s     1.84um          4.9Msz
                epP   26 17.95  52kmX
MBC    38.56  22 eP    26 13.30   1.0
       1.8s   880.00nm          6.3mb
                PP    27 45.50
                PPP   28 02.70
                S     32 04.10
                ScP   32 06.90
                SS    34 38.80
                SSS   35 29.80
MBC    38.56  22 ePc   26 14.20   1.9
       1.0s    70.00nm          5.4mb
WHN    38.77 254 Pd    26 14.60   0.1
       0.6s    45.00nm          5.4mb
UER    38.84 296 eP    26 14.00  -0.8
     Z  12s     3.24um          5.4MszX
     N  12s     2.90um
     E  12s     1.66um
                e     27 44.00 491kmX
                e     28 24.00
                eS    32 12.00
                SSS   35 24.00
                e     36 24.00
TATO   38.91 241 ePc   26 16.19   0.5
                ed    26 21.82  19kmX
                ed    26 24.13
XAN    39.65 263 P     26 21.00  -0.9
       1.0s    23.00nm          4.9mb X
     Z  20s    12.00um          5.7Msz
     N  18s     7.15um
     E  18s     7.12um
                pP    26 31.00  34kmX
                sP    26 35.00
                PP    27 52.00
                ScS   36 28.00
GUMO   39.71 201 ePc   26 21.03  -1.4
                ed    26 23.93  10kmX
                ed    26 28.56
QZH    40.53 244 iPc   26 30.00   0.9
     Z  21s     3.55um          5.2Msz
     N  14s     1.68um
                S     32 36.00
LZH    41.45 270 iPc   26 36.50  -0.3
       1.8s   250.00nm          5.6mb
     Z  18s    10.50um          5.8Msz
     N  16s     8.54um
                pP    26 48.50  44kmX
                sP    26 54.00
                PP    28 14.00
                PcP   28 38.50
                ScP   32 22.00
                PcS   32 25.50
                S     32 42.00
                ScS   36 36.00
GTA    41.88 277 Pc    26 40.00  -0.2
       1.5s   120.00nm          5.4mb
     Z  20s    13.20um          5.8Msz
     N  14s     5.44um
                pP    26 47.00  24kmX
                sP    26 51.00
                PcP   28 34.00
                ScP   32 24.00
                PcS   32 27.00
                S     32 52.00
                sS    33 06.00
                ScS   36 38.00
NVS    43.12 305 iPd   26 48.00  -2.0
     Z  14s    14.00um          6.0MszX
                e     28 38.00 646kmX
                e     36 23.00
ALE    44.30   7 ePc   27 00.16   0.9
                ed    27 08.93  29kmX
YKA    44.70  41 eP    27 03.00   0.3
       0.8s    38.30nm          5.3mb
RES    44.84  21 ePc   27 06.50   2.9
       1.0s    31.00nm          5.1mb
GZH    44.96 248 P     27 05.80   0.7
       1.1s    92.00nm          5.6mb
     Z  16s     4.75um          5.5MszX
     N  16s     3.74um
     E  15s     2.42um
                S     33 38.00
CD2    44.97 264 iPd   27 05.30   0.0
       0.9s    64.00nm          5.5mb
     Z  20s     9.93um          5.7Msz
     N  15s     5.54um
                S     33 35.00
HON    45.22 116 P     27 20.00  12.7X
     Z  21s     4.17um          5.3Msz
HON    45.22 116 P+    27 12.57   5.3X
     Z  21s     4.17um          5.3Msz
                ScP   32 35.51
                S     33 55.51
                SS    37 27.69
GYA    46.36 257 iPc   27 16.20  -0.2
       0.8s   130.00nm          5.9mb
     Z  26s     5.30um          5.4MszX
     N  17s     4.61um
     E  17s     2.00um
                PP    29 06.00
                S     33 54.00
BAG    46.44 235 ePc+  27 16.50  -0.7
WMQ    46.57 290 iPc   27 17.50  -0.3
       1.0s    63.00nm          5.5mb
     Z  17s    12.20um          5.9MszX
     E  13s     8.89um
                epP   27 26.11  29kmX
                esPd  27 32.32
                ScP   32 41.00
                PcS   32 41.50
                sS    34 24.00
                ScS   37 06.00
GQP    47.66 231 eP    27 26.50   0.0
QCP    47.70 233 eP    27 28.00   1.1
MCW    48.01  61 ePc   27 29.13   0.1
                esP   27 47.59
```

17d 11h

KBS		48.03	352	iPc	27	29.00	0.2
TGY		48.22	233	eP	27	30.00	-1.1
ONR		48.54	63	P	27	34.27	1.2
GMW		48.69	62	iPc	27	34.76	0.5
				esP	27	52.56	
JCW		48.78	61	Pc	27	35.40	0.4
PLP		48.87	226	ePd	27	36.80	0.8
BMW		49.08	64	iPc	27	37.81	0.4
RMW		49.28	62	iPc	27	39.20	0.3
KMOR		49.44	65	P	27	40.62	0.5
FMW		49.67	62	Pc	27	42.25	0.2
LON		49.70	62	iPc	27	42.05	-0.1
				S	34	55.82	
KMI		49.73	260	iPc	27	42.38	-0.4
		2.0s	330.00nm			6.0mb	
	Z	25s	11.20um			5.8MszX	
	N	18s	7.90um				
	E	18s	3.70um				
				ed	27	46.43	
				epPd	27	50.57	27kmX
				S	34	45.00	
				sS	35	07.00	
SHW		49.80	63	ePc	27	43.44	0.4
				isP	28	01.63	
MAP		50.07	227	eP	27	44.00	-1.1
WTV		50.14	60	Pc	27	45.23	-0.3
QIZ		50.15	248	ePc	27	47.44	1.7
				epPd	27	57.37	33kmX
				esP	28	03.25	
COR		50.18	66	(P)	27	46.90	1.2
ASR		50.18	63	Pc	27	46.02	0.1
EBG		50.28	62	Pc	27	46.96	0.4
RNO		50.34	66	P	27	48.10	1.0
SAW		50.44	60	Pc	27	47.43	-0.3
SSOR		50.49	65	Pc	27	48.77	0.5
VBEM		50.85	64	Pc	27	51.33	0.3
WAH2		50.93	61	P	27	51.28	-0.1
DPW		50.98	59	iPc	27	51.65	-0.2
VGB		51.02	63	iPc	27	52.35	0.2
CROR		51.23	64	Pc	27	54.16	0.3
NEW		51.31	58	ePc	27	54.17	-0.2
		1.2s	82.86nm			5.6mb	
				S	35	10.48	
				SS	39	03.38	
JBO		51.57	63	Pc	27	56.36	0.0
DAG		51.68	359	iPd	27	56.40	-0.3
		0.6s	324.00nm			6.5mb	
				ipP	28	07.20	37kmX
VIPM		51.73	64	Pc	27	57.99	0.2
ARC		52.06	70	iPc	28	01.06	1.0
		1.9s	580.00nm			6.2mb	
				ipPc	28	15.81	56kmX
FHC		52.16	70	ePc	28	02.14	1.3
		2.0s	1362.47nm			6.6mb	
				epP	28	16.96	56kmX
LNOR		52.17	61	Pc	28	00.78	-0.1
DAV		52.24	223	eP-	28	02.00	0.3
YBH		52.30	68	ePc	27	58.52	-3.5X
		1.8s	450.00nm			6.1mb	
	Z	22s	3.30um			5.3Msz	
				epPc	28	17.01	73kmX
				esPc	28	23.11	
				eS	35	25.52	
				i	36	05.52	
				eSS	39	02.52	
				eLQ	41	08.52	
				eLR	43	30.52	
KMPM		52.33	70	iPc	28	03.37	1.2
				epP	28	17.52	53kmX
SVE		52.62	317	eP	28	00.00	-4.0X
		1.1s	160.00nm			5.9mb	
	Z	15s	16.00um			6.2MszX	
	N	16s	9.50um				
	E	16s	10.00um				
				e	29	10.00	331kmX
				e	30	08.00	
				ePPP	31	11.00	
				eS	35	21.00	
				eSS	39	03.00	
CTB		52.74	225	ePd	28	07.00	1.7
LGPM		52.76	69	iPc	28	06.17	0.7
LBFM		53.02	68	iPc	28	08.18	0.7
WDC		53.14	69	iPc	28	05.21	-2.9
		1.8s	420.00nm			6.1mb	
	Z	22s	1.70um			5.1Msz	
				epPc	28	23.50	72kmX
				eS	35	25.21	
				eSS	38	34.21	
				eLQ	40	59.21	
				eLR	42	34.21	
WDC		53.14	69	ePc	28	08.53	0.4
				epPd	28	18.46	33kmX
				esPd	28	23.10	
LSA		53.62	273	iPc	28	12.12	-0.2
	N	16s	1.94um				
	E	12s	1.32um				
				ed	28	17.01	
				epPd	28	20.40	27kmX
				esPd	28	28.35	
LMEM		53.73	68	P	28	13.70	1.0
ARU		53.75	317	eP	28	10.14	-2.2
		0.5s	32.83nm			5.6mb	
KEV		53.75	341	(P)	28	10.99	-1.1
MIN		53.84	69	iPc	28	13.20	-0.2
		1.6s	300.00nm			6.1mb	
				ipPc	28	25.80	45kmX
ORV		54.41	69	ePd	28	15.39	-2.1
		1.5s	250.00nm			6.0mb	
	Z	22s	1.80um			5.1Msz	
				ipPc	28	29.44	52kmX
				esPc	28	34.04	
				iS	35	55.39	
				iLQ	41	36.39	
				eLR	44	14.39	
NTYM		54.51	71	eP	28	17.56	-0.6
FRU		54.66	296	iPc	28	18.00	-1.3
		2.2s	180.00nm			5.7mb	
	Z	18s	13.00um			6.0Msz	
	N	18s	11.00um				
	E	18s	15.00um				
				e	28	34.00	61kmX
				e	30	28.00	
				eS	35	48.00	
				(SS)	39	42.00	
ZSP		55.04	71	iP	28	22.26	0.2
BKS		55.10	71	iPc	28	22.09	-0.4
		1.8s	480.00nm			6.2mb	
	Z	21s	3.80um			5.4Msz	
				ipPc	28	35.44	48kmX
				iS	36	07.09	
				eLQ	41	27.09	
				eLR	44	34.09	
HMR		55.17	71	ePc	28	24.12	1.1
TRO		55.35	344	iPc	28	23.00	-0.9
STAN		55.45	72	iPc	28	24.85	-0.2
		1.7s	750.00nm			6.4mb	
	Z	21s	3.40um			5.4Msz	
				ipPc	28	39.29	53kmX
				eLR	44	19.85	
MHC		55.81	71	eP	28	25.19	-2.6
		2.0s	590.00nm			6.3mb	
	Z	21s	3.50um			5.4Msz	
				esPc	28	47.04	
				eS	36	13.19	
				eLQ	42	05.19	
				eLR	44	55.19	
SDF		55.81	340	eP	28	28.00	0.7
COE		55.84	72	iPc	28	28.22	0.3
ARN		55.87	71	iPc	28	28.03	-0.1
RAB		56.07	188	eP	28	29.00	-0.6
CMB		56.08	70	iPc	28	29.64	0.0
KSH		56.12	292	P	28	28.00	-2.0
		1.0s	50.00nm			5.5mb	
	Z	20s	7.40um			5.8Msz	
	N	14s	8.56um				
	E	14s	2.80um				
				pP	28	36.00	26kmX
				PcP	29	28.00	
				PP	30	34.00	
				PcS	33	27.00	
				eS	36	12.00	
				ScS	38	12.00	
				iSS	39	57.00	
SAO		56.31	72	iPc	28	31.00	-0.3
		2.6s	682.87nm			6.2mb	
				S	36	25.12	
SAO		56.31	72	iPc	28	25.00	-6.3X
		2.0s	330.00nm			6.0mb	
	Z	21s	3.20um			5.4Msz	
				eS	36	21.00	
				eLQ	42	08.00	
				eLR	44	01.00	
PRS		56.65	72	iP	28	33.66	-0.1
WWKK		56.69	198	ePc	28	35.70	1.5
KVN		56.71	68	ePc	28	34.84	0.4
CHTO		56.78	258	iPc	28	34.89	0.1
				epPd	28	44.49	31kmX
				esPd	28	50.87	
				eS	36	20.80	
GDH		56.95	13	iPc	28	34.70	-0.7
		1.2s	421.88nm			6.3mb	
				e	36	45.00	
MEMM		57.17	69	ePc	28	38.44	1.1
FRI		57.18	70	iP	28	37.29	-0.1
PRI		57.20	72	iP	28	37.99	0.3
BONR		57.34	69	iPc	28	39.36	0.4
				eP'P'	58	15.78	
SWI		57.36	213	ePc	28	38.50	-0.3
		1.0s	3.00nm			4.3mb X	
MRCM		57.42	69	eP	28	39.80	0.4
KKM		57.48	233	ePc	28	45.50	5.6X
PHAM		57.56	72	ePc	28	40.15	0.0
LOF		57.58	345	eP	28	38.98	-0.9
MTUM		57.60	69	ePc	28	40.92	0.3
HVU		57.86	62	iPc	28	42.86	0.5
TNP		57.88	68	iPc	28	42.80	0.2
		0.9s	66.38nm			5.7mb	
BDT		57.95	257	eP	28	44.00	1.0
		1.0s	96.60nm			5.8mb	
GUN		58.15	276	P	28	43.60	-1.2
BCH		58.20	72	iPc	28	44.65	-0.1
NST		58.49	255	iPc	28	47.50	0.8
PCT		58.50	253	eP	28	45.50	-1.4
		0.7s	8.00nm			4.9mb X	
KKN		58.61	276	P	28	46.80	-1.0
PKI		58.68	276	P	28	48.20	-0.3
ISA		58.81	71	ePc	28	48.19	-0.8
		1.9s	258.82nm			6.0mb	
	Z	21s	2.83um			5.4Msz	
				epPd	28	57.46	30kmX
				S	36	42.34	
				SS	40	45.76	
DMN		58.84	276	P	28	48.80	-0.7
GKN		58.85	277	P	28	48.20	-1.3
DUG		58.92	63	ePc	28	50.24	0.4
		2.1s	642.29nm			6.4mb	
	Z	21s	1.84um			5.2Msz	
				ed	28	54.87	
				epPd	29	00.17	33kmX
				eSP	29	07.84	
				S	36	54.55	
ABL		58.94	72	iPc	28	49.68	-0.4
FRB		59.03	22	ePc	28	48.40	-1.6
		1.0s	52.00nm			5.6mb	
LAT		59.10	194	eP	28	51.00	0.0
TPNV		59.22	68	ePc	28	51.79	-0.1
		2.1s	756.23nm			6.5mb	
DAU		59.63	62	iPc	28	55.43	0.5
GSC		60.04	70	iPc	28	57.26	-0.2
				ed	29	01.90	
				epP	29	06.53	30kmX
KHT		60.10	255	eP	28	58.50	0.6
ARUT		60.24	66	iPc	28	58.88	0.0
				epP	29	10.74	41kmX
				esP	29	17.15	
				eP'P'	58	20.22	
				i	58	40.17	
SSK		60.29	72	ePc	28	58.79	-0.5
ULM		60.34	45	ePc	29	01.10	1.9
MSU		60.44	64	iPc	29	00.74	0.3
				epPd	29	12.26	39kmX
				iP'P'	58	27.03	
				e	58	37.30	
SVD		60.71	71	iPc	29	01.40	-0.6
				epPd	29	11.91	35kmX
PEC		60.82	71	iPc	29	01.80	-1.0
		1.6s	184.45nm			6.0mb	
RSSD		60.85	55	ePc	29	04.64	1.6
		1.3s	437.52nm			6.4mb	
				eP'P'	58	15.65	
SRU		60.94	63	iPc	29	03.84	0.1
NNT		61.14	253	eP	29	04.40	-0.6
NSS		61.15	344	eP	29	03.82	-0.6
PUL		61.23	333	(P)	29	03.00	-2.1
	Z	18s	14.00um			6.2Msz	
	N	17s	8.30um				
	E	16s	7.00um				
				e	29	17.00	51kmX
				e	29	46.00	
				(S)	37	26.00	
				(SP)	37	46.00	

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PLM     61.38  72 iPc   29 06.15  -0.6
PFO     61.44  71 ePc   29 06.23  -0.8
                ed      29 13.18  23kmX
NIL     61.72 289 iPc   29 10.10   1.3
        0.9s     0.10nm          3.0mb X
                iS      37 25.90
PMG     61.77 193 iPc   29 08.40  -0.8
        2.0s   442.08nm          6.2mb
                epPd    29 19.49  37kmX
NUR     62.10 336 eP    29 10.00  -1.0
PV09    62.14  62 P     29 04.30  -7.7X
PV09    62.14  62 iPc   29 11.81  -0.2
                eP'P'   58 15.99
MOS     62.25 327 iPd   29 12.00   0.0
        2.4s   270.00nm          6.0mb
                e       33 06.00
PV10    62.28  63 iPc   29 12.94   0.1
PV08    62.36  62 iPc   29 13.34  -0.1
                eP'P'   58 20.32
GLA     62.79  70 iPc   29 15.94   0.0
AKU     62.80 358 iP    29 16.50   1.0
        1.1s    86.08nm          5.8mb
NDI     62.90 283 iP    29 15.00  -1.7
OBN     63.12 327 iPd   29 16.20  -1.5
        1.8s   180.00nm          5.9mb
      Z  17s    12.00um          6.1MszX
      N  17s     6.90um
      E  17s     3.40um
                ipP     29 31.50  56kmX
                iPcP    29 56.00
                i       30 17.50
                iPP     31 34.50
                e       33 23.00
                eS      37 40.00
                e       38 12.00
                eScS    38 44.00
                eSS     42 05.00
                eSSS    45 00.00
                LQ      50 18.00
                LR      55 00.00
GOL     63.32  59 iPc   29 20.17   0.5
        2.2s  1074.48nm          6.6mb
      Z  21s     4.55um          5.6Msz
                epPd    29 29.94  31kmX
                S       37 47.96
GLD     63.36  59 iPc   29 20.68   0.8
        1.6s   245.50nm          6.1mb
      Z  21s     3.37um          5.5Msz
                S       37 40.98
MOL     63.70 346 eP    29 20.25  -1.2
UPP     64.33 339 iP    29 24.40  -1.2
NB2     64.52 343 P     29 26.20  -0.7
        1.1s   286.00nm          6.3mb
NRA0    64.74 343 iPd   29 27.70  -0.6
NRE0    64.74 343 P     29 26.70  -1.6
                PP      32 18.80
                PPP     33 43.30
                S       38 05.30
                ScS     39 39.50
                SS      42 37.20
                SSS     45 48.10
                LQ      45 48.10
                LR      45 48.10
NAO     64.79 343 P     29 25.30  -3.3X
HFS     64.89 341 eP    29 27.70  -1.6
      Z  20s     7.11um          5.9Msz
                LR      53 35.00
FOO     65.00 346 eP    29 29.02  -0.9
JAQ     65.37  32 eP    29 30.50  -1.9
TUC     65.67  68 ePc   29 35.93   1.1
        1.9s   328.14nm          6.1mb
                epPd    29 46.19  33kmX
                esPd    29 50.16
ASK     66.04 346 eP    29 36.50  -0.1
BER     66.11 346 eP    29 37.00   0.0
ANMO    66.19  63 ePc   29 38.25   0.0
                ed      29 43.05
                epPd    29 48.43  33kmX
ALQ     66.20  63 iPc   29 38.43   0.2
        0.8s    29.02nm          5.4mb
      Z  21s     1.73um          5.2Msz
                epP     29 50.93  43kmX
                S       38 31.95
                SS      42 46.82
EGD     66.24 346 eP    29 37.70  -0.1
ODD1    66.36 345 eP    29 38.43  -0.3
IPM     66.83 246 ePc   29 43.00   0.8
ASH     66.90 302 eP    29 42.00  -0.4
MNK     67.01 331 iP    29 39.00  -3.8X
        1.0s   340.00nm          6.4mb
      Z  20s    20.10um          6.3Msz
                ePPP    33 44.00
                eS      38 40.00
KMY     67.25 346 eP    29 44.24   0.0
MAIO    67.53 300 iPc   29 45.20  -1.4
                eS      38 35.00
KGM     67.65 243 ePc   29 48.91   1.5
QUE     67.90 291 eP    29 44.30  -4.8X
                eS      38 40.60
ACO     68.83  57 iPd   29 53.50  -1.1
MUD     69.19 342 iPc   29 56.00  -0.4
        1.0s   300.00nm          6.3mb
BSD     69.27 339 iPc   29 56.50  -0.3
        1.0s   106.00nm          5.9mb
COP     69.27 340 iP    29 56.20  -0.7
        1.7s   661.54nm          6.4mb
      Z  18s     5.50um          5.8Msz
PYA     69.54 316 eP    29 56.00  -2.8
      Z  19s     5.00um          5.8Msz
      N  19s     3.80um
      E  19s     1.80um
HYB     70.42 273 iPc   30 03.70  -0.8
        1.0s   210.00nm          6.2mb
WMOK    70.52  59 iPc   30 04.40  -0.5
        2.3s  1051.77nm          6.5mb
      Z  21s     4.49um          5.7Msz
                ed      30 08.46
                epPd    30 14.00  31kmX
                S       39 16.44
EDR     70.53 349 eP    30 04.60   0.0
MEO     70.59  58 iPd   30 04.60  -0.7
OCO     70.60  57 iPd   30 04.70  -0.6
MTA     70.64 313 eP    30 04.60  -0.8
      N  18s     3.00um
      E  18s     5.00um
                i       30 11.60  22kmX
                eS      39 15.60
                ePS     39 43.00
                ePPS    40 04.00
ELO     71.10 350 eP    30 07.60  -0.5
TUL     71.17  56 iPd   30 08.30  -0.5
EBH     71.30 350 eP    30 09.00  -0.2
EAB     71.45 350 eP    30 09.90  -0.2
ESY     71.52 349 eP    30 10.10  -0.4
EDI     71.58 349 ePc   30 10.40  -0.5
        1.8s   606.00nm          6.3mb
      Z  20s     2.00um          5.4Msz
EAU     71.69 349 eP    30 11.30  -0.2
EBL     71.71 349 eP    30 11.40  -0.3
CCM     71.77  51 ePc   30 11.77  -0.5
        2.1s   801.17nm          6.4mb
                epPd    30 21.54  31kmX
SLM     71.79  50 P     30 20.00   7.6X
      Z  21s     4.93um          5.7Msz
LTX     71.96  66 iPc   30 12.48  -1.2
ERE     71.99 313 iP    30 12.00  -1.7
ELF     72.09  42 P     30 13.15  -1.0
BRN     72.15 339 ePc   30 15.00   0.7
EKA     72.16 349 Pc    30 14.10  -0.2
        0.9s   118.70nm          5.9mb
ESK     72.18 349 eP    30 14.50   0.0
        1.5s   400.00nm          6.2mb
FVM     72.22  51 P     30 30.00  15.0X
      Z  20s     7.66um          6.0Msz
FVM     72.22  51 P     30 16.15   1.1
      Z  20s    13.99um          6.2Msz
                S       39 40.16
                e       48 35.79
ACTO    72.26  41 P     30 14.20  -0.9
DLA     72.26  42 P     30 14.90  -0.2
LDN     72.27  42 P     30 14.30  -0.9
GAC     72.28  37 ePc   30 13.60  -1.6
CTA     72.41 192 iPc   30 15.50  -0.7
        1.0s   102.50nm          5.8mb
                i       30 28.00  43kmX
                iS      39 33.00
                e       44 00.00
CTAO    72.41 192 ePc   30 15.51  -0.7
                ipPd    30 24.12  28kmX
POO     72.48 278 iPc   30 16.00  -0.9
        1.0s    50.00nm          5.5mb
OJC     72.51 334 eP    30 15.80  -0.7
                i       30 16.70   3kmX
KIS     72.55 327 iP+   30 16.00  -0.7
      Z  21s     7.60um          5.9Msz
      N  19s     6.90um
      E  15s     3.10um
                eS      39 38.00
                ePS     40 12.00
KLI     72.59 237 eP    30 16.40  -1.0
                e       30 34.00  65kmX
WLVO    72.66  39 P     30 16.55  -0.9
TYNO    72.76  41 P     30 17.32  -0.8
TAB     72.83 310 iP+   30 15.00  -3.8X
BOM     72.84 279 iPd   30 17.40  -1.5
                eS      39 36.40
KSP     72.87 336 iPc   30 18.00  -0.6
        1.0s    86.00nm          5.7mb
                i       30 38.20  76kmX
STCO    72.95  40 P     30 18.30  -0.9
WIT     73.12 343 iPc   30 21.70   1.7
UYO     73.21  56 iPc   30 20.00  -0.9
UZH     73.22 331 iPc   30 20.00  -0.7
        1.5s   128.00nm          5.7mb
      Z  19s    21.70um          6.5Msz
      N  19s    10.60um
                i       30 29.20  30kmX
                e       30 41.00
                eS      39 43.00
CLL     73.23 338 iPc   30 20.20  -0.5
        1.5s   330.00nm          6.1mb
      Z  20s     6.00um          5.9Msz
                i       30 31.30  37kmX
SPC     73.32 333 iPc   30 20.30  -1.2
ELC     73.35  50 iPd   30 21.24  -0.4
                epP     30 33.87  43kmX
MIAR    73.37  55 ePc   30 21.19  -0.6
        2.0s   406.85nm          6.1mb
      Z  20s     4.60um          5.8Msz
                epPd    30 30.96  31kmX
                S       39 53.40
                SS      44 11.89
BRG     73.41 338 iPc   30 21.20  -0.5
        1.5s   170.00nm          5.8mb
      Z  17s     9.30um          6.1MszX
      N  17s     5.70um
      E  17s     2.20um
PTT     73.45 328 eP    30 05.00 -17.0X
RSNY    73.61  37 eP    30 21.30  -1.7
        1.5s   132.30nm          5.7mb
CBM     73.76  31 ePc   30 23.40  -0.4
        2.1s   600.13nm          6.2mb
      Z  20s     3.61um          5.7Msz
                ed      30 27.46
                epPd    30 33.34  32kmX
                S       39 52.76
YSNY    73.82  40 iPc   30 23.55  -0.8
        1.9s   987.13nm          6.5mb
      Z  20s     3.30um          5.6Msz
                epP     30 36.20  43kmX
                S       39 55.48
WTS     73.87 342 iPc   30 24.80   0.4
        1.0s   339.70nm          6.3mb
DZM     73.88 172 iPc   30 25.80   1.0
QIS     73.97 199 eP    30 24.20  -1.1
GBA     74.02 272 Pc    30 25.30  -0.5
        0.8s   999.90nm          6.9mb
DBN     74.07 343 eP    30 26.00   0.5
      Z  20s     6.00um          5.9Msz
PRU     74.09 337 iPc   30 25.50  -0.2
        1.5s   189.40nm          5.9mb
      Z  17s     8.70um          6.1MszX
      N  17s     8.20um
      E  12s     2.30um
                e       30 50.20  95kmX
                e       31 10.50
MOX     74.16 339 iPc   30 26.30   0.2
        1.8s   314.00nm          6.0mb
      Z  18s     4.10um          5.8Msz
                eS      39 54.00
VRI     74.27 327 ePd   30 26.00  -0.8
CFR     74.39 326 eP    30 28.00   0.6
HOF     74.41 339 iPc   30 27.70   0.1
        1.5s   200.00nm          5.9mb
WB5     74.48 204 iPc   30 28.00  -0.3
                iPcP    30 43.00
DLF     74.53 351 iPc   30 28.30   0.2
        1.0s   500.00nm          6.5mb
DCN     74.55 351 iPc   30 28.50   0.2
PSZ     74.57 333 iPc   30 28.70   0.1
BNS     74.79 342 iPc   30 29.80   0.1
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17d 11h

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      0.9s    86.00nm          5.7mb
    Z  15s     9.00um          6.2MszX
LBNH  74.82  35 ePc   30 29.87  -0.2
      2.3s   938.10nm          6.4mb
    Z  21s     1.91um          5.4Msz
                S     39 58.94
MLR   74.87 328 iPc   30 30.00  -0.4
KVT   74.91 319 iP    30 31.00   0.3
BINY  75.06  39 ePc   30 30.53  -1.0
ZST   75.09 335 iP    30 31.70   0.2
      1.4s   182.00nm          5.9mb
SRO   75.11 334 iPc   30 32.20   0.6
KHC   75.12 337 iPc   30 32.50   0.8
      1.0s   164.50nm          6.0mb
    Z  16s    12.50um          6.3MszX
                e     30 41.10  28kmX
                e     31 14.00
                eS    40 03.00
GRA1  75.14 339 iPc   30 32.60   0.8
      1.1s   343.00nm          6.3mb
                e     40 33.00
                e     48 08.00
GRF   75.14 339 iPc   30 32.60   0.8
      1.1s   343.00nm          6.3mb
    Z  22s     5.00um          5.8Msz
HCG   75.17 349 eP    30 31.80  -0.1
ENN   75.21 342 iPc   30 32.60   0.5
      1.0s   390.00nm          6.4mb
VKA   75.23 335 iPc   30 32.60   0.3
      3.0s   739.00nm          6.2mb
    Z  17s     4.40um          5.8MszX
                i     31 03.60 123kmX
                LR    08 00.00
TNS   75.24 341 iPc   30 32.60   0.2
                e     30 49.20  60kmX
                ePP   30 56.60
WET   75.27 338 iPc   30 33.00   0.4
      1.5s   538.00nm          6.3mb
    Z  15s     6.00um          6.0MszX
HAE   75.31 348 eP    30 32.90   0.2
GEC2  75.36 337 ePc   30 33.00  -0.2
      0.8s    42.35nm          5.5mb
                e     30 37.00  13kmX
CMP   75.36 328 iPd   30 35.00   1.8
HTR   75.36 349 eP    30 33.20   0.2
KER   75.42 307 eP    30 33.00  -0.8
UCC   75.47 343 P-    30 33.00  -0.6
OXF   75.48  52 iPc   30 33.29  -0.7
      1.3s   224.26nm          6.0mb
                epPd  30 43.06  31kmX
                S     40 16.75
KART  75.54 320 eP    30 35.50   1.0
KAS   75.59 320 iPd   30 35.30   0.8
ECP   75.61 351 eP    30 35.50   1.1
MCWV  75.64  43 ePc   30 34.59  -0.2
      2.2s  1226.97nm          6.5mb
    Z  20s     3.19um          5.6Msz
                epPd  30 44.36  31kmX
                esPd  30 50.82
                S     40 08.73
CTK   75.74 319 eP    30 36.60   1.1
HGH   75.74 348 eP    30 35.20   0.1
SNF   75.76 343 iPc   30 35.57   0.3
LMN   75.77  30 eP    30 35.50   0.1
KMR   75.98 336 iP+   30 37.20   0.6
DOU   76.10 343 Pc    30 37.60   0.4
      1.0s   266.70nm          6.2mb
                ic    30 38.90   4kmX
BZS   76.14 330 eP    30 28.00  -9.5X
UZD   76.15 333 iP    30 37.20  -0.3
VAL   76.20 353 iP    30 38.90   1.2
      1.0s     1.70nm          4.0mb X
WLF   76.23 342 iPc   30 38.22   0.3
HRV   76.46  36 ePc   30 39.18  -0.2
      1.3s   320.54nm          6.2mb
    Z  20s     2.41um          5.5Msz
                ipPd  30 47.96  28kmX
                esPd  30 53.25
                S     40 19.28
                SS    45 38.97
LANF  76.55 341 P     30 40.20   0.4
FUR   76.57 338 iPc   30 40.40   0.5
      1.2s   323.00nm          6.2mb
    Z  18s     6.40um          6.0Msz
                ePcP  30 50.70
LSCT  76.57  37 ePc   30 39.19  -0.8
      2.2s   617.90nm          6.2mb
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                S     40 26.58
KOD   76.59 269 eP    30 40.80  -0.1
                eS    40 20.00
BHG   76.60 337 iPc   30 40.80   0.7
      1.5s   410.00nm          6.2mb
SRBF  76.60 341 P     30 40.62   0.6
PNJ   76.88  38 iP    30 41.46  -0.2
GMTN  76.89  38 iP    30 37.90  -3.8X
SGKT  76.94 321 eP    30 42.70   0.4
KBA   77.09 336 iPc   30 44.00   1.0
      0.9s   677.00nm          6.7mb
                i     30 45.50  5kmX
WLS   77.18 341 P     30 43.77   0.4
CDF   77.20 341 iPc   30 43.90   0.4
      0.9s   177.55nm          6.1mb
WATA  77.28 338 iPc   30 44.60   0.6
                i     30 46.00  5kmX
WTTA  77.33 338 iPc   30 45.10   0.8
      1.0s   254.00nm          6.2mb
                i     30 46.60  5kmX
MOTA  77.38 338 iPc   30 44.80   0.2
      1.3s   392.00nm          6.3mb
                i     30 46.40  5kmX
LIBD  77.38 341 P     30 44.95   0.6
ECH   77.41 341 P     30 45.00   0.4
BLA   77.44  45 iPc   30 44.58  -0.4
      0.9s    53.90nm          5.6mb
SQTA  77.47 338 iPc   30 45.80   0.8
      0.9s   212.00nm          6.2mb
                i     30 47.20  5kmX
PTJ   77.51 334 iPc   30 45.40   0.2
MYNC  77.55  48 iPc   30 45.10  -0.5
      2.1s   611.71nm          6.3mb
    Z  21s     7.47um          6.0Msz
                epPd  30 54.61  30kmX
NAL   77.55 321 eP    30 45.20  -0.4
FEL   77.56 340 P     30 45.63   0.1
SLE   77.56 340 iPc   30 45.50   0.1
ZAG   77.58 334 iPc   30 45.90   0.5
ITU   77.63 323 eP    30 48.00   2.2
CVL   77.63  43 ePc   30 45.82  -0.1
VITF  77.64 342 P     30 46.43   0.6
EYL   77.67 322 eP    30 47.10   0.9
GAZ   77.70 316 eP    30 46.20  -0.1
LJU   77.75 335 eP    30 46.50   0.1
      1.0s   190.00nm          6.1mb
                esP   31 03.50 208kmX
                e     31 36.70
                e     39 32.00
MOF   77.76 341 P     30 46.81   0.2
HAU   77.77 341 iPc   30 47.00   0.4
      1.0s   204.00nm          6.1mb
    Z  23s     5.88um          5.8MszX
BSF   77.85 341 iPc   30 47.20   0.1
      1.0s   156.40nm          6.0mb
ZLA   77.85 340 iPc   30 47.50   0.5
GPA   77.86 322 iP    30 43.00  -4.2X
CBN   77.90  42 iPc   30 47.00  -0.3
                e     31 00.00  44kmX
VOY   77.93 336 iPc   30 47.00  -0.5
BBS   78.05 340 P     30 48.64   0.5
VBY   78.06 335 iPc   30 48.90   0.8
                isP   31 04.00
OSS   78.22 338 iPc   30 50.00   0.8
FLN   78.23 346 iPc   30 49.40   0.4
      1.5s   501.40nm          6.3mb
    Z  18s     2.50um          5.6Msz
ASPA  78.23 203 iPc   30 49.70   0.4
      0.8s    40.00nm          5.5mb
                iS    40 42.20
LLS   78.30 339 iPc   30 50.30   0.6
LOMF  78.30 341 P     30 50.07   0.5
LDF   78.34 346 iPc   30 50.00   0.4
      1.4s   277.05nm          6.1mb
RIY   78.44 335 iP    30 50.00  -0.2
VDL   78.56 339 iPc   30 52.10   1.0
GRR   78.65 346 iPc   30 51.90   0.6
      1.5s   580.80nm          6.4mb
EDC   78.72 324 eP    30 51.00  -0.8
RDO   78.85 326 eP    30 52.10  -0.4
ALN   78.89 325 eP    30 52.70   0.0
LOR   78.96 343 iPc   30 53.60   0.5
      1.0s   300.00nm          6.2mb
    Z  22s     5.85um          5.9Msz
ALT   79.00 322 eP    30 52.50  -1.1
LPF   79.03 346 iPc   30 54.10   0.7
      1.5s   457.55nm          6.3mb
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TMA   79.05 339 iPc   30 54.20   0.4
DST   79.09 323 eP    30 52.40  -1.5
CEH   79.13  44 ePc   30 53.66  -0.5
      1.4s   449.54nm          6.3mb
HYF   79.17 344 iPc   30 55.30   1.1
PRM   79.18  48 ePc   30 54.28  -0.2
LBF   79.21 343 iPc   30 54.80   0.3
      1.2s   220.15nm          6.0mb
SSF   79.22 343 iPc   30 55.20   0.7
      0.9s   167.05nm          6.0mb
MMK   79.30 340 iPc   30 56.30   1.0
DIX   79.39 340 iPc   30 56.90   1.1
SKO   79.48 329 iPc   30 55.80  -0.1
      1.2s   270.00nm          6.1mb
    Z  20s     5.53um          5.9Msz
                i     37 09.50
                LR    10 37.00
SKO   79.48 329 eP    31 04.00   8.1X
                iS    41 14.00
EMS   79.50 340 iPc   30 57.10   0.8
AVF   79.51 343 iPc   30 56.80   0.8
      0.9s   286.95nm          6.3mb
JSC   79.52  47 iPc   30 55.84  -0.4
                epP   31 08.75  44kmX
SRS   79.54 327 eP    30 56.10  -0.2
LHS   79.56  46 ePc   30 55.89  -0.6
SMF   79.56 343 iPc   30 57.00   0.7
      1.6s   932.85nm          6.5mb
ORX   79.70 340 P     30 57.17  -0.1
VAY   79.70 328 iPd   30 57.30   0.2
      1.2s   430.00nm          6.3mb
KNT   79.73 328 eP    30 57.78   0.5
BGF   79.83 343 iPc   30 58.60   0.9
      0.6s    69.25nm          5.8mb
KHL   79.87 322 eP    30 57.10  -1.1
HVAR  79.88 333 iPc   30 57.00  -1.1
RSL   79.93 340 P     30 59.39   0.9
SDA   80.01 330 iPd   30 58.90   0.1
LSD   80.04 340 P     31 00.42   1.2
LPL   80.07 340 iPc   31 00.70   1.3
      1.0s   205.60nm          6.1mb
GRG   80.08 328 eP    30 59.14  -0.1
LPG   80.09 340 iPc   31 01.00   1.5
      1.1s   326.25nm          6.2mb
OUR   80.11 327 eP    30 59.00  -0.3
THE   80.19 327 eP    30 59.06  -0.6
BOB   80.19 338 P     31 00.52   0.7
      1.6s  1030.00nm          6.6mb
TCF   80.20 344 iPc   31 00.80   1.0
      0.9s   158.55nm          6.0mb
MAF   80.20 343 iPc   31 01.10   1.3
      1.0s   348.80nm          6.3mb
MBL   80.21 216 eP    31 00.20   0.2
      1.0s    44.00nm          5.4mb
PLDF  80.25 343 P     31 01.43   1.3
RSM   80.26 336 P     31 01.65   1.6
      1.3s  2014.10nm          7.0mb
AGO   80.26 343 P     31 01.47   1.4
PRK   80.27 324 eP    30 59.00  -1.2
MFF   80.28 345 iPc   31 01.30   1.1
      1.1s   264.70nm          6.1mb
RSP   80.31 340 P     31 00.47   0.0
LACI  80.33 330 iPd   31 01.00   0.6
LSF   80.35 344 iPc   31 01.60   1.0
      1.0s   263.20nm          6.2mb
MME   80.44 337 P     31 02.98   1.6
      1.1s   707.60nm          6.6mb
PGD   80.49 336 P     31 03.40   1.9
      1.1s   640.00nm          6.5mb
BNI   80.53 340 P     31 03.04   1.3
      1.2s   187.50nm          6.0mb
ARV   80.53 335 P     31 02.54   1.0
      0.9s   756.10nm          6.7mb
TIR   80.54 330 eP    30 56.60  -5.0X
FNA   80.57 329 iP    31 01.58  -0.3
PAIG  80.57 327 eP    31 01.30  -0.5
PYM   80.58 343 P     31 03.11   1.3
BDI   80.59 337 P     31 02.26   0.3
      0.8s    78.40nm          5.8mb
BHB   80.61 340 P     31 01.75  -0.2
PCP   80.61 339 P     31 02.07   0.0
RRL   80.63 340 P     31 03.22   0.8
COLF  80.67 342 P     31 03.53   1.2
SSB   80.74 342 P     31 03.72   1.0
SGS   80.77  47 ePd   31 03.29   0.4
                epP   31 16.37  44kmX
CKI   80.78 339 P     31 03.02   0.2
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        1.5s  1469.80nm          6.8mb
MRX     80.81  70 iP    31 05.00   1.7
LIT     80.82 327 eP    31 02.46  -0.7
KZN     80.87 328 eP    31 03.00  -0.5
FAM     80.92 317 e(P)  31 04.00   0.3
PII     80.93 337 P     31 03.48  -0.1
        1.2s   150.60nm          5.9mb
DOI     80.93 340 P     31 02.94  -0.8
        0.9s    70.10nm          5.7mb
PZZ     80.96 340 P     31 03.35  -0.6
ROB     80.99 339 P     31 03.76  -0.3
FIN     81.00 339 P     31 03.76  -0.3
LBL     81.03 343 P     31 05.59   1.3
CIN     81.05 322 iPc   31 04.00  -0.3
PMO     81.05 128 iPc   31 04.60   0.1
        1.8s   321.10nm          6.0mb
BERA    81.10 329 eP    31 03.20  -1.3
BHL     81.14 315 Pc    31 02.00  -3.0
ENR     81.16 340 P     31 03.90  -1.1
STV     81.16 340 P     31 03.63  -1.3
TPT     81.17 128 iPc   31 05.10   0.0
        1.1s   140.70nm          5.9mb
CSS     81.23 317 eP    31 05.50   0.1
RJF     81.27 344 iPc   31 06.70   1.3
        1.6s   711.45nm          6.4mb
      Z  22s     6.07um          5.9Msz
RAR     81.30 141 (P)   31 07.33   1.7
IMI     81.36 339 P     31 05.96   0.0
SAOF    81.36 339 P     31 06.25   0.3
AUTN    81.38 339 P     31 05.99  -0.3
VAH     81.38 128 iPc   31 06.20   0.0
        1.5s   323.80nm          6.1mb
LSK     81.40 329 iPc   31 06.30   0.1
TOUF    81.40 340 P     31 05.49  -0.9
TPE     81.45 329 iPd   31 07.00   0.6
RUV     81.46 128 iPc   31 06.70   0.1
        1.4s   292.80nm          6.1mb
SBF     81.50 339 iPc   31 07.20   0.5
        1.0s   169.60nm          6.0mb
AURF    81.50 339 P     31 06.58  -0.2
MVIF    81.53 340 P     31 07.34   0.4
CAF     81.54 343 iPc   31 08.50   1.6
        1.1s   315.50nm          6.2mb
MNS     81.64 335 P     31 07.69   0.3
        0.9s   707.20nm          6.7mb
PPCY    81.71 318 eP    31 07.50  -0.3
CALN    81.73 340 P     31 08.51   0.5
LFF     81.76 344 iPc   31 09.50   1.6
        1.5s   977.75nm          6.6mb
SRN     81.83 329 iPd   31 08.80   0.5
DUI     81.84 334 P     31 09.26   0.7
        1.5s   301.70nm          6.1mb
AGG     81.85 327 iP    31 06.78  -1.7
LPO     81.93 344 iPc   31 10.40   1.6
        1.0s   344.00nm          6.3mb
FRF     81.96 340 iPc   31 09.60   0.6
        1.6s   294.75nm          6.1mb
SDI     81.98 334 P     31 09.47   0.3
        0.9s   243.30nm          6.2mb
IGT     82.04 329 eP    31 09.26  -0.2
KEK     82.05 329 eP    31 09.00  -0.5
ARMA    82.11 186 eP    31 10.00   0.1
        1.1s    29.00nm          5.2mb
LRG     82.12 340 iPc   31 10.90   1.1
        1.5s   346.80nm          6.2mb
      Z  23s     4.45um          5.8MszX
RMP     82.17 335 P     31 08.81  -1.3
        1.1s   806.50nm          6.7mb
LMR     82.21 340 iPc   31 11.10   0.8
        1.5s   416.80nm          6.3mb
RDP     82.22 335 P     31 11.35   0.9
        1.1s   711.50nm          6.6mb
ATH     82.31 326 eP    31 10.00  -0.9
AFR     82.34 131 iPc   31 11.20   0.0
        1.3s   297.50nm          6.2mb
PGF     82.40 338 iPc   31 11.90   0.4
        1.0s    94.80nm          5.8mb
PPT     82.46 131 iPc   31 12.00   0.2
        1.1s   235.50nm          6.2mb
PPN     82.49 131 iPc   31 12.10   0.1
        1.8s   390.10nm          6.2mb
PAE     82.53 131 iPc   31 12.30   0.1
        1.2s   144.60nm          5.9mb
SGO     82.63 333 P     31 12.84   0.4
        1.4s   187.70nm          6.0mb
TVO     82.79 131 iPc   31 13.70   0.1
        1.2s   136.90nm          5.9mb
MGR     82.95 332 P     31 14.30   0.1
        0.9s   292.70nm          6.4mb
VLS     83.19 328 eP    31 16.00   0.5
RYD     83.45 302 ePc   31 15.60  -1.5
EPF     83.68 344 iPc   31 18.70   0.7
        1.5s   279.95nm          6.2mb
VLI     83.71 326 eP    31 17.00  -1.1
ELIZ    83.85 346 iPd   31 19.62   0.8
QASM    83.92 305 ePc   31 18.40  -1.1
ETER    83.94 342 iPd   31 19.67   0.5
NPS     84.04 323 eP    31 19.00  -0.9
EMON    84.35 350 iPc   31 21.90   0.5
VAM     84.43 324 eP    31 20.50  -1.3
ECRI    84.55 346 iPd   31 24.30   1.9
EGRA    84.60 344 iPc   31 23.42   0.9
STK     84.68 195 iPc   31 17.20  -5.6X
        1.1s    16.10nm          5.1mb
UQSK    84.76 306 iPc   31 23.70  -0.1
STS     85.03 351 iPd   31 25.60   0.9
AYN     85.25 312 iPc   31 25.70  -0.3
HQL     85.35 313 ePc   31 26.10  -0.4
ERUA    85.36 349 iPd   31 27.62   1.2
SRFA    85.57 313 iPc   31 27.40  -0.2
MEEK    85.66 215 iPc   31 27.40  -0.5
        0.9s    69.00nm          5.9mb
AFIF    85.74 304 ePc   31 29.70   1.0
EZAM    85.77 351 iPd   31 30.12   1.7
EROQ    85.82 344 eP    31 29.89   1.2
CVT     86.02 333 P     31 30.20   0.6
        1.3s  1672.60nm          7.1mb X
ETOR    86.23 345 iPc   31 31.08   0.3
BWA     86.34 188 iPc   31 31.80   0.7
                i       31 50.40  67kmX
HLW     86.48 316 ePc   31 32.00  -0.1
                e       31 33.00   3kmX
                eS      41 54.00
FORT    86.52 206 iPc   31 32.20   0.2
        1.0s   105.00nm          6.0mb
GUD     86.71 347 iPc   31 33.22   0.0
CAN     87.18 188 iPc   31 35.80   0.7
                epP     32 08.60 127kmX
ECHE    87.25 344 eP    31 36.09   0.3
WAJH    87.27 310 ePc   31 35.40  -0.6
EPLA    87.54 348 eP    31 37.26   0.1
PAB     87.81 347 (P)   31 38.76   0.2
                iS      42 20.00
KMSA    88.12 301 iPc   31 39.00  -1.2
ADE     88.17 196 e(P)  31 40.40   0.5
ACU     88.21 344 eP    31 39.75  -0.6
EVIA    88.43 345 iPc   31 41.58   0.0
COOL    88.69 212 eP    31 41.50  -1.0
MRWA    88.95 216 eP    31 43.50  -0.2
        1.0s    48.00nm          5.8mb
EALH    89.02 344 eP    31 44.35   0.1
EBAN    89.09 346 eP    31 44.64   0.1
EHUE    89.25 345 P     31 46.15   0.7
        0.5s    25.10nm          5.8mb
TAIF    89.51 305 ePc   31 46.80  -0.2
EHOR    89.63 347 eP    31 46.61  -0.5
ELUQ    89.75 347 eP    31 48.08   0.3
ECOG    89.93 346 eP    31 48.13  -0.5
BAL     89.95 215 eP    31 47.50  -0.9
ENIJ    90.01 345 eP    31 48.83  -0.1
EVAL    90.06 348 P     31 46.15  -3.0
        1.7s   152.60nm          6.0mb
EVAL    90.06 348 eP    31 49.85   0.7
EGUA    90.36 346 eP    31 49.89  -0.6
EPRU    90.47 347 iPc   31 50.90  -0.2
KLB     90.48 214 eP    31 50.50  -0.3
ABHA    90.79 301 ePc   31 53.20   0.1
EJIF    91.01 347 P     31 50.22  -3.3X
        1.0s   122.60nm          6.2mb
EJIF    91.01 347 eP    31 54.09   0.6
MUN     91.37 215 eP    31 53.50  -1.4
AVE     94.37 348 iP    32 09.50   0.5
TIO     96.69 348 iPd   32 31.00  11.1X
CAR    106.57  47 ePKP  37 20.00   5.1X
LKO    117.40 342 PKP   37 34.88  -0.6
        0.8s    14.50nm
TIC    120.11 341 PKP   37 40.31  -0.3
        0.7s    15.50nm
KIC    120.33 341 PKP   37 40.71  -0.3
        0.8s    18.50nm
LIC    120.52 341 PKP   37 41.15  -0.2
        0.8s    17.00nm
MTD    125.69 290 iPKPc 37 36.50 -14.9X
                i       37 49.20
LSZ    126.45 294 iPKP  37 54.00   1.1
        1.0s     2.50nm
                i       38 06.00
KRI    126.88 292 iPKPd 37 43.50 -10.2X
                i       37 54.20
LPB    129.02  64 PKPc  37 58.20   0.1
CNCB   129.31  64 iPKPc 37 59.30   0.4
BUL    130.06 290 ePKP  38 00.00   0.3
                i       41 20.00
SIV    132.36  56 PKP   37 49.40 -14.6X
BFT    133.44 284 ePKP  38 07.50   1.4
SLR    134.53 285 iPKPc 38 15.00   6.9X
        0.8s   120.00nm
      Z  22s     5.95um          6.3Msz
SOB1   134.60  28 ePKP  37 52.30 -16.0X
                e       38 07.90
KSR    135.45 287 ePKP  38 09.00  -0.9
        1.0s    90.00nm
LBTB   135.58 289 ePKP  37 59.99 -10.0X
LBTB   135.58 289 ePKP  38 10.92   0.9
SEK    136.83 284 ePKP  38 11.50  -0.9
        0.1s   140.00nm
FSA    137.72  70 ePKPc 38 14.10   0.2
BDF    138.18  40 ePKP  38 14.20  -1.0
        1.0s     0.95nm
                e       38 17.00
BLF    138.26 284 ePKP  38 06.00  -9.1X
        1.0s   100.00nm
BOSA   138.37 285 ePKP  38 05.44  -9.6X
BOSA   138.37 285 ePKP  38 16.43   1.4
FRS    139.25 284 ePKP  38 08.00  -8.5X
        0.5s    16.00nm
GRM    140.98 279 ePKP  38 13.00  -6.7X
        1.0s   100.00nm
SPA    141.62 180 iPKPd 38 12.20  -7.7X
        0.8s   104.17nm
POF    142.16 290 iPKPc 38 19.00  -2.8
        0.5s    12.00nm
SUR    143.83 286 iPKPd 38 13.00 -11.8X
        0.9s    75.63nm
SUR    143.83 286 iPKPd 38 37.00  12.2X
        0.9s   166.00nm
CACB   144.05  43 ePKP  38 22.70  -2.7
                e       38 42.90
VAO    145.12  44 ePKP  38 26.50  -0.6
                e       38 29.40
                epPKP   38 37.00
                e       38 41.30
                e       38 47.30
CER    145.42 286 iPKPc 38 20.00  -7.3X
        1.2s   640.00nm
RSTA   145.62  48 ePKP  38 27.50  -0.3
                e       38 38.50
                e       38 48.30
BLE    146.19 286 iPKPd 38 30.00   1.5
        1.0s   210.00nm
SNA    159.47 198 e(PKP)38 45.00  -1.0
        0.8s    36.00nm
     S.D. = 0.9  on 574 of 618 obs.
-----------------------------------------
*  NOV  17, 1993  12h 54m 03.03± 1.76s
   14.866 N ±23.3km   93.176 W ± 8.8km
   DEPTH =  82.8 ±  9.5 km
   4.4mb (  9 obs.)
 NEAR COAST OF CHIAPAS, MEXICO    ( 69)

TPX      0.89  87 iPd   54 20.11  -1.0
                iS      54 30.23
SCX      1.93  16 iP    54 35.77   1.2
                iS      54 59.80
OXX      4.06 303 iP    55 05.63   1.3
                (S)     55 39.97
IISM     5.74 316 (P)   55 27.30  -0.2
LVVM     5.77 328 (P)   55 22.40  -5.4X
PPM      6.68 309 iP    55 41.70   0.7
                (S)     57 01.27
IIA      6.76 310 (P)   55 42.58   1.1
III      6.97 301 (P)   55 42.30  -2.4
MRX      9.04 303 (P)   56 13.50   0.6
UYO     19.25 357 iPd   58 21.50  -2.1
MIAR    19.60 359 ePd   58 25.14  -2.1
        0.9s    18.35nm          4.4mb
                e       58 31.10
WMOK    20.42 347 eP    58 34.34  -1.5
        0.8s     8.98nm          4.2mb
MEO     20.42 347 iPd   58 33.70  -2.1
TUL     21.09 354 iPd   58 43.40   0.9
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17d 12h

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PRM    21.49  25 (P)    58 46.54   0.0
MYNC   21.71  20 (P)    58 49.98   1.2
       0.8s     6.63nm          4.1mb
ACO    22.39 347 iPc    58 56.20   0.8
LHS    22.49  28 (P)    58 58.08   1.7
ALQ    23.29 331 iPc    59 05.60   1.2
       1.0s    16.88nm          4.4mb
GOL    26.95 339 ePc    59 40.00   1.1
                 e      00 01.90
PLM    28.28 315 (P)    59 51.25   0.4
RSSD   30.59 345 eP     00 10.39  -1.0
       0.6s     5.51nm          4.5mb
YKA    49.93 347 eP     02 49.20  -0.8
       0.7s     2.40nm          4.3mb
RES    59.83 359 eP     04 03.50   1.9
       0.6s     1.00nm          4.1mb
MBC    62.92 353 eP     04 23.50   1.1
       0.8s     6.00nm          4.7mb
DAG    72.06  13 iPc    05 19.90   0.3
       0.4s     5.08nm          4.8mb
GBA   150.23  19 PKP    13 48.00   6.5X
     S.D. = 1.4  on  25 of  27 obs.
-------------------------------------
?  NOV  17, 1993  14h 39m 36.10± 1.03s
   39.956 N ±10.7km   27.452 E ± 8.9km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                              (366)
      ML 3.0 (ISK).

EDC     0.50  39 iPg    39 45.80  -0.5
                 iSg    39 53.80
EZN     0.88 262 iPn    39 53.50   0.6
DST     0.97 111 iPn    39 55.50   0.9
IZM     1.56 185 ePn    40 03.00  -1.0
     S.D. = 1.5  on   4 of   4 obs.
-------------------------------------
?  NOV  17, 1993  15h 20m 06.64± 3.08s
   32.776 S ±11.1km   69.560 W ±36.6km
   DEPTH =  33.0km  (normal)
 MENDOZA PROVINCE, ARGENTINA         (139)

RTCV    1.26  44 eP     20 26.50  -1.5
                 S      20 40.00
RTCB    1.44  27 ePc    20 32.30   1.6
CFA     1.62  44 eP     20 31.80  -1.4
RTLL    1.71  33 ePd    20 35.10   0.4
RFA     2.19 156 ePd    20 41.20  -0.3
                 S      21 12.50
MRA     3.27  85 eP     20 58.00   1.2
                 S      21 33.50
     S.D. = 1.7  on   6 of   6 obs.
-------------------------------------
*  NOV  17, 1993  15h 35m 12.41± 0.93s
   6.379 S ± 5.4km  130.003 E ± 6.8km
   DEPTH = 156.1 ± 10.9 km
   5.0mb (  8 obs.)
 BANDA SEA                           (280)

SWI     5.62  13 ePc    36 35.00   0.0
                 iS     37 33.00
MTN     6.52 170 eP     36 46.50  -0.6
       0.3s   240.00nm          6.0mb
                 eS     37 52.00
KNA     9.39 187 eP     37 25.00  -0.4
       0.3s    23.00nm          5.2mb
                 eS     39 04.00
WWKK   13.84  79 eP     38 23.50   0.2
QIS    16.89 147 iPd    39 00.90  -0.2
                 eS     41 56.20
PMG    17.26 101 eP     39 07.00   1.4
ASPA   17.59 168 iPd    39 09.10  -0.4
       0.4s    36.90nm          5.1mb
                 eS     42 17.50
                 iScS   50 35.70
MBL    17.69 213 eP     39 11.00   0.4
                 eS     42 16.50
CTA    20.85 132 iPd    39 44.00   0.5
       1.0s    25.00nm          4.6mb
                 i      40 09.00
                 i(S)   43 52.00
ADE    29.56 165 eP     41 05.00   0.4
BRS    30.08 137 iPd    41 07.90  -1.3
       0.6s    24.00nm          5.1mb
                 i      41 44.00
                 i      42 49.00
ARMA   31.38 142 iPc    41 20.40  -0.3
       0.7s     8.00nm          4.6mb
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BWA    32.69 151 iPd    41 33.40   1.5
CAN    33.69 151 iPd    41 41.10   0.5
DZM    38.47 118 iPd    42 20.10  -1.0
BDT    38.59 308 eP     42 24.00   2.0
CHTO   39.55 310 eP     42 30.50   0.6
MAT    43.38  10 eP     42 59.00  -2.0
GUN    54.55 311 P      44 27.20   0.1
       0.6s    27.00nm          5.2mb
PKI    54.73 310 P      44 28.20  -0.2
KKN    54.94 310 P      44 29.80   0.0
DMN    54.98 310 P      44 30.40   0.3
GKN    55.53 310 P      44 33.80  -0.2
GBA    55.83 291 P      44 35.30  -0.8
       0.9s     3.00nm          4.2mb
HYB    56.05 296 eP     44 37.00  -0.7
YKA   107.20  26 ePKP   53 37.60  16.5X
       0.8s     2.90nm
CNCB  150.89 143 PKP    54 51.00   7.5X
LPB   151.04 142 ePKP   54 51.00   7.4X
LPAZ  151.20 142 PKP    54 50.70   6.6X
     S.D. = 0.9  on  25 of  29 obs.
-------------------------------------
   NOV  17, 1993  16h 13m 45.64± 0.55s
   40.530 N ± 4.5km   20.027 E ± 5.3km
   DEPTH =  10.0km  (geophysicist)
 GREECE-ALBANIA BORDER REGION        (392)
      ML 2.6 (TIR).

BERA    0.18 341 iPgd   13 48.70  -1.0
                 iSg    13 51.80
TPE     0.23 183 iPgc   13 50.20  -0.5
                 iSg    13 54.60
VLO     0.41 262 ePg    13 53.38  -0.6
                 iSg    14 01.70
LSK     0.58 131 ePg    13 56.10  -1.3
SRN     0.65 182 ePg    13 59.30   0.7
                 iSg    14 09.30
OHR     0.82  45 ePg    14 01.20  -0.4
       0.5s    90.00nm
                 iSg    14 14.20
IGT     1.02 167 ePb    14 05.48   0.5
                 eSb    14 22.52
FNA     1.06  76 ePb    14 05.80   0.2
                 iSb    14 22.60
LACI    1.13 348 ePn    14 08.70   1.9
                 iSn    14 27.50
SKO     1.79  36 ePn    14 21.20   4.4X
GRG     1.85  76 ePn    14 17.00  -0.8
LIT     1.93 102 ePn    14 19.80   0.9
                 eSn    14 48.84
VAY     2.08  67 ePn    14 24.40   3.4X
KNT     2.27  73 ePn    14 23.30  -0.4
AGG     2.33 130 ePn    14 25.50   0.9
     S.D. = 1.0  on  13 of  15 obs.
-------------------------------------
%  NOV  17, 1993  17h 13m 19.88± 1.02s
   40.795 N ± 6.8km   23.740 E ±10.0km
   DEPTH =  10.0km  (geophysicist)
 GREECE                              (364)

SRS     0.34 341 ePg    13 26.74  -0.2
                 eSg    13 31.78
OUR     0.50 158 ePg    13 29.94   0.0
                 iSg    13 36.78
THE     0.61 255 ePg    13 31.58  -0.6
                 iSg    13 40.18
KNT     0.74 300 ePg    13 34.26  -0.1
                 eSg    13 45.70
PAIG    0.87 183 ePg    13 36.58   0.0
                 eSg    13 50.06
GRG     1.03 279 ePg    13 39.94   0.6
                 iSg    13 53.98
     S.D. = 0.5  on   6 of   6 obs.
-------------------------------------
   NOV  17, 1993  17h 50m 55.63± 0.33s
   43.187 N ± 3.7km    0.233 E ± 2.9km
   DEPTH =  17.6 ±  4.6 km
 FRANCE                              (538)
      ML 3.8 (LDG). MD 3.8 (BTH). mbLg
      3.7 (MDD). Felt (IV) in Bigorre.

EPF     0.17 153 Pg     51 00.10  -0.2
BTH     0.33 259 iPgc   51 03.10   0.4
JAU     0.47 252 Pg     51 05.20   0.1
                 Sg     51 11.83
OGE     0.52 268 Pg     51 06.63   0.7
                 Sg     51 15.41
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ESCF    0.60 260 Pg     51 07.63   0.3
                 Sg     51 16.42
MLS     0.67 110 Pg     51 08.22  -0.3
                 Sg     51 18.57
LHE     0.68 247 Pg     51 08.72  -0.1
                 Sg     51 17.03
ATE     0.69 262 Pg     51 09.82   1.0
                 Sg     51 19.26
ISSF    0.77 258 Pg     51 10.68   0.4
                 Sg     51 21.47
MADF    0.77 267 Pg     51 10.55   0.3
                 Sg     51 23.14
LESF    0.79 101 Pg     51 11.46   1.0
SALF    0.82 121 Pg     51 10.62  -0.5
ELYF    0.90 269 Pg     51 13.54   1.2
                 Sg     51 26.35
BOH     0.91 265 Pg     51 13.80   1.1
                 Sg     51 27.04
GRBF    1.02 109 Pg     51 15.15   0.7
EGRA    1.07 202 iPc    51 12.64  -2.7
                 e      51 23.20
PAND    1.17 124 Pg     51 17.01  -0.2
LSPF    1.25 100 Pg     51 19.85   1.6
TRGS    1.45 118 Pg     51 22.73   1.6
LPO     1.65  24 Pn     51 25.70   1.8
                 Pg     51 30.70
                 Sg     51 53.70
VDCF    1.68 110 Pg     51 27.33   3.0
MTHF    1.70  98 Pg     51 28.57   3.8X
LFF     1.79  12 Pn     51 28.40   2.5
                 Pg     51 33.20
                 Sg     51 59.10
ECRI    2.10 255 iPc    51 32.55   2.1
                 e      51 56.90
ETER    2.12 114 iPc    51 33.72   2.9
                 e      51 59.00
CAF     2.18  37 Pn     51 32.70   1.0
                 Pg     51 40.00
                 Sn     51 59.20
                 Sg     52 09.90
RJF     2.31  23 Pn     51 34.10   0.7
                 Sg     52 13.60
EROQ    2.37 177 eP     51 37.05   2.8
                 e      52 04.90
EBR     2.37 175 ePn    51 41.00   6.7X
                 e      52 07.00
ETOR    2.92 217 iPd    51 41.93  -0.2
                 e      52 14.50
LSF     3.20  16 Pn     51 46.10   0.0
                 Pg     51 59.10
                 Sg     52 41.00
TCF     3.41  24 Pn     51 48.70  -0.3
                 Pg     52 02.60
                 Sg     52 48.20
MFF     3.43 356 Pn     51 50.80   1.6
                 Sg     52 49.40
MAF     3.46  28 Pn     51 49.70  -0.1
                 Pg     52 03.60
                 Sg     52 49.80
ECHE    3.70 195 P      51 55.97   2.6
BGF     3.85  28 Pn     51 55.20  -0.1
                 Pg     52 10.90
                 Sg     53 01.20
GUD     4.14 234 iPc    51 59.07  -0.5
                 e      52 43.60
AVF     4.23  30 Pn     52 01.40   0.7
                 Pg     52 19.00
                 Sg     53 13.20
SMF     4.30  35 Pn     52 02.20   0.4
                 Pg     52 20.30
                 Sg     53 14.20
LRG     4.48  84 Pn     52 02.90  -1.3
                 Pg     52 19.20
                 Sg     53 16.60
SSF     4.51  30 Pn     52 04.80   0.1
                 Sg     53 21.70
LMR     4.59  86 Pn     52 04.60  -1.2
                 Pg     52 22.20
                 Sg     53 19.30
LBF     4.63  34 Pn     52 07.10   0.6
                 Pg     52 24.10
                 Sg     53 25.70
FRF     4.69  83 Pn     52 04.80  -2.5
                 Pg     52 23.30
                 Sg     53 23.60
LOR     4.82  31 Pn     52 10.20   1.1
                 Pg     52 29.50
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                Sg    53 30.40
LPF     4.93 350 Pn    52 10.50    0.0
                Sg    53 37.00
PAB     5.01 225 iPn   52 10.20   -1.6
                ePb   52 17.80
                ePg   52 30.50
                eSn   53 05.00
                eSb   53 13.00
                iSg   53 31.00
LPL     5.21  61 Pn    52 12.50   -2.3
LPG     5.21  61 Pn    52 14.50   -0.4
GRR     5.26 352 Pn    52 14.60   -0.6
                Sn    53 14.10
                Sg    53 45.50
SBF     5.28  80 Pn    52 14.10   -1.6
                Pg    52 35.30
                Sg    53 43.90
LDF     5.41 357 Pn    52 16.80   -0.6
                Sn    53 18.10
                Sg    53 50.20
ERUA    5.49 264 eP    52 18.56    0.0
                e     53 17.60
EMON    5.52 275 eP    52 19.10    0.0
                e     53 21.30
FLN     5.60 355 Pn    52 18.70   -1.4
                Sn    53 21.60
                Sg    53 57.90
EPLA    5.67 239 eP    52 19.41   -1.7
                e     53 20.80
PGF     6.47  93 Pn    52 28.40   -4.1X
                Sn    53 38.70
     S.D. = 1.4  on  54 of  57 obs.
-----------------------------------
% NOV  17, 1993  18h 23m 29.58± 0.68s
  27.982 S ± 6.5km   26.757 E ± 7.9km
  DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)
     ML 2.6 (PRE).

SEK     0.84 114 iPc   23 46.10   -0.3
                S     23 55.00
BLF     1.23 204 eP    23 53.50    0.5
                S     24 10.00
SWZ     1.50 302 iPd   23 56.70   -0.6
                S     24 16.30
KSR     2.11   3 eP    24 07.00    0.8
                S     24 33.00
FRS     2.16 215 eP    24 06.60   -0.2
                S     24 32.00
SLR     2.62  32 eP    24 13.20   -0.2
                S     24 44.00
     S.D. = 0.7  on   6 of   6 obs.
-----------------------------------
*  NOV  17, 1993  19h 23m 23.42± 0.69s
  40.954 N ± 6.6km   22.569 E ± 5.0km
  DEPTH =  10.0km  (geophysicist)
 GREECE                            (364)

GRG     0.13 271 ePg   23 27.70    1.2
                eSg   23 31.00
KNT     0.32  50 ePg   23 29.95   -0.2
                eSg   23 33.50
VAY     0.37   0 ePn   23 42.80   11.8X
THE     0.44 137 ePg   23 33.52    1.1
                iSg   23 40.24
SRS     0.79  78 ePg   23 38.56   -0.3
LIT     0.85 184 ePg   23 39.50   -0.4
FNA     0.92 260 ePg   23 40.50   -0.6
                eSg   23 51.46
OUR     1.24 119 ePb   23 46.00   -0.5
                eSb   24 04.50
PAIG    1.33 140 ePb   23 48.40    0.4
AGG     1.94 186 ePn   23 55.92   -0.8
     S.D. = 0.8  on   9 of  10 obs.
-----------------------------------
?  NOV  17, 1993  19h 26m 12.16± 0.74s
  24.385 N ±15.3km   94.703 E ± 7.9km
  DEPTH = 112.5 ± 13.9 km
  4.1mb (  2 obs.)
 MYANMAR-INDIA BORDER REGION       (294)

CHTO    6.80 144 ePd   27 51.00    0.0
      0.9s    16.62nm          4.5mb X
KMI     7.34  83 Pd    27 58.50    0.0
      1.2s    30.00nm          4.7mb X
GUN     8.67 296 P     28 17.20    0.5
PKI     8.94 293 P     28 20.40    0.0
KKN     9.12 294 P     28 22.80    0.1
      0.4s    21.00nm          5.3mb X
DMN     9.21 292 P     28 23.60   -0.3
GKN     9.73 294 P     28 30.40   -0.4
HFS    64.74 327 eP    36 40.20    0.0
      0.4s     1.70nm          4.3mb
NB2    65.86 328 P     36 47.50    0.0
      0.7s     1.30nm          4.0mb
     S.D. = 0.3  on   9 of   9 obs.
-----------------------------------
?  NOV  17, 1993  20h 02m 10.28± 4.56s
  28.718 N ±12.3km   34.689 E ±32.2km
  DEPTH =  10.0km  (geophysicist)
 EGYPT                             (553)

BADA    0.34 125 iPc   02 17.00   -0.2
                iS    02 22.47
SRFA    0.49  64 iPc   02 19.67   -0.5
                eS    02 27.33
HQL     0.63  30 ePc   02 23.00    0.0
                eS    02 33.00
AYN     1.16  82 iPc   02 32.67    0.7
                iS    02 48.20
     S.D. = 0.9  on   4 of   4 obs.
-----------------------------------
%  NOV  17, 1993  20h 22m 20.09± 0.74s
  37.147 N ± 7.4km    4.984 W ± 6.9km
  DEPTH =  10.0km  (geophysicist)
 SPAIN                             (377)
     mbLg 2.3 (MDD).

EPRU    0.27 228 eP    22 25.54   -0.2
                e     22 30.70
EHOR    0.71 343 eP    22 34.72    0.7
                e     22 45.60
EJIF    0.80 209 eP    22 35.50   -0.1
ECOG    1.14  83 eP    22 41.18   -0.3
                e     22 56.30
EGUA    1.18 105 eP    22 43.00    0.9
                e     22 59.00
EBAN    1.39  43 eP    22 44.54   -1.0
                e     23 03.00
     S.D. = 0.9  on   6 of   6 obs.
-----------------------------------
*  NOV  17, 1993  22h 07m 21.48± 0.40s
  40.553 N ± 3.4km   19.671 E ± 3.7km
  DEPTH =   9.5 ±  2.5 km
 ALBANIA                           (391)
     ML 3.4 (TIR).

VLO     0.16 238 iPgc  07 25.30    0.2
                iSg   07 29.80
BERA    0.26  55 iPgc  07 25.00   -1.9
                iSg   07 29.50
TPE     0.37 135 iPgd  07 28.00   -1.0
                iSg   07 33.50
SRN     0.72 159 ePg   07 35.35   -0.3
                iSg   07 47.20
TIR     0.81  10 ePg   07 37.70    0.5
                iSg   07 53.00
LSK     0.82 119 ePg   07 35.50   -1.9
                iSg   07 51.50
OHR     1.02  57 iPn   07 38.60   -2.3
      0.7s   290.00nm
                i     07 44.20
                i     07 53.00
                i     07 56.50
                i     07 58.70
                Lg    08 08.50
LACI    1.08   2 iPnd  07 43.00    1.2
                iSn   08 02.50
IGT     1.14 153 iPb   07 44.20    1.3
                eSb   08 02.12
FNA     1.32  79 ePb   07 46.00    0.1
                eSb   08 07.56
ULC     1.44 347 iPgd  07 46.89   -0.8
                iSg   08 08.91
SDA     1.50 355 ePn   07 49.00    0.5
                iSn   08 13.40
BCI     1.84   9 iPnc  07 53.70    0.3
                iSn   08 20.20
BDV     1.84 340 iPnd  07 53.01   -0.4
                iSn   08 19.15
TTG     1.90 351 iPnd  07 54.25    0.0
                iSn   08 21.54
SKO     1.95  43 iPn   07 56.00    1.0
      0.6s   160.00nm
                iSn   08 23.00
                Lg    08 28.50
PVY     2.05   6 iPnc  07 57.50    0.9
                iSn   08 26.47
HCY     2.09 335 iPnc  07 56.24   -0.7
                iSn   08 24.69
GRG     2.11  78 ePn   07 57.92    0.5
BAI     2.20 286 ePn   07 57.50   -1.1
LIT     2.20 101 ePn   07 59.42    0.7
                eSn   08 30.50
NKY     2.31 348 iPnc  08 00.09   -0.3
                iSn   08 31.19
IVA     2.32   4 iPnc  08 00.72    0.2
                iSn   08 33.06
VAY     2.33  70 iPn   08 01.00    0.5
BRY     2.49 341 iPnd  08 02.18   -0.7
                iSn   08 34.91
THE     2.51  87 ePn   08 03.04    0.0
KNT     2.52  75 ePn   08 03.44    0.2
                eSn   08 36.50
AGG     2.56 126 ePn   08 04.64    0.9
                eSn   08 40.00
PLE     2.78 356 iPnc  08 06.97   -0.1
                iSn   08 43.41
SOH     2.81  83 ePn   08 07.72    0.3
                eSn   08 44.20
SRS     3.03  78 iPn   08 10.36    0.0
PAIG    3.13 100 ePn   08 12.00    0.2
OUR     3.30  92 ePn   08 14.28    0.1
HVAR    3.56 319 iPn   08 25.80    7.9X
     S.D. = 0.9  on  33 of  34 obs.
-----------------------------------
   NOV  17, 1993  22h 30m 12.50± 1.38s
   42.138 N ± 5.5km  125.747 W ±12.7km
   DEPTH =  10.0km  (geophysicist)
 OFF COAST OF OREGON               ( 30)

DBO     2.09  61 P     30 47.92   -0.2
RNO     2.30  39 Pd    30 50.87   -0.3
BBOR    2.39  71 P     30 52.77    0.3
HSO     2.40  54 P     30 52.16   -0.3
LGPM    2.51 118 eP    30 53.36   -0.8
MPOR    2.86  33 P     30 58.60   -0.5
HBO     3.04  55 Pc    31 02.06    0.4
FBO     3.17  46 P     31 03.45   -0.1
SSOR    3.62  40 Pd    31 10.51    0.6
BPO     3.88  48 Pc    31 13.63   -0.1
ORV     4.13 127 (P)   31 17.56    0.6
VLMM    4.33  37 P     31 20.58    0.6
RVW     4.56  27 P     31 24.02    1.0
LVP     4.61  30 P     31 23.84    0.0
MTMW    4.65  32 P     31 23.93   -0.5
BMW     4.70  22 eP    31 24.25   -0.9
FL2     4.74  30 P     31 25.72    0.0
JLK     4.77  32 Pc    31 25.94   -0.2
SHW     4.78  31 P     31 26.62    0.3
CDFW    4.79  33 P     31 26.18   -0.2
REMW    4.80  31 P     31 27.00    0.2
YEL     4.81  31 P     31 26.79    0.0
ESD     4.81  31 P     31 26.95    0.1
ERK     4.83  29 P     31 26.91   -0.2
SOSW    4.85  31 P     31 27.32    0.0
ASR     5.00  35 P     31 29.19   -0.3
LMW     5.16  27 P     31 32.16    0.5
GL2     5.21  41 Pc    31 32.31   -0.1
GLK     5.33  32 P     31 34.00   -0.1
LON     5.40  30 Pc    31 35.01   -0.1
JBO     5.42  50 P     31 35.26    0.0
REMR    5.45  30 Pc    31 35.91    0.0
WPW     5.46  32 Pc    31 35.72   -0.3
RVC     5.51  28 P     31 37.12    0.5
RCS     5.53  30 Pd    31 37.14   -0.1
FMW     5.61  30 Pc    31 38.31    0.2
     S.D. = 0.4  on  36 of  36 obs.
-----------------------------------
?  NOV  17, 1993  22h 39m 07.05± 1.05s
    5.873 S ±10.8km  146.056 E ±18.2km
   DEPTH =  33.0km  (normal)
   4.0mb (  1 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)

YYYY    0.38 193 eP    39 15.50   -0.5
MDG     0.68 336 eP    39 20.20    0.1
LAT     1.23 130 eP    39 27.50   -0.4
WWKK    3.30 313 eP    40 04.50    6.9X
PMG     3.68 163 eP    40 03.80    0.8
ASPA   21.21 212 eP    44 00.70    8.3X
```

17d 22h

```
      1.0s     6.10nm          4.0mb
    S.D. = 1.1  on   4 of   6 obs.
-------------------------------------
   NOV  18, 1993  01h 24m 57.33± 0.64s
   42.992 N ± 5.1km   18.775 E ± 4.1km
   DEPTH =   5.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)

BRY     0.19 242 iPgd  25 01.18  -0.2
                 iSg   25 03.90
NKY     0.24 137 iPgd  25 03.15   0.9
                 iSg   25 07.47
PLE     0.57  53 iPgd  25 08.40  -0.3
                 iSg   25 17.08
HCY     0.58 201 iPgd  25 08.67  -0.3
                 iSg   25 17.56
TTG     0.67 147 iPgd  25 10.14  -0.5
                 iSg   25 21.28
BDV     0.71 177 iPgd  25 11.35  -0.2
                 iSg   25 22.29
IVA     0.83  98 iPgd  25 13.81  -0.2
                 iSg   25 26.79
PVY     0.97 114 iPgc  25 16.35   0.1
                 iSg   25 31.41
ULC     1.09 161 iPgd  25 18.44   0.2
                 iSg   25 35.12
HVAR    1.72 277 i(Pn) 25 28.40   0.4
                 iSg   25 54.50
    S.D. = 0.5  on  10 of  10 obs.
-------------------------------------
?  NOV  18, 1993  01h 29m 28.31± 4.19s
   31.961 S ±15.0km   72.456 W ±35.3km
   DEPTH =  10.0km  (geophysicist)
 OFF COAST OF CENTRAL CHILE        (134)
      MD 4.2 (SAN).

ROCH    1.58 130 iP+   29 55.90  -0.8
                 iS    30 19.33
LCCH    1.69 154 iPd   29 58.49   0.6
JACH    1.73 115 iP+   29 57.24  -1.5
PEL     1.90 129 eP    30 00.34  -0.8
                 iS    30 26.67
TACH    2.12 143 eP    30 04.68   0.4
LNV     2.17 156 eP    30 04.91  -0.1
FCH     2.28 127 iP+   30 06.02  -0.9
                 (S)   30 36.06
PCH     2.33 136 eP    30 07.36   0.0
CACH    2.66 145 iP+   30 13.18   1.1
RTRS    3.13  56 P     30 59.50  41.0X
RTCB    3.15  82 e(P)  30 19.00   0.0
MDZ     3.19 108 eP    30 07.20 -12.3X
                 e     30 19.30
                 e     30 24.50
                 i     30 35.20
                 iS    31 03.20
ZON     3.24  84 eP    30 20.50   0.2
RTCV    3.33  89 eP    30 23.50   1.9
RTLL    3.46  81 e(P)  30 24.00   0.7
CFA     3.61  85 eP    30 13.80 -11.7X
RFA     4.36 131 e(P)  29 45.00 -51.2X
RTPR    5.36  74 e(P)  30 52.00   1.8
MRA     5.74  96 ePc   30 55.30  -0.3
CYA     6.75  60 ePc   31 07.50  -2.4
    S.D. = 1.2  on  16 of  20 obs.
-------------------------------------
*  NOV  18, 1993  01h 31m 23.05± 1.58s
   32.947 S ±10.6km  178.615 W ±22.5km
   DEPTH =  33.0km  (normal)
   4.7mb (  3 obs.)
 SOUTH OF KERMADEC ISLANDS         (179)

HBZ     5.28 208 eP    32 43.50   1.8
PUZ     5.72 206 eP    32 47.60  -0.2
                 eS    33 51.60
NOZ     6.28 205 eP    32 56.10   0.4
URZ     6.34 212 eP    32 55.80  -0.8
                 eS    34 06.50
OUZ     6.85 249 eP    33 06.30   2.6
PGZ     8.68 207 eP    33 27.30  -2.0
MNG     9.00 210 eP    33 29.90  -3.8X
                 eS    35 06.50
DZM    17.10 306 iPc   35 21.50   0.3
ASPA   42.52 270 eP    39 16.20  -1.0
       0.8s    10.00nm          4.6mb
WR2    43.71 275 iPc   39 25.30  -1.6
       0.4s    17.80nm          5.2mb
                 eS    45 48.30
WRA    43.73 275 P     39 25.80  -1.3
       0.5s     3.90nm          4.4mb
KAF   146.75 339 iPKP  51 00.90   0.3
       0.6s     2.90nm
NUR   148.49 338 ePKP  51 05.00   1.6
NB2   151.17 350 PKP   51 13.20   5.6X
       0.7s     3.00nm
HFS   151.61 347 ePKP  51 12.30   4.1X
       0.5s     1.90nm
    S.D. = 1.6  on  12 of  15 obs.
-------------------------------------
   NOV  18, 1993  03h 19m 47.09± 1.01s
   42.014 N ± 7.2km   19.324 E ± 6.7km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)

ULC     0.08 228 iPgd  19 49.70   0.2
                 iSg   19 51.82
TTG     0.42 354 iPgc  19 55.73   0.1
                 iSg   20 03.10
BDV     0.46 306 iPgd  19 56.13  -0.3
                 iSg   20 03.93
HCY     0.75 306 iPgd  20 01.49  -0.3
                 iSg   20 13.58
PVY     0.75  39 iPgc  20 01.48  -0.5
                 iSg   20 13.95
NKY     0.83 343 iPgc  20 03.48   0.2
                 iSg   20 16.93
IVA     0.96  26 iPgc  20 05.64   0.3
                 iSg   20 20.67
BRY     1.06 327 iPgd  20 07.39   0.3
                 iSg   20 24.22
    S.D. = 0.3  on   8 of   8 obs.
-------------------------------------
   NOV  18, 1993  03h 42m 54.26± 0.58s
   40.589 N ± 4.6km   21.293 E ± 5.4km
   DEPTH =  10.0km  (geophysicist)
 GREECE                            (364)

FNA     0.21  18 ePg   42 58.80   0.0
                 eSg   43 03.40
OHR     0.64 324 iPgd  43 06.50  -0.7
       0.4s   160.00nm
                 iSg   43 17.00
GRG     0.92  66 iPg   43 11.36  -0.5
                 eSg   43 25.50
LIT     1.04 118 ePg   43 13.00  -0.9
                 iSg   43 27.92
VAY     1.21  52 ePn   43 17.50   0.7
IGT     1.29 215 ePb   43 18.48   0.4
                 eSb   43 37.10
KNT     1.35  64 ePb   43 19.12   0.1
                 eSb   43 39.28
SKO     1.39   5 ePn   43 20.00   0.4
AGG     1.76 153 ePb   43 25.00   0.0
PAIG    1.94 109 ePb   43 28.04   0.4
    S.D. = 0.6  on  10 of  10 obs.
-------------------------------------
*  NOV  18, 1993  04h 00m 57.19± 2.09s
   40.465 N ±13.4km   21.193 E ±13.2km
   DEPTH =   5.0km  (geophysicist)
 GREECE                            (364)

FNA     0.35  24 ePg   01 04.00  -0.2
                 eSg   01 10.00
OHR     0.71 335 ePg   01 11.50   0.1
       0.3s    50.00nm
                 iSg   01 22.70
GRG     1.04  61 ePg   01 17.66   0.3
                 eSg   01 33.30
LIT     1.06 110 ePb   01 17.50  -0.1
KNT     1.47  61 ePb   01 24.26  -0.1
                 eSb   01 47.00
    S.D. = 0.3  on   5 of   5 obs.
-------------------------------------
*  NOV  18, 1993  04h 01m 34.78± 1.50s
   39.686 N ±10.7km   21.541 E ±17.8km
   DEPTH =  10.0km  (geophysicist)
 GREECE                            (364)

AGG     0.90 137 ePg   01 52.02  -0.1
FNA     1.10 353 iPg   01 55.21  -0.3
GRG     1.43  27 ePb   02 00.50  -0.3
                 eSb   02 18.30
OHR     1.53 339 ePg   02 02.50   0.3
                 eSg   02 11.80
KNT     1.80  35 ePb   02 06.50   0.4
                 eSb   02 28.90
    S.D. = 0.5  on   5 of   5 obs.
-------------------------------------
?  NOV  18, 1993  04h 18m 39.27± 3.26s
   38.746 N ±19.1km   26.492 E ±28.1km
   DEPTH =  10.0km  (geophysicist)
 AEGEAN SEA                        (365)
      ML 3.2 (ISK).

IZM     0.70 120 ePg   18 53.00  -0.1
                 eSg   19 03.50
EZN     1.09 353 iPn   18 59.80   0.1
DST     1.87  62 ePn   19 12.00   0.4
EDC     1.92  33 ePn   19 11.80  -0.5
    S.D. = 0.6  on   4 of   4 obs.
-------------------------------------
   NOV  18, 1993  04h 26m 15.57± 0.37s
   47.513 N ± 3.1km    7.184 E ± 3.8km
   DEPTH =  10.0km  (geophysicist)
 SWITZERLAND                       (544)
      ML 2.6 (LDG), 2.2 (STR).

BBS     0.23 102 Pg    26 21.12   0.7
                 Sg    26 24.85
LOMF    0.29 236 Pg    26 20.75  -1.0
                 Sg    26 24.34
MOF     0.34 354 Pg    26 23.41   0.8
                 Sg    26 29.10
CHAF    0.38  39 Pg    26 24.29   0.9
                 Sg    26 31.49
BSF     0.41 320 Pg    26 24.10   0.0
                 Sg    26 30.00
FEL     0.67  57 ePg   26 28.60  -0.3
LIBD    0.70  24 Pg    26 29.81   0.5
                 Sg    26 40.70
ECH     0.70 359 Pg    26 29.54   0.1
                 Sg    26 39.40
HAU     0.75 311 Pg    26 29.50  -0.8
                 Sg    26 40.00
ZLA     0.82  92 iPc   26 31.40  -0.1
CDF     0.90   4 Pg    26 32.00  -0.9
CDF     0.90   4 Pn    26 33.30   0.4
                 Sg    26 44.40
WLS     0.91   7 Pn    26 32.15  -0.8
SLE     0.92  74 eP    26 32.40  -0.8
EMS     1.45 187 ePd   26 41.20  -0.9
MMK     1.56 160 Pd    26 42.70  -0.9
LPL     2.02 189 Pg    26 51.10   0.8
                 Sg    27 16.90
LPG     2.04 189 Pg    26 51.50   0.9
                 Sg    27 16.90
LBF     2.25 258 Pg    26 54.90   1.5
                 Sg    27 22.70
LOR     2.27 265 Pg    26 56.70   3.0X
                 Sg    27 23.20
SMF     2.44 250 Pg    27 00.00   3.9X
                 Sg    27 27.20
SSF     2.54 261 Pg    27 01.10   3.6X
                 Sg    27 30.90
AVF     2.71 256 Pg    27 04.60   4.6X
                 Sg    27 35.70
MAF     3.42 250 Pg    27 16.50   6.5X
                 Sg    27 57.30
TCF     3.62 252 Pg    27 20.80   7.9X
                 Sg    28 04.60
    S.D. = 0.8  on  19 of  25 obs.
-------------------------------------
%  NOV  18, 1993  04h 49m 55.48± 0.68s
   26.449 S ± 6.6km   27.334 E ± 7.2km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)
      ML 2.8 (PRE).

KSR     0.70 326 eP    50 10.00   0.5
                 S     50 19.00
SLR     1.11  50 eP    50 16.40  -0.5
                 S     50 29.80
SEK     1.89 172 eP    50 29.60   0.8
                 S     50 53.00
SWZ     1.94 247 eP    50 29.10  -0.4
                 S     50 53.20
BFT     2.55  73 eP    50 38.50   0.1
                 S     51 08.50
BLF     2.84 201 eP    50 42.00  -0.5
                 S     51 15.50
    S.D. = 0.7  on   6 of   6 obs.
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   NOV  18, 1993  05h 39m 13.82± 0.68s
   42.987 N ± 6.1km   18.773 E ± 4.5km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)

BRY      0.19 243 iPgd  39 17.61  -0.5
                  iSg   39 20.56
NKY      0.24 136 iPgc  39 19.49   0.5
                  iSg   39 23.90
PLE      0.57  53 iPgd  39 24.82  -0.6
                  iSg   39 33.44
HCY      0.58 201 iPgd  39 25.17  -0.3
                  iSg   39 33.96
TTG      0.66 147 iPgc  39 26.23  -0.8
                  iSg   39 37.47
BDV      0.70 177 iPgc  39 27.59  -0.1
                  iSg   39 38.49
IVA      0.83  98 iPgd  39 30.14   0.1
                  iSg   39 42.90
PVY      0.97 113 iPgc  39 32.72   0.4
                  iSg   39 47.50
ULC      1.08 161 iPgc  39 34.67   0.5
                  iSg   39 51.23
HVAR     1.71 277 iPn   39 44.70   0.8
                  iSg   40 09.80
     S.D. = 0.6  on  10 of  10 obs.
-----------------------------------
&  NOV  18, 1993  06h 42m 04.40s
   62.151 N          148.268 W
   DEPTH =  36.1km
 CENTRAL ALASKA                    (  1)
     <AEIC>. ML 2.6 (AEIC).

SML      0.35 185 iP    42 12.53  -0.5
                  eS    42 19.93
GHO      0.49 219 eP    42 14.14  -0.8
                  eS    42 22.85
SCM      0.55 125 iP    42 14.67  -1.1
PLRM     0.69 216 eP    42 16.56  -1.2
                  eS    42 27.58
PMR      0.69 216 eP    42 16.27  -1.5
KNK      0.75 187 iP    42 17.69  -0.8
                  eS    42 28.91
PWA      0.91 237 P     42 20.30  -0.5
CUT      0.97 286 eP    42 20.95  -0.7
TOA      0.99  92 P     42 21.20  -0.8
CFI      1.00 166 eP    42 21.10  -1.0
HUR      1.04 323 eP    42 21.62  -1.1
                  eS    42 35.77
PMS      1.10 215 P     42 23.00  -0.6
RND      1.29 348 eP    42 25.12  -1.2
KLU      1.30 120 eP    42 25.07  -1.3
                  eS    42 42.60
PWL      1.30 181 eP    42 25.49  -0.9
SDG      1.33  72 eP    42 25.93  -0.9
TZL      1.34  93 eP    42 26.65  -0.3
                  eS    42 45.96
SUA      1.36 241 eP    42 27.25  -0.2
                  eS    42 45.88
VLZ      1.38 137 eP    42 25.79  -1.7
                  eS    42 43.22
PAX      1.54  56 eP    42 29.12  -0.8
                  eS    42 48.11
SKT      1.55 265 eP    42 29.12  -0.9
                  eS    42 50.61
TRF      1.60 325 eP    42 29.67  -1.3
MCK      1.62 349 eP    42 30.21  -0.9
FID      1.65 148 eP    42 30.51  -1.0
MPA      1.75 198 eP    42 31.76  -1.1
KNIM     1.83 172 eP    42 33.09  -1.0
KTH      1.86 320 eP    42 33.53  -1.1
SLKM     1.90 211 eP    42 34.53  -0.6
HIN      1.96 153 eP    42 34.90  -1.0
CGLM     1.97 246 eP    42 35.93  -0.2
NCG      1.99 250 eP    42 35.90  -0.6
CVA      2.02 142 eP    42 35.88  -0.8
                  eS    43 03.79
SPU      2.05 243 eP    42 36.65  -0.6
CRP      2.05 246 eP    42 36.74  -0.6
                  eS    43 03.06
CKN      2.08 245 eP    42 37.71   0.0
CP2      2.09 247 eP    42 37.54  -0.4
                  eS    43 06.40
BWN      2.10 346 eP    42 36.46  -1.4
LTI      2.13 174 eP    42 36.49  -1.8
SEW      2.13 196 eP    42 38.16  -0.1
BGL      2.16 247 eP    42 38.65  -0.1
CKL      2.16 246 eP    42 38.33  -0.5
BKG      2.20 242 eP    42 39.03  -0.3
DJE      2.22  31 eP    42 39.50  -0.1
GLB      2.23 107 eP    42 38.84  -1.0
                  eS    43 06.58
WRH      2.33   2 eP    42 39.69  -1.4
HDA      2.34  14 eP    42 40.28  -1.0
RAGM     2.48 134 eP    42 42.21  -1.1
CCB      2.51   5 eP    42 42.19  -1.6
                  eS    43 13.86
IL1      2.70  13 eP    42 44.77  -1.7
ILB      2.70  13 eP    42 44.85  -1.6
REF      2.71 234 eP    42 46.52  -0.2
FBA      2.77   4 eP    42 44.17  -3.2
CNPM     3.01 210 eP    42 49.95  -0.9
BALM     3.04 109 eP    42 49.86  -1.6
BC3      3.13  70 eP    42 51.04  -1.6
CTGM     3.52 107 eP    42 57.75  -0.5
TTA      3.67 286 eP    42 58.14  -2.1
IM3      4.54 330 eP    43 10.21  -2.2
IMA      4.59 331 eP    43 10.86  -2.5
BM3      5.52  15 eP    43 24.39  -1.9
        60 obs. associated
-----------------------------------
   NOV  18, 1993  06h 55m 43.81± 0.51s
   19.688 N ± 5.6km   63.976 W ± 6.5km
   DEPTH =  33.0km  (normal)
   4.2mb (  6 obs.)
 LEEWARD ISLANDS                   ( 92)
     MD 4.8 (TRN). ML 4.7 (FDF).

LPR      2.26 233 P     56 19.00  -0.6
CPD      2.46 229 P     56 23.20   0.6
SJG      2.59 233 P     56 23.90  -0.4
SKI      2.62 153 eP    56 27.00   2.2
                  eS    57 01.50
APR      2.88 245 P     56 27.30  -1.1
CLLP     2.94 237 P     56 28.70  -0.5
PORP     3.00 238 P     56 29.40  -0.7
LRS      3.05 243 P     56 32.50   1.6
BPA      3.31 142 eP    56 32.91  -1.7
                  S     57 13.00
MGP      3.39 241 P     56 34.00  -1.7
PAG      4.24 149 eP    56 48.00   0.1
                  S     57 38.10
DEG      4.36 140 eP    56 47.84  -1.6
MGG      4.52 146 eP    56 51.90   0.1
SLB      6.47 154 eP    57 19.07  -0.3
                  eS    58 35.37
SVV      6.86 157 eP    57 24.67  -0.2
SVB      6.89 157 eP    57 25.17  -0.1
                  eS    58 45.11
GRW      7.81 163 eP    57 39.00   0.9
TRN      9.32 164 eP    58 01.00   2.0
                  eS    59 41.00
TOV     11.33 211 eP    58 29.60   3.0
SDV     12.52 212 eP    58 46.40   3.6X
HBF     19.72 315 eP    00 12.01  -1.5
SGS     19.97 316 eP    00 15.75  -0.4
CEH     20.92 324 eP    00 27.48   1.5
                  S     03 51.24
LHS     20.97 318 eP    00 28.01   1.5
                  eS    03 56.82
JSC     21.13 317 eP    00 29.30   1.2
                  S     03 57.98
PRM     21.73 315 eP    00 34.26   0.0
                  eS    04 05.36
PRM     21.73 315 eP    00 39.25   5.0X
                  S     04 15.44
CVL     22.16 328 (P)   00 42.73   4.3X
NAV     22.89 324 eP    00 47.52   1.8
                  S     04 43.22
LSCT    23.29 342 (P)   00 57.61   8.1X
        0.6s      8.82nm          4.4mb
MYNC    23.49 315 eP    00 52.34   0.8
        0.3s      5.24nm          4.5mb
                  S     04 53.57
MCWV    24.14 329 (P)   01 03.60   5.8X
LBNH    25.37 347 eP    01 28.12  18.6X
YSNY    25.84 335 eP    01 20.52   6.6X
        0.6s      3.44nm          4.1mb
YSNY    25.84 335 (P)   01 11.53  -2.4
        0.6s      3.44nm          4.1mb
RSNY    26.30 343 (P)   01 28.63  10.4X
OXF     26.93 308 (P)   01 20.63  -3.4X
ELC     28.15 314 (P)   01 35.70   0.6
MIAR    30.08 306 (P)   01 52.57   0.1
        1.1s      2.91nm          4.0mb
SIV     35.57 175 P     02 39.20  -1.1
LPAZ    35.98 187 P     02 43.20  -1.3
LPB     36.22 187 P     02 46.00  -0.2
CNCB    36.48 186 P     02 48.20  -0.4
LTX     37.22 293 (P)   02 52.43  -1.8
                  e     03 03.70
YKA     54.96 334 eP    05 08.30  -5.5X
        0.7s      0.70nm          3.8mb
     S.D. = 1.3  on  35 of  45 obs.
-----------------------------------
?  NOV  18, 1993  07h 01m 06.16± 1.28s
   31.374 S ±34.0km   68.477 W ±36.0km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA      (137)

RTLL     0.04   8 iPd   01 20.40  -0.2
                  S     01 31.20
RTCB     0.30 248 ePd   01 21.20   0.1
                  S     01 32.50
CFA      0.31 139 ePc   01 21.20   0.2
                  S     01 32.50
RTCV     0.49 186 eP    01 22.00  -0.1
                  S     01 34.50
     S.D. = 0.3  on   4 of   4 obs.
-----------------------------------
?  NOV  18, 1993  07h 02m 46.30± 1.32s
    2.339 N ±24.2km  125.946 E ±40.1km
   DEPTH = 112.8 ± 20.7 km
   4.7mb (  7 obs.)
 TALAUD ISLANDS, INDONESIA         (263)

TNE      2.06 138 eP    03 19.70  -1.0
CTB      5.13 340 eP    04 03.00   0.9
MTN     15.94 161 eP    06 26.00   0.5
WR2     23.64 160 iPd   07 48.80   0.5
        0.3s     13.40nm          4.8mb
ASPA    26.98 164 eP    08 22.00   2.5
        0.3s      7.40nm          4.7mb
CHTO    31.10 304 eP    08 56.80   0.6
BJI     38.56 348 eP    09 53.50  -6.1X
        1.0s      6.00nm          4.4mb
LZH     39.32 331 eP    10 08.00   1.9
        2.0s     24.00nm          4.7mb
SHL     40.09 308 iP    10 12.00  -0.7
ARMA    40.76 145 eP    10 16.00  -2.0
        0.7s      8.00nm          4.6mb
GUN     45.93 308 P     10 59.80  -0.3
        0.6s     23.00nm          5.1mb
PKI     46.15 307 P     11 01.00  -0.8
KKN     46.35 307 P     11 02.60  -0.6
        0.6s     11.00nm          4.8mb
DMN     46.41 307 P     11 03.40  -0.4
GKN     46.95 307 P     11 07.00  -1.0
GBA     49.22 286 P     11 30.00   4.5X
     S.D. = 1.4  on  14 of  16 obs.
-----------------------------------
*  NOV  18, 1993  07h 13m 55.04± 1.21s
   31.659 S ±12.7km   68.880 W ±23.9km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA      (137)

RTCB     0.19  22 ePd   14 09.70  -0.1
                  S     14 20.60
ZON      0.21  57 eP    14 09.50  -0.3
                  eS    14 19.50
RTCV     0.35 125 iPd   14 11.00   0.8
                  S     14 23.00
RTLL     0.48  47 iPd   14 11.00   0.0
                  S     14 22.00
CFA      0.55  85 iPc   14 12.00   0.5
                  S     14 20.40
RTPR     2.44  57 eP    14 33.40  -0.6
RFA      3.12 174 ePd   14 42.80  -0.5
     S.D. = 0.6  on   7 of   7 obs.
-----------------------------------
&  NOV  18, 1993  07h 20m 36.41s
   66.565 N          148.081 W
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ALASKA                   (676)
     <AEIC>. ML 2.7 (AEIC).

FYU      1.14  89 eP    20 57.77   0.1
                  eS    21 12.61
BM3      1.61  56 eP    21 04.50  -0.5
                  eS    21 25.56
MDM      1.61 182 eP    21 04.26  -0.8
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18d 07h

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                  eS    21 25.86
FBA      1.68 176 eP    21 04.82   -1.1
IL1      1.87 164 eP    21 08.53   -0.2
ILB      1.87 164 eP    21 09.20    0.5
                  eS    21 30.92
CCB      1.93 176 eP    21 08.92   -0.7
WRH      2.10 180 eP    21 11.60   -0.5
HDA      2.22 167 eP    21 13.04   -0.8
IMA      2.31 260 eP    21 15.31    0.0
IM3      2.37 258 eP    21 16.09    0.2
                  eS    21 46.15
BC3      4.42 140 eP    21 42.43   -2.7
       12 obs. associated
-----------------------------------------
&  NOV  18, 1993  07h 35m 01.13s
   62.009 N          149.357 W
   DEPTH =  36.7km
 CENTRAL ALASKA                        (  1)
      <AEIC>. ML 2.6 (AEIC), 3.3
      (PMR).

GHO      0.31 139 iP    35 09.15   -0.3
                  eS    35 15.91
PLRM     0.43 165 eP    35 09.92   -0.9
                  eS    35 17.73
PMR      0.43 165 eP    35 09.74   -1.1
                  eS    35 17.50
PWA      0.44 215 P     35 10.60   -0.3
SML      0.52 112 eP    35 11.19   -1.0
CUT      0.58 313 iP    35 12.08   -0.8
KNK      0.74 144 iP    35 14.27   -0.9
                  eS    35 24.89
PMS      0.77 187 P     35 14.80   -0.9
SUA      0.86 231 eP    35 16.18   -0.7
                  eS    35 28.52
SCM      0.98 100 iP    35 17.52   -1.1
HUR      0.98 353 eP    35 17.62   -1.0
                  eS    35 31.07
SKT      1.03 269 eP    35 17.75   -1.5
                  eS    35 31.94
CFI      1.13 137 eP    35 19.95   -0.6
PWL      1.25 156 eP    35 21.74   -0.7
                  eS    35 39.52
RND      1.42   9 eP    35 23.84   -1.1
CGLM     1.45 242 eP    35 24.97   -0.3
NCG      1.47 247 eP    35 24.81   -0.8
TOA      1.50  85 P     35 26.10    0.0
TRF      1.51 344 eP    35 25.26   -1.0
MPA      1.53 180 eP    35 25.28   -1.1
CRP      1.53 242 eP    35 26.26   -0.3
SPU      1.53 238 eP    35 26.34   -0.2
CKN      1.56 241 eP    35 27.55    0.6
SLKM     1.56 196 eP    35 26.38   -0.6
                  eS    35 47.84
CP2      1.57 243 eP    35 27.13   -0.1
                  eS    35 48.58
CKT      1.59 240 eP    35 27.40    0.0
BGL      1.63 244 eP    35 28.21    0.2
CKL      1.64 242 eP    35 27.91   -0.3
VZW      1.65 124 eP    35 27.20   -1.0
BKG      1.68 237 eP    35 28.58   -0.2
VLZ      1.69 120 eP    35 27.50   -1.3
                  eS    35 49.69
KTH      1.71 336 eP    35 28.10   -1.0
KLU      1.72 106 eP    35 28.25   -1.0
                  eS    35 50.16
MCK      1.74   6 eP    35 28.55   -1.0
KNIM     1.84 154 eP    35 29.25   -1.7
                  eS    35 52.34
TZL      1.85  87 eP    35 31.47    0.4
SDG      1.86  72 eP    35 31.09   -0.1
FID      1.88 131 eP    35 30.58   -0.8
                  eS    35 53.00
SEW      1.91 181 eP    35 30.95   -0.9
PAX      2.05  60 eP    35 33.97    0.1
LTI      2.11 159 eP    35 32.94   -1.7
DFR      2.15 230 eP    35 35.83    0.5
CVA      2.28 129 eP    35 36.29   -0.8
WRH      2.54  12 eP    35 39.89   -0.9
NEA      2.58   3 eP    35 39.44   -2.0
DJE      2.63  38 eP    35 42.81    0.7
HDA      2.64  23 eP    35 41.51   -0.8
GLB      2.70 100 eP    35 41.96   -1.2
CCB      2.74  14 eP    35 41.94   -1.7
FBA      2.99  13 eP    35 45.12   -2.1
                  eS    36 19.46
ILB      2.99  21 eP    35 45.25   -2.0
                  eS    36 20.37
SVW      3.13 256 e(P)  35 47.80   -1.5
                  eS    36 47.00
TTA      3.23 290 eP    35 50.75    0.1
BALM     3.50 103 eP    35 52.54   -2.0
BC3      3.66  70 eP    35 57.62    0.7
IM3      4.43 336 eP    36 05.23   -2.5
IMA      4.50 337 eP    36 06.10   -2.6
BM3      5.80  18 eP    36 24.01   -3.0
       58 obs. associated
-----------------------------------------
?  NOV  18, 1993  08h 59m 19.56± 3.42s
   11.964 N ±28.6km   89.392 W ±31.0km
   DEPTH =  33.0km  (normal)
   4.2mb (  1 obs.)
 OFF COAST OF CENTRAL AMERICA      ( 76)
      Felt (II) at San Salvador, El
      Salvador.

SJAS     1.71   7 iPd   59 47.90    0.4
LFU      1.79   9 iP    59 49.40    0.6
CUSS     2.01 344 iP    59 51.90    0.0
TME      2.04   1 iPc   59 51.60   -0.7
YPE      2.16 353 iP    59 53.60   -0.5
LTX     21.80 325 eP    04 11.48    0.6
YKA     53.60 346 eP    08 38.90   -0.6
         1.0s     2.70nm          4.2mb
      S.D. = 0.7  on   7 of   7 obs.
-----------------------------------------
?  NOV  18, 1993  10h 08m 59.73± 1.00s
   39.062 N ± 8.5km   27.685 E ±10.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                                (366)
      ML 2.7 (ISK).

IZM      0.74 207 ePg   09 14.20   -0.1
                  eSg   09 26.20
DST      0.91  53 ePn   09 17.40    0.2
EDC      1.29   6 ePn   09 23.30   -0.3
EZN      1.30 306 ePn   09 24.00    0.2
      S.D. = 0.5  on   4 of   4 obs.
-----------------------------------------
   NOV  18, 1993  10h 23m 25.39± 0.72s
   42.995 N ± 6.4km   18.767 E ± 4.8km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)

BRY      0.19 240 iPgd  23 29.14   -0.5
                  iSg   23 32.10
NKY      0.25 137 iPgc  23 30.96    0.2
                  iSg   23 35.70
PLE      0.57  54 iPgd  23 36.30   -0.7
                  iSg   23 45.14
HCY      0.58 200 iPgd  23 36.80   -0.4
                  iSg   23 45.75
TTG      0.67 147 iPgc  23 37.77   -0.9
                  iSg   23 49.10
BDV      0.71 176 iPgd  23 39.28   -0.2
                  iSg   23 50.63
IVA      0.84  98 iPgd  23 41.87    0.2
                  iSg   23 55.13
PVY      0.97 114 iPgc  23 44.55    0.6
                  iSg   23 59.66
ULC      1.09 161 iPgc  23 46.77    0.9
                  iSg   24 03.51
HVAR     1.71 277 iPnc  23 56.20    0.8
                  iSg   24 20.20
OHR      2.42 141 e(Pn) 24 12.00    6.4X
      S.D. = 0.7  on  10 of  11 obs.
-----------------------------------------
   NOV  18, 1993  10h 26m 07.96± 1.22s
   43.076 N ± 8.3km   18.732 E ± 7.2km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)

BRY      0.22 218 iPgd  26 13.07    0.2
                  iSg   26 16.37
NKY      0.33 143 iPgd  26 14.89    0.1
                  iSg   26 19.79
PLE      0.55  62 iPgd  26 19.02    0.0
                  iSg   26 27.13
HCY      0.65 195 iPgc  26 20.70   -0.2
                  iSg   26 30.26
TTG      0.75 149 iPgd  26 22.02   -0.7
                  iSg   26 33.75
BDV      0.79 175 iPgc  26 23.35   -0.1
                  iSg   26 34.99
IVA      0.88 103 iPgc  26 25.02    0.1
                  iSg   26 38.05
PVY      1.03 117 iPgd  26 27.84    0.3
                  iSg   26 42.98
ULC      1.18 161 iPgd  26 30.35    0.4
                  iSg   26 47.76
HVAR     1.67 274 i(Pn) 26 42.20    4.8X
                  iSg   27 06.00
      S.D. = 0.4  on   9 of  10 obs.
-----------------------------------------
*  NOV  18, 1993  11h 38m 00.49± 0.75s
   6.546 S ± 9.4km  152.804 E ±13.9km
   DEPTH =  33.0km  (normal)
   5.0mb (  6 obs.)
 NEW BRITAIN REGION, P.N.G.        (192)

RAB      2.42 345 eP    38 40.00    1.3
PMG      6.27 243 eP    39 36.00    2.8
DZM     20.29 141 iPc   42 37.10    0.6
BRS     20.73 180 iPc   42 41.00    0.1
WR2     22.32 232 eP    42 55.50   -1.4
         0.7s     3.30nm          3.9mb X
ASPA    24.90 225 eP    43 21.40   -0.6
         0.7s     9.70nm          4.5mb
SHL     67.20 301 iP    48 53.50   -0.7
GUN     73.03 302 P     49 29.20   -0.7
         0.8s    15.00nm          5.0mb
PKI     73.33 301 P     49 31.20   -0.4
KKN     73.50 301 P     49 31.60   -0.9
         1.0s    14.00nm          4.9mb
DMN     73.60 301 P     49 32.60   -0.5
         1.0s    28.00nm          5.2mb
GKN     74.11 301 P     49 35.20   -0.7
         1.0s    70.00nm          5.6mb
FBA     83.49  22 eP    50 27.00    1.0
         1.1s    12.50nm          5.0mb
      S.D. = 1.3  on  13 of  13 obs.
-----------------------------------------
?  NOV  18, 1993  11h 56m 43.70± 2.02s
   39.206 N ±20.1km   29.070 E ±13.2km
   DEPTH =   5.0km  (geophysicist)
 TURKEY                                (366)
      ML 2.8 (ISK).

DST      0.53 320 ePg   56 53.40   -0.8
                  eSg   57 01.90
ALT      0.82 100 ePg   57 00.00   -0.2
                  eSg   57 11.40
IZI      1.17  15 iPg   57 06.20    0.1
                  iSg   57 20.70
EDC      1.47 321 ePn   57 11.80    0.9
      S.D. = 1.3  on   4 of   4 obs.
-----------------------------------------
*  NOV  18, 1993  12h 00m 40.36± 3.37s
   30.637 S ±18.5km   72.131 W ±27.8km
   DEPTH =  80.0km  (geophysicist)
 OFF COAST OF CENTRAL CHILE        (134)

RTRS     2.35  79 eP    01 20.00    2.4
                  S     01 45.00
JACH     2.42 148 eP    01 18.03   -0.7
                  iS    01 42.95
ROCH     2.52 158 eP    01 19.85   -0.3
LCCH     2.87 171 iP+   01 25.40    0.6
ZON      3.10 108 eP    01 27.80   -0.2
FCH      3.11 150 iP    01 28.24   -0.1
                  iS    01 59.59
TACH     3.17 162 iPd   01 29.29    0.3
PCH      3.28 156 iP+   01 29.79   -0.7
RTCV     3.31 113 eP    01 31.00    0.0
LNV      3.36 170 iP+   01 31.38   -0.2
MDZ      3.58 130 iP    01 35.90    1.2
                  i     01 56.80
CACH     3.70 160 eP    01 36.87    0.4
RTPR     4.86  87 eP    01 51.00   -1.5
CYA      5.94  70 ePc   02 06.60   -1.0
                  (S)   03 08.50
      S.D. = 1.1  on  14 of  14 obs.
-----------------------------------------
   NOV  18, 1993  12h 08m 28.45± 0.66s
   43.009 N ± 5.2km   18.788 E ± 4.2km
   DEPTH =   5.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)

BRY      0.21 239 iPgd  08 32.50   -0.3
                  iSg   08 35.53
NKY      0.25 142 iPgd  08 34.46    0.9
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                iSg   08 38.69
PLE     0.55  54 iPgc  08 39.04  -0.4
                iSg   08 47.12
HCY     0.60 201 iPgc  08 40.18  -0.3
                iSg   08 49.68
TTG     0.68 149 iPgd  08 41.36  -0.6
                iSg   08 52.81
BDV     0.73 178 iPgc  08 42.78  -0.2
                iSg   08 54.21
IVA     0.83  99 iPgc  08 44.87  -0.1
                iSg   08 57.56
PVY     0.97 115 iPgd  08 47.53   0.2
                iSg   09 02.48
ULC     1.10 162 iPgc  08 49.87   0.3
                iSg   09 07.21
HVAR    1.72 276 iPn   08 59.60   0.4
                iSg   09 24.10
     S.D. = 0.5  on  10 of  10 obs.
-----------------------------------
   NOV  18, 1993  12h 24m 57.05± 0.47s
   49.171 N ± 3.8km    6.925 E ± 5.7km
   DEPTH =  10.0km  (geophysicist)
 GERMANY                          (543)
      ML 3.1 (STR), 2.8 (BNS), 2.6
      (UCC).

RUP     0.54   9 ePg   25 07.60  -0.4
LANF    0.61 108 Pg    25 08.95  -0.4
WLF     0.71 315 iPd   25 10.24  -0.7
                iS    25 19.79
HOFF    0.72 108 Pg    25 11.05  -0.2
CDF     0.79 163 Pg    25 11.68  -0.9
                Sg    25 22.95
WLS     0.81 159 Pg    25 11.82  -1.0
                Sg    25 23.36
ABH     0.82  29 ePg   25 12.20  -0.7
ECH     0.97 171 Pg    25 15.64   0.2
                Sg    25 28.57
MOF     1.33 174 Pg    25 21.55  -0.1
                Sg    25 38.98
TNS     1.45  43 ePnc  25 24.50   1.2
                e     25 42.10
                eSn   25 44.20
FEL     1.48 150 Pg    25 24.68   0.8
MEM     1.56 338 iPc   25 25.58   0.8
                iS    25 44.13
ENN     1.72 338 iPnc  25 26.60  -0.6
      0.5s     5.60nm
                iPgc  25 29.00
                eSg   25 52.00
DOU     1.78 302 P     25 26.80  -1.2
BNS     1.80   5 ePn   25 30.40   2.0
      0.5s    84.00nm
                i(Sn) 25 50.70
                iSg   25 53.30
LOMF    1.82 182 Pg    25 30.88   2.1
KHC     4.37  88 ePn   26 04.50  -0.5
                ePg   26 17.50
                e     26 57.00
                eSg   27 18.00
GEC2    4.47  92 Pn    26 06.00  -0.5
                Sg    27 20.20
PRU     5.02  78 Pg    26 46.00  31.8X
                Sg    27 35.30
     S.D. = 1.1  on  18 of  19 obs.
-----------------------------------
% NOV  18, 1993  12h 56m 18.52± 1.04s
   31.829 S ± 9.4km   69.047 W ±20.1km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTCB    0.40  32 ePd   56 34.30   0.3
                S     56 45.70
RTCV    0.43  94 iPd   56 34.90   0.8
                S     56 47.00
RTLL    0.70  45 iPd   56 35.70  -0.5
                S     56 47.70
CFA     0.72  72 eP    56 36.20  -0.2
                S     56 50.00
RTRS    1.69 348 eP    56 47.50   0.0
                S     57 10.00
RFA     2.97 171 ePc   57 04.50  -0.3
     S.D. = 0.6  on   6 of   6 obs.
-----------------------------------
   NOV  18, 1993  13h 07m 48.66± 0.38s
    2.376 N ± 6.1km  126.584 E ±11.2km
   DEPTH =  33.0km  (normal)
   4.9mb ( 19 obs.)  4.2Msz (  1 obs.)
 NORTHERN MOLUCCA SEA             (266)

TNE     1.74 154 iPc   08 19.80   2.9
                iS    08 22.50
KKM    10.96 290 eP    10 37.00  10.5X
MTN    15.78 163 eP    11 29.50  -0.7
       0.6s    77.00nm          5.0mb
KNA    18.14 173 eP    11 59.60  -0.2
       0.9s   107.00nm          5.0mb
WR2    23.46 161 eP    12 53.60  -2.7X
       0.5s    55.90nm          5.3mb
                i     12 56.10
                eS    17 07.40
MBL    24.31 195 eP    13 04.50   0.1
       0.5s     4.00nm          4.2mb
ASPA   26.85 165 iPc   13 26.70  -1.6
       0.7s    15.60nm          4.7mb
                eS    18 06.80
CTA    29.51 140 iPc   13 52.50   0.1
CHTO   31.61 303 ePd   14 11.60   0.6
       0.9s    13.00nm          4.8mb
FORT   33.00 178 eP    14 22.50  -0.4
       0.8s    76.00nm          5.6mb
MRWA   33.01 197 eP    14 23.20   0.2
       0.8s    14.00nm          4.9mb
BAL    34.12 195 eP    14 33.50   0.8
KLB    34.81 193 eP    14 38.50   0.0
XAN    35.56 334 P     14 44.00  -1.0
       0.8s    11.00nm          4.8mb
                pP    14 50.00  20kmX
CD2    35.65 325 eP    14 45.60  -0.2
STK    36.93 158 iPc   14 49.10  -7.4X
       0.6s    16.00nm          5.1mb
TIY    37.49 341 eP    15 00.60  -0.6
     Z  24s     0.68um          4.4MszX
BJI    38.66 347 eP    15 11.50   0.6
       1.0s     8.00nm          4.5mb
                sP    15 26.50
BRS    38.89 141 iP    15 11.00  -2.1
       1.0s     6.00nm          4.3mb
LZH    39.60 331 eP    15 19.50   0.5
       1.5s    32.00nm          4.9mb
     Z  20s     0.35um          4.2Msz
ARMA   40.43 146 iPd   15 25.60  -0.3
       0.5s    17.00nm          5.0mb
SHL    40.57 308 iP    15 27.50   0.3
HHC    40.63 342 P     15 28.00   0.6
       1.0s    10.00nm          4.5mb
CN2    41.26 359 eP    15 31.50  -0.8
GUN    46.41 307 P     16 13.80  -0.8
       0.6s    30.00nm          5.4mb
PKI    46.64 307 P     16 17.40   1.0
KKN    46.84 307 P     16 17.80   0.0
       0.6s    13.00nm          5.1mb
DMN    46.90 306 P     16 18.60   0.2
       0.6s     9.00nm          4.9mb
GKN    47.44 307 P     16 22.00  -0.6
GBA    49.83 286 P     16 41.00   0.1
WMQ    53.75 326 P     17 09.50  -0.6
IMA    83.67  24 eP    20 17.40   2.1
       1.0s     6.00nm          4.7mb
     S.D. = 1.0  on  29 of  32 obs.
-----------------------------------
   NOV  18, 1993  13h 39m 23.37± 0.62s
   43.015 N ± 4.9km   18.824 E ± 4.0km
   DEPTH =   5.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION       (383)

BRY     0.23 241 iPgd  39 27.85  -0.3
                iSg   39 31.01
NKY     0.24 147 iPgc  39 28.75   0.5
                iSg   39 33.25
PLE     0.52  53 iPgc  39 33.66  -0.2
                iSg   39 41.32
HCY     0.62 203 iPgd  39 35.46  -0.2
                iSg   39 44.46
TTG     0.67 151 iPgc  39 36.54  -0.2
                iSg   39 47.31
BDV     0.73 180 iPgc  39 37.81  -0.2
                iSg   39 49.20
IVA     0.80 100 iPgd  39 39.28  -0.2
                iSg   39 51.42
PVY     0.94 116 iPgd  39 41.98   0.1
                iSg   39 56.64
ULC     1.10 163 iPgc  39 44.69   0.2
                iSg   40 01.42
HVAR    1.75 276 iPn   39 55.00   0.5
                iSg   40 21.60
     S.D. = 0.3  on  10 of  10 obs.
-----------------------------------
* NOV  18, 1993  14h 01m 31.93± 0.83s
   18.366 N ±11.6km   76.882 E ± 7.0km
   DEPTH =  33.0km  (normal)
 SOUTHERN INDIA                   (314)

HYB     1.85 120 ePn   02 02.00   0.1
                iPg   02 04.00
                iSn   02 24.50
                iSg   02 29.00
POO     2.88 274 iPd   02 16.00  -0.6
      0.9s    50.42nm
                iS    02 49.00
BOM     3.89 278 iP    02 31.50   0.6
                iS    03 16.50
GBA     4.76 173 P     02 33.00 -10.3X
KOD     8.10 176 eP    03 21.00  -9.6X
                eSn   04 42.60
GKN    11.95  35 P     04 23.40   0.3
KKN    12.15  38 P     04 26.20   0.3
GUN    12.59  39 P     04 31.20  -0.7
     S.D. = 0.7  on   6 of   8 obs.
-----------------------------------
* NOV  18, 1993  14h 21m 24.47± 0.52s
   27.903 S ± 5.1km   26.666 E ± 6.6km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA         (584)
      ML 3.5 (PRE).

SEK     0.94 117 eP    21 42.00  -1.1
                S     21 51.00
BFS     1.01   6 iPc   21 43.90  -0.2
                S     21 55.20
BLF     1.27 199 eP    21 49.10   0.4
                S     22 06.70
SWZ     1.39 301 eP    21 51.60   0.9
                S     22 10.00
KSR     2.04   6 eP    22 01.00   1.0
                S     22 26.00
FRS     2.19 212 eP    22 03.50   1.5
                S     22 30.00
SLR     2.60  34 eP    22 08.00   0.0
                S     22 39.00
HVD     2.88 201 eP    22 13.00   1.0
                S     22 46.50
BFT     3.74  55 eP    22 24.00  -0.3
                S     23 05.00
PKA     3.86 242 eP    22 26.30   0.4
                S     23 10.00
GRM     5.39 181 eP    22 47.00  -0.6
                S     23 44.00
POF     6.08 254 e(P)  22 57.00  -0.2
                S     23 59.00
SUR     6.75 227 eP    23 06.00  -0.9
                S     24 19.50
BUL     7.93  13 iPn   23 18.70  -4.6X
                iSn   24 44.50
                iSg   25 26.20
CER     8.36 228 eP    23 26.00  -3.3X
                S     24 52.00
WIN    10.16 299 eP    23 52.10  -2.1
                S     25 39.00
KRI    11.35  14 iPn   24 12.50   1.9
                iSn   26 13.50
                iSg   27 17.10
TIC    46.00 314 P     29 49.00  -1.8
     S.D. = 1.2  on  16 of  18 obs.
-----------------------------------
? NOV  18, 1993  14h 33m 35.24± 4.31s
   31.787 S ±15.5km   72.598 W ±36.7km
   DEPTH =  33.0km  (normal)
 OFF COAST OF CENTRAL CHILE       (134)
      MD 4.0 (SAN).

ROCH    1.79 132 iP+   34 03.62  -0.9
                iS    34 23.58
LCCH    1.89 153 iPd   34 06.25   0.4
JACH    1.92 118 iP+   34 05.12  -1.2
                iS    34 25.48
PEL     2.11 130 iPd   34 08.32  -0.6
                iS    34 32.30
TACH    2.33 143 iPd   34 12.50   0.5
LNV     2.38 156 eP    34 12.65  -0.1
FCH     2.48 129 iPd   34 13.60  -0.9
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18d 14h

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PCH      2.54 137 eP    34 15.12   0.0
                iS    34 46.09
CACH     2.87 145 iPd   34 20.74   1.0
RTCB     3.25  86 ePc   34 26.50   1.3
                S     35 05.00
ZON      3.35  87 eP    34 29.20   2.6X
MDZ      3.36 110 eP    34 31.20   4.5X
                iS    35 10.40
RTLL     3.55  84 e(P)  34 31.00   1.5
CFA      3.72  88 iPc   34 34.80   3.0X
RFA      4.56 132 ePd   34 44.40   0.6
CYA      6.77  62 e(P)  35 13.50  -1.4
     S.D. = 1.0  on  13 of  16 obs.
-------------------------------------
   NOV  18, 1993  14h 55m 13.84± 0.28s
    6.752 N ± 4.9km   74.632 W ± 4.9km
   DEPTH =  90.1km  (  3 depth phases)
   4.7mb ( 27 obs.)
 NORTHERN COLOMBIA                ( 99)

FUQ      1.55 145 iPc   55 40.50  -0.5
BMG      1.58  78 iPc   55 41.00  -0.1
BOG      2.19 165 iPc   55 50.00   0.5
                iS    56 19.50
SDV      4.49  62 iPnc  56 21.60   0.5
                iSn   57 11.50
UPA      5.34 295 eP    56 36.56   3.9X
                eS    57 34.34
ECO      5.64 298 eP    56 34.47  -2.5
                eS    57 32.36
TOV      5.66  57 ePnc  56 36.20  -1.0
                ePP   56 36.60
                eSn   57 40.20
PSO      6.14 206 eP    56 42.00  -2.1
CEOS     6.64  70 iPd   56 48.90  -1.8
                iS    58 01.30
CANV     7.14  53 eP    56 56.70  -0.9
                iS    58 14.60
MORO     7.46  56 eP    57 00.30  -1.8
                eS    58 16.50
GUAC     8.04  64 iPd   57 08.60  -1.5
                iS    58 36.10
OLLA     8.40  67 iPd   57 13.00  -1.9
                iS    58 45.00
LPAZ    23.78 164 eP    00 19.12  -0.8
LPB     24.02 164 P     00 22.00  -0.1
                e     07 17.00
CNCB    24.32 164 iPc   00 25.90   0.8
                i     07 26.50
CCH     25.41 161 P     00 36.50   1.4
SIV     26.28 149 P     00 40.70  -2.1
LTX     35.40 313 ePc   02 01.74  -1.4
                epP   02 22.95  89km
WMOK    35.65 325 ePc   02 03.31  -1.8
        0.7s     7.50nm          4.7mb
SOB1    37.17 115 eP    02 17.10  -1.0
TUC     42.17 312 eP    03 00.56   1.2
        0.8s     4.86nm          4.4mb
                ipP   03 21.93  89km
GOL     42.87 325 eP    03 05.09  -0.1
        1.0s    15.54nm          4.8mb
DAU     46.84 321 eP    03 36.46  -0.5
ULM     46.86 341 eP    03 38.00   1.5
DUG     47.70 320 eP    03 42.64  -0.8
        0.7s     4.93nm          4.5mb
GSC     47.99 312 ePd   03 45.44  -0.3
NEW     54.81 326 eP    04 34.48  -2.3
YKA     62.82 340 P     05 30.40  -1.5
        0.6s    19.00nm          5.3mb
RES     68.89 354 eP    06 10.00  -0.4
LIC     69.10  86 P     06 11.00  -1.8
        0.5s     2.50nm          4.4mb
PAB     70.54  51 eP    06 22.00   0.7
INK     72.59 341 eP    06 32.50  -0.3
        0.6s     4.00nm          4.5mb
MBC     73.60 350 eP    06 39.50   0.9
        0.6s     5.00nm          4.6mb
GRR     74.21  42 eP    06 43.00   0.4
        1.0s    17.80nm          4.9mb
EPF     74.44  47 eP    06 45.10   1.0
        0.9s     9.00nm          4.6mb
MFF     74.47  44 eP    06 44.10  -0.1
        1.0s    16.00nm          4.8mb
FLN     74.51  41 eP    06 45.00   0.7
        0.9s    12.60nm          4.8mb
LDF     74.73  42 eP    06 45.90   0.3
LFF     74.91  45 eP    06 47.40   0.7
LPO     75.20  46 eP    06 49.00   0.6
        1.1s    16.10nm          4.8mb
RJF     75.49  45 eP    06 50.40   0.4
        0.6s     4.35nm          4.5mb
LSF     75.59  44 eP    06 50.90   0.3
CAF     75.85  45 eP    06 52.60   0.5
        1.0s    10.40nm          4.7mb
TCF     76.06  44 eP    06 53.50   0.2
MAF     76.30  44 eP    06 54.30  -0.3
        1.4s    21.80nm          4.8mb
BGF     76.52  44 eP    06 56.10   0.3
        0.9s    11.30nm          4.7mb
AVF     76.88  44 eP    06 57.90   0.1
SSF     77.01  43 eP    06 58.60   0.1
        1.0s     6.60nm          4.5mb
SMF     77.21  44 eP    07 00.00   0.4
        0.8s     6.45nm          4.5mb
LOR     77.26  43 eP    07 00.00   0.1
        0.9s     9.65nm          4.7mb
LBF     77.33  43 eP    07 00.30   0.0
        0.8s     4.15nm          4.4mb
LPL     79.17  45 eP    07 12.00   1.3
        1.0s    10.40nm          4.7mb
LPG     79.18  45 eP    07 12.30   1.5
BSF     79.28  43 eP    07 11.20   0.2
CDF     79.62  42 eP    07 13.20   0.4
        1.3s    16.95nm          4.8mb
NB2     82.12  29 P     07 27.50   1.8
        1.1s    12.90nm          4.7mb
HFS     83.36  30 eP    07 32.30   0.3
        0.4s     2.80nm          4.6mb
KHC     83.78  41 eP    07 36.00   1.6
                e     08 00.50  92km
GEC2    83.87  42 ePc   07 36.30   1.3
        0.6s     1.46nm          4.1mb
                e     07 38.50  7kmX
                e     07 53.90
                e     07 59.90
                e     08 14.60
SDF     88.03  22 iP    07 56.20   1.3
KAF     89.17  27 iP    08 01.10   0.7
        0.6s     4.90nm          4.9mb
GKN    140.07  29 PKP   14 35.40   0.9
KKN    140.55  29 PKP   14 36.40   0.9
SHL    145.30  22 iPKP  14 43.50  -0.2
GBA    145.68  54 PKP   14 46.00   1.7
ASPA   147.85 235 iPKPc 14 49.50   1.8
        0.8s     8.70nm
                i     15 09.00
WR2    148.96 242 ePKP  14 49.40  -0.1
        0.6s    11.30nm
                e     15 07.80
WRA    148.98 242 PKP   14 50.00   0.5
        0.7s     3.80nm
     S.D. = 1.1  on  68 of  69 obs.
-------------------------------------
?  NOV  18, 1993  15h 32m 13.36± 5.35s
   15.815 N ±51.6km   98.789 W ±13.9km
   DEPTH =  33.0km  (normal)
 OFF COAST OF GUERRERO, MEXICO    ( 65)

ACX      1.47 316 iP    32 36.81  -1.0
                iS    32 56.14
OXX      2.35  57 iP    32 50.74   0.1
                iS    33 21.17
III      2.63 346 iP    32 53.70  -0.9
                iS    33 31.14
PPM      3.24   3 iP    33 06.50   3.0X
IIA      3.32   2 (P)   33 07.85   3.7X
IISM     3.43  23 (P)   33 05.70  -0.1
                (S)   33 49.70
UNM      3.52 354 (P)   33 14.70   7.4X
MRX      4.50 330 iP    33 22.79   1.9
                (S)   34 25.53
     S.D. = 1.6  on   5 of   8 obs.
-------------------------------------
*  NOV  18, 1993  15h 46m 24.56± 0.93s
   47.396 N ±11.1km   12.706 E ± 6.7km
   DEPTH =  10.0km  (geophysicist)
 AUSTRIA                          (546)
      ML 1.8 (VIE).

KBA      0.54 126 iPgc  46 35.80   0.3
                iSg   46 43.60
WTTA     0.74 260 iPgc  46 38.40  -0.8
                iSg   46 47.30
SCE      0.77 243 iPgc  46 38.80  -0.9
WATA     0.77 266 iPgd  46 39.70   0.0
                iSg   46 50.10
SQTA     1.03 261 i(Pg) 46 47.60   3.4X
                iSg   47 02.60
MOTA     1.09 268 iPgd  46 46.90   1.7
                iSg   47 02.40
KHC      1.83  18 ePn   46 56.00  -0.3
                Pg    46 58.40
                e     47 19.00
                eSg   47 22.50
     S.D. = 1.2  on   6 of   7 obs.
-------------------------------------
&  NOV  18, 1993  15h 58m 42.05s
   65.998 N          148.390 W
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ALASKA                  (676)
      <AEIC>. ML 2.6 (AEIC).

MDM      1.05 176 eP    59 01.55  -0.3
                eS    59 16.07
FBA      1.13 167 eP    59 02.60  -0.6
                eS    59 17.44
CCB      1.38 169 eP    59 06.20  -1.1
MLY      1.38 226 eP    59 06.71  -0.6
                eS    59 24.89
IL1      1.38 152 eP    59 07.13  -0.2
                eS    59 24.26
ILB      1.38 152 eP    59 07.14  -0.2
                eS    59 24.15
FYU      1.40  64 eP    59 05.05  -2.5
                eS    59 22.39
NEA      1.46 192 eP    59 07.59  -0.8
WRH      1.54 175 eP    59 08.87  -0.7
HDA      1.71 159 eP    59 11.11  -0.9
BWN      1.89 194 eP    59 13.97  -0.7
BM3      2.07  45 eP    59 14.08  -3.3
IMA      2.16 274 eP    59 18.75   0.0
IM3      2.19 272 eP    59 18.31  -0.7
DJE      2.29 149 P     59 21.10   0.7
KLU      4.65 165 (P)   59 57.31   3.2
BALM     5.67 149 (P)   00 14.12   5.7
       17 obs. associated
-------------------------------------
%  NOV  18, 1993  16h 42m 13.82± 0.41s
   38.808 S ± 5.5km  175.865 E ± 6.2km
   DEPTH = 120.0km  (geophysicist)
 NORTH ISLAND, NEW ZEALAND        (159)

MGZ      0.32 233 P     42 32.20   1.3
                eS    42 45.30
NGZ      0.42 209 P     42 32.60   0.9
CNZ      0.46 212 P     42 32.70   0.8
DRZ      0.52 207 P     42 33.70   1.2
PATZ     0.53  36 P     42 32.30   0.0
UTU      0.68  22 P     42 33.20  -0.1
TAZ      0.76  41 P     42 33.80  -0.1
MOZ      0.88 290 P     42 35.50   0.5
                eS    42 51.60
PAHZ     0.93  93 P     42 36.00   0.5
WAHZ     0.97 157 Pc    42 37.10   1.2
TTH      1.05 135 P     42 38.20   1.6
URZ      1.12  61 Pd    42 36.40  -0.9
                S     42 52.60
BSZ      1.23 216 P     42 39.90   1.4
TEHZ     1.39 148 P     42 41.30   1.0
NOZ      1.71  84 P     42 43.90  -0.2
MNG      1.83 189 Pc    42 46.00   0.4
                S     43 08.60
PGZ      1.84 170 Pd    42 46.10   0.5
PUZ      2.02  69 P     42 46.90  -1.1
KIW      2.18 199 Pc    42 49.70  -0.3
HBZ      2.27  59 P     42 50.00  -1.1
MTW      2.36 187 Pc    42 51.70  -0.7
CAW      2.38 195 P     42 52.00  -0.6
DIW      2.49 216 P     42 53.50  -0.6
AMW      2.50 182 P     42 53.50  -0.6
BLW      2.57 187 P     42 54.20  -0.9
MRW      2.58 200 P     42 54.30  -0.9
                S     43 26.00
WEL      2.61 198 P     42 54.70  -0.9
                S     43 27.00
TCW      2.69 206 P     42 55.70  -1.0
QRZ      3.27 231 P     43 03.30  -1.0
                S     43 41.50
DSZ      4.27 225 eP    43 15.40  -2.6X
     S.D. = 0.9  on  29 of  30 obs.
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%  NOV  18, 1993  16h 47m 32.08± 0.64s
   26.366 S ± 6.4km   27.452 E ± 6.6km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)
      ML 3.2 (PRE).

KSR     0.71 315 eP    47 46.50   0.3
                S     47 56.50
BFS     0.80 228 eP    47 48.60   0.4
                S     47 59.60
SLR     0.98  50 eP    47 50.40  -0.8
                S     48 03.00
SEK     1.96 176 eP    48 06.90   0.5
                S     48 30.80
SWZ     2.07 246 eP    48 07.90  -0.1
                S     48 33.10
BFT     2.43  74 eP    48 14.00   0.7
                S     48 43.00
BLF     2.95 202 eP    48 21.00   0.3
                S     48 54.80
FRS     3.86 209 eP    48 32.00  -1.4
                S     49 15.50
     S.D. = 0.9  on   8 of   8 obs.
-----------------------------------
?  NOV  18, 1993  17h 35m 44.55± 3.62s
   38.000 S ±12.0km  178.944 E ±32.2km
   DEPTH =  33.0km  (normal)
 OFF E. COAST OF N. ISLAND, N.Z. (160)
      ML 3.8 (WEL).

PUZ     0.55 262 Pc    35 56.40   0.5
                S     36 01.50
HBZ     0.65 308 Pc    35 58.50   1.3
NOZ     0.94 229 P     36 04.40   3.0
MAHZ    1.45 215 P     36 11.50   2.8
URZ     1.47 259 P     36 09.30   0.4
                S     36 24.40
TAZ     1.94 262 P     36 16.00   0.3
PATZ    2.15 259 P     36 18.40  -0.5
TTH     2.26 226 P     36 21.60   1.3
WAHZ    2.64 229 eP    36 24.70  -1.1
KUZ     2.86 295 P     36 27.10  -1.7
NGZ     2.87 245 P     36 29.00  -0.2
CNZ     2.92 245 P     36 29.70  -0.1
PGZ     3.34 218 P     36 34.60  -1.0
BSZ     3.61 239 P     36 39.20  -0.3
MNG     3.75 225 P     36 39.20  -2.3
                S     37 19.20
AMW     4.12 216 P     36 43.80  -2.9X
MTW     4.13 219 eP    36 44.20  -2.6X
KIW     4.23 226 P     36 45.70  -2.7X
BLW     4.30 217 P     36 47.00  -2.3
QRZ     5.71 238 eP    37 05.10  -4.2X
WRA    42.52 282 P     43 38.50  -0.2
        0.7s     0.40nm          3.3mb
     S.D. = 1.6  on  17 of  21 obs.
-----------------------------------
*  NOV  18, 1993  17h 52m 09.86± 0.61s
   35.095 S ±16.0km   17.208 W ± 8.0km
   DEPTH =  10.0km  (geophysicist)
   5.1mb ( 22 obs.)  4.9Msz (  3 obs.)
 SOUTHERN MID-ATLANTIC RIDGE      (410)

SUR    31.61  96 eP    58 37.00   1.7
WIN    32.38  77 e(P)  58 27.00 -15.1X
PPD    32.49 284 (P)   58 56.00  13.2X
SOB1   33.66 314 eP    58 51.20  -1.8
BDFB   33.70 297 eP    58 53.48  -0.1
FRS    36.09  94 eP    59 12.50  -1.2
        1.0s    40.00nm          5.2mb
BLF    37.02  93 eP    59 20.00  -1.8
        0.5s    25.00nm          5.2mb
LBTB   38.14  87 (P)   59 29.60  -1.5
        0.9s     7.41nm          4.4mb
SEK    38.48  93 eP    59 45.00  11.0X
        1.0s    30.00nm
SLR    40.04  89 eP    59 53.50   6.5X
        1.0s    20.00nm          4.7mb
     Z  20s     5.33um          5.4Msz
BFT    41.50  90 eP    00 01.00   1.9
MDZ    42.48 258 eP    00 07.80   0.9
SLA    42.75 270 eP    00 10.60   1.3
BUL    42.87  82 iPc   00 09.10  -1.2
KIC    42.88  18 P     00 08.24  -1.9
        1.5s   105.50nm          5.4mb
TIC    43.08  18 P     00 07.72  -4.0X
        1.1s    40.50nm          5.1mb
CCH    46.81 279 eP    00 48.00   5.9X
CNCB   48.61 279 P     00 55.00  -1.4
LPB    48.85 279 eP    00 58.00  -0.1
LPAZ   49.01 279 P     00 56.00  -3.6X
EPF    79.39  13 eP    04 17.00  -0.4
        1.4s    16.55nm          4.8mb
LPO    81.14  13 eP    04 26.90   0.3
        1.8s    50.05nm          5.3mb
LFF    81.31  13 eP    04 27.20  -0.2
CAF    81.54  14 eP    04 28.30  -0.4
        1.4s    19.15nm          5.0mb
RJF    81.80  13 eP    04 29.70  -0.3
        1.6s    37.95nm          5.2mb
     Z  19s     0.40um          4.8Msz
LSF    82.72  13 eP    04 35.00   0.2
        1.5s    43.35nm          5.4mb
TCF    82.88  13 eP    04 35.90   0.3
        1.8s    76.80nm          5.6mb
LPG    83.10  17 eP    04 37.40   0.3
        1.3s    11.90nm          4.9mb
LPL    83.11  17 eP    04 37.30   0.2
        1.5s    20.35nm          5.1mb
SMF    83.54  14 eP    04 39.00   0.0
        1.3s    23.85nm          5.2mb
AVF    83.59  14 eP    04 39.70   0.5
        1.3s    18.75nm          5.1mb
SSF    83.87  14 eP    04 40.80   0.1
LBF    83.90  14 eP    04 40.90   0.1
        1.2s    13.40nm          5.0mb
LOR    84.14  14 eP    04 42.10   0.1
     Z  22s     0.47um          4.8Msz
VAY    84.36  29 eP    04 40.00  -3.2X
SKO    84.48  28 iPc   04 44.70   0.9
        1.6s    70.00nm          5.6mb
HAU    85.37  16 eP    04 48.00  -0.2
        1.5s    29.25nm          5.3mb
GEC2   87.99  20 eP    05 02.70   1.7
        1.2s     2.81nm          4.5mb
                   e    05 07.20
                   e    05 10.60
                   e    05 19.00
                   e    08 25.60
                   e    08 39.00
KHC    88.21  20 P     05 03.50   1.5
        1.3s     9.70nm          5.0mb
                   e    05 21.80
                   e    05 54.00
PRU    89.26  20 eP    05 07.50   0.6
CLL    90.04  18 e(P)  05 13.00   2.4
        1.7s    19.00nm          5.1mb
IMA   139.91 334 (PKP) 11 36.56  -2.8
     S.D. = 1.2  on  34 of  42 obs.
-----------------------------------
*  NOV  18, 1993  17h 52m 35.07± 3.05s
   31.946 S ±10.1km   72.449 W ±26.7km
   DEPTH =  10.0km  (geophysicist)
 OFF COAST OF CENTRAL CHILE       (134)
      MD 4.2 (SAN).

ROCH    1.59 130 iP+   53 02.82  -0.7
LCCH    1.70 154 iPd   53 05.28   0.4
                eS    53 24.86
JACH    1.73 116 iPd   53 04.19  -1.3
                iS    53 24.57
PEL     1.91 129 iPd   53 07.51  -0.5
TACH    2.13 144 iP    53 11.67   0.6
LNV     2.19 157 iPd   53 11.74  -0.2
FCH     2.28 128 iPd   53 12.84  -0.9
                iS    53 40.26
PCH     2.33 136 iP+   53 14.18   0.0
                iS    53 41.86
CACH    2.66 145 iPd   53 19.90   1.0
RTRS    3.12  56 iPd   53 24.90  -0.2
                S     54 07.00
RTCB    3.14  83 ePc   53 25.20  -0.4
                S     54 03.70
MDZ     3.18 108 iP    53 31.70   5.5X
                i     53 40.30
                iS    54 09.60
ZON     3.24  84 eP    53 29.50   2.5
RTCV    3.33  90 e(P)  53 29.00   0.7
RTLL    3.45  81 e(P)  53 30.00   0.0
                S     54 18.10
CFA     3.60  86 iPc   53 31.80  -0.3
                S     54 24.50
RFA     4.36 131 ePd   53 43.00   0.0
                S     54 58.80
RTPR    5.35  74 e(P)  53 57.50   0.7
CYA     6.73  60 ePd   54 15.10  -1.4
                (S)   55 33.00
     S.D. = 1.0  on  18 of  19 obs.
-----------------------------------
&  NOV  18, 1993  19h 16m 30.49s
   34.034 N          116.326 W
   DEPTH =   5.5km
 SOUTHERN CALIFORNIA              ( 43)
      <PAS-P>. ML 2.7 (PAS).

PEC     0.71 259 eP    16 43.54  -1.1
PLM     0.81 213 eP    16 45.56  -1.2
SSK     1.15 279 eP    16 51.42  -1.1
                eS    17 07.54
GSC     1.32 343 eP    16 55.34  -0.1
GLA     1.59 128 eP    16 59.84   0.5
                eS    17 22.50
ISA     2.40 313 eP    17 09.28  -1.8
                eS    17 45.25
        6 obs. associated
-----------------------------------
?  NOV  18, 1993  19h 21m 35.32± 9.96s
   32.184 S ±67.3km   71.812 W ±46.7km
   DEPTH =  33.0km  (normal)
 NEAR COAST OF CENTRAL CHILE      (135)
      MD 4.0 (SAN).

ROCH    1.04 139 iPd   21 53.65  -0.1
                iS    22 05.81
JACH    1.14 116 iPd   21 55.21   0.0
                iS    22 08.14
LCCH    1.30 171 iP+   21 57.71   0.4
                iS    22 12.44
PEL     1.35 135 iP+   21 58.12   0.1
                iS    22 13.68
TACH    1.64 154 iPd   22 02.55   0.3
                iS    22 22.00
FCH     1.72 132 iP+   22 03.42  -0.2
                iS    22 22.91
LNV     1.80 169 iP+   22 03.78  -0.7
PCH     1.80 143 eP    22 04.25  -0.4
                iS    22 25.17
CACH    2.18 153 iP+   22 10.43   0.3
                iS    22 36.31
MDZ     2.60 106 eP    22 21.30   5.3X
     S.D. = 0.4  on   9 of  10 obs.
-----------------------------------
?  NOV  18, 1993  20h 34m 05.26± 3.27s
   32.027 S ±13.8km   72.135 W ±26.7km
   DEPTH =  19.0 ±  4.8 km
 OFF COAST OF CENTRAL CHILE       (134)
      MD 4.2 (SAN).

ROCH    1.34 135 iP+   34 28.44  -0.7
                iS    34 49.82
JACH    1.46 117 iP    34 29.96  -0.8
LCCH    1.52 162 iPd   34 31.23  -0.3
                iS    34 52.52
PEL     1.65 133 iPd   34 32.98  -0.6
                iS    34 58.61
TACH    1.91 148 iP+   34 37.30   0.1
                iS    35 02.74
LNV     2.02 163 iP    34 37.58  -1.2
FCH     2.03 130 iP+   34 38.63  -0.6
                iS    35 07.28
PCH     2.10 140 iP    34 39.78  -0.2
                iS    35 08.07
CACH    2.45 149 iP+   34 45.88   0.8
RTCB    2.89  80 e(P)  34 50.20  -1.1
                S     35 31.00
MDZ     2.91 108 eP    34 57.20   5.7X
                e     35 04.10
                eS    35 36.00
RTRS    2.95  52 iPd   34 54.40   2.5X
                S     35 30.00
RTCV    3.06  88 e(P)  34 54.00   0.3
RTLL    3.20  78 e(P)  34 56.00   0.3
                S     35 37.00
CFA     3.34  84 ePc   34 59.00   1.3X
                S     35 47.80
RFA     4.11 133 ePc   35 08.00  -0.6
RTPR    5.12  72 e(P)  35 22.00  -0.7
     S.D. = 0.7  on  14 of  17 obs.
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*  NOV  18, 1993  21h 32m 40.85± 1.34s
   31.754 S ± 5.7km   72.536 W ±14.0km
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18d 21h

DEPTH = 33.0km (normal)
4.9mb (2 obs.)
OFF COAST OF CENTRAL CHILE (134)
MD 4.7 (SAN).

IHA	1.48	149	iPd	33 05.70	0.3
			iS	33 26.90	
ROCH	1.77	134	iP+	33 09.29	-0.6
			iS	33 35.82	
JACH	1.89	120	iPd	33 10.57	-0.9
			iS	33 36.06	
LCCH	1.90	155	iP	33 11.71	0.2
			iS	33 41.13	
PEL	2.09	132	iPd	33 13.89	-0.4
			iS	33 44.76	
SAN	2.32	137	eP	33 17.73	0.2
TACH	2.32	145	eP	33 18.09	0.5
			iS	33 50.18	
LNV	2.39	157	(P)	33 18.09	-0.4
			(S)	33 58.12	
FCH	2.46	130	iPd	33 19.27	-0.6
			(S)	33 59.91	
PCH	2.52	138	eP	33 20.40	-0.1
CACH	2.86	146	iPd	33 26.33	1.0
RTCB	3.20	86	ePc	33 31.40	1.3
			S	34 14.00	
MDZ	3.32	111	eP	33 34.40	2.7X
			e	34 02.00	
			iS	34 18.30	
RTCV	3.41	93	eP	33 34.00	1.0
RTLL	3.50	84	e(P)	33 35.00	0.7
			S	34 21.00	
CFA	3.67	89	iPd	33 37.00	0.3
RFA	4.55	133	iPc	33 49.00	-0.2
			S	35 01.00	
RTPR	5.37	76	e(P)	34 02.00	1.3
CYA	6.71	62	eP	34 17.50	-2.1
			S	35 36.00	
FSA	8.04	47	e(P)	34 42.00	3.8X
SLA	9.35	43	e(P)	35 04.00	7.4X
CNCB	15.44	17	P	36 25.50	7.0X
LPB	15.68	16	eP	36 24.00	2.6X
LPAZ	15.91	16	P	36 26.30	1.7
VAO	24.28	75	eP	37 56.00	-0.3
BDFB	27.50	60	eP	38 24.71	-1.7
	1.0s	21.04nm		4.8mb	
BAO	27.52	60	eP	38 24.30	-2.3
KIC	74.79	72	P	44 20.90	1.0
	1.0s	22.50nm		5.1mb	
WRA	122.50	210	PKP	51 47.80	12.9X
	0.6s	0.40nm			
GBA	147.09	116	PKP	52 25.00	4.7X

S.D. = 1.1 on 23 of 30 obs.

? NOV 19, 1993 01h 06m 02.78± 1.18s
7.900 N ±12.5km 127.514 E ±15.7km
DEPTH = 33.0km (normal)
4.6mb (4 obs.)
PHILIPPINE ISLANDS REGION (248)

BIP	1.29	285	iPc	06 22.50	-2.1
			eS	06 33.50	
DAV	2.09	247	eP-	06 36.00	-0.1
	1.1s	1518.99nm			
			eS	07 06.00	
CGP	2.85	281	eP	07 05.00	18.1X
			eS	07 31.00	
CTB	3.36	258	ePd	06 55.00	0.8
			iS	07 35.00	
PLP	4.10	323	ePc	07 04.50	-0.2
MAP	4.24	305	iPc	07 08.00	1.3
ASPA	31.99	169	eP	12 38.10	9.8X
	0.6s	3.60nm		4.4mb	
CTA	33.37	147	eP	12 45.50	5.1X
MRWA	38.53	196	eP	13 25.00	0.9
	0.6s	10.00nm		4.8mb	
MUN	41.10	195	eP	13 47.00	1.8
STK	41.78	162	eP	13 48.20	-2.7
	0.8s	1.50nm		3.8mb	
GUN	44.04	302	P	14 09.60	-0.3
	0.4s	7.00nm		4.8mb	
KKN	44.51	302	P	14 13.00	-0.5
GKN	45.12	302	P	14 17.60	-0.7
KAF	88.28	333	eP	18 53.80	1.8

S.D. = 1.6 on 12 of 15 obs.

NOV 19, 1993 01h 43m 23.78± 0.11s
54.287 N ± 2.3km 164.164 W ± 1.8km
DEPTH = 30.3km (geophysicist)
6.1mb (182 obs.) 6.4Msz (73 obs.)
UNIMAK ISLAND REGION (10)

Mw 6.5 (HRV). Ms 6.0 (BRK).
Mo=5.0*10**18 Nm (PPT). Slight damage (VI) at False Pass where items were overturned and a television was knocked onto the floor. Felt (V) at Akutan and King Cove, (IV) at Cold Bay and (II) at Sand Point. Two events about 4.3 seconds apart. Depth from broadband displacement seismograms, based on first event.

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: **S, **C M.W.: 84S, **C
Centroid Location:
Origin Time 01:43:27.3 0.1
Lat 54.33N 0.01 Lon 164.04W 0.01
Dep 18.0 BDY Half-duration 4.2
Moment Tensor; Scale 10**18 Nm
Mrr=-2.88 0.03 Mtt=-1.66 0.03
Mff= 4.53 0.02 Mrt= 3.25 0.10
Mrf=-0.60 0.10 Mtf=-2.46 0.02
Principal Axes:
T Val= 5.74 Plg=12 Azm= 66
N -0.04 40 326
P -5.70 48 170
Best Double Couple:Mo=5.7*10**18
NP1:Strike=195 Dip=48 Slip= -30
NP2: 306 68 -134

SDN	2.37	62	iPc	44 01.27	-0.1
MCNL	7.30	44	eP	45 12.21	1.2
KDC	7.40	57	eP	45 10.59	-1.8
CDD	7.44	47	eP	45 13.52	0.6
PDB	7.74	41	eP	45 17.99	0.9
AUI	7.76	45	eP	45 18.74	1.3
			eS	46 47.50	
AUW	7.76	45	eP	45 18.88	1.4
AUH	7.77	45	eP	45 19.46	1.8
AGU	7.77	45	eP	45 18.92	1.2
AUP	7.78	45	(P)	45 16.45	-1.4
AUL	7.79	45	eP	45 18.70	0.9
AUE	7.80	45	eP	45 19.59	1.6
SYI	7.83	52	eP	45 18.42	0.1
ADK	7.91	257	ePc	45 17.93	-1.6
OPT	8.03	44	eP	45 22.36	1.1
SVW	8.22	30	iPc	45 23.32	-0.6
INE	8.35	42	eP	45 26.49	0.7
ILIM	8.40	42	eP	45 27.55	1.1
XLV	8.55	48	eP	45 28.23	-0.2
RED	8.69	40	eP	45 31.53	1.1
HOM	8.70	47	eP	45 30.13	-0.3
RDW	8.72	40	eP	45 31.11	0.2
NCT	8.73	39	eP	45 32.15	1.2
RS2	8.73	40	eP	45 32.14	1.1
REF	8.76	40	eP	45 32.51	1.0
CNPM	8.80	48	eP	45 30.76	-1.1
DFR	8.84	40	eP	45 33.11	0.7
BKG	9.31	38	eP	45 40.13	1.2
CKL	9.37	38	eP	45 41.61	1.8
BGL	9.39	37	eP	45 42.35	2.2
CKT	9.42	38	eP	45 41.67	1.2
CKN	9.44	38	eP	45 41.98	1.2
CP2	9.45	37	eP	45 41.96	1.0
CRP	9.48	38	eP	45 42.09	0.7
NKA	9.49	42	eP	45 44.33	3.0
CGLM	9.56	38	eP	45 43.65	1.2
NCG	9.57	37	eP	45 44.06	1.5
TTA	9.65	23	eP	45 42.13	-1.5
SLKM	9.76	45	eP	45 42.95	-2.2
SEW	9.87	48	eP	45 44.97	-1.6
MPA	10.11	46	eP	45 48.69	-1.1
SUA	10.12	39	eP	45 49.78	-0.4
SKT	10.19	36	eP	45 52.20	1.3
ANM	10.33	357	eP	45 51.04	-1.8
PMS	10.44	42	eP	45 52.90	-1.6
			i	45 55.30	
LTI	10.55	50	eP	45 53.76	-2.1
			eS	47 51.52	
PWA	10.56	40	eP	45 56.70	0.6
MTU	10.62	51	eP	45 55.02	-1.8
PWL	10.73	46	eP	45 56.63	-1.8
KNIM	10.74	49	eP	45 56.60	-1.9
PLRM	10.81	41	eP	45 58.40	-1.1
PMR	10.81	41	ePd	45 57.48	-2.0
CUT	10.91	36	eP	46 01.15	0.4
KNK	10.98	43	eP	46 00.27	-1.5
GHO	11.00	41	eP	46 00.45	-1.7
MID	11.02	55	eP	46 00.60	-1.6
CFI	11.14	45	eP	46 01.70	-2.1
SML	11.25	42	eP	46 03.44	-2.0
HIN	11.31	50	eP	46 04.04	-2.3
FID	11.48	49	eP	46 04.84	-3.7X
KTH	11.51	31	eP	46 10.51	1.5
TRF	11.63	32	eP	46 12.01	1.3
SCM	11.66	43	eP	46 09.13	-1.9
CVA	11.72	50	eP	46 09.07	-2.6
VLZ	11.72	47	eP	46 09.30	-2.4
KLU	12.06	46	eP	46 14.01	-2.5
RND	12.06	35	eP	46 16.33	-0.1
RAGM	12.14	52	eP	46 15.77	-1.8
MCK	12.26	33	eP	46 20.38	1.3
TOA	12.27	43	eP	46 17.30	-1.9
HMT	12.32	53	eP	46 16.71	-3.1X
BWN	12.40	31	eP	46 22.85	1.9
TZL	12.54	44	eP	46 21.88	-0.9
MLY	12.69	27	eP	46 25.14	0.3
SDG	12.74	42	eP	46 23.50	-1.9
IM3	12.80	20	eP	46 26.62	0.4
NEA	12.82	30	eP	46 27.24	0.8
IMA	12.89	19	eP	46 27.18	-0.3
GLB	12.95	48	eP	46 25.81	-2.4
PAX	13.01	41	eP	46 26.29	-2.8
SMY	13.02	272	eP	46 25.27	-3.9X
WRH	13.04	32	eP	46 27.41	-2.0
THY	13.16	39	eP	46 32.09	1.1
CCB	13.25	32	eP	46 30.73	-1.4
WRG	13.28	55	eP	46 30.16	-2.4
MDM	13.34	30	eP	46 31.82	-1.6
HDA	13.36	34	eP	46 32.59	-1.0
COL	13.43	31	iPc	46 32.59	-1.9
FBA	13.43	31	eP	46 32.79	-1.7
BALM	13.45	51	eP	46 32.11	-2.8
FX1	13.53	273	eP	46 33.61	-2.3
GLM	13.62	31	eP	46 36.60	-0.4
IL1	13.63	33	eP	46 35.72	-1.4
CTGM	13.89	52	eP	46 38.50	-2.2
DOT	13.91	40	eP	46 40.03	-0.9
TMW	14.15	42	eP	46 43.30	-0.7
PCA	14.16	56	eP	46 43.90	-0.2
YKU	14.30	59	e(P)	46 48.70	2.8
BCPM	14.43	57	eP	46 42.94	-4.7X
PNL	14.49	58	eP	46 47.21	-1.2
BC3	14.51	44	eP	46 46.78	-1.9
ILT	15.29	339	iPc	47 02.00	3.3X
	2.0s	3542.00nm		6.3mb	
Z	14s	426.00um		5.5MszX	
E	16s	360.00um			
FYU	15.36	29	eP	46 58.00	-1.7
BM3	16.14	28	eP	47 08.22	-1.5
SIT	16.44	69	eP	47 13.06	-0.5
	1.2s	586.12nm		5.6mb	
BRW	17.39	8	eP	47 25.16	-0.1
INK	20.02	34	eP	47 53.50	-3.0
	0.5s	67.00nm		5.2mb	
PET	21.92	282	eP+	48 15.00	-0.9
	1.1s	1070.00nm		6.2mb	
Z	18s	40.00um		5.9Msz	
N	18s	25.00um			
E	18s	35.00um			
			eS	52 16.00	
MCW	26.05	85	eP	48 57.13	1.2
ONR	26.40	90	P	49 00.97	2.0
YKA	26.61	52	eP	49 02.00	1.1
	0.7s	242.00nm		5.9mb	
GMW	26.63	88	eP	49 02.30	1.1
JCW	26.81	86	P	49 05.03	2.2
BMW	26.93	90	ePc	49 04.99	1.0
KMOR	27.23	92	P	49 08.86	2.1
RMW	27.25	87	eP	49 07.51	0.6
FMW	27.60	88	P	49 12.11	1.9
LON	27.61	88	eP	49 10.32	0.1
MBC	27.61	21	iPc	49 10.80	1.0
	1.7s	806.00nm		6.1mb	
			PP	49 45.80	
			PP	49 48.50	
			PPP	50 03.00	
			PPP	50 08.80	
			PcP	52 33.70	

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                S     53 45.60
SHW    27.66  90 eP    49 12.05   1.3
COR    27.92  93 iPc   49 14.48   1.5
ASR    28.06  89 P     49 16.15   1.8
RNO    28.06  95 P     49 16.15   1.9
WTV    28.21  85 P     49 15.75   0.1
EBG    28.26  87 P     49 16.74   0.7
SSOR   28.26  92 P     49 17.24   1.1
SAW    28.53  85 P     49 18.85   0.4
VBEM   28.66  91 P     49 20.43   0.6
DBO    28.82  96 P     49 23.15   2.0
VGB    28.88  90 eP    49 21.94   0.3
WAH2   28.92  87 P     49 22.30   0.4
CROR   29.05  91 P     49 23.94   0.7
DPW    29.15  84 eP    49 23.86  -0.2
JBO    29.46  89 P     49 27.81   0.9
VIPM   29.54  91 P     49 28.30   0.5
NEW    29.58  82 ePc   49 27.99   0.1
                e     49 42.04
ARC    29.75 100 ePc   49 29.76   0.4
       1.1s   350.00nm          6.1mb
     Z  18s    33.00um          6.0Msz
                id    50 20.42
                iS    54 30.42
                i     54 52.42
                iLQ   55 58.42
                eLR   56 45.42
FHC    29.85 100 eP    49 32.06   1.7
       1.3s  1219.32nm          6.5mb
YBH    29.99  98 iPc   49 33.16   1.5
       0.9s   310.00nm          6.1mb
     Z  18s    32.00um          6.0Msz
                ic    50 29.52
                iS    54 34.52
                iLQ   56 01.52
                eLR   56 27.52
KMPM   30.02 101 eP    49 33.18   1.3
LNOR   30.15  87 P     49 33.00   0.0
LGPM   30.44  99 ePc   49 36.60   0.9
LBFM   30.71  97 ePc   49 39.41   1.3
WDC    30.83  99 ePc   49 39.91   1.0
       2.6s  1968.44nm          6.5mb
     Z  19s    36.54um          6.1Msz
                ec    49 44.71
                epPc  49 48.19  29kmX
                esPd  49 53.98
LMEM   31.41  98 eP    49 45.47   1.1
MIN    31.52  99 ePc   49 39.71  -5.5X
       1.3s   440.00nm          6.2mb
     Z  18s    22.00um          5.9Msz
                ed    50 40.71
                iS    54 56.71
                iLQ   56 34.71
                e     56 59.71
ORV    32.10 100 iPc   49 50.09   0.0
       1.4s   330.00nm          6.1mb
     Z  19s    24.00um          5.9Msz
                id    50 52.39
                iS    55 02.39
                iLQ   56 57.39
                eLR   57 46.39
NTYM   32.22 102 eP    49 51.69   0.6
TIK    32.75 327 iPc+  49 55.00  -0.4
       2.0s   780.00nm          6.3mb
     Z  14s    72.00um          6.5MszX
                i     52 43.00
                (S)   55 04.00
                i     00 18.00
BKS    32.81 103 iPc   49 57.09   0.8
       1.7s  1120.00nm          6.5mb
     Z  18s    42.00um          6.2Msz
                ic    50 56.09
                iS    55 18.09
                iLQ   57 13.09
                iLR   58 42.09
HMR    32.87 102 eP    49 58.85   2.1
OPA    32.88 169 eP    49 56.54  -0.4
STAN   33.17 103 iPc   50 00.19   0.7
       1.6s  1690.00nm          6.7mb
     Z  19s    39.00um          6.1Msz
                iS    55 23.85
                ePcS  56 27.85
                eLQ   57 22.85
                iLR   58 10.85
HON    33.24 169 P     50 10.00   9.9X
     Z  20s    40.68um          6.1Msz
RES    33.27  27 eP    49 59.50  -0.4
       0.8s    27.00nm          5.2mb
DHH    33.32 169 eP    50 00.21  -0.6
MHC    33.52 103 ePc   50 03.24   0.6
       1.6s   860.00nm          6.4mb
     Z  18s    39.00um          6.2Msz
                ic    51 13.19
                i     55 27.19
                iLQ   57 20.19
                eLR   58 01.19
COE    33.56 103 P     50 04.10   1.2
ARN    33.58 103 eP    50 03.55   0.5
                iScP  56 24.63
LRM    33.58  83 ePc   50 02.90  -0.4
                iScP  56 25.70
YSS    33.74 280 ePc   50 03.50  -0.8
       0.9s    50.00nm          5.4mb
     Z  19s    77.90um          6.4Msz
     N  19s    22.90um
     E  19s    44.70um
                i     51 18.00
                (S)   55 22.00
                i     55 44.00
                eSSS  57 51.00
CMB    33.77 101 ePc   50 05.47   0.8
       1.1s   220.00nm          6.0mb
     Z  19s    32.00um          6.1Msz
                ec    50 10.35
                epPc  50 13.75  28kmX
                esPd  50 19.38
                iS    55 30.31
                iLQ   57 40.31
                eLR   58 27.31
SAO    34.04 103 eP    50 07.44   0.5
       2.6s  1311.89nm          6.4mb
YAK    34.28 310 eP    50 10.80   2.0
       1.5s   436.00nm          6.2mb
     Z  18s    64.10um          6.4Msz
     E  18s    43.70um
                e     51 26.00
                ePPP  51 47.00
                e     52 46.00
                eS    55 35.00
                eSS   58 09.00
                i     00 27.00
KVN    34.41  97 ePc   50 11.31   0.9
                eScP  56 28.09
KUSJ   34.81 273 eP    50 10.20  -3.3X
MMPM   34.84 100 eP    50 15.43   1.2
MEMM   34.85 100 eP    50 15.85   1.9
                eScP  56 29.32
BONR   35.02  99 ePc   50 16.98   1.2
KKH    35.13 167 eP    50 15.81  -0.6
MTUM   35.28 100 eP    50 19.07   1.2
PHAM   35.29 103 eP    50 19.28   1.5
PKEM   35.30 103 eP    50 20.40   2.6X
ASAJ   35.42 276 eP    50 18.90   0.2
TNP    35.57  98 ePc   50 20.97   0.7
HPO    35.75 166 eP    50 21.06  -0.6
HVU    35.77  89 eP    50 22.10   0.2
BCH    35.93 104 eP    50 24.91   1.6
ISA    36.51 102 eP    50 28.63   0.5
       2.2s  1296.80nm          6.4mb
     Z  20s    37.04um          6.2Msz
                eScP  56 31.58
ABL    36.67 103 eP    50 30.67   1.1
DUG    36.75  91 iPc   50 30.64   0.5
       2.0s  1017.36nm          6.3mb
                ec    50 35.52
TPNV   36.90  98 eP    50 32.35   0.8
       0.6s   283.27nm          6.3mb
DAU    37.52  89 eP    50 37.44   0.6
                eScP  56 38.36
GSC    37.73 101 ePc   50 39.09   0.7
                ec    50 43.81
                ec    50 47.12
                esPd  50 53.65
ARUT   37.97  95 eP    50 40.59   0.1
                eScP  56 41.18
SSK    38.00 103 eP    50 41.54   0.8
ALE    38.07  12 ePc   50 40.11  -0.5
                ec    50 45.74
                epPd  50 50.70  37kmX
EMUT   38.17  90 eP    50 42.30   0.1
                eScP  56 42.03
MSU    38.22  93 ePc   50 43.35   0.7
                eScP  56 42.45
PEC    38.54 102 ePc   50 44.92  -0.2
       0.7s   110.10nm          5.8mb
                eScP  56 42.28
SRU    38.80  90 eP    50 47.79   0.4
                eScP  56 43.69
PLM    39.10 103 ePc   50 51.03   1.1
OFUJ   39.13 270 eP    50 50.40   0.5
PFO    39.14 102 ePc   50 50.78   0.5
                ec    50 55.41
                epPc  50 59.05  28kmX
                esPd  51 03.85
RSSD   39.44  79 ePc   50 56.22   3.5X
       0.9s   392.34nm          6.2mb
                eScP  57 00.37
PV09   40.02  90 eP    50 57.29  -0.4
                eScP  56 49.61
PV10   40.15  90 ePc   50 58.40  -0.4
                eScP  56 49.57
PV08   40.25  90 eP    50 58.99  -0.7
                eScP  56 50.29
GLA    40.48 101 eP    51 01.91   0.7
ULM    40.51  67 eP    51 04.00   2.8X
GOL    41.43  86 iPc   51 09.49   0.3
       1.3s   853.75nm          6.3mb
                ic    51 14.62
                epPc  51 18.51  30kmX
                esPd  51 21.82
                ePP   52 50.10
GLD    41.48  86 ePc   51 10.73   1.2
       1.2s   475.24nm          6.1mb
     Z  19s    25.21um          6.1Msz
NIIJ   41.92 270 eP    51 12.20  -0.7
KAKJ   41.94 268 eP    51 12.30  -0.7
MDJ    42.63 285 eP    51 17.80  -0.9
     Z  20s    50.40um          6.4Msz
     N  18s    51.40um
     E  18s    13.80um
                PP    53 03.00
                eS    57 44.00
MDJ    42.63 285 iPc   51 21.02   2.4X
                epPd  51 28.55  25kmX
CHJJ   42.74 269 eP    51 18.90  -0.7
MAJO   42.86 270 (P)   51 18.71  -1.9
       1.0s   262.51nm          5.9mb
                ec    51 23.84
                ed    51 30.96
MAT    42.86 270 eP    51 19.00  -1.6
     Z  20s    24.11um          6.1Msz
                eS    57 38.00
MTMJ   43.06 270 eP    51 24.10   1.7
IIDJ   43.76 269 eP    51 30.80   2.8X
ANMO   44.01  92 ePc   51 30.08  -0.1
                ic    51 35.22
                epPc  51 38.53  28kmX
                esPd  51 44.98
ALQ    44.01  92 ePc   51 33.49   3.3X
       1.5s   387.51nm          6.0mb
     Z  19s    19.46um          6.0Msz
                eScP  57 32.22
                eS    58 29.40
TSRJ   44.85 271 eP    51 38.50   1.7
CN2    45.47 287 eP    51 38.80  -2.8
       1.0s   130.00nm          5.8mb
     Z  20s    37.80um          6.3Msz
     N  15s    26.90um
     E  15s     9.05um
                epP   51 50.00  39kmX
                ePP   53 24.00
FRB    45.57  38 eP    51 41.50  -0.6
       0.5s    70.00nm          5.8mb
WKYJ   46.00 270 P     51 45.90  -0.1
YONJ   46.57 272 P     51 50.00  -0.4
CIT    46.71 303 eP    51 53.00   1.7
     Z  16s    59.68um          6.6MszX
                eS    58 30.00
GDH    46.90  27 eP    51 54.00   1.5
                i     59 40.00
                i     02 26.00
KBS    47.03   1 eP    51 54.80   1.4
ACO    47.08  84 iPd   51 53.40  -1.0
TKSJ   47.08 271 P     51 53.50  -0.9
DAG    47.38  10 iPd+  51 55.10  -1.1
       0.6s     8.67nm          4.9mb X
                ipP   52 02.50  25kmX
SHK    47.49 272 eP    51 59.80   2.1
SNY    47.80 286 Pc    52 01.00   1.1
       1.2s   210.00nm          6.0mb
     Z  18s    36.30um          6.4Msz
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19d 01h

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     N  17s    29.80um
     E  18s    25.10um
                  PP    53 53.00
                  S     58 50.00
                  ScS   01 50.00
JAQ    48.58  52 eP    52 04.50  -1.3
WMOK   48.65  86 iPc   52 06.05  -0.6
       1.0s   466.18nm         6.5mb
     Z  19s    20.17um         6.1Msz
                  ic    52 10.77
                  epPc  52 14.74  29kmX
                  esPd  52 20.04
SHNJ   48.70 273 eP    52 13.00   6.0X
MEO    48.73  86 iPd   52 05.30  -2.0
OCO    48.86  84 iPd   52 07.50  -0.8
FNO    49.09  84 iPd   52 09.60  -0.5
TUL    49.57  82 iPc   52 13.00  -0.7
LTX    49.69  95 ePc   52 14.09  -0.7
                  eScP  57 28.31
KUMJ   50.00 272 eP    52 17.50   0.5
CCM    50.71  77 iPc   52 20.67  -1.7
       2.3s  1325.85nm         6.5mb
                  ic    52 25.39
                  epPc  52 29.36  29kmX
                  esPd  52 33.58
DL2    50.86 285 Pc    52 26.00   2.5
     Z  20s    21.30um         6.2Msz
     N  17s    22.70um
     E  17s    25.50um
                  S     59 35.00
                  SS    03 07.00
SLM    50.89  76 P     52 23.59  -0.1
     Z  19s    77.51um         6.7Msz
                  S     59 27.89
KAGJ   50.94 271 eP    52 23.70  -0.5
IRK    50.99 308 ePc   52 26.00   1.7
       2.0s   220.00nm         5.8mb
     Z  18s    36.09um         6.4Msz
     N  18s    34.50um
     E  18s    21.44um
                  e     52 42.30
                  eS    59 34.00
FVM    51.23  77 P     52 26.43   0.1
     Z  19s    93.15um         6.8Msz
                  S     59 37.19
UYO    51.58  83 iPc   52 27.30  -1.7
MIAR   51.82  82 iPc   52 29.40  -1.4
       1.7s   845.27nm         6.4mb
                  ic    52 34.03
                  epPc  52 38.09  29kmX
                  esPd  52 41.81
ELC    52.40  76 ePd   52 32.78  -2.4
LST    52.64  77 eP    52 34.60  -2.4
ELF    52.71  66 P     52 36.00  -1.4
ZAK    52.73 307 eP    52 38.00   0.6
       2.0s   123.00nm         5.5mb
     Z  18s    42.23um         6.5Msz
     N  17s    34.30um
     E  17s    36.63um
                  e     54 45.00
                  eS    00 00.00
DLA    52.80  66 P     52 37.50  -0.6
LDN    52.88  66 P     52 37.50  -1.2
ACTO   53.09  65 P     52 39.00  -1.3
BJI    53.14 289 eP    52 40.00  -0.6
       1.0s   44.00nm         5.4mb
     Z  20s    42.30um         6.5Msz
     N  18s    34.00um
                  ePP   54 38.00
                  eS    00 00.00
                  esS   00 17.00
                  eScS  02 25.00
                  eSS   03 38.00
TYNO   53.55  65 P     52 41.95  -1.6
WLVO   53.75  63 P     52 43.87  -1.2
STCO   53.84  64 P     52 44.35  -1.3
GAC    54.03  60 eP    52 48.00   0.9
OXF    54.25  79 iPc   52 47.01  -1.8
                  ec    52 51.48
                  esPd  53 01.08
YSNY   54.68  65 iPc   52 50.55  -1.5
       1.2s   677.16nm         6.6mb
     Z  19s    38.68um         6.5Msz
                  ic    52 55.44
                  ec    52 57.26
                  ed    52 59.99
HHC    55.10 293 Pd    52 55.00  -0.1
       1.4s   140.00nm         5.8mb
     Z  18s    53.20um         6.7Msz
     N  18s    42.40um
     E  15s    32.90um
                  PcP   53 59.00
                  S     00 30.00
TIA    55.30 285 eP    52 54.50  -2.0
       0.9s    96.00nm         5.8mb
     Z  26s    25.20um         6.2MszX
     N  17s    23.50um
     E  17s     9.30um
                  S     00 35.00
                  SS    04 20.00
RSNY   55.32  60 eP    52 54.54  -2.0
       0.9s    78.32nm         5.7mb
MCWV   55.96  68 ePc   52 59.20  -2.0
       1.2s   535.73nm         6.4mb
     Z  21s    40.32um         6.5Msz
                  ec    53 04.00
                  epPd  53 08.14  29kmX
KEV    56.00 355 (P)   52 59.58  -1.5
                  ec    53 03.80
BTO    56.11 294 P     53 01.00  -1.4
       0.6s    23.00nm         5.4mb
     N  16s    21.00um
     E  15s    21.50um
                  ePP   55 07.00
                  S     00 45.00
                  eSS   04 26.00
BINY   56.22  63 ePc   53 01.64  -1.5
       2.0s  1357.62nm         6.6mb
                  ec    53 06.69
                  ec    53 08.43
                  ed    53 10.99
TRO    56.37 359 eP    53 03.00  -0.7
SSE    56.67 278 (P)   53 03.43  -3.0
       1.5s   350.00nm         6.2mb
     Z  20s    18.00um         6.2Msz
     N  16s    10.00um
     E  16s     6.30um
                  ed    53 08.56
                  ec    53 12.36
                  PP    55 16.00
                  S     00 48.00
                  sS    01 04.00
GUMO   56.76 245 ePd   53 03.04  -4.1X
       1.7s  2311.85nm         6.9mb
GUA    56.78 244 eP    53 04.20  -3.1X
       0.7s  9987.95nm         8.0mb X
     Z  19s    16.93um         6.2Msz
CBM    56.80  55 ePc   53 05.74  -1.4
       1.6s   690.14nm         6.4mb
     Z  20s    32.27um         6.4Msz
                  ec    53 10.21
                  ed    53 16.50
                  S     00 53.72
TIY    56.85 290 Pc    53 06.40  -1.3
       1.2s   110.00nm         5.8mb
     Z  20s    42.40um         6.5Msz
     N  15s    17.00um
     E  16s    27.60um
                  S     00 58.00
LBNH   56.86  59 ePc   53 05.83  -1.8
       2.1s  1520.55nm         6.7mb
     Z  20s    27.43um         6.4Msz
                  S     01 00.96
MYNC   56.87  75 ePc   53 05.73  -2.1
       1.1s   372.97nm         6.3mb
     Z  21s    25.17um         6.3Msz
                  ec    53 10.19
                  epPd  53 14.17  28kmX
                  esPd  53 18.14
                  S     00 58.50
NAV    57.12  71 ePc   53 07.68  -1.9
                  ePP   55 16.85
NJ2    57.32 281 Pc    53 09.00  -2.0
       1.1s    58.00nm         5.5mb
     N  16s    18.80um
     E  15s     5.97um
                  S     00 55.00
BLA    57.40  70 eP    53 09.34  -2.2
       0.8s   102.13nm         5.9mb
                  ePP   55 21.22
AKU    57.59  16 iP    53 17.20   4.8X
       1.3s   184.62nm         6.0mb
     Z  17s    59.86um         6.8MszX
CVL    57.92  68 eP    53 13.44  -1.7
LSCT   58.03  62 ePc   53 14.48  -1.4
       1.8s  1079.68nm         6.6mb
     Z  18s    10.16um         6.0Msz
                  S     01 12.76
GMTN   58.11  63 eP    53 15.10  -1.3
HRV    58.29  60 ePc   53 16.44  -1.2
       2.1s  1307.51nm         6.6mb
     Z  19s    24.59um         6.3Msz
                  ec    53 20.99
                  epPd  53 25.30  29kmX
CBN    58.35  68 eP    53 17.00  -1.1
PRM    58.58  74 eP    53 17.22  -2.6
JSC    59.06  73 eP    53 20.70  -2.4
LMN    59.15  53 eP    53 22.50  -1.2
LHS    59.17  73 eP    53 21.37  -2.5
                  ePP   55 34.37
CRX    59.61  99 iP    53 27.20  -0.2
SGS    60.28  74 eP    53 29.87  -1.6
PPM    60.48  98 (P)   53 33.00  -0.7
HBF    60.55  74 ePc   53 31.25  -2.1
                  ePP   55 48.14
WHN    61.02 283 eP    53 35.50  -1.1
       1.0s    89.00nm         5.8mb
     Z  20s    23.50um         6.3Msz
     N  14s    19.50um
     E  16s     2.75um
                  S     01 52.00
TATO   61.07 273 (P)   53 33.38  -3.6X
XAN    61.47 289 P     53 37.50  -2.2
       1.0s    22.00nm         5.2mb
     Z  22s    42.50um         6.6Msz
     N  17s    21.10um
     E  17s    26.50um
                  pP    53 48.00  35kmX
                  sP    53 51.00
                  PcP   54 17.00
                  PP    55 56.00
                  S     01 58.00
                  sS    02 15.00
                  ScS   03 23.00
                  SS    06 02.00
GTA    62.32 300 eP    53 43.00  -2.4
       1.5s    18.00nm         5.0mb X
     Z  16s   122.00um         7.2MszX
     N  15s    25.70um
                  pP    53 51.00  26kmX
                  PP    56 02.00
                  S     02 05.00
                  ScS   03 30.00
                  SS    06 10.00
LZH    62.71 294 Pd    53 47.00  -1.1
       1.8s   350.00nm         6.2mb
     Z  18s    52.80um         6.8Msz
     E  16s    32.40um
                  pP    53 51.00  13kmX
                  PP    56 02.00
                  ScS   03 35.00
QZH    62.79 275 eP    53 47.00  -1.5
       1.3s   230.00nm         6.1mb
     Z  20s    16.20um         6.2Msz
     N  17s     9.59um
                  S     02 08.00
MOL    63.30   4 eP    53 50.51  -0.8
SVE    63.40 334 iPc   53 52.00  -0.1
       3.0s  1120.00nm         6.5mb
     Z  17s    46.00um         6.7MszX
     N  19s    18.00um
     E  19s    28.50um
                  e     54 04.00
                  ePPP  57 50.00
                  eS    02 20.00
KAF    63.65 355 iP    53 51.70  -2.0
       0.5s    53.60nm         5.9mb
ENH    63.98 286 ePd   53 54.39  -1.9
ARU    64.28 335 eP    53 56.73  -1.1
WMQ    64.74 310 P     53 59.00  -2.1
       1.0s    49.00nm         5.6mb
     Z  18s    33.00um         6.6Msz
     E  18s    41.70um
                  pP    54 05.00  19kmX
                  PcP   54 37.60
                  PP    56 17.00
                  ScS   03 49.90
                  SS    06 44.50
WMQ    64.74 310 iPc   54 04.86   3.7X
                  ed    54 10.57
NB2    64.96   2 P     54 00.50  -1.8
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        1.1s    64.20nm          5.6mb
NAO    65.17   3 P     54 00.47  -3.1X
ASK    65.26   6 eP    54 04.00  -0.1
NRA0   65.28   2 iPd   54 03.40  -0.8
                iPcPd  54 41.20
NRE0   65.28   2 P     54 04.30   0.1
                S      02 48.20
                S      02 48.30
                ScS    04 07.10
                SS     07 03.10
                SSS    10 42.50
NUR    65.34 355 eP    54 02.80  -1.8
BER    65.37   6 eP    54 05.00   0.2
EGD    65.48   6 eP    54 05.50   0.0
PUL    65.71 352 ePd   54 07.00   0.0
     Z  21s    33.00um          6.5Msz
     N  21s    26.00um
     E  21s     6.00um
                e      54 23.00
                e      54 45.00
                eS     02 49.00
                e      03 50.00
                e      07 09.00
HFS    65.92   1 eP    54 06.50  -1.8
        0.5s    50.30nm          5.9mb
     Z  17s    12.45um          6.2MszX
                LR     15 46.00
UPP    66.20 359 iP    54 09.20  -0.9
CD2    66.68 291 P     54 12.20  -1.5
        1.0s   340.00nm          6.4mb
     Z  20s    33.30um          6.5Msz
     E  19s    30.10um
                S      03 00.00
GZH    67.27 278 P     54 17.00  -0.4
        1.0s   360.00nm          6.4mb
     Z  20s    11.90um          6.1Msz
     N  16s    12.50um
     E  15s    11.60um
                S      03 10.00
HKC    67.39 277 eP    54 18.30   0.1
TPX    67.47  96 (P)   54 17.26  -1.5
EDR    68.15  11 eP    54 21.50  -1.0
BCP    68.22 268 eP    54 23.00  -0.7
AFI    68.23 188 P     54 22.40  -1.1
                eS     03 00.00
                e      14 00.00
BAG    68.24 268 ePc+  54 22.00  -1.9
                eS     03 20.00
ELO    68.45  12 eP    54 24.10  -0.3
EDU    68.46  11 eP    54 24.30  -0.1
GYA    68.50 286 iPd   54 24.00  -1.3
        1.0s   560.00nm          6.6mb
     Z  48s    16.70um          5.9MszX
     N  18s    22.90um
     E  18s    12.70um
                sP     54 40.00
RAB    68.65 228 eP    54 24.00  -2.1
EAB    68.66  12 eP    54 25.70   0.1
EBH    68.70  11 eP    54 25.80  -0.1
MOS    68.89 347 eP    54 28.00   0.9
        2.2s   570.00nm          6.3mb
     Z  18s    34.00um          6.6Msz
     N  19s    27.00um
     E  19s    21.00um
                e      54 51.00
                eS     03 28.00
                e      04 23.00
EDI    69.05  11 ePd   54 28.20   0.1
        1.6s   350.00nm          6.2mb
     Z  20s    18.00um          6.3Msz
     N  20s    10.00um
     E  20s    10.00um
                ePPP   59 46.00
                eS     03 36.00
GQP    69.13 265 ePc   54 29.50   0.4
EBL    69.21  11 eP    54 29.40   0.3
QCP    69.35 266 eP    54 19.50 -11.0X
TLG    69.56 317 eP    54 30.80  -0.7
        2.4s   133.00nm          5.6mb
     Z  18s    12.00um          6.2Msz
     N  19s    19.30um
                ePPP   58 41.00
                eS     03 32.00
                eSS    08 04.00
                eSSS   11 13.00
EKA    69.63  11 Pc    54 30.60  -1.0
        0.6s    20.20nm          5.4mb
ESK    69.64  11 eP    54 32.00   0.3
        0.5s    28.00nm          5.6mb
OBN    69.65 347 ePc   54 30.20  -1.5
                ec     54 34.67
                ePPd   54 40.30  32kmX
PLP    69.85 261 ePd   54 34.80   1.3
TGY    69.86 266 iPc   54 34.00   0.4
COP    70.36   2 iP+   54 35.80  -0.2
        1.0s   112.00nm          5.9mb
                iS     03 44.00
PMO    70.40 163 iPd   54 35.50  -1.2
        1.8s  3052.10nm          7.1mb
TPT    70.42 163 iPd   54 35.70  -1.1
        1.4s  *******nm          7.8mb X
RUV    70.67 163 iPd   54 37.20  -1.1
        1.2s  1380.50nm          6.9mb
BSD    70.97   1 iP    54 45.80   6.1X
        0.8s    32.00nm          5.5mb
FRU    71.02 318 eP    54 41.00   0.6
     Z  18s    46.00um          6.8Msz
                e      57 24.00
                ePPP   59 07.00
                eS     03 58.00
DCN    71.04  14 eP    54 39.40  -0.8
MAP    71.10 261 iPc   54 40.00  -1.1
DLF    71.19  14 eP    54 41.40   0.3
BIP    71.48 258 ePc   54 45.00   1.6
KMI    71.74 288 Pc    54 45.00  -0.1
        2.0s   400.00nm          6.1mb
     Z  20s    29.90um          6.6Msz
     N  19s    25.30um
     E  19s    21.60um
                pP     54 55.50  34kmX
                sP     54 59.50
                PP     57 29.00
                S      04 00.00
                sS     04 16.00
                SS     08 40.00
MNK    71.74 353 eP    54 39.00  -5.4X
     Z  21s    26.30um          6.5Msz
     N  24s    23.50um
     E  24s    32.50um
                eS     03 52.00
                ePS    04 24.00
                e      04 38.00
                eSS    08 22.00
YRH    71.90  13 eP    54 43.70  -1.7
VAL    71.93  17 iP    54 50.70   5.2X
        1.1s     2.90nm          4.2mb X
                S      04 30.00
QIZ    72.46 278 P     54 49.40   0.2
     N  17s    12.10um
     E  17s    10.50um
                S      04 10.00
AFR    72.59 166 iPd   54 48.60  -1.1
        1.3s  1369.00nm          6.8mb
PPN    72.63 165 iPd   54 48.90  -1.1
        1.6s  2079.60nm          6.9mb
PPT    72.65 165 iPd   54 49.00  -1.1
        1.8s  2686.20nm          7.0mb
PAE    72.74 165 iPd   54 49.50  -1.1
        1.6s  1815.90nm          6.8mb
DAV    72.79 258 eP+   54 50.00  -1.2
                e(S)   04 15.00
HTR    72.81  12 eP    54 51.20   0.4
TVO    72.91 165 iPd   54 50.60  -1.1
        1.5s  2331.60nm          7.0mb
HAE    72.94  12 eP    54 51.20  -0.3
WIT    73.00   6 ePd   54 53.50   1.7
                e      54 58.00
HGH    73.30  12 eP    54 53.20  -0.4
KSH    73.34 316 eP    54 54.00  -0.2
        1.0s   540.00nm          6.5mb
     Z  20s    49.40um          6.8Msz
     N  16s    53.70um
     E  16s    56.60um
                pP     55 00.00  19kmX
                sP     55 05.00
                PcP    55 10.00
                PP     57 39.00
                S      04 20.00
                sS     04 34.00
                SKS    04 53.00
                ScS    04 58.00
                SS     09 05.00
CTB    73.49 259 ePc   54 57.00   1.8
BBJ    73.50  81 iPd   54 58.20   2.9X
DBN    73.61   7 eP    55 00.00   4.6X
     Z  20s    20.00um          6.4Msz
                eS     04 20.00
                eSS    09 08.00
SVA    73.63 197 ePc   54 53.00  -2.8
WTS    73.82   6 eP    54 57.00   0.4
        1.0s    38.50nm          5.4mb
                e      55 01.00
STH    74.00  81 iPd   54 57.65  -0.5
GWJ    74.05  81 iPd   54 57.79  -0.8
LSA    74.34 299 eP    55 01.50   0.9
        1.2s    57.00nm          5.5mb
     Z  14s    15.30um          6.4MszX
     N  15s    12.30um
     E  15s     7.18um
                ePcP   55 16.00
                PP     57 52.00
                eSS    09 21.00
CPZ    74.39  14 eP    54 58.40  -1.5
CME    74.42  14 eP    55 00.90   0.8
PPR    74.60 265 iPd   55 01.00  -0.6
CLL    74.75   2 iP    55 01.20  -0.8
        1.4s   180.00nm          5.9mb
     Z  18s    14.50um          6.3Msz
                i      55 06.30
                eS     04 33.00
                P'P'   22 30.00
UCC    74.85   8 P+    55 05.00   2.4
                S      05 21.00
BNS    74.87   6 ePd   55 03.20   0.5
        1.2s   160.00nm          5.9mb
     Z  17s    31.00um          6.7MszX
ENN    74.99   6 iPd   55 04.20   0.8
        1.1s    92.10nm          5.7mb
                id     55 08.80
SNF    75.13   8 iPd   55 04.72   0.6
                id     55 09.54
MEM    75.15   6 iPc   55 03.56  -0.7
        1.3s    62.50nm          5.5mb
                id     55 04.89
BRG    75.20   1 iP    55 04.80   0.2
        1.4s   120.00nm          5.7mb
                i      55 07.40
                i      55 22.00
KSP    75.24 360 eP    55 04.20  -0.7
        1.0s    65.00nm          5.6mb
                id     55 09.80
                i      55 23.00
RAR    75.28 176 iPd   55 04.03  -1.3
                ec     55 08.33
MOX    75.38   3 eP    55 05.50  -0.2
        1.5s    76.00nm          5.5mb
     Z  20s    12.00um          6.2Msz
                eS     04 50.00
PMG    75.49 230 iPd   55 05.42  -1.3
        1.8s  1736.81nm          6.8mb
                ipPc   55 12.53  23kmX
DOU    75.56   7 Pd    55 07.60   0.9
TNS    75.68   5 ePd   55 07.90   0.5
                e      55 12.60
                i      55 49.70
HOF    75.72   3 iPd   55 08.00   0.4
OJC    75.81 357 iPc   55 08.50   0.4
        1.2s   114.00nm          5.8mb
                i      55 12.90
                e      55 20.40
                i      55 25.90
                eS     05 05.00
LVV    76.04 355 iP+   55 10.00   0.6
     Z  20s    46.80um          6.8Msz
     N  18s    47.00um
                eS     04 41.00
                e      05 29.00
PRU    76.09   1 P     55 09.30  -0.4
        1.3s    40.30nm          5.3mb
                pP     55 14.60  17kmX
                P'P'   22 22.20
WLF    76.10   6 iPd   55 10.68   1.0
        1.4s    53.50nm          5.4mb
                ic     55 16.27
GRA1   76.32   3 ePc   55 10.90  -0.1
        1.8s   247.00nm          5.9mb
                e      55 16.40
                ePP    58 00.00
                eS     04 57.00
GRF    76.32   3 ePc   55 10.90  -0.1
        1.8s   247.00nm          5.9mb
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19d 01h

	Z	21s	13.00um			6.2Msz
			ec	55	16.40	
FLN		76.41	11 eP	55	10.70	-0.8
		1.2s	348.70nm			6.3mb
	Z	21s	26.00um			6.5Msz
LDF		76.61	11 eP	55	11.80	-0.8
		1.1s	252.00nm			6.2mb
GRR		76.73	11 eP	55	12.70	-0.6
		1.0s	195.20nm			6.1mb
SPC		76.83	357 eP	55	12.70	-1.4
			e	05	24.30	
LANF		76.88	5 P	55	14.27	0.1
WET		76.91	2 iPd	55	15.40	1.1
	Z	16s	11.00um			6.3MszX
			i	55	19.80	
HOFF		76.93	5 P	55	15.02	0.6
KHC		76.94	2 Pc	55	14.00	-0.5
		1.0s	107.00nm			5.8mb
	Z	22s	23.10um			6.5Msz
			e	55	20.00	
			e	55	28.50	
			e	55	51.30	
			e	56	17.50	
			S	05	06.00	
LPF		77.06	12 eP	55	14.80	-0.3
		1.0s	231.20nm			6.2mb
GEC2		77.23	1 e(Pn)	55	15.70	-0.5
		0.8s	5.20nm			4.6mb X
GEC2		77.23	1 e(P)	55	21.00	4.8X
		0.8s	37.10nm			5.5mb
UZH		77.31	356 eP	55	17.00	0.5
	Z	17s	24.00um			6.6MszX
	N	17s	18.00um			
	E	17s	23.00um			
			i	55	29.80	
			e	55	30.00	
			i	55	35.50	
			ePPP	00	05.00	
			eS	05	02.00	
			ePS	05	38.00	
			ePPS	06	10.00	
CDF		77.42	6 P	55	16.36	-0.9
WLS		77.42	6 P	55	16.36	-0.8
ECH		77.61	6 P	55	18.33	0.1
LIBD		77.70	6 P	55	18.66	0.0
HAU		77.77	7 eP	55	18.70	-0.4
		1.1s	152.40nm			5.9mb
	Z	19s	19.48um			6.4Msz
MNI		77.81	255 eP	55	18.00	-1.7
VKA		77.82	360 iPc	55	17.30	-2.0
		5.5s	2463.00nm			6.5mb X
	Z	16s	10.70um			6.3MszX
			i	55	23.60	
			LR	40	00.00	
FUR		77.85	3 ePc	55	19.20	-0.3
	Z	18s	12.60um			6.3Msz
			e	55	24.10	
			eS	05	12.10	
ZST		77.89	359 eP	55	19.00	-0.6
			e	05	51.80	
BSF		77.97	6 eP	55	19.70	-0.6
		1.3s	248.40nm			6.1mb
MOF		77.97	6 P	55	19.32	-0.9
FEL		78.00	5 P	55	19.20	-1.3
KMR		78.02	1 iP+	55	19.90	-0.5
PSZ		78.11	357 iPd	55	25.00	4.0X
HYF		78.20	9 eP	55	21.30	-0.1
		0.8s	281.55nm			6.3mb
BMR		78.21	355 ePd	55	29.00	7.6X
SRO		78.25	358 iP	55	21.90	0.2
LOR		78.31	8 eP	55	21.60	-0.5
		1.1s	238.35nm			6.1mb
	Z	22s	19.98um			6.4Msz
BHG		78.34	2 iPd	55	23.40	1.2
			i	55	28.30	
BBS		78.38	6 P	55	22.17	-0.3
LOMF		78.45	6 P	55	22.17	-0.7
GUN		78.46	302 P	55	22.80	-0.8
KIS		78.47	351 iP-	55	22.50	-0.3
	Z	20s	32.30um			6.7Msz
	N	22s	29.60um			
	E	22s	14.90um			
			i	55	34.00	
			i	58	22.00	
			iS	05	13.50	
			i	05	25.00	
			iPS	05	57.00	

SSF		78.49	9 eP	55	22.60	-0.4
		1.0s	268.00nm			6.2mb
MFF		78.58	11 eP	55	23.30	-0.2
		1.0s	348.80nm			6.3mb
LBF		78.60	8 eP	55	23.10	-0.6
		1.1s	182.15nm			6.0mb
MOTA		78.66	3 iPc	55	23.70	-0.5
		1.2s	181.00nm			6.0mb
			i	55	29.80	
WATA		78.69	3 iPc	55	24.00	-0.3
			i	55	30.10	
AVF		78.74	9 eP	55	24.00	-0.4
		1.1s	251.05nm			6.1mb
WTTA		78.76	3 iPc	55	24.40	-0.3
		0.9s	105.00nm			5.8mb
			i	55	30.50	
SQTA		78.79	3 iPc	55	24.60	-0.2
		1.2s	250.00nm			6.1mb
			i	55	30.80	
KKN		78.85	302 P	55	25.00	-0.6
CHTO		78.87	287 ePd	55	23.40	-2.1
		0.9s	102.30nm			5.8mb
			eS	05	17.20	
BGF		78.93	9 eP	55	25.00	-0.4
		1.1s	217.80nm			6.1mb
SMF		78.93	8 eP	55	24.90	-0.5
		1.0s	281.60nm			6.2mb
PKI		78.97	302 P	55	25.40	-1.0
KBA		78.99	2 iPc	55	26.00	0.0
		1.2s	268.00nm			6.1mb
			i	55	32.10	
			i	55	36.70	
GKN		79.00	303 P	55	25.00	-1.3
KKM		79.06	265 ePc	55	32.90	6.2X
		0.2s	359.30nm			7.0mb
DMN		79.09	302 P	55	26.20	-0.8
LSF		79.10	10 eP	55	26.00	-0.4
		1.0s	307.20nm			6.3mb
TCF		79.13	10 eP	55	26.10	-0.5
		1.1s	131.40nm			5.9mb
OGA		79.14	3 eP	55	27.80	1.0
MAF		79.23	9 eP	55	26.70	-0.4
		1.1s	145.05nm			5.9mb
ECO		79.24	89 eP	55	27.23	-0.4
TLE		79.33	245 ePc	55	30.00	2.0
PYA		79.34	340 iPd	55	29.00	1.3
		2.5s	1080.00nm			6.4mb
	Z	23s	26.60um			6.5MszX
	N	23s	27.26um			
	E	23s	7.32um			
			iS	05	22.00	
			iS	05	28.00	
GRO		79.45	338 iPc	55	29.00	0.7
			i	55	34.00	
			iS	05	28.00	
			iPS	06	18.00	
KIV		79.48	341 eP	55	28.16	-0.5
		2.7s	1610.94nm			6.6mb
TSM		79.50	263 ePd	55	30.00	1.0
ANN		79.53	345 eP+	55	31.00	2.4
			i	55	33.00	
			ePPP	00	16.00	
			eS	05	42.00	
			eSP	06	28.00	
MGP		79.62	74 P	55	32.00	2.5
UPA		79.64	89 eP	55	29.34	-0.4
VRI		79.79	352 ePd	55	30.00	-0.1
PORP		79.84	73 P	55	31.40	0.7
SIM		79.92	347 eP	55	35.00	4.2X
	Z	20s	30.00um			6.6Msz
			e	58	34.00	
			ePPP	00	32.00	
			eS	05	36.00	
			ePS	06	26.00	
			eSS	10	40.00	
COLF		80.04	9 P	55	32.22	0.7
RJF		80.04	10 eP	55	30.90	-0.5
		1.4s	253.55nm			6.0mb
	Z	20s	28.00um			6.6Msz
LJU		80.04	1 eP	55	35.00	3.6X
			ePcP	56	03.50	
			eS	05	28.00	
			e	06	24.00	
			e	07	08.00	
SJG		80.06	73 ePc	55	32.00	0.0
		2.1s	901.35nm			6.4mb
			ec	55	36.14	

			ePPd	55	41.69	31kmX
BDT		80.10	286 iPc	55	32.00	-0.1
		0.8s	103.80nm			5.9mb
DZM		80.14	208 iPc	55	30.40	-1.9
PTJ		80.19	360 eP	55	32.50	0.2
MLR		80.23	353 ePc	55	34.50	1.9
ORX		80.23	6 P	55	33.72	1.1
CPD		80.25	73 P	55	33.50	0.5
LPL		80.27	6 eP	55	33.60	0.6
		1.2s	118.40nm			5.8mb
ZAG		80.27	360 eP	55	33.00	0.4
LPG		80.29	6 eP	55	33.90	0.7
		1.2s	119.00nm			5.8mb
LFF		80.32	11 eP	55	32.90	0.0
		0.9s	190.65nm			6.1mb
SSB		80.34	8 P	55	33.73	0.6
CFR		80.35	351 eP	55	30.00	-3.0X
BZS		80.35	356 eP	55	24.00	-9.0X
LSD		80.36	6 P	55	35.78	2.3
TRI		80.37	1 eP	55	36.00	2.9X
			e	05	52.00	
			e	10	40.00	
SOC		80.39	343 eP	55	35.00	1.7
		2.0s	188.00nm			5.8mb
			e	05	34.00	
			ePS	06	17.00	
CAF		80.47	10 eP	55	33.60	-0.2
		1.4s	376.40nm			6.2mb
CMP		80.51	353 iPd	55	35.00	1.0
ISR		80.53	352 eP	55	31.00	-3.1X
VBY		80.58	0 eP	55	34.30	0.0
			iPcP	55	40.10	
LPO		80.62	11 eP	55	34.30	-0.2
		1.2s	232.05nm			6.1mb
EMON		80.66	17 iPc	55	35.59	0.8
RSP		80.67	6 P	55	35.37	0.4
NST		80.71	284 eP	55	35.00	-0.4
BNI		80.73	7 P	55	37.70	2.4
		1.1s	87.00nm			5.7mb
RIY		80.74	1 iP	55	38.10	3.0X
PCT		80.78	282 eP	55	35.50	-0.2
		1.0s	8.00nm			4.7mb X
RRL		80.87	7 P	55	38.30	2.2
BHB		80.98	6 P	55	37.98	1.5
STS		80.98	18 eP	55	37.82	1.4
ASH		81.12	327 eP	55	38.50	1.3
		2.5s	1170.00nm			6.5mb
	N	16s	32.61um			
	E	16s	31.27um			
			e	55	50.00	
			e	58	49.00	
			ePPP	00	37.00	
			eS	05	48.00	
			e	06	28.00	
			PS	06	40.00	
			e	06	53.00	
			eSS	11	05.00	
			eSSS	14	28.00	
DRA		81.15	354 ePd	55	43.00	5.7X
BOB		81.17	5 P	55	38.09	0.6
		1.1s	553.60nm			6.5mb
MTA		81.22	338 ePc+	55	39.10	1.5
			iS	05	47.20	
			e	06	40.00	
			ePPS	06	58.00	
BAK		81.27	334 iPc	55	45.00	7.1X
			iS	05	51.00	
BUC		81.29	353 iPc	55	40.00	2.0
PZZ		81.30	6 P	55	40.50	2.2
DOI		81.31	6 P	55	42.95	4.7X
		1.3s	129.00nm			5.8mb
PCP		81.35	5 P	55	38.62	0.2
BUC1		81.36	353 iPc	55	36.00	-2.4
CKI		81.45	5 P	55	38.75	-0.1
		1.3s	1024.90nm			6.7mb
ROB		81.56	6 P	55	40.18	0.7
STV		81.58	6 P	55	44.62	5.0X
ENR		81.60	6 P	55	43.75	4.0X
FIN		81.66	6 P	55	40.68	0.6
EZAM		81.67	18 eP	55	41.54	1.5
ERUA		81.71	17 eP	55	40.82	0.6
ELIZ		81.79	13 eP	55	41.36	0.6
MME		81.80	4 P	55	43.00	2.0
		1.4s	351.30nm			6.2mb
TOUF		81.80	6 P	55	42.49	1.5
AUTN		81.83	6 P	55	42.49	1.3
SAOF		81.85	6 P	55	41.62	0.6

ELYF	81.86	12	P	55 41.27	0.2
MADF	81.90	12	P	55 41.27	0.0
MVIF	81.91	6	P	55 42.95	1.5
BOH	81.92	12	P	55 43.46	2.0
BDI	81.93	4	P	55 42.11	0.7
	1.0s	31.40nm			5.3mb
AURF	81.93	6	P	55 42.06	0.5
IMI	81.94	6	P	55 44.34	2.8
NDI	81.95	309	iPc	55 48.00	6.3X
	0.9s	151.26nm			6.0mb
SBF	81.96	6	P	55 42.06	0.4
ATE	81.98	12	P	55 42.48	0.8
ESCF	82.00	12	P	55 41.27	-0.5
ISSF	82.02	12	P	55 42.31	0.3
REVF	82.08	6	P	55 43.16	0.9
SFI	82.11	3	P	55 44.79	2.5
	1.4s	423.90nm			6.3mb
RSM	82.12	2	P	55 49.91	7.6X
	1.1s	595.90nm			6.6mb
PGD	82.15	3	P	55 45.34	2.6
	1.2s	753.90nm			6.6mb
EPF	82.16	11	eP	55 42.10	-0.5
	0.9s	54.55nm			5.6mb
LHE	82.16	12	P	55 43.46	0.7
ECRI	82.21	14	eP	55 43.51	0.6
FRF	82.21	7	eP	55 43.00	0.1
	1.3s	330.70nm			6.2mb
MAIO	82.25	326	iPd	55 44.00	0.7
	1.2s	59.03nm			5.5mb
			eS	06 10.00	
PII	82.26	4	P	55 43.61	0.5
	1.2s	385.40nm			6.3mb
LRG	82.30	7	eP	55 43.80	0.5
	1.4s	456.55nm			6.3mb
Z	20s	15.00um			6.4Msz
KHT	82.30	284	eP	55 43.00	-0.7
ENSF	82.38	11	P	55 45.27	1.4
CRE	82.40	3	P	55 45.86	1.9
	1.5s	222.80nm			6.0mb
LSPF	82.41	10	P	55 44.92	1.0
LMR	82.43	7	eP	55 44.30	0.3
	1.3s	342.25nm			6.3mb
MTHF	82.48	10	P	55 45.45	1.1
ARV	82.56	2	P	55 46.54	1.9
	1.3s	623.00nm			6.5mb
PLE	82.71	357	iPd	55 46.66	1.1
ERE	82.73	338	iP	55 47.00	1.3
			i	59 00.00	
			iS	06 04.00	
			iPS	07 08.00	
PAND	82.79	11	P	55 47.37	1.2
EGRA	82.90	12	eP	55 48.52	2.1
HVAR	82.91	360	iP	55 47.10	0.6
ASS	82.98	2	P	55 48.54	1.6
	1.1s	250.10nm			6.2mb
ETER	83.15	10	eP	55 48.58	0.9
IVA	83.15	357	iPd	55 48.98	1.1
BRY	83.16	358	iPd	55 47.40	-0.6
NKY	83.24	358	iPd	55 48.18	-0.1
BPA	83.31	70	eP	55 48.00	-0.9
PGF	83.36	5	eP	55 49.10	0.1
	1.3s	436.10nm			6.4mb
PVY	83.43	357	iPd	55 50.01	0.7
KVT	83.44	345	iP	55 51.00	1.7
KAS	83.48	347	eP	55 51.50	1.9
KART	83.60	346	eP	55 53.50	3.1X
HCY	83.61	358	iPd	55 49.19	-0.9
TTG	83.61	357	iPd	55 49.92	-0.1
BCI	83.65	357	eP	55 53.40	3.1X
MNS	83.67	2	P	55 51.13	0.7
	1.2s	327.90nm			6.4mb
AQU	83.71	2	P	55 53.56	2.9X
	1.3s	600.40nm			6.6mb
DMK	83.72	351	eP	55 55.00	4.3X
BDV	83.77	358	iPd	55 49.33	-1.6
GUD	83.90	15	eP	55 51.63	-0.1
SDA	83.99	357	eP	55 59.00	7.0X
SKO	84.00	356	eP	55 43.00	-9.1X
			iS	05 55.00	
CTK	84.00	346	eP	55 54.90	2.6
ETOR	84.03	14	iPc	55 52.33	0.0
ULC	84.08	357	iPd	55 50.98	-1.5
EPLA	84.15	17	iPc	55 53.22	0.3
RMP	84.24	2	P	55 59.79	6.5X
	1.4s	625.00nm			6.6mb
FG2	84.28	0	P	55 59.74	6.3X
	1.4s	436.40nm			6.5mb

RDP	84.29	2	P	55 54.75	1.1
	1.3s	389.20nm			6.4mb
ITU	84.31	350	iPc	56 00.00	6.4X
TAB	84.34	336	iPd	55 56.40	2.4
EROQ	84.34	12	eP	55 54.78	1.0
DEG	84.35	70	eP	55 53.00	-1.2
SDI	84.37	2	P	55 55.02	1.0
	1.4s	345.50nm			6.4mb
LACI	84.39	357	eP	55 54.50	0.5
DUI	84.42	1	P	55 56.63	2.3
	1.4s	321.90nm			6.3mb
SGKT	84.49	348	eP	56 00.60	5.8X
MGG	84.53	70	eP	55 55.80	0.8
SVST	84.57	344	eP	55 57.10	1.9
RDO	84.58	353	iPc	55 55.50	0.6
TIR	84.68	357	iPd	56 04.00	8.5X
TOV	84.68	81	eP	55 56.80	0.9
KNT	84.73	355	iP	55 56.46	0.7
ALN	84.79	352	eP	55 56.70	0.7
LIS	84.90	19	iPd	55 58.30	1.7
SDV	84.92	82	ePd	55 56.30	-1.0
PAB	84.94	16	ePc	55 57.10	0.2
			ic	56 01.57	
			epPd	56 05.21	26kmX
NAL	84.95	348	eP	56 00.00	3.0X
BMG	84.95	85	iPd	55 57.00	-0.3
FG4	84.95	0	P	55 59.38	2.5
	1.7s	100.20nm			5.8mb
GRG	84.96	355	eP	55 57.54	0.6
IZI	85.02	350	eP	55 58.70	1.4
FNA	85.18	356	eP	55 59.22	1.1
BERA	85.32	357	eP	55 58.20	-0.5
KBN	85.37	356	eP	56 02.50	3.5X
CTA	85.37	226	iPd	55 58.00	-1.1
	1.0s	300.00nm			6.5mb
			e	59 24.00	
			eSKS	06 22.00	
			esSKS	06 37.00	
			e	12 00.00	
CTAO	85.37	226	iPd	55 58.36	-0.7
			ipPc	56 05.56	23kmX
ECHE	85.38	13	eP	55 59.82	0.7
OUR	85.49	354	eP	56 00.10	0.6
SGO	85.53	0	P	56 01.01	1.3
	1.7s	377.00nm			6.3mb
FDF	85.59	71	eP	56 05.00	4.6X
			S	06 22.30	
KZN	85.64	355	eP	56 00.00	-0.4
ESEL	85.66	10	iPd	56 01.14	0.7
TPE	85.72	357	eP	56 02.60	1.9
LCI	85.74	358	P	56 06.82	6.1X
	1.4s	1081.30nm			6.9mb
CAR	85.75	78	eP	56 02.00	0.7
LIT	85.81	355	eP	56 03.66	2.4
EZN	85.83	352	eP	56 02.40	1.2
DST	85.84	350	eP	56 00.70	-0.7
LSK	85.85	356	eP	56 03.20	1.7
PAIG	85.92	354	eP	56 03.78	2.1
MGR	85.95	0	P	56 01.72	-0.1
	1.2s	1197.40nm			7.0mb
ORI	86.02	360	P	56 03.38	1.2
EVIA	86.11	14	eP	56 04.12	1.3
SRN	86.14	357	iP	56 03.20	0.5
KEK	86.31	357	eP	56 08.00	4.4X
BOG	86.34	87	iP	56 10.00	5.4X
			eS	06 27.00	
SLB	86.39	71	eP	56 05.21	0.8
EVAL	86.45	18	eP	56 05.41	1.0
IGT	86.47	357	iP	56 05.58	1.1
EHOR	86.48	17	eP	56 05.50	1.0
ACU	86.52	13	eP	56 05.23	0.5
AGG	86.89	355	eP	56 06.86	0.3
EHUE	86.90	15	eP	56 07.82	1.1
KHL	87.01	349	eP	56 07.00	-0.2
EALH	87.03	14	P	56 13.51	6.3X
PSO	87.19	92	eP	56 10.00	1.3
GRI	87.27	360	P	56 08.19	-0.1
	1.3s	586.90nm			6.7mb
SNG	87.27	278	eP	56 09.20	0.6
	1.1s	278.48nm			6.4mb
			eS	06 32.00	
ECOG	87.28	15	eP	56 09.33	0.7
EPRU	87.32	17	eP	56 08.54	-0.1
KER	87.69	335	eP	56 11.00	0.4
EGUA	87.72	15	eP	56 10.62	0.1
EJIF	87.78	17	eP	56 12.03	1.2
ENIJ	87.79	14	P	56 15.48	4.6X

VLS	87.82	356	eP	56 15.20	4.2X
ATH	87.86	354	eP	56 23.60	12.4X
			e	06 50.00	
CIN	87.88	350	eP	56 11.00	-0.2
GMB	87.92	360	P	56 11.65	0.0
	1.2s	153.30nm			6.2mb
SOI	88.01	360	P	56 11.19	-0.7
	1.2s	115.70nm			6.1mb
CPS	88.40	17	iP	56 15.50	1.7
QIS	88.70	231	eP	56 14.00	-1.3
TSY	88.74	18	iP	56 17.50	2.1
NKM	88.77	17	iPd	56 21.00	5.4X
TRN	88.77	74	eP	56 14.33	-1.5
IPM	89.13	277	ePd	56 17.20	-0.4
	0.8s	135.50nm			6.3mb
VLI	89.16	354	eP	56 17.00	-0.4
BRS	89.42	217	iPd	56 18.50	0.0
	1.0s	40.00nm			5.7mb
Z	18s	76.00um			7.2Msz
			e	04 51.00	
			iS	06 47.00	
KGM	89.85	273	eP	56 22.00	1.1
TAF	89.87	15	iP	56 27.00	6.1X
			i	56 57.00	
RTC	89.95	19	iP	56 25.50	4.3X
ZER	90.11	17	iP	56 27.00	5.1X
TZK	90.30	17	iP	56 22.50	-0.3
VAM	90.38	353	eP	56 27.80	4.7X
AVE	90.49	19	eP	56 16.00	-7.7X
			i	56 30.00	
BHL	90.52	344	P	56 30.00	6.1X
			PP	00 00.00	
			SKS	06 52.00	
WB5	90.59	236	iPd	56 22.50	-1.6
			iPcP	56 24.00	
			ipP	56 45.00	82kmX
			ePP	59 55.00	
			i	00 43.30	
			eScS	07 15.40	
WRA	90.65	236	iPc	56 22.70	-1.7
	1.4s	85.00nm			5.9mb
IFR	90.70	17	iPd	56 26.00	1.1
			i	56 31.00	
HYB	90.89	302	eP	56 24.50	-1.3
	1.0s	260.00nm			6.5mb
JHA	91.59	21	iP	56 29.00	0.3
CIA	91.90	21	iP	56 31.00	0.8
POO	92.22	306	iPc	56 37.00	5.1X
TBT	92.38	29	(P)	56 30.85	-1.6
	1.2s	185.97nm			6.4mb
BOM	92.39	307	eP	56 35.00	2.4
OUK	92.43	20	iP	56 35.00	2.4
ARMA	92.58	217	iPc	56 33.70	0.5
	0.6s	82.00nm			6.3mb
ASPA	94.04	234	iPd	56 38.90	-1.0
	1.6s	52.60nm			5.7mb
Z	23s	14.10um			6.4MszX
			ePP	59 20.40	
			iS	07 11.70	
GBA	94.69	301	P	56 43.00	-0.2
HLW	95.14	347	eP	56 50.00	4.9X
			eS	07 18.50	
RIV	95.84	216	eP	56 48.50	0.6
			iSKS	07 25.00	
			iS	08 10.00	
			ePS	09 29.00	
			eSS	14 41.00	
BWA	97.35	218	iPd	56 54.90	0.1
			i	57 02.90	
KOD	97.54	299	eP	56 51.80	-4.8X
STK	97.72	224	eP	56 49.10	-7.3X
	1.1s	19.50nm			5.5mb
CNB	97.81	217	eP	56 58.00	1.1
CAN	97.95	217	eP	56 57.90	0.5
			i	57 06.40	
NNA	98.07	99	eP	57 04.00	5.5X
	0.9s	10.08nm			5.3mb
MBO	106.11	33	ePKP	02 06.10	19.8X
LPAZ	106.56	95	iPKP	02 06.10	18.1X
LPB	106.77	95	Pdiff	57 54.00	16.1X
Z	18s	11.00um			6.5Msz
			PP	02 10.00	
			e	18 18.00	
			LR	28 20.00	
CNCB	107.06	95	ePdiff	57 51.00	11.7X
			e	01 50.00	
SOB1	116.51	67	ePKP	02 05.80	-0.5

19d 02h

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KIC   117.16  23 ePKP  02 07.20  -0.3
       0.6s     7.00nm
BAO   117.78  78 ePKP  02 07.70  -1.1
BDF   117.86  78 ePKP  02 09.00   0.1
       0.9s     0.40nm
                i     03 22.20
                e     03 48.90
MDZ   118.91 107 ePKP  02 19.30   8.9X
RFA   120.52 108 ePKPd 02 12.50  -0.9
PPD   120.89  85 ePKP  02 14.00  -0.4
VAO   124.17  82 ePKP  02 20.70  -0.1
NAI   124.42 334 PKP   02 24.00   2.3
     Z  20s     8.12um          6.4Msz
                PP    04 14.00
                SKS   09 36.00
                SKKS  10 28.00
                PKKS  15 28.00
                SS    21 12.00
DRV   127.72 205 PKP   02 15.00 -11.1X
                PP    04 24.00
                SS    21 50.00
SBA   133.09 188 ePKP  02 37.20   1.1
MTD   140.63 336 iPKPc 02 34.80 -17.2X
                i     02 37.50
                iPP   06 12.00
KRI   141.12 339 ePKP  02 36.50 -16.5X
                i     02 41.80
                i     02 50.00
                iPP   06 18.60
SPA   144.10 180 ePKPd 02 53.10  -3.5X
       0.9s   500.00nm
                i     03 53.10
BUL   144.54 339 iPKPc 02 56.60  -2.2
                i     03 01.90
                i     03 15.70
CIR   144.69 334 iPKPd 03 09.50  10.6X
                i     03 41.80
                iPP   06 45.60
PAF   146.74 256 ePKP  03 06.00   4.6X
                eSPP  19 23.00
                eSSS  20 39.00
WIN   148.31 358 iPKPc 03 06.00   1.0
       1.0s   520.00nm
BFT   149.55 334 ePKP  03 08.50   1.6
       1.3s   317.31nm
BFT   149.55 334 ePKP  03 12.30   5.4X
       1.3s   520.00nm
SLR   150.02 337 iPKPc 03 17.10   9.6X
       1.5s   777.78nm
     Z  18s    19.24um          6.9Msz
SLR   150.02 337 ePKP  03 08.20   0.7
       1.1s   560.00nm
KSR   150.45 339 ePKP  03 08.00  -0.2
       1.0s   960.00nm
SWZ   152.04 342 ePKP  03 11.00   0.5
       1.4s   420.00nm
SEK   152.67 337 ePKP  03 18.60   7.3X
       1.5s   120.00nm
BOSA  153.41 341 (PKP) 03 10.69  -1.4
                ec    03 24.43
                e     03 36.18
BLF   153.74 339 ePKP  03 13.00   0.2
       1.4s   400.00nm
MAW   154.34 220 PKP   03 12.60   0.4
       1.2s   250.00nm
FRS   154.53 341 ePKP  03 14.50   0.9
       1.4s   470.00nm
POF   154.93 352 iPKPc 03 16.00   1.9
       1.5s   120.00nm
CRZF  155.93 274 iPKP  03 18.00   3.0X
                ePP   07 20.00
                eSPP  20 30.00
GRM   157.70 336 ePKP  03 19.00   1.2
       1.0s   260.00nm
     Z  20s    13.30um          6.8Msz
SUR   157.82 349 ePKP  03 32.50  14.4X
       1.5s   140.00nm
     Z  20s    30.60um          7.1Msz
CER   158.94 352 ePKP  03 22.00   2.9X
       1.0s   120.00nm
SNA   161.98 160 e(PKP)03 18.60  -2.4
     S.D. = 1.2  on 634 of 729 obs.
-----------------------------------
*  NOV  19, 1993  02h 06m 09.03± 1.28s
   54.245 N ±19.5km  164.161 W ±14.1km
   DEPTH =  33.0km  (normal)
   4.0mb (  1 obs.)
```

```
 UNIMAK ISLAND REGION            ( 10)
      ML 4.4 (PMR). Felt (III) at
      False Pass.

SDN     2.39  61 eP    06 47.05   0.4
                eS    07 14.91
KDC     7.42  57 eP    07 56.16  -1.5
ADK     7.91 258 eP    08 03.83  -0.6
SVW     8.26  30 eP    08 09.20  -0.2
CRP     9.51  37 eP    08 27.99   1.1
PMS    10.47  42 eP    08 38.10  -1.8
KLU    12.09  46 eP    08 58.89  -3.0X
TOA    12.30  43 eP    09 02.90  -1.7
IMA    12.93  19 e(P)  09 14.40   1.4
YKA    26.64  52 eP    11 48.50   2.5
       0.5s    2.20nm          4.0mb
BONR   35.02  99 eP    13 00.97   0.3
PV09   40.01  90 (P)   13 46.12   3.6X
     S.D. = 1.6  on  10 of  12 obs.
-----------------------------------
?  NOV  19, 1993  02h 19m 08.61± 1.28s
   54.613 N ±30.8km  164.347 W ±16.3km
   DEPTH =  33.0km  (normal)
 UNIMAK ISLAND REGION            ( 10)
      ML 4.2 (PMR).

SDN     2.34  70 eP    19 45.94   0.5
                eS    20 12.71
KDC     7.32  60 (P)   20 54.94  -0.9
ADK     7.89 255 eP    21 03.80   0.0
SVW     8.00  32 eP    21 13.40   8.0X
PMS    10.28  44 eP    21 36.90   0.1
PMR    10.64  43 (P)   21 41.08  -0.6
KLU    11.92  47 eP    21 57.16  -1.9X
TOA    12.11  44 eP    22 02.60   1.0
IMA    12.62  20 e(P)  22 18.70  10.2X
     S.D. = 0.9  on   6 of   9 obs.
-----------------------------------
   NOV  19, 1993  02h 25m 08.86± 0.22s
   14.807 N ± 4.3km   93.972 W ± 3.5km
   DEPTH =  25.2km  ( 19 depth phases)
   5.6mb ( 83 obs.)
 NEAR COAST OF CHIAPAS, MEXICO   ( 69)
      Felt along the coasts of Chiapas
      and Oaxaca.

TPX     1.66  86 iPd   25 38.44   1.8
                (S)   26 01.50
SCX     2.31  34 iP    25 51.56   5.6X
                iS    26 21.79
IISM    5.28 322 iP    26 31.67   3.5X
                (S)   27 35.00
LVVM    5.44 335 (P)   26 28.96  -1.5
ACX     6.02 291 iP    26 36.50  -2.2
PPM     6.15 314 iP    26 43.45   2.5
IIA     6.22 315 iP    26 43.43   1.9
III     6.35 305 iP    26 44.53   1.0
UNM     6.71 313 (P)   26 51.00   2.3
CRX     7.12 311 (P)   26 58.00   3.6X
MRX     8.44 306 iP    27 14.50   1.9
BRU    12.66 117 eP    28 12.10   1.5
DVD    12.94 118 eP    28 16.59   2.7
ECO    14.97 110 eP    28 38.98  -1.7
UPA    15.26 111 eP    28 52.61   8.1X
BBJ    16.40  75 ePd   29 03.95   4.8X
STH    16.78  76 ePd   29 07.06   3.2X
LTX    17.01 330 eP    29 06.90   0.1
                pP    29 11.45
UYO    19.28 359 iPc   29 32.70  -2.0
OXF    20.05  11 eP    29 40.11  -2.9
       0.7s   63.17nm          5.1mb
                pP    29 46.31  23km
WMOK   20.31 349 ePc   29 43.80  -2.0
       1.6s  269.06nm          5.4mb
MEO    20.32 349 iPd   29 43.10  -2.8
FNO    20.60 352 iPd   29 47.80  -0.9
OCO    20.87 352 iPd   29 50.60  -0.9
TUL    21.08 356 iPd   29 53.20  -0.5
HBF    21.87  32 (P)   29 59.64  -2.0
PRM    21.88  27 eP    30 00.38  -1.3
LST    21.96   9 (P)   30 04.09   1.6
SGS    22.01  31 eP    30 02.01  -1.0
MYNC   22.04  22 (P)   30 02.96  -0.4
       1.5s  144.06nm          5.2mb
ACO    22.29 349 iPc   30 05.10  -0.7
JSC    22.53  28 ePc   30 07.93  -0.3
ELC    22.78  10 eP    30 09.77  -0.9
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LHS    22.91  29 ePc   30 11.41  -0.5
SDV    23.58 102 eP    30 19.30   0.5
TOV    24.14  99 eP    30 21.90  -2.2
CEH    24.87  30 eP    30 29.49  -1.4
       0.6s   18.34nm          4.9mb
NAV    25.30  25 eP    30 34.80  -0.2
                pP    30 43.14  30km
BLA    25.36  26 (P)   30 34.29  -1.3
GLA    26.24 317 eP    30 44.74   0.9
GLD    26.74 340 eP    30 49.18   0.7
       1.3s   66.25nm          5.1mb
GOL    26.74 340 eP    30 48.69   0.1
       1.2s   91.62nm          5.3mb
PV08   26.99 334 eP    30 52.09   1.1
PV10   26.99 333 ePc   30 50.66  -0.3
PV09   27.13 333 eP    30 52.06  -0.2
PLM    27.78 316 eP    30 58.70   0.6
SRU    28.25 332 eP    31 00.55  -1.8
PEC    28.30 316 eP    31 03.34   0.8
       1.3s   97.14nm          5.4mb
                ipP   31 11.14  27km
MSU    28.56 329 eP    31 04.02  -1.1
SSK    28.84 316 eP    31 08.76   1.1
GSC    28.93 319 eP    31 08.03  -0.3
DAU    29.64 333 eP    31 13.85  -1.1
TPNV   29.66 322 eP    31 15.78   0.8
       1.4s   46.81nm          5.1mb
ABL    30.24 316 eP    31 21.40   1.2
RSSD   30.45 346 eP    31 20.02  -1.9
       1.4s   32.47nm          5.0mb
TNP    30.99 323 eP    31 27.89   1.2
       2.5s  400.29nm          5.8mb
HVU    31.42 332 ePc   31 30.50   0.1
BONR   31.55 322 ePd   31 33.02   1.3
NNA    31.57 147 eP    31 31.00  -0.8
       1.1s   31.65nm          5.1mb
PHAM   31.59 316 (P)   31 33.15   1.3
                pP    31 39.91  24km
MEMM   31.75 320 eP    31 35.30   2.2
MMPM   31.77 320 eP    31 35.59   1.8
KVN    32.15 323 eP    31 37.99   1.1
SAO    32.81 317 ePd   31 43.50   1.0
       1.5s   80.00nm          5.4mb
CMB    32.88 320 ePd   31 43.75   0.7
       1.7s  100.00nm          5.5mb
ARN    33.20 318 eP    31 46.78   0.9
COE    33.24 317 eP    31 47.63   1.4
MHC    33.27 318 ePd   31 47.54   0.9
       1.4s  100.00nm          5.6mb
STAN   33.65 317 ePd   31 48.99  -0.8
       1.7s  370.00nm          6.0mb
HMR    33.84 319 (P)   31 52.00   0.6
BKS    33.96 318 ePd   32 00.24   7.8X
       1.7s  100.00nm          5.5mb
ORV    34.49 321 ePd   31 58.09   1.1
       1.7s  100.00nm          5.5mb
GAC    34.52  23 eP    31 55.50  -1.6
LRM    34.61 337 iPc   31 58.70   0.5
MIN    35.05 322 ePd   32 02.30   0.4
       1.4s   50.00nm          5.3mb
ULM    35.38 358 eP    32 05.00   0.6
WDC    35.75 321 ePd   32 06.25  -1.5
LBFM   35.84 323 eP    32 08.76   0.0
LGPM   36.13 322 eP    32 11.48   0.4
ARC    36.86 321 ePd   32 16.46  -0.6
       1.8s  350.00nm          5.9mb
VGB    38.04 329 eP    32 27.71   0.8
ARE    38.18 144 eP    32 30.00   1.3
DPW    38.59 334 eP    32 30.66  -0.9
ASR    38.89 329 P     32 35.41   1.2
EBG    38.94 331 P     32 35.54   1.1
SHW    39.24 329 eP    32 37.41   0.3
LON    39.42 330 ePc   32 38.48   0.0
FMW    39.48 330 P     32 38.30  -0.9
LPAZ   40.07 139 P     32 43.20  -1.7
LPB    40.28 140 P     32 41.50  -4.8X
GMW    40.46 330 eP    32 46.28  -0.7
                pP    32 54.37  27km
CNCB   40.56 140 P     32 48.20  -0.6
MCW    41.27 331 (P)   32 51.67  -2.0
JAQ    41.47  16 eP    32 53.50  -1.7
CCH    42.16 138 P     33 01.00  -0.6
YKA    49.82 348 eP    34 00.50  -0.9
       1.2s   50.30nm          5.4mb
FRB    51.98  14 eP    34 16.00  -1.8
       0.9s   21.00nm          5.1mb
MDZ    53.16 153 eP    34 26.80  -0.3
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PPD     55.58 130 eP    34 42.40  -2.5
INK     59.13 344 eP    35 08.50  -0.9
        1.5s    55.00nm          5.5mb
VAO     59.40 128 eP    35 07.00  -4.9X
KLU     59.41 334 eP    35 11.26  -0.3
RES     59.88 360 eP    35 13.00  -1.4
        1.1s    19.00nm          5.1mb
RUV     60.63 243 iPd   35 18.80  -1.5
        1.4s   362.50nm          6.3mb
TPT     60.74 243 iPd   35 19.50  -1.6
        1.6s   197.80nm          6.0mb
PMR     60.84 333 eP    35 20.01  -1.1
        1.9s   274.12nm          6.1mb
VAH     60.86 243 iPd   35 20.30  -1.6
        1.6s   318.40nm          6.2mb
SLKM    60.88 332 eP    35 19.66  -1.9
PMO     60.98 243 iPd   35 21.10  -1.7
        1.4s   292.80nm          6.2mb
FBA     61.76 337 eP    35 25.75  -1.6
        1.7s    78.86nm          5.6mb
                ipP     35 34.04  27km
CRP     62.05 332 eP    35 27.98  -1.6
CP2     62.09 332 eP    35 28.75  -1.2
MBC     62.89 353 eP    35 35.50   0.8
        1.4s   133.00nm          5.9mb
PPN     63.43 241 iPd   35 37.40  -1.7
        1.9s   382.50nm          6.2mb
SVW     63.57 331 (P)   35 37.79  -1.7
        0.9s    41.48nm          5.6mb
PAE     63.62 241 iPd   35 38.80  -1.6
        1.6s   385.60nm          6.3mb
AFR     63.73 242 iPd   35 39.30  -1.8
        1.2s   116.00nm          5.9mb
TTA     64.32 333 eP    35 42.47  -2.0
        1.5s    43.15nm          5.4mb
                ipP     35 50.23  25km
BRW     67.48 342 eP    36 04.71   0.3
                ipP     36 11.57  22km
DAG     72.30  14 iPc   36 32.00  -1.8
        0.7s    15.07nm          5.1mb
                ipP     36 42.00  32km
EKA     78.43  36 Pd    37 09.50   0.6
        1.3s    70.40nm          5.5mb
EHOR    80.09  53 eP    37 18.11  -0.2
GUD     80.38  51 eP    37 18.77  -1.2
PAB     80.45  52 eP    37 20.70   0.4
LPF     81.08  43 eP    37 23.00  -0.3
        1.4s    79.70nm          5.6mb
GRR     81.13  42 eP    37 23.30  -0.3
        1.4s   100.65nm          5.7mb
EBAN    81.15  53 eP    37 23.37  -0.6
ECRI    81.20  48 eP    37 24.28   0.1
FLN     81.29  42 eP    37 24.40   0.0
        1.4s   124.60nm          5.7mb
ECOG    81.51  54 eP    37 24.79  -1.2
LDF     81.56  42 eP    37 25.80   0.0
        1.4s   101.50nm          5.7mb
ETOR    81.91  50 eP    37 28.29   0.4
MFF     81.99  44 eP    37 27.80  -0.3
        1.3s    44.05nm          5.3mb
EVIA    82.04  52 eP    37 28.57  -0.1
EHUE    82.15  53 eP    37 28.63  -0.6
EGRA    82.87  48 eP    37 33.91   1.2
LFF     82.97  45 eP    37 33.20   0.0
        1.2s    61.30nm          5.6mb
EPF     83.15  47 eP    37 34.10  -0.2
        1.3s    45.85nm          5.5mb
LSF     83.19  44 eP    37 33.70  -0.7
        1.3s    38.25nm          5.4mb
LPO     83.34  46 eP    37 35.10  -0.1
        1.4s    57.95nm          5.5mb
RJF     83.42  45 eP    37 35.40  -0.2
        1.4s    72.30nm          5.7mb
TCF     83.64  44 eP    37 36.30  -0.4
        1.3s    45.85nm          5.5mb
HYF     83.68  43 eP    37 37.10   0.3
        1.1s    78.65nm          5.8mb
SNF     83.87  39 P     37 40.70   3.0X
CAF     83.89  45 eP    37 37.80  -0.2
        1.7s    44.85nm          5.4mb
MAF     83.90  44 eP    37 37.50  -0.5
        1.6s    79.60nm          5.7mb
BGF     84.00  44 eP    37 38.00  -0.5
        0.9s    24.90nm          5.4mb
KONO    84.06  30 eP    37 20.10 -18.3X
DOU     84.18  40 P     37 40.70   1.5
NAO     84.25  28 P     37 41.77   2.4
AVF     84.27  43 eP    37 39.20  -0.6
        1.0s    16.80nm          5.2mb
SSF     84.30  43 eP    37 39.50  -0.5
        1.0s    22.40nm          5.3mb
NB2     84.35  28 P     37 41.90   1.9
        1.0s    39.40nm          5.6mb
LOR     84.48  43 eP    37 40.80  -0.1
        1.5s    84.60nm          5.7mb
LBF     84.63  43 eP    37 41.40  -0.3
        1.5s    47.55nm          5.5mb
SMF     84.64  43 eP    37 41.00  -0.7
        1.6s    69.65nm          5.6mb
WIT     84.64  37 eP    37 43.00   1.5
                e       37 52.50  30km
ENN     84.80  39 iP    37 43.70   1.4
        1.0s    50.00nm          5.7mb
                e       37 51.00  23km
MUD     84.89  33 eP    37 44.00   1.4
        0.9s    33.00nm          5.6mb
MEM     84.90  39 iPc   37 44.50   1.7
        1.4s    36.70nm          5.4mb
WTS     84.97  38 eP    37 44.50   1.4
        1.0s    53.80nm          5.7mb
                e       37 52.50  25km
WLF     85.27  40 iPc   37 45.88   1.2
        1.4s    51.50nm          5.6mb
BNS     85.50  38 eP    37 46.90   1.1
        1.2s   150.00nm          6.1mb
HFS     85.82  29 eP    37 47.70   0.4
        0.6s     1.40nm          4.4mb X
ESEL    85.83  50 eP    37 48.36   0.6
HAU     85.88  41 eP    37 47.90   0.0
        1.1s   101.10nm          6.0mb
BSF     86.22  42 eP    37 49.40  -0.3
        1.4s   145.05nm          6.0mb
ECH     86.34  41 P     37 50.14   0.0
CDF     86.35  41 eP    37 50.20  -0.1
        1.3s    92.40nm          5.9mb
LOMF    86.39  42 P     37 50.47   0.0
WLS     86.40  41 P     37 50.68   0.2
MOF     86.43  41 P     37 50.68   0.0
TNS     86.50  39 eP    37 52.00   1.1
                i       37 54.50   8kmX
                i       38 00.50
                e       38 19.10
LANF    86.50  40 P     37 51.45   0.5
SRBF    86.55  40 P     37 51.90   0.8
HOFF    86.62  40 P     37 52.33   0.9
EMS     86.85  43 ePd   37 53.90   1.0
COP     86.87  33 eP    37 58.00   5.5X
        0.9s    40.34nm          5.7mb
LPL     86.89  44 eP    37 53.90   0.7
        1.5s    98.70nm          5.8mb
LPG     86.91  44 eP    37 54.20   0.9
        1.4s   108.90nm          5.9mb
FEL     86.99  41 P     37 53.53   0.1
DIX     87.17  43 ePd   37 56.10   1.6
LRG     87.27  46 eP    37 54.90   0.2
        1.3s    96.40nm          5.9mb
SLE     87.33  41 ePd   37 55.70   0.7
ZLA     87.35  42 P     37 54.90  -0.2
LMR     87.41  46 eP    37 55.40   0.0
        1.2s    77.05nm          5.8mb
FRF     87.43  46 eP    37 55.60   0.1
        1.3s   114.45nm          6.0mb
CALN    87.54  45 P     37 58.07   1.9
MMK     87.54  43 eP+   38 00.20   3.9X
MVIF    87.68  45 P     37 57.44   0.6
AURF    87.80  45 P     37 57.46   0.1
SBF     87.88  45 eP    37 57.50  -0.2
        1.5s   158.25nm          6.1mb
SAOF    87.92  45 P     37 57.77  -0.1
LLS     87.95  42 ePd   37 59.50   1.3
TMA     88.12  43 ePd   37 59.70   0.7
MOX     88.26  38 eP    38 00.40   1.1
        2.0s    57.00nm          5.6mb
GRF     88.37  39 ePc   38 00.60   0.7
                e       38 09.70
                e(pP)   38 29.60 110kmX
                e       38 34.60
VDL     88.38  42 eP+   38 02.00   1.7
OSS     88.75  42 eP+   38 05.00   3.0X
CLL     88.83  37 eP    38 02.00   0.0
                i       38 10.60  27km
PGF     89.39  46 eP    38 04.50  -0.5
        1.1s    49.55nm          5.7mb
BRG     89.55  37 iP    38 06.40   1.0
                i       38 13.50  22km
KHC     90.01  39 P     38 08.40   0.7
        1.1s    29.00nm          5.4mb
                e       38 15.00  21km
GEC2    90.19  39 e(P)  38 09.50   0.9
        0.9s     5.10nm          4.8mb
GEC2    90.19  39 e(P)  38 18.90  10.3X
        1.1s    14.70nm
GEC2    90.19  39 e(P)  38 16.40   7.8X
        1.2s    18.50nm          5.2mb
GEC2    90.19  39 e(P)  38 23.20  14.6X
        1.3s    12.80nm
PRU     90.25  38 eP    38 09.60   0.9
        1.1s    30.50nm          5.5mb
                i       38 17.20  24km
KAF     90.30  24 eP    38 14.30   5.6X
NUR     90.49  26 eP    38 17.40   7.8X
KBA     90.65  41 i(P)  38 11.20   0.3
        1.3s    30.60nm          5.4mb
                i       38 20.30  28km
KSP     90.92  37 eP    38 12.30   0.5
VKA     92.02  39 eP    38 18.00   1.1
        1.4s   136.00nm          6.2mb
                i       38 25.90  25km
ZST     92.52  39 eP    38 19.30   0.1
PTJ     92.78  41 eP    38 22.30   1.7
SRO     93.42  39 eP    38 27.00   3.7X
SPC     93.94  37 eP    38 26.70   0.7
OBN     98.84  26 eP    38 55.00   7.1X
        2.0s   144.00nm          6.2mb
                e       39 01.00  19km
TIY    122.16 335 ePKP  44 03.20  -0.2
FRS    122.47 116 ePKP  44 02.00  -2.1
        1.0s    40.00nm
BLF    123.24 115 ePKP  44 06.00   0.1
        0.5s    25.00nm
GRM    123.40 120 ePKP  44 13.00   7.1X
        0.7s    25.00nm
KSR    123.87 111 ePKP  44 06.00  -1.3
        1.0s    50.00nm
SEK    124.52 114 ePKP  44 16.00   7.6X
GTA    124.55 347 ePKP  44 07.50  -0.6
BUL    125.20 104 ePKP  44 09.00  -0.9
LZH    126.65 342 ePKP  44 12.50   0.2
XAN    126.76 336 PKP   44 12.00  -0.4
                sPKP    44 20.20
STK    126.78 241 ePKP  44 05.40  -7.1X
        1.1s     3.00nm
WRA    133.73 256 ePKP  44 25.20  -0.8
        0.6s     2.00nm
WRA    133.73 256 PKP   44 20.80  -5.2X
        0.8s     1.30nm
LSA    135.48 354 ePKP  44 30.40   0.7
NDI    135.94  11 iPKPc 44 30.00   0.0
BDT    145.68 338 ePKP  44 47.80   0.2
        0.9s    66.60nm
HYB    147.14  13 ePKP  44 50.00   0.0
MEEK   147.42 244 ePKP  44 51.50   1.2
        1.0s    50.00nm
MUN    147.61 233 ePKP  44 52.00   1.6
        1.8s   183.00nm
BAL    147.76 236 ePKP  44 53.00   2.3
        1.0s    52.00nm
GBA    150.52  17 PKP   44 57.00   1.8
     S.D. = 1.2  on 214 of 239 obs.
-----------------------------------------
& NOV  19, 1993   02h 37m 16.40s
   36.073 N          119.805 W
   DEPTH =  15.4km
 CENTRAL CALIFORNIA                ( 39)
      <GM-P>. MD 2.9 (GM). ML 2.8
      (PAS).

PKEM     0.25 267 eP    37 21.19  -0.8
PHAM     0.54 244 eP    37 27.18   0.2
BCH      0.91 194 eP    37 33.35  -0.2
ISA      1.16 110 eP    37 37.88   0.3
                eS      37 52.98
ABL      1.31 158 eP    37 38.60  -1.6
SAO      1.49 298 eP    37 42.70   0.1
MTUM     1.62  38 eP    37 46.41   1.8
MMPM     1.66  22 eP    37 46.50   1.2
                eS      38 08.86
MEMM     1.74  23 (P)   37 48.41   2.3
                eS      38 11.29
ARN      1.88 313 eP    37 48.21  -0.1
MRCM     1.91  33 (P)   37 48.39  -0.4
```

19d 02h

```
                 eS    38 17.41
COE     1.91 309 (P)   37 48.59   -0.1
CMB     2.01 347 eP    37 51.85    1.7
BONR    2.23  32 eP    37 55.95    2.4
                 eS    38 27.69
SSK     2.54 136 eP    37 58.67    0.8
GSC     2.56 107 eP    37 58.86    0.8
TNP     2.88  45 eP    38 04.63    1.9
       17 obs. associated
-------------------------------------
%  NOV  19, 1993  02h 54m 26.28± 0.87s
   39.087 N ± 7.3km   27.220 E ± 8.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                              (366)
      ML 3.2 (ISK).

IZM     0.69 177 ePg   54 39.90    0.0
                 eSg   54 49.20
EZN     1.01 317 iPn   54 45.50    0.1
DST     1.21  64 iPn   54 48.70   -0.1
EDC     1.35  21 iPn   54 50.80   -0.3
IZI     2.14  54 ePn   55 03.00    0.4
     S.D. = 0.4  on   5 of   5 obs.
-------------------------------------
?  NOV  19, 1993  03h 02m 20.32± 2.43s
   54.122 N ±20.1km  164.140 W ±18.2km
   DEPTH =  33.0km  (normal)
   4.1mb (  2 obs.)
 UNIMAK ISLAND REGION                ( 10)
      ML 4.3 (PMR).

SDN     2.44  58 eP    02 58.87    0.2
                 eS    03 29.65
KDC     7.48  56 eP    04 07.98   -1.8X
ADK     7.89 259 eP    04 19.50    3.9X
SVW     8.36  30 eP    04 22.90    0.8
CRP     9.60  37 eP    04 40.75    1.4
TTA     9.79  22 eP    04 40.58   -1.3
       1.0s     6.32nm          4.8mb X
SLKM    9.87  44 eP    04 43.40    0.5
ANM    10.50 357 e(P)  04 52.00    0.6
PMS    10.56  42 eP    04 51.80   -0.5
KLU    12.17  45 eP    05 11.55   -2.6X
TOA    12.38  43 eP    05 16.10   -0.9
IMA    13.04  19 eP    05 30.90    5.1X
FBA    13.57  31 (P)   05 31.90   -0.7
YKA    26.70  52 eP    07 58.30    0.4
       0.5s     1.20nm          3.8mb
FRB    45.69  38 eP    10 39.00   -0.2
       1.0s     6.00nm          4.5mb
JAQ    48.67  52 eP    11 02.50   -0.2
     S.D. = 0.9  on  12 of  16 obs.
-------------------------------------
   NOV  19, 1993  03h 02m 48.06± 0.62s
   14.706 N ±10.7km   94.020 W ± 8.5km
   DEPTH =  22.2km  (  3 depth phases)
   4.7mb ( 18 obs.)
 OFF COAST OF CHIAPAS, MEXICO        ( 68)
      Felt along the coasts of Chiapas
      and Oaxaca.

TPX     1.71  83 iPd   03 19.02    2.1
                 iS    03 37.20
SCX     2.42  33 iP    03 31.79    4.8X
                 iS    04 02.08
IISM    5.33 323 iP    04 17.69    9.3X
                 (S)   05 15.00
LVVM    5.52 335 (P)   04 10.17   -0.8
ACX     6.02 292 (P)   04 15.95   -2.1
PPM     6.18 315 eP    04 22.78    1.9
IIA     6.26 316 iP    04 24.70    3.2X
UNM     6.75 314 iP    04 37.00    8.4X
CRX     7.15 312 (P)   04 35.00    0.7
MRX     8.47 307 (P)   04 53.77    1.4
LTX    17.07 330 eP    06 48.85    1.8
UYO    19.38 359 iPd   07 13.70   -1.7
OXF    20.15  11 (P)   07 26.67    3.0X
WMOK   20.40 349 eP    07 24.89   -1.4
       0.7s    12.48nm          4.4mb
                 eS    10 58.43
MEO    20.41 349 iPc   07 24.10   -2.3
OCO    20.96 352 iPd   07 31.40   -0.7
TUL    21.18 356 iPd   07 36.60    2.4
PRM    21.99  27 eP    07 50.33    8.0X
SGS    22.12  31 (P)   07 51.15    7.5X
ACO    22.38 349 iPc   07 45.50   -0.8
ELC    22.89  10 eP    07 51.92    0.7
LHS    23.02  29 eP    08 00.75    8.2X
PV08   27.06 334 (P)   08 31.62    0.4
PV10   27.06 333 eP    08 30.80   -0.4
PEC    28.34 316 eP    08 41.93   -0.6
       1.0s    10.73nm          4.5mb
ARUT   28.72 327 (P)   08 47.87    1.7
TPNV   29.71 322 (P)   08 53.83   -1.2
       0.6s     1.86nm          4.1mb
BONR   31.60 322 eP    09 13.04    1.2
ARN    33.25 318 (P)   09 26.90    1.0
ULM    35.48 358 eP    09 45.00    0.1
LON    39.48 330 eP    10 17.75   -0.9
LPB    40.23 140 P     10 25.90    0.4
CNCB   40.52 140 P     10 28.00    0.0
CCH    42.11 138 eP    10 40.00   -0.9
YKA    49.91 348 eP    11 40.90   -0.8
       1.0s     7.30nm          4.7mb
FRB    52.09  14 eP    11 57.50   -0.8
       0.8s     4.00nm          4.4mb
INK    59.22 344 eP    12 50.00    0.4
RES    59.98 360 eP    12 54.00   -0.7
       0.6s     2.00nm          4.4mb
MBC    62.98 353 eP    13 15.50    0.5
       1.0s     7.00nm          4.8mb
DAG    72.41  14 iPd   14 14.10    0.1
       0.3s    11.69nm          5.4mb
FLN    81.39  42 eP    15 01.70   -2.9
LDF    81.66  42 eP    15 04.50   -1.5
MFF    82.09  44 eP    15 05.80   -2.5
MAF    84.00  44 eP    15 17.20   -1.0
BGF    84.10  44 eP    15 17.70   -0.9
       0.8s     6.30nm          4.9mb
SSF    84.41  43 eP    15 19.90   -0.2
       0.9s     4.60nm          4.7mb
NB2    84.46  28 P     15 21.30    1.1
       0.9s     4.20nm          4.7mb
APO    85.88  28 eP    15 27.70    0.5
       0.6s     1.30nm          4.3mb
HAU    85.99  41 eP    15 28.40    0.3
       1.0s    19.60nm          5.3mb
BSF    86.33  42 eP    15 29.90    0.1
       1.2s    18.15nm          5.2mb
CDF    86.46  41 eP    15 30.70    0.3
       1.1s    10.75nm          5.0mb
LPL    86.99  44 eP    15 34.20    0.9
LPG    87.01  44 eP    15 34.80    1.3
       0.9s     5.10nm          4.8mb
BRG    89.65  37 i(P)  15 54.40    8.8X
KHC    90.11  39 eP    15 48.50    0.7
       1.0s     5.40nm          4.7mb
                 i     15 57.00   27km
GEC2   90.30  39 eP    15 49.00    0.2
       1.0s     4.27nm          4.7mb
                 e     15 57.10   25km
                 e     16 01.50
                 e     16 06.40
PRU    90.35  38 eP    15 52.50    3.6X
                 e     15 57.30   15km
ZST    92.63  39 e(P)  16 02.00    2.6
     S.D. = 1.3  on  48 of  58 obs.
-------------------------------------
*  NOV  19, 1993  03h 18m 13.21± 0.63s
   28.356 N ±13.6km   66.162 E ± 6.2km
   DEPTH =  12.5km  (  2 depth phases)
   4.6mb ( 12 obs.)
 PAKISTAN                            (710)

MAIO    9.72 326 iPd   20 36.40    0.5
                 eS    23 19.00
POO    12.05 143 eP    20 53.50  -14.2X
KSH    13.74  34 P     21 30.30    0.2
       1.0s    50.00nm          5.4mb
     Z  20s     1.85um          3.9MszX
HYB    15.76 131 eP    21 53.00   -3.6X
GKN    16.30  87 P     21 59.40   -4.2X
DMN    16.75  88 P     22 07.60   -1.9
KKN    16.89  87 P     22 09.40   -1.7
PKI    17.03  88 P     22 11.00   -2.0
KER    17.33 295 eP    22 18.00    1.5
GUN    17.40  87 P     22 16.00   -1.7
GBA    18.04 142 P     22 29.00    3.7X
LSA    21.88  80 P     23 09.80    1.5
       1.2s    20.00nm          4.4mb
SHL    23.08  91 eP    23 21.50    1.7
                 eS    27 31.50
WMQ    23.16  42 P     23 22.50    2.2
                 pP    23 25.50   11km
                 PP    23 53.50
                 S     27 30.00
GYA    35.89  83 P     25 16.20    1.0
MLR    35.98 309 eP    25 16.50    0.7
BTO    37.80  59 eP    25 32.70    1.6
TIY    39.56  64 eP    25 47.00    1.1
KAF    42.68 334 iP    26 10.90   -0.1
       0.6s     5.10nm          4.4mb
GEC2   44.81 312 ePc   26 28.50   -0.1
       0.7s     2.40nm          4.2mb
                 e     26 32.80   14km
                 e     26 38.40
                 e     26 44.80
MOX    46.38 314 eP    26 41.70    0.7
GRF    46.52 313 ePc   26 43.10    1.0
       0.8s     6.00nm          4.7mb
HFS    47.33 327 eP    26 46.80   -1.5
       0.4s     1.00nm          4.3mb
NB2    48.77 328 P     26 58.60   -0.9
       0.9s     3.00nm          4.3mb
LPG    49.36 307 eP    27 03.90   -0.7
       0.9s     5.90nm          4.6mb
LPL    49.37 307 eP    27 04.00   -0.6
       1.5s    17.25nm          4.8mb
LBF    51.25 309 eP    27 18.00   -0.7
SMF    51.35 309 eP    27 18.00   -1.5
       1.0s     9.60nm          4.7mb
SSF    51.57 309 eP    27 19.70   -1.4
       1.0s    11.60nm          4.8mb
BGF    52.04 309 eP    27 23.90   -0.8
TCF    52.50 308 eP    27 27.50   -0.6
BUL    60.34 221 eP    28 25.50    1.0
ASPA   83.25 121 eP    30 42.50    1.4
       0.8s     5.00nm          4.8mb
     S.D. = 1.3  on  29 of  33 obs.
-------------------------------------
   NOV  19, 1993  03h 22m 30.50± 0.23s
   54.290 N ± 4.2km  164.264 W ± 3.1km
   DEPTH =  33.0km  (normal)
   4.9mb ( 50 obs.)  5.2Msz (  2 obs.)
 UNIMAK ISLAND REGION                ( 10)
      Felt (V) at False Pass and (IV)
      at Cold Bay, King Cove,
      Perryville and Sand Point.

SDN     2.42  63 eP    23 07.85   -0.7
KDC     7.45  58 eP    24 18.45   -1.1
ADK     7.86 257 ePd   24 23.98   -1.3
SVW     8.25  31 eP    24 31.00    0.2
CP2     9.48  38 eP    24 49.31    1.4
CRP     9.51  38 eP    24 49.60    1.3
TTA     9.67  23 eP    24 49.58   -0.8
SLKM    9.80  45 eP    24 52.22    0.1
ANM    10.32 357 eP    24 59.41    0.1
PMS    10.48  42 eP    25 01.60    0.1
PWA    10.60  40 eP    25 04.70    1.7
PMR    10.85  42 eP    25 06.75    0.3
MID    11.06  55 eP    25 09.10   -0.2
TOA    12.31  43 eP    25 25.40   -0.8
IMA    12.91  20 eP    25 34.59    0.4
FBA    13.46  31 eP    25 41.36    0.0
BALM   13.49  51 eP    25 41.30   -0.6
ILT    15.27 339 iPd   26 12.00    7.1X
       1.6s   159.00nm          5.0mb
SIT    16.50  69 eP    26 20.54   -0.1
       0.9s    26.68nm          4.4mb
BRW    17.39   8 (P)   26 32.33    0.5
INK    20.05  34 eP    27 01.00   -2.2
       1.0s    54.00nm          4.8mb
PET    21.86 282 eP    27 21.00   -0.7
GMW    26.69  87 eP    28 08.98    0.9
BMW    26.98  90 eP    28 11.47    0.6
RMW    27.31  87 eP    28 14.52    0.7
MBC    27.63  21 eP    28 23.00    6.6X
       1.0s     8.00nm          4.3mb
FMW    27.66  88 P     28 17.03   -0.1
LON    27.67  88 eP    28 17.46    0.3
SHW    27.72  90 eP    28 19.64    2.0
RNO    28.12  95 P     28 22.05    0.9
EBG    28.31  87 P     28 22.35   -0.6
SSOR   28.32  92 P     28 23.41    0.3
VBEM   28.72  91 P     28 27.01    0.3
DBO    28.88  96 P     28 29.07    1.0
VGB    28.94  90 eP    28 28.52    0.0
CROR   29.11  91 P     28 30.15    0.0
VIPM   29.60  91 P     28 33.57   -1.1
NEW    29.64  82 eP    28 34.40   -0.4
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FHC    29.90 100 eP    28 35.80  -1.4
       1.1s   150.51nm          5.7mb
LNOR   30.21  87 P     28 39.31  -0.5
LGPM   30.50  99 eP    28 42.19  -0.4
LBFM   30.77  97 ePd   28 45.97   0.9
ORV    32.16 100 eP    28 56.64  -0.3
NTYM   32.27 102 eP    28 58.05   0.1
TIK    32.72 327 eP    29 05.00   3.5X
       1.2s    20.00nm          4.9mb
               e       29 15.00
               e       30 11.00
HMR    32.93 102 eP    29 04.99   1.3
RES    33.29  27 eP    29 12.00   5.5X
       1.0s     5.00nm          4.4mb
COE    33.62 103 ePd   29 09.99   0.3
ARN    33.64 103 iPc   29 10.11   0.2
LRM    33.64  83 eP    29 09.40  -0.7
YAK    34.24 310 iPd   29 21.70   6.9X
KVN    34.46  97 eP    29 17.79   0.6
MMPM   34.90 100 eP    29 22.08   0.9
MEMM   34.91 100 eP    29 22.07   1.3
BONR   35.08  99 ePd   29 23.69   1.0
MRCM   35.16  99 eP    29 24.03   0.8
MTUM   35.34 100 iPd   29 25.78   1.0
PHAM   35.35 103 eP    29 25.24   0.6
TNP    35.63  97 eP    29 27.49   0.3
       0.8s    73.69nm          5.7mb
HVU    35.83  89 eP    29 28.68  -0.1
ISA    36.57 102 eP    29 34.44  -0.5
       0.9s    40.60nm          5.3mb
ABL    36.72 103 eP    29 37.03   0.6
DUG    36.81  91 eP    29 36.99   0.0
       1.2s    30.42nm          5.0mb
TPNV   36.96  98 eP    29 38.97   0.6
       0.6s    90.95nm          5.8mb
GSC    37.79 100 iPd   29 45.92   0.7
ARUT   38.03  94 eP    29 47.51   0.2
SSK    38.06 102 eP    29 47.99   0.4
MSU    38.28  92 eP    29 49.93   0.4
PEC    38.59 102 eP    29 51.51  -0.4
       0.9s    32.28nm          5.1mb
SRU    38.86  90 iPd   29 54.52   0.2
PLM    39.16 103 ePd   29 57.28   0.5
RSSD   39.50  79 eP    29 59.38  -0.2
       0.8s    23.79nm          5.0mb
PV09   40.07  90 eP    30 04.59   0.1
PV10   40.21  90 eP    30 05.36  -0.2
PV08   40.31  90 eP    30 06.48   0.0
GLA    40.54 101 iPd   30 08.53   0.5
ULM    40.56  67 eP    30 10.50   2.6
GOL    41.49  86 eP    30 16.21   0.2
       0.9s    24.06nm          4.9mb
GLD    41.54  85 eP    30 17.16   0.8
       1.2s    29.43nm          4.9mb
MAT    42.80 270 eP    30 26.00  -0.5
       1.0s     8.00nm          4.4mb
CN2    45.42 287 eP    30 46.00  -1.5
       0.8s    11.00nm          4.8mb
FRB    45.60  38 eP    30 46.50  -2.2
       0.6s    27.00nm          5.3mb
ACO    47.13  84 iPc   31 00.00  -1.2
DAG    47.39  10 iPd   31 04.00   1.4
       0.4s     2.54nm          4.6mb
               ipP     31 22.00  72kmX
JAQ    48.62  52 eP    31 12.50   0.0
WMOK   48.71  86 eP    31 12.65  -0.8
       0.8s    58.24nm          5.7mb
MEO    48.79  86 iPc   31 12.80  -1.3
OCO    48.92  84 iPd   31 14.40  -0.7
TUL    49.63  82 iPc   31 19.20  -1.3
LTX    49.75  95 eP    31 20.73  -0.9
UYO    51.63  83 iPd   31 34.20  -1.6
ELC    52.46  76 eP    31 39.70  -2.2
ZAK    52.68 306 eP    31 48.50   5.1X
               e       32 55.00
BJI    53.08 289 eP    31 49.00   2.5
       1.2s     8.00nm          4.6mb
GAC    54.08  60 eP    31 55.00   1.2
OXF    54.31  79 eP    31 53.72  -1.9
YSNY   54.74  65 eP    31 57.12  -1.6
       0.6s    13.43nm          5.1mb
BTO    56.05 294 eP    32 07.30  -1.0
BINY   56.27  63 (P)   32 08.57  -1.3
       1.0s    25.97nm          5.2mb
TIY    56.79 290 eP    32 17.60   3.9X
CBM    56.84  54 eP    32 15.71   1.9
       0.9s    30.45nm          5.3mb
CVL    57.97  68 eP    32 20.96  -0.9
JSC    59.12  73 eP    32 27.32  -2.5
CEH    59.14  70 eP    32 27.99  -2.0
       1.0s    29.55nm          5.4mb
LMN    59.20  53 eP    32 29.00  -1.3
XAN    61.42 289 P     32 47.00   1.3
       0.8s    13.00nm          5.1mb
               pP      32 52.50  18kmX
GTA    62.26 299 eP    32 50.50  -0.9
LZH    62.65 294 eP    32 51.00  -3.0X
       1.8s    18.00nm          4.9mb
SVE    63.37 334 ePd   33 03.00   4.7X
KAF    63.64 354 iP    32 58.90  -1.1
       0.4s     6.50nm          5.1mb
ARU    64.25 335 eP    33 08.00   4.0X
NB2    64.96   2 P     33 07.90  -0.7
       0.7s     2.10nm          4.3mb
NUR    65.33 355 eP    33 09.90  -1.0
HFS    65.91   1 eP    33 13.50  -1.1
       0.4s     8.30nm          5.1mb
CD2    66.63 291 P     33 24.40   4.7X
GYA    68.44 285 P     33 33.20   2.0
       1.0s    33.00nm          5.4mb
OBN    69.63 347 iPc   33 42.00   4.1X
       0.7s    24.00nm          5.4mb
               e       34 09.00
LSA    74.28 299 eP    34 12.60   6.0X
BRG    75.20   1 e(P)  34 14.80   3.9X
KSP    75.24 360 eP    34 14.80   3.6X
MOX    75.38   3 e(P)  34 16.30   4.3X
PMG    75.45 230 eP    34 11.50  -1.3
LDF    76.62  11 eP    34 20.30   1.3
SPC    76.83 357 eP    34 24.50   4.1X
KHC    76.94   1 eP    34 18.00  -2.8
       1.0s     5.40nm          4.5mb
               i       34 25.60
               e       34 44.00
               e       35 04.00
GEC2   77.23   1 ePd   34 25.40   2.9X
       0.7s     2.14nm          4.3mb
               e       34 30.30
               e       34 34.30
               e       34 38.40
HAU    77.77   6 eP    34 25.60   0.2
       0.7s     5.20nm          4.7mb
     Z 22s      1.45um          5.3Msz
ZST    77.88 359 eP    34 31.00   5.1X
BSF    77.97   6 eP    34 27.30   0.7
       0.8s     7.80nm          4.8mb
LOR    78.32   8 eP    34 28.50   0.1
       0.8s     8.85nm          4.8mb
     Z 20s      1.02um          5.2Msz
GUN    78.41 302 P     34 29.60  -0.1
       0.4s    14.00nm          5.3mb
SSF    78.49   8 eP    34 29.70   0.3
       0.6s     8.85nm          5.0mb
MFF    78.58  11 eP    34 30.30   0.4
       0.7s    13.10nm          5.1mb
LBF    78.61   8 eP    34 30.10   0.0
       0.5s     3.85nm          4.7mb
AVF    78.75   9 eP    34 30.90   0.2
       0.4s     5.40nm          4.9mb
KKN    78.80 302 P     34 32.00   0.3
PKI    78.92 302 P     34 33.00   0.5
SMF    78.94   8 eP    34 31.90   0.1
       0.9s    17.05nm          5.0mb
GKN    78.95 303 P     34 32.40   0.0
KBA    78.99   2 iPd   34 36.40   4.1X
       1.0s    12.60nm          4.9mb
               i       34 59.30
DMN    79.04 302 P     34 33.60   0.6
LSF    79.11  10 eP    34 33.00   0.2
       0.7s    12.90nm          5.0mb
TCF    79.14  10 eP    34 33.70   0.7
       1.1s    10.25nm          4.7mb
MAF    79.24   9 eP    34 34.70   1.2
       0.9s     8.50nm          4.7mb
LPG    80.30   6 eP    34 40.70   1.2
       0.7s     4.50nm          4.6mb
BZS    80.34 356 eP    34 29.50  -9.8X
EPF    82.16  11 eP    34 50.50   1.5
       0.9s     9.15nm          4.8mb
MAIO   82.22 326 eP    34 51.00   1.6
CTA    85.33 226 iPd   35 05.00  -0.2
               e       35 21.00
HYB    90.84 302 eP    35 32.50   0.6
ASPA   93.99 234 iPc   35 49.90   3.9X
       1.1s     5.10nm          4.9mb
GBA    94.64 301 P     35 51.00   1.7
SPA   144.11 180 ePKPc 42 00.00  -3.0X
       1.1s    59.52nm
BUL   144.52 339 ePKP  42 03.40  -1.7
               i       42 07.70
CIR   144.66 334 iPKPd 42 18.80  13.7X
WIN   148.31 358 ePKP  42 10.50  -0.8
       0.1s    40.00nm
BFT   149.52 334 ePKP  42 20.00   6.9X
SLR   150.00 337 iPKPc 42 28.00  14.2X
       0.5s    20.00nm
KSR   150.43 339 ePKP  42 22.00   7.5X
       1.0s   150.00nm
SEK   152.64 337 ePKP  42 31.50  13.9X
       0.6s    47.00nm
BLF   153.71 339 ePKP  42 27.50   8.4X
       0.7s    40.00nm
FRS   154.51 340 ePKP  42 32.00  12.1X
     S.D. = 1.1  on 132 of 162 obs.
-----------------------------------
?  NOV  19, 1993  03h 25m 27.56± 5.78s
   31.887 S ±19.7km   72.625 W ±49.4km
   DEPTH =  33.0km  (normal)
 OFF COAST OF CENTRAL CHILE        (134)

ROCH    1.74 129 iP+   25 55.02  -1.1
                iS     26 15.92
LCCH    1.82 151 iPd   25 57.83   0.8
                iS     26 22.08
JACH    1.89 115 eP    25 56.30  -2.0
PEL     2.06 128 iPd   25 59.62  -1.0
                iS     26 23.99
TACH    2.26 142 iP    26 04.05   0.6
LNV     2.30 154 iPd   26 04.22   0.3
FCH     2.44 127 iP+   26 05.17  -1.1
                eS     26 34.16
PCH     2.48 135 eP    26 06.16  -0.5
CACH    2.80 143 iPd   26 12.23   1.1
MDZ     3.34 108 eP    26 23.30   4.4X
                iS     27 02.00
ZON     3.38  85 eP    26 22.00   2.6
RTCV    3.48  91 e(P)  26 23.00   2.3
RTPR    5.48  75 e(P)  26 49.00   0.1
CYA     6.84  62 eP    27 06.00  -2.1
     S.D. = 1.6  on  13 of  14 obs.
-----------------------------------
   NOV  19, 1993  03h 31m 24.20± 0.90s
   42.999 N ± 6.3km   18.775 E ± 5.4km
   DEPTH =   5.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)

BRY     0.20 240 iPgd  31 28.27   0.0
                iSg    31 31.14
NKY     0.25 139 iPgc  31 30.03   0.8
                iSg    31 33.93
PLE     0.56  54 iPgc  31 35.44   0.0
                iSg    31 43.94
HCY     0.59 200 iPgc  31 35.99   0.0
                iSg    31 44.55
TTG     0.67 148 iPgc  31 36.83  -0.8
                iSg    31 47.96
BDV     0.72 177 iPgd  31 38.44  -0.1
                iSg    31 49.18
IVA     0.83  98 iPgd  31 40.71  -0.2
                iSg    31 53.30
PVY     0.97 114 iPgc  31 43.23   0.0
                iSg    31 57.85
ULC     1.09 161 iPgc  31 45.44   0.2
                iSg    32 01.77
HVAR    1.71 277 i(Pn) 31 57.30   2.4X
                iSg    32 20.60
     S.D. = 0.5  on   9 of  10 obs.
-----------------------------------
*  NOV  19, 1993  03h 55m 24.60± 0.75s
   28.554 N ±10.5km  128.508 E ±10.0km
   DEPTH =  28.5km  (  2 depth phases)
   4.6mb ( 12 obs.)
 RYUKYU ISLANDS                    (238)

SSE     6.85 293 Pg    57 36.00  30.3X
     N  14s     2.60um
     E  14s     2.00um
                Sg     59 06.00
SSE     6.85 293 Pn    57 03.00  -2.7
     N  14s     2.60um
     E  14s     2.10um
```

19d 03h

		Sg	59	06.00		
MAT	11.41	43	eP	58	07.00	-1.8
	1.8s	68.18nm				5.6mb X
BJI	15.32	322	eP	59	05.00	4.7X
	1.0s	7.00nm				3.9mb
	Z 20s	0.91um				3.9Msz
CN2	15.41	352	eP	59	06.00	4.4X
	1.0s	14.00nm				4.2mb
	Z 10s	1.02um				3.5MszX
	N 10s	1.51um				
	E 10s	0.81um				
		esP	59	14.00		
MDJ	16.05	3	eP	59	12.50	2.6
	1.4s	61.00nm				4.5mb
	Z 24s	1.32um				5.2Msz
TIY	16.25	308	eP	59	18.40	5.9X
XAN	17.60	293	P	59	31.00	1.5
	0.8s	7.00nm				3.8mb
		pP	59	35.20		
		sP	59	38.00		
HHC	18.52	316	Pc	59	42.50	1.7
	1.0s	16.00nm				4.2mb
BTO	19.35	313	eP	59	50.00	-0.8
GYA	19.49	269	P	59	53.20	0.7
	1.0s	29.00nm				4.5mb
CD2	21.61	282	P	00	13.50	-0.9
KMI	23.23	268	Pd	00	33.00	2.4
	1.0s	60.00nm				5.1mb
		pP	00	40.00	25km	
GTA	26.04	302	eP	00	56.00	-1.3
	1.0s	32.00nm				4.9mb
		pP	01	05.00	32km	
		sP	01	09.50		
GUN	37.42	279	P	02	37.60	0.1
	0.6s	12.00nm				4.9mb
PKI	37.90	279	P	02	41.40	-0.1
	0.8s	13.00nm				4.8mb
KKN	37.96	279	P	02	41.80	-0.2
	0.7s	33.00nm				5.3mb X
DMN	38.15	279	P	02	43.20	-0.4
	0.6s	17.00nm				5.1mb X
GKN	38.48	280	P	02	45.40	-0.8
	0.6s	23.00nm				5.1mb X
NDI	44.73	283	eP	03	36.50	-0.8
CTA	51.31	158	iP	04	28.50	0.1
ASPA	52.18	174	iPd	04	34.90	-0.1
	1.1s	6.70nm				4.5mb
WARB	54.45	182	iPc	04	52.40	0.7
	1.0s	36.00nm				5.4mb
MAIO	57.67	297	eP	05	15.00	0.1

S.D. = 1.4 on 20 of 24 obs.

NOV 19, 1993 03h 58m 53.33± 0.15s
54.283 N ± 2.6km 164.154 W ± 2.2km
DEPTH = 33.0km (normal)
5.4mb (131 obs.) 4.9Msz (21 obs.)
UNIMAK ISLAND REGION (10)

ML 5.8 (PMR). Felt (V) at False Pass and (IV) at Akutan, Cold Bay, King Cove, Perryville and Sand Point.

SDN	2.37	62	ePc	59	31.27	0.6
MCNL	7.30	44	eP	00	41.96	1.7
		eS		02	04.51	
KDC	7.40	57	eP	00	39.75	-1.9
CDD	7.43	47	eP	00	43.42	1.2
PDB	7.74	41	eP	00	48.06	1.6
AUI	7.76	45	eP	00	49.02	2.3
AUW	7.76	45	eP	00	48.99	2.2
SYI	7.82	52	eP	00	47.72	0.1
ADK	7.92	257	ePd	00	48.94	0.0
OPT	8.03	44	eP	00	52.48	1.9
SVW	8.22	30	eP	00	52.46	-0.8
INW	8.33	41	eP	00	56.39	1.6
INE	8.35	42	eP	00	56.67	1.6
ILIM	8.40	42	eP	00	57.07	1.3
RED	8.69	40	eP	01	01.27	1.5
CNPM	8.80	48	eP	01	01.40	0.2
BKG	9.31	38	eP	01	10.03	1.8
CKL	9.37	38	eP	01	11.49	2.4
BGL	9.39	37	eP	01	11.60	2.2
CP2	9.45	37	eP	01	11.84	1.6
SPU	9.46	38	eP	01	11.72	1.4
CRP	9.48	38	eP	01	11.91	1.2
TTA	9.65	23	eP	01	11.82	-1.1
SLKM	9.76	45	eP	01	14.68	0.3
SEW	9.87	48	eP	01	15.09	-0.8
MPA	10.11	46	eP	01	18.70	-0.4
SUA	10.12	39	eP	01	19.75	0.3
SKT	10.19	36	eP	01	22.04	1.8
ANM	10.33	357	eP	01	20.80	-1.4
ANM	10.33	357	eP	01	24.16	1.9
PMS	10.44	42	ePd	01	23.00	-0.8
PWA	10.56	40	eP	01	25.20	-0.2
PMR	10.81	41	eP	01	26.47	-2.3X
KNK	10.98	43	eP	01	29.56	-1.5
GHO	11.00	41	eP	01	29.41	-2.0
MID	11.02	55	eP	01	28.90	-2.6X
CFI	11.13	45	eP	01	31.70	-1.4
SML	11.25	42	eP	01	32.15	-2.6
HIN	11.31	50	eP	01	33.96	-1.6
FID	11.48	49	eP	01	35.02	-2.8
KTH	11.51	31	eP	01	40.61	2.3
TRF	11.63	32	eP	01	40.29	0.2
SCM	11.66	43	eP	01	37.92	-2.4
VLZ	11.72	47	eP	01	39.44	-1.5
KLU	12.06	46	eP	01	43.98	-1.8
RND	12.06	35	eP	01	45.29	-0.5
KAIM	12.10	54	eP	01	44.83	-1.4
MCK	12.26	33	eP	01	48.23	-0.1
TOA	12.27	43	ePc	01	47.10	-1.4
HMT	12.32	53	eP	01	47.46	-1.6
TZL	12.54	44	eP	01	50.72	-1.3
MLY	12.70	27	eP	01	54.54	0.4
SDG	12.74	42	eP	01	53.08	-1.6
IM3	12.80	19	eP	01	55.69	0.2
NEA	12.82	30	eP	01	55.19	-0.5
IMA	12.89	19	eP	01	56.85	0.0
GLB	12.95	48	eP	01	55.42	-2.1
PAX	13.01	41	eP	01	56.35	-2.0
SMY	13.03	272	eP	02	01.00	2.5
	0.8s	290.10nm				6.4mb X
WRH	13.04	32	eP	01	55.19	-3.5X
MDM	13.34	30	eP	02	01.55	-1.1
COL	13.43	31	eP	02	02.60	-1.2
FBA	13.43	31	eP	02	01.88	-1.9
BALM	13.45	51	eP	02	02.74	-1.4
IL1	13.63	33	eP	02	04.10	-2.3
BC3	14.51	44	eP	02	16.59	-1.4
ILT	15.29	339	iPc	02	33.50	5.4X
	Z 15s	8.30um				
	N 14s	8.40um				
	E 14s	3.20um				
FYU	15.36	29	eP	02	26.29	-2.7
BM3	16.14	28	eP	02	37.03	-2.0
SIT	16.44	69	eP	02	41.78	-1.0
BRW	17.39	8	eP	02	54.36	-0.2
INK	20.02	34	eP	03	22.50	-3.2X
	1.0s	136.00nm				5.2mb
PET	21.92	282	eP	03	42.00	-3.2X
	Z 20s	3.00um				4.7Msz
SKR	24.25	278	eP	04	07.90	-0.1
	0.7s	110.00nm				5.5mb
		e		04	19.70	
MCW	26.05	85	eP	04	25.32	0.3
YKA	26.61	52	eP	04	30.50	0.5
	0.6s	82.90nm				5.5mb
GMW	26.62	88	eP	04	31.22	0.9
JCW	26.81	86	P	04	32.99	1.0
BMW	26.92	90	eP	04	34.18	1.1
KMOR	27.22	92	P	04	36.82	1.0
RMW	27.24	87	eP	04	36.89	0.8
FMW	27.59	88	P	04	40.39	1.0
LON	27.61	88	eP	04	39.67	0.3
MBC	27.61	21	eP	04	40.50	1.5
	1.0s	14.00nm				4.6mb
SHW	27.65	90	eP	04	41.04	1.2
ASR	28.05	89	P	04	44.27	0.8
RNO	28.05	95	P	04	45.11	1.7
EBG	28.25	87	P	04	46.10	0.9
SSOR	28.26	92	P	04	46.46	1.1
SAW	28.53	85	P	04	47.82	0.2
VBEM	28.65	91	P	04	49.79	0.9
DBO	28.82	96	P	04	51.96	1.6
VGB	28.88	90	eP	04	51.28	0.5
WAH2	28.92	87	P	04	51.66	0.6
CROR	29.05	91	P	04	53.10	0.7
DPW	29.14	84	eP	04	53.01	-0.2
JBO	29.46	89	P	04	56.35	0.3
VIPM	29.54	91	P	04	57.51	0.6
NEW	29.58	82	eP	04	57.09	0.0
FHC	29.84	100	eP	04	58.48	-1.0
	1.0s	129.15nm				5.7mb
YBH	29.98	98	iPc	05	02.36	1.6
	0.9s	80.00nm				5.5mb
KMPM	30.01	101	eP	05	01.50	0.4
LNOR	30.14	87	P	05	02.29	0.2
LGPM	30.44	99	eP	05	05.89	1.0
LBFM	30.70	97	ePc	05	08.36	1.1
WDC	30.82	99	ePc	05	09.09	1.0
	0.8s	46.65nm				5.3mb
LMEM	31.41	98	eP	05	14.47	1.0
MIN	31.51	99	iPc	05	14.80	0.4
	1.2s	100.00nm				5.5mb
ORV	32.09	100	iPc	05	19.34	0.1
	0.9s	30.00nm				5.2mb
NTYM	32.21	102	eP	05	21.02	0.8
TIK	32.76	327	eP	05	25.00	0.3
	1.2s	20.00nm				4.9mb
		i		05	33.00	
		e		06	35.00	
BKS	32.81	103	ePc	05	26.34	0.9
	1.1s	70.00nm				5.5mb
HMR	32.86	102	eP	05	27.71	1.8
STAN	33.17	103	ePc	05	29.14	0.6
	1.2s	210.00nm				5.9mb
HON	33.24	169	P	05	40.00	10.7X
	Z 19s	1.07um				4.6Msz
RES	33.27	27	eP	05	28.00	-1.1
	0.6s	7.00nm				4.7mb
MHC	33.52	103	ePc	05	32.09	0.3
	1.3s	80.00nm				5.5mb
COE	33.56	103	eP	05	33.31	1.3
ARN	33.57	103	eP	05	32.43	0.2
		e		05	41.57	
LRM	33.57	83	iPc	05	32.20	-0.2
		iScP		11	53.70	
YSS	33.75	280	(P)	05	39.20	5.7X
CMB	33.76	101	iPc	05	34.60	0.8
	1.0s	50.00nm				5.4mb
SAO	34.03	103	ePc	05	36.20	0.1
	1.2s	50.00nm				5.3mb
PRS	34.38	104	iP	05	40.18	1.1
KVN	34.40	97	ePc	05	40.57	1.1
MMPM	34.83	100	eP	05	44.55	1.1
MEMM	34.85	100	eP	05	44.77	1.7
FRI	34.87	101	iP	05	44.12	0.9
PRI	34.92	103	iP	05	45.43	1.6
BONR	35.02	99	eP	05	46.26	1.3
MRCM	35.09	99	eP	05	46.89	1.4
MTUM	35.28	100	eP	05	48.44	1.4
PHAM	35.28	103	eP	05	47.93	1.1
TNP	35.56	98	iPc	05	50.32	0.9
	0.9s	102.31nm				5.8mb
		e		05	57.74	
HVU	35.77	89	eP	05	51.30	0.2
BCH	35.93	104	eP	05	53.78	1.3
ISA	36.51	102	ePc	05	57.52	0.3
	0.7s	50.76nm				5.5mb
	Z 21s	0.98um				4.6Msz
ABL	36.66	103	eP	05	59.44	0.7
DUG	36.74	91	eP	05	59.51	0.2
	1.4s	59.99nm				5.3mb
	Z 21s	0.72um				4.4Msz
TPNV	36.90	98	eP	06	01.81	1.2
	0.5s	64.92nm				5.8mb
DAU	37.52	89	eP	06	06.34	0.3
GSC	37.72	101	ePc	06	08.55	1.0
ARUT	37.96	95	eP	06	10.03	0.4
SSK	37.99	103	eP	06	11.23	1.3
EMUT	38.16	90	eP	06	11.72	0.4
MSU	38.22	93	eP	06	12.48	0.7
PEC	38.53	102	eP	06	14.30	0.1
	0.7s	32.16nm				5.2mb
SRU	38.79	90	ePc	06	17.05	0.5
PLM	39.09	103	ePc	06	20.01	0.9
RSSD	39.43	79	iPc	06	22.07	0.2
	0.7s	109.03nm				5.7mb
PV09	40.01	90	eP	06	26.72	-0.1
PV10	40.15	90	ePc	06	28.07	0.2
GLA	40.48	101	ePc	06	31.06	0.7
ULM	40.50	67	ePc	06	33.00	2.7
GLD	41.48	86	eP	06	39.74	1.0
	1.0s	95.04nm				5.5mb
	Z 19s	1.91um				5.0Msz
MAJO	42.86	270	eP	06	49.37	-0.5
	0.8s	33.57nm				5.1mb
MAT	42.86	270	(P)	06	49.00	-0.9
	0.9s	15.97nm				4.7mb
BOD	43.12	309	eP	06	52.20	0.6

	1.2s	26.00nm		4.8mb		
ALQ	44.00	92 ePc	06 59.17	-0.2		
	1.2s	45.88nm		5.2mb		
	Z 19s	0.98um		4.7Msz		
CN2	45.48	287 eP	07 08.00	-2.8		
	1.0s	34.00nm		5.2mb		
	Z 16s	0.47um		4.5MszX		
	N 13s	0.43um				
	E 13s	0.17um				
FRB	45.57	38 ePc	07 11.00	-0.2		
	0.6s	70.00nm		5.8mb		
ACO	47.07	84 iPd	07 22.90	-0.6		
DAG	47.38	10 iPd	07 25.70	0.3		
	0.7s	45.21nm		5.6mb		
		ipP	07 30.40	16kmX		
JAQ	48.57	52 eP	07 35.00	0.0		
WMOK	48.65	86 ePc	07 35.27	-0.6		
	0.7s	177.91nm		6.2mb		
	Z 19s	1.15um		4.9Msz		
MEO	48.73	86 iPd	07 35.50	-1.0		
OCO	48.86	84 iPc	07 37.00	-0.4		
FNO	49.09	84 iPd	07 38.20	-1.0		
TUL	49.57	82 iPd	07 41.90	-1.0		
LTX	49.68	95 iPc	07 43.40	-0.5		
CCM	50.71	77 ePc	07 49.81	-1.7		
	0.6s	54.11nm		5.7mb		
UYO	51.57	83 iPc	07 56.60	-1.5		
ELC	52.39	76 iPd	08 02.37	-1.9		
LST	52.64	77 eP	08 04.14	-2.0		
ELF	52.71	66 P	08 05.50	-1.1		
ZAK	52.74	307 eP	08 13.00	6.3X		
	1.8s	24.00nm		4.9mb		
		e	09 20.10			
DLA	52.80	66 P	08 07.00	-0.2		
LDN	52.88	66 P	08 07.00	-0.9		
BJI	53.15	289 eP	08 09.00	-0.8		
GAC	54.03	60 ePc	08 14.60	-1.6		
OXF	54.25	79 ePc	08 16.43	-1.5		
YSNY	54.68	65 ePc	08 20.02	-1.1		
	0.6s	147.62nm		6.2mb		
	Z 20s	1.24um		5.0Msz		
HHC	55.10	293 P	08 24.80	0.4		
	1.0s	16.00nm		5.0mb		
MCWV	55.96	68 ePc	08 28.54	-1.8		
	0.6s	103.58nm		6.0mb		
	Z 19s	1.64um		5.1Msz		
BTO	56.11	294 eP	08 30.00	-1.6		
BINY	56.22	63 ePc	08 31.27	-1.0		
	0.6s	90.00nm		6.0mb		
	Z 20s	1.20um		5.0Msz		
GUMO	56.76	245 eP	08 32.90	-3.4X		
	0.8s	214.90nm		6.2mb		
PJG	56.76	245 eP	08 32.80	-3.6X		
CBM	56.79	55 ePc	08 34.68	-1.6		
	0.8s	147.37nm		6.1mb		
	Z 19s	1.26um		5.0Msz		
LBNH	56.85	59 eP	08 35.22	-1.6		
	0.9s	86.23nm		5.8mb		
	Z 21s	1.25um		5.0Msz		
MYNC	56.86	75 ePc	08 34.65	-2.3		
	0.6s	104.02nm		6.0mb		
	Z 19s	1.24um		5.0Msz		
NAV	57.11	71 ePc	08 36.55	-2.2		
BLA	57.39	70 ePc	08 39.20	-1.5		
	0.8s	58.36nm		5.7mb		
CVL	57.91	68 ePc	08 42.98	-1.3		
LSCT	58.03	62 eP	08 43.79	-1.3		
	0.7s	46.12nm		5.7mb		
GMTN	58.10	63 iP	08 44.70	-0.9		
HRV	58.29	60 eP	08 45.76	-1.1		
	0.7s	52.66nm		5.7mb		
	Z 19s	1.20um		5.0Msz		
CBN	58.34	68 eP	08 45.50	-1.7		
	1.0s	46.00nm		5.5mb		
PRM	58.58	74 eP	08 46.31	-2.7		
JSC	59.06	73 eP	08 49.97	-2.3		
CEH	59.08	71 eP	08 50.68	-1.8		
	0.5s	70.14nm		6.0mb		
	Z 21s	2.04um		5.2Msz		
LMN	59.15	53 ePc	08 51.50	-1.3		
LHS	59.16	73 eP	08 50.73	-2.3		
SGS	60.28	74 eP	08 58.91	-1.7		
HBF	60.54	74 eP	09 00.91	-1.6		
WHN	61.03	283 P	09 08.00	2.2		
XAN	61.48	289 P	09 08.00	-0.9		
	1.0s	13.00nm		5.0mb		
		pP	09 14.80	22kmX		
		sP	09 18.00			
GTA	62.32	300 eP	09 13.00	-1.6		
	1.0s	4.00nm		4.5mb		
		pP	09 19.50	21kmX		
		PP	11 30.00			
LZH	62.71	294 eP	09 17.00	-0.3		
	1.8s	33.00nm		5.2mb		
MOL	63.31	4 eP	09 18.68	-1.9		
SVE	63.41	334 ePd	09 20.00	-1.3		
	3.9s	480.00nm		6.0mb X		
KAF	63.65	355 iP	09 21.70	-1.2		
	0.4s	17.70nm		5.5mb		
ARU	64.28	335 eP	09 26.56	-0.5		
WMQ	64.74	310 P	09 30.50	0.1		
NB2	64.97	2 P	09 30.50	-1.0		
	0.8s	25.80nm		5.4mb		
NAO	65.17	3 P	09 29.92	-2.8		
NUR	65.34	355 iP	09 32.70	-1.1		
	0.3s	11.40nm		5.4mb		
HFS	65.92	1 eP	09 35.50	-2.0		
	0.4s	34.50nm		5.8mb		
	Z 17s	0.60um		4.9MszX		
		LR	32 25.00			
UPP	66.20	359 iP	09 37.80	-1.5		
CD2	66.69	291 P	09 42.40	-0.6		
	0.8s	61.00nm		5.8mb		
GYA	68.50	286 P	09 54.20	-0.3		
	0.8s	51.00nm		5.7mb		
MOS	68.89	347 eP	09 53.00	-3.3X		
		e	10 23.00			
EKA	69.64	11 Pc	10 00.50	-0.3		
	0.6s	25.80nm		5.5mb		
ESK	69.65	11 eP	10 00.37	-0.5		
OBN	69.65	347 (P)	09 59.96	-0.9		
	0.6s	21.32nm		5.4mb		
COP	70.36	2 eP	09 55.60	-9.6X		
PMO	70.39	163 iPd	10 03.40	-2.4		
	1.0s	132.80nm		6.0mb		
TPT	70.42	163 iPd	10 03.67	-2.3		
	0.9s	120.20nm		6.0mb		
RUV	70.66	163 iPd	10 05.10	-2.3		
	0.9s	193.90nm		6.2mb		
VAH	70.67	163 iPd	10 05.10	-2.4		
	0.8s	167.60nm		6.2mb		
DCN	71.04	14 eP	10 09.10	-0.3		
DLF	71.19	14 eP	10 10.00	-0.3		
KMI	71.75	288 Pd	10 17.00	2.7		
	1.6s	50.00nm		5.3mb		
	Z 20s	1.40um		5.2Msz		
MNK	71.75	353 eP	10 09.00	-4.6X		
QIZ	72.47	278 eP	10 22.00	3.6X		
HCG	72.53	12 eP	10 17.60	-0.7		
AFR	72.58	166 iPd	10 16.50	-2.4		
	1.2s	368.90nm		6.3mb		
PPN	72.63	165 iPd	10 16.80	-2.3		
	0.9s	133.70nm		5.9mb		
PPT	72.64	165 iPd	10 16.90	-2.4		
	1.4s	305.00nm		6.1mb		
PAE	72.73	165 iPd	10 17.40	-2.4		
	1.4s	189.10nm		5.9mb		
HTR	72.82	12 ePc	10 19.80	-0.2		
TVO	72.90	165 iPd	10 18.40	-2.4		
	1.0s	232.00nm		6.1mb		
HAE	72.94	12 ePc	10 20.50	-0.2		
HGH	73.31	12 ePc	10 22.80	0.0		
CTB	73.50	259 ePc	10 25.00	0.6		
WTS	73.82	6 eP	10 26.00	0.2		
	0.8s	15.20nm		5.0mb		
		e	10 29.50			
LSA	74.34	299 Pd	10 31.50	1.7		
CLL	74.75	2 iPc	10 30.50	-0.7		
	1.1s	19.00nm		5.0mb		
		i	10 38.10			
BNS	74.87	6 ePc	10 31.20	-0.7		
ENN	74.99	7 eP	10 33.00	0.4		
	1.0s	38.00nm		5.3mb		
SNF	75.13	8 P	10 34.20	0.9		
BRG	75.20	1 iP	10 33.40	-0.4		
	1.0s	24.00nm		5.1mb		
KSP	75.25	360 iPc	10 33.60	-0.4		
		i	10 41.20			
MOX	75.38	3 iPc	10 34.80	0.0		
	1.4s	40.00nm		5.2mb		
		i	10 42.80			
PMG	75.50	230 iPd	10 34.80	-1.1		
DOU	75.57	7 P	10 35.90	0.0		
TNS	75.68	5 eP	10 36.30	-0.3		
		ePcP	10 40.80			
PRU	76.10	1 P	10 38.40	-0.5		
	1.4s	26.80nm		5.1mb		
		pP	10 45.30	22kmX		
WLF	76.11	6 iPc	10 39.23	0.4		
	1.3s	11.40nm		4.7mb		
GRF	76.33	3 iPc	10 40.70	0.5		
	1.1s	30.00nm		5.2mb		
		e	10 44.80			
		e	10 48.60			
FLN	76.41	11 eP	10 40.10	-0.5		
	0.8s	34.00nm		5.4mb		
	Z 20s	0.70um		5.0Msz		
LDF	76.62	11 eP	10 41.30	-0.5		
	0.9s	46.50nm		5.5mb		
GRR	76.73	11 iPc	10 42.20	-0.3		
	0.8s	26.20nm		5.3mb		
SPC	76.84	357 eP	10 42.90	-0.4		
LANF	76.89	5 P	10 43.36	0.0		
WET	76.92	2 iPd	10 44.10	0.6		
	1.2s	17.00nm		4.9mb		
KHC	76.94	2 iPc	10 44.00	0.3		
	1.2s	22.50nm		5.1mb		
		e	10 52.00			
		e	11 30.50			
LPF	77.06	12 iPc	10 44.30	0.0		
	0.8s	31.95nm		5.4mb		
GEC2	77.23	1 ePc	10 44.80	-0.5		
	0.7s	4.67nm		4.6mb		
		e	10 53.50			
		e	10 59.70			
		e	11 12.60			
		ePKKP	29 46.60			
UZH	77.31	356 eP	10 47.00	1.4		
	1.0s	31.00nm		5.3mb		
		e	10 49.70			
CDF	77.42	6 iPc	10 46.20	-0.2		
	0.9s	18.35nm		5.1mb		
ECH	77.61	6 P	10 47.38	0.0		
HAU	77.77	7 iPc	10 48.20	0.0		
	0.9s	29.15nm		5.3mb		
	Z 20s	0.40um		4.7Msz		
FUR	77.85	3 eP	10 48.90	0.2		
ZST	77.89	359 iPc	10 48.90	0.1		
BSF	77.97	6 iPc	10 49.20	-0.3		
	0.9s	23.75nm		5.2mb		
MOF	77.97	6 P	10 49.33	-0.1		
FEL	78.00	5 P	10 49.12	-0.5		
PSZ	78.12	357 e(P)	10 50.20	0.0		
SLE	78.14	5 eP+	10 50.00	-0.2		
HYF	78.21	9 eP	10 50.80	0.2		
	0.5s	39.80nm		5.7mb		
SRO	78.26	358 eP	10 50.40	-0.4		
LOR	78.32	8 iPc	10 51.20	0.0		
	1.0s	49.40nm		5.5mb		
	Z 21s	0.50um		4.8Msz		
BBS	78.38	6 P	10 51.59	0.0		
LOMF	78.45	6 P	10 52.00	-0.1		
GUN	78.46	302 P	10 52.80	0.0		
SSF	78.49	9 iPc	10 52.30	0.1		
	0.4s	23.05nm		5.5mb		
MFF	78.58	11 iPc	10 52.90	0.3		
	0.8s	47.00nm		5.6mb		
LBF	78.61	8 iPc	10 52.60	-0.3		
	0.5s	15.60nm		5.3mb		
MOTA	78.67	3 iPc	10 53.50	0.2		
	0.9s	26.60nm		5.2mb		
		i	11 01.10			
WATA	78.69	3 iPc	10 53.60	0.1		
		i	11 01.20			
AVF	78.75	9 iPc	10 53.50	-0.1		
	0.6s	27.80nm		5.4mb		
WTTA	78.77	3 iPc	10 54.20	0.3		
	1.1s	48.30nm		5.4mb		
		i	11 00.50			
SQTA	78.80	3 iPc	10 54.50	0.5		
	0.9s	38.20nm		5.4mb		
		i	11 02.00			
KKN	78.86	302 P	10 54.90	0.1		
	0.6s	28.00nm		5.4mb		
CHTO	78.88	287 ePd	10 53.60	-1.1		
	1.1s	19.43nm		5.0mb		
BGF	78.93	9 iPc	10 54.50	-0.1		
	0.7s	19.95nm		5.2mb		
SMF	78.93	8 iPc	10 54.50	-0.1		
	0.8s	38.15nm		5.4mb		
PKI	78.98	302 P	10 56.00	0.4		

19d 04h

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GKN    79.00 303 P     10 54.20  -1.3
LLS    79.06   5 ePd   10 56.30   0.8
KKM    79.07 265 eP    11 01.50   5.6X
DMN    79.10 302 P     10 56.40   0.2
        0.4s    22.00nm          5.5mb
LSF    79.11  10 iPc   10 55.50  -0.1
        0.8s    52.65nm          5.6mb
TCF    79.14  10 iPc   10 55.60  -0.2
        0.9s    27.20nm          5.2mb
OGA    79.14   3 eP    10 56.60   0.6
MAF    79.24   9 iPc   10 56.40   0.1
        0.8s    23.65nm          5.2mb
OSS    79.29   4 ePd   10 57.60   0.8
TLE    79.34 245 ePd   10 57.70   0.5
VDL    79.46   4 P     10 58.40   0.7
FVI    79.47   2 P     10 58.29   0.9
        1.1s    23.60nm          5.1mb
TMA    79.81   5 ePd   11 00.40   0.8
MMK    79.82   6 ePd   11 01.10   1.4
RJF    80.04  10 iPc   11 00.50  -0.1
        1.2s    37.80nm          5.3mb
     Z  21s     0.88um          5.1Msz
RSL    80.10   7 P     11 01.63   0.5
DZM    80.14 208 iPc   11 00.50  -0.9
PTJ    80.19 360 iP    11 02.00   0.5
MLR    80.23 353 eP    11 03.00   1.2
ORX    80.24   6 P     11 02.75   1.0
ORO    80.24   6 P     11 03.31   1.5
        1.1s    45.90nm          5.4mb
LPL    80.27   6 eP    11 03.10   1.0
        0.7s    11.70nm          5.0mb
LPG    80.29   6 eP    11 03.40   1.1
        0.8s    14.65nm          5.0mb
LFF    80.32  11 iPc   11 02.30   0.2
        0.5s    25.75nm          5.5mb
SSB    80.35   8 P     11 02.59   0.3
BZS    80.36 356 eP    10 53.50  -8.7X
LSD    80.36   6 P     11 04.67   2.0
CAF    80.47  10 iPc   11 03.20   0.3
        0.9s    25.55nm          5.2mb
LPO    80.62  11 iPc   11 03.80   0.1
        0.7s    19.85nm          5.2mb
EMON   80.66  17 eP    11 03.96   0.0
RSP    80.67   6 P     11 05.36   1.3
NST    80.72 284 eP    11 03.50  -1.1
BNI    80.73   7 P     11 06.05   1.6
        0.8s    26.10nm          5.3mb
RRL    80.87   7 P     11 07.14   1.8
BHB    80.98   6 P     11 05.50  -0.1
STS    80.98  18 eP    11 06.06   0.5
BOB    81.18   5 P     11 07.88   1.2
        0.6s    55.20nm          5.7mb
PZZ    81.31   6 P     11 08.15   0.7
PCP    81.35   5 P     11 07.69   0.1
ROB    81.56   6 P     11 08.61  -0.1
ENR    81.60   6 P     11 07.37  -1.6
EZAM   81.67  18 iPd   11 10.60   1.4
FIN    81.67   6 P     11 09.16   0.0
ERUA   81.71  17 iPc   11 10.64   1.2
TOUF   81.80   6 P     11 11.37   1.2
AUTN   81.83   6 P     11 11.37   1.0
MVIF   81.92   6 P     11 11.83   1.2
BDI    81.93   4 P     11 11.60   1.0
        0.8s     7.90nm          4.8mb
AURF   81.94   6 P     11 10.94   0.3
NDI    81.96 309 eP    11 11.00   0.1
SBF    81.97   6 P     11 11.37   0.6
SFI    82.11   3 P     11 13.43   2.0
        0.9s    40.10nm          5.5mb
EPF    82.16  11 iPc   11 11.60  -0.2
        0.9s    14.60nm          5.0mb
ECRI   82.21  14 iPc   11 12.98   0.9
FRF    82.22   7 iPc   11 12.60   0.6
        1.1s    50.80nm          5.5mb
MAIO   82.26 326 eP    11 14.00   1.5
LESF   82.26  11 P     11 13.08   0.8
LRG    82.30   7 eP    11 13.40   1.0
        0.9s    35.55nm          5.4mb
     Z  22s     0.65um          5.0Msz
ENSF   82.38  11 P     11 14.32   1.2
LMR    82.43   7 iPc   11 13.90   0.8
        1.1s    35.15nm          5.3mb
GRBF   82.48  11 P     11 13.97   0.5
MTHF   82.49  10 P     11 14.43   0.9
ERE    82.74 338 iP    11 16.00   1.1
        0.8s   120.00nm          6.0mb
PAND   82.80  11 P     11 16.09   0.8
EGRA   82.90  12 iPc   11 16.87   1.3
HVAR   82.91 360 iP    11 15.60   0.0
ASS    82.98   2 P     11 17.81   1.7
        1.0s    36.40nm          5.4mb
PGF    83.37   5 P     11 18.61   0.5
KVT    83.44 345 iP    11 20.00   1.5
MNS    83.67   2 P     11 20.00   0.4
        0.6s    26.80nm          5.6mb
GUD    83.90  15 iPc   11 21.52   0.6
SKO    84.00 356 eP    11 13.00  -8.2X
ETOR   84.03  14 iPc   11 22.11   0.6
EPLA   84.15  17 iPc   11 22.91   0.8
EROQ   84.34  12 eP    11 23.61   0.6
SDI    84.37   2 P     11 23.70   0.5
        1.5s    78.30nm          5.7mb
TOV    84.67  81 eP    11 24.90  -0.1
SDV    84.91  82 eP    11 33.10   6.7X
PAB    84.94  16 ePd   11 26.80   0.7
CTA    85.37 226 iPd   11 27.80  -0.4
        1.0s   110.00nm          6.0mb
     Z  18s    15.12um          6.4MszX
                ipP    11 36.00  26kmX
ECHE   85.39  13 iPd   11 29.43   1.1
ESEL   85.66  10 iPc   11 30.07   0.5
MGR    85.95   0 P     11 31.42   0.4
        0.8s   207.90nm          6.4mb
ORI    86.03 360 P     11 32.97   1.6
EVIA   86.11  14 eP    11 32.56   0.6
MTN    86.26 242 iPd   11 32.20  -0.5
        0.7s   161.00nm          6.4mb
SLB    86.38  71 eP    11 33.85   0.3
EBAN   86.38  15 eP    11 33.74   0.5
EVAL   86.45  18 eP    11 33.70   0.2
EHOR   86.48  17 eP    11 33.70   0.1
GRI    87.27 360 P     11 37.86   0.4
        0.9s    79.40nm          6.0mb
SNG    87.28 278 eP    11 39.30   1.5
ECOG   87.28  15 iPc   11 38.24   0.5
QIS    88.71 231 iPd   11 43.50  -0.9
TRN    88.77  74 eP    11 42.95  -2.0
IPM    89.13 277 ePc   11 46.50  -0.2
BRS    89.42 217 iP    11 48.00   0.3
        1.0s    11.00nm          5.1mb
     Z  18s    42.00um          6.9MszX
                i      11 53.00
HYB    90.90 302 eP    11 54.50  -0.5
        1.0s    40.00nm          5.7mb
ARMA   92.58 217 iPc   12 03.40   1.1
        0.9s    62.00nm          6.0mb
ASPA   94.04 234 iPd   12 08.50  -0.6
        0.7s    18.10nm          5.6mb
                iS     22 39.70
GBA    94.70 301 P     12 12.00  -0.4
STK    97.72 224 iPd   12 18.70  -6.9X
        5.5s     3.30nm          4.1mb X
PPD   120.88  85 (PKP) 17 38.00  -5.5X
KRI   141.13 339 iPKPd 18 12.20  -9.9X
                i      18 16.50
SPA   144.10 180 iPKPd 18 22.50  -3.3X
        0.7s   195.31nm
BUL   144.55 339 iPKPd 18 26.20  -1.8
                i      18 30.20
CIR   144.70 334 iPKPd 18 39.90  11.9X
                i      18 46.00
WIN   148.32 358 ePKP  18 35.00   0.8
        1.0s    84.00nm
BFT   149.56 334 ePKP  18 42.50   6.5X
        0.7s    23.00nm
SLR   150.03 337 iPKPd 18 49.00  12.4X
        1.4s   140.00nm
KSR   150.45 339 ePKP  18 41.50   4.2X
        1.0s   200.00nm
SWZ   152.04 342 ePKP  18 46.50   6.9X
        0.7s    55.00nm
SEK   152.67 337 iPKPd 18 47.90   7.4X
        0.8s   186.00nm
BOSA  153.42 341 PKP   18 49.70   8.4X
BOSA  153.42 341 (PKP) 18 40.00  -1.3
                ePKPbc18 49.50
BLF   153.74 339 ePKP  18 48.00   6.0X
        1.0s   120.00nm
FRS   154.54 341 ePKP  18 48.50   5.8X
        0.6s    57.00nm
CER   158.94 352 e(PKP)19 05.50  17.2X
        0.5s    33.00nm
     S.D. = 1.2  on 384 of 417 obs.
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NOV 19, 1993 04h 37m 56.49± 0.11s
22.427 S ± 3.6km 179.565 W ± 3.4km
DEPTH = 591.4km (2 depth phases)
5.3mb (69 obs.)
SOUTH OF FIJI ISLANDS (171)

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SVA     4.67 336 iPd   39 24.10  -2.6
                eS     40 36.20
VUN     4.77 337 iPc   39 24.60  -2.9
                eS     40 41.90
MBU     5.66 343 iPd   39 33.10  -1.8
AFI    11.24  42 eP    40 23.00  -4.9X
                e      54 33.00
BKM    12.39 290 iPc   40 38.50  -0.7
                iS     42 57.50
DZM    12.96 269 iPd   40 44.80   0.0
                iS     43 11.30
KUZ    14.84 195 P     41 05.00   2.0
URZ    16.04 190 eP    41 13.50  -1.1
MOZ    16.74 196 P     41 24.10   2.8
PGZ    18.48 190 P     41 37.00  -0.8
MNG    18.61 192 eP    41 38.10  -1.0
QRZ    19.52 198 eP    41 48.20   0.7
                eS     44 54.60
THZ    20.29 196 eP    41 54.90   0.3
                S      45 03.70
LTZ    21.41 197 eP    42 02.90  -1.8
BWZ    23.70 199 eP    42 24.10  -1.1
MSCZ   24.35 199 P     42 30.00  -1.0
MMCZ   24.35 200 P     42 30.10  -1.1
SBCZ   24.38 199 P     42 30.30  -1.0
LSCZ   24.38 199 P     42 30.50  -0.8
CMCZ   24.44 199 P     42 31.10  -0.8
TLC    24.54 200 P     42 32.30  -0.5
BRS    25.54 253 iPd   42 42.00   0.3
        0.7s    81.00nm          5.5mb
                i      43 36.00 290kmX
                i      46 31.00
ARMA   26.94 247 iPd   42 54.90   0.9
        0.3s    33.00nm          5.4mb
RIV    28.11 240 eP    43 05.10   1.1
AFR    28.39  86 iPd   43 04.80  -1.7
        0.7s   147.30nm          5.7mb
PAE    28.54  86 iPd   43 06.40  -1.4
        1.0s   136.00nm          5.5mb
PPT    28.57  86 iPd   43 06.00  -2.0
        0.9s   275.20nm          5.9mb
PPN    28.71  86 iPd   43 08.00  -1.2
        0.8s    75.00nm          5.4mb
TVO    28.81  86 iPd   43 08.70  -1.5
        0.7s   186.10nm          5.8mb
CNB    29.96 238 iPd   43 21.20   1.3
        0.7s   314.00nm          6.1mb
                eS     47 41.20
                eScP   48 54.20
CAN    30.24 238 iPd   43 23.30   1.0
BWA    30.46 240 iPd   43 22.80  -1.4
PMO    30.84  82 iPd   43 25.90  -1.5
        0.8s   129.50nm          5.6mb
VAH    31.01  82 iPd   43 27.50  -1.3
        1.0s   208.80nm          5.7mb
TPT    31.10  82 iPd   43 28.20  -1.4
        0.9s   263.40nm          5.9mb
RUV    31.25  82 iPd   43 29.50  -1.4
        1.1s   443.50nm          6.0mb
CTA    31.90 268 iPd   43 36.30   0.0
        1.0s   195.00nm          5.7mb
                i      43 40.00  13kmX
                i      44 46.00
                iPcP   46 07.00
                iScP   47 12.00
                iS     48 05.00
                i      49 01.00
PMG    34.42 287 iPd   43 56.60  -0.9
STK    35.66 246 iPd   44 01.70  -5.8X
        0.4s    50.30nm          5.5mb
                iPcP   46 13.20
                iS     48 56.80
QIS    37.96 265 eP    44 25.60  -0.8
                ePcP   46 26.50
                e      49 22.40
ADE    38.41 242 iPd   44 30.50   0.4
ASPA   42.69 259 iPd   45 04.00  -0.3
        0.6s   143.00nm          5.7mb
                iPcP   46 42.50
                iS     50 44.30
                iScS   53 58.50
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FORT	47.21	248	iPd	45 38.10	-0.8
	0.6s	35.00nm			5.1mb
MTN	47.76	273	iPc	45 41.60	-1.6
WARB	48.88	254	iPd	45 50.80	-0.7
	0.2s	21.00nm			5.3mb
KNA	49.09	268	iPd	45 54.20	1.1
	0.3s	55.00nm			5.6mb
GUMO	49.96	312	(P)	45 43.87	-15.5X
SBA	55.87	183	iPc	46 43.80	3.1X
MBL	55.94	259	iPd	46 40.70	-1.3
	0.8s	98.00nm			5.2mb
BAL	56.96	247	iPc	46 48.20	-0.6
	0.4s	12.00nm			4.5mb
MUN	57.19	246	eP	46 50.00	-0.4
MRWA	57.78	249	eP	46 54.00	-0.4
	0.5s	8.00nm			4.2mb X
NANU	59.51	256	iPc	47 06.10	0.1
	0.5s	40.00nm			4.9mb
SPA	67.71	180	iPc	47 58.80	1.4
	0.7s	117.19nm			5.5mb
CHJJ	70.13	325	P	48 10.90	-1.1
IIDJ	70.28	324	P	48 12.10	-0.8
MAJO	70.92	325	iPc	48 15.47	-1.1
	0.8s	56.38nm			5.1mb
MAT	70.92	325	iPc	48 15.40	-1.2
	0.8s	38.81nm			5.0mb
OFUJ	71.13	329	eP	48 16.70	-1.0
MTMJ	71.17	325	P	48 17.00	-1.1
TKSJ	71.38	321	P	48 19.00	-0.3
KAGJ	71.39	317	eP	48 19.00	-0.4
LEM	71.57	270	iPc	48 21.00	0.0
KUMJ	72.33	318	eP	48 24.20	-0.6
YONJ	72.57	321	P	48 25.70	-0.4
KUSJ	73.02	333	P	48 28.00	-0.5
HOOJ	73.04	332	eP	48 28.80	0.2
ADK	74.03	2	iPc	48 32.06	-1.8
	0.6s	78.13nm			5.4mb
MRRJ	74.05	331	eP	48 34.10	-0.1
TATO	74.10	306	eP	48 34.11	-0.8
	0.7s	162.75nm			5.7mb
ASAJ	74.72	333	P	48 39.00	1.1
YSS	77.04	335	iPc	48 50.00	-0.6
	0.6s	70.00nm			5.3mb
SSE	77.82	311	Pd	48 54.50	-0.6
	1.0s	11.00nm			4.2mb X
SDN	79.15	11	eP	48 59.90	-1.6
MAW	79.26	200	iP	49 03.60	1.6
	0.8s	35.29nm			4.8mb
NJ2	80.00	311	Pd	49 07.20	0.8
	1.2s	65.00nm			4.9mb
PRS	80.21	44	iP	49 08.34	0.9
JEGM	80.23	43	eP	49 08.19	0.6
STAN	80.35	43	iPc	49 08.94	0.8
	1.6s	230.00nm			5.4mb
BCH	80.37	46	iPc	49 09.26	0.8
SAO	80.42	44	eP	49 09.13	0.6
	0.8s	40.22nm			4.9mb
PHAM	80.55	45	eP	49 09.93	0.7
PRI	80.55	45	iP	49 10.24	0.8
COE	80.58	43	iPc	49 10.39	1.0
BKS	80.60	42	iPc	49 10.14	0.7
	1.0s	110.00nm			5.3mb
ZSP	80.63	42	iP	49 10.36	0.8
MHC	80.65	43	iPc	49 10.64	0.8
	1.0s	80.00nm			5.2mb
NTYM	80.65	42	eP	49 10.02	0.4
ARN	80.72	43	eP	49 10.96	0.8
ABL	80.75	46	eP	49 11.18	0.6
HMR	81.04	42	eP	49 12.94	1.3
KMPM	81.04	40	iPc	49 12.94	1.2
EKR	81.21	39	iP	49 13.33	0.9
MDJ	81.27	326	Pc	49 13.10	0.4
	1.0s	68.00nm			5.1mb
ARC	81.36	39	iPc	49 14.21	1.0
	1.3s	170.00nm			5.4mb
FHC	81.36	39	iP	49 14.72	1.4
SSK	81.42	48	ePc	49 14.08	0.1
PLM	81.51	49	iPc	49 14.78	0.3
PEC	81.60	48	iPc	49 14.99	0.3
	0.8s	45.12nm			5.1mb
FRI	81.68	44	iP	49 15.36	0.5
ISA	81.72	46	iPc	49 15.92	0.7
	0.9s	80.44nm			5.3mb
CMB	81.86	43	iPc	49 16.30	0.4
	0.9s	80.00nm			5.2mb
ORV	82.08	41	iPc	49 17.04	0.1
	1.0s	80.00nm			5.2mb
WDC	82.08	40	iPc	49 17.65	0.8
	1.2s	130.00nm			5.3mb
LGPM	82.12	40	ePc	49 18.26	1.1
			pP	52 06.26	
WHN	82.43	307	Pd	49 19.50	0.7
	1.0s	30.00nm			4.8mb
MTUM	82.63	45	eP	49 20.62	0.7
GSC	82.63	47	eP	49 20.36	0.5
LMEM	82.64	41	eP	49 20.62	0.7
YBH	82.70	39	iPc	49 21.11	1.1
	1.0s	100.00nm			5.3mb
SNY	82.76	321	P	49 20.40	0.2
	0.8s	65.00nm			5.2mb
GLA	82.78	50	iPc	49 21.84	1.3
MRCM	82.85	44	eP	49 21.96	0.9
LBFM	82.94	40	eP	49 21.99	0.6
CN2	82.95	323	Pc	49 21.20	0.1
	1.0s	95.00nm			5.3mb
KDC	83.01	14	eP	49 20.60	-0.5
BONR	83.15	44	eP	49 23.03	0.4
SNG	83.38	281	eP	49 25.90	2.0
RNO	83.48	37	P	49 25.08	1.2
TIA	83.51	313	Pc	49 24.50	0.4
KVN	83.91	43	eP	49 26.31	0.1
TNP	83.92	45	iPc	49 26.67	0.3
	1.3s	139.54nm			5.4mb
TPNV	83.92	46	iPc	49 26.72	0.4
	0.7s	19.31nm			4.8mb
KMOR	84.72	36	P	49 30.63	0.7
SSOR	84.79	37	P	49 30.68	0.4
BMW	85.39	35	iPc	49 33.72	0.6
VBEM	85.40	37	P	49 33.63	0.3
SVW	85.46	11	iPc	49 31.93	-1.2
	0.8s	102.99nm			5.6mb
VIPM	85.61	38	P	49 34.92	0.6
CROR	85.69	37	P	49 34.89	0.3
SHW	85.75	36	eP	49 35.66	0.7
SLKM	86.02	14	iPc	49 34.53	-1.2
			pP	51 24.08	490kmX
ASR	86.07	36	P	49 36.98	0.5
VGB	86.13	37	eP	49 36.76	0.1
STW	86.23	34	P	49 38.06	1.1
BJI	86.25	316	eP	49 38.00	0.8
	1.0s	22.00nm			4.8mb
ARUT	86.26	47	iPc	49 38.02	0.4
CP2	86.26	13	iPc	49 35.56	-1.6
CRP	86.28	13	iPc	49 35.17	-2.0
GMW	86.31	35	iPc	49 37.79	0.4
LON	86.33	36	iPc	49 37.56	0.0
GYA	86.35	300	P	49 39.00	0.8
	1.0s	29.00nm			5.0mb
FMW	86.51	36	P	49 39.21	0.6
JBO	86.63	38	P	49 39.52	0.5
MCW	87.00	34	iPc	49 41.33	0.6
			pP	51 32.76	499kmX
TTA	87.09	11	iPc	49 40.19	-0.7
	1.0s	35.84nm			5.1mb
EBG	87.10	36	P	49 41.81	0.6
JCW	87.16	34	P	49 41.96	0.5
PMR	87.23	14	ePc	49 40.36	-1.0
	1.1s	305.65nm			6.0mb
NST	87.23	288	eP	49 43.00	0.7
MSU	87.49	46	iPc	49 44.26	0.8
			pP	51 50.40	582km
TIY	87.49	313	Pc	49 44.30	1.0
	1.0s	53.00nm			5.3mb
SNA	87.50	179	iPc	49 43.50	0.8
	0.9s	41.00nm			5.2mb
			e	51 53.00	601km
LNOR	87.75	38	P	49 44.35	0.1
KLU	87.89	15	iPc	49 43.78	-0.9
			pP	51 41.88	534kmX
WTV	87.91	36	P	49 45.25	0.3
DUG	87.94	45	eP	49 45.19	-0.2
	1.5s	27.28nm			4.9mb
XAN	88.15	308	Pc	49 47.20	0.8
	0.8s	52.00nm			5.4mb
SAW	88.21	36	P	49 46.59	0.2
TOA	88.36	15	eP	49 46.70	-0.1
BALM	88.44	17	eP	49 45.84	-1.4
HVU	88.80	43	iPc	49 49.84	0.5
BDT	88.86	289	eP	49 52.50	2.7
	0.8s	57.10nm			5.5mb
SRU	88.90	47	iPc	49 50.29	0.4
KMI	88.93	298	Pc	49 51.80	1.4
	1.6s	90.00nm			5.4mb
DPW	88.96	36	iPc	49 49.88	0.1
DAU	89.07	45	eP	49 50.94	0.1
LTX	89.31	58	iPc	49 52.57	0.6
CHTO	89.54	290	iPc	49 54.70	1.7
	0.9s	79.92nm			5.6mb
PV09	89.54	48	iPc	49 53.32	0.3
PV10	89.55	48	iPc	49 52.79	-0.2
HHC	89.66	315	Pc	49 54.40	1.1
	1.0s	63.00nm			5.5mb
ALQ	89.74	52	iPc	49 54.23	0.4
	0.9s	38.03nm			5.3mb
NEW	89.78	36	ePd	49 53.09	-0.5
	1.3s	13.32nm			4.7mb
PV08	89.91	48	eP	49 55.00	0.2
ILT	90.06	0	iPc	49 53.40	-0.8
	1.2s	63.00nm			5.4mb
IMA	90.39	10	iPc	49 55.20	-0.9
	0.8s	20.55nm			5.1mb
FBA	90.43	13	iPc	49 54.55	-1.6
	0.8s	49.44nm			5.5mb
			pP	51 43.52	482kmX
BTO	90.56	314	eP	49 58.00	0.6
CD2	90.61	303	iPd	49 59.40	1.6
LRM	91.12	40	eP	49 59.90	-0.1
GLD	92.81	48	iPc	50 08.52	0.6
	1.1s	28.83nm			5.2mb
RSSD	95.54	44	eP	50 19.82	-0.4
	0.8s	19.61nm			5.4mb
INK	96.51	16	eP	50 21.00	-2.7
	0.9s	6.00nm			4.9mb
GTA	97.07	310	eP	50 27.50	0.4
	1.5s	19.00nm			5.2mb
YKA	98.87	25	eP	50 33.40	-1.1
	0.8s	4.30nm			4.9mb
KKN	104.45	294	Pdiff	51 00.00	-0.5
MBC	104.97	12	ePdiff	51 16.50	15.1X
GKN	105.06	294	PKP	55 12.20	-2.0
MYNC	106.79	59	ePKP	55 15.79	-1.3
GBA	106.92	278	PKP	55 17.00	-0.8
PPD	112.96	128	ePKP	55 28.00	-1.2
GAC	115.37	49	ePKP	55 31.50	-1.5
JAQ	115.89	40	ePKP	55 31.00	-2.8
RSNY	115.90	50	ePKP	55 32.76	-1.4
FRB	119.17	28	ePKP	55 38.50	-1.2
	0.6s	7.00nm			
GRM	119.22	205	ePKP	55 41.50	0.6
	0.6s	30.00nm			
BDFB	119.32	124	iPKPc	55 40.75	-0.8
BAO	119.34	124	PKPd	55 41.10	-0.5
CBM	120.53	48	iPKPc	55 41.29	-1.6
CER	121.68	199	ePKP	55 36.00	-9.5X
	0.5s	41.00nm			
SUR	122.12	200	iPKPd	56 02.00	15.4X
	0.8s	107.00nm			
LMN	122.83	49	ePKP	55 44.50	-2.8
FRS	122.87	206	iPKPc	55 48.00	0.1
	0.1s	60.00nm			
BLF	123.07	207	iPKPd	55 49.00	0.5
	0.5s	33.00nm			
SEK	123.13	209	ePKP	55 57.50	8.8X
	0.7s	33.00nm			
BFT	124.22	213	ePKP	55 52.00	1.1
SVE	124.73	324	iPKPd	55 50.10	-0.6
DAG	124.78	5	iPKPd	55 48.20	-2.0
	0.8s	24.63nm			
SLR	125.04	211	iPKPd	56 01.70	9.2X
	1.0s	50.00nm			
KSR	125.57	210	ePKP	55 52.00	-1.5
	1.0s	66.00nm			
CIR	127.20	217	iPKPd	56 09.00	12.5X
SOB1	128.73	123	ePKP	55 47.10	-12.5X
			e	55 47.60	
			e	58 26.10	
BUL	129.53	215	iPKPd	56 00.20	-0.9
			i	58 30.70	
MTD	130.52	221	iPKPd	55 48.00	-15.0X
KRI	131.65	219	iPKPd	55 54.20	-11.0X
SDF	132.16	347	iPKP	56 03.10	-1.4
WIN	132.42	201	ePKP	56 06.50	-0.1
	0.6s	18.00nm			
KAF	136.57	343	ePKP	55 58.80	-14.2X
OBN	137.71	330	ePKP	56 12.00	-3.3X
	1.2s	70.00nm			
NUR	138.35	342	ePKP	56 05.80	-10.5X
UPP	140.67	346	iPKP	56 12.90	-7.6X
NB2	140.69	352	PKP	56 13.90	-6.7X
	0.5s	14.10nm			
HFS	141.18	349	ePKP	56 14.20	-7.3X

19d 04h

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        0.5s    59.40nm
ANN   142.47 316 ePKP  56 20.00  -4.1X
        1.0s    40.00nm
KVT   144.78 310 iPKP  56 28.50   0.2
MUD   145.40 351 iPKPc 56 29.40   0.7
        1.0s   186.00nm
                 i     56 47.00
EDR   145.48   3 ePKPc 56 28.90   0.0
COP   145.61 348 iPKPc 56 30.00   1.0
        0.6s   149.33nm
BSD   145.61 345 iPKPc 56 29.90   0.8
        0.7s   154.00nm
BNN   145.66 307 iPKP  56 31.00   1.1
EDU   145.83   3 ePKPc 56 30.40   1.0
EBH   146.10   4 ePKPc 56 31.40   1.5
EAB   146.10   5 ePKPc 56 31.20   1.4
KAS   146.26 312 iPKPc 56 33.20   2.5
ESY   146.48   3 ePKPc 56 32.10   1.6
EAU   146.50   4 ePKPc 56 32.70   2.2
EBL   146.60   4 ePKPc 56 32.80   2.1
EKA   147.03   4 PKPc  56 30.10  -1.3
        0.8s    76.60nm
ESK   147.04   4 iPKPc 56 33.50   2.1
        0.6s    70.00nm
BHL   147.07 298 PKPc  56 34.00   1.7
PTT   147.82 326 ePKP  56 20.00 -12.9X
CFR   147.93 322 ePKP  56 33.50   0.4
WIM   148.09   6 iPKPc 56 36.70   3.6X
FAM   148.16 301 ePKP  56 37.00   3.2X
VRI   148.32 324 ePKPd 56 37.50   3.7X
OJC   148.37 336 ePKP  56 33.30  -0.4
        0.8s   170.00nm
                 e     56 37.80
                 i     56 43.40
                 i     56 47.00
DCN   148.58   9 iPKPc 56 37.90   4.1X
        0.5s   186.00nm
UZH   148.59 332 ePKP  56 40.00   6.0X
        1.0s    45.00nm
CSS   148.70 301 ePKPc 56 39.00   4.3X
DLF   148.73   8 iPKPc 56 38.10   4.0X
        0.6s   110.00nm
PSN   148.78 319 iPKP  56 40.00   5.5X
WME   148.87   5 iPKPc 56 38.40   4.1X
ISR   148.87 323 iPKPc 56 39.50   4.8X
MLR   148.98 324 ePKP  56 31.50  -3.4X
YRC   148.99   6 iPKPc 56 38.40   3.9X
SPC   149.03 334 ePKP  56 35.10   0.1
                 e     58 55.40
KSP   149.05 340 ePKP  56 34.20  -0.5
KSP   149.05 340 iPKPc 56 39.80   5.1X
        0.7s   301.00nm
                 i     56 44.70
                 i     58 56.20
WIT   149.29 353 ePKP  56 36.00   1.1
WIT   149.29 353 iPKPc 56 41.00   6.1X
                 e     58 57.00
YRH   149.40   6 ePKPc 56 39.30   4.2X
PPCY  149.51 301 ePKP  56 40.50   4.7X
CLL   149.56 344 iPKP  56 35.40   0.0
        1.8s    52.00nm
CLL   149.56 344 iPKP  56 40.90   5.5X
                 pPKP  58 57.00
CMP   149.62 324 ePKPc 56 41.00   5.2X
BRG   149.71 343 iPKP  56 34.60  -1.1
        0.8s   300.00nm
                 i     56 41.00
                 i     58 57.60
ALT   149.76 310 ePKP  56 41.00   4.7X
HCG   149.99   5 iPKPc 56 41.10   5.0X
WTS   150.07 352 iPKPc 56 36.10   0.0
        1.0s    38.50nm
WTS   150.07 352 iPKP  56 42.00   5.9X
                 e     58 55.00
HTR   150.26   5 iPKPc 56 41.70   5.2X
PRU   150.34 341 PKPc  56 36.40  -0.2
        0.8s   142.00nm
                 i     56 42.50
                 i     56 51.60
                 e     58 57.80
HAE   150.35   4 iPKPc 56 42.00   5.4X
JMB   150.43 319 iPKP  56 44.00   7.0X
KHL   150.48 309 ePKP  56 42.90   5.5X
MOX   150.51 345 iPKP  56 37.00   0.1
                 i     56 43.20
                 i     56 52.20
DST   150.56 312 ePKP  56 42.10   4.7X
EDC   150.73 314 ePKP  56 42.80   5.3X
HGH   150.73   4 iPKPc 56 42.80   5.6X
HOF   150.75 345 ePKP  56 37.10  -0.2
                 i     56 43.60
                 i     56 53.10
SRO   150.90 335 ePKP  56 37.10  -0.4
                 i     56 44.30
                 i     56 55.00
                 i     59 01.80
BNS   151.03 351 iPKPc 56 43.90   6.3X
ZST   151.04 337 ePKP  56 37.80   0.1
                 i     56 43.80
                 i     56 55.10
                 i     58 56.80
BZS   151.13 328 ePKP  56 28.50  -9.4X
VKA   151.27 338 ePKP  56 38.00  -0.1
                 i     56 45.00
DIM   151.30 319 iPKPc 56 45.00   6.7X
KHC   151.38 342 iPKP  56 38.00  -0.3
        1.0s    39.20nm
                 i     56 45.10
                 e     56 56.50
                 i     59 02.00
ENN   151.39 353 iPKPc 56 38.00  -0.1
        0.5s    10.00nm
ENN   151.39 353 iPKPc 56 44.90   6.8X
                 e     56 55.50
                 e     59 02.00
GRF   151.49 345 ePKPc 56 38.40   0.0
                 ic    56 45.60
                 e     56 56.40
UCC   151.52 355 PKP+  56 45.00   6.7X
MEM   151.54 353 iPKPc 56 38.86   0.5
                 ic    56 45.02
TNS   151.55 349 ePKP  56 39.10   0.6
                 i     56 45.40
                 i     56 56.40
WET   151.57 343 ePKP  56 38.80   0.3
                 i     56 45.70
                 i     56 57.30
GEC2  151.61 341 e(PKP)56 57.00  18.3X
        0.6s    16.60nm
GEC2  151.61 341 e(PKP)56 48.50   9.8X
        0.4s     4.10nm
GEC2  151.61 341 e(PKP)56 45.50   6.8X
        0.5s    27.90nm
GEC2  151.61 341 e(PKP)56 37.90  -0.8
        1.0s     6.90nm
KDZ   151.61 318 iPKPc 56 46.00   7.2X
ALN   151.63 316 ePKP  56 43.90   5.1X
PLD   151.77 320 iPKP  56 46.00   7.0X
SNF   151.81 355 iPKPc 56 45.80   7.1X
                 id    56 57.23
PGB   151.82 321 iPKP  56 46.00   6.9X
RZN   152.01 319 iPKPc 56 46.00   6.4X
DOU   152.19 354 PKP   56 39.80   0.5
                 ic    56 46.70
                 ec    59 04.80
VTS   152.35 322 iPKPc 56 48.00   8.0X
WLF   152.44 352 iPKPc 56 47.64   8.0X
                 id    57 00.27
MMB   152.67 320 iPKPc 56 48.00   7.7X
BHG   152.86 341 ePKP  56 40.70   0.3
                 i     56 47.90
                 i     57 03.00
HOFF  152.87 349 PKP   56 40.59   0.3
KKB   152.88 321 iPKPc 56 48.00   7.4X
FUR   152.89 344 iPKPc 56 40.00  -0.4
                 i     56 48.30
                 i     57 02.60
SOH   153.35 319 ePKP  57 03.02  21.7X
PTJ   153.39 335 ePKP  56 41.00  -0.3
WLS   153.49 350 PKP   56 40.49  -0.8
CDF   153.50 350 ePKP  56 41.10  -0.2
WATA  153.58 343 iPKPc 56 40.50  -1.0
                 i     56 49.30
                 i     57 05.50
                 ipPKP 59 07.10
WTTA  153.63 343 iPKPc 56 40.50  -1.1
                 i     56 49.70
                 i     57 06.00
                 ipPKP 59 08.20
MOTA  153.70 343 iPKPc 56 40.80  -0.9
                 i     56 49.50
                 i     57 05.90
                 ipPKP 59 08.00
FLN   153.71   1 ePKP  56 41.30  -0.1
        0.8s    36.15nm
ECH   153.71 350 PKP   56 40.71  -0.8
SKO   153.75 323 ePKP  56 34.00  -7.7X
SQTA  153.78 343 iPKPc 56 41.10  -0.7
                 i     56 49.90
                 i     57 06.40
LJU   153.80 337 ePKP  56 41.00  -0.7
LDF   153.89   1 ePKP  56 41.50  -0.2
        0.7s    16.30nm
FEL   153.89 348 PKP   56 41.25  -0.6
VBY   153.99 336 ePKP  56 41.50  -0.4
VBY   153.99 336 iPKP  56 50.50   8.6X
HAU   154.04 351 ePKP  56 42.10   0.1
        0.9s    10.95nm
MOF   154.07 350 PKP   56 41.04  -1.1
GRR   154.07   2 ePKP  56 41.90   0.0
        0.9s    20.00nm
BSF   154.14 350 ePKP  56 42.10  -0.1
        0.9s    13.25nm
OGA   154.16 343 ePKP  56 42.00  -0.4
TRI   154.36 338 ePKP  56 51.00   8.6X
                 e     57 07.50
LPF   154.42   2 ePKP  56 42.50   0.1
        1.0s    28.20nm
LOR   155.06 354 ePKP  56 43.40   0.0
        0.9s    18.20nm
HYF   155.15 356 ePKP  56 43.90   0.4
SSF   155.30 355 ePKP  56 43.80   0.1
        0.9s    24.90nm
LBF   155.33 354 ePKP  56 43.80   0.0
        1.2s    27.95nm
AVF   155.58 355 ePKP  56 43.80  -0.3
        1.0s     9.60nm
SMF   155.68 354 ePKP  56 44.00  -0.2
        1.1s    18.80nm
BGF   155.85 356 ePKP  56 44.60   0.2
        0.8s    15.30nm
MFF   155.88   1 ePKP  56 44.50   0.0
        1.0s    38.40nm
TCF   156.15 357 ePKP  56 44.90   0.0
        1.2s    38.40nm
MAF   156.20 356 ePKP  56 44.90   0.0
        1.6s    48.50nm
LSF   156.22 358 ePKP  56 44.70  -0.2
        1.1s    26.60nm
LPL   156.40 349 ePKP  56 45.80   0.3
        1.3s    24.90nm
LPG   156.41 349 ePKP  56 45.90   0.3
        1.2s    15.45nm
RJF   157.16 358 ePKP  56 46.30   0.2
        1.3s    41.15nm
CAF   157.52 357 ePKP  56 47.10   0.5
        0.8s    10.05nm
LFF   157.54 359 ePKP  56 47.20   0.7
LPO   157.79 359 ePKP  56 47.40   0.6
        1.4s    38.75nm
ERUA  159.11  16 ePKP  56 49.22   0.8
EPF   159.45   0 ePKP  56 49.40   0.6
        1.0s    17.20nm
ECRI  159.73   6 ePKP  56 49.79   0.7
GUD   161.43  11 ePKP  56 51.95   1.0
PAB   162.45  12 ePKP  56 52.50   0.5
LIC   163.05 161 PKP   56 53.54   0.4
        1.0s    59.00nm
KIC   163.26 162 PKPc  56 53.62   0.2
        0.8s    35.00nm
TIC   163.45 161 PKPc  56 53.88   0.3
        0.8s    35.00nm
EVIA  163.65   8 ePKP  56 54.91   1.7
EVAL  163.67  21 ePKP  56 53.97   0.9
ECOG  164.80  12 ePKP  56 50.43  -3.9X
     S.D. = 1.0  on 292 of 364 obs.
-----------------------------------
?  NOV  19, 1993  04h 53m 41.39± 1.21s
   16.511 S ±64.2km  173.900 W ±36.1km
   DEPTH =  33.0km  (normal)
   4.9mb (  3 obs.)
 TONGA ISLANDS                      (173)

DZM    19.35 250 iPc   58 09.00   1.7
STK    43.08 241 P     01 33.79  -6.3X
ASPA   49.32 253 eP    02 27.90  -1.8
        0.4s    16.00nm          5.4mb
GSC    74.71  45 eP    05 19.95   0.0
BONR   75.20  42 eP    05 22.86  -0.1
MSU    79.55  45 iP    05 48.33   1.3
DUG    80.00  43 eP    05 48.04  -1.2
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        1.1s     3.78nm          4.3mb
PV10    81.62  46 iPc    05 58.01   0.0
LTX     81.63  56 eP     05 58.20   0.2
PV08    81.99  46 eP     06 00.73   0.7
LRM     83.18  38 eP     06 06.10   0.2
FBA     83.57  11 ePc    06 07.23   0.1
        0.9s    11.06nm          5.0mb
RSSD    87.60  43 eP     06 27.41  -0.4
YKA     91.30  24 eP     06 58.20  13.7X
        0.4s     0.70nm
KSP    144.79 349 iPKP   13 16.00  -0.4
BRG    145.15 351 iPKP   13 16.00  -1.0
MOX    145.66 354 ePKP   13 18.80   0.8
GEC2   147.16 351 ePKPc  13 22.90   2.3X
        0.8s     1.64nm
FLN    147.39   8 ePKP   13 23.20   2.4X
        0.5s     5.05nm
LDF    147.60   8 ePKP   13 23.70   2.6X
        0.7s     4.30nm
GRR    147.70   9 ePKP   13 24.20   2.9X
        0.6s     7.75nm
LPF    148.02   9 ePKP   13 25.00   3.2X
        0.5s     4.50nm
CDF    148.17 359 ePKP   13 25.10   2.9X
HAU    148.59 360 ePKP   13 27.00   4.2X
LOR    149.27   3 ePKP   13 28.50   4.6X
SSF    149.46   3 ePKP   13 29.30   5.2X
LSF    150.10   6 ePKP   13 30.20   5.1X
     S.D. = 1.0  on  15 of  27 obs.
-------------------------------------
%  NOV  19, 1993  05h 30m 14.42± 0.75s
   44.336 N ± 6.6km     7.343 E ± 8.3km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                    (545)
      ML 1.9 (GEN).

STV     0.09 188 P      30 17.09   0.0
                 S      30 19.25
ENR     0.12 153 P      30 17.42  -0.1
                 S      30 19.29
PZZ     0.24 314 P      30 19.93   0.3
                 S      30 23.87
ROB     0.38  96 P      30 22.45   0.2
BHB     0.51 354 P      30 24.46  -0.3
     S.D. = 0.3  on   5 of   5 obs.
-------------------------------------
%  NOV  19, 1993  05h 45m 47.07± 1.03s
   43.007 N ± 7.7km    18.773 E ± 7.0km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)

BRY     0.20 238 iPgd   45 51.77   0.2
                 iSg    45 54.94
NKY     0.26 139 iPgd   45 52.93   0.4
                 iSg    45 57.21
PLE     0.56  54 iPgd   45 58.44   0.0
                 iSg    46 06.91
HCY     0.59 200 iPgd   45 58.61  -0.5
                 iSg    46 07.41
TTG     0.68 148 iPgc   45 59.91  -0.6
                 iSg    46 10.49
BDV     0.72 177 iPgc   46 01.44   0.1
                 iSg    46 11.76
ULC     1.10 161 iPgd   46 08.14   0.4
                 iSg    46 24.29
     S.D. = 0.5  on   7 of   7 obs.
-------------------------------------
*  NOV  19, 1993  05h 55m 12.51± 0.38s
   7.964 N ± 5.9km  126.973 E ±10.3km
   DEPTH =  34.0km  (  6 depth phases)
   4.8mb ( 21 obs.)  4.6Msz (  5 obs.)
 MINDANAO, PHILIPPINE ISLANDS      (259)

DAV     1.64 238 ePd-   55 42.00   2.6
                 iS     56 09.00
MNI     6.82 198 eP     56 55.00   2.2
TLE    14.69 157 ePc    58 38.30  -1.5
QIZ    19.94 305 eP     59 49.80   5.2X
     N  15s     2.30um
KNA    23.63 176 eP     00 21.50  -0.1
SSE    23.64 348 eP     00 20.00  -1.6
     Z  20s     0.90um          4.2Msz
                 sS     04 46.00
GYA    26.66 316 eP     00 50.00  -0.4
     Z  20s     1.58um          4.6Msz
NST    27.34 289 eP     00 57.00   0.4
WRA    28.66 165 iPc    01 06.30  -2.2
        0.9s     1.70nm          3.7mb X
                 ipP    01 13.40  25km
WRA    28.66 165 P      01 24.00  15.5X
        1.1s     4.50nm
KMI    28.73 309 eP     01 25.50  16.1X
        1.9s    50.00nm
     Z  20s     1.90um          4.7Msz
CHTO   29.27 294 eP     01 13.00  -1.0
XAN    30.83 330 P      01 25.00  -2.7
        0.6s     6.00nm          4.6mb
QIS    30.94 157 eP     01 27.30  -1.5
ASPA   32.16 168 eP     01 39.80   0.4
        0.7s     4.10nm          4.4mb
                 eS     06 43.10
TIY    32.41 338 eP     01 41.40  -0.2
     Z  22s     0.91um          4.4Msz
     N  13s     0.58um
BJI    33.37 345 eP     01 49.00  -0.7
        1.0s     6.00nm          4.5mb
CTA    33.72 146 iPc    01 52.00  -1.1
        2.0s   102.94nm          5.4mb
                 i      07 09.00
SNY    33.86 355 Pd     01 55.50   1.5
WARB   33.94 181 eP     01 54.50  -0.4
LZH    35.06 326 eP     02 03.50  -1.1
        1.8s    15.00nm          4.6mb
     Z  15s     0.53um          4.4MszX
MEEK   35.34 193 eP     02 05.50  -1.4
        1.0s    57.00nm          5.5mb
CN2    35.72 358 eP     02 11.00   1.1
        0.8s     5.90nm          4.6mb
     Z  16s     0.36um          4.2MszX
MDJ    36.58   3 Pc     02 19.50   2.3
        1.8s   180.00nm          5.7mb
SHL    37.71 302 iP     02 27.30   0.2
                 eS     09 18.00
MRWA   38.45 196 eP     02 32.00  -1.0
        0.6s    14.00nm          5.0mb
BAL    39.59 194 eP     02 41.50  -1.0
        0.9s    81.00nm          5.5mb
GTA    39.67 326 eP     02 43.00  -0.2
        1.0s     4.00nm          4.1mb
LSA    39.95 308 eP     02 48.00   1.9
        1.2s    29.00nm          4.9mb
MUN    41.03 194 eP     02 54.00  -0.3
STK    42.01 161 eP     02 56.70  -5.7X
        0.9s     5.30nm          4.3mb
ADE    44.11 166 e(P)   03 21.20   1.7
ARMA   44.91 149 eP     03 25.80  -0.3
        0.8s    15.00nm          4.9mb
BWA    46.79 156 iPc    03 42.40   1.6
                 ipP    03 53.00  36km
CAN    47.81 156 eP     03 48.50  -0.3
                 ipP    03 59.40  38km
CNB    47.95 155 eP     03 53.00   3.0
HYB    48.05 286 eP     03 50.50  -0.5
GBA    48.92 281 P      03 57.00  -0.6
WMQ    49.46 323 P      04 02.00   0.4
     Z  18s     0.84um          4.8Msz
SVW    76.99  29 eP     07 05.80   2.4
        0.9s    58.30nm          5.6mb
                 e      07 17.90  41km
TTA    77.04  27 eP     07 01.10  -2.6
KDC    78.26  33 eP     07 23.80  13.5X
IMA    78.44  24 eP     07 13.80   2.4
        0.7s     6.20nm          4.7mb
                 e      07 25.70  40km
PMS    79.92  29 eP     07 21.10   1.7
KAF    87.98 332 iP     08 00.00  -0.1
        0.6s     6.50nm          5.1mb
NUR    89.14 331 iP     08 06.10   0.4
NSD    90.31 336 eP     08 09.90  -1.2
        0.5s     1.50nm          4.5mb
DAG    93.13 353 iPd    08 23.70  -0.2
        0.6s     4.67nm          5.1mb
NB2    95.12 334 P      08 32.50  -0.9
        0.9s     2.90nm          4.7mb
GEC2   98.93 322 eP     08 50.20  -0.7
        1.0s     1.96nm          4.6mb
                 e      08 58.30  25km
CNCB  162.96 122 PKP    15 18.00   4.2X
LPB   163.00 121 ePKP   15 17.00   3.4X
     S.D. = 1.5  on  45 of  52 obs.
-------------------------------------
*  NOV  19, 1993  06h 53m 31.88± 0.82s
   21.776 S ±22.8km  174.137 W ± 9.3km
   DEPTH =  33.0km  (normal)
   4.9mb (  6 obs.)  4.2Msz (  1 obs.)
 TONGA ISLANDS                     (173)

SVA     7.86 296 eP     55 27.20   0.4
VUN     7.91 297 eP     55 27.60   0.1
AFI     8.14  16 eP     55 24.00  -6.8X
                 eS     57 00.00
DZM    18.02 265 iPc    57 43.00   1.4
ASPA   47.75 257 eP     02 06.70  -1.3
        0.8s     6.20nm          4.7mb
     Z  21s     0.30um          4.2Msz
                 eS     08 53.40
WRA    48.00 262 eP     02 07.70  -2.3
        0.6s     2.30nm          4.4mb
MAT    73.41 322 eP     05 01.00  -1.7
CMB    78.01  41 eP     05 28.77   0.0
        1.4s    14.50nm          4.8mb
BONR   79.24  42 eP     05 36.28   0.4
GMW    82.99  32 eP     05 54.31  -0.7
RMW    83.42  33 eP     05 57.41   0.1
MSU    83.45  44 eP     05 58.94   1.1
CP2    84.61  10 eP     06 01.39  -1.7
CRP    84.63  10 eP     05 58.62  -4.5X
SRU    84.86  44 eP     06 04.53  -0.3
CN2    85.53 321 eP     06 08.20   0.4
        1.0s    11.00nm          5.0mb
                 epP    06 14.00  18kmX
FBA    88.76  11 eP     06 21.92  -1.1
        1.3s    12.84nm          5.1mb
TIY    90.83 311 eP     06 35.20   1.8
XAN    91.78 306 P      06 38.50   0.7
        1.0s     9.00nm          5.1mb
                 sP     06 49.00
MUD   145.28 357 ePKP   13 07.20  -0.2
        0.9s    20.00nm
KSP   149.86 347 ePKP   13 19.80   4.8X
CLL   150.00 351 iPKPd  13 20.80   5.7X
BRG   150.28 350 ePKP   13 16.80   1.2
MOX   150.83 352 e(PKP)13 21.40   4.9X
PRU   151.02 348 ePKP   13 23.50   6.8X
                 e      13 32.00   .
GRF   151.82 353 ePKP   13 33.30  15.3X
KHC   152.02 349 ePKP   13 26.00   7.7X
        1.3s    13.30nm
                 e      13 34.60
GEC2  152.27 349 ePKP   13 26.30   7.5X
        1.0s     1.76nm
                 e      13 31.50
                 e      13 36.70
                 e      13 43.10
                 e      13 47.60
                 e      13 55.70
ELIZ  157.80  14 ePKP   13 15.20 -11.0X
                 e      13 19.50
ECRI  158.08  17 ePKP   13 28.20   1.6
                 e      13 40.00
     S.D. = 1.2  on  20 of  30 obs.
-------------------------------------
   NOV  19, 1993  07h 32m 36.41± 0.64s
   43.483 N ± 3.5km    1.805 W ± 6.2km
   DEPTH =  10.0km  (geophysicist)
 PYRENEES                          (378)
      mbLg 3.3 (MDD). MD 3.3 (BTH). ML
      2.9 (LDG).

ELIZ    0.38 148 iPd    32 45.31   1.1
                 e      32 49.20
ELYF    0.67 118 Pg     32 50.21   0.4
                 Sg     32 57.81
BOH     0.69 123 Pg     32 50.32   0.1
                 Sg     32 58.42
MADF    0.79 115 Pg     32 51.42  -0.5
                 Sg     33 01.58
ISSF    0.87 121 Pg     32 53.26   0.1
                 Sg     33 03.14
ATE     0.90 116 Pg     32 53.20  -0.5
                 Sg     33 04.48
ESCF    0.99 114 Pg     32 56.62   1.5
                 Sg     33 08.13
ECRI    1.02 211 iPc    32 56.25   0.6
                 e      33 08.80
LHE     1.04 123 Pg     32 55.71  -0.3
                 Sg     33 07.11
JAU     1.14 112 Pg     32 58.88   1.0
                 Sg     33 13.15
BTH     1.22 107 eP     33 00.20   1.1
                 iPgc   33 01.50
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19d 07h

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                 eSg   33 18.50
EPF      1.63 105 Pg   33 07.50   2.2X
                 Sg   33 27.80
EGRA     1.69 139 eP   33 10.53   4.5X
                 e    33 35.00
ENSF     1.71 113 Pg   33 08.12   1.6X
SALF     2.31 107 Pg   33 17.70   2.5X
LPO      2.47  60 Pn   33 18.10   0.8
                 Sn   33 45.10
ETOR     2.67 184 eP   33 19.54  -0.8
                 e    33 51.00
RJF      3.00  51 Pn   33 25.20   0.4
                 Sn   33 58.30
EROQ     3.13 147 ePn  33 23.97  -2.7
                 eSn  34 01.70
CAF      3.13  61 Pn   33 26.60  -0.2
                 Sn   34 00.20
MFF      3.33  20 Pn   33 31.10   1.5
                 Sn   34 08.90
ETER     3.62 107 eP   33 33.45  -0.3
                 e    34 13.90
LSF      3.64  39 Pn   33 34.20   0.2
TCF      4.00  44 Pn   33 38.90  -0.2
                 Sn   34 22.30
MAF      4.14  47 Pn   33 40.00  -1.1
                 Sn   34 25.10
BGF      4.51  45 Pn   33 45.70  -0.6
                 Sn   34 33.30
AVF      4.92  46 Pn   33 50.50  -1.7
                 Sn   34 44.80
GRR      4.95   7 Pn   33 53.90   1.4
                 Sn   34 47.70
SMF      5.10  50 Pn   33 54.00  -0.6
                 Sn   34 47.80
SSF      5.18  44 Pn   33 54.60  -1.2
                 Sn   34 50.60
LDF      5.24  12 Pn   33 56.90   0.2
                 Sn   34 53.80
FLN      5.36   9 Pn   33 58.40   0.1
                 Sn   34 56.00
     S.D. = 1.0  on  28 of  32 obs.
-----------------------------------
% NOV  19, 1993  08h 04m 55.08± 1.50s
  16.262 N ± 9.5km   60.877 W ±14.7km
  DEPTH =  33.0km  (normal)
 LEEWARD ISLANDS                  ( 92)
     ML 3.0 (FDF).

DEG      0.18 286 iPd  05 01.69   0.1
SFG      0.31 268 ePd  05 03.02   0.1
MGG      0.54 231 eP   05 06.37   0.1
                 S    05 14.90
PAG      0.81 253 eP   05 10.00   0.0
                 S    05 23.05
BPA      1.22 310 eP   05 15.80  -0.1
                 S    05 30.80
CRM      1.50 181 iPd  05 20.05   0.1
                 S    05 39.15
FDF      1.54 190 eP   05 20.20  -0.4
MVM      1.70 181 iPc  05 23.12   0.3
                 S    05 44.55
     S.D. = 0.2  on   8 of   8 obs.
-----------------------------------
   NOV  19, 1993  08h 53m 41.64± 0.56s
   54.291 N ± 6.9km  164.241 W ± 7.2km
   DEPTH =  33.0km  (normal)
   4.5mb (  9 obs.)
 UNIMAK ISLAND REGION             ( 10)
     ML 4.9 (PMR).

SDN      2.41  63 ePc  54 19.72   0.2
                 eS   54 50.60
KDC      7.44  58 eP   55 28.57  -1.9
ADK      7.87 257 eP   55 37.09   0.5
SVW      8.24  31 ePc  55 42.95   1.1
CRP      9.50  38 ePc  56 01.59   2.3
TTA      9.66  23 eP   56 01.08  -0.3
PMS     10.47  42 eP   56 12.90   0.4
PWA     10.59  40 eP   56 15.20   1.2
PMR     10.84  42 eP   56 18.13   0.7
KLU     12.09  46 eP   56 31.97  -2.5
TOA     12.30  43 eP   56 36.60  -0.6
        0.9s    93.60nm          5.9mb X
IMA     12.90  20 eP   56 47.28   2.0
FBA     13.45  31 eP   56 52.48   0.1
BALM    13.48  51 eP   56 51.53  -1.4
BRW     17.39   8 (P)  57 42.34  -0.6
INK     20.04  34 eP   58 13.00  -1.2
        0.9s     7.00nm          4.0mb
YKA     26.65  52 eP   59 19.30   0.6
        0.6s     3.00nm          4.1mb
MBC     27.62  21 eP   59 34.50   7.0X
NEW     29.63  82 eP   59 45.01  -0.8
LBFM    30.75  97 eP   59 57.25   1.2
KVN     34.45  97 eP   00 28.89   0.6
BONR    35.07  99 ePd  00 35.04   1.4
TNP     35.61  97 ePd  00 39.13   0.9
        0.6s     5.73nm          4.7mb
TPNV    36.95  98 (P)  00 50.21   0.8
        0.5s     6.50nm          4.7mb
SRU     38.84  90 eP   01 05.91   0.6
RSSD    39.48  79 eP   01 10.62   0.0
        0.7s     6.49nm          4.5mb
PV09    40.06  90 eP   01 14.81  -0.7
PV08    40.29  90 (P)  01 19.81   2.3X
GLA     40.53 101 (P)  01 18.14  -1.0
ULM     40.55  67 eP   01 22.50   3.5X
FRB     45.60  38 eP   02 03.50   3.8X
        0.9s     9.00nm          4.7mb
DAG     47.38  10 eP   02 19.00   5.3X
JAQ     48.61  52 eP   02 23.00  -0.6
WMOK    48.70  86 eP   02 23.85  -0.7
        0.8s     9.08nm          4.9mb
                 e    02 29.58
LTX     49.73  95 ePd  02 32.40  -0.2
UYO     51.62  83 iPd  02 41.30  -5.5X
GAC     54.07  60 eP   02 58.00  -6.8X
OXF     54.30  79 eP   03 05.38  -1.3
LMN     59.19  53 eP   03 42.50   1.1
KAF     63.64 354 eP   04 10.60  -0.5
NB2     64.96   2 P    04 25.70   6.0X
        0.9s     4.50nm          4.6mb
GUN     78.42 302 P    05 39.20  -1.7
WRA     90.62 236 P    06 42.00   0.3
        0.6s     0.40nm          3.9mb
     S.D. = 1.1  on  35 of  43 obs.
-----------------------------------
? NOV  19, 1993  09h 03m 11.55± 0.96s
  39.132 N ± 8.2km   27.574 E ± 9.7km
  DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
     ML 2.7 (ISK).

IZM      0.77 198 ePg  03 26.50  -0.1
                 eSg  03 37.00
DST      0.94  60 ePn  03 29.90   0.3
EZN      1.19 306 ePn  03 34.00   0.3
EDC      1.23  10 ePn  03 34.00  -0.5
     S.D. = 0.7  on   4 of   4 obs.
-----------------------------------
   NOV  19, 1993  09h 05m 39.31± 0.13s
   7.317 N ± 3.1km   34.703 W ± 2.2km
   DEPTH =  10.0km  (geophysicist)
   5.7mb (130 obs.)  5.6Msz ( 50 obs.)
 CENTRAL MID-ATLANTIC RIDGE       (406)
     Mw 5.8 (HRV).
     CENTROID, MOMENT TENSOR      (HRV)
     Data Used: GDSN
     L.P.B.: 52S, **C
     Centroid Location:
     Origin Time        09:05:43.3 0.1
     Lat  7.43N 0.01 Lon  34.85W 0.01
     Dep  15.0 FIX Half-duration  1.9
     Moment Tensor;   Scale 10**17 Nm
       Mrr=-0.14 0.07  Mtt= 0.54 0.11
       Mff=-0.40 0.11  Mrt= 0.00 0.00
       Mrf= 0.00 0.00  Mtf=-5.27 0.07
     Principal Axes:
       T  Val=  5.36  Plg= 0  Azm=222
       N       -0.14      90      180
       P       -5.22       0      132
     Best Double Couple:Mo=5.3*10**17
      NP1:Strike=267 Dip=90 Slip=-180
      NP2:        357     90        0

SOB1    17.54 201 iPd  09 46.30   0.6
MBO     18.79  67 iPc  10 01.60   0.6
                 iS   13 08.10
BAO     26.33 210 iPd  11 07.20 -10.3X
                 i    11 20.20
                 i    11 23.20
                 i    11 33.30
                 i    12 11.20
                 e    12 18.20
                 i    12 34.10
BDFB    26.35 210 eP   11 17.30  -0.3
        0.9s   320.67nm          6.0mb
TRN     26.57 279 eP   11 21.00   1.4
TIC     29.47  89 P    11 45.70  -0.2
        0.8s    26.50nm          5.1mb
LIC     29.49  90 P    11 45.50  -0.5
        0.7s    37.00nm          5.3mb
      Z  19s    12.00um          5.5Msz
KIC     29.76  90 P    11 48.12  -0.4
        0.7s    23.00nm          5.1mb
AGVB    30.93 209 iPc  11 57.80  -1.0
                 e    12 10.60
                 e    12 36.40
CACB    31.14 202 iPc  12 00.60  -0.1
                 e    12 07.20
                 e    12 20.60
                 i    12 49.10
OLLA    31.84 277 iP   12 04.10  -2.9
CAR     31.98 278 iPc  12 06.00  -2.3
VAO     32.43 201 eP   12 11.70  -0.3
                 e    13 08.60
                 e    13 29.30
TOV     34.78 277 eP   12 31.20  -1.2
SDV     35.60 275 iPc  12 38.40  -1.2
BMG     38.06 272 iPc  13 00.00  -0.3
CNIL    38.99  38 iP   13 09.10   1.5
PLAT    39.01  39 iP   13 09.60   1.8
MOMI    39.16  38 iP   13 10.90   1.8
BOG     39.23 268 iPc  13 11.00   0.6
                 iS   19 14.00
GIBL    39.35  37 iP   13 11.00   0.4
EVAL    39.38  36 iPc  13 10.90   0.0
EJIF    39.40  38 iPd  13 12.06   1.0
ALJ     39.46  38 iP   13 11.60  -0.1
CCH     39.59 231 Pd   13 14.00   0.8
LIJA    39.72  38 iP   13 14.00   0.2
EPRU    39.88  38 iPc  13 15.39   0.4
EHOR    40.42  37 iPc  13 19.81   0.3
LPAZ    40.55 234 iP   13 21.70   0.2
                 S    19 32.00
LPB     40.66 234 iPc  13 23.00   0.9
        1.2s   500.00nm          6.1mb
      Z  18s    16.49um          5.9Msz
                 S    19 44.00
                 LR   25 10.00
CNCB    40.72 234 iPc  13 23.10   0.3
EGUA    40.82  39 iPc  13 22.17  -0.6
ECOG    41.10  39 iPd  13 25.82   0.7
EPLA    41.47  34 iPc  13 28.40   0.4
EBAN    41.52  38 iPc  13 29.05   0.5
EZAM    41.62  29 iPd  13 29.71   0.5
ENIJ    41.77  40 eP   13 30.75   0.2
EHUE    42.04  39 eP   13 32.78  -0.1
YJA     42.07 225 ePc  13 34.00   0.3
PAB     42.09  36 eP   13 33.30   0.1
                 iS   19 53.00
ERUA    42.57  30 eP   13 37.44   0.4
EVIA    42.61  38 iPc  13 37.85   0.3
HJA     42.68 224 ePc  13 38.80   0.7
EALH    42.80  40 eP   13 38.31  -0.7
PSO     42.91 264 iPc  13 40.50  -0.2
GUD     42.93  35 iPc  13 40.34   0.2
EMON    43.25  29 eP   13 42.99   0.4
ARE     43.39 237 eP   13 42.00  -2.4
SLA     43.76 222 iPc  13 47.00  -0.1
ECHE    44.13  38 eP   13 49.46  -0.4
ETOR    44.25  36 eP   13 51.31   0.5
ECO     44.54 276 eP   13 52.97  -0.5
FSA     45.02 221 ePc  13 56.00  -1.0
ECRI    45.16  34 eP   13 58.65   0.5
EROQ    45.72  38 iPc  14 00.91  -1.5
EGRA    46.13  36 eP   14 08.54   2.9X
BOH     46.32  34 P    14 08.17   0.9
LMN     46.35 331 eP   14 06.50  -0.8
ELYF    46.37  34 P    14 08.59   0.9
ISSF    46.39  34 P    14 09.06   1.2
LHE     46.42  35 P    14 09.24   1.2
MADF    46.45  34 P    14 08.67   0.4
ATE     46.48  34 P    14 09.00   0.5
CYA     46.52 219 ePc  14 07.30  -1.6
ESCF    46.55  34 P    14 10.13   1.1
ESEL    46.66  40 eP   14 08.60  -1.3
OGE     46.66  34 P    14 10.78   0.9
ENSF    46.89  35 P    14 13.07   1.2
EPF     47.04  35 iPc  14 14.10   1.2
        1.7s   355.85nm          6.2mb
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DVD	47.29	275 iPd	14	15.66	0.4
SALF	47.36	36 P	14	16.69	1.2
BRU	47.38	275 iPd	14	16.85	0.3
PAND	47.42	36 P	14	17.12	1.0
LESF	47.58	36 P	14	18.37	1.2
TRGS	47.66	37 P	14	18.70	0.7
HRV	47.77	323 eP	14	17.92	-0.7
	1.5s	343.33nm			6.2mb
	Z 21s	3.69um			5.3Msz
LSPF	47.89	36 P	14	20.27	0.7
VDCF	47.95	37 P	14	20.59	0.5
ETER	48.07	37 eP	14	19.44	-1.6
PERF	48.19	37 P	14	22.13	0.2
MTHF	48.25	37 P	14	23.00	0.5
LFF	48.47	33 iPc	14	24.50	0.5
	1.2s	130.90nm			5.9mb
GMTN	48.47	320 eP	14	24.10	0.0
LPO	48.55	34 iPc	14	25.00	0.3
	1.9s	310.00nm			6.0mb
CBM	48.73	330 eP	14	25.68	-0.3
	1.6s	152.85nm			5.8mb
	Z 19s	6.12um			5.6Msz
VAL	48.83	20 eP	14	26.70	0.1
		S	21	25.00	
LBNH	49.03	325 eP	14	27.82	-0.5
	1.0s	51.28nm			5.5mb
	Z 21s	4.99um			5.5Msz
MFF	49.09	31 iPc	14	28.50	-0.2
	2.0s	305.55nm			6.0mb
RJF	49.13	33 iPc	14	28.80	-0.3
	1.2s	65.15nm			5.5mb
CAF	49.19	34 iPc	14	29.90	0.3
	1.3s	217.35nm			6.0mb
CBN	49.27	315 eP	14	33.00	2.7
HBF	49.36	308 (P)	14	31.68	0.7
CEH	49.50	312 eP	14	31.38	-0.7
	1.4s	241.34nm			6.0mb
	Z 22s	6.34um			5.6Msz
SGS	49.55	308 eP	14	33.43	0.9
LPF	49.61	29 iPc	14	32.80	0.1
	1.6s	207.70nm			5.9mb
LSF	49.73	33 iPc	14	33.70	-0.1
	1.8s	186.45nm			5.8mb
CVL	49.93	314 eP	14	35.09	-0.3
GRR	49.95	29 iPc	14	35.10	-0.2
	2.1s	373.35nm			6.0mb
TCF	50.12	33 iPc	14	36.80	0.0
	2.0s	282.20nm			5.9mb
RTLL	50.19	218 ePd	14	36.30	-1.2
CFA	50.24	218 ePc	14	36.80	-1.1
LHS	50.25	309 eP	14	37.49	-0.4
MAF	50.27	33 iPc	14	38.00	0.1
	2.0s	265.90nm			5.9mb
BINY	50.32	320 eP	14	37.48	-0.8
	0.6s	35.78nm			5.5mb
	Z 20s	3.97um			5.4Msz
FLN	50.39	29 iPc	14	38.20	-0.5
	1.2s	71.10nm			5.5mb
	Z 21s	4.95um			5.5Msz
LDF	50.44	29 iPc	14	38.80	-0.3
	1.1s	55.20nm			5.4mb
COLF	50.46	34 P	14	40.00	0.6
RTCB	50.50	218 ePc	14	39.20	-0.7
JSC	50.52	309 ePd	14	39.15	-0.8
BGF	50.63	33 iPc	14	40.70	0.1
	1.2s	105.90nm			5.7mb
RSNY	50.72	324 eP	14	40.65	-0.6
	1.4s	67.03nm			5.4mb
SSB	50.80	35 P	14	42.86	0.9
LRG	50.85	38 iPc	14	42.30	0.0
	1.3s	107.60nm			5.6mb
	Z 22s	3.92um			5.4Msz
LMR	50.88	38 iPc	14	42.10	-0.4
	1.8s	132.95nm			5.6mb
HYF	50.97	32 eP	14	43.40	0.2
DCN	51.01	21 iPd	14	43.20	-0.1
	1.0s	162.00nm			5.9mb
BLA	51.02	313 ePc	14	43.75	0.0
	1.3s	161.03nm			5.8mb
AVF	51.05	33 iPc	14	43.60	-0.2
	2.0s	229.75nm			5.8mb
FRF	51.08	38 iPc	14	43.90	-0.2
	1.1s	59.60nm			5.4mb
SMF	51.23	33 iPc	14	45.20	0.1
	1.7s	126.45nm			5.6mb
DLF	51.24	21 iPd	14	44.70	-0.3
SSF	51.30	33 iPc	14	45.50	-0.2
	2.0s	247.25nm			5.8mb
PRM	51.31	308 eP	14	45.41	-0.6
NAV	51.33	313 eP	14	44.29	-1.8
CALN	51.33	38 P	14	46.49	0.3
MDZ	51.51	217 iPc	14	46.80	-0.7
LBF	51.51	33 iPc	14	47.10	-0.2
	1.3s	73.30nm			5.5mb
MVIF	51.57	38 P	14	47.35	-0.6
LOR	51.62	33 iPc	14	47.70	-0.4
	1.1s	54.20nm			5.4mb
	Z 22s	7.07um			5.7Msz
REVF	51.62	38 P	14	48.46	0.2
MCWV	51.64	316 eP	14	47.97	-0.4
	0.8s	31.52nm			5.3mb
	Z 20s	3.95um			5.4Msz
AURF	51.67	38 P	14	48.67	0.0
TOUF	51.69	38 P	14	48.24	-0.7
SBF	51.73	38 iPc	14	49.00	0.0
	1.2s	213.05nm			5.9mb
AUTN	51.79	38 P	14	48.89	-0.9
STV	51.86	38 P	14	50.16	0.1
SAOF	51.87	38 P	14	50.00	-0.1
PZZ	51.87	37 P	14	50.53	0.3
RRL	51.91	37 P	14	50.43	-0.2
ENR	51.91	38 P	14	50.53	0.1
BNI	51.91	37 P	14	51.74	1.2
	1.4s	150.80nm			5.7mb
GAC	51.93	324 ePc	14	49.50	-0.9
DOI	51.95	37 P	14	51.52	0.7
	2.0s	541.20nm			6.1mb
IMI	52.03	38 P	14	50.75	-0.6
PGF	52.04	40 iPc	14	51.10	-0.4
	1.0s	77.60nm			5.6mb
YSNY	52.08	319 eP	14	50.76	-1.0
	0.8s	143.85nm			6.0mb
	Z 21s	4.05um			5.4Msz
BHB	52.15	37 P	14	52.17	0.0
LPG	52.21	36 iPc	14	53.40	0.5
	1.1s	40.55nm			5.3mb
LPL	52.20	36 iPc	14	53.20	0.4
	1.1s	38.10nm			5.2mb
ROB	52.22	38 P	14	51.90	-0.9
RSL	52.24	36 P	14	52.87	-0.1
RSP	52.31	37 P	14	53.68	0.2
FIN	52.38	38 P	14	53.64	-0.3
LSD	52.42	36 P	14	54.42	-0.1
CKI	52.54	38 P	14	55.08	0.0
	1.4s	387.50nm			6.1mb
RFA	52.62	215 ePc	14	54.50	-1.4
EMS	52.63	36 Pd	14	56.40	0.4
WLVO	52.72	321 P	14	54.42	-2.0
PCP	52.76	38 P	14	55.88	-0.9
STCO	52.85	320 P	14	56.57	-0.8
DIX	52.91	36 ePd	14	58.80	0.6
ORO	53.00	37 P	14	58.13	-0.5
	1.5s	159.70nm			5.7mb
ORX	53.00	37 P	14	57.62	-1.0
MYNC	53.02	309 eP	14	58.27	-0.6
	0.9s	52.64nm			5.5mb
	Z 19s	3.38um			5.4Msz
MMK	53.22	36 iPd	15	01.00	0.6
TYNO	53.24	320 P	14	59.22	-1.1
LOMF	53.29	34 P	14	59.87	-0.9
HAU	53.41	33 iPc	15	01.10	-0.4
	1.5s	150.95nm			5.7mb
	Z 23s	5.28um			5.5MszX
BOB	53.43	38 P	15	02.57	0.8
	1.2s	119.30nm			5.7mb
BSF	53.55	34 iPc	15	02.00	-0.6
	1.9s	281.85nm			5.9mb
PII	53.58	40 P	15	04.34	1.6
	1.1s	68.60nm			5.6mb
ACTO	53.61	320 P	15	02.16	-0.9
MOF	53.75	34 P	15	03.25	-0.8
DOU	53.76	30 P	15	03.70	-0.2
		S	22	42.00	
TMA	53.78	36 ePd	15	03.80	-0.6
BDI	53.79	39 P	15	04.21	-0.2
	0.9s	14.40nm			5.0mb
SNF	53.87	30 Pc	15	03.70	-1.0
ECH	53.97	33 P	15	05.07	-0.5
MNO	53.99	48 P	15	07.65	1.5
	0.1s	13.20nm			5.9mb
LDN	54.07	319 P	15	05.00	-1.3
UCC	54.09	30 P-	15	07.00	0.7
		S	22	44.00	
MDI	54.11	37 P	15	05.42	-1.1
	0.7s	18.20nm			5.2mb
CDF	54.15	33 iPc	15	06.20	-0.8
	1.8s	168.30nm			5.8mb
LIBD	54.18	34 P	15	06.38	-0.7
WLS	54.19	33 P	15	06.38	-0.9
DLA	54.24	319 P	15	05.50	-2.1
ZLA	54.25	35 ePd	15	08.00	0.3
FEL	54.25	34 P	15	06.64	-1.2
LLS	54.26	36 ePd	15	07.80	-0.2
WLF	54.29	32 Pc	15	06.00	-1.8
PGD	54.42	40 P	15	10.03	0.9
	1.6s	145.40nm			5.8mb
CRE	54.45	40 P	15	10.14	0.8
	1.4s	100.00nm			5.7mb
SLE	54.46	35 eP	15	08.40	-0.8
SFI	54.52	40 P	15	11.02	1.4
	2.2s	366.60nm			6.0mb
ATN	54.64	48 P	15	10.77	0.1
	0.1s	15.50nm			6.0mb
ASS	54.66	41 P	15	10.46	-0.3
	2.0s	365.20nm			6.1mb
LANF	54.76	33 P	15	10.54	-0.9
OSS	54.84	36 ePd	15	11.60	-0.6
AQU	54.84	42 P	15	12.23	0.1
	0.1s	23.10nm			6.2mb
SDI	54.84	43 P	15	12.22	0.1
	0.8s	46.80nm			5.6mb
ENN	54.84	30 ePc	15	11.50	-0.4
	2.0s	333.30nm			6.0mb
		e	16	15.00	
GMB	54.94	48 P	15	13.22	0.2
	0.7s	50.30nm			5.7mb
SOI	55.04	48 P	15	14.03	0.4
	0.9s	50.20nm			5.5mb
DUI	55.26	44 P	15	15.68	0.4
	1.6s	285.40nm			6.1mb
DBN	55.31	29 eP	15	16.00	0.7
	Z 20s	4.00um			5.5Msz
		eS	23	00.00	
CTI	55.41	38 P	15	15.84	-0.5
	0.7s	41.10nm			5.6mb
SGO	55.41	45 P	15	16.37	0.1
	1.1s	96.40nm			5.7mb
MGR	55.43	46 P	15	16.04	-0.3
	1.4s	230.70nm			6.0mb
OGA	55.45	37 iPc	15	15.50	-1.2
GRI	55.57	48 P	15	17.07	-0.4
	1.0s	83.70nm			5.7mb
BNS	55.59	31 iPc	15	17.00	-0.4
	Z 25s	8.00um			5.7MszX
SQTA	55.74	36 iPc	15	17.20	-1.4
		i	15	30.60	
MOTA	55.74	36 iPc	15	17.00	-1.7
	1.2s	69.30nm			5.6mb
		i	15	34.20	
TNS	55.82	32 ePc	15	18.20	-0.9
WTTA	56.01	36 iPc	15	19.10	-1.6
	0.8s	28.40nm			5.4mb
		i	15	28.40	
WATA	56.01	36 iPc	15	19.20	-1.4
		i	15	28.60	
WTS	56.03	30 ePc	15	20.00	-0.5
		e	16	26.00	
FUR	56.26	35 eP	15	21.80	-0.4
	Z 22s	7.00um			5.7Msz
FVI	56.36	38 P	15	21.78	-1.2
	1.5s	146.70nm			5.8mb
WIT	56.47	29 eP	15	24.00	0.4
RIY	56.78	40 iPc	15	25.10	-0.9
VOY	56.78	39 eP	15	25.00	-1.2
		e	15	37.20	
		e	15	42.70	
JAQ	56.92	332 eP	15	25.00	-1.9
KBA	56.94	37 iPc	15	26.00	-1.3
	2.2s	243.00nm			5.8mb
		i	15	39.50	
		i	15	41.40	
BHG	56.97	36 iPc	15	25.90	-1.4
OXF	57.00	307 eP	15	26.12	-1.6
GRF	57.02	34 iPc	15	27.00	-0.7
	1.6s	213.00nm			5.9mb
	Z 19s	3.00um			5.4Msz
LJU	57.19	39 ePc	15	28.50	-0.4
	2.0s	180.00nm			5.8mb
		ePcP	16	12.00	
		ePP	17	41.00	
		e	19	20.00	

19d 09h

		eS	23	27.00	
		e	25	44.00	
		eSS	27	16.00	
HVAR	57.22	43 iP	15	29.30	0.1
VBY	57.40	40 eP	15	29.50	-0.9
ELC	57.62	310 eP	15	30.88	-1.2
WET	57.67	35 iPc	15	31.00	-1.3
HOF	57.71	33 iPc	15	31.50	-1.0
MOX	57.74	33 eP	15	32.20	-0.5
	2.0s	154.00nm			5.7mb
	Z 18s	2.30um			5.3Msz
		eS	23	30.00	
KMR	57.87	37 iP+	15	32.10	-1.5
GEC2	57.99	36 e(P)	15	37.80	3.2X
	0.7s	2.40nm			4.3mb X
GEC2	57.99	36 e(P)	15	44.70	10.1X
	0.7s	3.70nm			
GEC2	57.99	36 e(P)	15	47.30	12.7X
	0.8s	8.20nm			
GEC2	57.99	36 e(P)	15	32.80	-1.8
	0.8s	6.30nm			4.7mb
ZAG	58.00	40 iPc	15	34.60	0.1
PTJ	58.02	40 eP	15	34.80	0.0
KHC	58.06	35 iPc	15	33.90	-1.1
	2.0s	110.00nm			5.5mb
	Z 24s	5.70um			5.6MszX
		e	17	32.00	
		eS	23	42.00	
HCY	58.34	44 iPc	15	36.59	-0.4
BDV	58.51	44 iPc	15	38.04	-0.2
BRY	58.54	44 iPc	15	38.04	-0.5
ULC	58.69	45 iPc	15	39.71	0.2
FVM	58.74	310 P	15	50.00	10.1X
	Z 19s	8.89um			5.9Msz
SLM	58.78	311 P	15	50.00	9.8X
	Z 20s	4.44um			5.6Msz
CLL	58.84	33 iP	15	39.30	-1.0
	2.3s	120.00nm			5.6mb
	Z 18s	3.00um			5.5Msz
		eS	23	54.00	
TTG	58.86	44 iPc	15	40.80	0.2
PRU	59.03	35 iPc	15	40.40	-1.3
	1.3s	60.90nm			5.6mb
		eS	23	57.00	
BRG	59.13	34 iPc	15	41.60	-0.8
	1.6s	100.00nm			5.7mb
		iS	23	53.00	
VKA	59.27	37 iPc	15	42.50	-0.9
	4.5s	1511.00nm			6.4mb X
		i	15	53.30	
		i	16	05.40	
PLE	59.27	43 iPc	15	43.25	-0.4
PVY	59.41	44 iPc	15	45.10	0.4
AKU	59.42	8 iPc	15	48.40	4.3X
	1.4s	102.33nm			5.8mb
IVA	59.46	44 iPc	15	44.91	0.0
OHR	59.51	46 iP	15	45.30	0.0
	0.9s	70.00nm			5.8mb
ZST	59.71	38 iPc	15	45.00	-1.4
	1.8s	222.20nm			6.0mb
MUD	59.86	26 iPc	15	46.00	-1.3
	0.8s	47.00nm			5.7mb
SRO	60.29	38 iP	15	51.00	0.6
MIAR	60.35	306 eP	15	46.57	-4.5X
	1.6s	129.56nm			5.8mb
	Z 21s	3.23um			5.4Msz
KSP	60.42	35 iPc	15	50.00	-1.3
	1.4s	49.00nm			5.4mb
COP	60.89	28 eP	15	54.00	-0.3
UYO	60.99	305 iPc	15	53.80	-1.6
PSZ	61.30	39 iPc	15	57.10	-0.3
PSZ	61.30	39 eP	15	57.60	0.2
FRB	61.33	344 eP	15	56.00	-1.2
	1.0s	22.00nm			5.3mb
KKB	61.37	46 iPd	15	59.00	1.1
VTS	61.68	45 iPd	16	00.00	-0.2
MMB	61.76	47 iP	16	01.00	0.4
SPC	62.01	37 iP	16	02.40	0.0
OJC	62.16	36 eP	16	02.70	-0.4
	1.0s	99.00nm			6.0mb
		i	16	05.40	
		i	16	09.60	
PGB	62.34	46 iP	16	05.00	0.5
TUL	62.41	307 iPd	16	04.00	-1.0
RZN	62.50	47 iPd	16	07.00	1.3
PLD	62.60	46 iP	16	07.00	0.9
DRA	63.03	43 ePd	16	09.00	0.1
PPM	63.03	288 iP	16	09.50	-0.5
UZH	63.06	39 eP	16	10.00	1.0
	1.0s	31.00nm			5.5mb
	Z 17s	7.00um			5.9MszX
	E 17s	5.00um			
		e	20	05.00	
DIM	63.18	46 iP	16	11.00	1.1
NB2	63.49	23 P	16	11.00	-0.7
	1.1s	44.30nm			5.6mb
OCO	63.68	306 iPc	16	12.50	-0.9
CMP	63.73	43 ePc	16	12.00	-1.6
HFS	63.95	25 eP	16	12.80	-1.9
	0.9s	37.20nm			5.6mb
	Z 18s	4.31um			5.7Msz
		LR	35	20.00	
POF	63.95	128 iPc	16	14.00	-1.2
	1.0s	60.00nm			5.7mb
CRX	64.03	288 (P)	16	16.00	-0.3
JMB	64.04	46 iP	16	16.00	0.4
MLR	64.41	43 iPc	16	18.00	-0.1
MEO	64.45	305 iPd	16	16.70	-1.8
WMOK	64.60	305 eP	16	17.20	-2.3
	1.3s	70.53nm			5.7mb
	Z 21s	8.30um			5.9Msz
CVN	64.72	130 eP	16	20.90	0.6
	1.1s	80.00nm			5.8mb
DST	64.89	50 eP	16	19.40	-1.9
BLE	65.02	133 iPc	16	31.00	8.9X
	1.0s	130.00nm			6.1mb
ACO	65.21	307 iPc	16	22.70	-0.7
CER	65.24	132 eP	16	11.00	-12.6X
	1.4s	180.00nm			
KHL	65.33	51 eP	16	34.00	9.8X
UPP	65.47	26 iP	16	23.00	-1.5
ALT	65.92	51 eP	16	26.70	-1.2
SUR	65.93	130 iPc	16	43.10	14.9X
	0.8s	92.00nm			
	Z 20s	10.60um			6.0Msz
ULM	66.17	322 eP	16	29.00	-0.2
BUL	67.96	115 iPd	16	40.00	-1.3
	1.2s	34.38nm			5.4mb
MNK	67.97	34 eP	16	42.00	1.5
		eS	25	42.00	
BOSA	68.02	125 eP	16	39.55	-1.7
	1.1s	43.82nm			5.6mb
LTX	68.13	299 eP	16	40.43	-1.7
KSR	68.27	121 eP	16	41.50	-1.7
	0.7s	55.00nm			5.9mb
FRS	68.37	126 iPc	16	42.00	-1.5
	1.0s	90.00nm			5.9mb
BLF	68.83	125 eP	16	46.00	-0.6
	0.8s	53.00nm			5.8mb
NUR	68.89	27 eP	16	34.40	-11.7X
SLR	69.40	121 iPd	16	57.00	6.9X
	1.3s	290.00nm			6.3mb
	Z 20s	16.60um			6.3Msz
		i	18	02.50	
BHL	69.66	57 P	16	52.00	0.5
		S	27	02.00	
SEK	69.73	124 iPc	17	01.00	8.9X
	1.0s	90.00nm			5.9mb
RSSD	70.13	314 eP	16	52.78	-1.6
	1.8s	65.68nm			5.5mb
KAF	70.26	26 iP	16	53.70	-0.8
	0.8s	26.50nm			5.4mb
GLD	70.39	310 eP	16	56.90	0.9
	1.9s	98.70nm			5.6mb
	Z 20s	3.41um			5.6Msz
GOL	70.50	309 eP	16	56.82	0.1
	2.1s	200.95nm			5.9mb
	Z 20s	3.74um			5.6Msz
		SP	26	20.13	
BFT	70.89	120 eP	17	00.50	1.2
ALQ	70.90	304 eP	16	59.28	0.1
	1.6s	86.33nm			5.6mb
	Z 21s	6.74um			5.9Msz
GAZ	71.21	53 eP	17	01.40	0.7
PUL	71.27	29 eP	17	03.00	2.4
		e	17	24.00	
		e	26	21.00	
NAI	71.83	94 iPd	17	08.00	2.8
	Z 16s	3.70um			5.7MszX
		ScS	26	36.00	
		LQ	34	10.00	
SDF	72.43	21 iP	17	06.70	-0.8
PV08	72.93	308 eP	17	12.08	0.7
PV10	73.22	308 eP	17	13.13	0.1
PV09	73.30	308 eP	17	14.30	0.8
OBN	73.36	35 iPc	17	12.50	-0.6
	2.0s	240.00nm			5.9mb
	Z 20s	2.50um			5.5Msz
	N 18s	1.20um			
	E 20s	2.70um			
		e	17	25.00	
		eS	26	44.00	
		iPS	27	14.00	
SOC	73.71	47 iPc+	17	15.00	-0.4
	Z 20s	1.40um			5.2Msz
	E 20s	1.00um			
		eS	26	46.00	
MOS	74.06	34 eP	17	18.00	0.9
	2.4s	440.00nm			6.1mb
	Z 17s	4.40um			5.8MszX
SRU	74.42	308 eP	17	19.75	-0.1
EMUT	74.69	309 eP	17	21.87	0.4
DAU	75.06	310 ePc	17	24.36	0.7
UQSK	75.23	65 iPc	17	24.53	-0.1
RES	75.35	346 eP	17	24.00	-0.3
	1.0s	20.00nm			5.1mb
MSU	75.68	308 eP	17	27.86	0.7
AFIF	76.02	67 eP	17	29.00	-0.1
DUG	76.24	309 eP	17	30.53	0.3
	1.5s	121.55nm			5.8mb
	Z 20s	3.60um			5.7Msz
LRM	76.25	315 ePc	17	30.60	0.3
HVU	76.27	311 eP	17	31.15	0.8
ARUT	76.66	307 eP	17	33.28	0.6
ERE	77.08	51 iP	17	34.00	-0.8
		eS	27	29.00	
MTA	77.34	49 iPc+	17	35.00	-1.0
	N 17s	0.50um			
	E 17s	1.50um			
		e	27	30.00	
KMSA	77.40	71 eP	17	38.00	1.2
GLA	77.79	302 eP	17	39.52	0.7
GRO	78.03	47 eP	17	40.00	0.2
	1.0s	110.00nm			5.9mb
	Z 20s	1.50um			5.3Msz
	N 18s	4.00um			
TAB	78.48	53 eP	17	42.00	-0.6
YKA	78.88	332 eP	17	42.70	-1.4
	0.9s	30.60nm			5.3mb
TPNV	78.90	306 eP	17	45.94	0.9
	1.0s	39.12nm			5.4mb
GSC	79.38	304 ePd	17	48.26	0.7
PLM	79.48	303 iPd	17	49.01	0.7
NEW	79.54	318 eP	17	47.34	-0.7
TNP	79.65	307 eP	17	49.61	0.5
	1.2s	91.42nm			5.6mb
PEC	79.72	303 eP	17	49.75	0.4
	1.8s	127.57nm			5.6mb
SSK	80.15	303 eP	17	52.49	0.7
DPW	80.26	317 eP	17	51.63	-0.3
KVN	80.32	308 eP	17	52.84	0.2
BONR	80.51	307 eP	17	54.16	0.4
SNA	80.51	169 iPd	17	53.70	1.0
	1.0s	50.00nm			5.5mb
MRCM	80.68	307 (P)	17	57.03	2.4
ISA	80.73	305 eP	17	55.83	1.1
	1.2s	98.36nm			5.7mb
	Z 21s	3.49um			5.7Msz
MTUM	80.74	307 (P)	17	55.69	0.8
MEMM	81.02	307 eP	17	58.26	2.2
MMPM	81.10	307 eP	17	58.72	1.8
ABL	81.38	304 eP	17	59.02	0.7
MBC	81.67	346 eP	18	01.00	2.3
	1.0s	25.00nm			5.2mb
NLW	81.69	317 P	17	59.62	0.0
MXC	81.71	316 P	18	00.56	1.0
EBG	81.89	316 P	18	01.45	1.0
TBM	81.90	317 P	18	01.07	0.5
VIPM	82.01	314 P	18	03.44	2.1
BCH	82.07	304 ePd	18	02.72	1.0
NAC	82.07	316 P	18	02.25	0.8
VGB	82.08	315 eP	18	03.11	1.6
CMB	82.15	307 eP	18	02.62	0.6
	1.3s	46.84nm			5.4mb
CMB	82.15	307 ePc	17	56.31	-5.7X
	1.4s	50.00nm			5.4mb
	Z 17s	1.20um			5.3MszX
		eSKS	28	20.31	
		eSP	29	05.31	
		iPS	29	14.31	
		eSS	33	44.31	

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                 eLQ   39 53.31
                 eLR   44 48.31
CROR   82.26 314 P     18 04.29   1.8
WPW    82.57 316 P     18 04.60   0.5
ASR    82.63 316 P     18 06.95   2.5
VBEM   82.68 314 P     18 06.35   1.6
RMW    82.71 317 (P)   18 07.93   3.1X
LON    82.75 316 (P)   18 06.20   1.2
ORV    82.93 309 ePd   18 06.19   0.2
     1.3s    50.00nm          5.5mb
   Z  20s     2.40um          5.6Msz
                 eSKS  28 31.39
                 eS    28 36.39
                 iPS   29 23.39
                 eSP   29 26.39
                 eSS   34 23.39
                 eLQ   40 18.39
                 eLR   44 18.39
MIN    82.96 310 ePd   18 06.25  -0.1
     1.3s    50.00nm          5.5mb
   Z  18s     2.10um          5.6Msz
                 eLR   44 47.71
SAO    83.07 306 P     18 20.00  13.2X
   Z  21s     2.36um          5.5Msz
SAO    83.07 306 eP    18 07.00   0.2
   Z  18s     2.10um          5.6Msz
                 eSKS  28 35.00
                 iS    28 38.00
                 eSP   29 07.00
                 iPS   29 24.00
                 eSS   34 07.00
                 eLQ   40 14.00
                 eLR   45 13.00
SHW    83.07 316 eP    18 10.62   3.8X
ARN    83.10 307 eP    18 08.19   1.2
LBFM   83.11 311 ePd   18 07.38   0.2
MHC    83.19 307 ePd   18 08.74   1.2
     1.7s   140.00nm          5.9mb
   Z  18s     2.00um          5.5Msz
                 eSKS  28 35.19
                 iS    28 39.19
                 eSPc  29 12.19
                 iPS   29 27.19
                 eSS   33 44.19
                 eLQ   40 12.19
                 eLR   45 26.19
COE    83.22 307 eP    18 09.59   2.0
SSOR   83.31 314 P     18 08.67   0.7
MCW    83.33 318 (P)   18 09.10   1.2
GMW    83.37 317 eP    18 09.01   0.9
STAN   83.61 307 ePc   18 17.85   8.4X
   Z  18s     1.60um          5.4Msz
                 eSP   29 35.85
                 eLR   45 37.85
WDC    83.66 310 P     18 20.00  10.3X
   Z  18s     2.14um          5.6Msz
YBH    83.70 311 ePd   18 09.86  -0.2
     2.1s    90.00nm          5.6mb
   Z  19s     1.90um          5.5Msz
                 iSKS  28 37.52
                 eS    28 54.52
                 eSP   29 23.52
                 iPS   29 42.52
                 iSS   34 37.52
                 eLQ   42 11.52
                 iLR   45 33.52
BMW    83.74 316 eP    18 10.31   0.2
LGPM   83.85 310 eP    18 10.96   0.1
STW    83.92 318 P     18 11.93   1.1
KMOR   83.98 315 P     18 13.25   1.9
FHC    84.73 310 (P)   18 15.95   0.8
ARC    84.80 310 ePc   18 25.42  10.0X
   Z  17s     2.30um          5.6MszX
                 iSKS  28 44.42
                 eS    28 56.42
                 eSPc  29 27.42
                 ePS   29 47.42
                 eSS   34 13.42
                 eLQ   41 28.42
                 eLR   45 39.42
KMPM   84.87 310 eP    18 17.72   1.8
ARU    85.79  34 eP    18 22.00   1.9
   Z  18s     2.50um          5.7Msz
   N  18s     1.00um
   E  18s     2.50um
INK    86.51 338 eP    18 24.00   0.6
     1.0s    14.00nm          5.1mb
SVE    86.85  33 iPc   18 25.00  -0.3
     2.3s   140.00nm          5.8mb
   Z  16s     2.50um          5.7MszX
   N  16s     1.00um
   E  16s     1.50um
                 eS    29 00.00
ASH    87.95  52 eP    18 40.00   9.0X
FBA    92.95 337 eP    18 53.78   0.0
     1.0s     9.58nm          5.2mb
KLU    93.51 333 (P)   18 56.61   0.1
IMA    94.62 339 eP    19 01.74   0.1
     0.8s     6.93nm          5.1mb
PMR    94.88 334 P     19 10.00   7.3X
   Z  19s     2.39um          5.7Msz
FRU    98.96  45 eP    19 24.00   2.4
   Z  20s     1.00um          5.3Msz
SDN   103.16 332 Pdiff 19 50.00  10.0X
   Z  18s     3.02um          5.9Msz
GTA   117.31  38 ePKP  24 28.50   1.3
HON   117.52 299 PKP   24 40.00  12.1X
   Z  19s     0.95um          5.4Msz
LZH   121.87  39 ePKP  24 37.50   1.4
   Z  28s     2.06um          5.6MszX
   E  16s     0.67um
                 ePKS  28 08.00
                 eSKS  31 44.00
HHC   122.91  30 PKP   24 39.00   1.2
   Z  24s     4.59um          6.1MszX
   N  18s     1.43um
   E  18s     1.22um
                 PP    26 19.00
CD2   124.99  44 ePKP  24 44.00   1.9
TIY   125.71  32 ePKP  24 45.00   1.6
   Z  19s     4.18um          6.1Msz
   N  17s     1.71um
   E  16s     1.01um
BJI   125.75  27 ePKP  24 44.00   0.8
   Z  22s     3.11um          5.9Msz
   N  20s     2.22um
                 ePP   26 36.00
CN2   126.04  18 ePKP  24 44.10   0.4
   Z  24s     1.34um          5.5MszX
   N  20s     0.84um
   E  20s     0.68um
                 ePP   26 39.00
                 eSS   43 38.00
XAN   126.35  38 PKP   24 45.40   0.7
   Z  24s     2.30um          5.8MszX
   E  18s     2.02um
                 PP    26 38.00
SNY   127.21  20 ePKP  24 47.20   1.3
CHTO  127.44  60 ePKP  24 48.00   0.9
KMI   127.51  51 ePKP  24 55.00   7.6X
   Z  45s     4.50um          5.8MszX
                 pPKP  25 06.00
                 sPKP  25 11.00
                 SKKS  34 40.00
TIA   129.26  30 PKPd  24 51.60   1.5
   Z  21s     2.67um          5.9Msz
GYA   129.69  47 PKP   24 52.60   1.3
SNG   133.17  73 ePKP  25 04.90   6.8X
MAT   135.87   8 ePKP  25 05.00   2.4
   Z  20s     1.06um          5.6Msz
MUN   143.45 136 ePKP  25 15.50  -1.0
BAL   144.59 135 iPKPc 25 17.00  -1.4
     1.5s   583.00nm
KLB   144.74 137 iPKPc 25 17.50  -1.2
     1.0s    50.00nm
MRWA  144.85 132 iPKPc 25 08.20 -10.7X
     0.7s    51.00nm
BAG   146.03  46 ePKPd 25 22.00   0.6
     2.0s   235.29nm
COOL  147.43 139 ePKP  25 22.00  -1.2
     0.7s    16.00nm
NANU  147.59 121 ePKP  25 27.20   3.6X
KKM   148.09  66 ePKPd 25 34.50   9.7X
ADE   151.82 168 ePKP  25 38.90   9.1X
CNB   151.89 187 ePKP  25 36.80   6.9X
     1.0s    32.00nm
CAN   151.92 186 ePKP  25 36.80   6.9X
                 i     25 39.20
                 i     25 51.00
BWA   152.87 186 ePKP  25 39.30   8.0X
                 i     25 52.80
DZM   154.88 232 iPKPd 25 42.50   8.1X
STK   155.32 172 ePKP  25 41.30   6.7X
     1.3s     3.20nm
ASPA  160.40 147 ePKP  25 41.10   0.1
     1.4s     9.00nm
WRA   163.55 141 PKP   25 46.30   2.1
     1.2s     1.80nm
CTA   167.27 184 iPKP  25 49.50   2.2
     S.D. = 1.0  on 407 of 445 obs.
-----------------------------------
*  NOV  19, 1993  09h 30m 14.35± 0.84s
   31.869 S ± 5.0km   72.551 W ± 9.3km
   DEPTH =  10.0km  (geophysicist)
 OFF COAST OF CENTRAL CHILE        (134)
     MD 4.6 (SAN).

IHA     1.39 147 iPd   30 40.40   0.7
                 eS    30 54.50
ROCH    1.70 131 iP+   30 43.80  -0.7
                 iS    31 09.62
LCCH    1.80 153 iPd   30 46.35   0.7
                 iS    31 16.06
JACH    1.85 117 iPd   30 45.57  -0.9
                 iS    31 09.40
PEL     2.03 129 iPd   30 48.46  -0.5
                 iS    31 17.28
TACH    2.24 143 iPd   30 52.87   0.8
                 iS    31 25.75
SAN     2.24 135 eP    30 51.91  -0.2
                 iS    31 24.55
LNV     2.29 156 (P)   30 52.83   0.1
                 (S)   31 27.61
FCH     2.40 128 iPd   30 53.77  -0.8
                 iS    31 26.92
PCH     2.45 136 iP+   30 55.04   0.0
CACH    2.78 144 iPd   31 00.90   1.1
RTCB    3.22  84 e(P)  31 05.70  -0.4
                 S     31 38.00
MDZ     3.29 109 eP    31 08.00   1.0
                 i     31 11.80
                 i     31 41.20
                 iS    31 51.00
ZON     3.32  85 eP    31 07.70   0.3
                 eS    31 44.70
RTLL    3.52  82 e(P)  31 10.00  -0.3
                 S     31 57.00
CFA     3.68  87 iPd   31 11.80  -0.8
                 S     32 45.00
RFA     4.48 131 e(P)  31 23.00  -0.9
                 S     32 30.50
RTPR    5.41  75 e(P)  31 38.00   1.0
CYA     6.77  61 ePc   31 55.00  -1.3
                 S     32 18.00
FSA     8.12  46 ePc   32 17.00   1.9
SLA     9.45  43 e(P)  32 40.00   6.4X
ARE    15.37   4 eP    34 01.00   7.8X
CCH    15.55  23 P     34 00.80   5.2X
CNCB   15.55  17 P     33 56.00   0.1
LPB    15.80  16 P     34 00.00   1.1
PPD    21.28  68 eP    35 03.30   0.0
VAO    24.32  75 eP    35 29.40  -3.8X
LTX    67.67 331 (P)   41 11.56  -2.3
KIC    74.84  72 P     41 55.40  -1.7
BONR   81.52 325 (P)   42 41.27   7.6X
GBA   147.05 117 PKPd  49 59.40   2.0
     1.0s     3.00nm
HYB   150.17 112 ePKP  50 07.00   4.7X
     S.D. = 1.1  on  26 of  32 obs.
-----------------------------------
?  NOV  19, 1993  09h 50m 57.84± 0.99s
   39.057 N ± 8.3km   27.681 E ±10.0km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
     ML 2.7 (ISK).

IZM     0.74 207 ePg   51 12.30   0.0
                 eSg   51 24.50
DST     0.92  53 ePn   51 15.40   0.0
EDC     1.30   6 ePn   51 21.80   0.0
EZN     1.30 307 iPn   51 21.90   0.0
     S.D. = 0.0  on   4 of   4 obs.
-----------------------------------
*  NOV  19, 1993  09h 53m 58.18± 1.42s
   31.734 S ± 7.1km   72.490 W ±15.1km
   DEPTH =  10.0km  (geophysicist)
   4.9mb (  1 obs.)
 OFF COAST OF CENTRAL CHILE        (134)
     MD 4.6 (SAN).

IHA     1.47 151 iPd   54 24.80   0.0
```

19d 09h

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                iS    54 38.70
ROCH    1.76 135 iP+  54 28.50   -0.6
                iS    54 52.25
JACH    1.87 121 iPd  54 29.74   -0.8
                (S)   54 52.46
LCCH    1.90 156 iPd  54 30.98    0.0
                iS    54 57.98
PEL     2.07 133 iPd  54 33.14   -0.4
                iS    55 01.60
SAN     2.31 138 iP   54 36.23   -0.6
                iS    55 08.57
TACH    2.32 146 iPd  54 37.39    0.4
                iS    55 08.50
LNV     2.39 158 (P)  54 37.45   -0.6
                (S)   55 14.16
FCH     2.44 131 iPd  54 38.43   -0.6
                iS    55 11.65
PCH     2.51 139 iP+  54 39.64   -0.2
                iS    55 13.89
CACH    2.86 147 iPd  54 45.60    0.8
                iS    55 23.93
RTCB    3.16  86 ePc  54 50.60    1.6
ZON     3.26  88 iPd  54 52.20    1.8
                eS    55 27.20
MDZ     3.29 111 iPc  54 52.80    2.0
                i     54 58.20
                i(S)  55 38.00
RTLL    3.46  84 ePc  54 53.60    0.4
                S     55 32.00
CFA     3.63  89 iPd  54 56.00    0.4
                S     55 45.00
RFA     4.53 133 ePc  55 08.40   -0.1
                S     56 17.50
RTPR    5.33  76 eP   55 21.00    1.4
CYA     6.66  62 ePd  55 36.40   -2.2
                S     56 57.00
SLA     9.31  43 e(P) 56 22.30    6.7X
CCH    15.41  23 P    57 44.70    7.1X
CNCB   15.41  16 P    57 40.00    2.1
LPB    15.65  16 eP   57 47.00    6.1X
PPD    21.19  68 eP   58 43.60   -2.5
BDFB   27.45  60 eP   59 44.27   -2.2
        0.8s    18.36nm        4.9mb
                e     59 53.22
BAO    27.47  60 eP   59 44.30   -2.4
KIC    74.75  72 P    05 39.60   -0.8
BONR   81.44 325 (P)  06 23.65    6.6X
WRA   122.54 210 PKP  13 01.00    5.1X
        0.7s     0.30nm
GBA   147.06 116 PKPd 13 44.00    2.7
        0.5s     3.00nm
     S.D. = 1.5  on  25 of  30 obs.
-----------------------------------
? NOV  19, 1993  09h 59m 50.41± 0.94s
   39.099 N ± 7.9km   27.567 E ± 9.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
     ML 2.7 (ISK).

IZM     0.74 199 ePg  00 04.90    0.0
                eSg   00 16.90
DST     0.97  58 ePn  00 08.90    0.1
EZN     1.20 307 iPn  00 12.90    0.1
EDC     1.27  10 ePn  00 13.80   -0.1
     S.D. = 0.2  on   4 of   4 obs.
-----------------------------------
? NOV  19, 1993  10h 03m 41.20± 0.97s
   39.107 N ± 8.2km   27.569 E ± 9.9km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
     ML 2.7 (ISK).

IZM     0.75 199 ePg  03 55.70   -0.2
                eSg   04 07.70
DST     0.96  58 ePn  03 59.90    0.4
EZN     1.20 307 ePn  04 03.90    0.3
EDC     1.26  10 ePn  04 04.00   -0.6
     S.D. = 0.8  on   4 of   4 obs.
-----------------------------------
   NOV  19, 1993  10h 19m 13.45± 0.45s
   54.339 N ± 5.7km  164.220 W ± 6.1km
   DEPTH =  33.0km  (normal)
   4.8mb ( 21 obs.)
 UNIMAK ISLAND REGION            ( 10)
     ML 4.7 (PMR).

SDN     2.38  63 ePc  19 51.76    0.9
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                eS    20 22.04
KDC     7.40  58 eP   21 00.14   -1.7
ADK     7.89 257 eP   21 09.22    0.5
SVW     8.19  31 eP   21 13.58    0.6
CP2     9.43  38 eP   21 32.99    2.9
CRP     9.46  38 eP   21 33.15    2.6
TTA     9.61  23 eP   21 31.67   -0.9
SLKM    9.74  45 eP   21 35.07    0.7
ANM    10.28 357 eP   21 43.90    2.3
PMS    10.43  43 eP   21 44.10    0.4
PMR    10.80  42 eP   21 47.81   -0.8
KLU    12.05  46 eP   22 04.05   -1.7
TOA    12.25  43 eP   22 07.70   -0.7
        1.1s   259.20nm        6.3mb X
IMA    12.85  20 eP   22 17.17    0.7
FBA    13.41  31 eP   22 23.90    0.3
BALM   13.44  51 eP   22 23.63   -0.6
SIT    16.46  69 eP   23 02.70   -0.4
        0.5s    7.25nm        4.1mb
INK    20.00  34 eP   23 43.50   -2.0
        0.5s    6.00nm        4.2mb
YKA    26.61  52 eP   24 51.00    0.9
        0.4s    7.20nm        4.6mb
GMW    26.66  88 eP   24 50.79    0.0
MBC    27.58  21 eP   25 00.50    1.7
NEW    29.61  82 ePd  25 17.75    0.3
LBFM   30.75  97 eP   25 29.15    1.3
ORV    32.14 100 eP   25 39.77    0.0
NTYM   32.26 102 eP   25 41.75    1.0
COE    33.61 103 eP   25 53.56    1.0
KVN    34.44  97 eP   26 00.78    0.8
MMPM   34.88 100 eP   26 05.38    1.4
MEMM   34.89 100 eP   26 05.55    2.0
BONR   35.06  99 eP   26 06.28    0.8
TNP    35.61  98 ePc  26 10.59    0.6
        0.5s    6.92nm        4.8mb
HVU    35.80  89 (P)  26 11.76    0.2
TPNV   36.94  98 ePc  26 22.20    1.1
        0.5s   12.08nm        5.0mb
GSC    37.77 101 eP   26 28.87    0.8
ARUT   38.01  95 (P)  26 30.85    0.8
PEC    38.58 102 eP   26 34.90    0.1
        0.6s    4.44nm        4.4mb
PLM    39.14 103 eP   26 41.04    1.4
RSSD   39.46  79 eP   26 42.59    0.4
        0.5s    9.05nm        4.8mb
GOL    41.46  86 eP   26 59.02    0.3
        0.7s    8.56nm        4.6mb
GLD    41.51  86 eP   26 59.90    0.8
        0.9s    9.51nm        4.5mb
FRB    45.55  38 eP   27 32.00    0.8
        0.5s   10.00nm        5.0mb
DAG    47.33  10 iPc  27 44.70   -0.5
        0.4s    7.63nm        5.1mb
JAQ    48.57  52 eP   27 55.00   -0.1
WMOK   48.68  86 ePc  27 55.75   -0.5
        0.6s   21.59nm        5.4mb
MEO    48.76  86 iPc  27 57.00    0.2
TUL    49.60  82 iPd  28 02.60   -0.6
LTX    49.72  95 ePc  28 04.07   -0.3
UYO    51.60  83 iPc  28 16.60   -1.9
MIAR   51.85  82 eP   28 19.40   -0.9
        0.8s    8.83nm        4.8mb
ELC    52.42  76 eP   28 22.79   -1.8
OXF    54.28  79 ePc  28 36.89   -1.4
RSNY   55.32  60 eP   28 44.71   -1.2
        0.7s    3.71nm        4.5mb
MCWV   55.97  68 eP   28 49.30   -1.3
        0.5s   10.04nm        5.1mb
MYNC   56.88  75 ePc  28 55.25   -2.0
        0.6s   14.38nm        5.2mb
CVL    57.93  68 eP   29 03.34   -1.1
JSC    59.08  73 eP   29 10.71   -1.8
CEH    59.10  71 ePc  29 11.17   -1.5
        0.4s   10.16nm        5.3mb
LMN    59.15  53 eP   29 12.00   -0.9
LHS    59.18  73 eP   29 11.40   -1.9
KAF    63.60 354 iP   29 42.00   -0.6
        0.3s    3.80nm        5.0mb
NB2    64.91   2 P    29 50.80   -0.4
        1.0s    8.20nm        4.8mb
NUR    65.28 355 eP   29 53.10   -0.4
HFS    65.87   1 eP   29 56.10   -1.2
        0.4s    8.60nm        5.2mb
CTA    85.38 226 iPc  31 49.00    0.6
WRA    90.66 236 eP   32 12.90   -0.8
        0.7s    0.90nm        4.2mb
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GBA    94.64 301 P    32 34.00    1.8
BUL   144.48 339 iPKPd 38 46.80   -1.2
        1.0s    6.00nm
SLR   149.96 337 ePKP 39 11.50   14.8X
        1.0s   50.00nm
SEK   152.60 337 ePKP 39 18.00   17.5X
        0.6s   21.00nm
     S.D. = 1.2  on  67 of  69 obs.
-----------------------------------
? NOV  19, 1993  10h 19m 22.73± 0.97s
   39.095 N ± 8.2km   27.612 E ± 9.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
     ML 2.7 (ISK).

IZM     0.75 202 ePg  19 37.30   -0.1
                eSg   19 49.80
DST     0.94  57 iPn  19 40.90    0.2
EZN     1.23 307 iPn  19 45.90    0.2
EDC     1.26   9 ePn  19 45.80   -0.4
     S.D. = 0.5  on   4 of   4 obs.
-----------------------------------
   NOV  19, 1993  10h 55m 44.03± 0.22s
   10.288 N ± 3.4km  126.401 E ± 5.2km
   DEPTH =  42.6km  ( 12 depth phases)
   5.2mb ( 48 obs.)  4.6Msz (  6 obs.)
 PHILIPPINE ISLANDS REGION       (248)

PLP     1.65 302 ePd  56 11.00    0.0
BIP     2.06 184 iPd  56 17.00    0.2
                iS    56 41.00
MAP     2.38 271 iPd  56 24.00    2.5
                iS    56 56.00
CGP     2.48 223 eP   56 54.00   31.1X
                eS    57 09.00
DAV     3.28 194 eP-  56 34.00   -0.3
CTB     3.76 216 ePd  56 43.00    1.9
                iS    57 44.00
GQP     5.28 313 eP   56 58.50   -4.1X
PGP     6.22 301 ePd  57 16.50    0.8
QCP     6.76 310 eP   57 04.00  -19.3X
BCP     8.30 318 eP   57 16.00  -28.9X
BAG     8.31 318 eP   57 44.00   -1.2
CVP     8.61 329 eP   57 55.00    6.0X
KKM    10.93 248 eP   58 29.00    8.0X
TLE    17.04 158 ePd  59 43.90    3.0X
GZH    17.82 317 P    59 52.00    1.4
     Z  18s     1.94um
QIZ    18.21 300 eP   59 56.80    1.3
     E  14s     1.85um
SSE    21.26 348 Pc   00 29.00    0.1
        1.0s   32.00nm        4.7mb
     Z  20s     1.40um        4.3Msz
     E  16s     1.00um
                pP    00 41.00   50km
                S     04 20.00
                sS    04 32.00
WWKK   22.03 128 e(P) 00 32.50   -4.2X
NJ2    22.76 343 Pc   00 45.00    1.3
        1.0s   50.00nm        4.9mb
                pP    00 55.00   37km
                sP    01 06.00
WHN    23.07 333 Pc   00 47.00    0.3
        1.1s   83.00nm        5.1mb
     Z  20s     1.86um        4.5Msz
                pP    00 58.00   43km
MTN    23.46 168 eP   00 50.00   -0.7
KGM    24.36 252 eP   01 00.00    0.6
GYA    24.63 313 P    01 01.60   -0.5
        1.0s   29.00nm        4.8mb
     Z  18s     2.02um        4.7Msz
                pP    01 14.00   50km
LEM    25.28 228 ePd  01 10.30    1.9
SNG    25.67 265 eP   01 12.70    0.8
IPM    25.78 259 ePd  01 13.50    0.5
KNA    25.98 175 eP   01 13.60   -1.1
NST    26.14 285 eP   01 16.00   -0.2
KMI    26.87 306 Pd   01 22.00   -1.2
        1.2s   40.00nm        4.9mb
     Z  20s     1.90um        4.7Msz
     N  12s     0.80um
     E  12s     0.50um
TIA    27.15 343 eP   01 24.40   -0.9
PMG    28.45 133 eP   01 34.00   -3.2X
XAN    28.56 329 P    01 36.50   -1.6
        1.0s   41.00nm        5.0mb
     Z  16s     1.41um        4.7MszX
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     E  14s      0.83um
                  pP     01 47.00  38km
                  S      06 22.00
                  SS     07 50.00
                  ScS    12 16.00
CD2    29.38 318 iPd     01 44.20  -1.4
       1.2s     48.00nm          5.1mb
     Z  20s      2.06um          4.7Msz
TIY    30.06 338 Pd      01 51.40  -0.2
     E  13s      0.47um
BJI    30.99 345 eP      01 58.50  -1.1
       2.0s     54.00nm          5.0mb
     Z  17s      0.59um          4.3MszX
WRA    31.04 165 eP      01 57.60  -2.7
       0.6s      1.10nm          3.8mb X
                  i      02 04.20  23kmX
SNY    31.51 356 eP      02 04.00  -0.2
MBL    31.91 192 iPd     02 07.00  -0.9
       0.8s     54.00nm          5.4mb
LZH    32.84 325 iPc     02 15.50  -0.5
       1.5s     95.00nm          5.4mb
     Z  16s      1.07um          4.6MszX
     N  14s      0.56um
                  pP     02 24.00  29kmX
                  PP     03 22.00
                  PcP    04 59.50
                  eS     07 25.00
HHC    33.15 339 P       02 18.40  -0.2
       1.4s     49.00nm          5.2mb
     Z  16s      1.19um          4.7MszX
     N  15s      0.43um
     E  13s      0.53um
                  S      07 35.00
QIS    33.29 157 eP      02 18.30  -1.6
                  epP    02 34.10  64kmX
CN2    33.40 359 eP      02 21.60   1.0
       1.0s      7.00nm          4.5mb
     Z  13s      0.71um          4.6MszX
     N  10s      0.12um
     E  10s      0.48um
BTO    33.49 337 P       02 21.00  -0.6
     N  13s      0.33um
     E  13s      0.30um
                  epP    02 33.00  45km
MDJ    34.31   4 eP      02 27.50  -1.0
       1.4s     61.00nm          5.3mb
NANU   34.34 198 eP      02 28.00  -1.0
ASPA   34.53 168 eP      02 30.30  -0.4
       0.9s      7.90nm          4.6mb
                  eS     07 53.70
                  iPcS   08 50.20
                  iScS   12 47.20
CTA    35.96 147 iPc     02 42.00  -0.8
       1.5s     69.44nm          5.4mb
SHL    36.05 300 eP      02 51.50   7.7X
WARB   36.25 180 eP      02 45.00  -0.2
       0.8s     95.00nm          5.8mb
GTA    37.44 325 iPc     02 55.00  -0.2
       1.5s     91.00nm          5.5mb
     Z  16s      1.71um          4.9MszX
     E  14s      0.68um
                  PcP    05 14.00
                  S      08 42.50
MEEK   37.47 191 eP      02 54.80  -0.7
       0.9s     80.00nm          5.6mb
LSA    38.12 306 eP      03 01.60   0.1
       1.2s     28.00nm          5.0mb
MRWA   40.54 194 iPd     03 21.00   0.1
       0.5s     27.00nm          5.3mb
FORT   40.86 178 eP      03 23.50   0.0
       0.5s     35.00nm          5.4mb
COOL   41.24 187 eP      03 26.00  -0.7
       1.0s     35.00nm          5.0mb
BAL    41.71 193 iPd     03 30.50   0.0
       1.0s     83.00nm          5.4mb
GUN    41.87 301 P       03 32.00  -0.4
       0.8s     39.00nm          5.2mb
PKI    42.17 300 P       03 34.60  -0.3
KKN    42.34 300 P       03 35.40  -0.7
DMN    42.44 300 P       03 36.20  -0.8
GKN    42.95 300 P       03 40.00  -1.0
MUN    43.14 193 iPd     03 42.50   0.3
       0.8s     42.00nm          5.2mb
STK    44.38 161 iPd     03 44.70  -7.5X
       0.7s     11.90nm          4.8mb
                  e      05 44.20
BRS    45.35 146 iPc     03 59.50  -0.6
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                  i      04 11.00  41km
ADE    46.49 166 e(P)    04 10.50   1.5
HYB    46.90 284 ePc     04 11.50  -1.0
       1.0s     25.00nm          5.1mb
                  e      04 23.50  43km
ARMA   47.18 150 eP      04 14.80   0.1
       1.0s     19.00nm          5.0mb
WMQ    47.29 322 P       04 15.00  -0.3
       1.0s     20.00nm          5.1mb
                  S      11 01.00
GBA    47.96 279 Pc      04 20.30  -0.5
       0.8s     14.00nm          5.0mb
BOD    48.38 351 eP      04 22.60  -0.9
       1.4s     21.00nm          5.0mb
BWA    49.13 156 eP      04 31.30   1.7
                  e      04 41.90  36km
                  i      04 46.20
CAN    50.14 156 eP      04 36.50  -0.9
                  e      04 49.00  45km
CNB    50.29 155 iPc     04 39.60   1.1
       1.0s     41.00nm          5.4mb
DZM    50.76 130 iPc     04 41.80  -0.5
POO    51.40 285 eP      04 46.00  -1.3
YAK    51.69   2 eP      04 48.50  -0.2
       2.0s    120.00nm          5.5mb
     Z  20s      0.80um          4.7Msz
TIK    61.32   1 iPd     05 55.00  -2.2
       2.0s     82.00nm          5.5mb
                  e      06 08.00  46km
                  e      06 45.00
MAIO   65.39 305 eP      06 23.00  -1.8
SVE    68.26 327 ePd     06 42.00  -0.5
       2.1s     60.00nm          5.3mb
                  e      07 02.90  80kmX
ARU    69.25 327 eP      06 47.00  -1.6
SVW    75.25  29 eP      07 26.40   2.3
TTA    75.25  28 eP      07 24.90   0.8
IMA    76.57  24 eP      07 33.00   1.4
       1.1s     23.60nm          5.1mb
PMR    78.39  29 eP      07 42.20   0.7
TOA    79.78  29 eP      07 51.10   1.9
OBN    81.54 324 eP      07 46.00 -12.4X
INK    84.22  22 eP      08 13.00   1.0
       1.0s      2.00nm          4.2mb
MBC    85.67  13 eP      08 20.50   1.4
       0.9s      5.00nm          4.7mb
KAF    85.67 332 iP      08 19.50   0.1
       0.9s     59.80nm          5.8mb
NUR    86.85 331 iP      08 25.30   0.2
       0.9s     33.50nm          5.6mb
UPP    90.38 331 iP      08 43.20   1.3
DAG    90.77 352 iPc     08 43.10  -0.4
       0.9s     18.49nm          5.5mb
                  ipP    08 54.80  38km
RES    91.46  10 eP      08 48.50   1.8
       1.0s      5.00nm          4.9mb
UZH    91.51 320 ePd     08 49.50   2.1
       1.0s     31.00nm          5.7mb
                  e      08 56.70  22kmX
                  e      09 05.10
HFS    92.09 332 eP      08 48.90  -1.0
       0.9s     26.90nm          5.7mb
     Z  16s      0.24um          4.7MszX
                  LR     47 57.00
NB2    92.80 334 P       08 51.80  -1.4
       0.9s     10.90nm          5.3mb
YKA    93.69  24 eP      08 58.10   0.9
       0.9s      4.40nm          4.9mb
KSP    94.43 323 eP      09 01.40   0.6
BRG    95.79 324 iP      09 07.40   0.3
       1.2s     13.00nm          5.3mb
                  eSg    37 33.20
CLL    96.15 325 e(P)    09 08.00  -0.7
GEC2   96.76 322 ePd     09 11.90   0.3
       1.1s      4.26nm          4.9mb
                  e      09 18.20  20kmX
                  e      09 22.30
GRF    97.87 324 eP      09 17.00   0.5
KIC   128.61 287 PKP     14 49.71   0.4
       1.3s     25.50nm
TIC   128.78 287 PKP     14 50.15   0.5
       0.9s      7.00nm
LIC   128.92 287 PKP     14 50.51   0.7
       1.0s     18.00nm
CNCB  164.59 116 PKP     15 48.00   2.3
LPB   164.60 115 ePKP    15 44.00  -1.6
LPAZ  164.66 114 PKP     15 48.00   2.1
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     S.D. = 1.1  on  96 of 108 obs.
-----------------------------------
*  NOV  19, 1993  11h 39m 01.09± 0.72s
   17.610 S ±12.6km  178.915 W ± 9.7km
   DEPTH = 560.9 ±  8.0 km
   4.7mb ( 17 obs.)
 FIJI ISLANDS REGION                (181)

VUN     2.53 261 ePc     40 16.60   1.8
AFI     7.79  63 eP      40 56.00  -2.0
DZM    14.47 250 iP      42 05.90   1.1
                  iS     43 56.00
ARMA   29.68 239 iPc     44 25.00   1.2
                  i      46 14.90
CTA    33.02 260 iPd     44 41.90 -10.1X
       1.0s     40.00nm
                  i      46 42.00
                  i      50 14.50
CNB    33.23 232 iPd     44 54.30   0.6
       0.4s     21.00nm          5.1mb
                  iPcP   46 45.90
CAN    33.50 232 eP      44 56.90   0.9
                  i      46 47.70
BWA    33.60 234 eP      44 55.50  -1.3
                  i      46 46.80
PMG    33.93 279 iPd     44 59.50  -0.2
       1.0s    120.00nm          5.5mb
LAT    34.99 284 ePd     45 08.70   0.3
MDG    36.64 285 eP      45 22.00   0.0
STK    38.36 241 iPd     45 30.40  -5.5X
       0.5s     20.20nm          5.0mb
WRA    44.21 259 iPc     46 21.00  -1.7
       0.3s     44.00nm          5.5mb
ASPA   44.41 254 iPd     46 23.60  -0.6
       0.6s    283.80nm          6.0mb X
                  iScP   50 57.60
                  iS     52 15.50
                  iScS   55 21.30
MTN    48.33 268 iPd     46 52.50  -1.6
TLE    48.68 278 iPd     46 56.80   0.1
KNA    50.02 264 iPd     47 05.80  -0.8
       0.5s     32.00nm          5.1mb
COOL   55.65 244 eP      47 45.70  -1.0
       0.4s      8.00nm          4.4mb
MEEK   58.09 249 eP      48 02.50  -1.0
       0.3s     13.00nm          4.7mb
KLB    58.52 243 eP      48 05.50  -0.8
       0.7s     38.00nm          4.8mb
BAL    59.47 244 iPd     48 12.00  -0.6
       0.3s      8.00nm          4.5mb
MUN    59.83 243 eP      48 15.00   0.1
MRWA   60.19 246 iPd     48 16.80  -0.5
       0.4s      7.00nm          4.3mb
NANU   61.35 254 eP      48 24.80  -0.2
       0.4s     24.00nm          5.0mb
MAT    67.38 324 eP      49 01.00  -1.6
       1.0s      5.00nm          4.0mb
LEM    72.24 268 iPc     49 32.80   0.8
SSE    75.18 310 eP      49 44.00  -3.9X
NJ2    77.38 310 eP      50 00.00   0.1
MDJ    77.67 325 eP      50 01.30   0.1
BONR   79.29  45 eP      50 10.59   0.3
CN2    79.49 323 eP      50 10.90   0.1
       1.0s     18.00nm          4.5mb
SNG    83.14 280 eP      50 32.20   2.2
BJI    83.23 316 eP      50 30.00   0.1
       1.5s     28.00nm          4.6mb
TIY    84.71 312 eP      50 38.00   0.6
DAU    85.26  45 (P)     50 41.48   1.2
FBA    85.62  13 ePc     50 40.00  -1.1
       1.1s     15.63nm          4.6mb
HHC    86.72 315 Pc      50 47.50   0.5
       1.0s     11.00nm          4.5mb
GTA    94.47 310 eP      51 23.00   0.2
       1.5s      6.00nm          4.6mb
OJC   144.17 339 ePKP    57 33.70  -0.8
CFR   144.41 326 ePKP    57 35.50   0.4
KSP   144.69 343 iPKPd   57 35.60   0.2
       1.2s     63.00nm
                  e      59 25.40
SPC   144.88 338 ePKP    57 36.90   0.9
CLL   145.07 347 iPKPc   57 36.50   0.5
       1.3s     60.00nm
                  ipP    59 26.30
BRG   145.26 346 iPKP    57 36.00  -0.4
       1.4s     34.00nm
MLR   145.33 329 ePKPc   57 37.50   0.7
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19d 11h

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PRU   145.93 344 iPKPd 57 39.00   1.5
       1.4s    33.40nm
SRO   146.73 339 ePKP  57 41.80   3.0X
ZST   146.81 340 iPKP  57 42.00   3.1X
KHC   146.97 345 PKP   57 28.50 -10.7X
       1.1s    16.70nm
                i      57 42.00
GRF   146.97 348 ePKP  57 42.50   3.3X
GEC2  147.20 345 e(PKP)57 42.40   2.7X
       1.1s    13.40nm
DOU   147.47 356 PKPc  57 43.80   3.9X
WLF   147.76 354 iPKPc 57 44.87   4.5X
       1.4s    18.20nm
CDF   148.87 352 ePKP  57 46.70   4.4X
       0.4s     4.60nm
FLN   148.90   2 ePKP  57 46.50   4.3X
       0.4s    13.65nm
LDF   149.08   2 ePKP  57 46.80   4.3X
       0.4s     7.50nm
GRR   149.26   3 ePKP  57 47.50   4.8X
       0.3s     4.00nm
HAU   149.38 353 ePKP  57 47.80   4.8X
       0.5s     4.65nm
BSF   149.50 352 ePKP  57 48.00   4.7X
       0.6s     5.05nm
LPF   149.61   3 ePKP  57 48.40   5.1X
       0.4s    12.60nm
LOR   150.34 356 ePKP  57 50.20   5.8X
       0.5s    10.15nm
HYF   150.40 358 ePKP  57 50.80   6.3X
SSF   150.56 357 ePKP  57 50.90   6.1X
       0.4s     8.70nm
LBF   150.61 356 ePKP  57 50.80   5.9X
       0.5s     5.90nm
AVF   150.84 357 ePKP  57 51.00   5.8X
SMF   150.96 356 ePKP  57 51.30   5.9X
MFF   151.07   2 ePKP  57 51.80   6.3X
       0.6s    10.80nm
BGF   151.10 357 ePKP  57 52.00   6.4X
       0.6s    10.75nm
TCF   151.39 358 ePKP  57 52.50   6.4X
       0.8s     7.80nm
LSF   151.44 359 ePKP  57 52.40   6.3X
       0.3s     3.45nm
MAF   151.44 358 ePKP  57 53.00   6.9X
       0.4s     4.65nm
LPL   151.78 352 ePKP  57 54.40   7.5X
       0.5s     3.20nm
LPG   151.79 352 ePKP  57 54.40   7.4X
RJF   152.39 359 ePKP  57 54.80   7.3X
CAF   152.75 358 ePKP  57 55.80   7.8X
       0.4s     2.40nm
LPO   153.01 360 ePKP  57 56.20   7.9X
       0.4s     2.20nm
     S.D. = 1.0  on  43 of  76 obs.
-----------------------------------
?  NOV  19, 1993  11h 42m 34.30± 1.78s
   32.899 S ±10.3km   69.154 W ±19.6km
   DEPTH =  14.7 ±  9.1 km
 MENDOZA PROVINCE, ARGENTINA      (139)

MDZ     0.26  87 iP    42 40.20   0.1
                iS    42 45.60
RTCV    1.16  27 eP    42 54.90  -0.7
                S     43 10.00
RTCB    1.44  12 e(P)  43 21.10  21.2X
CFA     1.50  31 ePd   43 00.80   0.0
                S     43 20.50
RTLL    1.67  21 ePc   43 03.70   0.5
                S     43 26.10
RFA     1.95 163 ePc   43 07.20  -0.1
                S     43 37.50
     S.D. = 0.9  on   5 of   6 obs.
-----------------------------------
?  NOV  19, 1993  11h 48m 09.61± 2.03s
   29.162 N ±13.5km  104.149 E ±27.0km
   DEPTH =  10.0km  (geophysicist)
   4.2mb (  1 obs.)
 SICHUAN, CHINA                   (307)
     ML 3.8 (BJI).

CD2     1.77 349 Pg    48 40.40  -0.2
                Sg    49 05.80
GYA     3.49 140 Pn    49 05.00  -0.2
                Sn    49 48.60
KMI     4.21 198 ePg   49 21.00   5.5X
                eSg   50 17.00
XAN     6.34  39 Pn    49 44.80  -0.7
                Pg    50 08.20
LZH     6.91 358 eP    50 25.00  31.4X
CN2    22.42  44 eP    53 10.80   1.1
WRA    56.85 146 eP    57 51.30  -5.6X
       0.5s     1.30nm          4.2mb
     S.D. = 1.3  on   4 of   7 obs.
-----------------------------------
?  NOV  19, 1993  11h 53m 18.15± 1.21s
   1.838 N ±16.3km  126.465 E ±18.2km
   DEPTH =  33.0km  (normal)
   4.6mb (  5 obs.)
 NORTHERN MOLUCCA SEA             (266)

MNI     1.67 256 iPd   53 46.50   1.0
                eS    54 03.50
WRA    22.98 161 iPd   58 21.00  -0.1
       0.9s    22.70nm          4.7mb
ASPA   26.36 165 eP    58 53.50   0.2
       0.9s    26.10nm          4.8mb
CTA    29.18 139 eP    59 26.00   7.1X
MRWA   32.47 197 eP    59 48.00   0.2
       0.4s     3.00nm          4.5mb
STK    36.48 158 iPd   00 15.90  -6.3X
       0.8s     6.30nm          4.6mb
LZH    40.00 331 eP    00 53.50   1.7
       1.4s    21.00nm          4.7mb
                sP    01 01.50
HYB    49.53 291 eP    02 07.00  -1.2
GBA    49.86 286 P     02 09.00  -1.7
     S.D. = 1.4  on   7 of   9 obs.
-----------------------------------
?  NOV  19, 1993  12h 35m 44.05± 0.97s
   39.225 N ± 8.5km   27.788 E ± 9.3km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
     ML 2.7 (ISK).

DST     0.75  59 ePg   35 59.00   0.2
                eSg   36 11.30
IZM     0.92 207 ePg   36 01.60  -0.1
                eSg   36 17.40
EDC     1.12   3 ePn   36 04.80  -0.3
EZN     1.28 298 iPn   36 08.00   0.2
     S.D. = 0.4  on   4 of   4 obs.
-----------------------------------
%  NOV  19, 1993  12h 44m 41.19± 0.68s
   26.841 S ± 6.1km   26.701 E ± 7.0km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA         (584)
     ML 2.5 (PRE).

BFS     0.09 127 iPc   44 43.20  -0.2
                S     44 43.90
KSR     0.99  10 eP    45 00.70   0.2
                S     45 13.00
SWZ     1.27 254 eP    45 05.10  -0.3
                S     45 24.30
SEK     1.69 151 iPd   45 11.60   0.0
                S     45 32.00
SLR     1.80  53 eP    45 13.10  -0.1
                S     45 35.40
BLF     2.30 191 eP    45 21.00   0.4
                S     45 49.00
     S.D. = 0.3  on   6 of   6 obs.
-----------------------------------
?  NOV  19, 1993  12h 45m 37.33± 0.98s
   39.110 N ± 8.4km   27.666 E ± 9.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
     ML 2.7 (ISK).

IZM     0.78 204 ePg   45 52.40  -0.1
                eSg   46 04.60
DST     0.89  56 ePn   45 54.80   0.3
EDC     1.24   7 ePn   46 00.00  -0.4
EZN     1.26 305 iPn   46 01.00   0.3
     S.D. = 0.6  on   4 of   4 obs.
-----------------------------------
?  NOV  19, 1993  13h 34m 48.87± 4.57s
   42.729 N ±42.5km   23.922 E ±10.9km
   DEPTH =   5.0km  (geophysicist)
 BULGARIA                         (359)

SRS     1.63 189 ePb   35 18.00  -0.3
                eSb   35 38.50
VAY     1.73 216 ePn   35 19.40  -0.4
KNT     1.74 206 ePb   35 19.50  -0.5
                eSb   35 42.08
GRG     2.10 213 ePn   35 26.00   0.8
                eSn   35 54.00
OUR     2.39 179 ePn   35 29.80   0.5
                eSn   36 00.50
ALN     2.42 138 ePn   35 29.56  -0.2
                eSn   35 59.16
ALT     5.95 126 ePn   36 20.00   0.1
     S.D. = 0.6  on   7 of   7 obs.
-----------------------------------
?  NOV  19, 1993  13h 41m 41.46± 1.09s
   39.026 N ± 9.1km   27.648 E ±11.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
     ML 2.6 (ISK).

IZM     0.70 206 ePg   41 55.00  -0.2
                eSg   42 07.00
DST     0.96  52 ePn   42 00.30   0.6
EZN     1.30 308 ePn   42 06.10   0.6
EDC     1.33   7 ePn   42 05.00  -1.0
     S.D. = 1.3  on   4 of   4 obs.
-----------------------------------
   NOV  19, 1993  14h 31m 14.36± 0.60s
   42.327 N ± 4.7km   19.880 E ± 5.6km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION       (383)
     ML 2.5 (TIR).

BCI     0.14  74 iPg   31 15.50  -2.3
                iSg   31 20.50
PVY     0.28  14 iPgc  31 20.57   0.3
                iSg   31 25.83
TTG     0.47 283 iPgc  31 23.07  -0.8
                iSg   31 31.57
IVA     0.54   1 ePg   31 25.65   0.3
                iSg   31 34.30
ULC     0.59 232 iPgc  31 25.54  -0.8
                iSg   31 34.33
LACI    0.70 190 ePg   31 27.40  -0.8
                iSg   31 39.40
BDV     0.78 267 iPgc  31 29.50  -0.1
                iSg   31 41.32
NKY     0.81 307 iPgc  31 30.22   0.0
                iSg   31 43.24
TIR     0.98 181 ePg   31 33.60   0.7
                iSg   31 48.50
HCY     1.03 277 iPgd  31 34.04   0.2
                iSg   31 49.62
PLE     1.06 341 iPgc  31 35.16   0.7
                iSg   31 51.68
BRY     1.14 301 iPgd  31 36.33   0.5
                iSg   31 54.06
SKO     1.21 106 ePn   31 39.50   2.6X
                iSn   31 57.80
OHR     1.40 150 ePn   31 42.00   2.1
     S.D. = 1.1  on  13 of  14 obs.
-----------------------------------
   NOV  19, 1993  14h 40m 39.16± 0.28s
   54.328 N ± 4.5km  164.318 W ± 3.8km
   DEPTH =  33.0km  (normal)
   4.7mb ( 28 obs.)
 UNIMAK ISLAND REGION             ( 10)
     ML 4.8 (PMR).

SDN     2.43  64 eP    41 16.86  -0.5
                eS    41 48.89
KDC     7.46  58 eP    42 27.60  -0.7
ADK     7.84 257 eP    42 34.50   0.9
SVW     8.23  31 eP    42 39.78   0.6
CP2     9.47  38 eP    42 58.14   1.7
CRP     9.50  38 eP    42 58.53   1.7
TTA     9.64  23 eP    42 58.88   0.2
ANM    10.28 357 eP    43 06.29  -1.1
PMS    10.47  43 e(P)  43 09.40  -0.6
PMR    10.84  42 eP    43 14.78  -0.2
KLU    12.10  46 eP    43 30.12  -2.0
TOA    12.30  43 eP    43 34.50  -0.2
       1.0s   166.80nm          6.1mb X
IMA    12.88  20 eP    43 44.38   1.8
FBA    13.44  31 eP    43 50.02   0.2
BALM   13.49  51 eP    43 49.39  -1.2
BRW    17.36   8 (P)   44 40.10   0.0
INK    20.04  34 eP    45 10.00  -1.7
       1.0s    9.00nm          4.1mb
MCW    26.14  85 (P)   46 13.20   1.5
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YKA    26.66  52 eP    46 16.80   0.5
        0.6s     4.70nm          4.3mb
BMW    27.02  90 eP    46 20.64   0.8
RMW    27.34  87 eP    46 22.94   0.2
MBC    27.61  21 eP    46 27.00   2.2
DBO    28.92  96 P     46 38.15   1.1
CROR   29.15  91 P     46 39.37   0.3
VIPM   29.63  91 P     46 43.75   0.2
NEW    29.67  82 eP    46 43.23  -0.5
LGPM   30.54  99 eP    46 52.15   0.6
ORV    32.19 100 eP    47 05.94   0.0
CMB    33.86 100 eP    47 20.71   0.2
        1.1s    15.23nm          4.8mb
KVN    34.50  97 eP    47 26.76   0.6
MEMM   34.95 100 eP    47 31.31   1.6
BONR   35.12  99 ePd   47 32.54   0.9
MTUM   35.38 100 eP    47 34.90   1.2
TNP    35.66  97 ePd   47 36.77   0.6
        0.5s    20.76nm          5.3mb
ISA    36.61 102 ePd   47 43.89  -0.1
        0.4s     8.62nm          5.0mb
DUG    36.84  91 eP    47 46.00   0.0
        1.2s    11.78nm          4.6mb
TPNV   37.00  98 ePd   47 48.09   0.8
        0.5s    36.55nm          5.5mb
                e       47 53.94
GSC    37.83 100 eP    47 54.71   0.5
ARUT   38.06  94 eP    47 56.67   0.4
MSU    38.32  92 iPc   47 59.31   0.8
SRU    38.89  90 eP    48 03.33   0.1
PLM    39.19 103 ePd   48 06.25   0.5
RSSD   39.52  79 ePd   48 08.42   0.0
        0.5s     8.64nm          4.8mb
PV09   40.11  90 eP    48 13.13  -0.3
PV10   40.24  90 eP    48 14.58   0.1
PV08   40.34  90 eP    48 14.58  -0.8
ULM    40.57  67 eP    48 20.00   3.3X
GOL    41.52  86 ePc   48 25.76   0.8
        0.8s    12.46nm          4.7mb
                e       48 29.64
GLD    41.57  85 eP    48 26.39   1.1
        1.0s    27.23nm          4.9mb
CN2    45.38 287 eP    48 54.40  -1.4
        0.8s     4.70nm          4.4mb
                ePP     48 59.00  15kmX
FRB    45.59  38 eP    48 57.50   0.2
        0.5s     5.00nm          4.7mb
DAG    47.35  10 iPd   49 11.70   0.7
        0.6s     4.00nm          4.6mb
JAQ    48.62  52 eP    49 20.50  -0.7
WMOK   48.74  86 ePd   49 21.66  -0.7
        0.7s    32.26nm          5.5mb
TUL    49.66  82 iPd   49 28.60  -0.8
LTX    49.78  95 ePd   49 29.76  -0.8
UYO    51.66  83 iPd   49 43.20  -1.4
MIAR   51.90  82 ePd   49 45.18  -1.3
        0.9s    16.68nm          5.0mb
ELC    52.48  76 eP    49 48.72  -2.0
GAC    54.09  60 eP    50 01.50  -1.0
CVL    57.99  68 eP    50 29.79  -0.8
LMN    59.20  53 eP    50 38.00  -1.0
LHS    59.24  73 eP    50 37.13  -2.2
HBF    60.62  74 (P)   50 47.59  -1.2
XAN    61.38 289 eP    50 54.40   0.4
KAF    63.60 354 iP    51 07.80  -0.5
        0.4s     5.30nm          5.0mb
NB2    64.93   2 P     51 16.40  -0.6
        0.9s     4.50nm          4.6mb
NUR    65.29 355 iP    51 18.90  -0.4
        0.3s     2.60nm          4.8mb
HFS    65.88   1 eP    51 21.70  -1.4
        0.4s     2.70nm          4.7mb
GEC2   77.19   1 eP    52 31.60   0.7
        0.9s     1.07nm          3.9mb
                e       52 42.40
                e       52 48.80
CDF    77.39   6 eP    52 32.40   0.4
BSF    77.94   6 eP    52 35.40   0.3
LOR    78.29   8 eP    52 37.30   0.4
        0.6s     3.25nm          4.5mb
GUN    78.36 302 P     52 38.60   0.5
        0.4s     7.00nm          5.0mb
SSF    78.46   8 eP    52 38.40   0.6
        0.4s     4.30nm          4.8mb
MFF    78.55  11 eP    52 39.00   0.7
LBF    78.58   8 eP    52 38.80   0.3
        0.4s     2.40nm          4.6mb
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AVF    78.72   9 eP    52 39.60   0.4
        0.4s     3.30nm          4.7mb
KKN    78.76 302 P     52 41.00   0.9
GKN    78.90 303 P     52 41.00   0.2
SMF    78.90   8 eP    52 40.60   0.3
        0.5s     4.00nm          4.7mb
LSF    79.08  10 eP    52 41.80   0.5
MAF    79.21   9 eP    52 42.70   0.7
        0.7s     3.00nm          4.4mb
CTA    85.33 226 iPc   53 18.00   4.1X
WRA    90.60 236 eP    53 38.30  -0.9
        1.3s     0.90nm          3.9mb
HYB    90.80 302 eP    53 40.50   0.2
GBA    94.59 301 P     53 58.00   0.3
SPA   144.14 180 iPKPc 00 09.10  -2.6
        1.0s    25.00nm
BUL   144.47 339 iPKPc 00 12.10  -1.6
        1.0s    14.00nm
LBTB  149.81 342 ePKP  00 22.55   0.5
                ePKPbc00 27.97
SLR   149.95 337 iPKPc 00 37.50  15.1X
        0.8s    25.00nm
KSR   150.38 339 ePKP  00 27.50   4.5X
     S.D. = 1.0  on  88 of  92 obs.
-----------------------------------
*  NOV  19, 1993  15h 20m 12.39± 0.62s
   51.843 N ±11.5km  158.365 E ±11.8km
   DEPTH =  33.0km  (normal)
   4.6mb ( 16 obs.)
 NEAR EAST COAST OF KAMCHATKA     (218)

MAT    20.94 231 iPc   24 55.00   0.4
        0.8s     7.46nm          4.1mb
IMA    27.68  41 eP    25 59.50   0.5
FBA    30.06  43 eP    26 20.00  -0.2
DAG    51.65 359 iPc   29 16.40  -0.8
        0.6s     4.00nm          4.6mb
GUN    57.97 275 P     30 05.20   0.9
KKN    58.42 276 P     30 07.40   0.1
DMN    58.66 276 P     30 08.80  -0.2
GKN    58.67 276 P     30 08.40  -0.6
HFS    64.81 341 eP    30 47.80  -1.7
        0.4s     1.40nm          4.5mb
GBA    73.83 271 P     31 45.00  -0.5
WRA    74.50 203 eP    31 48.50  -0.7
        0.6s     0.80nm          3.9mb
LOR    78.88 343 eP    32 13.10  -0.3
        0.6s     5.25nm          4.7mb
LBF    79.13 342 eP    32 14.30  -0.5
        0.6s     3.50nm          4.5mb
SSF    79.14 343 eP    32 14.70  -0.1
        0.8s     5.65nm          4.6mb
AVF    79.43 343 eP    32 16.40   0.0
        0.6s     5.75nm          4.7mb
SMF    79.48 342 eP    32 16.60  -0.1
BGF    79.75 343 eP    32 18.10   0.0
        0.5s     4.65nm          4.7mb
LPL    79.99 340 eP    32 20.30   0.6
        0.7s     4.20nm          4.5mb
LPG    80.00 340 eP    32 20.50   0.6
        0.6s     3.05nm          4.5mb
TCF    80.12 343 eP    32 20.40   0.2
        0.8s     6.45nm          4.7mb
MAF    80.12 343 eP    32 20.70   0.6
        0.6s     8.05nm          4.9mb
LSF    80.28 344 eP    32 21.30   0.3
        0.7s     7.95nm          4.8mb
CAF    81.46 343 eP    32 28.20   0.9
        0.7s     3.30nm          4.5mb
LPO    81.85 344 eP    32 30.00   0.8
        0.5s     3.05nm          4.6mb
     S.D. = 0.7  on  24 of  24 obs.
-----------------------------------
%  NOV  19, 1993  15h 43m 52.63± 0.84s
   26.859 S ± 6.3km   26.662 E ± 9.7km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA         (584)
     ML 2.5 (PRE).

BFS     0.12 110 eP    43 55.30   0.1
                S      43 55.90
KSR     1.01  12 eP    44 12.50   0.1
                S      44 25.50
SEK     1.69 150 eP    44 23.00  -0.1
                S      44 44.50
SLR     1.83  53 eP    44 25.00  -0.2
                S      44 48.00
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BLF     2.28 190 eP    44 32.00   0.3
                S      44 59.50
FRS     3.11 202 e(P)  44 43.00  -0.3
     S.D. = 0.3  on   6 of   6 obs.
-----------------------------------
*  NOV  19, 1993  16h 14m 32.49± 2.22s
   32.280 S ±11.2km   71.659 W ±17.5km
   DEPTH =  13.7 ±  4.2 km
 NEAR COAST OF CENTRAL CHILE      (135)
     MD 3.9 (SAN).

ROCH    0.88 142 iPd   14 49.75   0.5
                iS     15 02.91
JACH    0.99 114 iP    14 49.96  -1.0
                iS     15 03.46
PEL     1.19 137 iP    14 53.87  -0.5
                iS     15 10.45
LCCH    1.19 176 iP+   14 54.69   0.3
                iS     15 11.40
TACH    1.50 156 iP+   14 58.99   0.0
FCH     1.56 133 iPd   14 59.34  -0.8
                iS     15 20.42
PCH     1.65 145 eP    15 00.78  -0.4
                iS     15 22.57
LNV     1.68 173 eP    15 00.91  -0.7
CACH    2.04 154 eP    15 07.70   0.8
MDZ     2.45 105 eP    15 14.80   2.1
                iS     15 50.10
RTCB    2.56  73 e(P)  15 14.30   0.0
RTCV    2.68  82 eP    15 16.50   0.4
RTLL    2.88  72 e(P)  15 18.20  -0.6
CFA     2.98  78 ePc   15 19.90  -0.4
     S.D. = 0.9  on  14 of  14 obs.
-----------------------------------
%  NOV  19, 1993  16h 31m 57.48± 0.80s
   37.117 N ± 7.3km    4.122 W ± 5.6km
   DEPTH =  10.0km  (geophysicist)
 SPAIN                            (377)
     mbLg 2.6 (MDD).

ELUQ    0.46 345 eP    32 06.50  -0.3
ECOG    0.47  70 eP    32 06.50  -0.6
                e      32 16.00
EGUA    0.53 122 eP    32 08.50   0.3
                e      32 17.50
EPRU    0.90 261 eP    32 14.50  -0.3
EBAN    1.08  14 iP    32 18.40   0.6
                e      32 32.30
EHOR    1.14 309 eP    32 19.00   0.2
                e      32 33.30
     S.D. = 0.6  on   6 of   6 obs.
-----------------------------------
%  NOV  19, 1993  16h 33m 52.25± 1.11s
   31.142 S ±17.0km   68.447 W ±13.1km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTLL    0.19 186 iPd   34 06.90   0.0
                S      34 16.20
RTCB    0.46 221 iPd   34 08.00  -0.1
                S      34 20.00
CFA     0.50 159 ePc   34 08.80   0.5
RTCV    0.72 186 iPd   34 09.90  -0.3
                S      34 22.00
RTPR    1.87  64 eP    34 23.50   0.0
                S      34 48.00
MRA     2.65 119 ePd   34 33.90  -0.1
                S      35 06.60
     S.D. = 0.3  on   6 of   6 obs.
-----------------------------------
*  NOV  19, 1993  16h 46m 42.60± 0.65s
   26.825 S ± 7.2km   26.642 E ± 7.4km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA         (584)
     ML 3.8 (PRE). mbLg 3.9 (BUL).

BFS     0.15 120 iPc   46 45.50  -0.2
                S      46 46.00
KSR     0.98  14 eP    47 03.20   1.4
                S      47 15.00
SWZ     1.23 253 eP    47 07.50   1.5
                S      47 29.60
SEK     1.73 150 iPd   47 14.40   0.8
                S      47 36.40
SLR     1.83  54 eP    47 17.10   2.0
                S      47 40.00
BLF     2.31 190 eP    47 23.00   0.9
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19d 16h

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                S     47 52.00
FRS     3.14 201 eP   47 34.00    0.4
                S     48 09.50
BFT     3.26  70 eP   47 36.40    0.8
                S     48 14.10
PKA     4.45 230 eP   47 53.20    0.8
                S     48 40.70
UPI     5.02 251 eP   48 00.70    0.2
                S     49 05.60
POF     6.44 245 e(P) 48 20.00   -0.4
                S     50 02.00
GRM     6.47 181 eP   48 18.50   -2.4
                S     49 26.00
BUL     6.89  16 iPn  48 23.80   -3.1
                iSn   49 36.70
                iSg   50 11.90
CIR     7.34  39 iPn  48 32.00   -1.1
                iSn   49 51.80
                iSg   50 26.00
SUR     7.51 221 eP   48 34.00   -1.6
                S     50 02.20
CER     9.11 223 eP   48 38.00 -19.7X
                S     50 51.00
KRI    10.32  16 iPn  49 09.00   -5.6X
                iSn   50 54.00
                iSg   51 51.00
     S.D. = 1.6  on  15 of  17 obs.
-----------------------------------
% NOV  19, 1993  17h 07m 14.79± 0.88s
   26.898 S ± 9.0km   26.675 E ± 7.8km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)
      ML 2.4 (PRE).

BFS     0.10  90 iPd  07 16.10   -0.9
                S     07 16.90
KSR     1.05  11 eP   07 35.00   -0.2
                S     07 49.00
SWZ     1.24 257 eP   07 38.10   -0.2
                S     07 55.00
SEK     1.65 150 eP   07 45.10    0.4
                S     08 05.60
SLR     1.85  52 eP   07 48.50    0.9
                S     08 12.00
     S.D. = 1.0  on   5 of   5 obs.
-----------------------------------
   NOV  19, 1993  18h 06m 33.55± 0.43s
    0.034 S ± 8.3km   16.557 W ± 7.7km
   DEPTH =  10.0km  (geophysicist)
   4.9mb ( 22 obs.)
 NORTH OF ASCENSION ISLAND         (407)

KING   10.59  20 P    09 06.10   -2.4
MAMG   11.20  24 P    09 15.00   -2.0
LIC    13.08  61 P    09 42.38    0.2
       1.1s    19.00nm          5.2mb
     Z  20s     0.57um          3.9MszX
                S     12 09.49
TIC    13.29  60 P    09 45.34    0.4
       0.8s     6.00nm          4.7mb
                eTT   19 56.00
KIC    13.39  61 P    09 45.92   -0.4
       0.9s    20.50nm          5.2mb
EJIF   37.73  15 eP   13 54.20    2.9X
EPRU   38.28  15 eP   13 57.70    1.7
ECOG   39.02  17 eP   14 02.80    0.5
EHOR   39.09  14 eP   14 03.60    0.9
ELUQ   39.09  16 eP   14 02.30   -0.5
EBAN   39.79  16 eP   14 09.00    0.5
EPLA   41.04  12 eP   14 20.30    1.5
GUD    42.03  14 eP   14 27.20    0.2
EPF    45.48  17 eP   14 55.70    0.9
       1.0s    11.80nm          4.8mb
SIV    46.69 248 P    15 04.80    0.1
LPO    47.23  17 eP   15 09.00    0.4
       1.2s    15.75nm          5.0mb
LFF    47.34  17 eP   15 10.10    0.7
       1.5s    58.00nm          5.4mb
CAF    47.72  18 eP   15 12.60    0.1
RJF    47.89  17 eP   15 14.90    1.1
     Z  22s     0.22um          4.1Msz
KRI    48.44 113 eP   15 09.00   -9.7X
                i     15 15.60
BUL    48.50 117 eP   15 19.00   -0.1
       1.0s     5.00nm          4.5mb
                i     15 25.00
MFF    48.63  15 eP   15 20.30    0.9
LSF    48.76  17 eP   15 20.70    0.2
MAF    49.04  18 eP   15 23.50    0.9
       1.4s    30.50nm          5.1mb
BGF    49.43  18 eP   15 26.00    0.4
       0.8s     6.30nm          4.7mb
LPF    49.74  14 eP   15 28.90    1.0
       1.8s    88.05nm          5.4mb
LPG    49.80  21 eP   15 29.90    1.1
       1.1s    13.45nm          4.8mb
LPL    49.80  21 eP   15 29.70    0.9
       0.8s     8.35nm          4.8mb
SSF    50.08  18 eP   15 30.80    0.2
       0.8s     5.10nm          4.5mb
LBF    50.15  18 eP   15 31.30    0.0
LOR    50.37  18 eP   15 32.80   -0.1
       0.8s     4.85nm          4.5mb
     Z  17s     0.10um          3.9MszX
CIR    51.41 117 eP   15 35.00   -6.2X
BSF    51.82  20 eP   15 43.40   -0.6
HAU    51.82  19 eP   15 43.50   -0.4
       0.8s    10.90nm          4.8mb
CDF    52.48  20 eP   15 48.30   -0.6
CNCB   53.32 249 P    15 55.40   -0.8
CNCB   53.32 249 P    15 56.00   -0.2
LPAZ   53.34 250 P    15 55.40   -1.0
LPB    53.36 249 eP   15 57.00    0.7
GRF    54.96  22 eP   16 06.60   -0.5
     Z  19s     0.10um          3.9Msz
WET    55.15  23 iPc  16 08.30   -0.2
       1.2s    29.00nm          5.2mb
GEC2   55.24  24 ePc  16 08.80   -0.4
       0.7s     3.24nm          4.4mb
                e     16 14.40
                e     16 22.20
                ePP   18 08.50
                e     18 15.20
                e     18 25.10
MOX    55.89  21 eP   16 13.60   -0.2
ZST    56.19  27 eP   16 15.50   -0.4
CLL    56.94  22 e(P) 16 20.00   -1.3
BRG    56.94  23 eP   16 20.60   -0.7
SPC    58.34  28 eP   16 31.80    0.4
HFS    64.42  16 eP   17 09.30   -2.7
       0.4s     1.50nm          4.5mb
NB2    64.52  15 P    17 11.60   -1.1
       0.7s     3.60nm          4.7mb
DAG    76.73 359 iPd  18 26.40    0.2
       0.8s     9.70nm          4.9mb
RSSD   88.21 314 eP   19 26.10   -0.5
       1.4s    19.65nm          5.2mb
GOL    89.11 310 ePd  19 31.60    0.5
       0.9s     9.47nm          5.1mb
WRA   145.26 127 PKP  26 14.10    0.0
       1.0s     1.40nm
     S.D. = 0.9  on  50 of  53 obs.
-----------------------------------
?  NOV  19, 1993  18h 10m 37.83± 2.85s
   34.612 S ±28.0km   70.884 W ±14.0km
   DEPTH =  90.0km  (geophysicist)
 CHILE-ARGENTINA BORDER REGION     (127)
      MD 3.8 (SAN).

CACH    0.55  25 iP+   10 53.41    0.1
                iS     11 05.08
LNV     0.79 326 iPd   10 55.44    0.0
                iS     11 07.73
TACH    0.96 357 iP+   10 57.13   -0.2
                iS     11 11.07
PCH     1.04  17 iP+   10 58.33    0.0
                iS     11 13.13
LCCH    1.27 333 iP+   11 01.06    0.0
                iS     11 17.38
FCH     1.37  21 iP+   11 02.51   -0.2
                iS     11 20.73
PEL     1.47   6 iPd   11 04.01    0.3
                iS     11 22.30
ROCH    1.64 356 iP    11 05.91   -0.1
                iS     11 25.69
JACH    1.94   7 iP+   11 09.99    0.1
                iS     11 32.81
     S.D. = 0.2  on   9 of   9 obs.
-----------------------------------
?  NOV  19, 1993  18h 20m 29.71± 1.46s
    5.938 S ±13.2km  145.860 E ±30.4km
   DEPTH =  33.0km  (normal)
 EASTERN NEW GUINEA REG., P.N.G. (207)
      ML 4.0 (PMG).

YYYY    0.32 160 eP    20 36.70   -1.2
                eS     20 42.00
MDG     0.69 353 iPd   20 43.00    0.1
LAT     1.35 123 eP    20 52.30    0.0
                eS     21 36.00
MNDI    2.20 264 iP    21 15.00   10.1X
WWKK    3.20 316 eP    21 26.50    7.6X
PMG     3.68 160 iPc   21 26.80    1.1
     S.D. = 1.7  on   4 of   6 obs.
-----------------------------------
   NOV  19, 1993  18h 33m 03.43± 1.53s
   32.909 S ± 9.2km   70.263 W ± 7.9km
   DEPTH = 104.3 ± 17.3 km
 CHILE-ARGENTINA BORDER REGION     (127)
      MD 3.8 (SAN).

JACH    0.36 309 iP+   33 19.18    0.0
                iS     33 31.14
FCH     0.42 183 iP+   33 19.57   -0.2
                iS     33 32.10
PEL     0.43 236 iP+   33 19.50    0.0
                iS     33 31.72
ROCH    0.63 264 iPd   33 21.30    0.1
                iS     33 34.96
SAN     0.64 212 iP+   33 20.85   -0.1
                iS     33 34.42
PCH     0.74 196 iP+   33 21.95    0.0
                iS     33 36.09
TACH    0.93 217 iP+   33 23.82    0.0
                iS     33 39.18
MDZ     1.19  89 eP    33 26.70    0.1
                iS     33 44.10
LCCH    1.23 242 iPd   33 27.23    0.2
                iS     33 44.29
CACH    1.24 193 iPd   33 27.67    0.4
                iS     33 46.39
LNV     1.42 222 iPd   33 28.78   -0.5
                iS     33 48.58
RTCV    1.80  55 eP    33 34.00   -0.1
                S      33 57.50
     S.D. = 0.2  on  12 of  12 obs.
-----------------------------------
?  NOV  19, 1993  18h 33m 19.34± 1.41s
    5.933 S ±13.2km  145.876 E ±29.7km
   DEPTH =  33.0km  (normal)
 EASTERN NEW GUINEA REG., P.N.G. (207)

YYYY    0.32 163 eP    33 26.30   -1.2
                eS     33 32.00
MDG     0.69 352 iPd   33 32.60    0.1
LAT     1.33 123 ePd   33 41.70   -0.1
MNDI    2.22 264 eP    34 04.00    9.3X
PMG     3.68 160 eP    34 16.50    1.2
     S.D. = 1.7  on   4 of   5 obs.
-----------------------------------
&  NOV  19, 1993   20h 10m 28.57s
   59.898 N          153.176 W
   DEPTH = 111.5km
 SOUTHERN ALASKA                   (  2)
      <AEIC>.

INW     0.17   7 eP    10 43.35    0.5
                eS     10 55.63
INE     0.17  19 eP    10 43.51    0.6
                eS     10 55.66
ILIM    0.21  31 eP    10 43.41    0.5
                eS     10 55.48
OPT     0.25 186 iP    10 43.87    0.9
                eS     10 55.85
PDB     0.53 258 eP    10 45.10   -0.9
AUL     0.53 194 eP    10 45.11   -0.9
AUW     0.55 196 eP    10 45.51   -0.6
AUH     0.55 194 eP    10 45.66   -0.6
RED     0.56  21 eP    10 45.46   -0.9
AUI     0.58 193 eP    10 45.65   -0.7
RS2     0.60  20 eP    10 46.01   -0.8
                eS     10 59.94
RDW     0.61  17 eP    10 45.95   -0.9
REP     0.64  22 eP    10 46.22   -0.8
                eS     10 59.82
                eS     11 00.13
NCT     0.68  10 eP    10 46.49   -0.8
                eS     11 00.06
DFR     0.74  19 eP    10 46.91   -0.9
                eS     11 01.16
HOM     0.81 107 eP    10 47.62   -0.7
                eS     11 03.28
```

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MCNL     0.93 220 eP    10 48.48  -1.0
                eS     11 03.78
CDD      1.00 194 eP    10 49.21  -1.0
CNPM     1.05 110 eP    10 49.65  -1.1
                eS     11 06.11
BRLK     1.16  96 eP    10 51.27  -0.7
                eS     11 08.33
BKG      1.26  21 eP    10 52.35  -0.8
                eS     11 10.66
SYI      1.35 162 eP    10 53.33  -0.7
CKT      1.39  20 eP    10 53.73  -0.9
BGL      1.42  15 eP    10 54.54  -0.5
CP2      1.45  18 eP    10 54.41  -1.0
CRP      1.46  20 (P)   10 54.78  -0.8
CGLM     1.53  22 eP    10 55.46  -0.8
SLKM     1.60  66 (P)   10 55.93  -1.1
SVW      1.71 316 eP    10 56.63  -1.9
SEW      1.88  82 eP    10 58.99  -1.6
SUA      1.98  36 eP    11 01.41  -0.5
                eS     11 26.39
MPA      2.00  71 eP    11 00.67  -1.3
KDC      2.19 170 eP    11 01.55  -2.9
PMS      2.24  51 P     11 04.50  -0.7
SKT      2.24  20 eP    11 04.41  -0.8
                eS     11 30.89
PWA      2.39  41 eP    11 06.99  -0.2
PWL      2.59  66 eP    11 07.38  -2.5
PMR      2.61  48 (P)   11 07.71  -2.4
LTI      2.68  85 eP    11 09.13  -1.9
KNIM     2.76  78 eP    11 09.47  -2.6
GHO      2.81  46 eP    11 11.10  -1.7
CUT      2.88  28 eP    11 12.68  -1.0
SML      3.05  49 eP    11 13.54  -2.5
SCM      3.46  53 eP    11 19.52  -2.1
TRF      3.82  20 eP    11 25.06  -1.6
KLU      3.91  63 eP    11 24.74  -3.0
DHY      4.23  39 eP    11 30.25  -1.9
IL1      5.70  28 eP    11 49.41  -2.8
IM3      6.12 358 eP    11 56.56  -1.3
       49 obs. associated
-----------------------------------
*  NOV  19, 1993  20h 31m 43.60± 1.43s
   47.782 N ±17.8km  116.784 E ± 8.7km
   DEPTH =  33.0km  (normal)
   4.4mb (  7 obs.)
 MONGOLIA                          (334)

CN2      7.25 120 iPnd  33 29.50  -0.3
                Sn     34 50.40
                Sg     35 34.00
SNY      7.66 138 ePn   33 36.00   0.3
                Sg     35 49.60
BJI      7.75 183 ePn   33 37.00   0.1
     Z  10s     0.96um
     N  10s     1.98um
HHC      7.87 210 P     33 40.20   1.4
     Z  10s     2.28um
BTO      8.67 217 eP    33 50.00   0.3
                eS     35 26.00
TIY     10.56 199 eP    34 20.00   4.3X
     Z  10s     0.51um
     E  10s     0.80um
GTA     14.85 242 eP    35 11.00  -1.9
        1.5s    16.00nm          4.2mb
XAN     14.95 206 eP    35 12.70  -1.4
LZH     15.12 224 eP    35 23.50   7.1X
        1.2s    32.00nm          4.5mb
     Z  12s     1.16um           3.9MszX
     N  10s     0.44um
                eS     38 03.00
MAT     19.38 118 eP    36 08.00  -1.5
        1.0s    6.00nm           3.8mb
WMQ     20.60 270 P     36 23.10   0.7
KAF     49.54 322 eP    40 39.90   7.3X
DAG     52.59 348 iPd   41 00.50   4.9X
        0.6s    4.67nm           4.6mb
NB2     56.16 326 P     41 26.10   4.1X
        0.8s    3.20nm           4.4mb
WRA     69.23 162 eP    42 49.80   0.7
        0.5s    3.30nm           4.7mb
                e      43 10.20
ASPA    72.77 164 eP    43 12.10   1.7
        0.8s    3.20nm           4.4mb
     S.D. = 1.3  on  11 of  16 obs.
-----------------------------------
&  NOV  19, 1993  20h 35m 57.55s
   63.102 N          151.440 W
   DEPTH =   0.0km
 CENTRAL ALASKA                    (  1)
      <AEIC>. ML 2.8 (AEIC).

KTH      0.51  27 P     36 07.00  -0.7
                S      36 14.50
TRF      0.63  56 P     36 10.00  -0.1
                S      36 18.90
HUR      0.83  98 P     36 13.60  -0.5
                S      36 25.10
CUT      0.88 142 P     36 15.00  -0.2
                S      36 26.90
SKT      1.13 182 P     36 18.80  -0.8
RND      1.21  74 P     36 20.10  -1.0
MCK      1.29  60 P     36 21.50  -0.9
BWN      1.39  39 P     36 23.80  -0.3
PWA      1.63 153 P     36 27.70   0.1
NCG      1.74 191 P     36 27.80  -1.5
GHO      1.78 138 P     36 29.20  -0.6
NEA      1.81  34 P     36 30.10  -0.2
PMR      1.86 144 eP    36 27.44  -3.5
CRP      1.87 191 eP    36 29.96  -1.3
SML      1.94 131 P     36 30.80  -1.4
MLY      1.96   9 P     36 29.60  -2.9
WRH      2.03  46 P     36 33.90   0.6
TTA      2.09 267 eP    36 34.12  -0.3
CCB      2.23  44 P     36 37.40   1.0
FBA      2.42  40 eP    36 40.16   1.2
DFR      2.59 194 P     36 44.20   2.7
ILB      2.62  48 P     36 44.20   2.4
IL1      2.62  48 P     36 44.20   2.4
SVW      2.80 226 (P)   36 44.35  -0.2
IM3      3.06 342 P     36 45.20  -2.9
IMA      3.13 343 eP    36 46.02  -3.2
       26 obs. associated
-----------------------------------
?  NOV  19, 1993  21h 22m 21.81± 8.55s
   40.157 N ±23.1km   24.121 E ±72.4km
   DEPTH =   5.0km  (geophysicist)
 AEGEAN SEA                        (365)

OUR      0.21 329 ePg   22 26.02   0.0
                eSg    22 28.66
PAIG     0.41 236 ePg   22 30.02   0.0
                iSg    22 35.02
SRS      1.04 337 ePg   22 41.90   0.0
KNT      1.37 318 ePb   22 47.50   0.0
     S.D. = 0.0  on   4 of   4 obs.
-----------------------------------
*  NOV  19, 1993  21h 51m 55.20± 2.44s
   46.873 N ±10.2km  116.743 W ±19.9km
   DEPTH =   5.0km  (geophysicist)
 WESTERN IDAHO                     ( 33)
      ML 2.6 (GS). MD 2.7 (SEA).

DPW      1.41 316 eP    52 21.44  -0.1
                eS     52 40.73
NEW      1.41 350 eP    52 21.86   0.2
                eS     52 40.33
OD2      1.44 292 P     52 22.72   0.7
                S      52 43.63
LNOR     1.46 227 P     52 22.17  -0.2
                S      52 42.15
ET3      1.54 260 P     52 22.46  -0.9
CRF      1.82 269 P     52 29.72   2.4
MJ2      1.83 261 P     52 27.08  -0.5
LOCW     1.85 266 P     52 27.78  -0.1
GBL      1.89 263 P     52 29.17   0.8
SAW      1.99 296 P     52 29.61  -0.3
EPH      2.01 285 P     52 32.29   2.1
                S      52 59.98
RSW      2.02 257 P     52 30.98   0.6
BVW      2.16 269 P     52 35.30   3.0X
ETW      2.55 288 P     52 37.23  -0.8
EBG      2.62 272 P     52 38.58  -0.4
TBM      2.65 278 P     52 38.88  -0.6
NLW      2.72 298 P     52 39.63  -0.9
NAC      2.81 269 P     52 41.02  -0.6
FMW      3.38 273 P     52 48.63  -1.3
RPW      3.59 298 P     52 52.51  -0.2
     S.D. = 1.0  on  19 of  20 obs.
-----------------------------------
?  NOV  19, 1993  22h 01m 03.65± 0.94s
   26.327 S ± 9.5km   26.794 E ±17.5km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)

KSR      0.47  11 eP    01 13.00  -0.1
                S      01 22.00
SLR      1.46  67 eP    01 31.00   0.1
                S      01 44.00
SEK      2.12 160 eP    01 35.10  -5.3X
                S      01 56.70
BOSA     2.59 208 eP    01 47.20   0.4
                S      02 21.30
BLF      2.82 191 eP    01 50.00  -0.4
                S      02 23.50
     S.D. = 0.6  on   4 of   5 obs.
-----------------------------------
*  NOV  19, 1993  23h 11m 41.30± 3.27s
   31.893 S ±13.2km   72.288 W ±28.5km
   DEPTH =  10.0km  (geophysicist)
 OFF COAST OF CENTRAL CHILE        (134)
      MD 4.0 (SAN).

ROCH     1.52 135 iP+   12 08.27  -0.5
                iS     12 29.02
JACH     1.64 119 iPd   12 09.63  -0.7
LCCH     1.69 159 iP    12 11.18   0.2
PEL      1.84 133 iPd   12 12.86  -0.4
                iS     12 38.34
TACH     2.09 147 iPd   12 17.52   0.7
LNV      2.19 161 iP+   12 17.63  -0.5
FCH      2.21 131 iP    12 18.33  -0.5
                iS     12 48.97
PCH      2.28 140 iPd   12 19.93   0.3
CACH     2.63 148 iPd   12 25.55   0.9
MDZ      3.07 110 eP    12 36.50   5.7X
                eS     13 15.90
ZON      3.09  85 eP    12 32.50   1.4
CYA      6.59  60 ePc   13 20.00  -0.6
     S.D. = 0.8  on  11 of  12 obs.
-----------------------------------
%  NOV  19, 1993  23h 13m 39.00± 2.17s
   18.529 N ±22.5km   66.444 W ± 9.7km
   DEPTH =  33.0km  (normal)
 PUERTO RICO REGION                ( 90)

APR      0.28 254 P     13 45.00  -1.5
LRS      0.45 238 P     13 51.50   2.7
                S      13 58.50
CLLP     0.46 196 P     13 48.90  -0.2
SJG      0.50 146 iP    13 49.90   0.2
PORP     0.51 201 P     13 49.00  -0.7
LPR      0.59 112 P     13 51.00   0.1
CPD      0.70 134 P     13 43.00  -9.5X
MGP      0.80 230 P     13 53.30  -0.6
     S.D. = 1.6  on   7 of   8 obs.
-----------------------------------
?  NOV  19, 1993  23h 14m 07.86± 3.68s
   7.774 N ±29.4km   72.628 W ±47.1km
   DEPTH = 146.3 ± 37.9 km
 NORTHERN COLOMBIA                 ( 99)

SDV      2.26  61 iPnd  14 47.00   0.5
                iSn    15 18.10
TOV      3.44  54 ePn   15 00.20  -1.3
                iSn    15 41.10
CEOS     4.43  73 iPc   15 14.70   0.2
                iS     15 59.80
CANV     4.96  49 eP    15 21.30  -0.3
MORO     5.25  54 eP    15 27.00   1.4
GUAC     5.81  65 iPc   15 32.50  -0.6
LPAZ    24.32 169 P     19 14.20   0.1
LPB     24.56 170 (P)   19 16.00  -0.2
CNCB    24.86 169 P     19 19.20   0.1
     S.D. = 0.9  on   9 of   9 obs.
-----------------------------------
%  NOV  19, 1993  23h 51m 10.61± 0.81s
   40.525 N ± 6.1km   22.378 E ± 7.0km
   DEPTH =  10.0km  (geophysicist)
 GREECE                            (364)

GRG      0.43   2 ePg   51 19.50   0.1
                eSg    51 25.16
LIT      0.43 169 iPg   51 19.42   0.0
                iSg    51 26.76
THE      0.46  76 iPg   51 20.04   0.1
                eSg    51 27.44
KNT      0.75  32 iPg   51 25.12  -0.2
                eSg    51 37.10
FNA      0.80 289 ePg   51 26.28   0.0
                iSg    51 39.24
     S.D. = 0.1  on   5 of   5 obs.
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% NOV  20, 1993  00h 54m 52.87± 2.94s
   33.379 S ± 9.4km   71.787 W ±26.5km
   DEPTH =  33.0km  (normal)
 NEAR COAST OF CENTRAL CHILE       (135)
      MD 3.7 (SAN).

LCCH     0.21 118 iPd   54 59.88   0.4
                  iS    55 04.17
LNV      0.66 151 iPd   55 05.25  -0.4
                  iS    55 13.75
TACH     0.76 111 iP+   55 06.68  -0.5
                  iS    55 16.11
ROCH     0.77  58 iP+   55 06.99  -0.5
                  iS    55 16.92
PEL      0.95  76 eP    55 09.99   0.0
                  iS    55 22.28
PCH      1.09 103 iPd   55 11.88  -0.1
                  iS    55 25.83
JACH     1.22  56 iP+   55 14.10   0.3
                  iS    55 29.60
CACH     1.23 127 iP+   55 14.59   0.6
                  iS    55 30.67
FCH      1.25  88 iPd   55 14.63   0.1
     S.D. = 0.4  on   9 of   9 obs.
-------------------------------------
   NOV  20, 1993  01h 14m 28.44± 0.49s
   54.358 N ± 6.9km  164.188 W ± 6.5km
   DEPTH =  33.0km  (normal)
   4.6mb ( 17 obs.)
 UNIMAK ISLAND REGION              ( 10)
      ML 5.0 (PMR).

SDN      2.35  64 eP    15 06.30   0.8
                  i     15 08.50
                  iS    15 39.50
KDC      7.38  58 eP    16 15.60  -0.8
ADK      7.92 257 eP    16 24.40   0.4
SVW      8.17  31 eP    16 29.10   1.5
TTA      9.59  23 eP    16 48.70   1.5
PWA     10.52  40 e(P)  17 03.20   3.3X
TOA     12.23  43 eP    17 22.70  -0.3
        0.7s    83.50nm          6.0mb X
IMA     12.83  20 eP    17 33.50   2.4
        0.6s     4.60nm          4.7mb
FBA     13.38  31 eP    17 39.00   0.8
SIT     16.43  69 e(P)  18 17.30  -0.5
INK     19.97  34 eP    18 58.50  -1.7
        0.9s    10.00nm          4.1mb
YKA     26.58  52 eP    20 12.90   8.0X
        0.7s     7.60nm          4.4mb
BMW     26.94  90 (P)   20 08.97   0.6
MBC     27.55  21 eP    20 15.00   1.4
NEW     29.59  82 ePd   20 32.13  -0.1
YBH     30.01  98 iPc   20 37.31   1.1
        1.0s    10.00nm          4.6mb
LBFM    30.73  97 ePc   20 43.64   1.0
WDC     30.85  99 iPc   20 44.25   0.8
        1.2s    10.00nm          4.5mb
MIN     31.54  99 ePc   20 49.70   0.0
        1.1s    10.00nm          4.6mb
ORV     32.12 100 iPc   20 54.39  -0.2
CMB     33.79 101 iPc   21 09.80   0.6
KVN     34.43  97 eP    21 15.34   0.5
MEMM    34.88 100 eP    21 19.64   1.2
BONR    35.05  99 ePc   21 21.40   1.1
MTUM    35.31 100 ePc   21 23.53   1.1
DUG     36.76  91 eP    21 34.65   0.1
        1.0s     4.68nm          4.3mb
TPNV    36.93  98 ePc   21 36.76   0.8
        0.6s    13.72nm          5.0mb
GSC     37.76 101 eP    21 43.68   0.8
ARUT    37.99  95 (P)   21 45.31   0.4
MSU     38.24  93 eP    21 47.64   0.5
SRU     38.81  91 eP    21 52.10   0.3
PLM     39.13 103 eP    21 55.48   1.0
RSSD    39.44  80 iPc   21 56.91  -0.1
        0.8s    14.53nm          4.8mb
PV09    40.03  90 (P)   22 01.81  -0.3
PV10    40.17  90 eP    22 03.33   0.2
PV08    40.26  90 ePc   22 03.74  -0.3
ULM     40.49  67 eP    22 08.00   2.7X
GOL     41.44  86 ePc   22 14.03   0.5
        0.8s     9.03nm          4.6mb
FRB     45.52  38 eP    22 46.00   0.0
        0.8s     5.00nm          4.5mb
DAG     47.31  10 eP    22 55.00  -5.0X
JAQ     48.54  52 eP    23 09.50  -0.4
WMOK    48.66  86 iPc   23 10.31  -0.7
        0.7s    18.92nm          5.2mb
MEO     48.74  86 iPc   23 11.00  -0.7
TUL     49.58  82 iPc   23 17.00  -1.1
ELC     52.40  76 eP    23 36.97  -2.4
GAC     54.01  60 eP    23 50.00  -1.2
OXF     54.25  79 ePc   23 51.31  -1.8
CBM     56.77  55 (P)   24 09.03  -2.2
        0.9s    11.20nm          4.9mb
MYNC    56.86  75 ePc   24 09.37  -2.7
        0.6s     8.81nm          5.0mb
CVL     57.90  68 eP    24 18.27  -1.0
LMN     59.12  53 eP    24 26.50  -1.2
XAN     61.44 289 eP    24 45.00   1.3
NB2     64.89   2 P     25 04.90  -1.2
        0.8s     2.60nm          4.4mb
HFS     65.85   1 eP    25 10.10  -2.0
        0.5s     1.60nm          4.4mb
CD2     66.65 291 P     25 20.00   2.2X
GYA     68.46 285 P     25 32.00   2.7X
QUE     84.97 317 eP    27 09.50   7.9X
CTA     85.41 226 iP    27 12.00   8.5X
WRA     90.68 236 P     27 28.40  -0.4
        0.7s     0.40nm          3.9mb
BUL    144.47 339 ePKP  34 04.00   1.1
BFT    149.48 334 ePKP  34 02.00  -9.0X
SLR    149.95 337 ePKP  34 23.00  11.4X
        0.7s    27.00nm
KSR    150.38 339 ePKP  34 20.50   8.2X
SEK    152.59 337 ePKP  34 33.50  18.0X
        0.5s    20.00nm
BOSA   153.34 341 ePKP  34 24.60   8.3X
        0.2s     6.00nm
     S.D. = 1.1  on  52 of  65 obs.
-------------------------------------
   NOV  20, 1993  01h 40m 03.60± 0.65s
   43.005 N ± 5.1km   18.767 E ± 4.1km
   DEPTH =   5.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)

BRY      0.19 238 iPgd  40 07.60   0.0
                  iSg   40 10.54
NKY      0.26 138 iPgc  40 09.39   0.6
                  iSg   40 14.04
PLE      0.56  54 iPgd  40 14.74  -0.1
                  iSg   40 23.15
HCY      0.59 200 iPgc  40 15.45   0.0
                  iSg   40 24.27
TTG      0.68 148 iPgc  40 16.25  -1.0
                  iSg   40 27.56
BDV      0.72 176 iPgc  40 18.00   0.0
                  iSg   40 29.06
IVA      0.84  99 iPgd  40 20.36   0.0
                  iSg   40 33.19
PVY      0.98 114 iPgd  40 22.94   0.2
                  iSg   40 37.97
ULC      1.10 161 iPgd  40 25.09   0.4
                  iSg   40 41.77
HVAR     1.71 277 iPn   40 34.20   0.0
                  iSg   40 59.20
     S.D. = 0.5  on  10 of  10 obs.
-------------------------------------
% NOV  20, 1993  02h 28m 07.47± 0.70s
   26.420 S ± 6.6km   27.401 E ± 7.8km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)
      ML 2.4 (PRE).

KSR      0.71 321 eP    28 21.90   0.1
                  S     28 33.00
SLR      1.05  49 eP    28 28.00   0.2
                  S     28 41.00
SEK      1.91 174 eP    28 42.00   0.9
                  S     29 04.50
BFT      2.49  74 eP    28 49.00  -0.5
                  S     29 18.00
BOSA     2.81 218 iPd   28 54.00   0.2
                  S     29 30.00
BLF      2.89 202 e(P)  28 54.20  -0.9
                  S     29 25.00
     S.D. = 0.8  on   6 of   6 obs.
-------------------------------------
* NOV  20, 1993  03h 10m 05.65± 0.68s
   34.799 N ± 6.6km   25.795 E ± 5.5km
   DEPTH =  66.9 ±  6.9 km
   4.2mb ( 15 obs.)
 CRETE                             (370)

NPS      0.49 342 eP    10 19.20   1.0
                  eS    10 34.10
VAM      1.44 295 eP    10 32.30   2.2
                  eS    10 50.90
ATH      3.58 333 eP    10 59.90   0.0
IZM      3.78  18 ePn   11 03.10   0.3
PRK      4.46   5 eP    11 11.50  -0.7
KHL      4.62  39 iP    11 25.20  10.5X
BCK      4.70  54 iPn   11 16.70   0.9
EZN      5.04   5 iP    11 19.30  -1.1
DST      5.30  24 eP    11 24.60   0.4
PPCY     5.39  87 eP    11 25.00  -0.3
                  eS    12 22.00
PAIG     5.39 342 eP    11 25.26   0.0
OUR      5.71 346 eP    11 29.78   0.0
LIT      5.91 335 eP    11 31.82  -0.8
ALN      6.09   2 eP    11 34.66  -0.4
CSS      6.20  86 eP    11 36.00  -0.6
                  eS    12 42.00
KZN      6.36 331 eP    11 40.50   1.6
GRG      6.71 337 eP    11 43.62  -0.1
KNT      6.75 341 eP    11 44.22  -0.1
HLW      6.80 135 ePn   11 45.00   0.0
                  eSn   12 56.50
FNA      6.92 331 eP    11 45.34  -1.4
RZN      6.93 353 iP    11 47.00   0.1
MMB      6.97 347 iP    11 47.00  -0.4
PLD      7.34 354 iP    11 54.00   1.5
KKB      7.37 344 iP    11 52.00  -0.9
OHR      7.43 329 ePn   11 50.50  -3.3X
VTS      8.04 346 iP    12 03.00   0.8
HQL      9.59 123 eP    12 22.33  -1.1
                  eS    13 56.33
SRFA     9.90 124 eP    12 27.00  -0.5
BADA    10.03 126 eP    12 27.00  -2.4
AYN     10.50 121 ePd   12 34.80  -0.9
                  eS    14 24.87
GEC2    16.65 331 Pn    13 56.80   0.8
OSS     16.75 320 eP+   14 00.40   3.1X
VDL     16.98 318 eP+   14 03.30   3.0X
TMA     17.09 316 ePd   14 02.80   1.2
KSP     17.46 340 eP    14 04.00  -2.0
LLS     17.48 319 ePd   14 07.50   1.1
DIX     17.92 314 ePd   14 13.00   1.0
LPG     18.01 312 eP    14 13.80   0.7
LPL     18.04 312 eP    14 14.20   0.9
GRF     18.33 329 eP    14 15.80  -0.9
CLL     18.92 335 eP    14 28.00   4.4X
BSF     19.25 318 eP    14 25.50  -2.0
CDF     19.34 320 eP    14 27.60  -0.8
        0.7s    13.10nm          4.3mb
HAU     19.60 318 eP    14 29.70  -1.3
        0.5s     9.25nm          4.3mb
SMF     20.34 312 eP    14 37.50  -1.3
LBF     20.42 313 eP    14 38.30  -1.3
LOR     20.63 314 eP    14 40.40  -1.3
WLF     20.70 322 iPc   14 41.70  -0.6
        0.8s     6.10nm          4.0mb
AVF     20.71 312 eP    14 41.90  -0.6
SSF     20.74 313 eP    14 42.00  -0.8
BGF     20.91 311 eP    14 44.00  -0.6
TCF     21.20 310 eP    14 48.80   1.3
RJF     21.27 307 eP    14 47.00  -1.1
LPO     21.27 305 eP    14 50.40   2.2
ENN     21.51 324 eP    14 50.50   0.0
        0.9s     9.00nm          4.2mb
LSF     21.61 309 eP    14 53.40   1.8
        0.6s     3.70nm          4.0mb
OBN     21.64  17 ePc   14 54.00   2.2
        0.6s    32.00nm          4.9mb
DOU     21.76 321 Pc    14 53.20   0.2
WTS     21.93 327 eP    14 55.00   0.4
        0.9s     8.50nm          4.2mb
                  e     15 07.00
SNF     22.17 322 iPd   14 57.52   0.5
MFF     22.82 309 eP    15 05.30   1.8
        0.4s     1.95nm          3.9mb
LDF     23.62 314 eP    15 10.50  -0.7
        0.2s     1.15nm          4.0mb
FLN     23.90 314 eP    15 13.30  -0.7
        0.2s     2.05nm          4.2mb
LPF     23.94 312 eP    15 14.40   0.1
        0.5s     5.30nm          4.3mb
GRR     23.97 313 eP    15 14.50  -0.1
        0.5s     4.25nm          4.2mb
```

```
UPP     25.64 350 iP     15 29.20  -1.1
NUR     25.74 359 iP     15 29.80  -1.4
        0.5s     4.80nm          4.3mb
HFS     26.55 346 eP     15 35.80  -2.9
        0.4s     0.80nm          3.7mb
KAF     27.34   1 iP     15 44.30  -1.5
        0.6s     6.20nm          4.4mb
GKN     50.07  81 P      18 58.20   2.2
DMN     50.61  81 P      19 02.60   2.4
KKN     50.68  81 P      19 03.00   2.4
GBA     51.00 101 P      19 06.00   3.1X
GUN     51.12  80 P      19 06.20   2.1
     S.D. = 1.3  on  68 of  74 obs.
-----------------------------------
?  NOV  20, 1993  03h 13m 11.22± 3.89s
   31.942 S ±15.9km   72.219 W ±32.9km
   DEPTH =  10.0km  (geophysicist)
 OFF COAST OF CENTRAL CHILE        (134)
      MD 4.0 (SAN).

ROCH    1.45 135 iP+     13 37.18  -0.5
                 iS      13 58.48
JACH    1.56 119 eP      13 38.44  -0.7
LCCH    1.62 160 iP+     13 40.19   0.2
PEL     1.76 133 iPd     13 41.82  -0.2
                 iS      14 07.66
TACH    2.02 148 eP      13 46.40   0.7
LNV     2.12 162 eP      13 46.40  -0.7
FCH     2.13 131 iP+     13 47.34  -0.3
PCH     2.21 140 eP      13 48.58   0.1
CACH    2.56 148 iP+     13 54.66   1.1
RTCB    2.95  82 eP      13 59.20   0.1
                 S       14 30.00
MDZ     3.00 109 eP      14 16.40  16.7X
                 iS      14 45.10
RTLL    3.26  80 e(P)    14 04.80   1.4
CFA     3.41  85 ePc     14 07.80   2.3
MRA     5.54  97 eP      14 33.30  -2.4
CYA     6.56  60 eP      14 49.00  -1.2
     S.D. = 1.3  on  14 of  15 obs.
-----------------------------------
*  NOV  20, 1993  03h 23m 29.12± 1.05s
   38.911 N ± 9.5km  142.745 E ±17.8km
   DEPTH =  33.0km  (normal)
 NEAR EAST COAST OF HONSHU, JAPAN(228)

HOOJ    3.49   7 eP      24 22.90   0.5
                 eS      25 02.30
MRRJ    3.73 341 eP      24 25.30  -0.5
                 eS      25 04.50
MAT     4.30 238 (P)     24 34.00   0.0
KUSJ    4.44  19 eP      24 35.30  -0.5
                 eS      25 23.60
ASAJ    5.20 359 eP      24 47.10   0.4
WRA    59.07 189 P       33 28.40   0.0
        0.5s     0.40nm          3.8mb
     S.D. = 0.6  on   6 of   6 obs.
-----------------------------------
&  NOV  20, 1993  03h 27m 44.10s
   33.950 N          116.313 W
   DEPTH =   8.5km
 SOUTHERN CALIFORNIA               ( 43)
      <PAS-P>. ML 2.8 (PAS).

PEC     0.71 266 iPc     27 57.05  -1.2
                 eS      28 04.84
PLM     0.75 218 ePd     27 58.11  -1.0
                 eS      28 08.30
SSK     1.17 283 eP      28 05.36  -0.9
GSC     1.41 343 ePnd    28 10.24   0.2
GLA     1.53 125 ePn     28 08.91  -2.8
ISA     2.47 314 eP      28 23.04  -2.2
ABL     2.57 291 ePn     28 25.47  -1.3
TPNV    2.99   1 ePn     28 32.01  -0.8
        8 obs. associated
-----------------------------------
?  NOV  20, 1993  03h 46m 14.58± 1.78s
   5.906 S ±18.3km  146.631 E ±21.8km
   DEPTH =  33.0km  (normal)
 EASTERN NEW GUINEA REG., P.N.G. (207)
      ML 4.1 (PMG).

LAT     0.84 154 iPd     46 29.80  -0.2
PMG     3.52 171 eP      47 08.50   0.2
WRA    18.37 219 eP      50 28.50  -0.1
        0.6s     1.40nm          3.3mb
ASPA   21.49 213 eP      51 13.20  10.4X
        1.1s     3.00nm
CHTO   53.02 299 eP      55 31.00   0.0
     S.D. = 0.3  on   4 of   5 obs.
-----------------------------------
?  NOV  20, 1993  03h 48m 38.55± 1.17s
   13.163 S ±31.9km   72.245 W ±15.8km
   DEPTH =  33.0km  (normal)
 CENTRAL PERU                      (116)

NNA     4.64 284 eP      49 48.20   0.0
        0.8s    29.85nm
                 i       49 50.20
                 eS      50 37.50
LPAZ    5.05 128 iPc     49 55.00   0.4
LPB     5.22 130 P       49 57.00   0.1
CNCB    5.49 132 P       50 00.80   0.1
CCH     7.24 126 P       50 24.30  -0.8
SIV    11.17 106 P       51 19.30   0.1
     S.D. = 0.5  on   6 of   6 obs.
-----------------------------------
%  NOV  20, 1993  05h 22m 23.16± 1.16s
   17.965 N ±12.1km   66.747 W ± 6.8km
   DEPTH =  26.3 ±  8.8 km
 PUERTO RICO REGION                ( 90)

PORP    0.14  50 P       22 28.00  -0.3
CLLP    0.20  55 P       22 29.00   0.1
MGP     0.33 278 P       22 30.70   0.0
                 S       22 35.70
LRS     0.34 344 P       22 31.20   0.3
                 S       22 36.20
APR     0.49   2 P       22 33.00  -0.1
SJG     0.59  75 iP      22 34.90   0.1
                 S       22 43.70
CPD     0.79  85 P       22 38.60   0.3
LPR     0.90  68 P       22 39.80  -0.3
     S.D. = 0.3  on   8 of   8 obs.
-----------------------------------
&  NOV  20, 1993  05h 35m 17.53s
   57.334 N          157.086 W
   DEPTH =  10.0km  (geophysicist)
   4.2mb (  2 obs.)
 ALASKA PENINSULA                  ( 12)
      <AEIC>. ML 3.9 (AEIC), 4.1
      (PMR).

MCNL    2.36  37 eP      35 53.81  -3.1
CDD     2.43  47 eP      35 55.38  -2.5
KDC     2.51  79 P       35 56.20  -2.8
                 S       36 29.60
SDN     2.76 225 P       36 01.20  -1.3
AUW     2.79  42 P       36 04.30   1.2
SYI     2.81  61 eP      36 01.38  -1.9
PDB     2.89  30 eP      36 01.87  -2.6
                 eS      36 38.06
OPT     3.08  39 eP      36 04.89  -2.3
ILIM    3.50  36 eP      36 11.19  -1.9
CNPM    3.78  52 eP      36 14.68  -2.4
RED     3.82  34 P       36 15.80  -1.9
RDW     3.86  33 P       36 16.30  -2.1
SVW     3.86  11 P       36 15.80  -2.5
NCT     3.89  32 eP      36 16.11  -2.6
REF     3.90  34 P       36 17.30  -1.6
CP2     4.66  30 eP      36 28.22  -1.5
SEW     4.85  52 eP      36 30.67  -1.6
PMS     5.50  41 eP      36 40.00  -1.5
LTI     5.53  57 eP      36 38.33  -3.5
TTA     5.64   5 P       36 39.70  -3.8
PWA     5.67  37 eP      36 43.50  -0.4
KNIM    5.72  54 eP      36 40.36  -4.1
PMR     5.89  40 e(P)    36 48.70   1.9
TOA     7.30  45 eP      37 04.70  -2.1
IMA     8.91   9 eP      37 25.50  -3.8
INK    15.26  34 eP      38 55.50   1.3
MSU    34.68 103 eP      42 06.70  -2.7
SRU    35.12 101 eP      42 10.14  -2.9
RSSD   35.15  89 (P)     42 09.43  -3.9
        0.6s     2.22nm          4.2mb
FRB    40.65  43 eP      42 55.00  -3.8
        0.6s     3.00nm          4.2mb
        30 obs. associated
-----------------------------------
   NOV  20, 1993  06h 30m 50.63± 0.44s
   32.433 S ± 7.4km   69.371 W ± 6.3km
   DEPTH =  10.0km  (geophysicist)
 MENDOZA PROVINCE, ARGENTINA       (139)
      MD 4.0 (SAN).

RTCV    0.91  51 eP      31 07.50  -0.6
JACH    1.06 256 iP+     31 09.78  -0.9
                 iS      31 23.38
ZON     1.06  34 eP      31 14.40   3.7X
                 eS      31 25.40
FCH     1.18 221 iPd     31 11.74  -1.2
                 iS      31 26.94
CFA     1.27  50 iPd     31 14.50   0.3
                 S       31 31.90
PEL     1.31 237 iP+     31 13.94  -1.0
                 iS      31 31.04
RTLL    1.34  35 ePd     31 15.00  -0.4
ROCH    1.48 248 iPd     31 17.29  -0.3
SAN     1.49 227 iPd     31 17.11  -0.3
PCH     1.52 219 iPd     31 17.81  -0.2
                 iS      31 38.10
TACH    1.79 227 iPd     31 22.52   0.7
                 iS      31 45.73
CACH    1.97 211 iPd     31 25.76   1.2
                 iS      31 51.54
LCCH    2.12 240 iP+     31 27.98   1.4
LNV     2.29 228 iPd     31 30.38   1.4
RFA     2.45 162 iPc     31 30.50  -0.9
                 S       32 02.00
MRA     3.10  91 ePd     31 40.60   0.2
                 S       32 26.80
RTPR    3.24  50 e(P)    31 15.00 -27.5X
                 S       32 29.00
CYA     5.03  39 ePd     32 08.50   0.5
     S.D. = 0.9  on  16 of  18 obs.
-----------------------------------
%  NOV  20, 1993  06h 41m 03.72± 1.56s
   17.905 N ±12.4km   66.720 W ± 5.9km
   DEPTH =  10.0km  (geophysicist)
 PUERTO RICO REGION                ( 90)

PORP    0.17  28 P       41 08.10   0.6
CLLP    0.22  38 P       41 09.30   0.8
MGP     0.37 286 P       41 11.40   0.2
                 S       41 16.40
LRS     0.40 343 P       41 12.00   0.0
                 S       41 17.00
APR     0.54 359 P       41 13.90  -0.8
                 S       41 20.20
SJG     0.58  69 iP      41 15.50   0.0
                 S       41 24.50
LPR     0.90  63 P       41 20.30  -0.8
                 S       41 32.30
     S.D. = 0.7  on   7 of   7 obs.
-----------------------------------
%  NOV  20, 1993  07h 38m 11.76± 1.01s
   20.379 S ±12.2km  125.546 E ±10.6km
   DEPTH =  10.0km  (geophysicist)
 WESTERN AUSTRALIA                 (590)

MBL     5.40 261 eP      39 40.50   6.1X
                 eS      40 39.00
WARB    5.87 170 eP      39 42.20   1.4
        0.2s     3.00nm          4.7mb
                 eS      40 46.50
WRA     8.27  89 eP      40 13.60  -1.1
                 eS      41 35.70
ASPA    8.41 114 eP      40 17.20   0.5
        0.4s    27.00nm          5.9mb X
                 eS      41 44.20
MTN     9.20  36 eP      40 28.00   0.4
                 eS      42 04.00
NANU    9.58 255 eP      40 39.00   6.3X
                 eS      42 17.00
COOL   11.19 200 eP      40 52.80  -2.0
        0.3s     2.00nm          4.9mb
                 eS      42 51.00
MRWA   12.35 223 iPd     41 10.70   0.2
        0.3s     2.00nm          4.8mb
                 eS      43 18.50
BAL    12.93 216 eP      41 18.70   0.4
        0.3s     2.00nm          4.8mb
                 eS      43 31.50
KLB    13.17 210 eP      41 21.00  -0.5
        0.3s     2.00nm          4.7mb
                 eS      43 37.00
MUN    14.26 214 eP      41 36.50   0.7
                 eS      44 03.00
     S.D. = 1.2  on   9 of  11 obs.
-----------------------------------
?  NOV  20, 1993  09h 04m 05.28± 0.96s
   39.079 N ± 8.1km   27.621 E ± 9.8km
```

20d 09h

```
   DEPTH =  10.0km  (geophysicist)
 TURKEY                                (366)
      ML 2.7 (ISK).

IZM      0.74 202 ePg   04 19.70  -0.1
                  eSg   04 31.70
DST      0.94  56 ePn   04 23.40   0.1
EZN      1.25 307 iPn   04 28.60   0.1
EDC      1.28   8 ePn   04 28.80  -0.2
     S.D. = 0.3  on   4 of   4 obs.
-------------------------------------
?  NOV  20, 1993  09h 08m 04.47± 1.01s
   39.109 N ± 8.5km   27.600 E ±10.2km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                                (366)
      ML 2.8 (ISK).

IZM      0.76 201 ePg   08 19.10  -0.2
                  eSg   08 31.00
DST      0.94  58 ePn   08 22.90   0.5
EZN      1.22 306 iPn   08 27.60   0.5
EDC      1.25   9 ePn   08 27.00  -0.8
     S.D. = 1.0  on   4 of   4 obs.
-------------------------------------
%  NOV  20, 1993  09h 20m 51.89± 1.86s
   29.862 S ± 9.4km   19.773 E ±17.8km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA              (584)
      ML 3.5 (PRE).

POF      0.50  18 iPc   21 02.20   0.2
                  S     21 10.20
CVN      1.58 180 eP    21 22.40   1.7
                  S     21 47.40
PKA      2.60  87 eP    21 37.00   1.6
SUR      2.66 161 eP    21 34.00  -2.4
                  S     22 13.00
CER      3.51 187 eP    21 53.00   4.7X
                  S     22 32.00
BLE      4.14 193 eP    22 26.00  28.9X
                  S     22 45.00
FRS      4.82  90 eP    22 06.50  -0.4
                  S     23 06.00
HVD      5.01 100 eP    22 09.50  -0.1
                  S     23 11.00
BLF      5.64  84 e(P)  22 20.00   1.4
                  S     23 29.00
GRM      6.74 122 e(P)  22 34.50   0.4
                  S     24 14.50
SEK      7.04  79 e(P)  22 38.00  -0.3
                  S     23 58.00
WIN      7.65 341 eP    21 56.50 -50.4X
                  S     23 16.00
SLR      8.58  63 eP    22 57.80  -2.1
                  S     24 32.40
     S.D. = 1.6  on  10 of  13 obs.
-------------------------------------
?  NOV  20, 1993  10h 16m 09.73± 3.52s
   39.663 N ±30.3km   29.433 E ±21.2km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                                (366)
      ML 2.6 (ISK).

DST      0.62 265 ePg   16 21.90  -0.4
                  eSg   16 32.90
IZI      0.67   3 ePg   16 22.60  -0.6
EYL      1.06  31 ePn   16 30.00   0.2
EDC      1.39 300 ePn   16 35.80   0.7
     S.D. = 1.0  on   4 of   4 obs.
-------------------------------------
?  NOV  20, 1993  10h 28m 02.92± 0.90s
   28.101 S ± 9.1km   26.786 E ± 8.8km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA              (584)

SEK      0.77 107 eP    28 18.20  -0.3
                  S     28 27.20
BLF      1.13 207 eP    28 25.00   0.3
                  S     28 41.50
SWZ      1.59 305 eP    28 31.50  -0.4
                  S     28 50.20
SLR      2.71  30 eP    28 48.50   0.5
                  S     29 24.00
     S.D. = 0.7  on   4 of   4 obs.
-------------------------------------
*  NOV  20, 1993  10h 39m 15.77± 0.37s
   49.597 S ± 7.9km  117.322 E ± 8.3km
   DEPTH =  10.0km  (geophysicist)
   4.9mb ( 18 obs.)  4.3Msz (  1 obs.)
 SOUTH OF AUSTRALIA                    (437)

CSY     17.10 189 eP    43 25.50   9.4X
         0.8s    11.10nm          4.0mb
MUN     17.62 357 eP    43 25.00   2.2
         1.0s    28.00nm          4.3mb
MRWA    20.38 357 eP    43 55.00  -0.2
         0.7s    19.00nm          4.5mb
ADE     21.44  55 e(P)  44 06.50   0.4
MEEK    22.94   3 eP    44 21.50   0.4
         1.0s    43.00nm          4.9mb
WARB    24.47  21 eP    44 36.20   0.4
         0.8s    15.00nm          4.7mb
STK     25.34  55 iPc   44 37.30  -6.9X
         1.2s     8.90nm          4.3mb
ASPA    28.97  33 iPc   45 16.50  -0.9
         0.9s    12.10nm          4.7mb
       Z  22s     0.90um          4.3Msz
ARMA    32.13  66 eP    45 47.20   1.7
MAW     32.18 216 P     45 48.20   2.8
         0.9s    16.10nm          5.0mb
WRA     32.56  31 P     46 08.90  19.7X
         1.1s     2.10nm
WRA     32.56  31 iPc   45 48.30  -0.9
         0.8s     3.20nm          4.3mb
BRS     35.04  64 iPc   46 12.00   1.4
                 i      46 19.00
CTA     37.39  48 iPd   46 30.60   0.2
         1.5s    41.67nm          5.0mb
                 ipP    46 38.00  25kmX
DZM     47.26  73 iPc   47 49.50  -1.5
KGM     52.81 342 eP    48 32.00  -1.4
TSM     53.67   1 eP    48 40.50   0.8
IPM     55.78 340 ePc   48 53.90  -1.2
HVD     68.48 248 eP    50 25.50   5.2X
         0.2s    30.00nm          6.3mb X
SEK     68.81 251 eP    50 30.50   8.1X
         1.0s    26.00nm          5.4mb
BLF     69.13 249 eP    50 11.00 -13.3X
         0.6s    28.00nm
BFT     69.19 255 eP    50 25.50   0.7
FRS     69.20 248 eP    50 30.00   5.5X
         1.0s    48.00nm          5.6mb
SUR     69.98 243 eP    50 37.50   8.0X
CHTO    70.03 341 eP    50 29.10  -0.5
GBA     72.06 319 P     50 41.00  -0.9
BUL     74.11 258 iPd   50 53.80  -0.4
         1.2s    15.63nm          4.9mb
HYB     75.02 322 eP    50 59.00  -0.1
                 e      51 06.80
KMI     75.51 346 Pd    51 03.00   1.0
         1.5s   110.00nm          5.7mb
                 pP     51 10.50  24kmX
GYA     76.31 350 P     51 06.80   0.4
         1.0s    22.00nm          5.2mb
                 pP     51 14.00  23kmX
WHN     79.82 357 eP    51 25.50   0.1
                 pP     51 33.00  24kmX
CD2     81.05 348 iPc   51 32.50   0.5
PKI     81.91 332 PKP   51 36.60  -0.3
DMN     82.04 331 PKP   51 37.40  -0.1
GUN     82.08 332 PKP   51 37.80  -0.1
KKN     82.15 332 PKP   51 38.00  -0.1
GKN     82.55 331 PKP   51 39.00  -1.0
XAN     83.60 353 P     51 45.00  -0.1
         1.2s    26.00nm          5.3mb
                 pP     51 52.40  23kmX
                 sP     51 56.70
NDI     85.71 325 eP    51 55.00  -0.8
LZH     86.14 349 eP    51 58.80   0.8
         1.5s    45.00nm          5.4mb
                 pP     52 06.00  23kmX
TIY     87.04 356 eP    52 02.00  -0.2
CN2     93.29   6 eP    52 32.50   1.4
         1.0s     7.00nm          5.0mb
INK    141.66  34 ePKP  58 47.50  -0.1
DUG    143.86  86 ePKP  58 51.13  -1.4
HVU    144.71  83 ePKP  58 53.57  -0.3
                 e      59 00.78
SRU    144.77  89 ePKP  58 53.08  -1.0
                 e      59 00.83
NEW    144.86  71 ePKP  58 52.49  -1.3
                 e      59 00.29
ALQ    144.98  98 ePKP  58 53.69  -0.9
                 e      59 00.86
DAU    144.99  86 ePKP  58 54.60   0.0
                 e      59 02.21
PV10   145.33  91 ePKP  58 53.32  -1.9
                 e      59 02.46
PV09   145.33  91 ePKP  58 55.07  -0.2
MBC    145.37  21 ePKP  58 54.50   0.7
         1.0s     8.00nm
PV08   145.69  91 ePKP  58 56.46   0.5
                 e      59 04.03
MCMT   146.11  79 ePKP  58 58.40   2.1
GOL    148.44  92 ePKP  59 05.04   4.8X
GLD    148.56  92 ePKP  59 06.12   5.8X
MEO    149.89 106 iPKPd 59 08.30   6.0X
ACO    150.74 102 iPKPd 59 09.80   6.3X
RES    151.44  17 ePKP  59 09.50   6.2X
         0.9s    11.00nm
RSSD   151.47  85 ePKP  59 04.00  -0.6
                 ePKPbc59 10.94
TUL    152.35 107 iPKPc 59 15.50   9.6X
     S.D. = 1.0  on  47 of  61 obs.
-------------------------------------
   NOV  20, 1993  11h 37m 59.19± 0.25s
   31.723 S ± 3.2km   72.009 W ± 4.9km
   DEPTH =  20.9km  (  3 depth phases)
   5.2mb ( 12 obs.)
 OFF COAST OF CENTRAL CHILE            (134)
      MD 5.1 (SAN).

IHA      1.34 167 iPd   38 22.10  -0.6
                  iS    38 36.50
ROCH     1.50 146 iP+   38 25.57   0.3
JACH     1.53 129 iPd   38 26.76   1.1
                  iS    38 46.86
LCCH     1.79 168 iPd   38 28.35  -0.8
                  iS    38 49.24
PEL      1.81 142 iPd   38 30.29   0.8
SAN      2.07 147 iPd   38 33.54   0.2
TACH     2.13 155 iPd   38 34.44   0.3
FCH      2.16 138 iPd   38 35.55   0.6
PCH      2.27 147 iPd   38 36.53   0.2
LNV      2.28 167 iPd   38 34.92  -1.4
CACH     2.67 154 iPd   38 42.74   0.8
RTCB     2.75  86 iPc   38 47.40   4.3X
ZON      2.85  87 iPc   38 48.70   4.3X
MDZ      2.91 114 iPc   38 50.20   4.8X
                  i     38 54.20
                  i(S)  39 05.70
RTCV     2.96  94 iPc   38 50.00   4.0X
RTLL     3.05  84 e(P)  38 52.30   5.1X
CFA      3.22  89 iPd   38 53.10   3.4X
                  S     39 41.00
RFA      4.25 137 iPc   39 05.50   1.2
                  S     40 08.00
RTPR     4.93  75 eP    39 16.00   2.2
MRA      5.39  99 ePc   39 21.00   0.6
CYA      6.30  60 ePd   39 33.00  -0.3
                  S     40 49.50
FSA      7.69  45 ePc   39 56.50   3.8X
SLA      9.03  41 e(P)  40 11.00  -0.5
ARE     15.20   2 iPd   41 42.50   7.9X
CCH     15.24  22 P     41 41.40   6.3X
CNCB    15.29  15 P     41 37.30   1.3
                  i     45 54.00
LPB     15.54  14 eP    41 38.00  -1.1
                  LR    47 24.00
LPAZ    15.77  14 P     41 42.90   0.6
SIV     18.56  35 P     42 15.50  -1.3
NNA     20.14 346 eP    42 36.00   1.1
         0.8s     7.46nm          4.1mb X
PPD     20.80  67 eP    42 40.00  -1.7
                  e     42 45.40  20km
VAO     23.83  75 eP    43 11.70  -0.1
BAO     27.11  59 eP    43 41.70  -1.1
                  i     43 47.10  19km
SOB1    36.54  59 eP    45 02.90  -2.5
SNA     53.66 157 iPd   47 20.40  -0.6
         0.8s    42.00nm          5.5mb
SPA     58.45 180 iPc   47 54.50  -1.3
         0.7s    39.06nm          5.6mb
MYNC    67.41 349 (P)   48 55.37   0.2
         0.8s     5.48nm          4.8mb
LTX     67.77 330 (P)   48 56.51  -1.1
MEO     70.72 337 iPc   49 15.00  -0.6
TUL     70.88 340 iPc   49 16.10  -0.4
LIC     74.04  72 Pc    49 35.30  -0.3
         0.8s    18.00nm          5.1mb
TIC     74.29  72 P     49 37.18   0.1
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        1.0s    28.50nm          5.3mb
KIC    74.35  72 Pc    49 37.32  -0.1
        0.9s    44.00nm          5.5mb
SUR    75.91 119 eP    50 01.00  14.5X
        0.8s    46.00nm
GAC    77.12 358 eP    49 52.50   0.1
LMN    77.49   5 eP    49 55.00   0.5
PV08   77.82 331 eP    49 57.55   0.6
SRU    79.05 330 eP    50 03.58   0.1
ARUT   79.23 328 eP    50 05.55   1.1
MSU    79.26 329 ePc   50 05.28   0.6
HVD    80.27 120 eP    50 14.00   3.7X
DAU    80.44 331 eP    50 11.54   0.4
FRS    80.57 119 eP    50 11.50  -0.3
        0.7s    22.00nm          5.3mb
DUG    80.92 330 eP    50 13.67   0.3
        1.2s     8.17nm          4.6mb
RSSD   80.95 337 eP    50 13.72   0.2
        0.8s     5.29nm          4.6mb
TNP    81.23 325 eP    50 15.69   0.5
        0.8s     4.19nm          4.5mb
BLF    81.55 119 iPd   50 16.50  -0.6
        0.5s    25.00nm          5.5mb
BONR   81.66 325 eP    50 17.31  -0.2
                e      50 24.88  24km
HVU    82.22 330 eP    50 20.08   0.0
SEK    83.04 119 eP    50 34.00   9.1X
KSR    83.79 116 eP    50 10.50 -18.3X
ULM    84.31 345 eP    50 32.50   2.1
MCMT   84.77 332 iPc   50 34.10   0.9
SLR    84.91 117 iPd   50 34.00  -0.4
        0.7s    22.00nm          5.5mb
LGPM   86.18 324 eP    50 39.31  -0.8
BUL    88.19 112 eP    50 50.40  -0.1
WRA   122.75 210 PKP   56 55.00  -0.5
        0.7s     1.00nm
POO   146.56 105 iPKPc 57 43.20   3.5X
GBA   146.70 116 PKP   57 40.00   0.1
HYB   149.79 111 ePKP  57 49.50   4.7X
        1.0s    45.00nm
                e      57 59.50
IPM   152.22 165 ePKPd 57 55.00   6.5X
        0.9s    30.40nm
     S.D. = 0.9  on  55 of  71 obs.
-----------------------------------
   NOV  20, 1993  11h 54m 02.27± 0.18s
   54.306 N ± 3.9km  164.190 W ± 2.8km
   DEPTH =  33.0km  (normal)
   5.2mb ( 97 obs.)  4.9Msz ( 13 obs.)
 UNIMAK ISLAND REGION              ( 10)
      Mw 5.2 (HRV). Felt (IV) at Cold
      Bay, False Pass and King Cove.
      Felt (III) at Akutan.
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 22S, 31C
      Centroid Location:
      Origin Time        11:54: 4.8 0.4
      Lat 54.53N 0.10 Lon 164.03W 0.05
      Dep  15.0 FIX Half-duration  1.4
      Moment Tensor;   Scale 10**16 Nm
        Mrr=-7.05 1.44  Mtt= 0.27 2.16
        Mff= 6.78 0.80  Mrt= 0.00 0.00
        Mrf= 0.00 0.00  Mtf=-1.88 0.65
       Principal Axes:
        T  Val=  7.28  Plg= 0  Azm=255
        N       -0.23      0      165
        P       -7.05     90      180
      Best Double Couple:Mo=7.2*10**16
       NP1:Strike=345 Dip=45 Slip= -90
       NP2:        165     45      -90

SDN     2.38  63 eP    54 39.58  -0.1
KDC     7.41  58 eP    55 48.05  -2.6
ADK     7.90 257 eP    55 57.13  -0.5
SVW     8.21  30 eP    56 01.88  -0.2
CP2     9.44  38 eP    56 21.16   2.0
CRP     9.47  38 eP    56 21.27   1.7
TTA     9.63  23 eP    56 21.36  -0.3
SLKM    9.76  45 eP    56 22.98  -0.3
ANM    10.31 357 eP    56 31.60   0.7
PMS    10.44  42 eP    56 32.10  -0.6
PWA    10.56  40 eP    56 35.90   1.7
PMR    10.81  41 eP    56 35.43  -2.2
MID    11.02  55 eP    56 38.90  -1.6
KLU    12.06  46 ePc   56 52.75  -1.9
TOA    12.26  43 ePc   56 56.20  -1.2
IMA    12.88  20 eP    57 04.69  -0.9
SMY    13.01 272 (P)   57 07.81   0.7
FBA    13.42  31 eP    57 10.80  -1.8
BALM   13.45  51 ePd   57 11.22  -1.9
ILT    15.27 339 iPd   57 44.60   8.0X
        1.4s   210.00nm          5.2mb
     Z  14s     6.60um          4.5Msz
     N  14s     5.00um
     E  14s     1.50um
SIT    16.45  69 eP    57 51.45  -0.4
        1.0s   117.11nm          5.0mb
BRW    17.37   8 eP    58 04.25   0.9
INK    20.02  34 eP    58 32.00  -2.5
        0.9s    49.00nm          4.8mb
SKR    24.23 278 iPc   59 11.90  -4.8X
        0.5s  1540.00nm          6.8mb X
                i      59 21.40
                i      59 28.00
MCW    26.07  85 (P)   59 33.75  -0.4
YKA    26.61  52 eP    59 39.50   0.5
        0.9s    60.00nm          5.2mb
GMW    26.64  88 ePc   59 40.43   1.0
BMW    26.94  90 ePc   59 43.50   1.3
RMW    27.26  87 eP    59 45.89   0.7
RVC    27.43  88 P     59 48.05   1.3
MBC    27.60  21 iPd   59 49.00   1.1
                PP     00 38.50
                PPP    00 53.60
                PcP    03 05.30
                S      04 18.20
                SSS    06 01.90
                ScP    06 46.70
FMW    27.61  88 P     59 49.59   1.1
LON    27.63  88 eP    59 49.43   1.0
SHW    27.67  90 eP    59 50.13   1.1
ASR    28.07  89 P     59 53.34   0.8
RNO    28.08  95 P     59 54.21   1.6
WTV    28.23  85 P     59 54.17   0.3
EBG    28.27  87 P     59 55.28   1.0
SSOR   28.28  92 P     59 55.70   1.3
SAW    28.55  85 P     59 56.99   0.3
VBEM   28.68  91 P     59 58.93   0.9
DBO    28.84  96 P     00 01.27   1.8
VGB    28.90  90 eP    00 00.24   0.3
WAH2   28.94  87 P     00 00.83   0.6
CROR   29.07  91 P     00 02.36   0.8
DPW    29.16  84 eP    00 01.90  -0.4
VIPM   29.56  91 P     00 06.68   0.7
NEW    29.59  82 ePd   00 06.32   0.2
        0.9s    20.81nm          4.9mb
FHC    29.86 100 eP    00 10.51   1.9
        0.9s    79.48nm          5.5mb
YBH    30.01  98 ePd   00 26.52  16.6X
     Z  19s     0.60um          4.3Msz
                ePPc   01 29.52
                eS     05 12.52
                iLQ    06 45.52
                eLR    08 04.52
LNOR   30.16  87 P     00 11.08  -0.2
LGPM   30.46  99 eP    00 14.97   1.0
                ePcP   03 11.72
LBFM   30.73  97 ePc   00 17.74   1.3
WDC    30.84  99 ePc   00 18.45   1.3
        1.1s    36.03nm          5.1mb
LMEM   31.43  98 eP    00 24.15   1.5
ORV    32.12 100 eP    00 28.09  -0.3
NTYM   32.23 102 eP    00 30.35   1.0
TIK    32.73 327 eP    00 34.00   0.7
        1.0s    20.00nm          5.0mb
     Z  14s     1.70um          4.9MszX
                i      00 44.00
HMR    32.89 102 eP    00 37.02   1.9
RES    33.26  27 eP    00 37.50  -0.4
        0.6s     2.00nm          4.2mb X
COE    33.58 103 eP    00 41.89   0.7
ARN    33.60 103 ePc   00 41.79   0.4
                e      00 49.90
YSS    33.73 280 eP    00 42.00  -0.3
CMB    33.78 101 eP    00 43.88   0.9
        1.1s    51.31nm          5.4mb
                e      00 51.63
MCMT   33.92  85 iPc   00 44.50   0.1
                e      03 22.10
                e      07 04.20
HKL    34.08 167 (P)   00 47.84   1.8
YAK    34.26 310 iP    00 58.50  11.8X
        1.5s    61.00nm
KVN    34.42  97 eP    00 49.85   1.2
MMPM   34.86 100 eP    00 54.01   1.5
MEMM   34.87 100 (P)   00 54.09   1.9
BONR   35.04  99 ePc   00 55.26   1.2
MRCM   35.12  99 eP    00 56.25   1.6
MTUM   35.30 100 eP    00 57.01   0.8
PHAM   35.31 103 eP    00 57.58   1.5
PKEM   35.31 103 (P)   00 54.78  -1.3
HVU    35.79  89 eP    00 59.99  -0.2
BCH    35.95 104 eP    01 02.76   1.2
ISA    36.53 102 eP    01 06.97   0.6
        1.3s    72.88nm          5.4mb
ABL    36.69 103 eP    01 09.07   1.2
DUG    36.77  91 eP    01 08.05  -0.4
        1.1s    20.01nm          4.9mb
TPNV   36.92  98 eP    01 10.76   1.0
        0.8s    71.96nm          5.6mb
DAU    37.54  89 eP    01 15.24   0.1
                eScP   07 16.95
GSC    37.75 101 ePc   01 18.10   1.4
ARUT   37.98  95 eP    01 18.41  -0.3
SSK    38.02 103 eP    01 19.84   0.8
MSU    38.24  93 ePc   01 21.45   0.5
PEC    38.55 102 eP    01 23.35   0.0
        0.9s    17.04nm          4.9mb
SRU    38.81  90 ePc   01 26.14   0.5
PLM    39.12 103 eP    01 29.27   1.0
RSSD   39.45  79 ePc   01 38.21   7.2X
        0.7s    40.55nm          5.3mb
PV09   40.03  90 eP    01 35.51  -0.4
PV10   40.17  90 eP    01 37.02   0.0
PV08   40.26  90 ePc   01 37.78  -0.1
                eScP   07 27.29
ULM    40.51  67 ePc   01 42.10   2.8
GOL    41.44  86 ePc   01 48.11   0.7
        0.7s    33.31nm          5.2mb
GLD    41.50  86 ePc   01 49.01   1.2
        1.1s    34.35nm          5.0mb
MAT    42.84 270 eP    01 58.00  -0.6
        1.1s    20.25nm          4.8mb
BOD    43.09 309 eP    02 00.50   0.2
ALQ    44.03  92 eP    02 08.33  -0.2
        1.4s    21.92nm          4.8mb
                iPP    03 54.00
                iScP   07 43.24
CN2    45.45 287 eP    02 18.00  -1.6
        1.0s    17.00nm          4.9mb
     Z  20s     0.62um          4.5Msz
                epP    02 26.00  27kmX
FRB    45.57  38 ePc   02 20.00  -0.1
        0.6s    32.00nm          5.4mb
CIT    46.69 303 eP    02 39.20   9.9X
ACO    47.09  84 iPc   02 32.50  -0.1
DAG    47.36  10 iPd   02 33.80  -0.4
        0.6s    20.67nm          5.3mb
                ipP    02 55.20  88kmX
SNY    47.78 286 Pd    02 40.00   2.1
        1.1s    22.00nm          5.1mb
JAQ    48.58  52 ePc   02 43.50  -0.5
WMOK   48.67  86 ePc   02 44.28  -0.6
        0.7s    53.92nm          5.7mb
MEO    48.75  86 iPd   02 45.00  -0.5
TUL    49.59  82 iPc   02 51.10  -0.8
LTX    49.70  95 ePc   02 51.65  -1.4
MIAR   51.83  82 ePc   03 07.87  -1.2
        0.8s    18.38nm          5.1mb
ELC    52.41  76 ePd   03 10.89  -2.5
LST    52.65  77 eP    03 13.22  -2.0
ZAK    52.71 306 eP    03 22.00   6.6X
        1.2s    12.00nm          4.7mb
                e      04 24.50
BJI    53.12 289 eP    03 18.50  -0.1
     Z  20s     0.91um          4.8Msz
GAC    54.04  60 eP    03 24.00  -1.2
OXF    54.27  79 ePc   03 25.58  -1.5
        0.8s   142.38nm          6.1mb
YSNY   54.69  65 ePc   03 29.02  -1.1
        0.7s    59.83nm          5.7mb
HHC    55.08 293 Pc    03 35.00   1.9
        1.2s    16.00nm          4.9mb
     Z  21s     1.27um          5.0Msz
RSNY   55.32  60 eP    03 32.46  -2.3
        0.8s    13.61nm          5.0mb
MCWV   55.97  68 eP    03 37.21  -2.2
        0.7s    29.85nm          5.4mb
BTO    56.08 294 eP    03 39.10  -1.3
BINY   56.23  63 eP    03 40.09  -1.2
```

20d 12h

		0.6s	28.92nm			5.5mb	
CBM		56.80	55	ePc	03 43.77	-1.5	
		1.0s	71.70nm			5.7mb	
TIY		56.83	290	eP	03 47.70	2.0	
	Z	18s	0.84um			4.9Msz	
	E	16s	0.76um				
LBNH		56.86	59	ePc	03 44.19	-1.6	
		0.9s	32.47nm			5.4mb	
MYNC		56.88	75	eP	03 43.79	-2.2	
		0.6s	26.91nm			5.5mb	
NAV		57.12	71	eP	03 45.45	-2.3	
GPD		57.87	63	eP	03 51.19	-1.7	
CVL		57.92	68	eP	03 52.24	-1.0	
LSCT		58.04	62	eP	03 54.39	0.3	
		1.4s	70.97nm			5.5mb	
CRNY		58.13	62	eP	03 53.54	-1.1	
PRM		58.59	74	eP	03 55.68	-2.3	
JSC		59.07	73	eP	03 58.99	-2.3	
CEH		59.10	71	ePc	03 59.67	-1.8	
		0.6s	23.26nm			5.5mb	
LMN		59.16	53	eP	04 00.50	-1.3	
LHS		59.18	73	eP	03 59.89	-2.1	
XAN		61.45	289	P	04 17.00	-0.7	
		0.9s	8.00nm			4.8mb	
	Z	20s	0.97um			5.0Msz	
				pP	04 23.40	21kmX	
				sP	04 27.00		
				S	12 36.00		
				SS	16 40.00		
GTA		62.29	300	eP	04 22.50	-0.9	
		1.5s	6.00nm			4.5mb	
	Z	18s	1.14um			5.1Msz	
	N	17s	0.90um				
LZH		62.69	294	eP	04 24.50	-1.5	
		1.8s	30.00nm			5.1mb	
	Z	18s	0.94um			5.0Msz	
	N	15s	0.66um				
SVE		63.38	334	eP	04 30.00	-0.1	
		2.0s	40.00nm			5.2mb	
	Z	15s	1.00um			5.1MszX	
	N	15s	0.50um				
	E	15s	0.50um				
				e	05 10.00		
KAF		63.63	355	eP	04 31.20	-0.4	
		0.4s	13.50nm			5.4mb	
ARU		64.25	335	eP	04 35.00	-0.8	
				e	05 04.00		
WMQ		64.71	310	P	04 42.50	3.4X	
	Z	20s	0.80um			4.9Msz	
				PcP	05 16.50		
				PP	07 04.50		
				ScP	09 10.00		
				PcS	09 15.00		
				sS	13 31.50		
NB2		64.94	2	P	04 39.80	-0.5	
		0.9s	8.50nm			4.8mb	
NUR		65.32	355	eP	04 42.20	-0.4	
		0.3s	8.90nm			5.3mb	
HFS		65.90	1	eP	04 44.90	-1.4	
		0.4s	12.80nm			5.4mb	
	Z	17s	0.19um			4.4MszX	
				LR	25 36.00		
CD2		66.66	291	P	04 52.00	0.3	
		0.8s	44.00nm			5.6mb	
GYA		68.48	286	P	05 02.40	-0.8	
		1.2s	82.00nm			5.7mb	
EKA		69.62	11	Pd	05 09.90	0.3	
		1.5s	39.10nm			5.3mb	
OBN		69.62	347	eP	05 09.40	-0.3	
	Z	17s	413.90um			7.7MszX	
	N	17s	349.10um				
	E	17s	212.20um				
				epP	05 16.40	22kmX	
				(sP)	05 21.70		
				(PcP)	05 29.50		
OBN		69.62	347	eP	05 12.00	2.3	
		0.8s	21.00nm			5.3mb	
	Z	20s	0.60um			4.8Msz	
				e	05 39.00		
PMO		70.42	163	iPd	05 12.40	-2.5	
		1.3s	184.80nm			6.0mb	
TPT		70.45	163	iPd	05 12.60	-2.5	
		1.1s	155.80nm			6.0mb	
RUV		70.69	163	iPd	05 14.10	-2.4	
		1.0s	188.00nm			6.1mb	
FRU		71.00	318	eP	05 22.00	3.7X	
		2.0s	70.00nm			5.4mb	

	Z	20s	1.00um			5.1Msz	
				e	05 36.00		
				e	08 04.00		
DCN		71.02	14	eP	05 21.10	2.9	
				e	10 16.00		
MNK		71.72	353	eP	05 20.00	-2.4	
WWKK		72.08	236	eP	05 25.00	-0.1	
QIZ		72.45	278	eP	05 30.00	2.8	
AFR		72.61	166	iPd	05 25.40	-2.6	
		1.3s	268.60nm			6.1mb	
PPN		72.65	165	iPd	05 25.70	-2.5	
		1.3s	230.30nm			6.0mb	
PPT		72.67	165	iPd	05 25.90	-2.5	
		1.3s	197.80nm			6.0mb	
PAE		72.76	165	iPd	05 26.40	-2.5	
		1.2s	121.40nm			5.8mb	
TVO		72.93	165	iPd	05 27.30	-2.6	
		1.3s	255.60nm			6.1mb	
KSH		73.31	315	eP	05 32.00	-0.2	
	Z	16s	1.81um			5.4MszX	
	N	14s	1.28um				
	E	14s	1.11um				
WTS		73.80	6	eP	05 42.00	7.4X	
		0.8s	7.60nm			4.7mb	
LSA		74.31	299	eP	05 40.00	1.4	
		1.0s	18.00nm			5.0mb	
CLL		74.73	2	iP	05 39.00	-1.0	
				e	06 15.00		
ENN		74.97	6	eP	05 41.50	0.1	
		1.0s	10.00nm			4.8mb	
				e	05 50.00		
BRG		75.18	1	iP	05 50.40	7.8X	
		1.8s	280.00nm			6.0mb	
KSP		75.22	360	eP	05 43.40	0.6	
				e	05 50.00		
MOX		75.36	3	eP	05 44.30	0.6	
PMG		75.49	230	iPd	05 44.20	-0.6	
		0.9s	84.03nm			5.7mb	
PRU		76.07	1	eP	05 49.50	1.8	
				e	05 55.00		
GRF		76.30	3	eP	05 49.70	0.7	
				e	05 53.20		
				e	05 56.90		
FLN		76.39	11	eP	05 49.50	0.0	
		1.3s	52.35nm			5.4mb	
LDF		76.60	11	eP	05 50.50	-0.1	
		0.8s	15.05nm			5.1mb	
GRR		76.72	11	eP	05 51.30	0.0	
		1.0s	25.40nm			5.2mb	
SPC		76.81	357	eP	05 51.20	-0.9	
KHC		76.92	2	P	05 52.80	0.3	
		1.2s	8.00nm			4.6mb	
				e	06 00.80		
LPF		77.05	12	eP	05 53.50	0.4	
		0.9s	20.45nm			5.2mb	
GEC2		77.21	1	eP	05 54.40	0.2	
		0.8s	3.61nm			4.4mb	
				e	05 56.90		
				e	06 01.60		
				e	06 09.30		
CDF		77.40	6	eP	05 55.40	0.2	
		1.1s	15.65nm			5.0mb	
HAU		77.75	6	eP	05 57.30	0.2	
		0.9s	15.05nm			5.0mb	
ZST		77.87	359	e(P)	05 58.20	0.6	
BSF		77.95	6	eP	05 58.40	0.1	
		1.0s	19.00nm			5.1mb	
HYF		78.19	9	eP	06 00.30	0.8	
LOR		78.30	8	eP	06 00.40	0.3	
		1.1s	22.20nm			5.1mb	
GUN		78.43	302	P	06 01.20	-0.4	
SSF		78.47	9	eP	06 01.40	0.4	
		0.6s	16.95nm			5.2mb	
MFF		78.56	11	eP	06 02.00	0.5	
		1.0s	45.20nm			5.4mb	
LBF		78.59	8	eP	06 01.80	0.1	
		0.5s	7.75nm			5.0mb	
AVF		78.73	9	eP	06 02.60	0.2	
		0.5s	10.95nm			5.1mb	
WTTA		78.74	3	iPc	06 04.70	2.0	
		0.5s	8.20nm			5.0mb	
				i	06 13.80		
KKN		78.83	302	P	06 03.00	-0.6	
BGF		78.91	9	eP	06 03.70	0.3	
		1.0s	25.80nm			5.2mb	
SMF		78.91	8	eP	06 03.70	0.2	
		0.7s	15.30nm			5.1mb	

PKI		78.95	302	P	06 04.40	0.0	
KBA		78.97	2	iPc	06 04.90	0.9	
GKN		78.97	303	P	06 04.00	-0.3	
LLS		79.04	5	eP+	06 08.20	3.8X	
DMN		79.07	302	P	06 04.40	-0.5	
LSF		79.09	10	eP	06 04.70	0.3	
		0.7s	21.05nm			5.2mb	
TCF		79.12	10	eP	06 04.80	0.2	
		0.9s	12.60nm			4.9mb	
MAF		79.22	9	eP	06 05.60	0.5	
		0.6s	7.75nm			4.9mb	
PYA		79.31	340	eP	06 09.00	3.3X	
NIL		79.41	314	iPc	06 10.00	3.6X	
		0.5s	0.01nm			2.2mb X	
VDL		79.44	4	ePd	06 11.30	4.7X	
TMA		79.79	5	eP+	06 11.60	3.2X	
MMK		79.80	6	ePd	06 13.20	4.7X	
RJF		80.02	10	eP	06 09.60	0.2	
		0.9s	10.50nm			4.8mb	
BDT		80.08	286	eP	06 10.00	-0.1	
		0.5s	26.90nm			5.5mb	
DZM		80.15	207	iPd	06 09.90	-0.5	
LFF		80.30	11	eP	06 11.50	0.6	
		0.8s	26.85nm			5.3mb	
CAF		80.45	10	eP	06 12.40	0.6	
		1.0s	16.00nm			5.0mb	
LPO		80.60	11	eP	06 13.00	0.5	
		0.6s	7.50nm			4.9mb	
NST		80.70	284	eP	06 13.50	0.1	
ASH		81.09	327	eP	06 12.20	-3.0X	
MTA		81.19	338	iPc+	06 18.00	2.4	
		0.8s	30.00nm			5.3mb	
	N	18s	0.20um				
ERUA		81.69	17	eP	06 17.50	-0.8	
SBF		81.95	6	eP	06 20.30	0.7	
		0.8s	27.25nm			5.3mb	
EPF		82.14	11	eP	06 20.80	0.1	
		0.8s	6.70nm			4.7mb	
FRF		82.20	7	eP	06 21.70	0.8	
		1.2s	29.15nm			5.2mb	
MAIO		82.23	326	eP	06 22.00	0.7	
LRG		82.28	7	eP	06 22.50	1.2	
LMR		82.41	7	eP	06 23.00	1.0	
		1.0s	16.80nm			5.1mb	
EGRA		82.89	12	eP	06 21.70	-2.7	
PGF		83.35	5	eP	06 27.90	0.9	
		0.7s	17.85nm			5.3mb	
GUD		83.88	15	eP	06 31.50	1.7	
SKO		83.98	356	eP	06 31.50	1.4	
EPLA		84.14	17	eP	06 31.20	0.2	
TOV		84.69	81	eP	06 34.90	0.8	
PAB		84.93	16	eP	06 37.00	2.0	
SDV		84.93	82	eP	06 35.60	0.2	
CTA		85.37	226	iPd	06 36.90	-0.3	
		1.0s	80.00nm			5.9mb	
SNG		87.25	278	eP	06 48.00	1.4	
IPM		89.11	277	ePd	06 56.00	0.4	
BRS		89.42	217	iPc	06 58.00	1.4	
		1.0s	8.00nm			5.0mb	
WB5		90.59	236	iPd	07 01.30	-0.9	
				ePP	10 15.00		
WRA		90.65	236	P	06 49.20	-13.3X	
		0.7s	0.40nm				
HYB		90.87	302	eP	07 03.20	-0.6	
POO		92.20	306	eP	07 12.00	2.1	
ARMA		92.59	217	iPc	07 12.10	0.8	
		0.8s	42.00nm			5.9mb	
ASPA		94.04	234	iPd	07 17.40	-0.6	
		0.6s	10.90nm			5.5mb	
	Z	22s	0.30um			4.7Msz	
GBA		94.67	301	P	07 21.00	-0.2	
TIC		116.81	23	PKP	12 44.40	-0.5	
KIC		117.15	23	PKP	12 43.80	-1.7	
LIC		117.21	23	PKP	12 45.00	-0.7	
	Z	19s	0.41um			5.1Msz	
LSZ		139.87	341	ePKP	13 19.00	-9.8X	
				i	13 31.00		
KRI		141.10	339	iPKPc	13 23.00	-8.0X	
				i	13 30.50		
SPA		144.12	180	ePKPc	13 30.90	-3.9X	
		1.0s	225.00nm				
BUL		144.52	339	iPKPc	13 34.70	-2.2	
		1.0s	15.00nm				
				i	13 37.90		
CIR		144.67	334	iPKPd	13 47.10	10.2X	
				i	13 50.10		
				i	13 55.10		

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BFT   149.53 334 ePKP  13 50.00   5.1X
       0.7s   16.00nm
SLR   150.00 337 iPKP  13 51.00   5.5X
       1.0s  330.00nm
KSR   150.43 339 ePKP  13 50.50   4.3X
       1.0s  140.00nm
SWZ   152.01 342 iPKPc 13 55.00   6.5X
       0.5s   41.00nm
SEK   152.64 337 ePKP  14 06.00  16.6X
       1.0s  290.00nm
BOSA  153.39 341 ePKP  13 58.30   8.1X
BLF   153.72 339 ePKP  13 52.00   1.1
       1.0s   80.00nm
MAW   154.34 220 iPKPd 13 58.90   8.6X
       1.0s   17.31nm
FRS   154.51 340 ePKP  14 02.00  10.4X
       1.0s   50.00nm
HVD   155.31 340 ePKP  14 03.00  10.1X
GRM   157.67 336 e(PKP)14 14.00  18.2X
SUR   157.80 349 e(PKP)14 05.00   8.8X
CER   158.92 352 e(PKP)13 55.00  -2.2
     S.D. = 1.3  on 233 of 267 obs.
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   NOV  20, 1993  11h 58m 41.00± 0.28s
   51.811 N ± 5.1km  158.615 E ± 6.0km
   DEPTH =  43.7km  (  6 depth phases)
   5.2mb ( 63 obs.)  4.6Msz (  1 obs.)
 NEAR EAST COAST OF KAMCHATKA    (218)

KAKJ   20.39 227 P     03 14.90  -1.6
MAT    21.04 231 iPc   03 22.70  -0.5
       1.0s   64.00nm          4.9mb
                eS     07 21.00
CHJJ   21.06 229 P     03 23.20  -0.2
IIDJ   22.03 230 P     03 34.00   0.7
TSRJ   22.93 234 P     03 43.10   1.1
WKYJ   24.17 232 P     03 53.90  -0.2
YONJ   24.49 237 P     03 57.60   0.4
TKSJ   25.13 234 P     04 03.50   0.2
TKSJ   25.13 234 P     04 04.10   0.8
IMA    27.60  41 eP    04 25.60  -0.3
INK    35.44  36 eP    05 34.50   0.1
       0.9s    7.00nm          4.6mb
MBC    38.58  22 eP    06 02.50   1.8
       0.5s    7.00nm          4.8mb
RES    44.85  21 eP    06 52.50   0.5
       0.8s    9.00nm          4.7mb
KMI    49.71 260 eP    07 30.00  -0.9
DAG    51.68 359 iPd   07 44.00  -0.9
       0.9s   42.86nm          5.5mb
CHTO   56.75 258 ePc   08 22.00  -0.8
       0.9s   29.84nm          5.3mb
NST    58.46 254 eP    08 36.00   1.2
DUG    58.95  63 eP    08 38.30   0.1
       1.2s   18.55nm          5.1mb
                pP     08 50.21  41km
FRB    59.04  22 eP    08 36.00  -2.3
       1.0s    7.00nm          4.7mb
KAF    60.31 336 eP    08 45.70  -1.3
       0.5s    5.90nm          5.0mb
ULM    60.36  45 eP    08 49.50   1.9
NUR    62.10 336 eP    08 57.70  -1.4
       0.6s    6.00nm          4.9mb
PV10   62.31  62 eP    09 01.30   0.1
                pP     09 13.44  42km
PV08   62.38  62 eP    09 01.16  -0.6
                pP     09 13.71  44km
NB2    64.52 343 P     09 13.60  -1.5
       0.9s   17.50nm          5.1mb
HFS    64.89 341 eP    09 15.50  -1.9
       0.4s    9.40nm          5.2mb
HYB    70.40 273 eP    09 51.30  -1.2
       0.6s   26.70nm          5.4mb
WMOK   70.54  58 eP    09 52.10  -1.1
       0.9s   13.14nm          4.9mb
                pP     10 05.18  45km
LTX    71.98  65 iPd   10 01.46  -0.6
                pP     10 13.87  42km
EKA    72.16 349 Pc    10 01.90  -0.6
       0.6s   10.60nm          5.0mb
CTA    72.40 192 e(P)  10 14.00   9.7X
KSP    72.86 336 iP    10 05.70  -1.0
WIT    73.12 343 eP    10 09.00   0.9
CLL    73.22 338 iPc   10 07.90  -0.9
       1.0s   26.00nm          5.1mb
SPC    73.31 333 eP    10 11.90   2.3
MIAR   73.39  55 ePd   10 09.16  -0.9
                pP     10 22.92  48km
BRG    73.40 338 iP    10 07.00  -2.9
WTS    73.87 342 iPc   10 12.20  -0.3
       1.0s   64.10nm          5.5mb
GBA    73.99 272 P     10 13.00  -0.7
PRU    74.08 337 P     10 12.90  -0.9
       1.0s   14.70nm          4.9mb
MOX    74.15 339 e(P)  10 13.90  -0.3
HOF    74.41 339 iPd   10 15.50  -0.2
DLF    74.53 351 eP    10 16.00  -0.3
WRA    74.54 204 P     10 16.10  -0.6
       0.9s    1.90nm          4.0mb X
ZST    75.08 334 iP    10 19.10  -0.5
SRO    75.10 334 eP    10 20.00   0.3
KHC    75.11 337 iPc   10 19.80   0.0
       1.0s   22.80nm          5.1mb
GRA1   75.14 339 iPc   10 20.10   0.2
       1.0s   51.00nm          5.4mb
GRF    75.14 339 iPc   10 20.10   0.2
       1.0s   51.00nm          5.4mb
     Z 20s     0.30um          4.6Msz
ENN    75.21 342 iPc   10 20.50   0.2
       1.0s   70.00nm          5.6mb
                e      10 27.50  22kmX
WET    75.27 338 iPd   10 21.10   0.4
       0.8s   34.00nm          5.4mb
MEM    75.35 342 iPc   10 20.85  -0.2
       0.9s   31.30nm          5.3mb
GEC2   75.35 337 e(P)  10 21.00  -0.3
       0.6s   11.00nm          5.0mb
SNF    75.75 343 Pc    10 22.70  -0.7
LMN    75.79  30 eP    10 23.00  -0.7
DOU    76.10 343 P     10 25.10  -0.2
       0.9s   37.50nm          5.4mb
WLF    76.22 342 iPc   10 27.75   1.8
LANF   76.55 341 P     10 27.82  -0.1
FUR    76.56 338 eP    10 28.20   0.2
       0.9s   51.00nm          5.5mb
BHG    76.60 337 iPc   10 28.40   0.2
       0.7s   20.00nm          5.2mb
KBA    77.08 336 iPc   10 31.50   0.4
       0.8s   97.00nm          5.9mb
WLS    77.18 341 P     10 31.21  -0.3
CDF    77.19 341 iPc   10 31.40  -0.2
       0.9s   33.25nm          5.4mb
WATA   77.27 338 iPc   10 32.10   0.0
WTTA   77.32 338 iPc   10 32.70   0.3
       0.9s   47.20nm          5.5mb
MOTA   77.37 338 iPc   10 32.60  -0.1
       0.9s   35.00nm          5.4mb
ECH    77.41 341 P     10 32.53  -0.2
SQTA   77.46 338 iPc   10 33.40   0.3
       0.9s   40.50nm          5.5mb
PTJ    77.50 334 eP    10 28.30  -5.0X
FEL    77.55 340 P     10 33.30  -0.3
SLE    77.56 340 ePd   10 33.40  -0.1
VITF   77.64 342 P     10 34.07   0.1
MOF    77.76 341 P     10 34.40  -0.3
HAU    77.77 341 iPc   10 34.60  -0.1
       0.9s   36.85nm          5.4mb
OGA    77.84 338 iPc   10 35.80   0.5
       0.7s   13.00nm          5.1mb
BSF    77.85 341 iPc   10 34.90  -0.3
       0.9s   19.65nm          5.1mb
BBS    78.05 340 P     10 36.25   0.0
OSS    78.21 338 eP+   10 37.70   0.4
ASPA   78.22 203 eP    10 38.30   1.0
       0.7s    2.40nm          4.3mb
FLN    78.23 346 iPc   10 36.90  -0.2
       0.9s   15.05nm          5.0mb
LLS    78.30 339 iPd   10 38.20   0.4
LOMF   78.30 341 P     10 37.80   0.1
LDF    78.34 346 iPc   10 37.50  -0.3
       1.0s   20.60nm          5.1mb
VDL    78.55 339 iPd   10 40.00   0.8
GRR    78.65 346 iPc   10 39.50   0.0
       1.1s   40.55nm          5.3mb
LOR    78.95 343 iPc   10 41.20   0.0
       0.9s   41.75nm          5.4mb
LPF    79.02 346 iPc   10 41.80   0.3
       0.6s    7.50nm          4.8mb
TMA    79.05 339 iPd   10 42.10   0.2
HYF    79.17 344 iPc   10 42.90   0.5
LBF    79.20 343 iPc   10 42.40  -0.2
       0.7s   11.90nm          5.0mb
SSF    79.22 343 iPc   10 42.70   0.1
       0.8s   26.85nm          5.3mb
MMK    79.30 340 ePd   10 44.20   0.8
DIX    79.39 340 ePd   10 44.80   0.9
EMS    79.50 340 ePd   10 45.00   0.6
AVF    79.51 343 iPc   10 44.40   0.3
       0.9s   51.10nm          5.5mb
SMF    79.56 343 iPc   10 44.60   0.2
       1.1s   44.70nm          5.3mb
ORX    79.69 340 P     10 44.91  -0.4
BGF    79.82 343 iPc   10 46.20   0.3
       0.7s   15.65nm          5.1mb
RSL    79.93 340 P     10 47.05   0.4
LSD    80.04 340 P     10 48.25   0.9
LPL    80.07 340 iPc   10 48.40   0.9
       0.9s   31.95nm          5.3mb
LPG    80.08 340 iPc   10 48.60   0.9
       0.7s   19.60nm          5.2mb
TCF    80.20 344 iPc   10 48.40   0.5
       0.9s   30.80nm          5.3mb
MAF    80.20 343 iPc   10 48.70   0.8
       0.8s   37.35nm          5.4mb
PLDF   80.25 343 P     10 48.97   0.7
AGO    80.26 343 P     10 48.88   0.7
MFF    80.28 345 iPc   10 48.80   0.5
       1.0s   29.40nm          5.2mb
RSP    80.31 340 P     10 47.97  -0.6
LSF    80.35 344 iPc   10 49.20   0.5
       0.9s   31.95nm          5.3mb
PYM    80.57 343 P     10 50.66   0.7
BHB    80.60 340 P     10 48.25  -1.8
PCP    80.60 339 P     10 49.62  -0.5
RRL    80.63 340 P     10 51.22   0.7
COLF   80.67 342 P     10 51.25   0.8
SSB    80.74 342 P     10 51.38   0.6
PZZ    80.96 340 P     10 51.27  -0.8
ROB    80.99 339 P     10 51.22  -0.9
FIN    81.00 339 P     10 51.31  -0.8
LBL    81.03 343 P     10 53.08   0.7
ENR    81.15 339 P     10 51.40  -1.7
STV    81.16 340 P     10 51.59  -1.5
RJF    81.27 344 iPc   10 54.40   0.9
       1.1s   35.15nm          5.2mb
IMI    81.35 339 P     10 53.88  -0.2
SBF    81.50 339 eP    10 54.70  -0.1
       0.7s   15.30nm          5.1mb
CAF    81.54 343 iPc   10 56.20   1.2
       1.0s   33.40nm          5.3mb
LFF    81.75 344 iPc   10 57.10   1.1
       1.0s   42.80nm          5.4mb
LPO    81.93 344 iPc   10 58.00   1.0
       1.0s   51.60nm          5.5mb
FRF    81.96 340 eP    10 58.10   1.0
       0.9s   11.30nm          4.9mb
LRG    82.12 340 eP    10 58.40   0.5
       1.1s   45.40nm          5.4mb
LMR    82.20 340 eP    10 58.80   0.4
       1.1s   31.25nm          5.3mb
PGF    82.39 338 eP    10 59.40  -0.1
       0.5s    4.80nm          4.8mb
EPF    83.68 344 eP    11 06.60   0.5
       0.7s    7.70nm          4.9mb
LPAZ  128.83  64 PKP   17 39.40  -6.7X
                i      17 51.20
CNCB  129.34  64 PKP   17 47.00   0.0
     S.D. = 0.8  on 131 of 134 obs.
-----------------------------------
*  NOV  20, 1993  12h 02m 59.42± 2.84s
   31.844 S ±11.8km   72.260 W ±23.5km
   DEPTH =  16.2 ±  4.4 km
 OFF COAST OF CENTRAL CHILE       (134)
      MD 4.4 (SAN).

IHA     1.29 156 eP    03 23.00   0.3
                e(S)   03 47.30
ROCH    1.54 137 iP+   03 26.11  -0.4
                iS     03 47.11
JACH    1.64 121 iP+   03 27.31  -0.5
LCCH    1.73 160 iPd   03 28.99   0.0
PEL     1.86 135 iPd   03 30.73  -0.2
                iS     03 55.28
TACH    2.12 149 iPd   03 34.91   0.2
LNV     2.22 161 iPd   03 35.39  -0.7
FCH     2.23 132 iP+   03 36.31  -0.2
                iS     04 05.78
PCH     2.30 141 iPd   03 37.65   0.3
CACH    2.66 149 iPd   03 43.40   0.9
RTCB    2.97  84 ePc   03 48.00   1.2
                S      04 28.80
```

20d 12h

```
MDZ      3.07 111 iPd    03 54.60    6.5X
                  iS     04 33.70
ZON      3.07  85 eP     03 47.20   -0.9
RTCV     3.17  91 e(P)   03 50.50    0.9
RTLL     3.27  82 e(P)   03 52.00    0.9
                  S      04 35.00
CFA      3.43  87 iPc    03 53.80    0.4
                  S      04 44.00
RFA      4.31 134 ePc    04 06.00    0.1
                  S      05 16.00
RTPR     5.17  74 e(P)   04 18.00    0.2
MRA      5.59  98 ePd    04 22.00   -1.8
CYA      6.54  60 ePd    04 36.70   -0.7
                  (S)    05 56.00
     S.D. = 0.8  on  19 of  20 obs.
-----------------------------------
*  NOV  20, 1993  12h 41m 43.28± 1.47s
   21.258 S ±11.2km   67.684 W ±23.2km
   DEPTH = 200.0km  (geophysicist)
 CHILE-BOLIVIA BORDER REGION      (124)

YJA      2.22 114 ePc    42 25.00    0.0
                  S      42 55.70
HJA      2.87 133 ePc    42 32.20    0.4
                  S      43 10.50
SLA      4.00 150 iPc    42 45.50   -0.3
CCH      4.12  21 P      42 48.70    1.2
CNCB     4.43 356 iPc    42 53.00    1.4
LPB      4.72 355 P      42 53.00   -2.1
LPAZ     4.96 355 iPc    42 58.70    0.2
SIV      8.17  51 P      43 39.00   -0.8
     S.D. = 1.3  on   8 of   8 obs.
-----------------------------------
?  NOV  20, 1993  12h 51m 58.41± 0.96s
   39.086 N ± 8.2km   27.634 E ± 9.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
     ML 2.7 (ISK).

IZM      0.75 203 ePg    52 13.00   -0.1
                  eSg    52 24.50
DST      0.93  56 ePn    52 16.30    0.1
EZN      1.25 307 iPn    52 21.80    0.1
EDC      1.27   8 ePn    52 21.80   -0.2
     S.D. = 0.3  on   4 of   4 obs.
-----------------------------------
%  NOV  20, 1993  13h 45m 36.24± 0.78s
   44.547 N ± 6.8km    7.566 E ± 5.6km
   DEPTH =   5.0km  (geophysicist)
 NORTHERN ITALY                   (545)
     ML 1.7 (GEN).

ROB      0.33 139 P      45 42.92   -0.1
                  S      45 47.48
PZZ      0.33 263 P      45 42.80   -0.2
                  S      45 47.30
ENR      0.34 198 P      45 43.23    0.2
                  S      45 47.96
BHB      0.37 324 P      45 43.73    0.1
                  S      45 48.63
PCP      0.70  90 P      45 50.20    0.0
     S.D. = 0.2  on   5 of   5 obs.
-----------------------------------
%  NOV  20, 1993  13h 46m 04.33± 0.74s
   26.376 S ± 6.3km   27.422 E ± 7.9km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA         (584)
     ML 2.4 (PRE).

KSR      0.69 317 eP     46 18.00   -0.2
                  S      46 26.50
SLR      1.00  51 eP     46 24.00    0.1
                  S      46 37.50
SEK      1.95 175 eP     46 38.60    0.1
                  S      47 03.00
SWZ      2.04 246 eP     46 40.30    0.4
                  S      47 04.00
BOSA     2.85 218 eP     46 51.60    0.3
                  S      47 26.90
BLF      2.93 202 eP     46 52.00   -0.6
     S.D. = 0.5  on   6 of   6 obs.
-----------------------------------
*  NOV  20, 1993  13h 47m 07.90± 1.66s
   12.053 S ±10.0km  166.283 E ±12.5km
   DEPTH =  97.9 ± 13.4 km
   5.1mb ( 12 obs.)
 SANTA CRUZ ISLANDS               (184)

BKM      5.90 161 iPc    48 35.20    0.8
                  iS     49 44.80
HNR      6.75 292 eP     48 45.00   -1.1
                  eS     50 00.00
DZM      9.96 179 iPd    49 24.90   -5.1X
                  iS     51 12.50
BRS     19.83 218 iPc    51 33.50    0.1
CTA     20.82 245 iP     51 44.00    0.4
ARMA    22.77 214 iPd    52 03.00    0.2
         0.6s    19.00nm          4.6mb
STK     30.10 225 iPc    53 02.30   -8.0X
         0.7s    13.20nm          4.8mb
WRA     31.65 252 iPc    53 23.10   -1.0
         0.7s     5.60nm          4.4mb
ASPA    32.83 245 iPc    53 32.80   -1.6
         0.6s    14.60nm          5.0mb
ADE     33.85 223 eP     53 43.00    0.0
WARB    39.83 244 eP     54 33.50    0.1
         1.0s    41.00nm          5.2mb
FORT    39.91 236 iPd    54 34.10    0.1
         0.9s    52.00nm          5.4mb
MBL     45.29 252 eP     55 18.20    0.5
         0.6s    16.00nm          5.0mb
MEEK    46.99 245 iPc    55 31.60    0.4
         0.6s    50.00nm          5.5mb
NANU    49.37 251 iPc    55 50.30    0.7
         0.8s    53.00nm          5.6mb
MRWA    49.67 242 eP     55 51.50   -0.4
         1.0s    37.00nm          5.3mb
MUN     49.99 238 eP     55 54.00   -0.3
         1.0s    30.00nm          5.3mb
IPM     66.94 280 ePd    57 53.40    0.9
KMI     72.09 301 PKPc   58 25.00    0.9
                  pPKP   58 40.50
CHTO    73.11 294 eP     58 30.60    0.7
LZH     75.82 312 Pc     58 46.70    1.3
         1.0s    12.00nm          4.7mb
                  pP     59 00.50   48kmX
GUN     87.26 299 P      59 45.80    0.3
KKN     87.75 299 P      59 47.80    0.1
DMN     87.85 299 P      59 48.60    0.4
GKN     88.35 299 P      59 50.00   -0.5
SOB1   145.71 127 ePKP   06 34.50   -3.0
     S.D. = 1.0  on  24 of  26 obs.
-----------------------------------
?  NOV  20, 1993  13h 56m 20.68± 1.00s
   44.503 N ± 6.8km    7.304 E ±14.0km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                   (545)
     ML 1.5 (GEN).

PZZ      0.14 271 P      56 24.17    0.0
                  S      56 26.09
STV      0.26 177 P      56 26.32    0.1
                  S      56 29.97
ENR      0.29 163 P      56 26.67   -0.1
                  S      56 30.76
BHB      0.34 355 P      56 27.74    0.0
                  S      56 32.31
     S.D. = 0.2  on   4 of   4 obs.
-----------------------------------
?  NOV  20, 1993  13h 59m 35.96± 4.91s
   31.766 S ±18.6km   72.586 W ±42.0km
   DEPTH =  10.0km  (geophysicist)
 OFF COAST OF CENTRAL CHILE       (134)
     MD 4.2 (SAN).

ROCH     1.79 132 iP+     00 06.34   -1.1
LCCH     1.91 154 iPd     00 09.23    0.4
                  iS     00 33.55
JACH     1.92 119 iP+     00 07.58   -1.5
PEL      2.11 131 iPd     00 10.90   -1.0
                  iS     00 36.13
TACH     2.34 144 iP+     00 15.41    0.3
LNV      2.40 156 eP      00 15.40   -0.4
FCH      2.49 129 iP+     00 16.51   -0.9
                  iS     00 47.41
PCH      2.54 137 iP      00 17.96   -0.1
CACH     2.88 145 iPd     00 23.49    0.7
MDZ      3.35 110 eP      00 35.40    5.9X
                  iS     01 15.60
RTCV     3.45  93 eP      00 33.50    2.7
CYA      6.75  62 ePd     01 16.50   -1.1
     S.D. = 1.3  on  11 of  12 obs.
-----------------------------------
?  NOV  20, 1993  14h 23m 20.34± 3.19s
   30.851 S ±25.6km   68.259 W ±27.5km
   DEPTH =  33.0km  (normal)
 SAN JUAN PROVINCE, ARGENTINA     (137)

CFA      0.75 179 eP     23 33.00   -1.6
                  S      23 40.80
RTCV     1.03 193 eP     23 39.50    0.9
                  S      23 52.00
RTPR     1.60  71 eP     23 46.50   -0.2
MRA      2.67 126 ePd    24 02.50    0.5
RFA      3.91 182 ePd    24 20.00    0.3
                  S      25 18.00
     S.D. = 1.3  on   5 of   5 obs.
-----------------------------------
?  NOV  20, 1993  14h 31m 31.04± 1.87s
   31.079 S ±28.1km   68.544 W ±28.1km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTLL     0.26 166 iPd    31 45.80   -0.2
                  S      31 56.70
RTCB     0.46 208 iPd    31 47.00    0.1
                  S      31 59.00
CFA      0.59 154 ePc    31 47.80    0.0
                  S      32 00.00
RTCV     0.78 180 eP     31 49.50    0.0
                  S      32 02.00
RTPR     1.91  67 eP     32 03.00    0.0
                  S      32 28.00
     S.D. = 0.2  on   5 of   5 obs.
-----------------------------------
%  NOV  20, 1993  15h 26m 42.25± 0.90s
   26.322 S ± 8.2km   27.516 E ± 8.8km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA         (584)
     ML 2.6 (PRE).

KSR      0.72 309 eP     26 56.00   -0.7
                  S      27 07.00
SLR      0.90  50 eP     27 00.50    0.4
                  S      27 09.50
SEK      2.00 177 eP     27 16.20   -1.0
                  S      27 38.60
SWZ      2.14 246 eP     27 20.00    0.8
                  S      27 46.40
BOSA     2.95 219 eP     27 31.00    0.4
                  S      28 09.00
     S.D. = 1.1  on   5 of   5 obs.
-----------------------------------
?  NOV  20, 1993  15h 27m 02.99± 1.71s
   31.655 S ±19.2km   68.992 W ±21.3km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTCB     0.24  44 ePd    27 17.90    0.0
                  S      27 29.00
RTCV     0.44 118 eP     27 18.00   -0.6
                  S      27 32.00
RTLL     0.55  54 ePc    27 19.80    0.4
                  S      27 32.90
CFA      0.64  86 ePd    27 20.80    0.6
                  S      27 34.80
RTPR     2.52  58 eP     27 42.50   -0.5
MRA      2.89 106 ePd    27 48.10    0.1
     S.D. = 0.6  on   6 of   6 obs.
-----------------------------------
&  NOV  20, 1993  17h 12m 31.65s
   63.070 N          150.922 W
   DEPTH = 128.1km
 CENTRAL ALASKA                   (  1)
     <AEIC>.

TRF      0.48  37 P      12 50.50   -0.4
                  S      13 05.20
KTH      0.48   0 P      12 50.20   -0.6
                  S      13 03.90
HUR      0.59  98 P      12 50.70   -0.7
                  S      13 06.20
CUT      0.73 155 P      12 52.00   -0.3
                  S      13 08.10
RND      1.00  69 P      12 54.00   -0.7
MCK      1.11  52 P      12 55.20   -0.6
SKT      1.13 195 P      12 55.40   -0.6
                  S      13 13.20
BWN      1.28  30 P      12 57.20   -0.4
PWA      1.51 161 P      12 59.90   -0.1
GHO      1.60 144 P      13 01.00   -0.2
SUA      1.61 177 P      13 01.70    0.3
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DHY     1.62  88 P      13 01.10  -0.4
PLRM    1.70 150 P      13 01.70  -0.6
PMR     1.70 150 eP     13 01.32  -1.0
SML     1.75 135 P      13 02.00  -0.9
CRP     1.90 198 P      13 03.70  -1.2
MLY     1.97   2 P      13 04.40  -1.2
KNK     2.02 144 P      13 05.30  -1.0
CCB     2.10  40 P      13 05.80  -1.4
FBA     2.30  36 eP     13 08.05  -1.6
TOA     2.40 112 P      13 13.80   2.7
IL1     2.47  44 P      13 10.50  -1.4
ILB     2.47  44 P      13 10.30  -1.6
PWL     2.53 150 P      13 11.50  -1.2
SLKM    2.59 172 P      13 12.30  -1.2
DFR     2.62 199 P      13 13.30  -0.7
MPA     2.69 163 P      13 13.80  -1.0
RDW     2.75 200 P      13 15.60  -0.1
KLU     2.82 122 P      13 19.60   3.0
SVW     2.96 230 eP     13 16.68  -1.7
IM3     3.17 339 P      13 19.20  -1.9
CNPM    3.56 183 P      13 25.10  -1.2
BC3     4.16  86 P      13 32.90  -1.4
BALM    4.52 113 eP     13 46.42   7.1
        34 obs. associated
-----------------------------------
&  NOV  20, 1993  17h 22m 18.10s
   44.605 N          112.308 W
   DEPTH =   1.2km
 EASTERN IDAHO                    (457)
      <BUT-P>. ML 3.2 (BUT), 2.7 (GS).

LTMT    0.16 119 iPc    22 21.52   0.2
MCMT    0.45 300 iPc    22 26.76  -0.2
TPMT    0.48  75 ePc    22 27.41  -0.2
BGMT    0.66  17 iPc    22 30.91  -0.3
HBMT    1.21 350 ePnc   22 40.72  -0.9
LRM     1.22 355 ePn+   22 40.89  -0.9
MEMT    1.38  43 eP     22 43.68  -0.8
BUT     1.42 353 ePg    22 45.90   0.8
                eSn     23 04.70
SXM     1.73  26 ePn    22 49.40  -0.2
HRY     2.13   9 ePn    22 55.00  -0.4
HVU     2.84 187 eP     23 05.18  -0.5
DAU     4.26 169 (P)    23 26.08   0.2
DUG     4.42 185 (P)    23 29.07   1.0
        13 obs. associated
-----------------------------------
&  NOV  20, 1993  18h 44m 49.55s
   59.776 N          151.475 W
   DEPTH =  45.2km
 KENAI PENINSULA, ALASKA          ( 14)
      <AEIC>. ML 3.0 (AEIC).

HOM     0.15 216 ePc    44 56.95   1.5
                eS      45 03.30
CNPM    0.28 154 iPd    44 57.37  -0.8
                eS      45 03.95
BRLK    0.30  92 eP     44 57.82  -0.5
XLV     0.35 201 eP     44 57.88  -0.9
                eS      45 04.74
ILIM    0.81 293 ePd    45 03.83  -0.9
INE     0.85 290 ePd    45 04.35  -1.1
                eS      45 16.18
INW     0.88 290 ePd    45 04.87  -1.0
                eS      45 17.23
OPT     0.90 263 iPc    45 05.07  -0.9
                eS      45 17.84
RED     0.92 315 iPd    45 05.46  -0.8
                eS      45 18.57
RSO     0.94 318 ePd    45 06.00  -0.7
RS2     0.94 318 iPd    45 06.05  -0.7
REF     0.94 320 iPd    45 05.98  -0.8
                eS      45 19.56
SLKM    0.97  40 eP     45 06.09  -0.8
                eS      45 19.65
RDW     0.97 317 iPd    45 06.38  -0.8
DFR     1.02 324 iPd    45 06.74  -1.0
                eS      45 21.26
AUE     1.05 247 iPc    45 07.31  -0.8
SEW     1.07  71 eP     45 07.36  -1.0
                eS      45 23.87
AUL     1.07 249 ePc    45 07.74  -0.6
NCT     1.07 318 iPd    45 07.65  -0.8
AGU     1.08 248 eP     45 07.89  -0.7
AUH     1.08 248 ePc    45 07.92  -0.7
AUW     1.09 249 ePc    45 07.94  -0.7
MPA     1.28  55 eP     45 11.03  -0.2
BKG     1.36 344 ePd    45 11.67  -0.8
PDB     1.37 272 eP     45 11.37  -1.3
                eS      45 28.94
CDD     1.40 234 eP     45 11.91  -1.1
                eS      45 30.37
SPU     1.44 349 ePd    45 12.96  -0.7
                eS      45 32.28
CKT     1.47 346 ePd    45 13.45  -0.7
                eS      45 33.15
CKL     1.49 344 ePd    45 13.67  -0.7
CKN     1.49 347 ePd    45 14.03  -0.4
CRP     1.53 348 eP     45 13.32  -1.7
CP2     1.54 346 ePd    45 14.53  -0.7
CGLM    1.56 351 ePd    45 14.97  -0.4
BGL     1.56 344 ePd    45 14.92  -0.4
NCG     1.67 349 ePd    45 16.57  -0.3
SUA     1.73  12 eP     45 17.38  -0.4
PMS     1.75  32 P      45 17.70  -0.3
LTI     1.84  80 eP     45 17.33  -1.9
PWL     1.90  54 eP     45 18.92  -1.2
KNIM    1.96  71 eP     45 18.58  -2.4
KDC     2.10 195 P      45 20.30  -2.6
PMR     2.16  31 eP     45 23.10  -0.6
SKT     2.21 359 eP     45 24.54   0.0
KNK     2.22  41 eP     45 23.27  -1.3
CFI     2.32  51 eP     45 24.22  -1.7
GHO     2.36  31 eP     45 26.43  -0.3
SVW     2.45 305 eP     45 25.68  -2.3
CUT     2.70  12 eP     45 31.53   0.0
VLZ     2.89  60 eP     45 31.77  -2.4
SCM     2.90  43 eP     45 33.19  -1.2
KLU     3.23  55 eP     45 36.97  -2.2
TOA     3.49  46 P      45 41.50  -1.2
        52 obs. associated
-----------------------------------
*  NOV  20, 1993  19h 18m 28.64± 0.77s
   31.748 N ±15.9km  129.086 E ± 7.7km
   DEPTH =  33.0km  (normal)
 KYUSHU, JAPAN                    (235)

KAGJ    1.64 109 eP     18 55.80   0.3
KUMJ    1.67  62 eP     18 55.60  -0.4
                eS      19 20.50
SHNJ    2.92  35 eP     19 13.80   0.1
TKSJ    4.73  61 P      19 43.20   3.7X
YONJ    5.02  46 P      19 44.40   0.8
SSE     6.78 267 P      20 10.70   2.3
GUN    37.50 276 P      25 41.40  -0.2
        0.8s    23.00nm          5.1mb
PKI    38.00 275 P      25 44.80  -1.0
KKN    38.04 276 P      25 45.40  -0.6
        0.8s    19.00nm          5.0mb
GKN    38.52 276 P      25 48.80  -1.2
     S.D. = 1.2  on   9 of  10 obs.
-----------------------------------
&  NOV  20, 1993  19h 24m 53.86s
   60.025 N          153.003 W
   DEPTH = 116.3km
   5.6mb (186 obs.)
 SOUTHERN ALASKA                  (  2)
      Mw 5.9 (HRV). <AEIC>. mb 5.5
      (BRK). Felt (V) at Chugiak,
      Homer and Kenai; (IV) at
      Anchorage, Anchor Point, Eagle
      River, Kasilof, Pedro Bay,
      Seward, Sterling and Wasilla;
      (III) at Kodiak, Palmer and
      Soldotna.
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 45S, 94C
      Centroid Location:
      Origin Time        19:24:54.9 0.1
      Lat 59.84N 0.01 Lon 152.69W 0.03
      Dep 133.5 0.7 Half-duration  2.3
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 3.55 0.10  Mtt=-7.68 0.15
        Mff= 4.14 0.13  Mrt= 0.05 0.11
        Mrf= 5.19 0.11  Mtf= 2.94 0.14
       Principal Axes:
       T  Val=  9.33   Plg=42   Azm=280
       N        -0.83      48       113
       P        -8.50       6        16
      Best Double Couple:Mo=8.9*10**17
       NP1:Strike= 67 Dip=57 Slip=  28
       NP2:        321     67       143
INE     0.05 320 iPc    25 09.36   0.7
ILIM    0.06  21 iPc    25 09.18   0.7
INW     0.08 303 iPc    25 09.29   0.7
OPT     0.39 197 iPd    25 10.38  -0.7
RED     0.41  16 iPc    25 10.39  -0.9
RS1     0.45  16 P      25 11.80   0.2
                S       25 25.70
RS2     0.46  15 iPc    25 10.86  -0.8
RSO     0.46  16 iPc    25 10.85  -0.8
RDW     0.47  12 iPc    25 10.82  -0.9
REF     0.49  18 iPc    25 11.06  -0.8
RDN     0.50  14 eP     25 11.30  -0.5
                eS      25 25.59
NCT     0.54   4 iPc    25 11.31  -0.7
DFR     0.59  15 iPc    25 11.44  -0.9
PDB     0.64 249 iPd    25 11.79  -0.9
AUL     0.68 199 iPd    25 12.18  -0.8
AUE     0.69 196 iPd    25 12.05  -1.0
AUP     0.70 198 eP     25 09.87  -3.3
AUW     0.70 200 iPd    25 12.34  -0.7
AUH     0.70 199 iPd    25 12.38  -0.8
AGU     0.70 198 iPd    25 12.37  -0.9
AUI     0.72 197 P      25 11.80  -1.5
HOM     0.78 118 iPc    25 13.19  -0.6
NNL     0.86  88 P      25 16.50   2.0
XLV     0.87 131 iPd    25 13.48  -1.1
CNPM    1.02 118 iPc    25 15.16  -1.0
                eS      25 32.51
MCNL    1.08 219 P      25 14.60  -2.1
BRLK    1.10 103 ePc    25 15.97  -1.0
                eS      25 33.01
                eS      25 33.45
BKG     1.11  19 iPc    25 16.24  -0.9
NKA     1.13  50 iPc    25 17.98   0.7
CDD     1.15 197 iPd    25 15.96  -1.5
CKL     1.22  15 iPc    25 17.55  -0.8
CKT     1.24  18 iPc    25 17.59  -1.0
SPU     1.25  22 iPd    25 17.68  -0.9
                eS      25 37.42
CKN     1.27  18 iPc    25 18.10  -0.7
BGL     1.28  13 iPc    25 18.39  -0.6
BGM     1.29 242 eP     25 17.59  -1.5
CP2     1.30  16 (P)    25 16.84  -2.5
CRP     1.31  18 iPc    25 18.14  -1.3
CGLM    1.38  20 iPc    25 19.20  -0.9
NCG     1.44  16 iPc    25 20.04  -0.9
                eS      25 41.07
SYI     1.45 167 eP     25 19.83  -1.0
SLKM    1.47  70 ePc    25 19.30  -1.8
SVW     1.69 311 iPd    25 21.93  -1.8
SEW     1.78  86 iPc    25 22.81  -2.0
                eS      25 46.63
SUA     1.82  37 iPc    25 24.37  -1.1
                eS      25 48.33
MPA     1.87  74 iPc    25 24.31  -1.7
                eS      25 47.54
SKT     2.09  19 ePd    25 27.33  -1.4
PMS     2.09  53 P      25 26.80  -2.0
PTE     2.14  65 eP     25 27.23  -2.2
                eS      25 53.71
PWA     2.24  42 P      25 28.70  -1.9
KDC     2.30 173 iPd    25 28.30  -3.1
PWL     2.46  68 ePc    25 30.71  -2.9
PLRM    2.46  49 iPc    25 30.83  -2.8
PMR     2.46  49 iPc    25 30.57  -3.0
LTI     2.58  87 ePc    25 33.07  -2.1
                eS      26 03.32
KNK     2.63  56 iPc    25 33.12  -2.7
                eS      26 05.32
KNIM    2.65  81 iPc    25 32.96  -3.1
                eS      26 03.24
GHO     2.65  47 iPc    25 33.52  -2.7
MTU     2.69  88 eP     25 34.62  -2.0
                eS      26 06.13
CUT     2.73  28 ePd    25 35.16  -1.9
CFI     2.83  64 iPc    25 35.15  -3.3
                eS      26 08.83
SML     2.90  50 iPc    25 36.60  -2.8
TTA     3.25 335 iPd    25 41.77  -2.4
HIN     3.27  81 eP     25 40.72  -3.6
SCM     3.31  54 iPc    25 42.09  -2.9
FID     3.32  75 eP     25 40.83  -4.2
HUR     3.37  27 eP     25 43.28  -2.5
MID     3.43  97 P      25 44.20  -2.2
VLZ     3.47  68 iPc    25 43.64  -3.4
CVA     3.65  79 iPc    25 45.82  -3.6
TRF     3.67  19 ePd    25 47.30  -2.7
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20d 19h

KTH	3.68	15	ePd	25	47.31	-2.6
KLU	3.77	64	iPc	25	48.08	-3.2
			eS	26	30.36	
TOA	3.92	55	P	25	50.70	-2.5
RND	3.93	28	ePd	25	50.41	-2.9
DHY	4.08	39	ePd	25	52.69	-2.7
RAGM	4.17	81	eP	25	54.16	-2.4
MCK	4.19	26	ePd	25	54.03	-2.8
TZL	4.21	58	iPc	25	54.23	-2.8
KAIM	4.32	88	ePc	25	56.34	-2.2
HMT	4.38	82	eP	25	56.12	-3.3
SDG	4.39	52	iPc	25	56.72	-2.8
BWN	4.48	20	ePd	25	57.71	-3.0
PAX	4.66	47	iPc	26	00.67	-2.7
GLB	4.73	69	iPc	26	00.82	-3.4
THY	4.84	42	eP	26	03.88	-1.9
NEA	4.92	20	ePd	26	02.61	-4.2
WRH	5.02	25	ePd	26	04.41	-3.7
DDM	5.06	39	eP	26	07.24	-1.5
WAX	5.08	81	eP	26	06.31	-2.7
MLY	5.13	11	ePd	26	05.94	-3.8
HDA	5.23	30	iPd	26	07.77	-3.2
CCB	5.23	25	ePd	26	07.06	-3.9
CYK	5.27	85	eP	26	09.35	-2.1
			eS	27	06.16	
DJE	5.29	37	eP	26	09.27	-2.5
BALM	5.36	74	ePc	26	09.16	-3.7
MDM	5.42	22	ePd	26	09.72	-3.9
COL	5.46	24	eP	26	10.07	-4.0
FBA	5.46	24	iPd	26	09.88	-4.2
WRG	5.50	85	eP	26	12.57	-2.2
IL1	5.55	28	ePd	26	11.63	-3.7
ILB	5.55	28	ePd	26	11.70	-3.6
			eS	27	10.59	
DOT	5.58	46	eP	26	12.44	-3.4
YAH	5.63	82	eP	26	14.48	-2.2
TMW	5.80	51	eP	26	15.91	-2.9
CTGM	5.85	76	eP	26	16.49	-3.1
CHX	5.96	84	eP	26	18.85	-2.2
IM3	5.99	357	ePd	26	18.72	-2.7
IMA	6.08	357	iPd	26	19.51	-3.2
BC3	6.17	56	ePc	26	20.67	-3.3
SDN	6.18	224	ePc	26	19.87	-4.1
PCA	6.38	84	iP	26	24.29	-2.6
BCPM	6.71	85	eP	26	28.14	-3.1
YKU	6.72	88	P	26	29.20	-2.1
PNL	6.87	87	eP	26	30.13	-3.3
ANM	7.34	314	eP	26	37.01	-2.8
FYU	7.43	25	ePd	26	37.09	-4.0
BM3	8.30	23	eP	26	47.45	-5.4
SIT	9.70	100	eP	27	08.11	-3.6
BRW	11.43	354	eP	27	28.45	-6.0
INK	11.82	37	eP	27	36.00	-3.6
	0.9s	127.00nm			5.6mb	
ILT	13.66	316	iPc+	28	01.40	-2.2
	1.5s	700.00nm			5.8mb	
			iS	30	34.00	
ADK	15.49	249	eP	28	23.89	-3.0
	1.0s	208.75nm			5.4mb	
YKA	18.44	66	eP	28	59.10	-3.5
	0.7s	489.00nm			5.9mb	
SMY	19.45	263	eP	29	09.04	-4.3
	1.1s	1066.88nm			6.1mb	
MBC	20.00	23	ePd	29	15.00	-3.8
	0.7s	81.00nm			5.2mb	
MCW	20.72	110	eP	29	25.70	-0.7
GMW	21.55	112	eP	29	34.72	0.0
RMW	22.08	111	eP	29	40.04	0.1
			epP	30	03.83	116kmX
BMW	22.14	114	ePd	29	40.68	0.2
			epP	30	04.47	116kmX
FMW	22.52	112	P	29	44.74	0.4
LON	22.59	112	eP	29	44.83	-0.1
			epP	30	09.52	120kmX
KMOR	22.66	116	P	29	45.70	0.1
WTV	22.78	108	P	29	46.27	-0.5
SHW	22.81	114	eP	29	46.20	-0.9
SAW	23.05	107	P	29	48.64	-0.6
EBG	23.06	110	P	29	49.39	0.0
ASR	23.14	113	P	29	50.31	0.1
DPW	23.51	106	eP	29	52.32	-1.4
			epP	30	16.85	117kmX
WAH2	23.64	109	P	29	53.93	-1.1
SSOR	23.73	116	P	29	56.05	0.1
NEW	23.76	104	iPc	29	55.48	-0.7
	1.1s	430.02nm			5.8mb	
			pP	30	21.79	127kmX
RNO	23.90	119	P	29	57.27	-0.3
VGB	23.99	113	iPd	29	58.33	-0.1
			epP	30	24.45	126kmX
CROR	24.30	114	P	30	00.84	-0.6
JBO	24.47	112	P	30	01.78	-1.2
DBO	24.75	120	P	30	05.70	0.0
VIPM	24.83	114	P	30	05.81	-0.7
LNOR	24.90	109	P	30	05.81	-1.2
RES	25.28	32	ePd	30	06.60	-3.6
	0.6s	47.00nm			5.2mb	
YBH	26.10	121	ePd	30	18.21	0.0
	1.5s	350.00nm			5.7mb	
			ipPd	30	46.52	135kmX
			eS	35	07.52	
			esS	35	40.52	
ARC	26.23	124	e(P)	30	11.16	-8.0
	1.4s	230.00nm			5.5mb	
			epPd	30	45.76	170kmX
FHC	26.33	124	eP	30	20.49	0.3
	1.4s	87.40nm			5.1mb	
			epP	30	47.02	125kmX
LGPM	26.73	122	ePd	30	23.82	-0.1
			epP	30	49.22	118kmX
			eScP	37	09.36	
LBFM	26.77	120	eP	30	23.72	-0.7
			epP	30	50.00	123kmX
			eScP	37	09.14	
PET	27.03	277	eP	30	23.00	-3.4
	1.5s	900.00nm			6.1mb	
	Z 22s	2.20um			4.7Msz	
			e	30	52.00	
			ePPP	31	06.00	
			e	34	48.00	
WDC	27.12	122	eP	30	25.79	-1.6
	0.8s	14.53nm			4.6mb X	
			epP	30	52.23	123kmX
FFC	27.42	78	eP	30	27.17	-2.8
MIN	27.72	121	eP	30	31.70	-1.2
	1.0s	100.00nm			5.4mb	
LRM	27.75	102	iPd	30	31.80	-1.5
			e	30	58.90	
ORV	28.42	122	ePd	30	37.14	-1.9
	2.7s	370.00nm			5.6mb	
			epPd	31	04.14	126kmX
			eS	35	32.39	
			isS	36	13.39	
NTYM	28.91	125	eP	30	41.82	-1.6
			epP	31	08.84	125kmX
			eScP	37	14.16	
BKS	29.52	125	ePd	30	48.14	-0.8
	1.0s	100.00nm			5.5mb	
			ePPd	31	14.79	
CMB	30.17	122	ePd	30	53.45	-1.2
	1.3s	80.00nm			5.3mb	
			epPd	31	20.20	123kmX
			eS	35	49.31	
			isS	36	32.31	
			iSS	37	57.31	
MHC	30.23	125	ePd	30	54.24	-1.0
	1.3s	100.00nm			5.4mb	
			ePPd	31	20.74	
			epP	31	21.19	124kmX
			eS	36	04.19	
			isS	36	40.19	
			eSS	37	57.19	
ARN	30.26	124	eP	30	54.48	-1.0
			epP	31	18.38	108kmX
COE	30.28	125	iPd	30	54.81	-0.8
			pP	31	21.55	123kmX
KVN	30.31	118	eP	30	55.09	-1.0
HVU	30.60	108	iPd	30	57.68	-0.9
			epP	31	22.47	112kmX
			eScP	37	21.24	
SAO	30.80	125	ePd	30	58.83	-1.3
	1.3s	70.00nm			5.2mb	
			epPd	31	25.68	123kmX
			eS	36	06.99	
			isS	36	44.99	
MEMM	31.09	121	eP	31	02.89	0.2
			eScP	37	23.61	
MMPM	31.10	121	eP	31	02.81	-0.4
BONR	31.13	119	ePd	31	02.71	-0.7
			epP	31	29.71	124kmX
			eScP	37	23.06	
TIK	31.47	324	iPc+	31	01.00	-4.6
	2.0s	330.00nm			5.7mb	
	Z 12s	2.50um			5.1MszX	
			ipP	31	44.00	210kmX
			e	33	50.00	
			eS	36	03.00	
			i	41	16.00	
TNP	31.50	118	eP	31	05.55	-1.0
	0.7s	8.36nm			4.6mb X	
			eScP	37	24.03	
MTUM	31.52	120	eP	31	06.26	-0.4
			epP	31	33.45	125kmX
DUG	31.81	110	ePd	31	08.66	-0.5
	0.7s	16.16nm			4.9mb	
			eScP	37	32.90	
DAU	32.38	108	iPd	31	13.21	-1.1
			epP	31	40.20	123kmX
			eScP	37	27.35	
BCH	32.72	125	eP	31	16.45	-0.6
			epP	31	43.06	120kmX
			eScP	37	29.29	
TPNV	32.87	118	ePc	31	17.43	-1.0
	0.4s	14.09nm			5.1mb	
			epP	31	43.19	116kmX
			eScP	37	27.63	
ISA	32.99	122	eP	31	17.12	-2.2
	0.6s	15.63nm			5.0mb	
			epP	31	44.50	124kmX
EMUT	33.06	109	eP	31	18.58	-1.6
			epP	31	46.33	126kmX
ULM	33.07	81	ePd	31	20.00	0.2
RSSD	33.14	96	iPd	31	20.25	-0.5
	0.6s	65.33nm			5.6mb	
			epP	31	47.02	121kmX
			ePcP	34	30.92	
			eScP	37	33.64	
ABL	33.36	124	iPc	31	21.75	-1.0
			pP	31	49.89	128kmX
ARUT	33.45	114	ePd	31	22.34	-1.1
			epP	31	47.62	113kmX
			eScP	37	30.54	
MSU	33.45	111	iPd	31	22.60	-0.9
			epP	31	49.61	122kmX
			ePcP	33	59.14	
			eScP	37	31.51	
SRU	33.75	109	iPd	31	25.06	-1.0
			epP	31	51.09	117kmX
GSC	34.01	120	iPd	31	27.29	-0.9
			epP	31	54.43	122kmX
			eScP	37	33.15	
SSK	34.56	122	eP	31	31.91	-1.1
			epP	31	58.05	117kmX
PV09	34.90	108	iPd	31	34.50	-1.5
			epP	31	57.80	102kmX
			eScP	37	35.64	
PV10	35.04	108	ePd	31	36.13	-1.0
			epP	32	02.04	113kmX
			ePcP	34	33.77	
			eScP	37	36.71	
PEC	35.06	122	eP	31	35.83	-1.2
	0.5s	7.72nm			4.8mb	
			eScP	37	36.08	
PV08	35.07	108	ePd	31	35.72	-1.8
			epP	32	01.53	112kmX
			eScP	37	36.48	
YAK	35.44	307	iPc+	31	42.00	2.1
	1.2s	326.00nm			6.1mb	
			i	32	23.00	
			eS	37	05.00	
			esS	37	56.00	
PLM	35.65	122	eP	31	41.23	-1.0
			epP	32	08.63	120kmX
GOL	35.78	103	eP	31	41.73	-1.6
	0.7s	17.39nm			5.0mb	
			epP	32	10.03	125kmX
			esP	32	23.69	
			ePcP	33	25.44	
			eScP	37	38.92	
GLD	35.81	103	eP	31	43.11	-0.4
	1.2s	32.90nm			5.1mb	
			epP	32	08.56	110kmX
GLA	36.78	120	eP	31	50.88	-0.6
			epP	32	17.99	118kmX
FRB	37.24	47	ePd	31	52.00	-3.0
	0.9s	163.00nm			5.9mb	
KUR	37.44	274	iPc+	31	53.00	-3.9
	1.0s	920.00nm			6.6mb	
			e	33	19.00	
YSS	38.76	280	iPc+	32	05.20	-2.7
	1.0s	210.00nm			5.9mb	

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                e     33 40.00
                e     34 11.00
                e     37 53.00
                e     38 44.00
GDH    38.87  34 iPd  32 06.00  -2.5
       1.0s  120.00nm          5.7mb
                e     37 55.00
ALQ    39.03 109 ePd  32 09.45  -1.1
       0.5s    8.66nm          4.8mb
                epP   32 36.94 121kmX
                ePcP  34 05.75
                eScP  37 51.71
JAQ    40.38  63 eP   32 18.00  -3.1
KKH    40.38 184 (P)  32 19.54  -1.9
DAG    40.46  15 iPc  32 17.20  -4.3
       0.7s  158.22nm          5.9mb
                ipP   32 45.00 122kmX
KUSJ   40.55 274 eP   32 18.30  -4.4
ASAJ   40.85 277 eP   32 22.40  -2.7
KBS    41.01   4 iPc  32 25.00  -1.0
ACO    41.18 100 iPc  32 26.20  -1.8
HOOJ   41.79 275 eP   32 29.10  -3.7
SAP    42.27 277 eP   32 35.00  -1.8
MRRJ   42.87 276 eP   32 38.40  -3.2
WMOK   42.92 101 ePd  32 40.49  -1.7
       1.0s  174.06nm          5.8mb
                ePcP  34 55.91
                eScP  38 05.47
OCO    42.94  99 iPd  32 40.70  -1.6
MEO    42.98 101 iPc  32 40.50  -2.2
FNO    43.19  99 iPd  32 42.40  -1.9
TUL    43.47  97 iPc  32 44.30  -2.3
CCM    44.08  91 eP   32 48.41  -3.1
       0.7s   43.04nm          5.3mb
                epP   33 16.22 121kmX
BOD    44.14 310 iPc  32 48.70  -3.1
       1.4s  294.00nm          5.9mb
LTX    44.99 110 iPd  32 56.32  -2.6
                epP   33 24.50 123kmX
                eScP  38 13.67
OFUJ   45.08 273 P    32 56.50  -2.9
ELF    45.16  78 P    32 57.75  -2.3
DLA    45.28  79 P    32 59.60  -1.3
LDN    45.34  78 P    32 59.40  -2.0
ACTO   45.46  77 P    33 00.40  -2.0
UYO    45.52  98 iPd  33 00.30  -2.6
MIAR   45.66  96 ePc  33 06.50   2.5
       0.7s   74.46nm          5.6mb
                epP   33 35.51 127kmX
                e     37 25.16
ELC    45.68  90 iPc  33 01.02  -3.2
                epP   33 29.83 126kmX
TYNO   45.94  77 P    33 03.89  -2.3
LST    46.02  91 iPd  33 04.30  -2.6
                epP   33 32.36 122kmX
WLVO   46.04  75 P    33 04.58  -2.4
GAC    46.14  72 ePd  33 04.40  -3.3
                pP    33 35.00 134kmX
STCO   46.20  77 P    33 05.85  -2.3
YAMJ   46.60 273 P    33 08.60  -2.8
MDJ    46.88 287 Pc   33 10.00  -3.6
       1.2s  230.00nm          5.8mb
                PP    35 03.00
                eS    39 52.00
YSNY   47.05  77 ePd  33 12.31  -2.7
       0.9s  207.97nm          5.9mb
                epP   33 40.60 122kmX
                eScP  37 59.32
RSNY   47.44  72 iPc  33 14.44  -3.6
       0.8s   40.74nm          5.3mb
OXF    47.77  93 iPd  33 18.25  -2.4
       0.6s  485.29nm          6.5mb
                epP   33 46.63 122kmX
NIIJ   47.84 273 P    33 17.50  -3.6
KAKJ   48.06 272 P    33 19.40  -3.4
BINY   48.50  75 iPd  33 23.36  -2.9
       0.6s  138.14nm          6.0mb
                epP   33 52.79 127kmX
MCWV   48.55  80 eP   33 23.64  -2.9
       1.0s   85.85nm          5.5mb
CIT    48.60 305 eP   33 25.00  -1.9
     Z 16s     2.10um          5.2MszX
                e     35 19.00
                eS    40 20.00
CHJJ   48.77 272 P    33 25.20  -3.1
MAJO   48.78 273 ePc  33 24.42  -4.0
       1.5s 1557.62nm          6.6mb X
MAT    48.78 273 iPc  33 24.90  -3.5
       1.4s 1023.26nm          6.5mb
                eS    40 18.00
LBNH   48.91  70 eP   33 24.90  -4.4
       0.8s   61.61nm          5.5mb
MTMJ   48.95 274 P    33 26.50  -3.3
CN2    49.47 290 iPc  33 30.20  -3.4
       1.0s  530.00nm          6.4mb
                sP    34 12.50
                ePP   35 25.00
                eS    40 26.00
IIDJ   49.76 273 P    33 32.50  -3.5
NAV    49.88  83 iPd  33 33.90  -3.0
GPD    50.14  75 iPd  33 35.72  -3.1
                epP   34 04.75 124kmX
TBR    50.17  75 iPd  33 35.77  -3.2
                epP   34 04.53 123kmX
LSCT   50.24  74 eP   33 36.81  -2.7
       0.8s   22.49nm          5.2mb
                epP   34 07.02 130kmX
GMTN   50.38  75 iP   33 38.80  -1.8
PAL    50.42  75 iPd  33 37.69  -3.2
                epP   34 06.72 124kmX
TRO    50.51   4 eP   33 38.00  -3.1
KEV    50.51 360 eP   33 35.34  -5.8
       1.0s  135.01nm          5.8mb
CVL    50.53  81 eP   33 39.08  -2.6
TSRJ   50.68 275 P    33 39.60  -3.3
CBN    50.89  80 eP   33 41.00  -3.4
LMN    50.98  64 ePd  33 41.50  -3.6
PRM    51.64  87 eP   33 46.98  -3.2
                epP   34 16.04 124kmX
SNY    51.86 289 iPc  33 46.00  -5.7
       1.4s 1550.00nm          6.7mb X
     Z 20s     1.94um          5.1Msz
     E 11s     1.09um
                sP    34 30.00
                PP    35 50.00
                S     40 54.00
WKYJ   51.92 274 P    33 49.50  -2.9
JSC    52.04  86 iPd  33 49.90  -3.3
                epP   34 19.85 128kmX
IRK    52.09 311 eP   33 48.50  -4.9
       2.1s  592.00nm          6.2mb
     Z 18s     1.32um          5.0Msz
     N 20s     1.31um
     E 14s     0.67um
                e     34 18.00
                e     34 32.00
                e     37 02.00
                eS    40 54.00
                e     43 28.00
                e     46 22.00
LHS    52.11  85 ePd  33 50.43  -3.3
                epP   34 20.05 126kmX
YONJ   52.22 276 P    33 50.90  -3.6
TKSJ   52.88 275 P    33 56.40  -3.0
SHK    53.13 276 iP   33 57.60  -3.6
HBF    53.56  86 P    34 01.80  -2.5
ZAK    53.98 310 iPc  34 04.60  -2.6
       1.2s  166.00nm          5.9mb
                e     34 47.00
                eS    41 17.00
                e     43 37.00
SHNJ   54.24 277 P    34 06.10  -3.2
DL2    55.07 288 P    34 11.80  -3.5
       1.2s  390.00nm          6.2mb
     Z 20s     1.25um          5.0Msz
     N 14s     0.91um
                S     41 46.00
NSS    55.25   8 eP   34 10.60  -5.7
KUMJ   55.65 277 P    34 15.80  -3.8
PPM    56.12 112 (P)  34 22.00  -1.7
UER    56.39 316 iPc  34 21.80  -2.8
       2.2s  740.00nm          6.3mb
                e     35 04.00
                PPP   37 42.00
                iS    42 04.00
                e     43 58.40
                SSS   48 00.00
KAGJ   56.71 276 eP   34 23.30  -3.9
BJI    56.73 293 Pc   34 22.00  -5.2
       1.2s  320.00nm          6.2mb
                epP   34 52.00 126kmX
                esP   35 06.00
                ePP   36 32.00
                eScP  39 06.00
                eS    42 04.00
                esS   42 57.00
                eSS   46 00.00
MOL    56.83  11 eP   34 21.85  -5.7
SUE    58.03  13 eP   34 30.54  -5.5
HHC    58.17 297 iPc  34 34.20  -3.3
       1.4s  930.00nm          6.6mb
     Z 40s     2.82um          5.1MszX
     E 13s     1.16um
                sP    35 15.00
                PP    36 47.00
                ScP   39 12.50
                S     42 27.00
                sS    43 11.00
                ScS   44 10.00
KAF    58.19   0 iP   34 32.20  -4.9
       0.4s   30.80nm          5.7mb
NB2    58.65   9 P    34 35.30  -5.2
       0.8s   32.40nm          5.4mb
NAO    58.83   9 P    34 33.27  -8.4
TIA    59.37 290 eP   34 42.20  -3.4
       1.5s  340.00nm          6.2mb
     Z 25s     0.90um          4.8MszX
     N 15s     1.04um
                sP    35 25.00
                S     42 38.00
HFS    59.73   8 eP   34 42.10  -5.7
       0.3s   12.90nm          5.4mb
NUR    59.79   1 iP   34 43.20  -4.9
       0.5s   55.40nm          5.9mb
UPP    60.23   5 iP   34 46.30  -4.9
                iS    42 48.00
TIY    60.33 295 iPd  34 49.00  -3.2
       1.4s  360.00nm          6.2mb
     Z 42s     3.63um          5.2MszX
     N 13s     1.24um
                S     42 53.50
                ScS   44 28.00
SVE    60.51 340 ePd  34 49.00  -4.1
       1.8s  400.00nm          6.1mb
     Z 18s     1.00um          5.0Msz
     N 16s     0.50um
     E 16s     0.20um
                i     35 20.80
                eS    42 43.00
                e     44 26.00
PUL    60.52 358 ePc  34 48.00  -5.1
                e     35 38.00
                iS    42 53.00
                e     43 33.00
                eSSS  49 28.00
ARU    61.25 341 iPd  34 53.10  -5.1
       0.9s  200.00nm          6.1mb
     Z 20s     1.00um          5.0Msz
     N 16s     0.50um
     E 20s     0.50um
                e     35 24.00
                eS    43 01.00
                e     44 25.00
ELO    61.33  19 ePd  34 53.60  -5.1
EDU    61.37  18 ePd  34 53.70  -5.3
EAB    61.50  19 iPd  34 55.20  -4.6
EBH    61.57  19 iPd  34 55.60  -4.8
SSE    61.58 283 iPc  34 57.00  -3.7
       1.5s  210.00nm          5.9mb
     Z 20s     0.90um          4.9Msz
                PP    37 12.00
                S     43 08.00
NJ2    61.93 286 Pc   34 58.60  -4.4
       1.2s  610.00nm          6.5mb
                sP    35 40.00
                PP    37 18.00
                S     43 14.00
EDI    61.94  19 iPd  34 58.00  -4.7
EAU    61.97  19 iPd  34 58.50  -4.5
EBL    62.11  19 ePd  34 59.30  -4.6
EKA    62.51  19 Pc   35 02.20  -4.3
       0.8s  104.10nm          5.8mb
ESK    62.52  19 ePd  35 02.10  -4.5
       0.9s  142.00nm          5.9mb
MUD    63.00  11 iPc  35 05.60  -4.1
       0.9s   62.00nm          5.5mb
DCN    63.69  22 iPd  35 09.90  -4.4
       0.9s  384.00nm          6.3mb
DLF    63.87  22 eP   35 10.90  -4.6
       0.9s  154.00nm          5.9mb
COP    64.06   9 iPd  35 11.80  -4.8
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20d 19h

	0.9s	104.20nm			5.8mb	
		eS	43	26.00		
WME	64.18	20 iPd	35	12.70	-4.8	
YRC	64.27	20 eP	35	12.70	-5.3	
MOS	64.27	353 iPd	35	16.00	-2.1	
	2.0s	270.00nm			5.8mb	
	Z 16s	0.60um			4.9MszX	
GTA	64.41	305 Pc	35	15.00	-4.4	
	1.4s	350.00nm			6.1mb	
	Z 18s	2.85um			5.5Msz	
		PP	37	35.00		
		S	43	41.00		
		ScS	44	58.00		
VAL	64.43	25 iP	35	15.10	-4.0	
	1.0s	1.70nm			3.9mb X	
GUMO	64.52	252 (P)	35	14.49	-5.6	
GUA	64.54	252 eP	35	14.50	-5.8	
YRH	64.66	21 iPd	35	15.80	-4.8	
XAN	64.96	295 Pc	35	18.40	-4.5	
	1.4s	430.00nm			6.2mb	
	Z 18s	1.50um			5.2Msz	
	N 14s	1.16um				
	E 14s	1.10um				
		PP	37	43.00		
		PcS	39	53.00		
		S	43	48.00		
		ScS	45	00.00		
		SS	48	01.00		
ECP	64.97	22 eP	35	17.00	-5.5	
OBN	64.97	354 iPd	35	17.00	-5.5	
	0.8s	120.00nm			5.9mb	
	Z 18s	0.60um			4.8Msz	
		epP	35	47.00	122kmX	
		esP	36	01.00		
		iS	43	48.00		
		eSP	44	24.00		
		eSS	48	06.00		
WMQ	65.24	316 P	35	22.00	-2.6	
	1.0s	280.00nm			6.1mb	
	Z 16s	1.24um			5.2MszX	
	E 10s	8.71um				
		PcP	35	52.00		
		S	43	56.00		
HCG	65.32	20 iPd	35	20.10	-4.8	
WHN	65.34	289 Pd	35	21.50	-3.7	
	1.5s	820.00nm			6.4mb	
LZH	65.51	300 iPc	35	22.50	-4.0	
	1.6s	1040.00nm			6.5mb	
	Z 22s	1.61um			5.2Msz	
	N 16s	1.65um				
		pP	35	53.00	124kmX	
		PP	37	47.00		
		ScP	39	45.00		
		S	43	54.00		
		ScS	45	07.50		
		eSS	48	10.00		
HTR	65.62	20 iPd	35	22.30	-4.5	
HAE	65.78	20 iPd	35	23.70	-4.1	
HGH	66.12	20 iPd	35	25.70	-4.3	
WIT	66.33	13 iPd	35	28.50	-2.8	
MNK	66.43	360 eP	35	24.00	-7.8	
		eS	44	00.00		
TATO	66.50	279 (P)	35	30.83	-1.9	
	1.7s	795.15nm			6.4mb	
CPZ	67.05	22 ePd	35	31.50	-4.3	
CME	67.10	22 ePd	35	32.00	-4.2	
WTS	67.15	13 iPd	35	32.90	-3.6	
	0.9s	89.60nm			5.7mb	
UCC	68.02	15 P-	35	38.00	-3.9	
		S	44	27.00		
BNS	68.21	13 iPd	35	39.10	-4.0	
	0.6s	57.00nm			5.6mb	
ENN	68.26	14 iPd	35	39.20	-4.1	
	1.0s	88.00nm			5.6mb	
SNF	68.30	15 iPd	35	39.39	-4.2	
		ic	36	04.23		
MEM	68.42	14 iPd	35	40.25	-4.1	
	1.0s	34.70nm			5.2mb	
CLL	68.45	9 iPd	35	40.00	-4.5	
	1.3s	56.00nm			5.3mb	
		i	36	13.90		
		eS	44	31.00		
DOU	68.74	15 Pd	35	42.40	-4.0	
	0.9s	152.50nm			5.8mb	
		e	37	42.50		
		S	44	37.00		
BRG	68.95	9 iPd	35	43.60	-4.0	

	1.0s	50.00nm			5.3mb	
		ipP	36	22.00	159kmX	
		iS	44	36.00		
MOX	68.98	10 iPd	35	44.10	-3.8	
	1.2s	110.00nm			5.6mb	
		e	36	18.00		
		eS	44	40.00		
TNS	69.08	13 iPd	35	44.50	-4.0	
		e	35	50.10		
KSP	69.15	7 iPd	35	44.60	-4.2	
	1.0s	49.00nm			5.3mb	
		i	36	15.00		
FLN	69.29	19 iPd	35	45.30	-4.4	
	0.7s	44.75nm			5.4mb	
	Z 21s	0.77um			4.9Msz	
HOF	69.34	10 iPd	35	46.00	-4.0	
	0.7s	28.00nm			5.2mb	
WLF	69.37	14 iPd	35	46.67	-3.4	
	1.1s	38.60nm			5.1mb	
LDF	69.51	19 iPd	35	46.70	-4.4	
	0.7s	44.30nm			5.4mb	
GRR	69.59	19 iPd	35	47.40	-4.1	
	0.7s	52.45nm			5.5mb	
PRU	69.88	9 iPd	35	49.20	-4.1	
	1.0s	26.50nm			5.0mb	
		ipP	36	18.80	119kmX	
		S	44	49.50		
		SKS	45	37.10		
GRF	69.89	11 ePd	35	50.00	-3.4	
	1.1s	74.00nm			5.4mb	
	Z 20s	0.40um			4.7Msz	
LPF	69.91	20 iPd	35	49.60	-3.9	
	0.6s	53.55nm			5.6mb	
CD2	69.93	297 P	35	50.60	-3.4	
	1.4s	780.00nm			6.3mb	
		S	44	47.00		
LANF	70.24	13 P	35	51.80	-3.7	
HOFF	70.29	13 P	35	52.57	-3.2	
FRU	70.32	325 iPc+	35	53.50	-2.6	
	2.0s	530.00nm			6.0mb	
	Z 28s	1.50um			5.1MszX	
		e	36	20.80		
		e	36	36.00		
		e	38	29.00		
		iS	44	56.00		
WET	70.58	10 eP	35	54.00	-3.6	
	1.3s	67.00nm			5.3mb	
KHC	70.66	9 iPd	35	54.70	-3.4	
	1.2s	58.00nm			5.3mb	
		epP	36	19.00	94kmX	
CDF	70.74	14 iPd	35	54.70	-3.9	
	1.0s	60.60nm			5.4mb	
WLS	70.74	14 P	35	54.87	-3.8	
VITF	70.77	15 P	35	54.98	-3.8	
ECH	70.91	14 P	35	55.86	-3.8	
GEC2	70.95	9 e(P)	36	01.90	2.0	
	0.6s	12.20nm			4.9mb	
GEC2	70.95	9 e(P)	35	55.90	-4.0	
	0.7s	9.80nm			4.7mb	
SPC	71.01	5 iPd	35	56.40	-4.0	
HAU	71.02	15 iPd	35	56.40	-3.9	
	0.8s	87.85nm			5.6mb	
	Z 22s	0.32um			4.5Msz	
LIBD	71.03	14 P	35	56.62	-3.7	
HYF	71.23	17 iPd	35	57.80	-3.7	
BSF	71.25	14 iPd	35	57.70	-4.0	
	0.8s	71.75nm			5.5mb	
MOF	71.27	14 P	35	57.72	-4.1	
FEL	71.35	13 P	35	58.06	-4.3	
FUR	71.41	11 iPd	35	58.80	-3.8	
	1.0s	98.00nm			5.6mb	
LOR	71.41	16 iPd	35	58.60	-4.0	
	0.8s	134.30nm			5.8mb	
	Z 22s	0.60um			4.8Msz	
MFF	71.44	19 iPd	35	58.90	-3.9	
	0.9s	127.75nm			5.7mb	
SLE	71.51	13 iPd	35	59.20	-4.0	
SSF	71.56	17 iPd	35	59.60	-3.9	
	0.8s	187.50nm			6.0mb	
UZH	71.63	3 eP	36	00.50	-3.3	
	1.0s	31.00nm			5.1mb	
	Z 16s	1.00um			5.2MszX	
	N 16s	1.00um				
		e	36	17.20		
		eS	45	05.00		
BBS	71.70	14 P	36	00.35	-4.0	
LBF	71.71	16 iPd	36	00.20	-4.2	

	0.8s	92.40nm			5.6mb	
LOMF	71.73	14 P	36	00.58	-4.0	
AVF	71.81	17 iPd	36	00.80	-4.1	
	0.7s	133.15nm			5.9mb	
ZST	71.84	7 eP	36	01.40	-3.7	
		i	36	31.20		
BGF	71.96	17 iPd	36	01.70	-4.2	
	0.7s	133.60nm			5.8mb	
BHG	72.00	10 iPd	36	02.60	-3.5	
	1.0s	77.00nm			5.5mb	
SMF	72.02	17 iPd	36	02.10	-4.1	
	0.9s	117.30nm			5.7mb	
LSF	72.06	18 iPd	36	02.20	-4.2	
	0.8s	139.70nm			5.8mb	
GZH	72.08	285 iPc	36	04.20	-2.6	
	1.2s	290.00nm			6.0mb	
	Z 42s	2.24um			5.1MszX	
		S	45	17.00		
TCF	72.13	18 iPd	36	02.70	-4.2	
	0.7s	54.25nm			5.5mb	
MOTA	72.21	11 iPd	36	03.60	-3.9	
	1.1s	63.30nm			5.3mb	
MAF	72.25	18 iPd	36	03.60	-4.0	
	0.8s	43.90nm			5.3mb	
WATA	72.26	11 iPd	36	03.90	-3.9	
		ipP	36	30.20	103kmX	
SRO	72.29	6 eP	36	04.80	-2.9	
WTTA	72.34	11 iPd	36	04.80	-3.5	
	0.9s	97.40nm			5.6mb	
		i	36	34.00		
		i	37	09.90		
HKC	72.34	284 eP	36	06.20	-2.2	
		S	45	21.00		
SQTA	72.34	11 iPd	36	04.70	-3.5	
	0.9s	92.00nm			5.6mb	
		i	36	34.80		
GYA	72.39	292 iPc	36	05.00	-3.9	
	1.6s	1040.00nm			6.4mb	
	Z 30s	1.11um			5.0MszX	
	N 20s	1.42um				
	E 20s	1.93um				
		sP	36	44.00		
		PP	38	48.00		
		S	45	18.00		
		SKS	45	56.00		
		SS	49	58.00		
CVP	72.44	275 ePc	36	06.00	-3.1	
LLS	72.46	13 iPd	36	05.70	-3.3	
OGA	72.67	11 iPc	36	07.40	-2.9	
	0.8s	16.00nm			4.9mb	
KBA	72.68	10 iPd	36	06.90	-3.4	
	1.1s	146.00nm			5.7mb	
		ipP	36	32.40	99kmX	
		i	37	07.30		
OSS	72.76	12 ePd	36	07.40	-3.4	
VDL	72.89	13 iPd	36	08.50	-3.0	
SJG	72.94	83 eP	36	07.13	-4.9	
	0.8s	34.46nm			5.2mb	
		epP	36	38.66	126kmX	
RJF	72.98	19 iPd	36	07.50	-4.3	
	0.8s	28.50nm			5.1mb	
EMS	73.00	14 iP+	36	09.20	-3.0	
KSH	73.01	322 iPc	36	09.00	-3.3	
	1.0s	450.00nm			6.2mb	
	Z 18s	1.57um			5.3Msz	
	N 10s	1.35um				
	E 10s	1.58um				
		PcP	36	29.00		
		pP	36	37.00	110kmX	
		sP	36	49.00		
		PP	38	50.00		
		SKS	45	57.00		
		eScS	46	00.00		
DIX	73.05	14 iPd	36	09.50	-3.1	
FVI	73.11	10 P	36	08.85	-3.6	
	1.0s	30.80nm			5.1mb	
EMON	73.12	25 iPd	36	08.74	-4.0	
MMK	73.14	14 ePd	36	10.20	-2.9	
TMA	73.19	13 iPd	36	10.60	-2.7	
LFF	73.21	19 iPd	36	09.40	-3.7	
	0.7s	130.10nm			5.8mb	
RSL	73.34	15 P	36	10.80	-3.3	
CAF	73.43	18 iPd	36	10.60	-3.9	
	1.0s	96.40nm			5.6mb	
SSB	73.46	16 P	36	10.97	-3.7	
LPL	73.52	15 iPd	36	12.30	-2.9	
	0.9s	50.95nm			5.3mb	

LPO	73.53	19	iPd	36 11.30	-3.7
	0.7s	130.10nm			5.8mb
LPG	73.54	15	iPd	36 12.60	-2.8
	1.1s	65.95nm			5.3mb
CTI	73.54	11	P	36 11.00	-4.2
	0.8s	24.50nm			5.1mb
ORX	73.56	14	P	36 12.08	-3.2
ORO	73.57	14	P	36 12.42	-2.9
	1.0s	55.50nm			5.3mb
LSD	73.63	14	P	36 13.04	-2.9
RSP	73.94	14	P	36 14.41	-3.2
BNI	73.97	15	P	36 15.15	-2.6
	0.9s	64.10nm			5.4mb
EZAM	74.05	27	iPd	36 14.68	-3.4
PTJ	74.05	8	eP	36 13.10	-5.0
RRL	74.11	15	P	36 16.15	-2.6
ERUA	74.16	26	iPd	36 15.40	-3.3
BAG	74.16	275	eP	36 14.00	-5.3
	1.5s	166.67nm			5.6mb
BHB	74.25	14	P	36 15.10	-4.1
PZZ	74.56	15	P	36 17.66	-3.5
DOI	74.58	15	P	36 17.36	-3.9
	0.8s	29.30nm			5.1mb
BOB	74.58	13	P	36 18.05	-3.2
	1.0s	125.60nm			5.7mb
MADF	74.68	21	P	36 18.99	-2.8
PCP	74.70	14	P	36 17.30	-4.6
ATE	74.76	21	P	36 19.06	-3.1
CKI	74.78	14	P	36 18.55	-3.7
	0.8s	170.50nm			5.9mb
ESCF	74.79	21	P	36 19.56	-2.8
ISSF	74.80	21	P	36 19.46	-3.1
STV	74.84	15	P	36 17.94	-4.8
ROB	74.86	14	P	36 18.49	-4.3
TPT	74.87	175	iPd	36 20.30	-2.7
	1.0s	183.60nm			5.8mb
ENR	74.87	14	P	36 18.03	-4.9
PMO	74.88	175	iPd	36 20.20	-2.8
	1.4s	154.20nm			5.6mb
ECRI	74.89	22	iPd	36 19.69	-3.3
LHE	74.94	21	P	36 20.12	-3.2
FIN	74.99	14	P	36 18.67	-4.8
EPF	74.99	20	iPd	36 19.20	-4.4
	0.8s	33.60nm			5.2mb
TOUF	75.06	15	P	36 20.46	-3.7
RUV	75.09	174	iPd	36 21.60	-2.6
	1.0s	175.20nm			5.8mb
AUTN	75.10	14	P	36 20.64	-3.8
VAH	75.12	175	iPd	36 21.80	-2.6
	1.0s	178.40nm			5.8mb
SAOF	75.13	14	P	36 20.36	-3.9
LESF	75.15	19	P	36 20.97	-3.5
MVIF	75.17	15	P	36 20.69	-4.0
ENSF	75.21	20	P	36 21.97	-2.9
AFI	75.22	199	eP	36 22.00	-3.1
SBF	75.23	15	iPd	36 21.30	-3.6
	0.8s	153.65nm			5.9mb
IMI	75.24	14	P	36 20.91	-4.1
MME	75.28	12	P	36 22.15	-3.3
	0.9s	56.60nm			5.4mb
LSPF	75.34	19	P	36 22.08	-3.4
KMI	75.34	295	Pc	36 22.50	-3.5
	1.8s	450.00nm			6.0mb
Z	40s	3.00um			5.3MszX
N	12s	0.60um			
E	12s	1.00um			
		PP	39 10.00		
		S	45 50.00		
REVF	75.35	15	P	36 21.68	-3.9
GQP	75.36	272	ePd	36 23.00	-2.9
GRBF	75.38	19	P	36 22.08	-3.7
BDI	75.40	12	P	36 22.34	-3.6
	0.9s	11.90nm			4.7mb
FRF	75.43	15	iPd	36 22.40	-3.6
	0.9s	63.70nm			5.4mb
MTHF	75.45	18	P	36 22.76	-3.4
PYA	75.47	348	eP	36 24.00	-2.2
	1.5s	100.00nm			5.4mb
Z	24s	0.70um			4.9MszX
LRG	75.50	15	iPd	36 23.00	-3.3
	0.8s	51.45nm			5.4mb
Z	21s	0.40um			4.7Msz
LMR	75.63	15	iPd	36 23.80	-3.3
	1.0s	64.60nm			5.4mb
SFI	75.67	11	P	36 24.87	-2.4
	1.7s	366.30nm			5.9mb
EGRA	75.69	21	iPd	36 24.57	-2.8
PAND	75.69	19	P	36 24.34	-3.4
PGD	75.70	11	P	36 25.34	-2.4
	0.9s	111.90nm			5.7mb
PII	75.73	12	P	36 23.37	-4.3
	0.9s	62.80nm			5.4mb
TRGS	75.78	19	P	36 24.70	-3.5
GRO	75.85	346	iP+	36 25.00	-3.3
	2.0s	360.00nm			5.8mb
Z	14s	1.50um			5.5MszX
N	20s	1.50um			
E	20s	6.00um			
		iS	45 54.00		
PERF	75.94	18	P	36 25.15	-3.7
TGY	75.95	274	ePc	36 27.00	-2.3
MAK	75.95	345	eP	36 27.00	-1.9
	1.5s	360.00nm			5.9mb
Z	16s	1.10um			5.3MszX
N	16s	0.70um			
E	16s	1.00um			
		e	37 09.00		
		eS	45 57.00		
		e	46 25.00		
ETER	76.12	18	iPd	36 26.37	-3.5
SOC	76.22	351	eP	36 27.50	-2.9
		e	37 12.00		
		eS	46 31.00		
LSA	76.36	306	P	36 30.80	-1.2
	1.8s	780.00nm			6.2mb
PGP	76.45	273	ePd	36 28.00	-4.1
GUD	76.46	24	iPd	36 27.81	-4.2
ASS	76.59	11	P	36 29.29	-3.3
	1.1s	86.20nm			5.5mb
EPLA	76.62	26	iPd	36 29.88	-2.8
ETOR	76.71	22	iPd	36 29.56	-3.7
PGF	76.72	14	iPd	36 29.70	-3.6
	0.8s	111.75nm			5.7mb
PLE	76.82	6	iPd	36 30.60	-3.3
BRY	77.20	6	iPd	36 31.66	-4.3
QIZ	77.23	286	Pc	36 33.00	-3.3
	1.2s	210.00nm			5.8mb
		S	46 11.00		
MNS	77.27	11	P	36 32.41	-3.9
	2.3s	784.20nm			6.1mb
IVA	77.30	5	iPd	36 33.41	-3.1
NKY	77.31	6	iPd	36 32.21	-4.4
AFR	77.33	177	iPd	36 34.00	-2.7
	1.0s	60.00nm			5.3mb
PPN	77.33	177	iPd	36 34.20	-2.5
	1.1s	101.60nm			5.5mb
PPT	77.37	177	iPd	36 34.40	-2.5
	1.4s	231.80nm			5.8mb
PAE	77.46	177	iPd	36 35.00	-2.4
	1.4s	196.90nm			5.7mb
PAB	77.48	24	eP	36 33.71	-3.8
	0.8s	44.02nm			5.3mb
PVY	77.58	5	iPd	36 35.22	-2.8
MTA	77.58	346	iPd-	36 35.00	-2.9
	0.8s	60.00nm			5.4mb
N	17s	0.20um			
E	17s	1.00um			
		i	36 39.60		
		i	37 03.40		
		e	39 31.00		
		ePPP	41 27.00		
		iS	46 13.40		
		iS	46 14.60		
		i	46 37.00		
		eSS	51 13.00		
TVO	77.59	176	iPd	36 36.00	-2.2
	1.1s	149.00nm			5.7mb
HCY	77.65	6	iPd	36 33.15	-5.1
VTS	77.70	3	iP	36 31.00	-7.8
TTG	77.71	6	iPd	36 34.35	-4.2
BDV	77.83	6	iPd	36 34.09	-5.2
SDI	78.05	10	P	36 36.79	-3.8
	1.3s	0.80nm			3.4mb X
ECHE	78.10	22	iPd	36 37.96	-2.9
ULC	78.17	6	iPd	36 35.69	-5.5
TOV	78.20	91	ePd	36 40.00	-1.8
SKO	78.26	4	iP	36 38.50	-3.2
		i	37 08.30		
DIM	78.28	1	iP	36 39.80	-1.9
SDV	78.55	92	iPc	36 41.10	-2.8
ESEL	78.60	19	iPd	36 40.58	-3.0
RZN	78.63	2	iP	36 40.00	-3.9
EVIA	78.73	23	iPd	36 41.58	-2.8
EVAL	78.84	27	iPd	36 42.28	-2.6
EBAN	78.93	24	iPd	36 42.75	-2.6
EHOR	78.95	25	iPd	36 42.47	-3.0
VAY	78.95	3	eP	36 43.50	-1.9
ASH	79.01	335	eP	36 43.00	-2.8
	2.0s	410.00nm			5.9mb
OHR	79.09	5	iP	36 40.80	-5.5
	1.1s	70.00nm			5.4mb
ERE	79.11	346	iP	36 43.00	-3.5
		iS	46 33.00		
		iPS	47 14.00		
KNT	79.12	3	eP	36 42.44	-3.9
RDO	79.18	1	eP	36 42.00	-4.6
ACU	79.25	22	iPc	36 44.90	-2.2
GRG	79.31	4	eP	36 44.08	-3.3
SGO	79.31	9	P	36 43.61	-3.7
	1.3s	35.80nm			5.0mb
ALN	79.43	1	eP	36 44.36	-3.6
FNA	79.44	4	eP	36 44.40	-3.8
SOH	79.47	3	eP	36 44.68	-3.6
EHUE	79.51	23	P	36 46.50	-2.1
DAV	79.61	266	eP	36 45.80	-3.6
EALH	79.69	23	iPd	36 46.80	-2.7
GIBL	79.75	26	iP	36 47.50	-2.3
MGR	79.75	9	P	36 45.79	-4.0
	0.7s	89.90nm			5.7mb
EPRU	79.77	26	P	36 46.79	-3.2
ECOG	79.83	24	iPc	36 47.81	-2.5
KZN	79.93	4	eP	36 46.50	-4.3
OUR	79.97	2	eP	36 48.40	-2.5
ALJ	79.97	26	iP	36 50.00	-1.1
GUN	80.04	310	P	36 49.80	-2.1
CNIL	80.16	27	iP	36 50.00	-2.0
LIT	80.16	4	eP	36 47.92	-4.1
WWKK	80.19	245	eP	36 49.00	-3.5
CTB	80.20	267	iPc	36 53.00	0.5
EJIF	80.21	26	iPd	36 50.03	-2.2
EGUA	80.25	24	iPd	36 49.75	-2.7
MOMI	80:28	26	iP	36 51.00	-1.6
MAIO	80.35	334	eP	36 50.00	-3.1
		eS	46 48.00		
KKN	80.38	310	P	36 51.00	-2.6
ENIJ	80.40	23	iPc	36 49.91	-3.3
GKN	80.43	311	P	36 50.80	-3.0
KEK	80.44	6	eP	36 50.00	-3.4
PLAT	80.47	26	iP	36 52.50	-1.1
PKI	80.52	310	P	36 51.80	-2.7
DMN	80.61	310	P	36 52.40	-2.4
PPR	80.74	273	ePc	36 49.00	-6.3
TAB	80.97	345	iP+	36 53.00	-3.4
		i	40 40.00		
GRI	81.13	8	P	36 53.11	-4.0
	0.7s	47.20nm			5.4mb
NKM	81.19	26	iP	36 56.00	-1.4
AGG	81.23	4	eP	36 53.44	-4.2
LAT	81.39	240	eP	36 55.30	-3.3
TAF	82.44	24	iP	37 02.00	-2.0
NDI	82.50	317	iPc	37 01.70	-2.6
	1.5s	444.44nm			6.1mb
CHTO	82.54	295	ePc	37 00.30	-4.4
	1.2s	122.57nm			5.6mb
AVE	82.79	28	iP	37 03.00	-2.7
		i	37 43.50		
BKM	83.54	217	iPc	37 06.20	-3.4
PMG	83.77	239	eP	37 07.00	-3.8
	1.6s	400.00nm			6.1mb
BDT	83.88	294	eP	37 10.00	-1.5
	1.0s	69.00nm			5.5mb
NST	84.73	292	iPd	37 13.50	-2.2
VAM	84.89	2	eP	37 12.70	-3.6
PCT	85.00	291	eP	37 16.00	-1.1
KKM	85.20	274	eP	37 23.00	4.7
	1.6s	380.90nm			6.1mb
TSM	85.87	271	ePd	37 20.50	-1.0
BHL	86.14	353	P	37 21.00	-1.7
		S	47 31.00		
KHT	86.22	293	eP	37 20.60	-2.6
DZM	88.23	217	iPc	37 30.20	-2.5
SNG	91.90	288	eP	37 48.00	-1.9
HYB	92.34	312	eP	37 43.50	-8.5
	1.0s	45.00nm			5.7mb
POO	93.02	316	iPc	37 55.00	-0.1
	1.0s	20.00nm			5.4mb
CTA	93.70	235	iPc	37 55.00	-3.0
	1.7s	326.92nm			6.4mb
		i	38 27.00		
		i(PcP)	41 40.00		
		eS	48 24.00		

20d 19h

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                e     55 15.00
                e     02 12.00
                e     04 00.00
IPM    93.97 286 ePd   37 58.00  -1.5
       1.2s    45.40nm          5.7mb
MTN    94.10 251 eP    37 54.00  -5.9
GBA    96.25 311 P     38 07.00  -2.9
WRA    98.77 245 iPc   38 16.40  -4.6
       1.1s     3.10nm          4.8mb
                ePP   41 33.40
ASPA  102.20 244 ePdiff38 33.00  -3.5
       1.6s     6.40nm          5.1mb
     Z  20s     0.60um          5.1Msz
                ePP   41 44.80
                eS    48 58.00
                e     50 05.50
MRWA  115.32 255 ePKP  43 18.00  -4.6
       0.4s     2.00nm
KLB   116.43 252 ePKP  43 20.00  -4.6
       0.4s     4.00nm
MUN   117.49 253 ePKP  43 22.00  -4.6
BUL   140.14 358 iPKPd 44 04.90  -5.3
       1.0s     8.00nm
                iPP   47 28.00
CIR   140.89 353 ePKP  44 12.00   0.7
                iPP   48 34.00
CSY   144.47 224 iPKPd 44 20.50   4.4
       1.0s    77.50nm
BFT   145.61 355 ePKP  44 17.00  -2.6
       0.7s    22.00nm
SLR   145.72 358 iPKPc 44 16.50  -3.2
       0.7s   127.00nm
KSR   145.86   0 ePKP  44 15.50  -4.4
       1.5s   210.00nm
SEK   148.30 359 ePKP  44 20.00  -3.8
       0.7s   125.00nm
BOSA  148.57   3 ePKP  44 20.30  -3.6
                ePKPbc44 24.00
POF   148.99  12 iPKPc 44 26.00   1.4
       0.5s    30.00nm
BLF   149.08   1 ePKP  44 22.00  -3.0
       0.9s   110.00nm
FRS   149.71   3 iPKPd 44 27.00   1.4
       1.4s   130.00nm
SPA   149.86 180 ePKPc 44 18.80  -6.1
       1.5s   625.00nm
HVD   150.56   3 iPKPc 44 35.50   8.3
       1.6s    90.00nm
SUR   152.04  11 ePKP  44 41.00  11.6
       0.7s    62.00nm
CER   152.85  14 e(PKP)44 15.00 -15.2
       0.6s    47.00nm
GRM   153.28   1 ePKP  44 34.00   3.2
       0.6s    37.00nm
      611 obs. associated
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?  NOV  20, 1993  19h 29m 47.63± 1.25s
   35.809 N ± 6.7km    7.519 W ±14.0km
   DEPTH =  10.0km  (geophysicist)
 STRAIT OF GIBRALTAR              (385)
      mbLg 3.0 (MDD).

EJIF    1.78  68 eP    30 19.50   0.9
                e     30 40.00
EVAL    1.88  19 eP    30 21.38   1.3
                e     30 41.20
EPRU    2.18  57 eP    30 23.96  -0.5
                e     30 50.00
EHOR    2.71  42 eP    30 32.95   0.9
                e     31 03.50
IFR     3.02 139 iPnd  30 37.00   0.5
                iSn   31 08.00
ELUQ    3.14  55 eP    30 38.06  -0.1
                e     31 13.80
EGUA    3.35  71 eP    30 41.25   0.1
                e     31 17.50
ECOG    3.50  64 eP    30 43.83   0.5
                e     31 22.80
EBAN    3.80  51 iPd   30 46.63  -0.9
                e     31 27.70
EPLA    4.40  15 eP    30 55.30  -0.7
                e     31 42.40
TIO     4.87 177 iPn   31 02.50  -0.4
                iSn   31 52.50
EVIA    4.90  53 iPc   31 01.55  -1.6
                e     31 54.50
      S.D. = 1.0  on  12 of  12 obs.
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&  NOV  20, 1993  19h 35m 59.93s
   60.043 N          152.990 W
   DEPTH = 113.3km
 SOUTHERN ALASKA                  (  2)
      <AEIC>.

ILIM    0.04  22 ePc   36 14.95   0.8
                eS    36 27.45
INE     0.04 296 eP    36 15.07   0.8
                eS    36 27.90
INW     0.08 289 eP    36 15.12   0.9
RED     0.39  16 eP    36 16.03  -0.8
                eS    36 28.87
OPT     0.41 197 eP    36 16.34  -0.5
                eS    36 29.22
RS2     0.44  15 eP    36 16.53  -0.7
RSO     0.44  16 eP    36 16.49  -0.8
RDW     0.45  11 eP    36 16.57  -0.8
REF     0.47  18 ePc   36 16.63  -0.8
                eS    36 29.69
NCT     0.52   3 eP    36 16.85  -0.8
DFR     0.57  15 eP    36 16.87  -1.1
PDB     0.66 248 ePc   36 17.78  -0.7
AUL     0.70 199 eP    36 18.30  -0.6
AUE     0.71 196 eP    36 18.20  -0.8
AUW     0.72 200 eP    36 18.60  -0.4
AUH     0.72 199 eP    36 18.52  -0.6
AUI     0.74 198 eP    36 18.88  -0.4
                eS    36 33.34
HOM     0.78 119 eP    36 18.97  -0.6
                eS    36 34.26
CNPM    1.03 120 ePc   36 21.06  -0.9
BKG     1.09  19 ePd   36 21.83  -0.9
BRLK    1.10 104 eP    36 22.07  -0.7
                eS    36 38.06
MCNL    1.10 219 ePd   36 21.72  -1.0
                eS    36 38.76
NKA     1.12  50 eP    36 23.54   0.6
CDD     1.17 197 ePd   36 22.23  -1.3
                eS    36 40.29
CKL     1.20  15 iPd   36 23.12  -0.9
                eS    36 41.60
CKT     1.22  18 ePd   36 23.16  -1.0
CKN     1.25  18 eP    36 23.76  -0.7
BGL     1.26  13 ePd   36 23.94  -0.7
CP2     1.28  16 ePd   36 24.26  -0.7
CRP     1.30  18 eP    36 24.29  -0.8
                eS    36 43.30
CGLM    1.36  20 ePd   36 24.80  -0.9
NCG     1.43  16 eP    36 25.85  -0.7
SLKM    1.46  70 eP    36 25.33  -1.5
SYI     1.47 168 eP    36 25.49  -1.4
                eS    36 45.44
SVW     1.68 311 P     36 28.30  -1.3
SEW     1.78  87 eP    36 28.73  -1.9
SUA     1.80  37 eP    36 30.38  -0.8
MPA     1.86  75 eP    36 30.09  -1.7
SKT     2.07  19 eP    36 32.88  -1.6
                eS    36 59.88
PMS     2.08  53 P     36 32.70  -1.9
                S     36 57.90
PWA     2.22  42 eP    36 35.75  -0.6
PWL     2.45  68 eP    36 36.50  -2.9
LTI     2.58  88 eP    36 38.76  -2.3
KNK     2.62  56 eP    36 38.74  -2.9
KNIM    2.64  81 eP    36 38.65  -3.3
CUT     2.71  28 eP    36 41.36  -1.5
SCM     3.30  55 eP    36 48.32  -2.5
FID     3.31  75 eP    36 48.47  -2.4
CVA     3.64  79 eP    36 53.01  -2.3
KLU     3.76  64 eP    36 53.74  -3.3
      50 obs. associated
-----------------------------------
?  NOV  20, 1993  20h 03m 03.65± 2.44s
   47.193 N ±25.2km   11.427 E ± 6.9km
   DEPTH =   5.0km  (geophysicist)
 AUSTRIA                          (546)
      ML 0.6 (VIE).

SQTA    0.15 281 iPgc  03 07.00   0.1
                iSg   03 09.60
WTTA    0.16  64 iPgc  03 06.90  -0.1
                iSg   03 09.40
WATA    0.18  35 iPgd  03 07.50   0.2
                iSg   03 09.90
MOTA    0.27 305 iPgd  03 08.90  -0.2
                iSg   03 12.70
      S.D. = 0.3  on   4 of   4 obs.
-----------------------------------
%  NOV  20, 1993  20h 52m 38.73± 1.78s
   39.477 N ±12.0km   21.593 E ±16.0km
   DEPTH =  10.0km  (geophysicist)
 GREECE                           (364)

AGG     0.73 128 iPg   52 52.93  -0.2
LIT     0.93  48 ePg   52 56.50   0.0
                eSg   53 12.00
FNA     1.32 353 ePb   53 01.50  -1.6
                eSb   53 21.50
GRG     1.60  22 ePb   53 07.46   0.3
OHR     1.74 340 ePn   53 10.30   1.1
KNT     1.96  30 ePn   53 12.70   0.4
      S.D. = 1.1  on   6 of   6 obs.
-----------------------------------
&  NOV  20, 1993  20h 55m 26.62s
   60.042 N          153.044 W
   DEPTH = 121.3km
 SOUTHERN ALASKA                  (  2)
      <AEIC>.

INE     0.02 334 eP    55 42.64   0.7
                eS    55 55.54
ILIM    0.06  48 eP    55 42.37   0.5
                eS    55 55.41
OPT     0.40 194 eP    55 43.58  -0.9
                eS    55 56.88
RED     0.40  20 eP    55 43.87  -0.7
RS2     0.45  19 eP    55 44.68  -0.2
REF     0.48  21 eP    55 44.21  -0.9
                eS    55 57.91
NCT     0.52   6 eP    55 44.53  -0.7
DFR     0.58  18 eP    55 44.62  -1.0
PDB     0.63 247 eP    55 44.93  -0.9
AUL     0.69 197 eP    55 45.56  -0.7
AUE     0.71 194 eP    55 45.52  -0.9
AUW     0.71 198 eP    55 45.68  -0.7
AUH     0.71 197 eP    55 45.85  -0.7
HOM     0.81 118 eP    55 46.66  -0.6
                eS    56 02.33
CNPM    1.05 119 eP    55 48.46  -1.1
                eS    56 05.63
MCNL    1.08 218 eP    55 48.72  -1.2
BRLK    1.12 103 eP    55 49.66  -0.7
                eS    56 06.75
CDD     1.16 196 eP    55 49.22  -1.5
CKL     1.21  16 eP    55 50.72  -0.6
CGLM    1.37  21 eP    55 52.39  -0.7
SYI     1.48 167 eP    55 52.75  -1.4
                eS    56 13.59
SLKM    1.48  70 eP    55 53.26  -1.1
                eS    56 12.72
SEW     1.80  86 eP    55 55.72  -2.4
SUA     1.82  37 eP    55 57.83  -0.6
LTI     2.60  88 eP    56 06.67  -1.7
      25 obs. associated
-----------------------------------
&  NOV  20, 1993  21h 11m 02.65s
   62.807 N          150.287 W
   DEPTH =  78.5km
 CENTRAL ALASKA                   (  1)
      <AEIC>.

HUR     0.34  60 eP    11 14.86  -0.4
                eS    11 24.13
CUT     0.40 179 iP    11 15.66   0.0
TRF     0.65 360 eP    11 17.94  -0.1
                eS    11 29.54
KTH     0.80 339 eP    11 19.55  -0.1
                eS    11 32.62
RND     0.89  47 eP    11 19.90  -0.7
SKT     1.01 215 eP    11 21.90  -0.1
                eS    11 36.66
PWA     1.18 170 P     11 23.60  -0.4
GHO     1.22 148 eP    11 24.50  -0.2
                eS    11 42.34
PLRM    1.33 156 eP    11 26.10   0.0
PMR     1.33 156 eP    11 25.61  -0.5
SML     1.36 137 eP    11 26.07  -0.4
                eS    11 45.15
DHY     1.36  77 eP    11 25.40  -1.2
SUA     1.37 189 eP    11 26.85   0.2
PMS     1.61 167 P     11 29.70  -0.1
KNK     1.64 148 eP    11 30.14  -0.1
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NCG      1.66 213 eP     11 30.39  -0.2
SCM      1.69 124 eP     11 30.51  -0.5
CGLM     1.71 209 eP     11 31.02  -0.2
CRP      1.78 211 eP     11 31.47  -0.7
CP2      1.80 212 eP     11 32.86   0.3
CKN      1.82 210 eP     11 33.53   0.8
BGL      1.84 214 eP     11 33.54   0.6
CKT      1.85 210 eP     11 33.00  -0.1
CKL      1.88 212 eP     11 33.64   0.0
WRH      1.94  29 eP     11 32.96  -1.2
BKG      1.98 209 eP     11 34.62  -0.2
CFI      2.02 143 eP     11 34.99  -0.3
TOA      2.04 108 P      11 35.40  -0.2
CCB      2.15  30 eP     11 35.63  -1.5
PWL      2.16 154 eP     11 36.24  -1.1
HDA      2.19  41 eP     11 36.22  -1.4
SDG      2.21  95 eP     11 37.41  -0.5
                  eS     12 06.52
PAX      2.21  84 eP     11 38.25   0.2
                  eS     12 06.14
DDM      2.23  62 eP     11 38.59   0.4
SLKM     2.31 179 eP     11 40.33   1.0
KLU      2.44 121 eP     11 39.36  -1.8
ILB      2.48  36 eP     11 40.21  -1.5
                  eS     12 07.46
IL1      2.48  36 eP     11 40.20  -1.5
DFR      2.50 208 eP     11 42.84   0.8
GLM      2.54  29 eP     11 42.34  -0.1
TTA      2.63 275 eP     11 43.20  -0.6
LTI      3.01 156 eP     11 46.97  -2.0
SVW      3.04 238 eP     11 48.40  -1.1
IM3      3.53 336 eP     11 55.08  -1.1
BC3      3.89  82 eP     11 58.97  -2.4
BALM     4.15 112 (P)    12 04.09  -1.0
        46 obs. associated
-----------------------------------
?  NOV  20, 1993  21h 24m 50.39± 2.19s
   47.200 N ±23.6km   11.427 E ± 6.7km
   DEPTH =   5.0km  (geophysicist)
 AUSTRIA                            (546)
      ML 0.9 (VIE).

SQTA     0.15 278 iPgc   24 53.70   0.1
                  iSg    24 56.20
WTTA     0.16  66 iPgc   24 53.60  -0.1
                  iSg    24 56.10
WATA     0.17  37 iPgc   24 54.10   0.1
                  iSg    24 56.70
MOTA     0.26 303 iPgd   24 55.60  -0.2
                  iSg    24 59.50
      S.D. = 0.3  on   4 of   4 obs.
-----------------------------------
&  NOV  20, 1993  21h 26m 06.78s
   62.790 N          150.659 W
   DEPTH =  89.8km
 CENTRAL ALASKA                     (  1)
      <AEIC>.

CUT      0.43 155 P      26 21.00  -0.1
HUR      0.51  68 P      26 21.50  -0.3
                  S      26 32.40
TRF      0.68  14 P      26 23.30  -0.3
                  S      26 36.00
KTH      0.78 351 P      26 24.10  -0.3
                  S      26 36.70
SKT      0.91 207 P      26 25.20  -0.5
RND      1.03  52 P      26 26.70  -0.5
                  S      26 41.60
MCK      1.23  39 P      26 29.20  -0.3
GHO      1.30 141 P      26 30.60   0.1
SUA      1.33 182 P      26 30.80  -0.1
PMR      1.40 149 eP     26 30.85  -0.7
SML      1.47 131 P      26 32.00  -0.5
DHY      1.53  78 P      26 32.50  -1.0
                  S      26 52.90
CRP      1.68 205 eP     26 34.06  -1.4
CP2      1.70 207 iPc    26 35.13  -0.7
KNK      1.73 142 P      26 35.20  -0.7
                  S      27 00.70
SCM      1.83 120 P      26 36.40  -0.9
TOA      2.20 106 P      26 44.00   1.8
PWL      2.23 149 P      26 41.20  -1.4
MLY      2.25 359 P      26 41.90  -1.0
CCB      2.26  33 P      26 41.70  -1.2
SLKM     2.30 175 P      26 44.00   0.4
SDG      2.38  94 P      26 45.20   0.6
DFR      2.41 205 P      26 45.20   0.1
TTA      2.46 276 eP     26 44.22  -1.6
FBA      2.47  30 eP     26 44.49  -1.4
KLU      2.58 118 eP     26 45.18  -2.2
ILB      2.60  38 P      26 46.20  -1.4
IL1      2.60  38 P      26 46.20  -1.5
                  S      27 12.00
SVW      2.89 236 eP     26 49.30  -2.3
BC3      4.07  82 P      27 06.90  -1.0
        30 obs. associated
-----------------------------------
?  NOV  20, 1993  22h 20m 50.17± 0.87s
   43.406 N ±11.8km   17.618 E ± 7.7km
   DEPTH =   5.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION         (383)

BRY      0.85 126 iPgc   21 05.50  -1.6
                  iSg    21 20.82
HVAR     0.88 255 iPg    21 06.10  -1.5
                  iSg    21 21.70
HCY      1.16 146 iPgd   21 12.44   0.2
                  iSg    21 32.44
NKY      1.17 120 iPgc   21 11.76  -0.8
                  iSg    21 31.46
PLE      1.30  93 iPgc   21 13.08  -1.7
                  iSg    21 33.02
BDV      1.43 141 iPgd   21 17.87   1.0
                  iSg    21 41.31
TTG      1.55 128 iPnc   21 19.56   1.1
                  iSn    21 43.43
IVA      1.75 107 iPnc   21 21.81   0.3
                  iSn    21 47.37
ULC      1.88 140 iPnc   21 24.56   1.3
                  iSn    21 51.94
PVY      1.91 114 iPnd   21 24.26   0.5
                  iSn    21 51.35
VBY      2.69 322 ePn    21 36.00   1.1
                  iSn    22 11.60
      S.D. = 1.3  on  11 of  11 obs.
-----------------------------------
&  NOV  20, 1993  22h 22m 12.58s
   63.287 N          151.202 W
   DEPTH =  13.0km
 CENTRAL ALASKA                     (  1)
      <AEIC>. ML 2.7 (AEIC), 2.5
      (PMR).

KTH      0.30  25 eP     22 18.54  -0.4
TRF      0.44  68 iP     22 21.43  -0.3
                  eS     22 28.31
HUR      0.78 113 eP     22 27.22  -0.2
                  eS     22 37.64
CUT      0.98 154 iP     22 31.10   0.1
                  eS     22 46.08
RND      1.07  83 eP     22 32.25  -0.2
                  eS     22 49.03
MCK      1.11  65 eP     22 33.17   0.0
                  eS     22 48.35
BWN      1.18  40 eP     22 35.25   1.0
SKT      1.32 187 eP     22 36.19  -0.5
                  eS     22 53.61
NEA      1.60  35 eP     22 41.74   1.1
DHY      1.75  95 eP     22 44.13   1.2
PWA      1.75 159 eP     22 43.21   0.4
MLY      1.76   6 eP     22 41.89  -1.1
WRH      1.82  48 eP     22 44.69   0.9
SUA      1.84 173 eP     22 45.17   0.9
GHO      1.85 144 eP     22 44.26  -0.1
                  eS     23 09.25
NCG      1.94 194 eP     22 45.24  -0.4
PLRM     1.95 150 eP     22 45.88   0.2
PMR      1.95 150 eP     22 45.24  -0.5
SML      1.99 137 eP     22 46.19  -0.1
CCB      2.03  46 eP     22 45.18  -1.6
CRP      2.08 193 eP     22 47.16  -0.5
CP2      2.09 194 eP     22 47.40  -0.5
                  eS     23 13.28
BGL      2.11 196 eP     22 48.43   0.4
CKN      2.12 193 eP     22 48.96   0.8
MDM      2.13  37 eP     22 46.85  -1.4
                  eS     23 18.05
CKT      2.15 193 eP     22 48.61   0.0
SPU      2.15 191 eP     22 48.56  -0.1
CKL      2.16 195 eP     22 49.20   0.3
HDA      2.19  57 eP     22 49.51   0.3
FBA      2.21  41 eP     22 48.35  -1.0
TTA      2.22 263 eP     22 47.04  -2.6
KNK      2.28 145 eP     22 51.12   0.7
                  eS     23 20.24
BKG      2.28 193 eP     22 50.42  -0.1
                  eS     23 19.84
GLM      2.39  43 eP     22 51.97  -0.1
IL1      2.41  50 eP     22 54.24   1.9
ILB      2.41  50 eP     22 54.58   2.2
DDM      2.44  76 eP     22 56.46   3.6
TOA      2.60 115 P      22 56.20   1.1
PAX      2.62  94 eP     22 56.49   1.1
SDG      2.70 104 eP     22 57.57   1.1
DFR      2.79 195 eP     22 59.19   1.3
SLKM     2.83 170 eP     22 59.00   0.7
IM3      2.92 339 eP     22 58.06  -1.5
IMA      2.99 340 eP     22 58.50  -2.1
SVW      3.01 225 (P)    23 01.41   0.6
KLU      3.05 124 eP     23 02.60   1.2
        46 obs. associated
-----------------------------------
%  NOV  20, 1993  22h 44m 43.94± 0.61s
   31.794 S ± 9.3km   68.287 W ±10.1km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA       (137)

CFA      0.19  12 ePc    44 58.90   0.3
                  S      45 10.10
RTCV     0.22 253 iPd    44 59.00   0.3
                  S      45 10.00
RTLL     0.49 341 iPd    44 59.90   0.0
                  S      45 11.30
RTCB     0.53 305 ePd    45 00.40   0.1
                  S      45 12.80
RTPR     2.13  46 eP     45 18.00  -0.7
                  S      45 44.00
MRA      2.27 106 iPc    45 21.20   0.6
                  S      45 49.10
RFA      2.97 183 ePc    45 29.60  -0.6
      S.D. = 0.6  on   7 of   7 obs.
-----------------------------------
   NOV  20, 1993  23h 20m 22.62± 0.54s
   40.037 N ± 9.2km   25.038 E ± 4.2km
   DEPTH =  10.0km  (geophysicist)
 AEGEAN SEA                         (365)

OUR      0.86 290 ePg    20 38.92  -0.3
                  eSg    20 51.40
EZN      1.01 102 iPn    20 42.40   0.6
                  eSg    20 57.40
PAIG     1.05 264 iPg    20 42.48   0.1
                  eSg    20 57.60
ALN      1.15  42 iPg    20 43.12  -1.0
                  eSg    20 59.44
SOH      1.51 302 ePb    20 49.50  -0.2
                  eSb    21 11.16
THE      1.69 291 ePb    20 52.50   0.2
LIT      1.96 273 ePn    20 56.50   0.3
KNT      1.98 305 ePn    20 57.00   0.5
                  eSn    21 23.88
EDC      2.19  81 ePn    21 00.80   1.3
GRG      2.21 295 ePn    20 59.70  -0.2
                  eSn    21 31.00
VAY      2.27 305 ePn    21 05.40   4.6X
IZM      2.38 133 ePn    21 01.10  -1.2
      S.D. = 0.8  on  11 of  12 obs.
-----------------------------------
   NOV  21, 1993  00h 16m 00.67± 0.32s
   35.959 S ± 8.0km  102.893 W ± 5.9km
   DEPTH =  10.0km  (geophysicist)
   5.2mb ( 26 obs.)  4.8Msz ( 18 obs.)
 SOUTHERN PACIFIC OCEAN             (692)
      Mw 5.4 (HRV). Ms 4.8 (BRK).
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 26S, 43C
      Centroid Location:
      Origin Time        00:16: 5.9 0.3
      Lat 36.21S 0.03 Lon 102.65W 0.04
      Dep  15.0 FIX Half-duration  1.2
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 0.05 0.03  Mtt=-0.47 0.04
        Mff= 0.41 0.04  Mrt=-0.03 0.11
        Mrf=-0.56 0.13  Mtf=-1.34 0.04
       Principal Axes:
        T  Val=  1.52  Plg=17  Azm= 56
        N        0.00      68      196
        P       -1.52      13      322
      Best Double Couple:Mo=1.5*10**17
       NP1:Strike= 99 Dip=68 Slip= 177
```

21d 00h

```
      NP2:        190      87         22
MDZ    28.17  94 eP    21 58.50   3.2X
ARE    33.99  63 eP    22 47.00  -0.1
HJA    34.78  79 ePc   22 54.90   1.5
CNCB   36.36  68 iPc   23 09.00   1.4
LPB    36.45  67 iPc   23 09.30   1.2
       1.1s   227.85nm          5.9mb
     Z  15s     1.33um          4.8MszX
                LR    33 20.00
LPAZ   36.58  67 eP    23 09.83   0.4
CCH    37.41  70 P     23 16.40   0.3
SIV    42.13  73 P     23 54.70  -0.2
TVO    44.69 281 eP    24 17.20   1.5
       0.7s    18.50nm          5.1mb
PPN    44.97 281 eP    24 18.40   0.5
       1.4s   154.20nm          5.7mb
PAE    45.01 281 eP    24 18.40   0.2
       1.2s   107.70nm          5.7mb
PPT    45.06 281 eP    24 18.90   0.2
       1.2s   284.40nm          6.1mb
AFR    45.24 281 eP    24 18.60  -1.4
       1.6s   318.40nm          6.0mb
PPD    46.70  87 eP    24 31.50  -0.1
VAO    49.76  91 eP    24 56.50   1.0
BDFB   52.68  82 ePc   25 16.87  -0.8
       1.0s    30.88nm          5.2mb
SDV    53.97  41 ePd   25 24.20  -3.0X
SPA    54.23 180 iPd   25 28.70   0.1
       0.8s    12.50nm          5.0mb
TOV    55.17  41 eP    25 32.20  -3.7X
SNA    60.03 157 iPd   26 09.00  -0.5
       1.0s    54.00nm          5.6mb
SOB1   62.03  81 eP    26 23.20  -0.6
LTX    64.95 359 eP    26 41.56  -1.1
UYO    70.21   7 iPc   27 14.50  -1.0
WMOK   70.44   4 P     27 30.00  13.1X
     Z  19s     0.41um          4.7Msz
MEO    70.49   4 iPd   27 16.10  -1.2
ALQ    70.62 357 eP    27 17.07  -1.2
       1.2s     9.02nm          4.8mb
     Z  20s     0.39um          4.7Msz
MIAR   70.68   8 eP    27 16.95  -1.4
       1.2s     9.84nm          4.8mb
     Z  21s     0.29um          4.5Msz
                e     27 29.59
PEC    70.76 347 eP    27 20.05   1.1
       1.3s    22.80nm          5.1mb
OXF    71.23  12 eP    27 19.43  -2.3
TUL    71.81   6 iPd   27 12.40 -12.7X
GSC    72.07 348 eP    27 27.25   0.4
ABL    72.07 346 eP    27 27.05   0.0
ISA    72.72 347 eP    27 31.17   0.5
       1.6s    53.32nm          5.4mb
     Z  20s     0.28um          4.5Msz
MYNC   72.80  16 eP    27 29.63  -1.5
       0.8s    14.10nm          5.1mb
     Z  20s     0.42um          4.7Msz
ARUT   74.02 351 eP    27 39.55   1.2
PV10   74.18 355 eP    27 38.17  -1.2
PV08   74.35 355 eP    27 39.33  -1.1
SAO    74.38 345 ePc   27 40.93   0.7
       1.7s    40.00nm          5.2mb
MSU    74.60 352 eP    27 41.70   0.0
TNP    74.86 348 eP    27 43.01  -0.2
       0.8s    11.92nm          5.0mb
COE    74.90 345 (P)   27 43.98   0.7
ARN    74.96 345 eP    27 44.26   0.6
MHC    74.98 345 ePc   27 45.19   1.4
       1.4s    50.00nm          5.4mb
SRU    75.03 354 eP    27 43.37  -0.8
GOL    75.32 358 P     28 00.00  14.1X
     Z  18s     0.34um          4.7Msz
CMB    75.38 346 ePc   27 46.05   0.0
       1.1s    10.00nm          4.8mb
     Z  19s     0.50um          4.8Msz
                iS    37 41.31
                eSS   42 02.31
                iLQ   48 05.31
                eLR   51 12.31
BKS    75.62 344 ePc   27 48.49   1.2
       1.2s    40.00nm          5.4mb
NAV    75.73  18 eP    27 46.62  -1.4
KVN    75.95 348 eP    27 51.21   1.8
DUG    76.33 352 eP    27 50.98  -0.5
       1.5s    21.49nm          5.0mb
     Z  21s     0.30um          4.6Msz
DAU    76.39 353 eP    27 51.91  -0.1
CVL    76.97  20 eP    27 53.27  -1.6
ORV    77.08 345 ePc   27 57.09   1.6
       1.6s    30.00nm          5.1mb
     Z  19s     0.40um          4.8Msz
                ed    28 41.39
                iS    38 00.39
                ePS   38 31.39
                eSS   43 00.39
                iLQ   48 51.39
                eLR   52 16.39
MIN    77.86 345 eP    27 59.35  -0.6
       3.7s   340.00nm          5.8mb X
HVU    77.89 352 eP    28 00.89   0.8
WDC    78.28 345 ePc   28 01.79  -0.3
       1.4s    47.44nm          5.4mb
LGPM   78.66 345 eP    28 04.97   0.6
LBFM   78.88 346 eP    28 05.55  -0.1
YBH    79.42 345 ePc   28 07.52  -0.9
       2.1s    50.00nm          5.1mb
     Z  19s     0.40um          4.8Msz
                eS    38 15.52
                eSS   43 25.52
                iLQ   49 38.52
                eLR   53 33.52
RSSD   79.71 359 eP    28 09.59  -0.4
       1.1s    14.59nm          4.9mb
YSNY   81.17  18 P     28 30.00  12.4X
     Z  19s     0.61um          5.0Msz
BINY   81.58  20 P     28 30.00  10.2X
     Z  18s     0.73um          5.1Msz
LRM    81.86 353 eP    28 23.50   2.1
LSCT   81.90  22 P     28 30.00   8.6X
     Z  20s     0.87um          5.1Msz
VGB    82.69 347 eP    28 26.04   0.5
HRV    83.17  23 P     28 40.00  12.1X
     Z  20s     0.61um          5.0Msz
ARMA   83.83 237 iPd   28 32.10   0.1
       0.8s    23.00nm          5.5mb
LON    84.07 347 eP    28 32.70   0.2
RSNY   84.16  20 eP    28 31.50  -1.4
       0.8s    20.85nm          5.4mb
DPW    84.57 350 eP    28 35.27   0.3
LBNH   84.63  22 P     28 40.00   4.7X
     Z  20s     0.56um          4.9Msz
RMW    84.76 347 eP    28 36.45   0.5
NEW    84.80 351 eP    28 36.54   0.4
GAC    84.97  19 eP    28 36.00  -0.9
ULM    86.06   5 eP    28 44.50   2.3
CBM    88.22  23 P     29 00.00   7.2X
     Z  18s     0.44um          4.9Msz
LMN    88.38  26 eP    28 42.50 -11.1X
JAQ    92.44  16 eP    29 14.00   1.7
PMR   104.19 339 Pdiff 30 20.00  14.7X
     Z  21s     0.36um          4.9Msz
LPO   123.40  56 ePKP  35 01.50   2.3
LSF   124.14  54 ePKP  34 59.50  -1.2
       1.0s     6.60nm
BGF   125.10  54 ePKP  35 01.50  -1.0
       1.2s    13.10nm
LBF   125.97  54 ePKP  35 04.30   0.0
LOR   125.97  54 ePKP  35 04.30   0.1
       1.1s     5.35nm
     Z  22s     0.20um          4.7Msz
GRF   131.29  52 ePKP  35 15.00   0.8
CLL   132.65  50 e(PKP)35 11.00  -5.7X
GEC2  132.75  54 ePKP  35 16.00  -1.2
       1.1s     3.47nm
                e     35 24.80
                e     35 30.50
BRG   133.19  51 ePKP  35 26.60   8.8X
MDJ   139.65 299 ePKP  35 29.50  -0.6
NJ2   145.36 276 PKPc  35 39.20  -1.2
OBN   146.40  42 ePKP  35 41.50   0.1
       1.2s   100.00nm
MOS   146.75  41 ePKP  35 47.00   5.1X
BOD   147.15 324 ePKP  35 40.60  -1.9
       1.7s    41.00nm
TIA   147.82 282 PKPd  35 44.70   0.4
WHN   148.52 271 ePKP  35 48.50   2.9X
                pPKP  35 51.50
NNT   149.06 227 iPKPd 35 51.20   4.4X
BJI   149.12 290 ePKP  35 49.00   2.8X
CIT   149.63 313 ePKP  35 41.00  -5.7X
NST   151.19 231 ePKP  35 55.50   5.5X
TIY   151.77 284 ePKP  35 56.00   5.6X
     Z  24s     0.68um          5.4MszX
KIV   152.59  62 ePKP  35 58.60   7.2X
       1.1s    36.00nm
HHC   152.67 291 ePKP  35 57.00   5.4X
PYA   152.85  62 ePKP  35 56.00   4.3X
                i     36 12.00
ERE   154.07  71 ePKP  36 03.00   9.4X
ARU   156.02  26 ePKP  36 01.00   5.4X
SVE   156.37  23 ePKPd 35 56.00   0.0
GTA   161.71 288 ePKP  36 02.00  -0.7
     S.D. = 1.0  on  79 of 107 obs.
-----------------------------------
%  NOV  21, 1993  01h 06m 04.65± 0.53s
   39.044 N ± 4.5km   30.063 E ± 5.5km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
      ML 3.4 (ISK).

ALT     0.04  73 iPg   06 05.80  -1.0
KHL     0.83 211 ePg   06 21.00   0.2
DST     1.25 297 iPn   06 26.70  -1.1
IZI     1.37 341 iPn   06 29.50  -0.3
EYL     1.52   3 ePn   06 32.50   0.5
BCK     1.63 165 ePn   06 34.00   0.4
HRT     1.80 350 iPn   06 35.90  -0.1
BNT     2.11 309 ePn   06 41.00   0.6
EDC     2.14 308 ePn   06 41.00   0.1
ISK     2.16 339 ePn   06 42.00   0.8
IZM     2.28 254 ePn   06 43.00   0.0
CTT     2.45 330 ePn   06 45.00  -0.2
EZN     3.00 286 ePn   06 53.00   0.0
     S.D. = 0.6  on  13 of  13 obs.
-----------------------------------
%  NOV  21, 1993  01h 10m 15.69± 1.91s
   39.059 N ±10.0km   30.119 E ±20.5km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
      ML 2.8 (ISK).

ALT     0.01 241 iPg   10 16.20  -1.5
KHL     0.87 213 iPg   10 33.50   1.0
                eSg   10 46.00
DST     1.28 296 ePn   10 39.00  -0.4
IZI     1.37 339 iPn   10 40.50  -0.4
EYL     1.51   1 ePn   10 43.60   0.8
     S.D. = 1.4  on   5 of   5 obs.
-----------------------------------
   NOV  21, 1993  01h 50m 35.94± 0.59s
   26.390 S ± 5.9km   27.364 E ± 6.5km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA        (584)
      ML 3.1 (PRE). mbLg 3.0 (BUL).

KSR     0.67 321 eP    50 49.50   0.1
                S     50 56.00
SLR     1.05  52 eP    50 55.60  -0.8
                S     51 09.20
SEK     1.94 173 eP    51 10.60   0.6
                S     51 33.60
SWZ     1.99 246 eP    51 11.00   0.3
                S     51 33.90
BFT     2.51  74 eP    51 19.00   0.7
                S     51 48.00
BOSA    2.81 218 eP    51 22.60   0.2
                S     51 56.10
BLF     2.90 201 eP    51 23.00  -0.8
                S     51 55.50
FRS     3.80 208 e(P)  51 36.00  -0.4
                S     52 19.00
BUL     6.32  11 iPn   52 09.10  -3.2X
                iSg   03 50.50
     S.D. = 0.7  on   8 of   9 obs.
-----------------------------------
   NOV  21, 1993  01h 53m 54.71± 1.11s
   60.183 N ± 6.4km    5.107 E ±11.8km
   DEPTH =  10.0km  (geophysicist)
 SOUTHERN NORWAY                 (535)
      MD 2.6 (BER). Felt (IV) at
      Mottatt.

EGD     0.11  34 iPc   53 59.44   2.0
BER     0.23  29 iP    54 00.92   1.3
                eS    54 05.02
ASK     0.30   8 iPc   54 01.57   0.5
                eS    54 06.14
ODD1    0.81 109 iPd   54 11.95   1.5
                eS    54 23.53
SUE     0.89 349 iPc   54 11.64  -0.2
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SUE      0.89 349 eP     54 11.66  -0.1
                  eS     54 23.23
KMY      0.98 176 eP     54 13.19   0.0
                  eS     54 26.83
BLS5     1.02 138 eP     54 14.94   0.9
                  eS     54 29.00
HYA      1.12  28 eP     54 15.79   0.1
                  eS     54 31.75
FOO      1.42 359 eP     54 20.32  -0.2
                  eS     54 38.98
MOL      2.67  25 eP     54 36.69  -1.8
                  eS     55 09.15
NRA0     3.23  77 Pn     54 44.89  -1.6
                  Pg     54 52.52
                  Sn     55 21.84
                  Sg     55 35.32
HFS      4.29  87 eP     54 59.10  -2.4
       0.1s     1.10nm
     S.D. = 1.4  on  13 of  13 obs.
-----------------------------------
& NOV  21, 1993  03h 21m 35.06s
   59.902 N          141.323 W
   DEPTH =   6.2km
 SOUTHEASTERN ALASKA                ( 19)
      <AEIC>. ML 2.6 (AEIC).

WRG      0.38 291 eP     21 42.74   0.0
                  eS     21 49.08
YAH      0.51 336 eP     21 45.50   0.2
                  eS     21 54.83
CYK      0.61 288 eP     21 46.81  -0.5
                  eS     21 56.45
WAX      0.94 306 eP     21 51.91  -1.5
                  eS     22 05.47
CTGM     1.07 360 eP     21 54.44  -1.2
                  eS     22 09.37
BALM     1.25 336 eP     21 56.76  -1.9
                  eS     22 13.47
HMT      1.53 288 eP     22 01.75  -1.3
                  eS     22 21.63
KAIM     1.56 272 eP     22 02.59  -0.7
RAGM     1.75 288 eP     22 05.96  -0.1
GLB      1.97 323 eP     22 07.77  -1.6
                  eS     22 33.85
CVA      2.30 288 eP     22 11.58  -2.5
HIN      2.64 283 eP     22 17.22  -1.7
KLU      2.77 307 eP     22 19.17  -1.6
BC3      3.18 356 eP     22 26.22  -0.4
TOA      3.23 315 eP     22 26.22  -1.2
       15 obs. associated
-----------------------------------
% NOV  21, 1993  03h 28m 17.23± 0.69s
   47.460 N ± 5.2km    6.998 E ± 9.0km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                             (538)

BSF      0.40 340 Pg     28 25.40   0.0
                  Sg     28 32.90
HAU      0.70 321 Pg     28 31.00  -0.1
                  Sg     28 41.80
FEL      0.80  58 ePg    28 32.80  -0.1
CDF      0.97  11 Pg     28 35.90   0.2
                  Sg     28 50.30
LPL      1.95 185 Pg     28 51.50   0.5
LPG      1.97 185 Pg     28 50.80  -0.5
                  Sg     29 15.00
     S.D. = 0.4  on   6 of   6 obs.
-----------------------------------
   NOV  21, 1993  04h 44m 47.09± 0.68s
   50.075 N ± 5.9km    7.938 E ± 5.9km
   DEPTH =  10.0km  (geophysicist)
 GERMANY                            (543)
      ML 2.8 (LDG), 2.2 (UCC), 2.1
      (BNS).

ABH      0.32 233 ePg    44 53.40  -0.3
KOE      0.37 339 iPgd   44 54.70  -0.1
       0.2s   179.00nm
                  iSg    44 59.20
BGG      0.41 289 iPgc   44 55.20  -0.2
       0.2s   282.00nm
                  iSg    45 00.00
RUP      0.68 237 ePg    44 59.70  -0.9
TOD      0.73 130 ePg    45 01.40  -0.1
BNS      1.01 332 iPgd   45 05.80  -0.5
       0.2s    37.00nm
                  iSg    45 19.00
WLF      1.23 251 iPc    45 08.77  -1.1
                  iS     45 26.14
CDF      1.72 195 Pg     45 18.40   1.1
                  Sg     45 40.00
DOU      2.15 272 P      45 26.00   2.5
                  S      45 48.20
FEL      2.20 179 ePg    45 24.10  -0.3
HAU      2.32 207 Pg     45 29.00   3.0X
                  Sg     45 58.00
BSF      2.37 199 Pg     45 30.40   3.7X
                  Sg     45 59.30
CLL      3.45  67 (Pg)   45 54.00  12.1X
                  eSg    46 36.00
LOR      3.90 225 Pn     45 44.30  -4.0X
                  Sn     46 28.20
                  Sg     46 48.60
GEC2     3.96 106 Pn     45 49.00  -0.2
                  Sg     46 53.80
LBF      4.06 222 Pn     45 46.40  -4.2X
                  Sn     46 32.20
                  Sg     46 52.50
SSF      4.21 226 Pn     45 48.60  -4.2X
SMF      4.39 220 Pn     45 50.60  -4.6X
                  Sn     46 39.90
                  Sg     47 03.20
BGF      4.89 226 Pn     45 57.50  -4.9X
     S.D. = 1.1  on  11 of  19 obs.
-----------------------------------
   NOV  21, 1993  05h 42m 50.34± 0.95s
   41.302 N ± 8.4km   22.625 E ± 6.0km
   DEPTH =   5.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION         (383)
      ML 2.4 (THE), 1.9 (SKO).

VAY      0.05 294 iPg    42 51.70  -0.1
       0.1s  3440.00nm
                  iSg    42 52.50
KNT      0.25 124 ePgc   42 55.82   0.4
                  eSg    42 59.74
GRG      0.38 206 ePgc   42 57.85  -0.2
                  eSg    43 03.82
THE      0.72 159 ePg    43 04.30  -0.4
                  eSg    43 13.58
SOH      0.73 131 ePg    43 04.58  -0.4
                  eSg    43 15.30
LIT      1.20 185 ePb    43 13.78   0.5
OUR      1.41 133 ePb    43 16.34  -0.4
PAIG     1.59 149 ePb    43 19.68   0.5
     S.D. = 0.5  on   8 of   8 obs.
-----------------------------------
% NOV  21, 1993  06h 27m 41.59± 0.86s
   26.892 S ±10.6km   26.824 E ± 7.5km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA           (584)
      ML 2.2 (PRE).

BFS      0.04 260 iPd    27 43.00   0.0
                  S      27 44.30
SWZ      1.37 257 eP     28 07.20  -0.2
                  S      28 25.20
SEK      1.59 154 iPd    28 10.50  -0.2
                  S      28 30.10
SLR      1.74  49 eP     28 12.90   0.1
                  S      28 34.50
BOSA     2.12 216 eP     28 18.40   0.3
                  S      28 45.20
     S.D. = 0.3  on   5 of   5 obs.
-----------------------------------
* NOV  21, 1993  07h 00m 08.40± 1.54s
   39.065 N ±14.3km   21.809 E ± 8.6km
   DEPTH =  33.0km  (normal)
 GREECE                             (364)
      ML 2.6 (THE).

AGG      0.41  96 ePgc   00 17.84   0.1
                  eSg    00 24.56
LIT      1.16  27 ePg    00 27.40  -1.0
                  eSg    00 42.56
IGT      1.24 293 ePb    00 28.84  -0.6
                  eSb    00 45.16
PAIG     1.68  59 ePb    00 36.40   0.5
                  eSb    00 57.76
FNA      1.75 349 ePb    00 36.16  -0.8
                  eSb    00 57.56
GRG      1.94  13 ePb    00 38.76  -1.0
                  eSb    01 02.84
SOH      2.12  34 ePn    00 42.36   0.1
                  eSn    01 06.68
OHR      2.19 340 ePn    00 45.30   2.1
KNT      2.26  21 ePn    00 45.16   1.0
                  eSn    01 09.88
SRS      2.46  33 ePn    00 46.60  -0.5
                  eSn    01 15.24
     S.D. = 1.1  on  10 of  10 obs.
-----------------------------------
   NOV  21, 1993  07h 18m 48.30± 0.27s
   36.442 N ± 4.5km  141.190 E ± 4.0km
   DEPTH =  41.3km  (  8 depth phases)
   5.0mb ( 46 obs.)  4.5Msz (  5 obs.)
 NEAR EAST COAST OF HONSHU, JAPAN(228)

KAKJ     0.85 254 iPd    19 04.00   0.0
                  S      19 14.30
CHJJ     1.82 258 P      19 17.80   0.1
                  S      19 40.20
NIIJ     1.93 295 iPd    19 20.50   1.3
YAMJ     1.96 332 iPd    19 20.90   1.2
                  S      19 45.00
MAT      2.40 273 iPc    19 27.30   1.2
                  eS     19 57.00
OFUJ     2.66   8 P      19 29.50  -0.1
                  eS     20 00.80
MTMJ     2.73 274 iPd    19 32.40   1.6
IIDJ     2.83 251 iPd    19 34.10   2.0
                  S      20 09.30
AOMJ     4.16 351 eP     19 52.30   1.4
TSRJ     4.32 259 P      19 55.10   1.9
WKYJ     5.08 246 eP     20 05.00   0.9
MRRJ     5.98 359 eP     20 16.20  -0.3
HOOJ     6.15  15 eP     20 17.60  -1.4
                  eS     21 26.10
TKSJ     6.34 249 eP     20 22.00   0.3
YONJ     6.40 261 eP     20 23.20   0.6
KUSJ     7.18  21 eP     20 29.80  -3.6X
                  eS     21 46.40
ASAJ     7.75   8 eP     20 38.00  -3.3X
SHNJ     8.56 257 eP     20 55.70   3.1X
KUMJ     9.40 249 eP     21 04.60   0.4
KAGJ    10.04 242 eP     21 14.70   1.7
YSS     10.63   6 eP     21 16.50  -4.4X
       0.7s    10.00nm          5.1mb
     Z  16s     0.70um          4.4MszX
     N  15s     0.70um
     E  16s     0.50um
MDJ     12.01 316 eP     21 43.00   3.3X
CN2     14.10 306 eP     22 06.80  -0.5
       1.0s    11.00nm          4.5mb
     Z  20s     0.62um          4.7Msz
                  epP    22 13.60
SNY     14.68 297 Pc     22 10.40  -4.5X
     Z  20s     1.09um          4.7Msz
NJ2     18.97 263 Pd     23 05.70  -3.1X
     Z  18s     0.88um
TIA     19.39 276 Pd     23 10.50  -3.1X
       0.8s    10.00nm          4.1mb
BJI     19.95 288 eP     23 16.50  -3.1X
       1.0s     7.00nm          3.9mb X
     Z  16s     0.35um          4.5Msz
TIY     22.94 282 eP     23 47.00  -2.9X
     Z  18s     1.21um          4.4Msz
     E  14s     0.68um
                  S      27 49.00
HHC     23.50 290 eP     23 51.20  -4.1X
CIT     24.95 317 eP     24 07.80  -1.3
XAN     26.40 274 P      24 21.50  -1.3
       0.6s    16.00nm          4.8mb
                  sP     24 34.00
YAK     26.59 348 iPd    24 24.00  -0.2
       1.2s    80.00nm          5.2mb
     Z  17s     0.50um          4.1MszX
BOD     27.88 329 iPc    24 35.10  -0.8
       1.1s    29.00nm          4.9mb
LZH     29.99 281 eP     24 54.00  -1.4
       1.0s    25.00nm          4.9mb
     Z  16s     0.78um          4.4MszX
     E  10s     0.26um
ZAK     30.50 309 iPc    24 58.70  -0.7
       0.9s    21.00nm          4.9mb
GYA     30.95 261 P      25 02.00  -1.8
       1.0s    38.00nm          5.1mb
                  sP     25 15.00
CD2     31.50 271 eP     25 07.00  -1.5
GTA     32.57 288 eP     25 16.20  -1.7
       1.0s    13.00nm          4.7mb
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21d 07h

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      Z  18s      0.51um          4.3Msz
                   pP    25 24.00  27kmX
                   PcP   28 03.20
KMI     34.70 262 eP    25 35.00  -1.6
        1.9s    70.00nm          5.3mb
      Z  20s      1.10um          4.6Msz
                   pP    25 46.50  42km
ILT     38.67  23 eP    26 17.00   7.8X
WMQ     40.95 297 P     26 28.50   0.0
CHTO    40.97 256 eP    26 28.00  -0.8
NNT     44.10 248 eP    26 54.70   0.3
GUN     47.04 276 P     27 18.10   0.0
SNG     47.07 242 eP    27 19.00   1.1
PKI     47.56 276 P     27 21.80  -0.4
        0.8s    17.00nm          5.1mb
KKN     47.57 276 P     27 22.20   0.1
DMN     47.79 276 P     27 23.70  -0.2
GKN     47.99 277 P     27 25.10  -0.3
IPM     48.61 239 ePc   27 30.00   0.0
        0.9s    45.60nm          5.5mb
FBA     49.70  32 ePc   27 38.63   0.8
        0.8s     3.65nm          4.5mb
FRU     50.47 299 eP    27 44.00   0.0
        1.8s    40.00nm          5.1mb
      Z  19s      0.40um          4.5Msz
      E  19s      0.50um
                   e     28 03.00  76kmX
KSH     50.50 294 P     27 45.40   1.0
        1.0s    70.00nm          5.6mb
      Z  18s      0.96um          4.9Msz
      N  10s      0.54um
      E  10s      0.63um
                   ePP   29 37.00
INK     55.00  27 eP    28 17.50   0.2
        0.9s     2.00nm          4.1mb
SVE     55.48 319 ePc   28 20.00  -1.0
        1.2s    40.00nm          5.3mb
      Z  13s      0.50um          4.8MszX
      E  13s      0.50um
WRA     56.45 188 iPd   28 26.40  -1.9
        0.6s     5.20nm          4.7mb
ARU     56.67 319 iPc   28 28.80  -0.8
                   e     28 36.00  24kmX
MBC     57.14  16 eP    28 33.50   0.8
        1.0s     2.00nm          4.1mb
HYB     58.01 269 ePc   28 38.50  -1.0
                   e     28 51.00  44km
MBL     60.74 203 eP    28 56.50  -1.6
        0.5s     7.00nm          5.0mb
GBA     60.99 266 Pc    28 59.30  -0.7
        1.0s    12.00nm          5.0mb
POO     61.21 273 iPc   29 05.20   3.6X
RES     63.22  14 eP    29 13.50  -0.6
        1.0s     5.00nm          4.6mb
NANU    63.50 207 eP    29 16.20  -0.3
DAG     66.36 355 iPc   29 32.80  -1.6
        0.8s    13.43nm          5.1mb
STK     67.97 180 eP    29 36.40  -8.6X
FORT    67.99 192 eP    29 44.50  -0.7
        0.5s     7.00nm          5.0mb
KAF     68.75 333 iP    29 48.40  -1.2
        0.6s    10.10nm          5.0mb
MRWA    69.47 203 eP    29 51.00  -3.4X
        1.0s    32.00nm          5.3mb
NUR     70.39 332 iP    29 58.70  -0.9
KIV     71.16 311 iPc   30 04.60  -0.2
        1.1s    36.00nm          5.3mb
KER     73.46 301 eP    30 18.00  -0.5
HFS     74.55 336 eP    30 22.20  -2.0
        0.4s     1.40nm          4.3mb
      Z  18s      0.14um          4.3MszX
                   LR    04 25.00
NB2     74.66 337 P     30 24.60  -0.3
        0.8s    11.10nm          4.9mb
BONR    75.76  53 eP    30 33.63   1.7
FRB     77.39  13 eP    30 40.50   0.4
        1.0s    12.00nm          4.9mb
DUG     77.88  49 eP    30 43.86   0.4
        0.9s     3.85nm          4.4mb
DAU     78.68  48 iPd   30 49.48   1.4
MSU     79.30  50 eP    30 51.69   0.3
EMUT    79.32  48 eP    30 52.34   0.8
OJC     79.43 326 eP    30 51.80   0.2
                   e     31 04.10  41km
SRU     79.94  49 eP    30 55.30   0.5
KSP     80.51 328 iPc   30 57.60   0.3
                   i     31 09.50  39km
PSZ     81.03 324 e(P)  30 59.80  -0.4
PV09    81.17  48 eP    31 03.20   1.8
PV10    81.30  48 eP    31 03.14   1.1
PV08    81.41  48 eP    31 03.32   0.6
BRG     81.47 329 iP    31 02.80   0.5
        1.0s    14.00nm          4.9mb
CLL     81.52 330 iPc   31 02.20  -0.4
        0.9s    17.00nm          5.0mb
                   i     31 14.00  39km
PRU     81.89 328 P     31 05.00   0.5
                   e     31 17.50  42km
MOX     82.59 330 eP    31 08.60   0.4
KHC     82.95 328 P     31 10.30   0.2
                   e     31 22.50  40km
GEC2    83.12 328 ePc   31 10.90  -0.2
        0.8s     3.73nm          4.5mb
                   e     31 20.00  29kmX
                   e     31 22.60
                   e     31 33.60
GRF     83.49 330 iPc   31 13.60   0.7
        1.1s    29.00nm          5.3mb
                   e     31 26.40  43km
SKO     84.51 319 eP    31 18.80   0.7
CDF     86.08 331 eP    31 25.90  -0.1
        0.9s    10.95nm          5.1mb
HAU     86.77 332 eP    31 28.90  -0.4
        0.7s     3.65nm          4.7mb
LOR     88.32 332 eP    31 36.80   0.0
LBF     88.52 332 eP    31 37.60  -0.1
SSF     88.63 333 eP    31 38.30   0.1
LPL     88.66 330 eP    31 38.50  -0.1
        0.6s     3.05nm          4.8mb
LPG     88.66 330 eP    31 38.60  -0.2
        0.8s     5.50nm          4.9mb
AVF     88.91 333 eP    31 39.80   0.3
        0.9s     7.85nm          5.0mb
MAF     89.68 333 eP    31 43.70   0.5
LSF     90.04 333 eP    31 44.90   0.0
        0.8s     6.30nm          5.0mb
MFF     90.33 334 eP    31 46.60   0.4
        1.0s    11.80nm          5.2mb
RJF     90.85 333 eP    31 49.10   0.5
        0.8s     7.00nm          5.1mb
CAF     90.97 332 eP    31 49.90   0.7
        0.9s     5.40nm          4.9mb
LFF     91.45 333 eP    31 51.90   0.6
        0.9s    10.15nm          5.2mb
SLR    122.58 260 ePKP  37 41.00  -0.3
        0.7s    11.00nm
BOSA   126.16 259 ePKP  37 46.00  -2.0
LPAZ   147.15  60 PKP   38 28.50   1.1
LPB    147.33  60 PKP   38 28.00   0.5
CNCB   147.61  61 PKP   38 30.10   2.0X
SIV    151.60  50 PKP   38 39.80   6.2X
      S.D. = 0.9  on  98 of 115 obs.
-----------------------------------
*  NOV  21, 1993  07h 46m 20.31± 0.76s
    5.943 S ± 7.9km  146.185 E ± 9.5km
    DEPTH =  10.0km  (geophysicist)
    4.1mb (  2 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)

YYYY     0.37 216 iPd   46 27.50  -0.4
LAT      1.08 132 ePd   46 41.00   0.3
WWKK     3.44 312 eP    47 20.50   5.4X
PMG      3.57 164 eP    47 15.90  -1.0
CTA     14.06 180 iPc   49 42.00   0.1
WRA     18.06 219 iPc   50 32.90  -0.3
        0.6s     7.20nm          4.0mb
ASPA    21.22 213 eP    51 10.50   1.8
        1.0s    11.20nm          4.2mb
                   eS    54 58.00
GUN     67.16 303 P     57 17.80   0.4
        0.5s    23.00nm          5.6mb X
KKN     67.62 303 P     57 19.00  -1.1
DMN     67.70 303 P     57 21.00   0.3
GKN     68.22 303 P     57 23.60  -0.2
      S.D. = 0.9  on  10 of  11 obs.
-----------------------------------
*  NOV  21, 1993  07h 56m 55.67± 1.14s
    18.164 S ±16.1km   69.719 W ±10.9km
    DEPTH = 152.7 ± 15.2 km
    4.6mb (  1 obs.)
 NORTHERN CHILE                  (123)

CNCB     2.13  51 iPc   57 34.30   0.8
LPB      2.24  44 iPc   57 36.00   1.3
ARE      2.39 315 iPc   57 36.50   0.1
                   iS    58 01.00
LPAZ     2.40  39 iPc   57 37.10   0.2
CCH      3.50  78 iPd   57 49.70  -0.8
HJA      6.45 142 ePc   58 29.90   0.6
SIV      8.55  77 P     58 54.80  -2.8
NNA      9.22 311 eP    59 05.50  -1.0
        0.6s    10.00nm          4.6mb
                   eS    00 46.50
PPD     17.71 106 eP    00 53.70  -0.6
VAO     21.83 107 eP    01 37.00   0.3
SOB1    29.35  76 eP    02 48.30   1.9
GBA    148.11  93 PKP   16 30.00   7.9X
      S.D. = 1.5  on  11 of  12 obs.
-----------------------------------
?  NOV  21, 1993  08h 09m 07.48± 1.04s
    39.099 N ± 8.8km   27.618 E ±10.5km
    DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
      ML 2.7 (ISK).

IZM      0.75 202 ePg   09 22.00  -0.2
                   eSg   09 34.00
DST      0.93  57 ePn   09 25.90   0.6
EZN      1.24 306 ePn   09 31.00   0.6
EDC      1.26   9 ePn   09 30.00  -0.9
      S.D. = 1.2  on   4 of   4 obs.
-----------------------------------
%  NOV  21, 1993  08h 24m 08.65± 0.93s
    39.101 N ± 7.6km   27.663 E ± 9.6km
    DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
      ML 2.7 (ISK).

IZM      0.77 204 ePg   24 23.50  -0.2
                   eSg   24 35.80
DST      0.90  56 ePn   24 26.40   0.4
EDC      1.25   7 ePn   24 32.00   0.1
EZN      1.26 305 ePn   24 32.50   0.4
BNT      1.27   9 ePn   24 31.50  -0.7
      S.D. = 0.7  on   5 of   5 obs.
-----------------------------------
%  NOV  21, 1993  08h 34m 59.22± 0.99s
    39.061 N ± 8.1km   27.640 E ±10.4km
    DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
      ML 2.7 (ISK).

IZM      0.73 204 ePg   35 13.20  -0.3
                   eSg   35 25.20
DST      0.94  54 ePn   35 17.90   0.7
EZN      1.27 307 iPn   35 23.50   0.7
EDC      1.30   8 ePn   35 23.00  -0.2
BNT      1.31   9 ePn   35 22.50  -1.0
      S.D. = 1.0  on   5 of   5 obs.
-----------------------------------
*  NOV  21, 1993  08h 50m 35.74± 3.27s
    32.179 S ±14.7km   71.833 W ±26.1km
    DEPTH =  33.0km  (normal)
 NEAR COAST OF CENTRAL CHILE     (135)
      MD 4.0 (SAN).

ROCH     1.05 139 iP+   50 54.03  -0.4
                   iS    51 13.33
JACH     1.16 116 iP+   50 55.40  -0.4
                   iS    51 15.44
PEL      1.36 135 iPd   50 58.60  -0.1
TACH     1.65 153 iPd   51 02.96   0.1
FCH      1.73 132 iP+   51 04.14  -0.2
                   iS    51 34.02
LNV      1.81 169 eP    51 04.65  -0.4
PCH      1.82 143 eP    51 05.18  -0.1
CACH     2.19 152 iP+   51 11.48   0.8
MDZ      2.62 106 eP    51 22.60   5.9X
                   iS    52 02.00
ZON      2.76  78 eP    51 18.00  -0.6
RTCV     2.82  84 eP    51 20.00   0.5
CFA      3.11  80 ePc   51 24.00   0.3
                   S     52 09.50
RFA      3.82 133 ePc   51 34.20   0.5
RTPR     4.93  69 eP    51 14.00 -35.4X
CYA      6.41  56 ePd   52 04.80  -5.6X
WRA    122.43 209 Pdiff 06 08.40   9.3X
        0.9s     0.20nm
      S.D. = 0.5  on  12 of  16 obs.
-----------------------------------
*  NOV  21, 1993  08h 57m 46.59± 0.66s
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   52.889 N ± 7.7km  175.762 W ±11.1km
   DEPTH = 218.3 ±  6.9 km
   4.6mb (  8 obs.)
 ANDREANOF ISLANDS, ALEUTIAN IS. (  7)

ADK     1.16 210 ePc   58 18.90  -0.6
                 eS    58 42.76
SDN     9.30  69 eP    59 53.59  -3.7X
SVW    13.67  45 eP    00 54.18   1.5
KDC    14.08  61 eP    00 54.15  -3.5X
TTA    14.47  38 eP    01 01.88  -0.7
       0.9s    21.33nm          4.6mb
CP2    15.21  47 eP    01 14.43   2.6X
CRP    15.25  47 iPc   01 14.18   1.9
SLKM   15.88  51 eP    01 17.93  -1.8
PWA    16.41  48 eP    01 26.70   0.6
       0.6s    50.30nm          5.1mb
IMA    17.18  31 eP    01 35.78   1.0
       0.9s    20.35nm          4.6mb
KLU    18.17  50 eP    01 45.48   0.4
TOA    18.22  48 eP    01 45.70   0.1
FBA    18.60  39 eP    01 48.25  -1.1
       0.6s    17.30nm          4.7mb
BALM   19.76  52 eP    02 00.92  -0.5
GMW    33.66  77 eP    04 08.43   0.2
JCW    33.85  76 P     04 10.01   0.1
BMW    33.93  79 P     04 11.00   0.4
RVC    34.44  78 P     04 15.46   0.5
FMW    34.63  78 P     04 16.57  -0.1
LON    34.64  78 eP    04 16.31  -0.3
WPW    34.82  78 P     04 18.23   0.1
RNO    34.99  83 P     04 20.44   0.9
ASR    35.07  79 P     04 20.31   0.0
ETW    35.08  76 P     04 20.28  -0.1
TBM    35.14  77 P     04 20.66  -0.2
NAC    35.23  77 P     04 21.69   0.2
WTV    35.25  75 P     04 21.28  -0.5
EBG    35.29  77 P     04 22.29   0.2
SAW    35.58  75 P     04 23.99  -0.4
GL2    35.63  79 P     04 25.32   0.4
VBEM   35.65  80 P     04 25.50   0.3
DBO    35.73  84 P     04 27.00   1.2
VGB    35.89  79 eP    04 27.17   0.1
WAH2   35.96  77 P     04 27.45  -0.1
CROR   36.05  80 P     04 28.81   0.3
JBO    36.48  79 P     04 32.11   0.1
VIPM   36.53  81 P     04 32.83   0.2
NEW    36.63  73 eP    04 32.25  -1.0
LNOR   37.18  77 P     04 37.67  -0.3
LGPM   37.27  87 eP    04 39.75   0.9
ARN    40.29  90 eP    05 03.70   0.1
CMB    40.54  89 eP    05 05.84   0.1
MEMM   41.65  88 eP    05 16.08   1.3
BONR   41.85  87 eP    05 17.48   0.7
BCH    42.59  92 eP    05 23.10   0.5
HVU    42.79  79 eP    05 24.00  -0.1
DUG    43.74  81 iPc   05 31.71  -0.1
       0.5s    11.25nm          4.6mb
GSC    44.50  89 iPc   05 37.85   0.0
DAU    44.53  79 ePc   05 38.22  -0.1
ARUT   44.90  84 (P)   05 40.53  -0.5
EMUT   45.17  80 eP    05 42.84  -0.4
MSU    45.19  82 iPc   05 43.48   0.1
PLM    45.79  91 iPc   05 47.95  -0.2
SRU    45.79  80 ePc   05 47.66  -0.5
PV09   47.02  80 ePc   05 56.93  -0.9
PV10   47.15  80 ePc   05 58.19  -0.7
GLA    47.23  90 eP    05 58.89  -0.4
PV08   47.26  80 iPc   05 58.59  -1.2
GOL    48.47  76 ePc   06 08.65  -0.3
       0.6s    15.33nm          4.6mb
LZH    56.74 287 eP    07 17.50   7.7X
       1.2s    30.00nm          4.9mb
     Z 15s      0.68um          4.9MszX
     E 12s      0.52um
CEH    65.97  62 (P)   08 09.67  -1.5
       0.5s     3.39nm          4.3mb
JSC    66.01  65 (P)   08 10.27  -1.1
WRA    84.41 226 eP    09 56.70   1.5
       1.1s     0.70nm          3.3mb X
     S.D. = 0.7  on  59 of  63 obs.
-----------------------------------
*  NOV  21, 1993  09h 29m 43.69± 2.27s
   27.319 N ±17.0km  129.686 E ±13.9km
   DEPTH =  57.7 ± 19.7 km
   4.4mb (  7 obs.)
 RYUKYU ISLANDS                  (238)

KAGJ    3.99  15 eP    30 42.90  -0.9
KUMJ    5.29  11 eP    31 02.00  -0.1
SSE     8.33 299 Pd    31 46.00   1.7
        1.4s    37.00nm          5.0mb
     Z  20s     0.90um          3.9MszX
BJI    16.93 322 eP    33 50.00  12.0X
        1.0s     7.00nm
     Z  16s     0.35um
LZH    23.61 298 eP    34 57.00   6.7X
        1.8s    30.00nm          4.5mb
     Z  15s     0.68um          4.2MszX
     E  12s     0.52um
GUN    38.67 281 P     37 03.20  -0.7
PKI    39.13 281 P     37 06.80  -1.0
DMN    39.39 281 P     37 09.00  -0.9
GKN    39.73 282 P     37 11.40  -1.2
        0.8s    32.00nm          5.2mb
WRA    47.20 174 eP    38 13.10   0.5
        0.8s     1.50nm          4.0mb
ASPA   50.85 175 eP    38 51.40  10.7X
        0.9s     4.20nm
HFS    78.46 333 eP    41 40.40   0.8
        0.4s     1.30nm          4.2mb
NB2    78.91 334 P     41 43.00   0.8
        0.8s     3.70nm          4.4mb
KSP    82.58 324 eP    42 06.10   4.4X
GEC2   85.11 323 ePd   42 15.50   0.8
        1.2s     3.52nm          4.3mb
                  e    42 24.70
                  e    42 31.80
     S.D. = 1.2  on  11 of  15 obs.
-----------------------------------
?  NOV  21, 1993  09h 33m 39.60± 0.95s
   39.093 N ± 8.1km   27.594 E ± 9.7km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
      ML 2.7 (ISK).

IZM     0.74 201 ePg   33 54.10  -0.1
                 eSg   34 06.40
DST     0.95  57 ePn   33 57.90   0.2
EZN     1.22 307 ePn   34 02.50   0.1
EDC     1.27   9 ePn   34 02.90  -0.3
     S.D. = 0.3  on   4 of   4 obs.
-----------------------------------
%  NOV  21, 1993  09h 35m 06.11± 0.89s
   26.332 S ± 8.3km   27.623 E ± 9.6km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA        (584)
      ML 2.1 (PRE).

KSR     0.80 305 eP    35 21.90  -0.4
                 S     35 29.90
SLR     0.84  45 eP    35 23.00   0.1
                 S     35 35.00
SEK     1.98 180 eP    35 41.20   0.4
                 S     36 06.00
SWZ     2.22 247 eP    35 45.20   0.9
                 S     36 10.00
BLF     3.04 204 eP    35 55.00  -1.0
                 S     36 31.20
     S.D. = 1.0  on   5 of   5 obs.
-----------------------------------
?  NOV  21, 1993  09h 39m 19.64± 0.97s
   39.080 N ± 8.2km   27.617 E ± 9.9km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
      ML 2.7 (ISK).

IZM     0.74 202 ePg   39 34.00  -0.1
                 eSg   39 46.30
DST     0.94  56 ePn   39 37.90   0.2
EZN     1.25 307 iPn   39 43.00   0.2
EDC     1.28   8 ePn   39 43.00  -0.4
     S.D. = 0.5  on   4 of   4 obs.
-----------------------------------
?  NOV  21, 1993  10h 45m 38.41± 3.47s
    7.639 N ±39.6km   72.579 W ±37.4km
   DEPTH = 211.7 ± 29.9 km
   4.2mb (  1 obs.)
 NORTHERN COLOMBIA               ( 99)

SDV     2.29  57 iPnc  46 21.10  -0.3
                 iSn   46 59.10
TOV     3.48  52 iPnc  46 36.00   1.1
                 iPP   46 36.70
                 eSn   47 25.30

CEOS    4.42  71 iP    46 45.00  -1.5
MORO    5.29  52 eP    46 58.10   0.5
LLAV    6.36  63 eP    47 11.60   0.3
YKA    62.69 340 eP    55 41.60  -0.9
        0.5s     2.00nm          4.2mb
WRA   151.19 242 ePKP  05 03.30   0.8
        0.6s     0.70nm
     S.D. = 1.3  on   7 of   7 obs.
-----------------------------------
?  NOV  21, 1993  10h 52m 35.64± 1.00s
   39.077 N ± 8.4km   27.599 E ±10.2km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
      ML 2.6 (ISK).

IZM     0.73 201 ePg   52 49.80  -0.2
                 eSg   53 03.50
DST     0.96  56 ePn   52 54.30   0.4
EZN     1.24 308 ePn   52 59.00   0.4
EDC     1.28   9 ePn   52 58.80  -0.6
     S.D. = 0.9  on   4 of   4 obs.
-----------------------------------
?  NOV  21, 1993  11h 34m 38.77± 0.96s
   39.101 N ± 8.2km   27.648 E ± 9.7km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
      ML 2.7 (ISK).

IZM     0.76 203 ePg   34 53.70   0.0
                 eSg   35 05.20
DST     0.91  56 ePn   34 56.30   0.1
EZN     1.25 306 iPn   35 02.10   0.0
EDC     1.26   8 ePn   35 02.00  -0.1
     S.D. = 0.1  on   4 of   4 obs.
-----------------------------------
&  NOV  21, 1993  11h 39m 16.37s
   63.436 N          151.131 W
   DEPTH =  14.7km
 CENTRAL ALASKA                  (  1)
      <AEIC>. ML 2.7 (AEIC), 3.0
      (PMR).

KTH     0.15  39 iP    39 20.30  -0.2
TRF     0.38  87 eP    39 24.04  -0.4
HUR     0.82 124 eP    39 31.43  -0.4
                 eS    39 43.34
RND     1.03  91 eP    39 34.98  -0.4
MCK     1.03  72 eP    39 35.57   0.2
BWN     1.05  44 eP    39 36.89   1.3
CUT     1.11 159 eP    39 36.55  -0.1
NEA     1.46  37 eP    39 41.96  -0.2
SKT     1.47 187 eP    39 42.31  -0.1
                 eS    40 01.44
MLY     1.61   6 eP    39 43.82  -0.6
WRH     1.70  51 eP    39 44.71  -0.9
DHY     1.74 100 eP    39 46.63   0.3
                 eS    40 11.21
PWA     1.88 161 P     39 48.20  -0.1
CCB     1.90  49 eP    39 46.82  -1.7
GHO     1.96 148 eP    39 49.34  -0.1
                 eS    40 14.50
MDM     1.99  38 eP    39 48.37  -1.5
SUA     1.99 175 eP    39 50.37   0.5
PLRM    2.07 152 eP    39 50.92   0.0
                 eS    40 17.96
PMR     2.07 152 eP    39 50.60  -0.4
FBA     2.07  43 eP    39 50.80  -0.2
HDA     2.09  60 eP    39 51.26   0.0
NCG     2.10 194 eP    39 51.27  -0.2
                 eS    40 17.53
CRP     2.23 193 eP    39 52.63  -0.8
BGL     2.26 196 eP    39 54.46   0.6
TTA     2.27 259 e(P)  39 59.20   5.2
CKN     2.27 193 eP    39 54.78   0.8
ILB     2.30  52 eP    39 53.22  -1.0
IL1     2.30  52 eP    39 53.73  -0.5
PMS     2.32 161 P     39 55.00   0.4
KNK     2.38 147 eP    39 56.15   0.7
BKG     2.43 193 eP    39 56.57   0.3
PAX     2.61  98 eP    39 58.11  -0.7
TOA     2.64 118 P     39 59.50   0.2
SDG     2.71 107 eP    39 59.79  -0.4
CFI     2.75 144 eP    40 01.71   1.0
IM3     2.79 337 eP    40 00.57  -0.7
IMA     2.86 339 eP    40 00.34  -2.0
PWL     2.90 152 eP    40 03.51   0.7
MPA     3.07 163 eP    40 03.07  -2.1
```

21d 11h

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KLU      3.11 127 eP    40 06.68   0.9
                  eS    40 45.85
SVW      3.14 224 (P)   40 06.47   0.2
       41 obs. associated
-----------------------------------
%  NOV  21, 1993  11h 41m 31.15± 0.68s
   26.186 S ± 6.7km   28.182 E ± 7.6km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)
      ML 2.3 (PRE).

SLR      0.46  11 eP    41 40.00  -0.4
                  S     41 46.50
KSR      1.20 285 eP    41 53.90  -0.2
                  S     42 09.50
BFT      1.75  74 eP    42 03.00   0.5
                  S     42 24.00
SEK      2.19 193 eP    42 07.90  -0.9
                  S     42 31.30
SWZ      2.74 248 eP    42 17.30   0.5
                  S     42 52.70
BLF      3.41 211 eP    42 26.00  -0.2
                  S     43 02.00
BOSA     3.45 225 eP    42 27.20   0.6
                  S     43 12.00
     S.D. = 0.7  on   7 of   7 obs.
-----------------------------------
?  NOV  21, 1993  12h 12m 24.09± 3.72s
   50.169 N ±32.9km    7.926 E ± 9.1km
   DEPTH =  10.0km  (geophysicist)
 GERMANY                           (543)
      ML 2.4 (LDG), 1.7 (UCC).

ABH      0.38 220 ePg   12 31.40  -0.4
RUP      0.73 230 ePg   12 37.90  -0.6
TOD      0.80 134 ePg   12 39.30  -0.4
WLF      1.25 247 iPd   12 47.64   0.3
CDF      1.81 194 Pg    12 56.60   1.0
                  Sg    13 17.70
HAU      2.40 206 Pg    13 09.10   5.0X
                  Sg    13 36.50
BSF      2.46 198 Pg    13 09.60   4.7X
                  Sg    13 37.70
     S.D. = 0.9  on   5 of   7 obs.
-----------------------------------
*  NOV  21, 1993  12h 26m 24.12± 1.31s
   22.652 S ± 8.4km   68.844 W ±15.0km
   DEPTH = 115.3 ± 12.2 km
   4.9mb (  2 obs.)
 NORTHERN CHILE                    (123)

YJA      3.13  82 iPc   27 14.00   0.8
                  (S)   27 53.00
HJA      3.22 101 iPc   27 14.30   0.4
                  S     27 25.40
SLA      3.70 125 iP    27 21.30   0.7
CCH      5.83  26 P     27 49.20  -0.7
CNCB     5.87   8 P     27 50.20  -0.4
LPB      6.13   7 P     27 55.80   1.7
LPAZ     6.37   6 P     27 56.60  -0.9
CYA      6.39 155 ePd   27 56.00  -1.3
ARE      6.64 337 eP    28 10.00   9.0X
                  iS    29 32.90
SIV      9.88  49 P     28 38.50  -6.1X
MRA     10.11 165 ePd   28 43.30  -4.2X
MDZ     10.19 180 eP    28 58.80  10.1X
                  e     31 54.80
RFA     12.08 179 ePd   29 07.00  -6.6X
PPD     16.23  91 eP    30 05.90  -0.9
VAO     20.17  95 eP    30 48.40  -3.3X
UYO     61.53 336 iPd   36 30.40  -0.7
MIAR    61.55 337 ePd   36 30.12  -1.1
        1.2s    20.35nm         5.0mb
ELC     62.63 342 iPc   36 36.71  -1.6
PV08    71.43 328 eP    37 34.44   0.3
SRU     72.77 327 eP    37 42.49   0.6
MSU     73.16 326 ePd   37 45.49   1.3
LBFM    80.44 322 iPd   38 25.55   0.9
BOSA    82.99 118 eP    38 37.60  -0.3
        0.3s    37.00nm         5.8mb X
YKA     92.29 341 P     39 21.50  -0.3
        0.6s     3.00nm         4.7mb
WRA    131.99 210 ePKP  45 26.70   0.4
        0.7s     1.10nm
GBA    146.78 100 PKPd  45 54.00   1.0
     S.D. = 1.0  on  20 of  26 obs.
-----------------------------------
%  NOV  21, 1993  12h 39m 49.66± 0.90s
   39.104 N ± 7.4km   27.632 E ± 9.4km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.8 (ISK).

IZM      0.76 202 ePg   40 04.40  -0.2
                  eSg   40 16.70
DST      0.92  57 iPn   40 07.70   0.4
EZN      1.24 306 iPn   40 13.10   0.4
EDC      1.25   8 ePn   40 12.80  -0.2
BNT      1.27  10 ePn   40 12.70  -0.5
     S.D. = 0.6  on   5 of   5 obs.
-----------------------------------
*  NOV  21, 1993  12h 58m 48.04± 0.76s
   3.902 S ± 8.9km  130.801 E ±13.1km
   DEPTH =  33.0km  (normal)
   4.5mb (  4 obs.)
 SERAM, INDONESIA                  (272)

MTN      8.89 178 iPc   00 57.10  -0.2
                  eS    02 35.50
KNA     11.94 190 eP    01 38.00  -1.0
WRA     16.31 168 eP    02 31.50  -4.9X
                  i     02 35.60
                  eS    05 24.50
QIS     18.64 153 eP    03 05.30  -0.1
ASPA    19.88 172 iPd   03 19.90   0.3
        0.4s    46.80nm         5.2mb
                  eS    06 57.70
MBL     20.20 211 eP    03 23.00   0.1
        0.6s    15.00nm         4.5mb
CTA     22.04 138 eP    03 42.00   0.3
NANU    23.73 217 eP    03 59.80   1.7
COOL    28.34 198 eP    04 41.00  -0.2
MRWA    28.83 208 eP    04 45.00  -0.6
STK     29.62 161 eP    04 45.90  -6.7X
        1.3s     2.10nm         3.7mb
BAL     29.71 205 eP    04 53.50   0.1
KLB     30.15 203 eP    04 57.50   0.1
BRS     31.39 140 iP    05 08.50   0.1
        0.8s     5.00nm         4.4mb
GUN     53.58 309 P     08 09.60   0.8
KKN     53.99 309 P     08 12.20   0.6
DMN     54.04 308 P     08 13.00   0.9
GKN     54.59 309 P     08 13.20  -2.8
CNCB   152.29 138 PKP   18 47.00  10.3X
LPB    152.41 138 ePKP  18 50.00  13.3X
LPAZ   152.56 137 PKP   18 46.60   9.4X
     S.D. = 1.0  on  16 of  21 obs.
-----------------------------------
?  NOV  21, 1993  13h 04m 59.79± 0.98s
   39.080 N ± 8.3km   27.612 E ±10.0km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.7 (ISK).

IZM      0.73 202 ePg   05 14.10  -0.1
                  eSg   05 25.80
DST      0.95  56 ePn   05 18.20   0.3
EZN      1.24 307 iPn   05 23.20   0.3
EDC      1.28   9 ePn   05 23.00  -0.5
     S.D. = 0.7  on   4 of   4 obs.
-----------------------------------
?  NOV  21, 1993  13h 05m 39.10± 4.51s
   28.666 N ±13.3km   34.726 E ±31.4km
   DEPTH =  10.0km  (geophysicist)
 EGYPT                             (553)

BADA     0.28 120 iPd   05 44.87  -0.1
SRFA     0.48  57 iPd   05 48.67  -0.2
                  iS    05 55.33
HQL      0.67  25 iPc   05 52.33   0.0
AYN      1.14  79 iPd   06 00.73   0.4
                  iS    06 13.70
     S.D. = 0.5  on   4 of   4 obs.
-----------------------------------
?  NOV  21, 1993  13h 09m 02.63±11.95s
   36.981 N ±103.km   28.928 E ±23.4km
   DEPTH =  10.0km  (geophysicist)
 DODECANESE ISLANDS                (369)
      ML 3.1 (ISK).

KHL      1.42  19 iPg   09 28.10  -0.5
                  eSg   09 50.10
IZM      1.94 317 ePn   09 35.90   0.0
ALT      2.27  24 ePn   09 41.20   0.3
DST      2.63 355 ePn   09 46.00   0.1
     S.D. = 0.6  on   4 of   4 obs.
-----------------------------------
%  NOV  21, 1993  13h 23m 02.07± 0.97s
   39.700 N ± 8.8km   29.466 E ± 8.9km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.7 (ISK).

IZI      0.64   0 iPg   23 14.00  -0.9
DST      0.65 262 ePg   23 14.20  -1.0
                  eSg   23 25.20
ALT      0.81 142 ePg   23 18.00   0.1
EYL      1.01  31 ePn   23 21.60   0.3
EDC      1.39 298 ePn   23 29.00   1.5
     S.D. = 1.4  on   5 of   5 obs.
-----------------------------------
?  NOV  21, 1993  13h 38m 07.62± 4.57s
   39.596 N ±36.5km   29.521 E ±25.2km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.6 (ISK).

DST      0.69 271 ePg   38 20.70  -0.6
                  eSg   38 31.70
IZI      0.74 357 iPg   38 21.60  -0.6
EYL      1.09  27 ePn   38 28.30   0.2
EDC      1.48 301 ePn   38 35.30   1.0
     S.D. = 1.4  on   4 of   4 obs.
-----------------------------------
?  NOV  21, 1993  16h 35m 24.28± 4.82s
   14.282 N ±45.7km   92.309 W ±16.9km
   DEPTH =  61.6 ± 15.1 km
   4.2mb (  3 obs.)
 NEAR COAST OF CHIAPAS, MEXICO     ( 69)

TPX      0.62   4 iP    35 38.00   0.2
                  iS    35 55.00
PPM      7.70 309 (P)   37 16.00  -0.7
LTX     18.30 327 iPd   39 36.56   1.0
UYO     19.89 355 iPc   39 53.10  -0.3
MIAR    20.21 357 iPc   39 56.24  -0.4
        0.9s     9.16nm         4.1mb
MEO     21.18 346 iPd   40 06.40  -0.2
ALQ     24.21 331 ePc   40 36.91   0.4
        0.8s     3.18nm         3.9mb
PV08    28.18 332 eP    41 13.70   0.3
PV10    28.20 331 ePc   41 13.74   0.3
YKA     50.68 347 eP    44 18.50  -0.8
        0.7s     5.80nm         4.7mb
INK     60.08 344 eP    45 26.50  -0.5
MBC     63.60 353 eP    45 51.50   1.1
     S.D. = 0.7  on  12 of  12 obs.
-----------------------------------
   NOV  21, 1993  17h 29m 53.51± 0.35s
   22.778 S ± 7.8km  171.762 E ± 6.7km
   DEPTH =  31.5km  (  7 depth phases)
   5.2mb ( 22 obs.)  4.9Msz (  3 obs.)
 LOYALTY ISLANDS REGION            (189)

DZM      4.97 277 iP    31 07.70  -0.4
                  iS    32 05.20
BKM      6.06 326 iPc   31 26.20   2.8X
                  iS    32 44.00
HNR     17.44 318 eP    33 57.00   0.8
BRS     17.80 251 iPc   34 03.50   2.9X
                  i     34 13.00
                  i     34 31.00
                  eS    37 35.00
AFI     17.93  63 eP    34 10.00   7.7X
                  e(S)  37 20.00
MRW     18.57 173 P     34 10.50   0.6
ARMA    19.53 243 eP    34 23.00   1.4
        0.9s    26.00nm         4.5mb
CNB     23.16 232 eP    35 03.10   4.8X
        1.1s   100.00nm         5.2mb
CAN     23.43 233 eP    35 04.50   3.6X
                  e     35 50.50
BWA     23.49 235 eP    35 02.40   0.9
                  e     35 10.50  29km
CTA     23.89 272 iPc   35 07.50   2.2
        1.3s    33.65nm         4.7mb
                  i     35 17.00  34km
PMG     27.06 295 eP    35 35.00  -0.3
STK     28.22 245 eP    35 41.10  -4.6X
        1.8s     1.20nm         3.3mb X
ASPA    34.74 261 iPc   36 42.20  -0.9
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        1.0s    27.20nm          5.1mb
      Z  22s     1.00um          4.5Msz
                  i     36 51.80  33km
WRA    34.91 267 iPd    36 42.80  -1.7
        0.4s     4.20nm          4.7mb
GUMO   44.72 321 eP     38 05.10  -0.7
        1.2s   174.20nm          5.8mb
MBL    47.98 262 eP     38 31.50  -0.1
DRV    48.26 196 eP     38 50.00  16.8X
                  S     45 50.00
                  S     06 30.00
KLB    48.43 247 eP     38 34.00  -0.9
        1.0s    41.00nm          5.4mb
BAL    49.40 249 iPd    38 41.60  -0.8
        1.0s    52.00nm          5.5mb
MUN    49.72 247 eP     38 44.00  -0.9
        1.0s    40.00nm          5.4mb
MRWA   50.15 250 iPd    38 47.80  -0.4
        0.8s    19.00nm          5.2mb
SBA    55.18 181 eP     39 28.30   3.3X
LEM    63.57 274 ePd    40 24.00   0.0
SPA    67.36 180 ePd    40 46.50  -1.2
        2.2s   250.00nm          5.9mb
KGM    71.01 281 ePd    41 11.10   0.4
IPM    74.16 282 ePc    41 29.00  -0.3
        0.6s    17.20nm          5.2mb
TIA    78.14 318 Pd     41 50.30  -1.0
        1.0s    90.00nm          5.8mb
CN2    78.69 328 P      41 53.10  -1.0
        1.0s    14.00nm          4.9mb
                  epP   42 03.00  32km
GYA    79.76 304 P      42 00.60   0.1
BJI    81.15 320 eP     42 06.00  -1.4
        1.0s     8.00nm          4.7mb
      Z  24s     0.32um          4.6MszX
TIY    82.02 316 Pd     42 12.40   0.4
      Z  22s     0.78um          5.0Msz
KMI    82.13 301 Pd     42 13.60   0.5
        1.6s    50.00nm          5.3mb
                  pP    42 23.50  31km
XAN    82.22 312 P      42 13.00  -0.2
        1.2s    14.00nm          4.9mb
                  pP    42 22.40  30km
                  sP    42 26.50
CHTO   82.25 294 ePc    42 14.40   0.9
        1.1s    22.38nm          5.1mb
HHC    84.42 319 Pd     42 24.70   0.4
        1.2s    32.00nm          5.4mb
LZH    86.83 311 Pc     42 37.20   0.7
        1.2s    35.00nm          5.5mb
                  pP    42 47.50  32km
CMB    87.79  47 eP     42 40.28  -0.6
ISA    87.91  50 eP     42 41.34  -0.2
GSC    88.92  51 eP     42 45.46  -0.9
BONR   89.17  48 iPd    42 47.46  -0.3
TNP    89.97  48 eP     42 50.47  -1.0
        1.2s    18.14nm          5.2mb
GTA    91.25 313 eP     42 57.30   0.1
        1.0s    12.00nm          5.2mb
ARUT   92.47  50 eP     43 04.50   1.6
BUL   124.20 223 iPKPc  48 50.60  -0.9
        1.0s    10.00nm
KSP   146.10 332 ePKP   49 30.30  -0.6
BRG   147.07 334 ePKP   49 33.00   0.6
                  e     49 45.40
CLL   147.10 335 ePKP   49 32.00  -0.4
        1.1s    12.00nm
PRU   147.49 332 PKP    49 34.40   1.3
                  e     49 46.80
VAY   148.24 313 ePKP   49 38.00   3.4X
KHC   148.55 332 ePKP   49 37.30   2.4
        1.0s     5.40nm
                  e     49 47.00
                  e     49 56.50
                  e     50 27.50
SKO   148.70 315 ePKP   49 38.00   2.7X
        1.2s    50.00nm
                  i     49 43.00
                  i     49 54.00
GEC2  148.71 332 ePKPc  49 37.50   2.2
        0.8s     3.32nm
                  e     49 41.10
                  e     49 43.10
                  e     49 47.80
                  e     49 49.70
                  e     49 54.30
                  e     50 00.30
GRF   149.08 335 ePKP   49 38.70   3.0X
      Z  19s     0.20um          4.9Msz
                  e     49 44.10
OHR   149.53 314 iPKP   49 40.00   3.3X
LJU   150.34 327 ePKP   49 41.80   4.1X
                  e     50 05.50
DOU   150.93 343 PKPc   49 44.20   5.8X
CDF   151.59 338 ePKP   49 43.80   4.2X
        1.2s     9.80nm
BSF   152.26 338 ePKP   49 45.30   4.7X
LPG   154.25 335 ePKP   49 58.60  14.9X
SMF   154.26 341 ePKP   49 55.00  11.7X
        1.2s    12.20nm
KIC   163.33 192 PKP    49 54.30  -0.3
     S.D. = 1.0  on  44 of  62 obs.
-----------------------------------
%  NOV  21, 1993  18h 01m 55.07± 0.47s
   44.485 N ± 4.2km    7.281 E ± 5.7km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                    (545)
      ML 2.2 (GEN).

PZZ     0.13 279 P      01 58.40   0.1
                 S      02 00.23
STV     0.24 173 P      02 00.28   0.0
                 S      02 03.16
ENR     0.28 159 P      02 00.92   0.0
                 S      02 04.44
BHB     0.36 358 P      02 02.61   0.2
                 S      02 07.46
ROB     0.46 114 P      02 04.49   0.0
                 S      02 10.94
RRL     0.56 321 P      02 06.64   0.0
RSP     0.67 359 P      02 08.11  -0.3
FIN     0.72 112 P      02 09.43   0.2
IMI     0.72 143 P      02 09.25  -0.1
     S.D. = 0.2  on   9 of   9 obs.
-----------------------------------
%  NOV  21, 1993  18h 26m 30.32± 1.22s
   43.033 N ± 9.5km   18.725 E ± 7.4km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)

BRY     0.19 225 iPgd   26 34.73   0.2
                 iSg    26 37.73
NKY     0.30 138 iPgd   26 36.55   0.0
                 iSg    26 41.43
PLE     0.57  59 iPgd   26 41.63  -0.4
                 iSg    26 49.75
HCY     0.61 196 iPgc   26 42.70   0.1
                 iSg    26 52.10
TTG     0.72 147 iPgd   26 43.63  -0.9
                 iSg    26 55.46
IVA     0.88 100 iPgc   26 47.58   0.4
                 iSg    27 00.39
PVY     1.02 115 iPgd   26 50.34   0.7
                 iSg    27 04.92
     S.D. = 0.6  on   7 of   7 obs.
-----------------------------------
?  NOV  21, 1993  18h 49m 18.73± 5.50s
   32.434 S ±28.3km   72.176 W ±34.3km
   DEPTH =  10.0km  (geophysicist)
 OFF COAST OF CENTRAL CHILE        (134)
      MD 3.8 (SAN).

ROCH    1.12 119 iP     49 39.59  -0.3
                 iS     49 51.19
LCCH    1.16 154 iP+    49 40.41   0.1
                 iS     49 52.76
JACH    1.36 101 iPd    49 43.69  -0.1
                 iS     49 58.89
PEL     1.44 120 iP+    49 44.88   0.0
                 iS     50 00.50
TACH    1.60 140 iP+    49 47.09   0.0
LNV     1.65 157 iP+    49 47.50  -0.3
                 iS     50 07.15
FCH     1.82 120 iP+    49 50.81   0.2
                 iS     50 11.02
PCH     1.83 131 iPd    49 51.00   0.4
                 iS     50 12.16
CACH    2.13 142 eP     49 56.01   1.0X
                 eS     50 21.35
     S.D. = 0.3  on   8 of   9 obs.
-----------------------------------
*  NOV  21, 1993  19h 07m 45.05± 1.85s
   31.126 S ± 9.2km   69.143 W ±15.9km
   DEPTH = 130.4 ± 17.3 km
 SAN JUAN PROVINCE, ARGENTINA      (137)

RTCB    0.46 141 e(P)   08 05.70   1.4
RTLL    0.61 110 iPd    08 05.00  -0.2
RTCV    0.90 145 eP     08 07.50   0.1
CFA     0.91 122 iPd    08 06.80  -0.7
RTRS    0.99 344 eP     08 07.30  -0.8
MDZ     1.77 172 iPc    08 21.10   4.3X
                 i      08 32.10
                 i      08 38.90
                 iS     08 41.30
RTPR    2.41  71 iPc    08 24.50  -0.1
MRA     3.19 115 iPc    08 34.00  -0.8
RFA     3.68 171 iPc    08 41.60   0.2
                 S      09 20.50
CYA     3.95  48 iPc    08 46.00   1.0
                 S      09 28.50
     S.D. = 1.0  on   9 of  10 obs.
-----------------------------------
?  NOV  21, 1993  19h 49m 40.53± 0.89s
   9.074 N ±33.4km   80.491 W ± 8.4km
   DEPTH =  10.0km  (geophysicist)
 PANAMA                            ( 81)
      MD 3.9 (UPA).

ECO     0.84  70 eP     49 56.71   0.0
                 eS     50 09.20
UPA     0.95  96 eP     49 58.63   0.0
                 eS     50 11.58
DVD     2.04 252 eP     50 15.20  -0.1
                 eS     50 41.23
BRU     2.06 263 iPd    50 16.12   0.1
                 eS     50 41.35
     S.D. = 0.1  on   4 of   4 obs.
-----------------------------------
%  NOV  21, 1993  20h 00m 00.61± 0.57s
   26.903 S ± 5.9km   26.685 E ± 5.9km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)
      ML 3.3 (PRE).

BFS     0.09  87 iPc    00 02.60  -0.1
                 S      00 03.00
KSR     1.05  10 eP     00 21.00   0.0
                 S      00 35.00
SWZ     1.24 257 iPd    00 24.60   0.3
                 S      00 41.50
SEK     1.64 150 iPd    00 30.90   0.5
                 S      00 51.10
SLR     1.85  51 iPc    00 33.30   0.0
                 S      00 55.10
BOSA    2.04 213 eP     00 38.40   2.4X
                 S      01 04.50
BLF     2.24 191 iPd    00 39.20   0.1
                 S      01 08.50
FRS     3.08 203 eP     00 50.00  -0.8
                 S      01 26.50
BFT     3.25  69 eP     00 53.50   0.0
                 S      01 33.50
     S.D. = 0.5  on   8 of   9 obs.
-----------------------------------
%  NOV  21, 1993  20h 06m 05.75± 0.66s
   26.871 S ± 6.3km   26.726 E ± 6.7km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)
      ML 2.5 (PRE).

BFS     0.06 117 iPc    06 06.70  -0.7
                 S      06 07.10
KSR     1.01   9 eP     06 25.00  -0.5
                 S      06 36.50
SWZ     1.29 256 eP     06 29.80  -0.4
                 S      06 46.00
SEK     1.65 151 iPd    06 35.60  -0.1
                 S      06 54.40
SLR     1.80  51 eP     06 38.70   0.9
                 S      07 00.20
BOSA    2.09 213 eP     06 42.30   0.5
                 S      07 09.00
BLF     2.28 192 eP     06 45.00   0.2
                 S      07 15.00
     S.D. = 0.7  on   7 of   7 obs.
-----------------------------------
   NOV  21, 1993  20h 27m 58.49± 0.15s
   44.664 N ± 1.6km    6.797 E ± 2.0km
   DEPTH =  11.9 ±  1.6 km
 FRANCE                            (538)
```

21d 20h

ML 3.2 (GEN), 3.0 (LDG).

RRL	0.26	358	P	28 04.27	0.1
			S	28 08.86	
PZZ	0.27	126	Pc	28 04.16	-0.2
			S	28 08.38	
BHB	0.38	62	Pc	28 06.70	0.4
			S	28 12.84	
STV	0.56	138	P	28 09.21	-0.7
			S	28 17.36	
RSP	0.59	34	P	28 10.69	0.4
			S	28 19.46	
ENR	0.63	134	P	28 10.32	-0.6
			S	28 18.98	
TOUF	0.73	153	Pg	28 12.52	-0.2
			Sg	28 22.81	
AUTN	0.81	146	Pg	28 13.90	-0.2
			Sg	28 25.00	
MVIF	0.81	161	Pg	28 13.75	-0.4
LPG	0.83	358	Pg	28 14.80	0.2
			Sg	28 25.70	
LSD	0.83	18	P	28 14.81	0.2
			S	28 26.77	
ROB	0.85	115	P	28 14.94	0.1
			S	28 27.10	
LPL	0.85	357	Pg	28 15.10	0.2
			Sg	28 26.70	
AURF	0.87	154	Pg	28 14.97	-0.1
			Sg	28 27.12	
SAOF	0.87	141	Pg	28 15.27	0.2
			Sg	28 27.58	
CALN	0.91	176	Pg	28 16.01	0.1
SBF	0.92	150	Pg	28 16.10	0.1
			Sg	28 28.50	
REVF	1.01	156	Pg	28 18.32	0.8
RSL	1.03	353	Pg	28 16.93	-1.0
IMI	1.09	133	P	28 18.93	0.1
			S	28 33.21	
FRF	1.11	186	Pg	28 19.10	0.0
			Sg	28 34.00	
FIN	1.11	114	P	28 19.34	0.2
			S	28 34.02	
LRG	1.25	195	Pg	28 21.40	-0.1
			Sg	28 37.40	
PCP	1.26	95	P	28 21.97	0.3
			S	28 38.97	
LMR	1.35	189	Pg	28 23.60	0.5
			Sg	28 41.10	
SSB	1.71	292	Pn	28 28.79	0.4
			Sg	28 54.04	
PGF	2.65	142	Pn	28 42.10	0.2
			Sn	29 12.80	
SMF	2.87	315	Pn	28 45.50	0.7
			Sg	29 28.60	
LBF	3.04	321	Pn	28 47.60	0.2
			Sn	29 21.90	
			Sg	29 35.00	
AVF	3.22	313	Pn	28 50.30	0.5
LOR	3.31	323	Pn	28 51.40	0.2
			Sg	29 42.40	
SSF	3.32	317	Pn	28 51.60	0.3
BGF	3.36	306	Pn	28 52.20	0.4
			Sg	29 46.20	
HAU	3.36	355	Pn	28 52.30	0.5
MAF	3.36	299	Pn	28 52.10	0.3
CAF	3.38	276	Pn	28 51.90	-0.2
TCF	3.61	298	Pn	28 55.40	0.0
RJF	3.80	282	Pn	28 58.30	0.2
HYF	3.90	313	Pn	29 00.00	0.6
			Sg	30 01.40	
MFF	5.24	294	Pn	29 18.20	-0.3
LDF	6.18	312	Pn	29 31.00	-0.6
GEC2	6.32	46	Pn	29 32.80	-1.1
			Sn	30 43.70	
LPF	6.38	305	Pn	29 33.90	-0.7
GRR	6.46	308	Pn	29 34.80	-0.9
FLN	6.47	312	Pn	29 34.80	-1.0

S.D. = 0.5 on 45 of 45 obs.

% NOV 21, 1993 20h 28m 05.61± 0.88s
44.713 N ± 8.2km 6.788 E ±11.8km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.9 (LDG).

LPG	0.78	358	Pg	28 21.20	0.1
			Sg	28 32.20	
LPL	0.80	357	Pg	28 21.00	-0.4
SBF	0.97	151	Pg	28 24.10	0.0
			Sg	28 33.60	
SMF	2.83	314	Pn	28 52.60	0.9
BGF	3.32	305	Pn	28 59.00	0.3
MAF	3.33	298	Pn	28 57.80	-1.0

S.D. = 0.8 on 6 of 6 obs.

NOV 21, 1993 20h 36m 41.02± 1.17s
39.175 N ±10.5km 21.729 E ± 6.6km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 2.6 (THE).

AGG	0.49	108	ePgd	36 51.02	0.0
			eSg	36 59.26	
LIT	1.10	32	ePg	37 00.66	-0.9
			eSg	37 16.06	
IGT	1.14	289	ePg	37 01.70	-0.7
			eSg	37 19.58	
FNA	1.63	351	ePb	37 09.14	-0.7
			eSb	37 30.50	
PAIG	1.68	63	ePb	37 11.26	0.6
GRG	1.85	16	ePb	37 13.82	0.7
			eSb	37 36.66	
OHR	2.06	340	ePn	37 18.00	1.8
SOH	2.06	37	ePn	37 15.30	-0.9
			eSn	37 40.90	
OUR	2.09	56	ePn	37 16.78	0.3
KNT	2.18	24	ePn	37 17.64	-0.2
			eSn	37 44.82	
SRS	2.41	36	ePn	37 20.94	-0.2

S.D. = 0.9 on 11 of 11 obs.

NOV 21, 1993 21h 33m 05.68± 0.22s
4.916 S ± 4.3km 78.052 W ± 5.3km
DEPTH = 23.9km (3 depth phases)
4.8mb (30 obs.)
PERU-ECUADOR BORDER REGION (110)

NNA	7.13	170	iPc	34 51.30	0.1
	0.7s	54.79nm		5.7mb	
			eS	36 06.00	
ARE	13.16	151	eP	36 26.00	12.0X
LPAZ	14.92	140	P	36 34.10	-3.4X
			LR	42 59.00	
LPB	15.12	141	P	36 38.30	-1.7
	1.0s	100.00nm		5.1mb	
	Z 16s	2.36um		3.9Msz	
			i	36 46.60	
			LR	43 10.00	
CNCB	15.40	141	P	36 44.00	0.2
			i	36 51.20	
SDV	15.58	28	eP	36 45.90	0.2
TOV	16.76	29	eP	36 59.90	-0.8
CCH	17.02	138	P	37 07.80	3.6X
SIV	19.98	125	P	37 38.10	-1.3
YJA	21.02	146	ePd	37 51.70	1.0
HJA	21.91	147	iPc	38 00.50	1.4
			S	38 11.10	
SLA	23.10	150	ePd	38 13.90	2.8X
PPD	30.98	126	eP	39 22.70	-0.9
BDFB	31.37	112	eP	39 26.75	-0.5
	0.7s	12.73nm		4.9mb	
BAO	31.39	112	eP	39 27.40	0.0
			i	50 06.80	
			i	50 25.70	
			i	50 32.80	
VAO	34.98	124	eP	39 57.30	-1.2
MYNC	40.19	352	(P)	40 41.54	-0.4
	0.9s	12.51nm		4.6mb	
UYO	41.85	339	iPd	40 56.80	1.3
LTX	42.01	326	eP	40 56.68	-0.4
NAV	42.09	357	(P)	40 57.27	-0.2
CVL	42.68	360	eP	41 02.57	0.3
TUL	43.89	339	iPc	41 12.80	0.7
MEO	43.97	335	iPc	41 13.20	0.3
WMOK	44.01	335	eP	41 11.53	-1.7
	0.6s	3.39nm		4.4mb	
ACO	45.85	336	iPc	41 28.10	0.2
ALQ	47.82	328	ePc	41 43.67	0.0
	0.8s	8.85nm		4.8mb	
PV10	51.78	329	eP	42 12.40	-1.6
PLM	52.90	319	eP	42 22.83	0.4
SRU	53.09	329	eP	42 23.37	-0.4
PEC	53.43	319	eP	42 26.21	0.1
	1.0s	5.65nm		4.5mb	
ARUT	53.73	325	eP	42 28.69	0.3
GSC	54.08	321	eP	42 31.22	0.3
			e	42 38.38	23km
DAU	54.44	329	eP	42 33.53	-0.2
DUG	55.09	328	eP	42 38.20	-0.2
	0.8s	4.98nm		4.6mb	
ABL	55.36	319	eP	42 40.00	-0.5
			e	42 46.99	23km
BCH	56.13	319	eP	42 45.84	0.0
BONR	56.70	322	eP	42 50.37	0.2
			e	42 58.21	26km
PHAM	56.72	319	eP	42 50.16	0.2
ULM	57.06	346	eP	42 52.50	0.3
JAQ	58.53	2	eP	43 00.50	-1.9
ORV	59.65	322	eP	43 10.42	0.0
LMEM	60.29	323	P	43 19.87	4.8X
LBFM	60.98	323	eP	43 18.44	-1.3
YKA	72.77	343	eP	44 33.00	-0.7
	0.5s	1.90nm		4.4mb	
LIC	73.74	82	P	44 40.82	0.5
	0.7s	7.00nm		4.8mb	
	Z 21s	0.46um		4.7Msz	
TIC	73.80	82	P	44 40.12	-0.5
	0.8s	12.50nm		5.0mb	
KIC	74.04	82	P	44 42.54	0.5
	0.7s	13.50nm		5.1mb	
INK	82.47	342	eP	45 28.50	1.3
	1.2s	8.00nm		4.7mb	
MBC	84.46	351	eP	45 40.00	2.8X
	1.0s	3.00nm		4.5mb	
EPF	84.89	46	eP	45 41.00	0.9
	0.6s	4.05nm		4.8mb	
LPF	85.00	41	eP	45 40.70	0.3
	0.7s	3.75nm		4.7mb	
SPA	85.12	180	ePc	45 41.50	0.6
GRR	85.20	41	eP	45 41.70	0.3
	0.7s	7.40nm		5.0mb	
MFF	85.28	43	eP	45 42.60	0.7
	0.7s	11.70nm		5.2mb	
FLN	85.52	40	eP	45 43.50	0.5
	0.7s	5.30nm		4.9mb	
LFF	85.55	44	eP	45 44.00	0.8
	0.7s	12.35nm		5.2mb	
LDF	85.72	41	eP	45 44.30	0.3
	1.0s	11.20nm		5.0mb	
LPO	85.81	45	eP	45 45.20	0.6
	0.5s	3.85nm		4.9mb	
FBA	85.98	336	(P)	45 44.50	-0.5
	0.8s	2.72nm		4.5mb	
RJF	86.16	44	eP	45 46.30	0.0
	0.5s	2.50nm		4.7mb	
TCF	86.82	43	eP	45 49.80	0.3
	0.8s	3.65nm		4.7mb	
MAF	87.05	43	eP	45 51.10	0.5
	0.6s	2.25nm		4.6mb	
AVF	87.68	43	eP	45 53.90	0.3
SSF	87.83	43	eP	45 54.50	0.2
	0.8s	3.75nm		4.8mb	
SMF	87.99	43	eP	45 54.80	-0.3
	0.8s	3.10nm		4.7mb	
DAG	88.03	11	iPc	45 55.20	0.5
	0.9s	6.72nm		5.0mb	
LOR	88.10	42	eP	45 55.80	0.1
	0.6s	3.00nm		4.8mb	
WRA	139.70	231	ePKP	52 33.90	-0.4
	0.5s	1.20nm			
GTA	145.61	3	ePKP	52 44.20	0.0
			pPKP	52 50.50	
			sPKP	52 54.00	
TIY	145.98	345	ePKP	52 46.00	1.2
NJ2	148.70	332	ePKP	52 53.60	4.4X
LZH	148.93	357	ePKP	53 02.00	12.3X
	1.4s	28.00nm			
			pP	53 09.00	
POO	149.41	61	ePKP	52 56.00	5.3X
XAN	150.31	348	PKP	52 56.30	4.6X
			pPKP	53 03.00	
			sPKP	53 06.00	
GKN	151.75	34	PKP	53 01.20	7.0X
KKN	152.27	33	PKP	53 02.00	7.0X
DMN	152.31	34	PKP	53 02.50	7.4X
GUN	152.49	32	PKP	53 03.40	7.9X
PKI	152.51	33	PKP	53 03.00	7.5X

S.D. = 0.7 on 64 of 79 obs.

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* NOV 21, 1993 23h 21m 08.96± 2.95s
31.914 S ±12.4km 72.153 W ±24.2km

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   DEPTH =  14.3 ±  3.3 km
 OFF COAST OF CENTRAL CHILE        (134)
      MD 4.3 (SAN).

IHA      1.19 159 e(P)  21 31.50   0.8
                  e(S)  21 50.20
ROCH     1.43 138 iP+   21 34.25  -0.4
                  iS    21 55.59
JACH     1.53 121 iP    21 35.44  -0.4
                  (S)   21 55.97
LCCH     1.63 163 iPd   21 37.26   0.0
                  iS    22 01.82
PEL      1.74 135 iPd   21 38.87  -0.1
                  iS    22 05.02
SAN      1.98 141 eP    21 42.50   0.1
                  iS    22 11.29
TACH     2.01 150 iPd   21 43.54   0.7
                  iS    22 13.24
FCH      2.11 132 iP+   21 44.45  -0.1
                  iS    22 15.97
LNV      2.13 163 (P)   21 43.75  -0.7
                  iS    22 17.00
PCH      2.19 141 iPd   21 45.99   0.5
CACH     2.56 150 iP    21 51.21   0.5
                  iS    22 29.13
RTCB     2.89  82 ePc   21 56.10   0.7
                  S     22 33.70
MDZ      2.96 110 iP    22 03.10   6.8X
                  i     22 38.70
                  iS    22 41.70
ZON      2.98  84 eP    21 57.00   0.3
RTCV     3.08  90 e(P)  22 00.00   2.0X
RTLL     3.20  80 ePc   22 00.20   0.5
                  S     22 44.00
CFA      3.35  86 iPc   22 02.20   0.3
RFA      4.20 134 ePc   22 13.80  -0.2
                  S     23 25.00
RTPR     5.10  73 eP    22 26.00  -0.6
MRA      5.49  97 ePd   22 31.30  -0.9
CYA      6.50  59 ePc   22 42.50  -4.0X
     S.D. = 0.6  on  18 of  21 obs.
-----------------------------------
   NOV  21, 1993  23h 46m 15.17± 0.96s
   31.652 S ± 4.7km   72.390 W ±10.4km
   DEPTH =  10.0km  (geophysicist)
 OFF COAST OF CENTRAL CHILE        (134)
      MD 4.4 (SAN).

IHA      1.51 155 iPc   46 42.80   0.6
                  i     46 53.60
                  i(S)  47 03.90
ROCH     1.76 139 iP+   46 45.40  -0.7
                  (S)   47 06.14
JACH     1.84 124 iP+   46 46.30  -0.8
                  (S)   47 07.02
LCCH     1.95 159 iPd   46 48.71   0.1
                  iS    47 14.55
PEL      2.07 136 iPd   46 49.93  -0.5
                  iS    47 16.26
SAN      2.31 141 iP    46 53.46  -0.5
                  iS    47 24.19
TACH     2.34 149 iP+   46 54.58   0.3
FCH      2.44 134 iPd   46 55.19  -0.8
                  iS    47 27.26
LNV      2.44 161 (P)   46 55.36  -0.3
                  iS    47 29.32
PCH      2.52 142 iP    46 56.70  -0.2
                  (S)   47 27.82
CACH     2.88 149 iPd   47 02.69   0.6
RTCB     3.07  88 ePc   47 06.20   1.5
                  S     47 43.00
ZON      3.17  89 eP    47 09.00   2.9X
MDZ      3.24 113 eP    47 07.50   0.4
                  iS    47 54.20
RTCV     3.29  95 P     47 09.00   1.2
RTLL     3.36  86 ePc   47 09.80   0.9
                  S     47 52.80
CFA      3.54  90 iPc   47 12.80   1.4
                  S     47 59.00
RFA      4.53 134 iPc   47 25.00  -0.4
                  S     48 33.00
RTPR     5.22  77 eP    47 36.00   0.8
MRA      5.72  99 ePd   47 41.80  -0.4
CYA      6.55  62 ePd   47 52.20  -1.8
FSA      7.88  47 ePc   48 19.20   6.7X
SLA      9.19  43 iP    48 38.30   7.3X
CNCB    15.31  16 P     50 03.10   9.6X
LPB     15.55  16 P     49 56.00  -0.5
LPAZ    15.78  15 P     50 01.30   1.6
SIV     18.69  36 P     50 34.60  -1.1
PPD     21.08  68 eP    51 00.40  -1.6
VAO     24.13  75 eP    51 28.80  -3.4X
BDFB    27.34  60 ePd   52 00.73  -1.7
GBA    147.02 116 PKP   06 00.00   1.8
HYB    150.12 111 ePKP  06 09.00   5.9X
     S.D. = 1.1  on  26 of  32 obs.
-----------------------------------
   NOV  22, 1993  00h 07m 48.25± 0.42s
   31.136 S ± 7.1km   68.529 W ± 8.8km
   DEPTH = 113.5 ± 10.2 km
 SAN JUAN PROVINCE, ARGENTINA      (137)
      MD 4.3 (SAN).

ZON      0.43 197 iPd   08 05.00  -0.4
MDZ      1.76 189 iPc   08 21.90   2.9X
                  iS    08 41.50
RTPR     1.93  65 eP    08 20.00  -0.9
JACH     2.34 228 iPd   08 27.16   0.8
                  iS    08 57.93
FCH      2.65 214 iPd   08 31.98   1.3
                  iS    09 06.32
PEL      2.71 222 iP+   08 31.58   0.3
                  iS    09 04.95
MRA      2.72 119 iPc   08 32.50   1.2
ROCH     2.79 228 iP+   08 32.09  -0.4
                  iS    09 06.04
SAN      2.93 217 iP+   08 34.65   0.5
PCH      2.99 214 iP+   08 35.82   0.8
                  iS    09 12.77
TACH     3.23 218 iPd   08 37.88  -0.3
                  iS    09 17.18
CACH     3.45 210 iPd   08 41.79   0.6
                  iS    09 24.35
LCCH     3.47 227 iPd   08 40.41  -1.0
CYA      3.58  42 iPc   08 44.13   1.1
                  S     09 20.50
RFA      3.63 179 eP    08 42.60  -1.0
                  S     09 14.00
LNV      3.72 220 iP+   08 42.83  -1.9
                  iS    09 26.48
FSA      5.50  24 ePc   09 08.50  -0.6
SLA      6.92  24 ePd   09 27.50  -1.3
CNCB    14.27   2 eP    11 09.00   2.2
LPB     14.54   2 P     11 15.00   4.9X
LPAZ    14.79   2 P     11 13.50   0.1
SIV     16.54  26 P     11 33.80  -1.1
PPD     17.85  64 (P)   11 42.00  -8.9X
DAG    111.91  11 ePdiff22 03.00 -10.7X
WRA    124.67 206 PKP   26 36.20  -0.2
        0.5s     0.50nm
     S.D. = 1.1  on  21 of  25 obs.
-----------------------------------
% NOV  22, 1993  00h 16m 01.30± 0.94s
   37.118 N ± 6.5km    3.559 W ±14.3km
   DEPTH =  10.0km  (geophysicist)
 SPAIN                             (377)
      mbLg 2.3 (MDD).

ECOG     0.16 358 eP    16 03.94  -1.1
                  e     16 06.30
EGUA     0.28 181 eP    16 07.11  -0.2
                  e     16 10.30
EBAN     1.06 350 eP    16 21.87   0.6
                  e     16 36.40
EHOR     1.52 298 eP    16 28.70   0.2
                  e     16 48.10
EVIA     1.73  29 eP    16 32.13   0.4
                  e     16 53.30
     S.D. = 1.0  on   5 of   5 obs.
-----------------------------------
* NOV  22, 1993  00h 27m 06.82± 1.25s
   28.200 N ±18.2km   82.863 E ±10.5km
   DEPTH =  33.0km  (normal)
   4.4mb (  3 obs.)
 NEPAL                             (310)

NDI      4.99 277 iPn   28 21.00  -0.5
                  eSn   29 13.00
                  eSg   29 34.20
SHL      8.47 106 iPn   29 09.00  -1.4
                  iSn   30 42.50
HYB     11.44 201 eP    29 50.00  -1.0
        0.8s    19.50nm         5.3mb X
                  e     30 02.90
POO     12.68 223 eP    30 16.50   8.8X
                  iS    33 55.00
GBA     15.38 200 P     30 43.80   0.8
        0.4s     2.00nm          3.7mb
                  S     33 30.80
WRA     69.04 128 eP    38 12.50   0.9
        0.6s     2.60nm          4.5mb
ASPA    71.26 131 iPc   38 26.30   1.2
        0.3s     5.10nm          5.0mb
     S.D. = 1.4  on   6 of   7 obs.
-----------------------------------
   NOV  22, 1993  00h 49m 41.76± 0.67s
   38.712 N ± 5.4km  142.205 E ± 6.5km
   DEPTH =  51.7 ±  5.2 km
   4.7mb ( 22 obs.)
 NEAR EAST COAST OF HONSHU, JAPAN(228)

OFUJ     0.56 311 iPd   49 53.60  -0.3
                  S     50 02.10
YAMJ     1.79 253 P     50 11.40   0.7
                  S     50 34.00
AOMJ     2.32 323 P     50 19.90   1.6
                  S     50 49.90
NIIJ     2.93 241 eP    50 27.50   0.6
                  eS    51 03.40
KAKJ     2.98 213 eP    50 26.90  -0.7
                  S     50 59.30
CHJJ     3.69 225 eP    50 38.00   0.3
                  S     51 22.20
HOOJ     3.76  12 eP    50 37.70  -0.9
                  eS    51 19.20
MRRJ     3.81 347 eP    50 40.50   1.2
                  eS    51 24.20
MAT      3.84 237 iPd   50 41.20   1.4
                  eS    51 29.00
MTMJ     4.09 240 eP    50 42.10  -1.3
IIDJ     4.71 228 P     50 54.20   2.1X
                  eS    51 47.80
KUSJ     4.77  23 eP    50 50.80  -2.1
                  eS    51 42.40
ASAJ     5.41   3 eP    51 00.70  -1.2
TSRJ     5.90 239 P     51 11.70   3.0X
WKYJ     6.96 232 P     51 26.20   2.5X
YONJ     7.83 246 P     51 37.10   1.4
TKSJ     8.10 237 P     51 39.60   0.2
MDJ     11.12 306 eP    52 24.60   3.8X
        0.7s    20.00nm          5.3mb
CN2     13.59 297 eP    52 59.00   5.5X
        1.0s     8.40nm          4.5mb
SSE     18.82 253 Pc    53 59.00  -0.8
        1.0s    42.00nm          4.6mb
                  pP    54 03.00
                  PP    54 24.50
TIA     20.05 271 eP    54 11.30  -1.9X
        1.0s    70.00nm          4.9mb
BJI     20.15 282 eP    54 11.50  -2.7X
        1.0s     6.00nm          3.9mb
      Z  16s     0.35um          3.8MszX
TIY     23.37 277 eP    54 47.30   0.8
      Z  15s     0.71um          4.2MszX
      N  13s     0.29um
                  S     59 11.00
HHC     23.59 285 eP    54 47.40  -1.2
        1.0s    11.00nm          4.3mb
XAN     27.11 270 P     55 21.00  -0.7
        0.6s     6.50nm          4.4mb
                  pP    55 25.00  14kmX
LZH     30.44 277 eP    55 52.00   0.3
        1.0s    27.00nm          4.9mb
GYA     32.15 258 iPd   56 06.00  -0.7
        0.8s    18.00nm          5.0mb
CD2     32.33 268 eP    56 07.00  -1.2
        0.8s    23.00nm          5.1mb
GTA     32.70 285 eP    56 11.00  -0.4
        1.0s    11.00nm          4.6mb
                  pP    56 19.50  29kmX
KMI     35.86 260 Pd    56 38.50  -0.3
        1.5s    50.00nm          5.2mb
                  sP    56 49.00
WMQ     40.67 295 P     57 19.00   0.5
        1.0s    15.00nm          4.7mb
FBA     47.35  33 eP    58 12.00   0.0
        1.0s     5.00nm          4.4mb
GUN     47.63 275 P     58 15.60   0.5
KKN     48.15 275 P     58 18.50  -0.5
PKI     48.16 274 P     58 19.10  -0.1
DMN     48.38 275 P     58 21.00   0.2
```

22d 00h

```
GKN    48.56 275 P     58 21.60  -0.4
INK    52.61  28 eP    58 52.50   0.4
MBC    54.74  17 eP    59 09.00   1.3
WRA    58.81 189 eP    59 35.60  -1.5
       0.5s     2.60nm          4.6mb
                ipP   59 47.90  43kmX
GBA    61.98 265 P     59 58.00  -0.9
ASPA   62.54 189 iPd   00 01.70  -0.7
       0.7s     3.90nm          4.6mb
DAG    64.17 355 iPd   00 11.50  -1.1
       0.8s     7.46nm          4.8mb
OBN    67.12 323 eP    00 30.00  -1.8
       1.1s     8.00nm          4.7mb
HFS    72.82 336 eP    01 06.10  -0.3
       0.4s     3.30nm          4.6mb
NB2    72.88 337 P     01 06.70  -0.1
       0.7s     4.50nm          4.5mb
FRB    75.00  14 eP    01 19.00   0.1
       1.0s    10.00nm          4.7mb
SRU    77.84  49 eP    01 36.34   0.8
KSP    79.00 328 iPc   01 42.00   0.6
PV10   79.20  49 iPd   01 44.66   1.6
PV08   79.30  49 eP    01 45.03   1.3
KHC    81.44 329 eP    01 55.00   0.5
       0.8s     4.40nm          4.5mb
                e     02 07.50
SKO    83.31 320 eP    02 05.00   0.8
OHR    84.27 320 eP    02 09.20   0.0
SLR   123.72 262 ePKP  08 36.00   0.4
       0.6s    10.00nm
LPAZ  145.29  58 PKP   09 15.80  -0.7
LPB   145.49  59 PKP   09 19.00   2.5X
CNCB  145.77  59 PKPc  09 19.00   1.8
SIV   149.51  49 PKP   09 27.50   5.0X
SOB1  150.49   6 ePKP  09 30.20   6.2X
     S.D. = 1.0  on  50 of  60 obs.
-----------------------------------------
% NOV  22, 1993  02h 15m 01.77± 0.72s
  40.625 N ± 5.5km   22.750 E ± 6.6km
  DEPTH =  11.9 ±  9.3 km
 GREECE                              (364)
     ML 1.7 (THE).

THE     0.16  87 ePgc  15 05.36  -0.3
                eSg    15 07.28
GRG     0.42 322 ePg   15 10.60   0.1
                eSg    15 16.64
SOH     0.50  67 ePg   15 11.80  -0.2
                eSg    15 18.56
KNT     0.55  12 ePg   15 12.97   0.1
                eSg    15 20.28
LIT     0.56 201 ePg   15 12.74  -0.3
                eSg    15 19.84
OUR     0.98 107 ePg   15 20.32   0.1
PAIG    1.00 134 ePg   15 21.00   0.5
                eSg    15 33.88
     S.D. = 0.4  on   7 of   7 obs.
-----------------------------------------
   NOV  22, 1993  03h 00m 55.82± 0.14s
    5.877 N ± 3.3km  126.229 E ± 4.3km
   DEPTH =  38.0km  ( 17 depth phases)
   5.7mb (104 obs.)  5.1Msz ( 43 obs.)
 MINDANAO, PHILIPPINE ISLANDS      (259)
      Mw 5.9 (GS), 5.7 (HRV).
      RADIATED ENERGY
       No. of sta:   4  Focal mech.  M
       Energy        4.7±1.5*10**12 Nm
      MOMENT TENSOR SOLUTION
      Dep  44            No. of sta:  7
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 5.20        Mtt=-0.50
        Mff=-4.69        Mrt=-1.80
        Mrf=-4.03        Mtf= 4.01
       Principal axes:
        T  Val=  7.84  Plg=58  Azm=133
        N       -0.17      29      341
        P       -7.67      12      244
      Best Double Couple:Mo=7.8*10**17
       NP1:Strike=301 Dip=42 Slip=  42
       NP2:       177     63      123
      CENTROID, MOMENT TENSOR      (HRV)
      Data Used: GDSN
      L.P.B.: 42S, 76C
      Centroid Location:
      Origin Time        03:00:59.0 0.2
      Lat  6.13N 0.02 Lon 126.31E 0.02
      Dep  50.1 2.1 Half-duration  1.7
        Moment Tensor;   Scale 10**17 Nm
          Mrr= 3.50 0.08  Mtt=-0.61 0.11
          Mff=-2.90 0.14  Mrt=-0.73 0.15
          Mrf=-1.51 0.14  Mtf=-0.61 0.10
        Principal Axes:
         T  Val=  3.92  Plg=76  Azm=123
         N       -0.48       4       16
         P       -3.44      13      286
      Best Double Couple:Mo=3.7*10**17
       NP1:Strike= 10 Dip=32 Slip=  82
       NP2:        199     58       95

DAV     1.37 332 iPc+  01 22.00   3.2X
BIP     2.33   1 iPc   01 35.50   2.9X
CTB     2.41 303 iPd   01 37.00   3.4X
                iS     02 06.00
CGP     2.98 329 eP    02 07.00  25.2X
                eS     02 25.00
MAP     4.95 333 iPc   02 14.00   4.3X
                iS     02 45.00
PLP     5.40 347 ePd   02 18.30   2.3
TSM     8.47 260 ePd   03 03.00   3.9X
       0.9s   384.20nm          6.5mb
GQP     8.80 335 eP    03 08.00   4.3X
PGP     9.19 326 ePc   03 13.00   4.0X
TGY     9.69 328 iPd   03 24.00   8.0X
KKM     9.96 271 ePd   03 30.70  11.0X
       0.9s   102.10nm
QCP    10.07 330 eP    03 12.50  -8.6X
BCP    11.83 333 eP    03 56.00  10.7X
BAG    11.84 333 ePc   03 48.00   2.6X
       1.3s   134.62nm          5.9mb
                e     06 06.00
CVP    12.52 340 ePc   04 03.00   8.7X
MTN    19.23 165 iPd   05 18.20  -1.7
WWKK   19.77 118 eP    05 26.00   0.2
GUMO   19.89  66 eP    05 25.05  -2.0
       1.3s   772.95nm          5.9mb
PJG    19.89  66 eP    05 25.00  -2.1
GUA    19.92  66 e(P)  05 24.20  -3.2X
       1.1s   374.68nm          5.6mb
     Z  22s     8.87um          4.5Msz
HKC    20.06 326 iP    05 32.70   3.9X
QZH    20.32 340 P     05 33.00   1.5
       1.3s   650.00nm          5.8mb
     Z  27s     5.78um          4.8MszX
                S     09 16.00
QIZ    20.63 311 Pd    05 36.00   1.2
       1.0s   440.00nm          5.8mb
     E  14s     3.69um
                sP    05 46.50
                S     09 19.00
GZH    21.14 325 iPc   05 42.20   2.3
       1.1s   220.00nm          5.5mb
     Z  20s     3.12um          4.7Msz
     E  16s     3.30um
                iS    09 35.00
KNA    21.63 173 iPc   05 45.20   0.3
       1.0s   905.00nm          6.1mb
LEM    22.45 236 ePd   05 50.00  -3.3X
       2.0s  1494.12nm          6.1mb
                eS    09 48.00
KGM    23.17 261 ePd   06 03.10   2.9X
       0.7s   151.80nm          5.6mb
IPM    25.13 268 ePd   06 20.90   1.8
SSE    25.53 350 Pc    06 22.00  -0.6
       1.0s    53.00nm          5.1mb
     Z  20s     4.60um          5.0Msz
     N  16s     1.80um
                sP    06 37.00
                iS    10 47.00
                ScP   13 31.00
KAGJ   25.55   9 eP    06 23.80   0.9
PMG    25.80 126 eP    06 23.50  -1.8
PCT    25.91 292 eP    06 30.00   3.6X
       1.5s     5.00nm          3.9mb X
KUMJ   26.87   9 eP    06 37.60   2.6X
WRA    26.87 163 iPd   06 34.20  -0.9
       0.6s    71.00nm          5.5mb
NJ2    26.94 346 Pd    06 36.80   1.2
       1.0s   140.00nm          5.5mb
     Z  20s     1.78um          4.6Msz
WHN    26.96 337 eP    06 37.50   1.7
       1.0s    89.00nm          5.3mb
     Z  28s     7.38um          5.1MszX
     N  18s     5.56um
                S     11 12.00

NST    27.39 293 iPc   06 41.50   1.6
MBL    27.59 193 iPc   06 41.20  -0.5
       1.0s   294.00nm          5.9mb
GYA    27.70 320 P     06 44.00   1.2
       1.0s    67.00nm          5.3mb
     Z  20s     3.59um          4.9Msz
     N  16s     3.59um
     E  16s     1.69um
                pP    06 57.00  52kmX
RAB    27.76 111 eP    06 45.00   1.7
KHT    28.56 290 eP    06 52.50   2.0
TKSJ   28.89  14 P     06 56.60   3.3X
BDT    28.92 295 eP    06 55.80   2.1
       0.9s    42.40nm          5.1mb
QIS    29.37 154 iPc   06 57.20  -0.6
WKYJ   29.51  16 P     06 59.40   0.5
WKYJ   29.51  16 P     07 00.50   1.6
CHTO   29.53 298 ePd   07 00.20   0.9
       1.1s    55.95nm          5.2mb
                e     13 41.00
KMI    29.54 313 Pc    07 01.00   1.5
       1.5s   200.00nm          5.6mb
     Z  20s     9.20um          5.4Msz
     N  10s     1.10um
     E  10s     1.00um
                pP    07 14.50  53kmX
                PP    07 56.00
                S     11 52.00
YONJ   29.92  12 P     07 05.10   2.5X
NANU   30.14 200 iPc   07 04.30  -0.3
ASPA   30.30 166 iPc   07 05.30  -0.8
       0.7s   124.60nm          5.8mb
     Z  21s     2.20um          4.8Msz
TIA    31.32 346 Pd    07 14.30  -0.6
       0.8s   180.00nm          5.9mb
     Z  20s     2.26um          4.8Msz
     N  19s     2.01um
                sP    07 28.00
                eS    12 16.00
                ScP   13 50.40
IIDJ   31.36  19 P     07 18.10   2.8X
WARB   31.87 179 iPc   07 20.20   0.4
CHJJ   32.24  20 P     07 20.70  -2.2
XAN    32.29 332 P     07 22.00  -1.4
       1.0s   150.00nm          5.8mb
     Z  25s     9.61um          5.4MszX
     N  18s     3.37um
     E  18s     2.69um
                pP    07 32.00  35km
                sP    07 36.00
                S     12 38.00
                sS    12 48.00
MTMJ   32.35  18 P     07 24.40   0.4
MAT    32.43  18 (P)  .07 25.00   0.4
       0.8s     5.97nm          4.5mb X
     Z  20s     2.48um          4.9Msz
                eS    12 25.00
CTA    32.46 143 iPc   07 24.00  -1.0
       2.0s   602.94nm          6.1mb
                ipP   07 31.00  24kmX
                isP   07 38.50
                i     10 12.90
                eS    11 42.00
                e     12 24.00
CD2    32.64 322 eP    07 26.40  -0.1
       1.2s   180.00nm          5.8mb
     Z  20s     4.50um          5.2Msz
     E  17s     4.23um
                S     12 34.00
KAKJ   32.78  21 P     07 31.00   3.4X
DL2    33.14 353 P     07 32.50   1.8
       1.0s   400.00nm          6.3mb
     Z  20s     1.57um          4.7Msz
     E  11s     1.51um
                S     12 45.00
MEEK   33.15 193 eP    07 29.50  -1.5
       0.9s   223.00nm          6.0mb
TIY    34.09 340 eP    07 39.00  -0.1
       1.0s   100.00nm          5.7mb
     Z  20s     2.99um          5.0Msz
     N  16s     2.16um
                pP    07 48.00  31km
                sP    07 56.50
                S     13 04.00
BJI    35.20 347 eP    07 48.50   0.1
       1.0s    83.00nm          5.6mb
     Z  20s     2.42um          4.9Msz
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     N  18s      1.62um
                  esP    08 04.00
                  ePcP   10 17.00
                  esS    13 33.00
                  eScP   14 02.00
                  eScS   18 06.00
SNY    35.88 357 iPd    07 55.30   1.2
       0.8s   190.00nm          6.1mb
     Z  23s      2.92um          5.0MszX
                  sP     08 10.00
                  iS     13 28.00
MRWA   36.25 195 eP     07 55.80  -1.7
       0.8s   252.00nm          6.2mb
LZH    36.41 329 P      07 59.80   0.8
       2.0s   910.00nm          6.3mb
     Z  26s      6.69um          5.3MszX
                  pP     08 12.00  45km
                  PP     09 25.00
                  PcP    10 24.00
                  eS     13 36.00
                  ScP    14 05.00
                  PcS    14 10.50
                  ScS    18 10.00
FORT   36.49 177 iPc     07 59.20  -0.2
       0.3s    28.00nm          5.6mb
COOL   36.87 187 eP      08 02.00  -0.7
HHC    37.22 341 P      08 06.50   0.9
       1.0s   190.00nm          5.9mb
     Z  34s      2.59um          4.8MszX
     N  10s      0.36um
     E  10s      0.42um
                  sP     08 16.00
                  S      13 47.00
BAL    37.40 194 iPc    08 06.60  -0.5
       1.0s   354.00nm          6.2mb
BTO    37.50 340 eP     08 10.00   2.0
       1.0s    37.00nm          5.2mb
     N  19s      2.21um
     E  14s      0.76um
                  sP     08 19.00
                  ePP    09 38.00
                  S      13 56.00
                  eSS    16 29.50
CN2    37.78 359 P      08 10.80   0.7
       1.0s    34.00nm          5.2mb
     Z  20s      1.24um          4.7Msz
     N  16s      1.06um
     E  16s      0.71um
                  epP    08 18.00  24kmX
                  esP    08 25.00
                  PcP    10 26.40
                  eS     14 00.00
                  ScP    14 10.00
                  eSS    16 40.00
                  ScS    18 20.00
KLB    38.13 192 iPc    08 12.90  -0.3
       0.9s   163.00nm          5.9mb
SHL    38.23 305 iP     08 14.50   0.1
                  iS     14 02.00
MDJ    38.70   4 eP     08 18.00   0.2
       1.1s   170.00nm          5.8mb
     Z  24s      2.65um          5.0MszX
                  eS     14 11.00
MUN    38.84 194 iPc    08 18.80  -0.3
       1.0s   124.00nm          5.7mb
STK    40.30 160 iPc    08 23.70  -7.6X
       0.8s   203.80nm          5.9mb
                  eS     14 37.70
KUSJ   40.51  21 eP     08 32.90   0.1
LSA    40.67 310 iPc    08 38.00   3.1X
       1.0s    36.00nm          5.1mb
     N  16s      0.97um
                  pP     08 43.00  17kmX
                  iS     14 41.00
ASAJ   40.72  18 eP     08 36.00   1.4
GTA    41.01 328 eP     08 37.00  -0.2
       1.0s    48.00nm          5.2mb
     Z  30s      7.42um          5.4MszX
     E  18s      1.99um
                  pP     08 49.50  46km
                  sP     08 55.50
                  PP     10 14.00
                  PcP    10 37.00
                  ScP    14 21.50
                  PcS    14 26.50
                  eS     14 46.00
                  sS     15 07.00
                  eSS    17 46.00
                  ScS    18 34.00
BRS    41.86 143 iPc+   08 43.50  -0.7
       0.8s    50.00nm          5.3mb
                  i      08 48.00  15kmX
                  e      08 58.00
                  i      10 42.00
                  i      10 51.00
                  e      14 29.50
ADE    42.29 165 iPc    08 49.20   1.6
YSS    43.37  16 iPd    09 02.30   6.1X
       0.9s    60.00nm          5.3mb
ARMA   43.53 147 iPc    08 57.50  -0.3
       0.8s   106.00nm          5.6mb
                  i      10 46.60 634kmX
GUN    44.08 305 P      09 03.30   0.6
PKI    44.35 304 P      09 04.80   0.0
       0.6s    21.00nm          5.1mb
KKN    44.53 304 P      09 06.10  -0.1
DMN    44.61 304 P      09 07.20   0.3
GKN    45.14 304 P      09 10.80  -0.2
BWA    45.23 154 iPc    09 13.50   2.1
                  e      09 22.90  31km
                  i      09 26.80
RIV    46.01 151 eP     09 18.80   1.4
CAN    46.24 154 iPc    09 20.60   1.2
                  e      09 34.00  50kmX
                  i      11 06.50
CNB    46.40 154 iPc    09 21.40   0.8
       1.0s   215.00nm          6.1mb
CIT    47.15 349 eP     09 27.00   0.7
                  e      19 17.00
BKM    47.62 120 iPc    09 31.00   0.5
HYB    47.95 288 ePc    09 34.70   1.6
       1.2s    64.30nm          5.5mb
                  i      09 46.70  43km
                  eS     16 28.00
DZM    48.19 127 iPc    09 33.00  -2.0
ZAK    48.35 340 eP     09 35.00  -0.6
       1.6s    35.00nm          5.1mb
                  e      09 46.50  41km
                  e      11 00.50
                  eS     16 48.00
GBA    48.62 283 P      09 38.00  -0.3
IRK    49.66 342 eP     09 34.00 -11.7X
     Z  20s      1.08um          4.8Msz
     N  16s      0.67um
     E  22s      0.94um
                  e      09 46.00  43km
                  eS     16 49.00
                  ePS    17 04.00
WMQ    50.69 324 P      09 53.50  -0.4
       1.0s     7.00nm          4.6mb X
NDI    51.55 302 eP     09 59.50  -1.0
                  eS     17 17.00
POO    52.53 289 eP     10 07.00  -1.1
BOD    52.69 352 eP     10 07.90  -0.7
       1.6s   166.00nm          5.8mb
UER    52.76 335 eP     10 07.00  -2.2
       1.5s   168.00nm          5.8mb
                  eS     17 23.00
PET    53.96  24 eP     10 18.00   0.1
       1.0s   100.00nm          5.8mb
                  eS     17 52.00
YAK    56.08   2 iPc    10 34.10   0.9
       1.0s   604.00nm          6.6mb
                  eS     18 17.00
                  ePS    18 36.00
                  e      20 16.00
                  eSS    22 09.00
KSH    56.16 314 eP     10 35.00   0.6
       1.0s    50.00nm          5.5mb
     Z  20s      3.09um          5.4Msz
     N  16s      1.72um
     E  16s      1.88um
                  pP     10 45.00  33km
                  sP     10 49.00
                  PcP    11 35.00
                  PP     12 40.00
                  PcS    15 31.00
                  eS     18 18.00
                  esS    18 35.00
                  eScS   20 19.00
                  SS     22 06.00
FRU    58.44 317 eP     10 51.00   0.6
       2.9s   260.00nm          5.8mb
     Z  26s      2.00um          5.1MszX
QUE    60.60 301 eP     11 05.70   0.0
                  eS     19 08.60
SMY    60.89  31 eP     11 06.50  -0.4
       0.8s   229.60nm          6.4mb
MRW    64.49 141 P      11 29.00  -2.1
AFI    64.58 108 eP     11 33.00   0.9
                  e      21 00.00
                  e      31 00.00
ADK    65.49  35 eP     11 36.10  -1.2
       0.8s   107.80nm          6.0mb
TIK    65.70   1 ePc    11 35.00  -3.3X
       1.2s   120.00nm          5.8mb
                  i      11 48.00  45km
                  e      14 02.00
                  eS     20 17.00
                  iPS    20 42.00
MAIO   67.83 307 iPc    11 51.20  -1.4
       1.1s    41.22nm          5.4mb
                  eS     20 48.00
ASH    69.00 308 eP     11 59.00  -0.7
       1.5s   240.00nm          6.0mb
SVE    71.88 328 ePd    12 15.00  -1.8
       2.1s   360.00nm          6.0mb
     Z  20s      1.00um          5.1Msz
     N  18s      0.70um
     E  18s      1.00um
                  eS     21 28.00
ILT    71.96  19 iPc    12 16.50  -0.6
       1.0s    90.00nm          5.7mb
                  iS     21 32.00
ARU    72.84 327 iPd    12 21.00  -1.5
     Z  20s      0.50um          4.8Msz
     N  20s      1.00um
     E  22s      1.20um
                  e      12 28.00  23kmX
                  e      12 33.00
                  e      12 45.00
                  eS     21 43.00
                  eSS    26 33.00
CSY    72.89 187 iPd    12 32.60  10.1X
       0.7s    59.90nm
DRV    73.05 174 iP     12 23.40   0.0
PAF    73.34 214 eP     12 43.00  17.5X
                  eS     22 02.00
                  eSS    26 37.00
HON    74.65  70 P      12 40.00   6.4X
     Z  21s      0.61um          4.9Msz
DHH    74.83  70 (P)    12 32.80  -1.9
SDN    75.70  34 eP     12 37.63  -1.4
       1.0s   244.05nm          6.1mb
     Z  21s      6.61um          5.9Msz
KER    77.73 304 eP     12 59.00   8.0X
TAB    78.46 308 eP     12 55.00   0.1
GRO    79.12 313 iPd    12 58.00  -0.2
       1.0s   110.00nm          5.8mb
     Z  16s      1.00um          5.2MszX
     N  20s      2.00um
     E  20s      1.00um
                  i      13 09.00  36km
                  eS     22 50.00
SVW    79.16  29 eP     12 58.09  -0.1
       0.8s   157.52nm          6.0mb
TTA    79.23  27 eP     12 58.70   0.2
MTA    79.72 311 iPc    13 00.80  -0.7
       0.8s    60.00nm          5.6mb
                  i      13 05.20  14kmX
                  i      13 14.00
                  eS     22 57.00
                  ePS    23 48.00
                  ePPS   24 09.00
ERE    79.92 310 eP     13 15.00  12.2X
                  iS     23 01.00
BRW    80.31  19 eP     13 04.38   0.3
KDC    80.40  33 eP     13 04.38  -0.4
       0.7s    53.78nm          5.6mb
IMA    80.64  24 eP     13 05.69  -0.4
       0.8s    46.56nm          5.5mb
CP2    80.80  29 eP     13 05.85  -1.3
CRP    80.84  29 eP     13 05.56  -1.7
PYA    81.04 314 iPc    13 07.00  -1.5
       1.3s   150.00nm          5.8mb
                  i      13 18.50  38km
KIV    81.30 313 eP     13 10.40   0.4
       1.6s    93.00nm          5.5mb
                  e      13 22.10  38km
                  e      23 15.10
                  (S)    24 02.30
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22d 03h

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SLKM   81.74  30 eP    13 09.63  -2.2
PMR    82.31  29 eP    13 13.68  -1.0
        0.9s   186.40nm          6.1mb
     Z  20s     0.67um          5.0Msz
FBA    83.01  25 ePc   13 17.26  -1.0
        0.8s    43.77nm          5.6mb
SOC    83.46 313 eP    13 22.00   1.0
                e       23 44.00
TOA    83.72  28 eP    13 22.80   0.7
KLU    83.85  29 eP    13 22.20  -0.5
MOS    84.40 325 iPd   13 25.00  -0.5
        1.5s   160.00nm          5.9mb
     Z  20s     1.00um          5.2Msz
                e       13 34.00  28km
                e       23 46.00
OBN    85.01 325 iPc   13 27.50  -1.0
        1.0s   193.00nm          6.2mb
     Z  20s     1.10um          5.2Msz
     N  24s     0.90um
     E  20s     0.90um
                ePcP    13 36.00
                ipP     13 45.00  62kmX
                isP     13 55.00
                i       14 04.00
                e       14 25.00
                e       16 07.00
                ePP     16 49.00
                e       17 29.00
                e       18 18.00
                eS      23 44.00
                ePS     24 26.00
                eSS     29 28.00
                eSSS    33 00.00
                eSSSS   35 00.00
ANN    85.14 314 eP    13 28.00  -1.4
        1.1s    70.00nm          5.8mb
MAW    85.58 200 eP    13 32.00   0.9
        1.0s    41.67nm          5.6mb
BALM   85.60  29 eP    13 31.29  -0.3
AFR    86.05 108 iPc   13 36.20   1.8
        1.2s   184.50nm          6.2mb
PAE    86.25 108 iPc   13 37.20   1.8
        1.9s   738.80nm          6.6mb
PPN    86.38 108 iPc   13 38.20   2.2
        1.6s   422.90nm          6.4mb
TVO    86.58 108 iPc   13 39.00   1.9
        1.5s   518.10nm          6.5mb
BHL    87.24 304 P     13 39.00  -1.1
SALJ   87.38 302 P     13 39.70  -1.2
JRDJ   87.52 300 P     13 39.80  -1.8
PMO    87.54 105 iPc   13 43.60   2.0
        1.2s   260.60nm          6.4mb
TPT    87.80 105 iPc   13 44.80   1.9
        1.5s   328.00nm          6.4mb
VAH    87.82 105 iPc   13 44.90   1.9
        1.1s   142.60nm          6.2mb
KAS    88.01 311 eP    13 43.00  -0.6
RUV    88.05 105 iPc   13 46.10   2.0
        1.2s   265.40nm          6.4mb
INK    88.36  21 eP    13 44.00  -0.7
        1.0s    32.00nm          5.6mb
SDF    88.38 338 iP    13 44.20  -0.6
KAF    89.47 332 iP    13 48.50  -1.6
        0.6s    38.40nm          5.9mb
SIT    89.69  33 P     14 00.00   8.8X
     Z  21s     1.28um          5.3Msz
MBC    89.98  13 eP    13 53.50   1.3
        0.8s    11.00nm          5.2mb
MNK    90.38 324 eP    13 51.00  -3.4X
     Z  24s     1.92um          5.5MszX
TRO    90.48 340 eP    13 53.50  -1.1
NUR    90.60 331 iP    13 53.80  -1.5
        0.7s    40.20nm          5.9mb
MLR    93.02 316 eP    14 08.00   1.0
UPP    94.15 331 iP    14 16.60   5.0X
UZH    94.75 320 iPd   14 13.50  -1.2
        1.0s    65.00nm          6.0mb
DAG    95.09 352 iPd   14 14.90  -0.9
        0.7s    55.48nm          6.1mb
                ipP     14 27.00  39km
RES    95.80  10 eP    14 19.50   0.4
        0.9s    10.00nm          5.3mb
HFS    95.90 332 eP    14 17.80  -1.9
        0.4s     4.30nm          5.2mb
     Z  18s     0.80um          5.2Msz
                LR      53 20.00
OJC    95.90 322 eP    14 18.50  -1.5
                e       14 30.30  38km
SPC    95.91 321 eP    14 18.10  -2.2
VAY    96.32 313 eP    14 19.40  -2.6X
PSZ    96.48 319 e(P)  14 22.80   0.0
NB2    96.65 334 P     14 21.30  -1.9
        0.9s    29.70nm          5.8mb
SKO    96.98 313 eP    14 25.00   0.0
SRO    97.53 320 eP    14 27.20  -0.1
OHR    97.66 313 eP    14 22.70  -5.5X
YKA    97.76  24 eP    14 27.70  -0.4
        0.8s    11.60nm          5.5mb
KSP    97.84 323 iPd   14 28.60  -0.1
ZST    98.19 320 eP    14 30.30   0.0
BUL    99.13 251 eP    14 34.10  -1.1
        1.0s     5.50nm          5.0mb
PRU    99.18 323 P     14 34.00  -0.8
     Z  20s     0.50um          5.0Msz
                e       14 45.50  37km
BRG    99.22 324 iP    14 33.80  -1.1
        1.0s    18.00nm          5.6mb
                e       18 18.00
CLL    99.62 324 eP    14 35.00  -1.7
KHC   100.08 322 Pdiff 14 37.70  -1.2
        1.0s     7.00nm          5.1mb
     Z  20s     0.80um          5.2Msz
                e       14 49.90
                e       15 22.50
                e       16 38.00
                e       19 01.00
GEC2  100.10 322 ePdiff14 38.20  -0.9
        1.3s    15.58nm          5.4mb
                e       14 42.20
                e       14 50.20
MOX   100.68 324 ePdiff14 40.90  -0.6
        1.3s    16.00nm          5.4mb
     Z  22s     0.90um          5.2Msz
GRF   101.29 323 ePdiff14 44.00  -0.3
        1.7s    38.00nm          5.7mb
     Z  21s     0.80um          5.2Msz
                e(pP)d14 55.00
                e(sP) 15 00.20
WDC   102.03  47 Pdiff 15 00.00  12.2X
     Z  20s     0.52um          5.0Msz
WTS   102.84 326 ePdiff14 51.00   0.0
        1.0s    10.30nm          5.5mb
ENN   103.90 326 ePdiff14 47.50  -8.3X
        0.9s     3.70nm          5.2mb
                e       14 55.50
SAO   104.05  50 Pdiff 15 10.00  13.1X
     Z  21s     0.62um          5.1Msz
CDF   104.18 323 ePdiff14 56.30  -1.0
        0.8s     4.55nm          5.4mb
CMB   104.44  48 Pdiff 15 10.00  11.4X
     Z  19s     0.56um          5.1Msz
DOU   104.97 325 Pdiffc15 03.10   2.5X
LPG   105.78 320 ePdiff15 04.90   0.2
        0.8s     4.15nm          5.5mb
LPL   105.79 321 ePdiff15 04.60  -0.1
ISA   106.69  50 PKP   19 30.00  10.7X
     Z  20s     0.61um          5.1Msz
AVF   107.29 323 ePdiff15 09.80  -1.2
GSC   108.09  50 (PKP) 19 18.90  -3.1X
PEC   108.31  52 (Pdiff15 09.99  -5.9X
HVU   108.40  43 (PKP) 19 22.81   0.4
DUG   109.06  44 PKP   19 30.00   6.3X
     Z  20s     0.57um          5.1Msz
LPF   109.21 326 ePdiff15 17.30  -2.2
DAU   110.04  43 (PKP) 19 20.98  -4.8X
MSU   110.23  45 (PKP) 19 27.00   0.9
EMUT  110.61  44 ePKP  19 25.92  -0.9
ULM   113.32  28 ePKP  19 33.00   1.7
GOL   114.33  42 ePKPc 19 33.89  -0.1
     Z  21s     0.50um          5.1Msz
GLD   114.40  41 PKP   19 40.00   6.0X
     Z  19s     0.46um          5.1Msz
ALQ   115.94  47 PKP   19 50.00  12.9X
     Z  19s     0.72um          5.3Msz
JAQ   117.74  15 ePKP  19 38.50  -1.1
LTX   120.66  51 ePKPc 19 45.55  -0.6
WMOK  121.43  43 ePKPc 19 46.91  -0.4
     Z  21s     1.59um          5.6Msz
OCO   121.86  42 iPKPc 19 48.80   0.7
TUL   122.72  40 iPKPd 19 34.40 -15.3X
UYO   124.65  41 iPKPc 19 52.30  -1.2
MIAR  124.99  40 ePKPd 19 54.40   0.3
     Z  21s     1.92um          5.7Msz
GAC   125.11  18 ePKP  19 53.50  -0.5
ACTO  125.31  23 PKP   19 52.00  -2.5X
WLVO  125.67  22 PKP   19 53.25  -1.9
ELC   125.80  35 ePKP  19 55.32  -0.3
TYNO  125.81  23 PKP   19 53.45  -2.0
RSNY  126.44  18 ePKP  19 56.47  -0.2
YSNY  126.86  23 ePKP  19 56.70  -0.9
     Z  20s     1.93um          5.8Msz
LBNH  127.50  16 ePKP  19 59.27   0.6
     Z  21s     0.61um          5.2Msz
LMN   127.57  10 ePKP  19 59.00   0.2
OXF   127.61  37 ePKP  19 58.67  -0.5
BINY  128.04  21 iPKPd 19 59.98   0.2
     Z  20s     0.44um          5.1Msz
HRV   129.20  17 PKP   20 10.00   8.0X
     Z  19s     0.56um          5.3Msz
TBR   129.59  20 ePKP  20 02.72   0.0
GPD   129.62  20 ePKP  20 02.85   0.0
                eSKP   23 21.59
PAL   129.82  20 ePKP  20 03.21   0.0
PNJ   129.83  20 PKP   20 03.34   0.2
GMTN  129.84  20 ePKP  20 03.70   0.5
NAV   130.18  28 ePKP  20 03.70  -0.4
MYNC  130.23  33 ePKP  20 04.29   0.1
     Z  19s     0.84um          5.5Msz
CVL   130.69  26 ePKP  20 04.11  -0.8
                eSKP   23 24.21
CBN   130.96  25 e(PKP)20 06.00   0.6
CEH   132.13  28 ePKP  20 07.13  -0.6
JSC   132.36  31 (PKP) 20 05.87  -2.3
LHS   132.43  31 ePKP  20 09.07   0.7
BBJ   146.56  43 iPKPd 20 36.05   1.7
SPJ   146.62  44 iPKP  20 35.80   1.3
SPJ   146.62  44 iPKPd 20 35.92   1.5
STH   147.08  43 iPKPd 20 37.37   2.2
GWJ   147.13  43 iPKPd 20 37.67   2.3
RFA   148.20 157 ePKPd 20 40.70   4.1X
IHA   148.28 151 ePKP  20 38.50   1.9
PEL   148.64 152 ePKPd 20 38.00   0.7
MDZ   149.68 154 iPKP  20 46.20   7.3X
ECO   150.06  60 ePKP  20 39.63  -0.3
UPA   150.38  60 ePKP  20 40.10  -0.2
RTCV  150.69 154 e(PKP)20 46.00   5.6X
RTCB  150.89 153 e(PKP)20 42.60   1.8
CFA   151.04 154 iPKPc 20 41.80   0.8
RTLL  151.17 153 e(PKP)20 42.00   0.8
RTPR  152.90 155 ePKP  20 51.00   7.4X
NNA   156.42 107 iPKPd 20 50.30   1.4
        0.8s    18.66nm
FSA   156.75 151 ePKPd 20 50.70   1.8
SDV   157.69  49 iPKPc 20 50.90   0.2
TOV   157.71  46 ePKP  20 51.20   0.7
SLA   158.14 150 ePKPd 20 52.00   1.1
ARE   159.70 123 ePKP  21 03.00  10.0X
YJA   160.23 146 ePKPd 20 56.40   2.8X
VAO   161.75 200 ePKP  20 51.30  -3.3X
CNCB  162.35 129 PKP   20 58.10   2.2
LPB   162.42 128 PKP   20 58.00   2.2
     Z  15s     1.33um          6.9Msz
                PP      25 28.00
                LR      20 10.00
LPAZ  162.53 127 PKPc  20 57.70   1.5
                LR      20 08.00
CCH   163.36 134 PKPc  20 58.10   1.4
PPD   163.77 188 ePKP  20 57.20   0.6
SOB1  166.81 255 ePKP  20 59.00  -0.4
SIV   167.66 145 PKP   21 00.70   0.8
BAO   168.77 210 ePKP  21 00.00  -0.7
                e       21 16.40
                e       22 11.70
                e       22 23.20
BDFB  168.77 210 ePKP  21 00.85   0.1
                iPKPab22 11.80
                i       22 24.08
                ePP     26 11.81
     S.D. = 1.2  on 225 of 286 obs.
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   NOV  22, 1993  03h 28m 54.12± 0.32s
   45.610 N ± 3.0km     6.961 E ± 3.5km
   DEPTH =   6.4 ±  2.2 km
 FRANCE                            (538)
      ML 2.8 (GEN), 2.7 (LDG).

LPG     0.19 233 Pg    28 58.60   0.5
                Sg     29 00.80
LPL     0.19 240 Pg    28 58.50   0.4
                Sg     29 00.90
LSD     0.20 138 Pc    28 58.73   0.3
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                S     29 01.32
RSP     0.50 155 P    29 04.21    0.0
                S     29 11.05
RRL     0.70 190 Pc   29 07.70   -0.5
                S     29 17.32
BHB     0.80 164 P    29 09.82   -0.1
                S     29 20.28
PZZ     1.11 175 P    29 15.16   -0.2
                S     29 30.11
STV     1.39 169 P    29 19.23   -0.8
                S     29 37.31
ENR     1.42 167 P    29 19.52   -1.0
                S     29 37.73
ROB     1.47 154 P    29 21.51    0.4
PCP     1.55 133 P    29 23.02    0.7
FIN     1.66 147 P    29 24.70    0.9
SBF     1.78 169 Pn   29 26.20    0.6
                Pg    29 30.20
                Sg    29 52.10
IMI     1.82 158 P    29 27.02    0.7
FRF     2.06 186 Pg   29 33.30    3.6X
                Sg    30 01.10
LRG     2.20 191 Pg   29 35.90    4.3X
                Sg    30 05.20
BSF     2.23 357 Pn   29 32.70    0.6
                Pg    29 36.60
                Sg    30 05.00
LMR     2.30 188 Pg   29 38.40    5.3X
                Sg    30 07.70
SMF     2.40 297 Pg   29 39.40    4.8X
                Sg    30 09.80
HAU     2.43 350 Pg   29 41.30    6.3X
LBF     2.48 305 Pn   29 36.30    0.6
                Pg    29 41.40
                Sg    30 11.90
LOR     2.71 309 Pn   29 38.90   -0.1
                Pg    29 44.80
                Sg    30 19.60
AVF     2.77 297 Pn   29 40.20    0.4
                Pg    29 47.40
                Sg    30 20.40
SSF     2.80 302 Pn   29 40.50    0.3
                Pg    29 47.10
                Sg    30 22.60
CDF     2.81   4 Pn   29 39.80   -0.7
                Pg    29 49.10
                Sg    30 23.40
BGF     3.02 290 Pn   29 43.70    0.4
                Pg    29 51.40
                Sg    30 30.30
MAF     3.13 283 Pn   29 44.70   -0.1
                Pg    29 53.90
                Sg    30 32.30
TCF     3.38 283 Pn   29 48.50    0.0
                Pg    29 58.40
                Sg    30 39.60
CAF     3.52 261 Pn   29 50.40   -0.1
                Sg    30 45.00
     S.D. = 0.6  on  24 of  29 obs.
-----------------------------------
*  NOV  22, 1993  03h 45m 32.15± 1.89s
   37.784 N ±11.2km   20.625 E ±15.8km
   DEPTH =  10.0km  (geophysicist)
 IONIAN SEA                        (399)
      MD 3.5 (ATH). ML 3.4 (THE).

VLS     0.39 356 ePg  45 40.30    0.1
IGT     1.76 353 ePb  46 02.86    0.0
                eSb   46 25.86
AGG     1.82  47 ePb  46 04.78    1.0
                eSb   46 29.58
KEK     2.03 342 ePg  46 11.00    4.2X
VLI     2.13 119 ePn  46 08.20    0.0
KZN     2.67  19 ePn  46 17.00    0.9
LIT     2.73  32 ePn  46 17.01    0.1
                eSn   46 50.34
FNA     3.05  11 ePn  46 21.58    0.2
                eSn   46 59.14
PAIG    3.20  47 ePn  46 22.94   -0.5
OHR     3.33   2 ePn  46 23.20   -2.1X
GRG     3.45  23 ePn  46 26.26   -0.8
                eSn   47 08.66
SOH     3.70  34 ePn  46 30.62    0.0
                eSn   47 15.06
KNT     3.80  27 ePn  46 31.62   -0.4
                eSn   47 16.18
VAY     3.84  22 iPn  46 32.00   -0.5
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SKO     4.23   8 ePn   46 51.00  12.9X
     S.D. = 0.6  on  12 of  15 obs.
-----------------------------------
*  NOV  22, 1993  04h 14m 22.08± 0.64s
   13.565 N ±13.3km  120.332 E ±15.6km
   DEPTH =  33.0km  (normal)
   4.8mb (  7 obs.)  4.6Msz (  1 obs.)
 MINDORO, PHILIPPINE ISLANDS      (250)

BJI    26.62 353 eP    19 59.00  -0.4
       1.2s    10.00nm          4.3mb
     Z  24s     0.97um          4.3MszX
     N  14s     0.90um
LZH    26.88 329 eP    20 01.00  -1.0
       1.2s    25.00nm          4.7mb
GUN    35.10 299 P     21 15.20   0.2
PKI    35.40 299 P     21 17.20  -0.3
KKN    35.57 299 P     21 18.60  -0.2
DMN    35.67 299 P     21 19.80   0.1
WRA    36.04 157 eP    21 21.90  -0.6
       0.5s    21.50nm          5.3mb
GKN    36.18 299 P     21 23.40  -0.5
KAF    80.00 332 iP    26 29.40   0.0
       0.7s     9.80nm          4.9mb
NUR    81.09 330 iP    26 35.40   0.2
       0.5s     5.00nm          4.8mb
UPP    84.65 330 iP    26 53.40   0.0
SPC    86.32 320 eP    26 58.50  -3.8X
                e(Sn)  27 17.90
NB2    87.21 333 P     27 05.70  -0.5
       0.9s    14.10nm          5.2mb
KSP    88.24 322 ePc   27 12.60   1.3
                e      28 18.40
GEC2   90.51 321 ePc   27 22.90   0.7
       1.2s     3.04nm          4.5mb
                e      27 32.80
                e      27 36.70
GRF    91.69 322 eP    27 28.60   1.1
     Z  19s     0.20um          4.6Msz
     S.D. = 0.7  on  15 of  16 obs.
-----------------------------------
*  NOV  22, 1993  04h 16m 51.24± 0.90s
   7.343 S ± 8.5km  128.976 E ±17.8km
   DEPTH =  33.0km  (normal)
   4.4mb (  1 obs.)
 BANDA SEA                        (280)

MTN     5.87 159 iPc    18 18.20   0.0
                eS     19 24.00
KNA     8.36 181 eP     18 58.30   5.2X
                eS     20 24.20
WRA    13.56 158 eP     20 08.50   4.7X
       0.6s     9.60nm          4.9mb X
                S      22 27.60
MBL    16.33 212 eP     20 39.50  -0.3
                eS     23 26.00
ASPA   16.91 164 eP     20 52.00   4.9X
       0.5s    16.10nm          4.4mb
                e      21 50.50
                eS     23 45.90
WARB   18.87 186 eP     21 17.00   5.6X
                eS     24 35.00
NANU   19.92 219 eP     21 23.50   0.4
                eS     24 56.00
GUN    54.42 312 P      26 18.50   0.3
PKI    54.58 311 P      26 19.10  -0.3
KKN    54.80 311 P      26 20.90   0.1
DMN    54.83 311 P      26 21.10   0.0
GKN    55.39 311 P      26 24.80  -0.2
     S.D. = 0.3  on   8 of  12 obs.
-----------------------------------
   NOV  22, 1993  04h 16m 51.31± 0.53s
   50.747 N ± 3.9km  156.556 E ± 2.5km
   DEPTH =  85.1 ±  5.1 km
   5.1mb ( 84 obs.)
 KURIL ISLANDS                    (221)

SKR     0.30 255 iPnd   17 03.30  -1.0
                eS     17 12.00
KUR     8.02 230 iPn    18 49.00   2.0
YSS     9.85 253 ePn-   19 14.20   2.3
     Z  19s     1.90um
MGD     9.92 343 ePn    19 15.00   2.1
     Z  16s     0.50um
                eS     21 10.00
SMY    11.06  73 eP     19 24.96  -3.2X
KUSJ   11.13 231 eP     19 24.00  -5.2X
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                eS     21 20.70
ASAJ   11.51 240 eP     19 36.10   1.9
HOOJ   12.37 233 eP     19 42.70  -2.8X
                eS     21 54.40
MRRJ   13.50 238 eP     19 58.60  -1.7
OFUJ   15.69 228 P      20 25.10  -3.4X
                S      23 02.30
ADK    16.74  76 eP     20 39.74  -1.8
       1.1s    68.75nm          4.8mb
YAK    18.50 318 iPc    21 06.50   3.6X
       1.0s   579.00nm          5.8mb
                iS     24 32.00
MDJ    19.10 262 eP     21 07.10  -2.7X
       0.8s    43.00nm          4.8mb
                eS     24 38.00
MAJO   19.36 230 eP     21 10.97  -1.7
       0.5s    72.29nm          5.2mb
MAT    19.36 230 eP     21 11.00  -1.7
       0.6s    43.33nm          4.9mb
                eS     25 02.00
CHJJ   19.39 227 P      21 13.40   0.5
IIDJ   20.36 229 P      21 21.10  -1.9
ILT    21.07  26 iPc    21 29.00  -0.8
       1.4s   173.00nm          5.2mb
                iS     25 14.30
TSRJ   21.26 232 P      21 31.00  -1.0
CN2    22.10 264 eP     21 39.00  -1.4
       1.0s    14.00nm          4.3mb
     Z  20s     0.74um          4.1Msz
     N  12s     0.38um
     E  12s     0.19um
WKYJ   22.50 231 P      21 43.90  -0.5
YONJ   22.82 236 P      21 49.10   1.6
TKSJ   23.46 233 P      21 56.20   2.6X
TIK    24.39 339 eP     22 04.00   1.7
       1.4s    22.00nm          4.4mb
     Z  18s     0.30um          3.8Msz
                i      22 23.00
                e      22 46.00
                e      25 43.00
                eS     26 18.00
                i      32 58.00
SHNJ   24.89 238 eP     22 08.00   0.7
BOD    25.37 303 eP     22 12.10   0.4
       0.7s    47.00nm          5.1mb
KUMJ   26.26 236 P      22 20.90   0.8
KAGJ   27.29 234 P      22 30.60   1.1
TTA    27.95  46 eP     22 35.25   0.0
       1.1s    30.12nm          4.8mb
SVW    28.09  50 eP     22 37.00   0.5
IMA    29.25  40 eP     22 45.22  -1.8
       0.8s    15.35nm          4.7mb
BRW    29.36  29 eP     22 47.05  -0.7
CP2    29.72  49 eP     22 50.62  -0.7
CRP    29.76  49 eP     22 50.53  -1.1
PMS    31.01  49 eP     23 01.40  -1.1
       1.1s   105.10nm          5.5mb
PMR    31.19  49 eP     23 01.62  -2.3
       1.1s    38.38nm          5.1mb
     Z  20s     0.42um          4.1Msz
FBA    31.64  42 iPc    23 07.34  -0.5
       0.9s    46.15nm          5.2mb
HHC    32.44 270 eP     23 15.00  -0.1
       1.3s    16.00nm          4.7mb
     Z  36s     1.27um          4.4MszX
TOA    32.53  47 eP     23 15.80   0.1
       1.2s   188.70nm          5.8mb
SSE    32.72 247 Pc     23 16.00  -1.6
       1.0s    11.00nm          4.6mb
KLU    32.73  48 ePc    23 16.54  -0.9
TIY    33.69 265 eP     23 25.50  -0.5
     Z  18s     0.73um          4.4Msz
     N  12s     0.38um
BALM   34.51  49 iPc    23 32.27  -0.6
INK    37.06  35 ePc    23 54.80   0.7
       1.0s    26.00nm          5.1mb
SIT    39.09  54 eP     24 12.97   1.8
       1.1s    34.56nm          5.2mb
MBC    40.05  22 eP     24 20.00   1.1
       1.0s     6.00nm          4.4mb
LZH    40.13 269 eP     24 20.00  -0.2
       1.4s    70.00nm          5.4mb
     Z  25s     0.86um          4.5MszX
     E  10s     0.35um
                sP     24 35.00
                PP     26 02.50
GTA    40.69 276 P      24 25.00   0.2
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22d 04h

	1.4s	16.00nm			4.7mb
		ScS	34	20.00	
CD2	43.54	264 eP	24	48.20	0.2
GYA	44.84	257 P	24	58.60	0.0
	0.8s	11.00nm			4.7mb
WMQ	45.68	289 P	25	03.50	-1.5
	1.0s	28.00nm			5.1mb
HON	45.99	113 P	25	20.00	12.4X
	Z 20s	0.24um			4.1Msz
RES	46.31	20 eP	25	10.00	0.5
	1.0s	3.00nm			4.1mb
YKA	46.37	40 eP	25	10.80	0.7
	1.0s	31.90nm			5.2mb
KMI	48.24	259 Pc	25	25.50	0.0
	1.9s	100.00nm			5.4mb
	Z 30s	1.70um			4.8MszX
GMW	50.36	60 eP	25	41.76	0.5
LMW	51.15	61 P	25	47.95	0.6
FMW	51.34	60 P	25	48.92	0.0
SHW	51.47	61 eP	25	51.16	1.3
WPW	51.55	60 P	25	50.46	0.1
MTMW	51.58	62 P	25	50.81	0.2
ETW	51.67	59 P	25	51.23	-0.2
WTV	51.82	59 P	25	51.87	-0.5
NAC	51.92	60 P	25	53.11	0.0
EBG	51.96	60 P	25	53.30	-0.1
MXC	52.31	60 P	25	55.93	-0.1
GL2	52.39	61 P	25	56.90	0.2
VBEM	52.51	62 P	25	57.87	0.2
VGB	52.69	61 eP	25	58.21	-0.7
DAG	52.72	359 eP	25	57.50	-1.1
	0.5s	4.93nm			4.8mb
CROR	52.90	62 P	26	00.67	0.2
NEW	53.00	57 eP	26	00.53	-0.6
VIPM	53.40	62 P	26	04.13	-0.1
ARC	53.68	68 ePc	26	07.11	1.1
FHC	53.78	68 eP	26	07.31	0.4
	1.0s	110.70nm			5.8mb
YBH	53.94	66 iPc	26	09.16	1.1
	1.2s	80.00nm			5.6mb
FRU	53.94	296 eP	26	08.00	0.0
LGPM	54.39	67 iPc	26	12.21	0.7
LBFM	54.66	66 eP	26	13.97	0.4
SHL	54.77	268 eP	26	13.50	-1.0
WDC	54.77	67 eP	26	14.42	0.3
	1.0s	44.85nm			5.5mb
CHTO	55.26	257 ePd	26	18.10	0.2
	1.0s	48.75nm			5.5mb
MIN	55.46	67 iPc	26	19.15	-0.2
	1.2s	60.00nm			5.5mb
ORV	56.04	67 iPc	26	22.84	-0.4
	1.0s	40.00nm			5.4mb
NTYM	56.11	69 eP	26	23.77	0.0
BKS	56.70	69 iPc	26	27.84	-0.2
	1.2s	50.00nm			5.5mb
HMR	56.78	69 eP	26	29.48	0.9
NST	56.92	253 eP	26	30.50	0.7
LRM	57.02	56 eP	26	30.20	-0.3
STAN	57.05	70 iPc	26	30.59	0.1
	1.1s	60.00nm			5.6mb
MHC	57.41	69 iPc	26	33.04	-0.1
	1.4s	40.00nm			5.3mb
COE	57.45	70 eP	26	33.50	0.2
ARN	57.47	69 ePc	26	33.47	0.0
CMB	57.69	68 ePc	26	35.15	0.1
	1.3s	50.00nm			5.5mb
SAO	57.91	70 ePc	26	36.22	-0.3
	1.0s	16.26nm			5.1mb
KVN	58.35	66 iPc	26	40.31	0.5
MMPM	58.78	68 (P)	26	44.01	1.0
MEMM	58.79	67 eP	26	43.89	1.3
MTUM	59.22	67 eP	26	46.14	0.2
TNP	59.51	66 ePc	26	47.96	0.0
	0.9s	46.02nm			5.6mb
HVU	59.53	60 ePc	26	48.22	0.3
BCH	59.79	70 ePc	26	49.63	-0.1
NSD	59.88	341 eP	26	41.40	-8.3X
	0.5s	2.50nm			4.6mb
ISA	60.42	69 eP	26	52.70	-1.3
	0.9s	15.09nm			5.1mb
	Z 19s	0.22um			4.3Msz
FRB	60.51	21 eP	26	53.00	-1.1
	1.0s	8.00nm			4.8mb
DUG	60.59	62 ePc	26	55.28	0.1
	1.1s	51.52nm			5.5mb
	Z 19s	0.23um			4.3Msz
TPNV	60.85	66 eP	26	56.58	-0.4

	0.9s	43.44nm			5.5mb
DAU	61.30	60 ePc	27	00.69	0.5
GSC	61.66	68 iPc	27	02.16	-0.2
SSK	61.89	70 eP	27	03.88	-0.2
ARUT	61.89	64 iPc	27	04.01	0.0
EMUT	61.96	61 ePc	27	04.77	0.2
ULM	62.03	44 eP	27	06.50	2.0
MSU	62.11	63 eP	27	05.41	-0.1
PEC	62.43	69 ePc	27	06.46	-0.9
	1.0s	42.94nm			5.5mb
SRU	62.61	61 eP	27	08.52	-0.3
PLM	62.98	70 eP	27	10.21	-1.0
OBN	63.28	326 eP	27	10.00	-2.6X
		e	27	30.00	
		i	27	49.00	
		i	28	07.00	
		e	28	17.00	
PV09	63.81	61 ePc	27	16.88	0.0
PV10	63.95	61 ePc	27	18.09	0.4
		ePcP	27	51.33	
PV08	64.03	60 ePc	27	18.39	0.1
GLA	64.40	69 iPc	27	20.49	0.1
GLD	65.05	57 eP	27	25.50	0.8
	1.1s	49.20nm			5.4mb
JAQ	66.97	31 eP	27	35.50	-0.9
ALQ	67.86	62 eP	27	42.35	-0.2
	1.0s	26.58nm			5.1mb
		e	28	06.53	
HYB	69.16	272 eP	27	50.00	-0.5
POO	71.31	277 eP	28	03.00	-0.6
ERE	71.73	312 eP	28	04.00	-1.9
WMOK	72.21	57 ePc	28	08.44	-0.3
	0.9s	40.45nm			5.3mb
GBA	72.72	270 P	28	11.00	-0.9
GBA	72.72	270 Pd	28	12.90	1.0
	0.8s	8.00nm			4.7mb
TUL	72.87	54 iPc	28	12.60	0.1
DZM	73.02	170 iPc	28	13.90	0.4
WRA	73.06	202 eP	28	12.40	-1.3
	0.6s	6.90nm			4.7mb
		e	28	31.30	
LTX	73.61	64 ePc	28	17.01	0.0
SPC	73.66	332 eP	28	21.10	4.0X
CLL	73.71	337 e(P)	28	20.00	2.8X
	1.2s	14.00nm			4.7mb
BRG	73.88	336 e(P)	28	18.20	0.1
GAC	73.92	35 eP	28	19.00	0.6
PRU	74.54	336 eP	28	16.50	-5.5X
		e	28	47.50	
UYO	74.91	54 iPc	28	24.00	-0.4
ELC	75.05	49 iPd	28	24.99	-0.1
MIAR	75.07	53 ePc	28	24.90	-0.4
	0.9s	23.10nm			5.1mb
DLF	75.36	350 eP	28	26.60	0.0
DCN	75.39	350 eP	28	27.70	0.9
SRO	75.46	332 eP	28	34.40	7.2X
ZST	75.47	333 eP	28	34.80	7.5X
KHC	75.57	336 eP	28	28.50	0.5
	1.0s	7.00nm			4.5mb
		e	28	33.00	
		e	28	43.70	
GEC2	75.80	336 eP	28	29.40	0.1
	0.4s	1.12nm			4.1mb X
		epP	28	36.30	22kmX
		e	28	41.30	
		e	28	43.70	
		e	28	48.10	
		e	28	50.60	
		e	28	54.40	
ENN	75.82	341 eP	28	29.50	0.3
	1.0s	4.00nm			4.3mb
		e	28	34.00	
ASPA	76.74	201 eP	28	35.20	0.5
	0.8s	8.60nm			4.7mb
OXF	77.18	51 eP	28	36.84	-0.2
LMN	77.35	28 eP	28	38.50	0.7
KBA	77.52	335 i(P)	28	41.40	2.4
	1.3s	50.50nm			5.2mb
		i	29	16.80	
		i	29	25.40	
CDF	77.76	340 eP	28	40.20	0.0
	0.8s	3.75nm			4.3mb
WTTA	77.80	336 iPc	28	38.50	-2.0
		i	29	18.50	
PTJ	77.88	333 eP	28	42.50	1.6
HAU	78.35	340 eP	28	43.70	0.4
PAL	78.54	37 eP	28	43.63	-0.8

NAV	78.88	43 ePc	28	46.22	-0.2
FLN	78.93	345 eP	28	45.20	-1.3
	1.3s	39.00nm			5.1mb
	Z 21s	0.22um			4.5Msz
LDF	79.04	344 eP	28	45.90	-1.1
CVL	79.31	41 ePc	28	48.93	0.2
GRR	79.36	345 eP	28	47.70	-1.1
	1.1s	42.75nm			5.2mb
LOR	79.57	341 eP	28	50.20	0.2
	Z 22s	0.30um			4.6Msz
SKO	79.70	328 eP	28	54.00	3.3X
LPF	79.73	345 eP	28	49.90	-0.9
	1.0s	23.20nm			5.0mb
LBF	79.82	341 eP	28	51.50	0.2
SSF	79.84	342 eP	28	51.80	0.4
	0.9s	11.80nm			4.8mb
AVF	80.13	342 eP	28	53.30	0.4
	1.0s	23.80nm			5.0mb
SMF	80.17	341 eP	28	53.60	0.4
	1.0s	38.80nm			5.2mb
BGF	80.45	342 eP	28	55.00	0.3
	1.1s	16.85nm			4.8mb
LPL	80.62	339 eP	28	55.50	-0.3
	0.8s	9.65nm			4.7mb
LPG	80.63	339 eP	28	57.00	1.0
	1.3s	36.80nm			5.1mb
OHR	80.68	328 eP	28	55.50	-0.5
MAF	80.83	342 eP	28	56.20	-0.5
	1.0s	30.00nm			5.1mb
TCF	80.83	342 eP	28	56.00	-0.7
	1.0s	16.20nm			4.9mb
PRM	80.88	46 eP	28	57.12	0.0
MFF	80.97	344 eP	28	56.80	-0.5
	1.0s	22.20nm			5.0mb
LSF	81.00	343 eP	28	56.90	-0.7
	1.1s	27.35nm			5.1mb
PMO	81.45	126 eP	29	00.70	0.5
	1.4s	243.10nm			5.9mb
TPT	81.58	126 eP	29	01.60	0.8
	1.2s	118.40nm			5.7mb
VAH	81.79	126 eP	29	02.30	0.4
	1.3s	134.30nm			5.7mb
RUV	81.87	126 eP	29	03.10	0.8
	1.0s	102.40nm			5.7mb
RJF	81.91	342 eP	29	01.80	-0.5
	1.3s	42.95nm			5.2mb
SBF	82.02	338 eP	29	03.40	0.4
	0.8s	19.05nm			5.0mb
CAF	82.17	342 eP	29	03.60	-0.1
	1.2s	27.35nm			5.0mb
LFF	82.41	343 eP	29	04.60	-0.3
	1.1s	49.10nm			5.3mb
FRF	82.49	338 eP	29	05.90	0.6
	1.3s	29.25nm			5.0mb
LPO	82.58	343 eP	29	05.40	-0.4
	1.0s	33.20nm			5.2mb
AFR	82.66	129 eP	28	54.60	-11.8X
	1.2s	210.60nm			
LRG	82.66	339 eP	29	06.80	0.6
	Z 21s	0.22um			4.5Msz
LMR	82.74	338 eP	29	07.00	0.4
	1.1s	31.50nm			5.1mb
STK	83.32	193 eP	29	01.30	-8.2X
	1.3s	3.70nm			4.2mb
EPF	84.33	343 eP	29	13.70	-1.1
	0.6s	5.50nm			4.7mb
GUD	87.43	345 eP	29	48.50	18.3X
PAB	88.54	345 eP	29	35.80	0.3
EALH	89.67	343 eP	29	51.00	10.2X
EJIF	91.74	346 eP	29	51.40	1.1
LPAZ	130.47	63 ePKP	35	54.34	0.0
LPB	130.68	63 PKP	35	55.00	0.5
CNCB	130.97	63 PKP	35	56.90	1.7
SIV	134.06	55 PKP	36	00.30	-0.1
BDFB	139.78	38 ePKP	36	12.23	1.0
PPD	144.01	48 ePKP	36	16.10	-2.2
VAO	146.80	42 ePKP	36	24.50	1.5

S.D. = 0.9 on 186 of 206 obs.

% NOV 22, 1993 05h 18m 10.18± 0.84s
31.448 S ±10.0km 67.852 W ± 6.2km
DEPTH = 10.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

CFA	0.37	244 iPd	18	18.00	0.3
		S	18	23.00	
RTLL	0.54	282 iPc	18	21.30	0.2

```
                S     18 29.30
RTCV    0.71 235 iPc  18 24.00   -0.3
RTCB    0.81 267 ePc  18 26.50    0.5
                S     18 39.00
RTPR    1.62  46 eP   18 38.00   -0.9
                S     18 58.00
MRA     2.06 118 eP   18 46.70    1.5
                S     19 14.00
RFA     3.35 189 ePd  19 02.50   -1.2
                S     19 55.00
     S.D. = 1.1  on   7 of   7 obs.
-------------------------------------
*  NOV  22, 1993  05h 43m 44.42± 3.68s
   44.567 N ± 7.7km  129.087 W ±31.0km
   DEPTH =  10.0km  (geophysicist)
 OFF COAST OF OREGON                ( 30)

BMW     4.54  63 eP   44 53.69   -1.1
SSOR    4.73  84 P    44 57.61    0.0
CPW     4.81  58 P    44 58.37   -0.3
LVP     4.94  70 P    45 00.57    0.0
CZM     4.99  66 P    45 01.11    0.0
ERK     5.06  68 P    45 02.35    0.2
SHW     5.09  69 eP   45 02.37   -0.3
REMW    5.13  69 P    45 03.79    0.5
YEL     5.13  69 P    45 03.63    0.4
CDFW    5.20  70 P    45 04.45    0.3
HDW     5.20  52 P    45 04.35    0.1
LMW     5.21  64 P    45 04.63    0.3
MEW     5.21  57 P    45 05.07    0.8
GMW     5.30  54 eP   45 04.95   -0.6
ASR     5.51  71 P    45 08.92    0.2
RVC     5.52  62 P    45 08.61   -0.1
LON     5.55  64 eP   45 08.22   -0.9
REMR    5.55  64 P    45 09.77    0.5
GLK     5.62  67 P    45 10.61    0.5
WPW     5.70  65 P    45 11.13   -0.2
FMW     5.70  63 P    45 11.21   -0.2
VGB     5.96  78 eP   45 14.36   -0.5
JCW     6.14  51 P    45 17.50    0.2
TBM     6.47  63 P    45 22.38    0.2
RPW     6.51  51 P    45 22.64    0.0
ARUT   13.58 115 (P)  46 59.67    0.0
SRU    14.86 105 (P)  47 16.46    0.0
     S.D. = 0.4  on  27 of  27 obs.
-------------------------------------
*  NOV  22, 1993  05h 58m 11.01± 1.97s
   28.288 S ±14.5km  178.814 W ±14.3km
   DEPTH = 326.7 ± 21.4 km
   4.3mb (  5 obs.)
 KERMADEC ISLANDS REGION            (177)

MRW    13.96 201 P    01 17.60   -0.1
                (S)   03 40.00
                e     03 50.20
DZM    14.71 292 iPc  01 27.10    0.8
AFI    15.73  26 eP   01 37.00   -0.3
                eS    04 17.00
ARMA   25.82 258 iPd  03 17.00    1.7
       0.5s    10.00nm        4.4mb
CTA    32.80 277 iP   04 16.00   -0.5
STK    34.32 254 iPd  04 22.30   -6.9X
       0.8s     3.50nm        3.8mb
ASPA   42.55 265 iPd  05 36.80   -0.5
       0.5s    11.50nm        4.4mb
                eS    11 29.00
WRA    43.34 270 iPd  05 42.00   -1.6
       0.3s    11.70nm        4.6mb
                eS    09 43.40
WARB   48.20 259 iPc  06 20.80   -0.6
       0.4s     4.00nm        4.1mb
GBA   108.30 276 PKP  16 23.00   20.4X
UPP   146.50 345 iPKP 17 12.70    0.0
NB2   146.56 351 PKP  17 13.90    1.0
       0.5s     3.80nm
HFS   147.04 349 ePKP 17 13.60    0.0
       0.5s     4.50nm
     S.D. = 1.1  on  11 of  13 obs.
-------------------------------------
%  NOV  22, 1993  06h 25m 43.83± 1.04s
   16.552 N ±18.7km   94.046 W ±14.6km
   DEPTH =  10.0km  (geophysicist)
 OAXACA, MEXICO                     ( 60)

TPX     2.37 133 eP   26 23.50    0.1
LVVM    3.91 325 iP   26 44.50   -0.7
                (S)   27 19.50
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```
PPM     5.03 301 iP   27 03.50    1.9X
                iS    28 03.00
III     5.48 290 iP   27 08.00    0.2
                (S)   27 50.50
ACX     5.58 274 eP   27 08.25   -0.7
                (S)   28 23.00
UNM     5.62 300 eP   27 11.00    1.3
MRX     7.48 296 eP   27 35.50   -0.2
     S.D. = 0.9  on   6 of   7 obs.
-------------------------------------
&  NOV  22, 1993  08h 03m 00.55s
   62.623 N          149.530 W
   DEPTH =  71.0km
 CENTRAL ALASKA                     (  1)
     <AEIC>.

HUR     0.36 352 iPd  03 12.29   -0.2
                iS    03 20.74
CUT     0.41 238 iPd  03 12.65   -0.1
RND     0.84  21 iPc  03 17.35   -0.2
GHO     0.90 161 iPd  03 18.15    0.0
                eS    03 31.65
TRF     0.90 338 eP   03 18.17   -0.1
                eS    03 31.43
PWA     0.99 190 P    03 19.20    0.0
SML     0.99 145 iPd  03 19.09   -0.2
                eS    03 34.17
PLRM    1.05 170 ePd  03 19.93    0.0
                eS    03 36.01
PMR     1.05 170 ePd  03 19.65   -0.3
                eS    03 34.66
DHY     1.09  64 iPc  03 20.35   -0.3
                iS    03 35.68
KTH     1.13 326 eP   03 21.24    0.2
SKT     1.14 236 iPc  03 21.18    0.1
                eS    03 36.65
MCK     1.15  13 eP   03 21.40    0.1
SUA     1.30 207 ePc  03 23.66    0.3
SCM     1.30 127 eP   03 23.50    0.1
KNK     1.32 157 ePd  03 24.01    0.5
                eS    03 42.45
PMS     1.38 181 P    03 24.70    0.3
BWN     1.56   1 eP   03 24.43   -2.3
TOA     1.65 107 P    03 29.20    1.1
CFI     1.67 149 eP   03 28.53    0.3
CGLM    1.76 223 eP   03 29.92    0.3
CRP     1.84 224 eP   03 30.53   -0.2
SDG     1.85  91 eP   03 31.59    0.9
PWL     1.86 162 eP   03 31.95    1.1
CP2     1.87 224 eP   03 31.21    0.0
SPU     1.88 221 eP   03 31.37    0.2
                eS    03 56.12
CKN     1.88 223 eP   03 32.11    0.9
THY     1.90  64 eP   03 32.84    1.4
PAX     1.90  78 eP   03 31.92    0.4
CKT     1.91 223 eP   03 31.93    0.3
BGL     1.92 226 eP   03 32.70    0.9
NEA     1.97   6 ePc  03 31.86   -0.5
TZL     2.00 105 ePc  03 33.87    1.0
BKG     2.03 221 ePc  03 33.46    0.2
                eS    03 59.83
KLU     2.04 122 ePc  03 33.08   -0.4
                eS    04 00.41
HDA     2.13  32 ePc  03 34.28   -0.3
                eS    04 01.56
VLZ     2.13 133 eP   03 33.74   -0.8
                eS    03 59.34
MPA     2.14 178 eP   03 36.04    1.3
SLKM    2.15 189 eP   03 35.49    0.6
CCB     2.17  20 ePc  03 34.56   -0.6
                eS    04 00.28
DJE     2.24  49 eP   03 37.78    1.7
FID     2.38 141 eP   03 37.75   -0.3
FBA     2.41  18 iPc  03 37.84   -0.7
MDM     2.42  13 ePc  03 38.19   -0.4
                eS    04 06.21
KNIM    2.44 159 eP   03 39.90    1.0
ILB     2.46  27 iPc  03 38.52   -0.6
                eS    04 06.18
IL1     2.46  27 iPc  03 38.52   -0.6
MLY     2.48 348 eP   03 39.08   -0.4
SEW     2.53 179 eP   03 41.53    1.4
DFR     2.54 218 eP   03 40.44    0.1
REF     2.62 217 eP   03 42.30    0.7
HIN     2.66 146 eP   03 41.53   -0.5
DOT     2.69  65 eP   03 42.64    0.3
CVA     2.76 137 eP   03 42.80   -0.5
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GLB     2.94 111 eP   03 45.43   -0.6
                eS    04 19.32
TTA     3.00 279 eP   03 45.37   -1.3
TMW     3.07  74 eP   03 47.41   -0.2
CNPM    3.22 196 eP   03 50.05    0.3
RAGM    3.23 132 eP   03 49.29   -0.7
OPT     3.48 213 P    03 55.50    2.1
BC3     3.58  79 eP   03 53.97   -0.9
TGL     3.70 117 eP   03 55.62   -1.0
BALM    3.76 112 eP   03 55.87   -1.6
IM3     3.84 333 eP   03 57.71   -0.7
WAX     3.87 121 eP   03 58.01   -0.9
IMA     3.90 334 eP   03 58.40   -1.0
CTGM    4.23 109 eP   04 03.15   -1.0
SYI     4.27 201 eP   04 03.45   -1.0
FYU     4.37  23 eP   04 06.29    0.4
WRG     4.45 122 eP   04 05.79   -1.2
BM3     5.25  21 eP   04 16.50   -1.7
INK     8.75  42 eP   05 06.00   -0.5
       72 obs. associated
-------------------------------------
?  NOV  22, 1993  08h 03m 04.34± 3.33s
   19.036 S ±10.6km   68.915 W ±30.8km
   DEPTH = 222.1 ± 46.1 km
 CHILE-BOLIVIA BORDER REGION        (124)

CNCB    2.38  22 iPc  03 49.00   -0.4
                S     04 21.00
LPB     2.61  17 Pc   03 52.40    0.7
       1.0s   224.00nm
                S     04 28.00
LPAZ    2.83  15 P    03 54.40    0.0
                S     04 30.70
CCH     3.11  59 P    03 56.40   -0.8
YJA     4.46 135 ePc  04 14.50    0.8
HJA     5.29 142 ePd  04 23.90    0.4
SLA     6.49 151 eP   04 38.10   -1.0
SIV     8.07  69 P    04 59.70    0.2
     S.D. = 0.9  on   8 of   8 obs.
-------------------------------------
*  NOV  22, 1993  08h 03m 55.57± 1.83s
   31.438 S ±15.1km   69.378 W ± 9.9km
   DEPTH = 142.0 ± 21.6 km
 SAN JUAN PROVINCE, ARGENTINA       (137)
     MD 4.0 (SAN).

RTLL    0.78  82 ePd  04 17.30   -0.8
                S     04 31.20
CFA     0.99 100 iPd  04 19.00   -0.8
                S     04 34.00
MDZ     1.51 163 iP   04 26.20    1.2
                i     04 41.90
                iS    04 46.70
JACH    1.61 219 iP+  04 26.89    0.6
                iS    04 50.56
PEL     2.03 213 iP+  04 31.35    0.3
                iS    04 57.51
FCH     2.04 202 iP+  04 32.22    0.8
                iS    04 58.91
ROCH    2.06 222 iPd  04 31.77    0.1
                iS    04 58.07
SAN     2.28 208 (P)  05 02.47   28.3X
                iS    05 02.54
PCH     2.38 203 iP   04 35.76    0.4
                iS    05 05.67
TACH    2.57 210 iP+  04 37.37   -0.4
                iS    05 08.41
RTPR    2.71  66 eP   04 39.90    0.5
                S     05 10.00
LCCH    2.75 222 iP+  04 39.77   -0.2
                iS    05 10.83
CACH    2.86 201 iP+  04 41.94    0.4
                iS    05 16.78
LNV     3.04 214 iP+  04 42.38   -1.3
                iS    05 17.45
MRA     3.27 108 iPc  04 47.50    0.9
                S     05 23.00
RFA     3.41 167 iPd  04 47.00   -1.6
                S     05 24.50
     S.D. = 0.9  on  15 of  16 obs.
-------------------------------------
?  NOV  22, 1993  08h 17m 10.60± 0.95s
   39.147 N ± 8.0km   27.492 E ± 9.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)
     ML 2.8 (ISK).
```

22d 08h

```
IZM      0.77 194 ePg    17 25.50  -0.1
                  eSg    17 37.20
DST      0.99  62 ePn    17 29.80   0.3
EZN      1.13 307 ePn    17 32.00   0.3
EDC      1.23  13 ePn    17 33.00  -0.5
     S.D. = 0.7  on   4 of   4 obs.
-------------------------------------
?  NOV  22, 1993  08h 23m 09.68± 0.91s
   39.323 N ± 8.2km   27.633 E ± 8.7km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
     ML 2.8 (ISK).

DST      0.82  70 ePg    23 25.80   0.2
                  eSg    23 37.30
IZM      0.97 198 ePg    23 28.00  -0.1
                  eSg    23 42.70
EDC      1.04  10 ePn    23 29.00  -0.3
EZN      1.13 297 ePn    23 31.00   0.2
     S.D. = 0.4  on   4 of   4 obs.
-------------------------------------
?  NOV  22, 1993  08h 31m 39.81± 0.92s
   39.129 N ± 7.7km   27.478 E ± 9.4km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
     ML 2.7 (ISK).

IZM      0.75 193 ePg    31 54.50   0.0
                  eSg    32 07.70
DST      1.01  62 ePn    31 59.00   0.0
EZN      1.13 308 ePn    32 01.00   0.0
EDC      1.25  14 ePn    32 03.00  -0.1
     S.D. = 0.1  on   4 of   4 obs.
-------------------------------------
   NOV  22, 1993  09h 04m 18.15± 0.34s
   24.011 N ± 4.4km  122.529 E ± 5.9km
   DEPTH =  33.0km  (normal)
   4.8mb ( 24 obs.)
 TAIWAN REGION                     (243)
     ML 4.5 (BJI).

QZH      3.71 285 iPnc   05 13.50  -0.9
     Z  14s     3.07um
                  Sn    05 54.00
PIP      5.93 198 eP     05 45.00  -1.0
CVP      6.31 186 eP     05 21.00 -30.3X
SSE      7.16 351 Pd     06 02.20  -1.0
     Z  20s     1.80um
     N  12s     2.70um
                  pP    06 07.50
                  S     07 25.00
BAG      7.78 194 ePc    06 11.00  -1.1
       0.9s    48.74nm          5.6mb
GZH      8.48 266 eP     06 20.00  -1.6
NJ2      8.64 339 Pd     06 22.80  -1.1
     Z  14s     1.78um
                  S     07 59.00
WHN      9.76 314 P      06 45.00   5.7X
     N  12s     1.60um
                  pP    06 52.00
QIZ     12.80 250 eP     07 26.60   6.0X
TIA     13.02 340 eP     07 28.00   4.5X
     Z  12s     1.46um
     N  10s     0.64um
     E  10s     0.49um
GYA     14.56 283 P      07 44.20   0.3
     Z  14s     1.35um
     N  10s     0.69um
     E  10s     0.62um
                  pP    07 51.60
XAN     15.52 313 P      07 56.00  -0.3
       1.0s    21.00nm          4.3mb
     Z  15s     1.05um          4.0MszX
     N  11s     0.46um
     E  11s     0.46um
                  pP    08 02.20
TIY     16.16 330 P      08 06.80   2.4
     Z  14s     2.14um
     N  13s     1.61um
BJI     16.86 343 eP     08 16.50   3.4X
       1.0s     6.00nm          3.7mb X
     Z  14s     0.94um          4.5Msz
CD2     18.01 297 iPd    08 27.90   0.3
HHC     19.14 334 eP     08 41.90   0.4
       1.4s    34.00nm          4.4mb
     Z  16s     1.78um          4.7MszX
BTO     19.59 331 eP     08 47.00   0.4
     N  12s     0.78um
     E  12s     0.48um
CN2     19.89   6 eP     08 48.20  -1.3
       0.8s     9.40nm          4.2mb
     Z  18s     1.08um          5.0Msz
     N  16s     1.06um
     E  16s     0.54um
                  epP    08 59.40  50kmX
LZH     20.12 311 eP     08 52.50   0.2
       1.0s    54.00nm          4.8mb
     Z  16s     0.98um          4.3MszX
     E  10s     0.44um
CHTO    22.55 261 eP     09 18.60   1.9
GTA     24.58 314 Pc     09 36.60   0.0
       1.0s    28.00nm          4.8mb
     Z  16s     1.03um          4.4MszX
     E  11s     0.28um
                  pP    09 45.50  32kmX
                  sP    09 49.00
SHL     27.84 280 eP     10 09.00   2.1
LSA     28.51 288 P      10 14.10   0.9
GUN     33.10 285 P      10 53.80   0.1
PKI     33.53 284 P      10 57.00  -0.4
KKN     33.64 285 P      10 57.80  -0.4
DMN     33.80 284 P      10 59.50  -0.2
GKN     34.20 285 P      11 02.20  -0.8
WMQ     34.66 313 Pd     11 07.00   0.3
WRA     45.18 164 eP     12 33.80   0.0
       0.7s     4.40nm          4.5mb
ASPA    48.66 166 iPc    13 02.00   0.8
       0.7s     7.90nm          4.9mb
CTA     49.55 150 e(P)   13 09.50   1.4
STK     58.49 161 eP     14 06.30  -7.1X
       2.9s     2.70nm          3.8mb
SDF     70.40 336 iP     15 30.80   0.2
INK     72.92  22 eP     15 46.00   0.4
MBC     73.16  13 eP     15 46.50  -0.4
DAG     76.74 351 iPc    16 06.10  -1.3
       0.5s     2.82nm          4.5mb
HFS     78.31 331 eP     16 15.00  -1.3
       0.9s     5.80nm          4.6mb
     Z  16s     0.42um          4.9MszX
                  LR    52 40.00
NB2     78.95 332 P      16 19.60  -0.2
       0.7s     3.80nm          4.5mb
KHC     83.68 321 eP     16 45.50   0.6
       1.0s     3.50nm          4.5mb
GEC2    83.75 321 ePd    16 45.60   0.2
       0.9s     4.73nm          4.6mb
                  e     16 51.10
                  e     16 55.20
GRF     84.73 323 eP     16 51.70   1.6
CDF     87.60 323 eP     17 04.40   0.0
       1.2s    14.90nm          5.1mb
BSF     88.20 323 eP     17 06.80  -0.5
HAU     88.35 323 eP     17 07.50  -0.4
LPG     89.55 321 eP     17 14.00   0.0
       0.9s     5.90nm          4.9mb
LPL     89.55 321 eP     17 14.00   0.1
       0.9s     8.70nm          5.0mb
LOR     90.14 323 eP     17 15.90  -0.5
LBF     90.25 323 eP     17 16.40  -0.5
       1.1s     9.50nm          5.0mb
SSF     90.46 323 eP     17 17.60  -0.2
       1.1s    10.25nm          5.0mb
SMF     90.53 323 eP     17 17.90  -0.3
       1.0s    14.40nm          5.2mb
AVF     90.71 323 eP     17 18.70  -0.3
       1.1s    11.50nm          5.1mb
MAF     91.48 323 eP     17 22.80   0.2
       1.0s     7.20nm          5.0mb
TCF     91.64 323 eP     17 23.60   0.3
CAF     92.56 322 eP     17 28.10   0.5
       1.2s    17.25nm          5.4mb
RJF     92.63 323 eP     17 28.50   0.6
       1.0s    13.40nm          5.3mb
     S.D. = 0.9  on  50 of  56 obs.
-------------------------------------
?  NOV  22, 1993  09h 47m 59.68± 0.93s
   39.132 N ± 7.8km   27.509 E ± 9.4km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
     ML 2.7 (ISK).

IZM      0.76 195 ePg    48 14.60   0.1
                  eSg    48 27.40
DST      0.99  61 ePn    48 18.30  -0.2
EZN      1.15 307 ePn    48 21.00  -0.1
EDC      1.24  13 ePn    48 23.00   0.2
     S.D. = 0.3  on   4 of   4 obs.
-------------------------------------
*  NOV  22, 1993  10h 16m 38.29± 1.57s
   41.649 N ± 8.9km   82.505 E ± 9.0km
   DEPTH =  44.0 ± 17.4 km
   4.4mb (  8 obs.)
 SOUTHERN XINJIANG, CHINA          (321)
     ML 4.1 (BJI).

WMQ      4.40  59 Pn     17 43.80  -0.6
                  Sg     18 52.00
KSH      5.43 248 Pn     18 00.50   1.5
                  Pg     18 14.90
                  Sn     19 05.50
                  Sg     19 28.40
GTA     13.36  94 eP     19 40.80  -6.8X
                  PP     19 50.80
GKN     13.73 172 P      19 51.60  -0.9
GUN     13.98 168 P      19 57.40   1.4
       0.8s    28.00nm          5.0mb
KKN     14.01 170 P      19 54.80  -1.5
PKI     14.24 169 P      19 58.70  -0.7
SHL     17.82 151 iP     20 45.50   0.7
XAN     22.14 101 P      21 30.80  -0.9
       0.6s     3.20nm          3.9mb
                  pP     21 34.70  14kmX
                  sP     21 37.40
GYA     24.99 120 P      22 00.80   1.3
HFS     44.87 319 eP     24 51.40   1.7
       0.4s     1.50nm          4.2mb
NB2     45.94 320 P      24 57.00  -1.3
       0.5s     0.60nm          3.8mb
LPG     53.11 302 eP     25 53.20  -0.6
LPL     53.11 302 eP     25 53.00  -0.7
       0.6s     5.05nm          4.7mb
SMF     54.45 304 eP     26 01.80  -1.5
       0.8s     5.50nm          4.6mb
AVF     54.70 304 eP     26 04.60  -0.5
       0.6s     2.70nm          4.5mb
INK     67.09  14 eP     27 31.00   2.2
WRA     77.81 131 eP     28 33.00   0.4
       0.7s     2.30nm          4.3mb
     S.D. = 1.4  on  17 of  18 obs.
-------------------------------------
&  NOV  22, 1993  10h 18m 38.62s
   66.620 N          149.517 W
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ALASKA                   (676)
     <AEIC>. ML 2.9 (AEIC), 3.4
     (PMR).

MLY      1.67 198 eP     19 08.29   0.2
                  eS     19 30.47
FYU      1.71  90 eP     19 09.38   0.8
MDM      1.75 162 eP     19 09.20   0.0
                  eS     19 33.24
IMA      1.77 254 eP     19 09.06  -0.5
                  eS     19 33.19
IM3      1.83 251 eP     19 10.24   0.0
                  eS     19 34.44
FBA      1.87 157 eP     19 10.52  -0.4
                  eS     19 35.79
NEA      2.06 175 eP     19 13.24  -0.4
BM3      2.09  65 eP     19 13.89  -0.2
CCB      2.11 160 eP     19 13.91  -0.4
                  eS     19 41.97
IL1      2.15 148 eP     19 14.78  -0.2
ILB      2.15 148 eP     19 15.14   0.1
                  eS     19 42.87
WRH      2.24 164 eP     19 16.36   0.1
BWN      2.46 179 eP     19 19.63   0.2
HDA      2.47 153 eP     19 19.58   0.1
MCK      2.91 175 eP     19 25.83   0.0
KTH      3.14 192 eP     19 30.14   1.1
DHY      3.67 165 eP     19 37.12   0.3
PAX      4.05 153 eP     19 42.16   0.1
TTA      4.63 220 e(P)   19 53.80   3.5
TOA      4.76 161 eP     19 54.30   2.1
BC3      4.86 134 eP     19 51.91  -1.6
PMR      5.05 178 e(P)   20 03.40   7.3
KLU      5.38 161 (P)    20 00.73  -0.2
PMS      5.40 180 eP     20 02.10   1.0
       24 obs. associated
-------------------------------------
?  NOV  22, 1993  10h 22m 19.92± 0.94s
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   39.111 N ± 7.9km   27.528 E ± 9.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                                (366)
      ML 2.8 (ISK).

IZM      0.74 196 ePg   22 34.40  -0.1
                  eSg   22 47.20
DST      0.99  60 iPn   22 38.90   0.2
EZN      1.17 308 ePn   22 42.00   0.2
EDC      1.26  12 ePn   22 43.00  -0.3
     S.D. = 0.5  on   4 of   4 obs.
-------------------------------------
?  NOV  22, 1993  10h 35m 11.65± 0.98s
   39.090 N ± 8.2km   27.540 E ±10.0km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                                (366)
      ML 2.7 (ISK).

IZM      0.72 198 ePg   35 26.10   0.2
                  eSg   35 38.20
DST      0.99  58 ePn   35 30.00  -0.4
EZN      1.19 308 ePn   35 33.50  -0.4
EDC      1.28  11 ePn   35 36.00   0.6
     S.D. = 0.9  on   4 of   4 obs.
-------------------------------------
?  NOV  22, 1993  11h 13m 05.76± 1.06s
   51.862 N ±23.4km  173.707 W ±10.1km
   DEPTH =  33.0km  (normal)
 ANDREANOF ISLANDS, ALEUTIAN IS. (  7)
      ML 3.5 (GS).

ADK      1.85 272 ePc   13 35.55  -0.1
                  eS    13 51.86
KDC     13.55  56 (P)   16 17.34  -0.4
FBA     18.65  36 P     17 23.00   0.3
BALM    19.43  50 eP    17 27.87  -4.2X
MCMT    40.00  75 iPc   20 38.90  -0.1
GSC     43.26  89 eP    21 05.92   0.3
LTX     55.44  85 (P)   22 36.62  -2.8X
     S.D. = 0.5  on   5 of   7 obs.
-------------------------------------
   NOV  22, 1993  12h 15m 37.47± 0.64s
   31.712 S ± 7.9km   68.054 W ± 6.3km
   DEPTH =  33.0km  (normal)
 SAN JUAN PROVINCE, ARGENTINA      (137)

CFA      0.19 303 iPc   15 43.20  -0.8
RTCV     0.44 250 iPd   15 47.00  -0.2
RTLL     0.52 317 ePd   15 48.50   0.1
                  S     15 56.00
ZON      0.56 287 eP    15 49.80   0.8
                  eS    15 59.80
RTCB     0.67 289 ePd   15 51.00   0.4
                  S     16 03.00
MDZ      1.35 210 eP    16 23.80  23.6X
RTPR     1.93  44 eP    16 08.00  -0.6
                  S     16 32.00
MRA      2.11 110 eP    16 12.00   0.9
                  S     16 35.00
RFA      3.07 186 ePc   16 24.30  -0.6
                  S     17 11.00
     S.D. = 0.8  on   8 of   9 obs.
-------------------------------------
&  NOV  22, 1993  13h 28m 15.56s
   65.587 N          144.105 W
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ALASKA                       (676)
      <AEIC>. ML 3.0 (AEIC).

FYU      1.09 335 eP    28 36.62   0.7
IL1      1.43 236 iP    28 41.16  -0.4
ILB      1.43 236 iP    28 41.10  -0.5
                  eS    28 59.31
HDA      1.69 227 eP    28 44.41  -0.9
FBA      1.70 248 eP    28 44.45  -0.9
DJE      1.70 204 eP    28 45.79   0.3
                  eS    29 07.09
CCB      1.83 241 eP    28 46.61  -0.6
MDM      1.85 252 eP    28 46.72  -0.8
BM3      1.85 354 iP    28 47.27  -0.4
DOT      1.95 179 eP    28 48.78  -0.2
WRH      2.03 238 eP    28 49.52  -0.6
TMW      2.32 168 eP    28 54.16  -0.3
NEA      2.34 247 eP    28 54.16  -0.5
PAX      2.69 193 eP    28 59.45  -0.3
BC3      2.73 157 eP    28 59.20  -1.0
MLY      2.84 262 eP    28 59.69  -2.1
DHY      2.89 211 eP    29 02.62  -0.1
SDG      3.14 192 eP    29 05.86  -0.1
IMA      3.97 281 eP    29 16.10  -1.7
IM3      3.99 280 eP    29 16.79  -1.3
BALM     4.64 169 (P)   29 26.45  -0.9
       21 obs. associated
-------------------------------------
*  NOV  22, 1993  14h 00m 22.18± 0.92s
   26.134 S ±10.1km   29.230 E ± 9.2km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA              (584)

BFT      0.86  59 eP    00 39.70   0.4
                  S     00 49.00
SLR      0.94 295 eP    00 40.80   0.1
                  S     00 53.50
KSR      2.12 277 eP    00 50.00  -8.9X
BFS      2.32 250 eP    01 02.40   0.6
                  S     01 34.40
SWZ      3.65 253 eP    01 26.10   5.5X
                  S     02 04.30
BLF      4.01 222 eP    01 24.50  -1.2
                  S     02 19.00
BOSA     4.19 233 eP    01 28.90   0.7
                  S     02 20.00
FRS      4.99 223 eP    01 43.50   4.0X
                  S     02 32.00
BUL      5.99 354 iPn   01 53.20  -0.6
                  iSn   02 57.60
                  iSg   03 29.10
KRI      9.27   2 iPn   02 36.50  -3.1X
                  iSn   04 15.30
                  iSg   05 08.00
     S.D. = 1.0  on   6 of  10 obs.
-------------------------------------
?  NOV  22, 1993  14h 06m 16.67± 0.99s
   40.237 N ±11.2km   29.172 E ± 7.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                                (366)
      ML 2.5 (ISK).

IZI      0.25  67 iPg   06 21.80  -0.2
                  iSg   06 26.80
DST      0.76 214 ePn   06 31.00  -0.5
EDC      1.01 277 ePn   06 36.00   0.3
ALT      1.39 148 ePn   06 42.60   0.5
     S.D. = 0.8  on   4 of   4 obs.
-------------------------------------
   NOV  22, 1993  14h 12m 40.47± 0.41s
   38.245 N ± 4.0km   22.882 E ± 2.5km
   DEPTH =  51.0 ±  5.3 km
   4.2mb ( 20 obs.)
 GREECE                                (364)
      MD 4.2 (ATH).

ATH      0.71 112 ePg   12 53.00  -1.5
AGG      0.89 331 ePgc  12 55.06  -1.8
                  eSg   13 06.18
PAIG     1.79  20 ePbd  13 09.44   0.0
                  eSb   13 32.82
VLS      1.81 269 ePb   13 10.00   0.3
LIT      1.88 351 ePbc  13 11.17   0.4
                  eSb   13 35.94
KZN      2.23 338 ePn   13 16.30   0.5
OUR      2.25  22 ePnc  13 16.60   0.6
                  eSn   13 43.10
IGT      2.37 304 ePnc  13 18.66   1.0
                  eSn   13 47.80
THE      2.38   2 ePnd  13 17.70  -0.1
                  eSn   13 47.74
SOH      2.60   8 ePnc  13 21.73   0.8
LSK      2.60 318 iPnc  13 23.00   2.0
GRG      2.73 352 ePnc  13 22.94   0.1
SRN      2.77 307 iPnd  13 24.80   1.4
FNA      2.79 336 ePn   13 24.70   1.0
                  eSn   13 59.10
KEK      2.81 302 ePn   13 25.00   1.0
PRK      2.83  68 ePn   13 25.00   0.7
KNT      2.91   0 ePn   13 17.00  -8.4X
SRS      2.92  11 ePnc  13 25.90   0.4
                  eSn   14 00.26
VAM      3.02 159 ePn   13 27.00   0.0
TPE      3.03 313 iPnc  13 28.00   1.0
VAY      3.08 356 iPnd  13 28.20   0.4
       1.2s   770.00nm
                  iSn   14 16.70
                  Lg    14 21.50
EZN      3.11  58 ePn   13 26.50  -1.7
OHR      3.28 331 iPn   13 31.00   0.3
       1.0s   700.00nm
                  i     13 40.60
                  i     14 03.50
                  i     14 10.70
                  i     14 16.20
                  Lg    14 22.00
MMB      3.40  11 iPc   13 33.00   0.6
VLO      3.44 311 iPnd  13 34.10   1.3
IZM      3.45  86 ePn   13 33.80   0.7
RDO      3.55  34 ePn   13 33.50  -0.9
ALN      3.60  42 ePn   13 34.50  -0.7
KKB      3.62   2 iPc   13 36.00   0.6
NPS      3.70 143 ePn   13 36.00  -0.5
RZN      3.72  22 iPc   13 37.00   0.1
TIR      3.87 324 iPnd  13 39.10   0.1
SKO      3.88 344 iPn   13 39.50   0.4
       2.5s  1650.00nm
                  iPb   13 47.50
                  iPg   13 55.00
                  iSn   14 27.50
                  i     14 32.00
                  i     14 43.00
                  Lg    15 20.00
KDZ      3.92  29 iPc   13 39.00  -0.6
PLD      4.10  19 iPd   13 43.00   0.9
CIN      4.17  97 eP    13 46.00   2.9
DIM      4.31  27 iPc   13 45.00  -0.1
VTS      4.35   3 iPc   13 46.00   0.2
LCI      4.36 300 P     13 44.24  -1.5
EDC      4.40  60 ePn   13 47.00   0.7
PGB      4.41  12 iPc   13 46.00  -0.6
SDA      4.60 327 ePn   13 48.90  -0.3
ULC      4.64 324 iPnd  13 48.09  -1.7
                  iSn   14 28.74
BCI      4.64 333 ePn   13 49.70  -0.1
DST      4.68  71 ePn   13 51.00   0.6
PVY      4.88 334 iPnd  13 54.02   0.7
                  iSn   14 39.03
TTG      5.01 328 iPnc  13 54.15  -0.9
                  iSn   14 39.00
BDV      5.09 324 iPnd  13 54.11  -2.0
                  iSn   14 38.94
GRI      5.10 278 P     13 57.04   0.7
IVA      5.15 335 iPnc  13 58.00   0.9
                  iSn   14 45.77
DMK      5.17  45 ePn   13 56.00  -1.3
KHL      5.23  87 ePn   13 59.00   0.8
PVL      5.30  20 iPc   13 57.00  -2.1
ORI      5.32 292 P     13 59.27  -0.1
HCY      5.37 323 iPnd  13 57.64  -2.4
                  iSn   14 44.99
SOI      5.38 270 P     14 05.65   5.4X
NKY      5.44 328 iPnc  13 59.97  -1.1
                  iSn   14 49.11
BAI      5.46 304 e(Pn) 13 59.00  -2.3
BRY      5.70 326 iPnc  14 02.85  -2.0
                  iSn   14 54.27
ALT      5.72  80 ePn   14 06.20   1.2
PLE      5.73 334 iPnc  14 05.24   0.1
                  iSn   14 58.49
ELL      5.78 103 eP    14 10.50   4.5X
MGR      6.00 291 P     14 07.48  -1.4
EYL      6.09  65 ePn   14 09.80  -0.5
SGO      6.30 294 P     14 13.00  -0.1
BUC      6.62  20 iPc   14 31.00  13.5X
HVAR     6.94 317 iPn   14 18.40  -3.6X
CMP      7.20  12 iPd   14 26.00   0.3
DUI      7.31 300 P     14 26.97  -0.4
MLR      7.59  17 iPc   14 34.00   2.8X
SDI      7.77 299 P     14 33.81   0.1
AQU      8.32 303 P     14 41.93   0.6
MNS      8.82 301 P     14 48.45   0.3
ASS      9.14 305 P     14 52.65   0.1
VBY      9.21 324 ePn   14 49.60  -3.8X
PTJ      9.22 328 eP    14 50.10  -3.5X
RIY      9.51 321 ePn   14 55.30  -2.2
RSM      9.70 309 P     15 03.66   3.5X
CRE      9.86 306 P     15 02.68   0.2
PSZ      9.91 348 eP    15 02.70  -0.4
LJU      9.95 324 ePn   15 11.00   7.4X
                  eSn   16 52.50
SFI     10.07 308 P     15 06.74   1.6
TRI     10.08 321 e(Pn) 15 02.50  -2.8
                  e(Sn) 16 52.30
                  e     19 16.00
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22d 14h

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SRO    10.13 342 eP    14 29.00 -36.9X
                i      15 15.70
UZH    10.39 358 eP    15 12.00   2.5
     Z  13s     4.50um
     N  13s     1.50um
ZST    10.80 339 eP    15 15.60   0.5
PGF    11.42 296 eP    15 26.00   2.3X
       1.1s    30.05nm          5.3mb X
GEC2   12.50 331 Pn    15 35.20  -2.8X
                Sg     17 29.30
KHC    12.78 331 eP    15 36.50  -5.2X
       1.0s     7.00nm          4.6mb X
     Z  10s     1.30um          5.9MszX
                e      15 48.00
                e      16 23.00
PRU    13.17 336 eP    15 47.00   0.3
                e      15 52.50
                e      16 04.60
LPG    14.02 306 eP    15 58.50   0.3
       0.7s     5.20nm          4.3mb
LPL    14.04 306 eP    15 58.80   0.4
       0.8s     5.10nm          4.3mb
MOX    14.76 331 eP    16 13.90   6.4X
CLL    14.81 335 eP    16 12.00   3.9X
       1.3s    21.00nm          4.3mb X
BSF    15.15 314 eP    16 10.50  -2.2
CDF    15.21 317 eP    16 11.10  -2.4
HAU    15.49 314 eP    16 15.20  -1.8
KIV    15.97  63 eP    16 30.20   6.9X
       1.3s    17.00nm          4.0mb
SMF    16.34 307 eP    16 28.20   0.4
       0.7s     7.30nm          3.9mb
LBF    16.40 308 eP    16 28.30  -0.3
       1.0s    17.80nm          4.2mb
LOR    16.59 309 eP    16 30.70  -0.3
       0.8s     9.00nm          4.0mb
AVF    16.71 307 eP    16 33.10   0.7
       1.2s    18.45nm          4.1mb
SSF    16.72 308 eP    16 33.20   0.6
       1.0s    18.20nm          4.2mb
ERE    16.86  77 eP    16 43.00   8.5X
CAF    16.92 300 eP    16 35.00  -0.2
       0.9s     9.00nm          3.9mb
BGF    16.94 306 eP    16 37.70   2.4
       0.8s    14.50nm          4.2mb
MAF    16.99 304 eP    16 38.50   2.5
LSF    17.68 304 eP    16 46.90   2.4
MFF    18.89 304 eP    17 00.30   0.9
       0.9s    20.45nm          4.3mb
OBN    19.25  24 eP    17 03.00  -0.3
                i      17 06.00
                e      17 16.00
LDF    19.58 309 eP    17 07.00   0.0
       0.9s    16.05nm          4.3mb
FLN    19.87 309 eP    17 10.60   0.6
       1.1s    29.30nm          4.5mb
EVIA   19.87 279 eP    17 10.70   0.4
LPF    19.94 307 eP    17 12.40   1.7
GRR    19.95 308 eP    17 12.00   1.1
       0.6s     9.75nm          4.3mb
MOS    20.11  25 eP    17 19.00   6.6X
GUD    20.99 285 eP    17 21.00  -0.8
PAB    21.21 282 eP    17 23.60  -0.3
UPP    21.89 353 eP    17 20.00 -10.4X
NUR    22.31   2 eP    17 36.10   1.5
EPLA   22.49 284 eP    17 36.30  -0.4
HFS    22.67 348 eP    17 37.20  -1.0
       0.4s     3.10nm          4.0mb
     Z  15s     0.28um          3.8MszX
                LR     26 32.00
NB2    23.96 346 P     17 51.10   0.3
       0.9s     8.30nm          4.3mb
KAF    23.99   4 iP    17 51.10   0.2
ARA0   31.38   2 eP    18 58.15  -0.1
KIC    40.43 225 P     20 15.22  -0.3
       0.9s    18.50nm          4.9mb
LIC    40.70 226 P     20 16.68  -1.0
       0.4s     2.50nm          4.3mb
GKN    51.87  82 P     21 45.30  -0.8
DMN    52.42  82 P     21 50.00  -0.4
KKN    52.47  82 P     21 49.00  -1.7
GUN    52.88  81 P     21 53.40  -0.5
ZAK    56.11  50 eP    22 23.50   6.9X
       1.0s     8.00nm          4.7mb
BOD    59.25  38 eP    22 38.70   0.1
       1.0s     7.00nm          4.7mb
     S.D. = 1.2  on 112 of 133 obs.
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   NOV  22, 1993  14h 24m 02.84± 0.59s
   43.338 N ± 4.3km     8.227 E ± 4.7km
   DEPTH =  10.0km  (geophysicist)
 CORSICA                            (380)
      ML 3.1 (LDG), 2.7 (GEN).

IMI      0.62 337 P      24 15.75   0.3
                  S      24 22.71
SBF      0.78 313 Pn     24 18.40   0.3
                  Sg     24 27.80
SAOF     0.81 323 Pg     24 18.81   0.2
                  Sg     24 28.50
AURF     0.85 310 Pg     24 19.61   0.3
                  Sg     24 29.88
FIN      0.87 359 P      24 19.22  -0.4
                  S      24 26.85
AUTN     0.88 319 Pg     24 20.02   0.2
                  Sg     24 30.32
MVIF     0.96 306 Pg     24 21.32   0.1
                  Sg     24 32.79
PGF      0.97 144 Pn     24 21.80   0.4
                  Sg     24 33.30
TOUF     0.98 314 Pg     24 22.00   0.4
                  Sg     24 33.55
ROB      0.99 345 P      24 21.64   0.0
                  S      24 30.95
CALN     1.06 294 Pg     24 22.97   0.1
                  Sg     24 35.63
ENR      1.06 327 P      24 23.02   0.1
                  S      24 33.52
STV      1.12 325 P      24 23.89   0.0
                  S      24 34.67
FRF      1.17 282 Pn     24 24.20  -0.5
                  Sg     24 37.80
PCP      1.23  11 P      24 24.53  -1.1
                  S      24 37.07
LMR      1.25 270 Pn     24 25.40  -0.7
                  Sg     24 39.60
LRG      1.37 276 Pn     24 27.50  -0.4
                  Sg     24 43.00
PZZ      1.42 326 P      24 28.71  -0.1
BHB      1.66 336 P      24 30.64  -1.4
RRL      1.89 327 P      24 37.43   1.7X
LSD      2.25 340 P      24 41.40   0.4
LPG      2.40 334 Pn     24 44.00   0.9
                  Sg     25 12.90
LPL      2.43 334 Pn     24 44.30   0.9
     S.D. = 0.6  on  22 of  23 obs.
-----------------------------------
%  NOV  22, 1993  14h 30m 22.90± 0.96s
   15.676 N ± 5.6km    60.934 W ±11.4km
   DEPTH =  10.0km  (geophysicist)
 LEEWARD ISLANDS                    ( 92)
      ML 2.6 (FDF).

MGG      0.44 303 eP     30 32.20   0.3
DEG      0.64 349 eP     30 35.78  -0.1
                  S      30 44.78
DOG      0.75 298 eP     30 37.49  -0.1
PAG      0.80 296 eP     30 38.25  -0.2
                  S      30 48.69
CRM      0.92 179 iPd    30 40.60   0.2
                  S      30 52.80
FDF      0.96 193 iPc    30 41.06  -0.1
                  S      30 53.00
MVM      1.12 178 iPc    30 44.02   0.2
                  S      30 57.60
BIM      1.16 187 eP     30 44.40  -0.2
                  S      30 57.60
     S.D. = 0.2  on   8 of   8 obs.
-----------------------------------
%  NOV  22, 1993  15h 22m 14.30± 0.64s
   44.394 N ± 5.5km     7.401 E ± 5.9km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                     (545)
      ML 1.9 (GEN).

STV      0.16 200 P      22 18.10   0.1
                  S      22 20.39
ENR      0.17 175 P      22 18.14  -0.1
                  S      22 20.20
PZZ      0.24 297 P      22 19.52   0.0
                  S      22 23.54
ROB      0.35 106 P      22 21.48  -0.1
                  S      22 26.93
BHB      0.46 348 P      22 23.63   0.0
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                  S      22 30.09
FIN      0.61 107 P      22 26.70   0.1
     S.D. = 0.1  on   6 of   6 obs.
-----------------------------------
?  NOV  22, 1993  15h 49m 44.82± 2.14s
   26.339 S ±10.9km    27.415 E ±19.5km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA           (584)
      ML 2.7 (PRE).

KSR      0.66 315 eP     49 58.00  -0.1
                  S      50 08.00
BFS      0.79 225 eP     50 00.40  -0.4
                  S      50 10.40
SLR      0.98  53 eP     49 50.90 -13.2X
                  S      50 13.60
SEK      1.99 175 eP     50 19.60   0.0
                  S      50 45.70
SWZ      2.05 245 iPd    50 21.00   0.5
                  S      50 44.40
     S.D. = 0.7  on   4 of   5 obs.
-----------------------------------
?  NOV  22, 1993  15h 55m 19.34± 5.66s
   17.413 S ±25.9km    69.408 W ±49.3km
   DEPTH = 219.6 ± 40.1 km
 PERU-BOLIVIA BORDER REGION         (118)

CNCB     1.49  67 iPd    55 55.80   0.1
LPB      1.53  55 Pd     55 56.20   0.4
LPAZ     1.66  48 Pd     55 56.80  -0.4
CCH      3.13  90 P      56 12.10  -0.2
HJA      6.89 148 ePc    56 58.90   0.0
SIV      8.11  81 P      57 15.10   0.1
     S.D. = 0.4  on   6 of   6 obs.
-----------------------------------
&  NOV  22, 1993  16h 09m 00.00s
   62.312 N          151.271 W
   DEPTH =  85.3km
 CENTRAL ALASKA                     (  1)
      <AEIC>.

SKT      0.35 200 eP     09 12.74  -0.7
                  eS     09 22.72
                  eS     09 22.87
CUT      0.48  78 eP     09 13.57  -0.7
SUA      0.89 163 eP     09 17.82  -0.6
                  eS     09 32.92
PWA      0.93 135 P      09 18.20  -0.6
NCG      1.00 205 eP     09 18.92  -0.9
HUR      1.01  48 iP     09 18.79  -1.0
                  eS     09 33.46
CGLM     1.07 199 eP     09 19.52  -1.0
CRP      1.13 202 eP     09 20.66  -0.7
                  eS     09 37.00
                  eS     09 37.52
CRP      1.13 202 eP     09 20.78  -0.6
                  eS     09 36.88
CP2      1.15 204 eP     09 21.03  -0.6
CKN      1.17 202 eP     09 21.41  -0.4
BGL      1.18 207 eP     09 21.62  -0.3
SPU      1.19 199 eP     09 21.13  -0.9
                  eS     09 38.09
CKT      1.20 202 eP     09 21.33  -0.9
TRF      1.23  21 iP     09 21.69  -0.9
                  eS     09 39.09
GHO      1.23 115 eP     09 21.91  -0.7
PLRM     1.24 125 eP     09 21.60  -1.0
PMR      1.24 125 eP     09 21.60  -1.0
                  eS     09 40.30
KTH      1.26   7 iP     09 21.93  -0.9
BKG      1.33 201 eP     09 22.81  -1.0
PMS      1.34 142 P      09 23.10  -0.9
                  S      09 42.20
SML      1.47 109 eP     09 24.59  -1.0
RND      1.56  44 eP     09 25.53  -1.3
                  eS     09 45.84
NKA      1.57 179 eP     09 28.15   1.3
KNK      1.61 123 eP     09 26.16  -1.3
MCK      1.78  36 eP     09 28.67  -1.0
DFR      1.86 202 eP     09 29.57  -1.2
SLKM     1.88 164 eP     09 30.76  -0.2
SCM      1.92 103 eP     09 29.98  -1.6
DHY      1.95  65 eP     09 30.91  -1.2
REF      1.95 201 eP     09 31.55  -0.6
                  eS     09 55.58
RDW      1.98 203 eP     09 31.48  -1.0
RS2      1.99 202 eP     09 32.05  -0.6
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CFI      2.02 123 eP     09 30.90  -1.9
PWL      2.02 135 eP     09 30.83  -2.1
MPA      2.05 152 eP     09 31.90  -1.3
TTA      2.28 288 P      09 35.00  -1.4
ILIM     2.38 201 eP     09 37.21  -0.7
SEW      2.39 158 eP     09 37.89   0.1
TOA      2.40  93 eP     09 36.90  -1.2
WRH      2.60  32 eP     09 38.84  -1.9
VLZ      2.63 115 eP     09 38.60  -2.6
KLU      2.66 106 eP     09 39.13  -2.6
SDG      2.67  83 eP     09 41.79   0.0
MLY      2.74   5 eP     09 41.30  -1.4
PAX      2.76  74 eP     09 42.35  -0.7
CCB      2.81  32 eP     09 41.64  -2.0
HDA      2.86  41 eP     09 42.56  -1.8
PDB      2.90 211 eP     09 43.27  -1.7
MDM      2.98  26 eP     09 44.29  -1.8
FBA      3.03  29 eP     09 44.90  -1.7
IL1      3.15  37 eP     09 46.37  -2.0
ILB      3.15  37 eP     09 46.36  -2.0
CVA      3.19 121 eP     09 47.94  -0.9
GLB      3.64 101 eP     09 53.24  -1.9
IM3      3.84 345 eP     09 56.00  -1.9
                 eS      10 40.00
IMA      3.92 345 P      09 57.50  -1.6
TGL      4.33 107 eP     10 02.54  -2.4
BC3      4.44  76 eP     10 03.70  -2.6
BALM     4.44 103 eP     10 03.52  -2.9
BM3      5.86  26 eP     10 23.33  -2.7
       61 obs. associated
-----------------------------------
%  NOV  22, 1993  16h 45m 20.03± 0.57s
   38.864 N ± 4.3km   29.975 E ± 7.6km
   DEPTH =   5.0km  (geophysicist)
 TURKEY                              (366)
     ML 3.3 (ISK).

ALT      0.22  29 iPg    45 24.30  -0.2
KHL      0.65 213 iPg    45 33.00   0.0
                 eSg     45 41.50
DST      1.28 306 iPn    45 43.90  -0.4
BCK      1.48 161 ePn    45 47.00  -0.4
IZI      1.52 345 iPn    45 47.80  -0.2
EYL      1.71   5 ePn    45 51.30   0.6
ELL      2.11 181 ePn    45 57.00   0.4
EDC      2.20 313 ePn    45 58.00   0.2
     S.D. = 0.5  on   8 of   8 obs.
-----------------------------------
&  NOV  22, 1993  17h 19m 49.74s
   60.179 N          151.839 W
   DEPTH =  56.2km
 KENAI PENINSULA, ALASKA             ( 14)
     <AEIC>. ML 2.7 (AEIC).

RED      0.52 298 eP     20 01.27  -0.6
                 eS      20 10.81
REF      0.53 306 eP     20 01.40  -0.7
                 eS      20 10.73
                 eS      20 10.99
HOM      0.53 169 eP     20 02.21   0.4
RSO      0.54 302 eP     20 01.56  -0.6
RS2      0.54 302 eP     20 01.56  -0.6
ILIM     0.57 260 eP     20 01.91  -0.5
                 eS      20 11.83
RDW      0.57 303 eP     20 01.84  -0.7
DFR      0.59 315 eP     20 01.86  -0.8
INE      0.62 260 eP     20 02.54  -0.6
NKA      0.64  27 eP     20 04.41   1.3
INW      0.66 261 eP     20 03.09  -0.4
                 eS      20 13.91
CNPM     0.72 155 eP     20 04.19   0.0
                 eS      20 15.58
SLKM     0.87  67 eP     20 05.47  -0.6
OPT      0.88 234 eP     20 06.09  -0.1
                 eS      20 19.28
BKG      0.92 347 eP     20 05.84  -0.9
SPU      1.01 354 eP     20 07.11  -0.9
CKT      1.04 350 eP     20 07.44  -1.0
                 eS      20 21.50
CKN      1.06 351 eP     20 08.13  -0.6
                 eS      20 23.28
CRP      1.10 352 iPd    20 08.37  -1.0
                 eS      20 23.24
CP2      1.11 350 eP     20 08.70  -0.8
                 eS      20 24.13
BGL      1.12 346 eP     20 09.04  -0.5
AUL      1.14 226 eP     20 09.55  -0.1
CGLM     1.14 356 eP     20 08.93  -0.8
AUH      1.15 225 eP     20 10.00   0.1
AUW      1.16 226 eP     20 09.77  -0.2
SEW      1.20  93 eP     20 11.01   0.5
PDB      1.25 253 eP     20 09.63  -1.5
MPA      1.27  75 eP     20 11.58   0.1
SUA      1.40  22 eP     20 12.82  -0.6
                 eS      20 31.57
PMS      1.55  45 P      20 15.50   0.1
CDD      1.55 217 eP     20 14.86  -0.6
                 eS      20 35.61
SYI      1.60 190 eP     20 15.90  -0.1
MCNL     1.61 233 eP     20 15.03  -1.2
PWA      1.76  32 P      20 18.30   0.0
SKT      1.81   5 eP     20 18.11  -1.0
                 eS      20 41.18
PWL      1.86  67 eP     20 18.38  -1.4
                 eS      20 40.85
PLRM     1.94  42 eP     20 19.51  -1.3
PMR      1.94  42 ePn    20 19.25  -1.6
LTI      2.00  92 eP     20 19.96  -1.7
KNK      2.07  52 eP     20 21.41  -1.3
GHO      2.14  40 eP     20 22.50  -1.2
CFI      2.24  62 eP     20 23.06  -2.0
CUT      2.36  18 eP     20 24.95  -1.8
SML      2.36  45 eP     20 25.41  -1.5
SCM      2.75  51 eP     20 30.80  -1.6
VLZ      2.88  68 eP     20 31.68  -2.4
KLU      3.18  63 eP     20 36.21  -2.3
TOA      3.36  52 P      20 39.50  -1.5
TRF      3.37  12 eP     20 40.56  -0.6
KTH      3.41   7 eP     20 40.94  -0.8
IL1      5.15  24 eP     21 03.48  -2.6
       51 obs. associated
-----------------------------------
%  NOV  22, 1993  17h 26m 32.45± 0.91s
   26.860 S ± 8.1km   26.713 E ±15.4km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA            (584)
     ML 2.8 (PRE).

KSR      1.00   9 eP     26 52.00  -0.1
                 S       27 04.50
SEK      1.67 151 eP     27 03.00   0.4
                 S       27 24.00
SLR      1.80  52 eP     27 04.50   0.0
                 S       27 28.00
BOSA     2.09 213 eP     27 09.30   0.7
                 S       27 35.00
BLF      2.29 192 eP     27 10.50  -1.1
                 S       27 38.00
     S.D. = 1.0  on   5 of   5 obs.
-----------------------------------
?  NOV  22, 1993  17h 31m 19.13± 2.01s
   41.211 N ±15.7km   23.148 E ± 7.0km
   DEPTH =   5.0km  (geophysicist)
 GREECE-BULGARIA BORDER REGION       (363)
     ML 1.8 (THE).

SRS      0.35 105 ePg    31 26.10  -0.1
                 eSg     31 30.78
SOH      0.42 158 ePg    31 27.74   0.2
                 eSg     31 32.50
THE      0.59 194 ePg    31 30.86  -0.2
                 eSg     31 38.94
GRG      0.62 246 ePg    31 31.58   0.1
                 eSg     31 40.06
     S.D. = 0.3  on   4 of   4 obs.
-----------------------------------
   NOV  22, 1993  17h 49m 40.50± 0.64s
   17.854 S ±12.1km  178.716 W ± 8.6km
   DEPTH = 613.4 ±  7.3 km
   4.8mb ( 30 obs.)
 FIJI ISLANDS REGION                 (181)

VUN      2.69 266 iPd    50 58.40  -1.1
AFI      7.74  61 eP     51 24.00 -14.4X
BKM     12.43 269 iPc    52 26.00   2.7
                 iS      54 47.50
BRS     27.92 245 iPd    54 46.00   0.5
        1.0s    13.00nm          4.5mb
ARMA    29.72 240 iPd    55 01.10   0.2
        0.4s    16.00nm          5.0mb
CTA     33.17 260 iPd    55 31.00   1.1
        1.0s    60.00nm          5.2mb
CNB     33.23 232 iPd    55 31.10   0.8
        0.6s    74.00nm          5.5mb
CAN     33.50 232 iPd    55 32.80   0.2
PMG     34.16 280 iPd    55 40.50   2.3X
        1.0s   200.00nm          5.7mb
STK     38.40 241 iPd    56 05.70  -7.1X
        1.1s    24.30nm          4.6mb
DHH     43.95  29 eP     56 55.40  -1.2
WRA     44.35 260 iPc    56 59.80  -0.1
        0.7s    31.30nm          4.9mb
                 eS      02 52.20
MTN     48.51 268 iPd    57 31.80   0.3
FORT    49.77 245 iPd    57 39.80  -0.7
KNA     50.19 264 iPd    57 44.00   0.2
        0.3s    27.00nm          5.2mb
WARB    51.02 250 iPd    57 49.90   0.1
        0.4s    27.00nm          5.0mb
COOL    55.71 244 iPd    58 21.60  -1.3
        0.3s     9.00nm          4.6mb
MBL     57.71 256 iPd    58 36.10  -0.4
        0.3s    17.00nm          4.8mb
MEEK    58.18 249 iPd    58 38.80  -0.9
KLB     58.59 244 iPd    58 41.20  -1.1
BAL     59.54 245 iPd    58 47.60  -1.0
MUN     59.89 243 eP     58 50.50  -0.4
MRWA    60.26 246 eP     58 52.80  -0.6
        0.8s    14.00nm          4.3mb
NANU    61.46 254 iPd    59 01.50   0.3
MAT     67.69 324 (P)    59 40.00   0.2
        0.7s     4.79nm          4.1mb
ADK     69.46   1 eP     59 49.10  -0.9
        0.6s    10.47nm          4.5mb
STAN    76.47  43 ePc    00 30.44   0.4
        1.1s    80.00nm          5.1mb
SAO     76.59  44 eP     00 30.81   0.1
        0.8s    26.66nm          4.8mb
BCH     76.63  46 ePc    00 31.34   0.3
BKS     76.71  43 ePc    00 31.54   0.3
        1.4s    70.00nm          5.0mb
COE     76.72  43 eP     00 31.55   0.2
MHC     76.79  43 iPc    00 32.14   0.2
        1.0s    30.00nm          4.7mb
ARN     76.86  43 eP     00 31.59  -0.6
ABL     77.04  47 ePc    00 33.30  -0.1
PLM     77.92  49 eP     00 37.82  -0.3
PEC     77.98  48 eP     00 37.80  -0.4
        1.0s    20.34nm          4.5mb
ISA     77.99  46 ePc    00 38.39   0.1
        0.7s    19.96nm          4.7mb
CMB     78.00  43 ePc    00 38.15  -0.1
        1.1s    30.00nm          4.7mb
WDC     78.09  40 ePc    00 38.75   0.2
        1.8s    70.00nm          4.8mb
LGPM    78.11  40 ePc    00 39.26   0.4
ORV     78.14  42 iPc    00 38.94   0.0
        1.3s    30.00nm          4.6mb
YBH     78.67  39 iPc    00 42.36   0.7
        1.0s    30.00nm          4.7mb
MTUM    78.83  45 eP     00 43.03   0.2
GSC     78.96  47 ePc    00 43.16  -0.2
GLA     79.24  50 eP     00 44.68  -0.2
BONR    79.33  44 eP     00 45.76   0.2
KVN     80.06  44 ePc    00 49.11   0.0
VIPM    81.53  38 P      00 56.51   0.0
SHW     81.59  36 eP     00 57.23   0.5
REMW    81.63  36 P      00 57.34   0.3
TDL     81.70  36 P      00 57.35   0.1
TUC     81.90  52 eP     01 00.29   1.8
ASR     81.93  36 P      00 58.24  -0.1
HDW     82.02  34 P      00 59.34   0.6
GL2     82.25  37 P      01 00.11   0.2
FMW     82.35  35 P      01 00.64   0.1
GSM     82.44  35 P      01 01.06   0.2
JBO     82.53  37 P      01 00.97  -0.3
RMW     82.59  35 ePc    01 01.77   0.2
PMR     82.62  14 ePc    01 00.75  -0.5
        0.4s    21.75nm          5.1mb
RSW     83.20  37 P      01 05.06   0.4
KLU     83.30  15 (P)    01 03.39  -1.5
ETW     83.48  35 P      01 06.02  -0.1
WTV     83.74  36 P      01 06.67  -0.6
MSU     83.77  46 eP     01 08.49   0.6
BALM    83.85  17 ePc    01 07.21  -0.4
DPW     84.82  36 ePc    01 12.40  -0.1
HVU     84.94  43 ePc    01 13.55   0.1
SRU     85.19  46 ePc    01 14.58  -0.1
FBA     85.82  13 ePc    01 16.16  -0.7
        0.5s     9.65nm          4.8mb
PV09    85.88  47 ePc    01 18.13   0.0
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22d 18h

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                 epP   03 25.28 590kmX
LRM   87.12  40 ePc   01 23.80   0.0
GLD   89.17  48 ePd   01 34.57   1.3
      0.8s    34.58nm          5.3mb
RSSD  91.73  44 eP    01 44.61  -0.4
      0.8s    12.72nm          5.0mb
INK   91.91  15 eP    01 45.00  -0.1
      0.9s     4.00nm          4.4mb
YKA   94.40  25 eP    01 56.00  -0.6
      0.5s     2.20nm          4.6mb
HFS  136.83 351 ePKP  07 43.60 -12.0X
      0.3s     0.60nm
WIM  143.49   6 ePKPc 08 06.00  -1.6
DCN  143.96   9 ePKP  08 07.50  -0.9
DLF  144.11   8 ePKP  08 08.10  -0.5
WME  144.26   6 ePKP  08 08.00  -0.9
YRC  144.38   6 ePKPc 08 08.80  -0.3
YRH  144.79   6 ePKPc 08 09.80   0.0
WIT  144.86 354 ePKP  08 12.00   2.1X
KSP  144.97 343 iPKPc 08 11.90   1.7
      0.6s    28.00nm
CLL  145.34 347 iPKPc 08 12.40   1.6
      1.0s    42.00nm
BRG  145.54 346 iPKP  08 13.20   2.1X
      0.8s    24.00nm
WTS  145.65 354 ePKP  08 13.00   1.8
      0.9s    27.40nm
PRU  146.22 345 iPKPc 08 15.00   2.8X
      0.5s    11.30nm
                e     08 39.20
MOX  146.26 348 ePKP  08 15.10   2.8X
      1.5s    20.00nm
ENN  146.95 355 iPKPc 08 16.50   3.1X
      0.8s     8.90nm
                e     08 20.00
ZST  147.10 340 iPKP  08 17.40   3.7X
                e     32 20.10
MEM  147.10 354 iPKPc 08 17.11   3.5X
      1.1s     6.30nm
GRF  147.24 348 iPKPc 08 18.40   4.5X
KHC  147.25 345 PKP   08 14.50   0.5
      1.0s    10.50nm
                i     08 18.40
                e     08 22.50
                e     09 08.00
GEC2 147.48 345 e(PKP)08 18.60   4.2X
      0.5s     9.80nm
DOU  147.73 356 iPKP  08 19.10   4.5X
WLF  148.03 354 iPKPc 08 20.15   5.1X
FUR  148.68 347 iPKPc 08 21.70   5.5X
                i     08 28.70
CDF  149.13 352 ePKP  08 22.60   5.6X
      0.5s     7.45nm
FLN  149.14   2 iPKPc 08 22.10   5.3X
      0.5s    11.80nm
LDF  149.32   2 iPKPc 08 22.40   5.3X
      0.4s     8.30nm
WATA 149.40 346 iPKP  08 22.90   5.4X
WTTA 149.46 346 iPKPd 08 17.60   0.0
      0.5s    19.00nm
                i     08 23.30
GRR  149.49   3 iPKPc 08 23.10   5.7X
      0.5s    15.00nm
MOTA 149.50 347 iPKPd 08 17.50  -0.2
                i     08 23.00
                i     08 31.30
SQTA 149.59 347 iPKP  08 23.40   5.6X
      0.5s    10.50nm
HAU  149.64 353 iPKPc 08 23.60   5.9X
      0.5s     9.55nm
BSF  149.76 353 iPKPc 08 23.90   5.9X
      0.7s     9.15nm
LPF  149.84   3 iPKPc 08 23.90   6.0X
      0.4s    16.75nm
VBY  150.07 340 iPKP  08 24.80   6.4X
LOR  150.59 356 iPKPc 08 25.90   6.8X
      0.5s    14.15nm
HYF  150.64 358 iPKPc 08 26.30   7.1X
SSF  150.81 357 iPKPc 08 26.50   7.1X
      0.4s     8.80nm
LBF  150.86 356 iPKPc 08 26.40   6.8X
      0.5s     5.05nm
AVF  151.09 357 iPKPc 08 26.60   6.8X
      0.5s     3.05nm
SMF  151.21 356 ePKP  08 26.90   6.8X
MFF  151.31   2 iPKPc 08 27.20   7.0X
      0.5s     7.60nm
BGF  151.35 358 iPKPc 08 27.50   7.3X
      0.5s     7.50nm
TCF  151.64 359 ePKP  08 28.00   7.3X
      0.8s     8.85nm
LSF  151.68 360 iPKPc 08 27.90   7.2X
      0.5s     6.25nm
MAF  151.69 358 ePKP  08 28.50   7.7X
LPL  152.05 352 ePKP  08 30.00   8.4X
      0.7s     3.30nm
LPG  152.06 352 ePKP  08 30.10   8.4X
      0.6s     2.80nm
RJF  152.63 360 ePKP  08 30.30   8.2X
CAF  153.00 359 ePKP  08 31.30   8.6X
LPO  153.25   0 ePKP  08 31.60   8.6X
      0.3s     1.75nm
     S.D. = 0.7  on  85 of 127 obs.
-----------------------------------
   NOV  22, 1993  18h 58m 47.08± 0.27s
   36.263 N ± 4.3km  137.048 E ± 3.2km
   DEPTH =  10.0km  (geophysicist)
   4.1mb (  3 obs.)
 EASTERN HONSHU, JAPAN            (227)

MTMJ    0.69  62 iP+   59 00.10  -0.7
MAT     0.98  73 iPd   59 05.60  -0.1
                iS     59 19.20
IIDJ    1.05 138 iPd   59 07.00   0.1
                S      59 22.10
TSRJ    1.13 230 iP+   59 07.80  -0.4
                eS     59 22.80
CHJJ    1.59  97 iPd   59 16.20   0.9
                eS     59 39.50
NIIJ    1.85  58 P     59 19.20   0.1
                S      59 45.40
WKYJ    2.36 211 P     59 26.20  -0.3
                S      59 55.30
KAKJ    2.53  90 iPd   59 28.80   0.0
YAMJ    3.05  50 eP    59 36.50   0.2
YONJ    3.11 251 P     59 36.50  -0.5
TKSJ    3.35 228 P     59 39.90  -0.6
OFUJ    4.62  51 eP    59 59.20   0.7
AOMJ    5.02  30 eP    00 03.90  -0.3
SHNJ    5.31 248 eP    00 09.40   1.1
KUMJ    6.34 236 eP    00 23.30   0.4
MRRJ    6.90  26 eP    00 30.30  -0.3
KAGJ    7.21 227 eP    00 34.60  -0.4
HOOJ    7.79  36 eP    00 46.00   2.9X
ASAJ    8.94  27 eP    00 58.50  -0.6
TIY    19.71 282 eP    03 20.20   0.6
     Z  14s     0.48um
HHC    20.42 291 P     03 26.50  -0.6
XAN    23.07 273 P     03 55.00   1.2
       1.0s     4.50nm          4.0mb
                pP     04 01.50  23kmX
                sP     04 05.00
LZH    26.73 280 eP    04 24.00  -4.7X
       1.0s    29.00nm          4.9mb
                pP     04 33.00  32kmX
GYA    27.63 258 P     04 41.40   4.5X
WRA    55.96 183 P     08 27.40  -0.4
       0.6s     0.70nm          3.9mb
     S.D. = 0.6  on  22 of  25 obs.
-----------------------------------
%  NOV  22, 1993  18h 59m 13.50± 0.67s
   26.410 S ± 6.3km   27.405 E ± 7.3km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA         (584)
      ML 2.2 (PRE).

KSR     0.71 320 eP    59 27.90   0.2
                S      59 35.50
SLR     1.04  50 eP    59 33.00  -0.6
                S      59 45.50
SEK     1.92 174 eP    59 47.50   0.2
                S      00 12.00
BFT     2.48  74 eP    59 56.00   0.6
                S      00 26.50
BOSA    2.82 218 eP    59 59.90  -0.1
                S      00 32.20
BLF     2.90 202 eP    00 01.00  -0.3
                S      00 34.00
     S.D. = 0.6  on   6 of   6 obs.
-----------------------------------
&  NOV  22, 1993  19h 31m 17.50s
   61.465 N          141.630 W
   DEPTH =   0.0km
 SOUTHERN ALASKA                (  2)
      <AEIC>. ML 3.9 (AEIC), 4.0
      (PMR).

CTGM    0.52 164 iP    31 27.33  -0.6
BALM    0.55 219 iP    31 28.95   0.4
                eS     31 37.73
TGL     0.92 220 iP    31 35.56  -0.3
                eS     31 49.13
GLB     1.05 270 eP    31 36.37  -1.9
                eS     31 52.18
                eS     31 52.22
WAX     1.18 211 iP    31 39.75  -0.8
CHX     1.43 170 eP    31 44.53  -0.2
WRG     1.45 188 eP    31 45.53   0.6
                eS     32 06.66
CYK     1.45 197 eP    31 45.68   0.7
                eS     32 07.00
PCA     1.53 153 eP    31 45.34  -0.9
                eS     32 06.94
BC3     1.61 357 eP    31 44.71  -2.6
                eS     32 06.73
HMT     1.71 230 eP    31 48.31  -0.5
BCPM    1.81 146 eP    31 49.70  -0.4
TZL     1.90 290 eP    31 52.71   1.3
TMW     1.97 342 eP    31 50.37  -2.2
                eS     32 15.46
KLU     2.06 273 eP    31 53.87   0.0
                eS     32 23.38
PNL     2.11 148 eP    31 54.33  -0.3
SDG     2.13 302 eP    31 54.16  -0.7
YKU     2.14 153 P     31 54.50  -0.4
CVA     2.21 247 eP    31 56.63   0.7
TOA     2.25 289 P     31 56.90   0.3
VLZ     2.29 264 eP    31 56.89  -0.3
PAX     2.35 312 eP    31 58.00  -0.1
FID     2.46 255 P     32 01.70   2.1
DOT     2.46 334 eP    31 57.40  -2.3
HIN     2.61 248 eP    32 02.78   1.1
CFI     2.97 267 eP    32 04.58  -2.2
MID     3.10 231 e(P)  32 05.90  -2.7
DHY     3.13 304 eP    32 11.30   2.1
SML     3.22 279 eP    32 10.62   0.3
PWL     3.31 262 eP    32 12.11   0.5
LTI     3.37 248 eP    32 12.70   0.2
GHO     3.50 278 eP    32 14.79   0.4
PLRM    3.59 275 eP    32 14.58  -1.0
PMR     3.59 275 eP    32 15.11  -0.5
HDA     3.82 323 eP    32 16.50  -2.5
PMS     3.83 270 P     32 19.60   0.6
MPA     3.89 259 eP    32 18.84  -1.0
PWA     3.95 276 P     32 21.20   0.5
SEW     4.07 254 eP    32 21.46  -0.9
MCK     4.07 307 eP    32 23.17   0.7
IL1     4.09 327 eP    32 19.30  -3.3
ILB     4.09 327 eP    32 19.30  -3.3
SLKM    4.29 261 eP    32 25.46  -0.1
FBA     4.44 324 (P)   32 28.97   1.4
CRP     5.07 272 (P)   32 37.30   0.6
CNPM    5.13 252 eP    32 36.96  -0.5
FYU     5.36 344 eP    32 37.67  -3.0
SIT     5.48 141 (P)   32 40.82  -1.5
BM3     6.12 349 eP    32 47.47  -3.9
TTA     6.89 289 (P)   32 58.34  -3.9
IM3     7.03 315 eP    33 01.04  -3.1
IMA     7.05 316 eP    33 02.38  -2.3
INK     7.68  23 eP    33 08.00  -5.2
      53 obs. associated
-----------------------------------
?  NOV  22, 1993  21h 43m 58.54± 3.29s
   35.246 N ±26.4km   21.430 E ±22.2km
   DEPTH =  10.0km  (geophysicist)
 CENTRAL MEDITERRANEAN SEA        (400)
      ML 4.0 (ATH).

VLI     1.91  39 ePb   44 30.30  -1.1
                eSn    44 50.00
VAM     2.27  85 ePn   44 36.60  -0.1
                eSg    45 06.60
ATH     3.28  33 ePb   44 52.50   1.5
NPS     3.42  89 ePn   44 53.00   0.0
KZN     5.06   3 ePn   45 17.40   1.1
OHR     5.88 355 ePn   45 28.20   0.4
VAY     6.13   8 ePn   45 28.60  -2.7X
SKO     6.72   0 ePn   45 37.50  -2.1
HFS    25.40 351 eP    49 27.70   0.3
     S.D. = 1.4  on   8 of   9 obs.
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```

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*  NOV  22, 1993  21h 55m 48.33± 1.40s
   32.393 S ± 7.2km   71.724 W ±12.1km
   DEPTH =  10.0km  (geophysicist)
 NEAR COAST OF CENTRAL CHILE      (135)
      MD 3.9 (SAN).

ROCH     0.83 134 iPd    56 04.82   0.2
                 iS     56 19.69
JACH     1.00 107 iP+    56 06.87  -0.4
                 iS     56 22.73
LCCH     1.09 173 iPd    56 08.20  -0.6
                 iS     56 26.24
PEL      1.15 131 iP+    56 09.93   0.0
                 iS     56 28.79
TACH     1.42 153 iP+    56 14.38   0.2
                 iS     56 36.26
FCH      1.52 128 iPd    56 15.63  -0.3
                 iS     56 38.90
LNV      1.58 171 eP     56 16.31  -0.1
                 iS     56 40.70
PCH      1.59 141 iPd    56 17.17   0.5
                 iS     56 41.82
CACH     1.96 152 iP     56 22.55   0.5
                 iS     56 53.00
MDZ      2.47 102 iP     56 36.80   7.4X
RTRS     2.94  42 eP     56 36.00   0.0
                 S      57 15.00
      S.D. = 0.4  on  10 of  11 obs.
-----------------------------------
&  NOV  22, 1993  22h 03m 01.30s
   42.289 N          122.019 W
   DEPTH =   2.9km
 OREGON                            ( 32)
      <SEA-P>. MD 2.6 (SEA). ML 3.2
      (GS).

LAB      0.04 237 Pc     03 02.72   0.3
VRC      0.15 288 Pc     03 05.00   0.6
HAMO     0.22 171 P      03 06.05   0.2
LHEM     0.68 193 P      03 14.11  -0.7
LGMM     0.70 169 P      03 14.68  -0.7
LASM     0.76 154 P      03 15.80  -0.8
BBOR     0.77 321 Pd     03 15.64  -1.1
LMPM     0.81 188 P      03 16.50  -0.9
LBFM     0.95 174 ePd    03 18.81  -1.4
LGBM     0.95 188 P      03 19.10  -1.2
DBO      1.23 313 P      03 24.00  -0.8
LBKM     1.30 202 P      03 24.45  -1.6
KSXM     1.46 252 P      03 27.07  -1.6
HSO      1.47 328 P      03 27.90  -0.9
KOMM     1.47 227 P      03 26.96  -1.9
LGPM     1.50 204 eP     03 27.01  -2.3
                 eS     03 45.92
NCOR     1.55  24 P      03 30.01  -0.1
HBO      1.57 352 P      03 30.04  -0.3
WDC      1.75 193 eP     03 31.70  -1.1
LMEM     1.78 169 eP     03 31.09  -2.3
RNO      2.05 323 P      03 38.36   1.1
FBO      2.06 349 P      03 38.46   1.1
MPOR     2.48 334 P      03 44.10   0.7
ORV      2.76 172 (P)    03 46.32  -1.0
GT2      2.87 356 P      03 50.16   1.3
SHW      3.91 358 eP     04 01.12  -2.5
       26 obs. associated
-----------------------------------
   NOV  22, 1993  22h 34m 01.49± 0.40s
   10.332 N ± 5.0km  126.440 E ± 8.4km
   DEPTH =  42.8km  (  4 depth phases)
   4.7mb ( 17 obs.)
 PHILIPPINE ISLANDS REGION        (248)

PLP      1.66 300 ePd    34 29.00   0.4
                 iS     34 47.00
BIP      2.10 185 iPd    34 34.00  -0.9
                 iS     34 58.50
MAP      2.42 270 iPd    34 41.50   2.0
                 iS     35 14.00
DAV      3.33 195 eP     34 58.00   5.5X
CTB      3.82 216 ePd    35 13.00  13.7X
GQP      5.28 313 eP     35 20.00   0.0
PGP      6.23 301 eP     35 33.00  -0.3
BAG      8.31 317 ePd    36 01.00  -1.5
SSE     21.23 347 Pc     38 46.50   0.5
        1.0s     6.00nm          3.9mb
NJ2     22.72 343 Pc     39 02.50   1.7
        1.0s    21.00nm          4.5mb
WHN     23.04 333 P      39 05.00   1.0
        1.0s    30.00nm          4.7mb
                 pP     39 17.00  48km
GYA     24.63 313 P      39 18.40  -1.2
      Z  16s     0.61um          4.2MszX
IPM     25.83 259 ePd    39 31.70   0.9
        0.9s    30.40nm          4.9mb
XAN     28.54 328 P      39 54.50  -0.9
        1.0s    11.00nm          4.5mb
                 pP     40 06.50  46km
                 sP     40 13.00
CD2     29.38 317 eP     40 01.50  -1.5
TIY     30.03 337 eP     40 09.30   0.5
WRA     31.07 165 eP     40 17.40  -0.6
        0.5s     1.00nm          3.8mb
MBL     31.96 192 eP     40 25.00  -0.8
        0.4s     6.00nm          4.8mb
LZH     32.82 325 eP     40 32.50  -0.9
        1.2s    25.00nm          4.9mb
                 pP     40 42.50  35km
HHC     33.12 339 eP     40 36.60   0.8
ASPA    34.57 168 eP     40 49.70   1.3
        0.7s     5.00nm          4.6mb
CTA     35.98 147 eP     41 01.00   0.6
SHL     36.06 299 eP     41 02.50   1.2
WARB    36.30 180 eP     41 03.00   0.0
        0.4s    13.00nm          5.2mb
GTA     37.43 325 P      41 12.60   0.0
        0.8s     5.00nm          4.5mb
                 pP     41 24.20  42km
MEEK    37.53 192 eP     41 13.20  -0.2
        0.4s    11.00nm          5.1mb
LSA     38.13 305 P      41 19.00   0.0
MRWA    40.59 194 eP     41 38.70  -0.1
        0.3s     9.00nm          5.0mb
FORT    40.90 178 eP     41 42.20   0.9
        0.4s    15.00nm          5.1mb
BAL     41.76 193 eP     41 48.00  -0.4
STK     44.41 161 eP     42 01.10  -8.8X
        1.6s     3.00nm          3.8mb
HYB     46.92 284 eP     42 30.00  -0.2
GBA     47.99 279 P      42 37.00  -1.5
POO     51.43 285 eP     43 05.00   0.1
NUR     86.83 331 iP     46 43.00   0.5
DAG     90.73 352 eP     47 01.00   0.2
HFS     92.07 332 eP     47 06.00  -1.2
        0.5s     2.10nm          4.8mb
NB2     92.78 334 P      47 09.90  -0.6
        0.7s     2.20nm          4.7mb
OCO    118.37  40 iPdiff48 50.50 -15.2X
      S.D. = 0.9  on  35 of  39 obs.
-----------------------------------
   NOV  22, 1993  22h 43m 26.41± 0.14s
   11.743 N ± 2.9km   86.135 W ± 2.9km
   DEPTH = 108.1km  ( 38 depth phases)
   5.2mb ( 96 obs.)
 NEAR COAST OF NICARAGUA          ( 74)
      Mw 5.9 (HRV). mb 5.8 (BRK).
      Mo=1.6*10**18 Nm (PPT). One
      person died from possible heart
      attack during the earthquake.
      Felt (V) in the
      Cosiguina-Tipitapa-Rivas area,
      (IV) at Las Banderas and Los
      Zarzales and (III) at Sapoa.
      CENTROID, MOMENT TENSOR    (HRV)
      Data Used: GDSN
      L.P.B.: 49S, **C
      Centroid Location:
      Origin Time       22:43:30.7 0.1
      Lat 11.60N 0.01 Lon  86.48W 0.02
      Dep 106.4 0.9 Half-duration  2.3
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 1.18 0.09  Mtt=-3.06 0.15
        Mff= 1.88 0.18  Mrt= 6.52 0.09
        Mrf=-5.70 0.10  Mtf=-1.82 0.14
       Principal Axes:
        T  Val=  9.99  Plg=44  Azm= 54
        N       -1.75      19      304
        P       -8.25      40      198
      Best Double Couple:Mo=9.1*10**17
       NP1:Strike=221 Dip=19 Slip=   6
       NP2:        125     88      109

SSN      0.52 148 iPd    43 43.19  -0.2
PYT      0.78   5 iPd    43 47.65   2.0
PYN      1.08 306 iPc    43 48.15  -0.4
JUD      1.67 160 iPd    43 55.20  -0.5
VCR      1.68 163 iPd    43 54.86  -1.0
JTS      1.85 141 iPd    43 58.70   0.8
VACR     1.91 131 ePd    43 59.80   1.2
JCR      2.13 152 iPd    44 01.43  -0.2
                 eS     44 23.95
CAO      2.27 153 iPd    44 02.80  -0.5
POA2     2.42 130 iPd    44 06.40   0.8
SJS      2.72 131 ePc    44 11.02   1.6
IRZ2     2.82 129 iPd    44 12.20   1.2
OCM      2.82 130 iPd    44 11.80   1.0
ICR      2.86 128 eP     44 13.18   1.5
VTU      2.89 126 eP+    44 13.20   1.1
QCR      3.01 140 eP     44 14.14   0.9
CDM      3.19 133 eP+    44 17.50   1.4
BUS      3.19 133 eP     44 18.35   2.2
ACR      4.24 136 ePd    44 31.04   1.0
                 eS     45 11.56
BRU      4.57 129 eP     44 36.92   2.0
                 eS     45 32.98
DVD      4.89 132 eP     44 40.54   1.6
                 eS     45 37.17
TPX      6.74 298 iP     45 04.50   0.1
                 iS     45 55.00
ECO      6.76 110 iPc    45 06.40   1.7
                 eS     46 27.36
UPA      7.05 112 ePc    45 10.60   2.0
                 iS     46 31.77
SPJ     10.36  52 iPd    45 57.67   4.2X
                 S      49 36.49
PCJ     10.52  54 iPd    45 59.85   4.2X
                 S      49 40.35
BBJ     10.81  51 iPd    46 04.72   5.2X
                 S      49 57.39
STH     10.99  54 iPd    46 06.70   4.9X
                 S      50 02.59
HOJ     11.00  54 iPd    46 07.97   6.1X
GWJ     11.05  54 iPd    46 08.14   5.4X
                 S      50 02.32
LVVM    12.71 310 eP     46 25.00   0.5
IISM    13.01 305 eP     46 28.50   0.1
PSO     13.65 140 eP     46 40.00   2.9X
BMG     13.69 109 iPc    46 39.00   1.6
BOG     13.88 120 iPc    46 45.00   5.0X
                 iS     49 22.00
PPM     14.07 303 iP     46 44.00   1.4
                 eS     49 25.00
ACX     14.24 293 iP     46 46.00   1.7
III     14.46 299 eP     46 48.50   1.1
UNM     14.66 303 eP     46 51.50   1.6
SDV     15.51  99 ePc    47 02.10   1.4
TOV     16.17  95 ePc    47 11.20   2.4X
                 iPP    47 11.30
MORO    17.50  91 iPd    47 26.20   1.0
CEOS    17.71  97 iPd    47 28.20   0.4
CAR     18.89  92 iPd    47 40.00  -1.3
LLAV    19.01  92 iP     47 38.80  -3.8X
OLLA    19.06  93 eP     47 41.60  -1.6
MGP     19.42  69 P      47 48.90   2.0
PORP    19.85  69 P      47 52.80   1.5
APR     19.88  68 P      47 53.70   2.1
CLLP    19.91  69 P      47 54.00   2.1
SJG     20.31  69 ePc    47 57.03   1.0
        1.7s  1824.06nm          6.1mb
CPD     20.51  70 P      47 59.50   1.4
HBF     21.74  13 ePc    48 13.81   3.6X
                 pP     48 35.13 102km
SGS     21.96  13 eP     48 15.94   3.6X
PRM     22.50   8 eP     48 20.75   3.1X
OXF     22.86 353 eP     48 22.84   1.7
        1.0s   968.65nm          6.1mb
JSC     22.87  10 eP     48 24.80   3.6X
LHS     23.15  11 eP     48 27.18   3.3X
                 pP     48 49.09 102km
MYNC    23.30   4 eP     48 28.53   3.1X
        1.3s   348.79nm          5.6mb
MIAR    23.69 345 eP     48 30.10   0.9
        0.7s   105.32nm          5.4mb
LTX     23.94 320 eP     48 31.19  -0.6
BPA     24.09  75 eP     48 30.00  -3.2X
PAG     24.11  77 eP     48 33.00  -0.5
TRN     24.28  90 eP     48 34.31  -0.8
SVB     24.34  84 eP     48 37.69   2.1
FDF     24.50  80 eP     48 38.25   1.1
SLB     24.56  82 eP     48 39.04   1.3
MVM     24.73  81 eP     48 40.87   1.5
DEG     24.74  77 eP     48 35.00  -4.4X
CEH     24.87  14 eP     48 42.76   2.3
```

22d 22h

LST	24.88	353	eP	48	41.69	1.1				pP	50	52.87	106km	WAH2	44.86	328	P	51	31.16	-0.4
			pP	49	05.03	109km	SIV	37.07	137	P	50	27.20	-0.8	MDW	44.88	327	P	51	31.01	-0.6
NNA	25.32	158	eP	48	39.50	-5.3X	ISA	37.71	315	ePc	50	34.67	1.5	DPW	44.90	330	ePc	51	31.33	-0.6
	1.2s	39.06nm			4.8mb			1.2s	36.96nm			5.2mb		VBEM	44.92	324	P	51	32.29	0.1
			i	48	46.00	23kmX	ABL	37.83	313	eP	50	35.01	0.6	MXC	45.14	327	P	51	33.94	0.2
FNO	25.55	338	iPd	48	45.90	-0.8	HVU	37.91	327	eP	50	34.80	-0.2	SSOR	45.31	324	P	51	34.43	-0.8
ELC	25.58	354	eP	48	47.28	0.2	CBM	38.23	20	ePd	50	38.82	1.5	SAW	45.39	329	P	51	35.35	-0.4
TUL	25.60	342	iPd	48	47.00	-0.2		1.4s	317.15nm			6.0mb		EBG	45.49	327	P	51	37.02	0.4
WMOK	25.62	335	eP	48	47.40	0.0				pP	51	03.39	107km	RNO	45.53	322	P	51	37.29	0.3
	1.1s	486.68nm			5.9mb		LMN	38.54	24	ePd	50	41.50	1.6	ASR	45.58	326	P	51	37.80	0.4
BLA	25.87	10	eP	48	52.22	2.4X				pP	51	06.50	109km	TBM	45.67	327	P	51	38.09	0.1
	1.3s	496.51nm			5.9mb		BCH	38.61	313	eP	50	41.46	0.7	WTV	45.68	328	P	51	37.27	-0.7
NAV	25.91	10	eP	48	52.17	2.0	PHAM	39.15	314	ePc	50	46.46	1.3	SHW	45.96	325	ePc	51	41.05	0.6
CCM	26.60	351	ePc	48	56.75	0.4	ULM	39.22	350	eP	50	46.50	1.0	RTLL	46.06	159	ePc	51	41.70	0.5
	1.1s	367.21nm			5.8mb					pP	51	04.00	71kmX	LON	46.06	326	ePc	51	40.71	-0.4
			epP	49	20.40	109km	YJA	39.31	149	ePc	50	48.00	0.9	RTCB	46.09	159	eP	51	42.10	0.6
			esP	49	32.88		HJA	40.23	150	ePc	50	56.40	2.3	FMW	46.10	326	P	51	41.58	0.0
CVL	27.02	13	iPd	49	02.09	2.0	CMB	40.24	317	iPc	50	54.70	0.5	KMOR	46.35	324	P	51	43.13	-0.3
ACO	27.47	337	iPc	49	04.30	0.0		1.3s	40.00nm			5.1mb		CFA	46.39	159	ePd	51	44.00	0.2
CBN	27.49	15	iPc	49	07.30	2.9		Z 19s	1.10um			4.7Msz		RMW	46.50	327	ePc	51	43.57	-1.0
	1.0s	180.00nm			5.6mb					iS	56	59.31					epP	52	08.51	106km
MCWV	28.36	10	eP	49	13.81	1.6				eSS	00	15.31		RTCV	46.52	159	eP	51	45.00	0.2
	0.8s	269.30nm			5.9mb					eLQ	00	55.31		BDFB	46.52	125	ePc	51	42.72	-2.4
ALQ	29.57	325	ePc	49	23.45	0.1	SAO	40.34	314	ePc	50	55.70	0.8		1.0s	193.31nm				5.9mb
	0.7s	43.82nm			5.3mb			1.3s	30.13nm			4.9mb		GMW	47.08	326	eP	51	48.00	-1.0
			epP	49	47.24	107km	LRM	40.67	332	eP	50	58.20	0.3	MDZ	47.34	160	iP	51	54.30	2.9X
TUC	30.54	316	ePc	49	33.31	1.5				e	51	26.60	125kmX				i	52	27.00	144kmX
	1.0s	30.65nm			5.0mb					e	56	38.60		TCA	47.56	155	iPd	51	51.50	-1.6
PNJ	30.90	18	iP	49	36.97	2.2	ARN	40.68	315	ePc	50	58.89	1.1	PPD	47.89	134	eP	51	53.30	-2.4
GPD	30.92	17	eP	49	36.43	1.5	COE	40.73	315	ePc	50	59.76	1.6	RFA	49.20	161	ePd	52	04.40	-1.2
PAL	31.07	18	iPc	49	37.96	1.7	MHC	40.75	315	ePc	50	59.69	1.2	RIFB	49.45	129	(P)	52	02.00	-5.8X
TBR	31.10	18	iPc	49	38.26	1.7		1.3s	120.00nm			5.5mb					e	52	07.40	18kmX
YSNY	31.33	11	eP	49	39.51	1.0		Z 17s	1.30um			4.9MszX					e	53	00.20	
	1.1s	369.32nm			6.0mb					eS	57	09.19		SOB1	49.56	113	eP	52	06.20	-2.4X
CRNY	31.46	18	eP	49	41.03	1.4				iSS	01	06.19		VAO	51.61	132	eP	52	21.30	-2.8X
ARE	31.54	152	iPc	49	42.50	1.5				iLQ	02	40.19		FRB	53.39	10	eP	52	35.50	-1.1
BINY	31.61	14	eP	49	42.53	1.5	STAN	41.16	315	ePc	51	03.04	1.5		0.8s	26.00nm				5.3mb
	0.7s	480.92nm			6.3mb	X		1.4s	230.00nm			5.8mb		YKA	54.63	344	eP	52	44.50	-1.3
TYNO	31.71	9	P	49	42.15	0.4				ipPd	51	29.14	113km		0.7s	20.00nm				5.2mb
LSCT	31.89	18	eP	49	45.03	1.6	HMR	41.27	316	(P)	51	02.15	-0.3	RES	63.12	357	eP	53	43.00	-1.2
	0.8s	247.25nm			6.0mb		BKS	41.43	315	iPc	51	05.29	1.5		0.6s	9.00nm				4.9mb
STCO	31.93	10	P	49	44.20	0.5		1.2s	120.00nm			5.6mb		INK	64.26	342	eP	53	51.00	-0.8
ACTO	32.18	8	P	49	46.35	0.4				epPd	51	33.14	122kmX		0.9s	12.00nm				4.8mb
GLD	32.62	332	ePc	49	50.40	0.4	SLA	41.47	151	iPc	51	05.50	1.0	TBT	65.43	64	(P)	54	01.20	1.2
	1.3s	57.03nm			5.2mb		ORV	41.78	318	iPc	51	07.94	1.2	TOA	65.89	333	e(P)	54	03.00	0.5
GOL	32.64	332	eP	49	50.03	-0.3		1.2s	140.00nm			5.6mb		RUV	66.29	248	iPc	54	05.40	-0.2
	0.5s	32.19nm			5.4mb			Z 19s	0.90um			4.7Msz			1.2s	258.20nm				6.0mb
			epP	50	13.53	104km				eS	57	20.39		TPT	66.43	248	iPc	54	06.20	-0.3
WLVO	32.75	10	P	49	51.35	0.5				iSS	00	57.39			1.6s	379.40nm				6.1mb
LPAZ	33.06	147	P	49	54.30	-0.2				iLQ	01	34.39		VAH	66.53	248	iPc	54	06.80	-0.3
			S	55	14.30					eLR	04	20.39			1.5s	578.10nm				6.3mb X
			LR	00	21.00		NTYM	41.97	316	eP	51	10.06	1.8	PMO	66.69	248	iPc	54	07.80	-0.4
HRV	33.17	20	eP	49	56.27	1.7				ePcP	53	03.51			1.8s	704.30nm				6.3mb X
	1.2s	168.66nm			5.7mb		MIN	42.27	319	ePc	51	10.95	0.1	MBC	66.90	352	eP	54	08.50	-0.1
LPB	33.28	147	P	49	55.20	-1.0		1.2s	70.00nm			5.3mb			0.7s	13.00nm				5.0mb
	Z 16s	4.04um			5.2MszX					epPd	51	38.85	122kmX	COL	67.59	336	ePd	54	11.74	-1.4
			S	55	10.00		LMEM	42.35	319	(P)	51	12.85	1.3		0.6s	24.18nm				5.3mb
			LR	00	50.00		FSA	42.39	153	ePc	51	12.80	1.0				epP	54	37.14	100km
PV08	33.42	327	ePc	49	57.74	0.6	JAQ	42.77	9	eP	51	14.00	-0.5	FBA	67.59	336	eP	54	11.80	-1.3
PV10	33.48	326	ePc	49	57.02	-0.6	LBFM	42.99	320	ePc	51	16.77	0.0	TVO	68.87	246	iPc	54	21.30	-0.5
CNCB	33.57	147	P	49	59.00	0.1				epP	51	41.90	108km		1.1s	157.80nm				5.8mb
PV09	33.62	326	eP	49	59.36	0.5	WDC	43.00	318	ePc	51	14.30	-2.3	PPN	68.94	246	iPc	54	21.80	-0.4
GLA	33.77	314	ePc	50	00.80	0.9		3.7s	820.00nm			5.9mb	X		1.3s	213.70nm				5.8mb
RSNY	34.18	15	ePd	50	04.23	1.0		Z 20s	0.70um			4.6Msz		PPT	69.08	246	iPc	54	22.70	-0.4
	1.4s	805.65nm			6.4mb	X				eS	57	34.21			1.6s	495.00nm				6.1mb
			pP	50	28.91	109km				eSS	01	07.21		PAE	69.12	246	iPc	54	22.80	-0.5
LBNH	34.62	18	ePc	50	08.74	1.8				iLQ	02	01.21			1.1s	331.10nm				6.1mb
	0.7s	99.02nm			5.8mb					eLR	04	08.21		AFR	69.25	246	iPc	54	23.60	-0.5
			pP	50	33.19	109km	LGPM	43.36	319	ePc	51	18.94	-0.7		0.7s	111.10nm				5.8mb
SRU	34.82	326	eP	50	09.05	0.1				ePcP	53	06.38		IMA	70.29	336	eP	54	28.90	-1.0
CCH	35.04	145	P	50	11.00	-0.2	YBH	43.72	320	ePc	51	20.31	-2.2		0.8s	5.80nm				4.5mb
GAC	35.04	13	ePc	50	11.40	0.9		2.0s	190.00nm			5.5mb		BRW	72.77	341	ePc	54	43.12	-1.2
			pP	50	37.50	114km		Z 18s	0.90um			4.7Msz					epP	55	09.78	104km
MSU	35.34	323	eP	50	14.77	1.3				iS	57	52.52		DAG	73.53	13	iPd	54	46.40	-2.2
PLM	35.39	312	eP	50	15.03	1.2				iSS	01	21.52			0.5s	25.35nm				5.3mb
ARUT	35.63	321	eP	50	16.87	1.1				iLQ	02	07.52					ipP	55	15.40	114km
RSSD	35.76	338	ePd	50	17.82	0.9				eLR	05	56.52		EJIF	75.66	55	eP	55	02.26	0.6
	0.5s	29.11nm			5.4mb		VIPM	44.04	324	P	51	24.78	-0.4	EHOR	75.74	54	eP	55	02.04	0.0
PEC	35.87	313	ePc	50	19.20	1.4	FHC	44.05	318	(P)	51	25.65	0.4	PAB	76.33	52	ePc	55	04.11	-1.3
	1.1s	59.19nm			5.4mb			1.2s	304.27nm			6.0mb			1.4s	46.81nm				5.1mb
DAU	36.14	327	ePc	50	20.94	0.7	CYA	44.53	154	iPc	51	29.50	0.3				epP	55	30.75	103km
GSC	36.36	315	P	50	23.70	1.8	CROR	44.54	325	P	51	29.39	0.3	GUD	76.40	51	eP	55	05.61	-0.3
SSK	36.41	313	ePd	50	24.12	1.6	NEW	44.65	331	ePd	51	28.64	-1.2	ESK	76.42	36	eP	55	03.50	-2.0
DUG	36.84	325	eP	50	26.67	0.7	RTRS	44.66	159	eP	51	32.00	2.0	ECOG	77.12	54	eP	55	09.15	-0.8
	1.1s	52.42nm			5.3mb		GBL	44.71	327	P	51	30.05	-0.3	EGUA	77.16	55	eP	55	08.67	-1.3
TPNV	36.90	318	eP	50	28.26	1.7	VGB	44.74	325	ePd	51	31.11	0.5	ECRI	77.49	49	eP	55	11.22	-0.6
	1.0s	47.21nm			5.3mb					epP	51	57.23	113km	ETOR	77.98	51	eP	55	14.05	-0.5

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LPF     78.11  43 eP     55 12.30  -2.6X
        0.9s    33.75nm          5.2mb
GRR     78.20  43 eP     55 13.10  -2.4
        0.9s    45.05nm          5.3mb
FLN     78.42  42 eP     55 14.20  -2.5X
        0.9s    29.95nm          5.1mb
      Z 21s      2.05um          5.4Msz
LDF     78.67  42 eP     55 15.50  -2.6X
        0.8s    27.95nm          5.1mb
MFF     78.83  45 eP     55 16.50  -2.5X
        0.7s    19.60nm          5.0mb
EGRA    79.14  49 eP     55 22.42   1.7
RAR     79.36 246 (P)    55 19.80  -2.4X
EPF     79.53  48 eP     55 20.80  -2.1
        1.1s    25.90nm          5.0mb
LFF     79.61  46 eP     55 20.90  -2.3
        0.6s    14.60nm          5.0mb
LPO     79.96  46 eP     55 22.70  -2.4
        1.0s    26.60nm          5.0mb
TIC     80.01  85 P      55 24.01  -1.9
        0.7s     8.50nm          4.6mb
LSF     80.02  45 eP     55 22.50  -2.9X
        1.1s    14.90nm          4.7mb
LIC     80.08  86 P      55 24.49  -1.8
        0.7s    17.00nm          5.0mb
RJF     80.12  46 eP     55 23.30  -2.6X
        1.0s    17.80nm          4.8mb
      Z 21s      1.50um          5.3Msz
ILT     80.18 337 iPd    55 30.50   4.8X
        1.2s    33.00nm          5.0mb
                  i      55 55.20  94kmX
                  eS     05 26.00
                  ePS    06 18.00
KIC     80.33  85 P      55 25.85  -1.8
        0.6s    10.50nm          4.8mb
TCF     80.49  45 eP     55 25.10  -2.8X
        0.5s     5.90nm          4.7mb
CAF     80.55  46 eP     55 25.80  -2.5X
        0.5s     6.65nm          4.7mb
HYF     80.66  44 eP     55 26.90  -1.8
MAF     80.74  45 eP     55 26.50  -2.7X
        1.0s    13.20nm          4.7mb
BGF     80.89  44 eP     55 27.20  -2.7X
        0.5s     6.90nm          4.7mb
AVF     81.20  44 eP     55 28.60  -3.0X
        0.6s     4.05nm          4.4mb
ADK     81.21 321 ePd    55 32.18   0.7
        0.6s    42.80nm          5.4mb
                  epP    55 59.61 106km
SSF     81.27  44 eP     55 28.90  -3.0X
        1.2s    19.65nm          4.8mb
LOR     81.48  44 eP     55 30.20  -2.8X
        0.8s    10.90nm          4.7mb
      Z 22s      1.25um          5.2Msz
SMF     81.56  44 eP     55 30.40  -3.0X
        0.7s     6.50nm          4.6mb
DOU     81.57  41 Pc     55 33.10  -0.3
                  e      56 00.10 104km
                  e      56 58.80
                  S      05 44.00
LBF     81.60  44 eP     55 30.50  -3.2X
ENN     82.31  40 eP     55 35.50  -1.7
        0.8s    11.30nm          4.8mb
                  e      56 03.50 108km
                  e      58 45.00
WIT     82.44  38 eP     55 38.00   0.2
                  e      56 07.00 112km
WLF     82.63  41 iPc    55 37.45  -1.4
        1.2s    20.30nm          4.9mb
                  id     56 08.09 119kmX
WTS     82.66  39 eP     55 38.00  -1.0
        0.9s    28.30nm          5.1mb
                  e      56 05.50 105km
                  e      58 51.00
                  e      59 23.00
VITF    82.76  42 P      55 37.75  -1.9
HAU     83.03  43 eP     55 38.40  -2.7X
        0.8s    12.35nm          4.9mb
      Z 21s      1.20um          5.2Msz
BNS     83.06  39 ePc    55 40.00  -1.1
      Z 21s      2.70um          5.6Msz
NAO     83.22  29 P      55 39.87  -1.9
BSF     83.35  43 eP     55 39.90  -2.9X
        1.0s    20.00nm          5.0mb
NB2     83.36  29 P      55 41.70  -0.8
        0.9s    16.40nm          4.9mb
LOMF    83.46  43 P      55 41.82  -1.5
ECH     83.53  42 P      55 42.05  -1.6
CDF     83.57  42 eP     55 41.00  -2.9X
        0.7s     5.30nm          4.6mb
MOF     83.58  43 P      55 42.20  -1.7
WLS     83.62  42 P      55 43.71  -0.4
LPL     83.72  45 eP     55 42.80  -2.1
        0.5s     4.00nm          4.6mb
LPG     83.74  45 eP     55 43.30  -1.8
        0.7s     4.65nm          4.5mb
LANF    83.81  41 P      55 43.63  -1.4
LRG     83.83  47 eP     55 43.00  -2.1
      Z 23s      0.73um          5.0MszX
BBS     83.90  43 P      55 43.63  -1.9
HOFF    83.92  41 P      55 46.04   0.5
LMR     83.96  47 eP     55 43.60  -2.2
        1.0s     8.80nm          4.6mb
TNS     83.99  40 ePc    55 44.50  -1.4
                 ePPc    56 14.50
FRF     84.01  47 eP     55 43.80  -2.3
        0.7s     7.60nm          4.7mb
DIX     84.09  44 ePd    55 47.50   0.7
FEL     84.16  42 P      55 45.22  -1.7
MMK     84.47  44 ePd    55 48.80   0.1
ZLA     84.48  43 ePd    55 47.40  -1.0
SLE     84.49  42 ePd    55 47.30  -1.2
HFS     84.76  30 eP     55 47.30  -2.1
        0.5s     4.70nm          4.7mb
      Z 19s      1.07um          5.2Msz
                  LR     25 09.00
LLS     85.01  43 ePd    55 50.70  -0.6
TMA     85.08  44 ePd    55 50.60  -1.0
OSS     85.82  43 ePd    55 54.50  -0.8
GRF     85.85  40 ePc    55 54.40  -0.8
        1.0s    16.00nm          5.0mb
      Z 22s      2.00um          5.5Msz
                 e(pP)   56 22.40 107km
MOX     85.88  39 eP     55 53.80  -1.5
        1.4s    17.00nm          4.8mb
      Z 21s      0.80um          5.1Msz
                  eS     06 09.00
MOTA    86.31  43 iPc    55 56.00  -1.7
        1.1s    28.60nm          5.2mb
                  i      56 24.10 107km
                  i      56 25.70
                  i      59 11.40
                  i      59 27.20
SQTA    86.41  43 iPc    55 56.40  -1.7
        1.4s    35.90nm          5.2mb
                  i      56 24.70 108km
                  i      56 26.50
CLL     86.57  38 iP     55 57.20  -1.4
        1.5s    29.00nm          5.1mb
                  ipP    56 27.50 117km
WATA    86.63  42 iPc    55 57.20  -2.0
                  i      56 27.60 117km
WTTA    86.68  43 iPc    55 57.90  -1.6
                  i      56 27.50 113km
WET     87.03  40 eP     56 00.40  -0.6
                  i      56 30.40 115km
BRG     87.26  39 iP     56 00.80  -1.1
        1.2s    68.00nm          5.5mb
      Z 18s      5.20um          6.0Msz
      N 18s      1.30um
                  iS     06 28.00
KHC     87.48  40 P      56 02.00  -1.1
        1.1s     8.00nm          4.7mb
      Z 20s      2.00um          5.5Msz
                  pP     56 30.00 106km
                  e      57 22.50
SDF     87.62  21 iP     56 01.60  -1.8
GEC2    87.63  41 e(P)   56 02.40  -1.5
        0.9s     5.40nm          4.6mb
KBA     87.86  42 iPc    56 03.50  -1.7
        1.8s    67.00nm          5.4mb
                  i      56 30.30 101km
                  i      59 38.10
PRU     87.86  39 iPd    56 03.90  -1.0
        0.9s     8.60nm          4.8mb
      Z 22s      1.40um          5.3Msz
                  ipP    56 31.50 104km
                  esP    56 43.00
                  PP     59 34.30
                  e      00 04.30
                  eSKS   06 20.00
TRI     88.49  44 eP     56 08.00   0.0
                  e      06 48.00
KSP     88.70  38 eP     56 08.00  -0.9
                  e      56 37.50 112km
                  e      59 36.50
                  e      00 07.30
LJU     88.92  43 eP     56 09.00  -1.0
                  ePP    56 36.50
                  eSKS   06 26.00
                  eS     06 48.00
                  epS    07 20.00
                  eSS    07 36.00
                  e      08 32.00
NUR     89.79  28 iP     56 13.60  -0.1
ZST     89.99  41 eP     56 13.20  -1.7
                  e      56 41.50 107km
                  e      59 52.90
SRO     90.88  41 eP     56 19.40   0.4
                  e      56 45.30  96kmX
                  e      00 05.40
PSZ     91.85  40 eP     56 22.80  -0.8
TIK     93.59 350 iPc    56 30.00  -1.1
        1.2s    16.00nm          5.3mb
      Z 20s      1.00um          5.3Msz
                  e      57 00.00 114km
                  e      06 52.00
OBN     97.98  29 eP     56 34.50 -16.9X
      Z 20s      1.10um          5.3Msz
      N 24s      0.80um
      E 22s      1.00um
                  e      56 40.00  17kmX
                  e      56 51.00
                  e      57 20.50
                  e      57 30.00
                  e      59 12.00
                  i      00 51.00
                  i      00 56.00
                  iPSP   01 16.00
                  eSKS   07 12.00
                  eSKKKS08 02.00
                  ePS    09 36.00
                  eSS    14 52.00
                  e      16 22.00
                  e      17 28.00
                  eSSS   18 10.00
                  LR     29 32.00
ARU    106.05  20 ePKP   01 44.18   5.2X
MAJO   116.37 321 (PKP)  01 59.15  -0.2
MAIO   122.26  33 ePKP   02 10.00  -0.6
BRS    122.83 245 iPKPd  02 12.80   0.9
        2.0s     6.00nm
CSY    124.36 188 ePKP   02 21.40   7.8X
        0.7s    27.90nm
WMQ    124.42   5 ePKP   02 12.70  -1.9
BJI    124.47 339 ePKP   02 13.00  -1.7
      Z 28s      1.75um          5.6MszX
CNB    124.75 235 iPKPc  02 16.10   0.6
        0.9s    59.00nm
HHC    125.17 344 PKP    02 15.80  -0.4
      Z 15s      1.18um          5.7MszX
BTO    125.82 345 ePKP   02 18.00   0.5
KSH    126.41  17 ePKP   02 18.10  -0.6
      Z 24s      2.05um          5.7MszX
      N 14s      1.07um
      E 14s      1.00um
PMG    127.62 267 ePKP   02 22.06   0.6
GTA    128.81 354 ePKP   02 22.00  -1.2
      Z 34s      1.83um          5.5MszX
CTA    129.11 254 iPKPc  02 24.70   0.5
        1.3s   144.23nm
                  epPKP  02 54.00
                  e      03 04.00
                  iSKP   05 37.50
                  e(pSKP05 53.00
                  e      06 20.00
                  e      22 00.00
                  e      28 21.00
CTAO   129.11 254 ePKP   02 24.49   0.3
WWKK   130.10 275 ePKP   02 26.00  -0.3
QUE    130.92  31 ePKP   02 27.80   0.2
LZH    131.51 349 ePKP   02 22.50  -6.0X
      Z 20s      1.49um          5.7Msz
STK    131.81 238 iPKPc  02 20.80  -8.2X
        0.7s    30.30nm
                  i      02 50.60
XAN    132.27 343 PKP    02 29.00  -0.9
CD2    136.54 348 ePKP   02 39.00   0.9
LSA    138.72   4 PKP    02 42.40  -0.3
GKN    139.49  13 PKP    02 34.20  -9.5X
GUN    139.83  11 PKP    02 34.90  -9.7X
```

22d 23h

```
KKN   139.83  12 PKP   02 37.00  -7.4X
       0.6s    19.00nm
GYA   140.04 342 PKP   02 41.80  -2.9X
     Z  40s     1.44um          5.4MszX
PKI   140.07  12 PKP   02 36.20  -8.8X
ASPA  140.19 247 iPKPc 02 37.70  -7.3X
                 i     02 44.70
WRA   140.30 253 iPKP  02 45.40   0.2
                 ePP   06 07.20
KMI   142.35 347 ePKP  02 48.50  -0.5
SHL   142.87   3 ePKP  02 44.50  -5.3X
FORT  143.14 234 ePKP  02 45.80  -4.1X
       0.6s    30.00nm
DAV   143.33 299 ePKP  02 49.00  -1.6
POO   144.02  34 ePKP  02 48.50  -3.2X
QIZ   145.60 333 PKP   02 52.90  -1.5
KNA   145.89 259 ePKP  02 55.00   0.1
       1.0s   333.00nm
HYB   147.32  28 ePKP  02 55.20  -2.0
       0.8s    46.10nm
                 e     03 27.90
COOL  148.39 229 ePKP  02 58.00  -0.6
CHTO  149.23 351 ePKP  02 59.10  -1.1
GBA   150.01  33 PKPd  03 00.90  -0.5
       0.7s     8.00nm
KLB   150.40 224 ePKP  03 01.60   0.0
       0.8s   148.00nm
BDT   150.75 350 ePKP  03 00.00  -2.4X
       1.0s   124.20nm
MUN   151.21 222 ePKP  03 03.20   0.4
       0.8s   319.00nm
TSM   151.30 302 ePKPc 03 03.90   0.5
KKM   151.60 307 ePKPc 03 17.40  13.4X
       0.8s    49.00nm
BAL   151.71 225 ePKP  03 04.50   0.9
                 e     03 10.00
MEEK  152.40 234 ePKP  03 05.00   0.2
MRWA  153.03 227 iPKPc 03 04.90  -0.6
       1.0s    96.00nm
KHT   153.23 350 ePKP  03 05.50  -0.6
NANU  156.70 240 ePKP  03 11.50   0.9
IPM   162.29 336 ePKPc 03 16.50  -0.5
       0.9s    24.90nm
LEM   165.58 289 ePKPd 03 20.50   0.3
     S.D. = 1.2  on 298 of 358 obs.
-----------------------------------
&  NOV  22, 1993  23h 08m 21.10s
   37.568 N          118.840 W
   DEPTH =   2.8km
 CALIFORNIA-NEVADA BORDER REGION ( 40)
     <GM-P>. MD 3.0 (GM).

CLKR    0.03  29 P     08 22.02  -0.1
HTCR    0.07 125 P     08 22.81   0.1
MEMM    0.13 321 iPc   08 24.07   0.4
MMPM    0.16 286 iPc   08 24.46   0.2
ORC     0.16  65 P     08 24.69   0.3
MRCM    0.28  69 iPc   08 26.99   0.2
MTUM    0.31 134 ePd   08 27.35   0.1
BHPR    0.39 134 P     08 29.31   0.4
CWCR    0.43 100 P     08 29.77   0.0
BONR    0.58  48 eP    08 31.79  -0.8
CMB     1.31 291 eP    08 45.13  -0.9
                 eS    09 01.87
TNP     1.38  68 eP    08 47.21  -0.2
WLHM    1.48 163 P     08 48.77  -0.2
PDRM    1.74 225 P     08 54.18   1.8
BMSM    1.81 240 P     08 55.22   1.8
WASM    1.84 173 P     08 55.56   1.5
RCWM    1.88 149 P     08 56.62   2.1
NMC     1.88 156 P     08 55.95   1.4
ISA     1.92 171 eP    08 55.70   0.5
HVC     1.98 234 P     08 57.32   1.3
WOFM    2.03 177 P     08 58.47   1.7
EKH     2.07 245 P     08 59.18   1.9
LTR     2.08 252 P     08 58.88   1.5
WBSM    2.10 164 P     09 00.09   2.2
PHAM    2.13 216 eP    08 57.95  -0.2
ARN     2.15 265 eP    08 59.22   0.8
TPNV    2.16 106 eP    08 58.41  -0.2
WJPM    2.17 172 P     09 01.32   2.5
HSPM    2.18 259 P     09 00.45   1.6
WSHM    2.22 150 P     09 03.09   3.7
SAO     2.23 250 eP    08 59.63   0.1
COE     2.28 263 (P)   08 59.75  -0.5
BCH     2.58 203 eP    09 04.07  -0.6
                 eS    09 32.19
ABL     2.73 187 ePn   09 07.74   0.9
       34 obs. associated
-----------------------------------
&  NOV  22, 1993  23h 14m 44.87s
   62.109 N          150.087 W
   DEPTH =  48.8km
 CENTRAL ALASKA                    ( 1)
     <AEIC>. ML 3.5 (AEIC), 3.3
     (PMR).

CUT     0.31 344 iPd   14 53.58  -0.4
PWA     0.47 168 P     14 55.40  -0.3
GHO     0.65 121 iPd   14 57.50  -0.5
                 eS    15 07.78
PLRM    0.69 138 ePc   14 57.71  -0.8
                 eS    15 08.69
PMR     0.69 138 iPc   14 57.56  -0.9
                 eS    15 08.62
SKT     0.69 260 eP    14 57.82  -0.8
                 eS    15 08.69
                 eS    15 08.95
SUA     0.72 206 ePc   14 58.87  -0.2
                 eS    15 10.64
SML     0.88 109 eP    15 00.21  -1.0
                 eS    15 13.18
HUR     0.90  13 ePc   15 00.49  -0.9
                 eS    15 12.81
PMS     0.90 164 P     15 00.60  -0.9
KNK     1.04 131 eP    15 02.86  -0.6
                 eS    15 17.04
NCG     1.21 235 eP    15 04.90  -0.9
CGLM    1.22 230 ePc   15 05.01  -0.9
CRP     1.30 230 eP    15 05.60  -1.5
SPU     1.32 226 eP    15 06.42  -0.9
CP2     1.33 231 eP    15 06.91  -0.7
SCM     1.33 101 ePd   15 07.01  -0.5
CKN     1.34 229 eP    15 07.19  -0.3
TRF     1.35 356 iPc   15 06.66  -1.2
CKT     1.36 229 eP    15 07.19  -0.7
BGL     1.39 233 eP    15 07.41  -0.9
CKL     1.41 231 eP    15 07.85  -0.8
RND     1.42  23 iPc   15 07.51  -1.2
                 eS    15 25.29
CFI     1.45 129 eP    15 08.72  -0.2
                 eS    15 25.63
BKG     1.47 226 eP    15 08.52  -0.9
                 eS    15 28.61
NKA     1.48 202 eP    15 10.76   1.3
KTH     1.50 346 iPc   15 08.94  -0.9
                 eS    15 27.56
PWL     1.51 145 eP    15 09.24  -0.7
                 eS    15 28.81
DHY     1.59  51 ePc   15 09.74  -1.4
                 eS    15 30.74
SLKM    1.61 182 eP    15 10.41  -0.9
MPA     1.66 168 eP    15 11.65  -0.4
MCK     1.71  17 eP    15 11.79  -1.0
                 eS    15 32.79
TOA     1.84  88 P     15 14.60   0.0
DFR     1.97 221 eP    15 16.06  -0.5
SEW     2.04 171 eP    15 17.21  -0.1
VLZ     2.04 117 eP    15 16.04  -1.4
                 eS    15 40.27
REF     2.06 219 eP    15 17.53  -0.3
                 eS    15 41.08
NCT     2.07 223 eP    15 17.77  -0.2
KLU     2.07 106 ePd   15 16.73  -1.2
                 eS    15 42.40
BWN     2.09   7 eP    15 16.83  -1.3
RDW     2.10 220 eP    15 18.02  -0.3
RS2     2.10 219 eP    15 18.43   0.1
RED     2.14 219 eP    15 19.19   0.4
SDG     2.16  77 eP    15 19.32   0.2
TZL     2.20  90 eP    15 19.22  -0.4
PAX     2.31  66 eP    15 20.50  -0.8
LTI     2.34 151 eP    15 19.54  -2.1
THY     2.39  55 eP    15 22.42   0.1
ILIM    2.47 216 eP    15 23.36  -0.1
INE     2.51 216 eP    15 24.14  -0.1
NEA     2.52  10 eP    15 21.93  -2.2
WRH     2.54  20 ePc   15 22.64  -1.8
                 eS    15 53.06
DDM     2.56  47 eP    15 23.01  -1.8
HOM     2.57 198 eP    15 26.42   1.5
CNPM    2.65 193 eP    15 26.61   0.5
HDA     2.71  30 eP    15 25.09  -1.8
CCB     2.75  21 ePc   15 25.34  -2.1
                 eS    15 57.16
DJE     2.78  44 eP    15 27.66  -0.3
TTA     2.87 289 eP    15 28.00  -1.2
OPT     2.90 213 eP    15 30.08   0.4
MLY     2.95 355 ePc   15 28.13  -2.2
MDM     2.98  15 ePc   15 28.83  -1.9
FBA     2.98  19 iPc   15 28.62  -2.2
IL1     3.04  27 ePc   15 29.42  -2.1
                 eS    16 04.62
ILB     3.03  27 ePc   15 29.41  -2.1
                 eS    16 04.40
                 eS    16 04.87
GLB     3.06 100 eP    15 30.13  -1.8
                 eS    16 05.24
PDB     3.07 223 eP    15 31.51  -0.5
GLM     3.13  21 ePc   15 30.90  -2.1
DOT     3.16  58 eP    15 33.74   0.4
AUL     3.19 212 eP    15 34.88   1.1
AUH     3.21 212 eP    15 35.11   1.0
TMW     3.49  66 eP    15 37.62  -0.3
MCNL    3.60 217 eP    15 39.42  -0.2
CDD     3.64 210 eP    15 39.69  -0.5
SYI     3.69 199 eP    15 39.59  -1.2
BALM    3.86 103 eP    15 40.68  -2.6
BC3     3.96  72 eP    15 42.36  -2.3
IM3     4.21 339 eP    15 45.53  -2.6
IMA     4.28 340 eP    15 46.43  -2.7
CTGM    4.34 101 eP    15 47.72  -2.4
KDC     4.54 197 eP    15 51.59  -1.1
FYU     4.95  23 eP    15 55.95  -2.6
BM3     5.82  21 eP    16 07.61  -3.3
       83 obs. associated
-----------------------------------
?  NOV  22, 1993  23h 39m 53.40±17.54s
   16.502 N ±139.km    99.594 W ±34.2km
   DEPTH =  10.0km  (geophysicist)
 NEAR COAST OF GUERRERO, MEXICO  ( 58)

ACX     0.45 325 iP    40 02.50   0.0
                 iS    40 06.50
III     1.87   4 iP    40 25.00  -0.9
                 iS    40 45.50
PPM     2.71  20 eP    40 38.00  -0.3
UNM     2.84   8 (P)   40 41.00   1.1
IISM    3.25  40 eP    40 45.50   0.0
MRX     3.53 335 (P)   40 53.00   3.6X
     S.D. = 1.0  on   5 of   6 obs.
-----------------------------------
%  NOV  22, 1993  23h 52m 20.13± 2.07s
   44.587 N ± 7.6km    6.740 E ±16.9km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                            (538)
     ML 2.3 (GEN).

PZZ     0.27 107 P     52 26.20   0.3
                 S     52 30.04
RRL     0.33   5 P     52 27.55   0.4
                 S     52 32.42
BHB     0.45  56 P     52 29.27  -0.1
STV     0.54 129 P     52 30.87  -0.2
                 S     52 38.55
ENR     0.61 126 P     52 32.51   0.1
                 S     52 40.66
RSP     0.67  33 P     52 33.69   0.1
LSD     0.92  19 P     52 37.36  -0.5
                 S     52 49.39
     S.D. = 0.4  on   7 of   7 obs.
-----------------------------------
%  NOV  22, 1993  23h 55m 12.87± 0.69s
   37.039 N ± 5.2km    5.405 W ± 6.8km
   DEPTH =   5.0km  (geophysicist)
 SPAIN                             (377)
     mbLg 2.7 (MDD).

LIJA    0.14 182 iP    55 15.00  -0.8
EPRU    0.16 118 eP    55 15.56  -0.6
                 e     55 18.20
EJIF    0.59 185 eP    55 25.68   1.0
EHOR    0.79   9 iPd   55 28.20  -0.5
                 e     55 38.70
ELUQ    1.05  60 eP    55 33.56   0.4
                 e     55 48.10
EVAL    1.20 297 iPd   55 35.65  -0.1
EBAN    1.71  48 eP    55 44.00   0.5
                 e     56 04.70
     S.D. = 0.8  on   7 of   7 obs.
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   NOV  23, 1993  00h 23m 35.27± 1.13s
   32.691 S ± 6.1km   70.104 W ± 7.9km
   DEPTH = 107.9 ± 16.8 km
 CHILE-ARGENTINA BORDER REGION    (127)
      MD 3.9 (SAN).

JACH     0.41 271 iP+    23 51.35  -0.3
                  iS     24 04.02
FCH      0.65 194 iP     23 54.10   0.4
                  iS     24 08.29
PEL      0.67 227 iPd    23 53.39   0.0
                  iS     24 07.21
ROCH     0.81 250 iP+    23 54.67  -0.3
                  iS     24 09.39
PCH      0.99 200 iPd    23 57.22   0.7
                  iS     24 13.78
MDZ      1.07 101 iP     24 14.90  17.5X
                  i(S)   24 16.40
TACH     1.19 216 iPd    23 58.67   0.0
                  iS     24 17.01
LCCH     1.46 237 iP     24 01.61  -0.2
                  iS     24 22.38
CACH     1.48 196 iPd    24 03.07   0.8
                  iS     24 24.88
RTCV     1.56  58 eP     24 03.00  -0.2
                  S      24 24.00
RTCB     1.63  43 ePd    24 04.10   0.0
                  S      24 26.00
LNV      1.67 221 iP+    24 03.56  -0.8
                  iS     24 25.52
CFA      1.92  56 ePc    24 07.00  -0.6
                  S      24 31.00
RTLL     1.94  46 e(P)   24 08.00   0.0
                  S      24 31.00
RFA      2.48 147 iPc    24 14.80  -0.3
RTRS     2.57  13 eP     24 17.00   0.8
                  S      24 49.00
TCA      4.87  75 e(P)   25 45.00  57.4X
      S.D. = 0.6  on  15 of  17 obs.
-----------------------------------
%  NOV  23, 1993  02h 09m 57.55± 0.63s
   31.376 S ± 6.6km   68.596 W ± 6.9km
   DEPTH =  21.5 ±  6.8 km
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTLL     0.12  67 iPc    10 01.90  -0.1
RTCB     0.21 238 ePd    10 03.00  -0.1
                  S      10 06.00
CFA      0.38 127 ePc    10 06.00   0.3
RTCV     0.49 174 eP     10 07.30  -0.1
                  S      10 15.00
RTRS     1.41 328 eP     10 22.00  -0.1
                  S      10 40.90
RTPR     2.09  60 eP     10 32.50   0.6
                  S      10 59.00
RFA      3.39 178 e(P)   10 50.60   0.2
                  S      11 45.00
TCA      3.43  90 e(P)   10 50.10  -0.9
                  (S)    11 40.00
      S.D. = 0.6  on   8 of   8 obs.
-----------------------------------
?  NOV  23, 1993  02h 10m 30.20± 3.51s
   3.926 N ±26.2km  126.771 E ±39.4km
   DEPTH =  68.1 ± 26.7 km
   4.3mb (  3 obs.)
 TALAUD ISLANDS, INDONESIA        (263)

TNE      3.16 170 eP     11 18.40  -0.1
MTN     17.22 165 eP     14 24.00  -3.8X
WRA     24.86 163 eP     15 48.50   0.5
        0.5s     7.90nm          4.4mb
ASPA    28.29 166 eP     16 19.80   0.3
        0.6s     4.40nm          4.3mb
                  epP    16 39.10  85kmX
WARB    29.93 180 eP     16 35.00   0.9
MEEK    31.39 194 eP     16 45.20  -1.8
STK     38.30 159 eP     17 39.60  -6.3X
        0.7s     2.30nm          4.2mb
GBA     49.61 284 P      19 18.00   1.0
KAF     91.44 332 eP     23 36.50   6.6X
NUR     92.55 331 eP     23 34.20  -0.8
      S.D. = 1.4  on   7 of  10 obs.
-----------------------------------
*  NOV  23, 1993  02h 44m 02.17± 0.57s
   45.313 N ±10.1km  142.003 E ±11.4km
   DEPTH =  33.0km  (normal)
   4.7mb ( 10 obs.)
 HOKKAIDO, JAPAN  REGION          (224)

MAT      9.22 199 eP     46 16.00   0.1
        0.6s    13.33nm          5.3mb
                  eS     48 11.00
IMA     39.49  35 eP     51 31.40   0.4
        0.6s     8.30nm          4.7mb
PMS     41.79  42 eP     51 49.00  -0.7
FBA     42.03  37 eP     51 52.60   1.0
INK     46.92  30 eP     52 31.00   0.2
        0.5s     3.00nm          4.5mb
GUN     47.31 268 P      52 35.00   0.1
GKN     48.13 269 P      52 40.60  -0.5
YKA     56.52  33 eP     53 42.00  -1.1
        0.5s     3.70nm          4.7mb
KAF     61.22 331 eP     54 16.20   0.5
        0.5s     3.90nm          4.8mb
NUR     62.91 330 eP     54 27.50   0.5
        0.2s     5.00nm          5.3mb
WRA     65.31 188 eP     54 30.20 -12.8X
        0.6s     1.80nm
NB2     66.76 336 P      54 50.50  -1.4
        0.7s     3.10nm          4.5mb
HFS     66.76 335 eP     54 51.80  -0.1
        0.4s     3.70nm          4.9mb
LRM     68.02  47 ePc    54 57.30  -3.1X
CLL     74.16 330 iP     55 37.30   0.5
        0.8s     8.00nm          4.8mb
GEC2    75.93 328 ePd    55 47.50   0.4
        0.5s     0.62nm          3.9mb
      S.D. = 0.8  on  14 of  16 obs.
-----------------------------------
?  NOV  23, 1993  03h 11m 41.31± 3.60s
   50.223 N ±30.2km    7.872 E ± 9.2km
   DEPTH =  10.0km  (geophysicist)
 GERMANY                          (543)
      ML 1.9 (UCC).

ABH      0.40 212 ePg    11 49.20  -0.3
RUP      0.74 225 ePg    11 55.40  -0.5
TOD      0.86 135 ePg    11 57.60  -0.3
WLF      1.24 244 iPc    12 04.49   0.1
MEM      1.25 289 iP     12 23.62  19.0X
CDF      1.85 192 Pg     12 14.50   1.0
                  Sg     12 35.80
HAU      2.43 205 Pg     12 25.80   4.0X
                  Sg     12 54.00
BSF      2.50 197 Pg     12 26.40   3.7X
                  Sg     12 54.90
      S.D. = 0.9  on   5 of   8 obs.
-----------------------------------
?  NOV  23, 1993  03h 48m 14.23± 2.93s
   10.315 N ±17.2km  126.367 E ±32.1km
   DEPTH = 108.1 ± 24.5 km
   4.7mb (  6 obs.)
 PHILIPPINE ISLANDS REGION        (248)

DAV      3.30 194 ePc    49 05.00   0.0
WRA     31.08 165 eP     54 34.40  10.1X
        0.5s     1.00nm
WARB    36.28 180 eP     55 08.00  -1.0
FORT    40.89 178 eP     55 48.20   1.0
STK     44.42 161 eP     56 07.10  -8.8X
        0.5s     1.50nm          4.0mb
GBA     47.92 279 P      56 44.00   0.2
KAF     85.63 332 iP     00 41.50  -0.1
        1.0s    13.60nm          4.9mb
NUR     86.81 331 eP     00 56.40   9.1X
        0.4s     6.00nm          5.0mb
DAG     90.74 352 iPc    01 06.20   0.5
        0.5s     2.11nm          4.6mb
HFS     92.05 332 eP     01 11.70  -0.3
        0.5s     2.30nm          4.7mb
NB2     92.76 334 P      01 15.10  -0.3
        0.8s     1.80nm          4.4mb
      S.D. = 0.8  on   8 of  11 obs.
-----------------------------------
&  NOV  23, 1993  04h 09m 55.98s
   34.241 N          116.424 W
   DEPTH =   3.2km
 SOUTHERN CALIFORNIA              ( 43)
      <PAS-P>. ML 2.7 (PAS).

PEC      0.70 241 iPd    10 09.11  -0.9
PLM      0.96 202 ePd    10 13.87  -1.1
SSK      1.05 269 eP     10 15.52  -1.1
GSC      1.10 344 eP     10 16.72  -0.7
GLA      1.78 131 eP     10 25.18  -2.7
ISA      2.20 311 eP     10 35.18   1.2
ABL      2.39 286 (P)    10 36.92   0.1
        7 obs. associated
-----------------------------------
   NOV  23, 1993  04h 49m 09.65± 0.63s
   33.495 S ± 6.3km   70.100 W ± 4.4km
   DEPTH =  12.1 ±  5.1 km
 CHILE-ARGENTINA BORDER REGION    (127)
      MD 4.0 (SAN).

FCH      0.23 316 iP+    49 14.55  -0.4
                  iS     49 19.12
PCH      0.37 250 iP+    49 17.77   0.4
                  iS     49 25.45
SAN      0.47 275 iP+    49 19.57   0.2
PEL      0.60 305 iPd    49 21.16  -0.5
                  iS     49 31.06
TACH     0.72 257 iP+    49 23.73   0.1
                  iS     49 35.77
CACH     0.75 214 iP+    49 24.14   0.0
                  iS     49 35.93
JACH     0.91 333 iPd    49 25.77  -1.2
                  iS     49 38.69
ROCH     0.93 304 iPd    49 27.00  -0.3
                  iS     49 41.10
LNV      1.19 247 iP+    49 31.39  -0.1
                  iS     49 49.02
MDZ      1.21  60 iPd    49 30.40  -1.7
                  i(S)   49 56.70
LCCH     1.23 271 iP+    49 32.21  -0.1
                  iS     49 50.54
IHA      1.37 290 e(P)   49 34.60   0.1
                  eS     49 54.40
RFA      1.86 134 iPc    49 41.70   0.1
                  S      50 05.50
RTCV     2.10  39 eP     49 47.00   2.0X
                  S      50 15.00
RTCB     2.28  29 ePd    49 49.10   1.3
                  S      50 20.10
CFA      2.45  40 iPc    49 52.00   1.9
                  S      50 24.80
RTLL     2.56  33 ePd    49 53.40   1.7
                  S      50 28.00
TCA      5.13  67 e(P)   50 26.00  -2.2
                  (S)    51 45.00
WRA    121.97 207 Pdiff  04 38.20   4.1X
        0.7s     0.10nm
      S.D. = 1.2  on  17 of  19 obs.
-----------------------------------
?  NOV  23, 1993  05h 19m 42.57± 5.56s
   32.117 S ±42.2km   71.310 W ±14.2km
   DEPTH =   5.0km  (geophysicist)
 NEAR COAST OF CENTRAL CHILE      (135)
      MD 3.5 (SAN).

JACH     0.83 133 iP     19 59.00  -0.1
                  iS     20 12.22
ROCH     0.89 164 iPd    20 00.08  -0.2
                  iS     20 14.87
PEL      1.15 153 iP+    20 04.51  -0.1
                  iS     20 21.82
LCCH     1.37 189 iP+    20 07.92  -0.4
                  iS     20 27.95
FCH      1.48 145 iPd    20 09.86  -0.4
                  iS     20 31.79
TACH     1.56 169 iP+    20 10.89  -0.2
PCH      1.64 156 iPd    20 12.47   0.2
                  iS     20 36.45
LNV      1.84 183 iP     20 15.02   0.1
                  iS     20 40.65
CACH     2.08 164 iPd    20 19.79   1.1
      S.D. = 0.5  on   9 of   9 obs.
-----------------------------------
?  NOV  23, 1993  05h 40m 09.25± 3.31s
   36.461 N ±24.9km   21.065 E ±26.8km
   DEPTH =  10.0km  (geophysicist)
 SOUTHERN GREECE                  (368)
      ML 3.7 (ATH).

VLI      1.53  80 ePn    40 36.50  -0.1
VLS      1.75 348 ePn    40 41.00   1.1
ATH      2.60  54 ePn    40 53.00   1.0
VAM      2.75 112 ePn    40 54.00  -0.2
KZN      3.88   8 ePn    41 08.50  -1.8
OHR      4.65 358 ePn    41 15.00  -6.2X
      S.D. = 1.6  on   5 of   6 obs.
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? NOV  23, 1993  05h 40m 35.85± 3.38s
  38.688 N ±31.2km   22.190 E ±10.2km
  DEPTH =  10.0km  (geophysicist)
 GREECE                          (364)
     ML 2.3 (THE).

LIT      1.43   9 ePb   41 02.20   0.4
                eSb   41 21.12
IGT      1.67 301 ePb   41 05.60   0.3
                eSb   41 27.12
PAIG     1.69  43 ePb   41 05.40  -0.2
OUR      2.15  40 ePn   41 11.80  -0.4
FNA      2.19 344 ePn   41 11.68  -1.1
                eSn   41 40.72
GRG      2.27   4 ePn   41 14.52   0.5
                eSn   41 44.48
SOH      2.31  22 ePn   41 15.16   0.6
     S.D. = 0.7  on   7 of   7 obs.
-------------------------------------
? NOV  23, 1993  05h 58m 42.79± 6.71s
  37.798 N ±56.6km   22.125 E ±11.8km
  DEPTH =  33.0km  (normal)
 SOUTHERN GREECE                 (368)
     ML 2.9 (THE).

IGT      2.23 322 ePn   59 17.92  -0.2
                eSn   59 39.88
LIT      2.32   7 ePn   59 19.04  -0.4
                eSn   59 45.08
PAIG     2.45  29 ePn   59 21.12  -0.1
                eSn   59 46.84
THE      2.90  13 ePn   59 27.80   0.1
OUR      2.92  29 ePn   59 27.88   0.0
                eSn   59 59.48
FNA      3.04 349 ePn   59 29.72   0.0
                eSn   00 00.52
GRG      3.16   4 ePn   59 31.32  -0.1
                eSn   00 04.68
SOH      3.17  17 ePn   59 30.88  -0.6
                eSn   00 04.24
OHR      3.46 343 e(Pn) 59 42.00   6.2X
     S.D. = 0.3  on   8 of   9 obs.
-------------------------------------
  NOV  23, 1993  06h 49m 34.41± 0.49s
  31.557 S ± 9.8km   69.369 W ± 9.5km
  DEPTH = 117.1 ± 12.4 km
 SAN JUAN PROVINCE, ARGENTINA    (137)
     MD 4.3 (SAN).

ZON      0.59  89 iPc    49 53.00   0.0
                eS    50 05.00
RTCV     0.77 113 iPc    49 54.70   0.3
MDZ      1.39 162 iP     50 02.30   1.4
                i     50 11.90
                i(S)  50 20.40
JACH     1.53 222 iP+    50 03.03   0.6
                iS    50 25.36
FCH      1.93 204 iPd    50 08.64   1.0
                iS    50 34.78
PEL      1.93 215 iPd    50 07.47   0.0
                iS    50 32.62
ROCH     1.98 224 iP+    50 08.03  -0.2
                iS    50 33.34
SAN      2.18 210 iPd    50 10.80   0.2
                iS    50 37.92
PCH      2.27 205 iP     50 12.15   0.3
                iS    50 40.55
IHA      2.42 232 e(P)   50 12.50  -1.1
                e(S)  50 43.50
TACH     2.47 212 iPd    50 14.00  -0.4
                iS    50 43.76
LCCH     2.67 224 iP+    50 16.27  -0.6
                iS    50 46.50
CACH     2.75 202 iPd    50 18.45   0.3
                iS    50 52.23
RTPR     2.76  64 eP     50 17.20  -0.8
                S     51 18.00
LNV      2.95 215 iP+    50 18.98  -1.6
                iS    50 53.16
CYA      4.39  46 iPd    50 38.30  -1.8
                S     51 27.00
CNCB    14.73   5 P      53 00.80   2.1
LPB     15.00   5 P      53 06.00   4.1X
LPAZ    15.24   5 P      53 05.40   0.2
PPD     18.68  64 (P)    53 46.00  -0.2
     S.D. = 1.0  on  19 of  20 obs.
-------------------------------------
& NOV  23, 1993  06h 51m 08.78s
  63.131 N          151.452 W
  DEPTH =  12.6km
 CENTRAL ALASKA                  (  1)
     <AEIC>. ML 2.6 (AEIC), 2.8
     (PMR).

KTH      0.49  29 eP     51 18.17  -0.6
                eS     51 25.45
TRF      0.62  58 eP     51 20.70  -0.4
                eS     51 29.44
HUR      0.84 100 eP     51 24.75   0.0
                eS     51 36.58
CUT      0.91 143 eP     51 26.19   0.3
                eS     51 37.94
SKT      1.16 182 eP     51 29.88  -0.3
                eS     51 44.92
RND      1.21  76 eP     51 31.20   0.1
MCK      1.28  61 eP     51 32.57   0.2
BWN      1.37  39 eP     51 33.38  -0.2
                eS     51 54.00
PWA      1.66 153 P      51 38.00   0.4
SUA      1.71 168 eP     51 39.54   1.0
NCG      1.76 191 eP     51 39.05  -0.3
NEA      1.79  35 eP     51 37.89  -1.8
GHO      1.80 138 eP     51 40.51   0.7
                eS     52 03.64
CGLM     1.85 188 eP     51 40.28  -0.3
DHY      1.86  90 eP     51 41.70   1.0
                eS     52 06.80
PLRM     1.89 144 eP     51 41.21   0.2
PMR      1.89 144 eP     51 40.95   0.0
                eS     52 09.34
CRP      1.90 190 eP     51 40.75  -0.6
CP2      1.91 192 eP     51 41.56   0.0
BGL      1.93 194 eP     51 41.86   0.2
MLY      1.93   9 eP     51 40.66  -1.1
CKN      1.94 190 eP     51 42.31   0.4
SML      1.97 131 eP     51 41.98  -0.2
CKT      1.97 191 eP     51 42.39   0.1
SPU      1.98 188 eP     51 42.32  -0.1
CKL      1.99 192 eP     51 42.83   0.3
WRH      2.01  46 eP     51 41.35  -1.4
TTA      2.09 266 eP     51 41.40  -2.6
                eS     52 13.14
PMS      2.09 154 P      51 45.20   1.2
BKG      2.10 191 eP     51 44.20   0.0
CCB      2.22  45 eP     51 42.54  -3.2
KNK      2.22 140 eP     51 46.93   1.0
MDM      2.32  36 eP     51 45.39  -1.9
HDA      2.37  55 eP     51 49.44   1.4
FBA      2.40  41 eP     51 50.26   1.9
                eS     52 23.80
IL1      2.60  49 eP     51 52.36   1.1
ILB      2.60  49 eP     51 52.24   1.0
TOA      2.65 111 eP     51 57.30   5.3
PAX      2.73  91 eP     51 53.35   0.1
RED      2.79 194 eP     51 56.11   2.0
SVW      2.82 226 (P)    51 52.83  -1.6
                eS     52 35.90
IM3      3.03 342 eP     51 55.92  -1.4
KLU      3.06 120 eP     51 58.29   0.5
IMA      3.10 343 eP     51 56.80  -1.6
ILIM     3.15 194 P      52 02.50   3.5
        45 obs. associated
-------------------------------------
% NOV  23, 1993  07h 30m 20.14± 0.85s
  31.721 S ± 9.6km   67.909 W ± 6.9km
  DEPTH =  10.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA    (137)

CFA      0.30 292 iPc    30 26.80   0.3
RTCV     0.55 255 eP     30 30.50  -0.9
RTLL     0.62 309 ePc    30 32.50  -0.1
                S     30 42.00
RTCB     0.80 287 ePc    30 36.10   0.4
                S     30 47.80
RTRS     2.04 319 eP     30 59.00   4.1X
                S     31 26.00
TCA      2.86  83 eP     31 06.50  -0.2
                S     31 48.00
RFA      3.08 189 ePc    31 10.20   0.5
                S     31 55.50
     S.D. = 0.7  on   6 of   7 obs.
-------------------------------------
& NOV  23, 1993  07h 58m 58.52s
  59.840 N          151.645 W
  DEPTH =  60.2km
 KENAI PENINSULA, ALASKA         ( 14)
     <AEIC>. ML 2.9 (AEIC).

HOM      0.18 180 eP     59 07.76  -0.2
CNPM     0.38 146 iPd    59 08.88  -0.5
                eS     59 16.97
XLV      0.39 186 eP     59 08.32  -1.2
                eS     59 16.66
BRLK     0.39 101 eP     59 09.11  -0.5
                eS     59 17.46
INE      0.75 288 eP     59 12.40  -1.2
INW      0.78 288 eP     59 12.98  -1.0
                eS     59 24.52
RED      0.81 316 iPd    59 13.52  -0.8
                eS     59 25.62
OPT      0.82 258 ePc    59 13.57  -0.9
                eS     59 25.68
RS2      0.84 319 iPd    59 14.13  -0.7
REF      0.84 321 iPd    59 14.07  -0.7
                eS     59 26.46
RDW      0.87 318 iPd    59 14.43  -0.7
DFR      0.92 326 iPd    59 14.79  -0.9
                eS     59 27.95
NKA      0.93  12 eP     59 17.26   1.5
NCT      0.97 319 iPd    59 15.70  -0.7
SLKM     0.98  46 eP     59 15.86  -0.6
AUE      1.00 242 eP     59 15.99  -0.7
AUL      1.02 244 eP     59 16.37  -0.6
AGU      1.03 243 eP     59 16.36  -0.8
                eS     59 30.99
AUH      1.03 243 ePc    59 16.58  -0.6
                eS     59 31.10
AUI      1.04 242 eP     59 16.38  -0.8
                eS     59 30.84
AUW      1.04 244 ePc    59 16.59  -0.7
SEW      1.14  76 eP     59 17.72  -0.8
BKG      1.27 346 ePd    59 19.84  -0.6
PDB      1.29 269 ePc    59 19.41  -1.2
                eS     59 35.97
SYI      1.29 198 eP     59 19.50  -1.1
MPA      1.31  59 eP     59 20.53  -0.4
SPU      1.36 352 ePd    59 21.16  -0.5
                eS     59 39.12
CDD      1.37 229 ePc    59 20.63  -1.2
                eS     59 38.67
CKT      1.39 349 eP     59 21.58  -0.6
CKL      1.40 346 ePd    59 21.81  -0.5
CKN      1.41 349 eP     59 22.13  -0.3
CRP      1.45 350 eP     59 22.41  -0.7
CP2      1.46 349 eP     59 22.77  -0.4
BGL      1.48 346 eP     59 23.06  -0.2
CGLM     1.48 353 ePd    59 23.11  -0.3
MCNL     1.52 246 eP     59 22.10  -1.7
                eS     59 42.28
NCG      1.59 351 ePd    59 24.73  -0.2
SUA      1.69  15 eP     59 26.38   0.1
PMS      1.75  35 eP     59 27.03   0.0
PWL      1.94  57 eP     59 28.60  -1.0
PLRM     2.15  34 eP     59 31.83  -0.7
SKT      2.15   1 ePd    59 32.61   0.0
KNK      2.23  44 ePc    59 32.86  -0.8
CFI      2.34  53 eP     59 33.75  -1.5
SVW      2.34 305 eP     59 33.38  -2.0
GHO      2.35  33 eP     59 35.13  -0.4
SML      2.56  38 eP     59 37.56  -0.8
CUT      2.66  14 eP     59 39.53  -0.2
SCM      2.91  45 eP     59 42.77  -0.7
VLZ      2.93  61 eP     59 41.43  -2.2
CVA      3.03  74 eP     59 42.22  -2.8
KLU      3.27  57 eP     59 46.32  -2.2
FBA      5.39  18 ePc    00 16.11  -2.0
      0.3s     4.11nm          4.2mb X
IL1      5.42  22 eP     00 16.93  -1.7
IMA      6.32 352 eP     00 28.23  -3.1
        55 obs. associated
-------------------------------------
  NOV  23, 1993  08h 29m 24.10± 0.57s
  43.944 N ± 8.6km  149.465 E ± 7.6km
  DEPTH =  43.9km  (  8 depth phases)
  4.4mb ( 20 obs.)
 EAST OF KURIL ISLANDS           (222)

KUR      1.72 319 iPnc   29 51.00  -1.1
     Z  14s    10.80um
YSS      5.65 305 ePn    30 57.00   9.2X
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     Z  14s      2.10um
     N  14s      1.10um
     E  14s      1.30um
SKR     8.09  31 ePn   31 19.30  -2.5
     Z  12s      4.90um
     E  12s      4.60um
                  e     32 54.00
MAT    11.33 233 (P).   32 04.00  -2.3
                  eS    34 25.00
MDJ    14.26 280 eP     32 44.70  -0.3
CN2    17.31 278 eP     33 23.80  -0.2
       0.6s      3.40nm          3.7mb
SNY    19.07 273 Pd     33 44.60  -0.9
       1.0s     18.00nm          4.3mb
     Z  14s      0.59um          5.5Msz
YAK    21.50 334 eP     34 09.90  -0.8
       1.2s     70.00nm          4.9mb
                  eS    38 16.00
BJI    24.95 273 eP     34 44.00  -0.6
       1.2s     16.00nm          4.4mb
     Z  16s      0.35um          4.0MszX
BOD    25.89 315 eP     34 49.70  -3.5X
       1.1s     13.00nm          4.4mb
HHC    28.00 277 eP     35 09.00  -3.8X
       0.8s      5.40nm          4.3mb
BTO    29.19 277 eP     35 28.00   4.5X
ZAK    31.63 298 eP     35 44.00  -0.8
       1.0s     10.00nm          4.6mb
                  e     35 56.30  47km
XAN    32.74 266 eP     35 54.50  -0.3
LZH    35.44 273 eP     36 19.00   0.9
       1.4s     39.00nm          5.1mb
     Z  15s      0.34um          4.2MszX
                  pP    36 30.00  39km
GTA    36.91 281 eP     36 31.40   0.9
       1.2s      4.00nm          4.2mb
     Z  12s      0.60um          4.6MszX
     E  10s      0.26um
                  sP    36 44.00
CD2    38.09 266 eP     36 41.30   0.9
WMQ    43.58 292 P      37 26.00   0.6
     Z  16s      0.52um          4.5MszX
                  S     43 47.50
INK    45.39  31 eP     37 40.50   1.0
       1.0s      3.00nm          4.1mb
GUN    52.67 275 P      38 37.20   0.5
KKN    53.17 275 P      38 41.00   0.8
DMN    53.40 275 P      38 42.50   0.6
GKN    53.51 276 P      38 43.20   0.6
RES    54.30  17 eP     38 48.00   0.4
       1.0s      4.00nm          4.4mb
ARU    55.34 317 eP     38 43.00 -12.4X
NSD    64.63 339 eP     39 58.50  -0.3
       0.5s      0.80nm          4.0mb
LRM    64.96  50 eP     40 01.70   0.1
                  e     40 30.60 117kmX
WRA    65.07 196 eP     40 00.50  -1.6
       0.7s      2.40nm          4.4mb
                  ipP   40 14.20  48km
OBN    66.14 325 iPd    40 08.00  -0.6
       1.5s     70.00nm          5.5mb X
                  i     40 21.00  45km
ASPA   68.78 195 eP     40 26.20   0.6
       1.0s      3.10nm          4.3mb
NB2    70.01 340 P      40 32.40  -0.4
       1.3s     14.30nm          4.8mb
KIV    70.87 313 eP     40 39.90   1.5
       0.8s     19.00nm          5.1mb
     Z  16s      0.30um          4.6MszX
KSP    77.21 332 eP     41 15.40   0.7
                  e     41 28.60  45km
                  e     41 45.20
CLL    77.90 334 iP     41 18.80   0.3
       1.1s     10.00nm          4.8mb
                  i     41 31.60  43km
BRG    77.97 333 eP     41 32.00  13.1X
PRU    78.53 332 P      41 25.00   3.0X
                  e     41 51.00 100kmX
ZST    79.15 330 eP     41 29.20   3.8X
KHC    79.59 332 eP     41 29.00   1.2
       1.0s      5.40nm          4.5mb
                  e     41 41.00  40km
                  e     41 55.00
GEC2   79.79 332 eP     41 29.40   0.4
       0.8s      1.11nm          3.9mb
                  e     41 36.10  21kmX
                  e     41 40.50
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                  e     41 58.60
                  e     42 09.00
GRF    79.87 334 eP     41 32.30   3.0X
KBA    81.43 331 iPd    41 41.10   3.3X
       1.1s     16.00nm          4.9mb
                  i     41 54.00  44km
BHL    81.87 310 P      41 41.00   0.8
     S.D. = 1.0  on  32 of  42 obs.
-----------------------------------
?  NOV  23, 1993  10h 04m 01.95± 0.94s
   39.111 N ± 7.9km   27.523 E ± 9.7km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
      ML 2.6 (ISK).

IZM     0.74 196 ePg    04 16.40  -0.1
                  eSg   04 30.40
DST     0.99  60 ePg    04 21.00   0.3
EZN     1.17 308 ePn    04 24.00   0.2
EDC     1.26  12 ePn    04 25.00  -0.4
     S.D. = 0.5  on   4 of   4 obs.
-----------------------------------
?  NOV  23, 1993  10h 12m 12.99± 0.97s
   39.043 N ± 8.1km   27.541 E ±10.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
      ML 2.7 (ISK).

IZM     0.68 199 ePg    12 26.40  -0.1
                  eSg   12 38.00
DST     1.01  56 ePn    12 32.50   0.3
EZN     1.22 310 ePn    12 36.00   0.3
EDC     1.33  11 ePn    12 37.00  -0.4
     S.D. = 0.6  on   4 of   4 obs.
-----------------------------------
?  NOV  23, 1993  10h 21m 13.56± 1.99s
   31.541 S ±33.2km   68.896 W ±41.3km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA    (137)

RTCB    0.10  57 ePc    21 28.00  -0.1
                  S     21 39.10
RTLL    0.42  60 ePc    21 29.20   0.1
                  S     21 41.00
RTCV    0.44 136 eP     21 29.30   0.1
                  S     21 42.20
CFA     0.56  97 ePc    21 30.00  -0.1
                  S     21 43.00
     S.D. = 0.2  on   4 of   4 obs.
-----------------------------------
?  NOV  23, 1993  10h 47m 36.70± 1.01s
   39.598 N ±10.4km   29.498 E ±10.3km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
      ML 2.5 (ISK).

DST     0.67 271 ePg    47 49.50  -0.6
                  eSg   48 00.50
ALT     0.72 139 ePg    47 51.00   0.0
IZI     0.74 359 iPg    47 50.90  -0.3
                  iSg   48 01.40
EDC     1.46 301 ePn    48 04.00   0.9
     S.D. = 1.1  on   4 of   4 obs.
-----------------------------------
   NOV  23, 1993  10h 59m 55.44± 0.80s
   40.454 N ± 7.3km   21.882 E ± 6.0km
   DEPTH =   5.0km  (geophysicist)
 GREECE                          (364)
      ML 2.1 (THE).

FNA     0.51 311 ePg    00 05.14  -0.5
                  eSg   00 12.52
LIT     0.58 127 ePg    00 06.36  -0.8
                  eSg   00 17.00
GRG     0.64  38 ePg    00 08.12  -0.1
VAY     1.01  31 ePn    00 17.30   2.3X
KNT     1.05  47 ePg    00 15.48  -0.2
                  eSg   00 29.72
OHR     1.05 309 ePn    00 04.30 -11.5X
SOH     1.18  71 ePb    00 18.88   0.9
                  eSb   00 33.72
IGT     1.50 233 ePb    00 23.68   0.6
                  eSb   00 44.00
     S.D. = 0.8  on   6 of   8 obs.
-----------------------------------
&  NOV  23, 1993  11h 00m 46.81s
   33.347 N          116.363 W
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   DEPTH =  11.5km
 SOUTHERN CALIFORNIA             ( 43)
      <PAS-P>. ML 2.7 (PAS).

PLM     0.42 271 iPc    00 54.93  -0.5
                  eS    01 00.61
PEC     0.86 309 ePd    01 02.24  -1.0
                  eS    01 12.55
GLA     1.32 102 eP     01 08.42  -2.7
SSK     1.40 308 eP     01 11.95  -0.4
GSC     1.98 350 eP     01 21.48   0.8
       5 obs. associated
-----------------------------------
   NOV  23, 1993  11h 15m 06.66± 1.24s
   51.599 N ±11.4km   16.174 E ± 6.2km
   DEPTH =  10.0km  (geophysicist)
 POLAND                          (548)
      ML 3.8 (GRF), 3.7 (VIE).

KSP     0.76 174 iPd    15 21.60   0.1
       0.4s   154.00nm
                  iS    15 30.70
                  i     15 35.40
BRG     1.58 243 ePn    15 35.10   0.4
                  iPg   15 36.30
                  iSg   15 55.70
PRU     1.92 213 Pn     15 39.60   0.0
       0.5s   174.00nm
                  Pg    15 41.40
                  i     15 43.50
                  Sn    15 58.40
                  Sg    16 04.70
CLL     2.00 263 iPn    15 40.70  -0.2
                  iPg   15 43.30
                  iSg   16 10.00
OJC     2.68 120 eP     15 50.60   0.0
                  iPg   16 00.00
                  iS    16 35.60
KHC     2.98 215 ePn    15 54.00  -0.8
                  ePg   16 00.00
                  eSn   16 30.00
                  eSg   16 38.30
HOF     3.01 246 iPnc   15 55.10  -0.1
MOX     3.03 253 iPg    16 03.70   8.2X
                  iSg   16 43.20
WET     3.24 222 iPnc   15 58.70   0.2
VKA     3.34 178 iPgd   16 09.70   9.7X
                  iSg   16 53.40
ZST     3.46 170 iP     16 15.10  13.5X
                  e     16 54.90
GRF     3.68 241 ePn    16 05.00   0.1
                  ePg   16 18.20
                  e(Sn) 16 56.40
                  eSg   17 03.30
KBA     4.89 203 iPnc   16 22.00  -0.1
                  i     16 30.50
                  iSn   17 13.00
                  iSg   17 39.80
WATA    5.21 217 iPnc   16 26.50  -0.1
                  iSg   17 51.30
WTTA    5.25 216 iPnc   16 27.90   0.7
                  i     17 51.10
                  i     18 02.50
     S.D. = 0.4  on  12 of  15 obs.
-----------------------------------
   NOV  23, 1993  12h 29m 50.47± 0.97s
   33.460 S ± 5.7km   70.186 W ±10.1km
   DEPTH =  11.9 ±  9.8 km
 CHILE-ARGENTINA BORDER REGION   (127)
      MD 3.7 (SAN).

FCH     0.16 326 iP+    29 54.14  -0.4
                  iS    29 59.10
PCH     0.32 240 iP+    29 57.37   0.2
                  iS    30 05.62
PEL     0.52 307 iP+    30 00.84  -0.3
                  iS    30 10.64
TACH    0.66 253 iP+    30 03.35   0.0
                  iS    30 15.27
CACH    0.74 208 iP+    30 03.85  -1.1
                  iS    30 16.17
ROCH    0.85 305 iP+    30 06.70  -0.1
                  iS    30 20.77
JACH    0.85 336 iP     30 05.43  -1.3
                  iS    30 19.19
LNV     1.13 244 iP+    30 11.04  -0.5
                  iS    30 29.16
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23d 12h

```
LCCH     1.16 269 iP+    30 12.20    0.3
                  iS     30 30.25
RTCV     2.12  42 eP     30 27.00    0.8
                  S      30 52.00
     S.D. = 0.8  on  10 of  10 obs.
-----------------------------------
*  NOV  23, 1993  12h 47m 53.26± 1.54s
   42.623 N ±13.9km    7.518 E ± 8.8km
   DEPTH =  10.0km  (geophysicist)
 WESTERN MEDITERRANEAN SEA          (387)
      ML 2.6 (LDG), 2.3 (STR).

LMR      1.03 314 Pn     48 12.60    0.0
                  Sn     48 25.40
PGF      1.10  93 Pn     48 14.00    0.1
                  Sn     48 27.00
FRF      1.13 326 Pn     48 14.80    0.3
                  Sn     48 28.40
LRG      1.19 315 Pn     48 15.40    0.0
                  Sn     48 29.60
SBF      1.24 357 Pn     48 16.30   -0.1
                  Sn     48 31.90
AURF     1.27 354 Pn     48 17.65    0.7
MVIF     1.30 348 Pn     48 17.09   -0.3
                  Sg     48 35.33
TOUF     1.40 352 Pn     48 18.43   -0.6
                  Sg     48 37.25
     S.D. = 0.5  on   8 of   8 obs.
-----------------------------------
   NOV  23, 1993  12h 58m 13.80± 0.46s
    5.124 S ± 4.4km  144.272 E ± 6.2km
   DEPTH = 108.7 ±  5.5 km
   4.9mb ( 11 obs.)
 NEW GUINEA, PAPUA NEW GUINEA       (202)

MNDI     1.19 211 iPc    58 38.00    0.5
                  eS     58 57.00
MDG      1.51  95 iPc    58 40.00   -1.0
WWKK     1.63 337 ePd    58 42.90    0.4
PMG      5.13 146 eP     59 28.50   -1.1
RAB      7.92  84 eP     00 09.00    1.1
CTA     15.00 173 eP     01 25.00  -16.4X
                  e      05 14.00
                  i      06 33.00
                  e      07 50.00
MTN     15.07 239 iPd    01 41.40   -0.9
QIS     16.00 196 eP     01 56.00    2.1
WRA     17.62 212 iPd    02 13.40   -0.5
                  eS     05 19.40
KNA     18.53 234 eP     02 24.00   -0.8
ASPA    20.97 207 iPd    02 49.90   -0.1
        0.5s    51.90nm          5.1mb
      Z  23s     0.10um          3.1MszX
                  iS     06 37.80
STK     26.74 185 eP     03 36.80   -8.2X
        0.5s     2.30nm          4.0mb
WARB    26.89 217 eP     03 47.00    0.6
        0.4s    10.00nm          4.7mb
FORT    29.73 209 eP     04 11.80   -0.1
COOL    33.61 218 iPc    04 45.70   -0.2
        0.3s     5.00nm          4.8mb
KLB     36.21 220 eP     05 07.80   -0.1
BAL     36.27 222 iPc    05 08.80    0.4
        0.8s    37.00nm          5.3mb
MUN     37.46 221 eP     05 18.50    0.1
GYA     48.08 313 P      06 45.80    1.2
        1.0s    22.00nm          4.9mb
XAN     51.30 322 P      07 08.00   -1.0
        1.0s     9.80nm          4.7mb
TIY     51.90 328 eP     07 13.00   -0.5
CD2     52.74 315 eP     07 19.50   -0.3
LZH     55.80 321 eP     07 41.50   -0.7
        1.2s    20.00nm          5.0mb
GTA     60.35 321 eP     08 13.60   -0.2
        0.6s     5.00nm          4.8mb
LSA     61.55 308 P      08 23.80    1.2
        1.0s    18.00nm          5.0mb
GUN     65.12 304 P      08 46.00    0.1
PKI     65.39 303 P      08 47.10   -0.5
KKN     65.58 303 P      08 49.00    0.4
DMN     65.66 303 P      08 49.60    0.4
GKN     66.19 303 P      08 52.40    0.0
HYB     68.61 291 eP     09 07.00   -0.6
GBA     68.89 287 P      09 09.00   -0.2
WMQ     70.37 320 P      09 18.00    0.0
        1.0s    17.00nm          4.8mb
GEC2   119.64 325 ePKPd 16 52.80    0.2
        0.6s     0.88nm
CNCB   141.38 125 PKP    17 31.00   -4.3X
LPB    141.43 125 (PKP) 17 39.00    3.8X
LPAZ   141.53 124 PKP    17 30.40   -5.3X
SIV    147.30 130 PKP    17 48.00    3.4X
     S.D. = 0.8  on  32 of  38 obs.
-----------------------------------
%  NOV  23, 1993  13h 53m 23.80± 0.69s
   26.393 S ± 7.0km   27.430 E ± 6.9km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA           (584)
      ML 3.1 (PRE).

KSR      0.71 318 eP     53 38.00    0.0
                  S      53 48.00
BFS      0.77 229 iPc    53 40.90    1.6X
                  S      53 50.90
SLR      1.01  50 iPd    53 42.90   -0.6
                  S      53 56.80
SEK      1.93 175 iPc    53 57.90    0.1
                  S      54 22.00
SWZ      2.04 247 eP     53 59.90    0.6
                  S      54 23.30
BFT      2.45  74 eP     54 06.00    0.6
                  S      54 36.00
FRS      3.83 209 eP     54 23.90   -0.8
     S.D. = 0.7  on   6 of   7 obs.
-----------------------------------
*  NOV  23, 1993  14h 13m 55.07± 1.66s
   37.915 N ±15.6km   21.850 E ± 9.3km
   DEPTH =  10.0km  (geophysicist)
 SOUTHERN GREECE                    (368)
      ML 3.6 (ATH).

VLS      1.03 285 ePb    14 14.50    0.0
ATH      1.48  87 ePn    14 21.80    0.1
                  eSn    14 48.50
IGT      2.00 324 eP     14 36.20    6.9X
LIT      2.24  13 eP     14 32.80    0.1
GRG      3.07   8 eP     14 45.56    1.1
SOH      3.13  21 eP     14 43.52   -1.8
OHR      3.29 346 ePn    14 47.30   -0.5
KNT      3.34  14 eP     14 49.48    1.1
     S.D. = 1.2  on   7 of   8 obs.
-----------------------------------
?  NOV  23, 1993  14h 35m 33.47± 1.01s
   26.265 S ± 9.7km   27.404 E ± 9.2km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA           (584)

KSR      0.61 311 eP     35 45.00   -0.6
                  S      35 55.00
SLR      0.95  56 eP     35 52.50    0.4
                  S      36 08.50
SEK      2.06 175 eP     36 08.50   -0.8
                  S      36 31.50
SWZ      2.07 243 eP     36 10.50    1.0
                  S      36 33.50
     S.D. = 1.5  on   4 of   4 obs.
-----------------------------------
*  NOV  23, 1993  14h 58m 09.69± 1.89s
   11.256 N ± 9.4km  125.690 E ±17.9km
   DEPTH =  60.6 ± 13.5 km
   4.9mb (  4 obs.)
 SAMAR, PHILIPPINE ISLANDS          (251)

PLP      0.70 263 iPc    58 22.50   -1.6
MAP      1.92 241 iPd    58 41.00    0.5
                  iS     58 57.00
BIP      3.06 170 iPd    59 01.00    4.3X
GQP      4.12 310 eP     59 11.80    0.3
                  iS     00 04.00
CTB      4.29 200 ePd    59 29.00   15.1X
PGP      5.14 296 ePc    59 25.80   -0.2
QCP      5.61 307 eP     59 34.00    1.4
PPR      7.00 259 ePd    59 53.00    1.1
BAG      7.13 316 eP+    59 54.00    0.1
                  e      04 50.00
TANI    15.89 204 P      01 37.20  -13.8X
WRA     32.15 165 eP     04 32.90   -0.9
ASPA    35.62 167 eP     05 05.10    1.3
        0.4s     8.20nm          5.0mb
GUN     40.78 300 P      05 47.20    0.0
PKI     41.09 299 P      05 49.20   -0.5
KKN     41.26 299 P      05 50.60   -0.4
DMN     41.36 299 P      05 51.40   -0.5
GKN     41.87 300 P      05 54.80   -1.1
STK     45.52 161 iPd    06 19.00   -6.0X
        0.5s     6.00nm          4.7mb
                  epP    06 31.60   46kmX
KAF     84.49 332 eP     10 37.10    0.1
        0.5s     3.80nm          4.7mb
NUR     85.67 331 iP     10 43.50    0.7
        0.4s     5.00nm          5.0mb
     S.D. = 1.0  on  16 of  20 obs.
-----------------------------------
   NOV  23, 1993  15h 02m 13.02± 0.52s
    6.430 N ± 3.8km  125.827 E ± 5.6km
   DEPTH = 160.5 ±  5.3 km
   5.1mb ( 35 obs.)
 MINDANAO, PHILIPPINE ISLANDS       (259)
      Mw 5.4 (HRV).
      CENTROID, MOMENT TENSOR       (HRV)
      Data Used: GDSN
      L.P.B.: 19S, 24C
      Centroid Location:
      Origin Time        15:02:15.9 0.6
      Lat  6.62N 0.06 Lon 126.01E 0.07
      Dep 151.8 1.5 Half-duration  1.3
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 0.71 0.07  Mtt=-0.73 0.11
        Mff= 0.02 0.15  Mrt=-0.42 0.07
        Mrf= 1.05 0.09  Mtf=-0.88 0.09
       Principal Axes:
        T  Val=  1.78  Plg=47  Azm=241
        N       -0.43      42       44
        P       -1.35       9      142
      Best Double Couple:Mo=1.6*10**17
       NP1:Strike=269 Dip=52 Slip= 149
       NP2:         20     66       43

DAV      0.70 339 iPc+   02 36.00   -0.9
CTB      1.79 295 iPd    02 45.00   -1.8
                  iS     03 09.00
BIP      1.83  13 iPc    02 47.00   -0.3
                  iS     03 03.00
MAP      4.28 335 iPc    03 19.00    1.1
                  iS     03 58.00
PLP      4.78 350 ePd    03 24.50    0.0
PPR      7.77 296 ePc    04 04.00   -0.5
GQP      8.14 336 iPc    04 21.80   12.5X
TSM      8.20 255 ePd    04 11.50    1.4
TGY      9.02 328 ePd    04 24.00    3.0
PCI      9.43 220 ePd    04 31.00    4.7X
KKM      9.56 268 ePd    04 36.00    7.7X
BUNI    11.43 209 P      04 52.00   -0.6
YOMI    17.25 121 P      06 05.70   -0.2
KEDI    17.33 214 P      06 03.00   -3.9X
SRDI    18.84 218 P      06 24.40    1.1
MTN     19.86 165 iPd    06 33.80    0.0
QIZ     19.97 310 Pc     06 35.60    0.7
GUMO    20.04  68 eP     06 26.20   -9.4X
        1.5s   203.90nm          5.4mb
                  eTT    26 32.00
WWKK    20.38 119 eP     06 44.00    4.9X
KNA     22.23 172 iPc    06 57.70    0.5
        0.3s    41.00nm          5.4mb
SINI    22.64 234 P      07 03.80    2.4
KGM     22.87 260 ePd    07 05.20    1.8
PACI    22.88 236 P      07 06.80    3.1X
PENI    23.81 240 P      07 14.80    2.2
IPM     24.75 267 ePc    07 21.20   -0.3
        0.6s    58.80nm          5.3mb
SSE     24.92 351 P      07 18.50   -4.3X
PMG     26.45 126 iPd    07 36.70   -0.2
        1.0s    90.00nm          5.4mb
NST     26.81 292 eP     07 40.00   -0.2
MRPI    26.87 261 P      07 20.40  -20.6X
WRA     27.51 162 iPc    07 45.20   -1.4
        0.6s    14.40nm          4.8mb
                  ipP    07 57.70   49kmX
                  iS     12 12.60
KHT     28.00 289 eP     07 50.00   -1.0
MBL     28.04 192 eP     07 50.00   -1.3
        0.7s    52.00nm          5.4mb
KMI     28.87 313 eP     08 01.00    1.9
        1.6s    50.00nm          5.0mb
      Z  20s     1.20um          4.5Msz
                  eS     12 36.00
CHTO    28.92 298 iPc    07 58.60   -0.7
        0.6s     7.86nm          4.6mb
QIS     30.04 154 iPd    08 08.20   -0.9
NANU    30.53 199 iPd    08 02.00  -11.3X
ASPA    30.93 165 iPd    08 16.00   -0.9
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```
        0.5s    43.00nm          5.4mb
     Z  20s     0.40um          4.1Msz
                 epP   08 59.20 212kmX
                 iS    13 06.30
                 eScS  18 31.20
XAN    31.62 333 Pc    08 21.00  -1.8
        1.0s    13.00nm          4.6mb
     Z  25s     0.79um          4.3MszX
MAT    32.04  19 eP    08 25.00  -1.4
WARB   32.43 179 eP    08 30.20   0.3
CTA    33.14 143 iPd   08 36.80   0.7
        1.0s    35.00nm          5.0mb
                 e(PP) 09 42.50
                 e     13 32.00
                 eS    13 45.00
                 e(ScS)18 50.00
TIY    33.44 341 eP    08 40.50   1.9
     Z  22s     1.04um          4.5Msz
MEEK   33.61 192 iPc   08 38.60  -1.5
        0.3s    24.00nm          5.4mb
BJI    34.57 347 eP    08 46.00  -2.1
        1.0s     7.00nm          4.3mb
                 eS    14 00.00
                 eScP  14 49.00
SNY    35.31 357 iPd   08 55.20   0.9
        1.0s    41.00nm          5.1mb
     Z  15s     0.59um          4.5MszX
LZH    35.74 329 eP    08 58.50   0.2
        1.4s    41.00nm          4.9mb
     Z  20s     0.69um          4.4Msz
HHC    36.57 342 eP    09 04.60  -0.5
MRWA   36.68 194 iPc   09 05.20  -0.8
        0.3s    14.00nm          5.1mb
CN2    37.22 360 Pd    09 10.80   0.4
        0.7s     6.80nm          4.5mb
                 ePcP  11 27.30
COOL   37.37 187 iPc   09 10.80  -1.0
        0.3s    18.00nm          5.3mb
BAL    37.85 193 iPc   09 15.10  -0.7
        0.8s   207.00nm          5.9mb
MDJ    38.18   4 eP    09 20.00   1.6
        1.0s    27.00nm          4.9mb
KLB    38.59 191 iPc   09 21.20  -0.7
        0.3s    47.00nm          5.7mb
MUN    39.28 193 iPc   09 27.20  -0.5
        1.0s   230.00nm          5.8mb
LSA    40.01 310 P     09 35.00   0.7
GTA    40.34 328 eP    09 36.00  -0.4
        1.0s     4.00nm          4.0mb X
     Z  16s     0.86um          4.7MszX
                 pP    10 13.40 172kmX
                 sP    10 25.00
                 PcP   11 37.00
STK    40.96 159 iPd   09 33.60  -7.8X
        0.9s    32.00nm          4.9mb
                 e     11 08.80
                 iS    15 31.90
RKG    41.62 191 iPc   09 47.30   0.5
BRS    42.54 143 iPd   09 54.10  -0.4
        1.0s    20.00nm          4.7mb
                 i     09 57.50
                 ePP   11 34.00
                 i     15 22.20
ADE    42.93 164 iPd   09 59.10   1.6
GUN    43.44 304 P     10 02.20  -0.1
PKI    43.71 304 P     10 03.60  -0.8
KKN    43.89 304 P     10 05.40  -0.3
DMN    43.97 304 P     10 06.00  -0.4
ARMA   44.21 147 iPc   10 08.60   0.6
        0.6s    25.00nm          5.0mb
BWA    45.90 154 iPd   10 23.60   2.3
                 i     10 35.30
CIT    46.54 350 eP    10 27.00   0.9
CAN    46.91 154 iPd   10 30.60   1.3
                 i     10 35.10
                 i     10 38.40
                 e     12 50.50
CNB    47.07 154 iPc   10 32.10   1.6
        0.6s    37.00nm          5.2mb
HYB    47.40 288 eP    10 32.50  -0.8
GBA    48.11 282 P     10 36.00  -2.7X
DZM    48.84 127 iPc   10 43.90  -0.5
WMQ    50.02 324 eP    10 52.00  -1.0
     Z  12s     0.54um          4.8MszX
YAK    55.54   2 iPc   11 33.50   0.0
        1.0s    86.00nm          5.6mb
                 eS    19 06.00
```

```
QUE    59.97 301 eP    12 04.00  -1.2
TIK    65.16   1 iPc   12 37.00  -1.4
        1.2s    60.00nm          5.4mb
MRW    65.17 141 P     12 38.00  -1.0
MAIO   67.18 307 iPc   12 51.00  -1.1
                 eS    21 40.00
ASH    68.34 308 eP    12 54.40  -4.7X
SVE    71.20 328 eP    13 15.00  -1.1
ARU    72.16 327 eP    13 39.00  17.2X
CSY    73.39 186 iPc   13 18.80  -9.8X
        0.4s    27.50nm          5.3mb
IMA    80.30  24 eP    14 08.80   1.5
        1.4s    19.80nm          4.7mb
PMR    82.02  29 eP    14 18.20   2.1
OBN    84.33 325 iPd   14 27.50  -0.5
        1.0s    35.00nm          5.1mb
MAW    85.96 200 P     14 36.00   0.2
        1.2s    36.76nm          5.1mb
INK    88.00  21 eP    14 46.50   0.8
KAF    88.80 332 iP    14 48.20  -1.4
        0.4s     3.10nm          4.7mb
MBC    89.53  13 eP    14 56.00   3.2X
        1.0s     2.00nm          4.1mb X
NUR    89.92 331 eP    14 49.50  -5.3X
DAG    94.49 352 iPd   15 15.10  -0.6
        0.8s    23.88nm          5.5mb
RES    95.33  10 eP    15 21.00   1.4
NB2    95.98 334 P     15 20.90  -1.9
        0.7s     2.60nm          4.7mb
KIC   129.06 284 PKP   21 03.85  -0.6
        0.5s     9.50nm
TIC   129.26 284 PKP   21 04.17  -0.7
        0.6s     4.50nm
LIC   129.37 283 PKP   21 04.27  -0.8
        0.7s    12.00nm
RFA   148.87 157 ePKPc 21 40.00   0.5
MDZ   150.35 154 ePKP  21 49.00   7.2X
CNCB  163.00 129 PKP   22 01.00   2.6X
LPB   163.07 128 (PKP) 22 05.00   6.7X
LPAZ  163.18 127 PKP   22 01.40   2.7X
SIV   168.34 145 PKP   22 03.30   1.2
     S.D. = 1.2  on  81 of 102 obs.
-----------------------------------
?  NOV  23, 1993  15h 03m 25.49±10.06s
   31.704 S ±23.0km   69.069 W ±74.9km
   DEPTH = 111.7 ± 56.7 km
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTCB    0.32  47 iPc   03 41.80  -0.1
                 S     03 54.00
RTCV    0.48 109 iPc   03 43.00   0.3
RTLL    0.63  54 ePc   03 43.90   0.1
                 S     03 57.00
CFA     0.71  82 ePd   03 44.20  -0.2
                 S     04 00.00
RTPR    2.60  58 eP    04 07.00   0.1
                 S     04 38.50
MRA     2.94 105 ePc   04 11.30  -0.1
                 S     04 46.90
     S.D. = 0.3  on   6 of   6 obs.
-----------------------------------
%  NOV  23, 1993  15h 29m 14.46± 0.70s
   43.114 N ± 8.0km    0.647 W ± 5.0km
   DEPTH =  10.0km  (geophysicist)
 PYRENEES                         (378)
     ML 1.0 (STR).

ATE     0.05 234 Pg    29 16.79   0.2
                 Sg    29 18.75
ESCF    0.06 124 Pg    29 16.75   0.0
MADF    0.13 284 Pg    29 17.60   0.0
                 Sg    29 20.50
OGE     0.14  67 Pg    29 17.82   0.1
ISSF    0.14 232 Pg    29 18.14   0.3
                 Sg    29 21.15
LHE     0.20 175 Pg    29 18.79  -0.2
BOH     0.27 268 Pg    29 19.87  -0.3
     S.D. = 0.2  on   7 of   7 obs.
-----------------------------------
?  NOV  23, 1993  15h 34m 55.25± 1.58s
    4.244 S ±19.1km  129.620 E ±42.0km
   DEPTH = 120.0km  (geophysicist)
   5.2mb (  4 obs.)
 BANDA SEA                        (280)

KNA    11.46 184 eP    37 37.50   1.0
                 eS    39 35.20
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WRA    16.27 164 iPd   38 38.40   0.2
        0.9s    10.10nm          4.1mb X
                 iS    41 28.20
ASPA   19.75 168 iPd   39 17.50  -0.6
        0.4s    43.60nm          5.2mb
                 iS    42 42.60
WARB   22.00 187 eP    39 40.00  -0.7
GUN    52.89 310 P     44 01.80   0.3
        0.7s    32.00nm          5.4mb
GUN    52.89 310 P     44 02.80   1.3
KKN    53.29 309 P     44 04.30   0.0
        0.8s    17.00nm          5.0mb
DMN    53.33 309 P     44 04.80   0.1
GKN    53.89 309 P     44 08.50  -0.2
        0.6s    23.00nm          5.3mb
HYB    54.80 295 eP    44 14.00  -1.3
     S.D. = 0.9  on  10 of  10 obs.
-----------------------------------
   NOV  23, 1993  15h 52m 12.61± 0.72s
   33.174 S ± 5.8km   68.563 W ± 8.2km
   DEPTH =  10.0km  (geophysicist)
 MENDOZA PROVINCE, ARGENTINA      (139)

MDZ     0.38 320 iPd   52 20.10  -0.3
                 iS    52 23.50
RTCV    1.31   1 e(P)  52 37.00   0.1
CFA     1.59  10 iPd   52 41.20   0.4
                 S     53 04.00
RFA     1.59 177 iPd   52 41.00   0.0
                 S     53 05.00
ZON     1.63 357 eP    52 41.80   0.4
                 eS    53 03.80
RTCB    1.69 353 iPc   52 42.30  -0.2
                 S     53 05.00
RTLL    1.84   2 ePc   52 44.80   0.2
                 S     53 09.30
MRA     2.52  73 ePc   52 57.00   2.8X
RTRS    3.09 345 eP    53 02.50   0.2
                 S     53 46.00
RTPR    3.35  32 e(P)  53 15.00   8.9X
TCA     3.83  63 e(P)  53 13.20   0.2
                 S     54 19.00
CYA     5.28  28 ePc   53 32.50  -1.0
     S.D. = 0.5  on  10 of  12 obs.
-----------------------------------
%  NOV  23, 1993  17h 05m 20.88± 0.69s
   40.125 N ± 5.2km   29.265 E ± 6.5km
   DEPTH =   5.0km  (geophysicist)
 TURKEY                           (366)
     ML 3.0 (ISK).

IZI     0.26  37 iPg   05 26.30   0.0
                 eSg   05 29.80
DST     0.71 224 iPg   05 35.10  -0.1
                 eSg   05 44.60
ISK     0.95 351 ePg   05 39.30  -0.2
EDC     1.10 282 iPg   05 42.00   0.1
CTT     1.20 328 iPg   05 43.80   0.1
ALT     1.25 148 iPn   05 44.70   0.0
     S.D. = 0.1  on   6 of   6 obs.
-----------------------------------
&  NOV  23, 1993  17h 55m 41.58s
   63.524 N          150.121 W
   DEPTH = 138.5km
 CENTRAL ALASKA                   (  1)
     <AEIC>.

TRF     0.10 226 eP    56 00.36   1.4
                 eS    56 14.54
KTH     0.36 275 eP    56 00.93   1.4
                 eS    56 14.91
MCK     0.57  68 eP    56 01.99  -0.3
                 eS    56 16.93
RND     0.58 101 eP    56 01.90  -0.5
HUR     0.59 158 eP    56 01.81  -0.6
                 eS    56 17.39
BWN     0.71  24 iP    56 03.15   0.0
                 eS    56 19.05
CUT     1.13 184 eP    56 06.04  -0.7
NEA     1.15  23 eP    56 06.14  -0.8
                 eS    56 24.26
WRH     1.31  42 eP    56 07.82  -0.7
DHY     1.32 109 eP    56 08.47  -0.4
                 eS    56 29.48
CCB     1.52  41 eP    56 10.07  -0.7
MLY     1.54 350 eP    56 10.45  -0.6
HDA     1.65  56 eP    56 11.36  -1.0
```

23d 17h

MDM	1.66	29	eP	56 11.93	-0.5
SKT	1.68	203	eP	56 11.58	-1.1
			eS	56 35.76	
FBA	1.72	35	eP	56 12.13	-0.9
GHO	1.84	162	eP	56 13.90	-0.8
PWA	1.88	176	P	56 14.30	-0.7
			S	56 36.10	
IL1	1.89	47	eP	56 14.11	-1.0
ILB	1.89	47	eP	56 14.08	-1.1
			eS	56 38.25	
GLM	1.89	38	eP	56 14.46	-0.7
SML	1.91	154	eP	56 14.16	-1.2
THY	1.96	91	eP	56 16.35	0.3
PLRM	1.99	166	eP	56 15.28	-1.0
PMR	1.99	166	eP	56 15.12	-1.2
DJE	2.04	74	eP	56 16.15	-0.7
SUA	2.09	188	eP	56 17.17	-0.5
SCM	2.13	142	eP	56 16.85	-1.3
			eS	56 44.86	
PAX	2.18	103	eP	56 18.03	-0.7
KNK	2.26	159	eP	56 18.58	-1.0
PMS	2.30	173	P	56 19.20	-1.0
			S	56 47.80	
TOA	2.31	126	eP	56 19.67	-0.6
SDG	2.31	114	eP	56 19.52	-0.8
NCG	2.33	205	eP	56 19.46	-1.1
CRP	2.46	204	eP	56 20.18	-2.1
CP2	2.47	204	eP	56 21.36	-1.2
SPU	2.52	202	eP	56 22.00	-0.9
CFI	2.59	154	eP	56 22.37	-1.4
TZL	2.62	122	eP	56 23.64	-0.5
BKG	2.66	203	eP	56 23.71	-1.0
DOT	2.71	85	eP	56 24.16	-1.2
TTA	2.73	260	eP	56 23.69	-2.0
PWL	2.80	162	eP	56 25.54	-1.0
KLU	2.82	134	eP	56 25.12	-1.7
NKA	2.84	191	eP	56 28.25	1.3
IM3	2.92	329	eP	56 26.92	-1.1
IMA	2.97	331	eP	56 26.85	-2.0
SLKM	3.03	181	eP	56 28.58	-0.9
			eS	57 02.53	
MPA	3.07	173	eP	56 28.38	-1.5
			eS	57 03.84	
SVW	3.53	229	eP	56 33.76	-2.3
HIN	3.57	150	eP	56 34.78	-1.8
GLB	3.60	123	eP	56 35.99	-1.0
ILIM	3.71	203	eP	56 36.95	-1.5
BRLK	3.79	186	eP	56 38.57	-1.0
BC3	3.79	93	eP	56 37.95	-1.6
CNPM	4.05	188	eP	56 41.49	-1.4
OPT	4.16	202	eP	56 43.50	-0.9
HMT	4.23	136	eP	56 43.68	-1.7
AUL	4.45	202	P	56 50.90	2.6
BM3	4.54	28	eP	56 47.58	-1.9
WAX	4.61	129	eP	56 49.18	-1.3
CTGM	4.84	118	eP	56 53.60	-0.1
CDD	4.91	202	eP	56 53.07	-1.5
SYI	5.05	194	eP	56 55.33	-1.0
YAH	5.07	125	eP	56 55.72	-1.1

65 obs. associated

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* NOV 23, 1993 18h 05m 21.13± 1.54s
31.819 S ±13.8km 72.299 W°±16.2km
DEPTH = 102.4 ± 30.2 km
OFF COAST OF CENTRAL CHILE (134)

IHA	1.33	155	eP	05 45.10	-0.6
			eS	05 58.70	
RTRS	2.94	57	ePd	06 06.50	-0.4
			S	06 44.00	
RTCB	3.00	85	ePc	06 08.00	0.2
			S	06 48.10	
ZON	3.10	86	eP	06 10.20	1.1
MDZ	3.11	111	iPc	06 14.90	5.7X
			iS	06 55.10	
RTLL	3.31	83	ePd	06 12.80	0.9
			S	06 54.00	
CFA	3.47	88	iPc	06 14.00	-0.1
			S	06 17.30	
RFA	4.36	134	iPc	06 27.20	0.9
			S	07 38.50	
RTPR	5.19	75	eP	06 37.60	-0.2
TCA	6.60	88	eP	06 55.20	-2.0
			(S)	07 14.60	
FSA	7.93	46	ePc	07 20.80	5.4X
SLA	9.27	42	e(P)	07 39.30	5.6X
CNCB	15.45	16	P	08 54.00	-1.1
LPB	15.69	15	(P)	08 58.00	-0.1
LPAZ	15.92	15	P	09 02.60	1.4
GBA	146.88	116	PKP	25 02.00	10.5X

S.D. = 1.2 on 12 of 16 obs.

% NOV 23, 1993 18h 08m 26.09± 0.80s
40.088 N ± 6.3km 29.303 E ± 7.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
ML 2.8 (ISK).

IZI	0.28	28	iPg	08 31.80	-0.2
			eSg	08 35.80	
DST	0.71	227	ePg	08 40.10	0.0
			eSg	08 50.10	
EDC	1.13	284	ePn	08 47.00	-0.3
ALT	1.21	149	ePn	08 48.70	0.1
CTT	1.25	328	iPn	08 49.70	0.4

S.D. = 0.4 on 5 of 5 obs.

NOV 23, 1993 18h 15m 14.11± 0.55s
50.072 N ± 4.2km 7.906 E ± 5.1km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
ML 2.4 (BNS), 2.4 (UCC), 2.3 (STR).

ABH	0.30	231	ePg	15 20.60	0.2
KOE	0.37	342	iPgd	15 21.80	0.1
	0.2s	430.00nm			
			iSg	15 26.30	
BGG	0.39	290	iPgc	15 22.40	0.3
	0.2s	610.00nm			
			iSg	15 27.20	
RUP	0.66	236	ePg	15 26.70	-0.6
TOD	0.75	128	ePg	15 28.40	-0.3
BNS	1.01	333	iPgd	15 32.70	-0.5
	0.2s	138.00nm			
			ic	15 35.10	
			iSg	15 45.90	
LANF	1.09	183	Pg	15 34.68	0.0
			Sg	15 49.65	
HOFF	1.13	178	Pg	15 35.97	0.7
WLF	1.21	251	iPd	15 36.82	0.3
			iS	15 54.72	
MEM	1.33	295	iPc	15 38.81	0.2
			iS	15 54.46	
WLS	1.70	193	Pg	15 45.29	1.3
			Sg	16 06.99	
CDF	1.71	194	Pg	15 45.70	1.5
			Sg	16 07.10	
ECH	1.92	195	Pn	15 45.77	-1.4
			Sg	16 13.41	
DOU	2.13	272	P	15 53.80	3.6X
FEL	2.20	178	ePg	15 51.10	-0.2
MOF	2.28	193	Pn	15 48.42	-4.1X
			Sg	16 25.37	
HAU	2.31	207	Pg	15 57.30	4.5X
			Sg	16 24.90	
BSF	2.36	199	Pg	15 58.20	4.6X
			Sg	16 26.90	
LOMF	2.82	195	Pn	15 58.36	-1.7
CLL	3.47	67	ePg	16 21.00	11.8X
			eSg	17 03.00	
KHC	3.81	102	Pn	16 14.50	0.4
			ePg	16 24.50	
			eSn	16 56.00	
			eSg	17 14.50	
LOR	3.88	225	Pn	16 11.30	-3.8X
LBF	4.05	222	Pn	16 13.60	-3.8X
			Sn	16 59.20	
			Sg	17 19.00	
SSF	4.20	226	Pn	16 15.60	-3.9X
			Sg	17 24.20	
SMF	4.37	220	Pn	16 17.90	-4.1X
			Sg	17 30.50	

S.D. = 0.9 on 16 of 25 obs.

& NOV 23, 1993 19h 01m 50.14s
63.126 N 151.558 W
DEPTH = 7.8km
CENTRAL ALASKA (1)
<AEIC>. ML 2.7 (AEIC), 3.0 (PMR).

KTH	0.52	34	eP	01 59.91	-0.6
			eS	02 07.25	
TRF	0.66	60	eP	02 02.40	-1.1
HUR	0.89	99	eP	02 06.64	-0.8
CUT	0.94	140	eP	02 07.96	-0.2
			eS	02 19.73	
SKT	1.15	179	eP	02 11.68	-0.2
RND	1.26	76	eP	02 12.78	-0.9
MCK	1.33	62	eP	02 14.83	0.0
BWN	1.41	41	eP	02 16.74	0.7
			eS	02 36.02	
PWA	1.67	151	P	02 20.60	0.7
SUA	1.71	167	eP	02 21.27	0.7
NCG	1.75	189	eP	02 20.78	-0.3
NEA	1.82	36	eP	02 22.87	0.8
			eS	02 47.82	
GHO	1.83	137	eP	02 22.15	-0.1
			eS	02 45.42	
DHY	1.90	90	eP	02 23.29	-0.1
			eS	02 48.45	
BGL	1.91	192	eP	02 23.58	0.2
PLRM	1.91	143	eP	02 23.14	-0.1
PMR	1.91	143	eP	02 21.96	-1.3
MLY	1.95	10	eP	02 24.45	0.6
SML	2.00	130	eP	02 23.65	-1.0
TTA	2.04	266	eP	02 26.87	1.6
WRH	2.05	47	eP	02 26.76	1.5
BKG	2.09	189	eP	02 25.91	-0.1
PMS	2.11	153	eP	02 26.40	0.2
KNK	2.25	138	eP	02 28.65	0.4
CCB	2.26	46	eP	02 25.63	-2.7
MDM	2.35	37	eP	02 27.26	-2.5
HDA	2.42	56	eP	02 29.51	-1.1
FBA	2.43	41	eP	02 29.76	-1.1
GLM	2.62	43	eP	02 37.66	4.2
CFI	2.64	136	eP	02 34.43	0.7
IL1	2.64	49	eP	02 31.18	-2.6
ILB	2.64	49	eP	02 31.27	-2.5
			eS	03 09.96	
TOA	2.69	110	P	02 37.70	3.1
SVW	2.78	225	eP	02 37.25	1.4
IM3	3.02	343	eP	02 37.71	-1.4
IMA	3.09	344	eP	02 39.52	-0.8
KLU	3.10	119	eP	02 40.73	0.4

37 obs. associated

? NOV 23, 1993 19h 02m 33.49± 2.11s
18.567 S ±16.7km 176.917 W ±18.8km
DEPTH = 371.0 ± 16.2 km
4.7mb (11 obs.)
FIJI ISLANDS REGION (181)

VUN	4.42	277	iPd	03 48.00	-0.6
AFI	6.77	48	eP	04 04.00	-10.5X
BKM	14.14	271	iPc	05 42.00	1.6
DZM	15.99	255	iPc	06 01.20	1.0
BRS	29.19	247	iP	07 53.00	-11.3X
			i	08 05.00	
ARMA	30.86	242	iPc	08 20.00	1.1
CNB	34.17	234	iPc	08 48.30	1.4
	0.3s	14.00nm			4.8mb
CAN	34.45	234	iPd	08 49.80	0.5
			i	08 58.90	
BWA	34.61	236	iPd	08 49.00	-1.6
CTA	34.74	261	iPd	08 52.00	0.2
	1.0s	50.00nm			4.8mb
MDG	38.72	285	eP	09 26.50	1.6
STK	39.57	242	iPd	09 24.40	-7.3X
	0.6s	15.60nm			4.5mb
WRA	45.91	260	iPc	10 21.60	-0.9
	0.3s	15.60nm			4.8mb
ASPA	45.98	255	iPd	10 23.10	0.0
	0.4s	154.40nm			5.6mb
			iS	16 40.20	
FORT	51.01	245	eP	11 00.50	-0.6
	0.6s	20.00nm			4.6mb
KNA	51.82	264	iPd	11 06.80	-0.4
WARB	52.40	251	iPd	11 11.30	-0.2
COOL	56.96	245	eP	11 42.00	-1.9
MBL	59.20	256	iPd	11 58.80	-0.5
	0.3s	14.00nm			4.9mb
MEEK	59.53	250	iPd	12 00.40	-1.1
	0.6s	13.00nm			4.6mb
BAL	60.79	245	eP	12 08.80	-1.0
MUN	61.09	243	eP	12 11.50	-0.3
MRWA	61.54	246	eP	12 09.00	-5.8X
NANU	62.90	254	iPd	12 24.00	0.2
MAT	69.28	323	eP	13 02.00	-1.4
	0.8s	13.43nm			4.7mb

```
SPA     71.55 180 iPd    13 17.10    0.4
         0.6s    31.25nm          5.1mb
FBA     86.15  12 iPc    14 32.54   -1.6
         0.5s     4.31nm         4.6mb
OJC    145.71 341 ePKP   21 30.40    0.9
KSP    146.12 345 iPKPd  21 31.70    1.6
         0.7s    24.00nm
CLL    146.40 349 iPKPd  21 32.20    1.7
         0.9s    31.00nm
BRG    146.63 347 iPKP   21 33.00    2.1X
         1.0s    22.00nm
MOX    147.28 350 ePKP   21 35.00    3.0X
         1.6s    19.00nm
PRU    147.33 346 iPKPd  21 34.90    2.8X
         0.7s    12.40nm
MEM    147.95 356 iPKPc  21 36.56    3.6X
         1.5s     4.40nm
GRF    148.27 350 iPKPd  21 37.90    4.3X
ZST    148.32 342 i(PKP) 21 37.50    3.8X
KHC    148.35 347 PKPd   21 38.00    4.2X
         0.9s     8.70nm
                 e       22 04.00
DOU    148.52 358 PKP    21 38.20    4.2X
GEC2   148.60 346 ePKPd  21 38.30    4.0X
         0.6s     5.80nm
WLF    148.88 356 PKP    21 38.00    3.5X
FLN    149.74   5 ePKP   21 40.50    4.6X
         0.5s     6.65nm
LDF    149.94   4 ePKP   21 40.90    4.7X
         0.6s     4.95nm
CDF    150.04 354 ePKP   21 41.70    5.2X
         0.6s     3.80nm
GRR    150.08   5 ePKP   21 41.50    5.1X
         0.4s     5.20nm
KBA    150.34 346 iPKPd  21 41.80    4.7X
         0.6s     8.70nm
                 i       21 46.20
LPF    150.42   6 ePKP   21 42.40    5.5X
         0.5s    12.30nm
WATA   150.47 348 iPKPc  21 42.60    5.4X
HAU    150.52 356 ePKP   21 42.70    5.6X
         0.5s     4.30nm
WTTA   150.53 348 iPKPd  21 42.90    5.5X
         0.6s    19.80nm
MOTA   150.55 349 iPKPd  21 42.60    5.2X
         0.9s    11.80nm
BSF    150.65 355 ePKP   21 42.90    5.5X
         0.5s     3.45nm
SQTA   150.65 349 iPKPd  21 43.00    5.5X
         0.6s     7.80nm
LOR    151.37 359 ePKP   21 44.70    6.3X
         0.4s     2.60nm
SSF    151.58 359 ePKP   21 45.20    6.5X
         0.6s     3.25nm
LBF    151.65 359 ePKP   21 45.20    6.3X
AVF    151.85 360 ePKP   21 45.70    6.6X
MFF    151.91   5 ePKP   21 45.70    6.5X
         0.4s     1.90nm
SMF    151.99 359 ePKP   21 46.00    6.7X
BGF    152.09   0 ePKP   21 46.30    6.9X
         0.6s     3.50nm
TCF    152.35   1 ePKP   21 46.70    6.8X
         0.6s     2.45nm
LSF    152.36   2 ePKP   21 47.10    7.2X
MAF    152.42   1 ePKP   21 47.20    7.3X
         0.7s     2.45nm
     S.D. = 1.2  on  26 of  62 obs.
-----------------------------------
?  NOV  23, 1993  19h 15m 49.56± 1.01s
   50.268 N ±18.7km   18.978 E ± 7.5km
   DEPTH =  10.0km  (geophysicist)
 POLAND                            (548)
     ML 3.0 (WAR).

OJC      0.53  95 iPgc   16 00.10   -0.2
                  iSg    16 07.20
SPC      1.36 142 iPn    16 14.90    0.2
                  i(Sn)  16 34.90
KSP      1.81 290 ePn    16 21.20    0.2
         0.7s    41.00nm
                  iPg    16 23.80
                  iS     16 48.60
ZST      2.41 211 e(P)   16 37.30    7.7X
                  e      16 45.20
                  e      16 56.10
PSZ      2.43 165 e(Pn)  16 35.10    5.1X
PRU      2.87 266 ePn    16 40.80    4.6X
                  Pg     16 43.50
                  e      17 08.00
                  eSg    17 18.50
BRG      3.27 283 iPg    16 49.80    8.0X
                  iSg    17 34.20
KHC      3.69 254 ePn    16 47.50   -0.3
                  e      16 53.90
                  eSg    17 45.60
CLL      3.93 288 (Pg)   17 05.00   13.8X
                  eSg    17 57.00
     S.D. = 0.5  on   4 of   9 obs.
-----------------------------------
&  NOV  23, 1993  19h 32m 01.00s
   40.320 N          126.947 W
   DEPTH =  17.0km
 OFF COAST OF NORTHERN CALIFORNIA( 34)
     <BRK>. ML 4.1 (BRK).

KJJM     2.02  91 P      32 35.18    0.4
KSMM     2.13  93 P      32 35.81   -0.5
FHC      2.31  77 eP     32 38.77   -0.1
KCRM     2.39  86 P      32 41.36    1.3
KCPM     2.66 103 P      32 45.59    1.6
KIPM     2.71 100 P      32 45.06    0.4
GNAM     2.79 113 P      32 46.25    0.5
KFPM     2.79 103 P      32 47.72    1.9
GCBM     2.80 108 P      32 46.00    0.2
GHOM     2.92 115 P      32 48.25    0.7
GBDM     2.93 106 P      32 50.14    2.4
GGUM     3.04 118 P      32 49.27    0.0
LGPM     3.19  78 eP     32 50.81   -0.7
                  eS     33 28.23
GDCM     3.26 117 P      32 52.93    0.5
GHCM     3.37 119 P      32 54.06    0.1
WDC      3.37  84 eP     32 54.10    0.1
GHGM     3.39 109 P      32 57.49    3.2
FTR      3.44 120 P      32 55.00    0.1
YBH      3.50  65 ePd    32 55.93    0.1
                  e      33 18.56
                  iS     33 37.14
NTBM     3.74 122 P      32 59.52    0.3
LGBM     3.75  73 P      32 58.84   -0.7
NTYM     3.84 119 eP     33 00.08   -0.5
LBFM     3.97  73 eP     33 02.76    0.1
MIN      4.08  88 eP     32 55.98   -8.2
                  iS     33 51.99
LMEM     4.11  85 eP     33 06.35    1.8
ORV      4.26  99 ePd    33 06.79    0.3
                  eS     33 53.45
ZSP      4.35 122 iP     33 07.65   -0.2
MGA      4.40 126 P      33 08.69    0.2
BKS      4.40 122 iP     33 08.12   -0.5
                  eS     34 00.99
SAC      4.47 126 P      33 09.13   -0.3
JEGM     4.48 127 eP     33 08.74   -0.9
STAN     4.73 127 ePd    33 10.83   -2.4
                  iS     34 09.33
ADWM     5.08 110 P      33 17.61   -0.6
MHC      5.10 124 ePd    33 17.08   -1.5
                  eS     34 16.43
COE      5.13 125 eP     33 17.82   -1.1
ARN      5.16 123 eP     33 18.29   -1.1
SAO      5.59 128 eP     33 23.69   -1.7
                  iS     34 29.90
CMB      5.59 112 ePd    33 27.03    1.6
                  eS     34 33.24
PRI      6.47 128 eP     33 37.24   -0.7
MMPM     6.74 111 eP     33 42.07    0.2
MEMM     6.78 110 eP     33 41.81   -0.3
       41 obs. associated
-----------------------------------
%  NOV  23, 1993  19h 37m 17.33± 0.71s
   26.268 S ± 8.1km   27.639 E ± 7.3km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)
     ML 2.8 (PRE).

KSR      0.78 301 eP     37 32.90   -0.2
                  S      37 42.00
SLR      0.78  48 eP     37 33.00   -0.1
                  S      37 42.00
SEK      2.05 180 eP     37 53.50    0.5
                  S      38 18.20
BFT      2.24  76 eP     37 56.00    0.2
                  S      38 24.00
SWZ      2.26 246 eP     37 56.80    0.7
                  S      38 22.70
BLF      3.11 204 eP     38 07.00   -1.1
     S.D. = 0.8  on   6 of   6 obs.
-----------------------------------
%  NOV  23, 1993  20h 04m 47.10± 1.06s
   44.333 N ± 8.3km    7.250 E ±11.3km
   DEPTH =   5.0km  (geophysicist)
 NORTHERN ITALY                    (545)
     ML 1.5 (GEN).

STV      0.10 149 P      04 49.36   -0.1
                  S      04 50.68
ENR      0.16 131 P      04 50.36   -0.2
                  S      04 52.29
PZZ      0.20 328 P      04 51.55    0.3
                  S      04 54.53
ROB      0.45  95 P      04 56.37    0.3
                  S      05 02.45
BHB      0.51   1 P      04 56.94   -0.3
                  S      05 03.07
     S.D. = 0.4  on   5 of   5 obs.
-----------------------------------
   NOV  23, 1993  20h 07m 38.40± 0.13s
   41.302 N ± 2.5km  142.697 E ± 2.5km
   DEPTH =  37.5km  ( 29 depth phases)
   5.2mb (110 obs.)  5.1Msz ( 45 obs.)
 HOKKAIDO, JAPAN  REGION           (224)
     Mw 5.3 (HRV).
     CENTROID, MOMENT TENSOR     (HRV)
     Data Used: GDSN
     L.P.B.: 22S, 38C
     Centroid Location:
     Origin Time       20:07:40.3 0.3
     Lat 41.35N 0.04 Lon 142.97E 0.06
     Dep  32.6 4.0 Half-duration  1.1
     Moment Tensor;   Scale 10**16 Nm
       Mrr= 8.34 0.36  Mtt=-8.37 0.43
       Mff= 0.02 0.58  Mrt=-5.51 1.43
       Mrf= 1.51 0.88  Mtf=-0.84 0.43
      Principal Axes:
       T  Val= 10.27  Plg=71  Azm=210
       N       -0.24      10       91
       P      -10.03      16      358
     Best Double Couple:Mo=1.0*10**17
      NP1:Strike= 74 Dip=30 Slip=  71
      NP2:        276     62      101

HOOJ     1.17  22 iPd    07 58.90    0.5
                  eS     08 14.40
MRRJ     1.65 313 iPd    08 06.40    1.0
                  eS     08 28.20
AOMJ     1.91 248 iP+    08 10.70    1.6
                  S      08 33.50
SAP      2.03 330 eP     08 12.00    1.2
                  eS     08 37.00
KUSJ     2.34  39 iPd    08 14.60   -0.6
                  eS     08 42.20
OFUJ     2.36 200 P      08 15.90    0.4
                  eS     08 44.10
ASAJ     2.82 359 eP     08 23.30    1.3
YAMJ     3.74 214 P      08 36.60    1.5
                  S      09 17.80
NIIJ     4.97 216 eP     08 54.10    1.6
KUR      5.45  42 iPd-   08 58.00   -1.2
       0.5s  2810.00nm          7.0mb X
     Z  16s    16.80um          5.4Msz
     N  16s    14.00um
     E  16s    16.80um
                  iS     09 57.00
KAKJ     5.46 202 eP     08 57.20   -2.2
YSS      5.71   0 ePd-   09 02.20   -0.8
     Z  18s    13.00um
     N  18s    10.30um
     E  18s    12.50um
                  iS     10 05.00
MAJO     5.90 218 ePc    09 06.71    1.0
MAT      5.90 218 iPc    09 06.60    0.9
       1.0s   212.00nm          5.7mb
                  (S)    10 09.00
CHJJ     5.99 210 eP     09 06.50   -0.5
MTMJ     6.06 221 eP     09 09.70    1.7
IIDJ     6.92 214 eP     09 20.90    0.8
TSRJ     7.80 225 eP     09 34.30    2.0
VLA      8.22 286 iPd    09 38.00   -0.2
       2.0s   114.00nm          5.6mb
                  eS     11 06.00
WKYJ     9.03 221 eP     09 49.50    0.1
YONJ     9.48 233 P      09 57.40    1.8
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23d 20h

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TKSJ   10.01 226 eP    10 03.00   0.1
MDJ    10.16 293 eP    10 08.20   3.3X
       1.4s    81.00nm          5.8mb
     Z 14s     4.36um          4.7Msz
     N 12s     3.66um
     E 12s     1.89um
               eS      12 02.00
SHNJ   11.64 236 P     10 27.50   2.6X
KUMJ   12.90 231 P     10 48.90   7.1X
CN2    12.96 287 eP    10 45.00   2.4
       1.0s    11.00nm          4.8mb
     Z 20s     4.21um          4.7Msz
     N 12s     3.21um
     E 12s     2.88um
               epP     10 51.00
               eS      13 07.00
SKR    13.19  40 eP    10 41.50  -4.1X
       0.5s    80.00nm          5.9mb
     Z 18s     9.40um          4.5Msz
     N 18s     6.80um
     E 18s     5.90um
               eS      13 01.20
KAGJ   13.87 227 eP    10 55.10   0.5
PET    15.93  37 eP    11 33.00  11.8X
DL2    16.29 268 eP    11 28.00   2.0
       1.0s   150.00nm          5.1mb
     Z 20s     1.57um          5.9Msz
     N 11s     0.92um
     E 11s     0.66um
MGD    19.48  12 eP    12 00.00  -4.9X
       1.6s   500.00nm          5.5mb
               e       15 30.00
SSE    20.08 246 Pd    12 09.50  -1.9
       1.0s    53.00nm          4.8mb
     Z 20s     4.10um          4.8Msz
     N 15s     2.10um
     E 15s     2.00um
               sP      12 24.80
BJI    20.13 275 eP    12 07.50  -4.4X
       1.5s   130.00nm          5.0mb
     Z 16s     4.97um          5.0MszX
     N 12s     0.92um
               epP     12 22.50  72kmX
               eS      15 48.00
TIA    20.55 264 Pc    12 13.60  -2.7X
       1.6s   160.00nm          5.1mb
     Z 19s     1.91um          4.5Msz
     N 18s     1.48um
NJ2    21.18 252 Pc    12 20.00  -2.7X
       1.2s    90.00nm          5.0mb
     Z 18s     2.94um          4.7Msz
     N 13s     2.24um
     E 12s     1.77um
               pP      12 31.00  44km
YAK    22.17 344 iPc   12 30.00  -2.3X
       1.2s   125.00nm          5.2mb
     Z 18s     5.70um          5.0Msz
     N 17s     2.70um
     E 18s     3.20um
               i       12 52.00 105kmX
               iPPP    13 13.00
               iS      16 30.00
               eSS     17 10.00
CIT    22.51 308 eP    12 34.00  -1.9
     Z 16s     5.20um          5.1MszX
               eS      16 42.00
HHC    23.42 279 Pc    12 42.60  -2.3
       1.2s    32.00nm          4.7mb
     Z 20s     3.74um          4.8Msz
     N 15s     0.92um
     E 17s     2.16um
TIY    23.56 271 eP    12 44.40  -1.9
     Z 18s     1.09um          4.4Msz
     E 24s     5.04um
TATO   24.00 234 (P)   12 51.49   1.0
       0.6s    36.40nm          5.1mb
SMY    24.07  51 P     13 00.00   9.0X
     Z 20s     3.13um          4.8Msz
BOD    24.55 322 eP    12 55.10  -0.4
       0.6s    49.00nm          5.2mb
BTO    24.62 279 P     12 54.00  -2.5X
       0.9s    24.00nm          4.8mb
     N 14s     0.71um
     E 14s     0.83um
               sP      13 08.00
WHN    25.24 254 ePd   13 01.50  -0.9
       1.1s    89.00nm          5.3mb
     Z 20s     4.96um          5.0Msz
               pP      13 16.50  64kmX
XAN    27.57 266 P     13 22.00  -1.9
       1.2s    45.00nm          5.0mb
     Z 15s     1.46um          4.7MszX
     N 11s     0.92um
GUMO   27.67 175 e(P)  13 19.90  -4.9X
IRK    28.16 306 ePc   13 28.00  -1.0
       1.4s    43.00nm          4.9mb
     Z 17s     3.09um          5.0MszX
     N 16s     0.76um
     E 18s     2.99um
               e       13 47.50  86kmX
               eS      18 08.00
ZAK    28.63 302 iPc   13 32.00  -1.1
       1.4s    62.00nm          5.1mb
     Z 14s     2.34um          4.9MszX
     N 15s     1.05um
     E 14s     1.53um
               eS      18 21.00
LZH    30.59 273 eP    13 49.00  -2.0
       1.5s    53.00nm          5.1mb
     Z 18s     1.57um          4.7Msz
     E 15s     1.13um
               pP      14 00.00  41km
TIK    31.18 352 eP    13 48.00  -7.7X
       2.5s   111.00nm          5.2mb
     Z 17s     2.50um          4.9MszX
               e       14 59.00 380kmX
               eS      18 48.00
BAG    31.29 224 eP    14 01.00   3.6X
GTA    32.49 281 eP    14 06.80  -0.9
       1.2s     8.00nm          4.5mb
     Z 18s     5.48um          5.3Msz
     E 16s     1.80um
               pP      14 16.00  32km
               sP      14 20.00
               eS      19 18.00
               PcS     20 39.00
QCP    32.53 222 eP    14 27.20  19.2X
CD2    32.88 264 iPc   14 09.00  -2.0
       1.0s    63.00nm          5.4mb
     Z 16s     2.33um          5.0MszX
GYA    33.12 255 iPc   14 12.00  -1.2
       0.8s    73.00nm          5.6mb
     Z 18s     3.39um          5.1Msz
     N 16s     1.88um
     E 16s     1.86um
ILT    33.75  25 iPd   14 15.40  -2.7X
       1.6s   168.00nm          5.7mb
     Z 20s     3.20um          5.0Msz
     N 16s     1.70um
     E 18s     1.00um
               e       15 32.00 409kmX
               eS      19 34.00
               eSS     21 44.00
UER    34.45 304 eP    14 23.00  -1.3
       1.4s    30.00nm          5.0mb
               e       14 34.50  42km
               eS      19 54.00
KMI    36.76 257 Pc    14 43.50  -0.9
       1.8s   280.00nm          5.9mb
     Z 20s     3.70um          5.2Msz
     N 15s     1.80um
     E 15s     1.70um
               pP      14 58.50  58kmX
DAV    37.32 209 eP    14 46.00  -2.9X
CTB    37.74 211 eP    14 52.00  -0.4
SDN    39.17  49 P     15 10.00   6.0X
     Z 18s     0.78um          4.6Msz
WMQ    39.96 293 P     15 10.80   0.0
       1.5s    76.00nm          5.3mb
     Z 14s     2.87um          5.3MszX
     E 14s     3.58um
               pP      15 23.00  45km
               PP      16 40.50
               ScP     21 00.00
               S       21 11.00
               sS      21 30.00
TTA    41.39  37 ePc   15 22.96   0.7
       1.0s    12.05nm          4.6mb
SVW    41.55  40 eP    15 25.25   1.6
       1.0s    57.10nm          5.3mb
BRW    42.11  25 ePc   15 27.19  -0.8
IMA    42.54  33 ePd   15 31.37  -0.4
       0.6s    15.74nm          4.9mb
LSA    42.96 271 P     15 36.00  -0.1
     N 15s     0.82um
               pP      15 49.00  48kmX
               S       22 02.00
               sS      22 18.50
CP2    43.18  40 eP    15 38.56   1.4
CRP    43.23  40 eP    15 38.25   0.8
KDC    43.37  45 eP    15 38.07  -0.3
       0.8s    17.47nm          4.9mb
CHTO   43.42 252 iPc   15 39.50   0.2
       0.9s    24.94nm          5.0mb
SLKM   44.23  41 (P)   15 47.08   1.7
BDT    44.41 251 eP    15 48.80   1.5
       1.0s    34.50nm          5.1mb
PMR    44.65  39 eP    15 49.22   0.5
       0.8s    31.00nm          5.2mb
     Z 19s     1.15um          4.8Msz
NST    44.68 248 iPd   15 50.50   1.1
COL    44.99  34 ePd   15 52.11   0.6
       1.0s   113.02nm          5.7mb
FBA    44.99  34 ePd   15 51.82   0.4
       0.9s    46.64nm          5.4mb
TOA    45.98  38 eP    16 00.80   1.4
KHT    46.36 248 eP    16 02.50  -0.3
TLG    47.24 295 eP    16 10.00   0.4
       1.7s    47.00nm          5.2mb
     Z 20s     1.00um          4.8Msz
     N 16s     1.30um
               ePPP    18 50.00
               eS      23 07.00
GUN    47.85 273 P     16 14.60  -0.3
KKN    48.36 273 P     16 18.80   0.1
PKI    48.38 272 P     16 18.80  -0.2
DMN    48.59 273 P     16 20.60   0.1
GKN    48.73 273 P     16 21.20  -0.3
FRU    49.28 296 iP    16 25.40   0.0
       2.0s   120.00nm          5.6mb
               i       16 36.40  38km
               e       23 30.00
KSH    49.70 291 P     16 29.40   0.6
       1.0s    50.00nm          5.5mb
     Z 16s     3.50um          5.5MszX
     N 14s     3.20um
     E 14s     2.50um
               pP      16 39.00  32km
               sP      16 43.00
               PcP     17 49.00
               ePP     18 24.00
               eScP    21 41.00
               ePcS    21 46.00
               S       23 37.00
               sS      23 54.00
               ScS     26 16.00
               SS      27 08.00
INK    50.16  29 ePd   16 31.80   0.2
       0.8s    17.00nm          5.1mb
PMG    50.62 174 eP    16 34.50  -1.2
MBC    52.16  17 eP    16 47.50   0.7
       0.6s     6.00nm          4.7mb
IPM    52.18 237 ePc   16 46.80  -0.9
SIT    52.55  43 P     17 00.00  10.1X
     Z 20s     0.61um          4.6Msz
SVE    52.67 317 ePc   16 50.50  -0.4
       2.6s   120.00nm          5.4mb
     Z 13s     2.50um          5.4MszX
     N 13s     1.00um
     E 13s     1.50um
               e       18 04.00 351kmX
               e       18 50.90
               eS      24 15.00
KGM    52.77 233 ePc   16 52.80   0.7
HON    53.39  93 P     17 10.00  13.4X
     Z 20s     0.49um          4.5Msz
ARU    53.87 317 iPc   16 58.50  -1.2
     Z 18s     1.50um          5.1Msz
     N 11s     0.50um
     E 18s     1.50um
               e       17 09.00  35km
               e       18 56.00
               eS      24 31.00
               e       26 40.00
RES    58.23  15 eP    17 30.00  -0.7
       0.8s    17.00nm          5.2mb
HYB    59.38 267 ePc   17 38.00  -1.5
       1.0s    35.00nm          5.4mb
YKA    59.64  32 eP    17 40.00  -0.7
       0.6s     4.70nm          4.8mb
QUE    60.69 286 eP    17 48.50   0.0
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CTA     61.16 176 iPc   17 50.00  -1.4
        1.5s    41.67nm         5.3mb
                i       18 07.00  64kmX
WRA     61.42 189 iPd   17 50.50  -2.7X
        0.7s    13.00nm         5.2mb
SDF     61.47 337 iP    17 52.20  -0.9
DAG     61.62 355 iPc   17 52.80  -1.2
        0.6s     4.67nm         4.8mb
                ipP     17 59.90  23kmX
ASH     62.53 298 eP    18 00.00  -0.6
GBA     62.60 264 P     18 01.00  -0.2
MAIO    62.64 295 iPc   18 01.00  -0.5
                eS      26 32.00
BMW     64.01  50 eP    18 10.40   0.1
                e       18 20.98  34km
MOS     64.44 323 eP    18 13.00   0.2
        2.0s   270.00nm         6.0mb
      Z  15s     2.40um         5.5MszX
                e       18 46.00 136kmX
                e       20 35.00
                e       26 48.00
LON     64.67  49 eP    18 14.02  -0.6
SHW     64.74  50 eP    18 15.99   0.8
KAF     64.99 332 iP    18 14.80  -1.5
        1.1s    30.30nm         5.3mb
ASR     65.13  50 P     18 17.34  -0.3
ASPA    65.15 189 iPc   18 16.30  -1.4
        1.0s    39.20nm         5.4mb
      Z  23s     1.00um         4.9MszX
WTV     65.18  48 P     18 17.13  -0.8
EBG     65.29  49 P     18 18.41  -0.2
OBN     65.29 323 iPd   18 17.60  -0.7
        1.2s    44.00nm         5.4mb
      Z  16s     3.00um         5.6MszX
      N  16s     1.20um
      E  16s     1.90um
                i       18 28.00  33km
                e       18 57.00
                eS      26 56.00
                (PS)    27 12.00
                eSS     31 16.00
SAW     65.49  47 P     18 19.05  -0.8
MXC     65.63  49 P     18 20.60  -0.1
MBL     65.67 203 iPc   18 19.50  -1.5
        0.8s    31.00nm         5.4mb
GL2     65.68  50 P     18 21.18   0.0
DPW     66.05  47 ePc   18 22.56  -0.9
CROR    66.15  50 P     18 23.39  -0.7
NEW     66.41  46 eP    18 24.98  -0.7
                e       18 36.76  40km
VIPM    66.63  51 P     18 27.00  -0.4
NUR     66.67 332 iP    18 25.50  -1.5
        0.4s     6.00nm         5.0mb
DZM     66.79 156 iPc   18 28.70   0.4
LNOR    67.18  48 P     18 30.52  -0.1
LGPM    67.39  55 iPc   18 32.37   0.2
LBFM    67.72  54 ePc   18 33.88  -0.4
NANU    68.36 207 eP    18 37.50  -0.5
PYA     68.63 310 iPd   18 39.00  -0.7
WARB    68.77 195 iPd   18 40.60   0.0
        0.6s    11.00nm         5.1mb
KIV     68.89 310 iPc   18 41.70   0.3
        1.4s   218.00nm         6.0mb
                e       18 52.90  37km
BRS     68.98 170 iPc   18 42.00   0.1
        0.8s     8.00nm         4.8mb
MTA     69.01 307 iPc+  18 42.00   0.0
                e       27 43.00
ORV     69.01  55 ePc   18 41.27  -0.8
UPP     69.56 334 iP    18 45.60   0.6
MNK     70.08 325 eP    18 43.00  -5.3X
      Z  18s     2.98um         5.6Msz
ERE     70.11 306 iP    18 48.00  -0.9
        1.6s    12.00nm         4.7mb
                eS      27 58.00
ARN     70.32  57 eP    18 49.70  -0.4
                e       18 59.67  32km
LRM     70.43  46 ePc   18 50.60  -0.4
CMB     70.62  56 ePc   18 51.72  -0.3
        1.7s   110.10nm         5.6mb
      Z  19s     0.81um         5.0Msz
                e       19 02.53  35km
NB2     70.64 337 P     18 50.80  -0.9
        1.3s    31.80nm         5.2mb
KVN     71.41  54 eP    18 57.20   0.2
MEMM    71.75  56 eP    18 59.95   1.2
BONR    71.97  55 eP    19 00.52   0.1
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PTI     72.36  48 eP    19 03.17   0.7
                e       19 13.61  34km
FRB     72.40  14 eP    19 01.50  -0.6
        0.6s     8.00nm         4.9mb
TNP     72.56  55 iPc   19 03.73  -0.1
        0.6s     8.41nm         4.9mb
STK     72.83 181 eP    18 55.80  -9.1X
        3.5s     2.90nm         3.7mb X
HVU     72.84  49 eP    19 05.22  -0.1
DUG     73.84  51 iPd   19 11.53   0.4
        1.1s    31.40nm         5.2mb
      Z  19s     0.32um         4.6Msz
                e       19 23.31  39km
TPNV    73.87  55 eP    19 11.37   0.0
        0.7s     8.03nm         4.8mb
MRWA    74.39 204 iPd   19 13.70  -0.4
        1.0s    32.00nm         5.3mb
COOL    74.54 199 eP    19 13.50  -1.4
GSC     74.58  57 eP    19 15.31  -0.1
ARUT    75.04  53 eP    19 18.66   0.5
                e       19 29.41  35km
PEC     75.25  58 eP    19 18.63  -0.6
                e       19 29.69  36km
ULM     75.41  34 eP    19 21.50   1.7
BAL     75.47 203 eP    19 20.00  -0.3
PTT     75.52 321 eP    19 02.00 -18.5X
BWA     75.54 175 iPc   19 21.20   0.6
PLM     75.79  58 eP    19 21.49  -1.0
SRU     75.89  50 ePc   19 22.76  -0.2
ADE     75.98 183 e(P)  19 23.60   0.5
RSSD    76.01  43 eP    19 22.72  -0.9
        1.0s    22.62nm         5.1mb
OJC     76.05 326 eP    19 23.50   0.0
        0.9s    80.00nm         5.7mb
                e       19 36.70  45km
KLB     76.10 202 eP    19 22.50  -1.3
        1.0s    27.00nm         5.2mb
UZH     76.17 324 eP    19 26.00   1.9
        1.0s    25.00nm         5.2mb
      Z  15s     4.50um         5.9MszX
      N  15s     2.00um
      E  15s     3.00um
                e       19 34.10  26kmX
CAN     76.47 175 iPc   19 26.20   0.4
MLR     76.78 320 eP    19 31.00   3.3X
KSP     77.00 328 ePc   19 28.20  -0.5
                e       22 16.50
PSZ     77.76 325 ePc   19 33.30   0.2
BRG     77.88 330 iP    19 33.10  -0.5
        2.0s    66.00nm         5.3mb
      Z  18s     2.40um         5.6Msz
      N  18s     0.65um
      E  18s     1.70um
                i       19 44.00  35km
CLL     77.89 330 iPc   19 32.80  -0.8
        1.3s    29.00nm         5.1mb
      Z  19s     1.50um         5.3Msz
PRU     78.36 329 iPc   19 36.10  -0.1
        1.2s    29.70nm         5.2mb
      Z  14s     1.90um         5.6MszX
      N  14s     1.60um
      E  15s     1.40um
                i       19 48.30  41km
                i       20 44.40
GOL     78.39  47 P     19 50.00  13.1X
      Z  21s     0.64um         4.9Msz
GLD     78.44  47 eP    19 38.21   1.1
        1.3s    56.59nm         5.4mb
                e       19 49.86  39km
SRO     78.53 325 iP    19 38.30   1.2
ZST     78.74 326 eP    19 38.30   0.0
MOX     78.94 331 eP    19 39.60   0.2
        1.9s    55.00nm         5.2mb
      Z  20s     1.60um         5.4Msz
KHC     79.42 329 iPc   19 42.40   0.3
        1.1s    18.90nm         5.0mb
      Z  16s     2.30um         5.6MszX
                e       19 50.50  26kmX
DIM     79.48 318 eP    19 44.00   1.6
WTS     79.50 334 eP    19 42.50   0.2
        0.8s    14.40nm         5.0mb
GEC2    79.61 329 eP    19 42.90  -0.2
        0.8s     2.80nm         4.3mb
                e       19 51.80  28km
                e       19 55.20
                e       19 58.10
                e       20 00.60
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                e       20 07.20
JAQ     79.68  22 eP    19 45.00   1.7
WET     79.68 329 eP    19 44.00   0.5
        1.2s    34.00nm         5.2mb
PGB     79.80 319 iPd   19 45.00   0.7
PLD     79.86 318 eP    19 46.00   1.5
GRF     79.87 330 iPc   19 45.30   0.9
        1.1s    37.00nm         5.3mb
      Z  19s     1.40um         5.3Msz
                ed      19 57.20  39km
                ic      20 00.50
                ec      20 11.90
RZN     80.16 318 P     19 47.00   0.6
VTS     80.24 319 iPd   19 48.00   1.3
TUC     80.31  55 eP    19 48.88   1.7
      Z  21s     0.56um         4.9Msz
                e       19 59.36  33km
TNS     80.43 332 ePc   19 47.40  -0.1
MMB     80.73 318 iPd   19 50.00   0.8
ENN     80.83 334 eP    19 49.50   0.0
        1.0s    11.00nm         4.8mb
BHG     80.84 328 eP    19 50.00   0.4
KKB     80.85 319 iPd   19 51.00   1.2
ELL     80.95 311 eP    19 50.50   0.0
PTJ     81.03 325 eP    19 50.60  -0.1
FUR     81.10 329 iPc   19 51.40   0.4
        1.2s    52.00nm         5.4mb
      Z  17s     2.00um         5.5MszX
                i       20 07.10  55kmX
ALQ     81.11  51 P     20 00.00   8.5X
      Z  21s     0.54um         4.9Msz
KBA     81.17 328 iPc   19 51.70   0.1
        1.1s    37.50nm         5.3mb
                i       20 07.40  55kmX
                i       22 49.00
                i       23 09.10
CIN     81.36 313 eP    19 53.00   0.5
KNT     81.47 319 eP    19 40.64 -12.4X
VAY     81.51 319 iP    19 53.20   0.0
        1.4s    80.00nm         5.5mb
SKO     81.57 320 iP    19 54.00   0.5
        2.0s   370.00nm         6.0mb
      Z  17s     1.75um         5.5MszX
                i       20 06.00  40km
                LR      00 12.00
WATA    81.66 329 iPc   19 53.80  -0.3
WTTA    81.70 329 iPc   19 54.60   0.3
        1.0s    18.40nm         5.0mb
                i       20 06.80  41km
MOTA    81.84 329 iPc   19 55.20   0.2
        1.0s    36.80nm         5.4mb
                i       20 03.30  26kmX
                i       20 07.80
GRG     81.87 319 eP    19 52.76  -2.4
SQTA    81.90 329 iPc   19 54.70  -0.6
        1.0s    25.80nm         5.2mb
                i       20 08.00  45km
TRI     82.11 327 eP    19 55.50  -0.7
DLF     82.11 342 eP    20 10.00  13.9X
DCN     82.24 342 eP    20 13.00  16.3X
OGA     82.26 329 eP    19 57.50   0.2
CDF     82.37 332 iPc   19 57.80   0.1
        1.3s    22.00nm         5.0mb
LIT     82.47 318 eP    20 02.36   4.1X
OHR     82.54 320 iP    19 58.00  -0.6
        1.0s    60.00nm         5.6mb
                i       20 05.70  24kmX
BSF     83.04 332 iPc   20 00.80  -0.4
HAU     83.04 332 eP    20 01.00  -0.1
      Z  20s     1.65um         5.4Msz
ACO     83.95  45 iPc   20 06.20   0.3
IGT     83.98 319 eP    20 05.76  -0.2
LOR     84.54 333 iPc   20 08.60  -0.1
        1.2s    29.15nm         5.3mb
      Z  22s     2.13um         5.5Msz
LBF     84.75 333 iPc   20 09.60  -0.1
        1.4s    42.25nm         5.4mb
SSF     84.84 333 iPc   20 10.30   0.2
        0.8s     7.40nm         4.9mb
LPL     85.03 331 iPc   20 11.90   0.5
        1.2s    39.85nm         5.5mb
LPG     85.03 331 iPc   20 12.00   0.5
        1.2s    41.05nm         5.5mb
SMF     85.09 333 iPc   20 11.60   0.2
        1.5s    72.10nm         5.6mb
AVF     85.13 333 iPc   20 11.90   0.3
        1.3s    63.20nm         5.6mb
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23d 20h

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LPF     85.43 337 iPc   20 13.80   0.7
        1.3s    36.10nm          5.4mb
BGF     85.50 333 eP    20 14.10   0.6
        1.0s    12.40nm          5.1mb
WMOK    85.60  47 eP    20 14.30   0.1
        0.8s    16.35nm          5.3mb
      Z 19s      0.91um          5.2Msz
MEO     85.68  46 iPc   20 14.80   0.2
OCO     85.72  45 iPc   20 14.20  -0.6
MAF     85.89 333 iPc   20 16.20   0.8
        1.2s    59.80nm          5.7mb
TCF     85.95 334 iPc   20 16.40   0.6
        1.0s    18.80nm          5.3mb
LSF     86.21 334 iPc   20 17.40   0.4
        1.2s    53.55nm          5.6mb
TUL     86.32  44 iPd   20 17.50  -0.2
MFF     86.43 335 iPc   20 18.90   0.8
        0.9s    23.75nm          5.4mb
LTX     86.75  53 eP    20 20.13   0.1
GAC     86.91  26 eP    20 20.00  -0.4
RJF     87.05 334 iPc   20 21.90   0.8
        1.1s    25.40nm          5.4mb
      Z 21s      1.13um          5.2Msz
CAF     87.19 333 iPc   20 23.00   1.1
        1.3s    59.20nm          5.7mb
FVM     87.38  39 P     20 30.00   7.2X
      Z 21s      0.99um          5.2Msz
LFF     87.63 334 eP    20 25.00   1.1
        1.3s    65.35nm          5.7mb
LPO     87.70 334 iPc   20 25.20   0.9
        1.4s    66.65nm          5.7mb
CBM     87.97  21 P     20 40.00  14.5X
      Z 20s      1.31um          5.3Msz
MIAR    88.52  43 eP    20 28.11  -0.2
        0.8s    11.80nm          5.2mb
      Z 20s      0.70um          5.1Msz
                  e     20 39.45  36km
YSNY    88.67  29 P     20 40.00  11.0X
      Z 18s      0.57um          5.0Msz
LBNH    89.34  24 P     20 40.00   7.9X
      Z 21s      0.90um          5.2Msz
LMN     89.82  19 eP    20 34.50   0.2
BINY    89.83  28 P     20 50.00  15.5X
      Z 19s      0.89um          5.2Msz
MCWV    90.61  31 P     20 50.00  11.9X
      Z 20s      1.47um          5.4Msz
OXF     90.65  41 P     20 50.00  11.7X
      Z 21s      0.67um          5.0Msz
HRV     91.02  25 P     20 50.00  10.1X
      Z 19s      0.92um          5.2Msz
LSCT    91.23  26 P     20 50.00   9.1X
      Z 21s      0.56um          5.0Msz
MYNC    92.68  37 P     21 00.00  12.3X
      Z 21s      1.03um          5.2Msz
CEH     94.15  33 P     21 00.00   5.6X
      Z 18s      1.55um          5.5Msz
TIC    123.86 320 PKP   26 46.00  11.6X
SLR    124.39 264 iPKPd 26 35.00  -0.3
        1.0s    60.00nm
SEK    126.29 262 ePKP  26 38.50  -0.4
        0.7s    22.00nm
BLF    127.77 262 ePKP  26 41.50  -0.2
        0.7s    33.00nm
LPAZ   143.57  56 ePKP  27 08.68  -3.2X
LPB    143.78  56 PKP   27 11.00  -1.0
CNCB   144.06  56 PKP   27 11.80  -0.9
SNA    145.87 200 e(PKP)27 13.70   0.3
        1.0s    42.00nm
SIV    147.48  46 PKP   27 17.80   0.1
YJA    149.56  60 ePKPd 27 23.00   1.7
HJA    150.36  61 ePKPd 27 28.40   6.5X
SLA    151.33  64 ePKPd 27 29.40   5.8X
FSA    151.86  66 ePKPc 27 31.50   7.4X
BDFB   152.80  23 ePKP  27 31.82   6.0X
BAO    152.80  23 ePKP  27 33.50   7.7X
                  e     27 48.00
                  e     27 57.40
PPD    157.44  36 (PKP) 27 44.00  12.2X
     S.D. = 0.9  on 225 of 276 obs.
-----------------------------------
*  NOV  23, 1993  21h 14m 00.37± 2.79s
   42.443 N ±15.2km   21.412 E ±23.7km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)

SKO      0.47 178 iPg   14 10.00   0.1
                  iSg   14 15.60
PVY      1.07 279 iPgd  14 19.42  -1.3
                  iSg   14 33.39
IVA      1.20 292 iPgd  14 21.58  -1.2
                  iSg   14 37.35
OHR      1.41 199 ePn   14 25.30  -0.8
TTG      1.59 270 iPgd  14 28.71   0.1
                  iSg   14 50.42
ULC      1.68 254 iPgc  14 30.73   0.8
                  iSg   14 53.07
PLE      1.73 302 iPgd  14 31.07   0.3
                  iSg   14 53.45
NKY      1.82 283 iPnd  14 32.57   0.5
                  iSn   14 55.59
BDV      1.92 266 iPnc  14 34.12   0.7
                  iSn   14 58.54
HCY      2.16 271 iPnd  14 37.29   0.4
                  iSn   15 03.94
BRY      2.16 283 iPnd  14 37.33   0.2
                  iSn   15 03.91
     S.D. = 0.8  on  11 of  11 obs.
-----------------------------------
?  NOV  23, 1993  21h 27m 58.25±10.80s
   10.278 S ±99.1km  120.629 E ±37.9km
   DEPTH =  33.0km  (normal)
 SUMBA REGION, INDONESIA           (287)

KNA      9.61 125 eP    30 18.10   0.6
                  eS    31 54.80
MBL     10.85 184 eP    30 33.00  -1.4
                  eS    32 24.50
NANU    13.15 201 eP    31 05.40   0.0
                  eS    33 19.00
WRA     16.35 128 eP    31 45.20  -1.8
                  i     31 47.30
                  eS    34 26.40
MEEK    16.38 186 eP    31 48.50   1.0
                  eS    34 34.00
WARB    16.81 161 eP    31 53.10   0.2
ASPA    18.37 138 iPc   32 13.60   1.3
                  eS    35 21.10
     S.D. = 1.4  on   7 of   7 obs.
-----------------------------------
*  NOV  23, 1993  21h 41m 22.61± 2.34s
   31.391 S ±16.7km   68.358 W ±12.5km
   DEPTH = 101.8 ± 25.1 km
 SAN JUAN PROVINCE, ARGENTINA      (137)

RTLL     0.11 303 iPd   41 37.10  -0.2
CFA      0.24 155 ePc   41 37.80   0.1
ZON      0.31 240 eP    41 37.60  -0.2
                  eS    41 48.60
RTCB     0.39 256 ePd   41 38.00  -0.2
                  S     41 49.80
RTCV     0.49 198 iPd   41 39.20   0.4
                  S     41 52.00
RTRS     1.54 322 iPd   41 49.90   0.1
RTPR     1.92  56 eP    41 55.00   0.3
                  S     42 20.00
TCA      3.22  90 eP    42 12.00  -0.3
                  (S)   42 49.00
     S.D. = 0.3  on   8 of   8 obs.
-----------------------------------
&  NOV  23, 1993  22h 53m 34.75s
   62.568 N          147.044 W
   DEPTH =  25.1km
 CENTRAL ALASKA                     (  1)
     <AEIC>. ML 2.5 (AEIC).

DHY      0.53 344 eP    53 45.45  -0.1
                  eS    53 52.90
TOA      0.62 138 P     53 46.70  -0.2
                  S     53 55.50
SDG      0.70  93 eP    53 47.72  -0.5
                  eS    53 57.34
SCM      0.75 190 iP    53 48.31  -0.8
PAX      0.83  60 eP    53 49.81  -0.7
                  eS    54 00.63
TZL      0.92 124 eP    53 51.73  -0.2
SML      0.97 219 iP    53 51.86  -0.9
THY      1.04  34 eP    53 54.08   0.4
RND      1.18 316 eP    53 57.09   1.3
GHO      1.19 229 eP    53 55.29  -0.6
                  eS    54 10.84
KLU      1.20 153 eP    53 55.83  -0.3
                  eS    54 11.56
HUR      1.26 290 eP    53 58.46   1.6
KNK      1.34 211 eP    53 57.71  -0.2
                  eS    54 14.29
PLRM     1.39 226 eP    53 58.29  -0.3
                  eS    54 15.73
CFI      1.43 194 eP    53 59.38   0.2
                  eS    54 17.60
MCK      1.45 325 eP    54 02.31   2.7
VLZ      1.48 167 eP    53 59.13  -0.8
                  eS    54 16.77
CUT      1.51 265 eP    54 01.49   1.2
                  eS    54 21.00
DJE      1.59  22 eP    54 04.66   3.1
PWA      1.62 237 P     54 03.20   1.2
                  S     54 24.20
TRF      1.72 302 eP    54 04.68   1.0
DOT      1.74  50 eP    54 05.80   2.1
PMS      1.78 223 P     54 04.80   0.4
                  S     54 29.10
PWL      1.82 200 eP    54 05.95   1.0
HDA      1.85   1 eP    54 07.74   2.5
GLB      1.90 125 eP    54 06.59   0.5
                  eS    54 30.73
                  eS    54 30.83
WRH      1.97 347 eP    54 07.78   0.7
TMW      2.00  66 eP    54 10.71   3.2
KTH      2.02 301 eP    54 09.40   1.5
SUA      2.07 239 eP    54 10.17   1.6
CCB      2.11 351 eP    54 11.09   1.9
SKT      2.18 256 eP    54 11.92   1.8
IL1      2.21   2 eP    54 12.58   2.0
ILB      2.21   2 eP    54 12.47   1.9
                  eS    54 40.16
SGAM     2.25 156 eP    54 13.07   2.0
FBA      2.37 352 eP    54 13.30   0.6
BC3      2.47  76 eP    54 15.16   0.9
HMT      2.61 148 eP    54 18.23   2.0
CGLM     2.67 244 eP    54 17.90   0.8
BALM     2.71 122 eP    54 18.87   1.2
IMA      4.55 324 (P)   54 44.97   1.2
       41 obs. associated
-----------------------------------
*  NOV  23, 1993  23h 58m 28.16± 1.47s
   27.687 S ± 6.5km   71.355 W ±18.5km
   DEPTH =  37.7 ± 12.1 km
   4.8mb (  3 obs.)
 NEAR COAST OF NORTHERN CHILE      (122)

RTRS     2.98 147 iPd   59 15.00   0.9
                  S     59 49.00
RTCB     4.39 150 ePc   59 33.80  -0.4
RTLL     4.42 146 ePc   59 34.00  -0.5
                  S     00 28.00
ZON      4.50 149 eP    59 36.90   1.2
CFA      4.76 146 iPc   59 38.80  -0.6
RTCV     4.83 150 eP    59 39.50  -0.9
CYA      4.97 100 ePc   59 43.50   1.1
RTPR     4.98 123 eP    59 41.50  -1.0
FSA      5.03  73 ePc   59 47.50   4.3X
IHA      5.33 183 e(P)  59 54.50   7.2X
MDZ      5.61 158 eP    59 52.00   0.5
                  i     01 01.60
                  iS    01 14.40
SLA      6.03  62 e(P)  00 01.00   3.5X
TCA      6.93 123 eP    00 06.60  -3.3X
                  (S)   01 24.00
RFA      7.48 161 ePc   00 13.50  -4.2X
                  S     02 15.00
CNCB    11.26  17 P     01 11.00   0.8
LPB     11.50  16 eP    01 16.00   2.6X
LPAZ    11.73  15 P     01 15.60  -1.0
VAO     22.51  84 eP    03 25.40  -0.6
LIC     72.29  73 P     09 52.34   0.2
        1.1s    16.50nm          4.9mb
TIC     72.51  73 P     09 53.78   0.3
        0.7s     4.00nm          4.5mb
KIC     72.60  73 P     09 54.30   0.3
        0.6s     8.50nm          4.9mb
     S.D. = 0.9  on  15 of  21 obs.
-----------------------------------
&  NOV  24, 1993  01h 39m 26.91s
   61.393 N          140.644 W
   DEPTH =   0.0km
 SOUTHERN YUKON TERRITORY, CANADA( 18)
     <AEIC>. ML 2.7 (AEIC).

CTGM     0.54 218 eP    39 37.84   0.1
                  eS    39 46.47
BALM     0.90 247 eP    39 44.51  -0.3
```

```
                 eS    40 00.86
YAH     1.17 208 iP    39 49.18  -0.6
                 eS    40 06.22
TGL     1.24 240 eP    39 50.49  -0.5
                 eS    40 09.07
PCA     1.31 172 eP    39 50.13  -2.1
                 eS    40 09.49
CHX     1.35 190 eP    39 52.20  -0.7
                 eS    40 12.69
CRQM    1.37 243 eP    39 52.29  -1.0
WRG     1.52 207 eP    39 56.35   0.9
GLB     1.52 273 eP    39 55.21  -0.3
                 eS    40 16.83
                 eS    40 17.12
BCPM    1.53 161 eP    39 52.97  -2.6
                 eS    40 14.43
CYK     1.60 215 eP    39 57.68   1.3
SNH     1.62 222 eP    39 58.31   1.4
PNL     1.84 160 eP    39 57.91  -2.1
HMT     2.06 241 eP    40 05.33   2.1
RAGM    2.21 245 eP    40 07.38   1.9
TMW     2.23 332 eP    40 03.40  -2.2
SGAM    2.40 250 eP    40 09.92   1.8
KLU     2.54 275 eP    40 12.02   1.9
                 eS    40 49.09
TOA     2.72 288 eP    40 13.40   0.6
VZW     2.88 266 eP    40 15.94   1.0
INK     7.57  20 P     41 20.50  -0.6
      0.8s     2.30nm          4.5mb
      21 obs. associated
-----------------------------------
   NOV  24, 1993  02h 40m 17.38± 0.19s
    2.376 S ± 3.4km  141.167 E ± 4.6km
   DEPTH =  33.5km  (  7 depth phases)
   5.3mb ( 48 obs.)  4.7Msz ( 13 obs.)
 NEAR N COAST OF NEW GUINEA, PNG.(200)
      Mw 5.4 (HRV).
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 17S, 22C
      Centroid Location:
      Origin Time        02:40:21.9 0.9
      Lat  2.27S 0.08 Lon 141.49E 0.11
      Dep  15.0 FIX Half-duration  1.1
      Moment Tensor;   Scale 10**17 Nm
        Mrr=-0.51 0.06  Mtt= 0.77 0.07
        Mff=-0.26 0.10  Mrt= 1.03 0.18
        Mrf=-0.08 0.14  Mtf= 0.04 0.06
       Principal Axes:
        T  Val=  1.34  Plg=29  Azm=  0
        N       -0.25      6       93
        P       -1.09     60      193
      Best Double Couple:Mo=1.2*10**17
       NP1:Strike= 74 Dip=17 Slip=-110
       NP2:        275     74      -84
JAY     0.48 253 iPd   40 27.20  -0.5
                 iS    42 13.00
WWKK    2.75 117 eP    41 00.20   0.1
                 eS    41 32.00
MNDI    4.50 147 eP    41 32.00   6.7X
MDG     5.42 122 ePd   41 39.10   1.2
PMG     9.18 140 eP    42 30.00  -0.6
KVG     9.64  91 eP    42 34.00  -2.9X
RAB    11.13 100 eP    43 07.00   9.7X
GUA    16.24  13 e(P)  43 56.80  -8.0X
      0.9s   255.46nm          5.4mb
                 e     44 16.80
GUMO   16.28  13 e(P)  43 57.10  -8.2X
      1.1s   177.60nm          5.1mb
                 e     44 00.10
KNA    18.05 222 eP    44 27.00  -0.4
QIS    18.13 185 eP    44 26.00  -2.5
CTA    18.29 165 iPd-  44 30.90   0.5
                 i     44 34.00
                 i     44 42.50
                 eS    47 57.00
WB2    18.69 200 iPd   44 33.30  -2.0
      0.6s   176.20nm          5.4mb
                 eS    47 50.60
WRA    18.69 200 P     44 33.50  -1.8
      0.5s    41.20nm          4.9mb
HNR    19.94 111 eP    44 46.00  -3.6X
PLP    20.98 310 ePd   44 58.00  -2.3
MAP    21.26 307 eP    45 00.00  -3.1X
MKS    21.83 262 ePd   45 11.00   2.1
ASPA   22.30 198 iPc   45 13.10  -0.5
      0.6s    79.50nm          5.3mb
                 i     45 26.60  57kmX
                 iS    49 15.70
TSM    24.20 286 ePd   45 34.10   2.0
GQP    24.62 312 ePc   45 37.00   0.8
QCP    26.11 311 eP    45 49.50  -0.7
KKM    26.28 289 ePc   45 53.00   1.1
BRS    27.24 157 iPc   46 01.00   0.5
      0.6s    16.00nm          4.8mb
                 i     46 08.00  25km
                 i     46 12.00
                 i     46 35.00
                 eS    50 45.00
WARB   27.48 209 eP    46 03.00   0.3
BAG    27.61 313 ePd   46 05.50   1.4
      1.6s   133.33nm          5.4mb
MBL    27.94 226 eP    45 56.80 -10.0X
STK    29.35 179 iPd   46 10.60  -8.9X
      0.5s    12.20nm          4.9mb
ARMA   29.60 161 iPc   46 21.70  -0.2
      1.2s    52.00nm          5.2mb
FORT   30.85 202 eP    46 32.80   0.0
      0.7s    95.00nm          5.7mb
DZM    31.41 131 iPc   46 36.10  -1.9
NANU   31.96 229 eP    46 42.10  -0.6
MEEK   32.40 220 eP    46 45.50  -1.0
      0.5s    15.00nm          5.1mb
ADE    32.51 184 iPc   46 48.00   0.7
BWA    32.59 169 iPc   46 49.40   1.3
                 i     46 58.30  31km
CAN    33.58 168 iPc   46 57.40   0.8
                 ipP   47 01.90  15kmX
                 i     47 05.70
CNB    33.65 168 iPc   46 58.00   0.7
      0.4s    15.00nm          5.3mb
LEM    33.72 261 ePd   46 57.50  -0.8
COOL   34.09 212 eP    47 00.50  -0.6
      0.5s    45.00nm          5.7mb
MRWA   35.86 219 eP    47 15.50  -0.7
      0.5s    18.00nm          5.3mb
BAL    36.39 217 iPc   47 20.30  -0.4
      0.6s    26.00nm          5.3mb
KLB    36.49 215 iPc   47 20.90  -0.6
      1.0s    41.00nm          5.3mb
MUN    37.67 216 eP    47 31.00  -0.4
SSE    38.34 332 Pd    47 37.00   0.0
      1.6s    73.00nm          5.3mb
    Z  20s     1.40um          4.8Msz
                 S     53 32.00
MAT    38.82 356 eP    47 46.00   5.1X
      0.7s     4.79nm          4.4mb
    Z  20s     1.06um          4.7Msz
                 eS    53 40.00
RKG    39.14 212 eP    47 45.50   1.8
NJ2    40.25 330 eP    47 53.00   0.1
    Z  20s     0.71um          4.5Msz
WHN    41.54 324 eP    48 04.50   1.1
    Z  20s     1.22um          4.8Msz
SNG    41.56 284 iPd   48 04.60   0.7
      1.5s   277.78nm          5.8mb
NNT    43.75 291 eP    48 20.70  -1.0
NST    44.36 295 eP    48 27.00   0.4
TIA    44.46 332 Pc    48 26.80  -0.4
    Z  25s     0.84um          4.6MszX
KMI    46.20 309 Pd    48 42.00   0.5
      1.5s   140.00nm          5.7mb
    Z  20s     2.00um          5.1Msz
                 pP    48 50.50  28km
                 sP    48 56.00
CHTO   46.55 299 eP    48 43.00  -1.1
      2.0s    69.77nm          5.3mb
SNY    46.81 342 Pc    48 45.60  -0.1
    Z  20s     1.09um          4.8Msz
                 S     55 34.00
                 sS    55 47.00
XAN    47.25 323 Pd    48 49.00  -0.4
      1.6s    73.00nm          5.4mb
    Z  25s     0.99um          4.7MszX
                 pP    48 58.50  32km
                 sP    49 03.00
                 PP    50 40.00
                 S     55 40.00
TIY    47.95 329 eP    48 50.00  -4.9X
    Z  21s     1.75um          5.0Msz
    E  21s     3.08um
BJI    48.02 334 eP    48 54.00  -1.3
      1.5s    42.00nm          5.2mb
    Z  22s     0.93um          4.7Msz
                 eS    55 52.00
                 eSS   59 16.00
CN2    48.09 345 eP    48 55.20  -0.6
      1.2s    22.00nm          5.1mb
    Z  20s     0.93um          4.8Msz
    N  15s     0.45um
    E  15s     0.05um
                 epP   49 07.00  42km
                 eS    55 54.00
CD2    48.62 316 iPd   49 00.50   0.4
      1.4s   220.00nm          6.0mb
YSS    49.20   1 eP    49 02.00  -2.3
HHC    50.79 331 Pc    49 16.60  -0.1
      1.4s    29.00nm          5.1mb
    Z  32s     0.99um          4.6MszX
BTO    51.36 330 eP    49 20.00  -1.0
LZH    51.72 321 Pd    49 24.50   0.6
      1.5s   130.00nm          5.7mb
    Z  24s     1.05um          4.8MszX
    N  10s     0.27um
                 pP    49 35.00  36km
                 PP    51 22.50
                 eS    56 40.00
GTA    56.29 322 eP    49 57.00  -0.4
      1.5s    51.00nm          5.3mb
    Z  22s     0.59um          4.6Msz
                 pP    50 09.00  42km
                 sP    50 14.00
LSA    57.43 308 P     50 08.00   1.9
                 pP    50 13.00  16kmX
CIT    58.99 340 eP    50 16.80   0.7
GUN    61.03 304 P     50 31.20   0.3
PKI    61.31 303 P     50 32.80   0.1
      1.4s    54.00nm          5.5mb
KKN    61.49 303 P     50 34.20   0.4
DMN    61.57 303 P     50 34.80   0.3
      1.3s   191.00nm          6.1mb
ZAK    61.76 333 iPd   50 35.00   0.1
      1.8s    99.00nm          5.6mb
GKN    62.09 303 P     50 38.00   0.2
IRK    62.69 335 eP    50 39.00  -2.2
      1.7s    34.00nm          5.2mb
    Z  18s     0.22um          4.4Msz
                 eS    59 18.00
                 ePS   59 28.00
BOD    63.81 344 iPd   50 46.90  -1.5
      1.7s    51.00nm          5.3mb
HYB    64.75 290 eP    50 54.50  -0.8
YAK    64.81 354 eP    50 53.90  -0.9
      2.5s   232.00nm          5.8mb
GBA    65.14 286 P     50 57.00  -0.8
WMQ    66.29 321 P     51 04.50  -0.3
      2.0s    22.00nm          4.9mb
    Z  16s     0.52um          4.8MszX
CSY    67.34 193 eP    51 00.70 -10.2X
      0.6s    28.00nm
POO    69.36 291 iP    51 10.00 -14.4X
KSH    72.63 313 P     51 44.00   0.1
      1.0s    30.00nm          5.2mb
    Z  24s     0.82um          4.9MszX
    N  10s     0.47um
    E  10s     0.38um
                 ePcP  51 58.00
                 eScS  01 47.00
TIK    74.31 356 eP    51 52.00  -0.8
      2.0s    49.00nm          5.2mb
    Z  20s     0.30um          4.6Msz
                 e     52 08.00  58kmX
                 e     54 44.00
                 eS    01 13.00
FRU    74.66 316 eP    51 56.00   0.5
      2.0s    60.00nm          5.2mb
SVW    79.47  26 eP    52 22.59   0.6
      1.2s    62.12nm          5.5mb
KDC    79.62  30 eP    52 22.89   0.2
      0.8s    20.51nm          5.2mb
TTA    80.09  24 eP    52 24.83  -0.4
      1.3s    16.48nm          4.9mb
PWA    82.24  27 eP    52 36.50   0.1
IMA    82.32  22 eP    52 35.91  -1.1
      1.2s    11.15nm          4.8mb
PMR    82.55  27 eP    52 37.43  -0.6
      0.9s    31.80nm          5.4mb
MAW    83.36 202 iP    52 44.00   1.9
      0.9s    26.32nm          5.4mb
KLU    83.99  27 eP    52 45.18  -0.4
```

24d 02h

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TOA     84.05  27 eP     52 46.70   0.9
FBA     84.19  24 eP     52 43.95  -2.4
         1.1s    11.77nm          5.0mb
MAIO    84.69 307 iPd    52 51.00   1.4
                eS       03 25.00
ASH     85.78 308 eP     52 57.00   2.1
SVE     86.79 327 iP     53 00.00   0.6
      Z  17s     0.50um          5.0MszX
      E  17s     0.50um
                ePS      03 31.00
                eSS      09 21.00
SPA     87.64 180 iPc    53 04.60   1.0
         0.6s    36.59nm          5.8mb
ARU     87.84 327 eP     53 03.00  -1.5
                e        56 28.00
INK     90.45  22 eP     53 17.50   0.9
         1.1s     5.00nm          4.7mb
MBC     94.55  14 eP     53 36.00   0.6
OBN    100.26 326 ePdiff54 07.00   5.4X
      Z  20s     0.40um          4.9Msz
      E  20s     0.30um
RES    100.83  13 ePdiff54 04.00   0.3
         1.0s     2.00nm          4.6mb
GEC2   115.62 324 ePKP  58 58.00  -0.1
         0.5s     0.73nm
                e        59 08.50
                e        59 13.70
BSF    120.08 326 ePKP  59 05.90  -0.7
         0.4s     0.95nm
HAU    120.23 327 ePKP  59 06.20  -0.5
         0.5s     3.45nm
AVF    122.59 327 ePKP  59 11.10  -0.1
         0.8s     4.45nm
BGF    123.01 327 ePKP  59 12.00   0.0
         0.7s     8.05nm
FLN    123.32 331 ePKP  59 12.30  -0.3
         0.9s    15.55nm
TCF    123.52 327 ePKP  59 13.10   0.0
         0.5s     2.40nm
GRR    123.76 330 ePKP  59 13.20  -0.3
         1.0s    13.40nm
LPF    124.09 330 ePKP  59 12.90  -1.2
         0.8s     9.40nm
RJF    124.51 326 ePKP  59 15.80   0.8
         0.9s     7.20nm
MFF    124.58 328 ePKP  59 15.50   0.4
         1.0s    11.20nm
LPO    125.08 326 ePKP  59 17.00   0.9
         0.6s     3.80nm
LFF    125.17 326 ePKP  59 16.50   0.2
         0.8s     9.00nm
ARE    142.71 121 ePKP  59 48.00  -2.3
YJA    144.31 135 ePKPc 59 54.00   0.9
CNCB   145.48 125 PKP   59 56.70   1.3
LPB    145.53 124 iPKPc 59 57.20   1.9
LPAZ   145.62 124 PKP   59 56.90   1.2
KIC    145.79 278 PKP   59 56.82   1.5
         1.4s   143.50nm
TIC    146.04 278 PKP   59 57.28   1.5
         0.9s    38.00nm
LIC    146.08 278 PKP   59 57.38   1.6
         1.2s     6.50nm
SDV    147.72  77 ePKP  00 01.00   2.4X
TOV    148.37  75 ePKP  00 03.10   3.6X
      S.D. = 1.1  on 110 of 126 obs.
-----------------------------------
   NOV  24, 1993  03h 29m 26.25± 0.39s
   49.177 N ± 3.1km    6.906 E ± 4.4km
   DEPTH =  10.0km  (geophysicist)
 GERMANY                            (543)
      ML 2.7 (STR), 2.3 (UCC).

RUP      0.53  11 ePg   29 37.20   0.1
LANF     0.62 108 Pg    29 38.62  -0.2
WLF      0.69 315 iPd   29 39.86  -0.1
                iS      29 49.62
HOFF     0.73 108 Pg    29 40.84   0.2
CDF      0.80 162 Pg    29 41.80  -0.1
                Sg      29 52.24
ABH      0.82  30 ePg   29 42.40   0.3
WLS      0.82 159 Pg    29 41.26  -0.9
ECH      0.98 170 Pg    29 44.18  -0.6
                Sg      29 57.58
VITF     1.14 213 Pg    29 46.90  -0.7
MOF      1.34 173 Pg    29 51.12   0.2
                Sg      30 08.39
BSF      1.35 183 Pg    29 50.92  -0.2
TNS      1.45  43 ePnd  29 55.50   2.9X
                ePgd    29 58.00
                eSn     30 13.50
                eSg     30 16.00
FEL      1.50 150 Pg    29 54.05   0.8
MEM      1.55 338 iPc   29 53.62  -0.2
                iS      30 15.35
ENN      1.71 339 iPgc  29 59.50   3.2X
         0.4s    14.60nm
                e       30 22.50
DOU      1.76 302 P     29 56.90  -0.1
                i       30 00.10
                S       30 20.20
LOMF     1.83 182 Pg    30 00.20   2.1
SNF      2.16 309 iP    30 10.20   7.5X
KHC      4.38  88 ePn   30 34.50   0.2
                ePg     30 50.50
                Sn      31 24.00
                Sg      31 50.00
GEC2     4.49  92 Pn    30 35.10  -0.8
                Sg      31 49.20
      S.D. = 0.7  on  17 of  20 obs.
-----------------------------------
*  NOV  24, 1993  05h 00m 30.41± 2.33s
   23.144 S ±10.4km   70.048 W ±23.3km
   DEPTH = 115.4 ± 22.8 km
 NEAR COAST OF NORTHERN CHILE     (122)

YJA      4.31  78 ePd   01 35.50   0.1
SLA      4.45 112 e(P)  01 36.50  -0.7
MOCB     4.50  66 P     01 38.60   0.5
CNCB     6.59  18 P     02 14.30   7.5X
ARE      6.78 348 eP    02 35.00  25.8X
                eS      03 40.00
LPB      6.83  16 eP    02 21.00  11.1X
LPAZ     7.05  15 eP    02 13.00  -0.2
                i       02 20.20
TCA      9.50 150 ePd   02 46.00   0.3
SIV     11.05  52 P     03 04.40  -2.0X
VAO     21.23  94 eP    05 08.60  -0.1
      S.D. = 0.7  on   6 of  10 obs.
-----------------------------------
   NOV  24, 1993  05h 49m 52.15± 0.35s
   27.677 S ±11.5km  176.257 W ± 6.1km
   DEPTH =  33.0km  (normal)
   5.3mb ( 29 obs.)  5.1Msz ( 16 obs.)
 KERMADEC ISLANDS REGION          (177)

AFI     14.32  18 eP    53 00.00 -14.7X
                eS      55 36.00
MRW     15.43 206 P     53 45.00  16.1X
                eS      56 18.00
DZM     16.66 286 iPc   53 46.90   2.1
BKM     17.41 302 iPc   53 54.50   0.3
AFR     26.39  73 eP    55 39.20  11.7X
         1.2s   210.60nm
PAE     26.50  74 eP    55 39.70  11.2X
         1.1s   177.30nm
PPN     26.69  73 eP    55 41.40  11.2X
         1.4s   184.70nm
BRS     27.43 263 eP    55 47.50  10.5X
         0.7s     6.00nm
      Z  18s    21.00um          5.8Msz
                eS      01 06.00
PMO     29.19  70 eP    55 49.20  -3.6X
         1.2s    94.60nm          5.4mb
RUV     29.53  71 eP    55 52.00  -3.9X
         1.6s   274.90nm          5.8mb
CAN     30.47 247 eP    56 05.30   1.0
                e       56 34.70
BWA     30.89 249 iPd   56 07.90   0.0
                i       56 37.60
CTA     35.00 274 iPc   56 43.00  -0.7
         0.9s    75.63nm          5.6mb
      Z  18s     7.56um          5.5Msz
                i       58 57.50
                eS      02 15.00
STK     36.66 253 eP    56 49.90  -7.7X
         0.7s     3.60nm          4.4mb
ASPA    44.86 263 iPc   58 04.30  -1.1
         0.8s    12.10nm          4.8mb
      Z  19s     0.90um          4.7Msz
WB2     45.60 269 eP    58 09.90  -1.3
         0.8s    17.40nm          5.0mb
                ipP     59 50.30 547kmX
WRA     45.61 269 P     58 07.80  -3.5X
         0.8s     5.90nm          4.6mb
FORT    48.27 252 eP    58 31.50  -0.6
WARB    50.53 258 eP    58 49.00  -0.6
SBA     50.86 185 iPd   59 05.70  14.4X
HON     51.81  22 P     59 10.00  10.9X
      Z  20s     0.12um          3.9MszX
KLB     56.71 249 eP    59 34.00  -1.0
BAL     57.83 250 eP    59 41.50  -1.4
         1.0s    42.00nm          5.4mb
MRWA    58.80 251 eP    59 49.00  -0.8
         1.0s    27.00nm          5.3mb
NANU    61.28 258 iPd   00 06.90   0.1
SPA     62.48 180 iPc   00 19.20   4.7X
         0.9s    90.00nm          5.9mb
LEM     74.59 270 iPd   01 31.00   0.6
MAW     75.38 200 P     01 39.00   5.2X
         1.2s    36.76nm          5.3mb
WKYJ    76.60 321 P     01 40.60  -0.6
MAT     76.91 324 eP    01 41.00  -1.9
         1.2s    48.44nm          5.4mb
TKSJ    77.31 319 P     01 44.40  -0.7
YONJ    78.51 320 P     01 50.50  -1.2
MHC     82.52  41 eP    02 09.89  -3.1X
         5.3s  1890.00nm          6.4mb X
YSS     83.06 333 iPd   02 15.00  -0.4
SSE     83.50 310 Pc    02 17.50  -0.5
         1.0s    23.00nm          5.3mb
CMB     83.72  41 iPc   02 18.65  -0.4
         2.8s   150.00nm          5.6mb
GSC     84.09  45 eP    02 21.60   0.5
ORV     84.11  39 ePc   02 20.79  -0.2
         1.6s    20.00nm          5.0mb
WDC     84.24  38 ePc   02 21.90   0.3
         1.5s    40.00nm          5.4mb
LGPM    84.31  38 eP    02 22.45   0.3
MIN     84.59  39 eP    02 22.71  -0.9
         1.4s    20.00nm          5.1mb
BONR    84.89  42 eP    02 25.85   0.5
YBH     84.95  37 ePc   02 25.71   0.5
         1.5s    40.00nm          5.4mb
TPNV    85.49  44 eP    02 28.47   0.3
         0.8s     6.91nm          4.9mb
NJ2     85.66 310 Pd    02 29.80   0.9
         1.0s    26.00nm          5.4mb
TUC     86.22  51 eP    02 32.87   1.1
      Z  19s     0.33um          4.8Msz
MDJ     87.27 325 eP    02 36.50   0.0
WHN     87.96 306 Pc    02 41.00   1.0
         1.0s    30.00nm          5.5mb
CN2     88.92 322 eP    02 43.80  -0.6
         1.0s    14.00nm          5.2mb
GMW     88.98  33 eP    02 42.83  -1.8
                e       02 58.20
MSU     88.99  45 eP    02 45.84   0.7
TIA     89.26 312 Pd    02 47.10   0.9
RMW     89.40  34 eP    02 46.23  -0.4
                e       02 57.97
DUG     89.62  43 P     03 00.00  12.0X
      Z  20s     0.39um          4.8Msz
LTX     89.63  56 eP    02 47.90  -0.3
SRU     90.38  45 eP    02 51.21  -0.4
ALQ     90.68  50 eP    02 53.27   0.2
         1.1s     6.80nm          4.9mb
      Z  20s     0.60um          5.0Msz
PV08    91.27  46 eP    02 55.62  -0.3
DPW     91.47  35 eP    02 55.74  -0.5
BJI     92.08 315 eP    02 58.00  -1.1
         1.5s    17.00nm          5.3mb
TIY     93.21 311 eP    03 05.40   0.9
      Z  20s     0.62um          5.1Msz
LRM     93.24  39 eP    03 04.70   0.0
XAN     93.70 307 P     03 08.00   1.2
         1.0s     8.90nm          5.1mb
                pP      03 12.50  14kmX
KMI     93.98 296 Pc    03 09.50   1.0
         1.4s    60.00nm          5.8mb
                pP      03 19.00  30kmX
CHTO    94.13 289 ePc   03 11.00   2.0X
         1.0s    10.00nm          5.2mb
GLD     94.13  47 P     03 20.00  11.2X
      Z  18s     0.65um          5.1Msz
FBA     94.89  12 eP    03 09.73  -1.8
         0.8s     3.19nm          4.8mb
ILT     95.30 359 eP    03 19.00   5.8X
CD2     95.95 302 eP    03 18.60   1.4
WMOK    95.95  54 P     03 30.00  12.9X
      Z  20s     0.60um          5.1Msz
RSSD    97.21  44 eP    03 21.95  -0.8
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      1.1s    11.85nm          5.3mb
                e     03 33.65
MYNC  106.94  59 PKP   08 30.00  13.7X
    Z  19s     0.64um          5.2Msz
MCWV  111.72  56 PKP   08 40.00  14.8X
    Z  20s     0.74um          5.3Msz
YSNY  113.51  53 PKP   08 40.00  11.4X
    Z  21s     0.89um          5.3Msz
BINY  115.26  54 PKP   08 40.00   8.1X
    Z  20s     0.69um          5.3Msz
HRV   118.52  54 PKP   08 50.00  12.0X
    Z  19s     0.28um          4.9Msz
LBNH  118.62  52 PKP   08 50.00  11.8X
    Z  21s     0.60um          5.2Msz
CBM   121.71  50 PKP   08 50.00   6.0X
    Z  21s     0.29um          4.9Msz
ARU   131.90 322 ePKP  08 59.00  -4.2X
OBN   143.73 328 ePKP  09 22.00  -3.0X
      1.6s    60.00nm
AFIF  144.44 273 ePKPc 09 27.70   0.4
QASM  144.58 277 ePKPc 09 27.40   0.0
UQSK  145.55 276 iPKPc 09 31.00   1.8
NB2   146.26 353 PKP   09 28.90  -0.3
      1.0s    38.80nm
APO   146.42 351 ePKP  09 28.90  -0.5
      0.9s    19.70nm
UPP   146.45 347 iPKP  09 29.40   0.0
MNK   148.49 333 ePKP  09 35.00   2.2
OJC   154.37 336 ePKP  09 50.80   9.2X
                e     10 03.80
KSP   154.98 341 ePKP  09 43.00   0.6
                e     09 51.80
                e     10 05.10
CLL   155.38 346 iPKPd 09 52.90  10.0X
      1.0s     9.00nm
                e     10 06.00
BRG   155.57 344 iPKP  09 44.40   1.2
      1.0s    14.00nm
                i     09 53.20
ZST   157.03 337 ePKP  09 45.30   0.1
GEC2  157.50 343 ePKPc 09 46.70   0.8
      1.3s     2.79nm
                e     09 50.40
                e     09 56.10
                e     10 01.00
PAB   166.39  28 ePKP  09 58.50   3.5X
    S.D. = 0.9  on  62 of  94 obs.
-------------------------------------
?  NOV  24, 1993  06h 15m 53.16± 5.11s
   28.668 N ±14.9km   34.677 E ±34.5km
   DEPTH =  10.0km  (geophysicist)
 EGYPT                              (553)

BADA    0.32 117 iPd   15 59.67  -0.1
SRFA    0.52  60 iPc   16 03.47  -0.2
HQL     0.68  29 iPc   16 06.67   0.0
                iS     16 17.00
AYN     1.18  80 iPd   16 15.47   0.3
                iS     16 32.67
    S.D. = 0.4  on   4 of   4 obs.
-------------------------------------
   NOV  24, 1993  06h 19m 50.54± 0.65s
   15.344 N ± 8.5km  105.044 W ±10.1km
   DEPTH =  10.0km  (geophysicist)
   4.7mb ( 10 obs.)
 OFF COAST OF MICHOACAN, MEXICO  ( 64)

CRX     6.52  51 (P)   21 29.50   0.2
UNM     6.86  54 (P)   21 16.50 -17.4X
LTX    13.98   5 eP   23 10.74  -0.3
TUC    17.68 344 eP   24 00.20   1.6
       2.3s    56.05nm          4.3mb
ALQ    19.56 357 eP   24 21.91   0.2
       2.1s    58.13nm          4.5mb
WMOK   20.12  15 eP   24 25.89  -1.6
       2.0s   275.98nm          5.2mb
MEO    20.21  16 iPc  24 27.00  -1.4
PLM    20.88 331 eP   24 36.91   1.3
OCO    21.21  17 iPc  24 42.10   3.4X
PEC    21.47 332 eP   24 40.85  -0.5
       1.6s    41.54nm          4.6mb
ACO    21.91  13 iPd  24 48.70   2.9X
TUL    22.09  20 iPd  24 49.10   1.6
GSC    22.50 334 (P)  24 51.30  -0.4
PV10   23.21 352 eP   24 58.03  -0.9
PV09   23.35 352 eP   25 01.52   1.3
PV08   23.36 353 eP   25 00.51   0.1
ARUT   23.56 343 eP   25 02.93   0.7
MSU    23.92 346 eP   25 06.00   0.2
SRU    24.16 350 eP   25 08.26   0.2
GLD    24.32 360 eP   25 10.56   1.0
       1.5s    37.17nm          4.8mb
EMUT   24.90 349 eP   25 16.03   0.8
BONR   25.39 335 eP   25 21.44   1.5
MEMM   25.41 334 (P)  25 18.95  -0.8
DAU    25.56 349 eP   25 21.71   0.2
DUG    25.67 346 eP   25 22.08  -0.3
       1.4s    30.52nm          4.8mb
HVU    27.18 347 eP   25 36.36   0.1
LBFM   29.74 334 eP   25 57.94  -1.6
LRM    31.02 350 eP   26 10.70  -0.1
                e     26 16.10
NEW    34.30 346 eP   26 38.13  -1.1
       1.1s    15.78nm          4.8mb
GMW    35.32 339 eP   26 47.27  -0.6
YKA    47.57 354 eP   28 28.20   0.2
       0.9s     2.90nm          4.4mb
LPAZ   48.12 129 ePd  28 33.29  -0.3
       1.4s    21.00nm          5.0mb
LPB    48.30 129 P    28 35.20   0.5
                LR    45 50.00
CNCB   48.56 130 P    28 37.50   0.6
INK    55.98 348 eP   29 30.00  -1.1
       1.0s     5.00nm          4.5mb
RES    59.61   3 eP   29 55.50  -1.0
MBC    61.38 356 eP   30 14.00   5.4X
    S.D. = 0.9  on  33 of  37 obs.
-------------------------------------
?  NOV  24, 1993  06h 50m 54.89± 4.10s
   31.793 S ±17.1km   70.655 W ±40.6km
   DEPTH = 130.0km  (geophysicist)
 CHILE-ARGENTINA BORDER REGION   (127)

RTCB    1.61  80 e(P)  51 25.10   0.4
MDZ     1.88 126 eP    51 27.80   0.0
                i     52 10.70
RTRS    1.92  33 e(P)  51 28.00  -0.2
RTLL    1.92  77 e(P)  51 29.00   0.6
CFA     2.07  85 eP    51 33.50   3.3X
TCA     5.20  87 e(P)  52 11.00  -0.7
    S.D. = 0.7  on   5 of   6 obs.
-------------------------------------
*  NOV  24, 1993  07h 10m 51.71± 0.55s
   16.749 N ± 9.6km   46.576 W ± 9.5km
   DEPTH =  10.0km  (geophysicist)
   4.7mb ( 14 obs.)
 NORTHERN MID-ATLANTIC RIDGE     (403)

LPAZ   39.11 214 eP   18 19.80  -2.1
       0.9s     3.53nm          4.0mb
LPB    39.29 214 P    18 23.80   0.6
    Z  21s     0.72um          4.5Msz
                LR    29 46.00
CNCB   39.46 213 P    18 26.00   1.2
ELC    42.71 307 eP   18 51.15   0.5
FRB    49.33 347 eP   19 52.00   9.3X
       1.0s     6.00nm          4.6mb
WMOK   49.76 302 eP   19 45.58  -1.0
       1.2s    19.88nm          5.0mb
RSSD   55.26 312 eP   20 27.23  -0.6
       0.8s     3.42nm          4.4mb
GLD    55.48 307 eP   20 28.82  -0.6
       1.0s    15.78nm          5.0mb
                e     20 37.70
PV08   58.02 305 (P)  20 49.14   1.4
KHC    58.05  42 eP   20 46.00  -1.4
       1.0s     5.40nm          4.5mb
                e     22 08.50
GEC2   58.07  43 eP   20 47.00  -0.6
       1.3s     4.90nm          4.4mb
                e     20 54.10
                e     20 59.00
CLL    58.17  40 iP   20 48.50   0.5
       1.7s    30.00nm          5.1mb
                e     21 56.00
PV10   58.32 305 eP   20 49.55  -0.1
PV09   58.40 305 eP   20 50.77   0.5
BRG    58.65  40 e(P)  20 43.40  -8.0X
PRU    58.84  41 eP   20 54.50   1.7
SRU    59.52 306 eP   20 57.51  -0.4
EMUT   59.78 307 eP   20 59.47  -0.3
                e     21 05.96
DAU    60.14 307 eP   21 02.30  -0.1
MSU    60.78 305 eP   21 06.54  -0.1
HVU    61.36 309 (P)  21 09.67  -0.8
LRM    61.41 313 eP   21 11.60   0.8
DAG    61.71   7 iPc  21 12.40   0.4
       0.7s     4.11nm          4.7mb
ARUT   61.77 304 eP   21 14.32   1.0
GSC    64.54 302 eP   21 31.84   0.3
PLM    64.71 299 eP   21 33.60   0.8
                e     21 39.67
NEW    64.77 316 eP   21 31.31  -1.4
       0.9s    11.45nm          5.1mb
PEC    64.92 300 eP   21 34.52   0.6
       1.1s    16.14nm          5.1mb
INK    73.45 337 eP   22 25.00  -0.7
       1.0s     4.00nm          4.4mb
FBA    79.66 335 eP   22 59.96  -0.7
       1.0s    10.08nm          4.8mb
IMA    81.57 337 eP   23 11.38   0.4
       1.1s     7.34nm          4.7mb
    S.D. = 0.9  on  29 of  31 obs.
-------------------------------------
?  NOV  24, 1993  07h 11m 59.01± 1.69s
   16.511 N ±17.2km   46.330 W ±34.5km
   DEPTH =  10.0km  (geophysicist)
   4.7mb (  8 obs.)
 NORTHERN MID-ATLANTIC RIDGE     (403)

LPAZ   39.04 214 eP   19 28.59  -0.1
       0.7s     2.22nm          3.9mb
ELC    43.04 307 eP   20 01.46   0.8
WMOK   50.08 302 eP   20 55.45  -0.9
       1.3s    15.20nm          4.8mb
RSSD   55.59 312 eP   21 36.61  -0.9
       1.2s     8.15nm          4.6mb
GLD    55.81 307 (P)  21 39.42   0.4
       1.1s     9.94nm          4.8mb
PV10   58.65 305 eP   21 59.14  -0.1
SRU    59.84 306 (P)  22 07.75   0.3
EMUT   60.11 307 eP   22 09.54   0.2
DAU    60.48 307 eP   22 11.23  -0.7
MSU    61.11 305 (P)  22 17.52   1.3
ARUT   62.10 304 eP   22 23.70   0.9
NEW    65.10 316 eP   22 40.95  -1.2
       1.3s    16.56nm          5.1mb
LGPM   69.27 308 eP   23 08.02  -0.7
FBA    79.97 335 eP   24 08.44  -1.2
       1.1s     7.25nm          4.6mb
PMR    81.58 332 eP   24 19.98   1.8
       1.4s    32.40nm          5.2mb
IMA    81.88 337 eP   24 19.98   0.1
       1.3s     7.11nm          4.6mb
    S.D. = 1.0  on  16 of  16 obs.
-------------------------------------
&  NOV  24, 1993  08h 00m 50.03s
   60.872 N          147.363 W
   DEPTH =  13.6km
 SOUTHERN ALASKA                   (  2)
      <AEIC>. ML 2.6 (AEIC).

CFI     0.37 328 iP    00 57.69  -0.1
PWL     0.48 269 iP    00 59.06  -0.7
                eS    01 06.22
KNIM    0.56 199 eP    01 00.42  -0.7
                eS    01 08.64
VLZ     0.57  62 eP    01 00.42  -0.8
                eS    01 08.69
                eS    01 08.80
HIN     0.64 138 iP    01 02.32  -0.2
                eS    01 11.59
KNK     0.76 316 eP    01 03.79  -0.8
                eS    01 14.62
CVA     0.86 112 eP    01 05.95  -0.2
                eS    01 17.11
KLU     0.94  48 eP    01 06.33  -1.3
                eS    01 18.60
SCM     0.96   1 eP    01 07.11  -1.0
                eS    01 20.56
SML     1.05 334 eP    01 08.41  -1.1
                eS    01 22.88
MPA     1.06 250 iP    01 08.27  -1.3
                eS    01 22.44
PLRM    1.12 311 eP    01 09.29  -1.4
                eS    01 23.69
SGAM    1.12 108 eP    01 09.84  -0.9
PMS     1.13 290 P     01 10.00  -0.9
GHO     1.18 321 eP    01 10.55  -1.2
SEW     1.29 234 eP    01 11.57  -1.9
                eS    01 28.54
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24d 08h

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TOA      1.36  24 eP    01 13.03  -1.6
                eS    01 30.06
PWA      1.45 304 P     01 14.80  -0.9
SLKM     1.45 257 eP    01 14.49  -1.4
                eS    01 33.15
TZL      1.50  38 eP    01 16.21  -0.3
HMT      1.62 108 eP    01 16.33  -2.0
SUA      1.74 291 eP    01 18.89  -1.3
GLB      1.81  70 eP    01 19.80  -1.4
                eS    01 43.54
SDG      1.87  27 eP    01 21.37  -0.6
CUT      2.07 319 eP    01 24.06  -0.7
                eS    01 50.63
WAX      2.26  99 eP    01 25.49  -2.2
SKT      2.29 301 eP    01 25.98  -2.0
BKG      2.40 277 eP    01 27.20  -2.4
BALM     2.45  84 eP    01 27.47  -2.9
IL1      3.92   3 eP    01 48.76  -2.3
FBA      4.05 357 eP    01 49.64  -3.2
IMA      5.93 334 eP    02 16.54  -3.1
       32 obs. associated
-----------------------------------------
   NOV  24, 1993  09h 02m 55.14± 0.15s
   48.150 N ± 3.5km  147.184 E ± 2.8km
   DEPTH = 443.0km  (  5 depth phases)
   4.8mb ( 82 obs.)
 SEA OF OKHOTSK                    (663)

KUR      2.96 171 ePn   04 00.50  -1.3
                iS    04 53.00
YSS      3.23 251 iPnc  04 05.50   1.6
                iS    05 00.00
SKR      6.34  63 ePn   04 32.90  -0.7
                eS    05 49.70
MDJ     12.65 260 Pd    05 42.30  -0.5
        1.0s    87.00nm         5.1mb
                S     07 58.00
MAT     13.35 213 iPc   05 49.60  -0.8
        0.8s    58.21nm         5.1mb
CN2     15.71 262 P     06 13.60  -1.3
        1.0s    38.00nm         4.9mb
YAK     17.03 331 iPd   06 29.20   1.3
        1.0s   232.00nm         5.6mb
                eS    09 24.00
SNY     17.82 258 Pd    06 37.00   1.1
        1.2s    71.00nm         5.0mb
CIT     21.78 293 eP    07 14.50   0.6
BOD     21.89 309 iPd   07 15.10   0.3
        1.2s    25.00nm         4.6mb
BJI     23.58 261 eP    07 30.00  -0.3
        1.3s    29.00nm         4.6mb
TIK     25.06 346 iP    07 42.00  -1.4
        1.0s    19.00nm         4.6mb
                e     09 48.00
                e     11 33.00
TIA     25.10 253 Pd    07 44.20   0.0
ILT     26.20  29 iPd   07 52.80  -0.9
HHC     26.25 267 Pc    07 54.80   0.2
        1.0s    68.00nm         5.0mb
NJ2     26.78 243 Pc    07 59.60   0.5
        0.9s    26.00nm         4.7mb
TIY     27.28 260 eP    08 04.30   0.7
BTO     27.41 268 eP    08 05.00   0.3
ZAK     28.43 291 iPd   08 13.50   0.1
        1.4s    48.00nm         4.7mb
WHN     30.57 247 eP    08 32.00  -0.2
XAN     31.74 258 P     08 42.00  -0.3
        1.4s    52.00nm         4.8mb
LZH     33.90 265 iPd   09 01.50   0.9
        1.4s   360.00nm         5.6mb
                S     13 52.50
TTA     34.09  43 eP    09 02.02   0.2
        0.8s     8.10nm         4.2mb
SVW     34.37  46 eP    09 05.39   1.2
        0.9s    46.36nm         4.9mb
GTA     34.82 273 Pd    09 09.00   0.7
        1.2s    48.00nm         4.8mb
                PcP   11 30.00
                eS    14 06.00
IMA     35.10  38 eP    09 09.81  -0.5
        0.9s    28.28nm         4.7mb
CP2     35.98  46 eP    09 19.28   1.4
CRP     36.03  46 (P)   09 17.32  -0.8
CD2     37.10 258 iPd   09 27.40   0.3
        1.2s   150.00nm         5.3mb
PMR     37.42  45 eP    09 29.48   0.1
        0.6s     9.72nm         4.4mb
                e     09 57.88 125kmX
FBA     37.60  39 ePc   09 31.25   0.4
        0.6s    31.95nm         4.9mb
                e     09 50.67  81kmX
GYA     38.24 250 iPd   09 37.00   0.4
        1.0s   110.00nm         5.2mb
                PcP   11 40.60
                S     14 56.20
TOA     38.72  44 eP    09 41.40   1.3
KLU     38.95  45 eP    09 42.36   0.3
WMQ     40.67 287 P     09 57.00   0.8
        1.0s    14.00nm         4.3mb
                S     15 33.00
INK     42.64  33 eP    10 11.50   0.0
        0.5s    10.00nm         4.5mb
MBC     44.65  20 eP    10 28.00   0.6
LSA     46.24 268 iPd   10 42.80   2.0
        1.0s    63.00nm         5.0mb
CHTO    48.66 250 ePd   10 58.00  -0.8
        1.0s    25.25nm         4.6mb
FRU     49.41 292 eP    11 04.20  -0.1
        2.0s    80.00nm         4.8mb
                e     12 18.00 359kmX
SVE     50.03 314 iPd   11 08.00  -0.7
        1.7s    80.00nm         4.8mb
                e     12 19.80 347kmX
KSH     50.42 288 P     11 12.50   0.5
        1.0s    60.00nm         4.9mb
RES     50.76  18 eP    11 13.00  -0.7
        0.5s    18.00nm         4.7mb
GUN     50.92 270 P     11 16.10   0.1
ARU     51.21 315 iPd   11 17.00  -0.3
        1.2s    90.00nm         5.0mb
                e     13 23.00 738kmX
KKN     51.40 270 P     11 19.20  -0.2
DMN     51.64 270 P     11 21.50   0.3
GKN     51.70 271 P     11 21.40  -0.1
YKA     52.17  36 eP    11 23.10  -1.2
        0.8s     6.70nm         4.0mb
DAG     55.04 356 iPc   11 43.60  -1.0
        0.9s    14.29nm         4.3mb
                ipP   12 38.00 246kmX
NDI     56.21 277 iP    11 53.00  -0.5
        0.5s    63.38nm         5.2mb
SDF     56.45 337 iP    11 53.40  -1.3
SNG     56.70 240 eP    11 58.00   1.0
RMW     57.49  54 eP    12 02.47   0.3
KAF     60.41 332 iP    12 20.10  -1.4
        0.3s    12.40nm         4.9mb
LBFM    61.28  59 eP    12 28.60   0.7
                e     13 19.57 222kmX
OBN     61.81 322 iPd   12 29.70  -1.1
        1.0s    60.00nm         5.1mb
                e     13 06.00 153kmX
NUR     62.15 332 iP    12 32.00  -1.0
        0.2s     6.00nm         4.8mb
ASH     62.25 297 eP    12 34.40   0.4
MAIO    62.64 295 eP    12 36.00  -0.7
LRM     63.47  50 iPc   12 42.60   0.5
                e     14 24.60 491kmX
UPP     64.79 335 iP    12 48.50  -1.4
FRB     64.95  17 eP    12 49.00  -1.8
        0.9s     9.00nm         4.4mb
KVN     64.97  59 eP    12 52.24   0.6
APO     65.25 337 eP    12 51.30  -1.5
        0.3s     5.50nm         4.7mb
POO     65.36 271 iPc   12 40.20 -14.0X
NB2     65.52 338 P     12 53.70  -0.9
        0.9s    38.50nm         5.0mb
PTI     65.53  53 eP    12 55.79   0.7
NAO     65.80 338 P     12 53.07  -3.2X
GBA     66.49 264 P     13 00.30  -0.8
        0.5s     7.00nm         4.6mb
KIV     66.88 311 eP    13 04.50   1.1
        1.0s    93.00nm         5.4mb
DUG     67.15  55 eP    13 05.68   0.6
        0.9s     7.33nm         4.3mb
                epP   14 40.80 443km
TPNV    67.47  59 eP    13 07.14   0.0
        0.6s     6.86nm         4.5mb
DAU     67.85  54 (P)   13 09.39  -0.2
ARUT    68.49  57 eP    13 13.36   0.0
EMUT    68.51  54 eP    13 13.81   0.3
ERE     68.61 307 iP-   13 15.00   1.1
MSU     68.68  56 eP    13 15.06   0.5
                epP   14 51.05 445km
WB2     68.75 193 iPc   13 13.40  -1.3
        0.7s    13.20nm         4.7mb
                i     13 34.30  80kmX
WRA     68.75 193 P     13 13.60  -1.1
        0.7s     6.90nm         4.4mb
SRU     69.17  54 eP    13 17.70   0.3
                epP   14 53.54 443km
PV09    70.36  54 eP    13 25.02   0.3
PV10    70.50  54 eP    13 25.87   0.4
                epP   15 01.98 442km
PV08    70.57  54 eP    13 26.01   0.0
                epP   15 02.13 442km
OJC     72.06 328 iP    13 34.10   0.1
        1.0s    45.00nm         5.1mb
ASPA    72.47 193 iPd   13 36.60   0.0
        0.6s    28.00nm         5.1mb
SPC     72.76 327 eP    13 38.60   0.3
KSP     72.76 330 iP    13 38.00   0.0
MBL     73.22 207 eP    13 40.00  -0.9
CLL     73.43 332 iPd   13 41.30  -0.5
        1.0s    49.00nm         5.1mb
BRG     73.51 331 iP    13 41.80  -0.5
        0.9s    14.00nm         4.6mb
TUC     73.93  60 eP    13 46.02   0.9
PSZ     73.94 326 e(P)  13 45.30   0.4
PRU     74.07 330 iPd   13 45.30  -0.2
        1.0s    23.80nm         4.8mb
MOX     74.44 332 eP    13 47.60   0.0
        1.5s    36.00nm         4.8mb
SRO     74.61 327 eP    13 49.30   0.7
ZST     74.73 328 iP    13 49.60   0.4
KHC     75.13 331 Pd    13 51.80   0.3
        1.0s    26.80nm         4.8mb
                e     14 10.00  67kmX
GEC2    75.34 330 ePd   13 52.40  -0.3
        0.8s     8.18nm         4.4mb
GRF     75.40 332 iPd   13 53.50   0.6
        0.9s    55.00nm         5.2mb
      Z 17s      0.10um         4.2MszX
NANU    75.90 210 eP    13 56.20   0.3
MEM     76.12 336 iPc   13 56.88   0.1
        1.2s    13.80nm         4.5mb
WARB    76.26 199 eP    13 58.50   0.7
        0.7s    16.00nm         4.8mb
DOU     76.97 336 P     14 01.80   0.3
KBA     76.99 330 iPd   14 02.50   0.6
        0.9s    44.40nm         5.1mb
                ic    14 02.70   1kmX
CDF     77.73 334 iPd   14 05.50  -0.3
        1.1s    29.05nm         4.8mb
SKO     78.28 322 iPc   14 09.50   0.7
BSF     78.40 334 iPd   14 08.90  -0.5
        0.9s    11.45nm         4.5mb
TUL     79.24  47 iPd   14 14.10   0.1
OHR     79.27 322 eP    14 11.50  -2.6X
        0.7s    70.00nm         5.4mb
GAC     79.36  29 eP    14 14.00  -0.3
FLN     79.49 339 eP    14 14.80  -0.2
        1.1s    27.10nm         4.8mb
LDF     79.56 339 eP    14 15.00  -0.4
        1.2s    31.55nm         4.8mb
LOR     79.75 336 iPd   14 16.10  -0.3
        1.1s    25.90nm         4.8mb
STK     79.82 185 iPd   14 08.40  -8.4X
        0.8s     4.20nm         4.1mb
GRR     79.93 339 eP    14 17.30   0.0
        1.0s    33.40nm         4.9mb
LBF     79.97 335 iPd   14 17.20  -0.4
        1.0s    14.00nm         4.6mb
SSF     80.03 336 iPd   14 17.60  -0.3
        0.8s     9.65nm         4.5mb
LTX     80.20  57 eP    14 18.60  -0.6
                epP   15 50.23 405kmX
LPF     80.31 339 eP    14 19.50   0.3
        0.9s    25.55nm         4.9mb
SMF     80.32 335 iPd   14 19.30  -0.1
        0.9s    31.80nm         5.0mb
AVF     80.32 336 iPd   14 19.30  -0.1
        1.4s    63.15nm         5.1mb
CBM     80.43  24 eP    14 18.80  -1.1
        1.0s     8.27nm         4.3mb
LPL     80.50 333 iPd   14 20.90   0.3
        1.1s    15.15nm         4.6mb
LPG     80.51 333 iPd   14 21.20   0.4
        1.2s    28.85nm         4.8mb
MAF     81.06 336 iPd   14 23.80   0.5
        1.0s    34.00nm         4.9mb
TCF     81.10 336 iPd   14 23.70   0.2
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        0.9s    11.45nm          4.5mb
ELC     81.23  42 eP    14 24.26   0.0
LSF     81.31 337 iPd   14 24.80   0.2
        0.9s    14.40nm          4.6mb
MFF     81.42 338 eP    14 25.50   0.4
        1.1s    24.40nm          4.8mb
LBNH    81.79  27 eP    14 27.11   0.1
        0.9s     6.53nm          4.3mb
MRWA    81.94 207 eP    14 27.00  -0.8
        0.8s    24.00nm          4.9mb
BWA     82.21 179 iPd   14 30.10   1.0
LMN     82.29  22 eP    14 30.00   0.5
CAF     82.39 336 eP    14 31.00   0.9
        1.2s    36.60nm          4.9mb
LFF     82.74 337 eP    14 32.60   0.8
        1.2s    59.50nm          5.2mb
LPO     82.85 336 eP    14 33.00   0.6
        1.3s    39.00nm          5.0mb
BAL     83.03 206 eP    14 32.50  -0.7
CAN     83.11 179 iPc   14 34.80   1.2
KLB     83.65 205 eP    14 35.50  -0.8
TBR     83.84  30 eP    14 37.39   0.1
MUN     84.46 206 eP    14 40.00  -0.3
PRM     86.93  39 eP    14 53.00   0.5
TIC    120.21 328 PKP   20 54.00  -2.1
        1.0s    15.00nm
KIC    120.37 327 PKP   20 54.66  -1.7
        1.0s    23.00nm
LPAZ   137.04  55 PKP   21 24.00  -4.9X
                  i     21 27.80
                  i     24 18.70
LPB    137.25  55 ePKP  21 22.00  -7.1X
                  i     21 30.00
                  i     24 19.80
CNCB   137.55  55 PKP   21 21.00  -8.8X
                  i     21 30.80
                  i     24 21.30
BAO    145.25  26 ePKP  21 43.60   0.9
FSA    145.97  62 ePKPc 21 44.45   1.0
RIFB   149.58  28 (PKP) 21 54.80   5.4X
     S.D. = 0.8  on 143 of 151 obs.
-----------------------------------
% NOV  24, 1993  09h 45m 50.97± 0.59s
   44.370 N ± 5.1km    7.351 E ± 6.6km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                   (545)
      ML 2.0 (GEN).

STV      0.13 189 P     45 54.21   0.1
                  S     45 56.09
ENR      0.15 161 P     45 54.85   0.3
                  S     45 57.09
PZZ      0.22 307 P     45 56.14   0.3
                  S     45 59.39
ROB      0.38 101 P     45 59.57   0.8
                  S     46 05.38
BHB      0.48 352 P     46 00.07  -0.6
                  S     46 06.57
IMI      0.60 140 P     46 02.41  -0.8
                  S     46 10.55
FIN      0.64 104 P     46 03.46  -0.3
RSP      0.78 355 P     46 06.63   0.3
     S.D. = 0.6  on   8 of   8 obs.
-----------------------------------
? NOV  24, 1993  09h 51m 11.31± 0.97s
   39.645 N ± 9.4km   29.523 E ± 9.9km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 2.7 (ISK).

IZI      0.69 357 iPg   51 24.90  -0.1
                  eSg   51 35.90
DST      0.69 267 ePg   51 24.80  -0.2
                  eSg   51 34.80
ALT      0.74 142 ePg   51 26.00   0.0
EDC      1.45 299 ePn   51 38.00   0.4
     S.D. = 0.5  on   4 of   4 obs.
-----------------------------------
? NOV  24, 1993  10h 42m 09.01± 0.95s
   26.361 S ± 8.6km   27.356 E ± 9.1km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA         (584)

KSR      0.64 320 eP    42 21.50  -0.4
                  S     42 30.00
SLR      1.04  53 eP    42 29.50   0.3
                  S     42 42.00
SEK      1.97 173 eP    42 43.00  -0.5
                  S     43 07.00
SWZ      1.99 245 eP    42 44.50   0.7
                  S     43 08.80
     S.D. = 1.0  on   4 of   4 obs.
-----------------------------------
   NOV  24, 1993  10h 45m 57.41± 0.37s
   40.574 N ± 3.7km   22.367 E ± 3.2km
   DEPTH =   6.7 ±  3.8 km
 GREECE                           (364)
      ML 3.0 (THE).

GRG      0.38   4 ePgc  46 05.69   0.5
                  eSg   46 12.28
THE      0.46  83 ePgc  46 07.21   0.6
                  eSg   46 14.20
LIT      0.48 169 ePgc  46 06.42  -0.7
                  eSg   46 13.96
KNT      0.71  34 ePgc  46 11.68   0.0
                  eSg   46 21.20
VAY      0.76  12 iPn   46 12.00  -0.6
       0.8s   280.00nm
                  i     46 23.00
                  i     46 27.70
                  Lg    46 33.50
FNA      0.78 286 ePgc  46 12.16  -0.8
                  eSg   46 24.52
SOH      0.79  71 ePgd  46 13.32   0.2
                  eSg   46 25.92
SRS      1.08  59 ePgd  46 18.05   0.1
                  eSg   46 33.48
PAIG     1.19 122 ePb   46 18.96  -1.0
                  eSb   46 34.16
OUR      1.26 100 ePb   46 21.24   0.2
                  eSb   46 37.36
OHR      1.31 295 iPn   46 21.10  -0.8
       1.1s   300.00nm
                  i     46 23.10
                  i     46 41.10
                  i     46 42.70
                  Lg    46 47.50
LSK      1.42 253 ePn   46 24.30   0.6
AGG      1.55 181 ePbc  46 25.64   0.1
                  eSb   46 45.72
SKO      1.56 334 ePn   46 25.00  -0.7
IGT      1.88 237 ePb   46 31.44   1.2
                  eSb   46 53.48
SRN      1.94 250 ePn   46 35.50   4.4X
TIR      2.05 293 ePn   46 33.50   0.8
VLO      2.19 268 ePn   46 36.50   1.7X
BCI      2.49 317 ePn   46 43.20   4.2X
ALN      2.81  82 ePn   46 43.84   0.2
     S.D. = 0.7  on  17 of  20 obs.
-----------------------------------
   NOV  24, 1993  10h 49m 44.41± 0.81s
   12.186 N ± 3.6km  142.926 E ± 3.8km
   DEPTH =  62.0 ±  7.1 km
   4.8mb ( 27 obs.)
 SOUTH OF MARIANA ISLANDS         (210)

GUMO     2.35  53 eP    50 21.70   0.4
                  eS    50 45.20
PJG      2.35  53 eP    50 21.80   0.4
GUA      2.36  55 eP    50 21.80   0.3
PMG     21.86 169 eP    54 32.00  -1.6
BAG     22.05 284 ePc   54 36.50   0.8
KUMJ    23.10 333 eP    54 46.10   0.5
IIDJ    23.63 350 eP    54 50.40  -0.4
CHJJ    24.02 352 P     54 54.00  -0.5
KAKJ    24.04 355 P     54 54.60  -0.1
MAJO    24.62 351 ePc   54 58.27  -2.1
        0.6s    15.11nm          4.7mb
MAT     24.62 351 eP    54 59.00  -1.3
        0.7s     6.85nm          4.2mb
MTMJ    24.73 350 eP    55 01.30  -0.2
NIIJ    25.19 353 P     55 06.20   0.5
CTA     32.24 174 iPc   56 07.00  -2.1
                  i     56 18.00
WB2     33.02 195 eP    56 15.20  -0.8
        0.7s    14.50nm          4.9mb
                  i     56 31.00
WRA     33.03 195 P     56 15.89  -0.1
        0.7s     5.50nm          4.5mb
WRA     33.03 195 P     56 29.20  13.2X
        0.8s     2.40nm
BJI     36.42 324 eP    56 55.50  10.7X
      Z  20s     0.30um          4.1Msz
GYA     36.90 298 iPc   56 50.60   1.4
        1.0s    24.00nm          5.1mb
                  pP    57 00.40  33kmX
                  sP    57 05.00
                  ScP   02 53.00
TIY     37.25 318 eP    56 53.20   1.2
XAN     37.82 311 P     56 56.50  -0.3
        1.0s     6.30nm          4.5mb
                  pP    57 07.30  38kmX
                  sP    57 11.70
BKM     38.79 139 iPc   57 05.00   0.0
MBL     40.16 215 eP    57 15.80  -0.4
BTO     40.45 320 eP    57 20.00   1.5
BRS     40.49 166 iPc   57 19.00   0.1
        1.0s    17.00nm          4.8mb
                  i     57 35.00
KGM     40.52 259 eP    57 20.00   0.7
CD2     40.65 304 iPc   57 20.50   0.2
DZM     41.13 146 iPd   57 24.70   0.4
WARB    41.30 202 eP    57 27.00   1.5
SNG     41.97 267 eP    57 33.00   1.8
IPM     42.09 263 ePc   57 33.30   1.0
LZH     42.46 311 eP    57 45.50  10.3X
        1.4s    52.00nm
      Z  26s     0.40um          4.2MszX
                  pP    57 51.00  18kmX
ARMA    43.18 169 iPc   57 40.40  -0.6
        0.8s    17.00nm          4.9mb
NANU    43.74 218 iPd   57 46.20   0.7
STK     43.83 182 iPc   57 36.50  -9.6X
        1.3s     2.90nm          3.9mb
GTA     46.72 313 eP    58 10.50   1.3
        1.0s     6.00nm          4.5mb
                  pP    58 19.50  30kmX
CAN     47.59 173 iPc   58 16.00   0.0
MRWA    48.69 212 eP    58 24.00  -0.5
        0.6s     8.00nm          4.9mb
BAL     49.46 210 eP    58 30.00  -0.4
MUN     50.82 210 eP    58 40.50  -0.3
LSA     50.97 298 P     58 43.60   1.0
GUN     55.37 296 P     59 14.60  -0.5
PKI     55.76 295 P     59 16.90  -1.0
KKN     55.89 295 P     59 17.70  -1.0
DMN     56.03 295 P     59 19.10  -0.6
GKN     56.47 296 P     59 21.80  -1.0
HYB     62.22 283 eP    00 12.00   9.6X
GBA     63.68 279 P     00 12.00   0.0
SVW     65.78  28 eP    00 23.57  -1.3
        0.6s    95.93nm          6.0mb X
TTA     66.24  26 eP    00 27.02  -0.8
        0.6s     7.70nm          4.9mb
KDC     66.29  32 eP    00 26.82  -1.3
        0.7s    15.37nm          5.1mb
IMA     68.28  23 eP    00 39.95  -0.8
        0.7s     4.70nm          4.6mb
PMR     68.91  28 eP    00 42.30  -2.2
        0.6s    90.74nm          5.9mb X
COL     70.29  25 eP    00 51.40  -1.5
        0.7s    12.68nm          5.0mb
FBA     70.29  25 eP    00 50.75  -2.1
        0.6s     8.90nm          4.9mb
KLU     70.39  29 eP    00 52.35  -1.3
TOA     70.39  28 eP    00 53.60  -0.1
BALM    72.03  30 eP    01 02.08  -1.5
INK     76.38  22 eP    01 27.50  -0.9
        0.9s     3.00nm          4.2mb
MBC     80.08  14 eP    01 49.50   1.0
        0.9s     2.00nm          4.0mb
HDW     83.79  43 P     02 09.65   1.2
BMW     83.90  44 eP    02 09.12   0.1
GMW     83.99  43 eP    02 10.13   0.8
                  e     02 25.90
MBW     84.32  41 P     02 11.72   0.6
JCW     84.42  42 P     02 12.21   0.7
SHW     84.63  44 eP    02 13.23   0.5
RPW     84.64  42 P     02 12.94   0.3
RMW     84.66  43 eP    02 12.52  -0.2
GSM     84.72  43 P     02 13.76   0.6
LON     84.80  43 eP    02 12.38  -1.1
FMW     84.86  43 P     02 14.24   0.3
YKA     84.97  27 eP    02 14.00   0.1
        0.5s     5.00nm          4.9mb
ASR     85.08  44 P     02 15.50   0.6
LGPM    85.30  49 eP    02 17.07   0.9
EBG     85.60  43 P     02 18.24   0.8
ETW     85.60  42 P     02 17.90   0.3
CROR    85.75  45 P     02 18.63   0.4
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24d 11h

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VGB    85.77  44 eP    02 18.68   0.3
WTV    85.83  42 P     02 18.64   0.1
LBFM   85.90  49 eP    02 18.87  -0.4
VIPM   86.11  45 P     02 20.52   0.3
SAW    86.19  42 P     02 20.35   0.0
WAH2   86.31  43 P     02 21.42   0.6
RES    86.34  13 eP    02 21.00   0.5
       0.6s     4.00nm          4.7mb
DPW    86.93  42 eP    02 23.93  -0.1
ARN    87.05  53 eP    02 24.81   0.1
LNOR   87.38  44 P     02 26.64   0.5
NEW    87.53  41 eP    02 26.52  -0.3
       1.0s    24.12nm          5.3mb
                e      02 42.97
CMB    87.78  52 eP    02 28.24   0.0
       0.8s    12.29nm          5.1mb
PHAM   88.29  54 eP    02 31.47   0.8
BCH    88.69  54 eP    02 33.87   1.1
MEMM   88.98  52 eP    02 35.21   1.3
KVN    89.26  50 eP    02 36.37   0.8
BONR   89.39  51 eP    02 36.95   0.7
ABL    89.46  55 eP    02 37.27   0.7
TNP    90.19  51 eP    02 40.56   0.7
       0.7s    28.90nm          5.7mb
DAG    90.56 356 iPc   02 39.90  -0.6
       0.7s     6.16nm          5.1mb
TPNV   91.24  52 eP    02 45.18   0.5
       0.7s    25.48nm          5.7mb
                e      03 01.71
GSC    91.26  54 eP    02 45.43   0.8
LRM    91.30  43 ePc   02 45.20   0.3
PEC    91.35  55 eP    02 45.30   0.2
       0.9s    55.60nm          6.0mb X
                e      03 01.33
PLM    91.74  55 eP    02 46.95  -0.1
HVU    92.37  47 eP    02 50.23   0.5
DUG    92.85  48 eP    02 52.40   0.4
       0.8s    10.31nm          5.3mb
ARUT   93.13  50 eP    02 53.89   0.5
GLA    93.46  55 ePc   02 55.97   1.2
MSU    93.85  49 eP    02 57.25   0.5
DAU    93.90  47 eP    02 56.90  -0.2
EMUT   94.42  48 (P)   02 59.63   0.3
SRU    94.87  48 eP    03 00.78  -0.6
PV09   96.10  49 eP    03 07.19   0.0
PV10   96.22  49 eP    03 07.46  -0.2
PV08   96.43  48 eP    03 08.16  -0.5
TUC    96.93  55 eP    03 11.91   1.2
APO    97.00 337 eP    03 08.00  -2.4
       0.5s     0.80nm          4.5mb
LIC   143.26 298 PKP   09 10.60  -3.7X
MDZ   144.36 130 iPKP  09 15.80   0.0
SLB   144.90  43 ePKP  09 15.45  -1.6
ARE   146.41 101 ePKP  09 23.00   3.1X
TRN   146.85  48 ePKP  09 23.00   2.7X
TCA   148.27 131 ePKPc 09 26.50   4.3X
FSA   149.46 121 ePKPc 09 30.60   6.5X
LPAZ  149.64 101 PKP   09 27.10   1.7
LPB   149.66 102 PKP   09 32.00   6.8X
    Z  18s     1.03um          5.7Msz
CNCB  149.75 102 PKP   09 27.90   2.4X
SLA   150.37 119 ePKP  09 32.00   6.3X
YJA   151.13 114 e(PKP)09 30.50   3.2X
     S.D. = 0.9  on 113 of 127 obs.
-----------------------------------
?  NOV  24, 1993  11h 11m 37.49± 1.47s
   38.843 N ± 9.9km   30.002 E ±15.4km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 3.0 (ISK).

ALT     0.23  22 iPg   11 42.10  -0.4
KHL     0.64 216 iPg   11 50.40   0.0
                eSg    11 59.40
DST     1.31 306 iPn   12 01.40  -0.4
IZI     1.55 345 ePn   12 05.90   0.7
     S.D. = 0.9  on   4 of   4 obs.
-----------------------------------
   NOV  24, 1993  11h 25m 01.44± 0.60s
   40.500 N ± 6.2km   21.918 E ± 4.7km
   DEPTH =  10.0km  (geophysicist)
 GREECE                            (364)
      ML 1.9 (THE).

FNA     0.50 305 ePg   25 11.10  -0.5
                eSg    25 19.70
GRG     0.59  39 ePg   25 13.46   0.1
                eSg    25 21.86
LIT     0.59 132 ePg   25 12.34  -1.1
                eSg    25 20.78
VAY     0.96  31 eP    25 20.00   0.4
KNT     1.00  48 ePg   25 20.74   0.4
                eSg    25 36.06
OHR     1.05 306 iP    25 20.70  -0.5
SOH     1.14  73 ePg   25 22.02  -0.8
                eSg    25 39.26
PAIG    1.47 112 ePb   25 27.78  -0.1
SKO     1.51 346 eP    25 41.00  12.4X
IGT     1.55 232 ePb   25 30.22   1.0
                eSb    25 50.22
OUR     1.58  95 ePb   25 30.62   1.0
     S.D. = 0.8  on  10 of  11 obs.
-----------------------------------
   NOV  24, 1993  11h 27m 20.27± 0.25s
   21.412 S ± 8.9km  174.270 W ± 4.1km
   DEPTH =  33.3km  (  5 depth phases)
   5.3mb ( 41 obs.)  5.2Msz (  6 obs.)
 TONGA ISLANDS                     (173)
      Mw 5.4 (HRV). Mo=2.8*10**17 Nm
      (PPT).
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 29S, 55C
      Centroid Location:
      Origin Time        11:27:24.5 0.9
      Lat 21.31S 0.06 Lon 173.73W 0.06
      Dep  21.7 2.0 Half-duration  1.1
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 1.13 0.05  Mtt= 0.03 0.07
        Mff=-1.16 0.05  Mrt= 0.27 0.09
        Mrf= 0.58 0.12  Mtf=-0.62 0.05
       Principal Axes:
        T  Val=  1.28  Plg=77  Azm=299
        N        0.29      1      203
        P       -1.57     13      113
      Best Double Couple:Mo=1.4*10**17
       NP1:Strike=201 Dip=32 Slip=  88
       NP2:        24     58       92

AFI     7.83  18 eP    29 06.00  -8.9X
BKM    16.90 280 iPc   31 18.50   2.6
DZM    17.93 264 iPc   31 30.20   1.3
SNZO   21.92 203 P     32 23.00  10.6X
                S      36 24.00
AFR    23.40  85 iPd   32 27.30   0.1
       1.1s   166.10nm          5.5mb
PAE    23.56  85 iPd   32 28.80   0.1
       1.2s   134.50nm          5.3mb
PPT    23.58  85 iPd   32 29.00   0.0
       1.1s   177.30nm          5.5mb
    Z  29s  3925.00um          7.7MszX
PPN    23.72  85 iPd   32 30.40   0.1
       1.2s   142.20nm          5.4mb
TVO    23.84  86 iPd   32 31.50   0.0
       1.3s   280.90nm          5.6mb
PMO    25.83  80 iPd   32 50.00  -0.4
       1.4s   208.20nm          5.5mb
VAH    26.00  81 iPd   32 51.70  -0.3
       1.3s   118.40nm          5.3mb
TPT    26.09  80 iPd   32 52.40  -0.4
       1.5s   194.30nm          5.5mb
RUV    26.24  81 iPd   32 53.80  -0.5
       1.8s   343.50nm          5.7mb
BRS    30.54 252 eP    33 45.50  12.5X
ARMA   31.86 247 eP    33 51.40   6.7X
CTA    36.87 265 iPd   34 26.00  -1.7
       1.3s    24.04nm          4.9mb
    Z  18s     8.25um          5.6Msz
                e      34 39.00  49kmX
                ePP    37 00.00
                eS     40 21.00
PMG    38.94 282 eP    34 42.70  -2.4
STK    40.56 246 eP    34 49.20  -9.2X
       1.3s     4.10nm          4.0mb X
WB5    47.91 262 eP    35 55.50  -2.2
WRA    47.93 262 P     35 55.70  -2.1
       0.9s     5.20nm          4.6mb
GUA    53.03 307 eP    36 20.80 -15.8X
GUMO   53.09 307 eP    36 21.30 -15.7X
WARB   53.88 253 eP    36 41.00  -1.8
SBA    57.22 185 eP    37 11.50   5.3X
KLB    60.83 245 eP    37 31.00  -0.8
       1.0s    27.00nm          5.3mb
MBL    60.96 257 eP    37 31.20  -1.6
       0.3s     5.00nm          5.1mb
BAL    61.87 246 eP    37 38.00  -0.9
MUN    62.07 244 eP    37 40.50   0.2
MRWA   62.72 247 eP    37 44.00  -0.6
NANU   64.52 254 eP    37 56.00  -0.5
SPA    68.72 180 iPc   38 25.00   2.3
MAT    73.04 322 eP    38 47.00  -1.9
       1.8s   131.82nm          5.6mb
STAN   76.33  40 ePc   39 15.68   7.9X
       1.7s   530.00nm          6.3mb
SAO    76.36  41 ePc   39 07.77  -0.2
       1.3s    50.00nm          5.4mb
LEM    76.50 268 ePd   39 09.50   0.1
ABL    76.55  44 eP    39 09.47   0.1
MHC    76.61  41 iPc   39 09.59   0.1
       1.1s    40.00nm          5.3mb
ARN    76.68  41 eP    39 09.82   0.0
PLM    77.20  46 eP    39 12.44  -0.5
PEC    77.32  46 eP    39 12.89  -0.5
       1.6s    49.85nm          5.3mb
CMB    77.82  41 iPc   39 15.65  -0.4
       1.2s    20.00nm          5.0mb
ORV    78.13  39 iPc   39 16.99  -0.7
       1.5s    30.00nm          5.1mb
WDC    78.21  38 eP    39 17.64  -0.4
       1.2s    17.45nm          5.0mb
LGPM   78.26  37 eP    39 17.55  -1.0
YSS    78.37 332 eP    39 15.00  -3.8X
GSC    78.40  45 eP    39 18.83  -0.6
GLA    78.41  48 eP    39 19.95   0.5
                e      39 30.26  33km
MTUM   78.52  42 eP    39 20.52   0.4
MIN    78.59  38 ePc   39 20.91   0.5
YBH    78.88  37 iPc   39 21.71  -0.1
       1.7s    50.00nm          5.2mb
BONR   79.05  42 iPd   39 23.74   0.6
LBFM   79.08  37 eP    39 23.38   0.2
TPNV   79.74  44 eP    39 27.28   0.5
       0.3s     3.46nm          4.8mb
TNP    79.80  42 eP    39 27.03  -0.1
       1.0s    19.26nm          5.1mb
KVN    79.85  41 eP    39 27.80   0.5
TUC    80.84  50 ePd   39 33.99   1.4
       1.0s     8.29nm          4.7mb
BMW    81.80  33 eP    39 37.89   0.6
ARUT   82.05  44 eP    39 39.29   0.4
SHW    82.12  34 eP    39 40.13   1.1
ASR    82.42  34 P     39 40.54   0.0
VGB    82.43  35 eP    39 40.76   0.2
LON    82.71  33 eP    39 41.03  -0.9
GMW    82.75  32 eP    39 42.35   0.3
                e      39 53.91  38km
WPW    82.81  34 P     39 42.37  -0.2
JBO    82.90  35 P     39 42.71  -0.2
FMW    82.90  33 P     39 43.10   0.0
GSM    83.02  33 P     39 43.39  -0.2
NJ2    83.16 308 Pd    39 45.00   0.5
RMW    83.19  33 eP    39 44.64   0.2
MSU    83.28  44 ePd   39 46.49   1.2
MDJ    83.29 323 eP    39 45.00   0.1
       1.4s    41.00nm          5.4mb
EBG    83.46  34 P     39 45.84   0.1
JCW    83.62  32 P     39 46.61   0.1
KGM    83.67 275 eP    39 47.00  -0.5
LNOR   84.00  36 P     39 48.17  -0.4
ETW    84.03  33 P     39 48.72  -0.1
WTV    84.29  33 P     39 49.49  -0.5
CRP    84.30  11 ePd   39 48.34  -1.5
SAW    84.57  34 P     39 51.05  -0.3
LTX    84.65  56 eP    39 52.52   0.3
SRU    84.68  44 eP    39 52.31   0.0
HVU    84.74  41 eP    39 52.58   0.1
PMS    84.74  12 eP    39 51.30  -0.6
                e      40 03.00  38km
DAU    84.92  43 eP    39 54.68   1.0
CN2    85.17 321 Pd    39 55.40   1.0
       1.4s    62.00nm          5.6mb
PV10   85.27  46 eP    39 54.83  -0.5
PV09   85.27  46 eP    39 55.64   0.2
ALQ    85.29  50 ePc   39 56.02   0.6
       1.0s    18.32nm          5.2mb
                epP    40 06.07  32km
                esP    40 10.64
TTA    85.29   8 eP    39 54.12  -0.5
       1.1s    19.62nm          5.2mb
DPW    85.30  34 eP    39 54.79  -0.3
PTI    85.60  41 (P)   39 57.58   0.8
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WHN    85.80 305 Pd    39 59.00   1.2
TOA    86.20  13 eP    39 58.40  -0.8
TIA    86.48 311 Pd    39 58.00  -3.0X
IPM    86.74 276 ePc   40 03.60   0.8
LRM    87.23  38 eP    40 04.70  -0.1
FBA    88.42  11 ePc   40 08.66  -1.1
       1.4s    41.25nm          5.6mb
IMA    88.60   8 ePc   40 10.38  -0.4
       1.4s    13.47nm          5.1mb
BJI    89.01 314 eP    40 13.00  -0.1
       2.0s    64.00nm          5.6mb
     Z 20s      0.48um          4.9Msz
               eSKS   50 44.00
ILT    89.11 358 iPc   40 14.00   1.1
               e      50 58.00
GYA    90.14 298 P     40 20.00   1.1
       1.2s    33.00nm          5.5mb
TIY    90.50 311 eP    40 21.40   1.2
     Z 28s      0.89um          5.1MszX
RSSD   91.42  43 eP    40 24.31  -0.2
       1.0s    11.53nm          5.2mb
XAN    91.47 306 P     40 25.50   0.8
       1.2s    40.00nm          5.7mb
NST    91.63 286 eP    40 27.50   1.8
KMI    92.87 296 Pd    40 32.50   0.9
       1.5s   110.00nm          6.1mb
     Z 20s      1.90um          5.5Msz
               pP     40 41.00  27km
BDT    93.22 287 eP    40 35.00   2.0
CHTO   93.83 289 iPc   40 36.80   1.0
       1.9s    69.84nm          5.8mb
INK    94.27  14 eP    40 36.50  -0.3
       1.0s     4.00nm          4.8mb
YKA    95.91  24 eP    40 44.20  -0.2
       1.0s     5.10nm          4.9mb
LZH    96.10 306 eP    40 47.00   0.8
       1.5s    40.00nm          5.7mb
     Z 24s      0.42um          4.8MszX
LPAZ   98.49 111 PKPd  41 01.40   3.5X
       0.9s     2.90nm          4.8mb
               PP     45 04.90
               i      51 29.90
               e      55 05.60
               LR     13 41.10
GKN   109.15 293 Pdiff 42 00.00  15.2X
SVE   126.71 326 ePKPd 46 19.00  -2.6
ARU   127.91 326 ePKP  46 24.00   0.1
               e      46 36.00
OBN   139.17 333 (PKP) 46 47.00   1.8
     Z 19s    272.50um          8.0MszX
               e      47 04.90
               (PP)   49 39.90
KIV   142.07 315 (PKP) 46 55.40   4.5X
       0.9s    27.00nm
EDI   144.90   9 ePKP  46 55.00  -0.2
MUD   144.91 357 iPKPc 46 53.50  -1.6
       1.1s    95.00nm
QASM  145.17 285 ePKPc 46 57.70   1.0
COP   145.41 353 iPKPd 46 56.70   0.7
       1.1s   111.39nm
AFIF  145.43 282 ePKPc 46 58.30   1.1
BSD   145.65 351 iPKPd 46 56.30  -0.2
       1.1s   100.00nm
UQSK  146.22 285 ePKPc 47 00.70   2.2
SIM   146.89 322 ePKP  47 04.00   5.1X
OJC   149.18 342 ePKP  47 07.00   4.7X
               e      47 12.00
KSP   149.48 347 ePKP  47 08.00   5.2X
CLL   149.62 351 iPKPc 47 07.90   5.0X
       1.8s    89.00nm
UZH   149.78 338 iPKPc 47 10.00   6.8X
       1.0s   110.00nm
               i      47 15.50
BRG   149.90 350 iPKP  47 08.40   5.0X
       1.3s    44.00nm
               i      48 05.60
SPC   149.97 341 ePKP  47 09.40   5.6X
MOX   150.46 352 iPKPd 47 10.50   6.3X
       1.9s    83.00nm
               iSg    48 25.60
PRU   150.64 348 PKP   47 10.50   6.0X
       1.5s    45.70nm
               e      47 18.50
MLR   150.82 330 ePKP  47 10.00   4.9X
GRA1  151.44 353 ePKP  47 13.00   7.2X
               e      47 20.40
GRF   151.44 353 ePKP  47 13.00   7.2X
     Z 18s      0.30um          5.1Msz
               e      47 20.40
KHC   151.64 349 ePKP  47 07.00   0.9
       1.2s    24.00nm
               e      47 13.50
               e      47 26.50
ZST   151.76 344 ePKP  47 12.90   6.7X
               e      18 28.90
SRO   151.77 342 ePKP  47 12.40   6.1X
               i      47 21.80
GEC2  151.90 349 ePKP  47 07.30   0.7
       1.4s     2.21nm
               e      47 13.10
               e      47 18.40
               e      47 22.40
               e      47 24.80
               e      47 29.40
               e      47 32.40
               e      47 35.40
               e      47 37.90
FLN   152.26   9 ePKP  47 22.70  15.7X
       1.2s    45.50nm
     Z 21s      0.25um          5.0Msz
LDF   152.48   8 ePKP  47 23.60  16.3X
       0.9s    15.90nm
LPF   152.89  10 ePKP  47 25.60  17.8X
       1.2s    39.55nm
CDF   153.03 358 ePKP  47 26.30  18.1X
       1.1s    18.80nm
HAU   153.46 359 ePKP  47 28.20  19.5X
       0.9s     9.65nm
     Z 18s      0.25um          5.1Msz
BSF   153.63 358 ePKP  47 28.70  19.6X
       1.2s    19.05nm
KBA   153.66 348 iPKPc 47 27.00  17.8X
       1.1s    13.90nm
     S.D. = 1.0  on 112 of 147 obs.
-----------------------------------
% NOV  24, 1993  11h 42m 53.48± 3.61s
  47.603 N ± 8.6km    1.279 W ±37.4km
  DEPTH =  10.0km  (geophysicist)
 FRANCE                            (538)
     ML 2.8 (LDG).

LPF     0.46  20 Pg    43 02.80   0.0
               Sg     43 09.80
GRR     0.84  20 Pg    43 09.50  -0.1
               Sg     43 22.80
LDF     1.26  38 Pn    43 17.40   0.5
               Pg     43 18.20
               Sg     43 36.50
MFF     1.27 142 Pn    43 17.40   0.4
               Pg     43 18.40
               Sg     43 36.20
FLN     1.28  24 Pn    43 16.90  -0.3
               Pg     43 17.80
               Sg     43 35.50
LSF     2.35 124 Pg    43 39.10   6.3X
               Sg     44 10.20
TCF     2.73 118 Pg    43 45.80   7.6X
               Sg     44 22.30
MAF     2.98 116 Pn    43 40.90  -0.7
               Pg     43 49.80
               Sg     44 30.20
RJF     3.00 139 Pg    43 50.70   8.7X
               Sg     44 28.80
BGF     3.01 109 Pn    43 42.10   0.1
               Pg     43 51.50
               Sg     44 33.20
LFF     3.01 152 Pg    43 49.00   7.0X
               Sg     44 29.50
SSF     3.30  98 Pg    43 57.50  11.3X
               Sg     44 42.20
LPO     3.39 149 Pg    43 56.60   9.2X
               Sg     44 41.10
CAF     3.54 138 Pg    43 58.80   9.1X
               Sg     44 46.20
     S.D. = 0.5  on   7 of  14 obs.
-----------------------------------
   NOV  24, 1993  11h 53m 56.32± 0.65s
   39.392 N ± 5.5km  144.421 E ± 7.7km
   DEPTH =  33.0km  (normal)
   4.4mb (  1 obs.)
 OFF EAST COAST OF HONSHU, JAPAN (229)

OFUJ    2.16 263 P     54 30.80   0.1
               eS     54 53.20
HOOJ    3.11 344 eP    54 44.20   0.1
               eS     55 17.50
AOMJ    3.32 292 P     54 47.20   0.0
               eS     55 23.40
YAMJ    3.64 252 P     54 51.70   0.0
               eS     55 30.70
KUSJ    3.71   3 eP    54 52.00  -0.6
               eS     55 31.90
MRRJ    3.95 321 eP    54 55.60  -0.5
               eS     55 36.10
KAKJ    4.63 228 P     55 04.90  -0.8
               S      55 54.40
NIIJ    4.77 245 P     55 08.20   0.5
ASAJ    4.91 345 eP    55 09.50  -0.1
               eS     56 02.80
CHJJ    5.44 234 P     55 16.70  -0.6
               S      56 14.10
MAT     5.67 242 iPc   55 21.00   0.5
       1.0s   164.00nm          5.6mb X
               eS     56 24.00
MTMJ    5.93 244 P     55 24.60   0.4
IIDJ    6.49 235 P     55 32.00   0.0
               eS     56 40.10
TSRJ    7.73 243 eP    55 50.20   0.8
RES    59.72  15 eP    04 12.00  12.5X
       0.6s     2.00nm
WB2    59.77 191 eP    03 59.10  -1.3
       0.6s     1.80nm          4.4mb
               ipP    04 17.90  72kmX
LRM    70.81  46 eP    05 13.50   1.8
               e      05 31.90
LPAZ  143.46  60 PKP   13 25.80  -4.5X
LPB   143.66  60 (PKP) 13 33.00   2.6X
CNCB  143.93  61 PKP   13 30.90  -0.1
     S.D. = 0.7  on  17 of  20 obs.
-----------------------------------
? NOV  24, 1993  11h 56m 32.06±20.75s
  18.581 N ±82.7km   67.584 W ±146.km
  DEPTH =  33.0km  (normal)
 MONA PASSAGE                      ( 89)

MGP     0.74 140 P     56 46.40   0.4
APR     0.82  99 P     56 47.00  -0.2
PORP    1.04 120 P     56 49.70  -0.7
CLLP    1.08 117 P     56 51.50   0.6
SJG     1.44 109 iP    56 56.80   0.7
               S      57 14.60
LPR     1.65  99 P     56 59.50   0.3
CPD     1.67 109 P     57 00.00   0.5
     S.D. = 0.6  on   7 of   7 obs.
-----------------------------------
   NOV  24, 1993  12h 29m 42.19± 0.70s
   40.753 N ± 4.9km   23.633 E ± 6.0km
   DEPTH =  10.0km  (geophysicist)
 GREECE                            (364)
     ML 2.7 (THE).

SOH     0.22 288 ePg   29 47.02   0.0
               eSg    29 50.98
SRS     0.37 355 ePgc  29 49.70   0.0
               eSg    29 55.46
OUR     0.50 147 ePg   29 52.34   0.1
               eSg    29 59.38
THE     0.52 257 ePg   29 52.66  -0.1
               eSg    29 59.14
KNT     0.69 307 ePg   29 55.98   0.1
               eSg    30 04.90
PAIG    0.83 177 ePg   29 57.89  -0.3
               eSg    30 07.94
GRG     0.96 283 ePg   30 00.21  -0.2
               eSg    30 11.82
VAY     0.98 306 ePn   30 03.00   2.1X
LIT     1.09 234 ePg   30 02.98   0.3
               eSg    30 17.54
GEC2   10.73 322 eP    32 21.00   2.1X
       1.5s     2.61nm          4.4mb
               e      32 27.80
     S.D. = 0.2  on   8 of  10 obs.
-----------------------------------
   NOV  24, 1993  12h 29m 48.39± 0.90s
    5.850 N ± 3.9km  126.254 E ± 6.7km
   DEPTH =  59.0 ±  8.3 km
   5.0mb ( 24 obs.)
 MINDANAO, PHILIPPINE ISLANDS      (259)

BIP     2.36 360 iPc   30 25.00  -0.4
               iS     30 55.00
```

24d 12h

```
CTB      2.44 303 ePd   30 27.00   0.4
                  eS    30 57.00
MAP      4.98 333 ePd   31 02.00  -0.4
                  eS    31 51.00
PLP      5.43 347 ePc   31 08.00  -0.7
GQP      8.84 335 eP    32 01.00   4.9X
BAG     11.88 333 eP    32 42.00   4.5X
QIZ     20.67 311 Pc    34 29.00   3.1X
KNA     21.60 173 eP    34 35.60   0.3
        0.9s   116.00nm          5.3mb
LEM     22.46 236 ePc   34 47.00   3.0X
IPM     25.16 268 ePd   35 11.00   1.1
SNG     25.51 274 eP    35 12.80  -0.3
SSE     25.56 350 P     35 14.50   1.0
        1.5s    29.00nm          4.6mb
WB2     26.84 163 eP    35 24.30  -1.1
        0.7s     9.60nm          4.5mb
                  eS    40 07.50
NJ2     26.97 346 eP    35 27.60   1.2
WHN     27.00 337 eP    35 23.00  -3.7X
NST     27.42 293 eP    35 32.00   1.3
MBL     27.57 193 eP    35 31.50  -0.5
QIS     29.34 154 iPd   35 48.00   0.1
NANU    30.12 200 eP    35 55.00   0.1
WARB    31.84 179 eP    36 10.30   0.3
XAN     32.33 332 P     36 12.00  -2.1X
        1.0s    47.00nm          5.3mb
CTA     32.42 143 eP    36 15.00  -0.1
                  e     36 22.00
CD2     32.67 322 eP    36 17.60   0.4
MEEK    33.13 193 eP    36 20.40  -0.8
        1.0s    29.00nm          5.1mb
TIY     34.12 340 eP    36 30.00   0.2
        0.7s    20.00nm          5.2mb
BJI     35.23 347 eP    36 38.00  -1.0
        1.0s    16.00nm          4.9mb
SNY     35.90 357 Pc    36 44.80   0.1
        1.1s    32.00nm          5.2mb
MRWA    36.23 195 iPd   36 47.20  -0.5
        0.6s    10.00nm          4.9mb
LZH     36.45 329 eP    36 49.00  -0.6
        1.5s    48.00nm          5.2mb
HHC     37.25 341 eP    36 57.80   1.6
        1.2s    48.00nm          5.3mb
      Z 22s      0.65um          4.4Msz
BAL     37.38 194 eP    36 56.50  -0.8
BTO     37.54 340 eP    36 55.00  -3.6X
KLB     38.10 192 eP    37 03.00  -0.4
MDJ     38.72   4 eP    37 09.50   1.1
MUN     38.82 194 iPd   37 09.20  -0.1
STK     40.27 160 iPc   37 12.80  -8.5X
        0.9s    15.80nm          4.9mb
GTA     41.05 328 eP    37 27.00  -0.8
        1.0s     8.00nm          4.4mb
                  pP    37 40.00  49kmX
                  sP    37 45.00
                  PcP   39 27.00
BRS     41.83 143 iPc   37 43.00   8.8X
        1.0s     8.00nm          4.4mb
ADE     42.26 165 eP    37 39.30   1.6
ARMA    43.49 147 eP    37 48.20   0.4
        0.7s    15.00nm          4.9mb
GUN     44.12 305 P     37 53.20  -0.1
        0.6s    14.00nm          4.9mb
PKI     44.38 304 P     37 54.70  -0.7
KKN     44.57 304 P     37 58.00   1.2
DMN     44.65 304 P     37 57.30  -0.2
GKN     45.18 304 P     38 00.60  -1.0
CAN     46.21 154 eP    38 10.50   1.1
CNB     46.36 154 eP    38 12.00   1.3
        0.9s    11.00nm          4.8mb
DZM     48.15 127 iPc   38 24.10  -0.9
GBA     48.66 283 P     38 29.00   0.2
WMQ     50.73 324 P     38 47.00   2.6
MAIO    67.86 307 eP    40 42.00  -1.0
SVW     79.17  29 eP    41 48.30   0.0
IMA     80.65  24 eP    41 56.70   0.5
        0.6s     8.60nm          4.9mb
PMR     82.32  29 eP    42 03.80  -1.0
TOA     83.73  28 eP    42 13.10   0.9
OBN     85.05 325 eP    42 17.00  -1.8
        1.1s    39.00nm          5.4mb
INK     88.38  21 eP    42 34.00  -0.8
KAF     89.51 332 eP    42 38.00  -2.3
        0.7s     6.10nm          5.0mb
MBC     90.00  13 eP    42 44.00   1.7
        0.6s     2.00nm          4.6mb
```

```
DAG     95.12 352 iPc   43 05.10  -0.8
        0.5s     9.86nm          5.5mb
                  ipP   43 17.00  38kmX
RES     95.82  10 eP    43 09.50   0.3
NB2     96.69 334 P     43 11.40  -2.0
        0.8s     3.70nm          5.0mb
YKA     97.77  24 eP    43 17.30  -0.9
        0.8s     1.90nm          4.7mb
KIC    129.61 283 PKP   48 53.74   0.3
        0.9s    21.00nm
LKO    129.64 287 PKP   48 53.62   0.1
        0.8s     7.50nm
TIC    129.81 284 PKP   48 54.04   0.2
        0.8s     5.00nm
LIC    129.92 283 PKP   48 54.21   0.2
        1.0s    15.50nm
MDZ    149.64 154 ePKP  49 35.10   6.4X
TCA    152.68 159 ePKPd 49 41.60   8.3X
FSA    156.71 151 ePKP  49 45.90   7.2X
     S.D. = 1.0  on  58 of  70 obs.
-----------------------------------
% NOV  24, 1993  12h 30m 34.00± 0.76s
   40.742 N ± 5.4km   23.617 E ± 6.5km
   DEPTH =  10.0km  (geophysicist)
 GREECE                            (364)
      ML 2.6 (THE).

SOH     0.22 292 ePg   30 39.26   0.6
                  eSg   30 42.50
SRS     0.38 357 ePgc  30 41.38  -0.3
                  eSg   30 46.90
OUR     0.49 146 ePg   30 44.10   0.1
                  eSg   30 50.94
THE     0.51 258 ePg   30 43.14  -1.1
                  eSg   30 50.54
KNT     0.69 308 ePg   30 47.66   0.0
                  eSg   30 56.54
PAIG    0.81 177 ePg   30 49.66  -0.1
                  eSg   31 00.34
GRG     0.95 284 ePg   30 52.54   0.5
                  eSg   31 05.10
LIT     1.07 234 ePg   30 54.62   0.4
                  eSg   31 09.06
     S.D. = 0.7  on   8 of   8 obs.
-----------------------------------
? NOV  24, 1993  12h 42m 03.82± 0.99s
   39.078 N ± 8.4km   27.581 E ±10.2km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.7 (ISK).

IZM     0.72 200 ePg   42 17.90  -0.2
                  eSg   42 29.90
DST     0.97  57 ePn   42 22.70   0.4
EZN     1.23 308 ePn   42 27.00   0.4
EDC     1.29  10 ePn   42 27.00  -0.7
     S.D. = 0.9  on   4 of   4 obs.
-----------------------------------
   NOV  24, 1993  12h 55m 04.95± 0.81s
   41.167 N ± 8.5km   21.883 E ± 5.9km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)
      ML 2.4 (THE), 2.1 (SKO).

VAY     0.54  73 iPg   55 16.00   0.1
        0.2s   110.00nm
                  iSg   55 21.70
FNA     0.54 225 ePg   55 16.10   0.2
                  eSg   55 22.06
KNT     0.77  90 ePg   55 20.82   0.9
                  eSg   55 29.54
SKO     0.87 338 ePg   55 21.50  -0.2
LIT     1.16 156 ePg   55 21.54  -5.1X
                  eSg   55 31.46
SOH     1.17 107 ePg   55 25.82  -0.9
                  eSg   55 40.94
SRS     1.29  92 ePb   55 28.86   0.0
                  eSb   55 43.78
OUR     1.80 117 ePb   55 33.70  -2.5X
     S.D. = 0.8  on   6 of   8 obs.
-----------------------------------
? NOV  24, 1993  13h 14m 12.38± 1.60s
   38.907 N ±10.3km   30.047 E ±16.7km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.8 (ISK).
```

```
ALT     0.16  19 iPg   14 15.50  -0.6
KHL     0.71 215 ePg   14 26.50   0.0
                  eSg   14 37.00
DST     1.30 303 ePn   14 36.00  -0.5
IZI     1.49 343 ePn   14 40.40   1.1
     S.D. = 1.3  on   4 of   4 obs.
-----------------------------------
   NOV  24, 1993  13h 16m 42.14± 0.62s
   40.469 N ± 5.0km   23.546 E ± 5.7km
   DEPTH =   5.0km  (geophysicist)
 GREECE                            (364)
      ML 2.2 (THE).

OUR     0.36 112 ePg   16 49.80   0.4
                  eSg   16 54.04
SOH     0.38 338 ePgc  16 49.89   0.1
                  eSg   16 55.08
THE     0.47 290 ePg   16 51.20  -0.4
                  eSg   16 57.36
PAIG    0.55 169 ePgc  16 52.64  -0.5
                  eSg   17 00.20
SRS     0.65   3 ePg   16 54.66  -0.4
                  eSg   17 03.16
KNT     0.85 325 ePgc  16 58.08  -0.9
                  eSg   17 09.36
LIT     0.89 246 ePg   17 00.00   0.3
                  eSg   17 11.72
GRG     1.00 300 ePg   17 01.60   0.1
                  eSg   17 15.52
VAY     1.13 319 ePn   17 05.00   1.3
     S.D. = 0.8  on   9 of   9 obs.
-----------------------------------
? NOV  24, 1993  13h 20m 04.68± 3.85s
   31.298 S ±22.1km   68.677 W ±16.9km
   DEPTH =  98.5 ± 39.1 km
 SAN JUAN PROVINCE, ARGENTINA      (137)

RTLL    0.18 100 ePd   20 19.00  -0.1
                  S     20 29.00
RTCB    0.21 209 ePd   20 19.10  -0.2
                  S     20 30.20
CFA     0.48 130 ePd   20 21.00   0.5
                  S     20 33.00
RTCV    0.57 168 eP    20 21.00  -0.1
                  S     20 34.00
RTRS    1.31 329 eP    20 29.00   0.1
                  S     20 48.00
RTPR    2.11  63 eP    20 39.00  -0.1
                  S     21 05.00
     S.D. = 0.5  on   6 of   6 obs.
-----------------------------------
   NOV  24, 1993  13h 29m 06.90± 0.74s
   42.582 N ± 7.3km   24.186 E ± 9.7km
   DEPTH =  10.0km  (geophysicist)
 BULGARIA                          (359)
      ML 2.9 (THE).

SRS     1.53 197 ePbc  29 33.86  -0.4
                  eSb   29 55.30
KNT     1.71 215 ePb   29 36.66  -0.3
                  eSb   29 59.50
VAY     1.74 224 iPn   29 37.30  -0.1
SOH     1.87 200 ePb   29 38.94  -0.3
                  eSb   30 05.90
GRG     2.10 220 ePn   29 42.70   0.1
                  eSn   30 10.70
ALN     2.18 140 ePn   29 43.38  -0.4
                  eSn   30 15.10
OUR     2.25 184 ePn   29 45.06   0.3
                  eSn   30 16.42
PAIG    2.68 188 ePn   29 51.74   0.9
MLR     3.17  23 eP    29 58.00   0.1
     S.D. = 0.5  on   9 of   9 obs.
-----------------------------------
* NOV  24, 1993  14h 45m 58.89± 1.90s
   18.172 N ± 7.3km   76.280 E ±24.5km
   DEPTH =  33.0km  (normal)
 SOUTHERN INDIA                    (314)
      Felt in the Latur area.

HYB     2.29 109 ePn   46 35.20   0.0
                  ePg   46 38.60
                  eSn   46 59.90
                  eSg   47 02.70
BOM     3.36 283 ePn   47 06.80  16.4X
                  eSn   47 52.90
GBA     4.68 166 P     47 09.00   0.0
```

```
                S     48 00.00
DMN    12.42  39 P     48 57.20   0.7
GKN    12.44  37 P     48 56.40  -0.2
PKI    12.58  40 P     48 58.60   0.0
KKN    12.66  39 P     48 59.60   0.0
       0.7s    15.00nm          5.2mb X
GUN    13.11  41 P     49 05.30  -0.4
     S.D. = 0.4  on   7 of   8 obs.
-----------------------------------
&  NOV  24, 1993  15h 18m 07.99s
   37.768 N          122.590 W
   DEPTH =  11.8km
 CENTRAL CALIFORNIA                ( 39)
      <GM-P>. MD 3.0 (GM). ML 3.2
      (BRK). Widely felt in the Sunset
      District of San Francisco. Also
      felt at Albany.

AGC     0.16  54 P      18 11.93   0.1
JSBM    0.18 120 P      18 12.23   0.1
JEGM    0.27 158 eP     18 13.77  -0.1
JCPM    0.28 130 P      18 13.96   0.0
CSPM    0.29  49 P      18 14.46   0.3
BKS     0.30  69 iP     18 14.49   0.1
                 iS     18 18.89
NFIM    0.33 258 P      18 15.15   0.2
JHPM    0.40 145 P      18 16.09  -0.1
BKC     0.41  68 P      18 17.01   0.5
BGC     0.42  83 P      18 16.78   0.1
STAN    0.49 138 eP     18 17.84  -0.2
                 eS     18 25.71
BBR     0.49   4 P      18 18.21   0.1
CPLM    0.52 104 P      18 18.36  -0.1
NCFM    0.58 344 P      18 19.46   0.0
LT3     0.59 149 P      18 19.39  -0.3
SJH     0.59 137 P      18 19.97   0.3
GVR     0.59  30 P      18 19.96   0.2
MSJ     0.62 113 P      18 20.12  -0.2
NTYM    0.62 355 eP     18 19.98  -0.3
CVAL    0.68 103 P      18 21.64   0.4
HMR     0.73  58 eP     18 22.64   0.4
MHR     0.78 121 P      18 23.11   0.1
MAC     0.79 352 P      18 22.79  -0.3
JSTM    0.84 131 P      18 23.64  -0.4
MHC     0.87 119 eP     18 24.48  -0.1
                 eS     18 36.45
CSTL    0.88  98 P      18 24.79   0.2
FTR     0.88 329 P      18 25.18   0.5
JRGM    0.88 145 P      18 24.44  -0.3
COE     0.89 125 eP     18 25.14   0.2
JTGM    0.93 142 P      18 25.87   0.3
ARN     0.94 116 eP     18 25.17  -0.6
                 eS     18 35.90
EUC     0.95 139 P      18 26.25   0.3
NBPM    0.95  19 P      18 26.81   0.9
COSM    1.00 105 P      18 27.14   0.3
GCVM    1.05 342 P      18 29.13   1.5
HSPM    1.08 127 P      18 27.32  -0.8
CBC     1.12 138 P      18 30.12   1.4
GDCM    1.12 333 P      18 27.94  -0.9
CSR     1.14 135 P      18 27.96  -1.2
CDC     1.15 130 P      18 30.20   0.8
GARM    1.21  13 P      18 33.40   3.0
SFL     1.23 129 P      18 31.17   0.5
HBTM    1.24 138 P      18 32.93   2.2
LTR     1.35 130 P      18 33.65   1.0
SAO     1.36 137 eP     18 34.26   1.6
HJSM    1.40 132 P      18 31.54  -1.8
BHRM    1.48 134 P      18 36.20   1.7
GNAM    1.64 331 P      18 35.22  -1.6
AFDM    1.73  47 P      18 36.79  -1.3
CMB     1.76  81 eP     18 38.19  -0.4
                 eS     18 59.60
       50 obs. associated
-----------------------------------
&  NOV  24, 1993  15h 28m 04.28s
   37.767 N          122.589 W
   DEPTH =   9.2km
 CENTRAL CALIFORNIA                ( 39)
      <GM-P>. MD 2.4 (GM).

NTYM    0.62 355 eP     28 16.63  -0.2
                 eS     28 24.37
HMR     0.73  58 eP     28 19.04   0.3
COE     0.89 125 eP     28 21.04  -0.4
ARN     0.94 116 eP     28 21.75  -0.5
                 eS     28 34.26
       4 obs. associated
-----------------------------------
?  NOV  24, 1993  16h 30m 14.93± 3.86s
   31.458 S ±24.6km   68.511 W ±14.8km
   DEPTH = 101.3 ± 35.9 km
 SAN JUAN PROVINCE, ARGENTINA      (137)

RTLL    0.13  16 iPd    30 29.60   0.0
                 S      30 40.70
ZON     0.17 238 eP     30 29.20  -0.5
                 eS     30 39.20
RTCB    0.25 263 iPd    30 30.10   0.1
                 S      30 42.00
CFA     0.28 123 ePc    30 30.50   0.4
                 S      30 42.00
RTCV    0.40 183 eP     30 30.50   0.0
                 S      30 43.00
RTRS    1.52 327 eP     30 42.00   0.1
                 S      31 02.50
RTPR    2.07  57 eP     30 48.80  -0.1
                 S      31 14.00
     S.D. = 0.4  on   7 of   7 obs.
-----------------------------------
   NOV  24, 1993  16h 56m 59.29± 0.77s
   43.478 N ±10.5km   17.214 E ± 6.8km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)

HVAR    0.63 242 iPgc   57 11.90  -0.1
                 iSg    57 24.40
BRY     1.13 120 iPgc   57 18.54  -2.0
                 iSg    57 34.63
HCY     1.40 137 iPgd   57 24.00  -0.8
                 iSg    57 45.07
NKY     1.47 116 iPgc   57 25.60  -0.3
                 iSg    57 45.94
PLE     1.60  95 iPgc   57 27.25  -0.5
                 iSg    57 49.98
BDV     1.68 135 iPnd   57 29.19   0.3
                 iSn    57 54.13
TTG     1.83 124 iPnd   57 31.88   0.9
                 iSn    57 57.09
IVA     2.06 106 ePn    57 35.09   0.7
                 iSn    58 01.69
ULC     2.13 135 iPnd   57 36.41   1.0
                 iSn    58 04.57
PVY     2.21 113 iPnc   57 37.59   1.0
                 iSn    58 06.47
VBY     2.46 326 ePn    57 40.00  -0.1
                 iSn    58 12.00
TRI     3.32 313 eP     58 29.90  37.6X
                 e(Sg)  58 47.50
     S.D. = 1.0  on  11 of  12 obs.
-----------------------------------
?  NOV  24, 1993  17h 13m 28.78± 5.00s
   38.844 N ±14.1km   30.245 E ±50.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.8 (ISK).

ALT     0.24 334 iPg    13 33.10  -0.8
KHL     0.77 228 ePg    13 43.60  -0.2
                 eSg    13 54.10
DST     1.47 302 ePn    13 56.00   0.7
IZI     1.61 338 ePn    13 57.70   0.4
     S.D. = 1.1  on   4 of   4 obs.
-----------------------------------
%  NOV  24, 1993  18h 05m 15.94± 0.78s
   37.636 N ± 5.2km    2.562 W ± 7.5km
   DEPTH =  10.0km  (geophysicist)
 SPAIN                             (377)
      mbLg 3.0 (MDD).

EHUE    0.18 352 iPc    05 20.06   0.0
                 e      05 23.40
ENIJ    0.72 157 iPc    05 30.00  -0.1
                 e      05 39.30
ECOG    0.88 246 eP     05 33.29   0.4
                 e      05 45.90
EVIA    1.00   3 iPd    05 35.19   0.2
                 e      05 48.40
EBAN    1.10 299 iPc    05 36.81   0.2
                 e      05 51.30
EGUA    1.13 225 eP     05 37.37   0.2
                 e      05 53.20
ELUQ    1.36 267 eP     05 41.22   0.3
                 e      05 59.50
EHOR    2.14 276 eP     05 50.93  -1.2
                 e      06 17.30
     S.D. = 0.6  on   8 of   8 obs.
-----------------------------------
&  NOV  24, 1993  18h 08m 48.60s
   35.300 N          117.669 W
   DEPTH =   7.1km
 CENTRAL CALIFORNIA                ( 39)
      <PAS-P>. ML 2.7 (PAS).

GSC     0.71  90 iPc    09 01.84  -0.9
SSK     1.09 181 eP     09 08.40  -1.0
ABL     1.35 251 eP     09 13.07  -0.8
PEC     1.47 163 eP     09 14.65  -0.8
TPNV    2.01  35 eP     09 22.30  -1.1
PLM     2.05 161 eP     09 23.20  -0.9
BONR    2.70 349 (P)    09 36.46   3.0
       7 obs. associated
-----------------------------------
%  NOV  24, 1993  18h 50m 20.07± 0.96s
   43.004 N ± 7.2km   18.741 E ± 5.9km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)

BRY     0.18 234 iPgd   50 24.56   0.4
                 iSg    50 27.62
NKY     0.27 135 iPgc   50 26.29   0.5
                 iSg    50 30.29
PLE     0.58  56 iPgd   50 31.67  -0.2
                 iSg    50 40.53
HCY     0.58 198 iPgd   50 31.45  -0.4
                 iSg    50 40.21
TTG     0.69 146 iPgc   50 33.18  -0.5
                 iSg    50 43.62
BDV     0.72 175 iPgd   50 34.03  -0.3
                 iSg    50 44.86
IVA     0.86  98 iPgc   50 36.71   0.0
                 iSg    50 49.79
PVY     1.00 114 iPgd   50 39.24   0.2
                 iSg    50 54.04
ULC     1.11 160 iPgd   50 41.12   0.3
                 iSg    50 57.27
     S.D. = 0.4  on   9 of   9 obs.
-----------------------------------
?  NOV  24, 1993  19h 31m 46.24± 4.02s
   28.776 N ±10.4km   34.703 E ±29.2km
   DEPTH =  10.0km  (geophysicist)
 EGYPT                             (553)
      MD 3.8 (RYD).

BADA    0.36 134 iPc    31 53.53  -0.2
                 iS     31 58.80
SRFA    0.45  70 iPd    31 54.93  -0.5
                 iS     32 01.67
HQL     0.58  32 iPc    31 57.93   0.0
                 iS     32 06.00
AYN     1.14  85 iPc    32 08.33   0.7
                 iS     32 24.38
     S.D. = 0.9  on   4 of   4 obs.
-----------------------------------
%  NOV  24, 1993  19h 58m 48.83± 0.85s
   40.319 N ± 6.7km   24.064 E ± 7.0km
   DEPTH =  10.0km  (geophysicist)
 AEGEAN SEA                        (365)
      ML 2.3 (THE).

OUR     0.06 284 ePg    58 51.74   0.6
                 eSg    58 53.44
PAIG    0.49 217 ePgc   58 58.57  -0.2
                 eSg    59 05.68
SOH     0.74 313 ePg    59 03.20  -0.1
                 eSg    59 13.24
SRS     0.87 336 ePg    59 05.40  -0.2
                 eSg    59 17.32
KNT     1.22 314 ePb    59 11.56   0.0
                 eSb    59 27.44
GRG     1.42 297 ePb    59 14.56  -0.1
                 eSb    59 33.20
ALN     1.61  68 ePb    59 17.52   0.1
     S.D. = 0.4  on   7 of   7 obs.
-----------------------------------
   NOV  24, 1993  20h 37m 30.06± 0.40s
   41.164 N ± 3.6km    7.746 W ± 4.4km
   DEPTH =  10.0km  (geophysicist)
 PORTUGAL                          (376)
      mbLg 3.6 (MDD).
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24d 20h

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PTO      0.65 268 iPgc   37 42.40  -0.6
MTE      0.78 168 ePg    37 45.90   0.7
                  eSg    37 56.40
COI      1.08 208 Pg     37 51.50   1.1
EZAM     1.21 324 eP     37 52.31  -0.4
                  e      38 07.80
ERUA     1.31  20 iPc    37 55.53   1.3
                  e      38 13.10
EPLA     1.68 130 iPd    38 00.52   0.9
                  e      38 22.40
STS      1.82 341 iPd    38 01.27  -0.4
                  e      38 24.10
EMON     2.29   8 eP     38 09.20   0.7
                  e      38 36.70
MOE      2.68 190 ePn    38 14.40   0.4
GUD      2.77 100 iPc    38 15.70   0.2
                  e      38 50.10
PAB      3.06 121 iPn    38 19.70   0.3
                  ePb    38 23.00
                  eSn    39 05.80
                  eSb    39 07.90
                  eSg    39 11.00
EVAL     3.66 167 eP     38 27.27  -0.6
                  e      39 08.20
EHOR     3.86 149 eP     38 30.04  -0.6
                  e      39 13.80
ECRI     4.17  68 eP     38 35.94   0.8
                  e      39 22.80
EBAN     4.28 133 eP     38 35.64  -1.1
                  e      39 24.70
ETOR     4.32  93 eP     38 37.45   0.0
                  e      39 27.80
ECOG     5.06 139 eP     38 46.94  -0.9
                  e      39 43.80
BTH      5.94  68 e(Pn)d39 13.20  13.1X
                  Sn     40 20.30
EPF      6.30  70 Pn     39 06.70   1.4
                  Sn     40 18.90
LFF      7.27  56 Pn     39 18.00  -0.9
RJF      7.93  55 Pn     39 27.00  -1.1
                  Sn     40 50.40
CAF      8.11  59 Pn     39 29.50  -1.2
     S.D. = 0.9  on  21 of  22 obs.
-------------------------------------
&  NOV  24, 1993  20h 38m 10.85s
   38.792 N          122.769 W
   DEPTH =   2.1km
 NORTHERN CALIFORNIA                ( 36)
      <GM-P>. MD 2.9 (GM). ML 2.9
      (GS).

GCRM     0.05 114 P      38 11.86  -0.1
GAXM     0.08 172 P      38 12.63   0.1
GACM     0.11 318 P      38 13.31   0.2
GRTM     0.17  28 P      38 14.46   0.3
MAC      0.24 171 P      38 16.20   0.5
NMTM     0.25  87 P      38 16.22   0.3
GHLM     0.32 322 P      38 17.44   0.3
GDCM     0.37 266 P      38 18.73   0.5
GBMM     0.41  31 P      38 20.62   1.6
NTYM     0.41 168 ePd    38 19.18   0.1
                  eS     38 25.30
GCWM     0.41 325 P      38 19.34   0.2
GARM     0.44  68 P      38 21.70   2.2
NTBM     0.56 193 P      38 22.60   0.6
GNAM     0.78 301 P      38 26.98   0.5
GCBM     0.83 316 P      38 28.18   0.7
AGC      0.97 164 P      38 29.39  -0.6
DUC      0.97 141 P      38 30.29   0.3
HMR      0.99 130 eP     38 29.66  -0.7
JSBM     1.15 165 P      38 32.77  -0.3
CSLM     1.18 154 P      38 33.70   0.1
LKC      1.19 152 P      38 34.97   1.2
ORV      1.25  52 eP     38 32.29  -2.5
JEGM     1.30 169 eP     38 33.34  -2.3
JHPM     1.40 165 P      38 39.97   2.7
ARN      1.74 146 eP     38 40.55  -1.7
COE      1.76 150 ePc    38 40.72  -1.8
CMB      2.02 111 eP     38 44.07  -2.3
LGPM     2.12 359 eP     38 47.72  -0.1
FHC      2.21 335 (P)    38 48.74  -0.4
MMPM     3.17 111 eP     39 02.39  -0.7
MEMM     3.22 109 eP     39 02.84  -0.5
BONR     3.61 102 ePn    39 07.68  -1.6
MTUM     3.62 112 (Pn)   39 08.72  -0.5
       33 obs. associated
-------------------------------------
*  NOV  24, 1993  21h 02m 00.47± 1.68s
   35.442 N ±23.0km   27.131 E ±10.2km
   DEPTH =  10.0km  (geophysicist)
 DODECANESE ISLANDS                 (369)
      MD 3.8 (ATH).

NPS      1.25 262 ePg    02 24.00   0.2
VAM      2.39 270 ePn    02 44.00   3.7X
ELL      2.60  59 eP     02 44.50   1.1
IZM      2.95   2 eP     02 48.70   0.4
BCK      3.44  53 eP     02 53.90  -1.3
VLI      3.63 292 ePn    02 57.50  -0.4
     S.D. = 1.3  on   5 of   6 obs.
-------------------------------------
   NOV  24, 1993  21h 30m 02.98± 0.78s
   37.811 N ± 7.1km   21.933 E ± 7.8km
   DEPTH =   5.0km  (geophysicist)
 SOUTHERN GREECE                    (368)
      ML 3.3 (ATH), 3.2 (THE).

VLS      1.12 289 iPgc   30 22.50  -2.0
VLI      1.35 143 iPbd   30 28.80   0.4
ATH      1.42  83 ePb    30 29.80   0.3
                  eSb    30 51.80
IGT      2.13 324 ePn    30 41.72   2.1
                  eSn    31 11.44
LIT      2.33  11 ePn    30 42.40  -0.2
                  eSn    31 11.28
KZN      2.49 357 ePn    30 45.00   0.0
PAIG     2.51  32 ePn    30 43.72  -1.4
KEK      2.53 319 ePn    30 45.00  -0.3
OUR      2.98  32 ePn    30 49.76  -2.0
                  eSn    31 23.56
FNA      3.00 352 ePn    30 52.56   0.5
                  eSn    31 30.16
VAM      3.01 142 ePn    30 52.50   0.2
GRG      3.16   6 ePn    30 55.20   0.8
                  eSn    31 33.00
OHR      3.41 345 ePn    31 03.80   5.8X
KNT      3.43  12 ePn    30 58.84   0.7
                  eSn    31 38.64
VAY      3.54   8 ePn    31 05.40   5.7X
SRS      3.54  21 ePn    30 59.24  -0.5
SKO      4.17 355 ePn    31 10.00   1.3
                  e      31 18.00
     S.D. = 1.2  on  15 of  17 obs.
-------------------------------------
%  NOV  24, 1993  21h 58m 32.18± 0.74s
   40.497 N ± 6.8km   23.520 E ± 7.2km
   DEPTH =   5.0km  (geophysicist)
 GREECE                             (364)
      ML 1.9 (THE).

OUR      0.39 115 ePg    58 40.53   0.5
                  eSg    58 46.25
THE      0.44 288 ePg    58 40.76  -0.3
                  eSg    58 46.40
PAIG     0.58 168 ePg    58 43.28  -0.5
                  eSg    58 50.64
SRS      0.62   5 ePg    58 44.24  -0.4
                  eSg    58 53.84
KNT      0.81 325 ePg    58 48.04  -0.4
                  eSg    58 58.72
GRG      0.97 299 ePg    58 52.18   1.1
                  eSg    59 05.36
     S.D. = 0.9  on   6 of   6 obs.
-------------------------------------
*  NOV  24, 1993  22h 16m 13.29± 1.45s
   35.366 N ±16.3km   27.140 E ± 7.0km
   DEPTH =  10.0km  (geophysicist)
 DODECANESE ISLANDS                 (369)
      MD 4.0 (ATH).

NPS      1.25 266 iPgd   16 37.00   0.4
VAM      2.40 272 ePg    16 57.60   4.3X
ELL      2.63  58 ePn    16 56.50  -0.2
IZM      3.03   2 ePn    17 02.00  -0.2
BCK      3.48  52 eP     17 08.90   0.3
KHL      3.52  32 eP     17 13.00   3.8X
VLI      3.66 293 ePn    17 10.00  -1.2
ATH      3.79 314 ePn    17 14.00   1.1
GEC2    16.72 328 ePn    20 08.90  -0.2
         0.6s     0.65nm          2.9mb X
                  e      20 15.70
                  e      20 17.20
                  e      20 24.40
KHC     16.99 328 eP     20 12.50   0.0
YKA     77.74 343 eP     28 26.80  15.2X
         0.7s     0.70nm
     S.D. = 0.8  on   8 of  11 obs.
-------------------------------------
*  NOV  24, 1993  22h 37m 50.45± 2.48s
   38.987 N ±22.3km   21.778 E ± 7.5km
   DEPTH =  10.0km  (geophysicist)
 GREECE                             (364)
      ML 3.0 (THE).

LIT      1.24  26 ePg    38 12.38  -1.1
                  eSg    38 28.50
IGT      1.25 296 ePb    38 12.86  -0.8
                  eSb    38 28.42
PAIG     1.75  57 ePb    38 21.46   0.5
                  eSb    38 42.58
FNA      1.82 350 ePb    38 21.90  -0.2
                  eSb    38 41.86
THE      1.88  29 ePb    38 23.34   0.5
                  eSb    38 44.10
GRG      2.02  13 ePb    38 25.70   0.7
                  eSb    38 50.66
OUR      2.17  51 ePn    38 27.42   0.3
OHR      2.25 341 ePn    38 29.30   1.0
KNT      2.34  21 ePn    38 28.26  -1.2
                  eSn    38 56.30
VAY      2.41  14 ePn    38 33.00   2.5X
SRS      2.54  33 ePn    38 31.58  -0.8
                  eSn    38 59.34
SKO      2.99 355 ePn    38 40.00   1.2
     S.D. = 1.0  on  11 of  12 obs.
-------------------------------------
*  NOV  24, 1993  22h 54m 00.13± 0.56s
    7.382 S ± 7.8km  125.810 E ±14.0km
   DEPTH =  32.0km  (  3 depth phases)
   4.7mb ( 10 obs.)
 BANDA SEA                          (280)

MKS      6.66 288 iPd    55 36.50  -1.8
KNA      8.81 161 eP     56 08.20  -0.1
                  eS     57 45.80
WB2     14.99 147 iPc    57 29.50  -1.9
         0.8s    16.10nm          4.4mb
                  eS     00 07.60
ASPA    17.96 155 iPc    58 09.10  -0.1
         0.5s    52.90nm          4.9mb
      Z  23s     0.50um          3.9Msz
                  i      58 13.20
                  i      58 22.20
                  eS     01 19.70
WARB    18.71 178 eP     58 18.00  -0.5
MEEK    20.34 199 eP     58 36.50  -0.1
PMG     21.22  97 eP     58 38.50  -7.1X
CTA     23.50 125 iPc    59 12.20   4.0X
                  i      59 22.00  36km
MRWA    23.61 202 eP     59 11.50   2.3
COOL    23.79 190 eP     59 19.00   8.1X
BAL     24.63 199 eP     59 20.50   1.4
STK     28.47 151 eP     59 48.20  -6.3X
         0.5s     1.60nm          4.0mb
CAN     35.01 146 eP     00 55.70   3.8X
CHTO    37.14 315 eP     01 10.10   0.1
GYA     38.43 332 P      01 22.20   1.3
         1.0s    13.00nm          4.7mb
XAN     44.20 340 P      02 08.40   0.3
         0.8s     3.40nm          4.2mb
                  pP     02 17.40  30km
LZH     47.92 336 eP     02 39.00   1.3
         1.0s    24.00nm          5.2mb
                  pP     02 48.00  30km
LSA     49.69 320 P      02 53.20   1.4
         1.0s     9.00nm          4.8mb
GUN     52.15 314 P      03 10.10  -0.3
PKI     52.29 313 P      03 10.70  -0.7
         0.7s    14.00nm          5.0mb
GBA     52.36 293 P      03 11.00  -0.7
GTA     52.42 335 eP     03 12.00   0.0
         1.0s     6.00nm          4.5mb
KKN     52.51 313 P      03 12.60  -0.4
DMN     52.53 313 P      03 12.50  -0.7
         1.0s    34.00nm          5.3mb
GKN     53.09 313 P      03 16.60  -0.6
WMQ     61.53 329 eP     04 16.20  -0.3
CNCB   152.36 151 PKP    13 58.30   9.3X
LPB    152.54 150 PKP    13 57.00   7.9X
LPAZ   152.73 150 PKP    13 58.90   9.3X
     S.D. = 1.1  on  21 of  29 obs.
```

? NOV 24, 1993 23h 24m 28.34± 2.09s
22.298 S ±15.7km 65.891 W ±19.9km
DEPTH = 274.8 ± 26.4 km
JUJUY PROVINCE, ARGENTINA (128)

YJA	0.38	71	iPc	25 05.00	-0.4
			S	25 31.30	
HJA	1.02	154	iPc	25 06.90	0.6
SLA	2.45	172	ePc	25 17.20	-0.2
CNCB	5.80	340	P	25 56.00	0.2
LPB	6.10	340	eP	26 11.00	11.7X
LPAZ	6.34	340	P	26 02.30	-0.2
SIV	7.75	37	P	26 19.40	0.0

S.D. = 0.6 on 6 of 7 obs.

NOV 24, 1993 23h 28m 42.66± 0.44s
42.877 N ± 6.5km 1.973 E ± 3.6km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 3.3 (LDG). mbLg 3.4 (MDD).
MD 3.2 (BTH).

GRBF	0.32	264	Pg	28 47.96	-1.4
MTHF	0.42	81	Pg	28 51.49	0.3
SALF	0.59	259	Pg	28 52.55	-2.1
ETER	0.87	131	iPd	28 59.02	-0.4
			e	29 09.50	
EPF	1.21	278	Pn	29 03.80	-1.4
			Pg	29 05.70	
			Sg	29 19.40	
BTH	1.62	279	ePnc	29 12.80	1.5
			iPgc	29 14.20	
			Sn	29 33.20	
			eSg	29 34.50	
EGRA	1.82	249	eP	29 08.89	-5.4X
			e	29 26.00	
LPO	1.89	343	Pn	29 15.20	-0.1
			Pg	29 19.70	
			Sg	29 44.90	
CAF	2.05	2	Pn	29 17.70	0.1
			Pg	29 21.70	
			Sg	29 49.70	
LFF	2.25	337	Pn	29 20.60	0.2
			Pg	29 26.20	
			Sg	29 55.00	
EROQ	2.36	210	eP	29 23.78	1.7
			e	29 50.30	
RJF	2.45	352	Pg	29 29.40	6.1X
			Sg	30 02.50	
ELIZ	2.58	278	eP	29 26.28	1.0
			e	29 56.70	
LRG	3.26	78	Pn	29 34.20	-0.6
			Pg	29 44.40	
			Sn	30 11.60	
			Sg	30 28.50	
ECRI	3.31	267	eP	29 36.47	0.8
			e	30 14.30	
LMR	3.35	81	Pn	29 35.30	-0.8
			Sn	30 14.10	
			Sg	30 30.60	
MAF	3.37	7	Pg	29 47.10	10.7X
			Sg	30 30.70	
LSF	3.39	355	Pg	29 47.30	10.7X
			Sg	30 30.90	
TCF	3.41	3	Pg	29 47.20	10.2X
			Sg	30 31.40	
FRF	3.48	77	Pn	29 37.50	-0.5
			Sn	30 17.00	
ETOR	3.64	237	iPd	29 41.04	0.7
			e	30 20.00	
BGF	3.73	9	Pg	29 53.20	11.6X
			Sg	30 42.70	
AVF	4.03	14	Pg	29 58.10	12.4X
			Sg	30 50.80	
SBF	4.10	74	Pn	29 46.00	-0.8
LPG	4.32	51	Pn	29 51.20	1.0
LPL	4.32	51	Pn	29 50.90	0.8
SSF	4.32	14	Pg	30 04.60	14.7X
			Sg	31 00.20	
LOR	4.59	16	Pg	30 09.60	15.9X
			Sg	31 08.90	
PGF	5.19	91	Pn	29 58.90	-3.4X
			Sn	30 56.30	

S.D. = 1.1 on 19 of 29 obs.

NOV 24, 1993 23h 38m 21.54± 0.77s
42.804 N ± 7.5km 1.918 E ± 6.2km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 2.2 (LDG), 1.5 (STR).

LSPF	0.14	356	Pg	38 24.88	0.0
GRBF	0.28	278	Pg	38 27.22	-0.3
			Sg	38 31.30	
TRGS	0.30	173	Pg	38 28.12	0.2
			Sg	38 32.59	
VDCF	0.39	123	Pg	38 29.43	-0.2
LESF	0.52	296	Pg	38 31.71	-0.3
SALF	0.54	266	Pg	38 31.80	-0.7
EPF	1.18	282	Pg	38 44.90	1.3
			Sg	38 59.60	
LPO	1.95	344	Pg	38 59.00	4.0X
			Sg	39 23.00	

S.D. = 0.8 on 7 of 8 obs.

NOV 25, 1993 00h 19m 51.52± 0.55s
42.811 N ± 5.4km 1.924 E ± 4.0km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 2.6 (LDG).

LSPF	0.14	354	Pg	19 54.97	0.2
GRBF	0.29	276	Pg	19 57.35	-0.2
			Sg	20 01.60	
TRGS	0.31	174	Pg	19 58.22	0.2
VDCF	0.39	124	Pg	19 59.54	0.0
PAND	0.40	224	Pg	19 59.76	0.0
MTHF	0.47	74	Pg	20 00.82	-0.2
LESF	0.52	295	Pg	20 01.60	-0.4
SALF	0.54	265	Pg	20 01.86	-0.7
EPF	1.18	281	Pg	20 14.90	1.2
			Sg	20 30.00	
CAF	2.12	3	Pg	20 31.00	3.6X
			Sg	20 58.70	
LFF	2.29	338	Pg	20 34.30	4.3X
			Sg	21 04.30	

S.D. = 0.6 on 9 of 11 obs.

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* NOV 25, 1993 00h 46m 20.53± 2.85s
41.325 N ±20.3km 19.018 E ±19.7km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)

ULC	0.66	15	iPgc	46 32.76	-0.9
			iSg	46 41.41	
BDV	0.97	352	iPgd	46 38.61	-0.3
			iSg	46 53.02	
TTG	1.12	9	iPgd	46 40.75	-0.7
			iSg	46 56.51	
HCY	1.19	341	iPgc	46 41.54	-1.1
			iSg	47 00.44	
OHR	1.36	98	iPn	46 43.40	-2.2
PVY	1.46	29	iPgd	46 46.85	-0.1
			iSg	47 06.94	
NKY	1.49	359	iPgd	46 47.64	0.3
			iSg	47 09.31	
BRY	1.61	348	iPgd	46 50.28	1.0
			iSg	47 13.64	
IVA	1.68	23	iPnd	46 50.72	0.6
			iSn	47 14.63	
SKO	1.93	70	ePn	46 53.50	-0.2
PLE	2.02	8	iPnd	46 56.70	1.5
			iSn	47 22.90	
VAY	2.68	89	ePn	47 06.50	2.1

S.D. = 1.3 on 12 of 12 obs.

% NOV 25, 1993 01h 33m 01.27± 0.71s
26.371 S ± 6.9km 27.467 E ± 7.6km
DEPTH = 5.0km (geophysicist)
REPUBLIC OF SOUTH AFRICA (584)
ML 2.8 (PRE).

KSR	0.72	314	eP	33 15.90	0.2
			S	33 24.50	
SLR	0.97	49	eP	33 19.50	-0.7
			S	33 31.50	
SEK	1.95	176	iPc	33 36.00	0.5
			S	33 59.90	
BFT	2.42	74	eP	33 43.00	0.7
			S	34 12.50	
BOSA	2.88	219	iPc	33 48.90	0.2
			S	34 22.60	
BLF	2.95	202	eP	33 49.00	-0.9
			S	34 22.60	

S.D. = 0.8 on 6 of 6 obs.

NOV 25, 1993 01h 39m 18.62± 0.74s
63.301 N ± 7.0km 151.548 W ± 8.8km
DEPTH = 33.0km (normal)
CENTRAL ALASKA (1)
ML 2.9 (PMR).

PWA	1.83	154	eP	39 48.50	0.3
PMR	2.05	146	eP	39 49.92	-1.5
CRP	2.06	188	eP	39 52.14	0.4
			eS	40 20.76	
TTA	2.06	262	eP	39 50.90	-0.8
CP2	2.07	189	eP	39 52.44	0.5
PMS	2.26	155	eP	39 56.10	1.6
FBA	2.30	44	eP	39 55.87	0.9
			eS	40 24.36	
TOA	2.75	113	eP	40 00.10	-1.3
IMA	2.93	343	eP	40 04.00	0.0

S.D. = 1.2 on 9 of 9 obs.

? NOV 25, 1993 02h 24m 43.56± 4.01s
31.348 S ±23.6km 68.416 W ±13.9km
DEPTH = 108.7 ± 40.4 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.05	291	iPd	24 58.70	-0.4
			S	25 08.30	
CFA	0.30	150	iPc	24 59.90	0.2
			S	25 12.00	
ZON	0.30	229	iPd	24 59.60	-0.1
			eS	25 11.60	
RTCB	0.36	247	iPd	24 59.80	0.0
			S	25 10.20	
RTCV	0.52	191	e(P)	25 00.80	0.1
			S	25 13.00	
RTRS	1.48	322	eP	25 10.50	0.1
			S	25 30.00	
RTPR	1.94	58	eP	25 16.20	0.0
			S	25 41.20	

S.D. = 0.3 on 7 of 7 obs.

? NOV 25, 1993 02h 25m 18.73± 1.28s
38.876 N ± 9.5km 29.975 E ±13.2km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
ML 2.8 (ISK).

ALT	0.21	31	iPg	25 23.00	-0.3
KHL	0.66	213	iPg	25 31.90	0.0
			eSg	25 40.90	
DST	1.27	305	ePn	25 42.00	-0.4
IZI	1.51	345	ePn	25 46.60	0.7

S.D. = 0.9 on 4 of 4 obs.

& NOV 25, 1993 02h 35m 16.50s
63.145 N 150.574 W
DEPTH = 119.7km
CENTRAL ALASKA (1)
<AEIC>.

TRF	0.33	23	eP	35 33.72	1.5
			eS	35 46.37	
KTH	0.44	339	eP	35 34.01	-0.4
			eS	35 46.97	
HUR	0.46	111	eP	35 33.77	-0.7
			eS	35 48.16	
CUT	0.76	169	eP	35 36.02	-0.5
RND	0.82	71	eP	35 36.73	-0.5
MCK	0.94	51	eP	35 37.90	-0.4
			eS	35 54.06	
BWN	1.14	25	eP	35 39.73	-0.5
SKT	1.25	201	eP	35 41.18	-0.3
			eS	36 00.13	
GHO	1.58	150	eP	35 44.91	-0.4
			eS	36 07.04	
NEA	1.58	24	eP	35 44.26	-1.0
SUA	1.69	183	eP	35 46.41	-0.3
PMR	1.70	156	eP	35 45.24	-1.4
SML	1.70	141	eP	35 45.86	-0.8
			eS	36 09.43	
MLY	1.90	358	eP	35 48.11	-1.0
CGLM	1.96	201	eP	35 50.14	0.1
KNK	2.00	149	eP	35 49.61	-0.8
SCM	2.00	130	eP	35 49.92	-0.6
			eS	36 17.33	

25d 02h

```
HDA      2.05  50 eP     35 50.31  -0.7
MDM      2.09  28 eP     35 50.66  -0.9
CKL      2.12 204 eP     35 51.37  -0.7
DDM      2.21  71 eP     35 53.06  -0.1
BKG      2.23 202 eP     35 52.88  -0.5
TOA      2.29 115 eP     35 54.03  -0.1
GLM      2.32  36 eP     35 53.63  -0.9
PAX      2.33  92 eP     35 54.48  -0.3
                  eS     36 23.26
CFI      2.37 145 eP     35 54.38  -0.7
SDG      2.39 103 eP     35 54.90  -0.5
PWL      2.53 154 eP     35 55.94  -1.3
SLKM     2.65 176 eP     35 57.96  -0.9
MPA      2.73 167 eP     35 58.46  -1.3
KLU      2.73 125 eP     35 58.46  -1.5
REF      2.85 202 eP     36 02.58   0.9
SEW      3.10 170 eP     36 03.51  -1.2
IMA      3.23 337 eP     36 04.55  -2.0
GLB      3.59 115 eP     36 10.12  -1.3
CNPM     3.65 185 eP     36 10.91  -1.2
BALM     4.41 115 (P)    36 22.56   0.0
       37 obs. associated
-------------------------------------
   NOV  25, 1993  02h 46m 35.77± 0.31s
   35.850 N ± 3.3km  115.828 W ± 3.0km
   DEPTH =   5.0km  (geophysicist)
 CALIFORNIA-NEVADA BORDER REGION ( 40)
      ML 3.3 (GS), 3.6 (PAS).

GSC      0.97 236 eP     46 54.78   0.1
TPNV     1.15 343 eP     46 57.31  -0.5
                  eS     47 10.71
PEC      2.24 210 eP     47 14.13   0.0
SSK      2.24 224 eP     47 14.58   0.3
TNP      2.49 334 eP     47 17.35  -0.5
PLM      2.63 199 eP     47 19.52  -0.3
MTUM     2.66 305 eP     47 20.05  -0.3
ARUT     2.72  44 eP     47 21.31   0.2
MRCM     2.82 311 (P)    47 23.79   1.3
BONR     2.89 317 ePn    47 23.20  -0.4
                  ePg    47 29.84
GLA      2.91 163 ePn    47 22.83  -0.8
ABL      2.95 251 ePn    47 25.54   1.2
MEMM     3.09 307 (P)    47 25.46  -0.6
KVN      3.67 331 (P)    47 34.54  -0.1
MSU      3.95  47 ePnd   47 39.00   0.5
CMB      4.25 302 ePn    47 42.74   0.0
COE      4.91 288 (P)    47 51.41  -0.6
DUG      4.95  28 (Pn)   47 51.88  -0.8
SRU      5.33  51 (Pn)   47 58.95   0.8
                  ePg    48 15.37
EMUT     5.60  44 (Pn)   48 03.16   1.1
DAU      5.81  37 (P)    48 05.03   0.1
PV09     5.96  62 (Pn)   48 06.38  -0.8
PV10     5.98  63 (Pn)   48 07.00  -0.4
PV08     6.34  62 (Pn)   48 12.72   0.1
     S.D. = 0.7  on  24 of  24 obs.
-------------------------------------
   NOV  25, 1993  02h 51m 19.12± 0.53s
   35.386 N ±10.0km  134.571 E ± 6.0km
   DEPTH =  11.5 ±  3.9 km
 WESTERN HONSHU, JAPAN              (232)

YONJ     0.93 258 P      51 35.40  -1.3
                  S      51 47.20
TSRJ     1.16  82 P      51 40.50  -0.2
                  S      51 56.10
WKYJ     1.44 144 iP+    51 45.00   0.0
                  S      52 04.20
TKSJ     1.46 197 iP+    51 45.00  -0.4
                  S      52 03.90
SHK      1.77 242 iPd    51 49.90   0.1
       0.2s  1222.22nm
IIDJ     2.73  87 P      52 02.90  -0.7
MTMJ     2.88  65 P      52 06.30   0.5
SHNJ     3.12 247 eP     52 09.70   0.7
MAT      3.17  68 iPd    52 09.90   0.1
CHJJ     3.66  78 P      52 17.30   0.5
NIIJ     4.03  61 P      52 21.70  -0.2
KUMJ     4.21 229 eP     52 26.10   1.5
KAKJ     4.63  78 P      52 30.60   0.1
KAGJ     5.20 217 eP     52 38.10  -0.5
     S.D. = 0.8  on  14 of  14 obs.
-------------------------------------
?  NOV  25, 1993  02h 54m 13.91± 4.69s
   28.712 N ±12.6km   34.676 E ±32.8km
   DEPTH =  10.0km  (geophysicist)
 EGYPT                              (553)
      MD 3.1 (RYD).

BADA     0.34 123 iPd    54 20.80  -0.2
SRFA     0.50  64 iPd    54 23.67  -0.4
                  iS     54 30.00
HQL      0.65  30 iPd    54 26.80   0.0
                  iS     54 35.67
AYN      1.17  82 iPc    54 36.33   0.5
                  iS     54 52.00
     S.D. = 0.7  on   4 of   4 obs.
-------------------------------------
%  NOV  25, 1993  03h 08m 04.43± 0.55s
   42.389 N ± 4.7km   18.933 E ± 4.6km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION         (383)

BDV      0.13 217 iPgc   08 08.36   0.8
                  iSg    08 11.14
TTG      0.25  80 iPgd   08 10.28   0.6
                  iSg    08 15.14
HCY      0.33 281 iPgd   08 11.20   0.0
                  iSg    08 16.52
NKY      0.43   6 iPgc   08 13.17   0.0
                  iSg    08 20.49
ULC      0.49 151 iPgc   08 13.52  -0.8
                  iSg    08 20.93
BRY      0.59 331 iPgd   08 15.81  -0.6
                  iSg    08 25.25
PVY      0.80  75 iPgc   08 19.79  -0.2
                  iSg    08 32.34
IVA      0.86  56 iPgd   08 21.05   0.0
                  iSg    08 34.58
PLE      1.00  20 iPgd   08 23.69   0.2
                  iSg    08 39.13
     S.D. = 0.6  on   9 of   9 obs.
-------------------------------------
?  NOV  25, 1993  04h 44m 31.08± 1.07s
   25.922 S ±14.5km   29.241 E ± 9.4km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA           (584)

BFT      0.76  72 eP     44 46.50   0.0
                  S      44 58.00
SLR      0.88 282 eP     44 48.50  -0.1
                  S      45 01.00
SEK      2.79 211 eP     45 16.50  -0.9
BLF      4.17 220 e(P)   45 38.00   1.0
BOSA     4.33 231 eP     45 44.60   5.5X
                  S      46 39.10
     S.D. = 1.4  on   4 of   5 obs.
-------------------------------------
*  NOV  25, 1993  05h 43m 51.56± 0.44s
   14.936 S ±22.4km  173.939 W ±15.5km
   DEPTH =  40.7km  (  9 depth phases)
   4.9mb ( 10 obs.)  5.0Msz (  4 obs.)
 SAMOA ISLANDS REGION               (169)

AFI      2.33  64 iPc    44 23.20  -5.2X
ARMA    35.14 238 eP     50 42.60  -1.1
       0.6s     7.00nm          4.8mb
CNB     38.63 232 eP     51 26.20  13.3X
STK     43.82 239 P      52 00.50   5.0X
WB2     49.43 256 eP     52 39.60  -0.3
       0.3s     4.00nm          4.9mb
                  ipP    52 55.70  63kmX
ASPA    49.76 252 iPc    52 41.60  -0.8
       0.7s    15.30nm          5.1mb
     Z  22s     0.70um          4.6Msz
                  epP    52 57.70  62kmX
CMB     72.76  42 eP     55 16.47  -1.3
       0.8s     5.21nm          4.6mb
                  pP     55 28.60  41km
WDC     72.94  39 eP     55 17.85  -0.9
                  pP     55 30.40  43km
LBFM    73.80  38 eP     55 23.89  -0.1
BONR    74.07  43 eP     55 25.51  -0.2
SPA     75.16 180 iPc    55 52.90  21.5X
       0.8s    29.17nm
TUC     76.50  51 eP     55 40.26   0.8
       1.5s    23.80nm          5.0mb
                  pP     55 51.81  38km
ARUT    77.24  45 eP     55 43.83   0.3
MSU     78.47  45 eP     55 50.70   0.3
HVU     79.71  42 eP     55 57.07   0.1
                  pP     56 09.71  43km
SRU     79.88  45 eP     55 57.63  -0.4
PV09    80.55  46 eP     56 01.61  -0.1
                  pP     56 14.69  44km
PV10    80.56  46 eP     56 01.14  -0.6
ALQ     80.90  50 eP     56 02.17  -1.4
       0.9s     4.89nm          4.5mb
PV08    80.93  46 eP     56 04.22   0.5
LRM     81.98  38 eP     56 08.10  -0.8
                  e      56 20.70  42km
GOL     83.71  46 eP     56 18.44   0.4
       1.7s    30.93nm          5.1mb
                  pP     56 30.00  38km
GLD     83.84  46 eP     56 18.37  -0.2
       1.4s    29.74nm          5.2mb
                  pP     56 31.09  42km
BJI     84.77 314 eP     56 24.00   1.1
RSSD    86.47  43 eP     56 32.11   0.5
       1.2s    21.63nm          5.3mb
                  pP     56 43.18  35km
MEO     86.81  53 iPc    56 33.60   0.4
OCO     87.91  53 iPc    56 34.40  -4.1X
INK     87.95  14 eP     56 51.00  13.1X
       1.0s     2.00nm
MAW     88.06 199 P      56 39.50   0.8
YKA     89.88  24 eP     56 52.50   5.3X
       0.8s     2.70nm          4.6mb
MBC     96.58  11 eP     57 29.00  11.3X
CLL    143.29 353 iPKP   03 36.40  13.3X
       1.9s    18.00nm
BRG    143.59 352 ePKP   03 34.00  10.4X
SPC    143.92 344 ePKP   03 35.90  11.4X
MOX    144.10 354 ePKP   03 37.00  12.5X
PRU    144.37 351 ePKP   03 30.00   5.0X
                  e      03 37.50
DOU    144.91   2 PKP    03 39.70  13.8X
                  i      03 44.40
GRF    145.08 354 ePKP   03 27.30   1.1
     Z  18s     0.30um          5.1Msz
                  ic     03 40.30
                  e      03 46.00
                  e      03 49.20
KHC    145.35 351 ePKP   03 28.00   1.3
       1.0s    21.00nm
                  e      03 41.00
WLF    145.37 360 PKP    03 41.00  14.4X
WET    145.43 352 ePKP   03 40.60  13.8X
ZST    145.60 347 iPKP   03 41.60  14.5X
GEC2   145.61 351 e(PKP)03 28.10   0.8
       0.6s     0.80nm
SRO    145.68 345 iPKP   03 42.30  15.1X
LANF   146.02 358 PKP    03 42.53  14.7X
LDF    146.05   7 ePKP   03 39.50  11.6X
       1.3s    48.40nm
HOFF   146.05 358 PKP    03 42.86  15.0X
GRR    146.16   8 ePKP   03 40.10  12.1X
       1.0s    29.00nm
SOP    146.21 347 e(PKP)03 43.80  15.7X
LPF    146.48   9 ePKP   03 41.00  12.5X
       1.4s    65.35nm
FUR    146.59 354 ePKP   03 44.80  16.0X
WLS    146.60 358 PKP    03 44.33  15.5X
CDF    146.60 359 ePKP   03 43.70  14.8X
       1.0s    32.20nm
ECH    146.80 359 PKP    03 44.50  15.4X
VITF   146.82   0 PKP    03 44.91  15.8X
BHG    146.82 352 iPKPc  03 45.30  16.1X
       1.2s    45.00nm
HAU    147.03 360 ePKP   03 42.90  13.4X
       1.1s    31.25nm
     Z  20s     0.22um          4.9Msz
FEL    147.12 358 PKP    03 45.70  15.9X
MOF    147.17 359 PKP    03 46.15  16.3X
BSF    147.20 359 ePKP   03 44.80  14.9X
       1.5s    42.30nm
SLE    147.20 357 ePKP+  03 45.70  15.9X
WATA   147.37 353 iPKPc  03 46.70  16.5X
KBA    147.38 351 iPKPc  03 46.60  16.3X
MOTA   147.42 354 iPKPc  03 46.70  16.4X
                  i      03 55.00
WTTA   147.44 353 iPKPc  03 46.40  16.0X
                  i      03 52.00
ZLA    147.49 357 ePKP+  03 46.60  16.3X
SQTA   147.53 353 iPKPc  03 47.00  16.6X
                  i      03 54.10
LOMF   147.68 359 PKP    03 46.17  15.6X
LOR    147.71   3 ePKP   03 45.00  14.4X
       1.4s    48.35nm
     Z  20s     0.22um          5.0Msz
```

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OGA   147.90 354 iPKPc 03 48.50  17.3X
SSF   147.90   3 ePKP  03 45.40  14.5X
       1.2s    39.85nm
LBF   148.00   3 ePKP  03 45.80  14.7X
       1.3s    41.15nm
MFF   148.01   8 ePKP  03 45.20  14.2X
       1.2s    26.20nm
PTJ   148.03 347 ePKP  03 45.10  13.9X
LLS   148.07 356 ePKP+ 03 48.80  17.4X
AVF   148.16   4 ePKP  03 45.80  14.5X
       1.2s    32.45nm
OSS   148.16 355 ePKP+ 03 49.20  17.7X
LJU   148.18 349 ePKP  03 46.00  14.6X
                  e    03 48.60
                  i    03 55.00
                  e    04 02.00
SMF   148.33   3 ePKP  03 46.40  14.8X
       1.3s    37.20nm
BGF   148.36   4 ePKP  03 46.60  15.0X
       1.5s    62.70nm
LSF   148.55   6 ePKP  03 48.00  16.0X
       1.2s    52.35nm
TCF   148.58   5 ePKP  03 47.00  15.0X
       1.4s    34.00nm
MAF   148.67   5 ePKP  03 47.40  15.2X
       1.2s    46.40nm
TMA   148.84 356 ePKP+ 03 50.50  17.8X
DIX   148.93 358 ePKP+ 03 51.50  18.6X
MMK   148.94 357 ePKP+ 03 51.60  18.7X
LPL   149.51 359 ePKP  03 50.70  16.9X
       1.4s    40.10nm
LPG   149.53 359 ePKP  03 50.80  16.9X
       0.9s    19.50nm
LFF   149.76   8 ePKP  03 50.10  16.3X
       1.1s    38.85nm
CAF   149.92   6 ePKP  03 50.70  16.6X
SKO   149.96 337 ePKP  03 40.00   5.8X
                  i    03 53.00
LPO   150.06   7 ePKP  03 50.90  16.6X
     S.D. = 0.8  on  26 of  92 obs.
-------------------------------------
   NOV  25, 1993  06h 16m 20.91± 0.98s
   42.725 N ± 6.6km  146.861 E ± 7.2km
   DEPTH =  26.8 ±  6.4 km
   4.5mb ( 15 obs.)  4.3Msz (  2 obs.)
 OFF COAST OF HOKKAIDO, JAPAN      (225)

KUSJ    1.62 284 eP    16 47.10  -0.9
KUR     2.61  16 iPnd  17 02.50   0.3
HOOJ    2.66 264 eP    17 05.10   2.2
                 eS    17 36.80
ASAJ    3.37 296 eP    17 13.90   0.9
MRRJ    4.29 268 eP    17 27.50   1.6
                 eS    18 17.40
YSS     5.20 327 iPnd  17 37.10  -1.8
     Z  16s     4.70um
     N  16s     4.10um
     E  16s     2.20um
AOMJ    5.32 248 eP    17 41.90   1.3
                 eS    18 39.60
OFUJ    5.36 229 iP+   17 41.40   0.2
                 eS    18 39.60
YAMJ    6.91 231 eP    18 03.10   0.1
NIIJ    8.15 230 P     18 19.70  -0.6
KAKJ    8.31 221 P     18 21.30  -1.3
                 S     19 48.20
CHJJ    9.03 225 P     18 31.40  -1.1
                 S     20 06.30
MAT     9.09 230 eP    18 33.00  -0.4
       0.8s    11.94nm         5.2mb
                 (S)   20 16.00
MTMJ    9.29 232 P     18 35.20  -1.0
IIDJ   10.03 227 P     18 46.70   0.4
                 S     20 36.00
SKR    10.16  35 ePn   18 44.90  -3.1X
CN2    15.64 281 eP    19 58.00  -2.9X
       0.6s     4.50nm         3.8mb
     Z  16s     1.19um         4.3Msz
BJI    23.12 274 eP    21 23.50  -2.1
       1.4s    29.00nm         4.6mb
SSE    23.49 249 P+    21 40.00  10.8X
       4.0s     0.40nm
     Z  20s     0.90um         4.2Msz
     N  16s     0.90um
     E  16s     1.00um
                 S     26 04.00
TIA    23.78 264 eP    21 32.00  -0.1
BOD    25.46 318 eP    21 42.20  -5.7X
HHC    26.27 278 eP    21 57.40   1.6
       0.8s    14.00nm         4.6mb
     Z  18s     1.09um         4.4Msz
TIY    26.64 271 eP    22 00.80   1.6
     Z  15s     0.83um         4.4MszX
     E  17s     0.75um
                pP    22 11.00  37kmX
BTO    27.47 278 eP    22 07.00   0.3
XAN    30.77 266 P     22 41.50   5.2X
       0.6s     6.50nm         4.6mb
                sP    22 51.50
LZH    33.61 273 eP    23 00.00  -1.2
     Z  14s     0.44um         4.3MszX
GTA    35.27 281 eP    23 14.50  -0.9
       1.0s     8.00nm         4.6mb
     Z  16s     0.92um         4.6MszX
     E  12s     0.31um
                pP    23 27.50  49kmX
CD2    36.10 265 eP    23 23.00   0.6
GYA    36.47 257 P     23 26.60   0.9
IMA    39.65  33 eP    23 52.75   0.9
       0.6s     3.27nm         4.2mb
WMQ    42.28 293 P     24 13.50  -0.2
     Z  16s     1.61um         5.0MszX
INK    47.40  30 eP    24 54.50   0.3
       0.7s     3.00nm         4.4mb
MBC    49.85  18 eP    25 13.00  -0.1
GUN    50.87 274 P     25 22.10   0.2
       0.5s    16.00nm         5.2mb
KKN    51.37 274 P     25 25.70   0.1
PKI    51.40 274 P     25 25.90  -0.1
DMN    51.60 274 P     25 27.60   0.2
GKN    51.73 275 P     25 28.00  -0.2
RES    56.01  16 eP    25 57.50  -1.4
       0.9s     4.00nm         4.4mb
YKA    56.77  33 eP    26 09.50   5.0X
       0.6s     2.20nm         4.4mb
WB2    63.41 193 eP    26 47.90  -2.4
       0.8s     1.60nm         4.2mb
                i     27 04.70
WRA    63.41 193 P     26 52.00   1.7
       0.6s     0.90nm         4.1mb
KAF    65.14 333 eP    26 57.80  -3.3X
GBA    65.81 266 P     27 07.00   1.0
LRM    67.19  48 eP    27 15.80   0.9
                e     27 21.60
APO    70.15 337 eP    27 30.70  -1.9
       0.4s     1.90nm         4.6mb
FRB    70.22  16 eP    27 43.00  10.1X
PV08   74.02  52 eP    27 57.40   1.0
CLL    78.12 332 e(P)  28 17.00  -1.8
KHC    79.75 331 eP    28 27.50  -0.3
                e     28 40.50
GEC2   79.95 331 eP    28 28.40  -0.5
       0.8s     1.03nm         3.9mb
LTX    83.40  56 eP    28 48.91   1.7
SOB1  145.93  14 ePKP  35 54.90  -4.3X
     S.D. = 1.2  on  44 of  53 obs.
-------------------------------------
% NOV  25, 1993  06h 23m 24.65± 4.50s
   43.597 N ±28.5km    7.935 E ± 9.6km
   DEPTH =   5.0km  (geophysicist)
 NEAR SOUTH COAST OF FRANCE        (379)
      ML 2.4 (GEN).

IMI     0.31 354 P     23 31.50   0.5
                 S     23 35.56
FIN     0.64  18 P     23 37.34  -0.2
                 S     23 45.27
ROB     0.70 356 P     23 38.36  -0.3
                 S     23 47.52
ENR     0.73 330 P     23 39.29   0.0
                 S     23 48.60
STV     0.78 326 P     23 40.38   0.0
                 S     23 50.24
PCP     1.04  25 P     23 44.96   0.1
                 S     23 57.93
PZZ     1.09 327 P     23 45.76   0.1
                 S     23 59.29
BHB     1.33 339 P     23 49.50  -0.3
                 S     24 05.34
     S.D. = 0.3  on   8 of   8 obs.
-------------------------------------
* NOV  25, 1993  06h 44m 52.14± 0.56s
   5.398 S ±10.0km   77.134 W ±17.6km
   DEPTH =  33.0km  (normal)
   4.3mb (  3 obs.)
 NORTHERN PERU                     (111)

PSO     6.55 358 eP    46 34.00   4.9X
NNA     6.55 177 iPc   46 28.30  -0.5
       0.6s    36.67nm         5.4mb X
                 eS    47 35.50
LPAZ   13.97 141 P     48 08.70  -1.9
                 i     48 21.00
LPB    14.17 142 P     48 22.00   8.9X
CNCB   14.46 142 P     48 25.10   8.1X
SDV    15.60  25 eP    48 38.70   7.2X
CCH    16.06 139 P     48 39.60   2.1
TOV    16.76  26 eP    48 45.20  -1.0
UYO    42.62 339 iPc   52 46.90  -0.2
PV10   52.66 329 eP    54 04.54  -1.3
MSU    54.44 326 eP    54 18.54  -0.4
RSSD   54.93 337 eP    54 22.70   0.3
       0.9s     5.12nm         4.6mb
GSC    55.03 320 eP    54 23.47   0.3
DAU    55.32 329 eP    54 25.11  -0.3
ULM    57.75 346 eP    54 43.50   1.3
LRM    59.91 332 eP    54 57.00  -0.6
LBFM   61.91 323 (P)   55 07.84  -3.4X
YKA    73.49 343 eP    56 21.80  -1.3
       0.8s     1.30nm         4.0mb
INK    83.21 342 eP    57 17.00   0.9
       1.0s     3.00nm         4.4mb
MBC    85.08 351 eP    57 28.00   2.6
WRA   140.10 230 PKP   04 20.20   0.1
       0.7s     1.20nm
GKN   151.62  36 PKP   04 46.20   7.1X
GBA   153.65  70 PKP   04 53.00  11.0X
     S.D. = 1.3  on  16 of  23 obs.
-------------------------------------
   NOV  25, 1993  07h 09m 13.89± 0.48s
   39.314 N ± 6.1km   25.972 E ± 3.3km
   DEPTH =  10.0km  (geophysicist)
 AEGEAN SEA                        (365)
      ML 3.9 (THE).

EZN     0.58  28 iPg   09 26.00   0.4
                 eSg   09 34.00
IZM     1.36 132 iPn   09 39.20   0.3
ALN     1.58   2 ePb   09 42.12   0.1
                 eSb   10 04.80
EDC     1.78  54 iPn   09 45.00   0.0
OUR     1.84 304 ePn   09 45.40  -0.4
PAIG    1.87 290 ePn   09 46.80   0.6
                 eSn   10 15.28
DST     2.08  81 ePn   09 49.20  -0.1
SOH     2.51 308 ePn   09 56.24   0.8
                 eSn   10 32.56
SRS     2.56 315 ePn   09 55.56  -0.6
                 eSn   10 34.12
THE     2.66 301 ePn   09 58.40   0.9
                 eSn   10 36.68
LIT     2.80 287 ePn   09 58.96  -0.6
IZI     2.88  68 ePn   10 00.00  -0.8
KHL     2.94 109 ePn   10 02.00   0.3
KNT     2.99 309 ePn   10 01.84  -0.4
                 eSn   10 44.36
GRG     3.19 302 ePn   10 04.28  -0.8
                 eSn   10 48.56
HRT     3.21  61 ePn   10 05.00  -0.4
VAY     3.28 309 iPn   10 16.00   9.6X
MLR     6.17 360 ePc   10 48.00   0.6
     S.D. = 0.6  on  17 of  18 obs.
-------------------------------------
? NOV  25, 1993  07h 16m 04.98± 2.71s
   15.668 S ±31.3km   76.502 W ±26.7km
   DEPTH =  33.0km  (normal)
   3.8mb (  1 obs.)
 OFF COAST OF PERU                 (114)

NNA     3.67 355 iPc   17 00.90   0.0
       0.5s    52.82nm
                 eS    17 30.00
ARE     4.88 100 eP    17 18.00  -0.3
                 iS    18 14.50
LPAZ    8.07  96 P     18 03.60   0.1
LPB     8.12  97 P     17 56.00  -8.0X
                 i     18 06.20
CNCB    8.26  99 P     18 06.30   0.2
CCH    10.09 101 P     18 39.60   8.5X
TUL    54.45 341 iP    25 31.50   0.0
YKA    83.44 343 eP    28 35.70   5.6X
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25d 07h

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      0.8s      0.60nm          3.8mb
    S.D. = 0.3  on   5 of   8 obs.
-------------------------------------
&  NOV  25, 1993  08h 06m 43.90s
   35.759 N          121.391 W
   DEPTH =   1.6km
 CENTRAL CALIFORNIA                ( 39)
     <GM-P>. MD 2.9 (GM). ML 2.9 (GS)

PAPM    0.16   9 P      06 47.50   0.5
PANM    0.39  87 P      06 52.36   0.6
PADM    0.44 105 P      06 53.30   0.5
BAPM    0.46 334 P      06 53.99   0.8
PSAM    0.49  57 P      06 53.99   0.4
BPOM    0.56 327 P      06 55.58   0.5
PTV     0.65  57 P      06 56.68  -0.1
MOP     0.66  47 P      06 57.24   0.1
BTW     0.67  34 P      06 57.22   0.0
WKR     0.72  85 P      06 58.56   0.3
PSTM    0.74  76 P      06 58.34  -0.3
HVC     0.77  37 P      06 59.25   0.0
PMGM    0.78 115 P      06 59.27  -0.2
PRCM    0.80  51 P      07 00.00   0.2
PHAM    0.81  84 eP     06 59.82  -0.3
                eS      07 11.22
PMCM    0.83  92 P      07 00.67   0.2
PCRM    0.85  66 P      07 01.99   1.2
GHC     0.85  85 P      07 00.25  -0.6
PSRM    0.91  83 P      07 01.73  -0.3
BLRM    0.91   6 P      07 01.53  -0.5
PAGM    0.93  91 P      07 01.94  -0.5
PMRM    0.94  88 P      07 02.76   0.1
BCGM    0.95   2 P      07 02.20  -0.6
BHRM    0.97   6 P      07 03.26   0.1
FRP     1.00 355 P      07 02.64  -1.0
SAO     1.00 358 eP     07 02.47  -1.2
                eS      07 16.28
PDRM    1.01  55 P      07 04.36   0.6
BMSM    1.02  28 P      07 04.50   0.5
HJGM    1.05 352 P      07 04.46   0.0
HSFM    1.05 355 P      07 04.96   0.4
HERM    1.07 346 P      07 04.84   0.1
PKH     1.10 359 P      07 06.97   1.7
PHBM    1.17  65 P      07 07.71   1.2
CSR     1.21 353 P      07 06.34  -0.8
YEG     1.21 105 P      07 06.50  -0.8
BCH     1.21 118 eP     07 05.41  -1.9
SCCM    1.29 129 P      07 06.78  -1.8
JBZM    1.30 346 P      07 07.65  -1.0
GHS     1.33 358 P      07 08.35  -1.0
CRGC    1.46 110 P      07 13.06   1.7
COE     1.51 351 eP     07 10.77  -1.3
PKM     1.55 123 P      07 14.46   1.7
ARN     1.59 356 eP     07 11.36  -1.9
JEGM    1.95 334 eP     07 17.20  -1.2
ABL     1.99 116 eP     07 16.87  -2.4
CMB     2.41  19 eP     07 23.49  -1.6
MMPM    2.65  45 (P)    07 28.66  -0.1
MEMM    2.74  45 eP     07 29.67   0.0
MTUM    2.78  54 eP     07 29.85  -0.6
NTYM    2.82 339 (P)    07 30.48  -0.3
BONR    3.31  48 eP     07 37.59  -0.5
SSK     3.41 116 eP     07 36.09  -3.3
GSC     3.77  96 eP     07 42.34  -2.1
      53 obs. associated
-------------------------------------
%  NOV  25, 1993  08h 26m 13.93± 1.30s
   39.086 N ±13.5km   21.881 E ±10.5km
   DEPTH =  26.3 ± 11.1 km
 GREECE                            (364)
     ML 2.4 (THE).

AGG     0.36 100 ePg    26 21.74  -0.2
                 eSg    26 28.90
LIT     1.12  25 ePb    26 34.18   0.3
                 eSb    26 49.50
IGT     1.28 291 ePb    26 36.30   0.1
                 eSb    26 51.34
PAIG    1.63  58 ePb    26 41.42   0.3
                 eSb    27 03.90
FNA     1.74 347 ePb    26 42.80  -0.1
                 eSb    27 06.18
GRG     1.91  12 ePb    26 44.90  -0.4
                 eSb    27 10.06
     S.D. = 0.4  on   6 of   6 obs.
-------------------------------------
?  NOV  25, 1993  08h 30m 47.94± 0.93s
   39.168 N ± 8.0km   27.585 E ± 9.3km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
     ML 2.8 (ISK).

IZM     0.81 198 ePg    31 03.60  -0.1
                 eSg    31 16.40
DST     0.92  61 ePn    31 05.70   0.2
EZN     1.18 304 ePn    31 10.00   0.1
EDC     1.20  10 ePn    31 10.00  -0.2
     S.D. = 0.3  on   4 of   4 obs.
-------------------------------------
   NOV  25, 1993  08h 31m 14.82± 0.18s
   22.035 S ± 4.5km  170.094 E ± 3.7km
   DEPTH =  32.4km  (  8 depth phases)
   5.6mb ( 59 obs.)  5.6Msz ( 48 obs.)
 LOYALTY ISLANDS REGION            (189)
     Mw 6.0 (HRV). Ms 5.5 (BRK).
     Mo=7.4*10**17 Nm (PPT).
     CENTROID, MOMENT TENSOR     (HRV)
     Data Used: GDSN
     L.P.B.: 45S, **C
     Centroid Location:
     Origin Time        08:31:19.4 0.2
     Lat 21.96S 0.02 Lon 169.97E 0.02
     Dep  18.9 1.3 Half-duration  2.5
     Moment Tensor;   Scale 10**18 Nm
       Mrr=-0.29 0.01  Mtt= 0.29 0.02
       Mff= 0.00 0.02  Mrt= 0.00 0.03
       Mrf=-0.34 0.04  Mtf= 1.16 0.01
      Principal Axes:
       T  Val=  1.35  Plg= 8  Azm=138
       N       -0.24      71      25
       P       -1.11      18     230
     Best Double Couple:Mo=1.2*10**18
      NP1:Strike=273 Dip=72 Slip=  -7
      NP2:          5     83     -162

DZM     3.39 269 iPd    32 06.20  -0.6
PVC     4.59 338 iPd    32 24.50   0.7
                 iS     33 17.50
BKM     4.68 338 iPc    32 24.50  -0.6
SVA     8.77  65 ePc    33 23.20   0.8
VUN     8.83  64 iPd    33 23.10  -0.1
MBU     9.57  60 eP     33 35.10   1.6
HNR    15.88 321 eP     34 57.00  -0.6
                 eS     38 16.00
SVO    16.18 321 eP     35 06.00   4.5X
BRS    16.61 248 iPc    35 06.50  -0.4
        1.7s    48.00nm          4.4mb X
                 i      35 09.00
                 i      35 12.00
                 i(PP)  37 17.50
                 iS     38 24.00
ARMA   18.53 239 iPc    35 32.90   2.0
        1.1s   322.00nm          5.4mb
SNZO   19.61 170 P      35 41.70  -1.7
                 e      35 56.00  72kmX
                 S      39 22.00
RIV    20.41 231 iPc-   35 54.10   2.3
                 i      36 06.00  51kmX
                 eS     39 45.00
CTA    22.33 271 iPd    36 13.30   2.0
        1.5s   388.89nm          5.6mb
                 i      36 17.00  13kmX
                 i      36 24.00
                 i      36 30.00
                 iS     39 51.00
                 i(S)   40 20.00
CNB    22.43 229 eP     36 14.10   1.7
        0.5s   166.00nm          5.8mb
                 ipP    36 28.00  59kmX
BWA    22.68 232 iPd    36 14.10  -0.7
                 ipP    36 22.80  31km
                 i      36 27.60
                 i      36 40.20
CAN    22.69 230 iPd    36 16.50   1.6
                 ipP    36 23.50  25km
                 i      36 29.40
                 i      36 42.10
                 i      39 10.20
RAB    24.84 313 eP     36 36.00   0.2
PMG    25.35 296 iPc    36 41.00   0.4
        1.0s   220.00nm          5.7mb
KVG    26.92 313 eP     36 53.00  -2.1
STK    27.16 243 iPd    36 48.50  -8.8X
        0.6s    33.00nm          5.2mb
                 i      36 59.00  39km
                 eS     41 21.30
QIS    28.42 267 eP     37 09.00   0.2
MDG    28.84 302 eP     37 13.00   0.4
ADE    30.31 238 e(P)   37 26.00   0.4
WWKK   31.53 302 eP     37 37.50   1.0
ASPA   33.34 260 iPd    37 51.20  -1.0
        0.9s    57.30nm          5.5mb
WB5    33.39 267 iPd    37 51.50  -1.1
                 e      42 46.20
WB2    33.39 267 iPc    37 51.40  -1.3
        0.5s    43.30nm          5.6mb
                 eS     43 09.30
WRA    33.40 267 P      37 51.70  -1.0
JAY    34.52 300 ePd    38 03.20   0.7
                 eS     39 24.90
KNA    39.51 272 iPd    38 44.20  -0.2
        0.8s   162.00nm          5.8mb
GUA    43.13 323 eP     39 10.80  -3.3X
COOL   44.41 248 eP     39 23.50  -1.0
        1.0s    76.00nm          5.5mb
MBL    46.57 261 iPd    39 41.50  -0.2
        0.8s   160.00nm          6.0mb
MEEK   46.88 254 iPd    39 43.60  -0.5
        1.0s   114.00nm          5.8mb
KLB    47.29 247 eP     39 46.20  -1.1
BAL    48.24 248 iPc    39 53.40  -1.3
        0.9s   185.00nm          6.1mb
DRV    48.55 195 iP     39 48.00  -8.6X
MUN    48.60 246 eP     39 56.50  -1.0
        1.2s   188.00nm          6.0mb
     Z  20s     14.00um          5.9Msz
     N  20s     16.90um
     E  20s      7.40um
MRWA   48.95 250 eP     39 59.00  -1.2
        0.8s    79.00nm          5.8mb
MNI    49.94 292 ePd    40 08.50   0.6
NANU   50.24 258 iPc    40 10.80   0.6
        0.9s   145.00nm          6.0mb
DAV    52.35 298 ePc+   40 26.00  -0.2
HON    53.16  38 P      40 50.00  17.9X
     Z  20s      2.55um          5.3Msz
PLP    55.20 302 ePd    40 45.00  -2.1
SBA    55.89 181 iPc    40 51.30   0.0
        0.6s    53.33nm          5.7mb
                 S      49 09.00
TSM    57.38 291 ePc    41 03.70   0.9
CSY    57.91 204 eP     40 53.30 -12.5X
        0.8s    18.70nm
                 ipP    41 08.20  55kmX
KKM    59.67 291 ePd    41 20.00   1.1
        1.5s    22.90nm          5.1mb
QCP    60.31 303 eP     41 23.00   0.0
CVP    61.58 306 eP     41 25.00  -6.7X
BAG    61.74 304 ePd    41 32.00  -1.0
LEM    61.98 274 ePd    41 35.50   0.8
KAKJ   64.47 333 eP     41 49.20  -1.2
IIDJ   64.83 331 P      41 51.70  -1.1
CHJJ   64.83 332 P      41 51.30  -1.5
WKYJ   64.86 329 P      41 52.70  -0.4
KAGJ   64.91 323 P      41 53.20  -0.2
KLI    65.25 275 eP     41 55.10  -0.9
TKSJ   65.43 327 eP     41 56.20  -0.5
MAT    65.58 332 iPc    41 56.00  -1.6
        1.2s    62.50nm          5.6mb
     Z  20s      2.84um          5.5Msz
                 eS     50 20.00
TSRJ   65.75 330 eP     41 58.30  -0.4
MTMJ   65.80 332 P      41 57.60  -1.5
KUMJ   65.97 324 P      41 59.60  -0.6
YAMJ   66.21 334 eP     42 01.70   0.1
OFUJ   66.36 336 eP     42 01.80  -0.8
SHK    66.55 327 iP     42 03.30  -0.6
YONJ   66.68 328 P      42 04.20  -0.5
SHNJ   67.05 325 P      42 05.80  -1.2
SPA    68.10 180 iPc    42 11.70  -1.8
        1.0s   125.00nm          6.0mb
QZH    68.41 310 Pc     42 21.00   5.2X
     Z  40s      5.63um          5.5MszX
                 S      51 19.00
HOOJ   68.71 339 eP     42 10.60  -6.7X
KUSJ   68.90 340 eP     42 17.90  -0.5
KGM    69.35 281 ePd    42 22.30   0.5
ASAJ   70.47 339 eP     42 28.70   0.7
SSE    70.64 317 Pc     42 28.00  -1.3
        1.0s    12.00nm          4.9mb
     Z  20s      2.30um          5.4Msz
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     N  14s      0.60um
     E  16s      1.40um
                  PcP    42 51.50
GZH    71.15 306 Pc     42 36.00   3.4X
     Z  30s      2.34um          5.3MszX
                  eS     51 51.00
IPM    72.49 283 ePd    42 41.40   0.6
       0.6s     50.50nm          5.7mb
NJ2    72.77 316 Pd     42 42.00   0.0
       1.0s     23.00nm          5.1mb
     Z  20s      1.48um          5.3Msz
YSS    73.04 341 iPc    42 43.20   0.0
       1.0s     50.00nm          5.5mb
     Z  19s      2.40um          5.5Msz
     N  19s      2.00um
                  e      42 53.30  32km
                  e      43 02.40
                  ePS    52 46.00
VLA    73.75 332 iPc    42 53.00   5.6X
       2.5s    463.00nm          6.0mb
                  i      43 11.00  66kmX
                  i      45 35.00
                  i      53 15.00
SNG    73.95 285 eP     42 49.80   0.6
                  eS     52 34.40
SMY    74.53   3 P      43 10.00  18.3X
     Z  20s      5.21um          5.8Msz
WHN    74.81 312 eP     42 54.50   0.6
     Z  14s      2.63um          5.7MszX
                  S      52 32.00
DL2    75.72 323 P      42 59.50   0.6
       1.0s    180.00nm          6.0mb
     Z  30s      3.11um          5.4MszX
     N  16s      2.55um
     E  16s      2.53um
MDJ    75.95 331 eP     43 00.00  -0.1
       1.0s     37.00nm          5.3mb
     Z  22s      3.05um          5.6Msz
MAW    76.16 202 P      43 01.00   0.0
       1.0s     50.00nm          5.5mb
TIA    76.55 318 Pc     43 03.00  -0.7
       0.8s    180.00nm          6.1mb
     Z  21s      2.18um          5.4Msz
     N  15s      1.48um
SNY    76.74 326 Pd     43 04.40  -0.2
     Z  24s      2.33um          5.4MszX
                  sP     43 21.00
CN2    77.25 329 Pc     43 07.00  -0.4
       1.0s     53.00nm          5.5mb
     Z  22s      1.99um          5.4Msz
     N  16s      1.41um
     E  16s      0.54um
                  epP    43 20.00  44kmX
                  esP    43 25.00
GYA    78.07 305 iPc    43 13.00   0.5
       1.0s     33.00nm          5.3mb
     Z  36s      2.27um          5.2MszX
     N  20s      1.42um
     E  20s      3.22um
                  PP     46 04.00
NST    78.10 292 eP     43 14.50   1.9
BJI    79.60 321 eP     43 20.00  -0.3
       1.0s     16.00nm          5.0mb
     Z  22s      2.80um          5.6Msz
     N  17s      1.50um
                  esP    43 38.00
                  eS     53 22.00
BDT    79.78 293 eP     43 24.10   2.4
       1.1s     74.90nm          5.6mb
TIY    80.42 317 Pd     43 26.00   1.1
     Z  22s      3.37um          5.6Msz
     N  19s      3.16um
KMI    80.42 302 Pc     43 26.50   1.1
       1.4s    160.00nm          5.8mb
     Z  20s      3.90um          5.8Msz
     N  18s      2.10um
     E  18s      3.80um
                  pP     43 31.50  16kmX
                  eS     53 34.00
                  sS     53 46.00
CHTO   80.54 295 iPd     43 27.40   1.6
       1.1s    139.87nm          5.9mb
                  eS     53 36.10
XAN    80.58 312 Pc     43 26.20   0.4
       1.0s     46.00nm          5.4mb
     Z  50s      3.69um          5.3MszX
     E  15s      1.54um
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                  SKS    53 35.00
SDN    81.05  16 P      43 40.00  12.3X
     Z  20s      3.97um          5.8Msz
CD2    82.56 307 iPd    43 37.20   1.0
     Z  20s      2.72um          5.6Msz
HHC    82.85 319 Pc     43 38.00   0.4
       0.8s     27.00nm          5.4mb
     Z  46s      6.46um          5.6MszX
     N  18s      1.02um
     E  17s      1.22um
BTO    83.65 318 eP     43 42.00   0.4
LZH    85.18 312 eP     43 50.00   0.5
       1.2s    100.00nm          5.9mb
     Z  38s      3.69um          5.5MszX
     N  14s      0.69um
                  pP     44 00.00  31km
                  sP     44 05.00
                  PP     47 10.00
                  S      54 18.00
SAO    87.06  48 P      44 10.00  11.5X
     Z  18s      1.36um          5.4Msz
MHC    87.22  48 ePc    43 59.24  -0.2
       1.7s    120.00nm          5.9mb
ARN    87.30  48 eP     43 56.95  -2.7X
FHC    87.44  44 (P)    44 01.11   0.8
SNA    87.75 183 iPc    44 00.30  -1.0
       0.8s     46.00nm          5.8mb
LGPM   88.25  44 ePc    44 04.88   0.6
WDC    88.27  45 eP     44 04.66   0.4
       1.4s     56.20nm          5.7mb
     Z  18s      1.92um          5.6Msz
WDC    88.27  45 ePc    44 00.95  -3.3X
       1.4s     50.00nm          5.6mb
     Z  17s      1.90um          5.6MszX
                  eSKS   54 18.21
                  eS     54 40.21
                  eSS    59 44.21
                  eLQ    07 41.21
                  eLR    11 14.21
CMB    88.43  48 ePc    44 05.05  -0.1
       1.1s     20.00nm          5.3mb
     Z  18s      1.80um          5.5Msz
                  eS     54 53.31
                  eLQ    07 41.31
                  eLR    12 16.31
ORV    88.43  46 ePc    44 04.44  -0.6
       1.2s     40.00nm          5.6mb
     Z  17s      1.70um          5.5MszX
                  eS     54 37.39
                  eLQ    07 37.39
                  eLR    11 47.39
CIT    88.65 329 eP     44 08.00   2.1
PLM    88.72  53 eP     44 07.19   0.4
PEC    88.75  53 (P)    44 07.85   1.1
       1.4s     24.72nm          5.3mb
YBH    88.75  44 ePc    44 06.71   0.1
       1.5s     60.00nm          5.7mb
     Z  17s      1.50um          5.5MszX
                  eSKS   54 25.52
                  eLQ    06 52.52
                  eLR    11 28.52
MIN    88.76  45 ePc    44 07.66   0.9
       1.4s     40.00nm          5.5mb
LBFM   89.08  44 eP     44 09.42   1.0
MEMM   89.25  49 eP     44 10.81   1.9
MTUM   89.36  49 (P)    44 09.47  -0.3
SHL    89.36 298 iP     44 10.50   0.5
       1.4s     81.40nm          5.8mb
                  iS     55 12.00
PMR    89.52  18 (P)    44 21.39  11.7X
     Z  20s      2.10um          5.6Msz
GTA    89.62 313 Pc     44 11.00   0.2
       1.0s     20.00nm          5.4mb
     Z  20s      1.79um          5.5Msz
     N  16s      0.85um
                  pP     44 22.00  35km
                  sP     44 26.00
                  PP     47 41.00
                  sS     55 12.00
GSC    89.66  52 eP     44 11.31   0.2
YAK    89.74 342 eP     44 10.00  -0.7
       1.5s    171.00nm          6.1mb
     Z  20s      2.70um          5.7Msz
     N  20s      1.40um
     E  17s      0.90um
                  eSS    01 04.00
BONR   89.83  49 eP     44 11.15  -0.9
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ILT    90.05   4 iPc    44 12.40   0.4
       1.4s     57.00nm          5.6mb
                  i      44 22.00  30km
                  ePS    56 12.00
KVN    90.49  48 (P)    44 15.48   0.5
TPNV   90.81  50 eP     44 16.56   0.1
       0.9s     14.93nm          5.3mb
SIT    91.07  26 P      44 30.00  13.1X
     Z  20s      1.84um          5.5Msz
BALM   91.21  21 eP     44 16.48  -1.2
LSA    91.67 301 Pc     44 22.40   1.5
       1.4s     45.00nm          5.7mb
                  pP     44 28.00  17kmX
IMA    92.02  14 eP     44 21.70   0.3
       1.3s      6.40nm          4.9mb
BOD    92.13 334 eP     44 20.30  -1.5
       1.1s     17.00nm          5.4mb
FBA    92.51  17 eP     44 23.60   0.2
TUC    92.87  56 P      44 30.00   4.0X
     Z  20s      2.11um          5.6Msz
ZAK    93.02 324 iPd    44 26.00   0.0
       1.6s     55.00nm          5.7mb
                  e      44 37.30  36km
                  e      54 55.00
                  eS     55 33.00
ARUT   93.19  50 (P)    44 27.78   0.4
IRK    93.46 326 eP     44 25.00  -3.1X
     Z  18s      0.88um          5.3Msz
     N  18s      0.43um
     E  16s      0.59um
MSU    94.40  50 eP     44 33.99   1.0
DUG    94.65  49 P      44 40.00   6.0X
     Z  19s      1.03um          5.3Msz
GUN    95.22 298 P      44 37.60   0.4
NEW    95.40  40 P      44 50.00  12.9X
     Z  19s      1.87um          5.6Msz
PKI    95.48 297 PKP    44 38.90   0.5
KKN    95.66 298 P      44 39.80   0.7
       0.8s     20.00nm          5.6mb
DMN    95.74 297 P      44 39.80   0.3
       1.0s     55.00nm          6.0mb
KOD    96.18 278 eP     44 47.40   5.6X
GKN    96.27 298 P      44 41.70   0.0
       0.9s     28.00nm          5.7mb
ALQ    97.22  55 P      44 50.00   4.1X
     Z  19s      1.93um          5.6Msz
LRM    97.22  43 eP     44 41.60  -4.1X
GBA    97.41 282 P      44 48.00   1.2
TIK    97.62 348 eP     45 05.00  18.4X
       1.5s     14.00nm
     Z  20s      1.90um          5.6Msz
                  e      58 23.00
HYB    97.75 286 eP     44 50.00   1.6
INK    98.93  18 eP     44 55.50   2.9X
       1.0s      5.00nm          5.0mb
                  pP     45 24.00 107kmX
WMQ    99.70 313 P      44 57.00   0.2
     Z  28s      1.92um          5.5MszX
                  PP     49 04.30
                  SKS    55 37.00
GOL    99.74  51 P      45 10.00  12.7X
     Z  18s      1.32um          5.5Msz
GLD    99.86  51 P      45 10.00  12.2X
     Z  19s      2.13um          5.7Msz
YKA   102.77  27 ePdiff 45 19.30   9.3X
       0.8s      0.80nm          4.5mb X
WMOK  103.10  58 Pdiff  45 20.00   7.8X
     Z  20s      3.15um          5.8Msz
MBC   106.75  14 PKP    49 35.20  -2.4X
       1.7s    192.00nm
                  PP     49 52.30
                  PKSdf  52 46.60
MIAR  107.16  59 PKP    49 50.00  10.4X
     Z  20s      1.79um          5.6Msz
ULM   109.14  43 ePKP   49 43.50   0.7
FVM   110.45  56 PKP    49 50.00   4.3X
     Z  21s      3.62um          5.9Msz
OXF   110.48  60 PKP    49 50.00   4.2X
     Z  19s      2.20um          5.8Msz
CNCB  111.27 119 PKP    49 33.30 -15.2X
LPB   111.32 119 PKP    49 38.80  -9.7X
LPAZ  111.42 119 PKPc   49 46.70  -2.2
       0.5s     15.00nm
                  PP     50 39.60
                  PPP    52 34.90
                  e      58 26.70
                  PKKP   01 21.40
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25d 08h

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                SS    06 27.60
                LQ    17 50.40
                LR    23 49.50
RES   112.40  17 ePKP  49 46.50  -1.8
       1.0s    3.00nm
MYNC  114.85  60 PKP   50 00.00   5.7X
    Z  20s    2.49um          5.8Msz
SEK   118.21 218 ePKP  50 01.00   0.0
FRS   118.36 215 ePKP  50 13.00  12.0X
       0.8s   13.00nm
BFT   118.75 221 ePKP  50 15.00  12.8X
SVE   118.78 324 iPKPc 50 19.80  18.8X
       2.4s   60.00nm
                e     51 21.00
                e     01 04.00
MCWV  118.87  56 PKP   50 10.00   8.3X
    Z  19s    2.13um          5.8Msz
MAIO  118.92 300 ePKP  50 09.00   6.9X
CEH   119.04  60 PKP   50 10.00   7.9X
    Z  19s    2.37um          5.8Msz
BOSA  119.20 216 ePKP  50 02.04  -0.6
SLR   119.78 220 ePKP  50 15.00  10.9X
ARU   119.94 323 ePKP  50 07.00   3.8X
    Z  20s    1.00um          5.5Msz
    N  20s    1.00um
    E  20s    1.00um
                e     50 20.00
                e     02 35.00
YSNY  120.07  53 PKP   50 10.00   6.0X
    Z  19s    1.34um          5.6Msz
KSR   120.50 219 e(PKP)50 04.00  -1.5
POF   121.35 211 ePKP  50 08.50   1.8
       1.1s   40.00nm
JAQ   121.72  40 ePKP  50 04.50  -2.2
GAC   122.34  49 ePKP  50 06.50  -1.6
VAO   122.50 139 e(PKP)50 21.00  11.8X
FRB   123.29  27 ePKP  50 08.00  -1.3
       1.3s   25.00nm
BUL   123.67 225 iPKPc 50 10.90  -0.8
       1.0s    8.00nm
LSCT  124.00  54 PKP   50 20.00   8.5X
    Z  18s    0.92um          5.5Msz
LBNH  124.91  51 PKP   50 20.00   6.9X
    Z  19s    2.23um          5.9Msz
DAG   125.04   2 iPKPd 50 10.10  -2.3X
       0.8s    4.48nm
HRV   125.23  53 PKP   50 20.00   6.2X
    Z  20s    1.67um          5.7Msz
BAO   127.14 132 ePKP  50 17.70  -0.7
                e     50 29.80
CBM   127.34  47 PKP   50 30.00  12.2X
    Z  20s    1.73um          5.7Msz
LSZ   127.38 229 iPKP  50 19.00   0.1
                i     50 31.00
                i     50 42.00
                i     50 48.00
KER   128.86 297 e(PKP)50 22.00   0.7
NAI   128.89 249 PKPd  50 36.30  14.3X
    Z  22s    1.19um          5.5Msz
TAB   129.50 302 ePKP  50 34.00  11.6X
GRO   129.62 309 ePKP  50 39.00  16.8X
       2.0s  240.00nm
                i     52 34.00
LMN   129.77  48 ePKP  50 21.00  -1.4
                pP    50 32.00
MTA   130.44 307 ePKP  50 28.00   4.2X
ERE   130.80 305 ePKP  50 43.00  18.3X
MOS   131.45 326 ePKP  50 44.00  18.7X
                e     50 58.00
KIV   131.69 310 ePKPd 50 39.60  13.3X
    Z  23s    1.20um          5.5MszX
                e     52 46.70
OBN   132.24 326 ePKP  50 27.50   0.7
       1.8s   30.20nm
KAF   132.94 338 ePKP  50 23.00  -4.9X
NUR   134.61 337 ePKP  50 26.00  -5.1X
SOB1  136.55 132 ePKP  50 22.60 -13.7X
APO   138.06 343 ePKP  50 31.70  -6.0X
       0.4s    2.30nm
BHL   138.37 297 PKP   50 52.00  12.8X
NRA0  138.52 344 PKPd  50 36.90  -1.6
NAO   138.62 345 PKP   50 28.30 -10.4X
       0.8s    2.30nm
MLR   142.57 317 ePKP  50 27.00 -19.4X
UZH   143.12 324 iPKP  50 46.00  -1.0
                e     50 57.90
                e     54 00.00
OJC   143.47 328 ePKP  50 46.60  -1.0
CIN   143.84 304 ePKP  50 47.00  -1.6
SPC   143.89 326 ePKP  50 44.50  -4.1X
                e     51 05.40
                e     54 12.80
DRA   144.01 317 ePKP  50 49.00   0.3
DEV   144.26 320 ePKPc 50 48.00  -1.1
ALN   144.35 310 ePKP  50 56.18   6.8X
KSP   144.71 331 iPKP  50 47.70  -2.0
       1.1s  111.00nm
                e     54 23.00
EDU   145.16 353 ePKP  50 48.80  -1.5
ELO   145.30 354 ePKP  50 49.20  -1.4
EBH   145.50 354 ePKP  50 49.80  -1.1
EAB   145.64 354 ePKP  50 50.50  -0.6
BRG   145.71 333 iPKPc 50 51.00  -0.4
       1.3s  320.00nm
ESY   145.73 353 ePKP  50 50.70  -0.6
SRO   145.75 326 iPKP  50 52.70   1.1
                i     51 09.20
CLL   145.77 334 iPKP  50 51.20  -0.3
       1.1s  175.00nm
                i     51 09.00
EDI   145.79 353 ePKPc 50 51.40   0.1
                e     51 09.50
EAU   145.89 354 ePKP  50 51.60   0.0
EBL   145.92 353 ePKP  50 51.00  -0.6
SRS   145.99 312 ePKP  50 51.70  -0.5
OUR   146.02 310 ePKP  50 51.18  -1.1
PRU   146.11 331 iPKPd 50 52.80   0.7
       1.4s  148.00nm
                e     51 04.00
                i     51 10.10
ZST   146.13 327 ePKP  50 51.10  -1.1
                i     51 05.10
                i     51 14.40
                e     54 32.40
SOH   146.27 311 ePKP  50 53.66   0.9
PAIG  146.39 310 ePKP  50 49.94  -2.9X
KNT   146.45 312 ePKP  50 53.10   0.1
VKA   146.48 328 ePKP  50 51.00  -1.8
       3.0s 1903.00nm
                i     50 55.00
                i     51 06.70
                i     51 14.40
VAY   146.61 313 iPKP  50 53.80   0.6
                i     51 00.50
                i     51 07.60
                i     51 14.20
WIT   146.74 342 ePKP  50 55.50   2.5X
MOX   146.84 335 ePKPd 50 55.00   1.7
       1.3s   73.00nm
    Z  21s    1.30um          5.7Msz
GRG   146.88 312 ePKP  50 53.42  -0.3
HOF   147.00 334 ePKP  50 55.00   1.4
       1.2s   55.00nm
SKO   147.08 314 iPKPd 50 56.00   2.1
       1.4s  600.00nm
    Z  20s    1.43um          5.8Msz
                i     51 15.00
                i     51 33.00
SKO   147.08 314 ePKP  51 09.00  15.1X
KHC   147.16 331 PKPd  50 56.20   2.3
       1.0s  132.00nm
                e     51 03.00
                e     51 15.50
LIT   147.17 311 ePKP  50 53.02  -1.1
GEC2  147.32 331 ePKPd 50 55.00   0.8
       0.9s   66.47nm
                e     51 04.00
                e     51 06.40
                e     51 15.70
                e     51 22.10
WTS   147.42 341 ePKP  50 56.50   2.4
       1.0s   61.50nm
WET   147.46 332 iPKPd 50 57.00   2.7
IVA   147.64 317 iPKPd 50 57.90   3.0X
FNA   147.65 313 ePKP  50 55.98   1.0
KMR   147.68 329 iPKP- 50 58.40   3.7X
WIM   147.69 354 ePKP  50 56.40   1.9
PLE   147.72 318 iPKPd 50 57.93   2.9X
PVY   147.74 316 iPKPd 50 58.30   3.2X
GRA1  147.75 334 ePKP  50 57.80   3.0X
GRF   147.75 334 ePKPd 50 57.80   3.0X
    Z  21s    1.00um          5.6Msz
BCI   147.79 316 ePKP  50 55.70   0.6
DBN   147.80 342 ePKP  51 09.00  14.3X
OHR   147.90 313 iPKP  50 53.60  -1.7
       1.1s   70.00nm
                i     51 09.00
                i     51 15.30
BNS   148.19 339 iPKPc 50 58.80   3.4X
    Z  17s    2.20um          6.0MszX
PTJ   148.21 325 ePKP  50 59.10   3.4X
NKY   148.24 317 iPKPd 50 59.09   3.2X
ZAG   148.25 325 iPKP  50 58.50   2.9X
TTG   148.27 317 iPKPd 50 59.18   3.4X
SDA   148.31 316 ePKP  51 02.30   6.5X
LACI  148.38 315 ePKP  51 03.00   7.0X
TNS   148.38 337 ePKPd 50 58.80   3.0X
WME   148.40 354 ePKP  50 58.50   2.9X
TIR   148.41 314 ePKP  51 02.60   6.5X
LSK   148.46 312 ePKP  51 00.90   4.6X
BRY   148.48 318 iPKPd 50 59.48   3.2X
BHG   148.51 330 ePKP  50 59.50   3.4X
ULC   148.52 316 iPKPd 50 59.87   3.6X
YRC   148.57 354 ePKP  50 59.10   3.2X
BDV   148.62 317 iPKPd 50 59.87   3.5X
DCN   148.68 357 iPKPc 50 59.40   3.3X
       1.0s  174.00nm
DLF   148.68 356 iPKPc 50 59.40   3.3X
       0.9s   96.00nm
HCY   148.75 317 iPKPd 51 00.45   3.9X
KBA   148.75 329 iPKPd 50 59.30   2.6X
       1.1s   98.10nm
                i     51 16.70
                i     53 44.80
                i     54 46.10
ENN   148.76 340 ePKP  51 00.00   3.7X
       0.9s   63.40nm
VBY   148.84 325 iPKP  51 00.40   3.8X
                ipPKP 51 11.40
                i     51 20.60
LJU   148.87 326 ePKP  51 00.00   3.3X
       2.0s 1180.00nm
                epPKP 51 11.50
                i     51 20.60
                ePP   54 38.00
MEM   148.87 340 iPKPc 51 00.40   4.0X
FUR   148.90 332 ePKP  51 01.50   4.8X
    Z  22s    1.60um          5.8Msz
                i     51 05.20
                e     51 12.20
                i     51 21.00
                i     51 43.30
                ePP   54 39.10
IGT   148.91 311 ePKP  51 00.66   3.7X
SRN   148.99 312 ePKP  51 02.80   5.8X
VLO   149.07 313 ePKP  51 03.30   6.2X
UCC   149.20 342 PKP   51 02.00   5.0X
VOY   149.21 327 e(PKP)51 01.70   4.4X
                epPKP 51 11.80
                e     52 03.50
HCG   149.38 352 ePKP  51 00.50   3.2X
WATA  149.39 331 iPKPd 51 01.20   3.6X
                i     51 07.20
                i     51 19.00
WTTA  149.42 331 iPKPd 51 01.50   3.8X
       1.5s  314.00nm
                i     51 18.20
                i     54 40.80
                i     54 49.00
SNF   149.47 342 PKPc  51 01.80   4.4X
TRI   149.49 326 ePKP  51 02.00   4.4X
                e     51 13.20
                e     15 42.70
HAE   149.51 351 ePKP  50 58.60   1.2
HTR   149.57 352 ePKP  51 01.40   3.9X
MOTA  149.60 331 iPKPd 51 01.80   3.9X
       0.9s  110.00nm
                i     51 12.90
                i     51 18.00
WLF   149.64 339 iPKPc 51 03.07   5.4X
SQTA  149.64 331 iPKPd 51 01.90   3.9X
       0.9s   85.50nm
                i     51 18.20
LANF  149.65 337 PKP   51 02.42   4.7X
DOU   149.75 341 PKPc  51 02.70   4.9X
ECP   149.78 356 ePKP  51 02.00   4.2X
HGH   149.94 351 ePKP  51 02.00   3.9X
WLS   150.28 336 PKP   51 03.65   4.9X
CDF   150.31 337 ePKP  51 02.70   3.8X
       1.2s   81.80nm
SLE   150.38 334 ePKPc 51 04.00   5.1X
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FEL   150.48 335 PKP   51 03.44   4.3X
ECH   150.52 336 PKP   51 03.79   4.7X
OSS   150.53 331 ePKPc 51 05.20   5.8X
ZLA   150.65 334 ePKPc 51 04.70   5.3X
MOF   150.83 336 PKP   51 04.64   5.0X
LLS   150.88 333 ePKPc 51 05.50   5.6X
VITF  150.94 338 PKP   51 05.30   5.6X
BSF   150.98 336 ePKP  51 04.10   4.2X
       1.0s    42.80nm
VDL   150.98 332 ePKPc 51 05.90   5.8X
HAU   150.99 337 ePKP  51 04.20   4.4X
       1.0s    56.00nm
    Z  23s     1.48um          5.7MszX
BBS   151.01 335 PKP   51 05.08   5.2X
TMA   151.53 332 ePKPc 51 06.90   6.0X
MMK   151.97 333 ePKPc 51 08.60   7.0X
DIX   152.17 334 ePKPc 51 08.90   6.9X
FLN   152.29 347 ePKP  51 06.70   5.0X
       0.9s    48.65nm
LDF   152.37 346 ePKP  51 06.80   5.0X
       1.2s    47.00nm
EMS   152.38 334 ePKPc 51 09.20   7.0X
LOR   152.48 339 ePKP  51 07.50   5.5X
       1.0s    28.80nm
LBF   152.69 339 ePKP  51 08.80   6.4X
       1.0s    29.00nm
GRR   152.73 347 ePKP  51 07.90   5.6X
       1.0s    48.20nm
SSF   152.78 340 ePKP  51 08.30   5.9X
       0.9s    32.45nm
LPL   152.91 334 ePKP  51 09.10   6.1X
       0.9s    42.40nm
LPG   152.92 334 ePKP  51 08.40   5.3X
       0.7s    23.35nm
SMF   153.03 339 ePKP  51 08.50   5.7X
       1.2s    52.35nm
AVF   153.07 340 ePKP  51 08.50   5.7X
       1.0s    20.00nm
LPF   153.10 347 ePKP  51 08.80   6.0X
       1.1s    67.15nm
MAF   153.82 340 ePKP  51 10.80   6.9X
       0.9s    14.60nm
TCF   153.87 341 ePKP  51 10.50   6.5X
       1.0s    19.60nm
PGF   154.15 327 ePKP  51 12.80   8.2X
       1.1s    65.20nm
MFF   154.24 344 ePKP  51 12.30   7.8X
       1.2s    33.30nm
RJF   154.97 341 ePKP  51 13.10   7.6X
       1.1s    42.75nm
    Z  23s     1.90um          5.9MszX
CAF   155.14 339 ePKP  51 14.80   9.1X
LIC   163.59 197 PKP   51 16.78   0.7
       1.1s    23.50nm
    Z  22s     4.50um
KIC   163.64 199 PKP   51 16.80   0.7
       1.2s    34.00nm
TIC   163.99 198 PKP   51 15.94  -0.6
       1.2s    18.50nm
LKO   166.91 199 PKP   51 18.82  -0.1
       1.2s    15.00nm
KDS   170.33 166 ePKP  51 21.50   0.5
     S.D. = 1.1  on 189 of 346 obs.
-----------------------------------
*  NOV  25, 1993  09h 08m 18.92± 0.53s
   22.008 S ± 8.8km  170.032 E ±11.3km
   DEPTH =  33.0km  (normal)
   4.7mb ( 13 obs.)
 LOYALTY ISLANDS REGION            (189)

DZM     3.33 268 iPc   09 08.30  -1.7
                iS    09 49.80
BKM     4.63 338 iP    09 28.00  -0.5
                iS    10 25.00
BRS    16.57 248 iPc   12 14.00   3.6X
       1.3s    15.00nm          4.0mb
ARMA   18.50 239 eP    12 44.10   9.6X
       1.2s    29.00nm          4.3mb
SNZO   19.64 169 P     12 47.00  -0.8
CTA    22.27 271 iPc   13 16.00   1.2
CNB    22.41 229 eP    13 17.10   1.0
       0.5s    23.00nm          4.9mb
BWA    22.65 232 eP    13 18.40  -0.2
                i     13 27.60
CAN    22.67 230 eP    13 20.00   1.3
                i     13 29.20
                i     13 36.30
STK    27.12 243 eP    13 51.80  -9.1X
       0.4s     3.20nm          4.3mb
                i     13 59.00
ASPA   33.29 260 eP    15 00.10   4.3X
       1.3s    28.10nm          5.0mb
WB2    33.33 267 eP    14 55.00  -1.2X
       0.4s     2.70nm          4.5mb
WRA    33.34 267 P     14 55.30  -1.0
       1.2s     1.40nm          3.7mb
SBA    55.92 181 eP    18 05.00   9.5X
SPA    68.12 180 ePc   19 16.50  -1.2
       1.1s    29.76nm          5.3mb
TIA    76.50 318 eP    20 06.30  -1.1
CN2    77.20 329 eP    20 10.60  -0.5
       1.2s    12.00nm          4.8mb
BJI    79.54 321 eP    20 23.50  -0.5
KMI    80.36 302 Pc    20 30.00   0.9
       1.9s    50.00nm          5.2mb
                sP    20 40.00
TIY    80.36 317 Pd    20 29.70   1.1
XAN    80.52 313 P     20 29.50   0.0
       1.0s     4.50nm          4.4mb
                pP    20 38.00  27kmX
HHC    82.79 319 eP    20 41.80   0.5
       1.4s    20.00nm          5.0mb
LZH    85.12 312 eP    20 54.00   0.8
       1.2s    28.00nm          5.3mb
                pP    21 04.00  31kmX
SPC   143.83 326 ePKP  28 02.60  10.1X
KSP   144.66 331 ePKPc 27 51.30  -2.3
BRG   145.66 333 iPKPc 27 54.60  -0.7
       1.3s    68.00nm
SRO   145.70 325 ePKP  27 56.10   0.6
CLL   145.72 334 iPKP  27 54.30  -1.1
       1.5s    47.00nm
                i     28 04.70
PRU   146.06 331 ePKP  27 55.60  -0.4
       1.4s    16.50nm
    Z  20s     1.50um          5.8MszX
    N  20s     1.00um
    E  20s     0.50um
                i     28 05.40
ZST   146.08 327 ePKP  27 56.20   0.1
SKO   147.02 314 ePKP  27 59.50   1.7
                i     28 09.00
KHC   147.11 331 ePKP  27 59.50   1.7
       1.3s    21.20nm
    Z  22s     2.10um          5.9MszX
                e     28 09.00
                e     28 30.00
GEC2  147.26 331 ePKP  27 59.40   1.3
       0.8s     5.26nm
                e     28 03.50
                e     28 05.00
                e     28 09.10
                e     28 16.00
                e     28 25.50
                e     28 30.30
GRF   147.70 334 ePKP  28 00.90   2.2X
                e     28 11.50
KBA   148.70 329 i(PKP)28 05.40   4.8X
WTTA  149.37 331 iPKPc 28 04.60   3.0X
                i     28 14.60
LPL   152.86 334 ePKP  28 25.00  18.1X
       0.7s     3.65nm
LPG   152.87 334 ePKP  28 25.10  18.1X
       0.9s     8.50nm
     S.D. = 1.1  on  26 of  38 obs.
-----------------------------------
   NOV  25, 1993  09h 08m 53.03± 0.33s
   46.289 N ± 2.9km    7.494 E ± 3.6km
   DEPTH =  10.0km  (geophysicist)
 SWITZERLAND                       (544)
     ML 2.8 (LDG).

DIX     0.22 196 iPc   08 57.60  -0.3
MMK     0.40 126 ePc   09 00.80  -0.6
EMS     0.45 241 iPc   09 01.60  -0.6
ORX     0.74 152 P     09 08.00   0.4
                S     09 17.15
LSD     0.86 196 P     09 10.00   0.2
                S     09 20.17
LPL     0.94 215 Pg    09 10.40  -0.7
LPG     0.95 214 Pg    09 10.70  -0.6
TMA     0.98 100 ePc   09 11.30  -0.4
RSP     1.15 188 P     09 14.58   0.0
                S     09 28.54
LLS     1.19  60 iPd   09 14.70  -0.6
BHB     1.46 186 P     09 19.48   0.1
                S     09 36.55
RRL     1.46 200 P     09 20.44   0.8
                S     09 37.69
BSF     1.62 343 Pg    09 23.80   2.0
                Sg    09 43.80
FEL     1.63  12 ePn   09 22.10   0.2
SLE     1.63  24 ePc   09 21.00  -0.9
PZZ     1.81 189 P     09 24.97   0.4
HAU     1.89 336 Pg    09 27.50   1.9
                Sg    09 51.90
PCP     1.90 157 P     09 26.16   0.4
ROB     2.01 172 P     09 28.36   0.9
ENR     2.06 181 P     09 28.54   0.3
CDF     2.13 356 Pn    09 27.80  -1.4
                Sg    09 58.90
LBF     2.52 287 Pn    09 35.00   0.3
                Pg    09 40.80
                Sg    10 11.90
SMF     2.55 279 Pn    09 34.20  -0.9
                Pg    09 41.10
                Sg    10 12.60
LOR     2.68 293 Pn    09 36.60  -0.5
                Sg    10 18.00
AVF     2.90 281 Pn    09 39.50  -0.6
     S.D. = 0.9  on  25 of  25 obs.
-----------------------------------
   NOV  25, 1993  09h 13m 14.28± 1.06s
   43.030 N ± 7.5km   18.730 E ± 6.1km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)

BRY     0.19 227 iPgd  13 18.72   0.2
                iSg   13 21.49
NKY     0.29 138 iPgc  13 20.52   0.1
                iSg   13 24.72
PLE     0.57  58 iPgd  13 25.78  -0.2
                iSg   13 34.52
HCY     0.61 196 iPgc  13 26.28  -0.2
                iSg   13 35.13
TTG     0.72 147 iPgc  13 27.34  -1.0
                iSg   13 38.66
BDV     0.75 174 iPgc  13 28.75  -0.2
                iSg   13 40.37
IVA     0.87 100 iPgc  13 30.87  -0.2
                iSg   13 44.58
PVY     1.01 115 iPgc  13 33.56   0.0
                iSg   13 48.90
SDA     1.13 150 ePn   13 39.00   3.6X
ULC     1.13 160 iPgc  13 35.60   0.1
                iSg   13 52.78
BCI     1.19 123 ePn   13 37.20   0.7
                iSn   13 55.70
LACI    1.57 152 ePn   13 43.00   0.8
TIR     1.88 153 ePn   13 50.10   3.4X
SKO     2.27 117 ePn   14 03.00  10.7X
OHR     2.46 141 ePn   14 01.50   6.4X
VBY     3.51 316 ePn   14 17.50   7.5X
     S.D. = 0.6  on  11 of  16 obs.
-----------------------------------
%  NOV  25, 1993  09h 46m 16.33± 1.18s
   46.153 N ± 6.5km    7.081 E ±13.5km
   DEPTH =  10.0km  (geophysicist)
 SWITZERLAND                       (544)
     ML 2.7 (LDG).

LPL     0.68 201 Pg    46 29.90  -0.1
                Sg    46 40.90
LPG     0.69 199 Pg    46 30.30   0.0
                Sg    46 40.60
BSF     1.69 353 Pg    46 44.70  -1.5
                Sg    47 04.50
HAU     1.92 345 Pg    46 49.00  -0.4
                Sg    47 11.10
CDF     2.26   3 Pg    46 55.90   1.5
                Sg    47 24.00
SMF     2.30 284 Pg    46 54.60  -0.2
                Sg    47 20.90
LBF     2.30 292 Pg    46 53.50  -1.4
                Sg    47 20.40
LOR     2.48 298 Pg    46 58.30   0.9
                Sg    47 26.40
SSF     2.63 292 Pg    47 00.70   1.2
                Sg    47 30.70
     S.D. = 1.2  on   9 of   9 obs.
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25d 09h

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*  NOV  25, 1993  09h 51m 29.29± 1.02s
   49.685 N ±10.1km    7.901 E ± 7.4km
   DEPTH =  10.0km  (geophysicist)
 GERMANY                              (543)
      ML 2.9 (LDG).

ABH      0.30 311 ePg    51 35.00  -0.6
RUP      0.55 272 ePg    51 41.20   0.9
TOD      0.59  97 ePg    51 41.50   0.2
WLF      1.14 270 iPd    51 51.23   0.7
                  iS     52 09.23
CDF      1.34 198 Pn     51 57.80   3.8X
                  Pg     52 00.60
                  Sg     52 21.80
MEM      1.53 308 iPc    51 53.20  -3.4X
                  iS     52 09.36
HAU      1.97 212 Pn     52 04.90   1.8
                  Pg     52 11.50
                  Sg     52 40.40
LOR      3.62 230 Pn     52 25.60  -0.9
                  Sg     53 28.90
LBF      3.76 226 Pn     52 27.70  -0.9
                  Sn     53 13.80
                  Sg     53 34.70
GEC2     3.89 100 Pn     52 33.90   3.4X
                  Sg     53 35.30
SMF      4.08 223 Pn     52 31.90  -1.1
     S.D. = 1.3   on   8 of  11 obs.
-------------------------------------
   NOV  25, 1993  09h 53m 16.50± 0.34s
   22.027 S ± 7.9km  170.092 E ± 6.3km
   DEPTH =  32.0km  (  9 depth phases)
   4.9mb ( 15 obs.)
 LOYALTY ISLANDS REGION               (189)

DZM      3.38 269 iPc    54 07.00  -1.5
                  iS     54 47.00
PVC      4.58 338 iP     54 26.80   1.4
SVA      8.77  65 ePc    55 24.50   0.4
VUN      8.83  65 eP     55 25.20   0.3
MBU      9.56  60 eP     55 35.20   0.1
HNR     15.87 321 eP     57 07.00   7.8X
BRS     16.61 248 iPc    57 14.00   5.3X
        1.5s     7.00nm          3.6mb X
      Z  18s    13.00um          7.7MszX
SNZO    19.62 170 P      57 45.20   0.0
CTA     22.33 271 iP     58 15.00   1.9
                  e      58 20.00  18kmX
CNB     22.44 229 iPd    58 17.30   3.2X
        0.5s    22.00nm          4.9mb
BWA     22.69 232 eP     58 16.80   0.2
                  i      58 27.50  41km
CAN     22.70 230 eP     58 17.80   1.1
                  i      58 29.00  44kmX
PMG     25.35 296 eP     58 41.00  -1.3
STK     27.16 243 iPd    58 49.70  -9.3X
        1.0s     3.80nm          4.0mb
                  i      58 59.70  36km
                  iPcP   02 19.50
ASPA    33.34 260 eP     59 54.40   0.5
        1.2s     8.00nm          4.5mb
                  ipP    00 02.20  27km
                  i      02 44.40
WB2     33.39 267 eP     59 51.60  -2.8X
        0.9s     2.90nm          4.2mb
                  ipP    00 02.00  37km
                  iPP    02 37.20
WRA     33.40 267 P      00 03.00   8.5X
        1.1s     6.70nm          4.5mb
JAY     34.52 300 ePd    00 02.00  -2.2
SBA     55.90 181 eP     02 53.30   0.2
LEM     61.98 274 iPc    03 37.70   1.2
MAT     65.58 332 eP     03 57.00  -2.3
        1.2s    15.63nm          5.0mb
SPA     68.10 180 iPc    04 13.50  -1.8
        0.9s    68.18nm          5.7mb
TIA     76.55 318 eP     05 04.60  -0.8
CN2     77.24 329 eP     05 08.20  -0.9
        1.2s    20.00nm          5.0mb
                  epP    05 17.00  28km
BJI     79.59 321 eP     05 21.50  -0.5
        1.1s     7.00nm          4.6mb
                  pP     05 30.00  27km
TIY     80.41 317 eP     05 27.00   0.4
KMI     80.42 302 eP     05 28.50   1.4
        1.5s    50.00nm          5.3mb
                  pP     05 37.50  29km
CHTO    80.53 295 ePc    05 28.00   0.5
        1.5s    51.24nm          5.3mb
XAN     80.57 312 P      05 27.30  -0.2
        1.0s     8.90nm          4.7mb
                  pP     05 37.00  31km
CD2     82.56 307 eP     05 39.80   1.9
HHC     82.85 319 eP     05 39.50   0.2
        1.4s    29.00nm          5.2mb
LZH     85.18 312 eP     05 51.00  -0.2
        1.5s    50.00nm          5.5mb
                  pP     06 01.50  33km
GTA     89.61 313 eP     06 13.00   0.4
        1.4s     9.00nm          4.9mb
FRB    123.28  27 ePKP   12 09.00  -2.0
        1.0s     6.00nm
BUL    123.67 225 iPKPc  12 22.00   8.6X
        1.2s    14.84nm
SOB1   136.56 132 ePKP   12 25.40 -12.6X
KSP    144.70 331 iPKP   12 48.80  -2.6X
        1.2s    58.00nm
                  i      13 00.40
BRG    145.71 333 iPKP   12 52.20  -0.9
        1.3s    90.00nm
SRO    145.74 326 iPKP   12 54.50   1.2
                  i      13 04.10
CLL    145.76 334 iPKPd  12 52.00  -1.2
        1.4s    90.00nm
                  i      13 02.30
PRU    146.10 331 iPKP   12 54.00   0.2
        1.3s    30.10nm
      Z  16s     0.50um          5.4MszX
                  e      13 02.50
ZST    146.12 327 iPKP   12 53.20  -0.7
MOX    146.83 335 ePKP   12 56.00   1.0
        1.3s    30.00nm
SKO    147.07 314 iPKP   12 57.00   1.3
                  i      13 06.80
KHC    147.16 331 PKP    12 55.50  -0.1
        1.2s    42.50nm
      Z  18s     1.10um          5.7MszX
                  e      13 07.50
                  e      13 24.00
GEC2   147.31 331 ePKPc  12 57.30   1.4
        1.3s    37.19nm
                  e      13 01.20
                  e      13 03.30
                  e      13 06.10
                  e      13 08.80
                  e      13 23.30
GRF    147.74 334 ePKPc  12 58.80   2.3X
                  e      13 08.30
DCN    148.67 357 ePKP   13 00.00   2.2X
DLF    148.68 356 ePKP   13 00.00   2.2X
KBA    148.74 329 iPKPc  13 00.50   2.1X
        1.1s    13.90nm
                  i      13 05.20
MEM    148.86 340 iPKPd  13 01.98   3.8X
        1.2s    11.50nm
WATA   149.38 331 iPKPc  13 02.50   3.2X
                  i      13 12.20
WTTA   149.41 331 iPKPc  13 02.80   3.4X
        1.5s    87.40nm
                  i      13 12.20
MOTA   149.59 331 iPKPc  13 03.10   3.4X
                  i      13 11.50
WLF    149.64 339 iPKPd  13 04.61   5.2X
        1.7s    21.50nm
                  id     13 14.01
SQTA   149.64 331 iPKPc  13 03.30   3.6X
                  i      13 12.40
DOU    149.75 341 PKP    13 04.50   4.9X
WLS    150.28 337 PKP    13 04.73   4.2X
CDF    150.31 337 ePKP   13 05.30   4.7X
        1.1s    23.70nm
FEL    150.47 335 PKP    13 05.30   4.4X
ECH    150.51 336 PKP    13 06.24   5.4X
MOF    150.82 336 PKP    13 06.01   4.6X
BSF    150.97 336 ePKP   13 06.70   5.1X
        1.3s    35.40nm
HAU    150.98 337 ePKP   13 06.70   5.1X
        0.9s    13.60nm
LOMF   151.36 336 PKP    13 07.43   5.2X
LBF    152.68 339 ePKP   13 20.70  16.6X
        1.3s    20.95nm
SSF    152.77 340 ePKP   13 21.70  17.6X
        1.0s     8.80nm
LPL    152.90 334 ePKP   13 11.70   7.0X
        0.8s     5.65nm
LPG    152.91 334 ePKP   13 12.00   7.2X
        0.9s    10.00nm
SMF    153.03 339 ePKP   13 21.40  16.9X
        0.9s    10.80nm
AVF    153.06 340 ePKP   13 22.70  18.2X
        1.1s    14.40nm
LIC    163.60 197 PKP    13 17.63  -0.2
        1.7s    39.00nm
KIC    163.65 199 PKP    13 17.65  -0.2
        1.0s    19.00nm
TIC    164.00 198 PKP    13 17.93  -0.3
        1.0s     5.50nm
LKO    166.91 199 PKP    13 30.00   9.3X
        0.9s    10.50nm
     S.D. = 1.1   on  40 of  75 obs.
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   NOV  25, 1993  10h 40m 13.16± 0.85s
   31.741 S ± 6.9km   67.637 W ± 6.9km
   DEPTH =  10.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA         (137)

CFA      0.53 284 iPc    40 24.00   0.1
RTCV     0.78 261 iPd    40 28.00  -0.3
RTLL     0.82 300 iPd    40 29.00  -0.1
                  S      40 41.80
RTCB     1.02 284 ePd    40 32.80   0.2
                  S      40 47.10
MDZ      1.53 222 eP     40 40.90   0.2
RTPR     1.73  34 eP     40 43.40   0.0
RFA      3.10 193 e(P)   41 03.00  -0.1
                  S      41 48.50
     S.D. = 0.2   on   7 of   7 obs.
-------------------------------------
   NOV  25, 1993  11h 42m 00.22± 0.41s
   48.153 N ± 3.5km    7.650 E ± 3.7km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                               (538)
      ML 2.8 (LDG).

LIBD     0.03 266 Pg     42 02.49   0.3
                  Sg     42 04.25
WLS      0.33 323 Pg     42 06.57  -0.5
                  Sg     42 11.04
ECH      0.34 281 Pg     42 07.12   0.0
CDF      0.36 316 Pg     42 07.24  -0.4
                  Sg     42 12.25
FEL      0.37 139 ePg    42 07.60  -0.2
MOF      0.46 229 Pg     42 09.92   0.3
BSF      0.66 241 Pg     42 13.67   0.2
                  Sg     42 22.91
SLE      0.69 124 iPc    42 13.10  -0.7
LANF     0.83   7 Pg     42 15.14  -1.2
ZLA      0.84 143 ePd    42 16.50   0.1
HAU      0.89 261 Pg     42 17.50   0.3
                  Sg     42 28.90
LOMF     0.98 215 Pg     42 19.24   0.4
VITF     1.12 274 Pn     42 19.89  -1.3
RUP      1.60 346 ePg    42 29.60   1.0
TOD      1.64  27 ePg    42 30.10   0.9
ABH      1.73 358 ePg    42 31.60   1.0
LOR      2.71 252 Pg     42 51.50   6.9X
                  Sg     43 25.80
LPG      2.73 193 Pg     42 52.00   6.9X
                  Sg     43 27.00
LBF      2.75 246 Pg     42 52.30   7.1X
                  Sg     43 27.60
SMF      2.99 241 Pg     42 56.90   8.3X
                  Sg     43 35.20
SSF      3.01 250 Pg     42 57.00   8.2X
                  Sg     43 34.80
AVF      3.22 247 Pg     43 00.40   8.6X
                  Sg     43 41.30
BGF      3.63 246 Pg     43 08.20  10.5X
                  Sg     43 54.70
MAF      3.97 243 Pg     43 14.80  12.4X
                  Sg     44 06.20
GEC2     4.08  78 Pg     43 15.30  11.2X
                  Sg     44 07.90
     S.D. = 0.8   on  16 of  25 obs.
-------------------------------------
   NOV  25, 1993  11h 56m 18.25± 1.04s
   23.984 S ± 6.6km   70.407 W ±10.9km
   DEPTH =  33.0km  (normal)
 NEAR COAST OF NORTHERN CHILE         (122)

FSA      4.50 119 e(P)   57 26.50   0.6
```

```
SLA      4.54 100 ePd    57 27.10    0.4
HJA      4.65  82 ePd    57 28.10    0.1
                  S      57 49.50
YJA      4.86  69 ePd    57 30.00   -1.4
MOCB     5.18  59 P      57 35.70   -0.2
CNCB     7.49  18 P      58 09.30    0.8
ARE      7.55 352 eP     58 09.00   -0.1
                  eS     59 30.00
CCH      7.69  32 P      58 11.90    0.8
LPB      7.72  17 eP     58 16.00    4.4X
LPAZ     7.95  16 P      58 14.30   -0.7
MDZ      8.97 172 eP     58 37.50    8.9X
RFA     10.88 172 ePc    58 54.50   -0.3
SIV     11.84  50 P      59 00.70   -7.1X
     S.D. = 0.8  on  10 of  13 obs.
-----------------------------------
%  NOV  25, 1993  12h 14m 25.21± 0.77s
   26.877 S ± 8.1km   26.657 E ± 7.4km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)
      ML 2.3 (PRE).

BFS      0.12 101 eP     14 26.60   -1.2
                  S      14 27.60
KSR      1.03  12 eP     14 45.00   -0.3
                  S      14 57.50
SWZ      1.23 255 eP     14 48.00   -0.6
                  S      15 03.00
SEK      1.68 149 eP     14 56.00    0.5
                  S      15 17.00
SLR      1.85  52 eP     14 59.00    1.0
                  S      15 23.00
BOSA     2.05 212 eP     15 01.20    0.5
                  S      15 26.20
     S.D. = 1.0  on   6 of   6 obs.
-----------------------------------
?  NOV  25, 1993  12h 16m 25.23± 0.95s
   39.127 N ± 8.1km   27.618 E ± 9.5km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.8 (ISK).

IZM      0.78 201 ePg    16 40.40    0.0
                  eSg    16 53.10
DST      0.92  58 ePn    16 42.90    0.1
EZN      1.22 305 ePn    16 48.00    0.1
EDC      1.23   9 ePn    16 48.00   -0.1
     S.D. = 0.2  on   4 of   4 obs.
-----------------------------------
?  NOV  25, 1993  12h 22m 02.87± 3.30s
   21.823 S ±30.1km  177.974 W ±32.6km
   DEPTH = 411.3 ± 25.2 km
   4.4mb (  5 obs.)
 FIJI ISLANDS REGION               (181)

VUN      5.06 318 iPd    23 26.10   -0.6
BKM     13.62 285 iPc    25 03.50    1.2
CNB     31.52 238 iPc    27 52.40    1.6
         0.8s    16.00nm          4.4mb
CAN     31.81 238 eP     27 54.50    1.3
CTA     33.41 266 iPc    28 07.20    0.4
STK     37.26 246 eP     28 30.80   -8.0X
         1.4s     4.10nm          3.6mb
ASPA    44.26 258 iPc    29 35.50   -0.1
         0.7s    11.50nm          4.3mb
WB2     44.44 263 eP     29 36.00   -1.1
         0.4s     6.40nm          4.3mb
WARB    50.47 253 eP     30 22.80   -0.3
KLB     57.52 246 eP     31 11.50   -1.9
BAL     58.55 247 eP     31 19.50   -0.9
MUN     58.78 245 eP     31 22.00    0.0
MRWA    59.37 248 eP     31 25.50   -0.5
FBA     89.52  12 eP     34 16.06    0.8
         0.9s     9.17nm          4.6mb
APO    140.42 351 ePKP   40 37.80   -7.1X
         0.3s     1.20nm
KSP    148.95 342 ePKP   41 04.20    4.7X
CLL    149.35 346 iPKPc  41 07.30    7.3X
         1.1s    18.00nm
BRG    149.54 345 ePKP   41 07.10    6.8X
PRU    150.20 344 ePKP   41 07.50    6.1X
KHC    151.24 344 ePKP   41 09.50    6.5X
                  e      41 20.50
GRF    151.25 348 ePKP   41 11.40    8.4X
GEC2   151.47 344 ePKPc  41 10.30    6.9X
         0.8s     2.81nm
                  e      41 21.70
     S.D. = 1.2  on  13 of  22 obs.
-----------------------------------
%  NOV  25, 1993  13h 04m 24.56± 0.79s
   26.930 S ± 8.6km   26.770 E ± 9.4km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)
      ML 2.1 (PRE).

BFS      0.03  23 eP     04 25.00   -0.9
                  S      04 25.80
SWZ      1.31 259 eP     04 49.50    0.1
                  S      05 05.40
SEK      1.58 152 eP     04 53.30   -0.2
                  S      05 13.70
SLR      1.80  49 eP     04 57.50    0.8
                  S      05 20.50
BOSA     2.06 215 eP     05 00.20    0.0
                  S      05 26.00
     S.D. = 0.9  on   5 of   5 obs.
-----------------------------------
   NOV  25, 1993  13h 15m 43.35± 0.95s
   36.441 N ± 6.7km   70.780 E ± 7.3km
   DEPTH = 194.9 ± 10.8 km
   4.6mb ( 20 obs.)
 HINDU KUSH REGION, AFGHANISTAN    (718)

KSH      5.09  52 iPc    17 01.00    1.4
                  S      17 59.20
QUE      7.01 208 eP     16 27.50  -57.2X
                  eS     17 44.50
FRU      7.04  24 ePn    17 25.00    0.2
                  i      18 55.60
NDI      9.45 143 iP     17 57.50    1.1
         0.7s   116.44nm          5.4mb
                  eS     19 34.00
ASH     10.03 282 eP     18 02.80   -1.2
                  eS     19 50.50
GKN     14.42 122 P      18 58.20   -1.7
WMQ     14.88  55 P      19 04.50   -0.9
DMN     14.99 122 P      19 06.30   -0.8
KKN     15.00 121 P      19 06.00   -1.1
PKI     15.22 121 P      19 09.00   -1.0
GUN     15.34 119 P      19 10.70   -0.8
POO     18.04 171 eP     19 37.00   -5.6X
                  S      23 21.00
LSA     18.33 106 Pd     19 47.60    1.6
         0.8s    29.00nm          4.8mb
HYB     20.16 158 eP     20 05.00    0.7
         1.0s    70.00nm          5.1mb
GRO     20.41 297 eP     20 05.00   -1.5
         1.0s   110.00nm          5.3mb
MTA     20.81 293 eP     20 14.00    3.5X
                  e      24 45.00
SHL     21.04 115 iP     20 13.50    0.4
         1.2s    74.22nm          5.1mb
SVE     21.49 345 ePd    20 17.70    0.7
         2.2s    50.00nm          4.6mb
                  e      20 53.20
ARU     21.59 341 eP     20 20.00    1.9
         1.5s   110.00nm          5.2mb
                  e      20 52.00
GTA     23.05  74 eP     20 34.20    1.6
         1.0s     6.00nm          4.2mb
                  pP     21 12.00 198kmX
GBA     23.51 164 P      20 39.00    2.1
                  S      27 00.00
KOD     26.79 165 eP     21 09.00    1.6
ZAK     27.16  49 eP     21 10.00   -0.2
         1.1s    10.00nm          4.5mb
OBN     29.85 320 iPc    21 34.90    0.9
         1.0s    35.00nm          5.0mb
                  e      22 16.00
                  e      22 30.00
BOD     35.61  39 eP     22 21.90   -1.7
KAF     37.58 327 eP     22 40.60    0.5
NUR     37.77 324 iP     22 42.30    0.6
         0.5s     8.30nm          4.6mb
APO     42.94 323 eP     23 23.60   -0.5
         0.4s     5.70nm          4.5mb
NB2     44.32 323 P      23 34.40   -0.8
         0.8s    13.70nm          4.5mb
DAG     54.76 344 iPd    24 54.10   -0.2
         0.6s    10.00nm          4.7mb
MBC     67.40   3 eP     26 20.00    1.0
         0.5s     3.00nm          4.3mb
INK     73.99   9 eP     26 59.00    0.5
         0.5s     3.00nm          4.3mb
YKA     81.31   3 eP     27 36.60   -1.9
         0.6s     2.70nm          4.2mb
WRA     82.11 122 P      27 42.80   -0.6
         0.6s     1.40nm          3.9mb
WB2     82.12 122 eP     27 42.30   -1.2
         0.4s     6.30nm          4.7mb
ASPA    84.36 125 iPc    27 54.20   -0.6
         0.6s     4.70nm          4.4mb
     S.D. = 1.2  on  33 of  36 obs.
-----------------------------------
   NOV  25, 1993  13h 58m 43.56± 0.55s
   26.279 S ±11.2km  105.706 W ± 9.8km
   DEPTH =  10.0km  (geophysicist)
   4.9mb (  7 obs.)
 EASTER ISLAND REGION              (685)

FSA     35.53  99 ePc    05 43.90    1.2
CNCB    36.22  83 P      05 51.00    1.6
LPB     36.22  82 eP     05 54.00    4.8X
LPAZ    36.28  82 P      05 50.60    0.6
CCH     37.66  85 P      06 01.80    0.6
PPD     49.52  97 (P)    07 34.00   -2.6
BDFB    54.53  91 eP     08 08.62   -5.8X
         1.1s    17.05nm          5.0mb
LTX     55.33   2 iPc    08 19.16   -0.7
PEC     60.82 349 iPc    08 58.77    0.5
         0.8s    12.47nm          5.1mb
WMOK    61.04   7 eP     08 58.54   -1.1
         0.9s     8.14nm          4.9mb
UYO     61.05  11 iPd    09 00.00    0.2
MEO     61.10   7 iPd    08 59.20   -0.9
OCO     61.96   8 iPd    09 06.10    0.2
GSC     62.14 350 eP     09 08.27    1.0
TUL     62.56   9 iPc    09 09.40   -0.5
ACO     62.94   6 iPc    09 12.30   -0.1
PV10    64.39 357 eP     09 21.21   -1.0
PV09    64.52 357 iP     09 23.11    0.0
PV08    64.57 357 iP     09 23.10   -0.4
TNP     64.93 350 eP     09 25.06   -0.6
         0.9s     8.09nm          4.9mb
BONR    64.98 349 ePc    09 26.61    0.5
SRU     65.20 356 eP     09 26.47   -0.9
HMR     65.85 346 eP     09 32.58    1.3
KVN     66.01 349 iP     09 33.26    0.7
DAU     66.55 355 iPc    09 36.10    0.0
ORV     67.13 347 iP     09 39.92    0.4
LGPM    68.71 346 eP     09 49.79    0.3
LBFM    68.94 347 iPc    09 50.91   -0.1
VUN     69.85 259 ePd    09 58.60    1.8
RSSD    70.07   1 ePc    09 57.89    0.1
         1.0s    17.17nm          5.1mb
VGB     72.76 349 eP     10 13.99    0.2
NEW     74.90 352 eP     10 25.84   -0.3
         0.8s     4.82nm          4.6mb
GMW     75.08 348 ePc    10 26.93   -0.2
ULM     76.68   6 eP     10 38.50    2.4
ARMA    87.03 238 eP     11 30.00   -0.9
YKA     88.75 356 eP     11 36.90   -1.2
         1.0s     3.20nm          4.6mb
GEC2   128.45  47 ePKP   17 50.90   -1.3
         1.0s     2.08nm
OBN    140.23  33 ePKP   18 13.00   -0.9
         1.0s    18.00nm
BJI    142.69 302 ePKP   18 16.00   -2.8X
WHN    144.64 286 ePKP   18 19.00   -3.4X
TIY    145.92 299 ePKP   18 22.00   -2.5X
HHC    145.99 305 PKP    18 24.00   -0.6
BTO    147.19 305 ePKP   18 27.00    0.5
XAN    149.19 293 PKP    18 32.00    2.2X
GYA    151.04 278 iPKPc  18 37.40    4.5X
LZH    152.98 298 PKP-   18 41.00    5.5X
         1.5s    29.00nm
                  pP     18 52.00
     S.D. = 1.0  on  38 of  46 obs.
-----------------------------------
%  NOV  25, 1993  14h 00m 40.09± 0.93s
   40.978 N ± 9.0km   24.486 E ± 6.0km
   DEPTH =   5.0km  (geophysicist)
 AEGEAN SEA                        (365)
      ML 2.5 (THE).

SRS      0.69 282 ePg    00 53.50   -0.4
                  eSg    01 02.80
OUR      0.75 211 ePg    00 55.52    0.5
                  eSg    01 05.92
SOH      0.87 260 ePg    00 57.32    0.0
                  eSg    01 08.44
```

25d 14h

```
ALN      1.18  93 ePb   01 02.64   0.0
                  eSb   01 19.96
KNT      1.21 279 ePb   01 03.68   0.5
                  eSb   01 19.16
PAIG     1.22 211 ePb   01 02.64  -0.6
     S.D. = 0.6  on   6 of   6 obs.
-------------------------------------
?  NOV  25, 1993  14h 10m 53.05± 2.42s
   19.862 S ±17.4km  175.409 W ±18.0km
   DEPTH = 217.0 ± 21.5 km
   4.4mb (  6 obs.)
 TONGA ISLANDS                      (173)

SVA      6.06 286 eP    12 22.20   0.2
VUN      6.09 287 eP    12 22.10  -0.3
BKM     15.64 275 iPc   14 27.80   4.2X
ARMA    31.53 244 eP    16 57.00  -0.1
        0.7s     5.00nm          4.3mb
CNB     34.60 236 iPd   17 22.50  -0.8
        0.5s    16.00nm          4.9mb
CAN     34.89 236 eP    17 25.00  -0.7
CTA     35.98 263 iP    17 37.00   2.0
STK     40.26 244 eP    18 00.00 -10.4X
        1.6s     1.50nm
                  e     18 38.20
ASPA    47.04 256 iPd   19 04.30  -0.5
        0.9s     7.30nm          4.1mb
                  epP   19 37.30 146kmX
                  eS    25 44.20
WB2     47.09 261 eP    19 05.00  -0.3
        0.3s     4.10nm          4.3mb
SBA     58.68 184 eP    20 30.70   1.2
CSY     65.58 205 eP    21 04.40 -10.8X
        0.6s     5.30nm
SPA     70.26 180 iPd   21 43.90  -0.5
        1.0s    75.00nm          5.4mb
      Z  16s     2.11um          5.5MszX
LRM     86.68  39 eP    23 13.50  -0.1
YKA     94.93  24 eP    23 51.00  -0.2
        0.8s     1.40nm          4.2mb
APO    138.83 353 ePKP  29 58.70   4.2X
        0.1s     1.50nm
KSP    147.73 346 ePKPd 30 14.50   4.4X
                  e     30 49.80
CLL    147.92 350 iPKPd 30 15.10   4.7X
        1.3s    25.00nm
SPC    148.16 340 ePKP  30 15.10   4.0X
BRG    148.18 349 iPKP  30 16.20   5.4X
        1.4s    24.00nm
MOX    148.78 351 ePKP  30 17.70   5.9X
        1.4s    14.00nm
PRU    148.91 348 PKP   30 18.30   6.3X
GRF    149.77 351 ePKP  30 20.10   6.8X
KHC    149.92 348 PKP   30 20.40   6.8X
        1.1s    14.70nm
                  e     30 27.40
                  e     30 55.00
SRO    149.97 341 ePKP  30 21.80   8.2X
ZST    149.98 343 ePKP  30 20.00   6.4X
                  e     52 09.40
GEC2   150.17 348 ePKP  30 20.50   6.4X
        1.1s     9.29nm
                  e     30 28.20
                  e     30 53.40
                  e     30 59.40
                  e     31 06.90
     S.D. = 1.0  on  12 of  27 obs.
-------------------------------------
%  NOV  25, 1993  14h 44m 12.06± 1.17s
   42.171 N ± 7.7km   19.617 E ± 7.4km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION         (383)

ULC      0.34 233 iPgd  44 19.24   0.1
                  iSg   44 24.61
TTG      0.37 314 iPgc  44 19.49  -0.2
                  iSg   44 25.47
PVY      0.50  32 iPgc  44 22.05  -0.2
                  iSg   44 29.33
IVA      0.73  16 iPgc  44 26.38  -0.1
                  iSg   44 37.12
NKY      0.79 325 iPgd  44 27.37  -0.1
                  iSg   44 39.53
HCY      0.87 289 iPgd  44 28.67  -0.2
                  iSg   44 42.20
BRY      1.08 313 iPgc  44 32.56   0.1
                  iSg   44 49.03
PLE      1.17 352 iPgc  44 34.44   0.5
                  iSg   44 52.00
     S.D. = 0.3  on   8 of   8 obs.
-------------------------------------
&  NOV  25, 1993  14h 45m 50.05s
   38.504 N          119.594 W
   DEPTH =  16.4km
 CALIFORNIA-NEVADA BORDER REGION ( 40)
      <GM-P>. MD 3.1 (GM).

CMB      0.78 233 ePd   46 03.86  -0.9
                  eS    46 13.92
MSTM     0.88 227 P     46 05.55  -0.9
ASMM     0.91 291 P     46 06.25  -0.8
MOYM     0.98 232 P     46 07.46  -0.6
MEMM     0.98 148 eP    46 08.29   0.1
                  eS    46 21.10
ADWM     0.99 267 P     46 07.69  -0.6
MMPM     1.00 153 eP    46 08.01  -0.7
ALAM     1.07 274 P     46 09.02  -0.7
ARJM     1.08 280 P     46 09.35  -0.6
BONR     1.16 118 eP    46 11.60   0.2
AFDM     1.17 293 P     46 10.72  -0.7
HTCR     1.17 146 P     46 12.35   0.6
AASM     1.19 267 P     46 11.68  -0.1
AHRM     1.21 287 P     46 11.56  -0.5
BCKR     1.26 129 P     46 14.05   1.1
ARRM     1.26 282 P     46 12.56  -0.3
KVN      1.29  64 iPd   46 13.93   0.4
                  eS    46 31.06
APRM     1.32 287 P     46 13.51  -0.3
ALNM     1.39 288 P     46 14.78   0.1
AFRM     1.40 282 P     46 15.43   0.6
AVRM     1.41 292 P     46 16.69   1.8
MTUM     1.41 144 eP    46 16.22   1.1
ABJM     1.41 298 P     46 15.23   0.2
FRI      1.51 183 P     46 17.23   0.8
OHCM     1.69 300 P     46 19.64   0.6
ORAM     1.71 305 P     46 20.39   1.0
COSM     1.72 235 P     46 21.65   2.1
CSTL     1.73 241 P     46 21.79   2.1
HMR      1.77 259 eP    46 20.88   0.7
ORV      1.82 306 eP    46 21.10   0.2
OBHM     1.85 309 P     46 23.76   2.3
TNP      1.92 102 eP    46 23.01   0.5
ARN      1.92 234 eP    46 24.03   1.7
OGOM     1.95 307 P     46 24.57   1.9
MGL      2.01 311 P     46 25.97   2.2
HSPM     2.06 228 P     46 26.67   2.2
COE      2.06 234 eP    46 26.57   2.1
BMSM     2.07 208 P     46 26.94   2.3
PDRM     2.25 196 P     46 30.20   3.0
NMTM     2.25 279 P     46 29.56   2.4
PARM     2.33 195 P     46 31.51   3.2
GGUM     3.08 278 P     46 37.88  -1.0
GSC      3.90 144 (P)   46 51.97   1.3
       43 obs. associated
-------------------------------------
%  NOV  25, 1993  15h 09m 51.80± 0.69s
   26.320 S ± 7.5km   27.522 E ± 6.4km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA           (584)
      ML 2.8 (PRE).

KSR      0.72 309 eP    10 06.00  -0.3
                  S     10 15.50
BFS      0.88 229 eP    10 10.00   0.8
                  S     10 20.50
SLR      0.90  50 eP    10 09.50  -0.1
                  S     10 22.00
SEK      2.00 177 eP    10 26.00  -0.7
                  S     10 48.00
SWZ      2.14 246 eP    10 28.70  -0.1
                  S     10 53.60
BFT      2.36  75 eP    10 32.40   0.4
                  S     11 01.00
     S.D. = 0.7  on   6 of   6 obs.
-------------------------------------
*  NOV  25, 1993  15h 20m 58.90± 1.21s
   43.379 N ±15.7km   17.452 E ± 6.3km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION         (383)

HVAR     0.76 255 iPgc  21 13.50  -0.3
                  iSg   21 25.80
BRY      0.93 121 iPgd  21 15.63  -1.1
                  iSg   21 29.87
HCY      1.21 140 iPgc  21 20.75  -0.6
                  iSg   21 39.27
NKY      1.27 116 iPgc  21 21.81  -0.7
                  iSg   21 41.02
PLE      1.42  91 iPgc  21 24.49  -0.3
                  iSg   21 45.57
BDV      1.49 137 iPgc  21 26.16   0.4
                  iSg   21 48.66
TTG      1.63 125 iPnd  21 28.63   0.9
                  iSn   21 52.66
IVA      1.86 105 iPnd  21 31.54   0.4
                  iSn   21 57.66
ULC      1.94 136 iPnd  21 33.05   0.8
                  iSn   22 00.15
PVY      2.01 112 iPnd  21 33.86   0.5
                  iSn   22 01.84
     S.D. = 0.8  on  10 of  10 obs.
-------------------------------------
   NOV  25, 1993  15h 23m 05.30± 0.66s
   40.541 N ± 4.6km   22.323 E ± 5.2km
   DEPTH =   5.0km  (geophysicist)
 GREECE                             (364)
      ML 2.4 (THE).

GRG      0.42   8 ePgc  23 14.26   0.5
                  eSg   23 20.46
LIT      0.46 164 ePgc  23 14.89   0.4
                  eSg   23 21.82
THE      0.50  79 ePg   23 15.66   0.4
                  eSg   23 22.70
KNT      0.76  35 ePgc  23 20.30  -0.2
                  eSg   23 29.90
FNA      0.76 289 ePgc  23 20.54   0.0
                  eSg   23 32.42
VAY      0.80  13 iPn   23 20.50  -0.8
SOH      0.83  70 ePg   23 22.21   0.3
                  eSg   23 34.82
SRS      1.12  59 ePgc  23 27.14   0.3
                  eSg   23 42.06
PAIG     1.21 120 ePb   23 27.46  -0.8
                  eSb   23 42.34
OUR      1.28  99 ePb   23 29.26  -0.3
                  eSb   23 45.89
     S.D. = 0.6  on  10 of  10 obs.
-------------------------------------
?  NOV  25, 1993  15h 28m 09.90± 1.21s
   29.950 S ±39.3km  177.210 W ±18.4km
   DEPTH =  33.0km  (normal)
   4.9mb (  5 obs.)
 KERMADEC ISLANDS, NEW ZEALAND      (178)

DZM     16.65 294 iPc   32 02.80   0.4
STK     35.25 256 eP    35 04.00   0.5
        0.3s     4.70nm          4.9mb
ASPA    43.82 266 iPd   36 16.50   1.8
        0.6s    15.40nm          5.0mb
WB2     44.76 271 iPc   36 20.70  -1.6
        0.4s    11.00nm          5.1mb
WRA     44.77 271 P     36 21.00  -1.4
        0.8s     2.90nm          4.2mb
NANU    60.03 260 iPd   38 18.80   2.8X
        0.3s     3.00nm          4.9mb
MAT     78.27 325 eP    39 56.00 -12.0X
        0.9s     5.88nm
KAF    144.35 341 ePKP  47 36.50  -7.0X
        0.4s     1.40nm
NB2    148.41 352 PKP   47 50.80   0.5
        0.7s     8.90nm
UPP    148.46 346 iPKP  47 50.10  -0.2
APO    148.51 349 ePKP  47 50.30  -0.1
        0.3s     2.60nm
     S.D. = 1.3  on   8 of  11 obs.
-------------------------------------
?  NOV  25, 1993  15h 44m 05.04± 1.58s
   18.371 N ±11.5km   99.158 E ±35.9km
   DEPTH =  10.0km  (geophysicist)
 SOUTHEAST ASIA                     (299)

CHTO     0.48 335 iPg   44 14.80  -0.1
                  iSg   44 25.00
BDT      1.13 188 eP    44 25.20  -1.0
        0.8s   176.50nm
NST      2.84 161 ePn   44 51.20  -0.1
                  ePg   45 38.50
KHT      3.61 189 ePn   45 03.30   1.1
                  ePg   45 09.50
                  eSg   45 54.30
```

```
     S.D. = 1.5  on   4 of   4 obs.
-----------------------------------
   NOV  25, 1993  16h 34m 03.44± 0.58s
   43.137 N ± 7.2km     0.708 W ± 3.6km
   DEPTH =  10.0km  (geophysicist)
 PYRENEES                          (378)
      ML 1.0 (STR).

ATE      0.05 174 Pg    34 05.99   0.3
                  Sg    34 07.82
MADF     0.08 276 Pg    34 06.73   0.8
                  Sg    34 09.03
ESCF     0.11 121 Pg    34 06.47   0.1
ISSF     0.13 210 Pg    34 06.93   0.3
                  Sg    34 09.51
OGE      0.17  80 Pg    34 07.77   0.4
                  Sg    34 11.07
ELYF     0.21 279 Pg    34 07.12  -0.9
BOH      0.22 261 Pg    34 08.35   0.0
LHE      0.23 164 Pg    34 08.16  -0.3
                  Sg    34 11.13
JAU      0.27 112 Pg    34 08.99  -0.2
EPF      0.78  98 Pg    34 18.20  -0.4
                  Sg    34 29.40
CAF      2.68  47 Pg    34 43.90  -3.6X
                  Sg    35 15.50
     S.D. = 0.5  on  10 of  11 obs.
-----------------------------------
% NOV  25, 1993  17h 38m 27.07± 1.07s
   42.014 N ± 7.6km    19.336 E ± 6.8km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)

ULC      0.08 232 iPgd  38 29.80   0.2
                  iSg   38 31.89
TTG      0.42 352 iPgc  38 35.89   0.3
                  iSg   38 43.33
BDV      0.46 306 iPgd  38 36.30  -0.2
                  iSg   38 44.57
PVY      0.75  39 iPgc  38 41.35  -0.5
                  iSg   38 53.44
HCY      0.76 305 iPgc  38 41.42  -0.5
                  iSg   38 53.98
NKY      0.84 343 iPgc  38 43.44   0.1
                  iSg   38 57.06
IVA      0.95  26 iPgd  38 45.47   0.2
                  iSg   39 00.45
BRY      1.06 327 iPgd  38 47.45   0.3
                  iSg   39 04.59
     S.D. = 0.4  on   8 of   8 obs.
-----------------------------------
? NOV  25, 1993  17h 48m 35.42±12.90s
   16.651 N ±79.0km   61.143 W ±33.1km
   DEPTH =  10.0km  (geophysicist)
 LEEWARD ISLANDS                   ( 92)
      ML 2.6 (FDF).

DEG      0.34 167 ePc   48 42.69   0.1
                  S     48 48.62
SFG      0.40 187 eP    48 43.70   0.1
                  S     48 51.20
MGG      0.75 193 eP    48 49.57  -0.5
                  S     48 59.20
DOG      0.77 217 eP    48 50.60   0.2
     S.D. = 0.5  on   4 of   4 obs.
-----------------------------------
* NOV  25, 1993  19h 01m 50.92± 1.22s
   33.180 S ± 7.5km    69.106 W ±19.9km
   DEPTH =  10.0km  (geophysicist)
 CHILE-ARGENTINA BORDER REGION     (127)

MDZ      0.37  36 iPd   01 58.30  -0.2
                  i     02 03.30
                  iS    02 07.60
RTCV     1.40  20 eP    02 16.00  -0.5
                  S     02 40.00
RFA      1.67 162 iPd   02 20.40   0.0
                  S     02 46.00
RTCB     1.71   9 ePd   02 19.80  -1.2
                  S     02 47.30
CFA      1.73  25 ePc   02 22.20   0.9
                  S     02 46.00
RTLL     1.92  16 ePd   02 24.60   0.6
                  S     02 52.00
RTRS     3.02 354 eP    02 40.00   0.4
                  S     03 20.00
RTPR     3.62  38 e(P)  02 50.00   1.8X
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```
     S.D. = 0.9  on   7 of   8 obs.
-----------------------------------
* NOV  25, 1993  19h 08m 02.59± 1.16s
   15.730 N ±15.0km   94.333 W ±11.2km
   DEPTH =  50.1 ± 10.2 km
   4.1mb (  4 obs.)
 NEAR COAST OF OAXACA, MEXICO      ( 66)

TPX      2.16 112 eP    08 37.50   0.7
                  iS    08 57.00
IISM     4.35 319 (P)   09 07.50  -0.3
LVVM     4.47 333 (P)   09 07.50  -1.9
PPM      5.27 310 eP    09 22.50   1.1
III      5.57 299 eP    09 24.50  -0.8
                  (S)   10 25.00
UYO     18.36 360 iPd   12 16.00   0.8
MIAR    18.75   2 ePd   12 19.68  -0.3
         1.8s    14.85nm        3.9mb
WMOK    19.34 349 ePc   12 26.92   0.0
         0.7s     5.20nm        3.9mb
MEO     19.35 349 iPc   12 26.80  -0.2
OCO     19.91 352 iPc   12 33.50   0.6
TUL     20.14 357 iPc   12 38.70   3.4X
ACO     21.32 349 iPc   12 48.10   0.8
PV08    26.01 334 iPd   13 34.48   1.4
PV09    26.16 333 ePc   13 35.67   1.3
DAU     28.66 332 eP    13 57.51   0.4
HVU     30.44 332 iPd   14 13.60   0.8
LRM     33.63 337 ePc   14 41.20   0.5
YKA     48.85 348 eP    16 43.60  -1.2
         0.6s     2.00nm        4.3mb
INK     58.15 344 eP    17 52.00  -1.3
MBC     61.94 353 eP    18 19.00  -0.1
EKA     77.89  36 P     19 56.00  -0.5
         2.0s    57.00nm        5.3mb X
GEC2    89.70  39 eP    20 55.20  -1.6
         1.0s     1.51nm        4.3mb
     S.D. = 1.0  on  21 of  22 obs.
-----------------------------------
* NOV  25, 1993  19h 13m 22.92± 1.03s
   7.639 N ±17.5km   74.743 W ± 9.4km
   DEPTH =  33.0km  (normal)
 NORTHERN COLOMBIA                 ( 99)

SDV      4.25  73 ePnc  14 29.10   1.9
                  iSn   15 14.80
UPA      4.93 286 iPc   14 36.49  -0.1
                  eS    15 40.81
ECO      5.19 290 eP    14 45.62   5.3X
                  eS    15 43.80
TOV      5.34  66 ePnd  14 43.20   0.7
                  iPP   14 43.40
                  iSn   15 43.70
CEOS     6.49  77 iPd   14 57.80  -1.0
                  iS    16 03.50
CANV     6.74  59 iPc   15 03.10   0.8
                  iS    16 16.80
MORO     7.11  63 eP    15 06.50  -1.0
                  iS    16 19.90
OLLA     8.19  73 iPd   15 21.00  -1.6
                  iS    16 47.50
LPB     24.90 165 eP    18 49.00   4.1X
CNCB    25.20 165 P     18 48.10   0.2
YKA     61.95 340 eP    23 56.50  14.8X
         0.4s     0.60nm
     S.D. = 1.4  on   8 of  11 obs.
-----------------------------------
   NOV  25, 1993  19h 22m 22.55± 0.76s
   43.011 N ± 6.6km   18.756 E ± 5.0km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)

BRY      0.19 235 iPgd  22 26.32  -0.5
                  iSg   22 29.42
NKY      0.27 138 iPgc  22 28.05  -0.2
                  iSg   22 32.82
PLE      0.57  55 iPgc  22 33.48  -0.6
                  iSg   22 42.22
HCY      0.59 199 iPgd  22 34.11  -0.5
                  iSg   22 43.55
TTG      0.69 147 iPgd  22 35.10  -1.1
                  iSg   22 47.14
BDV      0.73 176 iPgd  22 37.05   0.2
                  iSg   22 48.32
IVA      0.85  99 iPgd  22 39.26   0.3
                  iSg   22 52.07
PVY      0.99 114 iPgd  22 42.02   0.6
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                  iSg   22 56.99
ULC      1.11 161 iPgc  22 44.51   1.1
                  iSg   23 01.13
HVAR     1.70 276 e(Pn) 22 53.10   0.7
                  iSn   23 18.60
     S.D. = 0.8  on  10 of  10 obs.
-----------------------------------
% NOV  25, 1993  19h 36m 05.22± 0.78s
   39.127 N ± 7.4km   29.006 E ± 8.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.9 (ISK).

DST      0.56 329 iPg   36 15.20  -1.4
                  eSg   36 22.20
ALT      0.86  94 ePg   36 21.90   0.0
                  eSg   36 35.00
KHL      0.90 153 ePg   36 22.00  -0.5
IZI      1.26  16 iPn   36 29.30   0.6
EDC      1.50 324 ePn   36 33.00   0.8
IZM      1.55 242 ePn   36 33.30   0.4
     S.D. = 1.1  on   6 of   6 obs.
-----------------------------------
   NOV  25, 1993  20h 24m 00.73± 0.14s
   0.963 S ± 2.8km   13.264 W ± 2.9km
   DEPTH =  10.0km  (geophysicist)
   5.7mb (141 obs.)  5.5Msz ( 48 obs.)
 NORTH OF ASCENSION ISLAND         (407)
      Mw 5.7 (GS), 5.7 (HRV).
      FAULT PLANE SOLUTION: P-Waves
       NP1:Strike= 75 Dip=90 Slip=  -6
       NP2:        165     84     -180
       Principal Axes:
        T                Plg= 4  Azm=120
        P                     4       30
      Comment: The focal mechanism is
        moderately well controlled
        and corresponds to strike-
        slip faulting. The preferred
        fault plane is NP1.
      RADIATED ENERGY
       No. of sta:   5  Focal mech.  F
       Energy        6.4±2.3*10**13 Nm
      MOMENT TENSOR SOLUTION
      Dep  13            No. of sta:  8
      Moment Tensor;    Scale 10**17 Nm
        Mrr=-0.16        Mtt= 2.53
        Mff=-2.37        Mrt= 0.13
        Mrf= 0.87        Mtf=-2.14
       Principal axes:
        T  Val=  3.34  Plg= 3  Azm=201
        N        0.06      75      302
        P       -3.40      15      110
      Best Double Couple:Mo=3.4*10**17
       NP1:Strike=246 Dip=77 Slip=-172
       NP2:        155     82      -13
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 37S, 75C
      Centroid Location:
      Origin Time        20:24: 5.5 0.2
      Lat  0.41S 0.02 Lon  13.31W 0.02
      Dep  15.0 FIX Half-duration  1.7
      Moment Tensor;    Scale 10**17 Nm
        Mrr=-0.48 0.05  Mtt= 2.45 0.08
        Mff=-1.97 0.08  Mrt=-0.23 0.23
        Mrf= 1.18 0.20  Mtf=-3.14 0.05
       Principal Axes:
        T  Val=  4.20  Plg= 9  Azm=209
        N       -0.34      72      328
        P       -3.87      16      116
      Best Double Couple:Mo=4.0*10**17
       NP1:Strike=253 Dip=72 Slip=-175
       NP2:        162     86      -18

LIC     10.89  49 P     26 33.95  -5.8X
         0.4s    24.00nm        5.9mb
      Z  19s     33.00um        4.3MszX
                  S     28 37.87
TIC     11.17  47 P     26 37.73  -5.9X
         0.7s    69.00nm        6.1mb
                  S     28 38.37
KIC     11.19  49 P     26 38.63  -5.3X
         0.4s    40.00nm        6.1mb
                  S     28 36.27
LKO     12.94  36 Pc    26 59.79  -7.7X
         0.6s   196.50nm        6.5mb
```

25d 20h

MBO	15.69	347	eP	27 42.20	-1.3
			iS	30 21.20	
OUK	32.40	9	iP	30 33.00	0.1
JHA	32.72	6	iP	30 35.50	-0.2
WIN	36.50	128	iPd	31 07.00	-1.6
	0.9s	92.00nm		5.6mb	
TSY	36.78	10	iP	31 12.50	2.0
BIT	37.10	10	iP	31 14.00	0.9
BAO	37.23	245	eP	31 13.20	-1.5
			i	31 21.20	
BDFB	37.25	245	ePc	31 15.06	0.2
	1.6s	415.11nm		6.0mb	
			ed	31 17.62	
CPS	37.26	10	iP	31 16.00	1.5
PLAT	37.55	10	iP	31 19.00	2.0
CNIL	37.74	10	iP	31 20.00	1.5
MOMI	37.75	10	eP	31 20.00	1.3
EJIF	37.92	10	iPd	31 21.28	1.2
ALJ	38.12	10	iP	31 23.00	1.2
GIBL	38.21	10	iP	31 23.00	0.5
EPRU	38.47	10	iPd	31 25.57	0.9
RIFB	38.49	238	eP	31 24.90	-0.3
			e	31 26.20	
			e	31 31.80	
			e	32 50.50	
EVAL	38.83	8	eP	31 27.98	0.3
ECOG	39.10	12	eP	31 28.29	-1.8
ENIJ	39.11	14	eP	31 30.45	0.4
ELUQ	39.23	11	eP	31 31.03	0.0
EHOR	39.30	10	eP	31 31.76	0.2
VAO	39.38	234	eP	31 32.30	-0.3
			e	31 41.20	
			e	31 47.90	
			e	33 05.40	
EBAN	39.90	12	eP	31 36.00	-0.6
EALH	40.15	15	eP	31 39.45	0.8
EVIA	40.63	13	eP	31 41.95	-0.8
PAB	41.13	10	ePd	31 45.71	-1.1
	1.8s	124.71nm		5.3mb	
EPLA	41.36	8	eP	31 49.00	0.5
ECHE	41.90	14	eP	31 53.66	0.6
GUD	42.23	10	eP	31 56.34	0.5
POF	42.42	135	iPc	31 59.00	1.7
	1.0s	110.00nm		5.5mb	
PPD	42.54	238	eP	32 05.00	6.5X
BLE	44.34	141	iPd	32 15.50	2.6X
	1.0s	120.00nm		5.7mb	
CER	44.40	140	eP	32 07.00	-6.5X
	1.2s	240.00nm		5.9mb	
ECRI	44.44	11	eP	32 13.86	0.1
LBTB	44.49	126	(P)	32 15.02	0.6
	1.7s	438.12nm		6.1mb	
			ed	32 16.68	
EGRA	44.53	14	eP	32 15.73	1.5
LHE	45.14	13	P	32 19.89	0.5
BUL	45.15	118	iPd	32 19.50	-0.4
	1.1s	56.96nm		5.4mb	
ELIZ	45.18	12	eP	32 19.78	0.2
ISSF	45.21	13	P	32 20.39	0.5
BOH	45.23	13	P	32 20.78	0.7
ENSF	45.26	14	P	32 20.78	0.4
ATE	45.28	13	P	32 20.58	0.2
ELYF	45.30	13	P	32 21.30	0.7
PAND	45.30	15	P	32 24.21	3.4X
ESCF	45.30	13	P	32 21.28	0.7
JAU	45.31	13	P	32 21.36	0.5
MADF	45.31	13	P	32 21.19	0.5
OGE	45.41	13	P	32 22.08	0.7
SALF	45.43	15	P	32 22.37	0.7
EPF	45.47	14	iPc	32 22.50	0.5
	0.9s	28.65nm		5.2mb	
LESF	45.71	15	P	32 24.33	0.6
KSR	45.92	126	eP	32 23.50	-2.4
	1.3s	110.00nm		5.7mb	
MTHF	45.96	16	P	32 26.15	0.4
BOSA	46.03	130	(P)	32 25.60	-0.9
	2.1s	417.27nm		6.1mb	
FRS	46.53	132	iPc	32 29.30	-1.1
	1.4s	90.00nm		5.6mb	
MTD	46.85	112	iPd	32 17.60	-15.7X
			i	32 25.50	
BLF	46.87	130	iPc	32 33.20	-0.1
	1.0s	80.00nm		5.7mb	
SLR	46.99	125	iPd	32 34.00	-0.3
	1.0s	190.00nm		6.1mb	
	Z 22s	17.20um		6.0Msz	
LPO	47.23	14	iPc	32 35.80	0.0
	0.8s	18.25nm		5.2mb	
LFF	47.37	14	iPc	32 37.00	0.2
	1.0s	45.20nm		5.5mb	
LMR	47.54	20	iPc	32 38.40	0.2
	1.4s	118.50nm		5.8mb	
LRG	47.59	19	iPc	32 39.00	0.4
	1.2s	112.15nm		5.8mb	
	Z 20s	12.10um		5.9Msz	
SEK	47.60	129	iPc	32 39.20	0.0
	1.0s	160.00nm		6.1mb	
CAF	47.68	15	iPc	32 39.20	-0.1
	1.0s	54.60nm		5.6mb	
PGF	47.74	22	iPc	32 40.10	0.2
	1.4s	125.90nm		5.8mb	
FRF	47.78	20	iPc	32 40.10	0.0
	1.3s	88.45nm		5.7mb	
RJF	47.90	14	iPc	32 40.80	-0.2
	1.3s	69.30nm		5.6mb	
	Z 22s	5.80um		5.5Msz	
MVIF	48.25	20	P	32 44.21	0.2
AURF	48.30	20	P	32 44.16	-0.1
SBF	48.32	20	iPc	32 44.50	0.1
	1.2s	133.30nm		5.9mb	
TOUF	48.39	20	P	32 44.38	-0.7
BFT	48.42	124	eP	32 46.50	0.9
	1.0s	50.00nm		5.5mb	
AUTN	48.43	20	P	32 45.49	0.0
SAOF	48.47	20	P	32 45.49	0.0
IMI	48.51	20	P	32 46.10	0.2
STV	48.62	20	P	32 47.47	0.8
ENR	48.63	20	P	32 47.65	0.8
SSB	48.68	17	P	32 47.38	0.3
MFF	48.75	12	iPc	32 47.40	-0.2
	1.1s	33.95nm		5.3mb	
PZZ	48.77	19	P	32 48.75	0.8
LSF	48.79	14	iPc	32 48.00	0.1
	1.0s	88.00nm		5.8mb	
DOI	48.82	19	P	32 49.56	1.3
	1.6s	93.10nm		5.6mb	
ROB	48.85	20	P	32 49.03	0.6
FIN	48.89	20	P	32 49.07	0.4
TCF	48.99	14	iPc	32 49.80	0.3
	1.2s	89.55nm		5.7mb	
MAF	49.02	15	iPc	32 50.10	0.5
	1.1s	80.85nm		5.7mb	
RRL	49.04	19	P	32 50.99	0.9
SDI	49.04	27	P	32 50.61	0.7
	1.1s	47.60nm		5.4mb	
MNS	49.09	25	P	32 50.81	0.6
	2.0s	426.40nm		6.1mb	
CKI	49.10	20	P	32 50.95	0.6
	1.4s	254.60nm		6.1mb	
BNI	49.12	19	P	32 51.56	0.9
	1.4s	76.90nm		5.5mb	
BHB	49.12	19	P	32 51.22	0.7
DUI	49.30	27	P	32 53.50	1.6
	1.8s	248.00nm		5.9mb	
PCP	49.30	21	P	32 49.53	-2.4
GRM	49.31	135	eP	32 50.70	-1.4
	1.0s	120.00nm		5.9mb	
	Z 22s	4.63um		5.4Msz	
PII	49.32	23	P	32 52.61	0.7
	1.3s	89.50nm		5.6mb	
AQU	49.37	26	P	32 53.47	1.0
	1.6s	496.40nm		6.3mb	
RSP	49.40	19	P	32 53.28	0.6
BGF	49.40	15	iPc	32 52.80	0.2
	1.2s	61.90nm		5.5mb	
SIV	49.43	250	P	32 53.20	-0.1
LPG	49.54	18	iPc	32 55.00	0.9
	1.2s	95.80nm		5.7mb	
LPL	49.55	18	iPc	32 54.80	0.7
	1.0s	86.40nm		5.7mb	
MVM	49.59	290	eP	32 54.46	0.0
LSD	49.64	19	P	32 55.25	0.5
BDI	49.64	23	P	32 54.15	-0.4
	1.1s	15.90nm		4.9mb	
ASS	49.64	25	P	32 54.75	0.2
	2.2s	273.50nm		5.9mb	
CRM	49.65	290	eP	32 54.63	-0.4
RSL	49.67	18	P	32 54.97	0.1
SMF	49.74	15	iPc	32 55.20	0.0
	1.1s	31.50nm		5.2mb	
AVF	49.74	15	iPc	32 55.20	0.0
	1.1s	44.20nm		5.4mb	
CRE	49.81	24	P	32 56.13	0.3
	1.8s	150.30nm		5.7mb	
BOB	49.81	21	P	32 57.36	1.5
	1.1s	301.00nm		6.2mb	
FDF	49.87	290	iPc	32 57.32	0.6
PGD	49.92	24	P	32 56.90	0.1
	1.3s	91.70nm		5.6mb	
LPF	49.94	11	iPc	32 56.40	-0.3
	1.0s	25.00nm		5.1mb	
SFI	50.01	24	P	32 57.41	0.2
	1.3s	81.20nm		5.5mb	
HYF	50.01	14	iPc	32 57.60	0.3
SSF	50.04	15	iPc	32 57.50	0.0
	1.2s	99.10nm		5.7mb	
ORO	50.05	19	P	32 57.00	-0.7
	1.0s	39.20nm		5.3mb	
NAI	50.06	91	iPd	33 02.30	3.8X
	Z 18s	1.82um		5.1Msz	
			iS	40 22.00	
ORX	50.06	19	P	32 56.35	-1.5
LBF	50.09	15	iPc	32 57.70	-0.2
	1.1s	63.00nm		5.5mb	
ARV	50.11	25	P	32 58.93	0.9
	1.5s	459.20nm		6.2mb	
EMS	50.11	18	ePc	32 58.30	0.0
DIX	50.27	19	ePc	32 59.80	0.2
LOR	50.32	15	iPc	32 59.30	-0.3
	1.1s	72.55nm		5.5mb	
	Z 19s	4.97um		5.5Msz	
GRR	50.32	11	iPc	32 59.40	-0.2
	0.8s	43.00nm		5.5mb	
MMK	50.42	19	ePc	33 00.70	0.0
LDF	50.66	11	iPc	33 02.00	-0.2
	1.3s	79.40nm		5.5mb	
IGT	50.69	34	eP	33 01.84	-0.7
FLN	50.75	11	iPc	33 02.30	-0.5
	1.2s	51.15nm		5.3mb	
	Z 21s	8.07um		5.7Msz	
TMA	50.77	20	ePc	33 02.10	-1.2
MDI	50.78	21	P	33 02.26	-0.8
	1.0s	25.30nm		5.1mb	
SAL	50.92	21	P	33 04.17	0.0
	1.1s	274.60nm		6.1mb	
LOMF	51.22	17	P	33 05.72	-0.9
VDL	51.31	20	ePc	33 06.10	-1.3
LLS	51.48	19	ePc	33 07.50	-1.2
BBS	51.53	18	P	33 08.35	-0.6
BSF	51.65	17	iPc	33 09.00	-0.8
	1.2s	89.55nm		5.6mb	
HAU	51.67	17	iPc	33 09.50	-0.4
	1.4s	197.80nm		5.9mb	
	Z 24s	4.15um		5.4MszX	
CTI	51.71	22	P	33 09.73	-0.6
	1.3s	157.30nm		5.8mb	
OSS	51.71	20	ePc	33 09.40	-1.1
VITF	51.76	16	P	33 10.22	-0.4
MOF	51.77	17	P	33 09.67	-1.1
ZLA	51.82	19	ePc	33 10.20	-0.9
HCY	51.83	30	iPc	33 11.57	0.4
ULC	51.85	31	iPc	33 12.89	1.5
BDV	51.87	30	iPc	33 12.53	1.0
OHR	52.05	32	iP	32 56.20	-16.7X
FEL	52.06	18	P	33 11.98	-1.0
ECH	52.10	17	P	33 12.08	-1.1
SLE	52.11	18	ePc	33 12.30	-0.9
FNA	52.14	33	eP	33 13.32	-0.3
LIBD	52.17	18	P	33 12.53	-1.1
OGA	52.18	21	iPc	33 13.40	-0.6
	1.4s	42.00nm		5.2mb	
BRY	52.19	29	iPc	33 14.22	0.2
TTG	52.20	30	iPc	33 14.88	1.0
TRI	52.25	24	eP	33 14.10	-0.2
			e	40 44.00	
LIT	52.29	35	eP	33 13.12	-1.6
CDF	52.31	17	iPc	33 13.90	-0.9
	0.9s	38.35nm		5.3mb	
WLS	52.33	17	P	33 13.07	-1.9
NKY	52.35	30	iPc	33 15.21	0.0
SQTA	52.55	21	iPc	33 15.40	-1.3
	1.1s	91.90nm		5.6mb	
			i	33 24.40	
VOY	52.57	24	ePc	33 16.80	0.0
			e	33 38.80	
FVI	52.60	22	P	33 17.36	0.5
	1.4s	133.00nm		5.7mb	
MOTA	52.62	21	iPc	33 15.50	-1.7
	1.4s	88.80nm		5.5mb	
			i	33 25.50	
PVY	52.68	31	iPc	33 18.86	1.2

VBY	52.70	25	iPc	33 17.90	0.2
			i	33 26.10	
WTTA	52.74	21	iPc	33 16.90	-1.3
	1.5s	166.00nm			5.7mb
			i	33 26.20	
WATA	52.78	21	iPc	33 16.90	-1.5
			i	33 27.00	
GRG	52.82	34	eP	33 17.56	-1.1
LJU	52.84	24	ePc	33 18.50	-0.2
	1.9s	410.00nm			6.0mb
			e	33 27.00	
			e	35 04.00	
			eS	40 48.00	
			e	41 40.00	
			e	44 56.00	
IVA	52.84	30	iPc	33 19.62	0.8
THE	52.91	34	eP	33 16.96	-2.3
PLE	52.93	30	iPc	33 19.86	0.3
LANF	52.98	17	P	33 18.87	-0.8
HOFF	52.99	17	P	33 18.87	-0.9
SKO	53.00	32	iPc	33 20.00	0.1
	1.6s	220.00nm			5.8mb
Z	17s	3.93um			5.5MszX
			i	33 28.50	
			i	33 35.50	
			iPP	35 24.00	
			i	36 10.00	
			iS	40 53.00	
			LR	58 41.00	
DOU	53.12	14	Pc	33 19.80	-0.9
			S	40 54.00	
WLF	53.13	16	iPc	33 19.96	-0.7
	1.3s	21.10nm			4.9mb
			ic	33 30.10	
VAY	53.16	33	eP	33 21.60	0.5
KBA	53.22	22	iPc	33 21.00	-0.7
	1.3s	64.80nm			5.4mb
			i	33 30.10	
KNT	53.23	34	eP	33 24.48	2.8X
ZAG	53.26	25	eP	33 21.50	-0.3
SOH	53.26	34	eP	33 20.28	-1.7
ECP	53.27	5	eP	33 30.10	8.4X
OUR	53.30	35	eP	33 22.04	-0.1
PTJ	53.31	25	iPc	33 22.40	0.1
FUR	53.38	20	iPc	33 22.00	-0.7
	1.5s	208.00nm			5.9mb
Z	20s	10.00um			5.9Msz
			eS	40 50.30	
SNF	53.43	14	iPc	33 21.65	-1.3
			id	33 31.26	
LPA	53.56	226	eP+	33 26.00	1.8
Z	20s	2.84um			5.3Msz
			eS	40 56.00	
BHG	53.58	22	eP	33 23.30	-0.8
SRS	53.59	34	eP	33 24.12	-0.2
UCC	53.71	14	P+	33 24.00	-1.0
MEM	53.95	15	iPc	33 26.45	-0.2
	2.0s	18.10nm			4.8mb
			ic	33 35.35	
ENN	54.07	15	iPc	33 27.40	-0.2
	1.0s	84.00nm			5.7mb
TNS	54.28	17	ePc	33 28.30	-1.0
			ec	33 37.10	
			ec	33 51.80	
			ec	34 08.10	
KMR	54.33	22	iP+	33 28.40	-1.2
DCN	54.35	4	eP	33 29.00	-0.6
	1.1s	174.00nm			6.0mb
DLF	54.36	5	eP	33 29.10	-0.6
CCH	54.46	249	P	33 32.00	0.6
CAR	54.58	284	eP	33 32.00	-0.1
BNS	54.58	16	ePc	33 31.40	0.0
Z	26s	6.70um			5.6MszX
			i	41 20.00	
GRF	54.67	19	iPc	33 31.30	-0.8
	1.8s	201.00nm			5.8mb
Z	22s	4.00um			5.4Msz
			e(pP)	33 40.60	30kmX
BADA	54.71	54	iPc	33 33.47	0.8
WET	54.77	21	iPc	33 31.90	-1.0
	1.5s	171.00nm			5.9mb
Z	19s	9.00um			5.9Msz
GEC2	54.82	22	eP	33 32.40	-0.9
	1.7s	164.95nm			5.8mb
			epP	33 41.50	30kmX
			e	33 44.40	
			e	34 00.00	

MOCB	54.87	245	P	33 34.00	-0.6
YJA	54.98	243	ePd	33 35.00	-0.4
KHC	55.01	21	iPc	33 33.40	-1.3
	1.4s	66.00nm			5.5mb
Z	20s	7.00um			5.7Msz
			i	33 41.40	
			e	33 57.70	
			e	34 48.00	
			eS	41 20.00	
SRFA	55.02	53	iPc	33 35.27	0.3
DBN	55.11	14	eP	33 36.00	0.7
Z	20s	2.80um			5.3Msz
			eS	41 14.00	
HJA	55.17	242	ePc	33 31.80	-4.4X
SJG	55.34	293	ePd	33 36.04	-1.5
	1.8s	458.95nm			6.2mb
VKA	55.35	24	iPc	33 36.40	-0.7
	3.5s	470.00nm			5.9mb X
Z	18s	4.40um			5.6Msz
			i	33 45.40	
			LR	58 15.00	
WTS	55.42	15	iPc	33 37.50	0.0
	0.9s	72.60nm			5.7mb
ZST	55.61	24	eP	33 38.30	-0.7
			i	33 46.30	
MOX	55.62	19	iPc	33 38.00	-1.0
	1.8s	147.00nm			5.7mb
Z	18s	4.30um			5.6Msz
			eS	41 29.00	
AYN	55.65	54	iPc	33 40.40	0.9
SLA	55.68	241	ePd	33 38.90	-1.2
SRO	55.82	25	iP	33 40.00	-0.4
PRU	56.07	21	iPc	33 40.50	-1.8
	1.7s	130.00nm			5.7mb
Z	21s	7.10um			5.7Msz
N	17s	3.80um			
E	19s	3.60um			
			e	33 47.20	
			S	41 30.90	
			eSg	56 18.50	
			i	56 27.00	
CNCB	56.09	250	P	33 43.00	-0.5
LPB	56.15	251	P	33 44.60	0.8
Z	19s	4.86um			5.6Msz
			S	41 30.00	
			LR	49 52.00	
DRA	56.35	31	ePd	33 46.00	1.7
DEV	56.50	30	eP	33 31.50	-13.9X
FSA	56.52	239	ePc	33 44.20	-1.7
BRG	56.60	20	ePc	33 44.60	-1.4
	1.4s	95.00nm			5.6mb
Z	18s	4.60um			5.6Msz
N	18s	4.40um			
E	18s	3.60um			
			iS	41 41.00	
			eSg	56 31.10	
CLL	56.65	19	iPc	33 45.10	-1.3
	1.8s	115.00nm			5.6mb
			e	33 52.00	
			eSg	56 55.00	
ESK	56.70	7	ePc	33 44.91	-1.7
			e	33 54.24	
EKA	56.72	7	P	33 46.00	-0.8
	1.0s	65.10nm			5.6mb
CYA	57.07	236	ePc	33 48.00	-1.9
TOV	57.27	282	eP	33 50.40	-1.0
KSP	57.42	22	ePc	33 50.60	-1.2
			e	33 59.20	
BHL	57.51	48	Pc	33 52.00	-0.9
			S	41 56.00	
SPC	57.70	25	iP	33 53.40	-0.7
MLR	57.78	32	iPc	34 04.00	9.4X
SDV	57.98	281	eP	33 55.20	-1.4
BMR	58.06	28	ePd	34 06.00	9.7X
UZH	58.19	27	ePc+	33 58.00	0.8
	1.3s	95.00nm			5.7mb
Z	16s	7.00um			5.9MszX
N	16s	4.00um			
E	16s	5.50um			
			eS	42 02.00	
			ePS	42 15.00	
OJC	58.30	24	iPd	33 57.00	-1.0
	1.3s	63.00nm			5.5mb
			i	34 05.50	
			e	34 19.10	
VRI	58.45	32	iPc	34 17.50	18.4X
PTT	58.98	31	eP	34 02.00	-0.8

CLI	59.18	31	ePd	34 03.70	-0.6
ARE	59.34	251	eP	34 05.00	-1.2
LVV	59.83	27	iP	34 08.00	-0.7
Z	18s	3.50um			5.5Msz
N	18s	3.00um			
E	18s	4.50um			
			e	34 55.00	
			ePPP	37 51.00	
			eS	42 17.00	
			ePS	42 36.00	
			eSS	46 14.00	
UQSK	59.89	59	iPc	34 09.33	-0.2
MUD	60.06	14	iPc	34 09.00	-1.0
	1.5s	327.00nm			6.2mb
CFA	60.11	234	e(P)	34 09.70	-1.3
AFIF	60.11	61	iPc	34 10.20	-1.0
RTLL	60.21	234	e(P)	34 10.00	-1.6
COP	60.23	16	eP	34 11.60	0.4
	1.0s	48.00nm			5.6mb
Z	18s	3.51um			5.5Msz
			iS	42 33.00	
KIS	60.32	32	iP+	34 10.00	-2.0
Z	15s	4.10um			5.7MszX
			eS	42 25.00	
			eSS	46 19.00	
KMSA	60.35	66	ePc	34 13.53	0.8
RTCV	60.43	234	e(P)	34 12.00	-1.2
RTCB	60.52	234	e(P)	34 13.30	-0.5
RTRS	60.65	236	eP	34 14.50	-0.1
QASM	60.98	59	ePc	34 18.13	1.1
BOG	61.00	276	eP	34 32.50	14.9X
			iS	42 40.00	
MDZ	61.02	233	eP	34 15.50	-1.7
RFA	61.37	230	ePc	34 18.00	-1.5
KMY	61.74	11	eP	34 20.11	-1.4
SIM	62.03	36	eP	34 14.00	-9.7X
Z	20s	1.50um			5.2Msz
			e	42 50.00	
MJMA	62.43	60	iPc	34 28.20	1.4
RYD	63.29	62	iPc	34 33.50	1.0
ANN	63.91	38	eP	34 35.00	-1.1
	1.8s	170.00nm			5.9mb
Z	20s	1.50um			5.2Msz
N	20s	2.50um			
			e	43 17.00	
NNA	63.97	257	eP	34 32.20	-4.9X
PSO	64.09	272	eP	34 38.00	-0.4
MNK	64.26	25	eP	34 40.00	1.8
			e	38 34.00	
			eS	43 22.00	
			eSS	47 30.00	
NB2	64.64	13	P	34 39.30	-1.4
	1.3s	75.00nm			5.7mb
APO	64.84	14	eP	34 40.00	-1.9
	1.0s	45.60nm			5.6mb
Z	18s	2.88um			5.5Msz
			LR	56 59.00	
LMN	65.00	323	eP	34 43.50	0.3
UPP	65.25	17	iP	34 43.80	-0.7
	1.4s	200.00nm			6.1mb
			i	34 51.50	
			iS	43 26.00	
KER	66.45	52	iPc	34 53.90	1.0
ERE	66.56	45	iP+	34 53.00	-0.4
			iS	43 50.00	
AKU	66.59	358	iP	34 53.30	0.4
	1.3s	92.31nm			5.8mb
UPA	66.74	280	iP	34 55.01	0.1
DHR	66.77	61	eP	34 56.40	1.5
KIV	66.88	41	eP	34 55.10	-0.3
	2.1s	351.00nm			6.2mb
Z	18s	0.90um			5.0Msz
ECO	66.93	281	eP	34 56.71	0.6
TAB	67.09	48	eP	34 56.00	-1.0
PYA	67.15	41	iPc+	34 56.00	-1.0
	1.5s	130.00nm			5.9mb
			eS	44 16.00	
MTA	67.36	44	iPc+	34 58.00	-0.3
	1.0s	50.00nm			5.7mb
N	17s	0.50um			
E	17s	1.00um			
			e	37 27.00	
			eS	43 58.00	
CBM	67.53	323	P	35 10.00	10.7X
Z	21s	2.03um			5.3Msz
HRV	67.83	317	eP	35 00.23	-1.1
	0.9s	45.07nm			5.7mb

25d 20h

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     Z  20s      2.40um          5.4Msz
NUR    67.93  19 iP     35 00.00  -1.6
       1.0s    24.90nm          5.4mb
GRO    68.60  42 iPc+   35 06.00  -0.1
       2.0s   360.00nm          6.2mb
     Z  15s      2.50um          5.6MszX
     N  14s      2.50um
     E  18s      2.00um
                  i      35 32.00
CRNY   68.75 315 eP     35 08.43   1.4
                  e      35 14.12
LBNH   68.77 319 eP     35 07.66   0.5
       1.0s    48.35nm          5.6mb
     Z  21s      1.76um          5.3Msz
                  e      35 15.03
PAL    68.90 315 eP     35 08.83   0.9
                  e      35 15.12
OBN    69.10  28 ePc    35 06.78  -2.1
       1.6s   264.67nm          6.2mb
                  e      35 15.91
TBR    69.17 315 eP     35 10.61   1.0
                  e      35 17.37
PUL    69.38  22 (P)     35 09.00  -1.6
     N  18s      1.50um
     E  18s      1.80um
                  e      44 10.00
                  e      45 12.00
SNA    69.61 176 e(P)   35 13.20   1.4
       1.3s    34.00nm          5.3mb
KAF    69.66  19 iP     35 11.20  -1.0
       0.9s    29.90nm          5.4mb
MOS    69.94  28 iPc    35 14.00   0.0
       2.0s   510.00nm          6.3mb
     Z  19s      6.60um          5.9Msz
                  e      37 50.00
BAK    70.49  46 iPc    35 19.00   1.3
     Z  15s      3.04um          5.7MszX
     N  12s      1.72um
     E  15s      3.58um
                  iS     44 38.00
CBN    70.51 311 eP     35 18.00   0.1
RSNY   70.61 318 eP     35 17.88  -0.5
       1.3s    75.78nm          5.7mb
                  e      35 25.73
BINY   70.77 316 ePc    35 20.32   0.9
       1.3s   263.46nm          6.2mb
     Z  21s      2.84um          5.5Msz
                  e      35 27.58
CEH    71.17 308 eP     35 21.98   0.0
       1.2s   240.66nm          6.2mb
     Z  20s      1.22um          5.2Msz
                  e      35 29.82
CVL    71.26 311 eP     35 23.18   0.7
                  e      35 30.17
HBF    71.46 305 eP     35 23.72   0.0
                  e      35 31.51
SGS    71.63 305 eP     35 26.31   1.6
                  e      35 33.04
GAC    71.66 319 eP     35 26.00   1.4
LHS    72.18 307 ePc    35 27.94   0.0
                  e      35 35.87
JSC    72.49 306 eP     35 29.60  -0.2
                  e      35 38.11
BLA    72.55 310 eP     35 30.42   0.2
       1.1s   126.26nm          5.9mb
                  e      35 38.63
YSNY   72.65 315 ePc    35 31.53   0.8
       1.4s   322.81nm          6.2mb
     Z  21s      2.44um          5.5Msz
                  e      35 37.89
MCWV   72.77 312 eP     35 32.23   0.8
       1.4s   118.36nm          5.8mb
     Z  19s      1.99um          5.4Msz
                  e      35 39.35
NAV    72.87 310 eP     35 31.61  -0.5
                  e      35 40.08
WLVO   73.01 317 P      35 40.19   7.5X
STCO   73.32 316 P      35 42.20   7.7X
PRM    73.34 306 eP     35 35.71   0.9
                  e      35 43.14
SDF    73.63  15 iP     35 35.10  -0.8
TYNO   73.77 316 P      35 44.92   7.8X
ACTO   74.06 316 P      35 46.50   7.7X
LDN    74.68 315 P      35 43.80   1.4
ELF    74.81 315 P      35 44.10   0.9
JAQ    74.88 327 eP     35 44.50   1.1
DLA    74.90 315 P      35 44.10   0.4
MYNC   74.97 307 ePc    35 45.04   0.7
       1.3s   254.91nm          6.1mb
     Z  19s      1.81um          5.4Msz
                  e      35 51.62
ASH    76.17  51 iPd    35 51.70   0.7
       1.4s   190.00nm          6.0mb
FRB    76.21 338 eP     35 51.00   0.3
       1.0s    11.00nm          4.9mb
MAIO   76.73  52 iPc    35 54.50   0.1
       0.9s    36.23nm          5.5mb
                  eS     45 48.00
OXF    79.15 305 ePc    36 06.56  -1.0
       1.2s    18.85nm          5.0mb
                  e      36 14.04
ELC    79.43 308 eP     36 07.73  -1.3
                  e      36 15.48
LST    79.71 307 eP     36 09.71  -0.9
                  e      36 17.15
SLM    80.44 309 P      36 20.00   5.6X
     Z  19s      2.42um          5.6Msz
FVM    80.48 309 eP     36 14.09  -0.6
       1.0s   352.48nm          6.3mb
                  e      36 21.69
ARU    80.84  32 ePc    36 16.17   0.0
       1.0s   125.86nm          5.9mb
                  e      36 24.10
CCM    81.13 309 eP     36 17.62  -0.5
       1.3s   144.08nm          5.9mb
                  e      36 25.33
SVE    82.04  32 iPc    36 22.70   0.3
       2.0s   120.00nm          5.6mb
     Z  17s      4.50um          5.9MszX
     N  17s      1.00um
     E  17s      3.00um
                  eS     47 22.00
MIAR   82.56 305 eP     36 25.91   0.3
       1.7s   130.15nm          5.8mb
     Z  20s      1.00um          5.2Msz
                  e      36 33.35
UYO    83.25 304 iPc    36 29.60   0.4
MAW    83.84 158 eP     36 34.00   2.5X
       0.8s    23.53nm          5.5mb
TUL    84.50 306 iPc    36 35.90   0.4
OCO    85.84 306 iPd    36 43.80   1.6
ULM    86.00 320 eP     36 48.50   5.9X
MEO    86.69 305 iPc    36 46.10  -0.3
WMOK   86.85 305 ePc    36 47.64   0.4
       1.3s   119.58nm          6.0mb
     Z  21s      2.18um          5.5Msz
                  e      36 55.08
ACO    87.26 307 iPd    36 49.80   0.6
POO    87.57  72 iPc    36 48.50  -2.4
POO    87.57  72 iPd    36 41.80  -9.1X
       1.0s    40.00nm          5.7mb
RES    88.71 345 eP     36 57.50   2.2
SPA    89.05 180 iPd    36 59.10   1.8
       0.9s   113.64nm          6.2mb
FRU    89.09  47 iPc    36 59.00   1.2
       2.0s   150.00nm          5.9mb
                  e      40 28.00
                  e      47 54.00
KSH    90.02  51 P      37 04.00   1.6
       1.0s    20.00nm          5.3mb
     Z  24s      2.73um          5.6MszX
     N  16s      1.72um
     E  16s      4.04um
                  PcP    37 05.00
                  SKS    47 34.00
                  iS     47 57.00
                  ScS    47 59.00
LTX    90.82 299 eP     37 06.59   0.4
NDI    90.88  61 iP     37 07.50   1.1
KOD    90.89  80 eP     37 09.00   2.0
GBA    90.90  76 P      37 08.00   1.4
RSSD   91.22 314 eP     37 09.14   1.2
       1.2s    30.04nm          5.5mb
HYB    92.02  73 ePc    37 12.50   0.7
GLD    92.12 310 P      37 14.10   2.0
       1.5s    72.96nm          5.8mb
GLD    92.12 310 eP     37 11.08  -1.0
       1.5s    72.96nm          5.8mb
     Z  20s      3.45um          5.8Msz
GOL    92.23 310 eP     37 14.17   1.4
       0.9s    15.97nm          5.4mb
     Z  19s      3.05um          5.8Msz
ALQ    93.17 305 eP     37 17.76   0.7
       0.9s    15.06nm          5.4mb
     Z  21s      1.34um          5.4Msz
MBC    94.74 347 eP     37 26.00   2.8X
PV10   95.13 308 eP     37 27.33   1.3
                  e      37 34.32
YKA    96.09 333 eP     37 34.70   5.1X
       0.9s     3.30nm          4.8mb
SRU    96.25 309 eP     37 31.43   0.3
EMUT   96.42 310 eP     37 32.68   0.7
DAU    96.71 310 eP     37 34.21   0.9
TUC    96.87 302 P      37 40.00   6.1X
     Z  21s      1.59um          5.5Msz
GKN    97.43  62 P      37 37.00   0.4
MSU    97.58 309 eP     37 37.84   0.7
DMN    97.87  62 P      37 39.40   0.7
DUG    97.92 310 P      37 50.00  11.5X
     Z  20s      2.57um          5.7Msz
KKN    98.01  62 P      37 40.40   1.1
PKI    98.14  62 P      37 40.10   0.1
GUN    98.53  62 P      37 43.30   1.5
WMQ    98.58  46 P      37 41.20  -0.1
       1.0s     8.40nm          5.3mb
NEW    99.93 319 P      38 00.00  12.6X
     Z  20s      2.57um          5.7Msz
CMB   104.04 309 Pdiff  38 20.00  14.1X
     Z  20s      1.25um          5.4Msz
PMR   110.97 339 PKP    42 50.00  14.4X
     Z  19s      1.32um          5.5Msz
HHC   116.36  44 ePKP   42 48.20   1.4
     Z  19s      2.82um          5.9Msz
     N  17s      0.61um
     E  18s      1.84um
XAN   116.84  52 PKP    42 47.50  -0.3
GYA   117.04  61 PKP    42 51.00   2.5
TIY   118.22  47 ePKP   42 52.40   2.0
CN2   123.75  35 ePKP   43 00.80   0.1
     Z  20s      1.61um          5.7Msz
     N  17s      1.04um
     E  17s      0.85um
SNY   123.79  38 ePKP   43 01.60   0.8
NJ2   125.33  51 ePKP   43 03.00  -1.0
MAT   135.84  34 ePKP   43 26.00   2.0
     Z  20s      1.77um          5.8Msz
STK   139.57 146 ePKP   43 17.80 -13.3X
       0.7s     2.20nm
ASPA  139.79 130 ePKP   43 32.80   1.1
                  ePKS   46 41.30
HON   140.10 303 PKP    43 40.00   7.7X
     Z  21s      0.61um          5.3Msz
CAN   140.28 157 iPKPc  43 35.60   3.3X
CNB   140.43 157 ePKP   43 27.90  -4.7X
BWA   140.83 156 iPKPc  43 36.60   3.3X
WRA   142.05 125 PKP    43 31.50  -4.4X
       0.8s     1.60nm
WB2   142.06 125 ePKP   43 31.60  -4.3X
       0.4s     4.70nm
ARMA  145.63 156 ePKP   43 43.30   1.5
       1.0s    57.00nm
QIS   145.90 130 ePKP   43 43.70   1.3
BRS   148.77 156 iPKPd  43 52.00   5.1X
       0.5s     6.00nm
CTA   151.01 137 iPKPd  43 57.50   7.1X
       1.0s    25.00nm
                  i      44 14.20
     S.D. = 1.0  on 356 of 402 obs.
-----------------------------------------
&  NOV  25, 1993  20h 27m 06.85s
   34.086 N          116.424 W
   DEPTH =   9.4km
 SOUTHERN CALIFORNIA                ( 43)
      <PAS-P>. ML 3.1 (PAS).

SSK     1.06 277 eP     27 26.15  -0.9
                  eS     27 40.50
GSC     1.25 346 ePd    27 28.93  -1.3
                  eS     27 46.08
ABL     2.43 289 eP     27 46.33  -1.2
TPNV    2.86   3 eP     27 51.93  -1.7
BCH     3.21 291 eP     27 57.94  -0.6
TNP     4.04 351 ePn    28 08.69  -1.6
BONR    4.15 339 ePn    28 10.73  -1.2
MSU     5.59  37 (Pn)   28 30.81  -1.6
        8 obs. associated
-----------------------------------------
   NOV  25, 1993  20h 56m 19.70± 0.54s
   45.265 N ± 3.5km    6.875 E ± 5.9km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                             (538)
```

ML 2.6 (GEN), 2.5 (LDG).

```
LPG     0.25 340 Pg    56 25.20   0.1
                Sg    56 28.10
LPL     0.27 338 Pg    56 25.50   0.0
                Sg    56 28.30
LSD     0.28  46 P     56 25.70   0.1
                S     56 29.59
RSP     0.29 113 P     56 26.57   0.7
                S     56 31.01
RRL     0.35 191 P     56 27.58   0.6
                S     56 32.43
BHB     0.51 147 P     56 30.64   0.7
                S     56 37.37
PZZ     0.78 168 P     56 35.27   0.3
                S     56 45.29
ORX     0.86  64 P     56 36.59   0.2
                S     56 47.58
ENR     1.11 159 P     56 40.44  -0.1
                S     56 54.49
ROB     1.20 143 P     56 42.38   0.2
PCP     1.39 121 P     56 44.77  -0.4
FIN     1.42 138 P     56 44.27  -1.3
SBF     1.46 164 Pg    56 52.00   5.9X
                Sg    57 14.80
IMI     1.54 152 P     56 46.22  -1.0
FRF     1.71 186 Pg    56 53.70   4.0X
                Sg    57 19.10
LMR     1.95 188 Pg    56 57.80   4.7X
                Sg    57 25.50
```

S.D. = 0.7 on 13 of 16 obs.

? NOV 25, 1993 21h 21m 43.38± 1.61s
38.844 N ±10.6km 30.014 E ±16.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

ML 2.9 (ISK).

```
ALT     0.22  20 iPg   21 47.70  -0.6
KHL     0.65 217 iPg   21 56.40   0.0
                eSg   22 05.90
DST     1.32 306 ePn   22 07.20  -0.6
IZI     1.55 345 ePn   22 12.20   1.1
```

S.D. = 1.4 on 4 of 4 obs.

NOV 25, 1993 21h 45m 24.77± 0.20s
12.252 N ± 3.1km 125.775 E ± 4.0km
DEPTH = 30.0km (23 depth phases)
5.4mb (55 obs.) 4.8Msz (6 obs.)
SAMAR, PHILIPPINE ISLANDS (251)

```
PLP     1.33 216 ePd   45 47.20  -0.2
MAP     2.60 223 iPd   46 07.00   1.3
GQP     3.64 297 ePd   46 38.20  17.8X
BIP     4.03 173 eP    46 25.00  -1.0
PGP     4.86 285 ePd   46 42.00   4.2X
                eS    47 38.20
TGY     5.06 292 ePd   46 41.00   0.3
                eS    48 37.00
DAV     5.14 182 eP    46 44.00   2.3
QVP     5.21 297 eP    46 47.50   4.8X
                iS    47 46.50
BCP     6.50 310 eP    47 04.00   3.0X
                eS    49 12.00
BAG     6.51 310 ePc   47 01.00  -0.3
                e     48 12.00
CVP     6.63 325 ePc   47 02.00  -0.7
PPR     7.34 251 eP    47 15.00   2.3
KKM    11.27 238 ePd   48 16.50   9.4X
GZH    16.00 314 P     49 13.00   3.7X
        1.2s   150.00nm          5.0mb
     Z  15s     4.14um          4.5Msz
     N  14s     2.24um
     E  15s     3.72um
BUNI   16.71 199 P     49 12.90  -5.5X
QIZ    16.75 296 P     49 18.00  -0.9
     N  13s     1.85um
     E  14s     2.34um
TANI   16.83 203 P     49 24.40   4.4X
SSE    19.23 348 Pd    49 49.50   0.1
        1.0s    82.00nm          4.9mb
     Z  16s     2.60um          5.0Msz
     N  14s     1.60um
     E  14s     1.20um
                iS    53 24.00
KAGJ   19.43  13 eP    49 48.90  -2.8X
NJ2    20.71 343 Pd    50 05.00  -0.2
        1.0s    26.00nm          4.6mb
     Z  14s     1.18um          4.4MszX
     N  11s     1.18um
     E  12s     2.87um
                S     53 53.00
KUMJ   20.71  12 eP    50 06.70   1.4
YOMI   20.85 134 P     50 05.20  -1.6
JAY    20.86 134 ePd   50 06.60  -0.4
                eS    51 44.20
WHN    21.05 332 eP    50 09.00   0.3
        1.5s   160.00nm          5.2mb
     Z  18s     3.13um          4.7Msz
     N  14s     3.90um
     E  13s     1.11um
GYA    22.86 311 iPc   50 27.00   0.0
        1.2s   220.00nm          5.5mb
     Z  16s     2.46um          4.7MszX
     N  16s     3.13um
     E  16s     1.86um
                pP    50 37.00  37km
TKSJ   22.91  18 P     50 28.40   1.2
SRDI   23.62 210 P     50 25.20  -9.1X
WKYJ   23.63  21 P     50 35.30   1.0
YONJ   23.88  16 P     50 38.40   1.8
KGM    24.46 247 ePd   50 43.30   0.8
        1.2s   287.50nm          5.7mb
TIA    25.10 343 eP    50 48.10  -0.3
        1.6s   140.00nm          5.3mb
     Z  18s     0.94um          4.3Msz
     N  11s     0.93um
     E  11s     1.76um
                pP    50 57.20  32km
                S     55 12.00
NST    25.11 281 eP    50 48.00  -0.6
KMI    25.25 304 Pc    50 50.00  -0.2
        1.5s   210.00nm          5.5mb
     Z  16s     3.30um          4.9MszX
     N  12s     1.10um
     E  12s     1.30um
                pP    50 59.00  32km
                sP    51 04.50
IPM    25.62 255 ePc   50 53.80   0.3
LEM    26.17 225 ePd   50 58.50  -0.3
                eS    55 41.00
KHT    26.54 279 eP    51 01.30  -0.7
XAN    26.58 327 Pc    51 01.70  -0.5
        1.0s    89.00nm          5.3mb
     Z  15s     2.92um          5.0MszX
     N  13s     1.47um
     E  13s     2.18um
                pP    51 11.50  35km
CHTO   26.64 288 ePc   51 01.50  -1.4
        1.2s    44.79nm          5.0mb
DL2    26.80 353 eP    51 05.00   0.9
        1.5s   220.00nm          5.6mb
     Z  16s     0.95um          4.4MszX
     E  13s     1.92um
                S     55 35.00
CD2    27.54 316 iPc   51 10.50  -0.6
        1.2s   240.00nm          5.7mb
     Z  15s     3.01um          5.0MszX
     N  15s     5.28um
TIY    28.02 337 eP    51 15.00  -0.4
     Z  14s     2.14um          4.9MszX
     N  12s     1.15um
                S     55 52.00
MRPI   28.27 250 P     51 19.40   1.5
AEKI   28.89 252 P     51 20.80  -2.6X
BJI    28.95 345 eP    51 22.50  -1.1
        1.4s    24.00nm          4.7mb
     Z  18s     1.18um          4.5Msz
     N  11s     0.82um
                eS    56 06.00
SNY    29.53 357 eP    51 28.40  -0.3
     Z  14s     1.30um          4.7MszX
     E  12s     1.41um
                S     56 22.00
LZH    30.89 324 Pc    51 41.50   0.4
        1.5s   180.00nm          5.7mb
     Z  17s     3.19um          5.0MszX
     N  13s     2.38um
                pP    51 51.50  36km
                PP    52 40.00
                eS    56 40.00
                ScP   58 20.50
HHC    31.10 339 eP    51 42.60  -0.3
        1.4s    56.00nm          5.2mb
     Z  15s     1.77um          4.8MszX
     N  11s     0.73um
     E  13s     1.11um
CN2    31.44 360 eP    51 44.00  -1.6
        1.0s     8.40nm          4.5mb
     Z  12s     1.21um          4.8MszX
     N  11s     0.51um
     E  11s     0.87um
                epP   51 52.00  28km
BTO    31.46 337 eP    51 45.50  -0.5
     N  11s     0.31um
     E  11s     0.19um
MDJ    32.42   5 eP    51 58.50   4.3X
SHL    34.57 297 iP    52 12.00  -1.4
        1.0s    47.50nm          5.4mb
                eS    57 40.50
GTA    35.49 324 iPc   52 21.00   0.0
        1.5s    97.00nm          5.5mb
     Z  14s     2.90um          5.2MszX
     E  12s     1.02um
                pP    52 30.00  30km
                sP    52 34.00
                PcP   54 55.00
                eS    57 54.00
                ScP   58 36.00
                ScS   02 38.00
LSA    36.50 304 iPc   52 31.00   1.0
        1.4s   230.00nm          5.9mb
ASPA   36.57 167 eP    52 29.20  -0.9
        1.3s    20.80nm          4.9mb
                eS    58 09.50
GUN    40.37 299 P     53 02.50   0.3
PKI    40.69 298 P     53 04.30  -0.5
CIT    40.85 349 eP    53 06.00   0.6
KKN    40.85 298 P     53 05.80  -0.2
DMN    40.96 298 P     53 06.80  -0.2
GKN    41.46 299 P     53 10.60  -0.3
ZAK    42.25 339 eP    53 17.00   0.1
        1.7s    21.00nm          4.6mb
                e     54 55.00 540kmX
                e     59 31.00
                e     03 10.00
WMQ    45.38 321 Pc    53 42.80   0.4
        1.5s    49.00nm          5.2mb
     Z  18s     2.15um          5.1Msz
     E  16s     2.53um
                PP    55 35.00
                SS    03 39.00
HYB    45.85 282 iPc   53 45.80  -0.6
        1.0s    55.00nm          5.4mb
BOD    46.35 351 eP    53 49.10  -0.7
        1.6s    30.00nm          5.0mb
STK    46.43 161 iPc   53 40.70  -9.9X
        1.9s    11.90nm          4.5mb
                e     55 30.00 617kmX
GBA    47.07 277 P     53 55.00  -1.0
BRS    47.32 147 iPc   53 56.00  -1.8
NDI    48.00 298 iPc   54 01.80  -1.4
ADE    48.53 166 e(P)  54 07.30   0.1
ARMA   49.18 150 eP    54 12.00  -0.3
        0.9s    19.00nm          5.1mb
YAK    49.77   2 iPd   54 16.40   0.2
        1.8s    98.00nm          5.5mb
POO    50.31 284 iPc   54 18.00  -3.2X
BWA    51.16 156 iPc   54 28.40   1.1
                i     54 31.50  10kmX
                i     54 37.90
KSH    51.54 311 P     54 32.00   1.7
        1.5s   140.00nm          5.7mb
     Z  20s     1.48um          5.0Msz
     N  14s     2.57um
     E  14s     2.52um
                pP    54 40.00  27km
                sP    54 43.00
                PP    56 33.00
                ScP   59 32.00
                PcS   59 43.00
                ScS   04 18.00
CAN    52.18 156 iPc   54 34.90  -0.1
                i     54 38.80  13kmX
                i     54 44.40
CNB    52.32 156 eP    54 35.00  -1.1
DZM    52.48 130 iPd   54 37.00  -0.6
FRU    53.57 315 iPc   54 45.80   0.5
        2.0s   100.00nm          5.5mb
                e     55 54.00 320kmX
TIK    59.38   1 iPc   55 25.50  -0.7
```

25d 21h

```
        1.5s    48.00nm          5.4mb
                  ipP   55 39.00  49kmX
                  iS    03 31.00
                  i     03 40.00
MAIO    63.77 304 iPc   55 56.40  -0.2
        1.1s    29.45nm          5.3mb
ASH     64.80 306 P     56 03.60   0.5
        1.3s   280.00nm          6.2mb
ILT     66.14  20 iPc   56 10.40  -0.7
        1.3s    22.00nm          5.1mb
SVE     66.29 327 iP    56 12.00  -0.3
        1.5s   140.00nm          5.8mb
      Z  18s     0.70um          4.9Msz
      N  16s     0.30um
      E  16s     0.60um
                  i     56 43.20 127kmX
                  eS    05 00.00
                  e     06 05.00
ARU     67.29 326 iPc   56 18.00  -0.7
        1.5s   120.00nm          5.8mb
      Z  16s     1.00um          5.1MszX
      N  16s     0.50um
      E  16s     0.50um
                  i     56 27.20  29km
                  e     56 40.00
                  eSS   09 25.00
TAB     74.29 306 iP+   57 02.00   0.5
BRW     74.46  19 eP    57 02.38   0.8
GRO     74.52 312 iPd   57 03.00   0.5
        2.0s   360.00nm          6.0mb
      Z  16s     2.00um          5.5MszX
      N  14s     2.50um
      E  18s     1.00um
IMA     75.05  25 eP    57 05.79   0.5
        1.4s    19.18nm          4.9mb
MTA     75.25 310 iPc   57 06.60  -0.1
        1.0s    50.00nm          5.5mb
                  i     57 14.60  26km
                  eS    06 44.60
ERE     75.57 309 iP+   57 09.00   0.2
        1.6s    15.00nm          4.8mb
MJMA    76.29 294 ePc   57 12.20  -0.8
PYA     76.38 313 iPd   57 13.00  -0.1
        1.3s   150.00nm          5.8mb
      Z  16s     1.50um          5.4MszX
                  eS    07 01.00
KIV     76.65 313 iPc   57 14.90   0.1
        1.8s   254.00nm          5.9mb
      Z  15s     0.50um          5.0MszX
                  e     57 23.20  27km
                  e     01 57.70
                  eS    06 53.60
KMSA    77.76 288 iPc   57 19.80  -1.4
AFIF    78.42 292 ePc   57 26.10   1.3
UQSK    78.91 294 iPc   57 28.00   0.5
MOS     78.95 325 iPc   57 27.00   0.0
        1.8s   190.00nm          5.8mb
                  e     57 36.00  29km
                  e     00 22.00
OBN     79.59 324 iPc   57 30.30  -0.2
        1.5s   142.00nm          5.8mb
      Z  16s     0.60um          5.0MszX
                  i     57 39.00  28km
                  eS    07 30.00
PUL     82.25 329 (P)   57 45.00   0.6
        1.4s   100.00nm          5.7mb
      Z  17s     1.50um          5.4MszX
      N  18s     1.30um
      E  18s     0.80um
                  e     57 54.00  28km
                  e     08 04.00
SDF     82.36 337 iP    57 45.40   0.5
INK     82.63  22 eP    57 46.50   0.3
        1.0s     3.00nm          4.3mb X
BHL     83.38 303 P     57 51.00   0.1
                  SKS   58 12.00
KAF     83.66 332 iP    57 51.60   0.0
        1.2s    89.50nm          5.8mb
MBC     83.90  13 eP    57 54.00   1.4
        0.8s     4.00nm          4.7mb
NUR     84.84 331 iP    57 58.00   0.5
        1.1s   111.30nm          6.0mb
MNK     84.99 324 eP    57 56.00  -2.4
CSS     85.06 305 eP    58 00.00   0.7
PPCY    85.87 305 eP    58 04.00   0.7
PTT     87.46 317 eP    58 10.00  -0.8
VRI     87.51 316 ePd   58 12.00   0.9
MLR     88.14 316 Pd    58 15.00   0.8
UPP     88.37 331 iP    58 04.60 -10.2X
UZH     89.62 320 iPc   58 22.00   1.0
                  i     58 29.90  25km
RES     89.64  10 eP    58 21.50   0.8
        1.0s     3.00nm          4.5mb
OJC     90.64 322 eP    58 26.00   0.2
                  e     58 35.50  30km
SPC     90.72 321 eP    58 26.70   0.3
NB2     90.78 334 P     58 25.20  -1.0
        1.2s    15.20nm          5.2mb
VAY     91.69 313 eP    58 28.50  -2.2
SKO     92.29 314 eP    58 33.50   0.0
SRO     92.40 320 iP    58 33.40  -0.5
KSP     92.50 323 ePc   58 34.50   0.2
                  e     58 44.00  30km
ZST     93.02 321 eP    58 36.90   0.2
                  e     11 39.40
BRG     93.85 324 eP    58 40.50   0.0
        1.3s    18.00nm          5.3mb
                  i     58 50.00  30km
PRU     93.87 323 eP    58 40.50  -0.1
                  e     58 50.50  31km
CLL     94.21 325 eP    58 41.00  -1.1
        1.3s    17.00nm          5.3mb
KHC     94.79 322 P     58 45.40   0.4
        1.4s    11.70nm          5.1mb
                  e     58 55.00  30km
                  e     59 44.00
GEC2    94.84 322 ePc   58 43.90  -1.3
        1.4s     6.05nm          4.8mb
                  e     58 55.20  36km
MOX     95.29 324 eP    58 47.80   0.7
        2.1s    55.00nm          5.6mb
                  e     58 57.20  29km
GRF     95.94 324 ePKPd 58 51.30   1.1
                  e     59 00.40  28km
WLF     98.84 325 iPd   59 04.39   1.2
        1.5s     8.60nm          5.1mb
LIC    127.76 288 PKP   04 27.62  -2.4
        1.3s    28.50nm
SDV    153.41  39 ePKP  05 17.00   2.0
MDZ    155.48 149 ePKP  05 18.50   1.4
      S.D. = 0.9  on 118 of 133 obs.
-----------------------------------
?  NOV  25, 1993  21h 47m 06.66± 6.81s
   8.118 S ±64.4km  122.914 E ±22.0km
   DEPTH = 230.3 ± 27.1 km
   4.5mb (  4 obs.)
 FLORES REGION, INDONESIA          (286)

MTN      9.34 121 iPc   49 18.10   0.0
                  eS    50 56.00
KNA      9.50 144 eP    49 19.30  -0.8
                  eS    51 04.60
MBL     13.30 193 eP    50 09.00   0.9
NANU    16.02 206 eP    50 41.40   0.1
        0.4s     5.00nm          4.3mb
ASPA    18.71 147 iPd   51 10.60   0.3
        0.6s    78.00nm          5.4mb
                  i     51 14.50
                  eS    54 37.80
MEEK    18.87 192 eP    51 11.80  -0.1
QIS     20.33 129 iPd   51 27.30   0.6
MRWA    21.98 196 iPd   51 43.20   0.5
        0.3s     5.00nm          4.5mb
COOL    22.71 184 eP    51 50.00   0.2
BAL     23.12 194 eP    51 53.00  -0.7
MUN     24.55 194 eP    52 06.00  -1.0
STK     29.34 146 iPd   52 41.10  -9.1X
        0.5s     6.60nm          4.6mb
      S.D. = 0.7  on  11 of  12 obs.
-----------------------------------
*  NOV  25, 1993  21h 52m 33.03± 2.19s
   33.106 S ± 9.0km   69.744 W ±26.2km
   DEPTH = 124.2 ± 25.3 km
 CHILE-ARGENTINA BORDER REGION     (127)

MDZ      0.78  74 iP    52 53.40  -0.4
                  iS    53 10.60
RTCV     1.61  40 iPc   53 02.50   0.1
                  S     53 26.50
RTCB     1.80  27 ePc   53 04.80   0.0
                  S     53 30.00
CFA      1.96  41 iPd   53 07.10   0.4
                  S     53 34.00
RFA      1.97 148 ePc   53 07.00   0.1
                  S     53 35.50
RTLL     2.07  32 iPc   53 08.70   0.6
                  S     53 36.00
RTRS     2.94   5 iPd   53 19.00  -0.2
                  S     53 55.00
RTPR     3.92  45 eP    53 32.00  -0.5
CYA      5.76  37 ePd   53 54.60  -2.8X
      S.D. = 0.5  on   8 of   9 obs.
-----------------------------------
%  NOV  25, 1993  21h 57m 03.42± 1.11s
   43.023 N ± 8.1km   18.739 E ± 6.8km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)

BRY      0.19 230 iPgd  57 08.18   0.5
                  iSg   57 11.33
NKY      0.28 138 iPgc  57 10.00   0.6
                  iSg   57 14.49
PLE      0.57  57 iPgc  57 14.74  -0.3
                  iSg   57 24.09
HCY      0.60 197 iPgc  57 15.18  -0.4
                  iSg   57 24.30
TTG      0.71 147 iPgc  57 16.82  -0.5
                  iSg   57 27.43
BDV      0.74 175 iPgd  57 17.77  -0.2
                  iSg   57 28.80
PVY      1.00 115 iPgc  57 23.09   0.6
                  iSg   57 37.47
ULC      1.12 160 iPgd  57 24.27  -0.2
                  iSg   57 41.02
      S.D. = 0.6  on   8 of   8 obs.
-----------------------------------
*  NOV  25, 1993  22h 17m 33.62± 0.53s
   22.001 S ±13.2km  169.952 E ±10.1km
   DEPTH =  25.8km  (  4 depth phases)
   5.1mb (  3 obs.)  5.0Msz (  1 obs.)
 LOYALTY ISLANDS REGION            (189)

DZM      3.25 268 iPd   18 23.80  -0.5
                  iS    19 05.50
BKM      4.60 339 iP    18 44.00   0.7
                  iS    19 44.00
HNR     15.77 321 eP    21 20.00   4.3X
BRS     16.50 248 iPc   21 28.00   3.0X
        2.0s     8.00nm          3.5mb X
AFI     19.14  68 eP    21 56.00  -1.8
                  e(S)  25 48.00
CTA     22.20 271 iP    22 36.00   6.3X
                  eS    26 39.00
CNB     22.36 229 eP    22 34.50   3.3X
BWA     22.60 232 eP    22 32.60  -1.0
                  e     22 42.10  35km
CAN     22.62 230 iPc   22 35.50   1.7
                  i     22 41.40  21km
STK     27.06 243 eP    23 05.90 -10.1X
        1.6s     3.60nm
ASPA    33.21 260 eP    24 09.20  -1.6
        0.8s     4.50nm          4.4mb
LEM     61.84 274 ePd   27 53.00  -0.6
BJI     79.49 321 eP    29 43.50   4.0X
KMI     80.29 302 Pc    29 44.00  -0.5
        1.4s    50.00nm          5.3mb
                  pP    29 51.50  24km
                  sP    29 56.50
CHTO    80.40 295 eP    29 45.00   0.1
                  eSg   59 00.90
LZH     85.06 312 eP    30 07.50  -1.2
        1.5s    27.00nm          5.3mb
                  pP    30 15.00  24km
GUN     95.08 298 P     31 00.00   3.7X
RES    112.41  17 ePKP  36 10.00   1.9
APO    137.98 343 ePKP  36 54.60  -2.8X
        0.6s     1.00nm
SPC    143.79 326 ePKP  37 11.00   2.7X
KSP    144.62 331 ePKP  37 05.00  -4.4X
                  i     37 12.40
                  e     37 20.00
BRG    145.62 333 iPKP  37 08.90  -2.2X
        0.8s    42.00nm
SRO    145.65 325 ePKP  37 17.70   6.5X
CLL    145.69 334 ePKP  37 08.00  -3.2X
        1.0s    15.00nm
                  i     37 15.00
PRU    146.02 331 ePKP  37 10.00  -1.8X
        0.9s    16.20nm
                  i     37 16.00
                  e     37 28.10
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ZST   146.03 327 ePKP  37 09.30  -2.5X
EKA   146.32 353 PKP   37 16.00   3.9X
       1.0s    24.00nm
MOX   146.76 335 ePKP  37 12.30  -0.6
SKO   146.96 314 ePKP  37 13.00  -0.5
                  i    37 19.50
KHC   147.07 331 PKP   37 13.00  -0.5
       1.0s    12.90nm
                  e    37 20.00
                  e    37 38.50
GEC2  147.22 331 ePKP  37 13.00  -0.9
       0.8s     2.37nm
                  e    37 16.10
                  e    37 19.60
                  e    37 22.90
                  e    37 26.60
                  e    37 31.90
                  e    37 39.80
                  e    37 48.10
WTS   147.34 341 ePKP  37 21.00   7.2X
       0.7s    14.40nm
GRF   147.66 334 ePKP  37 14.60   0.2
                  e    37 21.40
DCN   148.64 357 ePKP  37 22.50   6.7X
KBA   148.65 329 iPKPc 37 17.00   0.7
       1.2s     9.20nm
                  i    37 22.50
ENN   148.68 340 ePKP  37 23.50   7.5X
       0.7s    10.50nm
MEM   148.80 340 iPKPc 37 16.95   0.8
       0.9s     7.70nm
                  ic   37 23.71
WTTA  149.32 330 iPKPc 37 18.50   1.1
       1.2s    30.10nm
                  i    37 25.20
MOTA  149.51 331 iPKPd 37 19.10   1.5
       0.7s     9.90nm
                  i    37 25.40
SQTA  149.55 331 iPKPc 37 18.70   1.1
       0.7s    11.70nm
                  i    37 24.60
WLF   149.57 339 iPKPc 37 20.33   3.0X
                  i    37 26.09
DOU   149.68 341 PKP   37 19.80   2.3X
                  ic   37 25.80
CDF   150.23 336 ePKP  37 20.70   2.1X
       1.0s    13.20nm
BSF   150.89 336 ePKP  37 22.20   2.6X
       1.0s    13.20nm
HAU   150.91 337 ePKP  37 22.30   2.8X
       0.9s    16.70nm
     Z 25s      0.15um          4.7MszX
FLN   152.23 346 ePKP  37 23.90   2.5X
       0.8s     8.60nm
     Z 23s      0.15um          4.7MszX
LOR   152.40 339 ePKP  37 25.60   3.9X
       1.0s     7.20nm
     Z 21s      0.25um          5.0Msz
SSF   152.70 340 ePKP  37 26.40   4.3X
       1.1s    10.25nm
LPL   152.82 334 ePKP  37 27.30   4.7X
       0.7s     2.55nm
LPG   152.83 334 ePKP  37 28.90   6.2X
       0.9s     5.10nm
LPF   153.04 347 ePKP  37 26.90   4.4X
       1.0s    13.80nm
     S.D. = 1.1  on  21 of  51 obs.
-----------------------------------
%  NOV  25, 1993  23h 41m 00.80± 0.98s
   42.996 N ± 7.8km   18.738 E ± 6.0km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION       (383)

BRY     0.17 236 iPgd  41 04.93   0.2
                iSg    41 07.73
NKY     0.26 134 iPgc  41 06.82   0.4
                iSg    41 11.07
HCY     0.58 198 iPgd  41 12.35  -0.1
                iSg    41 21.22
PLE     0.58  55 iPgd  41 12.61  -0.1
                iSg    41 21.22
TTG     0.68 146 iPgd  41 13.57  -0.8
                iSg    41 24.17
BDV     0.72 175 iPgd  41 15.02   0.1
                iSg    41 25.55
IVA     0.86  98 ePg   41 17.28  -0.2
                iSg    41 30.08
PVY     0.99 113 iPgd  41 20.23   0.5
                iSg    41 35.01
     S.D. = 0.5  on   8 of   8 obs.
-----------------------------------
%  NOV  26, 1993  00h 22m 25.98± 1.18s
   16.634 N ± 8.8km   62.137 W ±11.5km
   DEPTH =   5.0km  (geophysicist)
 LEEWARD ISLANDS                  ( 92)
     ML 2.8 (FDF).

MGH     0.11 318 iPd   22 28.15  -0.3
BPA     0.49  33 eP    22 36.50   0.7
                S      22 42.60
SEG     0.65 111 eP    22 28.10 -10.9X
PAG     0.74 144 eP    22 42.00   1.1
                S      22 56.50
MGG     1.06 132 eP    22 46.09  -0.4
DEG     1.08 107 eP    22 45.63  -1.2
                S      23 00.69
     S.D. = 1.3  on   5 of   6 obs.
-----------------------------------
   NOV  26, 1993  00h 29m 15.46± 1.06s
   38.648 S ± 7.4km  175.607 E ± 6.1km
   DEPTH = 190.5 ±  9.9 km
 NORTH ISLAND, NEW ZEALAND        (159)

MGZ     0.36 189 P     29 41.00  -0.1
NGZ     0.53 181 P     29 41.60  -0.2
CNZ     0.55 185 P     29 41.80  -0.1
DRZ     0.63 183 P     29 42.80   0.1
MOZ     0.65 282 P     29 42.40   0.1
PAHZ    1.15 101 P     29 45.60  -0.1
WAHZ    1.20 151 P     29 46.20   0.1
URZ     1.24  72 P     29 45.40  -0.9
                S      30 04.30
BSZ     1.26 204 P     29 47.20   0.7
MAHZ    1.85 108 P     29 52.80   0.7
NOZ     1.90  90 P     29 53.00   0.4
MNG     1.97 183 P     29 53.50   0.2
                S      30 18.00
PUZ     2.16  75 P     29 54.90  -0.5
                S      30 21.30
HBZ     2.37  65 P     29 58.10   0.5
CAW     2.49 189 P     29 59.00  -0.1
MTW     2.51 182 P     29 58.90  -0.4
DIW     2.51 211 P     29 59.60   0.3
AMW     2.66 178 P     30 00.90  -0.1
MRW     2.67 195 P     30 01.00  -0.1
                S      30 32.60
BLW     2.72 182 P     30 01.40  -0.3
TCW     2.76 201 P     30 02.40   0.2
MOW     2.78 186 P     30 02.10  -0.4
QRZ     3.22 227 P     30 07.60  -0.1
                S      30 46.70
LTZ     4.85 210 P     30 28.40   0.1
     S.D. = 0.4  on  24 of  24 obs.
-----------------------------------
&  NOV  26, 1993  00h 39m 39.04s
   63.554 N          150.915 W
   DEPTH =  12.5km
 CENTRAL ALASKA                   (  1)
     <AEIC>. ML 2.5 (AEIC).

KTH     0.00 252 iP    39 41.27  -0.2
                eS     39 43.49
TRF     0.30 110 iP    39 45.31  -0.2
                eS     39 50.10
HUR     0.82 134 eP    39 54.01  -0.7
BWN     0.89  45 eP    39 57.32   1.4
MCK     0.90  78 eP    39 56.43   0.3
                eS     40 10.04
RND     0.94  98 eP    39 56.36  -0.4
                eS     40 09.11
CUT     1.19 165 eP    40 00.56  -0.4
NEA     1.31  37 eP    40 01.49  -1.5
                eS     40 21.54
MLY     1.49   3 eP    40 05.16  -0.4
                eS     40 26.09
WRH     1.55  52 eP    40 05.52  -0.8
SKT     1.60 190 eP    40 07.19   0.0
                eS     40 27.83
CCB     1.75  50 eP    40 08.10  -1.2
MDM     1.83  39 eP    40 09.52  -1.0
FBA     1.92  44 eP    40 10.77  -1.0
HDA     1.94  62 eP    40 11.52  -0.6
PWA     1.97 165 eP    40 12.81   0.4
                eS     40 38.30
GHO     2.01 152 eP    40 12.58  -0.6
SUA     2.10 178 eP    40 14.13  -0.4
SML     2.12 145 eP    40 14.07  -0.6
PLRM    2.14 156 eP    40 13.92  -0.9
NCG     2.23 196 eP    40 15.45  -1.0
SCM     2.39 135 eP    40 17.86  -0.8
KNK     2.43 151 eP    40 19.39   0.2
                eS     40 51.57
CKL     2.46 196 eP    40 19.44  -0.1
BKG     2.57 195 eP    40 20.99  -0.2
TOA     2.62 122 eP    40 20.53  -1.3
IMA     2.79 336 eP    40 22.50  -1.8
PWL     2.96 155 eP    40 26.54  -0.1
KLU     3.10 130 eP    40 29.17   0.5
       29 obs. associated
-----------------------------------
*  NOV  26, 1993  00h 49m 20.60± 0.76s
   21.853 S ±13.8km  169.938 E ±14.0km
   DEPTH =  33.0km  (normal)
   3.9mb (  3 obs.)
 LOYALTY ISLANDS REGION           (189)

DZM     3.25 266 iPc   50 11.00   0.4
                iS     50 57.70
BKM     4.46 339 iP    50 28.00   0.3
                iS     51 22.00
BWA    22.68 232 eP    54 20.30  -0.2
                i      54 28.50
CAN    22.70 229 eP    54 21.50   0.8
                i      54 30.20
STK    27.12 242 eP    54 53.80  -8.8X
       2.1s     3.50nm          3.6mb
ASPA   33.23 260 eP    56 12.00  15.1X
       1.2s     6.80nm
WB2    33.26 267 eP    55 55.70  -1.5
       0.4s     1.90nm          4.4mb
WRA    33.27 267 P     55 57.30   0.0
       0.6s     0.90nm          3.9mb
KSP   144.48 331 ePKP  08 51.80  -3.2X
BRG   145.49 333 ePKP  08 55.40  -1.3
       1.0s    14.00nm
CLL   145.55 334 iPKPc 08 55.30  -1.5
       1.0s    20.00nm
                i      09 03.80
PRU   145.88 331 ePKP  08 56.00  -1.4
                e      09 05.00
ZST   145.90 327 ePKP  08 57.20  -0.3
SKO   146.85 315 ePKP  09 00.50   1.2
KHC   146.93 331 ePKP  09 00.00   0.8
       1.0s     7.00nm
                e      09 08.50
                e      09 29.50
GEC2  147.09 331 ePKPd 09 00.70   1.2
       1.0s     3.69nm
                e      09 08.70
GRF   147.52 334 ePKP  09 01.60   1.5
MEM   148.65 340 iPKPc 09 05.08   3.3X
DOU   149.54 341 PKP   09 07.00   3.8X
     S.D. = 1.2  on  14 of  19 obs.
-----------------------------------
?  NOV  26, 1993  00h 56m 51.44± 1.13s
   31.392 S ± 7.4km   68.386 W ±12.0km
   DEPTH = 112.1 ± 13.4 km
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTLL    0.09 311 iPd   57 06.90  -0.5
CFA     0.25 150 iPc   57 07.90   0.1
                S      57 16.70
RTCB    0.37 255 iPd   57 07.70  -0.4
RTCV    0.49 195 iPd   57 09.00   0.3
RTRS    1.53 323 iPc   57 19.50   0.4
                S      57 40.00
MDZ     1.54 195 eP    57 19.60   0.3
                iS     57 39.20
RTPR    1.94  57 iPc   57 25.00   0.8
                S      57 50.00
RFA     3.37 181 ePc   57 43.00  -0.3
                S      58 23.50
CYA     3.70  38 ePc   57 47.00  -0.7
     S.D. = 0.6  on   9 of   9 obs.
-----------------------------------
&  NOV  26, 1993  02h 08m 20.00s
   40.238 N          126.843 W
   DEPTH =  23.0km
 OFF COAST OF NORTHERN CALIFORNIA( 34)
     <BRK>. ML 4.0 (BRK), 4.0 (GS).
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26d 02h

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KJJM    1.94  89 P     08 50.00  -2.1
ARC     2.20  72 ePc   08 55.24  -0.6
                eS     09 19.41
FHC     2.25  75 eP    08 53.18  -3.4
KCRM    2.32  84 P     08 56.02  -1.5
KBSM    2.51  96 P     08 58.80  -1.6
KPPM    2.66  87 P     09 02.78   0.2
GNAM    2.69 112 P     09 01.02  -1.7
GCBM    2.70 107 P     09 01.20  -1.7
KHBM    2.80  80 P     09 02.99  -1.5
GGUM    2.93 117 P     09 04.55  -1.6
LGPM    3.13  76 eP    09 05.65  -3.5
GDCM    3.15 117 P     09 07.82  -1.6
GMCM    3.21 115 P     09 08.60  -1.6
WDC     3.30  83 eP    09 09.34  -2.1
GPMM    3.32 113 P     09 10.43  -1.3
FTR     3.33 120 P     09 10.27  -1.6
GMKM    3.38 111 P     09 11.21   0.6
YBH     3.47  63 iPd   09 11.73  -2.1
                eS     09 51.98
NTBM    3.63 122 P     09 14.56  -1.6
NTYM    3.73 118 eP    09 15.28  -2.2
LMPM    3.76  69 P     09 17.71  -0.5
LBFM    3.92  72 eP    09 15.97  -4.4
DBO     3.94  42 P     09 16.38  -4.2
MIN     4.01  87 ePc   09 20.10  -1.5
                eS     10 07.50
LMEM    4.04  84 eP    09 21.18  -0.9
LSLM    4.06  86 P     09 20.94  -1.4
VRC     4.07  57 P     09 20.20  -2.1
BBOR    4.09  48 P     09 18.93  -3.9
LAB     4.13  59 P     09 21.17  -2.3
ORV     4.17  98 ePc   09 22.14  -1.6
                eS     10 12.83
JPRM    4.19 124 P     09 22.04  -2.0
ZSP     4.24 121 iP    09 22.83  -1.9
                iS     10 15.08
BKS     4.29 122 eP    09 21.85  -3.7
                eS     10 13.44
JSBM    4.31 125 P     09 23.52  -2.2
HSO     4.32  39 P     09 20.95  -5.0
RNO     4.34  31 P     09 20.76  -5.4
JEGM    4.37 127 eP    09 24.01  -2.6
LKC     4.48 122 P     09 26.18  -2.1
STAN    4.61 126 iPc   09 27.61  -2.5
                eS     10 22.57
JJRM    4.64 127 P     09 27.96  -2.5
JBMM    4.68 127 P     09 28.17  -3.0
SEC     4.72 127 P     09 28.92  -2.7
JSMM    4.74 128 P     09 29.27  -2.6
CDVM    4.83 122 P     09 31.05  -2.1
LXR     4.86 127 P     09 30.79  -2.7
HBO     4.93  42 P     09 29.97  -4.7
JUCM    4.95 129 P     09 32.18  -2.7
AMC     4.97 127 P     09 32.58  -2.6
MHC     4.99 124 ePc   09 32.90  -2.6
                eS     10 31.22
JHLM    5.01 127 P     09 32.91  -2.9
COE     5.02 125 ePc   09 33.40  -2.4
JTGM    5.04 128 P     09 34.27  -1.8
ARN     5.05 123 ePc   09 33.79  -2.5
HGWM    5.18 127 P     09 35.18  -2.9
HSPM    5.21 125 P     09 35.79  -2.7
CBC     5.23 127 P     09 33.95  -4.9
DIL     5.31 128 P     09 36.88  -3.0
PCL     5.39 124 P     09 38.40  -2.6
HSFM    5.41 128 P     09 39.20  -2.1
SAO     5.47 128 eP    09 38.51  -3.7
CMB     5.48 112 ePd   09 42.44   0.0
                eS     10 48.93
BVYM    5.50 128 P     09 39.50  -3.2
HJSM    5.53 126 P     09 39.97  -3.0
BMSM    5.94 125 P     09 46.45  -2.4
LRC     6.06 129 P     09 47.47  -3.0
PRI     6.36 128 iPd   09 52.11  -2.7
FRI     6.46 118 iP    09 54.22  -1.9
PANM    6.46 132 P     09 53.13  -3.1
MMPM    6.63 111 eP    09 58.86  -0.1
MEMM    6.67 110 (P)   10 00.09   1.0
PHAM    6.72 129 eP    09 56.19  -3.6
VGB     6.90  38 eP    09 58.22  -4.1
BONR    7.02 106 eP    10 03.20  -1.1
BCH     7.36 131 eP    10 04.94  -3.9
LON     7.47  28 eP    10 05.06  -5.2
GSC     9.35 119 eP    10 34.30  -2.2
      76 obs. associated
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   NOV  26, 1993  03h 13m 26.98± 1.30s
   39.024 S ± 7.2km  174.613 E ± 7.0km
   DEPTH = 268.2 ± 12.6 km
 NORTH ISLAND, NEW ZEALAND        (159)

MOZ      0.54  16 P     14 02.10   0.0
NRZ      0.61 239 eP    14 02.50   0.2
CNZ      0.75 104 P     14 02.90  -0.1
NGZ      0.78 102 Pc    14 03.20   0.0
BSZ      0.81 162 P     14 03.40   0.3
WAHZ     1.51 117 P     14 07.40  -0.1
MNG      1.73 157 P     14 08.90  -0.1
                  S     14 35.50
TTH      1.79 107 P     14 10.20   0.7
DIW      1.85 196 P     14 10.10   0.0
PAHZ     1.91  86 P     14 10.70   0.1
URZ      2.10  69 P     14 11.50  -0.6
                  S     14 40.30
CAW      2.11 171 P     14 12.10  -0.2
TCW      2.20 187 P     14 13.40   0.3
MRW      2.21 178 Pc    14 13.10   0.0
                  eS    14 43.20
MTW      2.24 163 P     14 12.90  -0.5
WEL      2.26 177 P     14 13.50  -0.1
QRZ      2.41 221 eP    14 14.60  -0.4
BLW      2.43 165 P     14 15.10  -0.1
MOW      2.44 169 P     14 15.10  -0.3
MAHZ     2.55  95 eP    14 16.80   0.4
NOZ      2.71  82 P     14 18.30   0.4
PUZ      3.01  73 eP    14 20.60  -0.5
THZ      3.03 205 eP    14 21.40   0.0
                  S     14 59.30
HBZ      3.23  65 P     14 23.50   0.1
LTZ      4.15 205 eP    14 34.40   0.5
     S.D. = 0.4  on  25 of  25 obs.
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   NOV  26, 1993  03h 58m 27.42± 1.05s
   13.552 N ± 7.1km   93.669 E ± 6.8km
   DEPTH =  67.1 ± 10.7 km
   4.8mb ( 13 obs.)
 ANDAMAN ISLANDS, INDIA           (703)

KHT      4.93  75 iPg   59 40.70   0.0
                  eSg   00 35.70
BDT      6.32  54 ePg   59 59.50  -0.6
                  eSg   01 08.50
NST      6.60  71 eP    00 04.00   0.0
CHTO     7.28  43 ePnd  00 13.60   0.1
                  eSg   01 33.70
PCT      7.59  81 ePg   00 18.50   0.7
                  eSg   01 39.40
SNG      9.32 132 eP    00 42.00   0.5
IPM     11.50 140 ePc   01 09.00  -2.1
        0.8s    31.30nm         5.3mb
SHL     12.07 352 eP    01 18.50  -0.3
                  iS    03 25.00
KMI     14.34  35 Pc    01 51.00   2.4
        1.0s    50.00nm         4.8mb
      Z  10s     0.80um         4.0MszX
                  pP    01 55.50
HYB     15.07 287 eP    02 02.00   4.0X
        1.0s    65.00nm         4.8mb
                  eS    04 32.00
GBA     15.78 272 P     02 09.20   2.2
        1.1s    26.00nm         4.3mb
                  S     04 49.20
PKI     15.94 332 P     02 07.60  -1.7
GUN     16.03 334 P     02 10.40   0.0
DMN     16.11 332 P     02 11.20  -0.2
KKN     16.18 332 P     02 12.00  -0.3
KOD     16.19 260 eP    02 16.00   3.4X
                  eS    04 58.00
LSA     16.24 352 Pc    02 15.60   2.4
        0.6s    22.00nm         4.5mb
GKN     16.66 331 P     02 16.40  -1.8
GYA     17.70  42 P     02 31.40   0.3
        1.6s    69.00nm         4.6mb
                  S     05 50.00
CD2     19.62  27 iPc   02 52.20  -1.1
        0.6s    96.00nm         5.3mb
                  S     06 32.00
                  sS    06 40.00
POO     19.68 287 iPc   02 55.00   1.0X
                  iS    06 18.00
BOM     20.71 288 eP    02 58.00  -6.6X
                  eS    06 44.00
LZH     24.23  20 P     03 39.50   0.2
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        1.8s   110.00nm         5.0mb
      Z  25s     0.54um         3.9MszX
XAN     24.65  32 P     03 41.80  -1.5
        0.5s    20.00nm         4.8mb
GTA     26.32  11 P     03 59.50   0.6
        1.0s    20.00nm         4.6mb
WMQ     30.60 351 P     04 36.60  -0.6
TIA     30.85  39 eP    04 39.80   0.3
BJI     32.97  33 eP    05 13.50  15.7X
        1.5s    17.00nm
NANU    41.80 149 iPd   06 08.80  -3.3X
        0.3s     4.00nm         4.7mb
ASPA    54.00 133 iPd   07 43.10  -4.0X
        0.7s    19.60nm         5.2mb
OBN     60.37 326 eP    08 20.00 -11.7X
                  e     08 41.00
                  e     08 55.00
VRI     64.36 315 eP    08 58.00  -0.5
MLR     64.86 314 ePc   09 01.20  -0.7
VAY     67.02 309 eP    09 28.70  13.1X
KAF     67.57 332 eP    09 19.00   0.4
SPC     69.04 318 e(P)  09 55.60  27.4X
ZST     71.08 317 eP    10 02.30  21.9X
KSP     71.65 319 eP    09 58.70  14.9X
                  e     10 05.50
PRU     72.77 318 eP    10 05.70  15.3X
        1.1s    15.90nm
                  e     10 13.60
                  Sg    26 20.30
BRG     73.14 319 iP    09 52.00  -0.6
GEC2    73.34 317 eP    09 53.00  -0.9
        0.7s     1.96nm         4.2mb
                  e     10 00.10
                  e     10 03.80
                  e     10 09.30
                  e     10 13.70
                  e     10 16.70
                  e     10 22.40
KHC     73.41 318 eP    10 09.00  14.8X
                  e     10 18.50
                  Sg    26 46.00
CLL     73.72 320 e(P)  09 57.00   1.1
                  e     10 23.00
NB2     74.60 330 P     10 15.20  14.3X
        0.7s     1.70nm
GRF     74.93 318 eP    10 17.20  14.2X
LPG     78.33 314 eP    10 37.80  15.4X
        1.0s    13.80nm
LPL     78.34 314 eP    10 37.90  15.5X
        1.2s    25.60nm
LBF     80.02 316 eP    10 46.20  15.0X
        1.1s    10.00nm
SMF     80.17 316 eP    10 50.00  18.0X
        1.1s    11.50nm
SSF     80.33 316 eP    10 45.70  12.9X
        0.8s     3.35nm
TCF     81.34 315 eP    10 51.70  13.6X
        1.1s     7.55nm
CNCB   162.00 257 PKP   18 24.00   0.6
LPB    162.14 258 ePKP  18 25.00   1.6
LPAZ   162.20 259 PKP   18 23.30  -0.4
     S.D. = 1.2  on  32 of  54 obs.
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*  NOV  26, 1993  04h 38m 37.69± 1.43s
   31.375 S ± 8.6km   68.810 W ±14.1km
   DEPTH = 122.7 ± 14.3 km
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTCB     0.11 175 ePc   38 54.60  -0.5
                  S     39 04.70
RTLL     0.29  81 iPd   38 55.00  -0.5
RTCV     0.54 154 iPc   38 57.00   0.5
CFA      0.54 116 iPd   38 56.60   0.1
                  S     39 08.30
RTRS     1.33 335 iPc   39 04.00   0.4
                  S     39 23.00
MDZ      1.50 181 eP    39 09.00   3.2X
                  iS    39 25.40
RTPR     2.25  62 eP    39 15.50   0.7
                  S     39 42.50
RFA      3.40 175 iPc   39 30.00  -0.1
                  S     40 09.50
CYA      3.92  43 iPd   39 36.50  -0.6
                  S     40 20.50
     S.D. = 0.7  on   8 of   9 obs.
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*  NOV  26, 1993  06h 09m 18.42± 0.85s
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5.796 S ± 6.4km 145.780 E ±12.8km
DEPTH = 10.0km (geophysicist)
3.8mb (1 obs.)
EASTERN NEW GUINEA REG., P.N.G. (207)

YYYY	0.48	157	iPc	09 28.40	0.2
			eS	09 36.00	
MDG	0.54	0	iPc	09 29.40	0.0
LAT	1.49	125	eP	09 45.30	0.1
MNDI	2.14	260	eP	10 02.50	7.6X
PMG	3.84	159	eP	10 18.50	-0.3
WB2	17.92	217	eP	13 29.60	0.1
	0.5s	3.60nm			3.8mb
ASPA	21.13	212	iPc	13 51.10	-14.8X
	0.5s	7.50nm			
			ipP	14 10.30	91kmX

S.D. = 0.3 on 5 of 7 obs.

? NOV 26, 1993 06h 20m 08.24± 3.28s
21.090 S ±19.1km 68.891 W ±35.3km
DEPTH = 130.0km (geophysicist)
CHILE-BOLIVIA BORDER REGION (124)

MOCB	3.04	94	P	20 56.70	0.2
YJA	3.33	109	e(P)	21 00.00	-0.3
HJA	3.86	124	ePd	21 07.10	0.2
CNCB	4.34	12	P	21 15.00	1.0
CCH	4.51	36	eP	21 16.00	-0.1
LPB	4.60	10	eP	21 16.00	-1.3
LPAZ	4.83	9	P	21 21.00	0.3

S.D. = 0.9 on 7 of 7 obs.

% NOV 26, 1993 06h 38m 00.68± 0.68s
26.895 S ± 7.0km 26.701 E ± 7.2km
DEPTH = 5.0km (geophysicist)
REPUBLIC OF SOUTH AFRICA (584)
ML 2.9 (PRE).

BFS	0.08	93	eP	38 02.90	0.3
			S	38 03.40	
KSR	1.04	10	eP	38 20.00	-0.9
			S	38 33.10	
SWZ	1.26	257	eP	38 25.20	0.6
			S	38 42.20	
SEK	1.64	150	eP	38 30.40	0.0
			S	38 48.90	
SLR	1.83	51	eP	38 33.90	0.7
			S	38 55.70	
BOSA	2.06	213	eP	38 37.50	1.2
			S	39 04.20	
BLF	2.25	192	eP	38 38.50	-0.8
			S	39 08.50	
FRS	3.09	203	eP	38 50.00	-1.0
			S	39 25.00	
BFT	3.23	69	eP	39 07.00	13.7X
			S	39 37.00	

S.D. = 1.0 on 8 of 9 obs.

NOV 26, 1993 06h 42m 16.14± 0.69s
42.316 N ± 5.3km 122.091 W ± 6.1km
DEPTH = 5.0km (geophysicist)
OREGON (32)
ML 3.0 (GS).

LHEM	0.69	188	P	42 30.48	0.4
LGMM	0.74	165	P	42 31.34	0.4
LASM	0.81	152	P	42 32.04	-0.5
LMPM	0.83	184	P	42 33.00	0.2
LGBM	0.97	185	P	42 35.50	0.2
LBFM	0.98	171	eP	42 35.39	0.0
			eS	42 48.74	
LBKM	1.30	199	P	42 40.29	-0.5
KSXM	1.41	251	P	42 41.93	-0.7
KOMM	1.45	225	P	42 43.41	0.2
LGPM	1.51	202	eP	42 43.40	-0.6
KSCM	1.54	272	P	42 44.95	0.6
WDC	1.77	191	ePc	42 47.28	-0.3
LMEM	1.82	167	eP	42 49.34	0.8
LHKM	1.98	162	P	42 52.59	1.8
FHC	2.08	224	(P)	42 51.85	-0.2
ORV	2.79	171	(P)	43 02.51	0.1
VGB	3.34	16	eP	43 10.34	0.3
BONR	5.23	145	(P)	43 35.13	-2.1

S.D. = 0.8 on 18 of 18 obs.

% NOV 26, 1993 07h 04m 50.12± 1.08s
37.074 N ±11.4km 5.119 W ±10.3km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
mbLg 2.5 (MDD).

EPRU	0.14	220	eP	04 53.15	-0.3
			e	04 56.60	
EHOR	0.76	352	eP	05 04.44	-0.4
			e	05 15.70	
ELUQ	0.84	54	eP	05 07.42	1.1
			e	05 19.00	
EVAL	1.39	292	eP	05 16.27	0.7
			e	05 35.10	
EBAN	1.52	44	eP	05 16.29	-1.1
			e	05 36.20	

S.D. = 1.3 on 5 of 5 obs.

? NOV 26, 1993 07h 54m 39.18± 6.45s
31.211 S ±24.6km 68.345 W ±44.6km
DEPTH = 105.2 ± 58.0 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.16	222	iPd	54 54.30	-0.1
			S	55 05.00	
CFA	0.40	167	ePc	54 55.30	0.1
			S	55 07.80	
RTCB	0.48	235	iPd	54 55.80	0.1
			S	55 08.00	
RTCV	0.67	194	eP	54 57.00	-0.1
			S	55 11.00	
RTRS	1.41	317	eP	55 05.00	0.0
			S	55 24.00	

S.D. = 0.2 on 5 of 5 obs.

& NOV 26, 1993 07h 57m 54.24s
64.820 N 146.840 W
DEPTH = 8.9km
CENTRAL ALASKA (1)
<AEIC>. ML 2.9 (AEIC), 2.9 (PMR). Felt at Fairbanks and Two Rivers.

GLM	0.29	306	iP	57 59.84	-0.4
			eS	58 04.07	
FBA	0.42	282	ePc	58 02.08	-0.6
HDA	0.42	187	iP	58 02.18	-0.6
CCB	0.45	248	eP	58 02.86	-0.5
MDM	0.61	284	eP	58 05.74	-0.8
			S	58 14.76	
WRH	0.64	238	eP	58 06.49	-0.6
			S	58 16.30	
DJE	0.94	147	eP	58 11.52	-0.8
			eS	58 25.77	
NEA	0.99	257	eP	58 12.90	-0.2
			eS	58 27.20	
DDM	1.12	157	eP	58 15.32	-0.1
BWN	1.31	241	eP	58 17.68	-0.9
			eS	58 35.02	
MCK	1.42	221	eP	58 20.66	0.3
			eS	58 40.34	
THY	1.49	161	eP	58 21.79	0.6
			S	58 40.86	
RND	1.67	213	eP	58 24.11	0.2
MLY	1.67	279	eP	58 23.22	-0.7
			eS	58 47.76	
DOT	1.69	133	eP	58 22.91	-1.2
			eS	58 46.74	
FYU	1.88	20	eP	58 26.72	0.0
			eS	58 51.63	
PAX	1.95	161	eP	58 27.73	-0.3
			eS	58 52.88	
TRF	2.04	229	eP	58 31.24	1.9
KTH	2.19	236	eP	58 32.19	0.7
TMW	2.26	130	eP	58 31.20	-1.2
SDG	2.37	165	eP	58 35.37	1.4
TOA	2.74	173	eP	58 39.70	0.4
SCM	3.01	184	eP	58 43.38	0.4
SML	3.10	193	eP	58 44.37	0.1
IMA	3.12	297	eP	58 44.27	-0.3
KLU	3.37	172	eP	58 49.73	1.6
PMR	3.40	199	eP	58 49.12	0.6
PWA	3.47	205	eP	58 53.10	3.7
SKT	3.55	219	eP	58 50.27	-0.3
TTA	4.48	249	(P)	59 03.92	0.1
SLKM	4.60	201	(P)	59 05.45	-0.1

31 obs. associated

NOV 26, 1993 08h 47m 23.37± 0.37s
49.143 N ± 3.5km 6.855 E ± 4.5km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
ML 2.9 (STR), 2.4 (UCC).

LANF	0.65	104	Pg	47 35.63	-0.7
WLF	0.70	319	iPd	47 36.78	-0.3
			iS	47 46.48	
HOFF	0.76	105	Pg	47 38.62	0.5
CDF	0.78	159	Pg	47 37.98	-0.7
			Sg	47 48.93	
WLS	0.80	156	Pg	47 38.29	-0.7
ECH	0.95	168	Pg	47 41.80	0.3
			Sg	47 53.80	
VITF	1.09	212	Pg	47 43.72	-0.2
MOF	1.31	172	Pg	47 47.91	0.3
			Sg	48 05.61	
BSF	1.31	182	Pg	47 48.07	0.3
			Sg	48 06.13	
FEL	1.48	148	Pg	47 51.20	1.0
TNS	1.50	43	ePnd	47 51.60	1.3
			ePbd	47 52.60	
			eSn	48 09.30	
			iSg	48 10.70	
MEM	1.57	340	iPc	47 51.06	-0.2
			iS	48 10.65	
ENN	1.73	340	ePn	47 53.00	-0.7
	0.5s	12.80nm			
			iPg	47 55.50	
			eSg	48 19.00	
DOU	1.75	304	iPc	47 53.70	-0.3
			i	47 56.00	
			iS	48 15.00	
LOMF	1.79	181	Pg	47 57.44	2.8X
SNF	2.16	310	iP	48 00.60	0.8
KHC	4.41	88	ePg	49 20.50	48.6X
			eSg	49 47.50	
GEC2	4.52	91	Pn	48 32.60	-0.8
			Sn	49 21.80	

S.D. = 0.7 on 16 of 18 obs.

NOV 26, 1993 09h 03m 49.69± 0.43s
12.373 N ± 7.0km 86.529 W ± 7.5km
DEPTH = 148.5km (2 depth phases)
4.7mb (12 obs.)
NICARAGUA (75)

TPX	6.11	295	(P)	05 19.00	0.1
ACX	13.65	291	(P)	07 00.00	1.6
OXF	22.19	354	eP	08 35.33	0.9
	0.9s	105.53nm			5.3mb
MYNC	22.71	5	ePc	08 42.23	2.8X
	0.6s	16.05nm			4.6mb
LTX	23.21	319	ePd	08 43.58	-0.9
CEH	24.36	15	eP	08 57.08	1.8
	0.6s	79.67nm			5.4mb
MEO	24.85	336	iPc	08 59.50	-0.4
TUL	24.88	342	iPc	08 59.50	-0.7
WMOK	24.89	335	ePd	08 59.70	-0.6
	0.8s	44.50nm			5.0mb
ACO	26.75	337	iPc	09 16.50	-0.8
MCWV	27.81	11	ePc	09 27.86	1.0
	0.5s	22.73nm			5.1mb
ALQ	28.83	325	eP	09 35.91	-0.4
	0.5s	4.36nm			4.4mb
YSNY	30.79	12	ePc	09 53.68	0.4
PV08	32.68	327	eP	10 09.86	-0.3
PV10	32.75	326	eP	10 09.86	-0.8
PV09	32.89	326	eP	10 11.63	-0.3
RSNY	33.67	16	eP	10 18.90	0.6
	1.0s	52.21nm			5.2mb
LPAZ	33.79	147	P	10 19.40	-0.9
LPB	34.01	147	eP	10 25.00	3.1X
SRU	34.08	326	ePc	10 21.75	-0.3
CNCB	34.31	147	P	10 25.00	0.4
GAC	34.52	14	eP	10 26.00	0.5
MSU	34.61	323	ePc	10 26.81	0.2
EMUT	34.74	326	eP	10 27.88	0.2
ARUT	34.90	321	eP	10 29.58	0.6
RSSD	35.03	338	eP	10 30.68	0.5
BONR	38.09	318	eP	10 56.83	0.8
LMN	38.12	25	eP	10 57.00	1.2
ULM	38.54	350	ePc	11 00.50	1.3
KVN	38.58	319	eP	11 00.05	0.2
LRM	39.94	332	ePc	11 11.10	0.0
			e	11 47.80	168kmX
YJA	40.05	149	ePc	11 13.00	0.6

26d 09h

```
JAQ     42.21  10 eP    11 28.00  -1.3
FRB     52.84  10 eP    12 50.00  -1.7
        1.0s     7.00nm          4.4mb
YKA     53.93 344 eP    12 57.00  -2.7X
        0.8s     2.40nm          4.1mb
RES     62.47 357 eP    13 57.00  -1.9
                  pP    14 33.00 151km
INK     63.55 342 eP    14 04.50  -1.6
        1.0s     3.00nm          4.2mb
                  pP    14 39.50 146km
TTA     69.76 333 eP    14 42.56  -2.8X
        1.8s    26.50nm          4.8mb
EKA     76.16  36 P     15 22.00  -0.8
        1.0s     6.60nm          4.3mb
CNB    124.79 236 iPKPd 22 33.70  -0.1
        0.7s    18.00nm
STK    131.82 238 ePKP  22 36.80 -10.5X
        0.5s     7.70nm
ASPA   140.08 248 iPKPc 22 54.90  -8.1X
        0.7s    11.30nm
WB2    140.10 254 ePKP  22 53.70  -9.4X
        0.5s     9.00nm
                   i    23 02.90
WRA    140.11 254 PKP   22 54.50  -8.6X
        0.7s     3.50nm
KNA    145.62 260 ePKP  23 13.30   0.6
GBA    149.69  32 PKP   23 08.00 -11.2X
                   S    23 32.00
MBL    153.32 247 iPKPc 23 31.70   7.3X
        0.3s    12.00nm
     S.D. = 0.9  on  37 of  47 obs.
-----------------------------------
%  NOV  26, 1993  09h 55m 52.68± 0.82s
   40.667 N ± 6.6km   22.946 E ± 7.8km
   DEPTH =   5.0km  (geophysicist)
 GREECE                              (364)
      ML 1.6 (THE).

THE      0.04 157 ePg   55 53.08  -0.9
                  eSg   55 54.88
SOH      0.35  63 ePg   55 59.94   0.3
                  eSg   56 05.05
KNT      0.50 356 ePg   56 01.74  -0.9
                  eSg   56 09.56
GRG      0.50 305 ePg   56 03.48   0.7
                  eSg   56 09.84
OUR      0.86 112 ePg   56 10.12   0.5
PAIG     0.93 143 ePg   56 11.16   0.3
                  eSg   56 24.24
     S.D. = 0.9  on   6 of   6 obs.
-----------------------------------
   NOV  26, 1993  09h 58m 01.41± 0.74s
   43.032 N ±12.6km    0.188 W ± 4.5km
   DEPTH =  10.0km  (geophysicist)
 PYRENEES                            (378)
      ML 2.5 (LDG).

JAU      0.13 273 Pg    58 05.16   0.4
                  Sg    58 07.76
OGE      0.25 303 Pg    58 06.90   0.2
ESCF     0.29 279 Pg    58 07.37  -0.1
                  Sg    58 11.75
LHE      0.34 250 Pg    58 08.52   0.0
ATE      0.38 278 Pg    58 08.97  -0.2
                  Sg    58 14.89
EPF      0.39  90 Pg    58 09.30  -0.1
                  Sg    58 15.00
ISSF     0.45 270 Pn    58 10.43  -0.1
                  Pg    58 10.60
                  Sg    58 17.06
MADF     0.48 284 Pg    58 10.93  -0.2
                  Sg    58 18.23
LPO      1.93  31 Pg    58 37.80   3.3X
                  Sg    59 03.00
LFF      2.02  19 Pg    58 39.60   3.7X
                  Sg    59 05.20
CAF      2.50  40 Pg    58 48.30   5.6X
                  Sg    59 19.30
RJF      2.58  28 Pg    58 49.70   5.8X
                  Sg    59 22.30
     S.D. = 0.2  on   8 of  12 obs.
-----------------------------------
   NOV  26, 1993  10h 53m 36.62± 0.84s
    2.199 N ± 3.4km  126.959 E ± 5.4km
   DEPTH =  70.3 ±  8.9 km
   5.0mb ( 20 obs.)
 NORTHERN MOLUCCA SEA                (266)

DAV      5.05 344 ePc+  54 52.00   0.5
CTB      5.68 331 ePd   55 04.00   3.7X
                  iS    56 12.00
BIP      6.03 353 iPc   55 05.50   0.3
                  iS    56 08.50
MAP      8.60 340 ePc   55 40.00  -0.7
PLP      9.12 348 ePd   55 48.20   0.3
TSM      9.31 283 ePd   55 51.80   1.4
TLE      9.70 143 ePc   55 57.50   1.7
KKM     11.37 290 ePc   56 22.80   4.2X
        0.8s    71.90nm          5.7mb X
GQP     12.46 339 eP    56 36.00   3.2X
BAG     15.45 336 ePd   57 11.00  -1.1
MTN     15.51 165 eP    57 10.50  -2.1
WWKK    17.63 109 eP    57 40.50   1.3
KNA     17.92 174 iPd   57 41.50  -1.3
        1.0s   274.00nm          5.4mb
GUMO    21.02  56 eP    58 15.00  -1.6
GUA     21.03  57 eP    58 16.00  -0.8
LEM     21.29 245 ePd   58 19.50   0.0
WB2     23.17 162 iPd   58 37.50  -0.4
        0.4s   119.40nm          5.7mb
                  eS    02 43.70
MBL     24.24 196 eP    58 48.50   0.2
QIS     25.79 152 iPc   59 02.70  -0.2
IPM     25.99 276 ePc   59 06.00   1.1
ASPA    26.58 166 iPc   59 09.00  -1.2
        0.7s    19.30nm          4.8mb
      Z  21s     0.20um          3.6Msz
                  eS    03 52.30
WARB    28.22 181 eP    59 25.50   0.6
SSE     29.25 350 eP    59 38.50   4.3X
MEEK    29.78 195 iPc   59 38.40  -0.6
        0.9s    96.00nm          5.5mb
CHTO    32.02 303 ePc   59 58.20  -0.6
        1.0s    15.00nm          4.8mb
TKSJ    32.31  11 P     00 01.40   0.4
KMI     32.63 316 Pd    00 04.50   0.3
        1.0s    30.00nm          5.1mb
FORT    32.81 178 eP    00 04.50  -0.9
WKYJ    32.86  13 P     00 06.20   0.3
YONJ    33.37  10 P     00 11.00   0.7
BAL     34.06 196 eP    00 14.00  -2.3
TSRJ    34.21  13 eP    00 16.20  -1.3
IIDJ    34.64  16 eP    00 20.80  -0.5
KLB     34.72 194 eP    00 22.00   0.0
TIA     35.05 346 eP    00 25.00   0.3
        1.2s    41.00nm          5.2mb
CHJJ    35.48  17 P     00 26.70  -1.7
MUN     35.49 196 eP    00 29.00   0.5
MTMJ    35.65  15 P     00 29.90  -0.1
MAT     35.72  16 eP    00 29.00  -1.4
        0.8s    13.43nm          4.9mb
XAN     35.88 334 P     00 30.90  -0.9
        1.0s    10.00nm          4.7mb
NIIJ    36.59  16 eP    00 37.20  -0.5
STK     36.63 159 iPc   00 27.90 -10.2X
        0.7s    66.70nm
                  iPP   01 49.50
                  eS    06 03.30
RKG     37.75 193 iPd   00 48.80   1.3
TIY     37.78 341 eP    00 47.40  -0.4
      Z  30s     0.94um          4.4MszX
BRS     38.52 142 iPc   00 50.00  -4.1X
        1.0s    19.00nm          5.0mb
ADE     38.58 164 eP    00 55.00   0.5
BJI     38.92 347 eP    00 58.00   0.8
        1.1s    22.00nm          5.0mb
SNY     39.57 356 eP    01 04.70   2.2
LZH     39.93 330 eP    01 05.20  -0.6
        1.5s    37.00nm          5.1mb
      Z  25s     0.43um          4.2MszX
                  sP    01 27.00
ARMA    40.07 146 iPd   01 07.20   0.2
        0.8s    86.00nm          5.7mb
HHC     40.91 342 Pc    01 14.40   0.6
        1.2s    13.00nm          4.6mb
SHL     40.97 308 iP    01 14.50  -0.1
CN2     41.45 358 eP    01 22.00   4.1X
        0.8s     3.50nm          4.2mb
BWA     41.64 153 iPc   01 21.60   1.9
                  epP   01 27.00  18kmX
MDJ     42.30   3 eP    01 26.50   1.6
        1.0s    19.00nm          4.9mb
CAN     42.65 153 iPc   01 28.80   0.8
                  epP   01 34.40  19kmX
CNB     42.81 153 eP    01 30.20   0.9

        1.0s    29.00nm          5.0mb
LSA     43.62 312 Pc    01 37.40   0.9
        0.6s     7.00nm          4.6mb
GUN     46.81 307 P     02 01.60  -0.2
PKI     47.05 306 P     02 02.60  -1.0
KKN     47.24 307 P     02 05.00   0.0
        0.6s    17.00nm          5.2mb
DMN     47.31 306 P     02 05.60   0.0
GKN     47.85 307 P     02 09.30  -0.4
HYB     49.86 291 eP    02 25.00  -0.2
GBA     50.24 286 P     02 26.00  -2.0
NDI     54.16 304 eP    02 59.00   1.9
IMA     83.68  24 eP    06 00.03   1.2
        0.7s     3.97nm          4.5mb
SLKM    84.55  30 (P)   06 04.14   1.0
RTRS   148.12 152 ePKP  13 18.50   5.4X
CNCB   159.34 136 ePKP  13 34.00   4.4X
LPB    159.45 135 ePKP  13 32.00   2.5X
LPAZ   159.59 134 PKP   13 33.40   3.4X
     S.D. = 1.1  on  61 of  72 obs.
-----------------------------------
%  NOV  26, 1993  11h 27m 16.49± 0.78s
   40.815 N ± 6.3km   22.979 E ± 5.8km
   DEPTH =   5.0km  (geophysicist)
 GREECE                              (364)
      ML 1.6 (THE).

THE      0.18 183 ePg   27 20.20   0.0
                  eSg   27 23.56
SOH      0.28  88 ePg   27 22.60   0.3
KNT      0.35 350 ePg   27 23.82   0.2
                  eSg   27 27.92
GRG      0.46 288 ePg   27 25.64  -0.1
                  eSg   27 31.36
SRS      0.55  57 ePg   27 27.12  -0.5
     S.D. = 0.4  on   5 of   5 obs.
-----------------------------------
?  NOV  26, 1993  11h 34m 29.33± 1.93s
   40.865 N ± 9.2km   27.612 E ±19.4km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                              (366)
      ML 3.0 (ISK).

CTT      0.68  65 iPg   34 42.90   0.1
                  iSg   34 52.90
DMK      0.96   6 iPg   34 47.60   0.0
                  eSg   35 01.60
DST      1.48 148 ePn   34 56.10   0.1
IZI      1.51 110 iPn   34 56.40  -0.1
     S.D. = 0.2  on   4 of   4 obs.
-----------------------------------
   NOV  26, 1993  11h 56m 40.84± 0.50s
   39.786 N ± 5.9km   20.742 E ± 3.8km
   DEPTH =  10.0km  (geophysicist)
 GREECE-ALBANIA BORDER REGION        (392)
      ML 2.6 (THE).

LSK      0.38 343 iPgc  56 49.00   0.3
IGT      0.40 231 ePg   56 48.94  -0.2
                  eSg   56 55.38
SRN      0.58 280 ePg   56 52.60   0.1
TPE      0.76 312 ePg   56 55.50  -0.1
FNA      1.11  26 ePg   56 58.33  -3.4X
                  eSg   57 16.98
LIT      1.38  76 ePb   57 06.78   0.6
                  eSb   57 25.10
AGG      1.45 121 ePb   57 07.10   0.0
                  eSb   57 28.42
GRG      1.73  47 ePb   57 11.34   0.3
                  eSb   57 34.10
THE      1.90  63 ePb   57 14.50   0.9
                  eSb   57 40.22
KNT      2.14  49 ePn   57 16.10  -1.0
                  eSn   57 46.30
PAIG     2.27  85 ePn   57 19.06   0.2
OUR      2.55  77 ePn   57 22.62  -0.2
                  eSn   57 56.70
SRS      2.55  58 ePn   57 21.86  -1.1
                  eSn   57 54.26
     S.D. = 0.6  on  12 of  13 obs.
-----------------------------------
*  NOV  26, 1993  12h 08m 05.55± 2.62s
    8.765 S ±11.6km  123.953 E ± 9.2km
   DEPTH =  35.5 ± 27.5 km
   5.0mb (  6 obs.)
 FLORES REGION, INDONESIA            (286)
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```
MTN      8.13 121 iPd   10 05.20   1.0
                  eS    11 26.00
KNA      8.38 146 iPd   10 06.50  -1.2
       0.2s    60.00nm          6.3mb X
                  iS    11 32.30
MBL     12.95 197 eP    11 09.50  -0.3
                  eS    13 27.20
WB2     14.99 139 eP    11 32.80  -3.9X
                  eS    14 06.60
NANU    15.93 210 eP    11 50.50   1.8
       0.3s     4.00nm          4.1mb
                  eS    14 34.00
WARB    17.51 172 eP    12 09.00   0.2
                  eS    15 06.00
ASPA    17.61 148 iPd   12 08.00  -2.1
       0.5s    28.10nm          4.6mb
                  eS    15 07.60
MEEK    18.48 195 eP    12 20.50  -0.3
                  eS    15 33.00
QIS     19.13 130 iPc   12 28.00  -0.6
                  eS    15 46.40
BAL     22.76 196 iPc   13 05.40  -0.6
CTA     24.32 120 iP    13 23.00   1.7
STK     28.24 147 eP    13 46.90 -10.6X
       0.8s     1.60nm
                  eS    19 03.60
ARMA    33.65 134 iPc   14 45.50   0.1
       0.7s     7.00nm          4.7mb
GUN     51.82 316 P     17 12.90   0.0
       0.6s    26.00nm          5.4mb
PKI     51.93 315 P     17 13.60  -0.2
       0.5s    24.00nm          5.4mb
KKN     52.16 315 P     17 15.20  -0.1
DMN     52.17 315 P     17 15.40  -0.1
GKN     52.74 315 P     17 18.80  -0.8
       0.5s    17.00nm          5.3mb
CNCB   151.98 155 PKP   28 00.70   7.3X
LPAZ   152.38 154 PKP   28 00.50   6.4X
     S.D. = 1.1  on  16 of  20 obs.
-----------------------------------
&  NOV  26, 1993  12h 18m 55.78s
   60.375 N          141.202 W
   DEPTH =   9.3km
 SOUTHEASTERN ALASKA                ( 19)
      <AEIC>. ML 2.6 (AEIC).

YAH      0.27 268 eP    19 01.71   0.2
                  eS    19 06.29
WRG      0.53 231 eP    19 10.76   4.2
CTGM     0.60 354 eP    19 07.60  -0.2
                  eS    19 16.58
CYK      0.70 246 eP    19 08.64  -1.1
                  eS    19 19.12
WAX      0.82 276 eP    19 10.69  -1.1
                  eS    19 22.86
BALM     0.87 320 eP    19 11.39  -1.3
                  eS    19 24.30
HMT      1.52 270 eP    19 21.97  -1.2
                  eS    19 42.80
GLB      1.66 311 eP    19 23.74  -1.5
RAGM     1.73 272 eP    19 25.01  -1.1
SGAM     1.99 275 eP    19 28.48  -1.4
CVA      2.26 276 eP    19 31.37  -2.4
KLU      2.56 298 eP    19 37.82  -0.4
       12 obs. associated
-----------------------------------
*  NOV  26, 1993  12h 23m 26.23± 1.56s
   32.482 S ± 7.2km    71.663 W ±13.5km
   DEPTH =  10.0km  (geophysicist)
 NEAR COAST OF CENTRAL CHILE        (135)
      MD 4.0 (SAN).

ROCH     0.74 132 iPd   23 41.25   0.4
                  iS    23 55.91
JACH     0.93 103 iP+   23 43.59  -0.4
                  iS    23 59.92
LCCH     0.99 176 iPd   23 44.73  -0.3
                  iS    24 00.68
PEL      1.06 129 iP+   23 46.39   0.2
                  iS    24 04.68
TACH     1.32 153 iPd   23 50.53  -0.1
                  iS    24 12.46
FCH      1.43 127 iP+   23 51.93  -0.6
                  iS    24 15.02
LNV      1.48 172 (P)   23 51.06  -1.9X
                  iS    24 16.00
PCH      1.49 140 iP+   23 53.36   0.2
                  iS    24 17.27
CACH     1.86 152 iPd   23 58.88   0.4
RTRS     2.98  40 eP    24 14.45   0.1
                  S     24 52.50
     S.D. = 0.4  on   9 of  10 obs.
-----------------------------------
*  NOV  26, 1993  12h 45m 42.73± 1.30s
   41.815 N ±12.4km    22.266 E ± 7.9km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION         (383)
      ML 2.3 (THE), 2.1 (SKO).

VAY      0.54 155 iPg   45 53.00  -0.7
       0.4s   170.00nm
                  iSg   45 58.60
SKO      0.64 285 ePg   45 55.00  -0.5
                  eSg   46 04.00
KNT      0.81 144 ePgd  45 58.17  -0.2
                  eSg   46 06.26
GRG      0.86 173 ePgc  45 58.62  -0.8
                  eSg   46 06.42
SRS      1.22 125 ePg   46 05.78   0.4
                  eSg   46 19.38
FNA      1.23 213 ePg   46 06.74   1.1
                  eSg   46 21.66
SOH      1.29 140 ePg   46 06.38  -0.2
                  eSg   46 20.50
OUR      1.97 138 ePb   46 17.38   0.9
                  eSb   46 40.10
     S.D. = 0.9  on   8 of   8 obs.
-----------------------------------
   NOV  26, 1993  12h 58m 13.67± 1.19s
   38.035 S ± 7.2km  176.178 E ± 6.0km
   DEPTH = 223.4 ± 11.2 km
 NORTH ISLAND, NEW ZEALAND          (159)

UTU      0.14 176 P     58 42.10  -0.7
TAZ      0.33 127 P     58 42.40  -0.6
PATZ     0.35 170 P     58 42.60  -0.7
URZ      0.77 107 P     58 43.50  -1.3
                  S     59 01.10
PAHZ     1.07 140 P     58 46.20  -0.4
MGZ      1.09 207 P     58 46.90   0.1
MOZ      1.18 246 P     58 47.80   0.5
CNZ      1.26 203 P     58 48.10   0.0
KUZ      1.34 344 P     58 49.10   0.7
                  eS    59 12.70
NOZ      1.57 112 P     58 50.90   0.5
TTH      1.59 162 P     58 51.00   0.5
PUZ      1.64  92 P     58 50.60  -0.4
                  S     59 14.40
WAHZ     1.67 175 P     58 51.50   0.2
HBZ      1.74  76 P     58 52.30   0.5
MAHZ     1.76 131 P     58 52.70   0.6
BSZ      2.01 209 P     58 55.20   0.8
TEHZ     2.01 166 P     58 54.80   0.4
PGZ      2.58 178 P     59 00.70   0.4
MNG      2.64 192 P     59 01.20   0.3
                  S     59 32.10
KIW      2.99 199 P     59 04.70  -0.1
MTW      3.16 189 P     59 06.60  -0.2
CAW      3.19 195 P     59 07.10   0.0
DIW      3.27 212 P     59 08.40   0.3
AMW      3.29 185 P     59 08.30   0.1
BLW      3.37 189 P     59 09.10  -0.2
MRW      3.39 199 P     59 09.40  -0.1
                  S     59 48.50
WEL      3.42 198 P     59 09.90   0.0
MOW      3.46 192 P     59 10.00  -0.3
TCW      3.50 204 P     59 10.80   0.1
QRZ      3.97 224 eP    59 16.50   0.1
                  eS    00 02.90
LTZ      5.60 211 eP    59 36.80  -0.1
MQZ      6.26 204 eP    59 43.90  -1.3
                  eS    00 50.50
     S.D. = 0.6  on  32 of  32 obs.
-----------------------------------
   NOV  26, 1993  13h 02m 34.24± 0.63s
   41.209 N ± 5.5km    21.990 E ± 4.4km
   DEPTH =   5.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION         (383)
      ML 2.1 (THE), 1.8 (SKO).

GRG      0.40 129 ePgc  02 42.16  -0.1
                  eSg   02 48.12
VAY      0.45  75 iPg   02 43.40   0.1
       0.3s    40.00nm
                  iSg   02 50.70
FNA      0.63 228 ePg   02 46.52  -0.3
                  eSg   02 53.56
KNT      0.69  94 ePg   02 47.68  -0.3
                  eSg   02 57.68
SKO      0.87 332 ePg   02 51.50   0.1
                  iSg   03 04.80
THE      0.94 128 ePg   02 52.28  -0.3
                  eSg   03 05.88
SOH      1.10 110 ePg   02 55.44   0.0
                  eSg   03 09.40
LIT      1.17 161 ePb   02 57.28   0.7
                  eSb   03 14.04
SRS      1.21  94 ePb   02 57.36   0.1
                  eSb   03 14.16
     S.D. = 0.4  on   9 of   9 obs.
-----------------------------------
*  NOV  26, 1993  13h 26m 52.65± 1.69s
   32.517 S ± 7.0km    71.675 W ±15.2km
   DEPTH =  27.5 ±  5.7 km
 NEAR COAST OF CENTRAL CHILE        (135)
      MD 4.0 (SAN).

ROCH     0.72 129 iPd   27 06.36  -0.4
                  iS    27 20.85
JACH     0.93 101 iP+   27 08.71  -1.2
                  iS    27 24.72
LCCH     0.96 175 iPd   27 09.87  -0.4
                  iS    27 25.60
PEL      1.04 127 iP+   27 11.45   0.0
                  iS    27 28.97
TACH     1.29 152 iPd   27 15.61   0.6
                  iS    27 37.17
FCH      1.42 125 iP+   27 17.06   0.0
                  iS    27 39.66
LNV      1.45 171 iPd   27 16.16  -1.1
                  iS    27 39.81
PCH      1.47 139 iP    27 18.53   0.9
CACH     1.83 151 iPd   27 24.10   1.2
                  iS    27 53.54
MDZ      2.41  99 eP    27 35.00   3.9X
                  eS    28 10.50
RTCB     2.65  68 e(P)  27 35.20   0.6
RTCV     2.74  77 eP    27 36.50   0.7
RTLL     2.97  67 e(P)  27 39.20   0.1
RTRS     3.01  40 eP    27 39.50   0.0
                  S     28 20.00
CFA      3.05  74 e(P)  27 40.00  -0.3
MRA      5.04  90 ePd   28 07.50  -0.9
     S.D. = 0.8  on  15 of  16 obs.
-----------------------------------
*  NOV  26, 1993  13h 30m 37.75± 0.81s
   33.036 S ± 7.7km    68.088 W ± 9.7km
   DEPTH =  60.0km  (geophysicist)
 MENDOZA PROVINCE, ARGENTINA        (139)

MDZ      0.66 283 eP    30 52.30   0.6
RTCV     1.23 342 eP    30 57.00  -2.1X
                  S     31 14.50
CFA      1.43 355 e(P)  31 01.00  -0.9
                  S     31 20.00
RTCB     1.66 338 ePc   31 05.30   0.2
RTLL     1.73 349 ePc   31 06.00   0.0
                  S     31 30.10
RFA      1.76 190 e(P)  31 06.00  -0.4
                  S     31 30.50
MRA      2.10  73 iPc   31 11.60   0.5
                  S     31 38.30
RTPR     3.04  27 eP    31 29.00   4.6X
                  S     32 09.00
     S.D. = 0.7  on   6 of   8 obs.
-----------------------------------
%  NOV  26, 1993  14h 18m 54.11± 0.55s
   42.389 N ± 4.9km    18.940 E ± 4.5km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION         (383)

BDV      0.13 218 iPgc  18 57.82   0.5
                  iSg   19 00.46
TTG      0.24  80 iPgd  18 59.73   0.5
                  iSg   19 04.21
HCY      0.33 280 iPgd  19 00.85  -0.1
                  iSg   19 06.15
NKY      0.43   6 iPgc  19 02.59  -0.2
                  iSg   19 09.94
ULC      0.48 151 iPgc  19 03.41  -0.5
                  iSg   19 10.46
```

26d 14h

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BRY      0.59 330 iPgd  19 06.14   0.0
                  iSg   19 15.20
PVY      0.79  75 iPgc  19 09.49  -0.1
                  iSg   19 21.79
IVA      0.86  55 iPgd  19 10.71   0.0
                  iSg   19 23.62
     S.D. = 0.4  on   8 of   8 obs.
-----------------------------------
   NOV  26, 1993  14h 26m 28.69± 0.66s
   41.199 N ± 5.7km   21.993 E ± 4.6km
   DEPTH =   5.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION       (383)
      ML 2.2 (THE), 1.9 (SKO).

GRG      0.39 128 ePgc  26 36.98   0.4
                  eSg   26 42.02
VAY      0.45  74 iPg   26 38.40   0.6
       0.2s    80.00nm
                  iSg   26 45.70
FNA      0.62 229 ePgc  26 41.10  -0.1
                  eSg   26 48.50
KNT      0.68  93 ePgc  26 42.53   0.1
                  eSg   26 52.10
SKO      0.88 332 ePg   26 46.00   0.0
                  iSg   26 57.70
THE      0.93 127 ePg   26 46.58  -0.3
                  eSg   26 59.02
SOH      1.10 110 ePg   26 48.78  -1.0
                  eSg   27 06.02
LIT      1.16 161 ePg   26 50.94   0.1
                  eSg   27 07.66
SRS      1.21  93 ePb   26 51.06  -0.6
                  eSb   27 08.86
OUR      1.74 119 ePb   27 01.26   1.6X
PAIG     1.81 134 ePb   27 01.50   0.8
                  eSb   27 26.58
IGT      2.09 218 ePn   27 06.37   1.5X
     S.D. = 0.6  on  10 of  12 obs.
-----------------------------------
*  NOV  26, 1993  15h 16m 51.91± 1.06s
   6.396 S ±15.6km  148.977 E ±11.7km
   DEPTH =  68.7 ± 19.9 km
   4.5mb (  2 obs.)
 NEW BRITAIN REGION, P.N.G.       (192)

LAT      1.98 262 eP    17 23.80   0.0
YYYY     2.99 273 eP    17 23.00 -15.2X
MDG      3.38 290 eP    17 43.50   0.1
PMG      3.49 211 eP    17 45.00   0.0
RAB      3.85  56 eP    17 50.00  -0.1
WB2     19.57 225 eP    21 15.90  -1.3
       0.3s    20.40nm          4.9mb
ASPA    22.47 219 iPc   21 47.80   1.2
       0.7s     7.10nm          4.2mb
                  iS    25 50.70
     S.D. = 1.3  on   6 of   7 obs.
-----------------------------------
?  NOV  26, 1993  15h 31m 20.07± 1.96s
   38.873 N ±11.3km   30.067 E ±20.5km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 2.8 (ISK).

ALT      0.18  10 iPg   31 23.40  -0.9
KHL      0.70 218 iPg   31 33.90   0.0
                  eSg   31 43.90
DST      1.34 304 ePn   31 44.00  -0.7
IZI      1.53 343 iPn   31 48.80   1.3
     S.D. = 1.7  on   4 of   4 obs.
-----------------------------------
*  NOV  26, 1993  16h 00m 42.94± 2.87s
   38.326 N ±23.3km   22.217 E ±11.5km
   DEPTH =   5.0km  (geophysicist)
 GREECE                           (364)
      ML 3.1 (THE).

AGG      0.70   7 ePg   00 56.56  -0.4
                  eSg   01 08.00
IGT      1.90 310 ePb   01 15.92  -0.4
                  eSb   01 40.48
PAIG     1.96  35 ePn   01 17.24   0.1
THE      2.37  14 ePn   01 23.64   0.5
                  eSn   01 54.20
FNA      2.54 345 ePn   01 26.04   0.5
                  eSn   01 58.00
GRG      2.63   3 ePn   01 27.12   0.3
                  eSn   02 00.68
SOH      2.64  19 ePn   01 25.84  -1.2
                  eSn   02 02.84
KNT      2.88  10 ePn   01 30.88   0.5
                  eSn   02 06.24
SRS      2.98  20 ePn   01 31.80   0.0
                  eSn   02 09.24
VAY      3.00   5 ePn   01 35.00   3.0X
SKO      3.69 351 ePn   01 30.00 -11.8X
     S.D. = 0.7  on   9 of  11 obs.
-----------------------------------
%  NOV  26, 1993  16h 00m 56.19± 1.35s
   41.057 N ±13.0km   22.269 E ± 7.0km
   DEPTH =   5.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION       (383)
      ML 1.3 (THE).

GRG      0.14 135 ePgc  00 58.44  -0.7
                  eSg   01 00.56
KNT      0.49  77 ePgc  01 05.60  -0.4
                  eSg   01 12.84
FNA      0.73 248 ePg   01 10.60  -0.2
                  eSg   01 21.44
LIT      0.97 170 ePb   01 15.40   0.3
                  eSb   01 39.72
OUR      1.49 118 ePn   01 24.48   0.9
                  eSn   01 55.68
     S.D. = 0.9  on   5 of   5 obs.
-----------------------------------
   NOV  26, 1993  16h 26m 16.32± 0.51s
   33.268 S ± 4.8km   68.236 W ± 4.8km
   DEPTH =  48.4 ±  6.3 km
   4.7mb (  5 obs.)
 MENDOZA PROVINCE, ARGENTINA      (139)
      MD 4.7 (SAN). Felt (V) at Santa
      Rosa and Rivadavia; (IV) at
      Mendoza.

MDZ      0.64 306 iPd   26 24.80  -4.6X
                  iS    26 32.10
RTCV     1.43 350 iPc   26 40.00  -0.2
RFA      1.51 187 iPc   26 41.50   0.1
CFA      1.66 360 ePd   26 43.80   0.3
FCH      1.72 267 iP+   26 44.59  -0.1
                  (S)   27 06.67
RTCB     1.84 345 ePc   26 46.80   0.7
PCH      1.94 259 iP+   26 47.62   0.1
                  iS    27 13.55
RTLL     1.94 354 ePc   26 47.80   0.3
SAN      2.04 264 iP+   26 49.07   0.2
PEL      2.06 273 iP+   26 49.37   0.2
                  iS    27 16.88
JACH     2.07 286 iP+   26 50.04   0.7
                  iS    27 16.69
CACH     2.15 246 iP+   26 50.57   0.1
                  iS    27 18.95
TACH     2.29 260 iPd   26 52.17  -0.3
                  (S)   27 24.11
MRA      2.29  69 ePd   26 54.00   1.6
ROCH     2.35 276 iPd   26 53.27  -0.2
LNV      2.74 255 iPd   26 58.13  -0.6
LCCH     2.80 265 iP+   26 58.71  -0.9
IHA      2.87 274 iPd   27 04.80   4.2X
                  iS    27 44.90
RTRS     3.26 341 iPc   26 07.90 -58.3X
                  (S)   27 34.00
RTPR     3.30  27 eP    27 07.20   0.5
CYA      5.25  24 iPd   27 33.30  -1.0
                  S     29 01.20
FSA      7.42  16 ePc   28 04.00  -0.6
SLA      8.84  16 ePc   28 23.00  -1.5
                  i     28 31.00
CCH     15.93   7 (P)   30 09.00   9.9X
CNCB    16.39   1 P     30 07.00   1.9
LPB     16.66   0 P     30 12.90   4.4X
LPAZ    16.91   0 P     30 07.90  -3.8X
                  i     30 12.50
ARE     16.99 349 eP    30 20.00   7.6X
SIV     18.38  22 P     30 28.00  -1.4
BDFB    25.35  51 eP    31 39.86  -0.7
       1.0s    11.76nm          4.4mb
BAO     25.37  51 eP    31 39.80  -1.0
SOB1    34.76  53 eP    33 10.30   6.1X
NVL     55.74 157 Pc    35 49.00  -0.9
       1.0s    20.00nm          5.1mb
LTX     70.73 328 iPc   37 37.02   7.6X
UYO     71.46 337 iPc   37 33.70   0.1
KIC     71.85  69 P     37 36.40   0.1
LKO     73.16  66 P     37 44.18   0.1
       0.8s     7.50nm          4.7mb
RSSD    83.65 335 eP    38 41.50   0.5
       1.0s     7.58nm          4.7mb
BUL     84.66 110 iPc   38 47.10   0.5
       1.0s     7.50nm          4.7mb
BONR    84.79 323 iPc   38 57.38  10.4X
WRA    122.86 205 PKP   45 08.90  -0.1
       0.6s     0.80nm
HYB    146.27 110 ePKP  45 54.00   1.5
     S.D. = 0.8  on  32 of  42 obs.
-----------------------------------
   NOV  26, 1993  17h 02m 13.77± 0.31s
   12.287 N ± 3.8km  125.643 E ± 5.6km
   DEPTH =  33.1km  (  5 depth phases)
   4.9mb ( 25 obs.)  4.5Msz (  5 obs.)
 SAMAR, PHILIPPINE ISLANDS        (251)

PLP      1.29 210 ePd   02 34.70  -0.9
                  iS    02 49.80
MAP      2.54 220 iPc   02 54.00   0.4
                  eS    03 29.00
GQP      3.51 298 eP    03 08.00   0.7
                  eS    03 52.00
BIP      4.08 172 ePd   03 14.50  -1.0
                  iS    04 20.50
PGP      4.73 285 ePc   03 26.00   1.3
QCP      5.02 298 eP    03 36.00   7.2X
QVP      5.08 298 eP    03 31.00   1.4
                  eS    04 47.50
DAV      5.17 181 eP    03 33.00   2.1
BCP      6.38 311 eP    03 52.00   3.9X
                  eS    05 10.60
BAG      6.39 310 ePc   03 48.90   0.6
                  eS    05 10.00
PPR      7.23 250 ePd   04 06.00   6.1X
GUMO    18.78  84 e(P)  06 23.70  -9.1X
SSE     19.17 348 Pc    06 38.50   1.2
       1.0s    16.00nm          4.2mb
     Z  20s     0.90um          5.5MszX
     N  14s     0.80um
     E  12s     0.80um
                  S     10 10.00
NJ2     20.64 343 eP    06 56.00   2.9X
     Z  16s     0.58um          4.0MszX
     E  11s     1.00um
                  eS    10 38.00
WHN     20.96 332 eP    06 57.50   1.1
       2.0s   230.00nm          5.2mb
     Z  20s     1.86um          4.5Msz
     N  12s     0.53um
     E  14s     0.97um
GYA     22.74 311 iPd   07 15.00   0.5
       1.4s   100.00nm          5.1mb
     Z  18s     1.61um          4.5Msz
     N  14s     1.23um
     E  14s     0.73um
                  pP    07 24.60  35km
KGM     24.36 247 ePd   07 30.50   0.4
TIA     25.03 344 eP    07 36.60   0.2
       1.2s    41.00nm          4.9mb
KMI     25.12 304 Pc    07 38.50   0.9
       1.6s    90.00nm          5.1mb
     Z  20s     1.90um          4.6Msz
IPM     25.51 255 eP    07 40.90  -0.2
XAN     26.48 328 P     07 49.30  -0.6
       1.2s    29.00nm          4.8mb
     Z  16s     1.43um          4.6MszX
     N  12s     0.62um
     E  12s     1.03um
                  pP    07 59.00  35km
CHTO    26.51 288 ePc   07 49.00  -1.3
       1.0s    12.25nm          4.5mb
MAT     26.67  23 eP    08 10.00  18.4X
     Z  20s     1.06um          4.4Msz
                  eS    12 20.00
CD2     27.43 316 P     07 58.30  -0.3
       1.4s   100.00nm          5.3mb
     Z  17s     1.45um          4.6MszX
                  pP    08 14.00  66kmX
TIY     27.94 337 eP    08 03.50   0.3
     Z  15s     0.95um          4.5MszX
     E  13s     0.62um
BJI     28.88 345 eP    08 10.00  -1.6
     Z  16s     0.88um          4.5MszX
SNY     29.48 357 Pc    08 17.70   0.7
     Z  20s     0.61um          4.2Msz
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     E  12s      0.71um
LZH    30.79 324 Pc     08 29.00   0.2
       1.5s     69.00nm          5.2mb
     Z  16s      1.81um          4.8MszX
     N  13s      1.07um
                  pP     08 38.00  31km
HHC    31.02 339 eP     08 30.40  -0.4
       1.2s     13.00nm          4.6mb
     Z  16s      0.71um          4.4MszX
     N  14s      0.31um
     E  14s      0.49um
BTO    31.37 337 eP     08 33.20  -0.7
WB2    33.16 165 eP     08 51.00   1.5
       0.4s      3.90nm          4.7mb
SHL    34.44 297 eP     09 00.00  -0.9
                  eS     12 40.70
GTA    35.39 324 iPc    09 09.00   0.3
       1.5s     34.00nm          5.1mb
     Z  14s      1.16um          4.8MszX
LSA    36.38 304 iPc    09 18.80   1.2
       1.4s     68.00nm          5.4mb
ASPA   36.63 167 eP     09 17.90  -1.3
       0.7s      4.80nm          4.5mb
     Z  23s      0.20um          3.8MszX
                  iS     14 56.40
GUN    40.24 299 P      09 49.80   0.1
PKI    40.56 298 P      09 51.80  -0.6
KKN    40.72 298 P      09 53.00  -0.6
CIT    40.79 349 eP     09 49.30  -4.2X
DMN    40.83 298 P      09 54.10  -0.4
GKN    41.33 299 P      09 58.00  -0.4
ZAK    42.17 339 eP     10 13.00   8.2X
       1.4s     12.00nm          4.4mb
WMQ    45.27 321 iPc    10 30.50   0.4
       1.5s     16.00nm          4.7mb
     Z  16s      1.66um          5.1MszX
                  S      17 05.00
HYB    45.71 282 eP     10 33.00  -0.9
BOD    46.30 352 eP     10 37.00  -0.9
       1.4s     17.00nm          4.8mb
STK    46.50 161 eP     10 29.60 -10.2X
       0.7s      3.60nm
GBA    46.94 277 P      10 42.00  -1.6
BRS    47.42 147 iPc    10 35.00 -12.2X
                  i      10 55.00  82kmX
NDI    47.87 298 eP     10 49.00  -1.8
ARMA   49.28 150 eP     11 02.50   0.8
YAK    49.74   3 eP     11 05.10   0.5
       1.8s    105.00nm          5.6mb
KSH    51.42 311 Pc     11 19.00   1.0
       1.0s     20.00nm          5.0mb
     Z  16s      1.20um          5.0MszX
     N  14s      1.28um
     E  14s      1.51um
                  pP     11 30.00  38km
                  PcP    12 32.00
                  PP     13 15.00
                  eS     18 32.00
CNB    52.40 155 eP     11 31.00   5.7X
TIK    59.34   1 eP     12 14.00  -0.6
       1.2s     16.00nm          5.0mb
                  e      12 22.00  26km
MAIO   63.65 304 iPc    12 44.00  -0.3
ASH    64.68 306 P      12 51.20   0.3
ILT    66.15  20 eP     13 00.50   0.7
SVE    66.19 327 eP     13 00.00  -0.2
       1.1s     20.00nm          5.1mb
     Z  13s      0.50um          4.9MszX
     N  13s      0.40um
     E  13s      0.30um
ARU    67.19 326 eP     13 06.00  -0.6
     Z  16s      0.50um          4.8MszX
IMA    75.07  25 eP     13 54.70   0.7
OBN    79.49 324 iPc    14 18.00  -0.5
       1.5s     70.00nm          5.4mb
     Z  16s      0.60um          5.0MszX
                  e      14 23.00  16kmX
                  e      14 28.00
INK    82.65  22 eP     14 35.00   0.1
       1.0s      2.00nm          4.1mb
KAF    83.57 332 eP     14 39.50  -0.2
NUR    84.75 331 iP     14 45.80   0.2
       0.6s     11.80nm          5.3mb
RES    89.63  10 eP     15 09.00  -0.2
NB2    90.69 334 P      15 13.20  -1.2
       0.7s      1.70nm          4.5mb
     S.D. = 0.9  on  55 of  66 obs.
-----------------------------------
*  NOV  26, 1993  17h 14m 56.40± 2.36s
   7.301 S ±10.4km  128.543 E ± 8.9km
   DEPTH = 118.7 ± 25.6 km
   5.0mb (  4 obs.)
 BANDA SEA                        (280)

KNA     8.40 179 iPd    16 56.80   0.0
       0.2s     68.00nm          6.0mb X
                  iS     18 24.60
WB2    13.77 156 eP     18 05.80  -2.1
                  i      18 13.20
                  eS     20 29.50
MBL    16.15 211 eP     18 37.60  -0.2
                  eS     21 29.00
QIS    16.98 142 eP     18 48.30   0.1
ASPA   17.07 163 iPc    18 49.80   0.6
       0.6s     38.90nm          4.8mb
                  iS     21 50.80
LAT    18.33  89 eP     19 05.50   1.1
WARB   18.87 185 iPd    19 10.80   0.7
NANU   19.68 218 iPd    19 19.20   0.6
MEEK   21.42 205 eP     19 37.00   0.7
                  eS     23 32.80
STK    27.32 155 iPc    20 21.70 -10.2X
       0.6s      8.30nm
BRS    30.45 134 iPc    21 00.00   0.0
       0.5s      9.00nm          4.8mb
CHTO   39.05 312 eP     22 15.00   1.5
LZH    49.00 333 Pc     23 33.20   0.0
       1.2s     40.00nm          5.1mb
GUN    54.07 312 P      24 11.50   0.0
       0.8s     20.00nm          5.1mb
PKI    54.23 312 P      24 12.20  -0.5
KKN    54.45 312 P      24 13.60  -0.5
DMN    54.48 311 P      24 14.10  -0.3
GKN    55.04 312 P      24 18.00  -0.4
GEC2  111.72 320 ePKP   33 17.60  -1.2
       0.7s      0.58nm
                  e      33 25.00
                  e      33 27.10
CNCB  151.00 146 PKP    34 39.00   6.7X
LPB   151.16 145 (PKP)  34 42.00   9.6X
LPAZ  151.34 145 PKP    34 39.10   6.2X
     S.D. = 0.9  on  18 of  22 obs.
-----------------------------------
?  NOV  26, 1993  17h 51m 05.80± 2.91s
   18.389 N ±24.7km   65.778 W ±21.5km
   DEPTH =  33.0km  (normal)
 PUERTO RICO REGION               ( 90)

LPR     0.12 227 P      51 11.80   0.0
CPD     0.37 201 P      51 14.50  -0.1
SJG     0.45 232 iP     51 15.80   0.1
                  S      51 28.70
CLLP    0.82 248 (P)    51 21.00   0.1
PORP    0.88 248 P      51 21.60  -0.2
     S.D. = 0.2  on   5 of   5 obs.
-----------------------------------
?  NOV  26, 1993  18h 25m 32.43± 1.48s
   31.187 S ±18.5km   68.740 W ±17.2km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTLL    0.27 122 ePd    25 47.20  -0.2
                  S      25 59.00
RTCB    0.30 190 ePd    25 47.20  -0.2
CFA     0.60 135 ePd    25 50.00   0.7
                  S      26 03.10
RTCV    0.69 166 eP     25 50.00  -0.1
                  S      26 04.00
RTPR    2.11  66 eP     26 07.00   0.1
                  S      26 34.00
MRA     2.86 116 eP     26 16.60  -0.4
     S.D. = 0.5  on   6 of   6 obs.
-----------------------------------
   NOV  26, 1993  19h 22m 35.12± 0.68s
   22.711 N ± 9.0km  120.604 E ± 7.7km
   DEPTH =  33.0km  (normal)
   4.2mb (  6 obs.)
 TAIWAN                           (244)
      ML 4.1 (BJI).

QZH     2.89 321 ePn    23 18.60  -1.2
                  Sn     23 58.30
HKC     5.96 267 iP     24 03.70   0.3
GZH     6.70 275 P      24 13.20  -0.6
SSE     8.37   3 P      24 41.20   4.2X
     Z  10s      1.00um
     N  10s      0.40um
NJ2     9.43 351 eP     24 52.00   0.3
QIZ    10.71 252 eP     25 16.80   7.5X
GYA    13.22 289 P      25 43.00  -0.2
       1.0s     11.00nm          4.8mb
     Z  14s      0.71um          7.7MszX
                  pP     25 50.00
XAN    15.25 320 eP     26 09.40  -0.3
TIY    16.52 337 eP     26 29.60   3.6X
     Z  13s      0.96um
     N  13s      0.58um
CD2    17.10 302 eP     26 35.20   1.9
LZH    19.73 316 eP     27 14.50   9.3X
       1.5s     32.00nm          4.4mb
MAT    20.55  44 eP     27 15.00   1.5
       0.8s      8.21nm          4.1mb
OFUJ   24.26  43 P      27 48.70  -1.5
WRA    44.47 161 P      30 45.20   0.1
       0.7s      1.30nm          3.9mb
WB2    44.47 161 eP     30 44.90  -0.2
       0.6s      3.00nm          4.3mb
NB2    79.27 332 P      34 38.60   0.0
       0.7s      1.20nm          4.0mb
     S.D. = 1.1  on  12 of  16 obs.
-----------------------------------
?  NOV  26, 1993  19h 45m 17.79± 6.99s
   24.322 S ±47.6km  178.321 W ±58.3km
   DEPTH = 478.4 ± 49.7 km
   4.5mb (  3 obs.)
 SOUTH OF FIJI ISLANDS            (171)

OUZ    12.93 211 P      48 07.60   0.1
KUZ    13.40 201 eP     48 12.90   0.4
HBZ    13.55 192 eP     48 13.90  -0.1
                  eS     50 36.10
PUZ    14.02 191 eP     48 19.10   0.2
URZ    14.43 195 eP     48 22.60  -0.5
NOZ    14.58 191 eP     48 23.90  -0.8
PGZ    16.87 194 eP     48 48.40   0.7
MNG    17.06 196 eP     48 49.00  -0.6
KIW    17.44 197 P      48 53.30   0.0
MTW    17.57 196 eP     48 56.10   1.6
CAW    17.63 197 eP     48 55.30   0.1
AMW    17.65 195 eP     48 55.40   0.1
MRW    17.84 197 eP     48 56.90  -0.3
QRZ    18.16 203 eP     48 59.80  -0.5
THZ    18.87 201 eP     49 07.90   0.7
LTZ    19.99 201 eP     49 17.50  -0.5
WVZ    20.77 203 eP     49 24.80  -0.5
ASPA   43.48 261 iPc    52 39.10  -0.1
       0.3s      6.90nm          4.6mb
                  iS     58 22.00
WB2    43.90 266 eP     52 42.40  -0.1
       0.4s     13.60nm          4.8mb
WRA    43.91 266 P      52 42.70   0.2
       0.5s      2.80nm          4.0mb
NB2   142.72 352 PKP    04 05.50   8.8X
       0.8s      3.10nm
APO   142.82 350 ePKP   04 04.70   7.9X
       0.5s      1.10nm
     S.D. = 0.6  on  20 of  22 obs.
-----------------------------------
&  NOV  26, 1993  19h 49m 51.77s
   37.647 N          118.857 W
   DEPTH =   5.2km
 CALIFORNIA-NEVADA BORDER REGION ( 40)
      <GM-P>. MD 3.0 (GM).

MCSM    0.04 282 P      49 53.27   0.0
CLKR    0.06 155 P      49 53.52  -0.1
MEMM    0.07 287 iPd    49 53.73   0.2
MMPM    0.14 255 iPc    49 54.90   0.0
ORC     0.16  94 P      49 55.40   0.2
MRCM    0.28  85 eP     49 57.63   0.2
MTUM    0.37 141 iPd    49 59.26  -0.1
BCKR    0.39  82 P      49 59.84   0.2
BHPR    0.45 140 P      50 00.88  -0.1
BONR    0.54  55 iPc    50 02.40  -0.2
MSTM    1.25 282 P      50 14.78  -0.7
CMB     1.27 288 eP     50 15.06  -0.8
                  eS     50 30.78
TNP     1.37  71 eP     50 17.61   0.0
KVN     1.52  23 eP     50 20.51   0.7
WLHM    1.55 164 P      50 20.62   0.2
BRMM    1.77 243 P      50 24.53   1.3
```

26d 19h

```
PARM     1.83 221 P      50 25.81   1.6
BMSM     1.84 238 P      50 25.82   1.6
PKEM     1.87 213 eP     50 25.90   1.2
HVC      2.02 232 P      50 28.36   1.4
EKH      2.09 243 P      50 30.43   2.5
CSTL     2.10 271 P      50 29.78   1.8
LTR      2.10 249 P      50 29.27   1.3
ARN      2.15 263 eP     50 29.53   0.8
PHAM     2.19 215 eP     50 30.99   1.6
TPNV     2.19 108 eP     50 30.41   0.9
LRC      2.24 232 P      50 31.82   1.8
WJPM     2.25 172 P      50 32.95   2.6
CBO      2.32 258 P      50 32.84   1.7
BMTC     2.51 175 P      50 38.45   4.4
BCH      2.65 202 eP     50 36.18   0.2
BAPM     2.67 238 P      50 37.18   0.9
ABL      2.81 186 eP     50 40.33   2.0
ORV      2.81 313 eP     50 38.63   0.4
GSC      2.87 144 (P)    50 43.17   4.1
ARUT     4.30  86 (P)    51 02.71   3.3
MSU      5.34  79 (P)    51 16.38   2.0
        37 obs. associated
-------------------------------------
&  NOV  26, 1993  20h 18m 56.02s
   32.862 N          115.677 W
   DEPTH =  10.8km
 CALIF.-BAJA CALIF. BORDER REGION( 45)
      <PAS-P>. ML 3.0 (PAS).

GLA      0.74  75 iPc    19 08.98  -1.5
PLM      1.11 297 eP     19 15.22  -1.7
PEC      1.61 310 eP     19 22.85  -1.7
SSK      2.16 309 (P)    19 31.36  -1.2
GSC      2.61 339 (Pn)   19 37.10  -1.8
TPNV     4.10 354 (Pn)   19 58.22  -2.0
BONR     5.51 338 (Pn)   20 20.65   0.3
        7 obs. associated
-------------------------------------
?  NOV  26, 1993  20h 20m 19.19± 1.00s
   14.703 N ± 9.2km   61.111 W ± 8.8km
   DEPTH =  10.0km  (geophysicist)
 WINDWARD ISLANDS                 ( 95)
      ML 1.3 (FDF).

FDF      0.05 308 iPc    20 21.33   0.0
                  S      20 22.40
BIM      0.19 168 eP     20 23.51   0.1
CRM      0.20  75 iPc    20 23.60   0.1
                  S      20 26.60
MVM      0.26 125 iPd    20 24.48  -0.1
                  S      20 28.30
     S.D. = 0.2  on   4 of   4 obs.
-------------------------------------
?  NOV  26, 1993  20h 32m 36.10± 1.00s
   14.710 N ± 9.6km   61.111 W ± 8.4km
   DEPTH =  10.0km  (geophysicist)
 WINDWARD ISLANDS                 ( 95)
      ML 1.4 (FDF).

FDF      0.04 301 iPc    32 38.20  -0.1
                  S      32 39.27
CRM      0.19  77 iPc    32 40.49   0.1
                  S      32 43.80
BIM      0.20 169 iPd    32 40.56   0.1
MVM      0.26 127 iPd    32 41.42  -0.2
                  S      32 45.20
     S.D. = 0.3  on   4 of   4 obs.
-------------------------------------
   NOV  26, 1993  20h 41m 30.36± 0.30s
   43.487 N ± 2.7km  110.180 W ± 4.6km
   DEPTH =   5.0km  (geophysicist)
 WYOMING                          (460)
      ML 3.8 (GS), 3.8 (BUT).

TPMT     1.64 320 iPnd   41 59.99  -0.2
LTMT     1.74 307 ePnd   42 01.26  -0.4
MEMT     2.19 345 ePn    42 08.70   0.6
BGMT     2.20 323 ePnd   42 08.39   0.1
MCMT     2.34 306 ePn    42 10.70   0.3
HVU      2.57 229 ePn    42 12.62  -0.8
                  eS     42 47.03
SXM      2.76 345 ePn    42 16.38   0.1
LRM      2.84 326 ePn    42 18.30   0.8
HBMT     2.88 324 ePn    42 18.00  -0.1
BUT      3.04 327 ePg    42 25.40   5.2X
                  eSg    43 04.70
DAU      3.18 195 eP     42 21.61  -0.6
HRY      3.43 341 ePn    42 25.40  -0.3
EMUT     3.70 188 ePn    42 30.07   0.4
DUG      3.83 212 eP     42 32.07   0.6
SRU      4.38 184 eP     42 39.50   0.2
RSSD     4.49  80 ePnc   42 40.19  -0.7
PV08     5.04 166 ePn    42 49.73   1.0
PV09     5.05 171 (Pn)   42 49.51   0.7
PV10     5.18 170 ePn    42 50.91   0.3
MSU      5.19 198 ePn    42 49.59  -1.2
GOL      5.23 135 ePn    42 50.40  -0.9
GLD      5.27 133 (Pn)   42 52.22   0.4
ARUT     6.21 205 (P)    43 05.21   0.1
NEW      6.80 317 eP     43 12.84  -0.4
     S.D. = 0.6  on  23 of  24 obs.
-------------------------------------
?  NOV  26, 1993  21h 01m 16.81± 1.26s
   38.888 N ± 9.7km   29.964 E ±12.9km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      ML 3.0 (ISK).

ALT      0.20  34 iPg    01 20.90  -0.4
KHL      0.66 212 iPg    01 30.10   0.1
                  eSg    01 38.60
DST      1.26 305 iPn    01 39.70  -0.6
IZI      1.50 345 ePn    01 44.70   0.9
     S.D. = 1.2  on   4 of   4 obs.
-------------------------------------
*  NOV  26, 1993  21h 12m 30.45± 0.56s
   3.355 S ± 9.7km  129.765 E ±10.8km
   DEPTH =  33.0km  (normal)
   5.0mb (  2 obs.)
 SERAM, INDONESIA                 (272)

KNA     12.36 184 eP     15 26.50  -0.5
                  eS     17 52.30
MDG     16.08  97 eP     16 17.00   1.2
QIS     19.60 151 eP     16 57.50  -1.6
MBL     20.16 208 eP     17 06.50   1.5
ASPA    20.58 169 iPc    17 08.80  -0.6
        0.6s   107.90nm          5.4mb
     Z  21s     0.40um          3.8Msz
                  eS     20 58.60
CTA     23.14 137 iPc    17 35.30   0.4
                  i      17 41.50
IPM     29.78 285 ePc    18 37.90   1.2
STK     30.48 160 eP     18 31.50 -11.1X
        0.6s     3.80nm
ADE     32.53 166 eP     19 01.60   0.9
ARMA    33.94 145 eP     19 12.30  -0.7
        0.7s     6.00nm          4.6mb
CHTO    37.49 307 eP     19 43.30   0.1
GUN     52.43 309 P      21 41.50  -1.3
PKI     52.64 309 P      21 45.20   0.9
KKN     52.84 309 P      21 45.00  -0.7
DMN     52.89 309 P      21 46.50   0.4
GKN     53.44 309 P      21 48.60  -1.4
CNCB   153.37 139 PKP    32 29.00   8.4X
LPB    153.50 139 ePKP   32 23.00   2.4X
LPAZ   153.66 138 PKP    32 28.00   6.9X
     S.D. = 1.1  on  15 of  19 obs.
-------------------------------------
&  NOV  26, 1993  21h 24m 46.96s
   59.147 N          152.122 W
   DEPTH =  65.5km
 SOUTHERN ALASKA                  (  2)
      <AEIC>. ML 2.9 (AEIC).

XLV      0.37  33 eP     24 58.01  -0.4
SYI      0.56 195 eP     24 59.27  -0.8
HOM      0.57  25 eP     24 59.74  -0.5
                  eS     25 08.60
CNPM     0.59  50 iP     25 00.01  -0.6
                  eS     25 09.72
AUE      0.68 289 eP     25 00.95  -0.5
AUI      0.70 286 eP     25 01.17  -0.5
                  eS     25 11.37
AGU      0.71 288 eP     25 01.25  -0.7
AUH      0.71 288 eP     25 01.33  -0.7
AUL      0.71 290 iP     25 01.31  -0.6
AUW      0.73 288 eP     25 01.34  -0.7
OPT      0.76 312 eP     25 01.83  -0.7
                  eS     25 13.35
CDD      0.82 255 eP     25 02.40  -0.8
                  eS     25 13.97
BRLK     0.88  45 eP     25 03.84  -0.2
                  eS     25 16.10
ILIM     1.03 336 eP     25 05.09  -0.8
                  eS     25 18.87
INE      1.03 333 eP     25 05.06  -1.0
INW      1.06 331 eP     25 05.67  -0.7
MCNL     1.14 273 eP     25 06.20  -1.2
PDB      1.24 302 eP     25 07.92  -0.7
                  eS     25 23.88
RED      1.32 346 eP     25 09.16  -0.7
                  eS     25 26.46
RS2      1.36 347 eP     25 10.01  -0.5
RDW      1.38 346 eP     25 10.29  -0.5
                  eS     25 28.11
KDC      1.42 188 eP     25 10.11  -0.9
RDT      1.44 354 eP     25 10.83  -0.6
                  eS     25 29.21
DFR      1.48 349 eP     25 11.52  -0.5
NCT      1.48 344 eP     25 11.57  -0.4
NKA      1.66  15 eP     25 15.52   1.1
SEW      1.66  54 eP     25 13.49  -0.9
SLKM     1.67  34 eP     25 14.33  -0.2
BKG      1.93 358 eP     25 18.10  -0.1
MPA      1.94  45 eP     25 17.20  -1.0
SPU      2.04   1 eP     25 19.67  -0.1
CP2      2.13 358 eP     25 20.63  -0.4
CRP      2.13 360 eP     25 20.59  -0.4
SUA      2.42  16 eP     25 24.93  -0.2
KLU      3.88  50 eP     25 44.52  -1.0
        35 obs. associated
-------------------------------------
   NOV  26, 1993  21h 47m 38.34± 0.93s
   34.952 S ± 9.7km  179.713 E ±15.0km
   DEPTH = 320.2 ±  8.1 km
   4.4mb (  5 obs.)
 SOUTH OF KERMADEC ISLANDS        (179)

HBZ      2.88 203 eP     48 33.90  -0.8
WIZ      3.28 218 eP     48 38.30  -0.3
PUZ      3.33 200 Pd     48 39.70   0.6
                  S      49 28.70
KUZ      3.71 240 P      48 40.20  -2.7
                  eS     49 29.40
NOZ      3.90 200 Pd     48 46.40   1.4
URZ      3.91 212 eP     48 44.60  -0.5
                  eS     49 38.40
TAZ      4.17 217 eP     48 49.50   1.7
PATZ     4.41 218 eP     48 51.70   1.1
WLZ      4.42 228 P      48 51.40   0.8
PAHZ     4.44 208 eP     48 51.40   0.5
MAHZ     4.47 199 eP     48 53.00   1.7
OUZ      5.02 265 P      48 50.30  -7.1X
MGZ      5.24 218 P      49 01.00   1.0
MOZ      5.30 227 P      49 01.90   1.3
                  eS     50 08.80
NGZ      5.35 217 P      49 01.50   0.2
CNZ      5.39 217 eP     49 02.90   1.1
WAHZ     5.44 208 eP     49 02.10  -0.2
TEHZ     5.53 204 eP     49 04.10   0.8
BSZ      6.16 217 eP     49 10.50  -0.1
PGZ      6.28 205 eP     49 12.30   0.3
NRZ      6.36 225 eP     49 16.10   3.1X
MNG      6.57 209 P      49 13.70  -1.9
                  eS     50 31.30
KIW      7.02 211 P      49 20.10  -0.8
MTW      7.03 207 P      49 20.70  -0.3
AMW      7.07 205 P      49 21.40  -0.1
CAW      7.16 209 P      49 21.30  -1.3
BLW      7.22 206 eP     49 23.80   0.4
MRW      7.41 211 eP     49 24.70  -0.9
                  eS     50 49.90
DIW      7.42 216 eP     49 21.90  -3.9X
WEL      7.43 210 eP     49 25.20  -0.6
TCW      7.58 213 P      49 26.60  -1.0
QRZ      8.16 222 eP     49 33.60  -1.2
THZ      8.65 216 eP     49 40.10  -0.6
LTZ      9.73 214 eP     49 53.30  -0.7
MQZ     10.31 210 eP     50 00.50  -0.4
WVZ     10.70 218 eP     50 04.60  -1.1
BWZ     12.19 215 eP     50 23.80   0.1
ODZ     12.24 212 eP     50 26.20   1.8
LRCZ    12.84 215 eP     50 31.30  -0.5
LSCZ    12.87 215 eP     50 32.00   0.0
SBCZ    12.88 215 eP     50 31.70  -0.5
MMCZ    12.90 216 eP     50 32.80   0.4
TLC     13.06 215 eP     50 34.00  -0.5
TUZ     13.39 212 eP     50 42.10   3.8X
DZM     17.32 314 iPd    51 14.00  -7.6X
AFI     22.32  22 eP     52 10.00  -0.9
```

ARMA	24.03	273	eP	52 28.10	1.3	
	0.6s	7.00nm			4.2mb	
CNB	24.78	260	iPc	52 37.10	3.5X	
	0.8s	26.00nm			4.7mb	
STK	31.84	265	eP	53 27.50	-8.4X	
	2.3s	4.50nm			3.5mb	
ADE	33.44	258	e(P)	53 53.10	3.5X	
QIS	38.02	281	eP	54 27.20	-0.8	
ASPA	41.18	273	eP	54 47.80	-6.2X	
			i	54 54.20		
			iS	00 45.30		
WB2	42.58	278	iPc	55 05.00	-0.3	
	0.5s	53.60nm			5.0mb	
WRA	42.59	278	P	55 05.10	-0.2	
	0.7s	18.30nm			4.4mb	
FORT	43.20	260	eP	55 12.00	1.9	
MEEK	52.43	261	eP	56 21.50	0.6	
MBL	53.88	268	eP	56 31.80	0.3	
KAF	148.07	337	ePKP	06 48.60	5.5X	
NUR	149.79	336	ePKP	06 53.60	7.9X	
APO	152.80	345	ePKP	06 59.30	9.1X	
	0.5s	0.80nm				

S.D. = 1.0 on 48 of 60 obs.

NOV 26, 1993 22h 20m 37.72± 0.24s
6.697 N ± 4.2km 73.054 W ± 3.6km
DEPTH = 148.0km (6 depth phases)
4.7mb (25 obs.)
NORTHERN COLOMBIA (99)
Felt at Bucaramanga and Cucuta.

BMG	0.37	357	eP	21 01.00	1.1	
BOG	2.29	206	iP	21 22.00	5.0X	
			iS	21 52.00		
SDV	3.24	48	iPnd	21 30.80	2.0	
			iSn	22 08.50		
TOV	4.45	46	iPnd	21 43.10	-1.7	
			iSn	22 36.30		
CEOS	5.22	63	iPc	21 55.00	0.0	
			iS	22 52.20		
PLAV	6.34	60	eP	22 09.30	-0.9	
			eS	23 18.30		
GUAC	6.69	58	iP	22 15.20	0.3	
			iS	23 25.50		
UPA	6.81	290	eP	22 13.49	-2.9X	
			eS	23 27.13		
PSO	6.93	218	eP	22 22.00	3.6X	
OLLA	7.01	61	iPd	22 18.60	-0.6	
			eS	23 35.50		
ECO	7.09	292	eP	22 18.13	-2.1	
			eS	23 21.99		
LLAV	7.23	58	eP	22 21.60	-0.5	
			eS	23 39.40		
BRU	9.65	283	eP	22 54.94	0.2	
			eS	24 27.53		
PCJ	11.69	340	ePd	23 22.10	1.0	
			S	25 11.22		
HOJ	11.80	343	ePd	23 24.65	2.1	
TCE	11.86	70	eP	23 24.84	1.6	
			e	23 32.07		
GWJ	11.87	343	ePd	23 25.15	1.6	
STH	11.89	342	ePd	23 24.77	1.0	
			S	25 12.50		
SPJ	12.06	339	ePd	23 27.44	1.5	
			S	25 18.32		
BBJ	12.32	341	ePd	23 31.00	1.7	
TBH	12.43	72	eP	23 35.48	4.7X	
			e	23 38.98		
SLB	13.78	58	eP	23 51.27	3.2X	
SLW	13.96	58	eP	23 56.90	6.5X	
FDF	14.16	55	ePc	23 52.34	-0.5	
MVM	14.27	56	eP	23 58.00	3.7X	
CRM	14.36	55	eP	23 59.40	4.0X	
NNA	18.94	191	iPc	24 50.50	0.5	
	0.6s	10.00nm			4.3mb	
LPAZ	23.35	168	eP	25 35.29	0.7	
	1.1s	1.50nm			3.4mb X	
LPB	23.60	168	P	25 38.30	1.6	
CNCB	23.89	168	P	25 41.20	1.5	
BDFB	33.28	132	eP	27 04.43	1.0	
	0.5s	18.27nm			5.1mb	
UYO	33.74	327	iPc	27 07.10	0.0	
FVM	34.91	336	eP	27 16.79	-0.2	
	0.6s	10.98nm			4.8mb	
HRV	35.69	2	eP	27 24.13	0.7	
	1.1s	70.68nm			5.3mb	
SOB1	35.73	116	eP	27 24.90	0.7	
TUL	35.78	328	iPc	27 23.50	-0.8	
MEO	36.53	323	iPd	27 29.40	-1.3	
LTX	36.59	312	iPd	27 30.96	-0.4	
			epP	28 03.11	144km	
WMOK	36.62	323	eP	27 29.91	-1.5	
	0.6s	9.35nm			4.7mb	
			epP	28 06.23	165kmX	
TYNO	36.74	352	P	27 33.05	0.7	
STCO	36.76	353	P	27 32.00	-0.4	
ACTO	37.28	352	P	27 37.43	0.6	
WLVO	37.37	354	P	27 37.96	0.4	
GAC	38.91	357	eP	27 51.50	1.1	
VAO	39.01	140	eP	27 52.10	0.5	
LMN	39.66	9	eP	27 57.00	0.5	
GLD	43.78	324	eP	28 31.50	1.0	
GOL	43.84	323	iPc	28 31.18	0.1	
	0.6s	16.53nm			4.8mb	
			epP	29 04.83	151km	
PV08	45.17	320	eP	28 41.94	0.2	
PV10	45.30	319	eP	28 42.30	-0.5	
			epP	29 13.15	136kmX	
PV09	45.44	320	eP	28 44.22	0.4	
RSSD	46.08	329	eP	28 48.16	-0.6	
	0.9s	12.61nm			4.6mb	
			epP	29 21.63	149km	
SRU	46.68	319	ePc	28 53.54	0.0	
			epP	29 26.74	147km	
JAQ	47.02	358	eP	28 54.50	-1.2	
ULM	47.42	340	eP	29 00.00	1.1	
DAU	47.87	320	eP	29 02.66	-0.3	
			epP	29 25.67	96kmX	
ARUT	47.93	316	eP	29 03.60	0.4	
DUG	48.75	319	eP	29 09.23	-0.3	
	0.8s	6.35nm			4.4mb	
			epP	29 41.89	143km	
GSC	49.19	312	eP	29 13.46	0.6	
			epP	29 48.75	155km	
HVU	49.59	321	eP	29 15.27	-0.6	
TNP	50.70	315	eP	29 24.23	-0.2	
BONR	51.41	314	eP	29 30.24	0.3	
LRM	51.72	326	ePc	29 31.70	-0.4	
MMPM	51.78	313	eP	29 30.11	-2.7X	
ORV	54.35	315	ePd	29 51.50	0.2	
			epP	30 20.40	122kmX	
LGPM	55.82	316	eP	30 00.18	-1.9	
DPW	56.13	325	ePc	30 03.22	-0.8	
VGB	56.48	321	eP	30 05.82	-0.7	
FRB	57.03	2	eP	30 08.50	-1.5	
	0.6s	15.00nm			5.1mb	
YKA	63.40	340	eP	30 51.80	-1.5	
	0.7s	35.00nm			5.4mb	
LKO	66.76	83	P	31 14.01	-1.7	
	0.9s	12.00nm			4.8mb	
TIC	67.52	86	P	31 18.73	-1.8	
	0.8s	11.00nm			4.8mb	
LIC	67.54	86	P	31 18.99	-1.6	
	0.5s	11.50nm			4.9mb	
KIC	67.82	86	P	31 20.93	-1.4	
	0.7s	24.50nm			5.1mb	
RES	69.10	354	eP	31 28.50	-0.6	
	1.0s	4.00nm			4.2mb	
INK	73.17	340	eP	31 53.00	-0.5	
	0.8s	7.00nm			4.4mb	
MBC	73.94	350	eP	31 58.50	0.6	
	0.8s	21.00nm			4.9mb	
TOA	76.24	332	eP	32 12.10	0.8	
FBA	77.51	335	eP	32 18.67	0.5	
	1.0s	5.46nm			4.2mb	
PMR	77.52	332	eP	32 18.04	-0.2	
	0.6s	12.42nm			4.8mb	
ENN	77.87	40	eP	32 20.00	-0.4	
	0.9s	8.20nm			4.5mb	
SLKM	77.89	330	eP	32 19.83	-0.5	
WTS	78.51	38	eP	32 23.50	-0.4	
	0.8s	15.20nm			4.8mb	
			e	32 30.00	21kmX	
CRP	78.92	331	iPc	32 25.38	-0.8	
CP2	78.96	331	eP	32 25.91	-0.5	
IMA	80.11	336	ePc	32 32.50	0.1	
	0.7s	5.60nm			4.4mb	
SVW	80.58	331	eP	32 33.90	-0.9	
TTA	80.87	333	eP	32 35.62	-0.7	
	0.8s	3.12nm			4.1mb	
NB2	81.40	29	P	32 39.60	0.5	
	0.7s	4.50nm			4.3mb	
APO	82.73	30	eP	32 46.20	0.3	
	0.4s	0.40nm			3.5mb X	
KHC	82.78	41	eP	32 47.00	0.5	
	1.0s	3.50nm			4.1mb	
			e	33 28.00	165kmX	
PRU	83.37	40	eP	32 50.30	0.9	
GTA	133.65	8	ePKP	39 39.50	0.6	
STK	139.12	228	ePKP	39 36.10	-13.1X	
	0.7s	3.40nm				
GKN	139.33	31	PKP	39 49.90	0.0	
	0.8s	17.00nm				
XAN	139.44	357	PKP	39 43.50	-6.3X	
CTA	139.63	247	iPKPc	39 48.00	-2.4X	
KKN	139.83	30	PKP	39 50.50	-0.4	
DMN	139.89	31	PKP	39 51.20	0.2	
GUN	140.03	30	PKP	39 51.00	-0.4	
PKI	140.07	31	PKP	39 51.00	-0.5	
GBA	144.43	55	PKP	39 57.00	-1.9	
GYA	147.04	0	PKP	40 04.40	1.3	
KMI	148.11	7	PKPd	40 08.00	3.0X	
ASPA	149.09	234	iPKPd	40 10.30	4.0X	
	0.5s	12.00nm				
			e	40 48.70		
WB2	150.32	241	iPKPc	40 08.60	0.4	
	0.4s	22.10nm				
WRA	150.33	241	PKP	40 09.10	0.9	
	0.5s	5.30nm				

S.D. = 1.0 on 93 of 107 obs.

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* NOV 26, 1993 22h 33m 42.94± 1.58s
33.702 S ±12.4km 179.795 E ±17.8km
DEPTH = 303.1 ± 10.0 km
4.4mb (3 obs.)
SOUTH OF KERMADEC ISLANDS (179)

HBZ	4.07	197	P	34 50.10	-0.4	
WIZ	4.37	208	eP	34 55.10	1.3	
KUZ	4.51	227	P	34 57.50	2.1	
PUZ	4.54	196	P	34 55.80	0.0	
			eS	35 57.90		
URZ	5.04	205	P	35 02.00	0.5	
			eS	36 08.40		
NOZ	5.11	196	P	35 02.70	0.4	
OUZ	5.34	252	Pd	35 03.60	-1.4	
WLZ	5.38	218	eP	35 08.70	3.2X	
PATZ	5.48	211	P	35 07.50	0.7	
PAHZ	5.60	202	eP	35 08.50	0.3	
MAHZ	5.69	195	P	35 09.60	0.4	
MOZ	6.27	219	P	35 20.00	3.9X	
NGZ	6.42	211	eP	35 18.90	0.7	
WAHZ	6.59	204	eP	35 19.80	-0.3	
TEHZ	6.72	200	eP	35 19.90	-1.6	
BSZ	7.23	211	eP	35 29.00	1.3	
PGZ	7.45	201	P	35 29.70	-0.8	
KIW	8.14	207	P	35 37.50	-1.4	
MTW	8.19	203	eP	35 39.00	-0.5	
AMW	8.24	202	P	35 38.90	-1.2	
CAW	8.29	206	eP	35 39.30	-1.5	
DIW	8.49	212	P	35 40.50	-2.8X	
MRW	8.53	207	eP	35 42.60	-1.2	
			eS	37 21.20		
SNZO	8.60	207	P	35 44.20	-0.4	
			S	37 24.00		
TCW	8.69	209	eP	35 44.60	-1.0	
QRZ	9.17	217	eP	35 51.50	-0.1	
THZ	9.72	212	eP	35 58.30	-0.2	
DSZ	10.22	216	eP	36 06.30	1.6	
LTZ	10.82	211	P	36 11.10	-1.0	
MQZ	11.44	207	eP	36 18.50	-1.0	
WVZ	11.74	215	eP	36 23.10	-0.2	
BWZ	13.26	212	eP	36 41.40	-0.2	
ODZ	13.35	209	eP	36 44.60	1.9	
MSCZ	13.91	212	eP	36 49.60	0.1	
LRCZ	13.92	212	eP	36 50.30	0.5	
LSCZ	13.95	212	eP	36 50.20	0.2	
SBCZ	13.95	212	P	36 50.10	0.0	
MMCZ	13.96	213	eP	36 50.20	-0.1	
CMCZ	14.01	212	eP	36 51.60	0.8	
TLC	14.14	213	eP	36 52.50	0.1	
MSZ	14.29	216	eP	36 56.30	2.2	
TUZ	14.50	209	eP	36 59.50	2.9X	
SIZ	15.86	210	eP	37 16.10	4.5X	
DZM	16.52	311	iPc	37 11.70	-7.2X	
BKM	19.03	324	iP	37 37.00	-7.7X	
ARMA	24.06	270	eP	38 35.70	2.7X	
	0.6s	10.00nm			4.4mb	
CNB	25.08	258	eP	38 46.40	4.1X	
ASPA	41.20	272	iPc	41 00.60	0.4	
	0.4s	39.50nm			5.0mb	

26d 22h

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                iS    46 55.00
                iScS  50 33.20
WB2    42.48 277 iPd   41 10.20  -0.4
       0.3s    81.30nm          5.4mb X
                eS    47 12.10
WRA    42.49 277 P     41 09.10  -1.6
       0.9s     2.50nm          3.4mb
SPA    56.47 180 iPc   43 04.20   8.4X
       0.5s    50.93nm          5.2mb X
KAF   146.95 337 iPKP  52 48.90   1.0
       0.4s     2.10nm
NUR   148.67 336 iPKP  52 55.30   4.6X
       0.3s     1.60nm
APO   151.61 345 ePKP  53 00.50   5.4X
       0.4s     2.50nm
NB2   151.66 348 PKP   53 01.50   6.3X
       0.7s     3.10nm
     S.D. = 1.0  on  42 of  55 obs.
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   NOV  26, 1993  23h 20m 04.17± 0.13s
    9.597 S ± 3.1km  158.148 E ± 3.0km
   DEPTH =  17.1km  (geophysicist)
   5.9mb ( 84 obs.)  6.2Msz ( 55 obs.)
 SOLOMON ISLANDS                (193)
      Mw 6.2 (GS), 6.2 (HRV). Ms 6.1
      (BRK). Mo=5.0*10**18 Nm (PPT).
      Depth from broadband
      displacement seismograms.
      FAULT PLANE SOLUTION: P-Waves
       NP1:Strike=180 Dip=85 Slip=   8
       NP2:        89     82       175
       Principal Axes:
        T                Plg= 9  Azm= 45
        P                    2      314
      Comment: The focal mechanism is
        moderately well controlled
        and corresponds to strike-
        slip faulting with a small
        normal component. The
        preferred fault plane is not
        determined.
      RADIATED ENERGY
       No. of sta:  10  Focal mech.  F
       Energy        1.4±0.4*10**14 Nm
      MOMENT TENSOR SOLUTION
      Dep  18          No. of sta: 14
      Moment Tensor;   Scale 10**18 Nm
        Mrr= 0.59       Mtt=-0.28
        Mff=-0.31       Mrt=-0.30
        Mrf= 0.71       Mtf= 1.76
       Principal axes:
        T  Val=  1.57  Plg=19  Azm=311
        N        0.68     66      171
        P       -2.25     14       46
      Best Double Couple:Mo=1.9*10**18
       NP1:Strike= 90 Dip=66 Slip=   3
       NP2:       358     87       156
      CENTROID, MOMENT TENSOR    (HRV)
      Data Used: GDSN
      L.P.B.: 49S, **C  M.W.: 38S, 62C
      Centroid Location:
      Origin Time       23:20: 9.8 0.1
      Lat  9.43S 0.01 Lon 158.28E 0.01
      Dep  15.0 FIX Half-duration  3.6
      Moment Tensor;   Scale 10**18 Nm
        Mrr=-0.18 0.01  Mtt=-0.50 0.01
        Mff= 0.68 0.02  Mrt=-0.61 0.06
        Mrf=-0.14 0.07  Mtf= 2.24 0.01
       Principal Axes:
        T  Val=  2.50  Plg=10  Azm=128
        N       -0.19     75      261
        P       -2.31     11       36
      Best Double Couple:Mo=2.4*10**18
       NP1:Strike=173 Dip=75 Slip=-180
       NP2:         82     90      -15

SVO     1.70  75 eP    20 29.40  -3.9X
                eS    20 39.00
HNR     1.78  85 eP    20 30.00  -4.4X
                eS    20 51.00
RAB     8.01 312 iP+   22 02.00  -0.6
                iS    23 58.00
PMG    10.84 270 eP    22 46.26   4.6X
LAT    11.41 284 eP    22 51.60   2.1
BKM    12.67 130 iPc   23 05.90  -0.5
PVC    12.76 130 iPc   23 08.80   1.1
MDG    13.00 289 eP    23 15.50   4.7X
DZM    14.74 148 iPc   23 34.00   0.2
CTA    15.51 226 iPd-  23 43.00  -0.8
       1.8s  2045.45nm          6.1mb
                ipP   23 50.50
                isP   23 58.00
                i     24 55.00
                eS    26 30.00
CTAO   15.51 226 ePd   23 43.35  -0.5
       1.4s   826.91nm          5.8mb
WWKK   15.60 291 eP    23 47.00   2.0
BRS    18.41 195 iPc   24 20.50   0.1
       1.3s    91.00nm          4.8mb X
                i     24 28.00
                e     25 10.00
                eS    27 25.00
                i     27 41.50
QIS    20.93 237 iPc   24 49.10   0.4
MBU    21.31 112 eP    24 52.30  -0.2
ARMA   21.59 195 eP    24 55.00  -0.4
       1.2s   429.00nm          5.7mb
RIV    24.96 194 eP-   25 29.40   1.3
     Z  17s     0.48um          4.1MszX
                iS    29 57.00
WB5    25.13 243 iPd   25 30.00   0.0
WB2    25.17 243 iPc   25 30.00  -0.3
       0.8s    97.90nm          5.5mb
WRA    25.18 243 P     25 30.50   0.1
BWA    26.27 198 eP    25 40.30  -0.2
                i     25 44.80  16kmX
GUA    26.48 330 e(P)  25 39.20  -3.3X
       1.2s   725.00nm          6.2mb
     Z  18s    30.98um          5.9Msz
                eS    30 15.00
GUMO   26.54 330 (P)   25 42.27  -0.8
MTN    26.69 261 eP    25 45.50   1.0
CNB    26.83 196 iPd   25 47.30   1.7
       0.9s   135.00nm          5.6mb
                eS    30 42.00
CAN    26.93 197 eP    25 47.00   0.4
                ipP   25 52.90  21kmX
                i     26 47.90
                i     28 21.70
STK    26.97 212 eP    25 37.00  -9.8X
       1.2s   146.00nm          5.5mb
                eS    30 19.30
ASPA   27.06 236 iPd   25 47.10  -0.7
       1.1s    73.40nm          5.3mb
     Z  21s    51.90um          6.1Msz
                eS    30 33.00
KNA    29.29 255 eP    26 07.50  -0.5
       0.5s    35.00nm          5.4mb
AFI    29.74 101 eP    26 11.00  -1.2
                e(S)  31 00.00
PUZ    33.63 151 eP    26 44.40  -1.6
WARB   34.08 237 eP    26 49.00  -1.1
KIW    34.50 157 eP    26 52.00  -1.4
MNG    34.51 156 eP    26 51.70  -1.8
TCW    34.57 158 eP    26 52.20  -1.8
CAW    34.77 157 eP    26 54.10  -1.7
SNZO   34.81 158 (P)   26 54.67  -1.4
                ec    26 56.49   6kmX
                esPd  27 02.37
MTW    34.98 157 eP    26 54.80  -2.8X
FORT   35.04 229 eP    26 58.50   0.3
       0.5s    25.00nm          5.4mb
BLW    35.15 157 eP    26 56.30  -2.7X
LTZ    35.29 162 eP    26 59.10  -1.2
DAV    36.44 296 eP+   27 08.00  -2.2
MBL    38.59 248 eP    27 27.00  -1.2
PLP    38.90 301 ePc   27 30.00  -0.9
MAP    39.34 299 eP    27 38.00   3.5X
COOL   40.39 233 iPc   27 43.90   0.8
MEEK   41.01 240 eP    27 48.00  -0.2
       0.8s   131.00nm          5.7mb
GQP    42.43 303 eP    28 01.00   1.1
NANU   42.78 247 eP    28 02.50  -0.2
       0.8s    96.00nm          5.6mb
KLB    43.33 234 eP    28 08.00   0.8
BAL    43.84 235 eP    28 11.00  -0.3
KKM    44.58 289 ePd   28 19.90   2.3
       1.7s   566.10nm          6.2mb
MUN    44.71 234 eP    28 19.00   0.7
                eS    35 00.00
CVP    44.98 307 ePd   28 12.00  -8.6X
BAG    45.27 305 ePc+  28 20.00  -3.2X
       1.8s  1818.18nm          6.7mb
                eS    35 02.00
KAGJ   48.24 328 eP    28 47.90   1.7
WKYJ   48.55 335 P     28 47.50  -1.1
KAKJ   48.60 341 P     28 48.70  -0.1
IIDJ   48.74 338 P     28 49.70  -0.3
CHJJ   48.86 339 P     28 50.50  -0.3
TKSJ   49.01 333 P     28 51.90  -0.1
KUMJ   49.35 329 eP    28 53.00  -1.6
TSRJ   49.53 336 P     28 56.00   0.0
TATO   49.58 315 (P)   28 56.17  -0.3
MAJO   49.58 339 eP    28 55.81  -0.6
       0.8s    34.72nm          5.4mb
                ec    28 57.80
                epPd  29 00.78  17kmX
                esPd  29 04.09
MAT    49.58 339 eP    28 53.00  -3.4X
       0.8s    26.87nm          5.3mb
     Z  20s    14.89um          6.0Msz
                eS    36 00.00
MTMJ   49.76 338 P     28 56.50  -1.4
NIIJ   49.93 340 P     28 58.10  -1.0
LEM    50.05 269 ePc   29 02.50   1.9
       1.0s    94.00nm          5.7mb
     Z  20s     0.64um          4.6MszX
                e(S)  36 11.00
                eLR   40 02.00
YONJ   50.29 334 P     29 01.20  -0.6
YAMJ   50.44 341 P     29 03.40   0.4
SHNJ   50.49 331 P     29 04.30   1.0
OFUJ   50.80 343 P     29 05.60   0.0
AFR    51.10 105 iPc   29 07.50  -0.8
       1.5s   618.40nm          6.3mb
PAE    51.29 105 iPc   29 09.00  -0.7
       1.8s  1129.00nm          6.5mb
PPT    51.30 105 iPd   29 09.00  -0.8
       1.8s   977.10nm          6.4mb
     Z  26s  3600.00um          8.3MszX
PPN    51.43 105 iPc   29 10.10  -0.7
       1.8s   894.20nm          6.4mb
TVO    51.61 105 iPc   29 11.40  -0.8
       1.8s  2037.10nm          6.8mb
QZH    51.63 312 eP    29 11.00  -1.1
       1.6s   410.00nm          6.1mb
     Z  21s    15.50um          6.0Msz
     N  11s     2.76um
                S     36 34.00
PMO    52.89 102 iPc   29 21.30  -0.5
       1.8s  2437.60nm          6.8mb
HON    52.90  54 P     29 30.00   8.2X
     Z  21s    12.64um          5.9Msz
OPA    53.08  54 eP    29 23.02  -0.1
VAH    53.14 102 iPc   29 23.10  -0.6
       1.9s  1578.30nm          6.6mb
TPT    53.16 102 iPc   29 23.20  -0.6
       1.8s  1788.50nm          6.7mb
RUV    53.38 102 iPc   29 24.90  -0.5
       1.7s  1388.10nm          6.7mb
SSE    53.78 320 iPc   29 27.14  -0.9
       1.0s    47.00nm          5.5mb
     Z  20s    13.70um          6.0Msz
     N  22s     8.10um
     E  20s     8.30um
                ec    29 28.55
                epPd  29 31.78  15kmX
                iS    37 02.00
KUSJ   53.86 348 eP    29 28.10  -0.3
MRRJ   54.08 344 eP    29 29.30  -0.7
GZH    54.57 307 iPc   29 36.00   2.0
       1.6s   240.00nm          6.0mb
     Z  22s    18.80um          6.1Msz
     N  19s     5.08um
     E  22s    16.70um
SAP    54.60 345 eP    29 34.00   0.1
ASAJ   55.28 346 eP    29 39.50   0.6
QIZ    55.47 301 eP    29 41.40   0.7
     E  24s    20.80um
                S     37 25.00
KGM    55.81 279 eP    29 45.00   1.8
NJ2    55.90 320 Pc    29 44.80   1.3
       1.0s    47.00nm          5.5mb
     Z  22s     9.76um          5.8Msz
     N  12s     4.05um
     E  13s     1.92um
                S     37 29.00
VLA    57.67 337 iPd+  29 56.00   0.1
     Z  14s     1.10um          5.1MszX
     N  15s     2.50um
     E  12s     1.60um
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                i     33 28.00
                iS    37 54.00
                iPS   38 12.00
                i     41 34.00
                i     43 56.00
WHN   57.97 315 P     29 57.50  -0.7
      1.5s   160.00nm          5.8mb
    Z  28s    23.60um          6.2MszX
    N  19s    12.90um
                S     37 58.00
YSS   58.02 348 ePd   29 56.77  -1.5
    Z  19s    11.60um          6.0Msz
    E  19s     3.20um
                ed    29 59.83  10kmX
                iS    37 57.00
DRV   58.31 188 eP    30 12.00  11.9X
                S     38 10.00
IPM   58.63 281 ePd   30 04.00   0.8
DL2   59.02 327 P     30 06.00   0.6
      1.0s  1400.00nm          7.0mb X
    Z  36s     9.78um          5.7MszX
    N  14s     5.90um
    E  18s     4.43um
                S     38 09.00
SNG   59.68 284 eP    30 10.00  -0.5
                eS    37 22.00
TIA   59.72 322 eP    30 07.40  -2.9X
      1.7s    24.00nm          5.0mb
    Z  26s     6.38um          5.6MszX
    N  16s     6.37um
    E  16s     3.36um
                S     38 20.00
MDJ   59.82 337 ePc   30 09.62  -1.3
      1.5s   350.00nm          6.3mb
    Z  22s    16.00um          6.1Msz
    N  20s    12.80um
    E  20s     8.89um
                S     38 22.00
SKR   60.04 358 eP    30 12.00  -0.2
                eS    38 23.00
SNY   60.21 331 Pc    30 10.00  -3.5X
    Z  40s    23.30um          6.0MszX
    N  19s     9.03um
                PcP   30 54.00
                iS    38 25.00
CN2   60.88 333 Pc    30 17.00  -1.1
      1.2s   160.00nm          6.0mb
    Z  27s     9.01um          5.8MszX
    N  15s     4.16um
    E  15s     3.32um
                eS    38 35.00
                ScS   39 58.00
PCT   61.20 293 eP    30 25.20   4.5X
GYA   61.50 307 iPc   30 22.60  -0.3
      1.4s   220.00nm          6.1mb
    Z  22s    13.60um          6.1Msz
    N  22s     7.91um
    E  22s     9.40um
                pP    30 35.00  43kmX
                PP    32 46.00
                S     38 44.00
                SS    42 48.00
PET   62.37   0 eP    30 27.00  -0.9
      1.2s   160.00nm          6.1mb
                eS    38 54.00
                eSS   42 50.00
NST   62.69 293 eP    30 31.50   0.7
BJI   62.82 325 ePc   30 29.75  -1.5
      2.0s   190.00nm          5.9mb
    Z  20s    16.50um          6.2Msz
    N  17s     4.79um
                ic    30 31.33   5kmX
                esPd  30 39.35
                eS    38 52.00
TIY   63.56 321 eP    30 34.70  -1.6
    Z  20s    13.70um          6.1Msz
    E  18s     6.02um
                sS    39 21.50
SMY   63.57  11 P     30 40.00   4.1X
    Z  20s    18.75um          6.3Msz
XAN   63.73 315 P     30 35.50  -2.0
      1.0s    59.00nm          5.7mb
    Z  22s    19.00um          6.2Msz
    N  18s     8.10um
    E  18s     8.33um
                pP    30 46.00  34kmX
                sP    30 50.00
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                PcP   31 12.00
                PP    32 56.00
                PcS   35 14.00
                S     39 04.00
                sS    39 21.00
                ScS   40 22.00
                SS    43 13.00
KHT   63.81 292 eP    30 39.00   0.8
KMI   64.05 304 P+    30 45.00   5.1X
      1.8s   390.00nm          6.3mb
    Z  26s    27.40um          6.3MszX
    N  14s     2.50um
    E  18s     6.50um
                pP    30 53.00  26kmX
                PcP   31 14.00
                iS    39 18.00
                sS    39 39.00
                ScS   40 37.00
                SS    43 28.00
KMI   64.05 304 ePc   30 39.76  -0.2
      1.8s   390.00nm          6.3mb
    Z  26s    27.40um          6.3MszX
    N  14s     2.50um
    E  18s     6.50um
                ec    30 41.83
                epPc  30 44.56  15kmX
                ed    30 50.11
                PcP   31 14.00
                iS    39 18.00
                sS    39 39.00
                ScS   40 22.00
                SS    43 13.00
BDT   64.24 294 eP    30 31.00 -10.0X
      1.2s    42.10nm          5.5mb
CHTO  64.84 296 ePc   30 44.60  -0.3
      1.1s    38.28nm          5.5mb
                ec    30 45.92
                epPd  30 49.48  16kmX
                ed    30 54.86
                eS    39 25.50
ADK   64.96  17 (P)   30 40.95  -4.1X
CSY   65.15 199 eP    30 35.70 -10.4X
      0.9s    22.40nm
CD2   65.87 310 iPd   30 51.40   0.1
      1.8s   620.00nm          6.5mb
    Z  14s    17.70um          6.4MszX
    N  12s     3.49um
                S     39 35.00
                SS    43 55.00
HHC   66.03 323 Pc    30 51.60  -0.7
      1.6s   150.00nm          5.9mb
    Z  28s    12.00um          6.0MszX
    N  16s     2.26um
    E  15s     3.65um
                PcP   31 24.00
                PP    33 15.00
BTO   66.81 322 P     30 56.50  -0.7
      0.8s    36.00nm          5.6mb
    N  17s     2.67um
    E  17s     1.02um
                PP    33 27.00
                S     39 45.00
                eSS   44 09.00
HIA   67.60 334 ePc   31 00.97  -1.0
                ec    31 03.12
                epPc  31 05.69  15kmX
                ed    31 10.99
LZH   68.35 315 P     31 06.50  -0.6
      2.0s   480.00nm          6.3mb
    Z  32s    17.80um          6.1MszX
    E  20s    10.10um
                pP    31 19.50  45kmX
                PP    33 35.00
                eS    40 02.00
                SS    44 26.00
SBA   68.38 178 eP    31 08.50   2.1
                S     40 15.00
CIT   72.28 333 eP    31 31.00   0.4
                e     40 57.00
GTA   72.76 316 iPc   31 33.50  -0.3
      1.5s   240.00nm          6.0mb
    Z  28s    20.90um          6.3MszX
    E  19s     6.99um
                pP    31 45.50  40kmX
                S     41 00.00
                SS    45 40.00
SHL   73.30 300 iP    31 37.50   0.3
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                iS    41 06.00
SDN   73.32  23 eP    31 34.60  -1.9
YAK   74.75 347 iPd   31 44.40  -0.3
      1.4s   221.00nm          6.0mb
                i     31 56.00
                ipP   34 32.00
                iS    41 22.00
                e     41 48.00
LSA   75.31 304 ePc   31 49.33   0.2
      2.2s   530.00nm          6.2mb
    N  16s     2.81um
                ec    31 51.31   6kmX
                ed    31 55.78
                S     41 20.00
BOD   76.14 338 eP    31 51.20  -1.5
      1.7s   183.00nm          5.9mb
ZAK   76.34 327 ePc   31 53.50  -0.4
      1.6s   261.00nm          6.0mb
    Z  14s     1.96um          5.6MszX
    E  17s     5.22um
                e     32 05.30  39kmX
                e     34 40.00
                ePPP  36 34.70
                eS    41 40.00
                ePS   42 13.00
IRK   76.88 329 eP    31 57.50   0.5
      2.2s   164.00nm          5.7mb
                e     32 07.30  31kmX
                e     32 14.00
                eS    41 42.00
                ePS   42 10.00
                eSSS  50 00.00
KDC   78.19  25 eP    32 01.90  -2.1
      0.8s    15.19nm          5.1mb
ANM   78.87  15 eP    32 07.67   0.0
ILT   79.06   9 iPd   32 08.30  -0.3
      1.4s   124.00nm          5.7mb
                i     32 19.80  38kmX
                iS    42 04.00
                i     42 56.00
GUN   79.12 301 P     32 10.00  -0.3
SVW   79.25  21 eP    32 09.92   0.1
      1.1s   217.79nm          6.1mb
PKI   79.43 300 P     32 10.80  -1.1
KKN   79.60 301 P     32 12.00  -0.7
DMN   79.69 300 P     32 12.00  -1.3
GKN   80.20 301 P     32 14.30  -1.5
TTA   80.38  19 eP    32 14.99  -1.0
      1.0s    57.23nm          5.5mb
SPA   80.46 180 ePc   32 16.30  -0.2
      1.4s   215.69nm          6.0mb
                i     59 11.10
SLKM  80.85  23 eP    32 17.19  -1.2
PAF   81.46 221 iP    32 29.00   7.2X
                ePP   35 38.00
                iS    42 40.00
                eSS   47 51.00
PMR   81.94  23 ePd   32 23.15  -0.8
      0.9s    75.84nm          5.8mb
    Z  19s     6.84um          6.0Msz
UER   81.96 325 iP    32 23.50  -0.8
      1.8s   112.00nm          5.6mb
                iS    42 38.00
KOD   82.65 282 eP    32 32.00   3.0X
                eS    42 50.00
WMQ   82.85 317 ePc   32 29.54   0.3
      1.5s   140.00nm          5.9mb
    Z  22s     8.81um          6.1Msz
    N  14s     2.00um
    E  17s     2.38um
                ec    32 31.53   6kmX
                ec    32 33.68
                S     42 48.50
HYB   83.06 289 eP    32 30.70   0.0
KLU   83.12  24 eP    32 27.20  -3.1X
MAW   83.21 203 P     32 32.59   2.1
IMA   83.28  18 eP    32 29.28  -1.8
      1.0s    24.06nm          5.3mb
GBA   83.34 285 P     32 33.00   0.9
TIK   83.36 351 iPd   32 33.00   1.9
      2.0s   185.00nm          5.9mb
    Z  18s     6.00um          6.0Msz
                e     32 45.00  40kmX
                e     35 43.00
                eS    42 51.00
TOA   83.38  23 eP    32 32.00   0.5
BALM  84.32  25 eP    32 36.15  -0.3
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26d 23h

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COL    84.43  20 eP    32 33.84  -2.9X
        0.9s   135.71nm          6.2mb
FBA    84.43  20 eP    32 33.80  -2.9X
        0.9s    85.36nm          6.0mb
SIT    85.65  30 P     32 50.00   7.2X
     Z  20s     1.23um          5.3Msz
BRW    86.12  13 eP    32 44.08  -0.9
NDI    86.70 300 iPd   32 49.00   0.2
        1.0s    24.00nm          5.4mb
                eS     43 14.00
ARC    87.11  48 eP    32 52.01   1.6
        2.5s   640.00nm          6.4mb
FHC    87.16  48 eP    32 52.36   1.6
        1.1s    67.97nm          5.8mb
NTYM   87.54  51 eP    32 54.58   2.0
POO    87.67 289 iPc   32 57.50   3.9X
STAN   87.68  52 ePd   32 52.29  -1.0
        1.8s   480.00nm          6.5mb
BKS    87.74  51 eP    32 54.79   1.2
        1.4s   130.00nm          6.1mb
     Z  18s     5.00um          6.0Msz
                eS     43 30.09
                eLQ    56 03.09
                eLR    58 03.09
COE    88.03  52 eP    32 56.83   1.8
LGPM   88.04  48 eP    32 56.50   1.4
                e      33 03.47  22kmX
MHC    88.07  52 ePd   32 55.54   0.2
        3.6s  1480.00nm          6.7mb X
     Z  18s     9.00um          6.2Msz
                eSKS   43 32.19
                eS     43 43.19
                eLQ    56 08.19
                eLR    59 04.19
SAO    88.09  52 eP    32 54.67  -0.6
        0.9s    16.75nm          5.4mb
     Z  19s    11.22um          6.3Msz
ARN    88.16  52 eP    32 57.08   1.4
WDC    88.17  48 iPc   32 56.93   1.4
        1.2s    42.86nm          5.6mb
     Z  18s     7.68um          6.2Msz
YBH    88.33  47 ePd   32 57.56   1.2
        1.3s    60.00nm          5.8mb
     Z  18s     6.00um          6.1Msz
                eSKS   43 29.52
                eS     43 46.52
                eSS    49 30.52
                eLQ    56 31.52
                eLR    59 56.52
ORV    88.70  50 eP    32 58.93   0.8
BOM    88.70 289 eP    32 41.00 -17.5X
                iS     43 30.00
PHAM   88.71  53 (P)   33 00.33   2.0
MIN    88.80  49 ePd   32 58.10  -0.7
        2.1s   160.00nm          6.0mb
BCH    88.82  54 eP    33 00.54   1.6
LBFM   88.83  48 eP    33 00.38   1.4
CMB    89.20  51 ePc   33 02.71   2.1
        1.2s    34.96nm          5.5mb
     Z  21s     5.10um          5.9Msz
ABL    89.44  55 eP    33 03.16   1.1
GMW    89.72  42 eP    33 03.12   0.3
TLG    89.86 314 eP    33 04.00   0.4
        1.8s   123.00nm          5.8mb
     Z  21s     2.70um          5.7Msz
     N  17s     1.80um
                eS     43 33.00
                e      44 00.00
MCW    89.97  41 (P)   33 02.63  -1.4
KSH    90.05 310 iP    33 06.50   1.9
        1.0s    50.00nm          5.7mb
     Z  24s     4.77um          5.8MszX
     N  18s     4.80um
     E  18s     8.68um
                pP     33 17.00  33kmX
                sP     33 21.00
                iSKS   43 28.00
MEMM   90.24  52 eP    33 06.63   1.3
                e      33 13.53  22kmX
MTUM   90.47  52 (P)   33 07.82   1.1
SSK    90.55  56 eP    33 08.25   1.1
VGB    90.58  44 (P)   33 07.93   1.0
BONR   90.79  52 ePd   33 09.21   0.9
PEC    90.92  56 eP    33 09.55   0.9
        1.3s    94.16nm          6.0mb
NIL    91.04 304 iPd   33 12.20   3.0X
        1.5s     0.03nm          2.4mb X
                iS     43 45.70
INK    91.05  20 eP    33 09.50   1.0
        1.2s     9.00nm          5.0mb
PLM    91.06  57 eP    33 09.86   0.3
KVN    91.17  51 eP    33 09.99   0.1
GSC    91.47  55 ePd   33 12.14   0.9
TNP    91.66  52 iP    33 12.14  -0.1
        0.9s    50.20nm          5.9mb
                e      33 21.28  28kmX
FRU    91.75 313 eP    33 15.00   2.7X
        2.2s   240.00nm          6.2mb
                e      43 46.00
TPNV   92.21  53 eP    33 14.70   0.0
        0.9s    24.89nm          5.6mb
                e      33 23.88  29kmX
GLA    92.69  57 eP    33 16.98   0.1
DPW    92.81  42 eP    33 17.33   0.2
NEW    93.60  42 P     33 30.00   9.3X
     Z  21s    10.59um          6.3Msz
ARUT   94.55  53 eP    33 27.50   2.0
DUG    95.38  50 P     33 40.00  10.8X
     Z  20s     4.13um          5.9Msz
HVU    95.63  49 ePc   33 30.80   0.5
MSU    95.64  52 eP    33 34.30   3.7X
TUC    95.95  58 P     33 40.00   8.1X
     Z  20s     9.16um          6.3Msz
LRM    96.38  45 eP    33 33.70  -0.1
DAU    96.59  50 eP    33 36.50   1.6
NVL    96.64 191 (P)   33 33.00  -1.3
     Z  20s    17.00um          6.5Msz
     N  20s    11.00um
     E  20s    12.00um
                ePP    37 30.00
                e      39 37.00
                eSKS   44 09.00
                eS     44 38.00
                ePS    46 16.00
                eSS    50 50.00
                eSSS   54 50.00
SRU    97.00  52 eP    33 36.93   0.3
YKA    97.16  28 eP    33 36.50  -0.1
        1.1s    11.60nm          5.4mb
MBC    97.47  14 P     33 37.00  -0.7
                PcP    33 38.20
PV09   98.01  52 eP    33 44.44   3.1X
PV10   98.07  52 eP    33 42.38   0.8
PV08   98.40  52 eP    33 44.78   1.6
ALQ    99.82  56 P     34 00.00  10.5X
     Z  20s     9.51um          6.3Msz
GLD   101.14  51 Pdiff 34 10.00  14.6X
     Z  19s    11.37um          6.4Msz
SVE   102.08 326 ePdiff34 00.00   1.2
        2.0s    20.00nm          5.4mb
     Z  19s     7.50um          6.2Msz
     N  20s     2.00um
     E  20s     3.00um
                e      38 07.30
                ePS    44 31.00
                e      47 12.00
RSSD  102.21  47 ePdiff33 59.37  -0.7
        1.3s    15.55nm          5.5mb
ARU   103.22 326 ePdiff34 02.00  -1.9
     Z  18s     7.50um          6.3Msz
     N  18s     2.00um
     E  18s     4.50um
                e      48 18.00
                e      52 58.00
                e      57 00.00
RES   103.66  15 ePdiff34 06.00   0.5
WMOK  106.12  57 PKP   38 40.00  10.4X
     Z  20s    14.23um          6.5Msz
FVM   112.72  53 PKP   38 50.00   8.1X
     Z  19s    16.64um          6.6Msz
SLM   112.80  52 PKP   38 50.00   8.0X
     Z  19s     5.14um          6.1Msz
OXF   113.85  57 PKP   39 00.00  15.8X
     Z  21s     9.57um          6.4Msz
KIV   114.88 314 iPdiff35 10.80  14.5X
KIV   114.88 314 ePKPd 38 45.70  -0.4
                e      39 40.60
                e      49 24.60
OBN   115.60 327 iPKP  38 57.00  10.1X
        2.0s    80.00nm
                e      39 46.00
                e      45 50.00
                iPS    49 20.00
                iPPS   50 50.00
                iSS    55 54.00
GRM   117.22 225 ePKP  39 02.00  11.2X
MYNC  118.10  55 PKP   39 00.00   7.6X
     Z  21s     7.26um          6.3Msz
BFT   118.54 234 ePKP  39 00.50   6.8X
NUR   118.67 336 ePKP  38 53.00   0.5
     Z  22s     6.00um          6.2Msz
                LR     27 00.00
                e      56 36.00
SEK   119.13 230 ePKP  39 00.50   5.8X
        0.7s    22.00nm
BLF   119.79 229 ePKP  39 02.00   6.1X
        0.7s    22.00nm
SLR   119.91 233 ePKP  39 05.50   9.3X
        0.5s    16.00nm
MCWV  120.58  50 PKP   39 10.00  13.1X
     Z  20s     8.73um          6.4Msz
YSNY  120.81  46 PKP   39 10.00  12.7X
     Z  19s     8.00um          6.4Msz
KSR   120.93 232 ePKP  39 05.50   7.3X
     Z  18s    27.10um          6.9Msz
SSPA  121.79  48 PKP   39 10.00  10.9X
     Z  20s     0.00um          2.8MszX
CEH   122.00  54 PKP   39 10.00  10.3X
     Z  21s     7.46um          6.3Msz
CER   122.06 221 e(PKP)39 10.00  10.1X
        0.5s    25.00nm
BUL   122.22 239 ePKP  39 00.00  -0.7
                i      39 10.10
APO   122.65 340 ePKP  38 58.40  -1.7
        0.6s     3.30nm
BINY  122.70  46 PKP   39 10.00   9.2X
     Z  19s     8.53um          6.4Msz
NB2   123.16 342 PKP   39 00.70  -0.5
        0.8s     4.50nm
NRA0  123.29 341 PKPd  39 00.80  -0.6
LBNH  124.76  42 PKP   39 20.00  15.2X
     Z  19s     6.33um          6.3Msz
MZZ   125.51 249 iPKP  39 08.00   0.7
                i      39 17.50
                i      41 10.00
HRV   125.67  44 PKP   39 20.00  13.4X
     Z  19s     6.61um          6.3Msz
CBM   126.00  38 PKP   39 20.00  12.9X
     Z  20s     4.82um          6.2Msz
YJA   126.82 127 e(PKP)39 11.00   1.0
SPC   127.24 326 ePKP  39 09.70   0.0
CNCB  127.37 120 PKP   39 12.00   0.7
                e      52 12.00
LPB   127.40 119 PKP   39 13.00   1.8
                LR     20 06.00
LPAZ  127.48 119 ePKP  39 11.02  -0.6
KSP   128.30 330 ePKP  39 12.30   0.9
                e      41 02.50
                e      41 18.50
CCH   128.68 121 PKP   39 09.00  -4.5X
SRO   129.07 326 ePKP  39 10.80  -2.1
BRG   129.42 331 iPKP  39 15.00   1.5
ZST   129.51 327 ePKP  39 13.30  -0.5
CLL   129.56 332 iPKP  39 12.50  -1.2
        1.8s    42.00nm
     Z  18s     3.50um          6.1Msz
PRU   129.71 330 PKP   39 16.40   2.3X
     Z  15s     4.40um          6.3MszX
     N  14s     2.80um
     E  16s     3.30um
                i      39 21.40
                PP     41 20.30
                i      41 35.00
SKO   130.21 318 ePKP  39 17.00   1.7
     Z  20s     2.77um          6.0Msz
                i      41 29.50
                i      42 42.00
WIN   130.22 230 ePKP  39 20.00   3.9X
        0.6s    18.00nm
MOX   130.65 332 ePKP  39 18.30   2.4X
        2.1s    50.00nm
     Z  22s     4.80um          6.2Msz
KHC   130.75 330 ePKP  39 17.50   1.3
        1.4s    22.80nm
     Z  18s     9.40um          6.5Msz
                e      40 34.00
                ePP    41 34.70
GEC2  130.87 329 ePKP  39 16.10  -0.4
        1.6s    18.95nm
                e      39 21.00
                e      39 23.60
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                e      39 30.60
                e      39 37.20
                e      41 38.00
                e      41 56.20
GRA1  131.50 332 ePKP  39 18.30   0.8
GRF   131.50 332 ePKP  39 18.30   0.8
    Z  20s     4.00um          6.1Msz
SDV   131.88  87 ePKP  39 17.50  -2.0
KBA   132.20 328 iPKPc 39 21.30   2.1
                i      39 41.70
FUR   132.53 330 iPKPd 39 22.00   2.5X
    Z  21s     5.90um          6.3Msz
                eSKP   42 48.00
                e      42 56.00
                eSS    59 38.30
WTTA  132.96 329 iPKPc 39 21.30   0.7
      0.8s    11.80nm
                i      39 29.40
SIV   133.59 123 PKP   39 21.80  -0.7
WLF   133.76 335 iPKPc 39 23.70   2.0
DOU   134.06 336 PKP   39 26.20   3.9X
CDF   134.23 333 ePKP  39 22.20  -0.7
      1.4s    20.50nm
BSF   134.87 333 ePKP  39 23.60  -0.5
      1.4s    34.85nm
HAU   134.94 333 ePKP  39 23.80  -0.3
      0.9s    10.50nm
    Z  21s     5.95um          6.3Msz
SJG   136.26  74 ePKP  39 27.00  -0.5
LOR   136.59 335 ePKP  39 27.20  -0.1
      1.4s    23.95nm
    Z  23s     4.38um          6.1MszX
LPL   136.61 331 ePKP  39 26.40  -1.3
      1.4s    31.80nm
LPG   136.61 331 ePKP  39 26.40  -1.4
      1.1s     9.30nm
SSF   136.90 335 ePKP  39 27.90   0.1
      1.2s    20.85nm
SMF   137.08 334 ePKP  39 25.70  -2.5
      1.5s    25.05nm
BGF   137.57 335 ePKP  39 27.90  -1.3
      1.0s    16.60nm
LPF   137.86 339 ePKP  39 28.60  -1.0
      1.0s    18.20nm
MAF   137.96 335 ePKP  39 30.20   0.3
      1.2s    10.10nm
TCF   138.06 335 ePKP  39 30.30   0.2
      1.1s    11.70nm
VAO   139.33 143 ePKP  39 34.10   0.9
BDFB  143.94 134 ePKP  39 37.85  -3.6X
BAO   143.96 134 ePKP  39 37.70  -3.8X
                e      40 33.60
                e      40 39.00
EMON  143.99 342 ePKP  39 38.10  -2.6X
ETOR  144.30 334 iPKPc 39 39.09  -2.3
ECHE  144.80 331 ePKP  39 41.85  -0.3
STS   144.86 343 ePKP  39 42.15   0.0
ERUA  144.87 341 iPKPc 39 40.64  -1.6
GUD   145.32 336 iPKPc 39 41.82  -1.4
EZAM  145.57 343 ePKP  39 41.53  -1.9
EVIA  146.27 332 ePKP  39 46.03   1.2
PAB   146.33 335 ePKP  39 45.63   0.8
EALH  146.38 330 ePKP  39 47.81   3.0X
EPLA  146.57 338 ePKP  39 44.96  -0.2
EHUE  146.98 331 iPKPd 39 49.46   3.5X
EBAN  147.24 333 iPKPc 39 47.34   1.1
ENIJ  147.46 330 iPKPd 39 47.52   0.9
ECOG  147.87 332 ePKP  39 49.33   1.9
ELUQ  147.96 333 iPKPc 39 51.58   4.1X
EHOR  148.16 335 iPKPd 39 50.33   2.7X
EGUA  148.23 331 ePKP  39 50.55   2.7X
LIS   148.85 341 ePKP  39 54.00   5.3X
EPRU  148.88 334 ePKP  39 52.81   3.9X
EVAL  148.98 336 iPKPc 39 52.25   3.2X
ALJ   149.28 334 ePKP  40 00.00  10.3X
GIBL  149.30 334 ePKP  39 55.00   5.4X
EJIF  149.41 333 ePKP  39 53.99   4.3X
MOMI  149.63 334 ePKP  39 57.00   7.0X
CNIL  149.73 334 ePKP  40 00.00   9.9X
PLAT  149.81 333 ePKP  39 56.00   5.7X
CPS   150.01 333 ePKP  39 57.00   6.4X
BIT   150.20 333 iPKP  39 57.50   6.7X
TSY   150.53 333 ePKP  39 58.00   6.6X
SOB1  153.38 134 ePKP  39 56.00  -0.2
                e      40 04.00
KIC   162.75 261 PKP   40 09.04   1.9
      0.9s    10.00nm
LIC   163.00 260 PKP   40 08.62   1.2
      1.1s    19.50nm
TIC   163.08 261 PKP   40 08.84   1.3
      0.9s     9.50nm
LKO   163.96 271 PKP   40 10.60   2.2X
    S.D. = 1.1  on 246 of 334 obs.
-----------------------------------
?  NOV  26, 1993  23h 50m 22.36± 0.89s
   18.028 N ± 8.9km   76.945 W ± 7.0km
   DEPTH =  10.0km  (geophysicist)
 JAMAICA REGION                    ( 86)
      MD 2.1 (HOJ).

STH     0.13  68 iP    50 25.72   0.1
                S     50 27.58
GWJ     0.20  77 iP    50 26.73  -0.1
                S     50 29.92
PCJ     0.36 217 iP    50 29.69   0.0
BBJ     0.47 319 iP    50 31.86   0.0
SPJ     0.59 267 iP    50 42.81   8.5X
    S.D. = 0.2  on   4 of   5 obs.
-----------------------------------
   NOV  27, 1993  00h 40m 14.19± 0.55s
   37.678 N ± 5.5km  137.452 E ± 4.2km
   DEPTH =  41.2 ±  6.8 km
   4.6mb ( 14 obs.)
 NEAR WEST COAST OF HONSHU, JAPAN(226)

MTMJ    1.13 165 P     40 33.30  -0.5
                S     40 49.40
MAT     1.29 152 eP    40 35.00  -1.0
                eS    40 53.00
NIIJ    1.31 109 iPd   40 35.30  -1.0
                S     40 53.10
CHJJ    2.04 142 iP+   40 47.30   0.5
                S     41 14.30
YAMJ    2.10  76 P     40 46.70  -1.0
                eS    41 09.90
IIDJ    2.22 170 eP    40 50.20   0.7
                eS    41 21.30
TSRJ    2.44 209 P     40 52.00  -0.5
KAKJ    2.63 123 eP    40 57.10   2.0
OFUJ    3.60  66 iPd   41 08.70  -0.2
AOMJ    3.67  37 eP    41 09.60  -0.3
                eS    41 53.40
WKYJ    3.77 204 P     41 10.80  -0.6
YONJ    4.06 234 P     41 15.10  -0.4
TKSJ    4.61 218 P     41 24.00   0.8
SHK     4.98 232 eP    41 28.50   0.1
SHNJ    6.25 237 P     41 46.60   0.3
                eS    42 58.40
KUMJ    7.47 229 eP    42 04.20   0.8
KAGJ    8.44 222 eP    42 16.90   0.0
TIA    16.32 271 eP    44 03.40   1.5
BJI    16.74 285 eP    44 04.00  -3.1X
TIY    19.79 278 Pd    44 44.00   0.1
XAN    23.37 270 eP    45 21.00   1.1
LZH    26.85 277 eP    45 52.00  -0.9
       1.4s    39.00nm          4.8mb
                pP    45 59.50  26kmX
GUN    43.96 273 P     48 19.00  -0.5
KKN    44.49 273 P     48 23.30  -0.3
GKN    44.90 274 P     48 26.20  -0.7
IMA    47.75  31 (P)   48 49.87   1.0
       1.2s     3.26nm          4.2mb
WB2    57.39 183 eP    49 59.70  -1.1
       0.6s     9.70nm          5.0mb
WRA    57.39 183 P     50 00.20  -0.6
       0.7s     4.10nm          4.6mb
GBA    58.14 263 P     50 06.00  -0.3
ASPA   61.11 184 eP    50 25.80  -0.7
       1.0s     4.50nm          4.6mb
KAF    66.26 331 eP    50 58.80  -1.0
       0.4s     2.00nm          4.5mb
NUR    67.87 330 eP    51 09.20  -0.8
APO    71.79 334 eP    51 32.50  -1.5
       0.4s     0.80nm          4.1mb
NB2    72.34 336 P     51 36.50  -0.8
       0.8s     2.70nm          4.3mb
PV10   82.67  47 eP    52 37.13   2.0
PV08   82.76  46 eP    52 37.57   1.9
CDF    83.52 329 eP    52 39.60   0.6
       0.9s     5.55nm          4.6mb
BSF    84.18 329 eP    52 42.50   0.1
       0.7s     3.40nm          4.6mb
HAU    84.22 329 eP    52 42.70   0.2
       0.7s     3.40nm          4.6mb
LOR    85.81 330 eP    52 50.70   0.3
       0.7s     3.30nm          4.7mb
SSF    86.12 330 eP    52 51.70  -0.2
       0.8s     3.65nm          4.7mb
AVF    86.40 330 eP    52 53.70   0.4
       0.6s     4.50nm          4.9mb
LPAZ  148.98  54 PKP   00 02.90   6.7X
                i     00 11.40
LPB   149.18  54 ePKP  00 05.00   8.7X
CNCB  149.46  54 ePKP  00 04.00   7.1X
SOB1  151.62 357 ePKP  00 05.00   5.5X
    S.D. = 0.9  on  41 of  46 obs.
-----------------------------------
*  NOV  27, 1993  00h 55m 11.14± 2.04s
   32.001 S ±10.5km   71.809 W ±15.7km
   DEPTH =  10.0km  (geophysicist)
 NEAR COAST OF CENTRAL CHILE       (135)
      MD 4.0 (SAN).

ROCH    1.18 145 iP+   55 33.27   0.0
                iS    55 52.03
JACH    1.23 124 iPd   55 33.92  -0.2
                iS    55 52.41
PEL     1.48 140 iP+   55 38.00   0.1
                iS    56 01.06
LCCH    1.48 172 iPd   55 36.89  -1.0
TACH    1.80 156 iPd   55 42.48   0.0
FCH     1.84 136 iP+   55 43.27  -0.1
                iS    56 10.74
PCH     1.95 146 iP    55 44.62  -0.1
LNV     1.98 170 eP    55 45.80   0.8
CACH    2.34 155 iP    55 50.74   0.3
                iS    56 24.50
RTCB    2.62  79 ePc   55 54.60   0.4
                S     56 31.00
ZON     2.70  81 e(P)  55 38.80 -16.7X
RTCV    2.79  88 eP    55 57.00   0.3
RTLL    2.93  78 e(P)  55 58.00  -0.6
                S     56 39.00
CFA     3.07  84 e(P)  55 54.70  -5.8X
                S     56 45.00
RFA     3.93 136 ePd   56 13.00   0.1
MRA     5.19  96 ePc   56 27.80  -2.8X
CYA     6.30  57 e(P)  56 42.00  -4.4X
    S.D. = 0.5  on  13 of  17 obs.
-----------------------------------
&  NOV  27, 1993  01h 15m 34.77s
   34.001 N          116.308 W
   DEPTH =   5.4km
 SOUTHERN CALIFORNIA                ( 43)
      <PAS-P>. ML 2.6 (PAS).

PEC     0.72 262 eP    15 47.86  -1.3
PLM     0.79 216 ePc   15 49.63  -1.1
SSK     1.17 281 eP    15 56.09  -1.1
GSC     1.36 343 eP    15 59.86  -0.5
GLA     1.56 127 eP    16 03.45   0.3
        5 obs. associated
-----------------------------------
?  NOV  27, 1993  01h 27m 46.79± 0.89s
   31.590 S ±29.7km   68.575 W ±18.7km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA      (137)

RTCB    0.22 298 iPd   28 01.00  -0.6
                S     28 12.30
RTCV    0.27 173 eP    28 02.00   0.2
                S     28 12.50
RTLL    0.27  19 iPd   28 02.00   0.2
                S     28 13.10
CFA     0.29  93 iPd   28 01.90   0.3
                S     28 14.00
MRA     2.57 109 ePc   28 27.20  -0.2
    S.D. = 0.6  on   5 of   5 obs.
-----------------------------------
*  NOV  27, 1993  01h 37m 56.41± 2.15s
   31.934 S ± 9.4km   71.851 W ±19.3km
   DEPTH =  10.0km  (geophysicist)
 NEAR COAST OF CENTRAL CHILE       (135)
      MD 4.2 (SAN).

ROCH    1.25 146 iP+   38 19.96   0.1
                iS    38 38.39
JACH    1.30 125 iP+   38 20.22  -0.3
                iS    38 39.43
LCCH    1.55 171 iPd   38 23.57  -0.6
PEL     1.56 141 iPd   38 24.34   0.1
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27d 01h

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                iS    38 47.29
SAN     1.82 147 eP   38 29.29   1.3
                iS    38 53.43
TACH    1.88 156 iPd  38 29.22   0.4
                iS    38 55.55
FCH     1.91 137 iPd  38 29.61  -0.1
                iS    38 57.09
PCH     2.02 147 iP   38 30.98  -0.1
                iS    38 59.67
LNV     2.05 170 iP   38 30.02  -1.3
CACH    2.42 155 iP+  38 37.61   0.9
RTCB    2.64  81 ePc  38 40.80   0.9
                S     39 17.70
MDZ     2.71 111 eP   38 55.50  14.6X
                iS    39 28.20
ZON     2.73  83 eP   38 39.80  -1.4
RTCV    2.82  89 eP   38 44.00   1.6
RTLL    2.95  79 ePc  38 45.20   1.0
                S     39 26.00
CFA     3.09  85 e(P) 38 46.30   0.1
                S     39 29.00
MRA     5.23  97 ePc  39 14.70  -1.8
                (S)   40 22.00
CYA     6.29  58 ePd  39 28.50  -3.0
FSA     7.75  43 e(P) 39 54.00   2.0
     S.D. = 1.4  on  18 of  19 obs.
-----------------------------------
*  NOV  27, 1993  02h 04m 26.76± 1.79s
   31.474 N ±10.8km   28.937 E ±19.1km
   DEPTH =  10.0km  (geophysicist)
 EGYPT                                (553)
     ML 4.3 (CSS).

HLW     2.62 127 eP   05 11.50   1.6
PPCY    4.44  39 eP   05 36.00   0.3
CSS     5.06  45 eP   05 45.00   0.5
                eS    06 39.00
ELL     5.32   8 eP   05 48.00  -0.3
HQL     5.72 111 iPd  05 53.53  -0.3
SRFA    5.97 114 eP   05 57.33   0.0
BADA    6.03 118 ePd  05 56.87  -1.2
BCK     6.13  12 eP   05 59.50  -0.1
AYN     6.64 111 ePd  06 06.20  -0.6
IZM     7.04 349 eP   06 12.40  -0.1
CLL    23.05 334 e(P) 09 39.00   6.0X
     S.D. = 0.8  on  10 of  11 obs.
-----------------------------------
   NOV  27, 1993  03h 14m 32.57± 0.33s
   53.010 N ± 7.7km  170.696 E ± 3.8km
   DEPTH =  33.0km  (normal)
   4.8mb ( 42 obs.)  4.4Msz (  1 obs.)
 NEAR ISLANDS, ALEUTIAN ISLANDS  (  5)

SMY     2.08  96 eP   15 06.03   0.2
ADK     7.80  93 eP   16 25.50  -1.0
SKR     9.34 261 eP   16 44.50  -3.3
ILT    15.79  15 iPd  18 15.40   1.8
        1.6s  173.00nm        5.0mb
YSS    18.88 263 eP   18 55.00   2.6
SVW    19.83  53 eP   19 03.50   0.4
TTA    20.02  47 ePd  19 05.74   0.7
        1.2s   48.38nm        4.7mb
KDC    21.26  62 eP   19 16.07  -1.7
        0.4s   16.33nm        4.8mb
CRP    21.51  53 eP   19 18.94  -1.6
IMA    21.90  40 eP   19 23.50  -0.8
        0.9s   57.40nm        5.0mb
SLKM   22.41  55 ePd  19 28.38  -0.9
PMS    22.76  53 eP   19 33.60   0.8
PMR    22.99  52 eP   19 36.90   2.0
BRW    23.30  26 ePd  19 38.21   0.4
YAK    23.40 309 iPc  19 37.60  -1.3
        1.0s   86.00nm        5.2mb
FBA    23.98  44 eP   19 44.09  -0.4
        0.7s   40.84nm        5.1mb
TOA    24.42  51 eP   19 50.20   1.3
KLU    24.52  53 eP   19 50.79   0.9
TIK    26.05 331 iPc  20 04.00   0.0
        1.0s   40.00nm        5.0mb
                i     20 14.00
                e     20 48.00
BALM   26.26  54 eP   20 06.88   0.6
INK    30.00  38 eP   20 40.50   0.7
        0.9s    6.00nm        4.4mb
CN2    30.95 271 eP   20 48.00  -0.4
        1.0s   14.00nm        4.7mb
MBC    34.59  23 eP   21 21.50   1.7
        0.8s    7.00nm        4.6mb
YKA    38.76  46 eP   21 55.30   0.2
        0.9s    9.70nm        4.6mb
ZAK    40.48 294 eP   22 09.70   0.4
        1.4s   14.00nm        4.5mb
RES    40.90  24 eP   22 14.00   1.4
        1.0s    6.00nm        4.3mb
HHC    41.03 277 Pd   22 15.00   0.8
        1.4s   20.00nm        4.7mb
TIY    42.49 273 eP   22 27.50   1.4
LBFM   45.64  76 iPd  22 52.40   0.7
XAN    47.06 272 P    23 03.00   0.3
        1.5s   25.00nm        5.0mb
                pP    23 16.00  48kmX
LRM    48.27  66 eP   23 10.80  -1.5
LZH    48.73 278 P    23 17.00   1.1
        1.5s   53.00nm        5.3mb
GTA    48.92 284 iPc  23 17.00  -0.3
        1.0s   23.00nm        5.2mb
BONR   49.95  78 eP   23 25.50   0.1
HVU    50.64  70 eP   23 30.59   0.1
TPNV   51.83  77 eP   23 44.07   4.5X
        0.6s   5.19nm        4.7mb
CD2    52.36 273 iPd  23 44.20   0.7
GSC    52.63  79 eP   23 45.03  -0.4
ARUT   52.91  74 eP   23 53.10   5.5X
WMQ    52.91 296 P    23 46.50  -1.0
        1.0s    8.50nm        4.7mb
MSU    53.15  73 eP   23 49.67   0.2
SRU    53.70  71 eP   23 53.16  -0.2
GYA    53.82 267 iPd  23 55.40   1.0
        1.0s   31.00nm        5.3mb
RSSD   53.94  63 ePd  23 54.50  -0.6
        0.7s    6.34nm        4.8mb
ULM    54.01  52 eP   23 57.00   1.7
PV09   54.91  71 eP   24 02.07  -0.4
PV10   55.05  71 eP   24 03.19  -0.2
PV08   55.13  71 eP   24 03.86  -0.3
KAF    61.82 342 eP   24 48.70  -1.4
MEO    63.50  67 iPc  25 01.10  -0.4
NUR    63.62 342 eP   24 59.80  -2.1
NB2    65.13 349 P    25 09.90  -1.9
        0.8s   10.30nm        5.0mb
GUN    65.21 284 P    25 12.60  -0.6
        0.8s   21.00nm        5.3mb
APO    65.28 348 eP   25 10.50  -2.2
        0.4s    0.70nm        4.1mb
KKN    65.65 284 P    25 15.60  -0.2
PKI    65.74 284 P    25 16.00  -0.5
        0.9s   21.00nm        5.2mb
GKN    65.87 285 P    25 16.60  -0.5
DMN    65.89 284 P    25 17.10  -0.3
GAC    66.59  44 eP   25 19.00  -2.2
ELC    66.65  59 eP   25 20.50  -1.3
EKA    71.90 356 P    25 55.00   1.2
        2.0s   58.70nm        5.2mb
KSP    74.30 343 eP   26 07.70  -0.2
CLL    74.37 346 e(P) 26 07.00  -1.3
SPC    75.14 340 eP   26 12.80  -0.2
PRU    75.42 344 eP   26 14.50   0.2
GRF    76.21 346 ePd  26 19.70   0.9
        1.3s   12.00nm        4.7mb
     Z  19s    0.20um        4.4Msz
KHC    76.40 345 eP   26 21.00   1.1
        1.0s    8.90nm        4.7mb
                e     26 32.50
GEC2   76.66 345 ePc  26 21.30  -0.2
        1.3s    6.80nm        4.5mb
                e     26 26.60
                ec    26 31.10
ZST    76.70 342 eP   26 21.70   0.2
CDF    77.98 349 eP   26 28.10  -0.6
        1.2s    5.65nm        4.5mb
KBA    78.43 344 iPc  26 32.40   1.0
        1.2s   30.10nm        5.2mb
WB2    79.18 215 eP   26 35.40  -0.1
        0.9s   13.30nm        4.9mb
WRA    79.18 215 P    26 36.30   0.8
        0.8s    4.30nm        4.5mb
LOR    79.47 351 eP   26 36.20  -0.6
        1.0s    7.80nm        4.7mb
AVF    79.99 351 eP   26 39.20  -0.4
        1.3s   16.25nm        4.9mb
LPL    80.89 349 eP   26 45.40   0.7
        1.0s    9.60nm        4.8mb
LPG    80.91 349 eP   26 45.60   0.7
        1.3s   21.30nm        5.0mb
GBA    81.21 281 P    26 47.00   0.6
SKO    81.74 337 e(P) 26 47.00  -1.9
CAF    81.96 352 eP   26 50.30   0.3
        1.3s   15.15nm        4.9mb
LPF    82.05 353 eP   26 50.60   0.2
        1.3s   29.95nm        5.2mb
ASPA   82.78 214 iPc  26 55.80   1.4
        0.9s    9.10nm        4.9mb
LMR    83.07 348 eP   26 57.00   1.3
        1.2s   27.05nm        5.2mb
STK    88.26 204 eP   27 11.80  -9.5X
        1.7s    3.80nm        4.4mb
     S.D. = 1.1  on  81 of  84 obs.
-----------------------------------
   NOV  27, 1993  03h 33m 11.80± 0.61s
   4.766 S ± 6.6km  150.149 E ± 9.4km
   DEPTH = 406.5 ±  5.5 km
   4.6mb (  8 obs.)
 NEW BRITAIN REGION, P.N.G.       (192)

KVG     2.26  17 eP   34 09.00  -1.4
LAT     3.66 239 ePc  34 22.50   0.9
PMG     5.48 213 eP   34 40.00   0.3
WWKK    6.61 280 eP   34 53.00   1.0
MTN    20.42 246 eP   37 20.00  -0.4
WB2    21.55 224 iPc  37 30.40  -0.8
        0.2s   86.80nm        5.9mb X
                eS    40 58.40
BRS    22.64 174 iPd  37 42.30   1.0
        0.7s   22.00nm        4.7mb
ASPA   24.47 218 iPd  37 56.50  -1.5
        0.3s   13.20nm        4.9mb
                iS    41 43.20
ARMA   25.56 177 eP   38 08.00   0.2
        0.3s    5.00nm        4.4mb
FORT   33.20 216 eP   39 12.80  -1.5
URZ    41.39 147 P    40 22.70   0.8
MNG    42.34 151 P    40 29.80   0.3
XAN    54.80 318 P    42 03.40  -0.4
        0.6s    6.00nm        4.1mb
LZH    59.38 317 eP   42 36.50   0.9
        1.5s   34.00nm        4.6mb
GTA    63.86 318 eP   43 05.00   0.2
        1.0s    5.00nm        4.1mb
GUN    69.85 302 P    43 42.80   0.3
        0.4s   18.00nm        5.1mb
PKI    70.15 301 P    43 44.30   0.0
KKN    70.32 302 P    43 45.10  -0.1
        0.7s   30.00nm        5.0mb
DMN    70.42 301 P    43 46.30   0.5
GKN    70.93 302 P    43 48.80   0.1
GBA    74.42 285 P    44 09.00   0.3
APO   115.31 338 ePKP 51 06.40  -0.6
        0.4s    0.90nm
GEC2  122.62 327 ePKP 51 21.30  -0.1
        0.6s    0.86nm
                e     51 28.00
     S.D. = 0.8  on  23 of  23 obs.
-----------------------------------
?  NOV  27, 1993  03h 55m 39.89± 7.63s
   19.196 N ±50.7km   66.024 W ±21.8km
   DEPTH =  10.0km  (geophysicist)
 PUERTO RICO REGION                ( 90)

LPR     0.90 171 P    55 57.20   0.1
                S     56 09.20
APR     1.00 222 P    55 59.40   0.6
SJG     1.09 186 iP   56 00.80   0.5
                S     56 15.80
CPD     1.16 175 P    56 01.30  -0.2
CLLP    1.23 205 P    56 02.50  -0.2
PORP    1.28 207 P    56 03.00  -0.6
MGP     1.56 221 P    56 07.40  -0.2
     S.D. = 0.5  on   7 of   7 obs.
-----------------------------------
*  NOV  27, 1993  04h 33m 28.71± 1.81s
   38.684 S ±11.4km  175.360 E ± 9.5km
   DEPTH = 225.5 ± 15.2 km
 NORTH ISLAND, NEW ZEALAND        (159)

MGZ     0.35 156 P    33 58.40  -0.1
NGZ     0.53 159 P    33 58.90  -0.2
CNZ     0.54 164 P    33 58.90  -0.2
BSZ     1.16 196 Pc   34 02.60   0.2
WAHZ    1.28 143 P    34 03.30   0.0
URZ     1.44  73 P    34 04.60   0.1
                S     34 27.20
```

```
MNG     1.93 177 P      34 08.90    0.0
                 S      34 33.60
PGZ     2.06 160 P      34 10.20    0.2
KIW     2.20 189 Pc     34 11.50    0.0
DIW     2.39 207 P      34 13.60    0.2
CAW     2.43 185 P      34 13.90    0.0
MTW     2.48 178 P      34 14.00   -0.3
MRW     2.60 191 P      34 15.70    0.1
                 S      34 46.60
AMW     2.64 173 P      34 16.20    0.1
TCW     2.66 198 P      34 16.60    0.3
BLW     2.68 178 P      34 16.40   -0.2
QRZ     3.06 225 P      34 20.70   -0.1
LTZ     4.72 209 P      34 41.00    0.2
MQZ     5.42 201 P      34 49.20   -0.3
     S.D. = 0.2  on  19 of  19 obs.
-----------------------------------
   NOV  27, 1993  04h 48m 16.20± 0.47s
   35.844 N ± 6.8km  105.554 E ± 5.3km
   DEPTH =  33.0km  (normal)
   4.2mb (  3 obs.)
 GANSU, CHINA                      (322)
      ML 4.2 (BJI).

LZH     1.41 280 iPgd   48 40.30    0.4
                 Sg     48 58.30
XAN     3.30 122 Pn     49 08.00    1.2
     Z  10s     1.21um
                 Pg     49 16.50
                 Sn     49 49.00
                 Sg     49 56.50
CD2     5.15 197 iPnc   49 34.20    1.2
                 Sn     50 33.20
                 Sg     50 57.60
GTA     5.78 310 iPnc   49 42.00   -0.1
                 Pg     50 01.00
                 Sn     50 46.50
                 Sg     51 12.00
TIY     5.83  69 ePn    49 41.70   -1.0
                 Pg     50 00.50
                 Sn     50 48.00
BTO     5.91  35 ePn    49 43.60   -0.2
                 Sg     51 16.60
HHC     6.87  42 Pg     50 19.00   21.6X
                 Sn     51 14.00
WHN     9.07 123 eP     50 31.00    3.2X
                 iS     52 08.50
BJI     9.38  60 eP     49 44.00  -48.0X
GYA     9.40 174 iPc    50 31.00   -1.6
     Z  10s     0.64um
                 PP     50 38.20
                 S      52 15.00
                 SS     52 27.60
CN2    17.20  56 eP     52 15.00   -0.4
GUN    18.47 250 P      52 32.20    0.6
       0.8s    19.00nm          4.3mb
KKN    18.99 251 P      52 37.80    0.0
PKI    19.00 250 P      52 37.20   -0.8
DMN    19.21 250 P      52 39.80   -0.7
GKN    19.38 252 P      52 41.20   -1.1
NB2    61.36 326 P      58 32.50    1.7
       0.6s     1.30nm          4.2mb
WRA    61.82 149 P      58 35.00    0.7
       0.7s     0.70nm          3.9mb
     S.D. = 1.0  on  15 of  18 obs.
-----------------------------------
&  NOV  27, 1993  04h 48m 55.17s
   34.827 N          120.432 W
   DEPTH =   1.2km
 SOUTHERN CALIFORNIA               ( 43)
      <PAS-P>. ML 2.7 (PAS).

BCH     0.46  39 iPd    49 03.81   -0.5
ABL     1.00  88 eP     49 13.65   -1.4
PHAM    1.01   2 eP     49 13.92   -1.2
PKEM    1.26  12 eP     49 15.91   -3.5
SAO     2.10 337 eP     49 28.51   -3.4
SSK     2.34 104 eP     49 34.58   -1.0
ARN     2.67 341 eP     49 37.08   -3.0
GSC     3.01  80 (P)    49 43.30   -1.7
MEMM    3.08  23 (P)    49 44.17   -1.6
PLM     3.31 115 (P)    49 46.31   -3.0
BONR    3.56  28 (P)    49 51.56   -1.5
       11 obs. associated
-----------------------------------
?  NOV  27, 1993  05h 12m 38.45± 9.24s
   19.555 N ±67.4km   65.903 W ±25.2km
   DEPTH =  10.0km  (geophysicist)
 PUERTO RICO REGION                ( 90)

LPR     1.24 179 P      13 01.60    0.1
APR     1.35 216 P      13 03.40    0.2
SJG     1.45 189 iP     13 04.90    0.1
CPD     1.51 180 P      13 05.50    0.0
CLLP    1.60 204 P      13 07.00    0.2
PORP    1.65 205 P      13 07.10   -0.4
     S.D. = 0.3  on   6 of   6 obs.
-----------------------------------
?  NOV  27, 1993  05h 27m 50.86± 7.98s
   18.921 N ±55.6km   66.108 W ±17.2km
   DEPTH =  10.0km  (geophysicist)
 PUERTO RICO REGION                ( 90)

LPR     0.65 160 P      28 03.90    0.0
APR     0.75 232 P      28 05.70    0.2
SJG     0.81 183 iP     28 07.00    0.5
                 S      28 21.00
CPD     0.90 168 P      28 07.80   -0.3
CLLP    0.95 208 P      28 09.00    0.1
PORP    1.00 210 P      28 09.30   -0.5
     S.D. = 0.4  on   6 of   6 obs.
-----------------------------------
   NOV  27, 1993  05h 54m 04.32± 0.46s
   43.995 N ± 4.1km    7.458 E ± 3.0km
   DEPTH =   5.0km  (geophysicist)
 NEAR SOUTH COAST OF FRANCE        (379)
      ML 2.0 (GEN).

AUTN    0.02 272 Pg     54 05.68    0.1
                 Sg     54 06.48
SAOF    0.07  97 Pg     54 05.79   -0.3
                 Sg     54 07.07
AURF    0.14 221 Pg     54 07.33    0.0
                 Sg     54 09.80
TOUF    0.15 277 Pg     54 07.76    0.2
ENR     0.23 353 P      54 09.53    0.4
                 S      54 13.06
STV     0.27 339 P      54 09.90    0.1
                 S      54 13.97
IMI     0.32 105 P      54 10.81    0.0
                 S      54 15.25
ROB     0.42  45 P      54 13.06    0.3
                 S      54 19.10
PZZ     0.57 333 P      54 15.66   -0.1
                 S      54 23.26
FIN     0.58  68 P      54 16.07    0.1
BHB     0.86 351 P      54 20.29   -1.0
PCP     0.95  55 P      54 23.22    0.2
     S.D. = 0.4  on  12 of  12 obs.
-----------------------------------
   NOV  27, 1993  06h 11m 22.68± 0.07s
   38.625 N ± 1.7km  141.164 E ± 1.7km
   DEPTH = 104.0km  (geophysicist)
   5.9mb (203 obs.)
 NEAR EAST COAST OF HONSHU, JAPAN(228)
      Mw 5.8 (GS), 5.8 (HRV). Felt (IV
      JMA) at Ofunato and Sendai; (III
      JMA) at Fukushima, Hachinohe,
      Miyako, Morioka and Sakata.
      Depth from broadband
      displacement seismograms.
      FAULT PLANE SOLUTION: P-Waves
       NP1:Strike=193 Dip=55 Slip= -65
       NP2:       334     42      -121
       Principal Axes:
        T                Plg= 7  Azm=265
        P                   69      158
      Comment: The focal mechanism is
        moderately well controlled
        and corresponds to normal
        faulting with a moderate left-
        lateral strike-slip
        component. The preferred
        fault plane is NP1.
      RADIATED ENERGY
       No. of sta:  10  Focal mech.  F
       Energy        2.8±0.7*10**12 Nm
      MOMENT TENSOR SOLUTION
      Dep 103            No. of sta: 16
      Moment Tensor;    Scale 10**17 Nm
        Mrr=-5.43        Mtt= 0.45
        Mff= 4.98        Mrt= 0.75
        Mrf= 2.33        Mtf= 1.53
       Principal axes:
        T  Val=  5.98  Plg=12  Azm=287
        N       -0.02      0       17
        P       -5.96     78      109
      Best Double Couple:Mo=6.0*10**17
       NP1:Strike= 17 Dip=33 Slip= -91
       NP2:       197     57      -90
      CENTROID, MOMENT TENSOR    (HRV)
      Data Used: GDSN
      L.P.B.: 42S, 87C  M.W.:  1S,  1C
      Centroid Location:
      Origin Time        06:11:24.5 0.2
      Lat 38.52N 0.02 Lon 141.30E 0.01
      Dep 110.7 0.8 Half-duration  3.0
      Moment Tensor;    Scale 10**17 Nm
        Mrr=-4.82 0.07  Mtt=-0.28 0.11
        Mff= 5.10 0.10  Mrt= 1.10 0.08
        Mrf= 1.09 0.08  Mtf=-0.20 0.10
       Principal Axes:
        T  Val=  5.22  Plg= 6  Azm=269
        N       -0.02     13        1
        P       -5.20     76      154
      Best Double Couple:Mo=5.2*10**17
       NP1:Strike=345 Dip=40 Slip=-110
       NP2:       191     52      -74

OFUJ    0.60  41 iPd    11 41.70    1.9
YAMJ    0.99 243 iP+    11 46.30    2.7
AOMJ    2.03 343 iP+    11 58.90    2.7
                 eS     12 26.20
NIIJ    2.20 232 P      12 00.90    2.4
                 S      12 29.00
KAKJ    2.54 198 P      12 03.00    0.0
CHJJ    3.10 215 P      12 11.40    0.8
MAJO    3.14 229 iPc    12 13.41    2.3
MAT     3.14 229 eP     12 13.00    1.9
                 eS     12 54.00
MTMJ    3.36 234 P      12 16.50    2.3
MRRJ    3.80 359 eP     12 20.80    0.7
IIDJ    4.08 221 P      12 25.80    1.8
HOOJ    4.09  23 P      12 23.90   -0.2
                 eS     13 09.70
SAP     4.43   2 eP     12 29.00    0.2
TSRJ    5.16 235 P      12 41.20    2.3
KUSJ    5.21  30 iP+    12 37.10   -2.5X
                 eS     13 33.30
ASAJ    5.60  11 P      12 43.90   -1.0
WKYJ    6.28 227 P      12 54.40    0.0
YONJ    7.06 243 P      13 06.80    1.8
TKSJ    7.38 233 P      13 09.90    0.5
SHK     7.95 242 iPc    13 18.80    1.6
     1.0s   400.00nm          6.0mb
KUR     8.28  35 iPc+   13 19.20   -2.3
     0.6s  2580.00nm          7.1mb X
                 eS     14 46.50
VLA     8.33 306 iPd    13 23.50    1.1
     1.2s  1116.00nm          6.4mb
     N  15s     7.00um
     E  11s     8.50um
YSS     8.46   7 ePc    13 21.97   -2.1
     0.7s   440.00nm          6.3mb
     Z  17s     7.30um          3.9MszX
     N  17s     3.80um
     E  17s     5.90um
                 eS     14 53.00
SHNJ    9.27 244 P      13 37.10    2.1
KUMJ   10.38 237 P      13 50.80    0.9
MDJ    10.53 308 iPc    13 52.75    0.8
     1.0s   630.00nm          6.4mb
     N  13s     8.00um
     E  13s     4.81um
                 sP     14 23.00
                 S      15 52.00
                 PcP    19 45.80
                 ScS    26 40.50
KAGJ   11.23 232 P      14 01.60    0.3
CN2    12.91 299 iPc    14 23.40    0.1
     1.0s   160.00nm          5.6mb
     Z  14s     4.44um          6.1Msz
     N  11s     4.27um
     E  11s     1.30um
                 sP     14 54.00
                 S      16 49.00
                 PcP    19 48.00
SNY    13.81 289 iPc    14 35.00   -0.1
     1.8s   790.00nm          5.7mb
     Z  32s    13.10um          4.4MszX
     E  11s     3.82um
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27d 06h

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                sP    15 08.00
DL2    15.25 277 iPc   14 54.00   0.6
       1.0s  1530.00nm          6.2mb
     Z  11s     3.16um          4.4Msz
     N  14s     3.13um
     E  14s     5.07um
                pP    15 10.00
                sP    15 22.50
                S     17 40.00
SKR    16.02  36 (P)   15 00.00  -3.0X
       0.8s   190.00nm          5.4mb
     Z  14s     7.00um          4.3Msz
     N  14s     4.20um
     E  14s     5.10um
                eS    18 04.00
SSE    18.01 251 ePc   15 25.26  -2.4
       1.0s  1010.00nm          6.0mb
     Z  16s     7.00um          4.8Msz
     N  14s     2.90um
     E  14s     4.50um
                pP    15 37.00
                sP    16 03.00
                sS    19 03.00
                SS    19 16.00
HIA    18.67 312 ePc   15 31.36  -3.9X
PET    18.78  34 eP    15 36.00  -0.3
     Z  16s     4.20um
                eS    19 06.00
TIA    19.24 270 Pc    15 38.90  -2.4
       1.0s   600.00nm          5.9mb
     Z  16s     4.07um          3.8MszX
     E  11s     2.64um
                S     19 03.00
NJ2    19.32 257 Pd    15 40.50  -1.6
       1.0s   350.00nm          5.6mb
     Z  14s     3.85um          5.0Msz
     N  15s     5.65um
     E  14s     4.29um
                S     19 10.00
BJI    19.37 282 ePc   15 39.45  -3.1X
       1.0s   220.00nm          5.4mb
     Z  12s     6.64um          5.0MszX
     N  12s     2.44um
                ePP   16 00.00
                eS    19 08.50
TATO   21.50 236 eP    16 06.81   2.5
       0.6s   167.65nm          5.6mb
TIY    22.57 277 Pc    16 13.00  -1.9
       1.0s   390.00nm          5.7mb
     Z  16s     4.16um          5.0MszX
     N  13s     2.48um
                sP    16 46.00
                S     20 16.00
HHC    22.82 285 Pd    16 15.60  -1.8
       1.0s   260.00nm          5.5mb
     Z  13s     6.43um          5.2MszX
     N  10s     1.49um
     E  12s     5.14um
                pP    16 40.00 118kmX
                sP    16 48.00
                S     20 17.00
CIT    23.38 314 eP    16 22.00  -0.6
                e     20 25.00
WHN    23.44 258 Pd    16 23.50   0.2
       0.5s   170.00nm          5.7mb
     Z  20s     3.73um          4.8Msz
     N  13s     4.85um
     E  12s     0.59um
                S     20 26.00
QZH    23.46 241 eP    16 21.00  -2.5
       1.2s   180.00nm          5.3mb
     Z  15s     5.79um          5.2MszX
     N  14s     4.20um
BTO    24.02 285 iPd   16 27.00  -1.9
     N  11s     0.96um
     E  13s     1.20um
                PP    17 02.00
                S     20 32.00
YAK    24.46 347 eP    16 32.90   0.1
       1.0s   695.00nm          6.0mb
     Z  13s     4.60um          5.2MszX
     N  12s     3.10um
                e     16 57.00
                ipP   17 20.00
                e     20 07.00
                iS    20 44.00
                iSS   22 00.00
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                i     27 22.00
GUMO   25.15 171 eP    16 39.16  -0.5
       1.3s  1023.82nm          6.1mb
PJG    25.15 171 eP    16 37.20  -2.5
GUA    25.20 171 eP    16 38.00  -2.2
       0.8s   280.60nm          5.8mb
BOD    26.03 326 iPd   16 46.70  -0.7
       1.4s   368.00nm          5.7mb
XAN    26.30 270 P     16 48.90  -1.3
       0.8s   110.00nm          5.4mb
     Z  12s     3.44um          5.1MszX
     N  10s     1.72um
     E  12s     1.29um
                sP    17 22.00
                PP    17 39.00
                PcP   20 12.00
                S     21 07.00
                SS    22 30.00
                PcS   23 51.00
SMY    26.71  47 eP    16 54.90   1.2
       1.2s   802.60nm          6.1mb
                e     17 30.80 176kmX
CVP    26.82 224 ePd   16 54.00  -1.0
ENH    27.32 262 ePc   16 58.81  -0.6
HKC    28.24 243 iP    17 09.40   1.6
                S     21 48.00
GZH    28.32 245 iPc   17 09.80   1.3
       1.0s   220.00nm          5.8mb
     Z  14s     5.33um          5.3MszX
     N  12s     2.36um
     E  12s     4.78um
                iS    21 50.00
BCP    28.54 225 ePd   17 10.40  -0.3
BAG    28.56 225 ePd   17 09.00  -1.9
       1.1s   139.24nm        / 5.5mb
                eS    21 48.00
IRK    28.89 310 ePc   17 13.00  -0.4
       2.0s   186.00nm          5.4mb
     Z  15s     3.02um          5.0MszX
     N  12s     1.12um
     E  14s     3.32um
                e     20 19.80
                iS    21 57.00
ZAK    29.15 306 iPc+  17 15.30  -0.4
       0.9s   188.00nm          5.7mb
     Z  12s     6.08um          5.4MszX
     E  11s     3.55um
                e     18 11.20 289kmX
                e     20 20.70
                eS    21 58.00
LZH    29.64 277 Pc    17 19.50  -1.0
       1.2s   450.00nm          6.0mb
     Z  13s     4.13um          5.2MszX
     E  11s     2.53um
                pP    17 46.50 125kmX
                PP    18 20.00
                PcP   20 23.00
                S     22 03.00
                sS    22 53.00
                ScS   27 48.00
GQP    29.67 219 ePc   17 22.00   1.4
QVP    29.80 222 ePd   17 22.00   0.2
TGY    30.27 222 ePd   17 26.00   0.0
PLP    30.93 212 ePc   17 31.00  -0.7
GYA    31.33 258 iPc   17 35.40   0.1
       0.8s   640.00nm          6.4mb
     Z  16s     3.52um          5.1MszX
     N  13s     2.19um
     E  13s     2.09um
                pP    18 03.00 127kmX
                PP    18 43.00
                PcP   20 26.20
                S     22 30.00
CD2    31.51 267 iPc   17 35.80  -1.0
       1.0s   250.00nm          5.9mb
     Z  11s     4.03um          5.4MszX
     N  11s     3.86um
                S     22 33.00
GTA    31.94 285 iPc   17 40.00  -0.5
       1.0s    80.00nm          5.4mb
     Z  34s     8.04um          5.2MszX
     E  12s     1.79um
                sP    18 12.00
                PP    18 50.00
                PcP   20 29.00
                S     22 43.00
                sS    23 28.00
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                ScS   27 59.00
ADK    32.03  52 eP    17 39.75  -1.2
       0.6s    78.72nm          5.6mb
MAP    32.11 213 iPd   17 42.00   0.0
BIP    33.11 208 ePd   17 49.00  -1.8
QIZ    33.44 243 P     17 54.60   1.1
     N  14s     1.86um
     E  14s     2.81um
                S     23 07.00
TIK    33.67 353 iPd   17 54.00  -1.0
       1.4s    77.00nm          5.3mb
     Z  15s     2.50um          5.1MszX
                iPPP  19 28.00
                e     20 32.00
                iS    23 12.00
DAV    34.41 208 eP    18 00.60  -1.3
                eS    23 20.50
KMI    35.04 259 ePc   18 07.44  -0.1
       2.0s   800.00nm          6.3mb
     Z  12s     4.30um          5.4MszX
     N  12s     2.60um
     E  12s     2.10um
                ec    18 08.35
                epPc  18 31.11 101kmX
                esPc  18 42.04
PPR    35.06 221 iPd   18 08.00   0.5
ILT    36.68  24 iPc   18 18.50  -2.0
       1.2s   270.00nm          6.0mb
     Z  24s     2.50um          4.9MszX
     N  24s     1.20um
     E  24s     0.70um
                i     18 43.60 108kmX
                eSS   23 54.00
KKM    39.53 221 ePd   18 49.00   4.0X
MNI    39.91 206 ePd   18 47.60  -0.4
       0.8s    20.50nm          5.0mb
WMQ    39.97 295 ePc   18 49.46   1.1
       1.0s   340.00nm          6.1mb
     Z  12s     2.41um          5.3MszX
     E  10s     1.20um
                epPc  19 13.21 102kmX
                S     24 41.00
                SS    27 46.20
TSM    40.21 218 ePc   18 32.00 -18.4X
ANM    40.35  32 ePd   18 51.88   0.8
                pP    19 17.50 111kmX
                sP    19 29.19
CHTO   41.52 254 ePd   19 01.73   0.5
       0.7s    49.24nm          5.4mb
                epPc  19 25.90 104kmX
                esPc  19 37.16
                eS    25 05.70
SDN    41.83  47 eP    19 01.54  -1.8
       0.6s    68.91nm          5.6mb
     Z  20s     2.38um          5.1Msz
LSA    41.89 273 eP    19 06.31   1.5
       1.2s   210.00nm          5.8mb
                ipPc  19 29.65  99kmX
                esPc  19 41.24
                ScP   24 38.00
                S     25 15.00
                SS    26 23.00
KVG    41.96 165 ePd   18 59.10  -5.7X
WWKK   42.10 176 ePd   19 06.70   0.7
BDT    42.44 252 eP    19 09.50   0.8
       1.1s    99.90nm          5.5mb
NST    42.60 249 iPd   19 11.00   1.0
SHL    43.25 267 iPd   19 15.50   0.0
                iS    25 30.00
RAB    43.80 164 iPd   19 20.00   0.2
MDG    43.86 173 eP    19 21.50   1.3
TTA    44.24  36 iPc   19 23.03   0.1
       1.0s    62.65nm          5.4mb
KHT    44.30 250 eP    19 24.00   0.1
SVW    44.37  38 iPd   19 24.74   0.8
       0.8s   575.55nm          6.4mb
TLE    44.72 192 ePc   19 25.00  -2.1
       1.0s    15.00nm          4.8mb X
NNT    44.93 246 iPd   19 29.20   0.4
BRW    45.03  24 iPc   19 28.93  -0.1
                pP    19 54.30 109kmX
LAT    45.38 172 ePd   19 33.00   0.7
IMA    45.43  31 iPd   19 32.29  -0.1
       0.9s    95.60nm          5.6mb
CP2    46.00  38 ePd   19 37.69   0.6
CRP    46.05  38 ePd   19 37.43   0.1
KDC    46.11  43 iPd   19 36.66  -1.0
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        0.7s   110.13nm          5.8mb
GUN     46.82 274 P      19 44.50   0.3
SLKM    47.04  39 iPd    19 43.59  -1.5
                 epP    20 10.30 115kmX
SLKI    47.27 193 iPd    19 48.30   1.1
KKN     47.35 274 P      19 48.30   0.1
PKI     47.35 274 P      19 47.60  -0.7
TLG     47.36 297 eP     19 48.80   0.9
        1.5s   142.00nm          5.6mb
      Z  17s     1.20um          4.9MszX
      N  15s     1.50um
                 e      21 17.00 454kmX
                 e      21 41.00
                 iS     26 34.00
PMR     47.48  37 ePd    19 47.40  -1.0
        0.9s   405.70nm          6.2mb
      Z  21s     0.96um          4.7Msz
DMN     47.57 274 P      19 49.90   0.0
GKN     47.75 275 P      19 51.20   0.0
COL     47.87  33 ePd    19 51.92   0.5
                 ipPc   20 16.92 106kmX
                 esPc   20 28.17
FBA     47.87  33 ePd    19 51.23  -0.2
        0.7s    76.31nm          5.6mb
MKS     48.03 210 iPd    19 53.70   0.5
PMG     48.11 172 iPd    19 53.24  -0.5
        0.7s    61.14nm          5.5mb
                 esPc   20 28.99
SNG     48.11 240 iPd    19 54.00   0.2
        1.1s   210.13nm          5.9mb
                 eS     26 48.00
TOA     48.82  37 eP     19 59.50   0.6
        1.1s   565.40nm          6.4mb
KLU     49.02  37 eP     20 00.08  -0.3
FRU     49.43 297 iPd    20 04.80   1.0
        1.6s   200.00nm          5.8mb
                 eS     27 04.00
KSH     49.61 293 P      20 06.50   1.2
        0.8s   180.00nm          6.1mb
      Z  16s     3.01um          5.4MszX
      N  12s     2.88um
      E  12s     3.10um
                 pP     20 29.00  93kmX
                 PcP    21 26.00
                 PP     22 02.00
                 PcS    25 23.00
                 iS     27 10.00
IPM     49.74 237 ePd    20 07.20   0.8
        0.9s   249.10nm          6.2mb
KGM     50.22 233 ePc    20 04.00  -6.0X
        0.8s   481.40nm          6.6mb
BALM    50.80  38 iPd    20 13.40  -0.6
INK     53.07  28 ePd    20 30.40  -0.3
        0.8s    72.00nm          5.7mb
                 pP     20 56.50 109kmX
NDI     53.19 280 iPd    20 32.00  -0.2
        1.0s   150.00nm          6.0mb
                 eS     27 52.00
SVE     53.84 318 iPd    20 36.00  -0.6
        1.9s   500.00nm          6.2mb
      Z  15s     3.00um          5.5MszX
      N  15s     0.60um
      E  15s     2.50um
                 i      21 01.90 107kmX
                 ePPP   23 52.10
                 iS     28 00.00
                 eSS    31 44.00
OPA     54.30  90 eP     20 39.97  -0.5
HON     54.50  90 P      20 50.00   8.1X
      Z  21s     0.49um          4.5Msz
DHH     54.69  90 eP     20 43.31   0.0
ARU     55.04 318 ePd    20 44.57  -0.7
        0.6s   205.64nm          6.3mb
                 epP    21 10.68 108kmX
MBC     55.06  17 iPd    20 45.50   0.2
        0.5s   315.00nm          6.6mb
SIT     55.32  41 eP     20 47.83   0.5
        1.3s   137.37nm          5.8mb
      Z  19s     1.20um          5.0Msz
                 epP    21 13.92 108kmX
KNA     55.32 195 iPd    20 47.20  -0.5
        1.0s   345.00nm          6.3mb
HYB     58.06 267 eP     21 06.50  -0.9
        1.0s   135.00nm          5.9mb
                 e      21 33.50 111kmX
WB5     58.54 188 eP     21 08.10  -2.3
                 iScP   25 26.00
                 eS     29 02.30
CTA     58.60 174 iPc+   21 09.00  -1.8
        1.0s   185.00nm          6.1mb
                 i      21 24.00
                 ipP    21 35.00 106kmX
                 i      21 48.00
                 e      27 16.00
                 eS     29 00.00
                 e      36 12.00
CTAO    58.60 174 eP     21 08.89  -1.9
        1.1s   187.20nm          6.1mb
                 epP    21 35.99 111kmX
WB2     58.61 188 eP     21 08.40  -2.5
        0.9s     2.60nm          4.3mb X
                 eS     29 02.70
                 eP'P'  50 15.60
WRA     58.61 188 P      21 08.89  -2.0
QIS     58.89 182 eP     21 11.00  -1.8
KBS     59.07 350 eP     21 13.70   0.2
RES     61.11  15 ePd    21 25.80  -1.7
        0.8s    96.00nm          5.9mb
                 pP     21 52.50 108kmX
POO     61.12 271 iPd    21 30.00   1.7
        1.0s    90.00nm          5.7mb
GBA     61.16 264 P      21 26.60  -1.9
        0.9s   999.90nm          6.9mb
BKM     61.48 150 iPc    21 30.00  -0.6
PVC     61.57 150 iPc    21 31.50   0.4
KEV     61.89 339 eP     21 31.32  -1.4
        1.3s   206.04nm          6.0mb
                 epP    21 58.72 111kmX
ASPA    62.33 188 iPd    21 34.30  -1.9
        0.8s   367.00nm          6.4mb
                 iS     29 51.40
                 eP'P'  50 26.60
YKA     62.54  30 eP     21 36.30  -0.8
        0.8s    68.90nm          5.7mb
ASH     62.73 298 iPd    21 39.10   0.3
                 i      22 05.00 104kmX
                 e      23 58.10
                 e      30 00.00
                 e      30 30.30
MAIO    62.74 296 iPd    21 39.80   0.9
        1.2s    39.58nm          5.2mb
                 eS     29 00.00
MBL     62.74 202 iPd    21 37.00  -1.9
        0.9s   462.00nm          6.4mb
KOD     63.17 261 eP     21 41.50  -0.8
SDF     63.47 337 iP     21 42.00  -1.2
TRO     64.15 341 iPc    21 47.00  -0.6
DZM     64.86 154 iPd    21 53.00   0.2
                 i      22 19.40 106kmX
MCW     65.72  46 eP     21 58.09   0.0
MOS     65.86 323 iPd    21 59.00   0.3
        2.0s   800.00nm          6.3mb
      Z  14s     1.93um          5.5MszX
      N  16s     2.80um
      E  11s     0.99um
                 e      22 26.00 108kmX
                 eS     30 37.00
                 ePS    30 54.00
                 e      31 42.00
WARB    65.89 194 eP     21 58.60  -0.6
ONR     66.12  48 P      22 01.66   1.1
GMW     66.34  47 ePc    22 02.51   0.5
                 pP     22 29.89 110kmX
JCW     66.49  46 P      22 03.23   0.3
BRS     66.56 169 iPc+   22 02.50  -1.0
        0.8s    87.00nm          5.7mb
      Z  18s     2.50um          5.5Msz
                 i      22 22.00  74kmX
BMW     66.65  49 iPc    22 04.40   0.3
                 pP     22 31.39 108kmX
OBN     66.70 323 eP     22 02.79  -1.3
        1.3s   538.80nm          6.3mb
                 epPc   22 28.45 102kmX
                 (sP)   22 39.54
PUL     66.73 329 ePd    22 04.00  -0.2
      Z  20s     0.70um          4.9Msz
      N  20s     0.70um
      E  20s     0.60um
                 e      22 30.00 103kmX
                 eS     30 46.00
                 e      31 47.00
KAF     66.81 332 iP     22 03.40  -1.3
        0.9s   133.50nm          5.9mb
KMOR    66.94  49 P      22 06.28   0.4
RMW     66.95  47 ePd    22 06.10   0.1
                 pP     22 31.24  99kmX
FMW     67.31  47 P      22 08.57   0.2
LON     67.33  48 ePc    22 08.01  -0.3
SHW     67.38  48 eP     22 09.35   0.6
COR     67.61  50 ePd    22 11.25   1.2
RNO     67.71  51 P      22 11.74   1.0
ASR     67.78  48 P      22 11.43   0.2
WTV     67.87  46 P      22 11.36  -0.4
EBG     67.96  47 P      22 12.71   0.5
SSOR    67.97  50 P      22 13.16   0.7
SAW     68.18  46 P      22 13.30  -0.3
MEEK    68.27 202 iPd    22 13.10  -1.1
        0.9s   181.00nm          6.0mb
AFI     68.30 130 eP     22 14.00  -0.7
NUR     68.46 332 iP     22 13.80  -1.2
        0.8s   132.20nm          5.9mb
                 i      22 41.80 112kmX
VGB     68.60  48 eP     22 16.07  -0.2
WAH2    68.62  47 P      22 16.32   0.1
DPW     68.76  45 iPd    22 16.74  -0.5
                 pP     22 44.27 109kmX
CROR    68.77  49 P      22 17.63   0.3
ARC     69.15  54 eP     22 20.36   0.8
        1.0s   500.00nm          6.3mb
JBO     69.18  48 P      22 19.95   0.2
FHC     69.25  54 eP     22 21.23   1.0
        0.8s   442.80nm          6.3mb
                 pP     22 49.10 111kmX
VIPM    69.26  49 P      22 20.66   0.2
ARMA    69.38 170 iPd    22 20.00  -1.0
PYA     69.46 310 iPd    22 21.00  -0.5
        1.5s   190.00nm          5.7mb
      Z  16s     1.50um          5.3MszX
                 i      22 50.00 116kmX
                 i      31 18.00
YBH     69.53  53 ePd    22 22.56   0.5
        1.0s   280.00nm          6.1mb
                 esPc   23 00.46
KIV     69.72 310 ePd    22 23.24   0.0
      Z  11s     6.70um          6.1MszX
                 ipPc   22 49.56 104kmX
                 eS     31 21.90
                 e      32 11.70
LNOR    69.85  47 P      22 24.11   0.3
LGPM    69.91  53 iPd    22 24.93   0.5
FORT    70.12 192 eP     22 24.50  -0.9
        0.8s   349.00nm          6.2mb
STK     70.15 180 eP     22 14.70 -10.8X
        0.8s    63.60nm
LBFM    70.26  53 eP     22 26.94   0.3
WDC     70.28  54 ePd    22 26.55   0.0
        0.9s   162.08nm          5.9mb
ERE     70.74 306 iP     22 29.50   0.1
        1.1s    39.00nm          5.1mb
                 i      22 58.40 115kmX
                 iS     31 35.00
TAB     70.76 304 eP     22 28.00  -1.7
                 i      22 57.00 115kmX
LMEM    70.92  53 ePc    22 30.92   0.3
MIN     71.00  53 ePd    22 30.30  -0.8
        1.0s   180.00nm          5.8mb
                 epPc   22 57.35 106kmX
UPP     71.44 334 iP     22 32.20  -0.9
        1.1s  5800.00nm          7.3mb X
                 i      23 00.30 111kmX
NTYM    71.44  56 eP     22 33.38  -0.1
ORV     71.52  54 ePd    22 33.39  -0.6
MNK     71.61 325 iP     22 32.00  -2.2
        1.0s   660.00nm          6.4mb
                 e      22 59.00 106kmX
                 eS     31 36.00
COOL    71.63 198 iPd    22 33.50  -1.1
SOC     71.69 311 iPd-   22 35.00   0.1
        1.4s    50.00nm          5.1mb
      Z  16s     0.50um          4.9MszX
      E  16s     0.50um
                 e      22 56.00  79kmX
                 iS     31 46.00
HMR     72.13  55 eP     22 38.62   1.0
APO     72.18 336 eP     22 36.00  -1.5
        0.9s   324.40nm          6.2mb
      Z  19s     0.54um          4.8Msz
                 LR     48 14.00
ANN     72.32 314 iPd-   22 38.50  -0.1
        1.3s   200.00nm          5.8mb
                 ipP    23 06.00 108kmX
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27d 06h

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                iS    31 52.00
                esS   32 34.00
STAN   72.32  56 ePd  22 38.69  -0.1
       1.1s   530.00nm          6.3mb
                esPc  23 16.59
KER    72.34 300 iPc  22 38.20  -0.9
FFC    72.48  33 ePd  22 38.38  -1.0
       0.9s   276.19nm          6.1mb
                epPc  23 06.01 109kmX
BAL    72.55 202 iPd  22 39.20  -0.8
       0.6s    67.00nm          5.6mb
NB2    72.65 337 P    22 38.90  -1.4
       0.9s   195.60nm          5.9mb
RIV    72.68 171 iPd  22 40.60   0.0
       1.0s  8320.00nm          7.5mb X
MHC    72.71  56 ePd  22 40.99  -0.2
       1.6s   350.00nm          5.9mb
                epPc  23 08.34 107kmX
COE    72.73  56 iPd  22 41.31   0.1
                pP    23 10.05 113kmX
ARN    72.77  56 ePd  22 41.27  -0.2
NRA0   72.78 337 P    22 40.00  -1.1
                PP    25 20.10
NRE0   72.78 337 P    22 43.90   2.8X
                S     31 57.30
                SS    36 35.40
                SSS   40 19.00
NAO    72.93 337 P    22 25.20 -16.7X
HRY    72.94  43 ePd  22 42.39   0.0
                i     23 10.30 110kmX
                e     23 21.00
BUT    72.97  44 ePd  22 43.40   0.7
BWA    72.99 174 iPd  22 43.00   0.5
                i     23 10.50 108kmX
HBMT   73.08  45 iPd  22 43.40   0.0
                e     23 10.95 108kmX
                e     23 22.50
CMB    73.11  55 ePd  22 43.73   0.3
       0.9s   158.36nm          5.8mb
     Z 19s      1.09um          5.2Msz
                epPc  23 10.22 103kmX
                esPc  23 21.48
LRM    73.15  45 ePd  22 43.80   0.0
                e     23 11.50 109kmX
                e     23 22.80
SAO    73.17  56 eP   22 42.97  -0.8
       0.9s    50.81nm          5.3mb
KLB    73.18 201 iPd  22 43.00  -0.6
       0.9s   174.00nm          5.9mb
ADE    73.26 182 iPd  22 40.40  -3.6X
MCMT   73.55  46 ePd  22 45.50  -0.6
SXM    73.62  44 ePd  22 46.50   0.0
BGMT   73.74  45 ePd  22 47.23   0.0
                e     23 15.10 109kmX
                e     23 26.50
CAN    73.93 173 iPd  22 48.10   0.2
                i     23 15.40 107kmX
KVN    73.95  53 iPd  22 48.87   0.4
                pP    23 16.76 109kmX
CNB    73.96 173 eP   22 47.80  -0.3
       0.9s    37.00nm          5.2mb
FOO    73.98 340 eP   22 48.03   0.1
MUN    73.98 202 eP   22 47.00  -1.3
SIM    74.06 315 iP   22 49.00   0.3
     Z 16s      0.50um          4.9MszX
                ipP   23 16.00 105kmX
                iS    32 13.00
MEMT   74.10  44 ePd  22 49.36   0.1
                e     23 17.07 108kmX
                e     23 28.30
LTMT   74.15  45 eP   22 49.80   0.1
MEMM   74.25  54 eP   22 51.12   1.2
                pP    23 19.51 111kmX
TPMT   74.27  45 ePd  22 50.50   0.2
PHAM   74.40  57 iPc  22 51.39   0.5
BONR   74.48  54 ePd  22 51.94   0.2
AKU    74.78 351 iP   22 54.00   1.5
       1.0s   144.00nm          5.8mb
BER    74.90 339 eP   22 53.50   0.2
BCH    74.99  57 iPd  22 54.61   0.2
                pP    23 22.38 108kmX
TNP    75.09  53 iPd  22 55.08   0.0
       0.8s    90.33nm          5.6mb
                pP    23 23.06 109kmX
FRB    75.27  13 ePd  22 54.50  -0.8
       0.8s   170.00nm          5.9mb
                pP    23 22.50 109kmX
KVT    75.37 311 iP   22 55.50  -0.9
HVU    75.49  48 eP   22 57.25   0.0
                pP    23 25.60 111kmX
                sP    23 36.75
KIS    75.52 319 iP-  22 56.50  -0.5
     Z 18s      1.30um          5.3Msz
                ipP   23 23.00 103kmX
                e     25 46.00
                iS    32 27.00
                i     32 57.50
                e     33 00.00
                esS   33 08.00
TRHT   75.75 310 eP   22 59.40   0.7
ABL    75.76  57 ePc  22 59.20   0.3
                pP    23 27.52 111kmX
                sP    23 43.96
KMY    75.90 338 eP   22 59.15   0.2
BSD    75.96 331 iPc  22 59.50   0.1
       0.9s   272.00nm          6.1mb
                i     23 27.00 107kmX
LVV    75.98 324 iP-  23 00.00   0.4
     Z 17s      1.50um          5.4MszX
     N 17s      1.40um
                ipP   23 28.00 109kmX
                e     25 53.00
                iS    32 35.00
                eSS   33 19.00
CTK    76.34 311 eP   23 03.60   1.6
KART   76.34 312 eP   23 03.10   1.0
TPNV   76.39  54 eP   23 02.21  -0.2
       0.6s    96.06nm          5.8mb
                epP   23 30.88 112kmX
COP    76.42 333 iPd  23 02.50   0.6
       0.8s   400.00nm          6.3mb
                i     23 30.00 107kmX
                e     32 34.00
DUG    76.47  49 ePd  23 03.00   0.3
       0.7s   191.76nm          6.0mb
                pP    23 30.65 108kmX
KAS    76.52 312 iPc  23 03.70   0.8
BNN    76.88 309 iP   23 05.40   0.4
MUD    76.93 335 iPc  23 06.00   1.3
       0.9s   164.00nm          5.9mb
                i     23 19.00  44kmX
GSC    77.05  55 ePd  23 05.93   0.0
CFR    77.12 318 eP   23 05.00  -1.0
SSK    77.15  57 iPd  23 06.64   0.0
DAU    77.25  48 eP   23 07.94   0.7
ARUT   77.61  51 eP   23 09.51   0.4
OJC    77.61 326 iPc  23 08.30  -0.3
       1.0s   375.00nm          6.2mb
                i     23 37.40 114kmX
UZH    77.62 324 iPd  23 10.00   1.3
                i     23 17.80  25kmX
                e     23 28.90
                eS    32 50.00
PEC    77.69  56 eP   23 08.80  -0.6
       1.2s   196.08nm          5.8mb
                pP    23 35.93 105kmX
EMUT   77.89  49 eP   23 10.81   0.1
                pP    23 39.10 110kmX
MSU    77.92  50 eP   23 11.48   0.6
                pP    23 39.51 109kmX
ISR    77.98 319 Pd   23 12.30   1.4
SGKT   78.03 313 eP   23 12.10   0.7
MLR    78.05 319 iPc  23 11.50   0.2
SPC    78.17 325 iP   23 11.60  -0.3
PLM    78.22  57 eP   23 12.87   0.3
ULM    78.29  33 eP   23 13.50   1.2
                pP    23 42.00 111kmX
SRU    78.52  49 eP   23 14.24   0.2
KSP    78.65 328 iPd  23 14.40   0.1
       0.9s   218.00nm          6.0mb
                i     23 42.50 109kmX
                i     26 14.80
CMP    78.66 320 ePc  23 17.00   2.5X
NAL    78.70 313 eP   23 15.00   0.0
RSSD   78.78  42 eP   23 14.63  -0.8
       0.9s   140.43nm          5.8mb
                pP    23 42.88 110kmX
                sP    23 54.35
DPC    78.97 328 iPd  23 16.46   0.3
                epPc  23 42.61 100kmX
DEV    79.29 321 eP   23 13.50  -4.4X
OUZ    79.37 153 eP   23 19.80   1.6
BRG    79.59 329 iP   23 19.70   0.3
       0.2s    20.00nm          5.6mb
                i     23 29.60  31kmX
                i     23 48.90
CLL    79.62 330 iP   23 19.00  -0.5
       1.0s   290.00nm          6.1mb
                ipP   23 47.90 112kmX
GLA    79.74  56 eP   23 20.87   0.3
PV09   79.74  49 eP   23 21.34   0.5
                pP    23 49.36 109kmX
PV10   79.87  49 iPd  23 22.17   0.7
PV08   79.97  48 eP   23 22.30   0.2
                pP    23 50.31 108kmX
                sP    24 01.86
EDR    80.00 341 eP   23 21.40  -0.1
PRU    80.03 328 P    23 22.00   0.3
       1.1s   204.00nm          5.9mb
                PcP   23 27.10
                e     23 32.30
                ipP   23 50.10 109kmX
                sP    24 03.00
                S     33 16.60
                eSKS  33 26.00
SRO    80.05 325 iP   23 24.50   2.6X
                i(pP) 23 52.70 109kmX
ALT    80.15 312 eP   23 21.50  -1.3
ZST    80.30 326 iP   23 24.00   0.8
                e     23 50.30 101kmX
EDU    80.45 341 eP   23 23.80  -0.1
VKA    80.59 326 iPd  23 25.80   1.0
       2.5s   634.00nm          6.0mb
                i     23 50.00  92kmX
DST    80.63 314 eP   23 26.70   1.5
MOX    80.69 330 ePd  23 25.10  -0.1
       1.6s   216.00nm          5.7mb
     Z 20s      0.70um          5.0Msz
                eS    33 24.00
ELO    80.70 341 eP   23 24.80  -0.4
WIT    80.75 334 eP   23 26.50   1.1
UZD    80.83 324 iP   23 26.10   0.1
EBH    80.85 341 eP   23 26.30   0.3
HOF    80.85 330 iPc  23 26.30   0.2
       1.0s   224.00nm          5.9mb
ESY    80.91 340 eP   23 26.30   0.0
KHC    81.09 328 Pc   23 28.60   1.2
       1.0s   153.50nm          5.8mb
                e     23 46.10
                pP    23 55.70 104kmX
                e     24 52.00
GOL    81.09  46 eP   23 28.70   0.8
       1.1s   124.74nm          5.6mb
                epP   23 56.74 108kmX
EAB    81.11 341 eP   23 27.70   0.4
GLD    81.14  46 iPd  23 29.60   1.6
       1.3s   320.11nm          6.0mb
     Z 19s     49.02um          6.9MszX
                ipP   23 57.40 107kmX
EBL    81.15 340 eP   23 27.90   0.4
ALN    81.18 316 eP   23 28.08   0.1
EAU    81.19 341 eP   23 27.90   0.1
RAR    81.25 126 eP   23 27.43  -1.0
       1.8s   266.15nm          5.8mb
GEC2   81.26 328 ePd  23 28.00  -0.4
       0.8s    71.93nm          5.5mb
                e(PcP)23 32.50
                epPd  23 56.20 109kmX
                esPd  24 09.30
                eSP   34 13.40
                PKKP  41 52.30
                PKKP3 42 01.80
                e     42 13.00
                sPKKP 42 30.70
                e     42 42.20
GEC2   81.26 328 e(P) 23 34.00   5.6X
       0.7s    10.10nm          4.8mb X
WET    81.36 329 iPc  23 29.40   0.6
       1.1s   231.00nm          5.9mb
WTS    81.37 333 eP   23 29.00   0.3
       0.9s   188.70nm          5.9mb
                e     26 40.00
EKA    81.57 340 Pd   23 30.35   0.6
       1.0s    71.30nm          5.4mb
ESK    81.60 340 eP   23 30.38   0.5
GRA1   81.60 330 ePd  23 30.60   0.6
       0.9s   305.00nm          6.1mb
                epP   24 00.50 116kmX
                esP   24 12.00
                e(PKKP42 01.60
GRF    81.60 330 ePd  23 30.60   0.6
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      0.9s   305.00nm          6.1mb
    Z  21s     0.50um          4.9Msz
                 epP   24 00.50 116kmX
                 esP   24 12.00
                 e(PKKP42 01.60
EZN   81.77 315 eP     23 28.00  -3.0X
BNS   82.09 333 iPd    23 32.80   0.3
                 ic    24 01.40 110kmX
TNS   82.23 332 ePc    23 33.80   0.4
SRS   82.34 317 eP     23 33.88  -0.1
BHG   82.48 328 iPd    23 35.00   0.4
      1.0s   407.00nm          6.2mb
                 i     24 03.40 109kmX
PTJ   82.55 325 eP     23 39.80   4.7X
JAQ   82.60  21 eP     23 33.50  -1.6
ZAG   82.61 325 eP     23 35.00  -0.3
KNT   82.67 318 eP     23 36.12   0.4
SOH   82.68 317 eP     23 35.56  -0.3
OUR   82.69 317 eP     23 34.52  -1.3
ENN   82.70 333 iPd    23 35.70   0.0
      0.8s   147.00nm          5.9mb
                 e     24 04.00 109kmX
                 e     26 49.00
VAY   82.73 318 iPc    23 36.60   0.6
      1.3s   260.00nm          6.0mb
MOZ   82.75 154 P      23 37.40   1.5
KBA   82.79 327 iPc    23 36.40  -0.1
      0.9s   133.00nm          5.9mb
                 i     23 37.70   4kmX
                 i     24 05.40
                 i     24 36.50
                 i     26 48.60
FUR   82.79 329 iPc    23 36.90   0.7
      0.8s   450.00nm          6.4mb
                 i     23 38.50
                 iPcP  23 42.20
                 epP   24 04.90 108kmX
                 esP   24 19.90
TUC   82.81  54 eP     23 38.32   1.6
      1.0s   115.72nm          5.7mb
    Z  21s     0.39um          4.8Msz
                 epP   24 06.05 106kmX
SKO   82.84 319 iPd    23 37.80   1.2
      1.2s   310.00nm          6.1mb
    Z  17s     1.13um          5.3MszX
                 i     24 05.70 107kmX
                 i     24 17.00
                 iS    33 40.00
                 LR    02 56.00
SKO   82.84 319 eP     23 54.00  17.4X
THE   83.02 317 eP     23 36.76  -0.7
WIM   83.03 341 eP     23 37.80   0.5
LJU   83.08 326 iP     23 37.70   0.0
      1.3s   270.00nm          6.0mb
                 iPcP  23 43.80
                 i     23 45.80
                 ipP   24 04.60 103kmX
                 i     24 14.60
GRG   83.08 318 eP     23 37.76  -0.1
PAIG  83.14 317 eP     23 36.44  -1.7
VBY   83.17 325 iPd    23 38.40   0.2
                 i     23 46.40
                 ipP   24 06.20 107kmX
NRZ   83.20 155 P      23 40.30   2.1
      1.1s   501.00nm          6.4mb
UCC   83.22 334 P-     23 39.00   0.7
BCI   83.25 320 iP     23 38.00  -0.7
WATA  83.33 328 iPd    23 38.70  -0.5
                 i     23 39.40   2kmX
                 i     23 50.00
URZ   83.35 152 P      23 37.60  -1.3
WTTA  83.36 328 iPd    23 39.10  -0.3
      0.8s    67.30nm          5.6mb
                 i     23 39.80   2kmX
                 i     26 39.80
                 i     26 53.70
VOY   83.37 326 iPd    23 38.70  -0.6
HOFF  83.46 331 P      23 40.03   0.4
SNF   83.49 334 iPc    23 39.53  -0.2
LANF  83.49 331 P      23 39.91   0.1
MOTA  83.52 328 iPd    23 39.70  -0.4
      0.9s   142.00nm          5.9mb
                 i     23 40.50   3kmX
SRBF  83.53 331 P      23 40.25   0.3
WLF   83.54 332 iPd    23 40.57   0.6
SQTA  83.57 328 iPd    23 40.10  -0.3
      0.8s    65.20nm          5.6mb
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                 i     23 40.80   2kmX
WME   83.60 340 eP     23 39.40  -0.8
PUZ   83.61 151 P      23 39.20  -1.1
LIT   83.65 317 eP     23 39.20  -1.6
TRI   83.68 326 eP     23 40.00  -0.7
ALQ   83.72  50 eP     23 42.19   0.8
      1.0s   217.76nm          6.0mb
    Z  20s     0.77um          5.1Msz
                 epP   24 10.67 109kmX
                 esP   24 21.70
DOU   83.73 334 P      23 40.50  -0.4
FNA   83.74 318 eP     23 40.76  -0.5
SDA   83.77 320 iPd    23 43.40   2.2
OHR   83.80 319 iPd    23 42.00   0.4
      1.0s   370.00nm          6.3mb
                 i     23 54.70  42kmX
                 i     24 09.70
YRC   83.81 340 eP     23 40.60  -0.6
PAHZ  83.86 153 P      23 41.20  -0.4
OGA   83.93 328 iPd    23 42.70   0.4
      0.8s    60.00nm          5.6mb
LACI  83.97 320 iPd    23 42.50   0.2
NOZ   84.00 152 P      23 41.80  -0.4
      0.8s   124.00nm          5.9mb
TIR   84.10 320 eP     23 43.10   0.1
QRZ   84.11 157 P      23 43.30   0.6
      0.8s   151.00nm          6.0mb
WLS   84.13 331 P      23 43.10   0.0
CDF   84.16 331 iPc    23 43.20  -0.1
      1.0s   262.40nm          6.1mb
YRH   84.20 340 eP     23 43.40   0.2
SLE   84.22 330 P      23 43.70   0.2
LIBD  84.25 331 P      23 43.76   0.2
DLF   84.27 341 eP     23 44.10   0.5
      0.8s   533.00nm          6.5mb
FEL   84.32 330 P      23 43.87  -0.2
HAE   84.33 338 eP     23 44.30   0.4
WAHZ  84.35 153 P      23 43.20  -0.8
ECH   84.37 331 P      23 44.09  -0.1
TTH   84.38 153 eP     23 43.60  -0.5
HCG   84.39 339 eP     23 44.40   0.2
HVAR  84.40 323 iP     23 43.80  -0.6
DCN   84.42 342 eP     23 45.00   0.7
      0.9s   614.00nm          6.5mb
OSS   84.44 329 P      23 44.70  -0.1
ZLA   84.49 330 P      23 45.09   0.2
HTR   84.50 339 eP     23 44.90   0.1
AGG   84.52 317 eP     23 43.76  -1.4
DIW   84.52 156 P      23 44.60  -0.2
LSK   84.61 318 iPc    23 45.60   0.0
MOF   84.68 331 P      23 45.73  -0.1
LLS   84.75 329 iPc    23 46.40   0.0
HGH   84.76 338 eP     23 46.00  -0.1
VITF  84.80 332 P      23 46.38   0.0
TPE   84.81 319 eP     23 51.50   5.0X
BSF   84.82 331 iPc    23 46.20  -0.4
      1.1s   124.55nm          5.7mb
HAU   84.84 331 iPc    23 46.30  -0.3
      0.8s   144.55nm          5.9mb
BBS   84.85 330 P      23 46.72   0.0
VDL   84.87 329 P      23 47.09   0.1
MNG   84.87 154 P      23 46.30  -0.3
      0.9s   304.00nm          6.2mb
                 e     24 13.30 103kmX
KIW   84.90 155 P      23 46.10  -0.6
VLO   84.94 319 eP     23 47.60   0.4
PMO   84.99 114 iPd    23 49.30   1.7
      1.4s   639.50nm          6.4mb
TCW   85.01 156 eP     23 46.80  -0.4
THZ   85.07 157 P      23 47.20  -0.4
                 e     24 14.30 103kmX
SRN   85.12 319 eP     23 48.00  -0.1
PGZ   85.14 154 eP     23 47.80  -0.1
      0.8s   222.00nm          6.1mb
CAW   85.18 155 P      23 47.70  -0.4
TPT   85.18 113 iPd    23 50.20   1.6
      1.6s   776.10nm          6.4mb
IGT   85.20 318 eP     23 48.36  -0.2
LOMF  85.21 331 P      23 48.37  -0.1
SNZO  85.24 155 ePd    23 47.93  -0.4
                 e     23 59.69
                 epPc  24 14.58 101kmX
ECP   85.25 341 iPd    23 49.30   0.8
      0.9s   557.00nm          6.5mb
VAH   85.34 114 iPd    23 50.90   1.5
      1.7s   682.30nm          6.3mb
AFR   85.36 117 iPd    23 51.00   1.6
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      1.2s   334.40nm          6.2mb
MTW   85.37 155 P      23 48.60  -0.4
TMA   85.42 329 ePc    23 49.30  -0.4
RUV   85.48 113 iPd    23 51.70   1.6
      1.2s   397.50nm          6.3mb
MOW   85.52 155 P      23 49.40  -0.4
PPT   85.52 117 iPd    23 51.80   1.5
      1.2s   334.40nm          6.2mb
    Z  39s  1200.00um          8.0MszX
BLW   85.54 155 eP     23 49.40  -0.5
PAE   85.58 117 iPd    23 52.10   1.6
      1.3s   290.30nm          6.1mb
AMW   85.59 155 P      23 50.10   0.0
PPN   85.59 116 iPd    23 52.20   1.6
      1.2s   310.60nm          6.2mb
WVZ   85.63 159 P      23 50.30   0.0
LTZ   85.81 158 eP     23 51.00  -0.2
MMK   85.83 329 iPc    23 52.00   0.1
TVO   85.89 116 iPd    23 53.80   1.6
      1.0s   462.40nm          6.4mb
DIX   86.03 330 P      23 53.09   0.2
ORX   86.17 329 P      23 51.23  -2.1
EMS   86.23 330 P      23 53.79   0.1
LOR   86.38 332 iPc    23 54.00  -0.2
      1.0s   336.00nm          6.3mb
LBF   86.58 332 iPc    23 54.90  -0.3
      1.0s   181.60nm          6.0mb
FLN   86.58 336 iPc    23 54.90  -0.3
      1.0s   199.20nm          6.1mb
LDF   86.61 335 iPc    23 55.10  -0.2
      1.0s   187.20nm          6.1mb
LSD   86.64 330 P      23 54.52  -1.3
ACO   86.67  44 iPd    23 56.00   0.1
SSF   86.68 333 iPc    23 55.60  -0.1
      0.9s   203.75nm          6.1mb
BWZ   86.74 160 P      23 56.50   0.9
      1.0s   172.00nm          6.0mb
LPL   86.76 330 iPc    23 56.30  -0.1
      0.8s    74.15nm          5.8mb
LPG   86.77 330 iPc    23 56.40  -0.1
      1.1s   123.05nm          5.8mb
HYF   86.82 333 iPc    23 56.70   0.3
PCP   86.83 328 P      23 54.62  -1.9
RSP   86.85 329 P      23 55.30  -1.4
SMF   86.92 332 iPc    23 56.70  -0.1
      1.2s   268.95nm          6.1mb
AVF   86.97 332 iPc    23 57.10   0.0
      1.0s   408.00nm          6.4mb
GRR   87.03 336 iPc    23 57.50   0.2
      1.0s   363.20nm          6.4mb
BHB   87.11 329 P      23 55.39  -2.4X
RRL   87.23 329 P      23 57.09  -1.6
FIN   87.24 328 P      23 55.67  -2.8X
ROB   87.31 328 P      23 55.58  -3.3X
BGF   87.35 333 iPc    23 58.90   0.0
      1.3s   146.55nm          5.8mb
LPF   87.40 336 iPc    23 59.50   0.4
      1.2s   535.55nm          6.4mb
PZZ   87.45 329 P      23 56.68  -2.9X
ENR   87.55 329 P      23 56.77  -3.3X
STV   87.58 329 P      23 57.18  -3.0X
IMI   87.62 328 P      23 56.90  -3.4X
SAOF  87.69 328 P      23 58.53  -2.1
MAF   87.74 333 iPc    24 01.30   0.5
      1.1s   214.90nm          6.1mb
TCF   87.81 333 iPc    24 01.30   0.1
      1.1s   129.90nm          5.9mb
SBF   87.85 328 iPc    24 00.10  -1.3
      0.7s    59.10nm          5.7mb
PCO   87.85  43 iPd    24 02.30   0.8
MVIF  87.93 329 P      24 00.28  -1.7
TUZ   87.99 161 P      24 03.00   1.4
      0.9s   195.00nm          6.1mb
LSF   88.08 333 iPc    24 02.40  -0.1
      1.0s   212.00nm          6.1mb
CALN  88.16 329 P      24 01.86  -1.2
PGF   88.27 327 iPc    24 02.80  -0.7
      1.3s   102.15nm          5.7mb
WMOK  88.31  45 eP     24 03.66  -0.1
      1.2s   195.22nm          6.0mb
    Z  21s     1.02um          5.2Msz
                 epP   24 32.14 108kmX
MFF   88.36 334 iPc    24 04.10   0.4
      0.9s   172.30nm          6.1mb
MEO   88.38  45 iPc    24 04.60   0.5
FRF   88.42 329 iPc    24 02.90  -1.2
      0.8s    17.05nm          5.2mb
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27d 06h

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OCO     88.45  44 iPc   24 06.00   1.6
LRG     88.62 329 iPc   24 04.30  -0.7
        0.7s    35.50nm          5.6mb
LMR     88.66 329 iPc   24 04.40  -0.8
        0.9s    41.10nm          5.5mb
RJF     88.90 333 iPc   24 06.60   0.2
        1.0s   114.40nm          5.9mb
CAF     89.03 332 iPc   24 07.60   0.6
        1.1s   113.80nm          5.9mb
TUL     89.07  43 iPd   24 07.40   0.1
LTX     89.31  52 eP    24 07.51  -1.2
                  epP   24 34.95 103kmX
LFF     89.49 333 iPc   24 09.50   0.3
        0.8s   119.80nm          6.1mb
LPO     89.56 333 iPc   24 09.80   0.3
        1.0s    92.80nm          5.9mb
CCM     89.75  39 eP    24 10.97   0.5
        0.9s   245.67nm          6.3mb
                  epP   24 38.55 104kmX
SLM     89.78  38 P     24 20.00   9.4X
      Z  21s     8.90um          6.2MszX
GAC     89.83  25 eP    24 10.50  -0.2
                  pP    24 29.00  66kmX
ACTO    90.04  29 P     24 12.18   0.5
FVM     90.20  38 eP    24 12.90   0.3
        0.5s     4.73nm          4.9mb X
WLVO    90.38  27 P     24 13.74   0.5
TYNO    90.55  29 P     24 14.52   0.5
MTHF    90.56 331 P     24 14.29   0.1
STCO    90.72  28 P     24 15.07   0.3
LSPF    90.79 331 P     24 15.45   0.3
CBM     90.89  20 eP    24 15.65   0.1
        1.0s   103.96nm          6.0mb
                  epP   24 43.50 105kmX
LESF    90.95 332 P     24 16.35   0.4
GRBF    91.02 332 P     24 16.04  -0.3
UYO     91.10  43 iPc   24 16.60  -0.2
RSNY    91.16  25 ePc   24 16.55  -0.3
        0.9s   131.78nm          6.2mb
                  epP   24 44.17 104kmX
PAND    91.29 331 P     24 17.50  -0.3
EPF     91.29 332 iPc   24 17.20  -0.4
        1.1s    33.95nm          5.5mb
ELC     91.34  38 eP    24 17.44  -0.3
ENSF    91.49 332 P     24 19.40   0.8
YSNY    91.58  28 ePd   24 19.54   0.6
        0.9s   212.90nm          6.4mb
                  epP   24 47.39 105kmX
EGRA    92.26 332 iPd   24 22.26   0.4
LBNH    92.26  23 eP    24 23.00   1.0
        0.8s    49.95nm          5.9mb
                  epP   24 51.21 106kmX
ECRI    92.67 334 iPc   24 25.54   1.6
LMN     92.73  18 eP    24 24.50   0.4
                  pP    24 52.50 105kmX
EROQ    93.18 331 iPc   24 27.03   0.8
OXF     93.45  40 eP    24 27.47  -0.1
        1.0s   223.33nm          6.5mb
EMON    93.47 338 iPc   24 29.10   1.5
MCWV    93.51  30 eP    24 28.17   0.4
        0.8s    55.36nm          6.0mb
HRV     93.95  24 eP    24 30.21   0.5
        0.9s    65.22nm          6.0mb
      Z  21s     0.98um          5.2Msz
                  epP   24 58.61 107kmX
ETOR    94.09 333 eP    24 31.12   0.6
TBR     94.30  26 eP    24 31.11  -0.2
PAL     94.52  26 eP    24 32.84   0.5
PNJ     94.53  26 iP    24 33.05   0.7
GMTN    94.54  26 iP    24 33.30   0.8
GUD     94.98 334 iPd   24 35.34   0.6
NAV     95.12  32 eP    24 35.07  -0.2
BLA     95.36  32 P     24 28.70  -7.7X
BLA     95.36  32 eP    24 36.81   0.4
        0.9s    35.93nm          5.8mb
AGX     95.44  57 (P)   24 39.50   2.6X
CVL     95.50  30 eP    24 37.39   0.5
MYNC    95.53  36 eP    24 37.15   0.0
        0.9s    26.23nm          5.7mb
      Z  20s     0.89um          5.2Msz
                  i     24 47.60
                  epP   25 04.78 103kmX
                  esP   25 15.14
PAB     96.03 334 eP    24 38.35  -1.1
        0.9s    19.60nm          5.6mb
                  epP   25 07.63 111kmX
EVIA    96.18 332 eP    24 41.45   1.3
CEH     97.04  32 eP    24 43.65  -0.3
        0.6s    22.70nm          5.9mb
MRX     97.70  57 (P)   24 49.50   2.4
EGUA    98.17 332 iPc   24 49.06   0.1
EPRU    98.65 333 eP    24 52.40   1.2
MZZ    114.26 275 iPKPc 29 52.50   0.3
        2.0s     0.50nm
                  i     31 21.00
SBA    117.25 174 iPKPc 29 57.00   1.1
SJG    118.02  30 ePKP  29 57.74  -1.3
MAW    120.88 206 PKP   30 02.80  -0.2
        1.0s    41.67nm
BFT    121.51 261 ePKP  30 06.50   0.7
        0.7s    16.00nm
SLR    122.90 262 iPKPc 30 08.00  -0.3
        0.8s   220.00nm
LKO    122.94 320 PKP   30 07.01  -1.5
        0.7s    76.50nm
TOV    123.86  38 ePKP  30 10.30  -0.1
KSR    124.04 262 ePKP  30 07.50  -3.1X
        0.7s    72.00nm
SDV    124.23  39 ePKPd 30 10.70  -0.6
SEK    124.69 259 iPKPd 30 11.50  -0.3
        1.0s   260.00nm
TIC    125.10 317 PKP   30 11.64  -1.1
        0.8s    65.50nm
KIC    125.19 317 PKP   30 11.84  -1.1
        0.8s    82.00nm
LIC    125.46 317 PKP   30 12.30  -1.1
        0.8s    65.50nm
SWZ    125.91 262 iPKPd 30 13.30  -0.9
        0.7s    88.00nm
                  i     30 43.10
BLF    126.18 259 iPKPd 30 13.80  -0.9
        0.7s   144.00nm
BOSA   126.54 260 iPKP  30 15.07  -0.1
                  epPKP 30 44.46
GRM    127.79 254 ePKP  30 16.60  -0.9
        0.9s    74.00nm
SPA    128.43 180 iPKPd 30 16.50  -1.3
        1.0s   125.00nm
WIN    130.00 272 iPKPc 30 21.60  -0.6
        0.9s    40.00nm
                  e     33 35.00
CER    133.34 258 iPKPc 30 08.60 -19.4X
        1.0s   100.00nm
BLE    134.05 257 ePKP  30 29.00  -0.3
        0.9s    83.00nm
NNA    137.07  62 ePKP  30 23.00 -12.6X
        0.9s    48.74nm
                  i     30 26.30
SNA    142.96 200 iPKPc 30 41.10  -3.3X
        1.2s    64.00nm
                  i     33 54.30
ARE    143.89  61 ePKP  30 46.00  -2.0
LPAZ   146.03  57 iPKPd 30 52.26   0.2
                  ipP'df31 20.57
LPB    146.23  58 PKP   30 53.10   1.0
CNCB   146.51  58 PKP   30 53.60   0.9
CCH    148.13  56 PKP   30 55.80   0.8
YJA    151.89  62 ePKPd 31 01.50   0.7
HJA    152.64  64 ePKPd 31 04.00   2.8X
SLA    153.53  66 ePKP  31 02.20  -0.5
PEL    153.70  88 ePKP  31 02.80   0.3
                  i     31 10.90
ZON    154.65  83 e(PKP)31 03.80   0.0
BAO    155.72  22 PKPc  31 05.90   0.1
                  i     31 15.80
                  i     31 33.10
BDF    155.78  22 PKPd  31 06.70   0.8
        0.9s     9.85nm
                  i     31 16.00
                  i     31 33.50
                  e     32 01.80
RIFB   160.05  25 iPKPd 31 12.10   1.4
                  ipP   31 40.90
                  e     31 51.60
                  i     32 19.90
     S.D. = 0.9  on 544 of 580 obs.
-----------------------------------
*  NOV  27, 1993  06h 13m 42.27± 1.27s
   26.023 S ± 4.4km   64.757 W ±22.6km
   DEPTH =  55.7 ± 17.6 km
   4.4mb (  1 obs.)  5.0Msz (  1 obs.)
 TUCUMAN PROVINCE, ARGENTINA      (131)

SLA      1.45 332 iPd   14 06.20  -0.5
CYA      2.58 201 iPc   14 23.50   1.0
                  S     15 03.50
HJA      2.86 348 iPc   14 27.20   0.8
                  S     14 57.30
YJA      3.90 350 ePc   14 41.90   0.4
                  (S)   15 27.50
RTLL     6.21 211 e(P)  15 14.00   0.4
CFA      6.35 208 ePc   15 15.70   0.2
MPA      6.42 187 ePc   15 14.60  -1.8
RTCB     6.50 212 e(P)  15 18.00   0.4
RTCV     6.69 209 eP    15 20.00  -0.3
CCH      8.69 351 P     15 47.30  -1.0
                  i     16 33.00
PEL      8.77 215 eP    15 53.70   4.6X
RFA      9.29 199 ePd   15 53.30  -2.9X
CNCB     9.64 341 eP    16 06.00   4.4X
LPB      9.94 341 eP    16 06.00   0.4
LPAZ    10.18 341 P     16 08.60  -0.5
CVL     64.95 348 P     24 28.70  10.5X
LKO     67.48  66 P     24 35.70   0.8
        0.7s     2.50nm          4.4mb
HRV     68.47 355 P     24 40.00  -0.4
      Z  21s     0.98um          5.0Msz
     S.D. = 0.9  on  14 of  18 obs.
-----------------------------------
   NOV  27, 1993  07h 04m 30.57± 0.89s
   15.542 S ± 8.5km  167.402 E ± 8.0km
   DEPTH = 134.3 ±  8.3 km
   4.5mb (  9 obs.)
 VANUATU ISLANDS                  (186)

BKM      2.26 159 iPc   05 07.20  -1.3
                  iS    05 38.00
PVC      2.35 158 iP    05 10.50   0.9
                  iS    05 40.50
DZM      6.56 188 iPc   06 05.60  -0.3
                  iS    07 20.60
SVO      9.76 310 eP    06 50.00   1.1
BRS     17.99 227 iP    08 34.00   0.4
CTA     20.63 254 iP    09 02.00   0.8
        1.0s    17.50nm          4.4mb
ARMA    20.70 222 eP    09 06.30   4.3X
STK     28.58 231 eP    10 06.70  -9.3X
        0.8s     2.90nm          4.0mb
WB2     31.75 257 eP    10 42.40  -1.7
        0.9s     8.10nm          4.5mb
WRA     31.76 257 P     10 43.20  -1.0
        0.9s     2.20nm          3.9mb
ASPA    32.51 250 iPd   10 50.10  -0.7
        0.5s    27.60nm          5.3mb
                  ipP   11 16.50 120kmX
FORT    39.00 240 eP    11 41.00  -4.5X
WARB    39.38 248 eP    11 49.60   0.8
MBL     45.37 255 iPd   12 37.80   0.5
SBA     62.33 180 eP    14 41.50   1.2
MDJ     69.05 332 eP    15 22.70  -0.9
CN2     70.40 329 eP    15 31.00  -0.8
        0.6s     7.90nm          4.7mb
                  epP   15 45.00  49kmX
TIY     73.94 317 Pd    15 53.10   0.1
XAN     74.33 313 P     15 54.50  -0.8
        0.7s     7.00nm          4.5mb
GTA     83.32 314 Pc    16 44.50   0.6
        1.0s    16.00nm          4.8mb
YKA     98.21  27 eP    17 49.50  -3.6X
        0.8s     0.80nm          4.3mb
KAF    125.99 339 ePKP  23 16.10  -1.7
        0.8s     4.90nm
APO    131.13 343 ePKP  23 23.80  -3.8X
        0.5s     1.00nm
NB2    131.44 345 PKP   23 12.30 -16.0X
        0.8s     1.90nm
GEC2   140.42 333 ePKP  23 44.90  -0.6
        0.9s     1.59nm
                  e     23 51.50
                  e     23 56.00
                  e     23 58.10
CDF    143.37 338 ePKP  23 46.80  -3.9X
        0.7s     6.05nm
BSF    144.04 338 ePKP  23 48.70  -3.2X
        0.7s     3.95nm
HAU    144.05 338 iPKPc 23 48.90  -2.9X
        0.9s    19.15nm
FLN    145.41 346 iPKPc 23 53.10  -0.9
        0.8s    55.35nm
LDF    145.48 345 iPKPc 23 53.40  -0.7
        0.8s    37.35nm
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LOR    145.54 340 iPKPc 23 54.10  -0.2
        1.0s    47.60nm
LBF    145.75 340 iPKPc 23 54.90   0.2
        1.1s    70.55nm
SSF    145.84 340 iPKPc 23 55.20   0.4
        1.1s    46.90nm
GRR    145.85 346 iPKPc 23 54.90   0.1
        1.1s    83.05nm
HYF    145.93 341 ePKP  23 55.60   0.6
LPL    145.98 335 ePKP  23 56.10   0.7
        1.3s    31.05nm
LPG    145.99 335 iPKPc 23 56.20   0.7
        0.8s    10.90nm
SMF    146.09 340 ePKP  23 55.70   0.4
        1.0s    37.60nm
AVF    146.13 340 ePKP  23 55.60   0.3
        1.0s    29.00nm
LPF    146.23 346 iPKPc 23 56.10   0.7
        0.9s    43.25nm
BGF    146.50 341 iPKPc 23 56.90   1.0
        0.8s    22.70nm
MAF    146.88 341 iPKPc 23 58.10   1.6X
        1.0s    26.80nm
TCF    146.94 341 iPKPc 23 58.20   1.5X
        1.0s    23.40nm
LSF    147.18 342 iPKPc 23 58.60   1.6X
        0.9s    25.90nm
MFF    147.33 344 iPKPc 23 59.20   2.0X
        0.8s    38.70nm
FRF    147.61 333 iPKPc 23 59.80   2.0X
        1.2s    35.40nm
LMR    147.85 333 ePKP  24 00.40   2.3X
        1.1s    23.95nm
RJF    148.03 341 iPKPc 24 01.20   2.8X
        1.0s    24.00nm
CAF    148.20 340 iPKPc 24 01.90   3.2X
        1.1s    16.35nm
LFF    148.60 342 iPKPc 24 02.80   3.5X
        0.9s    16.05nm
LPO    148.70 341 iPKPc 24 03.10   3.6X
        0.9s    18.20nm
EPF    150.45 341 ePKP  24 07.40   5.2X
        1.0s     8.80nm
     S.D. = 0.9  on  32 of  52 obs.
-----------------------------------
*  NOV  27, 1993  07h 42m 31.23± 1.22s
   6.898 S ±10.5km  130.484 E ±13.1km
   DEPTH = 117.1 ± 13.6 km
   5.1mb (  4 obs.)
 BANDA SEA                          (280)

SLKI     1.35 143 iPd    42 57.50   0.5
                 iS      43 14.50
TLE      2.58  61 iP     43 07.90  -4.6X
                 iS      43 30.50
MTN      5.95 174 eP     43 58.00  -0.3
                 eS      45 03.00
KNA      8.96 191 iPc    44 38.80  -0.4
        0.3s    70.00nm          5.9mb X
                 iS      46 17.40
WB2     13.50 164 iPd    45 35.80  -3.5X
        0.3s    83.50nm          5.6mb X
                 eS      47 59.90
QIS     16.20 148 eP     46 12.40  -1.1
                 eS      48 00.00
ASPA    16.99 169 iPd    46 22.60  -0.7
        0.4s    75.20nm          5.3mb
                 eS      49 23.40
MBL     17.53 215 eP     46 30.90   1.1
        0.3s    10.00nm          4.6mb
                 eS      49 37.20
WARB    19.53 190 eP     46 56.00   4.0X
MEEK    22.65 209 eP     47 28.50   5.3X
BRS     29.38 137 iPc    48 27.00   1.5
GUN     55.25 311 P      51 55.10   0.0
        0.6s    20.00nm          5.3mb
PKI     55.43 310 P      51 56.20  -0.1
KKN     55.64 310 P      51 57.40  -0.3
        0.6s    11.00nm          5.0mb
DMN     55.67 310 P      51 58.00  -0.1
GKN     56.23 310 P      52 01.80  -0.1
GBA     56.47 291 P      52 38.00  34.5X
GEC2   112.65 320 ePKP   00 48.90  -6.7X
        0.5s     0.66nm
                 e       00 57.30
LKO    136.47 277 PKP    01 44.24   2.1X
        0.6s     3.50nm
CNCB   150.19 142 PKP    02 16.20  10.1X
LPB    150.34 142 PKP    02 16.00   9.8X
LPAZ   150.50 141 PKP    02 16.20   9.5X
CCH    150.81 146 PKP    02 16.60   9.8X
     S.D. = 0.8  on  12 of  23 obs.
-----------------------------------
?  NOV  27, 1993  09h 21m 43.07± 0.94s
   39.170 N ± 8.1km   27.598 E ± 9.3km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)
      ML 2.7 (ISK).

IZM      0.81 199 ePg    21 58.80  -0.1
                 eSg     22 12.50
DST      0.91  61 ePn    22 00.70   0.2
EZN      1.18 304 ePn    22 05.30   0.2
EDC      1.19  10 ePn    22 05.00  -0.3
     S.D. = 0.4  on   4 of   4 obs.
-----------------------------------
*  NOV  27, 1993  09h 28m 40.81± 1.52s
   31.402 S ±21.8km   67.636 W ± 7.5km
   DEPTH =  10.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA       (137)

CFA      0.55 248 iPc    28 52.20   0.1
                 S       28 59.00
RTLL     0.72 276 iPd    28 54.80  -0.2
RTCV     0.89 239 iPd    28 57.80  -0.2
ZON      0.90 261 iPc    28 58.00  -0.1
                 eS      29 11.00
RTCB     1.00 265 e(P)   29 00.10   0.3
                 S       29 17.00
MRA      1.92 122 ePc    29 13.90   0.0
     S.D. = 0.2  on   6 of   6 obs.
-----------------------------------
?  NOV  27, 1993  09h 29m 19.53± 1.02s
   40.709 N ± 9.6km   29.837 E ± 8.3km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)
      ML 2.6 (ISK).

HRT      0.17 311 iPg    29 23.50   0.1
EYL      0.28 120 iPg    29 25.50   0.0
                 iSg     29 29.00
IZI      0.46 217 iPg    29 29.00   0.0
                 eSg     29 35.00
CTT      1.15 293 ePg    29 41.00  -0.1
     S.D. = 0.1  on   4 of   4 obs.
-----------------------------------
?  NOV  27, 1993  09h 36m 46.77± 0.93s
   39.164 N ± 7.9km   27.497 E ± 9.4km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)
      ML 2.7 (ISK).

IZM      0.79 194 ePg    37 02.00  -0.1
                 eSg     37 16.50
DST      0.98  63 ePn    37 05.70   0.3
EZN      1.12 306 ePn    37 08.00   0.2
EDC      1.21  13 ePn    37 09.00  -0.4
     S.D. = 0.5  on   4 of   4 obs.
-----------------------------------
   NOV  27, 1993  09h 59m 57.19± 1.10s
   14.341 N ±12.4km   96.393 E ± 7.9km
   DEPTH =  33.0km  (normal)
   4.2mb (  1 obs.)
 ANDAMAN ISLANDS, INDIA             (703)

KHT      2.18  78 ePn    00 32.00   0.2
                 ePg     00 38.50
                 eSg     01 02.50
KBR      3.06  96 eP     01 24.00  39.6X
NNT      3.69 118 ePn    00 53.30   0.0
                 eSg     01 35.80
BDT      3.83  41 ePn    00 55.80   0.6
                 ePg     01 09.20
                 eSg     01 56.50
NST      3.85  69 ePn    00 55.00  -0.5
                 ePg     01 08.00
                 eSg     02 00.50
PCT      4.87  85 ePg    00 58.20 -11.9X
                 eSg     02 29.10
CHTO     5.08  28 ePn    01 12.70  -0.3
                 eSg     02 37.50
SHL     11.94 340 eP     02 44.50  -3.8X
                 eS      04 56.00
GUN     16.67 326 P      03 55.00   4.6X
PKI     16.67 324 P      03 49.80  -0.5
DMN     16.88 323 P      03 53.60   0.8
GKN     17.44 323 P      03 59.60  -0.2
        0.5s    10.00nm          4.2mb
     S.D. = 0.6  on   8 of  12 obs.
-----------------------------------
   NOV  27, 1993  10h 00m 21.60± 0.81s
   38.207 S ± 8.3km  176.388 E ± 8.4km
   DEPTH = 187.1 ±  8.3 km
   4.4mb (  1 obs.)
 NORTH ISLAND, NEW ZEALAND          (159)

URZ      0.57  96 Pd     00 46.00  -1.7
                 S       01 02.30
PAHZ     0.83 141 P      00 49.30   0.1
MGZ      1.04 220 P      00 50.90   0.3
NGZ      1.15 212 P      00 51.80   0.2
CNZ      1.19 213 P      00 52.10   0.2
DRZ      1.25 211 P      00 53.30   0.7
MOZ      1.28 256 P      00 52.20  -0.3
                 S       01 14.00
NOZ      1.36 108 P      00 53.40   0.3
TTH      1.38 166 P      00 54.50   1.2
PUZ      1.48  85 P      00 53.20  -1.1
                 S       01 14.60
WAHZ     1.49 181 Pc     00 55.30   0.9
MAHZ     1.52 130 P      00 55.80   1.1
HBZ      1.63  69 Pc     00 54.90  -0.8
TEHZ     1.81 170 P      00 58.60   1.1
BSZ      1.95 215 P      00 59.80   0.8
PGZ      2.41 182 Pd     01 04.90   0.9
MNG      2.51 196 Pc     01 05.70   0.5
                 S       01 37.00
KIW      2.89 203 Pc     01 09.50  -0.2
MTW      3.03 193 Pc     01 11.30   0.0
CAW      3.07 199 P      01 11.80  -0.1
AMW      3.14 189 Pd     01 13.00   0.4
DIW      3.22 216 P      01 13.20  -0.5
BLW      3.24 192 P      01 13.70  -0.2
MRW      3.29 203 P      01 14.10  -0.4
                 S       01 54.00
WEL      3.32 202 P      01 14.60  -0.3
MOW      3.33 195 P      01 14.60  -0.5
TCW      3.42 208 P      01 15.40  -0.7
MQZ      6.18 206 P      01 49.50  -2.2
                 S       02 55.50
ODZ      8.07 210 eP     02 15.40  -1.3
ASPA    38.88 279 eP     07 32.10   1.8
        0.9s     7.90nm          4.4mb
     S.D. = 0.9  on  30 of  30 obs.
-----------------------------------
*  NOV  27, 1993  10h 08m 07.64± 0.80s
   40.711 N ± 6.3km   19.776 E ± 9.0km
   DEPTH =  10.0km  (geophysicist)
 ALBANIA                            (391)
      ML 2.5 (TIR).

VLO      0.32 221 ePg    08 14.20  -0.1
                 iSg     08 21.50
TPE      0.45 157 ePg    08 17.00   0.1
TIR      0.64   6 ePg    08 29.10   8.6X
OHR      0.87  62 iPn    08 24.00  -0.5
                 i       08 38.60
                 i       08 39.60
                 Lg      08 41.00
LACI     0.93 357 ePg    08 25.30   0.0
                 iSg     08 37.50
SKO      1.78  44 ePn    08 39.00   0.4
     S.D. = 0.4  on   5 of   6 obs.
-----------------------------------
?  NOV  27, 1993  10h 47m 36.55± 0.95s
   39.138 N ± 8.1km   27.588 E ± 9.5km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)
      ML 2.7 (ISK).

IZM      0.78 199 ePg    47 51.70  -0.1
DST      0.93  60 ePg    47 54.60   0.2
                 eSg     48 09.50
EZN      1.19 306 ePn    47 59.00   0.2
EDC      1.23  10 ePn    47 59.00  -0.3
     S.D. = 0.5  on   4 of   4 obs.
-----------------------------------
   NOV  27, 1993  10h 50m 18.46± 0.40s
   42.311 N ± 3.0km  122.105 W ± 5.0km
   DEPTH =   5.0km  (geophysicist)
 OREGON                             ( 32)
```

27d 10h

ML 3.5 (GS), 3.4 (BRK).

LHEM	0.69	187	P	50 32.54	0.3
YBH	0.73	218	ePc	50 32.45	-0.7
			iS	50 42.90	
LGMM	0.74	164	P	50 33.47	0.2
LASM	0.81	151	P	50 34.04	-0.8
LMPM	0.82	183	P	50 34.93	-0.1
LGBM	0.97	184	P	50 37.47	0.0
LBFM	0.98	170	eP	50 37.72	0.1
			eS	50 51.42	
LBKM	1.30	199	P	50 42.62	-0.4
KOMM	1.44	225	P	50 45.74	0.4
LGPM	1.50	201	eP	50 45.20	-1.0
			eS	51 04.43	
WDC	1.76	191	eP	50 49.51	-0.3
LMEM	1.82	167	eP	50 51.37	0.6
MIN	2.00	169	eP	50 54.80	1.4
ARC	2.06	227	eP	50 54.31	0.2
			eS	51 26.61	
FHC	2.07	224	eP	50 54.55	0.3
			eS	51 23.92	
ORV	2.79	170	eP	51 04.88	0.2
VGB	3.34	16	eP	51 11.37	-1.1
SHW	3.88	359	(P)	51 20.66	0.5
BMW	4.24	349	(P)	51 25.78	0.6
KVN	4.46	136	eP	51 28.21	-0.2
BONR	5.24	145	eP	51 39.65	0.1

S.D. = 0.6 on 21 of 21 obs.

% NOV 27, 1993 11h 43m 24.99± 0.88s
39.698 N ± 7.5km 29.407 E ± 8.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
ML 2.8 (ISK).

DST	0.61	262	ePg	43 37.60	0.3
			eSg	43 48.60	
IZI	0.64	4	iPg	43 38.40	0.5
			eSg	43 49.00	
ALT	0.84	139	ePg	43 41.20	-0.1
EYL	1.04	33	ePn	43 45.00	0.3
ISK	1.39	349	ePn	43 49.40	-1.0

S.D. = 0.9 on 5 of 5 obs.

? NOV 27, 1993 12h 04m 39.92± 0.97s
26.243 S ± 9.6km 27.454 E ± 8.7km
DEPTH = 5.0km (geophysicist)
REPUBLIC OF SOUTH AFRICA (584)

KSR	0.63	307	eP	04 52.00	-0.5
			S	05 01.50	
SLR	0.90	56	eP	04 58.00	0.3
			S	05 10.20	
SEK	2.08	176	eP	05 15.40	-0.6
			S	05 38.40	
SWZ	2.12	243	eP	05 17.50	0.9
			S	05 41.00	

S.D. = 1.2 on 4 of 4 obs.

% NOV 27, 1993 12h 19m 55.93± 0.78s
26.398 S ± 6.7km 27.388 E ± 8.4km
DEPTH = 5.0km (geophysicist)
REPUBLIC OF SOUTH AFRICA (584)
ML 2.5 (PRE).

KSR	0.69	320	eP	20 10.00	0.2
			S	20 18.50	
SLR	1.04	51	eP	20 16.00	-0.1
			S	20 30.00	
SEK	1.93	174	eP	20 30.00	0.1
			S	20 49.90	
SWZ	2.00	247	eP	20 30.50	-0.4
			S	20 55.10	
BLF	2.90	201	e(P)	20 44.00	0.2

S.D. = 0.4 on 5 of 5 obs.

% NOV 27, 1993 13h 02m 26.53± 0.78s
26.205 S ± 7.8km 28.148 E ± 7.8km
DEPTH = 5.0km (geophysicist)
REPUBLIC OF SOUTH AFRICA (584)
ML 2.0 (PRE).

SLR	0.48	14	eP	02 36.20	0.0
			S	02 41.50	
KSR	1.18	286	eP	02 48.90	-0.2
			S	03 06.00	
BFT	1.78	74	eP	02 58.50	0.1
			S	03 19.50	
SEK	2.16	192	eP	03 03.60	-0.2
			S	03 29.30	
SWZ	2.71	248	eP	03 12.00	0.4
			S	03 45.80	

S.D. = 0.3 on 5 of 5 obs.

% NOV 27, 1993 13h 11m 10.86± 0.82s
26.235 S ± 8.0km 28.178 E ± 8.1km
DEPTH = 5.0km (geophysicist)
REPUBLIC OF SOUTH AFRICA (584)
ML 2.0 (PRE).

SLR	0.51	11	eP	11 21.10	0.1
			S	11 26.60	
KSR	1.21	287	eP	11 33.50	-0.5
			S	11 50.50	
BFT	1.77	72	eP	11 42.50	0.0
			S	12 05.00	
SEK	2.14	193	eP	11 47.50	-0.3
			S	12 13.00	
SWZ	2.72	249	eP	11 56.90	0.7
			S	12 24.60	

S.D. = 0.7 on 5 of 5 obs.

NOV 27, 1993 13h 26m 45.01± 0.24s
38.899 N ± 3.1km 14.861 E ± 1.7km
DEPTH = 295.2 ± 2.5 km
4.8mb (76 obs.)
SICILY (398)

BAI	2.70	34	ePn	27 36.20	-1.6
VLO	3.90	65	ePn	27 49.50	-0.8
SRN	4.10	75	ePn	27 51.40	-1.1
TPE	4.22	69	ePn	27 54.00	0.2
IGT	4.30	80	ePnd	27 54.01	-0.7
			eSn	28 44.40	
HVAR	4.44	15	iPc	27 56.00	-0.3
HCY	4.50	37	iPnc	27 55.00	-2.0
			iSn	28 39.44	
BDV	4.53	41	iPnc	27 55.94	-1.5
			iSn	28 40.91	
ULC	4.54	46	iPnc	27 56.61	-0.9
			iSn	28 42.04	
TIR	4.55	56	iPnd	27 58.50	0.9
			iSn	28 48.50	
VLS	4.55	97	ePn	27 57.00	-0.6
LSK	4.61	72	iPnd	27 57.70	-0.7
SDA	4.73	47	ePn	28 01.50	1.8
			iSn	28 47.00	
TTG	4.86	42	iPnc	28 00.56	-0.6
			iSn	28 49.08	
BRY	4.87	34	iPnc	27 59.97	-1.5
			iSn	28 48.12	
NKY	5.01	37	iPnc	28 02.20	-0.9
			iSn	28 51.86	
OHR	5.07	62	iPn	28 04.70	1.0
			i	28 15.10	
			i	28 59.70	
			i	29 15.60	
			i	29 26.00	
			Lg	29 41.50	
FNA	5.36	67	ePn	28 07.08	0.0
			eSn	29 09.56	
PVY	5.36	45	iPnc	28 07.79	0.6
			iSn	29 01.67	
IVA	5.51	42	iPnc	28 09.48	0.6
			iSn	29 04.79	
KZN	5.52	73	ePn	28 10.00	0.9
PLE	5.59	36	iPnc	28 10.17	0.2
			iSn	29 05.80	
PGF	5.75	311	eP	28 12.20	0.3
	1.1s	210.00nm		5.0mb	
AGG	5.82	86	ePnc	28 12.88	0.2
			eSn	29 18.80	
SKO	5.88	56	i(P)c	28 12.00	-1.4
LIT	6.02	76	ePn	28 15.24	0.2
			eSn	29 23.12	
GRG	6.15	68	ePnc	28 16.78	0.2
			eSn	29 25.40	
VAY	6.38	65	iPn	28 19.30	-0.1
RIY	6.45	357	iPc	28 19.70	-0.4
THE	6.48	72	ePn	28 20.30	-0.2
			eSn	29 35.00	
KNT	6.57	67	ePnc	28 21.60	-0.1
			eSn	29 36.36	
VBY	6.61	2	iP	28 22.70	0.6
VLI	6.75	106	ePb	28 25.00	1.1
SOH	6.81	71	ePnc	28 24.28	-0.4
			eSn	29 41.40	
TRI	6.85	354	iP	28 25.00	-0.1
PAIG	6.91	79	ePn	28 25.16	-0.6
			eSn	29 42.56	
ZAG	6.96	6	iPd	28 27.20	0.8
PTJ	7.04	6	eP	28 27.20	-0.3
SRS	7.06	69	ePn	28 27.08	-0.6
LJU	7.14	358	ePc	28 28.50	-0.1
			i	28 34.30	
			i	28 46.00	
			i	28 53.50	
			iS	29 51.00	
			i(S)	29 52.30	
VOY	7.16	355	iPc	28 28.80	-0.2
			eS	29 51.30	
OUR	7.19	76	ePn	28 29.68	0.5
IMI	7.25	316	P	28 30.13	0.1
FIN	7.28	319	P	28 30.82	0.4
PCP	7.35	322	P	28 32.33	1.0
REVF	7.43	313	P	28 32.18	0.0
SBF	7.47	314	eP	28 33.20	0.5
	1.1s	321.35nm		5.2mb	
SAOF	7.48	315	P	28 33.37	0.6
ROB	7.51	318	P	28 34.57	1.3
AURF	7.54	314	P	28 34.34	0.7
AUTN	7.55	315	P	28 34.43	0.5
MVIF	7.65	313	P	28 35.16	0.1
TOUF	7.67	314	P	28 35.58	0.3
LMR	7.70	308	eP	28 35.70	0.1
	0.8s	57.50nm		4.6mb	
ENR	7.71	316	P	28 36.77	1.1
CALN	7.71	311	P	28 36.68	0.9
FRF	7.74	310	eP	28 36.60	0.5
	1.1s	262.75nm		5.2mb	
STV	7.77	316	P	28 37.45	1.0
LRG	7.86	308	eP	28 38.10	0.6
	1.1s	306.70nm		5.2mb	
PZZ	8.06	316	P	28 40.80	0.7
BHB	8.21	319	P	28 41.39	-0.4
VAM	8.23	112	ePn	28 42.00	-0.1
KBA	8.25	353	iPc	28 42.70	0.2
	0.7s	75.00nm		4.8mb	
			i	28 52.20	
RSP	8.43	320	P	28 44.41	-0.2
ORX	8.44	325	P	28 43.91	-0.8
OGA	8.45	342	iPc	28 46.80	1.9
	0.8s	100.00nm		4.9mb	
RRL	8.51	318	P	28 46.93	1.2
WTTA	8.69	345	iPc	28 49.90	2.1
	0.6s	69.40nm		4.9mb	
			i	28 51.70	
LSD	8.70	321	P	28 47.98	-0.1
SQTA	8.73	343	iPc	28 50.10	1.7
	0.9s	290.00nm		5.3mb	
WATA	8.77	345	iPd	28 49.90	1.1
ALN	8.83	73	ePn	28 48.40	-1.0
MOTA	8.88	343	iPd	28 51.30	1.1
	0.8s	106.00nm		5.0mb	
			i	28 52.40	
LPG	8.92	320	eP	28 52.20	1.3
	0.7s	81.15nm		4.9mb	
BHG	8.94	351	iPd	28 51.60	0.8
	1.0s	95.00nm		4.8mb	
LPL	8.95	320	eP	28 52.70	1.6
	0.6s	57.90nm		4.8mb	
DEV	9.17	38	eP	28 36.00	-17.6X
SRO	9.26	15	iP	28 55.40	0.7
NPS	9.33	110	ePn	28 55.00	-0.7
VKA	9.42	6	iPc	28 58.30	1.5
			i	29 12.00	
			i	29 22.00	
ZST	9.43	9	eP	28 56.80	-0.1
FUR	9.62	345	iPd	29 00.00	0.7
GEC2	9.98	356	Pn	29 04.40	0.6
			Sn	31 05.10	
BBS	10.10	330	P	29 04.28	-1.0
FEL	10.26	333	P	29 06.59	-0.7
KHC	10.27	355	P	29 07.80	0.4
	1.0s	50.00nm		4.6mb	
			e	29 12.50	
			e	29 17.50	
LOMF	10.28	328	P	29 06.36	-1.2
WET	10.34	353	eP	29 08.00	-0.2
MLR	10.53	48	ePd	29 13.70	3.0X

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MOF    10.56 330 P      29 09.30  -1.7
LIBD   10.64 333 P      29 11.06  -0.8
BSF    10.68 329 eP     29 11.30  -1.2
       0.7s    29.45nm          4.6mb
ISR    10.69  51 ePd    29 18.50   5.9X
ECH    10.85 332 P      29 13.81  -0.7
WLS    10.95 333 P      29 15.03  -0.7
CDF    10.98 332 eP     29 15.40  -0.7
       0.5s    27.35nm          4.7mb
SPC    10.99  19 eP     29 16.00  -0.4
                e       31 32.10
HAU    11.00 329 eP     29 15.00  -1.3
       0.4s    23.05nm          4.8mb
PRU    11.09 359 P      29 17.90   0.5
       0.9s    33.20nm          4.6mb
                S       31 26.00
GRF    11.10 348 iPc    29 18.00   0.4
       1.1s   127.00nm          5.1mb
UZH    11.11  26 eP     29 22.00   4.3X
       1.0s    35.00nm          4.5mb
SMF    11.20 317 eP     29 17.60  -1.2
       0.4s    17.25nm          4.6mb
EBR    11.21 284 eP     29 37.00  18.0X
CAF    11.27 306 eP     29 19.90   0.1
       1.3s    49.10nm          4.6mb
LANF   11.28 336 P      29 20.34   0.5
VITF   11.31 328 P      29 19.85  -0.4
LBF    11.35 319 eP     29 19.40  -1.2
       0.5s    12.55nm          4.4mb
AVF    11.55 317 eP     29 22.30  -0.8
       0.6s    18.60nm          4.5mb
LOR    11.59 320 eP     29 22.00  -1.7
       0.4s     9.10nm          4.4mb
HOF    11.61 350 eP     29 23.70  -0.1
SSF    11.64 318 eP     29 22.90  -1.3
       0.7s    26.35nm          4.6mb
MAF    11.64 313 eP     29 24.20  -0.1
       1.0s    38.80nm          4.6mb
BGF    11.68 315 eP     29 24.20  -0.5
       1.2s    90.75nm          4.9mb
CFR    11.70  53 eP     29 26.00   1.0
LPO    11.72 304 eP     29 25.80   0.5
       1.0s   111.20nm          5.0mb
EPF    11.73 295 eP     29 25.20  -0.2
       0.7s    10.15nm          4.2mb
RJF    11.79 307 eP     29 26.60   0.5
       1.1s    64.95nm          4.8mb
OJC    11.85  16 eP     29 27.90   1.2
                i       29 30.10
TCF    11.88 312 eP     29 27.20   0.0
       1.0s    29.40nm          4.5mb
CLI    11.90  46 iPc    29 31.50   4.0X
MOX    11.97 350 iP     29 28.90   0.7
       1.1s    88.00nm          4.9mb
KSP    11.99   4 iPc    29 29.50   1.1
       1.2s    43.00nm          4.6mb
                i       29 31.20
BRG    11.99 357 iP     29 29.40   0.9
       1.0s   110.00nm          5.0mb
                i       29 37.80
ELL    12.09  96 iP     29 30.50   0.6
LFF    12.12 304 eP     29 30.60   0.5
       0.7s    57.10nm          4.9mb
JAU    12.23 295 P      29 32.93   1.3
LSF    12.26 311 eP     29 32.60   0.8
       1.1s   126.50nm          5.1mb
LHE    12.38 294 P      29 33.43   0.0
ESCF   12.39 295 P      29 33.34  -0.1
WLF    12.43 333 iPc    29 34.92   1.2
       0.9s    57.50nm          4.8mb
BCK    12.46  92 eP     29 35.00   0.6
ATE    12.48 295 P      29 33.84  -0.7
CLL    12.48 355 iPc    29 35.20   0.8
       1.3s   140.00nm          5.1mb
KIS    13.06  47 eP     29 42.00   0.5
ELIZ   13.09 294 eP     29 42.74   0.8
ETOR   13.14 284 eP     29 43.38   0.7
BNS    13.22 338 ePc    29 44.30   0.9
DOU    13.36 330 Pc     29 45.80   0.7
       0.7s    25.60nm          4.7mb
MFF    13.43 310 eP     29 46.60   0.5
       0.9s    62.90nm          4.9mb
ENN    13.44 335 iPc    29 47.40   1.4
       0.9s    38.80nm          4.7mb
EVIA   13.56 274 eP     29 48.27   0.6
ECRI   13.68 291 eP     29 47.84  -1.3
SNF    13.82 331 P      29 50.90   0.3
WTS    14.25 339 eP     29 56.00   0.2
       1.0s    44.90nm          4.8mb
LDF    14.51 317 eP     29 57.40  -1.6
       0.9s    55.05nm          4.9mb
PPCY   14.55 101 eP     29 59.00  -0.6
KAS    14.67  74 eP     30 02.00   0.9
LPF    14.69 314 eP     29 57.40  -3.8X
       0.5s    30.20nm          4.9mb
GUD    14.73 283 eP     30 01.40  -0.5
GRR    14.79 315 eP     30 00.00  -2.4
       0.6s    29.15nm          4.8mb
FLN    14.80 317 eP     30 00.10  -2.4
       0.3s    11.95nm          4.7mb
PAB    14.91 279 eP     30 03.50  -0.5
CSS    15.28  99 eP     30 07.50  -0.6
FAM    15.79  98 eP     30 12.00  -1.5
EHOR   15.81 272 eP     30 12.60  -1.2
EPRU   15.97 269 eP     30 13.88  -1.7
BSD    16.22   0 iPc    30 15.80  -2.1
       0.7s    20.00nm          4.7mb
HLW    16.30 119 eP     30 19.50   0.5
ALJ    16.33 269 iP     30 19.00  -0.5
GIBL   16.57 269 iP     30 18.00  -3.9X
COP    16.87 355 iPc    30 23.90  -0.9
       0.9s    94.12nm          5.2mb
EVAL   17.03 272 eP     30 25.12  -1.5
ERUA   17.05 289 eP     30 26.87   0.0
EMON   17.30 292 eP     30 28.72  -0.8
MNK    17.33  26 eP     30 33.00   3.4X
                e       33 41.00
HAE    17.87 323 eP     30 33.80  -1.5
MUD    17.97 350 iPc    30 34.30  -1.9
       1.0s    26.00nm          4.6mb
HTR    18.24 322 eP     30 38.20  -0.8
HCG    18.58 322 eP     30 41.60  -0.9
YRH    19.36 322 eP     30 49.90  -0.4
WME    19.57 324 eP     30 51.90  -0.4
YRC    19.60 323 eP     30 52.30  -0.3
EKA    20.41 330 P      31 00.35  -0.2
DLF    20.56 321 eP     31 02.00   0.0
ESY    20.63 331 eP     31 01.80  -0.9
EBL    20.68 331 eP     31 02.50  -0.7
EDI    20.85 331 eP     31 04.30  -0.5
EAU    20.89 330 eP     31 06.90   1.7
DCN    20.95 321 eP     31 06.60   0.8
UPP    21.05   4 iP     31 06.00  -0.7
EBH    21.21 331 ePc    31 07.70  -0.6
KMY    21.24 346 eP     31 07.59  -1.0
EDU    21.25 332 eP     31 07.90  -0.7
KIV    21.42  67 eP     31 12.60   2.0
       1.2s    50.00nm          4.7mb
ELO    21.45 331 eP     31 10.30  -0.3
APO    21.67 359 eP     31 11.60  -1.1
       0.3s    13.70nm          4.7mb
     Z 19s      0.13um          3.4Msz
                LR      36 05.00
OBN    21.82  35 eP     31 14.00  -0.2
       0.9s    62.00nm          5.0mb
                eS      34 55.00
                e       34 58.00
NUR    22.49  13 iP     31 19.80  -0.8
MOS    22.68  35 eP     31 14.00  -8.4X
PUL    23.07  20 ePc    31 26.00  -0.1
       1.2s   280.00nm          5.6mb
KAF    24.28  13 eP     31 36.00  -1.2
       0.3s    19.40nm          5.0mb
ARU    33.56  44 iPd    32 58.80  -0.3
       1.2s   150.00nm          5.4mb
LKO    34.50 217 iPd    33 08.20   0.8
       0.5s    27.50nm          5.0mb
TIC    36.79 214 P      33 27.20   0.6
       0.7s     6.00nm          4.2mb
KIC    36.92 214 Pd     33 28.60   0.9
       0.3s     9.00nm          4.7mb
LIC    37.17 214 Pd     33 30.66   0.9
       0.0s    17.00nm
WMQ    53.26  60 P      35 36.00   0.2
RES    57.81 343 eP     36 07.50   0.0
       1.0s     2.00nm          3.6mb X
GKN    57.95  78 P      36 09.10  -0.3
DMN    58.51  78 P      36 13.20  -0.1
       0.6s    47.00nm          5.2mb
KKN    58.55  78 P      36 13.00  -0.6
       0.6s    29.00nm          5.0mb
PKI    58.76  78 P      36 15.00  -0.1
       0.6s    29.00nm          5.0mb
GUN    58.95  78 P      36 16.30  -0.1
ZAK    60.38  47 eP     36 25.00  -0.4
       1.0s    10.00nm          4.3mb
TIK    60.50  19 iPd    36 25.00  -0.9
       1.6s    26.00nm          4.5mb
                e       37 05.00
BOD    62.56  36 iPd    36 37.20  -2.4
       0.9s    17.00nm          4.7mb
GTA    63.34  60 Pd     36 45.00  -0.3
       1.6s    14.00nm          4.4mb
BRW    69.94 357 eP     37 25.99   0.3
CD2    70.57  66 iPc    37 31.60   1.3
YKA    71.12 338 eP     37 32.30  -0.6
       0.4s     4.50nm          4.6mb
XAN    72.39  60 P      37 41.50   0.6
       1.0s    27.00nm          4.9mb
TIY    72.58  55 Pd     37 42.60   0.6
BJI    73.55  52 eP     37 48.00   0.6
       1.3s    14.00nm          4.5mb
CHTO   73.94  79 eP     37 50.50   0.5
IMA    74.99 355 eP     37 56.60   1.2
       0.8s    10.50nm          4.6mb
GYA    75.22  68 iPc    37 58.20   0.9
       1.0s    29.00nm          5.0mb
FBA    75.64 352 eP     38 00.07   1.2
       0.8s     3.99nm          4.2mb
TIA    76.48  54 P      38 04.70   0.7
       0.8s    30.00nm          5.1mb
CN2    76.55  44 eP     38 05.00   0.8
       0.8s    18.00nm          4.9mb
PWA    79.03 353 eP     38 18.70   1.3
NJ2    80.21  57 Pc     38 25.50   1.4
RSSD   80.66 320 eP     38 27.50   0.9
       1.0s     8.41nm          4.5mb
YSS    82.62  33 iPc    38 37.40   1.1
       1.0s    50.00nm          5.3mb
LRM    83.32 326 eP     38 41.50   1.2
DPW    84.05 330 eP     38 45.00   1.4
WRA   124.98  88 PKP    45 12.60   0.8
       0.9s     1.00nm
YYYY  125.28  67 ePdiff42 10.50  19.8X
ARMA  143.72  90 ePKP   45 46.00  -0.5
       0.7s     4.00nm
PVC   148.72  55 iPKP   45 53.50  -1.3
DZM   150.49  64 iPKPc  46 05.50   8.0X
     S.D. = 0.9  on 218 of 230 obs.
-----------------------------------
&  NOV  27, 1993  13h 37m 52.23s
   39.628 N          123.443 W
   DEPTH =  11.5km
 NEAR COAST OF NORTHERN CALIF.    ( 35)
      <GM-P>. MD 3.2 (GM). ML 3.3
      (GS), 3.0 (BRK). Felt strongly
      at Laytonville.

KCPM    0.12 299 P      37 55.36  -0.2
GBDM    0.21 151 P      37 56.80  -0.2
KBNM    0.33  36 P      37 59.24   0.1
GNAM    0.45 199 P      38 02.06   0.5
GAS     0.56  87 P      38 03.88   0.2
GROM    0.66  64 P      38 05.57   0.2
GSNM    0.71 164 P      38 06.36   0.2
GHVM    0.77 134 P      38 07.61   0.4
LBPM    0.81  32 P      38 08.60   0.7
GDCM    0.87 170 P      38 08.39  -0.5
GCVM    0.92 159 P      38 09.18  -0.5
GWKM    0.94 128 P      38 11.27   1.3
GHCM    1.04 169 P      38 13.06   1.3
FTR     1.13 169 P      38 12.23  -1.0
NMTM    1.13 136 P      38 14.14   0.9
GARM    1.14 126 P      38 15.86   2.4
WDC     1.18  36 eP     38 13.88  -0.2
                eS      38 27.49
EKR     1.19 334 iP     38 13.15  -1.1
                iS      38 36.67
FHC     1.24 341 iP     38 14.12  -1.1
ARC     1.34 339 ePc    38 19.16   2.5
LGPM    1.37  20 ePc    38 16.52  -0.7
NTYM    1.38 154 eP     38 16.56  -0.7
MGL     1.47  82 P      38 18.27  -0.3
ORV     1.50  92 eP     38 16.23  -2.8
                iS      38 46.33
LBKM    1.57  22 P      38 20.02  -0.1
MIN     1.58  63 ePd    38 20.07  -0.3
LMEM    1.70  57 eP     38 21.89  -0.2
AGC     1.93 155 P      38 31.14   5.9
HMR     1.95 138 (P)    38 25.61   0.1
BKS     1.99 151 iP     38 28.20   2.1
```

27d 13h

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                    eS    38 33.28
LBFM     2.09  34 eP    38 27.56  -0.1
YBH      2.17  15 eP    38 28.96   0.1
                    eS    39 03.35
STAN     2.43 155 eP    38 30.81  -1.6
COE      2.74 149 eP    38 35.58  -1.4
CMB      2.87 123 eP    38 35.64  -3.1
                    eS    39 20.35
KVN      4.18  96 (P)   39 00.83   3.3
BONR     4.35 111 ePn   39 00.27   0.3
       37 obs. associated
-------------------------------------
?  NOV  27, 1993  13h 46m 07.38± 3.45s
   31.303 S ±20.8km   68.495 W ±14.2km
   DEPTH =  95.7 ± 36.7 km
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTLL     0.03 140 iPd   46 21.20   0.0
                    S     46 33.00
RTCB     0.32 235 ePd   46 22.00   0.1
                    S     46 33.10
CFA      0.37 144 iPc   46 22.10   0.0
                    S     46 34.70
RTCV     0.56 184 iPd   46 23.40   0.0
                    S     46 36.00
RTRS     1.40 323 iPd   46 32.50   0.0
                    S     46 52.00
RTPR     1.98  60 eP    46 40.00   0.0
                    S     47 04.50
     S.D. = 0.1  on   6 of   6 obs.
-------------------------------------
   NOV  27, 1993  13h 51m 45.08± 1.37s
   41.336 N ±12.3km   22.643 E ± 4.5km
   DEPTH =   5.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION       (383)
      ML 2.4 (THE).

VAY      0.06 255 iPg   51 46.40  -0.2
       0.1s   880.00nm
                    iSg   51 47.70
KNT      0.26 132 ePgc  51 51.14   0.8
                    eSg   51 55.72
GRG      0.42 206 ePgc  51 53.26  -0.3
                    eSg   52 00.08
SOH      0.74 133 ePg   51 59.48  -0.5
                    eSg   52 10.28
THE      0.74 161 ePg   51 59.76  -0.2
                    eSg   52 10.72
SRS      0.75 107 ePg   51 59.56  -0.5
                    eSg   52 10.24
FNA      1.11 240 ePg   52 06.72   0.4
                    eSg   52 20.20
OUR      1.43 134 ePb   52 12.08   0.4
                    eSb   52 31.60
     S.D. = 0.6  on   8 of   8 obs.
-------------------------------------
&  NOV  27, 1993  13h 56m 42.95s
   34.006 N          116.322 W
   DEPTH =   6.5km
 SOUTHERN CALIFORNIA               ( 43)
      <PAS-P>. ML 2.7 (PAS).

PEC      0.71 261 iPc   56 55.93  -1.2
PLM      0.79 215 iPc   56 57.72  -1.1
SSK      1.16 281 eP    57 03.97  -1.0
                    eS    57 20.59
GSC      1.35 343 eP    57 07.22  -1.1
GLA      1.57 127 eP    57 11.90   0.5
TPNV     2.94   1 (P)   57 28.23  -2.9
       6 obs. associated
-------------------------------------
?  NOV  27, 1993  14h 02m 29.80± 0.90s
   41.141 N ±15.4km   28.463 E ±10.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.8 (ISK).

CTT      0.03 283 iPg   02 31.40  -0.4
ISK      0.46  99 iPg   02 38.90  -0.2
                    eSg   02 45.40
DMK      0.86 322 ePg   02 46.70   0.3
                    eSg   02 58.20
IZI      1.11 136 ePg   02 50.90   0.2
                    eSg   03 04.90
     S.D. = 0.6  on   4 of   4 obs.
-------------------------------------
?  NOV  27, 1993  15h 16m 12.00± 1.43s
   33.569 S ± 8.0km   68.321 W ±34.3km
   DEPTH =  10.0km  (geophysicist)
 MENDOZA PROVINCE, ARGENTINA      (139)

MDZ      0.81 327 eP    16 27.80   0.0
                    i(S)  16 36.20
RFA      1.21 186 ePc   16 34.50   0.0
                    S     16 51.50
RTCV     1.71 354 e(P)  16 42.00  -0.1
                    S     17 07.00
RTRS     3.52 344 eP    17 08.00   0.1
RTPR     3.60  26 e(P)  17 22.00  13.0X
                    (S)   18 09.00
     S.D. = 0.2  on   4 of   5 obs.
-------------------------------------
&  NOV  27, 1993  15h 32m 19.26s
   36.423 N          121.943 W
   DEPTH =   4.3km
 CENTRAL CALIFORNIA                ( 39)
      <GM-P>. MD 2.7 (GM). ML 3.0
      (GS).

MTR      0.18   7 P     32 23.22   0.3
HERM     0.42  26 P     32 27.96   0.3
FRP      0.49  48 P     32 28.90  -0.2
SAO      0.53  49 eP    32 29.44  -0.4
                    eS    32 36.47
BVYM     0.54  52 P     32 29.72  -0.3
SHG      0.56  91 P     32 30.11  -0.3
JUCM     0.58 352 P     32 30.65  -0.3
BSLM     0.59  53 P     32 31.55   0.4
EUC      0.64  10 P     32 32.00   0.0
HJSM     0.65  53 P     32 32.43   0.2
CBO      0.72  16 P     32 33.09  -0.5
AMC      0.74   6 P     32 33.43  -0.6
LRC      0.75 103 P     32 33.74  -0.5
HSPM     0.77  26 P     32 34.52  -0.2
COE      0.86  15 iPd   32 36.28  -0.1
LT3      0.87 346 P     32 35.72  -0.7
HVC      0.91  93 P     32 36.93  -0.3
BMSM     0.95  75 P     32 38.24   0.2
ARN      0.98  19 eP    32 37.96  -0.5
                    eS    32 51.86
CVR      1.03   6 P     32 39.84   0.6
MSJ      1.10   3 P     32 40.56   0.1
JEGM     1.17 339 eP    32 39.97  -1.6
PSTM     1.26 113 P     32 42.97  -0.3
PHAM     1.38 115 eP    32 44.20  -1.1
YEG      1.89 121 P     32 51.09  -1.5
BCH      1.95 129 eP    32 51.12  -2.5
MEMM     2.70  62 (P)   33 04.58   0.3
BONR     3.29  61 (P)   33 13.19   0.4
       28 obs. associated
-------------------------------------
   NOV  27, 1993  16h 07m 57.20± 0.51s
    6.733 N ± 5.6km   72.956 W ± 6.7km
   DEPTH = 165.6 ±  6.3 km
   4.5mb (  5 obs.)
 NORTHERN COLOMBIA                 ( 99)

BMG      0.36 341 iPc   08 19.00  -2.4
BOG      2.37 208 iP    08 40.00   1.7
                    iS    09 11.00
SDV      3.14  47 iPnc  08 48.90   1.2
                    iSn   09 26.50
TOV      4.36  46 iPnc  09 04.20   0.9
                    iPP   09 04.90
                    iSn   09 54.00
CEOS     5.12  63 ePd   09 13.10  -0.2
                    eS    10 08.30
MORO     6.16  48 eP    09 26.90  -0.2
UPA      6.89 289 eP    09 34.42  -2.4
                    eS    10 50.35
                    e     10 50.86
OLLA     6.91  61 eP    09 36.60  -0.5
                    eS    10 54.40
PSO      7.02 219 eP    09 40.00   1.1
ECO      7.16 292 eP    09 37.00  -3.5X
                    eS    10 53.35
PCJ     11.69 340 ePd   10 40.73   0.7
                    S     12 43.30
GWJ     11.86 342 ePd   10 42.84   0.4
STH     11.89 342 ePd   10 43.03   0.4
                    S     12 44.49
SPJ     12.06 339 ePd   10 45.19   0.2
BBJ     12.32 340 ePd   10 49.12   0.9
LPAZ    23.37 168 eP    12 53.26   0.5
       0.6s     6.58nm          4.3mb
                    e     13 26.31
LPB     23.61 168 P     12 53.20  -1.6
CNCB    23.91 168 P     12 59.00   1.2
                    i     13 33.20
SIV     25.46 153 P     13 11.00  -0.7
SOB1    35.66 116 eP    14 42.60   1.2
LMN     39.60   9 eP    15 14.50   0.6
ULM     47.42 340 eP    16 18.00   1.4
YKA     63.40 340 eP    18 09.40  -1.5
       0.4s     2.40nm          4.4mb
TIC     67.42  86 P     18 36.28  -1.1
       0.7s     4.00nm          4.3mb
LIC     67.44  86 P     18 36.74  -0.8
       0.5s     7.00nm          4.7mb
KIC     67.72  86 P     18 38.66  -0.6
       0.6s    10.50nm          4.8mb
GBA    144.33  55 PKP   27 15.00  -1.0
ASPA   149.19 234 iPKPc 27 27.80   4.0X
       0.6s    18.40nm
WRA    150.44 241 PKP   27 26.60   0.9
       0.6s     4.80nm
     S.D. = 1.2  on  27 of  29 obs.
-------------------------------------
%  NOV  27, 1993  16h 08m 08.10± 0.68s
   26.433 S ± 6.7km   27.371 E ± 7.5km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA          (584)
      ML 3.0 (PRE).

KSR      0.71 323 eP    08 22.50   0.2
                    S     08 29.50
SLR      1.07  50 eP    08 29.00   0.1
                    S     08 44.40
SEK      1.90 173 eP    08 43.00   1.4
                    S     09 07.00
SWZ      1.97 247 eP    08 43.00   0.3
                    S     09 07.00
BFT      2.52  73 eP    08 50.00  -0.5
                    S     09 20.00
BLF      2.86 201 eP    08 55.00  -0.4
                    S     09 29.00
FRS      3.77 208 e(P)  09 07.00  -1.1
     S.D. = 1.0  on   7 of   7 obs.
-------------------------------------
   NOV  27, 1993  17h 14m 49.80± 0.37s
   44.545 N ± 2.6km    7.367 E ± 3.8km
   DEPTH =  11.0 ±  3.7 km
 NORTHERN ITALY                    (545)
      ML 2.2 (GEN), 1.9 (LDG).

PZZ      0.19 258 P     14 54.65   0.4
                    S     14 57.43
STV      0.30 186 P     14 56.35   0.1
                    S     15 00.36
BHB      0.31 346 P     14 56.12  -0.1
                    S     14 59.90
ENR      0.32 173 P     14 56.80   0.2
                    S     15 00.97
ROB      0.44 125 P     14 59.28   0.5
                    S     15 04.98
TOUF     0.54 189 Pg    14 59.66  -1.1
AUTN     0.55 175 Pg    15 00.74  -0.4
                    Sg    15 07.99
SAOF     0.58 166 Pg    15 01.02  -0.4
RSP      0.61 353 P     15 00.83  -1.3
                    S     15 08.28
AURF     0.66 182 Pg    15 02.51  -0.4
MVIF     0.67 193 Pg    15 02.40  -0.7
                    Sg    15 11.50
SBF      0.68 176 Pg    15 03.80   0.5
                    Sg    15 11.80
FIN      0.69 119 P     15 03.76   0.4
                    S     15 12.44
IMI      0.74 149 P     15 04.13  -0.1
PCP      0.84  90 P     15 06.23   0.2
                    S     15 17.25
LPG      1.05 336 Pg    15 10.40   0.7
                    Sg    15 22.30
LPL      1.07 335 Pg    15 10.20   0.2
FRF      1.11 208 Pg    15 10.70   0.1
                    Sg    15 24.60
LRG      1.31 214 Pg    15 14.40   0.5
                    Sg    15 31.70
LMR      1.36 207 Pg    15 15.40   0.8
                    Sg    15 32.20
     S.D. = 0.6  on  20 of  20 obs.
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   NOV  27, 1993  17h 47m 50.27± 0.68s
   44.164 S ± 4.0km  168.567 E ± 6.1km
   DEPTH =  10.0km  (geophysicist)
 SOUTH ISLAND, NEW ZEALAND          (162)
      ML 3.7 (WEL).

LMZ      0.68  49 P      48 03.50  -0.2
MSZ      0.68 222 P      48 03.70  -0.1
                  S      48 12.90
BWZ      1.01 112 P      48 09.50   0.1
MHZ      1.03 151 P      48 09.70  -0.1
LRCZ     1.06 149 P      48 10.20  -0.1
SBCZ     1.07 150 P      48 10.30  -0.1
TLC      1.09 161 P      48 10.90   0.1
CMCZ     1.11 153 P      48 10.90  -0.2
                  S      48 24.60
MSCZ     1.11 147 P      48 11.00  -0.1
LSCZ     1.11 149 P      48 11.00  -0.1
ODZ      1.73 121 P      48 20.70   0.2
WVZ      1.91  56 P      48 24.20   1.0
TUZ      1.94 158 P      48 23.60   0.0
SIZ      2.73 186 P      48 35.40   0.5
QRZ      4.44  43 P      48 58.30  -0.8
     S.D. = 0.4  on  15 of  15 obs.
-------------------------------------
%  NOV  27, 1993  18h 00m 56.03± 0.74s
   44.542 N ± 4.6km    6.613 E ±16.1km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                             (538)
      ML 2.0 (LDG).

SBF      0.90 139 Pg     01 13.20  -0.1
                  Sg     01 26.00
LPG      0.96   6 Pg     01 14.50   0.0
LPL      0.98   5 Pg     01 14.80   0.0
FRF      0.98 179 Pg     01 14.90   0.2
                  Sg     01 27.80
LRG      1.10 190 Pg     01 16.10  -0.6
                  Sg     01 31.00
LMR      1.21 184 Pg     01 19.00   0.5
                  Sg     01 34.60
     S.D. = 0.5  on   6 of   6 obs.
-------------------------------------
%  NOV  27, 1993  18h 45m 40.05± 0.71s
   31.448 S ± 6.6km   68.680 W ± 7.6km
   DEPTH =  16.8 ±  8.7 km
 SAN JUAN PROVINCE, ARGENTINA       (137)

RTCB     0.11 249 iPd    45 44.20   0.3
                  S      45 54.10
RTLL     0.22  57 ePd    45 44.80  -0.5
CFA      0.41 113 iPc    45 48.30  -0.2
                  S      45 55.00
RTCV     0.43 164 iPc    45 49.00   0.2
RTRS     1.44 332 eP     46 05.00  -0.3
                  S      46 23.00
RTPR     2.19  59 eP     46 17.00   0.8
                  (S)    46 45.00
RFA      3.32 177 ePd    46 32.00  -0.3
                  S      47 24.50
     S.D. = 0.7  on   7 of   7 obs.
-------------------------------------
%  NOV  27, 1993  18h 57m 50.37± 1.04s
   60.369 N ±10.2km   11.472 E ± 7.5km
   DEPTH =  10.0km  (geophysicist)
 SOUTHERN NORWAY                    (535)
      MD 3.1 (BER). Felt.

NRA0     0.37   5 Pg     57 58.32   0.4
                  Lg     58 02.24
NB2      0.68 349 P      58 03.80  -0.2
KONO     1.19 233 eP     57 55.11 -17.4X
                  eS     58 11.52
APO      1.23  81 eP     58 13.10  -0.1
       0.1s    20.20nm
ODD1     2.47 261 eP     58 32.53   1.3
                  eSg    59 10.15
BLS5     2.70 252 eP     59 10.59  36.0X
                  eSg    59 51.93
EGD      3.11 271 eP     58 39.73  -0.6
                  eSg    59 26.95
ASK      3.11 275 eP     58 39.63  -0.7
                  eSg    59 26.51
ARA0    10.92  27 Pn     00 23.31  -6.2X
                  Sn     02 19.94
                  Lg     03 28.59
     S.D. = 0.9  on   6 of   9 obs.
-------------------------------------
?  NOV  27, 1993  19h 16m 11.13± 5.87s
   31.711 N ±70.7km  138.080 E ±58.4km
   DEPTH = 383.9 ± 18.9 km
   4.1mb (  5 obs.)
 SOUTH OF HONSHU, JAPAN             (211)

MAT      4.82   1 eP     17 31.00   0.0
       0.7s     2.05nm
                  eS     18 33.00
GUN     45.10 279 P      23 53.60   0.6
       0.8s    24.00nm          4.5mb
PKI     45.60 279 P      23 56.70  -0.2
KKN     45.64 279 P      23 57.20   0.1
       0.8s    13.00nm          4.3mb
DMN     45.85 279 P      23 58.00  -0.7
GKN     46.12 280 P      24 00.80   0.2
GBA     58.10 267 P      25 28.00  -0.1
KAF     71.76 333 iP     26 54.00   0.0
       0.3s     1.40nm          4.1mb
NUR     73.33 332 iP     27 03.00   0.0
APO     77.40 335 eP     27 25.10  -0.7
       0.4s     1.30nm          4.0mb
KSP     83.12 327 eP     27 56.60   0.8
GEC2    85.71 327 eP     28 08.70  -0.1
       0.7s     0.52nm          3.5mb
     S.D. = 0.5  on  12 of  12 obs.
-------------------------------------
*  NOV  27, 1993  19h 39m 44.76± 1.64s
   38.234 S ± 8.9km  177.503 E ±10.6km
   DEPTH = 141.3 ± 16.1 km
 NORTH ISLAND, NEW ZEALAND          (159)

URZ      0.31 265 Pc     40 01.80  -2.5
                  S      40 10.10
NOZ      0.57 133 P      40 05.80   0.1
PUZ      0.62  75 Pd     40 06.20   0.2
                  S      40 18.10
PAHZ     0.72 209 Pc     40 06.10  -0.6
WIZ      0.75 340 P      40 05.80  -1.1
TAZ      0.78 270 P      40 06.10  -1.0
HBZ      0.89  45 P      40 09.20   1.2
PATZ     0.99 261 P      40 08.40  -0.6
MAHZ     1.00 163 P      40 10.00   1.0
TTH      1.41 202 P      40 13.90   0.9
WAHZ     1.72 211 P      40 16.90   0.4
NGZ      1.76 237 P      40 18.00   0.9
CNZ      1.81 237 P      40 18.60   1.0
KUZ      2.05 316 P      40 20.80   0.4
                  eS     40 45.80
MOZ      2.14 262 P      40 23.30   1.8
BSZ      2.54 231 P      40 28.20   1.8
PGZ      2.57 201 P      40 27.00   0.3
MNG      2.85 213 eP     40 30.50   0.1
                  S      41 02.00
KIW      3.30 217 P      40 36.30   0.0
MTW      3.30 207 P      40 36.10  -0.2
AMW      3.35 203 P      40 36.90   0.0
MOW      3.63 208 eP     40 40.20  -0.3
TCW      3.88 219 P      40 43.10  -0.8
LTZ      6.05 220 P      41 12.30  -0.7
MQZ      6.59 212 eP     41 18.10  -2.2
     S.D. = 1.1  on  25 of  25 obs.
-------------------------------------
&  NOV  27, 1993  19h 55m 21.41s
   34.628 N          116.557 W
   DEPTH =   7.9km
 SOUTHERN CALIFORNIA                (  43)
      <PAS-P>. ML 2.6 (PAS), 2.7 (GS).

GSC      0.70 343 eP     55 34.22  -1.3
                  eS     55 47.01
PEC      0.89 214 iPd    55 37.50  -1.2
                  eS     55 49.86
SSK      1.03 246 iPc    55 40.86  -0.3
                  eS     56 00.29
PLM      1.30 191 eP     55 45.23  -0.5
                  eS     56 02.43
ABL      2.20 277 (P)    55 59.96   0.9
BCH      2.95 282 (P)    56 13.62   4.1
       6 obs. associated
-------------------------------------
&  NOV  27, 1993  20h 12m 51.83s
   59.825 N          152.266 W
   DEPTH =  73.1km
 SOUTHERN ALASKA                    (   2)
      <AEIC>.

HOM      0.36 118 iP     13 03.47  -0.4
ILIM     0.43 307 eP     13 03.80  -0.8
                  eS     13 14.50
XLV      0.46 143 eP     13 03.64  -1.1
INE      0.47 301 iP     13 04.10  -0.9
INW      0.50 300 eP     13 04.58  -0.7
                  eS     13 14.97
OPT      0.52 251 iP     13 04.73  -0.6
                  eS     13 15.52
CNPM     0.60 119 iP     13 05.34  -0.8
                  eS     13 16.36
RS2      0.69 339 iP     13 06.68  -0.6
REF      0.70 342 eP     13 06.85  -0.5
                  eS     13 18.90
RDW      0.71 338 iP     13 06.86  -0.7
AUE      0.73 231 eP     13 06.72  -0.8
AUL      0.74 234 eP     13 07.11  -0.5
RDT      0.75 355 eP     13 07.07  -0.8
                  eS     13 19.59
AUH      0.76 233 eP     13 07.21  -0.7
AUW      0.76 234 eP     13 07.24  -0.6
DFR      0.80 345 eP     13 07.65  -0.7
NCT      0.81 336 eP     13 07.84  -0.7
                  eS     13 20.72
PDB      0.97 269 eP     13 09.20  -1.2
                  eS     13 22.93
NKA      1.05  29 eP     13 12.28   0.9
CDD      1.14 219 eP     13 11.43  -1.2
SLKM     1.23  55 eP     13 12.54  -1.2
BKG      1.25   0 eP     13 13.37  -0.7
CKL      1.38 359 eP     13 15.15  -0.6
CKT      1.38   1 eP     13 15.12  -0.7
CKN      1.40   2 eP     13 15.73  -0.3
CP2      1.44   0 eP     13 16.31  -0.5
BGL      1.44 358 eP     13 16.11  -0.6
CRP      1.45   2 eP     13 14.35  -2.4
                  eS     13 35.77
NCG      1.59   2 eP     13 18.01  -0.6
MPA      1.60  64 eP     13 17.50  -1.1
SUA      1.81  24 eP     13 21.16  -0.4
KDC      2.09 183 eP     13 22.58  -2.7
SVW      2.10 309 eP     13 23.47  -2.1
MTU      2.33  84 eP     13 26.71  -2.0
PMR      2.35  40 eP     13 26.93  -2.0
KNK      2.46  48 eP     13 28.88  -1.7
KLU      3.54  59 eP     13 43.02  -2.6
     37 obs. associated
-------------------------------------
?  NOV  27, 1993  20h 47m 49.36± 3.05s
   31.465 S ±18.2km   69.057 W ±21.9km
   DEPTH = 108.4 ± 23.1 km
 SAN JUAN PROVINCE, ARGENTINA       (137)

RTCB     0.22  96 ePd    48 05.10  -0.1
                  S      48 16.70
RTLL     0.52  75 iPd    48 06.20  -0.3
                  S      48 18.60
RTCV     0.59 132 iPc    48 07.00   0.0
                  S      48 21.20
CFA      0.71 102 ePd    48 08.40   0.4
                  S      48 22.00
RTRS     1.34 345 iPd    48 14.50   0.1
                  S      48 33.90
RTPR     2.48  63 e(P)   48 29.00   0.0
MRA      3.00 109 eP     48 35.90  -0.1
                  (S)    49 11.50
     S.D. = 0.3  on   7 of   7 obs.
-------------------------------------
   NOV  27, 1993  21h 50m 50.06± 0.40s
   47.951 N ± 3.2km    7.185 E ± 3.6km
   DEPTH =   5.0km  (geophysicist)
 SWITZERLAND                        (544)
      ML 2.9 (LDG).

MOF      0.11 199 Pg     50 52.78   0.4
                  Sg     50 54.68
ECH      0.27 356 Pg     50 55.10  -0.4
                  Sg     50 58.53
BSF      0.29 246 Pg     50 55.97   0.0
                  Sg     51 00.00
LIBD     0.34  54 Pg     50 57.06   0.1
                  Sg     51 01.82
CDF      0.47   7 Pg     50 58.83  -0.6
                  Sg     51 04.53
WLS      0.48  14 Pg     50 59.05  -0.6
```

27d 21h

```
                Sg    51 05.32
BBS     0.53 156 Pg    51 00.99   0.2
                Sg    51 11.93
FEL     0.56  97 ePg   51 00.90  -0.4
HAU     0.57 276 Pg    51 01.10  -0.3
                Sg    51 08.40
LOMF    0.65 202 Pg    51 02.96  -0.1
VITF    0.85 289 Pn    51 06.18  -0.7
SLE     0.90 101 iPd   51 07.30  -0.5
RUP     1.75 357 ePg   51 22.70   1.3
ABH     1.95   7 ePg   51 25.60   1.5
TOD     1.97  32 ePg   51 27.40   2.9X
LOR     2.35 254 Pg    51 34.40   4.4X
                Sg    52 04.20
LBF     2.38 247 Pg    51 35.10   4.7X
                Sg    52 04.80
LPL     2.46 187 Pg    51 37.40   5.8X
LPG     2.47 187 Pg    51 37.50   5.6X
SMF     2.62 241 Pg    51 39.30   5.5X
                Sg    52 11.90
SSF     2.65 252 Pg    51 40.00   5.8X
                Sg    52 12.10
AVF     2.85 247 Pg    51 43.80   6.7X
                Sg    52 20.10
HYF     3.15 259 Pg    51 49.70   8.4X
                Sg    52 29.80
BGF     3.27 246 Pg    51 51.50   8.6X
                Sg    52 32.50
MAF     3.60 243 Pg    51 57.60  10.0X
                Sg    52 43.10
TCF     3.78 246 Pg    52 01.00  10.7X
                Sg    52 48.80
     S.D. = 0.7  on  14 of  26 obs.
-----------------------------------
   NOV  27, 1993  22h 25m 16.07± 1.03s
   25.231 S ± 9.0km  179.999 E ± 5.7km
   DEPTH = 524.0 ± 15.5 km
   5.2mb ( 24 obs.)
 SOUTH OF FIJI ISLANDS            (171)

RAO     4.41 156 iP    26 41.00   0.9
                eS    27 43.00
KUZ    12.05 197 P     27 57.30   1.5
HBZ    12.41 186 eP    27 58.90  -0.6
PUZ    12.89 186 eP    28 06.00   1.5
                eS    30 16.60
URZ    13.22 190 eP    28 06.00  -1.8
                e     28 38.80
                eS    30 26.70
NOZ    13.45 187 eP    28 11.20   1.1
PGZ    15.66 191 eP    28 31.50  -0.8
KIW    16.16 194 eP    28 38.10   0.9
                e     29 08.70
CAW    16.36 193 eP    28 40.70   1.5
AMW    16.42 191 eP    28 40.30   0.6
MRW    16.55 194 eP    28 41.70   0.6
TCW    16.64 195 eP    28 42.70   0.8
                e     29 12.40
QRZ    16.76 200 eP    28 43.30   0.3
THZ    17.51 198 eP    28 50.60   0.2
LTZ    18.63 198 P     29 01.40   0.2
                eS    32 02.90
WVZ    19.36 201 eP    29 07.90  -0.2
MQZ    19.39 196 eP    29 07.50  -0.9
LMZ    20.42 203 eP    29 16.20  -1.8
BWZ    20.94 201 eP    29 21.00  -1.8
BRS    24.48 259 iPc   29 56.00   0.8
       1.0s    33.00nm          4.9mb
ARMA   25.58 252 eP    30 05.70   0.7
       0.7s    48.00nm          5.2mb
CNB    28.20 242 iPc   30 29.30   1.4
CAN    28.50 242 iPd   30 31.20   0.8
                i     35 00.20
BWA    28.79 244 iPd   30 31.70  -1.3
AFR    29.12  81 iPc   30 35.45  -0.4
       0.9s   104.50nm          5.4mb
PAE    29.25  81 iPc   30 36.50  -0.5
       1.0s    79.60nm          5.2mb
PPT    29.29  81 iPc   30 36.90  -0.5
       1.2s  2261.00nm          6.6mb X
     Z 25s   275.00um          6.8MszX
PPN    29.43  81 iPc   30 38.00  -0.5
       1.3s   127.80nm          5.3mb
TVO    29.50  82 iPc   30 38.80  -0.5
       0.8s    86.80nm          5.4mb
CTA    31.51 272 iPd   30 56.00  -0.3
       1.3s   288.46nm          5.7mb
                i     31 04.00
PMO    31.74  77 iPc   30 58.00  -0.3
       0.9s    69.40nm          5.2mb
VAH    31.88  78 iPc   30 59.10  -0.3
       1.2s    92.20nm          5.2mb
TPT    31.99  78 iPc   31 00.20  -0.2
       1.1s   185.60nm          5.6mb
RUV    32.12  78 iPc   31 01.20  -0.3
       1.4s   284.90nm          5.7mb
STK    34.25 250 iPd   31 09.30 -10.0X
       0.4s    13.40nm          4.9mb
PMG    34.95 291 eP    31 23.50  -1.7
LAT    36.54 295 eP    31 38.00  -0.4
ADE    36.80 245 iPd   31 40.60   0.2
QIS    37.40 269 eP    31 45.10  -0.3
ASPA   41.84 262 iPd   32 20.80  -0.5
       0.7s    53.80nm          5.2mb
                eS    37 59.60
WB2    42.32 268 iPc   32 23.90  -1.2
       0.4s   104.40nm          5.7mb
                iScP  37 13.50
                eS    38 06.60
FORT   45.86 251 iPc   32 51.80  -0.8
       0.8s   105.00nm          5.4mb
WARB   47.80 257 eP    33 06.50  -0.9
                e     34 20.00
KNA    48.67 271 eP    33 13.40  -0.7
       1.0s   214.00nm          5.6mb
SBA    53.05 183 eP    33 49.70   4.3X
KLB    54.48 248 iPd   33 55.20  -0.9
       0.8s    68.00nm          5.0mb
RKG    54.63 244 eP    33 56.50  -0.6
MEEK   54.74 254 iPd   33 56.20  -1.8
       0.3s     5.00nm          4.3mb
MBL    55.06 261 eP    33 58.80  -1.5
       0.3s     6.00nm          4.4mb
MUN    55.71 247 iPc   34 04.10  -0.6
CSY    58.93 206 eP    34 16.30  -9.8X
       0.8s    44.70nm          4.9mb
CN2    84.95 324 eP    36 57.00   0.6
       1.0s     7.00nm          4.2mb
TIA    85.15 314 Pc    36 58.60   1.1
       1.0s    76.00nm          5.3mb
NNT    86.69 285 eP    37 07.20   1.9
NST    87.72 288 eP    37 12.00   1.9
BJI    87.99 316 eP    37 12.00   1.1
TIY    89.09 313 eP    37 17.60   1.4
XAN    89.56 308 P     37 19.70   1.3
       1.0s    13.00nm          4.8mb
CHTO   90.14 291 eP    37 23.20   1.9
       1.1s    22.08nm          5.0mb
KAF   139.10 341 ePKP  43 37.10  -6.7X
UPP   143.28 345 iPKP  43 48.70  -2.4X
APO   143.42 348 ePKP  43 48.80  -2.6X
       0.4s     5.10nm
KSP   151.52 338 iPKP  44 12.80   8.3X
                i     44 22.70
                e     46 13.40
CLL   152.12 342 iPKPc 44 13.80   8.4X
       1.0s    11.00nm
                i     46 14.60
BRG   152.24 341 i(PKP)44 13.20   7.6X
GRF   154.07 343 ePKP  44 34.00  25.9X
GEC2  154.10 339 ePKP  44 17.90   9.6X
       1.3s     1.75nm
                e     44 21.00
                e     44 27.20
                e     44 33.90
                e     46 21.70
                e     46 33.40
     S.D. = 1.1  on  56 of  67 obs.
-----------------------------------
% NOV  27, 1993  22h 35m 54.38± 3.48s
   43.139 N ±14.8km   18.275 E ±22.5km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION       (383)

BRY     0.31 140 iPgc  36 00.76  -0.1
                iSg   36 06.99
NKY     0.62 121 iPgc  36 06.44  -0.6
                iSg   36 17.84
HCY     0.71 167 iPgd  36 07.82  -0.6
                iSg   36 19.25
PLE     0.84  77 iPgd  36 10.19  -0.5
                iSg   36 23.58
BDV     0.95 154 iPgd  36 12.35  -0.1
                iSg   36 27.52
TTG     1.01 134 iPgc  36 13.73   0.2
                iSg   36 30.28
IVA     1.22 102 iPgc  36 17.47   0.3
                iSg   36 36.97
PVY     1.36 113 iPgc  36 20.10   0.6
                iSg   36 41.61
ULC     1.38 148 iPgd  36 20.41   0.8
                iSg   36 42.10
     S.D. = 0.6  on   9 of   9 obs.
-----------------------------------
?  NOV  27, 1993  23h 11m 51.01± 1.27s
   68.926 N ±11.3km   17.950 E ±20.0km
   DEPTH =   5.0km  (geophysicist)
 NORTHERN NORWAY                  (646)
     MD 2.5 (BER). Felt.

TRO     0.79  26 eP    12 06.83   0.0
                eS    12 16.20
ARA0    2.76  74 Pg    12 36.70   0.0
                Sn    13 02.15
                Lg    13 07.83
NSD     3.76 174 eP    12 51.00   0.1
      0.1s     0.90nm
NRA0    8.66 201 Pn    13 59.75  -0.1
                Lg    16 29.42
     S.D. = 0.1  on   4 of   4 obs.
-----------------------------------
&  NOV  28, 1993  00h 41m 42.93s
   37.645 N          118.949 W
   DEPTH =   8.5km
 CALIFORNIA-NEVADA BORDER REGION ( 40)
     <GM-P>. MD 3.4 (GM). ML 3.4
     (GS), 3.2 (BRK).

CLKR    0.11 119 P     41 45.58  -0.3
MSTM    1.18 283 P     42 04.50  -0.6
CMB     1.20 289 eP    42 04.77  -0.7
KVN     1.55  25 eP    42 11.93   0.9
BAVM    1.65 271 P     42 17.44   5.1
ADWM    1.70 298 P     42 13.35   0.4
BRMM    1.70 242 P     42 14.22   1.2
PARM    1.78 219 P     42 15.60   1.4
ASMM    1.80 311 P     42 16.12   1.6
ALAM    1.83 301 P     42 16.14   1.3
AASM    1.88 295 P     42 16.92   1.4
ARJM    1.89 304 P     42 17.34   1.6
VPEM    1.92 151 P     42 18.31   2.0
NMC     1.98 155 P     42 19.22   2.0
ISA     2.01 169 ePc   42 19.33   1.7
CSTL    2.02 271 P     42 19.54   1.9
WORM    2.03 163 P     42 19.68   1.9
PRI     2.04 223 iP    42 18.84   0.9
AFDM    2.06 310 P     42 20.42   2.3
AHRM    2.06 307 P     42 20.09   1.9
SFL     2.06 252 P     42 20.00   1.8
ARN     2.08 263 eP    42 19.35   0.9
WOFM    2.11 175 P     42 20.85   1.7
MHC     2.16 263 eP    42 20.84   1.0
                eS    42 48.48
APRM    2.17 305 P     42 22.94   3.2
SAO     2.18 247 ePc   42 20.65   0.7
LRC     2.18 231 P     42 21.27   1.3
HSFM    2.20 249 P     42 22.54   2.3
AFRM    2.21 302 P     42 23.43   3.1
CSR     2.21 253 P     42 22.07   1.7
WKR     2.22 215 P     42 21.27   0.8
YEG     2.35 201 P     42 23.20   0.7
AMC     2.36 259 P     42 23.86   1.4
PADM    2.53 218 P     42 25.85   1.0
PAPM    2.60 229 P     42 27.12   1.2
BKS     2.61 276 eP    42 27.05   0.9
ZSP     2.64 278 iP    42 26.61   0.2
MARC    2.66 187 P     42 28.04   1.3
ORV     2.76 314 ePn   42 28.76   0.5
ABL     2.80 185 eP    42 29.42   0.5
SSK     3.58 163 eP    42 41.25   1.3
LBFM    4.34 329 ePn   42 52.71   1.9
     42 obs. associated
-----------------------------------
%  NOV  28, 1993  00h 47m 37.01± 3.25s
   32.769 S ±22.3km   70.651 W ±10.8km
   DEPTH =  41.0 ± 30.5 km
 CHILE-ARGENTINA BORDER REGION    (127)
     MD 3.7 (SAN).

JACH    0.10  30 iP+   47 43.87   0.0
                iS    47 49.46
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```
ROCH     0.36 236 iP+    47 46.59   0.2
                iS      47 54.49
PEL      0.37 184 iP+    47 46.24   0.0
                iS      47 53.83
FCH      0.63 152 iP+    47 49.89  -0.1
                iS      48 00.13
PCH      0.86 172 iP     47 52.53  -0.3
                iS      48 05.34
TACH     0.91 195 iPd    47 53.32  -0.2
                iS      48 06.86
LCCH     1.04 227 iP     47 55.38   0.0
LNV      1.34 208 iP+    47 59.23  -0.4
CACH     1.35 178 iPd    48 00.57   0.8
                iS      48 19.59
     S.D. = 0.4  on   9 of   9 obs.
-----------------------------------
&  NOV  28, 1993  00h 55m 13.63s
   37.637 N          118.937 W
   DEPTH =    8.0km
 CALIFORNIA-NEVADA BORDER REGION ( 40)
      <GM-P>. MD 2.8 (GM).

MEMM     0.03 357 eP     55 15.10  -0.2
MMPM     0.08 250 iPc    55 15.72  -0.4
MTUM     0.41 134 eP     55 21.57  -0.4
BONR     0.60  58 eP     55 24.77  -0.9
CMB      1.21 290 eP     55 35.17  -1.3
TNP      1.43  71 eP     55 40.05  -0.1
ISA      2.00 169 (P)    55 49.68   1.5
ARN      2.08 263 eP     55 48.76  -0.6
PHAM     2.15 214 P      55 53.99   3.8
TPNV     2.25 107 eP     55 51.46  -0.4
BCH      2.62 201 eP     55 57.19   0.2
GSC      2.90 143 (Pn)   56 01.18   0.2
       12 obs. associated
-----------------------------------
&  NOV  28, 1993  00h 56m 11.07s
   37.628 N          118.950 W
   DEPTH =    0.9km
 CALIFORNIA-NEVADA BORDER REGION ( 40)
      <GM-P>. MD 2.9 (GM).

MMPM     0.06 254 eP     56 12.02  -0.4
HTCR     0.17 125 P      56 15.23   0.7
ORC      0.23  88 P      56 16.35   0.6
BCKR     0.46  81 P      56 20.64   0.3
CWCR     0.53 104 P      56 21.85   0.2
BONR     0.61  57 eP     56 22.55  -0.7
CMB      1.21 290 eP     56 33.53  -0.9
KVN      1.57  25 eP     56 40.67   0.3
       8 obs. associated
-----------------------------------
?  NOV  28, 1993  00h 58m 31.04± 3.52s
   37.740 N ±70.3km   25.402 W ± 8.2km
   DEPTH =  10.0km  (geophysicist)
   3.7mb (  1 obs.)
 AZORES ISLANDS                    (405)

FRA      0.04  63 eP     58 32.00  -1.2
                iS      58 36.00
LFA      0.07 297 iP     58 33.35  -0.1
                iS      58 38.25
CML      0.12 285 iP     58 33.75  -0.3
                iS      58 39.25
FAC      0.20 280 iP     58 35.00  -0.4
                iS      58 41.50
GEC2    30.23  56 eP     04 44.30   0.3
       1.3s     1.75nm          3.7mb
                e       04 56.10
     S.D. = 0.8  on   5 of   5 obs.
-----------------------------------
&  NOV  28, 1993  01h 01m 52.13s
   37.638 N          118.946 W
   DEPTH =    8.2km
 CALIFORNIA-NEVADA BORDER REGION ( 40)
      <GM-P>. MD 2.9 (GM). ML 3.0
      (GS), 3.1 (BRK).

MCSM     0.04  63 P      01 53.86  -0.3
MMPM     0.07 247 iPd    01 54.30  -0.2
ORC      0.23  91 P      01 57.04   0.0
BCKR     0.46  82 P      02 01.39  -0.1
BONR     0.60  58 iPc    02 03.81  -0.5
CMB      1.21 290 eP     02 14.16  -0.6
                eS      02 29.79
TNP      1.44  72 ePc    02 19.24   0.6
KVN      1.56  25 iPd    02 21.56   1.2
WLHM     1.57 161 P      02 21.07   0.5
BRMM     1.70 242 P      02 23.62   1.4
BMSM     1.77 237 P      02 24.60   1.3
HVC      1.96 230 P      02 27.88   1.8
ISA      2.01 169 ePc    02 28.57   1.8
EKH      2.03 242 P      02 28.93   2.0
LTR      2.03 249 P      02 28.34   1.4
LRV      2.05 234 P      02 30.18   2.8
TOW      2.06 152 P      02 30.62   3.2
BTW      2.07 231 P      02 28.05   0.5
ARN      2.08 263 eP     02 28.09   0.4
BSLM     2.10 247 P      02 29.68   1.6
PHAM     2.14 213 eP     02 29.11   0.4
BVYM     2.16 247 P      02 30.28   1.4
MHC      2.16 263 eP     02 30.72   1.6
SAO      2.18 247 iPd    02 30.41   1.3
                iS      02 59.65
COE      2.20 261 eP     02 30.93   1.4
FRP      2.22 247 P      02 35.36   5.6
MTC      2.27 275 P      02 37.52   7.0
JRRM     2.29 256 P      02 32.43   1.6
MARC     2.65 187 P      02 37.68   1.8
ORV      2.77 315 (P)    02 39.14   1.5
ARUT     4.37  86 (Pn)   03 01.21   0.8
DUG      5.42  60 (Pn)   03 19.79   4.4
       32 obs. associated
-----------------------------------
&  NOV  28, 1993  01h 05m 15.27s
   62.007 N          150.981 W
   DEPTH =  64.6km
 CENTRAL ALASKA                    (  1)
      <AEIC>. ML 2.8 (AEIC).

SKT      0.26 264 iP     05 25.03  -0.7
                iS      05 33.14
CUT      0.52  40 iP     05 27.34  -0.6
SUA      0.56 168 eP     05 28.24  -0.3
PWA      0.63 124 P      05 29.00  -0.2
NCG      0.82 223 eP     05 30.89  -0.8
CGLM     0.86 215 eP     05 31.21  -0.8
CRP      0.93 218 eP     05 31.75  -1.3
                eS      05 45.46
CP2      0.96 219 eP     05 32.43  -1.0
                eS      05 45.96
PLRM     0.97 115 eP     05 32.85  -0.5
PMR      0.97 115 ePd    05 32.43  -0.9
                eS      05 47.48
CKN      0.97 217 eP     05 32.97  -0.5
SPU      0.97 212 iP     05 32.72  -0.8
                eS      05 46.75
CKT      1.00 216 eP     05 32.98  -0.9
GHO      1.00 103 eP     05 33.60  -0.3
                eS      05 49.06
BGL      1.00 223 eP     05 32.87  -1.1
PMS      1.02 138 P      05 33.70  -0.4
CKL      1.04 219 iP     05 33.58  -0.8
BKG      1.12 214 iP     05 34.55  -0.9
                eS      05 50.18
HUR      1.16  32 eP     05 34.80  -1.1
                eS      05 50.20
SML      1.27  98 eP     05 36.79  -0.6
NKA      1.27 186 eP     05 39.24   1.9
KNK      1.34 115 iP     05 37.81  -0.6
                eS      05 56.40
TRF      1.48  12 eP     05 39.20  -1.2
                eS      05 57.39
SLKM     1.55 166 eP     05 40.56  -0.6
KTH      1.55   1 eP     05 40.10  -1.2
                eS      05 58.79
RDT      1.59 206 eP     05 40.99  -0.9
DFR      1.64 211 eP     05 41.51  -1.0
MPA      1.71 152 eP     05 42.29  -1.1
RND      1.71  34 eP     05 42.22  -1.3
PWL      1.72 131 eP     05 42.06  -1.4
NCT      1.73 214 eP     05 43.02  -0.7
SCM      1.74  94 eP     05 43.21  -0.6
CFI      1.75 117 eP     05 42.44  -1.4
RDW      1.77 211 eP     05 43.36  -1.0
                eS      06 06.89
MCK      1.97  28 eP     05 46.59  -0.4
SEW      2.05 158 eP     05 47.61  -0.4
TOA      2.27  85 eP     05 50.74  -0.4
SVW      2.40 250 eP     05 50.49  -2.5
KLU      2.46 100 eP     05 52.21  -1.7
LTI      2.49 141 eP     05 51.48  -2.8
CNPM     2.49 183 eP     05 55.10   0.8
TTA      2.51 294 eP     05 51.55  -3.1
SDG      2.60  76 eP     05 57.12   1.4
PAX      2.74  67 eP     05 57.93   0.1
WRH      2.80  27 eP     05 56.51  -2.1
HDA      3.02  35 eP     06 00.01  -1.7
MLY      3.04   2 eP     05 59.63  -2.4
FBA      3.24  25 eP     06 01.63  -3.1
GLM      3.40  27 eP     06 05.02  -2.0
GLB      3.46  96 eP     06 05.64  -2.3
IMA      4.25 345 eP     06 14.72  -4.3
BALM     4.25  99 eP     06 16.15  -2.9
       52 obs. associated
-----------------------------------
&  NOV  28, 1993  01h 14m 11.45s
   37.631 N          118.922 W
   DEPTH =    0.1km
 CALIFORNIA-NEVADA BORDER REGION ( 40)
      <GM-P>. MD 2.8 (GM).

MCSM     0.03  30 P      14 12.32   0.3
MEMM     0.04 339 eP     14 11.42  -0.8
CLKR     0.09 117 P      14 14.21   1.0
HTCR     0.16 130 P      14 13.60  -1.0
MTUM     0.40 134 ePd    14 19.69   0.3
BCKR     0.44  81 P      14 20.89   0.6
BHPR     0.48 134 P      14 21.46   0.4
CWCR     0.51 105 P      14 22.44   0.8
BONR     0.59  56 eP     14 23.21   0.0
CMB      1.23 290 eP     14 34.23  -1.0
TNP      1.42  71 eP     14 38.97   0.3
ISA      2.00 169 eP     14 46.56  -0.3
ARN      2.10 263 eP     14 49.16   0.9
PHAM     2.15 214 eP     14 48.18  -0.9
COE      2.22 261 eP     14 51.17   1.1
TPNV     2.24 107 ePn    14 51.22   0.7
BCH      2.61 201 eP     14 55.67  -0.1
ABL      2.78 185 (Pn)   14 59.86   1.5
ORV      2.79 314 (P)    14 58.84   0.6
GSC      2.88 143 (P)    15 00.15   0.5
       20 obs. associated
-----------------------------------
   NOV  28, 1993  01h 19m 10.88± 0.53s
   37.655 N ± 5.8km  118.887 W ± 4.5km
   DEPTH =   5.0km  (geophysicist)
 CALIFORNIA-NEVADA BORDER REGION ( 40)
      ML 3.2 (GS). Small precursor
      about 35 seconds earlier.

MTUM     0.40 139 eP     19 18.02  -0.9
CMB      1.24 288 eP     19 32.98  -1.5
TNP      1.39  72 eP     19 36.43  -0.7
KVN      1.52  24 eP     19 39.84   0.8
PKEM     1.87 212 (P)    19 44.39   0.6
ISA      2.02 170 (P)    19 46.10   0.1
ARN      2.13 263 eP     19 47.87   0.3
PHAM     2.18 214 eP     19 48.45   0.1
TPNV     2.22 108 eP     19 49.74   0.7
SAO      2.23 247 eP     19 48.94  -0.1
COE      2.25 261 eP     19 50.05   0.7
ORV      2.79 314 eP     19 59.75   2.7X
ABL      2.81 186 (P)    19 57.30  -0.3
GSC      2.89 144 eP     19 56.58  -1.9X
     S.D. = 0.8  on  12 of  14 obs.
-----------------------------------
&  NOV  28, 1993  01h 31m 58.41s
   37.636 N          118.922 W
   DEPTH =    3.5km
 CALIFORNIA-NEVADA BORDER REGION ( 40)
      <GM-P>. MD 3.1 (GM). ML 3.0
      (BRK).

MTUM     0.40 135 iPd    32 06.41  -0.1
BCKR     0.44  82 P      32 07.52   0.3
CWCR     0.51 106 P      32 08.57   0.0
BONR     0.59  57 iPc    32 09.91  -0.2
MSTM     1.21 283 P      32 20.78  -0.7
CMB      1.22 289 eP     32 20.71  -1.1
                eS      32 36.54
TNP      1.42  71 eP     32 25.56   0.3
KVN      1.55  24 eP     32 27.71   0.6
BAVM     1.67 271 P      32 33.63   4.9
BRMM     1.72 243 P      32 30.15   0.9
BMSM     1.79 237 P      32 31.29   0.9
VPEM     1.90 152 P      32 34.38   2.2
WASM     1.92 171 P      32 33.80   1.4
HVC      1.97 231 P      32 34.00   0.9
ISA      2.00 169 iPd    32 34.99   1.5
                eS      33 00.67
```

28d 01h

```
WORM     2.01 164 P      32 35.30   1.7
HJSM     2.07 247 P      32 35.40   1.0
SFL      2.08 253 P      32 35.75   1.2
ARN      2.10 263 eP     32 35.42   0.6
WOFM     2.10 175 P      32 36.97   1.9
HSPM     2.13 257 P      32 36.59   1.2
MHC      2.18 263 eP     32 37.35   1.2
                  eS     33 05.44
WBSM     2.19 163 P      32 38.68   2.3
LRC      2.19 231 P      32 37.27   1.1
SAO      2.19 247 eP     32 36.84   0.6
TPNV     2.24 107 eP     32 37.13   0.1
MTC      2.29 275 P      32 44.02   6.3
WSHM     2.31 150 P      32 41.61   3.7
JRRM     2.31 256 P      32 38.52   0.6
BCH      2.62 201 eP     32 42.55   0.2
       30 obs. associated
-----------------------------------------
&  NOV  28, 1993  02h 06m 15.62s
   37.635 N          118.934 W
   DEPTH =    6.5km
 CALIFORNIA-NEVADA BORDER REGION ( 40)
      <GM-P>. MD 3.4 (GM). ML 3.4
      (GS), 3.4 (BRK).

MCSM     0.03  50 P      06 14.21  -3.1
MRCM     0.34  84 eP     06 22.37  -0.2
MTUM     0.41 134 iPd    06 23.67  -0.2
BHPR     0.49 133 P      06 22.34  -3.1
CWCR     0.52 105 P      06 25.72  -0.3
BONR     0.59  57 iPc    06 27.04  -0.5
FRI      0.89 224 iP     06 32.30  -0.7
                  iS     06 43.35
CMB      1.22 290 ePd    06 37.89  -0.7
                  eS     06 53.82
TNP      1.43  71 ePc    06 42.65   0.4
KVN      1.56  25 eP     06 45.23   1.2
PHBM     1.66 214 P      06 46.75   1.4
BAVM     1.66 271 P      06 50.61   5.2
ADWM     1.71 299 P      06 46.59   0.5
PARM     1.78 220 P      06 48.68   1.5
ASMM     1.82 311 P      06 48.68   1.0
PKEM     1.83 211 eP     06 49.32   1.5
ALAM     1.85 301 P      06 49.08   1.0
AASM     1.89 295 P      06 50.04   1.4
ARJM     1.91 304 P      06 50.31   1.4
PCL      1.97 253 P      06 50.79   1.1
ISA      2.00 169 iPd    06 52.04   1.7
                  eS     07 17.86
AFHM     2.03 314 P      06 52.75   2.0
EKH      2.04 242 P      06 52.25   1.5
TOW      2.05 152 P      06 53.72   2.7
HJSM     2.06 247 P      06 52.50   1.4
AFDM     2.07 310 P      06 53.14   1.8
BTW      2.07 231 P      06 51.56   0.3
AHRM     2.08 307 P      06 53.00   1.6
ARN      2.09 263 eP     06 52.49   0.9
WOFM     2.10 175 P      06 53.84   2.0
BLRM     2.10 243 P      06 54.27   2.5
PHAM     2.15 214 eP     06 53.07   0.7
MHC      2.17 263 ePc    06 53.76   0.9
                  eS     07 21.10
APRM     2.18 305 P      06 55.25   2.3
SAO      2.18 247 iPc    06 54.06   1.1
WBSM     2.19 163 P      06 55.70   2.5
COE      2.21 261 eP     06 55.09   1.7
AFRM     2.23 302 P      06 56.54   3.0
CVAL     2.24 270 P      06 56.43   2.7
PSAM     2.24 225 P      06 55.12   1.3
TPNV     2.25 107 eP     06 54.32   0.3
HMR      2.33 284 eP     06 57.57   2.6
SOS      2.43 260 P      06 57.29   0.7
PANM     2.44 221 P      06 57.65   1.1
CSVM     2.44 276 P      07 01.65   5.0
BPRM     2.55 242 P      06 59.02   0.8
BCH      2.62 201 eP     06 59.78   0.6
BKS      2.63 276 ePc    06 59.74   0.5
MARC     2.65 187 P      07 01.83   2.3
ZSP      2.65 278 iPd    06 59.65   0.1
ORV      2.78 314 eP     07 03.49   2.1
GSC      2.89 143 eP     07 04.55   1.4
NTYM     3.04 285 eP     07 05.90   0.9
LMEM     3.55 326 (P)    07 15.80   3.3
SSK      3.56 163 (P)    07 14.39   1.7
PEC      4.00 158 eP     07 20.15   1.3
LBFM     4.36 329 (P)    07 26.27   2.3
ARUT     4.36  86 eP     07 26.10   2.1
PLM      4.59 158 eP     07 28.26   0.9
MSU      5.41  79 (P)    07 38.48  -0.4
DUG      5.41  60 (P)    07 39.27   0.3
       0.8s     3.36nm          4.0mb X
HVU      6.30  47 (P)    07 50.08  -1.3
       62 obs. associated
-----------------------------------------
?  NOV  28, 1993  02h 07m 27.15± 8.25s
   19.548 N ±59.9km   65.909 W ±25.2km
   DEPTH =  10.0km  (geophysicist)
 PUERTO RICO REGION                ( 90)

LPR      1.23 178 P      07 50.20   0.1
APR      1.34 216 P      07 52.10   0.3
SJG      1.45 189 iP     07 54.50   1.1
                  S      08 08.50
CPD      1.50 180 P      07 54.20   0.1
CLLP     1.59 204 P      07 55.50   0.1
PORP     1.64 205 P      07 55.70  -0.4
MGP      1.90 216 P      08 00.00   0.2
     S.D. = 0.6  on   7 of   7 obs.
-----------------------------------------
?  NOV  28, 1993  02h 39m 57.62± 9.64s
   35.927 S ±77.2km  177.249 E ±32.1km
   DEPTH = 357.8 ± 57.6 km
 OFF E. COAST OF N. ISLAND, N.Z. (160)

HBZ      1.87 153 P      40 49.20   0.1
PUZ      2.29 160 P      40 51.90  -0.2
                  S      41 24.90
URZ      2.33 183 P      40 51.90  -0.4
                  S      41 25.40
NOZ      2.76 167 P      40 56.00   0.2
PAHZ     2.93 183 P      40 57.50   0.1
NGZ      3.50 201 P      41 03.20   0.5
TTH      3.62 185 P      41 04.10   0.4
WAHZ     3.83 190 P      41 05.60  -0.3
PGZ      4.75 189 P      41 15.30   0.0
MNG      4.89 196 P      41 16.50  -0.4
KIW      5.26 200 P      41 20.80  -0.1
CAW      5.45 198 P      41 22.80  -0.2
AMW      5.50 192 P      41 23.80   0.2
TCW      5.77 203 P      41 26.80   0.2
     S.D. = 0.3  on  14 of  14 obs.
-----------------------------------------
?  NOV  28, 1993  03h 05m 30.39± 6.01s
   43.434 N ±27.0km   20.480 E ±36.5km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)

IVA      0.71 217 iPgd   05 43.72  -0.6
                  iSg    05 54.19
PLE      0.80 263 iPgc   05 45.72  -0.3
                  iSg    05 57.54
PVY      0.92 204 iPgc   05 47.84  -0.2
                  iSg    06 01.09
NKY      1.25 241 iPgd   05 53.96   0.2
                  iSg    06 11.92
TTG      1.35 222 ePg    05 55.66   0.5
                  iSg    06 13.89
BRY      1.51 250 iPgc   05 57.69   0.0
                  iSg    06 17.83
ULC      1.73 212 ePn    06 00.96   0.3
                  iSn    06 23.22
HCY      1.76 237 iPnd   06 01.09   0.0
                  iSn    06 24.13
     S.D. = 0.4  on   8 of   8 obs.
-----------------------------------------
?  NOV  28, 1993  03h 13m 42.52± 5.04s
   40.687 N ±12.9km   30.190 E ±37.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      ML 2.9 (ISK).

HRT      0.42 289 iPg    13 51.00  -0.1
                  iSg    13 54.00
IZI      0.65 238 iPg    13 55.60   0.0
                  iSg    14 04.10
ISK      0.94 294 iPg    14 00.60   0.2
                  iSg    14 11.10
CTT      1.41 290 ePn    14 08.10  -0.1
DMK      2.16 303 ePn    14 19.00   0.0
     S.D. = 0.2  on   5 of   5 obs.
-----------------------------------------
%  NOV  28, 1993  03h 57m 06.60± 0.75s
   42.122 N ± 5.8km   19.082 E ± 5.1km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)

ULC      0.20 142 iPgc   57 11.09   0.0
                  iSg    57 14.38
BDV      0.25 311 iPgc   57 12.21   0.3
                  iSg    57 16.64
TTG      0.34  23 iPgd   57 13.59   0.1
                  iSg    57 18.35
HCY      0.54 307 iPgd   57 17.24  -0.3
                  iSg    57 26.00
NKY      0.69 355 iPgd   57 20.02  -0.4
                  iSg    57 30.33
PVY      0.81  54 iPgc   57 22.18  -0.3
                  iSg    57 33.98
BRY      0.87 333 iPgd   57 23.52   0.0
                  iSg    57 36.83
IVA      0.96  39 iPgd   57 25.02   0.1
                  iSg    57 39.00
PLE      1.23  11 iPgc   57 29.94   0.4
                  iSg    57 48.06
     S.D. = 0.3  on   9 of   9 obs.
-----------------------------------------
   NOV  28, 1993  04h 16m 07.30± 1.34s
   41.330 N ±11.9km   22.630 E ± 4.8km
   DEPTH =   5.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)
      ML 2.0 (THE).

VAY      0.05 259 iPg    16 08.50  -0.2
       0.2s   200.00nm
                  iSg    16 10.00
KNT      0.26 130 ePgc   16 13.25   0.6
                  eSg    16 17.92
GRG      0.41 205 ePgc   16 15.54   0.0
                  eSg    16 22.32
THE      0.74 160 ePg    16 21.60  -0.5
                  eSg    16 32.00
SOH      0.75 133 ePg    16 22.40   0.2
                  eSg    16 33.24
SRS      0.76 106 ePg    16 22.08  -0.4
                  eSg    16 32.20
FNA      1.09 240 ePg    16 28.64   0.3
                  eSg    16 44.20
     S.D. = 0.5  on   7 of   7 obs.
-----------------------------------------
?  NOV  28, 1993  05h 56m 53.10± 0.93s
   42.463 N ± 8.6km    8.107 W ± 7.1km
   DEPTH =  10.0km  (geophysicist)
 SPAIN                             (377)
      mbLg 2.8 (MDD).

STS      0.53 322 iPd    57 04.02   0.1
                  e      57 11.40
EZAM     0.54 234 iPd    57 03.92  -0.1
                  e      57 10.50
ERUA     0.72  95 eP     57 07.33   0.1
                  e      57 15.70
EMON     1.13  30 eP     57 14.10  -0.1
                  e      57 29.60
     S.D. = 0.2  on   4 of   4 obs.
-----------------------------------------
   NOV  28, 1993  06h 46m 02.30± 0.60s
   33.231 S ± 5.4km   68.231 W ± 5.4km
   DEPTH =  10.0km  (geophysicist)
 MENDOZA PROVINCE, ARGENTINA       (139)
      MD 4.3 (SAN).

MDZ      0.63 304 iPd    46 12.90  -2.0
                  iS     46 20.40
RTCV     1.39 349 iPc    46 28.00   0.2
RFA      1.55 187 iPc    46 29.00  -1.0
                  S      46 50.50
CFA      1.62 360 iPd    46 31.30   0.3
                  S      46 51.00
ZON      1.72 347 eP     46 31.50  -1.0
                  eS     46 55.50
FCH      1.73 266 iP+    46 32.39  -0.5
                  iS     46 54.46
RTCB     1.81 344 ePc    46 34.00   0.2
                  S      46 59.20
RTLL     1.91 354 ePc    46 35.20   0.0
                  S      46 59.00
PCH      1.95 258 iP     46 35.27  -0.6
                  iS     47 00.13
SAN      2.05 263 iP+    46 37.64   0.4
                  iS     47 04.59
JACH     2.06 285 iP+    46 38.05   0.6
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                iS    47 03.60
PEL     2.06 272 iP+   46 36.98   -0.4
                iS    47 03.75
CACH    2.16 245 iP    46 38.45   -0.6
                iS    47 05.94
MRA     2.28  70 eP    46 41.20    0.7
TACH    2.30 259 iP    46 41.32    0.4
                iS    47 10.79
ROCH    2.35 276 iP    46 43.02    1.3
                iS    47 13.51
LNV     2.75 254 iP    46 48.55    1.3
                iS    47 22.81
LCCH    2.80 264 iP    46 48.44    0.4
RTRS    3.23 341 iPd   46 55.00    1.0
                S     47 43.00
RTPR    3.27  27 eP    46 55.00    0.5
                (S)   47 45.00
CYA     5.21  24 ePd   47 21.00   -1.2
                S     48 48.00
     S.D. = 0.9  on  21 of  21 obs.
-----------------------------------
? NOV  28, 1993  07h 12m 55.32± 5.20s
   15.594 N ±13.8km   60.440 W ±51.5km
   DEPTH =  28.0 ± 12.7 km
 LEEWARD ISLANDS                    ( 92)
     ML 1.2 (FDF).

MGG     0.90 291 eP    13 12.00    0.0
DEG     0.93 320 eP    13 12.50    0.0
                S     13 23.50
CRM     0.95 209 iPc   13 12.78    0.0
                S     13 24.50
DOG     1.21 291 eP    13 16.60    0.1
PAG     1.27 290 eP    13 17.32    0.0
     S.D. = 0.1  on   5 of   5 obs.
-----------------------------------
   NOV  28, 1993  07h 14m 41.61± 0.44s
   38.471 S ± 3.1km  176.164 E ± 3.9km
   DEPTH =   9.4 ±  4.5 km
 NORTH ISLAND, NEW ZEALAND          (159)
     ML 3.8 (WEL).

UTU     0.29   4 P     14 47.70    0.0
                S     14 52.10
MGZ     0.72 222 P     14 55.50   -0.4
WLZ     0.75 323 P     14 56.40    0.1
URZ     0.77  75 P     14 55.50   -1.2
PAHZ    0.80 119 P     14 56.70   -0.5
TAHZ    0.80 146 P     14 57.30    0.0
NGZ     0.83 212 P     14 57.60   -0.2
CNZ     0.87 213 P     14 58.10   -0.4
DRZ     0.93 210 eP    14 59.60    0.0
MOZ     1.07 268 P     15 01.40   -0.4
                S     15 17.20
TTH     1.19 154 P     15 04.50    0.7
WAHZ    1.24 173 Pc    15 04.60   -0.1
PUZ     1.69  77 eP    15 12.00    0.5
KUZ     1.76 348 eP    15 12.60    0.3
MNG     2.21 194 P     15 19.10    0.2
     S.D. = 0.5  on  15 of  15 obs.
-----------------------------------
& NOV  28, 1993  07h 29m 51.91s
   38.868 N          122.495 W
   DEPTH =   5.0km
 NORTHERN CALIFORNIA                ( 36)
     <GM-P>. MD 2.8 (GM).

NTYM    0.50 195 eP    30 01.24   -0.6
HMR     0.90 142 eP    30 08.28   -1.3
ORV     1.03  48 eP    30 08.53   -3.4
ARN     1.70 153 eP    30 21.92   -0.4
COE     1.73 158 eP    30 21.35   -1.5
CMB     1.85 116 eP    30 20.18   -4.5
LGPM    2.06 353 (P)   30 25.96   -1.7
LBFM    2.52  10 (P)   30 31.75   -2.6
MEMM    3.05 112 eP    30 37.65   -3.9
BONR    3.42 104 (Pn)  30 43.20   -4.0
TNP     4.22  99 ePg   31 10.60   12.1
       11 obs. associated
-----------------------------------
& NOV  28, 1993  08h 17m 47.07s
   59.319 N          152.501 W
   DEPTH =  71.0km
 SOUTHERN ALASKA                    (  2)
     <AEIC>.

XLV     0.42  71 eP    17 58.70   -0.7
                eS    18 07.75
AUE     0.45 276 ePd   17 59.13   -0.5
                eS    18 07.87
AUI     0.48 272 eP    17 59.20   -0.7
                eS    18 08.82
AGU     0.48 275 eP    17 59.54   -0.5
AUL     0.48 278 P     17 59.50   -0.5
AUH     0.48 276 ePd   17 59.51   -0.6
                eS    18 08.08
AUW     0.50 276 eP    17 59.57   -0.6
                eS    18 08.18
OPT     0.50 312 eP    17 59.53   -0.7
HOM     0.55  52 eP    18 00.24   -0.4
                eS    18 09.53
CNPM    0.68  72 ePc   18 01.12   -0.9
                eS    18 12.64
CDD     0.71 237 eP    18 01.26   -1.1
                eS    18 12.58
INE     0.80 339 eP    18 02.69   -0.9
                eS    18 14.78
ILIM    0.80 343 eP    18 02.62   -0.8
INW     0.82 337 eP    18 03.07   -0.7
BRLK    0.94  61 eP    18 04.79   -0.3
                eS    18 17.40
MCNL    0.95 263 eP    18 04.09   -1.2
                eS    18 16.82
PDB     0.98 299 ePc   18 04.67   -1.0
                eS    18 18.36
RED     1.11 353 eP    18 06.75   -0.7
                eS    18 22.21
RDW     1.18 353 ePd   18 07.89   -0.5
                eS    18 23.36
REF     1.18 355 ePd   18 07.88   -0.5
                eS    18 23.76
NCT     1.27 350 eP    18 08.89   -0.5
DFR     1.28 356 ePd   18 09.08   -0.5
NKA     1.56  23 eP    18 14.15    0.9
KDC     1.58 180 P     18 12.30   -1.2
SLKM    1.66  43 eP    18 13.37   -1.3
SEW     1.74  62 eP    18 14.89   -0.7
BKG     1.76   4 ePd   18 15.72   -0.4
SPU     1.88   7 ePd   18 17.36   -0.4
                eS    18 41.14
CKL     1.89   2 eP    18 17.62   -0.2
CKT     1.89   4 eP    18 17.52   -0.4
CKN     1.92   5 eP    18 18.21    0.0
BGL     1.95   2 eP    18 18.47   -0.3
CP2     1.96   4 eP    18 18.47   -0.4
CRP     1.96   5 eP    18 18.17   -0.8
CGLM    2.01   7 eP    18 19.35   -0.2
NCG     2.10   5 eP    18 20.55   -0.2
SUA     2.32  21 eP    18 23.73   -0.2
SVW     2.38 320 eP    18 23.27   -1.3
PMS     2.42  36 P     18 24.50   -0.7
LTI     2.47  71 eP    18 24.65   -1.1
PWL     2.60  52 eP    18 25.91   -1.7
PWA     2.68  28 P     18 28.10   -0.6
SKT     2.71  10 eP    18 28.46   -0.8
PLRM    2.83  35 eP    18 29.07   -1.7
PMR     2.83  35 eP    18 28.54   -2.2
KNK     2.91  42 eP    18 30.26   -1.7
CFI     3.01  50 eP    18 31.20   -2.1
GHO     3.03  34 eP    18 32.24   -1.5
HIN     3.21  68 eP    18 34.34   -1.9
SML     3.24  38 eP    18 34.94   -1.6
CUT     3.28  18 eP    18 36.05   -1.1
SCM     3.59  43 eP    18 39.98   -1.6
KLU     3.93  53 eP    18 43.79   -2.4
BALM    5.35  67 eP    19 03.27   -3.1
FBA     6.02  20 eP    19 12.41   -3.1
       55 obs. associated
-----------------------------------
% NOV  28, 1993  09h 12m 10.01± 0.75s
   36.691 N ± 9.7km  106.364 E ± 7.1km
   DEPTH =  33.0km  (normal)
 WESTERN NEI MONGOL, CHINA          (323)
     ML 3.8 (BJI).

LZH     2.12 254 iPgd  12 44.50    0.5
                Sn    13 10.00
                Sg    13 12.00
XAN     3.37 141 Pn    13 01.70    0.0
                Pg    13 09.50
                Sn    13 42.50
BTO     4.84  35 ePn   13 22.60    0.1
                ePg   13 38.20
                Sg    14 45.40
TIY     4.95  76 Pnc   13 23.40   -0.7
                Pg    13 39.90
                Sn    14 23.10
                Sg    14 42.00
HHC     5.81  43 ePn   13 37.00    0.8
                ePg   13 54.80
                Sg    15 09.40
GTA     5.84 300 Pn    13 36.00   -0.7
                Pg    13 53.50
                Sn    14 41.00
                Sg    15 10.50
CD2     6.16 201 ePg   14 02.60   21.5X
     S.D. = 0.8  on   6 of   7 obs.
-----------------------------------
? NOV  28, 1993  09h 46m 49.15± 0.94s
   39.129 N ± 8.0km   27.582 E ± 9.5km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)
     ML 2.7 (ISK).

IZM     0.77 199 ePg   47 04.20    0.0
                eSg   47 16.20
DST     0.94  59 ePn   47 07.20    0.1
EZN     1.20 306 iPn   47 11.50    0.1
EDC     1.24  10 ePn   47 12.00   -0.1
     S.D. = 0.2  on   4 of   4 obs.
-----------------------------------
? NOV  28, 1993  09h 56m 52.39± 1.15s
   38.885 N ± 8.2km   29.906 E ±15.7km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)
     ML 3.1 (ISK).

KHL     0.64 208 iPg   57 04.90   -0.3
                eSg   57 14.90
DST     1.23 306 ePn   57 15.60    0.4
IZI     1.49 347 iPn   57 18.90   -0.3
BCK     1.52 159 ePn   57 20.00    0.3
     S.D. = 0.7  on   4 of   4 obs.
-----------------------------------
   NOV  28, 1993  10h 29m 11.47± 0.37s
   45.453 N ± 3.8km   14.335 E ± 2.9km
   DEPTH =   5.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION         (383)
     ML 4.4 (GRF), 4.0 (VIE). MD 3.9
     (LJU). Felt at Ilirska Bistrica,
     Ljubljana, Pivka and Postojna,
     Slovenia. Also felt in the
     Sneznik and Zatrep regions,
     Slovenia. Felt at Klana, Rijeka,
     Opatija and on Krk, Croatia.

RIY     0.12 162 iPgd  29 12.80   -1.1
CEY     0.29  13 iPg   29 18.50    1.1
                eSg   29 20.90
TRI     0.48 303 iPgd  29 21.80    0.8
                iSg   29 29.00
LJU     0.61  13 iPg   29 23.10   -0.5
                iSg   29 30.00
                iSg   29 30.10
VBY     0.65  85 iPgc  29 24.50    0.0
                i(Sg) 29 33.00
VOY     0.66 332 iPgc  29 24.20   -0.4
                eSg   29 32.00
ZAG     1.21  72 iPg   29 35.00    0.5
                i(Sg) 29 52.00
PTJ     1.22  68 iPg   29 35.00    0.3
                i(Sg) 29 52.20
KBA     1.76 337 iPgd  29 43.80    0.8
                iSg   30 07.50
SCE     2.41 312 iPnc  29 53.80    1.4
BHG     2.48 337 iPnc  29 54.20    1.0
WTTA    2.60 315 iPnc  29 56.60    1.5
                i     29 59.50
                iSg   30 35.20
WATA    2.68 316 iPnc  29 57.70    1.5
                i     30 33.30
                i     30 39.60
OGA     2.70 303 iPnc  29 58.00    1.5
HVAR    2.73 146 iPnd  29 59.30    2.5X
                iS    30 35.10
SQTA    2.80 310 iPnc  29 59.60    1.8
       0.4s   138.00nm
                i     30 05.20
                iSg   30 41.10
MOTA    2.93 311 iPnc  30 01.70    2.0
       0.6s   250.00nm
```

28d 10h

		i	30	38.60	
		i	30	47.10	
VKA	3.12	25	iPnc	30	02.30	0.0
		iPg	30	09.80	
		iSn	30	37.00	
		iSg	30	51.60	
		i	43	19.10	
		i	44	03.20	
OSS	3.17	294	ePc	30	05.20	2.1
ZST	3.34	34	iPn	30	04.30	-1.0
		i	30	16.00	
		i	30	20.10	
		i(Sn)	30	45.80	
		i	30	54.40	
		e	43	17.50	
GEC2	3.42	353	Pn	30	05.70	-0.9
		Sn	30	45.00	
FUR	3.43	323	ePn	30	08.20	1.5
VDL	3.55	289	ePd	30	11.30	2.8X
SRO	3.62	48	e(Pn)	30	09.20	-0.1
		i	30	22.20	
		i	30	53.70	
		e	43	50.60	
KHC	3.72	352	Pn	30	09.50	-1.3
		ePg	30	20.00	
		e	30	22.50	
		e	30	49.00	
		Sn	31	01.50	
		e	31	07.60	
WET	3.82	346	iPnd	30	11.20	-1.1
TMA	3.88	282	iPc	30	14.30	1.1
LLS	3.97	293	ePc	30	15.50	1.0
BGY	4.43	96	iPgc	29	35.80	-45.0X
		iSg	29	52.10	
MMK	4.50	280	ePc	30	22.20	0.1
PRU	4.54	2	Pn	30	20.00	-2.4
	0.6s	50.20nm				
		Pg	30	36.20	
		eSn	31	10.30	
		Sg	31	33.20	
ZLA	4.58	298	ePc	30	23.40	0.3
SLE	4.64	302	ePc	30	23.60	-0.3
GRF	4.74	335	ePnc	30	24.70	-0.5
		ePg	30	43.10	
		e(Sn)	31	14.80	
		eSg	31	39.90	
PGF	4.82	235	Pn	30	27.20	0.6
		Sn	31	20.70	
DIX	4.89	280	ePc	30	28.60	1.0
FEL	4.98	301	eP	30	28.20	-0.6
HOF	5.14	342	ePn	30	29.00	-1.9
SBF	5.17	255	Pn	30	30.80	-0.7
		Sn	31	27.80	
EMS	5.22	279	ePc	30	33.40	1.2
LPG	5.33	273	Pn	30	34.30	0.3
LPL	5.35	273	Pn	30	34.80	0.7
BRG	5.43	357	ePn	30	32.10	-2.9X
		eSg	32	02.70	
MOX	5.51	342	ePn	30	34.00	-2.1X
		iSn	31	34.80	
		iSg	32	05.00	
KSP	5.55	13	ePn	30	34.60	-2.1X
CDF	5.67	304	Pn	30	37.30	-1.2
		Pg	30	58.30	
		Sn	31	38.70	
		Sg	32	11.20	
BSF	5.71	297	Pn	30	38.00	-1.1
		Sn	31	41.10	
FRF	5.81	254	Pn	30	40.10	-0.3
		Sn	31	43.70	
CLL	5.93	352	iPn	30	39.70	-2.3X
		iSg	32	19.50	
LMR	5.99	252	Pn	30	41.70	-1.2
		Sn	31	46.90	
DEV	6.02	83	eP	30	21.50	-21.8X
LRG	6.05	254	Pn	30	43.10	-0.6
		Sn	31	46.90	
HAU	6.05	298	Pn	30	42.70	-1.1
		Sn	31	49.20	
SKO	6.21	122	ePn	30	47.50	1.4
ABH	6.37	316	eP	30	48.00	-0.4
OHR	6.41	130	ePn	30	50.00	1.1
WLF	6.96	310	P	31	04.00	7.5X
LBF	7.35	286	Pn	31	01.10	-0.9
		Sn	32	19.80	
SMF	7.40	283	Pn	31	01.70	-1.0
		Sn	32	21.80	

LOR	7.47	288	Pn	31	03.20	-0.6
			Sn	32	23.50	
SSF	7.68	286	Pn	31	05.50	-1.1
AVF	7.75	284	Pn	31	06.70	-0.9
DOU	8.04	309	P	31	11.90	0.3
BGF	8.08	282	Pn	31	11.00	-1.2
			Sn	32	38.30	
MAF	8.26	280	Pn	31	13.30	-1.4
TCF	8.50	280	Pn	31	16.20	-2.0X
			Sn	32	47.80	
CAF	8.68	271	Pn	31	20.00	-0.7

S.D. = 1.1 on 57 of 67 obs.

? NOV 28, 1993 10h 32m 48.26± 1.07s
45.556 N ± 6.6km 14.299 E ±14.7km
DEPTH = 10.0km (geophysicist)
NORTHWESTERN BALKAN REGION (383)
ML 3.0 (LJU).

CEY	0.20	26	e(Pg)	32	52.90	0.2
			eSg	32	56.70	
RIY	0.22	164	iPg	32	53.00	0.0
			iSg	32	56.90	
LJU	0.51	18	iPg	32	58.50	-0.2
			iSg	33	05.80	
VOY	0.55	329	ePg	32	59.60	0.0
			eSg	33	08.90	

S.D. = 0.2 on 4 of 4 obs.

NOV 28, 1993 10h 38m 18.24± 0.28s
29.003 N ± 6.6km 43.195 W ± 6.0km
DEPTH = 10.0km (geophysicist)
4.7mb (13 obs.)
NORTHERN MID-ATLANTIC RIDGE (403)

JAQ	34.27	325	eP	45	07.00	0.7
FRB	38.36	342	eP	45	41.00	0.2
LKO	40.19	111	iP	45	56.66	0.1
	1.0s	13.50nm			4.6mb	
TIC	42.31	114	P	46	13.76	-0.3
	0.9s	6.00nm			4.3mb	
LIC	42.55	115	P	46	16.92	0.9
	1.2s	18.00nm			4.7mb	
KIC	42.70	114	P	46	18.30	1.1
	1.3s	26.00nm			4.8mb	
UYO	43.60	290	iPd	46	25.30	0.9
TUL	44.47	293	iPd	46	32.00	0.6
MEO	46.89	292	iPc	46	50.90	0.3
WMOK	47.05	292	eP	46	52.16	0.2
	1.1s	15.04nm			5.0mb	
ACO	47.06	295	iPd	46	52.30	0.3
GEC2	47.30	49	ePc	46	53.40	-0.4
	1.2s	4.78nm			4.5mb	
			e	47	01.30	
			e	47	11.40	
LPAZ	51.07	211	eP	47	23.08	-0.6
	1.3s	9.04nm			4.5mb	
LPB	51.27	211	P	47	25.00	0.0
CNCB	51.46	211	P	47	26.80	0.2
RES	52.46	345	eP	47	33.00	0.1
SRU	55.55	299	eP	47	55.60	-0.6
LRM	55.82	308	eP	47	58.20	0.0
DAU	55.85	301	eP	47	58.18	-0.3
YKA	56.16	328	eP	47	58.40	-1.7
	1.1s	2.50nm			4.2mb	
HVU	56.72	303	eP	48	04.22	-0.3
MSU	56.93	299	eP	48	06.72	0.5
ARUT	58.07	299	eP	48	14.52	0.4
NEW	58.60	311	eP	48	17.03	-0.6
	1.0s	14.75nm			5.0mb	
MBC	58.77	344	eP	48	19.50	1.1
	1.0s	2.00nm			4.2mb	
PEC	62.03	295	eP	48	41.81	0.6
	1.3s	13.88nm			5.0mb	
			e	48	47.99	
INK	63.52	335	eP	48	50.00	-0.5
	1.2s	5.00nm			4.6mb	
MDZ	66.19	203	eP	49	07.60	-0.7
KLU	70.69	330	(P)	49	34.70	-1.3
SLR	87.55	121	eP	51	07.00	-1.0
	1.0s	15.00nm			5.2mb	
GBA	108.74	62	PKPd	56	58.00	8.2X
TLE	156.45	10	ePKPc	58	07.50	-7.7X
RIV	166.83	245	ePKP	58	11.30	-13.8X

S.D. = 0.7 on 30 of 33 obs.

NOV 28, 1993 10h 41m 52.89± 0.57s
43.883 N ± 5.0km 12.779 E ± 3.8km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)
ML 4.0 (STR), 3.8 (LDG). MD 3.6 (TRI).

RIY	1.86	38	iPnc	42	24.50	-0.5
			iSn	42	46.20	
TRI	1.96	21	ePnd	42	25.60	-0.8
			ePgPg	42	35.10	
			i	42	48.00	
			iSg	42	59.00	
CEY	2.19	32	ePn	42	30.20	0.3
	0.8s	275.00nm				
			eSn	42	56.00	
			eSg	43	05.50	
VOY	2.29	20	iPnd	42	30.70	-0.7
			eSn	42	56.00	
			e	42	57.70	
VBY	2.40	47	ePn	42	33.30	0.5
			iSn	43	00.00	
LJU	2.49	29	iPn	42	33.80	-0.3
	0.5s	310.00nm				
			iPg	42	43.00	
			iSn	43	02.50	
			i(Sg)	43	15.20	
HVAR	2.76	104	i(Pn)	42	36.60	-1.4
ZAG	2.99	49	e(Pn)	42	47.40	6.3X
PTJ	3.03	47	ePn	42	47.00	5.2X
			iSn	43	31.70	
PGF	3.07	246	P	42	43.45	1.1
PCP	3.11	284	P	42	43.93	0.9
KBA	3.22	7	iPnd	42	45.10	0.5
			i	43	01.40	
			i	43	20.60	
			i	43	22.00	
			i	43	42.50	
			i	43	44.60	
OGA	3.23	338	iP	42	45.50	0.7
SCE	3.24	347	iPnd	42	45.90	0.9
FIN	3.31	277	P	42	46.17	0.3
OSS	3.36	327	ePd	42	48.50	1.8
WTTA	3.47	347	iPnd	42	49.30	1.1
			i	42	50.30	
			i	43	29.00	
VDL	3.50	319	ePd	42	49.90	1.3
SQTA	3.51	342	iPnd	42	49.90	1.1
IMI	3.53	272	P	42	49.06	0.1
TMA	3.55	310	ePd	42	49.50	0.1
WATA	3.55	347	iPnd	42	50.60	1.3
			i	43	32.90	
ROB	3.56	278	P	42	49.65	0.3
MOTA	3.66	342	iPnd	42	52.10	1.3
			i	43	34.70	
SAOF	3.77	273	P	42	53.20	0.8
			S	43	34.41	
BHG	3.84	1	iPnd	42	53.80	0.5
ORX	3.84	299	P	42	52.44	-1.0
SBF	3.86	272	Pn	42	54.20	0.5
			Sn	43	36.40	
AUTN	3.87	274	P	42	54.37	0.5
			S	43	37.43	
ENR	3.88	277	P	42	54.36	0.4
STV	3.95	277	P	42	55.05	0.2
TOUF	4.00	274	P	42	56.88	1.2
			S	43	41.17	
LLS	4.00	320	ePc	42	56.70	1.0
MVIF	4.07	272	P	42	57.85	1.2
BHB	4.07	286	P	42	55.65	-0.9
PZZ	4.13	281	P	42	57.02	-0.5
RSP	4.15	290	P	42	55.65	-2.1
CALN	4.26	270	P	43	00.02	0.6
LSD	4.31	293	P	42	58.07	-2.1
DIX	4.40	302	ePd	43	01.00	-0.5
FUR	4.41	347	ePn	43	01.30	-0.1
RRL	4.42	286	P	43	00.82	-0.9
FRF	4.46	268	Pn	43	02.40	0.4
			Sn	43	50.70	
LMR	4.59	265	Pn	43	03.70	-0.2
			Sn	43	53.30	
LPG	4.59	293	Pn	43	02.90	-1.3
			Sn	43	51.10	
LPL	4.61	293	Pn	43	03.20	-1.2
			Sn	43	52.10	
LRG	4.68	267	Pn	43	05.50	0.3
			Sn	43	55.60	
EMS	4.69	300	ePc	43	06.60	1.0

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SLE      4.90 324 ePc   43 08.10  -0.3
GEC2     5.00   7 Pn    43 08.20  -1.7X
                 Sg    44 02.30
FEL      5.20 322 eP    43 11.90  -0.7
WET      5.26   1 iPnd  43 11.70  -1.8X
KHC      5.28   6 Pn    43 11.80  -1.9X
                 e     43 20.00
                 Sn    44 08.60
                 e     44 25.00
LOMF     5.43 312 P     43 14.96  -0.9
                 S     44 11.87
MOF      5.59 317 P     43 17.45  -0.8
                 S     44 17.77
BSF      5.75 315 P     43 19.15  -1.3
ECH      5.84 320 P     43 20.69  -0.8
WLS      5.89 322 P     43 21.62  -0.7
GRF      5.91 350 ePnc  43 20.30  -2.2X
                 ePg   43 36.20
                 eSg   44 24.10
CDF      5.93 322 P     43 21.98  -0.9
HAU      6.09 315 Pn    43 23.80  -1.3X
                 Sn    44 26.80
PRU      6.23  11 Pn    43 24.20  -2.8X
                 e     43 49.50
                 eSn   44 30.50
                 Sg    45 22.00
                 e     45 27.50
VITF     6.41 315 P     43 28.64  -1.1
HOF      6.46 355 ePn   43 27.80  -2.6X
MOX      6.81 354 ePn   43 32.20  -3.1X
                 iSn   44 42.90
SMF      6.89 297 Pn    43 34.70  -1.6X
                 Sn    44 46.10
LBF      6.92 300 Pn    43 35.30  -1.6X
                 Sn    44 46.10
ABH      6.99 331 eP    43 37.40  -0.4
RUP      7.02 328 eP    43 37.50  -0.7
BRG      7.04   6 ePn   43 36.00  -2.4X
                 i     44 49.20
LOR      7.12 302 Pn    43 37.80  -1.8X
                 Sn    44 51.20
AVF      7.25 297 Pn    43 40.00  -1.4X
                 Sn    44 56.50
SSF      7.25 299 Pn    43 39.80  -1.7X
                 Sn    44 54.60
CLL      7.43   1 (Pn)  43 41.50  -2.4X
                 (Sg)  46 06.00
BGF      7.51 294 Pn    43 42.70  -2.3X
                 Sn    45 01.20
MAF      7.60 291 Pn    43 44.50  -1.9X
                 Sn    45 02.60
DOU      8.36 321 Pc    44 04.20   7.3X
       0.6s    14.50nm          5.4mb
CVP     90.92  64 ePc   55 15.00  16.7X
     S.D. = 0.9  on  57 of  78 obs.
-----------------------------------
   NOV  28, 1993  10h 50m 27.15± 0.10s
    5.599 S ± 2.9km  110.267 E ± 3.1km
   DEPTH = 569.4km  ( 13 depth phases)
   5.6mb ( 95 obs.)
 JAVA SEA                          (275)
      Mw 5.5 (HRV).
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 32S, 49C
      Centroid Location:
      Origin Time        10:50:32.7 0.4
      Lat  5.50S 0.03 Lon 110.27E 0.04
      Dep 573.2 1.9 Half-duration  2.1
      Moment Tensor;   Scale 10**17 Nm
        Mrr=-1.91 0.07  Mtt= 1.88 0.10
        Mff= 0.03 0.14  Mrt=-0.40 0.08
        Mrf=-0.82 0.09  Mtf=-1.03 0.09
       Principal Axes:
        T  Val=  2.34  Plg= 0  Azm=204
        N        0.00      25      114
        P       -2.34      65      295
      Best Double Couple:Mo=2.3*10**17
       NP1:Strike=317 Dip=50 Slip= -56
       NP2:         91      51     -124

LEM      2.90 245 iPd   51 44.50   0.6
                 iS    52 44.00
TNG      3.65 261 iPd   51 48.50   0.1
KHKI     5.97 118 ePc   52 06.50  -0.6
                 e(S)  53 25.50
                 e     00 51.90
MKS      9.17  88 iPc   52 38.40   0.7
KGM     10.26 317 ePd   52 50.80   2.1
         0.8s   379.30nm          5.7mb
TSM     12.42  38 iPd   53 13.80   3.5X
         0.9s  7795.90nm          7.1mb X
KKM     13.00  27 iPc   53 19.50   3.3X
                 e     55 24.50
IPM     13.69 317 ePd   53 24.90   2.0
         0.8s   490.80nm          5.9mb
                 e     55 50.00
SNG     15.93 323 iPd   53 47.90   3.0X
         1.2s  1190.63nm          6.3mb
                 eS    56 32.00
PPR     17.45  29 eP    54 00.00   0.4
                 eS    54 46.00
NANU    17.61 164 eP    54 01.80   0.7
         1.0s   308.00nm          5.8mb
                 eS    54 48.50
MBL     18.04 150 iPc   54 05.20   0.0
         0.6s   241.00nm          6.0mb
                 iS    54 48.50
DAV     19.80  51 ePc+  54 23.00   1.2
         0.9s   255.46nm          5.8mb
                 e     56 46.00
KNA     20.77 121 eP    54 29.20  -1.4
NNT     20.88 330 iPd   54 34.00   2.3X
MTN     21.80 111 eP    54 40.00   0.0
PLP     22.18  41 ePd   54 43.00  -0.4
MEEK    22.39 160 iPc   54 44.80  -0.5
         0.6s   103.00nm          5.6mb
QCP     22.78  28 eP    54 54.50   5.6X
KHT     23.33 330 iPd   54 54.20   0.4
NST     23.40 335 iPd   54 55.50   1.1
BAG     24.13  25 ePc   55 00.00  -1.2
                 eS    58 26.80
BDT     25.28 334 iPd   55 12.50   1.4
         0.6s    35.70nm          5.2mb
BAL     25.60 167 iPc   55 13.20  -0.7
         0.8s   232.00nm          5.9mb
CHTO    26.70 336 iPd   55 24.20   0.6
         0.8s   105.42nm          5.5mb
                 e     01 15.50
KLB     26.80 166 iPc   55 23.40  -0.9
         0.9s   209.00nm          5.8mb
MUN     26.83 169 iPc   55 23.80  -0.8
         1.0s   300.00nm          5.9mb
COOL    27.15 159 iPc   55 26.20  -1.3
         0.3s    27.00nm          5.4mb
WB5     27.40 123 iPd   55 28.60  -1.1
                 epP   57 01.80
                 i     57 21.50
                 iPcP  58 29.30
                 eS    59 26.60
WRA     27.41 124 P     55 29.10  -0.7
         0.7s    16.80nm          4.8mb
WB2     27.42 124 iPc   55 28.80  -1.1
         0.6s    58.80nm          5.4mb
                 ipP   57 01.60
                 iPcP  58 29.20
                 eS    59 27.40
                 iScP  01 16.30
ASPA    28.99 131 iPc   55 42.50  -1.0
         0.5s    28.90nm          5.2mb
                 ipP   57 09.20
                 iPcP  58 33.40
                 iS    59 50.90
                 iScP  01 21.50
                 e     02 13.80
RKG     29.50 169 iPc   55 47.50  -0.2
FORT    30.12 148 eP    55 52.80  -0.2
         0.7s    83.00nm          5.5mb
KMI     31.40 347 iPd   56 07.00   2.8X
         1.5s   480.00nm          5.9mb
                 iS    00 37.00
GYA     32.06 354 Pd    56 11.40   1.9
         1.0s   170.00nm          5.6mb
                 PcP   58 42.00
                 S     00 44.00
                 ScP   01 33.00
                 PcS   02 29.20
                 ScS   05 28.00
QIS     32.12 120 iPd   56 09.50  -0.6
                 ePP   57 46.50
                 iPcP  58 42.20
                 eS    00 45.00
SHL     35.76 331 iPd   56 41.50   1.0
                 iS    01 32.00
WHN     36.15   6 iPc   56 45.50   2.1
         0.7s    45.00nm          5.2mb
                 iPcP  58 54.00
                 iS    01 46.00
PMG     36.76  98 iPc   56 49.10   0.5
         1.0s   140.00nm          5.5mb
CD2     36.83 351 iPc   56 50.20   1.1
         0.8s   530.00nm          6.2mb
                 sP    59 31.00
                 S     01 54.00
CTA     37.81 116 iPd   56 57.50   0.3
         1.3s   115.38nm          5.3mb
                 i     58 35.00 557kmX
                 i     58 59.00
                 i(S)  02 08.00
NJ2     38.32  12 Pd    57 02.80   1.6
         0.8s    51.00nm          5.2mb
                 pP    58 42.20 572km
                 PcP   59 00.50
                 ScP   01 55.50
                 S     02 19.00
STK     39.26 136 iPd   56 58.60 -10.3X
         0.4s    53.60nm
                 epP   57 38.20 184kmX
                 ePP   58 35.10
                 eScP  01 47.60
                 eS    02 17.30
ADE     39.28 142 iPc   57 09.90   0.9
XAN     39.44 358 iPd   57 10.90   0.6
         1.0s   310.00nm          5.9mb
                 S     02 31.00
LSA     39.61 333 iPc   57 14.20   2.0
         1.0s   640.00nm          6.2mb
                 S     02 37.00
GUN     40.79 326 P     57 22.40   0.8
PKI     40.79 325 P     57 21.20  -0.4
DMN     41.00 325 P     57 23.40   0.3
KKN     41.04 325 P     57 23.40   0.0
KAGJ    41.55  27 P     57 27.10   0.0
GKN     41.56 325 P     57 27.40  -0.1
LZH     41.90 352 iPd   57 31.50   1.5
         1.5s   440.00nm          5.8mb
                 pP    59 12.50 568km
                 ScP   02 10.00
                 S     03 06.00
TIA     42.08   8 Pd    57 30.80  -0.5
         0.7s    50.00nm          5.2mb
                 eS    03 06.00
KUMJ    42.67  26 eP    57 35.60  -0.3
TIY     43.14   3 iPd   57 40.00   0.4
         0.9s    72.00nm          5.2mb
                 sP    00 25.00
                 S     03 25.00
POO     43.17 305 iPd   57 39.80  -0.4
         1.0s   310.00nm          5.8mb
                 iS    03 23.00
SHNJ    44.15  25 eP    57 47.10  -0.4
BWA     45.45 134 iPd   57 59.10   1.5
                 iPcP  59 24.90
                 iPP   59 51.40
BJI     45.74   6 Pd    58 00.00   0.4
         1.0s    39.00nm          4.9mb
                 ePcP  59 24.50
                 epP   59 47.00 600kmX
                 eScP  02 24.50
                 eS    04 00.00
                 eScS  06 47.50
                 eSS   07 34.00
GTA     45.81 349 iPd   58 01.50   1.1
         1.5s   190.00nm          5.4mb
                 PcP   59 26.00
                 pP    59 45.50 575km
                 ScP   02 25.00
                 S     04 02.00
                 ScS   06 51.00
BRS     45.83 123 iPd   58 01.00   0.3
         1.0s    50.00nm          5.0mb
                 i     58 51.00 234kmX
                 e     59 40.00
                 i     59 46.00
                 i     02 57.00
                 e     03 55.00
BTO     45.97 360 P     58 01.50   0.0
         0.8s    95.00nm          5.4mb
                 S     04 02.50
ARMA    46.04 128 iPd   58 03.10   0.8
         0.9s    51.00nm          5.1mb
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28d 10h

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                e     59 27.20 430kmX
                i     02 27.10
HHC    46.24   1 P    58 04.00   0.5
       1.0s   63.00nm          5.1mb
                S     04 06.00
CAN    46.31 135 iPd  58 04.40   0.2
                ePcP  59 27.20
                epP   59 53.00 611kmX
                iScP  02 37.20
CNB    46.57 135 eP   58 06.00  -0.2
                e     59 55.00 613kmX
NDI    46.63 319 ePd  58 05.00  -1.6
       0.6s  386.67nm          6.1mb
                eS    04 08.00
SNY    48.74  13 Pd   58 20.80  -1.5
       1.2s   45.00nm          4.9mb
                S     04 42.00
MAT    49.41  30 iPd  58 25.30  -2.1
CN2    51.05  14 Pd   58 37.60  -1.7
       0.6s   28.00nm          4.9mb
                PcP   59 44.60
                epP   00 25.00 576km
                eScP  02 46.00
                ScS   07 27.00
YAMJ   51.59  30 P    58 42.10  -1.2
NIL    52.45 321 iPc  58 50.90   1.3
       0.5s    0.33nm          3.0mb X
                iS    05 31.60
MDJ    52.92  17 eP   58 50.80  -2.0
       1.0s   23.00nm          4.5mb X
OFUJ   53.10  30 P    58 52.70  -1.4
WMQ    53.25 340 iPd  58 55.00  -0.2
       1.0s  300.00nm          5.6mb
                S     05 41.50
                SS    09 31.00
KSH    54.88 328 iPd  59 06.70  -0.1
       1.0s  720.00nm          6.0mb
                iS    06 03.00
ZAK    56.08 355 iPd  59 14.20  -0.5
       1.3s   76.00nm          4.9mb
                i     00 04.00 222kmX
                e     01 23.00
                eSS   06 17.00
                e     08 04.00
HOOJ   56.41  29 eP   59 16.90  -0.2
DZM    56.63 113 iPd  59 18.90  -0.2
ASAJ   57.44  27 eP   59 23.30  -0.8
CIT    57.44   2 eP   59 24.20   0.1
                e     00 10.20 202kmX
KUSJ   57.64  29 eP   59 24.50  -1.0
BKM    57.83 107 iPc  59 15.90 -11.3X
IRK    57.87 356 ePd  59 26.00  -0.9
       1.4s   90.00nm          4.9mb
                eS    06 44.00
                e     13 36.00
FRU    58.04 330 iP   59 27.40  -0.9
       2.2s  660.00nm          5.5mb
                i     06 45.00
YSS    59.73  25 iPd  59 38.00  -1.4
       0.9s  120.00nm          5.2mb
CSY    60.59 180 eP   59 34.00 -10.7X
       0.8s   12.30nm
MAIO   63.17 315 iPd  00 00.80  -1.3
BOD    63.32   2 eP   00 00.50  -1.9
       1.4s  230.00nm          5.4mb
MSZ    63.40 138 eP   00 03.30   0.0
ASH    64.79 317 iPc  00 11.70  -0.5
       1.1s  390.00nm          5.8mb
QRZ    65.50 132 eP   00 16.70   0.1
LTZ    65.82 135 P    00 17.00  -1.6
THZ    66.01 133 eP   00 18.90  -0.9
DHR    66.28 302 iPd  00 20.50  -1.1
MQZ    66.34 135 P    00 21.30  -0.4
MOZ    66.68 130 P    00 24.40   0.5
MNG    67.64 132 P    00 28.80  -0.9
PGZ    68.23 132 P    00 32.60  -0.6
SKR    68.50  29 eP   00 33.00  -1.6
       0.6s  100.00nm          5.5mb
                e     00 53.20  77kmX
RYD    68.82 299 iPd  00 35.50  -1.6
ATA    68.83 284 ePd  00 37.48   0.3
MKL    68.93 285 ePd  00 38.28   0.5
YAK    69.07  10 iPd- 00 38.20   0.4
       1.0s    0.92nm          3.3mb X
                ipP   00 57.00  70kmX
                iPP   02 35.00
                ePPP  04 15.00
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                iS    08 57.00
                ePS   09 09.00
                esS   09 41.00
ARO    69.19 285 ePd  00 39.69   0.2
HBZ    69.23 128 P    00 38.50  -0.8
PUZ    69.27 129 P    00 38.10  -1.5
SGH    69.37 284 ePd  00 40.98   0.4
GBR    69.49 284 ePd  00 41.51   0.2
DAF    69.51 285 ePd  00 41.81   0.5
KMSA   69.53 294 iPd  00 39.33  -2.1
KSU    69.57 284 ePd  00 42.37   0.7
PET    71.21  28 eP   00 50.00  -0.5
       0.7s  170.00nm          5.7mb
                e     03 40.00
                eS    09 20.00
KER    71.50 309 iPd  00 51.20  -1.6
AFIF   71.65 298 iPd  00 54.33   0.5
QASM   71.87 300 iPd  00 54.07  -0.9
UQSK   72.81 299 iPd  01 00.73   0.3
TAB    73.40 312 iPd  01 03.80   0.2
NAI    73.42 270 PKP  01 04.50   0.2
     Z  24s    0.27um          4.5MszX
                e     21 08.00
TAIF   73.51 294 iPd  01 05.33   0.7
SVE    74.12 334 iPd  01 07.00  -0.1
       1.6s  320.00nm          5.6mb
                i     03 06.00 568km
                e     03 58.50
ARU    74.77 333 iPd  01 10.80   0.1
       1.3s  320.00nm          5.6mb
                e     01 21.50  35kmX
                e     03 10.00
ERE    75.48 314 iP-  01 14.00  -1.0
       1.2s   24.00nm          4.5mb X
GRO    75.80 317 iPd- 01 17.00   0.4
       1.0s  330.00nm          5.8mb
                iS    10 11.00
AFI    77.01 103 P    01 25.00   1.2
CIR    77.47 250 iPd  01 33.00   6.9X
SBA    77.81 170 iPd  01 28.70   1.8
PYA    77.82 317 iPd  01 27.40  -0.2
       1.0s  700.00nm          6.0mb
WAJH   77.97 298 iPd  01 28.86   0.2
KIV    78.05 317 iPd  01 29.30   0.4
       1.6s  636.00nm          5.8mb
TIK    78.05   6 iPc  01 27.00  -1.1
       0.8s  266.00nm          5.7mb
                ipP   03 28.00 570km
                eS    10 30.00
                i     10 40.00
                eSP   11 40.00
BFT    78.80 245 iPd  01 34.50   1.2
       0.7s   44.00nm          5.0mb
AYN    79.04 301 iPd  01 34.73   0.5
SRFA   79.75 301 iPd  01 38.73   0.8
BADA   79.82 300 iPd  01 38.87   0.6
SOC    79.96 316 iP   01 39.00   0.3
       1.0s  260.00nm          5.6mb
GAZ    80.01 309 iP   01 39.80   0.7
BUL    80.27 251 iPc  01 40.80  -0.2
                i     03 42.50 569km
SLR    80.39 245 iPd  01 41.50   0.0
       0.9s  308.00nm          5.8mb
BHL    80.45 306 PKP  01 43.00   1.4
MZZ    80.51 260 iPc  01 42.90   0.6
       1.0s    8.00nm          4.2mb X
                i     01 45.00   7kmX
                i     03 44.00
                i     04 55.00
SEK    80.90 242 iPd  01 44.50   0.3
       0.7s  222.00nm          5.8mb
ADAT   81.43 309 eP   01 48.10   1.7
BNN    81.46 310 iP   01 47.00   0.3
GRM    81.69 237 iPd  01 49.00   1.1
       1.0s  300.00nm          5.8mb
BFS    81.69 244 iPc  01 48.50   0.3
       0.7s  111.00nm          5.5mb
KVT    81.88 313 iP   01 49.00   0.3
ANN    82.00 317 iPd  01 49.00  -0.1
       1.0s  110.00nm          5.3mb
FAM    82.03 306 ePd  01 50.00   0.5
BLF    82.14 241 iPd  01 50.00  -0.4
       0.7s  111.00nm          5.5mb
CSS    82.56 306 iPd  01 52.70   0.5
BOSA   82.84 242 iPd  01 54.69   1.0
       0.6s   66.92nm          5.3mb
FRS    82.87 241 iPc  01 52.10  -1.7
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       0.6s  100.00nm          5.5mb
SWZ    82.98 243 iPc  01 54.90   0.3
       0.7s  111.00nm          5.5mb
HLW    83.22 301 eP   01 57.00   1.5
PPCY   83.34 306 ePd  01 56.00   0.0
BZK    83.58 313 iP   01 57.00  -0.1
KAS    83.62 313 iPc  01 57.80   0.4
SPA    84.43 180 iPd  02 00.30  -0.7
       0.7s  156.25nm          5.7mb
MOS    84.95 327 iPd  02 04.00   0.6
       1.8s 1200.00nm          6.2mb
                e     04 08.00 574km
                e     05 27.00
BEW    85.09 238 iPc  02 16.10  11.3X
       0.7s   77.00nm
PKA    85.10 241 iPd  02 05.80   0.8
       0.7s   66.00nm          5.4mb
BCK    85.23 308 eP   02 03.60  -1.7
OBN    85.32 326 iPd  02 06.00   0.8
       1.0s  740.00nm          6.3mb
                epP   04 09.00 567km
                e     05 34.00
                e     11 35.00
                iS    11 46.00
ELL    85.63 307 iP   02 07.50   0.2
KHL    86.21 309 iP   02 09.80  -0.2
SUR    86.58 238 iPd  02 15.20   3.1X
       0.8s  276.00nm          6.0mb
DST    87.12 310 eP   02 13.60  -0.7
CIN    87.21 308 iPd  02 16.00   1.3
NVL    87.53 199 iPd  02 17.00   1.4
       1.0s   87.00nm          5.5mb
                e     12 10.00
                e     13 18.00
CVN    87.55 239 iPd  02 17.60   1.0
       0.9s  100.00nm          5.6mb
POF    87.56 241 iPd  02 09.00  -7.5X
       0.5s   70.00nm          5.7mb
CER    87.77 237 iPd  02 11.20  -6.3X
       0.8s  120.00nm          5.8mb
PSN    88.12 314 iPc  02 19.00   0.2
ILT    88.13  21 iPd  02 18.50   0.2
                e     04 25.00 582kmX
                e     12 12.00
                e     13 24.00
KIS    88.21 317 iP-  02 18.50  -0.6
BLE    88.26 236 iPd  02 20.40   0.7
       0.8s   53.00nm          5.4mb
CFR    88.39 316 eP   02 19.00  -1.0
JMB    89.09 313 iPd  02 23.00  -0.3
CLI    89.21 317 iPd  02 23.80   0.0
ALN    89.27 311 ePd  02 23.82  -0.3
VRI    89.49 316 iPd  02 25.50   0.4
PUL    89.75 330 ePd  02 26.00   0.1
       1.2s  300.00nm          6.1mb
                e     04 30.00 565km
DIM    89.81 312 eP   02 25.00  -1.6
KDZ    89.84 312 iPd  02 19.00  -7.8X
PVL    90.11 313 eP   02 28.00   0.1
MNK    90.19 324 eP   02 28.00   0.0
       1.0s  264.00nm          6.1mb
RZN    90.37 312 iPd  02 21.00  -8.4X
PLD    90.43 312 iPd  02 29.00  -0.4
OUR    90.76 310 eP   02 30.50  -0.4
WIN    90.79 247 iPd  02 32.00   0.2
       1.0s  110.00nm          5.8mb
PGB    90.88 312 iPd  02 31.00  -0.6
PAIG   90.94 310 eP   02 30.78  -1.0
MMB    91.09 312 iPc  02 32.00  -0.6
SRS    91.14 311 eP   02 31.70  -1.1
SOH    91.29 311 eP   02 32.34  -1.1
THE    91.56 310 eP   02 33.10  -1.5
VTS    91.58 312 iPd  02 34.00  -1.0
KKB    91.60 312 iPd  02 34.00  -0.9
KNT    91.66 311 eP   02 34.10  -1.1
LIT    91.87 310 eP   02 35.18  -1.0
AGG    91.88 309 eP   02 34.82  -1.4
VAY    91.93 311 iP   02 35.40  -0.9
       1.2s  100.00nm          5.7mb
GRG    92.02 311 eP   02 35.82  -1.0
KAF    92.08 332 iP   02 36.70   0.1
       0.8s   91.20nm          5.9mb
ANM    92.59  25 eP   02 39.87   0.9
                e     04 44.80 569km
NUR    92.67 330 iP   02 39.30   0.0
       0.7s   58.70nm          5.8mb
SDF    92.77 337 iP   02 39.20  -0.5
```

UZH	92.81	318	eP	02	41.00	0.8
SKO	92.83	312	iP	02	39.00	-1.5
OHR	93.24	311	iP	02	41.20	-1.3
	1.1s	120.00nm				5.9mb
IGT	93.47	309	eP	02	42.98	-0.5
PVY	93.96	312	iPd	02	45.15	-0.7
IVA	94.04	313	iPd	02	45.62	-0.5
SPC	94.21	319	iPd	02	41.90	-5.0X
			i	06	37.80	
PLE	94.43	313	iPd	02	47.88	-0.1
ULC	94.46	312	iPd	02	46.91	-1.1
TTG	94.48	312	iPd	02	47.32	-0.7
OJC	94.56	320	eP	02	47.50	-0.7
	1.0s	54.00nm				5.7mb
NKY	94.69	312	iPd	02	48.39	-0.7
BDV	94.79	312	iPd	02	48.48	-1.0
BRY	95.03	312	iPd	02	49.62	-1.1
HCY	95.04	312	iPd	02	49.66	-0.9
SRO	95.42	317	i(PKP)	02	53.00	0.9
			e	06	39.60	
			i	06	49.40	
UPP	96.13	330	iP	02	54.50	-0.5
BRW	96.23	19	eP	02	55.75	0.5
			e	04	59.92	563km
ZST	96.25	318	eP	02	54.70	-1.1
			e	06	17.30	
KSP	96.82	320	iPd	02	58.40	0.0
			e	06	37.50	
			e	07	01.80	
SVW	96.86	29	eP	02	59.40	1.0
IMA	97.55	24	eP	03	02.13	0.5
	0.7s	5.84nm				5.0mb
			epP	05	06.73	567km
PRU	97.94	320	eP	03	03.00	-0.5
APO	97.97	330	eP	03	02.80	-0.6
	0.9s	58.60nm				5.9mb
LJU	97.98	316	iPDIF	03	03.80	0.0
	1.0s	115.00nm				6.2mb
			i	03	07.40	11kmX
BRG	98.30	320	iP	03	04.40	-0.7
	1.0s	20.00nm				5.4mb
			i	03	11.60	22kmX
GEC2	98.51	318	ePd	03	05.50	-0.7
	0.7s	3.54nm				4.9mb
			e	03	07.90	8kmX
			e	03	09.60	
			e	03	14.40	
			e	03	19.10	
			e	03	24.90	
KHC	98.58	319	eP	03	05.50	-1.0
			e	03	14.40	28kmX
CLL	98.88	321	iPd	03	06.90	-0.8
	1.1s	16.00nm				5.4mb
NRA0	99.13	331	P	03	08.00	-0.6
			PP	07	25.10	
PWA	99.58	28	eP	03	10.50	-0.1
MOX	99.79	320	eP	03	11.60	-0.2
	1.4s	15.00nm				5.2mb
GRA1	100.10	319	ePdiff	03	13.00	-0.2
			e(PP)	07	19.00	
GRF	100.10	319	ePdiff	03	13.00	-0.2
			e(PP)	07	19.00	
TOA	101.26	28	ePdiff	03	19.30	1.2
KLU	101.48	28	(Pdiff	03	19.17	0.0
LPG	103.44	315	iPdiff	03	27.50	-1.0
	0.7s	4.95nm				5.4mb
HAU	103.45	318	iPdiff	03	27.00	-1.1
	1.2s	16.65nm				5.6mb
LPL	103.46	315	iPdiff	03	27.50	-1.0
	0.8s	7.00nm				5.4mb
MBC	104.38	11	Pdiff	03	36.10	4.5X
LOR	105.21	317	iPdiff	03	34.90	-1.1
SMF	105.32	317	iPdiff	03	35.40	-1.1
	1.0s	13.20nm				5.7mb
RES	109.44	7	ePKPc	07	53.80	-0.1
	1.0s	10.00nm				
PAB	112.46	310	iPKPc	08	01.00	0.2
	0.8s	14.93nm				
YKA	114.41	21	ePKP	08	03.00	-0.8
	0.6s	12.00nm				
KIC	115.40	274	PKPd	08	06.24	-0.9
	0.8s	39.00nm				
LIC	115.67	274	PKPd	08	06.70	-0.9
TIC	115.69	275	PKP	08	06.78	-0.9
	0.7s	36.00nm				
LKO	116.37	278	PKPd	08	08.19	-0.8
	0.7s	93.50nm				

RMW	119.10	38	ePKP	08	13.28	0.0
SHW	119.38	39	ePKP	08	14.36	0.4
LON	119.41	39	ePKP	08	13.51	-0.4
FMW	119.41	38	PKP	08	14.06	0.0
ASR	119.80	39	PKP	08	14.50	-0.2
EBG	120.10	38	PKP	08	15.19	0.0
WTV	120.11	37	PKP	08	14.64	-0.5
VBEM	120.27	40	PKP	08	15.78	0.1
FHC	120.30	46	ePKP	08	16.72	1.0
SAW	120.44	37	PKP	08	15.33	-0.4
VGB	120.59	39	ePKP	08	16.33	0.2
CROR	120.69	40	PKP	08	16.21	-0.2
DPW	121.06	36	ePKP	08	16.91	-0.1
LGPM	121.08	45	ePKP	08	17.81	0.5
VIPM	121.13	40	PKP	08	17.40	0.0
NEW	121.49	35	ePKP	08	17.83	0.1
LBFM	121.57	44	ePKP	08	18.51	0.2
FRB	121.96	359	ePKPd	08	07.50	-10.5X
	1.0s	35.00nm				
LNOR	121.98	38	PKP	08	18.77	0.0
NTYM	122.10	48	ePKP	08	18.82	-0.3
LMEM	122.10	45	ePKP	08	20.10	0.7
ORV	122.52	46	ePKP	08	19.75	-0.2
HMR	122.82	48	ePKP	08	22.32	1.8
COE	123.23	49	ePKPd	08	22.38	0.9
ARN	123.30	49	ePKPc	08	22.86	1.2
PHAM	124.69	50	iPKPc	08	25.71	1.4
MEMM	125.10	47	ePKPc	08	26.96	1.9
KVN	125.15	45	ePKP	08	25.99	0.6
BCH	125.16	50	ePKP	08	26.12	0.7
LRM	125.50	36	ePKP	08	25.90	0.0
			e	10	39.20	
MTUM	125.50	47	ePKP	08	27.38	1.3
TNP	126.18	46	ePKP	08	28.28	0.9
ISA	126.21	49	ePKP	08	28.14	0.8
SSK	127.34	51	ePKP	08	30.22	0.5
TPNV	127.35	47	ePKP	08	30.42	0.8
HVU	127.47	40	ePKP	08	30.29	0.6
GSC	127.61	49	ePKP	08	31.34	1.3
PEC	127.87	51	ePKP	08	31.41	0.9
DUG	128.25	42	ePKP	08	31.95	0.7
			iSKP	10	58.79	
PLM	128.30	51	ePKP	08	32.99	1.4
ARUT	128.99	45	ePKPc	08	33.78	1.1
			iSKP	11	01.90	
DAU	129.16	41	ePKP	08	33.78	0.6
			iSKP	11	02.35	
EMUT	129.77	41	ePKP	08	34.80	0.6
			iSKP	11	04.88	
GLA	129.99	51	ePKP	08	35.88	1.3
			iSKP	11	06.15	
SRU	130.33	42	ePKP	08	35.50	0.3
			iSKP	11	06.48	
ULM	130.38	22	ePKP	08	37.00	2.3
PV09	131.57	42	ePKPd	08	38.49	0.7
			iSKP	11	11.04	
JAQ	131.70	5	ePKP	08	35.50	-1.6
PV10	131.70	42	ePKPd	08	38.74	0.8
			iSKP	11	11.73	
PV08	131.85	41	iPKP	08	39.15	0.8
			ePP	10	52.76	
			iSKP	11	12.43	
GOL	133.29	38	ePKPc	08	41.51	0.6
			iSKP	11	17.19	
TUC	133.40	50	ePKP	08	42.86	1.7
ALQ	135.29	44	ePKPc	08	45.72	0.9
			i	09	12.93	
			e	09	29.35	
			e	09	42.97	
			i	10	06.98	
CBM	138.80	358	ePKP	08	50.25	-0.4
			eSKP	11	32.01	
ACO	138.98	37	iPKPd	08	45.80	-5.6X
LMN	139.67	355	ePKP	08	45.00	-7.3X
GAC	139.74	6	ePKP	08	44.50	-7.8X
RFA	139.83	182	ePKPc	08	46.50	-6.5X
WMOK	140.49	39	ePKP	08	48.08	-6.1X
MEO	140.59	39	iPKPd	08	58.40	4.1X
OCO	140.77	37	iPKPd	08	50.00	-4.6X
ACTO	141.06	12	PKP	08	49.65	-5.2X
WLVO	141.08	10	PKP	08	48.95	-5.9X
DLA	141.44	14	PKP	08	51.15	-4.4X
LBNH	141.47	3	ePKP	08	51.20	-4.3X
TUL	141.48	35	iPKPc	08	51.10	-4.7X
TYNO	141.60	12	PKP	08	51.39	-4.4X
STCO	141.63	11	PKP	08	51.47	-4.3X
MDZ	141.72	181	ePKP	08	52.40	-4.0X

YSNY	142.45	11	iPKPc	08	54.34	-3.0X
CFA	142.98	182	iPKPc	08	56.50	-2.0
ZON	143.05	181	iPKPd	08	56.50	-2.2
RTCB	143.11	181	iPKPd	08	57.20	-1.7
BINY	143.13	8	ePKPd	08	56.52	-1.9
HRV	143.21	2	ePKPd	08	56.89	-1.6
RTLL	143.26	182	iPKPd	08	57.70	-1.3
UYO	143.49	36	iPKPd	08	57.60	-1.7
MIAR	143.72	34	iPKPd	08	58.90	-0.7
VAO	143.90	217	ePKP	09	00.30	-0.1
LSCT	143.94	4	iPKPd	08	58.99	-0.8
AGX	144.59	60	(PKP)	09	04.50	3.1X
GMTN	144.64	6	iPKP	09	01.90	0.9
MCWV	144.89	14	ePKP	09	01.97	0.5
OXF	145.95	30	ePKPc	09	03.35	0.0
			ePKPab	09	05.37	
CBN	146.81	11	ePKP	09	06.80	2.2
	1.0s	62.50nm				
PPD	147.14	213	ePKP	09	06.00	0.3
			e	09	08.90	
SOB1	147.71	243	ePKP	09	07.00	0.2
			i	09	10.70	
			e	11	20.00	
CRX	147.78	62	(PKP)	09	09.00	1.9
MYNC	147.80	22	ePKPc	09	06.98	0.6
			iPKPab	09	10.56	
UNM	148.25	62	(PKP)	09	13.50	5.7X
FSA	148.30	186	e(PKP)	09	08.90	1.6
ACX	148.46	67	(PKP)	09	10.00	2.2
CEH	148.65	15	ePKP	09	07.86	0.3
			iPKPab	09	12.25	
SLA	149.58	188	ePKP	09	10.20	0.6
			i	09	15.10	
BDF	149.77	225	ePKP	09	10.40	0.4
	1.1s	1.20nm				
			i	09	16.30	
			i	09	25.00	
			i	11	27.00	
BAO	149.86	225	ePKP	09	10.90	0.8
			i	09	16.20	
			i	09	24.00	
LVVM	150.46	59	(PKP)	09	17.00	6.3X
HJA	151.05	188	ePKPd	09	08.90	-2.6X
YJA	152.09	188	ePKPd	09	15.50	1.8
SIV	156.90	202	PKP	09	20.20	0.5
CNCB	157.67	184	PKP	09	23.50	2.2
			i	09	59.00	
LPB	157.95	184	PKP	09	23.20	1.8
ARE	158.01	175	ePKP	09	23.00	1.7
LPAZ	158.20	184	ePKP	09	22.74	0.8
			ePKPab	10	00.48	
NNA	161.15	158	ePKP	09	25.80	1.4
	1.1s	31.65nm				
TOV	175.84	1	ePKP	09	34.10	0.5
SDV	176.61	15	iPKPc	09	34.30	0.4
	S.D. = 1.0	on 327 of 366 obs.				

& NOV 28, 1993 11h 09m 32.70s
36.616 N 121.219 W
DEPTH = 5.3km
CENTRAL CALIFORNIA (39)
<GM-P>. MD 3.4 (GM). ML 3.3
(GS), 3.2 (BRK).

BCGM	0.14	313	P	09	35.77	0.2
SHG	0.20	188	P	09	36.63	-0.3
SAO	0.23	309	iPc	09	37.34	-0.2
BSRM	0.25	282	P	09	37.56	-0.2
FRP	0.26	302	P	09	37.68	-0.3
PKH	0.28	328	P	09	39.65	1.2
HSFM	0.30	311	P	09	38.86	0.1
BRMM	0.39	55	P	09	41.88	1.4
DIL	0.41	303	P	09	40.47	-0.4
HERM	0.44	295	P	09	41.24	-0.2
CSR	0.45	319	P	09	42.06	0.3
MOP	0.53	139	P	09	43.09	-0.2
PJLM	0.53	174	P	09	43.08	-0.2
MTR	0.56	269	P	09	43.45	-0.5
BPOM	0.59	229	P	09	43.79	-0.7
PRCM	0.60	126	P	09	44.88	0.1
PEV	0.61	306	P	09	44.63	-0.3
ADR	0.64	329	P	09	45.50	0.1
PSAM	0.65	156	P	09	45.09	-0.6
PTV	0.65	141	P	09	45.12	-0.5
PRI	0.65	136	iPd	09	45.73	0.0
			iS	09	58.77	
PAPM	0.71	189	P	09	46.41	-0.5

28d 11h

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COE     0.74 331 iPd   09 47.98   0.6
PDRM    0.74 112 P     09 47.91   0.4
JUCM    0.77 300 P     09 46.86  -1.2
ARN     0.77 341 eP    09 48.22   0.0
                 iS    10 00.04
PARM    0.80 117 P     09 49.34   0.7
MHC     0.80 335 iPc   09 48.69  -0.1
                 iS    10 00.79
PCRM    0.82 129 P     09 49.02   0.0
LXR     0.85 314 P     09 48.43  -1.1
PANM    0.87 163 P     09 49.25  -0.7
PSTM    0.89 140 P     09 49.63  -0.7
JBLM    0.92 304 P     09 50.00  -0.7
PHCM    0.93 177 P     09 50.29  -0.7
CVR     0.95 331 P     09 51.02  -0.3
WKR     0.98 144 P     09 51.45  -0.4
CTM     0.99 134 P     09 52.75   0.8
PHBM    0.99 111 P     09 52.58   0.7
PADM    1.02 163 P     09 51.54  -0.8
PHAM    1.02 139 eP    09 51.79  -0.7
LT3     1.03 309 P     09 51.50  -1.0
CSTL    1.05 348 P     09 53.31   0.5
GHC     1.05 138 P     09 52.18  -0.8
PKEM    1.05 121 eP    09 53.75   0.8
JJRM    1.07 313 P     09 52.60  -0.7
PSRM    1.07 135 P     09 53.25  -0.1
STAN    1.10 316 ePc   09 52.49  -1.2
                 iS    10 08.84
SFT     1.10 316 P     09 53.02  -0.7
PMCM    1.12 142 P     09 53.79  -0.4
PMRM    1.15 136 P     09 54.40  -0.3
BGH     1.15 309 P     09 55.93   1.2
CPLM    1.18 330 P     09 54.04  -1.1
PAGM    1.18 138 P     09 54.41  -0.8
PTRM    1.26 139 P     09 56.20  -0.4
FRI     1.27  72 iP    09 55.80  -0.9
                 iS    10 12.70
MTC     1.28 339 P     09 58.93   2.0
LKC     1.31 329 P     09 56.13  -1.2
PMGM    1.31 154 P     09 55.72  -1.7
CSVM    1.39 334 P     09 58.68  -0.1
MGA     1.43 316 P     09 57.16  -2.1
BKS     1.50 328 ePc   09 58.48  -1.7
                 iS    10 22.06
YEG     1.56 139 P     10 00.65  -0.5
ZSP     1.56 328 iP    09 59.36  -1.8
CMB     1.56  25 ePd   10 00.22  -1.0
                 eS    10 21.49
AGC     1.57 323 P     10 02.96   1.7
HMR     1.60 343 eP    10 01.02  -0.7
BCH     1.70 147 ePd   10 01.20  -2.0
ADWM    1.84   9 P     10 04.34  -0.9
MEMM    2.10  59 eP    10 09.57   0.6
NTYM    2.11 327 eP    10 06.46  -2.6
MARC    2.22 136 P     10 10.69   0.0
MTUM    2.25  70 eP    10 11.61   0.3
ORC     2.29  63 P     10 13.71   1.8
BONR    2.68  59 eP    10 18.76   1.2
ORV     2.94 356 eP    10 20.46  -0.5
KVN     3.46  45 ePn   10 29.61   1.1
TNP     3.51  64 ePn   10 29.47   0.3
SSK     3.75 129 eP    10 31.18  -1.4
GSC     3.81 109 eP    10 31.95  -1.5
TPNV    4.00  84 eP    10 36.44   0.3
PEC     4.29 128 ePn   10 38.72  -1.4
PLM     4.84 131 (P)   10 45.91  -2.1
        82 obs. associated
-----------------------------------
&  NOV  28, 1993  11h 23m 20.53s
   34.324 N          116.917 W
   DEPTH =   7.4km
 SOUTHERN CALIFORNIA                ( 43)
      <PAS-P>. ML 2.9 (PAS).

PEC     0.48 205 ePd   23 29.32  -0.8
SSK     0.65 260 P     23 32.61  -1.1
                 eS    23 40.77
PLM     0.97 177 iPd   23 38.38  -0.9
GSC     0.98   5 iPd   23 38.63  -0.8
ISA     1.85 317 eP    23 52.59  -0.3
GLA     2.16 125 eP    23 54.99  -2.4
TPNV    2.67  12 ePn   24 05.60   0.7
BCH     2.75 289 ePn   24 04.22  -1.6
TNP     3.76 356 (Pn)  24 21.49   1.2
        9 obs. associated
-----------------------------------
   NOV  28, 1993  11h 50m 20.71± 0.42s
   38.452 S ± 3.4km  176.155 E ± 3.6km
   DEPTH =  10.6 ±  3.6 km
 NORTH ISLAND, NEW ZEALAND          (159)
      ML 4.1 (WEL).

UTU     0.28   6 P     50 26.90   0.4
                 S     50 31.80
TAZ     0.35  52 P     50 27.60  -0.4
WLZ     0.73 323 P     50 35.50   0.5
                 S     50 46.10
MGZ     0.73 221 P     50 34.70  -0.4
URZ     0.77  76 P     50 34.70  -1.0
                 S     50 44.70
PAHZ    0.81 120 P     50 36.00  -0.4
TAHZ    0.82 146 P     50 36.70   0.0
NGZ     0.84 211 eP    50 38.10   1.1
CNZ     0.89 212 P     50 37.60  -0.1
DRZ     0.94 209 eP    50 38.20  -0.7
MOZ     1.06 267 P     50 40.80   0.1
TTH     1.21 155 P     50 44.30   1.2
WAHZ    1.26 173 P     50 43.70  -0.3
NOZ     1.49  97 eP    50 48.40   1.0
TEHZ    1.62 162 P     50 50.10   0.8
PUZ     1.70  78 eP    50 51.10   0.6
KUZ     1.74 348 eP    50 50.10  -0.9
NRZ     1.95 242 eP    50 55.00   0.9
MNG     2.23 193 eP    50 58.20   0.1
KIW     2.59 201 P     51 03.50   0.2
MTW     2.75 190 eP    51 04.20  -1.4
MRW     2.99 201 P     51 07.60  -1.4
     S.D. = 0.8  on  22 of  22 obs.
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?  NOV  28, 1993  12h 10m 40.56± 5.41s
   31.607 S ±33.1km   68.204 W ±27.0km
   DEPTH = 101.0 ± 51.8 km
 SAN JUAN PROVINCE, ARGENTINA       (137)

CFA     0.03 271 iPc   10 55.00  -0.1
                 S     11 06.70
RTLL    0.36 321 iPd   10 55.90   0.1
                 S     11 08.00
RTCV    0.38 228 iPd   10 56.00   0.1
                 S     11 08.00
RTCB    0.52 283 ePd   10 56.90  -0.1
                 S     11 10.00
RTPR    1.95  49 eP    11 13.00   0.0
                 S     11 37.50
     S.D. = 0.1  on   5 of   5 obs.
-----------------------------------
?  NOV  28, 1993  12h 14m 33.86± 0.93s
   39.191 N ± 8.1km   27.612 E ± 9.2km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)
      ML 2.8 (ISK).

IZM     0.84 199 ePg   14 50.00  -0.1
                 eSg   15 02.40
DST     0.89  62 ePn   14 51.10   0.1
EDC     1.17   9 ePn   14 55.50  -0.2
EZN     1.18 303 iPn   14 56.00   0.1
     S.D. = 0.3  on   4 of   4 obs.
-----------------------------------
?  NOV  28, 1993  12h 39m 01.67± 5.59s
   51.272 N ±35.2km   16.166 E ±37.1km
   DEPTH =  10.0km  (geophysicist)
 POLAND                             (548)

KSP     0.44 169 iP    39 10.50  -0.1
        0.8s    50.00nm
                 iS    39 19.30
BRG     1.46 255 iPg   39 27.50  -0.5
                 iSg   39 47.80
PRU     1.65 219 Pg    39 31.70   0.9
        0.4s    12.60nm
                 Sg    39 55.00
CLL     1.99 272 iPg   39 35.90   0.3
                 eSg   40 03.00
KHC     2.71 219 Pn    39 45.50  -0.6
                 ePg   39 51.30
                 e     39 58.00
                 e     40 18.00
                 eSg   40 29.00
MOX     2.94 259 ePg   39 55.30   6.0X
                 iSg   40 35.10
VKA     3.01 178 e(P)  40 44.00  53.7X
ZST     3.14 168 eP    40 47.00  54.9X
     S.D. = 0.9  on   5 of   8 obs.
-----------------------------------
   NOV  28, 1993  12h 40m 49.56± 0.32s
   3.827 S ± 5.5km  128.726 E ± 6.7km
   DEPTH = 142.3km  (  3 depth phases)
   5.0mb ( 19 obs.)
 SERAM, INDONESIA                   (272)

SWI     3.88  41 ePd   41 46.00  -2.8
                 eS    42 32.00
TLE     4.39 114 iPd   41 56.20   0.6
                 iS    42 41.00
MTN     9.27 165 iPc   43 01.00  -0.2
                 eS    44 41.00
MKS     9.33 261 ePd   43 05.00   3.0X
KNA    11.85 180 iPc   43 33.40  -1.7
        0.8s   243.00nm          5.8mb
KHKI   13.80 250 eP    44 01.00   0.6
                 e     05 31.90
WB2    16.93 162 iPc   44 36.30  -3.2X
        0.5s   122.40nm          5.5mb
                 eS    47 39.70
PMG    19.12 108 eP    45 04.00  -0.2
MBL    19.28 206 iPd   45 04.00  -1.7
        0.3s    14.00nm          4.8mb
QIS    19.72 148 iPc   45 09.70  -0.6
                 eS    48 44.40
ASPA   20.35 166 iPc   45 16.30  -0.4
        0.8s   519.40nm          6.0mb
                 iS    48 52.30
                 iScS  56 27.00
NANU   22.59 213 eP    45 38.50  -0.3
CTA    23.52 135 iPc   45 49.00   1.1
        1.3s   230.77nm          5.5mb
FORT   26.82 181 eP    46 11.50  -6.8X
STK    30.41 158 iPc   46 39.60 -10.9X
                 e     53 06.00
ADE    32.34 165 eP    47 07.60   0.3
BRS    32.81 138 iPc   47 10.50  -1.0
        0.5s    11.00nm          4.9mb
                 i     47 43.00 152km
                 i     48 28.50
ARMA   34.17 143 iPd   47 24.00   0.7
        0.4s    12.00nm          5.0mb
BWA    35.52 151 iPc   47 36.50   1.9
BDT    36.05 306 eP    47 40.80   1.7
        0.6s    28.60nm          5.2mb
                 e     56 41.00
CAN    36.53 152 iPc   47 44.00   1.0
                 e     49 11.90 467kmX
CHTO   36.96 309 ePd   47 48.10   1.3
        1.0s    44.50nm          5.2mb
DZM    40.81 120 iPc   48 20.10   1.3
CD2    41.96 327 eP    48 28.60   0.5
XAN    42.04 335 P     48 28.50  -0.2
        0.7s     7.00nm          4.4mb
TIY    44.01 341 Pc    48 45.00   0.3
BJI    45.15 346 eP    48 53.00  -0.5
                 pP    49 25.00 142km
LZH    46.03 332 eP    49 01.50   0.8
        1.5s    40.00nm          4.9mb
HHC    47.15 342 P     49 10.20   0.7
LSA    49.05 315 Pd    49 26.20   1.4
        0.8s    13.00nm          4.7mb
GTA    50.60 331 iPd   49 36.00   0.0
        1.0s    13.00nm          4.7mb
                 pP    50 07.00 134km
GUN    51.94 310 P     49 45.80  -0.7
        0.8s    48.00nm          5.3mb
PKI    52.13 310 P     49 47.00  -0.9
        0.8s    15.00nm          4.8mb
KKN    52.33 310 P     49 48.80  -0.5
        0.8s    32.00nm          5.2mb
DMN    52.38 309 P     49 49.30  -0.4
        0.8s    37.00nm          5.2mb
GKN    52.93 310 P     49 53.00  -0.6
GBA    53.76 290 Pd    49 58.10  -1.5
        0.6s     6.00nm          4.6mb
WMQ    60.06 327 P     50 44.00   0.2
        1.0s    15.00nm          4.9mb
CNCB  153.67 142 PKP   00 37.00  10.6X
LPB   153.81 141 ePKP  00 35.00   8.6X
LPAZ  153.98 141 PKP   00 37.20  10.3X
     S.D. = 1.1  on  34 of  41 obs.
-----------------------------------
?  NOV  28, 1993  13h 14m 02.43± 1.06s
   45.532 N ± 7.5km   14.334 E ±11.5km
   DEPTH =  10.0km  (geophysicist)
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NORTHWESTERN BALKAN REGION (383)
MD 2.0 (LJU).

RIY	0.19	169	iPg	14	06.90	0.2
			iSg	14	10.70	
CEY	0.22	17	ePg	14	07.70	0.6
			eSg	14	10.60	
VOY	0.59	328	ePg	14	14.00	-0.4
			iSg	14	22.70	
VBY	0.65	92	ePg	14	15.00	-0.4
			eSg	14	23.50	

S.D. = 0.8 on 4 of 4 obs.

NOV 28, 1993 13h 17m 38.57± 0.32s
41.110 N ± 4.3km 20.959 E ± 3.4km
DEPTH = 5.0km (geophysicist)
ALBANIA (391)
ML 3.3 (SKO), 3.0 (THE). Felt (IV) in the Ohrid area, the Former Yugoslav Republic of Macedonia.

OHR	0.12	271	iPgc	17	39.00	-2.2
	0.2s	7170.00nm				
			iSg	17	39.90	
FNA	0.45	136	ePgc	17	47.94	0.3
			eSg	17	55.68	
SKO	0.93	23	iPg	17	57.40	0.5
			i	18	06.50	
			iSg	18	08.00	
			Lg	18	08.50	
GRG	1.10	98	ePgd	17	59.53	-0.2
			eSg	18	16.68	
VAY	1.23	80	iPg	18	01.60	-0.4
			i	18	03.00	
			iSg	18	21.00	
			Lg	18	21.50	
KNT	1.47	87	ePbd	18	05.56	-0.1
			eSb	18	27.52	
LIT	1.54	130	ePb	18	07.00	0.2
			eSb	18	30.12	
ULC	1.54	304	iPgc	18	06.12	-0.6
			iSg	18	26.02	
THE	1.59	107	ePb	18	07.32	-0.2
			eSb	18	28.20	
IGT	1.65	197	ePb	18	09.64	1.4
			eSb	18	33.84	
PVY	1.66	334	iPgd	18	08.09	-0.4
			iSg	18	30.74	
TTG	1.83	317	iPnd	18	11.05	0.2
			iSn	18	35.67	
SOH	1.84	98	ePb	18	11.36	0.3
			eSb	18	37.96	
IVA	1.93	336	iPnc	18	12.62	0.2
			iSn	18	37.64	
BDV	1.98	307	iPnc	18	13.80	0.7
			iSn	18	39.21	
SRS	1.99	89	ePn	18	12.32	-0.9
			eSn	18	41.52	
NKY	2.24	320	iPnc	18	17.62	0.6
			iSn	18	45.52	
HCY	2.27	307	iPnd	18	17.94	0.6
			iSn	18	45.91	
AGG	2.34	153	ePn	18	18.48	0.2
PAIG	2.39	119	ePn	18	19.16	0.2
			eSn	18	53.04	
OUR	2.42	108	ePn	18	18.68	-0.8
PLE	2.50	333	iPnd	18	21.49	0.8
			iSn	18	51.97	
BRY	2.54	316	iPnd	18	20.84	-0.4
			iSn	18	52.41	

S.D. = 0.8 on 23 of 23 obs.

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* NOV 28, 1993 13h 35m 20.94± 1.52s
41.209 N ± 8.7km 20.843 E ±11.9km
DEPTH = 5.0km (geophysicist)
ALBANIA (391)
ML 2.4 (THE). Felt (IV) in the Ohrid area, the Former Yugoslav Republic of Macedonia.

OHR	0.10	199	iPgc	35	22.30	-0.9
	0.2s	2870.00nm				
			iSg	35	23.30	
FNA	0.59	136	ePgc	35	31.34	-1.3
			eSg	35	37.00	
SKO	0.88	30	iPg	35	38.00	-0.4
			iSg	35	51.30	
			Lg	35	52.00	
GRG	1.21	102	ePgd	35	42.82	-1.1
			eSg	35	59.74	
VAY	1.31	85	iPg	35	44.70	-0.9
			iSg	36	04.30	
			Lg	36	04.50	
KNT	1.55	91	ePb	35	49.10	-0.2
			eSb	36	08.70	
LIT	1.67	131	ePb	35	51.94	0.9
			eSb	36	11.86	
THE	1.71	109	ePb	35	51.02	-0.5
IGT	1.72	193	ePb	35	54.42	2.7X
			eSb	36	17.66	
SOH	1.94	101	ePb	35	56.26	1.3
SRS	2.08	92	ePb	35	58.54	1.6
AGG	2.46	152	ePn	36	04.38	1.9
OUR	2.54	109	ePn	36	02.90	-0.6

S.D. = 1.3 on 12 of 13 obs.

& NOV 28, 1993 13h 58m 18.41s
60.137 N 152.941 W
DEPTH = 108.7km
SOUTHERN ALASKA (2)
<AEIC>.

ILIM	0.06	189	iPc	58	32.82	0.7
			eS	58	44.52	
INE	0.10	219	ePc	58	32.89	0.6
			eS	58	45.13	
INW	0.12	234	iPc	58	32.97	0.7
			eS	58	44.93	
RED	0.30	17	iPc	58	33.42	0.7
			eS	58	45.37	
RDW	0.35	11	iPc	58	33.84	-0.9
REF	0.37	19	iPc	58	34.02	-0.8
			iS	58	46.62	
NCT	0.43	1	iPc	58	34.22	-0.8
DFR	0.47	15	iPc	58	34.30	-1.0
OPT	0.51	197	iPd	58	34.76	-0.7
PDB	0.72	241	ePc	58	36.15	-0.9
			eS	58	50.16	
AUL	0.80	198	iPd	58	37.00	-0.8
AUE	0.81	196	ePd	58	36.87	-1.0
HOM	0.81	126	P	58	37.20	-0.7
AUW	0.81	199	P	58	37.20	-0.7
AUH	0.82	198	ePd	58	37.19	-0.8
AGU	0.82	198	ePd	58	37.27	-0.8
XLV	0.92	137	eP	58	37.81	-1.2
			eS	58	53.83	
BKG	0.99	19	iPc	58	39.04	-0.8
NKA	1.04	54	iPc	58	41.00	0.8
CNPM	1.06	125	ePd	58	39.35	-1.1
			eS	58	56.06	
BRLK	1.10	109	P	58	40.20	-0.7
CKL	1.10	15	iPc	58	40.32	-0.7
CKT	1.13	18	P	58	40.40	-0.9
SPU	1.14	22	P	58	40.40	-0.9
CKN	1.15	19	iPc	58	40.88	-0.6
BGL	1.16	13	iPc	58	41.12	-0.6
CP2	1.18	17	iPc	58	41.44	-0.6
CRP	1.20	18	iPc	58	40.91	-1.2
CGLM	1.26	21	ePc	58	42.00	-0.8
CDD	1.26	197	ePd	58	41.32	-1.4
NCG	1.33	17	ePc	58	42.83	-0.8
SLKM	1.40	73	eP	58	43.03	-1.4
			eS	59	02.28	
SVW	1.64	308	iPd	58	45.39	-1.9
			eS	59	07.02	
SUA	1.71	38	iPc	58	47.53	-0.8
SEW	1.75	90	eP	58	46.80	-1.8
SKT	1.97	20	ePc	58	50.34	-1.2
PMS	2.00	55	P	58	50.70	-1.2
PWA	2.13	43	P	58	52.20	-1.3
PLRM	2.37	50	eP	58	54.25	-2.4
PMR	2.37	50	eP	58	54.07	-2.5
			eS	59	22.68	
PWL	2.39	70	ePc	58	54.48	-2.5
KDC	2.41	174	ePd	58	53.99	-3.1
KNK	2.55	58	eP	58	56.89	-2.1
LTI	2.55	90	eP	58	56.78	-2.3
GHO	2.56	48	eP	58	57.01	-2.2
CUT	2.62	28	eP	58	58.80	-1.1
MTU	2.66	91	eP	58	58.58	-1.9
CFI	2.76	65	eP	58	59.03	-2.7
SML	2.80	51	ePc	59	00.12	-2.4
TTA	3.17	334	eP	59	05.13	-2.3
HIN	3.22	83	eP	59	06.22	-1.9
SCM	3.22	56	eP	59	05.82	-2.4
HUR	3.26	28	eP	59	07.91	-0.7
VLZ	3.41	70	eP	59	07.90	-2.6
			S	59	45.95	
MID	3.41	99	P	59	09.30	-1.3
TRF	3.56	20	P	59	11.60	-1.2
KTH	3.56	15	eP	59	11.78	-1.0
CVA	3.60	80	eP	59	10.45	-2.7
KLU	3.70	65	P	59	11.60	-3.0
TOA	3.83	56	P	59	14.30	-2.1
SGAM	3.86	81	P	59	14.30	-2.5
HMT	4.33	84	eP	59	21.44	-1.8
GLB	4.66	70	eP	59	24.66	-3.1
WRH	4.90	25	eP	59	28.77	-2.3
BALM	5.30	76	eP	59	33.27	-3.4
FBA	5.34	24	eP	59	34.35	-2.7
YAH	5.58	83	eP	59	38.34	-2.3
CTGM	5.79	77	eP	59	41.43	-2.0
IMA	5.96	357	eP	59	44.60	-1.2

69 obs. associated

? NOV 28, 1993 14h 34m 49.77± 3.15s
18.372 N ±12.7km 101.735 W ±26.5km
DEPTH = 10.0km (geophysicist)
GUERRERO, MEXICO (59)

MRX	1.42	21	iP	35	15.34	-0.3
			iS	35	32.26	
III	2.15	90	iP	35	25.33	-1.1
			iS	35	50.22	
CRX	2.20	62	(P)	35	27.00	-0.2
ACX	2.33	130	iP	35	29.09	0.3
			iS	35	55.15	
UNM	2.60	68	(P)	35	34.50	1.7
			(S)	36	09.00	
IIA	3.02	75	iP	35	38.18	-0.3
			iS	36	11.54	
PPM	3.03	76	(P)	35	38.93	-0.1
AGX	3.53	351	(P)	35	56.00	10.3X
IISM	4.18	81	iP	35	54.82	-0.1

S.D. = 0.9 on 8 of 9 obs.

? NOV 28, 1993 15h 11m 43.43± 4.03s
10.797 N ±19.0km 62.194 W ±28.6km
DEPTH = 72.7 ± 33.7 km
NEAR COAST OF VENEZUELA (97)
MD 3.4 (TRN).

TCE	0.44	103	iPd	11	56.26	0.1
			eS	12	04.55	
TRN	0.79	101	iPd	11	59.85	0.1
			eS	12	10.72	
TPP	0.87	123	eP	12	00.63	-0.1
			eS	12	13.06	
TBH	1.15	106	eP	12	04.19	-0.1
			eS	12	19.00	
TPR	1.44	74	eP	12	08.27	0.1
			eS	12	27.91	
GRW	1.45	21	eP	12	08.03	-0.3
			eS	12	26.94	
BOT	1.50	76	eP	12	08.66	-0.1
			eS	12	28.66	
SVB	2.63	20	eP	12	36.50	12.1X
			eS	12	56.00	
SLB	3.21	20	eP	12	32.91	0.2
			eS	13	10.90	

S.D. = 0.2 on 8 of 9 obs.

NOV 28, 1993 15h 40m 33.81± 0.27s
41.078 N ± 3.6km 20.906 E ± 2.8km
DEPTH = 5.0km (geophysicist)
ALBANIA (391)
ML 3.5 (SKO), 2.9 (THE). Felt (IV) in the Ohrid area, the Former Yugoslav Republic of Macedonia.

OHR	0.09	293	iPgc	40	34.70	-1.2
	0.2s	3940.00nm				
			iSg	40	35.70	
FNA	0.46	129	ePgd	40	43.72	0.6
			eSg	40	49.80	
TIR	0.83	289	iPgc	40	48.60	-1.8
			iSg	40	59.60	
LSK	0.96	194	ePg	40	53.20	0.7
SKO	0.98	24	iPg	41	01.10	8.2X

28d 15h

		i	41	03.80	
		Lg	41	04.50	
TPE	1.04	221	ePg	40 53.00	-0.8
LACI	1.06	302	ePg	40 51.50	-2.7X
			iSg	51 06.30	
GRG	1.14	96	ePgc	40 55.21	-0.4
			eSg	41 10.84	
VLO	1.23	241	ePn	40 57.40	0.2
VAY	1.28	78	iPg	40 57.40	-0.6
			i	40 58.80	
			i	41 15.00	
			iSg	41 16.60	
			Lg	41 19.50	
SRN	1.38	210	ePn	41 03.50	3.8X
BCI	1.43	334	ePn	41 02.20	1.7
			iSn	41 18.20	
SDA	1.44	313	ePn	41 02.20	1.7
KNT	1.51	86	ePbc	41 01.56	0.0
			eSb	41 21.48	
ULC	1.53	306	iPgd	41 01.84	0.0
			iSg	41 23.70	
LIT	1.55	128	ePbd	41 02.64	0.5
			eSb	41 23.64	
IGT	1.60	196	ePb	41 06.60	3.7X
			eSb	41 29.40	
THE	1.62	105	ePb	41 02.84	-0.3
			eSb	41 25.00	
PVY	1.67	336	iPnd	41 03.72	-0.2
			iSn	41 27.57	
TTG	1.83	318	iPnc	41 06.37	0.3
			iSn	41 31.38	
SOH	1.87	97	ePb	41 06.76	-0.1
			eSb	41 28.76	
IVA	1.94	338	iPnd	41 07.75	-0.1
			iSn	41 34.14	
BDV	1.97	308	iPnc	41 08.41	0.2
			iSn	41 35.08	
SRS	2.03	88	ePb	41 08.36	-0.7
			eSb	41 33.92	
NKY	2.24	321	iPnc	41 12.47	0.2
			iSn	41 41.90	
HCY	2.26	308	iPnd	41 12.67	0.2
			iSn	41 42.35	
AGG	2.33	152	ePn	41 13.92	0.5
			eSn	41 43.00	
PAIG	2.41	118	ePn	41 14.36	-0.1
OUR	2.45	107	ePn	41 14.80	-0.3
PLE	2.52	334	iPnc	41 16.02	-0.1
			iSn	41 48.02	
BRY	2.53	317	iPnc	41 16.11	-0.3
			iSn	41 48.91	

S.D. = 0.8 on 27 of 31 obs.

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* NOV 28, 1993 16h 13m 46.14± 1.08s
24.042 S ± 6.7km 67.881 W ±15.2km
DEPTH = 33.0km (normal)
CHILE-ARGENTINA BORDER REGION (127)

SLA	2.28	108	iPc	14 23.20	0.8
			S	14 49.50	
HJA	2.42	71	ePd	14 29.10	4.9X
YJA	2.88	50	ePd	14 30.40	-0.7
			(S)	15 02.50	
MOCB	3.47	37	P	14 39.10	-0.4
CYA	4.77	157	iPc	14 58.10	0.5
RTPR	6.35	169	eP	15 19.00	-0.9
			S	16 27.50	
CNCB	7.19	359	P	15 33.50	1.3
LPB	7.47	358	eP	15 33.00	-3.0X
LPAZ	7.72	358	P	15 39.10	-0.6

S.D. = 1.0 on 7 of 9 obs.

NOV 28, 1993 16h 40m 44.98± 0.27s
44.460 N ± 3.9km 114.763 W ± 2.4km
DEPTH = 10.0km (geophysicist)
WESTERN IDAHO (33)
ML 3.2 (GS), 3.4 (BUT).

CPI	1.26	242	Pc	41 08.31	0.0
LVRI	1.30	292	P	41 09.60	0.4
MCMT	1.41	74	iPnd	41 11.36	0.4
SPVI	1.44	276	P	41 11.11	-0.1
BDID	1.55	283	P	41 13.17	0.3
TPOR	1.75	290	P	41 15.98	0.2
LIME	1.78	270	P	41 15.90	-0.2
WPI	1.85	232	Pc	41 16.71	-0.3
LTMT	1.90	87	ePn	41 18.76	0.7
HBMT	2.03	48	ePn	41 19.70	-0.1
BGMT	2.08	67	ePn	41 20.70	0.1
LRM	2.13	49	ePnc	41 21.17	-0.1
BUT	2.20	44	ePg	41 26.30	4.1X
			eSn	41 50.20	
			eSg	41 55.30	
LGOR	2.42	289	P	41 25.41	0.0
MEMT	2.92	66	ePn	41 32.49	-0.1
SXM	3.02	55	ePn	41 34.20	0.2
HVU	3.05	151	ePn	41 34.34	0.1
			eS	42 16.78	
HRY	3.05	41	ePn	41 33.30	-0.9
NEW	4.14	338	ePn	41 49.36	-0.3
			eS	42 54.09	
DUG	4.50	161	ePn	41 54.51	-0.4

S.D. = 0.4 on 19 of 20 obs.

? NOV 28, 1993 16h 42m 10.90± 4.30s
16.610 N ±35.9km 98.982 W ±15.5km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF GUERRERO, MEXICO (58)

ACX	0.88	287	iPd	42 27.51	-0.3
			iS	42 38.00	
III	1.82	345	iP	42 41.04	-1.6
			iS	43 03.45	
PPM	2.47	8	iP	42 52.13	-0.1
			iS	43 22.00	
IIA	2.54	7	iP	42 50.55	-2.3X
UNM	2.71	356	iP	42 56.00	0.4
			(S)	43 29.00	
IISM	2.82	33	iP	42 56.86	0.1
			(S)	43 24.00	
CRX	2.86	347	(P)	42 58.00	0.3
			(S)	43 31.50	
MRX	3.73	326	(P)	43 10.88	1.2
			(S)	43 52.00	

S.D. = 1.0 on 7 of 8 obs.

? NOV 28, 1993 16h 57m 43.86± 5.71s
11.883 N ±49.7km 69.457 W ±17.0km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF VENEZUELA (97)

CANV	1.04	144	iPc	58 03.60	0.1
MORO	1.50	132	eP	58 10.60	-0.4
			eS	58 31.00	
TOV	2.11	189	ePnc	58 29.50	9.8X
			eSn	58 42.60	
CEOS	3.04	159	eP	58 38.50	5.5X
SDV	3.19	201	ePn	58 35.30	0.0
			eSn	59 09.00	
OLLA	3.20	125	eP	58 35.50	0.3

S.D. = 0.5 on 4 of 6 obs.

? NOV 28, 1993 17h 15m 04.71± 1.56s
31.543 S ±32.4km 68.804 W ±38.5km
DEPTH = 100.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB	0.06	3	ePd	15 19.20	0.0
			S	15 31.30	
RTLL	0.36	53	iPd	15 19.80	-0.1
			S	15 31.00	
RTCV	0.39	144	eP	15 20.00	0.0
			S	15 32.60	
CFA	0.49	98	ePc	15 20.70	0.0
			S	15 33.00	

S.D. = 0.1 on 4 of 4 obs.

? NOV 28, 1993 17h 28m 05.60± 1.63s
43.101 N ±10.6km 0.479 W ±16.3km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 1.0 (STR).

OGE	0.07	3	Pg	28 07.96	0.0
			Sg	28 09.83	
ESCF	0.07	252	Pg	28 07.96	-0.1
			Sg	28 09.63	
ATE	0.16	265	Pg	28 09.43	0.1
			Sg	28 12.23	
LHE	0.21	209	Pg	28 10.35	0.0
			Sg	28 13.23	

S.D. = 0.1 on 4 of 4 obs.

NOV 28, 1993 18h 04m 35.98± 1.17s
18.128 N ±10.0km 76.803 W ± 8.0km
DEPTH = 10.0km (geophysicist)
JAMAICA REGION (86)
MD 2.8 (HOJ).

STH	0.05	192	iP	04 38.99	0.8
			S	04 41.34	
GWJ	0.08	131	iP	04 38.33	-0.3
			S	04 40.44	
HOJ	0.14	158	iP	04 39.16	0.0
			S	04 41.49	
BBJ	0.51	300	eP	04 46.46	0.2
PCJ	0.52	222	eP	04 46.08	-0.4
SPJ	0.73	260	iP	04 50.17	-0.2
			S	05 00.72	

S.D. = 0.6 on 6 of 6 obs.

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* NOV 28, 1993 18h 15m 14.75± 0.84s
23.900 N ±11.2km 121.887 E ±10.3km
DEPTH = 10.0km (geophysicist)
4.1mb (4 obs.)
TAIWAN (244)
ML 3.8 (BJI).

QZH	3.18	290	iPnd	16 05.00	-0.7
SSE	7.19	355	eP	17 03.50	1.0
			S	18 17.50	
NJ2	8.55	342	eP	17 17.00	-4.5X
WHN	9.42	316	eP	17 34.00	0.5
			S	19 15.50	
GYA	14.02	284	eP	18 36.00	0.2
			pP	18 45.60	
XAN	15.18	315	eP	18 50.70	-0.2
TIY	15.97	332	Pc	19 06.50	5.4X
CD2	17.54	297	eP	19 25.40	4.4X
GTA	24.24	315	eP	20 33.00	0.1
	1.5s	8.00nm		4.1mb	
			pP	20 37.50	16kmX
WRA	45.24	163	P	23 35.00	0.8
	0.5s	1.00nm		4.0mb	
INK	73.25	22	eP	26 46.50	-1.1
	1.0s	2.00nm		4.1mb	
YKA	82.98	23	eP	27 40.40	-0.7
	0.7s	3.40nm		4.6mb	

S.D. = 0.8 on 9 of 12 obs.

NOV 28, 1993 19h 23m 57.74± 0.52s
46.062 N ± 5.6km 14.690 E ± 4.8km
DEPTH = 13.5 ± 4.5 km
NORTHWESTERN BALKAN REGION (383)
ML 3.0 (VIE), 2.8 (LJU). MD 2.9 (TRI). Felt (IV) at Moravce, Dol, Kresnice and Litija, Slovenia.

LJU	0.11	260	iPgd	24 00.90	-0.2
			iSg	24 03.00	
			iSg	24 03.10	
CEY	0.37	210	iPg	24 06.30	0.7
			eSg	24 11.50	
VOY	0.56	267	iPgc	24 08.10	-0.7
			eSg	24 16.30	
			e	26 10.00	
VBY	0.68	144	iPgd	24 10.70	-0.3
			iSg	24 21.10	
TRI	0.74	242	ePg	24 11.20	-0.7
			eSg	24 21.40	
RIY	0.75	197	iPg	24 11.90	-0.2
			iSg	24 23.50	
PTJ	0.90	100	iPg	24 14.50	-0.2
			iSg	24 27.90	
ZAG	0.94	105	e(Pg)	24 16.80	1.6
			iSg	24 28.70	
KBA	1.38	318	iPgc	24 23.10	0.4
			iSg	24 40.60	
BHG	2.07	324	iPc	24 35.90	3.3X
WTTA	2.42	301	iPgd	24 38.90	1.2
WATA	2.49	302	iPgc	24 40.10	1.4
			i	25 12.00	
OGA	2.66	289	eP	24 46.40	5.3X
SQTA	2.66	297	iPgd	24 42.30	1.2
			i	25 20.10	
ZST	2.70	37	eP	24 45.90	4.4X
			e	25 25.40	
MOTA	2.78	299	iPgc	24 43.20	0.4
			i	25 20.20	
GEC2	2.86	347	Pn	24 42.90	-1.0

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                Sn    25 17.60
HVAR    3.14 156 e(Pn) 24 52.80   5.0X
KHC     3.16 347 Pn   24 47.00  -1.1
                ePg   24 55.60
                e     25 17.00
                e     25 24.40
                eSg   25 34.00
PRU     3.93 359 ePn  25 10.00  11.1X
                e     25 49.50
                Sg    26 03.80
GRF     4.32 329 ePg  25 18.10  13.6X
                eSg   26 13.60
     S.D. = 1.0  on  15 of  21 obs.
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   NOV  28, 1993  19h 50m 35.33± 0.58s
   41.366 N ± 5.2km   20.914 E ± 5.0km
   DEPTH =   5.0km  (geophysicist)
 ALBANIA                          (391)
     ML 2.3 (SKO).

OHR     0.27 199 iPg   50 40.50  -0.3
       0.5s    60.00nm
                iSg   50 45.50
SKO     0.72  33 iPg   50 49.00  -0.8
                iSg   50 59.60
                Lg    51 01.00
VAY     1.25  92 iPn   50 59.50   0.5
                iSn   51 17.40
                Lg    51 18.50
ULC     1.38 296 iPgd  51 00.90  -0.4
                iSg   51 21.17
PVY     1.41 331 iPgc  51 02.06   0.2
                iSg   51 21.84
TTG     1.63 311 iPnd  51 04.72   0.0
                iSn   51 28.35
IVA     1.68 334 iPnd  51 06.23   0.6
                iSn   51 29.34
BDV     1.81 301 iPnd  51 06.99  -0.4
                iSn   51 32.29
NKY     2.03 316 iPnc  51 11.61   0.9
                iSn   51 37.22
HCY     2.10 302 iPnc  51 11.61   0.0
                iSn   51 40.17
PLE     2.26 331 iPnd  51 13.25  -0.8
                iSn   51 42.73
BRY     2.34 312 iPnc  51 15.55   0.4
                iSn   51 45.69
     S.D. = 0.6  on  12 of  12 obs.
-----------------------------------
   NOV  28, 1993  20h 59m 27.12± 0.15s
   36.474 N ± 3.6km   71.309 E ± 2.3km
   DEPTH = 107.5km  ( 12 depth phases)
   5.1mb (105 obs.)
 AFGHANISTAN-TAJIKISTAN BORD REG.(717)

KSH     4.74  50 iPd   00 38.80   1.1
                S     01 31.00
FRU     6.84  21 iPnd- 01 05.30  -1.2
                iS    02 18.20
QUE     7.25 211 iPd   00 10.60 -61.6X
       0.9s   693.28nm
                eS    01 29.20
TLG     8.23  33 iPn   01 22.00  -3.4X
NDI     9.23 146 iPd   01 34.00  -4.9X
       0.8s   358.21nm          6.2mb X
                eS    03 10.00
MAIO    9.53 272 iPd   01 37.80  -5.2X
       0.9s    51.15nm          5.4mb
                eS    03 20.00
ASH    10.44 282 iP    01 49.30  -5.9X
       0.6s   135.00nm          6.0mb
GKN    14.08 123 P     02 38.00  -5.0X
WMQ    14.51  55 P     02 45.00  -3.4X
                S     05 22.40
DMN    14.65 123 P     02 45.50  -4.9X
KKN    14.65 122 P     02 44.80  -5.6X
PKI    14.88 123 P     02 48.20  -5.2X
GUN    14.99 121 P     02 49.20  -5.6X
LSA    17.93 106 iPd   03 29.60  -1.8
       1.0s   160.00nm          5.2mb
     E 10s     0.44um
                S     06 44.00
POO    18.01 172 iPc   03 31.00  -1.0
       1.0s    48.00nm          4.7mb
                iS    06 46.50
KER    19.83 271 ePc   03 51.50  -0.3
TAB    19.93 282 iP    03 54.00   1.2
SHL    20.67 116 iPd   03 59.50  -0.9
       1.0s   220.00nm          5.5mb
                iS    07 34.50
DHR    20.68 247 ePc   03 59.10  -1.2
GRO    20.77 297 iPc+  04 02.00   0.9
       2.0s  1200.00nm          5.9mb
     Z 14s     2.00um          4.6MszX
     N 15s     3.00um
MTA    21.19 292 iP    04 06.00   0.7
       0.8s   140.00nm          5.4mb
                eS    07 52.00
                eSS   08 04.00
                eSSS  08 37.00
ERE    21.32 288 iP    04 09.50   2.7X
       1.3s    28.00nm          4.4mb
                iS    08 05.50
SVE    21.57 344 iPd   04 08.00  -1.0
       1.6s    70.00nm          4.8mb
     Z 11s     1.00um          4.5MszX
     N 11s     0.70um
     E 11s     0.70um
                eS    08 08.00
                eSS   08 42.00
ARU    21.70 341 iPd   04 09.70  -0.6
       1.5s   600.00nm          5.7mb
                ePPP  04 44.00
                eS    08 04.00
                e     08 13.00
                eSS   08 35.00
GTA    22.63  74 P     04 21.00   1.3
       1.0s    72.00nm          5.0mb
     Z 10s     0.64um          4.4MszX
                pP    04 42.50 101km
                sP    04 54.50
PYA    22.77 298 iPd   04 20.00  -0.8
       1.3s   300.00nm          5.5mb
     Z 18s     1.00um          4.3Msz
                eS    08 26.00
KIV    23.02 298 iPc   04 24.20   0.8
       1.0s    51.00nm          4.8mb
     Z 11s     0.20um          3.8MszX
                eS    08 26.70
GBA    23.43 165 P     04 28.00   0.6
RYD    24.20 248 iPc   04 34.50  -0.4
SOC    25.11 296 eP    04 45.00   1.8
QASM   25.82 254 ePc   04 48.90  -1.1
LZH    26.17  81 P     04 55.00   1.7
       1.5s    85.00nm          5.1mb
                sP    05 33.00
ZAK    26.82  49 eP    04 59.00   0.2
       1.0s    10.00nm          4.3mb
                e     09 30.00
UQSK   26.88 255 eP    05 01.00   1.3
ANN    26.97 299 eP    05 01.00   0.8
                e     05 55.50 287kmX
                e     09 32.00
AFIF   27.14 251 iPc   05 04.70   2.6X
GAZ    27.22 282 eP    05 04.00   1.4
CD2    27.48  92 P     05 06.40   1.3
       1.2s    36.00nm          4.8mb
KMI    29.15 104 eP    05 20.50   0.1
KAS    29.46 291 eP    05 23.50   0.7
MOS    29.84 321 eP    05 26.00   0.2
       1.6s   200.00nm          5.6mb
                e     06 06.00 196kmX
CHTO   29.99 118 ePc   05 28.00   0.4
       1.2s    27.78nm          4.9mb
OBN    30.10 319 iPc   05 28.00  -0.1
       1.2s   180.00nm          5.7mb
                epP   05 57.00 135kmX
                e     06 28.00
                eS    10 16.00
BTO    30.39  70 eP    05 31.50   0.5
AYN    30.55 266 eP    05 32.70   0.3
XAN    30.68  83 P     05 33.50  -0.1
       0.7s     7.00nm          4.5mb
BDT    31.09 121 iPc   05 38.50   1.3
       1.0s    48.30nm          5.2mb
WAJH   31.26 261 ePc   05 39.70   1.0
HHC    31.54  70 P     05 40.60  -0.5
       1.0s    11.00nm          4.5mb
GYA    31.61  98 iPc   05 42.20   0.3
       1.0s    27.00nm          4.9mb
                pP    06 03.60  94kmX
                sP    06 22.00
                S     10 46.00
                ScP   12 03.80
KHT    32.54 124 iPc   05 50.50   0.6
TIY    32.64  75 Pc    05 51.30   0.6
     Z 16s     1.19um          4.7MszX
                S     11 02.50
NST    32.95 121 iPc   05 54.50   1.1
KHL    33.05 286 eP    05 53.60  -0.6
ELL    33.05 283 eP    05 54.50   0.2
CFR    33.46 299 eP    05 58.00   0.4
CIT    33.51  49 eP    05 57.00  -1.0
CLI    34.08 301 iPd   06 04.00   1.1
VRI    34.46 300 ePd   06 07.50   1.3
PTT    34.70 302 eP    06 06.00  -2.2
JMB    34.73 294 iP    06 10.00   1.5
MNK    34.74 314 eP    06 08.00  -0.5
       1.0s   198.00nm          5.9mb
NNT    34.89 126 eP    06 12.10   2.0
                eSg   25 37.80
PUL    35.08 325 eP    06 11.00  -0.3
       1.2s   150.00nm          5.8mb
                e     06 34.00  98km
                e     11 35.00
BJI    35.13  70 eP    06 12.00   0.1
       1.0s     7.00nm          4.5mb
     Z 16s     0.29um          4.1MszX
                ScP   12 15.00
BOD    35.31  39 eP    06 11.00  -2.3
       0.7s     7.00nm          4.7mb
WHN    36.15  87 eP    06 22.00   1.4
       1.0s    30.00nm          5.1mb
                pP    06 47.50 110km
RZN    36.19 293 iP    06 22.00   0.9
TIA    36.63  76 Pd    06 25.50   0.8
       1.0s    40.00nm          5.3mb
MMB    36.94 293 iP    06 29.00   1.8
VTS    37.19 295 iP    06 30.00   0.5
KKB    37.38 293 iP    06 31.00   0.1
UZH    37.48 305 eP    06 33.50   1.9
                e     07 13.50 184kmX
KAF    37.78 327 iP    06 34.10   0.1
VAY    37.84 293 eP    06 35.40   0.7
NUR    37.99 324 iP    06 36.10   0.3
       0.5s    57.10nm          5.7mb
SKO    38.58 294 iP    06 41.80   0.9
SPC    38.83 306 eP    06 40.50  -2.7X
PSZ    39.09 304 eP    06 45.60   0.4
OJC    39.12 307 eP    06 45.70   0.4
       0.9s    99.00nm          5.6mb
                i     06 49.40  13kmX
                i     08 20.00
NJ2    39.23  82 Pc    06 47.80   1.4
                pP    07 13.20 110km
                sP    07 25.20
SDF    39.97 335 iP    06 52.80   0.7
SRO    40.16 303 iPc   06 56.30   2.4
SNY    40.37  66 eP    06 57.00   1.4
ZST    40.95 304 eP    07 01.10   0.8
                e     08 39.00 545kmX
                e     19 16.30
UPP    41.25 322 iP    07 02.80   0.2
KSP    41.35 308 iPc   07 04.20   0.6
                e     08 40.50 530kmX
CN2    41.40  63 eP    07 09.60   5.5X
       1.0s     7.00nm          4.4mb
SSE    41.43  82 Pc    07 06.00   1.5
       1.0s    14.00nm          4.7mb
                sP    07 45.50
                eS    13 16.00
VKA    41.47 304 e(P)  07 06.00   1.4
IPM    41.86 132 ePd   07 09.00   0.9
ZAG    41.95 301 iP    07 09.80   1.2
PTJ    41.96 301 eP    07 09.10   0.4
PRU    42.51 307 iPc   07 13.90   0.8
       1.4s    81.00nm          5.3mb
                e     08 50.90 532kmX
BRG    42.83 308 iPc   07 16.10   0.4
       1.0s    70.00nm          5.4mb
                i     07 27.90  43kmX
LJU    42.92 301 eP    07 17.60   1.1
                ePP   07 50.00
                ePP   09 02.00
GEC2   43.15 305 ePc   07 18.90   0.5
       0.8s     4.53nm          4.3mb
                e     07 20.80   6kmX
                e     09 00.10
                e     09 08.30
                e     09 14.00
                e     09 26.60
```

28d 21h

APO	43.17	323	eP	07	17.90	-0.4
	0.4s	49.30nm				5.7mb
	Z 17s	0.13um				3.9MszX
		LR		24	00.00	
KHC	43.20	306	Pc	07	19.60	0.8
	1.5s	40.20nm				5.0mb
			e	07	53.20	151kmX
			e	09	04.20	
			e	09	22.50	
			e	09	38.50	
TRO	43.39	336	eP	07	20.00	0.0
CLL	43.40	309	iPc	07	20.30	0.0
	1.6s	80.00nm				5.3mb
KBA	43.59	303	iP	07	23.00	0.9
	0.6s	13.00nm				4.9mb
			i	07	39.50	65kmX
COP	43.63	315	iP	07	22.50	0.4
	0.8s	113.43nm				5.7mb
BHG	43.82	304	eP	07	24.30	0.5
YAK	43.86	35	eP	07	23.60	-0.2
	1.0s	30.00nm				5.0mb
			i	07	46.00	94kmX
			e	09	04.00	
			e	09	41.00	
			eS	14	07.00	
MOX	44.33	308	iPc	07	28.70	0.9
	1.8s	118.00nm				5.4mb
NB2	44.55	323	P	07	29.20	-0.3
	0.9s	106.20nm				5.6mb
GRF	44.68	307	iPc	07	32.40	1.8
	1.8s	239.00nm				5.7mb
			e	07	58.60	
			e(pP)	08	05.50	147kmX
WTTA	44.72	303	iPc	07	30.80	-0.4
	0.9s	32.00nm				5.1mb
WATA	44.75	303	iPc	07	30.90	-0.5
LOF	44.78	333	eP	07	30.85	-0.3
FUR	44.83	305	eP	07	32.70	0.8
	1.7s	140.00nm				5.5mb
SQTA	45.01	303	iPc	07	32.60	-0.9
MOTA	45.07	304	iPc	07	33.20	-0.7
	0.8s	22.90nm				5.0mb
OGA	45.19	303	iPd	07	35.10	0.1
MUD	45.46	316	iPc	07	38.80	2.2
	1.0s	42.00nm				5.2mb
TIK	45.70	22	iPd	07	37.00	-1.4
	1.0s	19.00nm				4.8mb
			ipP	08	02.00	107km
			i	08	17.00	
			e	09	28.00	
			iS	14	11.00	
OSS	45.82	303	ePc	07	40.00	0.1
VDL	46.31	303	iPd	07	44.00	0.2
LLS	46.56	303	iPd	07	45.70	-0.1
SLE	46.74	305	ePd	07	47.10	0.1
TMA	46.79	302	iPd	07	47.30	-0.3
HOFF	46.89	306	P	07	48.90	0.8
LANF	46.99	306	P	07	49.68	0.8
FEL	47.04	305	P	07	49.02	-0.4
WIT	47.16	312	eP	07	52.00	1.8
WTS	47.18	310	eP	07	51.00	0.7
	1.0s	41.00nm				5.2mb
CDF	47.43	306	iPc	07	52.00	-0.5
	0.9s	13.25nm				4.7mb
BBS	47.45	304	P	07	51.75	-0.8
ORX	47.50	302	P	07	51.29	-1.8
PGF	47.50	297	iPc	07	52.90	-0.2
	0.7s	16.20nm				4.9mb
ECH	47.54	305	P	07	54.83	1.6
MOF	47.63	305	P	07	53.72	-0.3
FIN	47.66	300	P	07	53.35	-0.9
DIX	47.79	302	ePd	07	55.80	0.2
BSF	47.86	305	iPc	07	55.60	-0.2
	0.7s	40.25nm				5.3mb
ROB	47.88	300	P	07	55.83	-0.1
ENN	47.90	309	eP	07	56.50	0.6
	1.0s	18.00nm				4.8mb
LOMF	47.93	304	P	07	55.04	-1.3
WLF	47.94	307	iPc	07	57.18	1.0
RSP	48.10	301	P	07	55.37	-2.4X
LSD	48.11	302	P	07	57.88	-0.1
HAU	48.11	305	iPc	07	57.50	-0.2
	0.7s	23.05nm				5.1mb
	Z 20s	0.10um				3.8Msz
EMS	48.12	303	iPd	07	58.30	0.3
SAOF	48.17	300	P	07	57.75	-0.4
BHB	48.17	301	P	07	56.51	-1.7
ENR	48.21	300	P	07	57.88	-0.7
AUTN	48.26	300	P	07	58.61	-0.5
STV	48.27	300	P	07	57.98	-1.0
SBF	48.29	300	eP	07	59.20	0.1
	0.9s	48.80nm				5.3mb
VITF	48.31	306	P	07	59.20	0.0
AURF	48.36	300	P	07	59.50	-0.2
PZZ	48.36	300	P	07	58.30	-1.5
LPG	48.37	302	eP	08	00.20	0.2
	0.9s	30.45nm				5.1mb
TOUF	48.38	300	P	07	59.50	-0.5
LPL	48.38	302	eP	08	00.10	0.1
	0.9s	27.85nm				5.1mb
MVIF	48.48	300	P	07	59.72	-0.9
RRL	48.48	301	P	08	01.00	0.2
DOU	48.85	308	P	08	03.80	0.5
			e	08	39.10	156kmX
FRF	48.91	299	eP	08	03.60	-0.3
	1.0s	33.40nm				5.2mb
SNF	48.97	309	Pc	08	04.40	0.2
LBF	49.90	304	iPc	08	10.80	-0.6
	0.7s	14.00nm				5.0mb
LOR	49.92	305	iPc	08	10.80	-0.7
	1.2s	26.50nm				5.1mb
	Z 21s	0.10um				3.8Msz
SMF	50.08	304	iPc	08	12.50	-0.2
	0.6s	27.60nm				5.4mb
SSF	50.20	305	iPc	08	13.20	-0.4
	0.9s	27.70nm				5.2mb
AVF	50.37	304	iPc	08	14.60	-0.3
	0.6s	29.15nm				5.4mb
HYF	50.72	305	eP	08	17.60	0.0
BGF	50.76	304	iPc	08	17.40	-0.5
	0.9s	16.40nm				5.0mb
MAF	51.03	304	iPc	08	20.10	0.1
	1.0s	62.40nm				5.6mb
TCF	51.26	304	iPc	08	21.70	0.0
	1.0s	70.60nm				5.6mb
LSF	51.72	304	iPc	08	24.70	-0.5
	0.7s	15.55nm				5.1mb
CAF	51.72	302	eP	08	25.40	0.1
	0.9s	27.85nm				5.2mb
RJF	51.99	303	eP	08	27.50	0.3
	1.0s	23.40nm				5.1mb
LDF	52.19	307	iPc	08	28.00	-0.7
	1.0s	54.60nm				5.5mb
FLN	52.38	307	iPc	08	29.20	-0.9
	0.6s	12.70nm				5.1mb
	Z 19s	0.13um				4.0Msz
LPO	52.39	302	eP	08	30.10	-0.1
	1.1s	25.40nm				5.1mb
EKA	52.48	316	P	08	31.00	0.3
LFF	52.62	303	eP	08	31.90	0.0
	1.0s	58.20nm				5.5mb
GRR	52.72	307	iPc	08	31.80	-0.8
	0.8s	33.30nm				5.4mb
MAT	52.73	69	eP	08	32.00	-0.8
MFF	52.74	305	eP	08	31.90	-0.8
	1.0s	51.80nm				5.5mb
LPF	52.93	307	iPc	08	33.00	-1.1
	0.7s	9.15nm				4.9mb
EPF	53.48	300	iPc	08	37.20	-1.0
	1.0s	12.80nm				4.9mb
DAG	54.85	344	iPd	08	47.10	-0.7
	0.7s	72.60nm				5.8mb
			ipP	09	22.50	153kmX
GUD	57.45	299	eP	09	08.50	1.5
ENIJ	57.48	294	eP	09	07.00	-0.1
PAB	58.01	298	eP	09	10.00	-0.9
EBAN	58.15	296	eP	09	11.00	-0.8
EPLA	59.04	299	eP	09	18.00	0.1
EHOR	59.35	296	eP	09	19.00	-1.0
EPRU	59.69	296	eP	09	21.00	-1.4
EJIF	60.08	295	eP	09	23.50	-1.5
MTD	64.91	223	iPc	09	41.40	-15.9X
			i	10	09.50	114km
SWI	66.75	110	ePc	10	07.00	-2.1
MBC	67.35	3	eP	10	12.50	0.5
	1.0s	21.00nm				5.0mb
RES	68.74	356	eP	10	20.50	-0.1
BUL	69.27	223	iPd	10	23.20	-1.5
	0.9s	25.21nm				5.0mb
IMA	72.07	18	eP	10	39.27	-1.8
	0.6s	2.39nm				4.2mb
			epP	11	07.20	110km
BFT	73.05	218	eP	10	48.50	1.1
	1.0s	30.00nm				5.1mb
LKO	73.88	270	P	10	50.07	-2.2
	0.4s	3.00nm				4.5mb
INK	73.89	9	eP	10	51.00	-0.4
	0.6s	5.00nm				4.5mb
TTA	73.96	20	eP	10	52.00	0.0
SLR	73.99	220	eP	10	51.70	-1.0
	1.4s	50.00nm				5.1mb
FBA	74.42	16	eP	10	52.61	-2.0
	1.0s	10.76nm				4.6mb
			epP	11	20.91	111km
KIC	75.03	267	P	10	56.96	-1.9
	0.6s	10.50nm				4.9mb
TIC	75.09	267	P	10	57.22	-2.0
	0.3s	4.50nm				4.8mb
FRB	75.16	343	eP	10	58.50	-0.3
	1.0s	7.00nm				4.4mb
LIC	75.34	267	P	10	59.30	-1.3
	0.6s	8.00nm				4.7mb
SEK	76.44	219	eP	11	03.00	-3.6X
	1.0s	130.00nm				5.7mb
PWA	76.67	19	eP	11	06.70	-0.6
PMR	76.91	19	eP	11	07.78	-0.9
	1.0s	17.54nm				4.8mb
TOA	77.20	17	eP	11	10.30	-0.1
SLKM	77.54	20	eP	11	10.79	-1.4
KLU	77.80	17	eP	11	13.62	0.0
BOSA	77.80	220	ePc	11	13.91	0.0
	0.9s	41.35nm				5.2mb
			epP	11	41.31	106km
BLF	77.80	219	eP	11	13.00	-1.1
	0.8s	53.00nm				5.4mb
WIN	77.88	230	eP	11	15.00	0.2
	1.0s	30.00nm				5.1mb
FRS	78.76	220	eP	11	18.80	-0.4
	1.2s	60.00nm				5.3mb
BALM	79.02	16	eP	11	19.99	-0.4
KDC	79.19	22	eP	11	21.60	0.5
HVD	79.36	219	eP	11	24.50	1.9
	1.0s	20.00nm				4.9mb
YKA	81.26	3	eP	11	32.10	0.1
	0.8s	10.20nm				4.7mb
WRA	81.77	122	P	11	34.70	-0.6
	0.9s	4.60nm				4.3mb
WB2	81.78	122	eP	11	34.30	-1.1
	0.4s	16.10nm				5.2mb
			e	12	03.00	111km
ASPA	84.03	125	eP	11	46.40	-0.5
	0.7s	13.50nm				5.0mb
			epP	12	13.50	103km
CER	84.77	221	eP	11	44.50	-5.8X
	0.7s	55.00nm				5.6mb
JAQ	85.68	341	eP	11	55.00	0.3
CTA	90.30	115	iPd	12	17.00	-0.2
ULM	92.91	352	eP	12	31.50	2.6X
NEW	95.30	6	eP	12	39.67	-0.4
	1.0s	7.26nm				5.1mb
			epP	13	08.61	109km
LRM	98.01	3	ePc	12	52.90	0.3
SIV	133.20	283	PKP	18	30.70	-1.6
LPAZ	138.86	288	ePKP	18	41.07	-2.6X
LPB	138.98	288	ePKP	18	43.00	-0.6
CNCB	139.06	288	PKP	18	35.10	-8.8X
			i	22	09.30	
ARE	141.51	291	ePKP	18	44.00	-4.0X
MDZ	147.20	264	ePKP	18	57.20	0.3
	S.D. = 1.0	on 214 of 237 obs.				

NOV 28, 1993 22h 21m 35.48± 0.23s
19.928 N ± 3.3km 121.358 E ± 5.5km
DEPTH = 34.7km (5 depth phases)
4.8mb (34 obs.) 4.5Msz (7 obs.)
PHILIPPINE ISLANDS REGION (248)

PIP	1.74	204	iPc	22	05.00	1.1
			eS	22	12.00	
CVP	2.25	169	ePc	22	15.00	3.8X
			eS	22	39.00	
BCP	3.56	192	eP	22	34.00	4.1X
			eS	23	22.20	
BAG	3.58	192	ePc	22	32.00	1.9
			eS	23	10.00	
QCP	5.27	183	eP	22	58.00	4.1X
QVP	5.29	184	eP	22	55.50	1.3
QZH	5.61	333	Pd	22	56.40	-2.3
	Z 15s	4.73um				
	N 15s	4.10um				
			S	23	57.00	

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TGY     5.81 184 eP    23 11.00    9.3X
GQP     6.08 170 ePc   23 04.50   -0.9
                eS     24 11.00
HKC     7.11 291 iP    23 15.50   -4.4X
GZH     8.10 294 P     23 28.80   -4.9X
      Z  16s     4.16um
      E  14s     4.35um
                 S     24 53.80
QIZ    10.90 267 Pd    24 08.50   -3.8X
        0.6s    32.00nm          5.7mb
      N  13s     1.93um
      E  14s     1.88um
                 S     26 03.00
SSE    11.12 359 eP    24 13.00   -2.2
      Z  20s     1.40um
      N  14s     1.00um
      E  16s     1.90um
                 S     26 20.00
NJ2    12.28 350 eP    24 31.00    0.2
      Z  18s     1.47um
      N  15s     2.06um
      E  12s     0.96um
WHN    12.32 330 eP    24 32.50    1.1
      Z  16s     4.14um
      N  16s     4.00um
DAV    13.40 162 eP    24 26.00  -19.8X
TIA    16.64 348 Pd    25 28.60    0.9
        1.0s   130.00nm          5.0mb
      Z  21s     1.82um          4.3Msz
      N  15s     1.19um
      E  15s     1.68um
XAN    17.88 324 P     25 43.50    0.3
        0.8s    16.00nm          4.2mb
      Z  14s     2.98um          5.0Msz
      N  12s     1.69um
      E  11s     0.74um
                 pP    25 52.00
                 sP    25 57.00
                 sS    29 10.00
                 SS    29 18.00
KMI    17.96 290 Pc    25 44.00   -0.5
        1.9s   120.00nm          4.7mb
      Z  15s     3.60um          4.6Msz
      N  12s     0.80um
      E  12s     1.60um
                 pP    25 53.00
                 sP    25 57.50
DL2    18.91   1 eP    26 00.00    4.1X
      Z  18s     1.21um
      N  14s     0.91um
      E  14s     1.35um
CD2    19.27 308 P     25 58.90   -1.3
        1.0s    79.00nm          4.9mb
      Z  14s     3.59um          4.6MszX
      N  13s     2.13um
TIY    19.35 338 eP    25 59.80   -1.3
      Z  15s     4.02um
      N  15s     2.22um
BJI    20.53 349 eP    26 13.00   -0.5
        1.0s    56.00nm          4.9mb
      Z  22s     1.56um          4.3Msz
      N  14s     0.90um
                 epP   26 26.00   58kmX
NST    20.64 262 eP    26 17.50    2.7X
CHTO   21.17 271 eP    26 20.10   -0.1
BDT    21.36 266 eP    26 23.00    1.0
SNY    21.91   4 eP    26 27.80    0.3
      Z  14s     1.53um          4.6MszX
                 eS    30 18.00
MAT    22.18  38 (P)   26 32.00    1.8
        1.2s    25.00nm          4.5mb
      Z  20s     0.71um          4.1Msz
                 eS    30 36.00
LZH    22.26 320 Pd    26 31.50    0.3
        2.0s   120.00nm          5.0mb
      Z  17s     2.15um          4.6MszX
      N  15s     1.39um
                 pP    26 42.00   40km
                 PP    27 01.50
                 sS    30 50.00
HHC    22.47 340 eP    26 32.60   -0.6
        1.0s    23.00nm          4.6mb
      Z  16s     3.32um          4.9MszX
      N  11s     0.91um
      E  12s     0.92um
BTO    22.77 337 eP    26 36.50    0.4
      N  12s     0.49um
      E  10s     0.18um
SWI    22.83 154 ePd   26 37.50    0.8
GUMO   23.36 102 e(P)  26 47.00    5.1X
GUA    23.42 102 e(P)  26 46.50    4.0X
CN2    24.05   7 eP    26 46.50   -1.9
        1.0s     7.00nm          4.1mb
      Z  18s     0.90um          4.3Msz
      N  13s     0.63um
      E  13s     0.55um
                 eS    31 04.00
MKS    25.06 184 ePd   26 47.30  -11.0X
MDJ    25.55  14 eP    27 03.00    0.3
OFUJ   25.91  38 eP    27 06.10    0.0
LSA    29.02 296 Pd    27 36.40    1.3
        0.8s     7.00nm          4.4mb
GUN    33.30 291 P     28 12.40   -0.3
        0.8s    39.00nm          5.4mb
ZAK    33.60 339 eP    28 14.00   -0.5
        1.0s    10.00nm          4.7mb
      Z  15s     0.29um          4.1MszX
      N  15s     0.77um
      E  16s     0.19um
                 eS    33 29.00
PKI    33.68 290 P     28 15.40   -0.6
KKN    33.82 290 P     28 16.60   -0.4
DMN    33.95 290 P     28 17.70   -0.5
GKN    34.40 291 P     28 20.80   -1.2
WMQ    36.81 318 P     28 43.00    0.9
        2.5s    41.00nm          4.9mb
      Z  16s     1.40um          4.8MszX
BOD    38.24 354 eP    28 52.80   -0.9
        1.0s     6.00nm          4.4mb
WB2    41.62 161 iPd   29 19.90   -2.2X
        0.5s    54.60nm          5.5mb
GBA    42.43 269 P     29 30.00    1.1
YAK    42.45   6 eP    29 37.80    9.3X
        1.0s    30.00nm          5.0mb
      Z  19s     0.70um          4.6Msz
      N  20s     0.50um
NANU   42.61 188 eP    29 27.50   -2.7
KSH    43.44 307 eP    29 38.00    1.0
        1.0s    20.00nm          4.8mb
      Z  20s     1.85um          5.0Msz
      N  14s     2.14um
      E  14s     2.52um
                 pP    29 48.00   34km
                 sP    29 52.00
                 PP    31 19.00
                 PcP   31 24.00
                 PcS   35 14.00
                 eS    35 52.00
                 sS    36 19.00
QIS    44.02 155 iPd   29 40.20   -1.5
ASPA   45.02 164 iPd   29 48.60   -1.2
        0.7s    55.70nm          5.6mb
                 eS    36 24.60
FRU    45.27 311 eP    29 53.00    1.4
      E  20s     2.00um
MEEK   46.36 183 eP    29 58.50   -1.8
CTA    46.65 147 iPd   30 04.50    1.8
        0.8s    14.93nm          5.0mb
      Z  21s     3.94um          5.3Msz
BAL    50.44 185 eP    30 30.50   -1.4
COOL   50.52 180 eP    30 31.00   -1.5
FORT   50.82 173 iPc   30 34.10   -0.7
        0.5s    31.00nm          5.5mb
KLB    51.34 184 eP    30 37.50   -1.2
MUN    51.85 186 eP    30 41.50   -1.0
TIK    51.90   3 eP    30 42.00   -0.4
        1.0s    12.00nm          4.8mb
      Z  20s     0.60um          4.6Msz
                 i     30 52.00   33km
STK    55.04 159 iPc   30 54.00  -12.2X
BRS    56.02 146 eP    31 13.00   -0.3
                 i     32 13.00  272kmX
SVE    57.59 325 ePc   31 24.90    0.8
        2.2s    40.00nm          5.1mb
      Z  16s     0.90um          5.0MszX
      N  18s     0.40um
      E  18s     0.40um
ARMA   57.91 149 iPc   31 27.70    0.9
        0.6s     4.00nm          4.7mb
ARU    58.60 325 eP    31 30.00   -1.2
BWA    59.87 154 eP    31 41.30    1.1
ILT    60.53  22 iPc   31 44.00   -0.3
                 i     31 53.20   30km
DZM    60.68 131 iPd   31 45.90   -0.1
CAN    60.88 154 iPc   31 47.20    0.1
                 i     31 48.10   3kmX
CNB    61.03 154 iPd   31 48.00   -0.1
        0.7s    35.00nm          5.6mb
KIV    68.42 310 eP    32 36.80    0.6
        0.9s    12.00nm          5.0mb
      Z  17s     0.40um          4.7MszX
TTA    69.12  29 eP    32 40.26    0.2
        1.0s     6.32nm          4.6mb
IMA    69.94  26 eP    32 45.64    0.5
        0.9s     3.59nm          4.4mb
CRP    71.06  31 eP    32 52.18    0.1
FBA    72.51  27 eP    33 00.52    0.1
        0.9s     3.71nm          4.4mb
SDF    73.67 336 eP    33 19.00   11.8X
KLU    73.99  30 eP    33 09.19    0.0
KAF    74.93 331 eP    33 14.40   -0.1
INK    77.10  22 eP    33 27.00    0.4
MBC    77.36  12 eP    33 30.00    2.0
VRI    79.09 315 eP    33 40.00    2.0
UPP    79.64 330 iP    33 53.30   12.7X
DAG    80.60 351 iPc   33 45.30   -0.2
        0.8s    10.45nm          4.9mb
APO    81.07 331 eP    33 57.60    9.3X
        0.4s     0.80nm          4.0mb
NB2    82.05 333 P     33 52.40   -1.0
        1.3s    10.60nm          4.7mb
RES    82.82   9 eP    33 58.00    0.9
KSP    83.86 322 eP    34 03.80    0.9
BRG    85.20 323 eP    34 10.80    1.2
CLL    85.54 323 e(P)  34 18.00    6.7X
GEC2   86.23 321 eP    34 15.80    0.9
        1.0s     1.18nm          4.1mb
                 e     34 27.20   37km
                 e     34 29.80
                 e     34 33.40
                 e     34 38.20
                 e     34 42.00
                 e     34 47.30
YKA    86.81  23 eP    34 17.20   -0.2
        0.6s     3.70nm          4.8mb
TOV   148.50  21 ePKP  41 21.50    4.1X
SDV   149.03  24 ePKP  41 19.10    0.6
     S.D. = 1.1  on  75 of  96 obs.
-----------------------------------------
&  NOV  28, 1993   22h 32m 47.20s
   37.637 N            118.941 W
   DEPTH =    7.8km
 CALIFORNIA-NEVADA BORDER REGION ( 40)
      <GM-P>. MD 3.0 (GM).

MEMM    0.03   3 iPc   32 48.83    0.0
MCSM    0.03  58 P     32 48.90   -0.2
MMPM    0.07 249 ePd   32 49.29   -0.3
HTCR    0.17 128 P     32 50.91   -0.2
ORC     0.23  90 P     32 52.04    0.0
MRCM    0.35  84 eP    32 54.10   -0.2
MTUM    0.41 133 iPd   32 55.28   -0.3
BHPR    0.49 133 P     32 56.97   -0.2
CWCR    0.52 106 P     32 57.52   -0.3
BONR    0.60  58 ePc   32 58.90   -0.4
MSTM    1.19 283 P     33 09.32   -0.3
CMB     1.21 290 eP    33 09.24   -0.7
TNP     1.43  71 eP    33 14.05    0.3
KVN     1.56  25 eP    33 16.58    1.1
WLHM    1.57 161 P     33 15.34   -0.3
BRMM    1.70 243 P     33 18.71    1.3
PDRM    1.73 222 P     33 19.47    1.7
PKEM    1.83 211 eP    33 20.41    1.2
VPEM    1.91 151 P     33 22.86    2.3
NMC     1.97 155 P     33 23.71    2.3
RCWM    1.98 148 P     33 23.94    2.5
ISA     2.01 169 eP    33 23.33    1.5
LTR     2.03 249 P     33 23.53    1.4
TOW     2.05 152 P     33 26.02    3.5
BHRM    2.07 245 P     33 24.79    2.2
GHS     2.07 256 P     33 24.38    1.7
ARN     2.08 263 eP    33 23.86    1.0
HSPM    2.12 257 P     33 25.12    1.7
PHAM    2.15 214 eP    33 24.30    0.5
LRC     2.18 231 P     33 25.94    1.6
COE     2.21 261 eP    33 25.99    1.3
TPNV    2.25 107 eP    33 26.37    0.8
WSHM    2.32 149 P     33 30.61    4.3
BCH     2.62 201 eP    33 31.32    0.7
ORV     2.77 314 eP    33 34.02    1.3
ABL     2.79 185 eP    33 34.91    1.7
```

28d 22h

```
GSC      2.90 143 eP    33 36.63   2.0
MSU      5.41  79 (Pn)  34 13.97   3.6
       38 obs. associated
-----------------------------------
&  NOV  28, 1993  22h 48m 33.31s
   37.436 N          118.541 W
   DEPTH =  12.9km
 CALIFORNIA-NEVADA BORDER REGION ( 40)
      <GM-P>. MD 3.1 (GM).

MTUM     0.08 192 iPc   48 36.04  -0.4
BHPR     0.14 163 P     48 36.97  -0.3
CWCR     0.20  72 P     48 37.75  -0.3
ORC      0.22 335 P     48 38.20  -0.3
MRCM     0.24   7 eP    48 37.95  -0.8
CLKR     0.27 305 P     48 38.93  -0.5
BCKR     0.29  27 P     48 39.59  -0.1
MEMM     0.39 306 ePd   48 41.29  -0.2
MMPM     0.42 294 eP    48 41.66  -0.6
BONR     0.55  20 ePd   48 44.14  -0.4
TNP      1.23  58 eP    48 55.78  -0.3
WLHM     1.29 172 P     48 57.18  -0.1
MSTM     1.55 288 P     49 01.54   0.9
CMB      1.58 293 eP    49 01.78   0.7
                  eS    49 21.48
WCHM     1.59 166 P     49 02.75   1.2
KVN      1.65  12 eP    49 03.20   1.0
NMC      1.67 162 P     49 04.03   1.6
TOW      1.74 159 P     49 05.84   2.4
WORM     1.75 172 P     49 05.52   1.9
ISA      1.77 178 (P)   49 06.03   2.1
PDRM     1.83 234 P     49 06.75   2.0
TPNV     1.89 104 eP    49 06.44   0.7
BRMM     1.92 252 P     49 08.32   2.3
WBSM     1.92 170 P     49 08.52   2.3
WSHM     1.99 155 P     49 10.82   3.8
WJPM     2.02 179 P     49 10.09   2.5
LTR      2.28 257 P     49 13.14   2.0
BHRM     2.29 253 P     49 14.26   2.9
CSTL     2.36 276 P     49 15.73   3.4
COE      2.50 267 eP    49 17.83   3.5
GSC      2.55 146 (P)   49 17.07   2.0
ABL      2.64 192 eP    49 17.95   1.4
ARUT     4.07  83 (P)   49 38.05   1.4
MSU      5.14  76 (Pn)  49 52.30   0.2
                  ePg   50 08.16
       34 obs. associated
-----------------------------------
*  NOV  28, 1993  23h 01m 33.60± 0.81s
   9.968 N ±13.6km   79.101 W ± 7.6km
   DEPTH =  33.0km  (normal)
   4.2mb (  1 obs.)
 PANAMA                          ( 81)
      MD 4.1 (UPA).

ECO      0.84 224 eP    01 48.60  -0.4
                  eS    01 56.69
UPA      1.07 204 eP    01 51.38  -0.9
                  eS    02 02.58
BRU      3.60 252 iPc   02 29.48   0.6
                  eS    03 07.34
DVD      3.64 246 iP    02 30.08   1.1
                  eS    03 06.99
SDV      8.42  97 eP    03 36.80   0.2
TOV      9.17  90 eP    03 47.30   0.5
YKA     58.35 342 eP    11 26.70  -1.0
       0.8s      1.60nm          4.2mb
     S.D. = 1.0  on   7 of   7 obs.
-----------------------------------
   NOV  29, 1993  00h 37m 52.03± 1.05s
   43.017 N ± 7.7km   18.723 E ± 6.3km
   DEPTH =  10.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION      (383)

BRY      0.18 229 iPgd  37 56.46   0.4
                  iSg   37 59.27
NKY      0.29 135 iPgc  37 58.28   0.2
                  iSg   38 02.46
PLE      0.58  57 iPgd  38 03.58  -0.3
                  iSg   38 12.46
HCY      0.59 196 iPgd  38 03.57  -0.4
                  iSg   38 12.61
TTG      0.71 146 iPgc  38 05.22  -0.8
                  iSg   38 16.08
BDV      0.74 174 iPgd  38 06.55   0.1
                  iSg   38 16.99
IVA      0.87  99 iPgd  38 09.11   0.2
                  iSg   38 21.90
PVY      1.01 114 iPgd  38 11.78   0.5
                  iSg   38 26.25
ULC      1.12 160 iPgd  38 13.25   0.2
                  iSg   38 29.95
     S.D. = 0.5  on   9 of   9 obs.
-----------------------------------
?  NOV  29, 1993  01h 27m 17.68± 2.91s
   35.188 S ±25.3km   70.449 W ±15.4km
   DEPTH =  10.0km  (geophysicist)
 CHILE-ARGENTINA BORDER REGION   (127)
      MD 3.8 (SAN).

CACH     1.08 353 iPd   27 36.28  -1.7
                  iS    27 51.86
LNV      1.46 327 iPd   27 43.26  -0.8
                  iS    28 02.81
PCH      1.56 358 iP    27 45.08  -0.6
                  iS    28 07.07
TACH     1.58 345 iP    27 45.34  -0.5
                  iS    28 06.35
RFA      1.68  76 iPd   27 47.00  -0.3
                  S     28 08.00
SAN      1.74 354 iP    27 48.49   0.4
FCH      1.86   4 iP+   27 50.47   0.3
                  iS    28 16.78
LCCH     1.94 331 iP+   27 51.43   0.4
                  iS    28 16.78
PEL      2.05 354 iPd   27 53.31   0.7
                  iS    28 21.15
ROCH     2.26 348 iPd   27 56.84   1.0
                  iS    28 27.03
JACH     2.50 357 iP    28 00.50   1.3
                  iS    28 33.87
     S.D. = 1.0  on  11 of  11 obs.
-----------------------------------
*  NOV  29, 1993  02h 17m 41.95± 1.74s
   21.102 S ±12.8km   69.340 W ±18.7km
   DEPTH = 150.6 ± 30.2 km
 NORTHERN CHILE                  (123)

MOCB     3.46  93 P     18 35.20  -1.1
YJA      3.72 107 ePc   18 39.10  -0.7
HJA      4.21 121 ePd   18 42.30  -3.4X
CNCB     4.46  17 P     18 50.00   0.5
LPB      4.69  15 P     18 54.20   1.6
CCH      4.78  40 P     18 53.80   0.2
LPAZ     4.92  14 P     18 55.30  -0.5
ARE      5.04 336 eP    18 56.00  -1.1
                  eS    19 49.00
SLA      5.06 136 iP    18 58.50   1.3
SIV      9.34  58 P     19 48.00  -6.4X
PPD     16.80  96 eP    21 29.40  -0.3
     S.D. = 1.3  on   9 of  11 obs.
-----------------------------------
*  NOV  29, 1993  03h 40m 08.11± 1.89s
   31.262 S ±11.1km   68.822 W ±19.7km
   DEPTH = 113.9 ± 13.5 km
 SAN JUAN PROVINCE, ARGENTINA    (137)

RTCB     0.22 175 iPd   40 24.20  -0.5
ZON      0.31 157 iPd   40 25.00   0.1
                  eS    40 37.00
RTLL     0.31 103 iPd   40 24.70  -0.2
CFA      0.61 125 iPc   40 26.50   0.1
                  S     40 39.00
RTCV     0.64 158 iPd   40 27.00   0.3
MDZ      1.62 181 eP    40 37.90   0.9
                  iS    41 00.50
MRA      2.89 114 eP    40 53.30  -0.1
                  S     41 21.00
RFA      3.51 175 iPc   41 01.20  -0.7
CYA      3.85  44 iPc   41 06.60   0.2
                  S     41 48.50
     S.D. = 0.6  on   9 of   9 obs.
-----------------------------------
*  NOV  29, 1993  04h 09m 05.04± 0.76s
   19.065 S ±13.2km   67.161 W ±13.3km
   DEPTH = 243.5 ±  7.8 km
   4.1mb (  1 obs.)
 SOUTHERN BOLIVIA                (125)

CCH      1.94  30 iPc   09 47.30   0.2
CNCB     2.37 341 iPc   09 51.90   0.4
LPB      2.67 340 iPc   09 54.90   0.4
LPAZ     2.91 341 iPc   09 57.00  -0.3
HJA      4.44 159 iPc   10 15.10   0.8
ARE      4.87 301 iPc   10 18.50  -1.4
                  iS    11 13.50
PPD     15.14 104 eP    12 28.40  -0.1
VAO     19.25 105 eP    13 11.80  -1.5
UYO     58.98 334 iPc   18 40.60  -0.7
ULM     73.52 341 eP    20 14.50   1.8
YKA     89.46 340 eP    21 35.40   0.3
       0.7s      1.90nm          4.1mb
     S.D. = 1.2  on  11 of  11 obs.
-----------------------------------
&  NOV  29, 1993  05h 01m 05.59s
   37.646 N          118.854 W
   DEPTH =   5.1km
 CALIFORNIA-NEVADA BORDER REGION ( 40)
      <GM-P>. MD 2.8 (GM).

MEMM     0.07 287 ePc   01 07.53   0.2
MMPM     0.14 255 iPc   01 08.75   0.0
MRCM     0.28  85 eP    01 11.38   0.1
MTUM     0.37 142 iPd   01 13.01  -0.1
BONR     0.54  55 ePc   01 16.15  -0.2
CMB      1.27 288 eP    01 28.82  -0.9
TNP      1.37  71 eP    01 31.47   0.0
KVN      1.52  23 eP    01 34.37   0.7
ISA      2.00 171 (P)   01 42.71   2.2
TPNV     2.19 108 eP    01 44.82   1.5
ORV      2.82 313 eP    01 52.70   0.6
       11 obs. associated
-----------------------------------
&  NOV  29, 1993  05h 07m 54.07s
   37.646 N          118.852 W
   DEPTH =   5.3km
 CALIFORNIA-NEVADA BORDER REGION ( 40)
      <GM-P>. MD 3.1 (GM). Double
      event. Smaller precursor about 5
      seconds prior to the main event.

MCSM     0.04 282 P     07 55.62   0.0
CLKR     0.06 158 P     07 55.84   0.0
MEMM     0.07 286 eP    07 55.99   0.1
HTCR     0.13 151 P     07 57.00  -0.1
MMPM     0.14 256 ePc   07 57.20  -0.1
ORC      0.16  94 P     07 57.66   0.2
MRCM     0.28  85 eP    07 59.88   0.2
MTUM     0.37 142 eP    08 01.51  -0.1
BCKR     0.38  82 P     08 02.18   0.3
BHPR     0.45 140 P     08 03.17   0.0
CWCR     0.46 109 P     08 08.26   4.9
BONR     0.53  55 iPc   08 04.70  -0.1
CMB      1.27 288 eP    08 16.73  -1.5
TNP      1.36  71 eP    08 19.94   0.1
KVN      1.52  23 eP    08 22.64   0.5
ISA      2.00 171 eP    08 30.56   1.6
ARN      2.15 263 (P)   08 32.80   1.7
TPNV     2.19 108 eP    08 32.36   0.6
PHAM     2.19 215 (P)   08 34.20   2.5
COE      2.28 261 (P)   08 32.13  -0.8
BCH      2.65 202 eP    08 38.98   0.7
ABL      2.81 186 (P)   08 40.99   0.4
ORV      2.82 313 (P)   08 40.53  -0.1
GSC      2.86 144 (P)   08 42.16   0.9
ARUT     4.29  86 (P)   09 04.33   2.6
MSU      5.34  79 (P)   09 14.70  -1.9
       26 obs. associated
-----------------------------------
   NOV  29, 1993  06h 35m 24.46± 0.20s
   20.783 S ± 5.9km  174.092 W ± 4.3km
   DEPTH =  32.6km  ( 13 depth phases)
   5.3mb ( 45 obs.)  5.0Msz (  6 obs.)
 TONGA ISLANDS                   (173)
      Mw 5.3 (HRV). Mo=1.8*10**17 Nm
      (PPT).
      CENTROID, MOMENT TENSOR    (HRV)
      Data Used: GDSN
      L.P.B.: 28S, 43C
      Centroid Location:
      Origin Time        06:35:26.6 0.6
      Lat 21.10S 0.07 Lon 173.57W 0.05
      Dep  21.3 2.5 Half-duration  1.5
      Moment Tensor;   Scale 10**16 Nm
        Mrr= 8.27 0.41  Mtt=-0.43 0.68
        Mff=-7.84 0.54  Mrt= 3.00 0.94
        Mrf= 4.96 1.16  Mtf=-3.33 0.40
       Principal Axes:
        T  Val= 10.08  Plg=72  Azm=312
        N        0.75       5      204
        P      -10.83      17      112
```

```
Best Double Couple:Mo=1.0*10**17
NP1:Strike=194 Dip=29 Slip=  79
NP2:        27     62        96

AFI     7.18  18 eP    37 04.00  -6.0X
                eS    38 40.00
SVA     7.51 289 ePd   37 19.10   4.6X
BKM    16.97 278 iPc   39 24.00   3.0X
DZM    18.17 262 iPc   39 37.80   1.7
PUZ    18.46 199 eP    39 41.90   2.4
MRW    22.49 203 P     40 23.00   0.6
QRZ    23.00 207 eP    40 26.40  -1.0
AFR    23.19  86 iPc   40 28.80  -0.6
       1.5s  337.40nm          5.6mb
PAE    23.35  87 iPc   40 30.40  -0.5
       1.7s  279.00nm          5.5mb
PPT    23.37  86 iPc   40 30.70  -0.5
       1.3s  156.70nm          5.4mb
     Z  28s 3400.00um          7.7MszX
PPN    23.51  86 iPc   40 32.00  -0.5
       1.6s  263.70nm          5.5mb
TVO    23.63  87 iPc   40 33.30  -0.4
       1.2s  131.50nm          5.3mb
THZ    23.63 205 eP    40 33.40  -0.2
LTZ    24.75 205 eP    40 48.10   3.7X
       0.6s   59.00nm          5.3mb
PMO    25.56  81 iPc   40 50.80  -1.4
       1.0s   46.00nm          5.0mb
WVZ    25.61 206 eP    40 52.70   0.3
VAH    25.74  82 iPc   40 52.50  -1.4
       1.1s   54.20nm          5.1mb
TPT    25.83  81 iPc   40 53.20  -1.5
       1.4s  204.80nm          5.5mb
EWZ    25.92 206 eP    40 55.20  -0.1
RUV    25.99  82 iPc   40 54.80  -1.4
       1.4s  119.40nm          5.3mb
CNB    35.14 238 iPd   42 17.10  -0.2
       1.0s   27.00nm          5.1mb
CAN    35.43 238 iPc   42 19.20  -0.5
                i      42 29.10  33km
BWA    35.68 240 eP    42 19.00  -2.9X
                i      42 32.30  50kmX
CTA    37.10 264 iPd   42 33.00  -0.9
       1.8s  102.27nm          5.4mb
                i      42 44.00  39km
                e(PP)  44 09.00
                eS     48 36.00
STK    40.98 245 eP    42 54.20 -11.8X
ASPA   48.02 256 iPc   44 00.50  -2.2
       1.2s   24.60nm          5.1mb
     Z  18s    1.60um          5.0Msz
                eS     51 04.40
WB2    48.17 261 eP    44 01.40  -2.5
       0.9s    9.60nm          4.8mb
                epP    44 12.40  38km
                iPP    45 39.80
WRA    48.18 261 P     44 02.20  -1.8
MTN    52.82 269 iPc   44 37.20  -2.2
       1.0s   88.00nm          5.7mb
KLB    61.24 245 eP    45 38.00  -1.0
MBL    61.26 257 eP    45 36.80  -2.4
MEEK   61.28 250 eP    45 40.50   1.2
BAL    62.28 246 eP    45 44.00  -2.0
MRWA   63.11 247 eP    45 50.50  -1.0
       0.9s   31.00nm          5.4mb
NANU   64.85 254 eP    46 02.00  -0.9
       0.3s    2.00nm          4.7mb
CSY    65.28 206 eP    45 56.10  -8.9X
       0.9s   14.70nm          5.1mb
SPA    69.34 180 iPc   46 33.10   2.3
       0.9s   68.18nm          5.7mb
KAKJ   71.29 322 P     46 42.10  -0.6
CHJJ   71.86 321 P     46 45.60  -0.6
IIDJ   72.11 320 eP    46 55.30   7.5X
MAT    72.66 321 (P)   46 49.00  -2.0
       1.6s  100.00nm          5.6mb
WKYJ   72.68 318 eP    46 50.80  -0.4
MTMJ   72.92 321 P     46 52.00  -0.6
TKSJ   73.50 317 eP    46 55.80  -0.1
YONJ   74.64 318 eP    47 02.30  -0.2
BCH    75.63  43 eP    47 09.13   0.8
ABL    75.98  44 eP    47 10.57   0.1
PLM    76.65  46 eP    47 13.63  -0.6
LEM    76.69 268 ePd   47 15.50   0.7
PEC    76.77  46 eP    47 13.90  -0.8
       1.2s   15.79nm          4.9mb
ISA    76.96  44 eP    47 15.87   0.1
       1.3s   29.68nm          5.2mb
CMB    77.24  41 eP    47 17.05  -0.1
       1.2s   15.44nm          4.9mb
GSC    77.84  45 eP    47 20.95   0.4
GLA    77.87  48 ePc   47 21.04   0.3
                e      47 29.64  27km
MTUM   77.94  42 (P)   47 21.49   0.2
BONR   78.47  42 eP    47 24.26   0.0
TNP    79.23  42 eP    47 28.38   0.0
       0.7s    8.36nm          4.8mb
KVN    79.27  41 ePd   47 28.82   0.3
TUC    80.31  50 eP    47 35.61   1.5
       1.5s   25.71nm          5.0mb
SSE    80.71 308 eP    47 32.50  -3.6X
ARUT   81.48  44 eP    47 41.01   0.8
RMW    82.57  33 ePc   47 45.50   0.0
MSU    82.71  44 ePc   47 47.53   0.8
MDJ    82.89 323 eP    47 47.60   0.4
       1.4s   41.00nm          5.3mb
     Z  20s    0.74um          5.1Msz
                SKS    58 08.00
NJ2    82.91 308 Pd    47 48.50   1.0
       1.4s   25.00nm          5.1mb
                pP     47 58.20  31km
DUG    83.24  43 eP    47 49.18  -0.1
       1.2s    8.09nm          4.7mb
SLKM   83.29  12 eP    47 47.44  -1.5
CRP    83.65  10 eP    47 49.10  -1.8
SRU    84.12  44 ePc   47 54.42   0.6
HVU    84.16  41 eP    47 53.71  -0.2
EMUT   84.31  44 eP    47 55.68   0.9
PMR    84.50  12 (P)   47 53.62  -1.3
       1.6s   93.47nm          5.7mb
TTA    84.65   8 eP    47 55.82   0.1
       1.3s   19.32nm          5.1mb
DPW    84.69  34 eP    47 56.20  -0.1
PV10   84.71  46 eP    47 57.21   0.3
PV09   84.71  46 eP    47 57.45   0.5
ALQ    84.76  50 eP    47 57.78   0.7
       1.2s   21.37nm          5.2mb
                i      48 09.70  39km
CN2    84.79 321 eP    47 57.40   0.6
       1.2s   16.00nm          5.1mb
     Z  20s    0.25um          4.6Msz
                epP    48 08.00  33km
                eS     58 29.00
SNY    84.81 318 eP    47 57.10   0.2
PV08   85.08  46 eP    47 59.65   0.8
TOA    85.55  13 eP    48 00.70   0.4
WHN    85.58 305 eP    48 02.00   1.0
       1.5s   41.00nm          5.4mb
                pP     48 11.00  28km
TIA    86.19 311 Pc    48 04.80   0.8
LRM    86.64  38 eP    48 06.50   0.3
FBA    87.78  11 ePc   48 10.01  -1.0
       1.5s   58.14nm          5.6mb
IMA    87.95   8 eP    48 11.50  -0.5
       1.6s   27.08nm          5.3mb
BJI    88.69 314 eP    48 15.50  -0.4
       2.0s   64.00nm          5.6mb
     Z  24s    0.32um          4.7MszX
                epP    48 26.00  33km
GYA    89.99 298 iPc   48 23.40   0.9
       1.2s   33.00nm          5.5mb
                pP     48 33.00  30km
TIY    90.22 311 eP    48 24.50   1.3
     Z  30s    0.62um          4.9MszX
MEO    90.43  53 iPd   48 25.00   0.8
XAN    91.24 306 P     48 29.00   1.0
       1.1s   20.00nm          5.4mb
                pP     48 38.40  29km
                sP     48 43.40
OCO    91.57  53 iPc   48 30.60   1.2
NST    91.62 286 eP    48 31.70   1.8
HHC    92.19 313 P     48 33.00   0.7
       1.4s   20.00nm          5.4mb
KMI    92.75 296 Pd    48 37.00   1.6
       1.6s   80.00nm          5.9mb
     Z  25s    1.00um          5.2MszX
                pP     48 47.00  31km
INK    93.62  14 eP    48 38.00  -0.1
       1.0s    4.00nm          4.8mb
CHTO   93.79 289 ePc   48 41.50   1.6
       1.5s   32.66nm          5.5mb
YKA    95.27  24 eP    48 45.00  -0.8
       0.8s    2.10nm          4.6mb
LZH    95.87 306 eP    48 50.00   0.6
       1.5s   53.00nm          5.8mb
     Z  18s    0.44um          5.0Msz
                pP     49 00.00  31km
                sP     49 06.50
CNCB   98.47 112 P     49 08.00   6.0X
LPB    98.48 111 P     49 09.00   7.1X
                LR     21 50.00
LPAZ   98.56 111 (P)   49 08.39   5.9X
       1.4s    6.20nm          4.9mb
SOB1  125.19 118 ePKP  54 24.30   0.1
MAIO  131.04 300 ePKP  54 37.00   2.1X
GAZ   148.30 308 ePKP  55 09.20   3.6X
KAS   148.75 317 ePKP  55 11.50   5.1X
WTS   148.84 359 ePKP  55 10.50   4.5X
       1.0s   29.50nm
KSP   148.91 347 iPKPc 55 10.60   4.4X
       1.1s   37.00nm
                i      55 25.10
CLL   149.03 351 iPKPc 55 10.80   4.4X
       1.5s   50.00nm
                i      55 20.90
SPC   149.43 341 ePKP  55 03.00  -4.3X
VRI   149.71 331 ePKPc 55 12.50   4.9X
MOX   149.86 353 ePKP  55 12.90   5.2X
       1.6s   52.00nm
                e      55 18.80
                e      55 23.20
PRU   150.06 349 iPKPc 55 13.40   5.4X
       1.4s   48.70nm
                e      55 22.20
ENN   150.08 360 ePKP  55 13.50   5.6X
       1.0s   15.00nm
MLR   150.35 331 ePKPc 55 13.00   4.3X
PSZ   150.67 341 ePKP  55 15.00   6.0X
KHC   151.06 350 PKP   55 10.00   0.5
       1.3s   30.20nm
                e      55 16.20
                e      55 49.50
WLF   151.18 360 iPKP  55 17.00   7.4X
ZST   151.20 344 ePKP  55 15.40   5.7X
SRO   151.23 342 ePKP  55 16.90   7.1X
GEC2  151.31 349 ePKPc 55 16.40   6.4X
       1.4s   18.42nm
                e      55 20.20
                e      55 25.40
                e      55 30.40
FLN   151.62   9 ePKP  55 16.10   5.8X
       1.2s   45.20nm
     Z  19s    0.20um          4.9Msz
LDF   151.83   8 ePKP  55 16.60   5.9X
       1.1s   44.70nm
GRR   151.92  10 ePKP  55 17.00   6.2X
       0.9s   20.80nm
LPF   152.24  10 ePKP  55 18.00   6.8X
       0.8s   18.95nm
CDF   152.41 358 ePKP  55 18.40   6.8X
       1.3s   35.00nm
HAU   152.84 359 ePKP  55 19.30   7.2X
       1.1s   18.80nm
BSF   153.01 359 ePKP  55 19.40   6.9X
       1.0s   11.60nm
KBA   153.08 349 iPKPd 55 20.20   7.5X
       0.7s    8.00nm
                i      55 32.20
WTTA  153.18 351 iPKPc 55 20.50   7.6X
       0.6s    8.20nm
                i      55 34.30
LOR   153.53   3 ePKP  55 20.80   7.7X
       0.9s    8.50nm
     Z  22s    0.28um          5.0Msz
SSF   153.71   4 ePKP  55 21.30   7.9X
       1.4s   42.70nm
LBF   153.82   3 ePKP  55 21.40   7.8X
       0.9s    7.70nm
BGF   154.17   5 ePKP  55 22.20   8.2X
       0.8s    7.40nm
     S.D. = 1.1  on  92 of 134 obs.
-----------------------------------
*  NOV  29, 1993  06h 57m 52.60± 1.85s
   38.187 S ±12.5km  175.917 E ±10.0km
   DEPTH = 221.1 ± 15.5 km
 NORTH ISLAND, NEW ZEALAND        (159)

MGZ     0.87 200 Pd    58 24.40   0.3
URZ     0.94  95 Pc    58 23.40  -1.0
                S      58 42.00
NGZ     1.02 194 P     58 25.00  -0.1
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29d 06h

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CNZ     1.05 196 P     58 25.40   0.1
PAHZ    1.12 127 P     58 25.30  -0.3
TTH     1.53 153 P     58 29.30   0.6
WAHZ    1.55 167 Pc    58 29.10   0.1
MAHZ    1.83 124 eP    58 31.80   0.3
PUZ     1.85  87 P     58 31.60   0.0
                S     58 56.20
TEHZ    1.93 159 P     58 32.50   0.1
HBZ     1.98  73 eP    58 33.20   0.4
PGZ     2.44 174 P     58 37.60   0.0
MNG     2.45 188 Pc    58 37.90   0.2
                S     59 06.80
KIW     2.78 196 P     58 41.30   0.0
MTW     2.99 186 P     58 43.30  -0.3
CAW     2.99 192 P     58 43.80   0.1
DIW     3.03 210 P     58 44.80   0.6
AMW     3.12 182 P     58 44.90  -0.2
MRW     3.18 197 P     58 45.70  -0.2
BLW     3.20 186 P     58 45.80  -0.2
MOW     3.27 189 P     58 46.60  -0.3
TCW     3.28 202 P     58 46.70  -0.3
     S.D. = 0.4  on  22 of  22 obs.
-------------------------------------
   NOV  29, 1993  07h 32m 05.59± 0.75s
    0.105 S ± 3.5km  123.005 E ± 4.7km
   DEPTH = 145.5 ±  7.0 km
   5.1mb ( 53 obs.)
 MINAHASSA PENINSULA, SULAWESI   (265)

MNI     2.39  50 ePd   32 45.60   0.0
                eS    33 17.00
TSM     6.74 310 iPc   33 42.00  -1.3
                iS    34 43.50
KKM     9.12 312 ePd   34 17.00   1.7
      0.4s   130.40nm          5.9mb
                e     35 29.00
QCP    14.77 353 eP    35 48.00  19.4X
MTN    15.01 148 eP    35 30.50  -1.0
      0.3s   110.00nm          5.7mb
BAG    16.58 352 ePc+  35 51.00  -0.3
      1.7s   230.77nm          5.2mb
                eS    39 05.00
LEM    16.74 246 ePc   35 53.20   0.1
      1.0s    70.00nm          4.9mb
                e(S)  39 07.50
KGM    19.79 276 ePc   36 26.40  -0.5
WWKK   20.90 100 eP    36 40.00   2.0
MBL    21.15 188 eP    36 40.00  -0.5
      0.3s    21.00nm          5.0mb
IPM    22.44 282 ePd   36 54.30   1.1
      0.7s    60.40nm          5.1mb
WRA    22.63 151 P     36 55.50   0.5
      0.7s    58.80nm          5.1mb
WB2    22.63 151 iPd   36 55.20   0.2
      0.8s    88.00nm          5.2mb
                ipP   37 23.60 142kmX
                eScP  44 08.00
QIZ    22.99 327 eP    37 00.00   1.6
                eS    40 57.00
SNG    23.47 288 eP    37 05.00   1.8
NANU   23.48 198 iPc   37 02.80  -0.4
GZH    24.89 338 P     37 17.60   1.1
                S     41 32.00
ASPA   25.70 156 iPc   37 23.90  -0.2
      0.4s    45.70nm          5.4mb
                epP   37 49.40 120kmX
                iPcP  40 50.90
                eS    41 41.70
                iScP  44 18.00
                iScS  48 04.70
PMG    25.76 112 eP    37 24.50  -0.1
QIS    26.02 142 iPc   37 27.30   0.4
NNT    26.31 299 eP    37 30.80   1.2
MEEK   26.72 189 iPc   37 31.60  -1.7
      0.5s    36.00nm          5.2mb
NST    27.49 306 eP    37 40.50   0.2
KHT    28.31 303 eP    37 48.30   0.5
MRWA   29.71 192 iPc   37 58.70  -1.4
      0.4s    22.00nm          5.2mb
CHTO   30.19 310 ePc   38 05.00   0.6
      0.7s    26.21nm          5.1mb
CTA    30.21 132 iPc   38 05.00   0.4
      1.1s    56.96nm          5.2mb
                e     38 38.00
                e     41 42.00
COOL   30.66 183 eP    38 07.50  -0.9
GYA    30.75 330 iPd   38 09.80   0.4
      0.8s    40.00nm          5.2mb
                pP    38 41.40 149kmX
                sP    38 57.00
                PP    39 20.00
                PcP   41 03.00
                S     43 02.00
                ScP   44 31.40
FORT   30.88 172 eP    38 09.50  -0.8
      0.5s    26.00nm          5.2mb
BAL    30.92 191 iPc   38 08.90  -1.8
      0.3s    40.00nm          5.6mb
SSE    31.08 357 eP    38 13.00   1.0
    Z  20s     0.60um          4.3Msz
    E  10s     0.30um
                sP    39 00.00
                S     43 06.00
WHN    31.57 346 eP    38 17.50   1.2
KLB    31.71 189 eP    38 15.50  -2.0
      0.3s    12.00nm          5.2mb
KMI    31.83 323 Pd    38 20.00   1.0
      1.8s    50.00nm          5.0mb
                S     43 20.00
NJ2    32.22 353 Pd    38 27.50   5.5X
TKSJ   35.46  16 eP    38 49.50  -0.2
CD2    35.85 331 P     38 53.50   0.4
      0.9s    46.00nm          5.2mb
                S     44 19.00
WKYJ   36.13  18 eP    38 55.40   0.0
STK    36.17 153 iPc   38 45.10 -10.6X
                eS    43 58.90
YONJ   36.44  14 eP    38 57.70  -0.3
XAN    36.45 340 P     38 57.70  -0.4
      1.0s    36.00nm          5.1mb
    Z  14s     0.60um          4.5MszX
    E  12s     0.51um
TIA    36.54 352 eP    39 00.00   1.2
TIY    38.88 347 Pc    39 20.00   1.6
    Z  22s     0.77um          4.5Msz
    E  16s     0.76um
CHJJ   38.92  21 P     39 17.20  -1.5
MTMJ   39.00  19 P     39 18.70  -0.8
MAT    39.10  20 eP    39 19.00  -1.2
      0.9s    16.81nm          4.8mb
                eS    43 58.00
BRS    39.41 136 iPc   39 23.00   0.1
      0.7s    17.00nm          4.9mb
LZH    40.18 336 P     39 30.00   0.8
      1.6s    95.00nm          5.3mb
                sP    40 15.00
                PP    41 04.00
                S     45 24.00
BJI    40.44 352 eP    39 31.50   0.4
      1.0s    11.00nm          4.5mb
    Z  20s     0.54um          4.4Msz
ARMA   40.61 141 iPc   39 34.20   1.4
      1.0s    57.00nm          5.2mb
                e     40 04.20
BWA    41.61 148 iPc   39 43.50   2.6X
                e     40 23.80
HHC    42.07 347 P     39 46.40   1.8
LSA    42.43 317 Pd    39 49.00   0.9
      0.8s    38.00nm          5.1mb
                S     46 00.00
CAN    42.60 148 iPc   39 50.50   1.6
                e     40 20.10
                i     40 30.20
RIV    42.70 145 eP    39 51.00   1.4
                e     40 31.70
CNB    42.79 148 iPd   39 52.80   2.3
                i     40 32.00
GTA    44.69 334 P     40 06.50   0.7
      1.5s    52.00nm          5.0mb
    Z  14s     0.58um          4.7MszX
                pP    40 37.00 135kmX
                ScP   45 24.50
                S     46 32.00
                sS    47 25.00
MDJ    44.91   7 eP    40 06.40  -0.9
      0.6s     9.30nm          4.6mb
GUN    45.19 311 P     40 10.20   0.0
PKI    45.37 310 P     40 11.00  -0.6
KKN    45.58 311 P     40 12.80  -0.3
DMN    45.62 310 P     40 13.20  -0.3
GKN    46.18 310 P     40 17.50  -0.3
HYB    47.08 294 eP    40 23.60  -1.3
GBA    47.14 289 P     40 21.00  -4.3X
DZM    47.61 120 iPc   40 29.90   0.9
BKM    47.79 114 iPd   40 41.60  11.3X
NDI    52.28 307 iP    41 03.00  -1.4
CIT    52.52 353 eP    41 07.00   1.2
ZAK    53.04 344 eP    41 08.20  -1.3
      1.3s    20.00nm          4.8mb
WMQ    53.88 329 P     41 15.00  -1.0
      0.7s    12.00nm          4.9mb
                pP    41 53.50 168kmX
BOD    58.21 354 eP    41 44.00  -2.4
      0.6s    20.00nm          5.2mb
KSH    58.22 318 eP    41 48.00   0.9
      1.0s    20.00nm          5.0mb
    Z  20s     1.23um          5.0Msz
    N  16s     1.43um
    E  16s     1.35um
                pP    42 22.00 144kmX
                sP    42 40.00
                PP    43 55.00
                sS    50 32.00
MSZ    59.57 144 eP    41 55.50  -0.5
YAK    62.17   4 eP    42 12.10  -1.1
      0.5s    59.00nm          5.8mb
MNG    62.30 137 eP    42 13.60  -1.0
URZ    62.44 134 P     42 14.70  -0.8
PGZ    62.84 137 eP    42 17.60  -0.5
CSY    66.64 185 iPd   42 31.40 -10.7X
      0.5s    53.10nm
SMY    67.64  31 eP    42 46.67  -1.9
      1.0s    89.17nm          5.6mb
TIK    71.72   2 iPd   43 11.00  -2.1
      1.2s    75.00nm          5.3mb
                e     45 51.00
ADK    72.21  34 (P)   43 15.75  -0.6
SVE    75.31 330 eP    43 31.00  -3.2X
      2.0s    60.00nm          5.0mb
ARU    76.19 329 eP    43 38.00  -1.2
ILT    78.63  19 iPc   43 52.00  -0.4
      1.2s    35.00nm          5.0mb
MAW    78.90 200 P     43 54.90   1.1
      1.1s    44.44nm          5.1mb
ANM    82.27  24 eP    44 12.70   1.0
SDN    82.42  34 (P)   44 12.18  -0.4
      0.5s    51.04nm          5.6mb
SVW    85.91  29 eP    44 29.92  -0.2
      0.6s    15.87nm          5.0mb
BRW    86.97  19 (P)   44 35.61   0.6
KDC    87.14  32 eP    44 35.60  -0.4
      0.4s     7.74nm          5.0mb
IMA    87.37  24 ePc   44 37.13  -0.1
      0.6s     7.72nm          4.9mb
CP2    87.56  29 eP    44 37.06  -1.2
CRP    87.60  29 eP    44 37.70  -0.7
SLKM   88.49  30 eP    44 41.16  -1.4
PWA    88.72  28 eP    44 42.90  -0.6
PMO    89.10 105 eP    44 49.50   3.3X
      1.4s   177.70nm          5.9mb
VAH    89.36 105 eP    44 50.50   3.1X
      1.4s   115.90nm          5.7mb
TPT    89.37 105 eP    44 52.10   4.7X
      1.5s    27.90nm          5.1mb
RUV    89.60 105 eP    44 51.50   3.0X
      1.4s   154.20nm          5.9mb
FBA    89.75  25 eP    44 46.56  -1.8
      0.7s     4.74nm          4.6mb
SPA    89.89 180 ePc   44 49.40   0.3
      1.1s    41.67nm          5.4mb
TOA    90.48  28 ePc   44 52.00   0.2
KLU    90.61  29 eP    44 51.99  -0.4
BALM   92.35  29 eP    45 00.58   0.1
BUL    94.09 250 iP    45 07.50  -1.8
      0.5s    10.92nm          5.4mb
INK    95.07  21 eP    45 12.00  -0.7
      0.5s     2.00nm          4.7mb
NSD    96.03 336 eP    45 14.40  -2.7
      0.4s     1.00nm          4.6mb
MBC    96.48  12 eP    45 20.00   1.0
DAG   100.53 352 iPdiff45 34.80  -2.4
      0.5s     4.93nm          5.4mb
RES   102.21  10 ePdiff45 45.00   0.3
LJU   102.83 317 ePdiff45 47.00  -1.1
YKA   104.50  24 ePdiff45 55.70   0.6
      0.7s     0.80nm          4.8mb
LRM   113.44  39 ePKP  50 28.30  -0.1
GSC   114.35  51 ePKP  50 30.73   0.4
HVU   114.95  43 ePKP  50 31.60   0.3
DUG   115.56  45 ePKPd 50 32.84   0.3
DAU   116.56  44 (Pdiff46 48.29  -1.4
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MSU   116.69  46 iPKPd 50 35.88   1.1
EMUT  117.12  44 ePKP  50 35.88   0.3
SRU   117.62  45 ePKP  50 36.40  -0.1
PV09  118.86  45 ePKP  50 39.43   0.4
PV10  118.98  45 ePKPc 50 39.52   0.3
PV08  119.17  45 ePKP  50 40.02   0.3
ULM   120.08  28 ePKP  50 42.00   1.5
GOL   120.91  42 ePKP  50 42.84   0.0
ALQ   122.34  48 ePKPc 50 45.87   0.3
KIC   127.49 278 PKP   50 55.24  -0.7
       0.6s    10.50nm
TIC   127.74 278 PKP   50 55.68  -0.7
       0.4s     7.00nm
LIC   127.79 278 PKP   50 55.70  -0.8
       0.6s    14.00nm
WMOK  127.96  44 ePKP  50 56.31   0.1
LKO   127.99 282 PKP   50 56.26  -0.6
       0.5s    15.50nm
UYO   131.24  42 iPKPc 51 03.00   0.5
GAC   131.75  17 ePKP  51 03.00   0.0
OXF   134.28  38 ePKP  51 08.49   0.3
RFA   143.68 164 ePKPc 51 23.00  -2.4
PEL   144.50 160 iPKP+ 51 26.20  -0.6
MDZ   145.34 162 ePKP  51 28.40   0.1
RTCB  146.65 161 e(PKP)51 33.00   2.5
CFA   146.71 162 ePKPd 51 32.80   2.3
RTLL  146.90 162 e(PKP)51 32.80   1.9
YJA   156.36 160 ePKPc 51 47.30   1.9
PPD   157.31 194 ePKP  51 46.10   0.0
                 e     52 17.70
CNCB  160.00 148 PKP   51 51.80   1.9
LPB   160.17 147 PKP   51 51.20   1.3
LPAZ  160.35 147 ePKP  51 51.59   1.3
CCH   160.43 153 PKP   51 52.10   2.1
     S.D. = 1.1  on 136 of 148 obs.
-----------------------------------
?  NOV  29, 1993  09h 15m 44.41± 2.72s
   19.036 N ±17.9km   69.261 W ±37.7km
   DEPTH = 162.0 ± 44.4 km
   3.7mb (  1 obs.)
 DOMINICAN REPUBLIC REGION        ( 88)

MGP     2.30 116 P     16 23.00  -1.1
APR     2.47 103 P     16 26.90   0.7
PORP    2.67 111 P     16 28.00  -0.7
CLLP    2.72 110 P     16 28.80  -0.4
SJG     3.09 107 iP    16 34.70   0.7
LPR     3.29 102 P     16 36.50  -0.1
CPD     3.33 107 P     16 38.00   1.1
CANV    7.96 177 eP    17 37.80  -0.6
TOV     9.21 183 eP    17 55.90   1.0
OLLA    9.27 165 eP    17 55.00  -0.8
                 eS    19 26.60
SDV    10.18 188 eP    18 08.30   0.5
YKA    53.43 336 eP    24 49.10  -0.2
       0.6s     0.90nm          3.7mb
     S.D. = 0.9  on  12 of  12 obs.
-----------------------------------
*  NOV  29, 1993  09h 26m 14.78± 1.60s
   14.330 N ±18.3km   94.163 W ± 8.3km
   DEPTH =  70.1 ± 12.6 km
   3.9mb (  1 obs.)
 OFF COAST OF CHIAPAS, MEXICO     ( 68)

TPX     1.93  73 iP    26 46.00   0.0
                 (S)   27 04.00
SCX     2.81  31 iP    26 58.50   0.2
                 iS    27 27.50
ACX     6.04 295 (P)   27 43.00  -0.6
III     6.49 309 eP    27 50.00   0.0
UNM     6.92 317 (P)   27 43.00 -13.0X
CRX     7.31 314 (P)   28 03.00   1.6X
MRX     8.59 309 (P)   28 19.50   0.8
UYO    19.75 359 iPd   30 40.30  -1.4
MEO    20.75 350 iPd   30 51.90  -0.2
OCO    21.31 353 iPd   31 06.10   8.4X
ACO    22.72 350 iPd   31 15.60   4.0X
YKA    50.24 348 eP    35 06.90   1.4
       0.7s     0.90nm          3.9mb
WRA   133.44 256 Pdiff 42 22.90  -0.2
       0.6s     0.20nm
     S.D. = 1.0  on   9 of  13 obs.
-----------------------------------
?  NOV  29, 1993  10h 04m 00.72± 3.46s
   31.568 S ±32.4km   69.369 W ±42.7km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTCB    0.49  81 ePd   04 16.90   0.1
                 S     04 31.70
RTCV    0.77 113 eP    04 19.00  -0.1
                 S     04 35.00
RTLL    0.80  73 ePd   04 19.40   0.0
                 S     04 35.00
CFA     0.96  93 ePc   04 21.10   0.0
                 S     04 38.00
RTRS    1.40 357 e(P)  04 26.00   0.0
     S.D. = 0.1  on   5 of   5 obs.
-----------------------------------
?  NOV  29, 1993  10h 16m 27.11± 3.35s
    4.524 S ±28.9km  146.902 E ±26.3km
   DEPTH = 104.9 ± 17.9 km
   3.8mb (  2 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)

MDG     1.33 237 eP    16 52.00   0.1
LAT     2.13 177 eP    17 03.00   0.9
WWKK    3.39 285 eP    17 36.00  16.9X
MNDI    3.61 243 eP    17 22.00  -0.3
PMG     4.86 177 eP    17 38.00  -1.2
WB2    19.61 218 eP    20 50.30   0.6
       0.7s     3.70nm          3.8mb
ASPA   22.79 212 eP    21 27.00   5.4X
       0.9s     3.80nm          3.7mb
NNT    49.86 291 eP    25 11.80  -0.1
     S.D. = 1.2  on   6 of   8 obs.
-----------------------------------
&  NOV  29, 1993  10h 47m 04.03s
   38.816 N          122.763 W
   DEPTH =   2.2km
   3.2mb (  1 obs.)
 NORTHERN CALIFORNIA              ( 36)
      <GM-P>. MD 3.8 (GM). ML 3.9
      (GS), 3.8 (BRK). Felt (V) at
      Cobb and (IV) at Geyserville,
      Kelseyville and Middletown. Also
      felt in The Geysers area.

GDXM    0.03 251 P     47 04.55  -0.3
GGPM    0.08 231 P     47 05.88   0.1
GAXM    0.11 177 P     47 06.30   0.1
SKG     0.23 240 P     47 09.05   0.5
NMTM    0.25  92 P     47 09.42   0.4
GMCM    0.29 265 P     47 10.18   0.4
GHGM    0.32 351 P     47 10.55   0.2
GWKM    0.32  42 P     47 10.93   0.6
GDCM    0.38 263 P     47 12.13   0.6
GHCM    0.40 238 P     47 12.47   0.5
NTYM    0.43 169 iPd   47 12.89   0.2
NBPM    0.47 108 P     47 14.46   1.1
GGUM    0.58 274 P     47 15.85   0.3
BBR     0.58 163 P     47 15.65   0.1
NTBM    0.58 193 P     47 16.20   0.5
GNAM    0.78 300 P     47 19.70   0.2
GCBM    0.82 314 P     47 21.12   0.8
KSPM    0.91 321 P     47 20.47  -1.7
CPIM    0.93 152 P     47 22.48  -0.1
ZSP     0.96 155 iPd   47 22.47  -0.5
                 eS    47 33.87
DUC     0.99 142 P     47 24.17   0.7
HMR     1.00 131 eP    47 23.60  -0.1
CVPM    1.02 155 P     47 24.30   0.2
BKS     1.03 156 ePd   47 23.08  -1.1
                 eS    47 38.35
BKC     1.03 150 P     47 23.76  -0.4
BGC     1.14 151 P     47 25.56  -0.6
LKC     1.21 153 P     47 26.54  -0.7
ORV     1.23  53 iPc   47 25.41  -2.2
ARRM    1.24  92 P     47 25.89  -2.0
MTC     1.26 143 P     47 27.71  -0.4
JEGM    1.32 170 eP    47 27.15  -2.0
AHRM    1.32  88 P     47 27.06  -2.2
AASM    1.35 106 P     47 27.76  -2.0
ARJM    1.42  95 P     47 28.73  -2.1
CVAL    1.43 146 P     47 30.35  -0.7
STAN    1.48 162 eP    47 31.45  -0.3
ADWM    1.55 103 P     47 30.78  -1.9
JBMM    1.57 162 P     47 31.92  -1.1
ASMM    1.62  89 P     47 32.58  -1.3
MHR     1.66 151 P     47 32.82  -1.4
MHC     1.72 149 ePc   47 33.78  -1.4
                 eS    47 57.36
LXR     1.72 159 P     47 33.08  -2.1
ARN     1.76 146 eP    47 33.93  -1.8
MIN     1.77  30 ePd   47 34.79  -1.2

WDC     1.77   6 eP    47 34.51  -1.3
COE     1.78 151 eP    47 34.67  -1.3
AMC     1.81 156 P     47 34.49  -1.9
JRGM    1.88 160 P     47 36.36  -1.2
EUC     1.92 157 P     47 36.09  -1.9
JRRM    1.94 155 P     47 36.15  -2.2
LMEM    1.95  28 eP    47 38.20  -0.4
MOYM    1.95 117 P     47 36.79  -1.7
HSPM    1.96 149 P     47 37.43  -1.3
HGWM    2.00 154 P     47 37.24  -1.9
CMB     2.02 112 ePc   47 38.24  -1.4
                 eS    48 05.01
MSTM    2.07 115 P     47 39.47  -0.7
CSR     2.08 153 P     47 38.36  -1.9
LGPM    2.09 359 eP    47 42.12   1.4
EKR     2.16 331 iPd   47 48.66   7.3
FHC     2.20 335 (P)   47 41.22  -0.8
HSFM    2.24 153 P     47 39.66  -3.0
ARC     2.29 334 ePd   47 53.84  10.4
SAO     2.30 153 eP    47 40.62  -2.9
HJSM    2.31 149 P     47 41.60  -2.1
BVYM    2.32 152 P     47 41.91  -2.0
BSLM    2.32 151 P     47 43.11  -0.8
BRMM    2.50 142 P     47 46.18  -0.3
LBFM    2.62  15 eP    47 48.08  -0.1
HVC     2.89 147 P     47 50.97  -1.0
YBH     2.91   1 eP    47 54.04   1.7
FRI     3.03 126 iPd   47 53.28  -0.5
PRI     3.15 147 iP    47 54.55  -1.1
MMPM    3.18 111 (P)   47 54.08  -2.2
MEMM    3.22 110 eP    47 55.67  -0.9
PHAM    3.52 147 eP    47 58.08  -2.8
BONR    3.61 102 eP    48 01.78  -0.6
MTUM    3.62 112 eP    48 02.56   0.1
KVN     3.64  85 eP    48 01.54  -1.3
BCH     4.21 149 eP    48 07.37  -3.4
TNP     4.41  98 ePn   48 12.05  -1.7
ISA     4.65 131 eP    48 14.90  -2.1
TPNV    5.48 108 (Pn)  48 26.28  -2.6
       0.6s     7.43nm          4.5mb X
GSC     5.92 125 eP    48 33.38  -1.5
SSK     6.15 137 eP    48 35.45  -2.8
PEC     6.68 136 eP    48 41.92  -3.7
PLM     7.25 137 eP    48 50.00  -3.7
ARUT    7.40  95 ePn   48 55.88   0.0
DUG     7.82  77 eP    48 59.49  -2.2
MSU     8.29  89 eP    49 06.59  -1.8
EMUT    9.31  80 eP    49 23.53   0.9
SRU     9.54  84 eP    49 23.83  -1.8
PV09   10.67  87 (P)   49 40.81  -0.4
PV10   10.75  88 eP    49 40.61  -1.8
MEO    19.76  94 iPc   51 38.50   0.3
YKA    24.22   9 eP    52 25.10   2.4
       0.6s     0.40nm          3.2mb
       95 obs. associated
-----------------------------------
&  NOV  29, 1993  11h 07m 00.32s
   33.711 N          116.847 W
   DEPTH =  16.3km
 SOUTHERN CALIFORNIA              ( 43)
      <PAS-P>. ML 2.7 (PAS). Felt.

PEC     0.32 305 ePc   07 06.48  -0.7
PLM     0.36 182 ePd   07 07.65  -0.3
SSK     0.86 306 eP    07 15.64  -0.9
GSC     1.59   1 eP    07 27.63  -0.3
                 eS    07 45.92
GLA     1.81 111 eP    07 31.87   0.7
TPNV    3.27   8 (P)   08 05.77  13.8
       6 obs. associated
-----------------------------------
&  NOV  29, 1993  11h 35m 29.44s
   59.436 N          152.737 W
   DEPTH =  78.4km
   3.1mb (  1 obs.)
 SOUTHERN ALASKA                  (  2)
      <AEIC>.

OPT     0.33 311 iPd   35 41.30  -0.7
                 eS    35 50.69
AUE     0.33 257 iPd   35 41.31  -0.6
AUL     0.36 262 ePd   35 41.60  -0.5
AGU     0.36 258 ePd   35 41.65  -0.6
AUH     0.37 259 ePd   35 41.66  -0.6
AUW     0.38 260 ePd   35 41.66  -0.6
XLV     0.52  87 eP    35 42.33  -1.1
                 eS    35 52.98
```

29d 11h

```
HOM      0.60  68 ePc   35 43.57  -0.6
INE      0.65 345 eP    35 44.05  -0.8
ILIM     0.66 350 ePd   35 44.00  -0.8
                  eS    35 55.42
INW      0.66 343 eP    35 44.44  -0.5
CDD      0.69 223 iPd   35 44.24  -0.9
                  eS    35 56.06
CNPM     0.77  83 ePc   35 45.08  -0.9
                  eS    35 57.23
PDB      0.82 296 ePd   35 45.71  -0.8
                  eS    35 58.24
RED      0.99 359 eP    35 47.85  -0.7
                  eS    36 02.27
BRLK     1.00  70 eP    35 48.08  -0.6
                  eS    36 01.81
RS2      1.03 359 eP    35 49.44   0.2
RDW      1.05 358 eP    35 48.83  -0.7
REF      1.06   1 eP    35 48.96  -0.6
                  eS    36 03.87
NCT      1.13 355 ePd   35 49.92  -0.5
DFR      1.16   1 ePd   35 50.20  -0.6
NKA      1.51  29 eP    35 56.28   1.1
BKG      1.66   8 ePd   35 56.85  -0.4
                  eS    36 17.95
SLKM     1.66  49 eP    35 56.12  -1.2
KDC      1.70 176 eP    35 56.14  -1.6
CKL      1.78   6 iPd   35 58.60  -0.3
SPU      1.78  11 ePd   35 58.54  -0.4
                  eS    36 20.90
CKT      1.79   8 ePd   35 58.69  -0.4
SEW      1.79  67 eP    35 58.93  -0.1
CKN      1.82   9 eP    35 59.20  -0.2
BGL      1.84   5 ePd   35 59.54  -0.3
CP2      1.85   7 eP    35 59.35  -0.7
CRP      1.86   9 eP    35 58.96  -1.1
CGLM     1.91  11 ePd   36 00.44  -0.3
NCG      2.00   8 ePd   36 01.59  -0.3
SVW      2.21 321 eP    36 03.54  -1.2
SUA      2.26  25 eP    36 05.21  -0.3
PMS      2.41  40 P     36 06.50  -1.0
LTI      2.55  74 eP    36 08.27  -1.1
SKT      2.62  13 eP    36 09.67  -0.8
PWL      2.62  55 ePd   36 08.57  -1.9
PWA      2.63  31 P     36 10.10  -0.4
KNK      2.90  45 eP    36 12.19  -2.2
GHO      3.00  37 eP    36 14.02  -1.8
CFI      3.03  53 eP    36 13.73  -2.3
CUT      3.21  21 eP    36 17.40  -1.2
SML      3.22  40 eP    36 16.95  -1.8
MID      3.27  87 P     36 18.00  -1.3
HIN      3.28  70 eP    36 18.13  -1.5
VZW      3.49  60 eP    36 19.93  -2.5
SCM      3.59  46 eP    36 22.05  -1.9
CVA      3.68  69 eP    36 23.07  -2.0
SGAM     3.93  71 eP    36 26.48  -2.2
KLU      3.96  56 eP    36 26.48  -2.5
TRF      4.20  15 eP    36 31.96  -0.6
HMT      4.37  74 eP    36 32.27  -2.5
RND      4.40  23 eP    36 33.82  -1.4
GLB      4.86  62 eP    36 38.70  -2.9
BALM     5.42  68 eP    36 47.07  -2.5
WRH      5.51  21 eP    36 48.34  -2.3
YAH      5.61  76 eP    36 50.52  -1.8
HDA      5.68  26 eP    36 51.08  -2.0
CCB      5.72  22 eP    36 51.03  -2.5
CTGM     5.89  70 eP    36 54.28  -1.8
FBA      5.95  21 eP    36 53.63  -3.2
YKA     18.57  64 eP    39 39.70  -2.6
         0.6s     0.70nm          3.1mb
         66 obs. associated
-----------------------------------
   NOV  29, 1993  13h 44m 49.11± 0.84s
    2.394 N ± 5.5km  121.215 E ± 6.3km
   DEPTH =  37.0 ±  8.2 km
   4.9mb ( 14 obs.)
 CELEBES SEA                      (262)

TSM      3.83 300 iPd   45 46.50  -0.7
                  i     46 24.50
KKM      6.17 306 ePc   46 21.50   1.2
         0.5s    39.00nm          5.3mb X
DAV      6.37  43 eP    46 22.00  -1.1
MTN     18.06 147 eP    48 59.50   0.4
QIZ     19.93 327 P     49 21.00   0.1
WWKK    23.18 105 eP    49 57.00   3.3X
WB2     25.67 150 iPd   50 17.30  -0.2
         0.6s    20.60nm          4.9mb
GYA     27.71 331 iPc   50 36.40   0.1
         1.0s    24.00nm          4.8mb
ASPA    28.70 155 iPd   50 44.40  -0.7
         0.9s     8.40nm          4.4mb
KMI     28.77 323 Pd    50 46.50   0.5
         1.8s    40.00nm          4.8mb
QIS     29.07 143 iPd   50 48.00  -0.5
CD2     32.82 332 iPc   51 21.00  -0.4
         1.0s    79.00nm          5.5mb
XAN     33.51 341 P     51 26.60  -0.9
         1.0s     9.00nm          4.6mb
TIY     36.06 348 eP    51 49.40   0.1
LZH     37.18 336 Pc    51 59.00   0.2
         1.0s    27.00nm          5.1mb
BJI     37.75 354 eP    52 03.50   0.2
STK     39.19 152 iPd   52 04.80 -10.7X
         0.9s     1.70nm
HHC     39.26 348 eP    52 17.40   1.3
GTA     41.68 335 iPc   52 36.50   0.5
         1.0s    64.00nm          5.3mb
                  pP    52 47.00  36kmX
                  sP    52 50.50
GUN     42.21 310 P     52 41.00   0.1
         0.8s    19.00nm          4.9mb
PKI     42.40 310 P     52 42.00  -0.4
BRS     42.44 136 eP    52 43.00   0.7
KKN     42.61 310 P     52 44.00   0.0
DMN     42.66 309 P     52 43.80  -0.6
MDJ     42.69   9 eP    52 44.60   0.5
         0.8s    16.00nm          4.8mb
GKN     43.21 310 P     52 48.60  -0.2
         0.8s    20.00nm          4.9mb
ARMA    43.66 141 eP    52 53.70   1.4
         0.9s     5.00nm          4.3mb
                  e     53 08.80
GBA     44.67 287 P     53 00.00  -0.6
WMQ     50.83 329 P     53 48.80   0.5
YAK     59.82   5 iPc   54 52.90   0.0
         0.8s    37.00nm          5.6mb
OBN     84.96 325 iPc   57 21.00  -0.7
         1.0s    24.00nm          5.3mb
                  e     57 37.30
                  e     04 18.00
BUL     93.26 250 iP    58 16.50  14.6X
         1.0s     6.00nm
LKO    125.70 283 PKP   03 48.39  -1.2
         0.8s     8.50nm
      S.D. = 0.7  on  30 of  33 obs.
-----------------------------------
*  NOV  29, 1993  14h 09m 14.59± 1.12s
   11.904 N ±10.8km   81.455 W ±14.8km
   DEPTH =  10.0km  (geophysicist)
   3.6mb (  1 obs.)
 NORTH OF PANAMA                  ( 79)
      MD 4.0 (UPA).

ECO      3.06 145 eP    10 03.60  -0.3
                  eS    10 38.50
BRU      3.26 200 eP    10 07.61   0.3
                  eS    10 43.26
UPA      3.46 147 eP    10 10.04   0.4
                  eS    10 47.99
DVD      3.58 196 eP    10 10.98  -0.4
                  eS    10 50.11
YKA     55.81 342 eP    18 54.00   0.0
         0.5s     0.30nm          3.6mb
      S.D. = 0.5  on   5 of   5 obs.
-----------------------------------
   NOV  29, 1993  14h 15m 02.92± 0.29s
   44.640 N ± 1.7km    6.742 E ± 3.0km
   DEPTH =  12.2 ±  2.3 km
 FRANCE                           (538)
      ML 3.0 (LDG), 2.7 (GEN).

RRL      0.28   6 P     15 09.02  -0.1
                  S     15 13.34
PZZ      0.29 118 P     15 09.24   0.0
                  S     15 13.93
BHB      0.42  61 P     15 11.74   0.1
                  S     15 17.96
STV      0.58 133 P     15 14.30  -0.2
                  S     15 22.44
RSP      0.63  35 P     15 15.54   0.1
                  S     15 24.78
ENR      0.64 130 P     15 15.39  -0.2
                  S     15 24.18
TOUF     0.72 150 Pg    15 16.61  -0.5
MVIF     0.80 158 Pg    15 18.43   0.1
                  Sg    15 30.22
AUTN     0.81 142 Pg    15 18.84   0.2
                  Sg    15 29.76
LPG      0.86   0 Pg    15 19.50   0.1
                  Sg    15 31.20
AURF     0.86 151 Pg    15 19.29  -0.1
                  Sg    15 32.13
LSD      0.87  20 P     15 19.47  -0.1
                  S     15 31.21
LPL      0.88 360 Pg    15 19.80   0.1
                  Sg    15 31.70
SAOF     0.88 138 Pg    15 19.93   0.3
                  Sg    15 32.99
ROB      0.88 113 P     15 20.18   0.5
                  S     15 31.72
CALN     0.89 173 Pg    15 20.23   0.3
SBF      0.92 147 Pg    15 20.90   0.5
                  Sg    15 34.10
FRF      1.08 184 Pn    15 23.50   0.4
                  Pg    15 24.70
                  Sg    15 39.20
IMI      1.10 131 P     15 23.87   0.4
FIN      1.14 112 P     15 24.42   0.4
LRG      1.22 193 Pn    15 25.60   0.3
                  Pg    15 26.80
                  Sg    15 43.60
PCP      1.29  94 P     15 27.18   0.5
LMR      1.32 187 Pn    15 27.30   0.3
                  Pg    15 28.10
                  Sg    15 45.70
ORX      1.32  41 P     15 27.16  -0.1
PGF      2.66 141 Pn    15 45.60  -0.8
                  Sn    16 18.10
BGF      3.34 306 Pn    15 56.30   0.3
                  Pg    16 04.80
      S.D. = 0.3  on  26 of  26 obs.
-----------------------------------
%  NOV  29, 1993  14h 42m 34.42± 2.77s
   33.463 S ± 6.2km   69.994 W ±21.7km
   DEPTH =  13.7 ±  5.4 km
 CHILE-ARGENTINA BORDER REGION    (127)
      MD 3.6 (SAN).

FCH      0.28 298 eP    42 40.53  -0.2
                  iS    42 45.57
PCH      0.46 250 iP+   42 43.82  -0.1
                  iS    42 52.07
PEL      0.66 299 iP+   42 47.34   0.1
                  iS    42 56.93
TACH     0.81 256 iP    42 49.82   0.0
                  iS    43 01.89
CACH     0.83 218 iP    42 50.23   0.1
                  iS    43 02.56
JACH     0.93 327 iP    42 51.76  -0.1
                  iS    43 04.87
ROCH     0.98 300 iP+   42 53.18   0.3
                  iS    43 07.10
LNV      1.28 247 iP+   42 57.48  -0.3
                  iS    43 15.01
LCCH     1.32 269 iP    42 58.62   0.3
                  iS    43 16.85
      S.D. = 0.3  on   9 of   9 obs.
-----------------------------------
%  NOV  29, 1993  15h 03m 04.95± 0.63s
   28.044 S ± 5.7km   26.813 E ± 7.3km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA         (584)
      ML 3.1 (PRE).

SEK      0.77 111 eP    03 20.40  -0.1
                  S     03 28.80
BFS      1.14 359 eP    03 26.00  -0.9
                  S     03 38.90
BLF      1.19 207 eP    03 28.00   0.2
                  S     03 43.70
PRY      1.26  28 eP    03 29.70   0.8
                  S     03 46.70
SWZ      1.57 303 eP    03 34.20   0.5
                  S     03 52.30
FRS      2.14 217 eP    03 41.50  -0.3
                  S     04 07.50
SLR      2.65  30 eP    03 49.00  -0.2
                  S     04 18.50
      S.D. = 0.7  on   7 of   7 obs.
-----------------------------------
?  NOV  29, 1993  15h 42m 17.87± 3.92s
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   31.622 S ±36.6km   69.168 W ±55.6km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTCB    0.34  67 iPd   42 33.10   0.1
                S     42 46.00
RTCV    0.59 114 eP    42 34.50  -0.1
                S     42 50.00
RTLL    0.66  64 ePd   42 35.10  -0.2
                S     42 49.20
CFA     0.79  89 ePc   42 36.60   0.1
                S     42 52.30
     S.D. = 0.3  on   4 of   4 obs.
-------------------------------------
   NOV  29, 1993  16h 26m 27.32± 0.69s
   12.251 N ± 7.0km  125.916 E ±11.8km
   DEPTH =  33.0km  (normal)
   4.5mb (  7 obs.)
 SAMAR, PHILIPPINE ISLANDS        (251)

PLP     1.42 220 iPd   26 51.50   0.5
                iS    27 01.00
MAP     2.70 225 iPc   27 09.00  -0.3
                iS    27 34.00
GQP     3.76 296 eP    27 24.00  -0.4
                eS    28 04.50
BIP     4.01 175 ePd   27 28.00  -0.1
CTB     5.30 199 eP    27 52.00   5.8X
CVP     6.71 324 eP    28 05.00  -1.2
GYA    22.97 311 P     31 32.00   1.8
        1.0s    16.00nm          4.5mb
KMI    25.36 304 eP    31 54.50   1.1
        1.2s    20.00nm          4.6mb
XAN    26.65 327 P     32 05.00  -0.1
        1.0s     6.00nm          4.2mb
                pP    32 13.50  30kmX
CD2    27.64 316 P     32 12.30  -1.8
TIY    28.08 337 eP    32 22.80   4.8X
     Z  14s     0.36um          4.1MszX
LZH    30.97 324 eP    32 56.00  12.0X
        1.5s    27.00nm
     Z  15s     0.48um          4.3MszX
WRA    33.05 165 P     33 00.50  -1.6
        0.6s     0.70nm          3.7mb
ASPA   36.54 168 iPc   33 32.50   0.5
        1.5s     7.50nm          4.4mb
LSA    36.62 304 Pc    33 34.40   1.2
        1.0s     9.00nm          4.6mb
GUN    40.49 299 P     34 05.40   0.0
PKI    40.81 298 P     34 07.50  -0.5
KKN    40.98 298 P     34 09.00  -0.2
DMN    41.08 298 P     34 09.60  -0.5
GKN    41.58 298 P     34 13.50  -0.6
        1.0s    38.00nm          5.1mb
WMQ    45.46 321 eP    34 46.50   1.3
STK    46.38 161 iPd   34 41.50 -10.9X
        0.5s     2.10nm
BRS    47.24 147 eP    35 00.00   0.6
INK    82.58  22 eP    38 54.00   5.9X
     S.D. = 1.0  on  19 of  24 obs.
-------------------------------------
% NOV  29, 1993  16h 49m 29.99± 2.39s
   31.759 S ±13.1km   68.324 W ±17.3km
   DEPTH = 117.9 ± 25.5 km
 SAN JUAN PROVINCE, ARGENTINA     (137)

CFA     0.17  26 iPc   49 46.80   0.0
                S     49 58.00
RTCV    0.21 241 iPd   49 47.00   0.1
RTLL    0.45 344 iPd   49 47.30  -0.4
RTCB    0.49 304 iPd   49 48.20   0.2
RTPR    2.13  47 eP    50 05.50   0.1
MRA     2.31 107 iPc   50 07.80   0.0
                S     50 33.50
RFA     3.01 182 ePc   50 17.00  -0.1
     S.D. = 0.3  on   7 of   7 obs.
-------------------------------------
* NOV  29, 1993  16h 55m 05.21± 1.32s
   40.622 N ±12.6km  142.524 E ±18.3km
   DEPTH =  33.0km  (normal)
 NEAR EAST COAST OF HONSHU, JAPAN(228)

HOOJ    1.85  18 eP    55 36.10   1.0
                eS    55 59.20
MRRJ    2.11 329 eP    55 38.20  -0.6
                eS    56 01.90
KUSJ    2.96  33 eP    55 49.90  -1.1
                eS    56 23.50
ASAJ    3.50   1 eP    55 58.40  -0.2
MAT     5.29 221 eP    56 24.00  -0.1
     S.D. = 1.1  on   5 of   5 obs.
-------------------------------------
* NOV  29, 1993  17h 02m 04.51± 1.68s
   12.157 N ±10.5km  125.837 E ±16.5km
   DEPTH =  32.6 ± 11.0 km
   4.6mb (  8 obs.)
 SAMAR, PHILIPPINE ISLANDS        (251)

PLP     1.30 221 iPd   02 27.50   1.1
                iS    02 39.50
MAP     2.58 225 iPc   02 46.00   1.1
                iS    03 11.00
BIP     3.93 174 iPc   03 01.60  -2.5
DAV     5.04 183 eP    03 29.00   9.1X
CTB     5.18 198 eP    03 35.00  13.1X
QCP     5.25 299 eP    03 48.00  25.2X
BAG     6.62 310 ePc   03 41.00  -1.3X
CVP     6.74 325 eP    03 42.90  -0.9
SSE    19.33 348 P     06 31.50   1.5
GYA    22.97 311 iPd   07 09.20   1.7
        1.0s    16.00nm          4.5mb
KMI    25.35 304 eP    07 31.00   0.4
        1.5s    30.00nm          4.7mb
XAN    26.69 327 P     07 42.00  -0.6
        1.0s     7.00nm          4.2mb
                pP    07 51.40  33kmX
                sP    07 56.50
CD2    27.65 316 P     07 51.00  -0.5
TIY    28.13 337 eP    07 55.30  -0.5
GTA    35.60 324 eP    09 01.50   0.2
        1.0s     6.00nm          4.5mb
ASPA   36.47 168 eP    09 08.80   0.2
        0.4s     5.00nm          4.8mb
LSA    36.61 304 Pc    09 11.40   1.1
        1.2s    17.00nm          4.8mb
GUN    40.47 299 P     09 42.40   0.0
        0.7s    39.00nm          5.3mb
PKI    40.79 298 P     09 44.20  -0.8
KKN    40.95 298 P     09 46.00  -0.2
DMN    41.06 298 P     09 46.80  -0.3
GKN    41.56 299 P     09 50.60  -0.5
WMQ    45.49 321 P     10 20.00  -2.7
STK    46.32 161 iPc   10 18.30 -10.9X
        2.1s     3.00nm
GBA    47.15 277 P     10 35.00  -1.0
BRS    47.21 147 iP    10 37.20   0.9
        0.5s     3.00nm          4.6mb
YAK    49.86   2 iP    11 08.10  11.8X
        1.2s    25.00nm
MAIO   63.88 305 eP    12 37.00   0.4
INK    82.70  22 eP    14 27.50   1.6
     S.D. = 1.2  on  23 of  29 obs.
-------------------------------------
   NOV  29, 1993  17h 20m 49.27± 0.73s
   16.128 N ± 8.3km   98.581 W ± 9.2km
   DEPTH =  10.0km  (geophysicist)
   4.3mb ( 11 obs.)
 NEAR COAST OF GUERRERO, MEXICO   ( 58)

ACX     1.43 301 iP    21 09.89  -5.4X
                iS    21 23.00
III     2.39 339 iP    21 27.26  -2.0
                iS    21 55.00
PPM     2.92 359 iP    21 39.61   2.5X
                iS    22 14.80
IIA     3.01 359 iP    21 40.06   2.3
IISM    3.07  22 (P)   21 38.00  -0.6
UNM     3.24 350 iP    21 42.50   1.1
                iS    22 18.00
CRX     3.42 342 iP    21 43.00  -1.1
                iS    22 25.50
LVVM    4.12  29 eP    21 50.00  -3.6X
                (S)   22 47.00
MRX     4.34 325 (P)   21 56.89   0.1
                iS    22 39.50
SCX     5.74  83 eP    22 25.00   8.4X
TPX     6.21 100 (P)   22 36.00  12.7X
AGX     6.71 329 (P)   22 43.00  12.7X
                (S)   23 55.00
UYO    18.34  11 iPc   25 03.30  -2.1
WMOK   18.53 359 eP    25 07.54  -0.3
        0.9s     5.79nm          3.8mb
MEO    18.58 360 iPc   25 09.50   1.1
MIAR   18.88  13 eP    25 12.59   0.5
        0.7s     6.51nm          4.0mb
OCO    19.34   3 iPd   25 17.90   0.2
TUC    19.55 328 (P)   25 20.61   0.3
TUL    19.86   7 iPc   25 08.20 -15.2X
ALQ    20.02 341 eP    25 24.04  -1.4
        0.8s     4.32nm          3.8mb
OXF    20.07  23 eP    25 26.82   1.1
        0.9s    27.41nm          4.6mb
ACO    20.49 359 iPc   25 30.30   0.2
GLA    22.36 322 eP    25 49.03   0.0
MYNC   22.88  32 eP    25 52.89  -1.3
        0.9s    56.13nm          5.1mb
PV10   24.00 339 eP    26 03.91  -1.3
PV08   24.05 340 eP    26 06.35   0.5
PV09   24.14 339 eP    26 06.55  -0.1
GOL    24.22 347 eP    26 08.27   0.8
        0.8s     7.10nm          4.3mb
SRU    25.17 338 eP    26 15.72  -0.8
ARUT   25.25 332 eP    26 16.57  -0.7
MSU    25.30 334 eP    26 18.01   0.2
TPNV   25.99 326 (P)   26 25.42   1.3
        0.9s     9.95nm          4.5mb
CEH    26.25  38 eP    26 26.99   0.6
        1.1s    56.86nm          5.2mb
DAU    26.59 338 eP    26 29.13  -0.7
DUG    26.99 335 (P)   26 32.91  -0.4
        0.8s     3.32nm          4.1mb
TNP    27.34 327 (P)   26 38.02   1.4
RSSD   28.28 352 (P)   26 45.57   0.5
        1.1s    10.71nm          4.5mb
HVU    28.34 337 eP    26 46.25   0.7
LPAZ   44.05 136 P     28 59.50  -0.5
LPB    44.24 136 P     29 06.00   4.7X
CNCB   44.52 136 P     29 04.00   0.3
YKA    47.67 350 eP    29 25.00  -2.5X
        0.8s     1.00nm          4.0mb
INK    56.69 345 eP    30 32.00  -2.9X
GBA   150.20   8 PKP   40 51.00  13.4X
     S.D. = 1.0  on  33 of  44 obs.
-------------------------------------
* NOV  29, 1993  17h 29m 23.91± 0.89s
   15.417 S ±21.4km   71.841 W ±13.6km
   DEPTH = 155.2 ± 12.5 km
   3.8mb (  1 obs.)
 SOUTHERN PERU                    (117)

ARE     1.09 162 iPd   29 50.50  -0.1
                iS    30 11.00
LPAZ    3.67 104 iPc   30 21.30  -0.1
LPB     3.77 108 iPc   30 23.50   1.1
CNCB    3.96 111 iPd   30 26.20   1.2
CCH     5.82 110 P     30 48.20  -1.2
NNA     5.94 304 iPd   30 50.00  -0.8
        0.4s    63.56nm          5.2mb X
                eS    31 52.50
HJA     9.85 143 ePc   31 42.80  -0.1
                S     31 47.20
PPD    20.51 112 eP    33 51.30  -0.4
SOB1   30.83  82 (P)   35 26.00  -1.5
YKA    84.56 342 eP    41 42.20   1.9
        0.6s     0.90nm          3.8mb
GBA   150.21  89 PKP   49 02.00   8.7X
     S.D. = 1.3  on  10 of  11 obs.
-------------------------------------
& NOV  29, 1993  18h 16m 41.53s
   37.637 N          118.945 W
   DEPTH =    7.5km
 CALIFORNIA-NEVADA BORDER REGION ( 40)
      <GM-P>. MD 3.0 (GM). ML 2.8
      (GS).

MEMM    0.03   9 ePc   16 43.57   0.5
MCSM    0.04  61 P     16 43.65   0.2
MMPM    0.07 248 ePc   16 44.42   0.6
CLKR    0.11 116 P     16 44.79   0.5
HTCR    0.17 128 P     16 45.72   0.3
ORC     0.23  90 P     16 47.34   0.9
MTUM    0.42 133 eP    16 50.20   0.2
BCKR    0.46  82 P     16 51.70   0.9
BHPR    0.50 133 P     16 52.20   0.6
CWCR    0.53 105 P     16 52.77   0.6
BONR    0.60  58 eP    16 54.03   0.4
CMB     1.21 290 eP    17 03.91  -0.4
TNP     1.44  71 ePn   17 09.46   1.3
ISA     2.01 169 ePn   17 15.22  -1.0
PHAM    2.14 213 (P)   17 19.62   1.5
BCH     2.61 201 eP    17 26.23   1.3
```

29d 18h

```
ORV      2.77 315 (Pn)  17 25.13  -2.0
ABL      2.79 185 eP    17 29.97   2.4
GSC      2.90 143 eP    17 27.50  -1.5
       19 obs. associated
-------------------------------------
   NOV  29, 1993  18h 49m 56.30± 1.51s
   43.559 N ±11.1km    7.144 E ±10.1km
   DEPTH =  10.0km  (geophysicist)
 NEAR SOUTH COAST OF FRANCE       (379)
      ML 1.9 (LDG), 1.5 (STR).

CALN     0.27 316 Pg    50 02.21   0.2
                  Sg    50 07.06
MVIF     0.34   1 Pg    50 04.10   0.8
                  Sg    50 09.56
AURF     0.35  22 Pg    50 03.27  -0.4
FRF      0.36 270 Pg    50 04.10   0.4
                  Sg    50 09.20
SBF      0.37  35 Pg    50 04.70   0.8
                  Sg    50 09.90
TOUF     0.46   9 Pg    50 04.42  -1.3
LMR      0.51 244 Pg    50 06.70   0.0
                  Sg    50 13.50
LRG      0.58 260 Pg    50 07.60  -0.4
                  Sg    50 15.10
     S.D. = 0.8  on   8 of   8 obs.
-------------------------------------
? NOV  29, 1993  18h 52m 14.41±12.20s
   32.153 S ±88.0km   71.250 W ±26.9km
   DEPTH =  71.1 ± 57.3 km
 NEAR COAST OF CENTRAL CHILE      (135)
      MD 3.8 (SAN).

JACH     0.77 134 iPd   52 30.52   0.0
                  iS    52 40.70
ROCH     0.84 166 iP    52 31.48   0.0
                  iS    52 42.32
PEL      1.10 154 iPd   52 34.42  -0.1
                  iS    52 47.13
LCCH     1.35 191 iP+   52 37.92   0.2
                  iS    52 54.79
FCH      1.42 146 iPd   52 39.06   0.0
                  iS    52 56.20
TACH     1.52 170 iP+   52 40.25   0.2
                  iS    52 57.90
PCH      1.59 157 iP+   52 40.89  -0.2
                  iS    52 59.30
LNV      1.80 184 iP    52 43.48  -0.4
CACH     2.03 165 iP+   52 47.63   0.4
                  iS    53 12.79
     S.D. = 0.3  on   9 of   9 obs.
-------------------------------------
% NOV  29, 1993  19h 13m 29.56± 1.70s
   41.068 N ±10.1km   23.718 E ±10.7km
   DEPTH =   5.0km  (geophysicist)
 GREECE-BULGARIA BORDER REGION    (363)
      ML 2.2 (THE).

SRS      0.11 298 ePgc  13 31.78  -0.1
                  eSg   13 34.78
SOH      0.37 228 ePg   13 37.22   0.2
                  eSg   13 43.18
THE      0.72 233 ePg   13 43.62  -0.3
                  eSg   13 54.66
OUR      0.76 165 ePg   13 44.89   0.1
                  eSg   13 55.94
GRG      1.00 264 ePg   13 49.26   0.2
                  eSg   14 03.02
PAIG     1.14 181 ePg   13 51.18  -0.2
                  eSg   14 06.58
     S.D. = 0.3  on   6 of   6 obs.
-------------------------------------
   NOV  29, 1993  19h 42m 29.23± 0.38s
    7.208 S ± 4.8km   93.840 E ± 6.9km
   DEPTH =  10.0km  (geophysicist)
   5.1mb ( 26 obs.)
 SOUTH INDIAN OCEAN               (425)

KLM     12.87  38 ePc   45 30.30  -4.7X
KGM     13.17  46 iPd   45 38.60  -0.4
        0.9s  537.10nm          6.7mb X
IPM     13.73  32 ePc   45 45.20  -1.3
        0.9s  206.00nm          6.0mb
TPI     14.45  73 ePd   45 53.00  -2.9
                  e     50 00.00
SNG     15.81  25 eP    46 14.00   0.4
        1.1s  121.52nm          5.0mb
NNT     20.52  17 eP    47 11.00   0.5
KHT     22.35  12 eP    47 29.00   0.0
PCT     23.01  19 eP    47 36.90   1.5
NST     23.57  15 eP    47 42.00   1.1
BDT     24.83  12 eP    47 54.80   1.7
        0.6s   35.70nm          5.2mb
NANU    25.87 128 iPc   48 03.80   0.8
        1.0s   58.00nm          5.2mb
KKM     25.92  60 ePd   48 06.00   2.4
GBA     26.32 322 Pd    48 08.00   0.9
        0.7s    8.00nm          4.5mb
CHTO    26.34  11 iPc   48 07.60   0.3
        1.2s   68.40nm          5.2mb
TSM     26.57  65 ePc   48 10.50   1.0
MBL     28.70 122 eP    48 28.50  -0.3
HYB     28.76 328 eP    48 29.00  -0.3
                  e     48 43.00
MRWA    30.25 139 eP    48 42.50  -0.1
        0.8s   19.00nm          5.0mb
MEEK    30.47 132 eP    48 44.20  -0.4
        1.0s   71.00nm          5.5mb
BAL     31.64 140 eP    48 55.00   0.2
KLB     32.97 141 eP    49 06.50   0.1
KMI     33.28  15 Pc    49 10.50   1.0
        1.4s   50.00nm          5.3mb
                  pP    49 19.50  31kmX
                  sP    49 23.50
COOL    34.75 136 iPd   49 21.80  -0.1
        1.0s   69.00nm          5.5mb
PKI     35.52 347 P     49 28.30  -0.6
DMN     35.63 347 P     49 28.80  -0.9
        0.9s   37.00nm          5.3mb
GUN     35.75 348 P     49 30.20  -0.6
        0.8s   23.00nm          5.1mb
KKN     35.76 347 P     49 30.00  -0.7
        1.0s   58.00nm          5.4mb
GKN     36.12 346 P     49 33.10  -0.6
        1.0s   34.00nm          5.2mb
ASPA    41.75 118 iPd   50 20.80   0.3
        1.2s   36.80nm          5.0mb
      Z 21s     0.40um          4.3Msz
XAN     43.44  18 P     50 33.50  -0.7
        1.0s   13.00nm          4.7mb
                  pP    50 39.00  18kmX
                  sP    50 46.50
LZH     44.08  12 eP    50 38.50  -0.9
        1.2s   25.00nm          4.9mb
      Z 16s     0.59um          4.6MszX
      E 11s     0.42um
                  pP    50 45.00  22kmX
                  sP    50 50.00
NJ2     45.76  30 Pd    50 53.00   0.3
SSE     46.21  33 Pd    50 56.50   0.2
        1.0s   23.00nm          5.1mb
      Z 16s     0.90um          4.8MszX
      N 12s     0.20um
      E 12s     0.50um
                  pP    51 03.00  22kmX
GTA     46.71   6 iPc   51 00.00  -0.3
        1.0s   20.00nm          5.1mb
TIA     48.41  25 eP    51 12.70  -0.9
ADE     49.56 130 eP    51 23.00   0.4
BTO     49.85  16 eP    51 23.50  -1.2
HHC     50.52  17 P     51 30.00   0.1
        1.2s   19.00nm          4.9mb
STK     50.73 126 iPd   51 20.30 -11.2X
        1.0s   10.10nm
BJI     51.34  22 eP    51 35.50  -0.4
        1.0s   11.00nm          4.7mb
      Z 20s     0.30um          4.3Msz
CAN     57.64 127 eP    52 22.30   0.1
BRS     59.19 118 iPd   52 43.50  10.3X
        1.0s   18.00nm
MAT     60.18  40 (P)   52 37.00  -2.7X
TAB     63.10 319 eP    53 05.00   5.4X
BUL     64.32 251 iP    53 07.60  -0.3
        0.9s    7.98nm          4.9mb
SLR     64.90 245 iPd   53 12.40   0.8
        0.7s   13.70nm          5.3mb
BLF     67.02 242 eP    53 20.50  -4.6X
YAK     74.38  17 iPc   54 10.30   1.6
        0.8s   37.00nm          5.5mb
                  e     54 17.00
                  i     54 25.00
OBN     78.08 330 iPd   54 36.00   6.3X
        1.9s   98.00nm          5.6mb
                  i     54 44.00
                  e     55 07.50
                  e     57 40.00
                  e     03 12.00
MLR     79.98 319 ePd   54 45.30   4.8X
SPC     84.85 321 eP    55 18.70  13.1X
ZST     86.58 319 eP    55 23.30   9.3X
                  e     55 28.50
KSP     87.75 322 eP    55 35.00  15.4X
BRG     89.20 321 iP    55 41.40  14.9X
        1.0s   20.00nm
CLL     89.88 322 iP    55 44.00  14.3X
        1.1s   14.00nm
MOX     90.61 321 e(P)  55 48.70  15.6X
APO     91.29 331 eP    55 43.20   7.2X
        0.5s    1.10nm          4.5mb
YKA    121.03  15 ePKP  01 35.00  11.7X
        0.8s    0.50nm
ACO    148.34  20 iPKPc 02 28.80  14.4X
CCH    148.56 219 PKP   02 29.60  14.0X
CNCB   150.12 217 PKP   02 25.10   6.8X
LPB    150.41 217 PKP   02 22.00   3.5X
LPAZ   150.62 217 PKP   02 17.30  -1.8
                  i     02 25.50
     S.D. = 1.0  on  43 of  63 obs.
-------------------------------------
? NOV  29, 1993  19h 53m 13.34± 1.52s
   31.278 S ±25.4km   68.660 W ±26.3km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTLL     0.17 107 iPd   53 28.10   0.1
                  S     53 39.00
RTCB     0.24 210 ePd   53 28.20  -0.1
                  S     53 40.00
CFA      0.49 132 iPc   53 29.40   0.1
                  S     53 42.00
RTCV     0.59 170 eP    53 30.00  -0.1
                  S     53 43.20
RTPR     2.09  63 eP    53 47.50  -0.1
                  S     54 18.00
     S.D. = 0.1  on   5 of   5 obs.
-------------------------------------
   NOV  29, 1993  20h 28m 43.93± 0.18s
   10.294 N ± 3.1km  126.477 E ± 3.8km
   DEPTH =  38.2km  (  9 depth phases)
   5.5mb ( 83 obs.)  5.6Msz ( 52 obs.)
 PHILIPPINE ISLANDS REGION        (248)
      Mw 5.8 (HRV). Ms 5.6 (BRK).
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 40S, 82C
      Centroid Location:
      Origin Time        20:28:47.2 0.2
      Lat 10.37N 0.02 Lon 126.61E 0.03
      Dep  15.1 1.3 Half-duration  2.3
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 3.63 0.08  Mtt= 0.09 0.10
        Mff=-3.73 0.13  Mrt=-0.60 0.22
        Mrf= 5.03 0.56  Mtf= 0.27 0.07
       Principal Axes:
        T  Val=  6.21  Plg=63  Azm=261
        N        0.11     1       354
        P       -6.32    27        85
      Best Double Couple:Mo=6.3*10**17
       NP1:Strike=178 Dip=18 Slip=  94
       NP2:        354    72        89

PLP      1.71 301 iPd   29 12.00   0.3
BIP      2.07 186 iPc   29 16.80  -0.2
MAP      2.46 271 iPd   29 24.00   1.5
                  iS    29 59.00
DAV      3.31 196 eP-   29 35.00   0.5
CTB      3.81 216 ePc   29 43.30   1.6
                  eS    30 48.00
GQP      5.33 313 iP    29 56.00  -7.2X
PGP      6.28 301 ePd   30 18.00   1.4
TGY      6.61 305 ePc   30 22.00   0.7
QCP      6.81 310 eP    30 53.00  28.9X
PPR      7.65 267 ePd   30 38.00   2.3
BCP      8.34 317 eP    30 46.00   0.4
BAG      8.36 317 ePc+  30 42.00  -3.8X
                  eS    32 29.00
CVP      8.64 329 eP    30 51.00   1.5
                  eS    32 28.00
TSM     10.41 236 eP    31 20.00   6.1X
KKM     11.00 248 ePd   31 27.00   5.0X
        0.9s   150.70nm         6.2mb
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QZH    16.38 334 P     32 32.00  -0.8
        1.3s   200.00nm          5.1mb
     Z  18s    22.40um           4.5Msz
     E  12s     9.30um
                  S     35 38.00
HKC    16.78 317 iPd   32 41.20   3.4X
                  e     35 54.00
GZH    17.87 317 iPc   32 51.00  -0.4
     Z  18s    26.00um
     N  16s    15.60um
     E  14s    21.40um
QIZ    18.27 300 Pc    32 56.00  -0.4
     N  10s     7.23um
     E  14s     6.56um
GUMO   18.29  78 eP    32 55.10  -1.5
        1.3s   306.50nm          5.3mb
     Z  20s     8.85um           4.6MszX
GUA    18.32  78 eP    32 55.00  -2.1
     Z  20s    19.81um
                  e     33 09.60
KAGJ   21.19  11 eP    33 29.50   1.0
SSE    21.27 347 iPc   33 29.50   0.2
        1.2s   160.00nm          5.3mb
     Z  20s    12.80um           5.3Msz
     N  12s     7.80um
     E  12s     5.70um
                  pP    33 36.30  25kmX
                  sP    33 41.50
                  PP    33 54.00
                  iS    37 24.00
                  isS   37 35.00
WWKK   21.97 128 eP    33 32.00  -4.5X
NJ2    22.77 343 Pd    33 45.80   1.6
        1.2s   220.00nm          5.5mb
     Z  18s     6.47um           5.1Msz
     N  10s     3.59um
     E  10s     8.47um
                  iS    37 53.00
TPI    22.79 236 ePc   33 46.50   2.0
                  e     37 00.00
WHN    23.09 332 eP    33 48.50   1.2
        1.0s   100.00nm          5.3mb
     Z  20s    16.80um           5.5Msz
     N  12s     9.04um
     E  12s     4.13um
                  iS    37 58.00
MTN    23.45 169 eP    33 51.00   0.1
KGM    24.43 252 ePc   34 03.30   2.8X
TKSJ   24.58  15 P     34 01.90   0.2
GYA    24.68 313 iPc   34 03.00   0.1
        1.0s    49.00nm          5.0mb
     Z  18s    21.70um           5.7Msz
     N  14s    11.10um
     E  14s    10.30um
                  pP    34 11.60  31km
                  sP    34 17.00
                  PP    34 44.00
PCT    24.85 283 eP    34 05.50   1.0
WKYJ   25.24  18 P     34 08.30   0.2
LEM    25.34 229 ePd   34 11.50   2.2
        1.0s    50.00nm          5.0mb
     Z  18s     8.25um           5.3Msz
                  e(S)  39 04.00
                  eLR   21 40.00
YONJ   25.59  13 P     34 11.70   0.4
SNG    25.74 265 eP    34 11.00  -1.9
                  eS    38 49.60
IPM    25.86 259 ePc   34 15.10   1.1
NST    26.21 285 eP    34 17.80   0.6
KLI    26.28 236 eP    34 17.20  -0.6
                  e     34 39.00  99kmX
NNT    26.31 278 eP    34 19.00   0.9
KMI    26.93 306 Pc    34 22.00  -2.0
        1.9s    80.00nm          5.0mb
     Z  15s    18.30um           5.8MszX
     N  12s     7.40um
     E  12s     5.50um
                  pP    34 34.00  47km
                  sP    34 40.50
                  PP    35 04.00
                  S     38 57.00
                  SS    40 12.00
                  ScS   45 09.00
TIA    27.16 343 eP    34 24.00  -1.7
     Z  20s     6.30um           5.2Msz
     N  13s     2.73um
     E  13s     8.95um
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                  S     38 59.40
BDT    27.54 288 eP    34 29.00  -0.4
KHT    27.57 282 eP    34 31.80   2.1
CHTO   27.93 291 eP    34 31.50  -1.4
CHJJ   28.04  22 P     34 33.00  -0.8
MAJO   28.21  20 eP    34 32.98  -2.3X
        1.4s   118.60nm          5.4mb
MAT    28.21  20 eP    34 33.00  -2.3X
        1.5s    77.78nm          5.2mb
     Z  20s    13.83um           5.5Msz
                  eS    39 10.00
PMG    28.40 133 eP    34 34.39  -2.7X
        1.1s   130.18nm          5.5mb
XAN    28.59 328 P     34 37.30  -1.4
        0.6s    14.00nm          4.8mb
     Z  16s    14.00um           5.7MszX
     N  12s     5.64um
     E  11s     5.32um
                  pP    34 47.00  34km
                  sP    34 51.00
                  PP    35 30.00
                  PcP   37 48.00
                  S     39 22.00
                  sS    39 40.00
                  SS    40 49.00
                  PcS   41 30.00
                  ScS   45 17.00
DL2    28.82 352 eP    34 43.00   2.3
        1.2s   160.00nm          5.6mb
     Z  16s     7.88um           5.4MszX
     N  14s     5.45um
     E  12s     9.38um
                  S     39 29.00
RAB    29.35 118 eP    34 48.00   2.2
                  iS    39 48.00
CD2    29.43 318 P     34 44.30  -2.1
        0.7s    36.00nm          5.2mb
     Z  16s    25.10um           5.9MszX
     N  14s    18.20um
                  S     39 30.00
TIY    30.08 337 eP    34 51.50  -0.6
     Z  12s     9.52um           5.7MszX
     N  13s     5.69um
     E  13s     7.21um
                  S     39 49.00
WB5    30.97 165 eP    34 57.20  -2.8X
                  ipP   35 12.00  60kmX
                  i     35 43.40
BJI    31.01 345 eP    34 59.00  -1.1
        1.7s    79.00nm          5.2mb
     Z  16s     6.44um           5.4MszX
     N  12s     3.66um
                  esP   35 18.00
                  eS    40 00.00
                  ePcS  41 40.00
                  eSS   41 48.00
WRA    31.03 166 P     34 58.20  -2.3
        0.8s     3.20nm          4.2mb X
SNY    31.51 356 Pc    35 05.00   0.5
        1.6s   300.00nm          5.9mb
     Z  18s     9.48um           5.5Msz
     E  12s     4.80um
                  pP    35 14.00  31km
                  PcP   38 00.00
                  S     40 13.00
                  sS    40 26.00
OFUJ   31.71  23 eP    35 07.60   1.2
MBL    31.93 192 iPc   35 06.80  -1.6
        0.8s   154.00nm          5.9mb
LZH    32.87 325 Pc    35 16.00  -0.7
        2.0s   180.00nm          5.6mb
     Z  16s    15.90um           5.8MszX
     E  13s     8.35um
                  pP    35 28.00  45km
                  sP    35 33.00
                  PP    36 23.00
                  S     40 28.00
                  ScP   41 44.00
                  SS    42 24.00
                  ScS   45 40.00
HHC    33.17 339 P     35 19.00  -0.1
        1.6s    80.00nm          5.4mb
     Z  16s    10.90um           5.7MszX
     N  19s     8.43um
     E  13s     4.74um
                  sP    35 37.00
                  PP    36 35.00
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                  S     40 38.00
QIS    33.27 157 iPc   35 19.00  -1.1
CN2    33.39 359 eP    35 20.40  -0.5
        1.2s    18.00nm          4.8mb
     Z  20s     4.96um           5.2Msz
     N  14s     5.04um
     E  14s     4.47um
                  esP   35 32.00
BTO    33.52 337 iPd   35 22.00  -0.2
        1.6s    51.00nm          5.2mb
     N  12s     3.59um
     E  14s     1.39um
                  ePP   36 38.00
                  S     40 40.00
MDJ    34.30   4 Pc    35 29.00   0.2
        1.3s   190.00nm          5.9mb
     Z  18s     6.71um           5.4Msz
     E  26s    38.90um
                  sP    35 44.00
                  S     40 54.00
NANU   34.37 198 eP    35 28.50  -1.1
ASPA   34.52 168 eP    35 29.20  -1.7
        1.0s    20.80nm          5.0mb
     Z  19s     0.50um           4.3MszX
                  i     35 42.30  51kmX
                  eS    40 54.90
CTA    35.92 147 iPc   35 43.00   0.1
        1.0s    85.00nm          5.6mb
     Z  18s    36.08um           6.2Msz
                  ipP   35 54.20  40km
                  esP   36 05.50
                  e(PP) 37 00.00
                  i     38 12.50
                  eS    40 48.00
                  i     41 18.00
                  e(SS) 43 36.00
                  eScS  46 05.00
CTAO   35.92 147 ePd   35 41.64  -1.2
        1.5s   215.08nm          5.9mb
GTA    37.48 325 iPc   35 56.00   0.1
        1.0s    76.00nm          5.5mb
     Z  18s    18.80um           5.9Msz
     E  13s     5.37um
                  pP    36 03.00  24kmX
                  sP    36 09.00
                  PP    37 18.00
                  S     41 38.00
                  ScS   46 08.00
MEEK   37.50 192 eP    35 54.50  -1.5
        0.6s   116.00nm          5.9mb
LSA    38.18 306 P     36 01.60  -0.7
        1.0s    18.00nm          4.9mb
     N  15s     2.86um
YSS    39.11  18 ePc   36 09.10  -0.2
        1.2s    90.00nm          5.4mb
     Z  18s     3.50um           5.2Msz
     N  18s     1.50um
     E  18s     3.50um
                  e     37 38.00 481kmX
                  eS    42 05.00
MRWA   40.56 194 iPc   36 20.60  -0.9
        0.5s    67.00nm          5.7mb
FORT   40.86 178 eP    36 23.20  -0.7
        0.4s    66.00nm          5.7mb
COOL   41.26 187 eP    36 26.50  -0.7
        1.0s   118.00nm          5.6mb
BAL    41.73 193 eP    36 29.50  -1.6
        1.0s   250.00nm          5.9mb
GUN    41.93 300 P     36 31.50  -1.7
PKI    42.24 300 P     36 33.20  -2.5
        0.7s    21.00nm          5.0mb
KKN    42.41 300 P     36 35.40  -1.6
        0.9s    33.00nm          5.1mb
KLB    42.48 191 eP    36 36.50  -0.7
        0.6s    37.00nm          5.3mb
DMN    42.51 300 P     36 35.90  -2.0
CIT    42.89 348 eP    36 42.00   1.6
GKN    43.01 300 P     36 39.80  -2.1
        0.4s    10.00nm          4.9mb
ZAK    44.32 339 iPc   36 52.00   0.1
        2.0s    88.00nm          5.2mb
                  e     38 40.00 618kmX
                  eS    43 26.00
STK    44.36 162 iPc   36 41.20 -11.3X
        1.2s    25.80nm
                  iPP   38 24.90
IRK    45.56 341 eP+   37 02.00   0.1
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29d 20h

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       1.8s   115.00nm          5.5mb
     Z  16s     4.80um          5.5MszX
     N  16s     2.60um
     E  20s     3.29um
                e     38 53.50 643kmX
                iS    43 44.00
                e     46 56.00
ADE    46.48 166 eP    37 08.50  -0.8
HYB    46.97 284 eP    37 11.50  -1.9
       1.0s    65.00nm          5.6mb
                eS    44 00.00
ARMA   47.15 150 iPd   37 15.10   0.3
       1.3s    97.00nm          5.6mb
                e     39 07.50 641kmX
WMQ    47.33 322 P     37 15.00  -1.0
       2.0s    22.00nm          4.8mb
     Z  16s    15.60um          6.1MszX
     E  14s     6.20um
                PcP   38 51.00
                PP    39 08.00
                ScP   42 39.80
                PcS   42 41.00
                S     44 08.00
                ScS   47 06.00
                SS    47 26.00
GBA    48.03 279 P     37 21.00  -0.8
BOD    48.38 351 iPc   37 24.00   0.1
       1.9s   141.00nm          5.7mb
UER    48.90 334 iP    37 27.50  -0.4
       1.7s   200.00nm          5.9mb
     Z  16s     5.00um          5.6MszX
     N  16s     4.15um
     E  16s     4.58um
                e     39 22.00 648kmX
                PPP   40 16.00
                iS    44 32.00
                SS    47 48.00
                SSS   49 10.00
BWA    49.11 156 iPc   37 31.50   1.7
                e     37 42.60  39km
                i     37 46.30
RIV    49.76 153 eP    37 35.70   0.9
                eS    44 43.00
CAN    50.12 156 iPc   37 38.40   0.8
                e     37 47.70  31km
                i     37 54.00
CNB    50.26 156 iPd   37 40.10   1.4
       1.3s   223.00nm          6.0mb
DZM    50.71 130 iPc   37 42.00  -0.3
POO    51.48 285 iP    37 44.98  -3.2X
YAK    51.68   2 iPc   37 52.80   3.8X
       1.6s   206.00nm          5.9mb
     Z  17s     6.60um          5.7MszX
     N  16s     4.60um
     E  14s     3.00um
                iPcP  38 49.00
                ePP   39 50.00
                ePPP  40 47.00
                iScP  42 51.00
                iS    45 10.00
                iPS   45 21.00
                eScS  47 38.00
                iSS   48 22.00
                eSSS  50 20.00
KSH    53.34 312 eP    38 04.50   2.5X
       1.0s    18.00nm          5.0mb
     Z  20s    11.10um          5.9Msz
     N  16s     5.73um
     E  16s    10.80um
                pP    38 09.00  15kmX
                sP    38 12.00
                PcP   39 12.00
                PP    40 05.00
                PcS   43 11.00
                S     45 31.00
                ScS   47 50.00
                SS    49 07.00
TLG    53.70 317 eP    38 03.00  -1.5
       1.3s    20.00nm          5.0mb
     Z  17s     4.20um          5.6MszX
     N  18s     3.00um
     E  17s     5.50um
                eS    45 36.00
NIL    53.89 304 iPc   38 06.40   0.5
       0.6s     0.02nm          2.3mb X
                iS    45 38.90
                iScS  47 56.80
FRU    55.43 315 eP    38 18.50   1.4
       2.0s    30.00nm          5.0mb
     Z  18s     8.00um          5.8Msz
     E  17s     7.00um
                eS    46 01.00
SMY    57.02  32 P     38 40.00  11.7X
     Z  20s     4.17um          5.5Msz
TIK    61.31   1 iPd   38 57.00  -0.6
       2.0s   210.00nm          5.9mb
     Z  18s     7.60um          5.9Msz
                iS    47 14.00
                e     47 32.00
ADK    61.77  36 eP    39 00.06  -1.0
       1.2s    61.79nm          5.6mb
MAIO   65.45 305 eP    39 24.00  -1.6
                eS    48 18.00
ASH    66.51 307 eP    39 29.00  -3.2X
     N  15s     2.63um
                i     40 07.40 160kmX
                PS    48 54.30
EWZ    67.05 146 P     39 37.20   1.8
THZ    67.07 144 P     39 35.50  -0.2
BWZ    67.21 148 P     39 36.80   0.4
ILT    67.74  20 iPc   39 39.40   0.0
       1.5s   125.00nm          5.8mb
     Z  18s     2.40um          5.5Msz
     N  18s     1.40um
     E  18s     1.50um
                i     40 12.00 133kmX
                i     42 08.00
                iPS   49 12.00
SVE    68.30 327 eP+   39 40.00  -3.1X
     Z  17s     4.00um          5.7MszX
     N  16s     2.00um
     E  16s     2.50um
                iS    48 40.00
ARU    69.29 327 eP    39 49.00  -0.2
       3.0s   400.00nm          5.9mb
     Z  16s     3.00um          5.6MszX
     N  20s     2.00um
     E  16s     2.00um
                e     40 12.00  89kmX
                eS    48 52.00
HON    72.93  71 P     40 20.00   8.3X
     Z  19s     2.26um          5.5Msz
MAK    75.06 312 eP    40 23.00  -0.7
     Z  14s     5.00um          6.0MszX
     N  14s     5.00um
     E  14s     5.00um
                ePPP  45 04.00
                eS    49 56.00
                ePS   50 36.00
SVW    75.20  29 eP    40 24.99   0.7
       1.3s   168.51nm          5.9mb
TTA    75.21  28 ePc   40 24.58   0.2
       1.3s    34.67nm          5.2mb
KER    75.53 303 eP    40 28.00   1.2
TAB    76.00 307 iP+   40 29.00  -0.4
BRW    76.07  19 eP    40 29.58   0.6
GRO    76.33 312 iP-   40 30.00  -0.9
       2.0s   240.00nm          5.8mb
     Z  16s    10.00um          6.2MszX
     N  18s    10.00um
     E  16s     6.00um
                e     43 20.00
                iS    50 14.00
                ePS   51 00.00
IMA    76.53  24 ePc   40 32.18   0.4
       1.2s    32.10nm          5.2mb
CP2    76.85  29 eP    40 33.02  -0.7
CRP    76.89  29 ePc   40 33.48  -0.4
MTA    77.04 311 eP    40 25.00  -9.9X
     N  17s     1.50um
     E  17s     1.50um
                e     50 47.00
PAF    77.11 214 eP    40 43.00   8.0X
                eS    50 24.00
                eSS   55 31.00
CSY    77.27 187 eP    40 26.60  -9.0X
       0.6s    21.40nm          5.4mb
ERE    77.33 309 iP-   40 37.00   0.3
     Z  20s     1.32um          5.3Msz
DRV    77.39 175 iP    40 36.00  -0.2
SLKM   77.81  30 ePc   40 38.27  -0.6
PYA    78.21 313 eP    40 40.50  -0.9
       0.8s    60.00nm          5.7mb
                ePPP  45 30.00
                iS    50 30.00
                iPS   51 01.00
PMR    78.35  29 eP    40 40.78  -0.9
       1.1s    90.46nm          5.7mb
     Z  20s     1.76um          5.4Msz
KIV    78.48 313 (P)   40 42.80  -0.2
       1.0s    33.00nm          5.3mb
     Z  17s     4.90um          5.9MszX
                eS    50 35.50
FBA    78.94  26 eP    40 43.71  -1.2
       1.4s    23.30nm          5.0mb
TOA    79.74  29 ePc   40 50.60   1.2
KLU    79.89  29 ePc   40 50.72   0.5
SOC    80.65 313 eP    40 55.50   1.0
                e     51 02.00
                ePS   51 44.00
                eSS   56 08.00
MOS    80.93 325 eP    40 56.00   0.3
     Z  18s     3.80um          5.8Msz
                e     51 00.00
OBN    81.58 324 eP    41 01.00   1.9
     Z  22s     2.80um          5.6Msz
     N  21s     1.20um
     E  20s     2.20um
                iS    51 06.00
                ePS   51 56.00
BALM   81.65  29 ePc   40 59.99   0.5
ANN    82.25 314 eP    41 04.00   1.2
     Z  16s     1.60um          5.5MszX
INK    84.19  22 eP    41 13.00   0.7
       1.5s    47.00nm          5.4mb
PUL    84.28 330 eP    41 12.00  -0.8
       3.0s   450.00nm          6.1mb
     Z  17s     6.00um          6.0MszX
     N  17s     2.20um
     E  17s     5.50um
                eS    51 35.00
                e     52 55.00
SIM    84.48 315 eP    41 12.00  -2.2
                e     44 24.00
                e     51 36.00
BHL    85.02 303 P     41 16.00  -1.3
                SKS   51 36.00
KAS    85.30 311 eP    41 22.00   3.5X
MBC    85.64  13 eP    41 21.50   2.0
       1.0s    11.00nm          5.0mb
SIT    85.87  33 P     41 30.00   9.2X
     Z  20s     1.23um          5.3Msz
MNK    86.97 324 eP    41 25.00  -1.3
AFR    87.18 108 iPd   41 31.60   3.6X
       1.3s   204.30nm          6.2mb
PPT    87.38 108 iPd   41 32.70   3.7X
       1.4s   273.60nm          6.3mb
     Z  21s  4275.00um          8.8MszX
PAE    87.39 108 iPd   41 32.80   3.8X
       1.6s   297.30nm          6.3mb
PPN    87.51 108 iPd   41 33.40   3.9X
       1.6s   318.40nm          6.3mb
KIS    87.69 317 eP    41 24.00  -5.9X
                e     51 57.00
TVO    87.72 108 iPd   41 34.80   4.1X
       1.6s   661.70nm          6.7mb X
PMO    88.46 105 iPd   41 37.20   3.1X
       1.4s   149.90nm          6.1mb
TPT    88.72 105 iPd   41 38.60   3.2X
       1.8s   336.60nm          6.4mb
VAH    88.76 106 iPd   41 39.00   3.4X
       1.5s   152.50nm          6.1mb
RUV    88.98 106 iPd   41 40.10   3.5X
       1.4s   130.70nm          6.1mb
HLW    89.35 300 eP    41 39.00   0.8
                eS    52 28.00
MAW    89.79 200 iPc   41 40.10   0.7
       1.3s    33.00nm          5.5mb
     Z  22s     1.15um          5.2MszX
                iSKS  52 08.10
                iS    52 26.30
                iSP   53 33.20
NAI    89.90 269 PKP   41 44.00   2.6X
                PS    52 14.00
MLR    90.02 316 eP    41 43.70   2.4X
LVV    90.12 321 eP    41 52.00  10.6X
                e     45 16.00
                ePPP  47 21.00
                iPS   53 39.00
UPP    90.41 331 iP    41 42.10  -0.4
                iS    52 32.00
```

```
DAG     90.77 352 iPc    41 44.40   0.4
        0.8s    39.55nm          5.8mb
RES     91.44  10 eP     41 48.50   1.4
        1.0s    10.00nm          5.2mb
UZH     91.55 320 iPc    41 49.00   1.0
                  ePS    54 00.00
APO     91.85 333 eP     41 48.30  -0.9
        0.5s     4.30nm          5.2mb
      Z 19s      2.39um          5.7Msz
                  LR    20 12.00
SPC     92.66 321 eP     41 56.30   2.9X
NRA0    92.82 334 P      41 53.50  -0.2
NRE0    92.82 334 P      41 45.40  -8.3X
                  SP    54 11.30
                  SS    59 11.70
                  SSS   02 50.20
NB2     92.83 334 P      41 52.70  -1.1
        1.0s    23.80nm          5.6mb
YKA     93.65  24 eP     41 57.70   0.2
        1.3s    13.70nm          5.2mb
SRO     94.34 320 eP     42 02.80   1.9
KSP     94.47 323 eP     42 01.60   0.1
ZST     94.96 321 eP     42 05.80   2.0
                  e     42 19.70  47km
BRG     95.83 324 iP     42 11.20   3.5X
        2.0s    52.00nm          5.7mb
      Z 18s      3.20um          5.8Msz
      N 18s      2.50um
      E 18s      1.20um
CLL     96.19 325 eP     42 09.00  -0.3
        1.8s    32.00nm          5.5mb
      Z 18s      3.00um          5.8Msz
GEC2    96.80 322 eP     42 14.70   2.4X
        1.2s     4.70nm          4.9mb
                  e     42 19.80  16kmX
                  e     42 24.20
                  e     42 38.80
MOX     97.27 324 eP     42 12.00  -2.2
      Z 19s      2.70um          5.8Msz
LJU     97.40 319 iPc    42 03.00 -11.9X
        2.5s   600.00nm
                  eSKS  52 52.00
                  eS    53 41.50
                  eSKKS 06 03.00
GRA1    97.91 324 eP     42 20.60   3.4X
                  eSKS  52 58.00
                  eS    53 34.00
YBH     98.28  45 eP     41 59.52 -19.5X
      Z 20s      1.00um          5.3Msz
                  ePPc  45 58.52
                  eSKKS 53 02.52
                  eS    53 03.52
                  ePS   55 00.52
                  eSS   00 17.52
                  iSKKS 04 29.52
                  eLQ   09 40.52
                  eLR   13 52.52
WDC     98.82  46 P      42 30.00   8.6X
      Z 20s      1.78um          5.5Msz
NEW     99.23  37 P      42 30.00   6.8X
      Z 19s      1.70um          5.6Msz
SAO    101.02  49 Pdiff 42 40.00   8.6X
      Z 19s      2.73um          5.8Msz
CMB    101.33  48 Pdiff 42 40.00   7.2X
      Z 20s      2.29um          5.7Msz
DOU    101.48 326 Pdiff 42 36.90   3.8X
ISA    103.67  49 Pdiff 42 50.00   6.7X
      Z 19s      2.21um          5.7Msz
DUG    105.71  43 PKP   47 20.00  14.6X
      Z 21s      1.12um          5.4Msz
ARUT   106.41  46 (PKP) 47 06.08  -0.8
DAU    106.65  42 (PKP) 47 08.87   1.4
PV10   109.16  43 ePKP  47 12.81   0.6
GOL    110.86  40 PKP   47 30.00  14.7X
      Z 19s      1.81um          5.7Msz
TUC    110.87  50 PKP   47 30.00  14.7X
      Z 21s      1.65um          5.6Msz
GLD    110.93  40 PKP   47 30.00  14.6X
      Z 19s      1.88um          5.7Msz
ALQ    112.71  45 PKP   47 30.00  11.1X
      Z 20s      1.56um          5.6Msz
LTX    117.66  49 (PKP) 47 27.03  -1.4
WMOK   118.02  42 PKP   47 40.00  11.1X
      Z 19s      1.94um          5.7Msz
MIAR   121.44  39 ePKP  47 35.72   0.4
      Z 21s      1.84um          5.7Msz
                  e     48 00.59
                  PP    49 11.76
CBM    121.56  12 PKP   47 50.00  14.9X
      Z 20s      2.02um          5.8Msz
YSNY   122.71  22 PKP   47 50.00  12.5X
      Z 19s      2.18um          5.8Msz
LBNH   123.21  16 PKP   47 50.00  11.6X
      Z 19s      1.30um          5.6Msz
BINY   123.85  20 (PKP) 47 38.77  -1.0
      Z 19s      1.72um          5.7Msz
OXF    123.94  36 PKP   47 50.00   9.9X
      Z 19s      1.73um          5.7Msz
MCWV   124.62  25 PKP   47 50.00   8.7X
      Z 20s      2.32um          5.8Msz
HRV    124.92  16 PKP   47 50.00   8.2X
      Z 19s      1.30um          5.6Msz
LSCT   125.20  18 PKP   47 50.00   7.6X
      Z 18s      1.78um          5.8Msz
MYNC   126.38  31 ePKP  47 45.08   0.1
      Z 20s      1.16um          5.6Msz
CEH    128.11  26 ePKP  47 49.02   0.9
      Z 19s      0.90um          5.5Msz
LKO    128.40 291 PKP   47 49.07  -0.3
        0.8s    14.00nm
KIC    128.68 287 PKP   47 51.08   1.2
        1.0s    29.50nm
TIC    128.85 287 PKP   47 50.68   0.5
        0.9s    11.00nm
LIC    128.99 287 PKP   47 50.80   0.4
        0.9s    21.50nm
      Z 21s      1.10um          5.5Msz
KDS    133.10 298 ePKP  47 58.50   0.3
ECO    147.45  54 ePKP  48 14.00  -9.9X
SDV    154.44  42 ePKP  48 36.50   2.0
YJA    163.53 137 ePKPd 48 48.20   3.3X
MOCB   164.06 135 PKP   48 47.60   2.1
CNCB   164.53 116 PKP   48 49.30   3.2X
LPB    164.53 115 ePKP  48 48.00   2.0
      Z 16s      1.35um
                  LR    45 46.00
LPAZ   164.59 114 ePKP  48 48.15   1.9
                  ePKPab49 44.00
SOB1   167.51 274 ePKP  48 45.60  -2.3
PPD    168.14 190 (PKP) 48 50.00   1.9
SIV    170.72 128 PKP   48 50.00   0.3
     S.D. = 1.2  on 163 of 230 obs.
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   NOV  29, 1993  21h 15m 00.86± 0.29s
   45.712 N ± 4.0km    4.601 E ± 2.7km
   DEPTH =   5.0km  (geophysicist)
 FRANCE                            (538)
      ML 3.1 (LDG), 2.9 (STR).

SSB     0.44 186 Pg      15 09.64   0.0
                 Sg      15 15.53
COLF    0.67 253 Pg      15 14.83   0.7
                 Sg      15 24.38
PLDF    0.73 291 Pg      15 15.74   0.2
                 Sg      15 26.35
LBL     1.07 244 Pg      15 22.26   0.8
                 Sg      15 37.23
SMF     1.07 331 Pn      15 21.70   0.2
                 Pg      15 22.20
                 Sg      15 36.40
AGO     1.08 289 Pg      15 22.29   0.6
                 Sg      15 37.50
PYM     1.12 273 Pg      15 23.14   0.8
                 Sg      15 38.64
LBF     1.34 341 Pn      15 25.40  -0.8
                 Pg      15 26.50
                 Sg      15 44.70
AVF     1.38 322 Pn      15 26.40  -0.4
                 Pg      15 27.40
                 Sg      15 46.50
RSL     1.42  90 Pn      15 26.74  -0.8
                 Pg      15 28.02
                 Sg      15 46.05
BGF     1.48 305 Pn      15 28.50   0.3
                 Pg      15 29.40
                 Sg      15 49.70
LPL     1.51  97 Pn      15 28.10  -0.7
                 Pg      15 30.00
                 Sg      15 47.60
MAF     1.51 290 Pn      15 28.60   0.0
                 Pg      15 30.00
                 Sg      15 50.00
LPG     1.52  97 Pg      15 30.20   1.1
                 Sg      15 48.80
SSF     1.55 331 Pg      15 31.00   1.9X
                 Sg      15 51.00
LOR     1.64 342 Pn      15 29.20  -1.2
                 Pg      15 32.20
                 Sg      15 53.40
RRL     1.73 116 P       15 32.53   0.5
TCF     1.76 290 Pn      15 32.10  -0.2
                 Pg      15 35.20
                 Sn      15 54.20
                 Sg      15 58.10
LSD     1.81  97 P       15 34.84   1.7
RSP     1.95 106 P       15 36.12   1.0
CAF     1.96 247 Pn      15 35.10   0.0
                 Sg      16 04.10
HYF     2.06 320 Pg      15 40.00   3.4X
                 Sg      16 07.20
BHB     2.07 114 P       15 37.86   1.1
PZZ     2.14 123 P       15 38.69   0.8
RJF     2.21 260 Pn      15 38.90   0.2
                 Pg      15 43.40
                 Sg      16 12.20
LSF     2.21 285 Pn      15 38.50  -0.2
                 Pg      15 43.10
                 Sg      16 11.20
ORX     2.37  91 P       15 41.66   0.5
ENR     2.49 126 P       15 42.15  -0.7
LRG     2.58 150 Pn      15 42.70  -1.3
                 Pg      15 49.80
                 Sn      16 12.80
                 Sg      16 21.80
HAU     2.59  27 Pn      15 41.20  -2.9X
                 Pg      15 49.40
                 Sg      16 21.60
FRF     2.60 145 Pn      15 43.00  -1.3
                 Pg      15 49.20
                 Sn      16 13.30
                 Sg      16 22.00
BSF     2.60  35 Pn      15 41.00  -3.4X
                 Pg      15 50.50
                 Sg      16 22.60
LPO     2.62 248 Pn      15 44.50  -0.1
                 Pg      15 51.70
                 Sg      16 25.40
LMR     2.74 149 Pn      15 44.10  -2.2
                 Pg      15 52.10
                 Sn      16 16.50
                 Sg      16 28.20
MFF     3.42 287 Pn      15 54.90  -1.0
                 Pg      16 06.70
                 Sn      16 33.50
                 Sg      16 50.00
     S.D. = 0.9  on  31 of  35 obs.
-----------------------------------
%  NOV  29, 1993  21h 39m 29.05± 0.98s
   43.025 N ± 6.6km   18.782 E ± 5.8km
   DEPTH =   5.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION        (383)

BRY     0.21 235 iPgd    39 33.57   0.1
                 iSg     39 36.77
NKY     0.26 143 iPgc    39 35.31   0.9
                 iSg     39 39.92
PLE     0.54  56 iPgd    39 39.87   0.0
                 iSg     39 47.95
HCY     0.61 200 iPgd    39 41.21  -0.1
                 iSg     39 50.39
TTG     0.69 149 iPgc    39 41.99  -0.9
                 iSg     39 53.81
BDV     0.74 177 iPgd    39 43.77  -0.1
                 iSg     39 55.24
IVA     0.83 100 iPgd    39 45.56  -0.2
                 iSg     39 58.51
PVY     0.98 116 iPgd    39 48.25   0.1
                 iSg     40 03.30
ULC     1.12 162 iPgc    39 50.66   0.2
                 iSg     40 07.66
     S.D. = 0.5  on   9 of   9 obs.
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&  NOV  29, 1993  21h 43m 12.09s
   61.670 N          151.789 W
   DEPTH = 105.7km
 SOUTHERN ALASKA                   (  2)
      <AEIC>.

NCG     0.32 214 iPd     43 27.00  -0.8
                 eS      43 38.87
SKT     0.33  21 iPc     43 26.82  -0.9
```

29d 21h

		eS	43	38.33	
		eS	43	38.39	
CGLM	0.38	196	iPd	43 27.23	-0.8
CRP	0.44	204	ePd	43 26.74	-1.8
		eS	43	39.65	
CP2	0.46	208	eP	43 27.67	-1.1
CKN	0.49	203	eP	43 28.13	-0.5
BGL	0.50	216	iPd	43 28.13	-0.7
SPU	0.51	195	iPd	43 27.92	-0.9
CKT	0.51	203	ePd	43 27.90	-1.0
SUA	0.54	112	iPc	43 29.23	0.1
		eS	43	42.08	
CKL	0.54	209	eP	43 28.26	-0.9
BKG	0.64	201	ePd	43 29.12	-0.8
		eS	43	43.46	
PWA	0.91	90	P	43 32.40	0.1
NKA	0.97	164	ePd	43 34.13	1.3
CUT	1.03	43	ePc	43 32.80	-0.7
PMS	1.15	111	eP	43 34.71	-0.2
DFR	1.17	202	iPd	43 34.59	-0.6
NCT	1.24	207	ePd	43 35.57	-0.5
REF	1.27	201	ePd	43 35.87	-0.5
		eS	43	53.26	
		eS	43	54.62	
		eS	43	54.70	
PLRM	1.27	92	iPc	43 35.10	-1.1
PMR	1.27	92	eP	43 34.73	-1.5
		eS	43	54.02	
RDW	1.29	203	iPd	43 36.22	-0.5
RED	1.34	201	iPd	43 36.64	-0.6
GHO	1.37	84	eP	43 36.48	-1.0
SLKM	1.39	146	eP	43 37.46	-0.3
KNK	1.62	98	iPc	43 39.48	-1.0
		eS	44	01.50	
SML	1.65	84	eP	43 39.78	-1.2
HUR	1.65	36	eP	43 39.88	-1.1
MPA	1.67	134	eP	43 40.91	-0.2
ILIM	1.70	200	eP	43 40.55	-1.0
INE	1.73	202	eP	43 41.18	-0.9
INW	1.74	203	eP	43 41.34	-0.8
TRF	1.92	21	eP	43 42.98	-1.5
SVW	1.93	255	eP	43 42.68	-1.8
KTH	1.93	12	iPd	43 42.78	-1.8
SEW	1.94	143	eP	43 44.08	-0.5
HOM	2.02	178	eP	43 45.30	-0.3
SCM	2.13	84	eP	43 45.74	-1.4
OPT	2.14	200	eP	43 46.84	-0.5
CNPM	2.17	173	eP	43 46.24	-1.4
RND	2.21	37	eP	43 46.84	-1.4
PDB	2.23	213	eP	43 47.46	-0.9
TTA	2.34	305	eP	43 47.24	-2.7
TOA	2.70	78	P	43 53.70	-1.0
BWN	2.73	22	eP	43 53.31	-1.7
KLU	2.81	91	eP	43 54.32	-1.9
HIN	2.87	114	eP	43 55.22	-1.8
CDD	2.90	199	eP	43 56.08	-1.3
MLY	3.41	8	eP	44 01.38	-2.9
DDM	3.46	49	eP	44 05.35	0.4
CCB	3.49	29	eP	44 02.78	-2.6
HDA	3.52	37	eP	44 03.52	-2.3
MDM	3.67	24	eP	44 05.18	-2.7
FBA	3.71	27	eP	44 05.49	-2.9
GLB	3.82	90	eP	44 08.30	-1.7
GLM	3.88	29	eP	44 08.56	-2.1
HMT	3.90	107	P	44 08.10	-2.9
IMA	4.49	350	eP	44 15.47	-3.8
BALM	4.59	94	eP	44 17.74	-2.8
		eS	45	10.34	
INK	10.17	41	eP	45 34.00	-2.4

60 obs. associated

NOV 29, 1993 21h 59m 55.69± 0.94s
43.001 N ± 6.5km 18.766 E ± 5.6km
DEPTH = 5.0km (geophysicist)
NORTHWESTERN BALKAN REGION (383)

BRY	0.19	239	iPgd	00 00.16	0.5
			iSg	00 03.13	
NKY	0.25	138	iPgc	00 01.92	1.1
			iSg	00 06.36	
PLE	0.57	54	iPgc	00 06.80	-0.2
			iSg	00 15.66	
HCY	0.59	200	iPgd	00 07.00	-0.4
			iSg	00 15.66	
TTG	0.68	147	iPgd	00 09.01	-0.2
			iSg	00 19.60	
BDV	0.72	176	iPgd	00 09.78	-0.3
			iSg	00 20.39	
IVA	0.84	98	iPgd	00 12.39	-0.1
			iSg	00 25.04	
PVY	0.98	114	iPgc	00 14.87	0.1
			iSg	00 29.45	
ULC	1.10	161	iPgd	00 16.45	-0.3
			iSg	00 32.80	

S.D. = 0.6 on 9 of 9 obs.

% NOV 29, 1993 22h 21m 33.93± 0.93s
43.012 N ± 6.4km 18.771 E ± 5.5km
DEPTH = 5.0km (geophysicist)
NORTHWESTERN BALKAN REGION (383)

BRY	0.20	237	iPgd	21 38.05	0.0
			iSg	21 41.25	
NKY	0.26	140	iPgc	21 39.76	0.5
			iSg	21 44.28	
PLE	0.56	55	iPgc	21 44.99	-0.1
			iSg	21 52.87	
HCY	0.60	200	iPgc	21 45.98	0.1
			iSg	21 54.84	
TTG	0.68	148	iPgd	21 46.73	-0.9
			iSg	21 58.26	
BDV	0.73	177	iPgd	21 48.54	0.0
			iSg	21 59.57	
IVA	0.84	99	iPgc	21 50.75	0.1
			iSg	22 03.52	
PVY	0.98	115	iPgc	21 53.14	0.1
			iSg	22 08.35	
ULC	1.11	161	iPgd	21 55.40	0.2
			iSg	22 12.37	

S.D. = 0.4 on 9 of 9 obs.

NOV 29, 1993 22h 44m 46.41± 0.74s
47.923 N ± 6.2km 7.201 E ± 6.8km
DEPTH = 10.0km (geophysicist)
SWITZERLAND (544)
ML 2.5 (LDG), 2.1 (STR).

MOF	0.08	213	Pg	44 49.00	0.0
			Sg	44 50.90	
BSF	0.29	252	Pg	44 52.24	-0.3
			Sg	44 56.31	
CDF	0.49	6	Pg	44 55.09	-1.3
			Sg	45 00.93	
WLS	0.50	12	Pg	44 55.31	-1.3
			Sg	45 01.52	
FEL	0.55	95	ePg	44 57.10	-0.4
HAU	0.58	279	Pg	44 57.30	-0.9
			Sg	45 04.80	
LOMF	0.63	204	Pg	44 59.43	0.4
			Sg	45 10.10	
VITF	0.87	290	Pg	45 03.25	0.1
			Sg	45 14.85	
RUP	1.78	357	eP	45 19.20	1.7
ABH	1.97	7	eP	45 22.40	2.1
LOR	2.35	255	Pg	45 29.90	4.2X
			Sg	46 00.10	
LBF	2.38	248	Pg	45 31.20	5.1X
			Sg	46 00.70	
SMF	2.62	242	Pg	45 35.40	5.9X
			Sg	46 08.20	
SSF	2.65	252	Pg	45 36.20	6.3X
			Sg	46 08.20	
AVF	2.85	248	Pg	45 40.00	7.3X
			Sg	46 16.20	
BGF	3.27	247	Pg	45 47.50	8.8X
			Sg	46 29.50	
MAF	3.60	243	Pg	45 53.80	10.5X
			Sg	46 40.30	
TCF	3.78	246	Pg	45 56.60	10.6X
			Sg	46 45.20	

S.D. = 1.3 on 10 of 18 obs.

& NOV 29, 1993 23h 29m 06.44s
38.795 N 122.735 W
DEPTH = 2.8km
NORTHERN CALIFORNIA (36)
<GM-P>. MD 2.8 (GM).

NTYM	0.41	172	eP	29 14.94	0.3
HMR	0.97	131	(P)	29 19.00	-6.6
ORV	1.22	51	eP	29 27.86	-2.0
COE	1.75	151	eP	29 35.27	-2.6
CMB	2.00	112	eP	29 39.21	-2.3
LGPM	2.12	358	eP	29 48.57	5.2

6 obs. associated

& NOV 29, 1993 23h 52m 39.27s
60.883 N 150.388 W
DEPTH = 31.9km
KENAI PENINSULA, ALASKA (14)
<AEIC>. ML 2.8 (AEIC).

SLKM	0.39	168	ePd	52 47.71	-0.4
			eS	52 54.84	
NKA	0.44	252	iPd	52 50.07	1.2
SUA	0.61	344	iPc	52 50.79	-0.8
			eS	53 00.60	
MPA	0.64	128	eP	52 50.91	-1.1
PWA	0.81	17	P	52 53.50	-0.8
SPU	0.86	291	iPc	52 54.23	-1.0
			eS	53 06.31	
CGLM	0.89	299	iPc	52 54.78	-0.9
SEW	0.91	149	eP	52 54.02	-1.7
BKG	0.93	282	eP	52 55.10	-1.1
			eS	53 08.41	
PLRM	0.94	40	ePd	52 55.11	-1.0
			eS	53 08.23	
PMR	0.94	40	eP	52 54.85	-1.3
			eS	53 08.11	
CKN	0.94	292	eP	52 55.49	-0.7
CKT	0.94	291	ePc	52 55.31	-1.0
CRP	0.94	295	eP	52 55.07	-1.3
			eS	53 08.78	
CP2	0.98	294	ePc	52 55.99	-1.0
CKL	1.00	289	iPc	52 56.24	-1.0
NCG	1.00	302	eP	52 56.38	-0.9
PWL	1.00	90	eP	52 55.93	-1.3
			eS	53 09.55	
BGL	1.05	292	eP	52 57.00	-0.8
KNK	1.08	60	ePd	52 57.23	-1.0
GHO	1.14	38	ePd	52 58.10	-1.0
			eS	53 13.68	
BRLK	1.15	193	eP	52 58.18	-1.1
			eS	53 12.86	
DFR	1.17	257	eP	52 58.21	-1.3
REF	1.21	252	eP	52 59.01	-1.1
			eS	53 15.01	
			eS	53 15.21	
SKT	1.23	334	eP	52 59.81	-0.5
			eS	53 16.16	
			eS	53 16.64	
RS2	1.24	251	eP	52 59.58	-1.1
RDW	1.26	252	eP	52 59.65	-1.2
RED	1.26	249	eP	52 59.70	-1.2
			eS	53 16.32	
NCT	1.29	257	eP	53 00.10	-1.2
CFI	1.31	76	eP	52 59.94	-1.5
SML	1.36	46	eP	53 01.12	-1.1
HOM	1.38	208	eP	53 02.05	-0.4
CNPM	1.43	198	ePc	53 02.00	-1.2
ILIM	1.51	239	eP	53 03.36	-1.0
			eS	53 22.92	
CUT	1.53	2	eP	53 04.52	-0.1
INE	1.56	239	eP	53 04.12	-1.1
MTU	1.63	122	eP	53 06.38	0.3
SCM	1.76	56	eP	53 06.45	-1.6
VLZ	1.99	81	eP	53 09.04	-2.3
KLU	2.25	72	ePd	53 12.75	-2.3
TOA	2.36	57	eP	53 15.41	-1.3
SVW	2.56	277	eP	53 17.76	-1.7
SGAM	2.58	96	eP	53 16.36	-3.3
TRF	2.58	1	eP	53 20.20	0.3
KTH	2.69	355	eP	53 21.78	0.4
TTA	3.36	310	eP	53 29.00	-1.9
IMA	5.41	346	eP	53 58.03	-1.9

47 obs. associated

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* NOV 30, 1993 00h 37m 27.83± 2.29s
36.119 N ±10.0km 10.706 W ±25.0km
DEPTH = 33.0km (normal)
NORTH ATLANTIC OCEAN (402)
mbLg 3.0 (MDD).

EVAL	3.50	64	eP	38 22.20	1.0
			e	38 56.80	
EJIF	4.24	84	eP	38 32.38	0.6
			e	39 14.60	
EPRU	4.49	78	eP	38 35.72	0.4
			e	39 17.90	
JHA	4.50	166	iP	38 35.50	0.1
			iS	39 22.00	

```
EHOR     4.69  67 eP     38 38.00  -0.1
                  e      39 25.10
CIA      4.83 160 iP     38 40.00   0.0
                  iS     39 29.00
EPLA     5.37  41 eP     38 48.66   0.9
                  e      39 44.60
OUK      5.44 153 iP     38 48.50  -0.2
                  iS     39 43.00
PAB      6.08  54 ePn    38 56.20  -1.7
                  eSn    40 02.50
GUD      6.85  47 eP     39 08.89   0.3
                  e      40 19.70
EVIA     7.00  67 eP     39 09.47  -1.3
                  e      40 19.30
     S.D. = 0.9  on  11 of  11 obs.
-------------------------------------
&  NOV  30, 1993  00h 42m 39.07s
   61.451 N          141.581 W
   DEPTH =   0.0km
 SOUTHERN ALASKA                    (  2)
      <AEIC>. ML 2.5 (AEIC).

CTGM     0.50 166 iP     42 49.03  -0.1
                  eS     42 57.27
BALM     0.56 222 iP     42 50.64   0.5
                  eS     42 59.46
GLB      1.07 270 eP     42 58.66  -1.5
                  eS     43 13.94
YAH      1.09 184 eP     43 00.43  -0.3
                  eS     43 16.59
WAX      1.18 212 eP     43 01.88  -0.2
HMT      1.72 231 eP     43 12.79   2.3
RAGM     1.85 236 eP     43 15.37   3.0
TMW      1.99 341 eP     43 14.46   0.1
KLU      2.08 273 eP     43 16.00   0.2
CVA      2.22 248 eP     43 18.41   0.7
TOA      2.28 289 P      43 20.50   1.9
VLZ      2.32 264 eP     43 20.05   1.0
SCM      2.77 280 eP     43 26.66   1.0
CFI      3.00 268 eP     43 29.63   1.0
KNK      3.30 272 eP     43 33.42   0.3
LTI      3.39 248 eP     43 34.90   0.6
PMR      3.62 276 (P)    43 39.62   2.1
        17 obs. associated
-------------------------------------
*  NOV  30, 1993  00h 48m 49.05± 0.86s
   40.090 N ± 6.5km   20.032 E ± 7.9km
   DEPTH =  10.0km  (geophysicist)
 GREECE-ALBANIA BORDER REGION      (392)

TPE      0.21 356 iPgd   48 53.50   0.0
SRN      0.21 187 ePg    48 53.80   0.2
                  iSg    48 55.80
LSK      0.44  82 ePg    48 57.50  -0.5
VLO      0.56 313 ePg    49 00.00  -0.4
OHR      1.18  30 ePn    49 11.70   0.7
     S.D. = 0.7  on   5 of   5 obs.
-------------------------------------
*  NOV  30, 1993  00h 51m 37.71± 0.86s
   29.356 S ±11.4km  125.228 E ± 8.2km
   DEPTH =  10.0km  (geophysicist)
 WESTERN AUSTRALIA                  (590)

FORT     2.83 121 eP     52 23.50  -0.3
       0.2s    15.00nm
                  eS     52 55.20
COOL     3.85 246 eP     52 39.00   0.7
                  eS     53 15.00
MEEK     6.44 293 eP     53 14.00  -1.0
                  eS     54 23.50
MBL      9.51 328 eP     53 58.00   0.4
                  eS     55 42.50
ASPA     9.61  56 iPc    54 05.60   6.5X
       0.3s     9.00nm          5.7mb
                  iS     55 45.20
WB2     12.51  44 eP     54 38.90   0.3
                  eS     56 55.00
     S.D. = 0.9  on   5 of   6 obs.
-------------------------------------
%  NOV  30, 1993  00h 59m 00.58± 1.18s
   26.191 S ± 9.7km   27.510 E ±16.0km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA           (584)
      mbLg 2.5 (BUL).

PRY      0.74 183 eP     59 15.70   0.4
                  S      59 23.00
SLR      0.83  57 eP     59 15.90  -1.3
                  S      59 25.00
SEK      2.13 177 eP     59 40.00   2.6X
                  S      00 04.20
BFT      2.34  78 eP     59 41.50   1.0
                  S      00 08.50
BLF      3.13 202 eP     59 51.00  -0.7
BUL      6.10  10 iPn    00 34.40   0.6
                  iSn    01 50.10
                  iSg    02 11.00
     S.D. = 1.4  on   5 of   6 obs.
-------------------------------------
%  NOV  30, 1993  01h 14m 52.44± 0.94s
   42.986 N ± 6.8km   18.757 E ± 5.7km
   DEPTH =   5.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION         (383)

BRY      0.18 241 iPgd   14 56.58   0.4
                  iSg    14 59.64
NKY      0.25 134 iPgc   14 58.35   0.8
                  iSg    15 03.02
HCY      0.57 200 iPgc   15 03.38  -0.5
                  iSg    15 12.64
PLE      0.58  53 iPgc   15 03.73  -0.3
                  iSg    15 12.60
TTG      0.67 146 iPgc   15 05.23  -0.6
                  iSg    15 16.19
BDV      0.70 176 iPgc   15 06.46  -0.1
                  iSg    15 17.41
IVA      0.85  97 iPgd   15 09.29   0.0
                  iSg    15 21.58
PVY      0.98 113 iPgc   15 11.78   0.2
                  iSg    15 26.34
     S.D. = 0.6  on   8 of   8 obs.
-------------------------------------
&  NOV  30, 1993  02h 54m 48.69s
   42.290 N          121.988 W
   DEPTH =   8.0km
 OREGON                             ( 32)
      <SEA-P>. MD 3.0 (SEA). ML 3.3
      (GS), 3.0 (BRK).

LAB      0.06 248 Pc     54 50.81   0.0
VRC      0.18 285 Pc     54 52.76   0.3
HAMO     0.22 177 Pc     54 53.49   0.0
                  S      54 57.18
LHEM     0.68 195 P      55 02.63   0.1
LGMM     0.70 171 P      55 02.14  -0.7
LASM     0.76 156 P      55 03.00  -0.8
YBH      0.78 224 iPc    55 02.30  -1.8
                  iS     55 12.23
BBOR     0.79 320 P      55 03.47  -0.8
                  S      55 14.39
LMPM     0.81 189 P      55 04.07  -0.7
LBFM     0.95 176 eP     55 06.57  -0.5
                  eS     55 17.92
LGBM     0.96 189 P      55 06.61  -0.7
DBO      1.24 312 P      55 11.48  -0.5
LBKM     1.31 203 P      55 11.56  -1.6
HSO      1.48 327 P      55 15.64   0.0
KOMM     1.49 228 P      55 16.32   0.5
LGPM     1.51 205 eP     55 14.82  -1.4
                  eS     55 34.16
NCOR     1.54  24 P      55 16.93   0.2
HBO      1.57 351 P      55 17.57   0.5
WDC      1.76 194 ePc    55 19.01  -0.6
LMEM     1.78 170 eP     55 20.17   0.1
TCO      1.84   9 P      55 21.55   0.6
MIN      1.96 171 eP     55 21.75  -1.0
FBO      2.06 348 P      55 25.53   1.4
RNO      2.07 322 P      55 25.95   1.8
FHC      2.11 226 eP     55 25.20   0.4
VIPM     2.43  24 P      55 30.30   0.8
SSOR     2.59 353 P      55 34.91   3.3
ORV      2.76 172 eP     55 33.67  -0.3
VGB      3.34  15 eP     55 42.23  -0.1
        29 obs. associated
-------------------------------------
   NOV  30, 1993  03h 07m 31.82± 0.49s
   35.863 N ± 7.1km  103.026 W ± 4.8km
   DEPTH =   5.0km  (geophysicist)
 NEW MEXICO                         (496)
      mbLg 3.3 (GS). MD 3.3 (SNM).
      Felt (IV) at Amistad and Nara
      Visa; (III) at Sedan. Also felt
      (III) in the area 10 miles north
      of Sunray, Texas.
CPRX     2.91 194 Pg     08 28.00   8.2X
                  Sg     09 03.40
ALQ      2.95 253 ePn    08 21.26   0.8
                  eS     09 00.97
ACO      3.24  74 iPd    08 25.10   0.7
BNM      3.41 241 Pg     08 36.80   9.7X
                  Sg     09 20.70
HTMS     3.42 189 Pg     08 36.90   9.9X
CLN7     3.50 191 Pg     08 38.30  10.2X
                  Sg     09 23.90
CRNM     3.59 239 Pg     08 39.90  10.4X
                  Sg     09 24.40
ANTR     3.60 185 Pg     08 39.90  10.3X
WMOK     3.65 107 ePn    08 30.56   0.4
                  ePg    08 40.17
                  eSn    09 23.78
CLNB     3.66 191 Pg     08 41.00  10.6X
LAZ      3.67 248 Pg     08 41.30  10.6X
MEO      3.79 105 iPd    08 32.60   0.4
BMNM     3.82 247 Pg     08 45.20  12.4X
GDL2     3.82 197 Pg     08 43.70  11.0X
GLD      4.25 337 (P)    08 38.93   0.1
GOL      4.26 335 ePn    08 37.89  -1.1
                  ePg    08 48.92
OCO      4.53  93 iPc    09 01.30  18.6X
FNO      4.63  96 iPc    08 58.10  14.1X
PCO      4.95  79 iPc    08 47.90  -0.7
PV08     5.24 303 (Pn)   08 53.42   0.4
                  ePg    09 12.31
PV10     5.42 299 (Pn)   08 55.78   0.2
                  ePg    09 12.75
PV09     5.54 300 (Pn)   08 58.01   0.7
                  ePg    09 16.11
TUL      5.87  87 iPd    09 20.00  18.4X
LTX      6.53 185 ePn    09 09.97  -1.1
SRU      6.79 301 (Pn)   09 13.91  -0.8
                  ePg    09 37.26
UYO      7.23 101 iPd    09 17.80  -2.9X
MIAR     7.85  97 ePc    09 26.68  -2.7X
RSSD     8.28 355 ePn    09 33.59  -2.1X
     S.D. = 0.8  on  12 of  28 obs.
-------------------------------------
?  NOV  30, 1993  03h 12m 32.48± 3.40s
   37.047 N ±16.1km    6.870 W ±27.8km
   DEPTH =  33.0km  (normal)
 SPAIN                              (377)
      mbLg 2.8 (MDD).

EVAL     0.54  10 iPd    12 43.83   0.1
                  e      12 54.50
CNIL     0.94 136 eP     13 04.00  14.6X
ALJ      1.08 110 eP     13 07.00  15.5X
MOMI     1.17 128 eP     13 05.00  12.3X
EJIF     1.27 117 eP     12 53.79  -0.3
                  e      13 12.20
PLAT     1.29 136 eP     13 05.00  10.7X
EPRU     1.31  93 iPd    12 55.11   0.4
                  e      13 14.40
EHOR     1.51  59 iPd    12 57.95   0.5
                  e      13 20.80
ELUQ     2.14  75 eP     13 06.84   0.2
                  e      13 35.70
EGUA     2.66  94 eP     13 14.06   0.2
                  e      13 46.70
EVIA     3.80  64 iPd    13 29.12  -1.2
                  e      14 16.00
     S.D. = 0.7  on   7 of  11 obs.
-------------------------------------
*  NOV  30, 1993  03h 21m 31.47± 0.63s
    3.580 S ± 9.9km  101.601 E ±12.6km
   DEPTH =  45.2km  (  4 depth phases)
   5.1mb ( 17 obs.)  4.6Msz (  2 obs.)
 SOUTHERN SUMATERA, INDONESIA       (274)

KGM      5.82  17 ePd    22 59.80   2.3
       0.8s   137.50nm          5.5mb
LEM      6.80 119 iPc    23 27.00  15.5X
IPM      8.13 356 ePc    23 31.60   1.8
       0.5s    17.10nm          5.2mb
CD2     34.36   3 P      28 14.60  -1.7
PKI     34.68 334 P      28 19.40  -0.1
       0.8s    19.00nm          5.1mb
GUN     34.78 335 P      28 20.60   0.3
DMN     34.85 334 P      28 21.00   0.2
       1.2s    82.00nm          5.5mb
KKN     34.93 334 P      28 21.40  -0.1
GKN     35.40 334 P      28 25.60   0.2
```

30d 03h

```
WB2     35.83 120 eP    28 28.90  -0.1
        0.2s    17.20nm         5.6mb
                e       28 45.60  67kmX
ASPA    37.03 126 iPc   28 40.20   1.1
        0.4s    14.10nm         5.2mb
                iS      34 18.90
XAN     38.05  10 P     28 46.50  -1.0
        0.6s    15.00nm         5.1mb
                pP      28 57.30  38km
                sP      29 01.90
LZH     39.51   3 eP    28 59.00  -0.8
        1.2s    32.00nm         5.0mb
NDI     39.73 325 iP    29 01.50   0.0
QIS     40.66 118 eP    29 10.00   0.7
TIY     42.30  13 eP    29 21.60  -0.9
      Z  20s     0.50um         4.4Msz
GTA     42.81 358 Pc    29 26.00  -0.8
        1.0s     8.00nm         4.4mb
HHC     45.14  11 P     29 45.80   0.2
        1.0s    11.00nm         4.7mb
BJI     45.42  16 eP    29 47.00  -0.6
        1.0s     6.00nm         4.4mb
CTA     46.49 114 iPc   29 56.00  -0.4
        1.0s    27.50nm         5.1mb
                i       30 10.00  53km
STK     46.91 132 iPc   29 50.10  -9.5X
        0.6s     7.80nm         4.8mb
                ipP     30 01.80  42km
WMQ     48.82 347 iPc   30 14.00  -0.3
YAK     68.87  14 iP    32 31.00  -2.2
        1.0s    50.00nm         5.4mb
      Z  22s     0.60um         4.8Msz
      N  18s     1.20um
      E  22s     0.50um
OBN     78.95 328 eP    33 32.00   0.2
        1.0s    28.00nm         5.2mb
                e       33 46.00  48km
SRO     88.12 318 eP    34 36.00  17.4X
ZST     88.97 318 eP    34 23.80   1.1
GEC2    91.28 319 eP    34 34.80   1.2
        1.0s     2.15nm         4.5mb
                e       34 40.80  19kmX
                e       34 46.30
APO     91.94 330 eP    34 35.90  -0.3
        0.5s     1.30nm         4.6mb
      S.D. = 1.1  on  25 of  28 obs.
-----------------------------------
&  NOV  30, 1993  03h 30m 36.69s
   42.287 N          121.995 W
   DEPTH =   8.1km
   3.1mb (  1 obs.)
 OREGON                          ( 32)
      <SEA-P>. MD 3.0 (SEA). ML 3.5
      (GS), 3.2 (BRK).

LAB      0.05 249 Pc    30 38.71  -0.1
VRC      0.17 287 P     30 40.65   0.2
                S       30 43.71
HAMO     0.22 175 P     30 41.43   0.0
                S       30 45.27
LHEM     0.68 194 P     30 49.49  -1.0
LGMM     0.70 170 P     30 50.13  -0.6
LASM     0.75 155 P     30 50.84  -1.0
YBH      0.77 224 iPc   30 50.21  -1.7
                eS      31 00.05
BBOR     0.78 320 P     30 51.31  -0.9
LMPM     0.81 189 P     30 51.80  -0.9
LBFM     0.94 175 eP    30 54.38  -0.6
                eS      31 05.72
LGBM     0.95 189 P     30 54.59  -0.6
DBO      1.24 313 P     30 59.36  -0.6
LBKM     1.30 203 P     30 59.40  -1.7
HSO      1.48 327 P     31 03.20  -0.4
KOMM     1.48 228 P     31 03.00  -0.8
LGPM     1.51 205 eP    31 02.45  -1.7
                eS      31 21.98
NCOR     1.55  24 P     31 04.88   0.1
HBO      1.57 351 P     31 05.05  -0.1
WDC      1.75 194 ePc   31 07.05  -0.5
LMEM     1.78 169 eP    31 07.75  -0.3
TCO      1.84   9 P     31 09.36   0.3
MIN      1.96 171 eP    31 10.42  -0.3
                iS      31 38.00
FBO      2.07 348 P     31 13.38   1.2
RNO      2.07 322 P     31 13.37   1.2
FHC      2.11 226 (P)   31 11.02  -1.7
GMO      2.28  19 P     31 16.40   1.0
BPO      2.37   5 P     31 17.69   1.0
SSOR     2.59 353 P     31 22.52   2.8
ORV      2.75 172 ePc   31 23.25   1.3
                iS      32 01.81
VGB      3.35  15 eP    31 30.23  -0.1
BMW      4.28 349 (P)   31 45.13   1.5
LON      4.46   2 (P)   31 45.11  -1.1
BONR     5.17 146 (P)   31 55.92  -0.6
HVU      6.88  91 (Pn)  32 23.27   2.7
YKA     20.71  10 eP    35 18.50  -1.1
        0.8s     0.70nm         3.1mb
        35 obs. associated
-----------------------------------
?  NOV  30, 1993  04h 34m 49.31± 1.09s
   22.499 S ±28.0km  172.191 E ±14.1km
   DEPTH =  33.0km  (normal)
   4.8mb (  5 obs.)
 LOYALTY ISLANDS REGION          (189)

DZM      5.34 273 iPc   36 07.90  -1.0
                iS      37 06.00
BKM      6.07 322 iPc   36 27.80   8.6X
                iS      37 54.00
BRS     18.26 251 iPc   39 04.50   2.5X
        1.0s     5.00nm         3.6mb X
ARMA    20.01 242 eP    39 23.00   0.7
        1.0s    15.00nm         4.3mb
CAN     23.92 233 eP    40 03.80   2.6X
BWA     23.98 235 eP    40 01.00  -0.8
CTA     24.28 271 iPKPd 40 06.50   1.7
                i(pPKP40 18.00
WB2     35.31 267 eP    41 42.80  -0.8
        0.6s     6.70nm         4.7mb
WRA     35.32 267 P     41 43.30  -0.3
        0.7s     3.30nm         4.4mb
MEEK    48.61 254 eP    43 32.20   0.1
        0.9s    43.00nm         5.5mb
BAL     49.87 248 eP    43 41.20  -0.5
        1.0s    42.00nm         5.4mb
MRWA    50.61 250 iPd   43 47.20  -0.1
NANU    52.05 258 eP    43 59.50   1.2
CHTO    82.50 294 eP    47 15.20   4.8X
III     95.38  72 eP    48 12.00  -0.3
SOB1   134.79 131 (PKP) 54 10.00   2.7X
GEC2   148.65 332 ePKP  54 36.40   5.6X
        0.8s     1.31nm
                e       54 41.20
                e       54 44.90
                e       54 47.70
                e       54 49.50
                e       54 56.00
      S.D. = 1.0  on  11 of  17 obs.
-----------------------------------
   NOV  30, 1993  04h 59m 26.11± 0.37s
   59.047 S ± 9.7km   18.158 W ± 7.4km
   DEPTH =  33.0km  (normal)
   5.2mb ( 14 obs.)  5.5Msz (  7 obs.)
 SOUTHWESTERN ATLANTIC OCEAN      (156)
      Mw 5.9 (HRV).
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 40S, 74C
      Centroid Location:
      Origin Time       04:59:27.2 0.2
      Lat 59.42S 0.02 Lon  17.12W 0.03
      Dep  15.0 FIX Half-duration  1.9
      Moment Tensor;   Scale 10**17 Nm
        Mrr=-0.54 0.12  Mtt=-1.47 0.19
        Mff= 2.02 0.14  Mrt= 0.00 0.00
        Mrf= 0.00 0.00  Mtf= 6.62 0.13
       Principal Axes:
        T  Val=  7.12  Plg= 0  Azm=128
        N       -0.54      90      180
        P       -6.58       0       38
      Best Double Couple:Mo=6.8*10**17
       NP1:Strike=173 Dip=90 Slip=-180
       NP2:        263     90        0

SNA     13.12 156 e(P)  02 20.50 -11.9X
        0.8s   413.00nm
                e       15 00.10
NVL     17.05 146 eP    03 12.00 -11.2X
        1.0s   243.00nm
      N  14s     6.00um
      E  14s     4.00um
                e       03 41.00
                e       04 10.00
                e       04 38.00
                e       05 20.00
                iS      06 30.00
                e       06 54.00
SPA     31.13 180 iPc   05 41.30  -2.2
        0.9s   100.00nm         5.6mb
                i       12 50.00
MAW     34.76 138 eP    06 11.00  -3.7X
        1.1s    55.56nm         5.4mb
BLE     34.97  60 eP    06 18.00   1.1
        0.5s    15.00nm         5.2mb
CER     35.71  61 e(P)  06 12.00 -11.2X
        0.7s    55.00nm
POF     39.39  58 iPc   06 55.00   0.9
        0.6s    19.00nm         5.0mb
                e       07 14.00
RFA     40.73 284 ePd   07 05.50   0.3
VAO     41.42 318 eP    07 12.20   1.3
FRS     41.51  65 eP    07 12.50   1.0
BLF     42.46  65 eP    07 18.50  -1.0
        0.6s    19.00nm         5.0mb
PEL     43.14 283 iP+   07 23.00  -1.9
CFA     43.16 287 e(P)  07 23.40  -1.6
SBA     43.32 182 eP    07 26.60   0.9
                S       14 02.00
RTLL    43.50 287 e(P)  07 27.00  -0.8
RTCB    43.53 286 e(P)  07 26.60  -1.5
SEK     43.79  66 eP    07 29.00  -1.4
        0.7s    27.00nm         5.1mb
PPD     43.88 313 eP    07 30.30  -0.6
                e       07 32.80
WIN     44.21  50 eP    07 33.00  -0.8
        1.5s    80.00nm         5.3mb
SLR     46.29  65 eP    07 45.00  -5.3X
        1.0s    20.00nm         5.0mb
      Z  20s    29.30um         6.2Msz
BFT     47.17  67 eP    07 54.00  -3.3X
        0.1s    20.00nm         6.1mb
SLA     47.57 295 ePd   08 01.80   1.4
BAO     48.60 320 eP    08 10.40   2.0
                e       08 16.70
                e       08 21.80
                e       08 44.90
PAF     48.91 120 eP    08 14.00   3.7X
                eS      15 12.00
                eSS     19 23.00
YJA     49.77 297 e(P)  08 19.00   1.2
BUL     51.27  61 iPd   08 27.50  -1.3
SOB1    52.64 331 eP    08 36.80  -2.3
DRV     53.55 169 eP    08 45.00  -0.1
                S       16 10.00
CCH     54.22 299 eP    08 52.00   1.0
CNCB    55.56 297 P     09 02.00   0.9
LPB     55.86 298 P     09 02.00  -1.1
                S       16 54.00
                LR      26 10.00
LPAZ    56.09 298 P     09 01.90  -3.1X
                S       17 02.10
                LR      26 13.00
ARE     57.50 294 eP    09 16.00   1.4
LIC     65.90  14 P     10 08.74  -1.8
        1.1s    23.00nm         5.2mb
      Z  20s     1.40um         5.2Msz
KIC     66.08  15 P     10 13.00   1.3
        1.1s    35.50nm         5.4mb
TIC     66.32  14 P     10 09.20  -4.1X
        0.8s     9.00nm         4.9mb
LKO     69.11  13 P     10 28.96  -1.8
        1.1s    24.50nm         5.2mb
CAR     79.63 311 iP    11 36.00   4.4X
SDV     79.64 307 eP    11 31.70   0.0
TOV     80.12 308 eP    11 37.70   3.6X
CAN     85.38 169 ePKP  12 02.20   1.2
                i       12 12.50
                i       12 20.40
BWA     86.21 169 ePKP  12 03.60  -1.5
                e       12 16.10
                e       12 23.20
STK     87.86 163 eP    11 59.40 -13.7X
        1.2s     2.20nm
ARMA    90.47 171 eP    12 34.20   8.6X
        1.0s    16.00nm         5.3mb
ASPA    94.42 154 eP    12 55.80  12.0X
        1.2s    10.50nm
      Z  22s     1.60um         5.4Msz
                i       13 01.40
WRA     98.11 154 P     13 02.00   1.4
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```
      1.1s      0.60nm          4.0mb X
NB2   121.91  16 PKP   18 17.60   0.7
      1.0s      5.50nm
NUR   123.80  24 ePKP  18 23.00   2.5X
KSH   124.80  70 ePKP  18 25.50   2.2
    Z  20s      1.85um          5.7Msz
    N  16s      0.72um
    E  16s      0.62um
LSA   124.80  89 ePKP  18 27.40   3.3X
ULM   125.86 309 ePKP  18 28.00   3.1X
NSD   127.01  19 ePKP  18 24.90  -1.7
      0.5s      1.10nm
KMI   127.02 103 ePKP  18 43.00  14.8X
    Z  25s      2.10um          5.7MszX
FRB   128.33 334 ePKP  18 30.00   0.9
GYA   130.09 106 ePKP  18 30.00  -3.9X
WMQ   133.86  75 ePKP  18 43.00   2.6X
DAG   135.56 360 iPKPd 18 43.80   1.2
      0.8s      6.72nm
LZH   136.38  95 ePKP  18 46.00   0.4
    Z  22s      0.76um          5.4Msz
GTA   136.81  89 ePKP  18 46.50   0.2
XAN   137.37 102 PKP   18 47.50   0.1
    Z  20s      1.27um          5.7Msz
YKA   141.73 312 ePKP  18 57.50   3.2X
      0.7s      3.30nm
TIY   142.02 102 ePKP  18 52.50  -3.2X
    Z  27s      1.45um          5.6MszX
RES   142.54 335 ePKP  18 52.50  -2.9X
      0.9s      3.00nm
BJI   145.68 103 ePKP  19 01.50  -0.2
    Z  24s      0.64um          5.3MszX
                ePPKP 19 12.00
                ePP   22 30.00
                eSS   41 18.00
MBC   148.78 333 ePKP  19 06.50   0.8
      1.0s      8.00nm
                pP    19 16.00
INK   151.28 316 ePKP  19 16.00   6.4X
      1.0s     22.00nm
MAT   152.73 135 ePKP  19 20.00   7.2X
    Z  20s      0.71um          5.5Msz
TOA   154.85 299 ePKP  19 35.00  20.1X
    S.D. = 1.3  on  42 of  68 obs.
-----------------------------------
*  NOV  30, 1993  06h 00m 39.36± 1.77s
   29.373 S ±11.4km   71.743 W ±13.3km
   DEPTH =  33.0km  (normal)
 NEAR COAST OF CENTRAL CHILE      (135)

RTCB    3.30 130 ePc   01 30.70   0.7
                 S     02 08.00
ZON     3.42 130 eP    01 30.10  -1.6
RTLL    3.44 125 e(P)  01 32.40   0.4
JACH    3.44 164 iP+   01 33.03   0.9
                 iS    02 11.69
ROCH    3.64 170 iPd   01 35.17   0.2
                 (S)   02 17.71
IHA     3.64 179 e(P)  01 43.50   8.7X
                 eS    02 25.50
RTCV    3.71 133 eP    01 36.00   0.2
CFA     3.75 127 ePc   01 36.70   0.3
                 S     02 18.00
PEL     3.87 167 iP+   01 38.39   0.4
                 iS    02 21.31
LCCH    4.09 178 iP+   01 40.90  -0.3
FCH     4.13 163 eP    01 42.23   0.2
                 iS    02 29.01
SAN     4.17 167 iPd   01 42.73   0.4
                 iS    02 28.38
TACH    4.32 171 iP+   01 44.34  -0.1
                 (S)   02 30.47
PCH     4.36 166 iPd   01 45.03  -0.1
                 iS    02 34.57
LNV     4.58 177 iP+   01 46.96  -1.1
RTPR    4.64 103 eP    01 48.00  -0.9
CACH    4.83 169 iP+   01 51.66  -0.1
CYA     5.30  81 ePc   01 58.70   0.4
                 (S)   02 54.50
MRA     6.00 122 iPc   02 04.70  -3.5X
                 S     03 07.20
RFA     6.06 154 e(P)  02 05.50  -3.6X
PPD    19.79  73 (P)   05 10.00   0.1
VAO    23.10  80 (P)   05 57.00  13.7X
    S.D. = 0.7  on  18 of  22 obs.
-----------------------------------
?  NOV  30, 1993  06h 22m 06.34± 0.96s
   26.941 S ±12.7km   26.687 E ± 8.8km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA         (584)

BFS     0.10  64 iPc   22 08.00  -0.6
                 S     22 08.40
SWZ     1.24 259 eP    22 29.80  -0.1
                 S     22 46.20
SEK     1.61 149 eP    22 35.70   0.1
                 S     22 56.20
SLR     1.87  50 eP    22 40.00   0.6
                 S     23 03.50
    S.D. = 0.9  on   4 of   4 obs.
-----------------------------------
&  NOV  30, 1993  06h 37m 55.73s
   37.574 N          118.844 W
   DEPTH =   8.0km
 CALIFORNIA-NEVADA BORDER REGION ( 40)
     <GM-P>. MD 2.9 (GM).

CLKR    0.02  43 P     37 57.38  -0.2
HTCR    0.07 127 P     37 57.84  -0.3
MCSM    0.09 329 P     37 58.36   0.0
MEMM    0.12 321 iPd   37 58.71   0.2
MMPM    0.15 284 P     37 59.04  -0.2
ORC     0.16  68 P     37 59.38   0.0
MRCM    0.29  70 eP    38 01.33  -0.4
MTUM    0.31 135 eP    38 01.92  -0.3
BHPR    0.39 134 P     38 03.65  -0.2
BONR    0.57  48 iPc   38 06.88  -0.5
MSTM    1.28 285 P     38 19.13  -0.5
CMB     1.30 291 iPd   38 19.54  -0.6
                 eS    38 34.01
TNP     1.38  68 eP    38 21.62   0.1
WLHM    1.48 163 P     38 23.11   0.1
KVN     1.59  21 eP    38 24.98   0.6
PHBM    1.65 217 P     38 26.60   1.5
BAVM    1.74 273 P     38 31.28   4.9
PDRM    1.74 225 P     38 27.77   1.4
BRMM    1.74 246 P     38 27.94   1.5
BMSM    1.81 240 P     38 29.09   1.6
VPEM    1.82 153 P     38 29.89   2.2
ISA     1.93 171 eP    38 31.52   2.3
TOW     1.96 153 P     38 32.75   3.0
HVC     1.98 233 P     38 31.67   1.7
EKH     2.07 245 P     38 33.47   2.2
HJSM    2.10 250 P     38 33.06   1.4
CSTL    2.11 273 P     38 34.40   2.7
PHAM    2.14 216 eP    38 32.84   0.6
ARN     2.15 265 eP    38 33.01   0.6
TPNV    2.16 106 eP    38 32.39  -0.3
WSHM    2.22 150 P     38 37.47   4.0
JUCM    2.62 258 P     38 45.93   6.9
ABL     2.73 187 (P)   38 42.49   1.6
GSC     2.80 143 (P)   38 43.49   1.7
       34 obs. associated
-----------------------------------
?  NOV  30, 1993  07h 14m 53.30± 5.87s
   31.429 S ±41.2km   69.353 W ±71.2km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTCB    0.48  97 ePd   15 09.40   0.1
                 S     15 21.80
RTLL    0.76  83 iPd   15 11.40  -0.2
                 S     15 25.00
RTCV    0.82 122 eP    15 12.00  -0.1
                 S     15 27.00
CFA     0.97 101 ePc   15 13.90   0.2
                 S     15 29.00
    S.D. = 0.4  on   4 of   4 obs.
-----------------------------------
*  NOV  30, 1993  07h 58m 30.61± 1.57s
   36.537 N ±12.8km   71.050 E ± 9.5km
   DEPTH = 169.5 ± 17.4 km
   4.3mb (  8 obs.)
 AFGHANISTAN-TAJIKISTAN BORD REG.(717)

QUE     7.20 210 iPd   00 14.50   0.0
      0.8s    570.90nm          6.0mb X
                 eS    01 33.60
NDI     9.40 145 eP    00 43.50   0.2
GKN    14.29 123 P     01 46.00  -0.6
DMN    14.86 123 P     01 53.60  -0.2
KKN    14.86 122 P     01 53.80   0.0
PKI    15.09 122 P     01 55.60  -1.1
GUN    15.20 120 P     01 59.40   1.3
GBA    23.54 164 P     03 28.00   1.4
APO    43.00 322 eP    06 13.40  -0.9
      0.4s      3.70nm          4.3mb
NB2    44.37 323 P     06 24.60  -0.8
      0.6s      5.80nm          4.3mb
MBC    67.30   3 eP    09 10.00   1.7
      0.9s      3.00nm          4.1mb
INK    73.86   9 eP    09 48.50   0.7
      0.6s      1.00nm          3.7mb
YKA    81.21   3 eP    10 28.30   0.2
      0.4s      1.80nm          4.2mb
WRA    81.98 122 P     10 32.30  -0.5
      0.8s      4.00nm          4.2mb
WB2    81.99 122 iPd   10 32.00  -0.9
      0.4s     17.00nm          5.1mb
ASPA   84.24 125 iPc   10 43.70  -0.6
      0.6s      9.90nm          4.8mb
    S.D. = 1.0  on  16 of  16 obs.
-----------------------------------
*  NOV  30, 1993  08h 24m 08.26± 1.44s
   22.710 S ±11.3km   68.860 W ±16.3km
   DEPTH = 122.9 ± 16.6 km
   4.4mb (  1 obs.)
 NORTHERN CHILE                   (123)

HJA     3.22 100 ePc   24 59.10   0.8
CCH     5.88  26 P     25 34.30  -0.5
CNCB    5.92   8 Pc    25 36.00   0.5
LPB     6.19   7 P     25 39.00   0.0
CYA     6.35 155 eP    25 40.50  -0.2
ARE     6.69 338 eP    25 45.00  -0.8
                 eS    27 17.00
PPD    16.25  91 eP    27 51.80   1.1
VAO    20.18  95 eP    28 33.00  -2.3
YKA    92.34 341 eP    37 06.60   1.4
      0.6s      1.30nm          4.4mb
WB2   131.93 210 ePKP  43 12.50   3.2X
      0.6s      2.90nm
    S.D. = 1.4  on   9 of  10 obs.
-----------------------------------
%  NOV  30, 1993  08h 32m 42.30± 0.86s
   44.414 N ± 7.1km   7.212 E ±10.5km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                   (545)
    ML 1.6 (GEN).

PZZ     0.12 319 P     32 45.59   0.2
                 S     32 47.47
STV     0.19 155 P     32 46.69   0.2
                 S     32 49.34
ENR     0.24 141 P     32 47.65   0.2
                 S     32 50.72
BHB     0.43   5 P     32 50.90  -0.2
                 S     32 56.67
ROB     0.49 104 P     32 52.56   0.3
                 S     32 59.55
IMI     0.70 136 P     32 55.52  -0.7
    S.D. = 0.5  on   6 of   6 obs.
-----------------------------------
   NOV  30, 1993  08h 46m 34.26± 0.47s
   41.976 N ± 6.1km   20.327 E ± 5.2km
   DEPTH =   5.0km  (geophysicist)
 ALBANIA                          (391)

PVY     0.67 337 iPgd  46 47.14  -0.6
                 iSg   46 57.87
ULC     0.80 269 iPgc  46 50.17  -0.2
                 iSg   47 02.94
SKO     0.83  90 iPg   46 49.70  -1.1
                 i     47 00.50
                 iSg   47 02.50
                 Lg    47 03.00
TTG     0.91 300 iPgc  46 51.38  -0.8
                 iSg   47 06.73
OHR     0.93 158 iPg   46 51.00  -1.6
      0.5s    130.00nm
                 iSg   47 04.50
IVA     0.95 341 iPgd  46 52.88   0.0
                 iSg   47 06.82
BDV     1.16 286 iPgc  46 56.61   0.3
                 iSg   47 14.81
NKY     1.29 311 iPgc  46 58.90   0.2
                 iSg   47 19.07
FNA     1.43 146 eP    47 01.96   1.0
                 eS    47 20.48
HCY     1.44 290 iPgc  47 01.49   0.5
                 iSg   47 24.19
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30d 08h

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PLE      1.52 333 iPgd  47 02.84   0.6
                  iSg   47 26.08
BRY      1.61 306 iPnd  47 04.75   1.2X
                  iSn   47 28.73
VAY      1.80 111 ePn   47 07.00   0.8
GRG      1.86 122 eP    47 07.84   0.7
                  eS    47 31.08
LIT      2.49 138 eP    47 02.20 -13.9X
                  eS    47 16.32
SOH      2.55 116 eP    47 15.00  -2.0X
                  eS    47 42.60
SRS      2.60 108 eP    47 19.20   1.6X
     S.D. = 0.9  on  13 of  17 obs.
-----------------------------------
%  NOV  30, 1993  09h 45m 35.27± 1.21s
   40.444 N ± 9.1km   21.868 E ± 7.6km
   DEPTH =   5.0km  (geophysicist)
 GREECE                              (364)
      ML 1.7 (THE).

FNA      0.51 312 ePg   45 45.40   0.0
                  eSg   45 53.84
LIT      0.59 126 ePg   45 47.00   0.0
                  eSg   45 55.72
GRG      0.65  38 ePg   45 48.28  -0.1
                  eSg   45 58.36
KNT      1.06  47 ePg   45 55.76   0.0
SOH      1.19  71 ePb   45 58.00   0.0
     S.D. = 0.0  on   5 of   5 obs.
-----------------------------------
%  NOV  30, 1993  10h 02m 59.34± 1.02s
   31.446 S ±17.1km   68.689 W ±14.8km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTCB     0.10 247 ePd   03 13.60  -0.3
                  S     03 24.90
RTLL     0.22  58 iPd   03 13.90  -0.2
                  S     03 25.90
CFA      0.42 113 ePc   03 15.60   0.8
                  S     03 28.00
RTCV     0.43 163 iPd   03 15.00   0.1
                  S     03 27.20
RTPR     2.19  59 e(P)  03 35.00   0.1
MRA      2.71 112 ePc   03 41.50  -0.4
                  S     04 14.00
     S.D. = 0.5  on   6 of   6 obs.
-----------------------------------
   NOV  30, 1993  11h 27m 10.52± 0.41s
   11.136 N ± 5.8km   95.185 E ± 5.5km
   DEPTH =  33.0km  (normal)
   4.6mb ( 23 obs.)
 ANDAMAN ISLANDS, INDIA           (703)

KHT      4.92  42 eP    28 24.00  -0.1
NST      6.60  46 eP    28 46.50  -1.2
SNG      6.65 126 eP    28 47.00  -1.5
BDT      7.11  31 eP    28 54.00  -0.9
       1.2s    52.70nm          5.4mb
CHTO     8.45  25 eP    29 14.00   0.3
IPM      8.71 138 ePd   29 15.80  -1.5
LOE      8.89  45 eP    29 21.00   1.2
KMI     15.65  26 Pd    30 54.50   4.0X
       1.5s    50.00nm          4.5mb
     Z 12s      1.30um          4.3Msz
     N 11s      0.60um
     E 10s      1.40um
                sP    31 02.00
HYB     17.28 293 eP    31 13.50   2.4X
GBA     17.51 280 P     31 15.00   1.1
GYA     18.70  34 iPd   31 30.60   2.0
       1.0s    13.00nm          4.1mb
     N 12s      0.83um
     E 12s      0.64um
                pP    31 37.80
PKI     18.75 332 P     31 29.40  -0.1
GUN     18.84 334 P     31 29.80  -0.8
LSA     18.85 349 Pc    31 31.00   0.2
       1.4s    45.00nm          4.5mb
DMN     18.93 331 P     31 31.20  -0.4
KKN     19.00 332 P     31 32.20  -0.2
GKN     19.48 331 P     31 36.90  -1.0
CD2     21.22  21 P     31 56.30   0.4
       1.0s    37.00nm          4.7mb
     Z 12s      1.02um          4.4MszX
     E 10s      1.09um
LEM     21.71 145 ePd   32 12.50  11.4X
NDI     24.23 319 eP    32 26.00   0.5
LZH     26.05  16 eP    32 41.50  -1.4
       2.0s    50.00nm          4.8mb
     Z 12s      0.47um          4.2MszX
                pP    32 54.00  50kmX
GTA     28.46   8 iPc   33 05.50   0.8
       1.5s    19.00nm          4.6mb
     N 13s      0.26um
                pP    33 13.00  26kmX
TIY     30.66  27 eP    33 24.70   0.4
     Z 12s      1.20um          4.8MszX
     N 20s      2.30um
QUE     32.37 310 eP    33 37.50  -2.0
WMQ     33.21 350 P     33 47.50   1.0
BJI     34.27  29 eP    34 04.00   8.4X
       1.2s    10.00nm          4.6mb
CN2     41.74  33 eP    35 07.20   9.0X
       1.0s    14.00nm          4.6mb
                esP   35 15.30
WRA     49.39 129 P     36 00.80   1.4
       0.6s     4.20nm          4.6mb
WB2     49.40 129 iPc   36 00.30   0.9
       0.6s     8.90nm          5.0mb
ASPA    51.28 133 eP    36 14.70   1.0
       0.9s     5.70nm          4.5mb
OBN     63.19 327 eP    37 44.00   6.5X
       1.9s    84.00nm          5.5mb
APO     76.08 330 eP    38 55.00  -1.4
       0.5s     1.70nm          4.3mb
GEC2    76.11 318 eP    38 57.70   0.8
       0.6s     3.66nm          4.6mb
                e     39 04.80
                e     39 16.20
NB2     77.42 330 P     39 02.10  -1.8
       0.8s     2.50nm          4.3mb
CDF     80.39 318 eP    39 19.70  -0.7
HAU     81.05 317 eP    39 22.80  -1.0
       0.8s     5.25nm          4.6mb
LPG     81.07 315 eP    39 25.00   0.7
       0.9s     6.40nm          4.6mb
LPL     81.08 315 eP    39 25.00   0.8
       0.7s     5.20nm          4.6mb
FRF     81.38 313 eP    39 26.20   0.7
       0.6s     4.50nm          4.7mb
LMR     81.50 312 eP    39 26.90   0.7
       0.6s     5.50nm          4.7mb
LRG     81.60 313 eP    39 27.50   0.9
       1.1s    28.35nm          5.2mb
SMF     82.92 316 eP    39 33.90   0.4
       1.0s     6.20nm          4.7mb
     S.D. = 1.1  on  36 of  42 obs.
-----------------------------------
*  NOV  30, 1993  11h 55m 50.28± 3.56s
   33.854 S ± 9.7km   71.959 W ±24.7km
   DEPTH =  10.0km  (geophysicist)
 NEAR COAST OF CENTRAL CHILE      (135)

LNV      0.47 103 iP+   56 00.62   0.8
                (S)   56 09.13
LCCH     0.50  41 iP+   56 01.11   0.7
                iS    56 10.08
TACH     0.87  77 iP    56 06.82  -0.3
                (S)   56 20.51
SAN      1.15  70 iPd   56 11.88   0.0
CACH     1.16 103 iP+   56 11.70  -0.3
                iS    56 31.24
ROCH     1.18  42 iP    56 12.06  -0.5
                iS    56 29.79
PCH      1.23  79 iP+   56 12.45  -0.7
                iS    56 32.02
PEL      1.28  57 iPd   56 14.13   0.1
                iS    56 33.41
FCH      1.49  70 iP    56 17.07  -0.3
                iS    56 39.35
JACH     1.64  45 iP    56 19.61   0.3
                iS    56 43.13
RFA      3.03 109 iPc   56 39.50   0.2
     S.D. = 0.6  on  11 of  11 obs.
-----------------------------------
%  NOV  30, 1993  12h 01m 02.88± 0.60s
   28.031 S ± 5.5km   26.752 E ± 7.1km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA         (584)
      ML 2.7 (PRE).

SEK      0.82 111 eP    01 19.30  -0.1
                S     01 30.50
BFS      1.13   2 eP    01 24.00  -0.6
                S     01 38.00
BLF      1.18 205 iPd   01 25.50   0.0
                S     01 41.50
PRY      1.27  30 eP    01 27.90   0.9
                S     01 44.70
SWZ      1.52 303 eP    01 31.10   0.2
                S     01 49.70
FRS      2.12 216 eP    01 39.50   0.1
                S     02 06.00
SLR      2.66  31 eP    01 47.00  -0.4
                S     02 18.50
     S.D. = 0.6  on   7 of   7 obs.
-----------------------------------
&  NOV  30, 1993  13h 03m 12.83s
   63.279 N          151.297 W
   DEPTH =  10.9km
 CENTRAL ALASKA                     (  1)
      <AEIC>. ML 2.6 (AEIC), 3.1
      (PMR).

KTH      0.32  31 iP    03 19.15  -0.5
TRF      0.49  69 eP    03 22.31  -0.5
                eS    03 29.97
HUR      0.81 111 eP    03 28.27  -0.2
                eS    03 39.50
CUT      1.00 151 eP    03 31.79   0.2
                eS    03 45.04
RND      1.11  82 eP    03 33.30  -0.3
MCK      1.15  66 eP    03 34.15  -0.2
BWN      1.21  41 eP    03 35.88   0.6
                eS    03 53.26
SKT      1.31 185 eP    03 36.40  -0.6
                eS    03 53.95
NEA      1.63  36 eP    03 41.83   0.3
                eS    04 03.46
MLY      1.78   8 eP    03 41.94  -1.8
SUA      1.84 172 eP    03 45.44   0.7
WRH      1.86  48 eP    03 46.77   1.9
GHO      1.87 143 eP    03 44.74  -0.4
                eS    04 10.03
NCG      1.92 192 eP    03 45.16  -0.8
                eS    04 09.90
PLRM     1.97 148 eP    03 46.13  -0.3
PMR      1.97 148 eP    03 45.88  -0.6
SML      2.02 136 eP    03 46.92  -0.3
CRP      2.06 192 eP    03 45.99  -1.9
                eS    04 14.10
CCB      2.06  47 eP    03 45.64  -2.2
                eS    04 12.72
CP2      2.07 193 eP    03 47.44  -0.7
                eS    04 14.44
BGL      2.09 195 eP    03 48.25   0.0
CKN      2.10 192 eP    03 48.86   0.4
SPU      2.13 190 eP    03 48.55  -0.4
MDM      2.16  37 eP    03 47.00  -2.2
TTA      2.17 263 eP    03 50.42   0.9
PMS      2.20 158 P     03 50.00   0.2
HDA      2.23  58 eP    03 51.23   0.9
                eS    04 18.46
FBA      2.24  42 eP    03 51.43   1.0
BKG      2.26 192 eP    03 50.68  -0.1
                eS    04 19.30
KNK      2.29 143 eP    03 51.23   0.0
                eS    04 20.88
SCM      2.34 127 eP    03 53.29   1.4
GLM      2.42  43 eP    03 56.01   3.0
TOA      2.64 114 eP    03 58.50   2.4
CFI      2.68 140 eP    03 57.23   0.7
SDG      2.74 103 eP    03 57.22  -0.3
PWL      2.80 149 eP    03 58.59   0.2
SLKM     2.83 169 eP    03 59.12   0.3
SVW      2.98 225 (P)   03 57.66  -3.2
IMA      2.98 341 eP    03 58.23  -2.8
KLU      3.08 123 eP    04 02.76   0.4
VLZ      3.17 131 eP    04 03.48  -0.1
       41 obs. associated
-----------------------------------
*  NOV  30, 1993  13h 17m 25.22± 1.02s
   32.486 N ± 9.7km    5.668 W ± 9.1km
   DEPTH =  10.0km  (geophysicist)
 MOROCCO                            (395)
      mbLg 3.1 (MDD).

TNF      0.30  81 iP    17 31.50   0.1
                iS    17 35.50
RTC      1.77 327 eP    17 58.00   1.9
```

```
                iS    18 21.50
OUK     2.27 236 iP   18 03.50    0.2
                iS    18 31.00
CIA     2.79 251 iP   18 10.50   -0.2
                iS    18 44.00
BIT     3.15 359 eP   18 16.50    0.7
                iS    18 54.00
JHA     3.29 258 iP   18 17.50   -0.3
                iS    18 55.50
EJIF    3.96   2 eP   18 29.40    2.1
                e     19 15.20
EPRU    4.48   4 eP   18 35.40    0.6
                e     19 27.20
EGUA    4.67  21 eP   18 38.00    0.5
                e     19 30.00
EVAL    5.16 350 eP   18 42.60   -1.8
EHOR    5.34   4 eP   18 45.00   -1.8
EBAN    5.87  15 iP   18 54.60    0.2
                e     19 57.50
EPLA    7.57 358 eP   19 16.00   -2.3
     S.D. = 1.5  on  13 of  13 obs.
-------------------------------------
*  NOV  30, 1993  13h 46m 57.42± 1.08s
   18.545 N ± 7.6km  145.481 E ±30.7km
   DEPTH = 219.8 ± 13.7 km
   4.5mb (  3 obs.)
 MARIANA ISLANDS                  (216)

GUMO    4.96 187 eP   48 12.60    0.1
                eS    49 10.60
PJG     4.96 187 eP   48 13.20    0.7
GUA     5.01 186 eP   48 12.20   -0.8
CHJJ   18.35 343 P    50 56.30   -1.7
MAT    19.04 342 (P)  51 06.00    0.9
                eS    54 27.00
NIIJ   19.47 344 P    51 09.50    0.0
YAMJ   20.13 347 eP   51 16.30    0.3
OFUJ   20.73 352 eP   51 22.70    0.7
WB2    39.78 196 iPc  54 10.50   -0.1
       0.3s    29.90nm        5.3mb
ASPA   43.45 196 iPc  54 40.70    0.2
       0.4s     7.00nm        4.5mb
INK    69.60  23 eP   57 44.50    0.4
YKA    78.22  28 eP   58 33.20   -0.5
       0.6s     0.90nm        3.7mb
LPAZ  147.88  91 PKP  06 19.40    3.2X
CNCB  148.09  92 PKP  06 21.00    4.6X
     S.D. = 0.9  on  12 of  14 obs.
-------------------------------------
%  NOV  30, 1993  13h 50m 42.23± 0.89s
   42.991 N ± 6.2km   18.771 E ± 5.3km
   DEPTH =   5.0km  (geophysicist)
 NORTHWESTERN BALKAN REGION       (383)

BRY     0.19 242 iPgd 50 46.38    0.2
                iSg   50 49.57
NKY     0.24 137 iPgc 50 48.13    0.9
                iSg   50 52.67
PLE     0.57  53 iPgc 50 53.48   -0.1
                iSg   51 02.31
HCY     0.58 200 iPgc 50 53.72   -0.1
                iSg   51 02.43
TTG     0.67 147 iPgd 50 55.13   -0.4
                iSg   51 05.84
BDV     0.71 177 iPgd 50 55.96   -0.4
                iSg   51 06.84
IVA     0.84  98 iPgd 50 58.69   -0.3
                iSg   51 11.75
PVY     0.97 114 iPgc 51 01.34    0.1
                iSg   51 15.90
ULC     1.09 161 iPgd 51 03.10    0.0
                iSg   51 19.84
     S.D. = 0.5  on   9 of   9 obs.
-------------------------------------
%  NOV  30, 1993  14h 11m 37.38± 1.29s
   41.347 N ±14.4km   24.347 E ± 6.2km
   DEPTH =   5.0km  (geophysicist)
 GREECE-BULGARIA BORDER REGION    (363)
      ML 2.3 (THE).

SRS     0.61 248 ePgd 11 49.40   -0.3
                eSg   11 56.80
SOH     0.92 235 ePg  11 54.72   -0.7
                eSg   12 09.12
OUR     1.05 195 ePg  11 58.20    0.6
KNT     1.11 261 ePg  11 58.96    0.3
                eSg   12 13.64
THE     1.27 236 ePb  12 00.88   -0.4
ALN     1.36 109 ePb  12 02.68   -0.2
                eSb   12 23.70
GRG     1.52 256 ePb  12 05.88    0.6
                eSb   12 26.04
LIT     1.88 229 ePb  12 10.60    0.1
     S.D. = 0.6  on   8 of   8 obs.
-------------------------------------
   NOV  30, 1993  14h 21m 11.34± 0.51s
    5.657 S ± 8.1km  145.470 E ± 8.6km
   DEPTH = 117.5 ±  5.9 km
   4.6mb (  3 obs.)
 EASTERN NEW GUINEA REG., P.N.G. (207)

MDG     0.51  37 iPc  21 29.50    0.2
YYYY    0.76 140 ePc  21 30.70   -0.7
LAT     1.82 123 iPd  21 44.30    1.4
MNDI    1.87 255 iP   21 44.50    0.8
WWKK    2.73 318 eP   21 54.00   -0.7
PMG     4.08 156 iPd  22 11.70   -1.2
CTA    14.37 177 iPc  24 36.00    5.5X
       0.6s    20.00nm        4.6mb
MTN    15.85 242 iPd  24 48.80   -0.3
       0.7s    97.00nm        5.2mb
ASPA   21.09 211 eP   25 48.80    0.8
       0.5s     8.60nm        4.4mb
                epP   26 15.80 142kmX
BRS    22.71 163 iPc  26 03.50   -0.4
STK    26.34 187 eP   26 27.50 -10.6X
       0.4s     2.10nm
GUN    66.41 304 P    31 50.80    0.2
KKN    66.86 303 P    31 53.20   -0.2
DMN    66.95 303 P    31 54.00    0.0
GKN    67.47 303 P    31 57.20    0.1
KBA   121.85 323 iPKP 40 01.90    8.5X
                i(Sg) 40 07.70
KIC   150.37 273 PKP  40 52.02    6.2X
       0.9s    18.50nm
TIC   150.65 273 PKP  40 52.62    6.3X
       0.5s     5.50nm
LIC   150.65 273 PKP  40 52.60    6.3X
       0.7s    10.50nm
LKO   151.06 279 PKP  40 53.63    6.7X
       0.8s    14.00nm
     S.D. = 0.8  on  13 of  20 obs.
-------------------------------------
   NOV  30, 1993  14h 30m 07.90± 0.67s
   38.372 N ± 5.7km   21.918 E ± 6.2km
   DEPTH =   5.0km  (geophysicist)
 GREECE                           (364)
      ML 3.4 (ATH), 3.3 (THE).

AGG     0.73  26 ePgc 30 21.08   -1.3
                eSg   30 30.12
VLS     1.06 260 ePb  30 26.20   -2.2
ATH     1.47 105 ePb  30 36.00    0.9
IGT     1.69 314 ePb  30 39.44    1.2
                eSb   31 03.28
LIT     1.78  14 ePbd 30 39.68    0.1
                eSb   31 02.00
VLI     1.84 154 ePb  30 41.00    0.6
KZN     1.94 357 ePn  30 42.70    0.9
PAIG    2.07  41 ePbd 30 42.92   -0.8
                eSb   31 08.52
THE     2.40  19 ePn  30 47.88   -0.6
                eSn   31 18.20
FNA     2.45 350 ePnd 30 49.68    0.5
                eSn   31 20.68
OUR     2.53  39 ePnc 30 49.48   -0.8
GRG     2.61   8 ePn  30 51.84    0.4
                eSn   31 24.16
SOH     2.69  24 ePn  30 52.00   -0.6
                eSn   31 25.12
OHR     2.87 343 iPn  30 56.60    1.4
                i     31 03.00
                i     31 30.30
                i     31 39.00
                Lg    31 48.50
KNT     2.89  15 ePn  30 55.04   -0.4
                eSn   31 28.72
VAY     2.99   9 iPn  30 56.80    0.0
SRS     3.03  25 ePn  30 57.32   -0.1
                eSn   31 32.96
SKO     3.61 354 ePn  31 06.40    0.7
     S.D. = 1.0  on  18 of  18 obs.
-------------------------------------
%  NOV  30, 1993  14h 37m 25.30± 1.30s
   60.114 N ± 6.3km    4.894 E ±13.0km
   DEPTH =  10.0km  (geophysicist)
 SOUTHERN NORWAY                  (535)
      MD 2.1 (BER).

EGD     0.23  46 iPc  37 30.26    0.1
ASK     0.40  22 eP   37 33.07   -0.4
ODD1    0.89 102 eP   37 43.17    0.7
                eS    37 56.32
KMY     0.92 169 eP   37 42.69   -0.2
                eS    37 57.92
FOO     1.49   3 eP   37 52.58    0.5
                eS    38 12.80
NRA0    3.35  76 ePn  38 18.09   -0.7
                ePg   38 24.79
                eSn   39 07.34
                eLg   39 15.14
     S.D. = 0.7  on   6 of   6 obs.
-------------------------------------
*  NOV  30, 1993  14h 54m 32.21± 2.15s
   20.963 S ±11.6km   68.183 W ±21.0km
   DEPTH = 214.9 ± 34.1 km
 CHILE-BOLIVIA BORDER REGION      (124)

MOCB    2.39  97 P    55 17.10    0.3
YJA     2.77 116 ePc  55 21.00    0.1
CCH     4.05  29 P    55 35.10   -1.0
CNCB    4.13   3 P    55 37.00   -0.3
LPB     4.41   1 P    55 42.00    1.4
SLA     4.49 147 eP   55 41.10   -0.3
LPAZ    4.65   1 P    55 43.20   -0.6
SIV     8.36  55 P    56 31.50    0.3
     S.D. = 1.0  on   8 of   8 obs.
-------------------------------------
?  NOV  30, 1993  14h 59m 21.78± 1.07s
   31.549 S ±20.5km   68.804 W ±20.6km
   DEPTH = 100.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTCB    0.06   3 ePd  59 36.00   -0.2
                S     59 48.00
RTLL    0.36  53 ePd  59 37.00    0.1
                S     59 49.10
RTCV    0.38 144 iPd  59 37.20    0.1
                S     59 49.00
CFA     0.49  97 ePc  59 38.00    0.3
                S     59 51.00
RTRS    1.49 338 iPd  59 48.20    0.0
MRA     2.77 109 ePc  00 04.90   -0.2
                S     00 38.00
     S.D. = 0.3  on   6 of   6 obs.
-------------------------------------
%  NOV  30, 1993  14h 59m 37.78± 2.10s
   60.093 N ± 7.4km    4.819 E ±19.6km
   DEPTH =  10.0km  (geophysicist)
 SOUTHERN NORWAY                  (535)
      MD 1.9 (BER).

EGD     0.27  48 iPc  59 43.66    0.2
ASK     0.43  25 eP   59 46.76    0.1
KMY     0.91 166 eP   59 55.22    0.1
                eS    00 09.64
ODD1    0.93 100 eP   59 55.90    0.4
                eSg   00 11.70
NRA0    3.40  76 ePn  00 31.10   -0.8
                ePg   00 37.90
                eLg   01 25.50
     S.D. = 0.6  on   5 of   5 obs.
-------------------------------------
%  NOV  30, 1993  15h 02m 34.82± 0.69s
   31.747 S ± 7.7km   68.151 W ± 7.4km
   DEPTH =  30.3 ±  8.9 km
 SAN JUAN PROVINCE, ARGENTINA     (137)

CFA     0.16 332 ePc  02 40.10   -0.7
                S     02 44.00
RTCV    0.35 251 eP   02 43.30    0.3
RTLL    0.50 327 iPd  02 45.30    0.0
RTCB    0.61 295 ePd  02 47.70    0.6
                S     02 59.00
RTRS    1.93 324 eP   03 10.00    3.8X
RTPR    2.01  45 eP   03 07.00   -0.3
                S     03 32.00
MRA     2.18 108 ePd  03 10.00    0.4
                S     03 35.10
RFA     3.03 185 ePd  03 21.30   -0.5
                S     04 09.00
```

30d 15h

```
     S.D. = 0.7  on   7 of   8 obs.
-------------------------------------
*  NOV  30, 1993  15h 18m 33.02± 0.63s
   24.313 S ± 5.6km   67.239 W ±13.0km
   DEPTH = 198.8 ± 12.8 km
 CHILE-ARGENTINA BORDER REGION    (127)

SLA      1.64 105 iPd   19 08.20  -0.2
                  S     19 34.00
HJA      2.00  57 iPd   19 12.00   0.2
FSA      2.08 148 iP    19 13.20   0.6
YJA      2.67  37 ePd   19 18.60  -1.0
                 (S)    19 52.50
CYA      4.31 163 ePd   19 10.20 -29.1X
RTPR     6.00 174 eP    20 00.50  -0.4
RTRS     6.16 198 e(P)  20 04.00   1.0
CCH      6.97   9 (P)   20 16.00   2.0
CNCB     7.50 355 P     20 21.00  -0.2
LPB      7.78 354 P     20 25.10   0.2
LPAZ     8.03 354 P     20 27.00  -1.3
MRA      8.18 171 ePc   20 38.00   8.4X
ARE      8.77 332 eP    21 04.00  26.5X
                  eS    22 06.00
RFA     10.48 186 ePc   20 58.50  -0.9
VAO     18.62  90 eP    22 38.20   0.2
WRA    131.25 207 PKP   37 29.50   6.0X
         0.8s     0.30nm
     S.D. = 1.1  on  12 of  16 obs.
-------------------------------------
?  NOV  30, 1993  15h 30m 55.39± 2.40s
   31.461 S ±24.4km   69.222 W ±27.8km
   DEPTH = 120.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTCB     0.36  94 ePc   31 12.80  -0.2
                  S     31 25.00
RTLL     0.66  79 iPc   31 14.80   0.1
                  S     31 29.00
CFA      0.85 100 iPd   31 16.60   0.2
                  S     31 33.10
RTPR     2.60  64 eP    31 37.00   0.0
MRA      3.13 109 ePc   31 44.00  -0.1
     S.D. = 0.2  on   5 of   5 obs.
-------------------------------------
   NOV  30, 1993  15h 40m 47.80± 0.45s
   51.499 N ± 9.8km  172.696 W ± 5.2km
   DEPTH =  33.0km  (normal)
   4.7mb ( 28 obs.)  4.6Msz (  3 obs.)
 ANDREANOF ISLANDS, ALEUTIAN IS. (  7)
      ML 5.0 (PMR).

ADK      2.51 280 ePc   41 26.60  -0.6
SDN      8.24  57 eP    42 46.58  -1.3
KDC     13.24  54 (P)   43 55.80   0.0
SVW     13.46  38 (P)   43 57.53  -1.2
TTA     14.53  32 eP    44 14.55   1.8
         1.2s    27.38nm          4.6mb
CRP     14.93  41 (P)   44 18.42   0.3
SLKM    15.40  45 eP    44 23.01  -1.0
PMS     16.02  44 eP    44 33.10   1.2
PMR     16.36  43 eP    44 39.70   3.5X
IMA     17.50  26 eP    44 51.40   0.8
         0.8s    8.17nm          3.9mb
KLU     17.71  45 eP    44 49.95  -3.3X
TOA     17.85  43 eP    44 54.60  -0.3
FBA     18.59  34 eP    45 02.99  -0.9
         0.7s    5.76nm          3.9mb
BALM    19.20  48 (P)   45 10.23  -1.1
SIT     22.31  61 eP    45 42.74  -0.7
INK     25.21  33 eP    46 11.50   0.0
         0.8s   17.00nm          4.7mb
MBC     32.09  21 eP    47 14.50   1.2
YKA     32.36  47 eP    47 17.50   1.7
         0.4s    1.40nm          4.2mb
NEW     35.23  73 eP    47 41.61   0.8
         0.7s    5.08nm          4.6mb
MAT     37.59 266 eP    48 01.00   0.2
         1.0s    9.00nm          4.6mb
CN2     41.25 284 eP    48 30.40  -0.6
         0.8s   12.00nm          4.7mb
                 esP    48 43.30
GSC     42.63  90 eP    48 43.07   0.5
                  e     48 55.27
RSSD    45.14  71 eP    49 03.23   0.3
         0.6s    2.41nm          4.3mb
ULM     46.37  60 eP    49 16.00   3.7X
FRB     50.87  34 eP    49 46.50  -0.3
DAG     50.93   7 iPc   49 46.60  -0.6
         0.9s    9.24nm          4.7mb
HHC     51.29 290 P     49 50.00  -0.6
         1.2s   14.00nm          4.8mb
BTO     52.36 290 eP    49 59.00   0.3
TIY     52.78 286 eP    50 02.00   0.2
      Z  20s    0.37um          4.4Msz
JAQ     54.31  46 eP    50 12.50  -0.3
LTX     54.85  86 eP    50 16.23  -0.9
XAN     57.36 285 P     50 34.00  -1.0
         1.0s    9.00nm          4.8mb
                  pP    50 42.50  28kmX
                  sP    50 48.20
LZH     58.98 290 P     50 46.50   0.1
         1.4s   65.00nm          5.6mb
      Z  20s    0.45um          4.6Msz
                  pP    50 53.00  21kmX
GTA     59.02 295 iPc   50 45.50  -1.2
         1.0s   16.00nm          5.1mb
      Z  16s    0.57um          4.8MszX
                  sP    50 58.50
WMQ     62.42 306 P     51 08.70  -0.9
         1.0s   28.00nm          5.3mb
CBM     62.57  48 eP    51 10.22  -0.3
         0.4s    3.17nm          4.8mb
CD2     62.65 286 P     51 11.00  -0.3
GYA     64.09 280 P     51 20.00  -0.9
LMN     64.91  47 eP    51 26.00   0.2
KMI     67.46 282 eP    51 53.00  10.3X
NB2     67.77 358 P     51 42.20  -1.6
         0.7s    4.20nm          4.6mb
APO     68.19 356 eP    51 44.40  -2.0
         0.6s    1.50nm          4.2mb
LSA     70.95 294 iPc   52 06.00   1.7
         1.0s   23.00nm          5.2mb
OBN     71.01 343 eP    52 02.00  -1.7
         1.0s   18.00nm          5.1mb
EKA     73.18   6 P     52 18.14   1.6
         2.1s   10.20nm          4.5mb
GUN     75.29 296 P     52 30.40   0.7
KKN     75.72 297 P     52 32.50   0.6
         0.8s   23.00nm          5.2mb
GKN     75.92 297 P     52 33.30   0.3
         0.6s   26.00nm          5.4mb
DMN     75.96 297 P     52 34.00   0.7
BRG     77.85 356 iP    52 43.20   0.1
GRF     79.13 357 ePc   52 51.90   1.7
         1.0s   25.00nm          5.2mb
GEC2    79.89 356 ePd   52 55.30   0.9
         0.6s    2.29nm          4.3mb
ZST     80.33 353 eP    53 11.80  15.2X
KBA     81.67 356 iPc   53 05.40   1.5
         0.6s    8.40nm          4.9mb
QUE     83.28 311 eP    53 14.50   2.0
WRA     84.86 229 P     53 20.20   0.0
         0.7s    1.40nm          4.3mb
ASPA    88.27 227 iPd   53 37.20   0.3
         0.9s    9.90nm          5.1mb
      Z  19s    0.30um          4.7Msz
BUL    144.53 324 ePKP  00 21.30  -1.2
SLR    149.71 320 e(PKP)00 34.00   3.3X
WIN    150.13 342 e(PKP)00 40.00   8.5X
         0.5s   15.00nm
SEK    152.27 319 ePKP  00 42.00   7.5X
         0.5s   12.00nm
     S.D. = 1.0  on  53 of  61 obs.
-------------------------------------
%  NOV  30, 1993  16h 23m 28.85± 0.94s
   26.385 S ± 8.8km   27.506 E ±11.4km
   DEPTH =   5.0km  (geophysicist)
 REPUBLIC OF SOUTH AFRICA         (584)
      ML 2.5 (PRE).

PRY      0.54 183 iPd   23 39.50  -0.2
                  S     23 45.20
SLR      0.95  47 eP    23 47.50   0.0
                  S     24 00.50
SEK      1.93 177 iPc   24 03.10   0.2
                  S     24 25.80
SWZ      2.10 247 iPc   24 05.30   0.0
                  S     24 29.40
BLF      2.95 203 e(P)  24 17.50   0.1
     S.D. = 0.2  on   5 of   5 obs.
-------------------------------------
*  NOV  30, 1993  16h 40m 35.69± 1.11s
   4.996 S ±19.5km  145.357 E ±17.4km
   DEPTH =  10.0km  (geophysicist)
 NEAR N COAST OF NEW GUINEA, PNG.(200)
      ML 4.5 (PMG).

MDG      0.49 121 iPc   40 45.20  -0.5
YYYY     1.38 154 iPc   41 01.60   0.5
WWKK     2.20 308 ePd   41 12.80  -0.1
LAT      2.33 135 eP    41 15.50   0.8
PMG      4.73 158 eP    41 48.00  -0.8
     S.D. = 1.0  on   5 of   5 obs.
-------------------------------------
*  NOV  30, 1993  18h 05m 31.18± 1.54s
   51.557 N ±16.6km   16.062 E ± 7.6km
   DEPTH =  10.0km  (geophysicist)
 POLAND                           (548)
      ML 3.5 (VIE), 3.3 (GRF).

KSP      0.73 168 iP    05 45.30  -0.2
         0.3s    62.00nm
                  i     05 47.80
                  iS    05 54.60
BRG      1.50 244 ePn   05 58.80   0.7
                  iPg   05 59.40
                  iSg   06 19.30
CLL      1.93 264 iPn   06 03.90  -0.4
                  iPg   06 07.20
                  eSg   06 34.00
OJC      2.72 118 iP    06 15.80   0.1
                  ePg   06 22.40
                  iS    06 46.30
                  iSg   06 59.10
HOF      2.93 246 eP    06 18.20  -0.4
MOX      2.95 254 iPg   06 26.90   8.0X
                  iSg   07 06.40
WET      3.16 221 eP    06 21.80  -0.1
VKA      3.30 177 ePg   06 33.00   9.1X
                  iSg   07 17.50
ZST      3.43 168 eP    07 19.30  53.5X
SPC      3.58 130 eP    06 38.60  10.6X
                  e     07 06.30
GRF      3.60 241 ePn   06 28.50   0.3
                  ePg   06 39.80
                  eSg   07 25.20
     S.D. = 0.5  on   7 of  11 obs.
-------------------------------------
*  NOV  30, 1993  19h 03m 15.95± 0.78s
   22.976 N ± 7.2km  121.336 E ±10.2km
   DEPTH =  30.2km  (  2 depth phases)
   4.5mb (  9 obs.)
 TAIWAN REGION                    (243)
      ML 4.2 (BJI).

QZH      3.18 308 iPnc  04 03.90  -1.2
                  Sn    04 41.90
BAG      6.57 186 eP    04 53.00  -0.2
HKC      6.65 266 iPd   04 54.80   0.6
GZH      7.36 272 Pc    05 03.60  -0.5
                  S     06 23.60
SSE      8.09 359 eP    05 15.50   1.3
      Z  12s     1.40um
NJ2      9.30 347 eP    05 31.50   0.5
      N  10s     1.69um
WHN      9.78 322 P     05 34.00  -3.7X
      Z  12s     2.41um
                  eS    07 33.50
QIZ     11.43 252 eP    05 58.80  -1.4
GYA     13.78 288 iPd   06 32.00   0.3
         1.0s    22.00nm          4.9mb
      Z  10s     1.21um          4.0MszX
      N  10s     0.76um
      E  10s     0.69um
                  pP    06 35.60
                  PP    06 41.60
XAN     15.49 318 P     06 52.50  -1.5
      Z  12s     1.38um
                  pP    07 01.60
TIY     16.56 334 Pd    07 10.70   3.1X
      Z  12s     1.69um
      N  11s     0.91um
KMI     17.12 281 eP    07 19.00   4.1X
CD2     17.54 301 Pd    07 21.20   1.3
BJI     17.57 347 eP    07 20.00  -0.1
         1.3s    10.00nm          3.8mb
      Z  12s     0.60um          4.5Msz
                  sP    07 30.00
LZH     20.02 315 eP    07 48.50  -0.8
         1.5s    32.00nm          4.4mb
      Z  12s     0.90um          4.3MszX
```

```
                pP    07 56.00  28km
                sP    08 01.00
                PP    08 12.00
CHTO   21.32 263 ePd   08 04.90   2.2
       1.0s   21.50nm          4.5mb
GTA    24.55 317 eP    08 34.00  -0.4
     Z  12s     0.84um          4.5MszX
                pP    08 43.00  32km
LSA    27.82 290 P     09 07.20   2.0
       1.8s   53.00nm          4.9mb
GUN    32.32 286 P     09 45.00  -0.1
PKI    32.74 286 P     09 48.80   0.1
KKN    32.85 286 P     09 44.00  -5.6X
WRA    44.51 162 P     11 24.80  -1.8
       0.7s    2.40nm          4.2mb
ASPA   47.94 164 eP    11 55.90   2.1
       1.0s    6.80nm          4.6mb
NB2    79.35 332 P     15 14.30  -5.9X
       0.7s    3.90nm          4.5mb
KSP    81.46 322 eP    15 30.50  -1.1
GEC2   83.86 321 ePd   15 42.90  -1.2
       0.7s    1.69nm          4.3mb
     S.D. = 1.3  on  21 of  26 obs.
-----------------------------------
%  NOV  30, 1993  19h 56m 42.49± 2.60s
   31.576 S ±17.5km   68.802 W ±18.1km
   DEPTH = 103.2 ± 20.6 km
 SAN JUAN PROVINCE, ARGENTINA     (137)

RTCB    0.09   1 iPd   56 57.10  -0.3
                S     57 10.00
RTCV    0.36 142 iPd   56 58.00   0.0
                S     57 11.00
RTLL    0.38  49 iPd   56 58.30   0.2
                S     57 11.60
CFA     0.48  94 ePc   56 58.90   0.1
                S     57 12.00
RTRS    1.51 338 eP    57 09.50   0.1
                S     57 30.50
RTPR    2.34  58 eP    57 20.00  -0.2
                S     57 50.00
MRA     2.76 108 ePc   57 25.80   0.1
     S.D. = 0.3  on   7 of   7 obs.
-----------------------------------
?  NOV  30, 1993  20h 06m 48.30± 3.65s
   7.334 S ±11.7km  129.138 E ±48.4km
   DEPTH = 145.9 ± 57.2 km
   4.4mb (  1 obs.)
 BANDA SEA                        (280)

TLE     3.97  65 ePc   07 48.70   0.0
                eS    08 29.00
MTN     5.82 160 eP    08 13.50   0.0
       0.2s  222.00nm          6.0mb X
                eS    09 15.50
ASPA   16.87 165 iPd   10 37.30   0.0
       0.4s    9.10nm          4.4mb
                eS    13 36.90
GUN    54.53 312 P     16 04.30   0.3
GKN    55.50 311 P     16 10.40  -0.3
     S.D. = 0.5  on   5 of   5 obs.
-----------------------------------
   NOV  30, 1993  20h 37m 12.80± 0.16s
   39.263 N ± 3.7km   75.533 E ± 2.5km
   DEPTH =  18.2km  ( 17 depth phases)
   5.2mb (105 obs.)  5.6Msz ( 39 obs.)
 SOUTHERN XINJIANG, CHINA         (321)
      Mw 5.6 (HRV). At least four
      people were injured and about
      100 houses destroyed in the
      Shufu area.
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 27S, 42C
      Centroid Location:
      Origin Time        20:37:26.6 0.8
      Lat 39.73N 0.06 Lon  76.50E 0.06
      Dep  19.0 FIX Half-duration  2.1
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 0.33 0.08  Mtt=-2.79 0.10
        Mff= 2.46 0.09  Mrt= 0.57 0.23
        Mrf=-0.51 0.34  Mtf=-0.57 0.12
       Principal Axes:
        T  Val=  2.66  Plg=14  Azm= 83
        N        0.27      73      297
        P       -2.93       9      175
      Best Double Couple:Mo=2.8*10**17
      NP1:Strike=219 Dip=74 Slip=   4
      NP2:        128     87      164

KSH     0.40  61 iPgd  37 20.00  -1.1
     Z  20s    98.80um
                Sg    37 25.50
FRU     3.63 349 iPnc- 38 13.40   4.0X
                i     38 20.00
                eS    38 54.00
                i     39 11.00
TLG     4.24  19 iPn   38 19.60   1.6
                i     38 33.20
                i     39 17.00
NIL     5.89 199 iPd   38 39.40  -2.0
       0.4s    2.20nm          4.2mb
                iS    39 56.70
WMQ    10.19  60 P     39 39.20  -2.1
                S     41 37.00
NDI    10.64 172 iPd   39 46.00  -1.4
QUE    11.47 221 eP    39 58.30  -0.6
                ePP   40 05.10
MAIO   13.03 262 eP    40 16.00  -3.7X
       0.8s   39.53nm          5.6mb
                eS    42 16.00
ASH    13.51 270 eP    40 22.50  -3.4X
                i     42 58.10
GKN    13.54 143 P     40 21.60  -5.0X
KKN    14.02 142 P     40 28.00  -5.0X
DMN    14.09 143 P     40 29.40  -4.5X
GUN    14.22 140 P     40 31.00  -4.7X
PKI    14.27 142 P     40 31.00  -5.3X
LSA    16.01 122 P     41 01.00   2.0
       1.4s   45.00nm          4.4mb
     N  12s   13.30um
                S     43 57.00
GTA    18.78  82 P     41 31.00  -2.3
       1.0s   80.00nm          4.9mb
     Z  18s   23.10um          4.5Msz
                pP    41 36.00
                S     45 08.00
                sS    45 14.00
SVE    20.11 336 ePc   41 46.50  -1.6
       2.7s  260.00nm          5.1mb
     Z  12s   23.00um          5.7MszX
     N  11s   14.50um
     E  11s   14.00um
                eS    45 25.00
ARU    20.47 332 eP    41 51.28  -0.6
       0.9s  189.29nm          5.5mb
                eS    45 41.73
                e     47 55.93
POO    20.71 185 iPc   41 54.00  -0.7
MAK    21.45 289 iP+   41 58.00  -4.0X
                e     42 26.00 145kmX
                iS    45 59.00
                eSS   46 26.00
HYB    21.93 172 iPc   42 06.50  -0.5
       1.0s  345.00nm          5.7mb
                eS    45 31.00
ZAK    22.47  51 eP    42 13.40   1.3
       1.4s   76.00nm          5.0mb
     Z  15s   11.27um          5.4MszX
     E  16s   14.06um
                e     42 53.00
LZH    22.59  89 P     42 13.50  -0.2
       2.0s  380.00nm          5.5mb
     Z  24s   14.60um          5.3MszX
     N  12s   17.50um
                pP    42 20.00  23km
                sP    42 28.00
                PP    42 48.00
                S     46 20.00
GRO    22.73 290 iPc+  42 15.50   0.7
       1.0s  990.00nm          6.3mb X
     Z  12s   33.00um          6.0MszX
     E  16s   31.00um
                i     42 30.00  62kmX
                i     42 46.50
                iSS   47 14.00
TAB    22.80 276 iP+   42 19.50   3.8X
KER    23.23 267 eP    42 23.00   3.1X
MTA    23.44 286 eP    42 23.00   1.3
IRK    23.74  47 eP    42 26.00   1.5
       2.4s  155.00nm          5.1mb
     Z  14s    8.32um          5.4MszX
     N  11s   12.60um
     E  11s    9.24um
                e     43 04.00 197kmX
                e     47 14.00
ERE    23.83 282 iP    42 28.00   2.4
     Z  15s     3.00um          4.9MszX
CD2    24.48 101 Pc    42 33.20   1.2
       1.0s  150.00nm          5.6mb
     Z  16s    13.70um          5.5MszX
     N  13s    19.80um
                S     46 53.00
                sS    47 04.00
PYA    24.63 292 iPc   42 33.00  -0.3
       1.0s  200.00nm          5.7mb
     Z  24s     8.40um          5.2MszX
     N  24s     6.80um
     E  24s     7.00um
                i     43 18.00 237kmX
                eS    46 56.00
KIV    24.90 292 eP    42 36.80   0.8
                e     42 41.50  17km
                ePPP  43 25.20
GBA    25.61 176 P     42 43.00   0.3
                S     47 17.00
BTO    26.38  76 eP    42 50.00   0.1
       1.0s   22.00nm          4.8mb
                sP    42 58.00
KMI    26.87 114 eP    42 54.50  -0.1
       1.9s  180.00nm          5.4mb
     Z  16s   14.80um          5.6MszX
     N  10s    7.80um
     E  11s    4.10um
                sP    43 07.00
                S     47 32.00
SOC    27.07 291 eP    42 55.00  -0.9
     Z  11s     3.20um          5.1MszX
     N  16s     3.00um
     E  13s     5.50um
                e     43 07.00  47kmX
                e     47 34.00
XAN    27.19  91 P     42 56.70  -0.6
       0.7s    9.00nm          4.6mb
     Z  16s    12.80um          5.6MszX
     N  14s    14.00um
     E  14s    14.50um
                pP    43 06.00  33kmX
                sP    43 10.00
HHC    27.51  75 eP    43 01.00   0.9
       1.0s   18.00nm          4.7mb
     Z  13s    16.10um          5.8MszX
     N  12s     6.18um
     E  12s     9.86um
                S     47 44.00
CHTO   28.73 128 eP    43 17.90   6.7X
ANN    28.74 294 eP    43 18.00   7.0X
     Z  19s     4.50um          5.1Msz
                e     47 51.00
TIY    28.80  81 eP    43 12.00   0.2
     Z  15s    16.70um          5.8MszX
     N  16s    21.30um
                PP    44 03.00
                S     48 02.00
GYA    28.95 107 P     43 17.20   3.9X
     Z  16s     7.95um          5.4MszX
     N  13s    11.00um
     E  13s     6.26um
                sP    43 27.60
                S     48 06.00
                SS    49 35.00
CIT    29.16  51 eP    43 14.00  -0.8
MOS    29.97 316 eP    43 22.00   0.0
       2.0s  240.00nm          5.7mb
     Z  11s    12.20um          5.8MszX
     N  12s    43.00um
     E  12s    16.40um
                e     44 21.00 307kmX
                ePPP  44 27.00
                eS    48 19.00
BDT    29.98 130 eP    43 27.50   5.1X
       1.0s   27.60nm          5.0mb
GAZ    30.03 278 eP    43 22.80   0.1
OBN    30.36 314 eP    43 25.00  -0.4
       0.9s   62.00nm          5.4mb
                e     44 31.00 349kmX
                eS    48 20.00
BOD    31.04  40 eP    43 29.20  -2.2
       1.3s   24.00nm          4.9mb
BJI    31.11  75 eP    43 33.00   0.8
     Z  20s     9.06um          5.4Msz
```

30d 20h

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     N  16s     12.70um
                  eS     48 40.00
KAS    31.70 287 eP     43 34.00   -3.5X
KHT    31.70 134 eP     43 36.60   -1.0
NST    31.88 131 eP     43 41.00    1.9
BHL    32.28 273 P      43 44.00    1.4
                  S      49 00.00
WHN    32.80  93 eP     43 48.00    0.9
       0.7s     68.00nm          5.7mb
     Z  16s     10.70um          5.6MszX
     N  13s      5.96um
                  eS     49 04.00
TIA    32.83  82 eP     43 47.60    0.3
     Z  20s      8.95um          5.5Msz
     N  15s     10.60um
     E  15s      8.95um
                  eS     49 06.00
KIS    34.49 298 eP     44 03.00    1.5
                  e      45 39.00
                  e      52 02.00
PUL    34.88 321 (P)    44 04.00   -0.7
                  e      44 10.00   20km
                  e      44 20.00
DL2    35.48  76 eP     44 14.00    3.9X
     Z  18s      6.17um          5.4Msz
     N  15s     10.80um
     E  14s      9.45um
                  S      49 40.00
NJ2    35.66  88 Pd     44 14.50    2.8X
     N  14s     12.60um
     E  12s      3.66um
                  S      49 50.00
ELL    35.75 281 eP     44 10.50   -2.1
QIZ    35.81 114 P      44 17.00    3.9X
     N  13s      3.94um
     E  14s      7.77um
                  S      49 51.00
SNY    36.23  70 Pc     44 17.30    0.9
     Z  14s      9.42um          5.7MszX
     N  14s     16.00um
MLR    36.68 296 ePc    44 22.80    2.5
CIN    36.87 283 eP     44 19.00   -2.8X
CN2    37.18  66 eP     44 27.80    3.4X
       0.8s      9.40nm          4.6mb
     Z  16s     10.10um          5.7MszX
     N  16s     10.60um
     E  16s      6.52um
                  epP    44 32.00   14km
                  eS     50 10.80
                  eSS    52 40.00
LVV    37.51 304 eP     44 27.00   -0.1
     Z  19s     10.50um          5.7Msz
     N  13s      4.70um
     E  20s      7.60um
                  e      46 01.00 528kmX
                  ePPP   46 20.00
                  eS     50 19.00
                  eSS    52 40.00
                  eSSS   53 11.00
SSE    37.87  88 P      44 32.00    1.7
       1.0s     38.00nm          5.2mb
     Z  19s      4.50um          5.3Msz
     N  14s      9.70um
     E  14s      4.80um
UZH    38.75 302 eP     44 39.00    1.6
       1.3s     35.00nm          4.9mb
     Z  13s     11.00um          5.9MszX
     E  13s      8.00um
                  e      44 56.50   71kmX
                  eSS    53 10.00
YAK    39.64  37 eP     44 46.20    1.5
       1.3s     15.00nm          4.5mb
     Z  18s     11.30um          5.8Msz
     N  18s     37.00um
                  e      50 57.00
                  e      56 42.00
                  i      58 24.00
KEV    39.66 336 (P)    44 44.92    0.2
VAY    39.93 290 eP     44 49.00    1.6
MDJ    39.95  64 eP     44 51.20    3.7X
       1.2s     16.00nm          4.6mb
SPC    40.03 303 eP     44 48.00   -0.3
OJC    40.20 305 iPd    44 50.30    0.8
                  i      44 54.90   16km
                  i      45 00.10
                  i      45 04.90
PSZ    40.43 301 e(P)   44 52.50    0.9
SKO    40.58 292 eP     44 54.00    1.3
     Z  14s      2.24um          5.2MszX
                  e      45 04.40   36kmX
                  i      54 10.00
                  LR     05 23.00
UPP    41.21 320 iP     44 57.30   -0.3
       0.8s    100.00nm          5.6mb
                  iS     51 10.00
OHR    41.27 291 eP     45 04.50    6.0X
SRO    41.50 301 iP     45 01.90    1.7
IPM    41.54 140 ePd    45 06.90    6.1X
TIK    41.86  22 eP     45 02.00   -0.8
       1.0s     57.00nm          5.3mb
                  ePPP   46 46.00
                  e      51 24.00
                  e      51 40.00
ZST    42.24 302 eP     45 06.70    0.5
KSP    42.34 306 eP     45 07.00    0.0
       0.8s     28.00nm          5.0mb
                  i      45 12.20   17km
                  e      46 49.60
VKA    42.74 302 eP     45 11.00    0.6
     Z  13s      4.85um          5.6MszX
                  LR     05 10.00
APO    43.08 320 eP     45 12.20   -0.8
       0.6s     20.00nm          5.1mb
     Z  17s      4.63um          5.4MszX
                  LR     00 04.00
PRU    43.58 305 eP     45 17.50    0.4
       0.8s     27.90nm          5.1mb
                  i      45 22.00   15km
                  ePP    47 06.70
                  i      47 13.90
                  S      51 54.50
BRG    43.80 306 iPc    45 19.00    0.0
       1.0s     30.00nm          5.1mb
     Z  18s     10.00um          5.8Msz
     N  18s     23.00um
     E  18s      9.90um
                  i      47 18.00
COP    44.08 313 iPd    45 27.00    6.0X
       0.7s     60.27nm          5.5mb
                  e      52 22.00
                  e      55 03.00
NRA0   44.25 321 P      45 21.80   -0.7
NRE0   44.25 321 P      45 25.40    2.9X
                  PP     47 15.90
                  S      51 55.30
                  SS     54 51.80
                  SSS    56 01.40
CLL    44.32 307 iP     45 23.20    0.1
       1.2s     39.00nm          5.1mb
GEC2   44.33 304 e(P)   45 24.30    0.9
       0.6s     16.80nm          5.1mb
LJU    44.40 299 iPd    45 24.80    0.9
                  i      46 05.80
                  i      46 19.00
                  i      46 25.40
                  ipP    47 11.60 606kmX
                  eS     52 05.00
                  e      55 33.00
                  e      56 56.00
NB2    44.41 321 P      45 19.00   -4.8X
       0.8s     29.30nm          5.2mb
NAO    44.60 321 P      45 19.90   -5.4X
WET    44.80 304 iPc    45 27.60    0.5
     Z  18s      8.00um          5.7Msz
KBA    44.95 301 iPc    45 28.70    0.2
       0.8s     13.70nm          4.9mb
                  i      45 36.20   25km
                  i      45 46.80
                  i      47 17.50
TRI    45.01 299 eP     45 28.90    0.2
                  e      03 17.30
BHG    45.11 302 eP     45 30.70    1.1
BAG    45.30 107 eP     45 32.00    0.4
GRA1   45.74 305 iPc    45 35.90    1.3
       0.8s     39.00nm          5.4mb
                  e(pP)  45 40.90   17km
                  e(sP)  45 44.60
                  e      45 49.00
                  eS     52 19.00
                  eSS    55 51.00
GRF    45.74 305 iPc    45 35.90    1.3
       0.8s     39.00nm          5.4mb
     Z  20s      8.00um          5.7Msz
                  e(pP)  45 40.90   17km
                  e(sP)  45 44.60
MUD    45.81 315 iP     45 35.00    0.1
       0.9s     38.00nm          5.3mb
WTTA   46.04 302 iPc    45 37.10    0.0
       0.6s     15.00nm          5.1mb
                  i      47 24.60 603kmX
FUR    46.06 303 eP     45 38.40    1.4
       0.7s     63.00nm          5.7mb
     Z  18s      6.40um          5.6Msz
                  i      46 26.70 224kmX
WATA   46.06 302 iPc    45 37.40    0.2
                  i      47 24.80 602kmX
MOL    46.10 323 eP     45 37.67    0.6
SQTA   46.33 302 iPc    45 38.80   -0.6
       0.8s     18.20nm          5.1mb
                  i      45 43.80   17km
MOTA   46.37 302 iPc    45 38.90   -0.8
       0.8s     20.50nm          5.2mb
                  i      45 46.30   25km
OGA    46.54 301 eP     45 40.60   -0.5
OSS    47.18 301 ePc    45 45.60   -0.5
VDL    47.68 301 ePc    45 49.30   -0.8
WIT    47.87 310 eP     45 59.00    7.8X
LLS    47.88 302 ePc    45 51.00   -0.7
WTS    47.97 309 eP     45 51.00   -1.0
       0.9s     27.40nm          5.3mb
BNS    47.98 308 ePc    45 53.80    1.6
LANF   48.08 305 P      45 53.77    0.8
TMA    48.18 301 ePc    45 52.80   -1.2
WLS    48.52 304 P      45 56.84    0.4
CDF    48.57 304 eP     45 56.40   -0.5
       1.0s     25.80nm          5.2mb
MAJO   48.65  72 eP     45 56.21   -1.3
       0.7s     14.94nm          5.1mb
MAT    48.65  72 eP     45 56.00   -1.5
       0.9s     10.08nm          4.9mb
     Z  20s      3.90um          5.4Msz
                  (S)    53 12.00
MEM    48.79 307 iPc    45 59.75    1.4
       1.0s     11.20nm          4.9mb
ENN    48.80 308 eP     45 59.00    0.6
       0.9s     21.60nm          5.2mb
MMK    48.80 301 ePc    45 58.60   -0.3
MOF    48.82 304 P      45 58.48   -0.3
PCP    48.88 299 P      46 00.10    0.9
ORX    48.92 301 P      45 58.36   -1.2
WLF    48.95 306 iPc    45 59.98    0.4
       1.3s     16.80nm          4.9mb
BSF    49.05 304 eP     46 00.00   -0.6
       1.0s     63.20nm          5.6mb
DIX    49.16 301 ePc    46 01.50   -0.2
LOMF   49.17 303 P      46 01.44    0.0
FIN    49.22 299 P      46 00.05   -1.7
PGF    49.22 296 eP     46 00.80   -1.2
       0.7s     13.45nm          5.1mb
HAU    49.28 304 eP     46 01.70   -0.6
       0.7s     21.85nm          5.3mb
KKM    49.35 121 eP     46 05.00    1.8
ROB    49.42 299 P      46 04.08    0.7
VITF   49.46 304 P      46 03.31   -0.3
EMS    49.48 301 ePc    46 03.70   -0.3
LSD    49.53 301 P      46 04.77    0.3
IMI    49.53 299 P      46 04.31    0.0
RSP    49.56 300 P      46 02.52   -2.0
BHB    49.65 300 P      46 03.03   -2.1
SAOF   49.73 299 P      46 05.52   -0.3
ENR    49.75 299 P      46 05.77   -0.2
LPG    49.78 301 eP     46 06.30   -0.2
       0.8s     33.60nm          5.4mb
LPL    49.79 301 eP     46 06.30   -0.1
       0.5s     17.20nm          5.3mb
DOU    49.80 307 P      46 07.80    1.7
                  e      57 05.00
STV    49.80 299 P      46 05.96   -0.4
RSL    49.81 301 P      46 05.78   -0.7
AUTN   49.82 299 P      46 05.09   -1.6
SBF    49.86 299 eP     46 06.50   -0.3
       0.8s     76.85nm          5.8mb
PZZ    49.87 300 P      46 05.73   -1.2
SNF    49.87 308 P      46 08.10    1.4
TOUF   49.93 299 P      46 06.84   -0.7
RRL    49.95 300 P      46 07.60   -0.1
FRF    50.50 298 eP     46 11.00   -0.6
       0.9s     32.45nm          5.3mb
LRG    50.73 298 eP     46 12.80   -0.5
       0.7s     17.55nm          5.1mb
     Z  20s      3.22um          5.3Msz
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LOR    51.11 304 eP    46 14.90  -1.3
       0.7s    12.35nm          4.9mb
LBF    51.13 303 eP    46 15.10  -1.3
       0.9s    15.05nm          4.9mb
SSB    51.32 301 P     46 17.49  -0.4
SMF    51.33 303 eP    46 16.90  -1.0
       0.8s    18.65nm          5.1mb
SSF    51.41 304 eP    46 17.40  -1.1
       0.8s    16.10nm          5.0mb
PLDF   51.70 302 P     46 21.44   0.7
COLF   51.80 302 P     46 21.89   0.3
BGF    52.00 303 eP    46 21.90  -1.1
       1.0s    25.40nm          5.1mb
PYM    52.18 302 P     46 24.62   0.2
MAF    52.30 303 eP    46 24.80  -0.4
       0.8s    26.05nm          5.2mb
TCF    52.51 303 eP    46 26.20  -0.6
       0.9s    24.25nm          5.1mb
EDI    52.67 316 eP    46 22.00  -5.8X
       2.0s   333.00nm          5.9mb
     Z  20s     4.00um          5.5Msz
     N  20s     8.00um
     E  20s     3.00um
EKA    52.82 315 Pd    46 30.15   1.1
       0.7s    18.70nm          5.1mb
ESK    52.85 315 eP    46 28.31  -0.9
LSF    52.96 303 eP    46 29.60  -0.6
       0.9s    21.80nm          5.1mb
CAF    53.09 302 eP    46 30.80  -0.4
       0.9s    25.20nm          5.2mb
DAG    53.13 343 iPc   46 29.90  -1.1
       0.7s    15.75nm          5.1mb
LDF    53.20 307 eP    46 30.70  -1.2
       0.7s    34.60nm          5.4mb
RJF    53.31 302 eP    46 32.40  -0.4
       1.0s    37.80nm          5.3mb
     Z  22s     2.20um          5.2Msz
FLN    53.36 307 eP    46 31.60  -1.4
       0.9s    20.80nm          5.1mb
     Z  21s     7.25um          5.7Msz
GRR    53.73 307 eP    46 34.50  -1.2
       0.9s    63.55nm          5.6mb
LPO    53.76 302 eP    46 35.30  -0.7
       0.7s    16.00nm          5.1mb
MFF    53.92 304 eP    46 35.70  -1.4
       0.9s    22.30nm          5.2mb
LFF    53.96 302 eP    46 37.10  -0.3
       0.7s    32.85nm          5.5mb
LPF    53.97 306 eP    46 36.70  -0.8
       0.8s    23.90nm          5.3mb
YRC    54.27 313 eP    46 40.80   1.2
YRH    54.44 313 eP    46 41.00   0.1
EPF    54.97 300 eP    46 43.30  -1.7
       0.5s     4.90nm          4.8mb
DLF    55.36 314 eP    46 49.00   1.4
ECP    55.67 312 eP    46 50.80   1.0
DCN    55.76 314 eP    46 51.50   1.0
EBR    55.77 298 eP    46 51.00   0.3
ECRI   57.05 301 eP    47 00.26   0.2
ECHE   57.31 297 eP    47 01.87   0.0
EALH   58.40 295 eP    47 10.14   0.7
GUD    59.02 299 eP    47 18.38   4.5X
ENIJ   59.37 295 eP    47 16.95   0.7
PAB    59.66 298 eP    47 18.80   0.5
                eS     55 21.00
ILT    59.76  25 eP    47 22.80   4.4X
       1.8s    28.00nm          5.1mb
                i      47 27.70  16km
                i      47 38.20
KHKI   60.22 133 eP    47 19.10  -3.0X
                e      49 38.00 774kmX
ERUA   60.22 302 eP    47 24.03   2.1
ELUQ   60.54 296 eP    47 24.43   0.2
EPLA   60.59 299 eP    47 24.83   0.2
EHOR   61.09 297 eP    47 28.35   0.4
EPRU   61.50 296 eP    47 26.04  -4.7X
EJIF   61.92 295 eP    47 28.15  -5.4X
EVAL   62.25 297 eP    47 36.08   0.3
MBC    64.38   4 iPc   47 49.40   0.2
                PPP    51 56.00
                sS     56 35.40
                PPS    57 09.80
                ScS    57 24.70
SMY    64.53  42 P     48 00.00   9.5X
     Z  19s     3.06um          5.5Msz
RES    66.16 357 eP    48 00.50  -0.1
       1.0s     4.00nm          4.5mb
IMA    68.37  19 eP    48 13.18  -1.8
       0.4s     5.27nm          5.0mb
MTD    69.23 225 iPc   48 05.00 -15.8X
                i      48 10.60  18km
INK    70.56  11 eP    48 27.50  -0.6
       0.7s    10.00nm          5.1mb
FBA    70.78  18 eP    48 28.54  -1.0
       0.6s     3.56nm          4.7mb
CRP    72.58  22 eP    48 40.69   0.1
PWA    72.92  21 eP    48 41.40  -0.9
PMR    73.17  21 P     48 50.00   6.2X
     Z  20s     2.52um          5.5Msz
FRB    73.45 344 eP    48 45.00  -0.3
       1.0s     7.00nm          4.7mb
BUL    73.59 226 iPc   48 46.00  -0.9
                i      48 52.50  21km
SLKM   73.76  22 eP    48 45.30  -2.0
KLU    74.10  19 eP    48 49.07  -0.2
SDN    74.36  29 P     49 00.00   9.3X
     Z  19s     2.38um          5.5Msz
KDC    75.31  24 eP    48 56.98   0.8
       0.7s    20.49nm          5.3mb
BALM   75.39  18 eP    48 55.84  -0.9
LKO    77.17 272 P     49 07.07  -0.3
       0.5s    12.00nm          5.2mb
BFT    77.33 221 eP    49 09.50   1.3
       0.7s    16.00nm          5.2mb
YKA    78.26   5 eP    49 11.80  -0.7
       0.6s    19.00nm          5.3mb
SLR    78.28 223 eP    49 15.00   1.7
       1.5s    20.00nm          4.9mb
     Z  20s   533.00um          7.9MszX
KIC    78.48 269 P     49 14.28  -0.3
       0.7s    15.00nm          5.2mb
TIC    78.52 269 P     49 15.10   0.3
       0.9s    24.50nm          5.2mb
LIC    78.79 269 P     49 15.28  -1.0
       1.0s    27.50nm          5.3mb
     Z  20s     1.25um          5.2Msz
WB5    80.50 125 eP    49 24.60  -0.7
                e      49 31.10  21km
WRA    80.53 125 P     49 25.39   0.0
SIT    80.57  17 P     49 30.00   4.9X
     Z  19s     1.80um          5.4Msz
SEK    80.72 222 eP    49 27.50   1.1
       1.0s   100.00nm          5.8mb
BLF    82.09 222 eP    49 38.00   4.4X
       0.8s    53.00nm          5.7mb
WIN    82.23 233 eP    49 40.00   5.5X
       1.2s    50.00nm          5.5mb
ASPA   83.01 128 iPd   49 38.10  -0.2
       0.9s     7.40nm          4.8mb
FRS    83.06 222 eP    49 42.70   4.4X
       0.7s    22.00nm          5.4mb
JAQ    84.05 343 eP    49 43.00  -0.2
LMN    88.10 333 eP    50 09.00   5.7X
CBM    88.25 336 eP    50 03.11  -0.9
       0.9s    29.92nm          5.6mb
     Z  19s     2.41um          5.6Msz
CER    89.08 224 eP    50 06.00  -2.0
       1.0s   120.00nm          6.1mb
ULM    90.55 354 eP    50 17.00   2.2
GAC    91.50 340 eP    50 26.50   7.3X
LBNH   91.84 337 (P)   50 20.68  -0.2
       0.9s    15.39nm          5.4mb
NEW    92.13   8 eP    50 22.40   0.2
       0.8s    19.42nm          5.6mb
     Z  21s     2.61um          5.7Msz
RMW    92.29  12 (P)   50 24.04   1.1
DPW    92.39   9 eP    50 24.21   0.8
HRV    93.30 336 P     50 40.00  12.4X
     Z  20s     1.54um          5.5Msz
BINY   94.89 339 P     50 40.00   5.0X
     Z  19s     1.40um          5.4Msz
LRM    94.99   6 eP    50 37.00   1.3
                e      50 40.80  12km
YSNY   95.31 341 P     50 50.00  13.1X
     Z  20s     2.00um          5.6Msz
RSSD   97.00 360 eP    50 46.07   1.3
       0.7s    13.85nm          5.6mb
DUG   100.55   6 (Pdiff51 02.15   1.5
       0.8s     3.25nm          4.9mb
     Z  21s     2.06um          5.6Msz
GLD   101.36   1 Pdiff 51 10.00   5.7X
     Z  20s     3.60um          5.9Msz
GOL   101.41   1 Pdiff 51 10.00   5.4X
     Z  19s     3.15um          5.8Msz
HON   101.67  50 Pdiff 51 20.00  14.2X
     Z  21s     1.23um          5.4Msz
CMB   101.70  13 Pdiff 51 20.00  14.4X
     Z  20s     1.33um          5.5Msz
SAO   102.75  14 Pdiff 51 20.00   9.7X
     Z  18s     1.64um          5.6Msz
MYNC  103.68 343 Pdiff 51 20.00   5.5X
     Z  19s     1.58um          5.6Msz
OXF   105.28 347 PKP   55 50.00  14.3X
     Z  19s     2.66um          5.8Msz
MIAR  105.87 351 PKP   55 50.00  13.2X
     Z  19s     1.93um          5.7Msz
ALQ   106.14   2 PKP   55 50.00  12.4X
     Z  20s     2.39um          5.7Msz
WMOK  106.18 355 PKP   55 50.00  12.6X
     Z  19s     2.43um          5.8Msz
TUC   108.55   6 PKP   55 50.00   7.9X
     Z  19s     1.42um          5.6Msz
LPAZ  140.92 295 PKP   56 44.60   0.0
LPB   141.06 295 PKP   56 44.20  -0.4
     Z  22s     2.22um          5.9Msz
                LR     46 28.00
CNCB  141.17 295 PKP   56 46.00   1.0
MOCB  142.30 287 PKP   56 47.10   0.3
ARE   143.36 299 ePKP  56 57.00   8.5X
MRA   148.03 270 ePKPc 56 59.40   4.1X
     S.D. = 1.0  on 209 of 270 obs.
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   NOV  30, 1993  20h 44m 13.14± 0.14s
   16.995 S ± 4.5km  177.048 W ± 3.5km
   DEPTH = 411.4km  (  6 depth phases)
   5.2mb ( 47 obs.)
 FIJI ISLANDS REGION              (181)
      Mw 5.6 (HRV).
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 11S, 14C
      Centroid Location:
      Origin Time        20:44:17.0 1.0
      Lat 16.86S 0.17 Lon 176.74W 0.08
      Dep 417.5 4.5 Half-duration  1.5
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 1.43 0.25  Mtt=-0.54 0.58
        Mff=-0.89 0.36  Mrt=-1.89 0.48
        Mrf=-2.09 0.33  Mtf= 0.33 0.25
       Principal Axes:
        T  Val=  3.48  Plg=54  Azm=135
        N       -1.01       5       38
        P       -2.48      36      304
      Best Double Couple:Mo=3.0*10**17
       NP1:Strike= 10 Dip=11 Slip=  62
       NP2:        219     81       95
MBU     4.05 270 iP    45 28.60   1.6
                eS     46 30.80
SVA     4.43 255 ePc   45 32.30   1.7
                eS     46 37.40
AFI     5.94  60 eP    45 41.00  -5.3X
BKM    14.06 265 iP    47 18.50   1.1
DZM    16.36 249 iPd   47 41.60   0.2
                i      50 41.90
                i      55 09.10
OUZ    19.98 203 P     48 20.60   3.6X
KUZ    20.69 197 P     48 24.80   0.9
PUZ    21.40 190 eP    48 30.80   0.1
URZ    21.80 192 P     48 32.10  -2.2
NOZ    21.97 190 eP    48 37.00   1.1
HNR    23.61 286 eP    48 53.00   1.8
SVO    23.83 286 eP    48 51.00  -2.2
QRZ    25.40 199 eP    49 05.40  -1.8
AFR    26.04  95 iPd   49 11.80  -1.3
       0.9s   150.70nm          5.4mb
THZ    26.15 197 eP    49 13.20  -0.8
PAE    26.22  96 iPd   49 13.50  -1.3
       1.0s   272.80nm          5.6mb
PPT    26.23  95 iPd   49 13.60  -1.3
       0.9s   288.30nm          5.7mb
     Z  26s  1025.00um          7.3MszX
PPN    26.37  95 iPd   49 14.90  -1.2
       1.0s   138.00nm          5.3mb
TVO    26.53  96 iPd   49 16.40  -1.2
       0.8s   371.80nm          5.9mb
LTZ    27.27 197 P     49 21.40  -2.5
PMO    28.08  90 iPd   49 29.80  -1.4
       0.8s   138.10nm          5.4mb
VAH    28.30  91 iPd   49 31.80  -1.3
       0.9s   148.10nm          5.3mb
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30d 20h

TPT	28.35	90	iPd	49 32.20	-1.3
	1.1s	153.40nm			5.3mb
EWZ	28.36	199	eP	49 33.50	0.2
RUV	28.55	91	iPd	49 33.90	-1.4
	0.8s	172.50nm			5.5mb
BWZ	29.58	199	eP	49 42.30	-1.7
BRS	29.72	244	iPc	49 45.50	0.0
	0.7s	60.00nm			5.1mb
			eS	54 12.00	
			i	55 45.00	
ARMA	31.52	239	iPd	50 01.30	0.1
			iPP	53 30.20	
CTA	34.89	259	P	50 30.50	1.0
CNB	35.01	232	iPd	50 31.80	1.3
	0.4s	222.00nm			5.9mb
			e	56 04.60	
CAN	35.29	232	iPd	50 33.30	0.5
			i	50 34.40	4kmX
			i	50 43.10	
BWA	35.40	234	eP	50 32.10	-1.7
			i	50 33.70	5kmX
PMG	35.61	278	iPc	50 36.30	0.7
LAT	36.59	282	eP	50 45.20	1.4
YYYY	37.70	282	eP	50 53.00	-0.1
MDG	38.21	283	eP	50 58.00	0.9
STK	40.21	241	iPd	51 02.30	-11.0X
	0.7s	81.50nm			
WWKK	40.80	285	eP	51 17.00	-1.4
ADE	43.22	237	iPd	51 37.90	0.4
ASPA	46.29	253	iPd	52 00.90	-0.8
	0.7s	293.00nm			5.7mb
			epP	52 29.50	124kmX
			iScP	56 48.30	
			eS	58 14.80	
			iScS	01 14.90	
GUA	48.29	307	eP	52 17.20	0.2
	0.9s	356.30nm			5.7mb
GUMO	48.35	307	eP	52 16.60	-0.8
	1.1s	409.10nm			5.7mb
PJG	48.35	307	eP	52 16.30	-1.1
MTN	50.13	267	eP	52 30.00	-1.0
TLE	50.36	277	ePc	52 31.90	-0.8
	1.0s	2.50nm			3.5mb X
FORT	51.57	244	eP	52 40.20	-1.1
	0.3s	23.00nm			5.0mb
COOL	57.52	244	eP	53 21.60	-2.1
MEEK	59.97	249	eP	53 38.50	-1.9
KLB	60.39	243	eP	53 41.50	-1.6
BAL	61.35	244	eP	53 47.50	-2.0
SBA	61.41	184	eP	53 53.50	4.4X
DAV	61.55	288	ePc	53 49.00	-1.9
	1.0s	176.00nm			5.5mb
MUN	61.69	242	eP	53 51.00	-0.7
MRWA	62.06	246	eP	53 52.50	-1.7
MKS	63.15	273	iPc	54 01.80	0.4
NANU	63.23	253	iPd	54 01.10	-0.7
	0.3s	25.00nm			5.3mb
MAP	64.30	291	eP	54 09.00	0.3
KHKI	66.00	268	eP	54 18.00	-1.5
			e	56 15.00	578kmX
KAKJ	66.60	323	P	54 21.60	-1.1
GQP	67.16	293	ePc	54 25.50	-1.1
CHJJ	67.17	322	P	54 25.30	-1.0
IIDJ	67.42	321	P	54 26.40	-1.5
OFUJ	67.83	326	eP	54 29.10	-1.2
MAT	67.97	322	eP	54 29.00	-2.2
	1.0s	33.00nm			5.0mb
WKYJ	68.01	319	eP	54 29.80	-1.7
MTMJ	68.23	322	P	54 31.80	-1.1
TSRJ	68.62	320	P	54 35.00	-0.2
TKSJ	68.84	318	eP	54 35.70	-0.8
KUSJ	69.35	331	eP	54 37.60	-1.8
CVP	69.35	297	ePd	54 40.00	0.0
HOOJ	69.47	330	eP	54 39.80	-0.3
KKM	69.79	283	ePc	54 44.50	1.7
	0.8s	103.20nm			5.5mb
BAG	69.86	295	eP	54 42.60	-0.6
ASAJ	71.09	330	eP	54 49.60	-0.2
SPA	73.11	180	iPc	55 02.80	1.3
	0.9s	272.73nm			5.9mb
LEM	74.05	268	ePd	55 08.00	0.3
	1.4s	288.37nm			5.7mb
			eS	04 10.00	
PHAM	75.04	45	eP	55 13.25	0.6
ARN	75.15	43	eP	55 13.47	0.2
ABL	75.30	46	(P)	55 14.77	0.4
PLM	76.16	48	eP	55 18.49	-0.6

PEC	76.23	48	eP	55 18.58	-0.7
	0.8s	36.32nm			5.1mb
ISA	76.25	46	eP	55 19.45	0.0
	1.1s	45.79nm			5.1mb
CMB	76.29	43	eP	55 19.34	-0.2
	0.9s	46.57nm			5.2mb
			epP	56 51.89	414km
LGPM	76.44	39	eP	55 20.28	-0.1
ORV	76.45	41	eP	55 19.93	-0.4
MMPM	76.94	44	eP	55 23.26	-0.3
LMEM	76.98	40	eP	55 23.71	0.2
MEMM	77.03	44	eP	55 24.82	1.3
MTUM	77.11	44	eP	55 24.29	0.0
GSC	77.21	47	eP	55 25.04	0.3
GLA	77.48	50	eP	55 26.50	0.3
			epP	56 58.32	409km
BONR	77.61	44	eP	55 27.66	0.5
MDJ	78.20	324	eP	55 29.60	-0.1
	1.2s	27.00nm			4.8mb
KVN	78.34	43	eP	55 30.75	-0.1
NJ2	78.37	309	Pc	55 29.00	-1.9
	1.0s	26.00nm			4.9mb
TNP	78.40	44	eP	55 31.12	-0.1
	0.7s	32.52nm			5.1mb
TPNV	78.45	46	eP	55 31.44	-0.1
	0.6s	37.79nm			5.3mb
SVW	79.71	10	eP	55 37.20	-0.2
DL2	79.83	316	eP	55 39.00	0.6
VIPM	79.88	37	P	55 38.89	0.0
CROR	79.95	37	P	55 39.09	0.0
CN2	80.10	322	P	55 39.80	0.0
	1.0s	25.00nm			4.9mb
TUC	80.12	52	eP	55 41.68	1.4
	1.6s	156.18nm			5.5mb
			epP	57 14.66	412km
SLKM	80.21	13	eP	55 38.54	-1.5
ASR	80.31	36	P	55 41.13	0.2
CP2	80.48	12	eP	55 39.58	-2.1
CRP	80.50	12	eP	55 39.41	-2.3
LON	80.55	35	P	55 41.91	-0.2
KGM	80.68	275	eP	55 44.50	1.1
FMW	80.73	35	P	55 43.23	0.0
ARUT	80.81	46	eP	55 44.61	0.8
JBO	80.89	37	P	55 43.85	0.0
RMW	80.98	34	eP	55 44.36	0.0
TTA	81.36	10	eP	55 44.99	-1.0
	0.8s	13.71nm			4.7mb
JCW	81.36	34	P	55 46.11	-0.1
PMR	81.42	13	eP	55 44.58	-1.6
	0.7s	28.05nm			5.1mb
WAH2	81.80	36	P	55 48.68	0.2
LNOR	82.02	37	P	55 49.58	-0.1
MSU	82.03	46	eP	55 50.87	0.7
			epP	57 24.97	415km
WTV	82.13	35	P	55 49.88	-0.4
DUG	82.42	44	eP	55 51.68	-0.3
	1.0s	26.78nm			4.9mb
SAW	82.43	35	P	55 51.69	-0.1
BALM	82.58	16	eP	55 50.65	-1.7
DPW	83.19	35	P	55 55.37	-0.2
HVU	83.23	43	eP	55 55.98	-0.1
SRU	83.45	46	eP	55 57.13	-0.1
DAU	83.57	44	eP	55 58.70	0.7
IPM	83.63	277	ePd	55 59.20	0.8
	0.8s	180.30nm			5.9mb
PV09	84.13	47	eP	56 01.42	0.6
PV10	84.14	47	eP	56 00.17	-0.7
LTX	84.41	57	eP	56 03.27	1.1
PV08	84.51	47	eP	56 03.39	0.7
ALQ	84.51	51	eP	56 02.90	0.2
	1.1s	37.07nm			5.1mb
			epP	57 36.27	408km
FBA	84.64	12	eP	56 00.22	-2.2
	0.6s	67.47nm			5.6mb
			epP	57 34.34	412km
IMA	84.66	9	eP	56 01.45	-1.2
	0.9s	11.52nm			4.7mb
MAW	85.15	199	iP	56 06.50	1.5
	1.3s	10.60nm			4.5mb
			i	56 32.00	96kmX
			iPS	05 52.40	
			i	08 56.90	
LRM	85.45	39	eP	56 08.00	1.0
GYA	85.72	299	P	56 09.60	1.0
	1.2s	33.00nm			5.0mb
GLD	87.42	47	eP	56 17.55	1.0
	0.9s	31.61nm			5.1mb

KMI	88.58	297	Pd	56 23.50	1.1
	1.2s	60.00nm			5.3mb
CHTO	89.91	290	ePd	56 29.00	0.7
	1.1s	15.31nm			4.8mb
RSSD	90.01	44	eP	56 28.14	-0.4
	0.9s	30.31nm			5.2mb
INK	90.67	15	eP	56 30.00	-0.8
	1.0s	9.00nm			4.6mb
OCO	91.53	53	iPd	56 37.90	2.4X
NVL	92.25	183	Pd	56 40.00	1.8
	1.0s	58.00nm			5.5mb
TUL	92.95	53	iPc	56 38.70	-3.3X
YKA	92.97	24	eP	56 41.10	-0.3
	0.6s	11.30nm			5.1mb
MBC	99.18	12	eP	57 10.00	0.6
	1.0s	4.00nm			4.7mb
RES	104.20	16	ePdiff	57 32.50	0.8
SUR	128.01	199	iPKPc	02 44.60	11.4X
	0.5s	46.00nm			
SOB1	129.43	118	ePKP	02 35.90	-0.2
OBN	134.07	334	ePKP	02 45.00	1.4
BUL	135.31	215	iPKPc	02 48.00	0.7
			i	02 50.00	
NB2	135.61	354	PKP	02 43.40	-3.1X
	0.7s	6.60nm			
APO	135.80	352	ePKP	02 33.60	-13.2X
	0.4s	0.70nm			
MTD	136.16	222	iPKPd	02 34.70	-14.2X
WIN	138.32	200	ePKP	02 44.50	-8.4X
	0.5s	23.00nm			
EKA	141.45	6	PKP	02 52.63	-4.6X
	1.1s	10.80nm			
DCN	142.85	10	ePKP	02 58.20	-1.5
DLF	143.02	9	ePKP	02 58.40	-1.6
KAS	144.08	319	iPKPc	03 01.30	-1.0
ECP	144.13	10	ePKP	03 01.00	-0.9
WIT	144.14	356	ePKP	03 03.00	1.1
KSP	144.58	345	iPKPd	03 02.00	-0.8
	0.8s	125.00nm			
HTR	144.65	7	ePKP	03 02.20	-0.6
HAE	144.77	6	ePKP	03 02.00	-1.0
CLL	144.84	349	iPKP	03 02.50	-0.7
	1.2s	100.00nm			
WTS	144.95	356	ePKPc	03 03.00	-0.3
	0.8s	212.10nm			
SPC	144.95	340	ePKP	03 04.20	0.5
BRG	145.07	348	iPKPc	03 03.20	-0.4
	1.5s	120.00nm			
			i	03 21.60	
HGH	145.13	6	ePKP	03 03.20	-0.4
MLR	145.70	331	ePKPc	03 05.50	0.5
MOX	145.72	350	ePKP	03 05.70	1.0
	1.5s	93.00nm			
BNS	145.94	355	iPKPc	03 06.30	1.3
	0.9s	52.00nm			
	Z 11s	10.90um			6.9MszX
HOF	145.99	350	iPKPc	03 06.70	1.5
BHL	146.20	306	PKP	03 07.00	0.9
ENN	146.23	357	ePKP	03 07.00	1.5
	0.8s	62.50nm			
MEM	146.38	356	iPKPd	03 06.81	1.1
	0.9s	21.60nm			
SNF	146.55	358	iPKPc	03 07.76	1.8
GRF	146.71	350	ePKP	03 08.70	2.4X
SRO	146.77	341	ePKP	03 07.30	0.9
ZST	146.79	343	iPKP	03 09.40	2.9X
			e	04 47.10	
VKA	146.95	344	ePKP	03 08.50	1.8
			i	03 10.70	
DOU	146.95	358	PKP	03 10.00	3.3X
GEC2	147.05	347	ePKP	03 07.80	0.8
	0.9s	14.16nm			
			e	03 10.00	
			e	03 12.60	
			e	03 16.80	
			e	03 24.20	
WLF	147.31	356	iPKPd	03 10.38	3.2X
			e	04 51.00	
HOFF	147.88	354	PKP	03 12.33	4.2X
FUR	148.17	349	ePKPc	03 12.80	4.1X
	0.7s	106.00nm			
FLN	148.19	4	ePKP	03 09.50	0.8
	0.8s	14.25nm			
BHG	148.29	347	ePKP	03 12.80	3.9X
LDF	148.39	4	ePKP	03 09.20	0.2
	0.7s	8.05nm			
WLS	148.46	354	PKP	03 13.44	4.2X

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CDF   148.47 354 PKP   03 13.32   4.0X
GRR   148.54   5 ePKP  03 09.60   0.4
        0.9s    16.05nm
VITF  148.76 356 PKP   03 13.87   4.2X
KBA   148.79 346 iPKPc 03 09.50  -0.4
        0.7s    25.50nm
                  i    03 14.40
LPF   148.87   5 ePKP  03 10.90   1.2
        0.8s    13.05nm
WATA  148.92 349 iPKPd 03 10.50   0.4
                  i    03 14.90
FEL   148.92 353 PKP   03 14.64   4.6X
WTTA  148.98 348 iPKPd 03 11.00   0.8
        0.6s    62.80nm
                  i    03 14.60
SLE   148.98 353 ePKPd 03 10.00   0.0
MOTA  149.00 349 iPKPc 03 11.30   1.1
        1.0s    39.10nm
                  i    03 15.30
MOF   149.04 355 PKP   03 14.75   4.6X
BSF   149.09 355 PKP   03 14.75   4.5X
SQTA  149.10 349 iPKPc 03 11.00   0.7
        0.6s    26.40nm
                  i    03 15.10
ZLA   149.27 353 ePKPd 03 10.90   0.4
BBS   149.38 354 PKP   03 15.73   5.1X
LJU   149.47 344 ePKP  03 12.00   1.2
LOMF  149.56 355 PKP   03 15.41   4.5X
VBY   149.77 343 ePKP  03 12.80   1.6
LLS   149.79 352 ePKPd 03 12.40   0.9
OSS   149.80 350 ePKPd 03 12.70   1.2
LOR   149.80 359 ePKP  03 12.40   1.2
        0.6s     4.25nm
CIN   149.83 318 ePKP  03 17.00   5.5X
SSF   150.01 359 ePKP  03 12.80   1.3
        0.6s     5.60nm
VDL   150.10 351 ePKPd 03 13.20   1.2
MFF   150.37   4 ePKP  03 13.20   1.1
        0.9s     8.50nm
VAY   150.46 329 ePKP  03 17.40   5.0X
SKO   150.49 331 iPKP  03 18.50   6.1X
        1.0s    60.00nm
BGF   150.52   0 ePKP  03 13.60   1.3
        0.6s     3.45nm
TMA   150.56 352 ePKPd 03 13.60   1.0
MMK   150.73 353 ePKPd 03 15.20   2.2X
DIX   150.76 354 ePKPd 03 15.10   2.0
TCF   150.79   1 ePKP  03 14.10   1.3
        1.0s    15.40nm
LSF   150.81   2 ePKP  03 13.70   0.9
        0.9s    10.00nm
EMS   150.82 354 ePKPd 03 15.40   2.4X
ORX   151.14 353 PKP   03 19.67   6.2X
LPL   151.39 354 ePKP  03 15.60   1.7
        0.7s     2.10nm
LPG   151.41 354 ePKP  03 15.70   1.6
        0.6s     2.55nm
LSD   151.41 354 PKP   03 20.95   6.9X
OHR   151.46 331 iPKP  03 19.50   5.5X
        0.7s    80.00nm
RSP   151.70 354 PKP   03 20.13   5.9X
RJF   151.75   2 ePKP  03 14.80   0.6
        0.6s     6.50nm
RRL   151.97 354 PKP   03 22.74   7.9X
BHB   152.00 353 PKP   03 20.22   5.6X
LFF   152.08   3 ePKP  03 15.40   0.8
        0.7s    17.00nm
PCP   152.14 351 PKP   03 21.64   6.8X
CAF   152.14   1 ePKP  03 16.30   1.5
        0.9s    10.50nm
PZZ   152.35 354 PKP   03 20.77   5.5X
LPO   152.36   3 ePKP  03 16.50   1.4
        0.8s     7.80nm
ROB   152.47 352 PKP   03 21.55   6.2X
FIN   152.51 352 PKP   03 21.28   6.0X
STV   152.59 353 PKP   03 21.60   6.1X
ENR   152.59 353 PKP   03 21.55   6.0X
SAOF  152.81 353 PKP   03 23.45   7.7X
AUTN  152.82 353 PKP   03 22.99   7.0X
IMI   152.85 352 PKP   03 23.11   7.3X
AURF  152.94 353 PKP   03 24.57   8.6X
SBF   152.95 353 PKP   03 23.21   7.2X
PGF   154.01 350 PKP   03 26.18   8.6X
LIC   166.75 143 PKP   03 32.65   0.9
        0.7s    14.50nm
KIC   167.03 144 PKP   03 32.93   1.0
        0.9s    34.50nm
TIC   167.09 142 PKP   03 32.81   0.8
        0.8s    16.50nm
LKO   168.87 131 PKP   03 33.81   0.7
        1.1s    19.50nm
     S.D. = 1.1  on 204 of 254 obs.
-----------------------------------
?  NOV  30, 1993  21h 54m 57.91± 6.33s
    5.824 S ±40.1km  147.636 E ±60.3km
   DEPTH =  94.0 ± 17.4 km
   3.9mb (  1 obs.)
 EASTERN NEW GUINEA REG., P.N.G.  (207)

LAT     1.05 217 iPc   55 18.00  -0.7
YYYY    1.71 256 eP    55 27.50   0.4
MDG     1.93 287 eP    55 29.90   0.0
PMG     3.59 188 eP    55 53.00   0.5
ASPA   22.13 215 eP    59 46.60  -0.3
        0.5s     3.10nm          3.9mb
     S.D. = 1.0  on   5 of   5 obs.
-----------------------------------
*  NOV  30, 1993  21h 59m 23.95± 0.88s
   50.883 N ±10.7km   98.415 E ±11.5km
   DEPTH =  10.0km  (geophysicist)
   4.4mb (  9 obs.)
 RUSSIA-MONGOLIA BORDER REGION   (333)

GTA    11.51 175 eP    02 10.00  -1.5
     Z  10s     2.89um
BTO    13.08 137 eP    02 31.00  -1.4
                eS    04 51.00
HHC    13.57 133 eP    02 45.00   6.2X
        1.0s    26.00nm          5.1mb
LZH    15.30 163 eP    03 02.00   0.4
        1.5s    24.00nm          4.3mb
     Z  12s     1.26um           3.9Msz
     N  10s     1.10um
                pP    03 07.50
BJI    16.47 124 eP    03 23.00   6.5X
     Z  12s     3.32um
XAN    18.50 151 eP    03 43.20   1.3
     Z  12s     1.56um
     N  10s     1.24um
                eS    07 02.00
CD2    20.35 167 Pd    04 04.10   1.1
GUN    24.83 207 P     04 47.70  -0.3
GKN    25.12 210 P     04 50.20  -0.3
KKN    25.12 208 P     04 50.50  -0.1
        0.7s    20.00nm          4.9mb
PKI    25.29 208 P     04 52.40   0.1
        0.8s    12.00nm          4.6mb
DMN    25.35 209 P     04 53.00   0.3
KMI    25.93 171 eP    05 01.00   2.8X
APO    45.36 316 eP    07 46.20   2.6X
        0.5s     1.30nm          4.1mb
NB2    46.29 318 P     07 44.60  -6.4X
        1.1s     5.40nm          4.5mb
YKA    63.98  16 eP    09 58.70  -0.4
        1.1s     2.10nm          4.2mb
WRA    77.28 146 P     11 20.80   0.9
        0.6s     1.20nm          4.2mb
WB2    77.28 146 iPc   11 19.80  -0.2
        0.6s     2.90nm          4.5mb
TUL    92.68  12 iPc   12 43.60   6.5X
     S.D. = 0.9  on  13 of  19 obs.
-----------------------------------
%  NOV  30, 1993  22h 33m 30.90± 2.78s
   11.103 N ±16.4km   61.784 W ±17.9km
   DEPTH =  56.4 ± 54.3 km
 WINDWARD ISLANDS                ( 95)
     MD 3.4 (TRN).

TCE     0.40 176 iPc   33 41.69   0.0
                eS    33 49.53
TRN     0.59 140 ePd   33 43.68   0.0
                eS    33 52.94
TBH     0.94 131 ePd   33 47.98  -0.1
                eS    34 01.22
TPR     0.99  85 eP    33 48.68  -0.2
                eS    34 01.79
BOT     1.05  86 eP    33 49.82   0.2
                eS    34 02.68
GRW     1.06   7 eP    33 49.68  -0.1
                eS    34 04.54
SVB     2.22  14 eP    34 06.55   0.6
                eS    34 35.19
SVV     2.27  14 eP    34 07.25   0.6
                eS    34 35.91
SLB     2.80  15 eP    34 13.18  -1.1
                eS    34 48.22
     S.D. = 0.6  on   9 of   9 obs.
-----------------------------------
?  NOV  30, 1993  22h 36m 00.93± 5.46s
   47.864 N ±14.7km    2.736 W ±45.4km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                          (538)
     ML 2.8 (LDG).

LPF     1.15  81 Pn    36 22.50   0.0
                Pg    36 23.20
                Sg    36 38.90
GRR     1.36  67 Pn    36 25.90   0.0
                Pg    36 27.90
                Sg    36 47.50
FLN     1.75  58 Pn    36 31.70   0.2
                Pg    36 35.20
                Sg    36 59.10
LDF     1.89  66 Pn    36 33.40  -0.2
                Pg    36 37.00
                Sg    37 02.70
MFF     2.17 125 Pg    36 37.60   0.0
                Sg    37 03.20
LSF     3.33 117 Pg    36 59.80   5.7X
                Sg    37 40.00
TCF     3.73 113 Pn    36 53.80  -6.0X
                Pg    37 06.70
                Sn    37 33.90
                Sg    37 53.30
LFF     3.79 139 Pg    37 06.50   5.9X
                Sg    37 54.70
RJF     3.89 130 Pg    37 08.40   6.3X
                Sg    37 56.90
     S.D. = 0.2  on   5 of   9 obs.
-----------------------------------
*  NOV  30, 1993  23h 23m 01.80± 1.27s
   35.833 N ± 9.1km    3.034 W ±15.2km
   DEPTH =  33.0km  (normal)
 STRAIT OF GIBRALTAR             (385)
     mbLg 3.0 (MDD).

EMEL    0.54 173 iPgc  23 12.88   0.0
                eSg   23 20.80
ECOG    1.50 344 eP    23 27.18   0.3
                e     23 50.00
ELUQ    1.99 330 eP    23 34.34   0.5
                e     23 57.50
EJIF    2.07 288 eP    23 29.00  -5.8X
                e     23 51.80
EPRU    2.10 303 iPd   23 32.36  -3.0X
                e     23 55.90
PLAT    2.23 278 eP    23 37.00  -0.2
MOMI    2.23 283 eP    23 37.00  -0.2
ALJ     2.24 293 eP    23 42.00   4.6X
GIBL    2.56 294 eP    23 43.00   1.1
EHOR    2.66 319 eP    23 41.68  -1.6
                e     24 12.70
     S.D. = 1.1  on   7 of  10 obs.
```

STATION DATA REPORT FOR NOVEMBER, 1993

1717 stations reported 76085 reading arrival groups

X = data received for this 6-hour time period

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      ------------------------------------------------------------------------------------------------------------------------
DATE  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |10 |11 |12 |13 |14 |15 |16 |17 |18 |19 |20 |21 |22 |23 |24 |25 |26 |27 |28 |29 |30
      ------------------------------------------------------------------------------------------------------------------------
ABH     X  X X            X      X   X X  X  X       X X          X X X     X      X XX X  X XX  XX X  X X       X X     X
ABL    XX     XXX X  X   XX    X X X X X XX X XXX XX  XXXXX X         XX      XX  X XXX  X   XX    X XXX X  XXX XX   XXX X X X
ACO     XX XXX XXXX  XXXX XXXX X    XX   XXXX XXX     XXXXX     XX X XXXXXX   XX   XXXX  X   X   X X X  XX X XXX X X X XXXX
ACTO  X               X                       X X  X  X X          X  XX      XX     X    X  X           X   X X   X
ACU     X        X                       X    XXXX    X     X X X     XX      X      X
ACX   X X   X       X X   XXXX X    X X       X X   X XXX XX XX  X          X X            XXXX           XX    X  XX XXXX  X
ADE     X        X   X X XX    X    XX    XXXX X     XXX X   X        XXX     XX   XX     X     XXX X  X XXX X X X XX  X X   X
ADK     X            X   X X               X  X    X  XX   X        X XX      XXX XX X X  XXXX               XXX       X X  X
AFI                                                               X XXXXX X XXXXX XXXXXXXXXXXXXXXXXX  X  XXXXX X XXXX XX XX  X
AFIF                   X       X  X  XX                           X X XX       X             X     X    XX         X X
      ------------------------------------------------------------------------------------------------------------------------
AFR                      X           X    XX  XXX     X X X            X      X     XXX   X  X    XX         X X X     X X   X
AGG    X X X XX X  XX       XXX         X     X X XX X XXX XX      XX  XXXX   X    X X X XX X      X   X   XX  XX  XX       XX
AGU   XX      X X     X   X  XX        X                           X  X       X      X         X             X     XX  X
AGVB  X           X    XXX                X    XX  X  X X                   X  X
AKU                                  X        XX      X                X      XX                     X   X     X
ALJ     X                                X     X      X                        X     X                   X   X  X         X  X
ALN    X XX     XXXX  X     X           X     X  X  X XX X XX          X      X X X  X      X      XXX XX      XX  X        X
ALQ     X  XX  XXXX   XXXXXX X X     XX   XXX XXX  XX XXX   X X  XX X  XX   X XX   XXXX XXX  X   X X  XX X X X X   X   XXXX  X
ALT   XXXXXXX  XX  XX    XXXX X    XXX   XXXXXXXXX XX XXXXXX    X X   XX   X  XXX     X X   X  XXXXXX X XXXXXX X
AMW          XX  XX  X       X XX   XX  XXXX X   X  X  XX XX  XXX   X       X                             X XXXX XX    X
      ------------------------------------------------------------------------------------------------------------------------
ANM        X                          X       X    X  X               XX      XXX  X X                       X X   X X X
ANN             XXXXX                XX               X             X         X           X              X     X   XX    X   X
AOMJ    XX X            XX X        XXX  X  X XX   X XX    X   X    X  X               X  X  X   X X   X      XX
APO                                                          X  X X X      X  XX               X  XXX XXXXXX XXXXXXXXXXXXXXXXX
APR     X     X       X           XX X       XXX XXX      XX X     X    X  X     XXX X       X X   X          X   X    X
AQU               X   X           X     XX    X       X               X       XX            X            X
ARA0   XX      XX   XX XXX     X X         XX  XXX XXX  XX      X  XX  XX  XX  X   X       XX   X   X      XX  X X      X  X
ARC                       X                    X      X                X      XX     X    X               X X XX       X
ARE   XX XXXX X X  XX X   X X X  X X  XX  X XXXXXXXX  XXX XXX X     X XX      XX  XX  XXXXX  X  XXXX   X X  XXXX  XX XX XXXXXX
ARMA  XXX  X    XXXXXXX XXX XXXXXXXXXX    XX XXXXX XXXXXXX    X  X XXXXXX  XX XX   XX X XXXXX   XXXXX XXXXXXXXXXXX XXX XXXX  X
      ------------------------------------------------------------------------------------------------------------------------
ARN   X X  XXXXXX    X   XX    X X XXXX  XXX  XXX X   X XXX X     X   XX      XX    XXXX  X  X   X XXX XX X  XXXX XX XXX   X X
ARU   X XX X    XXX X  XXX     X  X  XX   X   XX   XX X   XX X      X XX      XX    XXXX  X  X XXXXX   XXX  XX XX  X X X X   X
ARUT   XX  XX   X X  XX X XX XX      XX   XXX XXX  XX XXX X X  X  X   XX      XXX XXXXXXXXX  X   X X  XX   X XXX  XX XXXXX   X
ARV                   X      X    X     XX    X       XXX  X          XX      X                          X
ASAJ   XXX X            XX           XX  X X  XX  XXX XX XXX X X  X XXXXX     X   X  X X  X  X   X X   X    XX X   X    X    X
ASH   X    X    XX  X  XXX     X  X  XX       X    XX X    X        X XX      XX    XX    X     XXXX    XX  X  X   X X   X   X
ASK     X   X       X               X    X    X     XXX X       X   X  X      X       X                          X          X
ASPA  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
ASR     X                X           XX   XXX X X   X X X X           XX X    XX   X X X  X  X   X X           X   X         X
ASS                   X     X    XX     XX    X       XXX  X                  XX     X      X            X
      ------------------------------------------------------------------------------------------------------------------------
ATE                                              X  X   X                 X     XX     X          X       XX X    X   X
ATH                XX         X                      X       X           X      X   X     X   XXX X    X                      X
AUE   XX  X   X X  X  X X    XX     X  X         X           X     X  X       X      X         X             X   X XX  X
AUH   XX      X X  X   XX XX XX     X  X      X              X     XX X       X  X   X      XX X             X   X XX  X
AUI   XX        X  X  X X X  XX     X  X                X    X        X       X  X   X         X             X     X
AUL   XX  X   X X  X  X X X  XX     X  X      X  X      X          XX X       X  X   X      XX XX            X   X XX  X
AURF  X      X        X     XX   X      X  X  XXX   X X       X  XX   XX      XX         X  X   X        X    X X    X  XX   X
AUTN  X      X        X     XX   X      X  X  XXX   X X       X  XX   XX      XX     X   X  X            X    X X  X X  X    X
AUW   XX      X X  X  X X X  XX     X  X         X           X     XX XX      X XX   X      X  X             X   X XX  X
AVE               X             X                                    XXXX     XX     X       X
      ------------------------------------------------------------------------------------------------------------------------
AVF             XXXX XXX  XXXX XX X XXX XXXX XXXXX XX XXXXXX XX  XX X XXX X XXXXX X XX X XXXXX X XXX X X X    XXXX X X   X
AYN        XXX X XXXX   X   XX X XXXXX  XXXXX      XXXX    X XXX    XXXX XX       X     X      X   XXXX  X    X  X X X  X   X
BADA                                     X XX      X       X XXX    XX   XX       X     X      X   XXXX  X    X  X X    X   X
BAG     X       XXX X  XXXX   XX    XXX  XXX  XX   XX XX  X  X  X X X  X      XX     X    XX X  XXXXX  X X XXX X   X X XXX   X
BAI           X   X          XX      X      XX  X     X         X X      X                  X                   X
BAL     X    XX    XXX    X   XX    XX    XX XXXX X XXXX X X  X XX  X XX    X XX   X    X X XX  XXXXXX XXX XXX X   X X X XXX X
BALM  XXX XX  X  XXX XXXXXXXX XXX   XXX XXXXX XXXXXXX X    X X X   XX XX   XX XXX  XXXXX  XXXX   XXX  XX    XXXX  XXXX X XX XX
BAO   XXX X     XXX X XX XX X XX    X  X XX  XXXXXX   X X X         X X     XXXX   X  X  XX      X XX  X X  XX X   X      X
BBJ                                               X     X      X                XX          X  X   X           X  X    X
BBOR   X                  X                   X                X   X   X X                   X            X               X
      ------------------------------------------------------------------------------------------------------------------------
BBS     XX      X X  XX          X   X    XXXXXX   X  X          XX X  X  X   X     XX       X         X X     XXX   X       X
BBTK     XX    X  XXX       X        XX    X
BC3   XX  XX  X  XXX X  X     X     X   XX   XX XXXXX      X   X XX X X    X  X     XXX    XXX  XX
BCH   X X  XX XXX X  X   XXX   X X X X X XXXX X X XX  X  XX X    X    XX      XX    XX X XX  X     X   X XX  XXXXXXX XXX X
BCI      X   XX   X       XX X                X    X      XX X           X    X X          X       X   X       X    X      X
BCK    X XX  X X XXX     X               X X  X      XXX        X  X    X    X  X X X XX  X X   XX  X    X X XXX XX
BCKR                      X                                                                             X    X   X  XX  X
BCP          X      X X  X    X XX      X XX   XXX XXXXXX       X     X X     XX          X              X  X  X     X   X  X
BDF               X      X    X      X    X   X       X   X            X      X               X              X X   X X
BDFB                                        X   XXXX    XXX X           X     XXXX      X  XX  X   X      XX  XX
      ------------------------------------------------------------------------------------------------------------------------
BDI             X     X     XX   XX     XX    X       XXX  X          XX      XX     X                   X
BDT     X   X    X  X        X X  X XX      X XXX  XX XX  XXXX      X XXX     X X XXXX  X XX XX  X X   XXXXX X X  XXXX  XX X X
BDV      X   XXX  X       XX X       X     X  X X  X  X   X  X X X  X X  XXXX XXX X  X     X     X  XXXXXX  X   XXXXXXX XXXX
BERA                                          X X XX  X    X X         XXX    X
BFS       X X   XXX X       X  XX  X    X       X   X    X  X       XX      X   X      X X  X   X    X  X  X       XX   X  XX
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        ------------------------------------------------------------------------------------------------------------------------------
DATE    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |10 |11 |12 |13 |14 |15 |16 |17 |18 |19 |20 |21 |22 |23 |24 |25 |26 |27 |28 |29 |30
        ------------------------------------------------------------------------------------------------------------------------------
BFT                 X XX        X    X  X     XX X X XX   X  XX X   XXXXX X XXXXX XXXXXX X  XX  XX    XXXX XXX XX  X X   XXX X
BGF             XXXX XXX XXXXXX X X XXX XXXX XXXXX XX X XXX  XX  X  X XXX   X XXXXX XXX  XX XX X XXX X X XX  X XXX XXX XXX   X
BGL  XX  XX  X X XX  X X XX XX     XX XX    XX XXXXX   X  X X     XX X    X  X  X   X X   XXX X X              XXXX  X X  X
BGR  XX  XX  X X XX  X X XX XX     XX XX     X XXXXX       X     XX X    X  X  XX  X     XX  XXX X         X   XXXX  X X  X
BHB  X     XXX  X X XX    XXX XXXXXXXX XX XXXXX   XX X X     X   X X XX      XX    XX   XX XX   XXX   X X   XXX  X X  XX X X
BHG  X XX      XXX   XX     X   XX  XX X XX XX     X XXX        X  X XX      XX    XX           X     X X    XX  X X       X
BHL        X   XX  X   X    X  XX   X       X     XX           XX XX     XXX   X X    X    XXX    XX X    X  X X    X   X
BHPR X X   X            X        X            X                                          X               X    X  XX  X X
BIM        XX        XX          XX       X    XX X XXXX          XX      X                X               XX X
BINY            XXX   XX X           XX   X    XX  X  XXX X      X XX XX      XX    XXX   X  X   X X     X   X   X X     X   X
        ------------------------------------------------------------------------------------------------------------------------------
BIP  XXXXXXXXX  XX X XXX XX XXX XX X  XXXXXXXXX XX XXXXXX XXX XX XXXXXXXXX X XXX X XX XXXXXXXXXXXXXX XX XXXX  XX XXX XXXXX XX
BJI  XXXX XXXXXXXX XXXXXXX X  XXX  XXX XXXXXXXXX  XXXXXXXXX XXXXXXXX XX XXXX XX X  XXXXX XX X XXXXXX XXXXXXXXXXXXXXX XXXXX X
BKG  XX  XX  X X XX  X X XX XX     XX XX    XX XXXXX   X  X X     XX XX   X  X  X   X X   XXX XXX X  X   X  X   XXXX  X X  X
BKM  XXXX  X X XXXXXXX XXXXX  XXXX XX XXXXXXXXXXX XXXXXXX  XX  XX XXX  X  XXXX X  XX  XXXXX XXXXXXXXXXXXXXXXX XXXXX XXXX  X
BKS     XX X           X    X    X     X   XX     X   X X          XX      X      XX   X  X   X  X     X  X  X XX   X
BLA   X            XX                    X    X  X X            XX      XX            X           X     X
BLE      X       X                      X XX      X   X            X      XXX  X                     X     X   X     X
BLF  X    X XXXXXXX XXX   X XXX  X XX X  XX XXXX XXXX X X  XX   X XXXXXXX XXXXXXXXXXXXX  XX X X    XX XXXXX XX  X X  XXXXXX
BLS5      X       X              X                            XX                X     X   X              X         X
BLW        X   XX  XX      X  X   XX   XXX X X X  X   X XX  XXXX          X                            X XXXX       X
        ------------------------------------------------------------------------------------------------------------------------------
BM3  XX  XX     XX                X    X   XX XXXX        X X      X    XX X      X     XXX  X
BMG                    X                 X X     X                    X XXX            X              X  X
BMSM X                 X     X                                                          X         XX X  X  X X        X
BMW    X  X             X        XX  XXXX X X  X  XXX X    X       X X    XXX XX X X  X      X X           X         X
BNI            X           XX   X     X     X      X            XX     XX     X                    X
BNN                                     X   X  XX X          XX         X    X   X       XX      XX  X   X   X   X   X
BNS    X         X      X           X     X XX       X          X    X    X XX     XX      X   X     X X     XX           X
BNT     X   XXXXXXXXX XXXXXXX XXX XXXXXX  XX    X    XXX       X X   X              XXX
BOB            X     X     XX   XX     X     X      X X            XX     XX     X                    X
BOD    X  X    X X X  X X     XX X  XX   XX  XXX  XX X X X  X      X XX      XX    XXXX  X X  X XXX   XXX  XX XX  X X X X   X
        ------------------------------------------------------------------------------------------------------------------------------
BOG                    X                  X X X   X   X                X XX            X          X   X  X
BOM                   X                      XXX X  X    X  X    XX    XXX    X X              X     XX X
BONR XXX  XXXXXX X  XX XXXX XXX X XXXXX XXXXXXXX XXX XXXXX X  X XX   XX      XXX XXXX XXX   X   X X XXXXXXXXXXXX XX XXX XXX X
BOSA  X      X     X  X      XX  X X  X X X XX   X  X   X          X XX      XX XX XXXXXXXXXX        XXXXXX   X   X X
BPA              X  X     X     X          XX X  XX            X       X  XX              XX     X     X
BRG  XXXX XXX  XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX XXXXXX X  XXXXXX XXXXXXXX  XXXXXXXXXXX X XXXXXXXXXXXXXXXX XXXXXXXXX   XX XX
BRLK XX  X        X  X X  X  X     X         X         X    X      X X           X   X         XX            X     XX  X X
BRMM   X   X X          X      X X            X                                                              X    XX X X   X
BRS  XXX  XX X XXXXXX                    X XXXXX XXXXXXXX X    X XXXXX XXXXXX X XX   XXX XX  XXXXXXXXXXXXXXXX XXXXX XXXXXXX
BRU    X                X   X  XX       XX  X X X           X       X       XX   X X   XXXXXXX   X         X  X XX X  X
        ------------------------------------------------------------------------------------------------------------------------------
BRW                   X                  X       X       X    XXXX      XXX  X X    X  X   X       X   XXXX  X X X X
BRY    X   XXX  X       XX X      XX    X  X X  X  X   X  X X X  X X  XXXX XXX X  X   X  X    X  XXXXXX  X   XXXXXXX  XXXX
BSD   XX        X              X         XX X    XX            X  X      X                    X          XXX
BSF           XXX  XXX XXXXXXX XX XXX XXXXXXXXXX XXXXXXXXX  X  XX X XX  X X XXXXX XXX X XXXXX  XXX   X X X XXXXX XXX XXX   X
BSZ        X   XX   X      X  X        X   X   X  X   XXXX   XXX  X      X                    X XXXX X
BTH  X    X    X  X  X               XX X   X            X     X    X      X                 X   XX      X          X    X
BTO  XXX  X    XXX XX XXX           XX  XXXXXXXX  XX XX XX  X    X X XX X    XX X  X   X XX X X XXXX  XXX  XXXX   X X   X  XX
BUC    X   XX    X     XX                                X            X        X                X
BUL  XXX  XX XXXXXXX XX XXX XXXX X XXX XXXX XXX  XX  XXX XX X  XXX X XX   XXXXXXXXXXXX X XXXX  X      X XX XXXX   X X XXXXXXX
BWA  XXX        XX XX XXXX   XXX X XX    XX  XXX   XXXX      X  X    XXX      XX        XXX     XXXX   X XXX X X X XXX X XX  X
        ------------------------------------------------------------------------------------------------------------------------------
BWN  X   XX      XX    X     XX    X     X  XX XXXXX      X   X XX   X    XX X  X  XX X   X X XXX    X   XX            X  X
BWZ   X  XX     XX  X   XX   X X         XX X X    X   XX       X            X                              X XXX       X   X
BZS   XX   XX X XX      XX                          XX X    X     X XX    X XX
CACB        X   X   X  X                      X X     X X X            X      X
CACH    X XXX  X X    X X          X X XXXXXXXX  XX  X   X X   X XX   X  XXXXXXXXXXX  X XXX XXXX           X X   XX  X XX X
CAF            XXX X XX XXX X XX   XXX XXXX  XXXXXXX X XXXX XX  X  XXXXX   XXXXXX  XX X XXXXX   X X XXXXX X  XXX  X X   X   X
CALN X      X       X     X    X     X     XX    X X       X  X    XX      XX         X  X                  XX  X    XX
CAN  XXX        XX XX XXXX   XXX   XX   XXX XXXX  XXXXX X   XX  X X  XXX      XXX  X    XXX X   XXXXXX XXXXX X X X XXX X XX  X
CANV   X X         X X  XX X X   X       X    XX     X X       X     XX   X  XXX       X           X   X X      X X  X  XX
CAR  X X       XXXXX XXXXX XXX  XXXX XX  XXXXXXX X X X X X XX X XXXX XX      XX    XXX  X   X           X   XX          XX
        ------------------------------------------------------------------------------------------------------------------------------
CAW          XX  XX   XX X   X  X   XX  XXXX X XXX  X  XX XXXXXXXX  X      XX                          X XXXX XX    X
CBM    X       XXX      XX          XX   X    XX  X  XXX X        XX XX      XX  X X X      X   X X   X X   X X   X     X  XX
CBN                  XX  X                  XXX     X X X          X  XX      XX     X   X  X       X   X         X
CCB  XX  XX     XXX  X X X   X     X   X X  XX XXXXX      X      X   X    XX X  X  XX X   XXX XXX       XX         X X  X
CCH  XXX XXX                            X XXXXXXXXX XXXXXX  XXX XXX XXXXX XXXX XXXX XXXXXXXX X  X    XXX XXX XX  X  XXXXXXX
CCM                                     X X     X   X            X      X      X       X      X     X
CD2  XXXX X X  XXX X  XXXXX   XXXX XXX  XXXXXXX  XXXXXXXX X XXXX X XX    X XX  XXXX X  XX X XXXXXX  X XX XXXXX  XXX XXXXXXX
CDD  XX  X   X X XX  X X XX XX     XX XX     X  XX     X  X X X   XX XX     X  XX  X     XX XX           X   X XX  X X
CDF    XX      XXX  XX   XXXXX XXX XXX XXXXXXXXXX XXXXXX X   X  XX X XX  X X XXXXX XXXXX XXXXX  XXX   X X X XXXXX XXX XXX X X
CEH    X            XX XXX  X   X  X    X   XX   X  X X X        XX XX   X  XX    X  X  X  X   X     X X X X X   X    XX
        ------------------------------------------------------------------------------------------------------------------------------
CEOS X              X              X  X         X   X   X      X        X    XX X  X     X          X   X  X   X       X
CER      X    X   X              XXXXX     XX   X XX X X  X      X XX    X XXX  XXX           X       XX  X X   X X    XX X
CEY   XX      X    X X      XX   XX   X XXXX    X   X  XX  X                                   X                  XXX
CFA  XXXXXXXXXXXXXXXX
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      ------------------------------------------------------------------------------------------------------------------------
DATE  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |10 |11 |12 |13 |14 |15 |16 |17 |18 |19 |20 |21 |22 |23 |24 |25 |26 |27 |28 |29 |30
      ------------------------------------------------------------------------------------------------------------------------
CIN   X XXXXXX X XXX     XXX XXX XXXX    XXX XX    XXX   XXXXXX   XX  XX X XXXXXXX X XXX XXX X XXX  XXX    XXX    X      X X
CIR                                                                X X      XXXXX  XX          X        X         XX
CIT     X  X    X X X  XXX     X     XX   XX  XXX  X  XXX X        X XX      XX    XXXX  X     XXXX   X X  XX X   X X X X  X
CKI             X     X     XX   XX     XX    X       X X            XX      XX     X                   X
CKL   XX  X   X X XX  X X X  XX     XX X    XX X XXX    X   X     XX X    X  X      X       X X      X   X      XXXX  X X
CKN   XX  XX  X X XX  X X    XX     XX XX    X X XXX        X X    X X    X  X      X X   XXX X                 XXXX  X X  X
CKT   XX  XX  X X XX  X X    XX     XX XX    X XXXXX    X   X     XX X    X  X  X   X     XXX X                 XXXX  X X
CLI   X XX      X XX   XX   XX       XX          XX            X                                      X X  X  XX  X X
CLKR  X                   X        X                                                        X               X    X  XX X X
CLL   XXXX X X  XXXXXXXXXXXXXXXXXXX X X XXXX XXXXX XXXXXX X  XX  XX XXXXX  X XXX XXXXXXXXXX XXXXXX XXX XXXXXXXXXXXXXX X XX  X
      ------------------------------------------------------------------------------------------------------------------------
CLLP  X X  X  X      XX    X      XX X       XXX XXXX X  XX X     X    X  X     XXX X       X X   X       X X    X    X  X
CMB   X X XXXXXX X  X   XX    X X X XX  XXXX XXX XXX XXXXX X   XX X XX      XXX X XXXXX X  X   X XXXXXXXX X  XXXXX XXX X X X
CMCZ   X  X      X        X                 X    X     X              X      X                             X   X
CML          XX                       X   XX    X XXXX       XX          XX  XX             X        X          X X     XX X
CMP     XX   X  XX          X    X   XXX XX  X    X  XX        X   X  X      XX            X              X  X  X  X
CN2   XXX  X    XXX X  XXXX   XXX   XXX  XXXXXXXX XX XXXX   XXXXXX X XX X  X XXXX XXX XX XX   XXXXX  X X X XXXXX X X X X XXX
CNB   XXX           XX  XX     XX    X   XX XXXXX XX XXXX   XX  XX   X    X  XX        XXX XX  XXX X XXXXXXXX X X X X X X  X
CNCB  XXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXX XXXXXXXXXXXX
CNIL    X                             X  X    X      X                   X    X     X                  X   X            X
CNPM  XX  XX  X X XX  X X XXXXX     XX XX  X X  XXXX   X  X X X   XX XX   X  X  XX XX     XXX XX     X     X    XXXX X X
      ------------------------------------------------------------------------------------------------------------------------
CNZ              X  XXX     X  X        X X        X   X XX   XXX  X       X                            X XXXX X X   X
COE     X  XXXXXX        X    X X X X   XXX  XXX  X  X XXX X         XX      XX    XXX   X  X   X  XXXXX X X XX XX XXX X
COL     X       X                            XX      X               XX      X      X    X  X  X X         X X
COOL    X     X  X  XX  X     XX    XX    XXXXXXX  XXXX X X        X XX       X   X    X X XX  XXX X X X X X X   X X X XX  X
COP     X        X  X                XX  X   XX      X      X      X  X      XX     X             XX   X   X  XX   X       X
CP2   XXX XXX X X XX  XXXXX XX     XX XX  X  XXXXXXX X X  X X    X X XX   X  XXXXXX X X  XXXX XXX X X   X  X X XXXX  X X XX
CPD   X X  X  X      XX          X                                X    X  X  X  XXX X      X X    X       X X   X    X  XX
CRE                  X      XX   XX     XX   X       X X  X          X       XX            X           X
CRM        XX        X           XX           XX XXXXXX  X       XX      X    X   X       XX           X  XXX  X X
CROR    X            X  X            XX  XXX X X   X X X X    X      XX      XXX   XX X  X  X  X X           X   X         X
      ------------------------------------------------------------------------------------------------------------------------
CRP   XXX XXX X X XXXXXXXXXX XX     XXXXX X XXXXXXXX XXX  X X X    X X    X  XXXX XXX X XXXX XXX X  X   X  XXX XXXXX X X XX
CRX   X X   X        X   XXXX X    X         X X X   XX  X   X             X XX                   X         X    XX  XX
CRZF  X        XXX      X                    XX      X   X   X        X      XX
CSS      XX     XX XX XX         X    X X X  X      XX    X       XX XX      X   X          X XX       X    X XX X        X
CSY   XXX  X  XXXXX XX X X   XX X XXX   XXX X XX    XXX          X   X      X X   X X    XX X  X X   XX    X   X X   X X
CTA   XXXX XX   XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX X XXXXXXXX XXX  XXXXXXXXXXX XXXXXXX XXXXXXX XXXXXXX X XXXXX X XX XX
CTAO    X               X                    XX      X   X            X      X           X  X              X X         X
CTB        X     XX X XXXXX XX     X     XX  XX    XXX  X          X XX   XX XX     X X XXXXX XX  XXX   XX X    X   XXXX XX
CTGM  XX  X   X X X  X     X X     X    X  X X   X        X       X  X    X  X     XX     X X  X X        X       X  X  X
CTI                                  XX             XX  X          X        X     X                  X
      ------------------------------------------------------------------------------------------------------------------------
CTK      XX    XX  X  X    X        XX       X       X                X      XX   X   X       XX     XX      X
CTT      XX XXXXX XX X XX XXXX X  XXXXXX        X  X XXXX      X X   X         X   X XX        XX     XX  X   XX X X   X  X
CUT   XX  XX  X X XX X X XX XX      XX XX X XX XXXXX   X  X X X XXXX X    X  X  X  XX X   XXX XXX X X   X       XXX  X X  X
CVA   XX  X   X   XX X X X X X     X       X X   XXX   X  X X X      X    X  X     XX     XXX X  X        X       X  X  X
CVL     X            XX                  X   X    X  X X             XX   X  XXX X XXX  XX  X          X     X
CVP     X  X XX XXX X XXXXX   XXX XX XXXX XXXXXXXXXXXXX        XX  X  X  XXXXXX X   XX   XX     X X  XXX X X X   XXXXXXX XXX
CWCR  X X                X                     X                                            X                   X  XX  X
CYA   XX  X  XX  XXX X XX  X X X           XXX  XX XXXX    X X     X XX  X XXXX XXXX  XXXX XXXXXX  X   XX X XX   XX X    XX
DAG   XXXXXXXXXXXXXXXXXX    X XX X  XXX   XX XXX XXXXXXX    XXXXXX XXXXXX  XXXXXXXXXXXXXXXXXXXXXXXXX XX            X XXXX XX
DAU     X XX   X X   XXX XX X       XX  XXXX XXX  XX XXX X X  X  XX  XX    X XX   XXXXX XX  X    X  XXXX   X X   X   XXX   X
      ------------------------------------------------------------------------------------------------------------------------
DAV     X XX    XXX X XXXX    X         XX   XX    XXX      X      X XX      XX     X    X XX XX     X XXXXX X   X X  XX   X
DBO    X                 X               XX  X         X X    X      XX X    X X   XX X     X           X               X
DCN     X        X     X           XXX   X  XXX   X  X                X      XX    XX    X  X  X X   X X     XX            X
DDM                                   X   XX X XXX      X      X                  X       X       X    X             X
DEG        X      XX X X               X      XXXXXXXX     X X X XX       XXXXXX XXX      XXX    X    X X        X  X
DEV      X X X  X XXX             X          X   X      X      X   X  X    X                         X X     XX  X
DFR   XX  XX  X X XX X X XX XX     XX XX     X XXXXX      X X X    X X    X  X  X  XX     XXX X            X   XXXX  X X
DHLJ   X        X   X           XX                  XX                                               X
DHY                  X X X   X                                                  X  XX X   XXX XXX
DIM                   X             X        X  X    XX X                    XX     X      X   X                 X
      ------------------------------------------------------------------------------------------------------------------------
DIW         X   XX  XX      X  X   X   X X  X   X  X   X  X XXXXX  X       X                            X XXXX       X
DIX               XXX  X    XXX   X   XX XXXXX XX    X X       X  X  X XX      XX X XX        X        X X     XX  X X       X
DJE    X  X     XX     X     X     X    X   XX XXXXX      X      X   X   XXX        X     XXX XX         X
DL2     X               X      X    XX       XX      X                X X    X      X   X      X     X X   X X     X   X   X
DLA   X                                 X    X         X              X      XX     X                  X         X
DLF     X        X     X           XXX   X  XXX      X                X      XX    XX    X  X  X X   X X     XX  X         X
DMK    XXXX XX  X XX   XX  X   X  XXX XX        X    X XX      X X           X             X          X  X    X X
DMN   XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXX XXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
DOG               X        X                X      XX               X      X              X    X   X  X          X  X
DOI                  X     X     XX    X     X       X               XX      XX     X                  X
      ------------------------------------------------------------------------------------------------------------------------
DOT    X  X     XX     X     X          X   XX X X X      X      X           X      X     XXX XX         X
DOU   X XX  X   XXX               X XX  XXX XXXX  X XXX         XX X XXX   X XX X XXX X X  X   XXX   X XXX X XX  X X  XXXX X
DPW     X  X     X   X  XX          XX   XXX X X  XX X X X X  X      XX      XX X XXX      X   X X         X XX  X   X     X
DRA      X  X    XX         X                X       X                       XX                      X X
DRV   X         XX      X       X            XX      XX          X X  X      X        X X            X     X X         XX
DRZ                  X         X                               XX  X       X                            X    X   X
DST   XXXXXXXXXXX XXXX XXXXXX XXX XX XXXXXXX  XXX XX XXXXXXX  XXXXXX XXX XXX XXX XXX XXX  XX XXX XX XXXXXXXX XXX XX  XX  XX
DSZ      XX     XX   X      X XX   X    X X     X  X   X  X  XXXX  X       X                               X
DUG   X X  X   XXX   XXXXXX         XX  XXXX  XX XXX XXX X X  X X XX XX    X XXX XXXXXX XX X   X X  XX X   X X XXXX  XXX   X
DVD     X                X   X  XX    X  XX  X X X    X      X       X       XX     X   XXXXXXX              X XX  X  X
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DATE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |10 |11 |12 |13 |14 |15 |16 |17 |18 |19 |20 |21 |22 |23 |24 |25 |26 |27 |28 |29 |30
-----------------------------------------------------------------------------------------------------------------------------------
DZM  XXXX XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX X XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
EAB             X                       X  XXX      XX              X      X      X                  X       X
EALH   X        X   XX                  X   XX      X     X X       X      XX     X    X              X   X                X
EAU             X                       X  XX       XX              X      X      X                  X       XX
EBAN                   X        XX      X XX   XX      XXX X X X   XXXX X X  XXXX   X    X XXX      X X X X X    X  X      X
EBG    X             X             XX   XXX X X   X X X X    X     XX      XX X X X X  X  X   X X           X   X
EBH             X                       X  XX       XX              X      X      X                  X       XX
EBL             X                       X  XXX      XX              X      X      X                  X       XX
EBR    X       X                           XX         X            X   X X             X        X    X    X X           X
ECH    XX    X XXX   X          XX  XX X XX XXX   XXXX       X  XX X XX  X X XX    XX       X   XX    X X X   XXX X X
-----------------------------------------------------------------------------------------------------------------------------------
ECHE   X       XX    X              X  XX   XX      X X X X   X   X XXX     XX     X                  X   X                X
ECO   XX     X   X       X XXXX XXXX XX  X   XXX     XX  X                X XX X X X  XXXXXXX   XX    X   X  X XX X  XX
ECOG X X  XX   XXX  XX   X    XXX    XX XX   XX      XX XX X   X    X X X    XXXX   X    X  X       X   X   X              X
ECP                                        X       X              X            X                X X     X              X
ECRI   X       XXX    X              X  X    XX    X X             XXXXX     XX     X       X       X   X    XX            X
EDC   X XXXXXXXX XXXX XXXXXXX XX  XXXXXX  XX  XXX XXXXXX  X   XXXXXX XXX XXX XXX  XXXXXX  XX  XXX XX  XXX     X   XX     X
EDI            X                       X   X       X              X      X      X              X   X        X            X
EDU             X                      X  XXX      XX              X      X      X                  X       XX
EGD    X   X       X              X        X     XXX X       X   X  X      X       X     X                    X          XX
EGRA   X       XXX    X               XX   XX      X X X        X XXX     XX    XX       X       X X X     X     X
-----------------------------------------------------------------------------------------------------------------------------------
EGUA   X  XX    XX   X   X    XXX    XX X    XX      XX X  X   X     XX X    XXX    X    X XX       X       X X          X X
EHOR   X        XX   X   X     X    XX XX    XX      X XXX        XXXX X    XXXX   X    X  X       X X X X X  X X  X X  X XX
EHUE   X        XX  XX             X  XX    XX      X X X         X  X      XX     X        X      X       X
EJIF   X         X       X    X    X  XX    XX      X  XX          X X X  XX X    X    X XX           X   X       X    X XX
EKA  XXX  XX   X XX  XXX   X    X  XXX   X XXXX   X  XX          X X XX      X     XX    XX       X   XXXX XXX    X      XX
EKH  X X                     X               X        X                              X               X    X        X
ELC    XX X      X   XX  XX X            X  XX    X  X X X           XX   X  XXX X XX  X X  X     X     X    XX
ELF  X                                   X    X      X  X X            X      X     X                X
ELIZ   X         X                  X  X    XX      X            X XX      XX                    X    X      X
ELL                                                                                        X   XXX  X     XX XXX  X X     X X
-----------------------------------------------------------------------------------------------------------------------------------
ELO                                      X  XX       XX              X      X      X                  X       XX
ELUQ   X        X   XX   X     XX    X  X    XX      X XXX          XX        XX   X       X       X   X X X    X       X  X
EMON   X                               X  X    XX   XX X           XX XX     XX     X               X       X XX X
EMS            XXX  X    XXX  XXX  XX XXXX  XX    X X X     X  X  X XX  X   XX    XX                X X     X   X X       X
EMUT   X  XX   X X   XX  XX X       XX   XXX XX   X  XXX X    X   X  X      XX     X X  X        X  X  X X X X   X   X
ENIJ   X  XX    XX  XX         X    XX X    XX      XX  X X        XX      XX     X               X   X   X       X       X
ENN  X XX XXX  X X   X XX      XX   XX X XXXXXX   X XXX         XX X XX    X XX  XXXX    XXXX X XX    X X XXX XXX   X XX    X
ENR  X X   XX   X X XX   XXXXXX XXX XXXXX XXXXX   XX X X   X X   X X XX X    XX    XX  XXX XX   XXX   XXX    XXX  X X  XX X X
ENSF   X                                 X    XX     XX X                   XX  X  X                X    X
EPF            XXXXX XXX    X  X   XXX XXX   XXX XXX X XXX  XX  X XX XXXX  XXXX XX XX   XX  X       XX XX X   XX    X       X
-----------------------------------------------------------------------------------------------------------------------------------
EPLA   X       XXX                     X  X    XX   XX X X X        XX XX     XX X  XX      X       X   X   X       X X  X XX
EPRU X X       XXX       X     X     XX X    XX      X  X          XXX X    XXXX   X       X          X X X XX    X    X XX
ERE     X      XXX            X  X  XX   X    X    XX X             X XX      XX     XX   X X    X X   X X     X   X X   X   X
EROQ   X        X     X              X  X    XX      X       X X     XXX      XX                    X X       X
ERUA   X         X                    X  X    XX   XX X X            XX XX     XX     XX              X  X    X  X X          X
ESCF                                       X  X   X                 X     XX     X          X       XX X    X   X
ESEL   X                                   XX      X       X       X      XX     X
ESK             X                          X       XX              X      X      X       X           X     X              X
ESY                                      X  XXX     XX              X      X                  X       XX
ETER                  X                    XX      X               XXX    XX     X                  X
-----------------------------------------------------------------------------------------------------------------------------------
ETOR   X       XXX   XX              X  XX   XX   X  X X X X X X   XXXX     XX     X       X       X   X   X XX           X
EVAL   X       XX             X     XX X    XX      X X X         X X   X  XX     X       X       X X X X X  X      X  X XX
EVIA   X       XXX  XX   X     X     XX XX    XX      X X X X X X  XXXX      XX     X    X X X      X   X   X XX        X
EYL  X XX XX XX XXX  XXX  XXX    X XXX XXX     X XX XXXXXX X  X X   XX          X  X X   X                X
EZAM   X                                 X    XX   XX X              X      XX     X                X  X    X    X
EZN  XXXXXXXXXXXXXXXXXXXXXXX XX XXXXXXXX XX  XXX XXXXXX  XXX XXXXXX XXX XXX XXXXXXXXXXX  XX  X   XX XXX XXX  X   XX  XX
FAC         X                          X   XX     X X X          X         XX   X                  X           X X     XX X
FAM    X       X   X                  X X     X      XX              X      X                  X                XX X
FBA  XXX XXX    XXXXXXXXXXX XXXXXX XXX XXXXXXXXXXXXXXXXXXXXXXX XX XXXX   XX XXXXXXXX X XXXXXXXXXXX XXXX XX XXXX XXXX X XX XX
FCH     X XXX  X XXX  X X        X X X XXXXXXXX  XXX X   X X   X XX   X  XXXXXXXXXXX  X XXX XXXX           X X   XX  X XX X
-----------------------------------------------------------------------------------------------------------------------------------
FDF        XX       XXX                  X    XX X XXXX  X  X    XX      X   XX           XXX           X XXXXX X
FEL    XX      XXXX XX   X   X  XX  XX X XXXXXX    XXXXX     X  XXXX XX  X X XX    XXX      X X XX    X X X   XXX X X   X   X
FHC    X  X X  X    X   XX   XX  X           X X XX  X     X        XX      XX    XX    X  X   X   X X  XX X XX  X   X  X
FID  XX  XX  X   XX  X X X XXX     X  XX    XX XXXXX   X      X   XX X    X  X      X     X X
FIN  X X    X     X XX    XXX   XXXX X XX XXXXX   XX X X     X   X X XX      XX    XX   XX X      X   X X    XXX  X X  X    X
FLN            XXXX XX  XXX X  XXX XXX  XXXXXXXXX XX XXX X  XX  XX X XXX   X XX  X XX  XXX XX X XXX   X X     XX   XX X     X
FMW    X             X  X          XX   XXX X X   X X X X    X      XX X    X  X X X X  X  X     X           X   X         X
FNA  XX      XX    XXX     X XXX XX      X    XX X XX  XX X XX   X  X   XXXX   X  XXX X X XX X XX   XXX XXX XX  XX X X      XX
FNO    X                  X          X     X   X X  X  X X X  XXX          X      X       X                          X    X
FOO    X     X            X          X     XXX X       X      X             X                          X         X XX
-----------------------------------------------------------------------------------------------------------------------------------
FORT X X  X X   XX  X    X  XXX   XXX    XX X XX X XXXX X X  XX XX X XXX   X XX    X  X  XXXXX XXX    X XXX XXX X XXX X XX  X
FRA                X                    XX       XX X        X         X                                X       X  X
FRB    X  X X    X   X   X         XX    X   X XX X  XXX XXX  X   XX XX     XXXX X XX X  X  X X X X   X X X X X   X X     X XX
FRF            XXXX  XX XXXXX  X XXXXX XXXX XXXX  XX XXX X  XX  XX X XXX     XX    XX   XX XX  X    X  X X   XXX X X  XX X X
FRI    X                X      X             X X   X     X        XX      X     X                X X       XX   X
FRS   X    X  XXXX X  XX     XX   X X  X XX XXXXX X  X X X  XXX  X XXXXXX  XXXXX  XXXX  X  X   X      X XXX    X  X X  X XXXX
FRU  X XX X    X X    X X     X     XX   X X XXX  XX X   XX X      X XX  X   XX    XX X  X      XXX   XX   X X   X X   X   X
FSA  X XXX   X     X XX X  X X X  XX X   XXXXXXXX XXX X XXX X    X XX  X  X X  XX  XXXXX  X X X XXX XXX  X X    X  X X  XX
FUR    X       XXX   X      X   XX  XX X  XXXXX  X   XX        X  X  X      XX    XX       X   X     X X   X XX  X X       X
FVI            X     X     XX   XX     XX            XXX  X          X      XX     X                  X
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DATE   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |10 |11 |12 |13 |14 |15 |16 |17 |18 |19 |20 |21 |22 |23 |24 |25 |26 |27 |28 |29 |30
       ------------------------------------------------------------------------------------------------------------------------
FVM      X       XXX   XX XXX         XX   X   XX   X  XXX X         X  X      XX                 X     X X  X X X
FYU        X      XX            X             X    X X      X               XX X      X     XXX             X
GAC      X  X      X   XX    X X      XX   X   XXX  X  X X          X  XX      XXX XXXXX   X  X X X X   X X X XXX  XX   X     X
GAZ                                 XXXXXX   X    XX  XX     X  X    X XXX  X   XX  XX      XX  X  XX   XX  X       X XXXX    X
GBA    XXXX XXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXX XX XXXXXXXXXXXX XXXXXXXXXXX XXXXXXXXXXX
GBZT    XXXXX    X  XXX XXXXXXX     XX XXX      XXX  X XXX      XX  XX XX    X  XX  XX      XX  XX  XX  XX  XX  X  X X  XX  XX
GDH     XX         X      X X                  XX XXX  X            X   X      X      X           X     X X    X        XXX   X
GEC2   XXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXX XXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXX
GHO    XX  XX  X X XX  X X XX XX     XX XXXX  XX XXXXX   X  X X X XXXX X    X  X  X  XX X   XXX XXX X  X   X       XXX  X X  X
GIBL     X                             X  X     X      X                        X     X                   X   X  X            X
       ------------------------------------------------------------------------------------------------------------------------
GKN    XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
GLA     XX  X  X X X  XX   X    X     X X XXXXXXXX XXX XXX X X          X     XXX  X  X X  X  XXX   X  X      XXXX  X   XX    X
GLB    XX  XX  X  XXX  X X XXX X     X    X  X X XXXXX      X X X    X X    X  X      XX    XXX  XXXX  X    X      X X X XX
GLD      X  X    XXX   X  XXX         XX   XXX XXX  X X X X X  X    XX XX      XXX  XXX    X  X   X X  XX X  X X X        XX  X
GLM    XX  XX     XXX    X     XX    X     X  XX XXXXX      X                  X      X       X  XX    X    X      X      X  X
GMTN                    X X                    X       X   X            X      XX     X    X                    X   X
GMW      X  X      X    XXXXX         XX  XXXX XXX  XX XXX   X         XX      XX   X X X  X  X     X    X   X X
GOL      X  X    XXX     XXX  X X    XXX   XXX  XX  XX X X X   X  X XX XXX   X XXXXXXXXXX  X  X   X    XX X  X X    X   XXXX  X
GPA      XXXX X XX  X   X XX   X          X    X XX    X         X X    X
GPD               X    XX                      X       X X X                         XX    X  X
       ------------------------------------------------------------------------------------------------------------------------
GQP      X    X      XX X X   X XX   XX X XX   XXXXXXXXXXXX   XX X   XX XX X   XX X   X    X  X  X X XX X X XXX XX  X X XXX  XX
GRA1                                                       X         X  X      X     X              X   X    X X    X     X   X
GRBF     X              X                 X     X      X               X X     X      XX       X      XX        X             X
GRF    XXXX X    XXX  XX XXXXXXXXXXX XXX XXXXXXXXX  XX XXXXXX XX  XX X XX      XX XXXXXXXX XX X X X X   XXXXX XXXXXXX X    X XX
GRG    XX XXX XXXXXXXX   X X XXX XX X    X    XXX  XXXXXXX          XXX XXXX   X XXXX XXX XX X XXXX XXX XXX XX  XX XXX    X XX
GRM              X   X  X                X  X  XXX  X  X X X       X XXXX    XXXXX  XXX                   XX X X   X X     X  X
GRO    X         XXX    XXX    X   X  XX       X    XX X             X X       XX     X    X            XXX        X X    X   X
GRR              XXX  XX  XXX X  XXX  XXX XXXXXXXXX XX XXX X  XX  X  X XXX   X XX X XX    XX XX X XXX   X X     XX   XX X     X
GRW      X             X X         X         X  X     X                     X                                       X         X
GSC     XX  XX XXX X  XXX  XX  X  XXX XXX  XXXXXXX XXX X XXX X  X      XX    XXXXX X XXXXXXXX XXX X X XXXXXX  XXXXXXX XXX X XXX
       ------------------------------------------------------------------------------------------------------------------------
GTA    XXXX X    XXX XX XXXXX  XXXXX XXX  XXXXXXXX  XXXXXXXXX XXXXXX X XX      XX X  XXXXXXXX X XXXXXXX XXXX XXXXX  XXX XXXXXXX
GUA     XX        XX  XX XXXX     XXXXXX X     XX  X XXXXXXXX      XXXXX XXXXX X   XXXX XXX    X  XX   XXX X X  XXXXX X  XXX XX
GUD    X X       XXX   X               X  XX   XX   XX X X X X       XXXXX     XX X XX     X XX      X   X   X XX    X      X X
GUMO   XXX        XX  XX XXXXX    XXXXXX X  X XXX XXXXXXXXXXXXX    XXXXXXXXXXX XXX XXXX XXXX X XXXXX  X XX XXX X XXX X   XXX XX
GUN    XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
GWJ                        X                   X X     X          X            XX X        XX X   X          XXX X   X
GYA    XXX  X X  XXX X  XXX    XXXXX  XX  XXXXXXXX  XXXXXXXXX XXXXXX X XX      XX  XXXX XX XX X  XX X X XXXX XXXXX  X X XXXXXXX
GZH      X                X       X   XX     XXXX   XX X             X XX      XX     X    XX           X X  X X     X X X    X
HAE                X                  XX      XX X     X          X  X  X      X      X                 X       XX            X
HAU              XXX  XXX X XXXX XXX XXX XXXXXXXXXX XX XXX XX  X  XX X XX  X  XXX XX XXXXXXXXXXX  XXX   X X   XXXXX XXX XXX X X
       ------------------------------------------------------------------------------------------------------------------------
HBF      X             XX      X           X   X    X  X               X    X  XXX    X       X          X
HBZ    XXX    XX     XXXX  X  XXXXX XXX  XXXX X XX       XXXXXX XXX   X   XXX                             X XX X XXX   X
HCG                X                  XX      XX       X          X  X  X      X      X                 X       XX
HCY       X   XXX  X       XX X       XX    X  X X  X  X   X X X X   X X XXXX XXX X   X  X    X   XXXXXX X    XXXXXXX  XXXX
HDA    XX  XX     XXX    X X   XX    X    XX  XX XXXXX      X X X  X   X    XX X     X X    XXX XXX   X   XX      X    X X  X
HFS         XXX XXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXX XXXXXXXXX XXXXXXXXXXXXXXX XXXXXXXXXXX
HGH                X                  XX      XX       X          X  X  X      X      X                 X       X             X
HHC    XXXX X    XXX XX XXX     XX X  XX  XXXXXXXX  XXXXXXXX  X XXXX X XX X  X XX X  XXXXX XX X XXXXXX  XXX XXXXX   XXX XXXX XX
HIN    XX  X   X   XX        XX      X   X   X X XXXXX      X X X   XX X    X  X      XX    X X  X  X               XX  X X
HJA           XX  XXXX X X   X XX X    X   X  X XXXXX X X X X XX XX    X XX X   X  X X XXXX XXXX  XXXXX X XXXX  XXXXXXXX X  XX
       ------------------------------------------------------------------------------------------------------------------------
HJSM   X     X             X    X                                                                    X     X     X X    X   X
HKC      X                X   X                XX  XXX X  X          X XX X    X      X    X                 XX X     X   X   X
HLW     X   XX    XX X X X        XXX XXXXX XX  XX    XX XX   X      XXXXX XX XX   XX    X    X X              X X  X    XX
HMR              X         X    X X   X     X  XX   X  X X X X          X      X     X     X  X      XX  X      XX XX   X X
HMT    XX  X   X   X                         X      XX      X X      X X       X      XX      X XXXX         X       X  X XX
HNR     XX X X  XXXXXX  X X XX X X   X    XXX  XXX  X  XXXXX  XX XXXX X   X  X X XX  XXXXX  XXXXXXXXXX  X XX  XX  XXX    X X  X
HOF      X       X  X             X   X  X  X XX     X XX            X  X      XX    XX         X       X       XX  X         X
HOFF                                          XX      XX                     X X      X       X  XX     X X X   X     X       X
HOM    XX      X    X  X X  X XX     X  X      X  XX     X    X     XX X       X  X   X      XX X             X   X XX  X X
HON              XXX      X           X    X   XXX  X  XX         X  X XX      XX          X      XX    X X   X X         X   X
       ------------------------------------------------------------------------------------------------------------------------
HOOJ    XXX X   X        XXX   X X    XX   X X XXX  XXXXX    X   X  X XXXXX     X   X  X X  XX X   X X   X    X X    X  X X    X
HQL               X  X   X   XX   XXXXX  XXXXX      XXXX    X XXX    XX X XX      X      X      X   XXXX       X
HRT    X  XXXXX XX XX   XXX  XXX X  XXXXXX        X    X         X     XX              X                X       X XXXX
HRV      X       X X   XX X           XX   X   XXX  X  XXX X      X XX XX      XX      X   X  X   X X   X X   X X   X     X   X
HSO     X                  X                   X                X       X X                   X            X               X
HSPM     X   X X           X                                                                  X      X   X X     X X  X X
HTCR   X X   X  X          X        X            X X                                          X          X         X  XX X X
HTR                X                  XX       X X     X          X  X  X      X      X                 X       XX            X
HUR    XX  XX      XX    X     X     XX  X X   X XXXXX      X X X X  X X    X     X  XX X   XXX XXX    X   X       X X    X  X
HVAR     X    X    X        X X   XX     XX    XX   XX X   XX          XX XXXX XX X  X       X X     X  XXX X  XX  X X
       ------------------------------------------------------------------------------------------------------------------------
HVC      X                      X   X            X                                            X         X     X  X X    X   X
HVD              X X X         X    X X  X     XXX  X  X            XX       X      XXX                         X   X X    X
HVU      X  XX   X X   XXX XX         XX  XXXXXXXX  X  X X X    X   X  XX      XX   XXXXX  X  X   X X  X  X   XXX  XXX  XX X  X
HYB    XXXX XXX  XXX X XXXXXX X XX   XXX   X   XXX XXXXXXXXXXXX XXX XX XXX   X XXX XXXX X  X  X  XXXXX  XXXXXXXXXXX     X X X X
HYF                X   X   X  X      XXX  XXX  XX   X  X       X  X  X XX      XX    XX  X    X           X    X X    X   X
IFR         X      X             XX                                 XXXXXX X XXX      X     X X
IGT    XX     XX   XXX           XX      X     X X X   XX    X      XX  XXXX   X        X XX X XXXX X X X X XX  XX  XX       X
IHA        X       XX     X       X    X X XXXXX   X X     X            X    X X    XX    XX   XX X          X              X
IIA                    X                               XX  X  XX X       X   X X             X                       X   X
IIDJ     X  X    XXX  X  X           XXX  XXX  XX  XXX X X X    XX   X XX      X     XX X  X  X   X X  XX   X XXX       X   X X
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DATE  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |10 |11 |12 |13 |14 |15 |16 |17 |18 |19 |20 |21 |22 |23 |24 |25 |26 |27 |28 |29 |30
      ------------------------------------------------------------------------------------------------------------------------
III   X XX XX       XXX                           X X XXX XX XX XXX     X X XXXXX          XXXX          XX         X XXXXXXX
IISM  X XXXXXX X    X X                         X     XX  X  XX  X    X X X X X             XXX   X      XX     X   X   X
IL1   XX  XX  X  XXX  X X    XXX    XX XXXX  XX X XXX      X X X XX X XX X XX X   X  XX X   XXX XXX X
ILB   XX  XX  X  XXX  X X    XXX    X  XXXX  XX X XXX      X X X XX X      XX    X  XX X   XXX XXX
ILIM  XX  X   X X XX  X X XX XX     XX XX     X  XXXX   X    X     XX XX      X  XX  X      XX XX            X   X XX  X X
ILT   X X  X     XX X X XX           XX    X  X    XX XX            X XX      X    X X X  X  X   X X   X X  XXXX   X X X X   X
IM3   XX  XX      XX X X     XXX    XX X  X  X  XXXXX      X X X XX X XX   XX X  X  XX X   XXX XXX
IMA   XXX XXX    XX X XXXXX   XXX X XXX X XX XXXXXXXXXXXXXXXXX X  X XXXX   XXXXXXXXXXX X  XXXXXXXXXXXXXX XXXXXXXX XXXX X XX XX
IMI   X X    X   X X XX   XXXX X XXXX X XX X XXX   XX X X   X X   X X XX      XX    XX   XX X      X   X X    XXX  X    X  X X
INE   XX  X   X X XX  X X  X XX     X XX      X  X X    X    X     XX XX      X  X   X      XX X             X   X XX  X X
      ------------------------------------------------------------------------------------------------------------------------
INK   XXX XXXXXXXXXXXXXXXXXX XXXXXX  XXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX     X XXX XXXX XXXXX XXXXXXXXXXXXX XXXXXX XX XXXXXXXXX
INW           X X     X X    XX     X XX         X      X    X     XX X       X  X   X      X X              X   X XX  X X
IPM   X     XXXXX X X  XXXX X XXXX    X  XXX  XX   XXXXX  XX XXX X    XX      XX   XXX XX X XX  XX XX  X XXXXX X   X X X XXX X
IRK   X X  X    XX       X           XX     X XX   X  X   X         X XX      X      X    X      XX    X     X X   X     X   X
ISA   XXX  XX XXX X  X   XX    X X X XXX XXXXXXXX XX  XXXXX X    XX X XX     XXXX X XXX X X  XX                   XX XXX X X X
ISK      XX XX    XX     X  XX  X  XXXXXX   X    X XX X    X    X X   XX             XX X       X   X          XX X  X  X
ISR     XX   X     X   XX            XXXX     X    X  X  X      X         X   X  XXX                X    X     XX
ISSF                                           X  X   X                 X     XX     X          X       XX X
ITU      X     X         X            X       X   X     X              X      X                          X   X           X
IVA      X   XXX  X       XX X       XX    X  X X  X  X   X  X X X  X X XXXX XXX X   X   X  X    X  XXXXXX  X   XXXXXXX  XXXX
      ------------------------------------------------------------------------------------------------------------------------
IZI      XX XX     X                            XX XX XXXXXX X  X X   XXXX XX XXXX X  XXX  XXX XXXXXX XXXX XXX XXXXXXX XX   X
IZM   XXXXXXXXXXXXXXX XXXXXXXXXXX XXX XXXXXXX XXXX XXXXXXX XXX XXXXX  XXX XXX XXXXXXXXXXX XXX  XX  XXXXXXX XX XXX  XX  XX  X X
JACH     X XXX  X XXX  X X  X     X X X XXXXXXXX  XXX X   X X   X XX   X  XXXXXXXXXXX  X XXX XXXX           X X   XX  X XX X
JAQ     X  X X    X   XX  XX  X     X     X   X X  X  XXX X    X   X  XX      XXX X XXX  XX  X   X     X X X X X   X X      XX
JAY   XXX       XXXXX                                                                             X XX X X
JBO                   X  X           X    XXX X X   X X X X           XX X    X      X X     X     X           X             X
JCW     X         X   X  X           XX   XXX X X   X X X X            X      X        X  X        X           X             X
JEGM            X        X     X     X                                        X                  X  XX X  X     X      X
JMB                  X   X             X        X          X                    XX                                   X X
JNW   X  X X              X                   X       X      XXX                       X
      ------------------------------------------------------------------------------------------------------------------------
JRDJ   X         X  XX           XX  XX              XX             X                     X
JSC     X         X   XX  XX      X       X   X    X  XXX             XX   X  XX    XX X  X  X           X
KAF   X XXXX X  XXXXXXXXXX XX XXXXXXXXXX XX  XXXXXXXXXXX XXX XX XXX XX  X XXX XXXXX XX XX X XXXXXX XX  XXXX XXXXXXXX X
KAGJ    X  X         XX XX   XXX    XXX   X XXXX      X     XX X    X XX      X      X X  X  X   X  X XX X   XXX   X     X
KAKJ   XX  X    XX   X  X           XXXX XXX  XX  XXX XX  X    XX   X XX      X     XX X  X  X   X X  XX  X  XXX X     X     X
KAS   XX XX X  XX XX   XX            XX   X  XXX      X           X X XX      XX XX       X     X  X    X      XXX X X XXX   X
KBA   XXXXXX   XXXX   XX X  XX  XXX  XX XXX XXX                     X XX   XX XX    XX   XX  X X X X   XXX X XXXX  XXX X    XX
KBN    X X    XX  XX                                  X   XX                  X
KBS               X            X              X    X  X   X            X      X      X                         X            X
KDC   XXXXXX  X XXXX  XXXX X  X   X X X XXXXX XXXX XXXX X X  X      XXXXX   X XXXXXX X X XXX X   XXX         XXX X XXX X    XX
      ------------------------------------------------------------------------------------------------------------------------
KDS                                                                                         XX X XX    XXX          X   XXXX
KDZ               XX   X          X  XX         XX    XX X                    X             X                      X
KEK    X X   X    X         X X       X XX         X           X       X      X      X    X X        X
KER    X   X    XXX X X    X     XX  XXXX    XX X XXX XX XX      X  X XX    XXX      X X  X XX X   X X XXX     X X X X   X   X
KGM   X X   X   XXX X X X     X     XXX  XX   XX    XXXX     XX  X  X XX      XX   X    X X     XX X   X X  XX X   X   X XX  X
KGT            XXXXX   XX   X
KHC   XXXX X X  XXXXXXXXXXXXXX XXXX XXX XXXXXXXXX XXXXXXX XXXXXXXXX XXXXXX XXXXX    XX XXXXXXXXXXXXXXXXXXXXX XXXX  XXX X
KHKI      X X X                   X XX X      XXX X X                 X                                            XXX       X
KHL   XX XXXX  XX XXX    XX   X XX   X   XXX  XXXX X XX XX   XXX XX   XX  X   XX  X  XXXX X X     XXXXXX XX XX    XX XXX    X
KHT     X       X X      X    XXX    X        XXX X   XX  X  XX     X XX      X   X  X  X X  XX XX      XXXX X XX  X X XXX X X
      ------------------------------------------------------------------------------------------------------------------------
KIC   XXXX   XXXXXXXXXX XXX XXXXXXXXXXXXX X  XXXXXXXXXXXX XX      X XXXX     XXX X XX X XXX XX XXXXXX  XXXX XX XX  XXX X XX XX
KIS      X      XXXX     X            X       X       X                X      X                          X     XX  X     X   X
KIV                                                   X                       X       XX  X X  X X X   X X   X XX  X X   X   X
KIW          XX  XX  XXX X   XXXX   XX  X X  X X X  X  XXXXXXXXXXX  X     XX                                XXXX XXX   X
KKB               XX  X           X  XX       XXXX XX  X X X X                XX  X         X    X                 X X
KKM     X       XXX    X XX   X      X    XX  XXXX XXXX      X   XX X XX    X XX     X X  X  X  X X    X X X X X   X X XXX   X
KKN   XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
KLB     X    XX    XXX X XX   XX    XX    XX XXXX  XXXX X X   X  X   XX     X  X   X X XX X XXX XXXXX  XX  X X X X X X X XXX X
KLD    X                       X                X   X X                X                  X    X X
KLI   X X  XX                               X                        XX X                            XX       X X X  X XX
      ------------------------------------------------------------------------------------------------------------------------
KLU   XXX XXX X  XXX XXXXXXXXXX XXX XXXXXXX XXXXXXXXX X  X X X X  XXX XX   XX XXXX XXXXX  XXXX XXXXX X    XXXXXX XXXXX X XX XX
KMI   XXXX X   XXX  X XXXXX   XXXXXXXXX  XXXXXXXXX XXXXXXXX XXXXXXXX XXXX  X XX   XXX XX XX X  XXXXXX X XXXXX XX   X X XXXXXXX
KMOR                  X              X     XX X X     X X      X       X      XX     X       X                 X
KMPM       X X        X  XX   XX  X  X    XX  X X  X  X     X        XX       XX
KMR     X       X X          X    X   X X    XX       X                X      XX                       X X
KMSA  XX      X        X                                          X X XX       X                        XX         X
KMY     X   X     X X               X         X    X XX         XX     X              X     X   X   X    X    XX            X
KNA   XXXXXXXXXXXXXX X X XX XXXXX XXXXXXXXXXXXXX XXXXXXXXXXXXXXXXX XXX X X XXXXX X  X XXXX XX XXXX XX X X XXXXX XXXX
KNIM  X       X X XX                                               XX X    X  X XX   X     X       X
KNK   XX  XX  X X XX  X X XXXXX     XX XX X XXX XXXXX      X X X   XX X    X  X    XX X   XXX XXX X   X   X     XXXX  X XX X
      ------------------------------------------------------------------------------------------------------------------------
KNT   XX XXXXXXXXXXXX X X X XXX XX X    X    XXXXX XXXXX X  X  XX  XX XXXX   X XXXX XXX XX X  XXX XXX XXX XX  XX XXX      XX
KOD   XXX  X               X   X                  XXX X X  XX X      XX   XX X         X            X  XXXX  XXX
KOMM       X             XX                   X    X                                         X             X  X           X
KONO    X       X X      X           XX       XXX X XX              X X       XX     X    X  X  XX     X X   X XXX   X   X   X
KRI     X  XX  XXXX X  X          X  XX X X                     XX  X XX   XXXXXX XX    X XX
KSH   X X  X    XXX X  XXXX    X    XXX   X XXXXX XX X XXXX X       X XX      X    XX X  XX X   XXX     XX  XX X  X X X XX   X
KSP   XXXX XXX  XXXXXXXX X  XX XXXX  XX XXX  XX  X  X XX  X  XX XXX XXXX   X  XX XXXX XXXXX X X X X    XXXXX XXXXXXXX X XX   X
KSR    XX   X X XXXXX XX   XX XXX  X XX X XXX XXXX XXXXXX X   X X X XXXXXXX XXXXXXXXXXXXXX XX XXX X   XXXX XXX XX
KTH   XX  XX      XX  X X     X     XX  X X  XX XXXXX      X X X XX X X    X  X  X  XX X  XXX XXX     X   XX      X X    X  X
KTK1    X       X     X  X       X         XX X    XXX XX             XX                   X    X
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DATE  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |10 |11 |12 |13 |14 |15 |16 |17 |18 |19 |20 |21 |22 |23 |24 |25 |26 |27 |28 |29 |30
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KUMJ    X  X    XXX XXX XX     X    XXX   X XXXX      X     XX XX   X XX      X      X X  X  X   X XX XX X   XXX   X
KUR    X                 X     X     XX       XXX  X  X                X             X    X    X X X   X       X
KUSJ   XXX X   X        XXX X X X    XX  X X XXX  XXXXXX  XX X X  X XXXXX     X   X  X X  XX   X X X   X    XX X   X  X X    X
KUZ   XX         XX  X X       XX    X     X X        XXX  X    XX  XX      X X                           X XX   X X         X
KVG   XXX        X       X X  X   X X X  XX   XX    X X        X X  X X        X X         XX X   X X  X      XX  X       X  X
KVN                   X  XXX    X    XX   XXX XXX XX  XXX X X  X X    XX      XXX X XXX   X  X   X X  XXX  X X XX XX XXX   X X
KVT      X              X                     X       X               XX      X                 X       X      X   XX      X
KZN   XX X   X   XXXXX      X X      XX XX         X       X   X       X      XX  XX X    X XXX      X          X         X X
LACI     X    XX  X       XXXX                X    X  X   XX           XXX    X X X                   XX       X    X      X
LANF    XX        X              X   X        XX     XX          XX X  X    X XX    XX       X   XX    X X X   XX    X       X
      ------------------------------------------------------------------------------------------------------------------------
LAT   XXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXX XXXXXXX  X   XXXXXXXXXXXX XXXXXXXXX                  XXXXXXXX     XXXXXXX
LBF             XXXX  XXXXXXXXX XXX XXX XXXXXXXXXX XX XXXXX   X  XX X XXX X XXXXXXX XXXX XXXXX X X X   X XX    XXX XXX X X   X
LBFM   XXX X   X     X   XX  XX      XX   XXX XXX  X  X X   X  X X    XX      XX  X XXX XXX  X   X X  XXX XX XXXX XX   X  X
LBKM   X   X   X         XX                   X    X                                         X             X   XX         X
LBNH    X       XXX   X  X           XX   X   X    X  XXX X      X XX  X   X  XX    XXX   X  X   X X   X X   X X   X     X   X
LCCH     X XXX  X XXX  X X X     X X X XXXXXXXX  XXX.X   X X  X XX    X  XXXXXXXXXXX    XXX XXXX          X X    XX X XX X
LDF             XXXX XX  XXX X  XXX XXX  XXXXXXXXX XX XXX X  XX XX  X XXX   X XX  X XX  XXX XX X X X   X X     XX   XX X     X
LEM   XXXX XX XXXXXXX  XXX  XXX     XXX X XX XXXXX XXXXXXXXXXXXXXX  X XX X XX XX  XX    X XX XX X XXX  X X XXX X X X X XXXXX X
LESF    X              X                      X       X                 X     XX     X               XX  X     X
LFA          XX               X       XX XXXX    X XXXX X     XX          XX  XX                  X  XX   X      X X      XX X
      ------------------------------------------------------------------------------------------------------------------------
LFF             XXXXXXXX  X    XX X XXX  XXX XXXXX XX X XXX  XX X   X XXX   XXXX X  XX X XX  X X XXX XXX X X  XXX    X       X
LGBM   X   X   X         XX                   X                                              X   X         X   X          X
LGMM   X   X   X     X    X                   X                                              X             X   X          X
LGPM   XX  X   X     X   XX   XX X   XX  XXXX XXX  X  X X   X  X X    XX X    XXX  XXXXX  X  X  X X X XX XX X XX   X   X XX  X
LHE                                            X  X   X                 X     XX     X          X       XX X   X   X
LHEM       X   X         XX                   X                                              X             X   X          X
LHS     X         X   XX  XX      X       X   X    X  X X             XXX  X  XXX   XX    X  X           X
LIBD    X       XXX                        X XX       X          X  X  X  X   XX     X                 X X    XXX
LIC   XXXX   XXXXXXXX X XXX XXXXXXXXX XX  X  XXXX  XXXXXX XX      X X XX    X XX  XX X  XX XX  X XXXX XXXX X XX  X X X  XX XX
LISJ   X         X   X           XX                  XX             X                                  X
      ------------------------------------------------------------------------------------------------------------------------
LIT   XX XXX XX XXXXX     X XXX XX X    X     X XXXX X XXX XX  X   XX  XXXX   X  XXX XXX XX X XXXX XXX XXX XX  XX  XX     XX
LJU   XXXX      XXX   X  X  XX   XX  XX XXXX XXXX   X XXX XX  X     X XX      XX        X  XX   X      X X     XX X X X  XX  X
LKO   XXX                                  XXXXXXXXXXXXXXXX   X   XXXXXX                            X  XXXXXXX XX  XXX XXXXXXX
LLAV    X             X   X   X   XX      X  X                   X      X              X     X   X           X
LLS              XXX       XXX  XXX  XX XXXXXXXX    X X X     X  X  X XX      XX  X XX       X         X X     X   X X       X
LMEM   X   X   XX    X   XX                 X X       X     X          X      X     X    X   X   X        XX   XX XX   X  X  X
LMN     X         X  XXX  X   X X X XX    X  XX XX X  X X X        X  XX      XXXXXXXXX   X  X   X X   X X X X XX  X        XX
LMPM   X   X   X     X                        X                                              X            XX   X          X
LMR             XXXX  XX XXXXX X XXXXX  XXXX XXXX  XX X X X  XX  XX X XXX     XX    XX   XX XX  X    X   X X  XXXX X    XX X
LNOR                  X              X    XXX X X   X X               XX      X  X  XX X         X X           X   X         X
      ------------------------------------------------------------------------------------------------------------------------
LNV      X XXX  X XXX  X X  X     X X X XXX XXXX  XXX X   X X   X X    X  XXXXXXXXXXX  X XXX XXXX           X X   XX X XX X
LOE   XXX       XX    X XX                                                                                             X
LOF                              X             X      X X              X            X   XX         XX      X         X
LOMF    X       XXX  XX          XX  XX X X XXXX   XXXX       X  XX X XX  X X XX    XX       X   XX    X X X   XXX X X   X   X
LON     X  XX         X XX   X       X    XXX X X  X  X X X X  X       X X    XX   X XXX  X  X   X X      X    X   X      X  X
LOR             XXXX XXXXXXXXXX XXX XXX XXXXXXXXXX XX XXXXX   X XX X XXX  X XXXXXXX XXXX XXXXX X X X X X XX  XXXXX XXX X X   X
LPAZ  XXXXXXXXXXXXXXX XXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXX X  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXX XXXXXXXXXXXX
LPB   XXX XXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXX XXXXXXXXXXXX
LPF             XXXX XX  XXX XX XXX XXX  XXXXXXXXX XX XXXXX  XX  X  X XXX     XX XX XX  XXX XX X XXX   X X  X XX    XX X     X
LPG           X XXXX XXX XXXXXXXXXXXXXX XXXXXXXXXX XXXXXXXXXXXX  X  X XXX X XXXXXXX XXXXXXXXXX X X X X X XX  XXXXX XXX  XX X X
      ------------------------------------------------------------------------------------------------------------------------
LPL           X XXXX XXX XXXXXXXX XXXXX XXXXXXXXXX XXXXXXXXXXXX  X  X XXX X XXXXXXX XXXX XXXXX   X X X X XX  XXXXX XXX  XX X X
LPO             XXXXX XX XXX X  X X XXX XXXX XXXXX XX X XXX  XX  X XXXXXX   XXXXXXX XXX XXX  X   XXX X X X X   XX   X    X   X
LPR     X  X  X      XXX   X      XX X       XXX XXXX  X  XX       X    X  X     XXX X         X   X       X X    X    X
LRC     X     X                X X              X X      X  X                                              X X  X X  X
LRCZ   X  X               X     X          X X                   X                                           X  X
LRG             XXXX  XX XXX X  X XXXXX XXXX XXXX  XX XXX X  XX  XX X XXX     XX    XX   XX XX  X    X   X X   XXX X    XX X X
LRM   XXXX XX     X   XXXXXX X XX X XXXX XXXX XXX  X                          XX    XXXX  X  XXXXX XX XXXXXX XXXX  XXX X   X X
LRS   X X  X  X      XX           X  X       XXX                        X  X     XXX
LSA   XXXX X    XXX X  XXXX   XXX   XXX  XX   XXX  XXXXX XXX   XXX  X XX      XX    XX    XX X  XXXX X XXXXXXX X   XXX XXXXXXX
LSCT    X       XXX   XX X           XX   X        X  XXX X      X XX  X   X  X     XXX      X   X     X           X     X
      ------------------------------------------------------------------------------------------------------------------------
LSCZ   X  X      X   X    X     X          X X    X     X        X     X      X                              X  X
LSD   X X   XXX      XX    XXX X XXXX X XX XXXXX   XX X X     X     X XX      XX    XX   XXXXX         X X     XX X X   XX   X
LSF             XXXX XX  XX  X XX X XXX  XXX XXXXX XX X X X  XX  XX X XXX   XXXXXXX XXXX  X XX X X X X X X     XX   XX   X   X
LSK    X X   XX  XXX      XX X    X           X X X   X   XX       X   XXX    X   X         X      X   X   X   XX   X     X
LST     X             XX                              X X                     X     XX       X           X
LSZ     X       X        X                X   X    X  X   X         X  X           XX              X   X
LTI   XX  X   X X XX  X X XXXXX     X  XX     X XXXXX   X          XX X    X  X XX  X      XX                    XXX  X  X
LTR   X X   X                    X X            X X                                                         X      X        X    X X
LTX   XX X XX  XX X   XX  XX X  X X XXX  XXXXX XXX XX XXX X X XX    X XX   XX XXX  XXXX XXXX X   X X   XXX XXX X         XX XX
LTZ   X   XX     XXX XXXX    XXXX   X    XXX X X X  XX XXX X XXXXX   X        XX X                       X XXXX X X   X      X
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LVV     XX        X                  XX       X       X                       X                          X     X         X   X
LVVM       XX         X    XXX X                X     X   XX  X         X   X X            X X           XX     X  X    X
LZH   XXXX XXX XXXX XXXXXXXXXXXXXXX XXX  XXXXXXXX XXXXXXXXXXXXXXXXXXXXXX X XX XXXXXXXXXXXXXX XXXXXXXXX XXXXXXXXXX XXXXXXXXXXXX
MADF                                           X  X   X                 X     XX     X          X       XX X
MAF             XXXX XXX  XX X XX X XXX XXXX XXXXX XX X XXX  XX  XX X XXX X X XXXX  XX X XXXXX X X X X X X   X XXX X X   X   X
MAHZ         X    X  X       X XX        X   X   X              XX  X       X                             X XX X X     X
MAIO                                                             XXX  XX   XXXXX X  XXX XXX XX XXXXXXXXXXXXXXX XXXXXXXXXXX XXX
MAJO    X                X                    XX      X   X            X      X      X    X  X   X X         X X         X   X
MAK             XXX               X   X               X             X                X                                   X   X
MAP   X XXXXXXX  X XXXXXX  X XXX X     X XXX  XX  X  XX  X  XX X  X XXXX  X   XX     X  X X  XX X XXX  X X XXX X   X  XXXXXX X
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MASJ		X	X	X			XX					XX													X					
MAT	XXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX													XXXXXXXXXXXX	XX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX													
MAW	X	X	X	XX	XXX	X	X	X		XX	XXX	X	XXXX	XX	XXXXXXXX	XX	XXX	XXXXXX	X	XXX	X	XXXX	X	X	XX	XX	X	XXXX	X	XXX	XXX	X
MBC	XXX	XXX	XXXXXXXXXXXXX		XXX	XX	XXXX	XXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXX										XX	XXX	XXXX	XXXXX	X	XXXXXXXXXX		XXX		X	X	X	XXXXX
MBL		XX	XXXXX	XXXXX	XXXX		XX	XXXXXX	XXXXXXXXXXXXXXXXX						X	XX	XXXXX	XXX	X	XXXXX	XXX	XXX	XXXXXXXXXXX		X	XXXXXXX	X	XX		X	XX
MBO				XX		X							X	X			X	X		XX						X					
MCK	XX	XX		XX	X	X		X		X	X	XXXXX		X		XX	X		X	X	X	XX	X	XXX	XXX		X	XX		X			X
MCMT					X						X										XX	X		X					X	X		X	
MCNL	XX		X	X	XX	XXX	XX	XX		X	X				X		X		X	XX		X	XX	X			XX	X			X		X	
MCO				X			X			X			XX	X				X			X		X			X							
MCSM		X		X				X																				X		X	XX	X	X
MCW		X	X		X	XX	X		XXX		XXX	XXX		X	X	X			X		XXX	X	X					X	X				
MCWV						XX	X			X		X	XX		XXX	X		XX	XX		X	XX		XX		X		X	X	X	X	X	X	X	
MDG	XXXXXX	XXXXXXXXXXXXXXX					XXXXXX	X		X	XXXX		X	XX	XXXXX			XXXXXXX	X		XXXXXXX				XXXXXXX	XXXXXXXXXXXX	X			XX	XXXXX
MDI			X		X		XX	XX		XX				X	X				X			X						X					
MDJ	XXX	X		XXX	X	XXXX		X		XXX	XXXXXXXX		XXXXXXX	X	X	X	XX	X	XX		XX		XXX	X		XXX	XX	X	X	X	X	X		X	X	XXX		X
MDM	XX	XX		XXX		X		XX		X	X	XX	XXXXX			X	X	X	X		XX	X		X	X	XXX	XXX		X	XX						X	X
MDZ	X			XX	XXX	XX	XX	X	XXXX	XXXXXXXXXX			XXXXXXXXX	XX	XX		XXX	XXXXXXXXXXX	XXXXXXXXXXXXXXXX							XXXXXXXX	XX	X	XXX							
MEEK	XXX		XX	XXXX	X	XX	X		X	XX		XX	XX	X	X	XXXXX	XX	X	X	XX	XXX		X	XXXXX	XXX	XX	X	X	XXX	X	X	X	X	X	XX	X
MEM					X		X		X	XX		XX			XX	X		X	X		XXX		XXX	XXX		X	XXX						X	X
MEMM	X	X	XXXXXX	X	X		X		X	X	X	X		XXX	XXX	XXX	XXXXX	X	X		XX		XXX	X	XX	X	X	X	X	XXXX	X	XXXXXXX	XXX	X	X	X
MEO	X	X	XX	XX	X	XXX	XXX	X	X	X	XXX	XXXXXXXX		X	XXX	X	XXX	XXXX	XXXX		X	XX	XXXXX	XX		X	X	XXXX	XX	X	XXX	X	X	XXXX	XX		
MFF				XXXX		X	XXX			XXX	XXX	XXX	XXXXX	XX	X	XXX		XX	X		X	XXXXX	XX	XXXX	XX	X	XXX		X	X		XX		XX		X	X
MFT		XX	X	X	XX	XX	X		X	X	XX	XX		X		X	X	XX			X		X														
MGG			X		XX	X	X		X					XXXXXXX			X	X		XX		X	XX				X	X		X	X			X			
MGP	X	X		X		XX				XX			XXX	XXXX		X			X		X	X	XXX	X			X	X		X			X		X		X	X
MGZ																XX		XXX			X								X	XXXX		X		X			
MHC		X	X				X		X		X		XXX		X	X	X			XX		XX		XX	X	X	X	XX	X	X	X	X	XX		X		
MIAR	X			XXXX		XX	XXX	X	X		XXX		X	X	XXX	X	X	X	X	XX	XXX	X	XXX		XXX	X	X	X		X		X	X			XXX	X
MID	X		X					X				X		X					X		XXX	X	X		X								X	X			
MIN			X		X		X				X		XX	XXX		X		X			XX		XX	X	XX		X	X		X	X	X	XX			X	X
MKS	X	X	X			XXX				X		X	X	XXX		X	X		X			XX							X	X			X		XXX			X
MLR	XXXXXX	X	XXXXXX		XXXXX	XX	X	XXX	XXXX	XXX	XX	X	XX	XX	XXX	XXXX	XXX	XX	X		XXX	XXXX		X	X	X	XX	XXXX	X	XX	X	XXX		X	X	XX
MLY	XX	XX			XX		XX		X	X	X	XX	XXXXX			X				X	X	X	XX	X		XXX	XXX		X	XX			X			X	X
MMB					XX		X			X	XX		XXXX	XX	X	X	X	X			XX	X			X		X					X	X				
MME			X		X		XX		XX		X		XXX	X				XX			X		X														
MMK					XXX	X		XX		XX		X	XXXX	X		X	X	X	XX	X	XX		XX			X			X	X		X		X			X
MMPM	X	X		XXXXX		X		X	X	X	X		XXX	XXX	XX	X	XX	X			XX		XX		X	X		X	X	XX	X	X		XX	XXX	X	X	X
MNDI	XXX	X		XXXXXXXX	XXXX		X	XXXX	X	X	X	X		X		X	X	X		X			X		X		X	X		X					X		X
MNG	X	X		XXX	XX	XXX	X	X	XXXXXXXXX		XXXX	X	XXX		X	XXXXXXXXXXX		X	X		XXX	X						X	XXXX	XXX	XXX					
MNI	X	XX		XXX	X			XX					XXX			XXXX			X		XX						XXX		XXXXXX		X						
MNK				X	X		X			X	XX		X		X		X	XX			XX		XX		X		X	X		X		XX	X	X		X	
MNS				X	X		X		X		XX		XX		XXX	X					XX		X		X			X									
MOCB	XXXXXXXXX		XXXX	XXXXXX		XXXXXXXXXXXXXX						X		XXXXXXXX	XXX	XXXXX										XX	X	XXX	XX			XXXXXXXXXXX				
MOF		XX		XXX	XX				XX	XX	X	XXXXXX		XXX			X	XX	X	XX	X	X	XX		XX			X		XX		X	X	X		XXX	X	X		X
MOL		X		X		X		X		XX	X		X	X	X	XXX		X		X		X	XX		X	X	X		XX									X	X	X
MOMI		X							X	X						X					X					X			X								X	X
MOR8			X		X					X		X		XXXX	XX	X	X	X		X			X				X			XX	X		X			X	
MORO		X				X		X	X	X		X			X			XX		X		X		X				X	X	X		X		X			
MOS		XX		XXX		XXX			X	XX			X		XX	X		X	XX		XX		XX		X	X		X	X		XX	X	X		X	X
MOTA	XXX			XXX		X			X	X	XX		X	XX		X	XX	X	XX		X	XX			X		X		X	X	X	XX	X	X			X
MOW												X			X		X		X											X	X	X	X		X			
MOX	X	XX		X	XXXXXXX		XXXXX			XX	XX	XXXXXXXXX		XXXXXX	X		XX	XX	X	XX		X	XX	X	XX	X	X	XX	XXX		X	XX	XXX	X	XX	XX
MOZ	XX											XX	X	X		X		X	X		XXX		X		X	X				X	XX	X	XXX					
MPA	XX	XX		X	X	XX	X	X	XXXXX			XX	XX		X	XXXX		X	X	X	X		X	XX		X	X		XX	X		XXX	XX	X	X		X	XX		X
MQZ		X	XX		XX	XX		X	XX		X	X	X		X		X		X		X	X	XXXX	X									XXXX	X	X			
MRA	XXX			XXXX		XXXX		XX	XXXXXXXXXXX		XX	X			X		XXXXXX		XXXXXX	X		XXXXXXXXXXXXX			X							XXXX	X	X		X	XX	XXX
MRCM	X	X		X	XX		X		X		X	X				XX	X			X					X				X				X			X	XX		X
MRRJ		XXX	X				XX		X		XXX	X	X	XX		XXX		X	X		X	X	X	X	X		X	X	XX		X	X			X			
MRW		X		X	XX	XX	XXX	X		XXXX	X	XX	XXXX	X	X	X	X	XXXXXXXXXXXX			X					XX		X	X	X			X	XXXX	X	X		X	
MRWA		X		X	X	XXX	XXXX		XX		XXX		XXXXXXX	XXXXX		X	X	XX	X	XX		XX	XX	XXXX	XX	X	XX	XXXXXX	XXX							X	XXX	X
MRX	X	X		X			XX	XXXX	X		X				X		XXX	XX	XX	X			XX	X	X	X			XXX		X	X		XX		X	XX	X	
MSCZ		X	X		X		X					X	X			X			X			X											X	X					
MSTM				X	X			X																							X		X		X	X	X		
MSU	XXX		XX	X	X	X	XXXX	XX			X	XX			XXX	XX	XXXXX	X	XX	XX	XX		XXX	XXXXXXX	X	X		X	XX	X	X	XXX		XX	XXXX			X
MSZ		X	XX			X			X			X		X		XXX													X	X		X		XX					
MTA		X		XX		X	X			XX			X		X		X	XX		XX		XX		X		X		XXX					X		X		X	
MTD		X		XX		X		XX		X		XX	X	XX	X	XX	X	X		XXX								X	X				X		XX	XX	
MTHF						X					X	X		X				X	X		XX		X				XX	X		X							X	
MTMJ		X	X		XXX	X	X			XXX	XXX	XX	XX	X	XX		XX		X	XX		X	X	X	X	X	XX		X	XXX	X			X		X	X
MTN	XXXXXXXXXXXX				XXXXXX		XXXXXXXXXXXXXXXXXXXX						XXXXXXXXXXXXX				XXXXXXXX		XXXXXX		XXXXXXXXXXXXX		XX			X	XXXXX		XXX	XXXXX	XX					
MTU	X			X				X		XX	X		X	X					X		XX	X			X						X	X		X				
MTUM	X	X		XXXXX		X		X		X	X	X		XXX	XXX	XX	X	X	X			XX		XXX	X	XX		X	X		X	XXXX		X		XX	XXX	X	X	X
MTW				XX	XX	XXX	X		XXXX		XX	XXXX	X	XXX	X	XX	XXXXXXXX	X			XX											X	XXXX	X	X		X	
MUD	X	X			X	X				XX	XX	XXXX		X	XX					X	X	XX		XX		X			X		X		XX		X			X
MUN		X		XX		X	X	XXXX		XXX	X	XXX	X	XX		XXXX	X	X		X	X	XX		XX		XXX	XX	X	XXX	XXXXX		XXX	XXX	X	X	X	X		XX	X
MVIF	X			X			X		XX		X		XXX		X		X	XX		XX		XX		X		X		X		X		X		XX		X	X	XX	
MVM			XX					XXX			X	XXXXXX		X			XX		X		X			XXX					X	XXXX	X							
MYNC		X		XXX		XX	XXX			XXX		X	XX		X	XXX	X		XX	XXX	X		XX	X		X	X		X	X	X	X	X		X		XX		X
NAI				XXX			X					X		XX	X		X		XXX	XXXXX			XX	X		X				X	XX			X		X		

DATE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
NAL		XX		XX	XX	X X	X			XX			X	X		X X	XX		XX		X		X	X		X		X X		
NANU																		X	XXX	XXX	XX	XXXXX	XXXXX	XXXXXXXX				XXXXX	XX	XX
NAO	X							X		X			XX		X X	XXXXX	XXXX		XX		X		XX		X	X		X		X
NAQJ	X			X		X			XX		X	X			XX															
NAV	X					XX			X			X	X		X X				X		X	XX	XXX	XX	X			X		X	
NB2	XXXXXXXXXXXXXX					XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX											XXXX	XX	X	XXXXX	XXXX		XXXXXXXXXXX		XXX	XXXX	X		XX	XXXXX
NCG	XX	XX	X	X	XX	X	X	XX	XX		XX	XX	X	XXXXX		X	X	X	XX	X		X	X		X	X		XX	XXX		X		XXXX	X	X	X
NCT	XX	XX	X	X	XX	X	X	XX	XX		XX	XX		X		XXXX			X	XX	X		X	X			X		XXXX	X	X
NDI	XX		X	X	XXX	X	XXX	XX	XXXX	XXX	XXXX	XXX	X	XXXXXXXXXXXX		X	XXXX		XXXXX		XXXX		X	X	XXXX		XXXXXXX	X		X	X	X	XXXXX
NEA	X		XX		XX		X		XX		X		XX	X	X	X			X		X		XX	X	X		X	X	XXX	XXX		X	XX				X
NEW		X	X		X	X		XX	XXX	X	X	X	XX		XXX		XX	XXX	X	X	X	XXXXXXXXXX		X	X		X	X	XXX		X	X	X	XXX		X	XX
NGZ					X		XXX		X			XX		X			X	X									X	XXX	XXX		X						
NIIJ		X	X		XXX			XX		XXX		XXXX	XX	XX	X		X	XX			X		X	X	X		X	X	XX		X	XXX	X				X
NIL					X					X		X		X		X		X				X						X			X		X		X
NJ2	XXX		X	X	XXX	X		XXXX		XX	X	XX		X	XXXXX		XXXXX	X		X	X	XX	X	XX		XX		XXX	XXX	X		XXXX	X	X	XX	XX	X	X	X	X	X
NKA	XX				X	XX		X	X		XX			XX		XX			X			X		X			XX	XX				X		XXXX	X	X	
NKY		X		XXX		X			XX	X			X	X	X	X		X	X	X	X		X		X		X		XXXXXX		X		XXXXXXX		XXXX	
NNA	XXX		X	XXX		X	XX	X	XX	X	X		X	XXXXX	X		X	XXX	XXX		X	XXX	XXXXXX	XXXXXX	XX		XXX	XX	X		XX		X	X	X
NNT					XX				X				XXX		XXX			XXX												XXX	X	X	X	X			
NOZ	XXX			X	X	XXXXXX		X	XXXX	XXX	XXXX	X	XXX	X	XX	XXXX	XXX	XXX		X	XX								X	XX	X	XXX	X			X
NPS		X	X		XXX				X			X				X		X		XX			X	X		X		XX	X		X			X			
NRA0	XX			X	XXX		X	XXX		X	X	X	XX		X	X	XX	XXXX	X	X		XX	X	XX	XX	XXX	X	X		X	X	X	XX	XXX	X	X	X		XXXXXX
NRE0					X			X					X		X	X	X			X					X		X					X	X			X	X
NRI		XX	X		XXX	X	XXXX				XX		X	X	XX	XX	X	X																			
NRZ					XX	XX			X						X	X	XX	X										X	X	X		X					
NSD					X	X			X		XX	XX	X	XX	XX						XX		X		XXXXXXX		X		X	XXXX	X	XX	X	XX	XX	X
NSS						XXXX			X	X			XXX	X	X			X					XX				X		X	X							
NST	XXX		X		XXXX		XXXXX		XXXXX	XXX	XXX	XXX	XXXX	XX	XX	X		XX		XXX		XXX	X	X		X	XXXXX	XXXXX	X	X	X	XXX	XXX	X	X
NTYM			X	X		X	XX		X	X	X		XXX		X	X	X	X		X		XX		XX		X	X		X	XX	X	X	X	XX	XX		X	X
NUR	XXXX	X	X		XXXXXX	XXX	X		XXXX	XXXX		XX	XXXX	XXXXXX	XXX	X		XX	X	X	XX	XXX	X	XX	X	X	XXX	XX	X		XXX	XXXXXXXX	X			X
NVL																										XXX		XXX		X	XX
NWAO		X			XX		XXX	XXXX		XX		X																			X
OBN	X	XX	X		XXXXXX	XXXX	X	XXXXXXXXXX		XXXXXXXX		XXXXX	XXXXXX		XX	X	XXX		XX	XX		X	XXX		XXXXX	XXXXXX		XXXX	XX	XXX	X	X	XXXXXXX
OCO	X									X		XXX		X	X	X		XX		XX		X		X	X	X	XXXX	XX		X	X	X	XXXX	X	X
ODD1	X		X			X			X		X	X		XX	X		XX	X		X		X		X		X				X		X	X
ODZ	X	XX			XX	XX			XX		X	X			XX	X		XX	X	X								X	XX					X
OFUJ	XX	XX		X	XX	XXX			XXX	XX	XXXX		XX	XXXX	X	X	XX		X	XX		X	X	X	X	XXX		X	X	XXX		X	XX	XX	XX
OGA	X	X			XXX		X		X	XX	XXXX		X	X	XXX	X		X	X	X		XX		XX				X	X		XX	X	X		X
OGE												X	X		X				X			X				X		XX	X			X			
OHR	XXXXXXXXXXXXXXXXXXXXXXXX								XXX		XX	XXXX	XXXX	XXX	XX	XXXXXXXXXXXX		XXXXXXX		XX	X	X	XXXX	XXXXXX	X	XXXXX	XX		XX	XXXXXXXXXXX
OJC	XXXX	X			XXXXXXXX		X	XXX	XX	XX		XXXXXX			X		X	XX		X	X	XX	XXX	X	X	X	XXX		X	XX	X	X	X		X
OLLA		X				X	X	X	X	X		XX			X	X					X		XX	X			X		X		X	XXX		X		X		XX
OPT	XX		X		X	X		X	X	XX			XX	X		X		X	X		X		X		XXX	XX				X		X	XX	X	X	
ORC	X	X						X			X			X	X		X								X					X		XX	XX	X	X	
ORO						X			X	XX		XX		X				X		XX		X					X									
ORV	XXXX		XXXXXX	X		XX		XX	X		XX		XXXX	XXX	XXX	XXX	XXX	X	X		XX	X		XXX	X	XXX		XX		X	X	X	XX	XX	X	XXXXX	XXX	XX	
ORX	X	X			X			XXX		XXXX	X	XX	XXXX		XX	X	X			X		X	XX		XX		XX					X	X		XX	X	X	XX	
OSS						XXX	X		XX		XX	XX	XXXXXXXX		X	XXX			X	X	X	XX			XX	X	XX			X			X	X		X	X	
OUK		X								X				X						X		XX						X				X			X	XX	X
OUR	XX		X	XX	XXXX	X			XXX	X			X		X	XXXX		X	XX		XXX		X	XXX	XX	XX	X	X		XXX	XXX	XX	XX	XX		X	X
OUZ					X		X			XX	X			X	X	X	XX	X										X	XX							X
OXF		X			X	X		XX	XX	XX		X	X		X		X	X	X	XX			X	XX		X	XX	X	X	X	X	X	X	X		XXX		X
OXX			XXXXXX	X			X	X		XXXX	XX		XXX	X			X	X	X		XXX	XX	XXXXX			X	X	X										
PAB	X	XX		X		XXXX	X	X		X		X	X	XXXXX	XXX		XX	XXX	X	X	X		XXXXX		X	XXX		XX		X	XX	X	XXX	XXX		X	XX	XXX	X	XX	X
PAE								X			X		XX	XXX		X	X	X				X		X		XXX		X	XX		XX			X	X	X		X	X	X
PAF	X	X			XXX		X	X				X										X	X			X	X			X	X		X	X			XX	X
PAG			X			X	X		X					XXXXX	XXX		X	X		X	X		X			XX		X	X		X			X		X	
PAHZ				X		X		XX		X	XX		X		X		XX		XX	X		X						X	XX	X	XXX		X			
PAIG	X	XXX	XX	XXXXX	X		X	XXX		X	X		X		X X	XX	XXXXX	XX		XX	XX	XXXX		X	XXX		XXX	XX	X	X		XXX	XX		XX	XX		X	X
PAL	X					XX					X		X		X	X							X		X	X			X		X								
PAND							X					X			X		X			X		XX		XX					X	X		X						
PARM			X	XX										X		X	X											X		X		XX						
PATZ			X			XX			X		XX		X			X		XX	X			X								XX		X	X				
PAX	XX	XX		X	XXX	X	X	X		X		XX		XX	XXXXX		X		X	X	X		X	X		X	XXX	XXX		X		X						
PCH		X	XXX		X	XXX	X	X			X	X	X	XXXXXXXX		XXX	X		X	X		XX		X	XXXXXXXXXXX		X	XXX	XXXX				X	X		XX	X	XX	X
PCI				XXXX					X			XXX	XXX		X	XXXX		X	XXXXXX					X				XXXXXXXX	X		X						
PCJ							X					X	X		X							X				X		X				X	X		X		
PCO		X			XXX	XX	X				X		X	X																				X			X
PCP	X	X		X	X	XXXX	X	XXXXXX	XXXXXXX	XXXXXXXXXXXXX	X	X	XX	XXXX	XXX	XXX	XX		XXXXX	XX	XXXX	X				X	X	XX	XXXXXX	X		XX	XX
PCT					X		X	X			X		XXX		X			XX		X		X	X					X	X	X			X		X	
PDB	XX		X	X	X	X	X	X		X		X		X		X		XX	XX		X		X	XX	X					X		X	XX	X	X	
PDRM	X								X		X				X										X			XX				X	X		X	
PEC		XX		X	X	X	XX	XX	XXX	XX	XXXX	XXXXXXXX	XX	XXXXX	X			XX		XXX	X	XXX	XX	XXX	X	X	XXXX		XXXXXXX			X		X
PEL		X	XXX	X	XXX	X		X		X	X	X	XXXXXXXX		XXX	X		X	XX	X	XXXXXXXXXXX		X	XXX	XXXX					X	XX	XX	XXXXXX			
PET		X	X		X		X	X			XX		XX	XX	X			XX		X		X	X		X			X	X		X						
PGB									X			X	XX	XX	X	X	XXX		X		XX			X		X						X					
PGD						X				XX		XX		X		XXX			XX		XX		X						X								
PGF	X			XXXX	XX	XX	XX		XX	XXX	XXXX		XXXX	XX	XXX	X	XX	X		XXX		XX		XX	X	X	X		X	X	X		XX	X	X	X		X
PGP		X		XX	XX	XXX	X	X		X		X	XX	XXXXXX		X	X	X	X	XX		XXXX	X	X		X	XX	XX	XXX	X	X	X	X	XX	XX	X	X	
PGZ	X			X	XX	XXX		X	XX	X	XX	XXXX	X	X	X		XXXXX	X	XX	X		X	X	X								XXXX	XXX		X		

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        ----------------------------------------------------------------------------------------------------------------------------
DATE    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |10 |11 |12 |13 |14 |15 |16 |17 |18 |19 |20 |21 |22 |23 |24 |25 |26 |27 |28 |29 |30
        ----------------------------------------------------------------------------------------------------------------------------
PHAM    X X  XX                          X  X X X   X XXX X         XX      X     XX   X   X     X   X  X  XXXX XX XXX X X X
PII                  X     XX   XX     XX    X       X X             XX      XX     X                   X
PIP     XXXXX  X  XX XXXX XXX X XXX XX    X  XXXX  X XXX XX    X  XX    XXXX  XX X X XXXX  X XXX     XX   X  X    X XXXXXXX  XX
PJG     XXX        XX XXX XXXXX   XXXXXXXX    XXX XXXXXXXXXXX X   XXXXX XXXXX XXX XXX  XXXXX X X  XX  X XX   X X XXX X  X X XX
PKEM          XX      X   X    X X X                  X  X         X     X     X                          XX   XX X
PKI     XXXX XXXXXXXXXXXXXXX  XXXXXXXXXXX    X XXXX XXXXXXXXXXXXXXXXXXXXXXX XXXXX   XXXXX XXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXX X
PLAT                                  X  X     X      X                    X     X                   X   X  X   X     X  X
PLD                XX   X          X  X        X  X   X  X  XX      X         XX  X         X    X                  X
PLE       X   XXX  X       XX X       XX     X  X X  X  X   X  X X X  X X  XXXX XXX X  X   X  X    X  XXXXXX      XXXXXXX  XXXX
PLM      XX  X  X X X  XX  XX  XX  X  XX   XXXXXXXX X   X X   X         XXX    XXXX X XX X XX  XXX X X XXX     XXXXXXX   X     X
        ----------------------------------------------------------------------------------------------------------------------------
PLP     X XXXXXXXXXXXXXXXXX XXXXXXX XXX XXXX X XX XXXXXXXXXXXXXXXXXXXX XX  XX XXX     X   XX XXXXXXXXX XX XXXXX X X XX XXXXXXXX
PLRM                 X X X  XX     XX XXXX  XX XXXXX   X  X X X   XX X    X  X     XX X   XXX XXX X      X       XXX    X  X
PMG     XXX XXX XXXXXXXXXXXXX  XXXXXX X  XXXXXXXXXX XX XXXXXXX  X  XX XXXXXXXX  XX XX XXXXXXXXXXXX XXXX XXXXX XXXXXXXXXXX XXXXXXXX
PMO                        X           X    XX  XXX     X X X            X      X     XX    X  X   XX         X X X    X X   X
PMR     XXX XX    XXXXX XXXXXX XX XX  XXX X XX XXXXXXXX XXXX X X X XX X XX   X  XXXXXXXXXX  XXXX XXXXXX XX XXX XXX XXXXX X XX XX
PMS     XX  XX    X XX  XXX XX XX     XX XX X  XX XXXXX   X  X X X   XX XX   X  XXXXXX X X  XXXXXXXX X  X       X   XXX  X X  X
PNP     X X  X  X      XX    X      XX X       XXX
POF          X       X                    X   XX  XX  X X X       X XXXXX   XXXXX  X X                XX XX        X      X
POO       X  XX XXXXX    XXX XX  XXXX XXXXX XXX XXX XXX X XXXXXXXX    X XXX  XXXXX  XXXX X XXXXX  X XX XXXXXXX X X   X X X X X X
PORP                                          XXXX  X  XX X     X    X  X  X  XXX X       X X   X        X X   X    X  X
        ----------------------------------------------------------------------------------------------------------------------------
PPCY       XX      XX X  X          X    X X    X      XX    X       X  XX      X   X             XX       X    X X  X
PPD     XXX X     XXXX  XX XX X XX  X X  XX X XX  XXX XX    X   XX  X X       X XX  XX  XXXXX  X X X X    XX    X XX X  XXXXXX
PPM     X XXXXXX X    X X   XXXX XX  XXXXX      X X X X XXX XX XX XX  X   X X X XXX    X  X  XXX      X    X      X   X   XX   X
PPN                                    X    XX  X       X X X            X      X     XXX   X  XX   XX         X X X     X X   X
PPR       X    X   X  XXX               X   XXXX  X     X    X   X      X      X     X     X      X X  X  X X X X   XXX   X
PPT                    X           X    XX  XXX     X X X            X      X     XXX      XX    X        X X X     X X   X
PRI       X                                  X X   X     X          XX      X     X          X       X       XX   X
PRM       X         X   XX  XX XXX           X   X    X  X X            XXX  X  XX    XX    X  X     X     X
PRS       X                  X   X             X X   X     X          XX      X     X          X
PRU     XXXX X    XXXXXXXX XXXXX XXXX XXX XXXXXXXXX  XXXXXX XXXXXXXXX XXXXX  XXXXX X  XX XXXXXXXXXXX XXX XXXXXXXXXX  XXX X     X
        ----------------------------------------------------------------------------------------------------------------------------
PSO                        X                 X X     X   X                 X XX            X        X X   X  X
PSZ                  X XX                X XX XXXX  X  XX X    X   X X XX      XX       X  X XX   X X                  X XX   XX
PTJ     X X      XXXXX  X     XX   XX  XX XXXX XXXX  XX XXX  X X   X  XXXXX     XXXX  XX    X XX   X     X X     XX  X X
PTT              XX        X       XX     X X       X                X      X                  X       X XX       X
PUL       X      X X                X       X       X             X  X      XX     X            X     XX  X X   X   X
PUZ     XXX    X   XXXXXXX  X  XXXXXXXXX   XXX XXXXXX    XXXX X XXX XX     XXXX                     X XX XXXXX   X     X
PV08    X XX XX  XX X   XXX XX X X  X XXX   XXX XXXX X  X XXX X XX  XX  XX      XXX XXXXXXX X  X     X  XXXX X XXX   X   XX X  X
PV09    XXX  X    X X   X   XX X    X  XX  XXXX XXX  XX XXX X X  X  XX  XX      XXX XXXX X  X  X     X  X XX X XXX   X   XX X  X
PV10    X XX XX   X X   XXX XX XXX  X  XX  XXXX XXXX XX X XXX X XX XXXX XX      XXX XXXXXXXXX  X     X  XXXX X XXX   X   XXXX  X
PVC      XX   X X  XX     XXXX   X X     XX  XX   X  X  XXX        X  XX       X                 X     X     X XX   X
        ----------------------------------------------------------------------------------------------------------------------------
PVL                X   X          X  XX       X  X          X               X             X                    X
PVY        X   XXX  X       XX X       XX    X  X X  X  X   X  X X X  X X  XXXX XXX X  X   X  X    X  XXXXXX  X   XXXXXXX  XXXX
PWA     XX  XX    XXXX    X XX XX    XX XX X  XX XXXXX   X  X X X XX X XX   X  XX XXXXX X   XXX XXXXX  X   XX    X XXXX X X   X
PWL     XX  XX   X X XX  X X XXXXX    XX XX X XXX XXXXX   X  X   X   XX X    X  X  X  XX X   XXX XXX X  X   X      XXX  X X  X
PYA     X        XXX    X X     X  X  XX   X   X    XX X      X      X XX      X     XXX   X      X      X    X      X   X X   X   X
PZZ     X X   XXXX X X XXX  XXXXXXXXXXXXXXX XXXXX   XX X X   X X   X X XX X    XX    XX  XXX XX   XXX   XXX    XXX  X X  XX X X
QASM            X                X   X              X           X X  X                     X    X   XX        X X
QCP                X  X X               X   XX    X X         X   X  X      XX     X    X    XXX   X X  XX X   X X XXX
QIS     XXX  XXX  XXXXXX XXXX  XXXX XXXX  X XX XXX  X XXX  X   X       XXX X   XX       X X    X X X  XXX XXX X X XXX XXXX
QIZ     X X              X XX      X   X    X   XX   XXXXX X   X  X X X XX      XX    XX    XX X  X   X    X   X X     X XXX   X
        ----------------------------------------------------------------------------------------------------------------------------
QRZ        XX     XXX XXXX    X XXX  X   XX X X X X  XX  XX X XXXXX  XX      X X                          X XXXXXX X   X     X
QUE     XXX       XXX X  XXX          XXX XXX XXXXXX XXXX XXXXXXX   X   XX          X     X XX X  XXXXXX XXXXXXXXXX XXX XXX XXX
QVP                X    X     X               XXXX X X         X   X           X         X            X  X  X     X   X
QZH       X    X          X          X    X   XX   XX X  X          X XX      X          XX            X    X X     X   X   X
RAB     XXX   X   X XXX  X XXX XXXX X X  XX XX   X XX                 XX   X  X      X    X X X X X    X    XXXXX   XXXXXX  XX
RAGM    XX  X   X   X         X X     X       X X             X        X X    X  X      XX    X      X         X            X
RAR       X                          XX   X  X       X               X      X              X                  X
RDO        X   X   XX                        X               X          X      XX     X      X
RDW     XX  XX  X X XX  X X  X XX     XX XX        XXXX        X X   XX X       X  XX XX      XX X            X   XXXX  X X
RED     XX  X   X X XX  X X  X XX     XX XX        XXXX   X    X      X X       X  XX  X      XX X            X     XX  X X
        ----------------------------------------------------------------------------------------------------------------------------
REF     XX  XX  X X XX  X X XX XX     XX XX    X   XX    X  X X     XX XX   X  X  XX  X     XXX X      X          X XX  X X
RES       X  XXX    X  XXXXXX  X    X XXXX XX X XXX  XX X X   XXXX  X X XXX   XXXXX  XXX X  X  X XXXXXX  X X XXXXXX  X X X XX  X
REVF                                                X       X       X       X      XX     X   X                X
RFA             XXXXX XX XXXXXX XXXXX XXXX XXXX XXXXXXXX XX XXXXXXXX XXXX XXXXXX X XXXXXXXXXXXXXXXXXX X XX XXXXXX X XXXX XXXX
RIV                    X                 X  XX      XX      X  X          X              X  X         X     X X   X   X X
RIY      XX   X  XXXX   XX   X X   XX  XX XXXX XXXX X X XXX  XX         XX    XXXX            X      X  X         X  XXX       X
RJF             XXXX  XX  XX X XX X XXX XXXX XXXXX XX X X X  XX  X  XXXXX   XXXX XX XX X XXX X   XXX X X X X   XX    X   X   X
RKG       X     XX      XX XX   XX   XX XX  XX X X   XXXXX X X   X  XX  X   X   X              XXX X    X X XXX   X X XX
RMW       X  X          X X XX  X X    XX   XXXXXXX  X  XXX X X  X      XX      XXX  X XX      X     X          X   X   X     X
RND     XX  XX      XX  X X X   X     X   XXX  XX XXXXX      X   X XX X X    X  X  X  XX X   XXX XXX    X   XX      X    X X  X
        ----------------------------------------------------------------------------------------------------------------------------
RNO                  X  X               XX  X X     X X X    X   X  XX X    X    X X X     X           X    X          X
ROB     X X    X   X X XX     XX   XXXX X XX XXXXX   XX X X   X X   X X XX      XX    XX   XX X    X X   X X    XXX  X X  X  X X
ROCH      X XXX  X XXX  X X  X     X X X XXXXXXXX  XXX X   X X   X XX   X  XXXXXXXXXXX  X XXX XXXX          X X    XX  X XX X
RRL     X X   XXX    X XX    XXX X XXXX X X  X XX     XX X       X  X X XX      XX    XX   XX XX         X X     XX  X X  XX   X
RS2     XX   X  X X XX  X X  X XX     XX XX     X  XXXX   X    X     XX X      X  X   X      XX X            X   X     X X
RSL                  X    X     X    X X  X          X      X     X  X      XX    XX   XX              X              X   X
RSM                  X          XX     XX    X       XXX  X          X      X              X
RSNY                 XX  X               X       X  X X XX       X  XX    X  XX     XXX   X  X          X X   X
RSO     XX        X  X          XX                X                X              X      X     X
RSP     X X   XXX    X XX    XXX X XXXX X XX XXXX    XX X       X   X X XX      XX    XX   XX XX     X   X X     XX  X X  XX   X
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DATE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |10 |11 |12 |13 |14 |15 |16 |17 |18 |19 |20 |21 |22 |23 |24 |25 |26 |27 |28 |29 |30
RSSD  X X XX   XXX   XX XXX    X        XXXX   X  XX X X X X  X XXX  XXX     XXXXXXXXX      X   X X  XXXX XXXXXX       X X XX
RSTA   X     X XXXX     X  X XXXX X      X  XXXXX    X XXX X        XXX
RTCB XXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXX XXXXXX    XXX XXXXXXXXXXXX  XXXXXXXXXX XXXXX XXXXXXXXX XX XXXXXXXX
RTCV XXXXXXXXXXX XXX  X        XXXXXXXXXXXX XX XXXXXXXXXXXXXXXXXXX XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXX XXXXXXXXXX
RTLL XXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXX  XXXXXXXXXX XXXXXXX XXXXX XXXXXXXXXXXX  XXXXXXXXXX XXXXX XXXXXXXXX XX XXXXXXXX
RTPR  X XXX  XXX XXX XX XXXX XXXXXXXX  X    X   XXXXXXXXXX XXXXXXX XX X XXXXXXXX XXXXXX XXXX XXXXXXXXXX XXXXX  XX XXXX XXXXXX
RTRS XX  X   XX  X              XX X X         X        X              XX XX           X   XXXXXXXXXXXXXXXXX  XXXX  XXX   XX
RUP   X  X X        X   X      X   X X  X  X       X X           X X X     X      X XX X  X XX  XX X  X         X X     X
RUV                    X                XX  XXX     X X X           X     X     XX    X  X    XX         X X X     X X   X
RYD  XX      X XX                 X   X              XX           X X  X                                X         X X
RZN              XX   X          X  XX       XXXX XX    X XXX      X X       XX  X  X      X    X                X X
SAL                 X     XX   XX     XX            X X                                                X
SALF                X                 XX    X        X X            X      X      X      X      XX  X
SALJ        X   X   X             X  XX       X     XXX             X                  X           X
SAN     X   X  X  X     X        X X X X X XXX   X                     X     X X X X     XXX  XX            X X    X  X    X
SAO   X     XXX X      XX    X X X XX    X  XXX XX  XX XX X       X XX      XX     XX   X  X   X XX  X  X  XXXX XX   X X   X
SAOF X      X       X     XX   X      X  X  XXX   X             X   XX      XX      X   X  X            X    XXX  X X  X    X
SAW                 X  X            X    XXX X X   X X X X    X      XX      X  X X X X    X   X X           X   X         X
SBA  X X  X    XX   X X XX    X XX  X   XXX  XX     XXXX X  XX   X   X      XX       XX         XX   XX    X X X XXX   XX  X
SBCZ  X  X      X   X    X                                      X            X                              X  X
SBF            XXX   XX XXXXX  X XXXXX XXXX XXXXX XX XXX X  XX  XX X XXX     XX    XX   XX X   X    X   X X   XXX XXX  XX   X
SCE                 X      X   XX     XX X  X     X   X                   X                                X
SCM  XX  XX  X   XX  X X XXX X     XX XXXX  XX XXXXX      X X X  XXX X    X  X  X   X     XXX XXX X  X   XX      XXX  X XX X
SCX    XXXXXX X          XX X XX X XX                                X     X                              X        XX  X
SDA     X   XX   X                              X   XX X         X X    X              X         XX       XX   X      X
SDF  X          X   X    XX                 XX X XX X               X    X XX          XX X   X X     X     X   X X
SDG  XX  XX     XXX  X X X   X     X   XX   XX XXXXX     X      X X X    X  X      X X   XXX  XX X  X    X      X         X
SDI              X   X     X   XX     XX    X       X    X        XX      XX      X      X           X
SDN  X   X  X XXX  X X XXX             X  XX   X XXX     X      X XX      XXX XX X X  X      X     X     X X       X    XX
SDV  XXX XX XXXXXXXX XXXXX XXX  XXXXXXX                              X XXXX XXXXX XX XXXXXXX  X X XXXXX X XXXXX XXX XXX X XXXXX
SEK   XX X X X XXXXX XXX  XX XXXX X XX X  XX X XX XX X   X XXXXX X XXXXXXXXXXXXXXXXXXXXXX XX XXX X  XXXXXXXX XX  XXX  XXXXXX
SEW  XX  X   X X XX  X X XXXXX     XX XX   X X  XXXX   X  X X     XX X    X  X  XX  X     XXX X   X  X      X    XXX  X X
SFI           X     X      XX   X      XX    X       XXX  X          X       XX     X      X            X
SGAM X                                                                                                XXX        X       X  X X
SGKT    XX    XX  XX  X X  X        XX    X  X  X    X         X X   XX      XX   X  X     X   X       X    X X
SGS   X         X   XX  X                  X    X  X X            XX   X  XX     X       X           X
SHI  XXXX  X X XXX  X            X  XXX X       X  X    X  X X       XX   X  XX     X   XX XX X    XX  XXX X      X X X XX XX
SHK   X                X           X  X     X       X        X      XX      X     X              XX     XXX         X
SHL  XXX XXXXXXXX        XX X        XX XX            XXXXXXXX            XXXXX        XXXXX X        XXXXXXX XXX X X
SHNJ  X       XX      XX           XX   X X XX   X  X      X X    X XX      X      X X  X  X   X    XX     XXX   X     X
SHW   X  X          X X           XX   XXX X    X  XXX X XX        XX X    XX   X X    X  X   X X           X   X
SHWJ  X         X  XX           XX   X              XX            X
SIM    X      X XX     X            X       X       X            X     X   X                    X     X     X         X
SIT         X X X      X                    XXX  X  XX            XX XX      XX  XX X    X  X   X     X     X X         X  XX
SIV  XXXX    X XX                      XXXXXXXX    XXXXX X XXXXX   XXX XXX    XXXX XXXXXXXXXXXXXXXX XXX XXX  X  XXXXXXXXXXX
SIZ  X  X      X   X    X      X         X X    X                  X                                  X  X       X    X
SJG   X  X  X       X          XX         XXX XXXX X   XX       X    X  X  X  XXX X       X X   X     X  XXXX  X    X
SKO  XXXXX XXXXXXX  X  XXXXXX XXXXXXX XXXXXXXXX XXX XXXXXXXXX  XXXX XXXXX  XXXX X XX XXXX XXX  X XXXXXXXX XXXXX  XXX   XXXXX
SKR  X   X                  X              X X  X  X                X      X    X     X    X X X   X     XXX   X
SKT  XX  XX  X X XX  X X XX XX     XX XX X  XX XXXXX   X    X X XXXX XX   X  X  X  XX X   XXX XXX X  X   XX      XXX  X X  X
SLA  XXXXXX XX  X XX XXXX  XXXXX X   X     XXXXXXXXXXXXXXX X XXXXX   XXXX  XX X  XXX XXXXXXXXXXXXXXXX X XX XX X XXXX X X XXX
SLB   X            X   X       X       X         XX    X X             X  X              X     X        X     X       X
SLE  X          X   X    XXX  XX   XX XXXXXXXX      XX      X  X  X XX  X   XX    XX       X         X X     X X X X       X
SLKI  X  XXXX                     XXX                                                                  X    XX
SLKM XXX XXX X XXXX  XXXXXXXXXX X  XXXXX XXXXXXXXXXX X XX X X X   XX XX   X  XX X XXX X  XXXX XXX X  X    X XXX XXXXX X X  XX
SLL         X XX  X      X   X X                X
SLM   X       X       X                  X   X    X  X             X  X      XX                    X  X X
SLR  XX X X X XXXXX XXX  XX XXXX XXXX X XXX XXXX XXXXXX X  XXXX X XXXXXXXXXXXXXXXXXXXXXXX XXXXX XXXXXXXXX XX  XXX  XXXXXX
SMF           XXXX XXXXXXXXX XX X XXX XXXXXXXXXX XX XXX XX XX  XX X XXX X XXXXX X XXX XXXXXX   X X   X XX  X XXX XXX   X X X
SML  XXX XX XX   XX  X X X  XX     XX XXXX XXX XXXXX      X X    XXX X    X  X  X  XX     XXX XXX X  X   XX      XXX  X X  X
SMY           XXX      X           XX    X  XX   X  XX           X XX      X    X X    X      X     X     XXX       X X   X
SNA                        X       X X X X XX      XXXX X   X       X     XXX   XX X          X     X X     X         X
SNF  X XX      X X                XX  XXX XXX   X  XX        XX X XX    X XX  X XXX      X    X    X X X   XX  X X       X
SNG  X          XX    X X          X    X   XX  X XXXX  XX XXXXXX X         XX    XX X          XXX  X  X  X X   X   X X X
SNY  XXX  X    XXX X  XXXX    XX    XX  XXXXXXXX  XX X X    X XX   X XX X    XX X  XX X  X    XX XXX  X X XXX X   X X X X   X
SNZO                                   X   X      X                                          X   X     X X
SOB1   XXXXX   XXX  XXX XX XXXX X  XX X  XX       XXXXXX X     XX     X    XXXX   XX XX  XX X     X   X  X XXXXX  X   XXXX  X
SOC            XXXX   X             XX        X       X X      XX     X X       XX     X    X                  X   X X   X
SOH  XX XXXXXXXXXXXX X X X XXX XX X    X    XXXXXXXXXXXXX  X  XX  XXX   X    X   X XXX XX X XXX  XXX XXX XX  XX XXX    X XX
SOP   X                            X  X  X XX     X X   X                                                X
SPA       X    XXX  X X X    XXXX  XX X XXX XXXX  X  XXX     X  X    XX     XX X  XXXX XX       XXX  XXXX   XXX X X   X  X  X
SPC  X XX    XXXXXXX X      X   XX XXX  XXX XXX   XX XX  X   X  XX X XX   X  XX X  XX    XX     X X X XXXX  XXXX  X X X X XXX
SPJ                                      X     X                                    X  X   X            X  X    X
SPU  XX  XX  X X XX  X X XX XX     XX XX X  XX XXXXX   X  X X     XX XX   X  X      X     XXX XX            X    XXX  X X  X
SQTA XXXXX     XXX X X         X X  XX   XX   X  X X XX  X     XXX X XX     X XX     XX       X   X     X X X   XX  X X       X
SRBF    X                                  X       X          XX X XX      X                          X
SRFA      XX  X X  X       XX X XXXXX  XXXXX      XXXX    X XXX    XX X XX    X  X     X          XXXX  X    X  X X X    X   X
SRN  X X   XX  XXX     XXX    X          X X XX  X    X       X   XXX    X   X         X      X   X   X   XX   X     X
SRO  X XX X    XXX   X  XX  X XXXX  XX XXXX XXX   XX XX  X   X   X X XX      XX    XX     X XX   X X   XXX   X XX  X X XXXX  X
SRS   X XXXXXX XXXXX X X X XXX  X X    X    XXXXX XXXXX X XX  XX   XX XXX      XX     X X  X      XXX XXX XX  XX XXX    X XX
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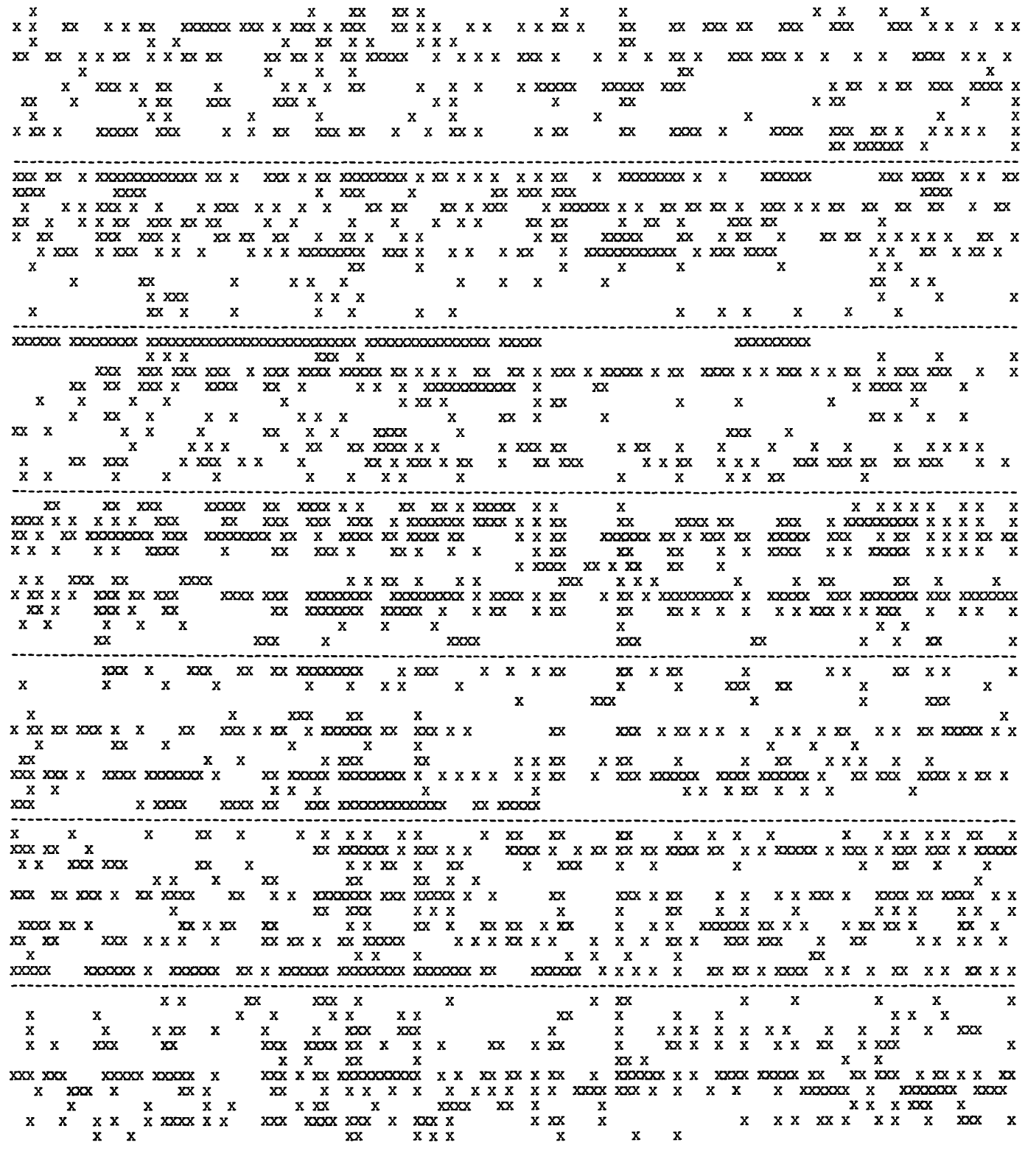
DATE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |10 |11 |12 |13 |14 |15 |16 |17 |18 |19 |20 |21 |22 |23 |24 |25 |26 |27 |28 |29 |30
SRU
SSB
SSE
SSF
SSK
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STAN
STCO
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STV
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SUE
SUR
SVA
SVB
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SVO
SVW
SWI
SWZ
SYI
TAB
TACH
TATO
TAZ
TBH
TBR
TCA
TCE
TCF
TCW
TEH
TEHZ
TGL
TGY
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THZ
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TIK
TIO
TIR
TIY
TKSJ
TLC
TLE
TMA
TMW
TNE
TNF
TNP
TNR
TNS
TOA
TOD
TOO
TOUF
TOV
TPE
TPI
TPNV
TPT
TPX
TRF
TRGS
TRI
TRN
TRO
TSM
TSRJ
TSY
TTA
TTG
TTH
TUC
TUH

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DATE  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |10 |11 |12 |13 |14 |15 |16 |17 |18 |19 |20 |21 |22 |23 |24 |25 |26 |27 |28 |29 |30
      ------------------------------------------------------------------------------------------------------------------------
TUL         XX XXXX   XXX XX X X    X     XXXXXXX  X  XXXXX XXX X  XXXXXX     XXXXXXXXX  XX  X  XX X X XXX X XXXXX X X  XXX  X
TUZ    XX XX     X   X   XX    XXX       X X XXX  X    XXX      XX  X  X     X                               X XX       X
TVO                      X          X    XX  XXX     X X X            X      X     XXX   X  XX    X         X X X     X X   X
TYNO  X               X                       X X  X  X X          X  XX      XX     X    X  X           X   X X   X
TZL   XX  XX  X   XX  X X     X     X    X    X  XXXX      X        X X    X  X      X     X X  XX X
UCC     X         X                   X    X  X       X          X     X      XX     X                 X X     X
UER             X        X           XX        X    X X   X         X  X             X    X      X           X           X
ULC      X   XXX  X       XX X       X     X  X X  X  X   X  X X X  X X  XXXX XXX X  X      X    X  XXXXXX  X   XXXXXXX  X XX
ULM     XX X      XX  XX  X  X     XXXX   X XXXXX  X  XXX X X  X   X  XX    X XXX XXXXX  XX  X   X X   XXX X XXXX XX XXX X XX
UNM   X X  XX         X   XXXX X    X         X X     X       X             X X            XXX     X      X   X    XX  XX
      ------------------------------------------------------------------------------------------------------------------------
UPA    XX     X   X   X   X XXXX XXXX XX  X   XXX     XX  X           X     X XX X X     XX XXXX    X    X   X  X  X X  XX
UPP   X XX  X   XXXX X  X        X    XX  X  XX    X XXX            X XXX     XX  X  X    XXX    X XX   XX  X  XXX X X XXX X X
UQSK   X      X XX     X       X  X  XX              X            X X XX       X             X     X    XX         X X
URZ   XXX    XXX XXXXXXX  X  XXXXX XXX  XXXX XXXXXX XX XXXXXXX XXX XXX   XXXXXX                           X XXXXXXXX XXX     X
UTU                  X          X                          X    XX  X       X                               X      XX
UYO     XX   X XXXXXXXXXXXX    X X  XXX   XXXXXXXX  XXXXXXX XXXXXX XXXXXXX  XXXXX    XX XXX  X       X XXX  XXXX  XX XXXX X
UZD                          X   X    X      XX     X XX X          X  X                                       X
UZH   X XX      XXXX  X  X        X  XX   XX  X       XX            X XX      XX     X    X X    X X   X X     XX  X X   X   X
VAH                      X                XX  XXX     X X X            X      X      X    X  X     X         X X X     X X   X
VAM      X  X X XXX          X       X   X                 XX     X   XX      X   X  X  X   XXXX     X          X
      ------------------------------------------------------------------------------------------------------------------------
VAO   XXXXX     XXXX     XX X XXXX     X  X  XXXX   XXX XXX XX X X  X XXX   XXXX   X  XXXXX  X  X X    X X  XX X   X  X X XXX
VAY   XX XXXXXXXXXXXX  XX XXXXX XXX XXX XXXXXXXXXXXXX  X XXXXX XX XXX XXXXX XXXXX   XXX X XXXXXX X XXXXXXXXXX  XX XXXX X  XXXX
VBEM    X             X              X    XXX X X   X X X X    X   X  XX      XX   X   X  X  X                     X
VBY   XXX  XX  X XXXX X X XXXXX  XX   XXXXXXXXXXXXX X XXX XXX  XX   XXXXX  XX XX     X      XXXX    X  XXX   X XX  XXX  X    X
VDL               XX  X    XXX   XX  XX XX XXXXX    X XXX     X  X  X XX      X   X XX                 X X     XX  X X       X
VGB     X  X   X  X   X XXX          XX   XXX X    XX X X X X         XX      XX    XXXX  X  X     X    X XX X X   X      X
VIPM   X                                      X X   X X X X    X   X  XX      XXX   XX X  X  X   X X           X   X      X  X
VITF    XX      X     X          XX  XX X XX  XX    XXX       X  XX X XX            XX       X    X    X X X   XXX X X   X   X
VKA     XX        X   X      X   XX          XX    XX X             X  X      XX               X       X X     XX  XXX       X
VLA     X  X    XXX      X           XX     X XXX  XX X             X  X                         X     X     X X
      ------------------------------------------------------------------------------------------------------------------------
VLI   XX X  XXX XXXXXX      XXX      X  XX         X       X    X X   XX      XX  XX    X X  XXX     X          X         X X
VLO    X X   XX   X       XX X    X           X   X   X    X            XX        X         X      X   X       XX   X     X
VLS   XX     X    XXXX      X X      XX XX         X           XX      X      X    X      X X X X    X          X         X X
VLZ   XX  XX      XX  X X XX  X     X  X X    X X XXX   X  X X     XX X    X  X      X     XXX X X X                X    XX X
VOY   XXX      XXXX X XX    XXX  XX  XXXXXXX XXXXXXXX X XX XX          X   XX  XX                 XX   X X     XX  XXX
VPEM  X     X             X      X                                                                                X  X     X
VRI   X XXXX X  XXXX   XXX  XX   XX  XXXX XXX XX   XX X  X      X X   XX  X   XX                  X    X XX X   XX X X X     X
VTS               XX   X          X  XX       XXXX XX XX X XX       X X       XX  X  X      X    X                 X X
VUN   X X    X                             X X                             X  XX          X XX   X X   XX X
VVI                   X          XX     XX            XXX  X
      ------------------------------------------------------------------------------------------------------------------------
VZW   XX          X   X X   X X     XX X X    X  XXXX               X      X                      X                    X
WAH2    X                                 XXX X X     X X X    X       X      X     XX X     X     X           X             X
WAHZ         XX  XX  XX      X XX       XXXX X   X  X   XXXXXX XXX  X       X                             X XXXX XXX   X
WAJH        X   XX     X         XX  XX              XX                X                                           X X  X
WARB  XXX  XXXX XXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXX X    X   X   X       XX   XX     XXXXX XXXXXX  X  XXX X X
WATA   X          X   X         X X  XX   XX  X       X          X  X XX    X XX    XX       X X X     X X X   XX  X X       X
WAX    X  X   X   XX  X X   X       X         X                     X X              XX    X X  X  X        X             X
WB2                                                                                               XXXXXXXXXXXXXX XXXXXXXXXXXXX
WB5     X       X X      X    X      X   XX        X  X   X         X  X      X     X              X   X     X X   X     X   X
WBSM  X X                 X      X              X X                                          X                    X  X
      ------------------------------------------------------------------------------------------------------------------------
WDC        X   XX X  X   XX          XX   XXX XXX  X  XX  X X    X  X XX      XX  X XXX   X  X   X X  XX  XX X XX      X XX
WEL              XX   X      X  X                   X   X  X   XXX  X       X                             X XX X
WET   X XX      XXXX  X      X   XX  XX X  X XX X   X XX               X      XX X  XX       X X X     X X     XX  X         X
WHN    XX  X     X     X X     XX    XX       XXX  XX XXXX     XXXX X XX      XX   X XX   XX X   XXXX  XXX  XXXX   X X X X   X
WIN     X       XXX    X        X    XX X XX XXX   X  X X X XX    X X X     X X    XXX                 X XX  X X   X X   XXXXX
WIT   X                              XX   X  XXX      XX              XX      XX    XX       X         X       X     X       X
WKYJ    XX X    XX  X   XX           XX  XXXXXXX  XXXXX XX   X XX   X XX      XX    XX X  X  X   X X XXX X X XXX   X   X X   X
WLF   X XX   X  X XX  X  X         X XX   XX XXXX  X XXX   X     XX X XX    X XX  X XXX X    XX  XXX   X X X X XX  X X XX X  X
WLHM  X X      X          X      X              X X      X  X                                X               X    X  X     X
WLS     XX      XXX  XX          XX  XX X XXXXXX   XXXX       X  XX X XX  X X XX    XX       X   XX    X X X   XXX X     X   X
      ------------------------------------------------------------------------------------------------------------------------
WLVO                  X                       X X  X  X X          X  XX      XX     X    X  X           X   X X   X
WLZ   X              X          X          X X             X    XX  X                                        X     X
WME                     X  X                 XX       X                       X      X       X         X       XX
WMOK     X XX   XXX   XX  XX X X  X XXX   X X XX   X  XXX X        XX XXX   X XXX X XXX  XX  X   X X   XXX X X X X X   XXXX  X
WMQ   XXX  X    XXX X  XXXX   XXX X XXX  XX   XXX  XXXX XXXX X  XXX X XX    X XX X  XX X  XX X XXXXXXX XXXX XXXXX  XXX XXXXXXX
WOFM  X X   X  X          X                                 X                                X                    X
WR2   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  XXXXXXXXXXXXXXX  XXXX
WRA   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXX
WRH   XX  XX     XXX  X X X   XX    X   XXX  XX XXXXX      X   X XX   X    XX X  X   X X   XXX XXX        XX      X X  X    X
WTS   X XX      X X   X XX    X X    XX   XX XXX      XX         XX X XX      XX  X XX    XX X X X     X XX  X XXX X X X     X
      ------------------------------------------------------------------------------------------------------------------------
WTTA  X X XX    XXX X XX    XX  X X  XX XXXXX X   X X  XX XX  X XXX X XX    X XX    XX   XX  X X X     XXX X X XX  X X X     X
WTV     X                X           XX   XX  X X   X X X X    X      XX      X    X X X  X  X   X X           X   X         X
WVZ    X   X   X X   X         XX          X X X        X     XX X                                        X  X XXX     X
WWKK  XXXXXXXXXXXXXXX XX XX XXXXXXX X XXX X XXXXXXX XXXXXXXXX X  XXXXXXXXXX XXXX XX XX XXXXXXXX X X XXXX XXXXXXX XXX XXXXXXXXX
XAN   XXXX X X  XXX XX XXXX   XXXXX XXX  XXXXXXXX  XXXXXXXXX XXXXXX X XX    X XXXXXXXX XXXXX X XXXXXXX XXXXXXXXXXX XXX XXXX XX
XLV   XX           X  X X     X     X                                 X       X      X         X             X   X XX  X
YAH                                 X       X X            X       X                 XX         X X         X       X  X  X
YAK             XXX X  X X      X    XX    XX  XXX  X  XX  X  X      X XX      XX    XX X  X    XXXXX   X X  XXXX   X X XXXX  X
YAMJ    X  X     X      X           XXX  XX   XX  XX XX X  X X XX   X XX             X X  X  X   X X   X     XXX   X        X
YBH        X     X       XX          X     XX XXX     X   X X         XX      XX  X XXX   X  X   X X   X  X  X XX      X XX
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      ------------------------------------------------------------------------------------------------------------------------
DATE  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |10 |11 |12 |13 |14 |15 |16 |17 |18 |19 |20 |21 |22 |23 |24 |25 |26 |27 |28 |29 |30
      ------------------------------------------------------------------------------------------------------------------------
YJA     XXXX XXXXXXXX XXX XXXXXXXX   XX  XX XXXXXXXX XXXXXXXX XXX     XXXXX X  X XX X XXXXXXXXX XXXXXXXX XXXXXXXXXXXXXXXXXXXXX
YKA     X  XX  XXXX XXXXXXXX XXXXXX XXXX  XXXXXXX  XX X  XX    X X XXXXXX  XXXXXXXXX X XXXXX XX  XXXXXXXXX X XXXXX X XXXXXXXXX
YONJ    XX X    XXX X   XX           XX  XXXXXXX  XX XX XX   X XX   X XX      X     XX X  X  X   X X XXX X X XXX   X   X X
YRC                     X  X                  X       X                       X      X       X         X       XX            X
YRH                 X                           X       X                       X      X       X                 XX            X
YSNY              XXX   XX XX          XX   X   X       XXX X        XX XX   X  XX    XXX   X  X   X X   X X X X X   X     X   X
YSS   XXX  X      X X  XXX     X     XX    X  XXX XXX XXX X  X      X XX      X     XX X  X    X XXX   X     XXXX  X     X
YYYY  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX   XX XXX  XXXXXXXXXXXXXXXXXXXXXXXXX
ZAG     X         X   X      X   XX     XX X XX     X X X       X     XX      XX                       X X     XX  X X
ZAK   X XX X    XXX X   XX     XX X  XX   XXX XXX  X  XXX X  X      X XX      X     XX X  X X  X XXX   XXX  XXXXX  X X X X   X
      ------------------------------------------------------------------------------------------------------------------------
ZLA               X   X      X   X    X   XXX XX    X X          X  X XX  X   XX             X         X X     X   X         X
ZON       X    X         X                 XXXX  XX X  X XX            X  XXX XX X XX  X XX X  XXX  XXX X     XX   X  X X  X
ZSP                               X                      X     X         XX      X                  X        X       XX   X
ZST   XXXX   X XXXXXXXXXXXXXXX  XXXXXXX XXXXXXXXXX XX XXX XX  X XXXXX XXX  XX XXXXX XX  X XXXX X XXXXX XXXXX XXXXXXXXX XXXX XX
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The following stations each reported less than 10 readings:

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AAE     AAI     AARM    AASM    ABHA    ABJM    ACR     ADAT    ADR     ADWM    AEKI    AFDM    AFHM    AFRM    AGC     AGO     AGX     AHRM
AIN     AKKT    ALAM    ALE     ALNM    AMC     ANG     ANMO    ANT     ANTR    ANZ     APM     APRM    AQBJ    ARJM    ARO     ARRM    ARTJ
ARVC    ASMM    ATA     ATN     AUP     AVRM    BAK     BAPM    BAVM    BBR     BCGM    BCPM    BDID    BER     BERF    BEW     BGC     BGG
BGH     BGM     BGMT    BGY     BHRM    BIR     BIT     BJO     BKC     BLN     BLRM    BMK     BMNM    BMO     BMR     BMTC    BNM     BOH
BOT     BPO     BPOM    BPRM    BRN     BRNL    BRT     BRVW    BSLM    BSRM    BTW     BUC1    BUD     BUNI    BURJ    BUS     BUT     BVW
BVYM    BZK     CALA    CAO     CBC     CBO     CBSW    CCW     CDC     CDCB    CDFW    CDM     CDVM    CEI     CGA     CGX     CHAF    CHIE
CHX     CIA     CKO     CLN7    CLNB    CME     CMW     COI     COLF    COR     COSM    CPI     CPIM    CPK     CPLM    CPRX    CPS     CPW
CPZ     CRF     CRGC    CRNM    CRNY    CRQM    CSLM    CSPM    CSR     CSTL    CSVM    CTFE    CTM     CUSS    CVAL    CVN     CVPM    CVR
CVT     CYK     CZM     DAF     DAQ     DBN     DHH     DHR     DHW2    DIL     DOMF    DPC     DUC     DUI     DVR     EBI     EDR     EKR
ELYF    EMEL    ENH     EPH     ERK     ERM     ESD     ET3     ETW     EUC     EWZ     FAI     FBO     FFC     FG2     FG3     FG4     FL2
FOX     FRP     FTC     FTR     FUQ     FX1     GACM    GANF    GARM    GAS     GAXM    GBDM    GBGM    GBL     GBMM    GBR     GCBM    GCC
GCRM    GCVM    GCWM    GDCM    GDL2    GDXM    GELF    GGC     GGPM    GGUM    GHC     GHCM    GHGM    GHLM    GHOM    GHS     GHVM    GHW
GIB     GIO     GL2     GLK     GMB     GMCM    GMKM    GMN     GMO     GNAM    GPMM    GRB5    GRI     GROM    GRS     GRTM    GSGM    GSM
GSNM    GT2     GUAC    GUAN    GULW    GVR     GWKM    GZR     HAM     HAMO    HBMT    HBO     HBTM    HCOM    HDW     HERM    HGWM    HIA
HITJ    HJGM    HKL     HOJ     HOR     HPK     HPO     HRY     HSFM    HTC     HTMS    HTW     HYA     IAS     ICR     IRZ2    JAU     JBLM
JBMM    JBZM    JCPM    JCR     JELM    JHA     JHLM    JHPM    JJRM    JLK     JMI     JNAM    JNE     JPRM    JRGM    JRRM    JRSJ    JSBM
JSMM    JSTM    JTGM    JTS     JUCM    JUD     KAIM    KALI    KART    KBBM    KBNM    KBR     KBRM    KBSM    KCPM    KCRM    KCTM    KEDI
KEV     KFH     KFNJ    KFPM    KGMM    KHBM    KHMM    KHZ     KING    KIPM    KJJM    KKH     KKPM    KKU     KLL     KLM     KOE     KOH
KPPM    KRKM    KRMM    KRPM    KSCM    KSD     KSMM    KSPM    KSU     KSXM    KSY     KWE     LAB     LASM    LAZ     LBL     LBPM    LBTB
LCFM    LCI     LCMM    LDBM    LDN     LFU     LGOR    LHCM    LHKM    LIJA    LIME    LIS     LKC     LMI     LMK     LMW     LMZ     LOCW
LPA     LRDM    LRN     LRV     LSLM    LSPF    LT15    LT3     LTMT    LVP     LVRI    LVZ     LWH     LXR     MAC     MAMG    MARC    MBU
MBW     MCP     MCQ     MCT     MDRJ    MDSJ    MDW     MEMT    MENF    MEU     MEW     MGA     MGD     MGH     MGL     MGR     MHA     MHR
MHZ     MJ2     MJMA    MKL     MKRJ    MLA     MLH     MLS     MLX     MMCZ    MNHM    MNO     MNR     MNT     MOE     MOP     MOQ     MOYM
MPOR    MRFM    MRFT    MRPI    MRSJ    MSI     MSJ     MTC     MTE     MTMW    MTR     MTUR    MXC     MYV     MZX     MZZ     NAC     NAH
NBPM    NCFM    NCOR    NDHM    NFIM    NGH     NKM     NLO     NLW     NMC     NMHM    NMTM    NNL     NRIL    NTBM    NVS     OBC     OBHM
OCM     OCR     OD2     OGOM    OHCM    OHW     OKH     ONR     OOW     OPA     ORAM    ORI     OSD     OSR     OTR     PACI    PADM    PAGM
PANM    PAPM    PATW    PCA     PCID    PCL     PCRM    PCRV    PDA     PENI    PERF    PEV     PFO     PHBM    PHCM    PICO    PIG     PJLM
PKA     PKH     PKM     PLAV    PLDF    PMCM    PMGM    PMRM    PNJ     PNL     POA2    PRAF    PRCM    PRK     PRP     PRW     PRY     PSAM
PSMM    PSN     PSRM    PSTM    PT03    PT06    PTE     PTI     PTO     PTRM    PTS     PTV     PUYF    PWMM    PYM     PYN     PYT     PZI
QCR     QTRJ    RAC     RANB    RAO     RCS     RCWM    RDN     RDP     RDT     REMR    REMW    REY     RIA     RIFB    RMP     RPW     RS1
RSA     RSW     RTC     RUWJ    RVC     RVW     RYS     SAC     SAP     SBO     SCCM    SDCA    SEC     SEG     SET     SFG     SFL     SFS
SFT     SGH     SGO     SHBJ    SHG     SHMJ    SIMI    SINI    SJAS    SJH     SJI     SJS     SKG     SKI     SLW     SMW     SNDC    SNH
SOI     SOS     SOSW    SPBA    SPVI    SPW     SRDI    SSN     SSPA    STR     SVD     SVST    SVV     SWH     SXM     SYP     TAC     TAF
TAHZ    TAIF    TANI    TAVF    TBM     TBT     TCO     TDH     TDL     TDS     TGT     TIM     TKL     TKO     TLG     TLY     TMB     TME
TNG     TOU     TOW     TPMT    TPOR    TPP     TPR     TREF    TRH     TRHT    TRQ     TRT     TZK     UPI     USI     VACR    VAI     VAL
VCR     VDCF    VFP     VILF    VLL     VLMM    VRC     VSM     VSS     VTHM    VTU     WASM    WBO     WCHM    WCZ     WIH     WIM     WIW
WIZ     WJPM    WKR     WOH     WORM    WPI     WPO     WPW     WRD     WRG     WSHM    WSI     YAKW    YEG     YEL     YKU     YOMI    YPE
ZAI     ZER
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