UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

EARTHQUAKE DATA REPORT

JUNE 1990

by

U.S. Geological Survey

NATIONAL EARTHQUAKE INFORMATION CENTER[1]

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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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* JUN 01, 1990 01h 00m 35.76± 0.83s
  2.107 N ±10.6km  97.308 E ±13.4km
  DEPTH = 33.0km (normal)
  4.8mb ( 6 obs.)
 NORTHERN SUMATERA                (706)

PPI     4.00 129 eP    01 34.00  -2.3
IPM     4.45  56 ePd   01 44.10   1.4
       0.8s   207.90nm
                e      03 45.50
KGM     6.01  91 eP    02 10.50   5.8X
CHG    16.68   5 eP    04 28.00  -0.8
CHTO   16.68   5 eP    04 28.20  -0.5
       0.6s     1.26nm          3.2mb X
HYB    23.89 311 eP    05 51.00   3.4X
       1.0s   230.00nm          5.7mb
BJI    41.46  22 eP    08 21.00  -0.1
       0.8s    98.00nm          5.6mb
WB5    42.42 123 eP    08 29.80   0.5
WRA    42.43 123 P     08 33.00   3.6X
       0.5s     3.10nm          4.3mb
FORR   43.97 141 eP    08 43.70   2.0
MAIO   48.75 319 eP    09 20.00   0.4
BCAO   78.65 274 ePd   12 37.00   0.1
       1.6s    13.00nm          4.7mb
                ic     13 51.00
SLL    85.21 330 ePKP  13 13.90   3.9X
       0.7s     3.10nm          4.6mb
NB2    86.27 331 P     13 14.80  -0.5
       1.0s     4.10nm          4.6mb
     S.D. = 1.3  on  10 of  14 obs.
---------------------------------------
   JUN 01, 1990 01h 22m 11.59± 0.11s
   35.522 N ± 2.6km  140.339 E ± 2.6km
   DEPTH = 67.0km (geophysicist)
   5.7mb ( 92 abs.)
 NEAR EAST COAST OF HONSHU, JAPAN(228)
      Ms 5.8 (BRK), 5.7 (PAS). Felt
      (IV JMA) at Choshi and and
      Chiba; (III JMA) in the Tokyo-
      Yokohoma area, Utsunamya and
      Mito (II JMA) at Kofu and
      Fukushima; (I JMA) at Sendai.
      Depth fram braadband
      displacement seismograms.
      FAULT PLANE SOLUTION: P-Waves
       NP1:Strike=323 Dip=72 Slip=  90
       NP2:      143     18        90
       Principal Axes:
        T              Plg=63  Azm=233
        P                27       53
      Comment: The focal mechanism is
        poorly controlled and
        corresponds to reverse
        faulting. The preferred fault
        plane is NP2.
      RADIATED ENERGY
       No. of sta:   4  Focal mech.  M
       Energy        1.1±0.5*10**13 Nm
      MOMENT TENSOR SOLUTION
      Dep  56          No. of sta: 21
      Moment Tensor;   Scale 10**18 Nm
        Mrr= 1.20      Mtt=-0.50
        Mff=-0.70      Mrt=-0.91
        Mrf= 1.44      Mtf= 0.59
       Principal axes:
        T  Val= 2.09  Plg=62  Azm=242
        N      -0.01     4       145
        P      -2.08    27        53
      Best Double Couple:Mo=2.1*10**18
       NP1:Strike=134 Dip=18 Slip=  78
       NP2:      326    72        94
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.8.: 13S, 34C
      Centroid Location:
      Origin Time      01:22:13.7 0.2
      Lat 35.51N 0.03 Lon 140.70E 0.03
      Dep  30.2 1.9 Half-duration  4.0
      Moment Tensor;   Scale 10**18 Nm
        Mrr= 1.59 0.04  Mtt= 0.19 0.05
        Mff=-1.78 0.06  Mrt= 0.03 0.09
        Mrf= 1.98 0.15  Mtf=-0.66 0.05
       Principal Axes:
        T  Val= 2.53  Plg=64  Azm=256
        N       0.29    10        8
        P      -2.82    24       103
      Best Double Couple:Mo=2.7*10**18
       NP1:Strike=214 Dip=23 Slip= 118
       NP2:          4     70        79

MAT     2.00 301 iPd   22 44.60   0.8
                eS     23 13.00
SHK     6.36 263 iP    23 47.70   2.9X
       0.8s   417.91nm          6.0mb
SAP     7.57   6 eP    23 59.00  -2.4
                eS     25 19.00
MDJ    12.25 321 Pc    25 05.00   0.0
     Z  25s    44.30um
     N  12s    21.80um
                ePP    25 10.00
                eSP    25 20.00
                S      27 25.00
                sS     27 38.00
CN2    14.12 310 iPc   25 28.00  -1.6
       1.0s   200.00nm          5.5mb
     Z  22s    44.00um
     N  13s    13.00um
     E  11s    10.00um
                PP     25 41.00
                S      28 11.00
SNY    14.52 301 iPc   25 35.60   0.8
       1.0s   400.00nm          5.7mb
     Z  27s    57.10um
     N  14s    15.50um
     E  17s    21.90um
                pP     25 40.00
                PP     25 48.00
DL2    15.28 288 iPc   25 48.00   3.3X
     Z  25s    57.20um
     N  12s    13.50um
     E  14s    20.70um
                pP     26 01.00
SSE    16.60 260 iPc   26 02.00   0.6
       2.0s   490.00nm          5.3mb
     Z  20s    47.80um
                sP     26 20.00
                sS     29 24.00
NJ2    18.19 265 Pc    26 20.00  -0.9
       8.0s  6000.00nm          5.8mb X
     Z  24s    18.90um
     N  14s    18.40um
     E  11s     7.70um
                sP     26 37.00
TIA    18.82 279 Pc    26 27.00  -1.6
       1.4s   400.00nm          5.5mb
     N  15s    17.40um
     E  15s    19.10um
ANP    19.20 243 iP    26 31.60  -1.4
                iS     30 34.00
TATO   19.35 242 ePc   26 30.22  -4.2X
BJI    19.60 291 iPc   26 34.31  -2.7
       8.0s  5190.00nm          5.9mb X
     N  17s    21.40um
                epPd   26 49.54  78kmX
OZH    21.50 247 iPc   26 54.50  -2.0
       0.8s   200.00nm          5.5mb
     Z  26s    38.90um          5.7MszX
     N  15s     9.20um
     E  15s    14.00um
                sP     27 19.00
PJG    22.22 168 eP    27 03.30  -0.4
GUMO   22.22 168 eP    27 03.00  -0.7
       1.2s  2138.89nm          6.5mb
GUA    22.27 168 eP    27 03.50  -0.8
       1.3s  2538.46nm          6.5mb
                pP     27 10.70  26kmX
                eS     31 02.50
WHN    22.32 265 Pc    27 04.50  -0.1
       7.0s  4300.00nm          6.0mb X
     Z  24s    24.50um          5.5MszX
     E  16s    35.60um
                sP     27 23.00
                S      31 01.00
TIY    22.47 284 Pc    27 04.50  -1.7
     Z  24s    47.60um          5.8MszX
     N  13s    14.10um
     E  17s    25.90um
                sS     31 29.00
HHC    23.18 292 Pc    27 10.50  -2.6
     Z  29s    31.10um          5.6MszX
     N  12s     8.30um
     E  11s     7.00um

BTO    24.34 291 P     27 22.00  -2.3
     N  15s    14.00um
     E  13s     9.00um
                sP     27 41.00
                PP     28 02.00
                S      31 42.00
XAN    25.79 276 iP    27 37.50  -0.5
       7.0s  4200.00nm          6.1mb X
     N  18s    26.20um
     E  20s    32.50um
                S      32 02.00
BAG    25.94 228 eP    27 36.00  -3.6X
HKC    26.33 247 iP    27 44.00   1.1
GZH    26.51 249 Pc    27 45.00   0.4
     Z  19s    31.20um          5.9Msz
     N  17s    18.80um
     E  17s    25.30um
                S      32 15.00
OCP    27.05 225 eP    27 47.80  -1.7
LZH    29.50 282 iPc   28 10.89  -0.8
       1.6s   580.00nm          6.0mb
     Z  25s    44.50um          6.0MszX
     E  16s    17.40um
                ipPd   28 26.94  67kmX
                PP     29 12.00
                PcP    31 17.30
                S      32 59.00
GYA    30.13 262 iPc   28 16.60  -0.7
       1.0s   100.00nm          5.5mb
     N  13s     9.20um
     E  13s     8.00um
                PP     29 16.00
                S      33 08.00
CD2    30.83 272 P     28 22.20  -1.2
       0.8s   100.00nm          5.6mb
     Z  18s    21.50um          5.8Msz
     N  15s    38.60um
                pP     28 38.00  65kmX
                PP     29 27.50
                sS     33 52.60
DAV    31.38 209 eP    28 25.00  -3.2X
QIZ    31.52 247 Pc    28 28.50  -1.0
     N  15s    12.20um
     E  14s     6.20um
GTA    32.21 289 P     28 34.40  -1.1
       8.0s  2300.00nm          6.1mb X
     Z  30s    41.50um          5.9MszX
     E  20s    19.40um
                pP     28 50.00  64kmX
                PP     29 42.00
                S      33 42.00
                sS     34 04.00
KMI    33.89 263 iPc   28 49.21  -1.1
       2.0s   400.00nm          6.0mb
     Z  24s    28.10um          5.9MszX
                ipPd   29 06.43  71kmX
                iPP    30 05.80
                iHPP   30 06.63
                ePcP   31 22.77
                eS     34 13.00
ADK    34.53  48 e(P)  28 53.40  -1.8
KKM    36.78 223 eP    29 13.50  -1.2
TSM    37.33 219 eP    29 18.50  -0.6
LOE    38.69 252 eP    29 30.00  -0.6
CHG    40.09 257 eP    29 42.90   0.7
       1.1s    51.90nm          5.3mb
                eS     36 24.00
CHTO   40.09 257 iPc   29 41.84  -0.4
                ipPd   29 58.89  69kmX
                eHPP   31 16.08
                ePP    31 17.46
WMO    40.77 298 iPc   29 48.72   1.1
       7.0s  5500.00nm          6.5mb X
     Z  25s    18.00um          5.8MszX
     N  15s     8.00um
                ipPd   30 04.94  64kmX
                ePcP   31 43.49
BDT    40.91 255 eP    29 50.20   1.3
       1.0s   172.50nm          5.8mb
NST    40.94 252 eP    29 49.20   0.1
LSA    41.50 276 P     29 56.50   2.3
       5.0s  2100.00nm          6.2mb X
     Z  17s     8.70um          5.7MszX
     N  14s     2.20um
     E  17s     3.90um
                pP     30 12.00  61kmX
                sP     30 18.00
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01d 01h

			S	36	01.00	
NNT	43.12	248	eP	30	09.30	2.3
SDN	44.47	44	eP	30	15.20	-2.3
PMG	45.15	170	eP	30	23.50	0.2
SNG	46.02	242	ePc	30	27.50	-2.8
	0.7s	84.93nm				5.8mb
			eS	37	14.00	
TTA	47.16	34	eP	30	38.80	0.0
IPM	47.54	239	ePd	30	43.70	1.4
	1.1s	115.30nm				5.7mb
			e	31	16.00	
KGM	47.85	234	ePd	30	45.90	1.3
HNR	48.39	154	eP	30	49.00	0.2
IMA	48.43	30	eP	30	47.80	-0.9
	1.3s	89.60nm				5.6mb
KSH	50.25	295	P	31	04.00	0.9
Z	25s	19.90um				6.0MszX
E	13s	7.20um				
TRT	50.30	217	ePd	30	59.00	-4.4X
PMR	50.36	36	eP	31	02.30	-1.0
	1.3s	226.40nm				6.0mb
FBA	50.84	32	eP	31	06.00	-1.0
PPI	51.62	235	eP	31	15.00	1.5
TOA	51.72	35	eP	31	13.90	0.1
KNA	52.16	194	eP	31	16.30	-1.1
HON	55.23	87	P	31	50.00	9.8X
Z	22s	4.72um				5.5Msz
WB5	55.39	187	iPc	31	39.70	-1.4
			e	39	19.30	
			eS	39	26.10	
WRA	55.45	187	Pc	31	42.20	0.6
	1.2s	221.40nm				6.1mb
CTA	55.59	173	iPc+	31	41.10	-1.4
	1.4s	139.53nm				5.8mb
			iS	39	21.00	
CTAO	55.59	173	iPc	31	40.75	-1.8
			ePcP	32	43.44	
QIS	55.77	181	eP	31	42.00	-1.9
			e	31	47.00	
INK	56.13	27	ePc	31	43.60	-2.3
	0.9s	60.00nm				5.6mb
SIT	58.10	40	eP	32	00.20	0.2
MBC	58.22	16	eP	31	59.00	-1.6
	1.0s	72.00nm				5.8mb
POO	60.56	273	iPc	32	15.80	-1.8
QUE	60.57	288	iPc+	32	17.50	-0.2
			eS	40	27.00	
QLP	61.88	176	eP	32	26.00	-0.1
KBS	62.00	350	iPc	32	25.40	-1.1
RMQ	62.19	171	iPc	32	27.60	-0.6
	1.1s	134.00nm				6.0mb
NANU	62.37	206	eP	32	29.50	0.1
DZM	62.39	153	iPc	32	30.70	1.0
WARB	62.72	194	iPc	32	31.70	-0.1
MAIO	63.53	297	iPc+	32	37.80	0.6
	0.9s	19.18nm				5.1mb
			eS	41	04.00	
BRS	63.67	168	iP	32	37.50	-0.5
			i	32	43.00	
			eS	41	13.00	
KEV	64.55	339	ePc	32	41.76	-1.5
	0.8s	55.70nm				5.6mb
			ipPd	32	57.98	60kmX
			eHPP	35	02.19	
			ePP	35	02.74	
			iS	41	17.81	
			esS	41	36.35	
MEKA	65.15	201	eP	32	47.40	-0.2
YKA	65.55	30	eP	32	48.20	-1.6
	1.1s	37.50nm				5.3mb
SOD	66.02	337	iP	32	51.60	-1.1
KTK1	66.07	339	ePc	32	55.10	2.1
COO	66.64	169	eP	32	57.00	-0.1
TRO	66.86	341	eP	32	58.04	0.0
FORR	67.02	191	eP	32	58.50	-0.9
	0.4s	103.00nm				6.1mb
STK	67.06	179	iPc	32	59.40	-0.2
	1.0s	19.00nm				5.0mb
			eS	41	35.50	
DAG	67.21	355	iPc+	32	58.10	-2.1
	1.2s	109.38nm				5.7mb
Z	21s	2.29um				5.4Msz
N	20s	1.56um				
E	19s	1.25um				
PGC	68.01	45	eP	33	05.00	-0.6
MRWA	68.36	203	eP	33	07.50	-0.4
	0.4s	13.00nm				5.2mb

COOL	68.48	198	eP	33	08.00	-0.6
SUF	68.94	333	iP	33	10.30	-0.8
GMW	68.94	46	P	33	11.00	-0.4
BMW	69.21	47	P	33	13.20	0.0
LOF	69.32	341	ePc	33	13.23	-0.1
BAL	69.43	202	eP	33	14.00	-0.4
TEH	69.61	300	eP	33	20.00	4.2X
PNT	69.86	43	ePc	33	16.00	-1.0
	1.3s	83.00nm				5.5mb
LON	69.92	46	P	33	17.40	-0.1
BWA	69.99	173	eP	33	18.50	0.7
KLB	70.05	200	eP	33	17.00	-1.2
ADE	70.14	181	eP	33	19.50	0.8
	1.0s	50.00nm				5.4mb
MUN	70.86	202	eP	33	34.00	10.9X
NUR	70.87	332	iP	33	22.00	-0.9
	0.5s	46.30nm				5.7mb
			eS	42	32.00	
CAN	70.94	173	eP	33	25.00	1.4
EDM	71.07	38	ePc	33	23.00	-1.3
DPW	71.42	44	P	33	26.50	-0.1
JNW	71.43	350	iP	33	26.90	0.8
FHC	71.62	53	ePc	33	28.70	0.9
NEW	71.82	43	P	33	28.50	-0.4
SHI	71.84	294	iPc	33	30.00	0.6
TAB	71.93	304	iP+	33	31.00	1.1
BFD	72.36	178	eP	33	33.00	1.1
	1.1s	41.00nm				5.3mb
NSS	72.39	339	iP	33	31.82	0.0
RKG	72.59	200	eP	33	39.00	5.6X
WDC	72.68	52	iPc	33	34.20	0.2
TOO	72.88	176	eP	33	37.00	2.0
KER	73.33	300	ePc	33	38.00	-0.1
MIN	73.40	52	ePc	33	38.00	-0.4
SES	73.88	39	eP	33	40.00	-0.9
	1.5s	285.00nm				6.0mb
ORV	73.90	53	ePc	33	40.90	-0.2
UPP	73.93	334	iP	33	39.90	-0.9
			iS	43	06.00	
RGS	73.97	339	eP	33	44.00	2.9X
BRK	74.31	55	ePc	33	43.60	0.1
Z	20s	6.00um				5.9Msz
			eScS	43	16.00	
			eLR	56	06.00	
BKS	74.32	55	ePd	33	43.50	-0.1
	1.0s	117.00nm				5.8mb
Z	20s	7.00um				6.0Msz
N	20s	1.80um				
E	20s	5.00um				
			eS	43	14.00	
			eLQ	53	00.00	
			eLR	56	06.00	
PCC	74.43	55	ePc	33	44.00	-0.2
GCC	74.94	55	e(P)	33	47.20	0.0
MHC	75.01	55	ePc	33	47.80	0.0
GDH	75.04	5	ePd	33	46.00	-1.1
	1.1s	78.48nm				5.6mb
			i	43	22.00	
ARN	75.08	55	P	33	48.60	0.6
HFS	75.10	335	eP	33	46.70	-1.0
	0.7s	41.30nm				5.5mb
MOL	75.17	339	ePd	33	48.96	1.0
NB2	75.24	337	P	33	48.00	-0.5
	0.9s	78.60nm				5.6mb
FFC	75.45	32	iPc	33	48.00	-1.7
	1.0s	118.00nm				5.8mb
SAO	75.46	55	eP	33	49.90	-0.3
CMB	75.46	54	iPc	33	50.60	0.4
PRS	75.75	56	ePc	33	52.10	0.3
LRM	75.84	44	eP	33	51.60	-0.9
LLA	75.88	55	eP	33	52.80	0.2
PRI	76.33	55	ePc	33	55.80	0.6
KVN	76.37	52	P	33	56.10	0.6
FRI	76.49	54	ePc	33	55.90	0.0
PHAM	76.68	56	P	33	57.90	0.9
HPI	76.72	46	P	33	58.20	0.7
BCH	77.25	56	P	34	01.10	0.7
TNP	77.49	52	P	34	02.20	0.4
BER	77.56	339	eP	34	01.80	0.4
AKU	77.74	351	iP	34	03.80	1.6
	1.1s	81.01nm				5.6mb
IAS	78.02	320	eP	34	02.00	-2.1
ABL	78.03	56	P	34	05.60	0.8
KAS	78.13	313	eP	34	04.00	-1.0
BSD	78.36	331	iPc	34	05.80	-0.1
	0.6s	75.00nm				5.8mb
FRB	78.44	13	eP	34	05.00	-1.1

	1.1s	96.00nm				5.7mb
CLC	78.56	54	eP	34	07.00	-0.4
CLI	78.57	320	ePc	34	01.00	-6.3X
PPE	78.61	319	eP	34	07.50	0.1
PTT	78.80	320	eP	34	12.00	3.5X
CFR	78.98	318	eP	34	11.00	1.5
DUG	79.00	48	P	34	11.00	1.1
	1.1s	49.34nm				5.4mb
SBB	79.06	55	eP	34	10.00	-0.2
PAS	79.14	56	eP	34	11.00	0.4
			eSKS	44	03.00	
			eS	44	13.00	
			ePS	44	44.00	
			eSS	48	27.00	
			eSSS	52	43.00	
			eLg	54	33.00	
			eLR	57	50.00	
MJMA	79.27	294	iPc	34	11.30	-0.2
VRI	79.31	319	ePd	34	13.50	2.2
BW06	79.34	45	P	34	12.30	0.5
BRD	79.37	319	eP	34	07.50	-4.1X
			e	43	54.00	
GSC	79.38	54	eP	34	12.00	0.0
TLB	79.43	318	eP	34	13.00	1.1
BBTK	79.66	312	iPc+	34	14.00	0.6
REY	79.68	352	iP	34	16.70	3.8X
RVR	79.77	56	eP	34	14.00	0.1
KRA	79.85	326	ePc	34	14.40	0.3
	1.0s	143.00nm				5.9mb
Z	20s	7.20um				6.0Msz
E	20s	6.40um				
			e	34	17.20	
			i	34	22.10	
			e	37	17.00	
			eS	44	13.00	
ISR	79.88	319	eP	34	16.00	1.6
PSN	79.93	317	iPd	34	16.00	1.4
MLR	79.97	319	eP	34	16.00	1.0
SPC	80.32	325	eP	34	16.50	-0.3
			i	37	22.40	
MSU	80.42	49	P	34	18.90	1.2
PLM	80.49	56	eP	34	18.00	0.0
TPC	80.59	55	eP	34	18.00	-0.4
BUC	80.60	319	eP	34	19.00	0.9
CMP	80.60	320	ePc	34	13.00	-5.2X
CPE	80.61	56	eP	34	19.60	1.2
GPA	80.86	313	eP	34	20.00	0.3
KSP	80.92	328	iP	34	19.50	-0.2
	1.0s	88.00nm				5.6mb
			id	37	26.00	
BAR	81.01	56	eP	34	21.00	0.4
BRN	81.05	330	ePc	34	21.00	0.7
BHL	81.42	306	Pc	34	24.00	1.2
			S	44	32.00	
QTFJ	81.43	303	Pc	34	23.80	1.0
RSSD	81.54	41	P	34	22.50	-0.9
HRI	81.75	305	iPc	34	26.00	1.5
ALT	81.76	312	eP	34	24.60	0.2
PVL	81.80	318	eP	34	22.00	-2.4
AFIF	81.84	294	iPc	34	27.80	2.7
BRG	81.90	329	iPc	34	24.60	-0.2
	1.6s	85.00nm				5.5mb
N	18s	4.50um				
E	18s	6.50um				
			i	34	29.70	
			eS	44	34.00	
CLL	81.97	330	iPc	34	24.90	-0.2
	1.5s	160.00nm				5.8mb
Z	17s	5.50um				6.0MszX
			i	34	31.80	
			eS	44	35.00	
LFK	81.98	308	iP	34	25.80	0.2
GLA	82.03	55	eP	34	27.00	1.1
SHMJ	82.06	305	Pd	34	28.00	2.0
BUD	82.10	324	iP	34	26.50	0.6
BZS	82.13	322	ePc	34	26.00	-0.1
SRO	82.20	325	iP	34	27.20	0.8
TIM	82.25	322	iPc	34	28.00	1.3
CSS	82.30	308	eP	34	28.00	0.8
PRU	82.31	328	Pc	34	27.40	0.4
	1.3s	63.20nm				5.4mb
Z	14s	7.50um				6.2MszX
N	16s	3.30um				
E	16s	5.90um				
			e	34	35.00	
			PP	37	35.00	
			S	44	38.00	

MDSJ	82.38	303	Pc	34	28.40	0.6				iS	45	25.50		ORO	88.49	329	P	34	58.10	0.2
ZST	82.49	326	eP	34	28.60	0.7				iSS	51	16.00		BOB	88.54	327	P	34	58.10	0.0
SALJ	82.54	304	Pd	34	29.10	0.5				LR	16	19.50		EMS	88.57	330	ePc	34	58.20	-0.2
KHL	82.58	312	eP	34	29.00	0.3	FUR	85.09	329	iPc	34	41.90	0.7	AQU	88.57	324	P	34	59.10	0.8
KFNJ	82.64	304	Pc	34	29.80	0.8	Z	18s		7.00um			6.1Msz	BDI	88.57	326	P	34	58.10	-0.2
SNZO	82.71	155	P	34	30.00	1.1	ENN	85.17	333	ePc	34	41.00	-0.4	DUI	88.58	323	P	35	00.00	1.6
			S	44	40.00			1.1s		119.00nm			5.9mb	ORI	88.75	320	P	35	04.00	4.9X
			SS	50	12.00					e	37	53.00		LOR	88.81	332	eP	34	59.10	-0.2
VKA	82.80	326	e(P)	34	31.00	1.5	LJU	85.26	325	ePc	34	41.50	-0.5		1.2s		63.95nm			5.7mb
			i	34	32.30					e	38	06.50		AZI	88.83	323	P	35	00.00	0.6
			i	34	40.20					eS	45	04.00		SDI	88.86	323	P	34	59.10	-0.6
			i	35	16.40		MEM	85.26	333	iPc	34	41.67	-0.2	PII	88.87	326	P	34	59.40	-0.2
			i	35	23.50		VBY	85.33	325	ePc	34	40.30	-2.0	MNS	88.90	324	P	34	59.00	-0.8
			e	37	35.50		STU	85.49	330	ePc+	34	42.90	-0.2	LSD	88.97	329	P	35	00.42	0.0
KDZ	82.80	317	iPc	34	32.00	2.3		0.9s		144.54nm			6.1mb	SGO	88.98	321	P	35	00.00	-0.1
MKRJ	82.85	304	Pd	34	30.90	0.7	Z	20s		2.13um			5.5Msz	LBF	89.00	332	eP	35	00.00	-0.3
PGB	82.89	318	eP	34	31.00	0.8	CEY	85.54	325	eP	34	42.80	-0.7		1.1s		29.30nm			5.5mb
PLD	82.89	317	eP	34	31.00	0.9	VOY	85.56	326	eP	34	42.70	-1.0	LPL	89.10	329	iPc	35	01.00	0.0
PPCY	82.98	308	eP	34	31.00	0.3	FVI	85.64	327	Pd	34	43.40	-0.5		0.9s		40.95nm			5.7mb
DSI	83.01	304	eP	34	32.00	1.1	OHR	85.70	319	iP	34	44.20	-0.2	LPG	89.11	329	iPc	35	01.10	0.0
MOX	83.04	330	ePc+	34	31.50	0.7		1.2s		182.00nm			6.0mb		0.8s		34.90nm			5.7mb
	1.6s		123.00nm			5.6mb				iPcP	34	51.00		PCP	89.11	328	P	34	59.70	-1.1
Z	16s		4.10um			5.9MszX				i	35	05.10		TDS	89.11	320	P	35	05.00	4.2X
N	16s		5.30um				UCC	85.71	334	Pc+	34	45.20	1.0	SSF	89.12	332	eP	35	00.70	0.0
SOP	83.11	326	iPc	34	34.00	2.8				S	45	11.00			1.1s		47.60nm			5.7mb
LISJ	83.15	304	Pc	34	32.50	0.9				e	46	26.00		FLN	89.13	335	iPc	35	00.60	-0.1
RZN	83.16	317	iPc	34	32.00	0.2	SOTA	85.85	328	iPc	34	45.00	-0.1		1.3s		57.75nm			5.7mb
HOF	83.19	330	iPc	34	31.90	0.4		1.3s		54.90nm			5.5mb	LDF	89.15	335	iPc	35	00.60	-0.2
WIT	83.24	334	eP	34	33.00	1.3				i	34	46.20			0.7s		19.85nm			5.5mb
	1.1s		230.00nm			6.1mb				i	34	52.80		RSP	89.17	329	P	35	00.63	-0.6
BEO	83.28	322	eP	34	32.50	0.5				i	34	57.00		VAL	89.18	342	P	35	04.00	3.1X
ELL	83.35	311	eP	34	32.00	-0.7				i	38	01.40					S	45	44.00	
KHC	83.37	328	iPc	34	32.60	0.1	TRI	85.87	326	iPc	34	44.30	-0.7	CKI	89.32	328	P	35	00.90	-0.8
	1.2s		80.00nm			5.6mb				iPP	38	06.00		RMP	89.32	324	P	35	02.40	0.6
Z	15s		7.50um			6.2MszX				iS	45	27.00		SMF	89.34	332	eP	35	01.80	0.0
N	15s		3.00um							iSP	46	16.00			1.5s		112.30nm			5.9mb
E	14s		4.00um							eSS	51	08.00		RDP	89.36	324	P	35	02.10	0.1
			e	34	41.00					eSSS	54	48.00		AVF	89.40	332	iPc	35	01.90	-0.2
			S	44	50.00		GWF	85.96	331	P	34	45.55	0.1	BNI	89.50	329	P	35	03.60	0.9
VTS	83.38	319	iPc	34	34.00	1.2	SNF	85.98	334	iPc	34	45.27	-0.2	FIN	89.52	328	P	35	01.35	-1.4
WET	83.66	328	eP	34	34.50	0.5	DOU	86.20	333	Pc+	34	47.10	0.5	RRL	89.56	329	P	35	02.68	-0.5
	1.5s		154.00nm			5.8mb				e	38	08.00		GRR	89.57	335	iPc	35	03.00	0.2
GOL	83.74	45	P	34	35.40	0.5				S	45	19.00			1.1s		61.05nm			5.8mb
	1.5s		165.09nm			5.8mb	ANMO	86.23	49	P	34	48.40	1.1	GRI	89.69	320	P	35	05.80	2.2
MMB	83.78	318	iPc	34	36.00	1.3	ALQ	86.23	49	eP	34	47.00	-0.3	DOI	89.70	328	P	34	57.00	-6.6X
GLD	83.79	45	P	34	36.50	1.5		1.0s		66.75nm			5.7mb	PZZ	89.76	329	P	35	02.17	-1.8
	1.7s		402.17nm			6.2mb	Z	22s		2.78um			5.6Msz	BGF	89.79	332	eP	35	03.90	0.0
Z	22s		2.90um			5.6Msz				e	34	55.80			1.3s		65.00nm			5.7mb
WTS	83.84	333	eP	34	34.50	-0.3				e	35	02.00		ENR	89.85	328	P	35	01.65	-2.7
	0.9s		30.00nm			5.3mb	KOT	86.43	304	eP	34	48.50	0.5	STV	89.87	328	P	35	01.96	-2.5
			e	37	35.00		WLS	86.52	331	P	34	48.13	-0.1	IMI	89.90	328	P	35	03.50	-1.0
KMR	83.93	327	iP+	34	36.20	0.9	CDF	86.55	331	P	34	48.38	-0.1	LPF	89.94	335	iPc	35	05.00	0.4
			iPP	37	50.30		CTI	86.56	327	P	34	47.00	-1.6		1.1s		83.05nm			5.9mb
GRF	83.94	330	iPc	34	36.10	0.8	SLE	86.57	330	ePc	34	48.20	-0.3	PLDF	89.98	331	P	35	04.89	0.0
	1.3s		224.00nm			6.0mb	SAX	86.62	329	ePc	34	48.90	-0.2	AUTN	90.03	328	P	35	04.53	-0.8
Z	20s		5.70um			5.9Msz	FEL	86.68	330	P	34	48.75	-0.4	TOUF	90.09	328	P	35	04.53	-1.1
			e	34	43.80		OSS	86.73	328	ePc	34	49.60	0.1	AGO	90.10	332	P	35	05.61	0.2
PRNI	84.02	303	iPc	34	37.00	0.9	ECH	86.75	331	P	34	49.13	-0.3	SBF	90.13	328	eP	35	04.50	-1.1
YER	84.09	312	iP	34	38.00	1.6	DHLJ	86.81	306	Pc	34	34.00	-15.9X		1.0s		106.00nm			6.1mb
EKA	84.26	340	P	34	37.00	0.2	ZLA	86.84	330	ePc	34	49.60	-0.3	MAF	90.18	332	iPc	35	06.10	0.4
	0.6s		13.60nm			5.2mb	YRH	86.87	340	eP	34	50.00	0.1		1.3s		111.90nm			6.0mb
ESK	84.29	340	iPc	34	37.29	0.3	SCH	87.05	15	ePc	34	50.30	-0.4	MVIF	90.23	328	P	35	05.27	-0.9
			eSKSpc	44	57.39		MOF	87.05	331	P	34	50.74	-0.2	TCF	90.26	332	iPc	35	06.20	0.1
			eS	44	59.38		LLS	87.07	329	ePc	34	50.80	-0.4		1.1s		40.30nm			5.6mb
DBN	84.35	334	iP+	34	38.00	0.7	DCN	87.14	341	eP	34	52.80	1.7	REVF	90.26	328	P	35	05.27	-0.9
Z	21s		4.00um			5.8Msz	BSF	87.21	331	eP	34	51.20	-0.5	PYM	90.40	332	P	35	06.81	0.0
			ePP	37	52.00			0.9s		26.20nm			5.4mb	SOI	90.43	319	P	35	08.00	1.1
			eS	44	56.00		BBS	87.21	330	P	34	51.31	-0.3	CALN	90.45	328	P	35	06.50	-0.7
			eSS	51	20.00		VITF	87.21	331	P	34	51.21	-0.3	PGF	90.49	326	P	35	06.79	-0.5
MBH	84.45	303	iPc	34	39.00	0.8	HAU	87.24	331	iPc	34	51.40	-0.4	LSF	90.54	333	iPc	35	07.30	-0.1
VAY	84.59	318	iPc	34	39.20	0.4		0.8s		26.85nm			5.5mb	BST	90.70	337	P	35	08.54	0.5
	1.4s		292.00nm			6.1mb	SAL	87.40	327	P	34	53.60	1.1	FRF	90.71	328	eP	35	07.30	-0.9
TNS	84.64	331	ePc	34	39.00	0.1	LOMF	87.58	330	P	34	53.08	-0.4		1.0s		68.00nm			5.9mb
PTJ	84.70	325	eP	34	39.20	-0.1	MDI	87.63	328	P	34	53.00	-0.5	LBL	90.74	331	P	35	08.79	0.6
BHG	84.74	327	iPc	34	40.10	0.7	TMA	87.73	329	ePc	34	53.90	-0.4	MFF	90.86	334	iPc	35	09.10	0.3
	1.6s		241.00nm			6.0mb	RSM	87.83	325	P	34	55.50	1.0		1.1s		90.35nm			6.0mb
ZAG	84.75	325	eP	34	39.00	-0.4	ARV	87.92	325	P	34	55.40	0.3	LRG	90.92	328	iPc	35	08.50	-0.6
SKO	84.76	319	iPc	34	40.80	1.2	ECP	87.94	340	eP	34	55.30	0.3		0.9s		101.55nm			6.2mb
	1.2s		189.00nm			6.0mb	VAI	87.96	328	P	34	54.40	-0.7	LMR	90.96	328	iPc	35	08.60	-0.7
Z	16s		9.88um			6.3MszX	SFI	88.11	326	P	34	56.90	1.0		1.1s		134.30nm			6.2mb
N	15s		7.00um				MMK	88.15	329	ePc	34	56.40	-0.1	MNO	91.25	320	P	35	16.00	5.0X
E	14s		4.76um				PGD	88.21	326	P	34	57.40	0.8	RJF	91.35	332	iPc	35	11.50	0.4
			i	34	41.50		CRE	88.29	325	P	34	57.00	0.0		0.9s		50.80nm			5.9mb
			iPcP	34	48.00		DIX	88.36	329	ePc	34	57.30	-0.2	CAF	91.46	332	iPc	35	12.50	0.9
			i	35	01.00		ASS	88.38	325	P	34	57.50	0.1		1.1s		72.05nm			6.0mb
			iPP	37	59.00		MME	88.43	326	P	34	58.20	0.4	LFF	91.95	333	iPc	35	14.50	0.7
			iSKS	45	05.50		ORX	88.48	329	P	34	57.35	-0.5		1.0s		94.00nm			6.2mb

01d 01h

```
LPO     92.00 332 eP     35 14.70   0.6
        1.1s    73.25nm          6.0mb
FVM     93.05  38 P      35 18.60  -0.5
EPF     93.72 332 iPc    35 22.10   0.0
        1.0s    23.00nm          5.6mb
UYO     93.82  43 iPd    35 22.50  -0.1
CBM     94.03  19 P      35 23.90   0.5
HBVT    94.90  23 P      35 28.00   0.5
RSCP    97.32  36 P      35 36.40  -2.2
        1.4s    88.41nm          6.1mb
TOL     98.10 333 eP     35 43.00   0.9
                  ePP    39 49.00
                  eSKS   46 19.00
                  iS     47 32.00
                  eSS    54 22.00
KRI    116.29 268 ePKP   40 52.50   2.9X
                  ipP    41 56.20
LSZ    116.63 270 ePKP   40 51.00   0.7
                  i      40 58.00
BUL    118.80 265 ePKP   40 54.30   0.0
                  ipP    42 14.30
SLR    121.74 259 iPKPc  41 00.00   0.2
        1.0s    30.00nm
      Z 20s     13.30um          6.6Msz
                  i      41 07.00
BPI    122.14 259 ePKP   41 00.70   0.1
SEK    123.41 257 ePKP   41 05.00   2.1
BLF    124.89 257 ePKP   41 07.00   1.2
SPA    125.34 180 iPKPc  41 05.10  -0.3
        0.9s    30.00nm
FRS    125.84 256 ePKP   41 13.80   6.4X
TIC    126.88 315 PKP    41 10.30   0.4
KIC    126.95 315 PKP    41 10.20   0.2
SDV    127.04  40 ePKP   41 10.30  -0.1
LIC    127.23 315 PKP    41 10.90   0.4
      Z 20s     2.75um           5.9Msz
NNA    139.05  64 ePKP   41 33.50   0.6
        1.1s    27.85nm
      Z 20s     1.24um           5.7Msz
ARE    145.89  64 ePKP   41 46.00   0.9
ZOBO   148.19  60 ePKPc  41 49.39   0.3
        1.5s   260.75nm
                  ipPKPd42 03.47
                  eSKPDF45 26.56
                  LR     32 04.00
CCH    150.34  59 PKP    41 55.00   3.0X
ANT    150.90  75 e(PKP)41 57.00   4.7X
CAI    151.05 355 iPKPc  41 58.40   5.6X
SIV    152.72  50 PKP    41 55.20   0.0
                  i      42 02.60
ITR    153.34 357 ePKP   41 55.90  -0.2
                  e      42 03.40
                  e      42 11.10
                  e      42 15.10
                  e      42 31.20
LNV    153.92  96 ePKP   42 05.00   8.7X
ROCH   154.01  93 ePKP   42 06.00   9.1X
TACH   154.24  95 ePKP   42 06.50   9.6X
PEL    154.32  94 iPKPc  42 05.00   8.0X
        1.0s    25.00nm
BAO    158.84  23 ePKP   42 04.50   1.3
     S.D. = 1.0  on 367 of 398 obs.
-------------------------------------
*  JUN  01, 1990  02h 12m 03.77± 1.69s
   45.485 N ± 7.3km   26.890 E ±18.0km
   DEPTH =  10.0km  (geophysicist)
 ROMANIA                          (358)

VRI     0.40 343 iPd    12 12.00   0.0
MLR     0.67 271 iP     12 18.00   0.9
PTT     1.49 347 eP     12 35.00   4.4X
PVL     2.53 207 eP     12 45.00  -0.5
PGB     3.53 215 eP     12 59.00  -0.8
BZS     3.71 274 eP     13 01.50  -0.8
PLD     3.73 206 eP     13 10.00   7.4X
VTS     3.93 224 eP     13 06.00   0.5
KDZ     3.98 196 eP     13 08.00   1.9
RZN     4.11 203 eP     13 07.00  -1.1
     S.D. = 1.2  on   8 of  10 obs.
-------------------------------------
?  JUN  01, 1990  03h 25m 00.02± 7.41s
   14.130 S ±51.8km   76.998 W ±46.0km
   DEPTH =  33.0km  (normal)
 NEAR COAST OF PERU               (115)

PT06    0.71  65 iPc    25 14.50   0.9
                  iS     25 18.50
PT03    1.17  83 iPd    25 19.70  -0.5
                  iS     25 29.90
PT02    1.30  25 iPd    25 21.60  -0.4
                  eS     25 50.10
PT10    2.04   1 iP     25 33.60   0.8
                  eS     25 55.00
NNA     2.14   4 eP     25 33.80  -0.3
        0.4s    5.93nm
                  eS     25 57.70
PT08    2.20  12 iP     25 34.90  -0.4
                  iS     25 55.00
     S.D. = 0.8  on   6 of   6 obs.
-------------------------------------
?  JUN  01, 1990  03h 28m 20.79± 1.97s
   10.091 N ±34.1km   84.353 W ±34.0km
   DEPTH =  33.0km  (normal)
   4.3mb (  4 obs.)
 COSTA RICA                       ( 78)
      Felt strongly at Santiago de
      Puriscal. Felt throughout Costa
      Rica.

DVD     2.50 131 iPd    29 00.00   0.0
UPA     4.88 103 iPd    29 33.60  -0.2
        0.5s    56.34nm
                  S      30 28.50
YKA    56.69 344 eP     38 02.20  -1.0
        0.8s     1.70nm           4.1mb
MBC    68.77 352 eP     39 24.00   0.8
        0.9s     4.00nm           4.5mb
NB2    83.94  29 P      40 50.40   1.7
        0.8s     1.10nm           4.1mb
HFS    85.31  30 ePKP   40 54.30  -1.2
        0.8s     3.10nm           4.6mb
     S.D. = 1.4  on   6 of   6 obs.
-------------------------------------
   JUN  01, 1990  04h 45m 09.98± 0.51s
   13.822 N ± 3.6km   61.113 W ± 9.0km
   DEPTH =  10.0km  (geophysicist)
 WINDWARD ISLANDS                 ( 95)
      ML 2.9 (FDF). MD 3.3 (TRN).

SLB     0.07  87 iP     45 12.71   0.3
                  eS     45 15.15
SLW     0.26  41 iP     45 15.30  -0.2
SOA     0.45 184 iP     45 18.95  -0.1
                  eS     45 25.75
SVV     0.51 191 iP     45 20.35   0.0
SVB     0.56 194 iP     45 21.45   0.0
                  eS     45 30.72
BIM     0.69   3 eP     45 24.07   0.4
                  S      45 34.10
MVM     0.76  16 iPc    45 24.55  -0.3
                  S      45 34.00
FDF     0.91 358 eP     45 27.63   0.3
                  S      45 40.40
CRM     0.95  12 iPc    45 27.60  -0.4
                  S      45 40.30
     S.D. = 0.3  on   9 of   9 obs.
-------------------------------------
   JUN  01, 1990  04h 45m 49.85± 0.25s
    5.119 S ± 3.8km  147.722 E ± 6.0km
   DEPTH =  33.0km  (normal)
   5.4mb ( 21 obs.)  4.9Msz ( 10 obs.)
 EAST PAPUA NEW GUINEA REGION     (207)
      ML 5.7 (PMG).
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 10S, 20C
      Centroid Location:
      Origin Time        04:45:57.5 0.9
      Lat  4.33S 0.10 Lon 147.75E 0.05
      Dep  26.7 7.6 Half-duration  2.0
      Moment Tensor;   Scale 10**17 Nm
        Mrr=-0.17 0.06  Mtt=-1.77 0.10
        Mff= 1.93 0.09  Mrt= 0.53 0.20
        Mrf= 0.38 0.21  Mtf= 0.44 0.08
       Principal Axes:
        T  Val=  2.08  Plg=11  Azm=278
        N       -0.12       71       43
        P       -1.95       15      185
      Best Double Couple:Mo=2.0*10**17
       NP1:Strike=322 Dip=71 Slip=-177
       NP2:       231     87      -19

LAT     1.69 205 iPc    46 19.80   2.4
LML     1.76 204 P      45 28.53 -49.9X
MNDI    4.17 256 eP     46 57.50   4.5X
PMG     4.30 188 iPd-   46 55.00   0.4
                  eS     58 04.00
RAB     4.53  78 iPd    46 50.50  -7.4X
                  iS     47 42.00
CTA    14.95 185 iPd-   49 20.20  -0.4
        1.6s   110.00nm          4.9mb
                  iS     52 28.00
QIS    17.26 206 iPc    49 49.20  -0.8
                  e      49 53.00
MTN    18.09 244 iPd    50 01.20   0.8
GUA    18.74 351 eP     50 08.00  -0.5
        1.2s   375.00nm          5.5mb
                  eS     53 37.00
GUMO   18.80 351 eP     50 07.00  -2.2
        1.8s  1014.08nm          5.7mb
PJG    18.80 351 eP     50 07.20  -2.0
WB5    19.60 220 eP     50 17.10  -1.4
WRA    19.67 220 Pc     50 18.70  -0.5
        0.8s    40.50nm          4.8mb
RMQ    21.27 177 Pc     50 36.00   0.2
        1.0s   181.00nm          5.4mb
KNA    21.40 239 eP     50 37.00  -0.1
QLP    21.60 189 eP     50 40.00   0.9
BRS    22.67 168 iP     50 39.00 -10.7X
                  i      50 58.00
                  i      51 19.00
                  eS     54 51.00
DZM    24.75 135 iPc    51 08.00  -2.0
DAV    25.21 299 eP     51 13.00  -1.3
COO    25.63 172 eP     51 19.00   0.8
STK    27.24 191 eP     51 32.20  -0.7
        1.2s    20.00nm          4.6mb
                  iS     56 07.30
BWA    29.17 179 eP     51 50.00  -0.4
CAN    30.08 178 eP     51 57.10  -1.4
CNB    30.09 177 eP     51 58.00  -0.6
ADE    30.85 195 iPc    52 05.20  -0.1
TSM    31.04 287 ePc    52 09.00   1.9
MBL    31.40 237 eP     52 10.00  -0.3
FORR   31.56 213 iPc    52 10.80  -0.7
        0.3s    17.00nm          5.4mb
TOO    32.36 183 eP     52 18.00  -0.6
KKM    33.35 289 eP     52 26.50  -1.0
MEKA   35.12 229 iPc    52 42.30  -0.2
        0.6s    60.00nm          5.7mb
NANU   35.61 238 eP     52 46.00  -0.7
COOL   35.79 221 eP     52 47.00  -1.2
MRWA   38.40 228 iPd    53 10.20   0.1
        0.6s    81.00nm          5.7mb
KLB    38.50 223 eP     53 10.00  -0.9
BAL    38.66 225 eP     53 13.00   0.8
MUN    39.79 224 eP     53 27.00   5.3X
RKG    40.51 221 eP     53 30.00   2.5
QZH    41.18 318 eP     53 34.50   1.5
        0.6s   100.00nm          5.7mb
      Z 28s     2.10um           4.9MszX
      N 16s     1.10um
                  S      59 48.00
MAT    42.39 349 eP     53 41.00  -1.9
        2.1s   420.00nm          5.8mb
      Z 21s     1.79um           4.9Msz
                  eS     59 50.00
TCW    43.08 150 P      53 47.60  -0.9
MNG    43.24 149 P      53 48.50  -1.3
MRW    43.31 150 eP     53 51.00   0.7
CAW    43.40 150 P      53 49.80  -1.2
WDW    43.48 150 P      53 50.20  -1.5
SSE    44.04 327 Pc     53 55.00  -1.3
        1.2s    28.00nm          4.9mb
      Z 18s     1.10um           4.8Msz
      N 18s     1.50um
      E 18s     1.26um
                  pP     54 01.00  20kmX
                  S      00 32.00
QIZ    44.35 304 eP     54 00.60   1.5
      N 12s     0.90um
NJ2    46.06 325 Pc     54 15.50   3.1X
        4.5s   500.00nm          5.7mb X
      Z 22s     0.70um           4.6Msz
      N 14s     1.00um
      E 16s     1.70um
IPM    47.63 281 ePc    54 27.40   2.2
SNG    48.57 284 eP     54 32.80   0.4
                  eS     01 19.00
DL2    50.02 333 eP     54 46.50   3.3X
        1.5s    70.00nm          5.5mb
```

	Z 20s	0.70um		4.7Msz	MBC	95.63 14 eP 59 14.00 1.1
TIA	50.11 328 eP	54 42.00	-2.0		PAS	96.24 56 eP 59 23.00 6.6X
	Z 17s	0.90um		4.8MszX	SBB	96.54 56 eP 59 23.00 5.1X
	N 16s	1.40um			CLC	96.76 55 eP 59 24.00 5.2X
	E 16s	1.30um			RVR	96.89 56 eP 59 24.00 4.6X
LOE	50.63 297 eP	54 48.00	-0.2		NEW	97.23 42 eP 59 20.00 -0.6
GYA	50.65 310 P	54 51.00	2.6			1.0s 15.63nm 5.5mb
	N 18s	2.10um			TPC	98.00 56 eP 59 29.00 4.6X
	E 18s	1.80um			YKA	98.06 28 eP 59 21.70 -2.3
NNT	50.83 291 eP	54 49.60	-0.1			0.8s 12.20nm 5.5mb
NST	51.44 295 eP	54 54.50	0.1		SES	101.09 40 ePdiff59 39.00 1.0
SNY	51.65 337 Pd	54 55.00	-0.6		BW06	102.80 47 ePdiff59 50.00 3.9X
	Z 18s	2.00um	5.2Msz			1.0s 3.00nm 5.0mb
	N 18s	1.00um			ALQ	105.88 55 e(PKP)04 06.00 -6.6X
	E 18s	1.00um			SUF	108.60 336 ePdiff00 14.00 2.9X
		S	02 14.00		APO	114.70 337 ePKP 04 28.60 0.3
MDJ	52.12 344 eP	54 57.50	-1.6			0.7s 5.50nm
CN2	52.68 340 Pc	55 05.60	2.3		NB2	115.41 338 PKP 04 30.40 0.7
	Z 20s	1.50um	5.0Msz			0.9s 2.40nm
	N 13s	0.70um			FRB	115.88 17 ePKP 04 31.00 0.6
	E 13s	0.30um			SPC	117.68 324 ePKP 04 38.80 4.2X
		pP	55 13.00	24kmX	ZST	119.98 324 ePKP 04 43.20 4.5X
		eS	02 32.00		BRG	120.34 328 ePKP 04 42.70 3.4X
BDT	53.00 296 eP	55 06.50	0.5			1.0s 15.00nm
KMI	53.04 307 Pc	55 07.50	0.9		PRU	120.51 327 ePKP 04 43.50 3.8X
	Z 30s	0.80um	4.6MszX		CLL	120.59 329 ePKP 04 43.00 3.2X
		S	02 49.00		KHC	121.50 326 ePKP 04 43.00 1.3
XAN	53.47 320 P	55 07.70	-1.6		MOX	121.69 329 ePKP 04 47.00 5.1X
BJI	53.49 330 eP	55 09.00	-0.3		MEM	124.50 331 PKP 04 48.60 1.3
	1.7s 89.00nm		5.5mb		EKA	124.75 340 PKP 04 50.00 2.3
	Z 20s	1.20um	4.9Msz			0.8s 5.10nm
		eS	02 36.00		DOU	125.52 332 PKP 04 53.90 4.5X
		eSS	06 13.00		BSF	125.91 328 ePKP 04 53.60 3.2X
CHG	53.61 298 eP	55 10.90	0.4			1.1s 22.00nm
	1.0s 16.25nm		5.0mb		HAU	126.03 329 ePKP 04 53.90 3.4X
CHTO	53.61 298 eP	55 10.20	-0.3			0.9s 13.10nm
TIY	53.78 325 eP	55 06.00	-5.6X		LPL	127.39 326 ePKP 04 57.30 3.9X
	Z 23s	1.70um	5.0MszX		LPG	127.39 326 ePKP 04 57.30 3.8X
	N 16s	0.80um				1.1s 7.35nm
	E 16s	1.00um			LOR	127.79 329 ePKP 04 57.40 3.5X
		pP	55 18.00	42kmX		1.1s 12.20nm
CD2	55.19 313 eP	55 20.40	-1.6		PGF	127.80 322 ePKP 04 57.60 3.5X
HHC	56.47 328 eP	55 31.00	-0.2		LBF	127.92 329 ePKP 04 58.00 3.9X
	Z 24s	1.60um	5.0MszX		SBF	127.98 324 ePKP 04 57.50 3.1X
	N 14s	0.50um				1.2s 29.75nm
	E 13s	0.30um			SSF	128.11 329 ePKP 04 58.20 3.8X
		sP	55 40.00			1.3s 18.05nm
		PcP	56 22.00		SMF	128.21 329 ePKP 04 58.20 3.5X
		PP	57 33.00			1.2s 17.85nm
		S	03 23.00		FRF	128.62 324 ePKP 04 59.00 3.5X
		sS	03 30.00			1.4s 43.55nm
BTO	57.14 326 eP	55 34.00	-1.9		LDF	128.77 333 ePKP 04 59.40 3.8X
N	15s	0.70um				1.3s 18.05nm
E	15s	0.80um			BGF	128.78 329 ePKP 04 59.60 3.9X
		pP	55 40.50	21kmX		1.4s 15.25nm
LZH	58.02 319 Pc	55 41.00	-1.2		FLN	128.80 333 ePKP 04 59.40 3.7X
	1.5s 44.00nm		5.3mb			1.3s 21.65nm
	Z 34s	1.90um	5.0MszX		LMR	128.84 324 ePKP 04 59.50 3.6X
	N 12s	0.50um				1.3s 25.25nm
SMY	61.82 18 eP	56 10.70	2.9X		LRG	128.85 324 ePKP 04 59.80 3.9X
GTA	62.53 320 eP	56 11.20	-1.8			1.1s 34.20nm
	Z 22s	1.10um	5.0Msz		MAF	129.15 329 ePKP 05 00.70 4.2X
ADK	64.37 24 eP	56 26.80	2.1			1.3s 12.65nm
HYB	71.83 290 eP	57 11.00	-0.9		GRR	129.25 333 ePKP 05 00.60 4.1X
WMQ	72.60 319 eP	57 15.90	-0.2			1.4s 30.50nm
	Z 22s	0.50um	4.7Msz		TCF	129.29 330 ePKP 05 00.70 4.0X
SDN	73.78 28 eP	57 23.40	0.9			1.2s 14.90nm
KSH	79.31 312 P	57 56.00	1.9		LPF	129.59 333 ePKP 05 01.20 4.0X
TTA	79.96 23 eP	57 57.30	0.2			1.2s 29.75nm
PMS	81.77 26 eP	58 06.50	-0.1		LSF	129.65 330 ePKP 05 01.00 3.6X
IMA	82.48 21 eP	58 10.70	0.3		CAF	130.29 328 ePKP 05 02.90 4.2X
	1.4s 58.10nm		5.5mb			1.4s 15.25nm
FBA	84.10 23 eP	58 17.10	-1.3		RJF	130.31 329 ePKP 05 03.00 4.3X
QUE	84.61 301 eP	58 22.60	0.6		LPO	130.91 329 ePKP 05 04.20 4.4X
INK	90.58 21 eP	58 52.00	2.3		LFF	130.96 329 ePKP 05 04.40 4.5X
WDC	93.09 50 eP	59 03.50	1.7		ZOBO	138.66 122 PKP 05 16.20 0.2
		e	59 06.70			Z 24s 0.35um 5.0MszX
BRK	93.12 52 eP	59 03.50	1.5			LR 51 54.00
		e	59 06.30		CCH	139.77 125 ePKP 05 14.00 -3.7X
ORV	93.82 51 eP	59 06.30	1.1		SIV	144.62 127 PKP 05 21.60 -4.2X
		e	59 09.70		TIC	152.85 275 PKP 05 50.30 11.6X
CMB	94.61 52 eP	59 10.20	1.3		LIC	152.86 274 PKP 05 50.50 11.8X
		e	59 13.50			Z 20s 0.35um 5.2Msz
FRI	95.10 53 eP	59 12.00	0.9		BAO	154.17 143 e(PKP)05 30.00 -10.6X
		e	59 15.70			S.D. = 1.3 on 91 of 145 obs.
PNT	95.58 41 eP	59 13.00	-0.1			
	1.0s 19.00nm		5.5mb		•	JUN 01, 1990 07h 05m 52.73± 2.91s

37.497 N ±23.1km 20.712 E ±22.9km
DEPTH = 10.0km (geophysicist)
IONIAN SEA (399)
ML 3.8 (ATH).

VLS	0.69 352 ePb	06 06.00	-0.3		
ITM	1.02 108 ePb	06 12.00	0.0		
VLI	1.94 113 ePg	06 33.00	6.9X		
KEK	2.33 342 ePn	06 31.50	-0.1		
ATH	2.43 78 ePn	06 37.50	4.4X		
	eSn	07 11.50			
NEO	2.68 47 ePn	06 36.50	-0.2		
OHR	3.61 1 ePn	06 50.50	0.6		
S.D. = 0.5	on 5 of 7 obs.				

& JUN 01, 1990 07h 21m 18.17s
64.573 N 152.223 W
DEPTH = 5.0km (geophysicist)
CENTRAL ALASKA (1)
<AGS-P>.

KTH	1.17 150 eP	21 40.33	-0.3		
	eS	21 54.70			
NEA	1.36 88 eP	21 43.88	0.2		
	iS	22 00.75			
IMA	1.62 339 eP	21 46.96	-0.6		
MCK	1.67 119 eP	21 49.07	0.9		
	eS	22 09.07			
WRH	1.79 91 eP	21 47.88	-2.1		
RND	1.89 127 eP	21 53.97	2.5		
CCB	1.91 86 eP	21 49.41	-2.2		
	eS	22 12.64			
FBA	1.93 78 eP	21 50.05	-1.9		
	eS	22 15.82			
HUR	1.97 143 eP	21 55.32	2.7		
HDA	2.29 92 eP	21 59.00	1.8		
	eS	22 25.82			
CUT	2.35 157 eP	21 58.30	0.3		
TTA	2.36 227 eP	21 59.81	1.6		
	eS	22 29.12			
SKT	2.62 173 eP	22 01.71	-0.2		
DDM	2.89 103 eP	22 06.51	0.7		
PWA	3.12 159 eP	22 09.02	0.1		
NCG	3.18 179 iP	22 09.89	0.0		
	eS	22 48.47			
GHO	3.18 150 eP	22 09.69	-0.2		
SUA	3.19 167 eP	22 09.89	-0.2		
PLRM	3.31 153 eP	22 11.12	-0.5		
19 obs. assocIated					

% JUN 01, 1990 07h 55m 14.43± 0.94s
27.298 S ± 9.2km 117.637 E ±11.1km
DEPTH = 10.0km (geophysicist)
WESTERN AUSTRALIA (590)

MRWA	2.40 217 iPd	55 54.30	-0.1		
	eS	56 22.00			
KLB	4.28 179 eP	56 22.00	0.9		
COOL	4.71 140 eP	56 26.00	-1.3		
MUN	4.83 195 eP	56 38.00	9.1X		
NANU	5.09 337 eP	56 32.30	-0.2		
	eS	57 30.50			
WARB	8.13 84 eP	57 16.00	0.7		
	eS	58 42.00			
FORR	9.81 114 eP	57 33.50	-5.1X		
	eS	59 14.00			
S.D. = 1.2	on 5 of 7 obs.				

? JUN 01, 1990 08h 03m 39.73± 1.99s
30.738 S ±33.4km 69.419 W ±60.5km
DEPTH = 130.0km (geophysicist)
CHILE-ARGENTINA BORDER REGION (127)

RTRS	0.57 356 iPd	03 59.50	0.1		
RTCB	0.92 145 eP	04 02.00	-0.3		
	S	04 18.90			
RTLL	1.01 126 iPd	04 02.20	-0.8		
	eS	04 21.80			
CFA	1.33 131 iPd	04 07.20	0.8		
	eS	04 28.80			
RTCV	1.35 146 iPc	04 06.70	0.1		
	S	04 28.00			
S.D. = 0.9	on 5 of 5 obs.				

& JUN 01, 1990 08h 32m 13.32s
31.790 N 116.150 W
DEPTH = 2.0km

01d 08h

BAJA CALIFORNIA (48)
<ECX>. ML 2.2 (ECX).

ENX	0.45	282	eP	32 21.50	-0.8
			S	32 28.30	
PBX	0.49	265	iPc	32 22.10	-1.1
			S	32 29.50	
CBX	0.68	320	ePc	32 25.40	-1.5
			S	32 34.95	
EMX	0.80	75	eP	32 27.76	-1.5
			S	32 38.67	
ECBX	0.99	108	ePc	32 30.70	-2.1
			S	32 44.50	
LMX	1.06	72	ePd	32 32.10	-1.9

6 obs. associated

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* JUN 01, 1990 09h 35m 52.08± 0.85s
31.449 S ± 7.4km 68.515 W ± 6.6km
DEPTH = 10.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.12	18	iPc	35 55.10	-0.1
ZON	0.17	235	iPc	35 55.50	-0.5
			eS	35 57.00	
RTCB	0.25	261	eP	35 57.80	0.4
CFA	0.28	124	iPd	35 58.10	0.1
RTCV	0.41	183	e(P)	36 00.60	0.1

S.D. = 0.5 on 5 of 5 obs.

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* JUN 01, 1990 09h 46m 50.11± 0.80s
38.327 N ±12.6km 25.109 E ± 7.6km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
ML 3.1 (ATH).

ATH	1.15	253	ePb	47 12.00	0.3
SMG	1.50	114	ePb	47 17.50	0.5
IZM	1.69	87	ePn	47 19.50	-0.4
NEO	1.77	304	ePg	47 39.00	18.0X
EZN	1.77	32	iPn	47 21.00	0.0
VLI	2.36	228	ePb	47 29.00	-0.5

S.D. = 0.6 on 5 of 6 obs.

% JUN 01, 1990 09h 55m 03.00± 1.24s
44.450 N ±11.1km 7.378 E ± 8.4km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.9 (GEN).

PZZ	0.21	286	P	55 07.53	0.0
			S	55 09.99	
STV	0.21	191	P	55 07.63	0.0
			S	55 10.20	
ENR	0.23	172	P	55 08.35	0.4
			S	55 11.33	
FIN	0.64	112	P	55 16.25	0.3
			S	55 25.27	
IMI	0.65	146	P	55 15.32	-0.8
			S	55 23.94	

S.D. = 0.7 on 5 of 5 obs.

JUN 01, 1990 10h 02m 46.65± 1.10s
15.697 S ± 8.0km 167.938 E ± 8.0km
DEPTH = 192.5 ± 9.8 km
4.8mb (7 obs.)
VANUATU ISLANDS (186)

PVC	2.06	170	iPd	03 26.20	0.6
			iS	03 56.00	
DZM	6.50	192	iPc	04 20.90	-0.2
			iS	05 36.90	
BRS	18.26	228	iPd	06 49.00	0.6
RMQ	20.84	236	eP	07 15.20	0.6
COO	20.87	222	iPc	07 15.40	0.5
	0.7s	30.00nm		4.9mb	
PMG	21.22	285	iPd	07 19.00	0.7
	1.0s	40.00nm		4.9mb	
LAT	22.40	291	iPd	07 11.00	-18.9X
HBZ	23.67	159	eP	07 41.40	-0.5
PUZ	24.08	160	P	07 47.00	1.2
NOZ	24.50	161	eP	07 49.80	0.1
MNG	25.68	167	P	07 58.40	-2.2
LTZ	27.25	173	P	08 13.50	-1.3
WB5	32.20	258	eP	08 56.00	-2.7X
WRA	32.23	257	Pc	08 56.30	-2.6X
FORR	39.35	240	eP	09 58.20	-0.7
MBL	45.83	256	iPd	10 40.10	-11.2X
NANU	49.78	254	eP	11 20.90	-0.9
	0.6s	37.00nm		5.1mb	
MAT	59.06	332	eP	12 27.00	-1.7
	1.0s	14.00nm		4.7mb	
SSE	64.66	316	P	13 04.50	-1.5
CN2	70.80	329	Pd	13 43.00	-0.9
BJI	73.42	321	eP	13 59.00	-0.4
	1.0s	9.00nm		4.5mb	
TIY	74.40	317	Pc	14 05.50	0.2
CHG	76.06	294	eP	14 15.00	0.1
CHTO	76.06	294	iP	14 14.90	0.0
	0.8s	6.95nm		4.4mb	
LZH	79.44	312	Pd	14 33.50	0.2
	1.2s	26.00nm		4.8mb	
GTA	83.80	314	P	14 56.00	0.3
APO	131.43	343	ePKP	21 36.00	-1.2
	0.4s	2.70nm			
NB2	131.72	345	PKP	21 37.30	-0.5
	0.5s	0.70nm			
CDF	143.71	338	ePKP	21 56.80	-3.5X
	0.5s	2.90nm			
BSF	144.37	338	ePKP	21 58.50	-2.9X
	0.8s	8.05nm			
HAU	144.38	339	ePKP	21 58.50	-2.8X
	0.9s	16.40nm			
ARV	145.05	328	PKP	22 02.00	-0.6
VAI	145.22	334	PKPc	22 01.80	-0.9
SFI	145.30	329	PKP	22 03.50	0.6
PGD	145.40	329	PKPc	22 04.00	0.6
CRE	145.46	329	PKP	22 03.50	0.1
ASS	145.49	327	PKP	22 02.50	-0.9
FLN	145.68	346	ePKP	22 02.30	-1.2
	0.4s	6.85nm			
LDF	145.76	346	ePKP	22 02.60	-1.0
	0.5s	4.35nm			
BOB	145.79	332	PKP	22 03.90	0.0
BDI	145.80	330	PKPc	22 02.90	-1.0
LOR	145.86	341	ePKP	22 03.30	-0.6
	0.7s	13.25nm			
MNS	145.96	326	PKP	22 04.00	-0.2
LBF	146.07	340	ePKP	22 03.50	-0.8
	0.5s	3.65nm			
GRR	146.12	347	ePKP	22 04.10	-0.1
	0.4s	6.85nm			
SSF	146.16	341	ePKP	22 04.20	-0.1
	0.5s	14.60nm			
LPL	146.33	336	ePKP	22 05.30	0.3
	0.5s	5.10nm			
LPG	146.34	336	ePKP	22 05.30	0.2
	0.7s	11.00nm			
SMF	146.41	340	ePKP	22 04.40	-0.4
	0.7s	5.50nm			
AVF	146.44	341	ePKP	22 04.40	-0.4
	0.7s	4.40nm			
LPF	146.50	347	ePKP	22 05.30	0.5
	0.4s	10.30nm			
BNI	146.74	335	PKP	22 07.10	1.6
BGF	146.81	341	ePKP	22 06.00	0.6
	0.7s	13.80nm			
PLDF	147.08	340	PKP	22 07.93	2.0X
AGO	147.17	340	PKP	22 07.78	1.8X
MAF	147.20	341	ePKP	22 07.30	1.3
	0.8s	7.40nm			
TCF	147.25	342	ePKP	22 07.10	1.0
	0.9s	12.30nm			
SBF	147.39	333	ePKP	22 07.10	0.6
	0.8s	14.80nm			
PYM	147.48	340	PKP	22 08.70	2.1X
LSF	147.49	342	ePKP	22 07.50	1.0
	0.4s	6.30nm			
MFF	147.62	345	ePKP	22 08.00	1.3
	0.4s	5.15nm			
PGF	147.71	330	ePKP	22 08.40	1.3
	0.8s	26.85nm			
LBL	147.85	339	PKP	22 10.12	3.1X
BCAO	147.92	253	iPKPd	22 09.00	0.9
	1.0s	75.00nm			
FRF	147.97	334	ePKP	22 08.80	1.5
	0.7s	9.90nm			
LRG	148.18	334	ePKP	22 09.50	1.9X
	0.7s	8.80nm			
LMR	148.22	334	ePKP	22 09.40	1.7
	0.7s	8.80nm			
RJF	148.35	342	ePKP	22 10.00	2.1X
CAF	148.51	341	ePKP	22 10.60	2.4X
	5.4s	0.30nm			
LPO	149.01	341	ePKP	22 12.00	3.1X
	0.3s	3.40nm			
EPF	150.76	341	ePKP	22 17.10	5.4X
	0.5s	2.90nm			

S.D. = 0.9 on 55 of 71 obs.

? JUN 01, 1990 10h 10m 15.20± 7.26s
45.493 N ±15.1km 2.636 E ±53.5km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
MD 1.5 (STR).

PYM	0.37	45	Pg	10 22.63	-0.1
			Sg	10 27.18	
LBL	0.50	121	Pg	10 25.36	0.0
			Sg	10 31.84	
AGO	0.66	32	Pg	10 28.31	0.0
PLDF	0.84	55	Pg	10 31.61	0.2
			Sg	10 42.15	

S.D. = 0.2 on 4 of 4 obs.

& JUN 01, 1990 10h 28m 59.44s
64.645 N 152.210 W
DEPTH = 5.0km (geophysicist)
CENTRAL ALASKA (1)
<AGS-P>.

KTH	1.23	152	eP	29 21.60	-1.3
			eS	29 35.89	
NEA	1.35	91	eP	29 23.79	-1.1
			eS	29 42.00	
IMA	1.56	337	eP	29 28.19	0.2
			eS	29 47.21	
MCK	1.70	121	eP	29 30.59	0.6
WRH	1.79	94	eP	29 29.30	-1.9
			eS	29 54.42	
CCB	1.90	88	eP	29 30.78	-1.9
FBA	1.91	80	eP	29 31.51	-1.4
RND	1.93	129	iP	29 35.33	2.0
HUR	2.03	145	eP	29 36.69	2.0
HDA	2.29	94	eP	29 38.05	-0.3
TTA	2.41	226	eP	29 39.28	-1.0
SKT	2.69	173	iP	29 42.98	-1.2
PWA	3.19	160	iP	29 50.49	-0.6
GHO	3.25	151	eP	29 50.87	-1.2
SUA	3.26	168	eP	29 51.03	-1.3

15 obs. associated

? JUN 01, 1990 10h 29m 37.58± 1.02s
4.244 N ±16.8km 128.281 E ±28.4km
DEPTH = 160.0km (geophysicist)
4.9mb (6 obs.)
NORTH OF HALMAHERA (264)

MTN	17.21	171	eP	33 27.30	-2.7
WB5	24.71	166	eP	34 47.00	1.4
WRA	24.76	166	Pc	34 47.40	1.3
SSE	27.53	347	P	35 10.00	-1.2
	1.5s	21.00nm		4.6mb	
LOE	29.12	299	eP	35 25.00	-0.6
CHG	32.10	299	iPc	35 52.00	0.2
	0.8s	15.30nm		4.8mb	
CHTO	32.10	299	iPc	35 51.90	0.1
	0.7s	13.98nm		4.9mb	
			pP	36 25.00	156kmX
LZH	38.07	328	iPc	36 52.00	2.9X
	2.0s	76.00nm		5.1mb	
GUN	46.69	305	P	37 53.00	0.4
	0.8s	28.00nm		4.9mb	
PKI	46.95	304	P	37 54.40	-0.3
GKN	47.74	304	P	38 00.40	-0.2
MAIO	70.44	307	eP	40 38.00	1.3
HFS	98.28	333	eP	42 58.00	0.3
	0.7s	2.50nm		4.8mb	

S.D. = 1.3 on 12 of 13 obs.

? JUN 01, 1990 10h 31m 27.76± 5.71s
44.036 N ±33.6km 6.423 E ±29.3km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.2 (LDG).

FRF	0.50	161	Pg	31 37.80	-0.1
			Sg	31 46.60	
LRG	0.58	184	Pg	31 39.20	-0.4
			Sg	31 49.20	
LMR	0.71	175	Pg	31 42.20	0.5
			Sg	31 53.40	

SBF	0.75	103	Pg	31	42.50	0.0	
			Sg	31	53.90		
S.D. = 0.7 on 4 of 4 obs.							

JUN 01, 1990 10h 59m 24.61± 0.56s
6.004 S ± 5.9km 76.931 W ±14.2km
DEPTH = 10.0km (geophysicist)
4.1mb (1 obs.)
NORTHERN PERU (111)

TUNG	4.80	342	P	00	39.80	0.8	
			IS	01	35.50		
VC1	5.53	345	P	00	50.60	1.1	
			eS	01	53.20		
PT08	5.93	176	IP	00	55.00	0.0	
			IS	02	03.40		
NNA	5.95	179	IP	00	54.90	0.0	
	0.7s	17.12nm			4.9mb	X	
			eS	01	59.50		
PT10	6.03	180	ePd	00	56.50	0.4	
			e(S)	02	04.80		
CAYA	6.13	350	eP	00	57.70	-0.3	
COTA	6.45	347	eP	01	07.70	5.2X	
PT02	6.91	176	eP	01	07.30	-1.2	
			eS	02	21.80		
PT06	7.80	176	IP	01	22.10	1.2	
			IS	02	25.60		
ZOBO	13.36	140	P	02	37.00	-0.5	
	Z 22s	0.24um					
			LR	08	26.00		
LPB	13.58	141	P	02	41.00	0.8	
			e	06	19.00		
SIV	18.45	124	P	03	42.00	-0.2	
KIC	73.09	82	P	10	58.00	0.4	
YKA	74.13	343	eP	11	00.20	-2.5	
	0.4s	0.80nm			4.1mb		
S.D. = 1.1 on 13 of 14 obs.							

JUN 01, 1990 11h 00m 23.11± 0.18s
15.985 N ± 4.5km 147.391 E ± 3.6km
DEPTH = 34.9km (5 depth phases)
5.1mb (26 obs.) 4.4Msz (5 obs.)
MARIANA ISLANDS REGION (215)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 17C
Centroid Location:
Origin Time 11:00:25.0 1.6
Lat 15.44N 0.22 Lon 147.57E 0.09
Dep 15.0 FIX Half-duration 1.5
Moment Tensor; Scale 10**16 Nm
Mrr=-2.91 0.38 Mtt=-0.27 0.52
Mff= 3.19 0.40 Mrt= 0.00 0.00
Mrf= 0.00 0.00 Mtf=-0.36 0.44
Principal Axes:

	Val=	Plg=	Azm=
T	3.23	0	264
N	-0.31	0	174
P	-2.91	90	180

Best Double Couple:Mo=3.1*10**16
NP1:Strike=354 Dip=45 Slip= -90
NP2: 174 45 -90

GUMO	3.41	226	eP	01	15.50	0.2	
GUA	3.42	225	eP	01	14.60	-0.7	
			eS	01	51.70		
RAB	20.60	166	e(P)	05	02.00	0.0	
MAT	22.04	340	eP	05	15.00	-1.5	
	0.7s	25.34nm			4.8mb		
			eS	09	09.00		
PMG	25.23	181	eP	05	48.00	0.5	
QCP	25.41	271	eP	05	30.00	-19.2X	
BAG	25.75	275	eP	05	55.00	2.4	
SSE	28.24	307	eP	06	14.50	-0.6	
MDJ	32.26	336	eP	06	52.50	1.9	
MTN	32.85	210	eP	06	55.30	-0.6	
CN2	33.41	331	eP	07	02.40	1.8	
	Z 18s	0.60um			4.4Msz		
WHN	33.49	302	eP	07	00.00	-1.4	
QIZ	35.89	280	eP	07	23.60	1.4	
			eS	13	02.00		
BJI	36.21	318	eP	07	23.00	-1.6	
	1.5s	20.00nm			4.8mb		
	Z 24s	0.64um			4.3MszX		
			ePP	08	52.00		
QIS	37.11	192	eP	07	30.00	-2.3	
WB5	37.87	200	eP	07	38.90	0.2	
			i	07	48.80	34km	
WRA	37.94	200	Pd	07	43.10	3.8X	
	0.8s	10.50nm			4.8mb		
GYA	39.22	292	P	07	51.00	0.8	
			pP	08	01.60	37km	
			S	13	51.00		
BTO	40.59	315	eP	08	01.50	0.2	
DZM	42.18	153	iPd	08	24.00	9.6X	
CD2	42.42	298	eP	08	16.00	-0.4	
KMI	42.62	290	Pc	08	19.50	1.2	
	2.0s	100.00nm			5.2mb		
	Z 20s	0.50um			4.4Msz		
			PP	08	26.00		
			eS	14	35.00		
LZH	43.52	306	Pd	08	25.00	-0.4	
	2.0s	100.00nm			5.2mb		
	Z 20s	0.50um			4.4Msz		
			pP	08	35.00	34km	
			sP	08	40.50		
			eS	14	53.00		
LOE	43.68	279	eP	08	28.00	1.3	
NST	45.39	276	eP	08	41.00	0.6	
ADK	45.77	30	e(P)	08	43.00	0.0	
CHG	46.21	281	eP	08	47.00	0.1	
CHTO	46.21	281	eP	08	47.00	0.1	
	0.6s	8.42nm			4.9mb		
BDT	46.29	279	eP	08	48.20	0.7	
WARB	46.52	206	iPc	08	48.50	-0.7	
SNG	46.56	265	eP	08	50.80	1.1	
IPM	46.90	261	ePd	08	54.10	1.7	
GTA	47.49	309	P	08	56.40	-0.6	
	Z 18s	0.90um			4.8Msz		
LSA	53.13	295	P	09	41.30	0.8	
SDN	55.80	33	eP	09	57.90	-1.1	
WMQ	57.31	312	iPc	10	09.60	-0.5	
	1.5s	50.00nm			5.3mb		
	Z 20s	0.40um			4.5Msz		
			S	18	05.00		
GUN	57.76	293	P	10	13.00	-0.9	
PKI	58.19	293	P	10	15.60	-1.2	
GKN	58.86	293	P	10	20.40	-0.9	
TTA	60.95	26	eP	10	34.40	-0.6	
IMA	63.11	23	eP	10	49.10	-0.3	
	1.2s	19.50nm			5.1mb		
PMR	63.53	29	eP	10	50.60	-1.4	
	1.2s	43.00nm			5.4mb		
TOA	65.02	28	eP	11	02.00	0.1	
FBA	65.03	25	eP	11	00.60	-1.2	
INK	71.23	23	eP	11	39.50	-0.9	
	1.0s	31.00nm			5.3mb		
QUE	74.03	297	eP	11	57.40	-0.4	
MBC	75.36	14	ePc	12	05.00	0.5	
	1.0s	13.00nm			4.9mb		
MCW	78.03	43	P	12	20.40	0.6	
GMW	78.27	44	P	12	21.50	0.3	
FHC	78.72	51	ePc	12	27.30	3.5X	
SHW	78.90	45	P	12	25.50	0.7	
YKA	79.62	28	eP	12	27.50	-0.6	
	0.8s	15.50nm			5.0mb		
WDC	79.84	51	ePc	12	30.20	0.4	
			e	12	41.30	36km	
PNT	79.98	42	ePc	12	31.00	0.6	
	0.9s	18.00nm			5.1mb		
NWRM	80.03	53	P	12	30.90	0.1	
MIN	80.58	51	ePc	12	33.90	-0.1	
BRK	80.64	53	eP	12	34.50	0.4	
BKS	80.66	53	ePc	12	34.50	0.3	
ORV	80.84	52	ePc	12	35.40	0.2	
DPW	81.22	43	P	12	37.10	0.0	
MHC	81.24	54	ePc	12	38.10	0.6	
ARN	81.32	54	P	12	38.00	0.2	
PRS	81.68	55	ePc	12	40.20	0.6	
NEW	81.83	42	P	12	40.20	0.0	
	1.0s	33.13nm			5.3mb		
LLA	81.95	54	ePc	12	41.70	0.7	
CMB	82.04	53	ePc	12	42.10	0.6	
			e	12	52.80	34km	
PRI	82.28	55	ePc	12	43.70	0.8	
EDM	82.78	37	eP	12	45.50	0.5	
FRI	82.82	54	iPc	12	46.00	0.5	
KVN	83.52	51	P	12	49.30	0.0	
TNP	84.45	52	P	12	54.40	0.4	
	0.9s	6.18nm			4.8mb		
PAS	84.77	56	eP	12	55.00	-0.4	
CLC	84.77	54	eP	12	55.00	-0.5	
SBB	84.90	56	eP	12	56.00	-0.2	
KEV	85.00	342	iP	12	56.00	0.1	
	0.7s	18.70nm			5.4mb		
SES	85.02	39	eP	12	57.00	0.6	
	1.2s	73.00nm			5.7mb		
RVR	85.45	58	eP	12	59.00	0.2	
GSC	85.53	55	eP	13	00.00	0.6	
LRM	85.58	44	eP	13	00.10	0.5	
BAR	86.38	57	eP	13	08.00	4.5X	
SOD	86.45	341	iP	13	03.00	-0.1	
DAG	87.06	357	iPd	13	05.40	-0.6	
	1.1s	11.39nm			5.0mb		
DUG	87.10	49	P	13	07.30	0.2	
GLA	87.76	56	eP	13	11.00	0.8	
MSU	88.11	51	P	13	12.50	0.5	
DAU	88.16	49	P	13	12.30	0.0	
FFC	88.49	33	iPc	13	13.70	0.5	
	1.1s	40.00nm			5.6mb		
BW06	88.55	46	P	13	13.40	-0.7	
	1.2s	6.85nm			4.8mb		
NUR	91.12	335	eP	13	24.00	-1.4	
RSSD	91.76	43	P	13	28.50	-0.5	
GOL	92.62	48	P	13	33.60	0.5	
	0.8s	6.70nm			5.1mb		
GLD	92.71	47	P	13	34.50	1.1	
	1.2s	17.68nm			5.4mb		
ANMO	93.66	52	P	13	38.40	0.6	
	1.0s	6.25nm			5.0mb		
ALQ	93.66	52	eP	13	37.00	-0.9	
	1.0s	5.25nm			4.9mb		
HFS	95.49	339	ePKP	13	43.60	-1.9	
	0.8s	4.10nm			4.9mb		
			i	13	45.20	5kmX	
N82	95.66	340	P	13	45.30	-1.1	
	0.9s	4.50nm			4.9mb		
FRB	95.81	15	eP	13	47.00	0.1	
KIC	144.59	307	PKP	19	57.40	-1.3	
TIC	144.62	307	PKP	19	57.60	-1.2	
LIC	144.89	307	PKP	19	58.40	-0.8	
ZOBO	145.91	96	PKP	20	02.20	0.6	
LPB	145.95	96	PKP	20	05.00	3.6X	
CCH	147.87	97	ePKP	20	07.00	2.7X	
S.D. = 0.9 on 96 of 103 obs.							

JUN 01, 1990 11h 08m 35.83± 0.23s
26.048 S ± 6.5km 176.567 W ± 6.1km
DEPTH = 74.8km (2 depth phases)
5.4mb (22 obs.)
SOUTH OF FIJI ISLANDS (171)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 33C
Centroid Location:
Origin Time 11:08:39.7 1.0
Lat 25.41S 0.11 Lon 176.32W 0.09
Dep 15.0 FIX Half-duration 1.8
Moment Tensor; Scale 10**17 Nm
Mrr= 1.05 0.06 Mtt= 0.11 0.08
Mff=-1.16 0.08 Mrt=-0.22 0.18
Mrf= 0.81 0.30 Mtf=-0.15 0.07
Principal Axes:

	Val=	Plg=	Azm=
T	1.37	68	237
N	0.07	12	359
P	-1.43	18	93

Best Double Couple:Mo=1.4*10**17
NP1:Strike=201 Dip=29 Slip= 115
NP2: 353 64 77

RAO	3.41	200	IP	09	30.20	2.5	
			eS	10	14.00		
MNG	15.97	203	eP	12	14.00	-3.2X	
DZM	16.01	281	iPc	12	20.00	2.0	
PVC	16.28	297	iPc	12	25.20	4.0X	
MTW	16.44	202	P	12	23.50	0.3	
MOW	16.76	202	eP	12	26.10	-1.0	
MRW	16.78	203	eP	12	27.00	-0.3	
			eS	15	22.00		
TCW	16.92	204	P	12	20.20	-0.9	
KHZ	18.24	204	P	12	44.40	-0.9	
LTZ	19.04	206	P	12	52.60	-2.1	
BRS	27.39	260	iPc	14	18.30	2.1	
COO	28.08	253	iPc	14	25.20	2.8X	
	0.5s	16.00nm			4.9mb		
CNB	30.60	244	iPc	14	47.10	2.2	
CAN	30.89	244	eP	14	49.20	1.7	
RMQ	31.05	261	iPd	14	50.00	1.2	
	0.7s	202.00nm			6.0mb		
			eS	21	59.30		
BWA	31.26	246	eP	14	50.20	-0.5	
CMS	33.29	252	iPd	15	09.30	0.9	

01d 11h

	0.4s	10.00nm		5.0mb		
TOO	34.02	241 eP	15	16.00	1.4	
CTA	34.63	272 iPc	15	19.20	-0.8	
	0.9s	84.03nm		5.7mb		
		i	15	37.00	74km	
PMG	38.14	289 eP	15	46.00	-3.6X	
OIS	40.48	268 eP	16	08.00	-1.0	
W85	45.38	267 eP	16	47.20	-1.6	
		eS	21	23.10		
WRA	45.39	267 Pc	16	47.10	-1.8	
	0.6s	29.30nm		5.3mb		
FORR	48.48	251 eP	17	12.00	-0.9	
	0.5s	141.00nm		6.2mb		
WARB	50.62	257 eP	17	28.00	-1.5	
MTN	50.73	275 eP	17	28.20	-2.1	
		e	18	47.30	388kmX	
KNA	51.77	270 eP	17	36.50	-1.7	
SBA	52.46	184 e(P)	17	48.70	6.1X	
COOL	54.36	249 eP	17	55.00	-2.2	
KLB	57.05	248 eP	18	15.00	-1.5	
MEKA	57.57	254 eP	18	19.20	-1.1	
BAL	58.15	249 eP	18	23.00	-1.2	
MUN	58.26	247 eP	18	24.00	-0.9	
MRWA	59.08	250 iPd	18	29.90	-0.8	
	0.4s	8.00nm		5.2mb		
NANU	61.35	257 iPc	18	45.50	-0.8	
SPA	64.10	180 iPc	19	07.90	3.7X	
	1.0s	44.00nm		5.3mb		
MAW	76.81	200 iPc	20	25.10	4.5X	
	1.1s	58.00nm		5.4mb		
ADK	77.59	360 iP	20	22.80	-2.1	
	1.2s	140.60nm		5.8mb		
PRS	80.97	42 ePc	20	44.00	0.4	
GCC	81.06	41 eP	20	44.30	0.3	
PCC	81.15	41 ePc	20	46.50	2.1	
PRI	81.27	43 ePc	20	45.90	0.6	
MHC	81.48	41 ePc	20	46.50	0.1	
PLM	81.90	47 eP	20	49.00	0.2	
KGM	82.00	276 ePd	20	50.50	1.0	
SBB	82.11	45 eP	20	49.00	-0.7	
SDN	82.22	9 eP	20	48.00	-1.6	
FRI	82.41	43 ePc	20	51.10	0.1	
CMB	82.68	41 ePc	20	52.70	0.2	
TPC	82.90	47 eP	20	54.00	0.3	
CLC	82.97	45 eP	20	54.00	-0.1	
ORV	83.04	40 eP	20	54.30	0.1	
GLA	83.07	48 eP	20	55.00	0.4	
WDC	83.14	38 iPc	20	55.00	0.3	
GSC	83.15	45 eP	20	55.00	0.0	
MIN	83.50	39 eP	20	56.60	-0.2	
QIZ	84.32	294 eP	20	55.80	-5.4X	
TNP	84.63	43 P	21	02.20	-0.4	
KVN	84.70	42 eP	21	02.00	-0.9	
		pP	21	18.30	57kmX	
IPM	85.19	277 ePd	21	06.60	1.0	
MDJ	85.79	325 Pc	21	08.00	0.1	
BMW	86.81	34 P	21	13.40	0.4	
SNY	87.28	320 Pc	21	14.60	-0.6	
Z	20s	1.00um		5.2Msz		
E	16s	0.90um				
CN2	87.47	322 Pc	21	15.00	-1.1	
GMW	87.77	33 P	21	17.50	0.0	
TIA	87.97	312 P	21	18.50	-0.2	
MSU	88.04	45 P	21	20.00	0.7	
ALQ	89.86	51 ePc	21	28.30	0.3	
	1.0s	20.00nm		5.3mb		
ANMO	89.86	51 eP	21	27.40	-0.6	
	1.0s	19.06nm		5.3mb		
		pP	21	48.20	75km	
		sP	21	48.00		
PNT	90.53	33 ePc	21	30.00	-0.4	
	1.1s	35.00nm		5.6mb		
NEW	91.11	35 P	21	32.00	-1.2	
	1.0s	8.75nm		5.1mb		
TOA	91.17	14 eP	21	33.20	0.0	
TIY	91.93	311 eP	21	25.10	-12.2X	
Z	28s	0.90um		5.1MszX		
E	22s	1.60um				
BW06	92.11	43 P	21	37.50	-0.7	
	1.0s	4.50nm		4.9mb		
LRM	92.15	39 eP	21	38.60	0.3	
XAN	92.51	307 P	21	35.00	-5.0X	
BDT	92.59	288 eP	21	43.00	2.5	
KMI	93.01	296 Pd	21	44.30	1.6	
	1.5s	0.10nm		3.0mb X		
Z	17s	0.60um		5.1MszX		
		sP	22	06.00		
GOL	93.10	47 P	21	43.00	0.1	
	0.9s	9.47nm		5.2mb		
GLD	93.23	47 P	21	44.20	0.9	
	1.1s	22.90nm		5.5mb		
CHG	93.33	289 iPc	21	46.00	2.0	
	1.0s	15.00nm		5.4mb		
CHTO	93.33	289 eP	21	45.80	1.8	
	0.9s	61.81nm		6.0mb		
FBA	93.36	12 eP	21	41.70	-1.4	
IMA	93.48	9 eP	21	42.80	-1.0	
HHC	94.14	314 eP	21	40.00	-7.4X	
Z	32s	1.60um		5.3MszX		
E	16s	0.70um				
CD2	94.86	302 eP	21	51.60	0.8	
BTO	95.02	313 eP	21	47.50	-4.0X	
SES	95.57	36 ePc	21	53.00	-0.6	
RSSD	96.23	44 P	21	56.40	-0.6	
LZH	97.15	307 Pc	22	02.00	0.7	
	1.0s	37.00nm		5.9mb		
Z	18s	0.70um		5.2Msz		
E	11s	0.30um				
		sP	22	12.00		
YKA	100.98	25 ePdiff	22	16.60	-1.2	
	0.8s	0.80nm		4.4mb		
GTA	101.46	308 ePdiff	22	20.80	0.1	
Z	18s	1.10um		5.4Msz		
FRB	120.99	30 ePKP	27	20.00	-0.5	
NPA	126.27	225 ePKP	27	33.40	1.2	
ITR	126.60	125 ePKP	27	34.20	1.3	
BUL	127.98	210 iPKPc	27	47.60	12.1X	
		ipP	28	12.10		
KRI	130.35	214 ePKP	27	45.20	5.1X	
LSZ	132.38	213 iPKPd	27	47.00	3.1X	
		e	30	40.00		
		i	32	35.00		
		i	33	03.00		
TEH	138.08	295 ePKPd	28	01.90	7.6X	
NB2	144.62	353 PKP	28	02.40	-2.4X	
	0.7s	46.30nm				
UPP	144.80	348 iPKPc	28	02.50	-2.5X	
HFS	145.20	351 ePKP	28	04.00	-1.7X	
	0.7s	99.00nm				
BER	145.65	358 iPKPc	28	06.20	-0.3	
COP	149.67	350 iPKPc	28	18.00	5.0X	
	0.8s	65.67nm				
		i	28	21.00		
		i	28	36.00		
BSD	149.77	347 iPKPc	28	17.70	4.5X	
	0.9s	51.00nm				
KAS	150.68	309 iPKPc	28	22.50	7.4X	
LFK	152.61	297 ePKP	28	23.00	4.9X	
KSP	153.35	342 ePKP	28	19.00	0.4	
SPC	153.45	335 ePKP	28	18.90	-0.1	
MLR	153.51	323 ePKP	28	20.00	0.8	
CLL	153.74	346 iPKPc	28	27.60	8.5X	
	0.9s	32.00nm				
BCAO	154.09	216 iPKPd	28	22.50	1.7	
	1.2s	18.00nm				
PRU	154.60	343 ePKP	28	29.30	9.0X	
		e	28	41.40		
MOX	154.65	348 ePKP	28	29.50	9.2X	
	1.3s	22.00nm				
		e	28	43.00		
SOP	156.05	338 ePKP	28	25.20	2.8X	
LJU	158.16	339 e(PKP)	28	25.00	0.0	
VOY	158.38	340 e(PKP)	28	25.00	-0.4	
CTI	158.99	344 PKP	28	26.50	0.4	
VAI	159.77	349 PKP	28	27.50	0.8	
BNI	160.86	353 PKP	28	30.00	1.9	
	S.D. = 1.2	on 96 of 124 obs.				

JUN 01, 1990 11h 14m 09.29± 0.17s
15.913 N ± 4.3km 147.295 E ± 3.9km
DEPTH = 36.7km (4 depth phases)
5.3mb (28 obs.) 4.6Msz (3 obs.)
MARIANA ISLANDS REGION (215)

GUMO	3.30	226 eP	15	04.00	4.2X	
MAT	22.08	340 (P)	19	03.00	0.2	
	0.9s	45.38nm		4.9mb		
PMG	25.16	180 eP	19	32.00	-0.9	
SSE	28.21	307 P	19	59.00	-1.8	
		pP	20	05.50	23kmX	
MDJ	32.29	336 eP	20	36.50	-0.3	
MTN	32.74	210 eP	20	41.00	0.0	
CN2	33.43	331 eP	20	48.00	1.3	
Z	20s	0.80um		4.4Msz		
N	12s	0.40um				
E	12s	0.30um				
		epP	20	54.00	21kmX	
WHN	33.45	302 eP	20	47.00	-0.1	
E	14s	0.70um				
		pP	20	58.00	40km	
BJI	36.20	318 eP	21	10.00	-0.5	
	1.5s	20.00nm		4.8mb		
Z	20s	0.96um		4.6Msz		
		esP	21	27.00		
		ePP	22	29.00		
		eS	26	48.00		
QIS	37.02	192 eP	21	17.00	-0.6	
WRA	37.84	200 Pd	21	23.60	-0.8	
	0.8s	15.40nm		4.9mb		
DZM	42.16	153 iPc	21	59.50	-0.7	
ADK	45.88	31 eP	22	29.70	-0.1	
NNT	46.14	272 eP	22	33.60	1.2	
WARB	46.42	206 iPc	22	35.10	0.7	
	0.6s	19.00nm		5.2mb		
SNG	46.46	265 eP	22	35.20	0.3	
		e	28	17.90		
NANU	49.29	220 iPc	22	57.10	0.3	
	0.6s	61.00nm		5.8mb		
ADE	51.25	189 iPd	23	12.00	0.3	
LSA	53.08	295 eP	23	27.50	1.4	
SDN	55.91	33 eP	23	44.40	-1.4	
WMQ	57.29	312 iPd	23	56.50	0.5	
	2.0s	100.00nm		5.5mb		
Z	20s	0.50um		4.6Msz		
		S	31	51.80		
GUN	57.71	293 P	24	00.00	0.6	
PKI	58.13	293 P	24	02.50	0.1	
	0.6s	27.00nm		5.5mb		
GKN	58.80	293 P	24	07.20	0.3	
TTA	61.85	26 eP	24	21.10	-0.5	
IMA	63.21	23 eP	24	35.80	-0.3	
	1.2s	23.40nm		5.2mb		
PMR	63.64	29 eP	24	37.00	-1.7	
	1.2s	50.80nm		5.5mb		
TOA	65.12	28 eP	24	48.30	-0.2	
FBA	65.14	25 eP	24	47.00	-1.5	
HYB	65.54	282 eP	24	51.50	-0.3	
KSH	65.73	306 P	24	54.20	1.3	
SIT	69.94	35 e(P)	25	18.50	-0.1	
INK	71.33	23 eP	25	26.00	-1.0	
	1.0s	52.00nm		5.5mb		
QUE	73.98	297 eP	25	43.60	0.1	
MBC	75.46	14 eP	25	51.00	0.1	
	0.7s	15.00nm		5.1mb		
MCW	78.14	43 P	26	06.50	0.1	
BMW	78.29	45 P	26	07.80	0.5	
GMW	78.38	44 P	26	08.50	0.7	
FHC	78.83	51 ePd	26	12.00	1.6	
MAIO	79.02	305 iPd	26	12.00	0.4	
LON	79.19	44 P	26	11.70	-0.6	
YKA	79.72	28 eP	26	06.50	-8.2X	
	0.9s	28.40nm		5.3mb		
WDC	79.95	51 ePd	26	16.60	0.2	
		e	26	27.60	36km	
		e	26	34.90		
PNT	80.09	42 eP	26	17.00	0.0	
	0.9s	27.00nm		5.2mb		
MIN	80.70	51 eP	26	20.00	-0.6	
PCC	80.74	54 eP	26	22.20	1.6	
BRK	80.75	53 eP	26	20.50	-0.2	
BKS	80.77	53 ePc	26	21.20	0.4	
ORV	80.96	52 eP	26	21.60	-0.1	
GCC	81.15	54 ePd	26	25.30	2.5	
DPW	81.34	43 P	26	23.80	0.2	
MHC	81.35	54 ePd	26	24.20	0.2	
ARN	81.44	54 P	26	24.50	0.2	
SAO	81.64	54 ePd	26	28.90	3.5X	
PRS	81.80	55 ePd	26	26.30	0.1	
NEW	81.94	42 P	26	26.30	-0.5	
	1.0s	45.63nm		5.5mb		
LLA	82.07	54 eP	26	27.90	0.3	
CMB	82.16	53 ePd	26	28.10	0.0	
		e	26	39.30	36km	
		e	26	46.60		
PRI	82.40	55 eP	26	30.00	0.5	

PHAM	82.68	55	P	26	31.40	0.6
EDM	82.90	37	ePd	26	31.50	-0.1
FRI	82.94	54	ePd	26	32.20	0.1
KVN	83.64	51	P	26	35.50	-0.4
TNP	84.56	52	P	26	40.80	0.2
	1.0s	14.17nm			5.1mb	
CLC	84.89	54	eP	26	42.00	-0.1
SBB	85.01	56	eP	26	43.00	0.3
KEV	85.04	342	iP	26	42.20	0.2
	0.7s	28.00nm			5.6mb	
SES	85.13	39	eP	26	43.00	0.0
	1.2s	108.00nm			5.9mb	
			pP	26	54.00	35km
RVR	85.56	56	eP	26	49.00	3.6X
GSC	85.65	55	eP	26	46.00	0.1
LRM	85.70	44	eP	26	46.40	0.2
SOD	86.48	341	iP	26	49.50	0.2
TPC	86.59	56	eP	26	50.00	-0.5
PTI	86.69	46	P	26	51.90	0.9
DAG	87.13	357	iPd	26	51.70	-0.5
	1.0s	11.00nm			5.0mb	
DUG	87.22	49	P	26	53.50	-0.1
TRO	87.36	344	eP	26	53.70	0.2
GLA	87.87	56	eP	26	57.00	0.3
MSU	88.22	51	P	26	58.90	0.3
FFC	88.60	33	iPd	26	59.50	-0.2
	1.0s	45.00nm			5.7mb	
BW06	88.67	46	P	27	00.30	-0.3
	1.0s	5.00nm			4.8mb	
NUR	91.15	335	iP	27	11.00	-0.5
	0.8s	19.10nm			5.5mb	
RSSD	91.88	43	P	27	14.90	-0.6
GOL	92.74	48	P	27	20.20	0.6
	0.8s	10.42nm			5.3mb	
GLD	92.83	47	P	27	20.90	1.0
	1.1s	28.93nm			5.6mb	
ANMO	93.77	52	P	27	24.80	0.5
	1.1s	10.28nm			5.2mb	
ALQ	93.77	52	eP	27	24.00	-0.4
	1.0s	7.75nm			5.1mb	
UPP	94.29	337	iP	27	24.90	-1.0
HFS	95.52	339	P	27	30.10	-1.6
	0.6s	4.80nm			5.1mb	
NB2	95.70	340	P	27	31.80	-0.7
	0.9s	6.30nm			5.1mb	
UOSK	96.06	299	ePc	27	35.70	0.8
BRG	101.98	332	ePdiff	28	19.70	18.9X
			i	28	27.70	
			i	28	39.60	
ZST	102.30	328	e(Pdif	28	21.50	19.2X
			e	28	47.80	
KHC	103.37	331	iPdiff	28	22.80	15.7X
			e	28	48.50	
EKA	104.75	343	Pdiffc	28	18.90	5.9X
	0.8s	12.30nm			5.9mb	
FLN	109.53	338	ePdiff	28	53.10	18.7X
	0.7s	15.45nm				
LDF	109.54	338	ePdiff	28	54.00	19.5X
	0.7s	8.80nm				
GRR	109.98	338	ePdiff	28	54.80	18.3X
	0.8s	12.10nm				
LPF	110.35	338	ePdiff	28	56.60	18.5X
	0.7s	14.35nm				
BUL	121.81	256	iPKPd	33	13.20	11.1X
KIC	144.56	307	PKP	33	42.80	-1.8
TIC	144.59	307	PKP	33	43.20	-1.5
LIC	144.86	307	PKP	33	44.20	-0.9
LPB	146.04	96	PKP	33	48.00	0.5
MBO	146.10	332	iPKPc	33	50.00	2.9X
SIV	152.73	94	PKP	33	57.80	0.5
S.D. = 0.8		on	92 of	106	obs.	

% JUN 01, 1990 11h 34m 34.85± 0.77s
37.712 N ± 8.4km 21.723 E ±10.0km
DEPTH = 10.0km (geophysicist)
SOUTHERN GREECE (368)

ITM	0.56	163	ePn	34	46.00	-0.1
			eSn	34	54.50	
VLS	1.01	298	ePn	34	54.50	0.5
			eSn	35	12.00	
VLI	1.39	135	ePb	35	00.30	0.1
NEO	1.98	36	ePn	35	09.00	0.2
KEK	2.50	324	ePn	35	15.50	-0.7
S.D. = 0.7		on	5 of	5	obs.	

& JUN 01, 1990 12h 19m 20.34s
59.863 N 152.835 W
DEPTH = 107.5km
3.4mb (1 obs.)
SOUTHERN ALASKA (2)
<AGS-P>.

RED	0.56	3	iP	19	36.87	-0.8
			iS	19	49.69	
AUL	0.57	213	eP	19	37.15	-0.5
AUE	0.57	209	iP	19	36.98	-0.7
XLV	0.70	125	eP	19	38.00	-0.7
			eS	19	52.22	
NNL	0.79	76	iP	19	40.05	0.5
CDD	1.02	204	iP	19	40.76	-1.1
MCNL	1.02	229	iP	19	40.80	-1.1
			eS	19	56.22	
NKA	1.19	41	eP	19	44.75	1.1
SHU	1.26	168	eP	19	40.95	-3.6
SPU	1.38	16	iP	19	44.92	-1.1
			eS	20	04.18	
CRP	1.45	13	iP	19	46.09	-0.8
			eS	20	06.06	
SLKM	1.46	63	eP	19	45.65	-1.3
			eS	20	05.42	
CGLM	1.51	15	iP	19	46.64	-0.9
			eS	20	06.59	
NCG	1.58	12	eP	19	47.49	-1.0
			eS	20	07.75	
SEW	1.72	80	eP	19	48.86	-1.2
SVW	1.86	313	iP	19	50.16	-1.8
			eS	20	11.40	
SUA	1.91	32	iP	19	51.79	-0.9
			eS	20	16.39	
PMS	2.13	48	iP	19	54.33	-1.1
			iS	20	19.72	
SKT	2.22	16	iP	19	55.08	-1.5
PWA	2.31	38	eP	19	56.22	-1.5
PLRM	2.51	45	eP	19	58.04	-2.4
MTU	2.61	85	eP	20	00.68	-1.1
GHO	2.71	43	iP	20	01.01	-2.2
CUT	2.84	25	eP	20	03.13	-1.7
SML	2.94	47	iP	20	03.94	-2.3
GLI	3.03	68	eP	20	05.31	-2.1
HIN	3.21	78	eP	20	07.98	-1.9
MID	3.33	95	eP	20	10.02	-1.4
VZW	3.33	66	eP	20	10.02	-1.6
VLZ	3.46	66	eP	20	11.86	-1.3
HUR	3.48	25	eP	20	12.22	-1.3
CVA	3.60	76	eP	20	12.83	-2.3
NCA	3.63	51	eP	20	13.07	-2.5
KLU	3.77	61	eP	20	15.01	-2.6
KTH	3.81	13	eP	20	15.67	-2.5
SGAM	3.86	77	eP	20	16.48	-2.3
TOA	3.95	52	iP	20	18.11	-1.9
RND	4.03	26	eP	20	18.98	-2.1
RAGM	4.12	79	eP	20	20.27	-2.0
MCK	4.30	24	eP	20	22.86	-1.9
PAX	4.72	45	eP	20	28.16	-2.3
WAX	5.02	79	eP	20	32.70	-2.0
NEA	5.05	19	eP	20	31.95	-3.0
TGL	5.06	75	eP	20	33.26	-1.9
WRH	5.13	24	eP	20	33.03	-3.1
DDM	5.14	37	eP	20	35.49	-0.8
BALM	5.33	73	eP	20	37.22	-1.7
HDA	5.33	29	iP	20	36.06	-2.8
CCB	5.34	24	eP	20	35.74	-3.3
FBA	5.57	23	eP	20	38.94	-3.2
PCA	6.32	82	eP	20	50.66	-1.9
YKA	18.43	65	eP	23	26.30	-3.4
	0.3s	0.60nm			3.4mb	
52 obs. ossociated						

% JUN 01, 1990 13h 22m 39.86± 2.84s
45.762 N ±10.0km 26.725 E ±13.6km
DEPTH = B4.9 ± 29.1 km
ROMANIA (358)

VRI	0.11	360	iPd	22	51.00	-0.5
BRD	0.33	137	iPc	22	53.00	-0.1
MLR	0.61	244	iP	22	55.50	0.1
ISR	0.64	192	iPc	22	56.00	0.4
PPE	0.77	53	ePc	22	58.00	1.1
CLI	0.88	26	iPc	22	57.50	-0.6
CFR	1.16	119	iPc	23	01.00	-0.4
TLB	1.49	141	iPc	23	05.50	-0.1
IAS	1.54	22	eP	23	23.00	16.7X
S.D. = 0.7		on	8 of	9	obs.	

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* JUN 01, 1990 13h 48m 08.65± 0.43s
14.999 S ±15.1km 176.340 W ± 9.8km
DEPTH = 13.2km (13 depth phases)
5.0mb (14 obs.) 4.9Msz (1 obs.)
FIJI ISLANDS REGION (181)

DZM	17.77	244	iPc	52	17.80	0.4
RMQ	34.48	245	eP	54	54.10	-4.4X
WRA	47.17	257	Pd	56	37.40	-5.6X
	1.1s	10.60nm			4.8mb	
MTN	50.94	266	eP	57	07.60	-4.5X
	0.9s	21.00nm			5.1mb	
GCC	72.75	43	eP	59	38.70	0.2
PRS	72.77	44	eP	59	39.30	0.6
			e	59	43.40	13km
SAO	72.96	43	eP	59	40.80	0.9
			e	59	44.70	13km
BRK	73.06	42	eP	59	40.60	0.3
			e	59	44.50	13km
BKS	73.08	42	ePd	59	45.10	4.6X
PRI	73.14	44	eP	59	41.90	0.9
			e	59	45.80	13km
MHC	73.16	43	eP	59	40.70	-0.4
			e	59	44.50	12km
LLA	73.21	44	e(P)	59	41.80	0.5
FRI	74.25	44	eP	59	47.10	-0.2
			e	59	51.30	14km
SBB	74.32	47	eP	59	53.00	5.1X
CMB	74.37	43	ePc	59	48.00	-0.1
			e	59	52.10	13km
WDC	74.45	40	eP	59	48.70	0.3
			e	59	52.60	13km
ORV	74.51	41	e(P)	59	48.60	-0.2
			e	59	52.60	13km
MIN	74.90	40	eP	59	50.70	-0.5
			e	59	54.80	13km
CLC	75.07	46	eP	59	53.00	0.8
SPA	75.10	180	iPc	59	50.80	-1.2
	1.2s	22.54nm			5.1mb	
TPC	75.30	48	eP	59	54.00	0.5
GSC	75.36	47	eP	59	56.00	2.1
KVN	76.43	43	P	59	59.50	-0.5
TNP	76.50	44	P	00	00.00	-0.5
BMW	77.58	34	P	00	08.30	2.2
GMW	78.48	34	P	00	10.00	-0.9
CN2	78.98	321	eP	00	15.20	1.5
SNY	79.08	319	Pc	00	14.60	0.3
TTA	79.29	9	eP	00	14.20	-0.9
PMR	79.33	13	eP	00	13.40	-1.8
	1.2s	46.90nm			5.4mb	
			e	00	17.60	13km
TOA	80.45	14	eP	00	20.50	-0.8
WHN	80.53	305	eP	00	25.00	2.7
PNT	81.23	34	eP	00	25.00	-0.6
	1.0s	26.00nm			5.2mb	
NEW	82.00	35	P	00	27.50	-2.2
	0.9s	7.13nm			4.7mb	
FBA	82.56	12	eP	00	30.50	-1.7
			id	00	34.80	14km
IMA	82.59	9	eP	00	31.70	-0.8
ALQ	82.74	51	eP	00	34.00	0.0
	1.0s	7.50nm			4.8mb	
ANMO	82.74	51	eP	00	34.00	0.0
	1.0s	6.88nm			4.8mb	
			pP	00	39.20	16km
BJI	83.15	314	eP	00	35.00	-0.7
	1.2s	36.00nm			5.4mb	
LRM	83.48	39	eP	00	37.70	0.0
BW06	83.89	43	P	00	38.90	-0.9
	0.9s	5.51nm			4.8mb	
TIY	84.84	311	eP	00	44.00	-0.4
GYA	85.36	299	P	00	47.20	-0.1
SES	86.51	36	eP	00	51.00	-1.4
BTO	87.68	313	eP	00	58.00	-0.4
INK	88.58	15	eP	01	04.00	2.0
CD2	89.19	302	eP	01	03.60	-2.2
CHTO	89.89	289	eP	01	08.80	-0.4
	1.0s	5.00nm			4.7mb	
LZH	90.71	307	eP	01	12.50	-0.4
	2.5s	45.00nm			5.3mb	
			sP	01	32.50	
YKA	90.88	24	eP	01	12.00	-0.8
	0.9s	5.40nm			4.9mb	
MBC	97.10	12	eP	01	43.50	2.4
	1.0s	7.00nm			5.2mb	
NB2	133.70	355	PKP	07	24.80	-1.7

01d 14h

	0.9s	2.00nm				
CLL	143.01	350	ePKP	07	40.00	-3.7X
MEM	144.43	357	PKP	07	45.90	-0.2
GRF	144.86	351	iPKPc	07	44.30	-2.7X
	Z 21s	0.20um			4.9Msz	
		e		07	46.40	
		e		07	48.20	
DOU	144.99	359	PKP	07	48.20	1.1
ZST	145.08	344	ePKP	07	44.80	-2.6X
		i		07	48.50	
SRO	145.10	343	ePKP	07	47.70	0.3
FLN	146.16	5	ePKP	07	47.10	-2.1X
	0.9s	21.30nm				
LDF	146.36	5	ePKP	07	47.20	-2.3X
	0.9s	13.10nm				
GRR	146.50	5	ePKP	07	48.30	-1.4
	0.9s	16.40nm				
CDF	146.55	356	ePKP	07	48.50	-1.5
	0.8s	16.10nm				
LPF	146.83	6	ePKP	07	49.60	-0.7
	1.0s	40.00nm				
HAU	147.01	357	ePKP	07	49.90	-0.7
	0.8s	10.75nm				
BSF	147.16	356	ePKP	07	49.70	-1.3
PTJ	147.51	344	ePKP	07	52.50	0.9
FVI	147.59	348	PKP	07	56.00	4.5X
LJU	147.73	346	e(PKP)	07	52.00	0.2
LOR	147.83	360	ePKP	07	52.00	0.1
	0.9s	16.40nm				
VOY	147.89	347	ePKP	07	51.70	-0.5
		i		07	55.90	
SSF	148.03	0	ePKP	07	53.00	0.8
	1.2s	34.20nm				
CEY	148.04	346	ePKP	07	57.00	4.7X
LBF	148.11	360	ePKP	07	52.90	0.5
	0.9s	13.90nm				
AVF	148.30	0	ePKP	07	53.00	0.3
	1.0s	15.00nm				
CTI	148.33	349	PKP	07	54.50	1.6
MFF	148.33	5	ePKP	07	53.50	0.8
	1.0s	20.00nm				
SMF	148.45	360	ePKP	07	53.50	0.6
	1.1s	22.00nm				
BGF	148.53	1	ePKP	07	54.00	0.9
	0.9s	22.95nm				
TCF	148.78	2	ePKP	07	54.60	1.1
	0.9s	8.20nm				
MAF	148.86	1	ePKP	07	55.20	1.6
	1.0s	31.00nm				
VAI	148.93	353	PKP	07	56.80	3.1X
LPL	149.47	356	ePKP	07	57.50	2.6X
	0.9s	9.00nm				
LPG	149.49	356	ePKP	07	57.70	2.7X
	0.9s	12.30nm				
BOB	149.93	352	PKP	08	05.90	10.5X
BNI	149.94	356	PKP	07	59.20	3.8X
OHR	150.02	334	ePKP	07	58.80	3.2X
CAF	150.14	2	ePKP	07	58.30	2.7X
LPO	150.34	4	ePKP	07	58.70	2.8X
SFI	150.34	348	PKP	08	01.50	5.7X
PGD	150.41	348	PKP	07	59.20	3.0X
ARV	150.51	346	PKP	08	02.00	5.8X
PGF	152.16	352	ePKP	08	02.50	3.7X
	0.9s	19.65nm				
	S.D. = 1.1	on 68 of 92 obs.				

JUN 01, 1990 14h 05m 33.14± 0.33s
52.820 N ± 7.6km 171.405 E ± 4.2km
DEPTH = 33.0km (normal)
4.9mb (38 obs.) 4.6Msz (2 obs.)
NEAR ISLANDS, ALEUTIAN ISLANDS (5)

SMY	1.64	92	iP	05	59.40	-0.6
ADK	7.36	93	eP	07	23.20	2.3
TTA	19.83	47	eP	10	03.20	-0.5
	1.0s	20.00nm			4.4mb	
IMA	21.78	39	eP	10	22.40	-1.2
	0.7s	11.99nm			4.4mb	
PMR	22.77	52	eP	10	34.50	1.2
FBA	23.82	44	eP	10	42.50	-1.0
TOA	24.20	51	eP	10	48.40	1.0
MAT	28.34	248	(P)	11	26.00	0.2
	0.5s	11.27nm			4.8mb	
		eS		15	16.00	
MDJ	28.43	270	eP	11	26.00	-0.6
INK	29.89	38	eP	11	40.50	1.1
CN2	31.39	272	Pc	11	51.00	-1.8
MBC	34.60	23	eP	12	09.50	-10.9X
	0.7s	3.00nm				
YKA	38.59	46	eP	12	53.20	-1.0
	0.7s	6.10nm			4.5mb	
BJI	39.20	274	eP	13	04.00	4.5X
TIA	41.06	268	eP	13	15.40	0.5
SSE	42.13	259	P	13	25.00	1.3
	1.0s	10.00nm			4.5mb	
TIY	42.93	274	P	13	31.10	0.8
	Z 20s	0.50um			4.4Msz	
	N 15s	0.40um				
NEW	43.93	66	eP	13	39.00	0.7
	0.5s	7.06nm			4.7mb	
WHN	46.64	265	eP	13	59.50	-0.4
FFC	48.08	51	eP	14	11.00	0.0
	1.3s	25.00nm			5.1mb	
KVN	48.97	77	eP	14	16.50	-1.8
LZH	49.18	278	Pc	14	20.20	0.3
	1.5s	29.00nm			5.1mb	
	Z 15s	0.50um			4.6MszX	
		pP		14	27.00	23kmX
GTA	49.38	284	iPc	14	20.90	-0.5
	Z 18s	0.70um			4.7Msz	
BW06	51.48	67	eP	14	36.50	-1.0
CD2	52.80	274	P	14	47.40	0.1
WMO	53.38	296	iPc	14	50.60	-0.9
RSSD	53.64	63	eP	14	52.00	-1.6
GYA	54.24	268	P	14	57.40	-0.6
FRB	54.78	28	eP	14	59.00	-2.4
GOL	55.88	68	eP	15	10.00	0.0
SOD	57.25	345	iP	15	17.50	-1.6
SUF	61.60	343	iP	15	48.40	-0.7
	0.6s	9.40nm			5.1mb	
SCH	62.42	34	eP	15	53.00	-1.8
NUR	63.93	342	iP	16	04.00	-0.5
	1.0s	36.00nm			5.4mb	
CHG	64.66	268	ePd	16	09.80	-0.1
	1.0s	66.25nm			5.7mb	
NB2	65.39	350	P	16	13.30	-0.8
	0.8s	13.10nm			5.1mb	
GUN	65.67	284	P	16	16.00	-0.7
HFS	65.98	348	eP	16	15.50	-2.3
	0.6s	4.10nm			4.7mb	
PKI	66.20	285	P	16	19.30	-0.8
	0.6s	28.00nm			5.5mb	
GKN	66.33	285	P	16	19.80	-0.9
	0.9s	33.00nm			5.4mb	
EKA	72.12	357	Pc	16	55.00	-0.6
	0.9s	14.80nm			5.0mb	
CLL	74.66	346	eP	17	10.00	-0.5
	1.4s	16.00nm			4.8mb	
BRG	74.95	345	eP	17	11.50	-0.7
	1.2s	15.00nm			4.9mb	
SPC	75.46	341	eP	17	14.80	-0.6
MOX	75.51	347	eP	17	15.50	0.1
PRU	75.71	345	P	17	16.80	0.2
MEM	76.21	350	P	17	19.30	0.0
KHC	76.70	345	iPc	17	22.90	0.7
	1.0s	11.50nm			4.9mb	
DOU	76.85	351	Pc	17	23.50	0.6
ZST	77.01	343	eP	17	24.00	0.2
SRO	77.16	342	eP	17	25.50	0.9
BUD	77.33	341	iP	17	27.00	1.4
HYB	78.02	283	eP	17	30.00	0.1
CDF	78.25	349	eP	17	30.40	-0.4
FLN	78.56	355	eP	17	31.90	-0.4
	1.0s	18.00nm			5.0mb	
LDF	78.71	354	eP	17	32.70	-0.5
	0.8s	10.75nm			4.9mb	
HAU	78.75	350	eP	17	33.20	-0.3
	0.9s	9.85nm			4.8mb	
BSF	78.87	350	eP	17	33.80	-0.4
SQTA	78.91	346	iPc	17	35.10	0.6
	0.9s	16.90nm			5.0mb	
GRR	78.96	355	eP	17	34.40	-0.1
	0.8s	14.80nm			5.0mb	
WB5	79.21	215	eP	17	36.00	-0.2
WRA	79.27	215	Pc	17	36.20	-0.3
	0.6s	2.20nm			4.3mb	
LPF	79.32	355	eP	17	36.50	0.0
	1.1s	26.85nm			5.2mb	
PTJ	79.43	343	eP	17	34.10	-3.2X
LOR	79.73	351	eP	17	38.60	-0.1
	1.0s	12.00nm			4.8mb	
SSF	79.96	352	eP	17	40.00	0.0
	0.8s	8.75nm			4.8mb	
CTI	80.00	346	P	17	41.00	0.7
LBF	80.00	351	eP	17	39.80	-0.4
	0.8s	6.05nm			4.6mb	
AVF	80.24	352	eP	17	41.30	-0.2
	0.9s	14.75nm			5.0mb	
SMF	80.34	351	eP	17	41.90	-0.2
	0.9s	10.65nm			4.8mb	
BGF	80.52	352	eP	17	43.00	0.0
VAI	80.57	348	P	17	44.00	0.8
MFF	80.69	354	eP	17	44.00	0.1
TCF	80.84	352	eP	17	44.80	0.1
	0.8s	6.05nm			4.6mb	
MAF	80.88	352	eP	17	45.60	0.7
	0.8s	6.05nm			4.6mb	
LSF	80.93	353	eP	17	45.10	0.0
AGO	81.00	352	P	17	46.32	0.8
PLDF	81.03	351	P	17	46.41	0.6
LPL	81.16	349	eP	17	47.70	1.0
	0.7s	5.50nm			4.7mb	
LPG	81.18	349	eP	17	47.90	1.1
	0.9s	11.45nm			4.9mb	
PYM	81.31	352	P	17	47.67	0.5
BOB	81.56	347	P	17	49.90	1.3
BNI	81.63	349	P	17	50.60	1.6
LBL	81.80	352	P	17	50.64	1.0
PGD	82.11	345	P	17	53.40	1.9
CAF	82.20	352	eP	17	52.50	0.7
	0.8s	12.10nm			5.0mb	
ARV	82.28	344	P	17	54.00	1.7
LFF	82.29	353	eP	17	52.70	0.5
CRE	82.31	345	P	17	54.00	1.5
LPO	82.51	353	eP	17	54.00	0.6
	0.8s	14.80nm			5.1mb	
PGF	83.80	347	eP	18	00.70	0.5
	0.7s	15.45nm			5.3mb	
	S.D. = 0.9	on 88 of 91 obs.				

JUN 01, 1990 14h 20m 39.21± 0.76s
4.685 S ± 6.1km 152.271 E ± 8.5km
DEPTH = 100.0 ± 7.7 km
4.9mb (5 obs.)
NEW BRITAIN REGION (192)

RAB	0.50	348	iPc+	20	55.10	-0.1
PMG	6.91	227	eP	22	19.00	-0.6
			eS	23	36.00	
GUA	19.52	338	eP	25	02.00	0.6
	0.8s	202.99nm			5.5mb	
GUMO	19.59	338	eP	25	02.20	0.2
	0.7s	111.82nm			5.3mb	
QIS	20.02	217	eP	25	05.00	-1.5
RMO	21.94	188	iPc	25	25.90	0.1
	0.8s	26.00nm			4.6mb	
DZM	22.07	143	iPd	25	28.10	0.9
MTN	22.40	247	eP	25	33.00	2.7
BRS	22.59	179	iP	25	32.30	0.2
WB5	23.07	228	iPc	25	36.30	-0.5
		e		25	55.00	
		eS		29	40.50	
WRA	23.13	228	Pc	25	36.90	-0.5
	0.7s	10.60nm			4.3mb	
TCW	41.37	155	P	28	17.50	0.6
MNG	41.42	153	P	28	17.50	0.2
CAW	41.63	154	P	28	19.30	0.3
WDW	41.73	154	P	28	19.80	0.0
MTW	41.86	153	P	28	20.50	-0.4
MOW	41.96	154	P	28	21.40	-0.4
BLW	42.02	154	P	28	22.70	0.5
INK	88.54	21	eP	33	21.00	-0.4
YKA	95.57	28	eP	33	53.10	-0.9
	0.7s	1.90nm			4.7mb	
BBTK	115.45	312	ePdiff	35	24.00	0.4
APO	116.02	339	ePKP	39	09.40	-2.3X
	0.4s	2.90nm				
NB2	116.63	340	PKP	39	11.80	-1.1
	0.6s	0.60nm				
	S.D. = 0.9	on 22 of 23 obs.				

& JUN 01, 1990 14h 55m 30.33s
60.167 N 148.587 W
DEPTH = 33.6km
KENAI PENINSULA, ALASKA (14)
<AGS-P>.

SEW	0.44	262	iP	55	38.93	-1.0
			iS	55	46.01	
MTU	0.50	111	iP	55	40.38	-0.6
			eS	55	48.89	

SLKM	0.88	294	iP	55 45.65	-0.7
			eS	55 58.47	
GLI	1.03	45	eP	55 47.08	-1.4
			eS	56 00.24	
HIN	1.06	77	iP	55 48.10	-0.9
PMS	1.18	337	eP	55 49.86	-0.9
VZW	1.34	47	iP	55 51.90	-1.1
			eS	56 09.19	
MID	1.36	122	iP	55 52.00	-1.1
NNL	1.36	266	eP	55 53.32	0.1
NKA	1.44	295	iP	55 56.27	2.0
PLRM	1.45	350	iP	55 53.61	-0.9
			eS	56 14.05	
CVA	1.46	74	iP	55 53.29	-1.4
VLZ	1.47	48	iP	55 53.92	-0.9
			eS	56 12.20	
PWA	1.62	338	eP	55 55.11	-1.8
GHO	1.62	354	eP	55 56.20	-0.9
SML	1.65	4	eP	55 56.58	-0.9
SUA	1.68	322	eP	55 57.86	-0.1
SGAM	1.71	77	iP	55 56.83	-1.5
KLU	1.86	43	iP	55 59.87	-0.7
			eS	56 21.95	
RAGM	1.96	82	eP	56 00.07	-1.8
SPU	1.99	302	eP	56 01.01	-1.3
NCA	2.02	24	eP	56 02.05	-0.7
CGLM	2.03	306	eP	56 02.02	-0.9
CRP	2.07	304	eP	56 02.76	-0.8
RED	2.10	279	eP	56 02.46	-1.5
NCG	2.15	307	eP	56 03.67	-0.9
TOA	2.27	30	eP	56 06.21	-0.1
SKT	2.31	323	eP	56 06.08	-0.9
CUT	2.39	341	eP	56 07.60	-0.3
CDD	2.86	246	eP	56 15.17	0.5
HUR	2.87	350	eP	56 17.80	3.1
WAX	2.87	82	iP	56 12.11	-2.7
TGL	2.91	76	eP	56 13.46	-2.0
PAX	3.18	27	eP	56 19.21	-0.1
BALM	3.20	71	eP	56 17.46	-2.1
KTH	3.57	343	eP	56 26.80	2.0
PCA	4.17	87	eP	56 30.00	-3.2

37 obs. associated

• JUN 01, 1990 16h 16m 21.92± 0.64s
3.621 N ±22.1km 31.551 W ±13.9km
DEPTH = 10.0km (geophysicist)
4.7mb (3 obs.)
CENTRAL MID-ATLANTIC RIDGE (406)

LKO	26.44	76	(P)	22 01.60	0.5
SIV	35.10	235	P	23 18.40	0.6
			i	24 29.00	
ZOBO	41.21	240	P	24 10.00	0.6
Z	24s	0.48um		4.3MszX	
			i	25 27.00	
			LR	36 32.00	
LPB	41.30	240	P	24 09.00	-1.0
			i	25 30.00	
BCAO	49.96	87	iPc	25 18.00	-0.7
	1.6s	39.00nm		5.1mb	
			id	26 35.00	
KHC	59.35	33	eP	26 28.60	2.0X
NB2	65.71	21	P	27 09.00	0.3
	1.5s	9.90nm		4.8mb	
YKA	83.59	332	eP	28 51.20	-0.3
	1.1s	1.90nm		4.2mb	

S.D. = 0.8 on 7 of 8 obs.

? JUN 01, 1990 16h 17m 32.43± 1.47s
2.547 N ±29.7km 31.528 W ±23.4km
DEPTH = 10.0km (geophysicist)
4.7mb (3 obs.)
CENTRAL MID-ATLANTIC RIDGE (406)

LKO	26.70	74	(P)	23 14.28	0.3
	0.9s	15.00nm		4.7mb	
SKO	61.44	43	eP	27 51.80	0.3
BLF	63.54	124	eP	28 13.00	7.1X
SLR	64.27	120	eP	28 10.50	-0.2
NB2	66.69	21	P	28 24.40	-1.2
	1.3s	11.00nm		4.9mb	
YKA	84.55	332	eP	30 06.50	-0.3
	1.1s	3.00nm		4.4mb	
MBC	87.02	346	eP	30 20.00	1.1
MAIO	89.33	54	eP	30 34.00	3.1X

S.D. = 1.0 on 6 of 8 obs.

• JUN 01, 1990 16h 43m 31.02± 1.97s
23.919 N ±15.6km 122.078 E ±11.0km
DEPTH = 10.0km (geophysicist)
4.0mb (1 obs.)
TAIWAN REGION (243)

TWD	0.47	290	iPc	43 40.30	-0.3
			eS	43 44.20	
TWC	0.72	343	iPd	43 44.50	-0.6
			eS	43 51.90	
TWQ	1.19	288	ePc	43 53.40	0.2
TWZ	1.26	339	ePc	43 54.60	0.2
ANP	1.36	338	iP	43 56.70	0.7
			eS	44 09.00	
SSE	7.19	354	P	45 15.00	-3.7X
Z	16s	0.40um			
			Lg	47 22.50	
YKA	82.90	23	eP	55 56.80	-0.1
	0.6s	0.70nm		4.0mb	

S.D. = 0.6 on 6 of 7 obs.

JUN 01, 1990 16h 49m 35.73± 0.30s
29.455 S ± 7.6km 178.867 W ± 9.5km
DEPTH = 33.0km (normal)
5.3mb (8 obs.)
KERMADEC ISLANDS (178)

HBZ	8.46	195	P	51 44.90	6.0X
PUZ	8.92	195	P	51 50.10	4.8X
			S	53 24.50	
NOZ	9.49	195	P	51 58.20	5.0X
MNG	12.06	201	P	52 28.00	-0.2
			S	54 29.80	
MRW	12.86	202	eP	52 43.00	4.2X
			eS	54 52.00	
KHZ	14.31	203	P	52 57.40	-0.5
DZM	15.13	296	iPd	53 25.30	16.5X
MQZ	15.76	203	P	53 18.00	1.3
BRS	25.00	268	iPd	55 03.50	5.4X
RMQ	28.70	268	eP	55 36.00	4.0X
	1.2s	84.00nm		5.3mb	
CTA	32.91	278	iPc	56 12.80	3.6X
	0.9s	43.28nm		5.4mb	
LAT	39.34	298	iPc	57 18.90	15.1X
WRA	43.31	272	Pd	57 36.70	0.3
	0.6s	19.10nm		5.0mb	
WB5	43.31	272	iPd	57 37.10	0.7
			ePcP	59 21.70	
			e	02 51.20	
SPA	60.71	180	iPd	59 44.40	-1.8
	0.7s	19.53nm		5.3mb	
MAT	77.04	326	iPd	01 26.20	-0.9
	1.1s	58.23nm		5.5mb	
SSE	82.92	312	Pd	01 58.00	-0.6
	1.0s	10.00nm		4.9mb	
IPM	83.65	279	ePc	02 01.80	-1.0
PRS	84.84	43	e(P)	02 08.30	0.0
MHC	85.37	42	eP	02 11.80	0.8
RVR	85.78	47	eP	02 13.00	0.0
SBB	85.94	46	eP	02 14.00	0.2
ISA	86.16	45	eP	02 15.00	0.1
FRI	86.28	44	eP	02 15.50	0.2
CMB	86.57	42	ePc	02 16.90	0.1
TPC	86.70	48	eP	02 16.00	-1.6
CLC	86.81	46	eP	02 18.00	-0.1
GLA	86.84	49	eP	02 19.00	0.7
ORV	86.94	41	e(P)	02 19.40	0.8
WDC	87.06	39	e(P)	02 19.40	0.3
MIN	87.42	40	e(P)	02 20.80	-0.2
LOE	89.56	290	eP	02 07.00	-24.5X
BJI	91.72	316	eP	02 41.00	0.0
	1.3s	29.00nm		5.5mb	
CHTO	92.55	290	e(P)	02 45.60	0.3
	1.2s	13.89nm		5.3mb	
SUF	142.98	341	ePKP	09 00.00	-7.0X
UPP	147.61	344	iPKP	09 13.80	-1.0
NB2	147.70	351	PKP	09 10.20	-4.8X
	0.5s	5.00nm			
HFS	148.17	348	ePKP	09 12.30	-3.4X
	0.4s	9.70nm			
BCAO	150.15	217	iPKPc	09 22.00	1.8
	0.9s	14.00nm			
			ic	10 22.50	
PRNI	150.69	280	ePKP	09 24.00	3.4X

S.D. = 0.8 on 26 of 40 obs.

% JUN 01, 1990 16h 51m 03.39± 1.07s
43.059 N ± 6.9km 0.383 W ± 7.6km
DEPTH = 5.0km (geophysicist)
PYRENEES (378)
Felt (II) at Asson, France.

JAU	0.02	154	Pg	51 04.64	0.0
			Sg	51 05.85	
OGE	0.13	329	Pg	51 06.09	0.0
ESCF	0.14	278	Pg	51 06.35	0.0
			Sg	51 08.93	
LHE	0.23	230	Pg	51 07.98	-0.1
			Sg	51 11.29	
ATE	0.24	277	Pg	51 08.15	0.0
			Sg	51 11.98	
ISSF	0.30	264	Pg	51 09.75	0.2
			Sg	51 14.54	
MADF	0.33	285	Pg	51 09.95	-0.1

S.D. = 0.1 on 7 of 7 obs.

• JUN 01, 1990 17h 23m 58.36± 1.63s
45.831 N ±11.0km 26.730 E ± 9.8km
DEPTH = 102.4 ± 16.2 km
ROMANIA (358)

VRI	0.04	355	iPc	24 11.50	-0.6
BRD	0.39	144	iPc	24 14.00	0.1
MLR	0.65	239	iP	24 16.00	0.1
ISR	0.71	191	iPc	24 16.50	0.1
PPE	0.73	58	eP	24 18.00	1.5
CLI	0.82	28	iPd	24 16.50	-0.8
CFR	1.19	122	iPc	24 21.00	-0.3
TLB	1.55	143	iPc	24 25.00	-0.7
PSN	2.38	154	iPd	24 37.00	0.4
PVL	2.80	201	iPc	24 43.00	0.8
PGB	3.76	210	eP	25 28.00	32.6X
KDZ	4.29	193	eP	25 02.00	-0.5
RZN	4.39	200	eP	25 04.00	-0.1

S.D. = 0.8 on 12 of 13 obs.

? JUN 01, 1990 18h 05m 57.21± 0.85s
15.703 S ±30.4km 70.605 W ±14.7km
DEPTH = 216.1 ± 13.4 km
4.1mb (2 obs.)
SOUTHERN PERU (117)

ARE	1.14	228	iPc	06 30.40	0.2
			iS	06 55.10	
ZOBO	2.45	104	iPd	06 45.50	2.9X
LPB	2.55	109	P	06 35.00	-8.5X
CCH	4.59	112	P	07 13.40	5.6X
PT03	5.30	288	iPd	07 13.60	-2.9X
			iS	08 07.80	
PT06	5.84	288	iP	07 27.60	4.2X
			iS	08 21.40	
PT08	6.87	302	eP	07 36.20	-0.8
			eS	08 49.60	
NNA	7.09	301	eP	07 40.00	0.4
	0.4s	7.63nm		4.2mb	
SIV	9.18	93	P	08 06.60	-0.1
YKA	85.21	341	eP	18 10.90	0.9
	0.5s	1.10nm		3.9mb	
CAN	116.87	216	ePdiff	20 42.10	7.9X
BWA	117.85	216	ePdiff	20 34.20	-4.4X
			e	21 06.60	
GTA	154.93	18	iPKPc	25 24.80	-0.7
	4.0s	1000.00nm			
LSA	158.20	47	PKP	25 42.40	12.0X

S.D. = 1.0 on 6 of 14 obs.

JUN 01, 1990 18h 14m 44.65± 0.14s
5.485 S ± 2.9km 154.117 E ± 3.4km
DEPTH = 144.7km (3 depth phases)
5.5mb (36 obs.)
SOLOMON ISLANDS (193)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 32C
Centroid Location:
Origin Time 18:14:45.2 0.6
Lat 5.78S 0.07 Lon 153.96E 0.04
Dep 134.9 1.4 Half-duration 2.2
Moment Tensor; Scale 10**17 Nm
Mrr= 1.82 0.07 Mtt=-1.11 0.09
Mff=-0.70 0.09 Mrt= 0.75 0.06
Mrf=-0.84 0.06 Mtf= 0.63 0.09
Principal Axes:
T Val= 2.17 Plg=73 Azm= 55

01d 18h

N -0.26 5 310
P -1.90 17 218
Best Double Couple:Mo=2.0*10**17
NP1:Strike=301 Dip=29 Slip= 80
NP2: 132 62 95
RAB 2.33 303 iPc+ 15 25.00 1.2
0.5s 2225.35nm
iS 15 38.00
HNR 6.98 124 eP 16 27.00 1.3
eS 17 32.00
LAT 7.17 260 eP 16 19.20 -9.0X
PMG 7.93 240 iPd 16 39.40 1.0
0.9s 949.58nm 6.4mb
eS 18 14.00
MNDI 10.43 266 eP 17 14.00 2.3
CTA 16.41 207 iPd- 18 29.40 1.4
0.9s 268.91nm 5.6mb
iS 21 31.00
PVC 18.46 132 iPc 18 52.50 0.4
DZM 20.35 145 iPc 19 10.70 -1.0
iS 22 51.00
QIS 20.57 222 eP 18 55.00 -18.8X
i 19 14.30 94kmX
RMQ 21.51 193 iPd 19 24.20 1.1
0.8s 117.00nm 5.4mb
e 23 26.30
BRS 21.82 183 iPc 19 27.00 0.8
QLP 23.00 203 eP 19 38.50 0.8
WB5 23.95 232 iP 19 47.50 0.6
WRA 24.01 231 Pc 19 47.90 0.4
0.8s 104.80nm 5.4mb
COO 25.05 185 eP 19 58.00 0.9
0.6s 42.00nm 5.1mb
KNA 26.89 246 eP 20 14.00 0.0
CMS 27.01 196 iPd 20 14.30 -0.7
0.3s 11.00nm 5.0mb
epP 20 48.00 163kmX
CNB 30.01 188 eP 20 41.00 -0.8
ADE 32.61 204 eP 21 04.60 0.0
TOO 32.89 193 eP 21 06.00 -1.0
TSM 37.27 284 eP 21 46.50 2.2
CNZ 38.76 153 P 21 57.80 1.2
HBZ 38.83 149 P 21 57.40 0.3
0.4s 38.00nm 5.5mb
PUZ 39.17 149 P 21 59.40 -0.5
NOZ 39.48 150 P 22 02.50 0.1
KKM 39.53 286 ePc 22 03.50 0.2
BAG 39.67 304 eP 22 05.00 0.5
1.7s 1384.61nm 6.4mb
eS 28 00.00
THZ 39.82 158 P 22 04.80 -0.5
KIW 39.85 155 P 22 05.20 -0.3
TCW 39.88 156 P 22 05.80 0.1
MNG 39.89 154 P 22 05.10 -0.7
0.4s 51.00nm 5.6mb
MEKA 39.91 234 eP 22 05.80 -0.3
COOL 39.96 227 eP 22 06.00 -0.5
MRW 40.07 156 P 22 06.60 -0.6
CAW 40.12 155 P 22 07.30 -0.4
SNZO 40.14 156 P 22 08.00 0.3
S 28 05.00
eSS 31 16.00
WDW 40.22 155 P 22 07.70 -0.8
PGZ 40.24 154 P 22 08.10 -0.5
CCW 40.31 157 P 22 09.10 -0.1
MTW 40.34 155 P 22 08.60 -0.9
MOW 40.46 155 P 22 09.50 -0.9
LTZ 40.48 159 P 22 10.30 -0.3
BLW 40.51 155 P 22 09.90 -0.9
KHZ 40.62 158 P 22 10.70 -1.0
MSZ 40.86 165 P 22 15.30 1.7
NANU 40.93 242 eP 22 14.00 -0.5
i 24 13.10
MQZ 41.42 160 P 22 17.70 -0.6
KLB 42.81 228 eP 22 28.00 -1.8
MRWA 43.05 232 eP 22 31.00 -0.8
BAL 43.13 230 eP 22 31.00 -1.4
MUN 44.15 229 eP 22 40.00 -0.6
MAT 44.38 342 iPc 22 40.60 -1.8
1.5s 125.00nm 5.3mb
RKG 44.60 225 eP 22 46.00 1.8
YAMJ 45.36 344 P 22 50.00 -0.1
OFUJ 45.81 346 P 22 53.60 0.0
QZH 45.92 313 P 22 55.60 0.9
1.0s 400.00nm 6.0mb
SSE 48.09 321 iPc 23 12.00 0.5
2.0s 250.00nm 5.6mb
Z 16s 0.40um 4.5MszX
eS 29 58.00
GZH 48.91 307 Pc 23 19.20 1.2
QIZ 49.94 300 Pc 23 27.00 1.0
S 30 24.00
NJ2 50.20 320 iPc 23 28.80 1.1
4.0s 700.00nm 5.8mb X
KGM 51.28 277 ePc 23 36.10 -0.1
WHN 52.26 316 Pc 23 44.10 0.9
1.2s 100.00nm 5.5mb
S 30 58.00
DL2 53.43 329 P 23 51.40 -0.3
1.0s 100.00nm 5.6mb
PPI 53.86 273 ePd 23 54.00 -1.3
0.9s 219.00nm 6.0mb
IPM 53.96 280 ePc 23 56.10 0.1
0.8s 31.80nm 5.2mb
e 25 35.20 504kmX
MDJ 54.52 339 eP 23 58.50 -1.2
SNY 54.71 332 Pc 24 00.00 -1.0
CN2 55.46 335 iPc 24 05.40 -1.0
4.0s 500.00nm 5.8mb X
GYA 55.85 307 P 24 10.00 0.3
3.0s 1100.00nm 6.3mb
S 31 47.00
LOE 56.51 295 iPc 24 14.00 -0.3
NNT 56.95 289 eP 24 17.30 -0.1
BJI 57.19 326 eP 24 18.00 -0.7
1.7s 130.00nm 5.6mb
e 24 48.00 126kmX
NST 57.43 292 eP 24 18.00 -2.7
PMO 57.70 104 iP 24 23.90 1.2
0.8s 35.00nm 5.4mb
TIY 57.87 321 Pc 24 23.00 -0.7
Z 24s 0.50um 4.5MszX
N 14s 0.40um
TPT 57.96 104 iP 24 25.60 1.1
0.8s 35.00nm 5.4mb
XAN 58.02 316 iPc 24 24.00 -0.7
4.0s 700.00nm 6.0mb X
S 32 12.00
RUV 58.20 104 iP 24 27.20 1.0
0.8s 30.00nm 5.3mb
KMI 58.45 304 iPc 24 29.00 0.9
2.0s 500.00nm 6.1mb
BDT 58.93 294 eP 24 32.20 1.0
CHG 59.46 295 ePc 24 35.50 0.6
1.0s 47.00nm 5.4mb
CHTO 59.46 295 iPc 24 35.30 0.4
1.5s 110.92nm 5.6mb
pP 25 09.70 145km
CD2 60.18 310 iPc 24 39.60 0.0
0.6s 100.00nm 5.9mb
pP 25 15.40 151km
S 32 43.00
HHC 60.37 324 Pc 24 40.00 -0.8
SMY 60.42 14 e(P) 24 41.20 0.4
BTO 61.13 323 iPc 24 45.00 -1.0
ADK 62.35 20 ePd 24 54.20 0.5
1.5s 361.10nm 6.1mb
LZH 62.63 315 iPc 24 57.00 0.9
2.0s 530.00nm 6.1mb
SBA 72.63 177 P 25 58.80 1.3
GUN 73.60 301 Pc 26 05.00 0.5
PKI 73.91 301 Pc 26 06.50 0.2
GKN 74.68 301 Pc 26 10.80 0.2
SVW 76.93 23 eP 26 23.00 0.6
WMQ 77.13 317 iPc 26 24.40 0.5
4.0s 1000.00nm 5.9mb X
PP 29 25.50
S 36 02.40
TTA 77.93 21 eP 26 28.10 0.2
HYB 77.95 289 iPc 26 28.50 -0.3
1.0s 140.00nm 5.7mb
e 27 03.00 138km
PMR 79.77 24 eP 26 37.30 -0.4
IMA 80.67 19 eP 26 42.70 0.1
1.4s 75.60nm 5.2mb
i 26 48.20 17kmX
TOA 81.24 24 eP 26 46.20 0.7
FBA 82.03 21 eP 26 48.00 -1.6
POO 82.55 289 iPc 26 52.80 -0.4
KSH 84.36 310 Pd 27 04.50 2.5
4.0s 1200.00nm 6.1mb X
S 37 12.00
SPA 84.55 180 iPc 27 03.20 0.7
0.8s 132.92nm 5.8mb
MAW 85.45 203 iPc 27 07.00 0.2
0.9s 43.00nm 5.3mb
INK 88.62 21 eP 27 21.50 -0.6
ARN 88.81 52 eP 27 25.50 1.8
QUE 90.28 300 iPc 27 30.50 -0.4
ISA 91.06 54 eP 27 35.00 0.8
MWC 91.25 56 eP 27 36.00 0.8
SBB 91.49 55 eP 27 41.00 4.8X
KVN 91.70 51 eP 27 36.80 -0.4
CLC 91.78 54 eP 27 38.00 0.5
RVR 91.79 56 eP 27 39.00 1.5
PLM 92.16 57 eP 27 40.30 0.9
BAR 92.26 58 eP 27 41.00 1.3
TNP 92.29 52 eP 27 40.20 0.2
0.9s 6.51nm 4.8mb
TPC 92.90 56 eP 27 43.00 0.3
NEW 93.23 42 eP 27 42.50 -1.3
0.8s 5.21nm 4.8mb
GLA 93.84 57 eP 27 49.00 2.0
MBC 94.46 14 eP 27 49.00 0.1
0.7s 6.00nm 5.0mb
YKA 95.42 28 eP 27 53.70 0.2
0.6s 3.30nm 4.9mb
MAIO 96.94 306 eP 28 01.00 -0.1
SES 97.28 40 eP 28 02.00 -0.3
BW06 98.34 48 e(P) 28 10.00 2.5
0.9s 2.12nm 4.7mb
HFS 117.79 339 ePKP 33 13.50 -1.5
0.4s 0.10nm
NB2 117.99 341 PKP 33 14.50 -1.0
0.7s 1.30nm
ZST 123.90 327 ePKP 33 25.70 -1.4
e 33 31.80
BRG 123.91 331 ePKP 33 30.90 3.9X
0.8s 11.00nm
e 35 13.00
CLL 124.08 332 iPKPd 33 32.10 4.8X
0.9s 11.00nm
KHC 125.20 329 ePKP 33 16.00 -13.6X
SQTA 127.64 329 i(PKP)33 35.30 0.8
0.8s 9.00nm
i 33 39.20
e 34 08.00
e 35 35.00
BSF 129.40 332 ePKP 33 36.70 -1.1
HAU 129.48 332 ePKP 33 37.00 -0.9
LPL 131.08 330 ePKP 33 40.80 -0.5
0.6s 2.70nm
LPG 131.08 330 ePKP 33 40.80 -0.6
0.7s 3.30nm
LOR 131.16 333 ePKP 33 40.60 -0.5
0.8s 4.05nm
SSF 131.47 333 ePKP 33 41.10 -0.6
0.7s 4.40nm
SMF 131.64 333 ePKP 33 41.40 -0.6
0.9s 4.90nm
FLN 131.78 338 ePKP 33 41.40 -0.7
0.9s 9.85nm
PGF 131.87 325 ePKP 33 42.00 -0.7
0.7s 7.70nm
BGF 132.15 333 ePKP 33 42.40 -0.6
0.6s 4.50nm
GRR 132.23 338 ePKP 33 42.60 -0.4
FRF 132.48 328 ePKP 33 42.80 -0.9
LPF 132.59 337 ePKP 33 43.30 -0.4
0.7s 6.60nm
TCF 132.64 334 ePKP 33 42.70 -1.2
0.8s 6.70nm
LRG 132.70 328 ePKP 33 43.50 -0.6
0.8s 10.75nm
LMR 132.71 328 ePKP 33 43.50 -0.6
ZOBO 132.95 118 PKP 33 45.00 -1.1
LSF 132.97 334 ePKP 33 42.90 -1.6
0.8s 5.35nm
SIV 139.16 122 PKP 33 48.00 -9.0X
BAO 149.67 134 ePKP 34 14.50 -0.3
S.D. = 1.0 on 144 of 151 obs.

? JUN 01, 1990 18h 14m 58.64± 1.85s
4.279 S ±11.9km 135.759 E ±36.1km
DEPTH = 33.0km (normal)
4.9mb (2 obs.)
WEST IRIAN REGION (196)

MTN 9.66 208 iPd 17 19.40 0.9
eS 19 07.00

KNA	13.31	211	eP	18	07.00	-0.9
WB5	15.57	185	eP	18	37.20	-0.2
			e	18	47.00	
WRA	15.63	185	Pc	18	38.40	0.1
	0.7s		2.10nm			3.4mb X
WARB	23.47	201	eP	20	11.00	4.7X
			e	21	11.00	
FORR	27.40	194	eP	20	47.00	3.9X
			e	21	25.00	
BJI	47.64	340	eP	23	38.50	4.9X
	1.5s		16.00nm			4.8mb
LZH	50.04	326	P	23	52.50	0.0
	2.0s		38.00nm			5.1mb
LSZ	105.73	253	ePKP	33	27.00	5.5X
ITR	165.81	204	ePKP	35	11.10	9.1X
	S.D. = 0.9		on	5 of	10 obs.	

? JUN 01, 1990 18h 20m 23.60± 4.74s
31.413 S ±16.9km 68.300 W ±26.9km
DEPTH = 88.8 ± 38.5 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.17	300	iPd	20	36.80	0.0
CFA	0.20	165	iPc	20	37.10	0.2
			eS	20	48.10	
ZON	0.35	248	iPc	20	37.00	-0.4
			eS	20	49.00	
RTCB	0.43	260	iPc	20	38.40	0.4
RTCV	0.49	204	e(P)	20	38.30	-0.1
RTBS	1.01	256	ePc	20	43.70	0.1
RTRS	1.59	321	iPc	20	50.80	0.0
			eS	21	12.20	
	S.D. = 0.3		on	7 of	7 obs.	

& JUN 01, 1990 19h 05m 56.60s
62.289 N 149.960 W
DEPTH = 9.4km
CENTRAL ALASKA (1)
<AGS-P>.

CUT	0.19	309	iP	06	00.94	0.3
			eS	06	04.29	
PWA	0.64	177	iP	06	09.17	-0.3
HUR	0.71	12	iP	06	09.24	-1.4
GHO	0.71	136	iP	06	09.76	-1.0
			eS	06	20.38	
SKT	0.80	248	iP	06	11.39	-0.8
PLRM	0.80	150	iP	06	11.78	-0.4
			eS	06	23.02	
SML	0.91	121	iP	06	13.18	-0.9
			eS	06	25.56	
SUA	0.91	204	iP	06	13.59	-0.5
PMS	1.07	170	iP	06	16.09	-0.7
RND	1.23	24	eP	06	18.14	-1.5
			iS	06	34.16	
KTH	1.34	341	iP	06	20.68	-0.8
			iS	06	37.98	
NCG	1.37	231	eP	06	20.20	-1.7
			eS	06	40.41	
CGLM	1.38	226	eP	06	20.73	-1.4
CRP	1.46	226	eP	06	22.54	-0.7
			eS	06	43.23	
SPU	1.49	223	eP	06	22.59	-1.0
			eS	06	43.67	
NCA	1.50	100	eP	06	22.59	-1.1
MCK	1.52	17	eP	06	23.43	-0.5
NKA	1.67	202	eP	06	27.86	1.8
TOA	1.79	94	iP	06	27.39	-0.4
SLKM	1.79	184	eP	06	27.68	-0.2
GLI	1.97	135	iP	06	30.78	0.3
VZW	2.04	126	eP	06	31.14	-0.4
SDG	2.07	81	eP	06	32.26	0.4
KLU	2.07	111	iP	06	31.29	-0.7
VLZ	2.08	122	eP	06	31.22	-0.8
RDT	2.08	215	eP	06	31.79	-0.4
PAX	2.19	70	eP	06	33.33	-0.3
SEW	2.21	173	eP	06	34.74	0.9
RED	2.31	217	eP	06	36.18	0.7
NEA	2.33	9	eP	06	36.86	1.2
WRH	2.35	20	eP	06	35.20	-0.7
DDM	2.40	49	eP	06	38.28	1.6
HDA	2.52	31	eP	06	37.13	-1.2
CCB	2.56	21	eP	06	37.58	-1.2
FBA	2.79	19	eP	06	43.59	1.4
TTA	2.87	286	eP	06	42.33	-1.1
IMA	4.13	338	iP	06	59.18	-2.0
	37 obs. associated					

JUN 01, 1990 19h 17m 04.67± 0.69s
37.801 N ± 7.6km 14.943 E ± 5.5km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO	0.24	303	P	17	10.50	0.7
			eSg	17	15.00	
ATN	0.55	49	P	17	15.50	-0.2
			eSg	17	24.00	
MSI	0.63	50	P	17	17.80	0.5
			eSg	17	27.10	
MEU	0.70	181	P	17	18.30	-0.2
			eSg	17	28.90	
GIB	0.75	285	P	17	18.00	-1.4
SOI	0.92	73	P	17	22.00	-0.2
			eSg	17	36.50	
FAI	1.14	243	P	17	26.80	0.9
	S.D. = 0.9		on	7 of	7 obs.	

JUN 01, 1990 19h 27m 51.92± 0.87s
39.905 N ± 7.1km 28.986 E ± 8.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZI	0.57	41	ePg	28	03.00	-0.5
			eSg	28	12.00	
GBZT	0.95	22	ePn	28	09.40	-0.6
EDC	0.97	298	iPg	28	10.60	0.3
			eSg	28	24.60	
GPA	1.09	69	ePn	28	13.70	1.3
ALT	1.22	134	ePn	28	14.00	-0.6
KHL	1.63	165	ePn	28	21.00	0.1
	S.D. = 1.0		on	6 of	6 obs.	

% JUN 01, 1990 19h 56m 36.12± 1.29s
25.729 N ±10.2km 102.839 E ±18.2km
DEPTH = 10.0km (geophysicist)
YUNNAN PROVINCE, CHINA (318)
ML 3.8 (BJI).

KMI	0.61	188	Pgd	56	48.50	-0.1
			Sg	56	58.00	
GYA	3.52	77	Pn	57	33.40	1.4
			Sn	58	14.00	
CD2	5.22	9	ePn	57	56.40	0.2
			Sn	59	00.00	
CHG	7.77	208	eP	59	06.00	34.0X
CHTO	7.77	208	e(P)	58	35.90	3.9X
WHN	11.23	62	eP	59	18.00	-1.7
TIY	14.46	32	eP	00	06.30	3.5X
	Z 27s		0.40um			
	N 15s		0.40um			
BTO	15.99	20	eP	00	23.00	0.2
	S.D. = 1.6		on	5 of	8 obs.	

JUN 01, 1990 20h 21m 27.34± 0.45s
47.877 N ± 4.3km 14.248 E ± 4.6km
DEPTH = 7.5 ± 3.5 km
AUSTRIA (546)
ML 3.7 (VKA), 3.4 (GRF), 3.0 (FUR), 3.3 (LDG). Felt (V) at Malln.

MOA	0.03	156	iPgc	21	27.40	-1.6
KMR	0.20	337	iPg+	21	32.60	1.1
			i(Sg)	21	37.40	
KBA	1.01	218	iP	21	45.30	-1.5
			i(Pg)	21	48.60	
			i	21	50.10	
			iSg	22	06.10	
			i	22	06.90	
KHC	1.33	341	iPg	21	53.20	1.0
			Sg	22	11.80	
VKA	1.44	74	iPgc	21	53.30	-0.5
			i	21	58.00	
			iSg	22	12.70	
			i	22	15.30	
WET	1.56	325	eP	21	56.60	1.1
SOP	1.57	96	eP	21	57.00	1.4
FVI	1.63	218	P	21	57.90	1.5
			eSg	22	22.30	
LJU	1.84	174	e(Pn)	22	00.60	1.0
			eSn	22	25.00	
VOY	1.86	188	iPnc	22	00.50	0.5
			eSn	22	26.10	
WATA	1.89	254	iPgc	22	02.60	2.2
			iSg	22	29.80	
SCE	1.92	245	eP	22	03.40	2.6
ZST	1.94	79	iPn	22	01.80	0.8
			i(Sn)	22	25.70	
FUR	2.02	279	iPnc	22	06.20	4.1X
PRU	2.12	5	ePn	22	03.50	-0.1
			Pg	22	05.80	
			Sg	22	34.00	
CEY	2.14	177	eP	22	09.50	5.5X
			eSn	22	37.50	
SQTA	2.16	253	iPgc	22	07.30	3.0X
			iSg	22	37.70	
TRI	2.19	189	P	22	05.40	0.7
PTJ	2.30	149	eP	22	05.50	-0.8
OGA	2.41	246	ePn	22	12.00	4.0X
CTI	2.55	225	P	22	11.10	1.2
GRF	2.70	313	ePn	22	12.70	0.8
			ePg	22	19.60	
			eSg	22	55.00	
SRO	2.74	90	eP	22	20.90	8.5X
			e	22	34.30	
BRG	3.01	356	ePg	22	25.00	8.8X
			eSg	23	02.00	
OSS	3.04	248	eP	22	23.70	6.9X
KSP	3.26	23	eP	22	18.50	-1.3
	0.6s		56.00nm			
			iS	23	09.00	
			i	23	12.00	
MOX	3.26	329	iPn	22	19.50	-0.4
			iSg	23	11.00	
CLL	3.53	347	iPg	22	23.70	0.1
			iSg	23	20.70	
SLE	3.88	270	eP	22	28.00	-0.6
ZLA	3.98	266	eP	22	29.60	-0.4
TMA	4.08	246	eP	22	33.40	1.8
TNS	4.48	304	ePn	22	38.60	1.5
			eSn	23	28.30	
			eSg	23	52.10	
MMK	4.67	249	eP	22	40.80	0.7
CDF	4.70	279	Pn	22	39.50	-0.8
			Pg	22	55.40	
			Sg	23	57.60	
BSF	5.02	272	Pn	22	43.80	-1.1
			Sn	23	39.30	
			Sg	24	08.60	
HAU	5.31	274	Pn	22	24.75	-24.2X
			Sn	23	47.80	
LPG	5.68	248	Pn	22	55.00	0.6
LBF	7.03	266	Pn	23	11.90	-1.2
AVF	7.48	266	Pn	23	18.00	-1.4
BGF	7.88	265	Pn	23	23.80	-1.1
TCF	8.37	264	Pn	23	29.60	-2.3
	S.D. = 1.3		on	33 of	41 obs.	

? JUN 01, 1990 20h 39m 57.36± 1.86s
13.936 N ±24.0km 93.202 W ±13.4km
DEPTH = 33.0km (normal)
4.6mb (4 obs.)
OFF COAST OF CHIAPAS, MEXICO (68)

TPX	1.33	43	iP	40	19.00	-0.7
			(S)	40	41.50	
SCX	2.84	11	iP	40	42.20	0.9
			iS	41	14.50	
PSM	3.28	327	(P)	41	28.20	40.5X
OXX	4.62	313	iP	41	07.00	0.2
			(S)	42	13.30	
PPM	7.29	315	(P)	41	51.00	6.3X
LRM	35.70	337	eP	46	55.20	0.2
YKA	50.83	347	eP	48	54.80	-1.7
	0.8s		6.40nm			4.6mb
MBC	63.84	353	eP	50	28.00	-0.4
	0.9s		5.00nm			4.6mb
NB2	84.76	28	P	52	30.60	1.2
	0.9s		2.00nm			4.3mb
APO	86.18	28	eP	52	36.70	0.3
	1.0s		6.40nm			4.8mb
	S.D. = 1.1		on	8 of	10 obs.	

JUN 01, 1990 21h 46m 18.73± 1.01s
45.851 N ± 7.7km 26.639 E ± 8.7km
DEPTH = 105.1 ± 12.1 km
ROMANIA (358)

VRI	0.06	73	iPc	46	32.50	-0.3
BRD	0.44	139	iPc	46	35.00	0.1
MLR	0.61	234	ePd	46	36.00	-0.2

01d 21h

ISR	0.72	185	iPd	46 37.00	-0.1
PPE	0.77	61	ePd	46 39.00	1.5
CLI	0.83	32	iPc	46 38.00	-0.1
PTT	1.10	351	eP	46 30.00	-10.9X
CFR	1.26	121	iPc	46 42.00	-0.7
CMP	1.27	243	iPd	46 46.00	3.1X
IAS	1.49	25	iPc	46 45.00	-0.4
TLB	1.60	142	iPd	46 46.00	-0.9
PSN	2.43	153	eP	46 58.00	0.3
PVL	2.79	200	iPd	47 04.00	1.5
PGB	3.75	209	iP	47 16.00	0.4
VTS	4.09	218	iPc	47 19.00	-1.3
KDZ	4.29	192	eP	47 23.00	0.0
RZN	4.39	199	eP	47 24.00	-0.5
MMB	4.75	207	eP	47 30.00	0.6

S.D. = 0.8 on 16 of 18 obs.

JUN 01, 1990 21h 52m 06.35± 0.87s
37.693 N ± 7.1km 15.202 E ± 7.6km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO	0.47	301	P	52 16.00	0.1
			eSg	52 22.00	
MSI	0.58	29	P	52 18.60	0.5
			eSg	52 28.40	
MEU	0.63	200	P	52 18.70	-0.4
			eSg	52 31.90	
GIB	0.98	288	P	52 24.50	-0.5
			eSg	52 40.40	
FAI	1.28	252	P	52 30.90	0.8
TDS	2.15	24	P	52 43.10	0.3
MGR	2.46	6	P	52 46.20	-0.9

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

JUN 01, 1990 22h 22m 06.15± 0.50s
51.355 N ±11.4km 176.890 W ± 6.4km
DEPTH = 33.0km (normal)
4.7mb (16 obs.) 4.5Msz (2 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS. (7)
Felt (V) on Adak.

ADK	0.54	14	iPc	22 18.40	1.0
SMY	5.73	287	eP	23 34.50	3.5
SDN	10.58	61	eP	24 38.20	-0.1
SVW	15.26	42	eP	25 45.10	4.5X
TTA	16.11	36	eP	25 54.00	2.4
PMS	17.97	46	eP	26 16.00	1.2
IMA	18.86	30	eP	26 27.00	1.3
	1.0s		18.80nm		4.3mb
FBA	20.24	37	e(P)	26 39.30	-1.5
	0.8s		21.55nm		4.5mb
SIT	24.67	60	eP	27 26.00	1.3
	0.8s		27.59nm		4.9mb
INK	26.80	34	eP	27 43.00	-1.5
MBC	33.19	22	eP	28 40.50	-0.7
	0.5s		3.00nm		4.5mb
MAT	34.97	263	eP	28 58.00	1.0
	1.0s		23.00nm		5.1mb
PNT	35.82	70	eP	29 05.00	0.9
	0.4s		9.00nm		5.1mb
CN2	38.73	282	eP	29 30.00	1.4
Z	20s		0.60um		4.4Msz
			esP	29 45.00	
SES	40.29	65	eP	29 41.00	-0.5
SNY	40.96	281	Pd	29 47.80	0.8
	1.2s		100.00nm		5.4mb
KVN	42.12	83	eP	29 58.00	1.2
TNP	43.25	84	eP	30 07.00	0.9
	0.8s		4.17nm		4.2mb
DL2	43.88	278	eP	30 10.50	-0.4
BJI	46.55	283	eP	30 32.50	0.4
	1.0s		24.00nm		5.1mb
Z	24s		0.38um		4.3MszX
TIA	48.35	279	eP	30 45.50	-0.9
HHC	48.84	287	eP	30 51.00	0.8
SSE	49.19	271	Pc	30 53.50	0.6
	1.0s		10.00nm		4.8mb
BTO	49.92	288	eP	30 57.00	-1.5
TIY	50.28	283	eP	31 02.00	0.8
Z	30s		0.90um		4.6MszX
ALQ	51.93	80	eP	31 13.00	-1.0
	1.0s		3.25nm		4.2mb
FRB	52.42	32	eP	31 14.00	-2.9
WHN	53.85	275	eP	31 27.50	-0.4
LZH	56.54	287	Pd	31 47.00	-0.7
	1.5s		44.00nm		5.3mb
Z	22s		0.50um		4.6Msz
			pP	31 56.00	29kmX
			sP	32 05.00	
GTA	56.68	293	P	31 47.40	-1.2
CD2	60.15	283	eP	32 12.10	-0.7
GYA	61.51	277	P	32 22.00	-0.2
NB2	67.77	356	P	32 58.70	-3.5X
	0.9s		1.10nm		4.0mb
HFS	68.54	354	eP	33 04.20	-2.7
	0.4s		0.60nm		4.0mb
GUN	72.97	293	P	33 33.20	-1.4
PKI	73.50	293	P	33 36.20	-1.4
GKN	73.61	294	P	33 36.70	-1.4
MTN	78.19	232	eP	34 04.70	1.0
	0.7s		25.00nm		5.3mb
KHC	79.49	353	eP	34 11.00	0.5
QUE	81.35	308	eP	34 20.40	-0.5
WB5	82.77	225	eP	34 28.10	0.1
WRA	82.84	225	Pd	34 28.90	0.6
	0.8s		4.90nm		4.6mb
HYB	85.34	292	eP	34 41.00	-0.2
MAW	147.20	218	ePKP	41 47.00	3.4X
	1.0s		26.00nm		
JOZ	147.64	306	ePKP	41 46.00	0.4
SWZ	150.58	317	iPKPd	41 43.00	-7.4X
	0.8s		63.43nm		

S.D. = 1.3 on 42 of 46 obs.

JUN 01, 1990 23h 09m 43.09± 0.59s
41.165 N ± 9.1km 14.767 E ± 9.7km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

DUI	0.55	335	P	09 54.00	-0.2
			eSg	10 03.10	
SGO	0.73	146	P	09 58.00	0.6
			eSg	10 10.00	
SDI	0.90	307	P	10 00.50	0.2
MGR	1.19	149	P	10 04.70	-0.6
			eSg	10 22.70	
AZI	1.29	310	P	10 07.00	0.0
ORI	1.69	130	P	10 12.70	-0.1
OHR	4.56	89	e(Pn)	10 53.80	0.1

S.D. = 0.4 on 7 of 7 obs.

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* JUN 01, 1990 23h 26m 20.41± 0.80s
10.021 S ±12.0km 108.128 E ±14.8km
DEPTH = 33.0km (normal)
4.9mb (5 obs.)
SOUTH OF JAVA (282)

TRT	5.01	63	iPd	27 34.80	-0.5
			iS	28 15.60	
NANU	14.34	151	eP	29 41.50	-1.7
			eS	32 13.50	
MBL	15.79	136	eP	30 04.00	1.9
			eS	32 44.00	
WRA	27.14	114	Pc	32 14.20	11.5X
	0.8s		6.20nm		
WB5	27.14	114	eP	32 07.00	4.2X
			e	37 26.50	
CHG	30.05	342	ePc	32 28.90	-0.1
	0.7s		11.13nm		4.8mb
CHTO	30.05	342	iP	32 28.00	-0.9
	1.2s		23.26nm		4.9mb
			pP	32 37.00	31kmX
			sP	32 42.90	
KMI	35.32	352	eP	33 16.00	1.0
PKI	43.37	330	P	34 22.20	0.2
GUN	43.43	331	P	34 22.60	0.2
	0.7s		24.00nm		5.1mb
GKN	44.11	330	P	34 27.60	-0.1
	0.9s		20.00nm		4.9mb
LZH	46.04	355	P	34 31.00	-12.0X
			pP	34 43.00	43kmX
			sP	34 52.00	
BJI	50.36	8	eP	35 23.50	7.2X
	1.2s		8.00nm		4.6mb
QUE	56.26	317	eP	36 04.90	4.4X
SIV	152.03	203	PKP	46 14.00	6.0X

S.D. = 1.2 on 9 of 15 obs.

? JUN 02, 1990 00h 16m 53.51± 4.52s
31.482 S ±18.7km 68.657 W ±17.9km
DEPTH = 90.4 ± 42.7 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB	0.12	268	iPd	17 07.00	0.1
RTLL	0.22	47	iPc	17 07.00	-0.1
CFA	0.38	109	iPc	17 07.70	0.0
			eS	17 19.90	
RTCV	0.39	165	iPd	17 07.80	0.0
RTBS	0.70	255	ePd	17 10.20	-0.1
			S	17 24.00	
RTRS	1.48	332	iPd	17 19.40	0.0
			eS	17 39.80	

S.D. = 0.1 on 6 of 6 obs.

JUN 02, 1990 00h 32m 35.02± 0.15s
32.434 N ± 3.6km 92.802 E ± 2.5km
DEPTH = 12.9km (10 depth phases)
5.6mb (57 obs.) 4.6Msz (2 obs.)
TIBET (306)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 22C
Centroid Location:
Origin Time 00:32:42.8 0.7
Lat 32.20N 0.12 Lon 93.28E 0.12
Dep 15.0 FIX Half-duration 1.7
Moment Tensor; Scale 10**16 Nm
Mrr=-5.98 0.60 Mtt= 0.73 0.65
Mff= 5.25 0.70 Mrt=-5.21 1.69
Mrf= 3.14 2.37 Mtf= 2.04 0.61
Principal Axes:

T	Val= 6.21	Plg= 9	Azm=282
N	3.54	30	187
P	-9.75	58	27

Best Double Couple:Mo=8.0**16
NP1:Strike= 43 Dip=44 Slip= -44
NP2: 168 61 -125

LSA	3.07	208	Pgd	33 30.80	6.3X
			Sg	34 13.80	
GTA	8.99	37	iPd	34 48.20	0.7
	1.2s		300.00nm		6.5mb
Z	12s		12.10um		
E	10s		7.60um		
			S	36 30.00	
CD2	9.46	96	P	34 54.50	0.5
N	10s		26.70um		
			S	36 40.00	
LZH	9.84	65	eP	34 59.00	-0.3
N	10s		15.60um		
			S	36 48.00	
KMI	11.35	127	iPc	35 18.00	-2.1
	1.5s		200.00nm		6.2mb
			S	37 34.00	
WMQ	12.05	342	P	35 28.00	-1.4
Z	13s		14.30um		
N	10s		9.20um		
E	11s		12.10um		
GYA	13.46	113	Pc	35 46.40	-1.9
	1.0s		190.00nm		6.0mb
N	10s		5.20um		
E	10s		8.52um		
			ScS	48 26.40	
XAN	13.59	79	Pd	35 49.00	-0.9
			S	38 22.00	
CHTO	14.64	156	iP	36 02.30	-1.4
KSH	15.31	302	P	36 14.50	2.0
			pP	36 22.10	
			S	39 08.00	
BDT	16.13	158	eP	36 22.90	-0.1
	0.9s		38.10nm		4.5mb X
TIY	16.90	66	P	36 32.40	-0.4
Z	11s		5.20um		
N	12s		6.00um		
			S	39 36.00	
			sS	39 48.00	
HHC	17.22	56	Pd	36 39.00	2.2
Z	16s		7.10um		
N	10s		4.50um		
E	10s		5.60um		
			S	39 52.00	
NST	17.97	157	eP	36 47.20	1.0
WHN	18.47	90	eP	36 50.50	-1.8
Z	14s		2.90um		
			pP	36 58.00	
			iS	40 15.00	
HYB	19.73	224	eP	37 06.00	-1.5
	0.8s		85.70nm		5.1mb
			e	38 08.00	
BJI	20.29	61	eP	37 13.00	-0.1

1.5s 480.00nm 5.6mb
Z 12s 4.58um 5.1MszX
N 12s 5.40um
E 13s 2.55um
eS 41 00.00
QIZ 20.30 127 P 37 13.30 -0.1
sP 37 20.00
eS 40 53.00
GZH 20.40 112 Pc 37 13.70 -0.6
Z 10s 3.90um 5.1MszX
S 40 50.00
TIA 20.42 73 P 37 14.10 -0.5
Z 14s 2.60um 4.7MszX
N 12s 5.10um
E 12s 3.10um
S 41 00.00
NNT 20.75 161 iPd 37 18.00 -0.1
HKC 21.46 113 iP 37 26.50 1.3
iS 41 24.00
POO 21.96 235 iPc 37 32.10 1.8
NJ2 22.03 84 Pd 37 33.00 2.2
4.0s 500.00nm 5.3mb X
N 11s 3.50um
E 12s 1.20um
S 41 32.00
QUE 22.19 271 eP 37 33.10 0.4
1.6s 321.67nm 5.5mb
e(S) 41 39.00
QZH 23.78 102 eP 37 52.70 4.6X
Z 14s 3.60um 5.0MszX
E 14s 3.60um
S 42 06.00
SSE 24.14 86 P 37 53.50 1.9
1.0s 160.00nm 5.6mb
Z 12s 3.20um 5.0MszX
ePcS 45 10.00
DL2 24.23 66 Pd 37 53.00 0.6
1.0s 100.00nm 5.4mb
Z 16s 2.10um 4.7MszX
N 12s 2.70um
SNY 26.15 60 iPd 38 10.00 -0.6
1.2s 200.00nm 5.7mb
Z 17s 1.80um 4.7MszX
N 10s 2.30um
E 12s 1.20um
iS 42 42.00
sS 42 54.00
MAIO 27.68 287 iPd 38 25.80 1.0
eS 43 16.00
CN2 27.91 57 iPd 38 26.00 -0.6
1.0s 100.00nm 5.5mb
Z 13s 2.60um 5.0MszX
N 13s 4.80um
E 13s 1.30um
pP 38 33.00 25kmX
S 43 08.00
IPM 28.76 163 ePc 38 36.00 1.5
MDJ 30.99 56 eP 38 53.50 -0.6
N 12s 5.20um
epP 38 57.00 12km
KKM 34.15 135 ePd 39 24.00 1.9
1.0s 76.10nm 5.6mb
MAT 37.39 71 (P) 39 50.00 0.7
Z 20s 0.71um 4.5Msz
TAB 38.06 292 eP 39 57.00 1.9
SUF 51.09 327 iP 41 39.50 0.6
0.5s 17.00nm 5.2mb
SOD 51.36 333 iP 41 41.30 0.4
KEV 51.61 336 eP 41 44.00 1.3
MLR 52.18 305 iPc 41 59.00 11.4X
BZS 55.14 306 eP 42 09.00 -0.2
SKO 56.14 302 iP 42 16.50 0.0
i 42 20.00 11km
BUD 56.47 309 iP 42 18.50 -0.2
KBS 56.66 347 eP 42 20.00 0.2
OHR 56.84 301 eP 42 19.30 -2.2
SRO 56.86 309 iP 42 22.60 1.1
HFS 57.18 324 eP 42 23.10 -0.5
1.4s 123.90nm 5.7mb
Z 16s 1.42um 5.2MszX
LR 05 57.00
KSP 57.46 313 iPd 42 25.80 0.0
ZST 57.56 310 eP 42 26.20 -0.3
SOP 58.04 309 iPd 42 31.80 2.0
NB2 58.23 326 P 42 30.80 -0.3
0.6s 9.90nm 5.0mb
COP 58.67 319 iPd 42 34.60 0.5

1.0s 100.00nm 5.9mb
i 42 39.00 14km
PRU 58.75 312 Pd 42 35.00 0.2
1.5s 44.60nm 5.3mb
Z 14s 0.80um 5.0MszX
N 12s 1.30um
E 12s 0.50um
e 42 38.40 11km
BRG 58.90 313 iPd 42 35.80 0.0
1.4s 60.00nm 5.5mb
i 42 40.10 14km
e 43 25.00
BRN 58.97 315 eP 42 37.50 1.2
CLL 59.37 314 iPd 42 39.20 0.2
1.7s 71.00nm 5.5mb
i 42 42.50 11km
KHC 59.58 312 iPd 42 41.00 0.4
1.4s 29.00nm 5.2mb
RIY 60.12 307 eP 42 43.10 -1.1
MOX 60.39 314 eP 42 46.00 -0.1
1.6s 74.00nm 5.6mb
Z 16s 1.60um 5.3MszX
e 42 50.50 15km
TRI 60.43 308 ePd 42 45.60 -0.7
TDS 60.52 300 P 42 47.30 0.2
FVI 60.82 309 P 42 48.20 -0.8
GRF 60.90 313 iPd 42 50.30 0.7
1.4s 111.00nm 5.8mb
Z 19s 0.70um 4.8Msz
e 42 54.30 13km
FUR 61.32 311 iPd 42 53.30 0.8
SQTA 61.65 310 iPd 42 54.20 -0.7
1.5s 100.00nm 5.8mb
i 43 04.50 34kmX
i 43 08.30
i 43 36.00
e 46 36.00
CTI 61.73 309 P 42 54.60 -0.8
RSM 61.87 306 P 42 56.70 0.5
ASS 62.01 305 P 42 58.50 1.2
MNS 62.23 304 P 42 57.80 -0.9
SFI 62.29 306 P 42 59.50 0.6
PGD 62.39 306 P 43 00.70 0.8
RDP 62.41 304 P 43 03.50 3.6X
OSS 62.51 310 ePd 43 00.20 -0.5
SAL 62.62 308 P 42 59.00 -2.1
WIT 62.69 317 eP 43 02.50 1.0
SAX 62.85 310 ePd 43 02.40 -0.6
WTS 62.87 316 eP 43 03.00 0.3
1.2s 50.00nm 5.6mb
MME 62.98 307 P 43 04.40 0.6
BDI 63.09 307 P 43 03.90 -0.5
MDI 63.10 309 P 43 03.30 -1.0
LLS 63.20 310 ePd 43 04.70 -0.5
SLE 63.22 311 eP 43 05.10 0.0
PII 63.26 306 P 43 04.50 -0.9
GWF 63.36 313 P 43 05.91 -0.2
ZLA 63.38 311 ePd 43 05.80 -0.5
FEL 63.49 311 P 43 06.58 -0.5
TMA 63.54 309 ePd 43 06.50 -1.0
BOB 63.62 308 P 43 08.00 0.1
VAI 63.69 309 P 43 06.90 -1.3
WLS 63.72 312 P 43 08.12 -0.4
CDF 63.77 312 P 43 08.43 -0.4
ENN 63.80 315 eP 43 09.00 0.2
1.0s 19.00nm 5.2mb
e 43 13.50 15km
MEM 63.80 315 Pc 43 09.50 0.6
ed 43 13.50 13km
ECH 63.91 312 P 43 09.20 -0.5
BBS 63.95 311 P 43 09.23 -0.8
MOF 64.05 312 P 43 10.55 -0.2
MMK 64.15 310 eP 43 11.60 0.0
BSF 64.28 312 P 43 11.62 -0.6
ORO 64.29 309 P 43 11.00 -1.3
LOMF 64.42 311 P 43 11.96 -1.2
HAU 64.49 312 eP 43 13.20 -0.3
1.2s 23.80nm 5.2mb
DIX 64.50 310 ePd 43 14.20 0.3
PGF 64.72 306 eP 43 14.50 -0.6
1.2s 38.70nm 5.5mb
EMS 64.82 310 ePd 43 15.70 -0.1
DOU 64.83 315 Pc 43 15.70 0.1
e 43 27.30 39kmX
SNF 64.86 315 iPd 43 15.87 0.1
LPG 65.14 309 iPd 43 18.40 0.3
1.2s 95.20nm 5.8mb

DOI 65.18 308 P 43 16.20 -1.9
SBF 65.29 307 eP 43 18.50 -0.3
1.0s 64.00nm 5.8mb
BNI 65.36 309 Pd 43 18.80 -0.5
WB5 65.48 137 eP 43 20.00 -0.1
WRA 65.51 137 Pc 43 20.00 -0.3
0.6s 22.10nm 5.5mb
FRF 65.94 307 eP 43 22.20 -0.6
1.3s 50.55nm 5.5mb
LMR 66.12 307 eP 43 23.50 -0.5
1.0s 64.00nm 5.8mb
LRG 66.17 307 eP 43 24.10 -0.2
1.2s 59.50nm 5.6mb
LOR 66.33 312 iPd 43 24.60 -0.7
1.2s 38.70nm 5.5mb
LBF 66.37 312 iPd 43 25.10 -0.5
1.2s 44.65nm 5.5mb
SMF 66.58 311 iPd 43 26.40 -0.5
1.2s 78.85nm 5.8mb
WARB 66.62 147 eP 43 27.00 -0.3
SSF 66.63 312 iPd 43 26.80 -0.4
1.2s 62.50nm 5.7mb
AVF 66.84 312 iPd 43 27.90 -0.6
1.2s 75.85nm 5.7mb
EKA 67.18 322 P 43 31.00 0.4
1.1s 39.80nm 5.5mb
BGF 67.25 312 iPd 43 30.90 -0.3
1.2s 41.65nm 5.5mb
MAF 67.56 311 iPd 43 33.60 0.4
1.2s 74.40nm 5.7mb
TCF 67.76 311 iPd 43 34.60 0.2
LSF 68.21 312 iPd 43 36.60 -0.6
1.2s 46.10nm 5.5mb
LDF 68.25 314 eP 43 37.20 -0.2
1.1s 43.95nm 5.5mb
FLN 68.40 315 eP 43 38.00 -0.3
1.1s 29.30nm 5.4mb
CAF 68.41 310 iPd 43 39.00 0.5
1.1s 45.20nm 5.6mb
RJF 68.61 311 iPd 43 40.30 0.6
1.2s 89.25nm 5.8mb
GRR 68.78 314 eP 43 40.50 -0.2
1.1s 48.85nm 5.6mb
LPO 69.08 310 iPd 43 43.00 0.4
1.2s 59.50nm 5.6mb
MFF 69.11 313 eP 43 42.60 -0.2
1.1s 39.05nm 5.5mb
LFF 69.26 311 iPd 43 44.20 0.5
1.1s 56.15nm 5.6mb
IMA 69.53 24 iP 43 45.00 -0.2
1.1s 23.44nm 5.3mb
MBC 69.70 8 eP 43 46.00 0.1
EPF 70.35 309 iPd 43 49.80 -0.7
1.3s 21.65nm 5.1mb
TTA 70.44 27 eP 43 50.90 0.2
1.2s 32.20nm 5.3mb
SVW 71.61 28 eP 43 58.50 0.8
FBA 72.20 23 eP 44 00.70 -0.5
1.0s 68.75nm 5.7mb
ECRI 72.41 310 eP 44 04.00 1.1
ETOR 72.95 308 eP 44 06.20 0.1
PMR 73.83 26 iP 44 10.70 0.0
1.1s 76.56nm 5.7mb
INK 73.84 16 iPc 44 11.00 0.4
1.0s 34.00nm 5.3mb
GUD 74.43 308 eP 44 15.20 0.4
TOA 74.57 25 eP 44 16.10 1.0
TOL 74.74 308 iPc 44 17.50 1.1
1.2s 187.50nm 6.0mb
EBAN 75.41 306 eP 44 20.60 0.3
AFC 75.69 305 e(P) 44 22.00 -0.1
EPLA 75.99 309 eP 44 25.00 1.4
EPRU 77.00 306 eP 44 29.50 0.2
KRI 77.78 241 eP 44 36.00 2.1
BUL 80.61 239 iPc 44 48.90 -0.3
YKA 82.87 12 eP 44 59.20 -1.0
0.6s 2.00nm 4.5mb X
FRB 83.01 352 eP 45 01.00 0.2
FFC 92.27 9 iPd 45 45.60 -0.2
1.1s 22.00nm 5.5mb
KIC 92.96 279 P 45 52.80 3.2X
PNT 93.64 21 eP 45 53.00 0.7
ITR 129.17 286 e(PKP)51 42.00 -3.2X
SIV 151.21 298 iPKPc 52 24.20 0.2
i 52 30.00
ZOBO 156.38 308 PKP 52 32.20 0.3
LPB 156.55 308 PKP 52 28.00 -3.9X

02d 00h

S.D. = 0.9 on 155 of 162 obs.

JUN 02, 1990 02h 35m 17.09± 0.77s
44.181 N ± 6.2km 6.985 E ± 6.8km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.0 (LDG), 1.7 (GEN).

STV	0.25	75	P	35	22.49	0.0
			S	35	26.59	
ENR	0.32	82	P	35	23.72	0.0
			S	35	28.33	
PZZ	0.33	14	P	35	24.02	0.0
			S	35	28.84	
SBF	0.45	134	Pg	35	26.50	0.1
			Sg	35	32.80	
FRF	0.67	202	Pg	35	29.80	-0.6
			Sg	35	38.90	
LRG	0.86	212	Pg	35	34.40	0.8
LMR	0.91	202	Pg	35	34.20	-0.4

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

& JUN 02, 1990 02h 36m 09.29s
62.293 N 149.952 W
DEPTH = 10.0km
CENTRAL ALASKA (1)
<AGS-P>.

CUT	0.19	307	iP	36	13.60	0.2
			eS	36	16.06	
PWA	0.65	177	iP	36	21.78	-0.4
HUR	0.70	12	iP	36	21.87	-1.3
GHO	0.71	137	iP	36	22.37	-1.0
			eS	36	32.98	
PLRM	0.80	151	iP	36	24.42	-0.4
			eS	36	35.61	
SKT	0.80	248	eP	36	24.03	-0.9
SML	0.90	122	iP	36	25.78	-0.9
			eS	36	38.34	
SUA	0.91	205	iP	36	26.23	-0.6
			eS	36	39.44	
PMS	1.07	170	eP	36	28.69	-0.7
			eS	36	42.71	
RND	1.23	24	eP	36	30.98	-1.2
KTH	1.34	341	iP	36	33.31	-0.7
			eS	36	50.53	
NCG	1.37	230	eP	36	33.07	-1.5
CGLM	1.39	226	eP	36	33.69	-1.1
CRP	1.47	226	eP	36	33.82	-2.1
SPU	1.50	223	eP	36	35.50	-0.8
NCA	1.50	100	eP	36	35.42	-0.9
TOA	1.78	94	eP	36	40.00	-0.4
SLKM	1.80	184	eP	36	40.13	-0.4
GLI	1.97	135	eP	36	43.35	0.3
VZW	2.04	126	eP	36	44.41	0.3
KLU	2.07	111	iP	36	43.89	-0.7
VLZ	2.08	122	eP	36	44.47	-0.1
RDT	2.09	215	eP	36	45.24	0.4
PAX	2.18	70	eP	36	43.80	-2.4
SEW	2.21	173	eP	36	47.74	1.2
RED	2.32	217	eP	36	48.86	0.7

26 obs. associated

& JUN 02, 1990 02h 43m 03.00s
36.840 N 121.582 W
DEPTH = 2.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.7 (BRK).

SAO	0.13	124	iP	43	05.60	-0.1
GCC	0.38	300	iPd	43	10.30	-0.3
MHC	0.50	355	iPd	43	13.40	0.3
			i	43	22.20	
ARN	0.51	4	iPc	43	13.40	0.2
PRS	0.54	161	iPd	43	13.20	-0.5
LLA	0.56	113	iPc	43	14.20	0.0
PCC	0.92	316	eP	43	20.00	-1.3
PRI	1.02	133	ePc	43	22.50	-0.5
BKS	1.16	334	iPc	43	25.10	-0.3
BRK	1.16	333	eP	43	24.90	-0.6
ZSP	1.23	334	ePc	43	24.70	-1.8
			i	43	26.70	
			eS	43	44.20	
			i	43	46.10	
PHAM	1.38	136	eP	43	27.30	-2.0
FRI	1.51	84	e(P)	43	29.80	-1.3
			eS	43	48.60	
CMB	1.53	38	ePc	43	30.50	-0.9
			eS	43	49.00	

14 obs. associated

? JUN 02, 1990 03h 25m 34.01± 1.98s
20.790 S ±17.2km 173.024 E ±18.7km
DEPTH = 504.4 ± 17.7 km
3.9mb (2 obs.)
VANUATU ISLANDS REGION (185)

DZM	6.26	257	iPc	27	14.20	0.1
HBZ	17.37	166	eP	29	07.00	-0.7
PUZ	17.81	166	P	29	12.10	0.0
NOZ	18.29	167	P	29	17.20	0.6
MNG	19.88	174	P	29	31.90	-0.1
KIW	20.07	176	eP	29	33.30	-0.5
CAW	20.33	176	eP	29	35.90	-0.3
TCW	20.39	177	P	29	37.30	0.6
MRW	20.43	176	P	29	37.00	-0.1
WDW	20.48	176	P	29	37.10	-0.5
BLW	20.62	175	P	29	38.40	-0.5
THZ	20.91	180	P	29	42.90	1.3
KHZ	21.57	179	P	29	47.20	-0.4
LTZ	21.94	181	eP	29	51.60	0.6
WB5	36.20	264	eP	31	54.40	-0.4
WRA	36.22	264	Pc	31	54.80	-0.1
	0.3s		1.20nm		3.9mb	
MTN	40.78	274	iPc	32	32.30	0.1
CHTO	82.53	293	iP	37	04.90	0.2
	0.7s		3.02nm		3.9mb	
APO	137.63	345	ePKP	43	54.00	-7.2X
	0.5s		0.60nm			
CLL	145.76	338	iPKP	44	14.50	-1.1
KHC	147.30	335	ePKP	44	19.50	1.2
CDF	150.15	341	ePKP	44	25.90	3.1X
	0.6s		3.60nm			
BCAO	150.35	240	iPKPc	44	30.00	6.0X
	0.5s		3.00nm			
HAU	150.80	342	ePKP	44	27.20	3.5X
	0.6s		5.40nm			
BSF	150.82	341	ePKP	44	27.30	3.5X
	0.6s		3.60nm			
LOR	152.16	344	ePKP	44	30.30	4.7X
SSF	152.44	344	ePKP	44	29.10	3.1X

S.D. = 0.7 on 20 of 27 obs.

& JUN 02, 1990 04h 01m 42.50s
40.543 N 125.327 W
DEPTH = 5.0km
OFF COAST OF NORTHERN CALIFORNIA(34)
<BRK>. ML 2.6 (BRK).

FHC	1.05	75	ePc	02	01.70	-1.1
			e(S)	02	15.70	
WDC	2.12	88	iPd	02	16.90	-2.2
			e(S)	02	42.30	
MIN	2.85	93	ePc	02	26.40	-3.2
			e(S)	02	59.20	
ORV	3.10	107	e(P)	02	30.70	-2.3
			e	02	41.10	
			e(S)	03	02.00	
KVN	5.76	103	eP	03	07.50	-3.4

5 obs. associated

? JUN 02, 1990 04h 46m 33.13± 3.00s
16.104 N ± 9.7km 61.051 W ±28.6km
DEPTH = 28.4 ± 11.6 km
LEEWARD ISLANDS (92)
ML 1.7 (FDF).

SFG	0.20	317	eP	46	39.20	0.0
SEG	0.53	304	eP	46	43.90	0.0
			S	46	49.60	
PAG	0.61	263	eP	46	45.30	0.0
			S	46	52.20	
BBL	0.71	216	eP	46	46.90	0.0
			S	46	56.10	
BPA	1.21	321	eP	46	54.30	0.0
			S	47	09.10	

S.D. = 0.0 on 5 of 5 obs.

? JUN 02, 1990 04h 57m 08.62± 1.48s
31.645 S ± 9.0km 68.260 W ±10.9km
DEPTH = 10.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

CFA	0.04	25	iPc	57	10.80	0.0
			eS	57	15.90	
RTCV	0.32	228	iPc	57	15.00	-0.3
RTLL	0.36	330	iPd	57	15.10	-1.0
RTCB	0.49	289	iPc	57	18.90	0.4
RTBS	1.02	269	ePd	57	27.80	0.0
			S	57	45.00	
RTRS	1.80	325	ePc	57	40.70	0.9

S.D. = 0.8 on 6 of 6 obs.

JUN 02, 1990 04h 57m 57.02± 0.20s
1.081 N ± 3.8km 122.776 E ± 5.8km
DEPTH = 33.8km (5 depth phases)
5.1mb (16 obs.) 4.9Msz (12 obs.)
MINAHASSA PENINSULA (265)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 33C
Centroid Location:
Origin Time 04:58: 0.3 0.4
Lat 1.59N 0.05 Lon 122.76E 0.06
Dep 44.8 3.8 Half-duration 2.0
Moment Tensor; Scale 10**17 Nm
Mrr= 1.61 0.09 Mtt=-1.13 0.11
Mff=-0.48 0.15 Mrt=-1.12 0.17
Mrf= 0.19 0.15 Mtf=-0.37 0.10
Principal Axes:

	Val=	Plg=	Azm=
T	2.04	69	199
N	-0.44	11	78
P	-1.60	18	345

Best Double Couple:Mo=1.8*10**17
NP1:Strike= 57 Dip=29 Slip= 66
NP2: 264 64 102

TSM	5.64	304	iPd	59	21.50	0.8
	0.2s		244.90nm		6.4mb	X
DAV	6.59	25	eP	59	33.00	-1.1
KKM	8.20	307	ePd	59	55.90	-0.8
	0.4s		100.30nm		6.3mb	X
MTN	16.13	149	eP	01	43.30	0.3
KNA	17.74	161	eP	02	04.50	1.3
KGM	19.47	273	ePd	02	24.60	0.4
QIZ	21.88	325	eP	02	48.60	-0.4
N	17s		2.80um			
IPM	22.00	280	ePd	02	52.00	1.8
	0.9s		43.10nm		4.9mb	
HKC	22.70	339	iP	02	58.00	1.0
			iS	07	08.00	
GZH	23.71	338	P	03	06.20	-0.7
Z	17s		2.70um		4.8MszX	
N	16s		1.20um			
E	15s		1.90um			
			S	07	20.00	
WB5	23.73	152	iPc	03	06.90	-0.3
WRA	23.77	152	Pd	03	08.60	1.0
	0.5s		29.20nm		5.1mb	
ANP	23.99	357	eP	03	05.20	-4.5X
			eS	07	27.20	
QZH	24.06	351	eP	03	10.00	-0.3
Z	20s		3.70um		4.9Msz	
E	20s		2.50um			
			S	07	26.00	
NANU	24.54	196	iPc	03	14.50	-0.4
GUMO	25.15	59	eP	03	50.00	29.1X
			eS	07	46.00	
LOE	26.30	309	eP	03	32.00	0.4
PMG	26.42	114	eP	03	32.50	-0.2
NST	26.63	304	eP	03	38.00	3.4X
QIS	27.09	143	iPc	03	38.20	-0.6
	0.9s		109.00nm		5.5mb	
WARB	27.36	172	iPc	03	40.50	-0.7
MEKA	27.84	188	eP	03	44.10	-1.4
	0.3s		14.00nm		5.1mb	
BDT	28.37	306	eP	03	52.00	1.6
CHG	29.27	308	eP	04	05.90	7.3X
CHTO	29.27	308	eP	03	58.40	-0.1
	1.2s		17.01nm		4.6mb	
GYA	29.61	330	P	04	01.80	0.2
N	18s		1.70um			
E	18s		2.30um			
			pP	04	12.40	38km
			S	08	57.00	
SSE	29.89	357	Pc	04	03.00	-0.9
Z	20s		1.80um		4.7Msz	
N	16s		0.90um			
E	16s		0.90um			
			pP	04	11.80	30km
			ePcS	10	52.00	

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WHN     30.37 346 eP     04 08.00  -0.2
     Z  18s      1.80um          4.8Msz
     N  18s      3.80um
     E  16s      1.40um
                 pP     04 21.50  53kmX
                 S      09 08.00
KMI     30.75 323 eP     04 12.50   0.6
     Z  16s      1.60um          4.8MszX
                 sP     04 25.00
                 S      09 16.00
                 iS     09 18.00
MRWA    30.82 192 iPd    04 10.60  -1.5
       0.7s     30.00nm         5.2mb
NJ2     31.03 354 eP     04 13.20  -0.7
     Z  23s      1.00um          4.4MszX
     N  11s      0.90um
                 S      09 13.00
CTA     31.18 134 iPc    04 15.40  -0.1
       1.1s     35.44nm         5.1mb
BAL     32.04 190 eP     04 21.00  -1.8
FORR    32.16 171 eP     04 21.40  -2.4
KLB     32.84 188 eP     04 28.00  -1.8
MUN     33.46 190 eP     04 33.00  -2.2
CD2     34.71 331 eP     04 45.30  -0.8
     Z  20s      0.90um          4.5Msz
     N  13s      1.00um
                 S      10 13.00
XAN     35.26 340 P      04 49.50  -1.2
     N  14s      1.00um
     E  14s      1.40um
                 PP     06 08.00
                 S      10 21.00
TIA     35.34 352 P      04 50.40  -1.0
     Z  23s      1.50um          4.7MszX
     N  15s      0.90um
     E  15s      0.90um
                 eS     10 21.00
RMO     37.14 139 iPc    05 06.20  -0.4
       0.8s     17.00nm         5.0mb
DL2     37.66 359 eP     05 09.00  -1.7
     Z  21s      1.20um          4.7Msz
     N  18s      1.80um
TIY     37.68 347 Pc     05 10.70  -0.4
     Z  21s      2.70um          5.0Msz
     N  21s      2.90um
                 PP     06 35.00
                 S      10 59.50
MAT     38.07  20 eP     05 17.00   2.7
       0.8s     5.97nm          4.5mb
     Z  20s      1.42um          4.8Msz
                 eS     10 40.00
ADE     38.84 159 iPc    05 21.50   0.7
       1.0s   198.00nm          5.8mb
LZH     39.01 335 Pd     05 22.50   0.1
                 pP     05 34.20  43km
BJI     39.24 352 eP     05 23.50  -0.5
       1.0s     36.00nm         5.1mb
     Z  24s      2.16um          4.9MszX
     E  16s      0.70um
                 eS     11 20.00
                 eSS    14 08.00
BRS     40.42 137 iPc    05 34.50   0.5
SNY     40.57   1 eP     05 32.80  -2.1
       1.2s     30.00nm         4.9mb
     Z  21s      2.50um          5.0Msz
     N  21s      2.20um
     E  21s      1.10um
                 sP     05 46.00
HHC     40.87 347 Pc     05 38.00   0.4
     Z  18s      1.80um          5.0Msz
     N  18s      1.70um
     E  18s      1.30um
                 S      11 50.00
BTO     41.00 345 P      05 38.00  -0.7
     N  19s      2.50um
     E  19s      2.00um
                 pP     05 46.00  27km
                 PP     07 17.00
                 S      11 50.00
                 eSS    14 49.00
LSA     41.41 316 eP     05 44.80   2.2
                 S      11 56.50
COO     41.94 141 iPc    05 48.60   2.1
BFD     42.25 156 eP     05 48.70  -0.1
       0.8s     38.00nm         5.2mb
CN2     42.60   3 eP     05 52.00   0.4
     Z  22s      1.60um          4.9Msz
     N  16s      0.60um
     E  16s      0.50um
                 eS     12 12.00
                 eSS    15 16.00
                 ScS    15 49.00
BWA     42.73 148 eP     05 55.10   2.2
GTA     43.53 334 P      06 00.00   0.6
     Z  20s      1.80um          5.0Msz
     E  16s      1.00um
                 S      12 28.00
CAN     43.72 148 eP     06 01.20   0.3
MDJ     43.77   7 eP     06 00.70  -0.4
                 epP    06 10.00  31km
TOO     43.83 154 eP     06 03.00   1.3
CNB     43.91 148 eP     06 03.00   0.5
GUN     44.25 310 P      06 06.80   1.1
       0.8s     44.00nm         5.3mb
PKI     44.44 310 P      06 08.00   0.8
GKN     45.24 310 P      06 13.40  -0.1
       0.8s     21.00nm         5.1mb
KOD     45.94 283 eP     06 19.80   0.5
HYB     46.40 293 eP     06 22.50   0.0
DZM     48.41 121 iPc    06 38.30   0.0
POO     51.01 293 eP     07 15.00  16.7X
WMQ     52.76 328 eP     07 11.00  -0.1
     Z  18s      1.10um          4.9Msz
                 S      14 40.00
QUE     60.29 304 eP     08 04.40  -0.8
SNZO    63.12 138 P      08 23.00  -0.7
                 S      17 08.00
                 ScS    18 10.00
MAIO    68.03 309 eP     08 56.00   0.4
                 eS     17 56.00
MAW     79.93 200 iPd    10 03.90   0.1
SBA     82.29 171 eP     10 17.50   1.4
KRI     93.34 253 eP     11 12.50   1.8
INK     94.05  21 eP     11 16.00   3.2X
BUL     94.28 250 iPd    11 13.70  -1.2
SLR     94.52 244 iPd    11 15.00  -1.0
LSZ     94.71 255 iPc    11 16.50  -0.5
       1.0s     11.90nm         5.3mb
BLF     96.28 241 eP     11 23.00  -1.0
ALQ    121.71  47 ePKP   16 49.00  -0.8
LNV    144.70 159 ePKP   17 31.00  -1.5
LCCH   145.08 159 ePKP   17 36.50   3.4X
TACH   145.14 160 ePKP   17 33.00  -0.3
PCH    145.31 160 ePKP   17 34.20   0.5
SAN    145.42 160 ePKP   17 34.00   0.2
FCH    145.66 160 ePKP   17 36.00   1.4
PEL    145.69 160 iPKPd  17 35.50   1.2
       1.0s     50.00nm
ROCH   145.73 159 ePKP   17 35.50   0.9
JACH   146.14 160 ePKP   17 35.50   0.4
LPB    161.28 146 PKP    17 54.00  -2.5X
                 e      18 39.00
ZOBO   161.48 145 PKP    17 58.80   1.9
                 LR     15 44.00
CCH    161.58 152 ePKP   18 03.00   6.4X
                 i      18 44.00
SIV    164.71 166 PKP    17 59.20  -0.1
                 i      18 55.60
     S.D. = 1.1  on  84 of  93 obs.
-------------------------------------
? JUN 02, 1990  05h 40m 48.26± 0.76s
   10.057 S ±17.6km  108.182 E ±33.4km
   DEPTH =  33.0km  (normal)
   4.8mb (  3 obs.)
 SOUTH OF JAVA                    (282)
NANU    14.29 151 eP     44 10.20  -0.1
                 eS     47 09.00
WB5     27.08 114 eP     46 36.00   6.0X
CHG     30.10 342 eP     46 56.50  -0.7
       0.9s     13.24nm         4.7mb
CHTO    30.10 342 eP     46 56.60  -0.6
       1.1s     17.96nm         4.8mb
PKI     43.43 330 P      48 50.40   0.1
GUN     43.48 331 P      48 51.20   0.5
       0.6s     21.00nm         5.1mb
GKN     44.17 330 P      48 56.40   0.4
LZH     46.08 355 P      49 11.00  -0.1
BJI     50.39   8 eP     49 45.00   0.6
     S.D. = 0.6  on   8 of   9 obs.
-------------------------------------
   JUN 02, 1990  05h 57m 02.23± 0.76s
   43.294 N ± 7.7km    8.144 E ± 7.8km
   DEPTH =  10.0km  (geophysicist)
 CORSICA                          (380)
      ML 2.4 (LDG). MD 2.1 (STR).

SBF     0.77 318 Pg      57 18.00   0.7
                 Sg     57 27.50
AURF    0.84 315 Pg      57 17.78  -0.7
AUTN    0.87 324 Pg      57 19.21   0.0
                 Sg     57 30.46
MVIF    0.94 310 Pg      57 20.21   0.0
                 Sg     57 32.60
TOUF    0.97 318 Pg      57 20.79   0.0
                 Sg     57 33.49
PGF     0.98 140 Pg      57 20.81   0.0
                 Sg     57 33.83
CALN    1.02 297 Pg      57 21.40  -0.2
                 Sg     57 34.68
FRF     1.12 284 Pg      57 23.30   0.0
                 Sg     57 37.20
LMR     1.19 272 Pg      57 24.50   0.0
LRG     1.31 278 Pg      57 26.60   0.2
     S.D. = 0.4  on  10 of  10 obs.
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& JUN 02, 1990  05h 59m 43.67s
   62.860 N          148.536 W
   DEPTH =  60.8km
 CENTRAL ALASKA                   (  1)
     <AGS-P>.

HUR     0.52 284 iP      59 55.98   0.0
                 eS     00 05.85
RND     0.57 345 iP      59 56.44  -0.2
                 eS     00 04.94
MCK     0.89 349 iP      00 00.46  -0.1
                 eS     00 13.70
CUT     0.92 241 iP      00 00.79   0.0
SML     1.06 175 iP      00 02.47  -0.3
GHO     1.11 190 iP      00 03.18  -0.2
                 eS     00 18.16
NCA     1.18 137 iP      00 04.31   0.0
                 eS     00 21.91
KTH     1.29 304 iP      00 05.95   0.1
                 iS     00 23.41
PLRM    1.30 193 eP      00 05.74  -0.2
PMR     1.30 193 iPc     00 05.80  -0.2
TOA     1.33 124 iPc     00 07.00   0.5
PWA     1.37 208 iPc     00 07.20   0.4
PAX     1.41  84 iP      00 07.30  -0.2
                 iS     00 25.67
SDG     1.42 102 iP      00 07.87   0.2
                 eS     00 26.76
DDM     1.52  51 iP      00 09.91   0.8
                 eS     00 29.34
WRH     1.63   7 iP      00 09.36  -1.1
SKT     1.65 239 iP      00 10.66  -0.1
PMS     1.69 197 iPc     00 12.00   0.6
HDA     1.71  24 iP      00 10.72  -0.8
                 eS     00 31.12
DMW     1.74  45 eP      00 11.88  -0.1
NEA     1.74 352 iP      00 10.69  -1.3
                 eS     00 30.85
SUA     1.74 217 eP      00 12.56   0.4
CCB     1.82  10 iP      00 11.81  -1.4
KLU     1.84 137 iP      00 13.15  -0.4
                 iS     00 38.11
VLZ     2.02 148 iP      00 14.93  -1.0
VZW     2.04 152 iP      00 15.33  -0.9
FBA     2.07   9 iPc     00 15.60  -1.1
GLI     2.10 160 iP      00 16.26  -0.8
                 eS     00 43.35
DOT     2.17  67 iP      00 17.50  -0.6
NCG     2.24 231 eP      00 19.55   0.4
CGLM    2.26 228 eP      00 19.75   0.4
CRP     2.34 228 eP      00 20.61   0.1
SPU     2.36 226 eP      00 20.99   0.2
NKA     2.48 212 eP      00 25.96   3.6
SLKM    2.49 200 eP      00 24.09   1.5
SEW     2.80 189 eP      00 27.39   0.5
MTU     2.91 171 eP      00 28.98   0.4
RED     3.18 221 eP      00 32.13  -0.2
TTA     3.42 274 iPd     00 34.20  -1.6
TGL     3.43 125 eP      00 34.21  -1.8
BALM    3.45 119 eP      00 34.95  -1.3
CNPM    3.59 203 eP      00 37.65  -0.5
SVW     3.78 245 eP      00 39.20  -1.5
IMA     3.92 328 iPd     00 41.20  -1.5
FYU     3.98  19 eP      00 42.23  -1.2
DWY     4.26  70 P       00 45.70  -1.7
```

02d 06h

PCA	4.84	121	eP	00 53.98	-1.7
INK	8.26	42	eP	01 41.00	-2.1
SIT	8.81	125	e(P)	01 48.50	-2.2

49 obs. assocloted

& JUN 02, 1990 06h 51m 53.59s
60.477 N 151.694 W
DEPTH = 61.3km
KENAI PENINSULA, ALASKA (14)
<AGS-P>.

NKA	0.35	40	iP	52 05.91	1.6
RDT	0.37	286	iP	52 04.09	-0.5
NNL	0.48	155	iP	52 06.26	0.7
RED	0.54	264	iP	52 05.55	-0.7
SPU	0.73	346	iP	52 07.69	-0.7
			iS	52 19.57	
SLKM	0.73	87	iP	52 07.80	-0.6
			iS	52 20.13	
BRLK	0.82	150	eP	52 09.23	-0.3
CRP	0.82	344	eP	52 09.25	-0.5
			eS	52 22.44	
CGLM	0.85	350	iP	52 09.46	-0.5
NCG	0.96	347	iP	52 11.00	-0.4
			eS	52 25.06	
CNPM	0.98	166	iP	52 11.18	-0.4
			iS	52 25.16	
XLV	1.03	181	eP	52 11.28	-0.9
SUA	1.09	25	iP	52 12.99	-0.2
			eS	52 26.91	
SEW	1.18	108	eP	52 13.05	-1.1
PMS	1.30	53	eP	52 15.25	-0.6
			eS	52 31.39	
AUE	1.40	218	iP	52 16.50	-0.8
SKT	1.51	3	eP	52 18.22	-0.6
PLRM	1.66	47	eP	52 19.75	-1.3
CDD	1.84	213	iP	52 22.43	-0.9
MCNL	1.86	227	eP	52 22.25	-1.4
GHO	1.87	45	eP	52 22.49	-1.4
CUT	2.05	19	eP	52 25.17	-1.1
MTU	2.08	102	eP	52 24.53	-2.1
SML	2.11	49	iP	52 25.64	-1.5
GLI	2.30	78	eP	52 26.67	-3.1
VZW	2.59	75	eP	52 31.17	-2.7
VLZ	2.71	74	eP	52 32.94	-2.6
NCA	2.80	55	eP	52 34.89	-2.1
KLU	2.99	68	iP	52 37.26	-2.4
KTH	3.11	6	eP	52 40.53	-0.8
TOA	3.13	56	eP	52 39.92	-1.6
RND	3.23	23	eP	52 42.03	-1.0
PAX	3.88	47	eP	52 50.36	-1.7

33 obs. assaciated

JUN 02, 1990 07h 06m 12.97± 0.21s
55.071 N ± 5.0km 161.941 E ± 3.8km
DEPTH = 33.0km (normal)
4.8mb (35 obs.) 4.4Msz (2 obs.)
NEAR EAST COAST OF KAMCHATKA (218)

SMY	7.56	103	P	07 59.00	-4.5X
ADK	13.11	95	P	09 12.50	-6.8X
TTA	22.66	53	P	11 12.80	0.6
NIIJ	23.70	231	P	11 23.50	1.1
IMA	23.86	45	P	11 24.50	0.7
	0.8s	10.13nm		4.4mb	
KAKJ	24.06	227	P	11 27.20	1.3
MAT	24.64	231	eP	11 32.00	0.5
	0.9s	48.74nm		5.1mb	
		eS		15 40.00	
CHJJ	24.70	229	eP	11 32.40	0.3
MTMJ	24.78	232	eP	11 39.00	6.0X
F8A	26.27	48	P	11 45.80	-0.8
	0.8s	9.48nm		4.5mb	
TSRJ	26.48	233	P	11 48.90	0.2
INK	31.64	40	eP	12 35.00	0.4
MBC	34.79	24	eP	13 02.50	0.7
	0.6s	3.00nm		4.4mb	
BTO	36.83	269	P	13 20.00	0.4
N	14s	0.30um			
E	14s	0.30um			
GTA	43.48	276	P	14 14.20	-0.4
Z	20s	1.20um		4.8Msz	
PNT	46.06	63	eP	14 36.00	1.0
WMO	47.35	289	eP	14 43.00	-2.4
SES	49.63	57	eP	15 03.00	0.1
WBC	50.24	74	eP	15 07.80	0.2
FFC	50.88	48	eP	15 11.00	-1.2
	0.9s	10.00nm		4.8mb	
LRM	52.01	62	eP	15 21.40	0.1
KVN	53.75	72	P	15 34.50	0.4
TNP	54.92	72	P	15 43.10	0.3
	0.9s	7.00nm		4.7mb	
FRB	55.25	25	eP	15 43.00	-1.6
BW06	55.62	63	P	15 47.50	-0.4
	0.9s	3.05nm		4.3mb	
CLC	56.36	74	eP	15 53.00	0.0
SBB	57.06	75	eP	15 58.00	0.0
GSC	57.17	74	eP	15 59.00	0.1
RSSD	57.42	58	P	16 00.00	-0.7
SUF	57.59	338	eP	16 01.00	-0.3
	0.5s	5.30nm		4.8mb	
TPC	58.47	75	eP	16 08.00	0.1
CHG	59.36	259	eP	16 14.70	0.5
CHTO	59.36	259	iP	16 14.60	0.4
	1.0s	5.00nm		4.6mb	
		pP		16 27.20	44kmX
		sP		16 37.00	
GUN	59.77	276	P	16 16.20	-1.1
	0.4s	6.00nm		5.1mb	
NUR	59.88	337	eP	16 17.00	-0.3
GLA	59.94	75	eP	16 18.00	0.0
PKI	60.29	276	P	16 19.40	-1.5
GKN	60.41	277	P	16 20.20	-1.3
NB2	61.94	344	P	16 30.50	-0.8
	1.0s	12.30nm		5.0mb	
HFS	62.39	343	eP	16 32.70	-1.5
	0.5s	4.20nm		4.8mb	
Z	17s	0.09um		4.0MszX	
		LR		41 22.00	
ANMO	63.05	67	P	16 39.50	0.4
ALQ	63.05	67	eP	16 38.90	-0.3
	1.0s	4.25nm		4.5mb	
FVM	68.67	54	P	17 13.70	-1.2
EKA	69.28	351	P	17 18.00	-0.3
	0.6s	6.60nm		4.9mb	
CLL	70.88	340	iPc	17 27.60	-0.5
	1.3s	21.00nm		5.0mb	
BRG	71.10	339	eP	17 29.20	-0.2
	1.2s	13.00nm		4.9mb	
SPC	71.26	335	eP	17 31.10	0.4
MOX	71.78	341	eP	17 34.00	0.5
PRU	71.82	339	Pc	17 34.00	0.3
PWLA	72.22	54	P	17 35.30	-1.1
MTN	72.48	212	iPd	17 38.10	0.1
	0.7s	16.00nm		5.1mb	
GRF	72.77	341	iPc	17 39.90	0.5
	1.1s	32.00nm		5.2mb	
Z	22s	0.10um		4.0Msz	
KHC	72.83	339	iP	17 44.40	4.6X
	1.0s	7.50nm		4.6mb	
ZST	72.94	336	eP	17 41.30	0.9
WET	72.96	339	iPc	17 41.00	0.5
	1.2s	21.00nm		5.0mb	
CDF	74.71	343	eP	17 51.00	0.2
	0.6s	5.40nm		4.7mb	
HAU	75.26	343	eP	17 54.00	0.1
	0.6s	8.10nm		4.9mb	
BSF	75.36	343	eP	17 54.50	0.0
	0.6s	3.60nm		4.5mb	
FLN	75.49	348	eP	17 54.80	-0.3
	0.6s	5.40nm		4.7mb	
LDF	75.61	348	eP	17 55.60	-0.2
GRR	75.90	348	eP	17 57.60	0.2
	0.5s	8.75nm		5.0mb	
LPF	76.28	348	eP	17 59.90	0.4
	0.5s	3.65nm		4.6mb	
LOR	76.37	345	iPc	18 00.00	-0.1
	0.5s	3.30nm		4.6mb	
SSF	76.63	345	eP	18 01.60	0.1
LBF	76.63	345	eP	18 01.30	-0.3
TCF	77.57	346	eP	18 07.00	0.2
MFF	77.58	347	eP	18 07.20	0.4
	0.6s	5.40nm		4.8mb	
LPL	77.61	342	iPc	18 08.50	1.2
	0.7s	7.70nm		4.8mb	
LPG	77.62	342	iPc	18 08.70	1.3
	0.7s	11.00nm		5.0mb	
WB5	78.27	206	eP	18 10.20	-0.6
WRA	78.34	206	Pc	18 10.50	-0.7
	1.0s	7.20nm		4.6mb	
RJF	78.63	346	eP	18 13.60	1.0
LPO	79.29	346	eP	18 17.20	1.0
	0.4s	4.00nm		4.8mb	
LRG	79.67	342	eP	18 19.00	0.8
	0.5s	5.85nm		4.8mb	
LMR	79.76	342	eP	18 19.50	0.7
	0.5s	3.65nm		4.6mb	
PGF	80.06	340	eP	18 21.00	0.5
	0.5s	8.75nm		5.0mb	
PRNI	83.55	316	e(P)	18 34.00	-4.8X
MBH	84.10	316	eP	18 42.00	0.5
SPA	144.89	180	iPKPc	25 44.90	-1.8
	0.9s	24.55nm			

S.D. = 0.8 on 74 of 79 obs.

% JUN 02, 1990 08h 18m 52.95± 1.44s
44.567 N ± 5.0km 6.127 E ±20.3km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.5 (LDG).

LPG	1.03	25	Pg	19 12.60	0.0
			Sg	19 27.40	
LPL	1.04	24	Pg	19 12.80	0.0
			Sg	19 27.80	
FRF	1.07	159	Pg	19 13.00	-0.1
			Sg	19 27.40	
LRG	1.12	171	Pg	19 14.30	0.3
			Sg	19 28.30	
SBF	1.17	126	Pg	19 15.00	0.1
			Sg	19 29.40	
LMR	1.26	167	Pg	19 16.20	-0.2
			Sg	19 33.00	

S.D. = 0.2 on 6 of 6 obs.

JUN 02, 1990 08h 26m 15.02± 0.64s
29.380 S ± 5.0km 69.096 W ±11.9km
DEPTH = 5.0km (geophysicist)
CHILE-ARGENTINA BORDER REGION (127)

RTRS	0.85	202	iPd	26 29.80	-2.1
RTLL	2.02	165	iPd	26 49.20	-0.9
RTCB	2.12	173	iPd	26 51.30	-0.3
ZON	2.19	171	eP	26 52.00	-0.6
			eS	27 22.00	
RTBS	2.29	188	e(P)	26 55.00	0.9
CFA	2.34	162	iP	26 55.00	0.2
			eS	27 25.00	
RTCV	2.52	169	ePd	26 58.20	0.9
JACH	3.53	201	iPc	27 15.00	3.2X
			iS	28 02.00	
ROCH	3.94	204	iP	27 18.50	0.8
			iS	28 10.50	
PEL	3.99	200	iP	27 19.00	0.8
FCH	4.07	194	iPd	27 22.50	3.0X
			iS	28 14.50	
SAN	4.28	198	eP	27 22.50	0.2
			e	28 18.00	
			e	28 23.50	
PCH	4.40	196	iP	27 24.60	0.5
			iS	28 20.50	
TACH	4.54	200	eP	27 26.50	0.5
			iS	28 23.50	
LCCH	4.60	207	iPc	27 27.20	0.4
LNV	4.97	203	iPc	27 31.00	-1.1
			iS	28 36.10	
			i	28 49.50	
ANT	5.77	348	e(P)	27 43.00	-0.4
ZOBO	13.08	4	eP	29 25.00	0.2
WRA	126.00	208	PKPd	45 15.50	-5.0X
	0.4s	1.10nm			

S.D. = 0.9 on 16 of 19 obs.

• JUN 02, 1990 08h 36m 14.03± 1.44s
27.488 S ± 7.9km 71.591 W ±23.6km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF NORTHERN CHILE (122)

RTRS	3.26	146	ePd	37 06.40	0.2
			e	37 07.00	
ANT	3.91	16	eP	37 15.50	0.0
RTBS	4.56	156	e(P)	37 26.00	1.4
RTCB	4.67	149	iPc	37 26.00	-0.3
RTLL	4.70	145	iPc	37 25.40	-1.3
ZON	4.77	149	eP	37 29.00	1.2
CFA	5.04	145	iPd	37 30.90	-0.5
RTCV	5.10	149	e(P)	37 32.00	-0.4
JACH	5.25	171	eP	37 42.50	8.0X
ROCH	5.49	175	eP	37 45.50	7.5X
			e	38 54.70	
PEL	5.69	172	iP	37 40.00	-0.7

FCH	5.93	169	eP	37 45.50	1.2
TACH	6.17	175	eP	37 46.50	-0.9
PCH	6.18	172	eP	37 55.00	7.3X
			e	39 05.50	
LNV	6.45	179	eP	37 46.00	-5.3X
LPB	11.37	17	P	39 13.00	13.0X
ZOBO	11.62	17	P	39 09.00	5.5X

S.D. = 1.0 on 11 of 17 obs.

& JUN 02, 1990 08h 49m 58.09s
64.566 N 152.426 W
DEPTH = 25.1km
CENTRAL ALASKA (1)
<AGS-P>.

KTH	1.21	146	eP	50 18.60	-1.0
			eS	50 35.73	
NEA	1.45	88	eP	50 21.94	-0.9
			eS	50 38.59	
IMA	1.60	341	eP	50 24.95	-0.2
MCK	1.74	117	eP	50 27.42	0.3
WRH	1.88	91	eP	50 28.65	-0.4
RND	1.96	125	eP	50 31.93	1.6
CCB	1.99	86	eP	50 28.49	-2.2
			eS	50 54.84	
FBA	2.02	78	eP	50 30.28	-0.8
HDA	2.37	91	eP	50 38.83	2.7
SKT	2.63	171	eP	50 39.53	-0.3
PWA	3.15	157	eP	50 46.94	-0.2
NCG	3.18	178	eP	50 47.57	-0.1
GHO	3.22	149	eP	50 47.00	-1.3
PMS	3.58	157	eP	50 53.87	0.5

14 obs. associated

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* JUN 02, 1990 09h 16m 58.64± 1.88s
37.688 N ±12.2km 20.865 E ±17.2km
DEPTH = 10.0km (geophysicist)
IONIAN SEA (399)
ML 3.6 (ATH).

VLS	0.53	336	ePg	17 09.40	-0.1
			eSg	17 18.50	
ITM	0.99	121	ePg	17 16.00	-1.4
			eSg	17 33.00	
VLI	1.92	120	ePn	17 33.00	1.4
KEK	2.19	338	ePg	17 43.50	7.9X
ATH	2.28	82	ePb	17 42.00	5.2X
			eSg	18 15.00	
NEO	2.46	48	ePn	17 40.00	0.6
OHR	3.42	359	ePn	17 57.00	3.9X
VAY	3.86	19	ePn	17 59.20	-0.1
SKO	4.30	6	ePn	18 01.00	-4.6X
MMB	4.48	29	ePd	18 08.00	-0.1
RZN	4.98	35	iPc	18 15.00	-0.3

S.D. = 1.0 on 7 of 11 obs.

? JUN 02, 1990 10h 17m 55.12± 4.34s
0.326 S ±11.3km 78.981 W ±28.6km
DEPTH = 10.0km (geophysicist)
ECUADOR (107)

GGP	0.41	69	iPd	18 04.00	0.2
			eS	18 09.60	
QTO	0.47	75	eP	18 04.60	-0.1
			iS	18 10.70	
QUR	0.48	71	iPd	18 04.80	-0.1
			iS	18 11.80	
VC1	0.66	118	P	18 08.60	0.0
			iS	18 19.20	
COTA	0.92	44	P	18 13.00	-0.1
			iS	18 26.00	
CAYA	1.08	68	P	18 15.80	0.1
			iS	18 30.70	

S.D. = 0.2 on 6 of 6 obs.

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* JUN 02, 1990 12h 13m 29.82± 2.61s
24.122 N ±12.9km 121.862 E ±20.8km
DEPTH = 10.0km (geophysicist)
TAIWAN (244)

TWD	0.25	260	iPc	13 34.90	-0.2
TWC	0.49	359	iPd	13 39.10	-0.6
			eS	13 46.50	
TWQ	0.95	279	ePc	13 47.90	0.0
TWZ	1.00	345	ePc	13 49.10	0.3
			eS	14 03.10	
ANP	1.10	343	iP	13 51.00	0.4
			eS	13 55.00	
TWK	1.52	236	ePc	13 57.20	0.1

S.D. = 0.4 on 6 of 6 obs.

? JUN 02, 1990 12h 39m 02.42± 1.20s
8.122 N ±19.2km 83.401 W ±17.6km
DEPTH = 33.0km (normal)
4.5mb (3 obs.)
COSTA RICA (78)

DVD	0.99	72	iPd	39 20.00	0.0
			S	39 33.50	
UPA	3.92	77	iPc	40 10.00	8.2X
	1.0s		100.00nm		
			S	41 04.00	
SIV	32.60	137	P	45 33.40	0.0
MBC	70.85	351	eP	50 17.50	0.0
	0.8s		5.00nm	4.6mb	
NB2	85.19	29	P	51 37.30	0.7
	0.9s		2.80nm	4.5mb	
HFS	86.54	30	eP	51 42.60	-0.7
	0.7s		1.60nm	4.4mb	
WRA	141.64	248	PKPc	58 28.10	-5.0X
	0.8s		2.50nm		
MTN	145.74	259	iPKPd	58 42.40	2.2X
	0.7s		25.00nm		

S.D. = 0.7 on 5 of 8 obs.

? JUN 02, 1990 13h 02m 04.96± 8.72s
51.696 N ±51.2km 16.328 E ±53.5km
DEPTH = 10.0km (geophysicist)
POLAND (548)
ML 3.6 (VKA).

KSP	0.85	181	iP	02 21.60	0.2
			iS	02 30.80	
BRG	1.71	242	iPg	02 35.90	1.0
			iSg	02 55.70	
PRU	2.05	214	ePn	02 39.80	-0.1
			Pg	02 41.60	
			eSn	02 58.50	
			Sg	03 05.00	
CLL	2.11	261	iPn	02 40.80	0.0
			iPg	02 43.80	
			iSg	03 09.40	
KHC	3.11	215	Pn	02 54.50	-0.5
			ePg	03 00.00	
			Sn	03 30.00	
			Sg	03 41.00	
HOF	3.13	246	ePn	02 55.10	-0.2
MOX	3.15	252	ePn	02 55.00	-0.5
			ePg	03 03.00	
			eSg	03 43.00	
VKA	3.44	180	eP	03 05.50	5.9X
			iPg	03 09.30	
			iSg	03 53.40	
ZST	3.54	172	eP	03 46.80	45.7X
			e	03 55.60	
GRF	3.82	240	e(Pg)	03 05.10	0.1
			eSg	04 02.60	

S.D. = 0.6 on 8 of 10 obs.

& JUN 02, 1990 13h 58m 18.10s
41.203 N 119.847 W
DEPTH = 10.0km
NEVADA (37)
<BRK>. ML 3.1 (BRK).

MIN	1.59	238	ePc	58 46.50	0.1
			iS	59 07.10	
ORV	2.07	218	e(P)	58 53.70	0.3
			e(S)	59 19.90	
WDC	2.13	254	iPd	58 53.80	-0.4
			eS	59 22.30	
KVN	2.53	148	eP	59 02.50	2.4

4 obs. associated

? JUN 02, 1990 14h 20m 18.42± 3.74s
31.218 S ±13.8km 68.322 W ±24.2km
DEPTH = 76.1 ± 34.0 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.17	229	iPc	20 30.00	-0.1
CFA	0.39	170	iPd	20 31.50	0.4
			eS	20 42.40	
ZON	0.45	223	eP	20 31.00	-0.6
			eS	20 42.00	
RTCB	0.49	237	iPd	20 32.50	0.5
RTCV	0.67	196	ePd	20 33.40	-0.3
			(S)	20 44.00	
RTBS	1.06	245	eP	20 38.40	0.1
			S	20 54.00	
RTRS	1.43	317	iPc	20 43.00	-0.1
			eS	21 02.80	

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

JUN 02, 1990 14h 33m 11.50± 0.34s
46.581 N ± 3.3km 1.552 E ± 3.1km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 3.5 (LDG), 3.5 (STR).

LSF	0.33	183	Pg	33 17.70	-0.7
TCF	0.54	123	Pg	33 22.20	-0.3
MAF	0.79	117	Pg	33 27.10	0.2
			Sg	33 36.80	
BGF	0.89	91	Pg	33 29.30	0.7
MFF	1.17	272	Pn	33 33.50	0.1
			Pg	33 34.30	
			Sg	33 48.40	
AVF	1.26	80	Pg	33 35.60	0.8
			Sg	33 52.00	
RJF	1.28	181	Pn	33 34.50	-0.7
			Pg	33 35.00	
			Sg	33 49.80	
PYM	1.31	129	Pg	33 36.00	0.2
			Sg	33 52.28	
SSF	1.43	70	Pg	33 38.30	0.9
			Sg	33 57.30	
PLDF	1.56	112	Pn	33 39.36	0.0
			Pg	33 41.16	
			Sg	34 00.44	
SMF	1.58	87	Pn	33 39.80	0.2
			Pg	33 41.60	
			Sg	34 01.00	
CAF	1.69	168	Pn	33 42.40	1.1
			Pg	33 44.00	
			Sn	33 58.60	
			Sg	34 02.80	
LBF	1.71	76	Pn	33 42.10	0.5
			Pg	33 44.50	
			Sn	34 01.40	
			Sg	34 06.20	
LOR	1.72	66	Pn	33 42.20	0.5
			Pg	33 44.50	
			Sg	34 06.20	
LFF	1.74	199	Pn	33 42.80	0.9
			Pg	33 43.60	
			Sg	34 05.30	
LBL	1.79	138	Pn	33 42.63	0.0
			Pg	33 44.29	
			Sg	34 08.06	
LPO	1.92	188	Pn	33 44.20	-0.3
			Pg	33 46.90	
			Sg	34 09.80	
LPF	2.28	310	Pn	33 50.20	0.4
			Sg	34 24.20	
LDF	2.31	331	Pn	33 50.60	0.4
			Pg	33 56.00	
			Sg	34 26.90	
GRR	2.44	319	Pn	33 51.10	-0.9
			Sg	34 29.90	
SSB	2.46	121	Pn	33 51.47	-0.8
			Pg	33 58.08	
FLN	2.58	329	Pn	33 53.60	-0.4
			Pg	34 00.60	
			Sg	34 33.80	
HAU	3.56	65	Pn	34 06.20	-1.7
			Sg	35 04.80	
LPL	3.76	105	Pn	34 11.40	0.4
			Sg	35 08.30	
LPG	3.78	105	Pn	34 11.50	0.2
			Sg	35 09.30	
BSF	3.78	69	Pn	34 09.70	-1.5
			Pg	34 23.30	
			Sg	35 11.40	
DOU	4.06	29	P	34 16.30	1.4
			iS	34 59.20	
CDF	4.29	63	Pn	34 16.90	-1.5
			Pg	34 33.40	
			Sg	35 27.80	

S.D. = 0.8 on 28 of 28 obs.

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* JUN 02, 1990 14h 43m 16.88± 6.26s

02d 14h

43.328 N ±20.4km 1.772 W ±50.0km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 3.0 (LDG).

ELYF	0.59	105	Pg	43	28.98	0.1
			Sg	43	37.39	
BOH	0.60	112	Pg	43	29.00	-0.1
			Sg	43	37.56	
MADF	0.72	104	Pg	43	30.52	-0.5
			Sg	43	41.85	
ISSF	0.78	112	Pg	43	31.99	-0.1
			Sg	43	42.72	
ATE	0.82	107	Pg	43	32.94	0.2
			Sg	43	44.17	
ESCF	0.91	105	Pg	43	34.44	0.1
LHE	0.94	116	Pg	43	34.51	-0.4
JAU	1.07	105	Pg	43	37.37	0.3
			Sg	43	52.64	
EPF	1.57	100	Pn	43	45.30	0.4
			Pg	43	48.80	
			Sg	44	10.20	
LFF	2.42	47	Pn	44	05.80	8.7X
			Sn	44	42.60	
LPO	2.53	57	Pn	44	01.80	3.2X
			Sn	44	33.80	
			Sg	44	46.00	
RJF	3.08	49	Pn	44	06.80	0.4
			Sn	44	47.10	
			Sg	45	02.40	
CAF	3.19	59	Pn	44	03.70	-4.4X
			Sg	44	46.50	
MFF	3.47	19	Pn	44	26.40	14.4X
LSF	3.75	38	Pn	44	16.60	0.6
TCF	4.10	42	Pn	44	20.20	-0.7
MAF	4.23	45	Pn	44	22.60	-0.3
BGF	4.60	44	Pn	44	28.00	-0.1

S.D. = 0.4 on 14 of 18 obs.

& JUN 02, 1990 16h 17m 46.60s
36.830 N 121.598 W
DEPTH = 5.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.5 (BRK).

SAO	0.14	118	iPd	17	49.30	-0.2
GCC	0.38	302	ePc	17	53.80	-0.4
MHC	0.51	356	iPd	17	57.10	0.2
			iS	18	05.40	
ARN	0.52	6	iPc	17	57.00	0.0
PRS	0.53	160	iPd	17	56.80	-0.4
LLA	0.57	112	iPc	17	57.80	-0.2
			iS	18	06.50	
PCC	0.92	317	ePc	18	03.30	-1.3
PRI	1.02	132	iPc	18	06.20	-0.2
BKS	1.16	334	iPc	18	08.90	0.1
BRK	1.17	333	e(P)	18	07.40	-1.4
ZSP	1.23	335	ePc	18	08.40	-1.5
			i	18	10.40	
			iS	18	27.90	
PHAM	1.39	135	eP	18	11.20	-1.4
FRI	1.52	83	ePd	18	13.70	-0.8
CMB	1.54	38	ePd	18	14.50	-0.3
			eS	18	32.40	

14 obs. associated

& JUN 02, 1990 16h 31m 44.22s
31.380 N 115.260 W
DEPTH = 10.0km
BAJA CALIFORNIA (48)
<ECX>. MD 2.5 (ECX).

ECBX	0.20	63	iPc	31	48.03	-0.6
			S	31	51.42	
EMX	0.61	1	eP	31	54.50	-1.9
			S	32	03.30	
LMX	0.77	19	iPd	31	57.70	-1.5
			S	32	09.00	
PBX	1.30	286	ePd	32	06.57	-1.8
			S	32	24.41	
CBX	1.51	308	eP	32	10.36	-1.1
			S	32	29.90	

5 obs. associated

JUN 02, 1990 17h 29m 58.54± 0.18s
21.877 S ± 5.2km 138.918 W ± 6.6km
DEPTH = 0.0km (geophysicist)

5.3mb (16 obs.)
TUAMOTU ARCHIPELAGO REGION (631)

DZM	50.43	259	iPd	39	01.10	0.8
PLM	58.81	22	eP	40	02.00	0.6
MWC	59.22	20	eP	40	05.00	0.8
RVR	59.23	21	eP	40	04.00	0.0
GLA	59.27	24	eP	40	05.00	0.6
ABL	59.44	19	P	40	05.50	-0.3
SBB	59.72	20	eP	40	08.00	0.5
TPC	59.78	22	eP	40	08.00	0.1
PHAM	60.02	17	P	40	10.20	0.7
PRS	60.22	16	ePc	40	11.10	0.2
PRI	60.23	17	ePc	40	11.60	0.5
ISA	60.42	19	eP	40	13.00	0.7
LLA	60.60	17	eP	40	14.00	0.5
GSC	60.61	21	eP	40	14.00	0.4
SAO	60.61	16	ePc	40	13.60	0.1
GCC	60.72	15	ePc	40	14.40	0.2
CLC	60.83	20	eP	40	15.00	0.0
PCC	61.08	15	ePc	40	16.60	0.0
MHC	61.11	16	ePc	40	17.50	0.5
ARN	61.14	16	P	40	17.80	0.7
FRI	61.29	17	eP	40	17.90	-0.2
BRK	61.46	15	eP	40	19.50	0.3
BKS	61.47	15	ePd	40	19.50	0.2
CMB	62.09	17	eP	40	23.60	0.0
TNP	63.03	19	P	40	30.00	0.0
	0.8s		8.70nm		5.0mb	
ORV	63.24	15	eP	40	30.80	-0.3
KVN	63.67	18	P	40	34.40	0.2
WDC	63.98	14	ePc	40	35.70	-0.2
ALQ	64.36	29	ePc	40	38.50	-0.3
	1.0s		14.50nm		5.2mb	
ANMO	64.37	29	P	40	38.40	-0.4
	0.8s		8.86nm		5.0mb	
MSU	65.10	23	P	40	44.50	0.9
RMQ	65.35	250	iPd	40	45.90	0.7
	0.8s		14.00nm		5.2mb	
LPB	66.58	99	P	40	48.00	-5.7X
ZOBO	66.63	99	iPc	40	55.00	0.7
	1.0s		37.00nm		5.6mb	
	Z 24s		0.25um		4.3MszX	
			LR	07	24.00	
CMS	66.76	244	iPc	40	54.30	0.1
	1.1s		14.00nm		5.1mb	
DAU	67.11	23	P	40	57.00	0.5
CCH	68.12	101	P	41	04.50	1.2
BFD	68.26	237	eP	41	03.70	0.1
GOL	68.80	27	P	41	06.50	-0.5
	0.8s		19.35nm		5.4mb	
CTA	69.21	256	iPc	41	10.00	0.3
	1.1s		81.01nm		5.8mb	
BMW	69.50	12	P	41	10.90	0.0
LON	70.03	12	P	41	13.00	-1.2
LRM	71.54	19	eP	41	24.30	0.7
NEW	72.50	15	P	41	28.50	-0.5
	0.8s		18.23nm		5.3mb	
OLY	72.64	39	P	41	29.00	-1.0
PNT	72.93	13	eP	41	32.00	0.5
	0.8s		16.00nm		5.2mb	
SIV	73.17	101	P	41	33.00	-0.6
FVM	74.97	38	P	41	42.70	-0.8
SES	76.06	18	ePc	41	49.60	0.0
EDM	78.00	15	iP	42	00.20	-0.1
JSC	78.24	46	P	42	02.00	0.1
WB5	79.90	253	eP	42	16.20	4.9X
WRA	79.90	253	Pd	42	11.50	0.2
	0.9s		7.00nm		4.6mb	
ADK	80.54	337	P	42	13.50	-0.4
BLA	80.54	44	P	42	14.50	0.1
	0.8s		15.94nm		5.1mb	
PMR	83.58	355	P	42	28.90	-0.6
	0.7s		35.61nm		5.7mb	
BAO	85.14	105	eP	42	39.00	0.5
MTN	85.26	258	iPc	42	39.20	0.2
	0.6s		19.00nm		5.5mb	
TTA	85.60	352	P	42	39.50	-0.3
	0.7s		25.44nm		5.5mb	
YKA	86.28	11	eP	42	42.20	-0.8
	0.8s		24.00nm		5.4mb	
TBR	86.73	43	P	42	45.20	-0.5
FBA	86.77	356	P	42	44.50	-0.8
MAW	89.33	188	iPd	42	58.80	1.0
MBC	98.64	5	eP	43	44.00	4.0X
CHG	125.93	278	ePKPd	49	05.20	0.2
	0.9s		12.82nm			

KEV	131.37	6	ePKP	49	13.00	-0.8
KIC	133.17	102	PKP	49	19.30	0.4
SOD	133.60	8	iPKP	49	17.30	-0.8
NB2	135.70	20	PKP	49	22.40	0.1
	0.9s		2.20nm			
HFS	137.18	20	ePKP	49	15.90	-9.2X
	0.8s		1.30nm			
SUF	137.93	10	ePKP	49	18.00	-8.5X
GUN	139.09	288	PKP	49	21.00	-9.1X
	0.6s		15.00nm			
PKI	139.50	287	PKP	49	23.20	-7.7X
	0.8s		15.00nm			
NUR	139.71	12	ePKP	49	23.00	-6.7X
DOU	139.85	36	PKP	49	22.40	-7.9X
WTS	139.97	33	ePKP	49	31.00	0.6
	0.7s		13.00nm			
GKN	140.20	288	PKP	49	24.20	-7.7X
ENN	140.21	35	ePKP	49	26.50	-4.4X
	0.8s		5.00nm			
ENN	140.21	35	ePKP	49	31.50	0.6
	0.8s		10.00nm			
MOX	143.18	32	ePKP	49	37.00	0.8
CLL	143.40	30	ePKP	49	34.00	-2.5X
	1.0s		14.00nm			
BNI	143.56	42	PKP	49	36.00	-1.2
GRF	143.60	33	ePKP	49	34.30	-2.7X
LSD	143.67	42	PKP	49	34.88	-2.7X
RRL	143.69	43	PKP	49	36.62	-1.0
RSP	143.88	42	PKP	49	35.29	-2.4X
PZZ	144.09	43	PKP	49	36.83	-1.3
ORX	144.09	41	PKP	49	36.01	-2.1X
BRG	144.13	30	iPKPc	49	36.00	-1.8
	1.0s		24.00nm			
STV	144.35	43	PKP	49	36.31	-2.2X
ENR	144.42	43	PKP	49	35.39	-3.2X
VAI	144.44	40	PKP	49	36.00	-2.4X
HYB	144.49	270	ePKP	49	38.50	-0.9
FUR	144.56	35	ePKP	49	37.60	-1.1
ROB	144.67	43	PKP	49	37.65	-1.4
WET	144.78	33	iPKPd	49	38.30	-0.7
	1.2s		60.00nm			
IMI	144.87	43	PKP	49	36.83	-2.5X
FIN	144.93	43	PKP	49	38.16	-1.3
PCP	144.98	42	PKP	49	38.26	-1.3
PRU	145.02	30	PKP	49	38.30	-1.0
	1.0s		50.60nm			
			e	49	40.80	
MDI	145.05	39	PKP	49	39.00	-0.5
SQTA	145.09	36	ePKP	49	38.50	-1.2
	1.0s		25.00nm			
			id	49	39.40	
			i	49	50.00	
			i	49	51.90	
			e	50	25.00	
KHC	145.13	32	iPKP	49	39.00	-0.6
	1.0s		32.00nm			
KSP	145.20	28	iPKPc	49	39.50	-0.1
	1.0s		42.00nm			
OGA	145.20	37	iPKPc	49	39.90	-0.1
	0.8s		38.00nm			
SAL	145.62	39	PKP	49	41.00	0.5
BHG	145.69	34	ePKP	49	40.80	0.2
	0.9s		98.00nm			
CTI	146.02	38	PKP	49	42.00	0.7
FVI	146.33	36	PKP	49	42.20	0.6
VKA	147.05	31	i(PKP)	49	45.50	2.7X
VOY	147.29	36	ePKP	49	43.70	0.4
			e	49	45.60	
SFI	147.33	41	PKP	49	46.20	2.9X
TRI	147.41	37	ePKP	49	46.10	2.7X
ZST	147.47	30	iPKP	49	44.20	0.8
			i	49	47.00	
CRE	147.55	41	PKP	49	46.00	2.2
LJU	147.63	36	ePKP	49	46.50	2.8X
SPC	148.12	26	ePKP	49	44.80	0.1
			e	49	47.80	
ARV	148.23	41	PKP	49	48.30	3.5X
ASS	148.29	42	PKP	49	48.00	3.0X
SRO	148.31	30	iPKP	49	48.90	4.2X
VBY	148.36	36	e(PKP)	49	49.30	4.4X
PTJ	148.48	35	e(PKP)	49	46.00	0.8
MNS	148.67	43	PKP	49	48.90	3.3X
BUD	148.88	30	iPKP	49	50.00	4.3X
RDP	149.02	44	PKP	49	51.00	4.8X
POO	149.10	270	iPKPd	49	51.00	4.1X
AZI	149.35	43	PKP	49	52.00	5.4X
SDI	149.74	43	PKP	49	52.00	4.7X

DUI	150.17	42	PKP	49	54.00	6.1X
HVAR	150.48	38	iPKP	49	53.30	5.1X
SGO	151.31	44	PKP	49	56.00	6.5X
BEO	151.51	32	iPKP	49	56.40	6.7X
BCAO	152.10	125	iPKPd	49	52.00	0.4
	0.8s	53.00nm				
			ic	49	58.50	
TDS	152.46	44	PKP	49	52.30	1.0
	S.D. = 0.7	on	96 of 134 obs.			

? JUN 02, 1990 17h 47m 36.17± 4.55s
31.625 S ±22.1km 68.764 W ±15.0km
DEPTH = 85.4 ± 41.8 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB	0.14	347	eP	47	49.00	0.0
RTCV	0.30	141	iPc	47	49.40	0.1
			(S)	48	01.00	
RTLL	0.39	41	ePd	47	49.80	0.0
CFA	0.45	88	iPd	47	50.20	-0.1
RTBS	0.59	266	ePc	47	51.30	-0.1
			S	48	03.40	
RTRS	1.57	337	ePc	48	03.00	0.0
	S.D. = 0.1	on	6 of 6 obs.			

% JUN 02, 1990 19h 49m 47.96± 0.72s
44.632 N ± 4.3km 7.271 E ± 9.9km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.1 (GEN).

PZZ	0.18	224	P	49	52.24	0.2
			S	49	54.60	
STV	0.39	174	P	49	55.93	0.0
			S	50	01.16	
ENR	0.42	165	P	49	56.44	-0.1
			SS	50	01.88	
RRL	0.45	310	P	49	56.96	-0.2
			S	50	02.60	
RSP	0.52	359	P	49	58.80	0.3
			S	50	05.36	
LSD	0.83	354	P	50	04.03	-0.2
			S	50	14.49	
	S.D. = 0.3	on	6 of 6 obs.			

% JUN 02, 1990 19h 50m 46.27± 0.88s
30.434 S ± 9.9km 69.307 W ±17.3km
DEPTH = 10.0km (geophysicist)
CHILE-ARGENTINA BORDER REGION (127)

RTRS	0.29	333	iPd	50	52.30	-0.1
RTCB	1.14	158	eP	51	07.00	-0.6
RTLL	1.15	141	iPd	51	07.00	-0.8
RTBS	1.23	186	ePd	51	09.20	0.1
			S	51	27.20	
CFA	1.49	142	iPc	51	14.10	1.0
			eS	51	33.30	
RTCV	1.57	155	ePc	51	14.60	0.4
	S.D. = 0.9	on	6 of 6 obs.			

• JUN 02, 1990 20h 07m 23.52± 0.80s
5.360 N ± 9.2km 31.241 E ±17.0km
DEPTH = 10.0km (geophysicist)
4.4mb (5 obs.)
SUDAN (557)

NAI	8.62	140	iPd	09	19.00	-12.5X
BCAO	12.69	266	iPd	10	27.00	0.0
	1.2s	14.00nm			5.1mb	
			iS	12	46.50	
			Lg	13	55.00	
LSZ	20.72	188	ePn	12	06.00	-1.0
	0.8s	16.70nm			4.4mb	
			iSn	16	48.00	
			iSb	17	20.00	
			iSg	17	42.60	
			iLg	18	10.40	
KRI	22.10	184	eP	12	22.20	1.2
			eLR	18	49.00	
BUL	25.47	186	iP	12	53.60	-0.1
			iLR	20	20.30	
KHC	46.12	344	eP	15	50.50	0.7
SLL	56.64	349	eP	17	04.70	-4.3X
	0.7s	2.00nm			4.3mb	
SUF	57.36	357	iP	17	13.80	-0.2
	0.7s	4.00nm			4.6mb	
NB2	57.56	349	P	17	15.00	-0.6
	0.9s	2.10nm			4.2mb	
	S.D. = 0.9	on	7 of 9 obs.			

% JUN 02, 1990 21h 41m 56.86± 5.24s
45.802 N ±14.2km 26.780 E ±18.6km
DEPTH = 107.9 ± 52.4 km
ROMANIA (358)

BRD	0.34	146	iPd	42	12.00	-0.8
MLR	0.66	242	iP	42	14.50	-0.6
ISR	0.68	194	eP	42	16.50	1.3
PPE	0.72	54	ePd	42	16.50	1.1
CLI	0.83	25	iPc	42	16.00	-0.4
CFR	1.15	122	eP	42	19.00	-0.7
TLB	1.50	143	iPd	42	24.00	0.1
	S.D. = 1.2	on	7 of 7 obs.			

& JUN 02, 1990 22h 43m 38.74s
61.346 N 150.391 W
DEPTH = 42.9km
SOUTHERN ALASKA (2)
<AGS-P>.

SUA	0.21	305	iP	43	46.67	0.1
			eS	43	53.28	
PWA	0.39	39	eP	43	47.90	-0.4
PMS	0.41	104	eP	43	48.43	-0.2
			iS	43	56.54	
PLRM	0.65	67	iP	43	50.93	-0.7
			eS	44	01.13	
NKA	0.73	215	iP	43	53.87	1.1
CGLM	0.78	268	eP	43	53.58	0.1
SPU	0.82	259	iP	43	53.50	-0.6
			iS	44	05.44	
GHO	0.82	58	eP	43	53.44	-0.7
			iS	44	05.67	
SKT	0.84	320	iP	43	53.56	-0.7
SLKM	0.85	174	iP	43	53.49	-0.9
			eS	44	05.43	
NCG	0.85	275	eP	43	53.75	-0.8
			eS	44	06.77	
CRP	0.86	265	eP	43	54.25	-0.4
CUT	1.06	3	eP	43	57.04	-0.4
SML	1.09	64	eP	43	57.26	-0.5
RDT	1.25	233	iP	43	59.37	-0.8
			eS	44	15.96	
SEW	1.33	159	eP	44	00.61	-0.5
NNL	1.38	199	eP	44	02.42	0.5
RED	1.49	232	eP	44	02.87	-0.7
GLI	1.67	105	iP	44	04.29	-1.7
NCA	1.82	68	eP	44	08.67	0.5
CNPM	1.87	193	eP	44	07.93	-1.0
VZW	1.88	97	eP	44	07.55	-1.5
VLZ	1.97	94	eP	44	08.94	-1.3
TOA	2.15	67	eP	44	12.71	-0.1
KLU	2.15	84	eP	44	11.52	-1.4
KTH	2.23	354	eP	44	13.79	-0.2
	26 obs. associated					

% JUN 03, 1990 00h 31m 52.46± 1.11s
36.168 N ±18.1km 31.520 E ±14.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

ELL	1.42	295	ePn	32	19.60	1.1
BCK	1.49	330	ePn	32	18.80	-0.6
LFK	1.86	118	iPn	32	24.70	0.0
KHL	2.68	324	ePn	32	37.00	0.5
ALT	3.09	339	ePn	32	42.50	0.2
CIN	3.10	298	eP	32	41.00	-1.3
	S.D. = 1.1	on	6 of 6 obs.			

JUN 03, 1990 00h 55m 16.27± 0.53s
5.976 S ± 3.3km 77.164 W ± 6.2km
DEPTH = 37.9 ± 5.3 km
4.8mb (18 obs.)
NORTHERN PERU (111)
Felt (V) at Riojo, (IV) at
Chachapoyas and (II) Contamono.

TUNG	4.70	344	P	56	27.00	-0.1
			eS	57	20.00	
VC1	5.44	347	P	56	37.40	-0.2
			eS	57	50.00	
QTO	5.90	347	eP	56	46.00	2.0
QUR	5.92	347	eP	56	45.70	1.3
GGP	5.94	346	eP	56	45.60	0.9
PT08	5.98	174	eP	56	45.90	0.9
			iS	57	56.70	
NNA	5.98	177	eP	56	43.80	-1.0
			i	56	45.40	
			eS	57	52.00	
PT10	6.06	178	eP	56	46.50	0.6
			eS	57	53.00	
CAYA	6.07	352	P	56	46.00	-0.5
COTA	6.38	349	eP	56	52.00	1.2
PSO	7.12	359	eP	57	00.00	-1.1
PT06	7.85	174	eP	57	10.20	-0.7
			iS	58	33.00	
BOG	10.97	16	eP	57	55.00	0.7
			eS	00	17.00	
ARE	11.81	152	eP	58	04.00	-1.6
ZOBO	13.53	140	P	58	30.00	1.3
	Z 20s	1.28um			4.8Msz	
			S	01	16.00	
			LR	03	20.00	
BMG	13.59	18	eP	58	29.00	0.0
LPB	13.74	140	P	58	40.00	8.6)
			S	01	02.80	
			LR	03	50.00	
CCH	15.64	137	P	59	03.90	7.9)
SDV	16.14	24	eP	59	01.60	-0.7
TOV	17.30	25	eP	59	15.40	-1.3
SIV	18.65	124	P	59	32.20	-1.3
OLLA	18.95	33	eP	59	37.00	-0.2
CAR	19.29	32	eP	59	38.00	-3.2)
LLAV	19.32	32	eP	59	40.70	-0.9
GUAN	19.55	36	eP	59	44.00	-0.1
SLB	25.36	39	eP	00	40.72	-1.0
SLW	25.57	39	eP	00	38.00	-5.7)
BAO	30.18	111	e(P)	01	29.00	3.3)
ITR	38.51	97	eP	02	41.30	4.2)
JSC	40.22	355	P	02	51.00	0.0
GBTN	41.95	351	P	03	04.40	-0.8
OLY	43.40	343	P	03	16.00	-1.0
NA2	43.88	359	P	03	21.50	0.7
LNO	45.19	339	eP	03	33.00	1.7
ALQ	49.18	328	eP	04	03.00	0.0
	0.9s	9.87nm			4.8mb	
ANMO	49.18	328	P	04	03.00	0.0
	0.9s	8.40nm			4.8mb	
GOL	52.38	333	P	04	26.50	-0.8
	0.7s	4.85nm			4.6mb	
TPC	54.22	320	eP	04	41.00	0.3
MSU	54.90	327	P	04	45.40	-0.5
RSSD	55.44	337	P	04	49.50	-0.2
GSC	55.46	321	eP	04	50.00	0.2
SBB	55.72	319	eP	04	51.00	-0.7
CLC	56.28	321	eP	05	11.00	15.3)
BW06	56.74	332	P	04	57.80	-1.3
TNP	57.50	323	P	05	04.00	-0.5
	0.6s	1.54nm			4.2mb	
KVN	58.66	323	P	05	11.50	-1.0
LRM	60.41	332	eP	05	23.00	-1.6
ORV	61.03	322	eP	05	28.60	0.0
FFC	63.93	344	eP	05	51.00	3.4)
	1.0s	15.00nm			5.0mb	
NEW	64.37	332	P	05	50.00	-0.7
	0.8s	11.98nm			5.0mb	
PNT	66.29	331	eP	06	03.00	0.0
EDM	66.42	337	eP	06	02.50	-1.2
FR8	69.83	4	ePc	06	24.00	-0.7
LKO	72.96	78	Pc	06	44.62	0.1
KIC	73.31	82	P	06	47.00	0.5
YKA	74.03	343	eP	06	48.50	-1.3
	0.6s	3.50nm			4.5mb	
SPA	84.06	180	iPc	07	45.60	1.3
	0.8s	11.25nm			5.0mb	
EPF	84.98	46	eP	07	54.70	5.5)
	0.6s	1.80nm			4.4mb	
GRR	85.42	41	eP	07	52.00	0.8
	0.6s	4.50nm			4.8mb	
MBC	85.64	351	eP	07	53.00	1.2
	1.0s	14.00nm			5.1mb	
LFF	85.69	44	eP	07	54.00	1.4
	0.6s	3.60nm			4.8mb	
FLN	85.75	40	eP	07	53.70	0.9
	0.6s	4.50nm			4.9mb	
LPO	85.94	44	eP	07	55.10	1.2
	0.6s	3.60nm			4.8mb	
LDF	85.94	40	eP	07	54.60	0.8
	0.6s	3.60nm			4.8mb	
CAF	86.60	44	eP	07	58.00	0.8
	0.6s	1.80nm			4.5mb	

03d 01h

```
DAG     88.89  11 iPc    08 07.70    0.2
        0.6s      6.67nm          5.1mb
IMA     89.99 337 P      08 13.10    0.1
        0.9s      4.69nm          4.8mb
WRA    139.70 229 PKPd   14 44.40    1.5
        0.4s      1.20nm
MTN    146.23 236 iPKPc  14 54.90    0.6
        0.6s     35.00nm
NANU   149.04 203 ePKP   15 03.00    4.4X
GKN    152.10  36 PKP    15 10.30    7.0X
GUN    152.89  34 PKP    15 22.90   18.3X
     S.D. = 1.0  on  60 of  72 obs.
-------------------------------------------
   JUN  03, 1990  01h 20m 52.17± 0.71s
   37.639 N ± 5.2km   20.733 E ± 4.9km
   DEPTH =  18.7 ±  6.4 km
   3.6mb (  2 obs.)
 IONIAN SEA                          (399)
      ML 3.9 (ATH).

VLS     0.55 348 ePg    21 02.20   -0.8
                eSg     21 11.20
ITM     1.05 115 ePg    21 10.00   -1.6
                eSg     21 25.50
IGT     1.92 351 iPd    21 40.00   15.8X
VLI     1.99 117 ePn    21 26.50    1.3
KEK     2.20 341 ePg    21 35.80    7.5X
ATH     2.39  81 ePn    21 32.00    1.1
                eSn     22 03.00
LIT     2.82  29 eP     21 38.10    1.0
FNA     3.18   9 iPd    21 43.00    0.7
                eS      22 19.50
THE     3.46  29 eP     21 46.10    0.0
                iS      22 25.20
OHR     3.47   1 ePn    21 50.30    3.9X
                eSg     22 04.50
GRG     3.56  21 eP     21 47.20   -0.4
VAM     3.57 128 ePn    21 47.50   -0.3
SOI     3.73 278 P      21 50.00    0.0
SOH     3.77  32 eP     21 50.20   -0.5
KNT     3.90  25 eP     21 52.30   -0.1
                iS      22 35.80
TDS     3.99 302 P      21 58.00    4.3X
SRS     4.12  32 eP     21 55.10   -0.5
SKO     4.36   7 iPn    21 58.80   -0.2
                iSn     22 48.50
MMB     4.57  29 iPd    22 01.00   -1.1
MEU     4.65 265 P      22 03.40    0.1
                eSn     22 56.30
RZN     5.08  36 iPc    22 08.00   -1.3
VTS     5.30  20 iP     22 13.00    0.6
KDZ     5.40  41 iPd    22 12.00   -1.7
SDI     6.71 309 P      22 32.00   -0.2
HFS    22.96 351 eP     25 54.70   -1.5
        0.5s      1.20nm          3.7mb
NB2    24.18 349 P      26 07.60   -0.5
        0.7s      1.30nm          3.6mb
     S.D. = 0.9  on  22 of  26 obs.
-------------------------------------------
&  JUN  03, 1990  02h 05m 48.86s
   62.241 N          150.189 W
   DEPTH =  10.5km
 CENTRAL ALASKA                      (  1)
      <AGS-P>.

CUT     0.17 347 iP     05 52.54   -0.2
PWA     0.61 166 iP     06 00.86   -0.2
SKT     0.68 248 iP     06 01.67   -0.7
                iS      06 11.52
GHO     0.76 128 iP     06 02.60   -1.1
                eS      06 14.02
PLRM    0.82 142 iP     06 04.04   -0.6
                eS      06 15.74
SUA     0.82 199 iP     06 04.71   -0.1
                iS      06 16.42
SML     0.98 116 iP     06 06.26   -1.1
                iS      06 19.97
PMS     1.04 163 iP     06 07.88   -0.7
                iS      06 21.39
NCG     1.26 229 eP     06 11.29   -1.0
                Sn      06 29.03
RND     1.32  27 eP     06 11.07   -2.2
                eS      06 27.83
KTH     1.36 346 iP     06 12.23   -1.6
                iS      06 29.80
SPU     1.39 221 iP     06 14.06   -0.1
                eS      06 32.32
NKA     1.59 199 iP     06 19.20    2.3
NCA     1.60  97 iP     06 16.20   -1.0
                iS      06 37.48
MCK     1.60  20 eP     06 16.08   -1.2
                iS      06 36.34
TOA     1.89  92 eP     06 20.79   -0.7
GLI     2.02 131 eP     06 23.85    0.6
                eS      06 50.46
VZW     2.10 123 eP     06 24.81    0.3
VLZ     2.15 119 eP     06 24.68   -0.4
        19 obs. ossociated
-------------------------------------------
   JUN  03, 1990  02h 39m 48.52± 0.45s
   43.097 N ± 4.7km   10.985 E ± 4.0km
   DEPTH =  13.3 ±  3.5 km
 CENTRAL ITALY                       (381)

MAO     0.69 170 Pc     40 03.10    1.2
                eSg     40 11.90
PII     0.71 332 P      40 02.00   -0.2
                eSg     40 11.60
CRE     0.88  53 P      40 05.50    0.3
                eSn     40 15.80
BDI     1.01 344 P      40 07.70    0.4
                eSg     40 18.90
SFI     1.04  37 P      40 07.80    0.0
MME     1.12 349 P      40 09.60    0.3
                eSn     40 22.30
ASS     1.23  91 P      40 10.90   -0.2
MNS     1.44 119 P      40 14.00   -0.2
ARV     1.48  74 P      40 14.80   -0.1
PGF     1.56 250 Pn     40 16.60    0.6
                Sn      40 37.80
SBF     2.70 288 Pn     40 31.40   -1.0
                Sn      40 59.40
LMR     3.28 276 Pn     40 39.40   -1.2
LRG     3.40 278 Pn     40 41.50   -0.7
LPG     3.87 310 Pn     40 50.60    1.4
LPL     3.89 310 Pn     40 50.70    1.2
SQTA    4.13   2 iPnd   40 53.20    0.6
                i       40 55.60
                e       41 42.00
     S.D. = 0.8  on  16 of  16 obs.
-------------------------------------------
?  JUN  03, 1990  02h 49m 25.32± 1.33s
    9.804 N ±39.5km   81.559 W ±24.5km
   DEPTH =  10.0km  (geophysicist)
   4.3mb (  2 obs.)
 PANAMA                              ( 81)
      MD 4.6 (UPA).

UPA     2.16 112 iPc    50 01.80    0.0
                S       50 41.50
GSC    40.91 314 eP     57 10.00    0.3
SBB    41.35 312 eP     57 13.00   -0.2
CLC    41.73 314 eP     57 16.00   -0.3
ORV    46.25 317 eP     57 53.00    0.3
YKA    57.76 343 eP     59 18.30   -0.4
        1.3s      2.30nm          4.0mb
INK    67.49 342 eP     00 23.00   -0.3
MBC    69.47 351 eP     00 36.00    0.5
        1.0s      5.00nm          4.6mb
     S.D. = 0.4  on   8 of   8 obs.
-------------------------------------------
*  JUN  03, 1990  03h 50m 34.71± 0.45s
    7.424 S ± 9.7km  106.688 E ±10.0km
   DEPTH =  33.0km  (normal)
   4.7mb (  8 obs.)
 JAVA                                (277)

TRT     5.90  93 iPd    52 03.30    1.1
                eS      53 05.10
KGM     9.96 340 ePc    53 07.00    8.3X
IPM    13.19 334 ePc    53 47.10    4.7X
KKM    16.41  36 ePc    54 31.00    6.6X
NANU   17.29 151 eP     54 31.00   -4.3X
                eS      57 28.00
QIZ    26.47   7 eP     56 16.40    5.6X
WARB   26.63 137 eP     56 10.00   -2.3
CHG    27.17 344 eP     56 16.10   -1.2
CHTO   27.17 344 iP     56 15.80   -1.4
        1.0s      7.00nm          4.3mb
WRA    29.55 118 Pd     56 38.50   -0.3
        0.6s      3.60nm          4.3mb
WB5    29.55 118 eP     56 38.50   -0.3
HYB    37.18 312 iPd    57 45.50    0.7
        1.0s     50.00nm          5.3mb
CD2    38.22 356 P      57 53.60    0.2
SSE    40.74  19 Pc     58 16.50    2.3
        1.0s     10.00nm          4.5mb
XAN    41.29   3 P      58 18.30   -0.5
POO    41.41 309 iPc    58 21.70    1.7
TIA    44.50  12 eP     58 44.10   -0.8
TIY    45.22   6 eP     58 51.30    0.6
NDI    45.79 323 iPd    58 55.00   -0.2
        0.8s     29.85nm          5.3mb
GTA    47.03 353 P      59 04.80   -0.3
BRS    47.91 120 iP     59 13.50    1.4
BJI    48.03  10 eP     59 13.00    0.3
MAT    52.79  32 eP     59 47.00   -2.1
        0.6s      3.33nm          4.5mb
CN2    53.74  17 P      59 54.80   -1.1
WMQ    53.83 343 eP     59 56.30   -0.4
MDJ    55.76  20 Pd     00 10.00   -0.7
MAIO   62.05 318 eP     00 53.00   -1.6
SLR    76.40 245 eP     02 22.00   -1.2
SUF    92.22 333 iP     03 43.50    1.3
        0.6s      3.10nm          4.9mb
NUR    92.50 331 eP     03 45.00    1.6
APO    97.77 330 eP     04 08.80    1.3
        0.5s      1.30nm          4.7mb
YKA   117.36  20 ePKP   09 16.40   -1.8
        0.7s      1.30nm
PNT   123.05  34 ePKP   09 30.00    0.6
SES   126.92  29 ePKP   09 37.00    0.0
KVN   128.95  45 PKP    09 42.20    0.8
LRM   129.02  35 ePKP   09 42.60    1.2
TNP   129.99  46 PKP    09 45.00    1.6
MSU   133.27  43 PKP    09 51.00    1.3
RSSD  134.67  31 PKP    09 52.40    0.2
ALQ   139.06  43 ePKP   09 52.00   -8.6X
WVLY  144.79   7 PKP    10 08.50   -1.7
TUL   144.97  33 ePKP   10 09.60   -1.1
        1.2s     51.40nm
FVM   145.85  24 PKP    10 12.80    0.7
BAO   146.03 228 ePKP   10 14.00    0.8
UYO   147.00  33 ePKP   10 15.70    1.6X
RSCP  149.79  20 PKP    10 22.60    4.1X
GBTN  150.17  18 PKP    10 24.40    5.4X
TKL   150.31  17 PKP    10 24.70    5.5X
SIV   153.77 207 ePKP   10 24.00   -0.8
                i       10 32.40
CCH   154.35 196 ePKP   10 34.00    8.1X
ZOBO  155.91 192 ePKP   10 31.00    2.7X
     S.D. = 1.2  on  39 of  51 obs.
-------------------------------------------
   JUN  03, 1990  05h 12m 41.70± 0.42s
   40.913 N ± 1.6km  125.515 W ± 5.0km
   DEPTH =  10.0km  (geophysicist)
   4.0mb (  4 obs.)
 OFF COAST OF NORTHERN CALIFORNIA( 34)
      ML 4.0 (BRK).

FHC     1.17  95 iPc    13 03.80    0.3
                iS      13 16.30
WDC     2.28  97 iPc    13 19.80   -0.2
LTCM    2.68 104 eP     13 25.80    0.2
MIN     3.03 100 i(P)   13 30.20   -0.5
NWRM    3.18 140 eP     13 32.70    0.0
ORV     3.36 112 ePc    13 34.50   -0.8
ZSP     3.89 139 ePc    13 42.90    0.1
BRK     3.95 139 ePc    13 43.40   -0.2
                eS      14 27.00
BKS     3.96 139 ePd    13 44.20    0.5
                eS      14 27.50
PCC     4.19 143 iPc    13 46.80   -0.2
GROR    4.64  16 P      13 56.03    2.5
MHC     4.67 139 ePc    13 53.80   -0.2
                eS      14 45.60
ARN     4.72 138 eP     13 54.80    0.2
GCC     4.75 144 eP     13 54.20   -0.8
GT2     4.86  28 P      13 57.13    0.5
GMO     4.87  42 P      13 56.88    0.0
CMB     4.90 124 ePc    13 57.60    0.4
KMOR    4.95  17 P      13 57.85    0.0
VBEM    5.05  33 P      13 59.56    0.2
PGO     5.07  25 P      13 59.96    0.4
VIPM    5.09  43 P      13 59.92   -0.1
TDH     5.15  31 P      14 01.08    0.2
                S       15 01.15
SAO     5.22 141 eP     14 00.30   -1.4
                eS      14 59.30
CROR    5.25  38 P      14 01.87   -0.3
VLMM    5.27  28 P      14 02.91    0.4
```

VFP	5.31	33	P	14	03.04	0.0
VLL	5.34	30	P	14	04.13	0.6
NLO	5.39	15	P	14	04.80	0.7
APM	5.57	29	P	14	07.31	0.6
VTHM	5.60	39	P	14	07.28	0.2
PRS	5.61	143	e(P)	14	05.90	-1.3
RVW	5.61	20	P	14	07.23	0.1
LVP	5.63	23	P	14	06.87	-0.6
MTMW	5.65	24	P	14	07.09	-0.7
VGB	5.76	35	eP	14	09.50	0.3
FL2	5.76	22	P	14	09.12	-0.2
GULW	5.76	28	P	14	09.96	0.6
JLK	5.77	24	P	14	08.98	-0.5
CDFW	5.78	25	P	14	09.11	-0.5
HSR	5.79	24	P	14	09.54	-0.3
SHW	5.79	23	P	14	10.49	0.7
BMW	5.80	16	P	14	09.71	-0.2
REMW	5.81	23	P	14	09.99	-0.2
ESD	5.82	24	P	14	09.95	-0.3
YEL	5.82	23	P	14	09.81	-0.4
STD	5.83	23	P	14	10.00	-0.4
SOSW	5.86	24	P	14	11.10	0.4
ERK	5.86	22	P	14	10.28	-0.5
CZM	5.94	21	P	14	11.67	-0.1
TDL	5.94	23	P	14	11.81	-0.1
ASR	5.96	27	P	14	11.88	-0.3
FRI	5.98	129	ePc	14	13.00	0.6
KVN	5.99	106	eP	14	11.50	-1.2
KOSW	6.05	22	P	14	13.83	0.5
GL2	6.09	33	P	14	14.09	0.1
ONR	6.09	11	P	14	13.98	0.1
PRI	6.09	140	eP	14	15.00	0.9
APW	6.10	19	P	14	14.63	0.6
JBO	6.15	41	P	14	15.24	0.4
LMW	6.21	21	P	14	16.16	0.5
CPW	6.30	15	P	14	17.07	0.2
GLK	6.32	25	P	14	17.04	-0.2
LON	6.42	23	eP	14	18.00	-0.6
WPW	6.46	25	P	14	18.43	-0.8
PATW	6.50	38	P	14	19.82	0.2
RVC	6.55	22	P	14	20.34	-0.1
GHW	6.56	20	P	14	20.70	0.2
FMW	6.63	23	P	14	21.27	-0.4
YAKW	6.67	31	P	14	22.66	0.6
MXC	6.81	32	P	14	24.13	0.1
GSM	6.84	22	P	14	24.50	0.0
BRVW	6.86	34	P	14	24.87	0.1
GMW	6.92	16	P	14	25.05	-0.5
RSW	6.96	36	P	14	25.95	-0.3
HDW	6.96	14	P	14	25.74	-0.5
TNP	7.01	111	eP	14	26.50	-0.6
OSD	7.03	10	P	14	27.09	-0.2
WG2	7.04	41	P	14	27.06	-0.3
MDW	7.06	34	P	14	27.40	-0.1
WIW	7.13	37	P	14	28.26	-0.2
GBL	7.18	36	P	14	28.95	-0.2
TBM	7.19	28	P	14	30.01	0.6
LNOR	7.23	44	P	14	29.93	-0.1
VTG	7.24	32	P	14	30.27	0.2
WAH2	7.25	34	P	14	30.43	0.2
STW	7.36	10	P	14	31.79	0.1
HTW	7.39	20	P	14	32.17	-0.1
ISA	7.62	131	eP	14	36.00	0.5
ETW	7.65	27	P	14	36.05	0.1
JCW	7.72	18	P	14	36.14	-0.6
CMW	7.89	17	P	14	39.33	0.1
MCW	8.00	13	P	14	40.56	-0.1
CLC	8.03	127	eP	14	49.00	7.7X
RPW	8.05	19	P	14	41.05	-0.5
SBB	8.69	133	eP	14	50.00	-0.5
DPW	8.70	34	P	14	49.26	-1.3
GSC	8.86	126	eP	14	53.00	0.2
PAS	8.92	137	eP	14	54.00	0.5
MWC	8.92	136	eP	14	54.00	0.3
PNT	9.38	24	eP	14	59.00	-0.8
RVR	9.46	134	eP	15	01.00	0.0
PLM	10.22	135	eP	15	12.00	0.3
MSU	10.55	99	eP	15	16.50	0.2
LRM	10.70	58	eP	15	18.30	0.0
BAR	10.85	136	eP	15	21.00	0.9
GLA	11.59	129	eP	15	30.00	-0.3
SES	13.85	42	eP	16	00.00	-0.2
ANMO	16.16	106	eP	16	32.00	1.4
ALQ	16.16	106	eP	16	32.00	1.3
	1.0s		4.50nm			3.6mb
FFC	20.86	41	iPd	17	25.70	-0.3
	0.6s		7.00nm			4.2mb
YKA	22.58	13	eP	17	43.90	0.7
	0.8s		2.80nm			3.8mb
TUL	23.76	92	eP	18	02.50	7.6X
	1.0s		5.70nm			4.1mb

S.D. = 0.6 on 110 of 112 obs.

• JUN 03, 1990 05h 54m 06.52± 1.30s
10.533 N ± 7.6km 62.154 W ±18.6km
DEPTH = 71.5 ± 16.5 km
3.1mb (1 obs.)
NEAR COAST OF VENEZUELA (97)
MD 3.8 (TRN).

TPP	0.72	107	eP	54	21.15	-0.8
			eS	54	31.19	
TRN	0.75	81	eP	54	21.02	-1.2
			eS	54	30.01	
TBH	1.07	93	eP	54	27.53	1.3
			eS	54	41.02	
TPR	1.50	64	eP	54	31.77	-0.2
			eS	54	49.87	
BOT	1.54	66	eP	54	32.27	-0.3
			eS	54	50.73	
SVB	2.86	18	eP	54	50.83	0.0
			eS	55	24.21	
SLB	3.45	18	eP	54	59.32	0.3
			eS	55	39.08	
SLW	3.66	19	eP	55	02.65	0.6
			eS	55	42.91	
BIM	4.10	15	iPd	55	48.24	40.1X
			S	55	53.30	
MVM	4.18	17	iPd	55	09.58	0.3
FDF	4.29	13	eP	55	10.66	-0.2
			S	55	57.90	
CRM	4.37	16	eP	55	12.34	0.4
BBL	5.00	7	eP	55	20.58	-0.3
PAG	5.48	5	eP	55	27.59	0.0
			S	56	28.00	
SFG	5.76	9	eP	55	31.40	0.0
SEG	5.87	6	eP	55	33.58	0.7
MGH	6.15	359	eP	55	36.96	0.1
			S	56	44.00	
BPA	6.48	3	eP	55	41.15	-0.3
NEV	6.58	357	eP	55	42.74	0.0
SKI	6.78	355	eP	55	45.79	0.2
SIV	26.37	178	P	59	39.30	1.2
YKA	63.95	336	eP	04	32.20	-1.9
	0.4s		0.10nm			3.1mb

S.D. = 0.8 on 21 of 22 obs.

JUN 03, 1990 07h 57m 28.03± 0.53s
6.041 S ± 3.2km 77.095 W ± 6.1km
DEPTH = 37.8 ± 5.6 km
4.7mb (11 obs.)
NORTHERN PERU (111)

TUNG	4.79	344	P	58	40.00	0.0
			iS	59	36.50	
VC1	5.52	346	P	58	51.00	0.5
			eS	59	59.00	
PT08	5.91	175	iPd	58	56.80	1.0
			iS	00	03.40	
NNA	5.91	178	iPd	58	54.50	-1.1
	0.3s		2.60nm			4.3mb
			eS	58	58.00	
QTO	5.97	346	eP	58	57.50	0.7
PT10	6.00	179	e(P)	58	57.00	0.2
			e(S)	00	04.00	
QUR	6.00	346	eP	58	57.30	0.1
CAYA	6.14	352	P	58	59.00	-0.3
COTA	6.45	349	P	59	05.00	1.4
PSO	7.19	358	eP	59	13.00	-0.8
PT06	7.78	175	iP	59	22.00	0.3
			iS	00	47.50	
BOG	11.02	16	eP	00	07.50	0.9
			eS	03	02.00	
ARE	11.72	153	eP	00	27.00	10.9X
FUQ	11.92	16	eP	00	26.00	7.2X
ZOBO	13.44	140	P	00	38.00	-1.3
	1.1s		17.40nm			4.9mb
Z	20s		0.73um			
			LR	05	24.00	
BMG	13.63	17	eP	00	41.50	0.2
LPB	13.65	141	P	00	42.00	0.1
Z	16s		2.02um			
			LR	06	20.00	
UPA	15.12	351	eP	01	00.00	-0.7
CCH	15.55	137	P	01	06.60	0.0
SDV	16.17	24	eP	01	14.20	-0.2
TOV	17.32	25	eP	01	29.00	0.1
SIV	18.56	123	P	01	42.70	-1.4
OLLA	18.96	33	eP	01	49.00	-0.1
CAR	19.31	32	eP	01	52.00	-1.1
LLAV	19.34	32	iP	01	53.50	0.0
GUAN	19.56	36	iPd	01	56.60	0.6
ITR	38.43	96	eP	04	49.50	1.2
JSC	40.29	355	P	05	03.50	0.2
RSCP	42.18	350	P	05	18.00	-0.9
UYO	43.23	339	iPd	05	28.10	0.7
OLY	43.48	343	P	05	28.20	-1.2
NA2	43.94	359	P	05	34.00	0.9
LNO	45.28	339	eP	05	45.20	1.4
FVM	45.52	345	P	05	45.00	-0.8
ALQ	49.27	328	eP	06	15.50	0.0
	1.0s		8.25nm			4.7mb
ANMO	49.27	328	P	06	16.00	0.5
	0.8s		4.66nm			4.6mb
GOL	52.47	333	P	06	39.50	-0.3
GSC	55.55	321	eP	07	03.00	0.7
SBB	55.82	319	eP	07	04.00	-0.2
CLC	56.38	321	eP	07	08.00	-0.2
TNP	57.59	323	P	07	15.00	-1.9
	0.7s		1.30nm			4.1mb
SCH	61.24	7	eP	07	41.00	-0.6
SES	63.40	336	ePd	07	55.70	-0.4
FFC	64.01	344	eP	07	58.50	-1.4
	0.9s		9.00nm			4.8mb
NEW	64.46	332	P	08	01.50	-1.5
	0.8s		7.03nm			4.8mb
PNT	66.38	331	eP	08	16.00	0.7
EDM	66.50	337	eP	08	15.00	-1.1
FRB	69.89	4	ePd	08	36.00	-0.8
LKO	72.91	78	(P)	08	56.50	0.6
	0.4s		3.00nm			4.6mb
KIC	73.25	82	P	08	58.90	1.0
YKA	74.12	343	eP	09	00.90	-1.1
	0.5s		2.40nm			4.4mb
INK	83.83	342	eP	09	55.00	0.4
			pP	10	06.00	35kmX
SPA	84.00	180	iPc	09	51.80	-3.9X
MBC	85.72	351	eP	10	05.50	1.6
	1.0s		12.00nm			5.1mb
DAG	88.94	11	eP	10	20.00	0.5
	1.1s		10.13nm			5.1mb
WRA	139.71	229	PKP	16	56.00	1.3
	0.8s		1.70nm			
MTN	146.26	236	ePKP	17	07.60	1.5
	0.5s		28.00nm			
GKN	152.12	36	PKP	17	22.20	7.2X

S.D. = 0.9 on 54 of 58 obs.

? JUN 03, 1990 08h 52m 16.17± 4.22s
39.362 N ±13.6km 10.989 W ±37.0km
DEPTH = 10.0km (geophysicist)
NORTH ATLANTIC OCEAN (402)
mbLg 3.3 (MDD).

LIS	1.57	114	eP	52	45.00	0.9
			iS	53	04.20	
EZAM	3.28	31	ePn	53	08.80	0.1
			eSn	53	44.80	
EVAL	3.77	117	ePn	53	15.00	-0.7
			eSn	53	55.90	
EPLA	3.85	78	ePn	53	17.20	0.4
			eSn	53	58.00	
ERUA	4.20	43	ePn	53	22.60	0.9
			eSn	54	07.20	
EHOR	4.76	107	ePn	53	29.60	0.0
			eSn	54	18.60	
EMON	4.91	33	ePn	53	31.10	-0.7
			eSn	54	23.00	
TOL	5.38	82	ePn	53	38.00	-0.5
			ePb	53	40.00	
			eSb	54	35.00	
			eSg	55	05.00	
GUD	5.40	74	ePn	53	38.40	-0.5
			eSn	54	36.00	

S.D. = 0.7 on 9 of 9 obs.

% JUN 03, 1990 09h 13m 05.11± 0.66s
43.857 N ± 7.6km 11.940 E ± 5.1km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

03d 09h

SFI	0.09	315	Pc	13	07.70	0.0
			eSg	13	09.30	
PGD	0.16	277	P	13	09.00	0.1
			eSg	13	12.00	
CRE	0.23	178	P	13	10.00	-0.1
RSM	0.38	79	P	13	13.20	0.4
ARV	0.81	116	P	13	19.80	-1.0
			eSg	13	31.20	
ASS	0.95	146	P	13	24.00	0.8
			eSg	13	38.60	
PII	1.03	263	P	13	24.40	-0.2
			eSg	13	37.90	

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

? JUN 03, 1990 10h 28m 11.44± 3.72s
31.521 S ± 9.7km 68.018 W ±26.8km
DEPTH = 10.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

CFA	0.21	246	iPd	28	16.50	0.5
			eS	28	22.10	
RTLL	0.43	296	iPc	28	20.00	-0.2
RTCV	0.56	232	iPc	28	22.40	-0.4
RTCB	0.67	273	iPd	28	24.90	0.1
RTBS	1.23	263	ePd	28	34.20	-0.1
			S	28	52.60	
RTRS	1.83	317	ePc	28	43.30	0.1
			eS	29	08.80	

S.D. = 0.4 on 6 of 6 obs.

% JUN 03, 1990 11h 27m 14.23± 0.89s
43.827 N ± 9.3km 11.962 E ± 6.7km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

SFI	0.12	320	P	27	16.20	-1.0
			eSg	27	18.40	
PGD	0.18	286	P	27	17.70	-0.7
			eSg	27	21.50	
CRE	0.20	182	P	27	18.00	-0.7
RSM	0.37	74	P	27	22.30	0.5
BDI	1.01	284	P	27	34.00	0.5
PII	1.05	265	P	27	35.30	1.3

S.D. = 1.2 on 6 of 6 obs.

JUN 03, 1990 11h 39m 11.98± 0.19s
44.636 N ± 2.5km 17.577 E ± 2.1km
DEPTH = 10.0km (geophysicist)
4.6mb (11 obs.)
YUGOSLAVIA (383)
ML 4.7 (VKA), 4.5 (KBA), 4.4 (LDG), MD 4.5 (TTG), 4.2 (TRI).
Felt (VII) in the Tesilic area.

ZAG	1.63	317	ePn	39	42.00	1.2
			iSg	40	06.00	
HVAR	1.67	210	iPnc	39	41.40	0.0
			iSg	40	06.20	
PTJ	1.70	318	iPgd	39	42.90	0.9
			eSg	40	06.10	
PLE	1.85	134	iPnc	39	44.90	0.8
			eSn	40	11.20	
VBY	1.86	299	ePnc	39	46.20	2.1
BRY	1.87	158	ePn	39	45.00	0.6
			eSn	40	13.00	
BEO	2.06	84	iPn	39	46.80	-0.2
			iSg	40	10.80	
NKY	2.09	150	ePn	39	48.40	0.8
			eSn	40	18.00	
HCY	2.29	163	ePn	39	52.20	1.8
			eSn	40	24.00	
IVA	2.44	136	ePn	39	53.00	0.5
			eSn	40	24.70	
CEY	2.49	297	ePn	39	55.90	2.7
			eSn	40	31.90	
BDV	2.52	158	iPnd	39	55.50	1.8
			eSn	40	28.50	
TTG	2.52	150	ePn	39	55.30	1.7
			iSn	40	28.50	
LJU	2.57	304	ePn	39	56.10	1.8
			i	40	01.60	
			(S)	40	33.80	
PVY	2.68	139	ePn	39	56.90	0.8
			eSn	40	32.10	
TIM	2.80	66	iPd	40	05.00	7.4X
TRI	2.90	293	ePn	40	01.00	2.0
			iPg	40	05.00	
			iSn	40	31.00	
			iSg	40	38.50	
ULC	2.94	155	ePn	40	01.00	1.4
			eSn	40	39.10	
VOY	2.95	300	ePn	40	02.60	2.8X
			eSn	40	40.30	
BUD	3.02	19	e(P)	40	00.00	-0.7
BZS	3.02	70	iPc	40	00.00	-0.7
SOP	3.13	347	iPnd	40	05.90	3.7X
SRO	3.22	9	iPnd	40	04.50	1.0
	2.0s		8.10nm			
			i(Pg)	40	16.70	
			i(Sn)	40	44.80	
			i	40	51.90	
			Lg	41	23.00	
ARV	3.53	253	P	40	08.80	0.8
ZST	3.58	355	i(Pn)d	40	08.90	0.3
			i	40	21.90	
			i	40	23.70	
			i(Sn)	40	50.50	
			i	41	06.50	
			i	41	21.20	
PSZ	3.66	25	iPn	40	09.30	-0.5
VKA	3.73	347	iPnd	40	11.60	0.7
			iPg	40	27.30	
			iSn	40	56.10	
			i	40	57.40	
RSM	3.75	261	P	40	13.30	2.2
DUI	3.75	219	P	40	13.00	1.8
AQU	3.80	235	P	40	12.90	1.1
KBA	3.83	311	ePn	40	14.00	1.5
			iPg	40	28.10	
			i	41	14.30	
			i	41	15.20	
			iSg	41	17.30	
SKO	3.88	132	iPn	40	13.40	0.5
			iPg	40	30.10	
			i	40	56.20	
			iSn	41	03.50	
			i	41	10.00	
			iSb	41	15.20	
			iSg	41	24.00	
			Lg	41	26.20	
ASS	3.88	248	P	40	16.00	2.9X
FVI	3.89	302	P	40	15.30	2.2
			eSn	41	00.00	
AZI	4.02	230	P	40	16.60	1.8
SDI	4.02	225	P	40	15.19	0.3
KMR	4.17	326	iPn-	40	18.40	1.4
			iPg	40	34.00	
			iSn	41	03.30	
			iSg	41	24.70	
SFI	4.17	262	P	40	19.57	2.5
MNS	4.21	239	P	40	18.40	0.7
OHR	4.24	145	iPnd	40	20.00	1.8
			i(Sg)	41	24.80	
			Lg	41	29.70	
RFI	4.25	220	P	40	20.13	2.0
PGD	4.27	262	ePn	40	21.44	2.7
			ePg	40	29.50	
			eSn	41	17.00	
LCI	4.31	176	P	40	19.00	0.0
BSS	4.35	209	P	40	19.90	0.3
SGO	4.41	203	P	40	20.90	0.5
CTI	4.41	291	P	40	21.80	1.2
BHG	4.49	315	iPnc	40	23.30	1.7
RMP	4.54	233	P	40	24.50	2.1
CEI	4.56	46	eP	40	45.00	22.4X
RDP	4.57	233	P	40	23.00	0.2
VTS	4.57	115	iPc	40	23.00	0.1
ORI	4.65	191	P	40	23.90	0.1
MGR	4.74	199	P	40	26.00	0.8
SCE	4.75	302	eP	40	28.10	2.6
DRA	4.77	87	eP	40	28.00	2.5
SPC	4.91	21	iPn	40	28.00	0.3
			iPb	40	35.90	
			iPg	40	50.50	
			i(Sn)	41	24.50	
			i(Sg)	41	51.80	
VAY	4.94	130	iPnc	40	28.00	0.1
MME	4.95	267	P	40	29.70	1.4
BDI	5.04	266	P	40	29.90	0.5
TDS	5.06	191	P	40	29.60	0.0
SAL	5.08	283	P	40	30.70	0.7
OGA	5.10	298	eP	40	33.30	2.9X
SQTA	5.14	302	iPnc	40	33.30	2.4
			iPg	40	53.70	
			i	41	00.90	
			i	41	13.20	
			iSn	41	31.70	
			iSg	41	59.40	
PII	5.15	262	P	40	31.10	0.1
MAO	5.17	247	P	40	31.90	0.7
KEK	5.19	161	eP	40	30.00	-1.5
KHC	5.27	330	iPd	40	33.40	0.8
			e	40	42.00	
CMP	5.33	81	iPc	40	36.00	2.4
MMB	5.43	122	iPc	40	35.00	0.0
WET	5.54	326	iPc	40	36.80	0.3
			i	40	46.10	
OSS	5.60	294	eP	40	39.70	2.2
FUR	5.61	311	iPc	40	37.90	0.5
MDI	5.67	284	P	40	37.90	-0.4
PRU	5.74	340	Pn	40	39.20	0.0
	1.0s		28.90nm			4.9mb X
			e	40	47.40	
PLD	5.78	113	eP	40	40.00	0.2
PVL	5.78	102	iPc	40	40.00	0.2
BOB	5.80	274	P	40	40.70	0.6
RZN	5.99	117	iPc	40	42.00	-1.0
GRC1	6.02	319	iPnd	40	42.30	-0.9
			e(Sn)	41	49.50	
BUC1	6.05	90	eP	41	12.00	28.4X
BUC	6.10	89	eP	40	46.00	1.8
KSP	6.27	353	iPc	40	46.50	-0.2
	1.0s		76.00nm			5.5mb X
TMA	6.31	287	eP	40	47.20	-0.2
SAX	6.31	297	eP	40	49.00	1.4
VAI	6.34	284	P	40	47.00	-0.7
DIM	6.35	111	eP	40	47.00	-0.9
ISR	6.39	82	eP	40	59.00	10.5X
LLS	6.40	293	eP	40	50.60	1.7
PCP	6.45	272	P	40	49.36	0.0
KDZ	6.46	115	iP	40	48.00	-1.5
PGF	6.57	254	Pn	40	49.80	-1.3
PTT	6.57	66	eP	41	27.50	36.4X
VRI	6.58	76	ePd	40	52.50	1.4
CKI	6.65	271	P	40	51.80	-0.3
SOI	6.66	190	P	40	52.00	-0.2
BRG	6.70	340	iPn	40	52.00	-0.8
			e	41	09.00	
			e	42	26.00	
			i	42	34.00	
FIN	6.72	270	P	40	51.62	-1.6
NEO	6.79	140	eP	40	53.00	-1.0
RDO	6.81	118	eP	40	53.00	-1.3
VLS	6.84	160	eP	40	52.00	-2.8
			eS	42	07.80	
ORO	6.86	282	P	40	53.30	-1.9
ORX	6.86	282	P	40	52.85	-2.3
HOF	6.87	328	eP	40	54.50	-0.6
JMB	6.89	105	eP	40	54.00	-1.5
ROB	6.95	271	P	40	54.90	-1.5
IMI	6.99	267	P	40	55.61	-1.4
ZLA	7.00	297	eP	40	57.20	0.2
SLE	7.04	300	eP	40	57.20	-0.4
MNO	7.04	199	P	40	56.00	-1.8
MOX	7.23	328	iPn	41	00.00	-0.3
	1.2s		66.00nm			5.7mb X
Z	15s		1.70um			
N	12s		2.10um			
E	12s		2.80um			
			eSn	42	07.00	
			eSg	42	45.00	
ENR	7.28	270	P	40	59.72	-1.3
DIX	7.31	285	eP	41	02.30	0.7
SBF	7.32	267	Pn	41	00.30	-1.3
CLL	7.35	337	iPnc	41	01.00	-0.8
	1.4s		42.00nm			5.4mb X
			(Sn)	42	10.00	
			(Sg)	42	49.00	
			i	43	03.00	
RSP	7.35	278	P	40	58.18	-3.8X
STV	7.35	271	P	41	00.54	-1.4
FEL	7.38	299	P	41	01.51	-0.9
DOI	7.38	273	P	41	02.20	-0.2
LSD	7.43	280	P	41	00.23	-3.0X
TLB	7.46	87	eP	41	12.00	8.5X
PZZ	7.48	273	P	41	01.05	-2.9
CFR	7.53	82	eP	41	14.00	9.6X
BBS	7.55	296	P	41	04.27	-0.5
EMS	7.64	285	eP	41	07.50	1.4
RRL	7.69	276	P	41	04.74	-2.1
PSN	7.69	93	eP	41	06.00	-0.6

LPG	7.71	280	Pn	41	06.20	-1.1
			Sn	42	24.40	
LPL	7.73	280	Pn	41	06.40	-1.0
MOF	7.92	298	P	41	09.33	-0.7
FRF	7.94	266	Pn	41	08.20	-2.0
LOMF	7.96	294	P	41	07.90	-2.7
ECH	8.04	300	P	41	10.27	-1.3
CDF	8.04	302	P	41	10.56	-1.2
EZN	8.07	123	iP	41	11.00	-1.0
LMR	8.09	265	Pn	41	10.40	-1.8
ATH	8.10	143	eP	41	11.50	-0.9
BSF	8.13	297	Pn	41	12.20	-0.8
			Sn	42	37.80	
ITM	8.14	155	eP	41	10.50	-2.5
LRG	8.17	266	Pn	41	12.20	-1.1
HAU	8.47	297	Pn	41	16.60	-1.0
EDC	8.72	116	eP	41	20.00	-1.1
VLI	8.89	151	eP	41	20.00	-3.4X
IZM	9.57	127	eP	41	32.50	-0.2
IZI	9.78	112	eP	41	31.00	-4.7X
LBF	9.78	289	Pn	41	34.20	-1.6
MEM	9.83	312	iP	41	45.30	9.0X
SMF	9.83	287	Pn	41	34.40	-2.0
LOR	9.91	290	Pn	41	36.20	-1.3
ENN	9.96	312	eP	41	38.00	-0.1
	0.8s		18.00nm			5.6mb X
			e	42	09.50	
SSF	10.11	289	Pn	41	38.60	-1.7
AVF	10.18	287	Pn	41	39.80	-1.4
WTS	10.27	320	eP	41	45.00	2.7
	0.9s		66.00nm			6.1mb X
DOU	10.36	306	P	41	43.20	-0.4
BGF	10.50	286	Pn	41	44.30	-1.3
VAM	10.52	149	eP	41	41.00	-4.8X
MAF	10.67	284	Pn	41	46.30	-1.6
ALT	10.88	116	eP	41	50.00	-0.9
TCF	10.92	284	Pn	41	50.20	-1.1
ELL	12.22	126	eP	42	11.00	1.9
HFS	15.70	353	eP	42	54.20	-0.3
	0.6s		10.20nm			4.2mb
NUR	16.45	12	eP	43	03.00	-1.2
TOL	16.69	261	iPc	43	11.50	4.2X
	1.2s		62.50nm			4.6mb
NB2	16.86	349	P	43	08.70	-0.7
	1.2s		12.60nm			3.9mb
EKA	17.03	316	P	43	16.00	4.5X
	1.2s		23.60nm			4.2mb
SUF	18.78	12	eP	43	33.00	-0.2
	0.7s		22.00nm			4.5mb
PRNI	19.80	130	eP	43	44.00	-1.4
MBH	20.19	131	eP	43	49.00	-0.4
SOD	23.29	9	iP	44	23.80	3.4X
KEV	25.64	8	eP	44	41.00	-1.8
BCAO	40.05	179	iPd	46	47.50	-1.5
	0.9s		32.00nm			5.0mb
LKO	40.29	217	P	46	50.22	-0.8
	0.6s		10.00nm			4.6mb
KIC	42.82	214	P	47	11.00	-0.7
LIC	43.06	214	P	47	13.00	-0.6
GKN	55.03	84	P	48	45.60	-0.6
PKI	55.84	83	P	48	51.40	-0.8
GUN	55.97	83	P	48	52.60	-0.6
KRI	62.14	167	eP	49	38.50	2.8
BUL	65.25	169	eP	49	54.50	-1.5
YKA	66.57	338	eP	50	03.30	-0.6
	0.9s		2.20nm			4.3mb
BJI	68.49	55	eP	50	15.50	-0.8
FFC	68.53	327	eP	50	16.00	-0.3
	0.6s		6.00nm			5.0mb
CHG	70.98	82	eP	50	11.80	-20.0X
CHTO	70.98	82	iP	50	31.90	0.1
	1.0s		8.00nm			4.8mb
SES	75.36	329	eP	50	58.00	0.9
PNT	79.24	333	eP	51	20.00	1.4
	0.6s		5.00nm			4.7mb
LRM	79.66	327	eP	51	22.70	1.4
	S.D. = 1.3		on 165 of 186 obs.			

% JUN 03, 1990 12h 17m 05.73± 1.15s
43.192 N ± 9.1km 19.574 E ±10.2km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 1.9 (TTG).

PLE	0.19	316	ePg	17	10.10	0.1
			eSg	17	13.00	
IVA	0.40	143	ePg	17	13.80	-0.1
			eSg	17	20.00	
NKY	0.57	228	ePg	17	16.90	-0.4
			eSg	17	25.00	
PVY	0.66	154	ePg	17	19.00	0.0
			eSg	17	27.00	
TTG	0.80	197	ePg	17	21.70	0.5
			eSg	17	32.00	
	S.D. = 0.5		on 5 of 5 obs.			

& JUN 03, 1990 12h 49m 27.70s
36.875 N 121.633 W
DEPTH = 5.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.8 (BRK).

SAO	0.19	126	iPd	49	31.20	-0.3
GCC	0.33	298	iPc	49	34.10	-0.2
MHC	0.47	359	iPd	49	37.40	0.3
ARN	0.48	10	iPc	49	37.40	0.1
PRS	0.58	159	iPd	49	38.70	-0.7
LLA	0.61	115	iPc	49	39.70	-0.2
PCC	0.86	316	iPc	49	43.50	-1.3
PRI	1.07	133	iPc	49	47.60	-0.8
BKS	1.11	335	iPc	49	47.90	-1.1
BRK	1.11	334	e(P)	49	47.00	-2.0
			eS	50	04.50	
ZSP	1.18	335	ePd	49	48.50	-1.6
			i	49	50.60	
			eS	50	07.50	
CMB	1.53	40	ePc	49	54.30	-1.4
			iS	50	13.20	
FRI	1.55	85	eP	49	54.00	-1.9
			iS	50	14.80	
KVN	3.54	51	eP	50	24.20	-0.4
	14 obs. associoted					

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* JUN 03, 1990 12h 49m 43.96± 1.10s
2.193 N ±18.6km 32.336 E ±16.4km
DEPTH = 10.0km (geophysicist)
4.7mb (11 obs.)
UGANDA (568)

NAI	5.64	128	iPd	51	10.00	-0.1
	1.0s		20.00nm			4.8mb
			iS	53	07.00	
AAE	9.33	43	eP	52	02.00	0.2
BCAO	13.96	280	iPc	53	14.00	9.9X
	0.3s		12.00nm			5.2mb
			iS	55	44.00	
			Lg	56	54.50	
LPG	48.63	336	eP	58	31.60	1.3
	1.0s		10.00nm			4.8mb
KHC	49.45	344	P	58	38.80	2.6X
TOL	49.96	323	eP	58	43.00	2.7
GRF	50.63	342	eP	58	43.20	-2.0
	1.4s		8.00nm			4.5mb
SMF	50.76	335	eP	58	45.10	-1.1
	1.0s		9.00nm			4.7mb
LBF	50.97	335	eP	58	46.50	-1.3
	1.0s		8.00nm			4.6mb
MAF	50.98	334	eP	58	47.80	-0.1
	0.9s		8.20nm			4.7mb
AVF	51.08	335	eP	58	47.60	-1.0
	0.8s		2.70nm			4.2mb
TCF	51.19	333	eP	58	49.40	-0.1
	1.0s		8.00nm			4.6mb
LSF	51.47	333	eP	58	51.30	-0.3
	0.8s		4.05nm			4.4mb
NUR	58.46	356	eP	59	58.00	15.8X
SUF	60.56	357	eP	59	58.00	1.4
NB2	60.86	348	P	59	59.20	0.4
	1.2s		8.70nm			4.8mb
	S.D. = 1.4		on 13 of 16 obs.			

% JUN 03, 1990 12h 58m 10.65± 4.05s
41.153 N ±31.4km 28.494 E ±14.5km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

ISK	0.44	101	ePg	58	19.00	-0.5
YLV	0.89	131	iPg	58	27.60	-0.1
KCT	0.91	187	iPg	58	27.10	-1.0
EDC	0.94	211	ePg	58	29.00	0.5
HRT	0.95	110	ePg	58	29.00	0.2
IZI	1.10	137	ePg	58	32.30	0.9
	S.D. = 0.9		on 6 of 6 obs.			

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* JUN 03, 1990 13h 12m 44.32± 1.07s
44.650 N ±10.9km 17.606 E ±10.5km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.1 (LJU).

ZAG	1.64	316	ePn	13	14.20	1.0
			lSg	13	37.60	
HVAR	1.69	210	iPn	13	13.80	-0.3
			lSn	13	38.20	
PTJ	1.71	318	ePn	13	15.10	0.7
			eSn	13	39.90	
VBY	1.87	298	ePn	13	19.50	2.9X
			lSn	13	42.40	
CEY	2.50	297	eP	13	31.50	5.8X
			e(Sn)	14	02.50	
LJU	2.58	304	eP	13	32.00	5.2X
			e	13	37.50	
			eSn	14	04.00	
VOY	2.96	299	ePn	13	32.50	0.2
			eSn	14	09.10	
BZS	3.00	70	eP	13	33.00	0.3
SFI	4.20	262	P	14	01.30	11.6X
			eSg	14	03.40	
KHC	5.26	330	ePg	14	03.00	-1.9
			eSg	15	03.00	
	S.D. = 1.3		on 6 of 10 obs.			

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* JUN 03, 1990 13h 33m 14.70± 0.84s
7.670 N ±14.9km 126.483 E ±16.4km
DEPTH = 33.0km (normal)
3.8mb (2 obs,)
MINDANAO, PHILIPPINE ISLANDS (259)

GUMO	18.99	70	eP	37	37.00	0.7
MTN	20.90	167	eP	37	57.80	1.0
LOE	26.00	294	eP	38	55.00	8.5X
CHTO	28.96	295	e(P)	39	21.00	7.5X
	1.0s		1.75nm			3.7mb
SHL	37.46	303	eP	40	28.40	1.1
FORR	38.33	178	eP	40	33.60	-0.6
YKA	96.03	24	eP	46	38.90	-0.9
	0.6s		0.30nm			3.9mb
BAO	170.41	214	ePKP	53	20.00	-1.2
	S.D. = 1.3		on 6 of 8 obs.			

? JUN 03, 1990 14h 25m 21.38± 3.34s
28.402 S ±11.7km 67.421 W ±48.4km
DEPTH = 186.3 ± 39.3 km
LA RIOJA PROVINCE, ARGENTINA (138)

RTRS	2.51	225	iPc	26	05.00	0.1
RTLL	3.06	197	iPc	26	11.50	0.0
CFA	3.27	192	eP	26	14.50	0.3
			eS	26	51.90	
RTCB	3.30	201	iPd	26	15.00	0.5
ZON	3.32	199	eP	26	12.00	-2.7
RTCV	3.58	195	ePc	26	18.60	0.6
RTBS	3.70	208	ePc	26	20.20	0.8
			S	27	02.00	
ANT	5.40	329	eP	26	41.30	0.0
FCH	5.49	206	eP	26	44.50	1.6
PEL	5.50	210	eP	26	43.00	0.3
PCH	5.84	206	iP	26	48.70	1.5
TACH	6.04	209	eP	26	48.50	-1.3
LNV	6.51	211	eP	26	54.00	-1.8
	S.D. = 1.4		on 13 of 13 obs.			

JUN 03, 1990 14h 33m 31.82± 1.05s
33.289 S ± 7.9km 70.834 W ± 7.9km
DEPTH = 88.6 ± 11.0 km
CHILE-ARGENTINA BORDER REGION (127)

PEL	0.19	41	iPc	33	45.00	0.0
			iS	33	54.00	
SAN	0.22	139	iPc	33	45.00	-0.1
			iS	33	55.10	
ROCH	0.35	335	iPd	33	45.50	-0.4
			iS	33	56.00	
TACH	0.37	193	iPd	33	46.00	0.3
			iS	33	56.50	
PCH	0.43	141	iPc	33	46.10	-0.1
			iS	33	57.50	
FCH	0.46	95	iPc	33	47.00	0.3
			iS	33	58.50	
JACH	0.64	19	iPc	33	48.00	0.0
			iS	34	00.00	

03d 14h

LCCH	0.64	253	iPc	33	48.10	0.2
			iS	34	00.50	
LNV	0.82	216	iPc	33	49.40	-0.2
			iS	34	03.00	
RTCV	2.41	54	ePc	34	10.20	0.1
			(S)	34	38.30	
RTCB	2.49	44	iPc	34	11.50	0.3
CFA	2.76	53	iPc	34	14.70	-0.2
RTLL	2.80	46	iPd	34	15.00	-0.4
			eS	34	48.00	
RTRS	3.32	21	ePc	34	22.90	0.3
S.D. = 0.3 on 14 of 14 obs.						

? JUN 03, 1990 14h 56m 49.63± 1.09s
42.474 S ±21.1km 82.642 W ±18.3km
DEPTH = 10.0km (geophysicist)
5.0mb (5 obs.) 4.9Msz (3 obs.)
WEST CHILE RISE (686)

LPA	20.67	77	eP-	01	40.00	8.0X
			eS	05	28.00	
ANT	21.29	32	e(P)	01	41.50	2.9X
LPB	28.70	30	P	02	48.00	-1.4
			LR	10	48.00	
ZOBO	28.93	30	iPc	02	53.20	1.5
	1.1s		31.90nm		5.0mb	
			LR	11	16.00	
NNA	30.79	11	eP	03	07.30	-0.3
	1.0s		25.00nm		5.0mb	
Z	20s		1.24um		4.6Msz	
PT08	30.86	12	eP	03	08.80	0.2
BAO	39.95	59	eP	04	26.00	0.0
ITR	51.25	62	eP	05	55.70	0.0
TUL	78.93	349	eP	08	53.20	-1.3
	0.5s		6.20nm		4.9mb	
Z	21s		0.83um		5.0Msz	
			LR	31	00.00	
LNO	78.93	349	e(P)	08	55.50	1.1
ALO	80.07	340	eP	08	59.50	-1.5
	1.0s		14.00nm		4.9mb	
Z	18s		0.52um		4.9Msz	
RVR	82.49	331	eP	09	16.00	2.6X
SBB	83.27	331	eP	09	15.00	-2.5X
SWZ	84.12	122	eP	09	09.50	-12.9X
CLC	84.21	332	eP	09	23.00	0.7
ISA	84.38	331	eP	09	26.00	2.9X
TIC	85.40	77	P	09	32.40	3.8X
KIC	85.41	77	P	09	32.20	3.5X
SLR	87.01	122	iPd	09	36.00	-0.7
	1.0s		15.00nm		5.2mb	
ORV	88.93	331	eP	09	47.00	1.8
WDC	90.21	331	eP	09	48.90	-2.2
LRM	91.83	340	eP	09	59.80	0.9
INK	116.81	341	ePKP	15	43.00	8.4X
KHC	124.05	52	ePKP	15	50.30	1.1
MAT	148.16	273	(PKP)	16	30.00	-3.6X
	1.2s		9.38nm			
MAIO	150.27	89	ePKP	16	41.00	4.0X
HYB	150.32	142	ePKP	16	35.00	-2.5X
QUE	152.76	107	ePKP	16	44.20	3.3X
S.D. = 1.3 on 15 of 28 obs.						

JUN 03, 1990 15h 19m 47.28± 0.50s
44.640 N ± 4.4km 17.680 E ± 5.8km
DEPTH = 5.0km (geophysicist)
YUGOSLAVIA (383)
ML 3.1 (KBA), 2.9 (TTG), 2.6 (LJU).

BLY	0.37	287	iPg	19	53.20	-1.5
			Sg	19	58.70	
ZAG	1.68	315	ePg	20	19.00	1.6
			iSg	20	42.00	
HVAR	1.71	212	iPn	20	16.90	-1.0
			iSn	20	40.30	
PTJ	1.75	317	ePn	20	18.00	-0.6
			iSg	20	41.80	
PLE	1.80	136	ePn	20	21.80	2.5X
			eSn	20	46.50	
BRY	1.85	160	ePn	20	21.00	1.0
			eSn	20	44.00	
VBY	1.92	298	ePn	20	22.70	1.7
			iSn	20	48.00	
			iSg	20	51.50	
BEO	1.99	84	ePn	20	30.70	8.8X
NKY	2.06	152	ePn	20	26.50	3.4X
HCY	2.27	165	ePn	20	26.50	0.5
			eSn	20	54.50	
RIY	2.44	288	e(Pn)	20	28.70	0.3
			iSn	20	58.90	
TTG	2.49	152	ePn	20	29.30	0.2
			eSn	21	02.50	
BDV	2.50	160	ePn	20	30.00	0.7
			eSn	21	02.50	
CEY	2.55	297	e(Pn)	20	34.00	4.0X
			eSn	21	07.00	
LJU	2.63	303	ePn	20	30.50	-0.6
			e	20	37.50	
			eSn	21	06.50	
BZS	2.95	69	ePc	20	34.50	-1.2
TRI	2.97	292	eP	20	39.90	4.0X
			i	21	14.00	
BUD	2.99	18	e(P)	20	47.00	10.7X
VOY	3.01	299	ePn	20	37.70	1.1
			e(Pg)	20	43.80	
			eSn	21	16.50	
SOP	3.14	346	ePn	20	39.90	1.6
SRO	3.20	8	e(Pn)	20	39.00	-0.2
			e	21	22.20	
			e	21	32.30	
ZST	3.58	354	i(Pn)	20	43.70	-0.9
			e	21	04.50	
			e	21	25.40	
ARV	3.60	253	P	20	50.00	5.1X
VKA	3.75	346	iPnc	20	46.20	-0.8
			iSn	21	30.20	
DUI	3.80	219	P	20	46.00	-1.8
SKO	3.83	133	ePn	20	59.00	10.9X
KBA	3.89	310	iPnd	20	52.80	3.6X
			iPg	21	05.40	
			iSn	21	34.70	
			i	21	51.30	
			iSg	21	54.10	
ASS	3.95	248	P	20	53.20	3.2X
FVI	3.95	301	P	20	59.00	9.1X
SDI	4.07	225	P	20	51.30	-0.3
AZI	4.08	231	P	20	53.00	1.4
OHR	4.21	146	ePn	20	49.50	-4.0X
MNS	4.28	240	P	20	53.30	-1.3
CTI	4.48	290	P	21	07.00	9.5X
SPC	4.88	20	eP	21	13.10	9.9X
SOTA	5.20	302	iPnc	21	09.10	1.4
			iPg	21	28.10	
			i	21	30.90	
			i	22	02.30	
			iSg	22	34.00	
KHC	5.30	329	ePg	21	07.70	-1.3
			Sg	22	08.50	
PRU	5.76	339	Pn	21	21.70	6.2X
			e	22	33.00	
S.D. = 1.2 on 23 of 38 obs.						

• JUN 03, 1990 15h 52m 52.09± 1.44s
4.055 S ±12.9km 153.614 E ± 9.3km
DEPTH = 46.5 ± 14.0 km
4.4mb (3 obs.)
NEW IRELAND REGION (190)

RAB	1.45	265	iPc	53	15.70	-0.5
	0.6s	1733.33nm				
			iS	53	36.00	
HNR	8.25	131	eP	54	52.00	0.0
PMG	8.33	230	eP	54	54.00	0.8
MTN	23.87	247	iPc	58	02.40	0.0
	0.7s	28.00nm			4.9mb	
WB5	24.48	228	eP	58	08.50	0.1
WRA	24.54	228	Pc	58	09.00	0.1
	0.4s	4.70nm			4.4mb	
FORR	35.90	219	eP	59	49.00	-0.8
MAT	42.87	342	eP	00	48.00	0.3
	1.0s	6.00nm			4.3mb	
S.D. = 0.7 on 8 of 8 obs.						

JUN 03, 1990 16h 23m 39.14± 0.41s
5.442 N ± 7.0km 32.121 E ± 7.7km
DEPTH = 10.0km (geophysicist)
5.1mb (27 obs.) 4.6Msz (4 obs.)
SUDAN (557)

AAE	7.49	61	eP	25	33.00	1.5
NAI	8.15	145	iPc	25	39.00	-1.5
			iS	28	07.00	
KRI	22.27	186	P	28	40.50	2.3
			eSn	32	45.00	
			iLR	34	58.90	
HLW	24.38	358	eP	28	59.50	1.7
			eS	33	18.50	
BUL	25.66	188	iP	29	10.60	-0.4
			iSn	33	56.30	
			iLR	36	52.30	
BLF	34.82	189	iPd	30	33.50	1.0
SOI	35.62	338	P	30	42.00	3.0
HVD	36.40	190	eP	31	03.50	17.6X
TIC	36.95	274	P	30	49.90	-0.7
LKO	37.59	279	Pc	30	54.30	-1.7
	1.2s	57.00nm			5.2mb	
SDI	39.63	338	P	31	15.00	2.2
AZI	40.02	338	P	31	19.00	3.1X
MNS	40.64	338	P	31	22.00	0.9
QUE	41.00	49	eP	31	26.70	2.3
SRO	43.84	347	eP	31	49.60	2.5
CTI	44.18	340	P	31	52.00	2.0
FVI	44.27	341	P	31	53.70	3.1X
ZST	44.49	346	eP	31	53.30	0.9
			e	36	35.00	
SPC	44.74	349	eP	31	55.70	1.1
BNI	45.28	335	P	32	00.60	1.7
LPG	45.60	335	eP	32	01.80	0.2
	1.0s	14.00nm			4.9mb	
LPL	45.62	335	eP	32	01.80	0.1
	1.2s	20.85nm			5.0mb	
KHC	46.29	343	P	32	06.40	-0.3
	1.4s	29.00nm			5.1mb	
Z	16s	0.90um			4.8MszX	
TOL	47.27	322	eP	32	14.00	-0.6
CAF	47.28	331	eP	32	14.20	-0.4
	1.2s	14.90nm			5.0mb	
BSF	47.47	337	eP	32	15.00	-1.2
	1.2s	17.85nm			5.0mb	
GRF	47.50	342	eP	32	09.80	-6.4X
Z	20s	0.20um			4.1Msz	
			e	32	12.20	
LPO	47.53	330	eP	32	15.80	-0.7
	1.2s	23.80nm			5.2mb	
SMF	47.75	334	eP	32	17.10	-1.2
	1.2s	32.75nm			5.3mb	
BRG	47.76	345	eP	32	19.60	1.3
	1.7s	18.00nm			4.9mb	
CDF	47.77	338	eP	32	17.00	-1.5
	1.0s	8.00nm			4.8mb	
HAU	47.79	337	eP	32	17.30	-1.3
	1.0s	12.00nm			4.9mb	
RJF	47.82	331	eP	32	18.20	-0.6
	1.2s	14.90nm			5.0mb	
LFF	47.94	330	eP	32	19.20	-0.5
	1.2s	23.80nm			5.2mb	
LBF	47.96	334	eP	32	18.50	-1.4
	1.2s	20.85nm			5.1mb	
MAF	48.00	333	eP	32	18.80	-1.5
	1.2s	26.80nm			5.2mb	
AVF	48.08	334	eP	32	19.60	-1.2
	1.2s	23.80nm			5.2mb	
MOX	48.22	343	eP	32	23.50	1.6
	1.6s	16.00nm			4.8mb	
Z	16s	0.80um			4.8MszX	
TCF	48.22	332	eP	32	21.30	-0.6
	1.2s	41.65nm			5.4mb	
SSF	48.22	334	eP	32	20.60	-1.3
	1.2s	8.95nm			4.7mb	
LOR	48.23	334	eP	32	20.60	-1.4
	1.2s	14.90nm			4.9mb	
CLL	48.41	344	eP	32	24.00	0.7
	1.5s	15.00nm			4.8mb	
			e	33	49.00	
LSF	48.51	332	eP	32	23.30	-0.8
	1.2s	26.80nm			5.2mb	
KSH	52.02	43	P	32	52.00	0.7
N	16s	2.80um				
GKN	54.57	59	P	33	09.30	-1.1
	1.1s	42.00nm			5.4mb	
PKI	55.13	60	P	33	13.20	-1.5
NUR	55.23	356	iP	33	28.00	13.6X
GUN	55.62	60	P	33	16.00	-2.2
HFS	56.34	349	eP	33	22.00	-0.4
	1.4s	31.50nm			5.2mb	
Z	18s	0.26um			4.4Msz	
		LR		56	08.00	
SUF	57.33	357	iP	33	28.00	-1.4
NB2	57.66	348	P	33	30.90	-1.0
	1.3s	27.80nm			5.1mb	
WMQ	61.81	43	P	34	00.00	-0.8

SOD	61.94	358	iP	34	01.30	0.2
CHG	66.34	72	eP	34	29.90	-0.8
CHTO	66.34	72	eP	34	29.60	-1.0
	1.1s		5.30nm			4.6mb
GTA	69.37	50	P	34	49.20	-0.3
Z	20s		0.50um			4.8Msz
LZH	72.05	54	eP	35	05.00	-0.9
	2.0s		42.00nm			5.2mb
Z	22s		0.80um			4.9Msz
			sP	35	16.50	
GYA	73.76	64	P	35	15.80	-0.2
MAW	76.06	168	iP	35	29.60	1.4
HHC	78.48	50	P	35	43.80	1.4
BJI	81.98	50	eP	36	00.00	-0.8
BAO	81.98	253	eP	36	03.50	2.1
TIA	82.79	54	eP	36	05.90	0.7

S.D. = 1.4 on 58 of 63 obs.

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* JUN 03, 1990 17h 04m 03.43± 1.71s
36.824 N ±16.6km 28.388 E ±15.4km
DEPTH = 33.0km (normal)
DODECANESE ISLANDS (369)

YER	0.32	345	iPg	04	10.00	-1.5
			iSg	04	18.00	
CIN	0.81	343	eP	04	18.00	-0.4
KSL	1.19	126	ePn	04	24.50	0.7
ELL	1.22	93	ePn	04	23.00	-1.4
SMG	1.52	306	ePn	04	34.00	5.4X
			eSn	05	04.00	
KHL	1.75	31	ePn	04	32.90	0.9
IZM	1.81	331	ePn	04	34.00	1.2
BCK	1.87	69	ePn	04	34.30	0.5

S.D. = 1.4 on 7 of 8 obs.

? JUN 03, 1990 19h 14m 59.05±10.61s
51.373 N ±70.9km 16.102 E ±55.6km
DEPTH = 10.0km (geophysicist)
POLAND (548)

KSP	0.54	167	iP	15	10.00	-0.1
	0.6s		62.00nm			
			iS	15	19.50	
BRG	1.45	251	iPg	15	25.70	0.4
			iSg	15	46.00	
PRU	1.71	216	ePn	15	29.00	0.0
			Sn	15	44.80	
			eSg	15	54.00	
CLL	1.94	269	iPn	15	30.30	-2.1X
			iPg	15	33.70	
			eSg	15	59.00	
KHC	2.77	217	ePn	15	44.50	0.2
			Pg	15	50.00	
			Sn	16	16.90	
			Sg	16	28.50	
HOF	2.88	250	ePn	15	53.80	8.0X
MOX	2.93	257	ePg	15	53.00	6.5X
			iSg	16	33.00	
GRF	3.54	244	ePn	15	54.50	-0.7
			e(Pg)	16	06.20	
			eSg	16	53.70	

S.D. = 0.6 on 5 of 8 obs.

JUN 03, 1990 19h 23m 55.45± 0.37s
46.304 N ± 3.0km 7.281 E ± 3.9km
DEPTH = 9.6 ± 3.2 km
SWITZERLAND (544)
ML 3.0 (LDG), 2.9 (VIE). MD 2.6 (STR).

DIX	0.24	158	iPd	23	59.40	-1.3
EMS	0.34	226	iPc	24	01.10	-1.4
MMK	0.54	118	eP	24	04.50	-1.9
ORX	0.83	144	P	24	10.41	-1.2
			S	24	21.49	
ORO	0.84	144	P	24	10.90	-0.8
LSD	0.85	186	P	24	10.41	-1.7
			S	24	21.49	
LPL	0.88	206	Pg	24	11.10	-1.4
			Sg	24	24.20	
LPG	0.89	205	Pg	24	11.40	-1.3
			Sg	24	24.60	
LOMF	1.09	344	Pg	24	17.05	1.0
			Sg	24	31.20	
TMA	1.12	100	eP	24	15.70	-1.0
VAI	1.13	112	P	24	15.60	-0.9
			eSg	24	28.40	
RSP	1.15	181	P	24	16.56	-0.6
			S	24	32.57	
BBS	1.17	8	Pg	24	18.25	0.9
			Sg	24	32.19	
LLS	1.31	64	eP	24	19.20	-0.7
BNI	1.32	199	P	24	19.10	-0.9
			eSg	24	34.90	
ZLA	1.40	32	eP	24	20.60	-0.5
RRL	1.43	194	P	24	21.49	-0.2
			S	24	39.75	
MOF	1.55	356	Pn	24	23.69	0.4
			Sg	24	44.45	
BSF	1.56	348	Pg	24	24.60	1.1
FEL	1.65	17	Pn	24	23.28	-1.4
			Sg	24	38.76	
SLE	1.68	29	ePc	24	23.90	-1.2
SAX	1.71	56	eP	24	26.10	0.4
MDI	1.77	106	P	24	29.00	2.6
PZZ	1.80	184	P	24	27.85	0.9
			S	24	49.60	
HAU	1.82	340	Pn	24	27.40	0.3
			Pg	24	29.40	
			Sn	24	51.10	
			Sg	24	53.40	
ECH	1.91	358	Pn	24	27.36	-1.1
			Sg	24	56.20	
PCP	1.97	153	P	24	31.13	1.7
			S	24	56.16	
OSS	2.01	78	eP	24	34.10	4.0X
ROB	2.05	168	P	24	34.00	3.5X
			S	24	59.65	
STV	2.06	179	P	24	32.98	2.3
			S	24	58.62	
ENR	2.08	177	P	24	32.77	1.8
			S	24	59.03	
CDF	2.11	360	Pn	24	29.84	-1.5
FIN	2.20	162	P	24	35.03	2.5
			S	25	01.50	
LBF	2.38	288	Pn	24	35.40	0.2
			Sg	25	09.60	
SMF	2.40	279	Pn	24	35.60	0.1
			Sg	25	10.60	
IMI	2.43	170	P	24	37.29	1.3
			S	25	05.60	
SBF	2.44	177	Pn	24	37.00	0.9
			Sn	25	05.20	
LOR	2.54	294	Pn	24	38.40	0.9
			Sg	25	15.30	
SSF	2.71	288	Pn	24	40.80	1.0
			Sg	25	19.80	
AVF	2.75	282	Pn	24	39.80	-0.7
			Sg	25	22.30	
FRF	2.78	190	Pn	24	42.00	1.1
SQTA	2.85	70	eP	24	43.50	1.5
			iPg	24	49.50	
			e	25	26.00	
			iSg	25	27.70	
BGF	3.08	276	Pn	24	44.70	-0.3
			Sn	25	17.40	
			Sg	25	31.80	
MAF	3.27	270	Pn	24	47.00	-0.8
			Sn	25	24.60	
			Sg	25	39.60	
GRF	4.30	37	e(Pg)	25	18.20	15.8X
			e(Sg)	26	15.30	
KHC	5.10	54	ePg	25	33.00	19.2X
			eSg	26	38.00	

S.D. = 1.3 on 42 of 46 obs.

JUN 03, 1990 19h 27m 26.79± 0.46s
46.215 N ± 4.5km 7.346 E ± 3.4km
DEPTH = 11.4 ± 4.2 km
SWITZERLAND (544)
ML 2.8 (LDG).

DIX	0.14	162	iPd	27	30.90	0.4
EMS	0.32	243	iPc	27	32.70	-1.0
MMK	0.46	111	eP	27	36.00	-0.3
LPL	0.82	212	Pg	27	42.80	0.1
			Sg	27	55.60	
LPG	0.83	210	Pg	27	43.10	0.2
			Sg	27	55.90	
VAI	1.05	109	P	27	44.30	-2.2
TMA	1.07	95	eP	27	47.70	0.8
BNI	1.25	202	P	27	51.00	0.9
LLS	1.31	60	eP	27	50.70	-0.4
BSF	1.66	347	Pg	27	56.00	0.0
			Sg	28	17.40	
SAX	1.72	52	eP	27	57.70	0.7
SLE	1.74	26	ePc	27	55.50	-1.6
HAU	1.92	340	Pg	28	00.60	1.0
			Sn	28	22.70	
			Sg	28	24.70	
SBF	2.35	178	Pn	28	13.80	7.8X
LBF	2.45	290	Pn	28	06.50	-0.8
			Pg	28	11.70	
			Sg	28	39.20	
SMF	2.46	281	Pn	28	08.50	1.1
			Sg	28	42.20	
LOR	2.62	295	Pn	28	10.00	0.3
			Pg	28	17.10	
			Sg	28	46.60	
FRF	2.70	191	Pn	28	18.20	7.3X
AVF	2.82	283	Pn	28	11.40	-1.1
			Sg	28	52.70	
SQTA	2.84	68	e(Pn)	28	14.00	1.0
			iPg	28	22.10	
			iSg	29	00.70	
BGF	3.13	278	Pn	28	16.20	-0.7
			Sn	28	50.50	
			Sg	29	03.20	
MAF	3.32	272	Pn	28	19.40	-0.2
			Sg	29	10.60	

S.D. = 1.0 on 20 of 22 obs.

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* JUN 03, 1990 19h 50m 44.17± 1.30s
35.848 N ±22.0km 31.064 E ±16.7km
DEPTH = 33.0km (normal)
CYPRUS (372)

ELL	1.30	314	iPn	51	06.90	0.7
BCK	1.65	347	ePn	51	10.70	-0.7
CSS	2.05	115	eP	51	17.50	0.5
LFK	2.09	105	ePn	51	17.20	-0.4
KHL	2.76	334	ePn	51	28.00	0.9
CIN	2.96	307	eP	51	29.00	-0.9

S.D. = 1.0 on 6 of 6 obs.

JUN 03, 1990 19h 54m 27.68± 0.83s
46.443 N ± 9.0km 13.135 E ± 8.1km
DEPTH = 10.0km (geophysicist)
AUSTRIA (546)
ML 2.5 (KBA). MD 3.0 (LJU), 2.1 (TRI).

FVI	0.29	302	P	54	32.50	-1.2
			eSg	54	36.80	
KBA	0.65	13	iPgd	54	41.00	0.2
			iSg	54	50.50	
VOY	0.67	128	ePgc	54	39.50	-1.5
			eSg	54	49.90	
TRI	0.86	149	e(Pg)	54	45.60	1.5
			e(Sg)	54	55.30	
CTI	1.10	250	P	54	47.80	-0.7
			eSg	55	01.70	
OGA	1.51	287	iPgd	54	56.00	1.0
SQTA	1.53	301	iPgd	54	56.00	0.8
			i	54	56.70	
			iSg	55	15.10	

S.D. = 1.4 on 7 of 7 obs.

? JUN 03, 1990 20h 41m 52.28± 0.88s
4.620 N ±14.1km 31.863 E ±11.8km
DEPTH = 10.0km (geophysicist)
4.6mb (4 obs.)
SUDAN (557)
mbLg 4.9 (BUL).

NAI	7.66	140	iPc	44	01.00	14.2X
			iS	45	30.00	
AAE	8.13	57	eP	43	53.00	-0.6
BCAO	13.29	270	iPc	45	03.00	-0.7
	0.8s		9.00nm			4.9mb
			iS	47	26.50	
			Lg	48	18.00	
NPA	20.90	160	eP	46	50.20	12.7X
			iSg	53	08.30	
			iLg	54	41.80	
KRI	21.43	186	eP	47	01.00	18.0X
			eLR	53	18.00	
BUL	24.81	187	iPc	47	16.50	0.3
	1.2s		23.44nm			4.7mb
IAS	42.57	356	eP	50	05.00	15.1X
KHC	47.00	344	P	50	26.20	0.7

03d 20h

APO	57.43	350	eP	51	43.50	0.2
	0.5s		0.50nm		3.8mb	
NB2	58.41	348	P	51	52.60	2.4X
	1.1s		5.40nm		4.5mb	
S.D. = 0.8		on	5 of	10 obs.		

* JUN 03, 1990 21h 16m 45.13± 1.14s
40.274 N ±10.4km 21.945 E ±10.3km
DEPTH = 10.0km (geophysicist)
GREECE (364)

VAY	1.15	24	iPn	17	07.00	0.4
OHR	1.21	314	iPn	17	07.90	0.2
			iSg	17	27.80	
			Lg	17	29.20	
NEO	1.38	134	ePb	17	10.50	0.1
SKO	1.74	347	ePn	17	15.00	-0.5
KEK	1.74	252	ePn	17	21.80	6.2X
RDO	2.87	71	ePn	17	31.50	-0.2
S.D. = 0.5		on	5 of	6 obs.		

& JUN 03, 1990 22h 14m 38.95s
63.151 N 150.221 W
DEPTH = 100.1km
3.1mb (1 obs.)
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.32	123	iP	14	53.79	-0.1
KTH	0.51	322	iP	14	55.24	0.1
			eS	15	07.97	
RND	0.67	67	iP	14	56.20	-0.2
CUT	0.75	182	iP	14	56.96	-0.1
MCK	0.82	44	iP	14	57.63	-0.2
			iS	15	11.32	
SKT	1.32	208	iP	15	02.80	-0.6
GHO	1.51	156	iP	15	05.71	-0.1
			eS	15	28.26	
PWA	1.51	174	iPd	15	05.60	-0.1
NEA	1.52	19	iP	15	04.89	-0.9
			iS	15	23.89	
SML	1.61	146	iP	15	06.52	-0.5
WRH	1.63	35	iP	15	06.38	-0.8
			eS	15	26.41	
PLRM	1.65	162	iP	15	06.75	-0.6
PMR	1.65	162	iPd	15	06.80	-0.6
SUA	1.71	188	iP	15	07.89	-0.5
CCB	1.84	34	iP	15	09.01	-0.9
			iS	15	31.60	
HDA	1.92	48	iP	15	10.09	-0.9
			iS	15	33.24	
PMS	1.94	171	iPd	15	10.40	-0.9
NCA	1.96	125	eP	15	10.86	-0.6
			eS	15	38.77	
NCG	1.97	208	iP	15	11.01	-0.8
			Sn	15	35.73	
CGLM	2.03	205	iP	15	11.69	-0.8
FBA	2.06	30	iPd	15	11.80	-1.0
DDM	2.06	70	iP	15	12.23	-0.6
			iS	15	39.40	
CRP	2.10	206	iP	15	12.77	-0.7
			iS	15	38.68	
TOA	2.15	117	iPc	15	13.80	-0.2
SPU	2.16	204	iP	15	13.37	-0.8
PAX	2.17	93	iP	15	13.97	-0.4
			Sn	15	41.15	
DMW	2.20	64	eP	15	13.84	-0.9
GLM	2.22	33	eP	15	16.82	1.8
SDG	2.24	104	eP	15	14.76	-0.4
NKA	2.46	192	eP	15	19.83	1.7
KLU	2.61	128	eP	15	18.57	-1.6
TTA	2.65	268	iPc	15	19.60	-1.2
SLKM	2.65	180	eP	15	19.54	-1.3
GLI	2.71	146	iP	15	19.74	-1.9
			eS	15	52.30	
VZW	2.72	139	iP	15	19.63	-2.0
VLZ	2.73	136	iP	15	19.55	-2.2
RDT	2.79	203	eP	15	21.18	-1.4
DOT	2.82	77	eP	15	21.52	-1.5
RED	3.00	205	eP	15	25.15	-0.4
SEW	3.08	173	iP	15	25.04	-1.5
NNL	3.16	190	eP	15	27.99	0.3
SVW	3.26	233	eP	15	27.40	-1.7
TMW	3.27	84	eP	15	27.36	-1.8
IMA	3.29	335	iPd	15	28.00	-1.5
CNPM	3.67	188	iP	15	33.42	-1.2
FYU	4.03	30	iP	15	38.09	-1.5
AUL	4.09	204	eP	15	41.36	1.0
MID	4.18	152	eP	15	41.10	-0.5
TGL	4.24	121	eP	15	40.03	-2.5
BALM	4.27	116	eP	15	40.30	-2.6
MCNL	4.45	208	eP	15	44.57	-0.8
CDD	4.55	203	eP	15	45.78	-1.0
DWY	4.90	75	P	15	49.30	-2.2
HYT	6.43	106	P	16	10.00	-2.8
INK	8.58	46	P	16	40.00	-2.0
YKA	16.16	76	eP	18	18.20	-2.8
	0.5s		0.60nm		3.1mb	
56 obs. associated						

? JUN 03, 1990 22h 51m 05.70± 6.90s
37.513 N ±38.0km 20.560 E ±53.4km
DEPTH = 10.0km (geophysicist)
IONIAN SEA (399)
ML 3.5 (ATH).

VLS	0.66	2	iPgd	51	18.60	-0.3
			eSg	51	28.00	
ITM	1.14	107	ePg	51	27.00	0.0
			eSg	51	41.50	
VLI	2.06	112	ePg	51	47.00	6.3X
KEK	2.28	345	ePg	51	52.00	8.1X
NEO	2.75	49	ePn	51	50.50	-0.2
OHR	3.60	3	ePn	52	14.00	11.3X
VAY	4.11	22	ePn	52	10.40	0.6
S.D. = 0.7		on	4 of	7 obs.		

JUN 03, 1990 23h 13m 45.50± 0.86s
42.941 N ± 8.1km 18.805 E ± 6.4km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 1.9 (TTG).

NKY	0.19	132	ePg	13	49.80	0.0
			eSg	13	53.20	
BRY	0.20	258	iPgd	13	48.70	-1.2
			iSg	13	52.10	
HCY	0.54	205	ePg	13	56.50	0.0
			eSg	14	05.50	
PLE	0.58	48	ePg	13	57.00	-0.3
			eSg	14	06.00	
TTG	0.61	147	ePg	13	58.00	0.2
			eSg	14	07.00	
HVAR	1.74	279	iPn	14	17.30	1.3
			eSn	14	40.90	
			iSg	14	42.10	
S.D. = 1.1		on	6 of	6 obs.		

* JUN 04, 1990 00h 24m 32.38± 0.86s
22.217 S ±13.2km 179.466 W ±10.9km
DEPTH = 590.3 ± 7.0 km
5.0mb (10 obs.)
SOUTH OF FIJI ISLANDS (171)

SVA	4.52	334	ePc	26	01.20	-0.2
VUN	4.62	335	ePc	26	01.40	-0.8
OVA	4.80	340	eP	26	04.00	0.4
KRO	4.99	347	eP	26	00.60	-4.6X
SGE	5.22	331	iPc	26	07.60	0.5
TVI	5.29	354	eP	26	07.60	0.0
MBU	5.49	342	eP	26	09.60	0.3
NDE	5.72	348	eP	26	11.50	0.3
YSA	6.16	333	eP	26	14.10	-0.9
DZM	13.06	268	iPd	27	22.70	1.0
			iS	29	44.10	
BRS	25.69	253	iP	29	20.00	1.0
COO	26.92	246	eP	29	31.00	1.4
	0.6s		23.00nm		5.0mb	
RMQ	29.22	255	iPd	29	50.70	1.1
CAN	30.43	238	iPd	30	00.90	1.1
BWA	30.65	240	iPd	30	00.70	-1.0
CMS	32.20	246	eP	30	15.60	0.9
WB5	43.02	264	iPd	31	41.80	-1.1
WRA	43.04	264	Pd	31	41.60	-1.4
	0.6s		20.10nm		4.8mb	
WARB	49.03	254	iPd	32	27.80	-0.7
	0.7s		60.00nm		5.2mb	
KNA	49.19	268	iPd	32	28.90	-0.9
	0.3s		24.00nm		5.2mb	
COOL	53.30	247	eP	32	58.00	-1.4
KLB	56.10	246	iPd	33	18.20	-0.7
BAL	57.12	247	iPd	33	25.00	-0.9
MUN	57.36	245	eP	33	27.00	-0.5
MRWA	57.94	249	iPd	33	30.70	-0.8
NANU	59.65	256	iPd	33	42.40	-0.5
	0.4s		38.00nm		5.0mb	
MAT	70.80	325	eP	34	50.00	-1.8
	0.8s		13.43nm		4.5mb	
NJ2	79.94	311	Pc	35	42.60	0.5
PRS	80.00	44	e(P)	35	43.00	0.6
GCC	80.02	43	e(P)	35	42.00	-0.4
PCC	80.06	43	e(P)	35	42.70	0.1
MDJ	81.15	326	eP	35	48.30	0.2
FRI	81.46	44	eP	35	48.90	-0.9
CMB	81.64	43	ePc	35	51.00	0.2
WDC	81.86	40	eP	35	52.00	0.2
ORV	81.86	41	eP	35	51.80	0.0
CN2	82.83	323	Pd	35	56.00	-0.5
TIY	87.41	313	eP	36	19.00	0.1
XAN	88.09	308	P	36	22.50	0.4
PNT	88.84	34	eP	36	25.00	-0.1
	0.7s		5.00nm		4.5mb	
KMI	88.92	298	Pc	36	27.50	1.2
ALQ	89.53	52	eP	36	28.80	-0.1
	1.0s		3.50nm		4.2mb	
CHG	89.55	290	iPd	36	30.50	1.5
	1.0s		32.50nm		5.2mb	
CHTO	89.55	290	iPd	36	30.50	1.5
	0.9s		24.94nm		5.1mb	
TEH	133.99	299	iPKPd	43	02.10	16.9X
SUF	135.94	343	ePKP	42	41.00	-6.8X
NUR	138.17	342	ePKP	42	45.00	-7.0X
NB2	140.50	352	PKP	42	49.00	-7.3X
	0.7s		2.20nm			
HFS	140.99	350	ePKP	42	49.60	-7.5X
	0.5s		6.00nm			
EKA	146.82	4	PKP	43	09.00	2.0X
	0.8s		6.20nm			
HRI	147.10	297	ePKP	43	11.00	2.7X
BBTK	147.51	310	ePKP	43	10.00	1.2
PRNI	148.15	292	ePKP	43	14.00	4.0X
MBH	148.31	291	ePKP	43	15.00	4.8X
SPC	148.88	335	iPKP	43	14.40	3.7X
KSP	148.89	341	iPKPd	43	15.00	4.6X
	0.7s		20.00nm			
			i	43	20.50	
WIT	149.09	353	ePKP	43	16.00	5.4X
CLL	149.38	345	iPKPd	43	16.10	5.0X
	0.9s		31.00nm			
			e	43	22.00	
BRG	149.54	343	iPKPd	43	16.20	4.8X
	0.9s		29.00nm			
			i	43	23.10	
WTS	149.88	352	ePKP	43	17.00	5.2X
	0.8s		32.00nm			
PRU	150.17	342	PKPd	43	17.70	5.3X
	0.7s		16.90nm			
			e	43	26.00	
MOX	150.33	346	(PKP)	43	18.50	5.9X
			e	43	27.00	
ZST	150.89	337	ePKP	43	19.70	6.2X
			e	43	29.60	
ENN	151.19	353	ePKP	43	20.50	6.7X
	0.9s		9.00nm			
			e	43	30.50	
KHC	151.21	342	PKP	43	20.40	6.4X
			e	43	31.20	
MEM	151.34	353	iPKPd	43	20.40	6.4X
DOU	151.99	354	PKPc	43	22.00	7.0X
S.D. = 0.9		on	44 of	67 obs.		

JUN 04, 1990 01h 08m 30.08± 0.42s
40.152 N ± 3.8km 29.257 E ± 4.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZI	0.25	42	iPg	08	35.50	0.1
YLV	0.42	12	iPg	08	38.90	0.2
GBZT	0.65	13	iPgc	08	47.10	4.0X
			eSg	09	01.10	
KCT	0.70	278	iPg	08	43.90	0.0
HRT	0.74	25	ePg	08	43.70	-0.9
GPA	0.82	80	iPg	08	45.40	-0.5
ISK	0.92	351	ePn	08	48.20	0.5
ITU	0.97	349	iPgc	08	49.00	0.5
			iSg	09	05.00	
EDC	1.08	281	iPn	08	50.60	0.1
ALT	1.28	149	iPn	08	53.30	-0.6
KHL	1.84	173	ePn	09	06.60	4.6X
EZN	2.28	263	iPn	09	07.20	-1.1
IZM	2.34	222	ePn	09	14.10	4.9X

BBTK	2.71	95	ePg	09	15.00	0.4
			eSg	10	00.00	
BCK	2.88	158	ePn	09	17.00	0.0
ELL	3.44	171	ePn	09	26.00	1.1

S.D. = 0.7 on 13 of 16 obs.

& JUN 04, 1990 02h 16m 39.70s
36.488 N 120.177 W
DEPTH = 14.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.6 (BRK), 3.4 (PAS).
Felt at Fresno.

PKEM	0.43	173	eP	16	47.30	-1.2
PRI	0.52	229	iPd	16	49.20	-1.0
FRI	0.63	37	iPd	16	50.60	-1.3
LLA	0.63	282	iPd	16	50.50	-1.5
PHAM	0.67	195	eP	16	51.00	-1.7
PRS	0.97	261	iPd	16	56.40	-1.5
SAO	1.06	286	iP	16	57.50	-1.8
BCH	1.30	177	eP	17	00.50	-3.0
ARN	1.39	309	eP	17	02.50	-2.1
MHC	1.45	306	iPd	17	03.10	-2.5
			i	17	07.90	
			iS	17	25.10	
CMB	1.55	354	eP	17	05.60	-1.4
GCC	1.56	291	eP	17	04.00	-3.0
ISA	1.61	120	ePd	17	05.40	-2.4
ABL	1.81	154	eP	17	07.00	-3.9
BLP	1.93	185	eP	17	10.20	-2.2
PCC	2.03	300	e(P)	17	11.00	-2.9
BRK	2.16	310	e(P)	17	12.50	-3.3
			i	17	17.40	
ZSP	2.21	312	eP	17	13.30	-3.1
TNP	2.85	55	eP	17	22.10	-3.6
NWRM	2.92	313	eP	17	26.20	-0.3
KVN	3.04	32	eP	17	27.20	-1.2
ORV	3.24	342	eP	17	30.10	-0.9
PLM	4.15	138	eP	17	40.40	-3.7
GLA	5.58	126	eP	17	59.80	-4.5

24 obs. associated

JUN 04, 1990 03h 49m 22.14± 0.27s
44.565 N ± 3.1km 10.316 E ± 2.5km
DEPTH = 20.2 ± 2.8 km
NORTHERN ITALY (545)
ML 3.7 (KBA), 3.5 (LDG), 2.9 (LJU).

BDI	0.54	158	P	49	32.00	-0.9
			eSg	49	41.00	
BOB	0.65	288	P	49	35.00	0.2
PII	0.86	170	P	49	38.10	-0.1
PGD	1.22	124	P	49	45.60	1.3
			eSg	50	02.40	
PCP	1.27	270	P	49	45.82	1.0
			S	50	03.87	
SFI	1.28	120	P	49	47.20	2.3
			eSg	50	03.40	
MDI	1.29	341	P	49	45.80	0.9
			eSg	50	03.50	
CKI	1.46	265	P	49	48.10	0.6
			eSn	50	08.70	
FIN	1.55	257	P	49	48.90	0.1
			S	50	08.17	
RSM	1.66	112	P	49	52.20	1.8
VAI	1.70	321	P	49	53.80	2.9
			eSn	50	14.30	
CTI	1.76	32	P	49	51.70	-0.2
			eSn	50	14.00	
ROB	1.77	262	P	49	52.18	0.1
			S	50	14.01	
TMA	1.85	327	eP	49	54.00	0.8
IMI	1.86	250	P	49	53.10	-0.3
			S	50	15.55	
ORO	1.96	303	P	49	57.70	2.8
ORX	1.97	304	P	49	55.66	0.7
			S	50	20.32	
VDL	2.01	343	eP	49	56.70	1.0
ENR	2.10	262	P	49	57.08	0.2
			S	50	22.48	
OSS	2.13	357	eP	49	58.70	1.4
AUTN	2.15	256	Pn	49	58.12	0.4
			Sg	50	23.12	
STV	2.17	263	P	49	58.02	0.2
			S	50	24.17	
ARV	2.17	118	P	50	00.00	2.2
SBF	2.19	252	Pn	49	57.60	-0.5
			Sn	50	24.60	
DOI	2.20	269	P	49	58.60	0.4
MMK	2.23	313	eP	50	03.00	4.2X
PGF	2.23	206	Pn	49	58.44	-0.3
			Sg	50	26.05	
AURF	2.25	254	Pn	49	59.09	0.1
			Sg	50	27.26	
RSP	2.25	286	P	49	59.15	0.1
ASS	2.26	131	P	50	00.00	0.9
TOUF	2.27	257	Pn	49	59.83	0.5
			Sg	50	28.37	
PZZ	2.30	270	P	49	59.56	-0.2
			S	50	26.48	
OGA	2.36	12	ePn	50	02.30	1.7
MVIF	2.37	255	Pn	50	01.04	0.3
LSD	2.41	293	P	50	00.89	-0.5
RRL	2.54	279	P	50	04.28	1.0
DIX	2.55	308	eP	50	07.00	3.6X
CALN	2.60	253	Pn	50	04.22	0.2
			Sg	50	36.83	
BNI	2.64	282	P	50	06.20	1.6
FVI	2.67	40	P	50	04.30	-0.5
LPG	2.69	292	Pn	50	05.70	0.2
TRI	2.70	64	ePnc	50	03.70	-1.5
			iSg	50	34.10	
LPL	2.71	292	Pn	50	05.80	0.1
SQTA	2.73	13	iPnc	50	07.30	1.5
			iPg	50	16.60	
			iSn	50	41.60	
			iSg	50	55.50	
SAX	2.77	346	eP	50	08.00	1.5
MNS	2.78	141	P	50	07.20	0.8
FRF	2.83	250	Pn	50	06.70	-0.4
			Sn	50	38.60	
VOY	2.92	59	iPnd	50	07.20	-1.3
			eSn	50	38.50	
LMR	3.01	247	Pn	50	09.00	-0.7
			Sn	50	43.00	
LRG	3.06	250	Pn	50	10.20	-0.2
			Sn	50	45.80	
CEY	3.14	67	eP	50	22.40	10.9X
			eSn	50	47.00	
ZLA	3.21	336	eP	50	12.80	0.2
KBA	3.29	39	ePn	50	13.70	-0.1
			iPg	50	23.50	
			i	50	27.90	
			iSg	51	06.10	
			i	51	08.80	
LJU	3.32	62	e(Pn)	50	13.50	-0.6
			e	50	23.50	
			eS	50	52.00	
SLE	3.44	339	eP	50	15.40	-0.4
VBY	3.63	73	e(Pn)	50	29.30	10.8X
			eSn	50	58.90	
FUR	3.66	10	iPc	50	31.30	12.3X
SDI	3.84	137	P	50	22.00	0.5
BSF	4.08	324	Pn	50	24.70	-0.3
PTJ	4.20	70	eP	50	31.60	4.9X
CDF	4.38	332	Pn	50	28.30	-0.9
HAU	4.41	323	Pn	50	29.10	-0.4
GRC1	4.51	10	ePn	50	28.30	-2.7
			e(Pg)	50	49.20	
			e(Sn)	51	20.20	
			e(Sg)	51	39.50	
HVAR	4.65	105	ePn	50	30.80	-2.1
			iSn	51	20.60	
SMF	5.00	297	Pn	50	36.20	-1.7
LBF	5.05	301	Pn	50	37.80	-0.9
KHC	5.09	25	Pn	50	37.30	-1.8
			Sg	51	35.50	
LOR	5.25	303	Pn	50	41.00	-0.5
AVF	5.36	297	Pn	50	43.40	0.4
SSF	5.38	300	Pn	50	43.20	0.0
BGF	5.61	293	Pn	50	45.70	-0.9
CAF	5.89	276	Pn	50	50.00	-0.5
ZST	5.93	50	eP	51	22.40	31.4X
PRU	6.14	26	eP	51	20.00	26.1X
			eSg	52	01.20	
RJF	6.29	280	Pn	50	57.60	1.5
BRG	6.77	20	e(P)	51	29.00	26.2X
			e	52	14.00	
			e	53	02.00	
CLL	6.99	14	(Pg)	52	01.00	55.2X
			(Sg)	53	16.00	
EPF	7.38	261	Pn	51	10.00	-1.4

S.D. = 1.1 on 68 of 78 obs.

• JUN 04, 1990 04h 45m 44.18± 1.93s
24.140 S ±12.7km 179.980 W ± 9.4km
DEPTH = 544.3 ± 25.8 km
4.8mb (4 obs.)
SOUTH OF FIJI ISLANDS (171)

DZM	12.66	277	iPc	48	31.20	1.1
			iS	50	53.90	
NOZ	14.53	186	P	48	50.70	2.1
MNG	16.87	192	P	49	10.40	-1.2
			S	52	01.70	
THZ	18.55	197	P	49	28.30	0.4
LTZ	19.67	197	P	49	36.40	-2.0
CAN	29.04	240	eP	51	02.70	0.6
TOO	32.33	237	iPd	51	33.60	3.5X
	0.6s		75.00nm			5.5mb
WB5	42.40	266	iPc	52	51.00	-1.5
			eScP	57	36.00	
			eS	58	36.10	
WRA	42.41	266	Pc	52	51.60	-1.0
	0.5s		17.10nm			4.8mb
WARB	48.07	256	iPc	53	34.30	-2.0
SPA	66.00	180	iPd	55	40.00	1.6
	0.8s		13.75nm			4.5mb
PRS	B1.70	44	eP	57	07.00	0.2
GCC	B1.74	43	eP	57	07.00	0.1
PRI	82.03	45	eP	57	08.70	0.1
BRK	82.10	42	ePc	57	08.30	-0.4
MHC	82.15	43	ePc	57	09.20	0.0
PLM	82.92	49	eP	57	13.00	-0.2
SBB	83.04	47	eP	57	13.00	-0.6
FRI	83.16	44	eP	57	13.70	-0.3
ISA	83.17	46	eP	57	15.00	0.7
CMB	83.36	43	ePc	57	14.60	-0.5
ORV	83.61	42	ePc	57	15.70	-0.6
WDC	83.63	40	ePc	57	16.10	-0.2
CLC	83.84	46	eP	57	17.00	-0.6
GSC	84.07	47	eP	57	18.00	-0.8
CN2	84.09	324	Pc	57	18.50	0.0
GLA	84.17	50	eP	57	20.00	0.8
TIA	84.41	314	eP	57	20.50	0.2
TIY	88.36	313	eP	57	39.60	0.5
KMI	89.39	298	Pc	57	45.50	1.2
CHG	89.78	291	eP	57	41.00	-4.9X
CHTO	89.78	291	iP	57	47.30	1.4
	1.0s		12.50nm			4.8mb
CD2	91.23	303	eP	57	53.20	0.8
NB2	142.32	351	PKP	04	10.90	-4.8X
	0.9s		2.80nm			
HFS	142.78	349	ePKP	04	11.50	-4.9X
	0.5s		7.50nm			
PRNI	148.38	289	ePKP	04	31.00	4.4X
CLL	151.09	343	iPKPd	04	36.50	6.5X
	0.9s		16.00nm			
BRG	151.22	342	iPKP	04	46.20	16.0X
KHC	152.87	340	ePKP	04	40.50	7.8X

S.D. = 1.0 on 31 of 39 obs.

? JUN 04, 1990 04h 54m 12.22± 1.74s
15.531 S ±55.8km 72.928 W ±24.6km
DEPTH = 10.0km (geophysicist)
SOUTHERN PERU (117)

PT03	3.17	299	iPd	55	02.41	-0.7
			iS	55	34.00	
PT06	3.70	297	iP	55	11.40	0.7
			iS	55	48.60	
LPB	4.75	103	P	55	26.00	0.0
PT08	5.00	315	iPc	55	29.50	0.1
			eS	56	25.10	
NNA	5.18	312	eP	55	37.00	5.2X
	0.5s		4.93nm			4.4mb X
			eS	56	26.50	

S.D. = 1.0 on 4 of 5 obs.

JUN 04, 1990 05h 14m 51.58± 0.87s
35.898 N ±11.1km 27.449 E ± 5.5km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)

YER	1.40	28	iPn	15	16.30	-1.0
KSL	1.74	82	ePb	15	21.60	-0.5
CIN	1.77	17	eP	15	22.00	-0.5
SMG	1.87	345	ePn	15	28.70	4.8X
ELL	2.16	66	ePn	15	29.00	0.8
IZM	2.50	357	ePn	15	34.00	1.0

04d 05h

VAM	2.69	260	ePn	15 35.50	-0.2
KHL	2.93	34	ePn	15 39.00	-0.2
BCK	2.97	57	ePn	15 40.40	0.8
VLI	3.73	284	ePn	15 49.80	-0.7
ALT	3.80	33	ePn	15 51.00	-0.5
ITM	4.63	288	ePn	16 04.00	0.8

S.D. = 0.8 on 11 of 12 obs.

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* JUN 04, 1990 05h 29m 51.01± 0.67s
4.608 S ± 8.5km 138.676 E ± 9.7km
DEPTH = 33.0km (normal)
4.8mb (2 obs.)
WEST IRIAN (201)

MNDI	5.19	107	eP	31 08.00	-0.7
			eS	32 27.00	
MTN	11.07	222	iPc	32 30.90	0.7
			eS	34 32.00	
KNA	14.75	221	eP	33 19.00	-0.1
WB5	15.75	195	eP	33 30.10	-2.0
			i	33 37.30	
			eS	36 20.10	
WRA	15.82	195	P	33 32.00	-1.0
	0.5s		1.40nm	3.4mb X	
QIS	15.88	177	eP	33 30.00	-3.8X
			eS	36 22.00	
CTA	17.06	155	eP	33 50.00	1.2
WARB	24.35	207	iPc	35 09.00	1.8
CHG	45.53	302	eP	38 10.00	0.3
CHTO	45.53	302	eP	38 09.90	0.2
	0.9s		6.18nm	4.5mb	
GUN	60.25	306	P	39 58.80	-0.4
PKI	60.50	305	P	40 00.20	-0.7
GKN	61.29	305	P	40 05.60	-0.5
	0.7s		10.00nm	5.1mb	
LKO	144.22	280	(PKP)c	49 23.62	-2.7X
	0.6s		5.50nm		
LPB	146.21	129	PKP	49 27.00	-3.1X
ZOBO	146.34	129	PKPc	49 31.70	1.2
CCH	147.17	132	PKP	49 43.20	11.7X
SIV	151.70	137	PKP	49 43.20	5.0X

S.D. = 1.1 on 13 of 18 obs.

JUN 04, 1990 05h 41m 25.37± 0.25s
44.622 N ± 1.9km 7.257 E ± 3.0km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.6 (GEN), 2.6 (LDG).

PZZ	0.16	224	P	41 29.23	0.1
			S	41 31.49	
STV	0.38	173	P	41 33.13	-0.1
			S	41 38.36	
ENR	0.41	163	P	41 33.61	-0.2
			S	41 39.46	
RRL	0.45	312	P	41 34.36	-0.2
			S	41 40.10	
RSP	0.53	0	P	41 35.69	-0.4
			S	41 42.23	
ROB	0.55	126	P	41 36.61	0.1
			S	41 44.07	
BNI	0.60	316	P	41 36.90	-0.6
			eSg	41 41.10	
TOUF	0.61	181	Pg	41 37.39	-0.4
AUTN	0.64	169	Pg	41 38.32	0.0
			Sg	41 46.75	
MVIF	0.73	186	Pg	41 39.79	0.0
			Sg	41 49.67	
AURF	0.74	176	Pg	41 39.79	-0.1
SBF	0.77	170	Pg	41 40.30	-0.1
			Sg	41 51.00	
FIN	0.80	121	P	41 40.92	0.0
			S	41 51.04	
LSD	0.84	355	P	41 42.15	0.4
			S	41 52.48	
IMI	0.84	147	P	41 41.23	-0.5
			S	41 51.56	
CALN	0.91	197	Pg	41 42.96	0.1
PCP	0.92	95	P	41 43.38	0.3
			S	41 55.86	
LPG	0.95	338	Pg	41 43.80	0.2
			Sg	41 56.30	
LPL	0.97	338	Pg	41 44.30	0.4
			Sg	41 57.20	
FRF	1.15	203	Pg	41 46.80	-0.1
			Sg	42 01.50	
LRG	1.33	209	Pg	41 50.60	0.7
			Sg	42 08.50	
LMR	1.40	203	Pg	41 51.30	0.4
			Sg	42 09.20	

S.D. = 0.3 on 22 of 22 obs.

% JUN 04, 1990 07h 05m 04.86± 0.81s
39.224 N ± 7.6km 27.766 E ± 8.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZM	0.91	206	ePg	05 22.20	-0.2
			eSg	05 36.20	
KCT	1.12	24	iPn	05 26.00	0.1
EDC	1.12	4	ePn	05 25.30	-0.6
EZN	1.27	299	ePn	05 28.70	0.3
IZI	1.72	49	ePn	05 35.50	0.4
YLV	1.82	42	iPn	05 36.50	-0.1

S.D. = 0.5 on 6 of 6 obs.

JUN 04, 1990 08h 30m 33.97± 0.22s
44.610 N ± 2.0km 7.231 E ± 2.7km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 3.3 (LDG), 3.2 (GEN), 2.6 (VIE). MD 2.7 (STR).

DOI	0.11	175	Pc	30 37.60	0.7
PZZ	0.14	222	P	30 37.64	0.2
			S	30 40.11	
STV	0.37	170	P	30 41.64	0.0
			S	30 46.67	
ENR	0.41	160	P	30 42.00	-0.3
			S	30 47.94	
RRL	0.44	314	P	30 42.87	-0.2
			S	30 48.41	
RSP	0.54	2	P	30 44.10	-0.9
			S	30 50.92	
ROB	0.56	124	P	30 45.13	-0.2
			S	30 52.51	
BNI	0.59	318	Pc	30 45.40	-0.7
			eSg	30 52.80	
TOUF	0.60	179	Pg	30 45.94	-0.2
AUTN	0.63	167	Pg	30 46.14	-0.7
			Sg	30 55.00	
MVIF	0.72	185	Pg	30 48.33	0.1
			Sg	30 58.56	
AURF	0.73	175	Pg	30 47.74	-0.6
			Sg	30 58.21	
SBF	0.76	169	Pg	30 48.30	-0.6
			Sg	30 59.00	
CKI	0.77	104	P	30 50.80	1.8
			eSg	31 03.70	
FIN	0.81	119	P	30 49.33	-0.3
			S	30 59.28	
IMI	0.84	146	P	30 49.64	-0.7
			S	30 59.80	
LSD	0.85	356	P	30 50.56	0.0
			S	31 01.13	
REVF	0.88	174	Pg	30 50.71	-0.1
CALN	0.89	196	Pg	30 51.56	0.4
			Sg	31 03.89	
PCP	0.94	94	P	30 51.90	-0.1
			e	31 04.45	
LPG	0.95	339	Pg	30 52.50	0.2
			Sg	31 04.60	
LPL	0.97	339	Pg	30 52.20	-0.4
			Sg	31 05.20	
FRF	1.13	202	Pg	30 55.30	0.2
			Sg	31 09.80	
ORO	1.15	27	P	30 56.00	0.5
ORX	1.15	27	P	30 53.54	-2.1
			S	31 07.02	
LRG	1.31	209	Pg	30 58.50	0.2
			Sg	31 16.80	
LMR	1.38	202	Pg	30 59.30	0.1
			Sg	31 17.80	
EMS	1.48	352	eP	31 02.60	1.8
DIX	1.48	5	eP	30 59.60	-1.2
MMK	1.53	19	eP	30 59.90	-1.7
BOB	1.59	84	P	31 04.80	2.5
			eSn	31 26.10	
VAI	1.66	40	P	31 05.40	2.2
TMA	1.89	37	eP	31 05.10	-1.7
MDI	2.11	55	P	31 11.00	1.3
PGF	2.43	147	Pn	31 12.21	-2.2
SMF	3.13	312	Pn	31 24.90	0.6
			Sn	32 00.10	
			Sg	32 13.30	
BSF	3.24	355	Pn	31 25.80	-0.1
			Sn	32 02.90	
SLE	3.28	15	eP	31 25.60	-0.8
LBF	3.29	317	Pn	31 27.50	0.9
			Sn	32 04.80	
			Sg	32 17.40	
HAU	3.45	350	Pn	31 28.80	0.0
			Sn	32 06.20	
AVF	3.48	310	Pn	31 29.50	0.2
			Sn	32 08.60	
LOR	3.55	320	Pn	31 30.60	0.4
			Sn	32 10.00	
SSF	3.58	315	Pn	31 30.80	0.2
BGF	3.64	304	Pn	31 31.70	0.1
			Sg	32 27.80	
MAF	3.66	298	Pn	31 32.10	0.3
CAF	3.69	277	Pn	31 32.00	-0.4
CDF	3.80	0	Pn	31 32.40	-1.5
			Sn	32 17.30	
SOTA	3.81	45	ePn	31 35.50	1.4
			iPg	31 45.20	
			iSg	32 21.50	
TCF	3.91	297	Pn	31 36.20	0.8
			Sn	32 19.30	
RJF	4.12	282	Pn	31 39.70	1.5
LSF	4.34	294	Pn	31 41.40	0.0
MFF	5.55	294	Pn	31 58.60	0.1
LDF	6.44	311	Pn	32 11.30	0.1
LPF	6.67	304	Pn	32 14.20	-0.2
FLN	6.74	311	Pn	32 14.20	-1.1
GRR	6.74	307	Pn	32 15.10	-0.3

S.D. = 1.0 on 56 of 56 obs.

& JUN 04, 1990 08h 30m 36.57s
60.263 N 153.491 W
DEPTH = 158.9km
SOUTHERN ALASKA (2)
<AGS-P>.

RED	0.39	66	eP	30 58.10	0.9
NNL	1.12	100	eP	31 03.43	0.0
SPU	1.16	37	iP	31 02.63	-1.3
CRP	1.20	32	iP	31 03.46	-1.0
CGLM	1.28	34	eP	31 03.82	-1.2
NCG	1.32	29	eP	31 04.53	-0.9
CDD	1.34	183	eP	31 04.40	-1.2
CNPM	1.36	122	iP	31 04.72	-1.0
			eS	31 26.78	
SLKM	1.64	80	eP	31 07.17	-1.5
			iS	31 30.54	
SUA	1.81	47	eP	31 08.60	-1.9
SKT	1.97	28	eP	31 10.78	-1.5
SEW	2.03	93	eP	31 11.61	-1.3
PMS	2.17	61	eP	31 12.22	-2.4
PWA	2.25	50	eP	31 12.90	-2.6
PLRM	2.51	56	eP	31 15.40	-3.3
CUT	2.65	34	eP	31 18.91	-1.5
GHO	2.69	54	eP	31 17.72	-3.3
SML	2.95	56	eP	31 21.20	-3.0
VZW	3.51	74	eP	31 28.46	-2.9
VLZ	3.63	73	eP	31 30.94	-1.8
KLU	3.90	68	eP	31 33.32	-3.2
TOA	4.00	59	eP	31 35.57	-2.1

22 obs. associated

JUN 04, 1990 09h 26m 36.58± 1.17s
14.410 S ± 6.9km 167.800 E ± 4.9km
DEPTH = 49.7 ± 10.4 km
5.1mb (15 obs.) 4.7Msz (5 obs.)
VANUATU ISLANDS (186)
Felt on Mere Lovo.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 23C
Centroid Location:
Origin Time 09:26:34.1 0.8
Lat 14.43S FIX; Lon 167.91E FIX
Dep 15.0 FIX Half-duration 1.5
Moment Tensor; Scale 10**16 Nm

Mrr= 4.75	0.40	Mtt= 0.34	0.63
Mff=-5.09	0.56	Mrt= 0.30	1.45
Mrf= 1.18	1.20	Mtf=-1.00	0.39

Principal Axes:

T	Val= 4.90	Plg=83	Azm=290
N	0.51	1	190
P	-5.41	7	100

Best Double Couple:Mo=5.2*10**16
NP1:Strike=189 Dip=38 Slip= 88
NP2: 11 52 91

PVC	3.35	172	iP	27	25.00	-2.7
DZM	7.73	189	iPc	28	24.30	-5.0X
			iS	29	54.50	
HNR	9.14	302	eP	28	50.00	1.3
SVA	10.88	111	eP	29	13.20	0.7
RAB	18.45	302	e(P)	30	52.00	1.5
BRS	19.05	225	eP	30	59.00	1.3
			i	31	10.00	
			eS	35	09.00	
CTA	21.33	252	iPd	31	22.00	0.4
	1.5s	247.22nm				5.4mb
	Z 20s	3.19um				4.7Msz
			iS	35	24.00	
RMQ	21.48	233	eP	31	24.00	0.9
QLP	25.13	237	eP	31	59.00	0.4
BWA	26.53	218	eP	32	14.90	3.4X
CNB	26.61	215	eP	32	14.10	1.7
CAN	26.82	216	eP	32	15.90	1.7
QIS	27.55	253	eP	32	21.00	0.0
STK	29.59	230	iPc	32	38.90	-0.4
	0.9s	13.00nm				4.6mb
			iPP	34	07.90	
			i	36	08.30	
TOO	30.41	217	eP	32	51.50	5.0X
WRA	32.40	255	Pc	33	01.40	-2.7
FORR	39.89	239	eP	34	06.50	-0.9
	0.4s	13.00nm				5.1mb
MEKA	47.45	247	eP	35	07.70	-0.9
NANU	50.03	253	iPd	35	27.90	-0.5
KKM	55.05	288	ePc	36	05.30	-0.8
BAG	55.79	302	eP	36	11.50	0.0
MAT	57.86	332	eP	36	24.00	-1.7
	1.4s	30.23nm				5.2mb
			eS	44	46.00	
SSE	63.65	316	Pd	37	04.50	-0.5
	1.2s	14.00nm				4.9mb
NJ2	65.81	315	eP	37	17.00	-2.0
WHN	68.11	312	eP	37	33.00	-0.6
MDJ	68.24	332	eP	37	33.00	-1.2
DL2	68.35	323	eP	37	34.00	-1.0
	Z 20s	0.30um				4.5Msz
CN2	69.64	329	Pc	37	38.60	-4.2X
	1.0s	30.00nm				5.2mb
	Z 20s	0.40um				4.7Msz
			ePP	37	53.00	51kmX
GYA	71.96	304	P	37	57.60	0.2
BJI	72.34	321	eP	37	59.00	-0.1
	2.0s	83.00nm				5.3mb
	Z 28s	0.69um				4.8MszX
			eS	47	24.00	
TIY	73.38	317	eP	38	05.40	0.0
	Z 22s	0.60um				4.8Msz
KMI	74.58	301	Pd	38	14.00	1.2
	2.0s	100.00nm				5.4mb
CHG	75.42	294	eP	38	18.00	0.5
CHTO	75.42	294	eP	38	18.20	0.8
	1.0s	8.00nm				4.6mb
HHC	75.68	319	eP	38	18.00	-0.6
	Z 24s	0.70um				4.9MszX
CD2	76.22	307	eP	38	22.00	0.1
BTO	76.52	319	eP	38	24.00	0.6
LZH	78.49	312	iPd	38	36.00	1.6
	2.5s	130.00nm				5.5mb
SVW	80.69	17	eP	38	45.10	-0.5
TTA	82.07	16	eP	38	52.70	-0.1
GTA	82.82	314	P	38	57.60	0.4
PMR	83.03	19	ePc	38	56.90	-0.7
	1.4s	46.50nm				5.3mb
PRS	83.62	50	eP	39	01.30	0.0
			e	39	06.80	
MHC	83.82	49	eP	39	02.40	0.0
ARN	83.90	49	P	39	03.70	1.0
PRI	84.08	51	ePc	39	04.30	0.6
			e	39	09.60	
WDC	84.47	46	ePc	39	05.70	0.3
			e	39	11.00	
ORV	84.79	47	eP	39	07.00	-0.1
			e	39	12.00	
CMB	85.01	49	ePc	39	07.90	-0.3
			e	39	13.50	
FRI	85.11	50	eP	39	08.70	0.0
			e	39	14.00	
IMA	85.21	15	ePc	39	08.50	-0.3
	1.5s	20.80nm				5.1mb
ISA	85.55	52	eP	39	12.00	1.0
SBB	85.70	53	eP	39	11.00	-0.8
RVR	85.81	54	eP	39	13.00	0.8
FBA	85.89	17	eP	39	10.80	-1.2
BAR	85.91	55	eP	39	14.00	1.2
PLM	85.99	54	eP	39	12.50	-0.9
CLC	86.27	52	eP	39	15.00	0.4
GSC	86.70	52	eP	39	17.00	0.3
KVN	87.05	49	eP	39	17.50	-0.9
TNP	87.35	50	eP	39	19.50	-0.4
GLA	87.50	55	eP	39	20.50	-0.1
GUN	89.69	299	P	39	31.10	-0.4
PNT	89.84	39	eP	39	34.00	2.7
	0.8s	6.00nm				5.0mb
PKI	90.00	298	P	39	31.40	-1.5
GKN	90.77	299	P	39	35.20	-1.0
WMQ	92.87	314	P	39	46.40	1.0
GBA	93.66	283	Pd	39	49.80	0.4
	0.8s	3.30nm				4.8mb
ALQ	94.70	55	e(P)	39	53.50	-0.7
	1.0s	2.50nm				4.6mb
	Z 20s	0.35um				4.8Msz
APO	130.17	343	ePKP	45	41.70	-0.7
	0.7s	1.20nm				
VAI	144.01	335	PKP	46	06.80	-1.5
SFI	144.13	330	PKP	46	07.00	-1.6
PGD	144.23	330	PKP	46	07.00	-2.0X
CRE	144.29	329	PKP	46	09.00	-0.1
DUI	144.35	325	PKP	46	08.00	-1.2
TDS	144.52	321	PKP	46	09.30	-0.1
LOR	144.61	341	ePKP	46	08.30	-1.1
	1.2s	11.90nm				
SDI	144.68	325	PKP	46	08.00	-1.7
AZI	144.69	326	PKP	46	09.00	-0.6
LBF	144.82	341	ePKP	46	09.10	-0.7
	1.4s	13.05nm				
SSF	144.90	341	ePKP	46	09.40	-0.5
	1.6s	31.10nm				
LPL	145.11	336	ePKP	46	11.10	0.5
	1.6s	34.20nm				
LPG	145.12	336	ePKP	46	11.20	0.5
	1.6s	37.30nm				
SMF	145.17	341	ePKP	46	10.10	-0.2
	1.6s	43.55nm				
AVF	145.19	341	ePKP	46	10.30	0.0
	1.4s	13.05nm				
LPF	145.22	347	ePKP	46	10.70	0.4
	1.3s	32.50nm				
ITR	145.26	130	ePKP	46	07.60	-3.8X
BNI	145.52	336	PKP	46	12.00	0.8
SOI	145.64	319	PKP	46	12.00	0.7
PLDF	145.83	340	PKP	46	11.49	-0.1
AGO	145.92	341	PKP	46	12.15	0.5
MAF	145.94	342	ePKP	46	13.40	1.7
	0.8s	6.70nm				
TCF	145.99	342	ePKP	46	13.30	1.5
	1.4s	23.95nm				
LSF	146.23	343	ePKP	46	13.80	1.7
	1.6s	37.30nm				
PYM	146.23	341	PKP	46	13.74	1.5
MFF	146.35	345	ePKP	46	14.30	2.0
	1.4s	34.85nm				
LBL	146.61	340	PKP	46	15.88	3.2X
BCAO	148.14	255	iPKPc	46	19.40	3.2X
	0.7s	44.00nm				
			i	46	23.90	
			i	47	49.00	

S.D. = 1.1 on 90 of 98 obs.

JUN 04, 1990 09h 44m 37.95± 0.23s
14.351 S ± 5.6km 167.742 E ± 5.6km
DEPTH = 26.5km (2 depth phases)
5.1mb (18 obs.) 4.8Msz (2 obs.)
VANUATU ISLANDS (186)
Some domage and landslides on Mere Lava.

PVC	3.41	171	iP	45	30.00	-0.7
DZM	7.78	189	iPc	46	28.00	-4.4X
			iS	47	58.00	
SVA	10.95	111	eP	47	26.10	10.0X
BRS	19.05	225	iPc	49	02.30	1.3
KDB	20.71	281	eP	49	23.00	4.1X
CTA	21.29	251	iPc	49	26.10	1.2
	1.0s	44.00nm				4.8mb
	Z 20s	3.26um				4.7Msz
			iS	53	30.00	
RMQ	21.47	233	eP	49	28.00	1.3
COO	21.76	219	iPd	49	30.90	1.3
CMS	26.34	226	eP	50	14.00	0.3
BWA	26.54	218	eP	50	14.30	-1.2
CNB	26.63	215	eP	50	16.70	0.3
	0.9s	17.00nm				4.7mb
CAN	26.84	216	eP	50	17.80	-0.4
QIS	27.52	253	eP	50	24.00	-0.5
STK	29.59	229	iPc	50	43.70	0.6
	0.9s	19.80nm				4.9mb
TOO	30.42	216	eP	50	50.40	-0.1
	0.9s	93.00nm				5.6mb
WB5	32.33	255	eP	51	05.50	-1.9
WRA	32.36	255	Pc	51	05.90	-1.8
	0.8s	6.70nm				4.6mb
ADE	33.23	227	e(P)	51	15.00	-0.1
WARB	40.15	246	iPd	52	14.10	0.4
MEKA	47.42	247	eP	53	12.00	-0.4
NANU	49.99	253	iPd	53	32.50	0.3
	0.7s	30.00nm				5.4mb
TRT	54.39	271	iPd	54	03.80	-1.5
KKM	54.98	288	eP	54	08.00	-1.7
BAG	55.71	302	eP	54	14.00	-1.1
MAT	57.78	332	eP	54	28.00	-1.3
	1.5s	44.44nm				5.3mb
SSE	63.57	316	Pd	55	08.50	-0.2
	1.0s	19.00nm				5.2mb
			pP	55	16.00	24km
			sP	55	20.00	
NJ2	65.73	315	Pd	55	23.00	0.3
QIZ	65.96	299	eP	55	25.70	1.3
WHN	68.03	312	eP	55	37.50	0.1
MDJ	68.16	332	eP	55	38.50	0.6
TIA	69.36	318	Pd	55	45.10	-0.4
CN2	69.56	329	Pc	55	46.40	-0.1
			epP	55	55.40	29km
GYA	71.88	304	P	56	01.60	0.5
BJI	72.26	321	eP	56	03.50	0.6
	1.0s	17.00nm				5.0mb
LOE	72.36	294	eP	56	03.00	-1.0
TIY	73.29	317	eP	56	10.00	0.8
	Z 16s	8.50um				4.9MszX
			S	05	44.00	
XAN	73.77	312	P	56	12.70	0.7
KMI	74.50	302	Pd	56	18.00	1.4
	2.0s	100.00nm				5.5mb
CHG	75.34	294	eP	56	21.00	-0.3
CHTO	75.34	294	eP	56	21.10	-0.2
	0.8s	5.67nm				4.6mb
HHC	75.60	319	P	56	24.00	1.5
CD2	76.14	307	P	56	26.70	1.0
BTO	76.44	319	eP	56	28.00	0.8
LZH	78.41	312	Pd	56	40.00	1.7
	1.5s	74.00nm				5.5mb
TTA	82.03	16	P	56	54.40	-2.5
	1.2s	7.58nm				4.6mb
GTA	82.74	314	P	57	02.40	1.2
PMR	82.99	19	eP	57	01.10	-0.7
	1.7s	55.60nm				5.4mb
SHL	83.79	298	iP	57	07.50	0.6
MHC	83.82	49	eP	57	06.60	-0.1
ARN	83.91	49	P	57	08.80	1.7
PRI	84.08	51	eP	57	09.30	1.2
WDC	84.47	46	eP	57	10.60	0.8
ORV	84.80	47	eP	57	11.80	0.4
CMB	85.01	49	eP	57	11.90	-0.7
FRI	85.12	50	eP	57	15.00	2.0
IMA	85.17	15	eP	57	12.60	-0.3
ISA	85.56	52	eP	57	15.00	-0.4
SBB	85.71	53	eP	57	16.00	-0.2
RVR	85.82	54	eP	57	17.00	0.4
FBA	85.86	17	eP	57	15.00	-1.2
PLM	86.00	54	eP	57	17.00	-0.8
CLC	86.28	52	eP	57	19.00	0.0
GSC	86.71	52	eP	57	21.00	-0.1
KVN	87.05	49	P	57	22.20	-0.6
TNP	87.35	50	P	57	23.00	-1.3
	1.4s	12.50nm				5.0mb
GLA	87.51	55	eP	57	26.00	1.0
GUN	89.61	299	P	57	34.60	-0.9
PNT	89.83	39	eP	57	39.00	3.4X
PKI	89.92	298	P	57	37.20	0.3
	0.8s	16.00nm				5.3mb
GKN	90.70	299	P	57	39.40	-0.9
WMQ	92.79	314	eP	57	50.40	1.0
GBA	93.59	283	Pc	57	53.30	-0.2

04d 09h

	0.8s	5.30nm			5.0mb	
ALQ	94.71	55 e(P)	58	00.00	1.4	
	1.0s	2.50nm			4.6mb	
	Z 20s	0.35um			4.8Msz	
ZOBO	116.99	117 ePKP	03	27.00	3.3X	
		LR	21	34.00		
APO	130.09	343 ePKP	03	46.50	-0.3	
	0.7s	1.60nm				
CLL	137.89	336 ePKP	04	20.00	18.1X	
KHC	139.35	334 ePKP	04	15.20	10.6X	
VAI	143.93	335 PKP	04	12.50	-0.2	
SFI	144.05	330 PKP	04	13.00	0.1	
PGD	144.15	330 PKP	04	13.00	-0.4	
CRE	144.22	329 PKP	04	14.00	0.6	
DUI	144.27	325 PKP	04	12.00	-1.6	
LOR	144.53	341 ePKP	04	11.20	-2.5X	
	1.3s	14.45nm				
SDI	144.60	325 PKP	04	13.00	-1.1	
AZI	144.61	326 PKP	04	15.00	1.0	
LBF	144.75	341 ePKP	04	12.10	-2.1X	
	1.2s	8.95nm				
SSF	144.83	341 ePKP	04	12.50	-1.7	
	1.2s	19.35nm				
LPG	145.04	336 ePKP	04	13.90	-1.1	
	1.3s	21.65nm				
SMF	145.09	340 ePKP	04	13.00	-1.7	
	0.6s	6.30nm				
AVF	145.12	341 ePKP	04	13.20	-1.5	
	0.6s	3.60nm				
ITR	145.35	130 ePKP	04	08.10	-8.0X	
		e	04	14.10		
BNI	145.44	336 PKP	04	16.00	0.5	
SOI	145.55	319 PKP	04	16.00	0.3	
MAF	145.87	342 ePKP	04	16.10	0.0	
	1.3s	19.85nm				
TCF	145.92	342 ePKP	04	16.30	0.1	
	1.3s	14.45nm				
SBF	146.11	334 ePKP	04	16.50	-0.1	
	1.0s	24.00nm				
LSF	146.15	343 ePKP	04	16.80	0.3	
	1.4s	34.85nm				
MFF	146.28	345 ePKP	04	18.80	2.1	
	1.0s	12.00nm				
CAF	147.19	341 ePKP	04	21.60	3.4X	
	1.3s	10.85nm				
BCAO	148.10	255 iPKPc	04	23.50	2.9X	
	0.5s	12.00nm				
		i	04	27.00		
	S.D. = 1.0	on 88 of 100 obs.				

? JUN 04, 1990 09h 47m 12.12± 1.07s
44.429 N ±11.8km 7.249 E ±10.9km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.6 (GEN).

PZZ	0.13	306 P	47	15.39	0.0	
		S	47	17.64		
STV	0.19	164 P	47	16.52	0.1	
		S	47	19.49		
ENR	0.24	149 P	47	17.13	-0.1	
		S	47	20.51		
ROB	0.47	107 P	47	21.64	0.0	
		S	47	27.49		
	S.D. = 0.1	on 4 of 4 obs.				

& JUN 04, 1990 10h 16m 29.10s
36.887 N 121.633 W
DEPTH = 3.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.5 (BRK).

SAO	0.19	129 iPd	16	32.70	-0.3	
GCC	0.32	296 iPc	16	35.40	-0.2	
		iS	16	40.90		
MHC	0.45	359 iPd	16	38.50	0.3	
		iS	16	47.40		
ARN	0.47	10 iPc	16	38.50	0.0	
PRS	0.59	159 iPd	16	40.20	-0.8	
LLA	0.62	116 iPc	16	41.20	-0.2	
PCC	0.86	316 eP	16	44.70	-1.5	
PRI	1.08	133 e(P)	16	49.20	-0.9	
BRK	1.10	333 eP	16	50.00	-0.4	
ZSP	1.17	335 ePc	16	51.70	0.2	
PHAM	1.45	136 eP	16	53.50	-2.7	
CMB	1.52	41 eP	16	55.40	-1.8	
		eS	17	14.10		
FRI	1.55	86 iPd	16	56.70	-0.9	
		eS	17	11.90		
KVN	3.53	51 eP	17	25.50	-0.7	
	14 obs. associated					

? JUN 04, 1990 10h 25m 18.53± 6.74s
3.807 S ±10.7km 80.459 W ±92.3km
DEPTH = 33.0km (normal)
PERU-ECUADOR BORDER REGION (110)

TUNG	3.11	40 P	26	07.00	0.2	
VC1	3.76	33 P	26	16.00	-0.1	
GGP	4.06	27 P	26	21.00	0.5	
		iS	27	05.00		
QTO	4.07	28 eP	26	21.30	0.9	
		eS	27	09.50		
QUR	4.09	28 eP	26	20.50	-0.3	
		iS	27	05.80		
CAYA	4.59	33 P	26	27.20	-0.7	
COTA	4.63	27 P	26	28.30	-0.2	
ZOBO	17.33	136 P	29	22.00	1.8	
CCH	19.47	135 P	30	15.50	29.4X	
SIV	22.58	124 P	30	15.50	-2.1	
	S.D. = 1.2	on 9 of 10 obs.				

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* JUN 04, 1990 10h 33m 37.88± 1.11s
11.063 S ± 3.9km 162.867 E ± 3.9km
DEPTH = 69.4 ± 9.9 km
5.1mb (26 obs.)
SOLOMON ISLANDS (193)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 25C
Centroid Location:
Origin Time 10:33:31.3 0.8
Lat 11.29S 0.07 Lon 162.51E 0.09
Dep 49.0 6.9 Half-duration 1.6
Moment Tensor; Scale 10**16 Nm
Mrr= 3.53 0.39 Mtt=-4.36 0.60
Mff= 0.83 0.60 Mrt= 5.39 0.67
Mrf= 0.70 0.58 Mtf=-0.31 0.47
Principal Axes:

	Val=	Plg=	Azm=
T	6.31	63	349
N	0.84	3	84
P	-7.14	27	175

Best Double Couple:Mo=6.7*10**16
NP1:Strike=272 Dip=18 Slip= 98
NP2: 83 72 87

HNR	3.30	299 eP	34	28.00	-0.2	
		eS	35	12.00		
PVC	8.48	142 iPc	35	34.00	-6.4X	
DZM	11.47	163 iPc	36	15.30	-5.8X	
KDB	15.54	274 eP	37	20.00	5.7X	
SVA	16.63	117 eP	37	28.60	0.5	
CTA	18.33	239 iPc	37	48.80	-0.3	
	1.2s	318.75nm			5.4mb	
		iS	41	18.00		
BRS	18.81	209 iPc+	37	54.30	-0.5	
		eS	41	33.00		
MNDI	19.60	283 eP	38	05.00	1.3	
RMO	20.31	219 iPd	38	11.00	0.2	
	1.0s	270.00nm			5.5mb	
		e	40	14.00		
COO	21.93	206 iPc	38	27.90	0.8	
	0.8s	89.00nm			5.2mb	
QLP	23.39	226 eP	38	42.00	0.7	
QIS	24.26	244 eP	38	50.00	0.1	
CMS	25.72	215 iPd	39	03.50	0.0	
BWA	26.73	207 iPd	39	11.80	-1.0	
CNB	27.08	205 eP	39	16.00	0.0	
	0.8s	29.00nm			4.9mb	
CAN	27.24	205 eP	39	17.50	0.1	
STK	28.55	220 iPd	39	29.30	0.1	
	0.8s	29.00nm			5.0mb	
WB5	28.79	249 eP	39	30.50	-1.1	
		e	46	21.90		
WRA	28.83	249 Pd	39	30.40	-1.5	
	0.3s	4.90nm			4.6mb	
TOO	30.67	208 iPd	39	48.40	0.4	
	0.7s	365.00nm			6.2mb X	
BFD	31.79	212 iPc	39	58.10	0.2	
		e	40	09.00		
ADE	32.39	219 iPd	40	03.50	0.3	
	1.0s	178.00nm			5.9mb	
KNA	33.47	258 eP	40	12.00	-0.7	
WARB	37.32	241 iPc	40	45.20	-0.2	
FORR	37.74	233 eP	40	49.00	0.2	
	0.4s	22.00nm			5.4mb	
COOL	43.34	236 eP	41	34.00	-1.0	
MEKA	44.47	243 iPd	41	44.80	0.6	
	0.4s	9.00nm			4.9mb	
KLB	46.32	237 eP	41	58.10	-0.7	
NANU	46.55	249 eP	42	01.40	0.7	
BAL	46.94	238 eP	42	03.20	-0.5	
MRWA	47.22	240 iPd	42	06.10	0.2	
	0.6s	25.00nm			5.3mb	
MUN	47.70	237 eP	42	09.00	-0.6	
KKM	49.44	288 eP	42	25.50	2.1	
MAT	52.74	335 eP	42	45.00	-2.9	
	1.3s	42.31nm			5.3mb	
	Z 20s	0.71um			4.7Msz	
		eS	50	15.00		
SSE	57.93	318 Pd	43	25.50	0.1	
	1.0s	19.00nm			5.2mb	
	Z 20s	0.50um			4.6Msz	
	N 16s	0.50um				
		eS	51	28.00		
NJ2	60.08	317 Pd	43	39.20	-1.0	
WHN	62.32	313 eP	43	55.00	-0.4	
DL2	62.82	325 eP	44	00.00	1.4	
	Z 20s	0.40um			4.6Msz	
		eS	52	30.00		
MDJ	63.08	334 eP	44	00.00	-0.2	
TIA	63.77	320 eP	44	03.90	-1.0	
SNY	63.82	328 eP	44	08.20	3.1X	
	Z 20s	0.60um			4.8Msz	
	E 20s	0.50um				
		eS	52	41.00		
CN2	64.34	331 Pc	44	08.00	-0.4	
	Z 20s	0.90um			5.0Msz	
	N 20s	1.00um				
	E 20s	0.40um				
		epP	44	18.00	32kmX	
		eS	52	46.00		
ADK	65.13	14 eP	44	13.40	0.0	
	0.8s	30.80nm			5.3mb	
GYA	66.11	305 P	44	21.20	0.9	
BJI	66.75	323 eP	44	24.00	0.0	
	1.0s	24.00nm			5.1mb	
		eS	53	08.00		
SBA	66.81	179 eP	44	20.20	-3.6X	
TIY	67.68	319 eP	44	30.00	0.0	
	Z 16s	1.00um			5.1MszX	
	E 16s	0.60um				
		S	53	28.00		
KMI	68.73	302 eP	44	37.50	0.5	
CHG	69.66	295 eP	44	43.00	0.5	
CHTO	69.66	295 eP	44	42.90	0.4	
	1.0s	5.00nm			4.4mb	
HHC	70.04	321 Pd	44	45.80	1.3	
CD2	70.38	308 P	44	47.00	0.2	
BTO	70.86	320 eP	44	50.00	0.5	
LZH	72.69	313 eP	45	01.00	0.4	
	2.0s	65.00nm			5.2mb	
	Z 20s	0.40um			4.7Msz	
		eS	54	24.00		
SDN	72.93	21 eP	45	00.00	-1.3	
GTA	77.05	315 P	45	26.00	0.6	
	1.4s	100.00nm			5.6mb	
	Z 18s	0.50um			4.9Msz	
SHL	78.05	299 eP	45	31.00	-0.3	
SPA	79.01	180 iPd	45	31.80	-3.9X	
	1.1s	36.31nm			5.2mb	
SVW	79.03	19 ePc	45	36.20	0.5	
TTA	80.28	18 ePc	45	42.80	0.3	
PMR	81.57	21 eP	45	48.60	-0.4	
	1.0s	9.30nm			4.7mb	
	Z 21s	0.80um			5.1Msz	
TOA	82.96	22 ePc	45	57.30	0.9	
IMA	83.30	16 ePc	45	58.60	0.4	
	1.1s	15.60nm			4.9mb	
MAW	83.64	202 iP	46	01.10	1.4	
PKI	84.18	299 P	46	04.20	0.5	
	0.6s	17.00nm			5.3mb	
FBA	84.24	19 ePc	46	02.00	-0.7	
GKN	84.95	300 P	46	07.60	0.3	
	0.7s	19.00nm			5.3mb	
GCC	85.00	51 ePc	46	07.00	-0.1	
BRK	85.06	50 eP	46	07.30	-0.1	
PRS	85.27	52 ePc	46	07.80	-0.7	
SAO	85.34	51 eP	46	09.70	0.9	
MHC	85.36	51 ePc	46	10.20	1.1	
ARN	85.45	51 P	46	10.00	0.6	

WDC	85.69	47 ePc	46	10.80	0.3
PRI	85.76	52 ePc	46	11.40	0.3
SYP	85.84	54 eP	46	13.00	1.5
ORV	86.14	49 eP	46	12.40	-0.3
CMB	86.52	50 ePc	46	14.50	-0.2
FRI	86.74	52 ePc	46	16.60	0.9
WMQ	87.12	316 eP	46	18.00	0.5
PAS	87.17	55 eP	46	17.00	-0.9
MWC	87.28	55 eP	46	18.00	-0.7
ISA	87.33	53 eP	46	19.00	0.3
SBB	87.59	54 eP	46	20.00	0.0
RVR	87.77	55 eP	46	20.00	-0.7
BAR	88.01	56 eP	46	23.00	1.0
PLM	88.02	56 eP	46	22.00	-0.2
CLC	88.06	53 eP	46	23.00	0.8
KVN	88.52	50 P	46	24.00	-0.5
GSC	88.56	54 eP	46	04.00	-20.6X
TNP	88.94	51 P	46	26.10	-0.4
	0.8s	5.39nm		4.8mb	
GLA	89.61	56 eP	46	30.00	0.4
INK	90.85	19 eP	46	34.50	0.1
NEW	91.61	41 P	46	36.00	-2.5
	1.1s	13.89nm		5.3mb	
LRM	94.17	44 eP	46	50.90	0.3
IMW	94.85	46 P	46	54.00	0.2
BW06	95.65	48 P	46	57.70	0.3
	1.0s	3.00nm		4.7mb	
SES	95.95	40 eP	46	58.00	-0.4
ALQ	96.79	56 eP	47	02.00	-0.7
	1.0s	2.50nm		4.7mb	
ZOBO	122.71	118 PKP	52	29.00	0.1
BUL	125.34	236 iPKPc	52	18.10	-15.3X
	0.7s	3.42nm			
APO	125.55	342 ePKP	52	31.20	-1.3
	0.5s	1.70nm			
NB2	125.95	343 PKP	52	33.10	-0.2
	0.9s	2.30nm			
SIV	128.88	121 PKP	52	39.30	-0.9
KHC	134.28	332 ePKP	52	54.20	4.7X
BCAO	144.08	262 iPKPd	53	07.00	-1.3
	0.7s	45.00nm			
		i	53	23.00	
ECRI	146.08	340 e(PKP)	53	15.00	4.1X
ETOR	147.51	338 e(PKP)	53	16.20	2.9X
GUD	148.39	341 ePKP	53	19.00	4.2X
TOL	149.04	340 ePKP	53	25.00	9.3X

S.D. = 0.8 on 97 of 110 obs.

JUN 04, 1990 11h 26m 47.06± 0.65s
41.098 N ± 5.6km 83.638 W ± 8.6km
DEPTH = 5.0km (geophysicist)
OHIO (471)

mbLg 2.5 (NEIS). Felt (IV) at Findlay and (III) at Bloomdale and Vanlue.

AN3	0.56	194 P	26	59.10	0.7
UTO	0.57	5 P	26	58.30	-0.1
AN9	0.76	240 P	27	02.30	0.1
AN11	0.95	236 P	27	11.60	5.9X
CLE	1.63	75 iP	27	15.84	-0.7
DLA	2.34	41 P	27	28.70	1.9X
		S	27	59.70	
LDN	2.67	42 P	27	32.10	0.7
		S	28	06.00	
BLA	4.62	146 e(P)	28	00.00	0.8
TKL	5.43	181 e(P)	28	10.00	-0.7
GBTN	5.44	185 e(P)	28	10.00	-0.8
FVM	6.10	242 P	28	23.00	3.0X

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

? JUN 04, 1990 11h 49m 38.16± 2.89s
2.153 N ±12.4km 127.668 E ±24.3km
DEPTH = 102.9 ± 28.5 km
4.3mb (1 obs.)
MOLUCCA PASSAGE (266)

MNI	2.91	256 ePd	50	23.50	-0.1
		eS	50	56.50	
AAI	5.82	175 eP	51	13.00	9.4X
WB5	22.86	164 eP	54	34.20	0.7
WRA	22.91	164 Pc	54	34.80	0.8
	0.2s	3.10nm		4.3mb	
FORR	32.82	179 eP	56	02.60	-1.2
KLB	34.85	195 eP	56	21.00	-0.4
MAT	35.58	15 eP	56	27.00	-0.5
GUN	47.41	307 P	58	05.40	0.7

S.D. = 1.1 on 7 of 8 obs.

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* JUN 04, 1990 12h 18m 24.11± 1.32s
11.110 S ±13.0km 163.217 E ±16.6km
DEPTH = 33.0km (normal)
4.3mb (2 obs.)
SOLOMON ISLANDS (193)

HNR	3.62	297 eP	19	20.00	0.7
		eS	20	00.00	
DZM	11.33	165 iPd	21	07.00	0.1
CTA	18.60	239 iPc	22	41.40	0.4
	0.9s	26.05nm		4.4mb	
RMQ	20.50	220 iPc	23	02.40	0.3
CMS	25.88	216 eP	23	54.50	-0.2
STK	28.74	221 iPc	24	20.70	0.0
	1.1s	7.00nm		4.3mb	
WB5	29.10	249 eP	24	21.80	-2.3
TOO	30.79	208 eP	24	39.90	0.9
ADE	32.57	219 eP	24	55.00	0.3
GKN	85.27	300 P	31	00.00	0.5
EKA	134.60	349 Pdiff	34	44.00	2.8X
	1.9s	28.80nm			
BCAO	144.41	262 ePKPc	37	59.10	-0.6
	0.4s	5.00nm			

S.D. = 1.0 on 11 of 12 obs.

% JUN 04, 1990 14h 56m 46.39± 3.44s
45.838 N ±12.2km 26.756 E ±15.1km
DEPTH = 97.2 ± 33.5 km
ROMANIA (358)

VRI	0.04	326 iPc	56	59.00	-0.4
BRD	0.38	147 ePd	57	01.50	0.2
MLR	0.67	239 iPd	57	03.50	-0.1
ISR	0.72	192 ePd	57	04.50	0.5
CLI	0.80	27 iPc	57	05.00	0.2
PTT	1.13	347 eP	57	25.00	16.7X
CFR	1.18	123 iPc	57	09.00	0.1
TLB	1.54	144 iPd	57	13.00	-0.4

S.D. = 0.5 on 7 of 8 obs.

& JUN 04, 1990 14h 59m 12.51s
60.473 N 143.190 W
DEPTH = 8.6km
SOUTHERN ALASKA (2)
<AGS-P>. ML 3.1 (PMR).

TGL	0.33	32 iP	59	19.62	0.2
		iS	59	25.82	
BALM	0.70	36 iP	59	25.54	-1.0
		iS	59	36.46	
PCA	1.51	103 iP	59	38.04	-1.8
		eS	59	57.59	
VLZ	1.68	295 eP	59	40.15	-2.0
		eS	00	02.50	
KLU	1.68	309 iP	59	40.76	-1.5
VZW	1.75	291 eP	59	40.87	-2.5
		eS	00	05.28	
GLI	1.96	284 eP	59	43.82	-2.5
YKU	1.97	116 eP	59	44.70	-1.7
TOA	2.18	320 iPc	59	49.40	-0.2
PAX	2.73	338 eP	59	56.13	-1.3
HYT	2.82	80 P	59	57.70	-1.1
SML	2.83	300 eP	59	56.89	-1.9
GHO	3.07	298 eP	00	00.94	-1.3
PLRM	3.10	294 eP	00	01.33	-1.2
PMR	3.10	294 ePc	00	04.00	1.5
PMS	3.21	287 eP	00	02.27	-1.9
DOT	3.21	353 eP	00	01.99	-2.2
PWA	3.46	293 eP	00	07.81	0.2
SLKM	3.48	274 eP	00	03.81	-4.2
SIT	5.34	126 eP	00	29.40	-4.8
IMA	7.33	324 eP	00	59.70	-2.8

21 obs. associated

JUN 04, 1990 15h 22m 22.75± 1.16s
31.796 S ± 6.2km 68.320 W ± 9.3km
DEPTH = 10.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)
Felt (II) in the San Juan area.

RTCV	0.20	251 iPc	22	27.00	-0.1
CFA	0.20	20 iPc	22	26.90	-0.3
ZON	0.39	309 iPd	22	30.00	-0.9
		eS	22	37.00	
RTLL	0.48	345 iPc	22	32.00	-0.6
RTCB	0.51	307 iPd	22	33.50	0.3
RTBS	0.98	278 ePd	22	41.20	0.0
MDZ	1.17	202 eP	22	44.60	-0.1
		iS	23	02.70	
RTRS	1.89	329 iPd	22	57.00	1.6

S.D. = 0.9 on 8 of 8 obs.

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* JUN 04, 1990 16h 35m 04.37± 1.59s
50.107 N ± 6.2km 128.942 W ±15.2km
DEPTH = 10.0km (geophysicist)
4.4mb (2 obs.)
VANCOUVER ISLAND REGION (25)

PHC	1.14	58 Pd	35	27.17	1.5
EDB	1.20	101 Pd	35	25.91	-0.8
GDR	1.91	99 P	35	36.17	-1.0
BBB	2.15	14 Pd	35	40.70	0.1
		S	36	09.00	
CBB	2.31	90 P	35	43.10	0.1
BTB	2.31	105 P	35	41.55	-1.6
		S	36	13.72	
MGB	2.98	110 P	35	52.20	-0.5
		S	36	28.56	
JCW	4.98	110 P	36	21.10	0.1
BMW	5.27	131 P	36	25.80	0.7
LMW	5.61	125 P	36	31.71	1.8X
FMW	5.78	121 P	36	32.85	0.5
KMOR	5.78	139 P	36	32.61	0.3
KOSW	5.80	126 P	36	32.87	0.4
FL2	5.90	129 P	36	34.83	0.9
LVP	5.96	130 P	36	33.36	-1.4
CDFW	6.10	128 P	36	37.46	0.7
ETW	6.21	110 P	36	38.77	0.4
ASR	6.31	126 P	36	39.59	-0.3
YKA	14.69	27 eP	38	32.50	-1.3
	0.6s	2.80nm		4.0mb	
FFC	17.03	64 eP	39	05.00	1.1
	0.7s	67.00nm		4.9mb	

S.D. = 0.9 on 19 of 20 obs.

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* JUN 04, 1990 17h 03m 32.47± 2.21s
31.778 S ±11.8km 69.886 W ±12.8km
DEPTH = 133.1 ± 29.5 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTBS	0.39	73 ePc	03	51.20	-0.3
RTCB	0.97	73 eP	03	56.00	0.2
		S	04	11.50	
JACH	1.08	213 iPd	03	57.00	0.2
		iS	04	14.50	
RTCV	1.15	94 iPc	03	57.50	0.0
		(S)	04	14.00	
RTLL	1.29	70 iPc	03	57.40	-1.5
		eS	04	16.20	
CFA	1.41	84 iP	04	00.50	0.3
		eS	04	20.40	
ROCH	1.52	218 iPd	04	01.00	-0.7
		iS	04	22.00	
FCH	1.58	192 iPc	04	03.50	1.1
		iS	04	26.20	
RTRS	1.64	13 iPc	04	03.70	1.0
PCH	1.91	196 eP	04	07.70	1.6
		iS	04	32.00	
TACH	2.07	205 iP	04	07.60	-0.3
		iS	04	34.00	
LCCH	2.21	220 iPd	04	09.10	-0.5
LNV	2.52	210 iPc	04	12.50	-1.1
		iS	04	42.00	

S.D. = 1.0 on 13 of 13 obs.

? JUN 04, 1990 19h 08m 33.65± 6.34s
35.849 N ±54.9km 9.586 E ± 9.1km
DEPTH = 10.0km (geophysicist)
TUNISIA (397)

ZGN	0.68	39 iPc	08	47.00	-0.1
MBZ	1.20	47 iPc	08	56.00	-0.1
PGF	6.71	356 Pn	10	16.00	1.3
LMR	7.84	343 Pn	10	31.30	0.8
		Sn	11	55.60	
LRG	7.99	343 Pn	10	31.80	-0.7
FRF	8.03	345 Pn	10	32.10	-1.0
		Sn	11	57.80	
SBF	8.17	349 Pn	10	35.00	-0.2
EPF	10.12	318 Pn	11	02.80	0.7
CAF	10.72	330 Pn	11	09.40	-0.9

S.D. = 0.9 on 9 of 9 obs.

? JUN 04, 1990 20h 01m 43.66± 2.12s
51.350 N ±34.4km 174.906 W ±19.7km
DEPTH = 33.0km (normal)
4.2mb (2 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS. (7)

ADK	1.23	296	iPd	02	04.60	0.0
IMA	18.26	28	eP	06	01.00	5.1X
MAT	36.20	264	eP	08	45.00	0.0
NB2	67.86	357	P	12	40.80	0.6
	0.7s		1.00nm			4.0mb
HFS	68.65	355	eP	12	44.50	-0.6
	0.5s		1.80nm			4.4mb

S.D. = 0.8 on 4 of 5 obs.

? JUN 04, 1990 20h 30m 17.58± 3.89s
37.450 N ±15.2km 19.334 E ±32.5km
DEPTH = 10.0km (geophysicist)
IONIAN SEA (399)
ML 3.8 (ATH).

VLS	1.23	53	ePg	30	41.00	0.5
ITM	2.08	97	ePg	30	48.20	-4.8X
KEK	2.29	9	ePg	31	15.00	19.0X
VLI	2.97	103	ePn	31	06.00	0.4
ATH	3.51	80	ePg	31	14.10	0.8
NEO	3.57	58	ePn	31	12.50	-1.7
OHR	3.83	17	ePn	31	29.50	11.6X
VAM	4.42	116	ePn	31	25.90	-0.3
VAY	4.61	32	ePn	31	13.50	-15.3X
SKO	4.80	19	ePn	31	32.00	0.4

S.D. = 1.2 on 6 of 10 obs.

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* JUN 04, 1990 21h 16m 41.09± 0.51s
14.450 S ± 9.6km 167.862 E ±10.9km
DEPTH = 33.0km (normal)
4.5mb (8 obs.)
VANUATU ISLANDS (186)

DZM	7.70	190	iPd	18	32.10	-1.7
			iS	19	59.20	
RMQ	21.50	233	eP	21	31.00	1.7
STK	29.61	230	iPd	22	46.70	1.1
	0.8s		9.00nm			4.6mb
WB5	32.42	256	eP	23	08.80	-1.6
WRA	32.45	256	P	23	10.00	-0.7
	0.7s		2.50nm			4.2mb
FORR	39.92	239	eP	24	14.30	0.4
NANU	50.07	253	iPd	25	35.30	0.2
	0.4s		5.00nm			4.9mb
NJ2	65.88	315	Pd	27	25.00	-0.9
WHN	68.18	312	eP	27	41.00	0.5
TIA	69.51	318	eP	27	47.50	-1.1
CN2	69.70	329	Pc	27	49.00	-0.6
GYA	72.03	304	P	28	04.00	-0.2
BJI	72.41	321	eP	28	04.50	-1.5
TIY	73.45	317	eP	28	12.40	0.1
XAN	73.93	312	P	28	15.20	0.1
KMI	74.65	301	eP	28	20.00	0.3
			PP	28	28.00	
CHTO	75.49	294	eP	28	24.60	0.3
	1.0s		4.00nm			4.4mb
CD2	76.30	307	eP	28	28.00	-0.8
BTO	76.59	318	eP	28	30.00	-0.3
LZH	78.56	312	eP	28	41.50	0.2
	2.5s		56.00nm			5.1mb
TTA	82.10	16	P	28	57.80	-1.6
GTA	82.89	314	P	29	04.80	0.7
PMR	83.05	19	eP	29	04.00	-0.3
IMA	85.23	15	eP	29	16.80	1.4
PLM	85.96	54	P	29	20.00	0.2
KVN	87.03	49	P	29	23.80	-1.1
TNP	87.33	50	P	29	26.00	-0.4
	0.7s		2.04nm			4.5mb
MSU	91.22	51	P	29	47.00	2.3
WMQ	92.94	314	eP	29	53.00	0.7
GBA	93.72	283	P	29	59.00	2.7
	0.9s		2.60nm			4.7mb
YKA	97.04	27	eP	30	10.60	0.1
	0.8s		0.70nm			4.2mb

S.D. = 1.1 on 31 of 31 obs.

JUN 04, 1990 21h 40m 24.37± 0.76s
23.666 N ± 7.3km 94.502 E ± 5.6km
DEPTH = 83.7 ± 8.2 km
4.4mb (18 obs.)

BURMA-INDIA BORDER REGION (294)

SHL	3.04	309	iP	41	12.50	1.1
			iS	41	46.60	
CHG	6.36	139	eP	41	56.50	-0.9
CHTO	6.36	139	ePn	41	56.00	-1.4
LSA	6.72	334	Pd	42	04.80	2.1
	0.7s		160.00nm			5.6mb X
KMI	7.65	77	eP	42	17.50	2.1
GUN	8.85	300	P	42	30.60	-1.3
PKI	9.08	297	P	42	33.60	-1.5
GKN	9.88	298	P	42	43.60	-2.2
CD2	10.94	47	eP	42	59.70	-0.2
GYA	11.37	73	P	43	06.40	0.7
LZH	14.78	31	eP	43	54.00	3.6X
	0.7s		23.00nm			4.5mb
HYB	16.17	250	ePc	44	13.00	5.0X
NDI	16.30	292	iPd	44	13.00	3.5X
	1.0s		45.00nm			4.6mb
			iS	46	56.00	
XAN	16.30	47	P	44	10.10	0.5
GTA	16.33	15	eP	44	05.60	-4.4X
WHN	18.94	64	eP	44	46.00	4.5X
GBA	19.00	241	Pc	44	43.80	1.6
	0.8s		3.80nm			3.7mb
TIY	20.78	43	eP	44	58.80	-1.9
WMQ	20.87	346	eP	45	02.00	0.4
KOD	21.04	233	eP	45	06.00	2.3
KSH	22.22	319	eP	45	18.50	3.4X
PRNI	52.93	291	ePd	49	30.50	-3.8X
MBH	53.11	290	eP	49	27.00	-8.6X
WRA	58.20	135	Pc	50	11.20	-1.0
	0.6s		4.00nm			4.7mb
SUF	59.33	330	iP	50	19.40	-0.1
	0.5s		4.50nm			4.9mb
UPP	63.28	327	iP	50	45.60	-0.5
HFS	65.24	327	eP	50	58.00	-0.8
	0.7s		5.80nm			4.6mb
NB2	66.37	328	P	51	06.10	-0.1
	0.9s		3.10nm			4.2mb
CDF	70.90	315	eP	51	34.10	-0.4
LPG	72.00	312	eP	51	41.40	0.1
	0.8s		4.05nm			4.4mb
LPL	72.01	312	eP	51	41.30	0.0
	0.8s		5.35nm			4.5mb
LBF	73.43	314	eP	51	48.80	-0.6
	0.6s		2.70nm			4.3mb
SMF	73.62	314	eP	51	50.10	-0.3
	0.8s		4.05nm			4.4mb
SSF	73.72	315	eP	51	50.80	-0.2
	0.6s		1.80nm			4.1mb
AVF	73.90	314	eP	51	51.70	-0.3
	0.8s		2.70nm			4.2mb
TCF	74.80	314	eP	51	57.60	0.3
	0.6s		1.80nm			4.1mb
EKA	75.07	324	P	51	59.00	0.4
	0.6s		1.90nm			4.2mb
CAF	75.33	313	eP	52	00.80	0.4
	0.6s		2.25nm			4.2mb
LSZ	75.46	246	iPd	52	03.00	1.4
	0.5s		9.40nm			4.9mb
			eLg	58	10.00	
LPO	76.00	313	eP	52	04.50	0.4
	0.6s		3.60nm			4.4mb

S.D. = 1.2 on 32 of 40 obs.

JUN 04, 1990 23h 00m 09.84± 1.57s
6.257 S ±24.4km 77.239 W ±41.8km
DEPTH = 10.0km (geophysicist)
4.7mb (3 obs.)
NORTHERN PERU (111)
Felt (V) in the Rioja-Moyobamba area.

TUNG	4.96	346	eP	01	26.10	-0.3
VC1	5.70	348	eP	01	36.90	-0.2
NNA	5.71	176	iPd	01	42.00	5.2X
	0.7s		73.29nm			5.5mb
			eS	02	48.50	
PT08	5.71	173	eP	01	44.00	6.9X
			eS	02	55.60	
PT10	5.79	177	eP	01	43.00	5.1X
			i	01	44.50	
			eS	02	54.00	
GGP	6.19	347	P	01	49.30	5.2X
CAYA	6.34	353	eP	01	45.00	-1.2
COTA	6.64	350	eP	01	55.00	4.6X
PT03	7.82	170	iP	02	03.60	-2.8X
ZOBO	13.37	139	P	03	26.00	3.2X
	Z 20s		0.41um			
			S	06	20.00	
			LR	09	24.00	
LPB	13.58	140	P	03	24.00	-1.4
			LR	09	28.00	
CCH	15.49	137	P	03	59.00	8.6X
SIV	18.56	123	P	04	29.60	0.7
FRB	70.12	4	eP	11	26.00	2.0
KIC	73.43	81	P	11	48.10	3.3X
YKA	74.28	343	eP	11	47.80	-1.0
	0.6s		1.50nm			4.2mb
INK	83.99	342	eP	12	41.00	-0.3
MBC	85.91	351	eP	12	52.50	1.7
	1.0s		5.00nm			4.6mb
LZH	150.30	358	PKP	20	05.00	6.8X

S.D. = 1.4 on 9 of 19 obs.

% JUN 04, 1990 23h 18m 04.52± 2.12s
44.541 N ±12.7km 6.917 E ±23.7km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 1.8 (GEN).

PZZ	0.14	105	P	18	07.69	-0.2
			S	18	10.05	
RRL	0.39	346	P	18	12.61	0.0
			S	18	18.56	
STV	0.42	135	P	18	12.71	-0.3
			S	18	18.76	
ENR	0.48	131	P	18	14.76	0.5
			S	18	21.02	
RSP	0.66	21	P	18	17.74	0.0
			S	18	25.63	

S.D. = 0.5 on 5 of 5 obs.

% JUN 04, 1990 23h 33m 23.61± 1.55s
0.383 S ± 5.7km 77.886 W ±12.0km
DEPTH = 10.0km (geophysicist)
ECUADOR (107)
Felt (II) at Quito.

GECU	0.31	282	iP	33	30.00	-0.3
CAYA	0.47	348	iP+	33	33.00	-0.3
			eS	33	39.40	
VC1	0.57	244	iPd	33	35.40	-0.2
OTO	0.67	286	iP	33	37.60	0.4
OUR	0.68	288	iPd	33	37.30	0.0
			iS	33	47.20	
GGP	0.74	286	iP	33	38.50	0.0
			eS	33	47.50	
COTA	0.84	328	P	33	40.60	0.3
			eS	33	52.10	
TUNG	1.17	209	P	33	45.80	0.1
			iS	34	02.50	

S.D. = 0.3 on 8 of 8 obs.

JUN 05, 1990 00h 00m 20.04± 0.91s
37.642 N ± 8.5km 20.629 E ± 7.7km
DEPTH = 10.0km (geophysicist)
3.5mb (2 obs.)
IONIAN SEA (399)
ML 3.5 (ATH).

VLS	0.54	357	ePg	00	31.00	0.1
ITM	1.13	114	ePb	00	40.50	-0.8
VLI	2.06	116	ePg	01	02.00	6.9X
KEK	2.17	343	ePb	00	59.50	2.8X
ATH	2.47	81	ePb	01	02.20	1.3
NEO	2.63	50	ePn	01	02.80	-0.5
OHR	3.47	2	iPn	01	15.30	0.1
VAY	3.97	22	ePn	01	23.50	1.3
SKO	4.37	8	ePn	01	27.50	-0.4
			i	01	39.50	
MEU	4.57	265	P	01	31.60	0.7
			eSn	02	24.10	
HFS	22.94	351	eP	05	23.50	-1.6
	0.6s		1.40nm			3.7mb
NB2	24.16	349	P	05	36.80	-0.2
	0.8s		0.70nm			3.3mb

S.D. = 1.0 on 10 of 12 obs.

& JUN 05, 1990 01h 19m 17.70s
41.185 N 121.415 W
DEPTH = 12.0km
NORTHERN CALIFORNIA (36)

<BRK>. ML 2.9 (BRK).

MIN	0.85	190	ePd	19 32.40	-1.6
			iS	19 44.60	
WDC	1.05	235	iPd	19 35.50	-1.7
			iS	19 50.40	
LTCM	1.11	209	eP	19 37.00	-1.4
ORV	1.63	182	e(P)	19 42.20	-4.1
			e	19 46.80	
KVN	3.32	129	eP	20 09.50	-1.1
	5 obs. associated				

& JUN 05, 1990 02h 04m 57.22s
64.016 N 148.156 W
DEPTH = 105.8km
CENTRAL ALASKA (1)
<AGS-P>.

MCK	0.45	231	iP	05 13.43	-0.1
			eS	05 25.03	
WRH	0.46	4	iP	05 13.46	-0.1
CCB	0.65	13	iP	05 14.59	-0.4
			eS	05 27.23	
HDA	0.66	53	iP	05 14.83	-0.2
			eS	05 28.01	
RND	0.69	207	iP	05 14.91	-0.5
NEA	0.69	325	eP	05 15.04	-0.3
FBA	0.90	10	iP	05 16.88	-0.4
ODM	1.04	102	iP	05 18.56	-0.3
HUR	1.24	213	eP	05 20.64	-0.4
			eS	05 37.95	
KTH	1.31	251	iP	05 21.57	-0.4
PAX	1.60	130	eP	05 25.17	-0.3
			eS	05 46.65	
DOT	1.85	100	eP	05 27.47	-1.2
			eS	05 50.35	
NCA	2.12	163	eP	05 31.61	-0.5
TOA	2.12	154	eP	05 31.91	-0.3
SML	2.22	182	iP	05 33.18	-0.2
GHO	2.28	189	eP	05 34.01	-0.3
PLRM	2.47	191	eP	05 36.65	-0.1
PWA	2.50	199	eP	05 37.16	0.0
SKT	2.56	219	eP	05 36.60	-1.3
KLU	2.73	157	eP	05 39.90	-0.4
SUA	2.83	206	eP	05 42.12	0.5
PMS	2.86	194	eP	05 42.10	0.2
GLI	3.19	171	eP	05 44.82	-1.6
NCG	3.20	217	eP	05 46.29	-0.4
	24 obs. associated				

? JUN 05, 1990 02h 54m 04.83± 2.80s
51.552 N ±47.6km 179.585 E ±11.8km
DEPTH = 33.0km (normal)
4.0mb (2 obs.)
RAT ISLANDS, ALEUTIAN ISLANDS (6)

ADK	2.34	80	eP	54 42.60	0.8
SMY	3.58	291	e(P)	55 00.00	0.7
IMA	19.84	33	eP	58 36.00	0.5
MBC	33.82	22	eP	00 46.50	1.1
YKA	35.84	46	eP	01 01.30	-1.5
	0.5s	0.60nm		3.8mb	
N82	67.37	354	P	04 56.80	-1.6
	0.9s	1.90nm		4.2mb	
	S.D. = 1.6	on	6 of	6 obs.	

% JUN 05, 1990 04h 09m 24.91± 1.47s
31.030 S ±12.0km 68.646 W ±17.4km
DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB	0.47	196	eP	09 36.80	1.6
			S	09 48.00	
CFA	0.67	149	eP	09 38.10	0.1
RTCV	0.83	174	iPd	09 39.30	-1.0
			S	09 53.00	
RTBS	0.93	227	eP	09 40.80	-0.9
			S	09 55.70	
RTRS	1.11	320	ePd	09 44.30	0.2
	S.D. = 1.4	on	5 of	5 obs.	

• JUN 05, 1990 04h 18m 55.22± 1.47s
40.647 N ±13.7km 19.760 E ±10.1km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)
ML 3.1 (SKO), 2.7 (TTG).

OHR	0.91	59	iPgd	19 12.60	-0.1
			iSg	19 26.60	
			Lg	19 28.40	
ULC	1.37	344	ePg	19 19.30	-1.1
			eSg	19 38.00	
LCI	1.41	258	P	19 21.00	0.1
			eSg	19 40.00	
TTG	1.82	348	ePn	19 27.30	0.5
			eSn	19 48.70	
PVY	1.95	5	ePn	19 29.00	0.2
			eSn	19 54.00	
IVA	2.23	3	ePn	19 33.20	0.4
			eSn	20 02.20	
	S.D. = 0.7	on	6 of	6 obs.	

? JUN 05, 1990 04h 50m 52.19± 2.63s
17.759 S ±32.8km 178.590 W ±49.7km
DEPTH = 571.4 ± 8.3 km
4.6mb (4 obs.)
FIJI ISLANDS REGION (181)

TVI	1.61	301	iPc	52 02.80	-1.1
KRO	1.98	283	iPc	52 03.60	-1.6
NDE	2.32	300	iPc	52 06.10	0.2
OVA	2.50	271	eP	52 06.90	0.1
MBU	2.68	287	iPc	52 08.40	0.7
VUN	2.82	265	eP	52 08.70	0.3
SVA	2.83	262	ePc	52 09.30	0.8
SGE	3.33	272	iPc	52 12.60	0.9
YSA	3.81	286	ePc	52 14.70	-0.1
DZM	14.71	251	iPc	54 01.10	3.0X
TOO	37.13	231	iPc	57 16.60	0.2
	0.6s	55.00nm		5.4mb	
STK	38.55	241	iPd	57 28.40	0.4
	0.6s	8.00nm		4.5mb	
WB5	44.47	259	eP	58 13.80	-1.3
WRA	44.49	259	Pc	58 14.30	-0.9
	0.4s	8.90nm		4.6mb	
CHTO	88.79	290	eP	02 48.30	1.2
	0.9s	1.49nm		3.9mb	
	S.D. = 1.0	on	14 of	15 obs.	

& JUN 05, 1990 05h 23m 42.11s
62.926 N 150.799 W
DEPTH = 112.9km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.53	84	iP	23 59.35	-0.4
			eS	24 12.21	
CUT	0.58	155	iP	23 59.85	-0.2
			iS	24 13.59	
KTH	0.63	355	iP	24 00.23	-0.3
SKT	1.01	200	iP	24 03.51	-0.4
MCK	1.17	45	eP	24 05.32	-0.3
PWA	1.35	161	iP	24 07.69	0.0
GHO	1.45	142	iP	24 08.76	-0.2
			eS	24 29.00	
SUA	1.47	179	eP	24 09.60	0.4
PLRM	1.55	149	eP	24 09.20	-0.8
			iS	24 30.74	
SML	1.61	133	iP	24 10.07	-0.7
			eS	24 33.43	
NCG	1.66	203	eP	24 10.86	-0.6
CGLM	1.72	200	eP	24 13.17	0.9
PMS	1.79	160	iP	24 12.83	-0.2
			eS	24 35.29	
NEA	1.83	24	eP	24 12.79	-0.7
WRH	1.97	37	iP	24 14.56	-0.7
HDA	2.27	47	iP	24 18.28	-0.9
TOA	2.30	109	eP	24 19.17	-0.5
PAX	2.44	87	eP	24 21.00	-0.5
SLKM	2.44	173	eP	24 20.79	-0.7
			iS	24 48.98	
RDT	2.48	199	eP	24 22.87	0.8
GLI	2.70	138	eP	24 22.29	-2.6
KLU	2.70	120	eP	24 23.47	-1.5
VLZ	2.77	129	eP	24 23.95	-1.8
SEW	2.91	167	eP	24 26.87	-0.7
SVW	2.91	233	eP	24 27.00	-0.8
DOT	3.13	74	eP	24 29.25	-1.4
CNPM	3.42	184	eP	24 33.80	-0.8
BALM	4.42	112	eP	24 45.59	-2.6
	28 obs. associated				

? JUN 05, 1990 06h 05m 41.93± 5.13s
31.274 S ±16.2km 68.403 W ±26.7km
DEPTH = 95.6 ± 46.6 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.08	226	iPc	05 55.70	-0.1
CFA	0.36	157	iPd	05 56.70	0.1
			eS	06 08.50	
RTCB	0.40	238	iPd	05 57.00	0.1
			S	06 08.00	
RTCV	0.60	191	ePd	05 58.20	-0.1
			(S)	06 10.40	
RTBS	0.98	246	ePc	06 02.00	0.0
			S	06 16.80	
RTRS	1.43	320	iPd	06 07.40	0.0
			eS	06 27.00	
	S.D. = 0.2	on	6 of	6 obs.	

? JUN 05, 1990 06h 48m 42.11± 0.96s
53.203 N ±18.3km 160.595 E ±25.8km
DEPTH = 33.0km (normal)
4.5mb (5 obs.)
NEAR EAST COAST OF KAMCHATKA (218)

MAT	22.85	232	iPc	53 44.40	1.0
	0.8s	24.63nm		4.7mb	
YKA	42.88	43	eP	56 39.10	0.7
	0.7s	0.40nm		3.3mb	X
FRB	57.29	24	eP	58 46.00	17.7X
SUF	59.01	337	iP	58 40.60	0.2
	0.5s	3.30nm		4.7mb	
NB2	63.52	344	P	59 10.20	-0.7
	0.8s	1.50nm		4.2mb	
GBA	75.15	273	Pc	00 22.60	-0.2
	0.8s	5.20nm		4.6mb	
WB5	76.24	205	eP	00 26.90	-1.9
WRA	76.31	205	P	00 30.00	0.8
	0.9s	2.40nm		4.2mb	
	S.D. = 1.3	on	7 of	8 obs.	

JUN 05, 1990 07h 51m 42.59± 0.81s
37.778 N ± 8.8km 20.848 E ± 7.9km
DEPTH = 10.0km (geophysicist)
3.7mb (2 obs.)
IONIAN SEA (399)
ML 3.7 (ATH).

VLS	0.45	333	ePg	51 51.00	-0.7
ITM	1.04	125	ePg	52 01.50	-0.8
VLI	1.97	122	ePg	52 20.50	4.1X
KEK	2.10	337	ePg	52 25.70	7.5X
ATH	2.28	84	ePb	52 25.10	4.3X
NEO	2.41	50	ePn	52 24.30	1.6
OHR	3.33	359	iPn	52 36.20	0.4
			iSn	53 28.30	
			Lg	53 32.10	
LCI	3.40	319	P	52 40.00	3.2X
			eSn	53 23.00	
VAM	3.59	130	ePn	52 40.00	0.6
VAY	3.78	20	ePn	53 41.00	58.9X
SOI	3.80	276	P	52 42.00	-0.4
			(Sn)	53 20.00	
			eTT	55 52.00	
TDS	4.00	299	P	52 45.50	0.3
			eSn	53 34.00	
SKO	4.21	6	ePn	52 48.50	0.2
			iPg	53 02.50	
			i	53 31.00	
			i	53 42.80	
			iSg	53 59.80	
SGO	5.12	305	P	53 03.50	2.4
DUI	6.27	310	P	53 25.00	7.6X
KCT	6.35	65	iPn	52 25.00	-53.5X
MLR	8.60	25	eP	53 50.00	-0.1
HFS	22.84	351	eP	56 44.70	-1.9
	0.4s	1.80nm		3.9mb	
NB2	24.06	348	P	56 57.00	-1.6
	0.6s	0.80nm		3.5mb	
	S.D. = 1.4	on	12 of	19 obs.	

% JUN 05, 1990 08h 04m 41.56± 1.04s
39.655 N ± 8.4km 29.443 E ±12.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZI	0.68	2	ePg	04 54.60	-0.5
ALT	0.79	139	ePg	04 57.00	0.0
YLV	0.91	357	iPn	04 59.00	-0.1
KCT	1.02	306	iPn	05 01.00	0.1

05d 08h

HRT 1.18 8 ePn 05 04.10 0.5
S.D. = 0.5 on 5 of 5 obs.

JUN 05, 1990 09h 03m 27.51± 0.45s
42.571 N ± 4.6km 111.381 W ± 5.3km
DEPTH = 5.0km (geophysicist)
EASTERN IDAHO (457)
ML 3.7 (SLC). Felt (IV) at Georgetown and (III) at Geneva.

PTI	0.79	293	iPc	03 42.30	-1.1
BW06	1.36	81	eP	03 53.30	0.0
IMW	1.36	14	P	03 56.00	2.6X
HPI	1.70	313	eP	03 57.50	-0.7
DAU	2.16	177	eP	04 05.80	0.8
DUG	2.61	205	eP	04 11.50	0.3
BGMT	2.70	350	ePnd	04 13.10	0.5
MEMT	3.05	5	ePn	04 18.40	1.0
LRM	3.34	347	ePn	04 24.40	2.7X
SXM	3.58	2	ePn	04 26.10	1.1
MSU	4.10	189	eP	04 31.50	-0.9
HRY	4.15	356	ePn	04 33.10	0.1
GOL	5.37	120	eP	04 50.40	-0.1
GLD	5.44	119	eP	04 52.00	0.6
RSSD	5.58	71	eP	04 51.30	-2.1
KVN	6.19	238	eP	05 01.40	-0.6
TNP	6.32	227	eP	05 05.00	1.1
ALQ	8.53	152	e(P)	05 46.00	11.2X
			e	06 12.00	

S.D. = 1.0 on 15 of 18 obs.

& JUN 05, 1990 09h 16m 48.10s
38.805 N 122.797 W
DEPTH = 4.0km
NORTHERN CALIFORNIA (36)
<BRK>. ML 2.8 (BRK).

NWRM	0.35	192	eP	16 55.00	-0.2
ZSP	0.96	154	eP	17 06.30	-0.6
BRK	1.02	155	ePc	17 07.40	-0.6
			eS	17 21.70	
BKS	1.03	154	iPc	17 07.70	-0.4
			eS	17 22.20	
ORV	1.26	53	eP	17 08.40	-3.6
PCC	1.34	166	e(P)	17 11.90	-1.5
			eS	17 31.40	
MHC	1.72	148	eP	17 18.60	-0.5
ARN	1.76	145	eP	17 18.00	-1.6
WDC	1.78	6	e(P)	17 18.70	-1.2
MIN	1.79	31	eP	17 19.00	-1.2
GCC	1.88	160	e(P)	17 20.50	-0.8
CMB	2.04	111	ePc	17 22.30	-1.4
SAO	2.30	152	e(P)	17 25.10	-2.3
FRI	3.04	126	eP	17 38.60	0.7
KVN	3.67	85	eP	17 45.50	-1.6

15 obs. associated

JUN 05, 1990 09h 38m 33.08± 0.76s
39.893 N ± 7.1km 20.495 E ± 8.4km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)
MD 3.2 (ATH).

KEK	0.57	252	ePg	38 44.40	-0.2
OHR	1.24	11	iPg	38 56.80	0.7
			iSg	39 14.60	
			Lg	39 19.90	
VLS	1.71	177	ePb	39 02.60	-0.6
VAY	2.13	47	ePn	39 08.30	-0.8
NEO	2.19	105	ePn	39 10.00	0.0
SKO	2.20	19	ePn	39 14.00	3.9X
ITM	2.93	157	ePb	39 21.50	0.9

S.D. = 0.9 on 6 of 7 obs.

• JUN 05, 1990 10h 15m 01.28± 1.12s
16.689 N ± 9.4km 61.594 W ±12.2km
DEPTH = 10.0km (geophysicist)
LEEWARD ISLANDS (92)
ML 2.2 (FDF).

SEG	0.30	163	eP	15 08.84	1.4
			S	15 13.30	
BPA	0.44	325	eP	15 10.25	0.1
			S	15 16.40	
SFG	0.58	139	eP	15 12.50	-0.5
MGH	0.60	273	eP	15 13.40	0.0
			S	15 21.50	
PAG	0.66	187	eP	15 14.30	-0.2
			S	15 23.60	
BBL	1.16	174	eP	15 22.20	-0.9
			S	15 38.00	

S.D. = 1.0 on 6 of 6 obs.

• JUN 05, 1990 11h 32m 47.75± 1.78s
14.440 S ± 8.5km 167.770 E ±13.2km
DEPTH = 53.8 ± 14.9 km
4.7mb (10 obs.)
VANUATU ISLANDS (186)

PVC	3.32	171	iP	33 39.00	0.5
DZM	7.69	189	iPc	34 34.40	-5.5X
			iS	35 59.20	
HNR	9.13	302	eP	34 59.00	-0.6
BRS	19.01	225	iP	36 54.30	-13.8X
			i	37 08.30	
RMQ	21.44	233	iPd	37 34.40	1.0
COO	21.71	220	eP	37 36.00	-0.1
CMS	26.30	226	eP	38 20.00	-0.2
CNB	26.57	215	eP	38 22.40	-0.3
	0.9s		13.00nm	4.5mb	
STK	29.55	230	iPc	38 49.80	0.1
	0.7s		18.00nm	4.9mb	
TOO	30.37	217	iPc	38 56.30	-0.6
	0.8s		81.00nm	5.5mb	
WB5	32.33	256	eP	39 11.30	-2.9X
WRA	32.36	256	Pd	39 12.50	-2.0
	1.1s		7.10nm	4.4mb	
MAT	57.88	332	eP	42 35.00	-1.5
	1.0s		9.00nm	4.8mb	
SSE	63.65	316	Pc	43 18.00	2.3
	1.0s		10.00nm	4.8mb	
NJ2	65.81	315	Pd	43 29.60	-0.1
CN2	69.65	329	Pd	43 56.00	2.5
GYA	71.95	304	P	44 08.00	0.0
BJI	72.35	321	eP	44 09.50	-0.4
	1.0s		8.00nm	4.6mb	
TIY	73.38	317	Pc	44 16.30	0.2
XAN	73.85	312	P	44 18.90	0.0
KMI	74.57	302	Pd	44 24.00	0.6
CHG	75.40	294	eP	44 28.90	0.8
CHTO	75.40	294	eP	44 28.30	0.3
	1.3s		9.40nm	4.6mb	
CD2	76.22	307	P	44 32.60	0.1
BTO	76.53	319	eP	44 33.00	-1.1
LZH	78.49	312	Pc	44 45.60	0.5
	1.5s		32.00nm	5.1mb	
GTA	82.82	314	eP	45 08.60	0.7
YKA	97.07	27	eP	46 13.10	-1.6
	1.2s		1.10nm	4.3mb	
LOR	144.63	341	ePKP	52 16.80	-3.2X
LBF	144.84	341	ePKP	52 17.30	-3.2X
SSF	144.92	341	ePKP	52 19.70	-0.8
	1.2s		11.90nm		
SMF	145.18	340	ePKP	52 19.10	-1.9
	1.4s		17.45nm		
ITR	145.27	130	ePKP	52 23.20	1.1
BCAO	148.11	255	iPKPd	52 27.30	0.6
	1.3s		32.00nm		

S.D. = 1.1 on 29 of 34 obs.

% JUN 05, 1990 11h 37m 30.66± 0.88s
39.270 N ± 7.2km 29.462 E ±10.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

ALT	0.55	113	ePg	37 41.30	-0.5
			eSg	37 51.00	
KHL	0.95	177	ePn	37 49.20	0.4
IZI	1.07	0	ePn	37 50.90	0.1
YLV	1.30	357	iPn	37 55.40	0.7
KCT	1.30	319	iPn	37 53.90	-0.8

S.D. = 0.9 on 5 of 5 obs.

JUN 05, 1990 12h 19m 28.46± 0.68s
42.642 N ± 7.4km 111.370 W ± 6.2km
DEPTH = 5.0km (geophysicist)
EASTERN IDAHO (457)
ML 3.3 (SLC).

PTI	0.77	288	eP	19 43.50	-0.5
IMW	1.29	14	P	19 57.00	3.9X
BW06	1.34	84	eP	19 54.20	0.3
HPI	1.66	311	eP	19 59.00	0.4
DAU	2.23	178	eP	20 06.80	-0.1
DUG	2.67	204	eP	20 13.10	0.0
MSU	4.17	189	eP	20 35.00	0.6
GOL	5.40	121	eP	20 51.20	-0.6
KVN	6.24	237	eP	21 06.00	2.4X
TNP	6.38	226	e(P)	21 08.50	2.9X

S.D. = 0.6 on 7 of 10 obs.

• JUN 05, 1990 13h 06m 52.72± 2.74s
32.027 S ±13.2km 71.814 W ±25.2km
DEPTH = 31.0 ± 7.1 km
NEAR COAST OF CENTRAL CHILE (135)

IHA	1.01	172	eP	07 11.80	1.1
			iS	07 25.60	
ROCH	1.16	144	iPd	07 12.00	-1.1
			i	07 20.90	
			iS	07 25.90	
JACH	1.22	123	iPd	07 12.10	-1.7
			iS	07 26.00	
LCCH	1.46	172	iPc	07 18.50	1.4
			iS	07 37.40	
SAN	1.72	146	iPc	07 20.50	-0.5
TACH	1.78	156	iP	07 22.00	0.1
			i	07 31.50	
			iS	07 43.00	
FCH	1.83	136	iPd	07 21.60	-1.2
			i	07 31.00	
			iS	07 42.20	
PCH	1.93	146	iPc	07 23.50	-0.6
			i	07 33.50	
			i	07 48.00	
LNV	1.95	170	iPc	07 24.50	0.2
			iS	07 50.00	
RTBS	2.04	80	e(P)	07 26.20	0.6
CHCH	2.14	153	iPc	07 26.70	-0.3
RTCB	2.62	79	eP	07 35.00	1.0
ZON	2.71	81	eP	07 37.00	1.8
RTRS	2.74	48	iPc	07 32.80	-2.6
			eS	08 12.00	
RTCV	2.79	87	e(P)	07 37.20	1.0
RTLL	2.93	77	iPc	07 49.30	11.0X
			eS	08 14.70	
CFA	3.07	83	ePc	07 40.50	0.2

S.D. = 1.4 on 16 of 17 obs.

& JUN 05, 1990 13h 10m 21.20s
41.175 N 119.880 W
DEPTH = 27.0km
NEVADA (37)
<BRK>. ML 3.5 (BRK).

MIN	1.55	238	ePc	10 45.50	-1.9
			iS	11 08.00	
LTCM	1.96	241	eP	10 52.00	-1.2
ORV	2.04	218	eP	10 56.50	2.1
			eS	11 20.50	
WDC	2.10	254	iPd	10 54.80	-0.5
KVN	2.52	147	eP	11 02.00	0.5

5 obs. associated

? JUN 05, 1990 13h 17m 48.22± 7.11s
30.608 S ±31.0km 72.344 W ±52.1km
DEPTH = 33.0km (normal)
OFF COAST OF CENTRAL CHILE (134)

RTRS	2.53	81	iPd	18 28.00	0.2
RTBS	2.69	114	ePc	18 30.40	0.3
PEL	2.90	151	eP	18 33.00	-0.1
			iS	19 09.00	
RTCB	3.17	107	eP	18 37.00	0.0
ZON	3.28	107	eP	18 39.00	0.4
RTLL	3.41	103	eP	18 39.10	-1.3
RTCV	3.49	112	eP	18 42.00	0.4
CFA	3.66	107	iPd	18 43.80	-0.1

S.D. = 0.6 on 8 of 8 obs.

JUN 05, 1990 13h 32m 52.77± 0.82s
33.188 S ± 6.1km 70.982 W ± 6.8km
DEPTH = 10.0km (geophysicist)
CHILE-ARGENTINA BORDER REGION (127)

ROCH	0.22	354	iPd	32 57.50	-0.1
			iS	33 06.70	
PEL	0.25	80	iPd	32 58.50	0.3
			iS	33 08.50	
SAN	0.38	135	iP	33 01.50	1.0
			iS	33 13.50	

TACH	0.47	175	iP	33	03.50	1.3
			iS	33	17.00	
LCCH	0.57	240	iPd	33	04.70	0.4
			iS	33	19.20	
PCH	0.58	138	iP	33	03.50	-1.1
			iS	33	17.50	
FCH	0.60	104	iPd	33	02.00	-3.1X
			iS	33	14.50	
JACH	0.60	33	iPd	32	57.30	-7.7X
			iS	33	06.00	
CHCH	0.79	160	iPc	33	07.00	-1.2
			iS	33	23.50	
LNV	0.85	205	iPd	33	08.50	-0.5
			iS	33	26.00	

S.D. = 1.1 on 8 of 10 obs.

& JUN 05, 1990 13h 41m 26.76s
60.810 N 151.570 W
DEPTH = 81.5km
KENAI PENINSULA, ALASKA (14)
<AGS-P>.

NKA	0.18	112	iP	41	40.29	3.2
SPU	0.44	328	iP	41	39.78	-0.6
			iS	41	50.47	
RDT	0.47	240	iP	41	39.99	-0.7
CRP	0.54	328	iP	41	40.85	-0.5
			eS	41	51.85	
CGLM	0.54	337	eP	41	40.53	-0.8
NCG	0.66	335	iP	41	41.77	-0.7
			iS	41	53.90	
RED	0.71	237	eP	41	42.29	-0.7
			eS	41	54.60	
SLKM	0.73	114	eP	41	42.73	-0.4
SUA	0.77	31	eP	41	43.31	-0.3
			eS	41	55.94	
NNL	0.78	170	eP	41	44.18	0.5
PMS	1.07	65	iP	41	46.90	-0.2
			eS	42	02.22	
PWA	1.18	43	eP	41	48.25	0.0
SEW	1.27	123	eP	41	48.74	-0.7
CNPM	1.30	172	eP	41	49.20	-0.7
PLRM	1.42	55	eP	41	50.22	-1.2
GHO	1.60	52	iP	41	52.82	-1.1
			eS	42	13.26	
CUT	1.72	21	eP	41	54.65	-0.7
SML	1.86	56	eP	41	56.01	-1.3
GLI	2.19	86	eP	41	59.13	-2.7
VZW	2.46	82	eP	42	03.39	-2.2
VLZ	2.57	81	eP	42	04.92	-2.1
KLU	2.82	73	eP	42	08.42	-2.2
PAX	3.61	50	eP	42	20.63	-0.9
BALM	4.51	83	eP	42	31.86	-2.3

24 obs. associated

JUN 05, 1990 13h 42m 51.20± 0.12s
35.412 N ± 2.7km 139.045 E ± 2.3km
DEPTH = 121.5km (13 depth phases)
5.3mb (91 obs.)
NEAR S. COAST OF HONSHU, JAPAN (230)
Felt (IV JMA) at Tokyo and Utsunomiyo; (III JMA) at Chiba, Yokohama, Kofu and on Oshima; (II JMA) at Yokosuka.
CENTROID, MOMENT TENSOR (HRV)
Doto Used: GDSN
L.P.B.: 10S, 18C
Centroid Location:
Origin Time 13:42:59.2 0.7
Lot 35.78N 0.09 Lon 138.94E 0.07
Dep 120.0 FIX Half-duration 1.7
Moment Tensor; Scale 10**16 Nm
Mrr= 4.28 0.53 Mtt= 0.60 0.89
Mff=-4.89 0.75 Mrt=-0.43 0.56
Mrf= 9.53 0.63 Mtf=-1.75 0.85
Principal Axes:

T	Val= 10.45	Plg=57	Azm=256
N	0.56	10	1
P	-11.02	32	97

Best Double Couple:Mo=1.1*10**17
NP1:Strike=217 Dip=16 Slip= 127
NP2: 359 77 80

CHJJ	0.64	356	iP+	43	11.40	0.9
IIDJ	0.93	275	P	43	16.40	3.4X
KAKJ	1.21	49	iP+	43	14.90	-0.9
			S	43	30.30	
MAT	1.32	329	iPd-	43	17.70	0.7
			iS	43	36.20	
MTMJ	1.54	320	iPd	43	21.20	1.5
NIIJ	1.83	359	P	43	23.10	0.1
			S	43	48.20	
TSRJ	2.50	274	iPd	43	34.30	2.7
YAMJ	2.87	16	iPd	43	36.30	-0.2
			S	44	10.80	
WKYJ	3.08	248	iPd	43	43.00	3.7X
MDJ	11.70	325	eP	45	36.80	1.5
	1.4s	200.00nm			5.6mb	
Z	13s	0.50um				
E	12s	0.90um				
		sP	46	08.00		
		S	47	49.00		
CN2	13.41	313	Pc	45	58.00	0.4
	1.0s	50.00nm			4.9mb	
		sP	46	30.00		
		S	48	26.50		
		ScP	54	39.00		
		ScS	58	14.00		
SNY	13.68	303	iPc	46	02.00	0.9
	1.0s	100.00nm			5.1mb	
Z	16s	1.10um				
E	10s	0.80um				
		sP	46	36.00		
DL2	14.32	289	eP	46	12.00	2.6
	5.0s	1400.00nm			5.5mb X	
Z	13s	0.90um				
N	12s	1.00um				
E	12s	1.30um				
		sP	46	46.00		
		S	48	53.00		
SSE	15.55	259	Pc	46	27.50	2.7
	1.0s	330.00nm			5.6mb	
Z	16s	0.70um			4.3MszX	
N	12s	0.60um				
E	12s	0.50um				
		sP	47	02.00		
NJ2	17.12	264	Pc	46	46.00	1.6
	0.8s	100.00nm			5.1mb	
		isP	47	20.00		
TIA	17.80	279	Pd	46	51.40	-1.2
		sP	47	27.00		
ANP	18.22	241	eP	47	00.00	2.3
		eS	51	08.80		
BJI	18.66	291	eP	46	59.50	-2.7
	2.0s	170.00nm			5.0mb	
		sP	47	36.00		
		eS	50	20.00		
		eScS	58	29.00		
QZH	20.49	245	Pd	47	20.40	-0.9
	0.7s	200.00nm			5.6mb	
		sP	48	03.00		
		S	51	02.00		
WHN	21.26	264	Pc	47	30.00	1.1
E	10s	0.40um				
		pP	47	56.50	137kmX	
TIY	21.48	284	eP	47	30.00	-1.2
Z	14s	1.40um			4.5MszX	
E	13s	0.70um				
HHC	22.24	292	eP	47	36.50	-2.2
Z	14s	0.60um			4.2MszX	
N	14s	0.80um				
E	14s	0.40um				
		pP	48	04.00	137kmX	
GUMO	22.35	165	eP	47	40.20	0.4
	0.7s	116.90nm			5.4mb	
		e	48	37.30		
PJG	22.35	165	eP	47	40.20	0.4
		e	48	37.00		
BTO	23.39	291	eP	47	47.50	-2.4
N	14s	0.40um				
E	14s	0.60um				
XAN	24.76	276	IPc	48	02.20	-0.7
BAG	25.10	226	eP	48	04.00	-2.3
HKC	25.32	246	iP	48	08.80	0.7
GZH	25.48	248	Pc	48	10.00	0.4
		pP	48	38.50	137kmX	
OCP	26.24	222	eP	48	02.10	-14.5X
LZH	28.49	282	Pc	48	36.50	-0.5
	2.0s	95.00nm			5.1mb	
Z	16s	0.10um			3.5MszX	
E	13s	0.60um				
GYA	29.07	261	iPc	48	41.00	-1.3
	1.0s	100.00nm			5.4mb	
		PcP	51	47.80		
		S	53	21.00		
		ScP	55	17.60		
		PcS	55	29.40		
		ScS	59	10.00		
CD2	29.78	271	P	48	46.40	-2.0
		S	53	36.00		
QIZ	30.51	245	eP	48	55.00	0.1
GTA	31.25	289	P	49	00.00	-1.4
	1.0s	50.00nm			5.2mb	
		PcP	51	53.40		
		ScS	59	19.00		
KMI	32.83	262	Pc	49	14.00	-1.4
	1.5s	200.00nm			5.7mb	
Z	12s	0.60um			4.5MszX	
ADK	35.39	48	P	49	35.30	-1.4
	0.8s	131.03nm			5.8mb	
LOE	37.65	251	iPc	49	55.00	-1.0
CHG	39.04	256	iPc	50	07.90	0.2
	0.9s	62.60nm			5.4mb	
CHTO	39.04	256	iPc	50	07.80	0.2
	0.8s	56.19nm			5.4mb	
BDT	39.86	254	eP	50	14.90	0.5
	1.0s	98.00nm			5.5mb	
WMQ	39.89	298	iPc	50	15.00	0.5
	2.5s	500.00nm			5.9mb	
Z	14s	0.30um			4.3MszX	
		sP	50	55.00		
		S	56	07.00		
		PcS	56	11.60		
NST	39.90	251	iPc	50	15.40	0.7
LSA	40.46	276	Pc	50	21.20	1.4
SHL	41.48	270	eP	50	26.50	-1.4
		eS	56	02.00		
SNG	45.04	241	eP	50	52.20	-4.3X
	0.8s	129.85nm			5.7mb	
KDB	45.29	169	eP	50	59.50	1.1
GUN	45.41	276	Pc	51	00.00	0.2
PKI	45.93	276	Pc	51	03.80	-0.1
GKN	46.39	277	Pc	51	07.30	0.1
IPM	46.59	238	ePc	51	09.90	1.2
	0.8s	201.10nm			5.9mb	
		e	52	43.10	490kmX	
TTA	47.84	34	P	51	17.70	-0.4
	0.9s	22.92nm			5.0mb	
MTN	48.57	190	eP	51	23.00	-1.0
IMA	49.05	30	P	51	26.50	-0.9
KSH	49.34	295	Pd	51	32.00	2.0
TRT	49.59	215	ePd	51	29.00	-2.9
PMR	51.06	36	P	51	41.10	-1.5
	1.0s	60.00nm			5.4mb	
FBA	51.49	31	P	51	45.00	-0.8
	0.8s	52.59nm			5.5mb	
KNA	51.80	193	eP	51	48.30	-0.3
NDI	52.10	281	iPc	51	49.50	-1.4
	0.5s	63.38nm			5.8mb	
WB5	55.17	185	iPc	52	12.90	-0.3
		e(S)	59	44.20		
WRA	55.23	185	Pc	52	13.20	-0.5
	0.6s	126.30nm			6.0mb	
QIS	55.66	179	eP	52	16.00	-0.8
HYB	56.24	268	iPc	52	20.30	-0.9
	0.6s	118.70nm			6.1mb	
		e	53	17.50	258kmX	
INK	56.70	26	eP	52	23.00	-0.7
MBC	58.61	16	eP	52	36.50	-0.6
	1.0s	18.00nm			5.0mb	
GBA	59.17	265	Pd	52	42.10	0.4
	0.5s	49.30nm			5.8mb	
POO	59.51	272	iPc	52	43.50	-0.6
	0.7s	68.49nm			5.8mb	
NANU	61.82	205	iPc	52	58.90	-0.4
RMQ	62.25	170	iPd	53	02.90	0.7
WARB	62.37	193	eP	53	03.00	0.0
	0.5s	41.00nm			5.6mb	
DZM	62.79	151	iPc	53	06.40	0.5
BRS	63.80	166	iPc	53	13.30	0.9
		i	53	17.30	13kmX	
KEV	64.27	339	iP	53	14.00	-1.0
	0.8s	32.30nm			5.3mb	
MEKA	64.67	200	eP	53	17.40	-0.6
	0.4s	17.00nm			5.3mb	
SOD	65.71	337	iP	53	23.30	-1.0
KTK1	65.80	339	iPc	53	24.01	-0.8
YKA	66.16	29	eP	53	26.50	-0.7
	0.9s	8.40nm			4.7mb	
FORR	66.71	190	eP	53	30.60	-0.3
	0.4s	65.00nm			5.9mb	

05d 13h

STK	66.98	178	iPd	53	33.10	0.5	MWC	80.10	55	eP	54	49.00	-0.3	MEM	84.87	332	P	55	13.20	0.1
	0.6s	9.00nm			4.8mb		BW06	80.16	44	P	54	49.00	-0.5	CEY	85.02	325	eP	55	13.90	-0.2
MRWA	67.86	202	eP	53	37.70	-0.5	GSC	80.30	54	eP	54	51.00	0.9	VOY	85.06	325	iPc	55	13.70	-0.6
COOL	68.06	197	iPc	53	39.00	-0.5				e	55	22.00	122km	OHR	85.08	318	iP	55	14.20	-0.3
	0.6s	38.00nm			5.5mb		KSP	80.45	327	iPc	54	51.00	0.5		1.0s	171.00nm			5.9mb	
SUF	68.56	333	iP	53	41.50	-0.7		1.0s	52.00nm			5.3mb		FVI	85.15	326	Pd	55	14.10	-0.5
	0.5s	31.40nm			5.4mb					id	55	22.00	122km	GWF	85.53	330	P	55	16.71	0.1
PGC	68.84	45	eP	53	44.00	-0.1				e	57	55.50		OGA	85.73	327	eP	55	18.10	0.3
BAL	68.95	201	eP	53	44.50	-0.4	YLV	80.55	313	iP	54	51.30	0.0	DOU	85.82	333	P	55	17.60	-0.3
MCW	69.18	45	P	53	50.00	3.7X	OTFJ	80.60	302	Pc	54	52.30	0.6	CTI	86.08	326	P	55	18.50	-0.9
KLB	69.59	199	iPc	53	48.30	-0.5	IZI	80.63	313	eP	54	52.00	0.2	WLS	86.09	330	P	55	19.32	0.0
	0.6s	31.00nm			5.3mb		DAU	80.66	47	P	54	52.80	0.5	CDF	86.12	330	P	55	19.45	-0.1
BWA	70.02	172	eP	53	52.20	0.7	RVR	80.70	55	eP	54	52.00	-0.1	FEL	86.24	329	P	55	19.59	-0.6
BMW	70.06	47	P	53	51.50	-0.3	PEC	80.90	55	P	54	53.00	-0.3	ECH	86.33	330	P	55	20.25	-0.2
MUN	70.38	200	eP	53	52.00	-1.6	ALT	81.05	312	eP	54	54.00	0.0	MOF	86.63	330	P	55	21.33	-0.7
NUR	70.47	331	iP	53	53.00	-0.8	LFK	81.20	307	iP	54	56.00	1.2	BBS	86.78	329	P	55	22.27	-0.4
	0.7s	44.00nm			5.4mb		MSU	81.29	49	P	54	56.50	1.0	BSF	86.78	330	eP	55	22.10	-0.7
PNT	70.67	43	ePd	53	55.00	-0.3	PLM	81.42	55	eP	54	56.00	-0.2		0.9s	9.85nm			4.8mb	
	0.7s	26.00nm			5.2mb					e	55	24.00	108kmX	VITF	86.80	331	P	55	22.23	-0.5
LON	70.76	46	P	53	55.40	-0.6	BRG	81.45	328	iPc	54	56.20	0.5	HAU	86.82	330	eP	55	22.20	-0.7
SHW	70.80	47	P	53	56.70	0.4		1.0s	40.00nm			5.2mb			0.8s	10.75nm			4.9mb	
CAN	70.98	171	eP	54	00.00	2.8				i	55	16.40	74kmX	ANMO	87.10	48	P	55	25.00	0.3
TAB	71.12	304	eP	53	57.00	-1.4				e	58	02.40			1.3s	13.22nm			4.8mb	
DPW	72.24	44	P	54	04.50	-0.3	CLL	81.52	329	iPc	54	56.10	0.0	ALQ	87.10	48	eP	55	25.00	0.3
KER	72.47	300	ePc	54	06.00	-0.5		1.1s	87.00nm			5.5mb			1.0s	7.50nm			4.6mb	
FHC	72.53	52	e(P)	54	07.40	0.8				ipP	55	26.90	120km				epP	55	57.00	124km
NEW	72.62	43	P	54	06.20	-0.8	SRO	81.68	324	iP	54	57.40	0.5	LOMF	87.15	330	P	55	23.89	-0.7
	0.8s	39.06nm			5.2mb		SALJ	81.72	303	Pd	54	57.90	0.3	ARV	87.40	324	P	55	26.50	0.8
TOO	72.86	175	eP	54	09.20	0.9	BCK	81.74	310	eP	54	57.10	-0.5	SCH	87.43	15	eP	55	26.00	0.3
UPP	73.55	333	iP	54	10.60	-1.5	KFNJ	81.82	303	Pc	54	58.40	0.5	VAI	87.50	328	Pc	55	25.30	-0.8
WDC	73.58	52	ePd	54	13.10	0.5	PRU	81.84	327	Pc	54	58.10	0.3	SFI	87.60	325	P	55	27.50	0.9
BRF	74.22	291	eP	54	16.20	-0.3		1.0s	36.10nm			5.1mb		PGD	87.69	325	Pc	55	28.40	1.0
	0.6s	133.00nm			5.9mb					e	55	28.70	119km	CRE	87.77	325	Pd	55	28.00	0.3
BEE	74.30	291	eP	54	16.50	-0.5	KHL	81.86	312	eP	54	58.20	0.0	DUI	88.02	322	Pd	55	29.30	0.5
MIN	74.30	52	ePd	54	16.60	-0.4	BAR	81.95	56	eP	54	59.00	0.3	AQU	88.03	323	Pd	55	29.80	0.9
SES	74.62	39	eP	54	19.00	0.4				e	55	32.00	130km	BOB	88.05	327	Pd	55	29.00	0.1
	0.7s	36.00nm			5.3mb		ZST	81.98	325	iP	54	59.80	1.3	BDI	88.07	326	Pd	55	28.50	-0.6
HFS	74.76	335	eP	54	18.20	-0.9	MKRJ	82.03	303	Pd	54	57.30	-1.9	SDI	88.31	322	P	55	30.00	-0.2
	0.8s	28.70nm			5.1mb		DSI	82.19	303	eP	55	01.00	1.1	MNS	88.36	323	Pd	55	30.00	-0.4
Z	17s	0.13um			4.3MszX		RSSD	82.31	40	P	55	00.20	-0.4	LOR	88.41	331	iPc	55	30.00	-0.5
		LR		25	29.00		SOP	82.60	325	iPc	55	03.10	1.3		0.8s	8.05nm			4.8mb	
ORV	74.80	52	eP	54	19.50	-0.2	MOX	82.60	329	eP	55	02.00	0.3	LBF	88.59	331	iPc	55	30.70	-0.8
NB2	74.93	337	P	54	19.30	-0.8		1.2s	41.00nm			5.2mb			1.0s	8.00nm			4.7mb	
	0.9s	47.90nm			5.3mb					e	55	10.00	25kmX	LPG	88.66	329	iPc	55	32.00	-0.1
BRK	75.23	54	eP	54	22.40	0.3				e	55	32.50			0.6s	7.20nm			4.9mb	
PCC	75.36	54	eP	54	22.80	-0.1				e	58	09.00		SSF	88.72	331	iPc	55	31.60	-0.4
GCC	75.87	55	ePd	54	26.00	0.2				e	58	13.00			1.0s	10.00nm			4.8mb	
MHC	75.93	54	eP	54	26.50	0.2	ELL	82.61	310	eP	55	02.00	-0.2	FLN	88.78	335	eP	55	31.80	-0.4
ARN	76.00	54	P	54	27.00	0.4	BEO	82.70	321	i(P)	55	03.00	0.7	LDF	88.79	334	eP	55	31.80	-0.5
FFC	76.10	32	iPd	54	26.40	-0.3	HOF	82.74	329	iPc	55	02.80	0.3	SMF	88.93	331	eP	55	32.30	-0.7
	0.7s	21.00nm			5.0mb			1.0s	39.00nm			5.2mb			1.3s	25.25nm			5.1mb	
KVT	76.19	311	iP	54	29.00	1.4	KHC	82.90	327	iPc	55	04.00	0.7	AVF	89.00	331	iPc	55	32.90	-0.4
CMB	76.37	53	ePd	54	29.00	0.3		1.1s	28.00nm			5.1mb			0.6s	6.75nm			4.9mb	
SAO	76.39	55	eP	54	28.50	-0.2				e	55	34.50	119km	BNI	89.04	328	P	55	34.00	0.3
LRM	76.64	43	ePd	54	30.60	0.3	GLA	82.96	54	eP	55	04.00	0.0	GRR	89.23	335	eP	55	34.20	-0.2
PRS	76.68	55	ePd	54	30.80	0.5				e	55	36.00	125km		0.9s	16.40nm			5.1mb	
PRI	77.26	55	e(P)	54	34.50	0.8	IZM	83.19	313	eP	55	05.00	0.0	BGF	89.39	331	eP	55	34.80	-0.4
KVN	77.27	51	P	54	34.10	0.3	PRNI	83.19	302	iPc	55	06.00	0.8	LPF	89.60	334	eP	55	36.20	0.1
FRI	77.41	54	ePd	54	34.50	0.2	WET	83.19	328	iPc	55	05.40	0.6		1.0s	26.00nm			5.3mb	
HPI	77.55	45	P	54	35.30	-0.1		1.2s	43.00nm			5.2mb		SBF	89.66	327	iPc	55	35.60	-1.0
PKEM	77.67	55	P	54	36.80	1.0	WTS	83.46	333	eP	55	06.00	0.0		0.8s	40.30nm			5.6mb	
BSD	77.95	331	iPd	54	36.90	0.0		0.8s	9.00nm			4.7mb		MAF	89.78	331	eP	55	37.40	0.4
	0.6s	46.00nm			5.4mb					e	55	36.50	118km		0.9s	10.65nm			4.9mb	
CLI	77.97	319	ePc	54	38.00	0.7	GRF	83.49	329	iPc	55	07.30	1.0	SOI	89.82	319	Pd	55	32.30	-5.0X
BCH	78.19	55	P	54	39.70	0.9		1.1s	92.00nm			5.6mb		TCF	89.86	332	iPc	55	37.40	0.0
MJMA	78.35	293	iPc	54	39.50	-0.2				e	55	37.80	118km		1.0s	8.00nm			4.8mb	
CFR	78.36	318	eP	54	40.00	0.7	VAY	83.96	317	iPc	55	09.60	0.8	PGF	89.98	326	eP	55	37.40	-0.7
TNP	78.39	51	P	54	40.30	0.3		0.9s	178.00nm			6.0mb			1.0s	20.00nm			5.2mb	
PTI	78.48	45	P	54	41.20	0.8	EKA	84.00	339	P	55	09.00	0.3	LSF	90.15	332	iPc	55	38.50	-0.2
COP	78.49	332	iPd	54	41.00	1.1		0.9s	11.80nm			4.8mb			1.2s	35.70nm			5.3mb	
	0.8s	104.48nm			5.7mb		SKO	84.14	318	iPc	55	11.00	1.3	FRF	90.25	328	eP	55	38.50	-0.7
SYP	78.64	56	eP	54	42.00	0.7		0.9s	163.00nm			5.9mb			0.8s	18.80nm			5.3mb	
VRI	78.70	319	ePc	54	41.50	0.2	PTJ	84.17	324	eP	55	05.90	-4.0X	LMR	90.49	327	iPc	55	39.60	-0.7
FRB	78.77	12	ePc	54	41.00	-0.3	TNS	84.22	331	ePc	55	10.20	0.2		1.0s	48.00nm			5.6mb	
BBTK	78.95	311	iPc	54	43.00	0.2	BHG	84.26	327	iPc	55	11.00	0.8	MFF	90.49	333	iPc	55	40.30	0.1
ABL	78.96	55	P	54	43.00	-0.2		1.4s	135.00nm			5.6mb			0.9s	22.95nm			5.3mb	
ISA	78.99	54	eP	54	43.00	-0.1	GOL	84.56	44	P	55	12.80	0.6	RJF	90.95	332	iPc	55	42.60	0.2
MLR	79.36	319	eP	54	45.00	0.0		1.0s	17.50nm			4.9mb			0.9s	16.40nm			5.2mb	
CLC	79.47	54	eP	54	45.00	-0.7	GLD	84.61	44	P	55	13.40	1.1	CAF	91.05	331	iPc	55	43.40	0.5
		e		55	16.00	122km		1.3s	63.22nm			5.3mb			1.2s	29.75nm			5.4mb	
SPC	79.80	324	iP	54	47.40	0.1	FUR	84.63	328	iPc	55	12.90	0.8	LFF	91.55	332	iPc	55	45.60	0.5
DUG	79.86	48	P	54	48.40	0.6		1.0s	61.00nm			5.4mb			0.9s	22.95nm			5.4mb	
	0.8s	13.89nm			4.8mb		LJU	84.75	325	eP	55	12.80	0.1	LPO	91.59	331	iPc	55	45.70	0.3
SBB	79.99	55	eP	54	48.00	-0.5	ENN	84.78	332	eP	55	12.00	-0.7		1.2s	29.75nm			5.4mb	
		e		55	19.00	122km		1.0s	35.00nm			5.2mb		BCAO	111.67	292	iPKPd	01	30.00	16.5X
CMP	79.99	319	ePd	54	49.00	0.7				e	55	43.00	120km		1.0s	5.00nm				
PAS	80.07	55	eP	54	49.00	0.2	VBY	84.80	324	ePc	55	13.40	0.5	BUL	117.74	264	iPKPc	01	23.40	-1.7

	0.9s		8.40nm			
			ipP	02	33.90	
SPA	125.23	180	iPKPc	01	38.00	0.0
	0.9s		16.36nm			
TIC	126.21	314	PKP	01	41.40	0.0
KIC	126.27	313	PKP	01	41.60	0.1
LIC	126.55	313	PKP	01	42.10	0.1
ARE	146.88	63	e(PKP)	02	07.00	-12.4X
ZOBO	149.16	59	PKP	02	25.40	2.0
			i	02	29.00	
LPB	149.36	59	PKP	02	18.00	-5.5X
CCH	151.30	58	PKP	02	33.80	7.5X
ITR	153.37	354	ePKP	02	36.90	7.9X
SIV	153.59	48	PKP	02	30.00	0.8
	S.D. = 0.9		on 256 of 268 obs.			

* JUN 05, 1990 19h 16m 48.40± 3.28s
45.677 N ±15.1km 26.696 E ±16.0km
DEPTH = 69.9 ± 34.2 km
ROMANIA (358)

VRI	0.19	6	iPc	16	58.00	-1.1
BRD	0.30	123	ePc	17	00.00	0.3
ISR	0.55	191	ePc	17	03.00	1.1
MLR	0.56	251	iP	17	02.00	-0.1
PPE	0.84	50	ePc	17	06.00	0.9
CFR	1.14	115	iPc	17	18.00	9.1X
TLB	1.44	139	iPd	17	12.00	-0.9
	S.D. = 1.4		on 6 of 7 obs.			

? JUN 05, 1990 20h 15m 11.94± 1.74s
15.756 S ±46.1km 73.363 W ±24.3km
DEPTH = 66.4 ± 17.9 km
4.1mb (2 obs.)
SOUTHERN PERU (117)

ARE	1.93	112	iPc	15	43.80	0.4
PT03	2.94	306	iPd	15	56.10	-1.1
			iS	16	10.00	
PT06	3.45	303	iPd	16	04.00	-0.5
			iS	16	43.20	
PT08	4.88	320	iPd	16	26.30	1.4
			iS	17	25.80	
NNA	5.04	318	eP	16	27.00	0.1
	0.5s		8.45nm		4.2mb	
			i	16	30.00	
ZOBO	5.06	96	iPc	16	32.00	4.3X
	0.4s		51.76nm		5.1mb X	
	Z 25s		0.13um		4.7Msz	
			LR	18	30.00	
LPB	5.12	99	P	16	28.00	-0.3
CCH	7.11	104	P	16	57.40	1.5
SIV	11.83	93	P	17	58.20	-1.8
YKA	84.42	342	eP	27	38.50	0.5
	0.9s		1.30nm		4.0mb	
	S.D. = 1.4		on 9 of 10 obs.			

? JUN 05, 1990 20h 29m 26.23± 0.91s
31.422 S ±10.4km 69.137 W ± 9.0km
DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB	0.30	103	iPd	29	37.00	3.0X
			S	29	51.00	
RTBS	0.36	228	iPd	29	35.20	0.4
RTLL	0.58	81	iPc	29	39.00	1.0
			eS	29	54.20	
RTCV	0.67	131	eP	29	38.50	-0.8
CFA	0.79	104	iPc	29	40.80	-0.1
			eS	29	57.10	
RTRS	1.28	347	iPc	29	47.40	-0.5
	S.D. = 1.0		on 5 of 6 obs.			

? JUN 05, 1990 20h 29m 53.36± 4.48s
43.877 N ±24.2km 7.194 E ±21.7km
DEPTH = 10.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)
ML 2.0 (GEN).

STV	0.38	14	P	30	01.20	0.0
			S	30	07.25	
ENR	0.39	25	P	30	01.20	-0.1
			S	30	07.25	
IMI	0.50	86	P	30	03.56	0.0
			S	30	10.74	
PZZ	0.63	354	P	30	06.12	0.0
			S	30	14.63	
ROB	0.64	49	P	30	06.33	0.1
			S	30	14.94	
	S.D. = 0.1		on 5 of 5 obs.			

? JUN 05, 1990 20h 31m 16.61± 9.19s
43.775 N ±63.3km 7.170 E ±18.6km
DEPTH = 10.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)
MD 1.0 (STR).

MVIF	0.12	354	Pg	31	19.86	0.1
			Sg	31	21.16	
AURF	0.16	45	Pg	31	20.09	-0.3
TOUF	0.24	13	Pg	31	21.75	-0.2
AUTN	0.29	40	Pg	31	23.11	0.4
			Sg	31	26.99	
	S.D. = 0.5		on 4 of 4 obs.			

? JUN 05, 1990 20h 43m 12.27± 2.70s
14.639 N ±31.0km 93.782 W ±13.7km
DEPTH = 66.4 ± 18.5 km
4.0mb (1 obs.)
NEAR COAST OF CHIAPAS, MEXICO (69)

TPX	1.50	80	eP	43	37.24	-0.2
			iS	43	51.70	
SCX	2.36	28	iP	43	49.79	0.4
			iS	44	14.36	
PSM	2.38	330	iP	43	50.80	0.9
			iS	44	15.73	
OXX	3.73	311	eP	44	09.00	0.1
			iS	44	53.00	
LVVM	5.67	334	iP	44	34.50	-1.5
			(S)	45	34.34	
PPM	6.39	314	(P)	44	51.80	5.3X
			(S)	45	45.50	
YKA	50.02	348	eP	52	02.00	0.3
	0.5s		0.80nm		4.0mb	
	S.D. = 1.3		on 6 of 7 obs.			

% JUN 05, 1990 21h 04m 25.35± 1.64s
27.837 N ±15.0km 17.995 W ±15.8km
DEPTH = 33.0km (normal)
CANARY ISLANDS REGION (394)
mbLg 3.6 (MDD). Felt (III) on Hierro.

CHIE	0.11	164	iP	04	31.40	0.2
TBT	0.84	5	iP	04	40.50	-0.3
			iS	04	52.20	
CTFE	1.66	67	iP	04	54.00	1.5
			iS	05	13.20	
GGC	2.10	82	iP	04	58.50	-0.5
			iS	05	22.70	
CFTV	3.50	80	iP	05	18.00	-0.9
			i	05	56.20	
	S.D. = 1.3		on 5 of 5 obs.			

& JUN 05, 1990 21h 49m 51.11s
59.652 N 151.785 W
DEPTH = 63.1km
KENAI PENINSULA, ALASKA (14)
<AGS-P>.

XLV	0.20	171	iP	50	00.16	-0.9
			eS	50	07.76	
CNPM	0.31	114	iP	50	01.34	-0.4
			iS	50	09.34	
NNL	0.46	32	iP	50	03.75	0.6
AUE	0.86	251	iP	50	06.94	-0.8
AUL	0.88	253	eP	50	07.30	-0.7
RED	0.92	328	iP	50	07.65	-0.9
			Sn	50	20.81	
RDT	0.98	342	iP	50	08.48	-0.8
			iS	50	22.21	
NKA	1.13	14	iP	50	12.60	1.4
SLKM	1.16	42	iP	50	11.18	-0.6
CDD	1.20	234	iP	50	11.05	-1.2
			iS	50	27.43	
SEW	1.26	68	eP	50	12.13	-0.9
MCNL	1.39	251	iP	50	13.02	-1.7
			eS	50	30.03	
SPU	1.54	355	iP	50	16.41	-0.5
			iS	50	36.65	
CRP	1.63	354	iP	50	18.10	-0.2
			iS	50	39.88	
CGLM	1.67	356	iP	50	18.41	-0.2
			iS	50	40.28	
NCG	1.77	354	iP	50	20.01	-0.1
SUA	1.89	15	iP	50	21.63	-0.2
PMS	1.94	34	iP	50	22.54	0.1
			iS	50	46.24	
MTU	2.11	79	eP	50	23.89	-0.9
PWA	2.21	24	eP	50	26.24	0.1
			iS	50	53.63	
SKT	2.34	3	eP	50	27.13	-0.9
PLRM	2.35	33	eP	50	27.06	-0.9
GHO	2.55	32	eP	50	30.22	-0.8
GLI	2.64	60	iP	50	29.94	-2.3
SML	2.75	37	iP	50	32.91	-0.8
CUT	2.86	14	iP	50	34.92	-0.3
VZW	2.96	59	iP	50	34.65	-2.1
VLZ	3.09	59	iP	50	36.69	-1.7
NCA	3.38	44	iP	50	41.66	-1.0
KLU	3.43	55	iP	50	41.85	-1.6
TOA	3.69	46	eP	50	45.03	-1.9
KTH	3.94	6	eP	50	49.42	-1.1
RND	4.02	19	iP	50	50.87	-0.8
BALM	4.89	69	eP	51	01.91	-2.1
WRH	5.14	18	eP	51	05.65	-1.7
HDA	5.28	23	eP	51	08.33	-1.0
	36 obs. associated					

* JUN 05, 1990 21h 50m 48.49± 2.16s
31.215 N ±11.9km 139.798 E ±15.7km
DEPTH = 145.8 ± 19.7 km
4.0mb (7 obs.)
SOUTH OF HONSHU, JAPAN (211)

MAT	5.47	346	(P)	52	09.00	-0.1
	0.5s		6.34nm		4.1mb	
			(S)	53	17.00	
CHTO	38.82	261	eP	58	02.30	1.5
	0.7s		0.48nm		3.3mb	
WB5	51.07	187	eP	59	37.10	-0.8
WRA	51.13	187	Pd	59	38.00	-0.4
	0.4s		2.10nm		4.2mb	
YKA	69.53	29	eP	01	41.20	-1.5
	0.7s		2.00nm		4.1mb	
WDC	75.69	51	eP	02	23.00	3.7X
ORV	76.89	52	eP	02	26.10	0.1
BKS	77.21	53	ePc	02	28.20	0.4
SES	77.51	38	eP	02	29.00	-0.3
CMB	78.40	53	eP	02	35.20	0.8
APO	78.46	336	eP	02	33.20	-1.0
	0.4s		0.80nm		3.8mb	
NB2	79.02	337	P	02	36.80	-0.5
	0.6s		0.60nm		3.5mb	
LRM	79.28	43	eP	02	40.20	0.9
FFC	79.34	31	eP	02	39.00	-0.1
	0.8s		9.00nm		4.6mb	
FRI	79.40	53	ePc	02	40.40	0.7
KVN	79.41	51	eP	02	40.60	0.5
	S.D. = 0.9		on 15 of 16 obs.			

? JUN 05, 1990 22h 01m 36.41± 1.73s
11.978 S ±18.0km 116.866 E ±30.4km
DEPTH = 33.0km (normal)
SOUTH OF SUMBAWA ISLAND (291)

TRT	5.95	315	ePd	03	04.60	0.0
			eS	04	05.10	
NANU	10.60	187	eP	04	10.50	1.3
			eS	05	58.50	
MEKA	14.64	174	eP	05	03.00	-0.1
	0.3s		6.00nm		4.5mb X	
			eS	07	36.00	
WARB	16.87	148	eP	05	32.00	0.3
MRWA	17.17	183	eP	05	34.00	-1.5
			eS	08	33.00	
COOL	19.23	169	eP	06	03.00	2.3X
KLB	19.54	178	eP	06	07.10	2.8X
	S.D. = 1.4		on 5 of 7 obs.			

* JUN 05, 1990 23h 25m 57.90± 1.78s
4.651 S ±12.9km 103.222 E ±13.0km
DEPTH = 68.8 ± 15.0 km
4.6mb (7 obs.)
SOUTHERN SUMATERA (274)

PPI	5.03	326	eP	27	13.00	0.4
			eS	28	14.50	
IPM	9.43	347	ePd	28	19.00	5.6X
CHTO	23.69	350	eP	31	05.30	0.9

05d 23h

	0.8s	9.15nm			4.3mb	
GBA	31.37	306	Pd	32	14.70	0.2
	0.3s	2.40nm			4.4mb	
WB5	33.89	119	eP	32	35.20	-1.3
WRA	33.89	119	Pc	32	37.00	0.5
	0.3s	5.70nm			5.0mb	
CD2	35.36	1	P	32	48.80	-0.1
PKI	36.36	333	P	32	57.00	-0.7
GUN	36.44	334	P	32	58.00	-0.4
GKN	37.08	332	P	33	03.10	-0.4
	0.6s	28.00nm			5.4mb	
XAN	38.86	8	P	33	18.50	0.3
NDI	41.53	324	iPc	33	40.00	-0.2
STK	45.00	132	iPc	34	08.60	0.2
	0.9s	7.00nm			4.5mb	
QUE	49.04	317	eP	34	38.70	-1.6
CN2	52.23	20	eP	35	03.40	-0.7
MLR	84.42	316	eP	38	25.00	0.6
SUF	88.21	333	eP	38	43.00	0.7
NUR	88.41	331	eP	38	44.00	0.7
SOD	89.13	338	iP	38	47.20	0.5
KEV	89.59	340	eP	39	04.00	15.2X
HFS	93.76	330	ePKP	39	08.00	-0.2
	0.8s	4.30nm			4.9mb	
NB2	95.01	331	P	39	13.20	-0.8
	0.7s	1.00nm			4.4mb	
OLY	146.43	22	ePKP	45	33.00	1.2

S.D. = 0.8 on 21 of 23 obs.

& JUN 06, 1990 01h 11m 59.81s
59.136 N 152.613 W
DEPTH = 75.2km
SOUTHERN ALASKA (2)
<AGS-P>.

AUE	0.45	300	iP	12	12.11	-0.7
AUL	0.49	301	iP	12	12.54	-0.6
CDD	0.57	249	iP	12	13.30	-0.7
			iS	12	24.32	
CNPM	0.81	60	iP	12	15.91	-0.6
MCNL	0.89	274	iP	12	16.65	-0.8
			Sn	12	28.22	
NNL	1.13	36	iP	12	20.53	0.1
RED	1.29	356	iP	12	21.62	-1.0
			iS	12	39.24	
RDT	1.45	4	iP	12	23.89	-0.8
			iS	12	41.98	
SLKM	1.83	40	eP	12	28.73	-1.1
SEW	1.88	58	iP	12	28.96	-1.5
SPU	2.07	8	eP	12	32.72	-0.5
CRP	2.15	6	eP	12	33.94	-0.4
CGLM	2.20	8	iP	12	34.65	-0.3
NCG	2.29	6	eP	12	35.71	-0.5
SUA	2.51	21	eP	12	38.38	-1.0
PMS	2.61	34	eP	12	39.69	-0.9
SKT	2.90	10	eP	12	44.04	-0.6

17 obs. associated

JUN 06, 1990 01h 14m 52.62± 0.28s
44.508 N ± 2.0km 7.284 E ± 2.6km
DEPTH = 11.8 ± 2.9 km
NORTHERN ITALY (545)
ML 2.6 (GEN), 2.5 (LDG).

DOI	0.03	262	Pd	14	55.40	0.4
			eSg	14	57.10	
PZZ	0.13	269	P	14	56.00	-0.1
			S	14	57.84	
STV	0.27	174	P	14	58.15	-0.2
			S	15	01.53	
ENR	0.30	161	P	14	59.64	0.7
			S	15	04.15	
ROB	0.47	117	P	15	02.56	0.2
			S	15	09.74	
TOUF	0.49	183	Pg	15	02.58	-0.2
AUTN	0.52	169	Pg	15	02.82	-0.5
			Sg	15	10.06	
RRL	0.54	319	P	15	03.59	-0.1
			S	15	11.07	
MVIF	0.62	189	Pg	15	04.92	-0.1
			Sg	15	12.81	
AURF	0.62	177	Pg	15	04.79	-0.2
			Sg	15	12.77	
RSP	0.64	358	P	15	04.92	-0.5
			S	15	13.84	
SBF	0.65	170	Pg	15	05.50	0.0
			Sg	15	13.80	
BNI	0.70	322	P	15	06.10	-0.2
			eSg	15	14.80	
CKI	0.72	96	P	15	06.70	0.1
			eSg	15	16.60	
FIN	0.73	114	P	15	06.76	0.0
			S	15	16.30	
IMI	0.74	144	P	15	06.76	-0.2
			S	15	16.20	
CALN	0.81	201	Pg	15	08.24	0.0
			Sg	15	18.91	
PCP	0.90	87	P	15	10.35	0.6
			S	15	22.50	
FRF	1.05	206	Pg	15	12.60	0.3
			Sg	15	25.30	
LPG	1.06	339	Pg	15	13.20	0.6
			Sg	15	27.20	
LPL	1.08	339	Pg	15	13.40	0.4
LRG	1.25	213	Pg	15	15.80	0.2
			Sg	15	32.00	
LMR	1.30	206	Pg	15	17.00	0.5
			Sg	15	32.60	

S.D. = 0.4 on 23 of 23 obs.

? JUN 06, 1990 01h 28m 30.27± 0.80s
6.182 N ±10.2km 33.481 E ±20.9km
DEPTH = 10.0km (geophysicist)
4.1mb (4 obs.)
SUDAN (557)
mbLg 4.7 (BUL).

NAI	8.11	156	iPc	30	31.00	-0.2
NPA	21.89	165	eP	33	19.00	-6.5X
KRI	23.18	189	eP	33	39.00	0.6
			eLR	39	48.00	
BUL	26.59	190	eP	34	10.40	-0.4
			eLR	41	43.90	
GBA	43.87	77	P	36	39.00	0.1
	0.7s	1.80nm			4.0mb	
APO	56.21	349	eP	38	13.70	1.1
	0.6s	1.30nm			4.1mb	
SUF	56.68	356	iP	38	19.80	3.9X
	0.5s	3.80nm			4.7mb	
NB2	57.23	347	P	38	18.80	-1.2
	0.8s	1.50nm			4.1mb	
MBC	96.19	354	eP	42	12.00	12.6X
	0.7s	3.00nm				

S.D. = 1.0 on 6 of 9 obs.

JUN 06, 1990 02h 01m 08.24± 0.15s
6.131 S ± 2.7km 77.213 W ± 3.9km
DEPTH = 25.3km (11 depth phases)
5.1mb (41 obs.) 5.0Msz (1 obs.)
NORTHERN PERU (111)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 18C
Centroid Location:
Origin Time 02:01:11.0 1.1
Lat 6.29S 0.13 Lon 77.46W 0.25
Dep 26.5 7.2 Half-duration 1.7
Moment Tensor; Scale 10**16 Nm
Mrr= 3.03 0.88 Mtt= 0.82 0.83
Mff=-3.86 1.49 Mrt=-8.18 1.95
Mrf= 6.37 2.20 Mtf= 1.59 0.79
Principal Axes:
T Val= 11.23 Plg=51 Azm=206
N -0.33 13 313
P -10.89 36 52
Best Double Couple:Mo=1.1*10**17
NP1:Strike=191 Dip=15 Slip= 149
NP2: 311 82 77

TUNG	4.84	345	eP	02	22.50	0.8
			iS	03	20.00	
VC1	5.58	348	eP	02	32.50	0.1
PT08	5.83	174	iPc	02	37.10	1.4
NNA	5.83	176	ePc	02	23.80	-11.6X
	0.7s	78.77nm				
			eS	03	28.00	
PT10	5.91	178	iP	02	37.50	1.0
			iS	03	44.00	
QTO	6.03	347	eP	02	43.60	5.0X
QUR	6.06	347	eP	02	45.00	6.0X
CAYA	6.22	353	eP	02	41.50	0.2
COTA	6.52	350	eP	02	49.50	3.9X
PSO	7.28	359	eP	03	07.50	11.5X
PT06	7.70	174	iP	03	00.30	-1.3
			e(S)	04	04.80	
BOG	11.14	16	eP	03	50.00	0.7
			eS	06	12.00	
ARE	11.70	152	eP	03	56.00	-0.9
FUO	12.03	17	eP	04	11.50	10.0X
ZOBO	13.45	139	Pd	04	18.60	-2.0
	0.9s	75.69nm			5.6mb	
Z	19s	5.11um				
			i	04	29.00	
			(S)	07	32.00	
			LR	10	01.00	
LPB	13.66	140	P	04	17.00	-6.2X
	1.0s	280.00nm			6.1mb	
			S	08	34.00	
			LR	10	04.00	
UPA	15.19	351	ePc	04	48.80	5.9X
CCH	15.56	137	P	04	47.40	-0.6
SDV	16.30	24	eP	04	56.30	-1.0
TOV	17.46	25	eP	05	12.20	0.4
SIV	18.61	123	P	05	22.60	-3.5X
OLLA	19.10	33	eP	05	33.00	0.9
CAR	19.44	32	iP	05	43.00	6.8X
LLAV	19.48	32	iP	05	38.00	1.4
TPP	22.66	44	eP	06	14.92	6.0X
TRN	22.93	43	eP	06	15.43	3.8X
TBH	23.04	44	eP	06	17.34	4.6X
SLB	25.51	39	eP	06	36.94	0.4
BBL	26.57	36	eP	06	45.00	-1.3
PAG	26.86	35	eP	06	50.00	1.0
MGH	27.12	33	eP	06	55.00	3.6X
ROCH	27.32	169	ePd	06	53.80	0.5
PEL	27.55	168	iPd	06	55.50	0.3
	1.0s	40.00nm			5.1mb	
BPA	27.58	33	eP	06	59.00	3.4X
SAN	27.86	168	eP	06	58.50	0.5
TACH	28.00	169	eP	06	53.80	-5.4X
LNV	28.20	170	iPd	07	01.00	0.0
CHCH	28.33	168	iP	06	50.50	-11.7X
BAO	30.17	111	eP	07	18.40	-0.7
ITR	38.54	96	eP	08	30.30	-0.6
			e	08	36.10	
			e	08	41.60	
CAI	39.83	93	eP	08	40.70	-0.9
JSC	40.37	355	P	08	45.70	0.0
RSCP	42.25	350	P	09	00.00	-1.2
			pP	09	08.00	27km
BLA	43.22	356	P	09	09.00	-0.1
	0.8s	11.41nm			4.7mb	
UYO	43.27	339	iPc	09	10.00	0.5
OLY	43.53	343	P	09	10.60	-1.0
			pP	09	17.60	23km
NA2	44.03	359	P	09	16.00	0.4
CBN	44.11	360	eP	09	16.00	-0.2
LNO	45.32	339	eP	09	27.00	1.1
TUL	45.32	339	eP	09	26.90	0.9
	1.2s	26.80nm			5.0mb	
FVM	45.58	345	P	09	26.80	-1.3
	0.8s	26.52nm			5.2mb	
			pP	09	33.90	24km
ALQ	49.29	328	ePc	09	57.00	-0.4
	0.9s	30.46nm			5.3mb	
ANMO	49.29	328	P	09	57.90	0.5
	1.0s	21.25nm			5.1mb	
			pP	10	06.00	27km
WNY	50.38	3	P	10	04.90	-0.4
HBVT	50.40	4	P	10	05.20	-0.3
RSNY	50.50	2	P	10	06.00	-0.3
	0.8s	9.62nm			4.8mb	
			pP	10	13.80	26km
BNH	50.77	5	P	10	08.50	0.2
GLD	52.47	333	P	10	20.80	-0.7
	1.3s	59.77nm			5.4mb	
			pP	10	29.50	29km
GOL	52.49	333	P	10	21.60	-0.2
	0.8s	5.21nm			4.5mb	
			pP	10	29.10	25km
GLA	52.85	320	eP	10	25.00	0.8
PV09	53.38	329	P	10	28.00	-0.4
CBM	53.44	8	P	10	29.00	0.7
			pP	10	36.20	24km
PLM	54.35	319	eP	10	43.00	7.5X
MSU	55.00	327	P	10	40.40	0.2
RVR	55.09	319	eP	10	41.00	0.4
GSC	55.55	321	eP	10	45.00	1.0
RSSD	55.56	337	P	10	44.20	0.0
			pP	10	51.50	24km
SBB	55.81	320	eP	10	45.00	-0.9

DAU	55.90	329	P	10	46.80	0.8	
CLC	56.37	321	eP	10	49.00	-0.9	
DUG	56.56	328	P	10	51.50	0.2	
	0.8s	5.56nm			4.6mb		
BW06	56.86	332	P	10	51.90	-1.6	
	1.1s	7.14nm			4.6mb		
TNP	57.60	323	eP	10	59.00	0.2	
	0.8s	5.39nm			4.6mb		
			ePP	11	06.50	25km	
PTI	58.28	330	P	11	02.60	-0.8	
PRI	58.53	319	eP	11	06.90	1.7	
KVN	58.75	323	P	11	06.50	-0.3	
PRS	59.10	319	ePc	11	08.90	-0.2	
HPI	59.26	330	P	11	10.40	0.0	
CMB	59.50	321	ePc	11	11.30	-0.5	
MHC	59.88	320	ePc	11	14.70	0.2	
LRM	60.52	332	eP	11	18.60	-0.3	
ORV	61.12	322	ePc	11	23.00	0.2	
SCH	61.35	7	eP	11	23.00	-1.1	
WDC	62.37	322	ePc	11	28.80	-2.4	
FHC	63.39	322	e(P)	11	38.30	0.3	
SES	63.44	337	ePc	11	37.50	-0.7	
FFC	64.06	344	eP	11	40.60	-1.5	
	1.1s	20.00nm			5.2mb		
NEW	64.49	332	P	11	44.00	-1.0	
	1.0s	27.50nm			5.3mb		
			pP	11	52.20	26km	
PNT	66.41	331	ePc	11	58.00	0.7	
	0.8s	18.00nm			5.3mb		
EDM	66.54	337	iPc	11	57.00	-1.2	
PGC	67.87	329	eP	12	07.00	0.5	
RUV	69.31	256	iP	12	16.90	0.8	
	0.9s	45.00nm			5.6mb		
TPT	69.54	256	iP	12	18.60	1.1	
	0.9s	40.00nm			5.5mb		
PMO	69.81	256	iP	12	20.30	1.2	
	0.9s	45.00nm			5.6mb		
FRB	69.99	4	ePc	12	18.00	-1.3	
LKO	73.04	78	Pc	12	38.14	-0.5	
	0.5s	16.00nm			5.3mb		
LIC	73.08	82	P	12	38.30	-0.5	
Z	20s	0.76um			5.0Msz		
TIC	73.15	81	P	12	38.80	-0.4	
KIC	73.38	82	P	12	40.40	-0.2	
	1.0s	32.50nm			5.3mb		
TOL	81.15	48	eP	13	25.00	1.7	
EPF	85.12	46	eP	13	44.80	1.2	
	1.0s	12.00nm			5.1mb		
LPF	85.36	41	eP	13	45.10	0.5	
GRR	85.57	41	eP	13	46.10	0.5	
MFF	85.61	42	eP	13	46.50	0.7	
TOA	85.74	334	eP	13	46.60	0.3	
	1.2s	46.70nm			5.6mb		
MBC	85.79	351	ePc	13	47.00	0.8	
	1.0s	34.00nm			5.5mb		
LFF	85.83	44	eP	13	47.60	0.6	
	0.6s	6.30nm			5.0mb		
FLN	85.90	40	eP	13	47.80	0.5	
	0.7s	6.60nm			5.0mb		
EKA	86.04	33	P	13	50.00	2.2	
	0.8s	5.20nm			4.8mb		
LPO	86.08	44	eP	13	48.90	0.6	
LDF	86.09	40	eP	13	48.30	0.1	
	0.9s	9.85nm			5.0mb		
RJF	86.45	44	eP	13	50.70	0.7	
CAF	86.75	44	eP	13	52.00	0.4	
PMR	86.88	333	eP	13	50.70	-1.1	
	1.3s	22.10nm			5.2mb		
TCF	87.13	43	eP	13	53.10	-0.3	
MAF	87.36	43	eP	13	54.60	0.2	
	0.7s	4.40nm			4.8mb		
FBA	87.42	336	eP	13	53.80	-0.5	
	1.6s	39.70nm			5.4mb		
BGF	87.61	43	eP	13	55.60	0.0	
	0.7s	4.95nm			4.9mb		
AVF	88.00	43	eP	13	57.00	-0.5	
	0.7s	3.85nm			4.8mb		
SSF	88.15	42	eP	13	57.80	-0.4	
SMF	88.30	43	eP	13	58.70	-0.3	
	0.8s	4.70nm			4.9mb		
LOR	88.43	42	eP	13	59.00	-0.6	
	0.7s	3.85nm			4.8mb		
LBF	88.46	43	eP	13	59.60	-0.1	
FRF	89.74	46	eP	14	05.90	0.0	
	0.7s	7.70nm			5.1mb		
SVW	89.75	332	eP	14	04.60	-1.0	
LPL	90.10	44	eP	14	08.60	0.8	
LPG	90.11	44	eP	14	08.70	0.8	
	0.6s	2.70nm			4.7mb		
IMA	90.11	337	ePc	14	07.00	-0.3	
	1.2s	12.90nm			5.0mb		
HAU	90.21	42	eP	14	07.70	-0.3	
TTA	90.34	333	eP	14	06.60	-1.7	
ENN	90.37	39	eP	14	09.00	0.4	
	0.9s	9.00nm			5.0mb		
CDF	90.89	42	eP	14	11.10	-0.1	
WTS	91.11	38	eP	14	13.00	1.1	
	0.7s	7.00nm			5.1mb		
BRG	95.44	40	e(P)	14	43.00	11.1X	
STK	127.12	222	iPKPc	20	12.50	-0.1	
	1.1s	8.00nm					
WB5	139.59	229	ePKP	20	28.10	-8.3X	
			e	20	35.40		
BJI	144.16	342	ePKP	20	43.00	-0.8	
HHC	144.55	348	ePKP	20	43.80	-1.7	
BTO	145.08	350	PKP	20	44.50	-1.1	
MTN	146.11	236	iPKPd	20	48.70	0.9	
KNA	146.32	230	ePKP	20	48.90	0.8	
	0.7s	85.00nm					
GTA	146.76	4	iPKPd	20	48.80	0.4	
TIA	147.30	338	ePKP	20	48.80	-0.4	
TIY	147.36	346	ePKP	20	49.90	0.5	
MBL	148.13	211	iPKPc	20	53.60	2.7X	
	0.6s	30.00nm					
SSE	149.76	327	PKP	20	57.00	3.8X	
LZH	150.17	358	PKPc	20	54.50	0.6	
			pPKP	21	05.00		
XAN	151.65	349	PKP	21	01.80	5.8X	
GKN	152.26	36	PKP	20	57.40	0.1	
	1.1s	54.00nm					
PKI	153.03	36	PKP	20	59.50	0.9	
HYB	153.80	63	ePKP	20	59.50	0.0	
GBA	153.96	72	PKPd	21	00.50	0.8	
	0.8s	7.90nm					
CD2	155.33	358	ePKP	21	01.00	-0.2	
GYA	159.45	350	PKP	21	07.00	0.5	

S.D. = 0.8 on 131 of 154 obs.

% JUN 06, 1990 03h 25m 28.05± 0.94s
61.893 N ± 9.5km 5.713 E ± 7.9km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 1.4 (BER).

FRO	0.42	251	iPd	25	36.49	-0.1
			iS	25	42.11	
FOO	0.43	227	iPc	25	37.18	0.3
			iS	25	42.55	
HYA	0.76	182	iP	25	43.00	0.1
			iS	25	53.70	
SUE	0.96	209	iP	25	45.90	-0.3
			iS	25	59.00	
MOL	1.10	51	iP	25	48.61	0.0
			iS	26	02.82	
NRA0	3.04	110	P	26	20.50	3.5X
			Lg	27	00.50	

S.D. = 0.3 on 5 of 6 obs.

• JUN 06, 1990 04h 10m 30.73± 0.83s
27.051 S ± 4.8km 71.661 W ±15.8km
DEPTH = 97.0 ± 18.8 km
4.6mb (2 obs.)
NEAR COAST OF NORTHERN CHILE (122)

RTCB	5.08	151	eP	11	46.70	0.8
RTLL	5.09	148	ePd	11	45.90	-0.2
ZON	5.18	151	eP	11	47.00	-0.3
CFA	5.43	147	iPd	11	50.00	-0.8
RTCV	5.51	151	ePd	11	52.30	0.4
JACH	5.69	171	eP	11	55.00	0.6
			iS	12	53.80	
PEL	6.13	172	iPc	12	00.50	0.1
			iS	13	08.00	
FCH	6.37	170	eP	12	06.00	2.0
			i	12	22.00	
			iS	13	14.30	
LCCH	6.40	179	eP	12	03.50	-0.6
TACH	6.61	175	iPd	12	06.50	-0.5
			iS	13	17.50	
PCH	6.62	172	ePc	12	07.70	0.5
LNV	6.88	178	iPd	12	09.50	-1.2
			iS	13	23.50	
CHCH	6.91	173	eP	12	10.60	-0.6
ARE	10.54	1	eP	13	01.00	0.3
CCH	10.89	29	P	13	04.00	-1.4
LPB	10.98	18	P	13	07.00	0.3
ZOBO	11.22	18	iPc	13	10.70	0.6
	0.5s	4.16nm			4.5mb	
Z	23s	0.15um			5.1MszX	
			LR	16	55.00	
SIV	14.76	44	P	13	50.00	-5.8X
			i	14	00.00	
BAO	24.75	67	eP	15	45.80	0.9
ITR	36.31	66	eP	17	26.20	-0.7
TUL	66.64	339	eP	21	22.80	10.0X
	0.7s	6.20nm			4.6mb	
GBA	148.19	109	PKPd	30	13.60	9.6X
	1.0s	9.00nm				

S.D. = 0.9 on 19 of 22 obs.

JUN 06, 1990 04h 21m 57.63± 1.07s
45.559 N ± 6.1km 3.652 E ± 8.5km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.6 (LDG). MD 2.1 (STR).

PLDF	0.41	357	Pg	22	05.23	-0.8
			Sg	22	10.85	
LBL	0.43	221	Pg	22	06.28	-0.2
			Sg	22	12.45	
PYM	0.49	293	Pg	22	07.50	-0.1
			Sg	22	14.47	
AGO	0.61	324	Pg	22	09.45	-0.6
			Sg	22	17.88	
MAF	1.01	312	Pg	22	17.10	0.4
			Sg	22	30.20	
SMF	1.09	7	Pg	22	17.40	-0.8
			Sg	22	31.60	
BGF	1.15	331	Pg	22	19.20	0.1
			Sg	22	34.50	
TCF	1.24	306	Pg	22	20.20	-0.5
			Sg	22	37.20	
AVF	1.25	351	Pg	22	20.20	-0.6
			Sg	22	36.70	
CAF	1.29	241	Pg	22	20.80	-0.7
			Sg	22	39.00	
LBF	1.44	9	Pg	22	24.00	0.2
			Sg	22	42.00	
SSF	1.51	356	Pg	22	25.20	0.5
			Sg	22	44.00	
RJF	1.52	261	Pg	22	25.00	0.1
			Sg	22	46.40	
LSF	1.64	296	Pg	22	28.40	1.9
			Sg	22	48.80	
LOR	1.72	5	Pg	22	29.80	1.3
			Sg	22	50.00	
LPO	1.95	244	Pg	22	34.40	3.3X
			Sg	22	59.00	
LPL	2.17	98	Pg	22	38.20	3.7X
			Sg	23	03.60	
LPG	2.18	91	Pg	22	38.30	3.6X
			Sg	23	03.80	

S.D. = 0.8 on 15 of 18 obs.

JUN 06, 1990 04h 54m 42.53± 0.91s
33.279 S ± 6.6km 70.557 W ± 6.1km
DEPTH = 89.1 ± 10.5 km
CHILE-ARGENTINA BORDER REGION (127)

PEL	0.17	322	iPd	54	55.80	0.1
			iS	55	06.00	
SAN	0.19	207	iPd	54	55.90	0.2
			iS	55	06.00	
			i	55	06.50	
FCH	0.23	102	iPd	54	56.20	-0.1
			iS	55	06.40	
PCH	0.34	174	iP	54	56.50	0.1
			iS	55	07.50	
ROCH	0.49	309	iPc	54	57.40	-0.2
			iS	55	08.50	
TACH	0.49	220	iPd	54	57.40	0.1
			i	55	07.10	
			i	55	08.50	
JACH	0.60	357	iP	54	58.00	-0.3
			iS	55	10.00	
CHCH	0.66	187	iPd	54	59.00	0.2
			iS	55	12.50	
LCCH	0.87	257	iPc	55	01.10	0.1
			iS	55	15.50	
IHA	0.94	285	eP	55	02.00	0.2
			iS	55	18.20	

06d 04h

LNV	0.98	226	iPd	55	01.70	-0.5
			iS	55	17.00	
RTCV	2.22	51	ePd	55	18.10	-0.1
			S	55	46.00	
RTCB	2.33	40	eP	55	20.50	0.8
			S	55	48.60	
CFA	2.57	50	iPc	55	23.00	-0.1
RTLL	2.63	43	iPc	55	23.20	-0.6
			eS	55	55.00	
RTRS	3.24	17	ePc	55	32.30	0.2

S.D. = 0.4 on 16 of 16 obs.

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* JUN 06, 1990 06h 06m 22.38± 2.09s
33.500 S ± 9.0km 72.392 W ±15.8km
DEPTH = 10.0km (geophysicist)
OFF COAST OF CENTRAL CHILE (134)

LCCH	0.69	88	iPd	06	35.80	-0.2
			iS	06	45.50	
IHA	0.79	53	iPc	06	38.10	0.4
			iS	06	49.50	
LNV	0.94	119	iPc	06	40.70	0.5
			iS	06	52.50	
TACH	1.22	98	iPc	06	44.50	-0.7
			iS	07	00.50	
ROCH	1.27	66	iPc	06	45.50	-0.6
			iS	07	02.50	
SAN	1.45	89	iPc	06	48.50	-0.1
			iS	07	08.00	
PEL	1.47	77	iPc	06	48.50	-0.5
CHCH	1.51	107	iPc	06	50.00	0.4
			iS	07	10.20	
PCH	1.57	95	iPc	06	50.20	-0.3
			iS	07	10.50	
			i	07	13.00	
JACH	1.72	62	iPc	06	51.40	-1.2
			iS	07	14.00	
			i	07	16.00	
FCH	1.77	85	iPc	06	53.50	0.0
			iS	07	15.50	
MDZ	3.03	79	eP	07	17.00	5.6X
			e(S)	08	02.80	
ZON	3.69	59	eP	07	22.00	1.2
RTLL	3.96	58	iPd	07	25.00	0.5
			eS	08	23.00	
CFA	3.98	63	ePd	07	25.50	0.7
			eS	08	24.00	
RTRS	4.15	38	eP	07	27.70	0.5
ZOBO	17.58	14	ePd	10	29.00	-0.7
Z 20s		0.06um				
			LR	19	00.00	
SIV	20.21	33	P	10	55.40	-4.9X

S.D. = 0.7 on 16 of 18 obs.

JUN 06, 1990 06h 33m 41.36± 0.90s
39.907 N ± 6.6km 29.037 E ± 8.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZI	0.54	38	ePg	33	51.70	-0.7
			eSg	34	01.20	
YLV	0.71	21	iPg	33	55.30	-0.1
			eSg	34	08.80	
GBZT	0.93	19	ePg	34	02.00	2.8
			iSg	34	16.00	
EDC	1.00	296	iPg	34	00.00	-0.3
			eSg	34	14.00	
HRT	1.03	28	ePn	34	01.20	0.3
GPA	1.05	68	ePn	34	00.00	-1.2
ALT	1.19	135	ePn	34	04.30	0.7
CTT	1.32	340	ePn	34	05.30	-0.5
KHL	1.63	166	ePn	34	10.00	-0.2

S.D. = 1.3 on 9 of 9 obs.

? JUN 06, 1990 06h 41m 55.28± 2.50s
30.436 N ±25.2km 138.483 E ±24.4km
DEPTH = 425.4 ± 18.7 km
4.2mb (6 obs.)
SOUTH OF HONSHU, JAPAN (211)

MAT	6.09	358	eP	43	29.00	-1.5
0.9s		41.18nm			4.5mb	
			eS	44	43.00	
OFUJ	9.01	16	eP	44	04.50	1.5
			S	45	40.90	
MDJ	15.80	336	eP	45	17.00	0.2
SNY	16.53	317	Pd	45	24.40	0.2
CN2	16.88	326	Pc	45	28.20	0.4
CHTO	37.58	261	eP	48	33.60	0.7
1.0s		2.75nm			3.6mb	
GUN	45.66	281	P	49	38.40	0.4
PKI	46.16	280	P	49	41.90	0.1
0.6s		8.00nm			4.3mb	
DMN	46.40	280	P	49	42.80	-0.9
0.5s		13.00nm			4.6mb	
GKN	46.69	281	P	49	45.80	0.1
HFS	79.06	335	eP	53	14.10	-0.6
0.5s		3.50nm			4.3mb	
NB2	79.29	337	P	53	15.40	-0.6
0.6s		1.10nm			3.7mb	

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

JUN 06, 1990 06h 57m 58.75± 0.90s
39.911 N ± 6.6km 28.950 E ± 8.4km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZI	0.58	43	ePg	58	09.70	-0.9
			eSg	58	19.20	
YLV	0.73	26	iPg	58	12.80	-0.4
			eSg	58	24.80	
EDC	0.94	298	ePg	58	16.50	-0.2
			eSg	58	30.50	
GBZT	0.96	23	ePg	58	19.00	2.1
			iSg	58	33.00	
HRT	1.06	31	ePn	58	17.70	-1.1
GPA	1.11	70	ePn	58	20.00	0.4
ALT	1.24	133	ePn	58	21.80	-0.1
KHL	1.65	164	ePn	58	28.00	0.1

S.D. = 1.2 on 8 of 8 obs.

? JUN 06, 1990 10h 45m 42.94± 9.02s
42.758 N ±16.8km 18.156 E ±59.8km
DEPTH = 5.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.6 (TTG).

BRY	0.32	63	iPgc	45	48.00	-1.4
			eSg	45	56.20	
HCY	0.40	141	ePg	45	50.10	-0.9
			eSg	46	00.00	
NKY	0.62	85	ePg	45	55.00	-0.4
			eSg	46	09.00	
BDV	0.69	133	ePg	45	55.80	-0.9
			eSg	46	10.00	
TTG	0.88	112	ePg	46	01.00	0.7
			eSg	46	17.10	
PVY	1.35	96	ePn	46	10.00	1.5
			eSn	46	33.00	

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

\% JUN 06, 1990 11h 32m 48.48± 0.84s
39.241 N ± 7.9km 27.735 E ± 8.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZM	0.92	204	ePg	33	06.10	0.0
			eSg	33	20.10	
EDC	1.11	5	ePn	33	09.40	0.1
EZN	1.24	299	iPn	33	11.40	0.0
IZI	1.73	50	ePn	33	19.00	0.2
YLV	1.83	43	iPn	33	20.00	-0.3

S.D. = 0.2 on 5 of 5 obs.

JUN 06, 1990 11h 38m 21.15± 0.77s
37.854 N ± 8.6km 14.742 E ± 7.0km
DEPTH = 10.0km (geophysicist)
SICILY (398)

GIB	0.58	284	P	38	32.40	-0.6
ATN	0.65	62	P	38	34.00	-0.1
MEU	0.77	169	P	38	35.10	-1.1
FAI	1.03	236	P	38	41.80	1.3
SOI	1.06	78	P	38	42.00	0.9
			eSn	38	56.00	
MGR	2.37	15	P	39	00.20	-0.4

S.D. = 1.2 on 6 of 6 obs.

? JUN 06, 1990 12h 01m 25.31± 1.00s
31.243 S ±25.0km 68.896 W ±37.9km
DEPTH = 110.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB	0.26	161	iPd	01	41.00	-0.5
RTLL	0.38	103	ePc	01	41.00	-0.7
CFA	0.67	123	iPd	01	44.30	0.6
			eS	01	58.70	
RTCV	0.69	154	e(P)	01	44.20	0.3
			S	01	58.00	
RTRS	1.17	335	iPc	01	48.90	0.3
			eS	02	06.30	

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

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* JUN 06, 1990 12h 16m 14.98± 1.14s
42.467 N ±12.5km 24.301 E ±18.5km
DEPTH = 10.0km (geophysicist)
BULGARIA (359)

SRS	1.45	202	ePd	16	42.00	0.8
			eS	17	04.40	
KNT	1.67	219	eP	16	44.60	0.1
			iS	17	08.00	
VAY	1.73	229	ePn	16	44.80	-0.4
ALN	2.04	140	ePd	17	20.90	31.1X
GRG	2.07	224	eP	16	49.20	-1.1
			eS	17	20.90	
SKO	2.18	258	ePn	16	52.50	0.7
			i	16	54.80	
MLR	3.25	21	eP	17	07.00	-0.1
BZS	3.70	329	ePc	17	20.00	6.7X

S.D. = 0.9 on 6 of 8 obs.

% JUN 06, 1990 12h 55m 14.97± 2.11s
23.237 N ±12.6km 121.845 E ±15.7km
DEPTH = 10.0km (geophysicist)
TAIWAN (244)

TWF1	0.52	283	iPc	55	25.70	0.3
			eS	55	31.40	
TWG	0.82	240	iPc	55	30.90	0.0
TWD	0.87	345	iPc	55	31.80	0.1
			eS	55	42.60	
TWC	1.37	0	ePc	55	40.20	0.2
TWQ	1.39	318	ePc	55	39.80	-0.6
			eS	55	56.40	
TWZ	1.87	353	ePd	55	47.20	0.0

S.D. = 0.4 on 6 of 6 obs.

JUN 06, 1990 13h 57m 17.85± 0.38s
17.938 S ± 6.1km 69.519 W ± 7.4km
DEPTH = 132.8km (4 depth phases)
4.4mb (6 obs.)
PERU-BOLIVIA BORDER REGION (118)

LPB	1.95	44	iPd	57	52.50	0.3
			i	58	20.00	
ZOBO	2.13	39	iPd	57	59.50	4.9X
Z 15s		2.03um				
			iS	58	30.00	
			LR	59	05.00	
ARE	2.39	308	iPc	57	58.10	0.5
			iS	58	26.00	
CCH	3.27	81	iPc	58	13.10	4.1X
ANT	5.80	188	iP	58	42.00	-0.8
			iS	59	45.00	
PT03	7.20	302	iP	58	48.90	-13.0X
			iS	00	08.80	
SIV	8.31	78	iPc	59	16.20	-0.7
PT08	9.02	310	iP	59	24.60	-2.2
PT10	9.26	308	iP	59	31.00	1.4
			eS	00	47.00	
RTRS	12.18	180	ePd	00	07.20	-0.7
RTLL	13.37	176	iPd	00	21.40	-2.1
RTCB	13.50	177	e(P)	00	24.00	-1.3
JACH	14.71	184	eP	00	47.00	6.3X
FCH	15.34	182	eP	00	51.70	2.9
BAO	20.74	87	eP	01	49.80	0.0
ITR	31.56	77	eP	03	31.50	1.6
RSCP	55.38	344	P	06	38.00	-2.3
			pP	07	12.00	146kmX
FVM	58.99	341	P	07	04.70	-1.0
			pP	07	36.50	133km
ALQ	63.22	326	eP	07	33.00	-1.4
0.8s		2.80nm			4.2mb	
ANMO	63.22	326	P	07	34.00	-0.4
GOL	66.39	330	P	07	54.00	-0.8
0.8s		3.13nm			4.3mb	
LIC	68.00	75	P	08	04.94	-0.2
TIC	68.16	75	P	08	05.88	-0.3
KIC	68.31	75	Pc	08	07.06	0.0
0.5s		4.50nm			4.6mb	

LKO	68.76	72	Pc	08	09.80	-0.1
	0.5s		40.50nm		5.5mb	X
MSU	68.93	325	P	08	11.40	0.7
RSSD	69.36	334	P	08	12.00	-1.2
TNP	71.48	322	P	08	27.00	0.8
	0.6s		2.22nm		4.1mb	
			pP	09	00.00	133km
SPA	72.17	180	iPd	08	31.90	2.1
	0.7s		8.59nm		4.6mb	
PRI	72.32	319	eP	08	32.30	1.3
KVN	72.64	322	P	08	33.80	0.8
			pP	09	06.00	129km
LLA	72.79	319	eP	08	34.70	1.0
ORV	74.98	321	ePd	08	47.50	1.3
WDC	76.24	321	ePd	08	52.80	-0.5
SES	77.23	334	ePd	08	59.00	0.4
			pP	09	33.00	136km
PNT	80.32	329	eP	09	16.00	0.7
	0.7s		8.00nm		4.6mb	
MTN	143.24	215	iPKPd	16	36.10	-2.6X
GBA	147.93	93	PKPd	16	51.10	4.6X
	0.5s		1.60nm			
MAT	149.33	313	ePKP	16	54.00	5.8X
	1.1s		24.05nm			
GKN	154.23	62	PKP	17	00.00	4.3X

S.D. = 1.3 on 32 of 40 obs.

% JUN 06, 1990 14h 01m 32.19± 1.76s
40.301 N ±18.6km 27.852 E ± 7.2km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

EDC	0.05	11	iPg	01	33.30	-1.0
			eSg	01	35.30	
KGT	0.45	290	iPg	01	41.30	0.0
CTT	0.95	27	ePn	01	51.00	0.7
YLV	1.19	77	iPn	01	54.80	0.3
IZI	1.24	88	ePn	01	49.20	-6.1X
HRT	1.48	69	ePn	01	58.80	-0.1

S.D. = 0.9 on 5 of 6 obs.

% JUN 06, 1990 14h 41m 26.61± 0.98s
60.563 N ± 5.5km 5.004 E ±11.8km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 1.4 (BER).

ASK	0.12	130	iPc	41	29.28	-0.4
			iS	41	31.45	
BER	0.24	138	iPc	41	31.25	-0.5
			iS	41	35.25	
SUE	0.51	347	iP	41	36.91	0.0
			eS	41	44.19	
HYA	0.84	43	iP	41	42.42	-0.3
			eS	41	55.46	
ODD1	1.04	128	iP	41	47.15	0.9
			eS	42	01.31	
KMY	1.36	175	iP	41	51.61	0.1
			iS	42	09.55	
MOL	2.35	30	iPc	42	06.17	0.3
			iS	42	35.78	

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

• JUN 06, 1990 14h 43m 50.26± 1.35s
33.980 S ±12.6km 71.270 W ± 7.4km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

LNV	0.12	282	iPc	43	56.50	0.4
TACH	0.43	40	iP	44	00.00	0.2
CHCH	0.52	85	iPc	44	00.70	-0.5
			iS	44	10.50	
LCCH	0.56	334	iPd	44	01.20	-0.6
			iS	44	12.20	
PCH	0.72	61	iPd	44	03.80	-0.3
			iS	44	16.00	
SAN	0.73	44	iPd	44	04.00	-0.1
			iS	44	16.50	
IHA	1.00	342	eP	44	08.00	0.0
			iS	44	22.90	
ROCH	1.03	12	iPd	44	08.50	-0.1
			i	44	21.00	
			iS	44	24.50	
FCH	1.04	52	iPd	44	08.60	-0.3
			iS	44	25.00	
JACH	1.41	24	iPd	44	13.50	-0.5
			iS	44	34.10	
MDZ	2.30	62	eP	44	27.50	0.8
			iS	44	45.40	
RTBS	2.77	34	e(P)	44	36.20	2.9
RTCV	3.12	48	ePd	44	38.00	-0.4
RTCB	3.24	41	iPc	44	40.00	-0.1
RTLL	3.54	43	ePc	44	43.20	-1.2
RTRS	4.10	23	ePd	44	51.80	-0.3

S.D. = 1.0 on 16 of 16 obs.

JUN 06, 1990 16h 08m 36.05± 0.55s
42.887 N ± 6.6km 20.773 E ± 4.5km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.6 (TTG).

IVA	0.64	269	ePg	08	47.30	-1.7
			eSg	08	55.70	
PVY	0.66	244	iPgc	08	47.70	-1.5
			iSg	08	57.40	
SKO	1.04	151	iPgc	08	55.00	-0.7
			i	08	56.80	
			iSg	09	11.80	
PLE	1.10	294	ePg	08	55.70	-1.1
			eSg	09	09.40	
TTG	1.21	248	ePg	08	57.80	-0.7
			eSg	09	13.50	
NKY	1.31	267	ePg	09	00.50	0.2
			eSg	09	19.00	
ULC	1.46	231	ePg	09	03.60	1.2
			eSg	09	22.00	
BDV	1.56	248	ePg	09	05.00	1.2
			eSg	09	28.00	
BRY	1.64	271	ePg	09	06.00	0.9
			eSg	09	28.00	
HCY	1.73	256	ePn	09	08.00	1.6
			eSn	09	32.00	
OHR	1.77	179	iPn	09	07.50	0.5
VTS	1.82	99	iP	09	08.00	0.2
			iSg	09	35.00	
BEO	1.95	353	ePn	09	11.50	2.0
			iSg	09	37.50	
VAY	2.06	139	ePn	09	10.70	-0.4
MMB	2.55	120	eP	09	18.00	-0.1
			eSg	10	01.00	
BZS	2.80	12	ePc	09	20.00	-1.6
PLD	3.01	104	eP	09	36.00	11.4X
RZN	3.16	111	eP	09	27.00	0.0
KDZ	3.66	108	eP	09	37.00	3.1X
			iS	10	32.00	

S.D. = 1.2 on 17 of 19 obs.

? JUN 06, 1990 17h 03m 55.16± 7.34s
32.319 S ±46.6km 71.804 W ±33.6km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF CENTRAL CHILE (135)

ROCH	0.93	134	eP	04	13.30	0.2
			i	04	27.50	
			iS	04	28.50	
JACH	1.09	110	iPd	04	15.20	-0.4
			iS	04	30.40	
LCCH	1.17	170	iPd	04	16.60	-0.4
			i	04	32.50	
TACH	1.52	152	iPc	04	22.50	0.1
			iS	04	45.00	
			i	04	48.00	
FCH	1.62	129	ePc	04	24.30	0.1
			iS	04	46.90	
			i	04	48.50	
LNV	1.67	189	iPc	04	24.50	0.0
			iS	04	48.20	
PCH	1.69	140	eP	04	25.70	0.7
			iS	04	50.50	

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

? JUN 06, 1990 18h 19m 41.48± 0.95s
31.484 S ±16.1km 68.586 W ±22.1km
DEPTH = 110.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB	0.18	269	eP	19	57.30	-0.1
RTLL	0.18	33	iPc	19	57.00	-0.4
RTCV	0.38	174	e(P)	19	58.30	0.4
RTBS	0.76	256	ePd	20	00.40	-0.2
MDZ	1.41	189	eP	20	26.90	19.2X
RTRS	1.51	330	iPc	20	09.00	0.3
			eS	20	28.80	

S.D. = 0.5 on 5 of 6 obs.

? JUN 06, 1990 18h 34m 29.48± 2.67s
53.672 N ±44.0km 163.846 W ±29.9km
DEPTH = 33.0km (normal)
4.5mb (2 obs.)
UNIMAK ISLAND REGION (10)

ADK	7.99	262	e(P)	36	26.50	0.4
TTA	10.15	21	eP	36	56.50	0.5
IMA	13.41	18	eP	37	44.00	4.1X
FRB	45.94	38	eP	42	51.00	0.7
NB2	65.57	3	P	45	10.50	-1.0
	0.7s		1.70nm		4.3mb	
HFS	66.53	1	eP	45	16.90	-0.7
	0.8s		5.60nm		4.7mb	

S.D. = 1.1 on 5 of 6 obs.

? JUN 06, 1990 19h 01m 10.04± 1.02s
39.638 N ± 9.3km 26.715 E ± 8.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

EZN	0.35	302	iPg	01	17.40	0.1
KGT	0.93	29	iPg	01	21.00	-6.8X
EDC	1.13	51	iPg	01	30.00	-1.2
			eSg	01	43.00	
IZM	1.31	161	ePn	01	34.00	-0.3
CTT	2.00	40	iPn	01	44.30	0.1
IZI	2.23	71	ePn	01	49.00	1.3
YLV	2.24	65	iPn	01	50.50	2.7X

S.D. = 1.3 on 5 of 7 obs.

% JUN 06, 1990 19h 02m 32.98± 0.96s
45.319 N ± 7.8km 26.667 E ± 6.4km
DEPTH = 10.0km (geophysicist)
ROMANIA (358)

BRD	0.33	54	iPc	02	40.00	0.1
MLR	0.54	289	eP	02	44.00	0.1
VRI	0.55	4	iPd	02	43.50	-0.7
CFR	1.06	97	iPc	02	52.00	-0.9
PPE	1.12	36	eP	02	55.00	1.1
CMP	1.15	268	ePd	03	04.00	9.5X
TLB	1.21	126	iPd	02	56.00	0.4
CLI	1.30	19	ePc	02	57.00	-0.1

S.D. = 0.8 on 7 of 8 obs.

% JUN 06, 1990 22h 49m 05.44± 1.14s
42.240 N ± 6.7km 13.616 E ±12.4km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

AQU	0.19	306	P	49	09.70	-0.1
			eSg	49	13.40	
AZI	0.29	208	P	49	12.00	0.6
			eSg	49	15.60	
SDI	0.55	164	P	49	16.30	-0.4
			eSg	49	25.60	
MNS	0.71	282	P	49	19.00	-0.5
ASS	1.09	320	P	49	25.80	-0.1
			eSn	49	41.50	
ARV	1.35	339	P	49	30.80	0.5

S.D. = 0.6 on 6 of 6 obs.

JUN 06, 1990 23h 30m 17.57± 0.58s
37.703 N ± 6.1km 20.785 E ± 4.4km
DEPTH = 10.0km (geophysicist)
4.1mb (3 obs.)
IONIAN SEA (399)
ML 3.8 (ATH).

VLS	0.50	342	ePg	30	28.00	0.3
ITM	1.05	120	ePg	30	35.90	-1.5
AGG	1.79	42	eP	30	51.60	2.8X
			eS	31	14.30	
IGT	1.86	349	eP	30	53.40	3.7X
			eS	31	20.90	
VLI	1.98	119	ePg	30	53.70	2.2
KEK	2.15	339	ePb	30	57.50	3.6X
ATH	2.34	83	ePb	30	58.50	1.9
NEO	2.49	49	ePn	30	59.40	0.5
LIT	2.74	29	eP	31	02.50	0.1
			eS	31	37.20	
FNA	3.11	8	eP	31	08.10	0.5
THE	3.38	29	eP	31	11.30	-0.1
OHR	3.40	0	iPn	31	13.80	2.0

06d 23h

LCI	3.43	321	P	31	12.40	0.3
			eSn	31	50.20	
GRG	3.48	21	eP	31	13.30	0.4
VAM	3.58	129	ePn	31	14.00	-0.3
SOH	3.70	32	eP	31	16.20	0.2
SOI	3.76	277	P	31	17.00	0.2
KNT	3.82	25	eP	31	17.70	0.0
			eS	32	02.60	
VAY	3.87	20	iPn	31	17.80	-0.5
TDS	3.99	301	P	31	22.30	2.2
SRS	4.04	32	eP	31	20.50	-0.3
			eS	32	07.60	
ORI	4.12	306	P	31	25.70	3.7X
			eSn	32	07.90	
ATN	4.23	278	P	31	24.00	0.4
			eSg	32	11.00	
SKO	4.29	7	iPn	31	24.00	-0.4
			iPg	31	40.80	
			iSn	32	14.50	
			i	32	25.00	
			iSg	32	36.00	
			e	33	10.00	
MMB	4.50	29	ePd	31	27.00	-0.3
MEU	4.70	264	Pc	31	28.70	-1.6
			eSn	32	22.60	
MGR	4.75	302	P	31	32.20	1.3
			eSn	32	21.00	
SMG	4.80	88	ePn	31	31.30	-0.3
MNO	4.83	275	P	31	31.00	-1.2
RZN	5.00	36	iPc	31	34.00	-0.6
RDO	5.04	45	ePn	31	33.30	-1.6
SGO	5.12	305	P	31	38.00	1.9
VTS	5.22	20	eP	31	37.00	-0.7
MLR	8.69	25	eP	32	28.00	1.7
VBY	8.82	334	e(P)	32	37.00	9.0X
VOY	9.78	331	e(P)	32	38.40	-2.9
			eS	34	24.50	
AFC	19.31	276	iP	34	39.30	-6.4X
			eS	34	44.00	
EBAN	19.38	279	eP	34	49.00	2.6X
			eS	35	00.00	
HFS	22.90	351	eP	35	20.00	-2.3
	0.7s	5.50nm			4.2mb	
EKA	23.94	325	P	35	33.00	0.7
	0.9s	10.30nm			4.4mb	
NB2	24.12	349	P	35	31.80	-2.4
	0.7s	1.60nm			3.7mb	
	S.D. = 1.4	on	34 of	41	obs.	

JUN 06, 1990 23h 47m 42.54± 0.35s
9.503 S ± 5.5km 119.746 E ± 8.0km
DEPTH = 33.8km (3 depth phases)
5.0mb (12 obs.)
SUMBA ISLAND REGION (287)

TRT	7.26	284	ePd	49	31.70	2.7
			eS	50	54.90	
KNA	10.77	126	eP	50	17.50	-0.1
	0.3s	16.00nm			5.8mb X	
			eS	52	06.00	
MBL	11.59	180	iPd	50	26.00	-2.7
			eS	52	21.00	
MTN	11.65	108	eP	50	30.00	0.4
			eS	52	31.00	
KKM	15.84	347	ePc	51	29.50	4.6X
MEKA	17.06	184	eP	51	40.10	-0.1
	0.3s	42.00nm			5.0mb	
			eS	54	19.00	
WB5	17.49	128	eP	51	46.20	0.6
			eS	54	45.20	
WARB	17.83	159	eP	51	50.00	0.1
	0.4s	20.00nm			4.6mb	
MRWA	19.93	190	iPd	52	15.10	0.6
BAL	21.19	187	eP	52	29.00	1.5
			eS	56	08.00	
COOL	21.31	177	eP	52	28.00	-0.8
	0.4s	12.00nm			4.7mb	
			e	52	37.00	33km
			eS	56	12.00	
KLB	22.06	185	eP	52	36.00	-0.2
	0.3s	13.00nm			4.8mb	
			e	52	45.00	32km
			eS	56	28.00	
QIS	22.08	122	eP	52	38.00	1.5
			eS	56	35.00	
MUN	22.60	188	eP	52	42.00	0.4
	0.5s	29.00nm			5.0mb	
			i	52	51.80	36km
			eS	56	40.00	
IPM	23.32	306	ePc	52	50.30	1.6
PSI	24.03	299	ePd	52	56.00	0.5
BDT	33.57	322	eP	54	22.30	0.6
	0.8s	47.20nm			5.5mb X	
OZH	34.25	358	Pc	54	28.00	0.4
CHG	34.82	324	iPc	54	33.00	0.4
	1.0s	28.75nm			5.2mb	
CHTO	34.82	324	iPc	54	33.00	0.4
	0.9s	10.02nm			4.7mb	
GYA	37.94	341	P	55	00.40	1.5
WHN	40.15	353	ePc	55	18.50	1.4
NJ2	41.33	359	iPd	55	27.90	1.2
CD2	43.01	340	P	55	40.70	0.0
TIY	47.46	352	eP	56	15.40	-0.8
			sS	03	25.00	
LZH	47.76	343	eP	56	19.00	0.4
	1.6s	51.00nm			5.3mb	
GBA	47.86	298	Pc	56	17.00	-2.5
	0.7s	11.70nm			5.0mb	
BJI	49.40	356	eP	56	30.00	-1.0
	1.0s	18.00nm			5.1mb	
GUN	49.57	320	P	56	31.80	-1.2
PKI	49.64	319	P	56	32.00	-1.5
	0.5s	11.00nm			5.1mb	
GKN	50.44	319	P	56	37.60	-1.8
BTO	50.65	350	eP	56	41.00	0.3
SNY	51.20	4	eP	56	41.60	-3.1X
GTA	52.07	340	eP	56	51.20	-0.3
	1.0s	15.00nm			4.9mb	
MDJ	54.60	9	Pc	57	08.50	-1.4
WMQ	60.53	334	P	57	50.80	-1.1
QUE	64.25	310	eP	58	15.51	-1.6
SLR	87.24	245	iPc	00	28.50	0.9
ITR	151.68	231	ePKP	07	36.60	7.0X
			e	07	55.20	
ZOBO	153.24	163	PKP	07	43.00	10.6X
	S.D. = 1.3	on	36 of	40	obs.	

? JUN 07, 1990 01h 38m 02.64± 0.89s
37.420 N ± 6.9km 3.690 W ±11.4km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
mbLg 2.7 (MDD).

AFC	0.20	145	iPgc	38	07.00	-0.2
			eSg	38	11.00	
EBAN	0.75	354	ePg	38	17.00	-0.3
			eSg	38	28.00	
MAL	0.90	220	ePn	38	20.00	0.1
EVIA	1.53	37	ePn	38	30.50	0.3
			eSn	38	52.00	
	S.D. = 0.5	on	4 of	4	obs.	

? JUN 07, 1990 02h 19m 56.73± 1.53s
31.371 S ±16.0km 68.333 W ±27.1km
DEPTH = 110.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.12	289	iPc	20	12.20	-0.3
RTCB	0.42	254	iPd	20	13.50	0.1
RTCV	0.52	200	e(P)	20	14.20	0.2
			S	20	26.20	
RTBS	1.00	253	ePd	20	18.00	-0.2
			S	20	32.60	
RTRS	1.54	321	iPc	20	24.50	0.1
			eS	20	44.80	
	S.D. = 0.3	on	5 of	5	obs.	

? JUN 07, 1990 02h 44m 13.53± 2.04s
31.154 S ±16.9km 179.822 E ±22.8km
DEPTH = 399.0 ± 18.9 km
KERMADEC ISLANDS REGION (177)

HBZ	6.55	191	P	45	53.40	0.6
PUZ	7.02	190	eP	45	57.90	-0.2
			eS	47	25.40	
WLZ	7.53	206	eP	46	07.70	3.9X
NOZ	7.59	191	eP	46	05.00	0.5
PGZ	9.87	196	eP	46	31.60	0.7
MNG	10.08	199	eP	46	31.00	-2.4
			eS	48	30.30	
MTW	10.58	198	eP	46	39.30	0.1
CAW	10.65	200	eP	46	39.70	-0.3
WDW	10.82	200	eP	46	41.00	-0.9
MRW	10.87	201	eP	46	42.00	-0.5
			eS	48	47.30	
TCW	10.99	202	eP	46	44.50	0.6
THZ	11.96	206	eP	46	56.70	1.1
			eS	49	12.10	
KHZ	12.31	202	eP	46	59.60	0.2
DZM	14.99	304	iPc	47	28.10	0.0
WB5	42.27	274	eP	51	31.60	0.2
			eS	57	27.10	
SUF	144.19	340	iPKP	02	58.20	-4.9X
	0.5s	29.70nm				
NUR	146.34	338	iPKP	03	05.00	-1.7
	0.6s	36.50nm				
BCAO	148.12	217	iPKPd	03	12.50	1.4
UPP	148.91	343	iPKP	03	10.10	-0.7
			i	03	15.80	
NAO	149.44	349	PKP	03	12.60	0.9
	0.6s	8.20nm				
HFS	149.57	346	ePKP	03	12.10	0.3
	0.8s	15.20nm				
MBH	149.82	277	ePKPd	03	18.00	4.8X
PRNI	149.83	278	ePKP	03	18.00	4.8X
	S.D. = 1.0	on	19 of	23	obs.	

? JUN 07, 1990 04h 07m 54.57± 1.26s
31.314 S ±15.4km 68.449 W ±24.7km
DEPTH = 110.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.02	227	iPc	08	10.00	-0.2
RTCB	0.35	240	iPd	08	11.00	0.1
RTCV	0.55	188	ePc	08	12.20	0.1
			S	08	25.00	
RTBS	0.92	248	ePd	08	15.10	-0.1
			S	08	29.70	
RTRS	1.43	322	iPc	08	21.00	0.1
			eS	08	40.50	
	S.D. = 0.2	on	5 of	5	obs.	

& JUN 07, 1990 05h 06m 16.42s
62.884 N 150.615 W
DEPTH = 88.6km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.46	78	iP	06	30.49	-0.4
			Sn	06	41.15	
CUT	0.51	161	iP	06	31.12	-0.1
			Sn	06	43.00	
KTH	0.69	348	eP	06	33.10	0.1
			Sn	06	45.74	
SKT	1.00	206	iP	06	35.98	-0.4
PWA	1.28	164	iP	06	39.71	0.0
GHO	1.37	144	iP	06	40.74	-0.1
			iS	07	00.59	
SUA	1.43	182	iP	06	41.91	0.2
PLRM	1.47	151	iP	06	41.96	-0.1
			iS	07	02.56	
SML	1.52	134	iP	06	42.12	-0.6
NCG	1.65	207	iP	06	44.07	-0.5
CGLM	1.71	203	iP	06	45.04	-0.3
			iS	07	07.08	
PMS	1.72	163	iP	06	46.09	0.7
			iS	07	09.10	
CRP	1.78	205	iP	06	46.09	-0.2
			iS	07	10.20	
SPU	1.84	202	iP	06	47.30	0.3
			iS	07	10.95	
NCA	1.98	115	eP	06	48.17	-0.7
CC8	2.17	34	eP	06	50.16	-1.2
TOA	2.21	109	iP	06	51.69	-0.3
			iS	07	20.69	
SLKM	2.39	175	eP	06	54.91	0.5
			iS	07	22.29	
RDT	2.47	201	iP	06	56.02	0.5
KLU	2.61	120	eP	06	55.66	-1.8
GLI	2.61	139	iP	06	55.80	-1.6
	21 obs. associated					

? JUN 07, 1990 05h 08m 29.28± 1.89s
27.825 N ±15.8km 18.041 W ±17.7km
DEPTH = 33.0km (normal)
CANARY ISLANDS REGION (394)
mbLg 3.1 (MDD).

CHIE	0.12	144	iP	08	35.30	0.1
			iS	08	39.20	
T8T	0.86	7	iP	08	44.80	-0.2

		i	08 56.20			
CTFE	1.70	67 iP	08 58.00	0.9		
GGC	2.15	82 iP	09 04.00	0.5		
		iS	09 26.80			
CFTV	3.54	80 iP	09 22.00	-1.4		
		iS	10 00.20			

S.D. = 1.2 on 5 of 5 obs.

? JUN 07, 1990 06h 01m 10.06± 1.28s
8.255 N ±23.0km 103.003 W ±31.5km
DEPTH = 43.0km (3 depth phases)
4.3mb (9 obs.) 5.0Msz (1 obs.)
OFF COAST OF MEXICO (63)

ALQ	26.75	354 eP	06 48.00	0.1		
	1.0s	3.00nm		3.9mb		
ANMO	26.75	354 P	06 49.00	1.1		
	1.3s	8.41nm		4.2mb		
UYO	26.96	16 e(P)	06 50.20	0.6		
GLA	27.00	338 P	06 49.60	-0.4		
MSU	31.24	346 P	07 30.00	1.8		
GOL	31.38	356 eP	07 30.00	0.6		
	1.0s	3.75nm		4.1mb		
		pP	07 41.30	42km		
TNP	32.35	339 eP	07 38.50	0.6		
	1.4s	1.56nm		3.7mb		
		pP	07 50.90	48km		
DAU	32.86	348 P	07 41.30	-1.1		
KVN	33.53	338 eP	07 48.20	0.1		
		pP	07 54.60	22kmX		
BW06	34.87	352 eP	07 57.30	-2.3		
	1.1s	5.95nm		4.4mb		
		pP	08 08.20	39km		
ORV	35.30	335 eP	08 04.70	1.7		
MIN	36.01	335 ePc	08 10.70	1.5		
WDC	36.59	335 eP	08 12.40	-1.5		
LRM	38.31	349 eP	08 27.80	-0.8		
NEW	41.62	346 P	08 53.20	-2.5		
	1.0s	9.38nm		4.5mb		
ZOBO	42.25	125 P	09 05.50	3.6X		
	1.2s	11.82nm		4.5mb		
		S	15 34.00			
		LR	22 56.00			
LPB	42.42	126 P	09 03.00	0.0		
Z	21s	2.15um		5.0Msz		
		LR	22 50.00			
SES	42.54	352 eP	09 05.00	1.8		
CCH	44.45	125 eP	09 20.00	0.6		
EDM	45.62	351 eP	09 26.50	-1.4		
FFC	46.35	1 eP	09 33.00	-0.6		
	1.2s	18.00nm		4.9mb		
SIV	48.00	120 P	09 46.60	-0.6		
INK	63.29	348 eP	11 36.00	-0.4		
MBC	68.54	356 eP	12 11.00	1.1		
	1.5s	16.00nm		4.8mb		
CHG	145.48	321 ePKP	20 48.50	2.4X		

S.D. = 1.3 on 23 of 25 obs.

? JUN 07, 1990 06h 47m 12.68± 1.29s
42.776 N ± 6.3km 12.796 E ±21.6km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

ASS	0.31	342 P	47 19.30	0.1		
		eSg	47 24.50			
MNS	0.40	192 P	47 20.90	0.0		
		eSg	47 27.00			
ARV	0.73	8 P	47 27.00	0.0		
		eSg	47 39.60			
PGD	1.35	325 P	47 37.50	-0.1		

S.D. = 0.2 on 4 of 4 obs.

? JUN 07, 1990 06h 57m 59.00± 8.37s
30.959 S ±20.0km 67.795 W ±74.6km
DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.69	237 iPc	58 14.00	1.7		
RTCB	1.01	238 eP	58 17.00	0.0		
RTCV	1.10	215 iPd	58 17.90	-0.3		
		S	58 30.00			
RTBS	1.58	243 e(P)	58 23.50	-1.5		
		(S)	58 40.30			
RTRS	1.64	298 iPc	58 25.90	0.1		
		eS	58 46.00			

S.D. = 1.6 on 5 of 5 obs.

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* JUN 07, 1990 07h 14m 42.40± 0.57s
20.117 S ±13.0km 66.555 E ± 8.8km
DEPTH = 10.0km (geophysicist)
5.0mb (14 obs.) 4.8Msz (3 obs.)
MASCARENE ISLANDS REGION (427)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 29C
Centroid Location:
Origin Time 07:14:51.1 0.8
Lat 19.84S 0.09 Lon 66.27E 0.09
Dep 15.0 FIX Half-duration 1.7
Moment Tensor; Scale 10**16 Nm
Mrr=-0.34 0.42 Mtt= 8.58 0.51
Mff=-8.24 0.60 Mrt= 7.02 1.80
Mrf= 1.10 1.53 Mtf=-4.68 0.47
Principal Axes:
T Val= 13.06 Plg=27 Azm= 11
N -2.60 56 233
P -10.46 19 111
Best Double Couple:Mo=1.2*10**17
NP1:Strike=153 Dip=57 Slip= 6
NP2: 60 85 147

CLK	30.34	273 iPd	20 56.10	-0.7		
NAI	34.59	299 iPd	21 34.00	-0.1		
	1.0s	10.00nm		4.7mb		
KRI	35.14	269 iPd	21 41.20	2.5		
GBA	35.18	19 Pc	21 38.80	0.1		
	1.1s	13.90nm		4.7mb		
BUL	35.57	263 iPd	21 40.10	-2.2		
SEK	36.31	249 eP	21 49.00	0.5		
	1.0s	15.00nm		4.8mb		
LSZ	36.81	271 iPd	21 53.10	0.3		
		i	23 19.90			
KSR	36.85	253 eP	21 53.00	-0.1		
SWZ	38.29	251 iPc	21 52.00	-13.1X		
	1.0s	22.00nm				
POO	39.07	11 iPc	22 09.80	-1.7		
HYB	39.12	18 eP	22 12.00	0.1		
CER	43.87	242 eP	22 48.00	-2.8		
QUE	50.01	0 eP	23 39.80	0.5		
		e	24 13.60			
CHG	50.05	41 eP	23 40.00	0.4		
CHTO	50.05	41 eP	23 39.90	0.4		
	1.0s	8.00nm		4.6mb		
DMN	50.73	21 P	23 44.80	-0.1		
PKI	50.80	22 P	23 44.80	-0.7		
GKN	50.93	21 P	23 46.00	-0.3		
	0.9s	48.00nm		5.4mb		
GUN	51.27	22 P	23 48.80	-0.3		
	0.8s	19.00nm		5.1mb		
BCAO	53.10	292 iPd	24 00.00	-2.7		
	0.8s	42.00nm		5.4mb		
		i	24 02.00			
		i	24 08.00			
MAIO	56.50	353 eP	24 26.00	-1.2		
KMI	57.10	40 Pd	24 32.00	0.2		
QIZ	57.57	50 eP	24 38.50	3.6X		
N	13s	0.80um				
		eS	32 34.00			
MBH	58.23	328 eP	24 44.00	4.7X		
PRNI	58.64	328 eP	24 47.00	4.7X		
KSH	59.91	8 eP	24 49.00	-2.0		
E	12s	1.30um				
GYA	60.48	42 P	24 54.80	-0.3		
CD2	62.06	36 eP	25 04.40	-1.3		
Z	22s	0.60um		4.7Msz		
		eS	33 31.80			
WB5	63.28	103 eP	25 12.20	-1.8		
LFK	63.38	330 eP	25 17.00	2.7		
ADE	64.43	120 eP	25 24.00	2.5		
LZH	66.10	32 Pc	25 31.00	-1.1		
	2.0s	34.00nm		5.2mb		
Z	25s	0.60um		4.7MszX		
		pP	25 38.50	24kmX		
		S	34 20.00			
WMQ	66.51	17 P	25 34.00	-0.5		
GTA	66.88	28 P	25 36.30	-0.7		
	1.0s	20.00nm		5.3mb		
XAN	67.29	37 P	25 38.60	-1.0		
ALT	68.03	330 eP	25 47.00	2.8		
IZM	68.90	328 eP	25 52.00	2.4		
YLV	69.58	331 eP	25 56.80	3.1X		
TIY	71.91	37 Pd	26 07.70	-0.2		
Z	20s	0.80um		5.0Msz		
E	12s	0.30um				
		S	35 20.00			
BTO	72.68	33 P	26 12.50	0.1		
		eS	35 36.00			
HHC	73.67	34 P	26 18.70	0.5		
OHR	74.25	326 eP	26 22.00	0.5		
SKO	74.53	327 eP	26 30.60	7.5X		
KIC	74.82	283 P	26 25.16	-0.1		
	1.1s	25.50nm		5.2mb		
VRI	74.95	332 ePd	26 26.00	0.6		
MLR	75.00	332 eP	26 28.00	2.1		
LIC	75.03	282 P	26 26.48	0.0		
	0.9s	19.00nm		5.1mb		
TIC	75.18	283 P	26 27.34	-0.1		
BJI	75.62	37 eP	26 30.00	0.7		
Z	18s	0.41um		4.8Msz		
LKO	76.83	285 P	26 36.36	-0.3		
	0.9s	9.50nm		4.9mb		
LAT	78.80	93 eP	26 33.00	-14.6X		
SRO	80.25	329 eP	27 13.00	18.3X		
SPC	80.34	331 eP	26 53.00	-2.4		
SOP	81.02	328 eP	26 59.20	0.5		
ZST	81.10	329 e(P)	27 02.80	3.6X		
KHC	83.46	328 eP	27 15.00	3.6X		
PRU	83.56	329 eP	27 11.50	-0.3		
		e	27 49.50			
VAI	83.95	324 P	27 22.00	8.1X		
BRG	84.43	330 eP	27 20.40	4.2X		
BNI	84.66	322 P	27 25.00	7.3X		
CLL	85.17	330 iPd	27 29.90	10.0X		
	1.7s	26.00nm				
MOX	85.41	328 e(P)	27 31.00	9.9X		
MDJ	86.27	40 eP	27 27.00	1.5		
		eS	38 00.00			
MAT	87.96	50 eP	27 34.00	0.0		
	1.2s	18.75nm		5.3mb		
		eS	38 24.00			
SUF	88.49	343 eP	27 42.00	6.1X		
NAO	92.22	336 P	27 57.60	4.4X		
	0.9s	1.70nm		4.4mb		
ZOBO	122.65	234 ePKP	33 28.00	-13.4X		
		e	33 45.00			
IMA	127.22	19 e(PKP)	33 51.30	3.0X		
	0.9s	4.17nm				
FFC	144.37	349 ePKP	34 18.00	-2.2X		
	0.6s	7.00nm				
FFC	144.37	349 ePKP	34 26.00	5.8X		
	0.9s	20.00nm				
BLA	146.61	308 PKP	34 26.00	1.4		
NAV	146.84	308 ePKP	34 28.20	3.3X		
EDM	146.96	360 ePKP	34 26.00	1.4		
SGS	147.96	301 PKP	34 33.00	6.3X		
JSC	148.24	303 ePKP	34 33.30	6.1X		
PRM	149.17	303 PKP	34 36.00	7.3X		
TKL	149.70	307 PKP	34 40.60	11.2X		
SES	149.73	357 ePKP	34 34.00	4.9X		
GBTN	150.02	307 ePKP	34 37.50	7.6X		
PNT	150.45	8 ePKP	34 39.00	8.9X		
	1.0s	17.00nm				
MCW	150.52	13 PKP	34 40.00	9.7X		
RSCP	151.06	308 PKP	34 38.50	7.0X		
GMW	151.60	13 PKP	34 38.00	6.1X		
FVM	153.25	317 ePKP	34 37.20	2.6X		
RSSD	154.81	344 PKP	34 49.00	12.2X		
RSSD	154.81	344 e(PKP)	34 45.00	8.2X		
TNP	161.80	10 ePKP	34 53.50	8.4X		
	0.8s	1.96nm				
ALQ	163.99	339 e(PKP)	34 50.00	2.6X		
GLA	167.06	5 ePKP	35 05.00	15.2X		

S.D. = 1.4 on 51 of 89 obs.

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* JUN 07, 1990 08h 13m 11.66± 1.17s
36.836 N ±12.9km 28.561 E ± 9.7km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)

YER	0.37	323 iPg	13 19.00	-0.3		
		iSg	13 24.00			
CIN	0.85	334 ePg	13 25.00	-3.1X		
		iSg	13 36.00			
ELL	1.08	94 ePn	13 31.00	-1.1		
KSL	1.09	131 ePb	13 33.00	0.9		
		eSb	13 53.00			
SMG	1.63	303 ePn	13 40.20	-0.2		
KHL	1.67	27 ePn	13 38.00	-3.1X		
BCK	1.74	68 ePn	13 41.50	-0.6		
IZM	1.87	327 ePn	13 41.00	-3.0X		
ALT	2.53	28 ePn	13 55.00	1.5		

07d 08h

S.D. = 1.3 on 6 of 9 obs.

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* JUN 07, 1990 08h 29m 04.46± 0.81s
39.778 N ±11.3km 114.281 E ± 7.6km
DEPTH = 13.0km (geophysicist)
3.8mb (1 obs.)
NORTHEASTERN CHINA (658)
ML 3.7 (BJI).

BJI	1.48	79	ePg	29 29.50	-1.2
			eSg	29 50.50	
HHC	2.34	298	Pgd	29 44.00	0.7
			Sg	30 15.40	
TIY	2.52	216	Pnd	29 44.40	-1.4
			Pgd	29 49.80	
			Sg	30 21.30	
BTO	3.37	285	Pg	30 02.60	4.7X
			Sg	30 44.50	
TIA	4.21	147	Pn	30 11.30	1.6
			Pg	30 20.80	
			Sg	31 12.80	
XAN	7.16	219	Pn	30 50.50	-0.9
			Pg	31 15.80	
			Sn	32 10.20	
			Sg	32 45.00	
SNY	7.34	71	Pnd	30 54.00	0.1
LZH	9.03	249	P	31 17.50	-0.1
CHTO	24.73	217	eP	34 28.00	1.2
	0.5s		1.28nm		3.8mb

S.D. = 1.3 on 8 of 9 obs.

JUN 07, 1990 09h 25m 19.19± 0.17s
3.563 S ± 3.5km 144.432 E ± 4.2km
DEPTH = 29.3km (8 depth phases)
5.9mb (50 obs.) 6.5Msz (29 obs.)
NEAR N COAST OF PAPUA NEW GUINEA(200)
Ms 6.9 (BRK), 6.1 (PAS).
Mo=1.1*10**19 Nm (PPT).
FAULT PLANE SOLUTION: P-Waves
NP1:Strike= 83 Dip=89 Slip= 0
NP2: 173 90 181
Principal Axes:
T Plg= 1 Azm=308
P 1 38
Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting. The preferred foult plone is not determined.
RADIATED ENERGY
No. of sta: 5 Focal mech. F
Energy 3.2±1.0*10**14 Nm
MOMENT TENSOR SOLUTION
Dep 40 No. of sto: 13
Moment Tensor; Scale 10**18 Nm
Mrr= 0.44 Mtt=-1.18
Mff= 0.73 Mrt=-0.50
Mrf= 0.72 Mtf= 4.53
Principal oxes:
T Val= 4.43 Plg= 4 Azm=309
N 0.56 80 197
P -4.98 9 39
Best Double Couple:Mo=4.7*10**18
NP1:Strike= 84 Dip=81 Slip= -4
NP2: 174 86 -171
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 17S, 44C M.W.: 11S, 25C
Centroid Locotion:
Origin Time 09:25:24.0 0.1
Lat 3.33S 0.01 Lon 144.77E 0.01
Dep 15.0 FIX Half-duration 6.7
Moment Tensor; Scale 10**18 Nm
Mrr=-0.57 0.05 Mtt=-0.51 0.06
Mff= 1.09 0.06 Mrt=-0.59 0.22
Mrf=-0.21 0.25 Mtf= 5.66 0.05
Principal Axes:
T Val= 6.05 Plg= 5 Azm=131
N -0.60 84 273
P -5.45 4 41
Best Double Couple:Mo=5.8*10**18
NP1:Strike=176 Dip=84 Slip= 179
NP2: 266 89 6

MNDI	2.69	197	eP	26 05.00	3.4X
LAT	4.00	140	eP	26 18.00	-2.0
KDB	6.47	155	iPc	26 53.00	-1.9
RAB	7.75	95	iPc+	27 06.00	-6.9X
	1.2s		1250.00nm		6.9mb X
			iS	28 34.00	
MTN	16.06	234	eP	29 05.70	1.0
AAI	16.21	269	ePc	29 11.50	5.0X
	0.6s		53.10nm		4.8mb X
HNR	16.48	111	eP+	29 04.00	-5.9X
			e(S)	32 22.00	
CTA	16.52	174	iPd+	29 16.00	5.5X
	1.3s		182.69nm		5.0mb
			iS	32 19.00	
GUMO	17.04	1	eP	29 16.00	-1.1
	1.4s		1046.15nm		5.8mb
			pP	29 25.40	
			eS	32 17.00	
QIS	17.53	195	eP	29 20.00	-3.3X
			e	29 26.00	
			e	33 26.00	
			e	34 43.00	
WB5	18.96	210	eP	29 39.00	-1.8
			eS	33 13.50	
KNA	19.60	231	eP	29 47.80	-0.5
	0.4s		178.00nm		5.7mb
MNI	20.20	284	ePc	29 55.00	0.4
DAV	21.59	299	eP	30 12.00	3.2X
	2.3s		8000.00nm		6.7mb
QLP	22.89	180	eP	30 21.50	-0.1
			i	30 30.00	31km
RMQ	23.17	170	eP	30 23.00	-1.4
			e	30 26.00	11kmX
BRS	25.00	162	iPc+	30 43.00	0.9
			i	30 47.20	
			ipP	30 52.00	32km
			eS	34 42.00	
PVC	27.32	123	iP	31 01.00	-2.6
COO	27.78	166	iPc	31 09.10	1.4
CMS	27.81	177	eP	31 07.00	-0.9
			e	33 00.00	
DZM	28.19	133	iPc	31 10.60	-1.0
WARB	28.23	215	eP	31 12.00	0.2
	0.5s		130.00nm		5.9mb
STK	28.30	185	iPc	31 11.40	-0.9
	1.6s		116.00nm		5.3mb
			eS	35 55.80	
QCP	29.37	309	eP	31 10.50	-11.7X
MBL	29.63	232	eP	31 23.00	-1.5
	0.5s		40.00nm		5.4mb
KKM	29.75	289	ePd	31 26.50	0.8
BAG	30.82	311	eP+	31 33.00	-2.2
			eS	36 41.00	
BWA	30.93	174	eP	31 35.70	-0.1
FORR	31.21	208	iPc	31 20.40	-17.9X
ADE	31.69	189	ePd-	31 42.50	-0.1
	1.0s		270.00nm		6.1mb
CAN	31.88	173	eP	31 43.20	-1.0
			e	34 41.90	
TRT	31.90	261	ePd	31 44.40	-0.2
CNB	31.92	172	eP	31 44.80	0.2
	1.2s		153.00nm		5.8mb
BFD	33.50	183	eP	31 58.00	-0.2
			e	32 05.00	24km
MEKA	33.77	225	eP	32 00.90	0.2
	0.6s		52.00nm		5.6mb
NANU	33.77	233	eP	32 00.00	-0.8
	0.4s		14.00nm		5.2mb
TOO	33.86	178	eP	32 02.00	0.6
			e	32 10.00	27km
COOL	34.94	216	iPd	32 10.00	-0.8
	0.7s		132.00nm		6.0mb
ANP	36.21	323	iP	32 21.60	-0.1
SVA	36.31	116	eP	32 25.10	2.6
MRWA	37.14	224	eP	32 29.00	-0.3
	0.5s		27.00nm		5.3mb
KLB	37.51	219	eP	32 32.00	-0.4
BAL	37.53	221	eP	32 32.00	-0.6
OZH	37.85	320	Pc	32 33.50	-1.8
	0.8s		200.00nm		6.0mb
	Z 30s		77.80um		6.3MszX
	E 15s		18.10um		
MUN	38.75	220	eP	32 43.00	0.2
	1.0s		140.00nm		5.7mb
			eS	38 44.00	
HKC	39.19	312	iP	32 47.30	0.7
			iS	38 57.00	
TAU	39.26	177	ePd	32 46.16	-0.8
MCO	39.53	312	eP	32 53.60	4.1X
GZH	40.27	313	Pc	32 56.60	1.1
	8.0s		3400.00nm		6.1mb X
	Z 32s		40.90um		6.1MszX
	N 14s		8.50um		
	E 16s		19.70um		
			PP	33 06.00	
			sP	33 12.50	
			PP	34 29.00	
MAJO	40.32	352	iPc	32 51.62	-4.1X
MAT	40.32	352	eP	32 52.00	-3.7X
	2.0s		176.47nm		5.5mb
	Z 20s		17.73um		5.9Msz
			eS	38 55.00	
QIZ	40.77	305	P	32 58.50	-1.2
	N 13s		10.90um		
	E 15s		16.70um		
SSE	40.98	329	iPc	33 00.00	-1.2
	2.2s		170.00nm		5.4mb
	Z 20s		47.30um		6.4Msz
	N 14s		20.10um		
	E 10s		6.20um		
			sP	33 14.00	
			iS	39 10.00	
KGM	41.47	277	eP	33 07.00	1.5
NJ2	42.95	327	iPc	33 17.00	-0.4
	7.5s		1800.00nm		5.9mb X
	Z 34s		35.30um		6.0MszX
	N 15s		23.10um		
	E 16s		8.30um		
			PP	35 04.00	
KLM	43.27	278	eP	33 24.00	3.7X
PPI	44.11	273	eP	33 28.60	1.5
	0.8s		187.70nm		6.0mb
IPM	44.12	280	ePc	33 29.50	2.4
	1.4s		178.10nm		5.7mb
WHN	44.45	322	Pc	33 30.50	1.0
	8.0s		1700.00nm		6.0mb X
	Z 18s		10.90um		5.8Msz
	N 15s		12.80um		
	E 13s		7.70um		
SNG	45.01	284	eP	33 26.20	-8.1X
			eS	40 10.30	
CNZ	45.35	146	eP	33 36.40	-0.4
PSI	45.91	277	ePd	33 42.40	1.0
	1.2s		502.30nm		6.3mb
LTZ	46.25	152	P	33 43.90	0.2
MNG	46.29	147	eP	33 42.20	-1.9
SNZO	46.37	148	iP+	33 48.00	3.4X
			S	40 34.00	
			SS	44 10.00	
SAP	46.49	357	eP	33 43.00	-2.5
KHZ	46.59	150	eP	33 47.80	1.5
LOE	47.00	298	eP	33 50.00	0.0
TIA	47.08	330	Pd	33 49.00	-1.4
	2.0s		200.00nm		5.8mb
	Z 32s		53.30um		6.3MszX
	N 15s		19.10um		
	E 16s		17.00um		
			pP	33 57.50	28km
			S	40 37.00	
GYA	47.16	312	iPc	33 53.00	1.7
	N 15s		4.90um		
	E 15s		11.70um		
DL2	47.21	336	eP	33 50.00	-1.3
	Z 24s		29.60um		6.2MszX
	N 18s		27.70um		
	E 12s		6.40um		
			S	40 42.00	
			ScS	43 43.00	
NST	47.81	295	iPc	33 57.00	0.6
SNY	49.00	339	iPc	34 03.00	-2.2
	1.6s		300.00nm		6.1mb
	Z 20s		63.60um		6.6Msz
	N 17s		19.80um		
	E 16s		22.80um		
			sP	34 18.00	
			iS	41 04.00	
			SS	44 30.00	
BDT	49.37	296	eP	34 10.00	1.6
	1.4s		217.80nm		6.0mb
KMI	49.49	308	iPc	34 10.61	1.0
	2.5s		670.00nm		6.2mb
	Z 30s		34.40um		6.2MszX
	N 10s		2.20um		
	E 10s		2.00um		
			eHPP	36 04.28	
			eS	41 20.08	
MDJ	49.77	346	eP	34 09.40	-1.7

1.4s 100.00nm 5.7mb
Z 28s 47.50um 6.3MszX
N 15s 10.60um
pP 34 18.00 29km
sP 34 23.00
iS 41 19.00
sS 41 34.00
CHG 49.98 298 iPc 34 14.00 0.8
1.0s 91.25nm 5.8mb
eS 41 32.00
CHTO 49.98 298 iPc 34 13.07 -0.1
ePcP 35 28.61
ePP 35 49.30
eHPP 35 51.23
CN2 50.15 342 Pc 34 11.00 -3.0
1.0s 100.00nm 5.8mb
Z 23s 40.00um 6.4MszX
N 14s 13.70um
E 14s 4.70um
pP 34 26.00 57kmX
S 41 22.00
XAN 50.19 321 Pc 34 13.40 -1.1
2.0s 550.00nm 6.2mb
N 15s 15.00um
E 14s 5.20um
S 41 23.50
YSS 50.39 358 ePd 34 17.00 1.3
eS 41 24.00
BJI 50.55 332 eP 34 14.00 -3.1X
1.5s 170.00nm 5.8mb
Z 24s 44.60um 6.4MszX
N 19s 37.50um
eS 41 32.00
TIY 50.68 327 Pc 34 17.00 -1.2
Z 26s 46.40um 6.4MszX
N 17s 21.20um
E 15s 14.10um
CD2 51.75 314 iPc 34 26.40 -0.1
Z 42s 27.90um 6.0MszX
N 14s 12.60um
PP 36 22.50
HHC 53.44 329 P 34 38.20 -0.7
1.2s 200.00nm 6.0mb
Z 32s 71.20um 6.5MszX
N 20s 26.30um
E 20s 25.40um
pP 34 42.00 13kmX
BTO 54.06 328 P 34 42.50 -1.0
N 15s 20.00um
E 15s 12.80um
sP 34 57.00
SS 45 57.00
LZH 54.71 320 iPc 34 48.05 -0.4
2.0s 460.00nm 6.2mb
Z 30s 44.40um 6.4MszX
N 17s 15.40um
E 16s 10.50um
pP 34 56.00 26km
SP 35 02.00
ePcP 35 50.84
ePP 36 47.12
eHPP 36 48.50
PET 57.63 10 eP 35 12.00 3.2X
eS 43 10.00
GTA 59.25 321 P 35 20.00 -0.6
1.0s 200.00nm 6.2mb
Z 45s 55.20um 6.3MszX
N 16s 7.80um
LSA 60.74 307 P 35 32.80 1.4
Z 19s 9.10um 5.9Msz
N 14s 2.90um
E 20s 4.00um
pP 35 44.00 38km
SMY 61.42 20 e(P) 35 34.80 -0.2
Z 20s 30.00um 6.4Msz
HON 61.52 64 P 35 44.00 7.8X
OPA 61.62 63 P 35 39.00 2.1
ADK 64.33 26 eP 35 52.90 -1.4
1.4s 438.00nm 6.4mb
Z 20s 40.00um 6.6Msz
GUN 64.40 303 P 35 55.40 -0.3
PKI 64.68 303 P 35 58.40 0.9
DMN 64.95 303 P 35 58.30 -0.8
IRK 65.15 334 eP 36 00.00 0.4
e(S) 44 43.00
GKN 65.47 303 P 36 02.00 -0.3
PPN 66.19 107 iP 36 10.20 3.4X

1.3s 145.00nm 5.9mb
TVO 66.38 108 iP 36 12.00 3.9X
1.3s 165.00nm 6.0mb
PMO 67.52 105 iP 36 17.30 2.0
1.3s 165.00nm 6.0mb
TPT 67.79 105 iP 36 18.80 1.8
1.3s 150.00nm 5.9mb
VAH 67.79 105 iP 36 18.60 1.6
1.3s 95.00nm 5.7mb
RUV 68.03 105 iP 36 20.10 1.6
1.3s 130.00nm 5.9mb
HYB 68.22 290 ePc 36 20.00 0.2
1.2s 181.80nm 6.1mb
eS 45 22.00
eP'P' 04 45.00
GBA 68.60 286 Pc 36 23.80 1.7
1.3s 143.50nm 5.9mb
WMQ 69.29 320 iPc 36 25.45 -0.5
7.0s 4200.00nm 6.6mb X
Z 36s 21.70um 6.1MszX
N 14s 4.20um
E 13s 3.10um
ePP 38 55.59
eHPP 38 57.80
iS 45 35.08
NDI 71.93 302 iPc 36 41.00 -1.2
ePPP 41 10.00
eS 46 04.00
POO 72.82 291 iPd 36 47.30 -0.3
iS 46 13.00
SDN 73.99 29 eP 36 50.00 -3.6X
Z 20s 15.00um 6.3Msz
SBA 75.17 175 eP 37 01.90 1.7
TIK 75.74 355 e(P) 37 00.00 -3.4X
eS 46 50.00
ILT 75.82 14 eP 37 04.00 0.1
iS 46 47.00
ANM 77.28 20 eP 37 12.10 -0.1
FRU 77.79 315 iP 37 16.00 0.5
e(S) 47 10.00
KDC 79.03 29 eP 37 21.60 -0.3
SVW 79.12 25 eP 37 22.70 0.3
TTA 79.83 24 P 37 23.50 -2.8
QUE 81.00 301 iP+ 37 34.40 1.1
1.0s 12.50nm 4.9mb
eS 47 44.50
DSH 81.05 310 eP 37 33.00 -0.3
eS 47 41.00
PMR 82.15 26 eP 37 39.10 0.8
1.4s 264.60nm 6.1mb
Z 20s 23.50um 6.5Msz
IMA 82.21 21 eP 37 38.80 0.0
1.3s 148.30nm 5.9mb
MAW 83.50 202 iP+ 37 45.20 -0.1
1.1s 134.00nm 6.0mb
Z 18s 23.00um 6.6Msz
TOA 83.64 26 eP 37 46.80 0.6
FBA 83.96 23 eP 37 46.70 -0.9
SIT 87.67 33 P 38 05.00 -1.0
Z 22s 25.81um 6.6Msz
MAIO 88.01 306 eP 38 09.00 0.7
0.8s 10.98nm 5.2mb
eS 48 36.00
INK 90.34 22 eP 38 18.00 -0.5
1.3s 71.00nm 5.8mb
SHI 93.40 299 eP 38 36.00 2.4
GMW 94.49 43 P 38 39.00 1.0
WDC 94.60 50 eP 38 37.40 -1.3
BRK 94.78 52 eP 38 41.10 1.6
Z 20s 46.00um 6.9Msz
e 40 34.00 501kmX
ePP 42 33.00
eSKS 50 03.00
eSP 51 16.00
eSS 56 26.00
eLQ 05 17.00
eLR 08 00.00
BKS 94.80 52 eP 38 41.30 1.6
1.1s 49.00nm 5.8mb
Z 20s 38.00um 6.9Msz
N 20s 26.00um
E 20s 34.00um
ePP 42 29.80
eSKS 49 05.20
ePS 51 05.60
iSS 56 26.00
eLQ 04 29.20

eLR 07 36.40
MBC 94.92 14 eP 38 41.00 1.5
1.2s 11.00nm 5.2mb
LON 95.15 44 P 38 41.30 0.1
MHC 95.26 53 e(P) 38 44.30 2.3
MIN 95.31 50 e(P) 38 42.00 -0.2
ARN 95.35 53 P 38 43.20 0.9
ORV 95.39 51 e(P) 38 42.50 0.2
CMB 96.26 52 e(P) 38 46.40 0.0
PNT 96.57 41 eP 38 52.00 4.5X
FRI 96.81 53 e(P) 38 50.20 1.4
ISA 97.83 55 eP 38 58.00 4.4X
e 42 43.00
KVN 98.03 51 ePd 38 53.20 -1.4
PAS 98.11 56 eP 38 54.00 -0.7
ePP 42 15.00
ePPP 45 47.00
eSKS 49 40.00
eS 50 46.00
ePS 51 45.00
epPS 52 30.00
eSS 56 59.00
eSSS 00 29.00
RScS 02 50.00
eLg 05 20.00
eLR 08 57.00
NEW 98.27 42 eP 38 55.00 -0.2
1.0s 8.00nm 5.2mb
SBB 98.38 56 eP 39 02.00 5.9X
CLC 98.54 54 eP 39 02.00 5.3X
e 42 55.00
TAB 98.57 308 e(P) 39 02.00 5.1X
RVR 98.77 56 eP 39 03.00 5.3X
GSC 99.20 55 eP 39 18.00 18.2X
e 42 52.00
PLM 99.22 57 eP 38 57.00 -3.0X
BAR 99.40 58 eP 38 45.00 -15.7X
BKR 100.51 312 iPdiff39 13.00 7.3X
GLA 100.94 57 ePdiff39 07.00 -0.7
e 43 26.00
KBS 101.01 352 ePdiff39 12.00 5.1X
LRM 101.68 44 ePdiff39 14.80 3.8X
SES 101.99 39 ePdiff39 12.00 0.1
OBN 103.07 326 ePdiff39 19.00 2.5X
Z 28s 13.00um 6.3MszX
eSKS 49 50.00
FFC 106.38 34 ePdiff39 40.00 8.7X
NUR 107.39 333 ePKP 43 52.00 7.7X
e 50 20.00
e 53 20.00
e 59 20.00
NAI 107.51 268 ePKP 43 48.00 1.8
ALQ 107.68 55 ePdiff39 40.00 2.2X
Z 18s 8.25um 6.3Msz
ALQ 107.68 55 e(PKP)43 45.00 -0.9
GOL 107.77 49 PKP 43 48.50 2.5X
Z 20s 10.00um 6.4Msz
RSSD 107.86 45 PKP 44 00.00 14.0X
Z 20s 6.78um 6.2Msz
GLD 107.87 49 PKP 43 48.00 1.9
Z 20s 13.50um 6.5Msz
BBTK 108.86 311 ePKP 43 54.00 6.1X
e 44 12.00
SEK 111.57 238 ePKP 43 47.00 -6.4X
0.9s 16.00nm
VRI 111.62 318 ePKPd 44 05.00 12.2X
SLR 111.72 241 iPKPd 43 56.00 2.2X
1.3s 50.00nm
Z 18s 29.80um 6.9Msz
MLR 112.26 318 ePKP 44 01.00 6.8X
KRI 112.55 250 ePKP 44 01.00 5.5X
HVD 112.65 235 ePKP 44 00.10 4.7X
BFS 112.69 239 iPKPd 44 04.00 8.4X
BUL 112.79 247 iPKPd 43 56.30 0.4
KSR 112.89 240 ePKP 44 10.00 14.0X
CMP 112.93 318 ePKPc 44 13.00 17.7X
GDH 113.33 7 ePKP 44 13.00 17.7X
i 46 10.00
e 52 25.00
i 00 36.00
UZH 113.48 322 ePdiff40 19.00 16.0X
SWZ 113.86 238 ePKP 43 48.00 -9.9X
LSZ 114.19 252 iPKP 44 02.80 4.0X
i 44 07.20
SPC 114.49 323 ePKP 44 03.20 4.7X
e 44 39.70
e 44 54.60

07d 09h

BZS	115.06	319	ePKP	44 03.00		3.6X
FRB	115.32	16	ePKP	43 59.00		-0.3
VAY	115.94	315	ePKP	44 03.30		2.1X
BUD	115.95	322	e(PKP)	44 08.00		7.0X
BEO	116.13	319	e(PKP)	44 10.50		9.1X
SRO	116.24	323	ePKP	44 11.10		9.6X
			e	44 43.50		
SKO	116.51	316	ePKP	44 03.00		0.7
	Z 18s		6.71um		6.3Msz	
	N 18s		4.24um			
	E 19s		5.27um			
			i	44 11.50		
			i	45 18.00		
			i	54 52.00		
			i	58 17.00		
			i	01 16.00		
			LR	42 24.00		
ZST	116.80	323	ePKP	44 09.50		6.9X
			e	45 20.50		
OHR	117.27	315	ePKP	44 04.00		0.2
BRG	117.28	327	ePKP	44 07.40		4.0X
	Z 18s		14.00um		6.6Msz	
	N 18s		8.00um			
	E 18s		11.50um			
			i	45 17.80		
			e	01 56.00		
			e	04 48.00		
SOP	117.36	323	ePKP	44 13.70		10.0X
PRU	117.41	326	PKP	44 07.50		3.8X
	Z 21s		12.20um		6.5Msz	
	N 20s		6.40um			
	E 18s		3.50um			
			e	45 24.50		
UYO	117.52	53	e(PKP)	44 04.00		-0.4
CLL	117.55	328	ePKP	44 10.00		6.1X
	1.1s		20.00nm			
	Z 21s		27.00um		6.8Msz	
			PKKP	54 40.00		
KHC	118.39	326	ePKP	44 04.50		-1.2
	Z 20s		9.40um		6.4Msz	
	N 20s		6.30um			
	E 20s		4.20um			
			e	44 13.20		
			i	45 32.50		
KMR	118.61	324	ePKP	44 13.00		6.9X
			iPP	45 32.00		
MOX	118.65	328	ePKP	44 12.00		5.9X
	Z 21s		25.00um		6.8Msz	
	N 22s		18.00um			
	E 20s		12.40um			
VBY	119.16	321	e(PKP)	44 09.90		2.7X
LJU	119.36	322	ePKP	44 11.00		3.4X
GRF	119.39	327	ePKP	44 10.30		2.8X
	Z 20s		17.00um		6.7Msz	
			e	44 15.10		
CEY	119.57	322	e(PKP)	44 13.50		5.5X
VOY	119.75	322	e(PKP)	44 10.50		2.1X
FVI	120.14	323	PKP	44 17.00		8.0X
WTS	120.29	331	ePKP	44 19.00		9.9X
	0.7s		9.00nm			
			ePP	45 42.00		
TNS	120.55	329	ePKP	44 17.80		8.0X
ORI	120.73	315	PKP	44 20.00		9.6X
SOTA	120.74	325	e(PKP)	44 11.00		0.7
TDS	120.97	315	PKP	44 20.80		10.0X
SGO	121.32	316	PKP	44 18.00		6.6X
MGR	121.33	316	PKP	44 20.00		8.5X
DUI	121.42	318	PKP	44 21.00		9.3X
ENN	121.50	330	ePKP	44 16.00		4.6X
	0.9s		12.00nm			
			ePP	45 52.00		
BSS	121.57	317	PKP	44 24.00		12.1X
SOI	121.80	313	PKP	44 17.00		4.6X
SDI	121.83	318	PKP	44 20.00		7.5X
ASS	121.95	320	PKP	44 15.00		2.3X
AZI	121.96	318	PKP	44 21.00		8.4X
SAL	121.99	323	PKP	44 22.00		9.5X
CRE	122.13	321	PKP	44 20.00		6.9X
PGD	122.16	321	PKP	44 22.00		8.8X
CDF	122.25	328	ePKP	44 15.10		2.0X
MNS	122.27	319	PKP	44 18.10		4.8X
MDI	122.39	324	PKP	44 16.00		2.7X
WIN	122.41	241	ePKP	44 04.50		-9.8X
	Z 22s		42.30um		7.0Msz	
BDI	122.76	322	PKP	44 18.20		4.0X
BSF	122.86	327	ePKP	44 16.50		2.2X
	1.0s		38.00nm			
VAI	122.89	324	PKP	44 17.40		3.2X
HAU	122.99	328	ePKP	44 16.80		2.4X
	0.9s		27.85nm			
BOB	123.09	323	PKP	44 17.00		2.2X
RSCP	123.96	49	PKP	44 30.00		13.2X
	Z 21s		33.70um		7.0Msz	
CKI	123.97	323	PKP	44 20.00		3.5X
LPG	124.26	325	ePKP	44 20.00		2.6X
	0.8s		11.40nm			
LPL	124.26	325	ePKP	44 19.80		2.5X
PGF	124.55	321	ePKP	44 21.20		3.4X
	1.0s		38.00nm			
BNI	124.56	325	PKP	44 25.20		7.4X
LOR	124.77	328	ePKP	44 20.50		2.6X
SBF	124.79	323	ePKP	44 20.10		2.0X
	1.3s		72.20nm			
LBF	124.89	328	ePKP	44 20.70		2.5X
SSF	125.09	328	ePKP	44 21.30		2.8X
	0.9s		16.40nm			
SMF	125.17	328	ePKP	44 21.10		2.4X
	1.1s		29.30nm			
AVF	125.34	328	ePKP	44 21.10		2.1X
	0.9s		8.20nm			
FRF	125.43	323	ePKP	44 21.60		2.3X
	1.3s		65.00nm			
LMR	125.65	323	ePKP	44 22.20		2.5X
	1.1s		34.20nm			
LRG	125.67	323	ePKP	44 22.30		2.5X
	1.5s		141.00nm			
BGF	125.76	328	ePKP	44 22.50		2.6X
	0.9s		20.45nm			
LDF	125.87	332	ePKP	44 22.50		2.5X
	1.1s		19.55nm			
FLN	125.92	332	ePKP	44 22.50		2.4X
	1.1s		39.05nm			
BCAO	126.03	273	iPKPc	44 21.00		-0.4
	1.6s		195.00nm			
			i	44 30.00		
			i	44 40.00		
			i	46 16.50		
			i	49 31.00		
			i	56 56.00		
MAF	126.12	328	ePKP	44 23.20		2.6X
	1.1s		19.55nm			
TCF	126.27	328	ePKP	44 23.50		2.6X
	0.9s		24.55nm			
GRR	126.37	332	ePKP	44 23.50		2.5X
	1.1s		19.55nm			
LPF	126.70	332	ePKP	44 24.40		2.8X
	0.9s		26.20nm			
RSNY	126.73	34	ePKP	44 23.00		1.2X
	Z 22s		21.16um		6.8Msz	
BLA	127.02	45	PKP	44 27.00		4.3X
WNY	127.20	34	PKP	44 27.30		4.5X
CAF	127.23	327	ePKP	44 25.80		3.0X
MFF	127.27	330	ePKP	44 25.30		2.5X
RJF	127.28	328	ePKP	44 25.40		2.6X
LPO	127.86	327	ePKP	44 27.10		3.1X
	1.1s		31.75nm			
LFF	127.93	328	ePKP	44 26.90		2.8X
EPF	129.40	326	ePKP	44 29.80		2.8X
LNV	129.66	141	iPKPd	44 33.00		5.3X
TACH	130.15	141	ePKP	44 34.50		5.8X
TOL	133.96	326	ePKP	44 38.00		2.3X
			ePP	47 06.00		
			iPKS	48 06.00		
			iPPP	49 58.00		
			ePS	57 25.00		
			ePPS	58 52.00		
			iSS	05 07.00		
NNA	136.16	111	iPKP	44 45.50		4.9X
	1.0s		27.00nm			
MAL	136.30	323	ePKP	44 44.00		3.8X
PSO	138.22	92	ePKP	44 36.00		-9.0X
ARE	139.30	120	e(PKP)	44 46.00		-0.7
BOG	141.59	87	ePKP	44 44.00		-7.0X
FUO	141.91	86	ePKP	44 57.50		5.9X
LPB	142.16	123	PKP	44 43.00		-9.0X
	Z 22s		6.30um		6.3Msz	
			eLR	06 24.00		
ZOBO	142.26	122	PKP	44 47.00		-5.4X
	1.2s		81.08nm			
	Z 24s		2.57um		5.9MszX	
			eLR	06 42.00		
BMG	142.50	83	ePKP	44 48.00		-4.3X
CCH	143.34	126	PKP	44 50.80		-3.1X
SDV	144.76	80	ePKP	44 52.30		-3.9X
PDA	144.79	346	e(PKP)	45 04.50		9.2X
TOV	145.47	78	ePKP	45 01.20		3.9X
CFTV	147.92	323	iPKP	45 10.50		9.7X
CAR	148.14	76	ePKP	45 05.50		3.9X
SIV	148.16	128	PKP	45 01.00		-0.5
LLAV	148.26	76	ePKP	45 05.50		3.7X
OLLA	148.35	77	ePKP	45 03.00		1.0
KIC	149.17	276	PKP	45 08.56		5.4X
TIC	149.42	277	PKP	45 09.22		5.7X
LIC	149.46	276	PKP	45 09.38		5.8X
LKO	149.65	283	PKP	45 09.56		5.7X
TBT	149.90	328	iPKP	45 13.80		10.0X
SKI	150.04	61	ePKP	45 08.73		4.4X
CHIE	150.68	327	iPKP	45 15.10		10.1X
MGH	150.75	62	ePKP	45 09.00		3.6X
BPA	150.93	61	ePKP	45 07.00		1.3
PAG	151.49	62	ePKP	45 10.00		3.4X
BBL	151.87	63	ePKP	45 13.00		5.9X
TCE	153.09	73	ePKP	45 13.03		4.1X
TRN	153.43	73	ePKP	45 13.52		4.2X
TPP	153.46	74	ePKP	45 11.78		2.4X
TBH	153.79	73	ePKP	45 21.45		11.6X
BAO	157.31	148	ePKP	45 20.00		5.4X
ITR	167.43	167	ePKP	45 29.70		5.3X
			e	45 34.10		
			e	45 42.40		
			e	46 34.80		
CAI	169.86	171	ePKP	45 32.20		6.3X
	S.D. = 1.2		on 140 of 304 obs.			

JUN 07, 1990 09h 59m 06.76± 0.62s
36.853 N ± 6.1km 28.597 E ± 6.5km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)

YER	0.38	318	iPg	59 15.00		0.5
			eSg	59 25.00		
CIN	0.85	331	eP	59 23.00		-0.1
ELL	1.06	95	ePn	59 26.70		-0.1
KSL	1.08	132	ePn	59 28.20		1.1
KHL	1.64	26	iPn	59 35.60		-0.2
SMG	1.64	302	ePn	59 37.20		1.5
IZM	1.87	326	iPn	59 39.50		0.4
APE	2.47	276	ePn	59 56.80		9.1X
ALT	2.50	28	ePn	59 48.00		-0.2
EZN	3.46	330	ePn	00 01.00		-0.8
EDC	3.54	351	ePn	00 01.60		-1.2
IZI	3.55	11	ePn	00 04.00		1.0
PPCY	3.62	122	eP	00 05.00		0.9
GPA	3.68	21	ePn	00 06.00		1.0
YLV	3.76	9	ePn	00 05.00		-1.1
VAM	3.84	249	ePn	00 15.40		8.2X
GBZT	3.99	9	eP	00 22.40		13.2X
HRT	4.05	12	ePn	00 13.00		2.9X
CSS	4.28	115	eP	00 11.50		-1.9
LFK	4.30	110	eP	00 15.00		1.3
BBTK	4.43	46	iPd	00 16.00		0.4
VLI	4.55	270	ePn	00 23.70		6.5X
VAY	6.47	315	eP	00 50.00		5.6X
HLW	7.34	161	eP	00 55.00		-1.6
MLR	8.86	348	eP	01 17.00		-0.8
	S.D. = 1.1		on 19 of 25 obs.			

? JUN 07, 1990 10h 11m 48.18± 1.26s
37.353 N ±12.3km 3.839 W ± 9.0km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
mbLg 2.7 (MDD).

AFC	0.26	113	iPgc	11 53.50		-0.2
			eSg	11 58.00		
EBAN	0.81	3	iPg	12 03.50		-0.4
			eSg	12 14.00		
EHOR	1.21	293	ePg	12 10.80		0.1
			eSg	12 27.50		
EVIA	1.66	39	ePn	12 18.00		0.5
			eSg	12 38.20		
	S.D. = 0.6		on 4 of 4 obs.			

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* JUN 07, 1990 10h 27m 55.86± 1.05s
51.368 N ±14.9km 176.798 W ±17.2km
DEPTH = 33.0km (normal)
4.8mb (2 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS. (7)
Felt on Adak.

ADK	0.52	8	iPd	28 07.50		0.7

KDC	15.42	56	eP	31 34.00	1.7
TTA	16.07	36	eP	31 41.50	0.8
IMA	18.82	30	eP	32 13.00	-2.0
FBA	20.19	37	eP	32 26.00	-4.1X
MBC	33.15	22	eP	34 30.00	-0.6
PNT	35.76	70	eP	34 54.00	0.6
	0.6s	5.00nm		4.6mb	
EDM	37.72	62	eP	35 08.50	-1.3
SES	40.24	65	eP	35 30.00	-0.8
MTN	78.25	232	iPc	39 53.80	0.1
	0.7s	9.00nm		4.9mb	
SLR	148.06	314	ePKP	47 37.00	0.8

S.D. = 1.3 on 10 of 11 obs.

? JUN 07, 1990 10h 34m 15.65± 1.13s
38.130 N ± 9.2km 23.627 E ±17.2km
DEPTH = 33.0km (normal)
GREECE (364)
ML 2.5 (ATH).

ATH	0.17	156	ePb	34 21.80	-0.2
			eSb	34 26.60	
NEO	1.22	345	ePn	34 36.50	0.1
VLI	1.51	202	ePn	34 41.00	0.3
ITM	1.65	235	ePn	34 42.50	-0.2

S.D. = 0.4 on 4 of 4 obs.

JUN 07, 1990 11h 18m 50.59± 0.16s
60.177 N ± 2.5km 152.324 W ± 2.0km
DEPTH = 103.7km (11 depth phases)
4.7mb (33 obs.)
SOUTHERN ALASKA (2)
Felt (IV) at Kenai, Ninilchik and Willow. Felt (III) at Anchorage, Chugiak, Eagle River, Girdwood, Homer, Palmer, Peters Creek, Sterling and Talkeetna.

RED	0.33	318	iP	19 05.71	-0.4
RDT	0.40	354	iP	19 06.13	-0.3
			eS	19 17.31	
NNL	0.53	104	iP	19 08.25	1.0
NKA	0.78	43	iP	19 11.53	2.2
XLV	0.79	157	iP	19 09.44	0.0
BRLK	0.83	119	iP	19 10.08	0.2
			eS	19 24.09	
CNPM	0.85	139	iP	19 10.44	0.4
AUL	0.98	216	iP	19 11.43	0.1
AUE	0.98	213	iP	19 11.25	-0.1
SPU	1.02	7	iP	19 12.29	0.5
			iS	19 27.53	
CRP	1.10	4	iP	19 13.44	0.6
SLKM	1.10	71	iP	19 12.63	-0.1
			iS	19 29.08	
CGLM	1.15	8	iP	19 13.94	0.6
			eS	19 29.79	
NCG	1.23	4	iP	19 14.88	0.5
CDD	1.42	209	iP	19 16.35	-0.1
MCNL	1.43	227	iP	19 16.34	-0.2
SEW	1.44	92	iP	19 16.26	-0.4
SUA	1.51	30	iP	19 18.67	1.0
PMS	1.73	51	iP	19 21.11	0.7
SKT	1.85	12	iP	19 22.32	0.4
SVW	1.87	301	iPc	19 21.70	-0.5
PWA	1.90	38	iP	19 23.51	1.0
PLRM	2.11	46	iP	19 25.50	0.3
			eS	19 50.85	
PMR	2.11	46	iPc	19 25.40	0.2
GHO	2.30	45	iP	19 28.27	0.4
MTU	2.35	93	eP	19 28.75	0.3
KDC	2.44	182	iPd	19 28.80	-0.8
CUT	2.45	23	iP	19 30.46	0.8
SML	2.54	48	iP	19 31.33	0.3
GLI	2.68	72	iP	19 31.39	-1.5
VZW	2.98	70	iP	19 36.01	-0.9
HUR	3.09	23	eP	19 39.19	0.8
VLZ	3.10	69	iP	19 37.67	-0.8
MID	3.12	101	eP	19 37.70	-1.0
NCA	3.23	53	iP	19 40.55	0.2
TTA	3.28	329	iPd	19 40.80	-0.2
KLU	3.40	64	iP	19 42.29	-0.4
KTH	3.45	10	eP	19 43.45	0.0
TOA	3.55	54	iPc	19 45.40	0.6
MCK	3.91	23	eP	19 50.08	0.5
SDG	4.03	51	eP	19 51.54	0.3
PAX	4.31	46	iP	19 55.64	0.5
NEA	4.67	17	eP	19 59.27	-0.7
DDM	4.73	37	iP	20 02.69	1.7
TGL	4.74	79	eP	19 59.35	-1.7
WRH	4.74	23	iP	20 00.38	-0.6
CCB	4.95	23	eP	20 02.82	-1.1
DMW	4.97	36	iP	20 04.89	0.7
BALM	4.99	76	eP	20 03.07	-1.5
FBA	5.18	22	eP	20 06.20	-0.9
DOT	5.23	45	eP	20 07.44	-0.3
GLM	5.34	23	eP	20 08.16	-1.1
IMA	5.95	355	eP	20 16.80	-1.0
PCA	6.03	86	eP	20 17.87	-1.0
BCPM	6.36	87	iP	20 22.82	-0.5
YKU	6.38	90	eP	20 23.90	0.4
SDN	6.53	226	eP	20 24.50	-1.0
HON	6.82	90	eP	20 27.56	-2.1
DWY	7.18	52	P	20 34.20	-0.4
HYT	7.35	79	P	20 36.00	-0.9
ANM	7.49	312	eP	20 38.40	-0.3
SIT	9.40	102	eP	21 03.50	-1.1
INK	11.49	37	eP	21 31.00	-1.5
ADK	15.87	249	eP	22 29.40	0.5
MBC	19.73	23	ePc	23 12.90	-0.9
	0.6s	49.00nm		5.0mb	
SMY	19.81	263	eP	23 14.90	0.1
	0.7s	116.28nm		5.3mb	
PNT	21.54	106	eP	23 36.00	3.6X
EDM	22.22	91	eP	23 41.50	2.4
NEW	23.47	105	eP	23 54.50	3.3X
	1.1s	11.57nm		4.2mb	
SES	25.06	94	eP	24 11.00	4.7X
FFC	27.06	79	eP	24 48.00	23.4X
	1.1s	15.00nm			
KVN	30.09	119	eP	24 54.00	1.9
			epP	25 18.00	108km
BW06	31.10	105	eP	25 01.50	0.5
			epP	25 25.50	108km
FRB	36.89	47	ePd	25 50.00	0.0
SCH	43.21	57	eP	26 43.00	0.7
			pP	27 07.00	102km
WVLY	46.68	78	eP	27 11.20	1.1
RSNY	47.07	73	eP	27 12.50	-0.7
	0.9s	10.07nm		4.6mb	
			epP	27 37.70	107km
WNY	47.51	72	eP	27 17.00	0.4
			epP	27 41.50	103km
PWLA	47.74	92	eP	27 19.80	1.4
HBVT	47.91	72	eP	27 20.40	0.7
			epP	27 44.50	101km
NIIJ	48.17	274	P	27 21.90	0.2
CHJJ	49.10	273	P	27 29.10	0.2
MAT	49.11	274	eP	27 29.00	0.0
	1.7s	126.92nm		5.6mb	
MTMJ	49.28	274	P	27 29.80	-0.6
TKL	49.34	88	eP	27 32.00	1.2
			epP	27 55.80	99km
NAV	49.53	84	eP	27 33.50	1.3
			epP	27 57.00	98km
CN2	49.74	290	Pc	27 33.30	-0.4
	1.0s	80.00nm		5.7mb	
BLA	49.80	84	eP	27 35.50	1.2
			epP	27 59.50	100km
TBR	49.80	75	eP	27 35.00	0.8
			epP	27 59.50	102km
IIDJ	50.09	273	P	27 36.70	0.2
KEV	50.36	0	eP	27 37.00	-1.0
JSC	51.69	87	eP	27 46.70	-1.9
			epP	28 13.50	113km
SNY	52.13	290	Pc	27 51.80	0.0
SOD	52.75	1	iP	27 55.30	-0.8
BJI	56.98	294	eP	28 26.50	-0.5
	1.2s	16.00nm		4.9mb	
SUF	57.42	1	iP	28 29.40	-0.4
	0.5s	5.50nm		4.8mb	
NAO	58.63	10	P	28 36.80	-1.5
	0.8s	4.50nm		4.6mb	
HFS	59.53	8	eP	28 43.00	-1.5
	1.0s	10.00nm		4.9mb	
Z	20s	2.32um		5.3Msz	
			LR	29 03.00	
NUR	59.62	2	iP	28 44.00	-1.1
	0.7s	20.00nm		5.3mb	
NJ2	62.22	286	Pc	29 02.50	-0.5
EKA	62.25	19	P	29 03.00	0.0
	0.7s	9.40nm		4.9mb	
GTA	64.60	305	P	29 18.40	-0.3
	1.0s	10.00nm		4.7mb	
XAN	65.20	295	P	29 21.60	-0.9
LZH	65.73	300	Pd	29 25.50	-0.5
	0.5s	30.00nm		5.5mb	
BRG	68.75	9	eP	29 44.50	0.0
	1.0s	10.00nm		4.6mb	
MOX	68.77	11	e(P)	29 45.50	0.8
FLN	69.04	20	eP	29 46.00	-0.3
	0.8s	14.80nm		4.9mb	
LDF	69.26	19	eP	29 47.50	-0.2
	0.5s	2.90nm		4.4mb	
GRR	69.33	20	eP	29 48.20	0.1
	0.8s	8.05nm		4.6mb	
LPF	69.65	20	eP	29 50.40	0.4
	0.7s	6.60nm		4.6mb	
PRU	69.68	9	P	29 50.70	0.5
CD2	70.16	298	eP	29 53.20	-0.3
KHC	70.45	10	P	29 55.80	0.8
HAU	70.79	15	eP	29 57.10	0.1
BSF	71.01	15	eP	29 58.60	0.1
	0.6s	3.60nm		4.4mb	
LOR	71.17	17	eP	29 59.40	0.1
	0.7s	8.80nm		4.7mb	
MFF	71.19	20	eP	29 59.60	0.2
	0.7s	6.60nm		4.6mb	
SSF	71.32	17	eP	30 00.40	0.2
	0.8s	13.45nm		4.8mb	
LBF	71.46	17	eP	30 00.90	-0.2
	0.7s	4.40nm		4.4mb	
AVF	71.56	17	eP	30 01.40	-0.2
	0.6s	8.10nm		4.7mb	
BGF	71.71	18	eP	30 02.40	-0.1
	0.8s	11.40nm		4.7mb	
SMF	71.77	17	eP	30 02.60	-0.3
	0.8s	7.40nm		4.6mb	
LSF	71.80	19	eP	30 02.80	-0.3
	0.7s	10.45nm		4.8mb	
TCF	71.88	18	eP	30 03.30	-0.2
	0.5s	1.80nm		4.1mb	
MAF	72.00	18	eP	30 04.20	0.0
GYA	72.65	293	P	30 09.40	0.9
LFF	72.95	20	eP	30 10.10	0.3
	0.7s	6.60nm		4.6mb	
CAF	73.18	19	eP	30 11.20	0.0
	0.7s	3.30nm		4.3mb	
LPO	73.27	19	eP	30 11.80	0.1
	0.6s	7.20nm		4.7mb	
PGF	76.49	14	eP	30 30.50	0.3
	0.8s	13.45nm		4.8mb	
GUN	80.20	310	P	30 51.90	0.9
GKN	80.59	311	P	30 53.70	0.9
PKI	80.68	310	P	30 54.40	0.9
DMN	80.77	311	P	30 55.00	1.2

S.D. = 0.8 on 130 of 134 obs.

& JUN 07, 1990 12h 18m 26.33s
60.904 N 147.584 W
DEPTH = 21.2km
SOUTHERN ALASKA (2)
<AGS-P>.

GLI	0.24	96	iP	18 32.13	-0.1
VZW	0.53	72	iP	18 36.08	-0.8
			iS	18 44.05	
VLZ	0.65	69	iP	18 37.89	-1.0
SML	0.98	339	eP	18 43.12	-1.4
			iS	18 56.68	
KLU	1.00	53	iP	18 43.39	-1.5
			iS	18 56.74	
PLRM	1.02	313	eP	18 43.26	-1.9
PMS	1.02	290	eP	18 43.50	-1.7
			eS	18 56.80	
GHO	1.08	324	eP	18 44.75	-1.6
NCA	1.15	18	eP	18 45.86	-1.4
SEW	1.22	230	eP	18 46.41	-1.8
PWA	1.34	305	iP	18 48.63	-1.2
SLKM	1.36	254	eP	18 48.65	-1.5
TOA	1.38	29	eP	18 49.11	-1.4
			eS	19 06.65	
SUA	1.63	292	eP	18 52.88	-1.3
CUT	1.98	321	eP	18 58.50	-0.6
CGLM	2.19	283	eP	18 59.86	-2.3
SPU	2.19	279	eP	19 01.15	-1.1
CRP	2.25	281	eP	19 01.90	-1.3
NCG	2.27	285	eP	19 02.26	-1.2
CNPM	2.29	234	eP	19 02.09	-1.5
TGL	2.33	92	eP	19 04.02	-0.2
RDT	2.39	264	eP	19 03.76	-1.3
BALM	2.56	85	eP	19 05.73	-1.8

07d 11h

23 obs. ossocioted

& JUN 07, 1990 12h 56m 39.71s
31.080 N 116.670 W
DEPTH = 9.5km
BAJA CALIFORNIA (48)
<ECX>. MD 2.9 (ECX).

PBX	0.66	356	iPc	56	51.61	-1.3
			S	57	00.52	
ENX	0.80	0	ePd	56	53.91	-1.4
			S	57	04.59	
SPX	1.03	92	ePd	56	57.60	-1.9
			S	57	11.27	
CBX	1.23	0	iPc	57	00.90	-1.8
			S	57	17.50	
ECBX	1.44	74	ePd	57	04.76	-1.1
			S	57	23.63	
EMX	1.52	53	eP	57	05.93	-1.0
			S	57	26.00	

6 obs. ossociated

? JUN 07, 1990 13h 23m 55.99± 3.21s
33.813 S ±18.9km 72.569 W ±23.1km
DEPTH = 33.0km (normal)
3.8mb (1 obs.)
OFF COAST OF CENTRAL CHILE (134)

LCCH	0.90	68	iPc	24	11.60	-0.7
			iS	24	25.50	
LNV	0.97	99	iPc	24	13.70	0.4
IHA	1.10	45	iPd	24	14.20	-1.0
			iS	24	32.90	
TACH	1.37	84	iPc	24	18.50	-0.5
ROCH	1.55	58	iPc	24	21.20	-0.6
			iS	24	42.60	
CHCH	1.60	95	iPc	24	22.90	0.5
SAN	1.63	78	iPc	24	22.90	0.1
			iS	24	45.00	
PCH	1.72	84	iPc	24	24.40	0.2
FCH	1.96	76	iPc	24	28.00	0.1
			iS	24	53.50	
JACH	2.00	56	iP	24	27.50	-0.8
			i	24	55.50	
			i	25	02.50	
RTCB	3.94	55	ePd	24	57.00	1.3
ZON	3.98	56	eP	24	27.00	-29.4X
RTLL	4.26	56	e(P)	25	01.00	0.8
RTRS	4.49	37	ePd	25	04.00	0.5
CCH	17.35	21	P	27	58.70	1.1
LPB	17.67	14	eP	28	09.00	7.3X
			LR	34	44.00	
ZOBO	17.92	14	Pc	28	05.80	0.8
	1.0s		8.00nm			3.8mb
	Z 18s		1.04um			5.1MszX
			LR	35	24.00	
SIV	20.55	33	P	28	32.00	-2.5
ITR	40.10	59	eP	31	38.00	7.7X

S.D. = 1.0 on 16 of 19 obs.

• JUN 07, 1990 13h 24m 39.38± 0.35s
16.125 S ±12.5km 176.885 W ± 9.1km
DEPTH = 33.0km (normal)
5.3mb (20 obs.) 5.2Msz (5 obs.)
FIJI ISLANDS REGION (181)
CENTROID, MOMENT TENSOR (HRV)
Dato Used: GDSN
L.P.B.: 16S, 31C
Centroid Locotion:
Origin Time 13:24:39.3 1.1
Lat 15.47S 0.11 Lon 176.89W 0.06
Dep 15.0 FIX Half-duration 2.2
Moment Tensor; Scale 10**17 Nm
Mrr= 0.03 0.08 Mtt=-1.08 0.10
Mff= 1.05 0.11 Mrt= 0.93 0.23
Mrf=-2.43 0.26 Mtf= 1.12 0.08
Principol Axes:
T Vol= 3.04 Plg=38 Azm= 96
N -0.04 31 338
P -3.01 37 221
Best Double Cauple:Mo=3.0*10**17
NP1:Strike=249 Dip=31 Slip= 0
NP2: 158 90 121

SVA	4.87	245	eP	25	51.10	-1.2
DZM	16.82	247	iPc	28	35.30	1.1
HNR	23.54	284	e(P)	29	40.00	-7.7X
			eS	34	10.00	
RMQ	33.54	246	eP	31	17.00	-1.4
CNB	35.67	231	eP	31	37.10	0.4
	0.9s		18.00nm			5.0mb
CAN	35.94	231	eP	31	38.80	-0.2
BWA	36.04	233	eP	31	37.70	-2.1
CMS	37.18	239	eP	31	48.00	-1.3
QLP	37.55	247	eP	31	50.00	-2.4
TOO	39.42	230	eP	32	08.00	-0.1
STK	40.78	240	iPc	32	19.40	0.1
	1.3s		33.00nm			4.9mb
WB5	46.39	258	eP	33	00.50	-4.3X
MTN	50.34	267	eP	33	31.30	-4.2X
	1.0s		150.00nm			6.0mb
IIDJ	66.84	321	eP	35	29.20	-1.2
MAT	67.38	322	(P)	35	28.00	-5.7X
	1.2s		34.38nm			5.3mb
	Z 20s		1.06um			5.1Msz
			eS	44	02.00	
MTMJ	67.65	322	eP	35	32.80	-2.7
PRS	73.94	44	e(P)	36	12.70	-0.6
MHC	74.34	43	ePc	36	17.00	1.2
FRI	75.42	44	eP	36	21.80	0.0
RVR	75.43	48	eP	36	24.00	2.0
PLM	75.47	49	eP	36	23.00	0.5
SBB	75.47	47	eP	36	23.00	0.7
ISA	75.54	46	eP	36	23.00	0.4
CMB	75.55	43	ePc	36	22.10	-0.5
WDC	75.65	40	eP	36	23.00	-0.1
ORV	75.70	41	e(P)	36	23.70	0.3
MIN	76.09	40	eP	36	25.90	0.1
CLC	76.22	46	eP	36	27.00	0.5
KDC	76.33	13	eP	36	24.70	-1.8
GSC	76.51	47	eP	36	28.00	-0.2
MDJ	77.59	324	Pc	36	35.50	1.7
	1.2s		40.00nm			5.3mb
	Z 20s		1.40um			5.3Msz
			pP	36	41.50	19kmX
			S	46	25.00	
			SS	51	28.00	
KVN	77.60	43	eP	36	34.30	0.0
TNP	77.67	44	eP	36	34.90	0.2
	1.0s		7.00nm			4.6mb
CN2	79.52	322	eP	36	42.20	-2.2
	Z 18s		0.90um			5.2Msz
	N 14s		0.60um			
	E 14s		0.40um			
			epP	36	48.00	18kmX
			eS	46	42.00	
SNY	79.58	319	eP	36	44.50	-0.3
	1.4s		50.00nm			5.3mb
TTA	80.48	10	eP	36	48.30	-0.9
PMR	80.54	13	eP	36	47.90	-1.5
	1.1s		18.50nm			5.0mb
WHN	80.75	305	eP	36	53.00	1.8
TOA	81.66	14	eP	36	54.50	-0.9
PNT	82.45	34	eP	36	59.00	-0.7
BJI	83.56	315	eP	37	06.00	0.4
	1.2s		41.00nm			5.4mb
	Z 22s		0.92um			5.1Msz
			eS	47	28.00	
IPM	83.69	277	ePd	37	08.10	1.3
	1.1s		66.80nm			5.7mb
FBA	83.76	12	eP	37	04.10	-2.0
IMA	83.78	9	eP	37	04.20	-2.2
	1.4s		24.40nm			5.2mb
ALQ	83.85	51	eP	37	08.00	0.5
	1.5s		34.72nm			5.3mb
ANMO	83.85	51	P	37	07.00	-0.5
	1.4s		26.16nm			5.2mb
LRM	84.68	39	eP	37	12.10	0.6
SNG	84.82	279	eP	37	14.10	1.6
BW06	85.07	43	P	37	11.00	-2.5
PSI	85.17	274	eP	37	15.00	0.8
TIY	85.18	311	eP	37	15.00	1.1
	Z 26s		1.14um			5.1MszX
	N 14s		0.40um			
XAN	86.35	307	P	37	22.20	2.4
GOL	86.59	47	P	37	21.50	0.4
	0.9s		3.79nm			4.6mb
LOE	86.82	289	eP	37	23.00	0.7
HHC	87.08	314	eP	37	23.00	-0.3
NNT	87.23	284	eP	37	27.40	3.1X
SES	87.73	36	eP	37	26.00	0.0
BTO	88.06	313	eP	37	29.50	1.6
	N 15s		0.50um			
	E 15s		0.50um			
			sP	37	39.00	
KMI	88.33	297	Pd	37	32.50	2.8X
RSSD	89.27	43	P	37	32.00	-1.8
CD2	89.34	302	eP	37	30.50	-3.7X
CHG	89.77	290	ePd	37	39.00	2.6X
	0.8s		9.33nm			5.1mb
CHTO	89.77	290	eP	37	37.70	1.3
	1.5s		28.72nm			5.3mb
INK	89.80	15	eP	37	42.00	6.6X
LZH	90.97	307	Pd	37	33.00	-8.8X
	2.5s		79.00nm			5.6mb
	Z 42s		1.50um			5.1MszX
			pP	38	02.50	112kmX
			i	38	33.50	
			i	39	38.00	
			S	48	38.00	
LZH	90.97	307	Pd	37	43.00	1.2
	2.5s		79.00nm			5.6mb
	Z 42s		1.50um			5.1MszX
			S	48	38.00	
FFC	94.57	34	eP	37	56.00	-1.7
	2.1s		55.00nm			5.6mb
GTA	95.03	309	eP	38	01.00	0.6
	1.4s		13.00nm			5.2mb
MBC	98.31	12	eP	38	15.00	0.8
MAIO	126.34	303	ePKP	43	36.00	-5.0X
ITR	132.02	118	ePKP	43	51.80	-0.4
CLL	144.02	349	e(PKP)	44	11.00	-2.1X
WTS	144.09	356	e(PKP)	44	12.00	-1.2
	1.5s		37.00nm			
SPC	144.19	341	ePKP	44	11.40	-2.3X
BRG	144.26	348	ePKP	44	12.60	-0.9
			e	44	22.80	
MOX	144.89	351	e(PKP)	44	17.00	2.4X
PRU	144.98	347	ePKP	44	09.00	-5.8X
	Z 19s		0.60um			5.4Msz
			e	44	13.00	
BBTK	145.01	318	ePKP	44	14.00	-1.3
MLR	145.02	332	ePKP	44	14.00	-1.2
ENN	145.37	357	ePKP	44	15.00	-0.4
	1.5s		57.00nm			
MEM	145.52	357	PKP	44	18.00	2.4X
CMP	145.60	332	ePKPc	44	22.00	5.9X
TNS	145.72	354	ePKPd	44	10.90	-5.2X
BHL	145.81	307	PKP	44	18.00	1.2
GRF	145.88	351	iPKP	44	16.00	-0.4
			e	44	19.60	
KHC	145.99	348	PKP	44	16.00	-0.6
	1.5s		62.00nm			
SRO	146.00	342	ePKP	44	16.40	-0.2
ZST	146.01	343	iPKP	44	16.80	0.2
BUD	146.08	341	e(PKP)	44	16.00	-0.7
DOU	146.10	358	PKP	44	18.80	2.1X
WET	146.12	348	iPKPc	44	17.60	0.8
	1.5s		65.00nm			
SOP	146.63	343	ePKP	44	20.40	2.8X
LFK	146.81	311	ePKP	44	19.60	1.2
KMR	146.89	346	iPKP+	44	19.20	1.2
			i	44	44.30	
FLN	147.32	4	ePKP	44	19.40	0.7
	0.7s		15.45nm			
BHG	147.48	348	ePKP	44	21.60	2.6X
LDF	147.51	4	ePKP	44	19.70	0.7
PRNI	147.60	302	e(PKP)	44	20.00	0.3
CDF	147.62	355	ePKP	44	20.60	1.3
	1.4s		52.30nm			
GRR	147.66	5	ePKP	44	20.80	1.6
	1.2s		35.70nm			
BEO	147.87	336	ePKP	44	25.00	5.4X
MBH	147.87	301	ePKP	44	22.00	1.9X
LPF	148.00	5	ePKP	44	21.90	2.1X
	1.2s		65.45nm			
HAU	148.10	356	ePKP	44	22.30	2.3X
BSF	148.24	355	ePKP	44	22.20	1.9
SQTA	148.28	349	iPKPc	44	24.70	4.3X
	1.5s		40.00nm			
FVI	148.57	347	PKP	44	24.00	3.3X
LJU	148.68	345	e(PKP)	44	21.50	0.5
VOY	148.85	345	e(PKP)	44	25.70	4.3X
LOR	148.94	359	ePKP	44	24.30	2.9X
	0.8s		8.05nm			
VBY	148.99	343	e(PKP)	44	25.30	3.9X
CEY	148.99	345	e(PKP)	44	23.00	1.5
SSF	149.15	359	ePKP	44	25.10	3.4X
	0.9s		11.45nm			
TRI	149.18	345	PKP	44	28.00	6.3X
LBF	149.22	359	ePKP	44	25.10	3.3X

	0.9s	12.30nm				
IZM	149.30	321	ePKP	44	26.00	3.8X
CTI	149.32	348	PKP	44	25.00	2.9X
AVF	149.42	360	ePKP	44	24.80	2.7X
	1.4s	26.15nm				
SMF	149.56	359	ePKP	44	25.40	3.1X
BGF	149.66	0	ePKP	44	26.20	3.8X
	1.3s	37.90nm				
VAY	149.79	330	ePKP	44	25.50	2.7X
SKO	149.80	332	ePKP	44	25.00	2.2X
			i	44	29.00	
TCF	149.92	1	ePKP	44	26.60	3.7X
MDI	149.93	351	PKP	44	30.00	7.2X
LSF	149.94	2	ePKP	44	26.60	3.7X
	1.0s	26.00nm				
VAI	149.97	352	PKP	44	29.40	6.5X
MAF	149.99	1	ePKP	44	27.30	4.3X
	1.5s	52.25nm				
LPL	150.54	355	ePKP	44	29.20	5.1X
LPG	150.56	355	ePKP	44	29.50	5.3X
	1.3s	39.70nm				
OHR	150.78	332	ePKP	44	20.50	-3.9X
	1.4s	117.00nm				
			e	44	29.50	
BOB	150.95	351	PKP	44	33.50	9.0X
BNI	151.01	355	PKPd	44	31.00	6.3X
PGD	151.39	347	PKP	44	31.00	5.7X
CKI	151.45	352	PKP	44	30.00	4.8X
DOI	151.50	354	PKP	44	31.00	5.6X
CRE	151.57	346	PKP	44	30.00	4.5X
PII	151.78	349	PKP	44	28.00	2.3X
ASS	151.93	345	PKP	44	32.00	6.0X
AZI	152.74	343	PKP	44	38.00	10.9X
SDI	152.89	342	PKP	44	37.00	9.6X
BCAO	160.91	234	iPKPd	44	39.50	1.5
	1.6s	39.00nm				
			i	45	22.50	

S.D. = 1.2 on 83 of 141 obs.

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* JUN 07, 1990 13h 53m 45.00± 1.13s
44.143 N ±27.5km 148.275 E ±12.4km
DEPTH = 33.0km (normal)
4.8mb (8 obs.) 4.2Msz (2 obs.)
KURIL ISLANDS (221)

AOMJ	6.86	241	eP	55	21.60	-4.2X
			eS	56	35.00	
OFUJ	7.08	227	P	55	21.40	-7.5X
			S	56	34.30	
YAMJ	8.61	229	P	55	43.10	-7.1X
MAT	10.79	229	(P)	56	13.00	-7.3X
	1.0s	6.00nm			4.8mb	
			eS	58	08.00	
MDJ	13.38	279	eP	56	56.00	1.1
CN2	16.43	277	eP	57	31.60	-2.9
			epP	57	41.50	
BJI	24.08	271	eP	59	00.00	1.8
	1.2s	34.00nm			4.8mb	
NJ2	25.97	252	Pc	59	18.00	1.8
Z	20s	0.40um			3.9Msz	
TIY	27.67	269	eP	59	34.00	2.2
BTO	28.31	276	eP	59	37.00	-0.6
LZH	34.57	272	Pc	00	31.50	-1.3
	2.0s	46.00nm			5.1mb	
Z	25s	0.60um			4.2MszX	
			pP	00	40.00	29kmX
GTA	36.03	280	P	00	45.20	0.1
	1.2s	10.00nm			4.6mb	
Z	26s	1.50um			4.6MszX	
CD2	37.25	265	eP	00	54.60	-0.7
WMQ	42.71	292	P	01	40.60	0.2
INK	45.65	31	eP	02	05.00	1.3
CHTO	48.17	255	eP	02	22.30	-1.8
	1.0s	2.00nm			4.1mb	
WDC	62.77	59	eP	04	11.10	1.9
ORV	64.02	59	eP	04	20.70	3.2X
FFC	64.90	37	eP	04	23.00	0.1
	0.6s	5.00nm			4.8mb	
LRM	65.48	49	eP	04	26.30	-0.9
CMB	65.64	60	e(P)	04	26.00	-2.0
FR8	68.57	17	eP	04	45.00	-1.0
HFS	69.64	338	eP	04	52.00	-0.6
	0.8s	6.80nm			4.8mb	
Z	19s	0.28um			4.5Msz	
		LR		32	00.00	
NAO	69.81	339	P	04	53.60	-0.1
	1.1s	8.90nm			4.7mb	
CLL	77.34	333	eP	05	38.00	0.4
			i	05	49.80	
BRG	77.40	332	e(P)	05	50.80	12.8X
PRU	77.95	332	eP	05	41.00	0.0
			e	05	54.10	
MOX	78.36	334	e(P)	05	56.00	12.7X
KHC	79.01	332	P	05	48.00	1.1

S.D. = 1.4 on 22 of 29 obs.

JUN 07, 1990 14h 48m 14.03± 0.58s
36.832 N ± 6.3km 21.304 E ± 3.9km
DEPTH = 58.2 ± 6.4 km
4.3mb (5 obs.)
SOUTHERN GREECE (368)

ITM	0.61	55	iPnd	48	26.30	-0.9
VLI	1.32	94	iPnd	48	38.50	2.0
VLS	1.46	337	ePn	48	40.00	1.6
ATH	2.23	59	ePn	48	51.00	1.8
			eSn	49	15.50	
VAM	2.74	120	ePn	48	57.00	0.5
NEO	2.90	31	ePn	48	59.60	0.9
KEK	3.11	338	ePn	49	02.20	0.5
APE	3.39	85	ePn	49	05.00	-0.8
OHR	4.29	355	iPn	49	19.20	0.9
			iSn	50	07.00	
			Lg	50	12.00	
SOI	4.36	288	P	49	20.00	0.8
LCI	4.37	324	P	49	18.10	-1.3
			eSn	50	03.00	
SMG	4.50	77	ePn	49	21.00	-0.2
TDS	4.82	307	P	49	25.00	-0.8
IZM	4.98	70	ePn	49	28.00	-0.1
ORI	4.99	312	P	49	28.80	0.6
			eSn	50	19.70	
MMB	5.11	21	iPc	49	30.00	0.1
			eS	50	27.00	
MEU	5.11	275	P	49	30.20	0.2
			eSn	50	25.50	
ULC	5.37	343	ePn	49	31.80	-1.6
			eSn	50	32.00	
RDO	5.42	36	ePn	49	33.80	-0.4
RZN	5.52	28	iPc	49	36.00	0.2
MGR	5.59	308	P	49	36.00	-0.5
KDZ	5.77	32	iP	49	39.00	-0.1
			eS	50	37.00	
TTG	5.81	345	ePn	49	38.30	-1.3
			eSn	50	42.00	
SGO	5.99	310	P	49	42.00	-0.1
KSL	6.71	94	ePn	49	52.20	0.0
DUI	7.17	314	P	49	59.00	0.3
CMP	8.89	17	ePc	50	21.00	-1.3
DSI	12.78	110	e(P)	51	12.00	-2.8
PRNI	13.11	116	eP	51	15.00	-4.3X
NUR	23.79	4	eP	53	22.00	0.1
HFS	23.83	351	eP	53	22.50	0.2
	0.5s	4.30nm			4.2mb	
NAO	24.92	348	P	53	33.40	0.6
	0.7s	2.10nm			3.7mb	
SUF	26.09	5	eP	53	44.00	0.4
GKN	53.33	80	P	57	29.50	-0.2
	0.6s	7.00nm			4.9mb	
DMN	53.88	80	P	57	34.00	0.1
	0.6s	10.00nm			5.0mb	
PKI	54.14	80	P	57	35.60	-0.2
GUN	54.35	80	P	57	37.20	-0.3
CHTO	69.27	82	eP	59	18.30	1.1
	1.0s	1.75nm			3.9mb	

S.D. = 1.0 on 37 of 38 obs.

JUN 07, 1990 15h 30m 13.17± 0.29s
10.990 N ± 3.9km 62.992 W ± 3.7km
DEPTH = 17.9km (6 depth phases)
4.8mb (11 obs.)
NEAR COAST OF VENEZUELA (97)
ML 5.1 (FDF). MD 4.4 (TRN).

TCE	1.25	103	eP	30	34.28	-1.5
			eS	30	48.84	
TRN	1.60	102	eP	30	40.40	-0.3
			eS	31	00.60	
TPP	1.66	114	eP	30	43.50	2.0
			eS	31	02.64	
GRW	1.75	48	eP	30	44.00	1.1
			eS	31	01.00	
TBH	1.96	105	eP	30	47.11	1.2
			eS	31	08.84	
TPR	2.18	85	eP	30	47.39	-1.8
			eS	31	13.56	
BOT	2.24	85	eP	30	49.96	0.0
			eS	31	19.25	
SVB	2.84	37	eP	30	58.99	0.5
SVV	2.89	37	eP	31	00.45	1.2
SLB	3.40	34	eP	31	06.69	0.2
			eS	31	45.33	
SLW	3.62	33	eP	31	09.79	0.1
			eS	31	52.03	
BIM	3.97	28	iPc	31	15.13	0.5
MVM	4.09	30	eP	31	16.60	0.3
FDF	4.13	26	iPc	31	17.26	0.4
			S	32	01.70	
CRM	4.25	28	eP	31	19.09	0.5
DPMT	4.52	20	eP	31	23.50	1.1
			eS	32	18.00	
BBL	4.74	18	eP	31	24.71	-0.9
MGG	5.16	18	eP	31	31.41	0.0
PAG	5.17	14	eP	31	31.71	0.1
			S	32	29.00	
SFG	5.51	18	eP	31	36.40	-0.1
SEG	5.57	15	eP	31	37.44	0.2
MGH	5.75	7	eP	31	39.10	-0.6
			S	32	45.00	
BPA	6.12	10	eP	31	44.84	-0.2
NEV	6.12	4	eP	31	44.10	-0.9
SKI	6.31	2	eP	31	47.43	-0.3
			eS	32	59.03	
BMG	10.69	249	eP	32	45.00	-3.7X
BOG	12.66	241	e(P)	33	18.00	2.4
			eS	36	22.00	
PSO	17.25	237	eP	34	17.00	1.8
NNA	26.65	211	iP	35	50.50	-2.5
	0.7s	10.96nm			4.6mb	
SIV	26.87	176	P	35	53.60	-1.4
ZOBO	27.56	191	P	36	02.50	0.6
LPB	27.81	191	eP	36	03.00	-1.0
RSCP	31.94	324	P	36	40.00	-0.2
	0.8s	28.04nm			5.2mb	
ALQ	46.10	308	ePd	38	39.00	0.6
	0.8s	12.13nm			4.9mb	
ANMO	46.10	308	P	38	39.00	0.6
	0.8s	8.86nm			4.8mb	
			pP	38	45.20	21km
GOL	47.15	315	P	38	46.80	0.0
	0.8s	3.13nm			4.4mb	
BW06	51.30	317	P	39	18.00	-0.7
	1.2s	12.33nm			4.7mb	
MSU	51.61	311	P	39	21.50	0.4
			pP	39	26.80	18km
GLA	52.24	303	eP	39	27.00	1.3
DUG	52.63	313	P	39	28.30	-0.3
	0.8s	9.72nm			4.8mb	
			pP	39	33.90	18km
FFC	53.34	333	eP	39	32.50	-1.0
	0.7s	9.00nm			4.8mb	
BAR	53.68	303	eP	39	46.00	9.6X
PLM	53.97	303	eP	39	39.00	0.4
GSC	54.33	306	eP	39	41.00	-0.1
RVR	54.51	304	eP	39	43.00	0.6
SBB	55.02	305	eP	39	46.00	-0.2
CLC	55.07	306	eP	39	42.00	-4.6X
TNP	55.30	309	P	39	48.50	0.1
	0.8s	11.27nm			4.9mb	
			pP	39	53.70	17km
SES	55.55	325	eP	39	50.00	0.2
KVN	56.21	310	P	39	54.00	-0.9
FRI	56.98	307	eP	39	59.60	-0.6
CMB	57.72	308	eP	40	04.60	-0.9
NEW	58.31	320	P	40	07.70	-1.7
	1.0s	10.63nm			4.9mb	
ARN	58.48	307	P	40	11.60	0.8
MHC	58.56	307	ePc	40	12.60	1.1
			e	40	21.80	30kmX
ORV	58.89	310	ePc	40	13.90	0.3
MIN	59.14	311	iPc	40	15.10	-0.4
			e	40	20.20	17km
WDC	59.88	311	ePc	40	18.30	-2.1
FHC	61.00	311	e(P)	40	28.90	0.8
SQTA	71.29	44	e(P)	41	32.00	-1.8
	1.1s	17.40nm			5.1mb	
			i	41	37.30	17km
KHC	72.99	42	eP	41	43.50	-0.2
BRG	73.31	40	e(P)	41	50.00	4.5X
PRU	73.65	41	eP	41	46.00	-1.5
BCAO	80.86	87	iPd	42	31.00	2.7

07d 15h

S.D. = 1.1 on 60 of 64 obs.

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* JUN 07, 1990 16h 06m 28.30± 0.94s
38.771 N ± 8.1km 21.003 E ±13.8km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 3.0 (ATH).

VLS	0.68	209	ePg	06 41.00	-0.7
KEK	1.33	316	ePn	06 57.00	4.2X
ITM	1.75	155	ePg	07 00.00	1.1
NEO	1.81	72	ePb	06 58.70	-1.1
OHR	2.34	356	ePn	07 07.80	0.3
VLI	2.56	143	ePg	07 14.20	3.7X
VAY	2.82	25	ePn	07 14.50	0.3

S.D. = 1.3 on 5 of 7 obs.

? JUN 07, 1990 16h 19m 56.97± 1.72s
53.347 N ±27.1km 163.587 W ±21.7km
DEPTH = 33.0km (normal)
4.5mb (2 obs.)
UNIMAK ISLAND REGION (10)

ADK	8.11	265	eP	21 56.00	0.8
TTA	10.40	20	eP	22 27.00	0.1
IMA	13.68	17	eP	23 11.50	0.7
INK	20.63	32	eP	24 39.00	3.4X
FRB	46.10	38	ePc	28 20.60	1.5
SOD	59.36	355	eP	29 48.00	-9.6X
SUF	64.02	355	eP	30 28.00	-0.9
NAO	66.09	3	P	30 41.50	-0.8
	0.7s		1.40nm		4.2mb
HFS	66.85	1	eP	30 45.90	-1.2
	0.5s		5.10nm		4.9mb
ZST	78.83	360	iP	31 47.80	-9.8X
BUL	145.55	339	iPKPc	39 33.10	-0.2

S.D. = 1.1 on 8 of 11 obs.

& JUN 07, 1990 16h 43m 08.40s
36.923 N 121.688 W
DEPTH = 11.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.5 (BRK).

SAO	0.25	129	iPd	43 13.40	-0.4
GCC	0.27	293	iPc	43 13.80	-0.3
MHC	0.42	5	iPd	43 17.10	0.0
			iS	43 23.60	
ARN	0.44	16	iPc	43 17.50	0.0
PRS	0.64	156	ePd	43 20.50	-0.7
			eS	43 31.80	
LLA	0.67	117	iPc	43 21.10	-0.6
PCC	0.80	316	ePc	43 22.90	-0.9
			eS	43 34.30	
BKS	1.05	336	eP	43 28.00	0.0
			eS	43 42.60	
PRI	1.13	133	ePc	43 29.50	-0.1
FRI	1.59	87	e(P)	43 35.30	-1.2
			i	43 36.50	
KVN	3.54	52	eP	44 11.50	6.9

11 obs. associated

? JUN 07, 1990 17h 07m 18.82± 1.46s
31.317 S ±10.8km 68.597 W ±17.7km
DEPTH = 32.7 ± 11.2 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.11	97	iPd	07 24.70	0.0
ZON	0.24	197	eP	07 26.00	0.1
			eS	07 32.00	
RTCB	0.24	226	iPd	07 25.90	-0.1
RTCV	0.54	175	iPd	07 30.10	0.0
RTRS	1.36	327	iPc	07 41.70	0.0
			eS	07 59.20	

S.D. = 0.1 on 5 of 5 obs.

? JUN 07, 1990 18h 00m 45.24± 0.94s
26.137 S ± 8.8km 28.174 E ± 9.3km
DEPTH = 5.0km (geophysicist)
REPUBLIC OF SOUTH AFRICA (584)
mbLg 3.4 (BUL).

SLR	0.41	14	iPd	00 54.00	0.5
	0.9s		378.15nm		
			S	01 00.40	
KSR	1.18	283	iPc	01 07.50	-0.4
	1.0s		650.00nm		
			S	01 23.50	
BFT	1.74	75	iPd	01 16.00	-0.5
			S	01 34.00	
SEK	2.23	193	iPc	01 24.00	0.4
			S	01 51.00	
SWZ	2.75	247	iPd	01 18.00	-13.0X
			S	01 51.50	
FRS	4.40	214	eP	01 59.00	4.9X
			S	02 47.50	
BUL	5.98	4	iPnd	02 12.80	-3.9X
			iSn	03 18.00	
			iSg	03 46.50	
KRI	9.36	9	iPn	03 06.00	2.1X
			iSn	04 49.00	
			iSg	05 45.00	
LSZ	10.81	0	iPc	03 21.00	-2.8X
			i	03 31.20	
			i	05 11.00	
			i	06 25.50	

S.D. = 0.9 on 4 of 9 obs.

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* JUN 07, 1990 18h 26m 39.24± 1.12s
39.699 N ±13.0km 25.863 E ± 8.6km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)

EZN	0.38	70	iPg	26 46.00	-1.0
			iSg	26 54.00	
EDC	1.67	67	ePn	27 09.30	0.7
IZM	1.70	140	ePn	27 09.00	-0.1
VAY	2.99	304	ePn	27 27.30	-0.2
HRT	3.12	68	ePn	27 30.00	0.6

S.D. = 1.0 on 5 of 5 obs.

? JUN 07, 1990 18h 33m 12.86± 3.01s
10.898 N ±17.3km 61.801 W ±26.2km
DEPTH = 33.0km (normal)
TRINIDAD (98)
MD 3.3 (TRN).

TCE	0.21	167	iPc	33 19.30	-0.2
			eS	33 24.68	
TRN	0.46	122	eP	33 22.58	-0.3
			eS	33 30.32	
TPP	0.67	149	eP	33 26.32	0.4
			eS	33 38.50	
TPR	1.05	74	eP	33 31.22	0.0
			eS	33 47.69	
BOT	1.10	76	eP	33 32.07	0.1
			eS	33 48.25	
SVB	2.42	13	eP	33 58.84	7.8X
			iS	34 23.22	

S.D. = 0.4 on 5 of 6 obs.

JUN 07, 1990 18h 51m 34.15± 0.61s
44.171 N ± 3.4km 6.292 E ± 5.9km
DEPTH = 10.8 ± 3.7 km
FRANCE (538)
ML 2.7 (LDG). MD 2.2 (STR).

CALN	0.60	134	Pg	51 46.62	0.3
			Sg	51 55.74	
FRF	0.66	157	Pg	51 47.40	0.1
			Sg	51 57.00	
PZZ	0.67	60	P	51 47.47	0.0
			S	51 55.79	
MVIF	0.68	114	Pg	51 47.40	-0.2
			Sg	51 58.66	
TOUF	0.71	103	Pg	51 47.55	-0.6
LRG	0.72	176	Pg	51 48.60	0.4
			Sg	51 59.60	
DOI	0.76	64	P	51 48.40	-0.6
			eSg	51 58.70	
AURF	0.80	110	Pg	51 49.50	-0.2
ENR	0.81	86	P	51 48.18	-1.7
			S	51 57.20	
RRL	0.83	25	P	51 50.44	0.2
			S	52 00.92	
AUTN	0.84	102	Pg	51 50.06	-0.3
LMR	0.85	169	Pn	51 50.80	0.3
			Pg	51 51.60	
			Sg	52 02.60	
SBF	0.88	110	Pg	51 51.20	0.2
			Sg	52 03.60	
REVF	0.89	119	Pg	51 52.42	1.3
			Sg	52 05.04	
BNI	0.92	17	P	51 52.10	0.3
			eSg	52 03.60	
ROB	1.14	83	P	51 55.67	0.2
			S	52 09.77	
IMI	1.18	102	P	51 57.41	1.2
			S	52 12.33	
RSP	1.20	35	P	51 57.11	0.6
			S	52 11.56	
LPG	1.37	14	Pg	52 00.30	0.9
			Sg	52 18.20	
FIN	1.38	88	P	51 59.57	0.2
			S	52 17.20	
LPL	1.38	13	Pg	52 00.40	0.8
			Sg	52 19.50	
PCP	1.66	76	P	52 04.80	1.4
			S	52 25.54	
PGF	2.56	128	Pn	52 15.80	-0.5
			Sn	52 44.80	
SMF	3.02	326	Pn	52 21.20	-1.5

S.D. = 0.8 on 24 of 24 obs.

JUN 07, 1990 19h 31m 30.86± 0.36s
32.358 N ± 5.4km 141.487 E ± 7.4km
DEPTH = 43.5km (4 depth phases)
5.0mb (19 obs.)
SOUTH OF HONSHU, JAPAN (211)

MAT	4.97	328	iPc	32 44.90	-0.1
			(S)	33 41.00	
YAMJ	5.92	349	P	32 55.60	-2.7
OFUJ	6.71	1	P	33 04.00	-5.3X
			S	34 16.80	
AOMJ	8.23	354	eP	33 26.70	-3.9X
MDJ	15.36	326	eP	35 05.50	-0.6
			pP	35 11.00	
CN2	16.99	317	eP	35 26.00	-0.9
Z	15s		0.30um		
N	11s		0.30um		
E	11s		0.10um		
			epP	35 35.00	
			eS	38 36.00	
SNY	17.10	309	Pc	35 30.40	2.2
Z	16s		0.60um		
E	16s		0.60um		
GUMO	18.94	170	eP	35 51.20	0.2
	0.9s		146.63nm		5.2mb
PJG	18.94	170	eP	35 51.30	0.3
BJI	21.77	298	eP	36 19.00	-1.5
Z	16s		0.29um		3.8MszX
TIY	24.33	291	eP	36 45.80	0.1
Z	16s		1.20um		4.5MszX
E	15s		0.80um		
HHC	25.38	298	eP	36 55.00	-0.7
BTO	26.50	297	eP	37 06.50	0.4
N	15s		0.50um		
E	15s		0.40um		
XAN	27.24	282	P	37 12.20	-0.7
GYA	30.81	268	P	37 46.00	1.0
CD2	32.05	278	eP	37 54.20	-1.5
GTA	34.25	294	eP	38 14.00	-0.9
	1.0s		10.00nm		4.7mb
CHTO	40.41	261	eP	39 05.80	-0.8
	0.9s		0.85nm		3.5mb X
WMQ	43.17	301	eP	39 30.50	1.5
MTN	46.03	194	eP	39 51.00	-1.0
GUN	47.85	280	P	40 07.30	0.4
PKI	48.36	280	P	40 10.80	0.0
DMN	48.60	280	P	40 12.80	0.3
GKN	48.85	281	P	40 14.60	0.2
	0.8s		16.00nm		5.1mb
WB5	52.39	188	iPc	40 39.00	-2.0
			i	40 51.80	46km
NDI	54.75	284	eP	40 59.50	1.1
WARB	59.91	195	eP	41 34.50	-0.3
MBC	60.99	16	eP	41 41.50	-0.1
	1.0s		5.00nm		4.6mb
GBA	61.02	268	Pc	41 43.20	0.6
	0.8s		5.40nm		4.7mb
QUE	62.49	290	eP	41 53.00	0.5
MAIO	65.85	299	eP	42 14.00	-0.2
SUF	72.19	334	iP	42 53.00	0.2
	0.5s		2.80nm		4.5mb
SES	75.72	39	eP	43 14.00	0.5
FFC	77.61	32	ePd	43 23.60	-0.3
	0.9s		10.00nm		4.8mb
HFS	78.37	336	eP	43 27.50	-0.5
	1.1s		16.50nm		4.9mb
Z	17s		0.05um		3.9MszX

			LR	17	42.00	
NAO	78.81	338	P	43	30.10	-0.3
	0.9s		8.10nm		4.7mb	
FRB	81.30	13	eP	43	46.00	2.4X
SPC	83.46	326	eP	43	55.40	0.1
KSP	84.11	329	ePc	43	59.00	0.7
			e	44	12.50	46km
BRG	85.10	330	eP	44	04.20	0.9
	0.8s		10.00nm		5.0mb	
			e	44	16.50	41km
CLL	85.18	330	iPd	44	04.50	0.9
	0.9s		15.00nm		5.2mb	
			e	44	17.00	41km
SRO	85.34	326	eP	44	05.00	0.5
PRU	85.50	329	eP	44	02.50	-2.8
			e	44	06.00	11kmX
ZST	85.64	326	eP	44	07.20	1.2
			e	50	03.60	
			e	50	25.20	
MOX	86.26	331	e(P)	44	10.00	1.0
KHC	86.56	329	eP	44	10.00	-0.6
LOR	92.05	333	eP	44	36.60	0.1
	0.9s		4.90nm		4.9mb	
LBF	92.24	332	eP	44	37.70	0.3
	0.9s		4.90nm		4.9mb	
LPL	92.31	330	eP	44	38.40	0.4
	0.7s		4.95nm		5.0mb	
LPG	92.31	330	eP	44	38.60	0.5
	0.7s		5.50nm		5.1mb	
SSF	92.36	333	eP	44	38.30	0.4
	0.9s		6.55nm		5.1mb	
SMF	92.57	332	eP	44	39.10	0.2
	0.7s		2.75nm		4.8mb	
AVF	92.64	333	eP	44	39.60	0.4
	0.9s		11.45nm		5.3mb	
TCF	93.50	333	eP	44	43.80	0.6
LSF	93.79	333	eP	44	44.90	0.4
	0.8s		6.70nm		5.1mb	
ZOBO	148.76	66	PKP	51	17.50	5.1X
SIV	153.84	57	(PKP)	51	32.00	12.9X
	S.D. = 1.0		on 52 of 57 obs.			

? JUN 07, 1990 19h 48m 49.30±13.38s
51.327 N ±61.4km 16.383 E ±96.4km
DEPTH = 10.0km (geophysicist)
POLAND (548)

KSP	0.49	187	iP	48	59.00	-0.2
			iS	49	07.50	
BRG	1.60	254	iPg	49	17.00	-0.7
			iSg	49	37.20	
PRU	1.78	222	Pg	49	21.00	0.7
			Sn	49	37.60	
			eSg	49	44.70	
CLL	2.12	271	iPn	49	25.50	0.3
			iPg	49	28.10	
			iSg	49	53.70	
KHC	2.84	220	ePn	49	35.50	-0.1
			Pg	49	40.50	
			Sn	50	08.80	
			Sg	50	17.30	
MOX	3.09	259	ePg	49	46.00	7.0X
			eSg	50	26.00	
	S.D. = 0.7		on 5 of 6 obs.			

? JUN 07, 1990 20h 37m 51.33±12.34s
44.119 N ±74.7km 6.380 E ±58.3km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.2 (LDG).

FRF	0.59	161	Pg	38	03.00	-0.3
			Sg	38	12.60	
LRG	0.66	181	Pg	38	04.20	-0.3
			Sg	38	15.20	
LMR	0.79	173	Pg	38	07.30	0.6
			Sg	38	19.20	
SBF	0.80	108	Pg	38	07.00	0.0
			Sg	38	19.00	
	S.D. = 0.7		on 4 of 4 obs.			

& JUN 07, 1990 20h 46m 29.49s
63.254 N 150.549 W
DEPTH = 133.0km
CENTRAL ALASKA (1)
<AGS-P>.

KTH	0.34	331	iP	46	48.04	1.3
			eS	47	01.77	
HUR	0.50	123	eP	46	48.75	-0.4
			eS	47	03.48	
CUT	0.86	171	eP	46	51.32	-0.4
			eS	47	09.19	
MCK	0.87	56	eP	46	51.33	-0.5
SKT	1.36	200	iP	46	55.90	-0.7
NEA	1.48	25	eP	46	56.54	-1.4
WRH	1.64	41	eP	46	58.70	-1.0
GHO	1.67	152	iP	46	59.51	-0.6
SML	1.78	144	iP	47	00.39	-1.0
PLRM	1.79	158	iP	47	00.55	-1.0
SUA	1.80	183	eP	47	01.55	-0.2
CCB	1.85	40	eP	47	01.14	-1.1
NCG	2.00	203	eP	47	03.92	-0.3
CGLM	2.07	200	eP	47	05.35	0.4
PMS	2.07	167	eP	47	04.23	-0.7
NCA	2.14	125	iP	47	04.90	-0.9
SPU	2.20	199	eP	47	06.35	-0.2
CKL	2.23	203	eP	47	06.89	-0.1
TOA	2.33	118	iP	47	07.68	-0.5
PAX	2.33	95	eP	47	07.37	-0.8
NKA	2.54	188	eP	47	12.77	2.0
SLKM	2.76	177	eP	47	13.00	-0.7
KLU	2.79	127	eP	47	12.51	-1.6
RDT	2.83	199	eP	47	14.94	0.3
GLI	2.88	144	iP	47	13.54	-1.8
VZW	2.89	138	eP	47	13.47	-2.0
VLZ	2.91	135	eP	47	13.53	-2.0
SEW	3.21	170	eP	47	18.31	-1.2
CNPM	3.76	185	eP	47	25.80	-1.0
TGL	4.42	121	eP	47	34.00	-1.8
BALM	4.45	116	eP	47	34.21	-2.0
	31 obs. associated					

& JUN 07, 1990 21h 03m 49.31s
31.730 N 115.900 W
DEPTH = 2.5km
BAJA CALIFORNIA (48)
<ECX>. ML 1.5 (ECX).

RDX	0.21	349	ePd	03	53.37	-0.1
			S	03	56.68	
EMX	0.62	65	eP	04	00.58	-1.0
			S	04	08.97	
PBX	0.70	271	ePd	04	01.90	-1.5
			S	04	11.58	
CBX	0.87	312	iPd	04	04.90	-1.9
			S	04	16.81	
	4 obs. associated					

• JUN 07, 1990 22h 18m 24.33± 1.13s
17.609 N ±15.1km 40.466 E ±12.5km
DEPTH = 10.0km (geophysicist)
4.5mb (2 obs.)
RED SEA (554)

ABHA	2.27	73	ePd	19	02.70	0.0
TAIF	3.67	358	eP	19	21.90	-0.6
TAB	21.02	13	eP	23	14.00	3.3X
MAIO	25.10	38	eP	23	56.00	5.2X
BCAO	25.15	241	iPd	23	51.10	-0.3
	1.5s		24.00nm		4.7mb	
SRO	35.17	334	e(P)	25	17.20	-3.1X
			e	25	21.00	
SPC	35.50	337	e(P)	25	24.60	1.2
APO	46.91	342	eP	26	56.20	-0.4
	0.7s		1.90nm		4.3mb	
	S.D. = 1.0		on 5 of 8 obs.			

JUN 07, 1990 22h 24m 58.54± 0.71s
40.434 N ± 7.4km 22.177 E ± 7.1km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 3.4 (ATH).

VAY	0.94	18	iPn	25	17.30	0.9
OHR	1.25	303	iPnc	25	20.50	-1.2
			iSn	25	40.20	
			Lg	25	42.60	
NEO	1.38	144	ePb	25	23.00	-0.9
KEK	1.96	249	ePn	25	32.00	-0.2
VLS	2.57	209	ePn	25	43.00	2.1
RDO	2.65	73	ePn	25	42.00	0.0
ATH	2.73	154	ePb	25	48.00	4.8X
ITM	3.26	184	ePb	25	57.00	6.3X
VLI	3.76	171	ePn	25	57.00	-0.8
MLR	5.76	27	eP	26	30.00	3.8X
DUI	5.96	284	P	26	30.00	0.9
SDI	6.45	284	P	26	35.00	-0.9
			eSn	27	45.00	
VOY	8.24	316	e(P)	26	55.40	-5.6X
			eS	28	33.50	
	S.D. = 1.3		on 9 of 13 obs.			

• JUN 07, 1990 23h 06m 13.71± 2.72s
5.094 S ±23.7km 102.450 E ±26.0km
DEPTH = 80.0 ± 19.8 km
4.3mb (3 obs.)
SOUTHERN SUMATERA (274)

PPI	5.04	336	eP	07	27.60	-0.9
PSI	8.50	335	iPc	08	12.80	-3.5X
IPM	9.71	352	ePc	08	33.00	0.2
	0.8s		26.10nm		5.2mb	
TRT	10.45	105	ePc	08	43.70	0.9
SNG	12.33	351	eP	09	07.50	-0.3
CHG	24.01	352	eP	11	22.90	0.7
CHTO	24.01	352	eP	11	22.10	-0.1
	0.7s		1.75nm		3.6mb	
GBA	31.01	307	Pc	12	29.30	3.3X
	0.7s		4.40nm		4.3mb	
WB5	34.36	118	eP	12	54.00	-1.1
GUN	36.50	335	P	13	13.80	0.2
QIS	39.22	116	eP	13	35.00	-1.1
NDI	41.44	326	iP	13	55.00	0.8
STK	45.28	131	iPc	14	26.60	1.3
SUF	88.26	333	eP	18	58.00	0.9
LNO	145.04	26	ePKP	25	43.00	-0.7
TUL	145.04	26	ePKP	25	42.90	-0.9
	0.7s		11.40nm			
	S.D. = 1.0		on 14 of 16 obs.			

& JUN 07, 1990 23h 22m 02.20s
60.528 N 153.017 W
DEPTH = 138.9km
SOUTHERN ALASKA (2)
<AGS-P>.

RED	0.16	132	iP	22	20.54	0.8
RDT	0.31	81	iP	22	20.82	0.7
CKL	0.75	26	eP	22	23.41	-0.9
			eS	22	40.05	
SPU	0.81	35	eP	22	23.44	-1.2
			eS	22	39.78	
CRP	0.85	29	eP	22	24.23	-0.9
NKA	0.90	75	eP	22	26.35	1.0
CGLM	0.93	32	iP	22	24.52	-1.1
NCG	0.97	25	eP	22	25.34	-0.8
NNL	0.99	119	iP	22	26.25	0.2
AUL	1.17	191	iP	22	28.20	0.4
AUE	1.19	189	eP	22	27.70	-0.2
CNPM	1.35	138	iP	22	28.91	-0.7
			eS	22	49.81	
SLKM	1.38	90	eP	22	28.21	-1.8
SVW	1.40	296	iP	22	28.88	-1.4
SUA	1.45	49	iP	22	29.58	-1.3
MCNL	1.50	207	iP	22	31.11	-0.2
SKT	1.63	26	iP	22	31.44	-1.3
CDD	1.63	191	iP	22	32.42	-0.4
SEW	1.83	102	eP	22	33.29	-1.7
PMS	1.84	65	eP	22	33.39	-1.8
			eS	22	56.98	
PWA	1.90	52	eP	22	34.50	-1.3
PLRM	2.17	59	eP	22	37.64	-1.5
CUT	2.30	34	eP	22	39.11	-1.6
			eS	23	07.90	
GHO	2.34	56	eP	22	38.70	-2.7
SML	2.61	58	eP	22	42.24	-2.5
GLI	2.93	81	eP	22	47.04	-1.8
KTH	3.19	17	eP	22	50.64	-1.7
VZW	3.21	78	eP	22	50.59	-2.0
VLZ	3.33	77	eP	22	51.29	-2.7
NCA	3.33	61	eP	22	51.73	-2.4
KLU	3.59	71	eP	22	54.81	-2.7
TOA	3.66	61	eP	22	56.45	-2.0
	32 obs. associated					

JUN 07, 1990 23h 28m 30.46± 0.77s
40.736 N ± 6.4km 29.180 E ± 6.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

07d 23h

```
GBZT     0.21  75 ePg   28 35.40   0.4
                iSg   28 38.60
YLV      0.22 139 iPg   28 35.30   0.0
                iSg   28 38.80
ISK      0.34 344 ePg   28 37.50   0.0
                eSg   28 42.30
HRT      0.38  77 iPg   28 37.90  -0.4
IZI      0.46 151 ePg   28 39.80   0.0
CTT      0.70 306 ePg   28 44.30   0.0
                eSg   28 52.30
     S.D. = 0.3  on   6 of   6 obs.
-------------------------------------
   JUN  07, 1990  23h 40m 25.31± 0.45s
    1.211 S ±10.0km   24.419 W ± 6.3km
   DEPTH =  10.0km  (geophysicist)
   5.0mb ( 33 obs.) 5.1Msz (  9 obs.)
 CENTRAL MID-ATLANTIC RIDGE       (406)
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 14S, 25C
      Centroid Location:
      Origin Time        23:40:32.1 0.4
      Lat  1.09S 0.04 Lon  23.85W 0.04
      Dep  15.0 FIX Half-duration  2.3
      Moment Tensor;    Scale 10**17 Nm
        Mrr=-0.11 0.07  Mtt= 0.80 0.07
        Mff=-0.69 0.10  Mrt= 0.67 0.24
        Mrf=-0.44 0.23  Mtf=-2.12 0.06
       Principal Axes:
        T  Val=  2.55   Plg=17   Azm= 35
        N       -0.36      73       218
        P       -2.19       1       126
      Best Double Couple:Mo=2.4*10**17
       NP1:Strike=172 Dip=78 Slip=  11
       NP2:        79     79       167

ITR     15.83 241 eP    44 08.70  -1.3
                e     44 10.50
                e     44 12.50
                e     44 36.20
LIC     20.72  69 P     45 04.14  -4.5X
        0.9s    63.00nm          5.0mb
                S     48 50.00
TIC     20.88  68 P     45 05.48  -4.8X
KIC     21.03  69 P     45 07.46  -4.4X
        1.1s   155.50nm          5.3mb
LKO     21.58  60 Pd    45 12.68  -4.8X
        0.9s   180.50nm          5.5mb
BAO     27.32 237 eP    46 13.50   0.9
SIV     39.00 246 P     47 56.20   2.2
CCH     44.05 246 P     48 38.00   2.3
TOL     44.94  22 eP    48 43.00   0.7
                ePP   50 50.00
                iS    55 22.00
                iSS   58 50.00
LPB     45.62 248 P     48 47.00  -1.5
     Z  22s     2.59um          5.1Msz
                LR    02 12.00
EBR     47.58  26 eP    49 12.00   8.9X
                eS    56 04.00
ARE     48.76 249 e(P)  49 11.00  -2.0
EPF     49.35  24 eP    49 17.60   0.7
        1.2s    26.80nm          5.1mb
CAF     51.62  24 eP    49 34.30   0.2
        1.0s    14.00nm          4.8mb
MFF     52.18  21 eP    49 39.00   0.7
        1.0s    12.00nm          4.8mb
BNI     53.70  27 P     49 50.90   1.2
SSF     53.94  23 eP    49 51.60   0.3
        1.0s     6.00nm          4.6mb
LBF     54.07  24 eP    49 52.30   0.0
        1.2s    13.40nm          4.8mb
LPG     54.07  27 eP    49 53.20   0.5
        1.0s    10.00nm          4.8mb
LPL     54.08  27 eP    49 53.10   0.5
        1.0s    12.00nm          4.9mb
SWZ     54.19 123 eP    49 42.00 -11.7X
        0.8s    11.19nm
LOR     54.25  23 eP    49 53.40  -0.2
        1.0s     8.00nm          4.7mb
RDP     54.38  34 Pd    49 57.10   2.4
RMP     54.41  34 P     49 56.70   1.8
PIL     54.57  31 P     49 59.00   3.0X
MNS     54.78  33 P     49 57.60  -0.1
BOB     54.79  29 P     49 59.70   2.0
BDI     54.85  30 P     49 58.40   0.2
AZI     54.93  34 P     50 00.00   1.3

SDI     54.96  34 P     49 58.00  -1.0
MGR     54.98  37 P     49 59.00  -0.1
MME     54.99  30 P     50 01.90   2.5
KSR     55.10 121 eP    50 05.00   4.5X
TDS     55.16  38 P     50 00.00  -0.4
ASS     55.23  33 P     50 00.00  -1.0
PGD     55.29  31 P     50 00.00  -1.5
DUI     55.30  35 P     50 00.00  -1.5
HAU     55.85  25 eP    50 05.70   0.4
        1.0s    16.00nm          5.0mb
BSF     55.90  25 eP    50 05.30  -0.5
        1.0s     8.00nm          4.7mb
SLR     56.25 120 eP    50 09.00   0.2
        1.0s    20.00nm          5.1mb
     Z  20s     5.32um          5.6Msz
SEK     56.49 124 eP    50 03.00  -7.5X
CDF     56.56  25 eP    50 10.70   0.2
        0.9s     6.55nm          4.7mb
CTI     56.79  29 P     50 12.30   0.1
DOU     56.84  22 P     50 12.90   0.6
     Z  18s     1.40um          5.1Msz
                S     58 10.00
SOTA    57.41  28 iPd   50 15.70  -0.9
        1.4s    31.30nm          5.1mb
                i     50 47.50
                i     52 21.60
                i     52 24.60
TRI     57.61  31 eP    50 16.40  -1.4
FVI     57.73  30 P     50 20.00   1.4
BFT     57.76 120 eP    50 15.50  -4.1X
ENN     57.88  22 eP    50 19.00  -0.6
        0.9s    13.00nm          5.0mb
VOY     57.90  31 eP    50 18.70  -1.2
CEY     57.97  31 e(P)  50 21.90   1.5
LJU     58.23  31 e(P)  50 22.00  -0.2
VBY     58.25  32 e(P)  50 24.00   1.7
OHR     58.77  39 eP    50 27.00   0.9
PTJ     58.88  32 e(P)  50 25.40  -1.4
EKA     58.99  14 P     50 30.00   2.7X
        1.1s     8.20nm          4.8mb
WTS     59.20  22 eP    50 30.00   1.2
        0.9s     9.00nm          4.9mb
GRF     59.22  26 eP    50 29.30   0.2
        1.4s    21.00nm          5.1mb
     Z  21s     0.70um          4.8Msz
SKO     59.65  38 iP    50 30.00  -2.2
     Z  21s     2.75um          5.4Msz
     N  19s     0.61um
     E  21s     2.42um
                LR    16 01.00
                iS    58 42.00
KHC     59.89  28 Pc    50 34.50   0.8
        1.2s    10.00nm          4.8mb
     Z  18s     1.00um          5.0Msz
     N  17s     0.50um
                e     52 44.00
                S     58 48.00
VAY     60.01  39 eP    50 33.40  -1.2
MOX     60.10  26 eP    50 36.00   0.9
        2.2s    50.00nm          5.3mb
     Z  19s     0.80um          4.9Msz
     N  18s     0.60um
     E  20s     0.50um
ZST     60.97  30 e(P)  50 39.80  -1.2
                e     52 51.40
CLL     61.18  26 eP    50 43.00   0.6
BRG     61.29  27 eP    50 46.00   2.9X
        0.8s    10.00nm          5.0mb
CBM     61.31 327 P     50 43.20  -0.2
SRO     61.35  31 eP    50 42.50  -1.1
                e     51 08.60
BUD     61.51  32 eP    50 43.00  -1.7
BNH     61.71 324 P     50 45.20  -0.9
TBR     61.73 319 P     50 46.30   0.0
HBVT    62.67 323 P     50 52.50   0.0
NA2     62.74 315 P     50 52.80  -0.3
SGS     62.86 309 P     50 54.50   0.6
WNY     63.16 322 P     50 55.90   0.1
CVL     63.19 314 P     50 55.80  -0.3
SPC     63.21  31 eP    50 55.50  -0.7

CMP     63.64  37 ePc   51 02.00   3.1X
JSC     63.83 309 P     51 01.20   0.9
MLR     64.30  37 iPd   51 02.00  -1.4
                e     59 50.00
BLA     64.30 313 P     51 03.80   0.3
        1.0s    20.00nm          5.3mb
WVLY    65.22 319 P     51 09.80   0.5
SCH     65.77 335 eP    51 12.00  -0.6
BBTK    66.18  45 eP    51 14.00  -1.6
TKL     66.25 310 P     51 16.00   0.0
GBTN    66.50 310 P     51 18.00  -0.1
AKU     66.90   3 e(P)  51 17.20  -2.3
        1.0s    16.00nm          5.2mb
NAO     67.56  18 P     51 22.40  -1.5
        0.9s     4.40nm          4.6mb
RSCP    67.61 309 P     51 25.00   0.3
        1.0s   124.73nm          6.1mb X
HFS     67.94  19 eP    51 26.70   0.4
        0.8s     5.60nm          4.8mb
     Z  20s     0.69um          4.9Msz
                LR    12 38.00
PWLA    69.36 308 P     51 34.80  -0.7
FVM     72.04 311 P     51 50.80  -0.9
OLY     72.19 308 P     51 51.60  -1.0
NUR     72.19  23 eP    51 52.00  -0.1
FRB     72.52 341 eP    51 53.00  -1.0
SUF     74.10  22 eP    52 03.00  -0.2
UYO     74.26 306 iPd   52 04.50  -0.3
LNO     75.70 307 eP    52 13.00   0.1
TUL     75.70 307 eP    52 13.00   0.0
        0.9s    15.40nm          5.1mb
SOD     77.06  18 iP    52 19.90  -0.2
MEO     77.72 306 iPd   52 24.30  -0.1
KEV     78.62  16 eP    52 29.00   0.4
RSSD    83.38 315 P     52 54.80   0.3
GOL     83.80 310 P     52 57.80   1.0
        1.3s    16.93nm          5.1mb
FFC     83.81 325 eP    52 54.00  -2.2
        1.3s    21.00nm          5.2mb
ALQ     84.16 305 eP    52 58.00  -0.6
        1.0s    10.00nm          5.0mb
     Z  20s     0.98um          5.2Msz
ANMO    84.16 305 P     53 00.00   1.4
MAIO    85.80  54 eP    53 06.00  -0.7
                eS    03 43.00
BW06    87.24 313 P     53 13.00  -0.8
        1.2s    4.11nm          4.6mb
DAU     88.36 310 P     53 21.20   1.9
SES     88.76 320 eP    53 21.00   0.3
MSU     88.99 308 P     53 23.00   0.8
EDM     90.32 323 eP    53 28.00   0.1
GLA     91.00 303 P     53 31.50   0.1
MBC     92.35 346 eP    53 38.00   1.2
        1.4s    13.00nm          5.1mb
WRA    150.40 136 PKPc  00 21.70   7.6X
        0.2s     3.20nm
WB5    150.47 136 ePKP  00 21.50   7.3X
     S.D. = 1.1  on 103 of 118 obs.
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*  JUN  07, 1990  23h 43m 41.91± 0.84s
    36.453 N ±12.0km   27.321 E ± 6.9km
    DEPTH =  10.0km  (geophysicist)
 DODECANESE ISLANDS              (369)

CIN      1.30  28 eP    44 06.00   0.1
SMG      1.31 343 ePb   44 13.70   7.6X
APE      1.56 294 ePn   44 09.50  -0.3
KSL      1.86 100 ePn   44 13.70  -0.3
ELL      2.10  81 ePn   44 21.00   3.3X
VAM      2.74 249 ePn   44 27.00   0.3
BCK      2.80  68 ePn   44 28.00   0.3
     S.D. = 0.4  on   5 of   7 obs.
-------------------------------------
*  JUN  08, 1990  00h 13m 25.57± 0.93s
    36.474 N ±11.2km   27.366 E ± 7.9km
    DEPTH =  33.0km  (normal)
 DODECANESE ISLANDS              (369)

CIN      1.26  27 eP    13 47.00   0.0
SMG      1.30 341 ePn   13 48.00   0.5
APE      1.59 292 ePn   13 51.00  -0.8
KSL      1.83 101 ePn   13 55.00  -0.2
VAM      2.78 248 ePn   14 09.20   0.5
     S.D. = 0.7  on   5 of   5 obs.
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*  JUN  08, 1990  00h 24m 19.72± 0.55s
    9.060 S ± 9.1km  124.026 E ±10.4km
```

DEPTH = 33.0km (normal)
4.5mb (4 obs.)
TIMOR (289)

MTN	7.93	119	iPc	26	17.60	2.0
			eS	27	40.00	
KNA	8.10	146	eP	26	18.50	0.5
	0.2s	35.00nm			6.1mb	X
			iS	27	42.50	
MBL	12.69	198	eP	27	21.60	0.9
WB5	14.69	138	eP	27	45.20	-1.8
			eS	30	17.00	
WRA	14.72	138	Pc	27	45.80	-1.6
	0.4s	11.60nm			4.7mb	
NANU	15.71	210	eP	28	00.00	-0.3
KKM	16.90	332	ePc	28	24.80	9.2X
WARB	17.21	172	eP	28	19.00	-0.4
QIS	18.89	129	iPc	28	41.20	1.1
	0.6s	73.00nm			5.1mb	
			eS	32	02.00	
BDT	35.99	317	eP	31	20.60	0.9
CHG	37.14	318	eP	31	30.00	0.6
CHTO	37.14	318	eP	31	30.00	0.6
	0.6s	2.38nm			4.2mb	
GBA	51.44	295	Pc	33	26.00	1.8
	0.7s	2.60nm			4.3mb	
GUN	52.08	316	P	33	28.30	-1.0
PKI	52.19	315	P	33	28.80	-1.4
GKN	52.99	315	P	33	34.60	-1.3
SBB	118.20	56	ePdiff	39	24.00	-0.5
CLC	118.21	54	ePdiff	39	27.00	2.6X
RVR	118.68	56	ePdiff	39	19.00	-7.5X
GSC	118.93	55	ePdiff	39	20.00	-7.7X
BAR	119.45	58	ePdiff	39	26.00	-4.0X
LKO	130.31	275	(PKP)	43	47.50	18.1X
	0.7s	5.50nm				

S.D. = 1.3 on 16 of 22 obs.

JUN 08, 1990 00h 31m 50.00± 0.26s
9.855 N ± 4.2km 84.327 W ± 3.7km
DEPTH = 10.0km (geophysicist)
4.7mb (33 obs.) 4.6Msz (4 obs.)
COSTA RICA (78)

Thirteen schools and a church damaged in the Santiago de Puriscol area. Felt strongly in much of Costa Rica.

PTCR	0.12	236	iPd	31	52.50	-0.6
HDC2	0.26	49	iPc	31	55.00	-0.5
EPA	0.30	297	iPd	31	55.40	-0.8
POA2	0.33	13	iPd	31	56.20	-0.7
OCM	0.36	84	iP+	32	56.50	59.0X
IRZ2	0.44	75	ePc	31	58.20	-0.8
QPS	0.49	157	iPd	31	59.50	-0.4
VTU	0.58	74	iPd	33	00.90	58.8X
CDM	0.63	118	iPc	32	01.50	-1.4
JTS	0.75	305	iPc	32	03.40	-1.3
CAO	0.78	259	iPc	32	04.30	-0.9
JUD	1.24	284	iPc	32	11.90	-1.2
TIG	1.30	129	eP	32	14.50	0.3
RIN3	1.39	312	iPc	32	14.50	-1.0
CTCR	1.82	121	iPc	32	21.40	-0.3
PBC	1.91	138	ePd	32	22.20	-0.8
DVD	2.33	127	iPc	32	30.00	1.1
UPA	4.81	100	iPc+	33	02.50	-1.7
			iS	33	58.00	
PSO	11.07	141	eP	34	32.00	0.1
FUQ	11.36	112	eP	34	40.00	4.2X
BOG	11.43	116	eP	34	39.00	2.3
			eS	36	52.00	
BMG	11.47	103	eP	34	35.50	-1.5
SDV	13.55	93	eP	35	03.40	-1.6
OXX	14.03	302	eP	35	12.70	1.4
TOV	14.32	89	eP	35	19.70	4.6X
			eS	37	48.60	
CAR	17.14	86	iP	35	52.00	0.6
OLLA	17.26	88	eP	35	51.50	-1.5
IIJ	17.83	305	(P)	36	04.00	3.6X
PAG	22.90	72	eP	37	00.00	4.7X
PRM	24.18	4	P	37	08.30	0.8
PWLA	25.24	353	P	37	17.00	-0.7
RSCP	25.65	358	P	37	21.50	-0.1
	0.9s	97.58nm			5.5mb	
TKL	25.69	1	P	37	24.00	2.1
GBTN	25.69	0	P	37	24.60	2.6
UYO	25.92	341	e(P)	37	24.00	-0.1
OLY	26.35	347	P	37	27.00	-1.0
BLA	27.46	7	P	37	40.50	2.2
TUL	27.96	340	eP	37	42.00	-0.7
	0.7s	6.90nm			4.5mb	
	Z 18s	0.99um			4.4Msz	
			e	37	49.50	
MEO	28.03	334	eP	37	44.00	0.6
CVL	28.50	10	P	37	47.30	-0.2
FVM	28.54	350	P	37	47.70	-0.3
NA2	28.77	11	P	37	51.80	1.9
CBN	28.91	11	eP	37	51.00	-0.3
ARE	29.07	154	eP	37	55.00	1.8
ZOBO	30.51	148	P	38	06.50	0.1
LPB	30.74	148	P	38	03.00	-5.3X
ALQ	32.13	324	eP	38	20.80	0.7
	0.9s	4.62nm			4.4mb	
	Z 20s	0.89um			4.4Msz	
ANMO	32.13	324	P	38	21.00	0.9
	0.9s	5.04nm			4.4mb	
CCH	32.49	146	P	38	24.00	0.5
WVLY	32.88	8	P	38	27.80	1.5
SIV	34.49	138	P	38	39.00	-1.5
GOL	35.14	331	P	38	46.00	-0.2
	1.0s	5.00nm			4.3mb	
RSNY	35.59	12	P	38	49.60	0.0
	1.0s	10.85nm			4.7mb	
BNH	36.41	16	P	38	54.20	-2.4
TPC	37.78	315	eP	39	10.00	1.8
MSU	37.91	323	P	39	08.20	-1.3
RSSD	38.18	337	P	39	11.80	0.1
BW06	39.52	330	P	39	24.00	1.1
	1.0s	2.00nm			3.7mb	
TNP	40.76	319	P	39	34.50	1.3
	0.9s	5.86nm			4.3mb	
KVN	41.88	320	P	39	43.20	0.8
CMB	42.83	317	e(P)	39	52.60	2.6
ARN	43.26	315	P	39	51.00	-2.5
BAO	44.00	125	eP	39	59.50	-0.3
ORV	44.36	318	e(P)	39	59.80	-2.6
SES	46.05	336	eP	40	16.00	0.3
FFC	46.90	346	eP	40	22.00	-0.3
	0.8s	12.00nm			5.0mb	
SCH	46.96	14	eP	40	21.00	-1.8
FRB	54.97	8	eP	41	21.00	-2.3
YKA	56.93	344	eP	41	33.40	-4.1X
	0.8s	6.30nm			4.7mb	
INK	66.59	342	eP	42	39.00	-3.3X
MBC	69.01	352	eP	42	55.00	-2.3
	0.6s	7.00nm			5.0mb	
IMA	72.72	336	P	43	19.30	-0.8
	1.0s	3.75nm			4.4mb	
TTA	72.97	333	P	43	19.50	-2.0
	0.8s	5.17nm			4.7mb	
DAG	74.97	13	eP	43	31.00	-1.8
EJIF	75.28	55	e(P)	43	43.30	8.0X
MAL	76.12	55	iP	43	40.00	0.0
GUD	76.21	51	e(P)	43	41.00	0.3
AFC	76.80	54	e(P)	43	42.00	-2.1
LPF	78.27	43	eP	43	52.10	0.4
GRR	78.38	43	eP	43	52.80	0.5
	0.7s	6.60nm			4.8mb	
FLN	78.62	42	eP	43	54.00	0.4
	0.8s	9.40nm			4.9mb	
KIC	78.71	85	(P)	43	57.50	2.7
LDF	78.86	42	eP	43	55.50	0.5
	0.7s	6.60nm			4.8mb	
MFF	78.93	44	eP	43	55.80	0.4
	0.8s	8.05nm			4.8mb	
EPF	79.47	48	eP	43	59.20	0.7
	0.8s	8.05nm			4.8mb	
LFF	79.64	46	eP	43	59.80	0.5
	0.5s	5.10nm			4.8mb	
LPO	79.97	46	eP	44	01.50	0.4
	0.7s	6.60nm			4.7mb	
LSF	80.11	45	eP	43	49.50	-12.3X
	0.6s	6.30nm				
RJF	80.16	46	eP	44	02.50	0.4
TCF	80.57	45	eP	44	04.40	0.1
	0.5s	3.30nm			4.6mb	
MAF	80.83	45	eP	44	05.90	0.3
	0.6s	3.15nm			4.5mb	
BGF	80.99	44	eP	44	06.50	0.0
	0.6s	5.85nm			4.8mb	
AVF	81.32	44	eP	44	07.90	-0.2
	0.7s	3.30nm			4.5mb	
SSF	81.40	44	eP	44	08.40	-0.2
	0.6s	3.60nm			4.6mb	
LOR	81.62	43	eP	44	09.60	-0.1
	0.6s	4.05nm			4.7mb	
SMF	81.67	44	eP	44	09.70	-0.3
	0.6s	4.05nm			4.7mb	
LBF	81.73	44	eP	44	10.60	0.3
	0.5s	2.55nm			4.6mb	
ENN	82.61	40	eP	44	15.00	0.3
	0.8s	7.00nm			4.9mb	
WTS	83.02	39	eP	44	18.00	1.2
	0.8s	13.00nm			5.2mb	
HAU	83.21	43	eP	44	18.20	0.2
BSF	83.53	43	eP	44	19.60	-0.1
CDF	83.78	42	eP	44	21.00	0.0
LPL	83.79	45	eP	44	20.30	-1.0
LPG	83.81	45	eP	44	20.40	-1.1
BNI	83.82	45	P	44	23.00	1.7
NAO	83.98	29	P	44	21.90	0.3
	1.3s	9.30nm			4.9mb	
DOI	84.29	46	P	44	25.00	1.4
ORO	84.65	45	P	44	27.00	1.6
HFS	85.51	30	ePKP	44	29.00	-0.2
	0.8s	6.00nm			4.8mb	
BOB	85.81	45	P	44	31.00	-0.2
GRF	86.13	40	eP	44	33.50	0.9
	0.9s	6.00nm			4.8mb	
	Z 19s	0.40um			4.8Msz	
			e	44	40.20	
MOX	86.21	39	e(P)	44	33.00	0.0
	Z 20s	0.50um			4.9Msz	
CLL	86.94	39	e(P)	44	34.00	-2.5
CTI	87.10	44	P	44	37.00	-0.6
BRG	87.61	39	eP	44	41.00	1.3
KHC	87.75	41	P	44	41.00	0.5
FVI	87.76	43	P	44	42.00	1.5
MNS	88.56	47	P	44	36.00	-8.5X
VOY	88.64	44	e(P)	44	43.00	-1.9
LJU	89.07	43	e(P)	44	48.00	1.1
AZI	89.19	48	P	44	39.00	-8.5X
SDI	89.53	48	P	44	40.00	-9.2X
ZST	90.25	41	eP	44	49.70	-2.6
SUF	90.46	26	eP	44	53.00	0.0
SPC	91.97	39	eP	45	01.80	1.3
WB5	141.38	251	ePKP	51	20.70	-3.2X
WRA	141.40	250	PKP	51	21.00	-2.9X
	0.8s	3.60nm				
MTN	145.13	262	ePKP	51	32.20	1.8
	0.9s	155.00nm				
HYB	148.05	32	ePKP	51	36.50	1.3
GBA	150.49	38	PKPc	51	40.20	1.3
	1.0s	4.50nm				

S.D. = 1.3 on 114 of 130 obs.

? JUN 08, 1990 01h 04m 40.28± 5.67s
31.251 S ±22.4km 68.303 W ±38.2km
DEPTH = 100.4 ± 50.4 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.16	241	iPc	04	54.60	-0.3
CFA	0.36	171	iPd	04	55.80	0.3
			eS	05	07.90	
ZON	0.44	227	eP	04	56.00	0.0
			eS	05	07.00	
RTCB	0.49	241	iPd	04	56.60	0.3
RTCV	0.64	198	ePc	04	57.20	-0.3
RTRS	1.47	317	iPd	05	06.50	0.0
			(S)	05	21.80	

S.D. = 0.4 on 6 of 6 obs.

JUN 08, 1990 01h 47m 56.05± 0.59s
40.497 N ± 6.1km 30.224 E ± 4.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

Felt in the Kocaeli area.

HRT	0.53	308	iPg	48	06.20	-0.6
IZI	0.60	255	iPg	40	07.90	-0.2
YLV	0.65	276	iPg	48	09.20	0.1
GBZT	0.66	296	iPgd	48	09.00	-0.2
			iSg	48	28.00	
ISK	1.05	303	iPg	48	15.20	-0.7
KCT	1.45	261	iPg	48	21.70	-0.6
CTT	1.51	296	iPg	48	23.20	0.1
EDC	1.81	266	iPn	48	28.10	0.6
BBTK	2.05	108	ePn	48	29.00	-2.1
			eSg	49	01.00	
KAS	2.82	71	iPnc	48	44.20	2.1
			iSg	49	24.00	

08d 01h

EZN	3.06	259	iPn	48	45.50	0.2
IZM	3.11	229	ePn	48	46.70	0.7
CIN	3.34	211	eP	48	58.00	8.7X
KDZ	3.81	289	iP	48	57.00	0.9
			iS	49	42.00	
DIM	3.86	295	iP	48	57.00	0.3
			eSg	49	48.00	
TLB	4.40	339	ePc	49	04.00	-0.3
CFR	4.93	343	eP	49	11.00	-0.8
MMB	5.03	285	ePc	49	13.00	-0.4
			eS	50	10.00	
VTS	5.66	294	iP	49	22.00	-0.5
			iSg	51	01.00	
VAY	5.86	281	ePn	49	24.70	-0.3
MLR	5.90	329	eP	49	25.00	-0.6
VRI	5.95	336	ePc	49	06.00	-20.2X
CMP	6.10	323	ePc	49	30.00	1.6
SKO	6.78	285	ePn	49	38.00	-0.1

S.D. = 0.9 on 22 of 24 obs.

JUN 08, 1990 02h 22m 56.77± 0.63s
23.813 N ± 7.6km 123.630 E ± 8.2km
DEPTH = 33.0km (normal)
4.5mb (10 obs.)
SOUTHWESTERN RYUKYU ISLANDS (246)

TWC	1.81	296	ePc	23	26.60	0.5
			eS	23	46.30	
TWD	1.88	279	ePc	23	26.00	-1.2
			eS	23	45.40	
TWF1	2.19	258	ePc	23	30.10	-1.5
TWZ	2.26	305	eP	23	33.90	1.3
TWG	2.55	248	ePc	23	35.30	-1.4
QZH	4.73	285	Pn	24	05.90	-1.7
SSE	7.57	344	Pd	24	46.50	-1.1
	0.6s	50.00nm				5.7mb X
Z	20s	0.50um				4.7Msz
N	14s	0.70um				
NJ2	9.23	334	eP	25	07.40	-3.2X
Z	16s	0.40um				
WHN	10.64	311	eP	25	31.00	1.1
N	16s	1.60um				
GYA	15.59	283	P	26	42.00	6.1X
XAN	16.40	312	eP	26	48.50	2.4
TIY	16.85	328	eP	26	54.00	2.3
Z	14s	0.70um				
N	12s	0.40um				
BJI	17.36	340	eP	27	01.00	3.0X
	1.0s	10.00nm				3.9mb
Z	16s	0.29um				
CD2	19.00	296	eP	27	17.50	-0.9
KKM	19.05	203	ePc	27	19.50	0.3
HHC	19.78	332	P	27	26.20	-1.0
Z	28s	1.30um				
N	17s	0.50um				
CN2	19.99	4	eP	27	29.00	-0.3
Z	12s	0.60um				
BTO	20.27	329	eP	27	32.00	-0.4
N	14s	0.30um				
E	14s	0.30um				
LZH	21.01	310	Pd	27	41.50	1.4
	2.5s	79.00nm				4.7mb
		pP		27	52.00	42kmX
CHG	23.52	263	eP	28	07.10	2.3
CHTO	23.52	263	eP	28	06.10	1.3
	1.0s	5.25nm				4.0mb
GTA	25.45	313	eP	28	22.00	-1.4
WB5	44.67	166	eP	31	08.30	-0.1
WRA	44.73	166	P	31	10.00	1.2
	0.8s	4.50nm				4.4mb
SOD	70.91	336	iP	34	11.40	-0.9
SUF	72.46	331	iP	34	20.60	-1.0
	0.6s	3.40nm				4.5mb
INK	72.72	22	eP	34	23.00	-0.1
MBC	73.13	13	ePc	34	24.60	-0.7
	0.5s	4.00nm				4.7mb
NUR	73.85	329	eP	34	29.00	-0.7
HFS	78.97	331	eP	34	56.90	-1.6
	1.1s	9.30nm				4.7mb
Z	17s	0.17um				4.4MszX
		LR		10	29.00	
NAO	79.86	333	P	35	01.90	-1.4
	0.7s	2.80nm				4.4mb
YKA	82.43	23	eP	35	16.80	0.0
	0.7s	2.60nm				4.4mb
SKO	82.92	313	e(P)	35	22.20	2.5
CLL	83.68	324	eP	35	27.00	3.6X
	1.1s	8.00nm				4.8mb
KHC	84.47	322	P	35	31.90	4.4X
VOY	85.84	319	eP	35	38.50	4.0X
FRB	92.21	5	eP	36	05.00	0.9

S.D. = 1.4 on 31 of 37 obs.

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* JUN 08, 1990 03h 17m 02.07± 1.34s
17.529 N ±16.7km 40.972 E ±14.0km
DEPTH = 10.0km (geophysicist)
4.5mb (6 obs.) 4.4Msz (1 obs.)
RED SEA (554)

ABHA	1.84	67	iPd	17	34.70	0.5
			iS	17	43.00	
TAIF	3.79	351	eP	18	01.30	-0.7
AFIF	6.86	17	eP	18	43.30	-1.9
TAB	20.99	12	e(P)	21	54.00	5.8X
			e	22	21.00	
BBTK	23.35	344	eP	22	15.00	3.4X
MAIO	24.87	38	iPd	22	36.60	10.3X
			eS	27	16.00	
BCAO	25.54	242	iPd	22	31.50	-1.3
	1.3s	25.00nm				4.7mb
			iS	26	07.00	
			i	29	52.00	
QUE	26.82	57	eP	22	56.00	11.3X
	1.5s	123.61nm				
SRO	35.45	333	eP	24	03.00	2.6X
SPC	35.77	337	eP	24	04.90	1.5
ZST	36.27	333	eP	24	08.60	1.3
KHC	38.54	331	P	24	26.50	0.0
BRG	39.64	333	eP	24	35.80	0.3
	1.5s	13.00nm				4.4mb
CLL	40.36	333	eP	24	42.00	0.5
	1.7s	15.00nm				4.4mb
GKN	41.40	67	P	25	00.00	9.5X
NUR	44.50	349	eP	25	17.00	1.8
SUF	46.31	351	eP	25	32.00	2.5X
HFS	46.87	342	eP	25	34.00	0.0
	0.6s	2.40nm				4.4mb
NAO	48.30	341	P	25	43.20	-2.0
	0.9s	4.50nm				4.5mb
LZH	58.13	58	Pc	27	06.00	7.3X
	2.5s	79.00nm				5.3mb
Z	20s	0.30um				4.4Msz
		pP		27	12.00	20kmX

S.D. = 1.4 on 12 of 20 obs.

JUN 08, 1990 03h 42m 01.91± 0.36s
27.962 S ± 4.7km 66.578 W ± 9.4km
DEPTH = 179.0km (3 depth phases)
4.6mb (14 obs.)
CATAMARCA PROVINCE, ARGENTINA (130)

RTRS	3.35	228	iPc	42	56.50	1.2
RTLL	3.74	206	iPd	43	00.10	-0.2
CFA	3.91	201	iPc	43	02.30	-0.1
RTCB	4.01	208	ePc	43	04.00	0.2
ZON	4.01	207	iPc	43	05.80	2.0
RTCV	4.24	203	ePd	43	06.70	0.0
MDZ	5.28	201	iP	43	20.80	0.5
ANT	5.47	320	iPd	43	21.80	-0.9
JACH	5.84	215	iPd	43	27.50	-0.2
			i	44	23.00	
FCH	6.23	210	iPc	43	33.00	0.0
			i	44	32.00	
ROCH	6.29	216	iPd	43	32.00	-1.7
			i	44	21.60	
SAN	6.50	212	iPc	43	35.00	-1.3
PCH	6.58	210	iPc	43	36.70	-0.7
IHA	6.67	220	eP	43	35.50	-3.0
			e	43	51.50	
			e(S)	44	37.50	
TACH	6.80	212	iPc	43	38.50	-1.7
CHCH	6.90	209	iPc	43	40.30	-1.3
			i	44	38.30	
LCCH	6.97	217	iPc	43	40.00	-2.5
LNV	7.27	214	iPd	43	43.00	-3.5X
CCH	10.54	2	P	44	27.40	-2.3
LPB	11.46	353	P	44	36.60	-5.2X
			i	46	40.00	
ZOBO	11.72	353	P	44	44.00	-1.4
	0.9s	69.20nm				5.1mb
Z	22s	0.09um				4.6Msz
		SKS		52	48.20	
		LR		12	34.00	
ARE	12.31	337	eP	44	50.00	-2.7
SIV	12.96	24	P	44	58.60	-2.1
NNA	18.57	327	iP	46	12.30	4.4X
	0.8s	15.67nm				4.5mb
		i		46	17.00	
BAO	21.14	58	eP	46	32.90	-1.1
ITR	32.70	60	eP	48	17.80	-1.7
SPA	62.20	180	eP	52	08.10	1.8
	0.7s	14.06nm				4.9mb
JSC	63.44	346	P	52	13.70	-0.8
TKL	65.33	345	P	52	24.80	-1.9
			pP	53	07.60	181km
GBTN	65.44	344	P	52	26.00	-1.4
RSCP	65.71	343	P	52	27.90	-1.3
	0.8s	52.08nm				5.4mb
		pP		53	10.00	178km
PWLA	65.81	341	P	52	28.00	-1.8
OLY	67.35	338	P	52	38.30	-1.2
KIC	68.68	70	(P)	52	47.20	-1.0
	0.5s	6.00nm				4.6mb
TUL	69.24	335	eP	52	50.60	-0.6
	0.9s	11.70nm				4.7mb
FVM	69.30	340	P	52	50.70	-0.8
			pP	53	33.20	178km
LKO	69.74	67	(P)	52	53.74	-0.9
	0.7s	10.50nm				4.7mb
WVLY	70.95	351	P	53	01.70	0.3
WNY	72.31	355	P	53	10.00	0.6
RSNY	72.52	354	iP	53	11.00	0.4
			iPcP	53	20.00	
ALQ	73.04	327	eP	53	14.20	0.1
	0.9s	6.51nm				4.4mb
ANMO	73.04	327	P	53	14.40	0.3
	1.0s	8.13nm				4.4mb
CBM	74.56	359	P	53	23.50	1.2
GLA	76.02	320	eP	53	33.00	2.0
GLD	76.37	330	P	53	34.20	1.2
	1.0s	15.00nm				4.7mb
GOL	76.40	330	P	53	34.00	0.8
	1.0s	7.75nm				4.4mb
BAR	76.82	318	eP	53	37.00	1.6
PLM	77.42	319	eP	53	40.00	1.1
MAW	77.56	162	iPd	53	41.00	2.1
	1.0s	22.00nm				4.8mb
MSU	78.68	325	P	53	47.00	1.2
GSC	78.78	320	eP	53	48.00	1.8
RSSD	79.51	334	P	53	50.80	0.7
DAU	79.68	327	P	53	52.50	1.3
DUG	80.28	326	P	53	55.50	1.3
BW06	80.74	329	P	53	57.00	0.4
PTI	82.11	328	P	54	05.30	1.7
HPI	83.10	328	P	54	10.50	1.7
LRM	84.42	330	eP	54	16.90	1.5
MIN	85.02	321	e(P)	54	18.90	0.5
BUL	85.15	110	iPc	54	18.50	-1.0
SES	87.38	333	ePd	54	30.30	0.8
KRI	87.55	108	eP	54	36.00	4.8X
FFC	87.80	340	iPd	54	32.20	0.8
	0.9s	9.00nm				4.7mb
DPW	88.58	328	P	54	36.50	1.2
LON	89.53	326	P	54	40.00	0.2
BMW	90.06	325	P	54	43.00	0.8
EDM	90.48	334	eP	54	40.50	-3.5X
GMW	90.56	326	P	54	44.70	0.2
YKA	97.96	340	eP	55	17.80	0.0
	0.8s	1.00nm				4.3mb
WRA	128.25	205	PKPc	00	50.00	1.0
	0.3s	5.70nm				
WB5	128.30	205	ePKP	00	50.00	0.9
GBA	143.60	106	PKPc	01	19.70	2.2
	0.9s	7.80nm				

S.D. = 1.4 on 67 of 72 obs.

% JUN 08, 1990 04h 28m 09.92± 1.05s
24.960 S ±13.6km 25.936 E ± 8.0km
DEPTH = 10.0km (geophysicist)
BOTSWANA REPUBLIC (579)
ML 3.3 (PRE).

KSR	1.25	136	eP	28	32.90	-0.4
			S	28	50.00	
BPI	2.25	123	eP	28	46.80	-1.1
			S	29	07.90	
SLR	2.26	110	iPd	28	48.00	0.0
			S	29	12.50	
SWZ	2.28	194	eP	28	49.00	0.7
			S	29	15.00	
PRY	2.40	145	eP	28	50.00	0.0

SEK	3.68	156	eP	29 04.50	-3.7X
BFT	3.79	102	eP	29 11.00	1.2
	0.5s	73.94nm			
			S	29 40.50	
FRS	4.80	186	eP	29 33.50	9.5X
			S	30 27.50	
WIN	8.44	285	eP	30 15.00	-0.3
S.D. = 0.9		on	7 of	9 obs.	

% JUN 08, 1990 04h 40m 00.44± 0.76s
44.561 N ± 6.3km 7.266 E ± 8.6km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.2 (GEN).

PZZ	0.13	245	P	40 04.32	0.6
			S	40 06.27	
STV	0.32	172	P	40 07.60	0.5
			S	40 12.01	
ENR	0.35	162	P	40 06.48	-1.3
			S	40 10.37	
RRL	0.50	316	P	40 10.17	-0.4
			S	40 16.83	
ROB	0.51	121	P	40 11.30	0.5
			S	40 18.17	
RSP	0.59	359	P	40 12.53	0.1
			S	40 20.73	
S.D. = 0.9		on	6 of	6 obs.	

JUN 08, 1990 06h 53m 29.21± 0.64s
44.929 N ± 6.0km 9.012 E ± 5.1km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.3 (GEN).

BOB	0.35	117	Pc	53 35.60	-0.9
			eSg	53 40.90	
PCP	0.51	221	P	53 39.53	0.0
			S	53 47.53	
CKI	0.73	226	P	53 50.10	6.6X
FIN	0.92	219	P	53 48.24	1.4
			S	53 59.63	
MDI	0.98	30	P	53 49.20	1.4
			eSg	54 00.10	
ORO	1.01	314	P	53 52.00	3.6X
ORX	1.01	314	P	53 47.32	-1.1
			S	54 01.06	
ROB	1.03	233	P	53 49.27	0.5
			S	54 03.63	
RSP	1.26	281	P	53 52.14	-0.6
			S	54 08.85	
IMI	1.30	219	P	53 52.24	-1.1
			S	54 09.26	
ENR	1.34	239	P	53 54.29	0.4
			S	54 11.01	
STV	1.39	241	P	53 54.91	0.3
			S	54 12.24	
BDI	1.43	127	P	53 55.00	-0.2
S.D. = 1.0		on	11 of	13 obs.	

? JUN 08, 1990 07h 11m 03.82± 2.95s
50.600 N ±18.1km 16.276 E ±32.3km
DEPTH = 10.0km (geophysicist)
POLAND (548)
ML 2.7 (KRA).

KSP	0.24	3	iPd	11 09.00	0.0
	0.6s	40.00nm			
			iS	11 18.50	
			iLR	11 26.00	
PRU	1.27	242	ePn	11 27.50	0.1
			Pg	11 28.80	
			Sn	11 46.50	
			Sg	11 54.50	
KHC	2.28	231	Pn	11 43.00	0.9
			Pg	11 48.70	
			Sn	12 11.00	
			eSg	12 23.50	
KRA	2.41	102	eP	11 51.00	7.1X
			iS	12 31.10	
WET	2.64	238	ePn	11 46.00	-1.1
MOX	2.97	273	ePg	11 52.00	0.2
			eSg	12 32.00	
S.D. = 1.0		on	5 of	6 obs.	

• JUN 08, 1990 07h 21m 42.72± 1.62s
45.933 N ±10.6km 26.820 E ±11.5km
DEPTH = 114.3 ± 17.7 km
ROMANIA (358)

VRI	0.09	226	iPc	21 58.00	0.0
ISR	0.82	194	iPc	22 02.50	-0.4
PTT	1.05	343	eP	22 05.00	0.0
CFR	1.20	128	iPc	22 07.00	0.4
IAS	1.36	22	iPd	22 42.00	33.5X
TLB	1.59	147	iPc	22 11.00	-0.3
PSN	2.45	156	iPd	22 30.00	7.8X
			Sg	22 50.00	
PVL	2.92	202	iPd	22 30.00	1.6
			Sg	23 02.00	
JMB	3.47	183	eP	22 35.00	-0.9
PGB	3.88	210	iPc	22 41.00	-0.5
			S	23 22.00	
VTS	4.23	219	iP	22 46.00	-0.3
			iS	23 29.00	
KDZ	4.40	194	iPc	22 49.00	0.5
			iS	23 34.00	
RZN	4.51	200	iPc	22 50.00	-0.2
			Sg	23 36.00	
MMB	4.89	208	iPc	22 55.00	-0.2
			eS	23 48.00	
VAY	5.55	215	ePn	23 04.40	0.2
S.D. = 0.7		on	13 of	15 obs.	

? JUN 08, 1990 07h 50m 29.46± 2.73s
7.503 S ±16.4km 128.247 E ±16.6km
DEPTH = 163.2 ± 32.8 km
4.4mb (1 obs.)
BANDA SEA (280)

MTN	6.02	152	eP	51 58.00	0.6
			eS	53 01.00	
KNA	8.21	176	eP	52 26.80	0.1
	0.2s	31.00nm			5.5mb X
			eS	53 53.00	
WB5	13.66	155	eP	53 36.10	-1.6
			iS	56 00.30	
WRA	13.71	155	Pd	53 37.50	-0.8
	0.3s	5.50nm			4.4mb
MBL	15.83	210	eP	54 05.30	0.6
QIS	17.01	141	eP	54 20.00	0.8
			eS	57 21.00	
WARB	18.64	185	eP	54 39.00	1.6
NANU	19.34	218	eP	54 43.30	-1.3
GUN	53.99	313	P	59 39.50	0.1
PKI	54.15	312	P	59 40.40	-0.1
GKN	54.95	312	P	59 46.20	0.1
S.D. = 1.1		on	11 of	11 obs.	

JUN 08, 1990 08h 16m 51.24± 1.00s
33.184 S ± 8.7km 73.273 W ± 9.0km
DEPTH = 10.0km (geophysicist)
4.6mb (2 obs.)
OFF COAST OF CENTRAL CHILE (134)

IHA	1.38	84	eP	17 15.50	-1.0
			i(S)	17 31.50	
LCCH	1.46	102	iPc	17 17.00	-0.6
			iS	17 33.00	
LNV	1.73	117	iPc	17 21.70	0.1
			iS	17 42.00	
ROCH	1.91	84	iPd	17 24.00	-0.4
			iS	17 45.00	
TACH	2.01	104	iPc	17 25.00	-0.6
			iS	17 48.00	
SAN	2.20	98	iPc	17 28.60	0.2
			iS	17 53.00	
JACH	2.31	78	iPd	17 29.00	-1.0
			iS	17 54.50	
CHCH	2.31	110	iP	17 30.50	0.5
			iS	17 56.50	
PCH	2.35	101	iPc	17 31.00	0.4
			i	17 58.00	
FCH	2.50	94	iPc	17 33.00	0.0
			iS	18 01.50	
MDZ	3.73	87	e(P)	17 56.10	5.9X
RTCB	4.15	67	eP	17 57.20	1.1
			S	18 45.00	
RTCV	4.21	73	ePc	17 58.30	1.3
			(S)	18 46.20	
ZON	4.22	68	eP	18 01.00	3.9X
RTRS	4.43	48	ePd	18 00.30	0.4
			eS	18 51.00	
RTLL	4.47	67	eP	18 00.70	0.1
			eS	18 51.50	
CCH	16.99	24	P	20 54.90	4.0X
LPB	17.23	17	P	20 52.00	-2.0
ZOBO	17.47	17	P	20 59.00	1.8
SIV	20.37	36	P	21 30.00	-0.8
LKO	77.04	69	(P)	28 46.22	-0.2
	0.8s	10.00nm			5.0mb
BW06	82.58	334	e(P)	29 15.90	0.0
	1.0s	1.75nm			4.2mb
GBA	146.98	119	PKPd	36 34.60	0.5
	0.6s	2.10nm			
S.D. = 0.9		on	20 of	23 obs.	

• JUN 08, 1990 08h 24m 21.07± 1.59s
51.253 N ±16.1km 15.655 E ± 7.5km
DEPTH = 5.0km (geophysicist)
POLAND (548)
ML 3.6 (VKA), 2.8 (KRA).

KSP	0.58	135	iP	24 30.50	-2.1
			iS	24 39.50	
			iLR	24 45.50	
BRG	1.14	251	ePn	24 43.60	0.7
			iPg	24 44.60	
			iSg	25 03.80	
PRU	1.45	210	Pn	24 48.10	0.1
			Pg	24 50.20	
			Sn	25 07.30	
			Sg	25 12.80	
CLL	1.67	273	iPn	24 49.50	-1.5
			iPg	24 52.90	
			iSg	25 17.90	
KHC	2.51	213	Pn	25 03.50	0.3
			Pg	25 09.00	
			Sg	25 50.00	
HOF	2.58	250	iPnc	25 03.80	-0.3
MOX	2.63	258	iPg	25 12.00	7.1X
			iSg	25 52.00	
WET	2.76	221	iPnc	25 07.40	0.5
KRA	2.98	112	eP	25 11.70	1.9
			iS	25 50.60	
VKA	3.02	172	iPgd	25 18.40	7.9X
			iSg	26 02.00	
ZST	3.20	162	eP	25 38.50	25.5X
			e	26 04.00	
FVI	5.03	203	P	25 39.00	0.0
CTI	5.85	209	P	25 51.00	0.4
S.D. = 1.3		on	10 of	13 obs.	

• JUN 08, 1990 08h 42m 28.88± 1.28s
35.077 N ±15.6km 33.850 E ±12.9km
DEPTH = 33.0km (normal)
CYPRUS (372)
ML 3.4 (CSS).

FAM	0.15	123	ePg	42 35.00	0.0
			eSg	42 38.00	
LFK	0.33	308	iPg	42 37.40	0.3
CSS	0.44	255	eP	42 37.80	-0.8
			eSg	42 46.00	
PPCY	1.25	262	eP	42 51.00	0.9
BCK	3.55	313	ePn	43 22.70	-0.4
S.D. = 0.9		on	5 of	5 obs.	

? JUN 08, 1990 09h 15m 48.97± 2.15s
6.106 S ±12.1km 148.513 E ±24.4km
DEPTH = 87.7 ± 16.7 km
4.7mb (2 obs.)
NEW BRITAIN REGION (192)

LAT	1.60	250	eP	16 17.00	0.7
KD8	3.60	202	eP	16 43.00	-0.6
			eS	17 28.00	
MNDI	4.83	269	eP	17 08.00	7.1X
QIS	16.77	210	eP	19 39.00	-0.8
WB5	19.40	224	eP	20 09.80	-1.1
WRA	19.46	224	Pd	20 11.40	-0.1
	0.6s	22.90nm			4.7mb
GUMO	19.90	350	eP	20 33.00	16.9X
QLP	20.77	191	eP	20 26.50	1.6
WARB	28.89	224	eP	21 24.50	-17.2X
NANU	35.77	239	eP	22 42.40	0.8
MAT	43.51	348	eP	23 45.00	-0.4
	0.7s	9.59nm			4.7mb
INK	91.20	21	eP	28 45.00	-0.1
BAO	152.91	143	e(PKP)	35 38.00	7.0X
S.D. = 1.1		on	9 of	13 obs.	

JUN 08, 1990 09h 59m 22.24± 0.31s
55.354 N ± 4.4km 156.355 W ± 3.9km
DEPTH = 33.0km (normal)
4.8mb (28 obs.)
SOUTH OF ALASKA (17)
ML 4.4 (PMR).

SDN	2.37	271	iPc	59	57.90	-1.6
KDC	3.21	40	iPc	00	11.80	0.3
CDD	3.88	21	iP	00	22.83	1.8
MCNL	3.99	15	iP	00	24.02	1.3
AUE	4.33	21	iP	00	29.99	2.6
CNPM	5.01	31	iP	00	37.52	0.4
NNL	5.43	28	iP	00	43.95	1.1
RED	5.43	19	iP	00	44.08	1.1
RDT	5.64	20	iP	00	46.65	0.7
SVW	5.78	4	eP	00	48.60	0.6
SEW	6.03	35	eP	00	50.05	-1.3
SLKM	6.11	30	eP	00	51.83	-0.8
SPU	6.27	19	iP	00	55.10	0.3
CRP	6.33	19	iP	00	56.31	0.5
CGLM	6.39	19	iP	00	56.87	0.2
NCG	6.46	18	eP	00	57.90	0.4
MID	6.78	49	iP	01	01.89	0.0
SUA	6.80	23	eP	01	01.95	-0.4
PMS	6.90	28	eP	01	02.76	-1.0
SKT	7.10	19	eP	01	06.39	-0.1
PWA	7.17	26	eP	01	07.32	0.0
PLRM	7.31	28	eP	01	07.74	-1.6
PMR	7.31	28	eP	01	07.70	-1.6
GLI	7.39	38	eP	01	07.83	-2.7
GHO	7.51	28	eP	01	11.05	-1.2
TTA	7.60	1	eP	01	13.50	0.0
VZW	7.71	38	eP	01	12.79	-2.2
VLZ	7.84	38	eP	01	14.56	-2.1
KLU	8.23	37	eP	01	20.60	-1.7
NCA	8.30	33	eP	01	22.25	-0.9
TOA	8.59	34	eP	01	26.90	-0.3
TGL	8.98	47	iP	01	30.93	-1.7
BALM	9.32	47	eP	01	35.06	-2.4
PAX	9.45	32	eP	01	38.55	-0.6
PCA	9.82	55	eP	01	42.78	-1.5
DDM	9.98	28	eP	01	46.76	0.4
ANM	10.27	338	eP	01	50.40	0.1
FBA	10.47	20	eP	01	51.50	-1.5
IMA	10.83	6	eP	01	57.70	-0.3
INK	16.72	30	eP	03	15.00	-0.1
YKA	22.35	54	eP	04	21.50	3.2X
	0.7s	2.20nm				3.7mb X
PNT	23.04	90	eP	04	36.00	10.8X
	0.5s	3.00nm				
NEW	25.00	90	eP	04	45.00	0.8
	0.9s	9.87nm				4.4mb
MBC	25.02	20	ePc	04	46.50	2.5
	0.5s	32.00nm				5.2mb
SES	27.41	81	eP	05	08.00	1.6
KVN	30.20	107	eP	05	31.60	-0.2
TNP	31.38	107	eP	05	41.80	-0.3
	0.8s	1.72nm				3.9mb
BW06	32.51	93	eP	05	51.50	-0.5
DAU	33.08	98	eP	05	58.00	0.9
MSU	33.87	101	eP	06	04.00	0.1
RSSD	34.82	87	eP	06	12.20	0.2
PLM	35.11	112	eP	06	14.00	-0.5
GLA	36.42	110	eP	06	25.80	0.4
GOL	36.90	93	eP	06	30.40	0.7
	0.7s	2.12nm				4.1mb
FRB	41.85	42	ePc	07	10.60	0.6
NIIJ	46.38	275	P	07	45.90	-1.0
KAKJ	46.44	273	eP	07	56.70	9.3X
MDJ	46.64	289	eP	07	47.50	-1.3
CHJJ	47.23	274	P	07	52.90	-0.7
MAT	47.33	275	(P)	07	53.00	-1.4
	1.0s	13.00nm				4.9mb
MTMJ	47.53	275	P	07	55.00	-1.1
IIDJ	48.25	274	eP	07	57.60	-4.1X
TSRJ	49.31	276	eP	08	09.00	-0.7
CN2	49.40	291	Pc	08	09.00	-1.4
PWLA	50.06	84	eP	08	15.00	-0.6
RSCP	51.03	82	eP	08	22.00	-1.0
	0.9s	16.26nm				5.0mb
GBTN	51.75	81	eP	08	27.50	-0.9
SNY	51.76	290	Pc	08	27.60	-0.7
	0.8s	20.00nm				5.1mb
KEV	55.17	359	eP	08	53.00	-0.2
	0.7s	14.70nm				5.1mb
SOD	57.57	359	iP	09	10.90	0.5
HHC	58.73	298	eP	09	19.00	0.0
SUF	62.25	359	iP	09	43.00	0.5
	0.5s	9.60nm				5.2mb
NAO	63.72	7	P	09	52.40	0.1
	0.7s	7.00nm				4.9mb
NUR	64.48	359	iP	09	58.00	0.9
	0.6s	30.00nm				5.6mb
UPP	65.04	3	iP	10	00.60	-0.1
WHN	65.09	288	eP	10	00.50	-1.0
XAN	65.27	294	P	10	01.00	-1.7
GTA	65.59	304	P	10	03.90	-0.9
	1.2s	10.00nm				4.8mb
LZH	66.26	299	Pc	10	08.00	-1.2
	2.0s	34.00nm				5.1mb
Z	15s	0.40um				4.7MszX
WMQ	67.33	315	iPd	10	16.00	0.3
EKA	67.52	16	P	10	18.00	1.4
	0.9s	12.40nm				5.0mb
CD2	70.41	296	eP	10	34.00	-0.9
GYA	72.45	291	P	10	47.20	-0.1
			pP	10	55.80	20kmX
BRG	73.83	6	e(P)	10	56.20	1.4
MOX	73.89	8	e(P)	10	56.00	0.8
KHC	75.55	7	P	11	06.00	1.3
LOR	76.40	14	eP	11	10.60	1.0
	0.8s	6.70nm				4.7mb
MFF	76.45	17	eP	11	11.20	1.4
	0.6s	5.40nm				4.7mb
SSF	76.56	14	eP	11	11.60	1.2
	1.0s	16.00nm				5.0mb
LBF	76.70	14	eP	11	12.10	0.9
	0.8s	5.35nm				4.6mb
AVF	76.80	14	eP	11	12.80	1.1
	0.6s	5.40nm				4.7mb
BGF	76.96	15	eP	11	13.80	1.2
	0.6s	7.20nm				4.9mb
SMF	77.01	14	eP	11	13.80	0.8
	1.0s	10.00nm				4.8mb
LSF	77.06	16	eP	11	14.30	1.1
	0.8s	12.10nm				5.0mb
TCF	77.13	15	eP	11	14.70	1.1
	0.8s	6.70nm				4.7mb
MAF	77.24	15	eP	11	15.60	1.3
	0.7s	5.50nm				4.7mb
LFF	78.21	16	eP	11	21.00	1.4
	0.7s	15.45nm				5.1mb
CAF	78.44	15	eP	11	22.00	1.2
	0.6s	3.60nm				4.6mb
LPO	78.54	16	eP	11	22.60	1.2
	0.7s	6.60nm				4.8mb
GUN	81.56	308	P	11	38.90	0.7
GKN	82.04	309	P	11	41.00	0.5
PKI	82.06	308	P	11	41.20	0.4
DMN	82.17	308	P	11	41.80	0.5
MAIO	83.69	332	eP	11	51.00	2.2
WRA	95.08	242	Pc	12	49.70	6.9X
	0.7s	1.30nm				4.5mb
BUL	144.65	352	iPKPd	18	54.10	-2.9X
SWZ	151.83	357	iPKPd	19	02.50	-5.7X
	0.3s	19.48nm				
SEK	152.84	352	ePKP	19	17.00	7.4X
	1.0s	11.00nm				

S.D. = 1.1 on 100 of 108 obs.

JUN 08, 1990 10h 35m 13.50± 0.59s
39.384 N ± 4.8km 16.125 E ± 9.9km
DEPTH = 11.3 ± 7.5 km
SOUTHERN ITALY (390)

CZI	0.17	178	P	35	17.50	0.1
TDS	0.32	31	P	35	18.90	-1.3
			eSg	35	22.60	
CSI	0.41	18	P	35	23.50	1.5
ORI	0.72	20	P	35	28.10	0.5
			eSg	35	37.60	
MGR	0.87	330	P	35	29.70	-0.4
			eSg	35	43.20	
MSI	1.26	201	P	35	38.10	1.3
SOI	1.31	182	P	35	37.00	-0.6
ATN	1.33	203	P	35	37.00	-0.9
			eSn	35	56.00	
SGO	1.33	332	P	35	37.50	-0.4
BSS	1.73	325	P	35	44.40	0.8
GIB	2.15	230	P	35	50.00	0.1

S.D. = 1.1 on 11 of 11 obs.

* JUN 08, 1990 11h 01m 10.90± 2.40s
16.847 N ±21.3km 98.522 W ±11.9km
DEPTH = 59.5 ± 12.2 km
4.4mb (4 obs.)
NEAR COAST OF GUERRERO, MEXICO (58)
Felt at Oaxaca.

OXX	1.74	82	iP	01	39.28	-0.1
			iS	02	07.00	
III	1.77	329	iP	01	38.27	-1.6
			iS	02	11.55	
IIT	2.17	5	iP	01	51.91	6.4X
			iS	02	29.72	
PPM	2.21	357	iP	01	48.18	1.9
			(S)	02	26.50	
UNM	2.55	346	(P)	01	56.00	5.1X
			(S)	02	33.00	
CRX	2.77	337	iP	01	55.00	0.9
			(S)	02	41.00	
IIC	2.99	347	(P)	02	03.73	6.6X
			(S)	02	53.48	
IIJ	3.09	338	(P)	02	04.97	6.1X
			iS	02	45.00	
PSM	3.34	92	iP	01	59.10	-2.8X
			(S)	02	41.50	
LVVM	3.48	34	(P)	02	03.62	-0.2
			iS	02	58.06	
MRX	3.81	319	iP	02	06.50	-1.9X
			(S)	03	01.00	
SCX	5.64	90	(P)	02	56.50	22.4X
			(S)	04	02.50	
AGX	6.15	325	(P)	02	59.00	17.8X
UYO	17.63	11	iPc	05	13.70	-0.2
TUL	19.14	7	eP	05	31.50	-0.7
	0.7s	11.70nm				4.2mb
LNO	19.14	7	eP	05	30.80	-1.3
ALQ	19.37	340	eP	05	34.00	-0.8
	0.9s	7.35nm				3.9mb
KVN	27.96	326	eP	06	58.10	0.1
LRM	31.14	341	eP	07	27.20	0.8
PNT	36.63	337	ePd	08	14.00	0.7
FFC	37.90	357	eP	08	24.50	0.7
	0.9s	16.00nm				4.9mb
SCH	45.07	25	eP	09	23.00	0.4
FRB	51.18	17	eP	10	10.00	0.2
INK	56.01	345	eP	10	44.00	-1.4
MBC	60.40	354	eP	11	16.50	0.6
	1.0s	4.00nm				4.5mb

S.D. = 1.0 on 17 of 25 obs.

& JUN 08, 1990 11h 26m 15.66s
65.897 N 150.512 W
DEPTH = 25.0km (geophysicist)
ALASKA (676)
<AGS-P>.

IMA	1.31	279	eP	26	38.41	-0.1
			eS	26	54.44	
NEA	1.46	155	eP	26	39.63	-0.9
			eS	26	59.17	
FBA	1.52	130	eP	26	40.99	-0.4
			eS	26	59.54	
GLM	1.59	124	eP	26	42.21	-0.4
			eS	27	01.40	
CCB	1.69	137	eP	26	43.51	-0.5
WRH	1.76	143	iP	26	44.81	-0.1
MCK	2.28	162	eP	26	52.14	-0.2
KTH	2.36	184	iP	26	52.57	-1.1
	8 obs. associated					

JUN 08, 1990 11h 35m 49.84± 1.60s
15.031 N ± 4.0km 60.377 W ±17.4km
DEPTH = 33.0km (normal)
LEEWARD ISLANDS (92)
ML 3.2 (FDF). MD 3.5 (TRN).

CRM	0.59	242	iPd	36	01.94	0.2
			S	36	09.50	
MVM	0.69	227	iPd	36	03.42	0.3
FDF	0.80	248	iPd	36	04.53	-0.2
			S	36	14.10	
BIM	0.84	233	iPd	36	05.40	0.1
			S	36	15.50	
DPMT	1.00	283	eP	36	17.50	10.0X
SLW	1.14	208	eP	36	09.41	-0.2
			eS	36	29.10	
BBL	1.17	295	ePd	36	09.85	-0.1

			S	36	22.20	
MGG	1.26	314	ePd	36	11.21	-0.1
			S	36	24.40	
SFG	1.45	327	eP	36	14.00	0.0
PAG	1.60	308	eP	36	16.05	-0.2
			S	36	34.00	
SEG	1.74	322	eP	36	18.82	0.6
SVB	1.94	206	eP	36	21.11	-0.1
			eS	36	43.21	
MGH	2.44	314	eP	36	23.60	-4.7X
BPA	2.46	325	eP	36	28.20	-0.3

S.D. = 0.3 on 12 of 14 obs.

% JUN 08, 1990 12h 54m 47.71± 0.72s
37.420 N ± 6.7km 3.802 W ± 6.5km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
mbLg 2.8 (MDD).

AFC	0.26	129	lPgc	54	52.80	-0.6
			eSg	54	57.00	
EBAN	0.74	1	lPgc	55	02.30	0.0
			eSg	55	13.00	
MAL	0.85	215	iPn	55	05.00	1.0
			iSg	55	13.60	
EHOR	1.21	290	ePg	55	10.00	-0.3
			eSg	55	24.80	
EPRU	1.23	249	ePg	55	10.00	-0.6
EVIA	1.59	40	ePn	55	16.50	0.5
			eSn	55	37.50	

S.D. = 0.8 on 6 of 6 obs.

& JUN 08, 1990 13h 03m 34.05s
65.934 N 150.533 W
DEPTH = 20.1km
ALASKA (676)
<AGS-P>.

IMA	1.29	277	lPc	03	57.40	0.3
NEA	1.49	155	eP	03	59.42	-0.5
			eS	04	19.67	
FBA	1.55	131	eP	04	01.40	0.8
GLM	1.62	124	eP	04	01.43	-0.3
			eS	04	23.29	
CCB	1.73	137	eP	04	02.69	-0.6
WRH	1.79	144	eP	04	04.12	-0.1
MCK	2.31	162	eP	04	11.12	-0.6
KTH	2.40	184	eP	04	11.98	-1.0
TTA	3.84	221	eP	04	33.20	-0.2
TOA	4.30	151	eP	04	39.20	-0.7
PMR	4.40	171	eP	04	42.50	1.2
SVW	5.35	208	eP	04	52.00	-2.8
INK	7.04	63	eP	05	17.00	-1.4

13 obs. associated

? JUN 08, 1990 13h 16m 58.73±16.79s
42.796 N ±80.1km 128.749 W ±108.km
DEPTH = 10.0km (geophysicist)
OFF COAST OF OREGON (30)
CL 2.9 (SEA).

GT2	5.24	61	P	18	19.10	0.1
PGO	5.26	57	P	18	20.67	1.4X
BMW	5.39	45	P	18	20.51	-0.7
RVW	5.45	50	P	18	21.72	-0.3
LVP	5.60	52	P	18	24.01	-0.1
TDH	5.60	61	P	18	24.24	0.0
MTMW	5.69	53	P	18	25.14	-0.3
VLL	5.74	60	P	18	26.83	0.6
CZM	5.75	49	P	18	25.84	-0.4
ERK	5.77	50	P	18	26.66	0.1
CPW	5.77	42	P	18	27.33	0.8
APW	5.81	46	P	18	26.53	-0.5
ESD	5.82	52	P	18	27.57	0.3
VFP	5.82	62	P	18	27.75	0.4
CDFW	5.83	53	P	18	27.11	-0.3
KOSW	5.94	50	P	18	28.96	0.0
GULW	6.01	56	P	18	29.97	0.1
LMW	6.01	48	P	18	29.97	0.0
ASR	6.12	54	P	18	31.37	-0.1
VIPM	6.14	71	P	18	31.54	-0.3
GLK	6.33	51	P	18	34.84	0.3
RVC	6.35	47	P	18	35.08	0.3
WPW	6.44	50	P	18	36.36	0.3
GL2	6.50	58	P	18	36.44	-0.4
FMW	6.51	48	P	18	36.95	-0.1
HTW	7.02	42	P	18	44.12	0.0
RPW	7.59	39	P	18	52.00	-0.1

S.D. = 0.4 on 26 of 27 obs.

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* JUN 08, 1990 13h 45m 46.56± 1.22s
17.888 S ±18.1km 71.737 W ±15.7km
DEPTH = 33.0km (normal)
NEAR COAST OF PERU (115)

ARE	1.44	9	iPd	46	11.00	0.2
			i(S)	46	27.20	
LPB	3.73	69	P	46	37.00	-6.6X
ZOBO	3.81	66	iPc	46	52.00	7.1X
CCH	5.36	85	P	47	13.80	7.2X
PT03	5.50	314	eP	47	41.80	33.4X
PT03	5.50	314	iPc	47	03.30	-5.1X
PT06	5.98	312	iP	46	12.50	-62.7X
			e(S)	47	27.10	
PT02	6.69	317	eP	47	28.40	3.3X
PT08	7.51	321	eP	47	36.50	-0.4
			eS	48	52.90	
NNA	7.66	319	iP	47	44.30	5.5X
	0.5s	11.97nm				5.2mb X
			iS	48	15.50	
PT10	7.68	318	eP	47	53.50	14.5X
			eS	49	25.00	
SIV	10.38	81	P	48	19.60	3.3X
BW06	69.68	331	e(P)	56	54.90	-0.3
KIC	70.35	76	(P)	56	59.60	0.0
LKO	70.76	73	(P)	57	01.82	-0.3
KVN	71.33	323	eP	57	06.20	0.9
BBTK	112.23	54	ePKP	04	08.00	-12.9X
MAT	147.72	311	ePKP	05	38.00	11.1X
	0.9s	5.88nm				

S.D. = 0.6 on 6 of 18 obs.

JUN 08, 1990 13h 49m 22.93± 0.17s
17.573 S ± 3.7km 71.824 W ± 3.9km
DEPTH = 26.8km (15 depth phases)
5.6mb (65 obs.) 5.4Msz (15 obs.)
NEAR COAST OF PERU (115)
Felt (IV) ot Arequipo.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 32C
Centroid Location:
Origin Time 13:49:30.3 0.3
Lat 18.33S 0.04 Lon 71.67W 0.05
Dep 15.0 FIX Half-duration 3.0
Moment Tensor; Scale 10**17 Nm
Mrr= 1.94 0.10 Mtt=-1.43 0.09
Mff=-0.51 0.14 Mrt= 0.40 0.28
Mrf=-1.30 0.29 Mtf= 2.84 0.10
Principal Axes:

	Val=	Plg=49	Azm=119
T	2.76	39	321
N	1.31	11	222
P	-4.07	49	29

Best Double Couple:Mo=3.4*10**17
NP1:Strike=274 Dip=48 Slip= 32
NP2: 161 66 133

ARE	1.15	16	iPd	49	46.20	2.6
LPB	3.71	74	iPc	50	22.00	1.7
ZOBO	3.77	70	iPc	50	27.90	6.6X
PT03	5.23	312	iP	50	39.70	-1.7
CCH	5.43	89	P	50	47.60	3.1X
PT06	5.72	310	iP	50	46.60	-1.7
			e(S)	51	58.80	
ANT	6.24	168	iPd	50	50.70	-5.0X
			iS	51	52.50	
PT02	6.40	315	iP	50	59.40	1.4
			eS	52	10.70	
PT08	7.21	320	iPd	51	09.50	-0.2
			eS	52	24.30	
NNA	7.37	318	eP	51	11.40	-0.3
	0.7s	212.33nm				6.3mb
			i	51	13.50	
			eS	52	45.00	
PT10	7.39	317	e(P)	51	12.50	0.7
			i	51	22.50	
			eS	52	57.00	
SIV	10.42	83	P	51	52.60	-1.2
RTRS	12.72	171	ePd	52	20.20	-4.7X
RTLL	14.03	168	e(P)	52	38.00	-4.2X
ZON	14.20	169	e(P)	52	46.00	1.5
CFA	14.35	168	e(P)	52	41.30	-5.0X
			e	52	45.50	
JACH	15.09	176	eP	52	55.00	-1.1
ROCH	15.35	177	eP	53	03.50	3.8X
MDZ	15.48	171	iP	52	59.30	-1.9
PEL	15.54	176	lPd	53	00.10	-1.8
	1.0s	65.00nm				4.8mb
FCH	15.75	175	iPd	53	04.00	-0.9
			e	57	08.00	
PSO	19.42	343	eP	53	52.00	1.3
LPA	21.25	147	ePd+	54	08.00	-1.2
	0.9s	1075.63nm				6.3mb
Z	20s	18.44um				5.5Msz
			lS	57	58.80	
BOG	22.16	354	eP	54	21.00	2.0
			eS	58	28.00	
BAO	22.92	89	eP	54	24.50	-1.6
BMG	24.52	357	iPd	54	39.00	-2.7X
SDV	26.32	3	eP	54	58.10	-0.6
TOV	27.26	4	eP	55	06.00	-1.2
UPA	27.46	343	eP	55	11.80	2.9X
LLAV	28.31	10	iPc	55	15.50	-1.2
CAR	28.32	10	eP	55	04.00	-12.8X
TPP	29.55	21	eP	55	29.58	1.9
TRN	29.87	21	eP	55	30.00	-0.6
SVB	32.38	19	eP	55	50.44	-2.2
SLB	32.96	20	eP	55	55.30	-2.5
SLW	33.18	20	eP	55	57.41	-2.2
ITR	33.63	79	eP	56	05.80	2.1
			e	56	08.30	9kmX
			e	56	12.30	
			e	56	26.50	
CAI	35.58	76	lPd	56	19.00	-1.4
PORP	35.77	8	P	56	20.00	-1.9
CPD	35.86	10	P	56	20.00	-2.7X
AIA	47.91	176	eP	58	10.50	10.0X
PRM	52.34	349	P	58	33.60	-1.1
TKL	54.14	348	P	58	45.40	-2.6
GBTN	54.23	348	P	58	46.50	-2.2
RSCP	54.46	346	P	58	48.00	-2.4
Z	20s	2.82um				5.3Msz
PWLA	54.49	344	P	58	47.50	-3.1X
BLA	55.09	352	P	58	54.00	-1.0
	1.5s	118.42nm				5.7mb
NAV	55.24	351	P	58	54.70	-1.4
UYO	55.79	337	eP	58	58.80	-1.2
OLY	55.98	341	P	58	58.40	-3.0X
TUL	57.83	337	lPd	59	13.40	-1.1
	1.2s	195.40nm				6.0mb
Z	22s	2.99um				5.4Msz
			LR	21	00.00	
LNO	57.83	337	iP	59	13.50	-0.9
MEO	57.95	334	eP	59	14.30	-1.1
FVM	57.96	343	P	59	12.80	-2.6
	1.0s	135.00nm				5.9mb
			pP	59	20.50	25km
GMTN	58.19	358	eP	59	14.90	-2.0
PNJ	58.22	358	iP	59	12.30	-4.8X
TXNY	58.49	358	lP	59	19.30	0.3
ALQ	61.72	328	eP	59	40.80	-0.8
	1.3s	40.87nm				5.4mb
Z	19s	2.73um				5.4Msz
			e	59	48.50	25km
ANMO	61.73	328	P	59	40.90	-0.7
	1.6s	38.33nm				5.3mb
Z	20s	2.13um				5.3Msz
			pP	59	48.80	26km
RSNY	61.87	358	P	59	42.50	0.4
	1.0s	23.86nm				5.3mb
Z	22s	2.65um				5.4Msz
CBM	64.29	3	P	59	57.50	-0.5
			pP	00	06.50	29km
GLA	64.98	321	eP	00	04.00	1.2
GLD	64.98	332	P	00	03.50	0.6
	1.2s	60.61nm				5.6mb
GOL	65.01	332	P	00	02.40	-0.8
	1.2s	38.93nm				5.4mb
Z	20s	1.50um				5.2Msz
			pP	00	10.00	24km
PV09	65.84	329	P	00	08.00	-0.6
BAR	65.85	319	eP	00	09.00	0.6
PLM	66.42	320	eP	00	13.00	0.7
PEC	66.97	320	P	00	16.30	0.7
RVR	67.17	320	eP	00	17.00	0.2
MSU	67.40	327	P	00	18.60	0.1
GSC	67.71	321	eP	00	21.00	0.7
MWC	67.74	320	eP	00	21.00	0.3
PAS	67.76	320	eP	00	22.00	1.4
SBB	67.91	320	eP	00	21.00	-0.6
RSSD	68.09	336	P	00	22.10	-0.6

08d 14h

DAU	68.36	329	P	00	24.50	0.0	ENIJ	85.04	49	iPd	01	57.00	-0.6										
	1.0s					5.9mb																	
CLC	68.53	321	eP	00	25.00	-0.4	GUD	85.35	45	iPd	01	59.90	0.7	DOU	94.89	39	P	02	43.70	0.0			
																	S	13	22.00				
ABL	68.88	320	P	00	28.00	0.2	EVIA	85.57	47	iPd	02	00.60	0.3										
ISA	68.96	321	eP	00	28.00	0.0	ETOR	86.85	45	iPc	02	06.50	-0.1	HAU	95.22	41	eP	02	44.70	-0.6			
DUG	68.98	327	P	00	28.60	0.4	ECHE	87.06	47	iPd	02	08.10	0.6		1.0s		20.00nm			5.5mb			
	1.2s		37.82nm			5.4mb	HVD	87.29	121	iPc	02	25.50	16.4X	KRI	95.44	109	iPc	02	52.00	4.8X			
SYP	69.14	319	eP	00	31.00	1.8	ECRI	87.34	44	iPd	02	09.30	0.5	BSF	95.44	42	eP	02	45.40	-1.1			
BW06	69.36	331	P	00	30.00	-0.6	VAL	87.40	33	iP	02	09.70	1.0		0.9s		11.45nm			5.3mb			
	1.4s		17.95nm			5.0mb	FRS	87.42	120	eP	02	19.00	9.5X	MEM	95.92	39	Pc	02	48.80	0.4			
BCH	69.63	319	P	00	33.60	1.4	GDH	87.57	6	eP	02	10.00	0.8	ENN	95.93	39	eP	02	48.50	0.1			
TNP	69.86	323	P	00	34.10	0.4				e	12	32.00			1.0s		35.00nm			5.8mb			
	1.2s		37.63nm			5.4mb	SWZ	88.25	118	iPd	02	01.40	-12.3X				e	02	58.00	30km			
			pP	00	42.00	25km		0.4s		16.95nm				CDF	95.95	41	eP	02	47.90	-0.8			
LIC	70.04	76	P	00	32.50	-2.5	EROO	88.54	46	eP	02	14.80	0.3		1.0s		22.00nm			5.5mb			
TIC	70.20	76	P	00	34.28	-1.7	EBR	88.60	46	eP	02	15.00	0.2	INK	96.34	341	eP	02	50.00	0.0			
KIC	70.36	76	P	00	34.76	-2.1				eS	13	02.00		WTS	96.87	38	eP	02	53.50	0.9			
	0.7s		50.00nm			5.8mb	MAW	88.85	164	iP	02	15.50	-0.2		1.0s		42.00nm			5.9mb			
FRI	70.58	321	ePd	00	37.60	-0.2		1.0s		63.00nm			5.9mb				e	03	03.00	30km			
PRI	70.61	320	ePd	00	38.20	0.0	EPF	89.41	44	eP	02	18.90	0.2	WIT	97.06	37	eP	02	55.00	1.5			
LKO	70.75	73	P	00	37.12	-2.2		1.1s		65.95nm			5.8mb	TNS	97.26	40	ePd	02	55.10	0.5			
	0.6s		41.50nm			5.7mb	SEK	89.80	120	iPc	02	20.50	-0.6	MBC	97.89	350	eP	02	57.00	0.2			
KVN	71.03	323	P	00	40.30	-0.5		1.0s		20.00nm			5.3mb		1.0s		5.00nm			5.0mb			
LLA	71.09	320	ePd	00	41.00	0.0	REY	90.02	20	iP	02	23.10	2.1	SQTA	98.09	43	iPc	02	56.50	-2.0			
			epP	00	49.60	28km		0.9s		0.50nm			3.8mb X		1.1s		31.40nm			5.8mb			
PRS	71.17	320	eP	00	41.80	0.4	PRY	90.14	118	iPc	02	22.00	-0.7				i	02	59.50	9kmX			
CMB	71.68	321	ePd	00	44.30	-0.2		1.0s		15.00nm			5.2mb				i	03	08.40				
HPI	71.74	330	P	00	45.10	0.0	LFF	90.47	43	eP	02	23.20	-0.3	GRF	98.81	41	eP	03	01.40	-0.1			
ARN	71.92	320	P	00	47.50	1.5		0.9s		91.75nm			6.1mb		Z 19s		0.70um			5.2Msz			
MHC	71.98	320	eP	00	46.90	0.5	MFF	90.61	41	eP	02	23.50	-0.6				e	03	02.80	4kmX			
			epP	00	55.50	28km		0.8s		49.70nm			5.9mb	MOX	99.32	40	eP	03	03.00	-0.8			
GCC	72.00	320	e(P)	00	45.80	-0.6	LPO	90.66	43	eP	02	24.00	-0.4		2.0s		49.00nm			5.7mb			
			epP	00	55.20	30km		0.9s		58.95nm			5.9mb		Z 20s		1.20um			5.4Msz			
SCH	72.22	3	ePc	00	46.30	-1.0	LPF	90.67	39	iPc	02	23.50	-0.8		E 20s		1.00um						
	1.0s		72.00nm			5.7mb		1.0s		68.00nm			5.9mb	FBA	99.95	335	eP	03	05.10	-1.3			
SPA	72.54	180	iPc	00	48.90	-0.5	GRR	90.93	39	iPc	02	22.48	-3.1X		1.3s		0.60nm			4.0mb X			
	1.0s		74.00nm			5.7mb		0.8s		63.15nm			6.0mb	KHC	100.14	42	Pdiffd	03	08.50	0.8			
BKS	72.69	320	iPd	00	51.90	1.5	RJF	91.12	43	eP	02	25.90	-0.6		Z 18s		1.00um			5.4Msz			
	1.4s		94.00nm			5.6mb		0.8s		25.50nm			5.6mb		N 18s		0.60um						
			i	19	03.50		SLR	91.23	117	iPc	02	27.50	-0.2		E 18s		0.50um						
			i	25	07.30			1.0s		30.00nm			5.6mb	CLL	100.35	39	iPdiff	03	09.50	1.0			
BRK	72.70	320	e(P)	00	50.90	0.4		Z 18s		5.50um			6.0Msz		1.1s		11.00nm			5.3mb			
LRM	73.04	332	eP	00	53.00	0.4	FLN	91.32	39	eP	02	26.70	-0.6	BRG	100.81	40	ePdiff	03	11.80	1.2			
ORV	73.33	322	ePd	00	54.60	0.5		1.1s		73.25nm			6.0mb		1.3s		23.00nm			5.6mb			
			ipP	01	03.30	28km	CAF	91.33	43	iPc	02	27.10	-0.4	PRU	100.96	41	ePdiff	03	10.90	-0.4			
MIN	73.90	323	e(P)	00	57.80	0.2		0.9s		26.20nm			5.6mb		Z 18s		1.50um			5.5Msz			
WDC	74.60	322	ePd	01	00.00	-1.5	LDF	91.46	39	eP	02	27.30	-0.7		N 18s		0.80um						
			ipP	01	08.50	27km		0.8s		52.40nm			6.0mb				e	05	32.00				
SES	75.97	335	eP	01	09.00	-0.2	LSF	91.51	42	eP	02	27.50	-0.8	ZST	102.18	43	ePdiff	03	15.60	-1.2			
	1.2s		108.00nm			5.7mb		0.9s		36.05nm			5.8mb				e	07	20.50				
			pP	01	17.00	26km	BCAO	91.66	86	iPc	02	20.00	-9.7X				e	19	35.60				
FFC	76.46	343	eP	01	11.00	-0.8		1.3s		54.00nm			5.8mb	KSP	102.25	40	ePdiff	03	18.50	1.5			
	1.3s		40.00nm			5.3mb				i	05	08.50		KRA	104.38	42	ePdiff	03	28.00	1.5			
VGB	76.88	327	P	01	15.30	0.9				i	06	03.00		SPC	104.42	43	ePdiff	03	28.20	1.2			
NEW	76.99	331	P	01	15.40	0.5				iS	13	03.50		QIS	131.15	220	iPKPc	08	34.30	-0.6			
	1.2s		35.04nm			5.3mb	TCF	91.96	42	eP	02	29.60	-0.8	MAIO	133.29	56	iPKPd	08	39.30	0.7			
TIO	78.54	52	iP	01	24.00	0.0		0.9s		18.00nm			5.5mb				e	11	06.00				
			i	01	31.00	22km	MAF	92.16	42	iPc	02	30.80	-0.5	WRA	134.72	216	PKPc	08	40.70	-1.0			
PNT	78.90	330	eP	01	26.00	0.6		1.1s		37.85nm			5.7mb		0.5s		10.20nm						
	0.7s		23.00nm			5.3mb	LBL	92.22	43	P	02	32.47	1.0	WB5	134.76	216	ePKP	08	40.80	-1.0			
SBA	79.17	191	e(P)	01	25.60	-0.9	AKU	92.26	20	iP	02	34.00	2.7X	GUA	144.42	269	ePKP	08	56.80	-2.5X			
GMW	79.26	328	P	01	28.20	0.8		0.9s		13.45nm			5.4mb		0.8s		101.49nm						
AVE	79.57	50	iP	01	30.50	1.2	PYM	92.26	43	P	02	32.68	0.8	GUMO	144.47	269	ePKP	08	57.40	-2.0			
			i	02	23.50	220kmX	AGO	92.46	42	P	02	33.19	0.5		1.2s		250.00nm						
PGC	80.32	328	eP	01	34.00	1.0	BGF	92.47	42	iPc	02	32.00	-0.7	PJG	144.47	269	ePKP	08	57.20	-2.2			
FRB	81.10	1	eP	01	35.00	-1.7		0.9s		38.50nm			5.8mb	KSH	144.58	45	PKP	08	59.00	-0.1			
CER	81.45	122	iPc	01	41.00	1.5	BFT	92.73	118	iPc	02	35.50	0.8	KAKJ	146.18	310	ePKP	09	02.60	0.9			
	0.4s		15.91nm			5.4mb		1.0s		35.00nm			5.7mb	NIIJ	146.57	312	ePKP	09	03.00	0.7			
CNIL	82.02	48	eP	01	45.50	3.3X	PLDF	92.74	43	P	02	34.81	0.8	CHJJ	147.11	310	ePKP	09	04.90	1.7			
NKM	82.05	49	iPd	01	43.50	1.2	AVF	92.88	42	eP	02	33.50	-1.1	POO	147.38	83	iPKPd	09	05.00	0.8			
PLAT	82.11	48	eP	01	45.50	2.8X		1.2s		23.80nm			5.5mb	MAT	147.46	311	(PKP)	09	04.00	0.2			
EVAL	82.12	47	iPd	01	43.60	0.9	SSF	93.09	41	eP	02	35.10	-0.4		Z 20s		1.77um			5.8Msz			
MOMI	82.23	48	eP	01	46.00	2.7X		0.7s		7.70nm			5.2mb	MDJ	147.59	331	ePKP	09	04.50	0.8			
GIBL	82.31	48	eP	01	45.00	1.3	SMF	93.14	42	eP	02	35.00	-0.8	MTMJ	147.72	312	ePKP	09	07.60	3.3X			
EJIF	82.47	48	iPd	01	46.00	1.4		1.1s		37.85nm			5.7mb	IIDJ	148.15	310	ePKP	09	08.10	3.1X			
ALJ	82.48	48	eP	01	45.50	0.8	LOR	93.39	41	eP	02	36.40	-0.5	WMQ	148.64	29	iPKPd	09	06.50	1.0			
EPRU	82.89	48	iPd	01	48.60	1.9		0.8s		9.40nm			5.3mb		Z 25s		1.70um			5.7MszX			
EZAM	83.11	42	eP	01	48.00	0.3	BUL	93.42	112	iPd	02	37.00	-0.9				e	09	15.00				
EHOR	83.28	47	eP	01	49.20	0.6		1.0s		30.50nm			5.7mb	KOD	149.34	100	ePKP	09	08.80	1.1			
MAL	83.36	48	iPc	01	50.00	0.9	LRG	93.64	46	eP	02	38.10	0.0	TSRJ	149.52	311	ePKP	09	12.80	5.8X			
			iS	12	12.00			1.5s		125.35nm			6.1mb	NDI	149.54	63	ePKP	09	08.00	0.7			
STS	83.58	41	eP	01	50.60	0.5	LMR	93.69	46	iPc	02	38.10	-0.3		1.0s		125.00nm						
EPLA	83.78	45	iPc	01	51.20	0.0		1.3s		68.60nm			5.9mb	CN2	150.06	334	PKP	09	12.00	4.4X			
TAF	83.94	51	iPd	01	53.00	0.8	FRF	93.87	46	iPc	02	38.90	-0.3		Z 20s		0.90um			5.6Msz			
AFC	84.21	48	eP	01	54.00	0.4		1.3s		65.00nm			5.9mb				ePP	12	50.00				
ERUA	84.22	42	eP	01	53.70	0.3	LPL	94.61	44	eP	02	43.20	0.4	GBA	150.15	93	PKPc	09	09.10	0.6			
EBAN	84.46	47	iPc	01	54.90	0.2		0.9s		32.75nm			5.8mb		1.1s		38.20nm						
EMON	84.63	41	eP	01	55.60	0.2	LPG	94.61	44	iPc	02	43.30	0.4	SNY	152.46	335	PKPc	09	13.60	2.4X			

GKN	155.99	60	PKP	09	16.90	0.2
DMN	156.51	61	PKP	09	18.40	0.9
BJI	156.56	344	ePKP	09	18.00	1.2
	Z 22s		0.62um			5.4Msz
			e	09	42.00	
HHC	156.62	354	PKPd	09	19.00	1.9
			sPKP	09	29.00	
PKI	156.78	61	PKP	09	18.40	0.4
GUN	157.04	59	PKP	09	18.90	0.6
GTA	157.06	17	PKP	09	18.80	1.1
	Z 24s		2.20um			5.9MszX
	N 20s		1.30um			
			e	09	46.00	
			PP	13	24.00	
TIY	159.59	350	ePKP	09	22.20	1.7
	Z 28s		1.90um			5.8MszX
			e	09	59.60	
			SS	33	42.00	
LSA	160.31	49	PKP	09	24.10	2.0
LZH	161.16	11	PKPc	09	22.00	-0.3
			pPKP	09	31.00	
			e	10	07.00	
SSE	162.08	321	PKP	09	24.00	0.9
			pPKP	09	34.00	
PSI	162.65	147	ePKPd	09	24.80	0.6
XAN	163.59	358	PKP	09	25.80	1.1
WHN	165.92	338	ePKP	09	28.50	1.8
CD2	166.13	16	ePKP	09	28.00	1.0
KMI	170.94	33	PKPc	09	30.50	0.1
	Z 18s		0.60um			
GYA	171.05	9	PKP	09	31.40	1.1
			pPKP	09	38.60	
			e	10	50.00	
			PP	14	39.80	
CHG	171.14	81	ePKP	09	20.90	-9.5X
CHTO	171.14	81	ePKP	09	30.90	0.5
	1.1s		14.72nm			
BDT	171.24	91	ePKP	09	30.50	0.1
	S.D. = 1.1		on 221 of 253 obs.			

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* JUN 08, 1990 13h 58m 44.01± 1.77s
8.091 N ±20.8km 71.175 W ±11.5km
DEPTH = 5.0km (geophysicist)
4.4mb (2 obs.)
VENEZUELA (101)
Felt at Merida and Barinas.

SDV	0.95	34	iPgd	59	01.10	-1.7
TOV	2.17	39	iPnc	59	22.40	1.0
			iSn	59	47.10	
GUAC	4.38	61	iP	59	53.60	0.6
OLLA	4.72	66	iP	59	58.30	0.6
			iS	00	52.20	
CAR	4.83	60	iP	00	00.50	1.2
LLAV	4.92	61	iP	00	01.40	0.9
			iS	00	56.50	
GUAN	5.77	71	iP	00	12.30	-0.2
			iS	01	16.70	
TCE	9.65	74	eP	01	05.92	-0.7
TRN	9.97	74	eP	01	09.33	-1.7
BW06	48.23	322	eP	07	28.00	-0.1
	0.9s		4.03nm			4.5mb
NAO	79.09	30	P	10	50.90	0.1
	0.6s		2.00nm			4.3mb
WRA	152.63	242	PKP	18	47.00	10.1X
	0.4s		0.60nm			
	S.D. = 1.1		on 11 of 12 obs.			

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* JUN 08, 1990 14h 51m 48.73± 1.05s
32.219 S ±11.2km 70.130 W ±11.0km
DEPTH = 31.8 ± 9.1 km
CHILE-ARGENTINA BORDER REGION (127)

JACH	0.60	220	iPd	52	03.70	2.7
			iS	52	16.30	
PEL	1.03	207	iPc	52	07.40	0.3
			iS	52	24.00	
ROCH	1.06	224	iP	52	08.00	0.4
			iS	52	24.50	
FCH	1.11	187	iPd	52	09.30	0.8
			iS	52	26.70	
MDZ	1.27	122	i(P)	52	11.30	0.9
SAN	1.31	200	eP	52	11.00	0.0
			iS	52	29.50	
RTCV	1.40	76	e(P)	52	12.00	-0.3
PCH	1.43	193	iP	52	12.50	-0.3
			iS	52	32.40	
TACH	1.58	205	iP	52	13.90	-1.0
			iS	52	35.00	
RTLL	1.67	58	iPd	52	15.80	-0.4
CFA	1.72	70	iPc	52	16.00	-0.9
			eS	52	39.80	
LCCH	1.74	224	iPd	52	15.90	-1.3
			iS	52	39.00	
LNV	2.04	211	iPc	52	18.60	-2.9
			iS	52	43.50	
RTRS	2.12	16	iPc	52	23.20	0.6
			eS	52	50.00	
ZOBO	15.98	7	P	55	44.00	10.5X
	S.D. = 1.5		on 14 of 15 obs.			

JUN 08, 1990 15h 05m 09.52± 0.12s
18.874 S ± 3.3km 178.789 W ± 3.3km
DEPTH = 499.2km (25 depth phases)
5.6mb (66 obs.)
FIJI ISLANDS REGION (181)
mb 6.2 (PAS), 5.5 (BRK).
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 39C M.W.: 13S, 25C
Centroid Location:
Origin Time 15:05:19.2 0.2
Lat 18.51S 0.02 Lon 178.93W 0.02
Dep 503.5 0.9 Half-duration 6.0
Moment Tensor; Scale 10**18 Nm
Mrr=-3.14 0.05 Mtt= 4.44 0.08
Mff=-1.29 0.09 Mrt= 2.42 0.07
Mrf=-3.12 0.07 Mtf=-1.41 0.08
Principal Axes:
T Val= 5.91 Plg=20 Azm= 20
N -0.31 27 121
P -5.60 55 258
Best Double Couple:Mo=5.8*10**18
NP1:Strike= 73 Dip=34 Slip=-143
NP2: 311 70 -61

TVI	2.27	328	iPd	06	17.40	0.7
KRO	2.32	312	iPd	06	17.30	0.4
OVA	2.59	297	eP	06	19.60	1.2
SVA	2.72	286	iPc	06	21.10	1.9
			eS	07	17.50	
VUN	2.75	288	iPc	06	20.10	0.7
			eS	07	19.70	
NDE	2.90	321	iPd	06	21.20	0.7
MBU	3.03	308	ePd	06	23.70	2.4
SGE	3.38	292	eP	06	23.70	-0.2
NDF	3.74	287	iP	06	29.50	3.0X
YSA	4.09	301	eP	06	29.40	0.1
PVC	12.30	273	iPd	07	54.30	1.9
			iS	10	22.50	
DZM	14.20	255	iPd	08	13.00	0.9
			iS	10	35.80	
HBZ	18.83	187	eP	08	59.20	1.6
PUZ	19.30	187	eP	09	03.30	1.0
			eS	12	08.20	
WLZ	19.53	193	P	09	06.90	2.5
NOZ	19.87	187	eP	09	08.00	0.4
			S	12	19.70	
WHH	20.36	191	P	09	11.30	-1.0
HATZ	20.44	192	eP	09	12.70	-0.3
CNZ	20.84	192	eP	09	16.70	-0.2
PGZ	22.08	190	eP	09	28.10	0.0
MNG	22.22	192	eP	09	27.70	-1.7
			eS	12	55.90	
HNR	22.63	292	eP+	09	30.00	-3.3X
			e(S)	13	05.00	
MTW	22.74	191	eP	09	32.40	-1.7
CAW	22.78	192	eP	09	33.00	-1.5
WDW	22.95	192	eP	09	35.20	-0.7
BLW	22.95	191	P	09	36.30	0.3
MRW	22.97	193	eP	09	34.90	-1.2
WEL	23.01	192	P	09	39.20	2.7
			i	09	47.00	
			SS	13	10.00	
			SS	17	12.00	
TCW	23.04	193	eP	09	35.70	-1.1
THZ	23.89	195	eP	09	43.50	-1.1
			e	11	13.60	
			eS	13	21.10	
KHZ	24.36	194	eP	09	47.20	-1.4
LTZ	25.01	196	eP	09	52.90	-1.7
			eS	13	39.70	
MOZ	25.79	194	eP	10	00.30	-1.1
BRS	27.44	247	iPc+	10	16.10	-0.1
			i	10	33.10	
			e	10	42.00	
			e	11	23.00	
			eS	14	23.00	
AFR	27.58	92	iP	10	16.70	-0.7
	1.0s		175.00nm			5.5mb
TBI	27.69	104	eP	10	22.00	3.6X
	0.8s		30.00nm			4.9mb
PAE	27.75	92	iP	10	18.40	-0.5
	1.0s		195.00nm			5.6mb
PPT	27.77	92	iP	10	18.60	-0.5
	1.0s		275.00nm			5.7mb
PPN	27.91	92	iP	10	19.80	-0.5
	1.0s		115.00nm			5.4mb
MMCZ	27.93	198	P	10	19.50	-0.9
			e	11	48.90	
MHZ	27.94	198	P	10	19.80	-0.7
			e	11	48.80	
MSZ	28.02	200	eP	10	20.90	0.0
			e	11	50.30	
			e	11	50.50	
COO	28.98	241	eP	10	30.00	0.4
PMO	29.78	87	iP	10	36.30	-0.3
	1.0s		100.00nm			5.3mb
VAH	29.98	88	iP	10	37.60	-0.7
	1.0s		115.00nm			5.4mb
TPT	30.05	87	iP	10	38.40	-0.5
	1.0s		105.00nm			5.3mb
RUV	30.23	88	iP	10	39.90	-0.5
	1.0s		180.00nm			5.6mb
RIV	30.63	235	iPc	10	47.00	3.2X
			e	12	12.00	
			e	13	04.00	
			eS	15	13.00	
			e	18	04.00	
RMO	30.83	250	iPd	10	46.10	0.6
	0.4s		153.00nm			5.9mb
			e	11	53.00	
RAB	31.90	294	iP-	10	56.00	1.3
			iS	15	28.00	
CNB	32.56	233	iPd	11	01.90	1.7
	0.5s		338.00nm			6.1mb
			e	15	44.00	
CAN	32.84	234	iPd	11	03.50	1.0
			e	15	47.00	
			e	16	38.10	
CTA	32.94	262	iPd-	11	03.00	-0.4
			iPcP	13	37.00	
			iS	15	42.00	
			iScP	16	36.00	
			iScS	20	37.00	
BWA	32.97	235	eP	11	03.40	-0.2
			e	15	47.70	
			e	16	35.50	
CMS	34.24	242	iPd	11	15.20	0.9
	0.4s		115.00nm			5.8mb
			e	16	07.00	
KDB	34.25	281	eP	11	14.00	-0.5
QLP	34.86	250	iPd	11	19.80	0.3
LAT	35.43	286	eP	11	25.00	0.7
TOO	36.29	232	iPd	11	32.80	1.6
	0.4s		214.00nm			6.0mb
			e	16	38.00	
STK	37.86	242	eP	11	45.30	1.2
	0.6s		252.00nm			5.9mb
			eS	16	59.00	
BFD	38.37	234	iPc	11	49.50	1.2
	0.7s		232.00nm			5.8mb
MNDI	38.68	284	eP	11	53.00	1.7
OIS	39.13	260	iPd	11	53.70	-1.0
	0.7s		164.00nm			5.7mb
			e	17	17.00	
RKT	41.01	104	eP	12	13.00	3.1X
	0.9s		80.00nm			5.2mb
WB5	44.09	261	eP	12	32.90	-1.4
			e	16	39.00	
			e	18	25.20	
WRA	44.11	261	Pc	12	33.20	-1.3
	0.6s		123.30nm			5.6mb
HON	44.83	28	P	12	40.00	0.1
GUA	48.13	309	eP	13	04.60	-0.7
	1.3s		2569.23nm			6.5mb
			eS	19	29.40	
GUMO	48.20	309	eP	13	04.20	-1.6
	1.3s		1836.60nm			6.4mb
PJG	48.20	309	eP	13	04.80	-1.0
MTN	48.42	269	eP	13	06.00	-1.6

08d 15h

Station	Distance	Azimuth	Phase	Time	Residual / depth / magnitude
			e	14 39.00	
			e	19 27.00	
FORR	49.24	245	iPd	13 12.30	-1.2
KNA	50.02	265	iPd	13 18.30	-1.2
	0.4s	191.00nm			5.9mb
WARB	50.63	251	eP	13 22.00	-1.8
AAI	53.91	279	ePc	13 45.80	-2.0
DRV	54.64	199	eP	13 54.00	1.9
COOL	55.22	245	iPd	13 55.30	-1.5
	0.6s	69.00nm			5.2mb
MBL	57.40	257	iPd	14 10.50	-1.4
MEKA	57.83	250	iPd	14 13.70	-1.2
	0.5s	175.00nm			5.6mb
KLB	58.08	244	iPd	14 14.60	-1.8
	0.5s	142.00nm			5.6mb
BAL	59.05	245	iPd	14 22.10	-1.0
	0.6s	348.00nm			6.0mb
MUN	59.37	244	iPc	14 25.00	-0.2
SBA	59.44	184	iPc	14 28.10	3.2X
MRWA	59.79	247	iPd	14 27.10	-0.9
	0.4s	33.00nm			5.1mb
DAV	60.59	290	eP	14 32.00	-1.4
			eS	22 13.20	
NANU	61.11	254	eP	14 36.10	-0.6
MKS	61.61	274	e(P)d	14 40.70	0.6
KAKJ	67.13	325	eP	15 13.20	-1.3
CHJJ	67.67	324	eP	15 15.90	-2.0
IIDJ	67.87	323	eP	15 17.50	-1.7
OCP	67.93	295	ePc+	15 12.00	-7.8X
WKYJ	68.36	320	eP	15 21.50	-0.7
MAT	68.46	324	iPd	15 21.00	-1.7
	0.6s	80.00nm			5.5mb
			eS	23 43.00	
OFUJ	68.50	328	P	15 16.90	-5.9X
NIIJ	68.53	325	eP	15 22.80	-0.3
YAMJ	68.66	326	P	15 22.90	-1.0
MTMJ	68.72	324	eP	15 22.30	-2.1
TSRJ	69.03	322	eP	15 23.90	-2.2
TKSJ	69.14	319	eP	15 25.90	-0.9
BAG	69.18	297	eP	15 26.00	-1.6
			e	18 00.90	
			eS	23 54.00	
KAGJ	69.36	315	eP	15 28.40	0.2
KUSJ	70.21	332	eP	15 31.70	-1.2
KUMJ	70.25	316	eP	15 32.20	-1.2
AOMJ	70.27	328	P	15 33.40	0.0
HOOJ	70.28	331	eP	15 33.20	-0.1
YONJ	70.30	320	eP	15 32.70	-1.0
ADK	70.48	1	eP	15 33.50	-0.8
	0.9s	219.10nm			5.7mb
SHNJ	71.08	318	eP	15 36.90	-1.3
SPA	71.24	180	iPd	15 40.60	1.6
	0.8s	110.83nm			5.4mb
			e	17 30.20	
MRRJ	71.35	330	eP	15 38.20	-1.4
SMY	71.57	355	eP	15 40.10	-0.5
SAP	71.71	330	eP	15 42.00	0.3
ASAJ	71.93	332	P	15 43.30	0.3
OZH	74.90	303	eP	16 00.00	-0.3
	5.0s	4200.00nm			6.2mb X
			S	24 57.00	
SDN	75.54	11	eP	16 02.50	-0.6
SSE	76.08	310	Pd	16 06.00	-0.6
	1.4s	150.00nm			5.3mb
			S	25 10.00	
SYP	77.09	46	eP	16 13.00	0.7
			e	18 01.00	
GCC	77.16	43	eP	16 12.70	0.3
			epP	18 01.50	501km
PRS	77.17	44	ePc	16 13.00	0.5
			epP	18 00.70	495km
PCC	77.19	43	ePc	16 12.70	0.2
			epP	18 00.60	496km
HKC	77.25	299	iP	16 14.30	1.1
			iS	25 29.00	
SAO	77.37	44	ePc	16 13.40	-0.2
BCH	77.38	46	P	16 14.50	0.7
BRK	77.48	43	eP	16 14.50	0.4
			ipP	18 02.00	493km
			iS	25 27.00	
BKS	77.50	43	ePd	16 13.60	-0.7
	1.0s	178.00nm			5.5mb
			ipP	18 02.20	499km
			eS	25 18.80	
			i	27 38.00	
			isPS	29 17.60	
			eLQ	36 53.40	
PRI	77.53	45	ePc	16 15.20	0.6
			epP	18 03.30	496km
PHAM	77.53	45	P	16 16.00	1.5
MHC	77.57	43	ePc	16 15.20	0.4
			epP	18 03.50	497km
LLA	77.61	44	e(P)	16 15.30	0.4
			epP	18 03.10	494km
ARN	77.65	43	P	16 15.70	0.6
			pP	18 04.40	499km
ABL	77.79	47	P	16 16.00	-0.2
PAS	78.13	48	eP	16 18.00	0.3
			epP	18 04.00	483kmX
			epPcP	18 10.00	
			esScP	19 00.00	
			ePP	19 13.00	
			iS	25 35.00	
			eScS	25 45.00	
			ePS	26 32.00	
			esS	28 42.00	
			esSP	29 13.00	
			eSS	31 36.00	
			eLg	37 02.00	
FHC	78.17	39	eP	16 18.60	0.8
MWC	78.25	48	eP	16 19.00	0.4
			e	18 05.00	
NJ2	78.27	310	iPd	16 19.00	0.5
	1.2s	100.00nm			5.1mb
			PP	19 24.00	
			iS	25 36.00	
GZH	78.28	299	iPc	16 19.40	0.7
	5.0s	4600.00nm			6.2mb X
			sP	18 55.00	
			iS	25 28.00	
			SKS	25 35.00	
BAR	78.42	50	eP	16 21.00	1.7
			e	18 08.00	
RVR	78.61	48	eP	16 21.00	0.7
			e	18 08.00	
PLM	78.64	49	eP	16 20.00	-0.7
			e	16 57.00	
			e	18 09.00	
FRI	78.64	44	eP	16 20.60	0.3
			e	16 56.60	
			epP	18 08.50	493km
SB8	78.66	47	eP	16 20.00	-0.6
			e	18 09.00	
PEC	78.71	48	P	16 21.50	0.7
ISA	78.74	46	eP	16 22.00	1.0
			e	17 45.00	
			e	18 10.00	
MDJ	78.77	325	iPd	16 21.00	0.2
	1.5s	600.00nm			5.8mb
			PcP	16 27.10	
			pP	18 13.00	516kmX
			iS	25 43.00	
CMB	78.79	43	ePc	16 21.10	-0.1
			e	16 58.50	
			e	17 40.70	
			ipP	18 09.90	498km
			eP'P'	43 17.00	
WDC	78.91	40	ePc	16 21.90	0.2
			e	16 53.20	
			e	17 40.80	
			ipP	18 10.00	494km
			eP'P'	43 16.00	
ORV	78.95	42	ePc	16 21.90	0.0
			epP	18 10.20	495km
KGM	79.21	276	ePc	16 24.70	0.9
	1.3s	983.30nm			6.1mb
MIN	79.35	41	ePc	16 23.90	-0.3
			e(pP)	18 10.60	485kmX
KDC	79.41	14	eP	16 24.50	0.6
CLC	79.43	46	eP	16 25.00	0.4
			e	17 48.00	
			e	18 13.00	
QIZ	79.51	294	iPd	16 27.00	1.7
	6.0s	3000.00nm			5.9mb X
GSC	79.70	47	eP	16 26.00	0.0
			e	17 50.00	
			e	18 14.00	
GLA	79.95	50	eP	16 28.00	0.7
			e	17 51.00	
			e	18 16.00	
DL2	80.04	317	iPd	16 29.00	1.4
	1.8s	700.00nm			5.8mb
			pP	18 20.00	508km
			sP	19 10.00	
			PP	19 38.00	
			S	25 53.00	
SNY	80.49	320	iPd	16 30.00	0.2
	6.5s	2800.00nm			5.9mb X
			pP	18 21.00	507km
			iS	25 59.00	
CN2	80.56	323	iPd	16 30.20	0.0
	1.0s	300.00nm			5.7mb
			pP	18 21.50	509km
			sP	19 13.00	
			S	26 00.00	
KVN	80.84	43	P	16 31.90	-0.1
			pP	18 22.00	502km
WHN	80.88	307	Pc	16 33.20	1.1
	1.5s	380.00nm			5.7mb
			PP	19 42.00	
			iS	26 03.00	
TNP	80.90	45	P	16 32.60	0.2
			pP	18 22.00	498km
KLM	81.14	276	eP	16 34.00	0.1
PPI	81.16	273	eP	16 33.60	-0.4
	0.7s	77.70nm			5.3mb
TIA	81.63	313	P	16 35.50	-0.4
	6.0s	2900.00nm			6.0mb X
			pP	18 26.90	507km
			sP	19 18.50	
			S	26 11.20	
SVW	81.85	11	eP	16 36.70	0.2
BMW	82.09	35	P	16 37.50	-0.5
			pP	18 29.00	507km
IPM	82.22	278	ePd	16 40.90	1.6
	0.8s	328.20nm			5.9mb
AIA	82.75	157	eP	16 43.30	2.3
MAW	82.83	200	iP	16 43.10	1.7
	0.7s	72.00nm			5.3mb
GMW	82.98	34	P	16 42.00	-0.4
LON	83.03	36	P	16 41.40	-1.3
PGC	83.31	33	eP	16 45.00	1.0
SNG	83.47	280	eP	16 46.70	1.2
	2.0s	2235.29nm			6.4mb
			eS	26 28.00	
TTA	83.48	10	eP	16 44.60	-0.1
PSI	83.57	275	iPd	16 46.40	0.3
	1.3s	603.80nm			6.0mb
PMR	83.62	14	eP	16 44.40	-0.9
	0.3s	58.10nm			5.7mb
			i	18 36.10	
MCW	83.65	34	P	16 46.00	0.2
ANM	83.81	6	eP	16 46.90	0.7
SIT	83.90	22	eP	16 47.40	0.6
	0.8s	48.70nm			5.2mb
BJI	84.22	316	eP	16 48.50	-0.2
	1.5s	580.00nm			6.0mb
			esP	19 28.00	
			eSKS	26 23.50	
			eS	26 38.00	
MSU	84.52	46	P	16 51.80	1.2
			pP	18 43.00	502km
TOA	84.76	15	eP	16 51.40	0.4
GYA	85.20	300	iPd	16 54.40	0.4
	5.0s	3100.00nm			6.2mb X
			sP	19 39.00	
			PP	20 22.00	
			SKS	26 33.00	
			S	26 46.00	
TIY	85.64	312	iPd	16 56.40	0.6
	0.9s	200.00nm			5.8mb
			sP	19 34.00	
			SKS	26 35.50	
			SS	32 32.00	
PNT	85.73	34	eP	16 56.00	0.1
	0.9s	146.00nm			5.7mb
LOE	86.02	290	eP	16 58.00	0.1
NNT	86.14	285	iPc	17 00.00	1.5
NEW	86.50	36	P	16 59.00	-0.6
	1.0s	40.00nm			5.1mb
			pP	18 51.00	503km
XAN	86.56	308	P	17 01.20	0.9
	1.5s	430.00nm			6.0mb
			iS	27 00.00	
IMA	86.78	10	eP	16 59.90	-0.8
	1.2s	73.70nm			5.3mb
			epP	18 20.50	344kmX
			esP	18 52.60	
FBA	86.82	13	eP	16 59.60	-1.2
			epP	18 19.70	342kmX
			esP	18 52.00	

NST	86.84	288	iPc	17	04.00	2.2	SOD	128.86	348	ePKP	23	11.00	-9.5X	WTS	146.66	354	ePKP	23	53.00	-0.1
ALQ	86.97	52	eP	17	02.50	0.1				e	25	20.00			1.0s	340.00nm				
	1.0s	37.00nm			5.1mb					eSKP	25	54.00					e	25	53.00	
			ePP	18	54.00	500km	NPA	129.58	231	ePKP	23	23.50	0.1	CMP	147.07	328	ePKPc	23	58.00	3.9X
ANMO	86.98	52	P	17	03.00	0.6				ePP	25	27.00		LFK	147.09	306	ePKP	23	53.60	-0.9
	1.0s	30.00nm			5.0mb					iSKP	26	02.50		BUC	147.12	326	ePKPd	23	55.00	0.9
			pP	18	53.00	492km				e	26	50.50		GPA	147.14	317	iPKP	23	56.60	2.2
HHC	87.69	315	Pc	17	06.40	0.8	AKU	131.50	11	iPKP	23	28.00	2.5X	PRU	147.17	344	PKP	23	53.50	-0.6
	1.6s	700.00nm			6.2mb			1.0s	20.00nm								PKKP	23	57.20	
			sP	19	46.00					i	27	10.90		BUC1	147.20	326	ePKPc	23	56.00	1.7
			PP	20	44.00		ITR	132.24	122	ePKP	23	20.80	-7.7X	VRAC	147.21	341	PKP	23	56.80	2.7X
			SKS	26	49.50					e	23	31.40		MOX	147.23	348	ePKP-	23	54.00	-0.2
BSI	87.91	276	ePd	17	09.00	2.0				e	25	31.70					i	23	57.00	
	0.5s	258.00nm			6.3mb					e	26	10.40					i	24	00.00	
LRM	87.94	40	eP	17	07.40	0.6				e	28	55.90		HRT	147.26	318	ePKP	23	51.40	-3.2X
			e	18	58.60		BUL	132.83	216	ePKP	23	27.40	-2.2	PSZ	147.28	337	iPKP	23	58.30	3.9X
KMI	87.95	297	Pd	17	08.00	0.7				iPP	25	32.00		GBZT	147.42	318	ePKP	23	58.10	3.4X
BW06	88.30	44	P	17	08.00	-0.5				iSKP	26	01.00		ISK	147.51	319	ePKP	23	53.00	-1.9
	1.0s	72.50nm			5.5mb					iSKS	29	53.30		YLV	147.59	318	iPKP	23	52.90	-2.3X
			pP	18	59.00	495km	SUF	132.92	345	ePKP	23	13.00	-15.3X	BADA	147.70	294	ePKPc	23	55.40	-0.1
BDT	88.40	289	eP	17	10.00	0.9	KRI	134.84	220	ePKP	23	37.50	4.0X	CTT	147.85	320	iPKP	23	54.10	-1.3
	1.0s	127.70nm			5.7mb					iPP	25	39.00		SRO	147.94	338	iPKP	23	57.50	2.2
BTO	88.62	314	iPd	17	11.00	1.1				iSKP	26	19.00					i	25	21.60	
	6.0s	2300.00nm			6.2mb	X	NUR	135.18	344	ePKP	23	18.00	-14.6X				i	25	58.20	
CHG	88.99	290	ePd	17	12.60	0.7		0.6s	31.30nm					ENN	147.96	354	ePKP	23	56.00	0.7
	0.9s	111.34nm			5.7mb					i	23	32.00			0.9s	99.00nm				
			eS	27	00.00					e	25	36.00					e	25	56.50	
CHTO	88.99	290	eP	17	12.90	1.0				eSKP	26	17.00		BUD	147.97	337	iPKP	23	57.00	1.6
	0.9s	69.69nm			5.5mb		TAB	136.46	306	ePKP-	23	35.00	-1.0	ZST	148.03	340	ePKP	23	58.40	2.9X
CD2	89.29	303	P	17	14.00	0.9				e	25	38.00					i	24	03.00	
	2.0s	300.00nm			5.8mb		UPP	137.39	348	iPKP	23	27.50	-9.3X				e	25	20.90	
			pP	19	09.00	516kmX	NAO	137.54	353	PKP	23	29.30	-7.8X				e	26	00.40	
			sP	19	58.80			0.8s	10.90nm					MEM	148.11	354	iPKPc	23	55.35	-0.1
			PP	21	00.00		HFS	137.82	351	ePKP	23	26.00	-11.7X				i	23	58.32	
			iS	27	25.50			0.8s	20.70nm								i	25	58.43	
GOL	89.78	48	P	17	16.40	1.0	UQSK	141.44	288	iPKPc	23	40.70	-4.7X	JMB	148.14	323	iPKP	23	58.00	2.2
	1.0s	21.25nm			5.0mb		KVT	142.94	314	iPKP	23	45.00	-2.4	KHC	148.21	345	iPKPc	23	55.60	-0.2
SES	91.01	36	eP	17	20.00	-0.5	EKA	143.45	4	PKPc	23	44.70	-3.0X		1.5s	294.50nm				
	0.9s	90.00nm			5.7mb			1.2s	59.50nm								e	25	51.80	
EDM	91.16	33	eP	17	20.00	-1.2	KAS	144.33	316	iPKPd	23	49.80	0.0	VKA	148.22	341	ePKP	23	54.00	-1.8
LZH	91.19	308	Pc	17	22.00	0.1	SHBJ	144.76	300	PKPc	23	47.20	-3.6X		3.5s	2612.00nm				
	2.0s	580.00nm			6.2mb		QTFJ	144.95	299	PKPd	23	47.30	-3.8X				i	23	59.00	
			PP	21	05.00		PTT	145.23	329	ePKP	23	41.00	-10.0X				i	24	03.00	
			SS	34	00.00		BRN	145.23	347	ePKPd	23	52.50	1.7				i	25	59.00	
MEO	92.87	54	e(P)	17	29.30	-0.1	KRA	145.47	339	ePKP	23	50.50	-0.8				i	26	42.70	
INK	92.91	15	eP	17	28.00	-0.8		0.8s	118.00nm								e	30	13.00	
	1.0s	71.00nm			5.7mb			Z 24s	1.80um				5.8MszX	GRF	148.22	348	ePKP	23	56.10	0.3
GTA	95.37	310	eP	17	40.40	-0.5		E 24s	2.30um						Z 22s	1.00um				5.6Msz
	1.2s	100.00nm			5.9mb					i	23	51.80					ic	23	58.70	
			PcP	17	44.20					i	24	11.40					e	24	03.10	
TUL	95.40	54	eP	17	43.10	2.2				i	25	51.40					e	25	55.90	
	1.1s	7.60nm			4.8mb		CFR	145.52	326	ePKPc	23	51.50	0.0				e	26	01.20	
LSA	99.17	298	P	18	01.40	2.7	BBTK	145.74	314	ePKP	23	52.00	-0.3	SNF	148.34	356	PKP	23	58.60	2.7X
			PP	22	12.00		ETA	145.75	8	ePKP	23	50.40	-1.3				id	24	02.40	
			SKS	27	50.00		VAL	145.80	13	iPKP	23	53.60	1.9				e	25	58.30	
			sS	32	02.00		VRI	145.80	328	ePKPd	23	52.50	0.5	PVL	148.34	325	ePKP	23	57.00	0.9
			SS	35	49.00		YRH	145.80	6	ePKP	23	46.70	-5.1X	BCK	148.36	312	ePKP	23	57.60	1.1
MBC	101.36	12	ePdiff	18	07.00	0.2	WIT	145.86	354	ePKP	23	52.00	0.2	WET	148.37	345	ePKP	23	56.30	0.3
	0.5s	3.00nm			5.1mb					e	24	13.00		BZS	148.42	332	ePKPc	23	56.00	-0.2
GUN	103.15	295	Pdiff	18	19.20	2.8X				e	25	55.00		TIM	148.50	333	iPKPc	24	00.00	3.7X
ZOBO	103.38	113	Pdiff	18	23.00	5.1X	BHL	145.89	303	PKPd	23	53.00	0.3	SOP	148.65	340	ePKP	24	01.10	4.6X
PKI	103.47	295	Pdiff	18	17.50	-0.3				PP	25	55.00		EDC	148.67	319	ePKP	23	54.00	-2.7X
GKN	104.24	295	Pdiff	18	20.20	-0.8	KSP	145.93	343	ePKP	23	51.50	-0.5	KHL	148.68	314	iPKP	24	00.00	3.1X
WMQ	105.30	311	Pdiff	18	27.70	2.5X		1.1s	200.00nm					DIM	149.01	323	iPKP	24	01.00	3.8X
			PP	22	55.00					id	23	53.00		KMR	149.05	343	ePKP	23	56.00	-1.1
HYB	107.08	283	ePKP	22	42.00	1.6				id	25	13.50					i	24	00.00	
NDI	110.78	294	ePKP	22	46.00	-1.0				ic	25	53.00					i	24	05.00	
BAO	120.66	122	ePKP	23	06.50	0.1				ic	26	49.00					ipPKP	26	00.30	
DAG	121.19	5	ePKP	23	03.00	-2.5X	TLB	145.97	325	ePKPc	23	54.00	1.7	ELL	149.17	311	iPKP	23	57.50	-0.3
	0.4s	15.25nm					SPC	146.09	337	ePKP	23	54.30	1.7	KDZ	149.33	323	ePKP	23	57.00	-0.7
CER	125.26	199	iPKPd	23	15.00	0.3				i	23	56.50		PGB	149.42	325	iPKP	24	00.00	2.1
	0.6s	14.29nm								i	25	53.40		PLD	149.43	324	ePKP	23	59.00	1.2
HVD	125.54	206	iPKPd	23	33.50	18.0X	BURJ	146.23	300	PKP	23	48.80	-4.5X	GWF	149.53	352	PKP	24	00.68	2.9X
	1.0s	20.00nm					ECP	146.23	8	ePKP	23	49.10	-3.3X	BEO	149.55	332	iPKP	24	02.50	4.6X
MAIO	126.27	302	iPKPc	23	16.00	-0.7	SALJ	146.39	300	PKPd	23	49.00	-4.5X	RDO	149.59	322	ePKP	23	57.20	-0.9
			i	23	19.20		ISR	146.40	327	ePKPc	23	55.50	2.4X	FUR	149.66	347	ePKP	24	00.30	2.3X
FRS	126.36	206	ePKP	23	27.00	10.1X	KFNJ	146.43	299	PKPc	23	48.90	-4.5X				i	24	03.40	
	1.0s	15.00nm					MLR	146.46	328	ePKP	23	58.00	4.7X	KSL	149.69	310	ePKP	23	59.20	0.8
KEV	126.74	349	ePKP	23	10.00	-6.4X	PSN	146.46	323	iPKPc	23	54.00	0.9	RZN	149.70	324	iPKP	23	58.00	-0.5
	0.9s	43.90nm					BRG	146.51	345	iPKP	23	52.90	-0.1	VTS	149.90	327	iPKPc	24	02.00	3.3X
			i	23	16.00					i	23	55.40		EZN	149.93	319	ePKP	23	57.00	-1.6
BFT	127.58	213	iPKPc	23	20.50	0.9				i	23	57.50		WLS	150.12	352	PKP	24	01.29	2.6X
	1.0s	60.00nm								i	24	15.00		CDF	150.13	352	ePKP	23	57.00	-1.8
PRY	127.83	210	iPKPc	23	20.50	0.5				ipPKP	25	53.10			1.1s	19.55nm				
SWZ	128.59	208	ePKP	23	10.00	-11.4X				e	29	21.00		IZM	150.15	316	iPKP	24	00.90	1.8
	0.3s	41.56nm								iSKKS	33	28.00		FLN	150.15	2	ePKP	23	57.10	-1.6
SOD	128.86	348	iPKP	23	19.70	-0.8	MKRJ	146.53	299	PKPc	23	49.20	-4.5X		0.9s	21.30nm				

08d 15h

MMB	150.32	325	iPKPd	24	01.00	1.8
LDF	150.33	2	ePKP	23	57.30	-1.7
	1.1s	31.75nm				
ECH	150.34	352	PKP	24	01.46	2.4X
PTJ	150.41	339	ePKP	24	00.00	0.7
VITF	150.48	354	PKP	24	01.70	2.6X
ZAG	150.48	339	iPKPc	24	02.20	2.9X
			i	27	01.00	
GRR	150.51	3	ePKP	23	58.10	-1.1
	1.1s	34.20nm				
HLW	150.54	298	ePKP	24	02.00	2.1
			e	26	04.20	
			e	27	50.00	
FEL	150.55	351	PKP	24	01.49	2.0
SQTA	150.56	346	iPKPd	24	05.20	5.6X
	1.7s	311.00nm				
			ic	24	05.40	
			i	24	17.20	
			i	26	06.60	
HAU	150.64	353	ePKP	23	58.10	-1.4
	0.9s	21.30nm				
MOF	150.70	352	PKP	24	02.11	2.4X
LJU	150.75	341	ePKP	24	00.00	0.3
			i	24	05.60	
			e	26	02.50	
			e	26	06.00	
FVI	150.76	344	PKP	24	01.80	2.2
8SF	150.76	352	ePKP	23	58.10	-1.7
	1.1s	29.30nm				
SMG	150.81	315	ePKP	24	05.50	5.5X
LPF	150.86	3	ePKP	23	58.70	-1.1
	0.9s	21.30nm				
OGA	150.94	346	ePKP	24	00.30	0.1
VOY	150.96	342	ePKPc	24	02.40	2.3X
			e	26	03.50	
V8Y	151.00	339	ePKPd	24	00.70	0.6
BBS	151.02	351	PKP	24	02.66	2.5X
CEY	151.06	341	ePKP	24	00.40	0.2
			e	26	04.90	
VAY	151.13	325	ePKP	24	05.80	5.4X
	0.7s	155.00nm				
			i	24	17.80	
			i	26	06.60	
LOMF	151.23	352	PKP	24	03.32	2.8X
SKO	151.26	328	iPKPc	24	02.50	1.9
			i	24	06.80	
			i	26	09.00	
			e	34	48.00	
			e	36	12.00	
			i	46	30.00	
			i	46	40.00	
TRI	151.29	342	ePKP	24	03.80	3.3X
			e	26	05.20	
CTI	151.56	345	PKP	24	01.50	0.5
LOR	151.60	356	ePKP	23	59.60	-1.3
	1.2s	31.25nm				
SSF	151.82	357	ePKP	24	00.20	-1.0
LBF	151.87	356	ePKP	24	00.10	-1.3
AVF	152.10	357	ePKP	24	00.10	-1.5
OHR	152.21	327	iPKP	24	02.00	0.0
	1.1s	92.00nm				
			i	24	09.60	
			i	26	01.50	
SMF	152.22	356	ePKP	24	00.30	-1.5
MDI	152.26	347	PKP	24	07.80	6.0X
MFF	152.32	2	ePKP	24	00.40	-1.5
	1.1s	29.30nm				
8GF	152.36	358	ePKP	24	00.70	-1.3
VAI	152.36	349	PKP	24	01.90	-0.1
HVAR	152.57	335	iPKP	24	07.90	5.5X
TCF	152.65	358	ePKP	24	01.10	-1.4
	1.1s	29.30nm				
ATH	152.67	319	ePKP	24	09.60	6.9X
LSF	152.70	360	ePKP	24	00.90	-1.6
	1.1s	39.05nm				
MAF	152.70	358	ePKP	24	01.30	-1.2
ORO	152.74	350	PKP	24	04.50	1.8
AGO	152.85	357	PKP	24	05.87	3.1X
PLDF	152.91	356	PKP	24	05.96	3.1X
LPL	153.04	351	ePKP	24	02.60	-0.7
LPG	153.06	351	ePKP	24	02.60	-0.8
PYM	153.16	357	PKP	24	05.64	2.4X
BNI	153.50	351	PKP	24	05.60	1.8
ARV	153.54	341	PKP	24	03.10	-0.6
PGD	153.55	343	PKP	24	06.00	2.1
RJF	153.64	360	ePKP	24	02.70	-1.1
	1.1s	29.30nm				

LBL	153.66	357	PKP	24	07.53	3.8X
CRE	153.72	342	PKP	24	05.00	0.9
KEK	153.76	326	ePKP	24	04.30	0.2
FIR	153.77	343	e(PKP)	24	05.00	1.0
			i	26	14.00	
VAM	153.84	314	ePKP	24	12.90	8.5X
VLI	153.92	317	ePKP	23	56.10	-8.3X
LFF	154.01	1	ePKP	24	03.10	-1.2
CAF	154.01	359	ePKP	24	03.40	-1.0
LPO	154.27	0	ePKP	24	03.90	-0.8
ITM	154.27	319	ePKP	24	04.60	-0.3
SBF	154.54	349	ePKP	24	03.50	-1.6
	1.3s	97.50nm				
MNS	154.62	340	PKP	24	05.10	-0.2
AZI	154.72	338	PKP	24	08.00	2.7X
SDI	154.83	337	PKP	24	05.00	-0.6
FRF	154.97	351	ePKP	24	04.30	-1.3
LRG	155.11	351	ePKP	24	05.00	-0.8
LMR	155.21	351	ePKP	24	04.80	-1.2
SGO	155.23	334	PKP	24	08.50	2.5X
PGF	155.49	346	ePKP	24	05.10	-1.4
	1.4s	122.00nm				
TDS	155.51	331	PKP	24	09.00	2.5X
EPF	155.91	2	ePKP	24	06.00	-1.0
	1.3s	28.90nm				
SOI	156.90	329	PKP	24	12.00	3.7X
MAL	161.54	14	iPKP-	24	14.00	0.7
			i	26	57.00	
NKM	162.48	18	iPKPd	24	19.00	4.7X
			i	25	07.50	
AVE	163.69	27	ePKP	24	17.00	1.4
			i	26	21.00	
TAF	163.80	11	ePKP	24	20.00	4.2X
			e	26	20.00	
IFR	164.35	20	iPKPd	24	18.00	1.5
			i	26	21.00	
TIO	165.76	31	iPKP	24	29.00	11.4X
			i	26	21.00	
LIC	166.04	153	PKP	24	18.26	0.1
TIC	166.42	153	PKP	24	18.56	0.1
LKO	168.63	144	PKP	24	19.60	-0.3
	1.1s	33.00nm				
S.D. = 1.1 on 324 of 407 obs.						

JUN 08, 1990 16h 23m 02.10± 0.61s
39.913 N ± 5.7km 28.924 E ± 5.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZI	0.60	45	iPg	23	13.30	-0.9
YLV	0.74	28	iPg	23	15.90	-0.7
EDC	0.92	298	iPg	23	19.50	-0.2
			iSg	23	34.50	
GBZT	0.96	24	iPgc	23	22.20	1.8
			iSg	23	36.20	
HRT	1.07	32	iPg	23	21.30	-1.0
GPA	1.13	70	iPn	23	24.70	1.5
ISK	1.16	5	ePn	23	22.80	-0.9
CTT	1.29	343	iPn	23	26.10	0.1
KHL	1.65	163	iPn	23	31.00	-0.4
IZM	1.99	221	iPn	23	35.90	-0.3
EZN	2.00	268	iPn	23	36.50	0.2
8BTK	2.95	90	ePg	23	58.00	8.0X
			eSg	24	40.00	
KDZ	3.18	304	eP	23	54.00	0.9
			iSg	24	45.00	
RZN	3.65	300	iP	24	00.00	-0.1
			Sg	24	01.00	
S.D. = 1.0 on 13 of 14 obs.						

JUN 08, 1990 16h 27m 24.19± 0.76s
5.426 S ± 4.9km 152.304 E ± 6.1km
DEPTH = 49.1 ± 7.5 km
4.9mb (6 obs.)
NEW BRITAIN REGION (192)

RAB	1.23	354	iPd-	27	45.00	-0.4
			iS	28	00.00	
LAT	5.41	257	eP	28	45.00	0.5
KDB	6.49	231	eP	29	00.00	0.4
HNR	8.56	118	eP	29	28.00	-0.3
CTA	15.72	201	iPd	31	08.80	4.8X
	1.0s	69.00nm				4.8mb
QIS	19.45	218	iPd	31	49.20	-0.6
RMQ	21.22	189	eP	32	08.00	-0.1
DZM	21.47	142	iPc	32	11.00	0.2
QLP	22.41	199	eP	32	20.00	0.1

WB5	22.60	229	eP	32	21.30	-0.6
			eS	36	27.20	
WRA	22.66	229	Pc	32	30.40	7.9X
	0.5s	31.20nm				5.0mb
KNA	25.28	244	eP	32	47.80	0.1
CMS	26.63	192	eP	33	01.50	1.4
STK	28.17	200	iPc	33	13.10	-1.0
	1.2s	8.00nm				4.2mb
ANM	76.52	17	eP	39	10.80	0.3
SVW	77.58	23	eP	39	17.40	0.9
TTA	78.53	21	eP	39	22.10	0.3
PMR	80.46	24	eP	39	31.60	-0.4
	1.1s	29.30nm				5.1mb
IMA	81.21	20	eP	39	36.50	0.4
	1.1s	16.00nm				4.9mb
FBA	82.65	22	eP	39	42.60	-0.8
INK	89.21	21	eP	40	15.50	-0.2
KVN	93.07	51	P	40	35.00	0.6
M8C	94.83	14	eP	40	42.00	0.5
	1.5s	10.00nm				5.0mb
RSSD	103.56	46	Pdiff	41	22.00	0.2
APO	116.72	338	ePKP	46	03.20	-1.2
	0.5s	0.80nm				
BAO	150.99	136	e(PKP)	47	15.00	6.7X
S.D. = 0.7 on 23 of 26 obs.						

JUN 08, 1990 16h 43m 19.30± 0.29s
52.347 N ± 7.6km 169.457 W ± 3.6km
DEPTH = 33.0km (normal)
5.1mb (63 obs.)
FOX ISLANDS, ALEUTIAN ISLANDS (9)
ML 5.3 (PMR).

ADK	4.48	267	eP	44	28.80	2.2
KDC	11.12	54	eP	45	55.20	-3.7X
SVW	11.59	35	eP	46	09.20	3.9X
ANM	12.44	8	eP	46	20.30	3.7X
TTA	12.79	29	eP	46	24.30	2.9
PMR	14.38	42	e(P)	46	44.70	2.5
IMA	15.88	24	eP	47	06.00	4.3X
FBA	16.77	33	eP	47	12.40	-0.5
SIT	20.14	63	eP	47	53.00	0.0
	0.7s	16.28nm				4.5mb
INK	23.40	33	eP	48	24.00	-1.5
MBC	30.58	21	eP	49	31.50	0.0
	0.5s	5.00nm				4.6mb
LON	30.95	81	eP	49	37.50	2.2
PNT	31.12	75	eP	49	38.00	1.3
	0.6s	9.00nm				4.8mb
NEW	33.07	76	eP	49	54.00	0.3
	1.0s	21.25nm				5.0mb
SES	35.67	69	eP	50	16.00	0.0
	0.7s	28.00nm				5.3mb
CMB	36.69	93	e(P)	50	30.50	5.8X
LRM	37.05	77	eP	50	29.10	1.2
KVN	37.46	90	eP	50	33.20	1.8
HPI	37.79	80	eP	50	35.50	1.3
TNP	38.60	90	eP	50	42.50	1.5
	0.9s	7.81nm				4.5mb
PTI	38.70	81	eP	50	43.50	1.7
NIIJ	38.71	268	P	50	41.80	0.2
FFC	38.78	59	ePc	50	42.00	0.0
	0.6s	20.00nm				5.1mb
CHJJ	39.48	267	eP	50	46.90	-1.2
MAT	39.64	268	eP	50	50.00	0.6
	0.6s	25.33nm				5.2mb
MTMJ	39.86	268	P	50	52.10	0.8
DUG	40.00	84	P	50	53.70	1.2
	0.9s	8.46nm				4.5mb
BW06	40.46	79	eP	50	56.00	-0.3
IIDJ	40.52	267	eP	50	57.80	1.1
MSU	41.42	86	eP	51	06.00	1.7
CN2	42.97	286	Pc	51	15.20	-1.4
RSSD	42.98	74	eP	51	16.00	-0.9
GOL	44.82	80	eP	51	32.30	0.3
	1.0s	33.75nm				5.2mb
GLD	44.88	80	eP	51	33.00	0.6
	1.0s	35.00nm				5.2mb
SNY	45.24	284	eP	51	35.00	0.1
SHNJ	45.59	271	eP	51	38.80	1.0
ALQ	47.23	86	eP	51	51.00	0.0
	1.0s	4.50nm				4.4mb
FRB	49.03	35	eP	52	03.00	-1.3
TIA	52.69	283	eP	52	31.40	-1.2
HHC	52.88	291	P	52	35.40	1.4
SSE	53.74	275	P	52	42.00	1.7
	1.0s	20.00nm				5.1mb

BTO 53.93 292 eP 52 42.00 0.3
TIY 54.46 287 eP 52 43.10 -2.5
Z 16s 0.40um 4.6MszX
FVM 54.81 72 eP 52 45.80 -2.4
SCH 55.52 43 eP 52 52.00 -1.1
OLY 55.89 75 eP 52 53.00 -2.9
KEV 57.62 353 eP 53 06.00 -1.8
WHN 58.29 280 eP 53 13.00 0.1
RSNY 59.04 56 eP 53 16.00 -2.1
0.7s 10.38nm 5.1mb
XAN 59.05 287 P 53 17.00 -1.3
RSCP 59.28 70 eP 53 17.50 -2.4
0.9s 78.07nm 5.8mb
WNY 59.49 56 eP 53 19.70 -1.6
OZH 59.75 272 P 53 23.00 -0.2
HBVT 59.92 55 eP 53 22.20 -1.9
SOD 59.99 353 iP 53 23.10 -1.2
GBTN 60.01 70 eP 53 23.00 -1.9
GTA 60.44 297 P 53 26.60 -1.3
0.8s 10.00nm 5.0mb
LZH 60.55 292 Pd 53 28.00 -0.7
2.5s 87.00nm 5.4mb
Z 25s 0.70um 4.7MszX
sP 53 46.50
BNH 60.66 54 eP 53 28.00 -1.2
NAV 60.78 66 eP 53 29.50 -0.6
BLA 61.07 66 eP 53 30.80 -1.3
0.9s 35.12nm 5.5mb
CVL 61.61 64 eP 53 34.90 -0.8
JSC 62.70 69 eP 53 41.70 -1.2
WMQ 63.50 308 P 53 48.20 -0.1
CD2 64.33 288 eP 53 53.00 -0.8
GZH 64.34 275 Pd 53 54.60 0.8
SUF 64.62 352 iP 53 54.10 -1.1
0.5s 19.50nm 5.5mb
GYA 65.88 282 P 54 03.80 -0.1
pP 54 15.00 37kmX
NUR 66.93 352 iP 54 09.00 -0.9
0.9s 45.60nm 5.6mb
NAO 67.18 360 P 54 09.90 -1.6
0.6s 4.00nm 4.7mb
HFS 67.84 358 eP 54 14.00 -1.7
0.4s 20.20nm 5.6mb
UPP 68.00 356 iP 54 27.50 10.8X
KMI 69.22 284 eP 54 24.50 -0.5
sP 54 36.50
LSA 72.41 296 Pc 54 46.90 2.4
LOE 75.70 280 iPc 55 03.00 -0.1
WTS 75.98 2 eP 55 04.50 0.3
0.8s 9.00nm 4.8mb
CHG 76.29 283 ePc 55 06.50 0.0
0.8s 13.06nm 5.0mb
GUN 76.69 298 P 55 08.90 -0.1
0.6s 41.00nm 5.6mb
CLL 76.70 358 iP 55 08.60 0.4
1.2s 14.00nm 4.9mb
KSP 77.07 356 eP 55 11.00 0.7
BRG 77.12 358 iP 55 10.80 0.3
0.6s 14.00nm 5.2mb
ENN 77.19 3 eP 55 11.50 0.6
0.7s 17.00nm 5.2mb
PKI 77.21 299 P 55 11.40 -0.5
0.6s 12.00nm 5.1mb
GKN 77.28 299 P 55 11.90 -0.2
DMN 77.34 299 P 55 12.60 0.1
0.6s 22.00nm 5.4mb
MEM 77.35 3 P 55 12.30 0.5
MOX 77.38 359 eP 55 12.00 0.0
0.8s 17.00nm 5.1mb
BDT 77.47 282 eP 55 13.00 0.0
0.6s 24.30nm 5.4mb
KRA 77.66 354 eP 55 14.50 0.9
DOU 77.81 4 Pc 55 14.30 -0.1
PRU 77.99 357 eP 55 15.30 0.0
GRF 78.34 360 iPc 55 17.90 0.6
0.9s 16.00nm 5.0mb
FLN 78.83 7 eP 55 19.10 -0.9
0.9s 24.55nm 5.2mb
KHC 78.87 358 P 55 21.00 0.7
LDF 79.03 7 eP 55 20.40 -0.7
0.4s 12.05nm 5.2mb
GRR 79.17 8 eP 55 21.40 -0.5
0.7s 11.00nm 5.0mb
LPF 79.51 8 eP 55 23.50 -0.2
0.5s 8.00nm 5.0mb
CDF 79.58 2 eP 55 23.80 -0.4
0.6s 6.30nm 4.8mb

ZST 79.68 356 iP 55 25.30 0.7
HAU 79.96 3 eP 55 25.90 -0.3
0.6s 9.00nm 4.9mb
BSF 80.15 3 eP 55 26.90 -0.4
0.6s 9.00nm 4.9mb
NDI 80.58 305 iPc 55 29.00 -0.8
0.6s 20.00nm 5.3mb
LOR 80.60 5 eP 55 29.20 -0.4
0.6s 7.65nm 4.9mb
NNT 80.64 278 eP 55 28.00 -2.2
SSF 80.79 5 eP 55 30.40 -0.1
0.7s 13.80nm 5.1mb
SQTA 80.81 360 iPd 55 31.60 0.8
0.7s 20.10nm 5.2mb
i 55 52.80
LBF 80.89 5 eP 55 30.60 -0.5
0.7s 8.80nm 4.9mb
MFF 81.01 7 eP 55 31.60 -0.1
0.5s 10.20nm 5.1mb
AVF 81.05 5 eP 55 31.50 -0.4
0.8s 12.75nm 5.0mb
SMF 81.22 5 eP 55 32.50 -0.3
0.7s 16.55nm 5.1mb
BGF 81.25 5 eP 55 32.80 -0.2
0.7s 9.35nm 4.9mb
FVI 81.42 358 P 55 35.00 1.2
LSF 81.48 6 eP 55 33.80 -0.4
TCF 81.48 6 eP 55 33.80 -0.4
0.7s 7.70nm 4.8mb
MAF 81.57 6 eP 55 34.70 0.0
0.7s 10.45nm 5.0mb
AGO 81.77 5 P 55 36.65 0.9
PLDF 81.88 5 P 55 37.46 1.1
MAIO 81.95 322 eP 55 38.00 1.1
CTI 81.98 359 P 55 36.00 -0.9
PYM 82.07 5 P 55 37.81 0.5
VAI 82.15 1 P 55 39.00 1.4
RJF 82.42 6 eP 55 38.70 -0.4
LBL 82.60 5 P 55 41.57 1.6
LFF 82.73 7 eP 55 40.80 0.1
0.7s 20.95nm 5.3mb
CAF 82.83 6 eP 55 41.40 0.1
0.8s 12.10nm 5.0mb
BNI 82.92 3 P 55 43.90 2.0
LPO 83.01 7 eP 55 42.30 0.1
0.7s 15.45nm 5.2mb
BOB 83.26 1 P 55 44.90 1.4
BDI 83.97 360 P 55 48.00 0.9
SBF 84.13 2 eP 55 48.50 0.5
0.9s 42.60nm 5.6mb
PGD 84.15 359 P 55 50.50 2.3
QUE 84.19 314 eP 55 49.20 0.6
FRF 84.41 3 eP 55 49.50 0.2
0.7s 14.35nm 5.3mb
LRG 84.51 3 eP 55 50.40 0.7
0.5s 5.85nm 5.0mb
EPF 84.59 7 eP 55 49.80 -0.5
0.8s 13.45nm 5.2mb
LMR 84.64 3 eP 55 50.20 -0.2
PGF 85.47 1 eP 55 55.00 0.3
0.7s 35.30nm 5.7mb
MNS 85.63 358 P 55 56.00 0.6
AZI 86.01 358 P 55 58.00 0.8
SDI 86.28 358 P 56 00.00 1.3
WB5 86.88 232 eP 56 01.80 0.1
WRA 86.95 232 Pd 56 01.90 -0.1
0.8s 2.80nm 4.5mb
PSI 88.88 273 iPd 56 12.00 0.5
0.5s 15.60nm 5.6mb
HYB 89.10 298 eP 56 12.50 -0.1
0.8s 35.00nm 5.7mb
GBA 92.84 296 Pc 56 29.40 -0.4
0.6s 6.70nm 5.2mb
KRI 141.49 330 ePKP 02 52.20 3.4X
BUL 144.92 330 iPKPd 02 52.20 -2.4
0.8s 20.52nm
BFT 149.57 324 iPKPd 03 07.50 5.4X
0.8s 37.31nm
SLR 150.23 326 iPKPc 03 08.50 5.5X
0.8s 48.51nm
i 03 13.00
MAW 150.82 218 iPKP 03 09.00 6.7X
PRY 151.61 327 ePKP 03 12.50 7.5X
SWZ 152.53 330 iPKPc 03 02.00 -4.3X
0.9s 25.21nm
SEK 152.84 325 iPKPc 03 15.00 8.3X
0.4s 16.95nm

S.D. = 1.1 on 140 of 153 obs.

• JUN 08, 1990 17h 10m 46.60± 1.71s
31.612 S ± 9.8km 71.546 W ±15.3km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

JACH 1.34 143 iPd 11 09.50 0.3
iS 11 26.20
ROCH 1.43 162 iP 11 11.10 0.4
iS 11 29.00
PEL 1.69 155 iPc 11 14.50 0.2
i 11 31.50
iS 11 35.00
LCCH 1.86 181 ePd 11 17.00 0.3
iS 11 39.30
FCH 2.01 149 iPd 11 19.20 0.0
iS 11 43.70
TACH 2.10 166 iPd 11 20.00 -0.1
iS 11 45.50
PCH 2.18 157 iP 11 21.40 0.0
i 11 40.50
iS 11 47.10
RTRS 2.30 52 iPd 11 23.10 0.2
LNV 2.34 177 iPc 11 22.70 -0.8
iS 11 50.50
RTCV 2.58 96 eP 11 27.00 0.1
(S) 11 58.00
RTLL 2.64 85 e(P) 11 28.30 0.4
CFA 2.82 91 e(P) 11 29.50 -0.9
S.D. = 0.5 on 12 of 12 obs.

? JUN 08, 1990 19h 04m 22.29± 5.94s
23.012 N ±39.3km 121.813 E ±27.8km
DEPTH = 10.0km (geophysicist)
TAIWAN (244)

TWF1 0.58 306 iPd 04 34.40 0.3
eS 04 40.50
TWD 1.08 349 eP 04 42.40 -0.2
TWK 1.25 282 ePc 04 45.40 -0.1
TWQ 1.54 325 ePc 04 49.60 -0.3
TWC 1.59 1 ePd 04 50.70 0.2
S.D. = 0.4 on 5 of 5 obs.

• JUN 08, 1990 20h 35m 36.69± 0.80s
5.540 S ±11.2km 152.474 E ±18.1km
DEPTH = 33.0km (normal)
4.7mb (2 obs.)
NEW BRITAIN REGION (192)

RAB 1.37 347 iP 35 59.60 -0.1
KDB 6.56 233 eP 37 14.00 0.6
QIS 19.47 219 iPd 40 03.80 -0.1
0.7s 34.00nm 4.7mb
WB5 22.66 229 eP 40 36.10 -0.4
WRA 22.72 229 Pd 40 36.70 -0.3
0.4s 9.50nm 4.6mb
TTA 78.57 21 eP 47 36.70 0.3
IMA 81.26 19 eP 47 51.20 0.4
INK 89.26 21 eP 48 30.00 -0.4
S.D. = 0.5 on 8 of 8 obs.

• JUN 08, 1990 21h 04m 43.61± 1.24s
50.455 N ±15.1km 18.863 E ± 7.3km
DEPTH = 10.0km (geophysicist)
POLAND (548)
ML 2.8 (KRA).

KRA 0.80 120 ePg 04 59.30 0.2
iSg 05 10.20
SPC 1.55 144 iPn 05 11.00 -0.5
i 05 14.00
i(Sg) 05 33.20
KSP 1.60 284 ePn 05 13.50 0.3
iS 05 39.50
VRAC 1.86 233 iP 05 15.60 -0.2
S 05 39.20
ZST 2.54 208 eP 05 26.20 0.7
e 06 02.60
SRO 2.67 188 eP 05 34.00 6.6X
PRU 2.81 262 ePn 05 29.50 0.0
ePg 05 35.50
Sg 06 10.90
BRG 3.16 280 ePg 05 43.50 9.2X
iSg 06 26.50
KHC 3.67 251 ePg 05 41.00 -0.7

08d 21h

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                      Sg      06 34.00
      S.D. = 0.6   on     7 of    9 obs.
----------------------------------------
   JUN  08, 1990  21h 16m 59.25± 0.39s
   44.646 N ± 2.9km     7.008 E ± 5.7km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                    (545)
       ML 2.2 (GEN), 2.0 (LDG).

PZZ       0.16 155 P       17 02.98    0.0
                   S       17 05.96
RRL       0.32 330 P       17 05.65   -0.3
                   S       17 10.37
STV       0.46 151 P       17 08.42   -0.2
                   S       17 14.67
ENR       0.51 145 P       17 09.23   -0.4
                   S       17 16.30
RSP       0.54  19 P       17 10.67    0.6
                   S       17 18.16
ROB       0.71 119 P       17 13.34    0.0
                   S       17 23.18
SBF       0.84 158 Pg      17 15.80    0.3
                   Sg      17 28.20
LPG       0.87 348 Pg      17 16.20    0.0
                   Sg      17 27.80
LPL       0.89 347 Pg      17 16.20   -0.3
FRF       1.12 194 Pg      17 20.60    0.4
                   Sg      17 34.00
LRG       1.28 202 Pg      17 23.20    0.2
LMR       1.36 196 Pg      17 24.00   -0.2
                   Sg      17 42.00
      S.D. = 0.3   on    12 of   12 obs.
----------------------------------------
?  JUN  08, 1990  21h 24m 25.32± 1.89s
   31.713 S ±28.9km    68.855 W ±36.6km
   DEPTH = 110.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA      (137)

ZON       0.22  42 iPd    24 41.50    0.2
                   eS     24 52.00
RTCV      0.31 119 eP     24 41.30   -0.1
RTLL      0.50  41 iPc    24 42.20   -0.3
CFA       0.54  79 iPd    24 42.90    0.2
                   eS     24 56.10
RTRS      1.62 341 iPc    24 54.00    0.0
                   eS     25 16.00
      S.D. = 0.3   on     5 of    5 obs.
----------------------------------------
   JUN  08, 1990  21h 30m 45.17± 0.63s
    6.128 S ± 3.8km    77.121 W ± 8.7km
   DEPTH =  43.5 ±   8.0 km
   5.0mb (   6 obs.)
 NORTHERN PERU                     (111)

TUNG      4.86 344 eP     31 57.50   -0.6
VC1       5.60 347 P      32 08.20   -0.5
                   eS     33 16.00
PT08      5.82 174 iPd    32 12.70    1.0
                   eS     33 20.10
NNA       5.83 177 iPc    32 11.50    0.0
        0.8s     48.51nm          5.0mb
                   i      32 13.00
                   eS     33 15.50
PT10      5.91 179 iPc    32 13.50    0.9
                   eS     33 21.00
QTO       6.05 347 eP     32 22.90    8.0X
QUR       6.08 347 eP     32 20.70    5.4X
GGP       6.09 346 ePn    32 16.30    0.6
CAYA      6.23 352 eP     32 16.50   -1.0
COTA      6.53 349 eP     32 24.50    2.7
PT02      6.81 174 iP     32 24.70   -0.4
                   eS     33 38.20
PSO       7.27 358 eP     32 56.50   24.5X
PT06      7.69 174 iP     32 33.00   -4.5X
                   iS     33 53.00
PT03      7.92 171 iPc    32 38.90   -1.8
                   iS     34 05.40
BOG      11.11  16 eP     33 26.50    1.7
                   eS     36 30.00
FUQ      12.01  16 eP     33 36.00   -0.9
ZOBO     13.39 140 P      33 53.80   -1.7
LPB      13.60 140 eP     33 50.00   -8.1X
BMG      13.72  17 eP     33 59.00   -0.4
CCH      15.50 137 P      34 24.70    1.9
SDV      16.26  24 eP     34 31.50   -0.9
TOV      17.41  25 eP     34 46.30   -0.5
SIV      18.54 123 P      34 59.60   -1.0
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FISA     18.94  24 eP     35 04.00   -1.5
MORO     19.03  27 iP     35 07.60    1.0
OLLA     19.05  33 eP     35 07.00    0.1
LLAV     19.43  32 eP     35 10.70   -0.5
GUAN     19.65  36 iP     35 14.00    0.5
ITR      38.45  96 eP     38 05.20    0.3
                   e      38 13.70
CAI      39.73  93 eP     38 15.60   -0.1
ALQ      49.33 328 eP     39 32.20   -0.3
SCH      61.33   7 eP     40 58.00   -0.7
SES      63.47 336 eP     41 13.00    0.0
FFC      64.09 344 iPd    41 16.20   -0.7
         1.0s    12.00nm          4.9mb
FRB      69.98   4 eP     41 53.00   -0.8
LIC      72.99  82 P      42 13.74    0.9
TIC      73.06  81 P      42 14.18    0.9
         0.8s    40.50nm          5.4mb
KIC      73.29  82 Pd     42 15.70    1.1
         0.6s    22.50nm          5.3mb
YKA      74.19 343 eP     42 18.00   -0.9
         0.5s     2.20nm          4.4mb
INK      83.91 342 eP     43 11.00   -0.4
MBC      85.80 351 eP     43 22.50    1.7
         0.6s     3.00nm          4.7mb
     S.D. = 1.1   on   36 of   41 obs.
----------------------------------------
   JUN  08, 1990  21h 37m 38.45± 0.16s
    9.103 S ± 3.6km   120.264 E ± 4.8km
   DEPTH =  33.0km  (normal)
   5.6mb ( 40 obs.)  4.7Msz (  3 obs.)
 SUMBA ISLAND REGION               (287)
        CENTROID, MOMENT TENSOR    (HRV)
        Data Used: GDSN
        L.P.B.: 15S, 30C
        Centroid Location:
        Origin Time        21:37:45.7 0.7
        Lat  9.55S 0.07 Lon 120.17E 0.07
        Dep 101.0 3.1 Half-duration  2.0
        Moment Tensor;   Scale 10**17 Nm
          Mrr=-1.65 0.09  Mtt= 0.40 0.17
          Mff= 1.25 0.21  Mrt=-0.47 0.10
          Mrf= 0.63 0.09  Mtf= 0.86 0.12
         Principal Axes:
          T  Val=  1.81   Plg= 5  Azm=300
          N        0.15       22      208
          P       -1.96       68       43
        Best Double Couple:Mo=1.9*10**17
         NP1:Strike= 52 Dip=44 Slip= -58
         NP2:        191     54     -117

MKS       3.94 348 iPc    38 48.00    9.9X
                   iS     39 33.50
AAI       9.54  56 ePc    40 07.00   10.4X
         0.5s    36.00nm
KNA      10.61 129 iPc    40 09.80   -1.5
                   eS     41 58.00
MTN      11.30 110 eP     40 21.00    0.3
                   eS     42 09.00
MBL      11.99 182 eP     40 26.30   -3.8X
         0.3s    48.00nm          6.1mb
NANU     14.13 198 iPc    40 56.00   -2.5
         0.2s    53.00nm          5.9mb
                   eS     43 16.00
KKM      15.58 345 ePc    41 24.00    6.5X
         0.6s    35.90nm          4.7mb
DAV      16.93  18 eP     41 40.80    6.2X
WB5      17.34 130 eP     41 37.70   -2.0
                   eS     44 37.00
WRA      17.36 130 P      41 39.00   -0.9
         0.5s    48.20nm          4.9mb
MEKA     17.49 185 eP     41 41.20   -0.4
         0.3s    40.00nm          5.0mb
                   eS     44 35.00
WARB     18.03 161 eP     41 46.00   -2.3
         0.3s    29.00nm          4.9mb
                   eS     44 53.00
KGM      20.18 302 ePd    42 13.90    0.7
MRWA     20.41 191 eP     42 14.00   -1.5
PPI      21.56 292 eP     42 16.00  -11.3X
BAL      21.65 188 eP     42 27.50   -0.6
                   e      42 38.00
                   eS     46 12.00
COOL     21.69 178 eP     42 28.00   -0.5
                   eS     46 22.00
QIS      21.86 124 iPd    42 31.40    1.1
                   eS     46 23.00
KLM      22.17 302 eP     42 36.50    3.1X
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KLB      22.50 186 eP     42 32.00   -4.5X
                   e      42 41.00
                   eS     46 34.00
FORR     22.84 162 eP     42 39.00   -0.8
MUN      23.07 189 eP     42 44.00    1.8
                   e      42 55.00
                   eS     46 49.00
MNDI     23.37  84 eP     42 49.00    3.6X
IPM      23.51 305 ePc    42 48.20    1.7
         0.8s    79.70nm          5.3mb
                   e      43 55.00
QCP      23.60   2 eP     42 48.00    0.7
PSI      24.28 298 iPd    42 55.40    1.4
         0.8s   236.60nm          5.8mb
BAG      25.35   1 eP     43 05.90    1.5
SNG      25.39 309 eP     43 06.10    1.4
                   eS     47 24.00
KDB      26.54  93 eP     43 17.00    1.7
CTA      27.38 116 iPd    43 23.80    0.9
         1.0s   242.00nm          5.8mb
                   i      43 54.00
                   i      44 02.50
                   iS     47 58.00
QLP      28.59 131 iPd    43 34.90    1.0
NNT      29.67 316 eP     43 44.00    0.4
                   e      46 38.00
QIZ      29.78 340 eP     43 46.00    1.4
       E  16s      1.90um
                   S      48 32.00
STK      30.09 142 iPd    43 47.20    0.0
         0.9s    81.00nm          5.5mb
                   eS     49 38.10
ADE      30.79 149 iPd    43 54.00    0.6
         1.0s    70.00nm          5.4mb
NST      31.68 321 iPc    44 03.50    2.2
RMQ      32.05 126 iPc    44 05.70    1.2
         1.0s   276.00nm          6.1mb
CMS      32.56 137 eP     44 10.00    1.1
         0.7s    17.00nm          5.1mb
GUA      33.24  48 eP     44 13.80   -1.1
         0.8s   155.22nm          6.0mb
GUMO     33.24  48 eP     44 13.20   -1.7
         1.1s   400.47nm          6.2mb
PJG      33.24  48 eP     44 13.20   -1.7
BDT      33.57 321 eP     44 18.50    0.7
         0.5s    40.60nm          5.6mb
QZH      33.88 357 P      44 21.40    1.1
                   S      49 39.00
BFD      34.46 148 eP     44 25.00   -0.3
CHG      34.81 323 ePd    44 29.50    1.0
         1.0s    50.00nm          5.4mb
                   eS     49 50.00
CHTO     34.81 323 eP     44 26.30   -2.2
         1.0s    50.50nm          5.4mb
                   pP     44 35.10  30kmX
                   sP     44 45.70
                   PcP    46 02.00
BRS      35.67 125 iPc    44 36.50    0.7
                   i      44 47.20
                   i      44 59.40
BWA      36.08 139 eP     44 42.20    3.0X
TOO      36.36 145 iPc    44 43.60    2.1
         1.0s   108.00nm          5.7mb
COO      36.41 130 eP     44 44.00    2.0
         0.9s   137.00nm          5.9mb
CAN      37.00 139 eP     44 48.20    1.3
                   e      46 14.30
CNB      37.24 139 eP     44 50.00    1.1
GYA      37.74 340 iPd    44 55.60    2.4
                   PcP    47 10.60
                   S      50 38.00
                   ScP    50 52.00
                   ScS    55 00.40
KMI      38.06 334 Pd     44 58.50    2.4
         1.5s   300.00nm          5.9mb
       Z  20s      1.40um         4.8Msz
                   S      50 46.00
WHN      39.82 352 eP     45 12.00    1.6
       Z  14s      0.60um        4.6MszX
                   S      51 10.00
SSE      39.98   1 P      45 14.00    2.3
       Z  20s      0.60um         4.4Msz
                   eS     51 08.00
NJ2      40.94 358 Pc     45 21.20    1.6
CD2      42.82 339 P      45 35.40    0.3
         1.2s   200.00nm          5.7mb
XAN      44.23 346 P      45 46.30   -0.2
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	0.8s	100.00nm		5.7mb		
		PcP	47	29.00		
		S	52	10.00		
		ScS	55	37.00		
TIA	45.17	356 eP	45	53.60	-0.3	
DZM	46.13	112 iPc	46	03.20	1.3	
TIY	47.14	352 Pd	46	09.80	0.2	
Z	32s	0.80um		4.5MszX		
E	28s	0.60um				
		S	52	54.50		
LZH	47.53	342 Pd	46	13.00	0.1	
	1.8s	320.00nm		6.0mb		
Z	40s	1.50um		4.7MszX		
N	14s	0.40um				
		ScP	51	29.50		
		S	53	00.00		
LSA	47.68	325 Pd	46	15.30	0.8	
		iS	53	02.00		
DL2	47.78	1 P	46	13.00	-1.5	
	1.0s	100.00nm		5.8mb		
GBA	48.13	297 Pc	46	15.80	-1.8	
	0.6s	23.60nm		5.4mb		
CHJJ	48.25	20 P	46	16.20	-2.1	
MTMJ	48.34	19 P	46	17.20	-1.9	
HYB	48.92	303 ePc	46	22.50	-1.2	
	1.0s	50.00nm		5.5mb		
BJI	49.04	356 eP	46	23.00	-1.2	
	1.0s	91.00nm		5.8mb		
Z	24s	0.57um		4.5MszX		
		ePcP	47	49.00		
		eScP	51	36.00		
		eS	53	20.00		
GUN	49.60	319 P	46	28.50	-0.7	
PKI	49.68	318 P	46	28.80	-1.0	
DMN	49.91	318 P	46	30.50	-1.0	
HHC	50.35	351 Pc	46	35.00	0.6	
Z	38s	1.50um		4.7MszX		
E	13s	0.20um				
		PcP	47	53.00		
		S	53	40.00		
		ScS	56	16.00		
		SS	57	07.00		
BTO	50.35	350 P	46	35.00	0.6	
N	11s	0.20um				
E	11s	0.20um				
		S	53	39.00		
GKN	50.48	318 P	46	34.60	-1.1	
SNY	50.77	3 eP	46	34.20	-3.2X	
	0.7s	100.00nm		5.9mb		
E	24s	0.70um				
		SS	57	18.00		
GTA	51.87	340 iPd	46	46.40	0.4	
	1.0s	100.00nm		5.7mb		
Z	26s	0.90um		4.7MszX		
		ScP	51	48.60		
		S	54	02.00		
		ScS	56	26.00		
OFUJ	51.90	21 P	46	44.80	-1.3	
CN2	52.86	5 eP	46	51.00	-2.2	
Z	26s	0.60um		4.5MszX		
		epP	47	03.00	42kmX	
		PcP	48	00.00		
		ScP	51	50.00		
		eS	54	14.00		
POO	53.39	301 iPc	46	55.40	-2.2	
MDJ	54.13	8 eP	47	00.50	-2.0	
Z	28s	1.10um		4.8MszX		
MSZ	54.21	139 P	47	04.10	1.0	
NDI	56.01	314 eP	47	13.00	-3.5X	
THZ	56.45	134 P	47	19.80	0.2	
KHZ	57.12	135 P	47	25.10	0.9	
		e	47	47.00		
TCW	57.25	133 P	47	23.80	-1.4	
		e	47	37.30		
		e	47	47.40		
MRW	57.56	133 P	47	26.40	-0.9	
WEL	57.63	133 P	47	28.50	0.7	
WDW	57.78	133 eP	47	27.50	-1.4	
CAW	57.79	133 eP	47	27.70	-1.3	
MNG	57.94	132 P	47	29.20	-0.9	
MOW	58.01	133 eP	47	31.10	0.5	
MTW	58.11	133 P	47	30.40	-0.9	
BLW	58.16	133 eP	47	31.00	-0.6	
		e	47	58.00		
WMQ	60.40	333 P	47	45.50	-1.5	
Z	20s	0.60um		4.7Msz		
		S	55	53.00		
		ScS	57	25.00		
KSH	63.39	323 eP	48	07.00	-0.2	
		ePP	50	23.00		
		SS	56	53.00		
QUE	64.39	310 P	48	12.00	-2.1	
	1.0s	49.00nm		5.6mb		
		eS	56	39.70		
MAW	69.57	200 iP	48	46.40	0.6	
SBA	72.69	171 eP	49	05.70	1.2	
MAIO	72.73	312 iPd	49	04.40	-1.1	
		eS	58	22.00		
SMY	76.73	30 eP	49	27.70	-0.3	
SPA	80.96	180 iPd	49	51.70	0.7	
	0.9s	45.45nm		5.5mb		
TAB	83.16	310 eP	50	03.00	0.0	
BFT	86.31	245 iPc	50	20.50	1.3	
	0.8s	26.12nm		5.5mb		
AFR	87.26	107 eP	50	28.00	4.4X	
	0.8s	35.00nm		5.7mb		
SLR	87.88	244 iPd	50	27.00	0.4	
	1.0s	30.00nm		5.5mb		
KRI	88.02	253 eP	50	31.50	4.1X	
		i	51	51.00		
SEK	88.05	242 iPd	50	31.00	3.6X	
	0.8s	7.46nm		5.0mb		
PRY	88.40	243 eP	50	48.50	19.3X	
BUL	88.45	250 iPd	50	29.10	-0.3	
	1.0s	29.00nm		5.5mb		
KSR	89.09	244 eP	50	51.40	18.9X	
FRS	89.79	240 eP	50	51.00	15.5X	
MKRJ	90.16	302 Pd	50	33.30	-3.9X	
SALJ	90.21	302 Pd	50	33.80	-3.6X	
SWZ	90.25	243 eP	50	28.00	-9.8X	
SDN	91.36	34 eP	50	40.80	-1.2	
CER	94.09	235 eP	51	10.00	14.8X	
SVW	95.06	29 eP	50	58.80	-0.3	
TTA	95.18	27 eP	50	59.30	-0.3	
IMA	96.65	24 eP	51	05.80	-0.5	
	0.7s	10.10nm		5.4mb		
PMR	98.22	29 eP	51	11.70	-1.5	
MLR	99.44	315 eP	51	18.00	-1.4	
SOD	99.74	337 iP	51	20.30	0.2	
SUF	99.91	332 eP	51	20.00	-0.9	
NUR	100.62	330 ePdiff	51	23.00	-1.2	
INK	104.39	22 ePdiff	51	39.00	-1.8	
ZST	105.50	317 ePKP	56	08.40	8.6X	
APO	105.90	330 ePKP	56	01.40	1.3	
	0.5s	0.60nm				
HFS	106.08	330 ePdiff	51	47.20	-1.3	
	2.3s	118.50nm		6.5mb		
NAO	107.34	331 Pdiff	51	53.00	-1.1	
	0.8s	2.00nm		5.3mb		
BSF	112.41	318 ePKP	56	10.30	-2.7X	
	0.8s	5.35nm				
HAU	112.66	318 ePKP	56	10.10	-3.3X	
	0.7s	4.40nm				
YKA	113.77	25 ePKP	56	12.80	-2.2X	
	0.5s	2.20nm				
LBF	114.46	318 ePKP	56	14.50	-2.4X	
LOR	114.47	318 ePKP	56	13.70	-3.2X	
	0.7s	4.95nm				
SSF	114.75	318 ePKP	56	15.10	-2.3X	
BGF	115.31	317 ePKP	56	16.20	-2.3X	
	0.7s	6.60nm				
MAF	115.58	317 ePKP	56	16.70	-2.4X	
WDC	116.46	49 ePKP	56	20.80	-0.1	
		e	57	25.30		
MFF	117.29	318 ePKP	56	19.90	-2.4X	
	0.6s	4.50nm				
ORV	117.45	50 ePKP	56	23.40	0.6	
LPF	117.45	320 ePKP	56	20.40	-2.1X	
	0.6s	7.20nm				
PRS	118.14	54 e(PKP)	56	25.10	0.9	
NEW	118.20	40 PKP	56	22.60	-1.4	
	0.8s	8.85nm				
CMB	118.60	52 ePKPc	56	25.10	0.0	
		e	57	37.10		
FRI	119.33	53 ePKPc	56	26.90	0.5	
SYP	119.56	55 ePKP	56	29.00	1.8	
KVN	120.13	50 iPKP	56	28.30	0.1	
		iPP	57	51.80		
TNP	121.03	51 PKP	56	30.70	0.8	
	0.8s	7.84nm				
SES	121.06	36 ePKP	56	29.00	-0.4	
PAS	121.10	56 ePKP	56	31.00	1.1	
MWC	121.18	56 ePKP	56	31.00	0.7	
CLC	121.24	54 ePKP	56	31.00	0.8	
SBB	121.28	55 ePKP	56	31.00	0.7	
RVR	121.78	56 ePKP	56	31.00	-0.2	
GSC	121.98	54 ePKP	56	32.00	0.3	
LRM	122.05	41 ePKP	56	31.90	0.2	
PLM	122.32	56 ePKP	56	36.00	3.5X	
BAR	122.61	57 ePKP	56	34.00	1.2	
TPC	122.84	55 ePKP	56	34.00	0.7	
PTI	123.17	44 PKP	56	35.10	1.3	
FFC	123.51	28 ePKP	56	33.00	-0.9	
	0.7s	13.00nm				
DUG	123.74	47 PKP	56	35.70	0.7	
	1.0s	35.00nm				
GLA	124.05	56 ePKP	56	37.00	1.3	
NKM	124.12	307 ePKP	56	24.00	-11.7X	
IFR	124.35	304 iPKP	56	36.00	-0.4	
MSU	124.73	49 PKP	56	38.40	1.3	
FRB	125.09	5 ePKP	56	36.00	-0.6	
BW06	125.13	43 PKP	56	37.50	-0.2	
	1.4s	13.81nm				
KIC	125.48	271 PKPc	56	38.70	-0.2	
LIC	125.74	271 PKPc	56	39.18	-0.3	
	0.5s	13.00nm				
TIC	125.78	272 PKPc	56	39.26	-0.3	
AVE	126.26	305 ePKP	56	45.00	5.1X	
TIO	126.68	302 ePKP	56	41.00	0.0	
PV09	127.00	48 iPKP	56	42.10	0.5	
RSSD	128.18	40 PKP	56	42.60	-0.9	
GOL	129.25	45 PKP	56	45.30	-0.5	
	1.0s	46.25nm				
GLD	129.34	45 PKP	56	46.90	1.1	
ALQ	130.23	52 ePKP	56	48.00	0.3	
		e	00	04.00		
ANMO	130.23	52 ePKPc	56	48.30	0.6	
		i	57	10.00		
		i	00	03.00		
SCH	134.06	6 ePKP	56	54.00	-0.1	
TUL	137.72	45 e(PKP)	57	00.20	-1.4	
	1.2s	28.60nm				
FVM	140.12	39 PKP	56	56.70	-9.2X	
CBM	141.63	9 PKP	57	02.50	-5.8X	
HBVT	143.02	16 PKP	57	06.40	-4.4X	
BNH	143.26	14 PKP	57	06.60	-4.6X	
PWLA	143.47	41 PKP	57	07.60	-4.3X	
EMM	143.87	9 PKP	57	09.50	-2.7X	
GBTN	145.40	36 PKP	57	13.90	-1.2	
TXNY	145.59	19 iPKP	57	15.20	-0.1	
TBR	145.61	20 PKP	57	14.80	-0.5	
TKL	145.66	36 PKP	57	15.10	-0.5	
LVNJ	145.72	20 PKP	57	15.40	-0.1	
PNJ	145.84	20 iPKP	57	16.20	0.5	
GMTN	145.85	20 iPKP	57	15.90	0.2	
NAV	146.06	31 PKP	57	16.00	-0.3	
BLA	146.33	31 PKP	57	16.50	-0.2	
CVL	146.66	27 PKP	57	17.50	0.4	
NA2	146.86	26 PKP	57	17.20	-0.2	
CBN	146.96	26 PKPd	57	19.00	1.4	
ARE	152.06	155 ePKP	57	33.00	6.6X	
PT03	152.06	145 ePKP	57	34.10	8.0X	
ITR	152.33	231 ePKP	57	27.30	0.8	
		e	57	31.80		
		e	57	34.00		
		e	57	40.90		
CAI	152.65	236 ePKP	57	27.20	0.2	
BAO	152.81	205 ePKP	57	28.20	0.9	
PT10	152.87	141 e(PKP)	57	33.00	5.8X	
CCH	152.93	166 PKP	57	37.20	9.6X	
NNA	153.02	141 iPKP	57	28.50	1.0	
	1.0s	13.00nm				
ZOBO	153.46	162 PKP	57	31.00	2.3X	
		i	57	51.00		
SIV	155.03	177 PKP	57	30.80	0.7	
		i	57	51.80		

S.D. = 1.1 on 164 of 211 obs.

JUN 08, 1990 21h 57m 54.15± 4.78s
32.113 S ±12.5km 68.420 W ±36.5km
DEPTH = 140.9 ± 40.3 km
MENDOZA PROVINCE, ARGENTINA (139)

RTCV	0.27	338 ePc	58	13.00	-1.0	
CFA	0.53	17 iPd	58	14.20	-0.7	
		(S)	58	26.80		
ZON	0.61	339 iPd	58	15.50	0.1	
		eS	58	27.00		
RTLL	0.78	357 iPc	58	16.00	-0.6	
MDZ	0.85	205 i(P)	58	18.90	1.7	
JACH	1.92	252 iPc	58	28.60	0.3	

08d 21h

			i	58 56.50		
FCH	1.99	232	iPc	58 30.40	1.0	
			iS	58 58.00		
RTRS	2.13	335	iPc	58 32.20	1.5	
PEL	2.17	241	iPc	58 31.40	0.1	
			iS	58 58.80		
SAN	2.31	234	iP	58 33.30	0.3	
			iS	59 02.00		
PCH	2.32	229	iPc	58 33.50	0.4	
			iS	59 03.50		
ROCH	2.35	248	iPd	58 33.00	-0.7	
			iS	59 01.70		
TACH	2.62	233	iPc	58 36.50	-0.3	
			iS	59 08.50		
LCCH	2.98	242	iPc	58 40.70	-0.8	
			iS	59 14.00		
LNV	3.11	233	iPd	58 41.80	-1.4	
			iS	59 17.50		

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

? JUN 08, 1990 22h 53m 00.56± 6.55s
47.078 N ±13.8km 2.418 W ±58.0km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.8 (LDG).

LPF	1.33	44	Pg	53 26.00	0.9	
			Sg	53 42.00		
MFF	1.63	106	Pg	53 32.60	3.2X	
			Sg	53 53.00		
GRR	1.68	38	Pn	53 29.50	-0.6	
			Pg	53 32.00		
			Sg	53 52.00		
FLN	2.13	37	Pg	53 40.20	3.6X	
			Sg	54 07.00		
LSF	2.84	105	Pg	53 55.20	8.4X	
			Sg	54 31.80		
LFF	3.07	133	Pg	54 00.00	10.1X	
			Sg	54 41.00		
TCF	3.28	102	Pn	53 53.00	-0.1	
			Pg	54 02.30		
			Sg	54 44.20		
MAF	3.54	102	Pg	54 08.00	11.3X	
BGF	3.65	96	Pn	53 58.00	-0.3	
			Sg	54 55.50		
CAF	3.79	123	Pn	54 00.60	0.3	

S.D. = 0.8 on 5 of 10 obs.

• JUN 08, 1990 23h 02m 28.08± 0.75s
45.154 N ±10.2km 27.192 E ± 6.1km
DEPTH = 10.0km (geophysicist)
ROMANIA (358)

ISR	0.46	268	ePd	02 37.50	0.1	
CFR	0.68	87	iPd	02 41.50	0.0	
VRI	0.79	336	ePd	02 43.50	0.1	
TLB	0.82	133	ePc	02 44.00	0.0	
MLR	0.94	291	eP	02 46.00	-0.2	

S.D. = 0.1 on 5 of 5 obs.

& JUN 09, 1990 00h 04m 18.00s
38.822 N 122.773 W
DEPTH = 4.0km
4.1mb (1 obs.)
NORTHERN CALIFORNIA (36)
<BRK>. ML 3.6 (BRK>.
Mo=1.1•10••15 Nm (BRK). Felt (V) at Angwin; (IV) at Cobb and Santa Rosa; (III) at Finley and Guerneville.

NWRM	0.38	194	iPd	04 25.80	0.3	
BRK	1.03	157	iPd	04 37.20	-0.8	
			iS	04 52.30		
BKS	1.03	156	ePc	04 36.80	-1.3	
			eS	04 50.20		
ORV	1.23	53	iPd	04 40.20	-1.3	
			i	04 46.40		
PCC	1.36	167	iPd	04 41.70	-1.9	
LTCM	1.47	20	eP	04 43.80	-1.5	
MHC	1.73	149	e(P)	04 46.80	-2.3	
WDC	1.76	6	eP	04 49.30	-0.2	
ARN	1.77	146	eP	04 47.50	-2.1	
MIN	1.77	30	i(P)	04 48.60	-1.1	
GCC	1.89	161	eP	04 48.70	-2.6	
CMB	2.03	112	iPc	04 52.30	-1.2	
FHC	2.19	335	e(P)	05 01.00	5.3	
FHC	2.19	335	e(P)	04 55.50	-0.2	
SAO	2.31	152	eP	04 55.40	-2.0	
LLA	2.64	146	ePc	05 00.20	-1.9	
PRS	2.72	155	eP	05 00.90	-2.5	
FRI	3.04	126	ePc	05 06.20	-1.5	
PRI	3.16	147	eP	05 08.00	-1.5	
KVN	3.65	85	eP	05 14.00	-2.7	
TNP	4.42	98	eP	05 24.50	-3.2	
FFC	21.22	35	eP	09 05.00	-1.9	
	0.6s		5.00nm		4.1mb	
	22 obs. associated					

? JUN 09, 1990 00h 20m 10.47± 4.62s
16.863 N ±20.7km 61.033 W ±32.6km
DEPTH = 10.0km (geophysicist)
LEEWARD ISLANDS (92)
ML 2.6 (FDF).

SEG	0.64	225	eP	20 23.78	0.4	
			S	20 32.80		
BPA	0.81	283	eP	20 26.12	-0.1	
			S	20 37.80		
MGG	0.98	196	eP	20 28.94	-0.1	
			S	20 42.00		
PAG	1.04	217	eP	20 29.60	-0.5	
			S	20 43.10		
BBL	1.40	198	eP	20 36.20	0.2	

S.D. = 0.5 on 5 of 5 obs.

JUN 09, 1990 00h 34m 50.02± 1.20s
9.934 N ±10.8km 84.155 W ± 7.4km
DEPTH = 25.0 ± 8.9 km
4.7mb (25 obs.) 4.6Msz (5 obs.)
COSTA RICA (78)
MD 5.3 (UPA). Felt strongly at Santiago de Puriscal. Felt in much of Costa Rica.

DVD	2.25	131	iPc	35 26.00	-0.3	
UPA	4.66	101	iPc+	36 00.00	-0.6	
	0.8s		574.63nm			
			iS	36 55.50		
FUQ	11.23	112	eP	37 29.00	-3.5X	
BOG	11.31	117	eP	37 38.00	4.4X	
			eS	39 48.00		
BMG	11.32	104	eP	37 35.00	1.5	
SDV	13.38	93	eP	38 01.10	-0.1	
TOV	14.15	89	eP	38 12.30	1.1	
FISA	14.63	83	eP	38 18.00	0.6	
CAR	16.96	87	eP	38 45.00	-2.5	
LLAV	17.08	87	iP	38 49.00	0.0	
OLLA	17.09	88	eP	38 48.50	-0.6	
CRX	17.71	304	(P)	39 02.00	4.9X	
IIJ	17.92	305	(P)	39 01.50	1.6	
MRX	19.10	302	(P)	39 19.00	5.2X	
RSCP	25.58	357	eP	40 20.20	1.3	
	1.1s		49.69nm		5.1mb	
UYO	25.90	340	iPd	40 22.20	0.3	
OLY	26.31	346	eP	40 25.00	-0.6	
TUL	27.94	340	eP	40 40.70	0.2	
	1.2s		5.90nm		4.2mb	
Z	19s		1.62um		4.6Msz	
			LR	49 00.00		
LNO	27.94	340	e(P)	40 40.80	0.4	
FVM	28.49	350	eP	40 45.00	-0.4	
	1.2s		26.47nm		4.8mb	
CBN	28.80	11	eP	40 38.00	-10.2X	
ZOBO	30.49	148	P	41 05.00	0.9	
			LR	47 34.00		
LPB	30.72	149	eP	41 22.00	16.0X	
Z	18s		2.61um		4.9Msz	
			LR	48 09.00		
ALQ	32.16	324	eP	41 16.00	-2.3	
	1.3s		7.69nm		4.5mb	
Z	18s		0.69um		4.4Msz	
ANMO	32.16	324	eP	41 16.80	-1.5	
	1.0s		3.25nm		4.2mb	
SIV	34.43	138	P	41 36.20	-1.8	
RSNY	35.48	12	eP	41 48.00	1.4	
	1.0s		14.10nm		4.8mb	
PLM	38.03	313	eP	42 10.00	1.6	
TNP	40.81	319	eP	42 31.50	0.0	
	0.7s		2.00nm		4.0mb	
KVN	41.93	319	eP	42 40.80	0.2	
BAO	43.91	125	eP	42 56.50	-0.4	
SCH	46.84	14	eP	43 17.00	-2.7	
FFC	46.87	346	eP	43 17.00	-2.8X	
	0.8s		10.00nm		4.9mb	
PNT	49.10	330	eP	43 37.00	-0.4	
FRB	54.86	8	eP	44 16.00	-4.4X	
YKA	56.90	344	eP	44 11.90	-23.2X	
	0.6s		0.50nm			
INK	66.57	342	eP	45 35.00	-4.9X	
MBC	68.96	351	eP	45 52.50	-2.2	
	0.6s		5.00nm		4.8mb	
MAL	75.94	55	iPd	46 37.00	0.3	
AIA	76.43	172	eP	46 19.80	-19.0X	
GRR	78.20	43	eP	46 49.90	0.8	
	0.7s		6.60nm		4.8mb	
FLN	78.44	42	eP	46 51.30	0.9	
LDF	78.69	42	eP	46 52.70	1.0	
	0.7s		7.70nm		4.8mb	
MFF	78.75	44	eP	46 53.00	0.9	
EPF	79.29	48	eP	46 55.20	0.0	
	0.9s		12.30nm		4.9mb	
LFF	79.46	46	eP	46 57.00	1.0	
	0.7s		6.60nm		4.8mb	
LPO	79.79	46	eP	46 58.80	1.0	
	0.7s		6.60nm		4.8mb	
LSF	79.93	45	eP	46 59.10	0.6	
TCF	80.40	45	eP	47 01.60	0.5	
	0.7s		4.40nm		4.6mb	
MAF	80.65	45	eP	47 03.10	0.7	
	0.9s		6.55nm		4.7mb	
BGF	80.82	44	eP	47 03.90	0.7	
	0.7s		6.60nm		4.8mb	
AVF	81.14	44	eP	47 05.10	0.2	
	0.7s		3.85nm		4.5mb	
SSF	81.22	44	eP	47 05.60	0.3	
	0.8s		5.35nm		4.6mb	
LOR	81.45	43	eP	47 06.90	0.4	
	0.7s		4.40nm		4.6mb	
HAU	83.04	43	eP	47 15.50	0.7	
	0.8s		5.35nm		4.7mb	
BSF	83.36	43	eP	47 17.00	0.5	
NAO	83.83	29	P	47 16.70	-1.8	
	1.2s		13.90nm		5.0mb	
HFS	85.35	30	eP	47 23.70	-2.4	
	0.5s		1.60nm		4.5mb	
Z	18s		0.32um		4.8Msz	
			LR	15 36.00		
GRF	85.96	40	eP	47 28.20	-1.3	
Z	22s		0.20um		4.5Msz	
			e	47 30.70		
MOX	86.04	39	eP	47 31.00	1.2	
CLL	86.77	39	iP	47 33.90	0.6	
	1.7s		24.00nm		5.1mb	
UPP	87.34	30	iP	47 35.40	-0.5	
BRG	87.44	39	eP	47 36.80	0.2	
	1.6s		19.00nm		5.1mb	
KHC	87.58	41	P	47 38.50	1.1	
KSP	88.90	39	eP	47 41.00	-2.6	
ZST	90.07	41	eP	47 48.70	-0.5	
KRA	91.35	39	eP	47 34.80	-20.2X	
PJG	126.03	295	ePKP	54 06.50	13.8X	
GKN	140.76	16	PKP	54 00.00	-20.4X	
WB5	141.57	251	ePKP	54 18.50	-3.3X	
WRA	141.58	250	PKPc	54 18.70	-3.2X	
	1.2s		6.60nm			
HYB	147.90	32	ePKP	54 32.00	-0.5	
GBA	150.32	38	PKPc	54 37.30	1.1	
	1.3s		15.70nm			
KOD	152.88	43	ePKP	54 46.00	5.6X	

S.D. = 1.2 on 57 of 74 obs.

% JUN 09, 1990 00h 53m 36.67± 2.32s
36.612 N ±22.3km 2.963 W ± 9.4km
DEPTH = 10.0km (geophysicist)
STRAIT OF GIBRALTAR (385)
mbLg 2.9 (MDD).

ENIJ	0.70	59	ePg	53 50.00	-0.5	
			eSg	54 01.00		
AFC	0.79	324	iPgc	53 51.00	-1.2	
			eSg	54 03.00		
EBAN	1.68	337	ePn	54 07.00	0.7	
			eSn	54 31.00		
EPRU	1.85	282	ePn	54 09.00	0.2	
EVIA	2.05	10	ePn	54 12.50	0.8	
			eSn	54 37.50		

S.D. = 1.2 on 5 of 5 obs.

JUN 09, 1990 01h 14m 34.57± 0.18s
6.062 S ± 3.0km 77.136 W ± 4.2km

DEPTH = 25.6km (20 depth phases)
5.5mb (67 obs.) 4.9Msz (6 obs.)
NORTHERN PERU (111)
One person killed and at least 14 houses destroyed (VI) in the Rioja-Moyobombo area. Felt (II) at Iquitos.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 25C
Centroid Location:
Origin Time 01:14:40.6 0.5
Lat 5.70S 0.06 Lon 77.07W 0.12
Dep 31.1 6.3 Half-duration 2.0
Moment Tensor; Scale 10**17 Nm
Mrr=-0.17 0.09 Mtt= 0.12 0.07
Mff= 0.05 0.14 Mrt=-0.01 0.09
Mrf= 1.95 0.38 Mtf= 0.40 0.07
Principal Axes:
T Val= 1.94 Plg=42 Azm=282
N 0.11 11 181
P -2.05 46 79
Best Double Couple:Mo=2.0*10**17
NP1:Strike= 82 Dip=12 Slip= -9
NP2: 181 88 -101

TUNG	4.79	344	P	15	47.70	0.4
VC1	5.53	347	P	15	58.40	0.4
GECU	5.80	350	eP	16	02.00	0.2
PT10	5.98	178	eP	16	03.00	-0.7
			i	16	04.10	
			eS	17	00.50	
QTO	5.98	347	Pn	16	07.20	3.0X
QUR	6.01	347	eP	16	05.40	0.8
GGP	6.03	346	eP	16	06.00	1.0
CAYA	6.16	352	eP	16	07.00	0.2
COTA	6.47	349	eP	16	12.60	1.5
PSO	7.21	358	eP	16	20.50	-0.9
BOG	11.05	16	iP	17	15.00	0.6
			iS	19	26.00	
ARE	11.72	152	eP	17	22.00	-1.6
FUQ	11.95	17	eP	17	20.00	-6.6X
ZOBO	13.45	140	P	17	45.00	-1.9
			LR	21	56.00	
BMG	13.66	17	iPc	17	49.50	0.2
LPB	13.66	140	iPc	17	44.20	-5.4X
	1.0s	420.00nm			6.3mb	
Z	19s	29.17um				
			LR	22	26.00	
SDV	16.20	24	eP	18	21.70	-0.7
TOV	17.36	25	eP	18	35.70	-1.2
SIV	18.58	123	P	18	48.40	-3.7X
ANT	18.70	160	e(P)	18	53.00	-0.3
FISA	18.88	24	eP	18	53.00	-2.7
MORO	18.98	28	eP	18	56.20	-0.7
OLLA	19.00	33	eP	18	55.50	-1.7
CAR	19.35	32	eP	19	02.70	1.3
			iS	22	30.00	
LLAV	19.38	32	iP	19	01.00	-0.8
TPP	22.56	44	eP	19	35.97	1.7
TRN	22.82	43	eP	19	37.33	0.4
TPR	23.64	44	eP	19	45.84	1.0
BOT	23.66	44	eP	19	46.27	1.2
SVB	24.86	39	eP	19	59.44	2.8X
RTRS	25.05	164	ePd	20	00.10	1.8
SLB	25.41	39	eP	20	08.80	6.9X
PORP	26.11	23	P	20	08.70	0.4
CPD	26.38	25	P	20	10.50	-0.4
RTLL	26.42	163	ePc	20	10.30	-0.9
ZON	26.56	164	eP	20	06.00	-6.5X
CFA	26.74	163	ePc	20	13.90	-0.3
JACH	27.18	168	eP	20	28.50	10.3X
PEL	27.61	168	iPd	20	23.00	1.0
	1.1s	101.27nm			5.4mb	
			i	20	31.70	31km
FCH	27.87	168	eP	20	26.00	1.3
			e	20	33.80	27km
BAO	30.12	111	eP	20	43.50	-1.5
ITR	38.47	96	eP	21	55.60	-1.0
			e	22	02.40	23km
			e	23	07.30	
HBF	38.90	356	P	22	00.60	0.7
CAI	39.75	93	eP	22	03.30	-4.0X
PRM	40.23	353	P	22	10.80	-0.1
JSC	40.31	355	P	22	11.40	-0.1
TKL	41.96	352	P	22	24.80	-0.3
GBTN	42.03	351	P	22	25.30	-0.4
PWLA	42.10	347	P	22	25.10	-1.1
RSCP	42.19	350	iP	22	25.20	-1.8
	1.0s	135.57nm			5.6mb	
			ipP	22	33.00	26km
BLA	43.16	356	iP	22	34.00	-0.9
	0.8s	26.85nm			5.0mb	
UYO	43.24	339	iPd	22	36.00	0.5
NAV	43.29	356	P	22	36.00	0.1
OLY	43.49	343	iP	22	35.70	-1.8
CVL	43.83	358	P	22	40.50	0.2
NA2	43.96	359	P	22	42.10	0.8
CBN	44.04	360	eP	22	42.00	0.1
TUL	45.28	339	eP	22	51.70	-0.3
	1.0s	88.00nm			5.6mb	
Z	22s	0.74um			4.6Msz	
			LR	38	00.00	
LNO	45.28	339	ePd	22	52.70	0.8
MEO	45.39	335	eP	22	52.70	-0.2
FVM	45.53	345	iP	22	52.00	-2.0
	0.7s	68.03nm			5.7mb	
			ipP	22	59.10	24km
GMTN	46.79	3	iP	23	04.00	0.2
PNJ	46.82	3	iP	23	06.30	2.3
TBR	47.05	3	P	23	06.50	0.6
TXNY	47.09	3	iP	23	07.10	1.0
WVLY	48.32	359	P	23	14.20	-1.6
ALQ	49.27	328	eP	23	23.10	-0.4
	0.8s	44.03nm			5.5mb	
Z	18s	0.69um			4.7Msz	
			e	23	33.00	33km
ANMO	49.27	328	iP	23	24.20	0.7
	1.0s	43.75nm			5.4mb	
WNY	50.31	3	P	23	30.60	-0.5
HBVT	50.32	4	P	23	30.60	-0.6
RSNY	50.43	2	eP	23	31.50	-0.5
	0.9s	23.23nm			5.2mb	
			epP	23	39.00	25km
BNH	50.70	5	P	23	34.70	0.7
GLD	52.44	333	P	23	55.60	8.0X
	1.2s	63.13nm			5.4mb	
GOL	52.47	333	eP	23	46.00	-1.9
	0.7s	14.56nm			5.0mb	
GLA	52.84	320	eP	23	51.00	0.5
PV09	53.36	329	eP	23	54.20	-0.3
CBM	53.36	8	eP	23	53.50	-0.5
BAR	53.81	318	eP	24	08.00	10.4X
TPC	54.30	320	eP	24	02.00	0.8
PLM	54.35	319	P	24	04.00	2.2
MSU	54.99	327	P	24	06.30	-0.1
RVR	55.09	319	eP	24	10.00	3.1X
RSSD	55.53	337	iP	24	10.10	-0.1
			ipP	24	16.50	21km
GSC	55.54	321	eP	24	10.00	-0.3
MWC	55.67	319	eP	24	13.00	1.6
SBB	55.81	319	eP	24	11.00	-1.2
DAU	55.88	329	P	24	13.00	0.1
CLC	56.37	321	eP	24	16.00	-0.2
DUG	56.54	328	P	24	18.00	0.5
	0.8s	15.28nm			5.1mb	
BW06	56.83	332	iP	24	18.50	-1.1
	1.1s	40.18nm			5.4mb	
SYP	57.12	318	eP	24	28.00	6.3X
TNP	57.59	323	iP	24	24.50	-0.5
	0.6s	9.26nm			5.0mb	
			ipP	24	31.00	21km
FRI	58.43	321	e(P)	24	29.90	-0.7
			e	24	37.00	23km
PRI	58.53	319	e(P)	24	32.40	0.9
			e	24	39.00	22km
KVN	58.74	323	iP	24	31.50	-1.5
LLA	58.99	319	ePc	24	35.10	0.5
PRS	59.10	319	eP	24	35.00	-0.4
			e	24	43.10	27km
HPI	59.24	330	P	24	37.50	1.0
CMB	59.49	321	eP	24	38.20	0.1
			e	24	45.70	25km
MHC	59.87	320	eP	24	41.40	0.6
			e	24	48.40	23km
LRM	60.50	332	eP	24	44.30	-0.8
ORV	61.11	322	eP	24	48.50	-0.5
			e	24	56.10	25km
SCH	61.27	7	ePc	24	49.00	-0.9
	0.8s	46.00nm			5.7mb	
FHC	63.38	322	P	25	01.00	-3.2X
	1.0s	78.00nm			5.8mb	
SES	63.41	336	eP	25	04.00	-0.2
	0.7s	50.00nm			5.8mb	
			pP	25	11.00	23km
FFC	64.02	344	eP	25	06.00	-2.1
	1.4s	46.00nm			5.4mb	
NEW	64.46	332	iP	25	10.00	-1.2
	1.0s	75.00nm			5.8mb	
DPW	64.71	331	P	25	20.00	7.2X
BMW	66.37	327	P	25	22.60	-0.9
PNT	66.38	331	ePc	25	24.00	0.5
	0.9s	55.00nm			5.7mb	
EDM	66.51	337	eP	25	22.50	-1.7
MCW	67.55	329	P	25	30.70	-0.2
PGC	67.85	329	eP	25	39.00	6.3X
RUV	69.40	256	iP	25	51.00	8.1X
	1.2s	90.00nm			5.8mb	
TPT	69.63	256	iP	25	51.40	7.1X
	1.2s	100.00nm			5.8mb	
VAH	69.64	256	iP	25	52.50	8.1X
	1.2s	80.00nm			5.7mb	
PMO	69.90	256	iP	25	54.20	8.3X
	1.2s	115.00nm			5.9mb	
FRB	69.92	4	eP	25	44.00	-1.1
PPN	71.34	254	iP	26	02.60	7.9X
	1.2s	45.00nm			5.4mb	
PAE	71.48	253	iP	26	03.60	8.1X
	1.2s	125.00nm			5.9mb	
AFR	71.67	254	iP	26	04.70	8.0X
	1.2s	80.00nm			5.7mb	
LIC	73.00	82	P	26	04.08	-0.5
Z	20s	3.25um			5.6Msz	
TIC	73.06	81	P	26	04.64	-0.4
	1.2s	76.50nm			5.6mb	
KIC	73.30	82	P	26	06.00	-0.4
	1.2s	108.00nm			5.8mb	
YKA	74.12	343	eP	26	08.40	-1.8
	0.6s	7.90nm			4.9mb	
TIO	76.09	56	iP	26	23.50	1.1
AVE	76.62	54	iP	26	26.00	0.9
			i	27	06.00	163kmX
IFR	78.52	54	iPc	26	37.00	1.2
NKM	78.81	52	iP	26	48.50	11.4X
MAL	79.93	51	iPc	26	45.00	1.9
TOL	81.05	48	iPc	26	50.50	1.5
	1.2s	93.75nm			5.7mb	
			eS	36	56.00	
			eSS	41	25.00	
AKU	83.32	21	iP	27	02.10	1.9
	1.0s	24.00nm			5.3mb	
INK	83.84	342	ePd	27	03.00	0.2
	0.9s	59.00nm			5.8mb	
SPA	83.98	180	iPc	27	04.20	0.3
	1.1s	38.10nm			5.5mb	
EPF	85.02	46	eP	27	10.10	0.7
	1.6s	139.90nm			5.9mb	
LPF	85.26	41	eP	27	10.60	0.3
	1.3s	39.70nm			5.5mb	
GRR	85.47	41	eP	27	11.60	0.2
	1.1s	24.40nm			5.3mb	
MFF	85.50	42	eP	27	11.90	0.3
	1.3s	46.95nm			5.6mb	
LFF	85.73	44	eP	27	13.00	0.2
	1.3s	61.35nm			5.7mb	
MBC	85.73	351	eP	27	13.00	0.8
	1.0s	120.00nm			6.1mb	
FLN	85.80	40	eP	27	13.40	0.4
	1.6s	93.30nm			5.8mb	
EKA	85.94	33	P	27	14.00	0.4
	1.7s	81.80nm			5.7mb	
LPO	85.98	44	eP	27	14.30	0.2
	1.5s	62.70nm			5.6mb	
LDF	85.99	40	eP	27	14.40	0.4
	1.4s	56.65nm			5.6mb	
RJF	86.34	44	eP	27	16.00	0.2
	1.6s	62.20nm			5.6mb	
CAF	86.64	44	eP	27	17.10	-0.3
TCF	87.02	43	eP	27	18.80	-0.4
MAF	87.25	43	eP	27	20.00	-0.2
	0.9s	6.55nm			4.9mb	
FBA	87.38	336	eP	27	20.00	-0.5
	1.2s	39.39nm			5.6mb	
BGF	87.51	43	eP	27	21.10	-0.4
	1.3s	30.70nm			5.4mb	
AVF	87.90	43	eP	27	22.60	-0.7
	0.8s	5.35nm			4.9mb	
SSF	88.05	42	eP	27	23.30	-0.7
SMF	88.20	43	eP	27	24.20	-0.6
	0.9s	9.85nm			5.1mb	
LOR	88.33	42	eP	27	24.60	-0.8

09d 01h

	0.9s	9.85nm		5.1mb	
DAG	88.97	11 iPc	27	28.00	0.2
	1.0s	74.00nm		6.0mb	
	Z 19s	1.39um		5.4Msz	
DOU	89.32	40 P	27	40.50	10.5X
		S	38	21.00	
LRG	89.42	46 eP	27	30.80	0.2
	1.4s	56.65nm		5.7mb	
LMR	89.51	46 eP	27	31.00	0.0
	1.6s	80.85nm		5.8mb	
FRF	89.64	46 eP	27	31.40	-0.3
	1.1s	24.40nm		5.4mb	
LPL	89.99	44 eP	27	34.00	0.4
	1.1s	9.75nm		5.0mb	
LPG	90.01	44 eP	27	34.30	0.6
	1.1s	17.10nm		5.2mb	
IMA	90.08	337 eP	27	33.20	-0.2
	1.5s	17.40nm		5.1mb	
HAU	90.11	42 eP	27	33.40	-0.4
ENN	90.27	39 eP	27	34.00	-0.4
	0.9s	26.00nm		5.5mb	
		e	27	44.00	31km
MEM	90.30	39 P	27	44.30	9.8X
BSF	90.38	42 eP	27	34.50	-0.7
CDF	90.79	42 eP	27	36.50	-0.5
	0.9s	9.85nm		5.1mb	
WTS	91.01	38 eP	27	38.50	0.8
	0.9s	31.00nm		5.6mb	
		e	27	48.00	30km
WIT	91.04	37 eP	27	40.00	2.1
		e	27	48.00	25km
SQTA	93.28	43 iPc	27	49.10	0.6
	1.6s	52.30nm		5.7mb	
		i	28	12.50	86kmX
		i	28	26.40	
MOX	93.85	40 eP	27	52.00	1.1
	2.0s	29.00nm		5.4mb	
	Z 20s	0.50um		5.0Msz	
NAO	94.25	29 P	27	52.80	0.3
	1.2s	9.80nm		5.1mb	
CLL	94.77	39 eP	27	56.00	0.9
KHC	95.00	41 eP	27	55.50	-0.8
BRG	95.34	40 iP	27	59.00	1.2
	1.0s	12.00nm		5.3mb	
		i	28	10.60	37kmX
		e	31	48.20	
HFS	95.63	30 eP	28	07.00	8.2X
	1.0s	17.60nm		5.4mb	
	Z 18s	0.26um		4.7Msz	
		LR	03	07.00	
PRU	95.68	40 eP	28	09.50	10.2X
BCAO	96.09	86 iPd	28	00.00	-2.0
	1.5s	24.00nm		5.4mb	
		i	31	10.00	
		i	32	03.00	
ZST	97.30	42 eP	28	07.00	0.3
		e	32	04.60	
UPP	97.60	30 iP	28	07.40	-0.3
		i	28	16.80	29km
KRA	99.16	40 eP	28	15.80	0.8
SPC	99.38	41 eP	28	16.70	0.4
		e	32	41.70	
STK	127.22	222 ePKP	33	46.40	7.3X
	1.1s	8.00nm			
MAIO	130.23	47 ePKP	33	45.00	0.2
		e	37	07.00	
QUE	138.58	50 ePKP	34	11.10	10.2X
WRA	139.67	229 PKPd	33	54.40	-8.5X
	0.6s	1.10nm			
WB5	139.69	229 PKP	34	00.00	-2.9X
SNY	139.90	336 ePKP	33	58.80	-3.8X
WMQ	140.10	17 ePKP	34	02.00	-1.1
HHC	144.50	349 PKP	34	08.60	-2.3X
BTO	145.02	350 PKP	34	10.50	-1.3
KNA	146.42	230 ePKP	34	14.50	-0.1
GTA	146.69	4 PKP	34	14.00	-0.6
TIA	147.27	338 ePKP	34	15.50	0.1
TIY	147.31	346 PKP	34	17.50	1.9
	Z 26s	0.80um		5.4MszX	
MBL	148.23	211 ePKP	34	19.30	1.9
NANU	148.97	203 ePKP	34	21.80	3.3X
SSE	149.74	328 PKPc	34	24.00	4.6X
LZH	150.10	358 PKPc	34	25.00	4.9X
	Z 25s	0.50um		5.2MszX	
NJ2	150.14	332 PKPc	34	24.20	4.2X
XAN	151.60	349 PKP	34	28.50	6.2X
GKN	152.16	36 PKP	34	24.40	1.0

	1.2s	106.00nm			
DMN	152.73	36 PKP	34	25.40	1.1
PKI	152.93	36 PKP	34	24.20	-0.5
GUN	152.94	35 PKP	34	25.70	0.9
WHN	153.36	337 ePKP	34	30.50	5.8X
HYB	153.70	63 ePKP	34	26.00	0.4
GBA	153.87	71 PKPc	34	26.40	0.6
	1.4s	22.70nm			
CD2	155.27	358 ePKP	34	26.30	-1.1
GYA	159.40	350 PKP	34	33.80	1.1
KMI	161.05	0 ePKP	34	39.50	4.9X
CHG	166.76	16 ePKP	34	40.00	0.3
	S.D. = 1.0	on 171 of 212 obs.			

JUN 09, 1990 02h 02m 51.91± 0.44s
44.141 N ± 4.5km 8.747 E ± 3.3km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.7 (LDG), 2.4 (GEN). Felt
(I) at Genoa.

FIN	0.39	280	P	02	59.98	0.0
			S	03	06.03	
PCP	0.43	340	P	02	59.47	-1.2
			S	03	05.01	
CKI	0.44	310	Pd	03	00.20	-0.7
			eSg	03	05.60	
ROB	0.65	284	P	03	04.46	-0.5
			S	03	13.72	
IMI	0.66	250	P	03	05.62	0.5
			S	03	15.46	
BOB	0.80	38	P	03	07.80	0.3
			eSg	03	21.20	
ENR	0.96	276	P	03	10.82	0.6
			S	03	23.43	
SBF	0.99	254	Pn	03	11.20	0.5
			Sn	03	24.40	
STV	1.03	276	P	03	12.18	0.8
			S	03	25.51	
DOI	1.14	289	P	03	13.90	0.6
			eSg	03	30.50	
PZZ	1.24	288	P	03	15.26	0.3
			S	03	30.81	
BDI	1.34	93	P	03	16.60	0.0
PII	1.35	107	P	03	16.90	0.2
ORO	1.58	340	P	03	20.50	0.4
PGF	1.60	173	Pn	03	20.40	0.0
			Sn	03	39.40	
FRF	1.63	250	Pn	03	19.70	-1.0
			Sn	03	40.00	
LMR	1.81	244	Pn	03	21.80	-1.6
			Sn	03	43.00	
LPL	1.99	315	Pn	03	26.80	0.7
			Sn	03	51.00	
	S.D. = 0.7	on	18 of	18	obs.	

% JUN 09, 1990 02h 49m 54.88± 0.88s
37.412 N ± 6.8km 3.765 W ± 8.7km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
mbLg 2.8 (MDD).

AFC	0.24	132	iPgc	49	59.40	-0.6
			eSn	50	03.20	
EBAN	0.75	359	iPg	50	09.50	-0.1
			eSn	50	20.00	
MAL	0.86	217	ePn	50	11.50	0.1
			iSg	50	22.20	
ENIJ	1.31	109	ePn	50	19.80	0.6
EVIA	1.58	39	ePn	50	23.00	0.0
			eSn	50	44.00	
	S.D. = 0.6	on	5 of	5	obs.	

JUN 09, 1990 03h 53m 11.28± 0.52s
43.569 N ± 2.0km 127.201 W ± 5.0km
DEPTH = 10.0km (geophysicist)
3.8mb (8 obs.)
OFF COAST OF OREGON (30)

GROR	3.10	54	P	54	00.69	-0.5
			S	54	39.58	
KMOR	3.36	51	P	54	04.51	-0.4
			S	54	47.52	
FHC	3.65	138	ePc	54	08.20	-0.9
NLO	3.67	45	P	54	09.39	0.0
			S	54	55.61	
GT2	3.87	64	P	54	12.72	0.5

PGO	3.89	59	P	54	13.01	0.6
BMW	4.05	43	P	54	14.28	-0.3
RVW	4.09	49	P	54	15.32	0.2
TCO	4.09	81	P	54	15.47	0.1
ONR	4.10	35	P	54	14.96	-0.3
VLMM	4.18	60	P	54	17.18	0.6
			S	55	09.70	
LVP	4.23	52	P	54	17.82	0.6
			S	55	10.12	
TDH	4.24	64	P	54	17.85	0.3
VBEM	4.30	68	P	54	18.27	0.0
MTMW	4.32	54	P	54	18.87	0.3
			S	55	12.88	
FL2	4.33	51	P	54	19.20	0.4
			S	55	13.10	
VLL	4.38	62	P	54	20.03	0.6
CZM	4.39	48	P	54	19.37	-0.2
ERK	4.40	50	P	54	19.95	0.2
HSR	4.42	52	P	54	20.89	0.9
JLK	4.42	53	P	54	20.54	0.6
OBH	4.43	31	P	54	19.49	-0.5
REMW	4.43	52	P	54	20.98	0.7
STD	4.43	51	P	54	20.68	0.5
YEL	4.43	52	P	54	20.90	0.6
ESD	4.45	52	P	54	21.07	0.6
CPW	4.45	39	P	54	19.82	-0.6
			S	55	12.73	
APW	4.46	45	P	54	20.24	-0.2
CDFW	4.46	53	P	54	21.06	0.5
VFP	4.46	65	P	54	20.73	0.0
SOSW	4.48	52	P	54	21.37	0.5
APM	4.50	59	P	54	21.50	0.5
TDL	4.50	50	P	54	21.48	0.3
WDC	4.58	129	eP	54	22.00	-0.1
KOSW	4.58	49	P	54	22.66	0.4
GMO	4.59	77	P	54	21.72	-0.7
GULW	4.64	58	P	54	23.51	0.4
LMW	4.66	47	P	54	23.46	0.1
			S	55	21.39	
OOW	4.67	26	P	54	23.15	-0.4
CROR	4.68	70	P	54	22.83	-0.9
ASR	4.75	55	P	54	25.15	0.4
			S	55	23.58	
OFK	4.81	23	P	54	25.12	-0.3
VIPM	4.84	77	P	54	25.12	-0.9
MEW	4.85	40	P	54	26.50	0.6
OSD	4.91	29	P	54	26.61	-0.4
GHW	4.91	43	P	54	27.12	0.2
OTR	4.94	23	P	54	27.03	-0.2
LON	4.96	48	ePc	54	28.00	0.3
GLK	4.97	51	P	54	28.40	0.7
VGB	4.99	65	eP	54	27.50	-0.5
RVC	5.00	46	P	54	28.53	0.3
HDW	5.01	34	P	54	27.91	-0.4
VTHM	5.03	69	P	54	28.07	-0.5
GMW	5.04	36	P	54	28.02	-0.7
			S	55	28.80	
WPW	5.08	50	P	54	29.78	0.4
GL2	5.13	60	P	54	30.21	0.1
FMW	5.15	47	P	54	30.87	0.4
STW	5.20	27	P	54	31.15	0.2
GSM	5.26	44	P	54	32.25	0.3
MIN	5.27	126	eP	54	33.50	1.4
SPW	5.29	39	P	54	32.59	0.4
BLN	5.33	32	P	54	32.99	0.1
PGW	5.34	36	P	54	32.67	-0.2
NAC	5.51	53	P	54	35.86	0.5
JBO	5.60	68	P	54	36.10	-0.5
HTW	5.69	40	P	54	37.36	-0.6
			S	55	45.61	
TWW	5.71	49	P	54	39.02	0.7
MXC	5.74	56	P	54	38.76	0.1
EBG	5.75	52	P	54	39.37	0.6
OHW	5.76	33	P	54	39.69	0.9
PATW	5.78	64	P	54	38.82	-0.3
ORV	5.86	131	eP	54	40.80	0.5
TBM	5.88	50	P	54	41.10	0.5
BRVW	5.88	58	P	54	40.58	-0.1
JCW	5.91	37	P	54	40.61	-0.3
MCW	5.94	29	P	54	41.08	-0.4
PRW	5.96	61	P	54	41.46	-0.2
CMW	6.01	34	P	54	42.35	0.0
MDW	6.08	57	P	54	43.29	-0.1
RSW	6.09	60	P	54	43.28	-0.3
GBL	6.26	58	P	54	45.93	0.0
WAH2	6.27	57	P	54	45.63	-0.4
RPW	6.28	37	P	54	45.86	-0.4

ETW	6.29	48	P	54	46.63	0.2
WIW	6.30	60	P	54	46.32	-0.1
CRF	6.41	57	P	54	47.91	-0.1
WTV	6.55	48	P	54	49.81	-0.2
NLW	6.58	44	P	54	49.75	-0.8
SAW	6.85	50	P	54	53.79	-0.5
ARN	7.57	143	eP	55	03.00	-1.3
CMB	7.57	135	eP	55	05.00	0.7
DPW	7.62	53	eP	55	04.00	-1.1
PNT	7.77	40	iPd	55	06.60	-0.6
	0.5s	57.00nm			6.0mb	X
KVN	8.20	120	eP	55	12.30	-1.0
NEW	8.45	53	iP	55	15.00	-1.6
FRI	8.71	136	eP	55	19.90	-0.3
ISA	10.37	137	eP	55	43.00	-0.1
CLC	10.70	133	eP	55	51.00	3.3X
SBB	11.47	138	eP	55	57.00	-1.1
GSC	11.51	132	eP	56	01.00	2.2
BW06	12.91	87	eP	56	17.50	-0.2
SES	12.96	53	eP	56	17.00	-1.1
PV09	14.54	104	eP	56	40.00	0.8
RSSD	16.71	80	eP	57	06.50	-0.7
GOL	16.76	96	eP	57	06.00	-1.9
	0.8s	4.46nm			3.6mb	
GLD	16.85	96	e(P)	57	13.00	4.1X
	0.8s	25.88nm			4.4mb	
ANMO	18.19	111	eP	57	25.80	0.2
	0.8s	1.87nm			3.3mb	
ALQ	18.19	111	eP	57	25.20	-0.5
	0.9s	2.52nm			3.4mb	
FFC	19.80	47	ePc	57	43.70	-0.8
	0.6s	13.00nm			4.4mb	
YKA	20.34	17	eP	57	50.20	0.1
	0.7s	1.50nm			3.4mb	
MEO	23.76	102	iPd	58	26.70	2.2
INK	25.02	354	eP	58	37.00	0.7
TUL	25.22	97	e(P)	58	38.80	0.2
	1.1s	4.60nm			4.1mb	
MBC	32.95	3	eP	59	47.50	0.0
	0.7s	2.00nm			4.2mb	
	S.D. = 0.7	on 112 of 114 obs.				

? JUN 09, 1990 03h 56m 52.16± 2.84s
12.566 N ±31.0km 95.488 E ±14.7km
DEPTH = 33.0km (normal)
4.2mb (1 obs.)
ANDAMAN ISLANDS REGION (703)

NNT	4.15	89	eP	57	54.80	0.1
BDT	5.76	36	eP	58	17.60	0.0
CHTO	7.05	28	eP	58	44.00	8.3X
LOE	7.71	51	eP	58	45.00	-0.1
GYA	17.36	36	P	01	01.60	7.9X
GBA	17.62	275	Pc	01	20.10	23.3X
	0.6s	4.20nm				
PKI	17.66	329	P	00	59.20	1.5
GUN	17.71	331	P	01	05.80	7.4X
GKN	18.41	328	P	01	05.20	-1.5
NDI	23.39	316	eP	02	13.00	14.0X
LZH	24.60	16	eP	02	22.00	11.1X
	2.5s	110.00nm				
	Z 15s	0.50um			4.1MszX	
		S		06	40.00	
XAN	24.63	28	P	02	24.60	13.6X
GTA	27.01	7	eP	02	47.00	13.8X
	1.2s	10.00nm				
SPC	70.96	318	eP	08	18.50	9.9X
		•		08	33.50	
SRO	72.20	316	eP	08	27.00	11.2X
		•		08	41.20	
ZST	73.01	317	eP	08	34.50	13.9X
KSP	73.55	320	eP	08	09.00	-14.7X
BRG	75.04	320	eP	08	52.60	20.3X
	1.0s	10.00nm				
HFS	75.11	329	e(P)	08	53.00	20.5X
	0.4s	0.70nm				
CLL	75.62	320	e(P)	08	45.00	9.4X
NAO	76.53	330	P	08	50.20	9.7X
	1.0s	2.40nm			4.2mb	
	S.D. = 1.5	on 5 of 21 obs.				

? JUN 09, 1990 04h 09m 59.62± 2.98s
19.971 S ±66.8km 178.799 W ±38.8km
DEPTH = 599.1 ± 18.4 km
4.2mb (1 obs.)
FIJI ISLANDS REGION (181)

KRO	3.15	327	ePc	11	19.30	-0.8
SVA	3.18	305	ePc	11	20.10	-0.1
VUN	3.24	307	ePd	11	20.20	-0.4
TVI	3.25	339	iPc	11	20.50	-0.2
MBU	3.80	321	iPc	11	25.00	0.8
NDE	3.81	332	iPc	11	24.40	0.1
SGE	3.91	307	iPc	11	26.40	1.4
YSA	4.74	313	eP	11	29.90	-1.0
DZM	13.94	259	iPc	13	02.90	5.5X
WB5	43.91	262	iPd	17	16.50	0.0
WRA	43.93	262	Pd	17	16.40	-0.2
	0.7s	6.20nm			4.2mb	
MTN	48.41	270	iPc	17	50.80	0.0
HFS	138.90	351	ePKP	28	09.60	-10.2X
	0.3s	1.60nm				
KSP	146.96	342	ePKP	28	34.00	0.1
CLL	147.37	346	iPKPd	28	37.20	2.7X
	0.8s	11.00nm				
			i	28	41.30	
BRG	147.56	345	iPKP	28	37.60	2.8X
			i	28	42.50	
PRU	148.22	344	PKPd	28	39.50	3.6X
KHC	149.26	344	PKP	28	42.20	4.7X
	S.D. = 0.8	on 12 of 18 obs.				

• JUN 09, 1990 05h 37m 42.37± 3.35s
33.543 S ± 9.7km 70.785 W ±11.1km
DEPTH = 79.5 ± 31.9 km
CHILE-ARGENTINA BORDER REGION (127)

SAN	0.14	49	eP	37	54.00	-0.2
			iS	38	02.70	
TACH	0.17	229	iPc	37	54.00	-0.3
			iS	38	02.60	
PCH	0.24	109	iPd	37	54.90	0.3
			iS	38	03.10	
CHCH	0.40	164	iPd	37	55.50	0.0
			iS	38	05.50	
PEL	0.41	12	iPc	37	55.60	0.0
			iS	38	05.10	
FCH	0.47	63	iPc	37	56.50	0.1
			iS	38	07.00	
ROCH	0.60	342	iPd	37	57.50	0.1
			iS	38	08.50	
LCCH	0.66	276	iPc	37	58.10	0.3
			iS	38	10.00	
LNV	0.66	232	iPd	37	57.60	-0.2
			iS	38	09.00	
JACH	0.87	11	iP	38	00.00	-0.3
			iS	38	13.50	
	S.D. = 0.3	on 10 of 10 obs.				

JUN 09, 1990 06h 07m 08.38± 0.76s
43.186 N ± 6.4km 19.280 E ± 6.2km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.5 (TTG).

PLE	0.17	30	iPgd	07	12.50	0.2
			iSg	07	15.50	
NKY	0.43	209	iPgd	07	17.10	0.0
			iSg	07	24.40	
IVA	0.55	124	ePg	07	19.40	-0.2
			eSg	07	29.00	
BRY	0.61	242	iPgd	07	20.00	-0.8
			iSg	07	30.30	
TTG	0.76	181	ePg	07	23.10	0.0
			eSg	07	34.50	
PVY	0.78	139	ePg	07	23.40	-0.3
			eSg	07	35.20	
HCY	0.94	218	ePg	07	26.50	0.3
			eSg	07	43.00	
BDV	0.96	200	ePg	07	27.50	0.8
			eSg	07	44.00	
ULC	1.22	181	ePg	07	34.50	3.4X
			eSg	07	52.00	
HVAR	2.07	271	ePn	07	47.00	3.4X
			iSg	08	14.30	
	S.D. = 0.6	on 8 of 10 obs.				

JUN 09, 1990 06h 24m 14.13± 0.72s
46.361 N ± 6.7km 11.257 E ± 5.9km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.5 (VIE).

CTI	0.42	139	Pc	24	22.30	-0.3
			eSg	24	27.70	
OGA	0.53	343	iPgd	24	24.40	-0.5
SCE	0.75	25	iPgd	24	28.70	-0.2
OSS	0.84	293	iP	24	29.00	-1.4
SOTA	0.86	358	iPgd	24	30.70	-0.1
			iSg	24	42.00	
WATA	1.00	13	iPgc	24	33.60	0.4
			iSg	24	46.00	
FVI	1.08	77	P	24	35.20	0.8
			eSg	24	50.40	
MDI	1.22	242	P	24	35.60	-1.3
			eSg	24	50.40	
VDL	1.24	276	iP	24	35.90	-1.5
SAX	1.59	305	eP	24	45.90	3.3X
TMA	1.67	262	eP	24	43.40	-0.4
VAI	1.80	255	P	24	46.10	0.7
MMK	2.31	263	eP	24	55.30	2.3
SLE	2.36	308	eP	24	56.30	2.8
KHC	3.18	29	ePg	25	03.80	-1.4
			Sg	25	54.90	
	S.D. = 1.4	on 14 of 15 obs.				

JUN 09, 1990 06h 54m 23.15± 0.63s
44.163 N ± 5.0km 8.569 E ± 4.8km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.9 (GEN). MD 2.4 (STR).

FIN	0.26	280	P	54	28.86	0.1
			S	54	32.14	
CKI	0.33	322	Pd	54	29.60	-0.5
			eSg	54	34.40	
PCP	0.38	357	P	54	30.60	-0.4
			S	54	35.42	
ROB	0.52	285	P	54	33.06	-0.6
			S	54	39.83	
IMI	0.55	243	P	54	34.19	-0.2
			S	54	41.68	
ENR	0.83	275	P	54	39.02	-0.2
			S	54	49.41	
AUTN	0.84	259	Pg	54	40.12	0.6
SBF	0.87	250	Pg	54	40.00	0.1
			Sg	54	52.40	
BOB	0.87	46	P	54	40.90	0.9
			eSg	54	53.10	
STV	0.90	276	P	54	40.55	0.1
			S	54	51.21	
AURF	0.94	253	Pg	54	41.26	0.2
			Sg	54	55.52	
TOUF	0.96	262	Pg	54	42.24	0.6
REVF	0.97	244	Pg	54	42.50	1.0
			Sg	54	56.67	
DOI	1.01	290	P	54	41.90	-0.4
			eSg	54	55.00	
MVIF	1.06	256	Pg	54	44.10	0.9
PZZ	1.11	289	P	54	43.22	-0.8
			S	54	55.70	
CALN	1.28	252	Pg	54	48.20	1.2
BDI	1.46	93	P	54	50.70	1.0
			eSg	55	09.60	
RRL	1.48	301	P	54	49.78	-0.3
			S	55	05.70	
FRF	1.51	247	Pn	54	48.20	-2.1
			Pg	54	52.20	
			Sg	55	11.40	
ORX	1.53	344	P	54	50.60	0.0
			S	55	08.48	
BNI	1.62	304	P	54	52.40	0.5
LSD	1.64	323	P	54	50.70	-1.7
			S	55	09.71	
PGF	1.64	169	Pn	54	50.06	-2.2
LMR	1.71	242	Pn	54	51.40	-1.7
			Sg	55	18.00	
LRG	1.75	247	Pg	54	56.40	2.7
			Sg	55	19.00	
LPG	1.86	317	Pg	54	56.80	1.2
			Sg	55	21.00	
	S.D. = 1.2	on 27 of 27 obs.				

& JUN 09, 1990 07h 45m 46.11s
61.604 N 150.930 W
DEPTH = 62.5km
SOUTHERN ALASKA (2)
<AGS-P>.

SUA	0.17	147	iP	45	55.98	0.0
			Sn	46	03.44	

09d 07h

SKT	0.47	323	iP	45	57.64	-0.6
PWA	0.50	84	iP	45	58.46	0.0
			iS	46	08.06	
CGLM	0.60	241	iP	45	59.02	-0.6
			iS	46	09.27	
NCG	0.62	252	iP	45	59.23	-0.7
			Sn	46	09.49	
CRP	0.68	241	iP	46	00.01	-0.6
			iS	46	11.08	
SPU	0.69	232	iP	45	59.72	-0.9
			eS	46	10.43	
PMS	0.75	118	iP	46	00.91	-0.5
			eS	46	13.01	
PLRM	0.86	90	iP	46	01.81	-0.9
			Sn	46	15.15	
NKA	0.88	190	eP	46	03.73	0.9
GHO	0.97	79	iP	46	03.88	-0.3
SLKM	1.15	162	iP	46	05.24	-1.3
			iS	46	22.26	
SML	1.25	79	iP	46	07.23	-0.7
RDT	1.26	215	eP	46	07.13	-0.9
			iS	46	23.73	
RED	1.49	218	eP	46	10.81	-0.4
HUR	1.51	23	eP	46	11.92	0.6
NNL	1.58	187	iP	46	12.69	0.3
SEW	1.67	154	eP	46	13.66	0.1
			iS	46	32.77	
KTH	1.96	0	eP	46	17.64	0.0
			eS	46	41.94	
NCA	1.99	77	eP	46	17.46	-0.6
GLI	1.99	110	iP	46	15.68	-2.4
CNPM	2.09	184	eP	46	18.04	-1.5
VZW	2.18	103	eP	46	19.06	-1.7
VLZ	2.26	100	eP	46	20.52	-1.3
TOA	2.31	75	eP	46	21.73	-0.9
KLU	2.40	90	eP	46	21.95	-1.9
BALM	4.18	94	eP	46	48.86	-0.1

27 obs. ossociated

JUN 09, 1990 07h 59m 45.77± 0.76s
45.106 N ± 7.1km 27.094 E ± 6.6km
DEPTH = 19.0 ± 10.9 km
ROMANIA (358)

ISR	0.39	275	iPd	59	54.50	0.5
CFR	0.75	84	iPd	00	00.00	0.0
VRI	0.81	341	iPd	00	01.00	0.0
TLB	0.85	127	iPc	01	00.00	58.4X
MLR	0.90	296	iPd	00	03.50	0.9
CVD	1.02	139	iP	00	17.00	12.4X
PPE	1.17	18	ePc	00	07.00	-0.1
CLI	1.45	5	iPd	00	29.50	18.4X
CMP	1.46	277	iPc	00	10.00	-1.3
IAS	2.11	9	eP	00	45.00	24.4X
PVL	2.27	214	eP	00	31.00	8.1X
			iS	01	01.00	
JMB	2.66	188	eP	00	35.00	6.5X
			iS	01	07.00	
DIM	3.26	201	eP	00	46.00	9.1X
			Sg	11	29.00	
PLD	3.47	211	eP	00	47.00	7.1X
KDZ	3.66	200	iP	00	44.00	1.3
			iS	01	31.00	
VTS	3.77	230	iP	00	44.00	-0.4
			iS	01	43.00	
RZN	3.83	208	eP	00	45.00	-0.2
			eS	01	46.00	
CTT	4.08	166	ePn	00	30.00	-18.5X
MMB	4.29	216	eP	00	57.00	5.4X
			eS	02	03.00	
VAY	5.02	223	ePn	01	01.20	-0.7

S.D. = 0.9 on 10 of 20 abs.

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* JUN 09, 1990 08h 06m 03.39± 0.41s
5.445 N ± 6.5km 32.022 E ±12.3km
DEPTH = 10.0km (geophysicist)
4.7mb (15 obs.) 3.8Msz (2 abs.)
SUDAN (557)

NAI	8.21	144	iPd	08	05.00	-0.6
			S	09	31.50	
CLK	21.19	172	iPc	10	53.60	2.0
NPA	21.62	161	eP	10	56.30	0.4
			e(Sn)	15	49.00	
			iSg	17	26.80	
			iLg	17	48.00	
KRI	22.26	186	eP	11	05.00	2.6
			iSn	15	02.00	
			iLR	15	02.00	
HLW	24.29	359	eP	11	32.00	10.0X
			e	16	08.00	
			e	19	08.00	
PRNI	24.93	6	eP	11	30.00	1.8
BUL	25.65	187	iPc	11	34.40	-0.8
			iPn	11	44.40	
			iSn	16	17.00	
			iLR	19	13.00	
DSI	26.18	7	eP	11	41.00	1.1
BFT	31.00	183	e(P)	12	21.00	-2.7
	1.5s		430.56nm			6.1mb X
			S	16	35.50	
SLR	31.21	187	eP	12	34.50	9.1X
VAY	36.71	348	eP	13	14.50	2.0
TIC	36.85	274	P	13	13.90	-0.1
SKO	37.57	347	eP	13	22.00	2.3
ZST	44.46	346	eP	14	16.60	0.2
			e	14	27.60	
			e	16	14.40	
SPC	44.72	349	eP	14	19.30	0.6
			e	14	29.40	
GBA	45.45	76	Pd	14	32.50	7.8X
	0.6s		2.10nm			4.3mb
LPG	45.56	335	eP	14	25.10	-0.4
LPL	45.58	335	eP	14	25.10	-0.5
	0.8s		5.35nm			4.6mb
KRA	45.61	349	eP	14	26.20	0.7
			e	14	36.40	
KHC	46.26	343	P	14	30.50	-0.2
	1.0s		10.50nm			4.8mb
			e	16	18.20	
KSP	47.12	346	eP	14	37.50	0.0
TOL	47.20	322	eP	14	38.00	-0.3
BSF	47.43	337	eP	14	39.70	-0.4
GRF	47.46	342	eP	14	37.50	-2.7
Z	20s		0.10um			3.8Msz
			e	14	39.60	
			e	14	50.40	
SMF	47.71	334	eP	14	42.00	-0.2
	0.7s		8.80nm			5.0mb
LBF	47.91	334	eP	14	43.40	-0.4
	0.6s		3.15nm			4.6mb
MAF	47.96	333	eP	14	44.90	0.8
	0.8s		6.05nm			4.7mb
AVF	48.03	334	eP	14	44.60	-0.1
	0.7s		4.40nm			4.7mb
TCF	48.17	332	eP	14	46.40	0.6
	0.7s		6.05nm			4.8mb
LOR	48.18	334	eP	14	45.60	-0.3
	0.6s		4.05nm			4.7mb
MOX	48.18	343	eP	14	56.00	10.2X
	2.2s		63.00nm			
CLL	48.38	344	eP	14	46.00	-1.3
LSF	48.46	332	eP	14	48.20	0.2
	0.8s		9.40nm			4.9mb
GKN	54.65	59	P	15	35.50	0.3
	1.2s		48.00nm			5.4mb
DMN	54.96	60	P	15	37.90	0.3
GUN	55.70	60	P	15	41.00	-2.1
HFS	56.32	349	eP	15	44.70	-1.8
	0.5s		0.70nm			3.9mb
Z	19s		0.09um			3.9Msz
			LR	39	53.00	
EKA	57.16	337	P	15	53.00	0.4
	0.9s		4.40nm			4.5mb
SUF	57.32	357	iP	15	53.50	-0.1
	0.5s		3.90nm			4.7mb
NAO	57.52	348	P	15	53.90	-1.2
	1.2s		9.60nm			4.7mb

S.D. = 1.3 on 36 of 40 obs.

& JUN 09, 1990 08h 27m 01.23s
58.977 N 154.010 W
DEPTH = 111.6km
3.3mb (1 abs.)
ALASKA PENINSULA (12)
<AGS-P>.

CDD	0.20	104	iP	27	16.20	0.7
			iS	27	27.74	
MCNL	0.27	321	iP	27	16.39	0.6
			iS	27	27.58	
AUL	0.50	36	iP	27	17.87	-0.6
AUE	0.50	40	iP	27	17.96	-0.5
KDC	1.47	146	eP	27	26.39	-1.7
			Sn	27	47.05	
CNPM	1.53	68	iP	27	27.46	-1.4
			iS	27	47.27	
RED	1.58	23	iP	27	28.18	-1.4
NNL	1.75	51	iP	27	30.84	-0.7
RDT	1.80	26	iP	27	30.56	-1.7
			iS	27	53.66	
SVW	2.29	340	iP	27	36.96	-1.6
SPU	2.42	23	eP	27	39.21	-1.1
SLKM	2.46	50	eP	27	38.40	-2.4
CRP	2.48	21	iP	27	39.56	-1.6
CGLM	2.54	22	iP	27	40.24	-1.7
SEW	2.58	62	eP	27	40.08	-2.3
NCG	2.60	20	eP	27	40.67	-2.1
SUA	2.98	32	iP	27	46.28	-1.6
			iS	28	21.14	
PMS	3.18	42	eP	27	48.08	-2.4
			iS	28	23.88	
SKT	3.25	21	eP	27	49.13	-2.3
PWA	3.38	36	eP	27	50.86	-2.2
PLRM	3.58	41	eP	27	52.38	-3.3
GHO	3.77	40	iP	27	55.44	-3.1
GLI	3.97	58	eP	27	57.28	-3.8
SML	4.00	42	eP	27	58.11	-3.5
VZW	4.28	58	eP	28	01.81	-3.7
VLZ	4.41	57	eP	28	04.08	-3.0
NCA	4.67	47	eP	28	07.35	-3.3
KLU	4.76	55	eP	28	08.70	-3.2
TOA	4.98	48	iP	28	12.15	-2.9
SDN	5.07	227	iP	28	13.80	-2.4
PAX	5.77	42	eP	28	22.90	-3.0
TGL	5.91	68	iP	28	24.59	-3.2
PCA	7.08	75	eP	28	41.41	-2.4
BCPM	7.39	76	eP	28	45.03	-2.9
HON	7.78	80	eP	28	49.82	-3.4
YKA	19.36	63	eP	31	16.30	-3.8
	0.4s		0.60nm			3.3mb

36 obs. associated

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* JUN 09, 1990 08h 41m 04.33± 0.84s
1.854 N ± 9.7km 98.956 E ±10.1km
DEPTH = 20.8km (2 depth phases)
4.5mb (3 obs.)
NORTHERN SUMATERA (706)

PSI	0.84	358	iPd	41	17.80	-2.2
			i(S)	42	12.40	
PPI	2.71	148	eP	41	53.00	5.4X
	0.6s		143.60nm			
KLM	2.96	65	eP	41	51.50	0.5
			e	41	59.00	
IPM	3.41	37	ePc	41	57.50	0.1
			e	42	07.10	
			eS	42	45.00	
KGM	4.36	88	ePc	42	10.70	-0.3
			e	43	26.50	
SNG	5.54	17	eP	42	37.90	10.2X
	0.8s		420.90nm			
LOE	15.69	10	eP	44	48.50	2.5X
CHG	16.85	360	eP	45	03.00	2.2X
CHTO	16.85	360	eP	45	02.40	1.6
	1.3s		19.20nm			4.1mb
KMI	23.42	9	Pc	46	14.50	1.2
	1.5s		0.05nm			1.8mb X
			pP	46	19.50	18km
HYB	25.32	309	eP	46	32.00	0.5
LZH	34.36	7	P	47	30.00	-22.2X
			pP	47	37.00	24km
WB5	40.91	124	eP	48	46.60	-0.5
WRA	40.91	124	Pd	48	47.30	0.1
ZST	83.19	318	eP	53	32.50	2.1X
			e	59	26.00	
HFS	86.03	330	ePKP	53	39.80	-4.7X
	1.1s		8.10nm			4.9mb
NAO	87.48	331	P	53	50.90	-0.6
	1.0s		3.50nm			4.6mb
BAO	144.66	245	ePKP	00	42.00	-0.3

S.D. = 1.1 on 11 of 18 obs.

JUN 09, 1990 08h 47m 29.78± 0.30s
45.768 N ± 7.2km 151.613 E ± 4.4km
DEPTH = 47.2km (2 depth phases)
4.8mb (21 obs.)
KURIL ISLANDS (221)

KUSJ	5.62	244	P	48	51.40	-1.5X
			S	49	50.50	

ASAJ	6.58	259	eP	49 08.50	2.2X
HOOJ	6.88	244	eP	49 10.30	-0.3X
			S	50 23.90	
MRRJ	8.29	250	eP	49 29.00	-1.1X
			eS	50 58.10	
AOMJ	9.72	242	eP	49 47.40	-2.4X
			eS	51 28.00	
OFUJ	9.93	231	eP	49 50.00	-2.7X
			eS	51 32.40	
YAMJ	11.47	233	eP	50 08.60	-5.1X
MAT	13.66	232	eP	50 40.00	-2.7X
CN2	18.65	273	eP	51 45.40	-0.5
FBA	37.58	38	iP	54 41.50	0.6
	0.8s	9.66nm		4.8mb	
CD2	39.76	265	eP	55 00.00	0.4
GYA	40.48	257	eP	55 09.40	3.8X
INK	43.04	32	iPc	55 26.30	0.4
MBC	45.87	19	eP	55 49.00	0.4
CHTO	50.88	256	eP	56 29.00	1.0
	1.1s	16.46nm		5.0mb	
			pP	56 41.30	44km
YKA	52.33	36	eP	56 37.90	-0.6
	0.7s	3.80nm		4.5mb	
GUN	54.05	275	P	56 52.00	0.0
PKI	54.58	275	P	56 51.00	-5.0X
DMN	54.77	275	P	56 57.60	0.3
GKN	54.86	276	P	56 57.80	0.0
PNT	56.64	52	eP	57 10.00	-0.2
	0.5s	6.00nm		4.9mb	
EDM	57.75	45	ePc	57 17.50	-0.5
NEW	58.60	52	iP	57 23.50	-0.5
	1.0s	15.50nm		5.1mb	
WDC	59.91	61	e(P)	57 33.50	0.4
SES	60.56	47	ePc	57 37.20	-0.3
MIN	60.62	61	e(P)	57 38.20	0.1
FFC	62.16	39	iPc	57 48.00	-0.1
	0.4s	9.00nm		5.3mb	
LRM	62.62	52	eP	57 52.00	0.4
CMB	62.78	63	ePc	57 53.00	0.5
KVN	63.55	60	eP	57 58.20	0.4
TNP	64.70	61	iP	58 05.40	0.1
	0.7s	2.44nm		4.4mb	
BW06	66.16	53	eP	58 13.70	-0.9
	1.0s	6.00nm		4.6mb	
WB5	67.19	198	eP	58 20.10	-0.8
			e	58 34.30	50km
WRA	67.25	198	Pc	58 21.20	-0.2
	0.7s	2.50nm		4.4mb	
RSSD	68.25	49	eP	58 28.50	0.7
HFS	69.01	339	eP	58 30.10	-1.8
	0.4s	6.80nm		5.0mb	
NAO	69.10	341	P	58 31.00	-1.4
	0.8s	3.20nm		4.3mb	
SCH	74.64	22	eP	59 05.00	-0.5
CLL	76.92	335	iPc	59 17.70	-0.7
	0.9s	9.00nm		4.8mb	
PRU	77.61	333	eP	59 22.00	-0.2
WTS	78.02	339	eP	59 24.50	0.1
	0.9s	13.00nm		5.0mb	
KHC	78.66	333	iP	59 28.50	0.4
ENN	79.37	339	eP	59 32.00	0.2
	0.7s	10.00nm		4.9mb	
MEM	79.49	339	P	59 32.60	0.2
DOU	80.32	339	P	59 36.80	-0.1
CDF	81.16	337	eP	59 41.40	-0.1
	0.8s	6.70nm		4.6mb	
FLN	82.75	342	eP	59 49.60	-0.1
LDF	82.83	342	eP	59 49.00	-1.1
LOR	83.12	339	eP	59 51.80	0.2
	0.8s	7.40nm		4.8mb	
GRR	83.19	342	eP	59 51.90	0.0
SSF	83.40	339	eP	59 53.20	0.2
	1.0s	9.00nm		4.8mb	
AVF	83.69	339	eP	59 54.70	0.2
	0.7s	6.60nm		4.8mb	
SMF	83.70	338	eP	59 54.80	0.2
	0.9s	13.10nm		5.0mb	
LPL	83.96	336	eP	59 56.90	0.7
LPG	83.97	336	eP	59 57.10	0.8
	0.7s	4.40nm		4.6mb	
MAF	84.42	339	eP	59 59.20	1.0
	0.5s	5.45nm		4.9mb	
TCF	84.45	339	eP	59 59.00	0.6
MFF	84.72	341	eP	00 00.00	0.3

S.D. = 0.6 on 48 of 58 obs.

& JUN 09, 1990 09h 54m 25.39s
59.982 N 152.154 W
DEPTH = 69.4km
SOUTHERN ALASKA (2)
<AGS-P>.

NNL	0.44	82	iP	54 38.39	0.7
RED	0.54	325	iP	54 38.10	-0.7
RDT	0.61	348	iP	54 38.85	-0.7
			iS	54 49.48	
CNPM	0.65	134	iP	54 39.43	-0.5
			eS	54 50.93	
AUE	0.88	225	iP	54 41.64	-0.9
			iS	54 50.00	
NKA	0.89	30	iP	54 44.05	1.4
SLKM	1.10	60	iP	54 44.78	-0.7
SPU	1.20	2	iP	54 46.23	-0.6
CRP	1.29	360	iP	54 47.91	-0.2
			iS	55 06.31	
CDD	1.30	216	eP	54 46.69	-1.4
			iS	55 04.02	
CGLM	1.33	3	iP	54 48.41	-0.2
SEW	1.36	84	iP	54 49.56	0.7
MCNL	1.37	235	iP	54 47.09	-1.9
			iS	55 04.35	
NCG	1.43	360	iP	54 49.60	-0.3
SUA	1.64	24	iP	54 52.69	-0.1
PMS	1.80	44	eP	54 54.80	-0.1
SKT	2.03	8	iP	54 57.32	-0.7
SVW	2.05	305	iP	54 56.53	-1.8
PLRM	2.19	41	iP	54 59.12	-1.1
GHO	2.39	40	eP	55 01.95	-1.2
SML	2.62	44	eP	55 05.13	-1.1
GLI	2.67	68	eP	55 04.22	-2.6
VZW	2.97	66	iP	55 09.19	-2.0
KLU	3.42	61	iP	55 15.33	-2.1

24 obs. associated

% JUN 09, 1990 10h 16m 45.88± 0.58s
45.486 N ± 6.0km 2.278 E ± 7.5km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.2 (LDG).

RJF	0.57	252	Pg	16 57.00	-0.4
			Sg	17 05.00	
CAF	0.58	195	Pg	16 56.80	-0.9
			Sg	17 04.00	
MAF	0.76	15	Pg	17 00.10	-0.7
			Sg	17 10.80	
TCF	0.80	357	Pg	17 02.00	0.5
			Sg	17 13.00	
LSF	0.93	326	Pg	17 03.60	0.0
			Sg	17 16.00	
LPO	1.11	224	Pg	17 08.00	1.2
BGF	1.14	20	Pg	17 06.90	-0.4
			Sg	17 22.00	
LFF	1.22	244	Pg	17 08.40	-0.1
			Sg	17 26.20	
AVF	1.50	29	Pg	17 13.20	0.3
			Sg	17 32.40	
SMF	1.59	43	Pg	17 14.60	0.5
			Sg	17 35.00	
SSF	1.79	28	Pn	17 16.40	-0.6
			Pg	17 18.40	
			Sg	17 41.20	
LBF	1.91	38	Pg	17 20.40	1.6
			Sg	17 45.20	
LOR	2.09	31	Pn	17 20.30	-1.1
			Pg	17 23.60	
			Sg	17 50.20	

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

& JUN 09, 1990 10h 47m 59.60s
39.807 N 122.665 W
DEPTH = 5.0km
NORTHERN CALIFORNIA (36)
<BRK>. ML 2.7 (BRK).

LTCM	0.58	46	eP	48 11.50	0.3
WDC	0.78	7	iPd	48 13.90	-1.3
			iS	48 25.30	
ORV	0.93	105	iPc	48 16.10	-1.8
			eS	48 28.60	
MIN	0.97	56	ePc	48 17.20	-1.5
			iS	48 30.40	
FHC	1.42	315	e(P)	48 25.70	-0.4
CMB	2.51	134	ePc	48 41.20	-0.6
KVN	3.61	101	eP	48 56.00	-1.6

7 obs. associated

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* JUN 09, 1990 11h 38m 48.89± 0.56s
71.024 N ±13.8km 8.412 W ±23.2km
DEPTH = 10.0km (geophysicist)
4.4mb (12 obs.) 2.7Msz (1 obs.)
JAN MAYEN ISLAND REGION (639)

JNW	0.01	314	iPg	38 48.50	-2.2
			iSg	38 58.00	
DAG	6.44	338	eP	40 26.00	0.1
AKU	6.44	218	iP	40 36.00	10.0
	0.8s	11.94nm			
			iS	41 50.70	
NAO	12.81	133	P	41 45.30	-8.3
	0.6s	1.50nm		4.4mb	
DOU	21.85	157	P	43 49.10	6.2
CLL	22.06	142	e(P)	43 48.00	3.0
KSP	23.19	138	eP	43 55.50	-0.7
GRF	23.27	146	eP	43 57.80	0.8
Z	22s	0.03um		2.7Msz	
			e	44 01.00	
PRU	23.62	141	P	44 03.20	2.8
KHC	24.25	143	eP	44 10.60	4.1
LOR	24.54	160	eP	44 09.40	0.0
SSF	24.71	160	eP	44 10.80	-0.1
	0.8s	6.70nm		4.4mb	
LBF	24.83	160	eP	44 12.20	0.0
	0.7s	7.15nm		4.5mb	
BGF	25.13	162	eP	44 15.50	0.5
	0.7s	9.35nm		4.6mb	
TCF	25.34	163	eP	44 17.50	0.5
	0.9s	6.55nm		4.3mb	
MAF	25.44	162	eP	44 17.70	-0.2
	0.8s	7.40nm		4.4mb	
RJF	26.25	164	eP	44 25.10	-0.3
	0.7s	7.70nm		4.5mb	
LPL	26.62	156	eP	44 29.10	0.0
	0.7s	3.30nm		4.1mb	
LPG	26.64	156	eP	44 29.20	-0.2
	0.7s	3.30nm		4.1mb	
CAF	26.67	163	eP	44 29.20	-0.2
EPF	28.41	166	eP	44 44.90	-0.2
	0.7s	6.60nm		4.5mb	
YKA	37.38	313	eP	46 08.80	6.0
	0.8s	1.20nm		3.7mb	
FFC	40.72	297	eP	46 38.00	7.3
	0.9s	9.00nm		4.5mb	

S.D. = 0.7 on 15 of 23 obs.

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* JUN 09, 1990 12h 21m 35.13± 2.56s
31.056 S ±14.9km 71.637 W ±20.0km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135

JACH	1.85	152	iPc	22 05.50	0.3
			iS	22 28.00	
ROCH	1.98	165	iPc	22 07.50	0.3
			i	22 25.00	
			i	22 31.00	
RTRS	2.07	65	iPc	22 08.80	0.5
			eS	22 33.00	
PEL	2.23	159	eP	22 10.50	-0.1
			i(S)	22 29.00	
FCH	2.54	154	iPd	22 15.70	0.5
			i	22 46.90	
ZON	2.58	102	eP	22 16.00	0.5
TACH	2.66	167	iP	22 16.50	-0.1
			iS	22 47.00	
PCH	2.73	160	eP	22 18.00	0.4
RTLL	2.73	97	ePd	22 16.40	-1.2
			eS	22 47.60	
RTCV	2.77	108	ePc	22 18.40	0.2
LNV	2.90	176	iPd	22 19.20	-0.7
CFA	2.96	102	e(P)	22 20.50	-0.4
CHCH	2.99	164	iPc	22 21.10	-0.2
			iS	22 55.50	

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

JUN 09, 1990 12h 30m 25.55± 0.23s
39.211 N ± 2.7km 23.663 E ± 2.1km
DEPTH = 10.0km (geophysicist)
4.4mb (19 obs.)
AEGEAN SEA (365
ML 4.4 (TTG), 4.3 (ATH). Felt i
the northern Sporades ond ot

09d 12h

Larisa.

NEO	0.35	286	ePg	30	33.20	0.3
PAIG	0.72	1	iPc	30	41.80	2.2
AGG	1.05	260	iPd	30	45.20	-0.2
OUR	1.15	12	iPc	30	48.60	1.6
ATH	1.24	178	ePg	30	48.80	0.3
LIT	1.27	315	ePd	30	49.60	0.5
THE	1.52	340	iPd	30	53.40	0.7
			eS	31	13.50	
SOH	1.63	352	ePc	30	55.50	1.1
SRS	1.90	358	ePc	30	59.10	0.7
			eS	31	22.30	
GRG	1.99	331	ePc	31	00.30	0.6
			eS	31	25.10	
KNT	2.03	344	iPc	31	01.50	1.3
			eS	39	03.60	
EZN	2.15	73	iPn	31	02.00	0.1
VAY	2.27	339	iPn	31	04.30	0.7
FNA	2.36	313	ePc	31	05.60	0.7
MMB	2.38	1	iPc	31	06.00	0.8
			eS	31	41.00	
RDO	2.41	36	ePn	31	05.20	-0.4
ITM	2.45	215	ePn	31	07.00	0.8
VLI	2.55	193	ePn	31	06.80	-0.9
IGT	2.60	278	eP	31	11.10	2.7
RZN	2.60	18	iPc	31	09.00	0.5
VLS	2.62	248	ePn	31	09.80	1.2
KDZ	2.78	28	iPc	31	10.00	-0.9
			iS	31	55.00	
OHR	2.90	312	iPn	31	13.60	0.9
			iSn	31	48.00	
			Lg	31	50.90	
SMG	2.91	120	ePn	31	12.60	-0.1
IZM	2.93	105	iPn	31	14.20	1.2
PLD	3.00	15	eP	31	15.00	1.1
			iSg	31	25.00	
KEK	3.03	281	ePn	31	16.70	2.2
KGT	3.06	65	iPn	31	14.70	-0.2
DIM	3.17	26	eP	31	17.00	0.6
			Sg	32	09.00	
SKO	3.24	329	iPnc	31	18.10	0.7
E	12s		7.89um			
			iPb	31	24.60	
			iSn	32	06.60	
			iSg	32	24.00	
			Lg	32	37.00	
PGB	3.36	6	iP	31	17.00	-2.1
			i	31	19.00	
			i	31	30.00	
VTS	3.39	354	iPc	31	21.00	1.3
			i	32	02.00	
EDC	3.43	69	eP	31	20.70	0.6
VAM	3.82	173	ePn	31	25.30	-0.4
CIN	3.83	113	eP	31	26.00	0.2
JMB	3.93	33	eP	31	27.00	-0.3
			iS	32	36.00	
CTT	4.13	61	eP	31	28.20	-1.9
YER	4.19	118	iP	31	31.50	0.5
PVL	4.20	17	iPc	31	30.00	-0.9
			i	32	39.00	
ULC	4.34	311	ePn	31	34.20	1.1
			eSn	32	23.50	
PVY	4.39	322	ePn	31	35.00	1.2
			eSn	32	25.00	
ISK	4.53	64	eP	31	34.80	-0.9
LCI	4.54	286	P	31	34.50	-1.3
			eSn	32	21.30	
IZI	4.62	74	eP	31	36.80	-0.3
IVA	4.63	323	ePn	31	38.00	0.7
			eSn	32	31.00	
TTG	4.64	315	ePn	31	38.30	1.1
			eSn	32	31.00	
KHL	4.67	99	iP	31	39.00	1.2
GBZT	4.71	69	ePn	31	40.30	1.9
BDV	4.79	311	ePn	31	40.00	0.6
			eSn	32	32.80	
HRT	4.88	69	eP	31	38.80	-2.0
ALT	5.02	90	iP	31	43.80	1.1
NKY	5.04	317	ePn	31	44.00	1.0
			eSn	32	38.00	
HCY	5.08	311	ePn	31	43.50	0.0
			eSn	32	37.00	
PLE	5.22	323	ePn	31	46.20	0.6
			eSn	32	41.00	
GPA	5.23	76	iP	31	46.00	0.2
BRY	5.34	315	ePn	31	47.50	0.1

			eSn	32	45.00	
BUC1	5.43	18	eP	32	12.00	23.6X
DRA	5.48	4	iPd	31	50.00	0.8
ELL	5.51	115	iP	31	52.50	2.7
PSN	5.61	36	iPd	31	50.00	-1.0
			i	32	53.00	
KSL	5.62	121	ePn	31	52.50	1.3
ORI	5.63	281	P	31	52.30	0.9
GRI	5.65	268	P	31	51.36	-0.3
TDS	5.69	277	P	31	54.00	1.8
BCK	5.72	106	iP	31	54.30	1.6
SOI	6.06	262	P	31	56.50	-0.9
CMP	6.14	9	ePd	31	56.00	-2.4
TLB	6.28	30	eP	32	00.00	-0.5
ISR	6.30	19	iPc	32	00.50	-0.2
MGR	6.32	281	P	32	01.10	0.0
			eSn	33	08.30	
MLR	6.50	14	iPc	32	03.50	-0.2
SGO	6.56	284	P	32	04.00	-0.5
BZS	6.58	347	iPc	32	04.00	-0.6
HVAR	6.73	308	ePn	32	05.30	-1.5
			iSn	33	18.30	
CFR	6.84	28	eP	32	04.00	-4.2X
BSS	6.98	286	P	32	10.40	0.1
			eSn	33	21.90	
VRI	7.03	18	ePd	32	12.00	1.1
BBTK	7.06	82	eP	32	11.00	-0.6
MEU	7.20	256	P	32	13.20	-0.2
			eSn	33	29.70	
PZI	7.23	255	P	32	09.65	-4.2X
DUI	7.43	292	P	32	17.30	0.5
			eSn	33	31.90	
RFI	7.69	289	P	32	22.81	2.6
CLI	7.80	19	eP	32	22.00	0.2
SDI	7.91	291	P	32	23.50	0.1
			eSn	33	45.40	
AZI	8.26	293	P	32	29.00	0.8
ZAG	8.70	322	eP	32	31.80	-2.5
PTJ	8.77	322	iPc	32	30.90	-4.5X
VBY	8.84	318	ePnc	32	44.30	8.0X
			iSn	34	10.40	
MNS	8.91	294	P	32	38.20	0.9
ARV	9.13	301	P	32	39.00	-1.3
RIY	9.21	315	e(P)	32	40.60	-0.7
SRO	9.43	337	eP	32	41.00	-3.4X
			i	32	44.70	
CEY	9.44	317	eP	32	49.00	4.5X
			eS	34	38.50	
LJU	9.58	318	eP	32	44.00	-2.5
			eS	34	32.00	
TRI	9.78	315	eP	32	48.30	-0.8
			e	34	33.60	
CRE	9.84	300	P	32	49.50	-0.7
VOY	9.91	317	eP	32	49.00	-2.1
			eS	34	36.60	
SOP	9.91	331	eP	32	52.80	1.8
PGD	10.09	301	P	32	51.50	-2.2
ZST	10.15	334	eP	32	53.80	-0.5
			e	33	09.00	
SPC	10.27	347	eP	32	54.70	-1.4
			e	35	03.20	
VKA	10.49	332	e(P)	32	58.00	-0.9
			i	33	04.30	
			i	33	07.40	
			i	33	52.20	
FVI	10.86	316	P	33	02.50	-1.5
KRA	11.16	348	eP	33	08.60	0.5
			e	33	17.10	
CTI	11.17	312	P	33	05.50	-2.9
OGA	11.99	314	eP	33	19.20	-0.4
SOTA	12.10	315	iPc	33	19.00	-1.9
	0.6s		13.20nm			5.4mb
			i	33	30.00	
			iS	35	28.40	
KHC	12.27	327	P	33	22.00	-1.1
N	16s		1.00um			
E	16s		1.00um			
PRU	12.57	332	Pd	33	26.00	-1.1
Z	12s		0.90um			
N	10s		0.50um			
			eS	36	23.00	
WET	12.58	326	iPc	33	35.90	8.7X
PRNI	12.84	130	eP	33	29.00	-1.8
BRG	13.52	333	e(P)	33	49.00	9.3X
LPG	13.98	302	eP	33	44.80	-1.4
	0.7s		17.65nm			5.0mb
LPL	14.00	302	eP	33	44.90	-1.5

	0.7s		12.15nm			4.8mb
CLL	14.22	332	eP	33	50.00	1.2
MOX	14.24	327	e(P)	33	50.00	0.8
Z	14s		0.80um			
BSF	14.94	311	eP	33	53.00	-5.5X
BSF	14.94	311	eP	34	16.40	17.9X
	1.2s		58.00nm			
HAU	15.29	311	eP	33	58.70	-4.3X
	0.8s		8.05nm			4.1mb
PLDF	16.21	301	P	34	18.88	4.0X
LBL	16.26	298	P	34	20.39	5.0X
SMF	16.28	304	eP	34	08.90	-6.9X
	1.1s		30.50nm			4.3mb
LBF	16.31	305	eP	34	09.10	-7.1X
	0.8s		18.80nm			4.3mb
LOR	16.49	306	eP	34	11.60	-6.9X
PYM	16.56	300	P	34	23.64	4.3X
AGO	16.56	301	P	34	22.67	3.4X
SSF	16.64	305	eP	34	14.20	-6.1X
	0.7s		12.15nm			4.1mb
AVF	16.65	304	eP	34	12.80	-7.6X
MEM	16.87	318	P	34	27.00	3.9X
MAF	16.99	301	eP	34	17.70	-7.0X
	0.9s		18.85nm			4.2mb
TCF	17.24	301	eP	34	21.80	-6.1X
	1.1s		20.75nm			4.2mb
DOU	17.34	315	P	34	31.40	2.4
Z	14s		0.50um			
RJF	17.46	298	eP	34	24.80	-5.9X
	0.9s		9.85nm			3.9mb
LSF	17.68	301	eP	34	25.80	-7.6X
MFF	18.89	301	eP	34	39.70	-8.6X
LDF	19.47	307	eP	34	44.70	-10.6X
GRR	19.86	305	eP	34	48.50	-11.0X
	0.7s		14.35nm			
LPF	19.87	304	eP	34	47.90	-11.7X
UPP	21.02	351	iP	35	10.00	-1.4
NUR	21.33	1	eP	35	14.00	-0.6
TOL	21.35	281	eP	35	17.00	2.0
			eS	39	15.00	
HFS	21.87	347	eP	35	21.00	1.0
	0.5s		2.90nm			4.0mb
NAO	23.07	344	P	35	31.80	-0.1
	0.7s		6.20nm			4.3mb
SUF	23.59	3	iP	35	37.50	0.6
	0.7s		6.00nm			4.3mb
EKA	24.09	321	Pc	35	41.60	-0.2
	0.9s		19.70nm			4.7mb
BCAO	34.93	189	iPc	37	18.00	-1.6
	0.8s		56.00nm			5.5mb X
LKO	39.44	229	P	37	56.44	-1.2
	0.7s		8.00nm			4.5mb
KIC	41.54	225	P	38	13.84	-1.0
LIC	41.81	226	P	38	16.04	-1.0
	1.0s		32.00nm			5.0mb
WMQ	47.11	63	P	39	00.50	1.0
GKN	51.14	83	P	39	30.40	-0.5
DMN	51.70	83	P	39	35.00	-0.3
PKI	51.95	83	P	39	35.60	-1.7
GUN	52.15	83	P	39	38.20	-0.6
GTA	57.17	64	P	40	14.60	-0.4
	1.0s		10.00nm			4.8mb
HHC	64.42	57	eP	41	04.40	0.2
TIY	66.63	60	eP	41	15.00	-3.4X
CHG	67.12	84	eP	41	21.00	-0.7
CHTO	67.12	84	eP	41	20.80	-0.9
	1.1s		5.01nm			4.6mb
YKA	73.24	341	eP	41	57.40	-0.8
	0.9s		2.60nm			4.3mb
RTRS	110.58	247	ePdiff	45	07.20	7.9X

S.D. = 1.2 on 129 of 161 abs.

JUN 09, 1990 13h 51m 53.40± 0.39s
39.218 N ± 3.9km 23.665 E ± 3.8km
DEPTH = 8.6 ± 2.6 km
3.6mb (2 obs.)
AEGEAN SEA (365)
ML 3.7 (ATH).

NEO	0.35	285	ePg	51	59.70	-1.0
PAIG	0.71	1	ePc	52	08.90	1.4
ATH	1.24	178	ePb	52	15.70	-0.9
			eSb	52	32.40	
LIT	1.27	315	iPc	52	16.40	-0.6
THE	1.51	339	ePd	52	20.80	0.1
			iS	52	40.00	
SRS	1.90	358	iPc	52	27.00	0.7

EZN	2.15	73	ePn	52 29.00	-0.9
VAY	2.26	339	iPn	52 32.40	0.9
FNA	2.35	312	ePc	52 32.10	-0.8
MMB	2.37	1	iPc	52 34.00	0.9
			eS	53 14.00	
RDO	2.40	36	ePn	52 32.20	-1.3
ITM	2.45	214	ePn	52 34.40	0.1
ALN	2.48	47	eP	52 34.20	-0.4
VLI	2.56	193	ePn	52 34.20	-1.6
RZN	2.59	18	iPc	52 36.00	-0.4
			iS	53 08.00	
IGT	2.60	278	eP	52 37.60	1.2
VLS	2.62	248	ePb	52 40.40	3.7X
KDZ	2.77	28	ePc	52 37.00	-1.9
			iSg	53 22.00	
OHR	2.90	312	iPn	52 41.00	0.3
			iSn	53 16.00	
			Lg	53 20.00	
SMG	2.91	120	ePn	52 40.00	-0.7
IZM	2.93	105	iPn	52 40.70	-0.4
PLD	2.99	15	iPc	52 42.00	0.1
			iSg	53 36.00	
KEK	3.03	281	ePb	52 44.50	2.0
KGT	3.06	65	ePn	52 43.00	0.1
DIM	3.17	26	eP	52 44.00	-0.3
			Sg	53 41.00	
SKO	3.23	329	iPn	52 44.50	-0.8
PGB	3.35	6	iP	52 46.00	-1.1
			i	52 56.00	
VTS	3.39	354	ePc	52 48.00	0.3
			iSg	53 45.00	
EDC	3.43	69	ePn	52 54.70	6.6X
VAM	3.83	173	ePn	52 55.70	1.9
JMB	3.93	33	ePg	53 09.00	13.8X
			iS	54 03.00	
CTT	4.13	61	eP	53 00.00	2.0
PVL	4.19	17	iPd	52 57.00	-1.9
YLV	4.59	71	eP	53 07.00	2.3
ALT	5.01	90	iP	53 10.80	0.1
TDS	5.69	277	P	53 19.00	-1.2
CMP	6.13	9	ePd	53 23.00	-3.4X
MGR	6.32	281	P	53 29.50	0.4
MLR	6.49	14	eP	53 31.00	-0.6
BZS	6.57	347	eP	53 13.50	-19.1X
VRI	7.02	18	ePd	53 07.00	-31.9X
NAO	23.06	344	P	56 59.30	-0.6
	0.7s		1.10nm		3.5mb
YKA	73.23	341	eP	03 24.20	-2.1
	0.5s		0.30nm		3.6mb

S.D. = 1.2 on 37 of 43 obs.

? JUN 09, 1990 14h 48m 25.88± 1.22s
51.929 N ±43.6km 179.289 E ± 9.9km
DEPTH = 33.0km (normal)
4.0mb (2 obs.)
RAT ISLANDS, ALEUTIAN ISLANDS (6)

ADK	2.49	89	eP	49 05.00	0.0
YKA	35.72	47	eP	55 22.80	0.0
	0.5s		0.70nm		3.8mb
NAO	67.22	354	P	59 25.80	7.4X
	0.9s		2.00nm		4.2mb
GUN	70.55	290	P	59 39.90	0.1
PKI	71.08	291	P	59 43.00	0.0
GKN	71.20	291	P	59 43.50	0.0

S.D. = 0.1 on 5 of 6 obs.

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* JUN 09, 1990 14h 48m 35.91± 1.18s
15.374 S ± 9.1km 167.490 E ± 8.9km
DEPTH = 125.3 ± 10.4 km
4.5mb (5 obs.)
VANUATU ISLANDS (186)

PVC	2.48	162	iPd	49 16.90	0.7
			iS	49 49.00	
DZM	6.74	188	iPc	50 12.50	-1.3
			iS	51 17.90	
HNR	9.44	308	eP	50 51.00	0.8
			eS	52 35.00	
RMQ	20.67	235	iPc	53 08.60	0.9
CTA	20.76	254	eP	53 10.00	1.4
QLP	24.37	239	iPd	53 44.10	0.4
QIS	27.00	255	iPc	54 08.00	-0.1
STK	28.75	231	eP	54 23.40	-0.3
	1.0s		5.00nm		4.1mb
WB5	31.85	257	iPd	54 49.20	-2.0
WRA	31.88	257	Pc	54 49.70	-1.7
MAT	58.57	333	iPc	58 20.20	-1.5
MDJ	68.95	332	eP	59 28.20	-1.1
CN2	70.30	329	eP	59 37.20	-0.4
GYA	72.25	305	P	59 50.00	0.2
TIY	73.88	317	eP	59 59.40	0.5
CHG	75.54	294	eP	00 09.00	0.3
CHTO	75.54	294	eP	00 09.20	0.5
	0.8s		4.03nm		4.3mb
			pP	00 39.30	119kmX
HHC	76.21	320	eP	00 11.80	-0.4
CD2	76.57	308	eP	00 14.90	0.5
LZH	78.91	312	eP	00 27.00	-0.3
	1.5s		34.00nm		4.9mb
GTA	83.26	314	P	00 50.90	0.9
	1.5s		30.00nm		5.0mb
	Z 20s		0.90um		5.1Msz
WMQ	93.33	314	eP	01 38.00	0.2
YKA	98.02	27	eP	01 56.90	-1.7
	0.7s		0.80nm		4.4mb
SUF	125.52	339	ePKP	07 22.50	-0.8
NUR	127.54	338	ePKP	07 26.00	-1.2
HFS	131.40	343	ePKP	07 32.70	-1.9
	0.7s		2.50nm		
NAO	131.58	345	PKP	07 35.10	0.2
	0.6s		1.40nm		
CDF	143.25	338	ePKP	07 53.60	-3.4X
	0.6s		5.40nm		
CTI	143.33	331	PKP	07 50.00	-7.2X
OSS	143.51	334	ePKP	07 55.40	-2.2X
LLS	143.85	335	ePKP	07 56.40	-1.8
BSF	143.91	338	ePKP	07 55.40	-2.7X
	0.6s		4.50nm		
HAU	143.93	338	ePKP	07 55.60	-2.4X
	0.8s		13.45nm		
TMA	144.51	334	ePKP	07 57.90	-1.4
VAI	144.74	334	PKP	07 57.90	-1.5
ITR	144.87	131	ePKP	07 57.40	-3.2X
PGD	144.90	329	PKP	08 01.00	1.0
MMK	144.93	335	ePKP	07 59.70	-0.4
DIX	145.13	335	ePKP	08 00.60	0.1
FLN	145.27	346	ePKP	07 59.90	-0.3
	0.6s		39.70nm		
BOB	145.31	332	PKP	08 01.20	0.6
EMS	145.33	336	ePKP	08 00.80	0.1
LDF	145.34	345	iPKPc	06 00.30	-0.1
	0.6s		25.25nm		
LOR	145.41	340	iPKPc	08 00.80	0.2
	0.8s		24.20nm		
LBF	145.62	340	ePKP	08 01.50	0.5
	0.8s		31.55nm		
GRR	145.71	346	iPKPc	08 01.70	0.7
	0.6s		39.70nm		
SSF	145.71	340	iPKPc	08 01.80	0.7
	0.6s		19.85nm		
LPL	145.86	336	iPKPc	08 02.80	1.1
	0.6s		8.55nm		
LPG	145.87	336	iPKPc	08 03.00	1.2
	0.6s		12.65nm		
SMF	145.96	340	iPKPc	08 02.40	0.9
	0.7s		14.35nm		
AVF	146.00	340	iPKPc	08 02.30	0.8
	0.6s		16.25nm		
LPF	146.08	346	iPKPc	08 03.00	1.4
	0.6s		28.85nm		
SOI	146.15	317	PKP	08 03.00	1.0
BNI	146.27	335	PKP	08 04.20	2.0X
BGF	146.37	341	iPKPc	08 03.70	1.5
	0.6s		22.55nm		
PLDF	146.63	339	PKP	08 04.68	2.0X
AGO	146.72	340	PKP	08 04.68	1.9X
MAF	146.75	341	iPKPc	08 05.00	2.2X
	0.6s		7.20nm		
TCF	146.81	341	iPKPc	08 04.90	2.0X
	0.6s		10.80nm		
PYM	147.03	340	PKP	08 05.76	2.4X
LSF	147.05	342	iPKPc	08 05.40	2.1X
	0.6s		27.95nm		
MFF	147.20	344	iPKPc	08 05.90	2.4X
	0.5s		23.30nm		
LBL	147.40	339	PKP	08 07.14	3.4X
BCAO	147.60	254	iPKPd	08 05.90	0.8
	0.9s		32.00nm		
			i	08 40.30	
RJF	147.90	341	ePKP	08 07.80	3.1X
	0.8s		8.05nm		
CAF	148.07	340	ePKP	08 08.60	3.6X
	0.6s		7.20nm		
LFF	148.47	342	ePKP	08 09.30	3.8X
	0.6s		9.00nm		
LPO	148.56	341	ePKP	08 09.70	4.0X
	0.6s		9.90nm		
GIBL	157.85	346	iPKP	08 07.00	-12.0X
ALJ	157.91	345	iPKP	08 05.00	-14.2X

S.D. = 1.0 on 49 of 70 obs.

JUN 09, 1990 15h 06m 45.06± 0.25s
40.104 N ± 5.0km 29.641 W ± 3.3km
DEPTH = 10.0km (geophysicist)
4.8mb (43 obs.) 4.6Msz (8 obs.)
AZORES ISLANDS REGION (404)

CALA	1.69	154	iPd	07 14.80	0.0
HOR	1.78	153	iPc	07 15.40	-0.4
PICO	1.86	149	iPc	07 16.90	-0.4
ADH	2.36	127	iPc	07 23.00	-1.4
PDA	3.89	126	eP	07 44.90	-1.3
EPLA	18.02	82	ePn	10 56.70	-0.5
AVE	19.05	104	iP	11 10.00	0.2
EHOR	19.10	89	e(P)	11 13.00	2.7
EJIF	19.31	93	eP	11 13.50	0.5
GUD	19.41	80	ePn	11 09.00	-5.4X
TOL	19.60	82	iP+	11 15.00	-1.3
NKM	19.69	96	eP	11 19.00	1.7
ECP	20.04	45	eP	11 24.00	3.2X
EBAN	20.13	87	eP	11 22.00	0.0
TIO	20.35	110	iP	11 24.70	0.3
ECRI	20.49	74	eP	11 28.00	2.3
AFC	20.55	90	e(P)	11 27.00	0.5
IFR	20.66	101	iPd	11 27.00	-0.7
ETOR	20.97	79	eP	11 29.50	-1.3
EVIA	21.01	85	eP	11 31.00	-0.1
YRH	21.29	45	eP	11 27.00	-6.7X
ENIJ	21.65	90	eP	11 40.00	2.5
LPF	21.93	59	eP	11 41.10	0.9
	1.0s		24.00nm		4.6mb
TAF	22.21	95	eP	11 42.00	-1.2
MFF	22.33	63	eP	11 44.20	0.0
	1.0s		28.00nm		4.7mb
EPF	22.57	73	eP	11 46.60	-0.1
	1.2s		66.95nm		5.0mb
LFF	22.83	68	eP	11 48.10	-1.1
	1.0s		30.00nm		4.8mb
LPO	23.15	68	eP	11 51.50	-0.8
	1.0s		38.00nm		4.9mb
EKA	23.24	40	Pd	11 54.80	1.7
	1.6s		37.10nm		4.7mb
LSF	23.45	65	eP	11 54.50	-0.7
	1.0s		29.00nm		4.8mb
CAF	23.77	68	eP	11 57.30	-1.1
	1.2s		29.75nm		4.7mb
TCF	23.92	64	eP	11 59.90	0.1
	0.9s		16.40nm		4.6mb
MAF	24.17	65	eP	12 02.20	0.0
	0.8s		25.50nm		4.9mb
BGF	24.38	64	eP	12 03.90	-0.3
	1.0s		63.00nm		5.2mb
AVF	24.74	63	eP	12 06.90	-0.8
	1.0s		15.00nm		4.6mb
SSF	24.86	63	eP	12 08.20	-0.7
	1.0s		27.00nm		4.9mb
SMF	25.07	64	eP	12 10.40	-0.5
	1.0s		16.00nm		4.7mb
LOR	25.12	62	eP	12 10.60	-0.8
	1.0s		14.00nm		4.6mb
LBF	25.18	63	eP	12 11.00	-1.0
	0.9s		9.85nm		4.5mb
UCC	25.92	54	P	12 19.00	0.2
			S	17 02.00	
DOU	25.94	56	Pc	12 20.40	1.4
	1.0s		75.00nm		5.3mb
	Z 18s		1.60um		4.6Msz
			S	16 50.00	
AKU	26.46	11	eP	12 25.80	2.2
	1.1s		25.32nm		4.8mb
DBN	26.69	52	eP	12 31.00	5.2X
	Z 20s		1.00um		4.4Msz
			eS	17 25.00	
ENN	26.89	55	eP	12 30.00	2.3
	0.8s		15.00nm		4.7mb
MEM	26.92	55	P	12 32.20	4.3X
WTS	27.66	52	eP	12 36.00	1.3
	1.0s		13.00nm		4.6mb
SQTA	30.12	63	eP	12 55.00	-2.1
	1.0s		14.30nm		4.8mb

09d 15h

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                    I      13 01.40
GRF      30.16   58 eP     12 56.20  -1.1
     Z  20s     1.60um              4.7Msz
                    e      12 59.20
                    e      13 02.10
MOX      30.47   56 eP     13 02.00   2.0
        1.6s    25.00nm            4.8mb
     Z  16s     1.50um              4.7MszX
     E  16s     1.20um
CTI      30.48   65 P      13 02.00   1.8
FVI      31.23   64 P      13 06.00  -0.6
CLL      31.39   55 eP     13 08.00   0.0
        2.5s    42.00nm            4.9mb
     Z  17s     1.00um              4.6MszX
                    eS     18 21.00
MNS      31.67   72 P      13 11.00   0.4
KHC      31.68   59 P      13 10.00  -0.7
        1.0s     9.00nm            4.6mb
     Z  20s     1.00um              4.5Msz
     N  16s     0.80um
     E  19s     0.60um
BRG      31.96   56 eP     13 13.00   0.0
        2.0s    40.00nm            5.0mb
                    eS     18 28.00
NAO      32.30   37 P      13 16.80   0.9
        1.6s    17.40nm            4.7mb
PRU      32.32   57 P      13 15.50  -0.7
        2.0s    66.40nm            5.2mb
     Z  15s     1.80um              4.9MszX
     N  14s     0.50um
                    S      18 34.00
LJU      32.48   65 eP     13 16.00  -1.7
FRB      32.84  329 eP     13 17.00  -3.5X
VBY      33.04   66 e(P)   13 23.40   0.9
HFS      33.42   39 eP     13 30.20   4.6X
        0.6s     0.80nm            3.8mb
     Z  18s     1.11um              4.6Msz
                    LR     22 33.00
KSP      33.45   56 eP     13 24.50  -1.5
ZST      34.05   60 eP     13 31.10  -0.2
                    e      31 56.40
SRO      34.89   61 eP     13 38.50   0.0
                    e      31 56.70
KRA      35.80   57 eP     13 46.10   0.0
        1.0s    50.00nm            5.3mb
                    e      13 51.60
                    e      19 30.00
SPC      36.05   58 eP     13 48.40  -0.2
BZS      37.44   64 eP     14 00.50   0.5
SKO      38.11   70 eP     14 09.00   3.3X
NUR      38.82   40 eP     14 10.00  -1.4
VAY      39.10   71 eP     14 14.40   0.4
SUF      39.81   37 iP     14 19.60   0.0
        0.7s    10.40nm            4.6mb
CMP      39.87   64 ePc    14 19.00  -1.4
TIC      39.97  140 P      14 28.20   6.8X
        1.0s    39.50nm            5.0mb
LIC      40.33  140 P      14 31.10   6.7X
     Z  20s     0.54um              4.4Msz
KIC      40.35  140 P      14 31.20   6.6X
        1.0s    11.50nm            4.5mb
MLR      40.45   63 eP     14 26.00   0.7
SOD      40.85   29 iP     14 28.80   0.7
VRI      40.90   63 ePc    14 26.50  -2.3
ITR      49.29  191 eP     15 37.10   1.0
                    e      15 46.40
UYO      51.00  285 iPc    15 50.80   1.8
LNO      51.21  288 eP     15 51.20   0.7
TUL      51.21  288 eP     15 50.20  -0.4
        1.2s    17.70nm            4.9mb
     Z  19s     1.76um              5.1Msz
                    LR     30 30.00
MBC      51.40  342 eP     15 53.00   1.5
YKA      53.16  325 eP     16 04.00  -0.9
        1.0s     2.70nm            4.1mb
SES      55.50  310 eP     16 22.00  -0.3
BCAO     56.00  116 iPc    16 26.00  -0.2
        1.2s    21.00nm            5.0mb
GOL      56.35  296 P      16 28.00  -0.9
        1.4s    11.42nm            4.7mb
BW06     57.79  301 P      16 37.00  -1.9
BAO      58.02  201 eP     16 41.40   0.8
INK      58.18  335 eP     16 40.00  -1.0
LRM      58.28  305 eP     16 42.40   0.0
ANMO     59.36  292 P      16 49.00  -1.0
        1.5s    20.83nm            5.0mb
ALQ      59.37  292 eP     16 49.50  -0.5
```

```
         1.8s     38.64nm             5.2mb
      Z  18s      0.86um              4.9Msz
NEW      60.01  310 P      16 52.00  -2.1
         1.0s     16.88nm             5.1mb
DAU      60.02  299 P      16 54.00  -0.6
PNT      60.96  312 eP     17 04.00   3.5X
MSU      61.57  298 P      17 04.50  -0.6
SIV      63.01  214 P      17 14.80   0.3
KVN      65.25  301 P      17 27.50  -1.7
IMA      65.75  338 e(P)   17 31.20  -0.8
         1.8s     41.70nm             5.3mb
GLA      66.27  294 eP     17 37.00   1.3
ZOBO     66.55  221 P      17 40.00   1.9
         1.2s     18.58nm             5.1mb
                    LR     38 16.00
CLC      66.67  298 eP     17 39.00   0.8
LPB      66.76  220 P      17 36.00  -3.2X
MIN      66.82  304 eP     17 37.80  -1.4
ORV      67.19  303 e(P)   17 41.20  -0.2
MAIO     67.20   61 eP     17 41.00  -0.6
CMB      67.31  301 eP     17 41.90  -0.3
ISA      67.35  298 eP     17 45.00   2.5
FRI      67.44  300 eP     17 42.30  -0.6
SBB      67.45  297 eP     17 44.00   0.8
PMR      67.48  333 P      17 41.00  -1.8
RVR      67.53  296 eP     17 48.00   4.4X
PLM      67.53  295 eP     17 49.00   5.2X
NNA      67.82  231 eP     17 45.00  -0.6
         0.9s      8.40nm             4.9mb
MWC      67.87  297 eP     17 48.00   2.1
WMQ      79.18   41 eP     18 52.00   0.4
GKN      88.81   54 P      19 41.00   0.2
PKI      89.59   54 P      19 38.30  -6.5X
GUN      89.64   53 P      19 45.60   0.6
BTO      91.68   30 eP     19 55.00   1.1
GBA      93.96   69 Pd     20 06.40   1.9
         0.9s      5.00nm             4.9mb
BJI      94.36   26 eP     20 06.00  -0.1
WRA     155.66   39 PKP    26 57.00  16.6X
         1.0s      2.40nm
      S.D. = 1.2   on 107 of 124 obs.
----------------------------------------------
   JUN  09, 1990  15h 07m 31.74± 0.62s
   37.487 N ± 5.5km    3.761 W ± 6.8km
   DEPTH =  10.0km  (geophysicist)
 SPAIN                              (377)
       mbLg 3.0 (MDD).

AFC       0.29  143 iPgc   07 37.00  -0.9
                    eSg    07 42.00
EBAN      0.68  358 iPg    07 47.00   1.8
                    eSg    07 57.30
MAL       0.92  215 iPnd   07 49.80   0.5
                    iSg    07 58.00
EHOR      1.22  286 ePg    07 54.00  -0.5
                    eSg    08 10.50
ENIJ      1.34  112 ePn    07 57.00   0.6
EVIA      1.52   40 ePn    07 59.00   0.0
                    eSn    08 19.50
EJIF      1.71  233 ePn    08 02.20   0.4
TOL       2.40  355 ePn    08 10.50  -1.2
                    ePg    08 20.00
                    eSn    08 42.00
                    eSg    08 52.00
GUD       3.17  355 ePn    08 22.00  -0.7
ETOR      3.58   21 ePg    08 43.00  14.5X
                    eSg    09 26.00
      S.D. = 1.1   on   9 of  10 obs.
----------------------------------------------
   JUN  09, 1990  15h 20m 04.97± 0.29s
   43.876 N ± 6.9km  148.142 E ± 4.3km
   DEPTH = 107.6km  (  3 depth phases)
   4.9mb ( 51 obs.)
 KURIL ISLANDS REGION               (222)

KUSJ      2.62  254 iP+    20 40.20  -6.2X
                    S      21 07.90
HOOJ      3.85  249 P      20 59.50  -3.7X
                    eS     21 42.00
ASAJ      3.98  275 P      21 02.10  -2.8X
MRRJ      5.37  257 P      21 19.70  -4.4X
                    S      22 16.90
AOMJ      6.65  243 eP     21 36.70  -4.9X
                    eS     22 46.10
OFUJ      6.82  228 P      21 37.00  -7.0X
                    S      22 49.30
YAMJ      8.36  230 eP     21 58.60  -6.4X
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KAKJ      9.79  221 eP     22 17.90  -6.4X
                    eS     23 58.90
CHJJ     10.50  225 P      22 27.10  -6.7X
                    S      24 17.60
MAT      10.55  229 iPd    22 28.70  -5.7X
         0.7s    20.55nm            5.1mb
                    (S)    24 23.00
MTMJ     10.74  231 P      22 31.90  -5.1X
BJI      24.00  272 eP     25 09.50  -1.0
         1.0s    10.00nm            4.2mb
TIA      24.84  263 eP     25 18.40  -0.2
TIY      27.57  269 eP     25 48.00   4.3X
BTO      28.25  277 eP     25 53.50   3.7X
LZH      34.49  272 eP     26 43.50  -1.0
         1.0s    26.00nm            5.0mb
      Z  25s     0.50um             4.2MszX
                    pP     27 07.50 105km
GTA      35.98  280 P      26 57.20   0.1
         1.0s    10.00nm            4.7mb
TTA      36.88   39 eP     27 04.50   0.2
SVW      36.97   42 eP     27 06.10   1.1
IMA      38.17   34 ePc    27 15.40   0.2
         0.8s    49.70nm            5.4mb
KDC      38.69   48 eP     27 18.30  -1.0
PMR      40.09   41 eP     27 30.30  -0.5
WMQ      42.72  292 iPc    27 52.40  -0.3
INK      45.93   30 ePc    28 18.00   0.0
         0.8s    48.00nm            5.3mb
CHG      48.01  255 eP     28 40.00   5.1X
CHTO     48.01  255 eP     28 35.00   0.1
         1.0s     2.25nm            3.9mb
                    pP     29 00.60 109km
MBC      48.47   19 eP     28 37.00  -0.7
         0.5s     2.00nm            4.2mb
GUN      51.72  274 P      29 03.00  -0.6
         0.6s    16.00nm            5.2mb
PKI      52.26  274 P      29 06.60  -1.0
         0.6s    11.00nm            5.0mb
DMN      52.46  274 P      29 08.40  -0.6
GKN      52.57  275 P      29 09.00  -0.7
YKA      55.30   34 eP     29 27.90  -1.0
         0.6s     6.80nm            4.8mb
MTN      58.54  200 iPd    29 52.40   0.1
KEV      58.85  340 iP     29 51.90  -2.0
         0.5s    19.60nm            5.5mb
PNT      59.75   49 eP     30 00.00  -0.5
         0.5s     7.00nm            5.0mb
SOD      60.62  338 iP     30 04.00  -2.1
NEW      61.71   49 P      30 13.00  -0.8
         0.8s     7.08nm            4.7mb
WDC      62.99   59 ePc    30 22.60   0.3
SES      63.65   45 eP     30 26.00  -0.6
                    pP     30 53.00 109km
MIN      63.71   58 eP     30 26.70  -0.5
ORV      64.24   59 eP     30 30.10  -0.4
WB5      64.69  194 eP     30 32.70  -0.7
WRA      64.75  194 P      30 35.00   1.2
         0.7s     1.40nm            4.0mb
FFC      65.17   37 iPc    30 36.10  -0.1
         0.5s    13.00nm            5.1mb
LRM      65.73   49 eP     30 40.20  -0.1
CMB      65.85   60 eP     30 40.90   0.0
NUR      66.25  333 iP     30 41.80  -1.2
         0.5s    23.90nm            5.4mb
KVN      68.64   58 P      30 46.40   0.3
TNP      67.79   58 P      30 53.50   0.1
         0.6s     8.02nm            4.8mb
FRB      68.86   17 eP     30 57.00  -2.2
UPP      68.95  336 iP     30 58.50  -1.3
BW06     69.27   50 P      31 01.40  -1.0
HFS      69.85  338 eP     31 04.00  -1.3
         0.6s    28.30nm            5.3mb
NAO      70.03  339 P      31 05.10  -1.3
         0.7s    16.10nm            5.0mb
AKU      70.25  354 iP     31 08.70   1.0
         0.7s    16.44nm            5.0mb
RSSD     71.35   46 P      31 14.00  -1.0
GOL      73.68   50 P      31 30.00   1.3
KRA      76.13  329 eP     31 42.00  -0.2
ANMO     76.35   55 P      31 44.60   0.6
ALQ      76.35   55 eP     31 44.30   0.3
         0.9s     3.57nm            4.2mb
SPC      76.71  328 e(P)   31 45.40  -0.3
KSP      76.81  331 eP     31 46.50   0.5
SCH      77.29   20 eP     31 49.00   0.4
MLR      77.30  322 eP     31 50.00   1.0
CLL      77.53  333 iPc    31 49.60  -0.3
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	0.9s	23.00nm		5.0mb		
BRG	77.59	332 iP	31	50.40	0.1	
	1.2s	10.00nm		4.5mb		
BUC	78.07	322 ePd	32	11.50	18.5X	
PRU	78.14	331 Pc	31	53.50	0.2	
		e	31	55.40	6kmX	
EKA	78.21	344 Pc	31	53.20	-0.4	
	0.6s	8.50nm		4.7mb		
MOX	78.55	333 eP	31	56.00	0.4	
WTS	78.83	337 iPd	31	57.40	0.4	
	0.8s	21.00nm		5.0mb		
KHC	79.20	332 P	31	59.70	0.6	
WET	79.42	332 iPc	32	00.80	0.5	
	0.8s	13.00nm		4.8mb		
GRF	79.50	333 iPc	32	01.40	0.6	
		e	32	03.80	8kmX	
ENN	80.18	337 eP	32	04.50	0.2	
	0.7s	16.00nm		4.9mb		
MEM	80.30	337 P	32	05.60	0.7	
DOU	81.16	337 P	32	09.80	0.4	
		i	56	32.30		
SQTA	81.65	332 iPc	32	12.60	0.4	
	0.6s	10.40nm		4.8mb		
CDF	81.88	335 eP	32	13.60	0.2	
	0.8s	8.05nm		4.6mb		
CTI	82.51	331 P	32	16.00	-0.7	
HAU	82.52	335 eP	32	16.60	0.0	
	0.6s	3.60nm		4.4mb		
BSF	82.54	335 eP	32	16.60	-0.2	
	0.6s	2.70nm		4.3mb		
VAI	83.65	333 P	32	22.10	-0.2	
FLN	83.72	340 eP	32	22.80	0.1	
	0.8s	13.45nm		4.9mb		
LDF	83.79	339 eP	32	23.30	0.2	
	0.6s	8.10nm		4.8mb		
LOR	83.92	336 eP	32	23.90	0.1	
	0.7s	8.80nm		4.8mb		
LBF	84.14	336 iPc	32	25.10	0.2	
	0.6s	6.75nm		4.7mb		
GRR	84.17	340 eP	32	25.60	0.7	
	0.8s	18.80nm		5.1mb		
PRNI	84.18	307 eP	32	26.00	0.6	
SSF	84.21	337 iPc	32	25.60	0.4	
	0.6s	5.40nm		4.6mb		
SMF	84.49	336 iPc	32	27.00	0.4	
	0.6s	11.70nm		5.0mb		
AVF	84.50	337 iPc	32	27.10	0.5	
	0.6s	4.95nm		4.6mb		
LPF	84.54	340 eP	32	27.80	1.0	
	0.8s	16.10nm		5.0mb		
LPL	84.62	334 iPc	32	28.40	0.8	
	0.7s	8.80nm		4.8mb		
HBVT	84.78	28 P	32	28.00	-0.1	
BGF	84.86	337 eP	32	29.70	1.2	
	0.8s	9.40nm		4.8mb		
BNI	85.06	334 P	32	31.00	1.4	
BNH	85.19	27 P	32	30.00	-0.1	
MAF	85.24	337 iPc	32	31.50	1.1	
	0.8s	24.20nm		5.2mb		
TCF	85.28	337 iPc	32	31.40	0.8	
	0.6s	4.50nm		4.6mb		
LSF	85.51	337 iPc	32	32.30	0.6	
	0.8s	19.50nm		5.1mb		
MFF	85.64	339 eP	32	33.20	0.9	
	0.8s	21.50nm		5.2mb		
RJF	86.38	337 eP	32	36.90	0.9	
	0.8s	6.70nm		4.7mb		
CAF	86.57	337 iPc	32	38.50	1.5	
	0.7s	7.70nm		4.8mb		
LFF	86.93	337 eP	32	40.00	1.3	
	0.7s	11.00nm		5.0mb		
LPO	87.04	337 eP	32	40.60	1.3	
	0.6s	7.20nm		4.9mb		
ITR	144.55	11 ePKP	39	29.20	-1.3	
BAO	148.68	31 e(PKP)	39	27.00	-10.3X	
	S.D. = 0.8	on 92 of 108 obs.				

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* JUN 09, 1990 15h 31m 32.29± 0.95s
28.272 N ± 8.4km 103.585 E ±16.5km
DEPTH = 10.0km (geophysicist)
4.3mb (1 obs.)
SICHUAN PROVINCE, CHINA (307)
ML 3.7 (BJI).

CD2	2.63	3 ePn	32	15.60	0.0	
		ePg	32	18.10		
		Sg	32	49.20		
KMI	3.23	194 Pnc	32	25.00	0.8	
		Pg	32	35.00		
		Sg	33	16.50		
GYA	3.28	123 iPnc	32	30.00	5.1X	
		Sn	33	15.40		
XAN	7.34	37 ePn	33	21.50	-0.7	
		Sn	34	45.50		
WHN	9.66	74 eP	33	55.00	0.7	
	E 10s	0.40um				
TIY	11.98	36 eP	34	26.90	0.7	
GUN	15.63	273 P	35	01.20	-13.5X	
PKI	16.08	272 P	35	06.40	-14.0X	
KSH	25.40	303 eP	37	05.50	4.0X	
WB5	56.37	145 eP	41	15.10	-1.0	
WRA	56.41	145 Pd	41	15.90	-0.5	
	0.7s	2.20nm		4.3mb		
	S.D. = 0.9	on 7 of 11 obs.				

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* JUN 09, 1990 15h 59m 47.17± 1.22s
5.649 S ±10.1km 151.749 E ±13.3km
DEPTH = 52.7 ± 13.4 km
4.4mb (3 obs.)
NEW BRITAIN REGION (192)

RAB	1.51	16 iPd	00	12.00	-0.2	
LAT	4.83	258 eP	01	05.00	5.9X	
		eS	02	22.00		
KDB	5.93	230 eP	01	15.00	0.4	
QIS	18.94	217 eP	04	06.00	-0.8	
		i	04	08.00		
RMQ	20.92	188 eP	04	29.00	1.3	
MTN	21.56	249 eP	04	35.00	0.8	
SRS	21.64	178 iPc	04	34.10	-0.9	
WB5	22.04	229 eP	04	39.00	0.0	
		eS	08	40.00		
WRA	22.10	228 Pd	04	40.00	0.4	
	0.4s	11.80nm		4.7mb		
KNA	24.68	244 eP	05	04.80	0.1	
STK	27.78	199 eP	05	36.10	2.9X	
	0.9s	2.00nm		3.7mb		
MRWA	41.10	231 eP	07	26.50	-1.2	
GBA	76.19	285 Pc	11	31.70	-0.4	
	0.7s	4.70nm		4.5mb		
KVN	93.63	51 eP	13	00.20	0.7	
	S.D. = 0.9	on 12 of 14 obs.				

JUN 09, 1990 17h 24m 52.30± 0.23s
40.121 N ± 4.8km 29.700 W ± 3.0km
DEPTH = 10.0km (geophysicist)
4.9mb (49 obs.) 5.0Msz (16 obs.)
AZORES ISLANDS REGION (404)

CALA	1.72	153 iP	25	21.00	-1.5	
HOR	1.79	152 eP	25	21.60	-1.9	
PICO	1.90	148 iP	25	23.30	-1.8	
ADH	2.41	127 iPc	25	30.10	-2.2	
PDA	3.94	126 iPc	25	52.80	-1.3	
ERUA	17.11	75 eP	28	56.00	3.0X	
EVAL	18.05	91 eP	29	06.50	1.7	
EPLA	18.07	83 e(P)	29	04.00	-1.0	
AVE	19.10	104 iP	29	18.00	0.4	
EJIF	19.35	93 eP	29	21.50	0.7	
EPRU	19.38	92 eP	29	21.00	-0.2	
GUD	19.45	80 eP	29	20.50	-1.6	
TOL	19.64	82 iP+	29	23.00	-1.0	
NKM	19.74	96 iP	29	25.00	-0.1	
ECP	20.06	45 eP	29	27.00	-1.3	
MAL	20.08	92 iPd	29	29.50	0.9	
		iS	33	28.00		
EBAN	20.18	87 eP	29	29.20	-0.5	
ETA	20.39	44 eP	29	33.00	1.2	
TIO	20.39	110 iP	29	32.50	0.4	
		i	30	06.00		
ECRI	20.53	74 e(P)	29	33.00	-0.4	
AFC	20.59	90 eP	29	34.50	0.3	
IFR	20.71	101 iPd	29	35.00	-0.5	
ETOR	21.01	79 eP	29	38.00	-0.4	
EVIA	21.05	85 eP	29	39.00	0.2	
ENIJ	21.69	90 eP	29	45.50	0.3	
LPF	21.96	59 eP	29	49.20	1.4	
	1.0s	36.00nm		4.8mb		
ECHE	22.03	82 e(P)	29	57.00	8.4X	
GRR	22.15	59 eP	29	51.20	1.6	
	0.9s	22.95nm		4.6mb		
MFF	22.36	63 eP	29	52.60	0.8	
	1.1s	39.05nm		4.8mb		
EPF	22.60	73 eP	29	52.90	-1.4	
	1.2s	77.35nm		5.1mb		
EROO	22.87	78 eP	30	00.00	3.2X	
LFF	22.87	68 eP	29	57.00	0.2	
	0.8s	14.80nm		4.6mb		
EBR	22.93	78 (P)	30	04.00	6.6X	
		e	34	12.00		
LPO	23.18	68 eP	30	00.00	0.1	
	0.8s	21.50nm		4.7mb		
EKA	23.26	40 P	30	01.00	0.5	
	1.2s	34.00nm		4.8mb		
LSF	23.48	65 eP	30	02.50	-0.3	
	1.0s	28.00nm		4.8mb		
TCF	23.96	65 eP	30	07.60	0.2	
	1.2s	35.70nm		4.8mb		
MAF	24.20	65 eP	30	09.80	0.1	
	1.0s	35.00nm		4.9mb		
BGF	24.41	64 eP	30	11.60	-0.2	
	1.0s	56.00nm		5.1mb		
AVF	24.77	63 eP	30	15.10	-0.2	
	0.8s	12.10nm		4.6mb		
SSF	24.90	63 eP	30	16.40	-0.1	
	1.2s	22.30nm		4.7mb		
SMF	25.10	64 eP	30	18.70	0.3	
	1.0s	16.00nm		4.7mb		
LOR	25.15	62 eP	30	18.70	-0.2	
	1.0s	14.00nm		4.6mb		
SNF	25.85	55 P	30	24.40	-0.9	
UCC	25.95	54 P	30	28.00	1.7	
		S	35	09.00		
DOU	25.97	56 P	30	27.00	0.5	
	1.0s	52.80nm		5.2mb		
	Z 18s	2.00um		4.7Msz		
		S	35	05.00		
AKU	26.46	11 iP	30	32.50	1.7	
	1.4s	55.81nm		5.1mb		
DBN	26.72	52 eP	30	40.00	6.7X	
	Z 20s	1.20um		4.4Msz		
		eS	35	34.00		
ENN	26.92	55 eP	30	37.00	1.8	
	1.0s	19.00nm		4.7mb		
MEM	26.94	55 P	30	36.80	1.4	
BNI	27.08	67 P	30	40.40	3.5X	
LPG	27.12	66 eP	30	36.30	-1.1	
	1.0s	8.00nm		4.4mb		
WTS	27.68	52 eP	30	42.00	-0.1	
	0.9s	14.00nm		4.7mb		
CBM	28.46	297 eP	30	48.00	-1.2	
SQTA	30.15	63 eP	31	06.50	1.9	
	1.0s	13.40nm		4.7mb		
		i	31	09.70		
		i	31	36.80		
		i	31	52.00		
GRF	30.19	58 iPc	31	03.80	-1.0	
	Z 20s	2.10um		4.8Msz		
		e	31	08.10		
		e	31	12.30		
CTI	30.51	65 P	31	11.00	3.2X	
FVI	31.26	64 P	31	16.00	1.9	
CLL	31.42	55 eP	31	15.00	-0.5	
	Z 17s	1.50um		4.7MszX		
		eS	36	25.00		
MNS	31.71	72 P	31	21.00	2.8	
KHC	31.71	59 eP	31	17.60	-0.6	
	Z 20s	1.10um		4.5Msz		
	N 15s	1.00um				
	E 19s	0.90um				
		e	31	26.00		
BRG	31.99	56 eP	31	19.20	-1.3	
		eS	36	36.00		
NAO	32.32	37 P	31	23.20	-0.1	
	1.2s	13.80nm		4.8mb		
PRU	32.35	57 P	31	22.50	-1.2	
	2.2s	63.10nm		5.2mb		
	Z 17s	2.40um		5.0MszX		
	N 14s	1.80um				
		eS	36	42.00		
FRB	32.81	329 eP	31	26.00	-1.5	
RSNY	33.12	293 eP	31	31.20	0.8	
	1.0s	10.85nm		4.7mb		
	Z 22s	7.20um		5.3Msz		
HFS	33.43	39 eP	31	31.00	-2.0	
	0.5s	1.40nm		4.1mb		
	Z 18s	1.48um		4.7Msz		
		LR	40	21.00		
KSP	33.47	56 eP	31	31.50	-2.0	
PTJ	33.52	65 eP	31	31.80	-2.2	
ZST	34.08	61 eP	31	37.30	-1.5	

09d 17h

SRO	34.93	61 eP	31 45.70	-0.3	
UPP	35.27	40 iP	31 49.90	1.1	
BUD	35.44	62 e(P)	31 47.00	-3.4X	
KRA	35.82	57 eP	31 53.00	-0.6	
		e	31 57.30		
SPC	36.08	59 iP	31 56.40	0.3	
BZS	37.48	64 eP	32 08.00	0.4	
OHR	37.91	72 eP	32 18.00	6.7X	
SKO	38.15	70 eP	32 16.00	2.7	
	Z 21s	1.45um		4.8Msz	
		i	38 10.00		
		LR	46 36.00		
NUR	38.84	40 eP	32 19.00	0.2	
VAY	39.14	71 eP	32 21.90	0.4	
SUF	39.82	37 iP	32 26.50	-0.5	
	0.6s	13.80nm		4.8mb	
CMP	39.91	64 ePc	32 26.00	-1.9	
TIC	40.01	140 P	32 36.20	7.2X	
	1.0s	17.00nm		4.7mb	
LIC	40.37	140 P	32 39.10	7.2X	
	Z 20s	0.88um		4.6Msz	
KIC	40.39	140 P	32 39.20	7.1X	
	1.1s	17.50nm		4.7mb	
MLR	40.48	63 eP	32 30.00	-2.8	
SOD	40.85	29 iP	32 35.00	-0.4	
RSCP	43.73	283 eP	33 00.50	1.2	
	1.0s	21.69nm		4.9mb	
	Z 20s	1.69um		5.0Msz	
FVM	46.40	288 eP	33 20.00	-0.6	
CAI	46.92	190 eP	33 26.80	2.0	
OLY	48.16	285 eP	33 34.30	-0.2	
FFC	48.84	313 eP	33 39.00	-0.4	
	1.0s	29.00nm		5.3mb	
ITR	49.30	191 eP	33 46.00	2.6	
		e	33 49.30		
TUL	51.17	288 e(P)	33 57.00	-0.5	
	1.2s	32.30nm		5.1mb	
	Z 18s	2.94um		5.3Msz	
		LR	48 48.00		
MBC	51.37	342 eP	33 58.00	-0.5	
	1.3s	45.00nm		5.2mb	
YKA	53.12	325 eP	34 10.60	-1.3	
	1.3s	7.60nm		4.5mb	
RSSD	53.53	300 eP	34 15.00	-0.4	
MEO	53.71	288 e(P)	34 15.40	-1.2	
SES	55.46	310 eP	34 29.00	-0.2	
	1.2s	64.00nm		5.5mb	
EDM	55.68	314 eP	34 29.50	-1.3	
BCAO	56.05	116 iPc	34 33.90	0.1	
	1.0s	20.00nm		5.1mb	
GLD	56.18	296 eP	34 35.00	0.3	
	1.0s	46.00nm		5.5mb	
	Z 20s	2.80um		5.4Msz	
GOL	56.30	296 eP	34 35.10	-0.7	
	1.0s	12.00nm		4.9mb	
	Z 20s	2.25um		5.3Msz	
TAB	57.30	66 eP	34 39.00	-3.7X	
BW06	57.74	301 eP	34 44.30	-1.6	
	1.2s	51.37nm		5.4mb	
BAO	58.02	201 eP	34 48.50	0.7	
INK	58.15	335 eP	34 46.00	-2.0	
LRM	58.23	305 eP	34 49.50	0.2	
ANMO	59.32	292 eP	34 57.50	0.6	
	Z 20s	1.91um		5.2Msz	
ALQ	59.32	292 eP	34 56.90	0.0	
	1.3s	14.42nm		4.9mb	
	Z 18s	1.32um		5.1Msz	
PV09	59.45	296 eP	34 57.00	-1.0	
NEW	59.96	310 eP	35 00.00	-1.0	
	1.0s	54.50nm		5.6mb	
PNT	60.92	312 eP	35 18.00	10.6X	
	0.8s	11.00nm			
SIV	63.00	214 P	35 19.20	-2.4	
FBA	64.75	335 eP	35 31.50	-1.1	
TNP	65.14	300 eP	35 34.50	-1.3	
	1.1s	40.58nm		5.5mb	
KVN	65.20	301 eP	35 35.20	-1.0	
IMA	65.72	338 eP	35 38.30	-0.7	
	1.3s	33.00nm		5.4mb	
GLA	66.23	294 eP	35 45.00	2.4	
GSC	66.36	297 eP	35 44.00	0.5	
CCH	66.52	218 P	35 47.00	2.2	
ZOBO	66.53	221 P	35 47.00	1.8	
	1.1s	31.90nm		5.4mb	
	Z 24s	0.53um		4.7MszX	
		LR	56 08.00		
CLC	66.62	298 eP	35 46.00	0.9	
LPB	66.74	220 P	35 48.00	1.6	
	Z 24s	1.55um		5.1MszX	
		LR	57 10.00		
MIN	66.77	304 eP	35 45.00	-1.1	
ORV	67.14	303 eP	35 46.80	-1.5	
MAIO	67.23	61 eP	35 49.00	0.0	
		eS	45 08.00		
WDC	67.23	304 e(P)	35 45.30	-3.6X	
CMB	67.26	301 eP	35 48.70	-0.4	
ISA	67.30	298 eP	35 43.00	-6.5X	
FRI	67.39	300 eP	35 49.20	-0.7	
SBB	67.40	297 eP	35 52.00	1.9	
PMR	67.45	333 eP	35 50.00	0.2	
PLM	67.48	295 eP	35 51.90	1.1	
BAR	67.72	294 eP	35 57.00	4.9X	
NNA	67.80	231 eP	35 53.50	0.8	
	1.1s	26.58nm		5.3mb	
PRI	68.50	300 ePc	35 57.30	0.2	
KSH	75.77	50 eP	36 42.00	1.9	
WMQ	79.19	41 eP	36 59.50	0.6	
	Z 20s	1.20um		5.2Msz	
		SKS	47 15.00		
NDI	83.66	58 eP	37 23.00	0.5	
GTA	88.40	37 eP	37 45.80	-0.1	
	Z 18s	0.90um		5.2Msz	
GKN	88.83	54 P	37 49.80	1.6	
	1.2s	36.00nm		5.5mb	
DMN	89.40	54 P	37 53.10	2.1	
PKI	89.62	53 P	37 53.20	1.1	
	1.2s	33.00nm		5.5mb	
GUN	89.66	53 P	37 53.00	0.6	
	1.2s	65.00nm		5.7mb	
BTO	91.68	30 eP	38 03.00	1.8	
LZH	92.95	36 eP	38 07.50	0.3	
	3.0s	120.00nm		5.8mb	
	Z 25s	0.60um		4.9MszX	
		pP	38 16.00	27kmX	
GBA	93.99	69 P	38 15.00	3.1X	
	1.1s	12.00nm		5.2mb	
TIY	95.11	29 eP	38 18.10	1.2	
WRA	155.68	39 PKP	45 03.00	15.3X	
	1.0s	3.50nm			

S.D. = 1.2 on 131 of 150 obs.

? JUN 09, 1990 17h 57m 04.13± 5.19s
35.368 S ±43.6km 72.161 W ±24.7km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

LNV	1.54	24 iPd	57 28.60	-0.9	
CHCH	1.90	41 iPd	57 35.10	0.3	
LCCH	1.95	15 eP	57 41.50	6.0X	
		iS	58 06.00		
TACH	1.99	31 iPc	57 36.40	0.3	
PCH	2.21	38 iPd	57 39.30	0.0	
		i	57 54.50		
SAN	2.28	33 iPc	57 40.00	-0.2	
		iS	58 00.00		
IHA	2.38	11 eP	57 41.50	-0.1	
		i(S)	58 06.00		
PEL	2.53	29 iPc	57 43.50	-0.4	
FCH	2.56	38 iPc	57 44.50	0.0	
		iS	58 08.50		
JACH	2.98	26 iP	57 50.00	-0.3	
		iS	58 18.00		
MDZ	3.70	49 eP	58 05.20	4.8X	
RTCB	4.78	37 iPd	58 16.30	0.5	
ZON	4.80	38 eP	58 18.00	2.0	
CFA	4.98	42 iPd	58 18.60	0.0	
		eS	59 16.90		
RTLL	5.08	39 ePc	58 19.60	-0.4	
RTRS	5.66	24 iPc	58 27.30	-0.8	
ZOBO	19.36	12 P	01 33.00	2.4	
SIV	21.70	30 P	01 52.00	-2.3	
GBA	145.09	121 PKPd	16 46.70	6.5X	
	0.8s	3.50nm			

S.D. = 1.2 on 16 of 19 obs.

JUN 09, 1990 18h 24m 34.25± 0.37s
75.092 N ± 4.7km 113.096 E ± 6.3km
DEPTH = 33.0km (normal)
5.0mb (34 obs.) 5.1Msz (1 obs.)
NEAR COAST OF CENTRAL SIBERIA (653)

KBS	20.29	327 iPd	29 08.20	-1.0	
KEV	24.27	302 iP	29 48.00	-0.7	
	0.7s	18.70nm		4.7mb	
MBC	25.83	26 eP	30 04.50	1.0	
	1.0s	4.00nm		4.0mb	
SOD	26.26	299 iP	30 06.90	-0.6	
SUF	30.28	294 iP	30 43.20	-0.6	
	0.5s	5.00nm		4.6mb	
NUR	32.56	293 eP	31 03.00	-0.8	
HFS	35.41	302 eP	31 26.70	-1.7	
	0.8s	8.30nm		4.7mb	
YKA	39.23	33 eP	32 00.20	-0.2	
	0.6s	0.70nm		3.6mb X	
FRB	41.41	1 eP	32 18.00	-0.2	
KRA	43.17	290 eP	32 32.80	-0.1	
	Z 18s	2.10um		5.1Msz	
	E 18s	2.90um			
		e	37 34.80		
KSP	43.32	293 iPd	32 34.30	0.2	
EKA	43.34	312 Pc	32 34.60	0.4	
	0.6s	12.20nm		4.8mb	
CLL	43.66	296 eP	32 37.00	0.2	
	0.8s	14.00nm		4.8mb	
BRG	43.85	295 iP	32 39.20	0.9	
	0.6s	12.00nm		4.9mb	
		i	32 48.00		
WTS	44.42	302 eP	32 44.00	1.1	
	1.0s	13.00nm		4.7mb	
PRU	44.53	294 eP	32 43.50	-0.4	
		e	34 27.00		
HOF	44.85	297 iPc	32 47.50	1.0	
	0.8s	18.00nm		5.0mb	
KHC	45.56	295 P	32 53.50	1.4	
GRF	45.58	297 iPc	32 52.90	0.6	
	1.0s	20.00nm		5.0mb	
ENN	45.76	302 eP	32 54.00	0.3	
	0.7s	17.00nm		5.1mb	
MEM	45.89	302 P	32 55.20	0.5	
DOU	46.69	303 P	33 01.30	0.3	
GWF	47.07	300 P	33 04.39	0.3	
WLS	47.66	300 P	33 09.18	0.4	
CDF	47.68	300 P	33 09.18	0.2	
ECH	47.89	300 P	33 10.80	0.3	
FEL	48.02	299 P	33 11.46	-0.2	
VITF	48.15	301 P	33 12.63	0.1	
HAU	48.27	300 iPd	33 13.80	0.3	
	0.6s	9.90nm		5.0mb	
BSF	48.34	300 P	33 14.01	-0.1	
LOMF	48.78	300 P	33 17.56	0.1	
FLN	49.03	307 iPd	33 18.90	-0.3	
	0.6s	12.65nm		5.1mb	
LDF	49.11	306 iPd	33 19.70	-0.2	
	0.6s	19.85nm		5.3mb	
GUN	49.19	212 P	33 21.40	0.2	
	0.8s	24.00nm		5.3mb	
GKN	49.28	214 P	33 21.80	0.2	
	0.6s	26.00nm		5.4mb	
GRR	49.46	307 iPd	33 22.30	-0.3	
	0.6s	9.00nm		5.0mb	
LOR	49.52	302 iPd	33 22.70	-0.4	
	0.8s	15.45nm		5.1mb	
PKI	49.59	213 P	33 24.40	0.2	
	0.8s	13.00nm		5.0mb	
DMN	49.60	213 P	33 24.80	0.6	
	0.8s	28.00nm		5.3mb	
LBF	49.76	302 iPd	33 24.60	-0.4	
	0.8s	22.15nm		5.2mb	
SSF	49.79	303 iPd	33 24.90	-0.2	
	0.6s	13.10nm		5.1mb	
LPF	49.84	307 iPd	33 25.50	0.0	
	0.8s	21.50nm		5.2mb	
AVF	50.08	303 iPd	33 26.90	-0.4	
	0.6s	5.40nm		4.7mb	
SMF	50.11	302 iPd	33 27.20	-0.4	
	0.8s	6.70nm		4.7mb	
BGF	50.41	303 iPd	33 29.80	-0.1	
	0.8s	27.55nm		5.3mb	
LPG	50.55	299 iPd	33 31.80	0.5	
	0.8s	5.35nm		4.6mb	
MAF	50.79	303 iPd	33 32.70	-0.1	
	0.6s	4.50nm		4.6mb	
TCF	50.81	303 iPd	33 32.80	-0.1	
	0.8s	16.10nm		5.0mb	
LSF	50.99	304 iPd	33 34.00	-0.3	
	0.8s	25.50nm		5.2mb	
MFF	51.01	305 iPd	33 34.70	0.3	
	0.6s	21.65nm		5.3mb	
RJF	51.89	303 eP	33 41.00	-0.2	
	0.6s	6.30nm		4.8mb	
LPO	52.56	304 eP	33 46.40	0.3	

0.6s 6.30nm 4.8mb
CHTO 56.81 196 e(P) 34 16.30 -1.1
0.7s 0.79nm 3.9mb X
WRA 95.77 160 Pc 37 57.00 -0.7
0.7s 1.40nm 4.5mb
S.D. = 0.6 on 54 of 54 obs.

& JUN 09, 1990 18h 42m 22.97s
62.938 N 148.126 W
DEPTH = 73.6km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.69	274	eP	42 38.05	-0.2
			iS	42 49.41	
MCK	0.88	336	iP	42 40.21	-0.2
SML	1.14	185	iP	42 43.40	-0.3
PAX	1.22	87	iP	42 43.96	-0.8
			iS	43 00.68	
GHO	1.23	198	iP	42 44.71	-0.2
			eS	43 01.92	
TOA	1.23	132	iP	42 45.03	0.1
			iS	43 04.13	
DDM	1.33	49	iP	42 46.95	0.7
			iS	43 05.23	
KTH	1.41	297	iP	42 47.43	0.1
			eS	43 05.35	
PLRM	1.43	200	iP	42 47.59	0.1
			iS	43 08.18	
PWA	1.53	213	iP	42 49.76	0.9
			iS	43 09.41	
WRH	1.54	1	iP	42 48.07	-0.9
			eS	43 08.20	
NEA	1.70	346	eP	42 49.93	-1.2
			iS	43 10.24	
CCB	1.72	5	eP	42 50.42	-1.0
			iS	43 11.34	
KLU	1.78	144	eP	42 51.62	-0.7
PMS	1.83	202	eP	42 54.12	1.2
			iS	43 19.70	
SKT	1.85	240	iP	42 53.51	0.3
			eS	43 17.53	
SUA	1.92	221	eP	42 55.25	0.9
DOT	1.97	67	eP	42 53.73	-1.2
			Sn	43 17.79	
FBA	1.98	4	iP	42 54.20	-0.7
VLZ	2.00	154	eP	42 53.93	-1.3
VZW	2.03	158	eP	42 54.41	-1.3
GLM	2.08	9	eP	42 55.05	-1.4
			eS	43 19.63	
GLI	2.12	166	eP	42 56.14	-0.8
NCG	2.44	233	eP	43 02.82	1.4
CGLM	2.45	230	eP	43 02.62	1.0
CRP	2.53	230	iP	42 59.77	-3.0
			iS	43 38.08	
SPU	2.55	228	iP	43 05.50	2.5
			iS	43 38.20	
SLKM	2.63	203	eP	43 06.59	2.5
SEW	2.91	193	eP	43 11.34	3.4
BALM	3.33	122	eP	43 12.07	-1.8
30 obs. associated					

JUN 09, 1990 20h 08m 30.92± 0.49s
44.467 N ±10.1km 148.305 E ± 8.5km
DEPTH = 33.0km (normal)
4.7mb (20 obs.)
KURIL ISLANDS (221)

KUSJ	2.94	244	P	09 17.20	0.8X
			S	09 48.30	
ASAJ	4.08	267	P	09 36.90	4.3X
HOOJ	4.21	242	eP	09 36.70	2.4X
			eS	10 23.00	
MRRJ	5.65	251	P	09 57.90	3.2X
			S	10 58.90	
AOMJ	7.04	239	eP	10 15.80	1.5X
OFUJ	7.32	225	eP	10 17.00	-1.2X
			S	11 33.40	
YAMJ	8.84	228	eP	10 38.90	-0.5X
MAT	11.03	228	eP	11 08.00	-1.4X
	0.9s		8.40nm	4.9mb	
BJI	24.10	271	eP	13 45.00	0.7
	1.5s		31.00nm	4.6mb	
TIY	27.70	268	eP	14 18.00	0.0
LZH	34.58	272	Pc	15 18.50	-0.3
	1.5s		36.00nm	5.1mb	
GTA	36.00	279	P	15 31.20	0.5
	1.0s		10.00nm	4.7mb	
CD2	37.31	264	eP	15 41.20	-0.5
IMA	37.62	35	eP	15 45.40	1.3
	0.8s		3.90nm	4.3mb	
GYA	37.90	256	P	15 47.00	0.1
FBA	40.03	37	eP	16 05.20	1.2
KMI	41.48	258	eP	16 17.00	0.4
WMQ	42.61	291	P	16 26.30	0.8
CHG	48.28	254	eP	17 11.50	0.6
CHTO	48.28	254	iP	17 11.50	0.7
	1.1s		8.54nm	4.7mb	
			pP	17 20.00	28kmX
YKA	54.74	34	eP	17 59.00	0.0
	0.6s		2.00nm	4.3mb	
NDI	57.50	280	iP	18 19.00	-0.3
FFC	64.63	37	eP	19 07.50	0.4
	0.6s		8.00nm	5.0mb	
WB5	65.29	194	eP	19 11.10	-0.5
WRA	65.36	194	Pd	19 11.80	-0.3
	0.9s		3.30nm	4.4mb	
GBA	66.96	267	Pd	19 21.70	-0.8
	0.9s		4.10nm	4.5mb	
FRB	68.26	17	ePc	19 28.00	-2.0
HFS	69.35	338	eP	19 34.50	-2.3
	0.5s		1.50nm	4.3mb	
KHC	78.73	332	eP	20 31.00	-0.3
LOR	83.43	337	eP	20 55.60	-0.5
	1.0s		6.00nm	4.7mb	
SSF	83.72	337	eP	20 57.40	-0.1
	0.8s		2.70nm	4.4mb	
SMF	84.00	336	eP	20 58.80	-0.2
	1.0s		10.00nm	4.9mb	
AVF	84.01	337	eP	20 58.90	-0.1
	0.8s		3.35nm	4.6mb	
LPL	84.15	334	eP	21 00.40	0.4
	0.7s		2.20nm	4.4mb	
LPG	84.16	334	eP	21 00.50	0.4
	0.8s		4.05nm	4.6mb	
MAF	84.75	337	eP	21 02.60	-0.1
	0.8s		5.35nm	4.8mb	
MFF	85.13	339	eP	21 05.00	0.4
	1.0s		12.00nm	5.1mb	
LFF	86.43	338	eP	21 11.20	0.1
	0.8s		6.70nm	4.9mb	
BAO	148.11	31	ePKP	28 16.00	4.2X
S.D. = 0.8 on 30 of 39 obs.					

& JUN 09, 1990 20h 16m 52.65s
46.857 N 120.602 W
DEPTH = 7.7km
WASHINGTON (29)
<SEA>. CL 2.8 (SEA).

EBG	0.06	24	Pd	16 54.80	0.2
NAC	0.20	232	Pc	16 57.90	1.0
TBM	0.31	0	Pd	16 59.50	0.4
TWW	0.34	327	P	17 00.14	0.6
			S	17 05.85	
YAKW	0.34	171	Pd	17 00.32	0.7
			S	17 05.83	
MXC	0.35	143	Pd	17 00.17	0.4
			S	17 05.75	
VTG	0.43	76	Pc	17 01.47	0.1
BVW	0.50	95	Pc	17 02.83	0.2
BRVW	0.56	131	ePd	17 04.10	0.1
MDW	0.63	113	P	17 05.11	-0.1
WPW	0.67	257	P	17 05.57	-0.6
WAH2	0.72	98	P	17 06.69	-0.4
FMW	0.74	276	Pc	17 06.79	-0.7
GLK	0.75	247	Pc	17 07.43	-0.2
ETW	0.77	14	Pd	17 06.90	-1.1
GBL	0.83	108	Pc	17 08.82	0.0
CRF	0.83	92	P	17 08.74	-0.2
RSW	0.84	123	P	17 08.94	-0.2
EPH	0.85	54	P	17 09.23	0.0
GSM	0.89	293	P	17 09.39	-0.6
PRW	0.90	135	P	17 10.53	0.4
GL2	0.91	190	P	17 10.20	-0.1
RVC	0.94	276	P	17 10.31	-0.6
WTV	0.95	27	P	17 10.45	-0.6
ASR	0.98	224	P	17 12.22	0.6
WIW	1.00	115	P	17 11.83	0.0
WRD	1.01	83	P	17 11.46	-0.5
GULW	1.16	217	P	17 14.93	0.3
KOSW	1.16	251	P	17 14.31	-0.3
SAW	1.18	44	P	17 14.23	-0.6
LMW	1.18	261	P	17 14.88	0.0
TDL	1.22	246	P	17 15.18	-0.5
NLW	1.23	8	P	17 15.21	-0.7
HTW	1.24	320	ePd	17 15.23	-0.6
CDFW	1.24	234	P	17 16.19	0.2
ESD	1.26	239	P	17 16.77	0.5
STD	1.28	242	P	17 16.47	-0.2
JLK	1.29	237	P	17 17.09	0.3
SPW	1.32	302	P	17 18.67	1.5
BLH	1.38	316	P	17 18.35	0.2
GMW	1.64	296	P	17 22.60	0.6
VTHM	1.68	179	P	17 22.66	0.2
RPW	1.71	339	P	17 23.35	0.4
BMW	1.85	259	P	17 25.48	0.5
CMW	1.87	327	P	17 26.40	1.0
VBEM	1.92	201	P	17 26.78	0.6
46 obs. associated					

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* JUN 09, 1990 21h 15m 05.32± 1.24s
7.542 S ±15.0km 119.362 E ±10.7km
DEPTH = 298.3 ± 17.3 km
4.1mb (3 obs.)
FLORES SEA (279)

TRT	6.67	268	ePd	16 43.80	0.5
KNA	12.30	132	eP	17 51.50	-1.2
			eS	20 05.00	
MTN	12.72	115	eP	17 58.00	0.1
			eS	20 12.00	
NANU	15.38	193	eP	18 29.00	-0.4
WB5	19.03	132	iPd	19 08.20	0.8
WRA	19.05	132	Pd	19 08.40	0.8
	0.3s		1.40nm	3.8mb	
PKI	47.93	318	P	23 16.60	-0.1
	0.4s		4.00nm	4.1mb	
DMN	48.16	318	P	23 18.20	-0.1
GKN	48.73	318	P	23 22.20	-0.4
	0.4s		9.00nm	4.5mb	
S.D. = 0.8 on 9 of 9 obs.					

JUN 09, 1990 21h 38m 21.17± 0.23s
1.253 N ± 4.4km 123.422 E ± 5.1km
DEPTH = 34.3km (11 depth phases)
5.1mb (20 obs.) 4.7Msz (8 obs.)
MINAHASSA PENINSULA (265)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 24C
Centroid Location:
Origin Time 21:38:23.3 0.5
Lat 1.41N 0.09 Lon 123.43E 0.10
Dep 15.9 3.6 Half-duration 1.9
Moment Tensor; Scale 10**17 Nm
Mrr= 1.13 0.13 Mtt=-0.86 0.09
Mff=-0.28 0.14 Mrt=-1.38 0.47
Mrf=-1.54 0.47 Mtf=-0.50 0.12
Principal Axes:

	Vol=	Plg	Azm
T	2.39	58	124
N	-0.07	7	226
P	-2.32	31	321

Best Double Couple:Mo=2.4*10**17
NP1:Strike= 73 Dip=16 Slip= 118
NP2: 224 76 82

MNI	1.43	82	ePc	38 48.00	2.9
			eS	38 57.00	
DAV	6.18	20	eP	39 52.50	-0.1
AAI	6.84	136	eP	40 02.00	0.2
			eS	41 24.50	
MKS	7.54	212	iPd	40 14.00	2.4
KKM	8.62	304	ePc	40 26.00	-0.7
TRT	13.96	230	iPd	41 43.50	4.6X
BAG	15.32	350	eP-	41 56.00	-0.9
			eS	45 04.00	
MTN	15.96	152	iPd	42 04.70	-0.2
			e	42 14.00	
KNA	17.70	163	iPd	42 26.50	-0.3
KGM	20.11	272	ePd	42 55.70	0.7
KLM	21.84	275	eP	43 15.00	2.3
QIZ	22.12	324	P	43 15.00	-0.5
N	15s		2.20um		
E	16s		1.40um		
			sP	43 25.00	
MBL	22.55	189	iPd	43 19.10	-0.6
IPM	22.61	279	ePc	43 22.00	1.6
HKC	22.78	337	iP	43 26.00	4.1X
			iS	47 32.00	
PPI	23.09	266	eP	43 27.00	2.0

09d 21h

	1.0s	69.30nm		5.1mb		
SNG	23.48	285 eP	43	30.20	1.3	
		eS	47	47.00		
WB5	23.59	153 eP	43	28.10	-1.8	
		i	43	40.00	47kmX	
WRA	23.63	154 Pd	43	29.80	-0.5	
	0.8s	58.80nm		5.2mb		
GZH	23.81	336 Pc	43	33.20	1.3	
Z	14s	3.10um		4.9MszX		
N	15s	2.40um				
E	15s	1.40um				
		pP	43	42.00	31km	
QZH	24.01	349 P	43	32.00	-1.9	
Z	16s	1.50um		4.6MszX		
N	14s	1.00um				
GUMO	24.51	59 eP	43	39.60	0.8	
	1.2s	333.33nm		5.8mb		
		eS	48	00.00		
PJG	24.51	59 eP	43	39.60	0.8	
GUA	24.52	59 eP	43	38.90	-0.1	
	0.8s	77.61nm		5.3mb		
PSI	24.52	274 eP	43	40.00	1.0	
	1.0s	32.40nm		4.8mb		
LAT	24.81	109 eP	43	44.00	2.3	
NANU	24.89	198 eP	43	40.40	-2.0	
	0.5s	18.00nm		4.9mb		
KDB	25.93	115 eP	43	52.00	-0.3	
NNT	26.04	297 eP	43	51.00	-2.3	
LOE	26.69	308 eP	44	01.50	2.2	
QIS	26.85	145 iPc	43	59.10	-1.6	
	1.0s	175.00nm		5.6mb		
		i	44	09.30	37km	
MEKA	28.10	189 eP	44	08.00	-4.0X	
BDT	28.80	305 eP	44	30.80	12.5X	
RAB	29.23	101 iPd	44	23.10	0.7	
CHG	29.67	308 eP	44	24.00	-2.3	
CHTO	29.67	308 eP	44	23.70	-2.6	
SSE	29.76	356 eP	44	23.00	-3.8X	
Z	20s	0.90um		4.4Msz		
N	14s	1.50um				
		sP	44	36.00		
		ePP	45	26.00		
		S	49	17.00		
GYA	29.80	329 P	44	27.80	0.4	
N	15s	1.30um				
E	15s	1.10um				
		S	49	25.00		
WHN	30.38	344 eP	44	32.00	-0.3	
Z	12s	1.30um		4.8MszX		
N	16s	2.20um				
E	14s	1.00um				
		pP	44	42.00	35km	
		S	49	32.00		
CTA	30.84	135 iPd	44	36.60	0.1	
	1.2s	54.69nm		5.2mb		
		iS	49	56.00		
NJ2	30.94	352 Pc	44	37.40	0.2	
Z	18s	0.50um		4.2Msz		
		S	49	39.00		
KMI	31.01	322 Pc	44	40.00	1.7	
Z	16s	1.80um		4.8MszX		
E	13s	0.80um				
		pP	44	48.50	30km	
CD2	34.89	330 eP	45	10.50	-1.2	
Z	18s	0.90um		4.6Msz		
N	12s	0.90um				
		eS	50	40.00		
TIA	35.27	351 eP	45	14.00	-0.8	
N	17s	1.00um				
E	15s	0.60um				
		S	50	45.00		
XAN	35.33	339 P	45	15.30	-0.1	
Z	14s	0.60um		4.5MszX		
N	14s	1.70um				
		S	50	49.00		
RMO	36.85	140 eP	45	27.00	-1.3	
STK	37.18	154 eP	45	29.20	-1.8	
	1.0s	20.00nm		4.9mb		
		i	45	39.20	34km	
TIY	37.67	346 Pc	45	35.80	0.7	
Z	16s	1.80um		5.0MszX		
N	16s	1.60um				
		S	51	23.00		
MAT	37.69	20 iPc	45	33.30	-1.9	
	1.0s	25.00nm		5.0mb		
Z	20s	1.42um		4.8Msz		
		eS	51	15.00		

HNR	37.89	107 eP	45	31.00	-6.2X	
ADE	38.77	160 iPc	45	44.30	-0.1	
	0.8s	49.25nm		5.3mb		
CMS	38.89	149 eP	45	45.00	-0.3	
LZH	39.13	335 Pd	45	47.50	0.0	
	2.5s	190.00nm		5.4mb		
Z	18s	2.20um		5.0Msz		
N	17s	0.90um				
E	16s	1.20um				
		pP	45	57.00	32km	
		PP	47	23.00		
		S	51	48.00		
		sS	52	04.00		
		SS	54	30.00		
BJI	39.16	351 eP	45	45.00	-2.5	
	1.0s	14.00nm		4.7mb		
Z	40s	1.48um		4.5MszX		
		eS	51	40.00		
BRS	40.11	137 iPc	45	53.10	-2.4	
		i	46	02.90	33km	
SNY	40.39	0 eP	45	57.60	0.0	
Z	20s	1.00um		4.7Msz		
E	22s	1.90um				
HHC	40.85	346 Pc	46	02.20	0.6	
Z	16s	1.30um		4.9MszX		
N	13s	0.40um				
E	14s	0.50um				
		S	52	08.00		
BTO	41.01	344 P	46	03.50	0.7	
N	15s	1.60um				
E	15s	1.20um				
		PP	47	43.00		
		S	52	10.00		
COO	41.67	142 eP	46	09.00	0.7	
LSA	41.74	316 eP	46	11.00	1.6	
CN2	42.40	2 eP	46	14.00	-0.1	
Z	23s	0.60um		4.4MszX		
		eS	52	28.00		
BWA	42.54	149 eP	46	16.80	1.4	
		i	46	27.40	37km	
CAN	43.54	149 eP	46	23.50	0.0	
		i	46	34.20	37km	
GTA	43.66	333 P	46	25.40	0.8	
	1.0s	30.00nm		5.0mb		
Z	18s	2.10um		5.1Msz		
E	15s	1.00um				
		pP	46	35.20	33km	
		PcP	48	16.00		
		S	52	48.00		
		sS	53	06.00		
		ScS	56	21.00		
TOO	43.70	154 eP	46	25.00	0.2	
CNB	43.72	149 eP	46	26.00	1.0	
		e	46	37.00	39km	
GUN	44.63	310 P	46	33.00	0.1	
PKI	44.83	309 P	46	34.20	-0.2	
	0.6s	19.00nm		5.1mb		
DMN	45.08	309 P	46	36.40	0.0	
	0.8s	56.00nm		5.5mb		
GKN	45.63	309 P	46	41.00	0.4	
HYB	46.93	293 eP	46	45.00	-5.8X	
		e	46	59.00	53kmX	
GBA	47.12	287 Pd	46	50.80	-1.5	
	1.0s	15.30nm		5.0mb		
POO	51.54	293 eP	47	40.50	14.1X	
NDI	51.81	306 eP	47	27.00	-1.2	
WMQ	52.95	328 P	47	36.70	0.0	
Z	20s	0.80um		4.8Msz		
		S	55	06.70		
KSH	57.50	317 eP	48	12.00	2.3	
		S	56	09.00		
MAIO	68.42	309 iPd	49	21.30	-0.8	
		eS	58	26.00		
TAB	79.07	308 eP	50	33.00	8.9X	
MAW	80.31	200 iPd	50	30.60	0.7	
IMA	85.97	24 eP	51	00.00	0.8	
	0.7s	2.10nm		4.5mb		
NAI	86.65	269 eP	51	14.00	10.3X	
SPA	91.24	180 eP	51	23.30	-0.9	
	1.1s	23.81nm		5.5mb		
INK	93.66	21 eP	51	46.00	10.9X	
KRI	94.00	253 eP	51	49.00	11.2X	
MLR	94.36	316 eP	51	20.00	-19.0X	
BUL	94.94	250 iPc	51	39.90	-2.2	
NAO	99.74	333 P	52	00.60	-2.3	
	0.9s	2.30nm		4.7mb		
BRG	101.21	322 e(Pdif	52	10.00	0.3	

ALQ	121.12	47 ePKP	57	13.00	0.2	
SCH	123.49	7 ePKP	57	16.00	-0.4	
TUL	128.04	41 e(PKP)	57	35.20	9.4X	
	1.2s	6.40nm				
LKO	128.11	283 (PKP)	57	25.52	-1.1	
LNV	144.63	158 ePKP	58	03.00	6.6X	
TACH	145.07	159 ePKP	57	57.00	-0.3	
PCH	145.25	159 ePKPd	57	58.00	0.3	
SAN	145.35	159 ePKPd	57	58.00	0.2	
FCH	145.59	159 ePKP	57	59.80	1.2	
PEL	145.62	159 iPKPd	57	59.40	1.1	
	1.1s	82.28nm				
ROCH	145.65	158 ePKP	57	59.50	0.9	
RTCB	147.79	160 e(PKP)	58	05.50	3.6X	
CFA	147.86	161 ePKPd	58	05.50	3.6X	
RTLL	148.04	161 ePKPd	58	05.50	3.3X	
RTRS	148.75	158 ePKPd	58	07.00	3.7X	
ITR	160.45	247 (PKP)	58	21.00	1.7X	
		e	58	29.20		
LPB	161.05	144 PKP	58	27.00	6.7X	
ZOBO	161.24	143 PKP	58	23.80	3.1X	
	1.0s	10.50nm				
		LR	59	44.00		
SIV	164.70	163 PKP	58	24.30	0.9	

S.D. = 1.3 on 85 of 107 obs.

JUN 09, 1990 22h 46m 22.39± 0.35s
39.199 N ± 3.4km 23.692 E ± 3.1km
DEPTH = 12.1 ± 2.4 km
4.4mb (1 obs.)
AEGEAN SEA (365)
ML 3.8 (ATH).

NEO	0.38	287 ePg	46	29.50	-0.8	
PAIG	0.73	359 iPc	46	38.10	1.6	
ATH	1.22	179 ePg	46	45.50	0.5	
		eSb	47	02.00		
LIT	1.29	315 iPc	46	45.60	-0.6	
THE	1.54	339 iPc	46	49.60	0.0	
		iS	47	09.50		
SRS	1.92	358 ePc	46	55.20	0.1	
EZN	2.13	72 iPn	46	58.50	0.3	
VAY	2.29	338 iPn	47	01.30	0.8	
FNA	2.38	312 eP	47	01.70	-0.2	
MMB	2.39	1 iPc	47	02.00	0.1	
		eS	47	42.00		
RDO	2.41	35 ePn	47	01.60	-0.5	
ITM	2.45	215 ePn	47	03.20	0.4	
ALN	2.48	46 eP	47	02.80	-0.3	
VLI	2.55	194 ePn	47	03.10	-1.1	
RZN	2.61	17 iPc	47	05.00	-0.2	
		iS	47	37.00		
IGT	2.63	278 eP	47	07.10	1.8	
VLS	2.63	248 ePn	47	05.00	-0.4	
KDZ	2.78	28 iP	47	07.00	-0.5	
		iS	47	52.00		
SMG	2.88	120 ePn	47	09.30	0.4	
IZM	2.90	105 iPn	47	15.30	6.0X	
OHR	2.93	312 ePn	47	10.70	1.1	
		iSn	47	44.70		
		Lg	47	47.30		
PLD	3.00	15 iPd	47	11.00	0.4	
		iSg	48	04.00		
KEK	3.06	281 ePb	47	14.80	3.4X	
DIM	3.17	26 eP	47	14.00	1.0	
		Sg	48	00.00		
SKO	3.26	329 iPn	47	14.60	0.3	
E	12s	1.49um				
PGB	3.37	6 iPc	47	16.00	0.1	
		i	48	12.00		
VTS	3.41	354 iPc	47	17.00	0.5	
		iSg	47	53.00		
EDC	3.41	69 ePn	47	17.40	0.9	
VAM	3.81	174 ePn	47	23.00	0.9	
JMB	3.93	33 eP	47	37.00	13.2X	
		iS	48	33.00		
CTT	4.12	60 eP	47	30.00	3.5X	
PVL	4.20	17 eP	47	28.00	0.4	
LCI	4.56	286 P	47	31.80	-1.0	
YLV	4.58	71 eP	47	31.00	-2.1	
IZI	4.60	74 eP	47	50.00	16.6X	
HRT	4.87	69 eP	47	35.40	-1.8	
ALT	4.99	90 eP	47	40.70	1.7	
PSN	5.61	36 eP	47	47.00	-0.6	
BCK	5.69	106 eP	47	50.60	1.7	
TDS	5.71	277 P	47	50.00	0.9	
SOI	6.08	262 P	47	53.00	-1.2	

CMP 6.15 9 ePc 47 53.00 -2.1
ISR 6.30 19 eP 48 04.00 6.6X
MGR 6.35 281 P 47 57.80 -0.2
MLR 6.51 14 eP 48 00.00 -0.3
SGO 6.59 285 P 48 01.50 0.1
BZS 6.59 347 eP 48 00.00 -1.4
CFR 6.84 28 eP 48 35.00 30.2X
BSS 7.01 286 P 48 09.30 2.0
VRI 7.03 18 ePd 48 09.00 1.4
BBTK 7.04 82 eP 48 38.00 30.1X
MEU 7.21 256 P 48 09.80 -0.5
eSn 49 22.70
BCAO 34.92 189 iPd 53 14.00 -2.0
1.0s 5.00nm 4.4mb
S.D. = 1.1 on 45 of 53 obs.

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* JUN 09, 1990 23h 25m 22.67± 2.62s
24.246 N ±11.2km 122.504 E ±20.2km
DEPTH = 10.0km (geophysicist)
TAIWAN REGION (243)

TWC 0.70 301 iPd 25 36.60 0.1
eS 25 41.80
TWD 0.85 259 iPd 25 38.30 -0.7
TWZ 1.19 315 iPd 25 45.60 0.7
eS 25 57.20
ANP 1.30 316 iP 25 46.80 0.1
eS 25 59.00
TWQ 1.52 271 iPd 25 49.20 -0.8
TWK 2.09 243 ePc 25 59.20 1.0
SSE 6.92 351 P 27 06.20 -0.4
eLg 29 04.20
S.D. = 0.8 on 7 of 7 obs.

& JUN 10, 1990 00h 49m 27.38s
62.379 N 151.192 W
DEPTH = 87.1km
CENTRAL ALASKA (1)
<AGS-P>.

SKT 0.43 202 iP 49 40.84 -0.7
HUR 0.94 49 iP 49 45.47 -0.9
eS 49 58.76
SUA 0.94 167 iP 49 46.09 -0.5
eS 50 00.14
PWA 0.96 139 eP 49 46.31 -0.3
NCG 1.08 205 eP 49 47.31 -0.9
CGLM 1.14 200 eP 49 48.00 -1.0
KTH 1.19 6 eP 49 48.61 -0.9
eS 50 04.16
CRP 1.21 203 iP 49 49.15 -0.7
GHO 1.23 119 eP 49 49.38 -0.6
eS 50 06.40
PLRM 1.25 128 eP 49 49.23 -1.0
SPU 1.27 199 eP 49 49.58 -0.9
PMS 1.38 145 iP 49 51.09 -0.8
eS 50 09.57
SML 1.46 112 iP 49 51.95 -1.0
RDT 1.90 198 eP 49 58.02 -0.8
SLKM 1.94 166 eP 49 58.34 -0.8
NCA 2.08 99 eP 49 57.25 -4.0
RED 2.11 202 eP 50 01.07 -0.5
TOA 2.37 94 eP 50 03.62 -1.4
SEW 2.43 159 eP 50 03.51 -2.4
GLI 2.47 126 eP 50 04.61 -1.8
VZW 2.57 119 eP 50 05.87 -2.0
KLU 2.65 107 eP 50 06.44 -2.5
22 obs. associoted

JUN 10, 1990 02h 09m 00.43± 0.47s
57.071 N ±11.8km 158.082 E ± 6.9km
DEPTH = 33.0km (normol)
4.7mb (21 obs.) 3.8Msz (1 obs.)
KAMCHATKA (217)

TTA 23.26 56 eP 14 06.60 1.1
SVW 23.72 61 eP 14 12.00 2.1
IMA 24.05 48 eP 14 14.20 1.0
1.3s 31.60nm 4.7mb
CN2 24.38 251 P 14 17.00 0.6
Z 12s 0.40um 4.1MszX
N 13s 0.50um
E 13s 0.30um
epP 14 27.00 37kmX
eS 18 36.00
MAT 24.46 221 (P) 14 17.00 -0.2
eS 18 50.00
FBA 26.60 51 eP 14 38.20 1.2
TOA 27.89 56 eP 14 48.70 -0.2
INK 31.53 41 eP 15 20.00 -1.0
MBC 33.88 25 eP 15 42.50 1.1
BTO 34.82 263 eP 15 51.00 0.9
N 14s 0.40um
E 14s 0.40um
eS 21 15.00
TIY 35.60 257 eP 16 00.40 3.7X
Z 14s 0.60um 4.5MszX
N 13s 0.50um
eS 21 28.00
YKA 41.08 45 P 16 39.40 -2.6
GTA 41.22 270 eP 16 43.40 -0.2
1.2s 10.00nm 4.4mb
Z 15s 0.70um 4.7MszX
E 13s 0.50um
LZH 41.43 263 P 16 46.00 0.6
Z 15s 0.50um 4.5MszX
E 15s 0.60um
WMQ 44.71 284 P 17 12.50 0.6
GYA 47.43 252 P 17 35.20 1.6
SES 50.34 56 eP 17 58.00 2.3
FFC 51.12 47 iPc 18 03.80 2.3
0.7s 8.00nm 4.8mb
WDC 51.72 72 e(P) 18 25.40 19.1X
FRB 54.31 23 ePc 18 22.00 -3.1X
CMB 54.73 73 eP 18 29.10 0.5
SUF 54.88 335 eP 18 28.00 -1.3
0.8s 8.50nm 4.8mb
KVN 55.15 71 eP 18 31.70 -0.2
FRI 55.87 73 e(P) 18 34.80 -2.0
TNP 56.34 71 eP 18 40.10 -0.4
0.8s 5.44nm 4.6mb
BW06 56.62 62 eP 18 40.00 -2.5
1.2s 7.53nm 4.6mb
NUR 57.17 335 eP 18 46.00 0.2
GUN 57.47 272 P 18 47.50 -1.3
CHG 57.73 254 eP 18 51.70 1.5
CHTO 57.73 254 eP 18 51.30 1.1
1.0s 3.50nm 4.4mb
PKI 57.99 272 P 18 50.90 -1.5
GKN 58.07 273 P 18 51.60 -1.1
DMN 58.13 272 P 18 52.30 -1.0
RSSD 58.18 57 eP 18 51.60 -1.8
NAO 59.66 342 P 19 01.60 -1.6
1.1s 8.20nm 4.8mb
HFS 59.80 340 eP 19 02.00 -2.2
0.8s 3.80nm 4.6mb
GOL 60.99 61 eP 19 13.00 0.1
GLD 61.03 61 eP 19 12.50 -0.5
ALQ 64.22 65 eP 19 34.00 -0.3
0.9s 2.10nm 4.2mb
KRA 67.78 332 eP 19 56.90 0.4
KSP 67.93 335 eP 19 58.00 0.5
CLL 68.22 337 eP 19 59.00 -0.2
1.4s 20.00nm 5.0mb
BRG 68.43 336 eP 20 02.20 1.6
1.4s 16.00nm 4.9mb
TUL 68.53 57 eP 20 02.10 0.7
1.3s 7.80nm 4.6mb
PRU 69.13 336 eP 20 04.50 -0.4
MOX 69.14 338 eP 20 06.00 1.1
1.4s 16.00nm 4.9mb
GRF 70.13 338 eP 20 10.90 -0.1
2.0s 54.00nm 5.3mb
Z 20s 0.05um 3.8Msz
KHC 70.15 336 eP 20 11.50 0.3
1.2s 10.00nm 4.8mb
LOR 73.83 342 eP 20 33.00 0.0
0.8s 4.05nm 4.5mb
SSF 74.09 342 eP 20 33.20 -1.3
0.6s 1.80nm 4.2mb
AVF 74.38 342 eP 20 33.20 -3.0
0.8s 5.35nm 4.6mb
LPL 75.01 340 eP 20 42.30 2.2
0.8s 5.35nm 4.6mb
LPG 75.02 340 eP 20 42.50 2.2
0.8s 7.40nm 4.7mb
WB5 79.19 203 eP 21 02.00 -1.3
S.D. = 1.4 on 51 of 54 obs.

% JUN 10, 1990 03h 10m 54.27± 0.71s
42.958 N ± 4.3km 13.262 E ± 8.9km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

ASS 0.46 285 P 11 03.00 -0.5
eSg 11 08.40
ARV 0.59 337 Pc 11 05.70 -0.5
eSg 11 15.60
AQU 0.61 170 P 11 05.60 -1.1
eSg 11 15.60
MNS 0.72 217 P 11 07.50 -0.9
AZI 0.98 172 P 11 13.50 0.7
RSM 1.13 329 P 11 16.30 0.8
CRE 1.17 305 P 11 17.10 0.9
eSg 11 32.80
RMP 1.22 200 P 11 17.50 0.5
eSn 11 34.00
RDP 1.27 199 P 11 18.00 0.2
eSg 11 35.00
SDI 1.32 162 P 11 19.10 0.5
SFI 1.41 314 P 11 20.00 0.1
eSn 11 40.00
PGD 1.45 310 P 11 21.00 0.3
CTI 3.30 340 P 11 46.00 -1.1
S.D. = 0.8 on 13 of 13 obs.

JUN 10, 1990 03h 17m 44.52± 0.62s
24.191 S ± 3.9km 66.912 W ± 7.3km
DEPTH = 158.3 ± 6.3 km
4.7mb (13 obs.)
SALTA PROVINCE, ARGENTINA (129)

ANT 3.24 278 iPc 18 36.00 0.2
iS 19 07.50
i 19 10.50
RTRS 6.37 200 ePd 19 18.00 0.8
eS 20 26.70
CCH 6.81 6 Pc 19 27.70 4.2X
RTLL 7.24 191 ePc 19 28.00 -1.0
RTCB 7.46 193 eP 19 31.50 -0.3
CFA 7.48 189 iPc 19 31.00 -1.1
ZON 7.49 192 eP 19 33.00 0.7
LPB 7.70 351 iPd 19 34.20 -1.2
1.0s 864.00nm 6.2mb X
S 21 01.00
ZOBO 7.96 352 iPd 19 42.00 2.9
ARE 8.81 330 iPc 19 48.40 -1.6
iS 21 21.60
MDZ 8.83 191 i(P) 19 51.10 1.1
JACH 9.06 200 iPd 19 54.00 0.9
PEL 9.51 200 iPc 19 59.60 0.6
i 21 39.00
FCH 9.57 197 eP 20 00.00 -0.1
SAN 9.80 199 eP 20 03.00 0.3
PCH 9.91 198 eP 20 04.50 0.2
TACH 10.06 200 eP 20 04.50 -1.7
CHCH 10.24 198 eP 20 07.00 -1.6
LNV 10.49 201 eP 20 07.00 -4.8X
PT08 15.22 321 iPc 21 19.80 6.9X
eS 23 56.00
NNA 15.36 320 eP 21 15.80 1.4
0.8s 8.21nm 4.1mb
e 24 00.00
BAO 19.70 68 ePc 22 05.10 1.2
ITR 31.23 65 eP 23 50.70 -0.6
e 23 55.10
e 24 35.50
CAI 33.53 63 iPd 24 09.40 -1.8
RSCP 62.03 343 iP 27 48.00 -2.2
BLA 62.38 348 eP 27 52.00 -0.5
0.5s 6.75nm 4.8mb
UYO 63.67 335 iPd 28 01.00 0.1
FVM 65.67 340 eP 28 12.20 -1.6
epP 28 56.30 187kmX
LNO 65.72 335 eP 28 12.90 -1.1
TUL 65.72 335 iP 28 13.50 -0.6
1.1s 15.30nm 4.8mb
e 28 57.70
SPA 65.95 180 iPd 28 15.40 -0.1
0.8s 40.83nm 5.4mb
LKO 68.59 68 (P) 28 32.22 -0.3
ALQ 69.74 326 ePd 28 39.00 -0.5
0.9s 14.50nm 4.8mb
e 29 24.00
ANMO 69.75 326 eP 28 39.80 0.4
0.9s 10.92nm 4.7mb
GLD 72.97 330 eP 28 59.00 0.5
0.9s 31.58nm 5.0mb
GOL 72.99 330 eP 28 58.20 -0.6
0.8s 4.91nm 4.3mb
SBA 73.52 190 e(P) 29 01.40 0.4

10d 03h

BAR	73.83	318	eP	29	04.00	0.5
PV09	73.86	327	eP	29	04.20	0.3
GSC	75.71	320	eP	29	15.00	0.7
SBB	75.90	319	eP	29	15.00	-0.3
RSSD	76.01	333	eP	29	15.90	0.0
CLC	76.53	320	eP	29	19.00	0.2
ISA	76.95	319	eP	29	22.00	0.9
BW06	77.36	329	eP	29	23.20	-0.2
	1.2s	12.67nm			4.5mb	
TNP	77.88	322	iP	29	26.80	0.4
	0.8s	6.32nm			4.4mb	
PRI	78.59	318	eP	29	31.10	0.9
SCH	78.68	0	eP	29	30.00	-0.1
KVN	79.05	322	eP	29	33.00	0.3
			epP	30	18.00	184kmX
LLA	79.07	318	e(P)	29	33.70	1.0
CMB	79.68	320	eP	29	36.10	0.2
MHC	79.97	319	eP	29	37.50	-0.1
LRM	81.02	330	eP	29	44.10	1.0
SWZ	81.18	116	eP	29	33.00	-11.3X
MAW	81.23	163	iPd	29	45.00	1.5
ORV	81.34	320	ePd	29	45.10	0.6
WDC	82.61	321	eP	29	50.00	-1.1
SEK	82.61	118	iPd	29	52.60	0.9
	0.6s	6.67nm			4.6mb	
SES	83.89	333	eP	29	58.00	0.6
SLR	84.18	115	eP	30	00.00	0.3
NEW	84.99	329	eP	30	00.00	-2.9
	0.7s	6.40nm			4.5mb	
BUL	86.74	110	iPd	30	12.00	-0.4
PNT	86.90	329	eP	30	13.00	0.7
BCAO	87.65	84	iPd	30	17.50	0.8
	1.0s	10.00nm			4.7mb	
YKA	94.33	340	P	30	46.20	-0.3
WRA	131.49	207	PKPd	36	39.80	-0.6
	0.5s	4.90nm				
WB5	131.54	207	ePKP	36	39.80	-0.7
GBA	144.76	101	PKPd	37	04.40	-0.3
	0.8s	16.40nm				
NDI	147.65	74	ePKP	37	11.00	1.9
	S.D. = 1.0	on	65 of	69	obs.	

JUN 10, 1990 03h 37m 56.69± 0.49s
39.193 N ± 4.9km 23.711 E ± 4.8km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)

NEO	0.40	287	ePb	38	04.00	-0.8
ATH	1.22	180	ePb	38	19.90	0.6
			eSn	38	35.40	
EZN	2.12	72	ePn	38	32.00	-0.6
VAY	2.30	338	iPn	38	36.20	1.0
RDO	2.40	35	ePn	38	36.20	-0.4
ITM	2.45	216	ePb	38	38.20	0.8
VLI	2.54	194	ePn	38	37.80	-0.9
RZN	2.61	17	eP	38	40.00	0.2
VLS	2.64	248	ePb	38	44.00	3.8X
KDZ	2.78	27	iP	38	41.00	-1.0
			iS	39	30.00	
IZM	2.89	105	ePn	38	44.00	0.4
OHR	2.94	312	ePn	38	44.80	0.4
PLD	3.01	14	iP	38	46.00	0.8
KEK	3.07	281	ePn	38	43.80	-2.4
VTS	3.42	354	eP	38	51.00	-0.2
MGR	6.36	281	P	39	33.50	0.7
MLR	6.51	14	eP	39	35.00	0.1
SGO	6.61	285	P	39	35.00	-1.2
RDP	8.76	291	P	40	08.60	2.2
RMP	8.79	291	P	40	07.10	0.4
			eSg	40	08.10	
	S.D. = 1.1	on	19 of	20	obs.	

JUN 10, 1990 04h 27m 42.39± 0.58s
17.118 S ±20.6km 173.116 W ±22.1km
DEPTH = 33.0km (normal)
4.4mb (6 obs.)
TONGA ISLANDS (173)

WLZ	22.91	203	P	32	42.80	-1.6
LTZ	28.45	203	P	33	38.40	2.0
WB5	49.72	258	eP	36	31.20	-2.6
WRA	49.74	258	Pc	36	32.30	-1.6
	0.6s	3.60nm			4.6mb	
CMB	73.87	41	eP	39	15.00	-1.0
MIN	74.56	38	eP	39	20.30	0.3
TNP	75.91	42	P	39	26.00	-1.9
	0.5s	0.28nm			3.5mb	
KVN	75.92	41	P	39	26.80	-1.1
PNT	81.31	32	eP	39	57.00	0.2
	0.7s	5.00nm			4.6mb	
ALQ	81.69	50	eP	39	58.30	-1.1
	1.2s	4.69nm			4.4mb	
FBA	84.02	11	P	40	10.80	0.4
	0.7s	3.27nm			4.6mb	
GOL	84.65	46	P	40	13.70	-0.8
	0.6s	0.46nm			3.8mb	
SES	86.45	35	eP	40	23.00	0.1
INK	89.86	14	eP	40	39.00	0.3
CHTO	93.51	288	e(P)	40	58.60	2.0
WTS	145.20	0	ePKP	47	28.00	10.0X
	0.8s	7.00nm				
KRA	145.50	345	ePKP	47	20.00	1.4
			e	47	28.50	
KSP	145.52	349	iPKPc	47	20.00	1.3
CLL	145.54	353	iPKP	47	19.70	1.0
	1.3s	30.00nm				
			i	47	30.90	
BRG	145.85	352	iPKP	47	20.50	1.3
	2.0s	48.00nm				
			i	47	31.00	
			i	47	38.50	
SPC	146.22	344	ePKP	47	21.50	1.3
MOX	146.34	355	ePKP	47	22.00	1.9X
	2.0s	59.00nm				
			e	47	34.00	
ENN	146.42	1	ePKP	47	23.00	2.9X
MEM	146.58	1	PKP	47	25.70	5.3X
PRU	146.63	351	PKP	47	23.00	2.5X
VRI	146.90	334	ePKPd	47	26.00	4.9X
			ec	12	06.50	
DOU	147.05	3	PKP	47	24.40	3.2X
GRF	147.32	355	ePKP	47	26.00	4.3X
	2.0s	28.00nm				
KHC	147.61	352	PKP	47	26.20	4.0X
FLN	147.87	9	ePKP	47	25.80	3.3X
	0.6s	5.40nm				
ZST	147.89	347	e(PKP)	47	26.70	4.1X
SRO	147.98	345	iPKP	47	27.40	4.7X
CMP	148.08	335	ePKPc	47	30.00	7.0X
LDF	148.09	9	ePKP	47	26.10	3.2X
	0.8s	5.35nm				
BBTK	148.11	320	ePKP	47	27.00	3.6X
GRR	148.18	10	ePKP	47	26.60	3.6X
	0.8s	10.75nm				
LPF	148.49	10	ePKP	47	27.30	3.8X
	0.8s	5.35nm				
CDF	148.79	359	ePKP	47	28.70	4.5X
	0.6s	3.60nm				
HAU	149.19	1	ePKP	47	29.80	5.1X
	0.6s	3.60nm				
LOR	149.83	4	ePKP	47	31.00	5.3X
	1.0s	6.00nm				
SSF	150.01	5	ePKP	47	31.80	5.9X
	0.8s	4.70nm				
LBF	150.12	4	ePKP	47	31.90	5.7X
	0.8s	4.05nm				
AVF	150.27	5	ePKP	47	31.80	5.5X
	0.6s	1.80nm				
SMF	150.45	4	ePKP	47	32.30	5.7X
	0.8s	4.05nm				
BGF	150.45	6	ePKP	47	32.50	5.9X
	0.8s	5.35nm				
LSF	150.61	8	ePKP	47	33.20	6.3X
	0.8s	4.05nm				
TCF	150.66	7	ePKP	47	32.70	5.7X
	0.8s	2.70nm				
MAF	150.76	6	ePKP	47	33.20	6.1X
	0.8s	5.35nm				
BCAO	162.99	223	ePKPd	47	40.20	-2.9X
	0.9s	5.00nm				
	S.D. = 1.5	on	20 of	49	obs.	

JUN 10, 1990 04h 43m 46.88± 2.61s
5.507 S ± 6.9km 150.882 E ±22.4km
DEPTH = 90.1 ± 23.0 km
4.7mb (7 obs.)
NEW BRITAIN REGION (192)

LAT	4.03	253	eP	44	49.00	1.6
KDB	5.40	223	eP	45	05.00	-1.5
CTA	15.18	197	iPc	47	26.90	9.3X
	1.2s	73.44nm			4.8mb	
QIS	18.54	215	iPc	47	58.70	-0.6
GUA	19.83	343	eP	48	13.30	0.2
	0.9s	134.45nm			5.3mb	
GUMO	19.89	343	eP	48	13.20	-0.5
	1.0s	100.00nm			5.1mb	
PJG	19.89	343	eP	48	13.10	-0.6
RMO	20.96	185	eP	48	24.60	0.0
			i	48	49.30	
WB5	21.50	227	iPd	48	29.90	-0.1
			i	48	41.00	
WRA	21.56	227	Pd	48	30.20	-0.4
	0.5s	14.20nm			4.6mb	
BRS	21.84	175	iPc	48	34.10	0.7
QLP	21.90	196	eP	48	34.50	0.6
CMS	26.28	190	eP	49	20.00	4.4X
	0.8s	5.00nm			4.1mb	
STK	27.64	197	eP	49	32.60	4.5X
	1.1s	8.00nm			4.2mb	
BWA	28.87	184	eP	49	44.30	5.2X
CAN	29.72	183	eP	49	51.50	4.8X
LZH	60.42	317	eP	53	50.00	0.5
	2.0s	23.00nm			4.9mb	
			pP	54	00.00	33kmX
			i	54	09.50	
BAO	151.88	139	ePKP	03	34.00	6.8X
	S.D. = 0.9	on	12 of	18	obs.	

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* JUN 10, 1990 04h 57m 39.96± 1.42s
31.094 S ± 8.7km 68.504 W ±14.4km
DEPTH = 10.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.24	173	iPd	57	45.80	0.7
RTCB	0.47	213	iPd	57	48.50	-1.0
ZON	0.47	198	eP	57	50.00	0.4
CFA	0.56	156	iPd	57	50.30	-1.0
RTRS	1.24	318	iPd	58	02.90	0.0
MDZ	1.81	189	iP	58	12.20	0.8
			iS	58	34.80	
	S.D. = 1.0	on	6 of	6	obs.	

? JUN 10, 1990 04h 57m 52.79± 5.76s
5.957 S ±37.0km 150.544 E ±39.6km
DEPTH = 118.1 ± 23.1 km
4.6mb (1 obs.)
NEW BRITAIN REGION (192)

LAT	3.59	259	eP	58	48.00	0.3
KDB	4.84	224	eP	59	04.00	-0.7
QIS	17.98	215	iPc	01	57.40	0.6
RMO	20.49	185	iPc	02	23.00	-0.3
WB5	20.95	227	iPd	02	28.10	0.1
WRA	21.01	227	Pd	02	28.50	-0.1
	0.4s	11.90nm			4.6mb	
QLP	21.38	196	eP	02	33.00	0.8
COOL	37.09	224	eP	04	53.10	-0.3
KLB	39.88	226	eP	05	16.30	-0.3
BAO	151.76	140	e(PKP)	17	27.00	-2.4X
	S.D. = 0.6	on	9 of	10	obs.	

& JUN 10, 1990 05h 00m 54.60s
62.361 N 124.292 W
DEPTH = 10.0km (geophysicist)
5.1mb (50 obs.) 4.6Msz (3 obs.)
NORTHWEST TERRITORIES, CANADA (679)
<PGC>. ML 5.6 (PGC). Felt at Fort Simpson.

YKR1	4.35	84	eP	02	00.50	-1.7
YKA	4.51	84	P	02	02.70	-1.7
WHC	5.42	257	eP	02	16.60	-0.8
HYT	6.49	262	Pc	02	32.00	-0.6
DWY	7.05	291	P	02	38.50	-1.8
INK	7.10	331	eP	02	38.00	-3.0
SIT	7.70	231	eP	02	48.40	-1.0
TOA	10.20	278	eP	03	25.30	1.2
FBA	10.73	294	eP	03	30.20	-1.0
EDM	10.85	143	iPd	03	27.90	-5.0
PMR	11.68	277	eP	03	45.30	1.1
	0.7s	144.30nm			6.4mb	X
PHC	11.81	190	eP	03	43.60	-2.3
WHB	12.29	176	eP	03	50.00	-2.4
CBB	12.37	183	eP	03	52.10	-1.4
GDR	12.65	185	eP	03	56.40	-0.7
WPB	12.75	177	eP	03	57.20	-1.3
SHB	12.80	179	eP	03	58.10	-1.2
BIB	13.00	177	eP	04	00.70	-1.1
HNB	13.15	175	eP	04	01.90	-1.9
IMA	13.24	299	eP	04	04.30	-0.8

PNT	13.33	167	eP	04	02.00	-4.2
MGB	13.40	181	eP	04	06.60	-0.6
VDB	13.42	174	eP	04	05.20	-2.2
MCW	13.74	176	P	04	11.40	-0.2
FFC	13.88	113	eP	04	06.00	-7.3
	0.8s	215.00nm				6.0mb
SES	14.02	143	P	04	10.00	-5.3
MBC	14.05	5	eP	04	10.50	-5.0
	0.5s	96.00nm				5.8mb
TTA	14.52	286	eP	04	22.10	0.3
NEW	14.69	161	P	04	22.10	-2.0
KDC	14.75	265	eP	04	25.40	0.7
SVW	14.82	279	eP	04	26.90	1.2
GMW	14.87	176	P	04	25.20	-1.2
LON	15.71	174	P	04	36.00	-1.4
BMW	15.93	177	P	04	38.40	-1.8
VGB	17.00	172	P	04	56.10	2.3
LRM	17.91	152	eP	05	03.10	-2.3
SDN	19.78	266	eP	05	27.20	-0.1
	0.8s	342.50nm				5.7mb
HPI	19.80	155	P	05	27.10	-1.0
PTI	20.75	155	P	05	38.50	0.6
BW06	21.46	149	P	05	45.80	0.6
FHC	21.59	179	eP	05	46.50	0.3
RSSD	21.75	138	P	05	47.10	-1.0
WDC	21.84	176	ePc	05	47.90	-0.8
MIN	22.11	175	ePc	05	51.60	0.1
ORV	22.90	174	eP	05	59.30	0.1
DUG	23.26	157	P	06	03.90	1.0
	0.7s	7.38nm				4.3mb
KVN	23.64	168	P	06	07.80	1.1
CMB	24.47	173	eP	06	14.80	0.3
BRK	24.55	176	ePc	06	16.50	1.3
FRB	24.63	62	ePd	06	16.00	0.3
TNP	24.69	167	P	06	17.90	1.0
PCC	24.92	176	ePc	06	19.20	0.5
MSU	25.01	157	P	06	21.70	1.8
ARN	25.10	175	P	06	20.90	0.4
MHC	25.10	175	ePc	06	21.10	0.4
GCC	25.40	176	ePc	06	23.80	0.5
GLD	25.42	144	P	06	26.30	2.6
GOL	25.42	144	P	06	26.00	2.1
	1.0s	25.00nm				4.9mb
FRI	25.55	171	ePc	06	25.30	0.5
SAO	25.68	175	ePc	06	27.00	1.0
LLA	25.85	174	eP	06	28.70	1.1
PRS	26.12	175	ePc	06	30.70	0.6
PRI	26.34	173	eP	06	34.00	1.7
GSC	27.49	167	eP	06	43.00	0.3
SYP	27.99	172	eP	06	47.00	-0.3
SBB	27.99	169	eP	06	48.00	0.7
MWC	28.43	169	eP	06	53.00	1.6
PAS	28.50	169	eP	06	53.00	1.2
RVR	28.73	168	eP	06	54.00	0.2
PLM	29.41	167	eP	07	01.00	0.8
ANMO	29.65	149	P	07	03.60	1.3
ALQ	29.65	149	eP	07	02.20	-0.1
	1.0s	19.50nm				4.9mb
SCH	29.96	78	P	07	04.00	-0.8
BAR	30.10	167	eP	07	07.00	0.9
GRQ	31.34	97	eP	07	16.70	-0.2
ELF	31.48	107	P	07	17.60	-0.6
DLA	31.63	108	P	07	19.80	0.3
LDN	31.66	107	P	07	19.30	-0.5
LNO	31.87	133	eP	07	20.10	-1.4
TUL	31.87	133	eP	07	20.30	-1.4
	0.7s	21.70nm				5.2mb
Z	19s	1.36um				4.7Msz
		LR	18	00.00		
MEO	31.98	138	e(P)	07	23.30	0.6
TRQ	32.23	97	eP	07	24.70	-0.1
DAQ	32.50	91	eP	07	27.50	0.4
DPQ	32.72	94	eP	07	29.20	0.3
RSNY	33.51	99	P	07	34.40	-1.5
	0.8s	6.14nm				4.6mb
UYO	33.91	132	iPd	07	38.30	-1.1
WNY	33.94	98	P	07	38.60	-1.0
CBM	34.70	90	P	07	46.10	0.0
KLN	35.58	88	eP	07	54.20	0.5
RSCP	35.99	120	P	07	54.90	-2.3
	1.0s	37.96nm				5.2mb
GBTN	36.48	118	P	07	59.60	-1.8
NAV	36.52	113	P	08	01.00	-0.7
PNJ	36.53	102	iP	08	03.20	1.6
GMTN	36.53	102	eP	08	02.10	0.4
TKL	36.67	118	P	08	02.00	-0.9
BLA	36.77	112	P	08	03.60	-0.2
	0.8s	16.78nm				4.9mb
LMN	37.05	88	eP	08	06.80	0.8
CBN	37.27	108	eP	08	07.00	-0.9
PRM	38.61	117	P	08	18.60	-0.6
JSC	38.90	116	P	08	21.00	-0.7
AKU	41.29	37	eP	08	45.10	4.2
	1.0s	12.00nm				4.6mb
MRX	45.52	149	(P)	09	18.50	2.7
KEV	46.62	13	eP	09	22.00	-1.9
PPM	46.78	146	(P)	09	29.50	3.2
SOD	48.86	14	iP	09	46.30	4.9
OXX	49.18	144	(P)	09	46.50	1.8
NAO	52.47	26	P	10	08.20	-0.8
	0.7s	10.80nm				4.9mb
SUF	53.26	16	iP	10	14.60	-0.3
	0.5s	13.80nm				5.2mb
HFS	53.67	25	eP	10	16.80	-1.1
	0.5s	6.70nm				4.9mb
Z	17s	0.20um				4.2MszX
		LR	30	25.00		
EKA	53.97	37	P	10	19.00	-1.1
	1.1s	16.60nm				5.0mb
UPP	54.66	22	iP	10	23.90	-1.2
NUR	55.18	18	iP	10	28.00	-1.0
	0.5s	14.00nm				5.2mb
WTS	59.62	33	eP	11	00.50	0.0
		e	11	18.00		
CN2	60.45	309	Pd	11	05.20	-1.1
ENN	60.52	34	eP	11	06.50	-0.1
	0.8s	24.00nm				5.4mb
		e	11	25.00		
FLN	60.56	39	eP	11	05.90	-1.0
	0.8s	10.75nm				5.0mb
MEM	60.69	34	P	11	07.60	-0.1
DOU	60.78	35	P	11	07.80	-0.6
GRR	60.78	40	eP	11	07.90	-0.6
	0.8s	8.05nm				4.9mb
LDF	60.82	39	eP	11	07.00	-0.9
	0.8s	10.75nm				5.0mb
LPF	61.05	40	eP	11	09.90	-0.3
	0.8s	13.45nm				5.1mb
MAT	61.62	295	iPc	11	13.90	-0.4
	0.8s	8.96nm				5.0mb
CLL	61.74	29	iPc	11	14.50	-0.4
	0.7s	12.00nm				5.2mb
		e	11	56.00		
MOX	62.04	30	eP	11	17.00	0.0
	1.4s	16.00nm				5.0mb
BRG	62.36	28	iPc	11	18.40	-0.6
	1.4s	24.00nm				5.2mb
		i	11	35.40		
MFF	62.60	40	eP	11	20.10	-0.6
	0.7s	6.60nm				4.9mb
GRF	62.83	31	iPd	11	22.50	0.3
	1.2s	27.00nm				5.3mb
Z	18s	0.20um				4.3Msz
SNY	62.84	309	eP	11	21.80	-0.5
KSP	62.89	27	iPd	11	22.00	-0.6
CDF	63.03	34	eP	11	23.60	-0.1
	0.8s	8.05nm				5.0mb
LOR	63.16	37	iPd	11	23.70	-0.7
	0.7s	9.90nm				5.1mb
HAU	63.16	35	eP	11	24.00	-0.4
	0.8s	5.35nm				4.8mb
SSF	63.25	37	iPd	11	24.50	-0.5
	0.6s	14.45nm				5.3mb
PRU	63.32	28	P	11	25.00	-0.4
LSF	63.41	39	iPd	11	25.30	-0.8
	0.8s	8.05nm				5.0mb
BSF	63.44	35	eP	11	25.80	-0.6
	1.0s	10.00nm				5.0mb
LBF	63.45	37	iPd	11	25.80	-0.6
	0.8s	5.35nm				4.8mb
AVF	63.45	37	iPd	11	25.60	-0.7
	0.8s	12.75nm				5.2mb
BGF	63.52	38	iPd	11	26.00	-0.8
	0.8s	18.80nm				5.3mb
TCF	63.58	38	iPd	11	26.50	-0.7
	0.8s	10.75nm				5.1mb
SMF	63.72	37	iPd	11	27.30	-0.8
	0.8s	80.50nm				6.0mb
WET	63.73	30	iPc	11	28.40	0.2
	0.7s	13.00nm				5.2mb
MAF	63.74	38	iPd	11	27.60	-0.7
	0.6s	2.70nm				4.6mb
KHC	63.91	29	iP	11	29.70	0.4
FUR	64.27	31	iPc	11	32.40	0.7
	0.7s	30.00nm				5.6mb
RJF	64.27	39	eP	11	30.60	-1.1
	0.8s	5.35nm				4.8mb
LFF	64.37	40	eP	11	32.00	-0.3
	0.6s	5.40nm				4.9mb
KRA	64.38	25	ePd	11	32.00	-0.3
	1.0s	68.00nm				5.8mb
		e	11	35.40		
LPO	64.73	40	iPd	11	34.40	-0.3
	0.8s	13.45nm				5.2mb
CAF	64.77	39	eP	11	34.50	-0.5
	0.8s	9.40nm				5.0mb
SQTA	65.13	32	iPd	11	37.70	0.3
	1.4s	35.40nm				5.4mb
		i	11	49.70		
SPC	65.27	25	eP	11	38.70	0.4
OGA	65.42	32	iPc	11	40.30	0.9
ZST	65.57	27	eP	11	40.40	0.4
VAI	65.78	34	P	11	41.00	-0.3
SOP	65.94	28	eP	11	44.70	2.3
FVI	66.10	31	P	11	44.20	0.8
MDI	66.10	33	P	11	41.00	-2.4
SRO	66.19	27	iP	11	46.00	2.0
CTI	66.34	32	P	11	45.00	-0.1
SAL	66.47	33	P	11	44.00	-1.8
BOB	66.97	34	P	11	50.00	0.8
TOL	67.41	46	eP	11	52.00	0.1
PTJ	67.49	29	eP	11	52.20	-0.2
MME	67.83	33	P	11	56.00	1.2
BDI	67.93	33	P	11	55.60	0.4
PII	68.23	34	P	12	02.50	5.6
SFI	68.38	33	P	12	02.00	4.2
PGD	68.39	33	P	12	02.50	4.3
BTO	68.52	318	eP	11	59.00	0.1
BZS	68.96	25	eP	12	02.00	0.6
ARV	69.05	32	P	12	03.50	1.5
ASS	69.38	32	P	12	04.50	0.4
MLR	69.88	22	eP	12	09.00	1.8
CMP	69.94	23	ePc	12	07.00	-0.4
TIA	70.13	311	eP	12	08.30	-0.4
CFR	70.55	20	eP	12	13.00	1.9
SDI	70.95	32	P	12	13.00	-0.7
WMQ	71.09	336	P	12	14.80	0.2
AVE	72.14	52	iP	12	20.00	-0.8
SKO	72.42	26	eP	12	23.00	0.6
		i	12	25.00		
GTA	72.55	326	P	12	23.80	0.4
IFR	72.76	50	iP	12	25.00	0.2
OHR	73.12	27	eP	12	27.00	0.4
ORI	73.14	30	P	12	27.50	0.8
NJ2	73.24	308	Pc	12	26.60	-0.7
VAY	73.28	25	eP	12	28.20	0.8
TDS	73.50	31	P	12	26.00	-2.7
TIO	74.32	53	iP	12	33.50	-0.3
LZH	74.54	321	Pd	12	35.00	0.0
	1.6s	49.00nm				5.3mb
Z	18s	0.60um				4.9Msz
XAN	74.87	316	P	12	35.70	-1.1
WHN	76.24	311	eP	12	45.00	0.5
BBTK	76.48	18	eP	12	47.00	1.1
CD2	79.39	319	eP	13	02.60	0.6
MAIO	81.63	357	eP	13	10.00	-3.9
GYA	82.61	315	P	13	19.60	0.5
PRNI	86.13	18	eP	13	38.00	1.3
GUN	86.84	334	P	13	42.00	1.3
GKN	87.01	335	P	13	42.20	1.0
PKI	87.27	334	P	13	43.20	0.5
DMN	87.29	334	P	13	43.50	0.8
	1.0s	71.00nm				5.9mb
ARE	88.77	130	eP	13	52.00	2.2
ZOBO	89.82	127	P	13	55.50	0.4
LPB	90.07	127	P	13	52.80	-3.3
CCH	91.58	126	P	14	04.40	1.5
CHG	92.19	320	eP	14	05.50	0.0
CHTO	92.19	320	eP	14	05.70	0.2
	1.0s	3.50nm				4.7mb
WRA	112.73	270	PKP	19	33.00	0.4
	0.7s	1.30nm				
KSR	138.76	41	ePKP	20	23.00	0.6
SLR	139.06	39	iPKPc	20	23.00	0.1
SWZ	139.49	44	ePKP	20	11.00	-12.6
SEK	141.28	42	ePKP	20	26.00	-0.8
CER	142.96	56	e(PKP)	20	22.50	-6.9
S8A	146.00	201	e(PKP)	20	35.00	1.7
SPA	152.20	180	ePKP	20	50.10	6.8
	0.8s	14.58nm				
	215 obs. associated					

? JUN 10, 1990 05h 41m 38.72± 0.97s
56.787 S ±22.8km 24.581 W ±21.8km
DEPTH = 33.0km (normal)
5.0mb (4 obs.)
SOUTH SANDWICH ISLANDS REGION (153)

SPA	33.39	180	eP	48	15.60	-0.3
	1.0s	16.50nm			4.9mb	
SWZ	45.96	71	eP	49	50.00	-10.3X
SEK	46.26	75	eP	50	10.00	7.3X
SLR	48.68	73	iPc	49	57.20	-24.5X
ITR	49.11	342	eP	50	21.30	-3.6X
BFT	49.65	75	eP	50	31.50	2.3X
	1.0s	12.00nm			4.9mb	
CCH	50.12	304	Pd	50	36.40	3.4X
LPB	51.76	303	iPc	50	44.00	-1.6
	1.0s	70.00nm			5.6mb	
ZOBO	52.00	303	iPc	50	50.80	3.2X
	Z 24s	0.13um			3.9MszX	
		eLR		08	24.00	
ARE	53.42	299	eP	51	00.00	2.2X
BUL	53.44	69	iPd	50	57.40	-0.3
KRI	56.73	68	iPc	51	27.50	5.8X
NNA	59.87	297	eP	51	44.50	1.0
	0.8s	10.45nm			5.0mb	
BCAO	70.34	46	iPd	52	53.00	2.0X
YKA	137.70	316	PKP	01	00.90	1.2
MBC	145.25	335	ePKP	01	16.00	3.4X
	1.4s	29.00nm				
INK	147.30	319	ePKPc	01	20.70	4.6X
	S.D. = 1.6	on	5 of	17	obs.	

? JUN 10, 1990 06h 39m 15.09± 1.50s
18.105 S ±20.8km 71.873 W ±16.8km
DEPTH = 10.0km (geophysicist)
4.8mb (2 obs.)
OFF COAST OF NORTHERN CHILE (121)

ARE	1.67	13	iPd	39	44.90	0.0
			iS	40	04.00	
LPB	3.93	67	Pc	40	20.30	3.1X
	1.0s	640.00nm				
ZOBO	4.02	64	iPc	40	26.40	7.8X
			S	41	56.00	
CCH	5.51	83	P	40	46.50	7.0X
			i	40	50.30	
PT03	5.56	317	eP	40	57.60	17.6X
			iS	41	37.70	
PT06	6.04	314	iP	40	05.80	-40.8X
			iS	41	49.90	
PT08	7.60	323	eP	41	08.10	-0.8
NNA	7.75	321	eP	41	12.00	1.3
	0.8s	7.46nm			4.9mb X	
			e	41	17.70	
			eS	42	41.50	
PT10	7.75	320	e(P)	41	17.00	6.2X
			e(S)	42	49.00	
BAO	22.98	87	eP	44	15.00	-6.2X
TUL	58.30	337	eP	49	11.10	-1.4
	1.0s	6.70nm			4.7mb	
LKQ	70.95	73	P	50	35.56	0.3
	0.5s	5.00nm			4.9mb	
SES	76.43	335	eP	51	07.00	0.5
YKA	87.09	342	P	52	01.90	0.0
MAT	147.77	311	ePKP	59	04.00	4.9X
	0.8s	10.45nm				
GBA	150.16	94	PKP	59	13.00	9.7X
	1.0s	12.30nm				
	S.D. = 1.1	on	7 of	16	obs.	

? JUN 10, 1990 07h 35m 02.66± 2.28s
17.554 N ±21.0km 99.247 W ±15.8km
DEPTH = 33.0km (normal)
GUERRERO, MEXICO (59)

III	0.84	346	iPd	35	16.50	-1.8
			iS	35	35.50	
PPM	1.62	21	eP	35	30.00	0.3
IIT	1.71	31	eP	35	30.50	-0.3
UNM	1.77	2	(P)	35	40.00	8.3X
			(S)	36	05.00	
IIJ	2.22	348	iP	35	40.00	1.7
			(S)	36	20.00	
OXX	2.46	101	eP	35	41.50	0.0
			iS	36	17.00	
MRX	2.82	320	eP	35	46.50	0.1
	S.D. = 1.5	on	6 of	7	obs.	

? JUN 10, 1990 08h 26m 57.52± 9.40s
41.107 N ±50.3km 19.381 E ±68.8km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)

KEK	1.43	167	ePb	27	23.50	0.0
EVR	2.87	139	iPnc	27	45.90	1.6
PLG	3.17	102	ePn	27	47.50	-1.0
NEO	3.45	120	ePg	28	01.50	9.1X
RDO	4.65	87	ePn	28	10.00	0.6
VLI	5.19	147	ePn	28	15.80	-1.2
	S.D. = 1.6	on	5 of	6	obs.	

? JUN 10, 1990 09h 25m 00.25± 1.18s
39.520 N ±14.5km 15.588 E ±41.6km
DEPTH = 282.6 ± 11.7 km
3.6mb (1 obs.)
SOUTHERN ITALY (390)

TDS	0.60	76	P	25	37.30	0.1
			eSn	26	01.50	
MGR	0.62	358	Pd	25	37.00	-0.2
			eSn	26	01.50	
ORI	0.86	50	P	25	38.00	-0.1
			eSn	26	03.50	
SGO	1.06	348	Pd	25	39.50	0.2
ATN	1.36	184	P	25	41.00	-0.1
			eSn	26	09.50	
SOI	1.49	166	P	25	42.00	0.1
			eSn	26	09.00	
HFS	20.67	357	eP	29	19.20	0.0
	0.4s	1.10nm			3.6mb	
	S.D. = 0.2	on	7 of	7	obs.	

JUN 10, 1990 10h 42m 38.71± 1.28s
5.880 N ± 6.9km 127.235 E ± 8.8km
DEPTH = 71.0 ± 12.6 km
4.6mb (8 obs.)
PHILIPPINE ISLANDS REGION (248)

DAV	2.04	306	eP	43	12.50	1.0
			eS	43	41.50	
MNI	5.01	209	ePc	43	52.00	-1.2
BAG	12.33	329	eP	45	38.50	5.1X
GUMO	18.98	65	eP	46	45.80	-11.7X
			eS	50	33.00	
PJG	18.98	65	eP	46	45.70	-11.8X
GUA	19.00	65	eP	46	45.70	-12.0X
			e	47	09.70	
MTN	19.00	168	eP	46	59.00	1.3
QIZ	21.40	309	eP	47	23.50	1.0
WB5	26.54	165	eP	48	11.50	-0.3
WRA	26.60	165	Pc	48	17.00	4.7X
	0.3s	5.90nm			4.6mb	
LOE	27.44	297	eP	48	19.00	-1.0
KMI	30.28	312	Pd	48	46.50	0.8
CHG	30.42	298	eP	48	46.80	0.1
CHTO	30.42	298	eP	48	45.90	-0.8
TSRJ	30.59	14	P	48	48.80	0.8
CHJJ	31.91	18	P	48	59.10	-0.5
MTMJ	32.06	16	eP	49	01.00	0.0
MAT	32.13	17	eP	49	01.00	-0.5
KAKJ	32.43	20	eP	49	02.20	-1.9
XAN	32.76	331	P	49	06.20	-0.9
NIIJ	33.01	17	eP	49	10.20	1.0
CD2	33.25	321	eP	49	11.00	-0.4
TIY	34.44	339	eP	49	20.50	-1.1
	Z 20s	0.38um			4.1Msz	
BJI	35.44	345	eP	49	29.50	-0.4
	0.8s	6.00nm			4.6mb	
LZH	36.94	328	Pc	49	43.00	0.1
	1.5s	42.00nm			5.1mb	
	Z 25s	0.50um			4.2MszX	
STK	39.97	161	iPc	50	11.00	3.0X
	0.8s	5.00nm			4.5mb	
GTA	41.54	327	iPc	50	22.00	1.0
	0.8s	10.00nm			4.7mb	
GUN	44.91	304	P	50	49.00	0.2
PKI	45.18	303	P	50	50.40	-0.5
DMN	45.44	303	P	50	52.60	-0.3
GKN	45.97	304	P	50	56.40	-0.5
GBA	49.60	283	P	51	26.00	0.9
	0.9s	5.60nm			4.6mb	
WMQ	51.28	324	iPd	51	38.40	0.7
NDI	52.39	302	iPd	51	45.00	-1.2
	0.6s	13.33nm			5.1mb	
MAIO	68.63	307	eP	53	26.00	-10.7X
SUF	89.88	333	eP	55	40.00	9.2X
NAO	97.36	334	P	56	07.60	2.4
	0.7s	1.10nm			4.5mb	
ZOBO	161.75	126	ePKP	02	46.00	11.9X
	S.D. = 1.0	on	29 of	38	obs.	

* JUN 10, 1990 10h 53m 28.66± 1.67s
5.844 N ± 7.0km 127.259 E ±15.1km
DEPTH = 73.9 ± 14.5 km
4.5mb (9 obs.)
PHILIPPINE ISLANDS REGION (248)

DAV	2.08	307	eP	54	03.00	0.9
			eS	54	31.70	
MNI	4.99	209	ePd	54	42.00	-0.8
MTN	18.96	168	eP	57	47.00	0.0
GUMO	18.97	65	eP	57	13.80	-33.3X
			e	57	46.20	
PJG	18.97	65	eP	57	14.00	-33.1X
QIZ	21.44	309	P	57	53.90	-18.7X
WB5	26.50	165	eP	59	00.20	-0.9
			e	59	06.30	
WRA	26.56	165	Pd	59	02.00	0.4
	0.5s	2.10nm			3.9mb	
LOE	27.47	297	eP	59	09.00	-1.0
KMI	30.32	312	Pd	59	36.50	0.8
KMI	30.32	312	Pd	59	26.50	-9.2X
CHG	30.45	298	eP	59	36.20	-0.5
CHTO	30.45	298	eP	59	36.50	-0.2
	0.6s	2.53nm			4.1mb	
NANU	30.48	202	eP	59	37.00	0.2
MAT	32.16	17	(P)	59	51.00	-0.4
XAN	32.80	331	P	59	56.50	-0.6
MEKA	33.35	194	eP	00	01.50	-0.4
TIY	34.48	339	eP	00	09.40	-2.2
BJI	35.48	345	eP	00	25.00	5.1X
	0.8s	6.00nm			4.6mb	
LZH	36.98	328	Pc	00	33.50	0.6
	2.0s	57.00nm			5.2mb	
	Z 25s	0.50um			4.2MszX	
HHC	37.58	340	eP	00	39.50	1.7
KLB	38.31	193	eP	00	44.70	0.8
MUN	39.06	195	iPd	00	51.00	0.9
STK	39.93	161	iPd	00	59.50	2.2X
	0.7s	4.00nm			4.5mb	
GTA	41.59	327	P	01	12.00	1.0
	0.8s	10.00nm			4.7mb	
BWA	44.76	155	eP	01	39.10	2.4X
CAN	45.77	155	e(P)	01	50.40	5.7X
GBA	49.63	283	P	02	16.00	1.0
	0.6s	3.00nm			4.5mb	
WMQ	51.32	324	P	02	25.80	-1.8
NDI	52.43	302	iPd	02	35.00	-1.1
	0.5s	12.68nm			5.2mb	
SUF	89.92	333	eP	06	23.00	2.4X
NAO	97.40	334	P	06	56.80	1.8
	0.7s	1.10nm			4.5mb	
KSP	98.48	323	eP	06	47.00	-13.1X
			e	07	11.00	
BRG	99.86	324	i(P)	07	19.20	12.8X
ZOBO	161.71	126	PKP	13	35.00	11.4X
	S.D. = 1.1	on	23 of	35	obs.	

JUN 10, 1990 11h 25m 40.06± 0.74s
18.166 S ±10.0km 69.594 W ± 6.9km
DEPTH = 132.4 ± 10.1 km
4.9mb (2 obs.)
NORTHERN CHILE (123)

LPB	2.16	42	iPd	26	15.60	-1.4
	1.0s	412.00nm				
			i	26	38.50	
ZOBO	2.35	37	iPd	26	23.00	3.4X
ARE	2.48	313	iPc	26	24.00	3.0X
			iS	26	54.20	
CCH	3.38	77	iPc	26	34.50	1.8
ANT	5.56	188	eP	27	01.50	-0.3
			iS	38	01.80	
PT03	7.26	304	iP	27	24.50	-0.5
			iS	28	40.80	
PT06	7.78	303	iP	27	32.20	0.2
			iS	28	53.30	
SIV	8.43	76	P	27	37.60	-3.1X
PT08	9.12	312	iPd	27	51.00	0.7
			eS	29	25.80	

NNA	9.31	310	iPd	27	52.50	0.0
	0.4s		11.02nm			4.9mb
			eS	29	23.50	
BAO	20.82	86	eP	30	12.00	-0.9
LIC	68.13	75	P	36	28.20	0.1
KIC	68.44	75	Pc	36	30.20	0.1
LKO	68.90	72	Pc	36	33.12	0.2
	0.4s		7.50nm			4.9mb
	S.D. = 1.0		on 11 of 14 obs.			

JUN 10, 1990 11h 36m 45.28± 0.50s
41.252 N ± 3.3km 29.328 E ± 3.8km
DEPTH = 17.8 ± 4.8 km
3.9mb (22 obs.)
TURKEY (366)
ML 4.1 (ATH). Felt in the Istanbul orea.

ISK	0.28	228	iPg	36	50.00	-1.5
ITU	0.28	238	iPgc	36	52.00	0.5
GBZT	0.47	169	iPgc	36	55.90	1.1
			iSg	37	02.20	
HRT	0.50	149	iPg	36	54.00	-1.3
YLV	0.69	177	iPg	36	56.90	-1.6
GPA	1.22	142	iPg	37	01.90	-5.5X
EDC	1.43	231	iPn	37	11.90	1.5
KGT	1.73	243	iPn	37	14.40	-0.3
ALT	2.27	164	iPn	37	23.70	1.0
JMB	2.38	302	ePd	37	25.00	0.9
ALN	2.51	263	ePd	37	25.70	-0.2
PSN	2.57	341	ePc	37	26.00	-0.8
			PP	37	29.00	
RDO	2.86	269	iPgd	37	31.00	0.1
			eSb	37	39.00	
KHL	2.93	177	iPn	37	31.50	-0.4
DIM	2.95	287	iPc	37	32.00	-0.2
KDZ	2.97	279	iPd	37	33.00	0.6
BBTK	2.97	117	ePn	37	32.00	-0.5
			ePg	37	39.00	
			eSg	38	39.00	
CVD	3.22	343	eP	37	40.00	4.0X
IZM	3.26	210	iPn	37	35.50	-1.2
KAS	3.35	86	iPgd	37	37.20	-0.7
RZN	3.49	279	iPd	37	40.00	-0.1
PVL	3.56	305	iPd	37	42.00	1.2
PLD	3.57	285	iPd	37	40.00	-0.9
CIN	3.77	195	ePg	37	43.00	-0.8
BCK	3.91	165	iPn	37	46.60	0.7
BUC1	3.93	323	eP	38	12.00	26.0X
BUC	3.95	324	iPd	38	00.00	13.7X
CFR	4.02	348	eP	37	48.00	0.7
SMG	4.03	209	ePn	37	59.40	12.0X
PGB	4.06	290	iPd	37	48.00	0.0
OUR	4.16	259	eP	37	31.60	-17.7X
YER	4.19	192	iPn	37	51.00	1.1
MMB	4.22	276	ePd	37	50.00	-0.3
SRS	4.33	270	eP	37	48.60	-3.2X
PAIG	4.50	255	ePc	37	54.40	0.2
ELL	4.52	174	iPn	37	55.50	0.9
SOH	4.54	267	iPc	37	51.60	-3.2X
VTS	4.76	288	iPd	37	57.00	-1.0
			iSg	39	15.00	
KNT	4.85	271	ePd	37	59.00	-0.2
			eS	38	53.10	
THE	4.86	265	eP	37	59.80	0.6
MLR	4.90	331	eP	38	00.00	0.0
VRI	4.99	339	ePc	38	05.00	4.0X
MTUR	5.05	323	iPd	38	02.50	0.5
DRA	5.06	314	eP	38	10.00	8.0X
NEO	5.06	249	ePb	38	05.00	2.9
CMP	5.09	323	iPc	38	01.00	-1.5
VAY	5.09	273	iPn	38	02.70	0.2
PPE	5.12	347	ePc	38	03.00	0.2
GRG	5.24	269	ePd	38	03.80	-0.9
LIT	5.32	260	eP	38	19.30	13.4X
ATH	5.43	235	ePn	38	05.20	-2.2
CLI	5.50	345	iPd	38	08.00	-0.3
AGG	5.81	250	ePc	38	21.90	9.2X
SKO	5.96	280	iPn	38	14.80	0.1
			iPg	38	42.50	
			iSn	39	28.80	
			iSb	39	49.60	
			Lg	40	15.00	
FNA	6.03	268	iPc	38	15.10	-0.8
PTT	6.06	341	eP	38	09.00	-7.2X
IAS	6.07	349	eP	38	15.00	-1.3
OHR	6.44	272	iPn	38	22.00	0.4
DEV	6.57	317	iPc	38	17.50	-5.9X
VLI	6.73	230	iPnc	38	24.50	-1.1
LFK	6.82	150	eP	38	28.50	1.5
ITM	7.04	237	ePn	38	30.00	0.0
IGT	7.08	259	ePc	38	32.00	1.5
			eS	39	50.60	
BZS	7.11	310	ePc	38	28.50	-2.4
BEO	7.41	302	ePn	38	33.20	-2.0
KEK	7.43	261	ePn	38	34.00	-1.4
TTG	7.61	282	ePn	38	41.00	3.1X
			eSn	39	58.00	
SOI	10.71	257	P	39	28.00	7.2X
KHC	13.60	311	eP	40	00.00	0.4
CLL	15.08	317	eP	40	16.00	-3.0X
LPG	16.94	292	eP	40	45.90	2.8
	0.8s		4.70nm			3.7mb
LPL	16.95	292	eP	40	45.90	2.7
	0.8s		2.70nm			3.4mb
LBF	19.04	296	eP	41	09.50	0.7
	0.8s		4.05nm			3.7mb
SMF	19.09	295	eP	41	10.40	1.0
	0.8s		5.35nm			3.8mb
LOR	19.16	297	eP	41	11.10	0.8
	0.8s		4.05nm			3.7mb
DOU	19.34	306	P	41	13.50	1.1
	0.7s		2.20nm			3.5mb
SSF	19.37	296	eP	41	11.90	-0.9
	0.8s		3.35nm			3.7mb
AVF	19.44	295	eP	41	13.80	0.2
	0.8s		2.70nm			3.6mb
NUR	19.50	353	eP	41	11.00	-3.1X
BGF	19.76	294	eP	41	18.00	0.9
	0.8s		6.70nm			4.0mb
MAF	19.92	293	eP	41	18.70	-0.1
	0.6s		3.60nm			3.9mb
UPP	20.00	343	iP	41	20.70	1.3
LSF	20.64	293	eP	41	25.50	-0.8
	0.8s		6.70nm			4.1mb
LPO	20.83	289	eP	41	28.40	0.1
	0.8s		12.10nm			4.3mb
LFF	21.15	290	eP	41	31.40	-0.1
	0.6s		4.50nm			4.1mb
HFS	21.24	338	eP	41	33.50	1.3
	0.5s		2.30nm			3.8mb
SUF	21.58	356	iP	41	34.80	-0.9
MFF	21.82	294	eP	41	38.40	0.2
	0.6s		5.40nm			4.1mb
LDF	22.01	299	eP	41	39.10	-1.0
	0.6s		7.20nm			4.3mb
FLN	22.27	300	eP	41	41.10	-1.6
	0.6s		3.60nm			4.0mb
GRR	22.47	299	eP	41	44.00	-0.6
	0.6s		5.40nm			4.2mb
LPF	22.55	298	eP	41	44.40	-1.0
	0.6s		3.60nm			4.0mb
NAO	22.63	336	P	41	44.60	-1.6
	0.8s		2.40nm			3.7mb
MAIO	23.97	92	eP	42	05.00	5.5X
EKA	25.51	315	P	42	15.00	1.0
	0.9s		3.60nm			4.0mb
SOD	26.22	358	iP	42	22.70	2.3
LKO	44.11	234	(P)	44	53.92	-0.4
	0.7s		5.50nm			4.5mb
	S.D. = 1.2		on 78 of 97 obs.			

& JUN 10, 1990 11h 40m 52.55s
63.067 N 149.360 W
DEPTH = 86.6km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.15	235	iP	41	04.83	1.4
			Sn	41	13.95	
MCK	0.69	16	eP	41	09.06	0.1
			eS	41	21.38	
KTH	0.86	305	iP	41	10.55	-0.2
			eS	41	24.09	
GHO	1.32	171	eP	41	16.13	-0.1
			eS	41	34.74	
SML	1.35	159	iP	41	16.43	-0.2
			iS	41	35.96	
PWA	1.44	190	iP	41	17.70	0.0
PLRM	1.48	176	eP	41	18.15	-0.1
SKT	1.48	224	iP	41	17.55	-0.8
WRH	1.52	21	iP	41	18.35	-0.4
			iS	41	37.16	
NEA	1.52	5	eP	41	18.06	-0.7
SCM	1.56	142	eP	41	18.08	-1.3
NCA	1.59	131	eP	41	19.14	-0.7
CCB	1.73	23	eP	41	20.91	-0.6
			iS	41	43.00	
DDM	1.73	64	eP	41	21.93	0.3
SUA	1.73	203	eP	41	21.81	0.1
TOA	1.76	122	iP	41	22.59	0.5
PAX	1.78	91	eP	41	22.61	0.3
			eS	41	45.75	
PMS	1.83	183	eP	41	23.80	0.8
SDG	1.84	105	eP	41	22.94	-0.1
FBA	1.97	20	eP	41	24.17	-0.5
GLM	2.11	23	eP	41	26.18	-0.6
NCG	2.12	219	eP	41	26.52	-0.4
CGLM	2.16	216	eP	41	27.70	0.3
CRP	2.23	217	eP	41	28.77	0.3
KLU	2.25	133	eP	41	27.68	-1.0
SPU	2.28	215	eP	41	29.52	0.5
VLZ	2.41	142	eP	41	28.96	-1.7
VZW	2.41	146	eP	41	29.59	-1.2
GLI	2.44	153	eP	41	29.70	-1.5
SLKM	2.60	189	eP	41	33.53	0.1
	30 obs. associoted					

% JUN 10, 1990 12h 37m 34.57± 1.06s
60.237 N ± 6.4km 5.588 E ±13.0km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 1.3 (BER).

BER	0.19	319	eP	37	39.08	0.3
			iS	37	41.87	
ASK	0.31	322	eP	37	40.99	-0.1
			eS	37	44.87	
SUE	0.92	334	eP	37	51.91	-0.2
			eS	38	03.90	
HYA	0.98	17	iPc	37	53.16	0.1
			iS	38	06.51	
KMY	1.04	190	eP	37	54.21	0.0
			eS	38	07.25	
	S.D. = 0.2		on 5 of 5 obs.			

* JUN 10, 1990 13h 23m 50.24± 2.93s
34.639 N ±27.4km 24.347 E ±11.4km
DEPTH = 10.0km (geophysicist)
CRETE (370)
ML 4.0 (ATH).

VAM	0.78	351	iPgc	24	05.00	-0.4
VLI	2.37	331	ePn	24	30.50	0.7
ITM	3.21	323	ePn	24	40.00	-1.7
ATH	3.37	351	ePn	24	42.60	-1.3
SMG	3.67	33	ePn	24	48.60	0.4
KSL	4.53	69	ePn	25	00.50	0.2
VLS	4.65	320	ePn	25	03.20	1.0
NEO	4.75	349	ePn	25	05.00	1.5
BCK	5.79	59	eP	25	17.80	-0.5
VAY	6.82	349	eP	25	41.40	8.7X
	S.D. = 1.2		on 9 of 10 obs.			

& JUN 10, 1990 14h 03m 12.39s
60.114 N 152.829 W
DEPTH = 115.7km
SOUTHERN ALASKA (2)
<AGS-P>.

RED	0.31	5	iP	03	28.38	0.8
			eS	03	41.33	
NNL	0.77	95	iP	03	32.40	0.2
AUL	0.80	203	eP	03	31.65	-0.7
AUE	0.81	200	eP	03	31.47	-1.0
XLV	0.87	139	eP	03	32.08	-1.0
CNPM	1.00	126	iP	03	33.77	-0.6
			eS	03	50.03	
NKA	1.01	51	eP	03	35.74	1.3
SPU	1.14	19	iP	03	35.38	-0.5
			iS	03	53.20	
CRP	1.20	16	eP	03	36.40	-0.3
			eS	03	54.80	
MCNL	1.21	220	eP	03	35.02	-1.5
CDD	1.26	200	eP	03	35.58	-1.6
CGLM	1.26	18	iP	03	36.86	-0.4
			eS	03	55.43	
NCG	1.34	14	eP	03	38.08	0.0
SLKM	1.36	72	eP	03	37.31	-1.0
SEW	1.69	89	eP	03	40.98	-1.2
SUA	1.70	36	eP	03	41.99	-0.5

10d 14h

			eS	04 04.97		
PMS	1.97	53	eP	03 44.88	-0.9	
SKT	1.98	18	iP	03 45.02	-0.8	
PWA	2.11	42	eP	03 46.76	-0.7	
PLRM	2.34	49	eP	03 48.55	-1.9	
GHO	2.53	47	eP	03 51.26	-1.8	
VZW	3.24	70	eP	04 01.39	-1.1	
VLZ	3.36	70	eP	04 01.52	-2.5	
KTH	3.57	14	eP	04 05.32	-1.6	
KLU	3.66	65	eP	04 05.87	-2.3	

25 obs. associated

& JUN 10, 1990 14h 48m 30.50s
60.475 N 145.187 W
DEPTH = 14.1km
SOUTHERN ALASKA (2)
<AGS-P>.

SGAM	0.03	339	iP	48 33.04	-0.2	
			eS	48 35.81		
RAGM	0.27	109	iP	48 36.22	-0.3	
			eS	48 41.98		
CVA	0.29	285	iP	48 36.63	-0.1	
HIN	0.66	264	eP	48 42.13	-1.1	
			Sn	48 54.13		
VLZ	0.87	320	eP	48 45.58	-1.2	
VZW	0.89	312	eP	48 46.19	-1.1	
			iS	48 59.52		
GLI	1.02	294	iP	48 48.34	-1.1	
			iS	49 03.51		
KLU	1.08	341	iP	48 48.98	-1.5	
			eS	49 04.50		
WAX	1.16	90	iP	48 50.35	-1.5	
			eS	49 06.79		
TGL	1.20	75	eP	48 50.62	-1.9	
			eS	49 07.66		
MID	1.20	209	eP	48 51.98	-0.5	
CYK	1.40	105	eP	48 53.73	-1.8	
			Sn	49 13.21		
BALM	1.50	67	eP	48 55.35	-1.8	
			iS	49 15.65		
TOA	1.70	344	iP	48 59.46	-0.5	
SCM	1.71	324	eP	48 58.80	-1.3	
			eS	49 20.71		
SML	2.03	313	iP	49 04.22	-0.4	
			eS	49 28.81		
SDG	2.07	355	iP	49 04.43	-0.8	
PLRM	2.22	302	eP	49 06.44	-0.9	
GHO	2.23	307	eP	49 06.59	-1.1	
PMS	2.28	292	eP	49 06.94	-1.3	
PAX	2.51	357	eP	49 11.03	-0.5	
SUA	2.89	293	eP	49 15.00	-1.9	
SKT	3.42	299	eP	49 22.16	-2.2	

23 obs. associated

JUN 10, 1990 15h 11m 52.69± 0.79s
0.008 N ± 6.0km 123.322 E ± 8.9km
DEPTH = 172.3 ± 9.3 km
4.7mb (6 obs.)
MINAHASSA PENINSULA (265)

MNI	2.08	47	ePd	12 30.90	0.4	
MKS	6.46	216	iPc	13 26.50	0.0	
MTN	14.93	149	eP	15 16.00	-0.6	
WB5	22.53	152	eP	16 38.30	-0.6	
WRA	22.58	152	P	16 40.00	0.7	
	0.2s		3.20nm		4.5mb	
QIZ	23.07	326	P	16 45.30	1.2	
QIS	25.91	143	iPc	17 10.20	-0.5	
CHTO	30.36	309	eP	17 49.60	-1.0	
	0.8s		9.70nm		4.6mb	
GYA	30.81	330	P	17 55.00	0.5	
CD2	35.91	331	eP	18 38.20	0.1	
XAN	36.45	340	P	18 42.70	0.0	
TIY	38.84	346	eP	19 03.20	0.5	
MAT	38.89	19	iPc	19 01.40	-1.6	
LZH	40.21	335	Pc	19 14.50	0.5	
	2.0s		46.00nm		4.8mb	
BWA	41.54	148	eP	19 28.80	4.0X	
CAN	42.53	148	eP	19 33.90	1.1	
GTA	44.72	334	P	19 50.40	-0.1	
	1.0s		20.00nm		4.6mb	
MDJ	44.76	6	eP	19 50.20	-0.4	
GUN	45.36	311	P	19 55.60	-0.4	
PKI	45.54	310	P	19 56.80	-0.6	
DMN	45.79	310	P	19 58.80	-0.5	
GKN	46.35	310	P	20 02.80	-0.8	
	0.7s		39.00nm		5.1mb	
WMQ	53.95	329	eP	21 10.50	9.6X	
MLR	95.18	316	eP	25 00.00	2.1	
HFS	99.67	331	ePKP	25 14.20	-3.5X	
	1.1s		4.80nm		4.9mb	

S.D. = 0.9 on 22 of 25 obs.

JUN 10, 1990 15h 23m 50.71± 0.76s
42.941 N ± 9.3km 21.330 E ± 6.4km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.5 (TTG).

SKO	0.97	175	iPg	24 08.00	-1.2	
			i	24 17.00		
			iSg	24 22.00		
IVA	1.05	267	ePn	24 09.90	-0.7	
			eSg	24 23.50		
PVY	1.06	251	ePn	24 09.50	-1.2	
			eSg	24 22.50		
VTS	1.43	104	iPc	24 17.00	0.2	
			iSg	24 35.00		
PLE	1.47	286	ePg	24 18.60	1.3	
			eSg	24 37.00		
TTG	1.61	252	ePg	24 19.60	0.4	
			eSg	24 40.00		
VAY	1.86	150	iPn	24 22.70	-0.2	
OHR	1.87	192	iPn	24 25.00	1.9X	
BEO	1.98	342	ePn	24 29.50	4.9X	
			e(Sg)	25 00.00		
BRY	2.05	270	ePn	24 27.50	1.8	
			eSn	24 54.00		
BZS	2.68	4	ePc	24 33.00	-1.7	
RZN	2.81	115	eP	24 38.00	1.4	
			iSg	25 21.00		

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

% JUN 10, 1990 15h 25m 29.16± 0.89s
45.672 N ± 8.1km 26.860 E ± 8.1km
DEPTH = 10.0km (geophysicist)
ROMANIA (358)

VRI	0.22	334	iPc	25 33.50	-0.4	
ISR	0.58	203	ePc	25 42.00	1.1	
MLR	0.67	255	eP	25 42.00	-0.5	
PPE	0.76	44	eP	25 45.00	1.0	
CLI	0.93	18	iPd	25 44.50	-2.4X	
CFR	1.03	118	iPc	25 47.50	-1.1	
TLB	1.36	142	iPc	25 52.00	-2.2X	

S.D. = 1.4 on 5 of 7 obs.

JUN 10, 1990 15h 58m 50.30± 0.37s
43.650 N ± 8.4km 148.545 E ± 5.1km
DEPTH = 47.6km (3 depth phases)
4.8mb (33 obs.) 4.1Msz (1 obs.)
KURIL ISLANDS REGION (222)

MAT	10.63	232	(P)	01 20.00	-2.8X	
	0.8s		9.70nm		5.0mb	
			(S)	03 18.00		
CN2	16.69	279	eP	02 43.00	0.8	
	Z 15s		0.60um			
	N 12s		0.30um			
	E 12s		0.10um			
			epP	02 47.50		
			eS	05 48.00		
BJI	24.30	273	eP	04 03.50	-0.7	
	1.2s		42.00nm		4.8mb	
	Z 16s		0.29um		3.9MszX	
TIA	25.11	264	eP	04 11.60	-0.4	
HHC	27.37	277	P	04 33.00	0.0	
TIY	27.87	270	eP	04 37.40	0.0	
	Z 16s		0.48um		4.2MszX	
			eS	09 13.00		
BTO	28.57	277	eP	04 43.00	-0.8	
XAN	32.06	266	eP	05 14.00	-0.7	
ANM	33.09	35	e(P)	05 23.00	-0.3	
LZH	34.79	273	Pc	05 38.00	-0.4	
	1.5s		49.00nm		5.2mb	
	Z 18s		0.30um		4.1Msz	
			pP	05 51.00	50km	
GTA	36.31	280	P	05 50.80	-0.4	
	1.2s		20.00nm		4.9mb	
TTA	36.87	39	eP	05 55.10	-0.5	
SVW	36.94	42	eP	05 56.90	0.7	
CD2	37.40	265	eP	06 00.20	-0.2	
GYA	37.88	257	P	06 04.60	0.1	
IMA	38.20	34	eP	06 07.20	0.4	
	1.2s		27.70nm		5.0mb	
PMR	40.07	41	P	06 21.80	-0.3	
FBA	40.58	36	eP	06 26.70	0.3	
KMI	41.49	259	eP	06 35.50	1.0	
WMQ	43.07	292	iPc	06 47.50	0.4	
INK	45.98	30	eP	07 10.00	0.1	
CHTO	48.23	255	eP	07 29.30	1.0	
	1.0s		4.75nm		4.5mb	
			pP	07 42.30	48km	
YKA	55.32	34	P	08 20.20	-0.8	
NDI	57.82	280	eP	08 39.00	-0.2	
SUF	64.45	334	eP	09 21.00	-2.6	
WB5	64.54	195	eP	09 24.00	-0.5	
WRA	64.61	195	Pc	09 24.70	-0.3	
	0.4s		0.50nm		3.9mb	
LRM	65.66	49	eP	09 31.80	-0.1	
CMB	65.71	60	ePd	09 32.60	0.5	
KVN	66.52	58	P	09 37.50	0.1	
NUR	66.58	333	eP	09 35.00	-2.2	
TNP	67.66	58	P	09 44.80	0.1	
	0.7s		3.33nm		4.5mb	
BW06	69.19	50	P	09 53.50	-0.6	
	0.6s		1.16nm		4.0mb	
HFS	70.17	338	eP	09 57.20	-2.2	
	0.6s		9.10nm		4.9mb	
NAO	70.34	340	P	09 58.70	-1.8	
	0.7s		6.90nm		4.7mb	
RSSD	71.30	47	P	10 06.00	-0.9	
KRA	76.47	329	iPd	10 36.70	0.3	
CLL	77.86	333	iPc	10 44.20	0.1	
	0.8s		15.00nm		5.1mb	
PRU	78.47	332	P	10 47.50	0.0	
EKA	78.51	344	Pc	10 47.90	0.3	
	0.7s		3.40nm		4.4mb	
KHC	79.53	332	iP	10 53.50	0.2	
GRF	79.84	333	iPc	10 56.40	1.5	
	0.8s		13.00nm		4.9mb	
SOTA	81.99	332	iPc	11 06.70	0.3	
	0.6s		8.30nm		4.9mb	
			i	11 20.00	45km	
CDF	82.21	335	eP	11 07.60	0.1	
	0.8s		5.35nm		4.6mb	
BSF	82.87	335	eP	11 10.50	-0.5	
FLN	84.04	340	eP	11 16.80	0.1	
	0.8s		8.05nm		4.8mb	
LDF	84.10	340	eP	11 17.20	0.1	
	0.8s		5.35nm		4.7mb	
LOR	84.25	337	eP	11 17.90	0.1	
	0.8s		8.05nm		4.8mb	
LBF	84.47	336	eP	11 19.00	0.0	
	0.8s		4.05nm		4.6mb	
GRR	84.48	340	eP	11 19.50	0.6	
	0.8s		10.75nm		5.0mb	
SSF	84.53	337	eP	11 19.50	0.2	
	0.8s		5.35nm		4.7mb	
SMF	84.82	336	eP	11 21.10	0.4	
	0.8s		8.05nm		4.9mb	
AVF	84.82	337	eP	11 21.10	0.4	
	0.8s		4.05nm		4.6mb	
LPF	84.86	340	eP	11 21.60	0.8	
	0.8s		8.05nm		4.9mb	
LPL	84.95	334	eP	11 22.50	0.8	
	0.6s		3.60nm		4.7mb	
LPG	84.97	334	eP	11 22.70	0.9	
	0.6s		5.40nm		4.9mb	
BNH	85.25	27	P	11 22.50	-0.4	
MAF	85.57	337	eP	11 25.60	1.1	
	0.8s		11.00nm		5.1mb	
TCF	85.61	337	eP	11 25.40	0.7	
	0.9s		3.30nm		4.5mb	
LSF	85.83	338	eP	11 26.40	0.6	
	0.8s		7.40nm		5.0mb	
MFF	85.95	339	eP	11 27.10	0.7	
	0.8s		8.05nm		5.0mb	
CAF	86.89	337	eP	11 32.20	1.1	
	0.8s		5.35nm		4.8mb	
LFF	87.25	338	eP	11 33.80	1.1	
	0.8s		8.05nm		5.0mb	

S.D. = 0.8 on 62 of 63 obs.

• JUN 10, 1990 16h 18m 02.71± 0.77s
53.044 N ±16.2km 170.995 E ± 8.5km
DEPTH = 33.0km (normal)
4.9mb (4 obs.)
NEAR ISLANDS, ALEUTIAN ISLANDS (5)

SMY	1.91	98	eP	18	33.40	-0.1
			e(S)	18	58.00	
IMA	21.76	40	eP	22	53.00	0.0
SOD	56.97	344	eP	27	47.00	0.4
SUF	61.31	342	iP	28	16.80	0.0
	0.5s		5.80nm		5.0mb	
NUR	63.64	342	eP	28	31.00	-1.2
GUN	65.38	284	P	28	44.60	0.2
NAO	65.38	349	P	28	43.20	-0.3
	0.6s		5.80nm		4.9mb	
HFS	65.71	348	eP	28	44.70	-0.9
	0.4s		8.60nm		5.2mb	
PKI	65.90	284	P	28	47.60	-0.1
GKN	66.03	285	P	28	48.00	-0.3
EKA	71.88	356	Pd	29	24.30	0.5
	0.7s		3.60nm		4.5mb	
KHC	76.42	345	eP	29	51.00	0.8
ZST	76.72	342	eP	29	52.70	0.9

S.D. = 0.7 on 13 of 13 obs.

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* JUN 10, 1990 16h 57m 40.28± 2.40s
44.093 N ±19.2km 7.740 E ± 8.6km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.5 (LDG). MD 1.6 (STR).

AUTN	0.25	247	Pg	57	45.51	-0.1
			Sg	57	49.30	
SBF	0.32	224	Pg	57	46.40	-0.5
			Sg	57	50.30	
TOUF	0.36	258	Pg	57	47.94	0.1
			Sg	57	52.08	
REVF	0.44	217	Pg	57	49.58	0.3
			Sg	57	56.04	
FRF	0.95	236	Pg	57	58.40	0.0
			Sg	58	10.00	
LMR	1.17	230	Pg	58	02.80	0.7
			Sg	58	16.80	
LRG	1.19	238	Pg	58	02.00	-0.4
			Sg	58	18.00	
LPG	1.57	334	Pg	58	12.00	3.5X
LPL	1.59	334	Pg	58	12.40	3.6X
PGF	1.80	149	Pn	58	11.60	0.0
			Sn	58	33.20	

S.D. = 0.4 on 8 of 10 obs.

JUN 10, 1990 17h 50m 19.33± 0.57s
43.992 N ± 4.4km 7.671 E ± 4.8km
DEPTH = 10.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)
ML 2.6 (LDG). MD 1.8 (STR).

AUTN	0.18	271	Pg	50	22.74	-0.7
SBF	0.21	233	Pg	50	24.20	0.2
			Sg	50	28.20	
AURF	0.27	247	Pg	50	24.91	-0.1
TOUF	0.31	274	Pg	50	25.04	-0.7
			Sg	50	29.56	
REVF	0.33	221	Pg	50	26.96	0.7
MVIF	0.39	256	Pg	50	27.44	0.1
			Sg	50	32.97	
DOI	0.60	329	P	50	30.60	-0.8
			eSg	50	38.40	
CKI	0.62	45	P	50	31.50	-0.2
			eSg	50	40.40	
FRF	0.86	240	Pg	50	35.60	-0.3
			Sg	50	47.50	
LMR	1.07	232	Pg	50	39.60	0.2
			Sg	50	54.00	
LRG	1.09	241	Pg	50	40.20	0.4
			Sg	50	55.00	
LPG	1.64	337	Pg	50	49.40	0.8
LPL	1.66	337	Pg	50	50.00	1.1
			Sg	51	13.60	
PGF	1.74	146	Pn	50	49.30	-0.5
			Sn	51	10.00	

S.D. = 0.7 on 14 of 14 obs.

JUN 10, 1990 19h 36m 10.65± 0.50s
52.818 N ± 5.6km 131.935 W ± 7.7km
DEPTH = 10.0km (geophysicist)
4.6mb (24 obs.) 3.7Msz (1 obs.)
QUEEN CHARLOTTE ISLANDS REGION (22)

BNAB	1.03	49	P	36	32.00	1.9
			S	36	49.00	
MSTB	1.19	355	P	36	33.70	0.8
NDB	1.29	333	Pc	36	33.50	-1.1
RUB	1.80	32	P	36	42.10	0.1
BBB	2.42	104	P	36	49.50	-1.3
			S	37	28.00	
PHC	3.51	125	P	37	02.52	-3.7
EDB	4.22	132	P	37	14.26	-2.1
SIT	4.68	337	eP	37	20.40	-2.5
GDR	4.79	127	P	37	22.40	-2.1
CBB	4.97	122	P	37	24.62	-2.4
BTB	5.25	127	P	37	29.50	-1.6
BMW	8.49	135	eP	38	18.00	1.4
PNT	8.51	109	P	38	20.00	3.2
	1.2s		8.00nm		4.9mb	
HYT	8.59	341	P	38	16.00	-1.9
LON	8.93	129	eP	38	22.80	0.2
NEW	10.47	110	eP	38	43.70	-0.1
EDM	11.20	81	eP	38	53.50	-0.3
PMR	12.77	320	eP	39	17.10	2.3
SES	13.20	92	P	39	22.00	1.3
YKA	13.37	37	P	39	23.10	0.4
WDC	13.82	149	ePc	39	38.20	9.5X
MIN	14.34	146	e(P)	39	42.00	6.3X
LRM	14.48	111	eP	39	38.60	0.9
ORV	15.08	147	e(P)	39	47.80	2.5
SVW	15.28	312	eP	39	51.60	3.8X
	1.2s		50.60nm		4.8mb	
INK	15.56	358	eP	39	52.00	0.7
TTA	16.22	318	eP	40	02.20	2.3
	0.9s		36.40nm		4.5mb	
KVN	16.75	140	eP	40	09.00	2.0
CMB	16.83	147	e(P)	40	08.80	1.1
IMA	17.14	329	eP	40	12.80	1.2
FFC	17.75	72	iPc	40	19.00	-0.1
	0.7s		10.00nm		4.1mb	
TNP	17.94	139	eP	40	22.50	0.7
	1.0s		4.69nm		3.6mb	X
FRI	18.00	147	e(P)	40	17.50	-4.8X
BW06	18.01	115	eP	40	24.50	1.8
	1.2s		8.90nm		3.8mb	
DUG	18.17	126	eP	40	25.80	1.2
ISA	19.62	146	eP	40	46.00	3.9X
CLC	19.79	144	eP	40	44.00	0.1
RSSD	20.34	104	eP	40	49.50	-0.2
GSC	20.54	143	eP	40	51.00	-0.7
SBB	20.72	145	eP	40	53.00	-0.7
MWC	21.07	146	eP	40	56.00	-1.3
PAS	21.10	147	eP	40	58.00	0.6
RVR	21.51	145	eP	40	58.00	-3.6X
GOL	22.41	115	P	41	12.10	1.2
	0.8s		2.79nm		3.8mb	
GLD	22.46	115	eP	41	13.00	1.7
	1.0s		25.00nm		4.6mb	
MBC	24.02	7	ePc	41	28.00	2.2
	0.9s		27.00nm		4.8mb	
ALQ	25.41	125	eP	41	39.00	-0.9
	1.0s		3.75nm		4.0mb	
NAO	62.87	19	P	46	37.40	-1.1
	0.9s		5.30nm		4.7mb	
HFS	64.07	18	eP	46	44.90	-1.5
	0.8s		5.50nm		4.8mb	
Z	19s		0.05um		3.7Msz	
			LR	13	05.00	
UPP	65.04	16	iP	46	51.60	-1.0
FLN	70.73	32	eP	47	27.60	-0.7
	0.6s		3.60nm		4.7mb	
GRR	70.94	32	eP	47	29.30	-0.3
	0.6s		3.60nm		4.7mb	
LDF	70.99	32	eP	47	29.30	-0.7
	0.6s		3.60nm		4.7mb	
LPF	71.19	32	eP	47	30.90	-0.2
	0.8s		8.05nm		4.9mb	
KSP	73.29	20	eP	47	43.50	-0.1
LOR	73.40	30	eP	47	43.80	-0.5
	0.8s		4.05nm		4.5mb	
SSF	73.48	30	eP	47	44.40	-0.3
	0.8s		4.05nm		4.5mb	
LSF	73.59	32	eP	47	44.80	-0.6
	0.8s		5.35nm		4.6mb	
AVF	73.68	30	eP	47	45.20	-0.6
	0.7s		2.75nm		4.4mb	
LBF	73.69	30	eP	47	45.40	-0.6
	0.6s		2.70nm		4.5mb	
TCF	73.77	31	eP	47	46.00	-0.4
	0.8s		4.05nm		4.5mb	
MAF	73.94	31	eP	47	47.20	-0.2
	0.8s		4.70nm		4.6mb	
SMF	73.96	30	eP	47	46.90	-0.6
	0.8s		4.05nm		4.5mb	
KHC	74.30	23	P	47	50.00	0.5
RJF	74.43	32	eP	47	49.60	-0.6
	0.8s		5.35nm		4.6mb	
KRA	74.78	18	eP	47	52.10	-0.1
SPC	75.66	18	eP	47	57.80	0.3
ZST	75.97	21	eP	48	05.40	6.4X
VRI	80.00	15	ePd	48	21.50	0.3

S.D. = 1.4 on 62 of 69 obs.

JUN 10, 1990 19h 42m 46.32± 0.43s
60.128 N ± 6.2km 141.088 W ± 3.4km
DEPTH = 10.0km (geophysicist)
4.0mb (3 obs.)
SOUTHEASTERN ALASKA (19)
ML 3.7 (PMR).

PCA	0.42	94	iP	42	54.13	-0.7
YKU	0.90	129	eP	43	05.20	1.7
BALM	1.10	326	iP	43	05.60	-1.5
			eS	43	20.49	
RAGM	1.81	280	eP	43	18.73	1.0
HYT	1.91	67	P	43	20.30	1.0
SGAM	2.08	282	iP	43	22.58	0.8
			Sn	43	47.95	
CVA	2.36	282	eP	43	25.98	0.4
HIN	2.71	278	eP	43	29.25	-1.5
KLU	2.74	302	eP	43	31.38	0.2
VLZ	2.77	294	eP	43	31.57	0.0
VZW	2.85	291	iP	43	32.65	-0.1
			Sn	44	06.69	
WHC	3.03	76	P	43	35.70	0.5
GLI	3.07	287	eP	43	35.25	-0.4
TOA	3.17	311	eP	43	38.30	1.1
SDG	3.23	320	eP	43	39.41	1.4
SCM	3.49	302	eP	43	42.14	0.4
PAX	3.54	326	eP	43	42.60	0.1
DOT	3.80	340	eP	43	46.87	0.6
SML	3.91	299	eP	43	48.21	0.4
DWY	4.02	10	P	43	50.20	1.0
GHO	4.16	297	eP	43	52.03	0.7
PLRM	4.20	294	eP	43	52.58	0.8
PMR	4.20	294	eP	43	52.80	1.1
SIT	4.31	133	eP	43	52.80	-0.5
PMS	4.31	289	eP	43	53.48	0.0
PWA	4.56	293	eP	43	57.80	1.0
SLKM	4.56	279	eP	43	56.03	-0.9
SUA	4.92	290	eP	44	01.94	-0.1
CNPM	5.16	268	eP	44	05.45	0.1
SKT	5.40	295	eP	44	07.79	-1.1
CGLM	5.49	287	eP	44	08.23	-2.0
FBA	5.71	330	eP	44	14.30	1.2
SVW	7.22	284	eP	44	33.80	-0.6
TTA	7.66	298	eP	44	39.70	-1.0
IMA	8.24	322	eP	44	49.00	0.2
MBC	17.86	17	eP	46	54.50	-1.4
	1.0s		4.00nm		3.5mb	
NAO	57.44	16	P	52	35.00	-1.9
	0.8s		1.40nm		4.0mb	
HFS	58.48	14	eP	52	42.20	-2.0
	0.4s		0.70nm		4.1mb	

S.D. = 1.0 on 38 of 38 obs.

JUN 10, 1990 19h 57m 36.35± 0.47s
39.176 N ± 3.7km 23.673 E ± 4.8km
DEPTH = 8.1 ± 3.1 km
AEGEAN SEA (365)
ML 3.3 (ATH).

NEO	0.37	291	iPgc	57	43.00	-0.9
PAIG	0.75	0	ePc	57	52.00	0.8
			eS	58	03.40	
AGG	1.06	262	ePd	57	55.00	-1.5
			eS	58	09.00	
OUR	1.18	12	ePc	57	58.70	0.2
ATH	1.20	178	ePb	57	58.60	-0.3
			eSb	58	15.00	
THE	1.55	340	eP	58	03.90	-0.4
			eS	58	23.40	
SOH	1.66	352	iPc	58	05.60	-0.3
SRS	1.94	358	iPc	58	09.10	-0.8
			iS	58	32.70	
GRG	2.03	332	eP	58	10.40	-0.8
			eS	58	35.00	
KNT	2.07	344	ePc	58	11.70	-0.1
			eS	58	36.90	
VAY	2.30	339	iPn	58	15.60	0.5

10d 19h

MMB	2.41	1	iPc	58 15.00	-1.7
ITM	2.42	215	ePn	58 17.00	0.1
RDO	2.43	35	ePn	58 16.00	-0.9
VLI	2.52	194	ePn	58 17.10	-1.1
VLS	2.61	249	ePb	58 22.00	2.4X
RZN	2.63	17	iPc	58 19.00	-1.0
KDZ	2.81	28	iPd	58 21.00	-1.3
			i	59 08.00	
SMG	2.88	120	ePn	58 23.10	-0.3
OHR	2.93	312	ePn	58 24.20	0.1
PLD	3.03	15	eP	58 26.00	0.6
KEK	3.05	281	ePn	58 27.00	1.3
SKO	3.27	329	ePn	58 35.00	6.1X
VTS	3.43	354	eP	58 31.00	-0.3
MLR	6.53	14	eP	59 10.00	-5.2X

S.D. = 0.8 on 22 of 25 obs.

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* JUN 10, 1990 20h 11m 35.15± 1.16s
32.073 S ± 8.9km 71.637 W ±15.8km
DEPTH = 64.6 ± 13.9 km
4.7mb (1 obs.)
NEAR COAST OF CENTRAL CHILE (135)

ROCH	1.04	150	iPc	11 54.00	-0.4
			iS	12 07.00	
JACH	1.07	125	iPc	11 54.60	-0.1
			iS	12 09.50	
PEL	1.34	143	iPc	11 58.50	0.3
			i(S)	12 16.00	
LCCH	1.40	178	iPd	11 58.70	-0.3
			iS	12 15.00	
SAN	1.60	149	iP	12 02.00	0.2
			i	12 14.50	
			iS	12 21.20	
TACH	1.68	160	iPc	12 03.00	0.1
			i	12 16.50	
			iS	12 22.50	
FCH	1.69	138	iPc	12 03.50	0.2
			i	12 16.40	
			iS	12 24.50	
PCH	1.81	149	iPc	12 05.00	0.3
			i	12 19.00	
			iS	12 27.50	
LNV	1.89	174	iPd	12 05.00	-0.7
			iS	12 26.50	
CHCH	2.03	156	iPc	12 08.20	0.4
			iS	12 33.00	
ZOBO	16.05	12	P	15 20.00	1.1
SIV	18.67	33	P	15 49.30	-1.4
			i	16 06.00	
BAO	27.02	58	eP	17 13.00	-0.3
LKO	75.35	69	(P)	23 14.14	0.4
	0.8s		8.00nm		4.7mb

S.D. = 0.7 on 14 of 14 obs.

? JUN 10, 1990 22h 00m 55.81± 1.88s
23.774 S ± 7.8km 32.723 E ±19.2km
DEPTH = 10.0km (geophysicist)
MOZAMBIQUE (581)
ML 3.5 (PRE). mbLg 3.5 (BUL).

BFT	3.09	231	eP	01 45.20	-0.6
			S	02 14.50	
JOZ	3.70	189	eP	01 54.90	0.6
			S	02 28.80	
SLR	4.48	243	eP	02 05.80	0.3
			S	02 51.00	
BUL	5.25	313	iPn	02 15.40	-1.1
			iSn	03 18.00	
			iSg	03 48.30	
KSR	5.69	247	eP	02 24.00	1.4
PRY	5.69	235	eP	02 20.90	-1.8
			S	03 21.00	
BFS	6.21	239	eP	02 31.00	1.1
SEK	6.44	224	eP	02 33.50	0.2
			S	03 40.00	
SWZ	7.50	242	eP	02 47.50	-0.5
			S	03 55.00	
KRI	7.50	337	ePn	02 48.30	0.3
			iP*	02 58.00	
			eSn	04 16.00	
			iSg	05 02.10	
FRS	8.90	226	eP	03 06.00	-1.3
			S	04 34.00	
WIN	14.42	272	eP	04 23.50	1.3

S.D. = 1.2 on 12 of 12 obs.

% JUN 10, 1990 22h 38m 59.94± 0.82s
39.351 N ±10.3km 20.623 E ± 8.7km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)

KEK	0.73	300	ePn	39 14.30	0.0
EVR	1.02	115	ePn	39 19.20	-0.1
ITM	2.40	154	ePn	39 40.00	0.1
PLG	2.40	64	ePn	39 40.00	0.1
VLI	3.20	144	ePn	39 51.20	-0.1

S.D. = 0.1 on 5 of 5 obs.

JUN 11, 1990 00h 01m 54.40± 0.47s
7.236 S ± 7.4km 118.896 W ± 9.9km
DEPTH = 33.0km (normal)
5.2mb (22 obs.)
EAST CENTRAL PACIFIC OCEAN (693)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 21C
Centroid Location:
Origin Time 00:01:58.2 1.2
Lat 6.98S 0.11 Lon 119.19W 0.07
Dep 15.4 5.8 Half-duration 1.5
Moment Tensor; Scale 10**16 Nm
Mrr= 3.45 0.27 Mtt=-2.24 0.36
Mff=-1.21 0.39 Mrt= 0.00 0.00
Mrf= 0.00 0.00 Mtf=-1.00 0.29
Principal Axes:

T	Val= 3.45	Plg=90	Azm=180
N	-0.60	0	239
P	-2.85	0	149

Best Double Couple:Mo=3.2*10**16
NP1:Strike=239 Dip=45 Slip= 90
NP2: 59 45 90

BAR	39.75	3	eP	09 27.00	1.2
GLA	40.25	5	eP	09 31.00	1.0
PLM	40.41	3	eP	09 32.00	0.6
MWC	41.24	1	eP	09 39.00	0.8
SYP	41.55	359	eP	09 42.00	1.3
SBB	41.71	1	eP	09 43.00	1.1
ABL	41.86	360	P	09 44.50	1.2
BCH	42.21	359	P	09 47.30	1.3
GSC	42.35	3	eP	09 48.00	0.8
CLC	42.84	2	eP	09 52.00	0.8
PRI	43.18	358	eP	09 55.50	1.5
ALQ	43.56	15	ePc	09 58.00	0.7
	1.1s		26.27nm		4.9mb
ANMO	43.57	15	iP	09 58.10	0.8
	1.3s		45.67nm		5.1mb
			iPcP	11 44.30	
SAO	43.83	357	e(P)	10 00.00	0.9
MHC	44.42	357	ePd	10 06.20	2.2
ARN	44.42	357	P	10 05.00	1.1
CMB	45.06	358	ePc	10 10.10	1.0
			e	11 49.80	
TNP	45.11	2	iP	10 10.20	0.5
	0.9s		19.21nm		5.0mb
			iPcP	11 50.50	
MSU	45.94	7	iP	10 17.60	1.3
			iPcP	11 53.40	
MEO	45.99	23	e(P)	10 16.40	0.0
KVN	46.06	1	iPc	10 17.40	0.3
			iPcP	11 53.30	
ORV	46.62	357	iP	10 22.10	0.8
			iPcP	11 59.30	
ARE	47.19	106	eP	10 27.00	0.4
UYO	47.23	28	eP	10 24.60	-1.7
DUG	47.53	6	P	10 29.80	1.1
	1.0s		18.75nm		5.1mb
WDC	47.70	356	ePc	10 30.00	0.2
			e	11 57.90	
BMG	47.86	74	iPc	10 33.00	1.3
TUL	48.10	25	iP	10 33.00	-0.1
	1.2s		62.70nm		5.5mb
			e	10 39.60	
LNO	48.11	25	eP	10 33.20	0.2
GOL	48.35	14	P	10 35.80	0.6
	1.2s		31.25nm		5.2mb
GLD	48.43	14	ePc	10 36.20	0.4
	1.2s		101.01nm		5.7mb
			iPcP	12 01.40	
OLY	49.74	30	P	10 45.30	-0.4
ZOBO	50.40	105	P	10 53.20	1.5
	1.1s		8.70nm		4.7mb
			LR	26 20.00	

LPB	50.44	105	P	10 52.00	0.2
BW06	50.50	9	P	10 58.00	-0.8
	1.2s		10.96nm		4.7mb
HPI	50.98	5	P	10 56.00	0.7
FVM	52.23	28	P	11 03.70	-0.9
CCH	52.37	106	P	11 08.00	1.7
RSSD	52.85	13	iPc	11 08.20	-1.2
			iPcP	12 16.80	
RSCP	52.91	34	P	11 08.30	-1.4
LRM	53.13	6	eP	11 11.50	0.0
BMW	53.61	356	iP	11 14.00	-0.7
			iPcP	12 20.20	
GBTN	53.72	35	P	11 14.50	-1.1
LON	53.81	358	P	11 15.40	-0.7
TKL	53.97	35	P	11 16.30	-1.1
JSC	54.52	38	P	11 20.80	-0.7
GMW	54.65	357	P	11 21.20	-1.1
NEW	55.28	1	P	11 26.00	-0.9
	1.2s		18.94nm		5.0mb
PNT	56.32	359	eP	11 34.00	-0.3
NAV	56.84	36	P	11 37.00	-1.3
BLA	56.99	36	P	11 38.50	-0.9
	0.7s		11.11nm		5.0mb
SIV	57.15	104	eP	11 40.00	-0.9
SES	57.80	6	ePc	11 44.60	-0.2
			pP	12 37.00	233kmX
CVL	58.66	37	P	11 50.00	-1.0
NA2	59.18	37	P	11 54.30	-0.3
EDM	60.41	4	iPc	12 01.90	-0.9
TXNY	63.24	36	iP	12 21.80	-0.2
FFC	63.34	11	iPc	12 20.70	-1.7
	1.4s		51.00nm		5.5mb
RSNY	65.19	33	P	12 34.00	-0.6
	1.3s		47.86nm		5.4mb
WNY	65.45	34	P	12 35.50	-0.9
SIT	65.47	350	P	12 32.90	-3.3X
	0.8s		124.14nm		6.1mb
HBVT	65.88	34	P	12 38.60	-0.5
BNH	67.04	35	P	12 46.60	0.1
YKA	69.60	2	eP	13 00.30	-1.7
	0.8s		17.80nm		5.2mb
BAO	69.74	104	eP	13 04.50	0.6
CBM	70.19	34	P	13 05.80	-0.2
PMR	72.54	345	P	13 18.50	-1.3
	1.3s		89.62nm		5.6mb
TTA	75.48	343	P	13 34.90	-2.0
	1.0s		15.00nm		4.9mb
SCH	75.49	28	ePc	13 36.60	-0.4
	0.8s		30.00nm		5.3mb
INK	76.07	354	ePc	13 39.20	-0.8
	1.1s		49.00nm		5.4mb
ADK	76.73	327	P	13 42.90	-1.1
	1.0s		115.00nm		5.9mb
IMA	77.40	346	P	13 45.60	-2.1
FRB	80.24	20	ePc	14 02.00	-0.9
SPA	82.81	180	iPc	14 17.60	1.0
	1.0s		46.00nm		5.5mb
MBC	83.34	360	ePc	14 19.00	0.2
	0.9s		21.00nm		5.3mb
BCAO	137.57	91	ePKPc	21 07.00	-11.0X
	1.0s		5.00nm		
			i	24 00.50	
BUL	138.03	131	ePKP	21 16.00	-2.8
CHG	141.47	291	ePKP	21 20.00	-4.8X
DSI	145.91	41	iPKPd	21 33.50	1.5
PRNI	146.42	43	ePKP	21 35.00	2.0
TAB	146.51	21	ePKP	21 34.00	0.9
MBH	146.68	44	iPKP	21 36.00	2.7
GUN	148.81	314	PKP	21 36.70	-0.6
PKI	149.35	314	PKP	21 37.00	-1.1
DMN	149.54	315	PKP	21 37.40	-0.9
GKN	149.63	316	PKP	21 37.20	-1.1
MAIO	151.03	3	iPKPd	21 41.30	1.2
	1.2s		25.00nm		
			i	21 46.00	
NDI	153.80	326	ePKP	21 44.50	0.4

S.D. = 1.1 on 85 of 88 obs.

JUN 11, 1990 00h 49m 09.49± 0.28s
32.334 N ± 4.5km 48.722 E ± 3.4km
DEPTH = 15.6km (4 depth phases)
4.6mb (31 obs.) 3.8Msz (2 obs.)
WESTERN IRAN (347)

KER	2.42	327	eP	49 52.00	2.8
TEH	4.05	32	eP	50 11.00	-1.3
TAB	6.05	342	eP	50 43.00	2.5

MJMA	7.12	206	ePd	50	55.10	-0.5
OASM	7.70	217	ePc	51	03.50	-0.2
RYD	7.81	194	ePc	51	06.00	0.8
UOSK	8.57	222	ePd	51	15.70	-0.2
MAIO	9.75	63	eP	51	33.00	0.9
			eS	54	08.00	
HRI	10.97	278	eP	51	50.00	1.1
PRNI	11.90	264	eP	52	01.00	-0.5
BADA	12.43	256	eP	52	08.30	-0.3
QUE	15.74	93	eP	52	51.50	-0.8
			e(S)	58	05.60	
YLV	17.58	303	eP	53	15.00	-0.4
RZN	21.27	303	eP	53	58.00	0.6
ISR	21.43	313	ePc	54	00.50	1.6
VRI	21.68	315	ePd	54	01.50	0.1
MMB	21.94	302	eP	54	03.00	-1.1
MLR	21.97	313	iPc	54	06.00	1.6
CMP	22.43	312	ePc	54	08.00	-0.9
VAY	22.71	301	iP	54	14.80	3.2X
SKO	23.69	302	iP	54	23.80	2.6
OHR	23.96	299	eP	54	25.30	1.5
	1.4s	117.00nm			5.3mb	
			e	54	31.00	20km
			e	54	45.50	
BZS	24.76	310	eP	54	33.50	2.0
ORI	27.05	296	P	55	03.00	10.0X
TDS	27.10	295	P	54	57.50	4.2X
SPC	27.14	317	eP	54	57.80	4.0X
SOI	27.21	291	P	55	01.50	7.1X
ATN	27.68	291	P	55	03.00	4.3X
SRO	27.71	313	e(P)	55	03.30	4.5X
KRA	27.72	318	ePd	54	59.20	0.3
MGR	27.74	296	P	55	03.50	4.3X
ZST	28.61	313	eP	55	19.70	12.8X
VOY	30.00	307	e(P)	55	19.20	-0.4
ARV	30.13	302	P	55	21.60	0.9
KSP	30.16	317	eP	55	20.50	-0.3
ASS	30.27	301	P	55	23.50	1.6
PGD	31.07	302	P	55	31.00	1.9
KHC	31.12	313	Pd	55	29.00	-0.4
GKN	31.26	88	P	55	31.80	0.9
CTI	31.53	307	P	55	32.50	-0.6
BRG	31.53	316	eP	55	32.70	-0.2
DMN	31.77	89	P	55	36.40	0.8
BDI	31.90	303	P	55	36.50	0.2
PKI	32.04	89	P	55	38.70	0.7
SQTA	32.09	309	iPc	55	37.00	-1.0
	0.7s	13.50nm			5.0mb	
			i	55	40.40	12km
			i	55	49.30	
			i	55	53.80	
			e	56	18.00	
			i	58	27.80	
SAL	32.21	305	P	55	38.00	-0.8
CLL	32.24	317	iPd	55	39.20	0.1
	1.1s	12.00nm			4.7mb	
NUR	32.33	338	eP	55	40.00	0.3
GUN	32.33	88	P	55	41.70	1.1
WMQ	32.47	58	eP	55	42.00	0.7
OSS	32.68	307	eP	55	43.60	0.4
GRF	32.76	313	iPc	55	43.40	-0.3
	1.0s	13.00nm			4.8mb	
Z	20s	0.05um			3.2Msz	
			e	55	47.80	15km
MDI	32.80	306	P	55	43.00	-1.0
BOB	32.82	304	P	55	45.50	1.2
SAX	33.34	308	eP	55	48.50	-0.5
TMA	33.43	306	eP	55	49.10	-0.7
VAI	33.46	306	P	55	48.00	-1.8
LLS	33.49	307	eP	55	49.70	-0.6
SUF	33.63	341	iP	55	51.00	0.0
	0.5s	5.80nm			4.8mb	
SLE	34.01	309	eP	55	53.90	-0.7
ZLA	34.02	308	eP	55	54.20	-0.5
SBF	34.14	302	eP	55	55.80	0.0
	0.8s	18.80nm			5.1mb	
DIX	34.43	306	eP	55	58.10	-0.4
BNI	34.81	304	Pd	56	01.50	-0.1
LPG	34.81	305	eP	56	01.50	-0.3
	0.8s	10.75nm			4.8mb	
LPL	34.82	305	eP	56	01.50	-0.3
	1.0s	20.00nm			5.0mb	
BSF	35.15	309	eP	56	03.40	-1.0
	0.8s	5.35nm			4.5mb	
HAU	35.47	309	eP	56	06.00	-1.1
	0.6s	3.60nm			4.4mb	
WTS	36.11	316	eP	56	13.50	1.1
	0.9s	24.00nm			5.1mb	
			e	56	18.00	15km
HFS	36.12	331	eP	56	11.80	-0.6
	0.8s	22.50nm			5.1mb	
MEM	36.24	313	P	56	15.60	2.1
ENN	36.33	313	e(P)	56	19.00	4.8X
LBF	36.90	307	eP	56	18.40	-0.8
	0.7s	3.30nm			4.2mb	
SMF	36.96	306	eP	56	18.90	-0.7
	0.6s	9.90nm			4.8mb	
DOU	37.01	312	P	56	20.40	0.4
	1.0s	16.70nm			4.8mb	
LOR	37.02	307	eP	56	19.20	-0.9
	0.6s	2.25nm			4.1mb	
SSF	37.23	307	eP	56	21.30	-0.6
	0.8s	9.40nm			4.6mb	
AVF	37.31	306	eP	56	21.80	-0.7
	0.6s	4.50nm			4.4mb	
SOD	37.41	346	iP	56	21.30	-1.8
BGF	37.63	306	eP	56	24.60	-0.7
	0.8s	4.05nm			4.3mb	
NAO	37.69	331	P	56	24.60	-0.9
	1.0s	8.70nm			4.5mb	
MAF	37.79	305	eP	56	26.50	-0.1
	0.8s	4.05nm			4.3mb	
TCF	38.04	305	eP	56	28.60	-0.2
	0.8s	3.35nm			4.2mb	
BCAO	39.60	232	iPc	56	43.00	0.9
	1.1s	11.00nm			4.5mb	
LDF	39.83	309	eP	56	42.60	-1.0
	1.0s	10.00nm			4.5mb	
FLN	40.08	309	eP	56	44.70	-1.0
	0.8s	8.05nm			4.5mb	
GRR	40.30	308	eP	56	46.70	-0.8
	0.9s	14.75nm			4.7mb	
LPF	40.39	308	eP	56	47.60	-0.6
	1.0s	12.00nm			4.6mb	
LZH	45.23	69	P	57	27.80	-0.2
Z	20s	0.50um			4.4Msz	
BTO	49.11	62	eP	57	59.00	0.7
TIY	51.57	65	eP	58	16.40	-0.6
Z	14s	0.50um			4.7MszX	
BJI	53.82	61	eP	58	34.00	0.4
TIA	55.59	66	eP	58	46.30	-0.3
KIC	55.98	254	(P)	58	51.00	1.3
CN2	59.48	55	eP	59	12.60	-1.3
MBC	71.42	357	eP	00	30.00	-0.4
	1.0s	5.00nm			4.6mb	
FRB	72.29	335	ePd	00	33.00	-2.7
INK	79.65	1	eP	01	17.00	-0.1
IMA	80.40	9	ePc	01	21.70	0.3
	1.4s	14.50nm			4.8mb	
FBA	82.23	7	ePc	01	21.50	-9.3X
YKA	84.56	352	eP	01	42.20	-0.5
	0.9s	2.80nm			4.5mb	
PMR	85.29	8	eP	01	46.70	0.3
	1.4s	26.20nm			5.3mb	

S.D. = 1.0 on 91 of 102 obs.

? JUN 11, 1990 01h 11m 22.88± 6.97s
42.808 N ±62.2km 0.180 E ±57.1km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 2.7 (LDG).

EPF	0.25	28	P	11	28.20	-0.1
			Sg	11	33.30	
LPO	2.01	21	Pg	12	00.20	3.0X
			Sg	12	29.80	
LFF	2.17	11	Pg	12	02.60	3.1X
			Sg	12	33.00	
CAF	2.52	32	Pn	12	03.70	-0.8
			Sg	12	45.10	
RJF	2.68	21	Pn	12	06.50	-0.3
			Sg	12	50.80	
LSF	3.57	15	Pn	12	19.20	-0.3
			Sg	13	17.80	
MAF	3.82	26	Pn	12	28.60	5.7X
BGF	4.20	26	Pn	12	29.80	1.4

S.D. = 1.2 on 5 of 8 obs.

& JUN 11, 1990 01h 38m 14.80s
37.290 N 121.640 W
DEPTH = 6.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.3 (BRK).
Mo=1.3*10**14 Nm (BRK). Felt at San Jose.

MHC	0.05	359	iPd	38	16.30	-0.2
ARN	0.10	55	iPd	38	17.20	0.0
SAO	0.55	163	iPd	38	25.80	0.0
BKS	0.75	321	iPc	38	28.90	-0.9
			iS	38	40.40	
ZSP	0.82	323	iPc	38	30.50	-0.5
			iS	38	43.40	
CMB	1.24	53	iPc	38	37.50	-0.8
			iS	38	53.50	
			i	38	54.90	
PRI	1.39	145	eP	38	39.60	-1.2
NWRM	1.53	320	eP	38	40.30	-2.3
PHAM	1.76	145	eP	38	47.00	0.9
KVN	3.30	57	eP	39	07.00	-1.2

10 obs. associated

? JUN 11, 1990 02h 31m 18.18± 2.91s
37.533 N ±22.8km 20.660 E ±23.0km
DEPTH = 33.0km (normal)
IONIAN SEA (399)
ML 3.8 (ATH).

VLS	0.65	355	eP	31	32.60	1.7
			eS	31	42.50	
ITM	1.07	109	iPc	31	37.00	0.1
VLI	1.99	113	eP	31	54.80	4.6X
KEK	2.28	343	eP	31	53.00	-1.2
ATH	2.46	79	eP	31	59.60	2.7X
NEO	2.68	48	eP	32	00.20	0.2
VAY	4.06	21	ePn	32	26.40	6.9X
RZN	5.20	36	eP	32	35.00	-0.9

S.D. = 1.6 on 5 of 8 obs.

? JUN 11, 1990 02h 39m 32.04± 0.98s
46.396 N ±10.5km 2.496 E ± 7.7km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 1.4 (LDG).

MAF	0.18	164	Pg	39	36.00	-0.1
			Sg	39	38.40	
TCF	0.23	241	Pg	39	37.40	0.5
			Sg	39	40.70	
BGF	0.29	56	Pg	39	38.20	0.1
			Sg	39	42.20	
LSF	0.69	258	Pg	39	45.20	-0.4
			Sg	39	54.40	

S.D. = 0.7 on 4 of 4 obs.

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* JUN 11, 1990 02h 42m 52.33± 1.77s
10.468 S ±32.5km 124.467 E ±10.8km
DEPTH = 92.5 ± 38.2 km
4.6mb (1 obs.)
TIMOR (289)

KUPT	0.90	290	iPc	43	11.50	0.1
			eS	43	32.50	
KNA	6.72	142	eP	44	31.10	1.0
	0.2s	50.00nm			5.6mb	X
			eS	45	48.00	
MTN	6.94	111	iPd	44	32.50	-0.7
			eS	45	50.00	
MBL	11.53	202	eP	45	35.70	0.3
			eS	47	42.00	
WB5	13.37	136	eP	45	58.20	-1.4
			eS	48	24.40	
WRA	13.39	136	Pd	45	59.50	-0.4
	0.2s	4.60nm			4.6mb	
NANU	14.76	214	eP	46	17.00	-0.6
QIS	17.69	126	iPd	46	56.00	1.7
			eS	50	05.00	

S.D. = 1.3 on 8 of 8 obs.

% JUN 11, 1990 02h 51m 04.40± 0.65s
10.045 N ± 8.7km 69.400 W ± 7.1km
DEPTH = 10.0km (geophysicist)
VENEZUELA (101)

TOV	0.46	237	iPgd	51	13.60	-0.3
			iSg	51	21.10	
FISA	1.21	3	eP	51	27.00	0.0
MORO	1.35	52	iP	51	29.40	0.1
SDV	1.68	227	ePn	51	34.40	0.3
			iSn	51	59.30	
OLLA	2.56	90	eP	51	46.60	-0.1

11d 02h

			eS	52	18.70	
LLAV	2.59	80	iP	51	47.00	-0.1
			eS	52	19.60	
S.D. = 0.3 on 6 of 6 obs.						

• JUN 11, 1990 03h 02m 18.73± 1.69s
5.160 S ±15.2km 152.018 E ±17.1km
DEPTH = 59.3 ± 12.1 km
4.4mb (3 obs.)
NEW BRITAIN REGION (192)

RAB	0.97	9	eP	02	36.50	0.0
GUA	19.87	339	eP	06	52.70	4.8X
WB5	22.57	228	eP	07	15.20	0.1
WRA	22.62	228	Pd	07	15.70	0.0
	1.0s		7.70nm			4.1mb
GUN	71.64	301	P	13	36.90	0.1
PKI	71.95	301	P	13	38.60	-0.1
DMN	72.22	301	P	13	40.40	0.2
GKN	72.72	301	P	13	42.80	-0.2
SVW	77.45	23	ePc	14	10.10	1.0
TTA	78.39	22	ePc	14	14.70	0.4
PMR	80.33	25	eP	14	24.30	-0.4
	0.7s		4.30nm			4.5mb
IMA	81.05	20	ePc	14	29.00	0.4
	0.9s		6.20nm			4.5mb
TOA	81.81	25	eP	14	33.30	0.8
FBA	82.51	22	eP	14	35.20	-0.8
INK	89.07	21	eP	15	07.00	-1.3
S.D. = 0.7 on 14 of 15 obs.						

• JUN 11, 1990 03h 46m 50.80± 1.12s
21.577 S ±11.9km 68.423 W ±13.6km
DEPTH = 108.8 ± 17.5 km
4.3mb (1 obs.)
CHILE-BOLIVIA BORDER REGION (124)

ANT	2.81	221	eP	47	35.00	0.1
			iS	48	04.30	
CCH	4.69	28	P	48	06.00	5.1X
LPB	5.03	4	P	48	07.00	1.4
ZOBO	5.29	3	P	48	14.60	5.3X
			i	48	15.00	
ARE	5.86	330	eP	48	16.00	-0.9
			iS	49	18.00	
SIV	8.91	53	P	48	57.40	-0.9
BAO	20.24	76	eP	51	20.00	0.3
YKA	91.41	340	eP	59	45.20	0.0
	0.6s		1.10nm			4.3mb
S.D. = 1.4 on 6 of 8 obs.						

JUN 11, 1990 04h 52m 52.05± 0.64s
27.394 N ± 8.3km 111.260 W ± 6.0km
DEPTH = 10.0km (geophysicist)
4.8mb (19 obs.)
GULF OF CALIFORNIA (49)

GLA	6.43	332	eP	54	25.00	-4.1X
			e	55	36.00	
			e	56	19.00	
BAR	7.05	320	eP	54	37.00	-0.9
PLM	7.66	322	eP	54	45.00	-1.5
			e	57	04.00	
RVR	8.42	323	eP	54	56.00	-1.0
			e	57	15.00	
ALQ	8.57	27	eP	54	59.50	0.2
ANMO	8.58	27	eP	55	00.00	0.6
MWC	8.97	321	eP	55	06.00	1.2
SBB	9.19	324	eP	55	06.00	-1.7
			e	57	43.00	
GSC	9.20	330	eP	55	05.00	-2.8
			e	57	42.00	
			e	57	59.00	
CLC	9.98	329	eP	55	18.00	-0.6
			e	58	27.00	
ISA	10.28	325	eP	55	22.00	-0.8
BCH	10.82	318	eP	55	30.20	0.0
MSU	11.12	356	eP	55	34.50	0.2
TNP	11.77	336	eP	55	42.30	-0.9
PRI	11.83	320	ePc	55	43.90	0.0
KVN	12.95	336	eP	55	59.40	0.4
CMB	13.09	326	eP	56	00.80	0.1
MEO	13.12	53	eP	56	01.00	0.0
ARN	13.18	321	eP	56	01.70	-0.1
GOL	13.21	20	eP	56	03.50	0.9
MHC	13.23	321	ePc	55	53.00	-9.7X
			e	56	03.30	
ORV	14.82	328	eP	56	26.00	2.6
BW06	15.41	5	eP	56	31.50	0.2
	1.0s		4.50nm			3.7mb X
TUL	15.66	53	eP	56	33.00	-1.3
	0.7s		2.40nm			3.5mb X
			eLg	01	02.40	
LNO	15.66	53	e(P)	56	28.90	-5.3X
			eLg	01	02.20	
UYO	15.93	61	eP	56	35.50	-2.4
WDC	16.12	328	ePc	56	42.00	1.8
HPI	16.35	355	eP	56	44.50	1.0
RSSD	17.68	17	eP	56	59.70	-0.4
LRM	18.42	357	eP	57	10.20	0.9
OLY	18.70	60	eP	57	11.30	-1.2
VGB	19.61	340	eP	57	24.00	0.5
FVM	20.43	54	eP	57	30.90	-1.2
LON	21.04	339	eP	57	37.80	-0.6
NEW	21.33	349	eP	57	39.80	-1.5
	1.0s		40.00nm			4.8mb
PNT	22.82	346	eP	57	58.00	1.9
SES	22.97	0	eP	57	57.00	-0.6
	1.4s		B9.00nm			5.1mb
RSCP	23.34	63	eP	57	59.50	-1.8
EDM	25.85	357	iPc	58	24.40	-0.8
FFC	28.14	11	eP	58	49.00	2.9
	0.9s		10.00nm			4.6mb
YKA	35.17	357	eP	59	45.60	-2.1
	1.2s		2.50nm			4.0mb
INK	43.05	348	ePd	00	52.80	-0.4
FBA	44.05	339	eP	01	01.00	-0.4
	1.0s		5.60nm			4.4mb
SVW	44.86	331	eP	01	07.90	-0.2
TTA	45.91	333	eP	01	16.10	-0.3
IMA	46.72	338	eP	01	22.00	-0.8
	1.1s		7.80nm			4.7mb
MBC	49.08	357	eP	01	41.50	0.6
	1.0s		6.00nm			4.6mb
ZOBO	60.28	131	P	03	03.00	-1.0
LPB	60.49	131	eP	03	03.00	-2.2
SIV	65.02	125	P	03	34.70	-0.2
			i	03	39.00	
HFS	81.88	24	eP	05	17.10	4.4X
	1.1s		9.70nm			4.8mb
FLN	82.27	39	eP	05	16.00	1.1
	0.8s		5.35nm			4.7mb
SUF	84.00	18	eP	05	24.00	0.4
LSF	84.81	40	eP	05	29.30	1.4
	0.8s		6.70nm			4.9mb
TCF	85.17	40	eP	05	31.00	1.2
	0.8s		5.35nm			4.8mb
NUR	85.31	20	eP	05	30.00	-0.2
RJF	85.34	41	eP	05	32.10	1.5
	1.0s		10.00nm			5.0mb
BGF	85.37	39	eP	05	32.00	1.2
	0.8s		8.05nm			5.0mb
MAF	85.41	40	eP	05	32.60	1.6
	0.8s		5.35nm			4.8mb
SSF	85.45	39	eP	05	32.40	1.3
	0.9s		8.20nm			4.9mb
AVF	85.52	39	eP	05	32.50	1.0
	0.8s		4.05nm			4.7mb
LOR	85.52	38	eP	05	32.80	1.3
	1.0s		14.00nm			5.1mb
LBF	85.75	38	eP	05	34.10	1.4
	0.8s		6.70nm			4.9mb
SMF	85.88	39	eP	05	34.20	0.9
	0.8s		6.70nm			4.9mb
S.D. = 1.3 on 60 of 64 obs.						

• JUN 11, 1990 05h 30m 13.76± 0.86s
13.708 N ±18.0km 145.804 E ±12.6km
DEPTH = 33.0km (normal)
4.0mb (2 obs.)
MARIANA ISLANDS (216)

GUA	0.88	259	iPd	30	29.50	-0.3
			eS	30	39.30	
GUMO	0.92	263	iPd	30	30.20	-0.1
PJG	0.92	263	iPd	30	30.20	-0.1
MAT	23.73	345	(P)	35	26.00	2.1
WRA	35.29	199	Pd	37	09.80	1.9
	0.9s		2.90nm			4.2mb
INK	73.91	22	eP	41	46.00	-1.0
			pP	41	58.00	40kmX
MBC	77.94	14	eP	42	10.00	0.3
YKA	82.34	28	eP	42	33.40	0.1
	0.8s		0.80nm			3.8mb
LRM	88.28	43	eP	43	03.80	0.2
KIC	144.61	302	(PKP)	49	47.70	-1.9
LIC	144.92	303	(PKP)	49	49.00	-1.2
ZOBO	147.15	99	PKP	50	00.00	5.5X
			i	52	03.80	
			LR	07	04.00	
S.D. = 1.4 on 11 of 12 obs.						

• JUN 11, 1990 05h 43m 03.37± 0.46s
7.398 S ± 7.7km 118.795 W ±11.1km
DEPTH = 33.0km (normal)
5.2mb (19 obs.) 5.1Msz (1 obs.)
EAST CENTRAL PACIFIC OCEAN (693)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 18C
Centroid Location:
Origin Time 05:43: 6.1 0.6
Lat 7.32S 0.14 Lon 119.54W 0.07
Dep 15.0 FIX Half-duration 1.6
Moment Tensor; Scale 10**16 Nm
Mrr= 5.12 0.33 Mtt=-1.04 0.48
Mff=-4.08 0.41 Mrt=-3.14 1.15
Mrf= 1.18 1.26 Mtf=-2.47 0.38
Principal Axes:

	Val=	Plg=	Azm=
T	6.84	63	205
N	-1.35	27	33
P	-5.49	3	301

Best Double Couple:Mo=6.2*10**16
NP1:Strike= 5 Dip=48 Slip= 52
NP2: 234 54 124

BAR	39.91	3	eP	50	37.00	0.9
GLA	40.40	5	eP	50	41.00	0.8
PLM	40.57	2	eP	50	43.00	1.3
			e	52	45.00	
RVR	41.19	2	eP	50	47.00	0.5
			e	52	46.00	
PAS	41.32	1	eP	50	48.00	0.4
TPC	41.36	3	eP	50	49.00	1.0
			e	52	47.00	
MWC	41.40	1	eP	50	50.00	1.5
SBB	41.87	1	eP	50	53.00	0.8
ABL	42.02	359	P	50	54.20	0.6
BCH	42.37	358	P	50	57.30	0.9
GSC	42.51	2	eP	50	58.00	0.5
ISA	42.83	0	eP	51	01.00	0.9
CLC	43.00	1	eP	51	02.00	0.6
PRI	43.34	358	e(P)	51	05.70	1.4
ALQ	43.69	15	ePc	51	08.00	0.7
	1.1s		21.84nm			4.8mb
ANMO	43.70	15	iP	51	08.30	1.0
	1.3s		30.05nm			4.9mb
			iPcP	52	53.40	
SAO	44.00	357	eP	51	09.90	0.4
MHC	44.58	357	eP	51	15.10	0.8
ARN	44.59	357	P	51	15.00	0.7
CMB	45.22	358	iPc	51	19.90	0.6
			ePcP	53	00.60	
			eLR	04	08.00	
TNP	45.27	2	iP	51	20.00	0.1
	0.9s		13.02nm			4.8mb
			iPcP	52	59.80	
MSU	46.09	7	iP	51	27.30	0.9
			iPcP	53	02.90	
MEO	46.10	23	iPd	51	26.30	0.0
KVN	46.22	1	iPc	51	27.40	0.1
			iPcP	53	02.40	
ORV	46.78	357	eP	51	31.50	-0.1
			iPcP	53	04.50	
UYO	47.33	28	eP	51	36.20	0.2
DUG	47.68	6	P	51	39.80	1.0
	1.1s		18.09nm			5.0mb
WDC	47.86	356	eP	51	38.90	-1.2
			PcP	53	08.20	
TUL	48.21	25	iP	51	42.80	-0.1
	1.2s		48.20nm			5.4mb
LNO	48.21	25	iP	51	43.20	0.4
GOL	48.48	14	P	51	45.00	-0.2
	1.0s		15.00nm			5.0mb
GLD	48.56	14	P	51	46.30	0.5
	1.3s		91.95nm			5.6mb
LPB	50.30	105	eP	51	57.00	-2.8
Z	20s		1.77um			5.1Msz
			LR	07	15.00	
BW06	50.64	9	P	52	00.20	-1.5
	1.4s		14.79nm			4.8mb

HPI	51.13	5	P	52	05.80	0.3
CCH	52.23	106	Pc	52	17.90	3.7X
FVM	52.32	28	P	52	13.30	-1.0
VGB	52.70	358	P	52	16.30	-0.7
RSCP	52.99	34	P	52	18.10	-1.2
RSSD	52.99	13	iPc	52	17.80	-1.6
			iPcP	53	27.00	
GBTN	53.80	35	P	52	24.40	-0.7
LON	53.97	357	P	52	25.20	-1.1
TKL	54.04	35	P	52	26.40	-0.5
JSC	54.58	38	P	52	30.70	-0.3
MCW	55.95	357	P	52	31.80	-8.9X
PGC	55.96	356	eP	52	40.00	-0.6
PNT	56.48	359	eP	52	44.00	-0.4
SIV	57.02	104	P	52	50.70	1.8
SES	57.95	6	ePc	52	54.40	-0.4
			pP	53	47.00	234kmX
CVL	58.73	37	P	53	00.10	-0.4
NA2	59.25	37	P	53	03.70	-0.3
CBN	59.53	37	iPd	53	06.50	0.6
	1.0s	21.00nm			5.2mb	
EDM	60.56	4	eP	53	09.50	-3.3X
FFC	63.48	11	ePc	53	30.60	-1.7
	1.8s	105.00nm			5.7mb	
RSNY	65.27	33	P	53	44.00	-0.1
	1.5s	53.76nm			5.4mb	
WNY	65.53	34	P	53	45.60	-0.3
SIT	65.65	350	P	53	46.20	-0.1
	1.0s	47.50nm			5.5mb	
HBVT	65.96	34	P	53	49.00	0.5
BNH	67.11	35	P	53	56.00	0.0
BAO	69.61	104	eP	54	11.00	-1.1
YKA	69.76	2	eP	54	10.20	-1.7
	0.9s	15.90nm			5.1mb	
TOA	72.46	347	eP	54	27.70	-0.7
PMR	72.72	345	ePc	54	28.70	-1.1
	2.0s	87.50nm			5.4mb	
SVW	74.11	342	ePc	54	36.20	-1.8
FBA	75.27	348	ePc	54	43.50	-1.0
	1.1s	34.40nm			5.3mb	
SCH	75.58	28	eP	54	47.00	0.5
TTA	75.66	343	P	54	44.70	-2.2
INK	76.24	354	eP	54	49.00	-0.9
	1.4s	94.00nm			5.6mb	
ADK	76.92	327	eP	54	52.60	-1.4
IMA	77.58	346	ePc	54	56.00	-1.6
	1.8s	20.80nm			4.9mb	
FRB	80.36	20	ePc	55	12.00	-0.5
SPA	82.65	180	iPc	55	27.60	2.8
	1.2s	61.27nm			5.6mb	
MBC	83.50	360	ePc	55	28.80	0.2
	1.0s	24.00nm			5.3mb	
KHC	122.38	35	ePKP	01	47.30	-9.5X
TIY	124.78	311	ePKP	02	02.30	0.4
	Z 24s	0.50um			5.1MszX	
LZH	131.76	313	ePKP	02	14.00	-1.5
	Z 25s	0.50um			5.1MszX	
			PKS	05	41.50	
WMQ	136.95	332	PKP	02	19.50	-5.5X
	Z 24s	0.30um			4.9MszX	
			PP	05	05.50	
BUL	137.85	131	ePKP	02	25.50	-1.9
CHG	141.62	291	ePKP	02	30.00	-4.1X
KSH	145.43	340	PKPd	02	41.00	0.8
DSI	145.96	42	ePKP	02	43.00	1.9
PRNI	146.46	44	ePKP	02	44.00	2.0
MBH	146.73	45	iPKPc	02	45.00	2.6
GUN	149.00	314	PKP	02	45.90	-0.7
PKI	149.53	314	PKP	02	46.20	-1.2
DMN	149.72	315	PKP	02	46.90	-0.7
GKN	149.81	316	PKP	02	46.90	-0.7
MAIO	151.19	3	ePKP	02	51.00	1.7
			i	02	56.00	
NDI	153.99	326	ePKP	02	55.50	2.1
	S.D. = 1.1	on 83 of 89 obs.				

? JUN 11, 1990 06h 05m 16.73± 0.90s
55.173 N ±19.4km 167.532 E ±14.8km
DEPTH = 33.0km (normal)
4.4mb (8 obs.)
KOMANDORSKY ISLANDS REGION (4)

TTA	20.04	52	P	09	51.70	2.2
IMA	21.53	44	eP	10	05.00	0.3
FBA	23.82	48	ePd	10	28.20	1.1
TOA	24.60	55	eP	10	36.10	1.4
INK	29.50	40	eP	11	18.00	-1.5
YKA	38.61	47	eP	12	36.90	-1.0
	0.6s	3.00nm			4.3mb	
NEW	45.06	66	P	13	31.00	0.1
	0.9s	5.48nm			4.5mb	
FFC	48.37	51	iPd	13	55.60	-1.2
	0.9s	11.00nm			4.9mb	
LRM	49.08	66	eP	14	02.20	-0.5
KVN	50.63	76	P	14	15.00	0.4
TNP	51.80	76	P	14	23.50	0.0
BW06	52.67	67	P	14	29.20	-0.8
	1.0s	4.50nm			4.4mb	
SYP	52.80	81	eP	14	46.00	15.1X
CLC	53.21	78	eP	14	34.00	0.2
SBB	53.90	80	eP	14	39.00	0.1
GSC	54.03	78	eP	14	40.00	0.1
MSU	54.28	72	P	14	42.40	0.5
RSSD	54.58	62	P	14	42.60	-1.4
RVR	54.66	80	eP	14	46.00	1.6
TPC	55.32	79	eP	14	49.00	-0.3
PLM	55.42	80	eP	14	50.00	-0.2
GLA	56.79	79	eP	14	53.00	-6.9X
GOL	57.08	67	P	15	01.80	-0.3
	1.2s	7.17nm			4.6mb	
GLD	57.12	66	P	15	02.80	0.5
	0.8s	14.71nm			5.1mb	
ANMO	60.01	71	P	15	21.70	-0.8
	0.8s	2.33nm			4.4mb	
ALQ	60.01	71	eP	15	21.30	-1.2
	1.0s	3.00nm			4.4mb	
CHTO	62.55	264	(P)	15	40.30	0.7
	S.D. = 1.0	on 25 of 27 obs.				

& JUN 11, 1990 06h 21m 09.80s
61.824 N 149.834 W
DEPTH = 37.0km
2.7mb (1 obs.)
SOUTHERN ALASKA (2)
<AGS-P>. ML 3.5 (PMR). Felt (IV) at Willow and (III) at Palmer.

PWA	0.18	187	iPd	21	17.00	0.4
PLRM	0.41	124	iP	21	18.38	-0.8
			eS	21	26.38	
PMR	0.41	124	iPd	21	18.50	-0.7
GHO	0.44	96	iP	21	19.16	-0.5
			eS	21	26.69	
SUA	0.56	231	iP	21	20.99	-0.5
			iS	21	30.67	
PMS	0.60	167	iP	21	21.13	-0.7
CUT	0.62	341	eP	21	21.21	-0.9
SML	0.71	91	iP	21	22.38	-1.1
SKT	0.82	282	iP	21	23.84	-1.1
CGLM	1.16	244	iP	21	29.57	-0.3
HUR	1.16	4	eP	21	29.24	-0.6
			eS	21	44.52	
NCG	1.19	250	iP	21	29.45	-0.8
			Sn	21	45.61	
SCM	1.19	88	eP	21	29.82	-0.5
			eS	21	44.99	
CRP	1.24	244	eP	21	30.81	-0.3
SPU	1.24	240	iP	21	30.63	-0.4
			eS	21	46.83	
NKA	1.28	213	eP	21	33.04	1.6
SLKM	1.33	188	eP	21	31.57	-0.7
			eS	21	48.36	
GLI	1.63	124	iP	21	35.86	-0.7
			eS	21	56.63	
SEW	1.74	174	eP	21	37.94	-0.1
TOA	1.75	79	iPc	21	38.90	0.5
VZW	1.75	115	iP	21	37.75	-0.6
KTH	1.81	344	eP	21	38.54	-0.6
VLZ	1.82	111	iP	21	38.38	-0.8
KLU	1.90	98	iP	21	39.97	-0.5
			Sn	22	04.24	
NNL	1.93	202	eP	21	41.52	0.8
MCK	1.96	12	eP	21	41.16	-0.1
RED	2.01	227	eP	21	41.73	-0.2
			Sn	22	07.24	
SDG	2.13	69	iP	21	44.16	0.4
			Sn	22	10.56	
HIN	2.16	130	eP	21	43.17	-1.0
PAX	2.34	59	eP	21	46.92	0.2
CVA	2.36	121	eP	21	45.52	-1.4
CNPM	2.41	197	eP	21	45.68	-2.0
SGAM	2.61	119	eP	21	48.91	-1.5
DDM	2.69	41	eP	21	52.78	1.2
WRH	2.77	16	eP	21	51.90	-0.9
NEA	2.79	7	eP	21	51.71	-1.3
SVW	2.87	258	iPc	21	52.90	-1.4
RAGM	2.89	118	eP	21	52.94	-1.6
MID	2.96	143	eP	21	58.40	3.0
CCB	2.98	17	eP	21	54.40	-1.4
AUL	3.03	218	eP	21	57.28	0.8
AUE	3.03	217	eP	21	56.63	0.2
TTA	3.08	294	ePd	21	55.70	-1.6
FBA	3.22	16	ePd	21	57.80	-1.4
DOT	3.23	53	eP	21	59.98	0.7
GLM	3.36	18	eP	21	59.98	-1.2
CDD	3.47	215	eP	22	01.30	-1.3
TGL	3.55	104	eP	22	03.07	-0.8
WAX	3.66	109	eP	22	03.37	-2.1
BALM	3.68	99	eP	22	03.71	-2.2
KDC	4.30	199	P	22	18.40	3.9
IMA	4.59	340	eP	22	16.50	-2.1
YKA	16.35	72	eP	24	56.70	-1.1
	0.6s	0.40nm			2.7mb	
	53 obs. associated					

? JUN 11, 1990 07h 39m 56.46± 4.07s
30.006 S ±50.9km 69.857 W ±107.km
DEPTH = 130.0km (geophysicist)
CHILE-ARGENTINA BORDER REGION (127)

RTRS	0.38	115	iPd	40	15.20	0.1
RTLL	1.78	138	ePc	40	28.00	-0.2
CFA	2.12	139	ePd	40	32.60	0.2
			S	40	59.10	
RTCV	2.17	149	ePc	40	33.00	0.0
			S	40	59.90	
	S.D. = 0.4	on 4 of 4 obs.				

• JUN 11, 1990 08h 20m 12.93± 1.44s
14.116 N ±11.6km 90.234 W ±14.3km
DEPTH = 194.1 ± 11.7 km
4.2mb (9 obs.)
GUATEMALA (70)

TPX	2.11	292	iP	20	51.00	-1.6
			iS	21	20.00	
SCX	3.48	319	eP	21	09.70	1.1
			(S)	22	07.50	
OXX	6.91	296	(P)	21	58.00	5.0X
UYO	20.33	350	iPc	24	35.60	0.0
HBF	20.77	24	P	24	41.50	1.5
PRM	21.12	18	P	24	44.20	0.8
OLY	21.32	357	P	24	47.20	1.8
JSC	21.66	20	P	24	48.40	-0.3
RSCP	21.80	10	P	24	49.80	-0.3
MEO	21.92	341	iPc	24	51.70	0.5
GBTN	22.13	13	P	24	53.80	0.5
TKL	22.22	14	P	24	54.70	0.5
TUL	22.27	348	eP	24	54.80	0.2
	0.7s	6.20nm			4.3mb	
LNO	22.27	348	e(P)	24	54.00	-0.5
FVM	23.77	360	P	25	08.50	-0.6
ALQ	25.38	328	eP	25	25.00	0.8
	0.8s	1.49nm			3.7mb	
ANMO	25.38	328	P	25	26.40	2.1
GOL	28.75	335	P	25	55.00	0.3
	0.7s	3.64nm			4.2mb	
RSSD	32.15	341	P	26	24.60	0.3
BW06	33.06	333	P	26	32.10	-0.2
	0.5s	0.71nm			3.6mb	
HPI	35.40	331	P	26	50.00	-2.2
LRM	36.74	334	eP	27	05.30	1.9
ZOBO	37.27	143	P	27	09.00	0.5
FFC	41.55	350	iPc	27	42.80	0.1
	0.4s	5.00nm			4.4mb	
PNT	42.57	332	eP	27	52.00	0.9
	0.7s	5.00nm			4.2mb	
SCH	44.54	19	ePc	28	05.20	-1.6
	0.5s	27.00nm			5.0mb	
YKA	51.32	346	eP	28	57.70	-1.4
	0.6s	3.10nm			4.1mb	
FRB	51.83	12	eP	29	00.00	-2.8
INK	60.82	343	eP	30	05.00	-1.4
MBC	64.01	353	eP	30	26.50	-0.9
	1.0s	4.00nm			4.2mb	
ADK	76.86	321	eP	31	42.70	-2.1
	1.5s	208.30nm			5.6mb X	
WB5	137.06	256	ePKP	39	16.80	1.5
			e	40	11.70	
WRA	137.08	256	PKPc	39	16.60	1.3
	0.7s	3.40nm				

11d 08h

GBA 149.87 24 PKPc 39 36.60 -0.5
0.9s 12.40nm
BSI 159.76 344 ePKP 39 56.50 6.2X
S.D. = 1.3 on 33 of 35 obs.

? JUN 11, 1990 08h 21m 48.19± 3.58s
6.020 S ±39.7km 145.133 E ±16.6km
DEPTH = 76.6 ± 25.8 km
3.9mb (1 obs.)
PAPUA NEW GUINEA (202)

LAT 1.96 109 iPc 22 20.00 0.0
eS 22 45.00
KDB 3.97 150 eP 22 48.00 0.0
WB5 17.30 216 eP 25 46.20 -0.1
eS 29 06.10
WRA 17.37 216 Pc 25 47.20 0.1
0.5s 4.20nm 3.9mb
BRS 22.46 162 iPc 26 42.00 0.0
S.D. = 0.1 on 5 of 5 obs.

JUN 11, 1990 08h 28m 10.86± 0.30s
57.182 N ± 7.7km 158.030 E ± 4.8km
DEPTH = 64.6km (2 depth phases)
4.9mb (40 obs.)
KAMCHATKA (217)

ASAJ 16.26 223 P 31 58.70 2.4
MRRJ 18.30 223 eP 32 13.10 -8.4X
MDJ 21.71 247 eP 32 56.00 -1.8
1.2s 100.00nm 5.1mb
TTA 23.22 57 eP 33 12.50 -0.1
SVW 23.69 61 eP 33 18.40 1.3
IMA 24.00 48 eP 33 19.30 -0.8
1.6s 96.80nm 5.0mb
CN2 24.39 251 Pc 33 22.00 -2.0
Z 16s 0.90um 4.4MszX
N 14s 1.00um
E 14s 0.30um
pP 33 32.00 37kmX
MAT 24.53 221 (P) 33 24.00 -1.3
1.0s 12.00nm 4.3mb
Z 20s 1.06um 4.3Msz
eS 37 49.00
FBA 26.55 51 eP 33 42.20 -1.7
SNY 26.77 250 eP 33 44.00 -2.0
Z 15s 1.20um 4.6MszX
N 15s 1.10um
E 15s 0.80um
eS 38 18.00
DL2 29.94 248 eP 34 17.50 2.9X
INK 31.46 41 eP 34 27.00 -0.7
BJI 31.92 256 eP 34 32.00 0.1
1.3s 19.00nm 4.8mb
Z 14s 1.17um 4.7MszX
N 14s 0.60um
eS 39 40.00
MBC 33.79 25 eP 34 49.50 1.6
0.9s 5.00nm 4.4mb
HHC 33.80 261 eP 34 47.60 -0.9
Z 14s 1.60um 4.9MszX
N 14s 0.50um
E 15s 0.80um
TIA 34.29 250 eP 34 51.70 -0.9
BTO 34.81 263 eP 34 58.00 0.9
N 16s 1.40um
E 16s 0.90um
TIY 35.60 257 eP 35 04.50 0.6
Z 12s 1.45um 5.0MszX
N 12s 0.80um
NJ2 36.73 244 Pd 35 12.60 -0.7
Z 14s 0.40um 4.4MszX
N 13s 0.60um
E 12s 0.30um
WHN 40.19 247 eP 35 42.20 0.1
Z 12s 0.60um 4.7MszX
N 13s 0.50um
E 12s 0.50um
XAN 40.24 256 P 35 43.00 0.4
YKA 41.02 45 eP 35 47.60 -1.0
0.8s 6.10nm 4.4mb
GTA 41.19 270 P 35 48.20 -2.2
1.0s 30.00nm 5.0mb
Z 16s 1.80um 5.0MszX
E 14s 1.00um
LZH 41.41 263 Pd 35 53.30 0.9
1.5s 47.00nm 5.1mb
Z 15s 1.10um 4.8MszX
N 13s 0.60um
E 14s 0.70um
WMQ 44.66 284 P 36 18.60 0.1
Z 14s 0.90um 4.8MszX
N 15s 0.80um
E 15s 0.80um
CD2 45.41 258 P 36 25.80 1.2
PNT 47.03 62 eP 36 35.00 -2.2
GYA 47.43 252 P 36 41.80 1.1
N 20s 1.00um
E 20s 1.00um
SES 50.30 56 eP 37 04.00 1.6
KMI 50.56 255 Pc 37 05.50 0.6
FFC 51.07 47 iPc 37 07.00 -1.1
1.1s 27.00nm 5.2mb
WDC 51.72 73 ePc 37 15.90 2.7
ORV 53.01 73 P 37 24.40 1.5
KSH 53.90 288 P 37 31.30 1.7
MHC 54.59 75 eP 37 36.90 2.2
ARN 54.64 75 P 37 34.70 -0.2
CMB 54.72 73 eP 37 34.30 -1.3
SUF 54.77 335 eP 37 34.00 -1.5
0.7s 18.70nm 5.2mb
KVN 55.14 71 P 37 38.20 -0.6
TNP 56.33 71 P 37 46.70 -0.6
1.2s 29.57nm 5.2mb
BW06 56.59 62 P 37 49.20 0.0
1.3s 9.84nm 4.7mb
DUG 56.95 66 P 37 51.40 -0.3
NUR 57.06 335 iP 37 52.00 0.1
0.7s 28.00nm 5.5mb
GUN 57.44 272 P 37 55.60 0.2
CHG 57.73 254 ePc 37 58.00 0.8
1.0s 12.50nm 5.0mb
CLC 57.86 73 eP 37 58.00 0.1
PKI 57.96 272 P 37 59.40 0.3
1.0s 60.00nm 5.7mb
GKN 58.04 273 P 37 59.90 0.5
DMN 58.09 272 P 38 00.50 0.6
1.2s 93.00nm 5.8mb
RSSD 58.15 57 P 37 59.00 -1.1
MSU 58.56 67 P 38 02.90 -0.1
SBB 58.61 74 eP 38 02.00 -1.2
GSC 58.66 73 eP 38 03.00 -0.6
MWC 58.84 74 eP 38 08.00 3.0X
NAO 59.55 342 P 38 06.70 -2.6
0.9s 4.70nm 4.6mb
HFS 59.69 340 eP 38 10.00 -0.3
0.9s 7.30nm 4.8mb
TPC 59.98 73 eP 38 15.00 2.3
PLM 60.14 74 eP 38 14.00 0.1
BAR 60.77 74 eP 38 21.00 3.0X
GOL 60.97 61 P 38 20.00 0.4
GLA 61.44 73 eP 38 22.00 -0.6
ANMO 64.20 65 P 38 43.30 2.3
0.9s 4.46nm 4.4mb
ALQ 64.20 65 eP 38 39.00 -2.0
0.9s 4.41nm 4.4mb
EKA 66.81 348 Pc 38 58.50 1.4
0.8s 6.80nm 4.7mb
KRA 67.67 332 eP 39 03.50 0.9
KSP 67.82 335 eP 39 05.00 1.4
CLL 68.11 337 iPc 39 06.70 1.4
1.3s 47.00nm 5.3mb
MEO 68.13 60 eP 39 04.50 -1.3
LNO 68.49 57 eP 39 10.50 2.7
TUL 68.49 57 eP 39 09.00 1.0
1.2s 15.00nm 4.8mb
PRU 69.02 336 Pc 39 13.00 2.1
e 39 32.70 74km
MOX 69.02 338 eP 39 13.00 2.0
1.2s 28.00nm 5.1mb
WNY 69.89 37 P 39 14.00 -2.4
GRF 70.01 338 eP 39 17.50 0.5
Z 20s 0.10um 4.1Msz
e 39 19.70 7kmX
KHC 70.04 336 P 39 18.00 0.8
1.2s 20.00nm 4.9mb
e 39 33.30 55km
HBVT 70.18 36 P 39 16.90 -1.2
WET 70.18 336 iPc 39 20.40 2.3
1.3s 38.00nm 5.2mb
OLY 70.77 54 P 39 22.90 1.0
CDF 72.01 340 eP 39 28.30 -0.9
0.8s 10.75nm 4.8mb
HAU 72.57 340 eP 39 31.40 -1.0
BSF 72.66 340 eP 39 31.90 -1.1
FLN 72.93 345 eP 39 33.00 -1.4
0.7s 9.90nm 4.9mb
LDF 73.04 345 eP 39 33.80 -1.3
GRR 73.35 345 eP 39 35.80 -1.1
0.7s 8.80nm 4.8mb
CTI 73.38 336 P 39 37.50 0.2
LOR 73.72 342 eP 39 38.10 -1.0
0.7s 8.80nm 4.8mb
LPF 73.72 346 eP 39 38.20 -0.8
LBF 73.97 342 eP 39 39.40 -1.2
SSF 73.98 342 eP 39 39.60 -1.0
0.7s 7.15nm 4.7mb
VAI 74.16 338 P 39 44.00 2.4
AVF 74.27 342 eP 39 41.30 -0.9
0.9s 16.40nm 5.0mb
SMF 74.33 342 eP 39 41.50 -1.1
BGF 74.58 343 eP 39 43.20 -0.9
0.7s 8.25nm 4.8mb
LPL 74.90 340 eP 39 46.30 0.1
0.9s 21.30nm 5.1mb
LPG 74.91 340 eP 39 46.70 0.3
0.8s 22.85nm 5.2mb
TCF 74.94 343 eP 39 45.30 -0.9
0.7s 3.85nm 4.4mb
MAF 74.95 343 eP 39 45.80 -0.4
0.8s 8.05nm 4.7mb
BOB 75.07 337 P 39 50.00 3.0X
LSF 75.09 343 eP 39 46.20 -0.8
MME 75.35 336 P 39 52.20 3.4X
BNI 75.35 339 P 39 51.30 2.6
PGD 75.43 336 Pc 39 52.40 3.2X
BDI 75.50 336 P 39 52.00 2.5
ARV 75.50 335 P 39 51.50 2.1
ASS 75.97 335 P 39 52.00 -0.1
CAF 76.29 343 eP 39 53.70 -0.2
LFF 76.49 344 eP 39 54.70 -0.2
LPO 76.67 343 eP 39 55.80 -0.1
LRG 76.95 339 eP 39 57.30 -0.2
0.8s 14.80nm 5.0mb
LMR 77.04 339 eP 39 57.80 -0.2
0.8s 8.05nm 4.7mb
WRA 79.35 203 Pd 40 09.60 -1.3
0.7s 3.20nm 4.4mb
MBH 81.06 313 eP 40 19.00 -0.9
S.D. = 1.3 on 105 of 112 obs.

• JUN 11, 1990 08h 32m 19.71± 1.76s
2.139 N ±14.2km 97.557 E ±15.3km
DEPTH = 33.0km (normal)
NORTHERN SUMATERA (706)

PSI 1.47 68 iPc 32 45.50 1.3
eS 32 52.50
TSI 1.69 37 iPc 32 48.50 1.2
e(S) 33 30.00
PPI 3.84 132 eP 33 17.50 -0.4
BSI 4.03 326 eP 33 21.00 0.4
IPM 4.23 55 ePc 33 22.90 -0.6
0.5s 22.50nm
SNG 5.86 31 eP 33 44.50 -2.1
S.D. = 1.7 on 6 of 6 obs.

& JUN 11, 1990 09h 07m 26.40s
38.358 N 122.393 W
DEPTH = 8.0km
NORTHERN CALIFORNIA (36)
<BRK>. ML 3.5 (BRK).
Mo=3.4*10**15 Nm (BRK). Felt (V) at Sonoma; (IV) at Angwin, El Verano, Glen Ellen, Napa, Rutherford and Yountville; (III) at Boyes Hot Springs, Oakville, Penngrove and Saint Helena. Felt in parts of Lake, Napa, Solano and Sonoma Counties.

NWRM 0.40 284 iPc 07 34.40 -0.1
ZSP 0.43 165 iPd 07 35.10 0.1
BKS 0.50 165 iPd 07 36.10 -0.3
iS 07 44.40
MHC 1.18 149 ePc 07 47.50 -1.1
ARN 1.22 146 eP 07 47.70 -1.5
ORV 1.38 30 eP 07 48.70 -3.3
CMB 1.61 101 eP 07 53.00 -2.3
SAO 1.76 154 iPc 07 55.50 -1.9
LTCM 1.86 6 eP 07 55.30 -3.5

WDC	2.22	357	eP	08 01.50	-2.6
FHC	2.73	334	e(P)	08 22.00	10.6
KVN	3.43	77	eP	08 19.00	-2.4
TNP	4.08	92	eP	08 28.50	-2.2

13 obs. associated

JUN 11, 1990 14h 48m 00.27± 1.32s
23.687 N ± 8.3km 121.554 E ±12.5km
DEPTH = 5.0km (geophysicist)
TAIWAN (244)
ML 3.9 (BJI).

TWD	0.39	5	iPd	48 08.40	0.2
			eS	48 13.80	
TWF1	0.41	215	iPc	48 08.30	-0.2
			eS	48 14.50	
TWQ	0.88	312	eP	48 18.00	0.4
			eS	48 31.40	
TWC	0.96	16	eP	48 19.00	0.1
			eS	48 33.50	
TWK	1.07	247	ePc	48 21.30	0.5
ANP	1.49	359	iP	48 29.50	1.7
			eS	48 55.00	
OZH	2.98	295	Pn	48 48.40	-0.6
			Sg	49 38.50	
SSE	7.39	358	eP	49 50.00	-1.3
NJ2	8.67	345	Pd	50 08.30	-1.0
			S	51 46.50	
GYA	13.77	285	P	51 19.00	0.2
E	10s		0.40um		
			S	53 50.80	
TIY	16.02	333	eP	51 52.00	4.1X
Z	10s		0.50um		

S.D. = 1.0 on 10 of 11 obs.

• JUN 11, 1990 14h 58m 48.96± 1.31s
36.328 N ±12.7km 28.128 E ± 8.3km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)

YER	0.81	9	iPg	59 06.50	1.7
			iSg	59 16.50	
KSL	1.20	100	iPbc	59 11.00	-0.2
CIN	1.27	359	ePg	59 11.00	-1.5
			iSg	59 27.00	
ELL	1.49	73	iPn	59 15.50	-0.5
SMG	1.72	324	ePb	59 17.60	-1.5
IZM	2.18	342	ePn	59 20.00	-5.8X
BCK	2.27	59	ePn	59 27.00	-0.2
KHL	2.28	29	iPn	59 28.50	1.2
VLI	4.20	277	ePn	59 55.40	1.0

S.D. = 1.4 on 8 of 9 obs.

? JUN 11, 1990 16h 46m 21.48± 2.51s
17.347 N ±20.8km 99.421 W ±16.7km
DEPTH = 10.0km (geophysicist)
GUERRERO, MEXICO (59)

III	1.02	358	iPd	46 39.44	-1.5
			iS	46 57.00	
PPM	1.87	24	eP	46 54.83	0.6
			eS	47 19.94	
IIT	1.97	32	eP	46 55.56	0.0
			(S)	47 34.54	
IIJ	2.39	353	iPc	47 03.35	1.6
			eS	47 40.00	
OXX	2.59	95	eP	47 04.09	-0.3
			eS	47 40.23	
MRX	2.88	325	(P)	47 08.00	-0.3
			(S)	47 52.00	
LVVM	3.69	49	(P)	47 09.34	-10.4X
			(S)	48 25.46	

S.D. = 1.3 on 6 of 7 obs.

• JUN 11, 1990 17h 49m 42.09± 2.03s
6.777 S ±12.3km 106.420 E ±11.8km
DEPTH = 106.0 ± 18.3 km
4.8mb (4 obs.)
JAVA (277)

TRT	6.23	99	ePd	51 13.50	0.4
KGM	9.27	340	eP	51 55.50	1.0
NANU	17.98	152	eP	53 39.00	-7.8X
			eS	56 36.00	
NNT	20.36	341	eP	54 13.50	1.2
KNA	23.64	114	eP	54 44.70	0.0
MTN	25.07	106	eP	54 57.00	-1.4
			e	55 09.50	
CHG	26.47	344	eP	55 11.20	-0.1
WB5	30.09	118	eP	55 43.00	-0.8
WRA	30.09	119	Pc	55 42.90	-0.9
GYA	33.04	0	P	56 10.60	1.0
QIS	34.94	116	iPc	56 25.70	-0.2
GBA	35.19	305	Pc	56 27.50	-0.5
	0.5s		7.00nm	4.8mb	
PKI	39.74	330	P	57 05.00	-1.3
GUN	39.79	331	P	57 05.60	-1.2
	0.5s		31.00nm	5.4mb	
DMN	39.92	330	P	57 06.60	-1.1
GKN	40.48	330	P	57 10.80	-1.4
POO	40.80	309	eP	57 09.00	-5.8X
TIY	44.61	7	eP	57 46.00	0.4
NDI	45.11	323	iPd	57 48.00	-1.6
GTA	46.36	353	P	58 00.00	0.5
	0.8s		10.00nm	4.7mb	
BRS	48.46	121	iPd	58 17.20	1.2
CN2	53.21	17	eP	58 51.40	-0.1
			epP	59 10.00	73kmX
			PcP	59 59.00	
MAIO	61.39	318	iPc	59 47.40	-2.1
TAB	71.41	314	eP	00 53.00	0.0
KRI	75.47	254	iPc	01 19.00	2.0
BUL	76.28	251	iPd	01 20.00	-1.5
MBH	77.55	302	iPc	01 27.00	-1.2
PRNI	77.61	303	eP	01 29.50	0.9
DSI	77.62	304	eP	01 30.00	1.5
SUF	91.53	333	iP	02 39.10	1.5
	0.4s		2.40nm	4.8mb	
NUR	91.81	331	eP	02 39.00	0.1
TRI	96.65	315	eP	03 02.90	1.5
			i	03 12.10	
YKA	116.85	20	ePKP	08 15.60	0.2
	0.6s		0.90nm		
BAO	146.26	229	ePKP	09 13.50	1.8
SIV	154.21	209	PKP	09 32.10	8.6X

S.D. = 1.2 on 32 of 35 obs.

JUN 11, 1990 18h 02m 50.74± 0.70s
45.830 N ± 6.7km 14.683 E ± 5.7km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
MD 2.8 (LJU). Felt in the Dobro Polje-Videm area.

CEY	0.20	243	ePgd	02 55.40	0.2
			eSg	02 58.40	
LJU	0.24	334	iPgd	02 55.20	-0.6
			eSg	02 58.50	
VBY	0.52	129	ePg	03 01.10	-0.1
			iSg	03 09.40	
RIY	0.53	203	ePg	03 01.20	-0.2
			iSg	03 09.50	
VOY	0.59	290	ePgc	03 01.80	-0.9
			eSg	03 10.30	
PTJ	0.89	85	eP	03 08.10	0.2
FVI	1.53	301	P	03 19.50	1.5
			eSg	03 41.00	

S.D. = 0.9 on 7 of 7 obs.

? JUN 11, 1990 18h 35m 38.44± 1.26s
36.046 N ±10.8km 100.152 E ±15.3km
DEPTH = 33.0km (normal)
QINGHAI PROVINCE, CHINA (325)
ML 4.0 (BJI).

LZH	2.99	88	ePn	36 24.00	-0.8
			Pg	36 27.00	
			Sn	36 59.50	
GTA	3.37	356	Pn	36 29.80	-0.3
Z	10s		0.40um		
			Pg	36 34.10	
			Sn	37 07.40	
CD2	5.94	149	Pg	37 23.20	16.7X
BTO	8.99	57	eP	37 50.00	1.0
WMQ	12.31	313	eP	38 27.50	-6.8X
			S	40 51.00	
CHG	17.20	184	eP	39 38.00	0.2

S.D. = 1.3 on 4 of 6 obs.

% JUN 11, 1990 18h 57m 00.65± 0.90s
27.720 N ±10.2km 103.702 E ±10.7km
DEPTH = 10.0km (geophysicist)
YUNNAN PROVINCE, CHINA (318)
ML 3.2 (BJI).

KMI	2.73	199	Pnc	57 45.00	-0.5
	1.5s		100.00nm		
			Sn	58 19.50	
GYA	2.92	115	Pn	57 43.00	-5.2X
CD2	3.18	1	Pn	57 50.60	-1.1
			Pg	57 57.30	
			Sg	58 38.00	
XAN	7.73	34	Pn	58 56.40	0.4
			Sn	00 26.50	
			Sg	01 06.50	
WHN	9.73	71	eP	59 24.00	0.4
LSA	11.20	283	Pc	59 45.00	0.8

S.D. = 1.1 on 5 of 6 obs.

? JUN 11, 1990 19h 23m 31.86± 0.99s
41.778 N ±21.7km 12.817 E ± 6.7km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

RDP	0.08	255	P	23 33.80	-0.6
			eSg	23 35.20	
RMP	0.09	291	P	23 35.00	0.5
			eSg	23 37.00	
AZI	0.51	65	P	23 41.70	-0.4
			eSg	23 48.00	
SDI	0.75	95	P	23 47.00	0.4
			eSg	23 57.50	

S.D. = 1.0 on 4 of 4 obs.

? JUN 11, 1990 20h 25m 19.73± 4.62s
30.458 S ±57.1km 68.797 W ±67.0km
DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)

RTRS	0.64	296	iPd	25 32.30	0.0
RTLL	0.91	162	iPd	25 36.10	-0.2
			eS	25 50.00	
CFA	1.24	157	iPc	25 41.00	0.1
RTCV	1.42	171	e(P)	25 43.50	0.1

S.D. = 0.2 on 4 of 4 obs.

% JUN 11, 1990 20h 28m 44.61± 1.05s
34.921 S ±12.2km 144.416 E ±10.1km
DEPTH = 10.0km (geophysicist)
NEW SOUTH WALES, AUSTRALIA (601)
ML 3.2 (BFD), 3.1 (CNB), 2.6 (TOO).

BFD	2.71	213	iPc	29 28.60	-0.4
			ePn	29 37.00	
			eSn	29 59.00	
			eSg	30 10.00	
TOO	2.78	162	e(P)	29 31.00	0.9
			eS	30 04.00	
BWA	3.34	83	iPc	29 39.50	1.6
CAN	3.78	97	iPd	29 41.90	-2.3
			i	29 44.50	
			eSn	30 21.60	
			iSg	30 38.20	
STK	3.84	321	eP	29 45.10	0.0
	0.3s		7.00nm		
			eS	30 28.40	
CNB	4.07	97	iPd	29 48.60	0.2
			eSg	29 53.00	
			eSn	30 29.00	
			eSg	30 47.00	

S.D. = 1.7 on 6 of 6 obs.

JUN 11, 1990 21h 50m 42.49± 0.35s
44.838 N ± 3.5km 9.673 E ± 3.3km
DEPTH = 26.4 ± 3.0 km
NORTHERN ITALY (545)
ML 3.0 (LDG), 2.7 (VIE).

BOB	0.18	246	Pd	50 47.50	-0.6
			eSg	50 52.00	
PCP	0.86	250	P	51 00.95	2.2
			S	51 13.36	
MDI	0.94	2	P	50 59.50	-0.4
			eSg	51 13.00	
SAL	0.98	38	P	50 59.50	-0.9
			eSg	51 13.70	
BDI	1.02	139	P	51 01.50	0.4
			eSg	51 16.50	
CKI	1.08	248	P	51 02.70	0.8
			eSn	51 19.00	
VAI	1.21	329	P	51 04.50	0.8

11d 21h

		eSn	51	21.50	
FIN	1.22	240 P	51	04.19	0.2
		S	51	18.86	
PII	1.27	151 P	51	04.50	-0.1
		eSn	51	21.00	
ROB	1.40	248 P	51	07.15	0.7
		S	51	23.65	
ORO	1.43	304 Pc	51	07.80	0.8
		eSn	51	28.00	
ORX	1.44	304 P	51	07.58	0.5
		S	51	24.36	
IMI	1.58	235 P	51	09.13	0.0
		S	51	26.62	
ENR	1.72	250 P	51	12.09	0.9
		S	51	32.96	
RSP	1.74	281 P	51	11.24	-0.3
		S	51	29.86	
PGD	1.76	123 P	51	12.50	0.7
DOI	1.76	260 P	51	13.70	1.9
STV	1.78	251 P	51	12.94	0.9
		S	51	33.67	
CTI	1.84	48 P	51	15.00	2.0
		eSn	51	36.50	
PZZ	1.86	261 P	51	14.06	0.7
		S	51	35.50	
SBF	1.88	240 Pn	51	13.80	0.4
		Sn	51	39.20	
LSD	1.89	290 P	51	13.93	0.2
		S	51	35.36	
RRL	2.06	273 P	51	15.77	-0.4
		S	51	38.75	
BNI	2.14	277 P	51	19.00	1.7
LPG	2.17	289 Pn	51	18.60	0.7
LPL	2.19	289 Pn	51	18.00	0.0
PGF	2.34	192 Pn	51	18.60	-1.5
		Sn	51	47.00	
FRF	2.52	241 Pn	51	22.00	-0.6
		Sn	51	53.00	
SQTA	2.61	24 iPgc	51	25.40	1.4
		iSg	51	57.40	
LMR	2.73	238 Pn	51	24.60	-0.9
		Sn	51	57.00	
LRG	2.76	241 Pn	51	26.40	0.5
		Sn	52	00.60	
FVI	2.80	50 P	51	26.50	0.1
VOY	3.20	67 e(Pn)	51	41.10	8.8X
		eSn	52	22.10	
BSF	3.60	327 Pn	51	38.20	0.2
		Sn	52	19.00	
HAU	3.91	325 Pn	51	42.00	-0.3
		Sn	52	26.80	
CDF	3.94	336 Pn	51	41.40	-1.3
		Sn	52	24.00	
SMF	4.46	296 Pn	51	50.00	-0.2
LBF	4.52	300 Pn	51	50.90	-0.1
		Sn	52	42.00	
LOR	4.72	303 Pn	51	53.00	-0.8
		Sn	52	47.00	
AVF	4.83	296 Pn	51	54.60	-0.7
SSF	4.84	300 Pn	51	56.00	0.5
		Sn	52	48.00	
BGF	5.08	292 Pn	51	57.80	-1.1
		Sn	52	55.60	
CAF	5.41	274 Pn	52	03.20	-0.3

S.D. = 0.9 on 42 of 43 obs.

& JUN 11, 1990 22h 05m 21.30s
60.581 N 150.150 W
DEPTH = 40.7km
KENAI PENINSULA, ALASKA (14)
<AGS-P>. ML 3.5 (PMR).

SLKM	0.08	206 iP	05	27.89	-0.1
NKA	0.56	287 iP	05	33.84	1.0
SEW	0.59	144 iP	05	32.41	-0.9
		eS	05	41.55	
PMS	0.73	23 iP	05	34.77	-0.5
NNL	0.79	227 iP	05	36.18	0.2
BRLK	0.90	204 eP	05	37.06	-0.6
		Sn	05	49.44	
SUA	0.93	342 eP	05	37.61	-0.6
		iS	05	50.16	
PWA	1.08	7 iP	05	39.95	-0.2
SPU	1.11	304 iP	05	40.12	-0.5
		iS	05	54.77	
RDT	1.11	271 iP	05	40.06	-0.7
PLRM	1.13	26 iP	05	40.38	-0.5
PMR	1.13	26 iPd	05	40.40	-0.4
CGLM	1.16	310 iP	05	40.97	-0.5
		Sn	05	55.99	
CNPM	1.19	208 iP	05	41.31	-0.5
		eS	05	56.69	
CRP	1.20	306 iP	05	41.61	-0.4
		iS	05	56.59	
NCG	1.28	311 iP	05	42.72	-0.4
RED	1.31	264 iP	05	42.86	-0.6
		iS	06	00.31	
GHO	1.33	26 iP	05	43.55	-0.3
		Sn	06	01.47	
XLV	1.38	216 eP	05	44.02	-0.4
SML	1.51	35 iP	05	45.96	-0.4
GLI	1.53	77 eP	05	44.86	-1.7
SKT	1.55	335 eP	05	46.75	-0.2
		eS	06	07.21	
VZW	1.83	73 eP	05	49.42	-1.4
VLZ	1.95	72 eP	05	51.44	-1.1
AUE	2.03	234 eP	05	54.09	0.3
AUL	2.04	235 eP	05	54.74	0.8
NCA	2.14	47 eP	05	50.64	-4.8
CVA	2.17	89 eP	05	54.34	-1.5
KLU	2.25	64 iP	05	55.87	-1.2
HUR	2.42	6 eP	06	01.25	2.0
CDD	2.42	228 eP	05	59.22	-0.1
SGAM	2.44	90 eP	05	58.41	-1.2
TOA	2.45	50 ePd	05	59.40	-0.4
MCNL	2.53	238 eP	06	00.77	-0.1
RAGM	2.72	92 eP	06	00.67	-2.8
SVW	2.73	284 eP	06	02.30	-1.4
SDG	2.94	46 eP	06	06.79	0.0
KTH	3.01	353 eP	06	09.30	1.6
KDC	3.09	204 eP	06	06.70	-2.0
MCK	3.21	10 eP	06	11.25	0.7
PAX	3.27	41 eP	06	10.71	-0.7
TGL	3.61	84 eP	06	15.87	-0.4
WAX	3.61	89 eP	06	13.80	-2.5
TTA	3.65	313 eP	06	16.70	-0.1
DDM	3.79	30 eP	06	19.31	0.4
BALM	3.85	80 eP	06	17.17	-2.6
WRH	4.02	13 eP	06	21.46	-0.5
CCB	4.22	14 eP	06	23.68	-1.1
FBA	4.47	13 iPc	06	27.60	-0.8
GLM	4.60	15 eP	06	29.46	-0.8
IMA	5.73	345 eP	06	47.00	0.7

51 obs. associated

& JUN 11, 1990 22h 06m 04.70s
40.455 N 124.048 W
DEPTH = 24.0km
NEAR COAST OF NORTHERN CALIF. (35)
<BRK>. ML 3.3 (BRK).

FHC	0.35	8 iPd	06	12.20	-0.3
		iS	06	18.10	
WDC	1.16	83 ePc	06	23.40	-2.0
		eS	06	38.30	
ORV	2.15	114 e(P)	06	35.80	-4.0
KVN	4.79	105 eP	07	22.50	5.1

4 obs. associated

& JUN 11, 1990 22h 32m 49.85s
60.494 N 151.988 W
DEPTH = 80.9km
KENAI PENINSULA, ALASKA (14)
<AGS-P>.

RDT	0.22	291 iP	33	01.62	-0.5
RED	0.40	259 iP	33	02.54	-0.6
NKA	0.45	56 iP	33	04.93	1.6
NNL	0.57	142 iP	33	05.18	0.7
		iS	33	16.33	
SPU	0.69	357 iP	33	05.16	-0.6
		eS	33	18.13	
CKL	0.73	346 iP	33	05.42	-0.8
CRP	0.78	354 eP	33	06.30	-0.5
		eS	33	19.80	
CGLM	0.82	359 iP	33	06.59	-0.6
		eS	33	19.66	
SLKM	0.87	88 iP	33	07.05	-0.7
		eS	33	20.63	
NCG	0.92	355 iP	33	07.55	-0.8
CNPM	1.04	158 eP	33	09.08	-0.7
		eS	33	23.61	
SUA	1.15	31 iP	33	10.75	-0.4
		eS	33	26.94	
SEW	1.32	106 eP	33	11.79	-1.5
AUL	1.33	214 eP	33	12.75	-0.6
AUE	1.34	212 iP	33	12.34	-1.1
PMS	1.41	57 iP	33	13.79	-0.6
SKT	1.51	8 eP	33	14.49	-1.2
PWA	1.55	41 eP	33	15.13	-1.1
PLRM	1.77	50 eP	33	17.54	-1.7
CDD	1.78	209 eP	33	18.25	-1.1
GHO	1.96	48 iP	33	20.35	-1.6
SML	2.21	52 iP	33	23.49	-1.7
GLI	2.44	79 eP	33	24.81	-3.5
VZW	2.73	76 iP	33	29.27	-3.1
VLZ	2.84	75 eP	33	31.19	-2.7
KLU	3.12	69 iP	33	35.14	-2.7

26 obs. associated

% JUN 11, 1990 22h 46m 02.38± 1.31s
33.721 S ± 6.4km 71.541 W ± 9.9km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF CENTRAL CHILE (135)

LCCH	0.25	354 iPc	46	07.50	-0.1
		iS	46	13.50	
LNV	0.26	155 iPc	46	08.00	0.2
		iS	46	14.50	
TACH	0.51	83 iPd	46	13.00	0.3
		iS	46	23.50	
CHCH	0.77	106 iPd	46	17.10	-0.3
		iS	46	31.10	
PCH	0.86	84 iPc	46	19.00	0.0
		i	46	33.60	
		i	46	36.00	
PEL	0.92	51 iPc	46	20.50	0.5
		iS	46	36.00	
FCH	1.12	70 eP	46	23.00	-0.5
		i	46	41.50	
		iS	46	44.50	

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

? JUN 11, 1990 22h 48m 54.91± 5.16s
29.184 N ±56.6km 16.902 W ±10.6km
DEPTH = 33.0km (normal)
CANARY ISLANDS REGION (394)
mbLg 2.7 (MDD).

CTFE	0.90	141 iP	49	11.60	0.4
TBT	1.02	241 iP	49	13.00	0.1
		i	49	24.80	
GGC	1.54	133 iP	49	20.00	-0.4
		iS	49	36.50	
CHIE	1.73	213 eP	49	22.90	-0.1
		iS	49	42.70	

S.D. = 0.6 on 4 of 4 obs.

? JUN 11, 1990 22h 55m 41.35± 0.88s
31.276 S ±26.7km 68.651 W ±42.4km
DEPTH = 100.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.16	109 iPc	55	55.70	-0.3
		eS	56	07.00	
CFA	0.48	133 iPd	55	57.50	0.2
		S	56	10.30	
RTCV	0.59	171 iPc	55	58.10	0.0
		(S)	56	10.50	
RTRS	1.30	327 iPc	56	05.60	0.1

S.D. = 0.4 on 4 of 4 obs.

JUN 11, 1990 23h 10m 29.02± 0.43s
2.998 S ± 5.9km 130.457 E ± 8.7km
DEPTH = 23.5km (2 depth phases)
4.7mb (3 obs.)
CERAM (272)

AAI	2.36	253 eP	11	07.50	0.5
MTN	9.81	176 eP	12	49.00	-2.8
		eS	14	36.00	
WB5	17.21	167 eP	14	29.50	-0.1
		eS	17	32.20	
WRA	17.26	168 Pd	14	32.80	2.5
	0.6s	14.80nm			4.3mb
QIS	19.60	154 iPc	14	59.10	0.3
		eS	18	25.00	
GUA	21.81	41 eP	15	21.30	-0.3
GUMO	21.82	41 eP	15	22.00	0.4
PJG	21.82	41 eP	15	22.20	0.6
BWA	35.46	154 eP	17	29.00	3.2X

CAN	36.47	154	eP	17	36.90	2.6X
GYA	37.24	323	P	17	41.20	0.3
CHG	37.83	306	eP	17	46.40	0.5
CHTO	37.83	306	P	17	46.00	0.1
			e	17	53.00	24km
KMI	38.79	318	Pc	17	55.00	0.9
TIY	43.82	339	iPd	18	34.40	-0.7
BJI	44.79	344	eP	18	42.00	-0.7
	1.0s		12.00nm			4.8mb
SNY	45.05	353	eP	18	44.80	0.0
LZH	46.15	330	eP	18	53.50	-0.3
CN2	46.80	355	eP	18	58.00	-0.6
			epP	19	05.00	23km
GTA	50.74	329	P	19	29.60	0.2
	0.8s		10.00nm			4.8mb
WMO	60.34	326	eP	20	37.90	-0.7

S.D. = 1.1 on 19 of 21 obs.

JUN 11, 1990 23h 27m 12.62± 0.78s
31.244 S ± 9.0km 70.070 W ±10.7km
DEPTH = 128.5 ± 14.5 km
CHILE-ARGENTINA BORDER REGION (127)

RTRS	1.19	26	iPd	27	37.60	0.0
			eS	27	55.40	
ZON	1.23	105	iPd	27	39.00	1.0
			eS	27	56.00	
RTLL	1.37	94	iPd	27	38.50	-1.1
			eS	27	57.40	
RTCV	1.45	116	iPd	27	40.20	-0.2
JACH	1.50	197	iPc	27	41.60	0.5
			iS	28	03.50	
CFA	1.61	103	iPc	27	41.90	-0.4
			eS	28	02.90	
ROCH	1.90	205	iP	27	46.00	0.1
			iS	28	11.00	
PEL	1.96	195	iPd	27	47.00	0.4
			iS	28	12.50	
FCH	2.09	185	iPd	27	49.50	1.1
			i	28	17.70	
PCH	2.40	189	iP	27	52.50	0.4
			i	28	24.00	
TACH	2.51	197	iPc	27	53.00	-0.5
			iS	28	24.00	
LCCH	2.56	209	iPc	27	53.50	-0.6
CHCH	2.73	190	eP	27	56.50	0.2
			i	28	29.00	
			iS	28	30.40	
LNV	2.93	202	iPc	27	57.50	-1.4
			iS	28	31.50	
SIV	17.26	30	P	31	07.60	0.3

S.D. = 0.8 on 15 of 15 obs.

% JUN 12, 1990 00h 21m 27.93± 0.90s
39.947 N ± 7.1km 28.980 E ± 7.7km
DEPTH = 5.0km (geophysicist)
TURKEY (366)

IZI	0.54	44	ePg	21	38.40	-0.4
			eSg	21	47.70	
KCT	0.57	302	iPg	21	37.70	-1.6
YLV	0.69	26	iPg	21	41.20	-0.5
EDC	0.94	295	iPg	21	47.00	0.6
			eSg	22	00.00	
HRT	1.02	31	ePg	21	46.70	-1.0
ISK	1.12	3	ePn	21	52.00	2.7
ALT	1.25	135	iPn	21	51.50	-0.2
KHL	1.68	165	ePn	21	58.50	0.4

S.D. = 1.5 on 8 of 8 obs.

JUN 12, 1990 00h 43m 38.96± 0.76s
34.380 N ± 9.2km 26.697 E ± 6.4km
DEPTH = 33.0km (normal)
CRETE (370)

VAM	2.29	297	eP	44	16.00	0.8
KSL	2.93	53	iPc	44	24.70	0.4
SMG	3.32	2	eP	44	35.80	6.0X
CIN	3.41	19	eP	44	30.00	-1.0
ELL	3.53	47	iPn	44	33.50	0.6
VLI	3.85	308	eP	44	36.00	-1.3
BCK	4.41	45	ePn	44	45.80	0.4
ITM	4.78	307	eP	44	51.20	0.7
DSI	7.81	109	eP	45	32.00	-1.2
PRNI	8.09	118	eP	45	37.00	-0.1
MBH	8.33	121	eP	45	41.00	0.7

S.D. = 1.0 on 10 of 11 obs.

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* JUN 12, 1990 01h 59m 14.05± 1.63s
36.639 N ±18.0km 71.396 E ±13.7km
DEPTH = 202.8 ± 21.4 km
4.3mb (7 obs.)
AFGHANISTAN-USSR BORDER REGION (717)

NDI	9.32	147	iPc	01	23.70	-1.7
			iS	03	02.50	
MAIO	9.59	272	eP	01	31.00	2.0
			eS	03	01.00	
GKN	14.11	124	P	02	26.40	-0.1
DMN	14.68	124	P	02	34.20	0.5
PKI	14.91	123	P	02	36.40	-0.2
GUN	15.01	121	P	02	38.00	0.2
HYB	20.17	160	eP	03	35.00	0.6
NUR	37.90	324	eP	06	12.00	-0.8
SUF	37.97	328	iP	06	12.80	-0.5
	0.5s		5.50nm			4.4mb
KEV	40.79	338	eP	06	36.00	-0.4
HFS	43.15	322	eP	06	53.80	-2.0
	0.6s		18.30nm			4.8mb
NAO	44.63	323	P	07	05.20	-2.4
	0.6s		8.70nm			4.4mb
BCAO	58.01	250	ePd	08	40.30	-7.6X
	1.0s		8.00nm			4.4mb
MBC	67.18	3	eP	09	48.50	1.0
	0.8s		5.00nm			4.3mb
INK	73.72	9	eP	10	28.00	1.3
FBA	74.25	16	(P)	10	31.60	1.7
YKA	81.09	3	eP	11	08.20	1.0
	0.4s		1.60nm			4.1mb
WB5	81.77	122	eP	11	11.00	-0.5
WRA	81.80	122	Pd	11	11.70	0.1
	0.7s		1.90nm			3.9mb

S.D. = 1.3 on 18 of 19 obs.

& JUN 12, 1990 02h 39m 27.01s
63.365 N 149.861 W
DEPTH = 9.5km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.40	165	iP	39	34.85	-0.4
			eS	39	40.17	
KTH	0.51	292	iP	39	36.92	-0.5
MCK	0.55	48	iP	39	37.48	-0.8
			Sn	39	45.09	
CUT	0.98	191	iP	39	45.57	-0.1
			eS	39	59.73	
NEA	1.27	16	eP	39	50.45	-0.1
			iS	40	07.38	
WRH	1.36	34	iP	39	52.14	0.1
			Sn	40	10.53	
CCB	1.57	34	eP	39	55.33	0.3
			eS	40	16.30	
SKT	1.59	210	eP	39	55.78	0.5
			iS	40	17.57	
GHO	1.66	164	iP	39	56.18	-0.2
			iS	40	17.89	
SML	1.72	155	eP	39	56.68	-0.5
PWA	1.72	180	eP	39	57.31	0.1
			iS	40	20.14	
FBA	1.79	30	eP	39	59.85	1.7
			iS	40	23.03	
PLRM	1.81	169	eP	39	58.69	0.2
DDM	1.84	75	eP	40	00.02	1.0
SCM	1.93	142	eP	40	01.50	1.1
SUA	1.95	193	iP	40	01.35	0.7
GLM	1.96	33	eP	40	02.45	1.8
PAX	2.03	99	eP	40	02.92	1.1
TOA	2.12	125	eP	40	04.13	1.1
PMS	2.13	176	eP	40	04.26	1.0
SDG	2.15	111	eP	40	04.10	0.7
NCG	2.24	210	eP	40	05.57	0.7
CGLM	2.29	207	eP	40	07.08	1.5
SPU	2.42	206	eP	40	08.24	0.9
DOT	2.62	81	eP	40	13.16	3.1
KLU	2.62	134	eP	40	12.32	2.0
GLI	2.81	151	eP	40	14.07	1.2
SLKM	2.87	184	eP	40	15.04	1.3

28 obs. associated

& JUN 12, 1990 02h 40m 06.15s
32.690 N 117.370 W
DEPTH = 12.4km
CALIFORNIA-MEXICO BORDER REGION (45)
<ECX>. MD 2.1 (ECX).

CBX	0.71	122	iP	40	18.60	-1.3
			S	40	28.08	
ENX	1.00	143	eP	40	23.53	-1.4
			S	40	37.30	
PBX	1.09	150	eP	40	25.00	-1.4
			S	40	39.70	
CPBX	1.77	98	eP	40	37.97	1.3
			S	40	59.20	

4 obs. associoted

? JUN 12, 1990 03h 06m 03.32± 4.92s
16.529 S ±111.km 72.045 W ±37.3km
DEPTH = 63.6 ± 12.8 km
4.4mb (3 obs.)
NEAR COAST OF PERU (115)

ARE	0.54	83	iPc	06	14.50	-2.0
			iS	06	30.00	
ZOBO	3.77	87	P	07	03.00	2.1
			S	07	56.00	
LPB	3.79	91	P	07	01.00	0.1
	1.0s		296.00nm			
			i	07	09.00	
			S	08	10.00	
PT03	4.41	304	eP	07	12.00	2.6X
PT06	4.93	302	iP	07	18.00	1.3
			iS	08	31.50	
CCH	5.71	99	eP	07	31.30	3.4X
			i	07	53.00	
PT08	6.30	316	iPc	07	26.80	-9.4X
			e(S)	08	16.10	
NNA	6.48	314	eP	07	38.00	-0.4
	1.0s		12.00nm			4.4mb
PT10	6.51	312	e(P)	07	48.00	9.3X
SIV	10.55	89	P	08	29.60	-4.8X
TUL	56.79	337	eP	15	43.20	-0.2
	1.2s		8.20nm			4.7mb
ALQ	60.73	328	eP	16	11.00	0.1
ANMO	60.73	328	eP	16	28.00	17.1X
	1.2s		5.08nm			
YKA	85.55	342	eP	18	34.30	-1.1
	0.8s		1.00nm			4.0mb

S.D. = 1.7 on 8 of 14 obs.

JUN 12, 1990 04h 21m 19.48± 0.31s
43.982 N ± 3.0km 26.368 E ± 3.8km
DEPTH = 19.6 ± 3.4 km
3.3mb (1 obs.)
BULGARIA (359)
Felt (IV) in the Giurgiu area
and (I) at Bucharest, Romania.

BUC1	0.44	326	iPc	21	28.00	-0.4
BUC	0.47	336	ePd	21	25.00	-4.0X
PVL	1.07	225	iPc	21	43.00	3.8X
ISR	1.16	6	iPc	21	41.00	0.3
TLB	1.34	63	iPd	21	43.00	-0.1
PSN	1.35	102	iPd	21	43.00	-0.2
JMB	1.52	174	iP	21	46.00	0.2
MLR	1.54	349	iPc	21	47.00	0.9
DRA	1.67	295	iPc	21	51.00	3.1X
CFR	1.75	46	iPc	21	48.50	-0.6
VRI	1.91	8	ePd	21	51.50	0.2
PGB	2.15	229	iP	21	56.00	1.0
PLD	2.24	214	iP	21	56.00	-0.1
KDZ	2.43	197	iPd	22	00.00	1.1
RZN	2.59	208	iPc	22	01.00	-0.4
VTS	2.69	240	iP	22	02.00	-0.7
PTT	2.95	0	eP	22	07.00	0.8
ALN	3.09	185	ePc	22	09.00	0.8
			iS	22	57.70	
DEV	3.11	309	ePd	22	12.00	3.5X
CTT	3.22	151	iPn	22	08.60	-1.4
IAS	3.32	14	eP	22	17.00	5.6X
SRS	3.52	217	iPc	22	14.10	-0.2
			eS	23	09.90	
ISK	3.53	145	ePn	22	13.60	-0.8
BZS	3.76	297	ePd	22	16.50	-1.2
EDC	3.80	162	ePn	22	20.40	2.1
KNT	3.81	223	iPc	22	18.73	0.3
VAY	3.86	228	iPn	22	20.20	1.1
SOH	3.87	216	ePd	22	18.90	-0.4
GBZT	3.92	143	ePn	22	25.00	5.0X
HRT	3.99	141	ePn	22	19.60	-1.4
OUR	4.05	207	ePd	22	22.60	0.8

12d 04h

YLV	4.08	146	eP	22 21.00	-1.3
SKO	4.14	243	iPn	22 39.50	16.4X
			i	23 23.00	
			Lg	23 42.50	
EZN	4.15	180	iP	22 23.30	0.0
THE	4.19	218	eP	22 23.10	-0.7
IZI	4.31	147	eP	22 26.60	1.0
GPA	4.71	140	eP	22 33.00	1.7
LIT	4.83	218	eP	22 33.60	0.6
FNA	4.89	231	eP	22 33.60	-0.1
KAS	6.04	113	eP	22 58.00	7.9X
IGT	6.33	227	eP	22 53.40	-0.7
NAO	19.26	337	P	25 46.20	0.9
	0.7s		1.30nm	3.3mb	

S.D. = 0.9 on 34 of 42 obs.

? JUN 12, 1990 06h 02m 23.43± 3.39s
31.393 S ± 9.2km 68.078 W ±28.1km
DEPTH = 10.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

CFA	0.25	213	iPc	02 28.80	0.0
			e	02 32.10	
			eS	02 34.50	
RTLL	0.34	281	iPc	02 30.50	0.0
			eS	02 37.20	
RTCV	0.61	220	eP	02 35.80	0.0
			(S)	02 46.30	
RTRS	1.70	315	iPd	02 53.30	0.0

S.D. = 0.1 on 4 of 4 obs.

& JUN 12, 1990 07h 10m 37.39s
31.940 N 116.240 W
DEPTH = 3.0km
BAJA CALIFORNIA (48)
<ECX>. ML 2.3 (ECX).

ENX	0.37	261	eP	10 44.20	-0.5
			S	10 48.90	
PBX	0.46	245	ePc	10 45.50	-1.0
			S	10 52.30	
CBX	0.52	316	ePd	10 46.70	-1.0
			S	10 54.00	
LMX	1.10	81	eP	10 56.50	-2.2
ECBX	1.12	114	ePd	10 57.00	-1.9
			S	11 12.30	

5 obs. associated

? JUN 12, 1990 07h 17m 15.01± 1.32s
9.768 S ±25.5km 159.752 E ±31.0km
DEPTH = 36.5 ± 10.2 km
4.8mb (5 obs.)
SOLOMON ISLANDS (193)

HNR	0.39	30	eP	17 24.00	-0.1
			eS	17 33.00	
RMQ	19.62	211	iPd	21 43.70	0.2
	0.5s		38.00nm	4.9mb	
QIS	22.18	239	iPd	22 10.20	0.5
WRA	26.53	245	Pd	22 50.70	-0.7
	0.8s		2.90nm	3.9mb	
ANM	78.63	15	eP	29 15.30	0.9
SVW	78.85	20	eP	29 16.40	0.6
	0.7s		13.00nm	5.0mb	
TTA	80.02	19	eP	29 22.90	0.8
PMR	81.50	22	eP	29 29.60	-0.1
IMA	82.96	17	eP	29 37.30	-0.2
FBA	84.04	20	eP	29 42.10	-0.7
	0.7s		12.90nm	5.2mb	
YKA	96.58	28	eP	30 40.90	-1.1
	0.5s		0.50nm	4.3mb	

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

? JUN 12, 1990 07h 50m 13.93± 5.01s
45.838 N ±30.1km 6.977 E ±23.9km
DEPTH = 10.0km (geophysicist)
FRANCE (538)

LSD	0.40	162	P	50 22.36	0.1
			S	50 26.15	
RSP	0.71	164	P	50 27.79	-0.3
			S	50 35.89	
ORX	0.73	106	P	50 28.41	0.0
			S	50 36.81	
RRL	0.93	188	P	50 31.79	0.0
			S	50 41.74	
PZZ	1.34	176	P	50 38.86	0.2
			S	50 54.66	

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

JUN 12, 1990 08h 00m 12.04± 0.29s
2.898 S ± 5.4km 130.315 E ± 7.7km
DEPTH = 33.0km (normal)
5.0mb (13 obs.) 4.4Msz (1 obs.)
CERAM (272)

AAI	2.26	250	eP	00 48.00	0.2
			eS	01 28.50	
MTN	9.92	175	e(P)	02 31.00	-4.4X
			eS	04 19.00	
KNA	12.86	187	eP	03 09.70	-5.6X
WB5	17.34	167	eP	04 07.20	-6.1X
			i	04 14.90	
			eS	07 12.00	
WRA	17.39	167	Pc	04 15.00	1.0
	0.4s		8.90nm	4.2mb	
QIS	19.75	153	eP	04 40.00	-2.3
			eS	08 19.00	
CTA	23.11	139	iPc	05 17.20	1.0
	0.8s		19.78nm	4.7mb	
QIZ	29.67	318	eP	06 17.50	0.3
PPI	30.00	274	eP	06 21.80	1.6
STK	30.72	161	eP	06 25.70	-0.7
	1.1s		6.00nm	4.3mb	
PSI	31.87	280	ePc	06 35.70	-0.9
BRS	32.47	141	iPc	06 42.20	0.4
ADE	32.85	167	iPc	06 43.00	-2.0
SSE	34.91	346	Pd	07 02.30	-0.4
	1.0s		10.00nm	4.7mb	
BWA	35.61	154	eP	07 10.20	1.4
NJ2	36.42	343	Pd	07 16.20	0.6
WHN	36.58	337	Pc	07 18.00	1.1
	0.9s		10.00nm	4.7mb	
CAN	36.62	154	eP	07 17.80	0.5
GYA	37.07	323	P	07 21.80	0.5
CHG	37.66	306	eP	07 27.00	0.8
	1.0s		35.75nm	5.2mb	
KMI	38.62	318	Pc	07 35.50	1.1
	1.0s		40.00nm	5.2mb	
XAN	41.91	333	P	08 00.00	-1.2
CD2	42.08	325	P	08 02.60	-0.1
TIY	43.68	339	Pd	08 15.20	-0.5
	Z 14s		0.40um	4.5MszX	
			eS	14 45.00	
BJI	44.66	345	eP	08 23.00	-0.4
	1.0s		30.00nm	5.1mb	
SNY	44.93	353	Pd	08 25.80	0.2
	Z 20s		0.50um	4.4Msz	
	N 20s		0.40um		
LZH	45.99	330	Pd	08 34.80	0.5
	1.5s		44.00nm	5.2mb	
	Z 16s		0.20um	4.2MszX	
			pP	08 38.70	13kmX
			sP	08 49.00	
CN2	46.69	355	Pc	08 39.00	-0.5
HHC	46.79	340	eP	08 40.30	-0.2
MDJ	47.31	359	Pd	08 44.50	0.2
GTA	50.59	329	P	09 08.80	-1.1
	0.8s		20.00nm	5.2mb	
GUN	52.57	309	P	09 25.00	-0.4
	0.6s		16.00nm	5.2mb	
PKI	52.78	308	P	09 26.10	-0.9
DMN	53.04	308	P	09 28.40	-0.4
GKN	53.59	308	P	09 32.10	-0.6
	0.8s		26.00nm	5.3mb	
WMQ	60.18	326	P	10 17.50	-1.6
KSH	65.23	316	P	10 54.00	1.2
FBA	89.16	25	(P)	13 06.00	0.6
INK	94.96	22	eP	13 32.00	-0.1
MBC	97.57	13	ePc	13 44.50	0.7
	1.0s		6.00nm	5.1mb	
NNA	149.22	119	iPKPd	20 02.20	6.7X
	0.9s		14.29nm		
ARE	151.12	132	ePKP	19 59.00	0.4
ZOBO	153.64	137	PKP	20 06.00	3.4X
	1.0s		9.25nm		
CCH	154.12	142	(PKP)	20 15.00	12.1X

S.D. = 0.9 on 38 of 44 obs.

& JUN 12, 1990 08h 38m 36.84s
61.630 N 150.892 W
DEPTH = 60.3km
SOUTHERN ALASKA (2)
<AGS-P>.

SUA	0.18	157	iP	38 46.64	0.1
			iS	38 54.98	
SKT	0.46	320	iP	38 47.81	-0.8
			iS	38 56.90	
PWA	0.48	87	iP	38 48.64	-0.1
			eS	38 58.08	
CGLM	0.63	239	iP	38 50.07	-0.4
			iS	39 00.56	
NCG	0.65	250	iP	38 50.08	-0.6
CRP	0.71	240	iP	38 51.13	-0.3
SPU	0.72	232	iP	38 50.87	-0.6
			iS	39 02.16	
PMS	0.75	121	iP	38 51.35	-0.5
			iS	39 03.37	
CUT	0.83	20	iP	38 52.29	-0.5
			iS	39 04.33	
PLRM	0.84	92	eP	38 51.98	-1.0
			iS	39 04.70	
PMR	0.84	92	iPc	38 51.90	-1.0
GHO	0.95	80	iP	38 53.96	-0.5
SLKM	1.17	164	iP	38 56.48	-0.9
SML	1.23	81	eP	38 57.17	-1.0
RDT	1.29	215	iP	38 58.21	-0.8
RED	1.52	218	iP	39 01.70	-0.5
SEW	1.69	155	eP	39 05.59	1.2
KTH	1.93	360	iP	39 07.39	-0.5
GLI	1.98	111	eP	39 06.37	-2.2
VLZ	2.25	101	eP	39 10.25	-2.0
TOA	2.29	76	iPd	39 12.10	-0.8
SVW	2.34	259	ePd	39 11.70	-1.9
KLU	2.38	91	eP	39 11.96	-2.3
TTA	2.73	301	ePc	39 16.80	-2.3
FBA	3.57	22	eP	39 31.10	0.2
IMA	4.62	346	eP	39 43.30	-2.5

26 obs. associated

% JUN 12, 1990 08h 39m 48.02± 1.02s
39.011 N ± 7.2km 29.282 E ±12.6km
DEPTH = 5.0km (geophysicist)
TURKEY (366)

ALT	0.65	86	iPg	39 59.90	-1.1
			eSg	40 08.00	
KHL	0.71	165	iPg	40 01.50	-0.8
			eSg	40 12.50	
IZI	1.33	6	ePn	40 14.50	1.4
KCT	1.43	330	iPn	40 13.40	-1.2
GPA	1.50	32	iPn	40 07.10	-8.6X
YLV	1.56	3	iPn	40 16.40	-0.1
EDC	1.73	321	ePn	40 22.20	3.4X
HRT	1.83	9	ePn	40 20.50	0.1
BCK	1.86	146	ePn	40 22.60	1.7

S.D. = 1.4 on 7 of 9 obs.

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* JUN 12, 1990 09h 58m 25.91± 2.31s
33.236 S ±12.4km 178.513 W ±13.8km
DEPTH = 61.1 ± 21.3 km
5.0mb (1 obs.)
SOUTH OF KERMADEC ISLANDS (179)

HBZ	5.07	210	eP	59 41.00	-0.1
			S	00 36.00	
SVA	15.30	349	eP	01 57.80	-1.8
DZM	17.34	306	iPd	02 28.10	2.8
RMQ	29.09	275	eP	04 23.00	0.1
QIS	39.18	278	eP	05 49.00	-0.7
WRA	43.84	275	Pc	06 26.80	-1.1
WB5	43.85	275	eP	06 27.00	-0.9
SPA	56.94	180	eP	08 07.00	-0.1
	1.0s		15.00nm	5.0mb	
PLM	88.02	47	eP	11 13.00	2.2
SBB	88.33	46	eP	11 13.00	0.9
ISA	88.61	45	eP	11 14.00	0.6
FRI	88.81	43	e(P)	11 12.30	-1.9
TPC	89.02	47	eP	11 17.00	1.6
GLA	89.09	49	eP	11 14.00	-1.7
CMB	89.15	42	eP	11 13.80	-2.1
CLC	89.24	45	eP	11 17.00	0.6
GSC	89.36	46	eP	11 18.00	1.0
ORV	89.61	40	e(P)	11 17.50	-0.5
WDC	89.79	39	ePc	11 19.00	0.3
BCAO	147.22	213	iPKPd	18 02.60	0.5
	0.9s		14.00nm		

S.D. = 1.5 on 20 of 20 obs.

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* JUN 12, 1990 10h 29m 59.41± 3.72s
41.293 N ±25.7km 29.346 E ±14.7km

DEPTH = 10.0km (geophysicist)
TURKEY (366)

ISK	0.31	224	iPg	30 05.90	0.0
			iSg	30 09.40	
GBZT	0.51	171	ePg	30 10.00	0.3
			iSg	30 16.00	
HRT	0.53	153	ePg	30 10.20	0.0
			eSg	30 14.90	
CTT	0.71	258	iPg	30 13.40	0.1
			iSg	30 22.90	
IZI	0.96	174	ePg	30 17.40	-0.3
			eSg	30 30.40	
MLR	4.87	331	eP	31 10.00	-4.6X

S.D. = 0.3 on 5 of 6 obs.

? JUN 12, 1990 11h 01m 49.01± 0.95s
37.740 N ±14.2km 6.226 W ± 7.7km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
mbLg 2.7 (MDD).

EVAL	0.44	249	eP	01 58.00	0.0
			eS	02 04.50	
EHOR	0.78	84	eP	02 04.50	0.3
			eS	02 15.50	
EBAN	1.98	77	eP	02 22.50	-0.4
EPLA	2.33	3	eP	02 28.00	0.0
			eS	02 55.50	

S.D. = 0.5 on 4 of 4 obs.

? JUN 12, 1990 11h 12m 20.35± 3.45s
50.118 N ±48.6km 168.667 W ±17.7km
DEPTH = 33.0km (normal)
4.1mb (3 obs.)
ALEUTIAN ISLANDS REGION (16)

ADK	5.36	292	eP	13 40.00	-0.1
TTA	14.58	23	e(P)	15 46.00	0.1
INK	25.03	30	eP	17 42.00	-0.3
YKA	31.44	46	eP	18 45.80	5.4X
	0.8s		0.70nm	3.6mb	
NAO	69.41	0	P	23 27.20	0.8
	0.6s		1.30nm	4.2mb	
HFS	70.09	359	eP	23 30.10	-0.4
	0.4s		1.00nm	4.2mb	

S.D. = 0.7 on 5 of 6 obs.

% JUN 12, 1990 11h 12m 59.52± 0.88s
37.536 N ± 7.7km 3.920 W ± 7.8km
DEPTH = 5.0km (geophysicist)
SPAIN (377)
mbLg 2.8 (MDD).

AFC	0.41	133	ePg	13 07.90	0.1
			eSg	13 14.00	
EBAN	0.64	10	ePg	13 12.00	-0.3
			eSg	13 20.50	
EHOR	1.09	285	ePg	13 20.50	0.0
			eSg	13 34.80	
ENIJ	1.47	112	ePn	13 26.40	-0.3
			eSn	13 46.60	
EVIA	1.57	45	ePn	13 28.60	0.4
			eSn	13 47.20	

S.D. = 0.4 on 5 of 5 obs.

? JUN 12, 1990 11h 18m 26.03± 2.33s
6.229 S ±12.3km 30.921 E ±46.0km
DEPTH = 33.0km (normal)
4.2mb (2 obs.)
LAKE TANGANYIKA REGION (572)

LWI	4.49	332	iPc	19 32.50	-1.3
			iS	20 22.40	
KRI	10.61	187	ePn	21 00.00	0.9
			iSn	22 58.00	
			iLg	24 07.50	
BUL	14.01	189	iPn	21 44.20	-0.4
			iSn	24 20.40	
			iLg	25 52.60	
			iLR	26 19.60	
BCAO	16.28	310	iPd	22 15.30	1.3
	0.8s		7.00nm	3.8mb	
			iS	25 01.00	
			Lg	26 52.50	
WIN	21.02	218	eP	23 08.50	-1.1
	1.0s		20.00nm	4.5mb	
			S	26 10.50	
TOL	56.08	328	eP	28 05.00	0.6

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

JUN 12, 1990 11h 43m 04.29± 0.92s
36.175 N ± 6.4km 99.911 E ± 6.0km
DEPTH = 32.2 ± 7.7 km
4.5mb (11 obs.)
QINGHAI PROVINCE, CHINA (325)
ML 4.4 (BJI).

LZH	3.19	90	iPnd	43 52.40	-1.1
			Pg	43 57.00	
			Sg	44 34.90	
GTA	3.23	359	Pn	43 56.60	2.6
Z	10s		1.80um		
			Pg	44 02.20	
			Sn	44 35.00	
			Sg	44 45.00	
CD2	6.15	147	Pn	44 37.00	1.6
XAN	7.69	103	Pn	44 50.60	-6.2X
			Pg	45 16.30	
			Sn	46 15.50	
			Sg	46 55.00	
BTO	9.08	58	eP	45 14.00	-2.2
N	10s		0.70um		
E	10s		0.60um		
			eS	47 01.50	
LSA	9.79	231	eP	45 33.00	6.7X
TIY	10.14	78	eP	45 27.00	-3.8X
HHC	10.25	59	eP	45 31.00	-1.4
Z	15s		1.30um		
GYA	11.27	147	P	45 43.60	-2.7
			pP	45 49.60	
WMQ	12.08	313	iPd	45 57.00	-0.1
E	12s		1.30um		
			S	48 10.60	
SHL	12.62	215	iP	46 03.50	-1.0
BJI	13.38	68	eP	46 13.00	-1.3
	1.0s		10.00nm	4.7mb	
Z	12s		0.66um	4.6MszX	
GUN	14.46	239	P	46 28.60	-0.3
	0.8s		38.00nm	5.0mb	
PKI	15.00	239	P	46 35.20	-0.7
DMN	15.19	240	P	46 37.50	-0.8
GKN	15.28	242	P	46 39.00	-0.5
CHG	17.32	183	ePc	47 07.90	2.7
	1.0s		58.50nm	4.7mb	
SSE	18.42	100	eP	47 20.00	1.3
Z	10s		0.50um	5.0MszX	
E	10s		0.20um		
QIZ	19.19	150	eP	47 29.90	1.7
E	11s		0.70um		
			eS	50 56.00	
			PcP	51 53.00	
SNY	19.22	66	Pc	47 28.60	0.3
NDI	20.53	255	iPd	47 43.80	1.3
CN2	20.94	61	eP	47 47.40	0.8
Z	14s		0.60um	4.1MszX	
			epP	47 56.00	32kmX
MDJ	24.02	60	eP	48 19.50	2.4
GBA	30.20	228	P	49 17.00	3.0X
	0.6s		2.80nm	4.2mb	
HFS	57.62	324	eP	52 52.80	-0.4
	0.4s		1.00nm	4.2mb	
NAO	58.76	325	P	52 59.90	-1.3
	0.5s		0.80nm	4.1mb	
IMA	63.69	26	eP	53 34.00	-0.6
	0.7s		2.50nm	4.4mb	
TTA	64.37	29	eP	53 40.00	1.0
WB5	64.58	144	eP	53 58.90	18.2X
WRA	64.62	144	Pc	53 39.40	-1.6
	0.6s		3.00nm	4.6mb	
MBC	65.12	10	eP	53 44.00	0.4
SVW	65.45	31	eP	53 46.60	0.7
FBA	66.39	26	eP	53 52.00	0.2
	0.7s		7.10nm	4.9mb	
PMR	67.81	29	eP	54 00.20	-0.6
	0.5s		4.60nm	4.8mb	
INK	68.51	19	ePc	54 04.90	-0.2
TOA	68.63	27	ePd	54 06.70	0.6
YKA	77.82	16	eP	54 58.00	-1.6
	0.9s		2.30nm	4.2mb	

S.D. = 1.4 on 32 of 37 obs.

? JUN 12, 1990 11h 47m 55.19± 2.21s
38.026 N ±22.9km 23.655 E ±13.1km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 2.5 (ATH).

ATH	0.07	138	iPbc	47 57.50	-0.1
			eSb	48 03.50	
VLI	1.43	204	ePn	48 21.30	0.2
ITM	1.61	239	ePn	48 23.50	-0.3
VLS	2.42	275	ePn	48 35.60	0.1

S.D. = 0.4 on 4 of 4 obs.

? JUN 12, 1990 11h 53m 56.92± 3.65s
36.168 S ±29.7km 72.012 W ±22.0km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

LNV	2.26	13	iPc	54 32.60	-0.1
CHCH	2.49	27	iPd	54 37.00	0.9
			i	55 00.80	
TACH	2.66	20	iPc	54 38.50	0.1
LCCH	2.71	8	iP	54 39.00	-0.1
			i	55 07.50	
PCH	2.82	26	iPd	54 41.20	0.4
SAN	2.93	23	eP	54 43.00	0.8
			i	55 00.00	
			i	55 09.00	
IHA	3.15	6	eP	54 44.50	-0.8
			e(S)	55 22.50	
FCH	3.17	27	iPc	54 46.60	0.7
			iS	55 18.50	
PEL	3.21	20	iPd	54 46.50	0.3
ROCH	3.29	15	iPc	54 47.50	-0.1
			iS	55 20.50	
JACH	3.67	19	iPc	54 52.00	-0.8
			i	55 29.20	
RTCV	5.17	35	ePd	55 14.50	0.3
			S	56 10.00	
CFA	5.53	36	e(P)	55 18.50	-0.6
			eS	56 15.90	
RTLL	5.66	32	iPd	55 20.30	-0.6
			eS	56 19.40	
RTRS	6.35	20	ePc	55 29.80	-0.9
CCH	19.42	17	eP	58 26.00	2.2
LPB	19.86	11	P	58 49.00	20.3X
ZOBO	20.12	11	P	58 31.90	0.4
SIV	22.33	29	P	58 51.50	-1.9
			i	59 14.00	

S.D. = 1.0 on 18 of 19 obs.

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* JUN 12, 1990 13h 09m 50.02± 1.59s
35.961 N ± 6.0km 10.656 W ±14.3km
DEPTH = 33.0km (normal)
NORTH ATLANTIC OCEAN (402)
mbLg 3.5 (MDD). MD 3.5 (RBA).

EVAL	3.53	62	ePn	10 44.70	0.8
			eSn	11 20.00	
SFS	3.63	81	eP	10 49.00	3.7X
CNIL	3.75	82	eP	10 48.00	1.1
AVE	3.77	134	iPn	10 48.00	0.8
			iSn	11 23.00	
			i	11 26.00	
PLAT	3.97	86	eP	10 51.00	0.8
OJEN	4.15	87	eP	10 53.00	0.3
EJIF	4.22	82	ePn	10 54.40	0.7
			eSn	11 39.00	
NKM	4.30	95	iPn	10 55.00	0.2
			iSn	11 36.00	
EPRU	4.49	75	ePn	10 58.00	0.5
			eSn	11 44.00	
EHOR	4.72	65	ePn	11 00.60	-0.1
			eSn	11 48.20	
IFR	5.16	117	iPn	11 05.50	-1.7
			iSn	11 56.50	
EPLA	5.46	40	ePn	11 11.00	-0.3
			eSn	12 07.00	
TIO	5.77	150	iPn	11 15.40	-0.3
			iSn	12 10.50	
AFC	5.86	75	ePn	11 17.00	-0.1
			eSn	12 17.80	
EBAN	5.92	66	ePn	11 16.80	-0.9
			eSn	12 18.00	
EZAM	6.36	13	ePn	11 24.80	0.9
			eSn	12 30.30	
TOL	6.53	51	e(Pn)	11 26.00	-0.2
			eSn	12 35.00	
			eSb	12 47.00	

12d 13h

			eSg	13 12.00		
GUD	6.93	46	ePn	11 31.60	-0.3	
			eSn	12 42.70		
EVIA	7.02	65	ePn	11 32.00	-1.3	
			eSn	12 43.60		
ETOR	8.31	52	ePn	11 50.40	-0.9	
			eSn	13 16.00		

S.D. = 0.8 on 19 of 20 obs.

? JUN 12, 1990 13h 19m 21.47± 4.42s
33.880 S ±22.4km 72.787 W ±32.7km
DEPTH = 31.9 ± 5.5 km
OFF COAST OF CENTRAL CHILE (134)

LCCH	1.09	69	iPc	19 40.00	-0.6	
			iS	19 51.50		
LNV	1.15	94	iPc	19 41.50	0.2	
			i	19 55.00		
TACH	1.56	82	iP	19 46.50	-0.8	
ROCH	1.74	59	iPc	19 49.50	-0.6	
			iS	20 08.00		
CHCH	1.78	92	iPc	19 50.50	0.0	
			iS	20 10.00		
SAN	1.82	77	iP	19 51.00	-0.2	
			iS	20 10.20		
PEL	1.90	68	iPc	19 52.30	0.0	
			iS	20 13.10		
PCH	1.91	83	iPc	19 52.00	-0.5	
			iS	20 12.00		
FCH	2.16	76	iPc	19 56.00	-0.2	
			iS	20 20.00		
JACH	2.19	58	iPc	19 55.60	-0.9	
			iS	20 20.00		
ZON	4.17	57	iPd	20 26.00	1.4	
SIV	20.71	34	P	24 01.30	-0.4	

S.D. = 0.7 on 12 of 12 obs.

% JUN 12, 1990 13h 37m 49.03± 1.15s
39.901 N ± 9.3km 28.962 E ± 7.6km
DEPTH = 5.0km (geophysicist)
TURKEY (366)

KCT	0.58	307	iPg	37 59.90	-0.7	
IZI	0.59	42	ePg	37 59.80	-1.0	
			eSg	38 09.30		
EDC	0.95	298	ePg	38 08.10	0.5	
			eSg	38 22.10		
GBZT	0.96	22	ePg	38 10.00	2.2	
			iSg	38 24.00		
HRT	1.07	30	ePn	38 08.80	-0.8	
ISK	1.17	4	ePn	38 11.00	-0.2	
ALT	1.23	133	iPn	38 12.40	0.0	

S.D. = 1.4 on 7 of 7 obs.

& JUN 12, 1990 13h 47m 17.11s
58.713 N 156.261 W
DEPTH = 204.1km
3.6mb (1 obs.)
ALASKA PENINSULA (12)
<AGS-P>.

MCNL	1.10	64	iP	47 47.40	-0.9	
			eS	48 10.13		
CDD	1.38	80	iP	47 49.45	-1.0	
			eS	48 14.18		
AUE	1.63	65	iP	47 51.80	-0.8	
KDC	2.22	114	iP	47 57.39	-1.1	
			Sn	48 26.79		
SVW	2.42	7	iP	47 59.81	-1.0	
			Sn	48 33.77		
XLV	2.46	70	eP	48 00.39	-0.8	
			Sn	48 32.27		
RED	2.47	45	iP	47 59.96	-1.4	
CNPM	2.72	70	iP	48 03.21	-0.9	
NNL	2.87	60	iP	48 05.83	0.0	
BRLK	2.96	67	eP	48 05.71	-1.2	
SPU	3.26	39	eP	48 09.32	-1.2	
NKA	3.26	49	iP	48 11.37	1.0	
CRP	3.29	37	iP	48 09.85	-1.1	
CGLM	3.37	38	eP	48 10.53	-1.3	
NCG	3.39	36	eP	48 11.06	-1.1	
SLKM	3.56	57	eP	48 12.22	-1.9	
SEW	3.75	65	iP	48 14.87	-1.5	
SUA	3.90	43	iP	48 16.26	-2.2	
SKT	4.03	34	eP	48 18.59	-1.4	
SDN	4.10	216	iP	48 19.33	-1.4	
PMS	4.22	50	eP	48 19.60	-2.7	
TTA	4.23	2	iP	48 21.57	-1.0	
PWA	4.34	45	eP	48 20.33	-3.4	
PLRM	4.59	48	eP	48 22.68	-4.2	
GHO	4.77	47	eP	48 25.40	-4.0	
SML	5.02	48	eP	48 28.47	-4.0	
GLI	5.11	61	iP	48 30.80	-2.8	
MID	5.17	78	eP	48 30.90	-3.4	
HIN	5.24	67	eP	48 33.18	-2.2	
VZW	5.42	60	eP	48 35.14	-2.6	
VLZ	5.55	60	iP	48 37.08	-2.1	
CVA	5.64	67	eP	48 37.81	-2.6	
KLU	5.87	57	iP	48 40.70	-2.8	
SGAM	5.89	68	iP	48 41.69	-2.0	
TOA	6.04	51	eP	48 42.70	-3.0	
RAGM	6.13	69	eP	48 45.09	-1.7	
SDG	6.51	50	eP	48 48.76	-3.0	
PAX	6.78	46	eP	48 52.16	-3.1	
WRH	6.96	31	eP	48 53.35	-4.2	
WAX	7.03	70	eP	48 57.03	-1.5	
CCB	7.18	30	eP	48 55.82	-4.6	
INK	13.88	37	eP	50 22.00	-4.1	
YKA	20.52	62	eP	51 39.00	-1.4	
	0.4s		0.80nm		3.6mb	
	43 obs. associated					

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* JUN 12, 1990 14h 11m 53.82± 0.83s
11.589 N ±11.8km 87.004 W ± 8.1km
DEPTH = 33.5km (3 depth phases)
4.7mb (10 obs.)
NEAR COAST OF NICARAGUA (74)

IIT	13.17	305	(P)	15 01.78	0.4	
PPM	13.45	305	iP	15 05.15	-0.2	
III	13.80	301	iP	15 09.33	-0.3	
IIJ	14.68	305	iP	15 22.83	1.3	
MRX	15.86	302	(P)	15 38.09	1.8	
SGS	22.31	14	P	16 52.00	2.0	
PRM	22.79	10	P	16 56.50	1.8	
JSC	23.19	12	P	17 01.40	2.9	
UYO	23.48	344	iPc	17 02.50	1.1	
RSCP	23.94	3	P	17 06.00	0.1	
	0.8s		328.53nm		5.9mb X	
GBTN	24.10	6	P	17 08.00	0.5	
TKL	24.14	6	P	17 09.50	1.7	
OLY	24.15	351	P	17 07.60	-0.3	
MEO	25.38	337	iPd	17 18.60	-1.1	
LNO	25.49	343	eP	17 20.40	-0.2	
TUL	25.49	343	eP	17 19.90	-0.8	
	1.2s		45.40nm		4.9mb	
BLA	26.19	12	P	17 27.50	0.2	
	0.8s		18.46nm		4.7mb	
FVM	26.46	354	P	17 27.70	-2.0	
CVL	27.37	15	P	17 38.50	0.5	
ALQ	29.21	326	eP	17 54.00	-0.9	
	1.2s		11.72nm		4.5mb	
ANMO	29.21	326	P	17 54.50	-0.4	
	1.0s		6.25nm		4.3mb	
GOL	32.39	333	P	18 22.00	-0.9	
	0.7s		6.67nm		4.6mb	
GLA	33.26	314	eP	18 32.00	1.6	
RSNY	34.55	16	P	18 41.20	-0.1	
			pP	18 50.30	31km	
WNY	34.59	17	P	18 41.00	-0.7	
PLM	34.86	313	eP	18 45.00	0.6	
MSU	34.97	324	P	18 43.00	-2.2	
RSSD	35.59	339	P	18 50.00	-0.4	
			e	18 59.20	31km	
MWC	36.17	314	eP	18 56.00	0.6	
SBB	36.24	314	eP	18 57.00	1.1	
CLC	36.69	316	eP	19 01.00	1.3	
BW06	36.74	332	P	18 58.80	-1.4	
	0.8s		3.93nm		4.3mb	
SIV	37.54	136	iPd	19 07.40	0.5	
TNP	37.74	320	P	19 17.50	8.9X	
KVN	38.87	320	P	19 18.00	-0.1	
CMB	39.77	317	eP	19 33.80	8.4X	
LRM	40.41	332	ePd	19 30.80	0.0	
			e	19 41.70	38km	
SES	43.44	338	eP	19 55.00	-0.3	
FFC	44.63	348	eP	20 04.00	-0.8	
	0.7s		12.00nm		4.9mb	
SCH	45.98	16	eP	20 14.00	-1.5	
PNT	46.29	331	eP	20 17.00	-1.0	
	0.7s		21.00nm		5.2mb	
YKA	54.55	345	eP	21 18.70	-2.0	
	0.7s		6.40nm		4.8mb	
INK	64.15	343	eP	22 25.50	-1.4	
MBC	66.93	352	eP	22 43.00	-1.6	
	0.9s		6.00nm		4.7mb	
WRA	139.44	253	PKP	31 21.00	0.5	
	0.7s		2.40nm			
CHG	149.23	349	ePKP	31 41.10	4.0X	
	1.0s		20.25nm			
LOE	149.93	343	ePKP	31 43.00	4.9X	
GBA	150.60	32	PKPc	31 39.20	0.1	
	0.9s		7.20nm			
BDT	150.74	348	ePKP	31 44.80	5.5X	
	0.6s		28.60nm			

S.D. = 1.2 on 44 of 49 obs.

? JUN 12, 1990 15h 05m 24.17± 4.16s
33.553 S ±23.9km 178.915 W ±32.4km
DEPTH = 100.7 ± 31.6 km
4.9mb (1 obs.)
SOUTH OF KERMADEC ISLANDS (179)

HBZ	4.63	209	eP	06 33.00	0.0	
			eS	07 28.00		
DZM	17.26	308	iPd	09 20.20	-0.1	
RMQ	28.78	275	eP	11 16.00	1.5	
WRA	43.54	276	Pc	13 18.70	-0.9	
	0.2s		4.10nm		4.9mb	
WB5	43.55	276	eP	13 19.00	-0.7	
SPA	56.62	180	iPd	15 18.60	11.8X	
	1.0s		19.00nm			
SUF	146.80	339	ePKP	24 52.00	-1.2	
NUR	148.96	337	iPKP	24 58.00	1.3	
	0.8s		17.60nm			
MBH	151.06	272	ePKP	25 07.00	6.2X	
PRNI	151.12	273	ePKP	25 07.00	6.1X	
UPP	151.51	342	iPKP	25 12.10	11.6X	
NAO	151.99	350	PKP	25 05.20	4.0X	
	0.9s		3.70nm			
HFS	152.15	346	ePKP	25 04.40	2.9X	
	0.5s		0.90nm			
LIC	152.22	167	(PKP)	25 20.00	17.0X	

S.D. = 1.5 on 7 of 14 obs.

? JUN 12, 1990 15h 43m 43.03± 4.10s
33.577 S ±22.5km 179.126 W ±31.2km
DEPTH = 112.3 ± 31.0 km
4.9mb (1 obs.)
SOUTH OF KERMADEC ISLANDS (179)

HBZ	4.53	207	eP	44 51.00	0.5	
			S	45 41.00		
DZM	17.13	308	iPc	47 36.00	-1.0	
BRS	24.94	277	eP	49 04.00	6.6X	
RMQ	28.61	276	eP	49 32.00	1.3	
WRA	43.37	276	Pc	51 35.50	-0.4	
WB5	43.38	276	eP	51 35.70	-0.2	
SPA	56.60	180	eP	53 15.00	-1.2	
	0.7s		8.59nm		4.9mb	
BCAO	146.66	213	iPKPc	03 11.00	-0.9	
	0.9s		18.00nm			
SUF	146.76	339	iPKP	03 09.10	-1.4	
	0.5s		5.50nm			
NUR	148.91	337	ePKP	03 15.00	1.0	
MBH	150.89	272	ePKP	03 24.00	6.1X	
PRNI	150.95	273	ePKP	03 22.00	3.9X	
NAO	151.98	350	PKP	03 22.00	3.4X	
	1.0s		4.70nm			
HFS	152.13	346	ePKP	03 21.20	2.4	
	0.6s		1.10nm			

S.D. = 1.5 on 10 of 14 obs.

? JUN 12, 1990 16h 29m 24.38± 2.49s
17.371 N ±26.2km 98.863 W ±19.1km
DEPTH = 10.0km (geophysicist)
GUERRERO, MEXICO (59)

III	1.15	330	eP	29 44.92	-1.2	
			eS	29 57.25		
PPM	1.70	8	iP	29 54.02	-0.7	
			(S)	30 28.56		
IIT	1.72	18	eP	30 00.50	5.7X	
			(S)	30 26.97		
OXX	2.06	98	iP	29 59.58	-0.1	
			(S)	30 31.52		
CRX	2.17	339	(P)	30 09.00	7.7X	
IIC	2.41	351	(P)	30 06.56	1.7	
			(S)	30 20.25		
IIJ	2.49	341	(P)	30 09.14	3.1X	
			(S)	30 46.08		

MRX	3.20	317	(P)	30	16.00	0.3
LVVM	3.28	44	(P)	30	08.79	-8.1X
			(S)	31	15.71	
S.D. = 1.6			on 5 of 9 obs.			

& JUN 12, 1990 17h 55m 28.20s
39.817 N 122.608 W
DEPTH = 31.0km
NORTHERN CALIFORNIA (36)
<BRK>. ML 2.6 (BRK).

LTCM	0.54	43	eP	55	39.30	0.0
WDC	0.76	4	iPd	55	41.60	-1.1
			iS	55	53.00	
ORV	0.89	107	ePc	55	43.90	-0.7
			eS	55	56.30	
MIN	0.93	55	ePc	55	45.10	-0.2
			eS	55	57.30	
FHC	1.44	313	e(P)	55	53.90	1.5
KVN	3.57	101	eP	56	24.00	1.0
6 obs. assacioted						

? JUN 12, 1990 18h 05m 22.70± 4.29s
31.136 S ±13.8km 68.645 W ±19.6km
DEPTH = 89.9 ± 45.9 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.25	142	iPd	05	36.10	0.0
			eS	05	47.20	
RTCB	0.37	201	iPc	05	37.00	0.1
CFA	0.58	144	eP	05	38.40	0.0
			S	05	51.70	
RTCV	0.73	173	eP	05	39.70	-0.1
			S	05	53.60	
RTBS	0.87	233	ePd	05	41.10	0.0
			(S)	05	56.00	
RTRS	1.19	324	e(P)	05	44.90	0.0
S.D. = 0.1			on 6 of 6 obs.			

• JUN 12, 1990 18h 45m 23.98± 1.09s
6.188 S ±12.6km 147.813 E ± 8.2km
DEPTH = 59.4 ± 11.4 km
4.9mb (7 obs.)
EAST PAPUA NEW GUINEA REGION (207)

LAT	0.93	240	iPc	45	41.20	0.0
KDB	3.33	191	iPd	46	15.30	0.6
			eS	46	58.00	
MNDI	4.13	270	eP	46	29.00	2.8
RAB	4.77	66	iPc	46	33.60	-1.5
0.5s 563.38nm						
QIS	16.35	208	eP	49	10.00	-1.2
WB5	18.87	223	eP	49	40.30	-2.0
			eS	53	34.20	
WRA	18.93	223	Pd	49	40.80	-2.2
0.5s 26.10nm 4.7mb						
RMO	20.21	178	iPd	49	57.40	0.8
0.7s 88.00nm 5.2mb						
OLP	20.57	189	iPd	50	00.80	0.5
KNA	20.95	241	eP	50	02.70	-1.6
			eS	51	36.00	
BRS	21.61	168	iPc	50	11.00	0.1
			i	50	17.00	
DZM	23.95	133	iPc	50	35.10	1.2
CMS	25.24	184	eP	50	46.50	0.5
STK	26.22	192	iPd	50	55.10	0.0
0.7s 19.00nm 4.7mb						
BWA	28.10	179	eP	51	12.90	0.6
CAN	29.01	178	eP	51	21.10	0.6
MEKA	34.50	231	iPd	52	09.00	0.4
0.5s 13.00nm 5.1mb						
COOL	35.06	222	eP	52	13.20	-0.2
0.4s 9.00nm 5.1mb						
NANU	35.13	239	eP	52	14.00	0.0
0.6s 14.00nm 5.1mb						
MRWA	37.76	229	iPc	52	36.50	0.4
MUN	39.10	225	eP	52	47.50	0.2
MAT	43.45	349	eP	53	30.00	7.2X
1.3s 19.23nm 4.7mb						
S.D. = 1.3 on 21 of 22 obs.						

JUN 12, 1990 18h 48m 56.07± 0.33s
43.230 N ± 4.0km 0.367 W ± 3.5km
DEPTH = 11.9 ± 3.1 km
PYRENEES (378)
ML 4.2 (LDG). mbLg 3.9 (MDD), 3.7 (UCC). Felt (V) in the Bearn-Bigarre area, France.

OGE	0.10	232	Pg	48	59.84	0.8
JAU	0.19	180	Pg	48	58.61	-2.0
ESCF	0.21	225	Pg	49	00.47	-0.4
			Sg	49	03.14	
ATE	0.28	240	Pg	49	02.14	0.0
			Sg	49	06.49	
MADF	0.34	256	Pg	49	04.02	0.8
			Sg	49	09.83	
LHE	0.37	211	Pg	49	02.29	-1.5
			Sg	49	06.19	
ISSF	0.37	237	Pg	49	03.72	-0.1
			Sg	49	08.79	
ELYF	0.46	263	Pg	49	06.58	1.0
			Sg	49	12.91	
BOH	0.49	255	Pg	49	06.49	0.4
			Sg	49	13.97	
EPF	0.55	111	Pn	49	06.00	-1.3
			Sg	49	14.50	
ECRI	1.69	249	iPnd	49	28.20	2.6
			eSn	49	50.40	
LPO	1.84	37	Pn	49	28.40	0.8
			Sg	49	59.70	
LFF	1.89	25	Pn	49	29.40	1.0
			Pg	49	34.40	
			Sg	50	01.80	
CAF	2.44	45	Pn	49	36.10	-0.2
			Pg	49	44.20	
			Sg	50	17.00	
EROO	2.47	166	ePn	49	37.70	0.9
			eSn	50	06.10	
RJF	2.48	32	Pn	49	36.20	-0.6
			Pg	49	44.80	
			Sg	50	18.50	
EBR	2.49	165	ePn	49	39.00	2.0
			eSg	50	09.50	
ETER	2.55	110	ePn	49	40.20	2.3
			eSn	50	10.60	
ETOR	2.72	208	iPnd	49	40.40	0.0
			eSn	50	09.60	
LBL	3.28	51	Pn	49	48.00	-0.2
			Sg	50	47.88	
LSF	3.31	23	Pn	49	48.00	-0.7
			Pg	49	59.40	
			Sn	50	26.20	
			Sg	50	44.30	
MFF	3.38	3	Pn	49	50.60	1.0
			Pg	50	02.10	
			Sg	50	45.40	
PYM	3.49	43	Pn	49	50.30	-1.0
TCF	3.57	30	Pn	49	51.20	-1.1
			Pg	50	04.80	
			Sn	50	32.00	
			Sg	50	53.80	
MAF	3.65	34	Pn	49	52.40	-1.1
			Pg	50	06.40	
			Sg	50	55.00	
ECHE	3.67	187	ePn	49	52.20	-1.6
			eSn	50	35.20	
GUD	3.83	229	ePn	49	56.20	0.0
			eSn	50	40.20	
PLDF	3.95	45	Pn	49	58.00	0.1
BGF	4.04	33	Pn	49	58.10	-0.9
			Pg	50	13.30	
			Sg	51	06.20	
ESEL	4.24	144	ePn	50	00.80	-1.1
			eSn	50	48.70	
TOL	4.34	221	ePn	50	02.50	-0.8
			ePg	50	23.00	
			iSb	51	11.00	
			iSg	51	22.00	
AVF	4.43	35	Pn	50	04.00	-0.6
			Pg	50	20.80	
			Sg	51	17.60	
SMF	4.54	40	Pn	50	04.60	-1.5
			Pg	50	23.80	
			Sg	51	22.30	
HYF	4.56	27	Pn	50	06.00	-0.5
SSF	4.71	34	Pn	50	07.40	-1.2
			Pg	50	27.00	
			Sg	51	27.60	
LPF	4.83	355	Pn	50	10.80	0.6
			Pg	50	29.40	
			Sg	51	32.80	
LBF	4.85	38	Pn	50	09.20	-1.4
			Pg	50	28.80	
			Sg	51	29.40	
EVIA	4.87	200	ePn	50	09.50	-1.4
LRG	4.91	85	Pn	50	11.00	-0.4
LMR	5.02	86	Pn	50	12.20	-0.8
LOR	5.02	35	Pn	50	11.60	-1.4
			Pg	50	32.00	
			Sg	51	35.20	
ERUA	5.05	263	ePn	50	14.00	0.6
			eSn	51	12.50	
EMON	5.08	275	ePn	50	15.80	1.9
			eSn	51	13.30	
FRF	5.12	84	Pn	50	13.00	-1.4
GRR	5.17	356	Pn	50	14.60	-0.4
			Sn	51	11.30	
			Sg	51	42.80	
EPLA	5.32	235	ePn	50	15.70	-1.6
			eSn	51	17.30	
LDF	5.37	2	Pn	50	17.20	-0.7
			Pg	50	39.10	
			Sg	51	48.40	
BNI	5.39	68	P	50	21.10	2.8
RRL	5.42	69	P	50	24.67	5.8X
FLN	5.53	359	Pn	50	19.80	-0.4
			Pg	50	43.00	
			Sg	51	53.20	
PZZ	5.55	74	P	50	21.79	1.2
LPL	5.58	63	Pn	50	21.80	0.7
LPG	5.58	64	Pn	50	22.00	0.8
DOI	5.65	74	P	50	29.00	7.0X
STV	5.66	77	P	50	24.46	2.3
SBF	5.71	81	Pn	50	20.20	-2.5
ENR	5.73	77	P	50	25.90	2.8
RSP	5.81	68	P	50	26.31	2.1
LSD	5.84	65	P	50	27.74	3.0X
IMI	6.04	81	P	50	32.05	4.7X
ROB	6.06	77	P	50	30.82	3.1X
FIN	6.29	78	P	50	34.31	3.4X
CKI	6.37	76	P	50	44.40	12.4X
ORX	6.44	65	P	50	38.82	5.7X
PCP	6.57	75	P	50	35.75	0.8
PGF	6.91	92	Pn	50	36.40	-3.4X
DOU	7.67	25	P	50	48.30	-1.8
			iS	52	14.60	
MEM	8.57	28	iP	51	04.30	1.6
SQTA	9.09	60	e(P)	51	18.00	7.9X
			e	52	56.00	
			i	53	59.20	
			i	54	08.90	
S.D. = 1.4			on 59 of 69 obs.			

• JUN 12, 1990 19h 07m 47.07± 0.82s
60.794 S ±14.4km 54.026 W ±16.8km
DEPTH = 10.0km (geophysicist)
5.0mb (4 obs.)
SOUTH SHETLAND ISLANDS (154)

AIA	6.45	222	eP	09	25.60	1.2
			eS	11	03.40	
SPA	29.37	180	iPd	13	49.90	-2.2
1.0s 20.50nm 4.9mb						
SIV	45.03	350	Pd	16	03.20	-1.3
ZOBO	45.61	341	P	16	10.00	0.3
Z 24s 0.13um 3.8MszX						
			LR	32	12.00	
SEK	61.70	98	iPd	18	09.20	1.6
1.5s 27.78nm 5.2mb						
SLR	64.18	97	eP	18	23.30	-0.7
BUL	69.06	94	iPc	18	55.00	-0.1
1.0s 11.50nm 5.0mb						
LWI	84.55	85	e(P)	20	26.40	4.7X
BCAO	85.43	73	iPc	20	27.00	1.1
1.0s 10.00nm 5.0mb						
S.D. = 1.6			on 8 of 9 obs.			

JUN 12, 1990 19h 56m 59.26± 0.95s
6.575 S ± 5.0km 130.234 E ± 7.0km
DEPTH = 140.1 ± 10.0 km
4.8mb (12 obs.)
BANDA SEA (280)

AAI	3.52	325	ePd	57	55.50	1.9
			eS	58	10.00	
MTN	6.29	172	iPd	58	29.70	-1.3
KUPT	7.46	241	eP	59	01.50	14.8X
			eS	00	20.00	
KNA	9.23	189	iPc	59	08.70	-1.7
0.2s 50.00nm 5.8mb X						

12d 19h

			eS	00 43.00		
WB5	13.82	164	eP	00 05.60	-4.9X	
			eS	02 32.50		
WRA	13.88	164	Pc	00 06.40	-4.8X	
	0.2s	4.40nm			4.4mb	
OIS	16.61	148	iP	00 44.60	-0.7	
			eS	03 30.00		
TRT	17.50	265	ePd	00 55.50	-0.7	
MBL	17.65	214	eP	00 58.50	0.5	
			eS	04 04.00		
KKM	18.79	312	ePc	01 10.30	-0.3	
CTA	20.55	132	iPd	01 29.00	0.4	
	0.9s	67.23nm			5.1mb	
NANU	21.30	220	eP	01 37.20	1.1	
	0.5s	27.00nm			4.9mb	
OLP	23.95	148	iPd	02 02.30	0.4	
MRWA	26.23	209	eP	02 23.50	0.6	
RMO	26.52	140	eP	02 25.00	-0.7	
			e	02 55.00		
			e	07 31.00		
BAL	27.07	206	eP	02 31.20	0.6	
STK	27.32	159	iPd	02 32.90	0.1	
	0.5s	12.00nm			4.8mb	
			eS	07 52.20		
MUN	28.47	206	eP	02 43.00	-0.1	
CMS	28.76	151	eP	02 46.00	0.2	
BRS	29.78	137	iPc	02 54.00	-0.9	
COO	31.36	142	iP	03 10.00	1.2	
	0.7s	10.00nm			4.7mb	
BWA	32.41	151	iPd	03 19.80	2.0	
CAN	33.41	151	iPd	03 27.30	0.8	
DZM	38.18	118	iPc	04 07.10	0.0	
SSE	38.44	347	eP	04 09.20	0.3	
	1.0s	10.00nm			4.5mb	
CHG	39.85	310	eP	04 21.50	0.7	
	0.9s	17.23nm			4.8mb	
WHN	39.92	338	eP	04 22.20	1.0	
KMI	41.33	321	Pc	04 34.00	0.9	
MAT	43.54	9	eP	04 49.00	-1.6	
	1.0s	8.00nm			4.3mb	
XAN	45.15	335	P	05 02.90	-0.7	
BJI	48.16	346	eP	05 26.50	-0.5	
	1.0s	17.00nm			4.8mb	
SNY	48.55	353	Pc	05 29.60	-0.4	
CN2	50.33	355	Pd	05 43.00	-0.5	
LSA	52.05	316	P	05 58.00	0.6	
GUN	54.85	311	Pc	06 17.70	-0.1	
PKI	55.03	310	Pc	06 18.70	-0.4	
	0.6s	28.00nm			5.3mb	
DMN	55.28	310	Pc	06 20.80	0.0	
GKN	55.84	310	Pc	06 24.50	-0.2	
GBA	56.12	291	Pc	06 24.50	-2.2	
	1.2s	17.60nm			4.9mb	
NDI	61.91	307	iPc	07 04.80	-1.6	
	0.9s	42.02nm			5.4mb	
WMQ	63.17	327	eP	07 15.00	0.5	
MAIO	78.60	309	eP	08 48.00	0.8	
ZOBO	150.93	141	PKP	16 41.00	8.6X	
	S.D. = 1.0		on	39 of 43 obs.		

JUN 12, 1990 21h 21m 52.94± 0.50s
44.289 N ± 2.8km 6.621 E ± 4.5km
DEPTH = 5.0km (geophysicist)
FRANCE (538)
ML 2.4 (GEN), 2.1 (LDG).

PZZ	0.41	58	P	22 01.61	0.5
			S	22 06.94	
STV	0.51	95	P	22 02.84	-0.3
			S	22 09.94	
ENR	0.58	96	P	22 04.41	-0.1
			S	22 12.00	
RRL	0.64	10	P	22 05.10	-0.7
SBF	0.73	126	Pg	22 07.60	0.2
			Sg	22 17.60	
FRF	0.73	179	Pg	22 07.10	-0.4
			Sg	22 17.10	
LRG	0.86	193	Pg	22 09.70	-0.2
			Sg	22 23.70	
ROB	0.90	89	P	22 10.53	-0.1
			S	22 21.74	
LMR	0.96	185	Pg	22 12.20	0.6
			Sg	22 27.30	
RSP	0.97	28	P	22 11.97	0.0
			S	22 24.20	
IMI	0.99	112	P	22 12.27	0.1
			S	22 25.33	
LPG	1.21	4	Pg	22 16.50	0.3
LPL	1.23	4	Pg	22 16.60	0.2
	S.D. = 0.4		on	13 of 13 obs.	

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* JUN 12, 1990 21h 32m 43.20± 3.63s
30.943 S ±17.8km 72.437 W ±26.9km
DEPTH = 33.0km (normal)
OFF COAST OF CENTRAL CHILE (134)

JACH	2.34	138	iPd	33 20.00	-0.2
			iS	33 45.50	
ROCH	2.36	149	iP	33 20.50	-0.1
			iS	33 45.50	
PEL	2.65	146	iPd	33 24.70	0.1
			iS	33 53.10	
RTBS	2.65	106	ePd	33 25.40	0.9
			S	33 54.60	
RTRS	2.68	74	ePc	33 25.20	0.3
TACH	2.99	155	eP	33 30.00	0.7
			i	34 02.50	
FCH	2.99	143	eP	33 30.00	0.2
LNV	3.13	164	eP	33 31.00	-0.3
			i	34 03.50	
PCH	3.13	149	iP	33 31.50	0.1
			iS	34 04.50	
RTCB	3.16	101	iPd	33 32.00	0.1
ZON	3.27	102	eP	33 33.00	-0.5
CHCH	3.34	154	eP	33 34.00	-0.4
			iS	34 10.80	
RTLL	3.42	97	ePc	33 34.60	-1.0
RTCV	3.46	106	ePd	33 36.20	0.1
CFA	3.65	102	ePc	33 39.00	0.2
			eS	33 47.10	
	S.D. = 0.5		on	15 of 15 obs.	

? JUN 12, 1990 23h 00m 15.76±16.67s
43.034 N ±82.0km 17.629 E ±108.km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
MD 4.2 (THE).

FNA	3.59	128	iPd	01 13.20	0.6
IGT	4.05	149	eP	01 19.40	0.3
			eS	02 02.80	
GRG	4.12	119	ePc	01 20.40	0.3
			eS	02 05.50	
KNT	4.34	114	iPc	01 23.50	0.2
			eS	02 11.60	
THE	4.65	119	eP	01 27.40	-0.3
			eS	02 19.40	
LIT	4.68	127	iPc	01 28.30	0.2
			eS	02 19.30	
SRS	4.83	111	eP	01 30.30	0.0
			eS	02 22.80	
AGG	5.36	137	eP	01 36.80	-0.9
OUR	5.47	117	eP	01 38.90	-0.3
ALN	6.63	106	eP	01 55.50	-0.1
	S.D. = 0.5		on	10 of 10 obs.	

% JUN 12, 1990 23h 06m 23.51± 1.06s
42.023 N ± 7.8km 14.092 E ± 8.2km
DEPTH = 5.0km (geophysicist)
CENTRAL ITALY (381)

SDI	0.38	213	Pc	06 30.70	-0.4
			eSg	06 36.80	
DUI	0.45	143	P	06 32.80	0.2
			eSg	06 39.40	
AZI	0.49	266	Pc	06 33.10	-0.2
			eSg	06 40.90	
RMP	1.06	259	P	06 45.60	1.7
RDP	1.06	256	P	06 43.00	-1.0
ASS	1.49	315	P	06 51.40	0.4
			eSn	07 11.10	
ARV	1.70	331	P	06 53.40	-0.6
	S.D. = 1.1		on	7 of 7 obs.	

JUN 12, 1990 23h 29m 16.01± 0.75s
43.078 N ± 9.3km 0.321 W ± 4.9km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
MD 1.0 (STR).

JAU	0.05	222	Pg	29 18.50	0.1
			Sg	29 20.34	
OGE	0.14	309	Pg	29 19.37	0.0
			Sg	29 21.80	
ESCF	0.19	270	Pg	29 19.84	-0.3
			Sg	29 22.92	
LHE	0.28	233	Pg	29 21.69	-0.2
ATE	0.28	272	Pg	29 22.19	0.3
			Sg	29 25.76	
ISSF	0.35	262	Pg	29 23.42	0.1
			Sg	29 28.78	
EPF	0.49	95	Pg	29 25.90	0.0
			Sg	29 33.40	
	S.D. = 0.3		on	7 of 7 obs.	

? JUN 12, 1990 23h 55m 27.61± 4.36s
42.610 N ±74.4km 7.738 E ±32.4km
DEPTH = 10.0km (geophysicist)
WESTERN MEDITERRANEAN SEA (387)
ML 2.2 (LDG).

PGF	0.93	93	Pg	55 45.50	0.0
			Sg	55 57.40	
LMR	1.16	309	Pg	55 49.40	0.2
			Sg	56 04.20	
FRF	1.24	320	Pg	55 50.70	0.0
			Sg	56 07.50	
LRG	1.32	310	Pg	55 51.70	-0.2
			Sg	56 09.20	
	S.D. = 0.3		on	4 of 4 obs.	

? JUN 13, 1990 00h 53m 56.92± 3.91s
40.135 N ±49.9km 28.377 E ± 8.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

EDC	0.45	298	iPg	54 06.00	0.0
			eSg	54 10.60	
IZI	0.86	76	ePn	54 13.80	0.2
YLV	0.87	60	iPn	54 12.90	-0.9
HRT	1.20	55	ePn	54 20.00	0.7
	S.D. = 1.1		on	4 of 4 obs.	

? JUN 13, 1990 01h 20m 40.34± 5.82s
14.770 N ±28.4km 60.735 W ±49.4km
DEPTH = 33.0km (normal)
WINDWARD ISLANDS (95)
ML 2.4 (FDF).

CRM	0.18	265	iPd	20 46.80	0.1
			S	20 53.00	
MVM	0.26	216	iPd	20 47.59	-0.1
			S	20 55.80	
FDF	0.40	265	iPd	20 49.46	-0.1
			S	20 59.20	
BIM	0.41	232	iPc	20 49.80	0.1
			S	20 59.80	
	S.D. = 0.2		on	4 of 4 obs.	

JUN 13, 1990 01h 56m 12.02± 0.34s
46.774 N ± 4.0km 10.032 E ± 3.1km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.9 (LDG), 2.9 (FUR), 2.8 (VIE), 2.7 (GRF).

OSS	0.12	139	ePd	56 13.70	-1.4
VDL	0.48	234	iPc	56 19.90	-2.0
SAX	0.67	316	ePc	56 25.20	-0.3
OGA	0.69	82	iPgc	56 24.80	-1.0
LLS	0.72	278	ePc	56 24.60	-1.7
SOTA	0.92	61	iPgc	56 29.00	-0.7
			iSg	56 43.60	
MDI	1.02	193	P	56 30.00	-1.3
			eSg	56 42.50	
TMA	1.04	231	ePc	56 30.10	-1.7
SCE	1.18	76	iPgd	56 33.70	-0.5
WATA	1.20	61	iPgd	56 34.00	-0.4
			iSg	56 53.50	
SAL	1.22	163	P	56 34.70	0.1
VAI	1.26	224	Pc	56 34.10	-1.3
			eSg	56 50.20	
CTI	1.33	122	P	56 36.70	0.0
			eSg	56 54.00	
SLE	1.44	314	ePc	56 39.20	1.0
FUR	1.63	31	iPgc	56 42.70	1.9
ORO	1.83	232	P	56 44.50	0.6
			eSn	57 05.50	
FVI	1.90	94	P	56 46.80	2.1
			eSn	57 10.90	
DIX	1.94	250	ePc	56 47.10	1.5

BOB	2.05	192	P	56 47.00	0.0
GRC1	2.44	24	ePn	56 52.00	-0.5
			e(Pg)	57 00.50	
			e	57 01.70	
			eSg	57 30.00	
BSF	2.45	297	Pn	56 52.80	0.1
			Pg	56 59.80	
			Sg	57 29.60	
CDF	2.48	312	Pn	56 53.40	0.2
			Pg	57 00.50	
			Sg	57 31.20	
LPG	2.61	242	Pn	56 57.00	1.7
			Sg	57 34.00	
LPL	2.62	242	Pn	56 57.20	1.9
VOY	2.77	104	e(Pn)	57 00.20	2.8X
			eSn	57 36.60	
HAU	2.79	298	Pn	56 57.70	0.1
			Sg	57 39.80	
BNI	2.91	235	P	57 00.00	0.7
KHC	3.35	44	ePn	57 05.20	-0.3
			Pg	57 14.50	
			Sn	57 45.00	
			Sg	57 58.00	
SBF	3.44	213	Pn	57 08.80	2.0
FRF	4.01	218	Pn	57 16.20	1.5
LBF	4.16	275	Pn	57 17.00	0.1
LRG	4.22	219	Pn	57 18.80	1.1
LOR	4.25	279	Pn	57 17.40	-0.9
			Sn	58 04.50	
			Sg	58 26.40	
SMF	4.26	271	Pn	57 18.40	0.0
			Sn	58 03.80	
PRU	4.40	41	ePg	57 35.50	15.1X
			e	57 37.30	
			Sg	58 33.00	
SSF	4.48	276	Pn	57 21.30	-0.2
			Sg	58 31.50	
AVF	4.59	273	Pn	57 22.80	-0.2
BGF	4.95	270	Pn	57 27.20	-1.0
			Sn	58 21.80	
MAF	5.19	267	Pn	57 30.40	-1.1

S.D. = 1.2 on 37 of 39 abs.

% JUN 13, 1990 02h 17m 18.92± 0.45s
46.953 N ± 5.5km 1.418 E ± 4.4km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.3 (LDG).

LSF	0.71	174	Pg	17 32.70	-0.2
			Sg	17 44.10	
TCF	0.86	140	Pg	17 36.20	0.7
			Sg	17 48.40	
BGF	1.06	111	Pg	17 38.90	0.0
			Sg	17 53.10	
MAF	1.08	132	Pg	17 40.10	0.9
			Sg	17 55.40	
MFF	1.13	253	Pg	17 39.40	-0.7
			Sg	17 54.20	
AVF	1.34	96	Pg	17 43.30	-0.2
			Sg	18 00.70	
SSF	1.43	85	Pg	17 44.50	-0.4
			Sg	18 03.50	
SMF	1.69	100	Pn	17 46.40	-2.3
			Pg	17 49.40	
			Sg	18 11.40	
LOR	1.70	78	Pg	17 49.00	0.3
			Sg	18 10.80	
LBF	1.75	88	Pg	17 50.80	1.2
			Sg	18 12.90	
LDF	1.94	328	Pg	17 51.70	-0.6
			Sg	18 15.70	
LPF	1.99	304	Pg	17 53.30	0.4
			Sg	18 17.00	
CAF	2.08	167	Pn	17 54.30	0.0
			Pg	17 58.20	
			Sn	18 20.50	
GRR	2.10	314	Pg	17 55.00	0.4
			Sg	18 20.30	
FLN	2.22	325	Pg	17 56.80	0.5
			Sg	18 23.40	

S.D. = 0.9 on 15 of 15 abs.

JUN 13, 1990 02h 44m 08.03± 0.13s
9.457 N ± 3.1km 138.202 E ± 3.4km
DEPTH = 20.6km (20 depth phases)
5.6mb (39 obs.) 4.9Msz (17 obs.)

WEST CAROLINE ISLANDS (209)
Damage (VI) on Yap.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 23C
Centraid Locatian:
Origin Time 02:44:11.7 0.3
Lat 9.32N 0.04 Lon 137.97E 0.05
Dep 41.0 3.4 Half-duration 2.1
Moment Tensor; Scale 10**17 Nm
Mrr= 1.90 0.10 Mtt=-2.42 0.13
Mff= 0.51 0.15 Mrt= 0.12 0.22
Mrf= 0.18 0.18 Mtf=-1.11 0.11
Principal Axes:
T Val= 1.92 Plg=83 Azm=268
N 0.87 7 71
P -2.79 2 161
Best Double Couple:Mo=2.4*10**17
NP1:Strike=259 Dip=43 Slip= 100
NP2: 65 48 81

GUMO	7.71	57	P	46 02.00	0.0
PJG	7.71	57	eP	46 44.50	42.5X
			eS	47 25.50	
GUA	7.73	58	e(P)	46 34.70	32.5X
DAV	12.72	260	eP	47 15.00	4.4X
	1.6s	1360.00nm		6.9mb	X
AAI	16.43	218	ePc	48 11.00	11.9X
BAG	18.50	294	ePc+	48 26.00	0.8
	1.7s	1000.00nm		5.7mb	
			eS	51 54.00	
RAB	19.43	134	iP-	48 38.00	1.7
			iS	52 20.00	
KDB	20.81	154	eP	48 50.00	-0.8
KKM	22.05	263	ePd	49 04.30	0.9
	0.8s	81.30nm		5.2mb	
ANP	22.28	317	eP	49 02.00	-3.7X
MTN	23.24	198	eP	49 15.80	0.7
MKS	23.69	233	iPc	49 22.70	3.3X
BKB2	23.74	244	iPd	49 27.00	7.1X
QZH	24.20	312	Pc	49 24.00	-0.3
	4.0s	1800.00nm		6.0mb	X
Z	16s	3.00um		4.9MszX	
N	14s	2.00um			
			S	53 34.00	
HKC	26.35	302	iPc	49 45.70	1.0
SSE	26.73	326	eP	49 47.00	-1.0
	1.4s	130.00nm		5.4mb	
Z	20s	2.20um		4.7Msz	
N	14s	2.20um			
E	15s	1.80um			
			pP	49 58.00	42kmX
			PcP	53 10.50	
KNA	26.73	201	eP	49 47.30	-0.9
MAT	26.96	0	(P)	49 48.00	-2.2
	0.8s	7.46nm		4.4mb	X
Z	20s	1.77um		4.6Msz	
			eS	54 22.00	
GZH	27.38	303	Pc	49 54.40	0.3
Z	18s	2.70um		4.9Msz	
N	13s	1.40um			
E	16s	2.20um			
NJ2	28.76	324	Pc	50 06.50	0.1
Z	20s	1.20um		4.5Msz	
N	12s	1.00um			
E	13s	1.40um			
QIZ	29.05	292	Pc	50 09.50	0.3
N	13s	1.20um			
E	15s	1.70um			
WB5	29.39	187	eP	50 10.80	-1.5
WRA	29.46	187	Pc	50 11.00	-1.9
	0.6s	9.80nm		4.8mb	
QIS	29.86	177	eP	50 15.00	-1.5
CTA	30.41	165	iPd	50 25.00	3.6X
	1.3s	105.77nm		5.5mb	
			iS	55 12.00	
WHN	30.57	317	Pc	50 24.00	1.3
	4.0s	600.00nm		5.8mb	X
Z	20s	1.40um		4.6Msz	
N	17s	3.20um			
			pP	50 30.00	21km
			S	55 28.00	
TIA	32.81	328	Pc	50 41.50	-0.7
	1.8s	100.00nm		5.4mb	
Z	17s	2.90um		5.0MszX	
N	16s	2.60um			
E	16s	2.00um			

DL2	32.87	336	P	50 43.00	0.3
Z	16s	1.80um		4.9MszX	
N	14s	1.80um			
E	15s	2.70um			
			pP	50 50.00	24km
			S	56 00.00	
GYA	34.30	304	iPc	50 57.00	1.6
	1.2s	100.00nm		5.6mb	
N	16s	1.50um			
E	16s	2.00um			
			sP	51 07.00	
			PcP	53 32.60	
			sS	56 38.00	
SNY	34.72	341	iPc	50 58.00	-0.7
	1.4s	400.00nm		6.1mb	
Z	16s	3.10um		5.1MszX	
N	15s	1.50um			
E	15s	1.40um			
			pP	51 03.00	17km
			sP	51 09.00	
			PP	52 16.00	
MDJ	35.81	349	eP	51 07.70	-0.3
Z	20s	2.30um		4.9Msz	
N	16s	1.50um			
			epP	51 16.00	28km
			S	56 40.00	
CN2	35.97	344	Pc	51 08.40	-0.9
	1.0s	100.00nm		5.7mb	
Z	18s	3.00um		5.1Msz	
N	18s	3.00um			
E	18s	0.70um			
			pP	51 14.50	21km
			ePP	52 28.00	
			PcP	53 34.00	
			eS	56 42.00	
			ScP	57 22.00	
BJI	36.22	331	eP	51 11.50	0.1
	1.5s	280.00nm		5.9mb	
Z	20s	1.80um		4.8Msz	
E	11s	0.54um			
			epP	51 18.00	22km
			ePcP	53 37.00	
			eS	56 52.00	
LOE	36.29	286	eP	51 07.00	-5.4X
QLP	36.30	171	eP	51 12.00	-0.2
XAN	36.34	317	P	51 13.00	0.4
N	13s	1.20um			
E	13s	0.80um			
			S	56 53.00	
TIY	36.48	325	eP	51 14.40	0.6
Z	18s	2.10um		5.0Msz	
N	17s	2.00um			
			pP	51 25.00	37kmX
KMI	37.12	299	Pc	51 21.50	2.0
	1.5s	200.00nm		5.7mb	
Z	18s	3.90um		5.2Msz	
N	20s	1.80um			
			pP	51 27.50	20km
			sP	51 32.00	
RMQ	37.17	164	eP	51 19.00	-0.6
IPM	37.20	265	ePd	51 20.50	0.5
	1.1s	50.10nm		5.2mb	
SNG	37.25	269	eP	51 18.80	-1.6
	1.2s	256.25nm		5.9mb	
			e	53 40.10	
NNT	37.86	278	eP	51 24.60	-1.0
			e	53 21.20	
CD2	38.49	309	P	51 31.60	0.9
	1.4s	200.00nm		5.7mb	
Z	20s	1.30um		4.7Msz	
N	11s	0.80um			
			S	57 26.50	
NANU	38.81	215	iPc	51 32.20	-1.2
	0.4s	20.00nm		5.2mb	
CHG	39.11	288	ePc	51 36.90	0.9
	1.0s	47.50nm		5.2mb	
HHC	39.16	327	Pc	51 37.00	0.7
	1.2s	200.00nm		5.7mb	
Z	20s	2.70um		5.1Msz	
N	18s	2.10um			
E	16s	0.80um			
			pP	51 49.00	44kmX
			S	57 40.00	
BRS	39.26	159	iPc	51 39.10	2.0
PSI	39.60	263	ePc	51 39.40	-0.8
	1.2s	178.80nm		5.7mb	
BTO	39.83	326	iPc	51 43.00	1.2

13d 02h

	N 16s 1.50um					pP 57 10.10 21km	
	E 16s 1.90um				GMW	89.12 42 P 57 04.10 0.7	
	pP 51 48.00 17km					pP 57 10.20 19km	
LZH	40.94 316 Pc 51 52.50 1.4				SOD	89.42 339 iP 57 03.40 -1.0	
	2.0s 120.00nm 5.3mb				YKA	89.47 26 eP 57 04.90 0.2	
	pP 51 59.50 24km					0.8s 14.10nm 5.3mb	
	sP 52 03.00				FHC	89.75 49 e(P) 57 07.90 1.4	
	PP 53 33.00				LON	89.95 43 P 57 07.10 -0.3	
	ScP 57 34.00				PNT	90.73 40 eP 57 11.00 0.1	
	S 58 05.00				WDC	90.87 49 ePc 57 12.30 0.6	
	sS 58 16.00				VGB	90.95 44 P 57 12.40 0.4	
STK	41.23 176 iPc 51 52.90 -0.3					pP 57 18.30 18km	
	1.3s 29.00nm 4.8mb				SUF	91.48 335 iP 57 12.70 -1.3	
	iPP 53 31.40					0.6s 13.50nm 5.5mb	
CMS	41.36 170 eP 51 55.00 0.7				MIN	91.61 49 ePc 57 15.10 -0.2	
DZM	41.82 139 iPc 51 58.00 -0.4				BRK	91.70 51 e(P) 57 16.50 1.0	
	i 53 55.80				ORV	91.88 50 ePc 57 16.50 0.1	
MRWA	44.01 208 eP 52 14.00 -2.0				MHC	92.30 52 ePc 57 19.20 0.7	
ADE	44.18 179 eP 52 18.00 0.7				ARN	92.38 52 P 57 19.60 0.9	
BWA	44.70 168 eP 52 22.10 0.5				SAO	92.58 52 eP 57 22.80 3.1X	
	i 52 28.20 20km				NEW	92.61 40 P 57 19.20 -0.4	
	e 54 04.80					1.0s 25.63nm 5.6mb	
GTA	45.39 317 P 52 27.80 0.6					pP 57 25.80 21km	
	1.4s 60.00nm 5.3mb				DAG	92.88 355 iPd 57 19.20 -1.0	
	Z 20s 2.00um 5.1Msz					0.5s 15.49nm 5.7mb	
	E 15s 0.80um				NUR	93.05 333 iP 57 22.00 0.7	
	pP 52 34.20 21km					0.6s 28.70nm 5.9mb	
	PcP 54 06.60					i 57 26.40 14km	
	PP 54 13.40				CMB	93.10 51 ePc 57 22.60 0.6	
	S 59 08.00				MAW	93.15 202 iP 57 22.00 0.5	
	sS 59 18.00				EDM	93.29 35 ePd 57 23.00 0.4	
	SS 02 21.00				FRI	93.88 52 ePc 57 25.90 0.3	
	ScS 02 25.00				KVN	94.56 49 P 57 28.80 -0.2	
CAN	45.69 168 eP 52 30.00 0.6				ABL	94.81 54 P 57 30.70 0.5	
	i 52 35.70 19km				TNP	95.49 50 P 57 33.20 -0.1	
	e 54 08.00					0.9s 11.07nm 5.3mb	
BFD	46.56 175 eP 52 35.00 -1.2					pP 57 39.90 21km	
	i 52 41.90 23km				SES	95.64 37 ePd 57 34.20 0.7	
SHL	46.73 296 eP 52 38.00 0.0				CLC	95.83 52 eP 57 35.00 0.3	
	eS 59 40.00				SB8	95.96 54 eP 57 35.00 -0.3	
TOO	47.28 172 eP 52 44.00 2.1				LRM	96.42 42 eP 57 37.70 0.3	
LSA	48.29 301 P 52 51.00 0.4				UPP	96.45 334 iP 57 36.40 -0.5	
SMY	52.01 27 eP 53 18.10 0.1				HFS	97.96 335 ePKP 57 41.10 -2.6	
GUN	52.44 298 P 53 22.10 0.0					1.5s 29.10nm 5.6mb	
PKI	52.79 297 P 53 24.00 -0.8				NAO	98.69 337 P 57 39.70 -7.3X	
DMN	53.06 297 P 53 26.40 -0.3					1.2s 6.90nm 5.1mb	
GKN	53.53 298 P 53 29.60 -0.4				FFC	98.72 31 eP 57 47.00 -0.2	
WMQ	55.47 317 iPc 53 44.00 0.1					1.0s 18.00nm 5.6mb	
	4.0s 900.00nm 6.2mb X				MSU	99.13 48 P 57 50.00 0.2	
	Z 20s 0.70um 4.7Msz				SPA	99.39 180 iPd 57 51.00 0.8	
	N 15s 0.70um					1.2s 19.72nm 5.5mb	
	E 14s 0.50um				KRA	100.16 325 ePdiff57 53.20 -0.6	
	PcP 54 44.00				PV09	101.37 48 Pdiff 58 00.00 0.1	
	S 01 29.00				KSP	101.79 327 ePdiff58 01.00 -0.1	
ADK	55.97 32 eP 53 46.00 -1.1					e 58 06.50	
	1.4s 234.20nm 6.0mb					e 02 10.00	
HYB	58.37 285 iPc 54 04.50 -0.2				SKO	102.86 317 ePdiff58 01.30 -4.8X	
	1.0s 140.00nm 6.0mb				PRU	103.20 327 ePdiff58 06.50 -0.9	
	e 54 11.00 21km					Z 17s 1.10um 5.5MszX	
GBA	59.56 280 Pd 54 11.60 -1.4					N 16s 0.60um	
	0.9s 64.60nm 5.8mb					E 16s 0.70um	
NDI	60.11 298 iPc 54 15.20 -1.4					e 01 29.50	
KSH	62.66 310 P 54 35.00 1.2				CLL	103.29 328 ePdiff58 06.00 -1.7	
	PP 56 53.00					1.8s 16.00nm 5.5mb	
	eS 03 04.00					Z 17s 1.50um 5.6MszX	
SDN	66.13 33 eP 54 54.70 -1.2				GOL	103.59 45 Pdiff 58 10.00 0.3	
ANM	67.49 23 eP 55 02.90 -1.5					Z 20s 0.90um 5.3Msz	
SVW	70.35 28 eP 55 22.50 0.3				KHC	104.19 326 ePdiff58 12.00 0.1	
TTA	70.71 26 ePc 55 24.10 -0.3					Z 16s 1.00um 5.4MszX	
KDC	71.05 32 eP 55 25.80 -0.6					N 16s 0.50um	
IMA	72.60 23 iPc 55 35.50 -0.2					E 16s 0.50um	
	1.5s 119.00nm 5.7mb					e 01 06.60	
PMR	73.51 28 iPc 55 39.70 -1.1				ALQ	104.70 50 ePdiff58 15.00 0.3	
	0.8s 63.60nm 5.7mb					Z 20s 0.35um 4.9Msz	
FBA	74.72 25 iPc 55 46.50 -1.4				BSF	108.61 328 ePKP 02 36.90 -0.4	
TOA	74.97 28 eP 55 49.80 0.3					1.0s 8.00nm	
MAIO	75.39 305 iPc+ 55 53.20 0.8				HAU	108.73 328 ePKP 02 37.20 -0.2	
	eS 05 12.00					1.0s 8.00nm	
SIT	80.22 34 e(P) 56 17.80 -0.6				LPL	110.08 326 ePKP 02 41.00 0.7	
INK	80.64 22 ePc 56 19.70 -0.8					0.6s 1.80nm	
	1.1s 45.00nm 5.4mb				LPG	110.08 326 ePKP 02 41.20 0.8	
MBC	83.82 14 ePc 56 37.10 0.2					0.6s 1.80nm	
	0.5s 23.00nm 5.6mb				LOR	110.49 329 ePKP 02 40.50 -0.3	
TAB	85.71 308 eP 56 49.00 1.7					1.0s 4.00nm	
KEV	88.35 341 eP 56 59.00 -0.3				LBF	110.62 328 ePKP 02 40.70 -0.3	
MCW	88.84 41 P 57 03.00 0.9					0.8s 2.70nm	
BMW	89.06 43 P 57 03.30 0.1				SSF	110.81 329 ePKP 02 41.30 0.0	
	0.8s 4.05nm						
BGF	111.48 329 ePKP 02 42.60 0.0						
	0.8s 5.35nm						
BUL	111.51 252 iPKPd 02 42.90 -0.7						
	1.0s 5.00nm						
TCF	111.99 329 ePKP 02 43.50 -0.1						
	0.6s 3.60nm						
GRR	112.03 332 ePKP 02 43.60 0.0						
	0.8s 8.05nm						
TUL	112.06 45 ePKP 02 44.50 0.5						
	0.9s 2.50nm						
LSF	112.37 329 ePKP 02 44.10 -0.2						
	0.8s 3.35nm						
LPF	112.37 332 ePKP 02 44.40 0.2						
	0.8s 5.35nm						
MFF	112.96 330 ePKP 02 45.20 -0.2						
	0.6s 3.60nm						
CAF	112.98 328 ePKP 02 45.70 0.1						
	0.8s 4.05nm						
LPO	113.61 328 ePKP 02 47.00 0.2						
	0.6s 3.60nm						
LFF	113.67 328 ePKP 02 46.90 0.0						
ETOR	118.00 327 e(PKP)02 56.00 0.6						
ECHE	118.25 325 e(PKP)02 56.00 0.2						
WVLY	118.35 30 PKP 02 55.30 -0.6						
RSNY	118.64 26 PKP 02 56.20 -0.2						
	0.9s 10.84nm						
GUD	119.25 328 ePKP 02 58.00 0.2						
HBVT	119.42 25 PKP 02 57.70 -0.2						
TOL	119.74 327 ePKP 03 06.00 7.4X						
BNH	119.97 24 PKP 02 59.30 0.4						
EPLA	120.67 329 e(PKP)03 06.20 5.8X						
NKM	123.66 324 ePKP 03 10.50 4.2X						
IFR	124.85 323 iPKPd 03 10.00 1.1						
AVE	126.35 324 iPKPd 03 11.50 -0.1						
TIO	127.95 322 iPKPc 03 16.50 1.6						
KIC	139.87 292 PKP 03 30.90 -6.7X						
TIC	140.02 292 PKP 03 30.10 -7.8X						
LIC	140.19 292 PKP 03 29.70 -8.5X						
	Z 20s 0.16um 4.8Msz						
SAN	144.28 136 ePKP 03 43.00 -1.8						
PEL	144.45 136 iPKPd 03 44.00 -1.1						
	0.8s 41.04nm						
FCH	144.61 136 ePKP 03 45.50 -0.3						
JACH	144.77 135 ePKP 03 46.00 0.2						
BMG	144.78 63 iPKPd 03 44.00 -2.3						
BOG	144.93 68 iPKPd 03 47.00 0.1						
PT10	145.36 98 ePKPc 03 47.80 0.7						
NNA	145.49 97 iPKPc 03 46.50 -0.9						
FISA	145.74 54 ePKP 03 47.50 -0.3						
SDV	145.99 58 iPKP 03 49.20 0.7						
RTCB	146.70 135 ePKPc 03 50.30 1.3						
MORO	146.78 53 ePKP 03 50.00 0.4						
RTRS	146.97 132 ePKPc 03 51.90 2.6						
CFA	147.02 136 ePKPd 03 51.20 1.7						
RTLL	147.02 135 ePKPd 03 50.90 1.4						
BPA	147.03 37 ePKP 03 48.00 -1.8						
MGH	147.07 38 ePKP 03 49.00 -0.9						
PAG	147.93 38 ePKP 03 50.00 -1.3						
CAR	148.09 52 iPKP 03 52.00 0.3						
LLAV	148.20 52 ePKP 03 51.50 -0.4						
BBL	148.44 38 ePKP 03 52.00 -0.1						
OLLA	148.48 53 ePKP 03 52.80 0.5						
ARE	150.26 107 ePKP 04 01.00 5.8X						
SVB	150.28 41 ePKP 03 59.32 4.4X						
LPB	153.45 108 PKP 03 57.00 -3.0X						
ZOBO	153.48 107 PKP 04 02.00 1.8						
	1.3s 67.03nm						
	LR 55 40.00						
CCH	155.07 111 ePKP 04 05.00 3.0X						
SIV	160.12 111 PKPc 04 07.50 -0.3						
	i 04 48.60						

S.D. = 0.9 on 174 of 196 obs.

? JUN 13, 1990 04h 17m 22.07± 1.26s
31.832 S ±19.9km 69.149 W ±17.2km
DEPTH = 120.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTBS	0.31 303 iPd	17 39.30	-0.2		
RTCB	0.46 41 iPd	17 40.00	-0.1		
	S	17 52.00			
ZON	0.49 55 eP	17 41.00	0.7		
	eS	17 52.00			
RTCV	0.52 93 iPd	17 40.50	0.0		
RTLL	0.77 49 iPd	17 42.00	-0.3		
	eS	17 57.00			

CFA	0.81	74	iPc	17 42.40	-0.2
			eS	17 57.00	
RTRS	1.68	351	ePc	17 52.00	0.0
S.D. = 0.4			on	7 of 7 obs.	

& JUN 13, 1990 08h 49m 49.20s
62.266 N 148.546 W
DEPTH = 46.6km
CENTRAL ALASKA (1)
<AGS-P>.

SML	0.47	168	iP	49 59.33	-0.7
			iS	50 07.60	
GHO	0.53	200	iP	49 59.90	-0.8
			eS	50 08.17	
SCM	0.72	127	iP	50 02.47	-0.8
			eS	50 13.19	
PLRM	0.73	203	iP	50 02.28	-1.0
			eS	50 13.68	
CUT	0.82	281	iP	50 03.74	-0.7
			eS	50 14.92	
HUR	0.87	325	iP	50 04.50	-0.8
			eS	50 16.49	
PWA	0.88	226	iP	50 05.00	-0.4
			eS	50 17.16	
TOA	1.13	97	eP	50 08.87	0.0
PMS	1.13	206	eP	50 08.57	-0.4
			eS	50 24.10	
SUA	1.32	233	iP	50 11.64	0.0
			eS	50 29.93	
SDG	1.42	78	eP	50 13.12	0.1
SKT	1.43	260	iP	50 12.63	-0.5
KLU	1.47	121	eP	50 13.32	-0.4
			eS	50 33.47	
MCK	1.48	353	eP	50 13.74	-0.1
VZW	1.54	141	eP	50 13.76	-0.9
VLZ	1.55	136	eP	50 13.93	-0.8
GLI	1.56	153	iP	50 14.73	-0.1
PAX	1.59	62	eP	50 15.70	0.3
KTH	1.69	321	eP	50 16.13	-0.7
CGLM	1.90	241	eP	50 21.38	1.5
NCG	1.92	245	eP	50 20.14	0.0
SLKM	1.94	205	eP	50 20.65	0.3
CRP	1.99	241	eP	50 21.77	0.6
SPU	1.99	238	eP	50 21.29	0.2
SEW	2.21	192	eP	50 24.95	0.8
WRH	2.22	5	eP	50 23.62	-0.7
CCB	2.41	8	eP	50 26.89	-0.1
RDT	2.52	229	eP	50 28.66	0.1
FBA	2.67	7	eP	50 29.84	-0.9
GLM	2.78	10	eP	50 32.26	-0.1

30 obs. associated

? JUN 13, 1990 09h 05m 18.65± 6.84s
41.103 N ±45.9km 29.536 E ±32.4km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

HRT	0.30	160	ePg	05 25.10	0.2
			eSg	05 31.60	
ISK	0.36	264	ePg	05 26.00	-0.1
YLV	0.55	193	iPg	05 30.30	0.4
IZI	0.77	184	ePg	05 33.00	-0.7
S.D. = 0.8			on	4 of 4 obs.	

* JUN 13, 1990 09h 18m 57.20± 1.55s
32.029 S ±11.8km 71.829 W ±17.9km
DEPTH = 90.6 ± 20.9 km
NEAR COAST OF CENTRAL CHILE (135)

ROCH	1.17	144	iP	19 18.50	-0.9
JACH	1.23	122	iPd	19 18.50	-1.6
			iS	19 34.60	
LCCH	1.46	171	iPd	19 23.60	0.8
			iS	19 42.00	
PEL	1.47	139	iPc	19 22.60	-0.5
			iS	19 40.00	
SAN	1.73	146	iPc	19 26.30	-0.1
			i	19 38.20	
			iS	19 47.70	
TACH	1.79	155	iPd	19 27.50	0.4
			iS	19 49.50	
FCH	1.83	135	iPd	19 27.70	-0.4
			iS	19 50.50	
PCH	1.94	145	iPd	19 29.50	0.3
			i	19 45.00	
			iS	19 58.80	
LNV	1.95	170	iPc	19 29.50	0.2
			iS	19 53.00	
RTBS	2.06	80	iPd	19 31.00	0.3
CHCH	2.14	153	iPc	19 32.50	0.6
			i	19 45.00	
			iS	19 58.80	
ZON	2.73	81	eP	19 41.00	1.1
			eS	19 54.00	
RTRS	2.75	48	iPd	19 40.50	0.4
RTCV	2.80	87	ePc	19 41.50	0.6
RTLL	2.95	77	ePc	19 42.30	-0.6
CFA	3.08	83	eP	19 45.00	0.2
SIV	18.73	34	P	23 10.80	-0.8
			i	23 21.00	
S.D. = 0.8			on	17 of 17 obs.	

& JUN 13, 1990 09h 50m 38.80s
63.529 N 150.742 W
DEPTH = 8.1km
CENTRAL ALASKA (1)
<AGS-P>.

KTH	0.08	287	iP	50 40.99	-0.2
			eS	50 42.83	
HUR	0.75	137	eP	50 52.78	-0.9
			eS	51 02.42	
MCK	0.83	75	eP	50 54.53	-0.6
			Sn	51 06.26	
CUT	1.15	169	iP	51 00.06	-0.4
			Sn	51 15.75	
NEA	1.28	34	eP	51 02.25	-0.5
			Sn	51 19.44	
WRH	1.50	50	eP	51 05.36	-0.7
SKT	1.60	193	iP	51 07.59	0.2
			eS	51 27.77	
CCB	1.71	48	eP	51 08.54	-0.5
			Sn	51 31.99	
GHO	1.95	154	eP	51 12.02	-0.6
SML	2.05	146	eP	51 13.13	-0.9
SUA	2.07	180	eP	51 15.14	0.7
PLRM	2.08	158	eP	51 13.43	-1.0
NCG	2.23	198	eP	51 15.79	-0.9
PMS	2.36	166	eP	51 19.48	1.0
TOA	2.54	122	eP	51 20.54	-0.5
KLU	3.03	130	eP	51 26.40	-1.6

16 obs. associated

& JUN 13, 1990 12h 07m 03.99s
19.273 N 155.499 W
DEPTH = 9.9km
HAWAII (613)
<HVO-P>. ML 4.2 (HVO). Felt (III) at Kalaoa, Keahou and Pahala.

WOH	0.02	187	iPc	07 05.88	-0.1
HTC	0.10	110	iPc	07 06.61	-0.1
AIN	0.11	20	iPd	07 07.25	0.3
			eS	07 09.07	
KHU	0.12	258	iPd	07 07.13	0.0
PPL	0.12	164	iPc	07 06.78	-0.1
DES	0.12	59	iPc	07 06.96	-0.1
TRH	0.15	341	iPd	07 07.86	0.1
KFH	0.17	27	iPd	07 08.22	0.4
DAH	0.18	298	iPd	07 08.02	-0.2
HLP	0.18	82	iPc	07 08.02	0.0
CPK	0.20	53	iPc	07 08.29	-0.2
SWH	0.21	331	iPd	07 08.35	-0.4
KNH	0.21	73	iPc	07 08.40	-0.2
WIH	0.21	338	iPd	07 08.59	-0.3
			eS	07 11.82	
MWH	0.23	336	iPd	07 08.86	-0.2
OUT	0.24	60	iPc	07 08.68	-0.4
MLX	0.24	38	iPd	07 09.38	0.3
AHA	0.24	66	iPc	07 08.91	-0.3
			eS	07 12.36	
RIM	0.24	59	iPc	07 08.89	-0.4
UWE	0.25	52	iPd	07 09.00	-0.3
			iS	07 13.60	
MLH	0.25	25	iPd	07 09.19	-0.2
			eS	07 12.96	
NPH	0.25	55	ePc	07 08.89	-0.4
			eS	07 12.49	
PWH	0.26	88	iPc	07 09.50	0.0
PLL	0.26	8	iPd	07 09.46	-0.2
WOB	0.28	343	iPd	07 09.51	-0.4
ESR	0.28	61	ePc	07 09.43	-0.5
PUH	0.28	69	ePc	07 09.43	-0.6
MKA	0.33	73	ePc	07 10.11	-0.7
SPT	0.33	209	ePd	07 10.54	-0.3
HMH	0.33	2	iPd	07 10.66	-0.3
KIH	0.34	313	iPd	07 10.70	-0.5
KAE	0.35	87	ePc	07 10.97	-0.2
KUH	0.35	269	iPd	07 10.72	-0.5
WHA	0.43	82	iPd	07 12.01	-0.7
CPH	0.45	298	iPd	07 12.53	-0.6
MVH	0.47	61	ePc	07 12.74	-0.8
HPU	0.51	4	iPd	07 13.55	-0.8
HUL	0.51	73	iPd	07 13.09	-1.3
HUH	0.52	322	iPd	07 14.30	-0.3
PKL	0.58	71	iPd	07 13.87	-1.8
HIL	0.59	41	iPd	07 30.86	15.0
			eS	07 39.16	
WKH	0.60	345	iPc	07 15.13	-1.1
NGH	0.62	46	ePc	07 15.56	-0.8
KKU	0.63	13	ePd	07 15.66	-1.2
POH	0.64	73	iPd	07 14.88	-1.9
KPO	0.66	70	iPd	07 15.11	-2.0
KOH	0.89	343	ePc	07 18.69	-2.5

47 obs. associated

? JUN 13, 1990 12h 14m 18.14±12.89s
32.765 S ±104.km 69.982 W ±70.9km
DEPTH = 120.0km (geophysicist)
MENDOZA PROVINCE, ARGENTINA (139)

RTBS	1.19	22	e(P)	14 42.20	-0.2
RTCV	1.52	54	e(P)	14 46.30	0.1
CFA	1.88	52	ePd	14 50.80	0.3
			eS	15 14.80	
RTLL	1.92	42	iPc	14 50.80	-0.3
			eS	15 13.90	
RTRS	2.62	10	ePc	15 00.30	0.2
S.D. = 0.4			on	5 of 5 obs.	

% JUN 13, 1990 12h 26m 15.25± 0.79s
31.334 S ±14.3km 68.618 W ±16.8km
DEPTH = 100.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.13	88	iPc	26 29.50	-0.3
			eS	26 39.80	
CFA	0.42	130	iPd	26 30.90	0.1
			eS	26 43.10	
RTCV	0.53	173	iPc	26 31.60	0.1
			S	26 42.80	
RTBS	0.78	245	e(P)	26 33.60	-0.1
RTRS	1.37	328	iPc	26 40.30	0.1
S.D. = 0.2			on	5 of 5 obs.	

JUN 13, 1990 12h 55m 51.91± 0.83s
41.154 N ± 7.1km 23.174 E ± 4.6km
DEPTH = 5.0km (geophysicist)
GREECE-BULGARIA BORDER REGION (363)
ML 1.4 (SKO).

KNT	0.21	272	iPd	55 55.50	-0.7
			eS	55 58.20	
SRS	0.32	97	ePd	55 57.90	-0.4
			iS	56 03.50	
SOH	0.36	158	iPc	55 59.70	0.6
			eS	56 05.20	
VAY	0.49	290	ePg	56 02.60	1.0
			iSg	56 07.20	
THE	0.55	197	eP	56 02.70	-0.1
			eS	56 11.10	
GRG	0.62	252	eP	56 03.80	-0.5
OUR	1.02	143	eP	56 12.00	0.3
			eS	56 27.50	
LIT	1.17	207	eP	56 14.60	0.3
PAIG	1.28	162	eP	56 15.80	-0.4
			eS	56 34.40	
S.D. = 0.6			on	9 of 9 obs.	

* JUN 13, 1990 15h 16m 29.82± 1.79s
16.891 N ±11.7km 60.994 W ±13.5km
DEPTH = 29.0 ± 4.9 km
LEEWARD ISLANDS (92)
ML 3.4 (FDF).

SFG	0.66	197	ePd	16 42.33	-0.5
			S	16 50.90	
SEG	0.69	225	ePd	16 42.78	-0.5
			S	16 51.90	

13d 15h

BPA	0.84	281	ePd	16 44.86	-0.7
			S	16 55.50	
MGG	1.02	198	ePd	16 47.95	-0.1
			S	17 01.00	
PAG	1.08	218	ePd	16 48.66	-0.4
			S	17 02.40	
MGH	1.18	262	ePd	16 50.59	0.1
			S	17 06.00	
BBL	1.44	199	eP	16 54.20	0.1
			S	17 13.50	
NEV	1.53	279	eP	16 55.27	-0.2
			S	17 15.00	
CRM	2.13	178	eP	17 03.70	-0.4
			S	17 28.20	
FDF	2.15	184	eP	17 04.11	-0.4
			S	17 29.70	
MVM	2.33	178	eP	17 06.63	-0.3
			S	17 33.00	
BIM	2.36	182	eP	17 07.20	-0.3

S.D. = 0.3 on 12 of 12 obs.

& JUN 13, 1990 16h 00m 00.01s
37.262 N 116.420 W
DEPTH = 0.0km
5.7mb (85 obs.) 4.5Msz (1 obs.)
SOUTHERN NEVADA (41)
<DOE>. ML 5.6 (BRK). 37° 15' 41.76" N., 116° 25' 12.42" W., Surfoce Elev. 1977 m., Depth of Buriol 700 m., Shot Time 160000.008, "BULLION," Nevada Test Site (Dept. of Energy). Felt ot Los Vegas.

BGB	0.27	145	P	00 06.00	0.6
GLR	0.33	101	P	00 07.00	0.5
GMR	0.52	82	P	00 10.80	0.4
TNP	1.03	323	iPc	00 20.50	-0.2
CLC	1.73	214	iPc	00 31.30	-0.2
GSC	1.98	189	iPc	00 34.70	-0.6
KVN	2.22	324	iPc	00 38.50	-0.4
ISA	2.30	227	iPc	00 39.70	-0.2
FRI	2.64	265	iPc	00 44.30	-0.3
SBB	2.81	204	iPc	00 46.40	-0.8
TPC	3.16	174	eP	00 52.00	-0.1
PKEM	3.20	249	eP	00 53.00	0.5
CMB	3.24	285	iPc	00 52.50	-0.7
PEM	3.31	201	ePc	00 53.94	-0.2
ABL	3.31	224	iPc	00 53.80	-0.5
MWC	3.31	204	iPc	00 54.10	-0.2
RVR	3.35	194	iPc	00 54.40	-0.4
PCF	3.39	200	ePc	00 55.14	-0.2
PEC	3.42	190	iPc	00 55.50	-0.2
PAS	3.42	205	iPc	00 55.60	-0.1
TWL	3.46	211	eP	00 56.61	0.3
PHAM	3.51	247	iPc	00 56.50	-0.4
SCY	3.56	208	iPc	00 57.21	-0.4
MSU	3.58	68	iP	00 57.60	-0.6
PRI	3.59	253	iPc	00 57.60	-0.6
HAY	3.60	170	eP	00 57.30	-1.0
VPD	3.61	198	ePc	00 58.38	0.0
BCH	3.62	236	eP	00 58.00	-0.6
LLA	3.68	261	iPc	00 59.90	0.5
PLM	3.92	185	iPc	01 02.50	-0.5
SYP	3.97	228	ePc	01 03.70	0.0
SAO	4.05	264	iPc	01 03.50	-1.2
DUG	4.07	43	eP	01 04.00	-1.0
ARN	4.08	273	eP	01 04.30	-0.8
PRS	4.08	258	iPc	01 04.00	-1.1
MHC	4.16	273	iPc	01 06.00	-0.4
CIS	4.17	203	ePc	01 05.50	-0.9
BLP	4.21	231	iPc	01 06.90	0.1
GLA	4.40	162	iPc	01 08.40	-1.3
CPE	4.41	187	ePc	01 08.90	-0.8
GCC	4.46	269	eP	01 08.60	-1.9
BAR	4.58	183	eP	01 11.10	-1.0
ORV	4.60	301	iPc	01 11.30	-1.2
IKP	4.61	177	eP	01 12.10	-0.6
SCI	4.61	203	ePc	01 11.90	-0.7
BKS	4.66	279	iPc	01 12.20	-1.1
			i	01 21.50	
			i	01 24.50	
BRK	4.68	279	ePc	01 12.40	-1.2
ZSP	4.68	280	ePc	01 13.00	-0.6
			i	01 24.10	
PCC	4.75	275	ePc	01 13.30	-1.4
MIN	5.09	309	iPc	01 18.70	-0.8
WDC	5.81	307	iPc	01 28.10	-1.4
ANMO	8.39	103	eP	02 04.40	-1.6
ALO	8.39	103	ePc	02 03.50	-2.5
BGMT	8.62	21	ePc	02 11.10	1.9
GOL	9.00	71	eP	02 14.20	-0.3
LRM	9.05	18	ePc	02 16.50	1.3
GLD	9.12	71	eP	02 16.00	-0.1
BUT	9.21	17	eP	02 18.40	1.2
MEMT	9.28	24	eP	02 21.60	3.3
SXM	9.69	22	ePc	02 25.80	1.8
HRY	10.04	18	ePc	02 29.40	0.8
NEW	11.01	358	eP	02 42.00	0.2
RSSD	11.62	50	eP	02 47.50	-3.0
PNT	12.27	350	P	03 00.00	1.1
PGC	12.48	338	eP	03 03.00	1.3
	0.8s	133.00nm		6.3mb	
SES	13.69	15	ePc	03 17.80	0.0
	0.9s	282.00nm		6.2mb	
ACO	13.83	87	ePd	03 19.90	0.2
	1.0s	63.20nm		5.5mb	
		i		03 29.00	
		e		03 47.70	
		i		04 20.00	
		eLg		07 13.80	
MEO	14.65	94	iPc	03 31.30	0.8
RRO	14.67	92	eP	03 34.20	3.5
	1.2s	208.90nm		5.6mb	
		e		04 41.00	
		eLg		08 04.30	
FKO	15.49	92	eP	03 41.40	0.0
	1.1s	269.00nm		5.5mb	
EDM	16.10	7	ePc	03 48.00	-1.3
	1.0s	868.00nm		5.8mb	
TUL	16.62	88	iPd	03 55.50	-0.5
	1.2s	17.50nm		4.1mb X	
Z	19s	2.81um			
		e		05 17.30	
		LR		07 15.00	
		(Lg)		08 31.60	
LNO	16.63	88	ePc	03 37.00	-18.9
		e		05 17.70	
UYO	18.09	93	iPd	04 13.60	-0.8
FFC	20.07	25	iPc	04 35.60	-2.0
	1.0s	909.00nm		6.1mb	
OLY	20.15	87	ePc	04 37.30	-1.4
FVM	20.59	80	eP	04 42.10	-1.1
MRX	21.97	139	(P)	05 00.00	2.7
IIJ	22.74	136	(P)	05 13.00	7.4
CRX	23.03	136	(P)	05 10.50	2.2
SIT	23.46	334	e(P)	05 13.00	1.3
PPM	23.90	134	(P)	05 18.70	1.8
III	23.99	137	(P)	05 18.00	0.6
RSCP	24.83	84	eP	05 24.50	-0.8
	1.0s	357.92nm		6.0mb	
YKA	25.28	2	eP	05 26.70	-2.6
	1.0s	73.30nm		5.4mb	
EVV	26.31	130	(P)	05 39.00	-0.2
OXX	26.56	134	(P)	05 43.00	1.2
DLA	27.12	67	P	05 45.50	-1.0
CLE	27.18	70	iP	05 45.40	-1.7
ELF	27.31	66	P	05 46.40	-1.8
LDN	27.41	67	P	05 47.00	-2.1
NAV	28.24	79	eP	05 56.20	-0.6
BLA	28.56	79	iPc	05 56.80	-2.8
	0.9s	214.29nm		6.0mb	
JSC	28.59	85	ePc	05 58.80	-1.0
WVLY	29.35	68	ePc	06 04.80	-1.8
CBN	30.74	76	e(P)	06 19.00	0.0
		e		16 19.00	
TOA	30.93	333	ePc	06 21.40	0.9
KDC	31.28	323	e(P)	06 22.10	-1.4
PMR	31.73	331	ePc	06 27.30	-0.2
	1.3s	168.50nm		5.8mb	
RSNY	32.21	64	ePc	06 29.80	-2.1
	0.8s	48.08nm		5.5mb	
INK	32.52	348	ePc	06 32.80	-1.5
	1.1s	42.00nm		5.3mb	
WNY	32.69	64	ePc	06 34.60	-1.5
TBR	32.70	70	ePc	06 34.80	-1.4
TXNY	32.72	70	iP	06 35.00	-1.3
FBA	33.30	336	iPc	06 40.50	-0.6
SVW	34.18	327	iPc	06 48.50	-0.4
SDN	34.69	316	eP	06 53.20	0.0
TTA	35.18	330	iPc	06 57.10	-0.4
IMA	35.96	335	iPc	07 03.80	-0.3
	1.5s	173.60nm		5.7mb	
SCH	37.75	46	ePc	07 17.00	-2.2
	1.1s	132.00nm		5.6mb	
FRB	38.92	32	iPc	07 27.90	-0.9
MBC	39.10	359	ePc	07 29.70	-0.4
	1.0s	101.00nm		5.4mb	
ANM	39.64	329	eP	07 35.10	0.3
UPA	43.62	121	eP	08 06.50	-1.5
ADK	44.08	309	ePc	08 09.90	-1.4
	1.3s	235.70nm		5.9mb	
MORO	50.48	109	eP	09 01.00	-1.0
NEV	51.20	98	eP	09 04.00	-3.4
MGH	51.72	98	eP	09 08.00	-3.3
BPA	51.82	97	eP	09 07.00	-5.1
LLAV	51.88	108	iPd	09 12.00	-0.6
OLLA	52.17	108	iPc	09 14.00	-0.9
PAG	52.53	98	eP	09 14.00	-3.5
MGG	52.88	98	eP	09 16.00	-4.0
BBL	52.98	99	eP	09 20.00	-0.8
GUAN	53.09	107	iPd	09 21.00	-0.7
DAG	55.79	16	iPc	09 37.00	-3.6
	0.7s	27.40nm		5.4mb	
TRN	55.92	103	eP	09 38.50	-3.8
	1.0s	42.00nm		5.4mb	
REY	59.05	31	iP	10 04.00	0.2
RUV	59.76	215	iP	10 08.70	-0.5
	1.1s	75.00nm		5.7mb	
VAH	59.92	215	iP	10 09.60	-0.6
	1.1s	80.00nm		5.8mb	
AKU	59.93	28	iP	10 08.20	-1.7
	1.1s	30.38nm		5.3mb	
KBS	60.28	10	iP	10 10.50	-1.6
NNA	61.49	135	eP	10 18.50	-2.6
	1.1s	48.10nm		5.6mb	
PT08	61.64	135	iPd	10 21.20	-1.3
PPN	62.75	216	iP	10 28.40	-1.0
	1.1s	30.00nm		5.4mb	
PAE	62.93	216	iP	10 29.60	-1.0
	1.1s	55.00nm		5.7mb	
ARE	68.15	133	eP	11 04.00	-0.6
TRO	68.53	15	eP	11 04.00	-1.9
KEV	69.99	13	iP	11 12.00	-2.9
	0.9s	22.00nm		5.3mb	
ZOBO	70.00	130	iPc	11 16.00	-0.4
	1.0s	72.50nm		5.8mb	
		LR		35 48.00	
LPB	70.22	130	P	11 12.00	-5.5
	0.8s	77.61nm		5.9mb	
VAL	70.38	39	eP	11 15.00	-2.5
RGS	71.44	23	eP	11 23.80	0.0
EKA	71.66	34	Pc	11 22.60	-2.6
	1.4s	57.60nm		5.5mb	
ETA	71.90	37	eP	11 25.80	-0.9
	1.3s	252.00nm		6.2mb	
SOD	71.99	14	iP	11 24.30	-2.7
CCH	72.07	129	Pc	11 27.40	-1.1
		i		11 45.40	
ECP	72.15	37	eP	11 26.80	-1.3
	1.4s	196.00nm		6.0mb	
YRH	72.57	36	eP	11 28.70	-2.0
	1.4s	123.00nm		5.8mb	
NAO	73.21	24	P	11 32.20	-2.1
	0.7s	20.20nm		5.3mb	
SIV	74.26	125	P	11 38.60	-2.4
HFS	74.65	23	iPc	11 39.20	-3.5
	0.7s	70.00nm		5.8mb	
Z	17s	0.14um		4.3MszX	
		LR		39 57.00	
AOMJ	75.43	310	eP	11 47.70	0.3
BST	75.75	40	P	11 44.12	-5.0
SUF	75.93	17	iP	11 48.00	-1.9
	0.7s	17.50nm		5.3mb	
UPP	76.08	22	iP	11 48.60	-2.2
YAMJ	77.07	308	P	11 55.70	-1.0
FLN	77.23	38	iPc	11 56.30	-1.1
	1.2s	130.90nm		5.9mb	
GRR	77.30	38	iPc	11 56.80	-1.0
	1.2s	89.25nm		5.8mb	
LPF	77.45	38	iPc	11 57.60	-1.0
	1.2s	127.95nm		5.9mb	
NUR	77.48	19	iP	11 57.00	-1.6
	0.7s	22.70nm		5.4mb	
LDF	77.52	38	iPc	11 57.90	-1.1
	1.0s	80.00nm		5.8mb	
WIT	77.60	31	eP	12 00.00	0.7
UCC	78.06	34	P	12 01.20	-0.7
SNF	78.23	34	iP	12 01.76	-1.1
WTS	78.26	32	eP	12 02.00	-1.0
	1.0s	54.00nm		5.6mb	

		e	12 25.00		
NIIJ	78.29	308 P	12 02.50	-0.9	
DOU	78.67	34 Pc	12 04.30	-1.0	
	1.3s	335.70nm		6.2mb	
ENN	78.78	33 iPc	12 05.00	-0.9	
	1.0s	79.00nm		5.7mb	
MFF	78.86	39 iPc	12 05.10	-1.4	
	1.2s	124.95nm		5.8mb	
MEM	78.93	33 iPc	12 05.69	-1.0	
CHJJ	79.02	307 P	12 06.40	-1.1	
MDJ	79.03	318 eP	12 06.00	-1.4	
MAT	79.22	308 iPc	12 07.20	-1.4	
	1.2s	135.94nm		5.8mb	
MTMJ	79.45	308 eP	12 08.60	-1.3	
LSF	79.95	39 iPc	12 10.90	-1.4	
	1.2s	74.40nm		5.5mb	
IIDJ	80.07	307 P	12 12.10	-1.1	
RTRS	80.21	140 eP	12 14.40	0.6	
TCF	80.26	38 iPc	12 12.60	-1.4	
	1.0s	64.00nm		5.5mb	
ECRI	80.33	43 iPc	12 13.20	-1.3	
SSF	80.34	37 iPc	12 13.20	-1.2	
LOR	80.36	37 iPc	12 13.40	-1.1	
	1.1s	190.80nm		6.0mb	
BGF	80.38	38 iPc	12 13.20	-1.4	
AVF	80.46	37 iPc	12 13.40	-1.6	
LFF	80.46	40 iPc	12 14.10	-1.0	
	1.2s	130.90nm		5.8mb	
MAF	80.48	38 iPc	12 13.90	-1.3	
	1.2s	98.20nm		5.7mb	
RJF	80.60	39 iPc	12 14.40	-1.4	
	1.2s	95.20nm		5.7mb	
LBF	80.62	37 iPc	12 14.60	-1.3	
	1.2s	98.20nm		5.7mb	
VITF	80.66	35 P	12 15.08	-1.0	
GUD	80.73	46 iPc	12 15.20	-1.6	
SMF	80.80	37 iPc	12 15.40	-1.4	
GWF	80.84	34 P	12 15.80	-1.2	
LPO	80.87	40 iPc	12 16.10	-1.1	
	1.3s	115.55nm		5.7mb	
HAU	80.98	35 iPc	12 16.80	-1.0	
	1.2s	127.95nm		5.8mb	
CDF	81.10	34 P	12 17.34	-1.2	
WLS	81.14	34 P	12 17.48	-1.2	
CAF	81.14	39 iPc	12 17.40	-1.3	
STR	81.19	34 P	12 18.20	-0.6	
ECH	81.20	34 P	12 17.59	-1.3	
EVAL	81.21	49 iPc	12 17.60	-1.6	
TSRJ	81.25	308 eP	12 18.50	-0.9	
MOX	81.26	30 eP	12 18.50	-0.7	
	1.2s	62.00nm		5.5mb	
TOL	81.29	46 iPc	12 18.50	-1.1	
	1.2s	187.50nm		6.0mb	
CLL	81.30	29 iPc	12 18.10	-1.2	
	1.3s	67.00nm		5.5mb	
BSF	81.31	35 P	12 18.41	-1.3	
MOF	81.45	35 P	12 19.09	-1.3	
EPF	81.58	41 iPc	12 19.80	-1.3	
	1.2s	62.50nm		5.6mb	
RTCB	81.60	140 eP	12 21.00	-0.2	
HOF	81.63	31 eP	12 20.00	-1.1	
	1.2s	38.00nm		5.4mb	
RTLL	81.64	140 ePd	12 20.70	-0.7	
JACH	81.67	142 eP	12 21.00	-0.6	
LOMF	81.69	35 P	12 20.11	-1.5	
ROCH	81.70	143 ePd	12 21.50	-0.4	
ZON	81.71	140 eP	12 21.00	-0.7	
CN2	81.75	320 P	12 20.50	-1.4	
	1.0s	100.00nm		5.9mb	
		esP	12 23.00		
ETOR	81.79	44 iPc	12 21.10	-1.2	
FEL	81.83	34 P	12 20.88	-1.5	
GRF	81.84	31 iPc	12 21.90	-0.3	
	1.2s	84.00nm		5.7mb	
Z	19s	0.20um		4.5Msz	
LCCH	81.85	143 eP	12 22.50	0.2	
BBS	81.91	35 P	12 21.39	-1.3	
EHOR	81.96	48 eP	12 21.70	-1.3	
CFA	81.98	140 ePd	12 22.50	-0.6	
PEL	82.00	143 iPc	12 22.50	-0.7	
	1.0s	35.00nm		5.4mb	
SLE	82.13	34 ePc	12 22.50	-1.3	
SAN	82.26	143 eP	12 24.50	-0.1	
TACH	82.30	143 iPc	12 23.90	-0.8	
ZLA	82.30	34 ePc	12 23.70	-1.0	
LNV	82.32	144 iPd	12 24.00	-0.7	
FCH	82.34	142 ePd	12 25.30	0.0	
PCH	82.47	143 eP	12 25.50	-0.2	
EPRU	82.53	49 eP	12 25.60	-0.5	
CHCH	82.66	143 eP	12 26.00	-0.6	
EMS	82.68	36 ePc	12 26.10	-0.8	
EJIF	82.73	49 eP	12 26.90	-0.2	
DIX	82.90	36 ePc	12 27.40	-0.8	
SAX	82.90	34 ePc	12 27.20	-0.9	
KSP	82.93	28 eP	12 24.00	-3.9	
	0.7s	27.00nm		5.6mb	
		ic	12 26.80		
		e	15 28.00		
PRU	82.94	29 Pc	12 27.00	-0.9	
	1.5s	55.80nm		5.6mb	
		e	13 04.00		
WET	82.94	31 iPc	12 27.40	-0.6	
	1.2s	64.00nm		5.7mb	
LPL	83.00	36 iPc	12 28.10	-0.5	
	1.2s	69.90nm		5.8mb	
EVIA	83.02	46 eP	12 28.10	-0.6	
LPG	83.02	36 iPc	12 28.50	-0.3	
	1.1s	76.30nm		5.8mb	
LLS	83.03	34 ePc	12 28.20	-0.5	
FUR	83.04	32 iPc	12 28.10	-0.4	
	1.2s	61.00nm		5.7mb	
BAO	83.04	115 ePd	12 29.00	-0.1	
EROQ	83.15	43 iPc	12 28.10	-1.1	
MMK	83.18	35 ePc	12 29.20	-0.4	
MAL	83.18	49 iPd	12 29.20	-0.2	
EBR	83.19	43 eP	12 29.00	-0.4	
ECHE	83.24	45 iPd	12 29.20	-0.5	
KHC	83.24	30 iPc	12 28.50	-1.1	
	1.2s	40.00nm		5.5mb	
		e	12 39.00		
LSD	83.24	36 P	12 29.54	-0.4	
AFC	83.34	48 iPc	12 29.60	-0.9	
ETER	83.41	41 eP	12 29.70	-0.8	
NKM	83.42	50 iP	12 30.00	-0.7	
RRL	83.46	37 P	12 30.87	-0.2	
ORX	83.50	36 P	12 30.16	-0.9	
ORO	83.50	36 P	12 30.60	-0.5	
RSP	83.52	36 P	12 30.87	-0.3	
VDL	83.53	34 ePc	12 30.80	-0.5	
TMA	83.55	35 ePc	12 30.60	-0.8	
AVE	83.58	53 iP	12 30.50	-1.0	
		i	12 49.00		
OSS	83.68	34 ePc	12 31.60	-0.4	
VAI	83.68	35 Pc	12 31.10	-0.7	
SQTA	83.74	33 iPc	12 31.80	-0.4	
	1.4s	123.00nm		5.9mb	
		ipP	12 44.00	40kmX	
		e	13 53.00		
PZZ	83.92	37 P	12 32.93	-0.3	
OGA	83.93	33 iPc	12 33.30	0.0	
	1.4s	68.00nm		5.7mb	
BHG	84.06	32 eP	12 32.70	-1.0	
	1.4s	91.00nm		5.8mb	
SNY	84.12	319 Pc	12 34.20	0.1	
	1.6s	200.00nm		6.1mb	
EALH	84.17	46 eP	12 33.80	-0.6	
MDI	84.18	35 P	12 33.10	-1.2	
STV	84.22	37 P	12 32.72	-2.0	
ENR	84.28	37 P	12 33.03	-2.0	
ACU	84.30	45 eP	12 34.90	-0.2	
LRG	84.34	38 iPc	12 34.30	-0.9	
	1.2s	71.40nm		5.8mb	
FRF	84.40	38 iPc	12 34.40	-1.1	
	1.1s	114.75nm		6.0mb	
ROB	84.45	37 P	12 33.75	-2.0	
LMR	84.50	38 iPc	12 35.00	-1.0	
	1.2s	136.85nm		6.1mb	
SBF	84.56	37 iPc	12 35.00	-1.4	
	1.1s	68.35nm		5.8mb	
PCP	84.58	36 P	12 34.46	-2.0	
FIN	84.67	36 P	12 35.08	-1.8	
SAL	84.68	34 P	12 36.20	-0.6	
IMI	84.74	37 P	12 35.28	-2.0	
BOB	84.83	35 P	12 36.70	-1.0	
IFR	84.88	51 iPc	12 37.50	-0.8	
FVI	84.90	32 P	12 36.80	-1.1	
KRA	84.91	27 eP	12 36.40	-1.5	
	1.4s	168.00nm		6.1mb	
		e	12 49.00		
VKA	85.02	30 iPc	12 37.50	-1.0	
	1.4s	92.90nm		5.8mb	
		e	15 23.00		
TIO	85.22	55 iPc	12 39.20	-0.8	
		i	12 49.40		
ESEL	85.24	42 iPc	12 38.80	-0.9	
ZST	85.39	29 iP	12 39.70	-0.6	
	1.0s	43.00nm		5.6mb	
CAI	85.45	102 iPc	12 40.60	-0.5	
SOP	85.59	30 iPc	12 37.80	-3.5	
SPC	85.74	27 eP	12 41.30	-1.1	
VOY	85.82	32 eP	12 40.30	-2.4	
MME	85.85	35 P	12 42.20	-0.8	
SRO	86.17	29 iP	12 44.00	-0.2	
PGF	86.30	37 iPc	12 43.50	-1.6	
	0.9s	26.20nm		5.4mb	
PGD	86.56	35 P	12 45.40	-1.1	
SFI	86.58	35 P	12 46.50	0.2	
PTJ	86.79	31 e(P)	12 45.90	-1.5	
VBY	86.82	32 eP	12 46.80	-0.7	
RSM	86.85	34 P	12 47.20	-0.4	
ARV	87.40	34 P	12 49.00	-1.4	
ASS	87.61	35 P	12 49.50	-1.9	
AZI	88.82	35 P	12 56.00	-1.1	
BJI	89.18	322 eP	12 58.50	-0.4	
SDI	89.22	35 P	12 57.00	-2.1	
BZS	89.25	28 eP	12 58.00	-1.1	
DUI	89.54	35 P	12 51.00	-9.7	
HHC	90.71	326 P	13 05.80	-0.4	
CMP	90.79	26 ePd	13 10.00	3.6	
MLR	90.91	25 eP	13 06.00	-1.1	
BTO	91.60	326 eP	13 10.00	-0.3	
TIA	91.65	319 Pc	13 09.70	-0.7	
	1.4s	100.00nm		6.0mb	
SKO	92.26	30 eP	13 11.00	-2.2	
		i	16 40.00		
TIY	92.81	323 Pd	13 15.40	-0.5	
SSE	93.26	313 Pc	13 17.50	-0.4	
	1.2s	80.00nm		6.0mb	
VAY	93.26	30 iP	13 16.60	-1.2	
DZM	93.47	245 iPc	13 19.90	1.0	
NJ2	93.87	316 Pc	13 20.00	-0.7	
	1.4s	40.00nm		5.6mb	
WMQ	96.38	343 eP	13 29.50	-2.7	
GTA	96.74	333 eP	13 32.00	-1.9	
	1.2s	10.00nm		5.3mb	
XAN	97.46	323 P	13 36.00	-1.1	
WHN	97.50	318 eP	13 36.50	-0.8	
LZH	98.03	328 eP	13 39.00	-0.8	
WB5	116.80	265 ePKP	18 46.50	-2.0	
WRA	116.86	265 PKPc	18 46.60	-2.0	
	0.8s	7.30nm			
STK	117.25	249 ePKP	18 47.30	-1.7	
	0.9s	4.00nm			
BCAO	121.05	55 iPKPd	18 55.00	-1.7	
	1.3s	32.00nm			
SPA	127.08	180 iPKPc	19 06.00	-0.9	
	1.0s	20.00nm			
KRI	143.82	65 iPKPd	19 38.70	-0.8	
BUL	145.15	70 iPKPd	19 37.90	-3.8	
	1.1s	132.91nm			
HVD	147.87	89 iPKPc	20 05.00	19.1	
PRY	147.89	82 ePKP	19 44.00	-2.0	
	0.6s	16.07nm			
SLR	147.96	79 iPKPc	19 45.50	-0.6	
	1.0s	85.00nm			
SEK	148.64	84 iPKPd	19 50.00	2.8	
	0.9s	75.63nm			
BFT	149.31	78 iPKPc	19 48.00	-0.4	
	1.0s	95.00nm			
MAW	149.61	179 iPKP	19 51.60	4.4	
	0.9s	60.00nm			
GRM	149.66	94 iPKPc	19 51.00	2.6	
	0.6s	2.67nm			
	340 obs. ossociated				

JUN 13, 1990 16h 32m 57.38± 0.70s
40.002 N ± 9.3km 106.232 E ± 5.9km
DEPTH = 10.0km (geophysicist)
4.5mb (4 obs.)
NORTHERN CHINA (323)
ML 4.7 (BJI).

BTO	2.96	77 Pn	33	46.60	1.3
		Pg	33	50.80	
		Sn	34	22.00	
		Sg	34	28.80	
HHC	4.16	77 iPnc	34	02.60	0.2
		Pg	34	13.60	
		Sn	34	50.00	
		Sg	35	05.60	
LZH	4.34	206 iPnd	34	06.40	1.3

13d 16h

		Pg	34	19.00	
		Sn	34	58.00	
		Sg	35	15.00	
TIY	5.35	113 Pnc	34	17.80	-1.5
		Pg	34	33.20	
		Sn	35	19.00	
		Sg	35	39.50	
XAN	6.33	159 Pn	34	34.80	1.7
		Pg	34	53.00	
		Sn	35	44.00	
CD2	9.29	193 P	35	14.40	0.0
TIA	9.38	110 eP	35	14.60	-1.0
WHN	11.53	142 eP	35	44.00	-1.0
E	10s	0.60um			
NU2	12.93	124 eP	36	02.00	-1.8
GYA	13.51	178 P	36	15.20	3.5X
WMO	14.32	291 P	36	22.50	0.3
CN2	14.80	69 eP	36	30.00	1.6
Z	16s	0.30um			
KMI	15.12	192 eP	36	35.00	2.0
GUN	20.69	241 P	37	39.90	-0.6
	0.6s	31.00nm		4.8mb	
PKI	21.23	241 P	37	45.00	-1.0
	0.6s	12.00nm		4.5mb	
DMN	21.41	241 P	37	47.00	-0.7
	0.7s	14.00nm		4.5mb	
GKN	21.47	243 P	37	47.40	-0.9
CHTO	22.03	199 (P)	37	53.90	0.1
HFS	57.50	324 eP	42	52.90	4.2X
	0.5s	1.00nm		4.1mb	
S.D. = 1.3 on 17 of 19 obs.					

JUN 13, 1990 16h 41m 53.60± 0.15s
6.371 N ± 3.1km 126.396 E ± 3.9km
DEPTH = 77.2km (9 depth phases)
5.6mb (50 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 29C
Centroid Location:
Origin Time 16:41:57.4 0.3
Lat 6.20N 0.03 Lon 126.27E 0.03
Dep 84.1 1.6 Half-duration 3.0
Moment Tensor; Scale 10**17 Nm
Mrr= 2.52 0.10 Mtt= 1.83 0.17
Mff=-4.35 0.23 Mrt=-1.33 0.11
Mrf= 1.79 0.10 Mtf=-2.50 0.14
Principal Axes:

	Val=	Plg=	Azm=
T	4.54	44	207
N	0.90	44	8
P	-5.44	9	107

Best Double Couple:Mo=5.0*10**17
NP1:Strike=236 Dip=52 Slip= 151
NP2: 345 68 41

DAV	1.08	311 iPd	42	16.70	2.9
OCP	9.74	328 eP	44	11.00	-2.1X
KKM	10.13	269 ePd	44	22.40	3.9X
	1.1s	235.50nm		6.1mb	
AAI	10.15	170 ePc	44	19.10	0.4
		eS	46	01.60	
BAG	11.49	331 eP	44	38.00	1.1
		eS	46	47.00	
MKS	13.43	211 iPc	45	04.90	2.6
ANP	19.28	347 eP	46	32.00	16.9X
GUMO	19.54	67 eP	46	17.30	-0.6
	0.7s	182.97nm		5.5mb	
		eS	49	53.00	
PJG	19.54	67 eP	46	17.60	-0.3
		TT	05	57.50	
GUA	19.57	67 eP	46	17.80	-0.3
	0.5s	123.94nm		5.5mb	
TRT	19.59	225 ePc	46	15.00	-3.4X
	0.6s	267.40nm		5.7mb	
MTN	19.66	166 iPc	46	18.70	-0.4
		e	47	30.00	
		e	50	04.00	
HKC	19.75	325 iPd	46	23.40	3.4X
		iS	50	04.00	
QZH	19.92	339 eP	46	24.00	2.2
Z	16s	2.40um			
N	16s	1.40um			
E	16s	1.50um			
		S	50	00.00	
QIZ	20.44	309 P	46	27.00	-0.2
N	13s	2.50um			
E	15s	2.30um			
		iS	50	12.50	
GZH	20.84	324 P	46	33.00	1.8
		iS	50	18.00	
KNA	22.10	174 iPc	46	44.50	0.7
KGM	23.41	260 ePd	46	58.30	1.7
SSE	25.08	349 eP	47	14.00	1.6
	1.5s	140.00nm		5.2mb	
Z	20s	1.40um		4.5Msz	
N	10s	0.80um			
E	10s	1.00um			
		pP	47	27.50	56kmX
		sP	47	42.00	
		S	51	30.00	
		sS	52	02.00	
		eSS	52	40.00	
		ScP	54	20.00	
IPM	25.32	267 ePd	47	16.00	1.1
	1.0s	110.10nm		5.3mb	
		e	50	48.00	
SNG	25.61	273 eP	47	16.50	-1.1
	0.8s	120.90nm		5.4mb	
		eS	51	37.50	
PCT	25.89	291 eP	47	24.10	3.9X
KDB	26.00	127 eP	47	21.00	-0.1
LOE	26.47	297 eP	47	25.50	0.0
NJ2	26.50	346 Pc	47	26.00	0.4
N	10s	0.40um			
E	11s	0.70um			
		S	51	55.00	
		ScP	54	24.30	
WHN	26.58	336 ePc	47	26.50	0.2
N	14s	1.50um			
E	11s	0.76um			
		S	51	56.00	
		iScS	58	14.00	
PPI	26.82	256 ePc	47	28.00	-0.7
	0.7s	252.10nm		5.9mb	
NNT	27.00	285 eP	47	29.30	-1.0
WB5	27.24	163 iPc	47	31.10	-1.4
		eS	52	01.90	
		iScP	54	25.00	
WRA	27.29	164 Pc	47	31.90	-1.1
	0.8s	49.80nm		5.1mb	
NST	27.35	292 eP	47	34.30	0.8
GYA	27.44	319 P	47	38.40	4.0X
		PcP	50	51.80	
		S	52	04.80	
		ScP	54	25.00	
		ScS	58	17.00	
PSI	27.62	264 ePd	47	35.70	-0.3
	0.8s	83.20nm		5.4mb	
TSI	27.87	265 eP	47	38.00	-0.2
BDT	28.86	294 eP	47	48.00	0.8
	0.8s	33.70nm		5.0mb	
KMI	29.33	312 Pc	47	51.50	-0.1
	2.0s	100.00nm		5.1mb	
Z	18s	2.70um		4.9Msz	
		eS	52	34.00	
		iS	52	39.50	
CHG	29.45	297 eP	47	53.00	0.5
	0.9s	12.60nm		4.6mb	
		eS	52	42.00	
		e	54	31.60	
QIS	29.74	154 iPc	47	54.60	-0.4
	0.3s	85.00nm		5.9mb	
TSRJ	30.34	16 P	47	58.10	-1.9
NANU	30.66	200 eP	48	01.00	-2.0
	0.4s	43.00nm		5.5mb	
TIA	30.89	345 eP	48	04.70	-0.3
	1.4s	100.00nm		5.4mb	
Z	24s	1.10um		4.4MszX	
N	10s	0.80um			
E	10s	0.80um			
		S	53	00.00	
CHJJ	31.72	20 eP	48	08.10	-4.1X
MAT	31.92	18 eP	48	11.00	-3.0X
		eS	53	14.00	
XAN	31.93	332 P	48	13.20	-1.0
		S	53	16.00	
CD2	32.35	322 P	48	16.50	-1.3
Z	16s	1.80um		4.9MszX	
E	13s	1.10um			
		eS	53	22.00	
WARB	32.36	180 eP	48	17.00	-0.9
	0.4s	82.00nm		5.9mb	
DL2	32.67	353 eP	48	18.00	-2.5X
	1.0s	100.00nm		5.6mb	
Z	18s	0.90um		4.5Msz	
N	12s	0.70um			
E	12s	0.70um			
MEKA	33.66	193 iPc	48	28.20	-1.0
	0.3s	32.00nm		5.7mb	
TIY	33.69	340 Pd	48	30.40	1.0
Z	19s	2.00um		4.9Msz	
N	19s	1.70um			
		S	53	48.50	
		sS	54	20.00	
YAMJ	33.99	19 P	48	29.90	-2.0
BJI	34.76	346 eP	48	39.00	0.6
	1.5s	420.00nm		6.1mb	
Z	20s	0.90um		4.5Msz	
E	10s	0.31um			
		eS	53	58.00	
		esS	54	39.00	
		eScS	58	53.50	
SNY	35.40	356 Pc	48	43.30	-0.5
	1.3s	100.00nm		5.6mb	
Z	20s	1.70um		4.8Msz	
N	15s	1.00um			
E	12s	0.70um			
		S	54	08.00	
LZH	36.08	328 Pc	48	49.40	-0.5
	1.6s	74.00nm		5.4mb	
Z	30s	5.30um		5.1MszX	
N	12s	0.90um			
E	12s	0.70um			
		pP	49	08.00	76km
		sP	49	17.00	
		PP	50	18.00	
		PcP	51	15.00	
		S	54	22.00	
		ScP	54	53.50	
		PcS	55	02.00	
		SS	56	54.00	
		ScS	58	57.20	
MRWA	36.77	195 iPc	48	55.00	-0.6
HHC	36.80	341 P	48	57.80	1.9
Z	15s	1.80um		5.0MszX	
N	10s	0.30um			
E	12s	0.40um			
		S	54	38.00	
OLP	37.04	153 ePc	48	57.50	-0.4
FORR	37.04	178 iPc	49	10.80	13.0X
	0.4s	112.00nm			
BTO	37.10	339 P	48	59.00	0.6
N	15s	0.90um			
E	12s	0.80um			
		PP	50	27.50	
		S	54	40.00	
		eSS	57	10.00	
CN2	37.29	359 eP	49	00.60	0.9
Z	20s	1.00um		4.6Msz	
N	10s	0.50um			
E	10s	0.40um			
		epP	49	16.00	60kmX
		PcP	51	18.50	
		eS	54	40.00	
		ScS	59	04.00	
COOL	37.38	187 iPc	49	00.00	-0.7
	0.4s	47.00nm		5.8mb	
BAL	37.92	194 iPc	49	04.70	-0.5
	0.5s	131.00nm		6.1mb	
SHL	38.09	304 eP	49	05.05	-1.9
		iS	54	50.00	
MDJ	38.20	4 Pc	49	07.30	-0.1
Z	28s	2.20um		4.8MszX	
N	14s	0.70um			
		epP	49	25.00	72km
		S	54	55.00	
RMO	39.21	147 ePc	49	15.20	-0.8
		i	49	35.80	86km
		e	51	26.00	
		i	55	08.00	
MUN	39.35	194 iPc	49	16.90	-0.2
	0.6s	390.00nm		6.5mb	
LSA	40.49	309 P	49	27.80	0.7
	3.0s	500.00nm		5.9mb	
GTA	40.69	328 P	49	27.80	-0.4
	1.2s	100.00nm		5.5mb	
Z	26s	4.70um		5.2MszX	
E	15s	1.70um			
STK	40.71	160 iPc	49	29.00	0.7
	0.7s	181.00nm		6.0mb	

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                    iPcP  51 29.60
                    eS    55 31.80
RKG    41.19 192 iPc    49 37.30   5.1X
       0.5s  159.00nm          6.1mb
ADE    42.72 165 iPc    49 46.00   1.2
       1.0s  530.00nm          6.3mb
GUN    43.95 304 P      49 54.70  -0.6
COO    44.12 148 eP     49 57.00   0.8
PKI    44.21 303 P      49 56.40  -1.0
DMN    44.48 303 P      49 58.60  -0.9
       0.6s   40.00nm          5.4mb
GKN    45.00 304 P      50 02.40  -1.1
BWA    45.60 154 iPc    50 10.10   2.1
BFD    45.88 162 iPc    50 10.20   0.2
       0.9s  193.00nm          6.0mb
CAN    46.61 154 iPc    50 17.00   1.1
CNB    46.77 154 iPc    50 18.70   1.5
       0.9s   94.00nm          5.7mb
TOO    47.21 159 iPc    50 21.60   1.0
       0.5s   52.00nm          5.7mb
                 i      50 37.60  62kmX
HYB    47.96 288 eP     50 26.00  -0.8
       1.0s   60.00nm          5.5mb
                 eS     57 18.00
DZM    48.35 127 iPc    50 30.00   0.2
KOD    48.53 278 iP     50 31.00  -0.6
GBA    48.68 282 Pd     50 31.40  -0.9
       0.7s   69.70nm          5.8mb
WMQ    50.39 324 iPd    50 44.50  -0.6
     Z  28s    2.60um          5.1MszX
     N  16s    1.50um
     E  16s    2.00um
                 ScP    55 50.00
                 S      57 49.00
                 ScS    00 26.00
KSH    55.94 314 eP     51 27.00   0.7
                 eS     59 04.00
QUE    60.49 301 eP     51 56.50  -1.8
                 e(S)   00 03.40
ADK    64.99  35 eP     52 26.70  -0.7
MAIO   67.67 307 eP     52 44.00  -0.9
                 eS     01 43.00
TAB    78.29 307 e(P)   53 46.00  -1.2
SVW    78.65  29 eP     53 50.70   2.2
TTA    78.71  27 eP     53 49.30   0.4
       0.8s   10.80nm          4.8mb
KDC    79.90  33 ePd    53 55.20   0.0
IMA    80.12  24 eP     53 56.70   0.2
       0.6s   11.30nm          5.0mb
PMR    81.80  29 eP     54 04.60  -0.6
       0.8s   34.60nm          5.3mb
FBA    82.49  25 eP     54 08.10  -0.6
TOA    83.21  28 eP     54 14.10   1.5
MAW    86.10 200 iP     54 26.80   0.0
       0.8s   29.00nm          5.4mb
BURJ   87.14 302 Pc     54 28.30  -4.5X
SALJ   87.27 302 Pc     54 28.70  -4.7X
KFNJ   87.29 302 Pc     54 28.80  -4.5X
KEV    87.31 340 eP     54 32.00  -0.7
       0.6s   27.40nm          5.6mb
MKRJ   87.35 301 Pd     54 29.50  -4.3X
DSI    87.57 301 eP     54 35.00   0.3
INK    87.84  21 eP     54 35.00  -0.3
       0.6s   21.00nm          5.4mb
SOD    87.91 338 iP     54 35.20  -0.4
PRNI   88.03 300 eP     54 37.00   0.0
MBH    88.19 300 eP     54 37.00  -0.7
SUF    89.06 333 iP     54 40.80  -0.4
       0.5s   17.30nm          5.5mb
MBC    89.46  13 eP     54 43.00   0.1
       0.9s   14.00nm          5.2mb
TRO    90.07 340 eP     54 44.50  -1.3
NUR    90.25 331 iP     54 47.00   0.3
       0.6s   31.30nm          5.7mb
                 i      55 07.00  72km
VRI    92.17 316 ePc    54 56.00   0.1
MLR    92.78 316 eP     54 58.00  -0.9
CMP    93.45 316 ePc    55 10.00   8.1X
UPP    93.80 331 iP     55 02.10  -1.0
DAG    94.63 352 iPd    55 06.00  -0.7
       0.4s   31.36nm          6.1mb
HFS    95.54 332 eP     55 09.00  -2.1X
       0.4s    5.60nm          5.4mb
KRA    95.58 322 eP     55 11.70   0.2
                 e      55 31.40  70kmX
SPC    95.64 321 eP     55 11.50  -0.6
                 e      58 25.60
VAY     96.11 313 eP      55 12.30  -1.8
                  i       55 35.50  85km
NAO     96.55 334 P       55 14.20  -1.5
        0.7s   12.70nm            5.6mb
SKO     96.77 313 eP      55 18.00   0.9
YKA     97.24  24 eP      55 18.20  -0.6
        0.8s    8.60nm            5.3mb
SRO     97.27 320 eP      55 21.20   2.0
                  e       55 41.50  73km
                  e       00 09.30
KSP     97.55 323 eP      55 20.00  -0.4
                  e       55 41.50  78km
ZST     97.92 320 eP      55 27.40   5.3X
                  e       55 43.50  56kmX
                  e       59 09.70
                  e       59 21.50
KRI     98.29 254 eP      55 25.00   0.5
PRU     98.90 323 P       55 26.90   0.4
      Z  19s    0.60um            5.1Msz
                  e       55 48.00  76km
CLL     99.32 324 eP      55 28.00  -0.4
                  e       55 34.00  19kmX
                  e       55 49.00
BUL     99.45 251 iPd     55 26.90  -2.8X
        0.8s   14.93nm            5.6mb
KHC     99.79 322 eP      55 31.90   1.2
      Z  18s    0.50um            5.1Msz
                  e       55 53.00  76km
MOX    100.38 324 e(Pdif55 35.00   1.8
                  e       55 40.00
DOU    104.66 326 Pdiffc55 53.50   1.3
                  S       06 28.00
KVN    105.31  47 PKP     00 10.00   0.4
FRB    109.17   7 ePKP    00 15.00  -0.7
RSSD   112.30  37 PKP     00 22.50  -0.1
GOL    113.85  42 PKP     00 26.00   0.1
ANMO   115.48  46 PKP     00 29.00   0.0
ANMO   115.48  46 (Pdiff56 34.00  -7.0X
ALQ    115.48  47 ePKP    00 29.00  -0.1
      Z  22s    0.37um            5.0Msz
SCH    118.05   9 ePKP    00 34.00   1.0
FVM    124.13  35 PKP     00 45.50   0.3
OLY    125.20  38 PKP     00 47.20  -0.1
CBM    125.39  12 PKP     00 47.00  -0.3
RSNY   125.93  18 PKP     00 48.00  -0.5
WVLY   126.34  23 PKP     00 49.00  -0.4
HBVT   126.54  17 PKP     00 49.00  -0.7
PWLA   127.59  36 PKP     00 51.00  -1.0
RSCP   128.56  33 PKP     00 54.00   0.1
TKL    129.48  32 PKP     00 55.50  -0.1
KIC    129.62 284 PKP     00 56.10  -0.3
        0.6s   33.00nm
TIC    129.83 284 PKP     00 56.38  -0.4
LIC    129.93 284 PKP     00 56.72  -0.3
CVL    130.17  26 PKP     00 57.00   0.2
JSC    131.85  31 PKP     01 01.50   1.4
LNV    147.98 151 iPKPd   01 37.60   8.7X
LCCH   148.29 151 ePKPd   01 34.50   5.1X
CHCH   148.35 152 ePKP    01 34.00   4.4X
TACH   148.45 152 ePKP    01 34.00   4.3X
PCH    148.68 152 ePKPd   01 35.10   4.9X
SAN    148.75 152 ePKP    01 36.00   5.8X
ROCH   148.97 151 ePKPd   01 36.40   5.5X
PEL    148.99 151 iPKPd   01 36.10   5.5X
FCH    149.02 152 ePKP    01 36.50   5.4X
JACH   149.41 151 iPKPd   01 37.60   6.2X
UPA    149.99  60 (PKP)   01 38.00   5.5X
RTBS   150.80 151 e(PKP)01 41.70   8.4X
RTCB   151.25 152 ePKP    01 41.50   7.4X
ZON    151.26 153 ePKP    01 41.00   6.9X
CFA    151.40 153 e(PKP)01 36.00   1.7
RTLL   151.53 153 ePKPc   01 40.80   6.3X
RTRS   152.02 150 ePKPc   01 43.10   8.0X
ZOBO   162.71 126 PKP     01 52.00   2.9X
        1.1s   11.60nm
      Z  24s    0.20um
                  i       02 42.40
                  LR      57 32.00
CCH    163.57 133 (PKP)   01 53.00   3.4X
SIV    167.96 143 iPKPd   01 54.10   1.2
                  i       03 02.50
BAO    169.27 210 ePKP    01 55.00   1.2
     S.D. = 1.0  on 138 of 177 obs.
------------------------------------------
* JUN 13, 1990  17h 01m 04.79± 1.61s
  69.053 N ±15.6km  144.444 W ± 9.4km
  DEPTH =  33.0km  (normal)
  3.8mb (  1 obs.)
 ALASKA                             (676)

 INK     4.06  96 P      02 06.00  -0.1
 GLM     4.24 197 eP     02 09.08   0.3
                  Sn     02 57.16
 FBA     4.37 199 eP     02 10.69   0.1
                  Sn     03 01.05
 CCB     4.62 198 eP     02 13.78  -0.3
 IMA     4.64 234 eP     02 14.65   0.3
 WRH     4.82 199 eP     02 17.02   0.1
 NEA     4.85 204 eP     02 17.60   0.3
 DOT     5.43 178 eP     02 26.24   0.7
 KTH     6.11 208 eP     02 34.85  -0.3
 PAX     6.12 184 eP     02 35.59   0.2
 SDG     6.57 184 eP     02 41.58   0.0
 SML     7.45 194 eP     02 52.58  -1.4
 MBC    10.28  35 P      03 28.00  -4.9X
 YKA    13.77 104 eP     04 14.60  -5.0X
         0.4s    0.70nm          3.8mb
     S.D. = 0.6  on  12 of  14 obs.
------------------------------------------
% JUN 13, 1990  17h 18m 28.98± 0.91s
  39.964 N ± 7.2km   29.003 E ± 6.9km
  DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)

 IZI     0.52  44 ePg    18 39.90   0.4
 YLV     0.67  25 iPg    18 42.30   0.0
 EDC     0.95 294 ePg    18 47.20   0.1
                  eSg    19 00.20
 HRT     1.00  30 ePn    18 47.40  -0.5
 ALT     1.25 136 ePn    18 52.20   0.0
 CTT     1.26 340 ePn    18 52.40   0.0
     S.D. = 0.4  on   6 of   6 obs.
------------------------------------------
? JUN 13, 1990  17h 18m 53.93± 5.10s
  31.549 S ±21.4km   68.633 W ±19.3km
  DEPTH =  94.3 ± 46.1 km
 SAN JUAN PROVINCE, ARGENTINA       (137)

 RTCB    0.16 294 iPd    19 08.00   0.1
 RTLL    0.26  33 iPc    19 07.80  -0.1
                  eS     19 19.30
 RTCV    0.32 165 eP     19 08.30   0.1
                  S      19 19.70
 CFA     0.34 100 eP     19 08.30   0.0
                  S      19 20.40
 RTBS    0.71 261 e(P)   19 11.00  -0.1
                  S      19 25.20
 RTRS    1.55 332 ePc    19 20.90   0.0
     S.D. = 0.2  on   6 of   6 obs.
------------------------------------------
   JUN 13, 1990  17h 22m 15.65± 0.72s
  36.978 N ± 7.2km   28.056 E ± 6.0km
  DEPTH =  12.6 ±  4.9 km
  3.8mb (  3 obs.)
 DODECANESE ISLANDS                 (369)

 YER     0.24  49 iPg    22 20.00  -1.0
 CIN     0.62   2 iPd    22 27.00  -0.9
 SMG     1.21 307 iPnd   22 38.60   0.6
 KSL     1.50 124 iPnd   22 44.70   2.5
 ELL     1.50  98 iPn    22 44.00   1.6
 IZM     1.55 336 iPn    22 43.40   0.4
 KHL     1.78  40 iPn    22 47.50   1.1
 APE     2.02 273 ePn    22 50.50   0.6
 BCK     2.08  76 ePn    22 54.10   3.4X
 ALT     2.63  37 ePn    23 00.20   1.5
 EDC     3.37 357 ePn    23 08.20  -0.8
 VAM     3.49 244 ePn    23 14.00   3.3X
 KGT     3.52 351 iPn    23 09.80  -1.3
 IZI     3.53  18 ePn    23 19.00   7.6X
 GPA     3.75  27 ePn    23 24.60  10.1X
 GBZT    3.96  15 eP     23 30.00  12.7X
 HRT     4.04  18 ePn    23 26.40   7.9X
 PPCY    4.06 120 eP     23 20.20   1.4
 VLI     4.11 268 ePn    23 20.00   0.4
 CTT     4.17   4 ePn    23 19.00  -1.4
 ITU     4.19  10 ePn    23 35.00  14.4X
 RDO     4.60 336 ePn    23 26.80   0.3
 CSS     4.73 114 eP     23 29.00   0.6
 LFK     4.75 109 ePn    23 31.60   2.9X
 VAY     6.08 317 eP     23 49.50   2.1
 DSI     8.11 130 e(P)   24 14.00  -1.9
 PRNI    8.79 137 eP     24 23.00  -2.3
 MBH     9.17 140 eP     24 29.00  -1.6
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13d 17h

SMF	20.40	306	eP	26 54.40	-0.5
	0.8s	6.05nm		4.0mb	
LOR	20.61	308	eP	26 56.20	-0.8
SSF	20.76	307	eP	26 53.20	-5.4X
	0.7s	2.75nm		3.7mb	
AVF	20.77	306	eP	26 58.20	-0.5
	0.8s	3.35nm		3.8mb	
S.D. = 1.4 on 23 of 32 obs.					

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* JUN 13, 1990 17h 33m 23.96± 0.63s
6.295 N ± 8.7km 126.349 E ±11.9km
DEPTH = 33.0km (normal)
4.8mb (6 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

AAI	10.09	169	eP	35 55.00	5.3X
TRT	19.51	225	ePc	37 51.50	-0.1
KNA	22.03	174	iPc	38 18.90	1.4
IPM	25.27	267	ePd	38 50.90	1.9
SNG	25.57	273	eP	38 51.60	-0.2
WB5	27.18	163	eP	39 05.30	-1.3
WRA	27.23	163	Pc	39 06.30	-0.8
	0.7s	6.60nm		4.4mb	
QIS	29.70	154	iPc	39 28.90	-0.4
NANU	30.57	200	eP	39 36.30	-0.7
XAN	31.98	332	P	39 48.50	-0.9
WARB	32.29	180	eP	39 52.50	0.4
MEKA	33.58	193	iPc	40 02.90	-0.4
	0.4s	16.00nm		5.3mb	
LZH	36.12	328	P	40 26.00	0.8
	1.2s	31.00nm		5.1mb	
MRWA	36.69	195	eP	40 29.00	-0.8
FORR	36.97	177	eP	40 45.50	13.4X
	0.4s	15.00nm			
COOL	37.30	187	eP	40 34.20	-0.7
BAL	37.84	194	eP	40 39.20	-0.2
MUN	39.27	194	iPc	40 51.30	-0.1
STK	40.65	160	iPc	41 03.40	0.6
	0.6s	11.00nm		4.8mb	
GTA	40.72	328	P	41 02.70	-0.8
	0.8s	10.00nm		4.6mb	
RKG	41.11	192	eP	41 12.00	5.5X
BRS	42.13	144	iPc	41 15.10	0.1
BWA	45.56	154	eP	41 45.00	2.4
CAN	46.57	154	eP	41 46.00	-4.6X
GBA	48.65	283	P	42 07.00	-0.2
	0.6s	6.50nm		4.8mb	
S.D. = 1.0 on 21 of 25 obs.					

? JUN 13, 1990 18h 09m 01.68± 7.26s
16.237 N ±67.9km 97.685 W ±15.8km
DEPTH = 33.0km (normal)
OAXACA, MEXICO (60)

OXX	1.25	48	iPc	09 23.10	0.0
			iS	09 41.33	
III	2.72	322	eP	09 43.84	-0.4
			eS	10 18.50	
IIT	2.83	348	eP	09 45.00	-0.8
			iS	10 25.66	
PPM	2.95	342	eP	09 48.51	0.7
			iS	10 24.50	
LVVM	3.67	18	(P)	09 53.00	-4.5X
			(S)	10 52.83	
IIJ	3.99	331	eP	10 03.00	0.5
			(S)	10 57.50	
S.D. = 0.9 on 5 of 6 obs.					

? JUN 13, 1990 18h 45m 29.66± 4.67s
31.277 S ±15.6km 68.427 W ±24.9km
DEPTH = 90.2 ± 43.3 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.06	214	iPc	45 42.70	-0.2
			eS	45 53.00	
CFA	0.37	154	iPd	45 44.00	0.3
			eS	45 56.00	
RTCB	0.38	237	iPd	45 44.00	0.1
RTCV	0.59	189	ePd	45 45.20	-0.3
			S	45 57.80	
RTBS	0.96	246	e(P)	45 49.20	0.1
			S	46 04.80	
RTRS	1.42	321	iPc	45 54.70	0.0
S.D. = 0.3 on 6 of 6 obs.					

? JUN 13, 1990 18h 55m 24.65± 1.22s
36.566 N ±13.6km 25.343 E ±15.0km
DEPTH = 5.0km (geophysicist)
DODECANESE ISLANDS (369)
ML 3.3 (ATH).

APE	0.52	17	eP	55 34.50	-0.7
			eSg	55 44.40	
VAM	1.48	219	ePb	55 51.50	-0.5
SMG	1.65	46	ePn	55 55.00	0.6
ATH	1.91	318	ePg	56 02.50	4.3X
VLI	1.94	275	ePn	55 59.10	0.5
IZM	2.38	39	ePn	56 08.40	3.4X
S.D. = 1.1 on 4 of 6 obs.					

? JUN 13, 1990 18h 58m 54.03± 8.66s
31.419 S ±18.4km 67.833 W ±59.0km
DEPTH = 10.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

CFA	0.39	241	ePd	59 02.20	0.1
			eS	59 09.00	
RTLL	0.55	279	iPc	59 04.80	-0.5
			eS	59 13.00	
RTCV	0.74	234	e(P)	59 08.30	-0.4
RTCB	0.83	265	eP	59 10.50	0.4
			S	59 21.80	
RTBS	1.40	260	ePc	59 20.00	0.4
			S	59 39.20	
RTRS	1.87	311	ePc	59 36.80	10.4X
S.D. = 0.6 on 5 of 6 obs.					

? JUN 13, 1990 19h 38m 26.18± 0.89s
37.378 N ± 8.6km 30.144 E ± 7.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

BCK	0.36	77	iPn	38 33.60	-0.1
ELL	0.66	197	iPn	38 39.50	0.2
KHL	1.06	333	ePn	38 46.50	0.2
CIN	1.65	278	ePn	38 55.00	-0.3
			iSg	39 22.00	
S.D. = 0.4 on 4 of 4 obs.					

& JUN 13, 1990 19h 44m 45.03s
60.808 N 151.180 W
DEPTH = 48.6km
KENAI PENINSULA, ALASKA (14)
<AGS-P>. ML 3.2 (PMR).

SLKM	0.56	122	iP	44 56.91	-0.1
SPU	0.57	312	iP	44 56.73	-0.4
CGLM	0.64	322	iP	44 57.62	-0.6
CRP	0.66	315	iP	44 58.13	-0.4
SUA	0.69	18	iP	44 58.35	-0.5
NCG	0.76	322	iP	44 59.16	-0.6
RED	0.88	244	iP	45 00.50	-0.8
			iS	45 13.34	
PMS	0.90	60	iP	45 01.02	-0.6
PWA	1.05	36	iP	45 03.43	-0.2
SEW	1.11	129	iP	45 03.27	-1.2
			Sn	45 20.04	
SKT	1.19	352	iP	45 04.75	-0.8
			iS	45 21.25	
PLRM	1.27	51	iP	45 05.52	-1.1
PMR	1.27	51	iPc	45 05.50	-1.1
CNPM	1.29	181	iP	45 06.26	-0.7
XLV	1.38	192	iP	45 07.52	-0.8
CUT	1.66	15	eP	45 11.41	-0.8
			Sn	45 33.91	
AUE	1.82	218	iP	45 13.90	-0.6
AUL	1.82	219	eP	45 13.92	-0.6
GLI	2.00	86	iP	45 14.14	-2.9
			Sn	45 37.77	
SCM	2.12	59	eP	45 17.14	-1.7
SVW	2.19	280	iPc	45 17.00	-2.7
CDD	2.26	214	eP	45 19.87	-0.8
VZW	2.27	82	eP	45 18.45	-2.4
HUR	2.30	18	iP	45 21.85	0.6
VLZ	2.39	80	iP	45 20.02	-2.4
KLU	2.64	73	iP	45 23.64	-2.5
TOA	2.73	59	iPc	45 26.00	-1.5
KTH	2.76	2	iP	45 27.22	-0.6
SGAM	2.96	93	eP	45 26.73	-3.9
MCK	3.12	19	eP	45 32.60	-0.3
TTA	3.13	315	ePd	45 30.70	-2.4
KDC	3.14	193	eP	45 30.00	-3.2
SDG	3.19	55	eP	45 32.66	-1.3
PAX	3.47	49	iP	45 36.36	-1.6
NEA	3.91	13	eP	45 42.29	-1.7
WRH	3.94	20	eP	45 43.12	-1.4
WAX	4.12	91	eP	45 42.53	-4.6
CCB	4.15	20	eP	45 45.60	-1.9
BALM	4.32	83	eP	45 45.64	-4.3
FBA	4.39	19	eP	45 48.30	-2.5
GLM	4.54	21	eP	45 52.40	-0.6
IMA	5.40	349	ePc	46 01.90	-3.3
42 obs. associated					

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* JUN 13, 1990 19h 54m 46.97± 1.36s
46.946 N ±13.7km 0.381 W ±20.9km
DEPTH = 5.0km (geophysicist)
FRANCE (538)
ML 2.7 (LDG).

MFF	0.38	155	Pg	54 53.90	-0.7
			Sg	55 00.30	
LPF	1.18	338	Pg	55 10.80	1.5
			Sg	55 28.00	
GRR	1.48	348	Pn	55 12.50	-1.7
			Sg	55 38.60	
LSF	1.49	117	Pg	55 16.30	1.9
			Sg	55 36.80	
TCF	1.90	109	Pn	55 20.00	-0.4
			Pg	55 24.80	
			Sg	55 50.30	
RJF	2.11	141	Pg	55 23.80	0.5
			Sg	55 49.80	
MAF	2.16	109	Pn	55 23.20	-0.9
			Pg	55 29.40	
			Sg	55 57.30	
CAF	2.64	139	Pg	55 34.10	3.0X
			Sg	56 08.60	
SSF	2.66	86	Pg	55 41.40	10.1X
			Sg	56 19.00	
LOR	2.91	82	Pg	55 46.00	11.1X
			Sg	56 25.00	
LBF	2.99	88	Pg	55 46.80	10.9X
			Sg	56 26.20	
S.D. = 1.6 on 7 of 11 obs.					

? JUN 13, 1990 20h 22m 12.30±18.01s
15.638 N ±159.km 97.732 W ±19.7km
DEPTH = 33.0km (normal)
NEAR COAST OF OAXACA, MEXICO (66)

OXX	1.73	34	iPc	22 40.74	0.0
			iS	23 01.88	
III	3.19	329	eP	23 00.81	-0.7
			eS	23 35.33	
IIT	3.41	351	(P)	23 11.04	6.3X
			eS	23 44.30	
PPM	3.51	346	eP	23 05.97	-0.5
			eS	23 43.69	
LVVM	4.26	17	(P)	23 26.19	9.8X
IIJ	4.50	335	eP	23 21.50	1.1
			eS	24 11.50	
S.D. = 1.4 on 4 of 6 obs.					

JUN 13, 1990 20h 41m 59.86± 0.52s
19.656 N ± 5.5km 144.544 E ± 8.7km
DEPTH = 497.3 ± 7.6 km
4.5mb (14 obs.)
MARIANA ISLANDS (216)

GUMO	6.04	177	eP	43 37.30	-0.1
	0.7s	152.48nm		5.1mb	
			eS	44 55.80	
PJG	6.04	177	eP	43 37.20	-0.2
GUA	6.09	177	eP	43 38.00	0.1
	0.7s	126.03nm		5.1mb	
			eS	44 54.80	
IIDJ	16.82	341	P	45 28.80	0.2
CHJJ	17.04	344	P	45 29.90	-0.9
MAT	17.72	343	eP	45 36.00	-1.3
	0.8s	10.45nm		4.5mb	
MTMJ	17.87	342	P	45 38.70	-0.2
NIIJ	18.18	346	P	45 41.70	0.0
YAMJ	18.86	349	P	45 49.70	1.3
BJI	31.69	316	eP	47 43.50	0.4
	1.5s	29.00nm		4.6mb	
HHC	35.16	314	eP	48 12.60	0.2
BTO	36.10	313	eP	48 21.60	1.4
LZH	39.21	303	Pd	48 46.50	0.7
	1.5s	46.00nm		4.8mb	
WB5	40.54	195	eP	48 56.90	0.4

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WRA     40.60 195 Pc     48 56.80  -0.2
        0.4s      1.30nm          3.8mb
GTA     43.10 307 P      49 27.60  10.7X
DZM     46.67 152 iPd    49 44.30  -0.3
WMQ     52.86 311 iPd    50 29.00  -1.4
GUN     53.88 291 P      50 39.20   0.9
PKI     54.33 290 P      50 41.40  -0.1
        0.6s     22.00nm          4.7mb
DMN     54.59 290 P      50 43.50   0.3
        0.6s     23.00nm          4.7mb
GKN     54.97 291 P      50 46.20   0.5
        0.6s     28.00nm          4.8mb
GBA     64.24 276 Pc     51 47.20  -0.3
        0.8s      6.50nm          4.3mb
INK     68.93  23 eP     52 16.00   0.5
MBC     72.50  14 eP     52 37.50   1.1
YKA     77.66  28 eP     53 05.00  -0.2
        0.5s      2.40nm          3.9mb
KEV     80.69 342 eP     53 21.00   0.0
SOD     82.09 340 iP     53 28.10  -0.1
KVN     83.35  51 P      53 36.00   0.7
LRM     84.80  43 eP     53 43.40   0.9
SUF     84.82 336 iP     53 41.20  -0.7
        0.5s      4.50nm          4.4mb
NUR     86.67 335 eP     53 50.00  -0.8
HFS     91.09 338 eP     54 10.20  -1.2
        0.4s      1.70nm          4.3mb
NAO     91.58 339 P      54 12.20  -1.5
        0.7s      1.20nm          4.0mb
     S.D. = 0.8  on  33 of  34 obs.
-------------------------------------
%  JUN  13, 1990  21h 30m 01.49± 1.76s
   46.734 N ± 7.0km    8.123 E ±15.6km
   DEPTH =  10.0km  (geophysicist)
 SWITZERLAND                      (544)
      ML 2.2 (LDG).

BSF     1.42 321 Pn      30 27.30  -0.2
                 Sg      30 48.70
LPL     1.56 219 Pn      30 29.80   0.3
                 Sg      30 54.20
LPG     1.56 218 Pn      30 29.70   0.1
                 Pg      30 31.10
HAU     1.75 317 Pn      30 32.50   0.4
                 Sg      30 58.90
CDF     1.77 341 Pn      30 32.20  -0.3
LBF     2.86 277 Pn      30 49.00   1.0
SMF     2.95 270 Pn      30 50.30   1.1
LOR     2.97 282 Pn      30 50.10   0.6
SSF     3.18 278 Pn      30 53.40   0.9
AVF     3.28 273 Pn      30 53.80  -0.1
BGF     3.64 269 Pn      30 58.30  -0.7
MAF     3.87 264 Pn      31 01.30  -1.1
TCF     4.11 266 Pn      31 04.70  -1.0
MFF     5.69 272 Pn      31 27.20  -0.9
     S.D. = 0.8  on  14 of  14 obs.
-------------------------------------
   JUN  13, 1990  21h 34m 39.90± 0.94s
   36.615 N ±10.3km   27.009 E ± 6.0km
   DEPTH =  29.9 ±  7.9 km
   3.8mb (  8 obs.)
 DODECANESE ISLANDS               (369)
      ML 4.1 (ATH).

SMG     1.10 353 ePg     34 59.10  -0.2
YER     1.15  63 iPn     34 59.00  -1.0
APE     1.27 291 ePb     35 02.20   0.5
                 eSb     35 25.00
CIN     1.31  41 eP      35 02.00  -0.2
KSL     2.14 103 ePb     35 13.50  -0.7
ELL     2.33  86 iPn     35 18.50   1.4
KHL     2.63  49 ePn     35 27.50   6.2X
ATH     2.95 298 iPgd    35 35.70   9.9X
BCK     2.99  73 iPn     35 27.50   1.1
VLI     3.28 273 ePn     35 31.50   1.1
ALT     3.46  44 ePn     35 39.20   6.1X
EDC     3.79  10 ePn     35 48.20  10.6X
ITM     4.11 279 ePn     35 44.70   2.4X
RDO     4.67 346 ePn     35 49.30  -0.8
LFK     5.46 102 eP      36 03.00   1.6
BBTK    5.56  53 eP      36 02.00  -0.8
VAY     5.83 325 eP      36 21.00  14.4X
PRNI    9.14 131 eP      36 47.00  -5.8X
KHC    15.89 326 eP      38 26.00   3.1X
LPG    17.63 306 eP      38 47.30   2.2
        0.6s      2.70nm          3.6mb
LPL    17.65 307 eP      38 47.30   2.0
        0.6s      1.80nm          3.4mb
SMF    19.94 307 eP      39 11.10  -1.1
        0.8s      4.05nm          3.8mb
LBF    19.98 308 eP      39 11.80  -0.9
        0.6s      2.25nm          3.7mb
AVF    20.31 307 eP      39 15.10  -0.9
        0.6s      3.60nm          3.9mb
SSF    20.31 308 eP      39 15.40  -0.6
        0.8s      9.40nm          4.2mb
BGF    20.55 306 eP      39 18.00  -0.5
        0.8s      6.05nm          4.0mb
BCAO   32.96 196 iPc     41 12.10  -2.1
        0.6s      8.00nm          4.8mb
     S.D. = 1.3  on  19 of  27 obs.
-------------------------------------
   JUN  13, 1990  22h 27m 21.33± 0.65s
   45.794 N ± 6.8km   26.874 E ± 8.2km
   DEPTH =  88.6 ±  9.1 km
   3.2mb (  1 obs.)
 ROMANIA                          (358)

VRI     0.13 306 iPd     27 32.50  -0.9
ISR     0.70 200 iPc     27 39.00   1.0
MLR     0.72 246 iP      27 38.00  -0.3
CLI     0.81  20 iPc     27 50.00  10.9X
CFR     1.09 124 iPd     27 42.00  -0.2
PTT     1.19 344 iPc     27 43.50   0.0
CMP     1.39 249 iPc     27 51.00   4.9X
TLB     1.46 145 iPd     27 48.50   1.7
BUC1    1.57 203 ePc     28 08.00  19.8X
DRA     2.16 240 eP      28 17.00  20.8X
BZS     3.69 269 ePc     28 17.00  -0.1
ISK     4.99 161 ePg     28 34.30  -0.9
GBZT    5.34 159 eP      28 40.50   0.3
VAY     5.46 216 ePn     28 42.00   0.3
YLV     5.53 160 iPg     28 42.20  -0.7
IZI     5.78 160 ePg     28 45.60  -0.7
NAO    17.77 334 P       31 24.40   0.4
        0.8s      1.30nm          3.2mb
     S.D. = 0.9  on  13 of  17 obs.
-------------------------------------
   JUN  13, 1990  23h 00m 43.79± 1.42s
    5.754 N ± 6.1km  124.528 E ± 8.7km
   DEPTH =  74.0 ± 14.4 km
   5.1mb (  8 obs.)
 MINDANAO, PHILIPPINE ISLANDS     (259)

DAV     1.68  38 iPd     01 11.00  -0.8
QCP     9.46 339 eP      02 48.00 -11.6X
AAI    10.07 159 eP      03 08.40   0.5
BAG    11.28 340 eP      03 26.00   1.6
HKC    19.26 330 iPc     05 10.00   4.8X
                 iS      08 43.00
QIZ    19.46 314 eP      05 06.60  -0.9
     N  13s      0.90um
     E  14s      1.20um
                 S       08 44.50
                 SS      09 13.00
MTN    19.61 160 eP      05 08.00  -1.0
QZH    19.91 344 eP      05 16.00   3.9X
     Z  24s      2.00um
     E  10s      0.90um
                 S       08 52.00
GZH    20.33 329 eP      05 19.00   2.6
     E  15s      1.40um
                 eS      09 02.00
GUMO   21.49  67 e(P)    05 22.80  -5.5X
        1.4s    492.31nm          5.7mb
GUA    21.52  67 e(P)    05 27.50  -1.0
        0.7s     60.27nm          5.1mb
KNA    21.77 169 eP      05 29.30  -1.7
IPM    23.44 268 ePc     05 48.00   0.6
SNG    23.80 275 eP      05 50.00  -0.9
                 eS      09 09.00
PPI    24.87 256 eP      05 58.50  -2.7
LOE    25.12 299 eP      06 03.00  -0.5
SSE    25.40 353 eP      06 06.00   0.0
     Z  20s      0.70um          4.2Msz
     N  14s      0.80um
     E  14s      0.30um
                 eS      10 30.00
NST    25.89 294 eP      06 12.00   1.4
WHN    26.45 340 eP      06 13.00  -2.7
     N  15s      0.60um
NJ2    26.70 349 Pd      06 19.50   1.6
     Z  20s      0.60um          4.1Msz
                 pP      06 30.50  42kmX
                 eS      10 50.00
WB5    27.25 159 iPc     06 22.00  -1.1
WRA    27.30 160 P       06 23.00  -0.5
        0.5s     23.90nm          5.0mb
CHG    28.11 300 eP      06 38.70   7.8X
KMI    28.41 315 Pd      06 36.50   2.8
     Z  16s      1.70um          4.7MszX
     N  14s      0.50um
                 S       11 17.00
QIS    30.05 151 eP      06 47.00  -1.2
TIA    31.06 348 eP      06 52.00  -5.0X
     Z  26s      0.80um          4.3MszX
     E  17s      1.10um
                 eS      11 56.00
XAN    31.65 335 P       07 01.00  -1.2
CD2    31.73 325 P       07 02.00  -0.9
                 eS      12 08.00
MAT    33.11  20 (P)     07 13.00  -1.8
     Z  20s      1.42um          4.7Msz
                 eS      12 42.00
TIY    33.67 343 eP      07 17.20  -2.5
     Z  26s      1.10um          4.5MszX
     N  18s      1.40um
                 S       12 41.50
BJI    34.95 349 eP      07 29.00  -1.6
     Z  24s      0.64um          4.3MszX
                 eS      12 56.00
LZH    35.67 331 eP      07 36.70  -0.2
        2.0s     61.00nm          5.2mb
     Z  16s      1.60um          4.9MszX
     N  16s      0.80um
     E  15s      0.90um
                 S       13 13.90
SNY    35.93 359 eP      07 41.60   2.8
     Z  18s      1.20um          4.7Msz
     N  18s      1.10um
     E  18s      0.80um
                 eS      13 12.00
HHC    36.82 344 eP      07 46.60   0.1
     Z  13s      1.20um          4.9MszX
                 S       13 30.00
BTO    37.05 342 eP      07 47.50  -1.0
     N  15s      0.50um
     E  15s      0.80um
                 eS      13 32.00
CN2    37.90   1 eP      07 56.00   0.6
     Z  18s      0.40um          4.3Msz
     N  15s      0.40um
     E  15s      0.40um
                 eS      13 44.00
MDJ    38.96   6 eP      08 06.00   1.7
LSA    39.46 311 P       08 11.20   2.0
RMQ    39.73 145 eP      08 11.00   0.1
GTA    40.25 330 P       08 15.20   0.1
        5.0s    300.00nm          5.4mb X
     Z  20s      2.00um          5.0Msz
     E  15s      0.80um
                 S       14 22.00
STK    40.81  158 eP      08 20.00   0.4
        1.0s     26.00nm          5.0mb
                 eS      14 29.90
ADE    42.65 163 iPc     08 36.00   1.2
GUN    42.77 306 P       08 36.90   0.7
        0.8s     48.00nm          5.4mb
BRS    42.79 142 iPc     08 35.50  -0.5
PKI    43.02 305 P       08 38.70   0.5
GKN    43.82 305 P       08 45.00   0.5
BWA    45.89 152 eP      09 03.70   2.9
BFD    45.90 160 eP      09 02.00   1.2
HYB    46.38 289 eP      09 10.00   5.1X
CAN    46.90 152 eP      09 20.30  11.6X
GBA    47.00 283 Pc      09 09.40  -0.4
        0.9s      3.00nm          4.2mb
TOO    47.33 157 eP      09 14.00   1.9
DZM    49.49 125 iPc     09 30.00   0.9
WMQ    49.82 325 eP      09 31.20  -0.1
     Z  20s      1.10um          4.9Msz
                 S       16 40.00
KSH    55.04 315 eP      10 16.00   5.6X
QUE    59.22 302 eP      10 39.50  -0.7
MAIO   66.55 307 eP      11 33.00   4.6X
                 eS      20 18.00
TAB    77.19 308 eP      12 31.00  -0.7
PRNI   86.73 300 eP      13 22.00   0.7
MBH    86.88 299 eP      13 22.00   0.1
SUF    88.76 333 iP      13 29.70  -0.6
INK    89.09  21 eP      13 25.00  -6.8X
```

13d 23h

NUR 89.88 331 eP 13 35.00 -0.6
MBC 90.47 12 eP 13 39.00 0.9
NAO 96.27 333 P 14 02.60 -2.4
0.8s 3.10nm 4.9mb
YKA 98.56 24 eP 14 26.80 11.5X
0.8s 1.00nm
ZOBO 163.78 131 ePKP 20 44.00 3.2X
Z 24s 0.13um
LR 17 54.00
S.D. = 1.4 on 54 of 67 obs.

? JUN 13, 1990 23h 17m 24.18± 5.49s
31.193 S ±23.2km 68.517 W ±37.9km
DEPTH = 99.1 ± 53.7 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL 0.14 163 iPc 17 38.40 -0.2
(S) 17 49.50
RTC8 0.38 219 iPd 17 39.60 0.2
CFA 0.48 150 ePd 17 40.20 0.2
RTCV 0.67 181 eP 17 41.30 -0.2
RTRS 1.30 321 e(P) 17 48.30 0.0
S.D. = 0.4 on 5 of 5 obs.

? JUN 13, 1990 23h 36m 06.66± 8.02s
31.834 S ±45.3km 69.462 W ±31.2km
DEPTH = 97.7 ± 57.1 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTBS 0.17 3 ePd 36 20.80 -0.1
S 36 32.80
RTCB 0.66 59 iPd 36 24.00 0.1
RTCV 0.79 92 ePc 36 25.10 0.1
RTLL 0.99 60 iPc 36 27.00 -0.1
eS 36 42.80
CFA 1.07 78 iPd 36 27.90 -0.1
S 36 45.80
RTRS 1.66 0 iPc 36 35.20 0.0
S.D. = 0.2 on 6 of 6 obs.

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* JUN 13, 1990 23h 48m 54.09± 1.55s
24.702 N ± 7.9km 122.639 E ±16.8km
DEPTH = 14.2 ± 8.7 km
4.8mb (2 obs.)
TAIWAN REGION (243)
ML 4.0 (BJI).

TWC 0.72 263 iPd 49 07.20 -0.7
eS 49 16.10
TWZ 1.04 292 ePc 49 13.90 0.6
eS 49 27.20
ANP 1.13 295 iP 49 15.00 0.2
eS 49 30.50
TWD 1.14 237 ePc 49 15.10 0.2
TWK 2.43 234 ePc 49 35.50 1.5
QZH 3.69 275 ePn 49 51.50 -0.3
Sg 50 55.00
SSE 6.50 349 Pc 50 29.50 -2.0
0.8s 13.00nm 4.9mb
Z 12s 0.60um 4.7Msz
N 12s 0.60um
NJ2 8.04 336 eP 50 54.00 0.8
N 11s 0.40um
E 13s 1.10um
WHN 9.37 310 eP 51 15.00 3.4X
N 13s 1.00um
GYA 14.52 280 eP 52 26.00 4.8X
XAN 15.14 311 P 52 35.90 6.8X
TIY 15.62 329 eP 52 40.70 5.4X
N 15s 0.70um
E 14s 0.70um
CD2 17.80 295 P 53 02.60 -0.4
HHC 18.57 333 eP 53 16.00 3.5X
BTO 19.05 329 eP 53 23.00 4.7X
CN2 19.19 6 Pd 53 21.70 1.8
GTA 24.18 313 eP 54 10.80 -0.2
WB5 45.76 165 eP 57 16.20 -0.7
WRA 45.82 165 Pd 57 17.20 -0.2
0.7s 6.60nm 4.7mb
S.D. = 1.2 on 13 of 19 obs.

% JUN 14, 1990 00h 47m 25.40± 1.45s
43.075 N ±10.0km 18.775 E ± 9.2km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.4 (TTG).

BRY 0.24 224 iPgd 47 30.70 0.0
iSg 47 35.10
NKY 0.31 148 iPgc 47 31.70 -0.2
iSg 47 36.80
PLE 0.52 60 iPgd 47 35.70 -0.3
eSg 47 44.00
TTG 0.74 151 ePg 47 38.80 -1.0
eSg 47 49.50
BDV 0.79 177 ePg 47 41.20 0.4
eSg 47 54.00
PVY 1.00 118 ePg 47 45.50 1.0
eSg 48 00.50
S.D. = 0.9 on 6 of 6 obs.

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* JUN 14, 1990 01h 03m 20.82± 0.91s
45.488 N ± 6.8km 27.158 E ± 8.6km
DEPTH = 10.0km (geophysicist)
ROMANIA (358)

VRI 0.49 322 ePd 03 30.00 -0.7
ISR 0.56 231 eP 03 32.50 0.3
MLR 0.85 271 eP 03 37.50 0.1
CLI 1.07 5 iPc 03 41.50 0.6
TLB 1.09 145 iPc 03 41.00 -0.3
S.D. = 0.7 on 5 of 5 obs.

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* JUN 14, 1990 02h 49m 49.10± 1.74s
24.731 N ±13.0km 122.659 E ±13.3km
DEPTH = 10.0km (geophysicist)
3.9mb (1 obs.)
TAIWAN REGION (243)

TWC 0.75 261 iPd 50 03.10 -0.6
eS 50 12.20
TWZ 1.05 291 ePc 50 08.90 0.1
eS 50 22.20
ANP 1.13 294 eP 50 10.50 0.2
eS 50 25.50
TWD 1.17 236 ePd 50 10.50 -0.4
TWK 2.46 234 eP 50 31.00 1.0
WRA 45.84 165 P 58 13.00 -0.2
0.5s 0.70nm 3.9mb
S.D. = 0.7 on 6 of 6 obs.

JUN 14, 1990 03h 55m 23.44± 0.17s
56.740 N ± 2.8km 155.344 W ± 2.5km
DEPTH = 45.6km (24 depth phases)
5.0mb (64 obs.) 4.5Msz (2 obs.)
ALASKA PENINSULA (12)
ML 5.2 (PMR). Felt (IV) at Akhiok.

CDD 2.38 22 iP 56 02.23 1.5
MCNL 2.51 12 eP 56 04.10 1.4
AUE 2.83 21 iP 56 09.33 2.1
AUL 2.84 20 eP 56 10.67 3.3X
SDN 3.21 246 ePd 56 13.40 0.8
XLV 3.33 34 eP 56 14.92 0.6
CNPM 3.54 36 eP 56 16.95 -0.4
RED 3.93 19 eP 56 23.35 0.5
NNL 3.94 31 eP 56 22.98 0.0
SVW 4.38 358 ePc 56 29.80 0.5
SEW 4.58 40 eP 56 29.40 -2.5X
SPU 4.77 20 eP 56 34.46 -0.2
CRP 4.83 19 eP 56 36.01 0.4
CGLM 4.89 19 eP 56 36.45 0.0
NCG 4.96 18 eP 56 37.70 0.3
MTU 5.20 48 iP 56 39.94 -0.7
SUA 5.30 25 eP 56 41.60 -0.6
PMS 5.42 31 iP 56 42.44 -1.4X
MID 5.48 57 iP 56 42.86 -1.8X
SKT 5.61 19 eP 56 45.99 -0.5
PWA 5.67 27 eP 56 46.25 -1.0
PLRM 5.82 31 eP 56 47.24 -2.1X
PMR 5.82 31 ePd 56 47.40 -2.0X
GLI 5.96 42 eP 56 48.19 -3.3X
GHO 6.02 30 eP 56 50.15 -2.2X
TTA 6.22 357 ePc 56 54.40 -0.7
SML 6.22 32 eP 56 52.74 -2.4X
CUT 6.24 22 eP 56 51.25 -4.0X
VZW 6.28 43 eP 56 52.90 -3.0X
VLZ 6.41 43 iP 56 55.11 -2.5X
SCM 6.55 35 eP 56 57.44 -2.3X
KLU 6.80 42 iP 57 00.45 -2.7X
TOA 7.12 37 eP 57 06.00 -1.7X
KTH 7.18 16 eP 57 07.68 -0.9
SDG 7.63 36 eP 57 13.84 -1.0

MCK 7.70 22 eP 57 14.24 -1.5X
PAX 7.98 34 eP 57 16.84 -2.8X
BALM 7.99 52 eP 57 16.12 -3.7X
NEA 8.44 19 eP 57 22.54 -3.4X
PCA 8.60 61 eP 57 24.39 -3.8X
CCB 8.74 22 eP 57 26.63 -3.5X
DOT 8.91 34 eP 57 34.20 1.8
FBA 8.97 21 eP 57 29.90 -3.3X
GLM 9.13 22 eP 57 32.38 -3.1X
ANM 9.25 332 eP 57 37.40 0.3
IMA 9.40 4 ePc 57 37.70 -1.5X
HYT 10.11 59 P 57 46.00 -3.0X
SIT 10.95 80 eP 57 54.40 -5.8X
ADK 13.35 258 eP 58 31.70 -0.5
INK 15.24 32 P 58 56.00 -0.7
PGC 20.80 99 eP 00 03.00 0.2
YKA 21.10 57 eP 00 04.00 -1.9
0.9s 16.80nm 4.4mb
MCW 21.12 99 eP 00 06.50 0.4
GMW 21.80 101 eP 00 13.20 0.2
BMW 22.23 104 eP 00 17.80 0.5
PNT 22.52 94 eP 00 21.00 0.9
0.8s 41.00nm 4.9mb
LON 22.82 102 eP 00 23.90 0.8
MBC 23.52 21 ePc 00 31.00 1.5
0.8s 52.00nm 5.1mb
EDM 24.07 80 iPd 00 35.80 0.6
VGB 24.16 103 eP 00 37.50 1.4
epP 00 49.50 48km
NEW 24.48 94 eP 00 39.80 0.6
1.0s 43.75nm 4.9mb
SES 26.67 85 ePd 00 58.80 -0.9
1.3s 85.00nm 5.2mb
pP 01 11.00 48km
WDC 26.68 113 e(P) 01 00.80 1.0
e 01 15.50 61kmX
MIN 27.33 112 ePc 01 06.30 0.4
e 01 22.20 67kmX
LRM 28.50 94 eP 01 16.50 0.0
FFC 29.49 71 iPd 01 23.90 -1.1
1.0s 15.00nm 4.6mb
HPI 29.49 98 eP 01 25.70 0.2
CMB 29.70 114 ePc 01 26.30 -0.8
KVN 30.10 110 eP 01 30.80 0.0
epP 01 43.00 47km
PTI 30.45 99 eP 01 34.40 0.6
TNP 31.28 110 eP 01 40.90 -0.3
1.0s 10.42nm 4.6mb
epP 01 53.80 50km
ISA 32.51 115 eP 01 53.00 1.2
CLC 32.83 113 eP 01 55.00 0.5
SBB 33.60 115 eP 02 01.00 -0.3
MSU 33.62 104 eP 02 01.90 0.3
epP 02 14.50 48km
GSC 33.63 113 eP 02 02.00 0.4
RSSD 34.21 89 eP 02 05.80 -0.8
epP 02 18.50 48km
RVR 34.38 115 eP 02 08.00 0.1
PLM 35.15 115 eP 02 15.00 0.3
BAR 35.78 116 eP 02 21.00 1.1
GLA 36.41 113 eP 02 26.00 0.8
GLD 36.50 96 eP 02 26.60 0.5
1.1s 38.57nm 5.2mb
epP 02 39.80 50km
ANMO 39.33 102 eP 02 49.30 -0.6
1.7s 13.22nm 4.5mb
ALQ 39.33 102 eP 02 48.00 -1.9
1.0s 6.75nm 4.4mb
FRB 40.44 43 eP 02 57.50 -0.8
ACO 42.02 94 eP 03 11.80 0.1
1.0s 42.20nm 5.1mb
MEO 43.74 95 iPc 03 25.70 0.0
DAG 43.96 13 iPc 03 26.10 -0.8
0.9s 34.45nm 5.1mb
LNO 44.44 92 e(P) 03 30.20 -1.0
TUL 44.44 92 eP 03 30.40 -1.0
1.0s 14.00nm 4.7mb
Z 22s 0.42um 4.3Msz
LR 17 00.00
UYO 46.47 92 eP 03 46.50 -0.9
1.4s 15.40nm 4.7mb
MDJ 46.72 289 Pc 03 48.20 -1.1
MAT 47.78 275 eP 03 58.00 0.2
1.0s 25.00nm 5.2mb
(S) 10 53.00
WVLY 49.11 72 eP 04 06.70 -1.3
CN2 49.44 291 iPc 04 09.40 -1.1

	1.0s	100.00nm		5.8mb		
		epP	04	15.00	19kmX	
RSNY	49.74	68 eP	04	10.50	-2.3	
	1.0s	10.85nm		4.8mb		
WNY	50.19	67 eP	04	14.20	-2.1	
CBM	51.24	61 eP	04	22.00	-2.2	
SNY	51.81	290 Pc	04	28.10	-0.4	
	1.1s	100.00nm		5.7mb		
TBR	52.33	71 eP	04	30.70	-1.8	
KEV	53.80	359 iP	04	42.00	-0.9	
	0.8s	29.30nm		5.4mb		
SOD	56.20	359 iP	04	59.40	-1.0	
BJI	56.91	294 eP	05	04.50	-1.3	
	1.0s	24.00nm		5.2mb		
HHC	58.59	297 Pc	05	17.50	-0.3	
BTO	59.54	298 P	05	24.00	-0.3	
TIY	60.57	295 Pd	05	30.50	-0.9	
Z	25s	0.60um		4.6MszX		
N	14s	0.40um				
		eS	13	49.50		
SUF	60.87	359 iP	05	32.70	-0.2	
	0.5s	5.80nm		5.0mb		
SSE	61.14	283 eP	05	34.50	-0.7	
	1.0s	10.00nm		4.9mb		
		sP	05	47.50		
NJ2	61.64	286 Pc	05	37.60	-1.0	
		pP	05	50.00	43km	
NAO	62.27	8 P	05	41.50	-1.0	
	0.7s	10.90nm		5.1mb		
NUR	63.09	0 iP	05	48.00	0.2	
	0.7s	29.40nm		5.5mb		
HFS	63.15	6 eP	05	46.30	-1.9	
	1.0s	33.80nm		5.4mb		
WHN	65.20	288 eP	06	00.00	-1.9	
		pP	06	14.00	50km	
XAN	65.21	294 P	06	01.50	-0.6	
GTA	65.27	304 P	06	00.00	-2.5	
	1.2s	60.00nm		5.5mb		
EKA	66.02	17 P	06	06.00	-0.9	
	0.7s	7.60nm		4.9mb		
LZH	66.07	299 Pd	06	07.20	-0.5	
	1.4s	61.00nm		5.5mb		
Z	20s	0.40um		4.6Msz		
		sP	06	19.00		
WMQ	66.74	315 iPc	06	12.00	0.3	
WIT	69.82	12 e(P)	06	35.00	4.5X	
WTS	70.64	12 iPc	06	36.20	0.7	
	0.7s	20.00nm		5.2mb		
		e	06	50.00	48km	
ENN	71.74	12 eP	06	43.00	0.8	
	1.0s	19.00nm		5.0mb		
CLL	71.89	8 iPc	06	43.20	0.1	
	1.8s	32.00nm		5.0mb		
		e	06	56.00	44km	
MEM	71.91	12 P	06	43.50	0.3	
		e	06	57.70	50km	
DOU	72.24	13 Pc	06	45.60	0.4	
	1.0s	22.20nm		5.1mb		
		e	06	58.30	43km	
MOX	72.44	9 iPc	06	47.00	0.6	
	1.0s	26.00nm		5.1mb		
		e	07	00.00	45km	
GYA	72.48	291 P	06	48.00	0.9	
		sP	07	01.40		
KSP	72.56	6 iPc	06	47.20	0.1	
		e	07	00.00	44km	
FLN	72.81	17 eP	06	47.90	-0.6	
	1.0s	12.00nm		4.8mb		
LDF	73.03	17 eP	06	49.40	-0.4	
PRU	73.31	7 Pc	06	52.00	0.6	
		e	07	04.40	42km	
GRF	73.35	9 eP	06	49.80	-1.9	
Z	24s	0.10um		4.0MszX		
		e	06	52.60	9kmX	
		e	07	05.80		
LPF	73.42	18 eP	06	52.20	0.1	
	1.0s	12.00nm		4.8mb		
KRA	73.50	3 eP	06	52.40	-0.1	
		e	07	04.50	41km	
WET	74.03	8 eP	06	56.50	0.8	
KHC	74.10	8 iP	06	57.00	0.9	
	1.0s	11.00nm		4.8mb		
		i	07	09.90	44km	
CDF	74.22	12 eP	06	56.50	-0.4	
	0.8s	6.70nm		4.6mb		
SPC	74.38	3 eP	06	58.70	0.8	
		i	07	10.30	39km	
HAU	74.51	13 eP	06	58.40	-0.1	
	0.7s	12.15nm		5.0mb		
BSF	74.74	12 eP	06	59.50	-0.4	
	0.8s	8.05nm		4.7mb		
KSH	74.84	321 eP	07	01.00	0.4	
LOR	74.92	15 eP	07	00.60	-0.2	
	0.9s	12.30nm		4.9mb		
MFF	74.96	17 eP	07	00.90	-0.1	
	0.8s	13.45nm		4.9mb		
SSF	75.07	15 eP	07	01.60	-0.1	
	0.9s	18.00nm		5.0mb		
LBF	75.21	14 eP	07	02.10	-0.5	
	0.9s	8.20nm		4.7mb		
ZST	75.24	5 iP	07	03.40	0.8	
		e	07	16.50	45km	
AVF	75.31	15 eP	07	02.60	-0.5	
	0.8s	10.05nm		4.8mb		
BHG	75.45	8 iPc	07	04.60	0.8	
	0.9s	16.00nm		5.0mb		
BGF	75.47	15 eP	07	03.80	-0.2	
	0.7s	9.90nm		4.9mb		
SMF	75.52	15 eP	07	03.90	-0.4	
	0.9s	11.45nm		4.8mb		
LSF	75.57	16 eP	07	04.20	-0.4	
	0.8s	13.45nm		4.9mb		
TCF	75.64	16 eP	07	04.70	-0.3	
	0.9s	9.00nm		4.7mb		
SRO	75.68	4 eP	07	05.50	0.4	
		e	07	19.90	51km	
MAF	75.75	16 eP	07	05.60	0.0	
	0.8s	8.05nm		4.7mb		
SQTA	75.80	9 iPc	07	06.00	0.0	
	0.9s	25.40nm		5.2mb		
		i	07	19.00	45km	
		i	07	27.70		
RJF	76.49	17 eP	07	09.40	-0.3	
	0.8s	9.40nm		4.8mb		
FVI	76.56	8 P	07	10.50	0.5	
LFF	76.72	17 eP	07	11.10	0.1	
	0.7s	17.65nm		5.2mb		
QIZ	76.90	285 eP	07	12.80	0.4	
CAF	76.94	16 eP	07	12.10	-0.2	
	0.8s	6.70nm		4.7mb		
LPL	77.01	13 eP	07	13.60	0.7	
LPG	77.03	13 eP	07	14.00	0.9	
LPO	77.04	17 eP	07	12.70	-0.1	
	0.7s	14.35nm		5.1mb		
LSA	77.28	305 P	07	16.20	1.2	
BZS	77.98	2 eP	07	18.50	0.6	
BOB	78.06	11 P	07	19.50	1.0	
MLR	78.13	359 eP	07	10.00	-9.0X	
CMP	78.36	360 ePc	07	29.00	8.9X	
EPF	78.51	18 eP	07	20.40	-0.6	
	0.7s	3.30nm		4.4mb		
SBF	78.73	13 eP	07	22.30	0.1	
	0.7s	14.35nm		5.1mb		
FRF	78.93	13 eP	07	23.30	0.1	
	0.7s	6.60nm		4.7mb		
LRG	78.99	13 eP	07	24.10	0.6	
LMR	79.13	13 eP	07	24.60	0.3	
	0.9s	9.85nm		4.8mb		
PGD	79.17	9 P	07	26.50	1.8	
ARV	79.65	9 P	07	28.00	0.9	
ASS	80.05	9 P	07	30.00	0.7	
GUN	81.15	308 P	07	36.50	0.7	
	1.0s	84.00nm		5.7mb		
AZI	81.19	8 P	07	36.00	0.8	
SDI	81.50	8 P	07	37.00	0.1	
DUI	81.59	8 P	07	38.50	1.0	
GKN	81.61	309 P	07	38.40	0.5	
	0.8s	34.00nm		5.4mb		
SKO	81.62	2 iP	07	38.70	1.2	
		i	07	50.50	39km	
PKI	81.65	308 P	07	38.60	0.3	
	0.8s	42.00nm		5.5mb		
DMN	81.75	309 P	07	39.40	0.7	
	0.8s	53.00nm		5.6mb		
VAY	82.29	2 eP	07	42.40	1.4	
OHR	82.46	3 eP	07	42.20	0.2	
	0.9s	31.00nm		5.3mb		
		i	07	55.80	46km	
LOE	82.51	290 eP	07	42.00	-0.5	
MAIO	82.73	332 iPc	07	44.70	1.2	
CHG	82.75	293 eP	07	46.60	2.8X	
MAL	83.69	23 iPc	08	00.40	12.2X	
DZM	84.84	215 iPc	07	55.20	1.0	
QUE	86.30	324 eP	08	03.20	1.5	
BUL	143.34	354 iPKPc	14	49.50	-4.8X	
WIN	145.42	12 iPKPc	14	58.00	0.1	
	0.8s	11.19nm				
SPA	146.56	180 iPKPd	14	59.60	1.3	
	1.0s	65.50nm				
		i	15	22.00		
BFT	148.73	351 iPKPc	15	07.50	4.3X	
	0.8s	33.00nm				
SLR	148.91	354 iPKPd	15	07.00	3.6X	
	0.9s	58.00nm				
KSR	149.11	356 ePKP	15	22.00	18.3X	
BPI	149.36	354 iPKP	15	08.30	4.2X	
BFS	150.14	356 ePKP	14	53.50	-11.7X	
JOZ	150.25	347 iPKPc	15	09.00	3.9X	
	0.4s	3.00nm				
SWZ	150.46	359 ePKP	14	57.50	-8.2X	
	0.5s	16.00nm				
SEK	151.52	355 iPKPc	15	13.50	6.2X	
	1.0s	40.00nm				
CER	156.33	11 ePKP	15	23.00	9.4X	

S.D. = 0.9 on 162 of 203 obs.

% JUN 14, 1990 04h 25m 23.49± 0.59s
44.607 N ± 4.9km 7.212 E ± 7.6km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.0 (GEN).

PZZ	0.13	218	P	25 26.60	-0.2
			S	25 28.35	
STV	0.37	167	P	25 31.22	0.1
			S	25 35.93	
ENR	0.41	158	P	25 31.83	0.0
			S	25 36.96	
RRL	0.44	316	P	25 32.65	0.2
			S	25 39.32	
RSP	0.55	3	P	25 34.40	-0.2
			S	25 42.80	
ROB	0.57	123	P	25 35.11	0.1
			S	25 42.70	
IMI	0.85	145	P	25 39.93	0.0
			S	25 50.90	

S.D. = 0.2 on 7 of 7 obs.

& JUN 14, 1990 05h 55m 34.74s
63.154 N 150.820 W
DEPTH = 134.4km
CENTRAL ALASKA (1)
<AGS-P>.

KTH	0.40	354	iP	55 53.77	-0.4
			eS	56 07.61	
CUT	0.79	161	eP	55 56.07	-0.4
			Sn	56 13.37	
SKT	1.22	196	iP	56 00.02	-0.5
PWA	1.57	163	iP	56 04.16	-0.1
GHO	1.64	147	iP	56 04.77	-0.4
			eS	56 27.92	
SUA	1.70	179	iP	56 06.27	0.4
PLRM	1.75	153	eP	56 05.56	-0.8
SML	1.78	138	iP	56 05.82	-0.9
			Sn	56 30.16	
NCG	1.86	200	iP	56 07.57	-0.3
PMS	2.01	162	iP	56 08.94	-0.5

10 obs. associated

JUN 14, 1990 06h 28m 34.93± 0.20s
18.211 N ± 3.9km 147.197 E ± 4.4km
DEPTH = 23.5km (3 depth phases)
5.1mb (25 obs.) 5.0Msz (9 obs.)
MARIANA ISLANDS REGION (215)
Ms 4.7 (BRK).
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 15C
Centroid Location:
Origin Time 06:28:41.8 1.0
Lat 18.14N 0.17 Lon 147.42E 0.06
Dep 15.0 FIX Half-durotion 1.6
Moment Tensor; Scale 10**16 Nm
Mrr= 7.03 0.49 Mtt= 1.09 0.72
Mff=-8.12 0.49 Mrt= 1.07 1.64
Mrf= 6.09 2.29 Mtf= 3.55 0.56
Principol Axes:

T	Val= 9.76	Plg=64	Azm=306
N	1.26	19	171
P	-11.02	17	75

14d 06h

Best Double Couple:Mo=1.0*10**17
NP1:Strike=138 Dip=32 Slip= 53
NP2: 1 65 111

GUMO		5.11	206	eP	29	54.00	1.9
PJG		5.11	206	eP	29	53.60	1.5
GUA		5.14	206	eP	29	53.50	1.1
		0.4s	467.80nm				6.4mb X
				eS	30	50.70	
KAKJ		18.97	342	eP	32	59.90	2.8
*WKYJ		19.01	329	eP	32	57.00	-0.8
IIDJ		19.07	336	eP	32	59.80	1.4
CHJJ		19.19	339	eP	33	00.20	0.4
MAT		19.91	338	eP	33	08.00	0.2
		0.8s	65.67nm				5.0mb
				eS	36	51.00	
SHK		20.78	324	ePd	33	16.10	-0.8
BAG		25.47	270	eP	34	04.00	0.8
SSE		26.82	304	eP	34	14.50	-0.9
		1.0s	10.00nm				4.4mb
	Z	20s	1.17um				4.4Msz
NJ2		29.02	304	Pc	34	37.00	1.7
	Z	16s	1.20um				4.6MszX
	N	14s	1.60um				
	E	15s	1.80um				
MDJ		30.18	335	Pc	34	46.00	0.5
	Z	16s	2.20um				4.9MszX
	E	14s	2.60um				
				pP	34	52.00	21km
				sP	34	56.00	
				PP	35	48.00	
				iS	39	46.00	
				sS	39	58.00	
DL2		30.31	318	eP	34	46.00	-0.8
	Z	16s	1.40um				4.7MszX
	N	14s	1.80um				
	E	14s	1.80um				
				S	39	45.00	
SNY		30.99	324	Pc	34	51.00	-1.7
		0.9s	20.00nm				5.0mb
	Z	20s	2.70um				4.9Msz
	N	12s	1.00um				
	E	14s	1.70um				
				S	39	50.00	
CN2		31.40	329	Pc	34	55.50	-0.9
	Z	18s	4.00um				5.1Msz
	N	15s	2.30um				
	E	15s	1.10um				
				pP	35	03.00	26km
				eS	40	04.00	
GZH		32.00	285	eP	35	00.00	-1.8
	E	16s	1.70um				
TIA		32.01	310	eP	35	01.40	-0.4
	Z	16s	2.10um				4.9MszX
	N	15s	1.60um				
	E	15s	1.40um				
WHN		32.22	299	eP	35	08.00	4.4X
	Z	20s	1.30um				4.6Msz
	E	13s	1.40um				
KKM		32.55	252	ePd	35	07.00	0.2
		0.8s	93.80nm				5.8mb
BJI		34.47	316	eP	35	22.00	-1.1
		1.5s	52.00nm				5.2mb
	Z	16s	2.91um				5.1MszX
				eS	40	46.00	
MTN		34.69	208	eP	35	23.50	-1.6
		0.7s	25.00nm				5.2mb
QIZ		35.37	277	P	35	31.80	0.8
	N	15s	0.70um				
	E	17s	2.10um				
				PP	36	54.00	
				eS	41	08.50	
TIY		36.05	310	eP	35	37.50	0.8
	Z	15s	2.60um				5.1MszX
	N	15s	2.20um				
				S	41	17.50	
XAN		37.56	302	P	35	44.90	-4.5X
	N	14s	1.70um				
HHC		37.96	314	Pc	35	53.00	0.3
	Z	18s	2.90um				5.1Msz
	N	15s	2.00um				
	E	14s	1.20um				
				S	41	44.00	
GYA		38.25	290	P	35	58.00	2.6
BTO		38.92	313	P	36	02.00	1.2
	N	16s	2.90um				
	E	16s	3.40um				

				S	42	03.00	
QIS		39.24	191	eP	36	02.50	-1.0
WB5		39.89	199	eP	36	07.80	-1.1
WRA		39.96	199	Pc	36	08.80	-0.6
		0.6s	13.30nm				4.8mb
CD2		41.24	296	eP	36	21.00	1.1
	Z	14s	0.90um				4.8MszX
	N	15s	2.60um				
				eS	42	40.00	
KMI		41.74	288	eP	36	25.00	0.7
	Z	16s	1.20um				4.9MszX
				eS	42	40.00	
LZH		42.10	304	Pc	36	27.00	-0.1
		0.7s	13.00nm				4.8mb
	Z	20s	1.70um				4.9Msz
	N	15s	0.80um				
	E	15s	1.50um				
				PP	38	06.00	
DZM		44.24	154	iPc	36	43.90	-0.6
RMQ		44.46	178	eP	36	45.00	-1.1
CHTO		45.65	279	(P)	36	53.50	-2.3
BRS		45.65	173	iPc	36	55.50	-0.1
BDT		45.81	277	eP	36	57.50	0.5
		0.8s	20.70nm				5.1mb
GTA		45.97	308	P	36	57.00	-1.3
	Z	18s	2.50um				5.2Msz
	N	15s	1.20um				
				S	43	46.00	
COO		48.72	175	eP	37	19.00	-0.7
PSI		49.72	258	ePc	37	28.50	0.8
		0.7s	33.30nm				5.5mb
STK		50.09	186	eP	37	30.20	0.0
		0.9s	5.00nm				4.5mb
NANU		51.00	219	eP	37	36.40	-0.8
BWA		52.35	179	eP	37	46.70	-0.6
CAN		53.26	178	eP	37	51.70	-2.3
ADE		53.49	189	eP	37	57.00	1.2
WMO		55.70	311	iPd	38	12.20	0.2
	Z	16s	2.00um				5.3MszX
ANM		56.09	23	eP	38	13.40	-1.0
SVW		58.55	29	eP	38	31.70	-0.1
TTA		59.04	27	eP	38	34.80	-0.5
IMA		61.15	24	eP	38	48.40	-1.3
		1.7s	27.40nm				5.1mb
PMR		61.68	29	eP	38	51.80	-1.4
		1.2s	20.70nm				5.1mb
FBA		63.11	26	eP	39	02.30	-0.4
GBA		66.90	277	Pc	39	27.50	-0.4
		0.7s	7.70nm				4.9mb
INK		69.26	23	eP	39	40.50	-1.3
MBC		73.27	14	eP	40	05.50	-0.2
		1.0s	16.00nm				5.0mb
BMW		76.74	45	P	40	28.30	2.1
GMW		76.80	44	P	40	27.00	0.5
LON		77.63	45	P	40	31.00	-0.1
YKA		77.75	28	eP	40	30.20	-1.1
		0.8s	8.20nm				4.8mb
PNT		78.45	42	eP	40	35.00	-0.5
		0.8s	18.00nm				5.2mb
WDC		78.58	51	eP	40	37.40	1.0
VGB		78.62	46	P	40	36.80	0.2
MIN		79.33	51	eP	40	40.70	0.0
BRK		79.47	54	e(P)	40	42.80	1.5
BKS		79.49	54	e(P)	40	43.00	1.6
		1.2s	94.00nm				5.7mb
	E	20s	0.40um				
				eLR	04	20.00	
ORV		79.61	52	ePd	40	41.70	-0.4
GCC		79.89	54	e(P)	40	47.30	3.7X
MHC		80.08	54	eP	40	45.10	0.3
ARN		80.16	54	P	40	45.00	-0.1
NEW		80.32	42	P	40	45.50	-0.2
				e	40	53.00	24km
PRS		80.56	55	eP	40	47.40	0.2
CMB		80.86	53	ePd	40	48.40	-0.4
EDM		81.12	37	eP	40	50.00	0.2
PHAM		81.45	55	P	40	51.00	-0.9
FRI		81.66	54	eP	40	52.80	-0.1
BCH		81.88	56	P	40	54.50	0.3
SYP		82.15	56	eP	40	57.00	1.3
KVN		82.29	52	P	40	56.00	-0.4
ABL		82.65	56	P	40	59.00	0.6
KEV		82.83	342	eP	40	58.00	-0.3
TNP		83.24	52	P	41	01.30	-0.1
		0.8s	12.50nm				5.1mb
SES		83.42	39	ePd	41	01.90	0.1
CLC		83.64	55	eP	41	03.00	-0.2

PAS		83.69	56	eP	41	04.00	0.5
SBB		83.80	56	eP	41	04.00	-0.1
LRM		84.11	44	eP	41	05.80	0.1
SOD		84.30	340	iP	41	06.70	0.8
RVR		84.37	56	eP	41	10.00	3.1X
GSC		84.41	55	eP	41	07.00	-0.2
DAG		84.84	357	eP	41	08.00	-0.4
PLM		84.97	57	eP	41	13.00	2.8
BAR		85.34	57	eP	41	13.00	1.2
DUG		85.79	49	P	41	13.70	-0.4
GLA		86.68	56	eP	41	22.00	3.5X
FFC		86.73	33	eP	41	18.00	-0.2
		0.8s	28.00nm				5.5mb
MSU		86.84	51	P	41	19.90	0.5
SUF		87.15	337	iP	41	19.40	-0.6
		0.5s	4.50nm				5.0mb
NUR		89.03	335	eP	41	28.00	-1.1
RSSD		90.27	43	P	41	34.00	-1.6
GLD		91.35	47	P	41	42.00	1.4
		1.6s	50.93nm				5.6mb
UPP		92.14	337	iP	41	42.40	-1.1
ALQ		92.45	52	eP	41	45.00	-0.7
		1.1s	11.08nm				5.2mb
	Z	18s	0.65um				5.1Msz
APO		92.98	339	eP	41	45.80	-1.7
		0.4s	1.90nm				4.9mb
NAO		93.80	340	P	41	50.20	-1.0
		0.9s	3.60nm				4.8mb
KSP		98.88	331	eP	42	14.20	-0.3
				e	46	16.00	
SKO		101.96	322	ePdiff	42	28.00	-0.4
CBM		107.78	25	Pdiff	43	06.80	12.6X
KRI		120.72	261	iPKPd	47	30.20	2.6
BUL		122.25	257	iPKPc	47	28.60	-1.8
SLR		123.28	251	ePKP	47	32.00	-0.3
KIC		143.08	309	(PKP)	48	05.60	-4.0X
LIC		143.39	309	(PKP)	48	06.40	-3.7X
		0.8s	14.50nm				
ZOBO		146.24	92	PKPc	48	18.00	2.4
		1.5s	53.76nm				
	Z	20s	0.26um				5.0Msz
				LR	36	24.00	
CCH		148.27	94	PKP	48	22.20	3.7X
SIV		152.90	90	ePKP	48	27.00	1.9
		S.D. = 1.1	on 108 of 117 obs.				

? JUN 14, 1990 06h 33m 23.76± 3.39s
37.329 N ±24.2km 72.123 E ±11.9km
DEPTH = 130.7 ± 35.2 km
4.1mb (5 obs.)
TAJIK SSR (715)

QUE		8.32	213	eP	35	22.50	-0.6
				eS	36	53.80	
NDI		9.62	152	eP	35	42.00	1.8
				eS	37	24.00	
GKN		14.04	128	P	36	38.00	-0.2
DMN		14.61	128	P	36	45.40	-0.2
		0.6s	46.00nm				4.9mb X
PKI		14.83	127	P	36	47.80	-0.6
		0.6s	29.00nm				4.7mb
GUN		14.90	125	P	36	48.80	-0.5
		0.4s	39.00nm				5.1mb
SHL		20.49	119	eP	37	42.50	-10.8X
				eS	41	27.00	
GBA		24.10	167	Pc	38	28.30	-0.1
		0.5s	3.20nm				4.1mb
NAO		44.44	322	P	41	29.70	6.8X
		0.4s	0.60nm				3.7mb
YKA		80.37	3	eP	45	21.70	0.4
		0.6s	0.80nm				3.7mb
		S.D. = 1.0	on 8 of 10 obs.				

JUN 14, 1990 07h 20m 52.44± 1.22s
37.110 N ± 7.0km 72.861 E ± 6.4km
DEPTH = 57.3 ± 12.6 km
4.8mb (19 obs.)
TAJIK SSR (715)

KSH		3.39	45	Pg	21	47.00	2.8
				Sg	22	32.00	
QUE		8.48	217	eP	22	55.00	-0.3
				e(S)	24	32.80	
NDI		9.16	155	eP	23	03.50	-1.1
				eS	24	44.00	
MAIO		10.76	270	eP	23	22.00	-4.5X
		0.8s	9.15nm				4.9mb

		eS	25 12.00		
WMQ	13.12	55 eP	23 55.00	-2.9	
	Z 12s	2.00um			
		S	26 15.00		
GKN	13.45	129 P	23 56.20	-6.1X	
DMN	14.02	129 P	24 04.40	-5.5X	
	0.4s	19.00nm		5.1mb	
PKI	14.23	128 P	24 05.60	-7.2X	
	0.6s	23.00nm		4.9mb	
SHL	19.87	120 eP	25 22.00	0.3	
HYB	20.25	164 eP	25 26.00	0.4	
GTA	21.26	76 iPc	25 35.20	-0.7	
	1.0s	40.00nm		4.7mb	
	Z 15s	0.90um		4.3MszX	
	N 10s	0.70um			
GBA	23.76	169 P	26 05.00	4.6X	
	0.7s	8.70nm		4.3mb	
GYA	30.49	101 P	27 04.60	2.3	
TIY	31.28	77 eP	27 06.70	-2.4	
SUF	38.21	327 iP	28 08.00	0.1	
	0.5s	4.50nm		4.6mb	
NUR	38.22	323 iP	28 08.00	0.0	
	0.6s	14.30nm		5.1mb	
KRA	39.65	306 eP	28 20.40	0.3	
	0.9s	43.00nm		5.3mb	
		e	28 22.80		
SOD	39.83	334 iP	28 21.30	0.0	
SSE	40.12	84 eP	28 25.50	1.4	
KEV	40.80	338 eP	28 29.00	-0.2	
UPP	41.52	321 iP	28 35.30	0.0	
KSP	41.94	308 eP	28 39.00	0.1	
PRU	43.13	307 P	28 49.70	1.1	
		e	30 29.50		
HFS	43.52	321 eP	28 50.60	-1.0	
	0.8s	16.60nm		4.8mb	
KHC	43.85	305 P	28 55.50	1.0	
CLL	43.98	309 eP	28 56.00	0.6	
		e	30 47.00		
NAO	44.97	322 P	29 02.30	-1.0	
	0.8s	8.90nm		4.6mb	
SMF	50.76	304 eP	29 57.80	9.3X	
AVF	51.04	304 eP	29 59.80	9.2X	
	1.0s	8.00nm		4.7mb	
MAF	51.72	304 eP	29 55.70	-0.1	
	1.0s	8.00nm		4.7mb	
TCF	51.94	304 eP	29 57.00	-0.5	
	0.9s	4.90nm		4.5mb	
EKA	52.89	316 P	30 04.00	-0.4	
	1.4s	9.60nm		4.6mb	
DAG	54.59	344 iPd	30 15.50	-1.2	
	0.8s	17.16nm		5.1mb	
MBC	66.65	3 ePd	31 38.50	0.0	
	0.8s	20.00nm		5.2mb	
INK	73.06	10 eP	32 18.00	0.4	
FBA	73.46	17 P	32 20.00	-0.1	
		e	32 26.00		
YKA	80.56	4 eP	32 59.00	-0.5	
	0.8s	4.80nm		4.5mb	
WB5	81.03	123 eP	33 03.10	0.4	
WRA	81.06	123 Pd	33 02.90	0.1	
	0.7s	1.50nm		4.0mb	
FFC	88.43	357 iPd	33 39.50	0.3	
	1.0s	16.00nm		5.2mb	
EDM	89.88	4 eP	33 47.00	0.8	
	S.D. = 1.1	on 34 of 41 obs.			

JUN 14, 1990 07h 40m 56.21± 0.17s
11.760 N ± 3.9km 121.899 E ± 3.9km
DEPTH = 18.1km (geophysicist)
6.0mb (88 obs.) 7.1Msz (30 obs.)
PANAY, PHILIPPINE ISLANDS (254)
Ms 6.8 (BRK). Mo=6.0*10**19 Nm (PPT). At least four people killed, 15 injured in the Culosi area. Considerable damage in other parts of Panay. Felt (VI RF) at Iloilo; (V RF) at Bacolod, Negros and on Cebu; (III RF) on Camiguin; (II RF) at Sorsogon and (I RF) at Manila, Luzan. Depth from broadband displacement seismograms.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike= 28 Dip=88 Slip=-180
NP2: 118 90 -358
Principal Axes:
T Plg= 1 Azm=343
P 1 253
Comment: The focal mechanism is poorly controlled and corresponds to strike-slip faulting. The preferred fault plane is not determined.
MOMENT TENSOR SOLUTION
Dep 20 No. of sta: 8
Moment Tensor; Scale 10**19 Nm
Mrr= 0.46 Mtt= 3.29
Mff=-3.74 Mrt=-0.17
Mrf= 0.55 Mtf= 0.55
Principal axes:
T Val= 3.34 Plg= 3 Azm=176
N 0.52 82 285
P -3.86 7 85
Best Double Couple:Mo=3.6*10**19
NP1:Strike=221 Dip=83 Slip=-177
NP2: 130 87 -7
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 32C M.W.: 12S, 30C
Centroid Location:
Origin Time 07:41: 8.1 0.2
Lat 11.70N 0.01 Lon 121.86E 0.02
Dep 15.0 FIX Half-duration 15.0
Moment Tensor; Scale 10**19 Nm
Mrr=-0.83 0.04 Mtt= 4.92 0.04
Mff=-4.09 0.04 Mrt=-0.13 0.33
Mrf= 1.07 0.34 Mtf= 0.31 0.03
Principal Axes:
T Val= 4.94 Plg= 1 Azm=178
N -0.51 73 271
P -4.42 17 88
Best Double Couple:Mo=4.7*10**19
NP1:Strike=224 Dip=78 Slip=-169
NP2: 132 79 -13

QCP	2.97	344 eP	41 44.00	0.7	
BAG	4.80	345 iP+	42 10.00	0.5	
DAV	5.89	142 eP	42 22.00	-2.7	
KKM	7.99	225 ePd	42 54.00	-0.3	
	0.6s	79.60nm		6.1mb X	
		e	44 10.50		
MNI	10.66	164 ePd	43 25.00	-6.1X	
HKC	12.82	326 P	44 02.00	1.7	
MCO	13.03	323 eP	44 05.60	2.5	
ANP	13.36	358 iP	44 08.00	0.5	
QZH	13.48	347 eP	44 06.00	-3.1X	
	6.0s	******nm		7.2mb X	
	E 24s	1917.00um			
		sP	44 22.00		
		iS	46 41.00		
QIZ	13.68	303 Pc	44 11.80	0.0	
	N 14s	1248.00um			
	E 15s	14.00um			
		iS	46 44.00		
BKB2	13.86	201 iPd	44 25.00	10.9X	
	1.4s	2055.30nm			
GZH	13.90	325 iPc	44 15.00	0.4	
	N 15s	1129.00um			
	E 15s	1142.00um			
		iS	46 52.80		
AAI	16.57	157 ePd	44 50.80	1.4	
MKS	17.04	188 iPc	44 54.50	-0.7	
	1.0s	443.80nm		5.5mb	
SSE	19.25	358 iPc	45 22.00	-0.5	
	1.2s	670.00nm		5.8mb	
	N 20s	708.00um			
	E 19s	330.00um			
		sP	45 34.00		
		PP	45 42.00		
WHN	19.96	341 iPc	45 30.50	0.2	
		sP	45 39.00		
		iS	49 12.00		
LOE	20.30	288 eP	45 33.00	-1.1	
NJ2	20.39	353 iPc	45 35.00	0.2	
	8.0s	******nm		6.5mb X	
	N 28s	1333.00um			
	E 21s	2025.00um			
		S	49 20.00		
GYA	20.49	318 Pc	45 40.00	4.0X	
	N 12s	466.00um			
	E 12s	287.00um			
KGM	20.81	244 ePd	45 39.40	0.1	
	1.5s	1994.10nm		6.3mb	
TRT	21.42	206 iPd	45 40.60	-4.9X	
	1.4s	789.40nm		5.9mb	
SNG	21.48	260 eP	45 43.00	-3.0X	
	2.0s	1317.65nm		6.0mb	
NST	21.50	283 iPc	45 46.00	-0.3	
NNT	21.68	275 eP	45 44.00	-4.1X	
KLM	21.83	248 eP	45 50.20	0.6	
IPM	21.85	253 ePc	45 49.80	0.0	
	1.2s	184.90nm		5.4mb	
		e	45 54.90	18kmX	
KMI	22.48	309 Pc	45 57.00	0.7	
GUMO	22.48	83 eP	45 52.00	-4.1X	
	1.4s	1738.46nm		6.3mb	
		(TT)	85 28.00		
PJG	22.48	83 eP	45 51.70	-4.4X	
GUA	22.52	83 eP	45 52.30	-4.2X	
	1.1s	911.39nm		6.2mb	
		eS	50 00.00		
BDT	22.82	287 iPc	45 59.70	0.3	
	1.2s	926.70nm		6.2mb	
CHG	23.21	290 ePc	46 04.00	0.7	
		eS	50 08.00		
PSI	24.48	250 ePc	46 14.30	-1.3	
	0.6s	44.10nm		5.2mb	
TSI	24.52	252 eP	46 15.00	-1.0	
PPI	24.56	242 eP	46 15.30	-1.1	
	1.0s	194.10nm		5.7mb	
SHK	24.70	22 ePc	46 15.70	-1.9	
TIA	24.72	351 Pc	46 19.00	1.2	
	N 22s	845.00um			
	E 22s	2336.00um			
XAN	25.14	334 P	46 20.00	-1.9	
	N 21s	566.00um			
CD2	25.40	321 eP	46 24.00	-0.3	
	E 16s	1722.00um			
		S	50 54.00		
MTN	26.11	159 eP	46 20.60	-10.3X	
DL2	27.04	360 P	46 38.00	-1.3	
	6.0s	5600.00nm		6.4mb X	
	N 18s	477.00um			
	E 20s	875.00um			
TIY	27.20	343 Pd	46 40.90	0.0	
	E 21s	1495.00um			
		pP	46 50.00	32kmX	
		S	51 23.00		
MNDI	28.02	128 eP	46 39.00	-9.8X	
KNA	28.16	166 eP	46 41.50	-8.2X	
BJI	28.62	351 eP	46 54.00	0.4	
	1.5s	1000.00nm		6.4mb	
	E 24s	1621.00um			
MAT	28.72	28 eP	46 52.00	-2.6	
	2.0s	382.35nm		5.8mb	
		eS	51 41.00		
LZH	29.20	329 Pc	46 59.00	-0.1	
	7.0s	6240.00nm		6.5mb X	
	E 15s	1000.00um			
		iS	51 57.00		
SNY	29.99	3 iPc	47 06.00	0.1	
	1.2s	1400.00nm		6.7mb	
	N 19s	204.00um			
	E 19s	495.00um			
		PP	47 58.00		
		S	52 02.00		
		sS	52 17.00		
HHC	30.37	344 Pc	47 08.00	-1.5	
	1.4s	1400.00nm		6.6mb	
	N 21s	755.00um			
		sP	47 22.00		
BTO	30.57	342 P	47 11.50	0.3	
	7.0s	4700.00nm		6.4mb X	
		sS	52 26.00		
SHL	31.48	300 iP	47 18.00	-1.5	
		eS	52 22.00		
CN2	32.07	5 Pc	47 23.00	-1.2	
	1.0s	400.00nm		6.3mb	
	N 18s	5.00um			
	E 18s	440.00um			
		epP	47 29.50	23kmX	
		PP	48 33.00		
		eS	52 40.00		
MDJ	33.40	10 iPc	47 37.00	1.2	
	1.6s	2300.00nm		6.9mb	
	E 20s	794.00um			
		pP	47 44.00	24kmX	
LSA	33.69	307 P	47 40.00	1.0	
	N 17s	276.00um			
		pP	47 48.00	27kmX	
WB5	33.75	159 eP	47 29.60	-9.5X	

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GTA	33.79	328	P	47	38.10	-1.3				e	50	20.00	20kmX	8ADA	81.79	297	eP	53	16.00	0.2
	1.5s	500.00nm			6.2mb					e	50	27.00		B8TK	81.92	309	iP	53	20.00	3.5X
	Z 22s	612.00um			7.3Msz		QUE	53.97	299	iPd	50	21.20	-0.5	LFK	81.99	304	iP	53	18.40	1.5
	N 18s	497.00um								eS	58	03.80		CSS	82.21	304	eP	53	17.50	-0.4
		S	53	06.00			PVC	54.40	122	iPc	50	22.50	-2.2	SUF	82.27	332	iP	53	15.70	-1.9
WRA	33.80	159	Pc	47	31.10	-8.4X	DZM	55.13	128	iPc	50	23.80	-6.4X	K8S	82.30	349	iPc	53	19.00	1.4
	0.9s	52.30nm			5.5mb		SMY	58.28	34	eP	50	52.30	0.3	PPCY	83.02	304	eP	53	24.00	1.9
RAB	34.02	116	eP	47	36.00	-5.5X		Z 20s		45.00um			6.6Msz	NUR	83.41	330	iP	53	25.00	1.5
		iS	53	12.00			TIK	59.99	3	ePc	51	02.00	-1.6				eS	03	40.00	
NANU	34.68	190	eP	47	40.50	-6.5X				eS	59	17.00					e	05	44.00	
	0.5s	45.00nm			5.6mb		MAIO	60.93	305	eP	51	09.00	-1.8	TRO	83.53	340	eP	53	24.90	0.9
QIS	36.53	151	iPc	47	53.70	-9.1X		1.0s	143.50nm				6.1mb	GPA	83.71	310	iP	53	26.40	0.8
GUN	37.32	301	P	48	08.60	-1.2				eS	59	28.00		BCK	83.98	307	eP	53	26.90	-0.2
PKI	37.62	300	P	48	10.60	-1.7	VUN	63.17	117	eP	51	21.30	-4.5X	HRT	84.09	310	eP	53	25.00	-2.5
DMN	37.88	300	P	48	13.60	-0.9	SVA	63.21	117	eP	51	26.80	0.7	GBZT	84.26	310	eP	53	29.00	0.7
WARB	38.00	173	eP	48	07.00	-8.0X	ADK	63.30	38	eP	51	25.20	-0.9	IZI	84.33	310	eP	53	26.90	-1.9
MEKA	38.28	185	eP	48	10.50	-6.9X		1.1s	265.70nm				6.3mb	AKSR	84.36	293	eP	53	31.00	1.9
	0.5s	63.00nm			5.6mb			Z 22s		59.10um			6.7Msz	YLV	84.36	310	iP	53	26.90	-2.0
GKN	38.40	300	P	48	16.80	-1.8	ILT	67.91	21	eP	51	53.00	-2.5	IAS	84.40	317	eP	53	26.00	-2.8
YSS	39.29	23	ePc	48	24.00	-1.6				iS	00	58.00		INK	84.47	21	eP	53	28.00	-0.8
		eS	54	28.00			BRF	68.24	293	eP	51	58.10	-0.2		1.0s	349.00nm			6.5mb	
MRWA	41.13	188	eP	48	32.50	-8.5X		0.6s	395.00nm				6.7mb	ISK	84.50	311	eP	53	30.00	0.5
HYB	42.26	283	ePd	48	50.50	0.0	DHR	68.63	294	iPc	52	00.00	-0.7	ITU	84.53	311	iPd	53	28.50	-1.1
	1.0s	460.00nm			6.2mb		KER	70.96	302	ePc	52	18.00	2.9X	AGAL	84.57	293	eP	53	33.00	2.9X
		eS	55	07.00			TAB	71.52	306	eP+	52	20.00	1.6	TLB	84.58	314	eP	53	31.50	1.7
COOL	42.40	181	eP	48	45.00	-6.4X	SNZO	71.77	141	ePc	52	15.37	-4.1X	AKRL	84.63	293	eP	53	31.00	0.6
BAL	42.42	187	eP	48	45.50	-6.0X				ePP	54	58.51		ELL	84.65	306	iP	53	27.50	-3.0X
IRK	42.83	344	ePc	48	54.00	-0.7				ePP	55	00.16		KHL	84.66	308	eP	53	32.50	2.0
		eS	55	20.00			WEL	71.80	141	P	52	16.00	-3.7X	CLI	84.71	316	ePc	53	34.50	4.0X
KLB	43.29	185	eP	48	52.00	-6.6X				PcP	52	36.00		HLW	84.72	299	eP+	53	33.00	2.2
HNR	43.29	118	eP	48	58.00	-0.8				ScP	56	54.00					ePP	56	55.00	
GBA	43.37	277	Pd	48	59.50	-0.1				S	01	20.00					eS	03	59.00	
	1.2s	239.10nm			5.8mb					ScS	02	02.00		AGMR	84.81	293	eP	53	41.00	9.7X
WMO	43.45	324	iPc	49	00.68	0.7	RYD	71.92	292	iPc	52	19.90	-1.0	AWKL	84.91	293	eP	53	33.50	1.7
	9.0s	9600.00nm			6.6mb X		ANM	72.05	26	eP	52	22.40	1.6	HYT	84.94	29	P	53	31.00	-0.4
		epPc	49	07.31	22kmX		HBZ	72.10	136	eP	52	17.00	-4.5X	CTT	84.95	311	eP	53	33.00	1.2
MUN	43.83	187	eP	48	57.00	-6.0X	MJMA	73.01	294	ePc	52	26.30	-1.0	KSL	85.02	306	eP	53	30.00	-2.2
	Z 20s	82.40um			6.6Msz		MCO	73.06	158	eP	52	42.00	15.2X	CRZF	85.12	221	eP	53	40.00	7.6X
	N 20s	52.90um					SDN	73.36	36	eP	52	31.30	2.6X				eS	04	05.00	
		eS	55	28.00				Z 20s		45.00um			6.7Msz				eSP	05	10.00	
OLP	43.86	151	eP	48	55.50	-7.8X	BKR	73.63	310	iPd	52	33.00	2.3				eSS	09	45.00	
NDI	44.89	299	iPc	49	12.00	0.3				iS	02	18.00					eSSS	13	30.00	
		ePP	50	56.00			OASM	74.56	294	ePc	52	35.00	-1.3	MBC	85.19	12	eP	53	31.50	-0.8
		eS	55	48.00			UOSK	75.65	294	ePc	52	42.80	0.2		1.0s	281.00nm			6.4mb	
		eSS	59	12.00			TTA	76.01	28	eP	52	43.00	-0.9	VRI	85.23	316	ePc	53	32.50	-0.6
RKG	45.81	186	iPc	49	17.40	-1.4	KMTA	76.12	286	eP	52	45.30	-0.3	PTT	85.24	317	eP	53	34.00	0.9
RMO	46.12	146	eP	49	16.00	-5.4X	SVW	76.16	30	eP	52	44.60	-0.1	NAI	85.46	268	iPd	53	36.00	0.9
		e	49	37.00	87kmX		ABHA	76.22	286	ePc	52	47.00	0.9		1.2s	15.63nm			5.1mb	
		e	51	12.00			OPA	76.63	70	P	52	53.00	4.9X	ISR	85.51	315	ePd	53	36.50	2.0
POO	46.76	284	iPd	49	27.50	0.9	HON	76.69	71	P	52	58.00	1.7	EDC	85.53	310	eP	53	34.00	-0.7
	1.5s	736.11nm			6.5mb			Z 20s		47.87um			6.8Msz	MLR	85.84	315	eP	53	35.00	-1.3
		iS	56	18.00			IMA	77.07	25	ePc	52	49.50	-0.4	CIN	85.91	307	eP	53	40.00	3.4X
STK	47.32	157	iPd	49	22.90	-7.9X		2.2s	1113.70nm				6.5mb	BUC1	86.03	314	ePd	53	40.00	3.0X
	0.9s	64.00nm			5.7mb		ARO	77.15	279	ePd	52	54.20	3.1X	NPA	86.06	254	iP	53	38.00	0.3
		iPP	51	15.00			OBN	77.77	324	iPc	52	54.50	0.8				eS	04	18.90	
		iS	56	14.70				Z 20s		37.00um			6.7Msz	IZM	86.39	308	iP	53	39.50	0.5
BOM	47.75	285	eP	49	30.20	-4.2X				iS	02	42.00		MTUR	86.51	315	eP	53	52.00	12.5X
		iS	56	31.20			APA	78.67	337	eP	53	00.00	1.5	CMP	86.52	315	ePc	53	52.00	12.5X
CMS	48.74	153	eP	49	37.00	-4.9X				eS	02	50.00		ALN	86.77	311	ePc	53	40.70	0.0
		e	49	54.00	67kmX		SHBJ	79.06	301	Pd	53	00.10	-1.4	EZN	86.79	310	eP	53	42.00	1.1
		e	50	42.00			QTFJ	79.20	300	Pd	53	00.20	-2.0	SMG	86.86	308	eP	53	41.60	0.4
KSH	49.03	313	eP	49	50.00	5.7X	PMR	79.27	29	eP	53	01.10	-0.6	UPP	86.96	331	iP	53	40.60	-0.7
	Z 14s	40.80um			6.6MszX			0.9s	142.90nm				6.0mb				i	53	51.40	34kmX
	N 16s	455.00um						Z 20s		35.00um			6.7Msz				iSKS	04	10.00	
BRS	49.11	143	iPc-	49	37.00	-7.8X	COL	79.58	26	iPc	53	02.94	-0.5				iS	04	26.00	
		i	49	40.50						epPc	53	07.58	15kmX	SIT	87.06	32	eP	53	44.40	2.6X
		ipP	49	48.00	38kmX		FBA	79.58	26	eP	53	02.60	-0.8		1.4s	196.60nm			6.2mb	
		isP	49	55.00				1.2s	116.60nm				5.8mb		Z 22s	37.60um			6.8Msz	
		iPcP	51	07.00			SIM	80.24	314	ePKP	53	08.00	0.6	DRA	87.19	315	eP	53	49.00	6.3X
		eS	56	38.00			BHL	80.46	303	Pd	53	12.00	3.1X	UZH	87.52	319	eP	53	44.00	-0.2
ADE	49.13	162	iPc+	49	37.20	-7.7X				S	03	28.00		GZR	88.04	316	ePd	53	54.00	7.1X
	1.0s	440.00nm			6.4mb		BURJ	80.56	301	Pc	53	05.00	-4.5X	SRS	88.52	312	ePc	53	56.10	6.9X
PET	50.55	28	eP	49	56.00	0.6	TOA	80.61	28	eP	53	11.00	1.9	KRA	88.62	321	eP	53	50.50	1.0
		eS	57	02.00			SALJ	80.69	301	Pd	53	07.30	-2.9		1.7s	245.00nm			6.2mb	
COO	51.03	146	eP	49	54.00	-5.4X	KFNJ	80.72	301	Pc	53	06.80	-3.4X		Z 18s	161.80um			7.5Msz	
BWA	52.38	152	eP	50	04.00	-5.7X	KEV	80.75	339	iPc	53	08.33	-1.3		E 18s	184.80um				
BFD	52.40	159	eP	50	01.00	-8.7X				epPc	53	14.79	21kmX				e	53	56.70	19kmX
		e	50	04.00	10kmX		MKRJ	80.79	300	Pd	53	06.20	-4.5X				e	55	06.00	
		e	50	09.00			AYN	80.87	298	eP	53	11.30	0.3				e	04	35.00	
RIV	53.20	149	eP+	50	22.00	6.3X	KAS	80.95	310	eP	53	12.50	1.2	SPC	88.68	320	eP	53	49.00	-1.0
	Z 18s	29.14um			6.4Msz		DSI	81.01	300	eP	53	12.00	0.3				i	53	57.80	27kmX
CAN	53.39	152	eP	50	10.00	-7.1X	SOD	81.26	337	iP	53	10.20	-2.1				i	54	05.50	
		e	50	27.00	66kmX		PRNI	81.52	299	eP	53	14.00	-0.5				i	54	36.30	
CNB	53.55	152	eP	50	11.00	-7.3X	AAE	81.53	277	eP	53	17.00	1.9	DAG	88.71	352	eP+	53	48.00	-1.4
		e	50	15.00	13kmX		HOL	81.63	298	ePc	53	15.30	0.3		0.5s	119.72nm			6.5mb	
		e	50	29.00			FAM	81.66	304	eP	53	20.50	5.5X	HFS	88.73	332	eP	53	50.60	0.8
TOO	53.83	157	eP	50	14.00	-6.3X	M8H	81.70	299	eP	53	15.00	-0.3		1.2s	84.70nm			5.9mb	

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Z 18s 130.08um 7.4Msz
LR 28 33.00
BZS 88.77 316 eP 53 48.00 -2.2
KNT 89.02 312 eP 53 52.10 0.5
RGS 89.04 335 eP 54 01.30 10.1X
ATH 89.20 309 eP 53 56.00 3.5X
eS 06 10.00
PSZ 89.27 319 eP 54 01.20 8.5X
VAM 89.45 306 eP 53 55.10 1.4
LIT 89.59 311 ePd 53 54.40 0.1
MAW 89.65 199 eP+ 53 52.00 -1.9
1.1s 63.00nm 5.8mb
Z 19s 25.00um 6.7Msz
e 11 38.00
NAO 89.77 333 P 53 52.50 -2.2
1.2s 120.40nm 6.0mb
BEO 89.77 316 eP 53 54.00 -1.0
SKO 89.87 313 eP 53 56.00 0.4
i 54 40.00 175kmX
i 55 12.50
i 56 36.00
i 04 45.00
BSD 89.92 327 iPc 54 00.80 5.3X
0.8s 67.20nm 5.9mb
VLI 90.12 307 eP 53 48.00 -8.8X
FNA 90.23 312 ePd 53 56.50 -0.9
SRO 90.31 319 e(P) 54 03.20 5.7X
Z 17s 182.80um 7.6MszX
i 54 34.90 122kmX
e 58 27.60
OHR 90.56 312 iP 53 59.50 0.6
0.2s 85.00nm 6.7mb
e 54 23.30 88kmX
i 54 43.30
KSP 90.60 322 eP 53 57.50 -1.2
1.2s 103.00nm 6.0mb
id 54 00.00 8kmX
i 54 10.50
PHP 90.66 313 eP 53 58.10 -1.1
KBN 90.69 312 eP 53 59.60 0.3
BCI 90.74 313 eP 54 00.30 0.8
ITM 90.78 308 eP 53 58.50 -1.4
JNW 90.91 346 eP 54 03.80 4.0X
PLE 90.93 315 eP 54 02.00 1.4
ZST 90.97 320 e(P) 54 03.50 3.0X
e 54 31.40 105kmX
e 57 40.90
e 58 06.20
COP 91.03 328 iPc- 54 02.60 2.0
0.3s 155.84nm 6.8mb
Z 19s 114.58um 7.3Msz
TIR 91.17 313 eP 54 05.60 4.0X
LACI 91.20 313 eP 54 07.40 5.7X
SDA 91.24 313 eP 54 02.80 1.0
TTG 91.29 314 eP 54 02.00 -0.1
eS 04 50.00
BERA 91.30 312 eP 54 05.80 3.7X
ULC 91.44 313 eP 54 03.10 0.3
VKA 91.44 320 eP 54 05.00 2.3
5.5s 1601.00nm 6.6mb X
Z 17s 91.30um 7.3MszX
i 54 10.10 16kmX
i 54 25.60
i 54 38.30
i 55 06.20
i 57 53.30
e 58 06.00
i 58 19.90
LR 38 40.00
SOP 91.48 319 eP 54 01.80 -1.0
VLS 91.53 309 eP 54 04.00 0.7
KEK 91.69 311 eP 54 13.70 9.7X
BRN 91.84 325 eP 54 05.00 0.6
AFR 91.91 107 iP 54 05.30 0.0
1.4s 135.00nm 6.1mb
PRU 91.94 322 eP 54 05.50 0.6
Z 18s 232.60um 7.7Msz
e 54 09.50 12kmX
SKS 05 16.00
PPT 92.10 107 iP 54 06.60 0.4
1.4s 170.00nm 6.3mb
PAE 92.12 107 iP 54 07.90 1.7
1.4s 150.00nm 6.2mb
PPN 92.23 107 iP 54 08.20 1.5
1.4s 120.00nm 6.1mb
CLL 92.37 324 eP 54 07.00 0.1
1.9s 110.00nm 5.9mb

Z 18s 126.00um 7.4Msz
e(S) 05 18.00
BER 92.40 334 iP 54 17.00 10.2X
PTJ 92.46 318 eP 54 06.00 -1.5
ZAG 92.47 318 eP 54 08.00 0.6
KHC 92.84 321 iPc 54 09.50 0.3
1.1s 41.50nm 5.8mb
Z 20s 156.00um 7.5Msz
N 20s 96.80um
E 20s 110.00um
e 55 11.50 255kmX
S 05 28.00
KMR 92.88 320 eP 54 10.00 0.7
i 54 16.40 20kmX
SBA 92.92 171 e(P) 54 04.60 -4.2X
HVAR 93.03 315 iP 54 14.40 4.3X
VBY 93.05 318 ePDIF 54 11.60 1.5
PMO 93.18 105 iP 54 10.40 -0.7
1.4s 95.00nm 6.0mb
WET 93.26 322 eP 54 10.50 -0.6
LJU 93.34 318 ePDIF 54 12.00 0.5
TBI 93.35 113 eP 54 18.00 6.2X
1.2s 70.00nm 6.0mb
TPT 93.44 105 iP 54 11.50 -0.8
1.4s 110.00nm 6.1mb
MOX 93.44 323 ePc 54 12.50 0.7
1.2s 63.00nm 5.9mb
Z 16s 134.60um 7.5MszX
N 16s 134.60um
i 54 24.00 37kmX
VAH 93.48 105 iP 54 11.60 -0.9
1.4s 85.00nm 6.0mb
LWI 93.48 268 iPd 54 16.80 3.8X
CEY 93.52 318 ePDIF 54 13.20 0.9
RIY 93.68 318 eP 54 19.20 6.2X
RUV 93.70 105 iP 54 12.50 -1.0
1.4s 100.00nm 6.0mb
VOY 93.76 318 ePDIF 54 12.90 -0.6
TRI 93.96 318 eP 54 15.20 0.9
ePP 58 10.20
e 06 13.00
eSS 12 04.00
i 19 36.00
GRF 94.05 322 eP 54 14.00 -0.7
Z 20s 261.00um 7.7Msz
e 54 18.90 15kmX
e 54 27.60
e(SKS)05 03.00
e 05 41.00
YKA 94.10 23 eP 54 09.40 -5.3X
1.3s 16.90nm 5.3mb
TDS 94.25 312 P 54 13.00 -2.8
FVI 94.27 319 P 54 16.40 0.7
MGR 94.66 312 P 54 21.50 3.8X
SGO 94.70 313 P 54 19.00 1.2
DUI 94.92 314 P 54 29.90 10.9X
SOI 94.97 310 P 54 29.00 9.9X
BSS 94.98 313 P 54 28.00 8.9X
SQTA 95.03 320 iPd 54 18.20 -1.2
0.8s 29.20nm 5.8mb
i 54 20.30 7kmX
i 54 31.60
i 54 50.60
i 57 28.90
i 57 47.50
i 58 37.10
i 58 40.60
CTI 95.21 319 P 54 20.50 0.3
ARV 95.31 316 P 54 24.00 3.4X
SDI 95.36 314 P 54 25.90 5.0X
TNS 95.46 324 ePc 54 24.60 3.4X
KRI 95.49 254 eP 54 26.20 4.2X
ipP 54 44.00 63kmX
iPP 58 21.00
AZI 95.52 315 P 54 25.00 3.4X
WTS 95.60 326 eP 54 25.00 3.3X
1.0s 38.00nm 5.8mb
e 57 53.00
SFI 95.89 317 P 54 27.50 4.3X
OSS 95.91 320 ePc 54 24.00 0.5
CRE 95.93 317 P 54 24.50 0.9
PGD 95.99 317 P 54 25.10 1.1
SAL 96.10 319 P 54 35.00 10.9X
SAX 96.18 321 ePc 54 25.20 0.3
FIR 96.34 317 eP 54 31.00 5.7X
DBN 96.44 326 eP 54 33.00 7.5X
Z 20s 191.00um 7.6Msz

eSKS 05 11.00
eS 05 44.00
eSS 12 28.00
SLE 96.49 321 ePc 54 27.00 1.1
LLS 96.56 320 ePc 54 26.80 0.3
MDI 96.56 319 P 54 30.00 3.8X
BFT 96.66 245 eP 54 29.50 2.3
1.5s 130.00nm 6.2mb
ENN 96.66 325 eP 54 28.00 1.5
1.0s 39.00nm 5.9mb
e 57 44.00
e 58 43.00
MEM 96.68 325 Pc 54 30.20 3.6X
PGC 96.85 37 eP 54 29.00 1.6
CDF 96.94 322 eP 54 27.20 -0.8
1.0s 32.00nm 5.8mb
TMA 96.95 320 ePc 54 29.20 1.0
BUL 97.01 251 iPd 54 24.50 -4.3X
ipP 54 48.00 86kmX
iPP 58 07.80
iS 05 30.10
ECH 97.10 322 P 54 37.50 8.8X
VAI 97.12 320 P 54 32.40 3.7X
AKU 97.26 344 eP 54 32.10 3.1X
1.8s 218.18nm 6.4mb
i 54 38.00 18kmX
i 58 34.30
BSF 97.49 322 eP 54 29.30 -1.2
1.1s 26.85nm 5.7mb
UCC 97.52 325 eP 54 38.00 7.6X
S 05 06.00
MMK 97.55 320 ePc 54 31.50 0.5
DOU 97.72 325 P+ 54 31.60 0.2
BMW 97.95 39 P 54 32.20 -0.4
SLR 98.23 245 iPc 54 35.50 1.3
1.5s 120.00nm 6.3mb
i 54 47.50 39kmX
BPI 98.52 245 eP 54 37.00 1.4
LPG 98.55 320 eP 54 35.10 -0.5
0.9s 26.20nm 5.8mb
LPL 98.56 320 eP 54 35.10 -0.4
1.2s 28.25nm 5.7mb
LON 98.70 39 P 54 34.60 -1.3
PNT 98.77 36 eP 54 37.00 0.8
1.3s 107.00nm 6.3mb
EKA 98.93 332 P 54 47.00 10.3X
1.1s 34.10nm
PRY 99.13 244 eP 54 42.00 3.7X
1.0s 26.00nm 5.8mb
SEK 99.20 243 eP 54 41.50 2.9X
1.1s 40.00nm 5.9mb
REY 99.48 345 iP 54 44.80 5.7X
LOR 99.51 322 eP 54 38.50 -1.1
1.0s 12.00nm 5.4mb
LBF 99.58 322 eP 54 38.80 -1.1
0.9s 19.65nm 5.7mb
BFS 99.73 244 eP 54 41.50 0.4
0.6s 14.00nm 5.7mb
i 58 42.00
SMF 99.82 322 eP 54 40.00 -1.0
0.9s 14.75nm 5.5mb
SSF 99.82 322 eP 54 40.00 -1.0
EDM 100.01 30 ePdiff54 43.50 1.8
1.4s 151.00nm 6.3mb
AVF 100.05 322 ePdiff54 40.90 -1.0
0.9s 13.10nm 5.5mb
NEW 100.73 36 Pdiff 54 45.50 0.5
1.2s 54.92nm 6.0mb
GRM 100.77 238 ePdiff54 57.50 12.0X
MAF 100.80 322 ePdiff54 44.90 -0.4
0.9s 9.00nm 5.3mb
TCF 100.98 322 ePdiff54 45.50 -0.7
0.9s 10.65nm 5.4mb
WDC 100.99 44 ePdiff54 47.40 1.1
ePP 58 59.30
ePKKP 11 10.50
SWZ 101.06 244 ePdiff54 36.50 -10.6X
LDF 101.15 325 ePdiff54 46.10 -0.7
1.1s 29.30nm 5.8mb
FLN 101.26 325 ePdiff54 46.40 -0.9
1.3s 43.30nm 5.9mb
GRR 101.67 325 ePdiff54 48.80 -0.3
1.2s 32.75nm 5.8mb
SPA 101.68 180 ePdiff54 50.20 1.2
1.0s 7.50nm 5.3mb
Z 20s 25.77um 6.7Msz
MIN 101.73 44 ePdiff54 50.20 0.4

14d 07h

CAF	101.75	321	ePdiff	54	49.20	-0.4
RJF	101.89	322	ePdiff	54	50.20	0.0
	1.0s	22.00nm				5.7mb
ETA	101.96	331	ePdiff	54	55.00	4.7X
LPF	101.96	325	ePdiff	54	50.00	-0.4
BCAO	102.13	277	iPdiff	54	52.00	0.0
	1.0s	10.00nm				5.4mb
		id	58	26.00		
		ic	59	06.00		
ORV	102.16	45	ePdiff	54	52.00	0.5
MFF	102.22	323	ePdiff	54	51.10	-0.5
ECP	102.35	330	ePdiff	54	56.00	4.0X
BRK	102.36	47	ePdiff	54	57.40	5.0X
BKS	102.37	47	ePdiff	55	08.00	15.5X
Z	20s	37.00um				6.9Msz
N	20s	22.00um				
E	20s	15.00um				
		eS	06	44.00		
		e	07	52.00		
		eSS	13	40.00		
		e	14	00.00		
		eSSS	17	40.00		
		eLQ	21	00.00		
		e	24	00.00		
		eLR	27	00.00		
SES	102.83	32	ePdiff	54	55.00	0.7
MHC	103.03	47	ePdiff	54	58.10	2.5
		ePP	59	06.80		
CMB	103.61	46	ePdiff	54	59.10	1.0
		e	57	49.60		
		e	58	21.00		
		ePP	59	17.80		
		ePPP	01	32.20		
		ePKKP	11	06.90		
FFC	104.15	24	ePdiff	55	04.00	4.0X
	1.4s	43.00nm				6.1mb
FRI	104.57	47	ePdiff	55	02.80	0.5
KVN	104.73	44	ePdiff	55	00.00	-3.2X
LRM	104.74	36	ePdiff	55	05.00	1.8
TNP	105.80	45	Pdiff	55	00.00	-8.1X
	1.5s	31.57nm				6.1mb
POF	106.01	243	ePdiff	55	23.00	14.1X
	0.7s	16.00nm				
		i	58	45.00		
ISA	106.06	47	ePdiff	55	20.00	10.9X
		e	58	38.00		
CLC	106.62	47	ePdiff	55	18.00	6.4X
		e	58	21.00		
SBB	106.99	48	ePdiff	55	27.00	13.8X
		e	58	34.00		
GSC	107.43	47	ePdiff	55	22.00	6.8X
		e	58	32.00		
RVR	107.64	49	ePdiff	55	20.00	4.0X
		e	58	45.00		
WIN	107.97	250	ePdiff	55	27.50	9.5X
BAR	108.77	49	ePdiff	55	38.00	16.8X
		e	59	01.00		
TAF	109.82	314	ePKP	59	10.00	-18.5X
GLA	109.96	48	ePdiff	55	43.00	16.6X
		e	59	01.00		
GOL	112.57	38	PKP	59	40.00	6.2X
Z	20s	39.00um				7.0Msz
GLD	112.63	38	PKP	59	40.00	6.2X
Z	20s	45.00um				7.1Msz
AVE	114.14	315	iPKP	59	18.00	-18.7X
		i	59	29.00		
ANMO	114.78	43	PKP	59	37.00	-1.1
Z	20s	40.43um				7.0Msz
ALQ	114.78	43	ePdiff	55	54.00	5.9X
ALQ	114.78	43	ePKP	59	37.00	-1.2
Z	19s	48.61um				7.1Msz
TIO	115.33	313	iPKP	59	43.50	4.3X
		i	00	07.50		
MEO	119.87	38	e(PKP)	59	46.30	-1.3
LNO	120.72	35	ePKP	59	49.20	0.2
		e	01	23.80		
TUL	120.72	35	ePKP	59	44.20	-4.9X
	1.2s	31.80nm				
Z	19s	55.89um				7.2Msz
		e	59	48.10		
		e	01	23.90		
CBM	120.89	8	ePKPc	59	50.00	0.9
FVM	121.99	30	PKP	59	48.00	-3.5X
RSNY	122.01	14	ePKPc	59	50.00	-1.3
Z	18s	90.32um				7.5Msz
HBVT	122.51	13	PKP	59	50.00	-2.3
UYO	122.73	36	e(PKP)	59	49.30	-3.7X
CLE	122.78	21	iPKP	59	56.50	3.6X
KIC	123.96	286	PKP	59	54.62	-1.4
TIC	124.13	286	PKP	59	54.12	-2.2
TXNY	125.27	15	iPKP	00	02.30	4.6X
PNJ	125.54	15	iPKP	59	58.30	0.1
GMTN	125.55	15	ePKP	59	56.20	-2.1
RSCP	126.21	28	PKP	59	58.00	-1.8
Z	20s	65.54um				7.3Msz
AIA	126.41	177	ePKP	00	02.00	2.8X
BLA	126.96	22	ePKP	00	01.50	0.3
	1.7s	257.69nm				
Z	22s	68.15um				7.3Msz
CBN	127.12	19	ePKP	00	03.00	1.6
		e	02	01.00		
MRX	127.29	54	(PKP)	00	04.50	2.3
IIJ	128.43	53	(PKP)	00	09.00	3.9X
CRX	128.65	53	(PKP)	00	10.00	4.8X
JSC	129.20	25	PKP	00	04.00	-1.5
III	129.38	54	(PKP)	00	10.50	4.0X
PPM	129.66	53	(PKP)	00	12.00	4.6X
OXX	132.27	54	(PKP)	00	16.00	4.0X
EVV	132.55	51	(PKP)	00	12.00	-0.2
TPX	137.02	53	(PKP)	00	30.00	9.2X
DVD	148.55	51	ePKP	00	49.40	8.6X
MGP	149.12	17	PKP	00	43.50	1.9
PORP	149.20	16	PKP	00	41.50	-0.2
SJG	149.27	15	e(PKP)	00	46.00	4.1X
CPD	149.40	15	PKP	00	42.00	-0.1
UPA	150.36	47	ePKPc	00	44.00	0.4
BPA	151.14	7	ePKP	00	49.53	4.8X
MGH	151.41	8	ePKP	00	47.50	2.4
PAG	152.16	7	ePKP	00	49.00	2.7X
BBL	152.69	7	ePKP	00	50.00	3.1X
FDF	153.51	7	ePKP	00	53.20	5.1X
SLB	154.41	7	ePKP	01	03.46	14.1X
LNV	154.78	153	ePKP	00	50.00	0.7
CHCH	155.13	155	ePKP	00	50.50	0.6
MORO	155.33	25	ePKP	00	56.00	5.3X
SAN	155.54	154	ePKP	00	51.50	1.1
TOV	155.64	29	ePKP	00	53.50	2.4
PEL	155.79	154	iPKP	00	51.50	0.7
	1.1s	75.95nm				
ROCH	155.79	153	ePKP	00	54.00	2.9X
SDV	156.00	32	ePKP	00	50.70	-1.1
BMG	156.09	39	ePKP	00	53.00	1.2
CAR	156.20	22	iPKP	00	44.00	-8.0X
LLAV	156.28	22	ePKP	00	53.00	1.0
GUAC	156.36	23	ePKP	00	47.00	-5.2X
OLLA	156.70	22	ePKP	00	53.00	0.4
FUQ	156.87	43	ePKP	01	06.50	13.4X
LPA	156.95	180	PKPc-	00	54.40	2.2
Z	20s	21.28um				7.0Msz
GUAN	157.16	19	ePKP	00	53.00	-0.2
BOG	157.26	45	ePKP	00	56.00	2.4
TRN	157.50	9	ePKP	00	58.13	4.7X
	1.0s	60.00nm				
RTBS	157.59	154	e(PKP)	00	56.00	2.9X
CFA	158.14	156	e(PKP)	00	55.00	1.2
RTLL	158.30	155	ePKPc	00	53.00	-1.0
CAI	158.67	282	ePKP	00	59.80	5.0X
RTRS	158.86	152	ePKPd	00	57.70	3.2X
NNA	161.66	93	iPKP	01	01.00	3.1X
	1.4s	158.14nm				
Z	20s	7.98um				
PT08	161.94	93	iPKPc	01	02.10	3.5X
PT03	162.61	99	iPKPc	01	03.60	4.8X
ANT	163.32	137	ePKP	01	01.50	2.2
ARE	166.20	111	ePKP	01	04.00	1.6
LPB	169.21	117	PKPc	01	03.00	-1.6
ZOBO	169.29	116	ePKPc	01	05.27	0.4
	1.5s	220.43nm				
		i	01	07.90		
		ePKPpb	02	11.99		
		i	05	16.00		
		eHPP	05	56.98		
		ePP	05	59.39		
BAO	169.45	247	ePKP	01	08.70	4.3X
CCH	170.42	127	PKP	01	08.10	2.9X
SIV	174.90	146	PKP	01	03.70	-2.9
		i	01	08.60		

S.D. = 1.2 on 283 of 453 obs.

? JUN 14, 1990 08h 13m 20.53± 3.61s
36.716 N ±31.9km 26.850 E ±13.1km
DEPTH = 5.0km (geophysicist)
DODECANESE ISLANDS (369)

SMG	0.99	359	ePb	13	39.00	-0.8
			eSb	13	56.50	
APE	1.11	289	ePb	13	41.80	-0.1
CIN	1.32	48	ePg	13	45.00	-0.5
			iSg	14	07.00	
IZM	1.71	11	ePn	13	52.50	1.3

S.D. = 1.6 on 4 of 4 obs.

* JUN 14, 1990 08h 13m 53.43± 0.84s
12.099 N ±11.3km 121.423 E ±17.5km
DEPTH = 33.0km (normal)
4.3mb (2 obs.)
MINDORO, PHILIPPINE ISLANDS (250)

BAG	4.36	349	eP	15	01.10	1.8
QIZ	13.11	303	eP	16	57.90	-2.1
SSE	18.91	359	eP	18	12.50	-1.4
TRT	21.53	204	ePc	18	43.00	1.1
KMI	21.90	309	eP	18	48.00	2.1
LZH	28.67	329	eP	19	48.80	-0.8
WRA	34.29	158	Pc	20	37.90	-1.0
	0.8s	4.20nm				4.4mb
FBA	79.48	26	(P)	25	59.20	1.3
INK	84.33	21	eP	26	23.00	-0.1
MBC	84.96	12	eP	26	26.00	-0.1
YKA	93.97	23	eP	27	08.50	-0.6
	0.8s	0.80nm				4.2mb

S.D. = 1.5 on 11 of 11 obs.

? JUN 14, 1990 08h 20m 29.33±10.64s
1.120 S ±68.4km 78.394 W ±23.7km
DEPTH = 10.0km (geophysicist)
ECUADOR (107)

VC1	0.48	359	iP+	20	39.20	0.0
			S	20	48.00	
GECU	0.82	14	eP	20	45.30	-0.4
			S	20	57.30	
QUR	0.95	352	eP	20	47.80	0.1
			eS	21	02.00	
GGP	0.96	348	iPd	20	48.00	0.0
			eS	21	05.00	
CAYA	1.26	19	P	20	53.40	0.3

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

JUN 14, 1990 08h 31m 10.01± 0.18s
11.603 N ± 3.2km 121.808 E ± 4.4km
DEPTH = 17.8km (5 depth phases)
5.4mb (29 obs.) 5.6Msz (1 obs.)
PANAY, PHILIPPINE ISLANDS (254)

BAG	4.93	346	eP	32	24.00	-1.1
DAV	5.83	140	eP	32	42.10	4.4X
KKM	7.81	225	ePd	33	20.00	14.3X
MNI	10.53	163	ePc	33	43.00	-0.2
QIZ	13.70	304	P	34	23.60	-2.2
GZH	13.98	326	P	34	33.00	3.5X
MKS	16.87	188	iPc	35	14.00	7.0X
SSE	19.41	358	Pd	35	39.50	1.3
	1.5s	200.00nm				5.2mb
WHN	20.08	341	ePc	35	45.20	-0.2
	1.0s	100.00nm				5.1mb
LOE	20.27	289	eP	35	47.00	-0.5
NJ2	20.53	353	Pd	35	50.60	0.5
	1.0s	300.00nm				5.6mb
GYA	20.54	318	iPd	35	52.00	1.6
KGM	20.66	244	ePd	35	54.90	3.3X
KAGJ	21.22	22	P	35	57.30	0.1
TRT	21.24	206	iPc	35	57.50	0.0
	1.1s	199.30nm				5.4mb
NNT	21.61	275	eP	36	03.00	1.8
IPM	21.71	253	ePd	36	06.00	3.7X
	1.0s	82.40nm				5.1mb
KUMJ	22.42	20	eP	36	09.70	0.5
KMI	22.51	309	Pc	36	12 50	2.1
	2.0s	1100.00nm				6.0mb
Z	18s	20.50um				5.6Msz
E	12s	10.40um				
BDT	22.78	287	eP	36	11.00	-1.8
	1.0s	55.20nm				5.0mb
SHNJ	23.97	19	eP	36	25.30	1.0
TSI	24.39	253	eP	36	32.00	3.5X
TIA	24.86	351	Pc	36	32.70	-0.3
SHK	24.88	22	eP	36	33.20	0.0
TKSJ	24.93	25	eP	36	34.40	0.8
XAN	25.24	334	P	36	35.00	-1.7
YONJ	25.76	22	eP	36	42.10	0.7

WKYJ	25.79	27	P	36 42.10	0.3
MTN	25.99	159	iPd	36 36.40	-7.3X
TSRJ	27.07	26	P	36 53.40	-0.1
IIDJ	27.90	29	eP	37 02.80	1.7
MTMJ	28.75	27	P	37 07.50	-1.3
BJI	28.76	351	eP	37 08.00	-0.7
	1.1s	100.00nm		5.5mb	
CHJJ	28.87	30	P	37 07.50	-2.3
MAT	28.90	28	eP	37 08.00	-2.1
	1.4s	60.47nm		5.2mb	
LZH	29.29	329	Pc	37 13.50	-0.3
	1.6s	150.00nm		5.5mb	
			pP	37 24.60	41kmX
KAKJ	29.58	31	eP	37 15.20	-1.0
NIIJ	29.84	28	eP	37 17.50	-0.9
SNY	30.15	3	iPd	37 21.10	0.0
	1.4s	400.00nm		6.1mb	
HHC	30.50	345	eP	37 25.00	0.6
BTO	30.70	342	eP	37 25.90	-0.2
CN2	32.24	5	iPd	37 39.10	-0.4
MDJ	33.57	10	Pd	37 51.00	-0.1
	1.2s	200.00nm		5.9mb	
			pP	37 58.00	24km
WB5	33.64	158	eP	37 50.00	-1.9
WRA	33.69	158	Pc	37 52.00	-0.4
	0.9s	105.10nm		5.8mb	
LSA	33.71	307	P	37 53.80	0.7
GTA	33.88	329	P	37 53.60	-0.4
	1.2s	100.00nm		5.6mb	
HOOJ	35.93	28	eP	38 12.20	0.9
QIS	36.44	151	ePc	38 14.00	-1.8
ASAJ	37.04	25	eP	38 21.40	0.8
KUSJ	37.14	28	eP	38 22.20	0.7
GUN	37.33	301	P	38 23.40	-0.3
PKI	37.62	300	P	38 25.40	-0.7
	0.4s	11.00nm		5.0mb	
WARB	37.85	173	eP	38 27.00	-0.7
DMN	37.88	300	P	38 27.70	-0.6
MEKA	38.12	185	iPc	38 30.00	0.1
	0.5s	33.00nm		5.4mb	
GKN	38.40	301	P	38 31.60	-0.9
MRWA	40.97	188	eP	38 54.80	1.3
HYB	42.20	283	eP	39 04.00	0.1
COOL	42.25	181	eP	39 04.50	0.6
KLB	43.12	185	eP	39 11.60	0.5
GBA	43.31	278	Pd	39 12.90	0.1
	0.9s	21.90nm		4.9mb	
WMQ	43.52	324	P	39 15.80	1.4
QLP	43.77	150	ePc	39 16.50	0.1
			e	41 06.50	641kmX
NDI	44.89	299	eP	39 24.00	-1.5
RMQ	46.04	146	eP	39 34.00	-0.6
			e	41 13.00	534kmX
STK	47.21	157	iPd	39 43.70	0.0
	1.5s	59.00nm		5.4mb	
CMS	48.64	152	eP	39 55.00	0.0
	1.0s	31.00nm		5.3mb	
ADE	49.01	162	eP	39 59.70	1.9
	1.0s	250.00nm		6.2mb	
BRS	49.04	143	eP	39 57.00	-1.1
			e	41 28.00	467kmX
KSH	49.07	313	eP	40 00.90	2.5
COO	50.95	146	eP	40 14.00	1.3
BWA	52.29	152	P	40 23.30	0.5
BFD	52.29	159	eP	40 22.00	-0.7
			e	40 27.00	17km
CAN	53.29	152	eP	40 30.20	0.0
CNB	53.46	152	iPc	40 32.20	0.7
			i	40 37.00	16km
TOO	53.73	157	iPc	40 33.90	0.5
	0.9s	68.00nm		5.6mb	
			e	40 38.50	15km
			e	41 40.00	
QUE	53.96	299	eP	40 35.00	-0.5
DZM	55.10	127	iPc	40 43.20	-0.6
MAIO	60.95	305	eP	41 24.00	-0.7
	0.8s	21.41nm		5.3mb	
ADK	63.48	38	eP	41 41.10	-0.1
DHR	68.61	294	ePc	42 13.50	-1.0
RYD	71.90	292	iPc	42 34.40	-0.2
HBZ	72.05	136	eP	42 42.00	6.9X
ANM	72.23	26	eP	42 36.90	1.2
QASM	74.55	294	eP	42 50.30	0.2
TTA	76.19	28	ePc	42 59.30	0.5
IMA	77.25	25	ePc	43 05.40	0.7
	1.1s	26.50nm		5.2mb	
PMR	79.45	29	P	43 16.30	-0.3
			pP	43 21.90	18km
FBA	79.76	26	ePc	43 17.80	-0.4
KEV	80.86	339	eP	43 24.00	0.0
DSI	81.01	300	eP	43 27.00	1.4
SOD	81.37	337	iP	43 26.60	-0.1
PRNI	81.51	299	eP	43 24.00	-4.3X
MBH	81.70	299	eP	43 30.00	0.8
SUF	82.37	332	iP	43 31.90	-0.1
NUR	83.50	330	eP	43 38.00	0.2
BCK	84.01	307	eP	43 41.40	0.4
INK	84.65	21	eP	43 43.00	-0.5
	1.1s	57.00nm		5.7mb	
MBC	85.36	12	ePd	43 47.90	0.9
	1.4s	40.00nm		5.4mb	
MLR	85.89	315	eP	43 51.50	1.1
KRA	88.69	321	eP	44 03.40	-0.2
			e	44 19.30	55kmX
SPC	88.74	320	eP	44 05.00	0.8
HFS	88.82	332	ePKP	44 02.00	-2.1
	0.6s	5.60nm		5.0mb	
NAO	89.87	333	P	44 07.20	-1.8
	0.8s	2.60nm		4.5mb	
KSP	90.67	322	eP	44 12.50	-0.4
PRU	92.01	322	eP	44 21.50	2.4
CLL	92.45	324	e(P)	44 28.00	6.9X
KHC	92.90	321	eP	44 24.20	0.9
YKA	94.28	23	eP	44 29.20	-0.1
	1.2s	10.60nm		5.1mb	
SQTA	95.09	320	iPd	44 32.90	-0.6
	0.7s	5.70nm		5.1mb	
BUL	96.88	251	iPd	44 41.30	-0.8
MEO	120.05	38	e(PKP)	50 02.00	0.2
TUL	120.90	35	e(PKP)	50 02.50	-0.8
	1.2s	3.20nm			
LKO	123.64	290	PKP	50 09.40	0.2
KIC	123.92	286	(PKP)	50 10.00	0.2
LPB	169.21	118	ePKP	51 16.00	-2.5
ZOBO	169.30	117	PKP	51 21.00	2.3
	1.0s	6.25nm			
SIV	174.82	148	PKP	51 20.80	0.4
			i	51 27.80	
			e	53 00.00	

S.D. = 1.1 on 108 of 119 obs.

? JUN 14, 1990 08h 33m 20.04± 6.47s
41.188 N ±52.2km 29.270 E ±10.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

ISK	0.20	233	ePg	33 24.30	-0.1
HRT	0.47	140	ePg	33 29.00	-0.7
YLV	0.63	173	iPn	33 32.90	0.2
GPA	1.20	138	iPn	33 42.90	0.5
VRI	5.03	339	ePd	34 47.50	10.2X

S.D. = 0.9 on 4 of 5 obs.

• JUN 14, 1990 08h 48m 46.55± 0.96s
51.744 N ±12.2km 176.354 W ± 7.4km
DEPTH = 66.3 ± 8.2 km
4.5mb (10 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS. (7)
Felt (IV) on Adak.

ADK	0.25	304	iPd	48 56.80	-0.3
SMY	5.95	283	eP	50 14.30	0.3
ANM	14.07	20	eP	52 07.80	4.0X
SVW	14.75	42	eP	52 17.10	4.4X
TTA	15.60	36	eP	52 24.50	0.9
IMA	18.36	30	eP	52 58.20	0.4
	0.9s	8.20nm		3.9mb	
TOA	19.27	46	eP	53 10.10	1.8
FBA	19.72	37	eP	53 10.80	-2.2
INK	26.29	35	eP	54 18.00	1.0
MBC	32.70	22	ePd	55 14.90	0.9
	0.9s	6.00nm		4.4mb	
YKA	33.87	47	eP	55 23.10	-1.2
	0.5s	1.70nm		4.2mb	
GMW	34.28	75	eP	55 28.00	-0.1
MAT	35.35	263	eP	55 35.00	-2.2
	0.9s	8.40nm		4.7mb	
PNT	35.37	71	eP	55 38.00	0.7
	0.7s	14.00nm		5.0mb	
NEW	37.32	71	eP	55 53.60	-0.2
SES	39.83	65	eP	56 14.00	-0.6
KVN	41.74	84	eP	56 30.50	-0.1
TNP	42.88	85	eP	56 40.50	0.5
	0.9s	5.53nm		4.4mb	
PTI	42.99	76	eP	56 41.50	0.7
RSSD	47.21	69	eP	57 13.20	-1.3
FRB	51.91	33	eP	57 48.00	-1.9
HFS	68.18	355	eP	59 40.70	-0.5
	0.7s	3.50nm		4.4mb	
GUN	73.12	294	P	00 12.60	0.6
	0.4s	40.00nm		5.7mb	X
GKN	73.76	295	P	00 16.60	1.2
	0.6s	12.00nm		5.0mb	
MTN	78.70	232	iPd	00 44.00	1.0
	0.7s	38.00nm		5.4mb	
WB5	83.28	226	eP	01 07.30	0.3
WRA	83.35	226	Pc	01 07.70	0.3
	0.6s	3.10nm		4.5mb	
TIC	121.37	10	PKP	07 33.80	0.1
KIC	121.68	10	PKP	07 34.20	-0.1
LIC	121.78	10	PKP	07 34.40	-0.1
MAW	147.71	218	iPKPc	08 24.30	3.7X

S.D. = 1.1 on 28 of 31 obs.

• JUN 14, 1990 09h 09m 30.60± 0.81s
11.836 N ±12.4km 121.089 E ±21.5km
DEPTH = 33.0km (normal)
4.4mb (2 obs.)
PANAY, PHILIPPINE ISLANDS (254)

BAG	4.57	354	eP	10 40.80	1.3
QIZ	12.98	305	eP	12 36.40	0.9
SSE	19.17	0	eP	13 53.30	-0.9
NJ2	20.22	355	eP	14 04.00	-1.7
KMI	21.81	310	Pd	14 22.50	0.3
XAN	24.73	335	eP	14 48.00	-2.5
MTN	26.47	158	eP	15 08.50	1.8
SNY	29.96	4	eP	15 34.20	-3.8X
WB5	34.12	157	eP	16 12.10	-2.6
WRA	34.17	157	P	16 15.00	-0.1
	0.6s	3.20nm		4.4mb	
INK	84.69	21	eP	22 03.50	1.4
MBC	85.28	12	eP	22 06.00	1.1
YKA	94.34	23	eP	22 48.80	0.9
	0.8s	1.30nm		4.4mb	

S.D. = 1.7 on 12 of 13 obs.

JUN 14, 1990 09h 21m 39.36± 1.26s
11.662 N ± 7.2km 121.474 E ±10.2km
DEPTH = 26.1 ± 9.2 km
4.7mb (6 obs.)
PANAY, PHILIPPINE ISLANDS (254)

QCP	2.98	353	eP	22 26.00	0.0
BAG	4.80	350	eP	22 53.50	1.5
QIZ	13.39	305	eP	24 48.20	-2.1
SSE	19.34	359	eP	26 06.00	0.2
	1.4s	20.00nm		4.2mb	
WHN	19.92	342	eP	26 11.50	-0.5
LOE	19.94	289	eP	26 14.00	1.6
GYA	20.28	319	P	26 19.60	3.5X
NJ2	20.44	354	eP	26 17.20	-0.3
KMI	22.22	310	Pc	26 38.50	2.7
	2.0s	100.00nm		4.9mb	
XAN	25.05	335	P	27 02.80	-0.3
MTN	26.17	158	eP	27 13.30	-0.3
BJI	28.65	351	eP	27 36.00	0.0
SNY	30.11	3	Pc	27 48.00	-1.0
GTA	33.66	329	eP	28 18.80	-1.6
	1.0s	10.00nm		4.7mb	
WB5	33.82	158	eP	28 20.80	-0.9
WRA	33.86	158	Pc	28 21.10	-1.1
	0.3s	6.10nm		5.0mb	
QIS	36.65	151	eP	28 45.00	-0.8
GUN	37.02	301	P	28 49.60	0.3
PKI	37.30	300	P	28 51.50	-0.3
DMN	37.57	300	P	28 53.80	-0.1
GKN	38.09	301	P	28 57.30	-0.8
ADE	49.17	161	eP	30 28.00	0.8
BWA	52.49	152	eP	30 54.70	2.2
CAN	53.50	152	eP	31 00.30	0.4
MAIO	60.65	305	eP	31 51.00	0.1
FBA	79.85	26	P	33 47.20	0.3
INK	84.71	21	eP	34 12.00	0.0
MBC	85.37	12	eP	34 16.00	0.8
	1.0s	5.00nm		4.7mb	
YKA	94.36	23	eP	34 57.20	-0.6
	0.9s	1.40nm		4.4mb	

S.D. = 1.1 on 28 of 29 obs.

JUN 14, 1990 10h 00m 46.41± 0.72s

14d 10h

60.301 N ± 5.5km 5.339 E ± 8.5km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 3.7 (BER).

BER	0.08	358	iPd	00	48.80	-0.1
			iS	00	51.23	
ASK	0.20	339	iPc	00	50.81	0.1
			iS	00	54.22	
ODD1	0.75	121	eP	01	00.68	-0.5
SUE	0.81	340	iP	01	01.76	-0.3
			eS	01	14.34	
HYA	0.96	25	iPd	01	05.00	0.3
			eS	01	18.99	
KMY	1.09	182	iP	01	07.19	0.3
			iS	01	21.35	
NRA0	3.10	79	P	01	36.50	0.3
			Lg	02	22.70	

S.D. = 0.4 on 7 of 7 obs.

? JUN 14, 1990 10h 14m 48.53± 0.74s
6.085 N ±10.5km 126.576 E ±28.4km
DEPTH = 33.0km (normal)
4.2mb (3 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

MNI	4.93	201	ePd	16	02.20	0.0
WRA	26.97	164	Pd	20	33.90	4.6X
	0.4s		1.30nm			3.9mb
QIS	29.41	155	eP	20	51.50	0.2
STK	40.38	160	eP	22	25.00	-0.1
	0.6s		3.00nm			4.2mb
BRS	41.83	144	iPd	22	29.00	-8.1X
FBA	82.67	25	P	27	10.50	0.6
INK	88.04	21	eP	27	36.00	-0.5
MBC	89.70	13	eP	27	45.00	0.7
YKA	97.43	24	eP	28	19.00	-0.9
	0.7s		1.60nm			4.7mb

S.D. = 0.7 on 7 of 9 obs.

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* JUN 14, 1990 10h 34m 38.79± 1.37s
11.571 N ±19.2km 122.470 E ±11.7km
DEPTH = 33.0km (normal)
4.8mb (2 obs.)
PANAY, PHILIPPINE ISLANDS (254)

QCP	3.34	336	eP	35	40.00	10.1X
BAG	5.15	339	eP	36	00.20	4.4X
QIZ	14.25	303	eP	38	01.00	0.6
SSE	19.47	357	eP	39	05.50	-0.3
WHN	20.33	339	eP	39	16.50	1.6
NJ2	20.65	351	eP	39	17.50	-0.8
GYA	21.00	317	P	39	16.40	-5.7X
KMI	23.03	309	Pc	39	35.00	-7.4X
	1.5s		100.00nm			5.1mb
CHTO	23.80	290	P	39	50.00	0.3
TIA	25.00	350	eP	40	02.00	0.8
XAN	25.56	333	P	40	05.00	-1.5
TIY	27.54	343	eP	40	25.00	0.3
BJI	28.90	350	eP	40	36.00	-0.7
SNY	30.16	2	Pc	40	48.30	0.3
CN2	32.22	4	eP	41	06.00	-0.1
WRA	33.43	159	Pd	41	37.40	20.5X
	0.7s		1.60nm			
MDJ	33.49	9	Pd	41	18.00	0.8
GTA	34.25	328	eP	41	22.50	-1.5
FBA	79.50	26	P	46	44.00	0.6
INK	84.45	21	eP	47	09.00	-0.1
MBC	85.25	12	eP	47	13.00	0.0
YKA	94.06	23	eP	47	54.40	-0.4
	0.9s		1.90nm			4.5mb

S.D. = 0.9 on 17 of 22 obs.

JUN 14, 1990 11h 37m 12.91± 0.59s
79.035 N ± 7.1km 2.048 E ± 9.6km
DEPTH = 10.0km (geophysicist)
4.4mb (6 obs.)
GREENLAND SEA (640)

KBS	1.90	89	iPc	37	43.90	-1.7
			iS	38	05.00	
JNW	8.47	204	iP	39	16.90	-1.5
			eS	40	47.00	
JNE	8.50	203	iP	39	17.50	-1.2
			eS	40	47.30	
JMI	8.59	204	iP	39	18.60	-1.5
			iS	40	50.00	
AKU	14.57	215	eP	40	48.80	8.2X
	1.0s		16.00nm			4.6mb
SUF	17.90	142	iP	41	32.80	9.8X
NRA0	18.63	165	Pn	41	34.40	2.4X
MBC	21.71	326	eP	42	05.00	-0.2
	1.5s		10.00nm			4.0mb
FRB	24.85	274	eP	42	36.00	-0.1
LOR	31.89	178	eP	43	40.60	0.6
SSF	32.10	178	eP	43	42.70	0.9
LBF	32.18	178	eP	43	43.40	0.9
	0.8s		4.70nm			4.5mb
AVF	32.37	178	eP	43	45.10	1.0
	0.9s		4.90nm			4.4mb
BGF	32.60	179	eP	43	47.30	1.2
	0.9s		9.85nm			4.7mb
MAF	32.94	179	eP	43	50.20	1.2
YKA	33.96	312	eP	43	57.00	-0.8
	1.1s		2.00nm			4.0mb
SES	45.08	304	eP	45	31.00	0.7
LRM	49.75	304	eP	46	07.30	0.2
KVN	57.25	307	P	47	02.90	0.3

S.D. = 1.1 on 16 of 19 obs.

JUN 14, 1990 11h 49m 01.35± 0.43s
11.490 N ± 6.0km 122.281 E ± 7.3km
DEPTH = 16.9km (2 depth phases)
5.0mb (16 obs.) 4.5Msz (2 obs.)
PANAY, PHILIPPINE ISLANDS (254)

QCP	3.34	340	eP	49	55.00	1.1
BAG	5.16	342	eP	50	21.10	1.2
DAV	5.45	143	eP	50	25.30	1.5
	1.2s		625.00nm			6.1mb X
KKM	8.07	228	ePc	50	58.50	-2.3
QZH	13.83	346	eP	52	20.00	1.1
	Z 18s		2.10um			
	E 13s		1.10um			
			sP	52	31.00	
QIZ	14.14	303	eP	52	19.30	-3.8X
	N 12s		1.40um			
	E 14s		2.90um			
			eS	55	07.00	
MKS	16.83	190	ePd	53	02.00	4.1X
SSE	19.54	357	Pc	53	32.00	0.9
	1.2s		80.00nm			4.9mb
	Z 20s		1.40um			4.3Msz
	E 14s		0.90um			
			S	57	10.00	
WHN	20.34	340	ePc	53	40.50	0.9
	1.5s		100.00nm			4.9mb
	Z 20s		1.30um			4.3Msz
	N 18s		3.00um			
	E 11s		0.70um			
			eS	57	28.00	
NJ2	20.71	352	Pd	53	44.00	0.6
	Z 14s		0.50um			4.0MszX
	N 15s		0.90um			
	E 12s		0.90um			
			eS	57	28.00	
LOE	20.74	289	eP	53	44.00	0.1
GYA	20.94	318	P	53	46.80	0.8
KGM	21.03	245	eP	53	48.50	1.6
KAGJ	21.16	21	eP	53	48.60	0.6
IPM	22.13	254	ePd	53	58.70	0.8
	1.2s		79.30nm			5.0mb
KUMJ	22.37	19	eP	54	00.20	0.0
KMI	22.94	309	Pc	54	04.50	-1.6
	2.0s		100.00nm			5.0mb
	Z 14s		1.80um			4.7MszX
	N 14s		1.20um			
	E 14s		1.00um			
			sP	54	11.50	
CHG	23.66	291	eP	54	15.00	2.1
	1.1s		32.59nm			4.8mb
SHNJ	23.93	18	eP	54	15.70	0.4
TIA	25.05	350	Pc	54	26.40	0.2
	Z 24s		0.80um			4.1MszX
	E 13s		0.60um			
			eS	58	53.00	
XAN	25.55	334	P	54	29.20	-1.8
MTN	25.72	160	eP	54	32.00	-0.7
DL2	27.31	359	eP	54	46.80	-0.2
	1.0s		50.00nm			5.2mb
	Z 16s		0.05um			3.2MszX
	N 13s		0.78um			
			eS	59	30.00	
TIY	27.56	343	eP	54	49.00	-0.5
	Z 20s		2.10um			4.7Msz
	N 17s		1.50um			
			pP	54	54.50	19km
MTMJ	28.64	27	P	54	58.30	-1.0
CHJJ	28.75	29	P	54	58.30	-1.8
MAT	28.79	27	eP	54	58.00	-2.5
	1.5s		41.67nm			5.0mb
BJI	28.94	350	eP	55	01.00	-0.8
	1.0s		39.00nm			5.1mb
LZH	29.62	329	eP	55	09.80	1.6
	1.4s		41.00nm			5.0mb
			pP	55	14.00	15km
SNY	30.24	2	Pc	55	12.80	-0.6
	1.0s		100.00nm			5.6mb
8TD	30.95	342	eP	55	22.00	2.2
	N 17s		1.70um			
	E 17s		1.90um			
			eS	00	21.00	
CN2	32.31	4	P	55	31.00	-0.6
WB5	33.37	159	eP	55	34.60	-6.4X
WRA	33.42	159	Pd	55	40.10	-1.4
	0.6s		2.40nm			4.3mb
MDJ	33.60	9	iPc	55	42.50	-0.3
	1.2s		100.00nm			5.6mb
LSA	34.15	307	P	55	47.60	-0.7
GUN	37.78	301	P	56	17.70	-1.3
PKI	38.07	300	P	56	19.60	-1.8
DMN	38.34	300	P	56	21.90	-1.7
GKN	38.85	301	P	56	25.90	-1.9
HYB	42.68	283	eP	57	01.00	1.7
GBA	43.78	278	Pd	57	12.20	4.1X
	1.1s		17.20nm			4.8mb
WMQ	43.89	324	eP	57	10.00	1.2
ADE	48.76	162	e(P)	57	43.00	-4.3X
QUE	54.42	299	eP	58	28.70	-1.7
DZM	54.67	128	iPd	58	34.80	2.7
MAIO	61.39	305	eP	59	18.00	-1.2
FBA	79.66	26	P	01	08.20	-1.0
KEV	81.13	339	eP	01	18.00	1.1
SUF	82.68	332	eP	01	25.00	-0.1
NUR	83.82	330	eP	01	32.00	1.0
INK	84.59	21	eP	01	34.00	-0.7
	1.1s		37.00nm			5.5mb
MBC	85.37	12	eP	01	38.00	-0.5
	1.0s		7.00nm			4.8mb
MLR	86.30	316	eP	01	46.00	2.1
YKA	94.21	23	eP	02	19.20	-1.3
	0.9s		6.90nm			5.1mb
ZOBO	168.84	116	PKP	09	11.00	1.1
SIV	174.47	144	PKP	09	12.80	1.0

S.D. = 1.4 on 52 of 57 obs.

% JUN 14, 1990 12h 24m 31.14± 1.17s
39.161 N ± 8.3km 29.616 E ±14.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

KHL	0.84	185	iPg	24	46.50	-0.9
			eSg	24	57.50	
IZI	1.18	355	ePn	24	51.70	-1.5
GPA	1.25	25	ePn	24	55.50	1.2
YLV	1.42	352	iPn	24	55.70	-1.3
KCT	1.46	319	iPn	24	56.20	-1.3
HRT	1.66	1	ePg	25	02.00	1.6
EDC	1.80	312	ePn	25	03.30	0.9
IZM	1.99	248	ePn	25	06.60	1.3

S.D. = 1.6 on 8 of 8 obs.

JUN 14, 1990 12h 47m 28.82± 0.10s
47.869 N ± 2.3km 85.076 E ± 1.8km
DEPTH = 57.9km (geophysicist)
6.1mb (89 obs.)
KAZAKH-XINJIANG BORDER REGION (331)

mb 6.5 (PAS). Ms 6.6 (BRK), 6.4 (PAS). One person killed, 3,000 houses destroyed and 20,000 people left homeless in the Ust-Kamenogorsk-Zayson area, USSR. Damage in Jeminay and Hobahe Counties, China. Felt (V) at Novosibirsk, Semipolatinsk and Ust-Kamenogorsk and (III) at Andizhan and Frunze, USSR. Also felt at Urumqi, China. Depth from broadband displacement seismograms.
FAULT PLANE SOLUTION: P-Waves

NP1:Strike=292 Dip=83 Slip= 157
NP2: 25 67 8
Principol Axes:
T Plg=21 Azm=246
P 11 340
Comment: The focol mechonism is moderotely well controlled ond corresponds to strike-slip foulting with o moderate reverse component. The preferred foult plone is not determined.
RADIATED ENERGY
No. of sto: 8 Focol mech. F
Energy 3.6±1.0*10**14 Nm
MOMENT TENSOR SOLUTION
Dep 46 No. of sto: 14
Moment Tensor; Scole 10**18 Nm
Mrr= 0.81 Mtt=-6.15
Mff= 5.34 Mrt=-4.62
Mrf= 3.38 Mtf=-2.69
Principol oxes:
T Val= 8.63 Plg=32 Azm=249
N -0.11 48 116
P -8.52 25 355
Best Double Couple:Mo=8.6*10**18
NP1:Strike= 35 Dip=48 Slip= 6
NP2: 301 86 138
CENTROID, MOMENT TENSOR (HRV)
Doto Used: GDSN
L.P.B.: 15S, 39C M.W.: 11S, 25C
Centroid Locotion:
Origin Time 12:47:32.6 0.2
Lot 47.88N 0.02 Lon 85.19E 0.04
Dep 36.0 BDY Holf-durotion 8.4
Moment Tensor; Scole 10**18 Nm
Mrr= 3.33 0.15 Mtt=-7.97 0.15
Mff= 4.64 0.16 Mrt=-3.82 0.34
Mrf= 2.13 0.30 Mtf=-5.44 0.15
Principol Axes:
T Val= 8.85 Plg=33 Azm=244
N 1.75 54 89
P -10.60 12 342
Best Double Couple:Mo=9.7*10**18
NP1:Strike= 28 Dip=58 Slip= 16
NP2: 289 76 147

WMQ	4.44	155	iPd	48 35.20	-0.1	
KSH	10.68	221	P	50 01.60	0.0	
IRK	13.11	63	iPc	50 34.00	0.1	
			eS	53 00.00		
GTA	13.60	123	P	50 35.10	-5.4X	
	1.0s	100.00nm			5.5mb	
Z	18s	1353.00um				
N	10s	699.00um				
			S	53 15.00		
DSH	15.07	238	iPc	50 57.00	-2.6	
			iS	53 45.00		
LZH	18.20	123	iPd	51 38.00	-1.0	
	2.0s	1290.00nm			5.8mb	
			pP	51 50.00		
			iS	54 56.00		
			sS	55 12.00		
			SS	55 22.00		
LSA	18.74	163	iP	51 47.00	1.2	
			pP	51 58.00		
			iS	55 10.00		
BTO	19.24	103	P	51 49.00	-2.2	
			sP	52 03.00		
			S	55 17.00		
GKN	19.84	181	P	51 56.80	-0.8	
GUN	19.94	178	P	51 58.20	-0.7	
NDI	20.10	200	iPc	51 57.50	-2.7	
	1.2s	1218.75nm			6.1mb	
			ePP	52 13.00		
			iS	55 26.00		
HHC	20.13	101	iPc	52 00.00	-0.6	
	1.4s	200.00nm			5.3mb	
N	11s	382.00um				
			pP	52 08.00	30kmX	
			sP	52 13.00		
DMN	20.23	180	P	52 00.80	-1.0	
PKI	20.27	179	P	52 01.60	-0.7	
MAIO	22.12	248	iPc	52 19.80	-0.9	
			eS	55 59.00		
CD2	22.16	133	iPd	52 21.50	0.4	
N	10s	357.00um				

			sP	52 35.00		
TIY	22.39	107	iPd	52 23.50	0.2	
	1.3s	600.00nm			5.9mb	
			pP	52 39.00	68kmX	
QUE	22.49	225	iPc+	52 22.90	-1.6	
			eS	56 34.00		
XAN	22.58	119	P	52 24.50	-0.7	
	1.0s	100.00nm			5.2mb	
E	17s	231.00um				
			pP	52 39.00	62kmX	
			sP	52 43.00		
SHL	22.90	164	iP	52 28.00	-0.5	
BJI	23.60	98	eP	52 36.00	1.1	
	2.0s	550.00nm			5.7mb	
N	10s	476.00um				
			epP	52 52.00	69kmX	
			eS	56 44.00		
TIA	26.31	104	Pc	53 01.90	1.3	
	8.0s	8400.00nm			6.3mb X	
N	12s	589.00um				
E	12s	434.00um				
			pP	53 14.50	50kmX	
			eS	57 33.00		
KMI	26.65	142	P-	53 04.00	-0.1	
N	14s	178.60um				
			pP	53 18.00	57kmX	
			S	57 37.00		
GYA	27.27	134	iPc	53 09.00	-0.6	
N	12s	311.00um				
E	12s	327.00um				
			S	57 48.00		
SNY	27.74	88	iPc	53 13.00	-0.6	
	1.6s	900.00nm			6.1mb	
N	10s	468.00um				
E	10s	204.00um				
			sP	53 28.00		
			PP	54 08.00		
			iS	57 54.00		
DL2	27.81	95	Pc	53 15.00	0.7	
	9.0s	1100.00nm			5.5mb X	
N	10s	213.00um				
E	12s	161.00um				
			pP	53 30.00	62kmX	
			PP	54 07.50		
			S	57 54.00		
CN2	28.19	83	iPc	53 17.00	-0.6	
	1.0s	200.00nm			5.7mb	
N	15s	250.00um				
E	15s	296.00um				
			pP	53 25.00	28kmX	
			PP	54 08.00		
			eS	57 58.00		
WHN	28.29	117	ePd	53 18.50	-0.1	
	1.0s	100.00nm			5.4mb	
N	15s	521.00um				
			pP	53 30.00	44kmX	
			S	57 56.00		
TAB	29.72	265	eP	53 33.00	1.4	
			i	53 35.00	7kmX	
BKR	29.84	274	iPc	53 32.00	-0.7	
			iS	58 30.00		
NJ2	30.04	109	Pd	53 34.00	-0.3	
	1.4s	100.00nm			5.4mb	
N	11s	318.00um				
E	13s	320.00um				
			sP	53 49.00		
			iS	58 30.00		
			sS	58 47.00		
OBN	30.50	302	ePc	53 37.20	-0.9	
Z	16s	53.00um			6.3MszX	
			iS	58 32.00		
BOM	30.58	203	ePd	53 39.10	0.0	
			iS	58 37.40		
MDJ	30.64	79	iPc	53 39.50	0.1	
	7.0s	1200.00nm			5.7mb X	
N	10s	256.00um				
			pP	53 54.00	59kmX	
			PP	54 45.00		
			iS	58 40.00		
POO	30.66	201	iPc	53 39.00	-0.9	
	0.8s	177.61nm			5.8mb	
			iS	59 20.00		
HYB	30.84	192	iPc	53 40.40	-1.1	
	1.0s	168.00nm			5.7mb	
			eS	58 40.00		
CHG	31.11	154	ePc	53 43.00	-0.8	
	1.0s	96.00nm			5.5mb	

			eS	58 48.00		
CHTO	31.11	154	ePc	53 42.75	-1.1	
			epPd	53 55.33	49kmX	
			eHPP	54 45.15		
			ePP	54 46.81		
			ePcP	56 39.04		
TIK	31.21	25	iPd	53 42.20	-1.9	
			eS	58 43.50		
KER	31.30	258	iPc	53 45.50	-0.1	
SSE	32.16	108	Pd	53 53.00	0.1	
	1.5s	170.00nm			5.7mb	
N	16s	246.00um				
E	14s	173.00um				
			pP	54 05.00	46kmX	
			PP	55 00.00		
			S	59 00.00		
			sS	59 21.00		
			SS	00 56.00		
			eScS	04 19.50		
APA	32.57	326	iPd	53 40.00	-16.0X	
			iS	59 00.00		
BDT	32.61	155	eP	53 57.00	0.1	
	1.0s	303.60nm			6.1mb	
GZH	33.45	128	Pd	54 04.00	-0.2	
			PP	54 15.50		
			iS	59 19.00		
PUL	33.46	311	iPd	54 03.00	-0.9	
			iS	59 18.00		
MCO	34.35	128	eP	54 13.00	1.0	
NST	34.43	154	iPc	54 12.00	-0.7	
HKC	34.53	127	iPd	54 15.20	1.7	
			iS	59 43.00		
BRF	34.68	244	iP	54 14.10	-0.7	
	0.6s	814.00nm			6.8mb	
SIM	34.74	285	iPc	54 15.00	-0.1	
			iS	59 42.00		
GBA	34.75	193	Pd	54 14.90	-0.5	
	0.8s	189.40nm			6.1mb	
DHR	34.78	244	iPc	54 15.50	-0.1	
QZH	34.95	119	eP	54 16.00	-1.0	
E	16s	333.00um				
			pP	54 28.00	45kmX	
			S	59 40.00		
			SS	02 04.00		
SOD	35.10	325	iP	54 16.70	-1.3	
QIZ	35.12	136	P	54 18.00	-0.5	
N	12s	194.00um				
			pP	54 28.00	34kmX	
			S	59 50.00		
			sS	00 08.00		
KEV	35.21	329	iPd	54 17.36	-1.4	
	1.0s	710.00nm			6.6mb	
			ipPc	54 32.43	59kmX	
			eHPP	55 36.16		
			ePP	55 37.15		
			eScP	59 22.18		
SUF	35.28	317	iP	54 18.30	-1.2	
	0.7s	195.50nm			6.1mb	
NUR	36.20	313	iP	54 26.00	-1.3	
			eS	59 52.00		
KTK1	36.47	328	iPc	54 28.66	-0.8	
ANP	36.52	115	eP	54 44.00	13.6X	
			eS	00 12.00		
KAS	36.52	279	iPc	54 31.20	0.9	
NNT	37.24	156	eP	54 31.70	-4.7X	
SHK	37.63	93	eP	54 41.00	1.4	
BBTK	37.93	278	eP	54 43.00	0.8	
TRO	38.01	329	eP	54 42.20	-0.1	
KOD	38.06	192	eP	54 43.00	-0.6	
			eS	00 36.80		
IAS	38.06	291	eP	54 45.00	2.0	
RYD	38.10	246	iPc	54 43.50	-0.2	
MJMA	38.11	249	iPc	54 42.70	-1.0	
YSS	38.21	69	iPc	54 44.00	-0.3	
			iS	56 20.00		
PPE	38.41	290	ePc	54 46.00	0.0	
CLI	38.49	290	iPc	54 47.00	0.3	
CFR	38.50	288	eP	54 47.00	0.3	
TLB	38.83	287	ePc	54 50.00	0.5	
SHBJ	38.88	264	Pc	54 57.80	7.6X	
PTT	38.90	291	eP	54 51.00	0.9	
QASM	39.05	251	iPc	54 51.50	-0.1	
VRI	39.12	289	ePc	54 52.00	0.0	
PSN	39.13	286	iPd	54 53.00	0.9	
GPA	39.34	280	iP	54 54.00	0.1	
HRT	39.51	281	iP	54 54.70	-0.5	
GBZT	39.67	281	eP	54 57.00	0.5	

14d 12h

FAM	39.70	270	eP	54	57.50	0.7	SRS	43.35	285	ePc	55	27.10	0.5				eS	02	12.00										
UPP	39.77	313	iPd	54	55.80	-1.3	KSP	43.43	301	iP	55	27.00	-0.2	IPM	45.25	157	ePc	55	43.20	1.0								
			i	54	57.50	6kmX				i	55	40.00	48kmX		1.2s	212.40nm				5.9mb								
			i	55	08.00					i	57	23.00					e	55	57.30	53kmX								
			iS	00	58.00		OUR	43.49	284	ePd	55	28.90	1.1	AGG	45.27	283	iPc	55	49.30	7.2X								
MLR	39.78	289	iPc	54	59.00	1.4	SRO	43.51	296	iP	55	29.50	1.6	KMTA	45.31	244	iPc	55	43.80	0.9								
ISK	39.79	282	iP	54	56.70	-0.8				i	56	11.60	194kmX	ABHA	45.32	244	iPc	55	45.20	2.2								
ITU	39.80	282	iPd	54	59.00	1.4				i	57	17.60		KBN	45.41	286	iPd	55	43.20	0.1								
YLV	39.83	281	iP	54	57.20	-0.7	WAJH	43.52	258	iPc	55	29.50	1.4	TTG	45.47	289	iP	55	44.00	0.3								
LFK	39.85	271	iP	54	58.60	0.4	BEO	43.55	291	iP	55	25.30	-2.9	SUE	45.49	318	iP	55	44.20	0.7								
IZI	39.87	280	eP	54	58.70	0.4	SOH	43.65	284	ePd	55	29.00	-0.2	ASK	45.50	317	eP	55	43.80	0.2								
ADI	39.99	267	ePc	55	00.90	1.6	COP	43.69	308	iPd-	55	29.90	0.7	LACI	45.59	287	eP	55	45.40	0.8								
UOSK	40.01	252	iPc	55	01.10	1.5		1.0s	2040.00nm			6.8mb		BLY	45.63	293	eP	55	41.20	-3.7X								
JARJ	40.02	265	Pd	54	48.00	-11.6X				i	55	30.00	0kmX	TIR	45.64	287	iPd	55	45.70	0.7								
LOF	40.06	326	iPc	54	58.17	-1.2				i	55	43.00		BRY	45.69	290	iP	55	49.00	3.4X								
ATZ	40.12	267	ePc	55	02.10	1.8				i	55	45.00		TSI	45.70	161	eP	55	52.00	6.3X								
CSS	40.17	271	eP	55	01.20	0.5	KONO	43.72	315	iPd	55	28.57	-0.9	ULC	45.72	288	iP	55	45.80	0.1								
MDSJ	40.18	264	P	54	58.80	-2.2				ipPd	55	43.80	59kmX	BDV	45.82	289	iP	55	46.60	0.1								
MAJO	40.22	86	ePc	54	59.61	-1.5				ePP	57	16.45		PTJ	45.83	295	eP	55	46.30	-0.2								
			epPc	55	14.51	58kmX	MOL	43.73	319	iP	55	28.97	-0.4	ZAG	45.85	294	eP	55	46.50	-0.1								
MAT	40.22	86	eP	55	00.00	-1.1	KNT	43.78	285	ePd	55	31.40	1.3	KMR	45.91	298	iP+	55	48.00	0.9								
	1.5s	61.11nm				5.2mb	PAIG	43.90	283	ePc	55	31.30	0.2				ipP	56	04.00	63kmX								
			eS	01	08.00		VAY	43.91	286	iPc	55	32.20	1.0				iPP	57	36.40									
KBS	40.26	343	eP	55	01.50	0.6		1.3s	657.00nm			6.2mb					iS	02	36.30									
SALJ	40.33	265	Pd	54	59.10	-3.0X				i	55	44.00	42kmX	BERA	45.92	286	eP	55	46.30	-0.9								
KFNJ	40.43	265	Pc	54	59.90	-2.9	THE	44.00	284	ePc	55	32.30	0.4	KMY	45.96	315	iP	55	47.10	-0.1								
CMP	40.45	289	iPd	55	04.00	1.1	ZST	44.07	297	eP	55	33.30	0.9	VAM	46.04	278	iPd	55	47.50	-0.7								
MTUR	40.45	289	ePd	55	06.50	3.5X				i	55	33.50	83kmX	VLI	46.13	280	eP	55	46.50	-2.5								
BCK	40.62	276	iP	55	04.80	0.3	GRG	44.20	285	ePc	55	33.90	0.3	WET	46.15	300	iPc	55	49.50	0.5								
ZNT	40.63	266	iPc	55	06.40	1.9	APE	44.22	279	eP	55	33.40	-0.4		1.8s	444.00nm				6.1mb								
MKRJ	40.64	265	Pd	55	01.30	-3.4X	SKO	44.31	287	iPc	55	35.00	0.6	HOF	46.20	302	iP	55	49.80	0.5								
AFIF	40.69	249	iPc	55	09.00	3.8X		1.2s	231.00nm			5.8mb		MOX	46.20	302	ePd-	55	50.00	0.7								
JMB	40.74	285	iPc	55	06.00	0.7	N	14s	135.00um						1.8s	523.00nm				6.2mb								
UZH	40.75	295	iPd	55	06.00	0.7				i	55	48.20	49kmX	IGT	46.30	285	eP	55	42.90	-7.3X								
			iS	01	10.00					iPP	57	21.00		SRN	46.33	285	eP	55	49.40	-1.0								
DSI	40.80	265	iPc	55	07.20	1.3				i	57	57.00		VBY	46.45	294	ePc	55	52.20	0.9								
KHL	40.88	278	eP	55	07.50	0.9				iS	02	06.50		ITM	46.54	281	iPd	55	50.60	-1.6								
PPCY	40.87	271	eP	55	06.80	0.3				iSS	05	02.00		KEK	46.55	285	eP	55	50.50	-1.7								
EDC	40.93	281	iP	55	08.00	1.1	VKA	44.51	297	iPc	55	36.90	0.9	PSI	46.56	161	ePd	55	51.40	-1.1								
LISJ	40.94	264	Pd	55	04.50	-2.5		1.9s	1602.00nm			6.5mb			0.7s	21.50nm				5.2mb								
CEI	41.04	294	eP	55	25.00	17.4X	Z	10s	91.00um			7.0MszX		LJU	46.63	295	eP	55	52.50	-0.3								
PVL	41.19	286	iPd	55	06.30	-2.7				i	55	37.60	2kmX	JNE	46.72	333	eP	55	55.10	2.0								
DRA	41.21	289	eP	55	14.00	4.9X				i	55	38.40		JNW	46.75	333	eP	55	55.30	2.0								
NSS	41.30	321	iP	55	08.89	-0.7				i	55	53.00		BHG	46.81	298	iPc	55	55.40	1.2								
KRA	41.60	298	eP	55	12.30	0.0				i	56	31.90			1.6s	523.00nm				6.2mb								
	1.0s	968.00nm				6.5mb				iPP	57	24.00		KLM	46.83	157	eP	55	55.30	0.7								
Z	16s	166.00um				7.0MszX				i	57	40.30		CEY	46.84	295	ePc	55	53.90	-0.6								
			i	55	14.20	6kmX				iS	02	11.00		KBA	46.84	297	iPd	55	55.80	1.1								
			i	55	25.00					i	05	41.20			1.2s	885.00nm				6.6mb								
			i	55	30.80					LR	11	12.00					ic	55	56.60	3kmX								
			e	56	53.00		NEO	44.53	283	iPd	55	36.40	0.1				i	56	13.20									
			iS	01	24.00		QCP	44.53	126	eP	55	28.00	-8.4X	GRF	46.86	301	iPd	55	54.80	0.2								
HFS	41.61	314	eP	55	11.30	-0.9	BRN	44.54	304	eP	55	36.00	-0.1	Z	18s	85.00um				6.7Msz								
	0.7s	294.30nm				6.2mb	HLW	44.58	266	eP+	55	37.50	0.7				e	55	57.10	8kmX								
Z	19s	87.50um				6.7Msz				ePP	57	08.00					e	56	12.10								
			LR	12	04.00					ePPP	57	48.00					eS	02	45.00								
DIM	41.62	285	iPc	55	14.00	1.5				eS	02	07.00		VLS	46.87	283	iPd	55	53.00	-1.8								
SPC	41.77	297	eP	55	14.30	0.4	LIT	44.59	284	ePd	55	37.00	0.3	HVAR	46.87	291	iPc	55	52.80	-1.9								
	4.0s	64.10nm				4.7mb X	SOP	44.63	296	iPc	55	34.90	-2.0	JMI	46.88	333	iP	55	56.50	2.1								
			i	57	02.00		HYA	44.80	318	eP	55	37.60	-0.5	DAG	46.97	342	iPd-	55	53.50	-1.6								
PRNI	41.83	264	iPc	55	15.90	1.5	PRU	44.80	300	P	55	38.50	0.2		1.2s	665.63nm				6.4mb								
ALN	41.85	283	iPc	55	15.00	0.6		1.8s	318.80nm			5.8mb			Z	18s	56.36um			6.6Msz								
KDZ	41.89	284	ePc	55	16.00	1.2	Z	16s	93.90um			6.8MszX			N	17s	35.37um											
RMN	41.98	264	iPc	55	16.80	1.2				PP	57	24.00			E	20s	55.32um											
KSL	42.03	275	iPd	55	15.00	-1.0				S	02	11.00		VOY	47.02	296	ePc	55	54.70	-1.3								
RDO	42.06	284	iPd	55	16.80	0.7				S$	05	36.00		RIY	47.06	295	ePc	55	55.70	-0.5								
AYN	42.10	261	iPc	55	17.70	1.1	IVA	44.85	289	iP	55	39.50	0.7	TRI	47.26	295	ePd	55	57.60	-0.1								
PLD	42.13	285	eP	55	17.00	0.3	ATH	44.92	281	eP	55	40.00	0.6				iSP	02	52.00									
EZN	42.21	282	iP	55	19.00	1.6				e$	02	14.00					iSS	06	06.00									
PGB	42.26	286	iPc	55	19.00	1.1				e$$	05	30.00		LCI	47.41	287	P	55	58.50	-0.5								
RGS	42.33	319	eP	55	19.00	1.0	PVY	44.94	289	iP	55	40.50	0.9	FVI	47.42	297	P	55	59.00	0.0								
RZN	42.33	285	iPc	55	19.00	0.4	PLE	44.94	290	iP	55	40.60	1.0	FUR	47.55	299	eP	56	00.40	0.4								
IZM	42.34	279	iP	55	19.10	0.6	FNA	44.96	286	ePc	55	41.80	2.1		2.0s	1319.00nm				6.6mb								
YER	42.34	277	iP	55	19.00	0.4	ODD1	45.04	316	eP	55	40.50	0.4	AKSR	47.59	258	iPc	56	03.00	2.5								
BZS	42.45	292	ePd	55	20.00	0.7	CLL	45.12	303	iPd	55	40.00	-0.7	BRT	47.60	288	P	56	01.00	0.5								
HOL	42.47	263	iPc	55	20.80	1.2		1.7s	460.00nm			6.0mb		WATA	47.77	298	iPc	56	02.00	0.0								
PSZ	42.51	295	iP	55	21.80	2.0	Z	21s	92.50um			6.7Msz			1.3s	986.00nm				6.6mb								
BSD	42.58	307	iPd	55	20.40	0.2				i	55	55.00	58kmX				ic	56	03.50	5kmX								
	0.6s	360.00nm				6.3mb				iS	02	12.00					i	56	19.40									
TIM	42.65	292	iPd	55	23.00	2.1				eSS	05	40.00		AKRL	47.78	259	iPc	56	04.00	2.0								
NAO	42.77	316	P	55	20.00	-1.7	OHR	45.16	286	iPc	55	41.40	0.1	AGAL	47.86	258	iPc	56	05.00	2.3								
BAG	42.81	125	eP	55	24.00	1.3		1.5s	419.00nm			6.1mb		WIT	47.96	307	ePc	56	05.00	1.9								
VTS	42.86	287	iPc	55	23.00	0.1				i	55	55.00	51kmX				e	56	20.00	58kmX								
SMG	42.99	279	iPd	55	24.30	0.5				i	56	12.80		AGMR	47.97	259	eP	56	07.00	3.5X								
MMB	43.02	285	ePc	55	25.00	1.0				i	56	35.50		SOTA	48.05	298	iPc	56	04.10	0.0								
BSI	43.12	165	eP	55	13.00	-11.9X				i	56	46.00			1.3s	823.00nm				6.6mb								
BUD	43.23	295	iP	55	26.50	1.0	PET	45.24	55	eP	55	42.00	0.4				id	56	04.80	2kmX								

14d 12h

				i	56	22.00		GBR	51.07	239	iP+	56	27.45	0.0		0.9s	131.50nm		6.1mb
				i	56	24.90		EMS	51.17	299	eP	56	27.80	-0.2	Z	20s	35.00um		6.5Msz
AWKL	48.11	259	iPc	56	07.00	2.4		CKI	51.25	297	P	56	27.50	-0.9	ECRI	58.69	300	iPc	57	22.40	-0.1
TNS	48.19	303	ePc	56	05.00	0.0		GIB	51.25	287	P	56	27.00	-1.6	TTA	59.44	28	ePd	57	26.80	-0.6
			id	56	20.70	61kmX		LSD	51.36	298	P	56	29.48	-0.1	ETOR	59.53	298	iPc	57	27.30	-1.1
			ePP	58	18.50			FIN	51.41	296	P	56	28.56	-1.1	ECHE	59.66	297	iPd	57	28.60	-0.6
WTS	48.26	306	ePc	56	06.00	0.6		RSP	51.47	298	P	56	27.95	-2.3	GUMO	59.87	104	eP	57	41.70	10.9X
	1.7s	514.00nm				6.3mb		ROB	51.57	297	P	56	29.89	-1.0		1.2s	1122.22nm				
			e	56	21.00	57kmX		LPG	51.58	298	iPc	56	31.50	0.2	PJG	59.87	104	eP	57	41.80	11.0X
KGM	48.33	155	ePd	56	17.10	10.8X		LPL	51.58	298	iPc	56	31.40	0.2	GUA	59.93	104	eP	57	41.50	10.2X
			e	56	25.00	26kmX		IMI	51.76	296	P	56	31.84	-0.6		0.8s	173.13nm				
OGA	48.33	298	eP	56	06.40	0.0		EKA	51.78	313	Pd	56	31.10	-1.2	Z	20s	22.35um			6.3Msz
CTI	48.37	297	P	56	06.00	-0.5			0.9s	154.90nm			6.0mb					eS	05	45.00		
STU	48.46	301	iPc	56	07.20	0.1		DOI	51.83	297	P	56	31.00	-1.9	ACU	60.00	295	iPd	57	31.50	-0.1
	2.0s	647.06nm				6.3mb		PGF	51.84	294	P	56	31.95	-1.1	COL	60.31	23	iPd	57	32.25	-1.0
ORI	48.52	287	P	56	07.50	-0.2		ENR	51.87	297	P	56	31.53	-1.8				ePPc	57	48.47	61kmX
PLH	48.72	305	ePc	56	08.60	-0.3		RRL	51.87	298	P	56	33.18	-0.3				ePcP	58	13.69	
TDS	48.82	287	Pc	56	10.70	0.8		PZZ	51.91	297	P	56	31.84	-1.8				eHPP	59	44.73	
ARV	48.89	293	P	56	10.50	0.0		STV	51.92	297	P	56	32.05	-1.6				ePP	59	45.28	
OUI	48.92	290	P	56	11.00	0.2		AUTN	52.00	297	P	56	34.61	0.2				eS	05	16.43	
OSS	48.95	298	iPc	56	10.90	-0.1		SBF	52.06	296	eP	56	34.20	-0.5				eSP	06	02.74	
SGO	48.98	289	P	56	12.00	0.9		TOUF	52.09	297	P	56	34.81	-0.3				eSS	09	06.48	
MGR	49.06	288	Pc	56	11.50	-0.2		AURF	52.12	296	P	56	34.79	-0.3	FBA	60.31	23	ePd	57	32.30	-1.0
DBN	49.10	307	iP-	56	13.00	1.2		REVF	52.17	296	P	56	34.94	-0.6	TRT	60.45	148	iPc	57	32.00	-2.7
Z	16s	68.90um				6.7MszX		MVIF	52.22	297	P	56	35.55	-0.4		0.7s	86.30nm			6.0mb	
			iS	03	16.00			LOR	52.31	302	iPc	56	35.20	-1.2	INK	60.61	15	iPd	57	34.50	-0.8
			eSS	06	45.00				1.2s	255.70nm			6.1mb		GUD	60.88	299	iPc	57	37.10	-0.6
SAX	49.13	299	eP	56	12.80	0.2		LBF	52.39	301	iPc	56	35.90	-1.2	MKS	60.89	140	iPc	57	37.60	-0.1
BSS	49.18	289	P	56	13.00	0.4		AKU	52.45	329	iP	56	37.90	0.7	SVW	60.90	29	ePd	57	37.60	0.2
GWF	49.27	302	P	56	12.62	-0.7			1.0s	244.00nm			6.2mb			1.7s	1305.20nm			6.8mb	
SAL	49.27	297	P	56	13.00	-0.3					i	56	39.20	4kmX	EMON	60.93	304	iPc	57	37.30	-0.5
ASS	49.30	293	P	56	14.00	0.4		CALN	52.45	297	P	56	37.35	-0.4	EALH	61.03	295	iPd	57	38.40	-0.1
SDI	49.31	291	Pc	56	13.50	-0.2		SSF	52.62	302	iPc	56	37.50	-1.2	EVIA	61.18	297	iPd	57	39.10	-0.6
ENN	49.34	305	ePc	56	14.00	0.3		SMF	52.66	301	iPc	56	38.20	-0.8	TOL	61.31	299	iPc	57	40.50	0.1
	1.6s	538.00nm				6.3mb		FRF	52.71	296	eP	56	38.90	-0.5		1.5s	1277.78nm			6.8mb	
			e	56	29.50	60kmX		AVF	52.86	301	iPc	56	39.60	-0.9				iPP	00	00.00	
SFI	49.34	294	P	56	15.00	1.1		LMR	52.92	296	eP	56	40.20	-0.7				iPPP	01	44.00	
MEM	49.37	304	iPd	56	14.68	0.7		LRG	52.94	297	eP	56	40.50	-0.6				iS	05	58.00	
SLE	49.37	300	ePc	56	14.00	-0.1			1.0s	250.00nm			6.2mb					iScS	07	32.00	
AZI	49.39	291	P	56	15.00	0.7		PLDF	53.16	300	P	56	41.86	-0.9				iSS	09	46.00	
CRE	49.44	294	P	56	15.50	0.7		DAV	53.22	126	eP	56	51.00	7.6X				iSSS	12	30.00	
PGD	49.45	294	P	56	15.50	0.6		BGF	53.28	301	iPc	56	42.70	-0.9	ERUA	61.49	303	iPc	57	41.30	-0.3
VDL	49.45	298	eP	56	14.90	0.0		AGO	53.39	301	P	56	43.96	-0.5	STS	61.96	304	iPd	57	44.71	-0.1
LLS	49.53	299	ePc	56	15.10	-0.5		SMY	53.57	49	eP	56	42.90	-2.6	ENIJ	62.08	295	iPc	57	45.40	-0.3
ZLA	49.58	300	ePc	56	15.70	0.0		MAF	53.63	301	iPc	56	45.70	-0.4	EBAN	62.26	297	iPc	57	46.50	-0.3
FEL	49.59	300	P	56	15.32	-0.6		PYM	53.63	301	P	56	45.91	-0.4	EZAM	62.52	303	iP+	57	48.40	-0.1
MDI	49.67	297	P	56	15.00	-1.3		LBL	53.79	300	P	56	47.02	-0.2	PMR	62.55	26	ePd	57	46.70	-1.6
WLS	49.70	301	P	56	15.94	-0.7		TCF	53.79	301	iPc	56	46.80	-0.6		2.3s	2425.00nm			6.9mb	
CDF	49.75	301	P	56	16.40	-0.7		LDF	53.82	305	iPc	56	46.60	-0.9	Z	20s	75.00um			6.9Msz	
FIR	49.79	294	eP	56	18.00	0.7		YRH	53.85	311	eP	56	47.30	-0.4	ECOG	62.70	296	iPc	57	48.80	-1.1
			iS	03	21.00			FLN	53.92	305	iPc	56	47.30	-0.9	AFC	62.70	296	iPc	57	48.70	-1.2
SOI	49.89	286	Pc	56	18.00	-0.1			0.9s	767.80nm			6.7mb		TOA	62.98	24	ePd	57	50.40	-0.9
ECH	49.92	301	P	56	17.72	-0.6		LSF	54.21	302	iPc	56	49.20	-1.2	DWY	63.08	20	P	57	50.30	-1.5
PPI	49.95	160	eP	56	17.60	-1.1		GRR	54.34	305	iPc	56	50.40	-0.9	EHOR	63.36	298	iPc	57	53.70	-0.3
RMP	49.95	291	P	56	19.00	0.4		LPF	54.64	305	iPc	56	52.80	-0.8	SDN	63.40	36	eP	57	52.80	-1.2
TMA	50.00	298	ePc	56	18.00	-1.1		CAF	54.65	300	iPc	56	53.70	0.0	MAL	63.57	296	iPc	57	53.00	-2.4
BDI	50.04	295	P	56	19.50	0.2		REY	54.67	329	iP	56	56.00	2.4				iPP	01	58.00	
BBS	50.10	300	P	56	19.43	-0.3		ETA	54.73	312	eP	56	53.70	-0.4	TAF	63.61	293	iPd	57	57.00	1.2
MOF	50.12	301	P	56	19.15	-0.7		RJF	54.75	301	iPc	56	54.20	-0.2	AAI	63.69	130	eP	57	59.00	2.6
UCC	50.18	305	Pd-	56	20.50	0.3		AAE	54.92	241	eP	56	56.50	0.2	EPRU	63.91	297	iPc	57	56.70	-1.0
			S	03	31.00			MFF	54.96	303	iPc	56	54.90	-1.0	ALJ	64.33	297	eP	58	00.50	0.0
			e	07	05.00			ECP	55.10	311	eP	56	56.30	-0.5	EJIF	64.39	297	iPc	57	59.60	-1.2
VAI	50.19	298	P	56	19.50	-0.8			0.9s	352.00nm			6.4mb		EVAL	64.40	298	iPc	58	00.51	-0.4
ATN	50.22	286	P	56	20.00	-0.7		M8C	55.17	7	iPd	56	55.90	-1.1	NAI	64.42	236	iPd	58	02.50	1.0
PII	50.26	295	Pc	56	20.50	-0.4			0.5s	235.00nm			6.5mb			1.0s	25.00nm			5.2mb	
TDD	50.29	239	iP+	56	21.59	0.2		ANM	55.28	30	ePd	56	58.20	0.2	GIBL	64.43	297	eP	58	01.50	0.4
BSF	50.32	301	eP	56	20.80	-0.7		LPO	55.30	300	iPc	56	58.20	-0.2	OJEN	64.67	296	eP	58	02.50	-0.2
BOB	50.36	296	P	56	22.00	0.2		LFF	55.41	301	iPc	56	59.20	0.0	PLAT	64.79	297	eP	58	05.60	2.2
SNF	50.37	305	P	56	22.80	1.2		ETER	55.71	297	iPd	57	00.60	-0.8	CNIL	64.80	297	eP	58	05.00	1.6
			id	56	37.23	54kmX		BST	56.14	306	P	57	03.66	-0.7	NKM	65.02	296	iPc	58	03.50	-1.4
			e	59	00.40			EPF	56.77	299	iPc	57	07.80	-1.3				i	58	19.00	56kmX
DOU	50.41	304	P-	56	22.30	0.4			1.0s	312.50nm			6.3mb		LIS	65.06	301	iPc	58	05.50	0.5
	1.6s	2375.00nm				7.0mb		OGE	57.16	300	P	57	10.52	-1.3	MID	65.11	26	P	58	05.60	0.5
			e	56	47.00	103kmX		VAL	57.18	313	eP	57	11.00	-0.7	IFR	66.15	294	iPc	58	12.00	-0.4
			S	03	22.00			JAU	57.18	300	P	57	12.02	-0.1				i	58	15.50	11kmX
HAU	50.49	301	eP	56	22.10	-0.5		ESEL	57.20	295	iPc	57	11.90	-0.2				i	58	24.50	
ARO	50.55	239	iP+	56	24.00	0.5		ESCF	57.28	300	P	57	15.44	2.8X	HYT	66.32	21	P	58	12.50	-0.5
LOMF	50.55	300	P	56	22.78	-0.4		MADF	57.38	300	P	57	13.12	-0.2	FRB	66.80	348	ePd	58	13.60	-2.2
MMK	50.57	298	ePc	56	23.00	-0.5		LHE	57.40	300	P	57	13.16	-0.4	AVE	67.70	295	iP	58	21.20	-0.7
VITF	50.59	302	P	56	22.99	-0.3		ISSF	57.44	300	P	57	13.66	-0.2				i	58	37.00	57kmX
DAF	50.67	239	iP+	56	24.58	0.3		ELYF	57.47	300	P	57	13.88	0.0	YKA	68.87	10	eP	58	27.10	-1.6
HLD	50.73	239	iP+	56	24.52	-0.2		MNI	57.60	131	eP	57	17.00	2.0		0.8s	186.30nm			6.1mb	
SGH	50.74	239	iP+	56	25.32	0.4		IMA	57.82	24	ePd	57	14.80	-1.4	TIO	69.24	293	iPc	58	31.50	-0.2
ORX	50.78	298	P	56	23.23	-1.8		EBR	58.02	297	iPd	57	17.00	-0.7				i	58	47.00	56kmX
MNO	50.85	286	P	56	26.50	0.8					e	17	25.10		LWI	69.83	242	iPd	58	34.80	-0.7
DIX	50.88	299	ePc	56	25.70	-0.2		EROQ	58.06	297	iPc	57	17.00	-1.1	SIT	70.18	22	eP	58	38.10	1.4
PCP	51.02	297	P	56	26.61	-0.2		ADK	58.64	46	eP	57	20.80	-1.1		2.0s	1125.90nm			6.5mb	

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14d  12h

BCAO   71.09 255 iPc    58 41.00  -2.0
       1.6s  624.00nm          6.3mb
                 id     58 55.00  49kmX
MTN    73.00 133 eP     58 52.30  -1.8
MNDI   74.32 118 eP     59 04.00   1.8
KNA    74.37 136 iPc    59 02.00   0.0
       0.5s  145.00nm          6.2mb
PDA    74.83 310 e(P)   59 08.00   3.5X
SCH    74.97 344 ePd    59 03.60  -1.5
       0.8s  105.00nm          5.8mb
CFTV   75.19 296 iPd    59 07.00   0.2
                 i      59 22.50  55kmX
NANU   75.26 151 eP     59 07.70   0.7
       0.4s   32.00nm          5.6mb
                 e      59 22.00  50kmX
GGC    76.34 297 eP     59 13.20  -0.1
                 i      59 28.10  53kmX
CTFE   76.46 297 iP     59 16.60   2.7
                 i      59 30.40  48kmX
TBT    77.29 299 iP     59 19.50   1.0
                 i      59 34.90  55kmX
FFC    77.61   4 iPd    59 19.20  -0.6
       0.8s  218.00nm          6.2mb
RAB    78.01 110 e(P)   59 26.00   3.4X
                 iS     09 36.00
CHIE   78.02 298 iPd    59 24.10   1.5
                 i      59 39.90  56kmX
EDM    78.07  11 iPd    59 22.10  -0.4
MEKA   80.01 150 eP     59 32.90  -0.3
       0.6s   50.00nm          5.6mb
WB5    80.60 134 iPc    59 36.40   0.0
                 i      59 51.20  52kmX
WRA    80.64 134 Pd     59 37.20   0.5
       0.7s   66.40nm          5.7mb
PGC    80.73  19 eP     59 38.00   1.2
       1.0s  327.00nm          6.2mb
PNT    80.87  16 ePd    59 38.00   0.4
       0.8s  176.00nm          6.0mb
SES    81.14  10 ePd    59 38.60  -0.4
       0.9s  486.00nm          6.4mb
                 pP     59 51.00  41kmX
KRI    81.21 233 iPc    59 43.50   3.6X
                 eS     09 47.50
MRWA   81.61 153 eP     59 41.00  -0.5
NEW    82.33  15 iPd    59 45.00  -0.2
       1.0s  200.00nm          6.1mb
LON    82.88  18 ePd    59 48.12  -0.1
                 epPc   00 04.34  57kmX
                 ed     00 06.33
BAL    83.12 153 eP     59 48.50  -0.8
LKO    83.45 277 Pc     59 51.34  -0.1
       0.5s   53.50nm          5.8mb
QIS    83.80 130 iPc    59 52.60  -0.4
MUN    84.25 154 eP     59 54.50  -0.5
                 eS     10 19.00
KLB    84.37 152 eP     59 55.00  -0.6
BUL    84.47 232 iPd    59 54.90  -1.6
                 iS     10 17.50
COR    84.61  20 ePd    59 59.59   2.8
                 ec     00 11.18
                 epPd   00 16.97  62kmX
                 eScS   09 54.80
                 eSP    11 24.62
COOL   84.82 149 eP     59 57.50  -0.4
TIC    85.19 275 Pc     00 00.58   0.4
LRM    85.44  12 eP     00 01.20  -0.1
LJC    85.50 274 Pc     00 02.30   0.6
    Z  22s    16.00um          6.4Msz
RSNY   86.24 346 ePd    00 09.00   4.0X
    Z  20s    67.80um          7.0Msz
RKG    86.44 154 eP     00 22.00  16.2X
HRV    87.67 343 iPd    00 12.76   0.8
HRV    87.67 343 ePd    00 23.19  11.3X
                 ed     00 28.15  16kmX
                 eS     10 24.40
                 eScS   10 24.71
                 iSKSpc10 31.84
                 eSP    11 50.06
FHC    88.02  22 eP     00 15.00   1.3
BFT    88.31 228 iPd    00 15.00  -0.3
       1.2s  610.00nm          6.7mb
WDC    88.59  21 ePd    00 16.60   0.2
                 eS     11 07.20
MIN    89.03  20 e(P)   00 18.80   0.1
                 eS     11 10.70
SLR    89.24 229 iPc    00 19.00  -0.6
       1.6s  130.00nm          6.0mb

    Z  18s    77.20um          7.2Msz
TXNY   89.45 344 iP     00 20.90   0.4
PNJ    89.71 344 iP     00 23.50   1.9
BPI    89.73 229 iPc    00 28.00   6.0X
GMTN   89.74 344 eP     00 18.20  -3.6X
ORV    89.80  20 ePd    00 22.30   0.1
                 eS     11 13.00
CLE    90.24 350 iP     00 26.10   2.0
SCP    90.43 347 iPd    00 24.76  -0.3
                 ed     00 35.52
                 epPd   00 42.31  62kmX
                 iPP    04 01.61
                 eHPP   04 03.27
PRY    90.63 229 iPd    00 25.50  -0.6
       1.5s  100.00nm          6.0mb
BFS    90.95 229 iPd    00 21.50  -6.1X
       0.7s   38.00nm          5.9mb
HON    90.97  56 P      00 35.00   7.3X
    Z  19s     8.33um          6.2Msz
KVN    91.03  18 iPd    00 28.00  -0.1
QLP    91.15 130 ePc    00 29.00   0.7
BRK    91.22  21 eP     00 29.60   0.9
    Z  20s    34.00um          6.8Msz
BKS    91.23  21 ePd    00 32.00   3.3X
       2.0s  786.00nm          6.8mb
    Z  20s    19.00um          6.5Msz
    N  20s    15.00um
    E  20s    15.00um
                 ePP    03 52.00
                 e      07 57.00
                 e      10 07.00
                 e      10 18.00
                 iS     11 03.00
                 e      11 28.00
                 i      11 38.00
                 e      12 44.00
                 eSS    17 45.00
                 i      21 59.00
                 eLQ    24 18.00
                 e      24 52.00
                 eLR    26 48.00
CMB    91.51  20 iPd    00 30.60   0.5
                 ed     00 42.19
                 epPc   00 45.83  52kmX
                 ePP    04 03.32
                 eHPP   04 04.56
                 eS     11 25.20
                 eSKPP'29 52.30
PCC    91.55  22 ePd    00 30.90   0.7
SEK    91.70 228 iPd    00 31.50   0.5
       1.1s  130.00nm          6.3mb
MHC    91.88  21 eP     00 32.50   0.6
SWZ    91.94 230 iPc    00 19.50 -12.6X
       1.1s  210.00nm
GCC    92.09  21 eP     00 33.30   0.6
GLD    92.28   8 P      00 35.50   1.7
       1.5s  303.13nm          6.5mb
    Z  18s    46.92um          7.0Msz
GOL    92.32   8 P      00 35.00   0.9
    Z  18s    26.86um          6.7Msz
SAO    92.47  21 e(P)   00 35.00   0.5
FRI    92.66  20 eP     00 35.90   0.6
LLA    92.74  21 eP     00 36.90   1.2
WIN    92.79 239 iPc    00 37.00   0.8
       1.5s  140.00nm          6.2mb
    Z  20s    80.00um          7.2Msz
CBN    92.89 346 eP     00 38.00   1.7
                 e      04 21.00
PRS    92.90  21 eP     00 37.40   0.9
PRI    93.26  21 ePd    00 39.70   1.4
RMQ    93.47 126 iPd    00 40.10   1.1
                 i      00 52.10  39kmX
STK    94.16 135 iPc    00 41.90  -0.1
       0.8s   27.00nm          5.7mb
ISA    94.21  19 eP     00 46.00   3.4X
CLC    94.26  18 eP     00 44.00   1.2
BLA    94.31 348 eP     00 44.20   1.2
       2.2s  153.85nm          6.0mb
    Z  18s    42.27um          6.9Msz
CCM    94.39 357 ePd    00 43.94   0.7
                 ed     00 55.03
                 epPc   00 59.83  55kmX
                 ePP    04 27.31
                 eHPP   04 28.14
HVD    94.62 228 iP     01 02.50  18.1X
       1.0s   50.00nm
GSC    94.92  18 eP     00 46.00   0.1

SYP    94.96  21 eP     00 50.00   3.8X
SBB    95.29  19 eP     00 48.00   0.4
ADE    95.39 138 iPc+   00 48.00   0.3
MWC    95.69  19 eP     00 53.00   3.4X
ACO    95.72   3 eP     00 51.80   2.3
       1.4s   78.90nm          6.0mb
PAS    95.74  19 eP     00 51.00   1.4
                 esP    01 16.00
                 ePP    04 38.00
                 ePPP   06 50.00
                 eSKS   11 22.00
                 eS     12 02.00
                 ePS    13 46.00
                 eSS    18 24.00
                 eSSS   23 19.00
                 RScS   24 06.00
                 eLg    28 20.00
                 eLR    30 52.00
CMS    95.93 131 eP     00 50.00  -0.1
RVR    96.06  19 eP     00 54.00   3.0X
TPC    96.23  18 eP     00 55.00   3.1X
GRM    96.29 226 iPc    00 52.50   0.7
       1.2s  140.00nm          6.4mb
BRS    96.38 124 iPc    00 33.20 -19.1X
                 i      10 07.00
                 eS     11 45.00
RSCP   96.48 352 P      00 55.00   2.0
    Z  21s    38.04um          6.9Msz
POF    96.53 233 eP     00 54.00   1.1
       1.0s   80.00nm          6.2mb
LNO    96.59   1 eP     00 56.50   3.3X
TUL    96.59   1 eP     00 54.80   1.4
       1.3s   33.50nm          5.7mb
    Z  19s    31.37um          6.8Msz
                 e      01 06.00  36kmX
PLM    96.79  18 eP     00 58.00   3.4X
ANMO   96.91  10 P      00 56.00   0.9
                 pP     01 11.50  53kmX
ALQ    96.92  10 eP     00 55.00  -0.2
       1.0s   60.00nm          6.1mb
    Z  18s    37.80um          6.9Msz
BAR    97.48  18 eP     01 01.00   3.5X
GLA    97.49  17 eP     01 01.00   3.4X
MEO    97.65   3 eP     01 00.00   1.8
BWA    99.58 131 eP     01 11.20   4.6X
CER    99.99 231 iPd    01 10.00   1.5
       1.0s   72.00nm          6.2mb
CAN   100.57 132 ePdiff01 14.60    3.4X
CAI   116.11 291 ePKP   06 23.80  16.6X
MAW   116.36 189 ePKP   06 07.00   1.0
    Z  20s    25.00um          6.8Msz
PMO   125.59  72 iPKP   06 30.40   5.2X
       0.9s   30.00nm
TPT   125.76  71 iPKP   06 30.70   5.2X
       0.9s   20.00nm
VAH   125.94  72 iPKP   06 31.00   5.1X
       0.9s   15.00nm
AFR   126.25  75 iPKP   06 31.60   5.2X
       0.9s   25.00nm
PPT   126.40  75 iPKP   06 32.00   5.2X
       0.9s   50.00nm
PAE   126.46  75 iPKP   06 32.10   5.2X
       0.9s   30.00nm
PPN   126.47  75 iPKP   06 32.00   5.1X
       0.9s   10.00nm
TVO   126.77  75 iPKP   06 33.00   5.5X
       0.9s   70.00nm
BAO   129.87 294 ePKP   06 34.20   0.6
SBA   134.58 163 e(PKP)06 28.20  -12.4X
SPA   137.68 180 ePKP   06 34.80 -12.1X
       1.0s   20.00nm
    Z  20s    20.27um          6.9Msz
SIV   137.75 307 ePKP   06 40.00  -8.4X
                 i      06 48.00
                 i      06 59.00
RKT   139.74  66 iPKP   07 08.00  16.2X
       1.6s  280.00nm
PT08  141.03 331 ePKP   06 48.70  -6.1X
NNA   141.16 331 ePKP   06 44.00 -10.6X
ZOBO  141.54 316 PKP    06 50.00  -6.0X
       1.0s   45.00nm
                 i      07 13.20
PT06  142.70 329 iPKP   06 58.00   0.8
ANT   149.00 312 iPKP   07 12.50   5.1X
LPA   149.68 282 PKPd+  07 14.00   5.9X
       1.1s  405.06nm
    Z  20s     8.51um          6.5Msz
```

RTRS	153.66	303	e(PKP)	07	24.00	9.9X
			e	07	26.00	
			e	07	37.50	
RTLL	153.95	300	e(PKP)	07	18.80	4.3X
			e	07	20.70	
			e	07	36.80	
CFA	154.01	299	e(PKP)	07	14.90	0.3
ZON	154.23	300	e(PKP)	07	27.00	12.1X
ROCH	156.62	301	ePKP	07	19.00	0.7
TACH	157.06	300	ePKP	07	19.50	0.9
LNV	157.55	300	iPKP	07	20.40	1.3

S.D. = 1.0 on 501 of 573 obs.

JUN 14, 1990 13h 27m 29.99± 1.01s
44.517 N ± 5.8km 129.914 W ± 7.6km
DEPTH = 10.0km (geophysicist)
4.2mb (2 obs.)
OFF COAST OF OREGON (30)

GROR	4.52	77	P	28	39.59	-0.5
KMOR	4.69	74	P	28	41.48	-1.0
NLO	4.82	69	P	28	44.78	0.3
ONR	4.91	59	P	28	45.88	0.3
OBH	5.07	54	P	28	47.74	-0.1
BMW	5.09	65	P	28	47.61	-0.6
OOW	5.12	49	P	28	48.70	0.2
OFK	5.16	46	P	28	49.40	0.3
OTR	5.25	45	P	28	50.95	0.5
OSP	5.27	42	P	28	51.48	0.8
RVW	5.31	70	P	28	51.13	-0.2
CPW	5.34	60	P	28	51.39	-0.4
OBC	5.36	47	P	28	52.27	0.2
PGO	5.38	77	P	28	52.90	0.7
GT2	5.47	81	P	28	53.90	0.3
LVP	5.52	71	P	28	53.71	-0.6
APW	5.53	65	P	28	53.98	-0.4
CZM	5.55	67	P	28	54.22	-0.5
FL2	5.59	70	P	28	55.21	-0.1
ERK	5.62	69	P	28	55.22	-0.6
MTMW	5.64	72	P	28	55.59	-0.4
STW	5.65	48	P	28	56.08	0.1
VLMM	5.67	77	P	28	56.75	0.3
STD	5.68	70	P	28	56.49	-0.2
HSR	5.70	70	P	28	57.15	0.3
REMW	5.70	70	P	28	57.96	1.0
YEL	5.70	70	P	28	57.56	0.6
HDW	5.71	54	P	28	56.63	-0.3
JLK	5.71	71	P	28	57.66	0.7
TDL	5.72	69	P	28	56.76	-0.4
ESD	5.72	70	P	28	57.45	0.2
MEW	5.74	60	P	28	58.24	0.9
SOSW	5.74	70	P	28	57.48	0.0
LMW	5.77	65	P	28	57.89	0.2
KOSW	5.77	68	P	28	57.53	-0.2
CDFW	5.77	71	P	28	57.52	-0.3
GMW	5.81	56	P	28	58.23	-0.1
TDH	5.82	80	P	28	58.57	0.0
GHW	5.91	62	P	28	59.92	0.3
VLL	5.92	78	P	29	00.24	0.4
BLN	5.94	52	P	29	00.71	0.5
APM	5.95	75	P	29	00.82	0.5
VBEM	5.95	82	P	29	01.16	0.8
GULW	6.04	74	P	29	01.83	0.2
VFP	6.05	79	P	29	01.92	0.1
RVC	6.07	64	P	29	02.29	0.4
PGC	6.08	45	eP	29	00.00	-1.9
	0.4s	84.00nm				5.9mb X
ASR	6.09	72	P	29	02.03	-0.3
SPW	6.14	58	P	29	03.67	0.8
GLK	6.18	68	P	29	03.88	0.3
FMW	6.25	64	P	29	04.53	-0.2
WPW	6.26	67	P	29	04.96	0.2
GSM	6.27	62	P	29	05.17	0.2
OHW	6.37	51	P	29	06.32	0.2
BLH	6.40	56	P	29	05.99	-0.6
MCW	6.41	47	P	29	06.80	0.0
HTW	6.54	57	P	29	08.38	-0.3
JCW	6.64	54	P	29	10.18	0.2
VIPM	6.65	87	P	29	09.28	-1.0
CMW	6.65	51	P	29	10.66	0.4
NAC	6.75	68	P	29	11.78	0.2
EBG	6.97	67	P	29	14.58	0.0
MBW	6.97	49	P	29	15.24	0.4
RPW	7.01	53	P	29	15.25	0.1
TBM	7.03	65	P	29	15.87	0.4
MXC	7.06	70	P	29	15.88	0.0
ETW	7.35	62	P	29	19.86	-0.2
MDW	7.43	70	P	29	20.85	-0.2
NLW	7.53	58	P	29	22.15	-0.4
WAH2	7.59	69	P	29	23.38	0.1
GBL	7.63	71	P	29	23.83	0.0
CRF	7.73	69	P	29	25.12	-0.1
EPH	7.73	65	P	29	24.84	-0.5
SAW	7.97	63	P	29	27.48	-1.2
DPW	8.79	63	P	29	38.61	-1.4
YKA	20.08	21	eP	32	05.50	-0.6
	0.9s	5.40nm				3.9mb
FFC	20.65	50	iPc	32	12.20	0.2
	0.7s	16.00nm				4.5mb
ZOBO	82.52	121	P	39	55.20	0.2

S.D. = 0.5 on 78 of 78 obs.

? JUN 14, 1990 13h 55m 10.49± 6.72s
43.025 N ±14.6km 0.192 W ±41.5km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
MD 1.0 (STR).

JAU	0.13	276	Pg	55	13.75	0.0
OGE	0.25	305	Pg	55	15.88	0.0
ESCF	0.29	281	Pg	55	16.48	0.0
			Sg	55	18.74	
LHE	0.33	251	Pg	55	17.41	0.0
			Sg	55	20.90	
ATE	0.38	280	Pg	55	18.04	-0.2
			Sg	55	22.16	
ISSF	0.44	271	Pg	55	19.78	0.2
			Sg	55	24.54	

S.D. = 0.2 on 6 of 6 obs.

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* JUN 14, 1990 14h 02m 02.14± 0.55s
7.004 S ±10.3km 125.074 E ±12.1km
DEPTH = 567.0 ± 9.6 km
5.0mb (5 obs.)
BANDA SEA (280)

AAI	4.53	43	eP	03	30.50	0.7
			eS	04	37.50	
MKS	5.85	287	iPc	03	41.80	0.9
MTN	8.32	135	iPd	04	03.00	-1.3
KNA	9.41	158	iPd	04	13.80	-1.3
	0.4s	47.00nm				5.0mb
WB5	15.66	146	iPc	05	17.00	-0.3
			eS	07	58.00	
WRA	15.69	146	Pc	05	17.60	-0.1
	0.7s	39.60nm				5.0mb
QLP	26.68	139	iPc	06	58.50	0.1
STK	29.16	150	iPc	07	20.10	0.2
	0.5s	39.00nm				5.3mb
RMQ	29.72	133	iPc	07	24.50	-0.4
BRS	33.19	131	iPd	07	58.20	4.1X
BWA	34.76	145	eP	08	09.20	2.0
CAN	35.74	145	eP	08	16.20	1.0
DZM	42.59	115	iPc	09	10.80	0.1
MAT	45.03	15	eP	09	29.00	-0.4
	0.8s	8.21nm				4.3mb
GUN	51.36	314	P	10	17.20	-0.2
PKI	51.50	314	P	10	17.80	-0.6
DMN	51.74	313	P	10	19.90	-0.1
	0.7s	27.00nm				4.8mb
GKN	52.30	314	P	10	23.60	-0.4

S.D. = 0.9 on 17 of 18 obs.

JUN 14, 1990 14h 18m 10.62± 0.12s
47.892 N ± 3.0km 85.050 E ± 2.5km
DEPTH = 37.1km (50 depth phases)
5.2mb (74 obs.) 5.0Msz (2 obs.)
KAZAKH-XINJIANG BORDER REGION (331)

WMQ	4.47	155	iPc	19	20.20	2.4
KSH	10.68	221	P	20	47.00	2.7
			S	22	43.00	
GTA	13.63	123	iPd	21	21.10	-2.6
	1.0s	100.00nm				5.6mb
Z	16s	5.80um				3.9MszX
LZH	18.23	123	Pd	22	22.00	-0.5
	1.2s	200.00nm				5.1mb
Z	20s	3.20um				
N	10s	1.80um				
			sP	22	37.00	
LSA	18.77	163	P	22	31.60	2.2
BTO	19.26	103	eP	22	34.50	-0.4
N	12s	1.70um				
E	12s	1.90um				
GKN	19.86	181	Pc	22	41.40	-0.1
	0.6s	26.00nm				4.7mb
KKN	20.87	179	Pc	22	42.60	-1.2
NDI	20.12	200	iPc	22	42.60	-1.4
	0.8s	100.75nm				5.2mb
			iS	26	18.60	
HHC	20.16	101	eP	22	44.00	-0.5
Z	20s	5.70um				4.9Msz
			eS	26	28.00	
DMN	20.25	180	Pc	22	45.60	-0.1
PKI	20.29	179	Pc	22	46.20	0.0
MAIO	22.11	248	eP	23	06.00	1.7
			eS	27	27.00	
CD2	22.19	133	eP	23	06.00	0.9
TIY	22.41	107	iPc	23	07.50	0.2
	1.4s	300.00nm				5.6mb
Z	15s	2.10um				4.7MszX
QUE	22.49	225	iPd	23	07.80	-0.4
XAN	22.61	119	Pc	23	09.00	-0.2
SHL	22.93	164	iP	23	12.50	0.0
BJI	23.62	98	eP	23	20.50	1.6
	2.0s	330.00nm				5.5mb
			sP	23	35.50	
TIA	26.33	104	Pc	23	45.60	0.9
KMI	26.68	142	Pc	23	47.50	-0.7
	1.0s	100.00nm				5.4mb
GYA	27.29	134	iPc	23	53.60	-0.1
	1.0s	90.00nm				5.4mb
SNY	27.76	88	iPc	23	57.20	-0.4
	0.8s	40.00nm				5.1mb
CN2	28.21	83	Pc	24	01.20	-0.5
WHN	28.32	117	Pc	24	02.50	-0.2
	0.7s	40.00nm				5.2mb
			pP	24	16.00	54kmX
NJ2	30.06	109	Pd	24	18.50	0.1
	1.0s	40.00nm				5.2mb
MDJ	30.65	79	eP	24	23.20	-0.3
POO	30.68	201	eP	24	24.00	0.0
CHG	31.14	154	ePc	24	27.90	-0.1
	0.9s	42.23nm				5.2mb
SSE	32.18	108	Pd	24	37.40	0.4
	1.0s	40.00nm				5.3mb
			sP	24	52.00	
BDT	32.64	155	ePc	24	41.00	-0.1
	1.0s	48.30nm				5.3mb
LOE	33.34	150	eP	24	46.00	-1.2
GZH	33.48	128	Pd	24	48.00	-0.4
GBA	34.77	193	Pd	24	59.00	-0.5
	0.7s	45.90nm				5.5mb
SOD	35.08	325	iP	25	01.70	0.0
QIZ	35.14	136	Pc	25	02.60	-0.1
KEV	35.18	329	iP	25	02.50	0.0
SUF	35.25	317	iP	25	03.30	0.1
	0.7s	14.40nm				5.0mb
NUR	36.17	313	iP	25	11.00	0.0
	0.7s	25.40nm				5.3mb
KTK1	36.44	328	iPc	25	13.25	0.1
KAS	36.50	279	iPc	25	16.20	2.1
TRO	37.98	329	eP	25	26.50	0.4
KOD	38.08	192	eP	25	28.00	0.2
CFR	38.48	288	eP	25	41.00	10.5X
VRI	39.10	289	ePd	25	36.50	0.7
TSRJ	39.29	89	P	25	37.60	0.1
UPP	39.74	313	iP	25	41.00	0.2
			i	25	51.50	37km
MLR	39.76	289	eP	25	42.50	1.1
LFK	39.83	271	eP	25	42.00	0.0
MTMJ	39.94	87	P	25	41.80	-1.1
LOF	40.03	326	iPc	25	42.74	-0.4
BURJ	40.09	265	Pd	25	41.50	-2.7
MAT	40.23	86	eP	25	43.00	-2.2
	0.9s	13.45nm				4.7mb
SALJ	40.31	265	Pd	25	43.10	-2.9X
NIIJ	40.38	85	P	25	46.90	0.5
KFNJ	40.41	265	P	25	44.00	-2.7
CMP	40.43	289	ePc	25	50.00	3.3X
BCK	40.60	276	eP	25	49.30	1.0
MKRJ	40.63	265	Pd	25	46.00	-2.6
CHJJ	41.03	86	P	25	50.40	-1.4
NSS	41.27	321	iP	25	54.24	0.9
KRA	41.58	298	eP	25	56.50	0.4
	0.7s	56.00nm				5.4mb
			e	26	07.90	41km
HFS	41.58	314	eP	25	55.70	-0.3
	0.7s	24.40nm				5.0mb
KAKJ	41.74	85	P	25	56.30	-1.2
SPC	41.74	297	eP	26	01.50	3.8X

14d 14h

PRNI	41.81	264	eP	26	00.00	1.7			0.8s	42.00nm		5.5mb			0.6s	21.10nm		5.4mb
MBH	42.25	263	ePd	26	03.00	1.2	LPL	51.56	298	eP	27	15.00	-0.1	TIO	69.21	293	iP	29	27.00	11.3X
RZN	42.31	285	ePd	26	04.00	1.6	IMI	51.74	296	P	27	16.33	0.0	SIT	70.16	22	eP	29	21.80	0.9
BSD	42.55	307	iPd	26	03.70	-0.2	EKA	51.76	313	Pd	27	15.40	-0.8	BCAO	71.08	255	iPc	29	25.00	-2.1
	0.5s	21.60nm				5.1mb		0.6s	8.50nm			4.9mb			0.5s	28.00nm			5.5mb
SNG	42.68	157	eP	26	05.70	0.3	DOI	51.80	297	P	27	27.50	10.7X				ic	29	36.00	36km
NAO	42.74	316	P	26	04.60	-0.9	PGF	51.81	294	eP	27	16.70	-0.3	MTN	73.03	133	iPc	29	37.50	-1.0
	1.0s	126.80nm				5.6mb		0.7s	16.55nm			5.1mb		KNA	74.40	136	iPc	29	46.20	-0.2
VTS	42.84	287	eP	26	08.00	1.3	BNI	51.84	298	P	27	17.50	0.3		0.4s	64.00nm			6.0mb	
KSP	43.40	301	iPd	26	11.40	0.4	ENR	51.85	297	P	27	16.64	-0.5	NANU	75.29	151	eP	29	51.00	-0.4
			id	26	22.80	41km	RRL	51.85	298	P	27	17.36	0.0	FFC	77.59	4	iPc	30	03.70	-0.3
SRO	43.49	296	eP	26	13.40	1.7	PZZ	51.89	297	P	27	16.13	-1.4		0.7s	39.00nm			5.5mb	
MOL	43.70	319	iP	26	13.39	0.2	STV	51.90	297	P	27	15.51	-2.0	EDM	78.05	11	iPc	30	06.80	0.1
ZST	44.05	297	eP	26	17.30	1.1	SBF	52.04	296	eP	27	17.80	-0.8				pP	30	18.80	37km
SOP	44.60	296	eP	26	19.30	-1.4		0.7s	15.45nm			5.1mb		MEKA	80.04	150	eP	30	16.50	-1.1
HYA	44.77	318	eP	26	32.80	10.9X	LOR	52.28	302	eP	27	18.80	-1.5		0.5s	18.00nm			5.3mb	
PRU	44.78	300	eP	26	22.80	0.7		0.9s	9.00nm			4.7mb		WB5	80.63	134	iPc	30	20.70	-0.2
			e	26	34.20	40km	LBF	52.37	301	eP	27	19.40	-1.6	WRA	80.67	134	Pc	30	21.00	-0.1
CLL	45.09	303	iPd	26	24.80	0.2		0.9s	6.55nm			4.6mb			0.5s	61.20nm			5.8mb	
	1.0s	19.00nm				4.9mb	AKU	52.42	329	iP	27	32.90	11.9X	PGC	80.71	19	eP	30	22.00	1.0
Z	18s	2.00um				5.1Msz		1.0s	84.00nm					MCW	80.82	18	P	30	22.50	0.8
			ipP	26	35.50	37km	SSF	52.60	302	eP	27	21.40	-1.2				pP	30	33.20	34km
			isP	26	40.00			1.0s	14.00nm			4.9mb		PNT	80.85	16	ePc	30	22.00	0.2
IPM	45.28	157	ePc	26	27.90	1.5	FRF	52.68	296	eP	27	22.50	-0.8		0.8s	37.00nm			5.4mb	
	1.0s	63.70nm				5.5mb		0.8s	18.80nm			5.1mb		SES	81.12	10	ePc	30	23.00	-0.2
KHC	45.72	300	P	26	30.50	0.9	AVF	52.83	301	eP	27	23.10	-1.3		1.0s	93.00nm			5.7mb	
			e	26	41.90	40km		1.0s	10.00nm			4.7mb					pP	30	35.00	40km
PTJ	45.80	295	e(P)	26	30.00	-0.4	LMR	52.89	296	eP	27	24.00	-0.9	KRI	81.21	233	iPc	30	28.30	4.1X
MOX	46.17	302	eP	26	34.00	0.9	LRG	52.91	296	eP	27	24.30	-0.7				ipP	30	40.00	38km
	1.0s	21.00nm				5.0mb		0.8s	13.45nm			5.0mb		GMW	81.90	19	P	30	28.80	1.5
			e	26	45.00	38km	MAF	53.60	301	eP	27	29.60	-0.4				pP	30	40.00	36km
VBY	46.42	294	ePc	26	36.60	1.4		1.0s	18.00nm			5.0mb		NEW	82.31	15	P	30	30.00	0.5
LJU	46.60	295	e(P)	26	37.00	0.4	TCF	53.77	301	eP	27	30.40	-0.9		1.0s	47.50nm			5.5mb	
BHG	46.79	298	iPc	26	39.80	1.7		1.0s	10.00nm			4.8mb					pP	30	41.30	37km
	0.9s	18.00nm				5.0mb	LDF	53.79	305	eP	27	30.50	-0.9	DPW	82.50	16	P	30	30.90	0.4
GRF	46.83	301	eP	26	39.00	0.6		0.9s	22.95nm			5.2mb					pP	30	42.00	36km
	1.7s	55.00nm				5.3mb	FLN	53.90	305	eP	27	31.00	-1.1	CBM	82.70	342	P	30	31.50	0.1
			e	26	50.60	41km		0.8s	26.85nm			5.3mb					pP	30	42.80	37km
DAG	46.94	342	eP	26	38.00	-0.9	LSF	54.18	302	eP	27	32.90	-1.4	BMW	82.82	19	P	30	33.30	1.1
FVI	47.39	297	P	26	46.00	3.2X	GRR	54.31	305	eP	27	34.20	-1.0				pP	30	44.90	38km
SOTA	48.02	298	iPd	26	48.40	0.5		0.9s	19.65nm			5.1mb		LON	82.87	18	P	30	33.00	0.6
	0.5s	12.40nm				5.2mb	LPF	54.62	305	eP	27	36.40	-1.1				pP	30	44.90	39km
			i	26	56.80	28km	CAF	54.62	300	eP	27	37.20	-0.4	LKO	83.43	277	Pc	30	35.72	0.0
			i	26	59.80			0.8s	8.05nm			4.8mb			0.5s	8.50nm			5.1mb	
			i	27	08.60		ETA	54.70	312	eP	27	35.80	-2.2	QIS	83.83	130	iPc	30	36.90	-0.5
			i	27	27.00		RJF	54.72	301	eP	27	37.60	-0.7		0.8s	31.00nm			5.5mb	
			i	28	03.50			0.9s	9.85nm			4.8mb		VGB	84.26	18	P	30	40.20	0.7
TNS	48.16	303	ePc	26	49.30	0.4	MFF	54.93	303	eP	27	38.80	-1.0				pP	30	51.90	38km
			e	28	49.30	706kmX		0.9s	14.75nm			5.0mb		BUL	84.47	232	iPd	30	39.40	-1.4
WTS	48.23	306	eP	26	50.00	0.7	ECP	55.07	311	eP	27	40.20	-0.5				ipP	30	51.00	38km
	1.0s	11.00nm				4.8mb	MBC	55.15	7	iPc	27	40.70	-0.3	KIC	85.19	274	(P)c	30	45.00	0.5
			e	27	01.00	38km		1.0s	136.00nm			5.9mb			0.6s	5.50nm			4.9mb	
OGA	48.31	298	eP	26	50.90	0.7	ANM	55.27	30	iPc	27	42.80	0.8	LIC	85.48	274	(P)	30	46.30	0.3
KGM	48.35	155	eP	26	51.20	0.6				e	27	53.50	36km	BNH	85.58	343	P	30	46.20	0.2
TDS	48.79	287	P	26	55.50	1.7	LPO	55.27	300	eP	27	41.70	-0.6				pP	30	58.10	39km
ARV	48.87	293	P	26	55.00	0.6		0.8s	16.10nm			5.1mb		HBVT	86.14	344	P	30	49.50	0.7
DUI	48.90	290	P	26	55.50	0.8	LFF	55.38	301	eP	27	42.70	-0.4				pP	31	00.70	36km
SCO	48.96	289	P	26	56.00	1.0		0.9s	18.00nm			5.1mb		RSNY	86.21	346	P	30	50.00	0.8
MGR	49.03	288	P	26	56.00	0.4	EPF	56.74	299	eP	27	51.60	-1.4	WNY	86.25	345	P	30	50.00	0.6
BSS	49.15	289	P	26	53.50	-3.0X		0.8s	14.10nm			5.0mb					pP	31	00.90	35km
ASS	49.27	293	P	26	58.00	0.5	VAL	57.15	313	iP	28	06.00	10.4X	HPI	87.39	13	P	30	55.90	0.6
SDI	49.28	291	P	26	57.50	-0.1	IMA	57.81	24	iPc	27	59.60	-0.7				pP	31	07.00	35km
ENN	49.31	305	eP	27	01.50	3.9X		0.6s	18.20nm			5.3mb		RSSD	88.02	7	P	30	58.10	-0.1
	1.0s	27.00nm				5.2mb				e	28	10.70	38km				pP	31	09.90	38km
			e	27	08.00	22kmX	ADK	58.64	46	ePc	28	05.30	-0.8	BFT	88.31	228	eP	31	00.50	0.8
SFI	49.32	294	P	26	59.50	1.8		0.8s	61.60nm			5.8mb			0.7s	13.70nm			5.4mb	
MEM	49.34	304	P	27	02.00	4.2X	TTA	59.42	28	eP	28	12.40	0.9	WDC	88.57	21	ePc	31	01.40	0.8
			e	27	09.10	24kmX	FBA	60.29	23	ePc	28	16.60	-0.7				e	31	05.70	
			e	29	08.70			0.7s	22.20nm			5.4mb					ipP	31	13.00	37km
AZI	49.37	291	P	27	02.00	3.9X				e	28	27.40	36km				e	31	17.70	
PGD	49.42	294	P	26	59.50	0.7	TRT	60.48	148	iPd	28	16.00	-3.0X	WVLY	88.86	348	P	31	02.00	-0.1
CDF	49.72	301	eP	27	00.20	-0.7		1.0s	124.70nm			6.0mb					pP	31	13.80	38km
SOI	49.87	285	P	27	02.50	0.5	INK	60.60	15	eP	28	18.50	-0.8	MIN	89.01	20	ePc	31	03.50	0.5
BDI	50.01	295	P	27	05.00	1.8				pP	28	29.00	35km				epP	31	15.20	38km
VAI	50.16	298	P	27	03.00	-1.1	SVW	60.89	29	ePc	28	22.20	0.7	TBR	89.46	344	P	31	16.00	11.1X
PII	50.24	295	P	27	05.00	0.2				e	28	33.70	39km	ORV	89.79	20	ePc	31	07.00	0.6
BSF	50.30	301	eP	27	04.50	-0.9	TOL	61.28	299	ePc	28	24.50	0.1				epP	31	18.60	37km
BOB	50.33	296	P	27	18.50	12.9X	PMR	62.53	26	eP	28	31.20	-1.2	DUG	90.87	14	P	31	12.10	0.5
DOU	50.38	304	P	27	06.30	0.5		0.7s	12.00nm			5.1mb					pP	31	23.80	38km
HAU	50.46	301	eP	27	05.70	-0.8				e	28	42.40	37km	KVN	91.02	18	P	31	12.90	0.5
PCP	51.00	297	P	27	10.08	-0.6	TOA	62.97	24	eP	28	35.30	-0.1				pP	31	24.30	36km
CKI	51.22	297	P	27	24.50	12.2X	NAI	64.42	236	iPc	28	57.00	11.4X	QLP	91.17	130	iPc	31	13.50	0.8
LSD	51.34	298	P	27	13.77	0.3	NKM	65.00	296	eP	28	48.00	-0.9	CMB	91.50	20	eP	31	15.40	1.0
FIN	51.38	296	P	27	12.34	-1.2				e	28	55.00	22kmX				epP	31	27.10	38km
RSP	51.44	298	P	27	12.95	-1.2	IFR	66.12	294	iP	28	57.00	0.6	ARN	91.88	21	P	31	17.50	1.3
ROB	51.54	297	P	27	14.49	-0.3	AVE	67.67	295	eP	29	16.00	10.0X				pP	31	28.90	36km
LPG	51.55	298	eP	27	15.20	0.0	YKA	68.85	10	eP	29	11.50	-1.3	TNP	92.13	17	P	31	18.00	0.5

1.0s 21.67nm 5.5mb
pP 31 30.00 39km
FRI 92.65 20 eP 31 20.80 1.2
ipP 31 32.60 38km
PRI 93.24 21 eP 31 24.60 2.1
epP 31 36.00 36km
RMQ 93.49 126 iPc 31 24.50 1.1
STK 94.19 135 eP 31 25.80 -0.7
0.9s 17.00nm 5.5mb
ABL 94.81 20 P 31 31.70 1.8
pP 31 42.80 35km
TKL 96.23 351 P 31 46.80 10.7X
GBTN 96.26 351 P 31 47.00 10.7X
BRS 96.41 124 iPc 31 37.10 0.3
RSCP 96.46 352 P 31 35.20 -2.0
0.8s 39.26nm 6.0mb
pP 31 47.00 38km
ANMO 96.89 10 P 31 40.20 0.8
pP 31 51.40 36km
ALQ 96.90 10 eP 31 40.00 0.6
1.0s 9.50nm 5.3mb
epP 31 51.00 35km
GLA 97.47 17 P 31 42.80 1.0
pP 31 54.00 36km
SIV 137.72 307 PKP 37 31.60 -1.2
ZOBO 141.51 316 PKP 37 34.00 -6.4X
S.D. = 1.0 on 212 of 236 obs.

& JUN 14, 1990 14h 37m 49.87s
63.371 N 151.247 W
DEPTH = 6.5km
CENTRAL ALASKA (1)
<AGS-P>.

HUR 0.83 118 eP 38 05.63 -0.6
CUT 1.07 155 iP 38 10.09 -0.2
eS 38 25.10
MCK 1.10 70 eP 38 10.32 -0.5
eS 38 25.95
SKT 1.40 185 iP 38 15.31 -0.6
WRH 1.78 50 eP 38 19.29 -2.0
PWA 1.84 159 iP 38 22.65 0.5
SUA 1.93 173 eP 38 23.31 -0.3
GHO 1.93 145 eP 38 23.34 -0.2
CCB 1.98 48 eP 38 21.69 -2.6
NCG 2.02 193 eP 38 24.42 -0.5
PLRM 2.04 150 eP 38 24.57 -0.4
SML 2.07 138 eP 38 25.08 -0.4
CGLM 2.10 190 eP 38 25.81 -0.2
CRP 2.15 192 eP 38 26.98 0.1
PMS 2.27 159 eP 38 28.54 0.0
SCM 2.38 129 eP 38 31.17 1.1
SDG 2.74 105 eP 38 35.19 0.0
17 obs. associated

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* JUN 14, 1990 14h 46m 51.86± 0.83s
11.161 N ±12.7km 122.111 E ±11.7km
DEPTH = 33.0km (normal)
4.8mb (8 obs.)
PANAY, PHILIPPINE ISLANDS (254)

QIZ 14.19 305 eP 50 10.00 -2.6
GZH 14.51 326 eP 50 17.70 0.9
WHN 20.59 341 eP 51 32.50 1.8
NJ2 21.01 352 eP 51 35.00 0.0
GYA 21.07 318 P 51 37.40 1.6
IPM 21.88 254 ePc 51 49.10 5.2X
KMI 23.01 310 Pd 51 59.50 4.2X
2.0s 100.00nm 5.0mb
CHG 23.62 292 eP 52 03.00 2.0
1.1s 13.29nm 4.4mb
TIA 25.34 351 eP 52 16.90 -0.5
XAN 25.77 334 P 52 22.10 0.6
TIY 27.83 343 eP 52 38.70 -1.6
BJI 29.24 351 eP 52 53.00 0.1
LZH 29.82 329 P 53 03.00 4.6X
2.0s 42.00nm 4.9mb
SNY 30.57 2 eP 53 03.60 -1.1
WB5 33.12 159 eP 53 26.80 -0.5
WRA 33.17 159 P 53 34.00 6.3X
0.6s 1.30nm 4.0mb
MDJ 33.95 10 Pc 53 33.00 -1.2
GUN 37.81 301 P 54 07.80 0.2
1.0s 96.00nm 5.6mb
PKI 38.10 301 P 54 09.60 -0.4
1.0s 22.00nm 5.0mb
DMN 38.36 301 P 54 12.20 0.1
GKN 38.88 301 P 54 15.00 -1.3
IMA 77.53 25 eP 58 45.60 -0.3
1.1s 7.50nm 4.6mb
PMR 79.68 29 eP 58 57.90 0.4
INK 84.95 21 eP 59 26.00 1.3
YKA 94.57 23 eP 00 10.90 0.6
0.9s 2.20nm 4.6mb
S.D. = 1.3 on 21 of 25 obs.

% JUN 14, 1990 15h 12m 03.73± 0.66s
59.890 N ± 5.8km 6.196 E ± 6.9km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 1.4 (BER).

ODD1 0.22 84 iPc 12 08.82 0.3
iS 12 12.19
BLS2 0.70 148 eP 12 17.22 -0.5
eS 12 26.68
ASK 0.78 320 ePd 12 18.68 -0.2
eS 12 30.91
KMY 0.83 216 eP 12 20.18 0.4
eS 12 30.98
HYA 1.28 360 iPc 12 27.46 0.0
eS 12 43.02
SUE 1.37 329 eP 12 28.78 0.0
eS 12 47.24
NRA0 2.79 70 Pg 12 49.70 0.4X
Lg 13 29.10
S.D. = 0.4 on 6 of 7 obs.

JUN 14, 1990 15h 28m 21.41± 0.37s
24.976 N ± 6.5km 94.019 E ± 5.1km
DEPTH = 60.7km (2 depth phases)
4.5mb (11 obs.)
BURMA-INDIA BORDER REGION (294)

LSA 5.35 332 Pn 29 41.50 0.5
Sn 30 37.80
CHG 7.65 142 iPn 30 12.00 -0.6
eSg 32 09.00
KMI 7.91 87 Pc 30 19.00 2.6
GYA 11.50 80 P 31 05.00 -0.3
LZH 13.93 35 eP 31 36.00 -1.4
2.0s 70.00nm 4.9mb
sP 31 45.00
eS 34 08.00
GTA 15.20 17 P 31 50.00 -3.9X
0.8s 10.00nm 4.1mb
NDI 15.45 288 eP 31 50.50 -6.5X
iS 34 33.20
XAN 15.79 52 P 32 01.50 0.1
S 34 55.00
QIZ 15.82 109 P 32 06.00 4.3X
N 12s 0.70um
HYB 16.26 245 eP 32 06.00 -1.3
1.0s 80.00nm 4.8mb
eS 34 53.50
e 35 01.00
WHN 18.82 68 eP 32 44.00 5.1X
WMQ 19.50 346 P 32 46.00 -0.4
POO 19.79 255 iPd 32 48.80 -0.8
TIY 20.17 47 eP 32 52.70 -0.7
Z 22s 0.90um 4.1Msz
BTO 20.53 37 eP 32 57.00 -0.2
N 12s 0.30um
E 12s 0.50um
eS 36 36.00
IPM 21.37 161 eP 33 05.90 0.1
KOD 21.50 230 eP 33 10.00 2.6
HHC 21.56 38 eP 33 07.00 -0.6
TIA 22.77 55 eP 33 18.90 -0.5
BJI 23.88 46 P 33 31.00 0.8
QUE 24.52 288 eP 33 37.40 0.7
e(S) 38 07.20
SNY 29.66 48 eP 34 22.40 -0.9
CN2 31.75 46 eP 34 41.80 0.0
MAT 39.38 62 (P) 35 49.00 2.2
MLR 57.53 309 eP 38 08.00 1.0
WB5 59.40 135 eP 38 18.90 -1.2
WRA 59.43 135 Pd 38 19.50 -0.8
0.5s 2.00nm 4.5mb
UPP 61.95 326 iP 38 51.50 14.6X
KSP 63.45 316 eP 38 40.70 -6.3X
HFS 63.90 327 eP 38 49.40 -0.4
0.5s 2.40nm 4.4mb
PRU 64.68 315 eP 38 55.50 0.5
e 39 14.00 70km
NAO 65.24 328 P 38 57.90 -0.6
0.6s 1.10nm 4.0mb
KHC 65.44 315 eP 39 02.50 2.5
LPG 70.80 312 eP 39 33.80 0.0
0.6s 3.60nm 4.5mb
LPL 70.80 312 eP 39 33.90 0.2
0.7s 4.95nm 4.5mb
LBF 72.21 314 eP 39 41.20 -0.7
SSF 72.49 314 eP 39 43.20 -0.3
0.6s 4.05nm 4.5mb
AVF 72.67 314 eP 39 43.00 -1.5
0.7s 2.20nm 4.2mb
TCF 73.58 314 eP 39 50.30 0.4
BCAO 74.99 268 iPc 39 50.50 -8.0X
0.8s 11.00nm 4.8mb
KRI 75.25 243 iPd 40 04.90 4.9X
ipP 40 19.50 51km
BUL 77.81 241 iPc 40 13.40 -0.9
INK 80.68 16 eP 40 46.00 17.2X
YKA 89.88 13 eP 41 32.30 17.6X
0.7s 0.70nm
S.D. = 1.1 on 34 of 44 obs.

? JUN 14, 1990 17h 08m 01.38± 4.77s
31.342 S ±22.1km 68.537 W ±32.4km
DEPTH = 90.5 ± 45.7 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL 0.06 78 iPd 08 14.50 -0.1
eS 08 24.80
RTCB 0.27 237 eP 08 15.10 0.1
CFA 0.37 136 ePc 08 15.60 0.1
S 08 27.10
RTCV 0.52 180 ePc 08 16.50 -0.1
S 08 28.30
RTRS 1.41 326 ePc 08 26.40 0.0
S.D. = 0.2 on 5 of 5 obs.

% JUN 14, 1990 17h 32m 45.54± 0.87s
39.862 N ± 7.3km 30.276 E ± 8.6km
DEPTH = 5.0km (geophysicist)
TURKEY (366)

GPA 0.43 3 iPg 32 54.10 0.0
IZI 0.78 308 ePn 33 00.00 -1.2
YLV 0.99 316 iPn 33 05.50 0.7
HRT 1.06 334 ePn 33 06.50 0.4
KHL 1.64 201 ePn 33 15.50 0.2
BBTK 1.91 90 ePg 33 19.00 -0.2
eSg 33 45.00
EDC 1.91 285 ePn 33 23.00 3.9X
S.D. = 0.8 on 6 of 7 obs.

JUN 14, 1990 19h 01m 30.42± 1.29s
29.882 N ± 9.0km 138.761 E ± 6.5km
DEPTH = 444.8 ± 13.5 km
4.6mb (17 obs.)
SOUTH OF HONSHU, JAPAN (211)

MAT 6.66 356 eP 03 11.00 -1.4
0.8s 28.36nm 4.4mb X
eS 04 32.00
SSE 15.20 279 eP 04 43.00 -2.0
SNY 17.10 318 iPc 05 05.80 1.7
0.6s 20.00nm 4.8mb
NJ2 17.21 282 Pd 05 05.60 0.3
CN2 17.48 326 eP 05 10.40 2.6
QZH 18.56 259 eP 05 19.50 0.9
TIA 19.19 295 Pd 05 25.10 0.5
BJI 21.05 305 eP 05 43.00 0.6
1.0s 18.00nm 4.5mb
WHN 21.10 278 eP 05 44.00 1.1
TIY 23.18 297 eP 06 03.10 0.9
XAN 25.61 287 P 06 24.00 -0.1
QIZ 28.38 254 Pc 06 50.30 1.7
GYA 28.45 271 iPd 06 49.60 0.2
1.0s 10.00nm 4.2mb
S 11 03.80
LZH 29.83 291 P 07 00.00 -1.3
1.0s 33.00nm 4.7mb
KMI 32.21 270 Pd 07 22.50 0.5
GTA 33.20 297 iPc 07 30.10 0.0
CHG 37.74 262 iPd 08 09.00 1.1
0.9s 44.54nm 4.9mb
GUN 46.00 281 P 09 13.00 -1.3
0.8s 59.00nm 5.1mb

14d 19h

PKI	46.50	281	P	09	16.40	-1.6
	0.6s	12.00nm			4.5mb	
DMN	46.74	281	P	09	18.40	-1.5
	0.8s	25.00nm			4.7mb	
GKN	47.03	282	P	09	20.40	-1.6
	0.8s	26.00nm			4.7mb	
WB5	49.65	185	eP	09	41.00	-0.6
WRA	49.72	185	Pc	09	41.70	-0.4
	0.7s	2.40nm			3.7mb	
INK	61.77	25	eP	11	05.00	-0.7
MBC	63.99	15	ePc	11	19.50	-0.5
	0.5s	4.00nm			4.3mb	
KEV	69.35	340	eP	11	53.00	-0.2
SOD	70.70	338	iP	12	01.40	0.2
YKA	71.12	28	eP	12	02.40	-1.3
	0.7s	7.50nm			4.4mb	
SUF	73.38	334	iP	12	16.60	-0.2
	0.4s	7.80nm			4.7mb	
PNT	74.91	42	eP	12	26.00	0.3
	0.7s	6.00nm			4.3mb	
NUR	75.21	332	eP	12	26.00	-1.1
ORV	78.42	51	ePc	12	44.70	-0.3
BRK	78.71	53	eP	12	46.80	0.2
SES	79.11	38	iPc	12	48.40	-0.1
MHC	79.40	53	iPc	12	50.60	0.2
HFS	79.66	335	eP	12	50.50	-0.6
	0.5s	8.80nm			4.7mb	
CMB	79.92	52	iPc	12	53.30	0.3
PRS	80.09	54	eP	12	54.20	0.4
NAO	80.18	337	P	12	53.20	-0.6
	0.6s	7.50nm			4.5mb	
LRM	80.87	42	ePc	12	58.60	0.6
FRI	80.91	53	eP	12	58.30	0.2
FFC	80.94	31	eP	12	57.50	-0.3
	0.9s	17.00nm			4.7mb	
KVN	80.95	50	P	12	58.70	0.2
TNP	82.04	51	(P)	13	04.00	-0.2
SBB	83.41	54	eP	13	11.00	0.1
GSC	83.80	53	eP	13	13.00	0.2
FRB	84.22	12	ePc	13	13.50	-0.7
GLA	86.39	54	eP	13	27.00	1.5
ANMO	90.94	48	P	13	48.00	1.1
ALQ	90.94	48	eP	13	47.20	0.3
S.D. = 1.0 on 50 of 50 obs.						

JUN 14, 1990 19h 31m 59.31± 1.21s
24.403 S ±10.9km 179.974 W ± 4.2km
DEPTH = 498.9 ± 16.5 km
4.9mb (13 obs.)

SOUTH OF FIJI ISLANDS (171)

DZM	12.70	278	iPc	34	49.30	2.9
			iS	37	01.00	
HBZ	13.24	186	eP	34	59.00	7.2X
			S	39	18.00	
MBW	17.36	194	eP	35	33.00	-0.1
			eS	38	25.00	
TBI	27.90	94	eP	37	10.00	0.1
	0.7s	20.00nm			4.8mb	
RMQ	28.28	259	iPd	37	14.50	1.2
			e	38	40.00	
CAN	28.91	241	eP	37	20.30	1.6
AFR	28.97	82	iP	37	18.80	-0.5
	0.9s	50.00nm			5.0mb	
PAE	29.11	83	iP	37	20.00	-0.5
	0.9s	45.00nm			5.0mb	
PPT	29.14	82	iP	37	20.30	-0.5
	0.9s	50.00nm			5.0mb	
BWA	29.19	243	eP	37	20.20	-0.9
PPN	29.28	82	iP	37	21.50	-0.5
	0.9s	30.00nm			4.8mb	
TVO	29.37	83	iP	37	22.20	-0.6
	0.9s	60.00nm			5.1mb	
PMO	31.55	79	iP	37	41.20	-0.2
	0.9s	40.00nm			4.9mb	
VAH	31.70	79	iP	37	42.00	-0.7
	0.9s	30.00nm			4.8mb	
TPT	31.80	79	iP	37	43.30	-0.3
	0.9s	80.00nm			5.2mb	
RUV	31.94	79	iP	37	44.30	-0.4
	0.9s	55.00nm			5.1mb	
OIS	37.45	268	eP	38	30.00	-0.7
WB5	42.39	267	iPd	39	10.00	-0.6
			eScP	43	56.09	
			eS	44	50.20	
WRA	42.40	267	Pd	39	09.30	-1.4
	0.5s	17.80nm			4.8mb	

MTN	47.52	275	iPc	39	48.80	-1.6
			e	44	17.20	
KNA	48.68	270	eP	39	58.50	-0.8
NANU	58.70	258	iPd	41	09.90	-0.5
SPA	65.74	180	iPc	41	56.30	0.6
	0.7s	11.33nm			4.6mb	
CHJJ	71.54	326	P	42	29.50	-1.1
IIDJ	71.66	325	P	42	30.50	-0.9
MAT	72.32	326	eP	42	34.00	-1.2
	0.9s	17.65nm			4.6mb	
MTMJ	72.56	325	P	42	35.80	-0.9
TSRJ	72.74	324	P	42	36.80	-0.7
NJ2	81.01	311	P	43	22.00	-0.4
PRS	81.88	44	eP	43	27.60	0.7
PRI	82.22	45	eP	43	29.40	0.7
MHC	82.34	43	ePc	43	29.90	0.6
MDJ	82.69	326	Pd	43	31.20	0.5
PLM	83.09	49	eP	43	34.00	0.8
SBB	83.21	47	eP	43	34.00	0.4
WHN	83.33	308	ePd	43	34.50	0.3
FRI	83.34	44	eP	43	34.20	0.1
ISA	83.35	46	eP	43	35.00	0.7
CMB	83.55	43	ePc	43	35.40	0.2
ORV	83.80	42	eP	43	36.50	0.1
WDC	83.83	40	ePc	43	36.90	0.4
SNY	84.05	321	Pc	43	37.50	0.0
MIN	84.23	41	ePc	43	41.20	2.5
GSC	84.25	47	eP	43	39.00	0.2
CN2	84.30	324	iPd	43	38.00	-0.8
GLA	84.33	50	eP	43	40.00	0.8
TIA	84.59	314	eP	43	40.60	0.2
TNP	85.58	45	P	43	45.20	-0.2
KVN	85.59	44	P	43	45.40	0.0
BJI	87.41	316	eP	43	54.00	0.2
TIY	88.55	313	Pd	43	59.90	0.6
CHG	89.88	291	eP	44	06.50	0.8
ALQ	91.24	52	eP	44	11.50	-0.4
ANMO	91.25	52	P	44	12.10	0.2
NAO	142.84	351	PKP	50	32.00	-4.2X
	0.9s	2.80nm				
HFS	143.04	349	ePKP	50	31.90	-4.7X
	0.4s	12.20nm				
PRNI	148.47	289	ePKP	50	51.00	4.5X
MBH	148.59	288	ePKP	50	51.00	4.4X
KSP	150.76	339	iPKP	50	55.40	6.2X
			ic	51	04.70	
			e	52	56.00	
CLL	151.34	343	ePKP	51	07.00	16.9X
S.D. = 0.9 on 53 of 60 obs.						

JUN 14, 1990 19h 39m 12.30± 1.07s
31.883 S ± 9.4km 70.854 W ±12.7km
DEPTH = 120.0km (geophysicist)

CHILE-ARGENTINA BORDER REGION (127)

ROCH	1.09	187	iPd	39	34.90	-0.9
			iS	39	52.00	
RTBS	1.21	80	eP	39	37.20	0.4
PEL	1.26	174	iPd	39	37.50	0.0
			iS	39	56.00	
FCH	1.52	162	iPd	39	41.50	0.8
			iS	40	02.50	
SAN	1.57	174	iPc	39	41.50	0.5
			iS	40	02.50	
PCH	1.76	171	eP	39	43.50	0.2
			i	40	07.50	
TACH	1.77	182	iPd	39	43.50	0.2
			iS	40	06.00	
RTCB	1.80	78	eP	39	44.00	0.2
			S	40	07.00	
ZON	1.88	80	eP	39	44.00	-0.8
RTCV	1.97	90	e(P)	39	46.00	0.1
CHCH	2.05	175	iPd	39	46.80	-0.1
			iS	40	13.00	
RTRS	2.09	35	iPd	39	47.80	0.5
RTLL	2.11	75	eP	39	47.30	-0.4
			eS	40	12.60	
LNV	2.12	193	iPd	39	47.20	-0.5
			iS	40	12.80	
CFA	2.25	84	iPd	39	49.10	-0.3
			eS	40	16.80	
S.D. = 0.5 on 15 of 15 obs.						

JUN 14, 1990 20h 22m 17.48± 1.08s
6.342 N ± 5.6km 126.338 E ±10.0km
DEPTH = 95.0 ± 9.8 km
5.0mb (12 obs.)

MINDANAO, PHILIPPINE ISLANDS (259)

DAV	1.06	314	iPd	22	38.20	-0.3
MNI	5.09	197	ePc	23	34.50	1.7
			eS	24	36.50	
AAI	10.13	169	eP	24	40.00	-1.8
TRT	19.53	225	iPd	26	39.30	-0.8
OZH	19.93	339	eP	26	43.20	-1.0
OIZ	20.42	310	eP	26	50.80	1.5
			S	30	33.50	
KNA	22.08	174	eP	27	06.00	0.1
KGM	23.35	260	eP	27	21.00	2.7
IPM	25.26	267	ePd	27	37.70	1.1
WB5	27.23	163	eP	27	52.00	-2.5
WRA	27.28	163	Pc	27	53.60	-1.4
	0.7s	17.20nm			4.7mb	
KMI	29.31	312	eP	26	13.00	-0.5
CHG	29.41	297	eP	28	14.80	0.5
QIS	29.74	154	iPc	28	16.40	-0.7
	0.9s	62.00nm			5.3mb	
NANU	30.61	200	eP	28	24.00	-0.7
XAN	31.93	332	P	28	36.40	0.1
MEKA	33.62	193	eP	28	49.50	-1.5
TIY	33.69	340	eP	28	52.10	0.5
BJI	34.77	346	eP	29	01.00	0.3
	1.1s	14.00nm			4.8mb	
			PcP	31	31.50	
			eS	34	20.00	
			eScP	35	12.00	
SNY	35.42	356	eP	29	07.60	1.5
LZH	36.08	328	P	29	13.50	1.5
	1.8s	42.00nm			5.1mb	
MRWA	36.73	195	eP	29	16.90	-0.4
HHC	36.81	341	eP	29	17.60	-0.4
CN2	37.32	359	eP	29	26.80	4.7X
COOL	37.35	187	eP	29	21.50	-1.0
BAL	37.88	194	eP	29	26.60	-0.3
SHL	38.06	304	iP	29	27.80	-1.0
KLB	38.60	192	eP	29	32.80	-0.2
	0.3s	10.00nm			5.2mb	
MUN	39.31	194	iPc	29	39.00	0.1
GTA	40.68	328	P	29	51.80	1.6
	1.0s	10.00nm			4.6mb	
STK	40.70	160	iPc	29	50.80	0.5
	1.0s	27.00nm			5.0mb	
BRS	42.17	144	iP	30	02.00	-0.5
ADE	42.71	165	iPc	30	08.10	1.3
	0.8s	59.70nm			5.5mb	
GUN	43.91	304	P	30	16.40	-0.7
	0.4s	11.00nm			5.0mb	
PKI	44.18	303	P	30	18.00	-1.2
DMN	44.44	303	P	30	20.20	-1.0
GKN	44.97	304	P	30	24.20	-1.1
BWA	45.60	154	eP	30	32.00	2.0
BFD	45.87	162	iPd	30	32.70	0.8
CAN	46.61	154	eP	30	38.70	0.7
CNB	46.77	154	iPc	30	40.40	1.2
TOO	47.20	159	iPc	30	44.20	1.6
DZM	48.38	127	iPc	30	51.90	-0.1
WMO	50.38	324	eP	31	06.00	-1.1
KSH	55.92	314	P	31	50.00	1.9
MAIO	67.64	307	eP	33	05.00	-1.6
MAW	86.05	200	eP	34	49.00	0.7
KEV	87.32	340	eP	34	53.00	-1.5
SOD	87.92	338	iP	34	56.50	-0.9
SUF	89.06	333	iP	35	02.20	-0.7
	0.5s	4.70nm			4.9mb	
NUR	90.24	331	eP	35	08.00	-0.5
HFS	95.54	332	eP	35	29.70	-3.2X
	0.7s	4.00nm			5.0mb	
Z	19s	0.04um			3.9Msz	
			LR	13	25.00	
NAO	96.55	334	P	35	35.60	-1.9
	0.7s	3.60nm			5.0mb	
LKO	129.57	288	PKP	41	18.06	0.1
	0.7s	7.00nm				
KIC	129.58	284	(PKP)	41	17.50	-0.5
LNV	147.98	151	iPKP	41	55.00	4.5X
PEL	148.99	152	iPKPd	41	58.00	5.7X
ZOBO	162.74	126	PKP	42	13.00	2.2
			i	43	04.00	
SIV	167.97	143	PKPd	42	15.60	1.1
S.D. = 1.2 on 55 of 59 obs.						

? JUN 14, 1990 21h 23m 13.18± 9.24s
32.021 S ±54.7km 70.469 W ±74.5km
DEPTH = 110.0km (geophysicist)

CHILE-ARGENTINA BORDER REGION (127)

RTBS	0.94	68	ePd	23	33.40	-0.6
			S	23	49.70	
RTCB	1.52	70	eP	23	40.60	-0.1
			S	24	02.80	
RTCV	1.65	85	eP	23	42.70	0.4
RTLL	1.84	69	iPd	23	44.10	-0.5
			eS	24	09.80	
CFA	1.94	78	ePc	23	46.10	0.1
			S	24	12.30	
RTRS	2.04	25	e(P)	23	47.30	0.2

S.D. = 0.5 on 6 of 6 obs.

JUN 14, 1990 21h 56m 48.19± 0.26s
11.312 N ± 4.3km 122.252 E ± 5.7km
DEPTH = 22.9km (5 depth phases)
5.3mb (28 obs.) 5.1Msz (11 obs.)

PANAY, PHILIPPINE ISLANDS (254)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 22C
Centroid Location:
Origin Time 21:56:50.8 0.5
Lat 11.52N 0.08 Lon 121.95E 0.09
Dep 15.0 FIX Half-duration 2.3
Moment Tensor; Scale 10**17 Nm
Mrr= 0.12 0.07 Mtt= 0.48 0.08
Mff=-0.61 0.10 Mrt=-1.39 0.19
Mrf=-0.55 0.19 Mtf= 1.06 0.07
Principal Axes:

T	Val= 2.19	Plg=36	Azm=152
N	-0.82	46	290
P	-1.37	22	45

Best Double Couple:Mo=1.8*10**17
NP1:Strike=183 Dip=47 Slip= 168
NP2: 281 81 43

OCP	3.50	341	eP	57	55.00	12.5X
BAG	5.32	342	eP	58	08.50	0.0
KKM	7.94	229	ePd	58	55.50	10.3X
MNI	10.14	165	eP	59	17.00	1.5
HKC	13.38	326	iP	00	00.00	0.7
ANP	13.81	357	eP	00	12.00	6.9X
OZH	13.99	346	Pd	00	07.00	-0.4
	5.0s	1500.00nm				6.0mb X
	Z 20s	4.70um				4.7Msz
	N 16s	3.50um				
	E 14s	3.80um				
		pP		00	14.00	
		PP		00	17.00	
OIZ	14.22	304	eP	00	09.10	-1.2
	N 12s	4.00um				
	E 14s	6.90um				
GZH	14.47	325	P	00	12.00	-1.5
	Z 18s	4.80um				
	N 12s	1.60um				
	E 13s	5.50um				
		sP		00	22.00	
MKS	16.65	190	iPc	00	47.00	5.2X
SSE	19.71	357	Pd	01	18.00	-1.1
	1.6s	190.00nm				5.1mb
	Z 20s	3.20um				4.3MszX
	E 14s	2.30um				
		pP		01	26.00	31km
		sP		01	32.00	
		ePP		01	40.00	
		S		04	56.00	
WHN	20.49	340	ePc	01	27.50	0.2
	1.5s	200.00nm				5.3mb
	Z 16s	3.60um				4.8MszX
	N 17s	6.40um				
	E 12s	1.80um				
LOE	20.77	289	iPc	01	21.50	-8.8X
NJ2	20.88	352	Pd	01	31.00	-0.2
	4.0s	3000.00nm				6.1mb X
	Z 13s	1.90um				4.7MszX
	N 11s	0.50um				
	E 11s	1.70um				
		S		05	23.00	
KGM	20.93	245	eP	01	27.50	-4.4X
GYA	21.05	318	P	01	33.00	-0.2
	4.0s	1600.00nm				5.8mb X
	N 13s	3.40um				
	E 13s	3.80um				
TRT	21.18	207	ePd	01	34.70	0.3
KAGJ	21.33	21	eP	01	35.80	-0.1
SNG	21.74	261	eP	01	40.20	0.1
NST	21.94	284	eP	01	41.50	-0.5
IPM	22.05	254	ePd	01	46.20	3.0X
	0.9s	36.50nm				4.8mb
NNT	22.07	276	eP	01	34.00	-9.4X
GUMO	22.20	82	eP	01	48.50	3.8X
GUA	22.24	82	eP	01	47.70	2.6
	0.7s	49.32nm				5.1mb
KUMJ	22.55	19	eP	01	47.50	-0.5
KMI	23.03	309	Pd	01	54.00	0.9
	2.5s	0.90nm				2.9mb X
BDT	23.28	287	eP	01	55.00	-0.3
	1.0s	82.80nm				5.2mb
CHG	23.69	291	eP	01	59.00	-0.3
	1.2s	152.34nm				5.4mb
		eS		06	16.00	
SHNJ	24.11	18	eP	02	03.30	0.2
PSI	24.67	251	ePd	02	08.80	0.1
	0.6s	50.20nm				5.3mb
PPI	24.67	243	eP	02	13.80	5.0X
SHK	24.99	21	eP	02	11.20	-0.6
TKSJ	25.01	24	eP	02	08.70	-3.2X
TIA	25.22	350	eP	02	13.40	-0.5
	1.2s	200.00nm				5.6mb
	Z 24s	1.70um				4.5MszX
	E 13s	2.00um				
		S		06	39.50	
MTN	25.57	160	eP	02	15.00	-2.3
XAN	25.70	334	Pd	02	16.40	-2.0
	N 15s	4.90um				
	E 17s	2.40um				
		S		06	42.00	
WKYJ	25.85	26	eP	02	19.90	0.0
YONJ	25.86	21	eP	02	19.70	-0.2
CD2	25.96	321	eP	02	22.50	1.6
	Z 18s	2.80um				4.8Msz
	N 11s	3.90um				
TSRJ	27.14	25	eP	02	25.20	-6.5X
DL2	27.49	359	Pc	02	35.00	0.3
	1.0s	100.00nm				5.5mb
	Z 16s	1.80um				4.7MszX
	E 15s	3.00um				
		pP		02	43.50	30km
		S		07	12.50	
TIY	27.73	343	eP	02	35.10	-1.9
	Z 20s	4.80um				5.1Msz
	N 15s	3.20um				
		pP		02	39.50	16km
		S		07	20.00	
MTMJ	28.81	27	eP	02	44.50	-2.4
MAT	28.96	27	eP	02	45.00	-3.1X
	1.5s	63.89nm				5.1mb
	Z 20s	2.13um				4.8Msz
		eS		07	41.00	
BJI	29.11	350	eP	02	47.00	-2.4
	1.0s	73.00nm				5.4mb
	Z 24s	1.91um				4.6MszX
	N 11s	0.58um				
		eS		07	36.00	
		ScP		09	39.00	
LZH	29.76	329	P	02	54.00	-1.5
	2.5s	320.00nm				5.7mb
	Z 18s	7.70um				5.4Msz
	N 13s	3.50um				
	E 13s	3.10um				
		PP		03	53.00	
		S		07	50.00	
SNY	30.42	2	iPd	03	01.20	0.2
	1.2s	100.00nm				5.5mb
	Z 23s	2.00um				4.7MszX
	E 17s	2.20um				
		SS		09	40.00	
HHC	30.89	344	eP	03	04.20	-1.2
	Z 20s	6.60um				5.3Msz
	N 17s	2.70um				
	E 15s	2.60um				
		S		08	09.00	
BTO	31.11	342	eP	03	06.50	-0.8
	N 17s	3.30um				
	E 14s	3.40um				
		eS		08	10.00	
		eSS		09	53.00	
SHL	32.01	301	iP	03	13.00	-2.5
		iS		08	28.00	
WB5	33.21	159	eP	03	23.80	-1.9
WRA	33.26	159	Pd	03	21.50	-4.7X
MDJ	33.78	9	Pc	03	31.20	0.8
	Z 20s	1.40um				4.7Msz
	E 18s	2.60um				
		S		08	46.00	
LSA	34.23	307	P	03	35.00	-0.1
GTA	34.35	328	iPd	03	34.20	-1.4
	5.0s	600.00nm				5.8mb X
	Z 16s	7.40um				5.5MszX
	E 14s	2.90um				
		S		09	05.00	
QIS	35.98	152	eP	03	47.00	-2.4
		e		06	16.00	
ASAJ	37.12	25	eP	03	59.00	0.2
KUSJ	37.19	28	eP	03	59.70	0.3
GUN	37.85	301	P	04	08.00	2.4
MEKA	37.87	185	eP	04	04.90	-0.4
PKI	38.14	300	P	04	10.00	2.0
	0.6s	29.00nm				5.3mb
DMN	38.41	300	P	04	12.00	1.8
GKN	38.92	301	P	04	15.80	1.4
MRWA	40.74	188	eP	04	29.00	-0.1
	0.6s	19.00nm				5.0mb
COOL	41.97	181	eP	04	38.50	-0.6
HYB	42.69	283	eP	04	46.00	0.6
		eS		11	14.00	
KLB	42.88	186	eP	04	46.00	-0.6
MUN	43.43	187	eP	04	51.60	0.5
KOD	43.98	273	eP	04	56.00	-0.2
WMQ	44.02	324	eP	04	54.60	-1.2
	5.0s	600.00nm				5.7mb X
	Z 18s	3.60um				5.3Msz
	N 14s	1.90um				
	E 13s	1.80um				
		PcP		06	35.00	
		eS		11	28.00	
NDI	45.41	299	iPd	05	04.50	-2.7
	0.6s	13.33nm				5.1mb
ADE	48.60	162	e(P)	05	31.00	-1.1
KSH	49.59	313	P	05	40.50	0.6
	Z 16s	2.40um				5.3MszX
	E 24s	9.90um				
		eS		12	53.00	
CAN	52.84	152	ePKP	06	04.20	-0.2
QUE	54.48	299	ePd	06	16.00	-0.8
		eS		14	03.00	
DZM	54.58	127	iPc	06	17.20	-0.3
MAIO	61.47	305	eP	07	05.00	-0.7
	0.8s	10.98nm				5.0mb
		eS		15	32.00	
ADK	63.44	37	eP	07	18.00	-0.4
KER	71.49	303	eP	08	11.00	1.4
		e		20	55.00	
TAB	72.07	306	eP	08	15.00	2.1
ANM	72.30	26	eP	08	17.10	3.5X
SVW	76.37	30	ePc	08	41.30	4.1X
IMA	77.33	25	eP	08	43.40	0.8
	1.8s	98.40nm				5.5mb
PMR	79.49	29	eP	08	55.00	0.8
	1.1s	56.10nm				5.5mb
FBA	79.83	26	eP	08	57.20	1.1
	1.1s	47.20nm				5.4mb
TOA	80.83	28	eP	09	02.60	1.1
KEV	81.29	339	eP	09	03.00	-0.7
DSI	81.53	300	eP	09	05.00	-0.7
SOD	81.81	337	iP	09	06.10	-0.3
PRNI	82.04	299	eP	09	08.00	-0.4
MBH	82.22	299	eP	09	09.00	-0.3
BBTK	82.47	309	eP	09	12.00	1.4
KBS	82.80	349	iP	09	15.00	3.5X
SUF	82.82	332	eP	09	12.00	0.2
NUR	83.96	330	iP	09	19.00	1.4
	1.0s	38.00nm				5.6mb
INK	84.76	21	eP	09	21.00	-0.5
	1.1s	39.00nm				5.5mb
MBC	85.55	12	eP	09	25.50	0.1
	1.4s	45.00nm				5.5mb
NAI	85.78	268	iPd	09	35.00	7.0X
VRI	85.79	316	ePc	09	26.00	-1.1
		ec		17	43.50	
MLR	86.40	316	eP	09	31.00	0.6
KRA	89.19	321	eP	09	45.50	2.1
	Z 18s	1.40um				5.4Msz
	E 18s	1.70um				
		e		09	51.90	20km
SPC	89.24	320	e(P)	09	45.00	1.0
HFS	89.28	332	eP	09	41.50	-2.2
	0.4s	1.40nm				4.6mb
NAO	90.32	333	P	09	47.50	-1.1

14d 22h

	1.4s	25.60nm		5.3mb			
KSP	91.16	322 eP	09	54.20	1.6		
		e	10	14.70	74kmX		
PRU	92.51	322 eP	10	00.00	1.2		
	Z 19s	0.70um		5.1Msz			
	N 18s	0.40um					
	E 18s	0.50um					
		e	10	28.70	108kmX		
CLL	92.94	324 eP	10	02.00	1.2		
LJU	93.90	318 e(P)	10	07.50	2.2		
MOX	94.00	323 eP	10	07.50	1.8		
		e	10	27.50	72kmX		
CEY	94.08	318 e(P)	10	08.40	2.2		
VOY	94.33	318 e(P)	10	08.00	0.6		
GRF	94.61	323 eP	10	11.40	2.9X		
	0.8s	6.00nm		5.1mb			
	Z 20s	0.60um		5.1Msz			
SQTA	95.59	320 e(P)	10	09.00	-4.3X		
	0.8s	7.10nm		5.2mb			
		i	10	14.90	18km		
		e	10	34.00			
BUL	97.19	251 eP	10	18.80	-2.1		
DOU	98.29	325 P	10	27.40	2.2		
PNT	98.93	36 eP	10	33.00	4.8X		
NEW	100.89	36 ePdiff	10	38.00	1.0		
	1.0s	8.13nm		5.2mb			
RSSD	110.67	34 PKP	15	23.20	2.0		
ANMO	114.87	43 PKP	15	33.60	4.0X		
ALQ	114.87	43 ePKP	15	33.50	3.9X		
	Z 20s	0.35um		5.0Msz			
TUL	120.88	36 ePKP	15	40.80	0.1		
	1.2s	12.30nm					
UYO	122.89	36 iPKPd	15	48.10	3.6X		
LKO	124.15	290 PKP	15	48.00	0.4		
LP8	168.69	118 PKP	16	53.00	-2.6		
ZOBO	168.78	117 PKP	16	58.00	2.2		
	1.1s	13.05nm					
	Z 20s	0.38um					
		eLR	22	44.00			
CCH	169.87	128 ePKP	16	57.00	0.9		
SIV	174.34	146 ePKPc	16	57.00	-0.7		
		i	18	30.50			
	S.D. = 1.3 on 103 of 127 obs.						

? JUN 14, 1990 22h 01m 05.42± 0.93s
56.692 N ±15.7km 155.329 W ±24.1km
DEPTH = 33.0km (normal)
4.3mb (10 obs.)
ALASKA PENINSULA (12)

PMR	5.86	30 e(P)	02	32.00	-0.2		
IMA	9.44	4 e(P)	03	22.00	-0.3		
INK	15.27	32 P	04	48.00	8.1X		
MBC	23.56	21 eP	06	18.00	4.9X		
	0.5s	3.00nm		4.1mb			
		pP	06	28.00	37kmX		
DAG	44.00	13 eP	09	12.00	1.4		
SOD	56.24	359 iP	10	44.20	0.1		
SUF	60.92	359 eP	11	17.00	0.3		
NAO	62.32	8 P	11	25.90	-0.3		
	0.7s	2.20nm		4.4mb			
NUR	63.14	0 eP	11	31.00	-0.5		
LOR	74.96	15 eP	12	44.50	-0.1		
SSF	75.11	15 eP	12	45.50	0.1		
	0.8s	2.70nm		4.3mb			
LBF	75.25	14 eP	12	45.90	-0.4		
	0.8s	2.70nm		4.3mb			
AVF	75.36	15 eP	12	46.60	-0.2		
	0.8s	2.70nm		4.3mb			
SMF	75.57	15 eP	12	48.00	0.0		
	0.8s	2.70nm		4.3mb			
LSF	75.61	16 eP	12	48.10	-0.2		
	0.6s	1.80nm		4.2mb			
MAF	75.80	16 eP	12	49.60	0.3		
	1.0s	4.00nm		4.4mb			
LFF	76.76	17 eP	12	54.70	0.0		
	0.6s	3.60nm		4.6mb			
CAF	76.99	16 eP	12	55.90	-0.1		
	0.6s	1.80nm		4.3mb			
SPA	146.51	180 iPKPc	20	31.60	-10.2X		
	1.0s	10.50nm					
	S.D. = 0.5 on 16 of 19 obs.						

JUN 14, 1990 22h 15m 17.89± 0.33s
36.672 N ± 3.9km 21.377 E ± 2.5km
DEPTH = 40.2km (2 depth phases)
4.4mb (36 obs.)

SOUTHERN GREECE (368)
MD 4.7 (HLW), 4.5 (ATH).

ITM	0.67	41 iPbc	15	30.00	-1.0		
VLI	1.26	87 iPnd	15	39.50	0.3		
VLS	1.63	338 iPnc	15	46.10	1.6		
ATH	2.27	54 iPbd	15	54.80	1.0		
		eSn	16	15.20			
AGG	2.46	18 eP	16	00.10	3.5X		
VAM	2.61	118 iPnd	15	59.00	0.4		
IGT	2.97	344 iPc	16	05.20	1.5		
NEO	3.01	28 ePn	16	05.70	1.5		
KEK	3.28	338 iPnd	16	09.10	1.0		
APE	3.35	82 ePn	16	08.80	-0.4		
LIT	3.53	14 iPc	16	13.10	1.4		
KBN	3.97	354 iPnc	16	20.30	2.5		
VLO	4.07	339 iPn	16	20.10	0.9		
FNA	4.11	360 iPc	16	21.10	1.3		
THE	4.14	17 ePc	16	21.40	1.1		
		eS	17	07.60			
BERA	4.18	345 iPnd	16	21.90	1.2		
OUR	4.19	28 eP	16	21.60	0.7		
GRG	4.35	10 eP	16	25.90	2.6		
SOH	4.42	20 eP	16	25.60	1.3		
OHR	4.46	354 iPnc	16	26.80	2.0		
SOI	4.46	290 Pc	16	25.50	0.6		
SMG	4.48	75 ePn	16	25.20	0.1		
LCI	4.54	325 P	16	25.00	-0.9		
KNT	4.64	14 ePc	16	28.00	0.6		
		eS	17	22.10			
VAY	4.73	11 iPnd	16	30.30	1.6		
TIR	4.81	346 iPnd	16	31.40	1.6		
ATN	4.94	289 Pd	16	32.00	0.4		
TDS	4.97	308 Pc	16	31.90	0.0		
IZM	4.98	68 eP	16	29.00	-3.3X		
EZN	5.01	50 eP	16	33.00	0.5		
PHP	5.06	352 iPn	16	33.50	0.3		
LACI	5.12	346 iPnc	16	34.10	0.0		
ORI	5.14	313 P	16	35.20	0.7		
MEU	5.19	277 P	16	34.80	-0.3		
SKO	5.29	1 iPn	16	37.20	0.6		
		i	16	48.50			
		i	17	01.00			
		i	17	14.00			
		i	17	30.00			
		Lg	17	40.00			
BRT	5.32	323 Pc	16	37.00	0.1		
CIN	5.44	78 eP	16	39.00	0.4		
MNO	5.47	285 P	16	40.00	0.7		
PUK	5.49	348 iPnd	16	39.90	0.7		
RDO	5.52	35 ePn	16	39.00	-0.7		
SDA	5.53	345 iPnc	16	40.80	0.9		
ULC	5.54	343 ePn	16	39.00	-1.0		
		eSn	17	36.00			
RZN	5.64	26 ePc	16	42.00	0.4		
MGR	5.73	309 P	16	42.60	-0.2		
BCI	5.78	350 iPnd	16	44.00	0.7		
KDZ	5.88	31 eP	16	44.00	-0.8		
BDV	5.94	341 ePn	16	44.20	-1.5		
		eSn	17	43.00			
TTG	5.98	345 ePn	16	45.30	-0.9		
		eSn	17	46.50			
GIB	6.00	285 P	16	47.20	0.5		
PLD	6.01	24 eP	16	48.00	1.4		
PVY	6.01	350 ePn	16	47.00	0.2		
		eSn	17	50.00			
VTS	6.08	13 iPc	16	49.00	1.2		
SGO	6.13	311 P	16	49.00	0.6		
HCY	6.18	340 ePn	16	47.50	-1.6		
		eSn	17	49.00			
PGB	6.25	19 eP	16	52.00	1.9		
MCT	6.26	281 P	16	52.50	2.2		
IVA	6.30	350 ePn	16	50.70	0.0		
		eSn	17	58.00			
NKY	6.40	344 ePn	16	50.90	-1.3		
		eSn	17	59.00			
BSS	6.58	311 P	16	54.30	-0.3		
BRY	6.59	342 ePn	16	53.00	-1.9		
		eSn	18	02.50			
KSL	6.64	92 ePn	16	56.00	0.5		
KHL	6.68	73 eP	16	57.50	1.3		
PLE	6.82	348 ePn	16	57.50	-0.6		
		eSn	18	11.00			
ELL	6.85	87 iP	17	00.00	1.4		
ERC	7.13	284 P	17	03.50	1.1		
LVI	7.32	283 P	17	06.00	1.0		
DUI	7.33	315 P	17	05.60	0.4		
IZI	7.33	58 eP	17	04.00	-1.2		
YLV	7.37	56 eP	16	58.00	-7.8X		
BCK	7.41	81 eP	17	07.60	1.3		
HVAR	7.52	331 iPn	17	04.90	-2.9		
		iS	18	27.90			
HRT	7.69	55 eP	17	08.00	-2.2		
SDI	7.73	313 Pc	17	09.90	-0.9		
AZI	8.12	313 P	17	16.30	0.1		
BEO	8.17	355 eP	17	13.50	-3.3X		
DRA	8.29	14 eP	17	25.00	6.5X		
AQU	8.37	315 P	17	20.70	1.0		
RDP	8.42	310 P	17	20.20	-0.2		
RMP	8.46	310 P	17	20.30	-0.6		
GZR	8.78	6 ePd	17	26.00	0.7		
BZS	8.94	1 eP	17	26.00	-1.4		
CMP	9.02	17 ePd	17	33.00	4.4X		
ASS	9.25	316 P	17	33.00	1.1		
ARV	9.39	319 P	17	32.90	-0.8		
MLR	9.46	20 eP	17	36.00	1.3		
BBTK	9.50	67 eP	17	43.00	7.7X		
MAO	9.76	309 P	17	38.10	-0.6		
RSM	9.94	320 Pc	17	41.10	-0.1		
VBY	9.96	334 ePn	17	39.40	-2.0		
		eSn	19	28.40			
ZAG	9.99	338 eP	17	38.50	-3.4X		
CRE	10.01	317 P	17	44.00	1.7		
PTJ	10.08	338 eP	17	39.60	-3.6X		
RIY	10.14	331 ePn	17	42.30	-1.6		
		iSn	19	31.80			
SFI	10.26	318 Pd	17	46.60	1.1		
PGD	10.30	317 P	17	48.50	2.2		
CEY	10.46	332 eP	17	46.00	-2.3		
		eS	19	39.90			
FIR	10.49	316 eP	17	50.00	1.2		
LJU	10.68	333 eP	17	48.80	-2.5		
		eS	19	43.50			
TRI	10.69	330 eP	17	49.60	-1.8		
HLW	10.75	126 ePd	17	48.00	-4.4X		
		eS	19	39.00			
VOY	10.91	331 eP	17	52.90	-1.6		
		eS	19	48.50			
BDI	11.04	315 P	17	57.30	0.9		
MME	11.07	316 P	17	59.10	2.3		
PGF	11.20	305 eP	17	56.30	-2.3		
	1.0s	50.00nm			5.6mb X		
SRO	11.36	349 eP	18	02.80	2.3		
FVI	11.81	330 P	18	05.10	-1.4		
CTI	11.87	325 P	18	05.50	-2.0		
ZST	11.94	346 eP	18	04.30	-4.0X		
		e	18	12.70			
		e	18	38.90			
SAL	12.10	321 Pc	18	09.00	-1.4		
BOB	12.13	315 P	18	12.60	1.7		
VKA	12.17	344 e(P)	18	10.00	-1.4		
	Z 10s	1.50um					
		e	18	31.00			
		LR	23	49.00			
SPC	12.54	357 eP	18	14.00	-2.5		
KMR	12.57	337 eP	18	14.00	-2.7		
CKI	12.61	312 P	18	18.50	1.2		
MDI	12.63	320 P	18	16.90	-0.6		
DSI	12.67	110 eP	18	14.00	-4.1X		
BHG	12.70	333 iPc	18	17.90	-0.6		
	1.3s	81.00nm			5.6mb X		
OGA	12.77	326 eP	18	20.90	1.2		
SBF	12.83	308 eP	18	18.00	-2.4		
	0.6s	14.45nm			5.2mb		
SQTA	12.96	328 iPd	18	22.70	0.6		
		i	18	30.00			
		i	18	33.00			
		i	20	36.20			
		iS	20	40.30			
		i	21	06.40			
		i	22	06.80			
PRNI	12.99	115 eP	18	15.00	-7.5X		
VAI	13.19	318 P	18	24.70	-0.2		
MBH	13.23	117 eP	18	17.00	-8.5X		
KRA	13.42	356 eP	18	29.20	1.3		
		e	18	49.60			
ORO	13.47	316 P	18	28.50	-0.3		
BNI	13.91	312 P	18	37.10	2.5		
LPG	14.10	313 eP	18	36.80	-0.5		
	1.0s	14.00nm			4.6mb		
LPL	14.12	313 eP	18	36.70	-0.8		
	0.8s	6.70nm			4.4mb		
PRU	14.20	342 P	18	36.50	-1.7		
	Z 18s	1.20um					

N 14s 0.80um
E 14s 1.00um
e 18 45.90
KSP 14.63 347 eP 18 43.50 -0.3
i 18 51.00
GRF 14.95 334 eP 18 46.30 -1.7
Z 19s 0.50um 4.0MszX
e 18 54.70
BSF 15.49 321 eP 18 54.80 -0.4
0.8s 28.20nm 4.5mb
MOX 15.63 336 eP 18 57.50 0.7
CDF 15.64 323 eP 18 55.90 -1.2
0.8s 21.50nm 4.4mb
CLL 15.81 340 eP 19 01.00 2.0
1.2s 33.00nm 4.4mb
HAU 15.83 320 eP 18 58.70 -0.7
1.0s 72.00nm 4.8mb
SMF 16.43 313 eP 19 05.40 -1.6
0.6s 10.80nm 4.2mb
LBF 16.53 314 eP 19 07.70 -0.6
0.8s 22.85nm 4.4mb
LOR 16.75 315 eP 19 10.50 -0.5
0.8s 12.75nm 4.1mb
CAF 16.76 305 eP 19 10.50 -0.7
0.8s 9.40nm 4.0mb
AVF 16.79 313 eP 19 09.70 -1.8
0.8s 10.75nm 4.0mb
SSF 16.84 314 eP 19 10.10 -2.1
0.6s 6.75nm 4.0mb
BGF 16.98 311 eP 19 11.80 -2.1
0.8s 28.20nm 4.4mb
MAF 16.99 310 eP 19 11.60 -2.5
1.2s 38.70nm 4.4mb
TCF 17.24 310 eP 19 14.70 -2.5
1.0s 22.00nm 4.2mb
RJF 17.26 306 eP 19 16.90 -0.6
1.0s 12.00nm 4.0mb
LFF 17.64 304 eP 19 21.30 -0.8
0.8s 14.80nm 4.2mb
LSF 17.65 309 eP 19 20.00 -2.2
0.9s 15.55nm 4.1mb
MEM 17.78 326 Pd 19 27.00 3.3X
ECHE 17.81 286 eP 19 26.50 2.1
ENN 17.93 327 eP 19 29.00 3.4X
0.8s 13.00nm 4.1mb
DOU 18.08 323 P 19 30.20 2.8
0.7s 26.70nm 4.5mb
S 23 02.00
WTS 18.47 331 eP 19 34.00 1.8
1.0s 25.00nm 4.3mb
SNF 18.50 324 P 19 34.70 2.1
UCC 18.66 325 P 19 30.00 -4.6X
ETOR 18.73 290 eP 19 37.00 1.4
ENIJ 18.89 278 eP 19 38.00 0.4
ECRI 19.30 295 eP 19 43.00 0.7
LDF 19.73 314 eP 19 45.30 -1.6
0.8s 12.10nm 4.3mb
TAB 19.87 78 eP 19 35.00 -13.6X
LPF 20.01 312 eP 19 47.60 -2.2
0.9s 21.30nm 4.5mb
FLN 20.02 314 eP 19 48.80 -1.1
0.8s 13.45nm 4.3mb
EBAN 20.03 282 eP 19 51.00 0.8
TOL 20.20 287 iPd 19 53.00 1.1
1.0s 40.00nm 4.7mb
GUD 20.30 289 eP 19 54.00 0.9
EJIF 21.54 277 e(P) 20 11.00 5.3X
NKM 21.67 275 iPd 20 08.00 1.1
IFR 21.89 270 iP 20 13.50 4.2X
UPP 23.33 355 iP 20 22.50 -0.5
AVE 23.79 270 iP 20 30.50 2.8
NUR 23.95 4 iP 20 30.00 1.0
0.6s 22.20nm 4.9mb
HFS 23.99 351 eP 20 29.20 -0.2
0.5s 5.20nm 4.3mb
Z 15s 0.33um 3.9MszX
LR 30 06.00
TIO 24.43 265 iP 20 37.00 2.9X
EKA 25.05 326 Pd 20 40.70 1.0
0.8s 9.40nm 4.4mb
NAO 25.09 348 P 20 40.20 0.2
0.7s 7.30nm 4.4mb
SUF 26.24 5 iP 20 51.10 0.4
0.5s 4.80nm 4.3mb
MAIO 30.52 79 eP 21 29.00 -0.6
SOD 30.89 4 eP 21 36.00 3.6X
BCAO 32.19 185 iPc 21 44.50 0.2

0.6s 32.00nm 5.4mb
id 21 56.00 43km
LKO 36.41 229 P 22 21.64 1.0
QUE 38.30 86 eP 22 36.00 -0.6
KIC 38.47 225 (P) 22 40.50 2.7
NDI 47.11 83 iPd 23 47.60 -0.3
0.5s 147.89nm 6.2mb X
WMQ 49.91 60 eP 24 08.80 -0.7
GKN 53.30 80 P 24 34.00 -1.4
0.6s 29.00nm 5.5mb
HYB 53.63 95 ePc 24 37.00 -0.7
KRI 53.78 170 iPc 24 43.20 4.5X
ipP 24 54.20 37km
DMN 53.85 80 P 24 38.40 -1.1
0.4s 25.00nm 5.6mb X
PKI 54.11 80 P 24 40.00 -1.5
0.8s 42.00nm 5.5mb X
GUN 54.33 80 P 24 41.80 -1.3
0.8s 59.00nm 5.7mb X
BUL 56.92 172 eP 25 00.20 -1.3
GTA 59.94 61 P 25 21.00 -1.5
0.8s 10.00nm 5.0mb
SHL 60.16 79 iP 25 22.10 -2.1
LZH 64.27 63 Pc 25 51.00 -0.5
HHC 67.33 55 eP 26 10.70 -0.3
KMI 68.87 74 eP 26 19.00 -1.9
CHG 69.23 82 eP 26 22.10 -0.9
1.1s 13.29nm 4.9mb
e 35 23.10
TIY 69.49 58 eP 26 24.10 -0.3
GYA 71.17 71 P 26 34.00 -0.8
QIZ 77.70 75 eP 27 12.80 0.5
NEW 87.70 334 e(P) 28 06.20 2.7
0.7s 5.50nm 4.9mb
S.D. = 1.4 on 178 of 201 obs.

JUN 14, 1990 22h 25m 26.03± 0.49s
5.870 S ± 6.1km 153.302 E ±11.9km
DEPTH = 49.5km (2 depth phases)
5.0mb (6 obs.)
NEW IRELAND REGION (190)

RAB 2.01 326 e(P) 25 57.00 -1.2
iS 26 50.00
CTA 15.71 205 iPc 29 09.60 3.9X
1.1s 48.10nm 4.6mb
QIS 19.75 221 iPd 29 53.50 -1.3
DZM 20.51 143 iPc 30 01.20 -1.7
i 34 59.00
RMQ 20.96 191 eP 30 06.00 -1.3
e 30 19.00 56km
GUA 21.00 337 eP 30 08.00 0.2
GUMO 21.07 337 eP 30 08.40 0.0
PJG 21.07 337 eP 30 08.20 -0.2
QLP 22.34 202 eP 30 20.00 -1.1
MTN 22.94 251 eP 30 27.60 0.6
WB5 23.08 231 eP 30 30.00 1.6
WRA 23.14 231 Pd 30 28.40 -0.6
0.2s 4.20nm 4.5mb
CMS 26.43 194 e(P) 31 00.00 -0.1
MAT 44.50 343 eP 33 32.00 -2.5
1.0s 11.00nm 4.6mb
TIA 53.87 324 Pc 34 45.80 -0.7
MDJ 54.59 339 eP 34 50.70 -1.0
BJI 57.05 326 eP 35 08.50 -1.0
TIY 57.67 322 eP 35 14.20 0.2
XAN 57.74 317 P 35 13.80 -0.7
KMI 58.00 304 Pd 35 17.50 0.8
CHTO 58.90 296 P 35 23.30 0.5
e 35 35.60 43km
HHC 60.20 324 eP 35 30.00 -1.5
BTO 60.95 323 eP 35 37.50 0.9
LZH 62.34 316 Pd 35 47.00 0.9
GTA 66.78 317 P 36 15.60 0.8
SHL 67.28 301 iP 36 18.00 -0.3
GUN 73.10 301 P 36 54.40 0.5
0.8s 38.00nm 5.4mb
PKI 73.41 301 P 36 55.80 0.1
DMN 73.68 301 P 36 57.60 0.5
1.0s 57.00nm 5.5mb
GKN 74.18 301 P 37 00.20 0.3
1.0s 54.00nm 5.4mb
WMQ 76.86 317 P 37 16.00 1.2
KSH 83.99 311 P 37 56.50 3.7X
APO 117.49 339 ePKP 44 06.50 -1.2
0.4s 1.30nm
BUL 119.81 243 ePKP 44 14.00 0.5

ZOBO 133.48 119 PKP 44 43.00 2.7
BCAO 134.94 270 ePKPd 44 43.00 0.5
SIV 139.63 123 PKP 44 51.20 0.1
NKM 144.64 329 ePKP 44 56.00 -3.3X
IFR 145.97 327 iPKPd 45 04.00 2.1
AVE 147.35 329 iPKP 45 07.50 3.6X
TIO 149.11 326 iPKPd 45 18.00 11.1X
BAO 149.98 136 ePKP 45 10.00 1.4
S.D. = 1.1 on 37 of 42 obs.

JUN 14, 1990 22h 36m 18.67± 0.78s
36.683 N ±10.9km 21.383 E ± 5.5km
DEPTH = 10.0km (geophysicist)
3.4mb (1 obs.)
SOUTHERN GREECE (368)
ML 3.5 (ATH).

ITM 0.66 41 iPgd 36 32.50 0.7
VLI 1.25 88 ePb 36 42.00 0.1
VLS 1.62 337 ePb 36 51.50 4.1X
ATH 2.26 55 ePg 37 01.20 4.6X
VAM 2.61 118 ePn 37 01.50 -0.2
OHR 4.45 354 eP 37 33.00 5.3X
SOI 4.46 290 P 37 28.00 0.1
LCI 4.53 325 P 37 27.90 -0.9
ATN 4.94 289 P 37 35.00 0.3
ORI 5.14 313 P 37 38.00 0.5
BRT 5.31 323 P 37 40.00 0.1
MGR 5.73 309 P 37 45.40 -0.5
SGD 6.13 311 P 37 52.50 1.1
NAO 25.08 348 P 41 43.00 -1.4
0.6s 0.50nm 3.4mb
S.D. = 0.8 on 11 of 14 obs.

* JUN 14, 1990 22h 44m 25.06± 3.24s
31.394 S ±10.8km 68.035 W ±23.6km
DEPTH = 10.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

CFA 0.27 219 ePd 44 24.40 -6.5X
eS 44 37.40
RTLL 0.38 280 iPc 44 33.00 0.2
eS 44 39.00
RTCV 0.63 222 ePc 44 37.90 0.1
RTCB 0.66 262 iPc 44 38.10 -0.2
RTBS 1.24 257 ePd 44 48.00 -0.1
S 45 05.30
RTRS 1.73 314 ePd 44 55.30 0.0
SIV 16.60 24 P 48 27.60 8.1X
S.D. = 0.2 on 5 of 7 obs.

JUN 14, 1990 23h 04m 33.14± 0.53s
30.150 S ± 6.2km 69.409 W ±10.0km
DEPTH = 117.0 ± 6.0 km
4.9mb (1 obs.)
CHILE-ARGENTINA BORDER REGION (127)

RTRS 0.05 246 iPd 04 51.00 1.4
RTLL 1.43 146 iPd 04 59.30 -0.7
RTCB 1.43 159 eP 05 02.00 1.9
RTBS 1.51 181 iPd 05 02.00 1.2
ZON 1.53 156 iPd 05 00.30 -0.8
eS 05 15.00
CFA 1.77 146 iPc 05 03.80 -0.2
RTCV 1.86 157 e(P) 05 05.00 -0.2
JACH 2.72 202 iPd 05 17.50 1.1
i 05 49.50
ROCH 3.13 206 eP 05 28.30 6.3X
iS 06 07.50
i 06 10.00
PEL 3.18 200 iPc 05 22.50 0.0
iS 06 00.10
FCH 3.26 193 iPd 05 24.50 0.7
iS 06 02.50
i 06 05.00
IHA 3.44 213 eP 05 25.00 -0.9
i(S) 05 58.00
SAN 3.46 198 ePc 05 25.80 -0.5
i 06 04.50
iS 06 06.00
PCH 3.59 195 iP 05 28.30 0.3
iS 06 07.50
i 06 10.00
TACH 3.73 200 iP 05 28.50 -1.3
i 06 12.40
iS 09 11.00
CHCH 3.92 195 iPd 05 32.10 -0.4

14d 23h

			iS	06 16.00		
LNV	4.16	204	iPc	05 33.50	-2.1	
			i	06 09.00		
			i	06 20.00		
ANT	6.48	352	eP	06 06.00	-1.5	
LPB	13.61	5	eP	07 45.00	2.1	
ZOBO	13.87	5	Pc	07 50.40	4.0X	
SIV	16.03	30	eP	08 11.00	-2.3	
BAO	24.39	58	eP	09 42.00	0.0	
SPA	60.02	180	iPd	14 29.90	0.4	
	1.0s		12.50nm		4.9mb	
LIC	71.43	71	P	15 42.60	-0.3	
TIC	71.67	71	P	15 44.70	0.4	
KIC	71.74	71	P	15 44.50	-0.2	
LKO	72.87	68	Pd	15 51.28	-0.1	
SLR	83.61	116	eP	16 49.50	-0.6	
WRA	125.20	208	PKP	23 24.00	2.1	
	0.6s		1.20nm			
WB5	125.24	208	ePKP	23 22.50	0.5	
	S.D. = 1.2		on 28 of 30 obs.			

& JUN 14, 1990 23h 28m 48.92s
31.570 N 114.480 W
DEPTH = 5.7km
GULF OF CALIFORNIA (49)
<ECX>. ML 3.8 (ECX).

ECBX	0.50	259	iPd	28 58.70	-0.2	
			S	29 06.10		
LMX	0.68	323	iP	29 01.80	-0.6	
EMX	0.77	303	iPd	29 02.50	-1.8	
			S	29 14.20		
CPBX	1.10	321	eP	29 07.90	-2.0	
ENX	1.89	280	ePn	29 18.80	-3.2	
			S	29 42.00		
PBX	1.92	276	ePn	29 19.20	-3.3	
			S	29 43.10		
CBX	2.00	292	ePn	29 20.50	-3.3	
			S	29 44.80		
	7 obs. ossociated					

JUN 14, 1990 23h 45m 01.30± 0.40s
39.096 N ± 4.3km 20.766 E ± 3.1km
DEPTH = 28.9 ± 3.2 km
3.7mb (2 obs.)
GREECE-ALBANIA BORDER REGION (392)
ML 3.8 (ATH).

IGT	0.55	323	eP	45 09.80	-2.7	
			eS	45 19.00		
VLS	0.93	189	eP	45 20.00	1.7	
			eS	45 35.50		
KEK	0.97	310	eP	45 20.00	1.1	
			eS	45 34.00		
SRN	0.98	323	iPg	45 19.10	0.0	
AGG	1.22	93	ePd	45 21.60	-0.9	
			eS	45 38.50		
KBN	1.53	1	ePn	45 28.20	1.3	
LIT	1.67	52	eP	45 29.20	0.2	
			eS	45 53.20		
VLO	1.68	325	iPn	45 30.40	1.3	
FNA	1.75	15	eP	45 30.70	0.5	
			eS	45 54.90		
NEO	1.92	83	eP	45 32.70	0.0	
OHR	2.01	1	iPnc	45 36.20	2.2X	
			i	46 05.00		
			Lg	46 10.10		
ITM	2.12	154	eP	45 35.00	-0.5	
GRG	2.24	34	eP	45 37.20	0.0	
			eS	46 06.90		
THE	2.28	47	eP	45 37.70	-0.1	
			eS	46 08.40		
TIR	2.35	343	ePn	45 40.20	1.5	
LCI	2.50	301	Pd	45 39.00	-1.8	
ATH	2.57	115	eP	45 45.20	3.3X	
VAY	2.62	31	iPn	45 43.00	0.5	
SOH	2.63	48	ePc	45 42.70	-0.1	
			eS	46 16.70		
KNT	2.63	38	eP	45 42.70	-0.1	
			eS	46 16.60		
LACI	2.66	343	ePn	45 43.00	-0.1	
OUR	2.77	62	eP	45 44.10	-0.6	
			eS	46 20.20		
SKO	2.92	10	iPn	45 47.70	0.9	
			i	45 54.00		
			i	46 22.20		
			Lg	46 43.00		
VLI	2.93	143	eP	45 51.60	4.7X	
SRS	2.96	46	eP	45 46.70	-0.7	
			eS	46 23.70		
SDA	3.07	342	ePn	45 50.20	1.3	
BRT	3.26	304	P	45 52.50	0.8	
BCI	3.31	351	iPnd	45 53.40	1.1	
MMB	3.37	41	ePc	45 52.00	-1.2	
ORI	3.47	288	P	45 55.40	0.7	
TDS	3.48	281	P	45 55.90	1.1	
SOI	3.83	256	P	45 59.50	-0.2	
VTS	3.95	27	eP	46 02.00	0.4	
RZN	3.98	48	ePd	46 01.00	-1.0	
MGR	4.16	286	Pd	46 04.60	0.2	
RDO	4.19	59	eP	46 04.20	-0.7	
ATN	4.26	259	P	46 04.80	-1.0	
SGO	4.45	291	P	46 09.50	1.0	
VAM	4.59	142	eP	46 12.60	2.1	
BSS	4.88	292	P	46 15.60	0.9	
MEU	5.02	248	Pd	46 14.20	-2.5	
HVAR	5.22	323	ePn	46 15.90	-3.5X	
			iSn	47 14.60		
DUI	5.46	300	P	46 22.50	-0.4	
SDI	5.91	298	P	46 30.00	0.7	
AZI	6.29	300	P	46 35.00	0.5	
ASS	7.30	306	P	46 47.50	-1.2	
ARV	7.35	309	P	46 45.90	-3.5X	
MLR	7.45	29	eP	46 52.00	1.1	
VBY	7.59	329	eP	46 51.50	-1.2	
			e(Sn)	48 26.30		
VRI	8.07	31	ePd	47 00.00	0.5	
CEY	8.12	327	e(P)	46 57.00	-3.2X	
			e(S)	48 28.80		
LJU	8.33	329	e(P)	46 59.00	-4.0X	
VOY	8.59	326	ePnc	47 03.20	-3.5X	
			eSn	48 37.20		
FVI	9.51	325	P	47 19.00	-0.3	
CTI	9.66	319	P	47 17.30	-4.3X	
NAO	22.62	347	P	50 00.00	-0.7	
	0.5s		0.80nm		3.5mb	
EKA	22.80	323	Pc	50 00.60	-1.9	
	1.0s		5.60nm		4.0mb	
SUF	23.88	6	eP	50 11.00	-1.9	
	S.D. = 1.1		on 49 of 58 obs.			

JUN 15, 1990 00h 30m 51.40± 0.82s
23.297 S ±10.7km 178.955 E ± 8.5km
DEPTH = 563.4 ± 9.4 km
4.8mb (11 obs.)
SOUTH OF FIJI ISLANDS (171)

SVA	5.18	355	iPd	32 24.60	0.5	
			eS	33 38.40		
VUN	5.28	355	iPd	32 33.10	8.1X	
NDF	5.69	345	eP	32 27.70	-0.8	
DZM	11.62	274	iPc	33 27.50	1.0	
HBZ	14.27	182	eP	33 52.00	-0.8	
			S	36 28.00		
COO	25.15	247	iPd	35 36.00	1.5	
RMQ	27.55	257	iPc	35 56.70	1.3	
	0.7s		83.00nm		5.5mb	
CAN	28.63	238	iPc	36 05.80	1.0	
BWA	28.85	241	iPc	36 05.40	-1.3	
CMS	30.43	247	iPd	36 21.10	0.8	
	0.9s		94.00nm		5.4mb	
CTA	30.52	270	iPd	36 21.70	0.6	
	0.7s		109.59nm		5.6mb	
TOO	31.98	236	iPd	36 34.60	1.3	
STK	34.07	247	iPc	36 51.00	0.2	
	0.9s		29.00nm		4.9mb	
QIS	36.53	267	eP	37 11.00	-0.2	
WB5	41.48	266	eP	37 50.00	-1.3	
			eScP	42 35.90		
WRA	41.49	266	Pc	37 51.50	0.1	
	0.3s		8.00nm		4.7mb	
MTN	46.46	274	eP	38 29.00	-1.0	
KNA	47.71	270	eP	38 38.20	-1.3	
COOL	51.54	248	eP	39 06.30	-1.4	
KLB	54.33	247	iPd	39 26.50	-1.1	
MUN	55.59	246	eP	39 30.50	-5.8X	
NANU	57.98	257	eP	39 51.30	-1.5	
	0.4s		26.00nm		4.9mb	
SPA	66.84	180	iPd	40 49.10	-0.2	
	1.0s		36.50nm		4.9mb	
PRS	81.78	45	e(P)	42 13.40	0.6	
PCC	81.84	43	ePc	42 13.40	0.4	
BCH	81.95	46	P	42 14.10	0.3	
PRI	82.13	45	iPc	42 15.40	0.7	
BRK	82.14	43	ePc	42 14.90	0.4	
MHC	82.21	44	ePc	42 15.70	0.6	
ARN	82.29	44	P	42 15.50	0.2	
ABL	82.34	47	P	42 15.80	-0.1	
BAR	82.87	50	eP	42 24.00	5.7X	
RVR	83.11	49	eP	42 20.00	0.6	
PLM	83.11	49	eP	42 20.00	0.3	
SBB	83.19	48	eP	42 19.00	-0.9	
FRI	83.25	45	ePc	42 20.40	0.3	
ISA	83.30	47	eP	42 21.00	0.5	
CMB	83.43	44	ePc	42 21.20	0.2	
WDC	83.63	41	iPc	42 22.50	0.6	
ORV	83.63	42	ePc	42 22.20	0.3	
CLC	83.98	47	eP	42 23.00	-0.8	
TPC	84.09	49	eP	42 24.00	-0.4	
GSC	84.23	48	eP	42 25.00	-0.1	
GLA	84.38	51	eP	42 26.00	0.2	
KVN	85.48	44	P	42 30.70	-0.5	
TNP	85.50	45	P	42 31.20	-0.1	
GMW	87.80	35	P	42 42.00	0.2	
LON	87.83	36	P	42 41.80	-0.2	
PMR	88.40	15	P	42 42.90	-1.3	
	0.7s		8.36nm		4.7mb	
MCW	88.48	34	P	42 45.30	0.4	
MSU	89.07	47	P	42 48.70	0.6	
DUG	89.52	45	P	42 50.00	0.0	
PNT	90.55	35	eP	42 54.00	-0.4	
ALQ	91.34	52	eP	42 57.80	-0.8	
	1.0s		5.00nm		4.5mb	
ANMO	91.35	52	P	42 58.40	-0.2	
IMA	91.49	11	P	42 57.80	-0.7	
	0.8s		3.02nm		4.4mb	
BW06	92.93	44	P	43 04.50	-1.3	
	0.7s		1.75nm		4.3mb	
GOL	94.28	49	P	43 11.70	-0.4	
RSSD	97.12	45	P	43 11.40	-13.3X	
FRB	120.58	29	ePKP	48 38.00	-2.0	
SUF	136.54	342	ePKP	49 10.60	0.0	
	0.6s		3.80nm			
NUR	138.74	341	ePKP	49 10.60	-4.0X	
NAO	141.60	351	PKP	49 13.40	-6.4X	
	0.8s		4.70nm			
HFS	141.77	348	ePKP	49 13.10	-7.0X	
	0.9s		10.50nm			
PRNI	147.18	290	ePKP	49 33.00	2.9	
MBH	147.31	289	ePKP	49 33.00	2.8	
EKA	147.97	2	PKPd	49 33.30	2.8	
	1.0s		13.10nm			
KRA	148.65	334	ePKP	49 35.70	4.0X	
MLR	148.85	322	ePKP	49 30.00	-2.4	
SPC	149.19	332	iPKP	49 37.90	5.1X	
KSP	149.38	338	iPKPd	49 37.10	4.3X	
	0.8s		28.00nm			
			e	51 51.80		
WIT	149.95	351	ePKP	49 39.50	6.0X	
CLL	149.99	342	iPKP	49 38.30	4.6X	
	1.1s		51.00nm			
			i	49 39.20		
PRU	150.69	339	PKP	49 40.30	5.5X	
WTS	150.72	350	ePKP	49 40.00	5.3X	
	0.9s		38.00nm			
MOX	150.97	343	ePKP	49 41.50	6.3X	
SRO	151.07	332	ePKP	49 41.70	6.3X	
ZST	151.26	334	ePKP	49 42.60	6.9X	
ENN	152.05	351	ePKP	49 43.50	6.8X	
	0.7s		5.00nm			
			e	49 55.50		
MEM	152.19	350	PKP	49 43.90	7.0X	
DOU	152.89	352	PKP	49 45.50	7.6X	
BCAO	153.37	228	iPKPc	49 38.50	-1.2	
	1.2s		18.00nm			
			ic	51 55.00		
	S.D. = 1.1		on 62 of 82 obs.			

? JUN 15, 1990 01h 28m 21.06± 4.38s
31.246 S ±14.9km 68.492 W ±22.6km
DEPTH = 89.0 ± 42.5 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.09	167	iPc	28 34.10	0.0	
RTCB	0.36	228	iPd	28 35.00	0.0	
CFA	0.42	149	iPd	28 35.50	0.1	
			eS	28 47.80		
RTCV	0.61	184	ePc	28 36.80	-0.2	
			S	28 48.80		
RTBS	0.92	243	eP	28 40.10	0.1	
			(S)	28 55.00		

RTRS 1.36 322 ePc 28 45.30 0.0
S.D. = 0.2 on 6 of 6 obs.

JUN 15, 1990 02h 10m 09.06± 0.28s
18.950 N ± 3.8km 64.309 W ± 3.7km
DEPTH = 47.4km (2 depth phases)
4.4mb (8 obs.)
VIRGIN ISLANDS (91)
MD 4.8 (TRN).

LPR	1.61	247	P	10 35.40	-0.2
CPD	1.77	240	P	10 38.10	0.3
SJG	1.94	245	iP	10 40.20	0.0
			S	11 04.20	
SKI	2.19	137	eP	10 44.18	0.4
PORP	2.38	248	P	10 46.40	-0.1
NEV	2.45	137	eP	10 48.08	0.7
			S	11 22.70	
CPB	2.69	119	eP	10 50.04	-0.9
			eS	11 26.83	
MGP	2.80	251	P	10 52.80	0.3
MGH	2.98	138	eP	10 55.93	0.9
BPA	3.00	129	eP	10 54.42	-0.9
			S	11 35.50	
SEG	3.68	133	eP	11 04.54	-0.4
PAG	3.84	139	eP	11 07.37	0.1
			S	11 54.00	
SFG	4.00	132	eP	11 08.20	-1.2
MGG	4.15	136	eP	11 11.59	0.0
BBL	4.35	141	eP	11 14.52	0.1
DPMT	4.61	142	eP	11 18.00	-0.1
FDF	5.17	144	eP	11 28.70	2.7
CRM	5.29	142	eP	11 28.52	0.9
BIM	5.39	144	eP	11 29.18	0.1
MVM	5.46	143	eP	11 30.00	0.0
SLW	5.87	146	eP	11 33.84	-2.0
SLB	5.98	148	eP	11 36.05	-1.4
SVB	6.36	152	eP	11 41.92	-0.8
TCE	8.57	163	eP	12 14.20	0.8
TRN	8.72	161	eP	12 16.01	0.6
HBF	20.03	317	P	14 47.50	6.7X
SGS	20.28	318	P	14 51.00	7.6X
JSC	21.46	319	P	15 06.50	11.1X
NA2	22.41	331	P	15 18.10	13.3X
BLA	23.03	325	eP	15 29.50	18.5X
	0.5s		24.65nm		
			eS	19 15.00	
GBTN	24.21	317	P	15 35.00	12.6X
RSCP	25.06	316	P	15 30.00	-0.6
SIV	34.87	175	P	16 55.80	-2.3
ZOBO	35.20	186	eP	17 06.00	4.5X
LPB	35.46	186	eP	17 00.00	-3.5X
BAO	37.93	154	e(P)	17 26.00	1.9
ALQ	40.49	302	eP	17 45.20	-0.1
	1.0s		3.25nm		4.1mb
			e	17 58.00	48km
ANMO	40.49	302	P	17 45.40	0.1
RSSD	41.57	316	P	17 58.00	4.0X
BW06	44.84	312	P	18 20.90	0.2
			e	18 33.70	47km
FRB	44.85	357	eP	18 19.00	-1.1
LPF	58.33	45	eP	20 01.90	0.3
	0.7s		4.40nm		4.7mb
GRR	58.49	44	eP	20 03.00	0.3
	0.6s		3.60nm		4.7mb
FLN	58.78	44	eP	20 05.20	0.4
EPF	58.89	51	eP	20 06.60	0.9
	0.6s		1.80nm		4.4mb
RJF	59.85	48	eP	20 12.50	0.3
TCF	60.39	47	eP	20 16.30	0.4
	0.6s		1.80nm		4.4mb
AVF	61.20	46	eP	20 21.30	-0.1
	0.6s		1.80nm		4.4mb
SSF	61.32	46	eP	20 22.40	0.2
	0.8s		2.70nm		4.4mb
LOR	61.57	46	eP	20 23.60	-0.3
	0.6s		1.80nm		4.4mb
LBF	61.64	46	eP	20 24.10	-0.3
LPG	63.54	48	eP	20 37.50	0.1
PRU	68.61	43	eP	21 22.50	13.3X
S.D. = 0.9 on 43 of 53 obs.					

? JUN 15, 1990 03h 20m 57.46± 2.85s
4.025 S ±51.3km 104.572 W ±60.4km
DEPTH = 10.0km (geophysicist)
4.0mb (4 obs.)
NORTHERN EASTER I. CORDILLERA (694)

ZOBO	37.80	111	eP	28 18.00	1.3
	Z 24s		0.13um		3.6MszX
			LR	37 16.00	
LPB	37.89	112	eP	28 16.00	-1.3
ALQ	38.80	358	eP	28 24.80	0.4
	1.0s		2.50nm		3.9mb
ANMO	38.80	358	P	28 25.00	0.6
	1.0s		3.13nm		4.0mb
CCH	39.92	112	(P)	28 24.00	-10.1X
MSU	42.91	351	P	28 59.20	1.0
TNP	43.51	345	P	29 03.50	0.4
SIV	44.35	109	(P)	29 04.00	-6.1X
KVN	44.65	345	P	29 12.50	0.2
DUG	44.65	351	P	29 28.40	16.1X
	0.6s		1.64nm		
ORV	46.08	342	P	29 24.00	0.5
BW06	46.80	355	P	29 28.40	-1.0
	0.6s		0.93nm		4.0mb
RSSD	47.93	1	P	29 38.50	0.3
NEW	53.22	350	P	30 16.50	-1.7
	1.2s		10.42nm		4.7mb
PNT	54.71	348	eP	30 27.00	-2.1
INK	74.94	349	eP	32 42.00	1.9
MBC	80.61	356	eP	33 11.00	-0.3
MAIO	144.69	23	ePKP	40 32.00	-4.7X
S.D. = 1.3 on 14 of 18 obs.					

& JUN 15, 1990 03h 29m 36.50s
40.428 N 125.395 W
DEPTH = 5.0km
OFF COAST OF NORTHERN CALIFORNIA(34)
<BRK>. ML 3.2 (BRK).

FHC	1.14	70	iPc	29 56.90	-1.4
			i	30 04.10	
			eS	30 11.30	
WDC	2.18	85	iPc	30 11.60	-2.4
LBFM	2.81	70	eP	30 21.50	-1.7
MIN	2.90	90	ePc	30 21.30	-3.0
ORV	3.12	105	eP	30 24.90	-2.3
PCC	3.75	140	ePd	30 34.20	-2.1
MHC	4.25	135	eP	30 40.50	-3.0
ARN	4.30	134	eP	30 41.50	-2.7
SAO	4.79	139	eP	30 46.80	-4.3
KVN	5.79	101	eP	31 02.00	-3.3
10 obs. associated					

JUN 15, 1990 04h 42m 51.99± 0.39s
42.366 N ± 4.2km 1.809 E ± 4.0km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 3.4 (LDG). mbLg 3.3 (MDD).

ETER	0.78	94	eP	43 07.50	0.3
			eS	43 18.00	
EPF	1.27	302	Pn	43 15.30	-0.3
			Pg	43 19.30	
			Sn	43 32.80	
			Sg	43 36.40	
EBR	1.83	213	ePn	43 25.50	1.8
			eSg	43 49.50	
EROO	1.87	215	eP	43 24.00	-0.2
			eS	43 46.60	
LPO	2.36	349	Pn	43 32.10	0.7
			Pg	43 36.20	
			Sn	44 00.20	
			Sg	44 06.80	
CAF	2.57	4	Pn	43 34.50	0.2
			Pg	43 39.60	
			Sn	44 04.20	
			Sg	44 13.00	
LFF	2.69	344	Pn	43 35.70	-0.3
			Sn	44 07.60	
			Sg	44 17.20	
RJF	2.94	356	Pn	43 39.40	-0.3
			Sn	44 13.60	
			Sg	44 25.60	
ECRI	3.20	276	eP	43 44.70	1.3
			eS	44 21.80	
ETOR	3.28	243	eP	43 44.40	-0.2
			eS	44 22.20	
ECHE	3.48	218	eP	43 46.70	-0.6
LRG	3.52	70	Pn	43 47.70	0.0
			Sn	44 27.90	
LMR	3.59	73	Pn	43 49.40	0.6
FRF	3.75	70	Pn	43 51.80	0.7
LSF	3.89	357	Pn	43 53.20	0.1
			Pg	44 04.60	
			Sn	44 34.60	
			Sg	44 54.60	
MAF	3.89	8	Pn	43 52.40	-0.7
			Pg	44 05.60	
			Sg	44 54.40	
TCF	3.93	4	Pg	44 06.20	12.5X
			Sn	44 36.20	
			Sg	44 56.60	
BGF	4.26	10	Pn	43 58.40	0.1
			Pg	44 12.10	
			Sg	45 06.30	
MFF	4.46	342	Pn	44 01.30	0.2
			Pg	44 17.20	
			Sn	44 48.40	
			Sg	45 11.40	
SMF	4.52	18	Pg	44 16.60	14.6X
			Sg	45 15.40	
AVF	4.56	13	Pg	44 18.00	15.5X
			Sg	45 16.20	
GUD	4.80	251	eP	44 04.60	-1.5
			eS	44 58.00	
SSF	4.85	14	Pg	44 23.40	16.7X
			Sg	45 25.20	
PGF	5.32	86	Pn	44 11.80	-1.7
S.D. = 0.9 on 20 of 24 obs.					

* JUN 15, 1990 05h 54m 55.74± 0.90s
30.582 N ±15.1km 67.429 E ±11.2km
DEPTH = 33.0km (normal)
4.4mb (2 obs.)
PAKISTAN (710)

QUE	0.57	227	eP	55 07.40	-0.1
NDI	8.73	100	eP	57 02.00	-0.6
	0.6s		20.00nm		5.4mb X
			eS	58 44.00	
MAIO	8.74	313	eP	57 04.00	1.1
			eS	59 21.00	
SHL	22.13	97	eP	59 51.50	1.2
NUR	41.14	329	eP	02 39.00	1.0
SUF	41.59	333	eP	02 39.00	-2.7
APO	46.08	327	eP	03 12.30	-5.7X
	0.5s		3.10nm		4.5mb
NAO	47.63	326	P	03 24.00	-6.3X
	0.9s		2.40nm		4.2mb
INK	80.18	8	eP	07 04.00	0.3
S.D. = 1.7 on 7 of 9 obs.					

? JUN 15, 1990 06h 02m 37.80± 3.36s
32.512 S ±14.5km 71.832 W ±34.5km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

IHA	0.54	163	iPc	02 48.90	0.0
			iS	02 56.00	
RTBS	2.19	68	e(P)	03 12.90	0.3
			S	03 38.50	
ZON	2.85	71	eP	03 22.00	0.0
RTCV	2.87	78	e(P)	03 23.00	0.7
RTLL	3.09	68	iPd	03 24.20	-1.3
			eS	04 03.60	
RTRS	3.09	42	iPc	03 25.60	0.2
CFA	3.18	74	iPc	03 21.90	-4.8X
S.D. = 0.9 on 6 of 7 obs.					

? JUN 15, 1990 06h 14m 13.32± 1.22s
31.513 S ±17.5km 69.361 W ±19.9km
DEPTH = 120.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTBS	0.17	208	ePd	14 30.10	-0.2
			S	14 42.50	
RTCV	0.78	116	e(P)	14 34.00	0.3
RTLL	0.78	77	iPd	14 33.30	-0.4
			eS	14 48.50	
CFA	0.96	96	ePc	14 35.40	0.1
RTRS	1.34	356	eP	14 39.40	0.2
S.D. = 0.4 on 5 of 5 obs.					

JUN 15, 1990 06h 19m 04.90± 0.45s
11.848 N ± 3.3km 61.030 W ±10.5km
DEPTH = 36.5 ± 16.6 km
WINDWARD ISLANDS (95)
MD 3.6 (TRN).

GRW	0.69	297	iP	19 18.22	-0.1

15d 06h

TPR	0.70	159	iP	19	18.29	-0.1
			eS	19	27.29	
PIG	0.71	165	eP	19	10.04	-8.4X
			eS	19	28.81	
BOT	0.74	156	eP	19	19.06	0.1
			eS	19	28.56	
TRN	1.25	197	eP	19	25.41	-0.7
			e	19	27.91	
			eS	19	40.57	
TCE	1.35	212	eP	19	26.37	-1.2
			e	19	30.24	
			eS	19	41.26	
TBH	1.36	182	eP	19	30.32	2.6X
SVB	1.43	351	eP	19	28.77	0.0
SVV	1.47	353	eP	19	29.52	0.1
			eS	19	49.63	
SOA	1.52	356	eP	19	30.36	0.3
			eS	19	49.62	
TPP	1.58	195	eP	19	32.93	2.0
SLB	1.97	360	eP	19	36.35	-0.2
			eS	20	00.14	
SLW	2.16	2	eP	19	40.46	1.2
BIM	2.65	359	eP	19	46.05	-0.2
MVM	2.69	3	eP	19	46.13	-0.7
			S	20	16.40	
FDF	2.87	358	eP	19	48.76	-0.6
			S	20	20.30	
CRM	2.89	2	eP	19	49.17	-0.4
			S	20	21.00	
BBL	3.68	353	eP	20	00.00	-0.9
PAG	4.20	351	eP	20	08.00	-0.4
			S	20	54.00	
MGH	4.98	347	eP	20	21.50	2.2
BPA	5.23	351	eP	20	23.00	0.2
NEV	5.46	344	eP	20	26.00	-0.1
SIV	27.66	180	P	24	51.20	-0.4

S.D. = 0.9 on 21 of 23 obs.

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* JUN 15, 1990 06h 20m 55.71± 0.61s
31.699 S ±10.7km 69.361 W ±13.8km
DEPTH = 124.8 ± 11.1 km
4.1mb (1 obs.)
SAN JUAN PROVINCE, ARGENTINA (137)

RTBS	0.09	296	iPd	21	13.00	-0.1
ZON	0.60	75	iPd	21	15.00	-0.2
			eS	21	28.00	
RTCV	0.72	103	iPc	21	16.30	0.3
RTLL	0.85	64	iPc	21	16.90	-0.2
CFA	0.96	85	iPd	21	18.10	0.0
JACH	1.43	226	iPd	21	24.00	0.9
			iS	21	45.50	
FCH	1.80	206	iPc	21	29.00	1.2
			iS	21	53.50	
PEL	1.82	218	iPc	21	28.00	0.3
			iS	21	51.50	
ROCH	1.89	227	iPc	21	28.40	-0.3
			iS	21	53.20	
SAN	2.06	212	iPc	21	31.00	0.3
			iS	21	56.90	
			i	21	57.40	
PCH	2.15	207	iPc	21	32.10	0.3
			iS	21	59.50	
TACH	2.36	214	iPd	21	34.00	-0.4
			iS	22	02.50	
CHCH	2.48	206	iPc	21	35.60	-0.4
			iS	22	06.70	
LCCH	2.57	226	iPd	21	37.00	-0.2
			iS	22	07.00	
LNV	2.84	217	iPc	21	39.00	-1.6
			iS	22	12.50	
CCH	14.55	12	eP	24	23.00	5.9X
LPB	15.14	5	P	24	22.00	-2.7
ARE	15.29	352	eP	24	27.00	0.6
ZOBO	15.40	4	P	24	30.00	1.9
	0.9s		9.95nm			4.1mb
ALQ	74.90	329	eP	32	25.00	0.4
RSSD	81.83	336	(P)	32	53.00	-9.1X

S.D. = 1.1 on 19 of 21 obs.

JUN 15, 1990 06h 31m 27.57± 0.44s
11.568 N ± 7.2km 121.791 E ±10.0km
DEPTH = 33.0km (normal)
4.8mb (13 obs.) 4.3Msz (5 obs.)
PANAY, PHILIPPINE ISLANDS (254)

DCP	3.13	347	eP	32	24.00	8.3X
BAG	4.96	346	eP	32	35.00	-6.9X
KKM	7.78	226	ePd	33	30.50	9.1X
QZH	13.64	348	eP	34	42.50	1.4
Z	16s		2.40um			
N	16s		1.50um			
QIZ	13.70	304	eP	34	41.60	-0.3
N	15s		1.30um			
E	15s		1.80um			
SSE	19.44	358	P	35	54.00	-0.3
Z	18s		1.00um			
WHN	20.11	341	eP	35	58.50	-2.9
Z	16s		1.20um		4.3MszX	
E	11s		0.90um			
			pP	36	04.00	21kmX
LOE	20.26	289	eP	36	06.40	3.2X
GYA	20.56	318	P	36	06.80	0.5
N	12s		1.30um			
E	12s		0.70um			
NJ2	20.57	353	Pd	36	06.80	0.6
	1.2s		30.00nm		4.5mb	
SNG	21.34	260	eP	36	22.30	8.1X
KMI	22.51	309	Pd	36	28.50	2.3
	2.0s		100.00nm		4.9mb	
Z	16s		1.80um		4.6MszX	
N	11s		0.70um			
E	11s		0.50um			
GUMO	22.61	82	eP	36	35.00	8.1X
CHG	23.18	291	ePd	36	37.90	5.4X
	1.2s		50.78nm		4.9mb	
TIA	24.90	351	Pd	36	48.80	-0.1
N	13s		0.50um			
XAN	25.27	334	P	36	51.50	-1.0
N	15s		0.80um			
E	15s		1.20um			
CD2	25.48	322	P	36	55.50	1.0
Z	18s		1.00um		4.4Msz	
N	13s		1.50um			
DL2	27.23	360	eP	37	09.80	-0.6
N	14s		0.90um			
			eS	41	50.00	
TIY	27.35	344	eP	37	10.50	-1.2
Z	17s		2.00um		4.8MszX	
N	15s		1.20um			
BJI	28.79	351	eP	37	23.50	-1.1
	1.0s		18.00nm		4.7mb	
Z	18s		0.59um		4.2Msz	
LZH	29.31	329	eP	37	30.30	0.8
	1.4s		30.00nm		4.8mb	
Z	17s		1.12um		4.6MszX	
N	14s		0.96um			
E	14s		0.94um			
SNY	30.18	3	eP	37	34.80	-2.2
	1.4s		100.00nm		5.4mb	
Z	22s		0.90um		4.4Msz	
E	14s		0.70um			
			S	42	30.00	
HHC	30.53	345	eP	37	39.60	-0.6
BTO	30.72	342	eP	37	42.00	0.0
N	12s		0.50um			
E	12s		0.50um			
SHL	31.49	300	iP	37	48.50	-0.5
CN2	32.27	5	eP	37	57.00	1.7
Z	20s		0.60um		4.3Msz	
N	12s		0.30um			
E	12s		0.30um			
			pP	38	07.00	35kmX
MDJ	33.61	10	eP	38	07.00	0.0
WB5	33.61	158	eP	38	05.80	-1.5
WRA	33.66	158	Pd	38	06.60	-1.1
	0.7s		7.90nm		4.7mb	
LSA	33.72	307	P	38	09.40	0.7
GTA	33.90	329	eP	38	09.50	-0.3
Z	20s		1.60um		4.7Msz	
E	12s		0.50um			
GUN	37.33	301	P	38	40.10	0.8
PKI	37.62	300	P	38	41.90	0.2
WARB	37.82	173	eP	38	43.00	0.1
	0.4s		11.00nm		5.1mb	
GKN	38.40	301	P	38	47.10	-1.0
WMQ	43.54	324	eP	39	28.60	-1.4
Z	15s		1.30um		5.0MszX	
STK	47.18	157	iPd	39	59.50	0.5
	1.8s		22.00nm		4.9mb	
QUE	53.97	299	eP	40	54.20	3.2X
DZM	55.10	127	iPc	40	59.30	0.1
MAIO	60.96	305	eP	41	39.00	-1.2
TTA	76.23	28	eP	43	18.50	4.1X
IMA	77.29	25	eP	43	20.90	0.6
	1.1s		8.00nm			4.7mb
PMR	79.48	29	eP	43	33.40	1.3
	1.7s		47.20nm			5.2mb
FBA	79.80	26	eP	43	36.50	2.7X
INK	84.69	21	eP	43	59.50	0.4
MBC	85.40	12	eP	44	06.50	4.0X
	1.1s		9.00nm			4.9mb
MLR	85.91	315	eP	44	06.00	0.2
NAO	89.89	333	P	44	26.00	1.6
	1.2s		3.60nm			4.5mb
ALQ	114.99	43	ePKP	50	10.00	2.4
ZOBO	169.30	117	PKP	51	42.00	8.1X

S.D. = 1.2 on 38 of 50 obs.

JUN 15, 1990 07h 21m 57.47± 0.22s
6.168 S ± 3.4km 77.100 W ± 5.3km
DEPTH = 35.3km (2 depth phases)
4.8mb (23 obs.)
NORTHERN PERU (111)
Felt in the Mendoza-Moyobamba areo.

VC1	5.64	347	eP	23	21.00	-0.7
PT08	5.78	175	eP	23	25.60	2.1
			iS	24	32.40	
NNA	5.79	177	iPc	23	23.50	0.2
			eS	24	27.50	
QUR	6.13	346	eP	23	29.20	0.7
CAYA	6.27	352	eP	23	30.20	-0.4
PSO	7.31	358	eP	23	48.50	3.4X
PT06	7.65	174	iP	23	47.00	-2.4
PT03	7.88	171	iPd	23	56.50	3.8X
			eS	25	38.10	
BOG	11.14	16	eP	24	39.00	1.2
			eS	26	50.00	
ARE	11.61	152	eP	24	44.00	-0.2
ZOBO	13.35	140	P	25	06.70	-0.9
Z	20s		1.99um			
			S	28	21.00	
			LR	30	24.00	
LPB	13.56	140	P	25	04.00	-6.2X
Z	18s		3.09um			
			eLR	30	40.00	
UPA	15.24	351	ePc	25	41.50	9.6X
CCH	15.46	137	P	25	35.00	0.0
			e	25	41.00	
SIV	18.50	123	Pc	26	10.30	-2.6
			i	26	15.00	
GUAC	18.97	31	eP	26	20.00	1.1
MORO	19.05	27	eP	26	20.00	0.2
OLLA	19.07	33	eP	26	20.00	0.0
CAR	19.42	31	eP	26	23.50	-0.5
LLAV	19.45	32	eP	26	23.00	-1.4
BAO	30.05	111	eP	28	06.50	0.5
CAI	39.71	93	eP	29	28.00	-0.6
PRM	40.34	353	P	29	33.00	-0.5
JSC	40.42	355	P	29	33.50	-0.6
UYO	43.35	339	iPd	29	58.30	0.2
NA2	44.07	359	P	30	04.20	0.4
LNO	45.39	339	eP	30	14.90	0.5
TUL	45.39	339	eP	30	14.70	0.2
	1.1s		6.50nm			4.4mb
MEO	45.50	335	eP	30	15.30	-0.1
FVM	45.64	345	P	30	24.50	8.0X
ALQ	49.38	328	eP	30	45.60	-0.4
	1.0s		10.50nm			4.8mb
ANMO	49.38	328	P	30	46.20	0.2
			pP	30	56.20	34km
WNY	50.41	3	P	30	53.00	-0.5
BNH	50.80	5	P	30	56.40	0.0
GOL	52.58	333	P	31	10.00	-0.3
	0.7s		2.43nm			4.3mb
MSU	55.10	327	P	31	28.60	-0.2
RSSD	55.64	337	P	31	32.50	-0.1
DUG	56.65	328	P	31	39.80	0.0
BW06	56.94	332	P	31	40.50	-1.5
	1.0s		2.00nm			4.1mb
TNP	57.69	323	P	31	47.00	-0.3
KVN	58.85	323	P	31	54.20	-1.2
ORV	61.22	322	P	32	11.60	0.3
SCH	61.37	7	eP	32	11.00	-1.1
SES	63.52	336	ePd	32	25.80	-0.7
FFC	64.13	344	eP	32	30.00	-0.4
	1.2s		18.00nm			5.0mb
NEW	64.57	332	P	32	32.70	-0.8
	0.8s		7.29nm			4.8mb

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BMW    66.48 327 P      32 46.00   0.2
PNT    66.49 331 eP     32 46.00   0.3
       0.5s     5.00nm          4.9mb
EDM    66.62 337 eP     32 45.00  -1.5
GMW    66.92 328 P      32 48.50   0.0
FRB    70.02   4 ePd    33 05.90  -1.4
LKO    72.94  78 P      33 25.92   0.1
LIC    72.98  82 P      33 26.18   0.1
TIC    73.04  81 P      33 26.70   0.2
KIC    73.28  81 Pd     33 28.08   0.3
       0.9s    22.50nm          5.1mb
SPA    83.87 180 iPd    34 26.10   1.3
       1.0s    14.00nm          5.1mb
INK    83.95 342 eP     34 25.00   0.1
EPF    85.07  46 eP     34 32.20   1.1
       1.0s    11.00nm          5.0mb
LPF    85.32  41 eP     34 32.70   0.5
       0.8s     5.35nm          4.8mb
GRR    85.52  40 eP     34 34.20   1.0
       0.6s     5.40nm          4.9mb
MFF    85.56  42 eP     34 34.00   0.6
       0.8s     6.70nm          4.9mb
LFF    85.78  44 eP     34 35.20   0.7
       0.6s     5.40nm          4.9mb
MBC    85.84 351 eP     34 35.00   0.7
       1.0s    14.00nm          5.1mb
              pP       34 46.50  37km
FLN    85.86  40 eP     34 35.40   0.5
       0.8s     6.70nm          4.9mb
EKA    86.01  33 Pc     34 36.10   0.6
       0.7s     3.80nm          4.7mb
MAF    87.31  43 eP     34 42.20   0.2
       0.6s     1.80nm          4.5mb
BGF    87.56  43 eP     34 43.30   0.1
AVF    87.95  43 eP     34 44.90  -0.2
       0.6s     2.70nm          4.7mb
SSF    88.11  42 eP     34 45.60  -0.2
       0.8s     2.70nm          4.6mb
SMF    88.25  43 eP     34 47.40   0.8
       0.6s     1.80nm          4.5mb
LOR    88.38  42 eP     34 46.80  -0.4
       0.6s     2.70nm          4.7mb
DAG    89.06  11 iPd    34 50.00   0.2
       0.8s     9.70nm          5.2mb
CDF    90.84  42 eP     34 58.60  -0.1
WRA   139.63 229 PKP    41 21.00  -3.3X
       1.0s     2.90nm
WB5   139.65 229 ePKP   41 25.10   0.8
BTO   145.13 350 ePKP   41 33.00  -0.4
MTN   146.18 236 iPKPd  41 36.90   1.2
GTA   146.79   4 ePKP   41 37.80   1.6
TIY   147.42 346 ePKP   41 39.00   1.8
SSE   149.85 328 ePKP   41 45.00   3.9X
LZH   150.21 358 ePKP   41 47.80   6.1X
     S.D. = 0.9  on  73 of  81 obs.
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   JUN  15, 1990  08h 12m 26.25± 0.10s
    5.041 S ± 2.8km  152.082 E ± 3.0km
   DEPTH =  60.1km  (  2 depth phases)
   5.5mb ( 37 obs.)
 NEW BRITAIN REGION              (192)
      Ms 6.0 (BRK).
      CENTROID, MOMENT TENSOR    (HRV)
      Data Used: GDSN
      L.P.B.: 11S, 24C
      Centroid Location:
      Origin Time       08:12:37.2 0.5
      Lat  4.58S 0.04 Lon 152.40E 0.03
      Dep  35.6 2.3 Half-duration  3.4
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 8.40 0.20  Mtt=-7.48 0.33
        Mff=-0.92 0.27  Mrt= 5.66 0.51
        Mrf=-0.18 0.43  Mtf=-4.16 0.21
       Principal Axes:
        T  Val= 10.41  Plg=69  Azm= 22
        N        0.43     14      251
        P      -10.84     15      158
      Best Double Couple:Mo=1.1*10**18
       NP1:Strike=228 Dip=32 Slip= 63
       NP2:         79     61      106

RAB     0.85   6 iPd-  12 43.10   0.6
LAT     5.30 252 eP     13 54.00   9.2X
               eS      14 06.00
KDB     6.57 228 eP     14 05.00   2.5
               eS      15 25.00
MNDI    8.46 262 eP     14 41.00  12.2X

HNR     8.94 120 eP     14 32.00  -3.3X
               eS      16 06.00
CTA    16.00 200 iPd-   16 09.10   0.2
       2.0s   529.41nm          5.3mb
                i      16 46.80
                i      17 05.00
                iS     19 09.00
QIS    19.62 217 iPc    16 52.80   0.1
       0.8s   102.00nm          5.2mb
                e      17 05.60  62km
GUA    19.78 339 ePd    16 56.50   2.0
       0.9s   732.77nm          6.0mb
GUMO   19.85 339 ePd    16 57.00   1.9
       1.3s  1084.97nm          6.0mb
PJG    19.85 339 eP     16 56.80   1.7
PVC    20.28 130 iP     16 59.00  -0.6
RMQ    21.56 188 ePd    17 12.50  -0.1
                e      17 17.00  16kmX
                e      17 53.60
DZM    21.91 142 iPd    17 15.20  -1.0
                iS     21 17.50
                ScP    25 13.00
MTN    22.09 248 iPd    17 18.10   0.2
                e      18 14.00
                e      21 22.00
                e      24 49.00
BRS    22.24 178 iP     17 12.20  -7.1X
                i      17 19.00  24kmX
                i      17 33.00
                eS     21 18.00
WB5    22.69 228 iPc    17 24.50   0.7
                eS     21 33.50
                iScP   24 51.20
WRA    22.75 228 Pc     17 24.90   0.5
       0.6s    73.60nm          5.3mb
AAI    23.86 272 eP     17 37.00   1.9
KNA    25.25 243 eP     17 48.90   0.5
       0.3s    49.00nm          5.5mb
COO    25.40 180 eP     17 50.00   0.2
STK    28.45 199 eP     18 17.60   0.0
       0.8s    12.00nm          4.6mb
                iS     23 00.80
BWA    29.43 186 eP     18 26.30  -0.2
                e      19 20.20 276kmX
CNB    30.23 184 eP     18 33.00  -0.5
                e      19 22.00 246kmX
CAN    30.27 185 eP     18 32.90  -0.9
                i      19 22.80 251kmX
WARB   32.15 226 eP     18 50.00  -0.5
       0.3s    15.00nm          5.3mb
ADE    32.25 201 iPc    18 52.00   0.8
TOO    32.93 190 e(P)   18 59.00   1.9
                e      19 46.00 230kmX
BFD    33.15 194 eP     19 00.00   1.0
QCP    36.43 303 eP     19 30.00   2.8
BAG    37.75 305 eP     19 38.00  -0.5
                eS     25 28.00
MEKA   38.54 233 eP     19 44.80  -0.1
       0.5s    25.00nm          5.4mb
COOL   38.81 225 eP     19 46.50  -0.7
NANU   39.37 240 iPc    19 51.70  -0.2
       0.5s    36.00nm          5.5mb
H8Z    40.28 147 eP     20 07.00   7.9X
SNZO   41.40 154 eP     20 16.00   7.8X
                pP     20 27.00  39kmX
                PP     22 01.00
                PcS    26 05.00
                S      26 24.00
                ScS    29 50.00
KLB    41.62 226 eP     20 09.00  -1.2
MRWA   41.74 231 iPc    20 11.00  -0.3
       0.6s    31.00nm          5.3mb
BAL    41.88 228 eP     20 11.50  -0.9
ANP    42.25 317 eP     20 16.00   0.5
KAKJ   42.52 346 P      20 17.90   0.5
CHJJ   42.68 344 P      20 15.50  -3.3X
MUN    42.94 227 eP     20 20.50  -0.5
TSRJ   43.10 341 P      20 13.70  -8.5X
MAT    43.35 344 P      20 25.00   0.7
SHK    43.41 336 eP     20 24.00  -0.7
MTMJ   43.51 343 P      20 25.50  -0.1
NIIJ   43.80 345 P      20 26.30  -1.5
QZH    44.14 314 Pc     20 31.50   0.7
     Z  26s     8.50um          5.5MszX
     N  20s     4.90um
HKC    45.98 308 iPc    20 48.00   2.6
SSE    46.49 323 P      20 48.00  -1.4

       1.5s    50.00nm          5.2mb
     Z 20s     6.40um          5.6Msz
     N 18s     2.90um
     E 18s     2.30um
               S      27 32.00
               sS     27 54.00
GZH    47.04 308 P      20 56.00   2.2
     Z 20s     7.10um          5.6Msz
     E 20s     7.40um
QIZ    47.98 301 P      21 02.00   0.7
     N 17s     2.30um
     E 20s     4.60um
               PP     22 55.50
               S      27 52.00
               SS     31 14.00
NJ2    48.58 322 eP     21 05.50  -0.2
       6.0s   400.00nm          5.6mb X
     N 20s     6.30um
               S      28 05.00
WHN    50.54 317 eP     21 21.00   0.3
       6.0s   600.00nm          5.8mb X
     Z 24s     5.40um          5.5MszX
     N 24s     5.40um
     E 22s     5.90um
               pP     21 27.00  20kmX
               eS     28 31.00
PPI    51.81 273 eP     21 29.70  -1.0
       0.7s   120.90nm          6.0mb
DL2    52.02 330 eP     21 30.00  -1.8
       6.0s   700.00nm          5.9mb X
     Z 22s     3.40um          5.3Msz
     N 19s     2.10um
     E 19s     2.10um
               eS     28 50.00
TIA    52.49 324 Pc     21 34.40  -1.0
     Z 30s     4.40um          5.3MszX
     N 21s     2.10um
     E 21s     4.30um
SNY    53.40 334 iPc    21 40.00  -1.9
       8.0s   700.00nm          5.7mb X
     Z 28s     6.50um          5.5MszX
     N 19s     1.90um
               pP     21 55.50  59km
               PP     23 42.00
               sS     29 30.00
MDJ    53.40 340 eP     21 40.50  -1.5
     Z 30s     7.00um          5.5MszX
     N 18s     2.00um
               eS     29 10.00
GYA    53.97 308 P      21 47.60   1.0
     N 20s     4.10um
     E 20s     5.00um
               pP     21 58.60  37kmX
CN2    54.23 336 Pc     21 47.00  -1.1
       1.0s   100.00nm          5.8mb
     Z 23s     5.50um          5.6MszX
     N 17s     1.80um
     E 17s     0.60um
               epP    21 54.00  23kmX
               eS     29 19.00
               SS     32 58.00
LOE    54.48 295 eP     21 50.00  -0.4
NST    55.39 293 eP     21 57.70   0.8
HON    55.49  60 eP     21 57.00  -0.6
     Z 22s     5.83um          5.6Msz
BJI    55.70 327 eP     21 58.50  -0.3
       2.0s    83.00nm          5.4mb
     Z 23s     6.57um          5.7MszX
     N 18s     2.86um
     E 20s     2.66um
               eS     29 36.00
TIY    56.28 323 P      22 02.50  -0.7
     Z 24s     8.70um          5.8MszX
     N 21s     4.60um
     E 22s     5.50um
               S      29 52.00
XAN    56.30 317 P      22 03.00  -0.4
     N 20s     3.70um
     E 20s     4.10um
               S      29 46.00
KMI    56.53 304 Pc     22 05.00  -0.4
       2.0s   100.00nm          5.5mb
     Z 24s     5.50um          5.6MszX
     N 20s     1.80um
     E 23s     3.90um
               S      29 50.00
CHG    57.45 296 ePc    22 12.10   0.4
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15d 08h

	1.0s	21.25nm		5.2mb			
BSI	57.66	280 eP	22	11.00	-2.2		
CD2	58.35	311 P	22	17.60	-0.3		
	Z 20s	4.80um		5.6Msz			
	E 20s	4.70um					
HHC	58.83	325 Pc	22	21.00	-0.1		
	Z 28s	7.40um		5.7MszX			
	N 20s	3.60um					
	E 21s	4.10um					
		PP	24	35.00			
		S	30	25.00			
BTO	59.56	324 P	22	26.00	-0.2		
	N 20s	4.60um					
	E 20s	2.90um					
LZH	60.90	316 eP	22	35.80	0.3		
	1.2s	30.00nm		5.3mb			
	Z 26s	6.40um		5.7MszX			
	N 19s	1.69um					
	E 19s	2.65um					
		sS	31	06.00			
ADK	62.65	21 eP	22	46.00	-0.6		
GTA	65.35	318 iPc	23	05.00	0.3		
	Z 26s	5.50um		5.6MszX			
	E 20s	2.80um					
LSA	67.79	305 P	23	21.20	0.4		
GUN	71.63	301 P	23	44.00	-0.2		
SDN	71.73	26 eP	23	42.10	-1.7		
	1.2s	195.30nm		5.9mb			
PKI	71.94	301 P	23	45.40	-0.6		
DMN	72.21	301 P	23	47.40	-0.1		
RKT	72.36	113 iP	23	48.20	0.1		
	1.1s	105.00nm		5.7mb			
GKN	72.72	301 P	23	50.00	-0.4		
SBA	73.18	177 e(P)	23	53.00	1.1		
WMQ	75.43	318 iPc	24	05.50	-0.2		
	6.0s	700.00nm		5.8mb X			
	Z 23s	4.00um		5.7MszX			
		eS	33	42.00			
KOD	75.83	282 eP	24	03.00	-5.7X		
SVW	77.32	23 ePc	24	16.30	0.5		
TTA	78.25	22 ePc	24	21.10	0.1		
NDI	79.23	300 eP	24	26.00	-0.9		
PMR	80.20	25 iPc	24	30.90	-0.5		
IMA	80.92	20 ePc	24	35.40	0.0		
	0.9s	42.20nm		5.4mb			
TOA	81.68	25 iPc	24	40.10	0.8		
FBA	82.37	22 ePc	24	41.20	-1.5		
KSH	82.53	311 P	24	46.00	1.8		
	Z 25s	5.00um		5.8MszX			
		S	35	04.00			
SIT	84.85	32 ePc	24	56.20	0.8		
	0.8s	76.40nm		5.8mb			
HYT	84.98	28 Pc	24	57.20	1.0		
SPA	84.99	180 iPc	24	56.40	0.2		
	1.0s	19.00nm		5.1mb			
	Z 20s	2.12um		5.5Msz			
MAW	85.07	203 iPc	24	57.10	0.7		
	0.9s	33.00nm		5.4mb			
QUE	88.31	300 eP	25	13.20	0.0		
FHC	88.68	49 ePc	25	16.30	1.8		
INK	88.94	21 ePc	25	14.60	-0.5		
	1.0s	58.00nm		5.8mb			
PCC	89.50	52 eP	25	18.90	0.5		
BRK	89.64	52 ePc	25	20.00	1.0		
	Z 20s	7.00um		6.1Msz			
		eLR	53	10.00			
BKS	89.66	52 e(P)	25	20.00	0.8		
	0.8s	38.00nm		5.7mb			
	Z 20s	7.00um		6.1Msz			
	N 20s	1.40um					
	E 20s	5.00um					
		ePS	37	12.00			
		eSS	42	08.00			
		eLQ	49	10.00			
		eLR	53	10.00			
WDC	89.74	49 iPc	25	19.80	0.3		
GCC	89.75	53 ePc	25	19.60	0.0		
BMW	89.96	43 P	25	20.40	-0.1		
MMC	90.07	53 eP	25	21.20	0.0		
PGC	90.09	41 eP	25	21.00	0.1		
ARN	90.15	53 P	25	22.00	0.5		
SAO	90.16	53 e(P)	25	21.30	-0.2		
PRS	90.17	54 eP	25	22.50	0.9		
LBFM	90.31	49 P	25	22.70	0.3		
GMW	90.40	42 P	25	22.40	0.0		
ORV	90.42	50 ePc	25	22.70	0.1		
MIN	90.42	50 ePc	25	22.70	-0.1		
MCW	90.50	41 P	25	23.00	0.1		
PRI	90.72	54 ePc	25	23.80	-0.5		
BLP	90.78	56 P	25	25.20	0.8		
LON	90.97	43 P	25	24.40	-0.7		
BCH	91.10	55 P	25	27.00	1.0		
SYP	91.13	56 eP	25	27.00	0.8		
CMB	91.13	52 ePc	25	26.30	0.3		
VGB	91.55	45 P	25	27.50	-0.3		
FRI	91.57	53 iPc	25	28.40	0.4		
ABL	91.78	55 P	25	30.20	0.9		
ISA	92.45	55 eP	25	33.00	0.8		
PAS	92.59	56 eP	25	33.00	0.3		
PNT	92.68	41 eP	25	32.00	-0.8		
	0.6s	11.00nm		5.5mb			
MWC	92.69	56 eP	25	34.00	0.6		
SBB	92.91	56 eP	25	35.00	0.7		
KVN	93.00	51 P	25	34.80	0.0		
CLC	93.18	54 eP	25	36.00	0.5		
		e	29	20.00			
RVR	93.23	56 eP	25	36.00	0.3		
DPW	93.51	42 P	25	36.40	-0.4		
PLM	93.62	57 eP	25	39.00	1.2		
TNP	93.62	52 P	25	38.00	0.3		
BAR	93.74	58 eP	25	39.00	0.9		
GSC	93.79	55 eP	25	39.00	0.6		
NEW	94.26	42 P	25	40.00	-0.2		
	1.0s	57.19nm		6.0mb			
MBC	94.52	14 ePd	25	41.00	0.2		
	1.0s	20.00nm		5.5mb			
MAIO	95.04	306 eP	25	44.00	-0.1		
		eS	36	12.00			
GLA	95.31	57 eP	25	47.00	1.6		
		e	29	34.00			
EDM	96.75	37 iPc	25	51.90	0.5		
	0.7s	66.00nm		6.3mb			
HPI	96.94	47 P	25	52.90	0.1		
LRM	97.40	45 eP	25	54.50	-0.3		
PTI	97.47	48 P	25	55.20	0.1		
MSU	97.61	52 P	25	56.20	0.3		
SES	98.24	40 ePc	25	58.30	0.1		
	0.5s	28.00nm		6.0mb			
BW06	99.54	48 P	26	03.20	-1.4		
	0.8s	15.00nm		5.6mb			
ALQ	102.26	55 ePdiff	26	17.90	1.0		
	1.0s	6.25nm		5.3mb			
	Z 22s	2.78um		5.7Msz			
ANMO	102.26	55 Pdiff	26	18.30	1.4		
	1.0s	6.25nm		5.3mb			
	Z 22s	2.00um		5.6Msz			
GOL	102.86	51 Pdiff	26	19.80	0.3		
	1.0s	10.31nm		5.5mb			
	Z 22s	3.53um		5.8Msz			
GLD	102.97	51 Pdiff	26	20.70	0.8		
	1.1s	26.52nm		5.9mb			
	Z 22s	4.40um		5.9Msz			
FFC	103.29	35 ePdiff	26	20.00	-0.7		
	0.8s	12.00nm		5.7mb			
RSSD	103.46	46 Pdiff	26	21.30	-0.7		
HFS	116.64	338 ePKP	31	03.60	-1.3		
	0.4s	3.20nm					
SEK	117.11	235 ePKP	31	07.00	-0.1		
NAO	117.18	340 PKP	31	05.40	-0.6		
	0.7s	5.10nm					
SLR	117.53	238 iPKPc	31	07.50	-0.4		
MLR	118.38	320 ePKP	31	00.00	-8.9X		
KSR	118.64	237 ePKP	31	17.50	7.4X		
RSCP	119.01	52 PKP	31	07.00	-3.3X		
BUL	119.10	244 iPKPc	31	09.90	-1.1		
KRI	119.15	248 iPKPd	31	10.20	-1.0		
SWZ	119.43	235 ePKP	30	59.00	-12.5X		
KRA	119.84	327 ePKP	31	10.60	-0.7		
		e	32	40.00			
SPC	120.12	326 iPKP	31	11.60	-0.6		
TKL	120.40	51 PKP	31	12.30	-0.6		
BZS	121.06	321 ePKP	31	12.00	-1.8		
CER	121.24	226 iPKPc	31	31.00	16.4X		
SCH	121.34	25 ePKP	31	14.00	-0.1		
KSP	121.35	329 ePKP	31	14.00	-0.2		
		e	31	46.50			
WVLY	121.74	42 ePKP	31	14.10	-1.2		
PRM	121.97	53 PKP	31	16.00	0.1		
ZST	122.41	326 ePKP	31	15.60	-0.7		
BLA	122.46	49 ePKPc	31	16.60	-0.2		
	0.8s	27.61nm					
	Z 20s	5.38um		6.2Msz			
CLL	122.71	331 iPKPc	31	17.60	0.9		
	1.0s	17.00nm					
	Z 18s	1.50um		5.7Msz			
		i	31	49.20			
POF	122.73	230 ePKP	31	19.00	1.6		
PRU	122.76	329 PKPc	31	16.70	-0.2		
		e	31	49.30			
SKO	122.82	318 iPKP	31	17.70	0.4		
LHS	123.07	52 PKP	31	18.20	0.2		
RSNY	123.39	38 PKP	31	17.50	-0.8		
	Z 21s	4.35um		6.1Msz			
CVL	123.63	47 PKP	31	18.40	-0.6		
OHR	123.63	317 ePKP	31	17.80	-1.2		
	0.9s	41.00nm					
KHC	123.77	328 PKPc	31	18.70	-0.3		
	Z 20s	2.00um		5.8Msz			
	N 20s	1.30um					
	E 20s	1.50um					
		e	31	38.40			
WNY	123.88	38 ePKP	31	18.20	-1.2		
CBN	124.33	46 ePKP	31	20.00	-0.3		
PTJ	124.33	324 ePKP	31	19.50	-0.7		
HBVT	124.39	38 ePKP	31	20.00	-0.3		
WIT	124.55	335 ePKP	31	22.00	1.8		
GRF	124.62	330 ePKP	31	20.90	0.3		
	Z 22s	2.00um		5.7Msz			
		e	31	39.80			
		e	31	53.10			
VBY	124.96	324 ePKP	31	21.90	0.6		
LVNJ	125.03	43 ePKP	31	21.30	-0.3		
LJU	125.07	325 ePKP	31	21.00	-0.5		
WTS	125.09	335 ePKP	31	21.00	-0.3		
CEY	125.31	325 ePKP	31	21.40	-0.6		
BNH	125.36	37 ePKP	31	22.30	0.1		
VOY	125.44	325 ePKP	31	21.50	-0.9		
TRI	125.70	325 ePKP	31	21.50	-1.3		
		e	31	55.20			
		e	33	12.00			
		e	44	58.00			
FVI	125.74	326 PKP	31	22.50	-0.3		
EKA	126.05	343 PKPd	31	23.20	0.0		
	0.7s	8.00nm					
ENN	126.36	334 ePKP	31	24.00	0.1		
	1.0s	32.00nm					
		e	31	56.00			
MEM	126.44	334 PKP	31	24.10	0.1		
SNF	127.26	335 PKP	31	26.00	0.4		
TDS	127.32	317 PKP	31	26.00	-0.1		
CDF	127.41	331 ePKP	31	25.00	-1.1		
DOU	127.43	334 PKP	31	26.40	0.4		
		e	33	30.00			
		e	45	13.00			
ARV	127.45	323 PKP	31	26.50	0.2		
SGO	127.56	319 PKP	31	26.00	-0.5		
SFI	127.85	324 PKP	31	28.00	1.1		
SDI	127.92	321 PKP	31	26.50	-0.7		
AZI	128.00	321 PKP	31	27.00	-0.3		
BSF	128.04	331 ePKP	31	26.50	-0.9		
	0.8s	17.45nm					
HAU	128.14	331 ePKP	31	26.70	-0.7		
	0.8s	17.45nm					
SOI	128.27	316 PKP	31	28.00	0.1		
VAI	128.36	328 PKP	31	27.50	-0.3		
BDI	128.49	325 PKP	31	28.50	0.2		
BOB	128.70	326 PKP	31	29.00	0.3		
PT08	128.78	110 iPKPc	31	30.70	0.7		
LPL	129.66	329 ePKP	31	30.20	-0.5		
LPG	129.66	329 ePKP	31	30.40	-0.4		
LOR	129.84	332 ePKP	31	30.40	-0.3		
	0.9s	15.55nm					
LBF	129.99	332 ePKP	31	30.50	-0.5		
	0.9s	11.45nm					
BNI	130.01	328 PKPd	31	32.00	0.8		
SSF	130.16	332 ePKP	31	31.00	-0.3		
	0.9s	16.40nm					
SMF	130.30	332 ePKP	31	31.10	-0.5		
	0.9s	16.40nm					
PGF	130.34	324 ePKP	31	31.20	-0.7		
	0.8s	18.80nm					
SBF	130.39	327 ePKP	31	30.80	-1.1		
	0.9s	16.40nm					
AVF	130.43	332 ePKP	31	31.10	-0.7		
	0.8s	5.35nm					
LDF	130.57	336 ePKP	31	31.50	-0.5		
	0.9s	13.10nm					
FLN	130.58	336 ePKP	31	31.50	-0.5		
	0.9s	21.30nm					
BGF	130.83	332 ePKP	31	32.50	-0.1		
	0.8s	13.45nm					

FRF	131.02	327	ePKP	31	32.40	-0.6
GRR	131.03	336	ePKP	31	32.70	-0.1
	0.7s	13.25nm				
MAF	131.21	332	ePKP	31	33.30	0.0
	0.9s	8.20nm				
LRG	131.24	327	ePKP	31	33.20	-0.2
	0.8s	16.10nm				
TCF	131.33	332	ePKP	31	33.40	-0.2
	0.9s	16.40nm				
LPF	131.39	336	ePKP	31	33.60	0.1
	0.9s	29.50nm				
ARE	131.91	117	ePKP	31	51.00	15.2X
MFF	132.14	334	ePKP	31	34.80	-0.2
RJF	132.39	332	ePKP	31	35.70	0.1
CAF	132.41	331	ePKP	31	35.40	-0.3
LPO	133.01	332	ePKP	31	37.00	0.3
BCAO	133.71	271	iPKPc	31	24.50	-14.5X
	1.0s	10.00nm				
			ic	31	37.50	
			ic	32	07.50	
			ic	33	50.50	
			ic	35	00.50	
			id	35	10.00	
			ic	35	32.00	
EPF	134.65	331	ePKP	31	40.10	0.1
LPB	134.86	119	ePKP	31	25.00	-16.6X
			i	31	38.00	
ZOBO	134.95	119	PKP	31	30.00	-12.0X
	1.0s	33.75nm				
			i	31	44.00	
CCH	136.17	121	PKP	31	33.40	-10.5X
			e	31	45.00	
EBR	136.20	329	ePKP	31	40.00	-2.9
FISA	138.57	79	ePKP	31	48.50	0.3
TOL	139.18	332	ePKP	31	40.00	-8.5X
			iPP	34	47.00	
			ePPP	37	44.00	
			eSKKS	44	25.00	
			ePPS	47	45.00	
			eSS	53	25.00	
MORO	139.60	79	ePKP	31	50.00	-0.1
GUAC	140.68	80	ePKP	31	52.80	0.7
CAR	140.99	80	ePKP	31	36.00	-16.6X
SIV	141.10	123	PKP	31	44.10	-8.5X
			i	31	52.50	
LLAV	141.11	80	ePKP	31	52.80	0.0
OLLA	141.15	80	ePKP	31	48.00	-4.9X
MAL	141.80	329	ePKP	31	42.00	-11.3X
			iPP	34	58.00	
NKM	143.30	328	ePKP	31	52.00	-3.9X
NEV	144.01	68	ePKP	31	53.00	-4.6X
MGH	144.45	68	ePKP	31	55.00	-3.4X
IFR	144.61	326	iPKPc	31	57.50	-1.0
BPA	144.69	68	ePKP	31	56.00	-2.8
PAG	145.12	69	ePKP	31	59.00	-0.6
BBL	145.43	70	ePKP	31	59.50	-0.6
AVE	146.01	328	iPKP	32	01.50	0.9
			i	32	21.00	
TCE	146.04	78	ePKP	32	00.39	-0.8
SVB	146.13	74	ePKP	32	00.87	-0.4
SVV	146.15	74	ePKP	32	01.02	-0.3
SLB	146.22	73	ePKP	32	01.98	0.5
TPP	146.37	79	ePKP	32	03.03	1.4
TRN	146.38	78	iPKPc	32	01.75	0.1
	1.0s	300.00nm				
TBH	146.73	79	ePKP	32	04.91	2.7
TIO	147.74	325	iPKP	32	06.50	2.9X
			i	32	41.50	
BAO	151.42	136	ePKP	32	10.00	0.4
TIC	157.17	275	(PKP)	32	27.88	10.5X
LKO	157.41	283	PKP	32	20.18	2.5
CAI	165.28	141	iPKPc	32	26.20	0.5
S.D. = 0.9 on 250 of 279 obs.						

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* JUN 15, 1990 08h 32m 16.89± 0.96s
24.060 S ± 8.0km 67.013 W ±23.7km
DEPTH = 267.0 ± 54.3 km
CHILE-ARGENTINA BORDER REGION (127)

ANT	3.13	276	iPc	33	12.00	-0.2
			iS	33	50.30	
RTRS	6.46	199	ePd	33	54.00	2.3X
CCH	6.69	7	P	33	56.30	1.4
			e	35	12.00	
RTLL	7.36	190	ePd	34	02.40	-0.5
			i	34	03.20	
LPB	7.56	352	P	34	04.50	-1.3
Z 24s 2.33um						
			LR	15	10.00	
CFA	7.60	188	ePd	34	06.50	0.6
ARE	8.65	330	eP	34	20.00	0.5
			eS	35	54.00	
SIV	9.78	36	eP	34	33.00	-0.5
S.D. = 1.3 on 7 of 8 obs.						

? JUN 15, 1990 10h 19m 10.91± 7.87s
17.221 N ±45.4km 60.912 W ±41.1km
DEPTH = 10.0km (geophysicist)
LEEWARD ISLANDS (92)
ML 2.8 (FDF).

BPA	0.92	259	eP	19	28.16	-0.4
			S	19	38.70	
SEG	0.99	215	eP	19	29.84	0.1
			S	19	41.50	
MGH	1.34	248	eP	19	36.20	0.5
PAG	1.39	212	eP	19	36.10	-0.3
			S	19	53.20	
BBL	1.77	198	eP	19	42.00	0.1
S.D. = 0.5 on 5 of 5 obs.						

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* JUN 15, 1990 10h 34m 41.88± 0.85s
20.979 N ±11.1km 97.000 E ±11.5km
DEPTH = 33.0km (normal)
BURMA (296)

BDT	4.17	153	eP	35	44.80	0.0
GUN	12.25	306	P	37	37.60	0.3
PKI	12.44	304	P	37	40.60	0.8
KKN	12.64	305	P	37	41.60	-0.9
	0.8s	23.00nm			5.3mb	X
DMN	12.69	304	P	37	43.00	-0.1
	0.8s	21.00nm			5.3mb	X
GKN	13.24	304	P	37	46.20	-4.2X
LZH	16.20	20	eP	38	28.80	0.0
Z 25s 0.40um						
S.D. = 0.7 on 6 of 7 obs.						

JUN 15, 1990 10h 37m 19.55± 0.50s
43.119 N ± 6.1km 0.344 W ± 3.9km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 3.2 (LDG). Felt (III) in the Ossau Valley, France.

JAU	0.08	193	Pg	37	21.91	-0.3
			Sg	37	23.14	
OGE	0.11	298	Pg	37	22.88	0.5
ESCF	0.17	257	Pg	37	23.14	-0.4
			Sg	37	25.49	
ATE	0.26	263	Pg	37	24.94	-0.2
			Sg	37	28.52	
LHE	0.29	225	Pg	37	24.99	-0.7
ISSF	0.34	255	Pg	37	26.40	-0.3
			Sg	37	31.10	
MADF	0.35	275	Pg	37	26.61	-0.2
			Sg	37	32.01	
ELYF	0.48	276	Pg	37	28.91	-0.3
			Sg	37	34.61	
EPF	0.51	100	Pg	37	30.30	0.4
			Sg	37	37.80	
ECRI	1.67	253	eP	37	51.20	2.1
			eS	38	13.20	
LPO	1.92	35	Pg	37	57.00	4.5X
			Sg	38	23.20	
LFF	1.98	23	Pg	37	58.30	4.8X
			Sg	38	25.30	
CAF	2.51	43	Pn	38	00.50	-0.5
			Pg	38	07.80	
			Sg	38	41.30	
RJF	2.56	31	Pn	38	01.70	-0.1
			Pg	38	08.90	
			Sg	38	42.60	
MFF	3.49	2	Pg	38	26.00	11.1X
			Sg	39	09.40	
TCF	3.65	29	Pg	38	29.00	11.6X
			Sg	39	14.90	
MAF	3.73	33	Pn	38	18.30	-0.2
			Sg	39	19.20	
BGF	4.12	32	Pg	38	37.80	13.9X
			Sg	39	31.10	
S.D. = 0.8 on 13 of 18 obs.						

? JUN 15, 1990 11h 36m 50.70± 1.51s
38.978 N ±10.9km 20.008 E ±19.0km
DEPTH = 33.0km (normal)
GREECE (364)

KEK	0.75	348	eP	37	04.50	-0.4
			eS	37	17.00	
VLS	0.92	150	eP	37	07.40	0.1
OHR	2.22	16	iPn	37	26.40	0.5
NEO	2.52	82	eP	37	30.00	-0.3
SKO	3.18	20	ePn	37	49.00	9.4X
S.D. = 0.7 on 4 of 5 obs.						

% JUN 15, 1990 12h 13m 26.51± 1.27s
39.365 N ±12.3km 27.797 E ±10.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

EDC	0.98	3	ePn	13	46.40	1.3
EZN	1.23	292	iPn	13	48.90	-0.4
IZI	1.61	53	ePn	13	55.40	0.2
KHL	1.70	127	ePn	13	57.00	0.5
YLV	1.70	45	ePn	13	54.90	-1.6
ALT	1.82	99	ePn	14	03.00	4.8X
S.D. = 1.5 on 5 of 6 obs.						

& JUN 15, 1990 12h 21m 55.50s
36.905 N 121.658 W
DEPTH = 7.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.9 (BRK).

SAO	0.22	129	iPd	21	59.70	-0.4
GCC	0.30	295	iPc	22	01.20	-0.4
			iS	22	05.50	
MHC	0.44	2	iPd	22	04.40	0.1
			iS	22	10.60	
ARN	0.45	13	iPc	22	04.70	0.0
PRS	0.62	158	iPd	22	07.00	-0.9
LLA	0.64	116	iPd	22	07.70	-0.7
PCC	0.83	316	iPc	22	10.50	-1.3
			eS	22	23.10	
BKS	1.07	335	iPc	22	14.50	-1.5
BRK	1.08	334	eP	22	14.60	-1.4
			eS	22	30.00	
PRI	1.10	133	ePc	22	15.60	-1.0
ZSP	1.14	336	iPd	22	15.60	-1.5
PHAM	1.47	136	eP	22	20.80	-1.7
CMB	1.52	42	e(P)	22	21.10	-2.0
			eS	22	40.30	
FRI	1.56	86	e(P)	22	21.50	-2.2
			iPg	22	23.10	
			eS	22	41.60	
			iSg	22	43.60	
14 obs. associated						

JUN 15, 1990 12h 41m 02.62± 0.78s
21.124 N ± 8.2km 119.649 E ± 8.5km
DEPTH = 33.0km (normal)
4.1mb (3 obs.)
TAIWAN REGION (243)

QZH	3.92	346	ePn	42	02.00	0.0
Z	12s	1.70um			3.6MszX	
HKC	5.23	284	iPd	42	19.60	-0.9
MCO	5.75	281	eP	42	26.90	-1.1
GZH	6.16	290	Pd	42	31.60	-2.2
E	10s	1.50um				
QIZ	9.45	259	P	43	19.50	0.0
N	10s	1.50um				
E	12s	1.40um				
SSE	10.03	8	eP	43	25.30	-2.1
E	10s	0.90um				
			S	45	26.00	
WHN	10.52	334	eP	43	35.00	0.8
Z	12s	1.20um				
N	11s	1.56um				
E	11s	0.84um				
GYA	13.02	297	P	44	07.60	-0.5
N	10s	0.80um				
E	10s	0.70um				
XAN	15.98	326	P	44	48.00	1.3
N	12s	1.28um				
KMI	16.05	288	eP	44	54.00	6.2X
CD2	17.27	308	eP	45	05.00	2.0
N	10s	1.70um				
TIY	17.67	341	Pc	45	08.90	1.0
Z	11s	1.00um				

15d 12h

	N	10s	1.40um			
			pP	45	15.00	
			eS	48	25.00	
BJI		19.09	352 eP	45	24.00	-1.2
		1.2s	16.00nm		4.1mb	
	Z	12s	0.48um		4.7MszX	
CHG		19.60	267 eP	45	34.00	2.8X
LZH		20.32	321 eP	45	40.80	1.9
	Z	12s	0.90um		4.3MszX	
	N	11s	0.35um			
	E	11s	0.54um			
HHC		20.83	343 P	45	44.00	0.0
SNY		20.91	8 eP	45	40.70	-3.9X
	Z	11s	0.50um		4.1MszX	
	E	13s	0.70um			
			eS	49	36.00	
BTO		21.07	339 eP	45	46.00	-0.5
	N	12s	0.50um			
	E	12s	0.90um			
CN2		23.12	11 eP	46	06.00	-0.7
	Z	14s	0.30um		3.9MszX	
			pP	46	16.00	37kmX
MDJ		24.83	17 eP	46	23.00	-0.2
GTA		24.92	321 eP	46	26.20	1.9
	Z	15s	0.60um		4.2MszX	
	E	10s	0.50um			
WB5		43.22	160 eP	49	02.50	0.0
			e	50	28.50	
WRA		43.27	160 Pc	49	03.60	0.6
		1.0s	3.80nm		4.1mb	
QIS		45.79	153 iPd	49	30.90	7.7X
			e	50	56.60	
			e	57	48.00	
			e	59	07.00	
MAIO		54.09	300 eP	50	37.00	10.3X
MBC		76.54	12 eP	52	50.50	-0.3
INK		76.58	21 eP	53	11.00	19.9X
YKA		86.33	22 eP	53	52.00	9.7X
		0.8s	1.40nm		4.2mb	
	S.D. = 1.3		on 21 of 28 obs.			

% JUN 15, 1990 12h 42m 22.73± 2.05s
38.171 N ±14.4km 27.306 E ±18.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

CIN		0.84	132 ePg	42	38.00	-0.9
			iSg	42	45.00	
KHL		1.75	84 ePn	42	55.30	1.9
EZN		1.82	335 ePn	42	55.00	0.7
EDC		2.22	11 ePn	42	56.40	-3.7X
ALT		2.37	67 ePn	43	03.00	0.7
IZI		2.74	37 ePn	43	06.00	-1.6
YLV		2.88	33 ePn	43	08.90	-0.7
	S.D. = 1.7		on 6 of 7 obs.			

& JUN 15, 1990 12h 57m 28.42s
61.031 N 150.742 W
DEPTH = 42.0km
3.2mb (1 obs.)
SOUTHERN ALASKA (2)
<AGS-P>. ML 4.0 (PMR). Felt (III) at Anchorage and Willow; (II) at Eagle River and Palmer.

NKA		0.38	220 eP	57	39.47	1.8
SUA		0.43	360 iP	57	38.03	-0.5
			iS	57	46.63	
SLKM		0.58	154 iP	57	39.97	-0.5
PWS		0.61	69 iP	57	40.40	-0.4
SPU		0.66	284 iP	57	40.68	-0.7
CGLM		0.67	295 iP	57	41.14	-0.6
CRP		0.73	290 iP	57	41.92	-0.6
PWA		0.75	33 eP	57	42.58	0.0
NCG		0.78	299 iP	57	42.46	-0.7
			iS	57	53.74	
RDT		0.94	241 iP	57	44.37	-1.0
PERM		0.96	53 iP	57	44.56	-1.0
			eS	57	57.86	
PMR		0.96	53 iPc	57	44.40	-1.2
SKT		1.02	339 iP	57	45.51	-1.0
NML		1.03	196 iP	57	47.21	0.6
SEW		1.13	145 eP	57	46.96	-1.0
GWO		1.15	49 iP	57	47.54	-0.8
RED		1.17	239 iP	57	47.73	-1.0
BRLK		1.27	183 eP	57	49.65	-0.4
			eS	58	06.49	
SML		1.40	55 iP	57	50.76	-1.1
CUT		1.40	9 eP	57	51.09	-0.7
CNPM		1.53	189 eP	57	53.16	-0.6
			eS	58	12.44	
XLV		1.66	198 eP	57	54.83	-0.6
			eS	58	15.86	
GLI		1.79	93 eP	57	55.09	-2.2
			iS	58	17.84	
SCM		1.83	62 eP	57	56.69	-1.3
MTU		1.85	123 eP	57	56.60	-1.7
HUR		2.02	14 eP	58	00.98	0.3
			eS	58	26.44	
VZW		2.04	87 iP	57	59.09	-1.9
AUE		2.13	219 eP	58	02.55	0.3
AUL		2.13	220 iP	58	02.75	0.5
VLZ		2.15	85 eP	58	00.65	-1.8
SVW		2.37	274 ePc	58	03.80	-2.0
KLU		2.38	77 eP	58	03.72	-2.1
TOA		2.44	62 eP	58	05.80	-0.9
KTH		2.53	358 iP	58	07.76	-0.3
CDD		2.56	216 eP	58	08.14	-0.3
MCNL		2.58	226 eP	58	07.81	-0.9
MCK		2.84	16 eP	58	13.03	0.7
SDG		2.89	56 eP	58	11.32	-1.8
TTA		3.13	310 ePc	58	14.60	-2.0
NEA		3.64	11 eP	58	22.79	-1.0
WRH		3.66	18 eP	58	23.30	-0.7
CCB		3.87	19 eP	58	25.83	-1.1
TGL		3.88	91 eP	58	23.68	-3.5
DOT		4.07	47 eP	58	28.88	-1.0
BALM		4.09	86 eP	58	26.86	-3.2
FBA		4.11	18 eP	58	28.30	-2.0
GLM		4.26	20 eP	58	31.25	-1.2
IMA		5.22	347 ePc	58	45.80	-2.4
DWY		6.05	55 P	58	54.80	-2.8
HYT		6.46	86 P	59	00.90	-2.6
INK		10.34	38 P	59	59.00	2.0
YKA		17.02	69 eP	01	22.60	-2.0
		0.8s	1.60nm		3.2mb	
MBC		18.63	23 eP	01	40.00	-4.3
PNT		21.06	110 eP	02	09.00	-1.8
EDM		21.48	94 eP	02	12.50	-2.6
SES		24.37	98 eP	02	42.00	-1.4
		56 obs. associated				

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* JUN 15, 1990 13h 05m 07.53± 1.04s
35.685 N ±10.0km 140.271 E ±10.3km
DEPTH = 67.4 ± 11.6 km
4.5mb (1 obs.)
NEAR EAST COAST OF HONSHU, JAPAN (228)

KAKJ		0.52	351 iP+	05	20.30	-0.2
			S	05	28.60	
CHJJ		1.10	290 iPd	05	27.00	-0.4
			S	05	41.80	
NIIJ		1.86	327 iPd	05	37.30	-0.4
			S	06	00.10	
IIDJ		1.93	265 iPd	05	39.20	0.4
			S	06	02.20	
MTMJ		2.19	295 iPd	05	42.30	-0.1
			S	06	06.70	
YAMJ		2.49	356 P	05	46.90	0.4
TSRJ		3.50	269 P	06	01.70	1.1
WKYJ		4.11	251 P	06	10.00	0.6
AOMJ		4.87	1 eP	06	20.20	0.3
TKSJ		5.39	253 P	06	26.50	-0.8
YONJ		5.58	267 eP	06	29.10	-0.8
AAI		40.77	199 eP	12	45.00	1.4
GUN		46.38	276 P	13	29.50	0.2
WB5		55.54	187 eP	14	36.90	-1.2
WRA		55.61	187 Pd	14	38.30	-0.3
		0.4s	2.20nm		4.5mb	
	S.D. = 0.8		on 15 of 15 obs.			

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* JUN 15, 1990 13h 14m 42.58± 1.87s
32.282 S ±12.7km 72.098 W ±21.2km
DEPTH = 74.7 ± 29.8 km
OFF COAST OF CENTRAL CHILE (134)

ROCH		1.15	127 iPd	15	01.80	-1.9
			i	15	16.00	
			iS	15	18.00	
LCCH		1.27	160 iPd	15	05.50	0.5
			iS	15	24.00	
JACH		1.33	108 iPd	15	03.60	-2.4
			iS	15	20.00	
PEL		1.47	126 iPd	15	07.00	-0.7
			iS	15	25.50	
TACH		1.68	145 iPd	15	11.60	1.1
			iS	15	33.50	
			i	15	35.00	
SAN		1.68	134 eP	15	10.00	-0.6
			i	15	30.70	
			iS	15	32.10	
LNV		1.77	161 iPc	15	12.00	0.3
			iS	15	37.50	
FCH		1.85	125 iPc	15	12.80	-0.3
			iS	15	36.50	
PCH		1.89	135 iPd	15	13.80	0.4
			i	15	40.00	
CHCH		2.05	144 ePd	15	16.70	1.1
			iS	15	43.70	
			i	15	45.70	
RTBS		2.33	75 e(P)	15	20.00	0.5
RTCB		2.92	75 ePc	15	28.00	0.3
RTCB		2.92	75 iP	15	29.00	1.3
			(S)	16	06.00	
ZON		3.00	77 eP	15	30.00	1.2
RTCV		3.05	83 e(P)	15	30.60	1.0
			(S)	16	06.00	
RTRS		3.09	48 ePc	15	29.40	-0.6
			S	15	32.40	
RTLL		3.23	74 ePc	15	31.80	-0.3
			i	15	32.10	
			(S)	16	10.00	
			e	16	13.90	
ZOBO		16.35	14 P	18	30.20	0.8
SIV		19.06	34 Pd	19	00.00	-1.9
	S.D. = 1.2		on 19 of 19 obs.			

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* JUN 15, 1990 13h 21m 24.83± 0.80s
10.221 N ±13.9km 127.094 E ± 5.8km
DEPTH = 33.0km (normal)
5.1mb (6 obs.) 4.2Msz (2 obs.)
PHILIPPINE ISLANDS REGION (248)

QCP		7.33	307 eP	22	55.00	-17.4X
BAG		8.83	315 eP	23	26.00	-7.4X
GUMO		17.71	77 eP	25	30.90	0.2
PJG		17.71	77 eP	25	30.80	0.1
GUA		17.74	78 eP	25	30.70	-0.4
QIZ		18.83	300 eP	25	43.60	-1.0
	E	12s	0.70um			
SSE		21.48	346 eP	26	11.30	-1.5
WHN		23.44	331 eP	26	33.50	1.4
GYA		25.17	313 P	26	49.40	0.3
LOE		25.63	289 eP	26	40.00	-13.2X
IPM		26.44	260 ePc	27	00.00	-0.8
		1.0s	42.20nm		5.0mb	
TIA		27.41	342 eP	27	09.50	0.1
KMI		27.46	306 Pc	27	10.00	-0.3
		1.5s	100.00nm		5.3mb	
CHG		28.52	291 iPc	27	15.50	-4.2X
		1.4s	40.70nm		4.9mb	
XAN		28.97	328 P	27	22.00	-1.6
CD2		29.90	317 eP	27	32.80	0.8
TIY		30.39	337 eP	27	36.50	0.2
	Z	20s	0.50um		4.2Msz	
	N	20s	1.00um			
			sS	32	51.50	
BJI		31.24	344 eP	27	44.00	0.4
SNY		31.63	355 Pc	27	47.00	0.0
LZH		33.28	324 eP	28	02.40	0.7
	Z	18s	0.54um		4.3Msz	
MDJ		34.34	3 eP	28	10.40	-0.1
SHL		36.67	299 iP	28	29.10	-1.7
GTA		37.89	325 P	28	40.40	-0.4
	Z	16s	0.60um		4.5MszX	
GUN		42.49	300 P	29	20.40	1.1
PKI		42.80	300 P	29	22.60	0.8
		0.8s	32.00nm		5.1mb	
DMN		43.07	300 P	29	24.80	0.9
		1.0s	59.00nm		5.3mb	
GKN		43.57	300 P	29	28.80	0.9
		1.0s	42.00nm		5.2mb	
QUE		59.17	299 eP	31	31.80	6.4X
MAIO		65.99	305 eP	32	21.00	10.5X
	S.D. = 0.9		on 23 of 29 obs.			

JUN 15, 1990 15h 04m 50.93± 1.28s
6.422 S ± 6.4km 131.240 E ±10.1km
DEPTH = 62.4 ± 13.5 km
5.0mb (12 obs.)
TANIMBAR ISLANDS REGION (281)

AAI	4.07	312	ePc	05	54.10	2.0
			S	06	46.50	
MTN	6.38	181	iPd	06	26.10	1.6
			eS	07	33.00	
KUPT	8.41	243	eP	07	06.70	14.1X
			eS	08	37.00	
KNA	9.58	194	eP	07	07.90	-0.8
	0.2s	93.00nm				6.5mb X
			eS	08	47.00	
MNI	10.09	321	e(P)	07	15.40	-0.3
MNDI	12.35	89	eP	07	46.00	-0.2
W85	13.72	167	eP	08	01.80	-2.3
			eS	10	28.00	
WRA	13.77	168	Pc	08	02.40	-2.4
	0.5s	17.70nm				4.9mb
KDB	16.05	102	eP	08	39.00	4.8X
OIS	16.23	151	eP	08	36.00	-0.4
			e	08	51.00	
			e	11	26.00	
TRT	18.51	265	ePd	09	02.50	-2.2
CTA	19.93	134	iP	09	24.90	4.5X
	0.9s	16.81nm				4.4mb
WARB	20.14	192	eP	09	23.00	0.4
	0.5s	23.00nm				4.8mb
NANU	22.07	222	eP	09	44.00	1.9
	0.4s	18.00nm				4.9mb
			eS	13	41.00	
MEKA	23.45	210	eP	09	58.00	2.5
OLP	23.57	150	e(P)	10	03.00	6.3X
GUA	24.03	34	eP	10	09.50	8.2X
RMQ	26.02	142	e(P)	10	19.00	-1.0
			e	10	47.00	
			eS	15	18.00	
COOL	26.11	200	eP	10	22.50	1.7
MRWA	26.86	211	eP	10	29.50	1.9
			e	10	57.00	
			eS	15	30.00	
STK	27.11	160	eP	10	37.70	7.8X
	1.0s	4.00nm				4.0mb X
			eS	15	41.10	
KLB	28.04	205	eP	10	40.00	1.7
			eS	16	07.00	
MUN	29.04	207	eP	11	00.50	13.1X
			eS	16	25.00	
BWA	32.07	153	eP	11	19.60	5.5X
BFD	32.30	163	e(P)	11	20.00	4.0X
QIZ	32.93	321	eP	11	21.30	-0.4
CAN	33.08	153	eP	11	27.70	4.8X
QZH	33.52	339	eP	11	26.50	-0.2
LOE	37.56	310	eP	12	01.00	-0.1
SSE	38.52	346	eP	12	09.00	0.0
	1.0s	20.00nm				5.0mb
BDT	39.60	307	eP	12	17.70	-0.4
	0.8s	72.70nm				5.6mb
NJ2	40.04	344	Pd	12	23.50	1.9
WHN	40.16	337	ePc	12	24.00	1.4
	1.0s	30.00nm				5.1mb
GYA	40.45	325	P	12	25.60	0.4
CHG	40.53	309	iPc	12	26.70	0.9
	1.0s	62.50nm				5.4mb
KMI	41.86	320	Pc	12	37.50	0.6
	1.5s	100.00nm				5.4mb
XAN	45.45	334	Pc	13	05.50	-0.1
TIY	47.28	340	Pd	13	20.70	0.6
BJI	48.28	344	eP	13	27.50	-0.1
	0.9s	11.00nm				4.9mb
LZH	49.49	331	eP	13	38.00	0.7
	1.4s	40.00nm				5.3mb
SHL	49.73	311	iP	13	37.50	-1.8
CN2	50.26	355	eP	13	45.00	2.2
HHC	50.39	341	P	13	44.80	0.7
BTO	50.70	339	eP	13	46.80	0.4
LSA	52.65	315	P	14	02.40	0.7
GTA	54.07	330	iPc	14	12.00	0.4
GUN	55.51	310	Pc	14	20.00	-2.6
PKI	55.70	310	Pc	14	21.00	-2.9
DMN	55.95	309	Pc	14	23.00	-2.6
GKN	56.51	310	Pc	14	27.00	-2.5
GBA	57.00	291	Pc	14	31.00	-1.9
	0.9s	19.40nm				5.2mb
HYB	57.17	295	ePc	14	33.00	-1.2
NDI	62.62	307	iPc	15	10.00	-1.3
WMQ	63.59	326	iPc	15	18.00	0.5
QUE	71.48	305	eP	16	08.00	0.6
MAIO	79.28	309	eP	16	53.00	1.4
LKO	137.16	277	PKP	24	12.58	2.7X
LPB	150.23	140	ePKP	24	40.00	7.4X
ZOBO	150.41	140	PKP	24	43.00	10.0X
	1.0s	13.00nm				
			i	25	10.00	
CCH	150.77	144	(PKP)	24	34.00	0.8
			e	25	10.00	
	S.D. = 1.5	on	47 of	60	obs.	

? JUN 15, 1990 17h 51m 03.13± 2.27s
17.747 S ±30.4km 72.411 W ±12.7km
DEPTH = 33.0km (normal)
4.3mb (1 obs.)
NEAR COAST OF PERU (115)

ARE	1.55	35	iPd	51	29.20	0.2
			i(S)	51	47.50	
LPB	4.30	74	P	52	09.00	0.7
	1.0s	224.00nm				
ZOBO	4.36	71	iPc	52	15.00	5.7X
			S	53	26.00	
PT06	5.42	315	iP	52	23.00	-0.8
			iS	53	39.00	
CCH	5.99	87	eP	52	41.00	8.8X
NNA	7.15	323	eP	52	51.50	3.3X
	0.6s	4.67nm				4.6mb X
			i	52	54.60	
			eS	54	07.00	
SIV	10.99	83	eP	53	40.00	-1.3
			i	53	45.00	
YKA	86.59	342	eP	03	45.20	1.2
	0.7s	1.30nm				4.3mb
GBA	150.70	94	PKPd	10	57.80	9.3X
	0.8s	2.90nm				
	S.D. = 1.5	on	5 of	9	obs.	

? JUN 15, 1990 18h 04m 55.28± 2.85s
16.448 N ±14.4km 61.112 W ±28.0km
DEPTH = 33.0km (normal)
LEEWARD ISLANDS (92)
ML 2.1 (FDF).

SFG	0.21	203	eP	05	02.07	0.1
SEG	0.38	263	eP	05	04.38	0.3
			S	05	11.90	
PAG	0.69	233	eP	05	08.30	-0.3
			S	05	19.60	
BPA	0.93	310	eP	05	11.91	-0.1
			S	05	25.60	
	S.D. = 0.4	on	4 of	4	obs.	

JUN 15, 1990 19h 24m 44.70± 0.65s
43.074 N ± 6.6km 0.342 W ± 4.4km
DEPTH = 13.8 ± 5.2 km
PYRENEES (378)
ML 3.1 (LDG). Felt (III) in the Ossau Valley, France.

JAU	0.04	209	Pg	24	46.92	-0.7
			Sg	24	47.92	
OGE	0.13	315	Pg	24	48.77	0.4
ESCF	0.17	272	Pg	24	48.74	-0.2
			Sg	24	51.28	
LHE	0.26	232	Pg	24	50.50	0.0
			Sg	24	54.23	
ATE	0.26	273	Pg	24	50.59	0.0
			Sg	24	54.31	
ISSF	0.34	262	Pg	24	52.02	0.1
			Sg	24	57.26	
MADF	0.36	282	Pg	24	52.54	0.3
			Sg	24	58.08	
EPF	0.50	95	Pg	24	55.30	0.5
			Sg	25	03.10	
ECRI	1.66	255	eP	25	17.50	3.9X
			eS	25	39.80	
LPO	1.95	34	Pg	25	22.40	4.7X
			Sg	25	49.50	
LFF	2.02	22	Pn	25	18.90	0.2
			Pg	25	23.80	
			Sg	25	51.20	
CAF	2.54	42	Pn	25	26.00	-0.2
			Pg	25	33.20	
			Sg	26	06.70	
RJF	2.60	30	Pg	25	34.80	7.8X
			Sg	26	08.40	
LSF	3.45	22	Pn	25	37.80	-1.2
			Sg	26	34.90	
MFF	3.53	2	Pg	25	51.60	11.4X
			Sg	26	35.70	
LKO	33.71	189	P	31	33.18	5.6X
	S.D. = 0.6	on	11 of	16	obs.	

% JUN 15, 1990 19h 28m 53.09± 0.70s
42.376 N ± 6.1km 19.342 E ± 5.4km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.4 (TTG).

TTG	0.08	312	iPgc	28	56.70	1.2
			iSg	29	00.00	
BDV	0.39	257	iPgd	29	01.20	0.1
			iSg	29	08.00	
ULC	0.42	189	ePg	29	01.50	-0.1
			eSg	29	08.60	
NKY	0.51	330	ePg	29	02.80	-0.6
			eSg	29	11.00	
PVY	0.52	65	ePg	29	03.70	0.1
			eSg	29	12.00	
HCY	0.63	277	ePg	29	05.30	-0.4
			eSg	29	15.00	
IVA	0.64	39	ePg	29	05.90	-0.1
			eSg	29	16.00	
	S.D. = 0.7	on	7 of	7	obs.	

% JUN 15, 1990 19h 40m 58.21± 1.58s
16.842 N ±14.3km 61.627 W ±18.0km
DEPTH = 33.0km (normal)
LEEWARD ISLANDS (92)
ML 2.9 (FDF).

BPA	0.30	313	eP	41	06.11	0.1
			S	41	16.70	
SEG	0.45	165	eP	41	07.69	-0.4
			S	41	18.50	
MGH	0.58	258	eP	41	09.70	-0.2
PAG	0.81	184	eP	41	14.10	0.9
			S	41	32.10	
MGG	0.97	162	eP	41	15.60	0.2
BBL	1.32	174	eP	41	20.00	-0.5
	S.D. = 0.6	on	6 of	6	obs.	

& JUN 15, 1990 20h 05m 56.80s
40.272 N 124.432 W
DEPTH = 8.0km
NEAR COAST OF NORTHERN CALIF. (35)
<BRK>. ML 2.9 (BRK).

FHC	0.63	33	iPc	06	09.30	-0.1
			iS	06	17.70	
WDC	1.48	77	eP	06	20.00	-3.7
			i	06	45.20	
MIN	2.16	87	eP	06	31.50	-2.3
LBFM	2.21	60	eP	06	33.00	-1.5
ORV	2.37	107	eP	06	32.20	-4.3
KVN	5.04	102	eP	07	10.50	-4.1
	6 obs. associated					

JUN 15, 1990 20h 11m 17.80± 0.68s
46.404 N ± 7.4km 12.905 E ± 7.2km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
MD 3.3 (LJU). ML 2.8 (KBA).

FVI	0.21	336	Pd	11	21.00	-1.3
			eSg	11	24.00	
KBA	0.74	24	iPgc	11	32.30	-0.1
			i	11	39.70	
			iSg	11	42.70	
VOY	0.78	118	ePg	11	31.10	-2.0
			eSg	11	44.00	
TRI	0.92	139	iPgd	11	34.60	-0.7
			iSg	11	47.30	
CTI	0.94	248	P	11	37.00	1.2
			eSg	11	46.00	
SCE	1.04	308	iPgc	11	35.60	-1.9
LJU	1.19	107	ePg	11	40.90	1.0
			eSg	11	57.00	
CEY	1.25	122	ePn	11	41.10	0.0
			eSg	12	00.40	
SQTA	1.42	306	iPgd	11	42.60	-1.2
			iSg	12	01.80	
VBY	1.87	118	ePn	11	51.30	1.2
			iSn	12	16.20	
FUR	2.08	328	eP	11	56.10	2.9
PTJ	2.18	102	e(P)	12	02.40	7.7X
WET	2.74	360	eP	12	02.90	0.2

15d 20h

GRC1 2.76 341 e(Pn) 12 03.60 0.7
iPgc 12 10.30
eSg 12 44.50
KHC 2.77 9 Pg 12 03.10 0.1
Sg 12 38.00
S.D. = 1.5 on 14 of 15 obs.

JUN 15, 1990 20h 26m 20.05± 0.48s
6.785 S ± 7.2km 142.994 E ± 7.7km
DEPTH = 33.0km (normal)
4.8mb (6 obs.)
PAPUA NEW GUINEA (202)

MNDI 0.91 47 eP 26 26.50 -10.2X
LAT 3.98 88 eP 27 19.00 -1.3
KDB 4.91 123 eP 27 33.00 -0.5
MTN 13.15 242 eP 29 26.00 -1.1
e 29 51.00
e 31 55.00
e 32 58.00
QIS 14.08 193 eP 29 41.00 1.6
e 29 50.00
e 32 09.00
e 33 56.50
WB5 15.48 212 eP 29 56.00 -1.7
eS 32 35.00
WRA 15.55 212 Pd 29 58.00 -0.5
0.8s 7.90nm 4.0mb
KNA 16.54 236 eP 30 10.00 -1.3
WARB 24.80 217 eP 31 42.00 1.4
SSE 43.06 332 eP 34 17.50 -1.1
GYA 48.30 315 P 35 01.60 1.0
KMI 50.39 311 eP 35 17.00 0.2
BJI 52.76 334 eP 35 33.50 -0.6
0.8s 5.00nm 4.5mb
GTA 60.87 323 eP 36 31.60 -0.4
0.8s 4.00nm 4.6mb
GUN 65.00 305 P 37 00.30 0.4
DMN 65.52 304 P 37 03.40 0.3
0.9s 23.00nm 5.3mb
GKN 66.05 305 P 37 06.20 -0.2
0.9s 18.00nm 5.2mb
WMO 70.84 321 eP 37 35.00 -0.7
QUE 81.45 302 eP 38 37.40 1.4
SPA 83.26 180 iPc 38 45.90 1.3
0.6s 5.69nm 4.9mb
SIV 147.14 134 PKP 46 01.90 1.8
KIC 147.95 271 PKP 46 06.00 4.5X
LIC 148.23 271 PKP 46 06.60 4.7X
TIC 148.24 272 PKP 46 06.80 4.8X
LKO 148.79 277 PKP 46 07.50 4.6X
0.9s 11.00nm
S.D. = 1.2 on 20 of 25 obs.

& JUN 15, 1990 20h 37m 35.10s
36.755 N 121.485 W
DEPTH = 7.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.8 (BRK).

SAO 0.03 73 iP 37 36.20 -0.5
PRS 0.43 168 iPd 37 43.40 -0.4
LLA 0.46 107 iPd 37 44.10 -0.2
iS 37 51.00
GCC 0.49 304 eP 37 44.10 -0.9
i 37 54.10
ARN 0.59 356 iPc 37 46.70 -0.3
MHC 0.60 348 iPd 37 47.00 -0.1
iS 37 55.80
PRI 0.90 133 ePc 37 52.20 -0.5
iS 38 07.30
PCC 1.03 316 iPd 37 53.50 -1.4
i 37 57.40
e 38 09.70
BKS 1.27 332 e(P) 38 00.00 1.1
BRK 1.28 331 ePd 37 59.70 0.7
FRI 1.44 80 eP 38 00.50 -1.2
iS 38 19.40
CMB 1.55 34 ePd 38 01.40 -1.8
BCH 1.94 144 eP 38 06.80 -2.0
KVN 3.52 48 eP 38 30.00 -1.6
14 obs. ossociated

% JUN 15, 1990 21h 04m 09.06± 2.19s
16.038 N ± 9.7km 61.095 W ±24.4km
DEPTH = 33.0km (normal)
LEEWARD ISLANDS (92)

ML 2.0 (FDF).

SFG 0.24 336 eP 04 15.97 0.0
MGG 0.24 241 eP 04 15.89 -0.2
S 04 19.30
SEG 0.54 313 eP 04 20.31 0.1
S 04 26.20
PAG 0.56 269 eP 04 20.60 0.0
S 04 27.20
BBL 0.63 216 eP 04 21.72 0.2
S 04 29.50
S.D. = 0.2 on 5 of 5 obs.

% JUN 15, 1990 22h 55m 34.99± 0.92s
45.700 N ± 8.8km 26.989 E ±12.0km
DEPTH = 33.0km (normal)
ROMANIA (358)

VRI 0.25 313 iPc 55 42.50 0.3
ISR 0.64 209 ePc 55 48.00 0.3
PPE 0.68 40 ePc 55 50.00 1.9
CLI 0.87 13 iPd 55 49.00 -1.9
CFR 0.97 122 iPd 55 52.00 -0.2
TLB 1.33 146 iPc 55 57.00 -0.4
S.D. = 1.6 on 6 of 6 obs.

% JUN 16, 1990 00h 28m 49.22± 4.42s
44.771 N ± 7.3km 6.653 E ±41.9km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.3 (GEN).

RRL 0.18 32 P 28 53.03 -0.3
S 28 55.70
PZZ 0.42 129 P 28 57.75 0.0
S 29 03.90
RSP 0.57 48 P 29 01.03 0.1
S 29 10.05
STV 0.71 137 P 29 03.18 -0.1
S 29 13.23
ENR 0.77 134 P 29 04.51 0.1
S 29 14.77
LSD 0.77 27 P 29 04.72 0.2
S 29 14.87
S.D. = 0.3 on 6 of 6 obs.

JUN 16, 1990 01h 34m 11.22± 0.19s
22.607 S ± 7.1km 176.720 W ± 5.0km
DEPTH = 139.4km (22 depth phases)
5.3mb (19 obs.)
SOUTH OF FIJI ISLANDS (171)
CENTROID, MOMENT TENSOR (HRV)
Doto Used: GDSN
L.P.B.: 9S, 18C
Centroid Locotion:
Origin Time 01:34:17.6 0.9
Lot 22.34S 0.11 Lon 176.53W 0.05
Dep 137.3 1.7 Half-durotion 2.4
Moment Tensor; Scole 10**17 Nm
Mrr= 0.81 0.09 Mtt= 0.42 0.17
Mff=-1.23 0.17 Mrt=-1.17 0.10
Mrf=-2.74 0.11 Mtf=-0.05 0.15
Principal Axes:
T Vol= 3.05 Plg=53 Azm=124
N 0.22 10 21
P -3.27 36 284
Best Double Couple:Mo=3.2*10**17
NP1:Strike=333 Dip=13 Slip= 41
NP2: 203 81 100

SVA 6.36 314 ePc 35 47.60 3.8X
VUN 6.43 314 eP 35 45.60 0.8
NDF 7.30 310 eP 36 01.90 5.4X
PVC 14.86 286 iPc 37 41.20 5.7X
DZM 15.59 269 iPc 37 49.10 4.4X
iS 40 54.90
ScP 45 22.40
MRW 19.92 199 P 38 29.00 -5.0X
S 41 53.00
TVO 26.20 84 iP 39 33.40 -1.4
1.2s 180.00nm 5.6mb
BRS 28.02 254 iP 39 53.20 2.0
i 40 23.00 141km
RMQ 31.58 256 eP 40 23.00 0.3
1.1s 195.00nm 5.8mb
e 43 18.00
CNB 32.10 239 eP 40 29.00 1.8

CAN 32.39 239 eP 40 31.00 1.3
e 46 49.00
BWA 32.66 241 eP 40 30.20 -1.9
e 46 47.30
CMS 34.37 247 eP 40 46.50 -0.3
CTA 34.52 267 iPc 40 48.10 0.0
0.5s 123.24nm 5.9mb
i 41 19.80 147km
iS 46 06.00
OLP 35.63 256 iPd 40 57.50 0.1
TOO 35.68 237 eP 40 56.00 -1.8
PMG 37.01 285 eP 41 11.00 1.9
BFD 37.89 238 eP 41 15.00 -1.3
STK 38.00 247 eP 41 18.60 1.3
1.2s 34.00nm 5.0mb
RKT 38.38 99 eP 41 18.00 -2.5
1.2s 50.00nm 5.2mb
QIS 40.56 264 iPc 41 38.40 -0.2
e 47 37.00
WB5 45.51 264 eP 42 16.90 -1.7
eS 48 45.00
WRA 45.52 264 Pd 42 16.60 -2.1
0.4s 16.80nm 5.1mb
MTN 50.40 272 iPc 42 55.50 -1.0
WARB 51.36 254 eP 43 00.00 -3.7X
0.3s 17.00nm 5.3mb
KNA 51.71 267 eP 43 04.90 -1.5
0.4s 52.00nm 5.7mb
GUMO 52.06 310 eP 43 16.50 7.5X
eS 50 22.00
PJG 52.06 310 eP 43 15.60 6.6X
COOL 55.49 247 eP 43 32.00 -2.0
SBA 55.86 184 iP 43 38.10 2.2
KLB 58.26 246 eP 43 52.60 -0.9
MEKA 58.45 252 eP 43 54.00 -0.9
MUN 59.51 245 eP 44 02.00 -0.1
MRWA 60.16 248 eP 44 04.00 -2.6
NANU 62.02 256 eP 44 17.70 -1.4
0.4s 25.00nm 5.5mb
SPA 67.53 180 iPd 44 54.70 0.5
1.2s 127.46nm 5.6mb
i 45 35.60 172kmX
MAT 72.60 323 (P) 45 27.00 1.9
eS 54 40.00
ADK 74.17 0 eP 45 31.60 -2.1
1.0s 60.00nm 5.3mb
PRS 78.53 43 ePc 45 59.00 0.4
epP 46 33.70 139km
AIA 78.57 157 e(P) 45 59.00 0.7
GCC 78.59 42 ePc 45 58.80 0.0
epP 46 33.90 140km
PCC 78.65 41 ePc 45 59.20 0.0
SAO 78.76 42 ePc 46 00.60 0.8
PRI 78.86 43 ePc 46 01.00 0.5
epP 46 34.40 133km
BRK 78.96 41 ePc 46 01.10 0.3
MHC 79.00 42 ePc 46 01.10 -0.2
epP 46 36.70 142km
PAS 79.26 46 eP 46 03.00 0.4
MWC 79.38 46 eP 46 03.00 -0.5
BAR 79.41 48 eP 46 03.00 -0.5
PLM 79.68 47 eP 46 05.00 0.0
e 46 40.00 140km
RVR 79.70 47 eP 46 05.00 0.1
SBB 79.81 46 eP 46 05.00 -0.6
e 46 38.00 131km
FHC 79.86 38 ePc 46 06.20 0.5
ISA 79.97 45 eP 46 06.00 -0.4
e 46 41.00 139km
FRI 79.99 43 ePc 46 06.20 -0.2
epP 46 41.30 140km
MAW 79.99 200 iPc 46 07.10 1.2
1.2s 43.00nm 5.1mb
CMB 80.21 42 ePc 46 07.60 0.0
ipP 46 42.60 139km
ORV 80.50 40 ePc 46 08.90 -0.1
epP 46 43.90 139km
WDC 80.55 39 ePc 46 09.70 0.5
ipP 46 44.60 139km
CLC 80.63 45 eP 46 10.00 0.1
e 46 45.00 139km
GSC 80.85 46 eP 46 11.00 -0.1
GLA 80.90 49 eP 46 12.00 0.7
e 46 47.00 139km
MIN 80.94 39 ePc 46 11.00 -0.5
NJ2 82.13 309 eP 46 17.00 -0.6
TNP 82.22 43 P 46 18.00 -0.3

	0.8s	9.80nm			4.6mb	
		pP	46	53.00	139km	
KVN	82.25	42 P	46	17.80	-0.6	
		pP	46	53.00	139km	
MDJ	82.92	325 eP	46	22.00	0.6	
BMW	84.05	34 P	46	27.80	0.6	
		pP	47	03.00	139km	
CN2	84.69	322 eP	46	29.00	-1.3	
LON	84.96	34 P	46	31.60	-0.2	
		pP	47	07.00	139km	
SNG	86.01	279 eP	46	39.80	2.3	
PMR	86.79	13 eP	46	39.60	-0.7	
	1.2s	31.30nm			5.1mb	
TTA	86.81	9 eP	46	40.80	0.3	
PNT	87.74	33 eP	46	45.00	-0.2	
	0.8s	21.00nm			5.2mb	
ALQ	87.80	51 eP	46	45.20	-0.8	
	1.0s	162.50nm			6.0mb	
		epP	47	21.00	140km	
ANMO	87.80	51 P	46	45.50	-0.5	
	0.8s	10.26nm			4.9mb	
		pP	47	21.00	139km	
NEW	88.39	35 P	46	48.00	-0.4	
TIY	89.56	311 eP	46	54.90	0.7	
LRM	89.58	39 eP	46	54.40	0.1	
BW06	89.69	43 P	46	53.70	-1.2	
FBA	90.04	12 eP	46	54.50	-1.2	
IMA	90.12	9 eP	46	55.80	-0.4	
GOL	90.87	47 P	47	00.00	-0.4	
	0.8s	6.32nm			4.8mb	
CHG	92.07	289 ePd	47	07.00	1.0	
	1.0s	10.75nm			5.0mb	
SES	92.87	36 ePd	47	09.40	0.3	
		pP	47	47.00	147km	
MEO	93.48	54 iPc	47	11.50	-0.7	
RSSD	93.85	44 P	47	13.00	-0.9	
INK	95.99	15 eP	47	23.00	0.1	
ARE	97.20	111 eP	47	32.00	2.1	
ZOBO	100.17	112 Pdiff	47	47.00	3.2X	
		SKS	58	16.00		
		LR	16	18.00		
GRM	120.12	203 iPKPd	52	42.00	-5.3X	
	0.7s	10.27nm				
SEK	124.18	206 ePKP	52	56.00	0.5	
BFT	125.43	210 iPKPd	52	58.50	0.5	
	1.0s	20.00nm				
SLR	126.18	208 iPKPc	53	00.00	0.6	
BUL	130.84	212 iPKPc	53	07.80	-0.6	
		ipP	53	17.20		
KRI	133.09	216 iPKPd	53	11.40	-1.3	
		ipP	53	20.00		
NAO	141.45	354 PKP	53	19.70	-7.0X	
	0.7s	2.50nm				
HFS	141.79	352 ePKP	53	20.00	-7.4X	
	0.4s	4.10nm				
BSD	146.40	348 iPKPc	53	36.00	0.7	
	0.8s	46.20nm				
EKA	146.97	7 PKPd	53	38.00	1.8	
	0.9s	13.30nm				
KAS	148.32	313 ePKP	53	43.00	4.1X	
YRH	149.22	9 ePKP	53	43.00	3.1X	
ECP	149.55	12 ePKP	53	44.00	3.7X	
KRA	149.64	339 ePKP	53	43.60	3.0X	
		e	53	48.90		
CFR	149.67	324 ePKP	53	46.00	5.3X	
		e	18	20.00		
BBTK	149.68	311 ePKP	53	46.00	4.8X	
WIT	149.73	356 ePKP	53	46.00	5.4X	
		e	54	24.00		
VRI	149.97	326 ePKPc	53	46.50	5.3X	
KSP	150.04	343 ePKP	53	42.50	1.3	
	1.0s	43.00nm				
		i	53	46.60		
		e	54	20.50		
		i	54	26.50		
DSI	150.15	294 ePKP	53	47.00	5.1X	
SPC	150.27	337 ePKP	53	46.30	4.5X	
		i	53	49.10		
CLL	150.37	348 ePKP	53	46.00	4.4X	
	1.2s	55.00nm				
		e	54	22.00		
WTS	150.54	356 ePKP	53	47.50	5.7X	
	0.9s	34.00nm				
		e	54	22.50		
MLR	150.63	326 ePKP	53	48.00	5.6X	
MBH	150.82	291 ePKP	53	48.50	5.5X	
RMN	150.95	292 ePKP	53	48.00	4.8X	
PRU	151.27	345 ePKP	53	45.00	2.0	
		e	53	48.70		
ENN	151.82	356 ePKP	53	50.00	6.2X	
	0.9s	29.00nm				
MEM	151.97	356 PKP	53	46.00	2.0	
SRO	152.11	338 e(PKP)	53	52.40	8.1X	
		i	54	01.60		
SNF	152.14	359 PKP	53	51.30	7.0X	
TNS	152.14	353 ePKPc	53	51.20	6.8X	
ZST	152.18	340 e(PKP)	53	49.70	5.3X	
GRF	152.25	349 ePKP	53	44.70	0.2	
		e	53	51.90		
		e	54	01.70		
		e	54	31.20		
KHC	152.30	345 PKP	53	45.30	0.7	
		e	53	52.00		
DOU	152.55	358 PKPc	53	52.20	7.3X	
	0.9s	30.00nm				
KHL	152.62	311 ePKP	53	53.00	7.5X	
FLN	153.73	6 ePKP	53	46.70	0.1	
	0.7s	5.50nm				
GRR	154.06	6 ePKP	53	47.50	0.5	
LPF	154.40	7 ePKP	53	49.00	1.5	
	1.0s	8.00nm				
SQTA	154.63	347 e(PKP)	53	47.00	-1.0	
	0.9s	10.80nm				
		i	53	57.60		
		i	54	12.40		
FVI	154.86	344 PKP	53	48.50	0.4	
LJU	154.89	341 e(PKP)	53	47.00	-1.2	
VOY	155.09	342 ePKP	53	48.50	-0.1	
CEY	155.20	341 e(PKP)	53	49.00	0.3	
LOR	155.39	359 ePKP	53	48.60	-0.3	
	0.9s	4.90nm				
SSF	155.60	360 ePKP	53	49.00	-0.2	
	0.8s	5.35nm				
CTI	155.64	346 PKP	53	48.00	-1.4	
LBF	155.67	359 ePKP	53	49.10	-0.2	
	0.7s	2.75nm				
AVF	155.87	360 ePKP	53	48.90	-0.6	
BGF	156.10	1 ePKP	53	49.60	-0.3	
	0.8s	4.05nm				
TCF	156.36	2 ePKP	53	51.30	1.0	
	0.8s	2.70nm				
VAI	156.37	350 PKP	53	52.50	2.3	
LSF	156.37	3 ePKP	53	51.10	0.9	
BCAO	156.67	221 iPKPc	53	50.70	-0.9	
	1.5s	38.00nm				
LPL	156.97	354 ePKP	53	51.20	-0.1	
	0.9s	4.10nm				
LPG	156.99	354 ePKP	53	51.50	0.1	
	0.7s	3.30nm				
BNI	157.44	354 PKP	53	53.00	1.2	
PGD	157.67	344 PKP	53	52.00	-0.1	
ARV	157.68	341 PKP	53	53.00	1.0	
BDI	157.76	346 PKP	53	52.00	-0.1	
LIC	161.85	153 (PKP)	53	57.40	0.2	
TIC	162.23	152 (PKP)	53	57.80	0.2	
LKO	164.48	145 PKP	53	59.28	-0.5	
	0.9s	10.50nm				

S.D. = 1.1 on 120 of 154 obs.

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* JUN 16, 1990 02h 05m 37.74± 0.50s
38.365 S ±11.7km 16.587 W ± 9.1km
DEPTH = 10.0km (geophysicist)
5.0mb (13 obs.)
SOUTH ATLANTIC RIDGE (410)

BAO	35.71	301 e(P)	12	38.00	-0.6	
SIV	44.88	287 Pc	13	54.70	0.4	
CCH	47.90	282 P	14	18.20	-0.3	
LKO	48.75	14 P	14	23.06	-1.6	
LPB	49.90	281 P	14	28.00	-6.1X	
ZOBO	50.08	281 P	14	35.00	-0.6	
	1.6s	8.15nm			4.4mb	
SPA	51.82	180 iPc	14	47.60	-0.2	
	1.4s	28.43nm			5.0mb	
BCAO	53.59	45 iPc	14	59.50	-1.8	
	1.4s	50.00nm			5.3mb	
EPF	82.46	12 eP	18	01.50	0.1	
	1.5s	15.65nm			4.9mb	
LPO	84.21	13 eP	18	10.40	0.2	
LFF	84.38	12 eP	18	11.30	0.3	
RJF	84.87	13 eP	18	13.80	0.3	
LSF	85.79	12 eP	18	18.60	0.5	
	1.5s	23.50nm			5.1mb	
MAF	85.94	13 eP	18	19.30	0.5	
	1.5s	15.65nm			5.0mb	
TCF	85.94	13 eP	18	19.50	0.6	
	1.4s	15.25nm			5.0mb	
SMF	86.59	14 eP	18	22.30	0.3	
	1.5s	20.90nm			5.1mb	
AVF	86.64	14 eP	18	22.70	0.5	
	1.4s	15.25nm			5.0mb	
SSF	86.93	14 eP	18	23.90	0.3	
	1.4s	13.05nm			5.0mb	
LBF	86.94	14 eP	18	23.70	0.0	
LPF	87.12	10 eP	18	25.00	0.5	
	1.5s	31.35nm			5.3mb	
LOR	87.19	14 eP	18	24.90	0.0	
	1.5s	15.65nm			5.0mb	
GRR	87.50	10 eP	18	26.60	0.3	
LDF	87.81	11 eP	18	28.30	0.5	
FLN	87.92	11 eP	18	28.50	0.2	
CDF	88.97	16 eP	18	33.50	0.0	
GRF	91.06	18 ePc	18	43.60	0.5	
	1.8s	46.00nm			5.5mb	
		e(pP)d	18	50.30	21kmX	
CLL	92.99	18 eP	18	51.00	-0.9	
WRA	115.90	149 PKPc	24	29.00	6.3X	
	0.4s	9.40nm				
WB5	115.97	149 ePKP	24	28.00	5.2X	
KNA	117.13	142 ePKP	24	41.00	16.0X	
PMG	130.11	159 ePdiff	21	48.00	9.2X	
LZH	133.23	73 ePKP	25	06.00	10.4X	

S.D. = 0.7 on 26 of 32 obs.

JUN 16, 1990 02h 16m 21.12± 0.15s
39.258 N ± 2.2km 20.528 E ± 1.7km
DEPTH = 31.7km (3 depth phases)
5.6mb (81 obs.) 5.2Msz (9 obs.)
GREECE-ALBANIA BORDER REGION (392)

MD 5.4 (TTG). One person slightly injured and damage in the Preveza area. Felt strongly in much of northwestern Greece and on Kerkira.

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 26C
Centroid Location:
Origin Time 02:16:21.5 0.9
Lat 38.70N 0.09 Lon 20.44E 0.09
Dep 15.0 BDY Half-duration 2.1
Moment Tensor; Scale 10**17 Nm
Mrr= 2.21 0.12 Mtt=-0.81 0.19
Mff=-1.40 0.11 Mrt= 0.53 0.39
Mrf=-0.25 0.41 Mtf= 1.53 0.10
Principal Axes:

	Val=	Plg=	Azm=
T	2.31	80	359
N	0.41	8	139
P	-2.72	6	230

Best Double Couple:Mo=2.5*10**17
NP1:Strike=329 Dip=39 Slip= 102
NP2: 133 52 80

KEK	0.72	309 iPnd	16	35.00	0.0	
SRN	0.74	327 iPn	16	34.60	-0.6	
VLS	1.08	177 iPnd	16	37.50	-2.6	
KBN	1.38	9 iPnd	16	45.20	0.9	
VLO	1.45	327 iPnc	16	48.10	2.8	
BERA	1.51	343 iPnc	16	49.40	3.2X	
OHR	1.86	6 iPnd	16	54.90	3.5X	
NEO	2.09	88 iPnd	16	55.50	0.8	
TIR	2.15	347 iPnc	17	01.00	5.6X	
LCI	2.26	299 P	16	57.10	0.2	
ITM	2.35	152 iPbd	16	58.80	0.5	
LACI	2.46	346 iPnc	17	02.00	2.2	
ATH	2.81	116 iPnd	17	05.20	0.4	
KKS	2.82	358 iPnd	17	08.00	3.2X	
PUK	2.82	350 iPnc	17	07.90	3.0X	
SDA	2.86	344 iPnc	17	08.80	3.3X	
ULC	2.87	341 iPnc	17	06.90	1.2	
		eSn	17	42.20		
BRT	3.02	303 P	17	10.00	2.2	
BCI	3.12	354 iPnc	17	11.70	2.4	
VLI	3.17	142 ePn	17	09.40	-0.5	
ORI	3.25	286 P	17	12.10	1.0	
TDS	3.27	278 P	17	12.40	1.1	
BDV	3.29	337 iPnc	17	12.10	0.5	
		eSn	17	52.00		
TTG	3.31	344 iPnc	17	13.00	1.1	
		eSn	17	53.00		
PVY	3.36	353 iPnc	17	15.00	2.2	

16d 02h

			eSn	17	56.50		CEY	7.89	327	iPnc	18	14.90	-1.6	VDL	10.86	315	eP	18	56.90	-0.7
MMB	3.37	45	iPc	17	14.00	1.1				eSn	19	43.50		VAI	10.89	311	P	18	56.40	-1.4
HCY	3.54	335	iPnc	17	15.20	0.0	SFI	8.00	308	P	18	17.60	-0.4				eSn	20	51.00	
			eSn	17	57.50					eSn	19	42.70		TMA	10.97	312	ePd	18	56.10	-2.9X
IVA	3.64	353	ePn	17	19.00	2.3	VRI	8.03	33	ePc	18	18.50	0.0	CSS	11.08	109	eP	18	57.20	-3.3X
			eSn	18	01.50		PGD	8.05	308	P	18	18.70	-0.2	LFK	11.10	107	iP	18	58.90	-1.8
SOI	3.70	253	P	17	17.00	-0.4				eSn	19	43.00		FUR	11.13	326	iPd	18	58.80	-2.3
NKY	3.73	342	iPnc	17	18.60	0.6	LJU	8.09	329	iPnc	18	17.70	-1.6	DOI	11.20	302	P	19	01.20	-0.9
			eSn	18	03.20					iSn	19	46.30					eSn	20	58.70	
VTS	3.90	31	P	17	22.80	2.4	BCK	8.11	100	iP	18	20.60	1.0	ORO	11.24	309	P	19	02.50	-0.2
BRY	3.94	338	iPnc	17	20.80	-0.1	TRI	8.15	324	ePnc	18	17.90	-2.2	FRF	11.27	297	eP	19	01.50	-1.6
			eSn	18	08.00					iSn	19	48.80			1.3s	176.90nm			6.1mb	
MGR	3.94	284	P	17	22.00	1.2	FIR	8.29	306	ePn	18	22.00	-0.1	WET	11.30	334	iPd	19	00.50	-2.9X
RZN	4.01	51	P	17	23.50	1.4	BUD	8.29	353	e(P)	18	19.00	-3.1X	LMR	11.30	296	eP	19	02.60	-0.9
MSI	4.03	256	P	17	21.80	-0.3	VOY	8.35	326	iPnc	18	20.80	-2.1		1.2s	190.40nm			6.2mb	
ATN	4.11	256	Pc	17	22.70	-0.6				eSn	19	54.70		LLS	11.35	316	ePd	19	02.80	-1.4
PLE	4.16	349	iPnc	17	25.50	1.5	CEI	8.54	9	eP	18	30.00	4.5X	SAX	11.41	318	ePd	19	03.70	-1.4
			eSn	18	13.00		PSZ	8.67	357	iP	18	26.10	-1.3	LRG	11.44	296	eP	19	02.60	-2.7X
SGO	4.22	290	Pc	17	26.80	2.0	PPE	8.69	35	ePd	18	31.50	3.9X		1.0s	203.15nm			6.3mb	
PLD	4.26	47	iPc	17	28.00	2.6	SRO	8.70	350	iP	18	26.60	-1.1	MMK	11.47	310	ePd	19	03.30	-2.6X
RDO	4.27	62	iPnd	17	25.00	-0.6				i	19	02.60		FAM	11.56	107	eP	19	07.00	0.0
PGB	4.29	39	iPc	17	27.00	1.1				i	19	36.00		BNI	11.79	304	P	19	10.30	0.1
KDZ	4.43	56	iPd	17	28.00	0.1				i	20	33.60		DIX	11.81	309	ePd	19	09.50	-1.1
APE	4.51	117	iPnd	17	28.50	-0.5	PII	8.73	304	P	18	29.10	1.0	LPG	11.94	306	eP	19	09.80	-2.5X
EZN	4.52	81	iP	17	29.30	0.2	PTT	8.79	27	eP	18	30.50	1.6		0.7s	86.15nm			6.0mb	
BSS	4.65	291	P	17	32.60	1.6	CLI	8.81	32	ePc	18	30.00	0.8	LPL	11.96	306	eP	19	09.70	-2.8X
			eSn	18	22.10		BDI	8.85	306	P	18	29.60	-0.2	KSP	11.96	347	eP	19	10.20	-2.1
DIM	4.72	52	iP	17	33.00	1.1	MME	8.85	307	P	18	27.80	-2.2		1.3s	119.00nm			5.9mb	
MNO	4.76	256	P	17	33.00	0.3	SOP	8.90	342	iP	18	25.70	-4.7X				ic	19	20.00	
VAM	4.83	142	iPnd	17	31.50	-2.0	FVI	9.27	325	P	18	34.30	-1.2				id	19	50.00	
MEU	4.91	246	P	17	32.20	-2.5				eSn	20	14.40		ZLA	12.05	317	ePd	19	11.70	-1.9
			eSn	18	27.00		ZST	9.27	346	eP	18	33.60	-2.0	EMS	12.10	309	ePd	19	12.90	-1.4
HVAR	4.98	323	iPnc	17	34.50	-1.1				i	19	44.70		SLE	12.18	318	ePd	19	13.00	-2.3
			iPg	17	49.80					i	20	24.50		GRF	12.36	331	ePc	19	13.60	-4.0X
			i(Sn)	18	27.30		PGF	9.33	294	eP	18	36.50	0.0				ed	19	21.20	
			i(Sg)	18	50.80		KBA	9.41	328	eP	18	35.00	-2.7X	FEL	12.50	318	P	19	17.16	-2.5X
SMG	5.19	105	iPnc	17	38.50	0.0				id	18	36.20		STU	12.52	323	ePd	19	16.80	-2.9X
DUI	5.21	299	P	17	39.90	0.8				i	18	47.80			1.0s	200.00nm			6.2mb	
GIB	5.25	258	P	17	39.20	-0.3	CTI	9.42	319	P	18	34.90	-2.9X	BBS	12.52	315	P	19	17.23	-2.6X
PVL	5.36	41	iPc	17	41.00	0.0				eSn	20	15.60		HOF	12.63	334	eP	19	18.00	-3.3X
BEO	5.56	359	iPn	17	43.20	-0.5	IAS	9.44	31	eP	18	39.00	1.1	LOMF	12.83	314	P	19	21.46	-2.6X
			iSg	19	27.70		BBTK	9.47	83	eP	18	40.00	1.5	HLW	12.93	133	eP	19	18.20	-7.0X
JMB	5.60	53	iPc	17	44.00	-0.3	VKA	9.50	343	eP	18	36.00	-2.8X				eS	21	32.00	
MCT	5.65	255	P	17	44.20	-1.1				i	18	39.10		MOF	12.95	316	P	19	23.93	-1.7
SDI	5.67	298	P	17	46.10	0.7				i	18	43.40		MOX	13.01	334	ePd	19	23.50	-2.7X
EDC	5.75	77	iP	17	46.90	0.3				i	18	52.70			0.8s	110.00nm			6.0mb	
USI	5.75	267	P	17	45.30	-1.2				i	19	05.00			Z 11s	23.70um				
BLY	6.02	337	Pn	17	50.50	0.2				i	19	23.60			E 14s	25.90um				
			e	18	55.00					iS	20	24.30					i	19	39.00	
AZI	6.05	299	P	17	51.80	1.1				i	20	31.00		STR	13.08	320	P	19	25.06	-2.1
DRA	6.09	26	eP	17	53.00	1.8				LR	23	03.00		BSF	13.13	315	P	19	25.88	-2.1
CVT	6.27	258	P	17	53.30	-0.5	SAL	9.74	314	P	18	40.30	-1.7	CLL	13.15	339	iPd	19	26.40	-1.7
ERC	6.33	261	P	17	54.80	0.0				eSn	20	23.60			1.5s	480.00nm			6.3mb	
GZR	6.35	14	ePd	17	52.00	-3.0X	BOB	9.91	307	P	18	44.10	-0.4				i	19	31.20	
YER	6.47	107	iP	17	57.00	0.4	SPC	9.93	359	eP	18	44.30	-0.5				i	19	39.20	
RMP	6.48	296	P	17	56.90	0.0				i	20	48.10					eS	22	03.00	
TIM	6.49	4	iPc	17	56.00	-0.9	KMR	9.94	334	iP+	18	43.00	-1.7	ECH	13.16	317	P	19	26.80	-1.5
LVI	6.54	261	P	17	57.40	-0.2				iS	20	41.70		WLS	13.18	318	P	19	26.27	-2.3
BUC	6.62	37	iP	18	00.00	1.3				i	20	53.90		CDF	13.22	318	P	19	26.81	-2.3
MTUR	6.85	28	ePc	18	04.00	2.1	SCE	10.09	323	iPc	18	45.60	-1.5	BHL	13.27	109	P	19	24.50	-5.4X
CMP	6.87	28	iPc	18	03.00	0.7	BHG	10.12	329	eP	18	44.90	-2.3				S	21	45.00	
YLV	6.92	76	iP	18	02.00	-1.1		1.1s	426.00nm			6.6mb	X	GAZ	13.29	94	eP	19	31.20	1.2
IZI	6.97	78	eP	18	02.90	-0.9	MDI	10.30	313	P	18	49.00	-0.7	GWF	13.41	321	P	19	29.41	-2.2
GBZT	7.01	75	eP	18	05.70	1.5				eSn	20	37.40		HAU	13.47	315	eP	19	29.00	-3.4X
AGS	7.05	305	P	18	05.40	0.6	KAS	10.33	74	iPc	18	52.80	2.5		0.5s	42.25nm			5.6mb	
KHL	7.09	95	eP	18	06.30	0.9	WATA	10.37	324	eP	18	46.00	-4.9X	ESEL	13.63	278	eP	19	36.50	2.0
ARV	7.10	309	P	18	04.30	-1.2				id	18	50.10		VITF	13.79	315	P	19	34.05	-2.5X
			eSn	19	20.50					i	19	01.50		TNS	13.90	326	ePd	19	31.40	-6.7X
PTS	7.17	253	P	18	05.80	-0.6	PPCY	10.40	111	eP	18	47.00	-4.1X	BGIO	14.03	118	eP	19	33.06	-6.8X
HRT	7.19	75	iP	18	04.40	-2.3	SQTA	10.46	323	eP	18	50.00	-2.0	JVI	14.09	117	iPc	19	34.06	-6.5X
PSN	7.25	50	iPd	18	07.00	-0.5				id	18	51.30					eS	22	08.00	
VBY	7.36	330	iPnc	18	07.90	-1.1				i	19	01.00		BRN	14.11	341	eP	19	39.00	-1.6
			iSn	19	27.20					i	19	06.40		SMF	14.26	307	eP	19	40.90	-1.9
ZAG	7.36	334	iPnc	18	07.40	-1.7				i	19	27.20		LBF	14.32	308	eP	19	41.00	-2.6X
			iSn	19	28.50					iS	20	43.20		RMN	14.49	123	iPc	19	38.08	-7.8X
ISR	7.38	35	iPc	18	11.00	1.6				i	20	45.80		LOR	14.53	309	eP	19	42.80	-3.4X
MLR	7.41	31	iP	18	11.00	1.2	CKI	10.49	303	P	18	51.00	-1.4		0.6s	35.25nm			5.0mb	
PTJ	7.44	335	iPnc	18	08.10	-2.2	OSS	10.62	318	iPd	18	52.80	-1.5	NOH	14.58	121	iPc	19	40.00	-7.1X
ALT	7.45	89	eP	18	11.20	0.7	KRA	10.80	358	iPd	18	56.20	-0.4				eS	22	15.00	
RHY	7.59	325	iPnc	18	10.60	-1.7		1.0s	198.00nm			6.3mb		AVF	14.63	307	eP	19	45.90	-1.6
			iSn	19	33.70			Z 14s	20.00um					SSF	14.65	308	eP	19	44.10	-3.7X
GPA	7.60	79	iP	18	13.60	1.0		E 18s	46.90um					CAF	14.82	298	eP	19	49.40	-0.7
TLB	7.72	44	ePd	18	15.00	0.9				i	19	04.70		BGF	14.85	305	eP	19	48.40	-2.1
MAO	7.78	297	P	18	14.90	-0.1				i	19	14.60		MAF	14.90	304	eP	19	49.30	-1.9
CRE	7.78	307	P	18	14.40	-0.7				e	20	59.00			1.4s	128.50nm			5.1mb	
			eSn	19	38.00		SBF	10.83	299	eP	18	57.20	0.1	TCF	15.16	304	eP	19	53.80	-0.7
ELL	7.82	106	iP	18	17.00	1.3		0.9s	96.65nm			6.0mb			1.3s	97.50nm			4.9mb	

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MEM	15.28	323	Pc	19	56.30	0.3	GIBL	20.97	272	eP	21	02.50	-1.4	KSH	42.29	71	iPd	24	14.00	0.6
RJF	15.30	299	eP	19	55.70	-0.6	PLAT	21.01	270	eP	21	04.50	0.1		N 10s	3.50um				
	1.5s	229.80nm			5.2mb		ERUA	21.14	287	iPc	21	07.30	1.8	NAI	43.02	156	P	24	22.20	2.6
LPO	15.36	297	eP	19	55.80	-1.3	EMON	21.28	290	iPc	21	07.00	0.0		1.0s	33.00nm			5.0mb	
	1.1s	61.05nm			4.8mb		HFS	21.34	351	eP	21	05.30	-2.1	NDI	47.50	85	iPc	24	53.00	-2.2
EBR	15.43	282	eP	19	59.00	1.0		1.3s	460.70nm			5.7mb			0.6s	50.00nm			5.7mb	
			e	22	52.00			Z 15s	3.15um			4.8MszX				eS	31	43.00		
			e	23	04.00				LR	28	33.00			WMQ	49.24	62	iPc	25	07.00	-1.5
ENN	15.43	323	ePc	19	58.50	0.6	IFR	21.40	262	iPc	21	11.50	3.0X		Z 20s	1.80um			5.1Msz	
	1.1s	441.00nm			5.6mb				i		21	32.50	100kmX		E 10s	1.50um				
EROQ	15.49	282	eP	19	59.30	0.5	EVAL	21.41	274	eP	21	09.10	0.8			PP	27	02.00		
HQL	15.58	125	ePc	19	54.10	-5.9X	NUR	21.43	6	eP	21	06.00	-2.3			S	32	12.00		
LSF	15.59	303	eP	19	59.60	-0.5	BLS2	21.85	341	iP	21	15.50	2.9X	GKN	53.55	81	Pc	25	38.00	-3.3X
	1.8s	215.80nm			5.1mb		YRH	21.97	316	iPc	21	14.00	0.2	DMN	54.11	82	Pc	25	42.40	-3.1X
DOU	15.64	319	P+	20	01.70	1.0		1.3s	595.00nm			5.9mb		PKI	54.36	82	Pc	25	44.20	-3.3X
			e	20	07.30		STS	22.17	289	eP	21	18.70	2.8	GUN	54.55	81	Pc	25	46.00	-2.9X
			S	22	47.20		KMY	22.22	339	iP	21	16.00	-0.2	HYB	54.55	96	eP	25	44.50	-4.1X
EPF	15.66	290	eP	20	01.20	0.1	EZAM	22.29	287	iPc	21	20.30	3.2X	GBA	55.98	101	Pc	25	55.30	-3.6X
	1.3s	77.60nm			4.7mb		NAO	22.42	348	P	21	16.10	-2.1		1.0s	30.40nm			5.3mb	
LFF	15.73	298	eP	19	59.30	-2.6	EKA	22.56	323	Pc	21	19.70	0.1	KRI	56.44	170	iPc	26	00.90	-1.4
	1.3s	115.55nm			4.9mb			1.4s	874.90nm			6.0mb		NPA	56.82	158	eP	26	05.30	0.4
WTS	15.91	328	eP	20	06.50	2.4	ECP	22.64	314	eP	21	24.60	4.2X	SCH	57.65	317	eP	26	10.00	-0.4
	1.0s	188.00nm			5.2mb		ESY	22.66	325	ePc	21	20.30	-0.3	GTA	59.31	62	iPc	26	20.00	-2.4
			e	20	09.00		EBL	22.77	324	ePc	21	21.50	-0.1		Z 20s	1.60um			5.1Msz	
SNF	16.06	320	P	20	06.70	0.7	ETA	22.77	315	iPc	21	22.10	0.5		E 14s	1.10um				
BADA	16.07	127	ePc	19	59.60	-6.7X		1.3s	287.00nm			5.6mb				S	34	26.00		
JAU	16.18	290	P	20	10.35	2.5	EDI	22.92	324	ePc	21	23.50	0.4			SS	38	15.00		
UCC	16.20	321	P	20	08.00	0.2		1.0s	276.00nm			5.7mb		BUL	59.57	171	iPc	26	22.30	-1.9
BSD	16.30	348	iPd	20	07.10	-2.0	EAU	22.99	324	ePc	21	24.00	0.1			iPP	28	26.30		
	0.9s	85.00nm			4.9mb			1.2s	326.00nm			5.7mb		SHL	60.35	80	iP	26	25.50	-4.2X
ACU	16.32	274	eP	20	09.90	0.3	BER	23.19	341	iP	21	26.20	0.5			eS	34	35.50		
ESCF	16.34	290	P	20	11.39	1.7	EDU	23.22	326	ePc	21	26.00	-0.1	CBM	61.87	309	P	26	39.00	-0.5
ATE	16.43	290	P	20	12.71	1.9	AVE	23.25	264	iPd	21	29.30	2.8	MBC	61.98	350	ePc	26	39.60	-0.3
AYN	16.46	124	ePc	20	05.70	-5.5X				i	21	38.00	31km		0.9s	50.00nm			5.6mb	
ISSF	16.49	290	P	20	13.45	1.7	EBH	23.26	325	ePc	21	26.70	0.3	LZH	63.72	64	iPc	26	50.20	-1.9
MADF	16.52	290	P	20	13.73	1.7	ASK	23.32	341	iP	21	27.50	0.6		1.5s	150.00nm			5.9mb	
WIT	16.58	329	e(P)	20	14.50	1.9	QASM	23.32	117	ePc	21	26.70	-0.6		Z 28s	1.60um			5.1MszX	
			e	26	21.00		ELO	23.48	325	ePc	21	29.00	0.4		N 18s	1.40um				
ECHE	16.62	278	eP	20	16.70	3.5X	EAB	23.60	324	ePc	21	30.20	0.5			PP	29	05.50		
ELYF	16.65	290	P	20	16.07	2.4		1.2s	409.00nm			5.8mb				eS	35	20.00		
BOH	16.66	290	P	20	15.53	1.7	HYA	23.67	343	eP	21	32.00	1.7	SLR	65.06	172	iPc	27	00.00	-0.7
DBN	16.69	325	eP+	20	09.00	-4.9X	SUF	23.74	6	iP	21	30.30	-0.7		1.0s	40.00nm			5.5mb	
	4.0s	3.10nm			2.8mb X			0.6s	170.30nm			5.7mb			Z 20s	4.26um			5.6Msz	
	Z 12s	7.10um			6.2MszX		TIO	24.14	258	iPd	21	37.80	2.4	BFT	65.22	171	iPc	27	02.50	0.7
			eS	23	36.00					i	22	26.00			1.0s	45.00nm			5.5mb	
MFF	16.80	303	eP	20	15.00	-0.4	AFIF	24.40	122	iPc	21	38.00	0.1	BTO	65.56	57	P	27	02.50	-1.4
	1.3s	267.15nm			5.2mb		RGS	24.56	349	eP	21	41.20	2.2		N 12s	0.80um				
EALH	17.22	272	eP	20	21.90	1.1	MOL	24.64	346	iP	21	39.98	0.3		E 12s	0.90um				
COP	17.30	344	iPc-	20	22.00	0.4	MJMA	24.69	115	iPc	21	39.30	-1.3			epP	27	11.50	29km	
	1.0s	200.00nm			5.2mb		VAL	24.78	311	iP	21	42.90	1.8			eS	35	49.00		
			i	20	24.00					S	26	12.00		HBVT	66.16	308	P	27	08.00	0.5
			i	20	29.00		NSS	25.81	351	iP	21	50.00	-0.7	CD2	66.37	69	P	27	06.80	-2.4
			iS	21	28.00		RYD	26.33	116	iPc	21	54.50	-1.5			iS	35	55.00		
LDF	17.51	309	eP	20	23.40	-0.9	DHR	27.91	109	ePc	22	08.50	-1.8	HHC	66.42	56	Pd	27	08.30	-1.1
	1.1s	100.10nm			4.9mb		SOD	28.37	5	iP	22	12.40	-1.7		Z 20s	1.40um			5.2Msz	
ECRI	17.72	288	iPc	20	27.40	0.4	ABHA	28.46	131	ePc	22	14.70	-0.9		N 13s	1.00um				
FLN	17.80	309	eP	20	24.20	-3.7X	KMTA	28.59	131	iPc	22	16.50	-0.3		E 12s	0.80um				
	1.2s	172.55nm			5.1mb		SRAT	28.86	131	iPc	22	19.20	-0.1			sP	27	17.50		
LPF	17.86	306	eP	20	27.50	-1.1	LOF	29.18	355	eP	22	20.19	-1.1			PP	29	40.00		
	1.1s	127.00nm			5.0mb		KTK1	29.85	2	iP	22	25.96	-1.4	WNY	66.62	309	P	27	10.40	-0.2
GRR	17.88	308	eP	20	27.50	-1.4	TRO	30.45	359	iP	22	31.27	-1.3	RSNY	66.94	309	P	27	12.50	-0.1
	0.9s	73.70nm			4.8mb		KEV	30.75	4	iP	22	34.00	-1.3		1.5s	84.49nm			5.6mb	
EVIA	17.92	275	iPc	20	30.70	1.1		1.0s	84.00nm			5.5mb		SEK	67.56	173	iPd	27	17.00	0.4
ENIJ	18.04	270	eP	20	30.10	-0.9				eS	27	36.00			0.9s	8.40nm			4.8mb	
WAJH	18.73	129	ePc	20	35.00	-4.4X	MAIO	30.78	83	eP	22	36.00	0.0	BLF	68.22	175	iPc	27	20.00	-0.7
AWKL	18.75	144	eP	20	37.20	-2.6				eS	27	40.00		POF	68.29	181	iPc	27	22.00	1.1
AKSR	18.84	142	iPd	20	38.50	-2.3	AAE	34.25	147	eP	23	07.50	0.9		1.2s	39.06nm			5.4mb	
AGAL	18.93	143	eP	20	40.00	-1.9	AKU	34.43	333	iP	23	09.10	1.8	XAN	68.33	63	iPc	27	19.00	-2.5
TOL	18.95	280	iP+	20	42.00	-0.1		1.3s	92.31nm			5.6mb			1.0s	100.00nm			5.9mb	
			iS	24	14.00		BCAO	34.71	183	iPc	23	08.00	-2.3		N 10s	0.50um				
GUD	18.96	282	iPd	20	41.90	-0.5		0.7s	45.00nm			5.5mb			E 12s	0.50um				
EBAN	19.00	274	iPc	20	42.30	-0.4	JNE	35.08	344	eP	23	13.90	1.1			PP	29	48.00		
AFC	19.00	272	eP	20	44.30	1.4	JMI	35.13	344	eP	23	14.60	1.3			S	36	15.00		
ECOG	19.01	272	eP	20	44.30	1.3	JNW	35.14	344	iP	23	14.40	1.1	TXNY	68.58	306	iP	27	24.30	1.5
EMEL	19.09	265	e(P)	20	43.40	-0.3	REY	35.14	329	iP	23	16.10	2.7	TIY	68.69	58	Pc	27	22.00	-1.7
MAL	19.80	271	iPd	20	50.60	-1.1	LKO	37.68	225	Pc	23	35.00	-0.4		Z 15s	2.60um			5.6MszX	
			iS	24	28.00			0.7s	95.00nm			5.7mb			N 13s	0.80um				
BST	19.85	305	P	20	36.99	-15.2X	QUE	38.86	89	eP	23	40.20	-5.2X		E 12s	0.90um				
TAB	20.16	85	eP	20	53.00	-2.7X				e(S)	29	33.80		KMI	68.81	74	Pc	27	21.50	-3.3X
EHOR	20.20	274	iPd	20	54.50	-1.4	TIC	39.80	222	P	23	52.84	-0.2		1.5s	120.00nm			5.8mb	
EPRU	20.38	272	eP	20	55.90	-2.0	KIC	39.90	221	P	23	53.68	-0.2			sP	27	36.00		
EJIF	20.70	270	iPc	21	00.70	-0.4	KBS	39.93	357	iP	23	54.20	0.8	CHG	69.53	82	ePc	27	26.10	-2.9X
UPP	20.70	356	iPc	20	58.90	-2.0	LIC	40.16	222	P	23	55.90	-0.1		1.2s	66.80nm			5.6mb	
			iS	24	46.00			0.6s	75.50nm			5.6mb		HVD	69.66	175	iPd	27	47.50	18.0X
ALJ	20.74	271	eP	21	02.00	0.3				S	30	02.00			1.5s	83.33nm				
OJEN	20.85	270	eP	21	04.50	1.8	DAG	41.26	347	iPc	24	04.00	-0.4	BJI	69.81	54	eP	27	28.50	-1.8
NKM	20.94	268	iPc	21	03.00	-0.6		0.5s	31.69nm			5.3mb			1.5s	170.00nm			5.9mb	

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	Z 22s	1.97um		5.3Msz		
	N 14s	2.70um				
		eS	36 36.00			
CAI	70.04	243 eP	27 33.10	1.1		
BDT	70.49	83 eP	27 32.00	-2.8X		
WVLY	70.54	309 P	27 35.00	0.1		
GYA	70.96	71 P	27 36.00	-1.8		
	1.2s	100.00nm		5.8mb		
		S	36 48.00			
INK	71.00	350 eP	27 36.00	-1.1		
	1.0s	53.00nm		5.6mb		
CER	72.26	181 iPc	27 46.00	1.0		
	0.6s	17.86nm		5.2mb		
NST	72.29	84 eP	27 43.50	-2.2		
CBN	72.30	305 eP	27 46.00	0.6		
	1.0s	65.00nm		5.6mb		
YKA	72.38	340 eP	27 45.50	0.0		
	0.9s	35.80nm		5.4mb		
GRM	72.42	175 iPd	27 47.50	1.5		
	1.0s	20.00nm		5.1mb		
LOE	72.50	82 eP	27 43.50	-3.4X		
NA2	72.58	305 P	27 48.00	0.9		
CLE	72.90	310 iP	27 50.00	1.1		
CVL	73.12	305 P	27 50.50	0.3		
CN2	73.14	47 Pc	27 49.00	-1.3		
	1.0s	100.00nm		5.8mb		
	Z 16s	2.20um		5.5MszX		
	N 12s	1.00um				
	E 12s	0.90um				
		pP	27 54.50	18kmX		
SNY	73.28	49 Pc	27 49.00	-2.1		
	1.2s	100.00nm		5.7mb		
	Z 16s	1.80um		5.4MszX		
	N 13s	0.70um				
	E 14s	1.60um				
		eS	37 12.00			
BPA	73.62	279 eP	27 53.50	0.1		
NNT	73.83	87 eP	27 50.10	-4.6X		
DL2	73.88	53 eP	27 50.00	-4.6X		
	Z 20s	1.00um		5.1Msz		
	E 12s	1.00um				
PAG	74.09	278 eP	27 58.00	1.8		
WHN	74.10	64 Pd	27 54.70	-1.3		
	Z 16s	0.60um		5.0MszX		
	E 14s	0.70um				
		pP	28 05.50	35km		
BBL	74.23	277 eP	27 59.00	2.0		
FFC	74.26	329 eP	27 57.00	0.5		
	0.8s	52.00nm		5.6mb		
BLA	74.82	306 P	28 00.50	0.3		
	0.8s	20.13nm		5.2mb		
FMA	74.91	358 ePc	28 01.30	1.0		
	1.5s	173.60nm		5.8mb		
MDJ	74.93	44 eP	27 58.70	-1.9		
	Z 16s	3.10um		5.7MszX		
	E 18s	5.10um				
		iS	37 36.00			
MAV	74.99	306 P	28 01.00	-0.2		
FBA	75.77	355 eP	28 05.70	0.6		
NJ2	76.27	60 Pc	28 06.50	-1.9		
	Z 17s	0.60um		5.0MszX		
		S	37 47.00			
LHS	76.76	304 P	28 12.00	0.9		
TBH	76.96	273 eP	28 13.86	1.3		
TRN	77.12	273 eP	28 16.62	3.2X		
JSC	77.17	304 P	28 14.50	1.1		
SGS	77.36	302 P	28 10.00	-4.5X		
QIZ	77.70	76 P	28 09.50	-7.0X		
		S	37 55.00			
SNG	77.83	91 eP	28 15.70	-1.6		
TKL	77.90	306 P	28 17.50	0.1		
PRM	78.01	304 P	28 19.00	1.0		
TTA	78.12	358 eP	28 19.20	1.0		
GBTN	78.17	306 P	28 20.00	1.1		
TOA	78.41	354 eP	28 21.00	1.2		
SSE	78.42	59 Pd	28 13.50	-6.8X		
	1.2s	44.00nm		5.4mb		
	Z 20s	0.90um		5.1Msz		
		eS	38 10.00			
		eSS	43 20.00			
RSCP	79.06	307 P	28 24.70	0.9		
	1.0s	287.42nm		6.2mb		
PMR	79.15	355 eP	28 24.00	0.3		
	1.2s	78.10nm		5.6mb		
EDM	79.63	334 eP	28 27.00	0.4		
IPM	79.76	92 ePd	28 27.40	-0.5		
FVM	80.39	312 P	28 31.70	0.8		
PWLA	81.00	308 P	28 34.50	0.4		
SES	81.11	331 ePc	28 35.20	0.7		
	1.6s	260.00nm		6.0mb		
LLAV	81.41	276 eP	28 39.00	2.3		
CAR	81.48	277 eP	28 40.00	2.9X		
OLLA	81.69	276 iP	28 40.10	1.9		
ASAJ	81.95	38 P	28 38.50	-0.4		
PPI	82.44	97 iPd	28 41.50	-0.4		
	0.6s	64.60nm		5.9mb		
MRRJ	82.44	40 eP	28 40.60	-0.9		
OLY	82.70	310 P	28 44.00	1.0		
RSSD	83.11	323 P	28 46.00	0.8		
KGM	83.14	93 ePd	28 45.20	-0.4		
KDC	83.18	356 eP	28 46.20	1.2		
HOOJ	83.57	39 eP	28 46.80	-0.5		
KUSJ	83.71	38 eP	28 47.00	-1.0		
BAO	83.97	244 eP	28 51.50	1.7		
TSRJ	84.69	48 P	28 52.80	-0.3		
LNO	84.92	313 eP	28 56.50	2.4		
TUL	84.92	313 eP	28 55.10	0.9		
	1.4s	231.60nm		6.2mb		
MTMJ	84.97	46 eP	28 54.70	0.1		
PNT	85.04	335 eP	28 56.00	1.4		
	1.1s	38.00nm		5.5mb		
NEW	85.09	333 P	28 56.00	1.0		
	1.0s	50.00nm		5.7mb		
NIIJ	85.16	45 P	28 54.60	-0.8		
MAT	85.23	46 eP	28 55.00	-0.8		
	1.2s	131.25nm		6.0mb		
	Z 19s	1.04um		5.2Msz		
		eS	39 22.00			
LRM	85.39	329 eP	28 57.90	1.2		
UYO	85.39	311 iPd	28 58.30	1.7		
DPW	85.81	334 P	29 00.00	1.4		
CHJJ	86.02	46 P	28 59.60	-0.1		
KAKJ	86.56	45 eP	29 00.10	-2.2		
BW06	86.65	326 P	29 03.00	0.0		
GLD	87.04	321 P	29 06.00	1.1		
	1.3s	40.23nm		5.5mb		
GOL	87.15	321 P	29 06.00	0.5		
	1.4s	26.11nm		5.3mb		
MEO	87.31	314 iPc	29 07.50	1.4		
GMW	87.60	336 P	29 08.00	0.7		
DAU	89.31	325 P	29 16.50	0.5		
MSU	91.27	325 P	29 25.50	0.5		
ANMO	91.39	319 P	29 26.00	0.5		
	1.4s	23.26nm		5.4mb		
ALQ	91.40	319 eP	29 26.00	0.5		
	1.3s	21.63nm		5.4mb		
	Z 19s	0.87um		5.2Msz		
KVN	93.34	329 P	29 34.00	-0.4		
MIN	93.56	332 ePc	29 36.00	0.7		
SIV	93.64	252 P	29 36.30	0.6		
WDC	93.69	333 ePc	29 36.20	0.5		
TNP	93.81	328 P	29 36.50	-0.1		
	1.0s	3.33nm		4.7mb		
ORV	94.21	332 eP	29 38.60	0.4		
CMB	95.11	330 ePc	29 43.60	1.2		
FRI	95.75	329 ePc	29 46.30	1.0		
CLC	95.89	327 eP	29 48.00	2.0		
GSC	95.99	326 eP	29 49.00	2.5		
MHC	96.20	331 ePc	29 49.20	1.7		
ISA	96.39	327 eP	29 50.00	1.7		
PRI	96.87	329 ePc	29 52.30	1.8		
SBB	96.95	327 eP	29 53.00	2.2		
GLA	97.00	324 eP	29 52.00	1.0		
MWC	97.45	326 eP	29 56.00	2.8		
PLM	97.66	325 eP	29 56.00	1.8		
BAR	98.15	325 eP	29 58.00	1.8		
CCH	98.28	254 eP	30 04.00	6.8X		
WB5	120.56	92 ePKP	35 10.90	-0.5		
WRA	120.57	92 PKPd	35 10.50	-0.9		
QIS	125.00	89 ePKP	35 19.00	-0.9		
SPA	129.07	180 iPKPd	35 26.10	-0.4		
	1.3s	40.00nm				
STK	132.23	100 iPKPd	35 33.30	-0.1		
	1.2s	16.00nm				
RMO	135.25	90 iPKPc	35 40.20	0.8		
BWA	138.49	100 ePKP	35 36.00	-9.3X		
		e	35 45.80			
CAN	139.26	101 ePKP	35 36.70	-10.0X		
		e	35 46.50			
DZM	146.30	70 iPKPd	36 01.70	2.4		

S.D. = 1.3 on 389 of 467 obs.

JUN 16, 1990 02h 41m 55.20± 1.05s
44.098 N ± 5.1km 16.360 E ±11.7km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)

HVAR	0.92	176 i(Pg)	42 12.80	0.0		
		iSg	42 28.80			
VBY	1.61	331 e(Pn)	42 23.50	-0.2		
		eSn	42 44.40			
PTJ	1.82	351 ePn	42 26.40	-0.5		
		eSn	42 51.60			
CEY	2.14	321 ePn	42 32.10	0.6		
		eSn	43 03.50			
LJU	2.34	327 ePn	42 35.00	0.7		
		eSn	43 07.20			
TRI	2.45	312 P	42 36.50	0.7		
ARV	2.55	258 P	42 36.60	-0.6		
		eSn	43 08.90			
VOY	2.61	319 ePn	42 39.30	1.1		
		eSn	43 13.90			
ASS	2.88	250 P	42 41.70	-0.3		
		eSn	43 18.40			
SDI	3.03	219 P	42 44.50	0.3		
CRE	3.22	263 P	42 47.50	0.6		
FVI	3.55	316 P	42 49.50	-1.9		
		eSn	43 33.00			
CTI	3.86	302 P	42 55.50	-0.6		

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

JUN 16, 1990 02h 44m 09.02± 0.67s
39.161 N ± 7.3km 20.519 E ± 7.4km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)

KEK	0.78	315 ePg	44 23.20	-1.1		
VLS	0.98	177 ePg	44 28.50	0.8		
VLO	1.53	329 ePn	44 38.00	1.7		
BERA	1.60	344 ePn	44 37.70	0.3		
OHR	1.96	6 iPn	44 44.20	1.5		
		iSg	45 09.30			
		Lg	45 10.80			
NEO	2.11	85 ePn	44 44.50	-0.3		
TIR	2.24	347 ePn	44 51.00	4.3X		
ITM	2.27	150 ePg	44 51.00	3.9X		
VLI	3.10	141 ePn	44 59.00	0.2		
MGR	3.95	286 P	45 10.20	-0.8		
SGO	4.25	291 P	45 14.50	-0.7		
RDO	4.33	61 ePn	45 14.70	-1.6		

S.D. = 1.3 on 10 of 12 obs.

JUN 16, 1990 03h 32m 14.80± 0.51s
39.152 N ± 5.4km 20.475 E ± 6.8km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)
MD 3.4 (ATH).

KEK	0.77	317 ePn	32 28.50	-1.3		
VLS	0.98	175 ePn	32 34.00	0.6		
VLO	1.52	330 ePn	32 41.10	-0.8		
BERA	1.60	346 ePn	32 44.00	0.9		
OHR	1.97	7 iPn	32 49.00	0.4		
		iSn	33 14.30			
		Lg	33 16.40			
NEO	2.14	85 ePn	32 50.00	-1.1		
TIR	2.24	348 ePn	32 53.00	0.5		
ITM	2.28	149 ePn	32 53.20	0.1		
PHP	2.53	359 ePn	32 58.50	1.9		
LACI	2.55	347 ePn	32 55.50	-1.3		
VLI	3.11	141 ePn	33 04.50	-0.3		
MGR	3.92	286 P	33 16.00	-0.4		
SGO	4.22	291 P	33 21.00	0.5		
		eSn	34 09.50			
BSS	4.65	292 P	33 27.00	0.2		

S.D. = 1.0 on 14 of 14 obs.

• JUN 16, 1990 03h 47m 59.68± 0.82s
5.474 N ±11.3km 31.863 E ±11.8km
DEPTH = 10.0km (geophysicist)
4.1mb (1 obs.)
SUDAN (557)
mbLg 4.4 (BUL).

AAE	7.70	62 eP	49 53.50	-1.5		
NAI	8.32	143 iPd	50 04.00	0.5		
BCAO	13.32	266 iPd	51 10.00	-1.5		
	0.8s	11.00nm		5.0mb X		
		iS	53 35.00			
		Lg	54 49.00			
NPA	21.70	160 eP	52 56.00	3.0X		

			e(Sn)	57	36.50	
			eSg	59	13.90	
			iLg	59	42.00	
KRI	22.27	186	iP	52	58.50	-0.3
			eSn	57	01.00	
			eLg	59	31.50	
BUL	25.66	187	iP	53	32.20	0.6
			iSn	58	26.00	
			iLg	01	11.90	
KHC	46.19	343	P	56	28.50	2.1
NAO	57.46	348	P	57	51.00	0.1

0.9s 1.90nm 4.1mb
S.D. = 1.5 on 7 of 8 obs.

& JUN 16, 1990 04h 25m 04.33s
68.024 N 148.713 W
DEPTH = 6.6km
ALASKA (676)
<AGS-P>.

FYU	2.00	136	eP	25	37.87	-1.0
			Sn	26	05.41	
IMA	2.76	227	eP	25	57.70	7.7
GLM	3.10	170	eP	25	54.09	-0.5
			Sn	26	33.53	
FBA	3.16	173	iP	25	55.40	0.0
CCB	3.41	173	eP	25	58.58	-0.5
WRH	3.58	176	eP	26	01.28	-0.1
INK	5.68	80	P	26	20.00	-11.1
YKA	15.15	95	eP	28	28.20	-11.9

0.7s 1.20nm
8 obs. ossocioted

JUN 16, 1990 04h 28m 03.93± 0.29s
64.661 N ± 2.6km 151.098 W ± 3.8km
DEPTH = 33.0km (normol)
4.1mb (9 obs.)
CENTRAL ALASKA (1)
ML 3.7 (PMR). Felt (IV) at Manley Hot Springs.

NEA	0.88	95	iP	28	19.89	0.0
KTH	1.11	176	iP	28	23.11	-0.2
WRH	1.31	97	iP	28	25.80	-0.3
MCK	1.33	134	eP	28	26.43	0.1
CCB	1.42	89	iP	28	27.25	-0.3
FBA	1.44	79	iPc	28	27.70	-0.2
GLM	1.62	77	iP	28	30.35	-0.2
IMA	1.78	324	iPd	28	33.50	0.5
HUR	1.81	158	eP	28	33.92	0.6
CUT	2.30	170	eP	28	40.27	0.1
DMW	2.41	102	eP	28	42.04	0.1
			eS	29	13.42	
SKT	2.70	184	eP	28	45.66	-0.3
TTA	2.79	234	iPc	28	45.70	-1.5
PAX	3.02	122	eP	28	50.36	-0.2
GHO	3.06	160	iP	28	50.78	-0.4
			eS	29	31.30	
PWA	3.07	169	eP	28	50.90	-0.3

1.0s 235.00nm

FYU	3.09	49	iP	28	50.89	-0.6
SML	3.12	155	iP	28	51.48	-0.6
PLRM	3.21	163	eP	28	52.95	-0.2
PMR	3.21	163	ePd	28	52.80	-0.3

0.4s 535.10nm

SUA	3.21	177	eP	28	53.09	-0.3
DOT	3.25	105	eP	28	51.99	-1.7
			eS	29	32.37	
SDG	3.28	128	eP	28	55.29	1.1
NCG	3.31	189	eP	28	54.48	-0.2
SCM	3.31	147	eP	28	54.45	-0.3
TOA	3.39	137	e(P)	28	58.60	2.7
CRP	3.44	189	eP	28	56.43	-0.2
PMS	3.50	168	iPd	28	58.20	0.8
SPU	3.52	188	eP	28	57.50	-0.2
			Sn	29	38.94	
KLU	3.96	141	iP	29	05.29	1.4
SVW	4.12	212	ePd	29	04.40	-1.8
RDT	4.15	189	eP	29	06.43	-0.1
VLZ	4.16	146	eP	29	06.67	0.1
VZW	4.17	148	eP	29	07.41	0.5
SLKM	4.19	174	eP	29	07.71	0.6
GLI	4.22	152	eP	29	07.62	0.1
RED	4.33	191	eP	29	09.38	0.2
SEW	4.64	170	eP	29	14.23	0.8
DWY	5.11	92	P	29	18.50	-1.6
CNPM	5.15	181	eP	29	21.22	0.4
HYT	7.33	115	P	29	50.00	-1.4
INK	7.91	55	P	29	58.00	-1.4
MBC	15.41	28	eP	31	39.00	-1.2

0.7s 6.00nm 3.9mb

YKA	16.24	81	eP	31	52.90	2.1

0.8s 5.10nm 3.7mb

PNT	22.67	118	eP	33	05.00	1.8
NEW	24.49	116	P	33	20.00	-0.9

0.8s 3.13nm 3.9mb

SES	25.26	105	eP	33	31.00	2.8X
BW06	32.01	113	P	34	27.00	-2.3

0.7s 1.46nm 4.0mb

KVN	32.07	127	P	34	30.00	0.2
TNP	33.24	127	P	34	43.00	3.0X

0.6s 1.08nm 3.9mb

NAO	54.10	11	P	37	26.80	-0.2

0.8s 1.80nm 4.2mb

EKA	57.83	21	Pc	37	54.50	0.6

0.6s 3.70nm 4.6mb

FLN	64.62	21	eP	38	39.60	-0.2
LDF	64.84	21	eP	38	41.20	0.0
GRR	64.92	21	eP	38	41.90	0.1
KHC	65.92	11	eP	38	50.00	1.8
CDF	66.01	16	eP	38	49.30	0.4
HAU	66.30	16	eP	38	50.90	0.3
BSF	66.52	16	eP	38	52.30	0.1
LOR	66.71	18	eP	38	53.20	0.0

0.7s 3.30nm 4.5mb

MFF	66.77	21	eP	38	54.00	0.4
SSF	66.86	19	eP	38	54.50	0.3

0.8s 3.35nm 4.5mb

AVF	67.10	19	eP	38	55.60	-0.1
ZST	67.11	9	eP	38	57.30	1.6

S.D. = 0.9 on 62 of 64 obs.

JUN 16, 1990 04h 53m 42.94± 0.71s
27.998 N ± 3.4km 127.976 E ± 3.0km
DEPTH = 27.0 ± 5.1 km
5.7mb (40 obs.) 6.1Msz (12 obs.)
RYUKYU ISLANDS (238)
CENTROID, MOMENT TENSOR (HRV)
Dota Used: GDSN
L.P.B.: 8S, 19C
Centroid Locotion:
Origin Time 04:53:44.2 0.3
Lot 27.43N 0.07 Lon 127.18E 0.08
Dep 15.0 BDY Holf-duration 3.4
Moment Tensor; Scale 10**17 Nm
Mrr=-7.37 0.47 Mtt= 1.89 0.43
Mff= 5.48 0.67 Mrt= 8.26 1.25
Mrf= 3.15 1.37 Mtf= 7.40 0.39
Principal Axes:

T	Val= 14.12	Plg=20	Azm=314
N	-1.84	24	53
P	-12.28	58	188

Best Double Couple:Mo=1.3*10**18
NP1:Strike= 9 Dip=32 Slip=-139
NP2: 243 69 -64

KAGJ	4.07	38	P	54	46.00	1.1
			eS	55	35.60	
KUMJ	5.15	28	eP	55	02.40	2.1
ANP	6.43	246	eP	55	18.00	-0.4
			eS	01	50.40	
SSE	6.67	299	Pc	55	19.50	-2.2

0.6s 120.00nm 6.0mb
N 10s 156.00um

			sS	56	52.00	
SHNJ	6.67	23	eP	55	25.40	3.7X
SHK	7.65	31	ePd	55	36.80	1.3
TKSJ	7.92	40	P	55	38.70	-0.5
YONJ	8.56	32	eP	55	47.80	-0.3
NJ2	8.88	299	Pc	55	50.60	-1.9

0.6s 100.00nm 6.2mb
Z 18s 41.20um 4.3Msz

OZH	8.94	252	Pd	55	52.00	-1.3

0.7s 300.00nm 6.6mb
Z 10s 111.00um 4.1Msz
E 10s 65.20um

			sP	56	10.00	
			S	57	38.00	
WKYJ	9.00	45	P	55	52.90	-1.4
TSRJ	10.14	40	P	56	09.90	0.0
IIDJ	11.27	46	eP	56	25.80	0.4
DL2	12.10	336	eP	56	36.00	-0.4

2.5s 700.00nm 6.4mb
N 10s 23.20um
E 12s 67.20um

MAT	12.14	43	(P)	56	35.00	-2.1

2.5s 1022.22nm 6.6mb
Z 22s 10.37um 4.7MszX

			(S)	59	15.00	
WHN	12.16	285	eP	56	38.00	0.6

2.0s 200.00nm 6.0mb
Z 16s 38.60um 4.7Msz
N 14s 200.00um
E 13s 61.60um

			pP	56	42.50	
			eS	58	50.00	
TIA	12.31	314	eP	56	35.70	-3.6X

7.0s 4700.00nm 6.8mb X
E 13s 162.00um

CHJJ	12.31	47	P	56	39.40	0.0
NIIJ	13.08	42	P	56	47.80	-1.7
KAKJ	13.18	49	P	56	51.40	0.6
BAG	13.41	212	eP	56	52.90	-1.2
			eS	59	28.00	
HKC	13.72	249	iPd	57	00.00	1.9
			iS	59	36.00	
GZH	14.08	253	P	57	04.00	1.2

8.0s 6600.00nm 6.4mb X
Z 10s 53.40um 3.2MszX
N 11s 64.80um
E 10s 47.50um

SNY	14.26	347	iPc	57	08.60	3.6X

2.0s 1700.00nm 6.3mb
N 12s 82.90um
E 11s 85.70um

YAMJ	14.31	42	eP	57	08.70	3.0X
MCO	14.31	249	iP	57	07.50	1.7
OCP	14.76	207	eP	56	57.00	-14.7X
BJI	15.47	324	eP	57	23.50	2.6X

1.0s 410.00nm 5.6mb
N 12s 45.20um
E 12s 33.50um

CN2	15.90	353	Pd	57	29.50	3.1X

1.8s 2100.00nm 6.0mb
Z 21s 34.60um 4.7MszX
N 10s 21.20um
E 10s 25.20um

			sP	57	36.50	
AOMJ	16.16	36	eP	57	32.70	3.0X
TIY	16.24	311	iPd	57	33.00	2.1

2.6s 700.00nm 5.3mb
Z 16s 65.60um 5.3Msz
E 13s 66.60um

MDJ	16.64	4	iPd	57	39.50	3.8X

2.1s 1800.00nm 5.8mb
Z 16s 39.20um 4.9MszX
N 16s 41.60um
E 13s 38.20um

XAN	17.40	295	Pc	57	46.00	0.6

9.0s 4800.00nm 5.6mb X
N 14s 82.20um
E 14s 83.30um

MRRJ	17.90	33	eP	57	51.40	-0.1
HHC	18.61	318	iPd	58	02.00	1.6

6.0s ********nm 6.2mb X
Z 15s 85.10um 3.9MszX
N 13s 76.60um
E 14s 43.20um

QIZ	18.85	246	Pd	58	03.00	-0.4

8.0s 5400.00nm 5.8mb X
N 13s 37.70um
E 12s 24.70um

			PP	58	24.50	
HOOJ	19.00	37	eP	58	02.90	-2.1
GYA	19.02	270	iPd	58	06.00	0.5

2.2s 400.00nm 5.3mb
N 13s 50.90um
E 13s 33.70um

BTO	19.40	315	iPd	58	10.00	0.1

7.0s ********nm 6.2mb X
N 13s 69.80um
E 13s 49.10um

			pP	58	22.00	52kmX
ASAJ	19.93	32	eP	58	13.50	-2.0
KUSJ	20.25	38	eP	58	17.10	-1.7
CD2	21.28	284	P	58	28.00	-1.6
GUMO	21.29	129	eP	58	30.50	0.8
PJG	21.29	129	eP	58	31.00	1.3
GUA	21.36	129	eP	58	31.00	0.6

Z 18s 37.01um 5.8Msz

			eS	02	29.50	

16d 04h

LZH 21.95 298 iPd 58 36.70 0.3
3.0s 1200.00nm 5.8mb
Z 14s 48.10um 6.1MszX
N 11s 62.70um
E 13s 47.50um
pP 58 46.00 34kmX
YSS 22.23 27 P 58 36.00 -2.8
KMI 22.74 269 iPd 58 45.00 0.6
3.0s 1450.00nm 6.0mb
Z 14s 24.70um 5.8MszX
N 10s 27.00um
E 10s 17.10um
pP 58 53.00 29kmX
GTA 25.94 303 eP 59 14.50 -0.4
1.0s 200.00nm 5.7mb
Z 14s 58.60um 6.3MszX
N 12s 50.20um
LOE 26.35 252 eP 59 18.00 -0.7
CHG 28.11 257 eP 59 34.80 0.1
0.9s 12.60nm 4.6mb X
eS 04 32.00
NST 28.53 250 eP 59 39.50 1.0
SHL 32.24 274 iP 00 09.00 -2.6
iS 05 24.00
IPM 34.64 233 ePd 00 33.10 0.9
1.1s 225.50nm 6.0mb
KGM 34.97 227 eP 00 37.00 2.0
WMQ 35.86 307 iPd 00 41.70 -0.7
6.0s 3100.00nm 6.4mb X
Z 15s 43.60um 6.3MszX
N 13s 24.60um
GUN 37.05 280 P 00 52.60 -0.4
PKI 37.52 280 P 00 56.20 -0.7
DMN 37.78 280 P 00 58.20 -0.8
GKN 38.11 281 P 01 01.20 -0.5
TRT 38.47 205 ePd 01 01.60 -2.9
0.7s 103.60nm 5.7mb
PPI 38.73 228 eP 01 06.00 -0.7
1.0s 77.60nm 5.4mb
LAT 39.04 149 eP 01 11.00 1.7
RAB 39.59 140 iP+ 01 16.00 2.1
iS 07 20.00
MTN 40.72 175 iPc 01 21.10 -2.0
i 01 23.40 8kmX
PMG 41.56 151 eP 01 30.00 0.0
SMY 41.98 41 P 01 31.00 -2.1
1.4s 378.79nm 5.9mb
KNA 43.49 179 eP 01 45.00 -0.8
KSH 44.19 299 iPc 01 52.00 0.5
Z 12s 20.10um 6.3MszX
N 14s 41.00um
PP 03 38.00
NDI 44.40 283 iP 01 52.00 -1.2
1.4s 220.93nm 5.8mb
ePP 03 36.00
eS 08 28.00
eSS 11 44.00
HYB 46.52 268 ePd 02 10.00 -0.2
eS 09 06.00
ADK 47.30 44 eP 02 14.30 -1.5
WB5 48.00 172 eP 02 19.50 -2.1
WRA 48.06 172 Pc 02 21.00 -1.1
0.6s 20.50nm 5.3mb
GBA 49.04 264 P 02 36.00 6.2X
1.2s 27.10nm 5.2mb
QIS 49.56 166 ePd 02 31.70 -2.0
0.7s 42.00nm 5.6mb
POO 50.27 271 iPc 02 43.20 3.9X
CTA 50.97 158 iPc 02 43.80 -0.6
1.0s 34.00nm 5.2mb
iS 09 52.00
QUE 52.81 288 eP 02 57.70 -0.8
eS 10 27.00
WARB 53.88 181 eP 03 04.50 -1.6
MAIO 57.50 297 iPc 03 33.40 1.1
eS 11 36.00
RMQ 57.74 158 eP 03 51.00 17.1X
COOL 58.91 187 eP 03 40.00 -2.0
TTA 59.13 31 eP 03 42.20 -1.1
BRS 60.00 154 iP 03 49.00 -0.6
eS 12 00.00
IMA 60.05 27 eP 03 48.50 -1.2
1.4s 58.10nm 5.5mb
KLB 60.05 190 eP 03 50.30 0.5
MUN 60.69 191 eP 03 55.00 0.9
SIK 60.94 167 eP 03 55.00 -0.9
0.7s 13.00nm 5.2mb
KDC 61.29 37 eP 03 56.70 -1.3
DZM 62.11 139 iPc 04 03.30 -0.8
PMR 62.46 32 eP 04 03.80 -2.0
2.0s 218.80nm 5.9mb
COO 62.56 157 eP 04 08.00 1.1
FBA 62.59 29 P 04 04.80 -1.9
1.3s 56.60nm 5.5mb
RKG 62.60 190 iPc 04 11.70 4.7X
CNB 66.13 161 eP 04 30.00 0.0
BFD 66.26 167 iPc 04 29.20 -1.5
HON 66.68 77 P 04 45.00 11.2X
Z 22s 3.33um 5.5Msz
TAB 67.16 302 eP 04 37.00 0.1
TOO 67.26 165 eP 04 35.00 -2.2
INK 67.36 23 iPd 04 35.80 -1.6
MBC 68.17 14 ePc 04 41.50 -0.9
1.0s 9.00nm 4.8mb
DAG 73.49 352 eP- 05 15.00 0.6
Z 17s 5.85um 5.9MszX
N 17s 4.08um
UPP 75.64 331 iP 05 25.40 -1.6
i 05 30.00 15kmX
iPP 08 17.00
iS 15 44.00
YKA 77.03 25 eP 05 33.80 -1.0
1.0s 24.90nm 5.2mb
NAO 77.91 334 P 05 26.90 -12.8X
1.0s 5.00nm
MLR 78.33 315 eP 05 42.00 -0.5
ITU 78.36 310 iPd 05 44.00 1.5
BUC 78.74 314 eP 05 44.00 -0.5
KRA 79.60 321 eP 05 47.90 -1.2
Z 18s 23.50um 6.6Msz
E 18s 21.60um
e 05 53.50
e 15 59.00
SPC 79.88 321 eP 05 49.50 -1.4
Z 20s 1.70um 5.4Msz
e 08 53.00
COP 80.28 329 iP- 05 53.00 0.5
KSP 81.14 323 eP 05 56.50 -0.8
e 09 02.00
SNZO 81.40 146 P 06 08.00 9.4X
S 16 10.00
PS 17 04.00
SS 21 56.00
SSS 25 16.00
GMW 81.60 40 P 06 00.00 0.2
SRO 81.70 320 eP 06 03.20 3.0X
HLW 81.80 299 eP 06 00.00 -1.1
ePP 09 12.00
eS 16 22.00
BRN 81.82 326 eP 06 01.00 0.3
ePP 09 11.50
BMW 81.92 41 P 06 01.00 -0.5
ZST 82.17 321 eP 06 05.60 2.9X
Z 18s 53.00um 6.9Msz
PNT 82.38 38 ePd 06 04.00 0.2
1.1s 55.00nm 5.5mb
PRU 82.55 323 P 06 03.50 -1.1
Z 16s 25.80um 6.7MszX
N 16s 13.50um
E 16s 19.70um
e 06 30.00
S 16 26.00
VKA 82.57 321 iPd 06 04.70 -0.1
5.5s 1354.00nm 6.2mb X
Z 17s 10.80um 6.3MszX
e 07 34.00
LR 45 56.00
CLL 82.58 325 eP 06 04.00 -0.7
iPP 09 15.10
e(SKS)16 30.00
LON 82.59 41 P 06 04.00 -1.0
EDM 83.22 32 ePd 06 08.50 0.4
KHC 83.56 323 P 06 10.00 0.1
1.2s 10.00nm 4.9mb
Z 16s 22.00um 6.6MszX
N 16s 5.60um
E 16s 17.70um
e 09 22.90
S 16 42.00
MOX 83.68 325 eP- 06 10.00 -0.4
Z 15s 36.00um 6.9MszX
N 15s 22.80um
E 15s 17.30um
KMR 83.89 322 iP- 06 11.70 0.2
iPP 09 19.50
WET 83.92 323 eP 06 11.90 0.2
NEW 84.34 38 P 06 14.00 0.1
1.0s 56.25nm 5.7mb
GRF 84.46 324 eP 06 13.30 -1.1
Z 18s 23.00um 6.6Msz
e 06 18.40
e 06 27.30
e 06 39.40
e(PP)d09 30.80
FHC 84.49 46 ePd 06 15.90 1.2
WIT 84.71 329 eP 06 17.00 1.5
e 06 55.00
VBY 84.73 319 e(PKP)06 17.00 1.2
LJU 84.83 320 e(PKP)06 15.00 -1.3
CEY 85.07 320 e(PKP)06 17.00 -0.6
WTS 85.18 328 eP 06 18.00 0.1
VOY 85.20 320 e(PKP)06 17.70 -0.6
FUR 85.36 323 eP 06 19.50 0.5
TRI 85.47 320 eP 06 16.00 -3.5X
ePP 09 36.00
ePPP 11 40.00
eS 16 30.00
eSS 22 36.00
eSSS 26 22.00
eLR 36 00.00
FVI 85.49 321 P 06 18.00 -1.6
LBFM 85.52 45 P 06 19.00 -1.1
WDC 85.53 46 iPd 06 20.50 0.6
DBN 85.87 329 eP 06 23.00 1.7
Z 18s 12.00um 6.3Msz
ePP 09 44.00
eSKS 16 46.00
eSP 17 57.00
eSS 22 37.00
eSSS 26 30.00
SOTA 85.97 322 i(P) 06 21.30 -0.9
1.1s 23.30nm 5.3mb
i 06 26.40
i 07 01.60
i 07 14.90
SES 86.13 33 ePd 06 22.70 -0.1
1.5s 122.00nm 5.9mb
MIN 86.25 46 iPd 06 23.90 0.2
ENN 86.40 327 eP 06 23.00 -1.0
CTI 86.45 321 P 06 23.50 -1.0
MEM 86.47 327 P 06 24.00 -0.3
PP 09 48.80
ORV 86.76 46 iPd 06 26.20 0.2
FFC 87.11 26 iPd 06 27.20 -0.2
0.9s 43.00nm 5.7mb
UCC 87.12 328 P+ 06 29.00 1.5
BRK 87.20 48 ePd 06 28.80 0.7
BKS 87.21 48 eP 06 28.50 0.2
1.2s 113.00nm 6.0mb
Z 20s 1.10um 5.3Msz
N 20s 0.40um
E 20s 0.70um
i 06 29.60
eS 17 12.00
ePS 18 08.00
e 24 30.00
eLQ 29 55.00
eLR 34 00.00
ARV 87.25 319 P 06 28.00 -0.3
PCC 87.33 49 ePd 06 29.10 0.3
DOU 87.49 327 P+ 06 30.00 0.7
Z 22s 28.90um 6.6Msz
S 17 16.00
SFI 87.63 320 P 06 30.50 0.4
FRB 87.64 7 ePd 06 28.30 -1.4
ASS 87.67 318 P 06 31.00 0.6
MDI 87.68 322 P 06 29.00 -1.3
PGD 87.73 320 P 06 30.50 -0.3
CRE 87.75 319 P 06 29.00 -1.8
SDI 87.79 317 P 06 35.50 4.5X
MHC 87.90 48 ePd 06 31.80 0.1
ARN 87.97 48 P 06 31.00 -1.0
FIR 88.05 320 eP 06 40.00 7.9X
VAI 88.13 322 P 06 30.00 -2.4
BDI 88.25 320 P 06 35.00 1.8
CMB 88.34 47 iPd 06 34.30 0.6
LRM 88.36 37 eP 06 34.50 0.6
PRS 88.65 49 ePd 06 35.70 0.5
KVN 89.21 45 P 06 38.00 -0.1
PRI 89.23 49 ePd 06 39.00 0.9
FRI 89.37 48 ePd 06 38.40 -0.2

```
LPL     89.45 323 eP     06 57.70   18.6X
        0.6s     2.25nm
LPG     89.45 323 eP     06 57.80   18.6X
        0.7s     2.20nm
TNP     90.34  46 P      06 43.50    0.1
        1.4s    87.50nm          5.8mb
SYP     90.61  50 eP     06 46.00    1.4
LDF     90.75 328 eP     06 43.40   -1.3
ISA     90.95  48 eP     06 46.00    0.0
GRR     91.23 329 eP     06 45.60   -1.4
        0.8s     5.35nm          5.0mb
CLC     91.44  48 eP     06 49.00    0.7
LPF     91.58 329 eP     06 47.50   -1.0
DUG     91.74  42 P      06 50.00    0.3
BW06    91.92  38 P      06 50.00   -0.6
SBB     91.96  49 eP     06 52.00    1.3
PAS     92.04  49 eP     06 57.00    6.0X
MWC     92.07  49 eP     06 53.00    1.6
GSC     92.27  48 eP     06 53.00    0.9
DAU     92.51  41 P      06 54.00    0.5
RVR     92.67  49 eP     06 54.00    0.1
PLM     93.39  49 eP     06 59.00    1.5
RSSD    93.90  35 P      06 59.00   -0.7
BAR     93.92  50 eP     07 01.00    1.3
GLA     94.93  49 eP     07 05.00    0.6
GOL     96.32  39 P      07 10.00   -0.9
ALO     98.99  43 eP     07 21.00   -1.9
        1.5s    19.44nm          5.4mb
      Z 19s     1.82um          5.6Msz
RSNY   104.93  16 Pdiff  07 55.00    6.1X
      Z 18s     7.74um          6.3Msz
UYO    106.27  36 e(PKP) 12 16.60    9.9X
BFT    108.15 250 ePKP   12 21.50   10.7X
SLR    109.63 251 ePKP   12 12.00   -1.5
SEK    111.13 248 ePKP   12 19.00    2.7X
BLF    112.59 248 ePKP   12 22.00    3.0X
HVD    113.66 247 ePKP   12 26.00    4.9X
KIC    123.01 299 (PKP)  12 38.40   -0.7
UPA    134.62  40 ePKP   13 02.00    0.7
      Z 20s     1.77um          5.8Msz
CAR    139.09  23 iPKP   13 10.00    0.1
BOG    141.23  37 ePKP   13 16.00    1.9
NNA    151.85  61 iPKP   13 36.00    5.1X
        1.0s    25.00nm
CAI    154.40 324 e(PKP) 13 32.50   -1.9
ZOBO   161.09  55 PKP    13 45.20    2.2
        1.6s    38.85nm
      Z 24s     1.49um
                  i      14 29.00
                  LR     09 40.00
LPB    161.28  56 PKP    13 41.00   -2.0
        1.0s    40.00nm
      Z 22s     2.22um
                  PP     18 10.00
                  LR     08 12.00
CCH    163.24  54 (PKP)  13 47.00    2.2
                  e      14 36.00
      S.D. = 1.2  on 185 of 216 obs.
-------------------------------------
% JUN 16, 1990  05h 10m 34.74± 0.77s
   41.334 N ± 5.4km   20.254 E ± 9.8km
   DEPTH = 10.0km  (geophysicist)
 ALBANIA                          (391)

TIR     0.29 273 Pc      10 34.60   -6.2X
PHP     0.38  22 ePg     10 42.50    0.0
BERA    0.67 200 iPgd    10 47.70   -0.4
KBN     0.83 149 iPg     10 50.80    0.1
SDA     0.89 321 iPgc    10 51.70    0.0
VLO     1.04 214 ePg     10 54.60    0.3
      S.D. = 0.3  on  5 of  6 obs.
-------------------------------------
* JUN 16, 1990  05h 48m 26.93± 0.89s
   39.174 N ± 8.1km   20.454 E ±12.0km
   DEPTH = 10.0km  (geophysicist)
 GREECE-ALBANIA BORDER REGION     (392)
      MD 3.2 (ATH).

KEK     0.74 317 ePn     48 41.00   -0.4
VLS     1.00 174 ePn     48 45.50   -0.4
                 eSn     49 00.00
OHR     1.95   8 ePn     49 01.30    0.8
NEO     2.15  86 ePn     49 02.50   -0.9
ITM     2.30 149 ePn     49 06.50    0.9
      S.D. = 1.2  on  5 of  5 obs.
-------------------------------------
* JUN 16, 1990  06h 16m 09.60± 1.02s
   39.170 N ± 7.9km   20.444 E ±10.0km
   DEPTH = 10.0km  (geophysicist)
 GREECE-ALBANIA BORDER REGION     (392)

IGT     0.37 347 eP      16 16.60   -0.7
                 eS      16 23.60
KEK     0.74 318 eP      16 25.30    1.2
                 eS      16 40.00
VLS     1.00 173 eP      16 28.20   -0.3
                 eS      16 43.50
AGG     1.47  95 ePd     16 36.10   -0.1
FNA     1.76  24 eP      16 42.00    1.6
                 eS      17 07.50
LIT     1.83  59 eP      16 41.60    0.2
OHR     1.96   8 ePn     16 40.80   -2.4
GRG     2.33  39 eP      16 48.30   -0.3
SOH     2.78  53 ePc     16 55.90    0.9
      S.D. = 1.4  on  9 of  9 obs.
-------------------------------------
? JUN 16, 1990  06h 52m 37.56± 1.08s
   11.217 N ±19.1km  121.768 E ±22.8km
   DEPTH = 33.0km  (normal)
   4.4mb (  2 obs.)
 PANAY, PHILIPPINE ISLANDS        (254)

CHTO   23.28 292 P       57 45.00    1.5
BJI    29.13 351 eP      58 38.00    0.4
WRA    33.35 158 P       59 15.00    0.1
        0.5s     0.60nm          3.8mb
GUN    37.49 302 P       59 50.40   -0.2
        0.6s    47.00nm          5.5mb X
PKI    37.78 301 P       59 52.60   -0.4
        0.8s    23.00nm          5.1mb
DMN    38.05 301 P       59 54.40   -0.8
GKN    38.56 301 P       59 58.80   -0.6
INK    85.02  21 eP      05 19.00    8.3X
      S.D. = 1.0  on  7 of  8 obs.
-------------------------------------
   JUN 16, 1990  07h 31m 17.12± 0.84s
   39.192 N ± 6.9km   20.421 E ±10.6km
   DEPTH = 10.0km  (geophysicist)
 GREECE-ALBANIA BORDER REGION     (392)
      MD 3.3 (ATH).

KEK     0.71 317 ePn     31 30.70   -0.4
VLS     1.02 173 ePn     31 36.00   -0.4
OHR     1.94   8 iPn     31 51.60    1.1
NEO     2.18  86 ePn     31 53.50   -0.5
ITM     2.33 149 ePb     31 57.00    0.8
VAY     2.69  37 ePn     32 00.50   -0.7
SKO     2.88  15 ePn     32 08.00    4.1X
      S.D. = 1.0  on  6 of  7 obs.
-------------------------------------
? JUN 16, 1990  08h 38m 04.61± 1.13s
   39.274 N ± 7.4km   29.463 E ±14.4km
   DEPTH = 10.0km  (geophysicist)
 TURKEY                           (366)

ALT     0.55 113 ePg     3B 15.70    0.0
                 eSg     38 24.70
KHL     0.95 177 iPn     38 22.80    0.0
IZI     1.06   0 ePn     38 25.30    0.6
YLV     1.29 357 ePn     38 28.00   -0.6
      S.D. = 0.9  on  4 of  4 obs.
-------------------------------------
* JUN 16, 1990  08h 47m 02.01± 0.40s
   33.385 S ±11.1km  178.510 W ± 9.0km
   DEPTH = 33.0km  (normal)
   4.9mb (  5 obs.)  4.9Msz (  3 obs.)
 SOUTH OF KERMADEC ISLANDS        (179)

HBZ     4.94 211 P       48 16.00    0.1
                 S       49 15.00
SNZO    9.58 212 eP      49 35.00   14.5X
                 S       50 58.00
DZM    17.43 306 iPc     51 05.10    0.8
COO    25.22 268 eP      52 30.00    3.5X
CAN    26.83 257 eP      52 45.00    3.7X
BWA    27.40 259 eP      52 45.29   -1.2
RMO    29.11 275 ePc     53 04.30    2.4
CTA    33.97 284 iPc     53 45.00    0.3
        1.3s    96.15nm          5.6mb
                  i      53 56.80   44kmX
                  iS     59 09.00
QIS    39.20 278 ePd     54 28.90    0.0
WRA    43.86 276 Pc      55 05.40   -1.7
        0.4s     7.60nm          4.8mb
SBA     45.04 184 e(P)   55 15.30   -0.5
WARB    47.68 263 eP     55 35.00   -2.5
SPA     56.79 180 iPc    56 45.80    0.5
        1.0s    21.50nm          5.1mb
      Z 20s     1.44um          5.1Msz
MAW     69.37 201 e(P)   58 09.00    1.0
MAT     80.45 326 (P)    59 20.00    8.1X
        0.7s     5.48nm          4.7mb
PRI     87.77  43 e(P)   59 48.80   -0.2
BAR     87.78  48 eP     59 51.00    2.0
MHC     88.07  42 eP     59 49.60   -0.8
PLM     88.12  47 eP     59 53.00    2.2
RVR     88.23  47 eP     59 53.00    1.9
SBB     88.44  46 eP     59 53.00    0.9
ISA     88.72  45 eP     59 54.00    0.6
FRI     88.92  43 eP     59 53.10   -1.1
GLA     89.18  49 eP     59 55.00   -0.7
CMB     89.26  42 eP     59 54.80   -1.2
CLC     89.34  45 eP     59 56.00   -0.4
GSC     89.47  46 eP     59 56.00   -1.0
WDC     89.90  39 e(P)   59 57.80   -1.0
MIN     90.23  40 e(P)   00 00.50    0.0
TNP     91.10  44 P      00 04.00   -0.7
        0.8s     2.35nm          4.6mb
KVN     91.26  43 P      00 04.70   -0.6
BJI     94.74 316 eP      00 32.00   10.9X
                 eSKS    11 00.00
                 eS      11 40.00
ALO     95.77  52 eP     00 25.00   -1.2
      Z 18s     0.46um          5.0Msz
ANMO    95.77  52 P      00 25.00   -1.2
ZOBO    97.32 115 (P)    00 45.00   10.8X
      Z 20s     0.19um          4.6Msz
                  LR     32 28.00
MAIO   132.92 291 ePKP   06 11.00   -4.6X
AKU    145.58  14 iPKP   06 37.30   -0.2
        1.4s    65.12nm
SUF    146.77 339 iPKP   06 40.00    0.5
        0.5s     6.30nm
NUR    148.93 338 ePKP   06 46.00    3.0X
UPP    151.45 343 iPKP   06 51.50    4.7X
                  i      07 01.60
NAO    151.88 350 PKP    06 51.10    3.6X
        0.9s     7.00nm
HFS    152.06 347 ePKP   06 51.80    4.0X
        0.5s     1.50nm
LIC    152.30 166 (PKP)  07 07.20   17.7X
KIC    152.49 166 (PKP)  07 07.50   17.7X
MLR    157.67 310 ePKP   07 10.00   14.0X
KRA    158.48 326 ePKP   07 05.80    9.3X
                  e      07 19.80
ZST    161.12 326 ePKP   07 08.00    8.6X
KHC    161.87 334 ePKP   07 03.00    2.8
                  e      07 48.80
      S.D. = 1.3  on 32 of 48 obs.
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& JUN 16, 1990  09h 10m 48.67s
   59.754 N          152.830 W
   DEPTH = 89.5km
 SOUTHERN ALASKA                  (  2)
      <AGS-P>.

AUE     0.48 215 iP      11 02.69   -0.7
AUL     0.48 220 eP      11 02.85   -0.6
                 eS      11 13.66
RED     0.67   2 iP      11 04.41   -0.8
                 eS      11 17.03
CNPM    0.84 105 eP      11 05.48   -1.4
                 Sn      11 18.74
RDT     0.85  14 iP      11 06.01   -1.0
                 iS      11 20.14
CDD     0.93 207 eP      11 06.36   -1.5
                 iS      11 20.34
MCNL    0.96 234 iP      11 07.01   -1.1
                 iS      11 21.39
SPU     1.48  15 eP      11 13.87   -0.8
                 iS      11 32.78
SLKM    1.51  59 eP      11 13.90   -1.1
                 Sn      11 33.81
CRP     1.55  12 iP      11 15.36   -0.3
CGLM    1.61  14 iP      11 15.67   -0.7
                 iS      11 36.30
NCG     1.69  11 eP      11 16.74   -0.6
SEW     1.74  77 eP      11 15.98   -1.9
SUA     2.00  30 iP      11 20.83   -0.7
PMS     2.20  46 iP      11 22.92   -1.3
PLRM    2.59  43 eP      11 27.27   -2.1
```

16d 09h

SML 3.02 45 eP 11 33.06 -2.3
17 obs. associated

% JUN 16, 1990 10h 05m 10.10± 0.95s
42.081 N ± 6.7km 12.849 E ± 7.8km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

RMP	0.29	202	P	05 16.40	0.2
			eSg	05 20.90	
AZI	0.45	102	P	05 19.50	0.3
			eSg	05 25.80	
AQU	0.49	56	P	05 20.40	0.3
			eSg	05 27.20	
SDI	0.81	117	P	05 25.30	-0.6
			eSg	05 37.50	
ASS	1.00	352	P	05 28.90	-0.2
			eSg	05 44.50	

S.D. = 0.5 on 5 of 5 obs.

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* JUN 16, 1990 10h 06m 12.95± 0.88s
41.840 N ± 8.8km 23.256 E ± 9.5km
DEPTH = 33.0km (normal)
GREECE-BULGARIA BORDER REGION (363)

MMB	0.43	125	iPgc	06 23.00	0.4
			iSg	06 29.00	
VAY	0.73	225	ePg	06 26.80	0.0
			iSg	06 36.30	
VTS	0.75	357	iPg	06 27.00	-0.2
PGB	0.98	43	ePg	06 31.00	0.5
RZN	1.10	97	eP	06 41.00	8.7X
KDZ	1.63	96	eP	06 39.00	-0.7
PVL	2.06	47	iPc	06 54.00	8.1X

S.D. = 0.7 on 5 of 7 obs.

% JUN 16, 1990 10h 28m 02.55± 1.27s
29.276 N ±10.8km 105.193 E ±13.8km
DEPTH = 10.0km (geophysicist)
SICHUAN PROVINCE, CHINA (307)
ML 3.6 (BJI).

CD2	2.05	323	Pg	28 38.00	0.5
			Sg	29 04.40	
GYA	3.09	155	Pn	28 52.00	-0.4
			Pg	29 05.00	
			Sn	29 28.40	
			Sg	29 43.60	
KMI	4.68	208	Pgd	29 26.00	10.9X
	1.6s		80.00nm		
XAN	5.71	33	Pn	29 29.70	0.1
			Sn	30 36.00	
			Sg	31 06.50	
WHN	8.05	79	eP	30 03.50	1.2
	E 12s		0.40um		
TIY	10.36	34	eP	30 32.80	-1.5

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

? JUN 16, 1990 10h 44m 43.27± 6.42s
36.234 N ±66.5km 70.420 E ±23.5km
DEPTH = 190.6 ± 27.7 km
4.6mb (6 obs.)
HINDU KUSH REGION (718)

QUE	6.69	207	eP	46 20.40	0.0
			eS	47 38.20	
NDI	9.46	141	iPc	46 56.50	-0.1
	0.6s		16.67nm	4.6mb	
			eS	48 36.00	
GKN	14.56	120	P	48 01.60	-0.2
	0.4s		11.00nm	4.6mb	
DMN	15.13	120	P	48 09.80	0.9
	0.6s		10.00nm	4.4mb	
PKI	15.37	120	P	48 11.60	-0.3
	0.4s		13.00nm	4.7mb	
GUN	15.50	118	P	48 13.20	-0.3
	0.4s		11.00nm	4.6mb	
GBA	23.40	163	Pc	49 36.10	0.0
	0.7s		3.00nm	4.0mb	

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

? JUN 16, 1990 10h 49m 58.29± 1.18s
37.833 N ±14.1km 23.190 E ±12.0km
DEPTH = 89.5 ± 25.2 km
SOUTHERN GREECE (368)

ATH	0.44	71	eP	50 23.00	10.3X
ITM	1.20	237	eP	50 24.80	4.2X
NEO	1.47	1	eP	50 24.70	0.6
APE	2.01	112	eP	50 31.20	0.0
VLS	2.08	280	eP	50 32.00	-0.1
VAY	3.52	352	eP	50 51.00	-0.7
SMF	16.78	308	eP	53 49.30	0.3

S.D. = 1.0 on 5 of 7 obs.

JUN 16, 1990 11h 09m 30.48± 0.57s
6.682 S ± 7.9km 149.145 E ± 7.1km
DEPTH = 54.1km (2 depth phases)
4.6mb (4 obs.)
NEW BRITAIN REGION (192)

LAT	2.13	271	iPd	10 04.00	-0.3
			eS	10 25.00	
PMG	3.35	216	iPc	10 22.00	0.4
			eS	11 00.00	
RAB	3.90	51	e(P)	10 28.50	-0.8
MNDI	5.48	275	eP	10 52.50	0.7
CTA	13.62	192	iPc	12 43.90	1.2
	1.0s		19.00nm	4.8mb	
QIS	16.61	213	eP	13 20.00	-1.2
			eS	16 18.00	
MTN	18.77	250	eP	13 47.00	-1.1
			e	17 00.00	
WB5	19.44	226	eP	13 54.20	-1.4
			eS	17 19.20	
			eScP	21 55.20	
WRA	19.50	226	Pc	13 54.70	-1.5
	0.4s		10.80nm	4.5mb	
RMQ	19.70	181	iPc	13 57.80	-0.5
	0.8s		64.00nm	5.0mb	
			i	14 08.60	48km
QLP	20.34	193	eP	14 04.50	-0.4
			i	14 17.80	60km
KNA	21.91	244	eP	14 20.50	-0.3
DZM	22.65	134	iPc	14 28.60	0.3
STK	26.05	195	eP	15 03.20	2.7
	1.1s		9.00nm	4.2mb	
WARB	28.92	225	eP	15 26.50	-0.2
MEKA	35.23	232	iPd	16 22.10	0.2
NANU	36.03	240	eP	16 29.00	0.3
MRWA	38.45	230	eP	16 49.00	0.0
KGM	46.55	279	eP	17 56.00	1.0
IPM	49.32	282	ePd	18 18.10	1.5
KVN	96.30	51	P	22 45.80	-9.1X
			e	22 57.00	36kmX
TNP	96.93	53	(P)	22 43.00	-14.8X
APO	116.68	337	ePKP	28 09.70	-0.3
	0.4s		1.00nm		
ZOBO	136.64	122	PKP	29 00.20	10.0X
			i	32 33.00	
SIV	142.55	127	ePKP	29 00.00	-0.2
BAO	152.08	143	e(PKP)	29 32.00	16.4X

S.D. = 1.1 on 22 of 26 obs.

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* JUN 16, 1990 11h 28m 17.81± 1.49s
36.024 N ±11.5km 29.234 E ±11.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

ELL	0.90	37	iPg	28 35.00	-0.2
			iSg	28 46.00	
YER	1.35	326	iPn	28 42.50	-0.1
BCK	1.80	37	iPn	28 49.00	-0.2
KHL	2.31	6	iPn	28 56.80	0.3
ALT	3.10	13	ePn	29 08.00	0.2
CSS	3.51	106	eP	29 13.00	-0.5
LFK	3.58	101	iPn	29 15.10	0.6

S.D. = 0.4 on 7 of 7 obs.

% JUN 16, 1990 11h 44m 25.22± 1.05s
44.497 N ± 6.3km 7.006 E ±10.1km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.2 (GEN).

PZZ	0.07	83	P	44 27.81	0.1
			S	44 29.22	
STV	0.34	138	P	44 32.39	0.1
			S	44 36.88	
ENR	0.40	132	P	44 33.65	0.2
			S	44 38.50	
RRL	0.45	340	P	44 34.22	-0.3
			S	44 40.32	
ROB	0.65	108	P	44 38.03	-0.2
			S	44 47.07	
RSP	0.68	15	P	44 38.62	-0.1
			S	44 47.34	
IMI	0.86	132	P	44 41.82	-0.1
			S	44 53.10	
FIN	0.91	108	P	44 42.60	0.0
			S	44 54.16	
LSD	0.97	6	P	44 44.23	0.5
			S	44 55.64	
PCP	1.10	87	P	44 45.88	-0.1
			S	45 00.17	

S.D. = 0.2 on 10 of 10 obs.

% JUN 16, 1990 12h 32m 42.74± 0.44s
45.337 N ± 3.7km 7.104 E ± 4.1km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.3 (GEN).

LSD	0.13	17	P	32 46.15	0.1
			S	32 47.90	
RSP	0.21	150	P	32 48.00	0.5
			S	32 51.38	
LPG	0.30	303	Pg	32 49.10	0.1
			Sg	32 52.80	
LPL	0.32	305	Pg	32 49.40	0.0
			Sg	32 53.20	
BNI	0.42	227	Pd	32 51.00	-0.3
			iSg	32 56.80	
RRL	0.47	209	P	32 52.92	0.5
			S	32 59.18	
ORO	0.60	65	P	32 56.30	0.0
			iSg	33 05.60	
ORX	0.68	64	P	32 56.31	-0.1
			S	33 05.53	
DOI	0.84	173	P	32 59.00	0.0
			eSg	33 10.50	
ENR	1.13	168	P	33 03.28	-0.7
			S	33 17.12	

S.D. = 0.4 on 10 of 10 obs.

? JUN 16, 1990 12h 42m 58.21± 1.37s
41.156 N ±22.7km 28.523 E ±17.4km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

ISK	0.41	102	iPg	43 06.60	-0.1
YLV	0.87	132	iPg	43 15.00	0.0
DMK	0.88	319	iPg	43 15.10	0.0
			iSg	43 27.60	
HRT	0.93	111	ePn	43 16.10	0.1

S.D. = 0.2 on 4 of 4 obs.

? JUN 16, 1990 12h 43m 27.71± 6.56s
68.523 N ±19.7km 33.090 E ±55.8km
DEPTH = 10.0km (geophysicist)
4.3mb (2 obs.)
EUROPEAN USSR (724)
MD 4.4 (BER).

KTK1	3.62	282	iP	44 26.15	1.2
			eSn	45 09.82	
TRO	5.20	289	iP	44 46.68	-0.5
			eSn	45 47.98	
LOF	7.24	276	iP	45 14.93	-1.1
			eSn	46 36.08	
NSS	9.30	255	iP	45 45.21	0.6
			eSn	47 31.56	
RGS	10.77	250	eP	46 05.70	0.9
			eSn	48 08.50	
UPP	10.96	225	iPn	46 07.90	0.5
			iSg	49 23.40	
HFS	11.83	234	eP	46 18.70	-0.6
	0.4s		6.70nm	5.3mb X	
MOL	12.07	253	iP	46 22.48	0.0
			eSn	48 38.69	
NAO	12.19	242	P	46 22.80	-1.3
	0.7s		5.10nm	4.9mb	
EKA	21.14	250	Pd	48 14.80	0.2
	0.7s		2.40nm	3.7mb	
ZST	21.90	210	eP	48 36.20	13.9X

S.D. = 0.9 on 10 of 11 obs.

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* JUN 16, 1990 14h 00m 30.07± 2.46s
7.477 S ±12.1km 128.809 E ±13.2km
DEPTH = 145.2 ± 29.0 km
5.2mb (2 obs.)

BANDA SEA (280)

MTN	5.80	157	iPd	01	55.20	0.1
			eS	02	46.00	
KNA	8.22	180	eP	02	26.80	-0.9
			eS	03	52.00	
WB5	13.46	157	eP	03	35.00	-1.4
			eS	05	57.30	
WRA	13.50	157	Pc	03	37.20	0.2
	0.2s		4.30nm			4.5mb X
QIS	16.68	142	iPd	04	19.00	2.2
			e	05	34.00	
WARB	18.72	186	eP	04	41.50	1.3
			eS	08	01.00	
NANU	19.71	219	eP	04	51.20	0.8
GUA	26.30	38	eP	05	54.00	0.0
	1.0s		160.00nm			5.6mb
GUMO	26.31	37	eP	05	55.00	0.9
PJG	26.31	37	eP	05	54.00	-0.1
RMQ	26.78	137	iPc	05	56.20	-2.2
GUN	54.38	312	P	09	44.60	-0.1
PKI	54.54	312	P	09	45.60	-0.3
GKN	55.35	311	P	09	51.00	-0.5
	0.4s		5.00nm			4.7mb

S.D. = 1.3 on 14 of 14 obs.

JUN 16, 1990 14h 13m 24.17± 1.31s
32.546 S ± 5.6km 71.642 W ±11.7km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF CENTRAL CHILE (135)

ROCH	0.68	129	iPd	13	38.00	0.2
			iS	13	52.00	
JACH	0.90	99	iPd	13	40.50	-0.9
			iS	13	55.50	
LCCH	0.93	176	ePd	13	41.80	-0.1
			i	13	57.10	
PEL	1.00	127	iPd	13	43.10	-0.1
			iS	14	00.10	
TACH	1.25	152	iP	13	47.00	-0.5
			iS	14	06.60	
FCH	1.38	125	iPc	13	49.40	-0.3
			iS	14	41.10	
			iS	15	12.00	
LNV	1.42	172	iP	13	49.60	-0.4
			iS	14	11.00	
PCH	1.43	139	iPd	13	51.00	0.8
			i	14	15.00	
CHCH	1.61	149	eP	13	53.50	0.7
			i	14	19.30	
RTBS	2.06	65	eP	13	59.00	-0.2
			S	14	28.00	
RTCB	2.64	67	eP	14	09.20	1.6
RTCV	2.72	76	eP	14	09.30	0.6
RTLL	2.96	67	eP	14	11.30	-0.8
RTRS	3.02	39	ePc	14	12.30	-0.5
CFA	3.04	73	iPd	14	13.00	-0.2
			S	14	57.30	

S.D. = 0.7 on 15 of 15 obs.

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* JUN 16, 1990 14h 19m 53.74± 1.00s
39.158 N ± 8.6km 20.520 E ±11.4km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)
MD 3.0 (ATH).

KEK	0.79	315	ePb	20	08.50	-0.6
VLS	0.98	177	ePb	20	12.50	0.1
OHR	1.96	6	ePn	20	29.00	1.6
NEO	2.10	85	ePn	20	29.50	0.0
VAY	2.67	35	ePn	20	36.40	-1.1
SKO	2.90	14	ePn	20	50.00	9.3X

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

% JUN 16, 1990 14h 58m 12.49± 3.10s
40.578 N ±16.6km 30.347 E ±19.8km
DEPTH = 5.0km (geophysicist)
TURKEY (366)

GPA	0.29	186	iPg	58	17.70	-0.7
			iSg	58	20.70	
HRT	0.57	296	ePg	58	24.00	0.1
IZI	0.71	250	iPg	58	27.50	0.8
YLV	0.74	269	iPg	58	26.50	-0.8
			iSg	58	37.00	
ALT	1.53	187	ePn	58	41.20	0.6

S.D. = 1.0 on 5 of 5 obs.

? JUN 16, 1990 18h 19m 05.39± 0.94s
39.192 N ± 8.5km 20.473 E ±10.2km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)
MD 2.8 (ATH).

KEK	0.74	315	ePb	19	20.00	0.1
VLS	1.02	175	ePb	19	24.50	-0.1
OHR	1.93	7	iPn	19	42.20	3.5X
NEO	2.14	86	ePn	19	42.00	0.4
VAY	2.66	36	ePn	19	48.70	-0.4

S.D. = 0.6 on 4 of 5 obs.

? JUN 16, 1990 19h 10m 12.27± 1.21s
39.138 N ± 8.1km 20.623 E ±17.1km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)
MD 3.0 (ATH).

VLS	0.96	182	ePb	10	30.50	0.0
			eSb	10	46.00	
OHR	1.98	4	iPn	10	46.30	0.1
NEO	2.03	84	ePn	10	47.00	0.1
VAY	2.64	34	ePn	10	55.40	-0.2
SKO	2.90	12	ePn	11	09.00	9.7X

S.D. = 0.3 on 4 of 5 obs.

? JUN 16, 1990 19h 15m 39.29± 6.38s
31.626 S ±24.5km 68.272 W ±34.2km
DEPTH = 86.7 ± 47.4 km
SAN JUAN PROVINCE, ARGENTINA (137)

CFA	0.03	55	iPd	15	51.90	-0.1
			eS	16	03.00	
RTCV	0.33	224	iPc	15	52.80	0.1
RTLL	0.34	330	iPd	15	52.80	0.0
RTCB	0.47	287	iPc	15	53.80	0.0
			S	16	05.50	
RTBS	1.01	268	ePc	15	59.00	-0.1
			S	16	16.10	
RTRS	1.78	325	iPc	16	08.90	0.0
			eS	16	32.40	

S.D. = 0.1 on 6 of 6 obs.

JUN 16, 1990 19h 27m 12.37± 0.53s
24.555 N ± 8.7km 141.671 E ± 6.9km
DEPTH = 122.8km (2 depth phases)
4.7mb (8 obs.)
VOLCANO ISLANDS REGION (213)

KAKJ	11.68	354	P	29	55.70	-0.6
			eS	32	03.10	
CHJJ	11.69	349	P	29	56.00	-0.3
			eS	32	00.00	
MAT	12.31	347	eP	30	04.00	-0.6
	0.6s		6.67nm			4.4mb X
			eS	32	17.00	
MTMJ	12.44	345	eP	30	07.00	0.7
NIIJ	12.85	350	P	30	10.60	-0.9
YAMJ	13.65	355	P	30	23.40	1.5
			eS	32	50.90	
AOMJ	16.00	356	eP	30	55.30	3.8X
SSE	19.24	294	Pc	31	30.00	0.5
	0.8s		32.00nm			4.7mb
WHN	24.91	290	eP	32	25.50	0.1
GYA	31.60	281	P	33	24.80	-0.9
KMI	35.25	279	Pc	33	56.50	-0.8
GTA	38.12	303	eP	34	20.40	-0.7
WB5	44.73	190	eP	35	10.00	-5.1X
WRA	44.80	190	Pc	35	10.00	-5.7X
	0.3s		1.80nm			4.3mb
SHL	44.90	282	iP	35	09.50	-7.2X
WMQ	47.72	308	P	35	37.70	-0.9
GUN	49.80	287	P	35	56.80	1.7
	0.4s		26.00nm			5.5mb
PKI	50.27	286	P	35	59.80	1.2
	0.6s		10.00nm			4.9mb
DMN	50.52	286	P	36	01.80	1.3
GKN	50.86	287	P	36	04.20	1.3
GBA	61.22	272	Pd	37	14.10	-2.7
	0.8s		9.90nm			4.8mb
YKA	74.59	28	eP	38	38.30	-0.9
	0.4s		1.30nm			4.1mb
WDC	78.59	51	ePc	39	01.50	-0.5
PCC	79.89	53	ePc	39	08.80	-0.2
PRS	81.10	54	ePc	39	15.70	0.3
CMB	81.13	52	ePc	39	15.60	0.0
PRI	81.70	54	e(P)	39	19.40	0.7
SES	81.70	38	eP	39	19.00	0.7
			pP	39	52.00	130km
FRI	82.05	53	e(P)	39	19.80	-0.5
KVN	82.34	51	P	39	22.10	0.1
TNP	83.38	51	P	39	27.60	0.2
			e	39	57.50	116km
FFC	84.14	32	eP	39	31.00	0.4
	0.8s		11.00nm			4.8mb
HFS	85.56	337	eP	39	34.20	-3.5X
	0.4s		0.90nm			4.0mb

S.D. = 1.0 on 28 of 33 obs.

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* JUN 16, 1990 19h 47m 26.75± 0.59s
12.077 N ±11.1km 125.177 E ±15.0km
DEPTH = 33.0km (normal)
4.9mb (7 obs.)
SAMAR, PHILIPPINE ISLANDS (251)

KGM	23.86	247	eP	52	51.50	13.3X
CHG	26.14	288	eP	53	02.10	2.2
BJI	28.97	346	eP	53	24.50	-0.8
WB5	33.02	164	eP	54	00.20	-1.1
WRA	33.07	164	P	54	02.00	0.3
	0.5s		1.60nm			4.2mb
QIS	35.40	156	iPd	54	21.40	-0.4
WARB	38.06	178	eP	54	45.00	0.9
GUN	39.94	299	P	55	00.00	-0.3
	0.6s		41.00nm			5.4mb
PKI	40.26	299	P	55	02.70	-0.2
	0.8s		26.00nm			5.0mb
DMN	40.53	298	P	55	04.60	-0.4
	0.8s		32.00nm			5.1mb
GKN	41.03	299	P	55	08.20	-0.8
GBA	46.52	277	Pc	55	52.70	-0.5
	0.6s		6.10nm			4.7mb
QUE	56.64	298	eP	57	08.50	-1.1
SOD	82.22	337	eP	59	46.00	0.4
SUF	83.47	333	iP	59	53.00	0.8
	0.5s		3.80nm			4.8mb
MBC	84.19	13	eP	59	56.50	0.8
	0.9s		5.00nm			4.7mb

S.D. = 1.0 on 15 of 16 obs.

& JUN 16, 1990 19h 52m 31.99s
58.621 N 153.899 W
DEPTH = 70.7km
KODIAK ISLAND REGION (13)
<AGS-P>.

CDD	0.34	23	iP	52	42.91	-0.8
			eS	52	52.26	
MCNL	0.61	338	iP	52	45.44	-0.7
			eS	52	56.35	
AUE	0.79	20	iP	52	47.60	-0.6
AUL	0.80	17	eP	52	47.72	-0.6
KDC	1.15	139	eP	52	52.16	-0.5
			eS	53	07.82	
CNPM	1.65	55	eP	52	58.04	-1.4
RED	1.89	17	eP	53	01.38	-1.5
NNL	1.95	42	eP	53	02.72	-0.8
SLKM	2.66	43	eP	53	11.88	-1.6
SEW	2.72	55	eP	53	11.22	-3.0
SPU	2.73	19	iP	53	13.02	-1.4
CRP	2.80	18	eP	53	14.22	-1.2
CGLM	2.86	19	eP	53	15.00	-1.3
NCG	2.93	17	eP	53	15.82	-1.4

14 obs. associated

JUN 16, 1990 20h 08m 50.39± 0.28s
26.706 N ± 5.9km 44.611 W ± 4.7km
DEPTH = 10.0km (geophysicist)
4.5mb (11 obs.) 4.0Msz (2 obs.)
NORTH ATLANTIC RIDGE (403)

LPF	39.97	46	eP	16	26.90	0.3
	1.1s		12.20nm			4.5mb
MFF	40.19	48	eP	16	28.60	0.2
	1.2s		14.90nm			4.5mb
LKO	40.61	107	P	16	32.14	-0.2
LDF	40.72	45	eP	16	32.70	0.0
LSF	41.24	49	eP	16	37.00	-0.1
TCF	41.71	49	eP	16	40.90	-0.1
BAO	42.21	185	eP	16	45.50	0.1
AVF	42.58	49	eP	16	47.80	-0.2
SSF	42.73	49	eP	16	49.20	-0.1

16d 20h

	1.2s	8.95nm			4.4mb	
SMF	42.88	49 eP	16	50.60	0.0	
	1.1s	11.00nm			4.5mb	
LOR	43.01	48 eP	16	51.30	-0.3	
LBF	43.04	49 eP	16	51.50	-0.3	
	1.2s	7.45nm			4.3mb	
TUL	44.26	295 e(P)	17	02.40	0.6	
	1.2s	10.50nm			4.6mb	
HAU	44.80	48 eP	17	05.60	-0.5	
BSF	45.07	48 eP	17	07.80	-0.5	
SIV	45.35	203 iPc	17	10.00	-0.8	
CDF	45.48	47 eP	17	11.20	-0.4	
GRF	48.23	46 eP	17	33.60	0.5	
Z	23s	0.10um			3.7MszX	
		e	17	39.70		
ZOBO	48.44	211 P	17	36.00	0.3	
	1.0s	10.00nm			4.8mb	
Z	18s	0.09um			3.8Msz	
		LR	34	36.00		
LPB	48.66	211 P	17	33.00	-4.2X	
CLL	49.56	44 e(P)	17	50.00	6.7X	
KHC	49.70	47 eP	17	45.00	0.5	
		e	17	51.00		
PRU	50.40	46 eP	17	50.00	0.3	
		e	17	56.70		
ZST	51.99	48 e(P)	18	07.60	5.8X	
		e	42	06.30		
SRO	52.80	49 eP	18	07.40	-0.5	
ANMO	53.01	295 P	18	10.30	0.3	
ALQ	53.02	295 eP	18	09.00	-1.0	
	1.4s	6.98nm			4.4mb	
Z	20s	0.27um			4.3Msz	
BW06	54.45	305 P	18	20.00	-0.5	
YKA	57.45	329 eP	18	40.20	-1.3	
	1.0s	3.10nm			4.3mb	
MLR	58.18	51 eP	18	47.00	0.0	
MBC	60.64	345 eP	19	04.00	0.6	
	1.2s	9.00nm			4.8mb	
INK	65.08	336 eP	19	33.00	0.1	
FBA	71.50	334 P	20	13.70	0.8	
IMA	73.21	336 eP	20	24.20	1.0	
	1.2s	5.90nm			4.5mb	
LWI	76.24	100 iPc	20	42.70	1.1	
S.D. = 0.6		on 32 of 35 obs.				

? JUN 16, 1990 21h 02m 16.16± 9.66s
8.840 S ±84.3km 127.271 E ±28.6km
DEPTH = 176.6 ± 44.9 km
4.0mb (1 obs.)
TIMOR (289)

MTN	5.50	137 ePn	03	37.00	-0.3
		eS	04	43.00	
KNA	7.02	168 eP	03	58.20	0.7
		eS	05	20.00	
WB5	12.95	149 eP	05	13.50	-1.4
		e	07	42.00	
WRA	12.99	149 Pd	05	15.50	0.1
	0.6s	3.60nm			4.0mb
QIS	16.66	136 eP	06	02.00	1.0
		e	09	05.00	
WARB	17.26	182 eP	06	12.00	3.8X
		eS	09	42.00	
MEKA	19.52	204 eP	06	32.00	-0.2
		eS	10	10.00	
S.D. = 1.3		on 6 of 7 obs.			

JUN 16, 1990 21h 39m 52.96± 0.44s
39.105 N ± 4.6km 20.469 E ± 4.2km
DEPTH = 10.0km (geophysicist)
4.0mb (2 obs.)
GREECE-ALBANIA BORDER REGION (392)
ML 3.8 (ATH).

KEK	0.80	320 iPgd	40	08.00	-0.5
SRN	0.85	335 iPg	40	09.00	-0.4
VLS	0.93	174 ePb	40	10.90	0.2
KBN	1.54	10 ePn	40	22.50	2.1
VLO	1.55	331 ePn	40	23.60	3.0
OHR	2.02	7 iPn	40	29.30	1.8
		eSg	40	59.20	
		Lg	41	00.80	
NEO	2.15	84 ePn	40	29.00	-0.4
ITM	2.24	149 ePg	40	36.00	5.3X
TIR	2.29	349 ePn	40	33.50	2.2
LCI	2.30	303 P	40	30.90	-0.5
		eSn	40	58.50	
VAY	2.74	35 iPn	40	37.40	-0.3
ATH	2.79	113 ePn	40	38.50	0.1
SKO	2.96	14 iPn	40	40.70	-0.1
		iSn	41	15.50	
		iSg	41	23.00	
		Lg	41	27.10	
ULC	3.00	342 ePn	40	40.50	-0.9
		eSn	41	16.00	
BRT	3.07	306 P	40	43.50	1.1
VLI	3.08	140 ePn	40	43.50	1.0
TDS	3.25	281 P	40	45.50	0.5
ORI	3.25	288 P	40	46.50	1.5
BDV	3.41	339 ePn	40	46.00	-1.3
		eSn	41	25.00	
TTG	3.45	345 ePn	40	48.00	0.3
		eSn	41	28.00	
PVY	3.51	354 ePn	40	50.80	2.1
		eSn	41	31.20	
SOI	3.61	255 P	40	50.50	0.4
		eSn	41	31.50	
		e	44	13.00	
HCY	3.66	336 ePn	40	49.00	-1.8
		eSn	41	29.50	
MGR	3.93	287 P	40	55.60	0.9
ATN	4.03	258 P	40	56.20	0.1
SGO	4.23	292 P	41	00.00	1.1
RDO	4.39	61 ePn	40	59.70	-1.4
BSS	4.67	293 P	41	05.50	0.4
VAM	4.74	140 ePn	41	06.00	-0.2
MEU	4.80	247 P	41	05.20	-2.0
HVAR	5.08	325 iPn	41	09.40	-1.4
DUI	5.25	301 P	41	13.70	0.2
SDI	5.70	299 P	41	20.00	0.2
ASS	7.10	306 P	41	39.00	-0.5
ARV	7.17	310 P	41	39.00	-1.4
MLR	7.56	31 eP	41	45.00	-0.9
CRE	7.84	308 P	41	49.50	-0.3
VOY	8.45	327 ePn	41	55.90	-2.4
		eSn	43	27.70	
FVI	9.37	325 P	42	09.50	-1.4
CTI	9.51	320 P	42	12.50	-0.4
		eSn	43	53.00	
NAO	22.56	348 P	44	57.80	3.5X
	0.7s	1.60nm			3.6mb
EKA	22.65	324 P	44	55.00	-0.2
	1.9s	21.70nm			4.3mb
SUF	23.90	6 eP	45	07.00	-0.3
S.D. = 1.2		on 41 of 43 obs.			

% JUN 16, 1990 22h 02m 58.22± 0.94s
39.208 N ± 7.5km 29.153 E ±11.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

ALT	0.76	101 ePg	03	12.80	-0.4
		eSg	03	23.80	
KHL	0.93	162 ePg	03	16.30	0.3
		eSg	03	26.80	
IZI	1.15	12 ePn	03	20.30	0.5
YLV	1.37	7 iPn	03	23.30	-0.1
EDC	1.51	319 ePn	03	25.00	-0.3
S.D. = 0.5		on 5 of 5 obs.			

JUN 16, 1990 22h 09m 16.68± 0.52s
37.247 N ± 5.0km 23.104 E ± 5.8km
DEPTH = 5.0km (geophysicist)
SOUTHERN GREECE (368)
ML 3.3 (ATH).

VLI	0.54	194 iPgd	09	27.00	-0.6
ATH	0.87	34 iPgc	09	34.00	0.1
		eSg	09	47.90	
ITM	0.94	266 iPgc	09	35.20	0.1
APE	1.95	95 ePb	09	51.00	0.2
VAM	2.04	154 ePn	09	53.00	0.9
		eSn	10	20.00	
NEO	2.06	3 ePn	09	52.00	-0.4
VLS	2.20	296 ePg	09	59.20	4.8X
SMG	3.01	80 ePn	10	05.00	-0.8
VAY	4.09	354 eP	10	21.70	0.5
EKA	25.38	324 P	14	46.00	-0.1
	1.6s	9.00nm			4.2mb
S.D. = 0.6		on 9 of 10 obs.			

JUN 16, 1990 22h 41m 43.78± 0.52s
47.579 N ± 5.7km 7.524 E ± 5.0km
DEPTH = 24.3 ± 7.5 km

SWITZERLAND					(544)
ML 2.6 (LDG), 2.5 (VIE). MD 2.4 (STR).					
BBS	0.12	185 Pg	41	47.98	-0.6
		Sg	41	50.50	
FEL	0.44	48 Pg	41	52.23	-0.9
		Sg	41	57.94	
LOMF	0.52	244 Pg	41	55.25	0.8
BSF	0.56	297 Pg	41	55.89	1.0
		Sg	42	03.83	
ZLA	0.59	99 eP	41	54.60	-0.9
SLE	0.68	74 eP	41	56.10	-0.9
ECH	0.68	339 Pg	41	57.47	0.5
		Sg	42	07.03	
WLS	0.84	352 Pg	41	59.37	-0.3
CDF	0.85	349 Pg	41	59.64	-0.2
HAU	0.90	299 Pg	42	01.60	0.9
HAU	0.90	299 Pn	42	02.00	1.3
		Sg	42	12.50	
		Sn	42	14.40	
LLS	1.23	125 eP	42	06.90	1.2
SAX	1.28	104 eP	42	07.30	0.8
GWF	1.40	3 Pn	42	08.52	0.6
		Pg	42	10.57	
		Sg	42	29.11	
DIX	1.50	183 eP	42	12.00	2.4
MMK	1.56	169 eP	42	12.80	2.4
LPL	2.13	195 Pg	42	27.80	9.0X
LPG	2.15	195 Pg	42	28.30	9.2X
LBF	2.49	257 Pg	42	31.80	8.2X
		Sg	43	02.60	
LOR	2.51	264 Pn	42	25.10	1.2
		Pg	42	31.90	
		Sg	43	04.10	
SOTA	2.53	97 iPgd	42	30.80	6.5X
		i	43	01.60	
		iSg	43	03.40	
SMF	2.68	251 Pg	42	35.40	9.1X
		Sg	43	10.20	
SSF	2.78	261 Pn	42	28.30	0.6
		Pg	42	37.20	
		Sg	43	12.10	
AVF	2.95	256 Pn	42	29.80	-0.3
		Sg	43	17.10	
GRC1	3.02	61 ePg	42	41.80	10.7X
		eSg	43	22.30	
BGF	3.36	254 Pn	42	34.00	-1.9
MAF	3.66	250 Pn	42	37.50	-2.7
TCF	3.86	252 Pn	42	41.10	-2.0
S.D. = 1.4		on 22 of 28 obs.			

? JUN 16, 1990 22h 52m 37.16± 3.71s
35.872 N ±35.6km 70.705 E ±13.9km
DEPTH = 109.0 ± 56.4 km
4.6mb (7 obs.)
HINDU KUSH REGION (718)

QUE	6.48	210 eP	54	11.00	-0.8
		eS	55	25.00	
NDI	9.04	141 iPc	54	49.00	2.7
	0.5s	38.73nm			5.5mb
		eS	56	23.00	
MAIO	9.09	276 eP	54	47.00	-0.1
		eS	56	25.00	
GKN	14.18	120 P	55	53.00	-1.4
	0.4s	19.00nm			4.7mb
DMN	14.75	120 P	56	01.40	-0.3
	0.6s	19.00nm			4.5mb
PKI	14.99	119 P	56	04.00	-0.8
	0.6s	25.00nm			4.6mb
GUN	15.13	117 P	56	06.60	0.1
	0.4s	22.00nm			4.8mb
HFS	43.41	322 eP	00	30.40	0.2
	0.3s	1.70nm			4.3mb
NAO	44.90	323 P	00	42.50	0.3
	0.4s	0.60nm			3.7mb
S.D. = 1.4		on 9 of 9 obs.			

? JUN 16, 1990 22h 56m 29.70± 1.19s
39.411 N ± 7.3km 29.384 E ±18.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

ALT	0.67	122 ePg	56	43.00	0.0
IZI	0.93	4 ePn	56	47.80	0.3
KHL	1.09	174 ePn	56	50.30	0.0

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YLV      1.15 360 iPn    56 51.00  -0.3
      S.D. = 0.5  on   4 of   4 obs.
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*  JUN  16, 1990  23h 46m 33.54± 0.96s
   55.086 N ±17.4km  161.120 E ±19.5km
   DEPTH =  33.0km  (normal)
   4.4mb (  4 obs.)
 NEAR EAST COAST OF KAMCHATKA     (218)

MAT     24.28 230 iPc    51 48.70   0.1
        1.1s     11.39nm          4.3mb
FBA     26.61  48 (P)    52 30.00  19.8X
MBC     34.97  24 eP     53 24.50   0.6
YKA     41.30  44 eP     54 16.60  -0.3
        0.6s      0.80nm          3.6mb
CDF     74.56 342 eP     58 10.20  -0.2
HAU     75.11 343 eP     58 13.20  -0.4
FLN     75.38 348 eP     58 14.20  -0.8
GRR     75.79 348 eP     58 16.90  -0.5
LOR     76.23 344 eP     58 19.40  -0.5
        0.5s     2.20nm          4.4mb
SSF     76.49 344 eP     58 21.10  -0.2
LBF     76.49 344 eP     58 21.30  -0.1
AVF     76.78 345 eP     58 22.60  -0.3
MAF     77.45 345 eP     58 26.80   0.1
LPL     77.45 342 eP     58 27.90   0.9
LPG     77.47 342 eP     58 28.00   0.9
        0.6s     2.25nm          4.4mb
LFF     78.97 346 eP     58 35.40   0.4
LPO     79.16 346 eP     58 36.40   0.4
      S.D. = 0.5  on  16 of  17 obs.
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?  JUN  17, 1990  00h 20m 15.76± 1.09s
    5.678 S ±22.3km  151.013 E ±19.6km
   DEPTH =  87.3 ± 22.7 km
   4.1mb (  1 obs.)
 NEW BRITAIN REGION               (192)

RAB      1.87  38 iPc    20 46.70   0.0
LAT      4.11 256 eP     21 23.00   5.6X
KDB      5.37 225 eP     21 35.00   0.0
RMQ     20.81 186 iPc    24 51.80  -0.4
WB5     21.48 227 eP     24 59.80   0.9
WRA     21.54 227 Pd     24 58.70  -0.8
        1.2s     11.80nm          4.1mb
BRS     21.66 176 iP     25 01.00   0.3
      S.D. = 0.9  on   6 of   7 obs.
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&  JUN  17, 1990  00h 27m 45.94s
   63.271 N          151.115 W
   DEPTH =  11.6km
   3.0mb (  1 obs.)
 CENTRAL ALASKA                   (  1)
      <AGS-P>. ML 3.9 (PMR).

KTH      0.30  17 iP     27 52.17  -0.1
HUR      0.73 113 iP     27 59.69  -0.5
                 iS     28 09.13
CUT      0.95 156 iP     28 04.13   0.2
MCK      1.08  64 iP     28 06.02  -0.1
                 iS     28 19.79
SKT      1.31 189 iP     28 10.08   0.1
                 eS     28 27.14
NEA      1.59  34 iP     28 12.82  -1.2
                 eS     28 33.44
PWA      1.72 160 eP     28 15.80  -0.1
WRH      1.80  47 iP     28 15.93  -1.1
GHO      1.82 145 eP     28 17.50   0.2
                 eS     28 40.60
SUA      1.82 174 iP     28 18.09   0.6
                 eS     28 42.11
PLRM     1.92 150 eP     28 18.66  -0.1
PMR      1.92 150 eP     28 18.60  -0.2
NCG      1.94 195 iP     28 19.49   0.4
                 iS     28 45.13
SML      1.95 137 eP     28 18.75  -0.6
CCB      2.01  45 iP     28 18.76  -1.3
CGLM     2.01 192 eP     28 20.55   0.3
                 eS     28 46.48
CRP      2.07 194 eP     28 21.48   0.4
SPU      2.14 192 eP     28 22.73   0.7
PMS      2.16 160 eP     28 22.70   0.4
FBA      2.19  40 ePc    28 21.20  -1.5
TTA      2.25 263 iPc    28 22.50  -1.2
SCM      2.27 128 eP     28 23.92   0.0
GLM      2.37  42 iP     28 24.09  -1.3
TOA      2.56 115 eP     28 27.40  -0.6
PAX      2.58  94 eP     28 29.20   0.8
SDG      2.66 104 eP     28 30.61   1.2
SLKM     2.81 171 eP     28 32.46   1.0
RED      2.97 196 eP     28 34.61   0.8
KLU      3.01 124 eP     28 35.07   0.7
IMA      3.02 340 iPd    28 34.00  -0.5
SVW      3.03 226 eP     28 33.90  -0.7
GLI      3.06 140 eP     28 35.77   0.8
VZW      3.08 134 eP     28 35.98   0.6
VLZ      3.10 132 eP     28 35.96   0.4
SEW      3.28 165 eP     28 38.09   0.0
CNPM     3.76 181 eP     28 45.77   0.7
FYU      4.15  35 eP     28 48.57  -1.8
TGL      4.65 119 eP     28 57.81   0.1
BALM     4.68 115 eP     28 58.19  -0.1
KDC      5.58 188 eP     29 11.00   0.2
YKA     16.52  76 eP     31 45.00   6.3
        0.5s     0.70nm          3.0mb
MBC     16.66  26 eP     31 41.00   0.7
        42 obs. associated
-------------------------------------
?  JUN  17, 1990  00h 52m 23.46± 3.18s
   10.291 S ±15.8km  165.059 E ±20.7km
   DEPTH =  53.5 ± 25.7 km
   4.1mb (  2 obs.)
 SANTA CRUZ ISLANDS               (184)

HNR      5.11 279 eP     53 40.00   0.6
                 eS     54 37.00
DZM     11.79 174 iPc    55 10.00  -1.6
                 iS     57 16.40
BRS     20.57 213 iPc    57 01.00   0.6
CTA     20.57 240 iPc    57 00.00  -0.5
        0.9s     19.75nm          4.4mb
                 iS     00 49.00
RMQ     22.29 222 eP     57 19.00   1.3
COO     23.61 209 eP     57 32.00   1.5
CMS     27.61 217 eP     58 09.00   1.1
WB5     31.08 249 eP     58 37.80  -1.2
WRA     31.12 248 Pc     58 38.20  -1.2
        0.6s     1.00nm          3.7mb
FBA     82.82  18 (P)    04 44.60   1.6
GKN     86.45 299 P      05 00.00  -2.2
      S.D. = 1.6  on  11 of  11 obs.
-------------------------------------
%  JUN  17, 1990  01h 29m 03.78± 1.23s
   43.302 N ± 8.3km   13.684 E ±12.4km
   DEPTH =  10.0km  (geophysicist)
 CENTRAL ITALY                    (381)

ARV      0.58 290 Pd     29 14.90  -0.6
ASS      0.78 253 P      29 18.50  -0.6
                 eSg    29 32.00
AQU      0.97 192 Pc     29 22.70   0.5
RSM      1.09 305 Pd     29 26.30   2.0
                 eSg    29 42.20
CRE      1.30 285 P      29 27.00  -1.0
AZI      1.33 188 P      29 29.00   0.8
PGD      1.54 293 P      29 32.00   0.6
SDI      1.60 176 P      29 31.00  -1.2
                 eSg    29 53.50
DUI      1.74 160 P      29 34.50   0.3
CTI      3.11 333 P      29 52.90  -0.9
                 eSn    30 29.50
      S.D. = 1.1  on  10 of  10 obs.
-------------------------------------
&  JUN  17, 1990  02h 40m 10.40s
   41.035 N          123.447 W
   DEPTH =  33.0km
 NORTHERN CALIFORNIA              ( 36)
      <BRK>. ML 3.0 (BRK).

FHC      0.47 240 iPd    40 19.50  -1.1
                 i      40 27.90
WDC      0.83 123 iPc    40 24.60  -1.0
                 iS     40 35.90
LBFM     1.22  75 eP     40 31.20  -0.2
LTCM     1.30 129 eP     40 33.50   1.1
MIN      1.56 116 eP     40 34.50  -1.8
ORV      2.10 134 ePc    40 43.10  -0.8
KVN      4.56 114 eP     41 22.00   3.0
        7 obs. associated
-------------------------------------
&  JUN  17, 1990  03h 10m 51.80s
   40.347 N          124.843 W
   DEPTH =  17.0km
 NEAR COAST OF NORTHERN CALIF.    ( 35)
      <BRK>. ML 3.0 (BRK).

FHC      0.80  55 iPc    11 06.00  -0.8
                 e(S)   11 21.30
WDC      1.77  82 ePc    11 19.70  -2.2
                 eS     11 41.40
LBFM     2.45  65 eP     11 30.50  -1.4
ORV      2.69 106 e(P)   11 31.20  -3.9
BRK      3.18 140 eP     11 39.70  -2.4
PCC      3.43 145 eP     11 42.30  -3.2
ARN      3.95 138 eP     11 50.30  -2.7
SAO      4.46 142 ePc    11 55.80  -4.4
KVN      5.36 102 eP     12 10.00  -3.2
        9 obs. associated
-------------------------------------
*  JUN  17, 1990  04h 01m 50.35± 1.23s
   36.245 N ±16.1km   27.174 E ± 7.1km
   DEPTH =  10.0km  (geophysicist)
 DODECANESE ISLANDS               (369)

YER      1.26  45 ePn   02 12.80  -1.0
SMG      1.49 350 eP     02 17.30   0.2
APE      1.56 302 eP     02 19.30   1.1
KSL      1.95  93 eP     02 24.00   0.1
ELL      2.26  76 ePn   02 29.00   0.6
VAM      2.56 252 eP     02 38.00   5.5X
BCK      3.00  65 ePn   02 45.00   6.2X
VLI      3.45 279 eP     02 44.00  -1.2
      S.D. = 1.2  on   6 of   8 obs.
-------------------------------------
*  JUN  17, 1990  04h 07m 47.62± 1.01s
   36.295 N ±13.9km   27.166 E ± 7.1km
   DEPTH =  10.0km  (geophysicist)
 DODECANESE ISLANDS               (369)

YER      1.23  47 iPn   08 09.80  -0.7
SMG      1.44 350 eP     08 13.70   0.1
CIN      1.50  29 eP     08 14.00  -0.5
APE      1.52 301 iPd    08 16.30   1.3
KSL      1.96  94 eP     08 20.00  -1.3
ELL      2.26  78 iPn   08 26.00   0.3
VAM      2.57 251 eP     08 31.00   1.1
KHL      2.76  42 ePn   08 36.00   3.2X
BCK      2.98  66 ePn   08 37.80   1.9
VLI      3.43 278 eP     08 40.00  -2.2
ALT      3.61  39 ePn   08 49.00   4.1X
KHC     16.22 326 eP     11 40.00   2.9X
      S.D. = 1.5  on   9 of  12 obs.
-------------------------------------
*  JUN  17, 1990  04h 23m 57.17± 0.96s
   13.129 N ±14.8km   88.769 W ±11.7km
   DEPTH =  74.5 ±  4.8 km
   4.7mb (  4 obs.)
 EL SALVADOR                      ( 73)
      Felt (II) at San Salvador.

QZA      0.45 331 iPd    24 09.50  -0.6
VSM      0.57  58 eP     24 13.00   1.5
SJAS     0.66 324 iPd    24 11.50  -0.8
SSS      0.69 323 iPd    24 11.90  -0.7
                 eS     24 22.50
LFU      0.70 331 iPd    24 13.10   0.4
TME      1.05 327 iPd    24 17.00   0.2
YPE      1.33 318 iPd    24 20.80   0.2
CUSS     1.38 304 eP     24 20.70  -0.5
TPX      3.82 298 (P)    25 14.50  19.7X
SCX      5.18 314 (P)    25 31.00  17.1X
TUL     23.55 346 eP     29 02.60   1.0
        0.7s     2.80nm          3.8mb
ALQ     26.98 327 eP     29 35.00   1.0
RSSD    33.55 340 P      30 32.90   0.8
BW06    34.58 333 P      30 42.00   0.9
KVN     36.59 320 P      30 58.80   0.8
LRM     38.26 333 eP     31 12.80   0.7
SIV     39.84 136 iP     31 25.08  -0.2
                 i      31 40.00
SES     41.37 338 eP     31 38.00   0.5
FFC     42.78 349 eP     31 49.00   0.2
        0.5s     6.00nm          4.7mb
EDM     44.52 339 iPc    32 02.40  -0.6
        0.5s    15.00nm          5.1mb
SCH     45.02  18 eP     32 06.00  -0.9
FRB     52.50  11 eP     33 02.00  -2.5
YKA     52.63 345 eP     33 03.70  -1.8
        0.7s     5.60nm          4.7mb
WRA    138.21 255 PKPc   43 16.70   0.3
        0.5s     0.70nm
```

17d 04h

S.D. = 1.0 on 22 of 24 obs.

JUN 17, 1990 04h 51m 45.51± 0.14s
27.398 N ± 3.7km 65.719 E ± 2.2km
DEPTH = 14.5km (geophysicist)
5.9mb (74 obs.) 6.3Msz (29 obs.)
PAKISTAN (710)
Ms 6.4 (BRK), 6.2 (PAS). At least six people injured and damage in southern Baluchistan Province. A 13-meter deep fissure was reported in the epicentral area. Felt in the Khuzdar-Surab area. Depth from broadband displacement seismograms.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=115 Dip=80 Slip= 153
NP2: 210 63 11
Principal Axes:
T Plg=26 Azm= 70
P 11 165
Comment: The focal mechanism is poorly controlled and corresponds to strike-slip faulting with a moderate reverse component. The preferred fault plane is not determined.
RADIATED ENERGY
No. of sta: 9 Focal mech. M
Energy 3.3±0.8*10**13 Nm
MOMENT TENSOR SOLUTION
Dep 7 No. of sta: 12
Moment Tensor; Scale 10**18 Nm
Mrr= 0.47 Mtt=-1.09
Mff= 0.62 Mrt= 1.09
Mrf=-0.50 Mtf=-0.89
Principal axes:
T Val= 1.74 Plg=39 Azm= 55
N 0.06 43 276
P -1.80 22 164
Best Double Couple:Mo=1.8*10**18
NP1:Strike=207 Dip=45 Slip= 15
NP2: 106 80 134
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 19S, 49C M.W.: 4S, 8C
Centroid Location:
Origin Time 04:51:44.8 0.5
Lat 26.75N 0.05 Lon 65.25E 0.04
Dep 15.0 BDY Half-duration 4.3
Moment Tensor; Scale 10**18 Nm
Mrr= 0.44 0.03 Mtt=-1.51 0.05
Mff= 1.07 0.05 Mrt= 0.53 0.16
Mrf=-0.56 0.11 Mtf=-0.92 0.04
Principal Axes:
T Val= 1.74 Plg=29 Azm= 69
N 0.11 60 270
P -1.85 9 164
Best Double Couple:Mo=1.8*10**18
NP1:Strike=210 Dip=63 Slip= 15
NP2: 114 77 153

NDI	10.24	80	iPc	54 12.60	-2.4	
	0.7s	578.77nm			7.1mb X	
			iS	56 01.00		
MAIO	10.33	331	iPd	54 15.70	-0.6	
	0.9s	120.20nm			6.3mb	
			eS	56 51.00		
BOM	10.68	141	eP	54 19.30	-1.7	
			eS	56 05.50		
DSH	11.42	12	iPc	54 31.00	-0.1	
			eS	57 15.00		
POO	11.57	138	iPc	54 32.00	-1.2	
SHI	11.82	284	eP	54 33.00	-3.7X	
DHR	13.95	269	eP	55 04.50	-0.4	
HYB	15.46	127	eP	55 23.40	-1.4	
	1.0s	240.00nm			5.4mb	
			e	57 02.00		
			eS	58 04.00		
			e	58 26.00		
GKN	16.77	84	Pc	55 38.00	-3.6X	
FRU	17.02	23	iPc	55 43.50	-1.0	
			eS	58 50.00		
DMN	17.20	85	Pc	55 44.00	-3.2X	
RYD	17.38	265	ePc	55 29.40	-19.7X	
KER	17.40	298	eP	55 49.00	-0.5	
PKI	17.48	85	Pc	55 47.20	-3.4X	
GBA	17.55	139	Pc	55 54.30	3.0X	
	1.6s	321.90nm			5.2mb	
GUN	17.87	84	Pc	55 52.00	-3.6X	
MJMA	18.33	270	ePc	55 57.00	-4.0X	
TAB	19.44	308	iP+	56 15.00	0.5	
QASM	19.86	271	eP	56 16.30	-2.7	
KOD	20.35	145	eP	56 24.00	-0.5	
			eS	00 12.00		
AFIF	20.56	266	iPc	56 29.00	2.6	
UQSK	20.95	271	iPc	56 30.30	-0.1	
LSA	22.45	78	iPc	56 48.10	2.2	
	Z 10s	41.50um			6.2MszX	
DHJN	22.67	249	ePd	56 48.00	0.0	
KMTA	22.96	251	eP	56 52.40	1.7	
ABHA	23.01	252	eP	56 55.00	3.7X	
BKR	23.12	314	iPd	56 53.00	0.9	
			iS	01 08.00		
SHL	23.48	88	iP	56 56.00	0.3	
			iS	01 13.00		
WMQ	24.13	41	iPc	57 04.00	2.3	
	5.0s	*******nm			7.2mb X	
	Z 13s	90.80um			6.4MszX	
	E 16s	99.20um				
GAZ	25.91	299	iP	57 20.60	1.9	
WAJH	26.03	274	ePc	57 21.40	1.5	
AYN	26.22	280	ePc	57 23.30	1.7	
ATA	26.42	238	eP+	57 25.35	1.8	
TDD	26.43	239	eP+	57 25.42	1.8	
BHL	26.61	292	P	57 26.50	1.3	
			S	02 06.00		
ARO	26.65	238	iPd	57 28.70	3.0X	
DSI	26.69	286	eP	57 27.00	1.1	
HQL	27.02	281	eP	57 32.00	3.0X	
PRNI	27.02	284	eP	57 30.00	1.0	
BADA	27.12	280	eP	57 31.30	1.4	
MBH	27.15	282	eP	57 27.50	-2.6	
LFK	28.50	294	iP	57 42.40	0.0	
CSS	28.63	293	eP	57 43.00	-0.5	
KAS	29.64	306	eP	57 54.00	1.4	
AKSR	29.70	270	iPd	57 57.00	3.8X	
AGAL	29.92	270	eP	58 01.00	5.8X	
BBTK	29.95	303	eP	57 55.00	-0.5	
AKRL	29.97	270	eP	58 01.00	5.4X	
AGMR	30.15	270	eP	58 03.80	6.6X	
HLW	30.21	283	eP	58 00.00	2.3	
			ePP	58 44.00		
			ePPP	59 03.30		
			eS	03 00.00		
AWKL	30.26	270	iPd	58 08.50	10.3X	
SIM	30.68	313	eP	58 01.00	-0.7	
GTA	30.70	58	iPc	58 03.80	1.6	
	0.8s	300.00nm			6.2mb	
	Z 18s	61.80um			6.3Msz	
	E 15s	46.90um				
			PP	59 03.40		
DHLJ	30.97	285	Pc	58 24.40	20.1X	
BCK	31.15	298	eP	58 07.00	1.0	
AAE	31.33	239	iP	58 11.20	3.2X	
ELL	31.59	296	iP	58 11.00	1.0	
CHG	31.65	99	iPc	58 10.80	0.3	
	1.0s	209.00nm			6.0mb	
			eS	03 22.00		
ALT	31.78	301	eP	58 11.00	-0.6	
KSL	31.79	295	eP	58 12.30	0.8	
KHL	32.11	299	eP	58 13.00	-1.5	
BDT	32.32	101	iPc	58 16.50	0.2	
	1.1s	183.70nm			5.9mb	
HRT	32.48	304	eP	58 14.00	-3.6X	
YLV	32.64	303	iP	58 18.10	-0.9	
YER	32.93	297	eP	58 24.00	2.4	
ITU	33.02	304	iPc	58 24.00	1.8	
KMI	33.20	85	Pc	58 24.50	0.2	
	2.5s	930.00nm			6.3mb	
	Z 18s	40.50um			6.2Msz	
	N 10s	19.20um				
	E 10s	8.60um				
			PP	58 35.50		
			iS	03 45.00		
CD2	33.30	75	iPc	58 25.30	0.5	
	0.8s	400.00nm			6.4mb	
LZH	33.39	65	iPc	58 27.00	1.3	
	2.5s	4130.00nm			6.9mb X	
	Z 16s	56.90um			6.4MszX	
	E 12s	38.90um				
			pP	58 39.00	45kmX	
EDC	33.73	302	eP	58 28.00	-0.4	
NST	33.96	103	iPc	58 31.50	0.9	
SMG	34.14	297	iPc	58 33.90	2.0	
LOE	34.64	99	iPc	58 36.50	0.0	
CFR	34.71	311	eP	58 37.00	0.2	
EZN	34.80	301	iP	58 37.20	-0.4	
OBN	34.82	331	iPc	58 38.10	0.6	
	Z 13s	31.00um			6.2MszX	
			iS	04 11.00		
NNT	35.05	108	iPc	58 41.60	1.6	
APE	35.12	296	eP	58 41.30	0.9	
PPE	35.39	312	eP	58 42.50	-0.1	
BSI	35.58	122	ePc	58 45.80	1.3	
	1.0s	327.20nm			6.2mb	
RDO	35.61	303	eP	58 44.30	-0.2	
CLI	35.72	313	ePc	58 46.50	1.1	
IAS	35.75	314	eP	58 45.00	-0.6	
ISR	35.79	310	ePc	58 48.50	2.4	
VRI	35.88	311	ePc	58 45.50	-1.3	
BUC	35.90	309	iP	58 45.00	-1.9	
BUC1	35.93	309	ePc	58 50.00	2.8X	
VAM	36.12	293	iPc	58 49.00	0.1	
GYA	36.40	82	iPc	58 51.40	-0.1	
	5.0s	3100.00nm			6.4mb X	
	N 16s	46.60um				
	E 16s	23.80um				
			PP	00 13.00		
			S	04 33.00		
ATH	36.62	298	eP	58 55.20	2.1	
CMP	36.85	310	ePc	58 56.00	1.0	
NEO	37.12	300	eP	58 59.50	2.2	
VLI	37.17	295	eP	58 58.00	0.3	
DRA	37.24	309	eP	59 00.00	1.8	
XAN	37.51	69	iPc	59 01.50	0.8	
	7.0s	4200.00nm			6.3mb X	
	N 14s	24.70um				
	E 12s	20.50um				
			S	04 52.00		
VAY	37.85	303	iP	59 03.00	-0.3	
IRK	37.99	39	ePc	59 06.00	1.6	
			eS	05 04.00		
ITM	38.00	296	eP	59 05.80	1.1	
GZR	38.43	309	ePd	59 13.00	4.7X	
BTO	38.63	58	iPc	59 12.00	1.9	
	N 13s	30.50um				
			pP	59 16.00	14kmX	
			PP	00 41.00		
			S	05 07.00		
			SS	05 16.00		
SNG	38.70	115	iPc	59 11.40	0.6	
	2.0s	941.18nm			6.2mb	
SKO	38.77	304	iP	59 10.50	-0.6	
	Z 21s	18.44um			5.9Msz	
	N 20s	20.92um				
	E 22s	27.96um				
			i	59 16.60	21kmX	
			iPP	00 48.00		
			i	01 56.00		
			iS	05 10.00		
			i	05 43.00		
			iSSS	08 41.00		
			LR	22 17.00		
KBN	39.09	302	eP	59 13.00	-0.7	
VLS	39.10	298	eP	59 15.50	1.6	
OHR	39.15	302	iP	59 13.80	-0.5	
	1.3s	82.00nm			5.3mb	
			i	59 21.30	25kmX	
			i	59 27.70		
BZS	39.27	309	eP	59 15.50	0.3	
UZH	39.56	314	iPc	59 19.00	1.4	
			iS	05 24.00		
TIM	39.57	310	iPd	59 24.00	6.3X	
SRN	39.65	300	iP	59 18.50	0.1	
KEK	39.79	300	eP	59 13.00	-6.6X	
HHC	39.82	58	iPc	59 22.60	2.6	
	6.0s	5300.00nm			6.4mb X	
	Z 20s	43.90um			6.3Msz	
	N 13s	23.10um				
	E 12s	24.60um				
			S	05 20.00		
NAI	39.83	229	iPd	59 23.90	3.5X	
	3.0s	1700.00nm			6.2mb	
TIR	39.87	303	eP	59 20.50	0.2	
BEO	39.92	308	eP	59 25.00	4.4X	
LACI	40.02	303	eP	59 20.00	-1.4	
PSI	40.14	122	ePc	59 22.40	-0.3	
	1.0s	196.70nm			5.8mb	

SDA 40.21 304 eP 59 21.30 -1.7
TIY 40.34 63 iPc 59 25.90 1.7
1.0s 300.00nm 5.9mb
Z 16s 68.20um 6.6MszX
E 13s 32.80um
PP 01 04.50
PUL 40.40 333 ePc 59 25.00 0.7
eS 05 24.00
TTG 40.43 304 eP 59 24.60 -0.2
PLE 40.45 306 eP 59 25.00 -0.1
IPM 40.57 118 ePc 59 28.00 1.7
1.0s 70.60nm 5.3mb
NKY 40.67 305 eP 59 26.00 -1.0
PSZ 40.93 313 eP 59 30.40 1.4
HCY 41.00 304 eP 59 30.00 0.5
BRY 41.01 305 eP 59 29.00 -0.8
SPC 41.02 315 iP 59 30.70 0.9
QIZ 41.23 92 eP 59 32.00 0.4
N 16s 42.60um
S 05 45.00
LCI 41.24 301 P 59 29.30 -2.2
BUD 41.41 312 e(P) 59 33.00 0.2
KRA 41.44 316 eP 59 32.70 -0.3
2.0s 837.00nm 6.1mb
Z 24s 9.00um 5.6MszX
E 24s 14.40um
i 59 35.60 10kmX
i 59 44.00
e 01 19.00
eS 05 51.00
BRT 41.84 302 P 59 36.00 -0.5
ORI 42.38 300 P 59 42.40 1.5
WHN 42.41 74 iPc 59 42.50 1.3
1.0s 600.00nm 6.3mb
Z 20s 26.90um 6.1Msz
N 14s 37.00um
E 10s 9.00um
iS 06 00.00
TDS 42.46 300 P 59 41.50 0.0
HVAR 42.57 305 eP 59 41.80 -0.6
SOI 42.67 297 P 59 44.00 0.8
ZST 42.82 312 eP 59 43.50 -0.9
MGR 43.07 300 P 59 46.20 -0.3
SOP 43.09 312 iP 59 44.10 -2.5
GZH 43.09 85 eP 59 46.00 -0.9
6.0s 4200.00nm 6.4mb X
Z 17s 14.40um 5.9MszX
N 11s 13.00um
E 13s 12.50um
S 06 12.00
NUR 43.16 332 iP 59 47.00 0.1
e 01 27.00 554kmX
eS 06 08.00
ZAG 43.19 309 eP 59 47.40 0.0
PTJ 43.22 309 eP 59 47.20 -0.6
SGO 43.27 301 P 59 48.50 0.4
BJI 43.29 60 eP 59 50.00 1.7
1.5s 650.00nm 6.2mb
Z 20s 35.90um 6.3Msz
N 12s 21.90um
E 12s 30.50um
ePP 01 34.00
eS 06 20.00
eScS 09 50.00
PPI 43.32 124 ePd 59 49.50 0.7
1.0s 124.80nm 5.6mb
VKA 43.35 312 iPc 59 48.90 0.2
5.0s 1791.00nm 6.1mb X
Z 17s 10.10um 5.8MszX
i 59 57.00 27kmX
i 00 25.10
i 01 37.90
e 05 30.00
e 06 25.00
LR 24 07.00
MEU 43.59 296 P 59 50.50 -0.4
BSS 43.66 301 P 59 51.60 0.4
VBY 43.66 308 ePc 59 51.90 0.7
SUF 43.78 335 iP 59 52.00 0.1
KSP 43.89 316 ePc 59 53.00 -0.1
1.6s 224.00nm 5.7mb
ic 59 56.30 11kmX
eS 06 25.50
DUI 43.94 303 P 59 54.00 0.3
KGM 43.95 119 ePd 59 55.10 1.2
HKC 44.04 86 P 59 52.00 -2.6
TIA 44.13 65 Pc 59 56.40 1.2

1.0s 400.00nm 6.2mb
N 12s 16.30um
E 12s 7.90um
S 06 29.50
LJU 44.23 309 eP 59 55.70 -0.1
eS 06 28.80
RIY 44.25 308 eP 59 57.70 1.7
GIB 44.27 297 P 59 58.60 2.2
SDI 44.43 303 P 59 55.00 -2.6
VOY 44.67 309 eP 59 58.80 -0.7
APA 44.68 343 eP 59 59.80 0.6
iS 06 36.00
AZI 44.72 303 P 00 00.40 0.6
TRI 44.72 308 iPd 59 58.70 -1.1
iPP 00 38.00
iS 06 38.00
iSS 09 56.00
iLR 13 20.00
KMR 44.76 312 iP+ 00 00.60 0.5
iPP 01 54.40
e 06 31.00
PRU 44.82 314 eP 00 00.00 -0.5
Z 14s 22.30um 6.2MszX
N 14s 16.00um
E 12s 16.50um
e 01 55.00 683kmX
S 06 34.00
USI 44.92 298 P 00 01.40 -0.1
ARV 45.14 305 P 00 03.00 -0.3
RMP 45.26 303 P 00 05.80 1.6
CVT 45.26 297 P 00 03.90 -0.3
ASS 45.33 305 P 00 04.00 -0.8
FVI 45.49 309 P 00 05.60 -0.3
RSM 45.52 306 P 00 07.30 1.1
BHG 45.55 311 eP 00 06.00 -0.4
1.0s 100.00nm 5.7mb
WET 45.74 313 eP 00 08.20 0.3
BSD 45.78 322 iPc 00 05.00 -3.0X
0.8s 46.20nm 5.5mb
CRE 45.87 305 P 00 09.00 -0.1
SFI 45.95 306 P 00 10.90 1.3
UPP 45.98 329 iP 00 09.10 -0.5
iS 06 52.00
NJ2 46.00 71 iPc 00 11.00 0.9
0.8s 300.00nm 6.3mb
Z 20s 12.50um 5.9Msz
N 13s 18.20um
E 13s 6.90um
S 06 54.00
CLL 46.02 316 iPc 00 10.90 0.9
1.9s 230.00nm 5.8mb
iS 06 58.00
PGD 46.05 306 P 00 11.10 0.5
BRN 46.12 318 ePc 00 12.00 1.3
LWI 46.17 236 iPd 00 12.50 0.6
CTI 46.22 309 P 00 12.10 0.2
FIR 46.38 305 eP 00 14.00 1.1
iS 07 05.00
MAO 46.42 304 P 00 14.20 0.8
SOD 46.44 340 iP 00 14.30 1.2
HIA 46.53 47 iPc 00 15.73 1.6
epPc 00 20.53 16kmX
ed 00 22.18
HOF 46.56 315 iPd 00 15.80 1.4
SOTA 46.63 310 iPc 00 13.60 -1.5
1.2s 164.00nm 5.9mb
i 00 20.10 22kmX
i 00 49.60
i 07 04.50
FUR 46.67 312 eP 00 14.90 -0.4
MOX 46.77 315 iPc+ 00 16.70 0.7
1.1s 109.00nm 5.8mb
Z 14s 15.10um 6.1MszX
N 17s 22.30um
E 20s 6.90um
i 00 22.00 18kmX
MME 46.79 306 P 00 16.90 0.3
BDI 46.86 306 P 00 15.60 -1.3
GRF 46.89 314 ePc 00 17.50 0.5
1.0s 48.00nm 5.5mb
Z 20s 5.00um 5.5Msz
e 00 23.50 20kmX
e 00 31.80
e 00 38.90
e 00 52.00
iS 07 12.00
PIL 46.91 305 P 00 17.00 -0.1

SAL 46.98 308 P 00 18.40 0.7
QZH 47.22 80 Pc 00 20.00 0.1
6.0s 2900.00nm 6.5mb X
Z 16s 24.30um 6.3MszX
N 16s 20.00um
E 16s 20.20um
PP 02 13.00
S 07 14.00
COP 47.29 322 iPc+ 00 21.00 1.0
0.9s 127.73nm 6.0mb
Z 19s 13.61um 5.9Msz
OSS 47.31 309 eP 00 19.90 -0.7
DL2 47.54 61 iPc 00 23.00 0.8
1.0s 300.00nm 6.3mb
PP 02 20.00
S 07 14.00
MDI 47.56 308 P 00 21.90 -0.3
BOB 47.71 307 P 00 23.40 -0.2
VDL 47.76 309 eP 00 22.70 -1.5
KEV 47.89 343 ePc 00 23.99 -0.5
0.7s 69.40nm 5.8mb
epPc 00 28.62 16kmX
ed 00 31.11
e 02 16.00
iS 07 21.00
iSS 10 51.92
SAX 47.89 310 eP 00 24.10 -1.2
HFS 47.93 328 eP 00 24.30 -0.6
0.7s 51.40nm 5.7mb
Z 16s 10.27um 5.9MszX
LR 22 01.00
LLS 48.11 310 eP 00 25.60 -1.3
SSE 48.12 72 Pc 00 26.50 -0.3
1.0s 140.00nm 6.0mb
Z 20s 28.00um 6.2Msz
N 11s 10.40um
E 12s 15.50um
S 07 18.00
VAI 48.22 308 P 00 25.80 -1.6
PCP 48.35 306 P 00 26.29 -2.2
CKI 48.54 306 P 00 29.50 -0.4
ZLA 48.56 310 eP 00 29.50 -0.6
FIN 48.59 306 P 00 28.44 -1.9
ORX 48.77 308 P 00 29.06 -2.8
MMK 48.79 308 eP 00 30.80 -1.3
IMI 48.82 306 P 00 31.11 -1.1
FEL 48.83 311 P 00 31.67 -0.6
SNY 48.88 57 iPc 00 32.50 -0.1
1.8s 500.00nm 6.2mb
Z 18s 50.00um 6.5Msz
N 13s 25.10um
E 17s 40.00um
PP 02 29.00
S 07 30.00
sS 07 42.00
ScS 10 21.00
SBF 49.14 306 iPc 00 33.10 -1.6
ENR 49.15 306 P 00 33.46 -1.3
BBS 49.15 310 P 00 33.65 -1.0
GWF 49.16 312 P 00 34.46 -0.2
DIX 49.17 308 eP 00 34.00 -1.1
RSP 49.27 307 P 00 32.23 -3.5X
DOI 49.28 306 P 00 33.20 -2.5
WLS 49.31 312 P 00 34.58 -1.3
LSD 49.34 308 P 00 35.10 -1.3
CDF 49.36 312 P 00 34.76 -1.5
MOF 49.42 311 P 00 36.39 -0.4
ECH 49.42 311 P 00 35.53 -1.2
NPA 49.43 215 eP 00 39.00 2.0
NAO 49.49 328 P 00 35.30 -1.7
1.1s 46.60nm 5.4mb
EMS 49.51 308 eP 00 38.30 0.7
RRL 49.60 307 P 00 37.05 -1.4
LOMF 49.61 310 P 00 37.28 -1.0
LPG 49.63 308 iPc 00 37.20 -1.5
0.8s 83.95nm 5.8mb
LPL 49.64 308 iPc 00 37.20 -1.5
BSF 49.65 311 eP 00 37.00 -1.6
1.0s 66.00nm 5.6mb
BNI 49.68 307 P 00 37.50 -1.4
ANP 49.72 79 eP 00 52.00 12.6X
FRF 49.72 305 eP 00 37.10 -2.0
1.0s 40.00nm 5.4mb
KONO 49.76 326 ePc 00 37.91 -1.2
epPc 00 43.21 18kmX
ed 00 45.69
LRG 49.93 305 eP 00 38.90 -1.7

17d 05h

0.9s 36.05nm 5.4mb
WTS 49.94 316 ePd 00 41.00 0.5
1.0s 135.00nm 5.9mb
HAU 49.96 311 eP 00 39.20 -1.6
1.2s 86.30nm 5.6mb
TRO 50.07 341 iPc 00 42.70 1.4
WIT 50.11 317 eP 00 45.00 3.2X
e 01 00.00 57kmX
CN2 50.19 54 iPc 00 43.00 0.4
2.0s 900.00nm 6.4mb
Z 16s 29.00um 6.4MszX
N 13s 11.00um
E 13s 23.00um
pP 00 53.50 36kmX
PP 02 40.00
S 07 53.00
eSS 11 24.00
VITF 50.21 311 P 00 41.74 -0.9
MEM 50.32 314 iP 00 43.75 0.3
RGS 50.34 331 eP 00 45.00 1.6
ENN 50.38 315 ePd 00 45.50 1.5
1.0s 96.00nm 5.7mb
e 01 01.50 62kmX
DBN 50.95 316 eP+ 00 45.00 -3.2X
Z 18s 6.50um 5.7Msz
e 01 21.00 158kmX
ePP 02 44.00
iS 08 08.00
eSS 11 48.00
DOU 51.19 314 P+ 00 50.60 0.5
PcP 02 06.70
S 08 10.00
UCC 51.38 315 P+ 00 51.90 0.4
S 08 07.00
ScS 10 44.00
SNF 51.41 314 P 00 52.00 0.2
LOR 51.63 310 eP 00 52.10 -1.4
1.1s 114.45nm 5.7mb
SMF 51.65 309 iPc 00 52.40 -1.3
BAG 51.71 90 ePc+ 00 55.00 0.3
1.0s 184.00nm 6.0mb
eS 08 18.00
PLDF 51.81 308 P 00 54.38 -0.7
AVF 51.98 309 iPc 00 54.50 -1.7
BER 52.01 327 eP 00 58.50 2.3
LBL 52.10 307 P 00 56.46 -0.6
AGO 52.15 308 P 00 56.56 -1.0
PYM 52.25 308 P 00 58.08 -0.3
BGF 52.34 309 iPc 00 57.40 -1.5
MAF 52.54 309 iPc 00 59.40 -1.0
ETER 52.57 304 iPc 01 01.60 0.9
OCP 52.83 92 iP 01 02.20 -0.8
CAF 52.95 307 iPc 01 02.40 -1.1
MDJ 53.13 53 Pc 01 04.50 -0.3
2.7s 1800.00nm 6.5mb
Z 18s 42.60um 6.5Msz
E 15s 52.10um
pP 01 14.00 31kmX
sP 01 18.00
iS 08 36.00
RJF 53.32 308 iPc 01 05.40 -0.8
LPO 53.59 307 iPc 01 07.00 -1.2
1.5s 313.40nm 6.1mb
LFF 53.89 307 iPc 01 09.30 -1.0
LDF 54.28 312 iPc 01 11.70 -1.4
0.9s 103.20nm 5.9mb
MFF 54.40 309 iPc 01 12.50 -1.5
1.3s 223.85nm 6.0mb
EBR 54.49 302 eP 01 16.00 1.2
eS 08 52.00
FLN 54.51 312 iPc 01 13.40 -1.4
1.0s 140.65nm 5.9mb
EROQ 54.56 302 eP 01 15.10 -0.2
GRR 54.77 312 eP 01 15.40 -1.4
1.4s 178.60nm 5.9mb
JAU 54.87 305 P 01 19.86 2.1
LPF 54.92 311 eP 01 16.40 -1.4
1.1s 73.25nm 5.6mb
LHE 55.06 305 P 01 20.99 1.9
ATE 55.10 305 P 01 21.20 1.9
ISSF 55.18 305 P 01 21.88 1.9
BOH 55.33 305 P 01 22.79 1.8
ACU 55.52 300 eP 01 24.80 2.4
SHNJ 55.75 66 P 01 24.70 0.7
ECHE 55.78 301 eP 01 24.80 0.6
TIK 55.85 20 iPc 01 23.00 -1.2
eS 09 10.00
KUMJ 55.87 68 P 01 25.30 0.4
EKA 56.03 320 Pd 01 25.20 -0.6
1.2s 87.20nm 5.7mb
KRI 56.20 223 iPc 01 27.00 -0.6
KAGJ 56.23 69 eP 01 27.20 -0.3
ETOR 56.41 302 eP 01 28.60 -0.2
EALH 56.42 299 eP 01 29.90 1.1
ECRI 56.48 305 eP 01 28.60 -0.7
KBS 56.59 349 iPc 01 30.20 0.7
BST 56.91 312 P 01 31.01 -1.2
SHK 56.94 65 ePc 01 32.80 0.2
EVIA 57.12 300 iPd 01 34.00 0.1
ENIJ 57.21 298 e(P) 01 33.90 -0.6
TRT 57.25 121 ePd 01 31.10 -3.9X
GUD 58.01 303 eP 01 38.90 -1.3
TOL 58.07 302 iPc 01 39.02 -1.4
epPc 01 42.66 12kmX
ed 01 43.82
iS 09 42.20
esS 11 22.00
iSS 11 30.62
eSSS 16 05.00
AFC 58.19 299 iPc 01 42.10 0.6
EBAN 58.19 300 iPd 01 41.90 0.6
ECOG 58.20 299 eP 01 41.90 0.4
MAL 58.98 298 iP+ 01 44.00 -2.8
iS 09 54.00
JNW 59.20 339 eP 01 49.20 1.2
TSRJ 59.36 63 P 01 49.40 0.0
BUL 59.37 221 iPd 01 47.20 -2.6
iS 09 57.00
EHOR 59.39 300 iPd 01 48.30 -1.3
EPRU 59.57 299 eP 01 50.70 -0.2
EMON 59.84 306 e(P) 01 49.00 -3.7X
EJIF 59.87 298 eP 01 52.90 -0.1
ERUA 59.90 305 eP 01 51.90 -1.2
ALJ 59.93 298 eP 01 55.50 2.0
OJEN 60.01 298 eP 02 14.00 20.0X
DAV 60.05 98 eP 01 54.90 0.3
eS 10 13.00
NKM 60.06 297 iP 01 54.00 -0.3
PLAT 60.18 298 eP 01 55.00 -0.1
IFR 60.31 295 iP 01 56.00 -0.3
i 01 58.50 8kmX
VAL 60.46 316 eP 01 57.00 0.2
S 10 14.00
MTMJ 60.55 62 P 01 57.30 -0.4
EVAL 60.61 300 eP 01 57.50 -0.5
STS 60.82 306 eP 01 58.90 -0.5
MAJO 60.87 62 iPc 01 58.59 -1.2
epPc 02 03.40 16kmX
ed 02 05.55
MAT 60.87 62 iPc+ 01 58.90 -0.9
1.5s 125.00nm 5.8mb
Z 20s 4.96um 5.7Msz
iS 10 17.00
IIDJ 60.90 63 P 01 59.20 -0.8
EZAM 61.07 305 eP 01 59.70 -1.4
MKS 61.17 114 iPd 02 01.50 -0.6
NIIJ 61.32 61 P 02 01.90 -0.9
CHJJ 61.61 62 P 02 04.10 -0.7
YSS 61.92 49 iPc 02 06.00 -0.8
eS 10 32.00
AVE 62.21 295 iPc 02 10.50 1.6
i 03 07.00 248kmX
DAG 62.28 345 iPc+ 02 07.90 -0.9
0.3s 293.51nm 6.9mb X
Z 22s 16.30um 6.1Msz
E 22s 14.81um
KAKJ 62.49 61 P 02 09.60 -1.1
TIO 62.76 292 iP 02 12.00 -0.8
AKU 62.86 332 iPc 02 13.60 0.9
1.6s 253.33nm 6.1mb
Z 20s 17.73um 6.2Msz
BFT 62.98 216 iPd 02 16.00 1.8
1.5s 390.00nm 6.4mb
SLR 63.95 218 iPd 02 21.20 0.6
1.6s 250.00nm 6.1mb
Z 18s 29.10um 6.5Msz
BPI 64.44 218 iPd 02 25.30 1.4
REY 64.69 331 iP 02 26.50 1.8
KSR 64.82 219 iPc 02 26.50 0.2
1.5s 60.00nm 5.5mb
PRY 65.34 217 iPc 02 30.50 0.9
1.5s 160.00nm 6.0mb
BFS 65.69 218 iPc 02 24.50 -7.3X
1.5s 150.00nm 5.9mb
SEK 66.37 216 iPc 02 35.00 -1.2
0.4s 35.00nm 5.9mb
i 02 39.00 13kmX
SWZ 66.72 219 iPc 02 25.00 -13.4X
0.4s 42.00nm
i 02 27.00 6kmX
AAI 67.62 107 eP 02 51.50 7.3X
BLF 67.76 217 iP 02 45.00 0.0
1.5s 180.00nm 6.0mb
WIN 68.37 228 iPd 02 51.00 2.0
1.2s 70.00nm 5.7mb
Z 20s 28.00um 6.5Msz
LKO 69.12 270 P 02 52.92 -0.7
NANU 69.16 131 eP 02 53.00 -0.6
CFTV 69.19 292 iPc 02 55.20 1.3
KIC 69.76 267 P 02 56.90 -0.6
TIC 69.88 267 P 02 57.74 -0.5
LIC 70.08 267 P 02 58.82 -0.6
Z 20s 18.00um 6.3Msz
S 12 14.00
PET 70.29 40 iPc 02 59.00 -1.1
iS 12 20.00
GGC 70.57 292 iPc 03 03.80 1.5
CTFE 70.95 293 iPc 03 06.90 2.3
i 04 06.50 256kmX
TBT 72.23 294 iPc 03 14.40 2.1
CHIE 72.63 293 iPc 03 17.00 2.4
ILT 73.83 21 iPc 03 20.20 -0.7
iS 12 52.00
MEKA 73.91 132 eP 03 10.50 -11.5X
MRWA 74.07 136 eP 03 20.00 -2.9
GUMO 74.36 83 eP 03 22.50 -2.3
eS 13 00.50
GUA 74.42 83 eP 03 23.00 -2.2
Z 19s 6.37um 5.9Msz
KNA 74.66 117 eP 03 26.00 -0.5
CER 74.79 219 iPd 03 28.80 1.8
0.5s 41.00nm 5.7mb
i 03 30.00 4kmX
MTN 74.95 113 iPd 03 27.90 -0.3
0.8s 57.00nm 5.7mb
e 03 43.00 54kmX
MUN 76.14 138 eP 03 33.00 -1.7
KLB 76.82 136 eP 03 36.00 -2.5
COOL 78.46 134 eP 03 45.50 -2.1
SMY 78.88 36 P 03 50.00 0.5
1.0s 83.33nm 5.7mb
WB5 81.38 118 eP 04 02.60 -0.8
WRA 81.39 118 Pc 04 02.60 -0.9
0.4s 8.70nm 5.2mb
IMA 82.09 15 iPc 04 06.80 0.3
1.7s 287.00nm 6.1mb
FRB 82.30 341 ePc 04 07.90 0.4
ADK 84.04 34 P 04 16.00 -0.6
TTA 84.06 18 eP 04 17.20 0.5
COL 84.39 14 iPc 04 18.72 0.5
epPc 04 23.35 15kmX
ed 04 26.33
eHPP 07 33.06
ePP 07 34.38
FBA 84.39 14 P 04 18.60 0.4
e 04 23.00 14kmX
OIS 85.90 115 iPc 04 26.00 -0.4
PMR 86.96 16 P 04 31.20 0.2
pP 04 35.70 14kmX
TOA 87.20 14 eP 04 33.60 1.3
SCH 88.53 335 ePc 04 39.30 0.6
1.2s 86.00nm 5.9mb
RAB 88.76 95 e(P) 04 38.00 -2.4
KDC 89.33 19 eP 04 42.80 0.4
HYT 90.08 11 P 04 47.70 1.6
YKA 90.42 0 eP 04 47.10 -0.3
1.0s 33.10nm 5.6mb
CTA 91.08 112 iPc 04 50.90 -0.2
1.4s 55.81nm 5.7mb
iS 15 45.00
ADE 92.72 128 eP 04 58.60 0.2
STK 93.21 124 eP 04 59.00 -1.6
2.0s 28.00nm 5.3mb
eS 15 36.60
MAW 94.73 181 iP 05 07.60 0.9
1.5s 200.00nm 6.3mb
Z 20s 15.00um 6.5Msz
CBM 95.09 330 P 05 10.00 0.8
RMQ 96.11 117 eP 05 14.00 -0.1
e 09 13.00
FFC 97.53 353 eP 05 20.00 -0.2

1.0s 27.00nm 5.8mb
WNY 99.57 332 P 05 30.50 0.9
RSNY 99.72 332 P 05 32.00 1.7
Z 20s 10.73um 6.3Msz
EDM 99.72 359 eP 05 30.50 0.3
SES 102.50 358 ePdiff 05 43.00 0.6
RSCP 111.73 335 PKP 10 35.00 13.5X
Z 20s 7.34um 6.3Msz
GLD 112.67 352 PKP 10 21.00 -2.4
Z 20s 17.00um 6.6Msz
GOL 112.73 353 PKP 10 24.00 0.4
Z 20s 12.50um 6.5Msz
KVN 113.80 3 PKP 10 25.00 -0.7
LNO 114.66 344 ePKP 10 27.20 0.2
TUL 114.66 344 ePKP 10 26.80 -0.4
1.0s 9.70nm
HON 115.70 46 PKP 10 30.00 0.5
MEO 116.40 346 iPKPd 10 30.00 -0.5
CLC 117.05 3 ePKP 10 32.00 0.2
e 11 35.00
e 21 00.00
SPA 117.24 180 ePKP 10 30.50 -0.8
1.0s 28.50nm
Z 20s 5.86um 6.2Msz
e 11 40.30
ANMO 117.55 353 PKP 10 34.00 1.1
Z 22s 13.33um 6.5Msz
ALQ 117.56 353 ePKP 10 32.00 -1.0
Z 20s 16.40um 6.7Msz
GSC 117.59 2 ePKP 10 34.00 1.1
e 11 50.00
e 20 57.00
BAO 117.84 266 ePKP 10 35.00 1.1
SBB 118.16 3 ePKP 10 34.00 0.1
GLA 119.88 1 ePKP 10 39.00 1.8
e 12 01.00
e 20 49.00
SIV 129.60 272 PKP 10 56.00 -0.3
UPA 130.60 312 ePKPd 10 58.00 -0.2
Z 20s 2.13um 5.8Msz
IIJ 131.07 342 (PKP) 11 01.30 1.7
PPM 131.38 340 iPKP 11 01.30 1.1
MRX 131.49 343 ePKP 11 01.30 1.6
CCH 134.63 272 PKPd 11 07.30 1.1
ZOBO 135.97 275 PKP 11 04.00 -5.1X
1.0s 20.50nm
i 11 10.90
LR 52 18.00
LPB 136.05 274 PKP 11 06.00 -3.0X
1.1s 55.70nm
Z 16s 8.08um 6.5MszX
PKS 13 45.60
eLR 52 50.00
ARE 139.02 276 e(PKP) 11 10.00 -4.4X
ANT 140.40 265 e(PKP) 11 19.50 3.2X
PEL 142.12 250 ePKP 11 16.00 -3.3X
LNV 142.76 249 iPKPc 11 17.50 -2.7
i 11 21.10
TVO 146.42 81 PKP 11 30.00 3.1X
0.9s 80.00nm
PMO 146.43 75 PKP 11 30.10 3.2X
0.9s 95.00nm
TPT 146.66 75 PKP 11 30.70 3.5X
0.9s 85.00nm
VAH 146.77 76 PKP 11 30.90 3.5X
0.9s 70.00nm
RUV 146.96 75 PKP 11 31.60 3.9X
0.9s 70.00nm
S.D. = 1.2 on 390 of 438 obs.

• JUN 17, 1990 04h 52m 37.05± 0.98s
36.289 N ±10.7km 27.399 E ± 8.0km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)

YER 1.10 40 iPn 52 58.30 0.5
CIN 1.42 23 eP 53 03.00 0.1
SMG 1.49 343 ePb 53 03.00 -0.8
KSL 1.77 95 ePn 53 08.50 0.5
ELL 2.07 76 ePn 53 11.00 -1.4
KHL 2.64 39 ePn 53 20.00 -0.6
VAM 2.74 252 ePn 53 22.20 0.3
BCK 2.81 64 ePn 53 27.00 4.0X
ALT 3.50 37 ePn 53 34.00 1.3
S.D. = 1.0 on 8 of 9 obs.

• JUN 17, 1990 05h 00m 48.60± 1.93s
36.279 N ±20.0km 27.115 E ±10.7km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)

YER 1.27 47 ePn 01 11.20 -1.0
SMG 1.44 351 ePb 01 15.50 0.8
APE 1.50 302 ePb 01 15.30 -0.3
CIN 1.53 30 eP 01 15.00 -1.0
KSL 2.00 94 ePn 01 22.00 -0.8
ELL 2.30 77 ePn 01 27.00 -0.3
KHL 2.80 43 ePn 01 39.00 4.6X
BCK 3.02 66 ePn 01 40.00 2.5
S.D. = 1.6 on 7 of 8 obs.

• JUN 17, 1990 05h 42m 47.77± 1.08s
36.373 N ±13.5km 27.286 E ± 8.1km
DEPTH = 33.0km (normal)
DODECANESE ISLANDS (369)

YER 1.10 46 iPn 43 06.20 -0.8
SMG 1.38 345 ePb 43 10.50 -0.4
CIN 1.38 27 eP 43 11.00 0.1
APE 1.57 297 ePn 43 12.50 -1.2
KSL 1.87 97 ePn 43 16.30 -1.8
ELL 2.14 79 ePn 43 23.00 1.0
KHL 2.64 42 ePn 43 31.00 2.0
VAM 2.68 250 ePn 43 30.80 1.2
BCK 2.86 67 ePn 43 36.30 4.1X
ALT 3.49 39 ePn 43 49.00 7.8X
S.D. = 1.5 on 8 of 10 obs.

& JUN 17, 1990 06h 08m 05.40s
34.050 N 117.250 W
DEPTH = 15.0km
SOUTHERN CALIFORNIA (43)
<PAS-P>. ML 3.7 (PAS). Felt (IV) at Moreno Valley and (III) at Cedarpines Park, Chino, Corona, Lake Arrowhead, Lomo Lindo, Riverside, Rubidoux, Running Springs and San Bernardino. Also felt at Hemet.

RVR 0.12 241 iPd 08 08.70 -0.3
PEC 0.17 155 iPc 08 09.50 -0.4
PCF 0.45 271 eP 08 13.86 -0.6
VPD 0.49 241 eP 08 14.80 -0.3
S 08 21.79
PEM 0.53 283 iPc 08 15.28 -0.6
MWC 0.69 285 iPc 08 18.00 -0.8
PLM 0.77 155 iPc 08 19.30 -0.7
PAS 0.77 278 iPc 08 19.24 -0.7
S 08 29.98
SBB 0.79 323 iPc 08 19.80 -0.6
LCL 0.81 255 eP 08 21.10 0.4
PVPS 0.99 255 eP 08 23.08 -0.7
S 08 36.58
SCY 1.00 274 ePc 08 23.06 -0.8
S 08 36.92
CPE 1.17 174 iPd 08 25.50 -1.4
GSC 1.30 16 iPd 08 28.70 -0.3
HAY 1.38 104 iPd 08 29.00 -1.1
BAR 1.45 160 iPd 08 30.30 -0.7
CLC 1.79 351 iPc 08 35.20 -0.7
CBX 1.80 164 eP 08 36.40 0.2
S 08 59.50
ABL 1.81 297 eP 08 35.10 -1.4
ENX 2.22 167 ePd 08 43.81 1.7
S 09 10.60
GLA 2.26 116 eP 08 40.80 -1.9
CPBX 2.30 134 ePd 08 49.00 5.6
S 09 18.90
PBX 2.34 169 ePd 08 45.65 1.7
S 09 12.80
RDX 2.38 152 eP 08 47.60 3.0
S 09 17.41
BCH 2.60 297 eP 08 46.70 -1.0
BLP 2.66 282 eP 08 46.50 -1.9
EMX 2.66 140 ePn 08 53.50 5.1
S 09 26.10
PKEM 3.09 311 eP 08 53.50 -0.9
ECBX 3.17 144 eP 09 00.30 4.7
S 09 38.50
TNP 4.02 0 eP 09 07.40 -0.5
CMB 4.72 328 eP 09 16.00 -1.7
KVN 5.04 352 eP 09 22.00 -0.3
ALQ 8.95 81 e(P) 10 23.00 5.7
33 obs. associated

• JUN 17, 1990 06h 17m 01.93± 1.54s
36.303 N ±17.4km 27.243 E ± 9.0km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)

YER 1.18 45 ePn 17 23.60 -0.4
SMG 1.44 347 ePb 17 28.00 0.0
APE 1.57 300 ePb 17 30.00 0.0
KSL 1.90 95 ePn 17 34.00 -0.7
ELL 2.19 78 ePn 17 40.00 0.9
S.D. = 0.9 on 5 of 5 obs.

? JUN 17, 1990 06h 39m 59.61± 1.29s
7.912 S ±28.5km 117.223 E ±15.4km
DEPTH = 293.2 ± 32.2 km
3.9mb (2 obs.)
BALI SEA (278)

TRT 4.55 272 iPc 41 12.20 0.0
eS 41 18.80
MTN 14.53 111 eP 43 14.00 -0.2
e 45 46.00
NANU 14.66 186 eP 43 15.60 -0.1
eS 46 00.00
MEKA 18.64 176 iPd 43 58.40 0.2
WARB 20.26 155 iPd 44 15.00 0.7
0.4s 7.00nm 4.4mb
WB5 20.43 127 eP 44 15.10 -0.9
e 48 15.00
WRA 20.45 128 P 44 17.00 0.9
0.5s 1.10nm 3.5mb
COOL 23.15 171 eP 44 41.20 -0.8
S.D. = 0.8 on 8 of 8 obs.

• JUN 17, 1990 07h 50m 20.54± 1.05s
4.138 N ±12.4km 126.494 E ±20.6km
DEPTH = 33.0km (normal)
4.3mb (1 obs.)
TALAUD ISLANDS (263)

MNI 3.15 212 ePc 51 09.50 0.6
eS 51 50.50
MTN 17.49 165 eP 54 22.00 -1.7
WB5 25.09 162 eP 55 44.20 0.3
WRA 25.14 162 Pc 55 44.30 -0.1
MRWA 34.66 196 eP 57 09.00 -0.2
KLB 36.49 193 eP 57 24.00 -0.7
BJI 36.94 347 eP 57 28.00 -0.3
MUN 37.23 195 eP 57 30.70 -0.1
STK 38.59 159 eP 57 44.50 2.2
1.0s 5.00nm 4.3mb
S.D. = 1.2 on 9 of 9 obs.

& JUN 17, 1990 08h 16m 05.83s
61.645 N 150.601 W
DEPTH = 47.0km
SOUTHERN ALASKA (2)
<AGS-P>.

SUA 0.19 201 iP 16 14.34 0.3
iS 16 21.68
PWA 0.34 89 iP 16 15.15 0.0
SKT 0.55 308 iP 16 16.89 -0.8
PMS 0.64 128 iP 16 18.16 -0.7
PLRM 0.70 94 iP 16 18.53 -1.1
eS 16 30.85
CGLM 0.75 244 iP 16 20.17 -0.2
eS 16 31.13
CUT 0.78 11 iP 16 19.78 -0.8
Sn 16 31.06
NCG 0.78 253 iP 16 20.27 -0.5
Sn 16 31.69
GHO 0.81 80 iP 16 20.52 -0.6
eS 16 33.63
CRP 0.84 244 iP 16 21.34 -0.3
iS 16 33.44
SPU 0.84 237 iP 16 20.97 -0.5
eS 16 33.00
SML 1.09 80 iP 16 24.24 -0.8
Sn 16 39.97
SLKM 1.16 171 eP 16 24.92 -1.0
HUR 1.41 18 iP 16 29.39 -0.1
iS 16 47.28
SCM 1.57 82 eP 16 31.24 -0.5
Sn 16 51.76

17d 08h

RED	1.62	222	iP	16 32.07	-0.4
NNL	1.64	192	eP	16 33.48	0.7
SEW	1.65	159	eP	16 33.10	0.4
GLI	1.86	113	iP	16 34.03	-1.8
KTH	1.92	356	iP	16 36.28	-0.5
VZW	2.04	105	eP	16 36.92	-1.4
VLZ	2.12	102	eP	16 37.60	-1.8
TOA	2.15	76	eP	16 39.81	-0.1
CNPM	2.15	189	eP	16 38.76	-1.2
KLU	2.24	92	iP	16 39.67	-1.7
SDG	2.54	67	eP	16 45.97	0.5
PAX	2.74	59	eP	16 47.81	-0.7
CDD	3.12	210	eP	16 53.38	-0.3
CCB	3.27	22	eP	16 54.01	-1.8

29 obs. ossocioted

? JUN 17, 1990 08h 20m 54.48± 1.07s
39.502 N ± 9.9km 21.136 E ±12.2km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 3.1 (ATH).

KEK	1.05	282	ePb	21 14.20	-0.2
VLS	1.39	198	ePb	21 20.00	0.1
			eSg	21 36.00	
OHR	1.63	351	ePn	21 31.50	8.2X
VAY	2.12	31	ePn	21 30.00	-0.4
SKO	2.48	5	ePn	21 36.00	0.5

S.D. = 0.7 on 4 of 5 obs.

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* JUN 17, 1990 08h 29m 37.80± 3.73s
31.281 S ±14.1km 68.748 W ±16.5km
DEPTH = 77.7 ± 42.6 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.24	102	iPc	29 50.00	0.3
ZON	0.27	167	iPd	29 49.50	-0.4
			eS	30 01.00	
CFA	0.54	127	iPd	29 52.10	0.2
			eS	30 04.50	
RTCV	0.61	163	iPc	29 52.40	-0.2
			S	30 04.20	
RTBS	0.71	238	ePd	29 53.80	0.2
			(S)	30 06.00	
RTRS	1.27	331	ePc	30 00.20	-0.1
			eS	30 18.70	

S.D. = 0.4 on 6 of 6 obs.

& JUN 17, 1990 09h 35m 04.23s
61.995 N 152.002 W
DEPTH = 126.0km
SOUTHERN ALASKA (2)
<AGS-P>.

SKT	0.22	94	iP	35 20.91	0.7
NCG	0.60	187	iP	35 23.09	-0.8
CRP	0.73	186	iP	35 24.35	-0.6
			eS	35 40.66	
SUA	0.80	131	iP	35 25.36	-0.1
			eS	35 41.39	
SPU	0.82	182	iP	35 24.62	-0.9
CUT	0.91	62	iP	35 25.51	-0.7
			iS	35 41.89	
PWA	1.07	108	iPc	35 27.20	-0.5
PMS	1.39	122	iPc	35 30.40	-0.8
PLRM	1.42	105	iP	35 30.08	-1.4
PMR	1.42	105	iPc	35 30.10	-1.4
GHO	1.48	97	eP	35 31.14	-1.1
HUR	1.48	47	eP	35 30.78	-1.4
			eS	35 51.42	
RED	1.63	194	iP	35 33.63	-0.3
KTH	1.64	17	iP	35 31.97	-2.2
			eS	35 53.62	
SLKM	1.72	149	eP	35 34.54	-0.5
			eS	35 57.76	
SML	1.75	95	iP	35 34.13	-1.2
SVW	1.95	244	iPd	35 35.90	-1.9
TTA	2.09	299	e(P)	35 36.70	-2.9
SCM	2.22	92	eP	35 39.83	-1.4
MCK	2.24	38	eP	35 39.57	-1.9
SEW	2.27	146	eP	35 41.01	-0.8
CNPM	2.51	171	eP	35 44.34	-0.6
GLI	2.61	113	iP	35 44.10	-2.1
AUL	2.71	196	eP	35 47.05	-0.5
AUE	2.73	195	eP	35 47.43	-0.3
TOA	2.75	85	eP	35 48.30	0.2
VZW	2.77	107	eP	35 46.61	-1.8
VLZ	2.85	105	eP	35 47.41	-1.9
NEA	2.91	26	eP	35 47.54	-2.6
KLU	2.94	97	iP	35 48.91	-1.7
MCNL	3.05	203	eP	35 51.19	-0.8
WRH	3.05	34	iP	35 49.43	-2.6
SDG	3.07	77	eP	35 51.54	-0.7
PAX	3.19	69	eP	35 52.65	-1.3
CCB	3.27	34	eP	35 52.14	-2.7
FBA	3.47	31	ePd	35 54.90	-2.7
GLM	3.65	33	eP	35 57.43	-2.6
DOT	4.00	62	eP	36 02.89	-1.9
IMA	4.16	351	iPd	36 03.80	-3.1

39 obs. ossocioted

& JUN 17, 1990 10h 37m 33.75s
31.530 N 115.790 W
DEPTH = 4.0km
BAJA CALIFORNIA (48)
<ECX>. ML 2.3 (ECX).

ECBX	0.63	95	eP	37 45.15	-1.3
			S	37 53.29	
EMX	0.65	45	eP	37 45.30	-1.5
			S	37 54.06	
ENX	0.82	295	ePc	37 48.37	-1.8
			S	37 59.44	
PBX	0.83	285	iPc	37 48.22	-2.0
			S	37 59.90	
LMX	0.91	51	eP	37 49.99	-1.7
			S	38 02.59	
CPBX	0.98	25	eP	37 50.83	-2.0
			S	38 04.20	

6 obs. ossocioted

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* JUN 17, 1990 11h 38m 54.21± 2.05s
50.339 N ±18.8km 19.035 E ±15.7km
DEPTH = 10.0km (geophysicist)
POLAND (548)

SPC	1.39	145	iPn	39 20.20	0.4
			i(Sg)	39 40.20	
KSP	1.82	287	ePn	39 25.50	-0.3
	0.9s		55.00nm		
			iPg	39 28.00	
			iS	39 50.50	
			i	39 57.00	
SRO	2.57	191	e(Pn)	39 35.50	-1.1
VKA	2.73	222	iP	39 39.80	0.9
			i	40 05.30	
			i(Sg)	40 10.60	
PRU	2.91	265	Pn	39 41.50	0.1
			Pg	39 43.80	
			Sg	40 16.50	
KHC	3.74	253	ePn	39 47.20	-6.1X
			Pg	39 54.60	
			eSg	40 39.40	
CLL	3.95	287	ePg	40 07.00	10.9X
			eSg	40 56.00	
GRF	5.08	266	e(Pn)	40 08.00	-4.2X
			ePg	40 23.00	
			eSg	41 27.00	

S.D. = 1.0 on 5 of 8 obs.

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* JUN 17, 1990 12h 28m 11.65± 1.06s
40.293 N ± 9.4km 24.165 E ±10.5km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)

NEO	1.22	217	eP	28 34.00	-0.4
			eS	28 51.20	
MMB	1.34	346	iPgc	28 35.00	-1.3
RDO	1.35	50	eP	28 37.50	1.1
			eS	28 56.50	
RZN	1.46	16	iPc	28 38.00	-0.1
VAY	1.59	311	ePn	28 41.30	1.5
KDZ	1.65	35	eP	28 40.00	-0.8
PLD	1.86	12	eP	28 48.00	4.3X
DIM	2.04	30	eP	28 51.00	4.6X
PGB	2.26	0	eP	28 53.00	3.4X
VTS	2.41	343	iPd	28 52.00	0.2
PVL	3.05	16	eP	29 07.00	6.3X

S.D. = 1.2 on 7 of 11 obs.

& JUN 17, 1990 12h 48m 39.59s
62.468 N 149.183 W
DEPTH = 0.0km
CENTRAL ALASKA (1)
<AGS-P>. ML 3.5 (PMR).

CUT	0.51	263	iP	48 50.03	0.3
			iS	48 58.05	
HUR	0.55	338	eP	48 50.25	-0.4
			iS	48 58.05	
GHO	0.71	170	iP	48 53.70	0.0
			Sn	49 04.35	
SML	0.77	149	iP	48 54.97	-0.1
PLRM	0.88	178	iP	48 56.83	-0.3
			eS	49 10.12	
PMR	0.88	178	iPc	48 56.90	-0.2
	0.3s		591.70nm		
PWA	0.88	202	iPc	48 57.10	-0.1
SCM	1.08	125	iP	49 00.02	-0.9
			S	49 14.87	
SKT	1.20	247	iP	49 02.30	-0.7
PMS	1.24	188	iPc	49 02.90	-0.7
SUA	1.25	217	iP	49 03.12	-0.7
			eS	49 21.10	
MCK	1.27	5	eP	49 03.34	-0.8
KTH	1.35	325	iP	49 05.17	-0.3
			iS	49 22.63	
TOA	1.45	103	iPd	49 06.90	-0.3
SDG	1.69	86	iP	49 09.84	-0.7
			iS	49 31.80	
NCG	1.77	234	eP	49 11.34	-0.4
			SS	49 35.96	
CGLM	1.77	230	eP	49 11.25	-0.6
PAX	1.78	72	eP	49 11.38	-0.6
			eS	49 33.78	
KLU	1.83	121	eP	49 11.88	-0.7
CRP	1.85	231	iP	49 13.80	0.7
SPU	1.88	228	eP	49 13.94	0.7
			eS	49 39.30	
GLI	1.88	147	iP	49 13.85	0.6
			eS	49 38.83	
VZW	1.89	137	eP	49 12.95	-0.5
VLZ	1.91	133	eP	49 12.44	-1.2
SLKM	2.03	195	eP	49 15.33	-0.1
WRH	2.07	13	eP	49 14.96	-1.1
			eS	49 44.36	
NEA	2.12	1	eP	49 15.54	-1.2
DMW	2.23	43	eP	49 19.84	1.5
CCB	2.27	15	eP	49 17.64	-1.3
SEW	2.38	183	eP	49 21.89	1.5
FBA	2.52	14	iPc	49 21.40	-1.1
DOT	2.62	61	eP	49 24.83	1.0
NNL	2.64	204	eP	49 26.27	2.1
GLM	2.65	17	eP	49 23.00	-1.4
RED	2.68	222	eP	49 25.79	0.9
CNPM	3.12	200	eP	49 31.70	0.7
TTA	3.18	281	eP	49 30.70	-1.2
SVW	3.35	249	eP	49 38.20	3.9
TGL	3.49	117	eP	49 37.03	0.7
BALM	3.55	111	eP	49 37.51	0.2
AUL	3.73	216	eP	49 41.58	1.9
AUE	3.73	215	eP	49 42.65	3.0
IMA	4.11	334	iPc	49 44.00	-1.2
FYU	4.45	21	eP	49 48.47	-1.4
DWY	4.68	66	P	49 53.10	-0.1
KDC	5.02	201	e(P)	49 57.20	-0.7

46 obs. ossociated

? JUN 17, 1990 12h 56m 34.50±12.06s
23.752 N ±19.1km 123.025 E ±103.km
DEPTH = 33.0km (normol)
SOUTHWESTERN RYUKYU ISLANDS (246)

TWD	1.35	284	ePc	56 57.10	0.0
			eS	57 17.80	
TWC	1.37	309	iPc	56 57.50	0.0
TWF1	1.63	256	iPc	57 01.40	0.1
			eS	57 25.70	
ANP	1.98	316	eP	57 11.00	4.6X
TWG	2.02	243	ePc	57 06.90	0.0

S.D. = 0.1 on 4 of 5 obs.

% JUN 17, 1990 13h 07m 47.59± 1.00s
40.469 N ±11.6km 15.574 E ±10.2km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

SGO	0.22	294	P	07 52.00	-0.3
			eSg	07 57.50	
MGR	0.33	182	Pd	07 54.30	-0.2
			eSg	07 58.50	

BSS	0.67	299	P	08	01.20	0.4
			eSg	08	12.00	
ORI	0.78	121	P	08	02.50	-0.3
			eSg	08	13.50	
TDS	1.00	144	P	08	07.00	0.5

S.D. = 0.6 on 5 of 5 obs.

JUN 17, 1990 13h 44m 57.07± 0.36s
39.191 N ± 3.4km 23.605 E ± 2.6km
DEPTH = 24.8 ± 3.7 km
4.0mb (14 obs.)
AEGEAN SEA (365)
ML 4.2 (ATH).

NEO	0.32	291	iPgd	45	03.30	-1.1
ATH	1.22	176	ePg	45	19.40	0.8
EZN	2.20	72	iPn	45	32.20	-0.5
VAY	2.27	340	iPn	45	34.00	0.3
			i	45	36.40	
			i	45	40.40	
			iSn	46	03.40	
			iSg	46	07.80	
			Lg	46	12.20	
MMB	2.40	2	iPc	45	36.00	0.5
ITM	2.40	214	ePn	45	36.00	0.4
RDO	2.45	37	ePn	45	35.50	-0.8
VLI	2.52	192	ePn	45	37.40	0.0
VLS	2.57	248	ePn	45	39.80	1.8
KBN	2.58	305	iPnd	45	39.50	1.4
APE	2.61	144	ePn	45	38.00	-0.6
			eSb	46	18.00	
RZN	2.63	18	iPc	45	40.00	0.9
KDZ	2.82	29	iPc	45	41.00	-0.5
SRN	2.87	285	iPn	45	45.30	3.1X
OHR	2.88	313	iPn	45	43.70	1.3
			iSg	46	31.00	
			Lg	46	33.30	
SMG	2.94	119	ePn	45	43.00	-0.1
KEK	2.99	281	ePn	45	46.00	2.1
PLD	3.03	16	iPc	45	47.00	2.6
DIM	3.21	27	ePd	45	46.00	-1.0
SKO	3.23	330	iPn	45	47.40	0.1
E	10s		2.69um			
			i	46	03.00	
			i	46	31.00	
			i	46	40.00	
			Lg	47	08.00	
PGB	3.38	7	iPc	45	49.00	-0.5
VTS	3.41	355	iPc	45	51.00	1.0
EDC	3.48	69	ePn	45	50.70	-0.2
TIR	3.58	308	ePn	45	56.00	3.7X
VAM	3.81	173	ePn	45	56.50	1.0
JMB	3.98	34	eP	46	12.00	14.1X
DMK	4.11	49	iPn	45	59.10	-0.8
SDA	4.21	313	ePn	46	05.20	4.0X
YER	4.22	118	ePn	46	01.50	0.0
PVL	4.23	17	iPc	46	00.00	-1.4
PVY	4.37	322	ePn	46	05.00	1.3
			eSn	46	54.00	
LCI	4.50	286	P	46	04.50	-0.9
TTG	4.62	316	ePn	46	08.30	1.3
			eSn	47	01.50	
IVA	4.62	324	ePn	46	08.00	0.8
YLV	4.65	71	iPn	46	06.70	-0.8
IZI	4.66	74	ePn	46	07.00	-0.8
KHL	4.71	99	ePn	46	09.80	1.4
HRT	4.93	69	ePn	46	10.70	-0.8
ALT	5.06	89	ePn	46	13.00	-0.4
BRT	5.19	291	P	46	15.50	0.3
GPA	5.28	76	ePn	46	15.70	-0.8
ELL	5.55	114	ePn	46	23.00	2.7
ORI	5.59	281	P	46	21.40	0.6
TDS	5.65	277	P	46	23.00	1.4
PSN	5.65	36	eP	46	20.00	-1.6
BCK	5.76	105	iP	46	24.40	1.2
SOI	6.02	262	P	46	25.50	-1.2
BEO	6.09	338	ePn	46	36.50	8.7X
GZR	6.23	355	ePd	46	31.50	1.7
MGR	6.28	281	P	46	31.30	0.7
ISR	6.33	19	eP	46	33.00	1.8
ATN	6.45	263	P	46	31.20	-1.8
SGO	6.53	285	P	46	34.00	0.0
MLR	6.53	15	iPc	46	33.50	-0.6
BZS	6.59	348	eP	46	32.50	-2.3
HVAR	6.71	309	i(Pn)	46	34.70	-1.8
BSS	6.94	286	Pd	46	40.20	0.4
VRI	7.06	18	ePc	46	47.00	5.6X
BBTK	7.11	82	eP	46	52.00	9.7X
			e	47	18.00	
MEU	7.15	256	P	46	40.10	-2.7
			eSn	47	51.60	
DUI	7.40	292	P	46	46.10	-0.2
			eSn	47	58.50	
SDI	7.88	292	P	46	53.40	0.4
			eSn	48	14.50	
USI	8.14	270	P	46	54.60	-2.0
AZI	8.23	293	P	46	58.00	0.3
AQU	8.36	295	P	46	58.80	-0.9
ZAG	8.69	322	eP	47	04.60	0.5
PTJ	8.76	322	eP	47	03.20	-2.0
VBY	8.83	318	e(Pn)	47	14.30	8.2X
			e(Sn)	48	40.20	
ARV	9.10	302	P	47	08.00	-1.9
CEY	9.42	317	e(P)	47	15.00	0.8
			e(S)	48	54.50	
SRO	9.43	338	eP	47	16.60	2.2
LJU	9.57	319	e(P)	47	15.20	-1.0
			e(S)	49	02.00	
CRE	9.81	301	P	47	20.00	0.2
VOY	9.89	317	eP	47	19.30	-1.5
			eS	49	05.30	
ZST	10.15	335	eP	47	26.50	2.2
			e	47	30.60	
SPC	10.28	348	eP	47	25.70	-0.5
CTI	11.15	312	P	47	37.50	-0.6
KRA	11.17	348	eP	47	39.90	1.7
KHC	12.26	327	P	47	53.00	0.1
PRU	12.57	332	eP	48	02.20	5.2X
LPG	13.96	302	eP	48	23.40	7.7X
	0.8s		13.45nm		4.7mb	
LPL	13.98	302	eP	48	23.60	7.7X
	0.8s		10.75nm		4.6mb	
SMF	16.26	304	eP	48	45.80	0.5
	1.0s		12.00nm		4.0mb	
LBF	16.29	305	eP	48	44.90	-0.8
	0.8s		5.35nm		3.7mb	
LOR	16.47	306	eP	48	47.00	-1.0
	0.8s		5.35nm		3.7mb	
SSF	16.62	305	eP	48	48.80	-1.0
	0.8s		6.70nm		3.8mb	
AVF	16.62	304	eP	48	49.70	-0.2
	0.8s		13.45nm		4.1mb	
BGF	16.87	303	eP	48	53.00	-0.1
	0.9s		21.30nm		4.3mb	
MAF	16.96	301	eP	48	54.40	0.3
	0.8s		9.40nm		4.0mb	
TOL	21.31	281	eP	49	44.00	-0.1
HFS	21.88	347	eP	49	50.20	0.6
	0.5s		0.90nm		3.5mb	
Z	15s		0.10um		3.3MszX	
			LR	58	01.00	
NAO	23.08	344	P	50	03.60	2.2
	0.7s		1.60nm		3.7mb	
IFR	23.77	265	iPd	50	11.00	2.4
EKA	24.08	321	P	50	15.00	3.8X
	1.0s		9.00nm		4.3mb	
BCAO	34.90	189	iPd	51	48.50	-0.3
	0.9s		14.00nm		4.9mb	
KIC	41.49	225	(P)	52	47.60	3.8X
YKA	73.24	341	eP	56	27.80	0.3
	0.7s		0.80nm		3.9mb	

S.D. = 1.2 on 84 of 97 obs.

JUN 17, 1990 13h 52m 40.77± 0.82s
39.212 N ± 6.3km 23.687 E ± 9.3km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
ML 3.3 (ATH).

NEO	0.37	285	iPbd	52	47.50	-0.9
ATH	1.24	179	ePn	53	04.80	1.0
VAY	2.27	338	ePn	53	20.00	1.1
MMB	2.37	1	iPc	53	21.00	0.6
RDO	2.40	36	ePn	53	20.00	-0.6
ITM	2.46	215	ePn	53	19.80	-1.7
VLI	2.56	194	ePn	53	22.50	-0.5
RZN	2.59	17	iPc	53	24.00	0.3
VLS	2.63	248	ePn	53	25.00	0.9
OHR	2.91	312	ePn	53	29.00	0.9
KEK	3.05	281	ePb	53	31.50	1.6
SKO	3.24	329	ePn	53	30.00	-2.7

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

% JUN 17, 1990 14h 01m 54.33± 1.27s
15.990 N ± 7.5km 60.839 W ±13.5km
DEPTH = 31.0 ± 7.9 km
LEEWARD ISLANDS (92)
ML 2.7 (FDF).

SFG	0.43	307	eP	02	03.35	-0.4
			S	20	10.00	
MGG	0.47	261	eP	02	04.63	0.4
			S	02	12.10	
SEG	0.76	303	eP	02	08.69	-0.1
			S	02	18.20	
BBL	0.77	233	eP	02	08.53	-0.4
			S	02	18.00	
PAG	0.81	273	eP	02	09.70	0.2
			S	02	20.50	
CRM	1.23	183	eP	02	15.51	0.0
			S	02	30.70	
FDF	1.28	194	iPd	02	16.18	-0.1
			S	02	31.70	
MVM	1.43	182	eP	02	18.52	0.2
			S	02	36.50	
BPA	1.43	317	eP	02	18.69	0.3
			S	02	36.00	
BIM	1.48	189	eP	02	19.12	0.0
			S	02	37.60	

S.D. = 0.3 on 10 of 10 obs.

? JUN 17, 1990 14h 27m 42.14±15.99s
36.530 S ±137.km 69.943 W ±21.9km
DEPTH = 140.0km (geophysicist)
MENDOZA PROVINCE, ARGENTINA (139)

CHCH	2.66	347	iP	28	26.40	1.1
			iS	28	57.10	
LNV	2.84	335	iPd	28	27.50	0.0
			iS	28	57.50	
PCH	2.94	351	iPc	28	30.00	1.0
			iS	29	02.50	
FCH	3.21	355	eP	28	33.50	0.8
			iS	29	09.00	
LCCH	3.33	336	iPc	28	33.10	-0.9
			iS	29	08.10	
PEL	3.43	350	iPd	28	35.10	-0.3
			iS	29	11.10	
ROCH	3.66	346	eP	28	38.00	-0.6
JACH	3.88	352	iPd	28	41.00	-0.3
			i	29	20.50	
RTCV	4.80	14	ePc	28	53.70	0.0
			S	29	44.70	
RTBS	4.87	5	ePd	28	55.80	1.3
			S	29	46.80	
CFA	5.11	17	ePc	28	58.00	0.2
RTCB	5.12	11	eP	28	57.70	-0.3
RTLL	5.33	14	iPc	29	00.00	-0.8
RTRS	6.36	4	ePd	29	13.40	-1.2

S.D. = 0.8 on 14 of 14 obs.

? JUN 17, 1990 15h 27m 32.09±15.61s
35.311 N ±146.km 24.473 E ±35.5km
DEPTH = 10.0km (geophysicist)
CRETE (370)

VAM	0.24	293	ePg	27	36.50	-0.8
VLI	1.88	319	ePb	28	04.00	-0.5
APE	1.95	26	ePb	28	05.50	-0.1
ITM	2.78	313	ePb	28	18.30	0.9

S.D. = 1.2 on 4 of 4 obs.

JUN 17, 1990 16h 25m 20.91± 0.79s
41.801 N ± 9.3km 20.968 E ± 6.5km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)
ML 2.5 (SKO), 2.2 (TTG). Felt (III) at Gostivor, Yugoslavio.

SKO	0.39	64	ePg	25	29.00	0.1
			iSg	25	34.90	
OHR	0.70	191	iPgd	25	34.00	-0.8
			iSg	25	45.10	
			Lg	25	46.20	
PVY	1.08	317	ePg	25	39.50	-1.9
			eSg	25	54.00	
ULC	1.29	278	ePg	25	45.00	0.1
			eSg	26	01.50	
VAY	1.29	111	ePn	25	45.20	0.3
TTG	1.42	297	ePg	25	47.20	0.5
			eSg	26	05.90	

17d 16h

HCY	1.95	290	ePn	25 56.00	1.7
			eSn	26 22.70	
NEO	3.03	145	ePn	26 18.50	8.7X
VLS	3.63	185	ePb	26 22.00	3.6X
S.D. = 1.4			on	7 of 9 obs.	

? JUN 17, 1990 16h 25m 50.31± 1.17s
37.487 N ±10.9km 22.773 E ± 9.8km
DEPTH = 10.0km (geophysicist)
SOUTHERN GREECE (368)
ML 2.8 (ATH).

ITM	0.74	246	ePn	26 04.80	-0.1
VLI	0.78	170	ePn	26 06.00	0.5
			eSn	26 18.00	
ATH	0.89	57	ePn	26 07.50	0.1
			eSn	26 20.30	
VAM	2.37	151	ePn	26 29.30	-0.6
			eSn	26 58.50	
S.D. = 0.8			on	4 of 4 obs.	

JUN 17, 1990 16h 34m 50.06± 0.70s
41.797 N ± 8.3km 20.965 E ± 5.8km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)
ML 2.5 (SKO), 2.5 (TTG). Felt (III) ot Gostivor, Yugoslovio.

SKO	0.40	64	ePg	34 58.20	0.0
			iSg	35 04.10	
OHR	0.70	190	iPg	35 03.20	-0.7
			iSg	35 14.40	
			Lg	35 15.50	
PVY	1.09	318	ePg	35 08.70	-1.9
			eSg	35 24.50	
ULC	1.29	278	ePg	35 14.00	0.0
			eSg	35 30.20	
VAY	1.30	111	ePn	35 14.30	0.3
TTG	1.42	297	ePg	35 16.10	0.3
			eSg	35 35.00	
BDV	1.66	288	ePn	35 20.50	1.1
			eSn	35 44.50	
NKY	1.78	306	ePn	35 22.00	0.9
			eSn	35 47.00	
S D. = 1.1			on	8 of 8 obs.	

JUN 17, 1990 16h 46m 04.21± 0.34s
38.477 S ± 8.9km 16.454 W ± 6.8km
DEPTH = 10.0km (geophysicist)
5.3mb (29 obs.) 4.6Msz (2 obs.)
SOUTH ATLANTIC RIDGE (410)

BAO	35.86	301	eP	53 05.00	-1.3
BUL	42.86	78	iPc	54 01.00	-3.5X
			i	54 06.10	
FCH	43.40	260	eP	54 10.00	1.0
SAN	43.63	259	eP	54 10.50	0.0
PEL	43.77	260	iPc	54 11.50	-0.2
	1.1s		31.65nm	5.0mb	
LNV	44.02	258	iP	54 12.60	-0.9
SIV	45.01	287	P	54 21.70	-0.1
KRI	45.59	75	iPd	54 24.00	-2.5
CCH	48.02	282	P	54 45.80	-0.1
LKO	48.84	14	P	54 48.84	-2.9
LPB	50.03	281	P	54 55.00	-6.5X
ZOBO	50.20	281	P	55 02.00	-1.0
	1.6s		25.06nm	4.9mb	
Z	22s		0.37um	4.3Msz	
			LR	09 38.00	
SPA	51.71	180	iPc	55 13.30	-0.2
	1.8s		129.63nm	5.6mb	
Z	19s		1.05um	4.9Msz	
ARE	52.69	279	eP	55 21.00	-0.6
BCAO	53.59	45	iPd	55 24.30	-3.5X
	1.6s		130.00nm	5.7mb	
LWI	54.82	60	ePc	55 35.10	-2.0
SBA	63.92	181	e(P)	56 39.70	0.7
TIO	69.58	8	iPd	57 16.00	0.6
			i	57 23.50	
IFR	72.40	10	eP	57 25.00	-7.4X
TOL	78.81	10	eP	58 09.00	0.5
HLW	81.31	41	(P)	58 22.80	0.8
SOI	81.84	25	P	58 24.80	0.2
EPF	82.55	12	eP	58 28.30	0.0
	1.4s		34.85nm	5.3mb	
TDS	83.37	25	P	58 32.50	0.0
ORI	83.77	25	P	58 35.00	0.4
SGO	83.85	24	P	58 35.00	0.1
RMP	84.21	21	P	58 38.10	1.4
LPO	84.30	13	eP	58 37.30	0.2
	1.2s		17.85nm	5.2mb	
SDI	84.44	22	P	58 38.00	0.1
LFF	84.47	12	eP	58 38.50	0.6
	1.2s		17.85nm	5.2mb	
AZI	84.59	22	P	58 39.00	0.5
DUI	84.59	23	P	58 39.00	0.3
CAF	84.69	13	eP	58 39.00	-0.1
	1.4s		21.80nm	5.2mb	
RJF	84.96	13	eP	58 40.60	0.2
	1.2s		20.85nm	5.2mb	
PII	85.39	19	P	58 41.00	-1.5
BNI	85.72	16	P	58 45.00	0.6
LSF	85.88	12	eP	58 45.40	0.4
	1.6s		55.95nm	5.5mb	
MAF	86.03	13	eP	58 46.20	0.5
	1.5s		20.90nm	5.1mb	
TCF	86.03	13	eP	58 46.30	0.5
	1.6s		34.20nm	5.3mb	
LPG	86.16	16	eP	58 47.00	0.2
	1.2s		11.90nm	4.9mb	
LPL	86.18	16	eP	58 46.80	0.0
	1.2s		11.90nm	4.9mb	
BGF	86.40	13	eP	58 47.90	0.4
	1.4s		19.60nm	5.1mb	
SMF	86.67	14	eP	58 49.10	0.2
	1.3s		21.65nm	5.2mb	
AVF	86.72	13	eP	58 49.30	0.2
	1.4s		34.85nm	5.4mb	
SSF	87.01	14	eP	58 50.60	0.1
	1.2s		14.90nm	5.1mb	
LBF	87.02	14	eP	58 50.40	-0.2
	1.4s		19.60nm	5.1mb	
MDI	87.11	18	P	58 50.00	-0.9
SKO	87.19	27	eP	58 50.50	-1.0
LPF	87.22	10	eP	58 52.00	0.6
	1.4s		43.55nm	5.5mb	
LOR	87.27	14	eP	58 51.90	0.1
	1.4s		13.05nm	5.0mb	
GRR	87.59	10	eP	58 53.30	0.1
	1.4s		26.15nm	5.3mb	
CTI	87.85	19	P	58 55.00	0.3
LDF	87.90	11	eP	58 55.10	0.4
	1.4s		34.85nm	5.5mb	
FLN	88.01	10	eP	58 55.40	0.2
	1.4s		47.90nm	5.6mb	
CEY	88.31	21	e(PKP)	58 57.00	0.2
BSF	88.39	15	eP	58 57.10	-0.2
VOY	88.43	21	e(PKP)	58 57.30	-0.2
LJU	88.62	21	e(PKP)	58 57.50	-0.8
FVI	88.65	20	P	58 58.60	0.3
CDF	89.04	16	eP	59 00.50	0.2
	1.6s		37.30nm	5.4mb	
DOU	90.13	13	Pc	59 06.20	1.0
SNF	90.47	13	P	59 07.80	1.0
MEM	90.88	14	P	59 05.70	-2.9
ENN	91.02	14	eP	59 10.00	0.7
	1.4s		36.00nm	5.5mb	
GRF	91.13	18	eP	59 10.40	0.5
	1.6s		70.00nm	5.7mb	
			e	59 17.30	
			e	59 29.80	
KHC	91.20	19	P	59 10.30	0.1
ZST	91.31	22	eP	59 11.30	0.6
			e	24 22.60	
SRO	91.33	23	iP	59 11.00	0.2
PRU	92.23	19	eP	59 15.50	0.6
			e	59 22.00	
CLL	93.06	18	iPc	59 18.90	0.2
	1.6s		18.00nm	5.2mb	
SPC	93.14	23	eP	59 19.60	0.2
KSP	93.48	20	eP	59 21.50	0.9
SUF	106.48	19	iPdiff	00 22.50	3.5X
	0.8s		5.70nm	5.7mb	
YKA	126.90	325	ePKP	05 15.10	6.2X
	1.0s		1.10nm		
FBA	141.40	329	(PKP)	05 27.60	-8.5X
BJI	143.62	72	ePKP	05 41.00	0.3
S.D. = 0.9			on	69 of 76 obs.	

* JUN 17, 1990 16h 47m 48.45± 1.59s
10.625 N ± 7.5km 63.244 W ±19.2km
DEPTH = 25.8 ± 9.4 km
3.7mb (1 obs.)
NEAR COAST OF VENEZUELA (97)

TCE	1.47	87	eP	48 13.90	0.5
			eS	48 33.76	
TPP	1.79	100	eP	48 18.73	0.6
			eS	48 51.37	
TRN	1.81	89	eP	48 16.85	-1.5
			eS	48 43.98	
TBH	2.14	94	eP	48 23.96	0.7
			eS	48 56.78	
GRW	2.18	45	eP	48 24.25	0.5
			eS	48 51.44	
SVB	3.27	36	eP	48 39.60	0.3
SLB	3.84	34	eP	48 47.53	0.2
			eS	49 34.35	
BIM	4.41	29	eP	48 55.55	0.1
MVM	4.53	30	eP	48 56.17	-1.0
FDF	4.57	26	eP	48 57.15	-0.6
SIV	26.53	175	P	53 25.60	-0.6
YKA	63.43	336	eP	58 18.80	0.8
	0.9s		0.60nm	3.7mb	
S.D. = 0.9			on	12 of 12 obs.	

JUN 17, 1990 17h 17m 43.16± 0.19s
27.302 N ± 4.8km 65.548 E ± 2.8km
DEPTH = 15.3km (10 depth phases)
5.3mb (68 obs.) 5.2Msz (12 obs.)
PAKISTAN (710)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 24C
Centroid Locotion:
Origin Time 17:17:49.3 0.4
Lot 27.34N FIX;Lon 65.62E FIX
Dep 15.0 FIX Half-durotion 2.2
Moment Tensor; Scale 10**17 Nm
Mrr= 0.37 0.07 Mtt=-1.87 0.10
Mff= 1.50 0.10 Mrt=-0.62 0.25
Mrf=-1.24 0.29 Mtf=-1.25 0.08
Principal Axes:
T Val= 2.43 Plg=28 Azm= 78
N 0.19 55 217
P -2.62 19 337
Best Double Couple:Mo=2.5*10**17
NP1:Strike=115 Dip=56 Slip= 173
NP2: 209 85 34

QUE	3.13	23	iPd	18 34.80	1.8
MAIO	10.34	332	iPd	20 13.20	-0.8
	0.8s		24.89nm	5.6mb	
			eS	22 55.00	
NDI	10.41	80	iPc	20 11.00	-3.8X
	0.6s		180.00nm	6.6mb X	
BOM	10.71	140	eP	20 14.60	-4.3X
			eS	22 01.40	
POO	11.60	137	iPc	20 30.00	-1.2
BRF	13.44	268	ePn	20 53.10	-2.6
			eSn	23 24.50	
KSH	14.91	33	eP	21 13.00	-2.1
			S	23 58.00	
HYB	15.53	127	eP	21 21.00	-2.1
	1.0s		180.00nm	5.3mb	
			e	24 32.00	
GKN	16.93	83	P	21 36.00	-5.1X
RYD	17.22	266	ePd	21 42.00	-2.7
KER	17.32	298	eP	21 46.00	0.1
DMN	17.36	84	P	21 41.90	-4.8X
GBA	17.58	138	Pd	21 51.30	2.1
	6.1s		45.80nm	3.8mb X	
PKI	17.64	85	P	21 45.50	-4.7X
GUN	18.03	83	P	21 50.60	-4.5X
MJMA	18.18	270	ePc	21 54.80	-1.8
TAB	19.38	308	eP	22 11.00	-0.4
QASM	19.71	272	ePd	22 14.30	-0.7
KOD	20.36	144	eP	22 23.40	1.2
			eS	26 08.00	
AFIF	20.40	266	ePc	22 26.00	3.7X
UQSK	20.80	271	eP	22 28.00	1.6
DHJN	22.50	249	ePd	22 45.50	1.7
LSA	22.61	78	P	22 46.50	1.4
N	10s		2.48um		
E	10s		1.56um		
KMTA	22.78	251	eP	22 48.70	2.2
ABHA	22.84	252	eP	22 58.80	11.7X
SHL	23.63	88	iP	22 54.00	-0.7
			iS	27 04.00	
WMQ	24.30	42	iPc	23 02.30	1.3
	2.0s		2800.00nm	6.5mb X	
Z	16s		14.60um	5.6MszX	

EDR No. 6-90
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

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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.

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

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	N 13s	8.30um					
	E 13s	3.90um					
BHL	26.50	292 P		23	26.00	4.2X	
		S		28	14.00		
PRNI	26.90	284 eP		23	30.00	4.6X	
BADA	26.99	280 eP		23	31.30	5.1X	
MBH	27.02	283 eP		23	32.00	5.6X	
LFK	28.40	294 eP		23	41.00	2.0	
CSS	28.53	294 eP		23	40.50	0.4	
KAS	29.57	307 eP		23	50.50	0.9	
GTA	30.88	58 iPc		24	01.80	0.6	
	1.0s	100.00nm				5.6mb	
	Z 17s	7.10um				5.4MszX	
	E 14s	4.70um					
		S		29	05.50		
ELL	31.50	296 iP		24	08.00	1.3	
ALT	31.70	301 eP		24	08.00	-0.4	
CHTO	31.79	98 P		24	08.90	-0.4	
BDT	32.45	101 eP		24	14.30	-0.6	
	1.0s	41.40nm				5.3mb	
KMI	33.36	85 eP		24	22.50	-0.7	
	1.5s	120.00nm				5.6mb	
	Z 16s	4.10um				5.2MszX	
		S		29	43.00		
CD2	33.47	75 P		24	23.20	-0.6	
	1.0s	100.00nm				5.7mb	
	Z 14s	3.60um				5.2MszX	
	E 11s	3.10um					
LZH	33.57	65 Pc		24	25.00	0.2	
	1.5s	150.00nm				5.7mb	
	Z 18s	7.00um				5.4Msz	
	N 12s	2.20um					
	E 12s	3.30um					
		pP		24	30.00	17km	
		PP		25	35.00		
		eS		29	41.00		
		SS		31	55.00		
NST	34.09	103 iPc		24	30.00	0.8	
LOE	34.77	99 eP		24	34.20	-1.0	
NNT	35.17	108 eP		24	37.20	-1.3	
RDO	35.53	303 eP		24	41.30	-0.1	
VRI	35.83	312 ePd		24	45.50	1.6	
BUC	35.84	309 eP		24	50.00	6.0X	
VAM	36.02	293 eP		24	46.00	0.4	
GYA	36.57	82 P		24	49.80	-0.6	
	N 16s	6.10um					
	E 16s	2.50um					
		S		30	26.00		
CMP	36.79	310 ePc		24	55.00	3.0X	
VLI	37.08	296 eP		24	57.00	2.5X	
XAN	37.69	69 Pc		24	59.50	-0.2	
	N 14s	2.70um					
	E 12s	2.10um					
		S		30	49.00		
VAY	37.77	303 eP		25	01.70	1.5	
ITM	37.90	296 eP		25	00.80	-0.6	
SKO	38.70	304 eP		25	07.00	-1.0	
SNG	38.80	115 eP		25	10.30	1.2	
BTO	38.81	58 P		25	10.50	1.4	
	N 14s	3.10um					
	E 15s	3.20um					
		pP		25	15.50	17km	
		PP		26	42.00		
		eS		31	08.00		
VLS	39.01	298 eP		25	10.00	-0.7	
BZS	39.22	310 eP		25	13.00	0.7	
HHC	40.00	58 P		25	20.60	1.6	
	1.4s	310.00nm				5.8mb	
	Z 18s	4.20um				5.3Msz	
	N 12s	2.60um					
	E 12s	2.00um					
		PP		26	58.50		
PSI	40.22	122 ePd		25	20.50	-0.4	
	1.1s	98.00nm				5.4mb	
TIY	40.51	63 iPc		25	23.80	0.6	
	1.1s	100.00nm				5.4mb	
	Z 15s	5.80um				5.6MszX	
	E 13s	2.80um					
		PP		27	05.50		
		SS		31	37.00		
IPM	40.66	117 ePd		25	26.00	1.4	
SPC	40.98	315 iP		25	28.50	1.5	
QIZ	41.37	92 eP		25	29.00	-1.4	
KRA	41.40	316 eP		25	30.50	0.3	
	0.8s	47.00nm				5.3mb	
	Z 18s	1.90um				5.0Msz	
	E 20s	3.30um					

SRO	41.90	312 iP		25	34.90	0.6	
ORI	42.30	300 P		25	42.00	4.2X	
TDS	42.37	300 P		25	40.00	1.6	
WHN	42.58	74 iPc		25	40.50	0.4	
	1.0s	100.00nm				5.5mb	
	Z 20s	2.90um				5.2Msz	
	E 14s	3.70um					
		sP		25	54.50		
		eS		32	02.00		
SOI	42.58	298 P		25	44.00	4.0X	
ZST	42.78	313 eP		25	41.90	0.4	
MGR	42.99	301 P		25	44.00	0.6	
SOP	43.04	312 iP		25	42.00	-1.7	
ATN	43.05	298 P		25	50.00	6.1X	
ZAG	43.14	309 e(P)		25	45.80	1.3	
PTJ	43.16	309 eP		25	44.00	-0.8	
NUR	43.17	332 iP		25	45.00	0.5	
	1.0s	56.00nm				5.3mb	
		eS		32	12.00		
SGO	43.19	301 P		25	46.00	1.0	
PPI	43.39	124 eP		25	47.50	0.6	
BJI	43.47	60 eP		25	48.50	1.2	
	1.0s	78.00nm				5.4mb	
	Z 16s	4.70um				5.5MszX	
	N 13s	2.65um					
	E 11s	2.08um					
		ePP		27	34.00		
		eS		32	19.00		
		eSS		35	28.00		
BSS	43.58	301 P		25	48.80	0.7	
VBY	43.60	308 eP		25	51.70	3.4X	
SUF	43.80	335 iP		25	49.80	0.2	
KSP	43.86	316 iPd		25	51.10	0.8	
	1.1s	36.00nm				5.1mb	
		i		26	08.20	68kmX	
		eS		32	20.00		
DUI	43.87	303 P		25	51.50	0.9	
KGM	44.03	118 eP		25	53.50	1.4	
LJU	44.17	309 eP		25	53.50	0.6	
GIB	44.18	297 P		25	56.00	2.8X	
CEY	44.21	309 eP		25	53.50	0.3	
TIA	44.31	65 Pc		25	55.10	1.0	
	Z 20s	3.00um				5.2Msz	
	N 10s	0.90um					
	E 11s	1.40um					
SDI	44.35	303 P		25	54.00	-0.5	
MCT	44.51	297 P		25	59.10	3.2X	
VOY	44.61	309 eP		25	56.30	-0.3	
AZI	44.64	303 P		25	58.50	1.8	
TRI	44.66	308 eP		25	59.70	2.8X	
		e		32	37.00		
		e		39	12.00		
PRU	44.77	315 P		25	57.60	-0.1	
	Z 20s	2.00um				5.0Msz	
	N 13s	1.40um					
	E 18s	1.40um					
		e		26	01.70	14km	
		PP		27	44.80		
		eS		32	34.00		
		eSS		36	00.00		
USI	44.83	298 Pc		26	04.70	6.4X	
ARV	45.07	305 P		26	01.00	0.7	
KHC	45.24	313 P		26	01.60	0.1	
	1.0s	14.00nm				4.9mb	
	Z 18s	1.30um				4.9Msz	
	N 18s	1.80um					
	E 19s	1.00um					
ASS	45.26	305 P		26	02.50	0.7	
FVI	45.44	310 Pc		26	03.30	0.3	
BHG	45.50	311 iPc		26	04.00	0.4	
	0.9s	41.00nm				5.4mb	
BSD	45.76	322 iPd		26	03.00	-2.4	
	0.6s	28.00nm				5.4mb	
CRE	45.80	305 P		26	10.00	3.9X	
SFI	45.89	306 P		26	09.70	3.1X	
PGD	45.98	306 Pc		26	08.90	1.3	
CLL	45.99	316 iPc		26	08.20	0.9	
	0.9s	27.00nm				5.2mb	
	Z 17s	1.00um				4.8MszX	
		eS		32	52.00		
UPP	45.99	329 iP		26	06.20	-0.9	
		iS		32	54.00		
LWI	45.99	236 iPd		26	14.80	6.8X	
CTI	46.17	309 P		26	08.50	-0.4	
NJ2	46.17	71 Pc		26	09.00	0.0	
	Z 16s	1.40um				5.0MszX	
FIR	46.31	306 e(P)		26	16.00	6.1X	

SOD	46.48	340 iP		26	11.00	0.0	
SOTA	46.57	310 iPd		26	11.10	-1.1	
	0.7s	24.30nm				5.3mb	
		i		26	18.00	23km	
		i		26	26.30		
		i		26	39.40		
FUR	46.62	312 eP		26	12.30	-0.1	
MME	46.73	306 P		26	14.80	1.2	
MOX	46.74	315 iPd		26	14.00	0.8	
	0.9s	42.00nm				5.5mb	
	Z 14s	1.90um				5.2MszX	
	N 20s	2.40um					
	E 17s	1.50um					
BDI	46.80	306 P		26	13.80	-0.1	
GRF	46.85	314 iPd		26	15.10	0.9	
	0.9s	23.00nm				5.2mb	
	Z 22s	0.70um				4.6Msz	
		ec		26	18.20	10km	
OSS	47.26	309 ePd		26	17.10	-0.5	
MDI	47.50	308 Pd		26	19.30	0.0	
BOB	47.64	307 P		26	23.90	3.3X	
VDL	47.71	309 ePc		26	20.50	-0.7	
DL2	47.72	61 eP		26	25.40	4.3X	
	1.0s	100.00nm				5.8mb	
	Z 16s	2.70um				5.3MszX	
	N 14s	1.80um					
	E 14s	1.40um					
SAX	47.84	310 ePc		26	21.70	-0.7	
HFS	47.93	328 eP		26	21.50	-1.0	
	0.4s	9.40nm				5.2mb	
	Z 17s	1.24um				5.0MszX	
		LR		46	31.00		
KEV	47.93	343 iP		26	23.00	0.6	
	0.7s	32.00nm				5.5mb	
		i		26	28.00	17km	
LLS	48.05	310 ePd		26	23.00	-0.9	
TMA	48.10	309 ePc		26	24.40	0.1	
VAI	48.16	308 Pc		26	23.40	-1.1	
PCP	48.28	307 P		26	27.59	2.0	
SSE	48.29	72 P		26	26.00	0.3	
	1.0s	19.00nm				5.1mb	
	Z 17s	2.80um				5.3MszX	
	E 12s	1.70um					
		S		33	32.00		
SLE	48.45	311 ePc		26	26.10	-0.7	
ZLA	48.50	310 ePc		26	26.40	-0.8	
FIN	48.52	306 P		26	29.64	2.3	
TNS	48.69	314 ePd		26	29.00	0.4	
ORX	48.70	308 P		26	26.77	-2.1	
MMK	48.73	309 ePd		26	29.00	-0.2	
IMI	48.75	306 P		26	27.08	-2.1	
SNY	49.06	57 Pc		26	30.00	-1.5	
	1.6s	100.80nm				5.6mb	
	Z 18s	5.20um				5.6Msz	
	N 13s	3.10um					
	E 15s	2.90um					
SBF	49.08	306 eP		26	30.90	-0.8	
	0.8s	24.20nm				5.3mb	
ENR	49.09	306 P		26	30.67	-1.1	
DIX	49.12	309 ePc		26	31.60	-0.6	
RSP	49.21	307 P		26	30.26	-2.5	
DOI	49.21	306 P		26	29.90	-2.8	
LSD	49.28	308 P		26	32.92	-0.6	
CDF	49.31	312 eP		26	32.40	-1.0	
	0.8s	8.05nm				4.8mb	
NAO	49.49	328 P		26	30.60	-3.9X	
	0.8s	20.40nm				5.2mb	
RRL	49.54	307 P		26	34.36	-1.1	
LPG	49.57	308 eP		26	34.90	-0.8	
	0.8s	22.85nm				5.2mb	
LPL	49.58	308 eP		26	34.90	-0.8	
	0.8s	29.55nm				5.3mb	
BSF	49.60	311 eP		26	34.70	-1.0	
	0.8s	13.45nm				5.0mb	
BNI	49.62	307 Pc		26	35.10	-0.8	
WTS	49.90	316 eP		26	39.00	1.2	
	1.0s	27.00nm				5.2mb	
HAU	49.91	311 eP		26	37.10	-0.9	
	0.8s	9.40nm				4.8mb	
WIT	50.08	317 eP		26	41.00	1.9	
BCAO	50.21	252 iPc		26	40.50	-0.2	
	0.8s	35.00nm				5.4mb	
		ic		26	42.50	7km	
		ic		26	50.00		
MEM	50.28	314 P		26	41.40	0.7	
CN2	50.37	54 Pc		26	42.00	0.5	
	Z 15s	4.70um				5.6MszX	

17d 17h

N 13s 1.10um
E 13s 2.70um
pP 26 47.00 17km
eS 33 52.00
DOU 51.15 314 P 26 48.30 1.0
1.0s 36.10nm 5.3mb
S 34 09.00
e 40 23.00
UCC 51.34 315 P 26 51.00 2.3
SNF 51.37 314 iPc 26 49.97 1.0
LBF 51.50 310 eP 26 49.40 -0.7
1.2s 38.70nm 5.2mb
LOR 51.58 310 eP 26 49.80 -0.9
1.0s 22.00nm 5.0mb
SMF 51.59 309 eP 26 50.20 -0.6
0.8s 32.25nm 5.3mb
PLDF 51.76 308 P 26 51.48 -0.6
SSF 51.82 310 eP 26 51.80 -0.7
1.0s 30.00nm 5.2mb
AVF 51.93 309 eP 26 52.40 -0.9
0.8s 12.75nm 4.9mb
LBL 52.04 307 P 26 52.95 -1.2
AGO 52.09 309 P 26 54.03 -0.6
PYM 52.19 308 P 26 54.43 -1.0
BGF 52.28 309 eP 26 55.20 -0.8
0.8s 15.45nm 5.0mb
MAF 52.48 309 eP 26 57.00 -0.5
0.8s 8.75nm 4.7mb
TCF 52.73 309 eP 26 58.90 -0.5
1.2s 23.80nm 5.0mb
CAF 52.89 307 eP 27 00.20 -0.4
0.9s 18.00nm 5.0mb
LSF 53.20 309 eP 27 02.10 -0.7
1.0s 20.00nm 5.0mb
RJF 53.26 308 eP 27 03.10 -0.1
1.0s 24.00nm 5.1mb
MDJ 53.31 53 Pc 27 02.00 -1.6
Z 16s 3.60um 5.5MszX
E 14s 3.90um
LPO 53.53 307 eP 27 04.80 -0.4
1.0s 16.00nm 5.0mb
LFF 53.83 307 eP 27 07.00 -0.4
1.0s 32.00nm 5.3mb
LDF 54.23 312 eP 27 09.60 -0.7
0.8s 10.75nm 4.9mb
MFF 54.34 309 eP 27 10.30 -0.8
1.0s 14.00nm 4.9mb
EBR 54.41 302 eP 27 11.00 -0.7
eS 34 56.00
FLN 54.46 312 eP 27 11.20 -0.8
1.0s 28.00nm 5.2mb
EROO 54.48 302 e(P) 27 13.00 0.8
GRR 54.72 312 eP 27 13.40 -0.5
0.8s 5.35nm 4.6mb
LPF 54.86 311 eP 27 14.20 -0.8
0.8s 5.35nm 4.6mb
ECHE 55.70 301 e(P) 27 21.30 0.1
EKA 56.01 320 P 27 22.00 -1.1
0.9s 17.80nm 5.1mb
KRI 56.03 223 eP 27 23.20 -0.7
ETOR 56.33 303 e(P) 27 28.00 2.2
ECRI 56.41 305 e(P) 27 26.20 -0.1
KBS 56.65 349 iPc 27 28.20 0.7
EVIA 57.03 300 e(P) 27 31.00 0.2
GUD 57.93 303 eP 27 37.00 -0.2
TOL 57.99 302 eP 27 37.50 0.1
eS 35 44.00
EBAN 58.11 300 eP 27 40.40 2.1
BUL 59.19 221 iPc 27 44.20 -2.0
i 27 47.10 10km
EJIF 59.78 298 e(P) 27 52.00 2.1
NKM 59.97 297 eP 27 52.00 0.8
IFR 60.21 295 eP 27 49.00 -4.1X
i 27 56.00 23km
MTMJ 60.72 62 P 27 54.90 -1.5
MAT 61.05 61 eP 27 56.00 -2.5
1.2s 21.88nm 5.2mb
eS 36 14.00
IIDJ 61.07 63 P 27 58.30 -0.5
NIIJ 61.50 61 P 28 00.80 -0.8
CHJJ 61.79 62 P 28 01.00 -2.6
DAG 62.34 345 eP 28 06.00 -0.7
0.8s 28.36nm 5.5mb
TIO 62.66 292 iP 28 10.30 0.7
KAKJ 62.67 61 P 28 07.30 -2.1
BFT 62.81 216 iPc 28 12.00 1.3
1.0s 75.00nm 5.8mb

AKU 62.87 332 iP 28 12.20 1.9
1.2s 75.00nm 5.7mb
SLR 63.79 217 iPd 28 21.50 4.5X
0.9s 33.61nm 5.5mb
LKO 68.97 270 P 28 52.04 1.8
1.0s 22.50nm 5.3mb
TIC 69.73 267 P 28 55.40 0.5
LIC 69.92 267 P 28 56.66 0.6
Z 19s 1.75um 5.3Msz
GUMO 74.52 83 eP 29 24.00 0.7
eS 39 02.50
PJG 74.52 83 eP 29 24.50 1.2
CER 74.62 219 iPd 29 28.40 4.9X
0.6s 21.43nm 5.4mb
MTN 75.05 113 iPc 29 25.90 -0.4
WB5 81.47 117 eP 30 00.20 -1.2
WRA 81.48 118 Pd 30 01.80 0.3
1.4s 37.00nm 5.2mb
IMA 82.22 15 eP 30 04.80 0.0
1.2s 37.70nm 5.4mb
FRB 82.34 341 ePc 30 05.80 0.6
TTA 84.20 18 e(P) 30 16.00 1.1
FBA 84.52 14 eP 30 17.20 0.9
PMR 87.09 16 e(P) 30 30.30 1.2
1.5s 65.20nm 5.6mb
TOA 87.33 14 eP 30 32.70 2.3
YKA 90.52 0 eP 30 45.20 -0.1
1.1s 11.40nm 5.1mb
MAW 94.63 181 iP 31 07.00 3.2X
FFC 97.61 353 ePc 31 20.10 2.1
1.2s 19.00nm 5.6mb
RSSD 108.29 352 PKP 36 10.00 -2.5
BW06 110.12 356 PKP 36 15.50 -0.6
1.0s 5.50nm
ALQ 117.63 353 ePKP 36 31.00 0.4
Z 22s 1.39um 5.5Msz
SIV 129.45 271 PKP 36 54.00 0.5
CCH 134.48 272 (PKP) 37 04.00 0.6
ZOBO 135.82 275 PKP 37 05.00 -1.3
Z 20s 0.70um 5.4Msz
LR 23 34.00
LPB 135.90 274 PKP 37 07.00 0.7
eLR 28 10.00
PMO 146.60 75 iPKP 37 30.50 5.8X
1.1s 80.00nm
TPT 146.83 75 iPKP 37 32.50 7.5X
1.1s 100.00nm
VAH 146.94 76 iPKP 37 32.50 7.3X
1.1s 90.00nm
RUV 147.13 75 iPKP 37 34.40 8.9X
1.1s 75.00nm
S.D. = 1.2 on 205 of 243 obs.

JUN 17, 1990 17h 27m 18.40± 0.54s
33.406 S ± 4.9km 71.196 W ± 5.8km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

LCCH 0.32 257 iPd 27 27.00 0.6
iS 27 34.50
SAN 0.45 96 iPc 27 28.60 0.3
iS 27 37.50
ROCH 0.46 20 iPc 27 27.80 -0.8
iS 27 36.00
PEL 0.50 59 iPc 27 29.00 -0.1
iS 27 38.00
LNV 0.58 198 iPd 27 29.70 -0.4
iS 27 39.50
PCH 0.61 111 iP 27 30.70 0.1
iS 27 41.00
CHCH 0.69 139 iPc 27 31.50 -0.3
iS 27 43.50
FCH 0.76 84 iPc 27 32.50 -0.5
iS 27 44.50
JACH 0.88 35 iP 27 33.50 -1.0
iS 27 45.50
RTBS 2.28 41 ePc 27 55.20 0.8
S 28 25.00
RTCV 2.72 56 eP 28 01.00 0.2
RTCB 2.79 47 eP 28 02.00 0.3
CFA 3.08 55 ePc 28 07.00 1.2
RTLL 3.10 49 ePc 28 06.10 -0.1
RTRS 3.55 25 ePc 28 12.30 -0.2
S.D. = 0.6 on 15 of 15 obs.

% JUN 17, 1990 17h 46m 32.87± 2.00s
44.184 N ± 8.0km 5.952 E ±22.0km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.2 (LDG).

LRG 0.79 158 Pg 46 48.20 0.0
Sg 46 58.80
FRF 0.80 141 Pg 46 47.50 -0.9
Sg 46 57.90
LMR 0.94 154 Pg 46 51.40 0.6
Sg 47 03.40
SBF 1.12 106 Pg 46 54.20 0.3
Sg 47 08.80
LPL 1.44 22 Pg 46 59.20 -0.1
S.D. = 0.8 on 5 of 5 obs.

& JUN 17, 1990 17h 55m 37.84s
63.511 N 150.718 W
DEPTH = 8.0km
CENTRAL ALASKA (1)
<AGS-P>.

KTH 0.10 295 iP 55 40.09 -0.3
HUR 0.73 137 iP 55 51.85 -0.5
eS 56 01.72
MCK 0.83 74 eP 55 53.60 -0.4
CUT 1.13 169 iP 55 59.14 0.0
eS 56 14.45
NEA 1.29 33 eP 56 01.21 -0.7
eS 56 18.05
WRH 1.51 49 eP 56 05.10 0.0
eS 56 24.73
SKT 1.58 194 eP 56 05.89 -0.3
CC8 1.71 47 eP 56 07.50 -0.6
iS 56 31.48
FBA 1.89 41 eP 56 10.71 0.0
Sn 56 36.22
PWA 1.91 168 eP 56 10.41 -0.5
Sn 56 36.66
GHO 1.93 154 eP 56 11.26 -0.1
Sn 56 36.30
SML 2.03 146 iP 56 11.99 -0.8
Sn 56 39.36
SUA 2.06 180 eP 56 12.67 -0.5
Sn 56 41.40
PLRM 2.06 158 eP 56 12.50 -0.6
Sn 56 40.66
NCG 2.22 198 eP 56 14.43 -1.1
CGLM 2.29 196 eP 56 16.34 -0.3
SCM 2.30 136 eP 56 16.36 -0.3
PMS 2.34 166 eP 56 17.20 0.0
CRP 2.35 197 eP 56 16.77 -0.7
SPU 2.42 196 iP 56 19.06 0.7
PAX 2.44 101 eP 56 19.71 1.1
TOA 2.52 122 eP 56 20.14 0.4
SDG 2.56 110 eP 56 20.46 0.2
KLU 3.01 130 iP 56 27.34 0.6
GLI 3.14 146 iP 56 28.73 0.2
VLZ 3.15 137 iP 56 28.60 0.1
26 obs. associated

? JUN 17, 1990 19h 43m 58.91± 4.47s
31.570 S ±22.0km 68.980 W ±13.2km
DEPTH = 86.9 ± 43.0 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB 0.18 62 iPd 44 12.10 0.1
(S) 44 22.50
RTBS 0.41 257 ePd 44 12.80 0.0
S 44 24.10
RTCV 0.48 128 ePc 44 13.30 -0.1
(S) 44 25.00
RTLL 0.50 61 iPc 44 13.40 -0.2
eS 44 26.00
CFA 0.63 94 eP 44 14.90 0.1
eS 44 27.90
RTRS 1.46 343 iPc 44 24.30 0.0
S.D. = 0.2 on 6 of 6 obs.

JUN 17, 1990 20h 37m 55.75± 0.85s
6.975 S ± 6.9km 147.985 E ± 7.7km
DEPTH = 67.2 ± 8.7 km
4.2mb (1 obs.)
EAST PAPUA NEW GUINEA REGION (207)

LAT 1.03 288 iPc 38 13.00 -1.7
KDB 2.61 198 eP 38 37.00 0.5
eS 39 10.00

```
MNDI    4.38 280 eP     39 02.50   1.0
                eS      39 56.00
RAB     5.00  57 iPc    39 11.00   1.0
QIS    15.76 210 eP     41 36.00   1.0
MTN    17.59 249 e(P)   41 53.00  -5.0X
                e       45 06.00
WB5    18.42 225 eP     42 08.00  -0.2
WRA    18.48 224 Pd     42 08.60  -0.3
RMQ    19.42 178 e(P)   42 20.00   0.5
                e       42 25.00
DZM    23.29 132 iPc    42 57.10  -1.5
MNI    24.56 289 eP     43 11.40   0.5
NANU   34.88 240 eP     44 42.00  -0.9
KLB    37.36 225 eP     45 03.00  -0.7
MAT    44.25 349 eP     45 59.00  -1.3
CHG    54.71 299 eP     47 21.60   0.8
DMN    69.76 303 P      49 02.40   1.0
GKN    70.28 303 P      49 04.60   0.1
GBA    72.95 286 Pc     49 20.60   0.2
        0.6s     1.90nm          4.2mb
     S.D. = 1.0  on  17 of  18 obs.
-------------------------------------------
?  JUN  17, 1990  20h 43m 35.98± 2.44s
   39.432 N ±25.2km   27.743 E ± 9.5km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                              (366)

EDC     0.92   6 iPg    43 53.40  -0.1
                eSg     44 06.40
EZN     1.16 290 ePn     43 57.70   0.0
IZI     1.61  55 ePn     44 04.00  -0.6
YLV     1.69  47 iPn     44 06.40   0.7
     S.D. = 0.9  on   4 of   4 obs.
-------------------------------------------
    JUN  17, 1990  21h 15m 26.06± 0.20s
    3.879 N ± 3.6km  125.690 E ± 5.0km
    DEPTH = 167.7km  (  4 depth phases)
    5.3mb ( 35 obs.)
  TALAUD ISLANDS                    (263)
       CENTROID, MOMENT TENSOR      (HRV)
       Data Used: GDSN
       L.P.B.: 15S, 25C
       Centroid Location:
       Origin Time          21:15:27.9 0.5
       Lat  4.10N 0.06 Lon 125.65E 0.05
       Dep 144.3 1.7 Half-duration  2.2
       Moment Tensor;   Scale 10**17 Nm
         Mrr=-0.67 0.07  Mtt= 0.06 0.09
         Mff= 0.61 0.10  Mrt= 0.56 0.07
         Mrf= 1.90 0.08  Mtf=-0.81 0.10
        Principal Axes:
         T  Val=  2.04  Plg=33  Azm=257
         N        0.35     24       3
         P       -2.38     48     122
       Best Double Couple:Mo=2.2*10**17
        NP1:Strike=295 Dip=25 Slip=-160
        NP2:        187    82      -66

MNI     2.56 199 iPd    16 09.30   0.0
                eS      16 42.30
DAV     3.19 358 eP     16 16.50  -0.5
                iS      16 55.80
AAI     7.92 162 ePd    17 16.60  -2.8
                eS      18 32.50
BKB2   10.16 240 iPd    17 56.30   7.4X
        1.0s   731.90nm          6.2mb
MKS    10.97 215 iPc    18 02.00   2.6
KUPT   14.09 188 ePc    18 55.00  15.5X
                eS      21 35.00
TRT    17.38 229 ePc    19 18.20  -1.8
        0.6s   179.30nm          5.6mb
MTN    17.47 162 iPd    19 17.70  -3.4X
                e       19 23.00
                e       22 46.00
KNA    19.74 171 iPd    19 43.90  -1.1
        0.3s    64.00nm          5.5mb
GUMO   21.25  62 eP     20 00.50   0.4
        0.5s    65.31nm          5.4mb
                eS      23 47.00
PJG    21.25  62 eP     20 00.80   0.7
GUA    21.27  62 eP     20 01.20   0.9
        0.5s    84.51nm          5.5mb
OIZ    21.60 315 Pc     20 06.20   2.7
QZH    22.03 343 eP     20 08.00   0.4
KGM    22.42 266 ePd    20 15.20   3.7X
KLM    24.01 269 eP     20 29.50   2.6
IPM    24.61 273 ePc    20 33.60   1.1
        0.5s    54.50nm          5.4mb
                e       21 08.30 174km
WB5    25.10 160 iPd    20 36.00  -1.0
                iS      24 46.70
                iScP    27 32.70
WRA    25.15 161 Pc     20 36.40  -1.1
        0.7s   223.30nm          5.9mb
KDB    25.17 122 eP     20 37.00  -0.7
LOE    27.06 302 eP     20 55.00   0.1
SSE    27.40 352 P      21 03.00   5.2X
     Z  16s      0.40um          4.1MszX
                S       25 24.00
QIS    27.86 151 iPd    21 00.90  -1.2
NANU   28.09 200 iPd    21 04.20   0.1
        0.3s     6.00nm          4.8mb
WHN    28.60 339 eP     21 08.50  -0.1
NJ2    28.75 348 Pc     21 08.00  -1.9
GYA    28.91 323 P      21 12.00   0.4
                PcP     24 18.00
BDT    29.35 299 eP     21 15.00  -0.4
        0.8s    20.70nm          4.9mb
CHG    30.06 302 iPc    21 22.00   0.3
        0.9s    22.06nm          4.9mb
CHTO   30.06 302 Pc     21 22.00   0.3
                pP      21 56.20 164km
KMI    30.55 316 eP     21 28.00   1.8
        3.0s   200.00nm          5.3mb
     Z  24s      0.80um          4.3MszX
                eS      26 20.00
MEKA   31.09 192 eP     21 30.00  -0.7
        0.4s    32.00nm          5.4mb
CTA    31.23 140 iPd    21 31.80  -0.1
        1.0s   105.00nm          5.5mb
TIA    33.13 347 eP     21 46.60  -1.6
IIDJ   33.42  18 eP     21 45.70  -5.1X
XAN    33.83 335 Pc     21 53.50  -0.8
CD2    33.92 325 eP     21 54.80  -0.3
MRWA   34.20 195 iPd    21 57.10  -0.4
        0.3s    4.00nm          4.6mb
MTMJ   34.41  17 P      21 58.20  -1.1
MAT    34.49  18 eP     21 58.00  -1.9
                eS      27 14.00
COOL   34.84 187 eP     22 02.00  -0.9
BAL    35.35 193 eP     22 07.00  -0.2
TIY    35.79 342 eP     22 10.00  -0.9
     Z  20s      0.60um          4.4Msz
KL8    36.07 192 eP     22 12.00  -1.3
        0.4s    12.00nm          4.9mb
YAMJ   36.56  19 P      22 17.60   0.3
BJI    37.01 348 eP     22 20.00  -1.0
        1.1s    35.00nm          5.0mb
                eS      27 50.00
                eScP    28 11.50
                eScS    32 20.00
RMQ    37.54 145 iPd    22 24.90  -0.8
SNY    37.83 357 iPc    22 28.00   0.1
        1.0s   200.00nm          5.8mb
                iS      28 06.00
LZH    37.86 331 iPd    22 29.00   0.6
        1.5s   200.00nm          5.6mb
     Z  20s      0.50um          4.3Msz
     N  10s      0.50um
STK    38.65 158 iPd    22 35.20   0.4
        0.8s   121.00nm          5.6mb
                eS      28 18.40
HHC    38.94 343 eP     22 37.00  -0.3
SHL    38.95 307 iP     22 37.50  -0.2
                iS      28 18.50
BTO    39.19 341 eP     22 38.00  -1.4
     N  13s      0.40um
     E  13s      0.50um
                eS      28 20.50
CN2    39.76 360 iPc    22 43.70  -0.1
                PP      23 21.00
                eS      28 38.00
ADE    40.53 163 iPd    22 51.70   1.4
        0.8s   253.73nm          5.9mb
BRS    40.62 142 iPc    22 51.00  -0.1
                i       23 34.00 201kmX
MDJ    40.72   4 Pc     22 53.00   1.4
        1.2s   100.00nm          5.3mb
                PP      23 22.00
                iS      28 53.00
                SS      29 46.00
                SS      31 54.00
LSA    41.57 312 P      23 00.60   1.2
COO    42.43 146 eP     23 07.00   1.1
GTA    42.44 330 iPc    23 06.00   0.0
        1.4s   100.00nm          5.2mb
     Z  20s      0.70um          4.5Msz
     E  10s      0.50um
                PcP     24 57.00
                S       29 10.60
                ScS     32 50.70
BWA    43.70 152 iPd    23 18.40   2.2
                e       24 16.30 279kmX
                e       25 00.80
BFD    43.76 160 ePd    23 17.20   0.7
        0.4s    43.00nm          5.4mb
                i       25 00.10 576kmX
CAN    44.71 153 iPd    23 25.20   1.0
                e       24 23.30 279kmX
                e       25 05.20
GUN    44.80 306 Pc     23 25.20  -0.2
CNB    44.88 152 eP     23 26.00   0.5
PKI    45.04 306 Pc     23 26.60  -0.7
        0.6s    23.00nm          4.9mb
TOO    45.16 158 iPd    23 29.80   2.1
        0.8s    67.00nm          5.3mb
                e       25 15.00 588kmX
DMN    45.30 306 Pc     23 29.00  -0.3
GKN    45.84 306 Pc     23 32.80  -0.6
DZM    47.47 125 iPc    23 46.10  -0.1
HYB    48.09 290 eP     23 51.00   0.1
        1.0s    72.00nm          5.3mb
                e       24 28.00 165km
KOD    48.23 280 eP     23 52.00  -0.4
GBA    48.58 285 Pc     23 54.40  -0.2
        1.2s    57.90nm          5.1mb
WMQ    52.01 326 iPc    24 19.60  -0.8
     Z  20s      0.40um          4.4Msz
                PcP     25 31.00
                S       31 30.00
                ScS     33 51.60
NDI    52.17 304 iPc    24 20.00  -1.8
                eS      31 32.00
KSH    57.18 315 eP     24 59.00   1.1
                PP      25 33.00
QUE    61.19 302 eP     25 24.80  -0.9
SNZO   63.33 140 eP     25 37.00  -2.4
H8Z    63.87 135 P      25 43.00   0.1
MAIO   68.60 307 iPc    26 12.80  -0.3
                eS      35 04.00
TAB    79.24 308 eP     27 14.00  -0.5
TTA    81.24  27 P      27 25.90   1.5
KDC    82.37  32 P      27 31.90   1.7
        0.5s    10.33nm          4.8mb
IMA    82.67  24 P      27 33.30   1.5
        1.2s    44.51nm          5.1mb
MAW    83.54 200 eP     27 37.00   1.0
PMR    84.31  29 P      27 40.20   0.2
        1.1s    45.00nm          5.2mb
FBA    85.03  25 P      27 44.30   0.7
KEV    89.39 340 iP     28 04.50   0.0
        0.6s    19.60nm          5.3mb
SOD    89.93 338 iP     28 06.40  -0.6
INK    90.41  21 ePc    28 10.00   0.8
SUF    90.95 333 iP     28 11.50  -0.3
        0.5s    12.40nm          5.3mb
NUR    92.07 331 iP     28 16.50  -0.4
        0.7s    17.40nm          5.3mb
VAY    97.26 312 eP     28 39.60  -1.5
HFS    97.40 332 eP     28 40.00  -1.3
        0.9s     9.50nm          5.2mb
     Z  17s      0.08um          4.3MszX
                LR      07 25.00
BUL    97.96 250 iPc    28 42.80  -2.0
NAO    98.45 333 P      28 45.20  -0.9
        0.8s    22.20nm          5.7mb
KSP    99.10 323 eP     28 49.50   0.3
                e       29 32.00 168km
YKA    99.79  24 eP     29 07.00  14.8X
        0.7s     0.70nm
CLL   100.91 324 ePdiff28 57.00  -0.3X
KIC   129.47 281 PKP    34 18.60   1.2
        0.6s     7.50nm
LKO   129.66 286 PKP    34 18.48   0.7
        0.6s     9.00nm
TIC   129.70 282 PKP    34 19.20   1.3
LIC   129.78 281 PKP    34 19.30   1.3
LNV   146.10 154 ePKPd  34 50.00   2.9X
CHCH  146.45 155 ePKPd  34 51.00   3.2X
PCH   146.77 155 ePKP   34 52.00   3.6X
PEL   147.11 154 iPKPd  34 52.50   3.6X
```

17d 21h

FCH 147.12 155 ePKP 34 54.00 4.7X
UPA 151.80 63 ePKPd 35 03.80 7.3X
ZOBO 161.67 133 PKP 35 13.50 4.2X
1.2s 6.76nm
Z 22s 0.29um 6.6Msz
LR 25 36.00
SIV 166.25 152 ePKP 35 15.00 2.2
i 36 16.70
S.D. = 1.2 on 96 of 111 obs.

& JUN 17, 1990 22h 32m 27.70s
40.273 N 124.683 W
DEPTH = 5.0km
NEAR COAST OF NORTHERN CALIF. (35)
<BRK>. ML 3.2 (BRK).

FHC 0.75 45 iPd 32 42.40 -0.3
iS 32 52.70
WDC 1.66 79 iPc 32 55.20 -2.4
iS 33 12.00
LTCM 1.96 91 eP 33 00.00 -1.9
MIN 2.35 87 eP 33 05.10 -2.7
LBFM 2.38 62 eP 33 06.50 -1.7
ORV 2.55 105 ePc 33 07.90 -2.5
eS 33 36.70
PCC 3.30 146 e(P) 33 18.90 -2.2
SAO 4.33 143 eP 33 32.70 -3.0
KVN 5.22 101 eP 33 45.80 -2.8
9 obs. associated

% JUN 17, 1990 22h 38m 08.34± 0.79s
40.185 N ±10.9km 28.656 E ± 5.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

KCT 0.24 286 iPg 38 13.90 0.5
iSg 38 15.60
EDC 0.63 285 iPg 38 20.40 -0.6
eSg 38 31.40
IZI 0.64 76 ePg 38 20.90 -0.4
eSg 38 33.40
YLV 0.67 55 iPg 38 21.40 -0.3
iSg 38 33.90
HRT 1.00 50 ePn 38 27.90 0.6
ALT 1.59 135 ePn 38 36.90 0.2
S.D. = 0.6 on 6 of 6 obs.

& JUN 17, 1990 23h 10m 25.57s
61.250 N 150.651 W
DEPTH = 50.8km
SOUTHERN ALASKA (2)
<AGS-P>.

SUA 0.22 348 iP 10 34.45 0.1
eS 10 42.05
PMS 0.53 90 iP 10 37.34 0.0
iS 10 46.92
PWA 0.55 42 iP 10 37.25 -0.2
CGLM 0.66 276 iP 10 38.48 -0.5
iS 10 48.71
SPU 0.68 265 iP 10 38.72 -0.6
iS 10 49.63
CRP 0.73 272 iP 10 39.44 -0.6
Sn 10 50.50
NCG 0.74 283 iP 10 39.48 -0.7
iS 10 50.61
SLKM 0.77 164 eP 10 39.82 -0.7
iS 10 51.74
PLRM 0.81 64 eP 10 40.18 -0.7
iS 10 52.10
SKT 0.84 331 iP 10 40.70 -0.7
eS 10 52.81
GHO 0.98 57 eP 10 42.68 -0.6
Sn 10 56.50
SML 1.24 62 iP 10 45.98 -1.0
SEW 1.29 152 eP 10 47.64 0.1
eS 11 05.82
RED 1.33 232 eP 10 47.40 -0.8
eS 11 05.36
SCM 1.70 68 eP 10 52.07 -1.3
CNPM 1.75 190 iP 10 53.11 -1.0
GLI 1.77 101 iP 10 52.10 -2.2
VLZ 2.10 91 eP 10 57.15 -1.7
KLU 2.29 82 iP 10 59.85 -1.9
KTH 2.32 357 eP 11 01.99 -0.1
20 obs. associated

• JUN 18, 1990 00h 22m 39.52± 1.02s
38.299 N ±11.6km 24.967 E ± 9.5km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
ML 3.3 (ATH).

ATH 1.04 252 ePn 22 59.50 0.4
APE 1.31 160 ePn 23 02.50 -1.2
SMG 1.59 111 ePn 23 08.70 1.0
NEO 1.69 307 ePn 23 07.80 -1.5
VLI 2.26 226 ePb 23 21.50 4.0X
ITM 2.66 246 ePn 23 24.00 0.8
VAY 3.54 329 ePn 23 43.00 7.4X
OHR 4.27 312 ePn 23 46.60 0.5
S.D. = 1.4 on 6 of 8 obs.

• JUN 18, 1990 00h 31m 18.24± 0.87s
38.327 N ± 9.3km 25.094 E ± 8.3km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
ML 2.9 (ATH).

ATH 1.14 252 ePg 31 38.30 -1.3
eSg 31 52.80
APE 1.30 164 ePb 31 41.50 -0.9
eSb 31 59.50
SMG 1.51 114 ePb 31 46.00 0.7
NEO 1.76 304 ePb 31 49.50 0.5
EZN 1.78 32 eP 31 48.60 -0.6
VLI 2.35 228 ePb 31 59.00 1.5
S.D. = 1.4 on 6 of 6 obs.

? JUN 18, 1990 01h 11m 19.91± 3.35s
39.494 N ±18.5km 27.674 E ±24.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

EDC 0.86 10 iPg 11 37.40 0.9
iSg 11 50.40
KCT 0.92 35 iPg 11 38.30 0.8
iSg 11 52.30
IZI 1.62 58 ePn 11 48.30 -0.4
YLV 1.69 50 iPn 11 48.80 -0.9
ALT 1.94 102 ePn 11 54.00 0.6
HRT 2.02 48 ePn 11 54.00 -0.5
DMK 2.33 2 iPn 11 58.20 -0.6
S.D. = 0.9 on 7 of 7 obs.

• JUN 18, 1990 01h 36m 04.05± 0.65s
19.609 S ±16.9km 175.083 W ±17.2km
DEPTH = 99.7km (3 depth phases)
4.8mb (5 obs.)
TONGA ISLANDS (173)

DZM 17.44 259 iPc 40 05.00 2.4
THZ 24.33 202 eP 41 13.40 -0.4
LTZ 25.45 202 P 41 23.90 -0.3
WB5 47.43 261 eP 44 27.40 -3.2X
WRA 47.44 261 Pd 44 27.90 -2.9
0.4s 8.20nm 4.9mb
SPA 70.51 180 iPd 47 18.20 8.4X
0.5s 11.11nm 4.9mb
MAT 71.17 322 eP 47 13.00 -0.9
0.9s 16.81nm 4.9mb
TNP 79.00 43 P 47 58.70 -0.1
pP 48 24.70 100km
KVN 79.01 42 P 47 58.70 -0.1
pP 48 24.90 101km
PMR 83.55 12 P 48 21.20 -0.5
TTA 83.63 9 P 48 22.30 0.0
0.8s 4.31nm 4.4mb
ALQ 84.72 50 eP 48 29.00 0.5
1.0s 3.50nm 4.2mb
ANMO 84.72 50 P 48 29.10 0.6
FBA 86.81 11 P 48 37.60 -0.3
pP 49 03.90 99km
INK 92.72 14 eP 49 05.00 -0.5
YKA 94.58 24 eP 49 40.70 26.6X
0.8s 0.90nm
HFS 139.03 353 ePKP 55 10.50 -9.7X
0.4s 1.00nm
KSP 147.56 347 iPKP 55 37.50 2.4
CLL 147.73 350 iPKPd 55 38.20 2.8X
0.8s 12.00nm
e 56 25.00
PRU 148.73 348 PKP 55 40.20 3.2X
e 56 10.70

GRF 149.56 352 ePKP 55 43.00 4.6X
e 55 49.00
KHC 149.74 349 iPKP 55 44.00 5.3X
1.1s 5.00nm
PRNI 150.80 297 ePKP 55 46.00 5.2X
LDF 150.80 7 ePKP 55 46.70 6.5X
0.6s 3.60nm
MBH 151.03 296 ePKP 55 47.00 5.9X
CDF 151.20 357 ePKP 55 46.70 5.7X
LPF 151.24 8 ePKP 55 46.50 5.6X
0.6s 3.60nm
HAU 151.65 358 ePKP 55 47.40 5.8X
0.4s 2.30nm
BSF 151.81 357 ePKP 55 47.60 5.7X
LOR 152.40 2 ePKP 55 49.10 6.5X
0.8s 2.70nm
SSF 152.59 2 ePKP 55 49.80 6.9X
0.8s 2.00nm
LBF 152.68 1 ePKP 55 49.80 6.7X
0.8s 2.70nm
S.D. = 1.4 on 14 of 32 obs.

JUN 18, 1990 01h 44m 39.27± 0.25s
21.882 S ± 7.1km 170.841 E ± 5.9km
DEPTH = 115.7km (4 depth phases)
5.0mb (5 obs.)
LOYALTY ISLANDS REGION (189)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 19C
Centroid Locotion:
Origin Time 01:44:48.2 1.4
Lat 21.72S 0.14 Lon 170.45E 0.09
Dep 120.1 4.1 Holf-durotion 1.8
Moment Tensor; Scole 10**16 Nm
Mrr=-4.19 0.66 Mtt= 3.41 1.23
Mff= 0.77 1.30 Mrt=-1.13 0.61
Mrf= 9.33 0.74 Mtf= 4.18 0.96
Principal Axes:
T Val= 9.26 Plg=29 Azm=301
N 2.88 26 195
P -12.14 49 70
Best Double Couple:Mo=1.1*10**17
NP1:Strike= 79 Dip=29 Slip= -23
NP2: 189 79 -117

DZM 4.09 267 iPc 45 39.00 -1.9
iS 46 15.00
PVC 4.76 330 iP 45 51.00 1.0
NDF 7.45 58 ePc 46 30.20 3.3X
SVA 8.08 64 eP 46 40.00 4.6X
HNR 16.21 318 eP 48 21.00 -0.7
WLZ 16.42 167 P 48 31.00 6.8X
BRS 17.31 248 iPc 48 37.00 1.8
e 48 44.00
iS 51 51.00
NGZ 17.71 168 P 48 57.60 17.4X
CNZ 17.73 168 P 48 57.70 17.4X
NOZ 17.79 161 P 48 40.20 -0.7
e 49 02.50
COO 19.06 239 eP 48 56.00 0.8
RMO 20.66 253 iPc 49 12.80 1.2
LTZ 20.88 177 P 49 32.60 18.8X
CTA 23.02 270 iPc 49 35.30 0.3
1.0s 88.00nm 5.1mb
iS 53 40.00
CAN 23.32 230 eP 49 40.00 2.1
i 50 04.90 119km
BWA 23.33 233 eP 49 37.70 -0.2
i 50 01.10 111km
QLP 24.69 254 ePc 49 51.00 0.0
KDB 25.88 295 eP 50 02.00 0.0
STK 27.85 243 eP 50 19.90 0.1
0.9s 6.00nm 4.2mb
e 57 05.20
WB5 34.09 267 eP 51 17.80 3.0X
e 56 31.70
WRA 34.10 266 Pc 51 12.30 -2.6
0.7s 15.90nm 4.9mb
WARB 40.45 255 eP 52 07.70 -0.3
S8A 56.06 181 eP 54 07.40 -0.5
MAT 65.78 332 (P) 55 13.00 -0.9
SPA 68.25 180 iPd 55 28.20 -1.2
0.9s 45.45nm 5.4mb
e 55 56.70 114km
MAW 76.56 202 eP 56 18.00 0.0
CN2 77.48 328 eP 56 23.00 -0.4

```
TIY     80.78 317 eP     56 41.00   -0.4
XAN     80.99 312 Pc     56 42.50   -0.1
CHG     81.11 294 eP     56 44.80    1.4
LZH     85.60 312 eP     57 07.00    0.9
         1.5s     29.00nm          5.0mb
PRS     86.28  49 eP     57 10.10    0.8
PRI     86.67  49 eP     57 12.40    1.1
WDC     87.67  44 eP     57 16.70    0.8
FRI     87.76  49 ePd    57 16.70    0.3
CMB     87.81  47 eP     57 17.30    0.6
ORV     87.83  46 eP     57 17.10    0.5
ISA     87.99  50 eP     57 18.00    0.4
SBB     87.99  51 eP     57 17.00   -0.6
RVR     87.99  52 eP     57 18.00    0.4
PLM     88.07  53 eP     57 18.00   -0.2
MIN     88.16  45 ePd    57 18.20   -0.2
CLC     88.69  50 eP     57 21.00    0.1
                  e      57 52.00  119km
GSC     89.02  51 eP     57 23.00    0.5
TPC     89.02  53 eP     57 23.00    0.5
GLA     89.45  54 eP     57 24.00   -0.6
GTA     90.02 313 P      57 27.40    0.2
PNT     93.88  38 eP     57 45.00    0.4
INK     98.57  18 eP     58 03.00   -2.4
MBC    106.44  14 ePKP   02 47.00   -3.9X
SUF    132.70 339 ePKP   03 38.00   -3.4X
NUR    134.74 337 ePKP   03 45.00   -0.3
APO    138.11 343 ePKP   03 46.40   -5.4X
         0.2s      1.50nm
NAO    138.65 345 PKP    03 51.00   -1.7
         1.2s      6.90nm
KRA    143.75 328 ePKP   04 01.30   -0.7
SPC    144.15 327 ePKP   04 02.80   -0.2
KSP    144.91 332 iPKPd  04 03.20   -0.8
         1.2s     94.00nm
                  e      04 29.00
RDO    145.05 311 iPKPc  04 03.00   -1.5
BZS    145.49 321 ePKP   04 04.50   -0.6
CLL    145.93 335 iPKP   04 06.00    0.3
         1.8s    110.00nm
                  pP     04 32.00
SRO    146.01 326 iPKP   04 07.30    1.4
EKA    146.30 354 PKPd   04 06.10   -0.1
         0.8s     15.90nm
PRU    146.30 332 PKP    04 06.50    0.2
         1.5s     40.20nm
                  e      04 31.50
ZST    146.38 328 ePKP   04 05.40   -1.1
VKA    146.71 328 e(PKP) 04 06.50   -0.6
         2.0s    149.00nm
WIT    146.81 342 ePKP   04 10.00    3.0X
                  e      04 36.00
VAY    147.01 313 ePKP   04 08.40    0.7
KHC    147.36 332 ePKP   04 07.20   -0.9
                  i      04 10.50
SKO    147.46 315 iPKP   04 10.90    2.4
WTS    147.50 342 ePKP   04 10.00    1.9
         1.1s     49.00nm
                  e      04 36.00
GRF    147.91 335 iPKPd  04 12.10    3.1X
       Z  23s      0.05um          4.2MszX
                  e      04 15.70
                  e(pPKP 04 38.50
                  e      04 43.20
VAM    147.94 302 ePKP   04 12.00    2.6
BCAO   148.04 241 iPKPc  04 08.50   -1.7
         1.4s    200.00nm
                  id     04 11.00
                  id     04 38.00
OHR    148.30 314 ePKP   04 09.00   -0.9
         1.1s     54.00nm
PTJ    148.49 325 ePKPc  04 07.60   -2.5
TNS    148.50 338 ePKPd  04 13.20    3.3X
VLI    148.52 305 ePKP   04 12.80    2.5
ZAG    148.53 325 ePKP   04 06.20   -3.8X
ENN    148.84 341 ePKP   04 14.00    3.7X
         1.0s     34.00nm
                  e      04 41.00
MEM    148.96 341 PKP    04 12.90    2.4
FUR    149.09 333 ePKP   04 14.90    4.0X
VBY    149.12 326 ePKP   04 10.80   -0.2
ITM    149.12 307 ePKP   04 14.00    2.7X
LJU    149.13 327 ePKP   04 10.30   -0.7
UCC    149.26 343 PKP    04 15.80    4.8X
CEY    149.39 327 ePKP   04 10.50   -0.9
VOY    149.46 328 ePKP   04 10.40   -1.2
                  i      04 15.20
                  e      04 45.00
FVI    149.60 329 PKP    04 15.50    3.9X
KEK    149.62 312 ePKP   04 16.00    4.1X
TRI    149.75 327 iPKPd  04 16.00    4.1X
DOU    149.83 342 PKP    04 16.60    4.7X
         1.0s    116.70nm
SQTA   149.84 332 iPKPd  04 16.50    4.3X
         1.0s     38.30nm
                  i      04 23.20
                  i      04 24.40
                  i      04 26.20
                  i      04 43.10
                  i      05 22.30
                  i      05 25.50
CDF    150.44 338 ePKP   04 17.90    4.9X
         1.1s     51.30nm
CTI    150.53 330 PKP    04 14.00    0.8
BSF    151.11 337 ePKP   04 19.40    5.4X
         1.0s     34.00nm
HAU    151.12 338 ePKP   04 19.50    5.6X
         1.0s     36.00nm
SAL    151.38 330 PKP    04 20.00    5.7X
MDI    151.61 332 PKP    04 19.50    4.8X
ARV    151.69 325 PKP    04 21.00    6.1X
VAI    151.95 333 PKP    04 14.00   -1.1
TDS    151.97 315 PKP    04 22.00    6.6X
PGD    152.07 327 PKP    04 22.00    6.3X
CRE    152.12 326 PKP    04 22.00    6.3X
ASS    152.13 324 PKP    04 21.50    5.9X
SGO    152.14 318 PKP    04 21.00    5.4X
MGR    152.22 317 PKP    04 21.00    5.2X
FLN    152.30 348 iPKPd  04 21.70    6.1X
         1.0s     30.00nm
SDI    152.36 321 PKP    04 20.00    4.0X
LDF    152.39 347 iPKPd  04 22.00    6.3X
         1.0s     24.00nm
BDI    152.50 328 PKP    04 21.00    4.9X
BOB    152.51 330 PKP    04 22.50    6.4X
LOR    152.58 341 iPKPd  04 22.70    6.6X
         1.2s     25.30nm
GRR    152.73 348 iPKPd  04 23.00    6.8X
         1.2s     29.75nm
LBF    152.79 340 ePKP   04 23.50    7.1X
         1.0s      8.00nm
SSF    152.87 341 iPKPd  04 23.40    6.9X
         1.2s     23.80nm
SOI    152.97 312 PKP    04 23.50    6.7X
LPL    153.07 335 ePKP   04 24.30    7.2X
         1.2s     10.40nm
LPG    153.08 335 ePKP   04 24.50    7.3X
         1.1s      9.75nm
LPF    153.11 348 iPKPd  04 23.90    7.2X
         1.0s     30.00nm
SMF    153.14 340 ePKP   04 23.70    6.8X
         1.2s     16.35nm
AVF    153.16 341 ePKP   04 23.60    6.8X
         0.9s      4.90nm
BNI    153.48 334 PKP    04 17.00   -0.6
BGF    153.52 341 ePKP   04 24.60    7.2X
         1.0s      9.00nm
MAF    153.91 341 ePKP   04 25.80    7.9X
         1.0s      6.00nm
TCF    153.95 342 ePKP   04 25.50    7.5X
         1.1s      8.55nm
SBF    154.12 332 ePKP   04 25.90    7.5X
         1.2s     23.80nm
PGF    154.40 328 ePKP   04 26.70    7.9X
         1.2s     17.85nm
FRF    154.71 332 ePKP   04 27.10    0.1X
         1.0s     10.00nm
LRG    154.91 333 ePKP   04 27.70    8.4X
         1.2s     14.90nm
LMR    154.95 332 ePKP   04 27.70    8.3X
         1.0s      0.00nm
LIC    163.93 195 PKP    04 30.62    0.3
         1.4s     49.50nm
KIC    163.99 196 PKP    04 30.68    0.3
         1.3s     36.50nm
TIC    164.33 195 PKP    04 30.90    0.2
      S.D. = 1.1  on  75 of 133 obs.
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```
%  JUN  18, 1990  03h 13m 03.49± 2.32s
   39.416 N ±22.7km   27.715 E ± 9.0km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                              (366)

EDC     0.94   7 iPg    13 21.20   -0.2
                 eSg    13 33.20
KCT     0.97  30 iPg    13 22.30    0.4
EZN     1.15 291 ePn    13 25.00    0.0
IZI     1.64  55 ePn    13 33.00    0.5
YLV     1.72  47 iPn    13 32.80   -0.8
      S.D. = 0.8  on  5 of  5 obs.
```

```
*  JUN  18, 1990  03h 32m 56.59± 0.70s
   14.772 S ±15.1km   74.431 W ±11.0km
   DEPTH =  91.6 ± 14.2 km
   4.4mb (  1 obs.)
 PERU                                (116)
      Felt (III) at Ice.

PT03    1.53 300 iPc    33 22.80   -0.5
PT06    2.07 297 iPd    33 30.80    0.5
                 iS     33 56.00
ARE     3.29 121 eP     33 49.00    1.7
                 iS     34 28.50
PT08    3.47 323 iPc    33 50.40    0.5
NNA     3.63 319 iPc    33 51.50   -0.2
                 eS     34 36.00
PT10    3.64 317 eP     33 51.50   -0.4
                 eS     34 34.50
ZOBO    6.26 105 Pd     34 33.80    5.1X
                 S      35 46.00
LPB     6.35 107 P      34 28.00   -1.7
ANT     9.66 158 e(P)   35 09.50   -5.1X
PEL    18.60 170 iPd    37 08.90   -0.7
BAO    25.52  95 eP     38 19.00    0.4
SES    72.40 336 eP     44 38.00   23.4X
SPA    75.32 180 eP     44 31.80    0.3
         1.0s      6.00nm          4.4mb
YKA    83.18 342 eP     45 37.00   23.6X
         0.9s      1.60nm
      S.D. = 1.1  on  10 of  14 obs.
```

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*  JUN  18, 1990  04h 05m 39.72± 1.05s
   11.163 N ±14.8km   121.962 E ±15.2km
   DEPTH =  33.0km  (normal)
   4.8mb (  4 obs.)  4.1Msz (  1 obs.)
 PANAY, PHILIPPINE ISLANDS           (254)

SSE    19.85 358 eP     10 09.40   -1.4
LOE    20.56 290 eP     10 19.00    0.6
GYA    20.97 319 P      10 23.60    0.9
CHG    23.48 292 ePc    10 49.30    1.8
         1.2s     18.75nm          4.5mb
CHTO   23.48 292 (P)    10 47.00   -0.5
XAN    25.70 334 P      11 06.20   -2.5
CD2    25.90 322 P      11 11.00    0.4
TIY    27.79 344 eP     11 26.00   -1.8
       Z  18s      0.50um          4.1Msz
BJI    29.21 351 eP     11 41.50    1.0
WB5    33.18 158 eP     12 14.80   -0.8
MDJ    33.98  10 eP     12 24.50    2.2
                 ePP    12 29.50
GUN    37.68 301 P      12 54.40    0.0
PKI    37.97 301 P      12 56.40   -0.4
         0.6s     26.00nm          5.3mb
DMN    38.24 301 P      12 58.60   -0.3
GKN    38.75 301 P      13 02.60   -0.6
         0.8s     24.00nm          5.0mb
MBC    85.75  12 eP     18 18.00    1.6
         0.7s      1.00nm          4.1mb
      S.D. = 1.4  on  16 of  16 obs.
```

```
   JUN  18, 1990  04h 25m 25.77± 1.58s
    4.479 N ± 5.1km  125.760 E ± 6.8km
   DEPTH = 207.2 ± 16.3 km
    5.1mb ( 23 obs.)
 TALAUD ISLANDS                      (263)
      CENTROID, MOMENT TENSOR        (HRV)
      Data Used: GDSN
      L.P.B.: 10S, 17C
      Centroid Location:
      Origin Time        04:25:23.3 1.1
      Lat  4.41N 0.09 Lon 125.45E 0.12
      Dep 164.0 3.3 Half-duration  1.7
      Moment Tensor;   Scale 10**16 Nm
        Mrr= 1.91 0.75  Mtt= 2.56 0.84
        Mff=-4.47 0.99  Mrt=-1.69 0.75
        Mrf= 2.97 0.91  Mtf=-9.44 0.88
      Principal Axes:
        T  Val= 10.26  Plg=20  Azm=216
        N        0.93      69       16
        P      -11.20       7      124
```

18d 04h

Best Double Couple:Mo=1.1*10**17
NP1:Strike=258 Dip=71 Slip= 170
NP2: 352 B1 19

TSM		7.67	268	ePd	27	17.90	2.2
MTN		18.02	163	iPc	29	21.10	-2.8
				e	32	35.00	
GUMO		20.91	63	eP	29	54.50	1.2
		0.5s	53.06nm			5.3mb	
	Z	19s	0.46um			3.9Msz	
				eS	33	34.50	
PJG		20.91	63	eP	29	54.50	1.2
GUA		20.93	63	eP	29	55.00	1.5
QZH		21.48	342	P	29	58.50	-0.3
KGM		22.54	264	ePd	30	11.50	2.4
LAT		23.91	117	iPd	30	33.50	11.2X
IPM		24.66	271	ePd	30	31.40	2.1
		0.9s	25.50nm			4.8mb	
SNG		25.15	277	eP	30	35.10	1.3
WB5		25.64	161	iPc	30	36.50	-1.7
				eS	34	51.20	
LOE		26.82	300	eP	30	48.00	-0.9
SSE		26.82	351	eP	30	48.00	-0.8
				eS	36	08.00	
QIS		28.35	152	iPc	31	01.20	-1.5
				e	31	55.00	
NANU		28.68	200	eP	31	05.00	-0.5
		0.5s	33.00nm			5.3mb	
BDT		29.12	298	eP	31	08.50	-1.1
CHG		29.81	301	eP	31	15.10	-0.6
		0.9s	11.76nm			4.6mb	
				e	37	42.90	
WARB		30.49	178	eP	31	21.40	-0.1
		0.3s	20.00nm			5.4mb	
CTA		31.65	141	iPc	31	31.60	-0.1
		0.9s	39.50nm			5.1mb	
MEKA		31.69	192	iPc	31	30.80	-1.2
		0.4s	64.00nm			5.6mb	
XAN		33.32	334	P	31	43.50	-2.5
CD2		33.47	324	P	31	45.40	-2.0
MRWA		34.79	195	eP	31	58.50	0.0
TIY		35.25	342	eP	32	00.70	-1.7
	Z	20s	0.50um			4.3Msz	
	N	13s	0.30um				
COOL		35.44	187	iPc	32	02.70	-1.3
		0.3s	10.00nm			5.0mb	
BAL		35.94	193	eP	32	07.30	-0.9
		0.5s	36.00nm			5.2mb	
BJI		36.44	348	eP	32	12.00	-0.3
		1.0s	36.00nm			4.9mb	
KLB		36.67	191	eP	32	13.50	-0.8
		0.4s	29.00nm			5.2mb	
SNY		37.24	357	iPd	32	18.60	-0.3
		1.0s	100.00nm			5.4mb	
LZH		37.37	330	P	32	20.00	-0.4
		2.0s	39.00nm			4.7mb	
MUN		37.38	193	eP	32	19.70	-0.5
		0.5s	83.00nm			5.6mb	
CN2		39.16	360	P	32	34.70	-0.1
STK		39.17	158	iPc	32	35.50	0.4
		0.8s	44.00nm			5.1mb	
				iS	38	16.90	
MDJ		40.12	4	Pd	32	43.50	0.8
		1.0s	100.00nm			5.3mb	
BRS		41.04	142	iP	32	48.00	-2.5
ADE		41.08	164	iPc	32	52.10	1.3
		0.6s	106.67nm			5.5mb	
GTA		41.96	330	eP	32	56.00	-2.1
				PcP	34	51.00	
				ScS	42	41.20	
BWA		44.20	153	iPc	33	18.00	2.0
BFD		44.30	161	eP	33	17.50	0.8
GUN		44.51	306	P	33	19.40	0.4
		0.6s	29.00nm			4.9mb	
PKI		44.75	305	P	33	21.00	0.1
DMN		45.01	305	P	33	23.40	0.6
CAN		45.21	153	eP	33	24.80	0.8
GKN		45.55	305	P	33	27.40	0.4
TOO		45.69	158	iPc	33	29.50	1.8
DZM		47.75	125	iPc	33	44.00	-0.2
WMQ		51.56	325	P	34	13.00	0.2
NDI		51.90	303	iPd	34	15.00	-0.5
		0.5s	21.13nm			5.0mb	
OUE		60.93	302	eP	35	18.70	-0.9
MAIO		68.29	307	eP	36	06.00	-0.7
MAW		84.12	200	eP	37	41.00	6.9X
FBA		84.46	25	(P)	37	47.50	11.5X

INK	89.82	21	eP	38	02.00	0.3
MBC	91.44	13	eP	38	10.00	1.0
SPA	94.45	180	iPd	38	24.90	1.7
	1.0s	14.00nm			5.1mb	
HFS	96.91	332	eP	38	33.80	-0.5
	0.3s	2.00nm			4.9mb	
NAO	97.95	333	P	38	38.70	-0.3
	0.7s	9.20nm			5.3mb	
KSP	98.67	323	eP	38	43.80	1.3
YKA	99.22	24	eP	38	45.00	0.2
	0.9s	1.80nm			4.5mb	
ALQ	117.23	47	ePKP	43	49.20	0.6
KIC	129.42	282	PKPc	44	13.46	1.2
	0.7s	11.50nm				
LKO	129.56	286	PKP	44	13.04	0.5
	0.6s	10.00nm				
TIC	129.64	282	PKP	44	13.70	1.0
LIC	129.73	282	PKPc	44	13.98	1.1
LNV	146.60	154	iPKPc	44	46.50	3.6X
CHCH	146.95	154	ePKP	44	47.00	3.4X
SAN	147.36	154	ePKP	44	48.00	3.8X
PEL	147.61	154	iPKPd	44	49.00	4.4X
ZOBO	162.02	132	PKP	45	08.00	3.4X

S.D. = 1.3 on 61 of 69 obs.

JUN 18, 1990 05h 10m 35.16± 0.33s
41.332 N ± 3.2km 20.090 E ± 2.9km
DEPTH = 19.4 ± 3.7 km
3.8mb (3 obs.)
ALBANIA (391)

ML 4.1 (SKO), 3.9 (TTG). Felt (IV) in the Shengjin-Tirano orea.

TIR	0.17	275	iPg	10	39.50	-0.4
LACI	0.42	317	iPgd	10	43.40	-0.3
PHP	0.44	36	iPgd	10	42.50	-1.7
OHR	0.58	112	iPgc	10	44.90	-1.6
			iSg	10	50.90	
BERA	0.64	190	iPg	10	47.70	0.2
PUK	0.73	348	iPgc	10	48.90	-0.1
SDA	0.81	327	iPgc	10	51.70	1.2
ULC	0.89	315	ePg	10	51.60	-0.2
			eSg	11	07.00	
KBN	0.90	142	iPgc	10	50.80	-1.0
VLO	0.97	208	ePg	10	54.80	1.6
TPE	1.04	183	iPgd	10	52.40	-1.9
SKO	1.20	57	iPgc	10	56.40	-0.5
SKO	1.20	57	iPn	10	57.00	0.1
			i	11	11.50	
			Lg	11	13.00	
TTG	1.26	331	ePg	10	58.40	0.7
			eSg	11	19.00	
PVY	1.27	356	ePg	10	58.00	0.1
			eSg	11	18.50	
BDV	1.34	316	ePg	11	00.20	1.4
			iSg	11	22.60	
IVA	1.55	355	ePg	11	03.20	1.3
			eSg	11	29.00	
HCY	1.63	314	iPnc	11	05.30	2.3
			iSn	11	30.20	
NKY	1.69	332	iPnc	11	06.00	2.0
			iSn	11	32.00	
VAY	1.87	90	iPn	11	07.20	0.7
			i	11	08.20	
			iSn	11	26.20	
			iSg	11	30.40	
			Lg	11	36.30	
LCI	1.90	239	P	11	07.20	0.3
			eSn	11	31.00	
BRY	1.94	324	ePn	11	10.00	2.3
			eSn	11	38.00	
PLE	2.06	346	ePn	11	12.50	3.1X
			eSn	11	41.00	
BRT	2.23	259	P	11	13.50	1.8
VTS	2.64	61	iP	11	18.00	0.2
MMB	2.75	83	eP	11	20.00	0.9
ORI	3.04	247	P	11	24.10	0.9
NEO	3.14	129	eP	11	26.00	1.4
VLS	3.17	173	eP	11	26.00	0.9
HVAR	3.27	306	iPn	11	27.30	0.8
			iSn	12	08.80	
PGB	3.28	67	eP	11	27.00	0.4
TDS	3.31	241	P	11	28.20	1.1
RZN	3.49	83	eP	11	30.00	0.2
MGR	3.65	252	P	11	32.90	1.1
			eSn	12	16.00	

SGO	3.70	260	P	11	33.60	1.0
			eSn	12	17.00	
BSS	4.03	264	P	11	38.80	1.6
RDO	4.11	91	eP	11	38.00	-0.4
DUI	4.24	276	P	11	41.30	0.9
BZS	4.42	14	ePc	11	42.00	-0.8
SOI	4.50	225	P	11	43.50	-0.4
			eSn	12	35.50	
SDI	4.73	277	P	11	48.20	1.0
			eSn	12	41.50	
ATN	4.77	230	P	11	47.00	-0.8
AZI	5.03	280	P	11	52.50	1.2
AQU	5.10	284	P	11	53.00	0.6
VLI	5.11	153	eP	11	54.50	1.9
VBY	5.46	321	ePn	11	58.40	1.0
			iSn	12	58.60	
PTJ	5.46	328	eP	11	57.10	-0.5
ARV	5.72	295	Pc	12	00.40	-0.8
ASS	5.78	290	P	12	02.20	0.1
CEY	6.03	319	ePnc	12	05.50	0.0
			eSn	13	14.50	
LJU	6.20	321	ePn	12	07.50	-0.3
			eSn	13	18.00	
BUD	6.20	353	e(P)	12	10.00	2.2
TRI	6.35	316	ePn	12	06.70	-3.3X
			iSn	13	19.60	
			iSgSg	14	03.50	
CRE	6.44	294	Pd	12	12.10	0.7
SRO	6.60	350	eP	12	21.20	7.6X
			e	12	57.30	
			i	13	52.40	
SFI	6.60	296	P	12	13.50	-0.1
PGD	6.68	295	P	12	14.80	0.0
FVI	7.45	317	P	12	24.50	-0.8
MME	7.48	296	P	12	26.30	0.2
BDI	7.51	294	P	12	25.50	-0.8
CTI	7.72	310	P	12	27.20	-2.1
SPC	7.86	1	eP	12	32.60	1.3
			e	12	39.60	
PGF	8.36	282	Pn	12	38.10	-0.2
BOB	8.51	297	P	12	39.60	-0.8
SQTA	8.67	316	iPnc	12	42.90	0.3
			i	13	08.70	
			iPgPg	13	21.00	
			iSn	14	06.20	
			i	14	15.60	
			i	14	20.20	
			i	15	03.00	
MDI	8.75	304	P	12	41.10	-2.4
VAI	9.38	303	P	12	51.20	-1.0
DOI	9.94	293	P	12	58.50	-1.6
FRF	10.18	287	Pn	13	03.20	-0.2
LRG	10.38	286	Pn	13	05.80	-0.2
BNI	10.48	295	P	13	07.00	-0.5
LPG	10.56	298	Pn	13	04.90	-3.9X
			Sn	14	50.20	
LPL	10.58	298	Pn	13	05.50	-3.5X
			Sn	14	51.00	
BSF	11.49	309	Pn	13	19.40	-1.8
HAU	11.83	309	Pn	13	23.80	-2.0
LBF	12.87	301	Pn	13	37.80	-1.9
			Sn	15	44.70	
LOR	13.04	302	Pn	13	39.20	-2.8
			Sn	15	49.00	
BGF	13.47	299	Pn	13	45.50	-2.1
HFS	19.24	350	eP	14	59.30	-1.4
	0.9s	3.20nm			3.6mb	
NAO	20.33	347	P	15	09.00	-3.6X
	0.7s	2.30nm			3.6mb	
EKA	20.72	320	P	15	23.00	6.3X
	1.9s	30.40nm			4.4mb	
SUF	21.72	B	eP	15	25.00	-1.8

S.D. = 1.3 on 75 of 82 obs.

? JUN 18, 1990 05h 59m 34.25± 6.21s
16.746 S ±51.8km 173.263 W ±71.9km
DEPTH = 33.0km (normal)
5.1mb (2 obs.)
TONGA ISLANDS (173)

DZM	19.85	251	iPc	04	05.90	0.3
HBZ	22.06	198	P	04	27.70	-0.2
PUZ	22.52	198	P	04	33.40	0.9
NOZ	23.09	198	P	04	37.60	-0.4
WLZ	23.19	203	P	04	38.70	-0.4
TAZ	23.22	201	eP	04	38.30	-0.9
THZ	27.62	203	P	05	18.50	-2.3

KHZ 27.97 201 P 05 24.70 0.9
LTZ 28.74 202 eP 05 33.30 2.5
WB5 49.66 258 eP 08 25.10 -0.1
WRA 49.68 258 Pc 08 25.30 0.0
0.6s 4.20nm 4.6mb
ASPA 49.83 253 iPc 08 26.20 -0.3
0.7s 47.00nm 5.6mb
S.D. = 1.3 on 12 of 12 obs.

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* JUN 18, 1990 10h 12m 04.63± 0.78s
4.943 N ±10.7km 31.994 E ±14.6km
DEPTH = 10.0km (geophysicist)
4.5mb (8 obs.)
SUDAN (557)
mbLg 4.8 (BUL).

LWI 7.81 204 iP+ 13 59.10 -2.3
NAI 7.82 142 iP 14 04.00 2.5
1.0s 60.00nm 5.8mb X
AAE 7.85 58 eP 13 59.50 -2.5
NPA 21.16 160 eP 16 56.00 3.5X
iSg 23 27.00
iLg 23 37.30
KRI 21.76 186 eP 17 21.10 22.4X
eSn 21 24.00
eLR 23 38.00
BUL 25.15 187 eP 17 55.20 23.4X
eSn 22 32.00
eLR 25 13.50
CFR 40.22 356 iPc 19 44.00 1.0
LPG 46.00 335 eP 20 30.40 0.1
0.6s 2.70nm 4.4mb
LPL 46.02 335 eP 20 30.60 0.2
0.6s 2.70nm 4.4mb
SMF 48.14 334 eP 20 47.50 0.7
0.8s 4.05nm 4.6mb
LBF 48.35 335 eP 20 48.70 0.2
0.6s 2.70nm 4.5mb
AVF 48.47 334 eP 20 49.30 0.0
0.6s 1.80nm 4.3mb
TCF 48.60 333 eP 20 51.80 1.4
0.6s 1.80nm 4.3mb
SSF 48.61 334 eP 20 50.10 -0.3
0.8s 4.05nm 4.5mb
LOR 48.62 335 eP 20 49.30 -1.2
0.8s 4.05nm 4.5mb
S.D. = 1.6 on 12 of 15 obs.

% JUN 18, 1990 11h 10m 22.79± 0.65s
60.290 N ± 5.3km 5.360 E ± 9.6km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 1.5 (BER).

BER 0.09 352 eP 10 24.98 -0.4
iS 10 27.71
ASK 0.21 337 iPc 10 27.31 0.0
iS 10 30.63
ODD1 0.74 120 iPd 10 37.21 -0.1
eS 10 48.42
SUE 0.82 339 eP 10 39.07 0.4
iS 10 50.62
HYA 0.97 24 eP 10 41.28 0.1
eS 10 55.47
KMY 1.08 183 eP 10 43.06 -0.1
eS 10 59.44
BLS2 1.28 141 eP 10 46.73 0.2
eS 11 03.67
S.D. = 0.3 on 7 of 7 obs.

JUN 18, 1990 11h 42m 32.39± 0.43s
24.887 N ± 5.3km 122.508 E ± 6.1km
DEPTH = 22.6km (3 depth phases)
4.8mb (11 obs.)
TAIWAN REGION (243)
ML 4.7 (BJI).

TWC 0.66 245 iPc 42 44.10 -1.0
eS 42 51.50
TWZ 0.87 284 ePc 42 48.50 -0.2
ANP 0.95 288 iP 42 50.00 -0.1
eS 43 02.00
TWD 1.16 226 ePc 42 53.70 0.5
eS 43 08.90
TWQ 1.64 249 ePc 43 02.20 2.0
TWF1 1.89 216 eP 43 06.10 2.4
TWK 2.45 229 ePc 43 13.90 2.0
QZH 3.56 272 Pn 43 25.50 -2.0
Z 10s 5.10um
Pg 43 41.00
Sg 44 22.00
SSE 6.29 350 Pd 44 03.50 -2.7
0.5s 52.00nm 5.6mb
Z 12s 3.10um 4.3Msz
N 10s 3.10um
PP 44 10.00
NJ2 7.83 337 eP 44 23.80 -3.9X
Z 12s 1.50um
S 45 52.50
BAG 8.62 192 eP 44 38.00 -1.0
WHN 9.16 310 eP 44 44.00 -2.2
Z 10s 1.40um
E 10s 1.00um
PP 44 51.50
TIA 12.20 339 eP 45 29.90 2.2
GYA 14.37 280 P 46 00.00 3.3X
N 10s 1.70um
E 10s 0.70um
S 48 38.60
XAN 14.93 311 P 46 03.00 -0.8
N 10s 2.20um
E 10s 0.90um
TIY 15.40 329 eP 46 15.50 5.6X
Z 10s 1.80um
N 10s 2.30um
BJI 16.02 342 eP 46 19.50 1.7
1.0s 24.00nm 4.3mb
Z 12s 0.90um 4.7MszX
N 10s 0.82um
SNY 16.92 3 eP 46 30.40 1.2
Z 11s 1.70um
N 10s 1.20um
E 10s 0.50um
eS 49 44.00
MTMJ 17.55 45 eP 46 41.90 4.6X
CD2 17.62 294 eP 46 37.60 -0.5
MAT 17.78 46 eP 46 46.00 5.9X
eS 50 07.00
CHJJ 18.02 48 eP 46 51.40 8.4X
HHC 18.36 333 eP 46 50.00 2.8X
Z 12s 1.40um
sP 47 04.00
BTO 18.83 329 eP 46 55.00 1.9
PP 47 01.00
CN2 19.02 7 Pd 46 56.80 1.6
Z 11s 1.50um
N 11s 0.90um
E 11s 0.70um
PP 47 06.00
eS 50 30.00
LZH 19.54 309 P 47 00.00 -1.7
3.4s 170.00nm 4.8mb X
Z 14s 1.00um 4.6Msz
E 10s 0.70um
eS 50 40.00
MDJ 20.51 15 eP 47 13.00 1.5
Z 15s 1.10um 4.3MszX
N 12s 1.00um
LOE 20.74 253 eP 47 14.00 -0.1
CHG 22.68 259 eP 47 35.00 1.4
GTA 23.97 313 P 47 47.50 1.3
GKN 33.96 284 P 49 00.00 -16.6X
WMQ 34.06 312 P 49 17.50 0.4
N 10s 0.30um
NDI 40.43 286 iPd 50 11.00 0.2
WB5 45.97 164 eP 50 55.00 -0.7
i 51 02.00 23km
i 52 31.20
WRA 46.02 164 Pd 50 55.60 -0.5
1.0s 25.70nm 5.1mb
QIS 48.13 158 eP 51 12.20 -0.6
e 51 19.00 23km
ASPA 49.51 166 iPd 51 22.30 -1.1
0.6s 33.00nm 5.5mb
MAIO 54.58 298 eP 52 05.00 3.6X
STK 59.32 161 eP 52 40.20 5.3X
0.7s 4.00nm 4.7mb
KEV 68.78 338 iP 53 36.00 -0.3
0.5s 8.40nm 5.1mb
SOD 69.52 336 iP 53 40.40 -0.5
i 53 47.20 22km
SUF 71.03 331 iP 53 49.20 -1.0
0.6s 4.10nm 4.7mb
INK 72.12 22 eP 53 56.00 -0.6
MBC 72.31 13 eP 53 56.50 -1.2
0.7s 4.00nm 4.6mb
NAO 78.44 332 P 54 30.70 -2.0
1.0s 4.60nm 4.5mb
YKA 81.85 23 eP 54 50.20 -0.7
0.7s 2.50nm 4.4mb
FFC 92.00 24 eP 55 40.00 -0.6
0.7s 7.00nm 5.2mb
ORV 92.42 44 eP 55 51.20 8.4X
CMB 94.01 45 iPc 55 51.00 0.8
KVN 94.85 43 P 55 55.00 0.8
FRI 95.06 45 ePc 55 55.60 0.7
TNP 95.99 43 P 56 00.20 0.7
LKO 118.93 298 PKP 01 20.04 -1.6
KIC 120.02 294 (PKP) 01 22.40 -1.3
ZOBO 166.87 51 PKP 02 40.00 1.5
S.D. = 1.4 on 44 of 55 obs.

JUN 18, 1990 13h 24m 04.29± 0.53s
34.046 N ± 5.1km 118.958 W ± 4.6km
DEPTH = 10.0km (geophysicist)
SOUTHERN CALIFORNIA (43)
ML 3.0 (NEIS).

TWL 0.38 52 iPc 24 12.59 0.5
S 24 18.12
SCY 0.42 82 eP 24 12.77 -0.1
PVPS 0.53 119 ePc 24 15.37 0.4
S 24 23.17
FMA 0.65 121 eP 24 17.40 0.2
CIW 0.67 150 iPc 24 17.90 0.3
S 24 26.98
MWC 0.77 76 eP 24 19.01 -0.4
CIS 0.79 144 eP 24 19.78 0.2
S 24 30.65
ABL 0.83 345 eP 24 20.60 0.1
BLP 1.30 294 eP 24 28.20 -0.1
BCH 1.47 321 eP 24 31.00 0.1
PEC 1.50 95 eP 24 31.80 0.5
PLM 1.88 111 eP 24 35.50 -1.4
TNP 4.27 19 eP 25 15.50 4.5X
KVN 5.04 8 eP 25 38.30 16.4X
S.D. = 0.6 on 12 of 14 obs.

% JUN 18, 1990 13h 26m 21.31± 0.83s
39.867 N ± 6.0km 29.262 E ± 8.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZI 0.50 19 iPg 26 31.00 -0.4
iSg 26 38.30
YLV 0.70 7 iPg 26 34.90 -0.4
iSg 26 46.90
GPA 0.91 62 ePn 26 40.70 2.0
GBZT 0.93 9 eP 26 39.00 -0.1
HRT 1.00 18 ePg 26 39.30 -1.0
ALT 1.04 141 iPg 26 40.00 -1.1
iSg 26 52.70
EDC 1.17 295 ePn 26 43.90 0.7
KHL 1.56 172 ePn 26 49.40 0.3
S.D. = 1.2 on 8 of 8 obs.

% JUN 18, 1990 13h 58m 37.16± 0.63s
44.387 N ± 5.9km 7.395 E ± 5.5km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.9 (GEN).

STV 0.15 200 P 58 41.02 0.2
S 58 43.35
ENR 0.16 174 P 58 40.98 0.0
S 58 43.65
PZZ 0.24 299 P 58 42.56 0.2
S 58 46.25
ROB 0.35 105 P 58 44.82 0.4
S 58 50.05
IMI 0.60 143 P 58 48.26 -1.0
RRL 0.69 321 P 58 50.46 -0.5
PCP 0.84 79 P 58 53.43 0.1
S.D. = 0.6 on 7 of 7 obs.

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* JUN 18, 1990 14h 12m 06.10± 0.95s
11.375 N ±11.3km 121.864 E ±16.1km
DEPTH = 33.0km (normol)
4.0mb (1 obs.)
PANAY, PHILIPPINE ISLANDS (254)

18d 14h

BAG	5.16	346	eP	13 23.00	-0.3
DAV	5.62	139	eP	13 30.20	0.7
TSM	8.04	208	eP	14 03.00	-0.5
LOE	20.39	289	eP	16 45.00	1.9
KMI	22.69	310	eP	17 11.50	5.1X
CHG	23.31	291	eP	17 15.10	2.8X
			e	23 42.00	
BJI	28.99	351	eP	18 08.00	3.1X
WB5	33.41	158	eP	18 39.00	-5.0X
WRA	33.46	158	P	18 44.00	-0.5
	0.5s		1.00nm	4.0mb	
PKI	37.78	301	P	19 20.20	-1.4
	S.D. = 1.5		on 6 of 10 obs.		

JUN 18, 1990 14h 34m 35.79± 0.89s
60.647 N ± 7.7km 152.205 W ± 7.6km
DEPTH = 112.2 ± 23.2 km
SOUTHERN ALASKA (2)

SVW	1.73	287	iPc	35 05.90	-0.1
PMR	1.77	56	eP	35 06.30	-0.1
KDC	2.91	183	eP	35 21.30	0.0
TTA	2.92	323	eP	35 21.80	0.3
TOA	3.25	61	eP	35 26.30	0.3
FBA	4.72	23	eP	35 45.60	-0.4
IMA	5.48	354	iPc	35 56.60	0.1
INK	11.08	38	eP	37 12.00	0.0
	S.D. = 0.3		on 8 of 8 obs.		

JUN 18, 1990 14h 45m 50.92± 0.63s
40.283 N ± 7.1km 25.864 E ± 7.8km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)

EZN	0.58	142	iPg	46 02.60	0.0
RDO	0.90	344	iPbc	46 08.30	0.2
KDZ	1.41	346	iPd	46 17.00	0.4
EDC	1.53	87	iPn	46 19.80	1.5
RZN	1.65	329	iPd	46 21.00	0.8
KCT	1.91	90	ePn	46 22.90	-0.9
MMB	2.08	310	iPd	46 26.00	-0.3
DMK	2.10	42	iPn	46 26.20	-0.4
NEO	2.26	245	ePn	46 36.00	7.1X
SMG	2.68	163	ePn	46 35.20	0.3
YLV	2.69	83	iPn	46 44.90	9.7X
VAY	2.71	294	ePn	46 40.00	4.7X
GBZT	2.78	78	eP	46 47.00	10.8X
			iPgc	47 55.70	
			iSg	47 56.70	
HRT	2.95	78	ePn	46 44.00	5.3X
PVL	2.96	352	iPc	46 38.00	-0.7
VTS	3.05	320	iP	46 41.00	0.8
KHL	3.45	123	ePn	46 44.00	-1.8
ALT	3.50	109	ePn	46 47.90	1.3
SKO	3.74	298	ePn	47 03.50	13.5X
OHR	3.94	284	ePn	47 06.50	13.7X
ISR	4.88	6	eP	47 21.00	14.9X
VRI	5.62	6	ePc	47 21.00	4.5X
BZS	6.17	331	ePc	47 23.00	-1.2
	S.D. = 1.0		on 14 of 23 obs.		

& JUN 18, 1990 14h 53m 31.60s
36.715 N 121.390 W
DEPTH = 3.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.3 (BRK). Felt (IV) at Tres Pinos. Also felt at Hollister.

SAO	0.07	318	iP	53 32.90	-0.2
LLA	0.37	105	iPd	53 39.40	0.3
PRS	0.38	178	iPd	53 39.20	-0.1
GCC	0.58	303	ePc	53 42.40	-0.8
ARN	0.64	350	iPc	53 44.70	0.2
MHC	0.66	342	iPd	53 44.90	0.2
PRI	0.82	134	iPd	53 47.40	-0.5
			i	53 48.40	
PCC	1.11	315	iPc	53 51.60	-1.5
PHAM	1.19	137	eP	53 52.70	-1.7
PKEM	1.22	122	eP	53 55.40	0.4
BKS	1.34	330	iPd	53 55.00	-2.0
			eS	54 16.80	
BRK	1.35	329	eP	53 55.00	-2.1
FRI	1.38	78	iPc	53 56.30	-1.3
			iS	54 14.00	
ZSP	1.41	331	ePc	53 55.90	-2.2
CM8	1.54	31	iPd	53 58.90	-1.2
BCH	1.86	145	eP	54 02.00	-2.7
BLP	2.30	159	e(P)	54 10.00	-0.9
ABL	2.56	136	eP	54 13.10	-1.9
KVN	3.49	47	eP	54 27.50	-0.7
TNP	3.59	66	eP	54 30.00	0.5
	20 obs. associated				

? JUN 18, 1990 15h 15m 53.94± 2.66s
16.741 S ±60.4km 71.702 W ±22.5km
DEPTH = 81.5 ± 15.1 km
3.7mb (1 obs.)
SOUTHERN PERU (117)
Felt (II) at Arequipa.

ARE	0.34	36	iP	16 06.50	-0.7
LPB	3.46	87	P	16 41.00	-6.0X
	1.0s		320.00nm		
			i	17 08.00	
ZOBO	3.46	83	iPc	16 49.20	2.0
			S	18 16.00	
PT03	4.80	304	iPd	17 06.10	0.7
			iS	17 54.70	
PT06	5.32	302	iP	17 12.90	0.3
			iS	18 11.90	
CCH	5.36	98	(P)	17 12.00	-1.4
			e	17 42.00	
PT08	6.68	315	eP	17 31.40	-0.4
			iS	18 51.30	
NNA	6.87	313	iP	17 38.00	4.0X
	0.5s		8.45nm	4.6mb X	
			eS	18 58.00	
YKA	85.85	342	eP	28 23.80	-1.6
	0.5s		0.40nm	3.7mb	
MAT	146.99	313	ePKP	35 28.00	1.1
	S.D. = 1.6		on 8 of 10 obs.		

JUN 18, 1990 15h 16m 57.67± 0.66s
39.229 N ± 7.4km 20.612 E ± 6.4km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)
ML 3.8 (ATH).

KEK	0.79	308	ePb	17 11.00	-2.1
VLS	1.05	181	ePb	17 16.70	-0.8
OHR	1.89	4	iPn	17 31.70	1.4
NEO	2.03	87	iPnc	17 33.50	1.2
LCI	2.33	299	P	17 38.00	1.4
			eSn	18 03.80	
VAY	2.57	35	ePn	17 40.40	0.4
ATH	2.74	116	ePn	17 42.40	0.0
SKO	2.81	13	ePn	17 41.00	-2.5
			iSg	18 23.20	
			Lg	18 31.60	
BRT	3.09	303	P	17 53.00	5.6X
VLI	3.11	143	ePn	17 47.50	-0.1
TDS	3.34	279	P	17 53.50	2.6
MMB	3.35	44	eP	17 52.00	0.9
SOI	3.75	253	P	17 56.00	-0.8
			eSn	18 30.50	
			e	21 36.50	
RZN	3.98	51	eP	17 59.00	-1.2
SGO	4.29	290	P	18 04.00	-0.4
	S.D. = 1.5		on 14 of 15 obs.		

% JUN 18, 1990 15h 49m 22.32± 1.10s
42.840 N ± 8.5km 12.649 E ±17.5km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

ASS	0.23	2	P	49 26.50	-0.8
			eSg	49 30.30	
ARV	0.69	18	P	49 36.70	0.7
			eSg	49 46.50	
CRE	0.94	327	P	49 40.50	0.2
			eSg	49 53.00	
AZI	1.03	145	P	49 42.00	0.2
SDI	1.43	142	P	49 48.00	-0.3
	S.D. = 0.8		on 5 of 5 obs.		

? JUN 18, 1990 16h 45m 03.27±17.39s
59.821 N ±36.8km 8.118 E ±121.1km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 1.6 (BER).

ODD1	0.76	278	eP	45 18.07	0.0
			eS	45 33.88	
BLS1	0.79	237	iP	45 18.71	0.1
			iS	45 34.66	
BLS2	0.80	229	iP	45 18.86	-0.1
			eS	45 35.22	
KMY	1.59	249	eP	45 31.46	0.0
			eS	45 54.89	
	S.D. = 0.1		on 4 of 4 obs.		

JUN 18, 1990 16h 52m 55.26± 0.28s
8.813 S ± 5.2km 111.235 E ± 7.7km
DEPTH = 33.0km (normal)
5.0mb (15 obs.)
JAVA (277)

NANU	14.28	164	eP	56 12.20	-5.0X
	0.2s		32.00nm	5.6mb	
			eS	58 40.00	
MEKA	19.01	160	eP	57 15.00	-2.1
	0.3s		29.00nm	5.0mb	
			eS	00 28.00	
MTN	19.94	103	eP	57 28.00	0.5
			e	00 58.00	
BAL	22.28	167	eP	57 51.00	-0.2
			e	58 00.00	
			eS	01 51.00	
WARB	22.64	142	eP	57 55.30	0.5
	0.3s		16.00nm	5.0mb	
			e	58 07.00	
			eS	01 57.00	
KLB	23.46	166	eP	58 03.00	0.2
	0.3s		5.00nm	4.5mb	
			e	58 15.00	
			eS	02 15.00	
MUN	23.51	169	eP	58 05.00	1.8
			e	58 17.00	
			eS	02 19.00	
COOL	23.83	159	eP	58 06.10	-0.2
	0.3s		18.00nm	5.1mb	
			e	58 18.00	
			eS	02 21.00	
NNT	24.14	332	eP	58 12.40	3.0X
WB5	24.93	119	eP	58 17.80	0.7
WRA	24.93	119	Pd	58 17.20	0.1
	0.9s		32.50nm	4.9mb	
ASPA	26.24	127	iPd	58 28.90	-0.4
	0.8s		19.00nm	4.8mb	
	Z 30s		0.19um	3.5MszX	
			eS	03 23.00	
			LR	06 20.20	
QIS	29.77	116	eP	59 01.00	-0.3
CHG	30.01	336	eP	59 05.20	1.8
CD2	40.14	350	P	00 31.20	1.2
GBA	40.27	303	Pd	00 31.20	0.1
	0.5s		12.00nm	4.9mb	
SSE	40.81	13	P	00 37.00	1.7
	0.7s		8.00nm	4.6mb	
NJ2	41.28	10	Pc	00 41.00	1.8
XAN	42.67	357	P	00 51.50	0.9
PKI	43.97	326	P	01 01.60	-0.1
GUN	43.98	327	P	01 01.80	0.0
	0.4s		18.00nm	5.2mb	
DMN	44.17	326	P	01 03.20	0.0
GKN	44.74	326	P	01 06.60	-1.0
	0.4s		15.00nm	5.2mb	
TIA	45.12	7	eP	01 09.70	-0.7
LZH	45.20	352	P	01 12.50	1.3
	1.1s		18.00nm	4.9mb	
			sP	01 26.50	
TIY	46.29	1	eP	01 19.90	0.2
BJI	48.82	5	eP	01 39.00	-0.3
GTA	49.13	348	P	01 42.80	0.8
BTO	49.18	359	eP	01 43.00	0.8
NDI	49.68	320	eP	01 45.00	-1.2
IIDJ	50.74	28	P	01 53.70	-0.5
MTMJ	51.60	27	P	02 00.40	-0.4
SNY	51.65	12	eP	02 00.40	-0.5
CHJJ	51.71	29	P	02 00.40	-1.1
MAT	51.75	28	eP	02 00.00	-1.8
YAMJ	53.92	28	P	02 17.20	-0.7
CN2	53.93	13	P	02 16.40	-1.5
WMQ	56.57	340	eP	02 37.00	-0.2
QUE	57.56	314	eP	02 43.10	-1.4
MAIO	66.13	316	iPc	03 40.50	-1.3
KRI	79.53	254	iPd	05 15.00	13.9X
BUL	80.13	251	iPd	05 04.90	0.6
BCAO	93.33	274	iPd	06 08.50	-0.4
	0.9s		23.00nm	5.6mb	

SUF	95.51	333	iP	06	18.30	0.5
	0.5s	3.80nm			5.1mb	
SOD	95.99	337	eP	06	29.00	9.0X
HFS	101.34	330	ePdiff	06	43.50	-0.7
	0.8s	3.60nm			5.0mb	
YKA	117.03	22	ePKP	11	37.20	-0.9
	0.5s	1.00nm				
LKO	117.71	276	PKP	11	40.24	-0.6
	0.6s	4.50nm				
KVN	126.66	47	PKP	11	58.80	1.2
RSSD	133.37	35	PKP	12	09.90	-0.3
UYO	145.44	39	ePKP	12	32.00	-0.1
BAO	148.16	220	ePKP	12	39.40	2.3

S.D. = 1.0 on 48 of 52 obs.

% JUN 18, 1990 17h 03m 37.21± 1.26s
45.700 N ± 8.7km 26.919 E ± 9.3km
DEPTH = 49.4 ± 23.6 km
ROMANIA (358)

VRI	0.22	322	iPc	03	45.50	-0.2
ISR	0.62	205	iPd	03	50.00	-0.1
PPE	0.71	43	iPc	03	52.50	1.3
CLI	0.89	16	iPd	03	52.50	-1.1
CFR	1.01	120	iPc	03	55.00	-0.2
TLB	1.36	144	iPd	04	00.00	-0.1
CMP	1.39	253	ePc	04	01.00	0.4

S.D. = 1.0 on 7 of 7 obs.

& JUN 18, 1990 17h 21m 39.47s
45.987 N 123.587 W
DEPTH = 20.5km
WASHINGTON-OREGON BORDER REGION (28)
<SEA>. CL 3.0 (SEA).

NLO	0.14	43	Pd	21	43.60	-0.4
KMOR	0.36	169	Pd	21	46.35	-0.9
BMW	0.55	27	Pd	21	49.37	-1.0
			S	21	57.24	
RVW	0.61	74	Pd	21	50.50	-0.9
GROR	0.64	185	Pd	21	50.92	-1.0
			S	21	59.87	
LVP	0.83	84	Pc	21	54.09	-1.0
CZM	0.87	59	Pd	21	54.76	-1.1
			S	22	06.31	
FL2	0.89	76	Pd	21	54.99	-1.1
ONR	0.90	352	P	21	55.88	-0.4
ERK	0.92	69	Pd	21	55.35	-1.4
			S	22	07.13	
APW	0.93	44	Pd	21	55.42	-1.4
PGO	0.95	123	Pc	21	56.41	-0.7
MTMW	0.96	87	Pc	21	56.36	-1.0
STD	0.98	75	Pd	21	56.52	-1.2
HSR	0.99	79	P	21	57.25	-0.8
REMW	1.00	77	ePd	21	57.28	-0.8
			S	22	10.20	
YEL	1.00	77	Pd	21	57.04	-1.0
JLK	1.01	80	P	21	57.35	-0.9
TDL	1.02	69	Pd	21	57.07	-1.3
ESD	1.02	78	P	21	57.49	-1.0
CPW	1.04	17	Pd	21	57.48	-1.1
SOSW	1.04	76	Pc	21	57.51	-1.2
KOSW	1.08	63	Pd	21	58.04	-1.4
CDFW	1.08	83	Pc	21	58.47	-0.9
LMW	1.13	52	Pd	21	58.93	-1.2
VLMM	1.17	112	iPc	21	59.97	-0.8
GT2	1.24	131	Pc	22	01.17	-0.6
OBH	1.35	352	P	22	03.19	-0.1
APM	1.36	100	Pc	22	03.03	-0.3
MEW	1.38	28	P	22	03.58	0.0
GULW	1.39	92	Pc	22	03.37	-0.5
ASR	1.40	83	Pc	22	03.53	-0.5
VLL	1.44	111	Pc	22	04.51	0.0
TDH	1.44	118	Pc	22	04.29	-0.3
RVC	1.47	49	Pd	22	04.50	-0.5
GLK	1.49	66	Pd	22	04.90	-0.4
WPW	1.58	63	P	22	06.24	-0.4
			S	22	27.21	
FMW	1.63	54	P	22	06.98	-0.5
VFP	1.63	113	Pc	22	07.55	0.1
GMW	1.66	19	P	22	07.24	-0.4
VBEM	1.68	123	Pc	22	08.55	0.4
HDW	1.70	12	Pd	22	08.36	0.0
GSM	1.73	45	Pd	22	08.74	-0.1
OOW	1.80	347	P	22	10.00	0.3
SPW	1.82	30	P	22	10.50	0.6
GL2	1.93	90	P	22	12.12	0.5
PGW	1.96	20	P	22	13.11	1.2
VGB	2.02	102	P	22	13.56	0.6
NAC	2.05	68	P	22	16.48	3.0
BLN	2.06	12	P	22	14.25	0.7
CROR	2.09	118	P	22	14.35	0.4
HTW	2.20	34	P	22	16.13	0.5
VTHM	2.27	110	P	22	17.17	0.6
EBG	2.28	65	P	22	19.60	2.9
TCO	2.35	142	P	22	19.38	1.6
MXC	2.36	74	P	22	18.98	1.2
TBM	2.38	59	P	22	20.65	2.6
GMO	2.42	129	P	22	19.22	0.5
JCW	2.48	27	P	22	20.27	0.8
BRVW	2.54	77	P	22	23.60	3.1
VIPM	2.57	124	P	22	21.38	0.5
CMW	2.64	22	P	22	23.38	1.6
JBO	2.68	100	P	22	23.65	1.3
MCW	2.74	11	P	22	23.49	0.3

64 obs. associated

& JUN 18, 1990 18h 29m 53.00s
62.224 N 151.525 W
DEPTH = 89.4km
CENTRAL ALASKA (1)
<AGS-P>.

SKT	0.24	181	iP	30	05.77	-0.5
CUT	0.61	72	iP	30	07.99	-0.9
			iS	30	19.15	
SUA	0.85	154	iP	30	11.03	-0.3
			iS	30	25.21	
NCG	0.88	200	iP	30	11.23	-0.4
PWA	0.97	126	iP	30	12.04	-0.5
CRP	1.01	198	eP	30	12.92	-0.3
			eS	30	27.47	
HUR	1.16	48	eP	30	13.92	-0.9
PLRM	1.30	118	eP	30	15.72	-0.8
			iS	30	33.35	
GHO	1.31	109	iP	30	16.14	-0.6
			iS	30	34.65	
PMS	1.36	136	eP	30	16.52	-0.8
KTH	1.36	11	iP	30	16.37	-1.1
SML	1.56	104	iP	30	18.91	-1.1
RED	1.91	199	iP	30	24.84	0.3
SCM	2.02	99	eP	30	24.53	-1.5
TOA	2.51	90	eP	30	31.44	-1.3
CNPM	2.71	177	eP	30	35.92	0.5
KLU	2.76	103	eP	30	33.64	-2.4
PAX	2.90	72	eP	30	36.87	-1.2

18 obs. associated

JUN 18, 1990 19h 02m 57.33± 0.20s
21.825 S ± 3.7km 68.438 W ± 6.4km
DEPTH = 117.0km (6 depth phases)
5.3mb (27 obs.)
CHILE-BOLIVIA BORDER REGION (124)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 19C
Centroid Locotion:
Origin Time 19:03: 4.9 0.8
Lat 21.92S 0.08 Lon 68.49W 0.12
Dep 136.1 2.8 Half-duration 1.6
Moment Tensor; Scale 10**16 Nm
Mrr=-9.26 0.69 Mtt= 2.06 0.95
Mff= 7.20 1.16 Mrt= 1.31 0.58
Mrf=-5.53 0.72 Mtf=-4.31 0.94
Principal Axes:

T	Val= 11.12	Plg=15	Azm= 63
N	-0.18	7	155
P	-10.94	73	270

Best Double Couple:Mo=1.1*10**17
NP1:Strike=142 Dip=31 Slip=-105
NP2: 339 61 -81

ANT	2.61	224	iPc+	03	38.50	-0.6
			iS	04	05.70	
CCH	4.92	26	Pc	04	11.20	0.6
LPB	5.27	4	Pc	04	15.20	-0.3
	1.0s	560.00nm			5.7mb	
			i	04	50.00	
			S	05	29.00	
ZOBO	5.53	3	Pc	04	20.20	1.0
RTRS	8.36	186	ePd	04	55.90	-1.3
RTLL	9.47	180	ePd	05	09.20	-2.9
RTCB	9.63	182	eP	05	11.60	-2.7
ZON	9.68	181	e(P)	05	17.00	1.9
CFA	9.74	179	iPc	05	13.00	-2.8
RTBS	9.84	185	e(P)	05	15.20	-1.8
RTCV	10.00	180	e(P)	05	16.00	-3.2X
PT03	10.47	317	eP	05	22.20	-3.4X
			eS	07	09.50	
PT06	10.94	315	iP	05	31.90	0.2
			iS	07	22.20	
JACH	10.98	190	eP	05	40.00	7.7X
PEL	11.45	190	eP	05	39.50	1.1
IHA	11.51	194	eP	05	49.00	9.8X
			e(S)	08	03.00	
LNV	12.37	192	iPc	05	49.90	-0.5
PT08	12.50	320	eP	05	51.50	-1.2
			e(S)	08	03.00	
NNA	12.66	319	eP	05	51.50	-2.9
	0.2s	16.67nm			5.3mb	X
BAO	20.31	76	eP	07	24.40	-1.9
PSO	24.47	338	eP	08	08.50	1.2
HBF	55.63	348	P	12	22.40	-0.8
SGS	55.91	348	P	12	24.00	-1.2
LHS	57.21	348	P	12	33.60	-0.8
TKL	58.99	345	P	12	44.80	-2.0
GBTN	59.10	345	P	12	45.80	-1.8
PWLA	59.49	341	P	12	47.70	-2.5
BLA	59.80	349	P	12	51.40	-1.0
	0.7s	41.67nm			5.6mb	
NAV	59.97	349	P	12	52.20	-1.3
CVL	60.23	351	P	12	54.30	-0.9
NA2	60.27	352	P	12	54.50	-1.0
OLY	61.05	339	P	12	58.30	-2.6
TBR	62.87	355	P	13	32.00	19.1X
FVM	62.98	341	P	13	12.00	-1.7
			ipP	13	40.20	115km
LNO	62.99	335	iP	13	12.50	-1.1
TUL	62.99	335	eP	13	12.50	-1.3
	1.4s	94.70nm			5.5mb	
MEO	63.16	332	iPd	13	12.80	-2.2
WVLY	64.65	352	P	13	23.00	-1.5
HBVT	66.00	356	P	13	32.00	-1.1
WNY	66.08	356	P	13	32.80	-0.8
RSNY	66.28	355	P	13	34.00	-0.9
	1.0s	36.15nm			5.2mb	
ALQ	67.01	327	ePd	13	39.80	-0.1
	1.2s	53.91nm			5.3mb	
ANMO	67.01	327	P	13	39.30	-0.6
			e	14	07.90	115km
LIC	68.06	73	P	13	45.54	-1.1
TIC	68.25	73	P	13	47.20	-0.7
SPA	68.31	180	iPd	13	49.20	1.5
	1.0s	90.00nm			5.6mb	
KIC	68.37	73	P	13	47.74	-0.9
	0.8s	44.00nm			5.4mb	
LKO	69.06	70	P	13	51.78	-1.1
GLD	70.23	331	P	13	59.90	0.2
	1.4s	94.59nm			5.4mb	
GOL	70.25	330	P	13	59.60	-0.4
GLA	70.27	320	eP	14	01.00	1.1
BAR	71.13	318	eP	14	05.00	-0.1
TPC	71.73	320	eP	14	09.00	0.3
RVR	72.46	319	eP	14	14.00	1.1
MSU	72.69	325	P	14	15.20	0.7
GSC	73.00	320	eP	14	17.00	0.8
MWC	73.03	319	eP	14	17.00	0.5
PAS	73.05	319	eP	14	17.00	0.6
SBB	73.20	319	eP	14	17.00	-0.3
RSSD	73.28	334	P	14	17.20	-0.6
			pP	14	46.90	118km
DAU	73.64	327	P	14	20.80	0.8
DUG	74.27	326	P	14	24.40	0.9
	1.0s	25.00nm			5.0mb	
SYP	74.42	318	eP	14	25.00	0.5
BCH	74.91	318	P	14	28.60	1.3
TNP	75.16	322	P	14	29.60	0.9
	1.0s	28.33nm			5.0mb	
SBA	75.59	190	e(P)	14	33.30	2.9X
FRI	75.88	320	ePd	14	32.00	-0.5
PRI	75.90	319	eP	14	33.90	1.1
PTI	76.03	328	P	14	34.00	0.5
KVN	76.33	322	P	14	36.00	0.7
SCH	76.34	1	ePd	14	33.90	-0.8
	0.7s	36.00nm			5.3mb	
LLA	76.38	319	eP	14	36.00	0.6
PRS	76.45	318	ePd	14	36.60	0.8
CMB	76.97	320	iPd	14	39.00	0.3
HPI	77.01	328	P	14	40.00	0.9
ARN	77.21	319	P	14	41.20	1.2
MHC	77.27	319	ePd	14	41.50	1.0

18d 19h

GCC	77.29	319	eP	14	41.20	0.8
BKS	77.98	319	ePd	14	45.20	1.0
	1.4s	108.00nm				5.5mb
BRK	77.99	319	eP	14	45.00	0.8
LRM	78.28	330	ePd	14	46.50	0.5
ORV	78.62	321	P	14	48.50	0.8
			pP	15	17.90	115km
MIN	79.20	321	eP	14	50.60	-0.4
WDC	79.89	321	iPd	14	53.70	-0.8
			e	15	02.40	28kmX
LBFM	80.02	322	P	14	56.00	0.6
FHC	80.88	321	ePd	15	01.10	1.3
SES	81.16	334	ePd	15	01.10	0.1
	0.8s	36.00nm				5.2mb
			pP	15	12.00	35kmX
FFC	81.48	341	iPd	15	02.20	-0.3
	0.6s	14.00nm				4.9mb
NEW	82.24	330	P	15	06.00	-0.7
	1.4s	43.48nm				5.1mb
HVD	82.40	120	iPc	15	27.50	19.3X
BLF	83.49	119	iPc	15	14.50	0.7
	1.2s	120.00nm				5.7mb
			e	15	45.20	119km
MAW	83.89	163	iPd	15	17.00	2.2
PNT	84.16	329	eP	15	16.00	-0.4
	0.8s	18.00nm				5.0mb
EDM	84.24	335	eP	15	15.50	-1.2
GMW	84.55	326	P	15	18.50	0.2
FRB	85.29	360	eP	15	21.00	-0.5
MCW	85.31	327	P	15	22.90	0.8
PGC	85.60	327	eP	15	24.00	0.5
TOL	85.81	44	iPc	15	26.30	1.5
	1.1s	50.63nm				5.4mb
SLR	86.47	116	iPc	15	28.00	-0.6
BCAO	88.82	85	iPd	15	40.00	0.1
	1.0s	5.00nm				4.6mb
BUL	88.89	111	iPc	15	40.50	0.2
			ipP	16	11.90	121km
KRI	91.05	108	iPc	16	04.00	13.7X
LFF	91.47	42	eP	15	51.90	0.5
	1.2s	35.70nm				5.5mb
YKA	91.64	340	eP	15	51.40	-0.4
	0.6s	19.30nm				5.5mb
MFF	91.76	40	eP	15	52.90	0.2
	1.2s	29.75nm				5.4mb
LPF	91.96	38	eP	15	53.80	0.2
	1.0s	8.00nm				4.9mb
RJF	92.13	42	eP	15	53.80	-0.7
	1.2s	11.90nm				5.0mb
GRR	92.25	38	eP	15	54.90	0.0
	1.0s	12.00nm				5.1mb
SMF	94.19	41	eP	16	05.50	1.6
	1.0s	10.00nm				5.1mb
INK	101.40	340	ePdiff	16	35.00	-1.0
MBC	102.63	349	ePdiff	16	41.50	0.1
	0.6s	2.00nm				5.1mb
WRA	132.89	210	PKPd	22	01.50	0.5
	1.4s	44.50nm				
WB5	132.94	210	ePKP	22	01.10	0.0
KSH	144.99	52	ePKP	22	23.50	0.9
KUSJ	145.23	315	ePKP	22	22.30	-0.3
ASAJ	146.06	318	ePKP	22	25.30	1.3
HOOJ	146.49	315	ePKP	22	26.30	1.5
GBA	146.54	98	PKPd	22	26.40	0.8
	0.6s	18.80nm				
GUA	147.23	261	ePKP	22	29.80	3.1X
	0.7s	142.47nm				
GUMO	147.29	261	ePKP	22	29.80	3.0X
	0.8s	257.69nm				
PJG	147.29	261	ePKP	22	29.60	2.8X
MRRJ	147.91	317	ePKP	22	29.20	2.2
NDI	148.27	71	iPKPd	22	29.50	1.4
HYB	148.64	92	ePKP	22	30.00	1.0
WMO	150.47	36	iPKPd	22	37.30	6.2X
YAMJ	150.60	310	PKP	22	37.70	6.4X
KAKJ	151.30	306	PKP	22	39.20	6.8X
NIIJ	151.74	309	PKP	22	40.30	7.2X
CHJJ	152.24	307	PKP	22	42.00	8.2X
MAT	152.62	308	(PKP)	22	35.00	0.6
MDJ	152.84	331	ePKP	22	34.50	0.1
MTMJ	152.89	309	PKP	22	42.90	8.1X
IIDJ	153.27	306	PKP	22	43.60	8.3X
CN2	155.24	335	PKP	22	38.30	0.7
			pPKP	23	03.30	
SNY	157.64	336	ePKP	22	39.60	-1.2
			e	23	14.50	
GTA	159.80	27	PKP	22	44.60	1.1
HHC	161.03	360	PKPc	22	47.50	2.8X
BJI	161.42	349	ePKP	22	46.00	1.1
TIY	164.15	357	ePKP	22	49.00	1.2
SSE	167.38	319	PKPd	22	52.50	2.0
XAN	167.61	10	PKP	22	52.50	1.8
CHG	167.79	102	ePKP	22	52.00	0.8
CD2	168.57	36	PKP	22	53.00	1.6
WHN	170.96	345	ePKP	22	54.00	1.4

S.D. = 1.2 on 126 of 145 obs.

JUN 18, 1990 19h 27m 08.18± 1.02s
40.511 N ± 8.3km 30.562 E ± 8.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

GPA	0.29	221	iPg	27	13.40	-0.9
			iSg	27	18.40	
HRT	0.75	295	ePg	27	22.10	-0.8
			eSg	27	33.10	
IZI	0.85	259	ePg	27	24.60	0.0
GBZT	0.89	288	ePg	27	25.00	-0.3
			iSg	27	39.00	
YLV	0.91	274	iPg	27	25.70	0.1
			iSg	27	38.20	
ALT	1.50	194	ePn	27	34.60	-0.6
KCT	1.71	262	ePn	27	40.00	1.9
BBTK	1.81	111	eP	27	41.00	1.2
			iS	28	03.00	
EDC	2.07	266	ePn	27	46.60	3.3
KHL	2.33	201	ePn	27	46.00	-1.2
DMK	2.49	303	iPn	27	48.70	-0.7
BCK	3.05	180	ePn	27	57.00	-0.3
EZN	3.32	259	ePn	28	01.10	-0.1
MLR	6.02	327	eP	28	38.00	-1.5

S.D. = 1.4 on 14 of 14 obs.

• JUN 18, 1990 21h 24m 36.60± 2.79s
31.375 S ±11.6km 68.532 W ±22.3km
DEPTH = 101.3 ± 22.7 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.07	50	iPc	24	50.80	-0.4
ZON	0.21	216	iPd	24	51.00	-0.5
RTCB	0.25	244	iPd	24	51.60	-0.1
CFA	0.34	133	iPd	24	52.00	0.2
			eS	25	02.20	
RTCV	0.48	181	iPc	24	52.90	0.2
RTBS	0.84	250	ePd	24	55.70	0.1
RTRS	1.44	326	iPc	25	02.90	0.3
JACH	2.18	233	iPc	25	13.00	0.8
			iS	25	41.00	
FCH	2.45	217	ePd	25	17.50	1.5
			iS	25	50.00	
PEL	2.54	225	iPc	25	17.10	0.2
			iS	25	47.50	
ROCH	2.64	232	iP	25	18.20	-0.3
			iS	25	49.00	
PCH	2.80	216	ePd	25	22.00	1.5
			i	25	57.00	
TACH	3.05	221	eP	25	23.00	-0.8
CHCH	3.12	214	iP	25	24.70	-0.1
LNV	3.54	223	iPc	25	27.80	-2.7
			iS	26	08.00	

S.D. = 1.1 on 15 of 15 obs.

? JUN 18, 1990 21h 52m 55.86± 0.89s
31.588 S ±18.1km 68.829 W ±15.0km
DEPTH = 100.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB	0.10	14	iPd	53	10.30	-0.1
			S	53	21.50	
RTLL	0.40	50	iPc	53	11.10	-0.2
			eS	53	22.90	
CFA	0.50	92	iPd	53	12.10	0.2
			eS	53	25.00	
RTBS	0.54	262	ePd	53	12.10	0.0
RTRS	1.51	339	iPc	53	22.70	0.1

S.D. = 0.2 on 5 of 5 obs.

? JUN 18, 1990 22h 46m 55.54± 2.54s
24.543 N ±34.6km 46.255 W ±34.8km
DEPTH = 10.0km (geophysicist)
4.3mb (3 obs.)
NORTH ATLANTIC RIDGE (403)

LKO	41.46	104	P	54	44.34	-0.1
KHC	52.26	46	eP	56	09.10	0.0
NAO	52.95	31	P	56	14.40	0.4
	1.0s	4.20nm				4.3mb
HFS	54.14	32	eP	56	22.00	-0.7
	0.4s	0.70nm				4.0mb
MLR	60.70	50	eP	57	10.00	0.5
			e	14	30.00	
MBC	62.33	345	eP	57	20.00	0.0
	1.1s	4.00nm				4.5mb

S.D. = 0.5 on 6 of 6 obs.

• JUN 18, 1990 23h 10m 11.63± 1.00s
6.909 S ±13.1km 128.154 E ±17.1km
DEPTH = 33.0km (normal)
4.7mb (3 obs.)
BANDA SEA (280)

WB5	14.23	156	eP	13	32.80	-0.2
			eS	15	58.00	
WRA	14.28	156	Pc	13	33.90	0.3
	0.8s	19.40nm				4.8mb
QIS	17.53	142	eP	14	16.00	0.8
			iS	17	18.80	
ASPA	17.55	162	iPd	14	16.00	0.4
	0.6s	48.00nm				4.8mb
			eS	17	12.80	
WARB	19.22	184	eP	14	35.00	-1.0
	0.3s	4.00nm				4.1mb
NANU	19.75	217	eP	14	42.00	0.2
			eS	18	15.00	
CHTO	38.51	312	(P)	17	33.90	1.0
YKA	108.47	26	ePKP	28	36.60	-1.5
	0.6s	0.50nm				
ZOBO	151.89	145	PKP	30	05.80	6.1X

S.D. = 1.0 on 8 of 9 obs.

? JUN 18, 1990 23h 46m 22.49± 6.12s
32.438 S ±41.8km 71.592 W ±26.6km
DEPTH = 23.4 ± 6.8 km
NEAR COAST OF CENTRAL CHILE (135)

IHA	0.59	184	iPd	46	33.80	-0.2
			iS	46	41.10	
ROCH	0.72	138	iPd	46	36.50	0.0
			iS	46	45.00	
JACH	0.88	106	iPd	46	39.10	0.1
			iS	46	50.70	
PEL	1.04	133	iPd	46	41.50	-0.1
			iS	46	54.00	
SAN	1.28	143	eP	46	44.50	-0.5
			iS	46	59.90	
TACH	1.33	156	iPd	46	45.50	-0.2
			i	47	03.00	
FCH	1.41	129	iPd	46	46.90	-0.2
			iS	47	03.60	
PCH	1.49	143	ePd	46	48.50	0.5
			iS	47	06.00	
LNV	1.52	174	iPc	46	48.60	0.2
			iS	47	06.50	
CHCH	1.69	152	eP	46	51.50	0.6
			iS	47	11.50	

S.D. = 0.4 on 10 of 10 obs.

? JUN 18, 1990 23h 56m 36.81± 1.16s
49.880 N ±13.9km 18.432 E ±10.3km
DEPTH = 10.0km (geophysicist)
CZECHOSLOVAKIA (547)

SPC	1.37	120	iPn	57	02.00	-0.1
			i(Sg)	57	20.20	
KSP	1.68	306	ePn	57	06.50	0.2
			iPg	57	09.80	
			iS	57	30.50	
ZST	1.90	208	ePn	57	09.80	0.3
			e	57	18.70	
			e(Sn)	57	33.50	
SRO	2.07	182	eP	57	16.80	4.8X
PRU	2.52	274	ePn	57	21.60	3.2X
			Pg	57	24.30	
			eSg	57	56.00	
SOP	2.52	210	eP	57	26.70	8.2X
KHC	3.25	259	ePn	57	28.50	-0.4
			Pg	57	36.40	
			Sg	58	24.20	
CLL	3.74	295	ePg	57	48.00	12.2X
			eSg	58	38.00	

S.D. = 0.5 on 4 of 8 obs.

JUN 19, 1990 01h 18m 13.46± 0.43s
44.011 N ± 6.0km 10.033 E ± 3.7km
DEPTH = 20.8 ± 5.0 km
NORTHERN ITALY (545)
ML 2.8 (LDG).

BDI	0.41	83	Pd	18 21.30	-0.8
			eSg	18 26.90	
PII	0.46	129	Pd	18 22.90	0.1
			eSg	18 29.50	
MME	0.51	69	Pd	18 23.40	-0.5
			eSg	18 30.50	
BOB	0.86	331	Pc	18 30.30	0.6
			lSg	18 42.80	
PCP	1.19	297	P	18 36.31	1.3
			S	18 52.47	
PGD	1.23	96	P	18 36.10	0.5
			eSn	18 53.00	
SFI	1.32	93	P	18 38.00	1.3
			eSg	18 55.00	
CKI	1.33	289	P	18 39.30	2.5
FIN	1.33	279	P	18 39.69	2.8
			S	18 57.55	
CRE	1.44	105	P	18 38.00	-0.5
			eSg	18 57.00	
IMI	1.55	267	P	18 39.23	-0.9
			S	18 56.62	
SAL	1.63	12	P	18 41.70	0.5
PGF	1.65	208	Pn	18 41.10	-0.4
			Sn	19 00.70	
RSM	1.75	92	P	18 43.90	1.0
MDI	1.78	353	P	18 44.00	0.7
SBF	1.88	266	Pn	18 44.30	-0.6
			Sn	19 06.70	
ENR	1.89	277	P	18 44.93	-0.2
			S	19 05.40	
VAI	2.06	335	P	18 48.50	1.1
DOI	2.06	285	P	18 49.70	2.1
ASS	2.13	115	P	18 48.00	-0.5
FRF	2.49	261	Pn	18 52.90	-0.7
			Sn	19 20.30	
LMR	2.64	256	Pn	18 54.60	-1.2
			Sn	19 23.70	
LRG	2.72	259	Pn	18 56.30	-0.5
LPG	2.77	304	Pn	18 58.20	0.4
LPL	2.79	304	Pn	18 58.30	0.2
FVI	3.23	36	P	19 03.50	-0.5
BSF	4.44	331	Pn	19 19.60	-1.7
HAU	4.75	329	Pn	19 24.20	-1.4
CDF	4.80	337	Pn	19 25.70	-0.7
LOR	5.42	309	Pn	19 32.50	-2.6
BGF	5.67	299	Pn	19 37.20	-1.5

S.D. = 1.3 on 31 of 31 obs.

? JUN 19, 1990 02h 41m 17.35± 4.46s
31.323 S ±13.2km 68.525 W ±35.7km
DEPTH = 115.3 ± 38.9 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.05	99	e(P)	41 33.40	-0.3
ZON	0.26	210	iPd	41 33.50	-0.6
			eS	41 44.00	
CFA	0.37	139	iPd	41 34.60	0.2
			eS	41 47.00	
RTRS	1.40	325	iPc	41 44.00	0.3
JACH	2.22	232	iPc	41 55.00	1.0
			iS	42 24.00	
FCH	2.50	216	iP	41 59.00	1.2
			iS	42 32.00	
PEL	2.58	225	iPc	41 59.50	0.9
			iS	43 31.00	
ROCH	2.67	231	eP	41 59.50	-0.6
			iS	42 32.00	
PCH	2.84	216	eP	42 03.00	0.8
			i	42 39.00	
TACH	3.09	221	iPd	42 05.00	-0.4
CHCH	3.16	214	iPc	42 06.70	0.3
			iS	42 45.80	
LCCH	3.35	229	iPd	42 08.00	-0.9
LNV	3.58	222	iPd	42 10.10	-1.9
			i	42 50.00	

S.D. = 1.0 on 13 of 13 obs.

JUN 19, 1990 02h 42m 58.60± 0.43s
42.015 N ± 4.6km 12.917 E ± 3.8km
DEPTH = 14.0 ± 3.2 km
CENTRAL ITALY (381)

RMP	0.26	218	Pd	43 05.20	0.8
			eSg	43 09.40	
AZI	0.39	94	Pd	43 06.90	0.2
			eSg	43 11.50	
AQU	0.50	47	Pd	43 08.50	-0.1
			eSg	43 15.70	
SDI	0.74	114	Pd	43 12.40	-0.4
			iSg	43 23.30	
ASS	1.07	350	Pd	43 18.40	0.0
			eSn	43 34.60	
DUI	1.20	107	P	43 21.00	0.3
ARV	1.48	1	P	43 25.50	0.7
CRE	1.76	337	P	43 29.40	0.5
BSS	1.88	130	P	43 31.00	0.5
PGD	2.06	335	P	43 33.00	-0.3
SFI	2.06	338	P	43 34.50	1.4
BDI	2.66	321	P	43 41.50	-0.3
PGF	2.96	282	Pn	43 46.70	0.7
VBY	3.88	25	e(Pn)	44 18.80	19.8X
VOY	4.08	10	e(Pn)	44 02.60	0.7
			eSn	44 41.00	
LJU	4.19	16	e(Pn)	44 05.50	2.0
			e	44 09.00	
			eSn	44 53.00	
SBF	4.43	296	Pn	44 06.70	-0.2
FVI	4.58	359	P	44 07.50	-1.4
FRF	4.87	291	Pn	44 12.90	-0.2
LMR	4.90	288	Pn	44 12.30	-1.3
LRG	5.04	289	Pn	44 15.50	0.0
LPG	5.66	310	Pn	44 28.00	3.4X

S.D. = 0.9 on 20 of 22 obs.

? JUN 19, 1990 04h 17m 35.36±10.50s
24.081 N ±40.1km 122.221 E ±60.6km
DEPTH = 5.0km (geophysicist)
TAIWAN REGION (243)

TWD	0.57	270	ePc	17 46.80	0.0
			eS	17 56.00	
TWC	0.63	327	iPd	17 47.90	0.0
			eS	17 58.00	
TWZ	1.17	330	ePc	17 57.90	0.3
ANP	1.27	330	eP	17 59.20	-0.3
TWQ	1.28	279	eP	17 59.60	0.0

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

? JUN 19, 1990 04h 33m 40.05±12.25s
42.618 N ±56.0km 6.158 E ±94.9km
DEPTH = 10.0km (geophysicist)
WESTERN MEDITERRANEAN SEA (387)
ML 2.3 (LDG).

LMR	0.76	20	Pg	33 54.80	-0.1
			Sg	34 03.20	
LRG	0.85	10	Pg	33 56.40	0.0
			Sg	34 05.80	
FRF	1.01	21	Pg	33 59.20	0.1
			Sg	34 10.60	
PGF	2.10	91	Pn	34 15.80	0.0
			Sn	34 38.60	

S.D. = 0.1 on 4 of 4 obs.

? JUN 19, 1990 04h 40m 22.77± 1.62s
47.331 N ±24.8km 12.067 E ± 8.5km
DEPTH = 10.0km (geophysicist)
AUSTRIA (546)
ML 2.0 (VIE).

WATA	0.33	271	iPgc	40 29.10	-0.6
			lSg	40 34.90	
			i	40 35.20	
SQTA	0.59	260	iPgc	40 35.60	0.7
			i	40 44.30	
			lSg	40 45.40	
FVI	0.89	146	P	40 39.50	-0.2
			eSg	40 54.00	
KBA	0.91	106	iPgd	40 40.40	0.1
			lSg	40 53.40	

S.D. = 1.0 on 4 of 4 obs.

? JUN 19, 1990 06h 41m 01.49± 2.82s
37.828 N ±18.2km 0.571 W ±27.5km
DEPTH = 5.0km (geophysicist)
SPAIN (377)
mbLg 2.8 (MDD). Felt (III) at Torreviejo.

ACU	0.69	10	iP	41 15.00	-0.4
			eS	41 21.80	
ENIJ	1.57	237	eP	41 30.00	0.0
EVIA	1.72	299	eP	41 32.20	-0.2
			eS	41 52.70	
ECHE	1.79	350	eP	41 33.80	0.6
			eS	41 54.00	

S.D. = 0.7 on 4 of 4 obs.

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* JUN 19, 1990 08h 45m 05.47± 0.40s
10.238 S ± 7.8km 110.577 E ±12.6km
DEPTH = 33.0km (normal)
4.7mb (3 obs.)
SOUTH OF JAVA (282)

NANU	13.14	159	iPd	48 04.90	-7.5X
			eS	50 18.00	
MEKA	17.94	156	eP	49 12.00	-2.2
BAL	21.05	165	eP	49 50.50	1.4
WARB	21.97	138	eP	50 03.50	5.1X
MUN	22.25	167	eP	50 06.00	4.9X
KLB	22.27	164	eP	50 02.00	0.7
COOL	22.77	156	eP	50 06.50	0.2
WRA	24.86	116	Pc	50 26.30	-0.3
	1.1s		23.90nm		4.7mb
WB5	24.86	115	eP	50 27.10	0.4
			e	55 03.20	
NNT	25.11	334	eP	50 26.00	-2.9
ASPA	25.95	124	iPc	50 37.10	0.2
	1.1s		18.00nm		4.6mb
			eS	55 21.20	
CHG	31.06	338	eP	51 23.50	0.6
KMI	35.97	348	Pc	52 08.50	3.0X
			sP	52 20.00	
GBA	40.53	305	Pc	52 43.30	-0.2
	0.7s		12.10nm		4.8mb
CD2	41.43	351	P	52 51.60	0.9
LSA	43.90	335	P	53 12.80	1.4
XAN	44.06	358	Pc	53 12.60	0.5
PKI	44.80	328	P	53 34.20	15.6X
GUN	44.83	328	P	53 35.00	16.1X
DMN	45.00	327	P	53 36.00	15.9X
GKN	45.56	327	P	53 40.20	15.8X
POO	46.16	308	eP	53 30.00	0.9
TIY	47.73	2	eP	53 41.20	0.0
BJI	50.29	6	eP	54 00.00	-0.8
GTA	50.40	349	eP	54 02.80	0.9
BTO	50.58	359	eP	54 03.00	-0.2
CN2	55.46	13	eP	54 38.00	-1.2
			PP	54 48.00	
WMQ	57.69	341	P	54 55.50	0.2
BUL	79.06	251	iPd	57 07.60	-1.2
YKA	118.59	22	ePKP	03 44.50	-6.7X
	0.9s		0.40nm		
TUL	144.99	39	ePKP	04 41.60	0.2
	0.7s		18.60nm		
			e	04 53.30	
LNO	144.99	39	ePKP	04 41.70	0.4
			e	04 52.80	
SIV	152.66	198	(PKP)	04 54.00	0.1
			e	05 01.00	
LPB	153.37	183	ePKP	05 10.00	14.6X
ZOBO	153.63	183	PKP	05 02.00	6.0X

S.D. = 1.1 on 24 of 35 obs.

? JUN 19, 1990 09h 14m 28.61± 5.75s
26.669 N ±37.7km 34.912 E ±56.5km
DEPTH = 33.0km (normal)
RED SEA (554)

WAJH	1.56	108	ePd	14 54.33	0.0
			lS	15 12.87	
BADA	1.85	2	ePd	14 57.97	-0.5
AYN	2.40	23	ePd	15 06.33	0.0
			iS	15 34.00	
HQL	2.59	3	eP	15 09.67	0.5

S.D. = 0.8 on 4 of 4 obs.

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* JUN 19, 1990 09h 15m 58.54± 0.64s
62.027 S ±12.5km 55.719 W ±12.5km
DEPTH = 10.0km (geophysicist)
5.1mb (3 obs.)
SOUTHWESTERN ATLANTIC OCEAN (156)

AIA	5.00	226	e(P)	17 16.00	0.8

19d 09h

SPA	28.13	180	iPd	21 51.30	-1.1
	1.0s	16.00nm		4.8mb	
SIV	46.13	353	iP	24 23.00	-1.6
ZOBO	46.54	343	P	24 30.00	1.5
			LR	40 34.00	
KIM	60.64	96	eP	26 13.00	1.2
BLF	61.00	98	eP	26 14.00	-0.3
	0.9s	15.38nm		5.1mb	
PRY	63.44	98	eP	26 31.00	0.4
SLR	64.83	98	iPc	26 39.50	-0.2
	1.0s	16.00nm		5.2mb	
BUL	69.78	95	iPd	27 10.00	-0.9
KRI	73.11	94	iPd	27 27.20	-3.7X
LSZ	73.79	92	iP	27 36.00	1.2
	1.1s	0.20nm		3.1mb X	
		i		27 43.00	
FBA	143.60	314	PKP	35 32.60	-0.8
MBC	143.72	339	ePKP	35 29.00	-4.3X
	0.7s	1.00nm			
MAT	153.04	205	(PKP)	36 07.00	17.8X
	0.9s	5.04nm			
	S.D. = 1.2	on	11 of	14 obs.	

& JUN 19, 1990 10h 20m 31.64s
46.840 N 119.322 W
DEPTH = 2.7km
WASHINGTON (29)
<SEA>. CL 3.3 (SEA).

CRF	0.05	252	Pc	20 32.65	-0.2
WRD	0.18	43	Pd	20 35.72	0.5
WAH2	0.19	243	Pd	20 35.75	0.4
G8L	0.26	201	Pd	20 37.27	0.4
BVW	0.39	266	P	20 40.24	0.9
			S	20 46.59	
WIW	0.41	177	P	20 40.55	0.7
			S	20 47.84	
VTG	0.47	285	P	20 41.60	0.5
RSW	0.49	202	P	20 42.14	0.8
EPH	0.55	340	P	20 42.68	0.1
BRVW	0.58	233	P	20 43.97	0.7
PRW	0.68	202	Pd	20 45.78	0.6
MXC	0.72	249	P	20 46.71	0.7
E8G	0.86	275	P	20 49.24	0.4
SAW	0.86	356	P	20 48.21	-0.7
WG2	0.87	158	P	20 48.65	-0.4
TBM	0.93	291	P	20 50.34	0.1
WTV	0.96	334	Pc	20 50.28	-0.4
PATW	1.01	198	P	20 51.41	0.0
ETW	1.03	318	P	20 51.22	-0.6
NAC	1.04	265	P	20 52.39	0.4
DHW2	1.19	345	P	20 53.89	-0.6
LNOR	1.21	143	P	20 54.84	0.0
DPW	1.28	36	P	20 55.61	-0.5
GL2	1.36	230	P	20 57.36	-0.2
NLW	1.42	331	P	20 56.99	-1.5
JBO	1.42	195	P	20 58.46	0.0
WPW	1.54	266	P	21 00.08	-0.1
GLK	1.60	261	P	21 01.23	0.2
FMW	1.61	274	P	21 00.80	-0.5
VGB	1.67	218	P	21 02.11	0.2
ASR	1.71	247	P	21 02.74	0.0
GSM	1.73	283	P	21 03.12	0.2
RMW	1.80	291	P	21 04.00	0.0
RVC	1.82	274	P	21 04.23	0.0
VTHM	1.87	208	P	21 05.95	1.0
HTW	1.92	301	P	21 04.64	-1.1
RPW	2.19	318	P	21 11.77	2.3
CROR	2.19	213	P	21 09.73	0.1
JCW	2.23	308	P	21 12.18	2.1
HDW	2.67	289	P	21 16.29	-0.1
	40 obs. ossociated				

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* JUN 19, 1990 10h 34m 43.68± 0.60s
38.409 S ±14.2km 16.450 W ±11.3km
DEPTH = 10.0km (geophysicist)
5.0mb (14 obs.) 4.3Msz (1 obs.)
SOUTH ATLANTIC RIDGE (410)

BAO	35.83	301	eP	41 43.90	-1.6
BUL	42.85	78	eP	42 41.00	-2.8
SIV	44.99	287	P	43 02.00	0.9
LSZ	45.45	72	eP	43 05.00	0.1
			e	10 10.00	
			iSn	10 31.30	
			iSg	10 42.40	
KRI	45.57	75	iPd	42 59.70	-6.1X
LIC	45.66	16	P	43 04.92	-1.3
KIC	45.85	16	P	43 06.34	-1.5
	1.0s	11.50nm		4.8mb	
TIC	46.07	16	P	43 07.92	-1.6
LKO	48.77	14	P	43 28.78	-1.9
ZOBO	50.19	281	P	43 41.20	-1.2
	Z 22s	0.37um		4.3Msz	
			LR	57 26.00	
SPA	51.78	180	iPc	43 53.90	0.5
	0.9s	22.73nm		5.1mb	
BCAO	53.54	45	iPc	44 03.50	-3.4X
	0.8s	39.00nm		5.4mb	
			id	44 10.50	
LWI	54.78	60	iPc	44 15.70	-0.6
SOI	81.78	25	P	47 04.00	0.3
EPF	82.48	12	eP	47 08.20	0.8
	1.2s	17.85nm		5.1mb	
TDS	83.31	25	P	47 11.00	-0.7
MGR	83.48	24	P	47 12.00	-0.5
SGO	83.79	24	P	47 14.00	0.0
BSS	83.84	23	P	47 14.50	0.2
RDP	84.10	22	P	47 17.00	1.3
SDI	84.37	22	P	47 17.50	0.4
AZI	84.52	22	P	47 19.00	1.3
DUI	84.53	23	P	47 19.00	1.1
CAF	84.62	13	eP	47 19.10	0.9
	1.2s	11.90nm		5.0mb	
LSF	85.81	12	eP	47 25.30	1.2
MAF	85.96	13	eP	47 26.00	1.1
	1.2s	13.40nm		5.0mb	
TCF	85.96	13	eP	47 26.40	1.5
	1.2s	14.90nm		5.0mb	
LPL	86.11	16	eP	47 25.40	-0.5
	1.0s	6.00nm		4.7mb	
OHR	86.14	27	eP	47 26.00	0.1
SMF	86.60	14	eP	47 29.00	1.0
	1.2s	11.90nm		5.0mb	
AVF	86.65	13	eP	47 29.40	1.2
	1.0s	9.00nm		4.9mb	
VAI	86.90	17	P	47 35.50	6.1X
SSF	86.94	14	eP	47 30.60	1.0
	1.1s	11.00nm		5.0mb	
MDI	87.04	18	P	47 29.50	-0.6
LOR	87.21	14	eP	47 31.70	0.8
	1.0s	6.00nm		4.8mb	
FVI	88.58	20	P	47 38.00	0.5
CDF	88.98	16	eP	47 40.10	0.6
	1.4s	17.45nm		5.1mb	
KHC	91.13	19	eP	47 50.70	1.3
MLR	91.81	28	ePc	47 53.10	0.4
	1.5s	11.60nm		5.0mb	
PRU	92.17	19	eP	47 55.00	0.9
			e	48 01.70	
YKA	126.85	325	ePKP	53 46.20	-2.1
	0.8s	0.80nm			
MBC	130.00	342	ePKP	53 53.00	-0.9
	0.7s	1.00nm			
INK	135.01	332	ePKP	54 02.50	-1.1
	S.D. = 1.2	on	40 of	43 obs.	

? JUN 19, 1990 10h 54m 11.40± 9.59s
46.693 N ±31.3km 15.175 E ±68.6km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
MD 2.6 (LJU).

LJU	0.79	215	ePg	54 26.50	-0.2
			eSg	54 36.00	
CEY	1.09	209	e(Pg)	54 32.00	0.2
			e	54 47.50	
			eSg	54 48.00	
VOY	1.11	234	ePn	54 32.30	0.1
			e	54 34.60	
			eSg	54 49.00	
			e	54 52.30	
FVI	1.65	267	P	54 40.50	0.0
			eSn	55 04.00	
	S.D. = 0.3	on	4 of	4 obs.	

? JUN 19, 1990 10h 55m 13.59± 1.34s
12.780 S ±24.4km 74.085 W ±12.3km
DEPTH = 33.0km (normal)
PERU (116)

PT06	2.42	244	iP	55 51.80	0.0
			iS	56 28.20	
PT08	2.54	288	eP	55 54.40	0.6
			eS	56 27.50	
NNA	2.81	286	iPd	55 56.50	-0.7
	0.6s	23.33nm			
			iS	56 33.30	
ARE	4.44	146	eP	56 36.00	15.3X
ZOBO	6.73	122	P	56 53.30	0.0
			S	59 02.00	
LPB	6.89	124	eP	57 24.00	28.6X
	S.D. = 0.9	on	4 of	6 obs.	

JUN 19, 1990 11h 30m 25.34± 1.14s
22.558 S ± 7.6km 177.795 W ± 8.8km
DEPTH = 303.7 ± 10.7 km
4.6mb (16 obs.)
SOUTH OF FIJI ISLANDS (171)

SVA	5.65	321	ePc	31 51.60	0.5
VUN	5.73	322	ePc	31 51.60	-0.5
DZM	14.60	269	iPc	33 42.80	2.4
THZ	20.68	200	eP	34 43.60	0.4
KHZ	21.09	198	eP	34 45.40	-1.6
LTZ	21.80	200	P	34 51.90	-2.1
RMQ	30.63	256	eP	36 15.00	1.0
ASPA	44.27	259	iPd	38 07.30	0.0
	0.6s	32.00nm		4.8mb	
			eS	44 16.40	
WB5	44.53	264	iPd	38 08.90	-0.5
WRA	44.54	264	Pd	38 08.70	-0.8
	0.5s	11.60nm		4.5mb	
WARB	50.42	254	iPd	38 54.00	-0.8
	0.3s	8.00nm		4.6mb	
NANU	61.06	256	iPd	40 09.50	-0.5
	0.4s	20.00nm		5.0mb	
SPA	67.58	180	iPc	40 52.90	1.5
	0.7s	8.59nm		4.6mb	
MAT	71.97	324	eP	41 16.00	-1.9
	0.9s	5.88nm		4.3mb	
ADK	74.12	1	eP	41 28.00	-1.9
	0.7s	17.10nm		4.9mb	
SDN	78.98	10	eP	41 55.40	-1.3
PRS	79.17	43	eP	41 58.70	0.5
GCC	79.22	42	eP	41 58.50	0.1
BCH	79.30	45	P	42 00.00	0.9
PLM	80.38	48	P	42 05.00	0.1
FRI	80.63	44	e(P)	42 05.80	0.0
CMB	80.84	42	ePd	42 07.10	0.1
ORV	81.10	41	eP	42 08.20	0.0
WDC	81.13	39	iPd	42 09.00	0.6
MIN	81.54	40	eP	42 10.50	-0.2
GLA	81.62	49	P	42 11.40	0.3
KDC	82.75	13	eP	42 16.30	0.0
TNP	82.87	44	P	42 17.70	0.1
	0.9s	5.70nm		4.4mb	
KVN	82.88	43	P	42 17.50	-0.2
SVW	85.28	11	eP	42 28.20	-0.7
LON	85.49	35	P	42 30.30	0.0
GMW	85.49	34	P	42 31.00	0.8
RMW	85.95	34	P	42 32.70	0.2
MSU	86.40	46	P	42 35.80	0.7
TTA	86.93	10	ePd	42 36.90	0.0
PMR	86.97	13	ePd	42 36.50	-0.5
	0.8s	15.40nm		5.0mb	
TOA	88.07	14	ePd	42 42.60	0.2
PNT	88.25	34	ePd	42 44.00	0.6
	0.8s	24.00nm		5.2mb	
ALQ	88.54	51	eP	42 45.00	-0.4
	0.9s	3.78nm		4.3mb	
ANMO	88.54	51	P	42 45.80	0.4
	0.7s	3.00nm		4.3mb	
NEW	88.93	36	P	42 46.20	-0.5
	1.1s	12.35nm		4.8mb	
LRM	90.17	39	eP	42 52.90	0.2
FBA	90.20	12	iPd	42 51.30	-0.8
IMA	90.23	10	ePd	42 52.20	-0.2
	1.1s	15.60nm		4.9mb	
BW06	90.33	43	P	42 53.00	-0.5
	0.7s	1.46nm		4.0mb	
CHTO	91.12	290	P	42 58.80	1.5
GOL	91.56	47	P	43 00.30	1.0
SES	93.41	36	eP	43 07.00	-0.3
RSSD	94.50	44	P	43 12.30	-0.3
INK	96.20	15	ePd	43 18.70	-0.8
YKA	98.29	25	eP	43 27.90	-1.1
	0.7s	0.90nm		4.2mb	
MBC	104.74	12	ePdiff	43 57.00	-0.6
NAO	141.29	353	PKP	49 23.20	2.1
	0.6s	2.80nm			

EKA	147.03	6	PKPc	49 33.10	2.3
	0.7s	21.80nm			
KRA	149.22	337	ePKP	49 38.60	4.1X
WIT	149.60	355	ePKP	49 41.50	6.6X
KSP	149.70	342	ePKP	49 35.00	-0.2
	1.1s	39.00nm			
			i	49 40.40	
SPC	149.83	336	e(PKP)	49 40.80	5.1X
MLR	150.03	325	ePKPc	49 40.40	4.3X
	1.2s	13.60nm			
CLL	150.10	346	iPKPd	49 41.50	5.8X
	1.1s	55.00nm			
WTS	150.40	354	ePKP	49 42.00	5.9X
	0.9s	73.00nm			
			e	49 55.00	
PRU	150.95	343	PKPd	49 43.40	6.3X
	1.0s	21.70nm			
			e	49 47.20	
MOX	151.01	348	iPKP	49 44.00	6.8X
	1.1s	37.00nm			
ENN	151.69	355	iPKP	49 45.40	7.3X
	0.9s	32.00nm			
			e	49 54.00	
MEM	151.84	355	PKPd	49 45.30	7.0X
TNS	151.96	351	ePKPd	49 45.50	6.8X
KHC	151.99	344	ePKP	49 39.40	0.7
			i	49 46.30	
SNF	152.05	357	PKP	49 44.00	5.3X
BZS	152.08	330	ePKP	49 46.00	7.1X
DOU	152.45	357	PKP	49 47.00	7.7X
FLN	153.76	4	iPKPd	49 49.20	8.1X
	0.8s	14.80nm			
CDF	153.89	352	ePKP	49 49.80	8.4X
	0.7s	6.60nm			
LDF	153.95	4	iPKPd	49 49.60	8.2X
	0.6s	7.20nm			
GRR	154.11	5	iPKPd	49 50.20	8.6X
	0.6s	7.20nm			
HAU	154.39	354	iPKPd	49 50.70	8.7X
	0.6s	5.40nm			
LPF	154.45	5	iPKPd	49 51.10	9.1X
	0.6s	9.00nm			
BSF	154.51	353	iPKPd	49 51.00	8.7X
	0.8s	5.35nm			
LOR	155.31	357	iPKPd	49 52.90	9.6X
	0.6s	4.50nm			
SSF	155.53	358	iPKPd	49 53.40	9.8X
	0.8s	6.05nm			
LBF	155.59	357	iPKPd	49 54.10	10.4X
	0.6s	3.60nm			
MFF	155.94	4	ePKP	49 54.00	9.9X
	0.6s	5.40nm			

S.D. = 1.0 on 56 of 81 obs.

? JUN 19, 1990 14h 21m 54.79± 2.97s
16.168 N ±27.2km 98.506 W ±15.1km
DEPTH = 33.0km (normal)
4.1mb (2 obs.)
NEAR COAST OF GUERRERO, MEXICO (58)

ACX	1.47	298	iPd	22 18.61	-0.7
			iS	22 28.00	
III	2.38	337	iP	22 31.66	-0.9
			(S)	22 43.00	
IIT	2.84	4	iP	22 39.61	0.5
			(S)	23 16.65	
PPM	2.89	358	iP	22 39.31	-0.6
			(S)	23 11.07	
UNM	3.21	349	(P)	22 51.30	6.9X
			(S)	23 35.50	
CRX	3.41	341	(P)	22 48.80	1.5
			(S)	23 19.50	
IIC	3.65	349	(P)	23 00.15	9.5X
			(S)	24 41.38	
IIJ	3.73	342	iP	22 56.20	4.2X
			(S)	23 43.80	
EVV	3.78	52	(P)	23 09.50	17.4X
LVVM	4.05	29	iP	22 55.14	-0.9
			(S)	23 49.50	
MRX	4.35	324	(P)	23 05.80	5.6X
			(S)	23 59.50	
FFC	38.57	357	eP	29 17.00	0.9
	0.7s	6.00nm		4.5mb	
YKA	47.64	350	eP	30 29.70	0.2
	0.8s	0.80nm		3.8mb	

S.D. = 1.1 on 8 of 13 obs.

JUN 19, 1990 14h 58m 22.59± 0.40s
35.912 N ± 9.2km 70.338 E ± 7.5km
DEPTH = 33.0km (normal)
4.9mb (33 obs.) 4.8Msz (1 obs.)
HINDU KUSH REGION (718)

QUE	6.38	207	eP	59 55.60	-1.3
MAIO	8.79	276	iPc	00 27.80	-2.6
	0.9s	21.31nm		5.3mb	
			eS	01 58.00	
GKN	14.46	119	P	01 47.40	0.4
	0.4s	21.00nm		5.0mb	
DMN	15.03	119	P	01 55.00	0.5
	0.6s	29.00nm		4.7mb	
PKI	15.27	119	P	01 58.00	0.3
	0.4s	18.00nm		4.7mb	
HYB	19.81	156	eP	03 06.50	13.1X
NUR	38.00	325	iP	05 38.00	-0.8
	0.7s	9.30nm		4.8mb	
SUF	38.14	329	iP	05 39.40	-0.6
	0.5s	7.20nm		4.8mb	
KRA	38.74	307	eP	05 46.10	0.9
	0.8s	38.00nm		5.2mb	
Z	18s	1.40um		4.8Msz	
E	18s	1.40um			
SOD	40.05	335	eP	05 55.00	-0.8
KEV	41.15	339	eP	06 04.00	-0.9
PRU	42.22	307	eP	06 15.50	1.6
KHC	42.90	306	eP	06 20.70	1.2
CLL	43.15	309	iPc	06 23.00	1.6
	1.3s	11.00nm		4.4mb	
HFS	43.20	322	eP	06 19.20	-2.6
	0.5s	14.90nm		5.0mb	
Z	12s	0.03um		3.4MszX	
			e	06 22.40	
			e	07 58.50	
			e	08 04.40	
NAO	44.69	323	P	06 31.60	-2.3
	0.7s	7.50nm		4.7mb	
PGF	47.07	298	eP	06 53.90	0.9
	1.0s	16.00nm		5.0mb	
CDF	47.12	306	eP	06 53.80	0.5
	0.8s	5.35nm		4.6mb	
BSF	47.53	305	eP	06 57.00	0.3
	0.8s	18.80nm		5.2mb	
LPG	48.00	302	eP	07 01.40	0.8
	0.8s	10.05nm		4.9mb	
LPL	48.01	302	eP	07 01.40	0.8
	0.8s	10.75nm		4.9mb	
LBF	49.57	305	eP	07 12.80	0.5
	1.0s	8.00nm		4.7mb	
LOR	49.59	305	eP	07 13.20	0.7
	1.0s	5.00nm		4.5mb	
SMF	49.74	304	eP	07 14.00	0.4
	0.8s	24.20nm		5.3mb	
SSF	49.87	305	eP	07 15.00	0.4
	1.2s	13.40nm		4.8mb	
AVF	50.03	304	eP	07 16.10	0.3
	0.8s	22.85nm		5.3mb	
BGF	50.43	304	eP	07 19.30	0.5
	0.8s	9.40nm		4.8mb	
MAF	50.69	304	eP	07 21.80	0.9
	0.8s	12.10nm		4.9mb	
TCF	50.92	304	eP	07 23.40	0.8
	1.0s	24.00nm		5.1mb	
LSF	51.38	304	eP	07 26.60	0.5
	0.8s	14.80nm		5.0mb	
LDF	51.91	307	eP	07 30.10	0.1
	0.9s	9.85nm		4.8mb	
FLN	52.10	308	eP	07 31.30	-0.1
	0.8s	10.75nm		4.9mb	
EKA	52.34	316	Pd	07 33.20	0.0
	0.8s	7.70nm		4.7mb	
MFF	52.42	305	eP	07 34.10	0.2
	0.8s	10.75nm		4.9mb	
GRR	52.43	307	eP	07 34.00	0.1
	0.8s	10.75nm		4.9mb	
BCAO	56.95	249	iPc	08 01.00	-6.3X
	0.9s	18.00nm		5.1mb	
MBC	67.95	2	ePc	09 18.70	-1.0
	0.6s	6.00nm		4.9mb	
YKA	81.86	2	eP	10 37.50	-1.9
	0.7s	1.10nm		4.0mb	
WRA	82.14	121	P	10 41.00	-0.6
	0.6s	1.40nm		4.2mb	

S.D. = 1.1 on 37 of 39 obs.

? JUN 19, 1990 15h 27m 01.82±17.02s
31.650 S ±26.4km 69.026 W ±143.km
DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)

ZON	0.31	71	iPc	27 09.30	-0.5
RTCV	0.47	117	iPc	27 12.00	0.0
RTLL	0.57	56	iPc	27 13.90	0.4
CFA	0.67	87	iPd	27 14.90	0.0
			eS	27 21.30	
RTRS	1.52	346	iPc	27 37.00	10.0X
			eS	27 56.60	

S.D. = 0.6 on 4 of 5 obs.

? JUN 19, 1990 15h 39m 05.21± 1.89s
31.218 S ±16.1km 68.126 W ±27.1km
DEPTH = 100.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.31	249	iPc	39 20.00	-0.1
CFA	0.40	194	iPc	39 21.20	0.6
			eS	39 32.90	
ZON	0.57	235	eP	39 21.00	-0.9
			eS	39 33.00	
RTCV	0.73	209	ePd	39 23.00	-0.2
RTBS	1.22	248	eP	39 28.90	0.5
			S	39 44.70	
RTRS	1.55	312	iPc	39 32.50	0.0
			eS	39 52.70	

S.D. = 0.7 on 6 of 6 obs.

? JUN 19, 1990 15h 58m 39.64± 2.91s
18.035 N ±13.1km 101.457 W ±25.1km
DEPTH = 33.0km (normal)
GUERRERO, MEXICO (59)

MRX	1.68	9	(P)	59 07.00	-0.1
			iS	59 32.00	
ACX	1.92	127	iP	59 10.76	0.2
			iS	59 34.53	
III	1.92	80	iP	59 10.00	-0.8
			iS	59 35.00	
CRX	2.17	51	(P)	59 18.03	3.6X
			(S)	59 57.97	
IIJ	2.35	44	iP	59 16.63	-0.6
			iS	59 46.50	
UNM	2.51	59	(P)	59 21.50	2.2
IIC	2.70	50	iP	59 21.62	-0.4
			(S)	00 03.94	
PPM	2.87	69	iP	59 24.19	-0.5
			iS	59 58.00	
IIT	3.14	71	(P)	59 20.00	-8.3X
OXX	4.61	101	iP	59 49.00	-0.1
			iS	00 38.00	
LVVM	5.03	70	(P)	59 34.98	-19.9X

S.D. = 1.1 on 8 of 11 obs.

? JUN 19, 1990 16h 10m 25.26± 1.32s
50.375 N ±16.8km 18.895 E ± 7.6km
DEPTH = 10.0km (geophysicist)
POLAND (548)
ML 3.2 (KRA).

RAC	0.54	237	ePg	10 36.00	-0.1
			eSg	10 43.00	
KRA	0.74	115	ePg	10 39.60	-0.2
			i	10 40.60	
			iSg	10 51.50	
SPC	1.48	143	iPn	10 52.30	0.3
			i(Sg)	11 13.50	
KSP	1.72	287	ePn	10 55.50	0.1
	0.5s	47.00nm			
			iPg	10 58.10	
			iS	11 20.20	
ZST	2.48	209	e(Pn)	11 12.30	6.0X
			e	11 35.70	
			i	11 45.50	
			e	11 55.60	
SRO	2.59	189	eP	11 15.50	7.6X
			i	11 20.50	
			e	11 43.70	
PRU	2.83	264	ePn	11 18.20	7.0X
			Pg	11 24.00	
			Sg	11 53.80	
KHC	3.67	252	ePg	11 29.00	5.8X
			Sg	12 15.50	
CLL	3.85	286	ePg	11 38.00	12.2X

19d 16h

			eSg	12 30.00	
GRF	4.99	265	e(Pg)	12 18.00	36.0X
			eSg	13 05.00	
S.D. = 0.4			on	4 of 10 obs.	

JUN 19, 1990 16h 11m 51.77± 1.18s
16.581 N ± 7.2km 60.678 W ±10.9km
DEPTH = 33.0km (normol)
3.9mb (1 obs.)
LEEWARD ISLANDS (92)
MD 4.1 (TRN). ML 3.7 (FDF).

SFG	0.59	237	iPd	12 03.06	-0.6
SEG	0.81	258	ePd	12 06.65	-0.1
			S	12 15.80	
MGG	0.90	223	iPd	12 07.65	-0.4
			S	12 17.00	
DOG	1.05	239	eP	12 10.10	-0.2
PAG	1.11	240	ePd	12 10.74	-0.3
			S	12 22.40	
BPA	1.22	292	ePc	12 13.28	0.7
			S	12 27.30	
BBL	1.30	216	iPd	12 13.38	-0.4
			S	12 28.00	
MDN	1.44	209	eP	12 15.47	-0.2
			eS	12 32.42	
DPMT	1.48	207	eP	12 16.59	0.2
MGH	1.48	276	eP	12 17.70	1.3
			S	12 35.00	
CRM	1.83	187	eP	12 21.70	0.2
			S	12 42.70	
FDF	1.89	194	iPd	12 21.98	-0.4
			S	12 42.00	
NEV	1.89	287	eP	12 20.30	-2.1
			S	12 46.00	
MVM	2.03	186	iPd	12 24.78	0.5
			S	12 47.80	
BIM	2.09	190	eP	12 25.36	0.2
			S	12 49.70	
SKI	2.11	291	eP	12 27.32	1.9
			eS	12 50.29	
SLW	2.56	186	eP	12 32.53	0.7
SLB	2.76	187	eP	12 33.35	-1.4
SVV	3.29	189	eP	12 43.02	0.9
			eS	13 17.21	
SV8	3.34	190	eP	12 43.45	0.6
			eS	13 19.68	
YKA	59.11	334	eP	21 50.20	-1.0
0.6s	0.60nm			3.9mb	
S.D. = 0.9			on	21 of 21 obs.	

* JUN 19, 1990 16h 16m 15.46± 0.93s
39.168 N ± 7.7km 20.497 E ±10.8km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)

KEK	0.77	315	eP	16 30.40	0.0
			eS	16 44.50	
VLS	0.99	176	eP	16 34.30	0.0
			eS	16 50.00	
OHR	1.95	7	ePn	16 48.00	-1.0
NEO	2.12	85	eP	16 51.50	0.0
VAY	2.67	36	ePn	16 58.70	-0.6
SKO	2.89	14	ePn	17 04.00	1.6
S.D. = 1.2			on	6 of 6 obs.	

JUN 19, 1990 16h 29m 14.52± 0.39s
42.075 N ± 4.1km 12.769 E ± 4.2km
DEPTH = 16.1 ± 5.0 km
CENTRAL ITALY (381)

RMP	0.27	191	Pd	29 20.90	0.4
			eSg	29 25.30	
RDP	0.32	187	Pc	29 21.90	0.5
			eSg	29 27.60	
AZI	0.50	100	Pd	29 24.10	-0.4
			eSg	29 31.30	
AQU	0.55	59	P	29 25.20	-0.1
SDI	0.86	115	P	29 29.80	-0.9
			iSg	29 44.00	
ASS	1.00	355	P	29 33.60	0.6
			eSg	29 49.30	
DUI	1.33	108	P	29 40.00	1.6
ARV	1.43	5	P	29 41.30	1.5
CRE	1.67	339	P	29 44.50	1.3
RSM	1.87	353	P	29 47.80	1.8
PGD	1.96	337	P	29 49.00	1.5
			eSn	30 14.10	
SFI	1.96	340	P	29 48.50	1.1
			eSn	30 14.50	
BSS	2.00	129	P	29 49.00	1.0
SGO	2.44	128	P	29 54.50	0.2
MME	2.60	325	P	29 55.70	-1.2
PGF	2.84	281	Pn	30 01.30	1.3
BOB	3.62	319	P	30 11.50	0.4
VOY	4.04	11	e(Pn)	30 16.00	-1.0
			eSn	31 14.50	
LJU	4.17	17	eP	30 17.50	-1.3
			e(Sn)	31 09.50	
SBF	4.30	296	Pn	30 20.90	0.1
FVI	4.52	0	P	30 23.50	-0.2
FRF	4.74	290	Pn	30 26.50	-0.5
LMR	4.78	287	Pn	30 26.80	-0.8
LRG	4.92	288	Pn	30 29.30	-0.1
BNI	5.33	306	P	30 34.50	-1.0
LPG	5.54	310	Pn	30 42.00	3.5X
LPL	5.56	310	Pn	30 42.10	3.3X
S.D. = 1.0			on	25 of 27 obs.	

JUN 19, 1990 17h 20m 09.07± 0.33s
45.943 N ± 6.5km 83.185 E ± 9.3km
DEPTH = 33.0km (normol)
4.6mb (12 obs.)
NORTHERN XINJIANG, CHINA (332)

GKN	17.94	176	P	24 17.60	-0.2
0.4s	19.00nm			4.6mb	
PKI	18.42	174	P	24 24.20	0.4
0.6s	19.00nm			4.4mb	
QUE	20.21	224	eP	24 48.00	4.0X
SHL	21.50	158	iP	24 56.60	-0.6
CHTO	30.03	149	(P)	26 17.00	-0.2
SUF	35.84	319	iP	27 07.80	0.7
0.3s	3.70nm			4.8mb	
SOD	35.97	327	eP	27 08.00	-0.1
NUR	36.61	315	eP	27 14.00	0.4
HFS	42.06	316	eP	27 58.50	-0.3
0.7s	6.90nm			4.5mb	
Z 17s	0.05um			3.5MszX	
		epP	28 02.70	14kmX	
		esP	28 04.20		
		LR	44 45.00		
NAO	43.27	317	P	28 08.50	-0.2
0.6s	2.10nm			4.1mb	
LPG	51.37	299	eP	29 13.80	1.1
0.5s	9.50nm			5.0mb	
LPL	51.37	299	eP	29 13.70	1.1
0.5s	12.40nm			5.1mb	
SSF	52.54	302	eP	29 20.90	-0.2
0.8s	4.70nm			4.5mb	
BGF	53.18	302	eP	29 25.80	-0.1
MAF	53.52	302	eP	29 28.80	0.4
TCF	53.70	302	eP	29 30.00	0.3
0.7s	2.75nm			4.4mb	
LDF	53.87	305	eP	29 30.20	-0.7
FLN	53.98	306	eP	29 31.30	-0.4
LSF	54.12	302	eP	29 32.60	-0.2
INK	62.81	14	eP	30 33.00	-0.1
BCAO	69.34	254	iPc	31 14.00	-1.5
0.7s	12.00nm			5.1mb	
YKA	70.98	9	eP	31 24.10	-0.7
0.7s	5.10nm			4.7mb	
WB5	80.24	132	eP	32 18.70	0.9
WRA	80.28	132	Pc	32 18.90	0.9
0.7s	4.00nm			4.5mb	
TNP	94.37	16	P	33 26.20	-0.6
S.D. = 0.7			on	24 of 25 obs.	

JUN 19, 1990 17h 47m 00.32± 0.74s
45.809 N ±11.6km 15.774 E ± 5.5km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
MD 2.7 (LJU).

ZAG	0.15	87	iPgd	47 03.60	-0.1
			iSg	47 07.20	
PTJ	0.16	55	iPgd	47 04.20	0.2
			eSg	47 08.20	
VBY	0.47	230	ePg	47 10.10	0.1
			iSg	47 13.20	
LJU	0.90	286	ePg	47 18.00	0.5
			eSg	47 30.00	
CEY	0.95	266	e(Pg)	47 18.40	0.0
			eSg	47 31.90	
VOY	1.33	280	ePg	47 24.30	-0.6
			eSg	47 41.20	
S.D. = 0.5			on	6 of 6 obs.	

JUN 19, 1990 18h 11m 23.22± 0.89s
19.740 N ±11.7km 109.209 W ± 8.8km
DEPTH = 33.0km (normol)
4.6mb (11 obs.) 4.4Msz (1 obs.)
REVILLA GIGEDO ISLANDS REGION (53)
Ms 4.6 (BRK).

MRX	7.55	89	iP	13 14.80	1.0
IIJ	8.92	88	(P)	13 34.00	0.6
CRX	8.99	91	(P)	13 33.20	-0.9
ACX	9.33	106	(P)	13 39.20	0.7
PPM	10.01	92	iP	13 48.70	0.3
OXX	12.14	101	iP	14 18.80	1.7
GLA	14.18	340	eP	14 45.00	1.2
BAR	14.52	334	eP	14 48.00	-0.2
PLM	15.18	335	eP	15 01.00	4.0X
ALQ	15.34	9	eP	14 59.00	-0.1
1.8s	125.00nm			4.9mb	
ANMO	15.34	9	P	15 01.00	1.8
1.5s	52.08nm			4.6mb	
TPC	15.55	338	eP	15 03.00	1.3
RVR	15.95	335	eP	15 06.00	-0.7
MWC	16.43	333	eP	15 16.00	2.9
SBB	16.73	335	eP	15 18.00	1.2
GSC	16.89	338	eP	15 19.00	0.2
SYP	17.55	329	eP	15 31.00	3.9X
CLC	17.64	337	eP	15 29.00	0.9
MEO	17.69	30	eP	15 27.50	-1.2
ISA	17.84	335	eP	15 36.00	5.4X
MSU	18.88	353	P	15 44.00	0.3
PRI	19.19	331	ePd	15 48.20	1.0
UYO	19.44	39	eP	15 50.50	0.5
FRI	19.49	334	ePd	15 49.70	-0.7
TNP	19.56	341	P	15 51.00	-0.5
1.7s	72.46nm			4.7mb	
PRS	19.68	330	ePd	15 53.50	0.9
TUL	19.97	33	e(P)	15 54.30	-1.3
1.3s	16.20nm			4.2mb	
GOL	20.17	9	P	15 56.50	-1.5
1.0s	8.75nm			4.1mb	
GCC	20.54	330	eP	16 00.50	-1.0
DUG	20.62	352	P	16 02.00	-0.5
MHC	20.62	331	eP	16 02.20	-0.3
CMB	20.66	334	e(P)	16 01.90	-0.9
DAU	20.68	356	P	16 03.00	-0.3
KVN	20.72	340	P	16 03.70	0.1
BKS	21.33	331	ePc	16 11.50	1.9
1.0s	39.00nm			4.8mb	
Z 20s	1.60um			4.4Msz	
N 20s	2.10um				
E 20s	1.20um				
		iS	20 13.60		
		eLR	21 56.00		
		e	26 43.20		
ORV	22.41	334	ePd	16 22.50	2.2
MIN	23.12	335	e(P)	16 29.20	1.7
WDC	23.70	334	eP	16 30.20	-2.7
LRM	26.15	355	eP	16 56.60	0.1
SES	30.62	358	eP	17 36.00	-0.5
FFC	35.36	7	eP	18 16.00	-1.5
1.1s	19.00nm			4.9mb	
YKA	42.88	356	eP	19 18.10	-1.8
0.9s	2.90nm			4.0mb	
INK	50.89	349	eP	20 22.50	-0.3
TTA	53.59	336	P	20 41.30	-1.9
1.0s	12.50nm			4.9mb	
ZOBO	53.95	129	P	20 48.30	1.3
1.3s	10.65nm			4.7mb	
Z 24s	0.45um			4.5MszX	
		LR	39 24.00		
IMA	54.50	339	P	20 48.00	-1.9
1.0s	5.00nm			4.5mb	
MBC	56.78	357	eP	21 04.50	-1.6
SIV	59.16	123	iP	21 22.10	-1.4
BAO	69.69	116	eP	22 24.50	-7.8X
S.D. = 1.3			on	45 of 49 obs.	

JUN 19, 1990 19h 07m 48.45± 0.24s
21.038 S ± 2.9km 178.855 W ± 3.2km
DEPTH = 612.2 ± 2.8 km
5.3mb (49 obs.)
FIJI ISLANDS REGION (181)
CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN
L.P.B.: 12S, 22C
Centroid Location:
Origin Time 19:07:54.9 0.8
Lat 20.59S 0.07 Lan 179.32W 0.06
Dep 614.5 4.0 Half-duration 2.4
Moment Tensor; Scale 10**17 Nm
Mrr=-1.24 0.10 Mtt= 0.35 0.16
Mff= 0.90 0.16 Mrt=-1.79 0.14
Mrf=-1.60 0.16 Mtf= 0.85 0.17
Principal Axes:
T Val= 2.88 Plg=30 Azm=131
N -0.21 7 225
P -2.67 59 327
Best Double Cauple:Mo=2.8*10**17
NP1:Strike=201 Dip=16 Slip=-115
NP2: 47 75 -83

SVA	3.86	318	iPc	09 13.90	-0.3
VUN	3.94	320	iPc	09 13.80	-1.0
KRO	4.06	336	iPc	09 14.80	-0.9
MBU	4.65	330	iPc	09 20.20	0.3
NDE	4.75	338	iPc	09 20.50	-0.3
NDF	4.78	312	iPc	09 23.00	2.2
			eS	10 39.00	
UDU	4.98	347	eP	09 21.80	-0.5
YSA	5.48	321	iPc	09 26.20	-0.2
PVC	12.55	283	iPc	10 33.80	1.4
			iS	12 55.50	
DZM	13.72	263	iPc	10 45.20	1.2
			iS	13 10.30	
HBZ	16.69	188	P	11 17.50	5.2X
			S	13 58.00	
PUZ	17.16	188	eP	11 17.30	0.4
WLZ	17.42	195	P	11 21.80	2.5
TAZ	17.60	192	eP	11 21.50	0.6
NOZ	17.72	188	eP	11 22.00	-0.1
WHH	18.23	192	eP	11 25.80	-1.1
TTH	18.81	190	eP	11 33.40	1.2
PGZ	19.95	191	eP	11 42.70	0.1
MTW	20.62	192	eP	11 47.10	-1.6
CAW	20.66	193	P	11 48.30	-0.8
BLW	20.83	192	eP	11 49.90	-0.7
WDW	20.83	193	P	11 49.50	-1.1
MRW	20.86	194	eP	11 50.00	-0.8
WEL	20.90	194	eP	11 50.70	-0.5
TCW	20.94	195	eP	11 50.80	-0.8
THZ	21.80	197	P	11 59.20	-0.3
KHZ	22.26	195	P	12 02.60	-0.8
	0.4s	34.00nm			5.3mb
LTZ	22.92	197	P	12 08.40	-1.1
HNR	23.45	296	eP	12 12.00	-2.4
MQZ	23.69	195	eP	12 15.60	-0.6
MMCZ	25.88	200	P	12 34.90	-0.7
MHZ	25.88	200	P	12 35.00	-0.7
MSZ	25.99	202	eP	12 37.20	0.8
AFR	27.65	88	iP	12 51.00	-0.1
	0.9s	75.00nm			5.3mb
TVO	28.09	89	iP	12 55.70	0.7
	0.9s	95.00nm			5.4mb
PMO	30.01	84	iP	13 11.60	0.3
	0.9s	25.00nm			4.8mb
RMQ	30.09	253	ePd	13 13.00	1.1
VAH	30.19	84	iP	13 12.70	-0.2
	0.9s	30.00nm			4.9mb
TPT	30.27	84	iP	13 13.70	0.2
	0.9s	70.00nm			5.3mb
RUV	30.44	84	iP	13 15.00	0.1
	0.9s	65.00nm			5.3mb
CNB	31.26	236	eP	13 24.00	2.2
CAN	31.55	236	eP	13 25.90	1.7
			e	15 03.80	
			i	18 47.10	
BWA	31.74	238	eP	13 25.10	-0.7
			e	15 03.80	
			i	18 47.00	
CTA	32.64	265	iPd	13 34.10	0.6
	0.8s	142.54nm			5.7mb
			iPcP	16 01.40	
			iS	18 07.50	
			iScS	22 54.00	
CMS	33.21	244	iPd	13 39.50	1.4
			e	18 53.00	
KDB	34.66	284	iPc	13 51.00	0.7
TOO	34.94	234	iPd	13 54.40	2.0
QIS	38.76	263	iPd	14 23.80	0.0
			e	19 43.00	

ADE	39.66	240	iPd	14 32.20	1.2
	0.6s	28.00nm			5.0mb
ASPA	43.62	257	iPd	15 02.40	0.1
	0.9s	282.00nm			5.8mb
Z	23s	0.23um			4.0MszX
			iPcP	16 36.20	
			iS	20 47.40	
			iScS	23 55.20	
			LR	30 08.80	
WB5	43.72	263	iPd	15 02.30	-0.7
			i	16 11.10	
			iS	20 48.80	
WRA	43.73	263	Pd	15 01.80	-1.4
	0.4s	42.10nm			5.3mb
MTN	48.37	271	iPd	15 37.20	-1.3
GUA	49.47	311	eP	15 45.60	-0.9
	0.8s	358.21nm			5.9mb
GUMO	49.54	311	eP	15 45.70	-1.2
	1.0s	384.00nm			5.8mb
			eS	22 13.00	
PJG	49.54	311	eP	15 46.00	-0.9
WAR8	49.91	253	eP	15 49.40	-0.3
	0.3s	13.00nm			5.0mb
COOL	54.28	247	iPd	16 20.40	-0.5
	0.4s	12.00nm			4.6mb
MEKA	57.06	251	eP	16 39.00	-1.1
	0.4s	20.00nm			4.7mb
KLB	57.10	245	eP	16 40.10	-0.2
	0.7s	110.00nm			5.2mb
SBA	57.29	184	P	16 44.10	3.2X
RKG	57.50	242	iPd	16 43.50	0.5
	0.6s	96.00nm			5.2mb
BAL	58.11	246	eP	16 46.90	-0.2
	0.6s	47.00nm			4.9mb
MUN	58.37	245	iPc	16 49.10	0.2
NANU	60.49	255	iPd	17 03.10	0.2
	0.4s	82.00nm			5.3mb
KAKJ	68.86	325	P	17 54.20	-0.6
SPA	69.09	180	iPc	17 58.00	1.9
	0.9s	85.91nm			5.3mb
			i	20 03.20	
KKM	69.13	285	iPd	17 57.00	0.0
	1.2s	207.10nm			5.5mb
CHJJ	69.38	324	P	17 57.20	-0.7
IIDJ	69.56	323	P	17 58.50	-0.5
MAT	70.17	324	iPd	18 01.30	-1.3
	0.8s	50.75nm			5.1mb
			eS	26 28.00	
NIIJ	70.26	325	P	18 02.40	-0.6
OFUJ	70.30	328	P	18 02.80	-0.4
YAMJ	70.42	327	P	18 04.00	0.1
MTMJ	70.42	324	P	18 03.70	-0.4
TSRJ	70.69	322	P	18 04.80	-0.7
AOMJ	72.07	328	eP	18 13.50	0.1
KUSJ	72.09	333	eP	18 13.10	-0.4
ADK	72.63	1	eP	18 15.00	-1.3
	0.7s	13.80nm			4.6mb
MRRJ	73.18	330	eP	18 19.10	-0.5
SMY	73.71	356	eP	18 21.20	-1.2
ASAJ	73.80	332	eP	18 24.00	0.8
QZH	76.04	304	Pd	18 36.00	0.1
SSE	77.42	310	Pd	18 43.00	-0.2
	1.0s	40.00nm			4.8mb
SDN	77.67	11	eP	18 43.00	-1.0
HKC	78.24	299	iP	18 49.30	1.5
SYP	78.62	46	eP	18 50.00	0.3
PRS	78.76	44	ePd	18 51.00	0.8
GCC	78.77	43	ePd	18 50.90	0.7
PCC	78.81	43	ePd	18 50.60	0.2
BCH	78.93	46	P	18 52.00	0.8
SAO	78.97	44	ePd	18 51.80	0.5
PHAM	79.10	45	P	18 54.30	2.3
PRI	79.10	44	ePd	18 53.10	1.0
BRK	79.12	42	ePd	18 52.90	0.9
BKS	79.13	42	iPd	18 53.20	1.1
	0.7s	100.00nm			5.4mb
MHC	79.19	43	ePd	18 53.30	0.7
ARN	79.26	43	P	18 53.50	0.7
KGM	79.37	276	ePd	18 55.00	1.1
NJ2	79.61	310	Pd	18 54.80	0.1
	1.2s	100.00nm			5.1mb
PAS	79.63	47	eP	18 56.00	1.2
MWC	79.75	47	eP	18 56.00	0.3
BAR	79.87	49	eP	18 56.00	-0.1
FHC	79.88	39	ePd	18 57.40	1.5
RVR	80.10	48	eP	18 58.00	0.8
PLM	80.10	49	eP	18 58.00	0.5

SBB	80.17	47	eP	18 58.00	0.3
FRI	80.23	44	ePc	18 58.40	0.6
ISA	80.28	46	eP	18 59.00	0.8
QIZ	80.35	295	eP	19 00.00	1.2
CMB	80.40	43	iPd	18 59.40	0.7
MDJ	80.50	325	Pd	18 59.50	0.5
	1.2s	100.00nm			5.2mb
WDC	80.60	40	iPd	19 00.40	0.8
ORV	80.61	41	ePd	19 00.10	0.4
CLC	80.96	46	eP	19 02.00	0.3
MIN	81.02	41	ePd	19 02.30	0.3
TPC	81.08	48	eP	19 03.00	0.7
GSC	81.21	47	eP	19 03.00	0.0
GLA	81.38	50	eP	19 05.00	1.2
KDC	81.51	14	ePd	19 03.50	-0.3
DL2	81.57	317	eP	19 05.00	0.4
	1.2s	100.00nm			5.2mb
SNY	82.11	320	iPd	19 07.10	-0.1
	0.8s	100.00nm			5.4mb
WHN	82.12	307	Pd	19 08.20	0.7
CN2	82.24	323	iPd	19 07.80	0.0
	1.0s	100.00nm			5.3mb
			PP	21 18.00	
			eS	28 37.00	
IPM	82.44	278	ePd	19 11.30	1.8
	0.9s	201.10nm			5.7mb
KVN	82.45	43	P	19 09.50	0.3
TNP	82.47	44	P	19 09.50	0.1
TIA	83.05	313	P	19 12.40	0.4
SNG	83.79	280	iPd	19 18.20	2.1
	0.9s	147.90nm			5.6mb
BMW	83.88	35	P	19 17.50	1.5
SVW	83.98	11	ePd	19 15.50	-0.7
LON	84.82	35	P	19 20.00	-0.5
PGC	85.15	33	eP	19 23.00	1.1
RMW	85.26	35	P	19 23.40	0.7
TTA	85.61	10	ePd	19 23.60	-0.4
BJI	85.71	316	P	19 25.00	0.1
	2.0s	280.00nm			5.6mb
PMR	85.73	14	iPd	19 23.70	-0.8
	1.4s	193.40nm			5.6mb
MSU	86.06	46	P	19 27.50	0.6
GYA	86.22	300	iPd	19 28.80	1.0
	1.4s	100.00nm			5.4mb
Z	16s	0.50um			5.0MszX
NNT	86.62	285	iPc	19 32.00	2.3
LOE	86.69	290	iPd	19 31.00	1.0
TOA	86.86	15	ePd	19 30.00	0.0
PNT	87.55	34	eP	19 33.00	-0.4
	1.6s	357.00nm			5.9mb
DAU	87.63	45	P	19 35.00	0.6
XAN	87.82	308	Pd	19 36.00	0.9
NEW	88.28	36	P	19 36.50	-0.3
ALQ	88.36	52	ePd	19 38.00	0.3
	1.0s	30.25nm			5.1mb
ANMO	88.36	52	P	19 38.50	0.8
	1.2s	41.02nm			5.1mb
KMI	88.88	297	Pd	19 42.00	1.6
	1.5s	170.00nm			5.7mb
IMA	88.91	10	ePd	19 38.80	-0.7
	1.1s	63.30nm			5.4mb
FBA	88.94	13	ePd	19 38.40	-1.1
BDT	89.03	289	iPd	19 41.30	0.5
	0.9s	105.90nm			5.7mb
HHC	89.16	315	Pd	19 42.00	0.9
LRM	89.63	40	eP	19 43.70	0.3
CHG	89.67	290	ePc	19 45.30	1.5
	0.9s	35.71nm			5.3mb
BW06	89.91	44	P	19 44.00	-0.7
	1.0s	21.00nm			5.0mb
BTO	90.07	314	P	19 46.50	1.2
CD2	90.41	303	P	19 48.40	1.4
GOL	91.27	48	P	19 51.00	-0.1
	1.0s	13.75nm			4.9mb
LZH	92.46	308	Pd	19 57.50	1.0
	1.5s	71.00nm			5.5mb
SES	92.78	36	ePd	19 57.30	-0.2
	1.2s	88.00nm			5.7mb
INK	95.00	15	eP	20 06.00	-1.1
GTA	96.69	310	eP	20 15.40	-0.2
	1.2s	20.00nm			5.3mb
YKA	97.33	25	eP	20 16.60	-1.2
	0.8s	4.00nm			4.8mb
GKN	105.09	295	PKP	25 02.80	-1.5
QUE	120.67	293	ePKP	25 30.50	-3.4X
MAIO	127.33	300	ePKP	25 46.00	-0.4
			e	27 54.00	

19d 19h

KEV	128.84	349	iPKP	25	48.20	0.1
SOD	130.95	347	iPKP	25	51.20	-1.0
BUL	131.04	215	iPKPc	25	53.10	-0.9
	1.0s		8.00nm			
			iPP	28	23.00	
KRI	133.14	219	iPKPc	25	53.50	-4.6X
			iPP	28	27.50	
SUF	134.98	344	ePKP	25	46.00	-14.0X
LSZ	135.20	219	iPKPd	26	03.00	1.0
			i	26	04.50	
			i	28	40.00	
			i	34	39.00	
			i	36	02.00	
			i	36	38.00	
NUR	137.22	343	ePKP	25	56.00	-8.3X
	0.9s		54.10nm			
			i	26	03.60	
UPP	139.48	347	iPKP	26	00.00	-8.3X
NAO	139.67	353	PKP	26	00.40	-8.3X
	0.8s		12.80nm			
HFS	139.94	350	ePKP	26	00.20	-9.0X
	1.0s		37.00nm			
	Z 12s		0.04um			4.4MszX
			e	26	10.00	
			e	28	48.00	
			e	29	44.70	
COP	144.39	349	iPKPd	26	16.20	-0.8
	1.3s		476.92nm			
LWI	144.39	233	iPKPd	26	20.40	1.8
BSD	144.43	346	iPKPd	26	15.10	-2.0
	1.0s		352.00nm			
EKA	145.60	4	PKPd	26	17.80	-1.3
	0.9s		75.50nm			
KAS	145.81	314	iPKPc	26	20.70	0.7
IAS	146.26	327	ePKP	26	22.00	1.6
BBTK	147.16	312	iPKPc	26	26.00	3.8X
GLH	147.23	298	ePKP	26	27.00	4.6X
CFR	147.24	324	ePKP	26	22.00	0.0
BRN	147.31	346	ePKP	26	23.00	1.1
KRA	147.45	337	ePKP	26	22.00	-0.2
	1.0s		87.00nm			
			e	26	25.00	
			i	26	29.60	
VRI	147.57	326	ePKPd	26	26.50	3.9X
DSI	147.69	296	ePKP	26	27.70	4.6X
ETA	147.89	8	ePKP	26	30.80	8.0X
YRH	147.95	7	ePKP	26	30.50	7.6X
KSP	147.96	342	ePKP	26	22.70	-0.3
	1.1s		187.00nm			
			id	26	27.10	
			i	26	31.70	
			e	28	47.70	
WIT	148.00	354	ePKP	26	24.00	1.1
RAC	148.03	339	ePKP	26	27.00	3.9X
SPC	148.05	336	ePKP	26	22.90	-0.6
			i	26	28.10	
			e	28	46.00	
PSN	148.13	321	iPKPd	26	27.00	3.5X
PRNI	148.22	294	iPKPd	26	29.00	4.9X
MLR	148.23	326	ePKPd	26	27.00	3.2X
LFK	148.28	304	iPKP	26	28.60	4.5X
ECP	148.37	9	ePKP	26	27.30	3.8X
CLL	148.39	346	iPKP	26	23.40	-0.2
	1.6s		45.00nm			
MBH	148.40	293	ePKP	26	29.70	5.4X
CSS	148.53	303	ePKP	26	23.80	-0.6
WTS	148.79	353	ePKP	26	24.00	-0.2
	1.0s		27.00nm			
HRT	148.79	316	ePKP	26	29.00	4.3X
GBZT	148.95	316	iPKPd	26	29.20	4.4X
YLV	149.12	315	iPKP	26	30.00	4.8X
IZI	149.17	315	ePKP	26	30.00	4.7X
PRU	149.22	343	ePdiff	24	05.00	-3.6X
PRU	149.22	343	PKP	26	24.60	-0.3
			PKKP	26	29.70	
MOX	149.32	347	iPKP	26	25.00	-0.1
	1.2s		17.00nm			
			i	26	30.50	
			i	26	37.50	
PPCY	149.33	303	ePKP	26	30.30	4.7X
ALT	149.35	312	ePKP	26	30.70	5.1X
DEV	149.48	329	iPKPd	26	31.00	5.5X
HOF	149.58	346	ePKP	26	25.80	0.3
			i	26	31.10	
			i	26	38.20	
BCK	149.71	309	iPKP	26	31.10	4.9X
GZR	149.90	329	ePKPd	26	26.50	0.3
SRO	149.91	337	iPKP	26	26.20	0.2
			i	26	32.20	
			i	26	41.20	
			e	27	51.20	
			e	28	54.60	
BUD	149.91	335	e(PKP)	26	27.00	1.0
ZST	150.02	338	ePKP	26	26.40	0.2
			i	26	32.10	
			i	26	40.40	
			e	28	53.60	
ENN	150.09	354	ePKPc	26	26.50	0.3
	0.9s		11.00nm			
KHL	150.09	311	iPKP	26	32.60	5.8X
UCC	150.19	356	iPKPc	26	33.00	6.7X
			e	26	42.00	
EDC	150.21	316	iPKP	26	31.80	5.1X
VKA	150.22	339	iPKPd	26	32.80	6.3X
	2.0s		209.00nm			
			i	26	41.80	
MEM	150.24	354	iPKPc	26	26.80	0.4
			id	26	32.57	
KHC	150.26	343	iPKP	26	27.00	0.4
			iPKKP	26	33.00	
BZS	150.28	330	ePKP	26	26.00	-0.6
GRF	150.31	347	ePKP	26	26.00	-0.6
			id	26	32.90	
			ic	26	42.20	
TNS	150.31	351	PKPd	26	32.20	5.5X
AKSR	150.43	281	iPKPd	26	34.80	7.3X
	1.0s		225.00nm			
SNF	150.48	356	iPKPd	26	33.15	6.4X
			ic	26	41.96	
ELL	150.50	308	iPKP	26	32.50	5.0X
AGAL	150.61	281	iPKPd	26	35.00	7.2X
SOP	150.64	339	ePKP	26	27.10	-0.1
AKRL	150.72	281	iPKPd	26	34.50	6.5X
DOU	150.87	355	iPKPd	26	34.20	6.8X
			i	26	43.10	
AWKL	150.96	281	iPKPd	26	35.30	7.0X
KDZ	150.98	321	ePKP	26	27.00	-0.9
RZN	151.37	321	iPKPc	26	28.00	-0.7
BEO	151.42	331	iPKP	26	35.00	6.6X
EZN	151.49	317	iPKP	26	35.00	6.4X
VTS	151.64	324	iPKPc	26	39.00	10.0X
MMB	152.01	322	ePKP	26	29.00	-0.4
CDF	152.25	351	ePKP	26	28.70	-0.9
FLN	152.31	2	ePKP	26	28.50	-1.0
	1.1s		31.75nm			
PTJ	152.39	337	ePKP	26	29.50	-0.3
ZAG	152.45	337	ePKP	26	30.00	0.2
LDF	152.49	2	ePKP	26	29.00	-0.8
GRR	152.66	3	ePKP	26	29.40	-0.6
	1.2s		26.80nm			
SLE	152.68	349	ePKPc	26	29.90	-0.2
LJU	152.75	339	ePKP	26	30.00	-0.3
			i	26	38.00	
HAU	152.77	352	ePKP	26	29.70	-0.5
FVI	152.80	342	PKP	26	28.50	-1.7
VAY	152.84	323	ePKP	26	29.60	-0.9
BSF	152.88	352	ePKP	26	29.90	-0.6
	1.1s		14.65nm			
VOY	152.97	340	ePKP	26	30.00	-0.7
			e	26	38.00	
			e	26	52.20	
ZLA	152.97	349	ePKPc	26	30.60	0.0
VBY	152.98	338	ePKPc	26	31.10	0.5
			i	26	38.90	
LPF	153.01	3	ePKP	26	29.90	-0.6
SAX	153.02	348	ePKPc	26	30.90	-0.1
SKO	153.02	325	iPKP	26	30.60	-0.1
CEY	153.06	339	ePKP	26	30.50	-0.2
			e	26	38.50	
TRI	153.30	340	PKP	26	29.00	-2.0
OSS	153.38	346	ePKPc	26	31.50	0.2
LLS	153.45	348	ePKPc	26	31.60	0.2
LOR	153.74	356	ePKP	26	31.00	-0.5
	1.3s		18.05nm			
OHR	153.96	325	ePKP	26	31.20	-0.9
	1.5s		720.00nm			
SSF	153.97	356	ePKP	26	31.50	-0.3
	1.0s		9.00nm			
LBF	154.01	356	ePKP	26	31.50	-0.5
TMA	154.21	348	ePKPc	26	32.30	-0.1
AVF	154.25	357	ePKP	26	31.30	-0.9
SAL	154.31	345	PKP	26	28.00	-4.3X
MDI	154.34	346	PKP	26	31.00	-1.3
SMF	154.36	356	ePKP	26	31.50	-0.9
	1.2s		11.90nm			
MMK	154.43	349	ePKP	26	33.70	0.9
VAI	154.46	348	PKP	26	31.50	-1.0
MFF	154.48	2	ePKP	26	31.90	-0.6
DIX	154.50	350	ePKP	26	33.70	0.7
BGF	154.51	357	ePKP	26	32.10	-0.5
	1.3s		23.45nm			
TCF	154.80	358	ePKP	26	32.40	-0.6
	1.1s		14.65nm			
LSF	154.85	359	ePKP	26	32.30	-0.8
MAF	154.85	358	ePKP	26	32.80	-0.3
LPL	155.16	351	ePKP	26	33.60	-0.2
LPG	155.17	351	ePKP	26	33.60	-0.3
BOB	155.36	346	PKP	26	37.50	3.6X
SFI	155.50	341	PKP	26	34.00	0.0
ARV	155.53	339	PKP	26	35.00	0.9
BNI	155.62	350	PKP	26	34.50	0.2
CRE	155.74	341	PKP	26	33.00	-1.5
RJF	155.80	359	ePKP	26	34.00	-0.4
	1.0s		12.00nm			
CKI	155.94	347	PKP	26	34.00	-0.6
BRT	155.98	329	PKP	26	34.00	-0.8
ASS	156.01	339	PKP	26	34.50	-0.3
LFF	156.16	1	ePKP	26	34.40	-0.4
CAF	156.16	358	ePKP	26	34.40	-0.5
BCAO	156.38	228	iPKPd	26	35.30	-0.8
	1.0s		30.00nm			
			ic	27	09.50	
LPO	156.42	360	ePKP	26	34.90	-0.3
SBF	156.64	348	ePKP	26	34.40	-1.2
	1.2s		29.75nm			
AZI	156.68	336	PKP	26	35.50	-0.1
SDI	156.78	335	PKP	26	34.00	-1.8
FRF	157.08	350	ePKP	26	35.40	-0.6
SGO	157.11	331	PKP	26	36.50	0.4
LRG	157.23	350	ePKP	26	35.00	-1.2
	1.1s		29.30nm			
LMR	157.32	350	ePKP	26	35.40	-0.9
TDS	157.34	328	PKP	26	36.00	-0.5
PGF	157.56	345	ePKP	26	36.20	-0.6
	1.1s		19.55nm			
EPF	158.06	2	ePKP	26	36.90	-0.3
	1.2s		16.35nm			
SOI	158.69	326	PKP	26	38.00	0.0
LIC	164.11	157	PKP	26	44.48	0.3
	1.1s		36.00nm			
KIC	164.33	158	PKP	26	44.44	0.1
	1.1s		27.00nm			
TIC	164.50	156	PKP	26	44.64	0.1
IFR	166.38	23	iPKPd	26	47.50	1.8
LKO	166.86	149	PKP	26	46.68	0.3
	1.4s		53.50nm			

S.D. = 0.9 on 267 of 315 obs.

? JUN 19, 1990 19h 31m 13.30± 4.66s
16.090 N ±17.1km 62.314 W ±43.2km
DEPTH = 33.0km (normal)
LEEWARD ISLANDS (92)
ML 3.0 (FDF).

PAG	0.61	96	eP	31	29.24	3.7X
			S	31	46.20	
SEG	0.84	68	eP	31	29.12	0.5
			S	31	45.50	
MGG	0.97	100	ePd	31	30.00	-0.6
B8L	0.98	125	ePd	31	31.10	0.3
BPA	1.05	25	ePd	31	31.58	-0.1
			S	31	48.30	

S.D. = 0.9 on 4 of 5 obs.

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* JUN 19, 1990 19h 39m 39.84± 2.88s
24.291 N ±15.1km 141.569 E ±12.0km
DEPTH = 151.2 ± 24.8 km
4.5mb (5 obs.)
VOLCANO ISLANDS REGION (213)

CHJJ	11.93	350	P	42	26.20	0.1
KAKJ	11.94	355	P	42	25.50	-0.7
SSE	19.27	295	Pc	43	55.60	0.6
	1.0s		40.00nm			4.7mb
WHN	24.92	291	eP	44	51.20	0.8
XAN	30.01	296	P	45	36.50	0.1
CD2	34.03	290	P	46	10.80	-0.6
KMI	35.20	280	eP	46	22.50	0.9
GTA	38.18	303	eP	46	46.70	0.3
CHTO	39.90	271	(P)	47	00.70	0.1
WB5	44.46	190	eP	47	37.30	-0.3

GBA 61.14 273 Pc 49 39.50 -1.2
0.7s 7.90nm 4.7mb
YKA 74.87 28 eP 51 05.10 0.0
0.5s 2.10nm 4.1mb
SES 81.97 38 eP 51 45.00 1.1
FFC 84.41 31 eP 51 57.00 0.8
1.1s 13.00nm 4.7mb
HFS 85.77 337 eP 52 00.70 -2.2
0.4s 0.80nm 3.9mb
Z 14s 0.04um 4.0MszX
epP 52 05.20 14kmX
esP 52 07.00
S.D. = 1.0 on 15 of 15 obs.

% JUN 19, 1990 19h 49m 38.01± 0.63s
40.504 N ± 6.9km 29.120 E ± 4.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

YLV 0.20 72 iPg 49 42.60 0.1
IZI 0.32 122 iPg 49 43.90 -0.7
GBZT 0.38 41 ePg 49 46.00 0.3
iSg 49 52.70
HRT 0.52 53 ePg 49 48.60 0.0
eSg 49 52.60
KCT 0.64 247 iPg 49 50.60 -0.2
GPA 0.93 103 iPn 49 55.40 -0.4
EDC 0.97 261 iPn 49 56.30 -0.2
ALT 1.64 152 ePn 50 08.20 1.2
S.D. = 0.7 on 8 of 8 obs.

% JUN 19, 1990 20h 52m 27.00± 0.92s
39.542 N ± 7.0km 28.759 E ± 8.4km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

KCT 0.77 336 iPg 52 41.60 -0.4
IZI 0.97 34 ePn 52 45.00 -0.4
EDC 1.06 320 iPn 52 46.80 -0.1
YLV 1.13 25 iPn 52 48.00 -0.2
ALT 1.16 114 ePn 52 47.70 -1.0
KHL 1.36 154 ePn 52 52.60 0.6
GPA 1.41 57 ePn 52 53.00 0.3
HRT 1.46 28 ePn 52 54.60 1.2
S.D. = 0.8 on 8 of 8 obs.

• JUN 19, 1990 21h 06m 55.92± 1.19s
35.054 N ±25.6km 136.600 E ± 9.8km
DEPTH = 332.9 ± 6.6 km
4.3mb (9 obs.)
SOUTHERN HONSHU, JAPAN (232)

MAT 1.98 41 iPc 07 45.90 0.0
eS 08 25.00
BJI 16.94 293 eP 10 34.00 -0.3
1.0s 18.00nm 4.4mb
LZH 26.60 282 P 12 06.70 0.0
1.4s 14.00nm 4.1mb
i 12 11.50
i 12 29.00
GUN 43.46 275 P 14 29.20 0.1
0.4s 27.00nm 4.8mb
PKI 43.97 275 P 14 33.00 -0.1
0.6s 27.00nm 4.7mb
DMN 44.21 275 P 14 35.00 0.1
MBC 59.50 16 ePc 16 26.60 0.2
YKA 67.44 28 eP 17 17.20 -0.6
0.7s 2.20nm 4.0mb
SUF 67.95 332 iP 17 21.70 0.8
0.4s 3.30nm 4.4mb
NUR 69.81 331 eP 17 32.00 -0.2
PNT 72.28 42 eP 17 47.00 -0.1
HFS 74.22 334 eP 17 58.00 0.0
0.4s 1.40nm 4.0mb
Z 14s 0.04um 3.9MszX
e 18 04.70
e 18 10.50
ePP 20 50.90
NAO 74.73 336 P 18 00.80 -0.1
0.7s 1.30nm 3.8mb
FFC 77.43 30 iPc 18 16.00 0.1
0.6s 7.00nm 4.6mb
LRM 78.25 42 eP 18 21.10 0.2
S.D. = 0.3 on 15 of 15 obs.

JUN 19, 1990 21h 33m 03.33± 0.29s
5.892 N ± 5.2km 125.429 E ± 6.2km
DEPTH = 88.0km (7 depth phases)
5.1mb (20 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV 1.20 7 iPc 33 28.10 2.6
TSM 7.51 258 eP 34 55.00 2.8
KKM 9.17 271 ePc 35 16.50 1.6
QCP 9.69 334 eP 35 25.30 3.5X
BAG 11.48 336 eP 35 48.00 1.9
MTN 19.46 163 eP 37 25.00 -0.8
e 42 24.00
QIZ 20.03 312 P 37 32.60 0.9
N 12s 0.80um
E 13s 0.90um
S 41 05.50
SS 41 32.00
QZH 20.05 342 eP 37 32.90 1.1
GZH 20.69 327 P 37 40.00 1.6
S 41 24.00
KGM 22.39 261 ePc 37 57.10 1.7
IPM 24.34 268 ePc 38 15.10 0.7
1.0s 105.30nm 5.2mb
SNG 24.68 274 eP 38 18.00 0.4
SSE 25.39 351 eP 38 26.50 2.5
LOE 25.84 298 eP 38 28.00 -0.4
NNT 26.20 287 eP 38 31.00 -0.8
WHN 26.64 338 eP 38 36.00 0.4
NST 26.65 293 eP 38 36.40 0.6
NJ2 26.74 348 eP 38 36.60 0.1
WB5 27.08 161 eP 38 38.10 -1.6
WRA 27.13 161 Pc 38 42.70 2.5
0.2s 7.50nm 4.9mb
GYA 27.18 321 eP 38 41.60 0.9
BDT 28.20 296 eP 38 47.50 -2.3
CHG 28.83 299 ePc 38 55.00 -0.6
1.0s 23.75nm 4.8mb
KMI 28.95 314 Pc 38 57.00 0.1
1.5s 60.00nm 5.0mb
sP 39 22.00
QIS 29.75 152 eP 39 02.00 -1.7
WARB 31.91 178 eP 39 22.30 -0.3
eS 43 32.00
XAN 31.91 333 P 39 21.30 -1.4
CD2 32.14 323 eP 39 23.60 -1.1
MAT 32.68 19 eP 39 27.00 -2.2
1.0s 6.00nm 4.4mb
CTA 32.95 142 iPc 39 32.90 1.1
1.0s 21.00nm 4.9mb
i 39 38.30 19kmX
iS 44 14.00
DL2 33.04 355 eP 39 31.60 -0.7
0.8s 23.00nm 5.1mb
PP 39 53.00
BJI 35.00 348 eP 39 47.50 -1.7
1.5s 39.00nm 5.1mb
SNY 35.82 358 Pc 39 55.20 -0.8
E 26s 0.70um
LZH 35.99 330 Pc 39 57.80 0.0
1.3s 53.00nm 5.3mb
Z 30s 0.30um 3.9MszX
PP 40 20.00
PP 41 20.00
eS 45 27.00
HHC 36.96 342 P 40 05.00 -0.8
SHL 37.57 305 eP 40 10.50 -0.7
eS 45 45.00
CN2 37.76 0 eP 40 13.80 1.5
KLB 37.99 191 eP 40 11.50 -2.9X
MUN 38.67 193 eP 40 19.00 -1.1
MDJ 38.74 5 Pd 40 21.40 0.8
PcP 42 30.20
LSA 40.05 310 P 40 33.40 1.2
GTA 40.59 329 P 40 35.50 -0.5
BRS 42.35 143 iPd 40 50.70 0.2
i 40 56.50 19kmX
ADE 42.52 164 eP 40 53.20 1.4
0.6s 29.33nm 5.3mb
GUN 43.42 305 P 40 59.60 0.0
0.6s 63.00nm 5.6mb
PKI 43.68 304 P 41 01.60 -0.1
0.8s 15.00nm 4.9mb
DMN 43.94 304 P 41 03.80 0.1
GKN 44.47 304 P 41 07.60 -0.3
BWA 45.60 153 iPd 41 18.80 2.2
CAN 46.61 153 iPd 41 25.70 1.2
HYB 47.19 288 eP 41 29.00 -0.4
1.0s 60.00nm 5.4mb
e 41 52.00 96km
KOD 47.65 278 eP 41 33.00 -0.3
GBA 47.85 283 Pc 41 33.80 -0.6
0.9s 32.20nm 5.2mb
DZM 48.84 126 iPc 41 42.80 0.6
WMQ 50.22 325 P 41 51.70 -0.7
KSH 55.58 315 eP 42 32.00 -0.3
QUE 59.91 301 eP 43 01.60 -1.3
MAIO 67.18 307 eP 43 49.00 -1.4
0.1s 22.58nm 6.0mb
e 44 13.00 94km
TAB 77.82 308 eP 44 52.00 -1.1
e 45 15.00 87km
SVW 79.53 29 ePc 45 03.00 1.2
TTA 79.57 27 ePc 45 02.80 0.8
KDC 80.82 33 ePc 45 09.00 0.5
e 45 31.50 84km
IMA 80.95 24 ePc 45 10.30 1.0
1.0s 30.00nm 5.1mb
e 45 33.20 86km
PMR 82.68 29 ePc 45 18.10 -0.1
1.2s 46.20nm 5.3mb
e 45 40.40 83km
FBA 83.33 25 eP 45 21.40 -0.1
TOA 84.08 28 ePc 45 26.60 1.1
e 45 49.60 86km
MAW 85.33 200 iPc 45 30.60 -0.8
PRNI 87.43 300 eP 45 42.00 -0.6
SOD 87.99 338 eP 45 42.00 -2.4
INK 88.64 21 eP 45 47.00 -0.5
SUF 89.05 333 eP 45 47.60 -2.0
MBC 90.14 13 eP 45 54.00 -0.5
0.9s 18.00nm 5.3mb
NAO 96.55 333 P 46 21.20 -2.9X
0.9s 2.90nm 4.8mb
ZST 97.67 320 eP 46 31.60 2.2
YKA 98.07 24 eP 46 30.50 -0.5
0.9s 2.60nm 4.8mb
KIC 128.80 283 PKP 52 01.32 -1.9
LKO 128.84 287 PKP 52 01.74 -1.6
0.5s 7.50nm
LIC 129.11 283 PKP 52 01.78 -2.0
0.4s 5.50nm
LNV 148.01 153 iPKPd 52 40.60 3.3X
CHCH 148.36 154 ePKPd 52 42.00 4.0X
TACH 148.47 153 iPKPd 52 42.00 3.9X
PEL 149.02 153 iPKPd 52 43.70 4.6X
LPB 163.05 130 PKP 52 55.00 -2.6
ZOBO 163.18 129 PKP 53 00.00 2.0
1.1s 13.05nm
CCH 163.92 136 ePKP 52 59.00 0.7
BAO 168.36 213 ePKP 53 01.50 -0.1
S.D. = 1.3 on 79 of 86 obs.

• JUN 19, 1990 21h 37m 19.65± 0.85s
4.098 S ± 7.7km 154.098 E ±12.6km
DEPTH = 365.5 ± 9.8 km
4.5mb (3 obs.)
SOLOMON ISLANDS (193)

RAB 1.93 267 iPd 38 12.00 -0.3
LAT 7.51 250 eP 39 09.00 0.0
KDB 8.71 232 eP 39 24.00 0.8
QIS 21.60 220 eP 41 42.00 -0.3
TCW 41.15 157 P 44 31.60 0.5
MRW 41.34 156 P 44 32.40 -0.2
WDW 41.49 156 P 44 33.40 -0.4
MTW 41.60 155 P 44 34.10 -0.7
BLW 41.77 156 P 44 36.00 -0.1
MAT 43.07 341 eP 44 46.00 -0.6
0.5s 4.93nm 4.0mb
SPA 85.93 180 iPd 49 20.80 0.6
1.0s 19.50nm 5.0mb
KVN 90.85 51 (P) 49 44.50 0.6
MBC 93.13 14 eP 49 54.00 0.6
YKA 94.21 28 eP 49 59.00 0.4
0.7s 3.10nm 4.5mb
HFS 116.50 339 ePKP 55 20.70 -1.0
0.4s 0.70nm
Z 18s 0.03um 4.0Msz
BAO 150.63 132 ePKP 56 31.50 6.2X
S.D. = 0.6 on 15 of 16 obs.

JUN 19, 1990 21h 48m 11.18± 0.39s
42.882 N ± 3.8km 1.665 W ± 3.7km
DEPTH = 27.9 ± 4.4 km
PYRENEES (378)

19d 21h

ML 3.8 (LDG). mbLg 3.6 (MDD). MD 3.2 (STR). Felt (V) at Pamplona, Spain.

BOH	0.53	65	Pg	48	21.76	-0.3
ELYF	0.57	60	Pg	48	22.67	0.0
			Sg	48	31.02	
MADF	0.67	67	Pg	48	24.28	-0.1
			Sg	48	33.87	
ECRI	0.68	247	iP	48	23.76	-0.7
			eS	48	32.60	
ATE	0.74	74	Pg	48	25.25	-0.1
			Sg	48	35.65	
LHE	0.77	87	Pg	48	26.08	0.0
ESCF	0.82	76	Pg	48	26.49	-0.4
OGE	0.92	71	Pg	48	28.68	0.5
JAU	0.96	80	Pg	48	29.20	0.2
EPF	1.48	84	Pn	48	38.50	2.3
			Pg	48	40.80	
			Sg	49	00.10	
ETOR	2.08	188	iP	48	45.41	0.4
			eS	49	11.50	
EROO	2.58	142	iP	48	51.85	-0.1
			eS	49	25.00	
LFF	2.69	39	Pn	48	55.70	2.2
			Sn	49	28.00	
LPO	2.74	48	Pn	48	55.90	1.7
			Sn	49	28.90	
GUD	2.91	221	iP	48	57.08	0.3
			eS	49	31.90	
ECHE	3.33	171	ePg	49	03.33	0.7
			eS	49	38.60	
RJF	3.33	42	Pn	49	03.80	1.1
			Sn	49	43.00	
CAF	3.38	52	Pn	49	03.80	0.4
			Sn	49	42.40	
ETER	3.39	98	ePg	49	05.12	1.7
			eS	49	44.00	
TOL	3.49	212	ePn	49	04.50	-0.5
			ePg	49	20.00	
			eSn	49	40.00	
			iSg	50	01.00	
MFF	3.87	16	Pn	49	11.30	1.0
			Pg	49	24.00	
LSF	4.07	33	Pn	49	13.80	0.7
			Sn	49	57.80	
ERUA	4.07	265	ePg	49	13.67	0.5
EMON	4.18	280	ePg	49	16.40	1.7
LBL	4.25	55	P	49	16.80	1.2
EVIA	4.29	189	ePg	49	15.61	-0.7
			eS	50	03.90	
TCF	4.39	38	Pn	49	17.70	0.1
			Sn	50	06.50	
PYM	4.41	48	P	49	19.14	1.1
MAF	4.50	41	Pn	49	19.00	-0.3
			Sn	50	10.20	
ESEL	4.63	131	ePg	49	20.21	-0.9
			eS	50	11.80	
AGO	4.67	46	P	49	21.64	0.0
BGF	4.88	40	Pn	49	24.30	-0.3
			Sn	50	17.80	
PLDF	4.88	49	P	49	25.33	0.6
EBAN	4.98	200	ePg	49	25.09	-1.0
LPF	5.17	5	Pn	49	29.40	0.8
AVF	5.29	41	Pn	49	30.20	-0.2
			Sn	50	30.60	
SMF	5.43	44	Pn	49	32.80	0.4
			Sn	50	32.80	
GRR	5.54	6	Pn	49	33.40	-0.4
SSF	5.56	39	Pn	49	33.40	-0.8
			Sn	50	35.20	
LBF	5.73	42	Pn	49	37.30	0.6
			Sn	50	40.60	
LDF	5.81	10	Pn	49	37.30	-0.4
LOR	5.88	40	Pn	49	37.80	-0.9
			Sn	50	42.00	
LRG	5.90	82	Pn	49	38.20	-0.7
FLN	5.94	8	Pn	49	39.10	-0.4
LMR	6.00	83	Pn	49	40.60	0.2
FRF	6.11	81	Pn	49	43.20	1.2
LPL	6.59	64	Pn	49	50.00	1.1
LPG	6.59	64	Pn	49	50.00	1.0
SBF	6.70	78	Pn	49	52.60	2.2
HAU	7.61	45	Pn	50	01.40	-1.6
			Sn	51	24.40	
BSF	7.74	47	Pn	50	03.30	-1.6
PGF	7.86	89	Pn	50	05.00	-1.6

CDF	8.35	45	Pn	50	10.60	-2.8
DOU	8.41	29	P	50	13.60	-0.4
	0.4s		25.00nm			5.8mb X
			i	50	23.60	
			iS	51	46.30	
MEM	9.35	32	P	50	26.80	-0.2
	S.D. = 1.1		on	55	of	55 obs.

& JUN 19, 1990 21h 50m 44.63s
58.533 N 142.822 W
DEPTH = 10.0km (geophysicist)
GULF OF ALASKA (15)
<AGS-P>.

CYK	1.56	6	ePg	51	07.92	-4.5
			Sn	51	26.14	
WAX	1.92	360	ePg	51	12.42	-5.4
PCA	2.05	39	iP	51	14.53	-5.1
RAGM	2.09	334	ePg	51	15.32	-4.8
CVA	2.51	325	ePg	51	19.17	-6.9
BALM	2.52	5	iP	51	20.40	-6.0
HIN	2.65	316	ePg	51	24.02	-4.2
			eS	51	53.27	
	7 obs. associated					

? JUN 19, 1990 21h 57m 40.03± 1.32s
31.236 S ±15.9km 68.330 W ±22.6km
DEPTH = 100.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.15	232	iPc	57	54.00	-0.6
CFA	0.38	168	iPc	57	55.90	0.6
			eS	58	06.90	
RTCV	0.65	196	e(P)	57	57.00	-0.3
RTBS	1.05	246	ePg	58	01.40	0.2
			S	58	17.00	
RTRS	1.44	317	ePc	58	06.00	0.1
	S.D. = 0.7		on	5	of	5 obs.

• JUN 19, 1990 22h 23m 46.66± 0.52s
10.926 N ±10.7km 125.657 E ±16.6km
DEPTH = 33.0km (normal)
4.5mb (4 obs.)
LEYTE, PHILIPPINE ISLANDS (256)

KMI	25.91	306	ePg	29	18.00	0.1
WB5	31.79	164	ePg	30	10.00	-0.5
WRA	31.84	164	Pd	30	10.60	-0.4
	0.5s		0.80nm			3.9mb
ASPA	35.31	167	ePg	30	41.80	0.8
	0.6s		11.00nm			5.0mb
GBA	47.14	278	Pd	32	18.20	0.2
	0.6s		2.30nm			4.4mb
SOD	83.45	337	iP	36	11.70	-0.3
INK	83.90	22	ePg	36	41.00	26.8X
SUF	84.70	333	iP	36	17.70	-0.6
MBC	85.21	13	ePc	36	21.10	0.5
YKA	93.41	24	ePg	36	59.80	0.1
	0.9s		2.10nm			4.6mb
	S.D. = 0.5		on	9	of	10 obs.

• JUN 19, 1990 23h 41m 39.91± 0.57s
54.512 N ±10.7km 161.937 W ± 8.3km
DEPTH = 33.0km (normal)
4.8mb (30 obs.) 5.0Msz (1 obs.)
ALASKA PENINSULA (12)
ML 4.2 (PMR). Felt (IV) at Sand Point.

SDN	1.18	44	ePc	42	01.60	1.5
KDC	6.20	55	ePg	43	11.60	0.2
SVW	7.42	24	ePg	43	29.80	1.2
TTA	8.98	18	ePg	43	50.70	0.3
ADK	9.24	259	ePg	44	06.20	12.5X
TOA	11.23	41	ePg	44	18.80	-2.3
IMA	12.28	16	ePg	44	36.70	1.4
INK	19.12	33	ePg	45	59.50	-2.9
YKA	25.44	53	ePg	47	07.00	1.2
	0.6s		3.00nm			4.1mb
MBC	26.93	21	ePg	47	19.00	-0.4
	0.5s		3.00nm			4.2mb
KVN	33.15	100	ePg	48	16.00	0.7
FRB	44.58	39	iPd	49	49.50	-0.4
KEV	55.87	356	iP	51	15.00	-0.9
SOD	58.27	356	iP	51	32.40	-0.5
SUF	62.94	356	iP	52	04.40	-0.3
	0.5s		15.40nm			5.4mb

NAO	64.87	4	P	52	16.70	-0.7
	0.8s		11.20nm			5.0mb
NUR	65.21	356	iP	52	19.00	-0.5
	0.7s		25.40nm			5.4mb
HFS	65.65	2	ePg	52	20.40	-2.0
	0.6s		16.70nm			5.3mb
Z	13s		0.05um			3.9MszX
			e	52	28.00	
			e	52	31.40	
UPP	65.98	0	iP	52	23.60	-0.8
EKA	69.14	13	Pd	52	44.80	0.4
	0.6s		7.80nm			4.9mb
WTS	73.45	7	ePg	53	11.00	0.8
	0.7s		10.00nm			4.9mb
CLL	74.46	3	iP	53	16.20	0.1
	1.2s		10.00nm			4.7mb
ENN	74.60	8	ePg	53	18.00	1.1
	1.0s		12.00nm			4.8mb
KSP	75.01	1	iPd	53	19.60	0.4
MOX	75.08	4	ePg	53	20.00	0.3
KRA	75.79	359	ePg	53	23.00	-0.7
Z	18s		0.70um			5.0Msz
PRU	75.83	2	P	53	24.30	0.4
FLN	75.92	13	ePg	53	23.80	-0.7
	0.9s		11.45nm			4.9mb
GRF	76.01	5	ePc	53	25.80	0.8
	0.7s		9.00nm			4.9mb
LDF	76.13	12	ePg	53	25.30	-0.4
GRR	76.24	13	ePg	53	26.10	-0.2
LPF	76.57	13	ePg	53	28.20	0.1
KHC	76.66	3	iP	53	29.50	0.8
	1.1s		8.00nm			4.7mb
CDF	77.05	7	ePg	53	30.70	-0.2
HAU	77.38	8	ePg	53	32.40	-0.3
	0.7s		5.50nm			4.7mb
BSF	77.59	8	ePg	53	33.70	-0.2
LOR	77.88	10	ePg	53	35.30	-0.1
	0.7s		4.40nm			4.6mb
SSF	78.05	10	ePg	53	36.40	0.1
	0.6s		3.60nm			4.6mb
MFF	78.09	13	ePg	53	36.60	0.1
	0.7s		6.60nm			4.8mb
LBF	78.18	10	ePg	53	36.80	-0.3
	0.7s		4.40nm			4.6mb
AVF	78.31	10	ePg	53	37.40	-0.3
	0.9s		7.35nm			4.7mb
SQTA	78.48	5	iPc	53	39.80	1.0
	0.6s		10.60nm			5.0mb
			i	53	52.10	
SMF	78.50	10	ePg	53	38.70	-0.1
	0.8s		4.70nm			4.6mb
LSF	78.64	12	ePg	53	39.60	0.0
MAF	78.78	11	ePg	53	40.40	0.0
	0.9s		4.90nm			4.5mb
GUN	79.43	304	P	53	44.40	-0.2
	0.6s		23.00nm			5.4mb
LPL	79.88	8	ePg	53	47.50	0.9
LPG	79.90	8	ePg	53	47.10	0.3
	0.7s		2.20nm			4.3mb
PKI	79.94	304	P	53	46.40	-1.0
	0.4s		5.00nm			4.9mb
GKN	79.95	305	P	53	48.00	0.8
	0.8s		18.00nm			5.1mb
DMN	80.06	304	P	53	48.60	0.7
	0.4s		7.00nm			5.0mb
SBF	81.58	8	ePg	53	55.70	0.3
	0.9s		11.45nm			4.9mb
MAIO	82.78	327	ePg	54	04.00	2.2
PGF	83.00	7	ePg	54	03.40	0.5
	0.7s		5.50nm			4.8mb
OHR	84.72	358	ePg	54	12.00	0.5
	1.3s		47.00nm			5.5mb
BUL	144.76	343	iPKPc	01	12.90	-2.0
SLR	150.28	341	iPKPc	01	29.50	5.9X
Z	17s		3.06um			6.2MszX
			i	01	41.00	
BLF	153.94	344	ePKP	01	28.00	-0.8
	S.D. = 0.9		on	56	of	58 obs.

• JUN 19, 1990 23h 56m 09.84± 0.51s
0.941 N ±12.4km 26.530 W ± 8.7km
DEPTH = 10.0km (geophysicist)
4.8mb (13 obs.) 4.9Msz (3 obs.)
CENTRAL MID-ATLANTIC RIDGE (406)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 24C

Centroid Location:
Origin Time 23:56:16.2 1.1
Lat 0.93N 0.09 Lon 26.17W 0.08
Dep 15.0 FIX Half-duration 1.6
Moment Tensor; Scale 10**16 Nm
Mrr= 1.05 0.35 Mtt= 2.26 0.41
Mff=-3.31 0.52 Mrt= 0.57 1.34
Mrf=-2.44 1.32 Mtf=-6.87 0.36
Principal Axes:
T Val= 7.43 Plg=16 Azm= 36
N 0.83 71 180
P -8.26 11 303
Best Double Couple:Mo=7.8*10**16
NP1:Strike= 79 Dip=71 Slip= 176
NP2: 170 86 19

LIC	22.09	76	P	01	07.54	0.6
TIC	22.19	75	P	01	08.42	0.4
KIC	22.39	76	P	01	10.96	0.9
LKO	22.52	67	P	01	09.18	-2.2
CCH	43.06	243	P	04	12.70	0.5
TOL	43.83	25	eP	04	19.00	1.1
			eS	11	01.00	
ZOBO	44.47	246	P	04	24.10	0.1
	1.2s		36.15nm			5.1mb
Z	20s		1.49um			4.9Msz
			S	11	08.00	
			LR	17	24.00	
LPB	44.53	245	P	04	24.00	-0.3
Z	18s		2.06um			5.1Msz
			LR	19	26.00	
BCAO	45.14	85	iPc	04	31.00	2.1
	1.6s		65.00nm			5.3mb
EPF	48.31	26	eP	04	55.30	1.9
	1.2s		11.90nm			4.8mb
TCF	51.70	25	eP	05	22.80	3.5X
	0.8s		1.90nm			4.1mb
BGF	52.19	25	eP	05	25.20	2.3
	1.2s		11.90nm			4.7mb
LBF	53.01	26	eP	05	32.40	3.3X
	0.8s		3.35nm			4.3mb
CKI	53.16	31	P	05	31.00	0.8
LOR	53.18	25	eP	05	30.50	0.2
	1.2s		6.40nm			4.4mb
ATN	53.43	41	P	05	32.00	-0.3
SOI	53.77	41	P	05	32.50	-2.2
BOB	54.00	31	P	05	38.00	1.6
AZI	54.40	36	P	05	38.50	-0.8
SDI	54.45	37	P	05	36.00	-3.8X
DUI	54.81	37	P	05	41.00	-1.5
MDI	54.83	30	P	05	41.00	-1.4
SOTA	56.57	30	iPd	06	04.60	9.5X
	1.3s		25.70nm			5.1mb
			i	06	05.40	
			i	06	24.20	
TRI	56.91	33	eP	05	58.50	1.1
			e	14	00.00	
			e	23	40.00	
FVI	56.95	31	P	05	58.50	0.8
VOY	57.18	33	eP	06	00.70	1.2
EKA	57.46	16	P	06	08.00	6.8X
	1.1s		7.50nm			4.6mb
LJU	57.53	33	e(P)	06	01.50	-0.3
VBY	57.60	34	e(P)	06	04.10	1.8
BUL	57.90	114	iPd	06	03.50	-1.5
KRI	58.08	110	iPc	06	01.20	-5.1X
PTJ	58.23	34	eP	06	06.00	-0.8
GRF	58.28	28	eP	06	03.00	-4.0X
Z	20s		0.30um			4.4Msz
			e	09	45.00	
			e	14	13.00	
OHR	58.48	41	eP	06	07.00	-1.6
KHC	59.03	30	eP	06	13.00	0.7
SKO	59.33	40	eP	06	14.00	-0.5
VAY	59.75	41	eP	06	17.00	-0.3
CLL	60.22	27	eP	06	30.00	9.6X
			e	07	29.00	
ZST	60.24	32	eP	06	18.30	-2.3
SRO	60.67	33	eP	06	24.40	0.9
KSP	61.47	29	eP	06	25.00	-3.9X
SPC	62.51	33	eP	06	35.80	-0.4
KRA	62.85	32	eP	06	37.00	-1.1
MLR	63.90	38	eP	06	45.00	-0.3
VRI	64.56	38	ePc	06	48.00	-1.5
BBTK	66.20	46	eP	06	57.00	-3.3X
TUL	72.73	307	eP	07	44.00	3.6X
	1.3s		18.40nm			5.0mb
FFC	80.85	325	eP	08	24.00	-1.4
	1.6s		44.00nm			5.2mb
ALQ	81.20	305	eP	08	26.00	-1.9
			e	08	34.00	
ANMO	81.20	305	(P)	08	28.30	0.4
SES	85.77	320	eP	08	51.00	0.3
MAIO	86.24	54	eP	08	56.00	2.6X
LRM	86.48	316	eP	08	55.50	0.9
EDM	87.34	323	eP	08	58.00	-0.3
GLA	88.06	303	eP	09	08.00	5.8X
YKA	88.28	332	eP	09	06.00	3.5X
	1.2s		2.60nm			4.4mb
TPC	89.08	304	eP	09	13.00	5.9X
GSC	89.69	305	eP	09	16.00	6.0X
MBC	89.77	346	eP	09	10.00	0.6
	1.4s		10.00nm			4.9mb
CAN	145.54	174	ePKP	15	51.40	0.8
BWA	146.36	172	e(PKP)	15	52.80	0.9
ASPA	150.50	141	ePKP	16	07.80	9.1X
	1.6s		21.00nm			

S.D. = 1.2 on 45 of 62 abs.

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* JUN 20, 1990 00h 40m 21.16± 3.33s
27.895 N ±13.8km 127.748 E ±14.8km
DEPTH = 138.1 ± 33.2 km
4.4mb (5 obs.)
RYUKYU ISLANDS (238)

BJI	15.44	325	eP	43	55.00	2.4
	0.9s		37.00nm			4.7mb
CN2	15.98	354	Pc	44	00.20	0.9
Z	11s		0.60um			
N	11s		0.50um			
E	11s		0.20um			
TIY	16.16	311	eP	43	59.40	-2.2
N	13s		1.20um			
MDJ	16.75	5	eP	44	08.00	-0.8
XAN	17.26	295	P	44	15.60	0.4
HHC	18.55	318	eP	44	29.00	-0.9
Z	13s		1.80um			
BTO	19.33	316	eP	44	36.50	-1.6
N	12s		0.30um			
E	12s		0.30um			
CD2	21.11	284	P	44	56.60	0.5
LZH	21.82	298	eP	45	03.50	0.3
	1.5s		125.00nm			4.4mb
Z	12s		0.40um			4.0MszX
WMQ	35.76	307	P	47	09.50	1.1
WB5	47.92	172	eP	48	47.00	-0.4
WRA	47.98	172	Pd	48	48.00	0.2
	0.6s		2.70nm			4.2mb
MAIO	57.37	297	eP	50	01.00	3.8X
YKA	77.20	25	eP	52	00.20	-0.7
	0.8s		3.00nm			4.1mb
FFC	87.30	26	eP	52	54.00	0.8
	0.9s		14.00nm			4.9mb

S.D. = 1.4 on 14 of 15 obs.

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* JUN 20, 1990 01h 44m 10.37± 0.68s
8.046 N ±11.9km 38.767 W ±16.2km
DEPTH = 10.0km (geophysicist)
4.6mb (6 obs.)
CENTRAL MID-ATLANTIC RIDGE (406)

BAO	25.24	201	eP	49	39.50	1.1
SIV	32.53	223	iP	50	42.60	-1.3
CCH	37.02	227	P	51	22.50	-0.2
ZOBO	37.79	230	iPc	51	29.30	-0.2
	1.1s		14.21nm			4.7mb
			LR	02	52.00	
LPB	37.93	230	P	51	30.00	-0.5
BCAO	57.04	90	iPc	54	00.00	0.5
	1.3s		16.00nm			4.9mb
TUL	58.75	307	eP	54	10.20	-0.9
	0.8s		5.50nm			4.7mb
HFS	65.02	26	eP	54	51.00	-1.7
	1.1s		9.00nm			4.9mb
Z	15s		0.07um			4.0MszX
			e	54	56.40	
SES	72.55	320	eP	55	40.00	0.4
TNP	76.00	307	P	56	01.40	1.3
YKA	76.37	332	eP	55	57.40	-3.9X
	1.2s		1.70nm			4.0mb
KVN	76.70	308	P	56	04.90	1.0
MBC	79.99	346	eP	56	20.00	-1.0
	0.7s		1.00nm			3.9mb
INK	84.34	338	eP	56	45.00	1.3

S.D. = 1.1 on 13 of 14 abs.

JUN 20, 1990 01h 53m 52.76± 0.41s
32.159 S ± 8.1km 69.202 W ± 9.4km
DEPTH = 120.0km (geophysicist)
MENDOZA PROVINCE, ARGENTINA (139)

RTBS	0.54	337	iPc	54	11.20	0.0
RTCV	0.64	62	iPc	54	12.00	0.0
ZON	0.76	36	iPd	54	12.60	-0.3
			eS	54	27.00	
CFA	0.99	56	iPd	54	15.00	0.0
			eS	54	31.10	
RTLL	1.04	37	iPc	54	15.20	-0.3
JACH	1.29	246	iPd	54	18.50	0.3
			iS	54	37.50	
FCH	1.48	218	iPd	54	21.60	0.9
			iS	54	44.00	
PEL	1.59	231	iP	54	21.80	0.1
			iS	54	43.50	
ROCH	1.73	242	iPd	54	23.20	-0.4
			iS	54	45.50	
SAN	1.78	223	iPc	54	24.50	0.5
			iS	54	48.50	
PCH	1.83	217	eP	54	25.20	0.6
			iS	54	51.00	
RTRS	1.99	354	iPd	54	27.00	0.4
TACH	2.09	224	iPd	54	27.40	-0.4
			iS	54	54.50	
CHCH	2.15	214	iPd	54	28.90	0.3
			iS	54	57.00	
LCCH	2.39	236	iPd	54	31.50	-0.1
LNV	2.58	225	iPc	54	32.50	-1.6
			iS	55	04.00	

S.D. = 0.6 on 16 of 16 obs.

% JUN 20, 1990 04h 17m 44.27± 3.24s
23.088 N ±19.4km 121.914 E ±22.1km
DEPTH = 12.0 ± 6.9 km
TAIWAN (244)

TWF1	0.63	295	iPd	17	56.70	0.1
			eS	18	06.90	
TWG	0.82	251	ePc	17	59.70	-0.3
TWD	1.03	344	iPc	18	03.00	-0.5
TWK	1.32	278	ePd	18	08.70	0.1
			eS	18	27.50	
TWC	1.52	358	iPc	18	11.10	-0.1
TWZ	2.02	351	eP	18	18.80	0.2

S.D. = 0.4 on 6 of 6 abs.

? JUN 20, 1990 05h 32m 21.65± 1.48s
53.616 N ±21.9km 169.979 E ±14.7km
DEPTH = 33.0km (normal)
4.3mb (6 obs.)
KOMANDORSKY ISLANDS REGION (4)

SMY	2.64	108	eP	33	03.00	0.3
TTA	19.93	49	eP	36	52.70	-0.5
IMA	21.71	41	eP	37	12.00	0.5
FBA	23.85	45	eP	37	33.00	0.7
MBC	34.21	24	eP	39	05.50	0.0
	0.6s		2.00nm			4.2mb
YKA	38.65	46	eP	39	42.50	-0.7
	0.7s		0.90nm			3.7mb
ALQ	59.15	72	eP	42	21.00	-0.5
SUF	60.58	342	iP	42	30.00	-0.7
	0.6s		2.80nm			4.6mb
NUR	62.90	342	eP	42	46.00	-0.3
NAO	64.70	349	P	42	56.50	-1.6
	0.8s		1.60nm			4.2mb
HFS	65.02	347	eP	43	02.10	2.0
	0.4s		1.40nm			4.4mb
Z	16s		0.02um			3.4MszX
			e	43	11.30	
EKA	71.27	356	P	43	40.00	1.0
	1.8s		17.80nm			4.8mb

S.D. = 1.0 on 12 of 12 obs.

JUN 20, 1990 06h 51m 39.27± 0.52s
42.128 N ± 5.4km 15.641 E ± 5.4km
DEPTH = 10.0km (geophysicist)
ADRIATIC SEA (382)
ML 2.5 (LJU).

DUI	1.00	243	P	51	57.70	-0.6
			eSg	52	08.40	

20d 06h

HVAR	1.21	29	iPg	52 02.10	0.4
			i(Sg)	52 15.40	
SDI	1.43	253	Pd	52 04.40	-0.9
			eSn	52 21.00	
BSS	1.48	205	P	52 05.50	-0.4
			eSn	52 22.50	
SGO	1.59	189	P	52 07.00	-0.5
AZI	1.65	266	P	52 09.00	0.7
			eSn	52 27.50	
AQU	1.68	278	P	52 09.70	0.9
BRT	1.71	136	P	52 08.50	-0.8
			eSn	52 29.50	
HCY	2.14	80	ePn	52 18.00	2.4
			eSn	52 44.00	
ASS	2.39	294	P	52 21.00	1.8
ARV	2.41	306	P	52 20.50	1.1
LCI	2.50	135	P	52 24.90	4.3X
			eSn	52 56.00	
TDS	2.52	168	P	52 22.60	1.7
TTG	2.70	82	ePn	52 29.30	5.8X
			eSn	53 01.00	
CRE	3.10	300	P	52 29.50	0.3
SFI	3.31	304	P	52 32.50	0.4
PGD	3.36	303	P	52 33.50	0.4
VBY	3.39	355	ePn	52 43.90	10.7X
			eSn	53 31.70	
CEY	3.71	347	eP	52 52.50	14.6X
			e(Sn)	53 41.00	
PTJ	3.78	3	eP	52 53.90	15.0X
LJU	3.99	349	e(Pn)	52 31.50	-10.3X
			e	52 35.50	
			eSn	53 28.50	
OHR	4.00	103	ePn	52 40.70	-1.2
SOI	4.06	175	P	52 42.00	-0.8
VOY	4.10	343	ePn	52 41.70	-1.7
			eSn	53 29.70	
FVI	4.91	336	P	52 52.50	-2.3
BOB	5.22	302	P	52 58.40	-1.0

S.D. = 1.3 on 20 of 26 obs.

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* JUN 20, 1990 08h 05m 23.61± 1.38s
35.314 N ±13.5km 3.764 W ± 8.0km
DEPTH = 10.0km (geophysicist)
3.6mb (1 obs.)
STRAIT OF GIBRALTAR (385)
mbLg 3.2 (MDD).

EMEL	0.66	91	iP	05 36.60	-0.1
			eS	05 46.00	
MAL	1.51	340	ePn	05 50.00	-0.6
			iSg	06 08.00	
EJIF	1.79	310	eP	05 53.60	-1.2
			eS	06 18.00	
PLAT	1.81	297	iP	05 59.00	3.9X
AFC	1.94	5	eP	05 58.00	0.8
			eS	06 23.50	
ECOG	1.97	5	eP	05 57.60	0.2
			eS	06 23.00	
ALJ	2.02	313	iP	05 59.00	0.8
EPRU	2.03	325	eP	05 59.00	0.7
			eS	06 25.00	
EHOR	2.77	335	eP	06 08.50	-0.3
			eS	06 43.80	
EBAN	2.85	360	eP	06 11.00	1.1
EVIA	3.47	17	eP	06 28.60	9.8X
			eS	07 10.40	
GUD	5.33	357	eP	06 44.00	-1.3
			eS	07 44.00	
ETOR	5.66	13	eP	06 49.30	-0.6
YKA	68.00	332	eP	16 25.10	0.4
	0.7s		0.30nm		3.6mb

S.D. = 0.9 on 12 of 14 obs.

? JUN 20, 1990 08h 07m 54.82± 3.91s
33.365 S ±10.6km 71.854 W ±32.1km
DEPTH = 32.6 ± 7.2 km
NEAR COAST OF CENTRAL CHILE (135)

LCCH	0.26	115	iP	08 02.10	0.0
			iS	08 07.00	
LNV	0.70	148	iP	08 08.10	-0.1
ROCH	0.81	61	iP	08 09.50	-0.5
			iS	08 19.50	
TACH	0.82	111	iPd	08 09.60	-0.3
			iS	08 20.10	
SAN	1.00	95	iPd	08 12.50	-0.1
			iS	08 25.20	
PEL	1.00	78	iPd	08 12.50	-0.2
			iS	08 25.50	
PCH	1.15	103	iPd	08 14.90	0.2
			iS	08 30.50	
CHCH	1.15	120	iP	08 15.00	0.3
			iS	08 30.50	
JACH	1.26	58	iP	08 16.80	0.5
			iS	08 32.50	
FCH	1.31	89	iP	08 17.50	0.3
			iS	08 35.00	

S.D. = 0.4 on 10 of 10 obs.

JUN 20, 1990 08h 30m 26.08± 1.00s
6.931 S ± 5.2km 155.656 E ± 6.6km
DEPTH = 85.9 ± 9.4 km
5.2mb (13 obs.)
SOLOMON ISLANDS (193)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 26C
Centroid Location:
Origin Time 08:30:28.5 1.6
Lat 6.78S 0.13 Lon 155.79E 0.10
Dep 53.0 6.4 Half-durotion 1.5
Moment Tensor; Scole 10**16 Nm
Mrr= 4.86 0.37 Mtt=-5.98 0.63
Mff= 1.12 0.63 Mrt=-0.71 0.66
Mrf= 3.52 0.63 Mtf=-1.99 0.45
Principol Axes:

	Val=	Plg=	Azm=
T	7.18	57	256
N	-0.68	33	74
P	-6.50	1	165

Best Double Couple:Mo=6.8*10**16
NP1:Strike=284 Dip=53 Slip= 133
NP2: 47 54 48

RAB	4.41	308	eP	31 34.00	2.0
			iS	32 32.00	
HNR	4.92	121	eP	31 39.00	-0.1
			eS	32 54.00	
LAT	8.60	271	eP	32 29.00	-0.9
KDB	8.78	253	eP	32 31.00	-1.3
DZM	18.30	146	iPc	34 36.00	0.0
			iS	37 02.40	
RMQ	20.53	198	iPc	34 59.40	-0.4
BRS	20.53	187	iPc	35 00.80	1.0
			i	35 16.00	
QIS	20.62	227	eP	35 01.00	0.2
QLP	22.37	208	iPc	35 18.30	0.2
GUA	22.96	332	e(P)	35 37.80	13.8X
	0.9s		121.01nm		
GUMO	23.03	332	e(P)	35 23.60	-1.0
			eS	40 02.50	
PJG	23.03	332	e(P)	35 23.60	-1.0
COO	23.79	188	iPd	35 32.90	1.0
WRA	24.39	236	Pc	35 38.00	0.2
	0.7s		37.50nm		4.9mb
MTN	24.85	254	iPd	35 43.00	0.8
			e	35 49.00	
CMS	26.10	199	eP	35 53.00	-0.6
	0.5s		25.00nm		5.0mb
STK	28.08	206	eP	36 09.70	-1.9
	0.8s		7.00nm		4.3mb
BWA	28.16	193	eP	36 14.60	2.2
CAN	28.91	191	eP	36 19.80	0.7
WARB	33.62	232	eP	37 00.00	-0.5
	0.5s		28.00nm		5.4mb
MEKA	40.35	237	iPd	37 57.00	-0.1
	0.6s		31.00nm		5.3mb
KKM	41.41	287	iPd	38 06.80	0.8
	0.9s		70.50nm		5.5mb
NANU	41.63	244	eP	38 05.00	-2.6
	0.5s		38.00nm		5.5mb
			e	38 07.50	
KLB	43.03	230	iPc	38 18.00	-0.9
MAT	46.24	340	(P)	38 43.00	-1.5
			eS	45 20.00	
OIZ	51.99	301	P	39 30.20	1.2
PPI	55.48	274	ePd	39 53.30	-1.4
	1.0s		66.90nm		5.6mb
CN2	57.41	334	eP	40 07.40	-0.6
NST	59.39	293	iPc	40 22.70	0.5
XAN	60.12	316	P	40 26.60	-8.4
KMI	60.52	304	eP	40 31.00	0.9
CHTO	61.46	296	P	40 36.60	0.3
			pP	40 54.50	68kmX
CD2	62.27	310	P	40 43.50	1.9
LZH	64.73	315	eP	40 58.00	0.3
	Z 28s		0.30um		4.3MszX
GTA	69.14	317	eP	41 25.80	0.3
GUN	75.65	301	P	42 05.20	0.8
	0.7s		44.00nm		5.5mb
PKI	75.96	301	P	42 05.70	-0.5
DMN	76.23	301	P	42 08.40	0.8
	0.7s		23.00nm		5.2mb
GKN	76.73	301	P	42 10.80	0.6
	0.8s		28.00nm		5.2mb
KOD	79.70	282	eP	42 28.00	1.1
IMA	81.53	19	eP	42 33.50	-1.8
FBA	82.82	21	eP	42 41.80	0.0
INK	89.43	21	eP	43 14.50	0.3
MBC	95.49	14	eP	43 42.00	0.0
	0.7s		2.00nm		4.7mb
YKA	95.97	28	eP	43 44.30	-0.1
	0.7s		1.00nm		4.5mb
HFS	119.68	339	ePKP	49 06.30	-1.0
	0.4s		0.80nm		
	Z 19s		0.14um		4.6Msz
			e	49 18.80	
			LR	32 15.00	
NAO	120.14	341	PKP	49 08.80	0.6
	0.7s		2.10nm		

S.D. = 1.1 on 46 of 47 obs.

JUN 20, 1990 10h 59m 31.77± 0.57s
47.854 N ± 4.2km 7.670 E ± 4.5km
DEPTH = 10.0km (geophysicist)
SWITZERLAND (544)
ML 2.7 (LDG). MD 2.3 (STR).

FEL	0.23	85	Pg	59 36.78	0.0
MOF	0.36	270	Pg	59 39.65	0.4
BBS	0.41	196	Pg	59 40.08	0.0
ECH	0.50	317	Pg	59 42.26	0.4
			Sg	59 49.11	
BSF	0.59	268	Pg	59 43.79	0.0
			Sg	59 51.90	
WLS	0.60	339	Pg	59 43.67	-0.2
			Sg	59 51.43	
CDF	0.62	335	Pg	59 44.04	-0.2
			Sg	59 51.97	
LOMF	0.76	229	Pg	59 46.71	0.0
			Sg	59 56.83	
HAU	0.90	280	Pg	59 49.50	0.4
			Sg	00 01.40	
GWF	1.12	358	Pg	59 53.26	0.4
VITF	1.19	288	Pn	59 52.86	-1.0
			Pg	59 53.85	
			Sg	00 10.85	
LOR	2.65	259	Pg	00 21.80	6.5X
			Sg	00 55.00	
LBF	2.65	252	Pg	00 21.60	6.2X
			Sg	00 55.30	
SMF	2.88	247	Pg	00 26.20	7.7X
			Sg	01 02.20	
SSF	2.93	256	Pg	00 27.30	8.0X
			Sg	01 04.60	

S.D. = 0.5 on 11 of 15 obs.

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* JUN 20, 1990 11h 19m 21.96± 1.20s
5.567 S ±11.4km 147.438 E ±21.5km
DEPTH = 33.0km (normal)
4.4mb (4 obs.)
EAST PAPUA NEW GUINEA REGION (207)

LAT	1.16	202	iPc	19 42.60	0.6
MNDI	3.81	261	eP	20 26.00	6.1X
KDB	3.89	184	eP	20 20.00	-0.9
WB5	19.08	221	eP	23 43.20	-1.4
WRA	19.14	221	Pc	23 46.20	0.8
	0.9s		12.00nm		4.1mb
ASPA	22.22	215	eP	24 17.30	-0.1
	0.4s		12.00nm		4.7mb
BRS	22.29	167	iPc	24 17.80	-0.3
STK	26.74	191	eP	25 01.90	1.4
	1.4s		5.00nm		3.9mb
MAT	42.77	349	eP	27 18.00	-0.1
	1.1s		15.19nm		4.6mb

S.D. = 1.1 on 8 of 9 obs.

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* JUN 20, 1990 11h 49m 29.77± 1.37s
42.079 N ±10.3km 142.780 E ±10.8km
DEPTH = 64.3 ± 13.7 km
4.1mb (7 obs.)

HOKKAIDO, JAPAN REGION (224)

AOMJ	2.36	231	P	50	07.60	0.6
			eS	50	38.40	
OFUJ	3.11	196	P	50	17.50	0.0
			eS	50	54.30	
YAMJ	4.43	209	P	50	36.20	0.1
NIIJ	5.64	212	eP	50	52.20	-0.8
KAKJ	6.21	200	eP	50	56.10	-4.8X
			eS	52	06.70	
MAT	6.57	214	eP	51	06.00	0.1
	0.6s	12.67nm				4.6mb X
		(S)		52	20.00	
CHJJ	6.70	207	eP	51	06.10	-1.7
MTMJ	6.70	217	eP	51	08.80	0.9
IIDJ	7.61	212	eP	51	21.00	0.7
			eS	52	49.80	
TSRJ	8.41	221	eP	51	35.10	3.7X
BJI	20.14	273	eP	53	59.50	-1.5
	0.8s	10.00nm				4.2mb
SSE	20.46	245	Pc	54	05.00	0.7
	1.0s	12.00nm				4.2mb
CHTO	43.72	252	P	57	31.90	1.6
FBA	44.32	35	eP	57	37.80	3.2X
TOA	45.34	39	eP	57	36.90	-5.9X
GUN	47.88	272	P	58	04.20	0.5
DMN	48.62	272	P	58	08.40	-0.8
INK	49.45	29	eP	58	15.00	0.3
MBC	51.40	18	eP	58	29.50	0.0
	0.6s	1.00nm				4.0mb
YKA	58.95	32	eP	59	24.70	0.4
	0.8s	0.70nm				3.8mb
WB5	62.13	189	eP	59	45.80	-0.5
WRA	62.20	189	Pd	59	46.80	0.0
	0.4s	1.60nm				4.5mb
HFS	69.93	336	eP	00	35.20	-0.4
	0.4s	3.10nm				4.6mb
Z	13s	0.03um				3.7MszX
			epP	00	37.30	7kmX
			esP	00	39.20	
			e	00	47.00	
NAO	70.23	337	P	00	37.10	-0.3
	0.7s	1.10nm				3.9mb
SIV	146.89	45	PKP	09	08.00	3.4X

S.D. = 0.9 on 20 of 25 obs.

? JUN 20, 1990 11h 49m 56.59± 8.07s
43.817 N ±39.0km 127.232 W ±51.5km
DEPTH = 10.0km (geophysicist)
2.9mb (1 obs.)
OFF COAST OF OREGON (30)

PGO	3.79	63	P	50	56.38	0.1
GT2	3.79	68	P	50	56.28	-0.1
BMW	3.88	45	P	50	57.07	-0.6
RVW	3.95	52	P	50	58.40	-0.1
VLMM	4.08	63	P	51	00.36	-0.2
LVP	4.10	55	P	51	00.74	0.0
TDH	4.16	67	P	51	01.20	-0.4
MTMW	4.19	56	P	51	02.15	0.1
FL2	4.20	54	P	51	02.48	0.3
VBEM	4.23	71	P	51	01.99	-0.7
OBH	4.23	33	P	51	02.57	0.1
CZM	4.25	50	P	51	02.51	-0.3
ERK	4.27	53	P	51	03.07	-0.1
CPW	4.28	41	P	51	02.44	-0.8
HSR	4.29	55	P	51	03.96	0.4
JLK	4.29	55	P	51	03.63	0.1
VLL	4.29	66	P	51	03.42	-0.1
STD	4.30	54	P	51	03.77	0.2
REMW	4.30	55	P	51	04.60	0.9
APW	4.30	47	P	51	03.26	-0.3
YEL	4.30	54	P	51	03.89	0.1
ESD	4.32	55	P	51	04.89	0.9
CDFW	4.34	56	P	51	04.04	-0.1
SOSW	4.35	54	P	51	04.25	-0.1
TDL	4.36	53	P	51	04.55	0.0
VFP	4.39	68	P	51	04.80	-0.1
APM	4.39	62	P	51	05.49	0.6
KOSW	4.44	52	P	51	05.81	0.3
LMW	4.51	49	P	51	06.54	0.0
GULW	4.53	60	P	51	07.00	0.2
CROR	4.62	73	P	51	09.96	1.8
ASR	4.63	58	P	51	08.17	-0.2
VIPM	4.81	79	P	51	08.66	-2.3X
GLK	4.83	53	P	51	11.53	0.3
RVC	4.85	48	P	51	11.44	0.1
FMW	5.00	50	P	51	13.59	-0.1
GL2	5.03	63	P	51	13.34	-0.6
GSM	5.11	47	P	51	15.14	0.1
RMW	5.27	44	P	51	17.20	-0.1
JBO	5.53	70	P	51	19.85	-1.1
MCW	5.74	31	P	51	24.58	0.7
RSW	5.99	62	P	51	26.56	-0.9
RPW	6.10	39	P	51	28.41	-0.6
YKA	20.11	17	eP	54	40.80	7.8X
	0.8s	0.50nm				2.9mb

S.D. = 0.5 on 42 of 44 obs.

& JUN 20, 1990 12h 31m 21.31s
60.483 N 151.991 W
DEPTH = 73.1km
KENAI PENINSULA, ALASKA (14)
<AGS-P>.

RED	0.39	261	iP	31	33.10	-0.7
			Sn	31	43.05	
NNL	0.56	142	iP	31	35.82	0.6
SPU	0.70	357	iP	31	36.03	-0.7
			eS	31	48.33	
CRP	0.79	354	iP	31	37.35	-0.5
			iS	31	50.15	
CGLM	0.83	359	iP	31	37.55	-0.7
			iS	31	50.49	
SLKM	0.88	88	eP	31	37.98	-0.8
NCG	0.93	355	eP	31	38.58	-0.9
			Sn	31	53.03	
CNPM	1.03	158	iP	31	40.02	-0.6
			Sn	31	55.01	
XLV	1.04	172	eP	31	39.95	-0.8
			Sn	31	54.15	
SUA	1.16	31	eP	31	41.86	-0.5
			eS	31	58.80	
SEW	1.32	106	eP	31	43.44	-0.9
			Sn	32	01.93	
AUE	1.33	212	iP	31	43.27	-1.1
PMS	1.41	56	iP	31	45.41	-0.3
			iS	32	03.32	
SKT	1.52	8	iP	31	45.73	-1.3
PWA	1.56	40	eP	31	46.88	-0.7
MCNL	1.76	223	eP	31	48.78	-1.5
PLRM	1.78	50	eP	31	49.09	-1.5
GHO	1.97	48	eP	31	51.56	-1.7
			iS	32	15.38	
SML	2.22	52	eP	31	54.80	-1.8
GLI	2.44	78	eP	31	56.42	-3.3
SCM	2.64	57	eP	32	00.31	-2.2
HUR	2.74	23	eP	32	04.15	0.2
VLZ	2.85	74	eP	32	02.56	-2.8
KTH	3.12	9	eP	32	07.40	-1.9
KLU	3.13	68	eP	32	06.56	-2.8
TOA	3.25	57	eP	32	09.35	-1.6
SDG	3.71	54	eP	32	15.42	-2.0
PAX	3.98	48	eP	32	19.19	-2.1

28 obs. associated

• JUN 20, 1990 12h 41m 49.25± 1.31s
42.606 N ± 9.9km 23.993 E ±15.9km
DEPTH = 10.0km (geophysicist)
BULGARIA (359)

VAY	1.67	220	ePn	42	18.30	-0.3
SKO	2.00	252	ePn	42	24.00	0.6
OHR	2.81	239	ePn	42	35.00	-0.2
GZR	2.92	343	ePd	42	36.50	-0.1
MLR	3.21	25	eP	42	41.00	0.2
BZS	3.46	331	ePc	42	44.00	-0.2

S.D. = 0.4 on 6 of 6 obs.

JUN 20, 1990 12h 45m 16.61± 1.18s
23.641 N ± 7.3km 121.784 E ± 9.7km
DEPTH = 37.1 ± 10.5 km
4.2mb (6 obs.)
TAIWAN (244)

TWD	0.47	338	iPc	45	26.20	-0.6
			eS	45	32.00	
TWF1	0.53	237	iPc	45	28.00	0.3
			eS	45	36.40	
TWC	0.97	4	iPd	45	34.40	0.6
			eS	45	47.00	
TWO	1.07	306	iPd	45	35.40	0.0
			eS	45	48.30	
TWK	1.25	253	ePc	45	38.90	1.0
			eS	45	55.00	
TWZ	1.46	353	eP	45	41.10	0.2
ANP	1.55	351	iP	45	42.20	-0.1
			eS	46	28.00	
QZH	3.19	295	ePn	46	03.00	-2.5
			Pg	46	14.80	
			Sn	46	36.40	
SSE	7.44	356	eP	47	00.00	-5.5X
Z	16s	0.40um				
GZH	7.77	268	eP	47	09.20	-1.0
NJ2	8.77	343	Pc	47	20.30	-3.6X
			S	48	57.40	
WHN	9.54	318	eP	47	30.50	-4.1X
N	12s	1.40um				
			PP	47	36.00	
QIZ	12.03	250	eP	48	08.20	-0.4
GYA	13.99	285	P	48	36.60	2.0
N	10s	1.10um				
E	10s	0.30um				
XAN	15.29	316	Pc	48	50.00	-1.5
TIY	16.15	332	eP	49	05.40	2.8X
Z	13s	1.00um				
BJI	17.02	345	eP	49	15.00	1.6
	1.0s	6.00nm				3.7mb
Z	12s	8.30um				4.7MszX
			eS	52	24.00	
CD2	17.57	298	P	49	21.60	1.2
HHC	19.19	336	eP	49	40.80	0.7
Z	25s	0.70um				
N	10s	0.50um				
LZH	19.86	313	eP	49	47.00	-0.6
	1.4s	41.00nm				4.6mb
Z	17s	1.20um				4.2Msz
CHTO	21.82	262	P	50	07.80	0.2
GTA	24.36	315	P	50	33.40	1.0
	1.2s	9.00nm				4.2mb
WB5	44.96	163	eP	53	28.80	-1.3
WRA	45.02	163	P	53	32.00	1.4
	0.6s	1.90nm				4.2mb
FBA	69.04	27	P	56	21.80	1.5
INK	73.52	22	eP	56	46.00	-1.1
MBC	73.67	13	eP	56	46.50	-1.3
	0.4s	1.00nm				4.1mb
YKA	83.25	23	eP	57	39.30	-1.1
	0.8s	1.80nm				4.2mb

S.D. = 1.3 on 24 of 28 obs.

JUN 20, 1990 13h 52m 31.21± 0.65s
39.221 N ± 6.6km 20.519 E ± 6.8km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)
ML 3.6 (ATH).

KEK	0.74	312	ePg	52	48.00	2.2
VLS	1.04	177	ePg	52	49.70	-1.2
			eSg	53	04.00	
OHR	1.90	6	iPn	53	05.90	1.9
			i	53	32.50	
			Lg	53	32.80	
NEO	2.10	87	ePn	53	06.00	-0.9
LCI	2.27	300	P	53	08.00	-1.3
			eSn	53	34.00	
ITM	2.32	151	ePg	53	12.30	2.2
VAY	2.62	36	ePn	53	13.70	-0.6
ATH	2.80	115	ePn	53	15.50	-1.3
SKO	2.84	14	ePn	53	17.50	0.1
			iSg	53	51.70	
			Lg	54	10.10	
VLI	3.15	142	ePb	53	24.10	2.4
MMB	3.41	45	eP	53	26.00	0.5
SOI	3.68	253	P	53	27.50	-1.8
VTS	3.94	30	eP	53	33.00	-0.1
RZN	4.04	51	eP	53	34.00	-0.6
SGO	4.23	290	P	53	37.00	0.0
			eSn	54	24.00	
PVL	5.40	41	eP	53	52.00	-1.6

S.D. = 1.6 on 16 of 16 obs.

• JUN 20, 1990 14h 53m 19.70± 2.96s
43.997 N ±14.8km 128.144 W ±19.4km
DEPTH = 10.0km (geophysicist)
3.2mb (1 obs.)
OFF COAST OF OREGON (30)

NLO	3.93	56	P	54	21.50	0.1
ONR	4.22	45	P	54	25.02	-0.4
BMW	4.27	53	P	54	25.69	-0.5

20d 14h

PGO	4.31	68	P	54	27.32	0.5
GT2	4.35	73	P	54	27.18	-0.3
RVW	4.39	59	P	54	27.62	-0.3
OBH	4.48	41	P	54	28.78	-0.4
LVP	4.56	61	P	54	30.28	-0.2
CPW	4.61	48	P	54	31.19	0.1
VLMM	4.61	68	P	54	31.14	0.0
FL2	4.65	60	P	54	31.67	-0.1
MTMW	4.67	62	P	54	32.01	0.0
CZM	4.67	57	P	54	31.33	-0.6
APW	4.70	54	P	54	31.75	-0.6
ERK	4.71	59	P	54	32.50	-0.1
TDH	4.72	72	P	54	32.49	-0.2
HSR	4.75	61	P	54	33.50	0.3
STD	4.75	60	P	54	33.10	-0.1
JLK	4.76	61	P	54	33.41	0.2
REMW	4.76	60	P	54	33.87	0.5
YEL	4.76	60	P	54	33.66	0.3
ESD	4.78	61	P	54	34.27	0.6
SOSW	4.81	60	P	54	34.18	0.2
TDL	4.81	59	P	54	33.79	-0.2
VBEM	4.81	75	P	54	33.91	-0.1
CDFW	4.81	62	P	54	34.13	0.2
VLL	4.83	70	P	54	34.49	0.1
KOSW	4.87	58	P	54	35.09	0.2
APM	4.91	67	P	54	35.35	0.0
LMW	4.92	55	P	54	35.30	-0.2
VFP	4.94	72	P	54	36.08	0.1
GULW	5.03	65	P	54	37.58	0.5
HDW	5.10	42	P	54	37.99	0.0
ASR	5.12	63	P	54	38.51	0.2
RVC	5.25	54	P	54	40.01	-0.1
FMW	5.42	55	P	54	42.30	-0.3
GSM	5.49	52	P	54	43.58	0.0
GL2	5.55	67	P	54	44.59	0.1
HTW	5.85	47	P	54	48.55	-0.1
MCW	5.95	36	P	54	50.49	0.5
JCW	6.02	44	P	54	51.42	0.4
CMW	6.09	41	P	54	52.19	0.2
MXC	6.11	62	P	54	51.89	-0.3
RPW	6.40	44	P	54	56.41	0.0
MBW	6.45	40	P	54	57.58	0.5
EPH	6.86	58	P	55	02.37	-0.5
FFC	20.02	48	eP	57	55.00	-0.2
	0.7s	6.00nm				4.0mb X
YKA	20.14	18	eP	58	00.00	3.6X
	0.7s	0.90nm				3.2mb
	S.D. = 0.3	on 47 of 48 obs.				

JUN 20, 1990 15h 17m 27.96± 0.21s
1.120 S ± 4.0km 126.816 E ± 4.8km
DEPTH = 24.2km (2 depth phases)
5.6mb (32 obs.) 5.3Msz (14 obs.)
MOLUCCA SEA (269)

AAI	2.90	152	ePd	18	14.00	0.5
			eS	18	38.60	
DAV	8.25	351	eP	19	34.00	4.9X
TSM	10.22	301	eP	19	58.70	2.4
MTN	12.41	160	iPd	20	23.70	-2.4
			e	22	51.00	
KKM	12.76	304	ePc	20	31.50	0.7
	1.1s	217.10nm				6.2mb
TRT	15.57	245	iPc	21	12.10	4.4X
	0.8s	156.30nm				5.3mb
MNDI	17.53	107	eP	21	38.00	5.2X
BAG	18.47	341	eP-	21	42.00	-2.4
			eS	25	05.00	
WRA	20.10	159	Pc	21	58.00	-5.0X
	0.7s	78.00nm				5.2mb
LAT	20.87	106	eP	22	11.00	0.1
KDB	21.87	113	eP	22	20.00	-1.0
QIS	23.01	148	ePc	22	31.00	-1.3
			e	27	00.50	
GUA	23.11	50	eP	22	32.80	-0.4
	0.7s	257.53nm				5.9mb
			eS	26	38.50	
ASPA	23.44	163	iPc	22	34.30	-2.2
	0.9s	300.00nm				5.8mb
			iPP	22	53.20	
			eS	26	43.70	
			iScS	33	58.20	
KGM	23.70	278	ePc	22	40.50	1.5
NANU	23.97	206	eP	22	40.00	-1.6
	0.5s	33.00nm				5.1mb
WARB	24.92	180	eP	22	51.00	0.2
RAB	25.51	97	iPc+	22	57.00	0.6
			iS	27	20.00	
QIZ	26.06	321	eP	23	00.70	-0.8
N	15s	3.20um				
E	17s	2.70um				
			PP	23	41.00	
			S	27	29.00	
HKC	26.35	333	iP	23	08.00	3.9X
			iS	27	40.00	
IPM	26.38	283	ePc	23	05.40	0.8
	1.1s	161.20nm				5.6mb
PPI	26.43	271	eP	23	06.00	1.1
	1.6s	976.70nm				6.2mb
CTA	26.77	136	iPd+	23	09.40	1.3
	1.1s	329.11nm				5.9mb
			iS	27	41.00	
QZH	27.11	343	P	23	10.50	-0.5
Z	28s	5.20um				4.9MszX
E	10s	1.00um				
			sP	23	25.50	
			S	27	45.50	
			SS	28	59.50	
GZH	27.40	332	P	23	15.20	1.5
N	14s	2.70um				
E	13s	1.80um				
SNG	27.41	288	eP	23	13.10	-0.8
			eS	28	00.40	
			e	30	09.00	
NST	31.20	303	eP	23	48.50	0.7
BSI	32.16	282	eP	23	55.00	-1.3
SSE	32.48	351	P	24	00.00	1.2
	8.0s	850.00nm				5.7mb X
Z	20s	2.30um				4.9Msz
N	12s	1.40um				
E	12s	1.20um				
			S	29	08.00	
			SS	29	28.00	
RMQ	32.88	142	iPc	24	02.20	-0.3
			i	24	13.60	42kmX
BDT	32.93	305	eP	24	00.00	-2.9X
	1.0s	82.80nm				5.6mb
GYA	33.61	326	P	24	11.40	2.5
N	18s	2.30um				
E	18s	5.20um				
			S	29	33.00	
			ScP	30	33.40	
			PcS	30	33.80	
			ScS	34	34.60	
WHN	33.65	340	Pd	24	10.50	1.5
	1.0s	100.00nm				5.7mb
Z	24s	2.70um				4.9MszX
N	23s	7.80um				
			PP	24	20.50	
			iS	29	32.00	
KUMJ	33.69	6	P	24	07.90	-1.4
CHG	33.80	307	ePc	24	09.80	-0.8
	0.9s	38.45nm				5.3mb
			e	30	33.10	
NJ2	33.84	348	Pc	24	12.30	1.6
Z	20s	1.50um				4.7Msz
			iS	29	32.00	
			ScP	30	32.60	
HNR	33.98	105	eP	24	14.00	1.9
KMI	34.99	320	Pd	24	25.00	4.1X
	1.5s	80.00nm				5.4mb
CMS	35.15	151	eP	24	21.00	-0.9
	0.8s	31.00nm				5.3mb
TKSJ	35.57	10	eP	24	25.00	-0.5
SHK	35.89	8	eP	24	28.00	-0.2
BRS	36.08	139	iPd	24	28.00	-2.0
			i	24	36.00	27km
			i	24	43.00	
			i	25	07.50	
			eS	29	56.00	
WKYJ	36.11	12	eP	24	29.30	-0.8
YONJ	36.65	9	P	24	33.50	-1.1
TSRJ	37.46	12	P	24	40.70	-0.6
COO	37.74	143	eP	24	45.00	1.2
IIDJ	37.86	15	P	24	44.50	-0.3
TIA	38.22	347	eP	24	47.90	0.1
	7.5s	1000.00nm				5.7mb X
Z	28s	2.90um				4.9MszX
E	12s	1.10um				
CD2	38.67	327	P	24	49.40	-2.3
Z	18s	2.20um				5.0Msz
			sP	25	00.00	
			PP	26	20.00	
			S	30	44.00	
CHJJ	38.68	16	P	24	49.00	-2.6
BWA	38.80	151	eP	24	53.90	1.2
XAN	38.81	336	P	24	51.80	-1.0
	6.0s	400.00nm				5.3mb X
N	14s	1.80um				
E	14s	1.50um				
			PP	25	03.80	
			S	30	47.00	
MTMJ	38.88	14	P	24	52.00	-1.4
MAT	38.94	15	eP	24	51.00	-2.8X
	0.7s	39.73nm				5.3mb
Z	20s	3.90um				5.2Msz
			eS	30	44.00	
KAKJ	39.16	17	P	24	53.70	-1.9
CAN	39.80	151	eP	25	00.60	-0.4
NIIJ	39.80	15	P	25	00.60	-0.3
CNB	39.97	151	eP	25	03.00	0.5
			e	25	15.00	44kmX
DL2	40.11	354	eP	25	04.00	0.5
Z	24s	2.60um				5.0MszX
E	13s	2.30um				
			sP	25	14.00	
			eS	31	04.00	
TOO	40.15	157	eP	25	04.00	0.2
			i	25	06.20	7kmX
			e	25	22.00	
TIY	40.87	342	eP	25	10.00	0.2
Z	21s	3.40um				5.2Msz
N	17s	1.80um				
			PP	25	21.50	
			S	31	18.00	
YAMJ	40.96	16	P	25	10.30	-0.1
BJI	42.10	348	eP	25	18.50	-1.3
	1.0s	120.00nm				5.6mb
Z	18s	2.90um				5.2Msz
E	14s	1.99um				
			PP	27	00.00	
			ScP	31	03.00	
			eS	31	34.00	
OFUJ	42.27	17	P	25	21.30	0.2
LZH	42.76	332	Pd	25	26.50	1.1
	1.4s	200.00nm				5.7mb
Z	25s	3.40um				5.1MszX
N	20s	4.90um				
E	18s	3.50um				
			PP	25	35.00	
			PP	27	08.00	
			S	31	41.00	
			ScS	35	25.00	
SNY	42.85	356	Pc	25	25.50	-0.3
	0.8s	100.00nm				5.6mb
Z	20s	2.40um				5.1Msz
N	14s	1.30um				
E	18s	2.30um				
			PP	27	11.00	
			S	31	46.00	
SHL	42.95	311	eP	25	26.60	-0.5
			eS	31	46.00	
DZM	43.82	121	iPc	25	35.00	0.8
PVC	43.98	115	iPc	25	37.50	2.1
HHC	44.02	343	P	25	37.00	1.5
Z	25s	5.00um				5.3MszX
N	15s	1.40um				
			sP	25	49.50	
			PP	27	16.00	
			S	32	07.00	
			SS	32	20.00	
			ScS	35	33.00	
BTO	44.26	342	P	25	39.00	1.5
N	17s	1.90um				
E	17s	1.70um				
			sP	25	51.00	
			S	32	08.50	
			SS	35	27.00	
CN2	44.74	359	Pc	25	40.00	-1.1
Z	19s	3.00um				5.2Msz
N	16s	1.00um				
E	16s	1.50um				
			PP	25	45.00	
			ScP	31	13.00	
			S	32	10.00	
			ScS	35	36.00	
MRRJ	45.22	15	P	25	46.20	1.2
MDJ	45.60	3	eP	25	46.70	-1.3
Z	15s	4.40um				5.5MszX
N	18s	2.00um				
			S	32	27.00	

			SS	35	41.00	
HOOJ	45.79	17	eP	25	50.40	0.9
LSA	45.80	315	P	25	51.00	0.6
			S	32	35.00	
SAP	45.88	15	eP	25	52.00	1.8
KUSJ	46.87	18	eP	25	59.20	1.2
ASAJ	47.21	16	P	26	00.80	0.1
GTA	47.32	331	P	26	02.00	0.1
	1.0s	100.00nm				5.8mb
Z	23s	3.83um				5.3MszX
N	20s	2.94um				
			sP	26	20.00	
			PcP	27	32.00	
			S	32	54.00	
			ScS	35	52.00	
GUN	48.75	310	P	26	13.00	-0.4
PKI	48.95	309	P	26	15.00	0.0
DMN	49.20	309	P	26	16.40	-0.4
GKN	49.75	309	P	26	19.80	-1.2
KOD	50.38	284	eP	26	25.00	-1.1
HYB	50.97	293	iPc	26	30.00	-0.2
	1.0s	360.00nm				6.3mb
			eS	33	40.00	
GBA	51.07	288	Pd	26	29.20	-1.7
	1.2s	140.20nm				5.8mb
NDF	52.40	112	eP	26	43.00	2.1
POO	55.58	293	iPd	27	04.80	0.4
	1.0s	88.00nm				5.7mb
NDI	55.94	306	iPc	27	06.00	-0.8
	0.6s	40.00nm				5.6mb
			eS	34	52.00	
WMO	56.77	327	P	27	12.00	-0.6
Z	22s	2.60um				5.3Msz
N	16s	1.80um				
E	16s	2.00um				
			ScP	32	07.50	
			S	35	03.50	
			ScS	36	57.50	
KSH	61.54	317	eP	27	47.50	1.8
			S	36	08.00	
OUE	64.86	304	eP	28	07.50	-0.4
	1.0s	95.00nm				5.9mb
			eS	36	46.50	
SMY	66.61	29	eP	28	20.30	1.9
ADK	70.92	33	eP	28	46.20	1.0
	0.7s	40.10nm				5.7mb
MAIO	72.54	309	iPd-	28	55.40	0.1
	0.8s	16.47nm				5.1mb
			eS	38	20.00	
HON	76.61	68	P	29	22.20	3.4X
Z	20s	10.64um				6.2Msz
MAW	79.27	201	iPc	29	35.00	2.4
SDN	81.14	34	eP	29	42.90	0.2
TAB	83.20	308	eP	29	55.00	1.0
SVW	84.97	28	eP	30	03.20	0.8
TTA	85.16	27	eP	30	04.00	0.7
KDC	85.97	32	P	30	09.00	1.7
	0.9s	58.33nm				5.8mb
IMA	86.76	24	eP	30	11.20	-0.1
	0.9s	7.30nm				4.9mb
PMR	88.14	28	P	30	17.20	-0.5
			e	30	24.10	22km
SPA	88.89	180	eP	30	22.20	0.7
	0.8s	14.58nm				5.4mb
TOA	89.58	28	eP	30	22.20	-2.5
NAI	89.99	269	iP	30	32.50	4.7X
	1.2s	40.63nm				5.5mb
PRNI	92.13	300	eP	30	49.00	11.9X
INK	94.61	22	eP	30	47.00	-0.7
BFT	95.63	244	eP	30	53.50	0.0
KRI	96.57	253	eP	31	10.50	12.7X
MBC	96.63	13	eP	30	55.00	-1.8
SLR	97.21	244	iPd	31	00.10	-0.5
BUL	97.32	250	iPd	31	01.00	-0.1
PRY	97.83	243	eP	31	19.50	16.1X
VRI	97.83	316	ePd	31	04.50	1.7
LSZ	98.03	255	iPc	31	05.00	0.6
			i	31	19.80	50kmX
MLR	98.42	316	eP	31	06.00	0.4
GZR	100.64	316	ePdiff	31	28.50	12.9X
VAY	101.43	312	ePdiff	31	17.00	-2.1
HFS	102.32	332	ePdiff	31	20.70	-1.9
	0.4s	0.70nm				4.7mb
Z	16s	0.04um				4.0MszX
OHR	102.78	312	ePdiff	31	20.50	-4.7X
YKA	103.84	25	ePdiff	31	30.30	1.0
	0.8s	1.40nm				4.8mb

PRU	105.04	322	ePKP	35	54.00	4.3X
Z	17s	0.60um				5.2MszX
N	15s	0.50um				
E	14s	0.60um				
			e	36	06.20	
WDC	106.32	48	ePKP	36	08.00	15.5X
MOX	106.62	323	ePKP	36	08.00	15.3X
Z	25s	1.20um				5.3MszX
			e	45	18.00	
MIN	107.07	48	e(PKP)	36	08.00	13.9X
FVI	107.15	319	PKP	36	11.00	17.2X
ORV	107.33	49	e(PKP)	36	11.30	16.9X
BCAO	108.31	274	iPKPd	35	57.00	0.0
	0.6s	3.00nm				
CMB	108.53	50	e(PKP)	36	12.50	15.7X
KVN	110.01	49	Pdiff	32	02.00	4.3X
BNI	111.69	319	PKP	36	16.50	13.8X
GOL	119.03	44	PKP	36	25.00	7.9X
Z	18s	2.08um				5.8Msz
GLD	119.11	44	PKP	36	25.00	7.9X
Z	18s	3.40um				6.0Msz
ANMO	120.15	50	PKP	36	25.00	5.8X
Z	18s	1.03um				5.5Msz
UYO	129.34	45	e(PKP)	36	35.20	-1.4
KIC	131.40	277	(PKP)	36	42.00	0.9
LKO	131.93	282	PKP	36	42.40	0.2
RSNY	132.80	21	PKP	37	00.60	17.7X
Z	20s	2.26um				5.9Msz
HBVT	133.47	20	PKP	36	56.60	12.4X
CFA	144.46	158	e(PKP)	37	05.00	0.4
RTLL	144.61	157	e(PKP)	37	02.50	-2.4
			e	37	03.70	
RTRS	145.23	155	ePKPc	37	07.00	1.1
UPA	152.64	73	iPKPc	37	33.30	15.5X
NNA	153.13	120	ePKP	37	26.00	7.4X
	0.7s	6.85nm				
PT08	153.40	120	ePKP	37	29.40	10.1X
LPB	157.10	141	ePKP	37	34.00	9.7X
			e	38	11.00	
ZOBO	157.28	140	PKPc	37	32.00	7.3X
	1.2s	16.22nm				
Z	24s	0.65um				5.4MszX
			LR	32	52.00	
CCH	157.61	146	ePKP	37	41.00	16.2X
SIV	161.30	156	PKP	37	18.40	-10.0X
			i	38	15.00	
BAO	162.58	197	e(PKP)	37	34.00	4.2X
S.D. = 1.2 on 116 of 153 obs.						

? JUN 20, 1990 16h 24m 22.34± 2.79s
31.182 S ±38.1km 68.970 W ±17.2km
DEPTH = 110.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

ZON	0.44	146	iPd	24	37.00	-2.1
			eS	24	49.00	
RTBS	0.63	221	iPd	24	42.00	1.7
CFA	0.75	124	iPd	24	42.10	0.6
			eS	24	55.40	
RTCV	0.77	151	e(P)	24	42.10	0.5
JACH	2.03	222	iPd	24	57.20	0.8
			iS	25	23.90	
			i	25	25.90	
FCH	2.41	207	iPd	25	03.00	1.4
PEL	2.44	216	iPc	25	01.70	0.1
			iS	25	31.60	
ROCH	2.49	224	eP	25	02.20	-0.2
			iS	25	32.00	
PCH	2.76	208	iPd	25	06.60	0.7
			iS	25	40.20	
TACH	2.97	214	iPc	25	08.20	-0.5
			iS	25	43.60	
CHCH	3.09	207	ePd	25	10.00	-0.3
			e	25	45.50	
			iS	25	47.50	
LCCH	3.17	223	eP	25	11.00	-0.4
			iS	25	46.50	
LNV	3.45	216	iPd	25	12.80	-2.3
S.D. = 1.3 on 13 of 13 obs.						

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* JUN 20, 1990 16h 24m 30.97± 0.64s
37.967 S ±19.1km 16.897 W ±10.0km
DEPTH = 10.0km (geophysicist)
5.0mb (13 obs.)
SOUTH ATLANTIC RIDGE (410)

BLF	36.71	89	iPc	31	42.00	1.7
SWZ	36.89	86	eP	31	33.00	-8.7X
SLR	39.91	86	iPd	32	07.50	0.5
BFT	41.32	87	iPc	32	13.00	-5.7X
	0.8s	11.19nm				4.6mb
BUL	43.10	79	iPd	32	25.60	-7.6X
FCH	43.15	259	eP	32	34.50	0.8
PEL	43.52	259	iPc	32	36.50	0.1
TACH	43.53	259	eP	32	34.50	-1.9
LNV	43.78	258	eP	32	37.60	-0.8
SIV	44.53	287	P	32	46.50	1.8
KIC	45.53	17	(P)	32	59.30	6.7X
KRI	45.80	76	eP	33	01.50	6.6X
CCH	47.58	282	P	33	11.00	1.8
LKO	48.43	15	P	33	14.12	-1.3
ZOBO	49.76	281	Pc	33	27.00	0.6
SPA	52.22	180	eP	33	38.50	-5.6X
	1.3s	65.00nm				5.4mb
BCAO	53.48	46	iPc	33	49.50	-4.3X
	1.0s	40.00nm				5.4mb
LWI	54.87	61	iPc	34	17.10	12.8X
HLW	81.15	41	eP	36	48.50	0.5
SOI	81.53	26	P	36	48.00	-1.8
TDS	83.05	25	P	36	51.50	-6.2X
BSS	83.58	24	P	36	57.00	-3.3X
SDI	84.10	23	P	37	02.50	-0.5
LSF	85.45	13	eP	37	10.20	0.6
	1.0s	17.00nm				5.2mb
TCF	85.61	13	eP	37	11.10	0.7
	1.0s	6.00nm				4.7mb
LPG	85.77	16	eP	37	12.00	0.4
	1.0s	8.00nm				4.9mb
LPL	85.79	16	eP	37	12.00	0.4
	1.0s	4.00nm				4.6mb
OHR	85.91	28	e(P)	37	11.00	-1.1
SMF	86.26	14	eP	37	13.90	0.3
	1.2s	17.85nm				5.1mb
AVF	86.31	14	eP	37	14.30	0.5
	1.0s	8.00nm				4.9mb
SSF	86.60	14	eP	37	15.40	0.1
	1.2s	11.90nm				5.0mb
LOR	86.86	14	eP	37	16.50	-0.1
	1.2s	13.40nm				5.0mb
FVI	88.29	20	P	37	23.00	-0.3
CDF	88.65	16	eP	37	26.60	1.6
	1.2s	14.90nm				5.2mb
GRF	90.75	18	ePc	37	35.70	0.8
	2.8s	192.00nm				5.9mb
			ed	37	42.80	
KHC	90.83	19	P	37	35.10	-0.2
ZST	90.97	22	eP	37	35.90	0.0
SRO	90.99	23	eP	37	35.60	-0.4
			e	37	43.30	
MLR	91.59	29	eP	37	38.00	-1.0
PRU	91.87	20	eP	37	40.50	0.5
CLL	92.69	18	eP	37	51.00	7.3X
YKA	126.29	325	ePKP	43	32.10	-2.4
	0.9s	1.40nm				
MBC	129.47	342	ePKP	43	35.00	-5.2X
INK	134.46	332	ePKP	43	48.00	-1.9
S.D. = 1.1 on 32 of 44 obs.						

? JUN 20, 1990 18h 04m 27.42± 6.66s
41.932 N ±43.7km 15.296 E ±32.9km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

DUI	0.68	247	Pd	04	40.50	-0.5
			eSg	04	48.70	
SDI	1.13	259	P	04	49.00	0.4
BSS	1.20	198	P	04	50.00	0.3
			eSn	05	06.50	
SGO	1.37	180	P	04	52.40	-0.1
			eSn	05	12.00	
S.D. = 0.7 on 4 of 4 obs.						

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* JUN 20, 1990 18h 42m 28.69± 0.83s
41.115 N ± 9.2km 140.489 E ± 9.2km
DEPTH = 178.7 ± 8.3 km
4.4mb (7 obs.)
HOKKAIDO, JAPAN REGION (224)

AOMJ	0.56	189	iPd	42	53.60	-0.2
			S	43	12.00	
OFUJ	2.22	156	iP+	43	08.20	-0.3
			S	43	37.70	
YAMJ	2.96	187	P	43	17.70	0.5
			S	43	55.80	

20d 18h

NIIJ	4.04	197	P	43	31.40	0.6
MAT	4.90	202	iPd	43	42.70	0.7
			eS	44	42.00	
KAKJ	4.91	183	P	43	39.30	-2.8
			S	44	34.30	
MTMJ	4.98	206	P	43	44.80	1.6
CHJJ	5.19	194	P	43	45.80	0.0
			S	44	46.30	
IIDJ	5.98	201	P	43	56.60	0.4
			eS	45	03.40	
TSRJ	6.60	214	eP	44	09.10	4.8X
MDJ	8.73	297	eP	44	31.70	-0.8
CN2	11.43	289	eP	45	10.00	2.2
SNY	12.71	279	eP	45	23.60	-0.5
BJI	18.49	275	eP	46	31.00	-2.6
	1.0s	7.00nm			4.0mb	
WMQ	38.49	292	P	49	34.50	-0.4
CHTO	41.79	251	P	50	03.60	1.6
PKI	46.72	271	P	50	41.80	0.0
	0.6s	12.00nm			4.6mb	
DMN	46.93	271	P	50	44.00	0.6
	0.6s	11.00nm			4.5mb	
GKN	47.08	272	P	50	44.40	0.0
	0.5s	23.00nm			5.0mb	
YKA	60.66	31	eP	52	21.80	-0.8
	0.7s	0.90nm			3.7mb	
WB5	60.95	187	eP	52	24.20	-0.7
WRA	61.01	187	Pd	52	24.40	-0.9
	0.5s	4.60nm			4.5mb	
HFS	70.09	335	eP	53	21.20	-1.5
	0.4s	0.90nm			3.9mb	
Z	17s	0.10um			4.1MszX	
		e		53	28.40	
		e		53	35.70	
		e		54	49.50	
		LR		22	49.00	
KVN	72.87	53	P	53	41.00	1.2
TNP	74.01	53	P	53	47.70	1.2
SOI	86.27	319	P	54	58.50	7.4X
ATN	86.49	320	P	55	01.50	9.2X
ZOBO	145.03	53	PKP	01	48.00	1.0
SIV	148.78	43	iPKP	01	57.10	4.7X
S.D. = 1.3 on 25 of 29 obs.						

JUN 20, 1990 18h 47m 58.95± 0.26s
5.412 N ± 3.8km 31.717 E ± 5.5km
DEPTH = 15.6km (4 depth phases)
5.0mb (29 obs.) 4.2Msz (1 obs.)
SUDAN (557)
mbLg 5.2 (8UL).

AAE	7.86	62	eP	49	55.50	-0.2
LWI	8.14	201	iPd	50	01.10	1.6
NAI	8.36	142	iP	50	03.50	0.9
	0.8s	47.01nm			5.8mb	
		iS		51	37.00	
BCAO	13.17	266	iPc	51	03.00	-5.0X
	0.6s	42.00nm			5.7mb	
		iS		53	15.00	
		Lg		54	07.00	
LSZ	20.85	190	iP	52	42.50	-0.4
		iS		56	46.00	
		iSg		57	31.20	
		iLg		58	49.30	
KRI	22.20	185	iPc	52	55.00	-1.5
		eSn		56	48.00	
		iLR		59	04.00	
HLW	24.32	359	eP-	53	16.00	-1.0
		eS		57	42.00	
MBH	24.41	7	eP	53	21.00	3.2X
PRNI	24.99	7	eP	53	25.00	1.5
BUL	25.58	187	iPd	53	28.90	-0.3
		eSn		58	12.00	
		iLg		01	04.00	
CIR	26.26	180	iPd	53	34.80	-0.6
		iLg		01	29.00	
SLR	31.14	186	eP	54	15.50	-4.0X
WIN	31.27	207	eP	54	19.50	-1.2
PRY	32.41	187	eP	54	30.50	-0.1
	1.0s	55.00nm			5.4mb	
		(S)		59	22.50	
SWZ	32.99	190	iPc	54	22.00	-13.6X
	1.3s	38.46nm				
BBTK	34.29	1	eP	54	48.00	1.3
BLF	34.73	189	eP	54	46.00	-4.7X
KIC	36.27	273	P	55	04.10	0.2
TIC	36.55	274	P	55	06.70	0.5
	1.0s	27.00nm			5.0mb	
LIC	36.56	273	P	55	06.50	0.2
Z	20s	0.38um			4.2Msz	
VAY	36.68	348	eP	55	08.00	1.1
TDS	36.81	340	P	55	08.00	0.0
OHR	36.86	346	eP	55	09.00	0.5
LKO	37.20	279	P	55	11.66	0.0
	1.0s	19.00nm			4.8mb	
SKO	37.54	347	eP	55	14.00	-0.1
SDI	39.51	339	P	55	31.50	0.8
AZI	39.90	339	P	55	35.00	1.2
MAIO	39.93	36	eP	55	35.00	0.7
MLR	40.24	354	eP	55	36.00	-0.8
ASS	41.12	339	P	55	43.50	-0.4
QUE	41.32	49	e(P)	55	46.00	0.1
ARV	41.39	339	P	55	47.50	1.4
VOY	43.32	342	e(P)	56	02.70	0.7
SRO	43.78	347	iP	56	06.60	1.1
LMR	43.83	333	eP	56	06.30	0.3
	0.8s	8.05nm			4.6mb	
FRF	43.95	334	eP	56	07.30	0.3
	0.8s	13.45nm			4.8mb	
LRG	44.00	333	eP	56	07.80	0.5
	0.8s	10.75nm			4.7mb	
FVI	44.17	341	P	56	09.00	0.3
SPC	44.69	349	eP	56	13.00	-0.2
BNI	45.13	335	Pd	56	17.50	0.8
SQTA	45.24	340	i(P)	56	17.70	0.2
	1.5s	40.80nm			5.1mb	
		i		56	23.60	20km
		i		56	32.60	
LPL	45.48	335	eP	56	19.00	-0.5
	0.8s	9.40nm			4.8mb	
KRA	45.58	349	eP	56	17.20	-2.8
		e		56	20.20	10km
KHC	46.20	344	iPc	56	24.90	0.0
	1.2s	25.00nm			5.1mb	
PRU	46.72	345	eP	56	33.30	4.3X
KSP	47.08	347	eP	56	30.20	-1.6
		e		58	21.00	627kmX
CAF	47.11	331	eP	56	32.00	-0.2
	0.8s	5.35nm			4.7mb	
8SF	47.35	337	eP	56	33.50	-0.6
	0.8s	8.05nm			4.8mb	
LPO	47.36	330	eP	56	34.30	0.2
	0.8s	10.75nm			5.0mb	
GRF	47.40	342	eP	56	34.30	-0.1
		e		56	39.70	18km
		e		56	44.20	
SMF	47.60	334	iPc	56	35.90	-0.1
	0.8s	18.80nm			5.2mb	
LBF	47.81	335	iPc	56	37.20	-0.5
	0.8s	7.40nm			4.8mb	
MAF	47.85	333	eP	56	38.20	0.3
	0.8s	12.10nm			5.0mb	
AVF	47.93	334	iPc	56	38.20	-0.3
	0.8s	12.10nm			5.0mb	
TCF	48.06	333	iPc	56	40.10	0.5
	0.8s	15.45nm			5.1mb	
SSF	48.07	334	eP	56	39.20	-0.5
	0.6s	3.15nm			4.6mb	
LOR	48.08	335	iPc	56	39.30	-0.5
	0.7s	11.00nm			5.0mb	
MOX	48.13	343	eP	56	40.00	0.0
CLL	48.33	344	eP	56	41.00	-0.6
LSF	48.34	332	iPc	56	42.10	0.3
	0.8s	13.45nm			5.1mb	
DOU	50.03	337	P	56	54.10	-0.6
	0.7s	8.90nm			4.9mb	
LDF	50.83	333	eP	57	00.50	-0.5
	0.8s	16.10nm			5.0mb	
LPF	50.84	332	eP	57	00.60	-0.3
	0.8s	13.45nm			4.9mb	
FLN	51.12	333	eP	57	02.10	-0.9
	1.0s	16.00nm			4.9mb	
KSH	52.32	43	P	57	13.50	1.1
GKN	54.93	60	P	57	30.60	-1.3
	1.0s	60.00nm			5.6mb	
NUR	55.23	356	eP	57	32.00	-1.3
DMN	55.24	60	P	57	33.00	-1.3
PKI	55.50	60	P	57	38.20	2.0
HFS	56.29	349	eP	57	38.70	-2.3
	1.2s	9.40nm			4.7mb	
Z	14s	0.03um			3.5MszX	
		e		57	43.20	15km
		e		57	50.00	
SUF	57.33	357	iP	57	49.90	1.6
	0.6s	12.90nm			5.1mb	
SOD	61.96	358	iP	58	19.40	-0.7
WMQ	62.10	43	P	58	21.00	-0.6
KEV	64.33	358	eP	58	35.00	-0.7
GTA	69.70	50	P	59	10.00	-0.4
HHC	78.80	50	eP	00	05.00	2.0
BAO	81.59	253	eP	00	20.00	1.7
SIV	94.14	254	eP	01	15.00	-3.8X
S.D. = 1.0 on 71 of 78 obs.						

? JUN 20, 1990 19h 02m 43.05± 7.64s
17.956 S ±37.8km 169.239 E ±74.4km
DEPTH = 33.0km (normal)
4.9mb (2 obs.)
VANUATU ISLANDS (186)

PVC	0.91	284	iPd	02	59.80	0.4
			iS	03	06.00	
DZM	4.86	212	iPd	03	56.10	0.2
			iS	04	42.90	
RMQ	20.76	242	eP	07	22.60	-1.1
QLP	24.65	245	eP	08	02.00	-0.1
CNB	24.71	222	iPd	08	05.90	3.2X
	0.9s	33.00nm			4.9mb	
BWA	24.78	225	eP	08	04.00	0.6
CAN	24.94	222	eP	08	07.80	2.9X
WB5	33.01	261	eP	09	14.00	-3.5X
ASPA	33.46	254	iPd	09	18.30	-3.1X
	0.8s	11.00nm			4.8mb	
S.D. = 1.0 on 5 of 9 obs.						

? JUN 20, 1990 19h 23m 27.49±18.25s
8.022 S ±125.km 77.467 W ±109.km
DEPTH = 33.0km (normal)
PERU (116)

NNA	3.99	171	iPd	24	27.30	-0.6
	0.6s	13.33nm				
			eS	25	14.50	
PT08	4.02	167	eP	24	30.10	1.5
			iS	25	24.10	
PT06	5.88	169	iP	24	54.00	-0.6
			iS	25	53.00	
ZOBO	12.27	133	P	26	23.00	-0.4
Z	22s	0.13um				
		LR		38	42.00	
SIV	17.87	118	P	27	35.70	0.2
S.D. = 1.3 on 5 of 5 obs.						

% JUN 20, 1990 20h 52m 59.04± 0.76s
60.567 N ± 4.2km 5.055 E ± 9.2km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)

ASK	0.11	140	iP	53	01.52	-0.3
			eS	53	04.37	
BER	0.23	143	iP	53	03.45	-0.5
			iS	53	08.78	
SUE	0.51	344	eP	53	09.38	0.0
			eS	53	16.89	
HYA	0.82	42	iP	53	14.52	-0.3
			iS	53	27.84	
ODD1	1.02	129	iPc	53	18.40	0.0
			eS	53	32.61	
KMY	1.36	176	iPd	53	23.75	-0.3
			iS	53	41.45	
BLS1	1.48	142	iP	53	26.33	0.5
			eS	53	45.71	
BLS2	1.59	143	iPc	53	28.02	0.7
			eS	53	48.32	
MOL	2.34	30	iP	53	38.34	0.3
			eS	54	08.27	
NRA0	3.20	84	Pn	53	50.30	0.0
			Lg	54	42.50	
S.D. = 0.4 on 10 of 10 obs.						

JUN 20, 1990 21h 00m 09.98± 0.18s
36.957 N ± 3.2km 49.409 E ± 2.3km
DEPTH = 18.5km (38 depth phases)
6.4mb (71 obs.) 7.7Msz (16 obs.)
WESTERN IRAN (347)
Ms 7.7 (BRK), 7.4 (PAS).
Mo=2.0*10**20 Nm (PPT).
Estimated 40,000 to 50,000 people killed, more than 60,000 injured, 400,000 or more homeless and extensive damage

and landslides in the Rasht-Qazvin-Zanjan area, Iran. Nearly all buildings were destroyed in the Rudbar-Manjil area. Substantial damage occurred as far away as Khalkhal and Now Shahr and slight domage occurred at Tehran. Felt in most of northwestern Iran, including Arak, Bakhtaran and Tabriz. Slight damage also occurred in southern Azerbaijan, USSR. Felt (VII) at Astra and Lenkoran; (VI) at Dzhibrail, Lerik, Mossony and Yardyshny; (III) at Baku, USSR. Complex event, observed on broadband displacement seismograms.

FAULT PLANE SOLUTION: P-Waves
NP1:Strike=288 Dip=88 Slip= -11
NP2: 18 79 -177
Principal Axes:
T Plg= 6 Azm=334
P 9 243

Comment: The focal mechanism is poorly controlled and corresponds to strike-slip faulting with a small normal component. The preferred fault plane is not determined.

RADIATED ENERGY
No. of sta: 8 Focal mech. F
Energy 1.1±0.3*10**16 Nm

MOMENT TENSOR SOLUTION
Dep 17 No. of sta: 12
Moment Tensor; Scale 10**20 Nm
Mrr= 0.42 Mtt= 0.38
Mff=-0.80 Mrt=-0.59
Mrf= 0.46 Mtf= 0.39
Principal axes:
T Val= 0.99 Plg=47 Azm=183
N 0.17 35 321
P -1.17 22 67
Best Double Couple:Mo=1.1*10**20
NP1:Strike=202 Dip=38 Slip= 156
NP2: 311 76 54

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 22C M.W.: 25S, 62C
Centroid Location:
Origin Time 21:00:31.1 0.2
Lat 36.95N 0.01 Lon 49.52E 0.02
Dep 15.0 FIX Half-duration 15.0
Moment Tensor; Scale 10**19 Nm
Mrr= 2.42 0.09 Mtt= 6.99 0.08
Mff=-9.41 0.09 Mrt=-8.73 0.97
Mrf=-1.22 0.77 Mtf= 6.40 0.06
Principal Axes:
T Val= 15.13 Plg=34 Azm=163
N -3.25 54 325
P -11.88 9 67
Best Double Couple:Mo=1.4*10**20
NP1:Strike=200 Dip=59 Slip= 160
NP2: 300 73 32

TAB	2.69	295	iP+	00 55.00	1.7
KER	3.20	216	iPc	01 02.50	1.9
BKR	6.60	318	iP	01 52.00	3.3X
MHI	8.14	92	iPd	02 09.00	-1.1
	0.5s	5098.59nm			8.0mb X
			eS	03 42.00	
GAZ	9.75	275	iP	02 36.40	4.1X
DHR	10.64	176	eP	02 42.00	-2.5
BRF	10.90	174	iPn	02 44.80	-3.2X
MJMA	11.61	199	eP	02 51.33	-6.5X
BHL	11.63	259	P	03 01.00	2.9X
QASM	11.93	206	ePd	02 55.00	-7.2X
ATZ	12.32	255	eP	03 08.50	1.2
			eS	06 36.80	
RYD	12.43	192	iPd	03 04.20	-4.7X
FAM	12.63	266	eP	03 14.00	2.5
UOSK	12.65	210	eP	03 05.00	-6.9X
ZNT	12.74	253	eP	03 14.30	1.3
			eS	06 53.00	
DSI	12.78	249	eP	03 14.40	0.9
KAS	12.91	295	eP	03 19.00	3.7X
LFK	12.95	267	iP	03 18.80	3.1X
CSS	13.18	266	eP	03 20.00	1.2
BBTK	13.37	288	eP	03 24.00	2.6
			eS	07 03.00	
PRNI	13.69	245	eP	03 23.50	-2.0
AYN	13.84	238	eP	03 27.30	-0.2
AFIF	13.89	204	eP	03 26.30	-1.9
PPCY	13.98	267	eP	03 30.50	1.2
SIM	14.03	309	eP	03 31.00	1.1
MBH	14.09	244	eP	03 32.10	1.4
HQL	14.26	242	eP	03 33.70	0.8
BADA	14.74	239	eP	03 38.70	-0.6
BCK	15.01	278	eP	03 46.30	3.5X
GPA	15.29	288	eP	03 47.50	1.0
WAJH	15.33	229	eP	03 46.70	-0.2
DSH	15.40	78	eP	03 47.00	-1.0
			eS	07 03.00	
KHL	15.81	281	eP	03 54.70	1.4
HRT	15.84	290	iP	03 55.60	2.0
IZI	15.94	288	eP	03 57.00	2.2
KSL	15.96	273	iPc	03 56.50	1.4
GBZT	16.01	290	eP	03 57.00	1.3
YLV	16.04	289	iP	03 58.00	1.9
QUE	16.09	110	eP	04 00.20	3.2X
	1.5s	1469.44nm			5.9mb
			e(S)	06 59.50	
ITU	16.37	291	eP	04 02.00	1.7
HLW	16.65	250	eP-	04 04.00	0.1
YER	16.87	277	eP	04 07.10	0.4
BNT	17.12	288	iP	04 12.10	2.3
EDC	17.16	288	iP	04 11.90	1.6
DMK	17.41	293	eP	04 14.00	0.6
TAIF	17.48	209	eP	04 17.70	3.1X
PSN	17.50	299	iPc	04 07.00	-7.5X
KGT	17.60	288	iP	04 17.10	1.4
TLB	17.86	302	ePc	04 20.50	1.5
SMG	17.96	279	iPd	04 20.80	0.5
CFR	17.98	304	eP	04 22.00	1.7
EZN	18.31	286	iP	04 26.50	2.0
JMB	18.38	294	eP	04 27.00	1.6
ALN	18.58	289	iPd	04 29.00	1.1
PPE	18.69	306	ePc	04 28.00	-1.2
RDO	18.99	290	eP	04 33.00	0.2
CLI	19.03	307	iPc	04 33.50	0.1
ISR	19.04	303	iPd	04 37.00	3.5X
APE	19.06	278	iPc	04 35.50	1.7
DIM	19.09	293	iPd	04 35.00	1.0
IAS	19.11	309	eP	04 39.00	4.7X
KDZ	19.13	292	iPd	04 36.00	1.5
VRI	19.15	305	ePc	04 35.00	0.2
BUC1	19.17	300	eP	04 36.00	1.0
AKSR	19.36	231	iPd	04 36.50	-0.9
	1.5s	********nm			7.2mb
PVL	19.42	296	iPc	04 38.00	0.0
AGRW	19.49	232	iPd	04 38.00	-0.9
ABHA	19.54	199	eP	04 40.20	0.4
AKRL	19.54	232	eP	04 38.80	-0.7
MLR	19.55	303	iPc	04 40.00	0.4
KMTA	19.59	199	eP	04 40.30	0.0
SRAT	19.63	198	iPd	04 41.10	0.2
AGAL	19.64	231	eP	04 39.50	-1.0
RZN	19.65	292	eP	04 40.00	-0.9
PLD	19.71	293	eP	04 58.00	16.8X
PTT	19.75	308	eP	04 42.00	0.4
DHJN	19.92	197	eP	04 44.33	0.4
MTUR	20.07	302	ePc	04 46.00	0.9
OUR	20.12	287	ePd	04 45.20	-0.4
OBN	20.15	338	iPc	04 44.30	-1.4
	Z 16s	700.00um			7.1MszX
			iS	08 34.00	
PGB	20.16	294	iPc	04 46.00	0.0
FRU	20.18	65	eP	04 46.00	-0.2
			eS	08 48.00	
MMB	20.38	291	iPc	04 47.00	-1.3
VAM	20.39	273	eP	04 49.50	1.0
ATH	20.40	281	iPd	04 50.50	2.0
			eS	08 42.00	
SRS	20.45	290	ePc	04 48.90	-0.1
DRA	20.49	300	ePd	04 51.00	1.7
SOH	20.62	289	ePc	04 50.90	0.1
NEO	20.71	285	eP	04 52.80	1.1
THE	20.91	288	ePd	04 54.00	0.3
			iS	08 52.80	
KNT	20.98	290	ePd	04 54.00	-0.4
KSH	21.01	75	Pd	04 56.00	1.1
			eS	08 53.00	
VLI	21.17	277	iPd	04 57.80	1.4
VAY	21.23	290	iPc	04 56.40	-0.6
	1.2s	1381.00nm			6.2mb
			i	05 01.40	18km
			i	05 11.20	
			i	05 27.30	
LIT	21.26	287	ePd	04 56.80	-0.6
GRG	21.34	289	ePd	04 58.00	-0.2
AGG	21.42	284	ePd	05 00.00	1.1
DEV	21.71	303	iPc	05 06.00	4.3X
ITM	21.91	279	iPd	05 02.70	-1.1
FNA	22.12	289	ePd	05 06.00	0.0
SKO	22.12	292	eP	05 05.50	-0.4
	1.9s	9246.00nm			6.9mb
	N 10s	451.20um			
			i	05 08.00	9km
			i	05 17.10	
			i	05 32.50	
			i	06 14.00	
			iS	09 14.00	
BZS	22.52	301	ePc	05 11.00	1.2
CEI	22.52	307	eP	05 20.00	10.2X
OHR	22.56	289	iPd	05 11.00	0.6
	1.5s	625.00nm			5.9mb
			i	05 14.60	13km
			i	05 20.80	
			i	05 26.60	
			i	05 40.20	
VLS	22.84	282	iPd	05 13.50	0.4
UZH	22.93	309	iPc	05 14.00	0.1
			eS	09 30.00	
IGT	22.94	285	ePd	05 13.40	-0.6
BEO	23.17	299	eP	05 20.00	3.8X
			i(Sg)	09 40.50	
PVY	23.25	293	eP	05 18.50	1.4
IVA	23.32	294	eP	05 19.00	1.2
KEK	23.34	286	iPd	05 18.00	0.1
PLE	23.73	295	eP	05 23.90	2.1
ULC	23.75	291	eP	05 21.20	-0.7
TTG	23.76	293	eP	05 22.00	0.1
			eS	09 42.00	
NKY	23.98	294	eP	05 24.50	0.3
BDV	24.07	292	eP	05 25.00	0.0
HCY	24.33	293	eP	05 27.30	-0.2
SPC	24.40	309	eP	05 30.10	1.8
			i	05 34.50	16km
			e	20 35.00	
BUD	24.69	305	e(P)	05 31.00	0.1
NDI	24.72	101	iPd	05 32.50	1.1
			iS	10 14.00	
LCI	24.73	288	P	05 31.10	-0.3
KRA	24.88	311	iPc	05 33.00	0.3
	1.9s	3478.00nm			6.7mb
			i	05 37.10	15km
			i	05 43.40	
			i	05 50.60	
			e	05 53.40	
			i	05 54.20	
			iS	10 06.00	
SRO	25.24	305	eP	05 37.80	1.7
			i	05 41.80	14km
			i	05 46.10	
			i	10 24.70	
BRT	25.28	289	P	05 32.50	-4.2X
BLY	25.46	298	eP	05 42.70	4.4X
HVAR	25.87	294	iPd	05 41.00	-1.1
ORI	25.90	287	P	05 43.50	1.1
PUL	25.92	338	eP	05 44.00	1.6
			iS	10 22.00	
RAC	25.95	310	eP	05 43.00	0.2
			e	05 48.00	18km
			e	05 52.00	
			e	05 54.00	
			i	05 58.00	
			eS	10 30.00	
ARO	26.00	195	ePd	05 51.00	7.4X
TDS	26.01	286	Pd	05 45.20	1.7
GRI	26.03	284	P	05 41.70	-1.9
ZST	26.12	306	eP	05 44.60	0.2
			e	05 49.30	17km
			i	05 55.40	
			i	06 00.40	
			i(PP)	06 33.50	
			e	20 56.00	
SOP	26.36	304	iP	05 47.30	0.7
SOI	26.40	283	P	05 46.50	-0.6
ZAG	26.44	300	ePc	05 47.00	-0.3
			i	05 53.50	23km
PTJ	26.46	300	eP	05 47.10	-0.6

20d 21h

			i	05 57.40	38kmX	
VKA	26.65	306	ePc	05 48.50	-0.7	
	2.5s	9515.00nm			7.0mb	
	Z 25s	369.00um			6.8MszX	
			i	05 54.20	20km	
			i	05 58.00		
			i	06 02.70		
			iPP	06 32.50		
			i	08 46.50		
			i	10 47.50		
			LR	17 00.00		
SGO	26.74	288	P	05 50.00	-0.1	
MSI	26.78	283	P	05 54.10	3.6X	
ATN	26.85	283	P	05 51.00	-0.2	
VBY	26.90	299	ePd	05 52.50	0.9	
BSS	27.10	289	Pc	05 54.20	0.7	
BOM	27.29	125	iP	06 04.80	9.5X	
			iS	11 06.50		
DUI	27.33	291	Pc	05 55.90	0.3	
KSP	27.34	311	ePc	05 55.50	0.0	
	1.3s	1850.00nm			6.6mb	
			i	06 04.00	30kmX	
			iS	10 36.00		
MEU	27.44	281	eP	05 57.30	0.6	
LJU	27.47	300	eP	06 00.50	3.7X	
			eS	11 08.00		
MNO	27.49	283	eP	06 00.00	2.7	
RIY	27.50	299	eP	05 57.80	0.8	
CEY	27.51	300	eP	05 57.00	-0.2	
RFI	27.70	290	P	05 59.00	0.2	
SDI	27.81	291	Pd	05 59.50	-0.4	
VOY	27.91	300	eP	06 00.60	-0.3	
			e	06 04.70	14km	
TRI	27.97	299	iPc	06 00.50	-0.7	
			i	06 09.50	32kmX	
			iPP	06 55.50		
			iS	11 00.00		
			iLR	14 11.00		
GIB	28.00	283	P	06 04.10	2.3	
KMR	28.04	304	eP	06 01.00	-0.9	
			i	06 05.30	15km	
			i	06 11.00		
			iPP	06 50.30		
			i	07 13.60		
			i	09 49.80		
			i	11 29.70		
AZI	28.08	292	P	06 02.50	0.2	
AQU	28.10	292	P	06 03.30	0.7	
PRU	28.18	309	P	06 02.20	-1.0	
POO	28.23	124	iPc	06 15.60	11.6X	
	1.5s	1050.00nm				
NUR	28.34	334	eP	06 04.00	-0.5	
MCT	28.37	282	eP	06 07.20	2.0	
KBA	28.41	302	eP	06 05.00	-0.5	
	1.2s	1425.00nm			6.6mb	
			i	06 10.80	20km	
			i	06 14.20		
			i	06 40.60		
ARV	28.43	295	Pd	06 05.10	-0.4	
USI	28.56	285	P	06 09.80	3.2X	
KHC	28.60	307	iPc	06 06.50	-0.5	
	Z 21s	121.00um			6.5MszX	
	N 20s	128.00um				
	E 20s	101.00um				
			e	06 15.30	31kmX	
RDP	28.63	291	P	06 08.40	1.1	
RMP	28.64	291	P	06 08.90	1.5	
ASS	28.64	294	P	06 08.40	1.0	
FVI	28.74	301	P	06 08.90	0.7	
BHG	28.82	304	eP	06 08.40	-0.5	
CVT	29.02	283	P	06 12.70	2.0	
WET	29.06	306	eP	06 10.20	-0.9	
ERC	29.11	283	P	06 15.70	4.0X	
CRE	29.15	295	P	06 12.50	0.4	
SFI	29.23	296	Pc	06 13.20	0.6	
LVI	29.32	283	P	06 20.40	6.9X	
PGD	29.32	295	ePd	06 14.00	0.3	
AAE	29.43	202	eP	06 16.00	1.0	
CLL	29.46	311	iPc	06 14.30	-0.4	
	1.3s	81.00nm			5.4mb	
			i	06 18.20	14km	
			i	06 22.90		
			i	06 29.00		
SUF	29.50	338	iP	06 14.90	0.1	
BSD	29.63	319	iPc	06 14.20	-1.9	
	0.7s	385.00nm			6.3mb	
WATA	29.64	302	iPc	06 15.00	-1.5	
	1.2s	3316.00nm			7.0mb	
			i	06 20.30	18km	
			i	06 24.20		
			i	06 46.70		
BRN	29.65	313	eP	06 17.00	0.7	
FIR	29.66	295	eP	06 17.00	0.5	
			iS	11 24.00		
WMQ	29.76	65	P	06 17.50	0.0	
	4.0s	*******nm			7.6mb X	
	N 12s	811.00um				
	E 14s	1342.00um				
PTS	29.81	281	P	06 21.30	3.4X	
SQTA	29.88	302	ePc	06 17.20	-1.4	
	0.8s	691.00nm			6.5mb	
			i	06 20.70	12km	
			i	06 25.80		
			i	06 28.90		
			i	06 34.30		
			i	06 52.80		
			iPP	07 11.30		
			i	11 00.30		
			i	11 16.80		
HOF	29.93	308	eP	06 18.50	-0.4	
FUR	29.95	304	eP	06 18.10	-1.0	
OGA	29.97	301	eP	06 18.80	-0.7	
MME	30.06	296	P	06 21.10	0.7	
BDI	30.14	296	P	06 23.60	2.7	
MOX	30.16	309	eP	06 20.00	-0.9	
	1.3s	103.00nm			5.5mb	
PII	30.19	295	P	06 20.10	-1.1	
GRF	30.22	307	ePc	06 21.20	-0.3	
	1.7s	50.00nm			5.1mb X	
	Z 25s	483.00um			7.0MszX	
			ec	06 25.40	14km	
			e	06 45.00		
			e	10 20.00		
			e(S)	11 32.00		
SAL	30.22	299	P	06 26.00	4.5X	
OSS	30.56	301	ePc	06 24.10	-0.6	
UPP	30.63	329	iP	06 24.00	-0.9	
			i	06 29.10	18km	
			i	06 32.60		
			iS	11 37.00		
MDI	30.80	299	Pc	06 26.20	-0.4	
GKN	30.89	97	P	06 27.80	0.1	
BOB	30.96	297	Pc	06 28.50	0.4	
SAX	31.14	302	eP	06 29.00	-1.0	
COP	31.15	319	ePc+	06 30.00	0.5	
			i	06 43.80	55kmX	
			i	11 47.00		
PGF	31.35	293	iPc	06 30.20	-1.4	
LLS	31.35	301	ePc	06 30.40	-1.3	
TMA	31.40	300	eP	06 31.30	-0.8	
DMN	31.43	97	P	06 33.20	0.5	
CGL	31.45	287	P	06 32.80	0.3	
VAI	31.46	299	Pd	06 31.20	-1.2	
PCP	31.61	297	Pc	06 32.20	-1.6	
PKI	31.69	97	P	06 35.20	0.2	
SLE	31.76	303	eP	06 34.00	-1.1	
CKI	31.80	297	P	06 36.00	0.6	
ZLA	31.81	302	eP	06 34.90	-0.6	
FIN	31.85	296	P	06 34.39	-1.5	
GUN	31.92	96	P	06 37.80	0.8	
APA	31.97	348	eP	06 45.00	8.4X	
ORX	32.01	299	P	06 35.83	-1.6	
ORO	32.01	299	P	06 36.60	-0.8	
ORO	32.01	299	P	06 41.00	3.6X	
MMK	32.03	300	eP	06 36.90	-0.8	
FEL	32.09	303	P	06 40.64	2.5	
IMI	32.09	296	P	06 35.62	-2.4	
ROB	32.10	296	P	06 36.65	-1.4	
HYB	32.22	119	eP	06 39.00	-0.3	
	1.4s	1950.00nm			6.8mb	
			e	06 46.00	24km	
			iS	12 06.00		
STR	32.32	304	P	06 43.00	3.1X	
BBS	32.40	302	P	06 44.71	4.0X	
DIX	32.42	300	eP	06 40.50	-0.6	
ENR	32.42	296	P	06 39.52	-1.4	
SBF	32.42	296	iPc	06 40.10	-0.8	
GWF	32.45	305	P	06 43.62	2.5	
HFS	32.46	327	eP	06 40.20	-0.8	
	0.7s	95.50nm			5.8mb	
	Z 19s	331.41um			7.1Msz	
			e	06 43.00	10km	
			e	06 45.00		
			e	06 46.50		
			LR	19 40.00		
STV	32.49	296	P	06 40.34	-1.2	
RSP	32.52	298	P	06 39.11	-2.7	
DOI	32.54	297	Pd	06 40.20	-1.7	
WLS	32.58	304	P	06 45.06	2.9X	
LSD	32.59	299	P	06 42.29	-0.3	
CDF	32.63	304	eP	06 40.40	-2.3	
PZZ	32.64	297	P	06 40.85	-2.1	
MOF	32.68	303	P	06 46.93	3.8X	
EMS	32.75	300	ePc	06 43.50	-0.4	
RRL	32.86	298	Pc	06 43.89	-1.0	
LOMF	32.86	302	P	06 47.88	3.2X	
LPG	32.87	299	iPc	06 43.90	-1.2	
	1.3s	1861.50nm			6.9mb	
LPL	32.89	299	iPc	06 43.90	-1.2	
BSF	32.91	303	eP	06 43.00	-2.2	
BNI	32.93	298	Pc	06 44.70	-0.7	
BNS	32.99	309	iPc	06 49.00	3.4X	
	2.8s	5555.00nm			7.0mb	
	Z 30s	390.00um			6.9MszX	
			i	06 53.00	14km	
			iPP	08 33.00		
FRF	33.01	295	iPc	06 44.90	-1.0	
SOD	33.09	344	iP	06 46.20	-0.2	
			i	06 51.20	17km	
LMR	33.12	295	eP	06 45.40	-1.5	
HAU	33.22	303	eP	06 46.00	-1.8	
	1.1s	228.95nm			6.0mb	
LRG	33.22	295	iPc	06 46.70	-1.1	
	1.3s	1100.00nm			6.6mb	
WTS	33.38	310	iPc	06 49.80	0.8	
	1.0s	565.00nm			6.5mb	
VITF	33.47	304	P	06 52.83	2.9X	
WIT	33.61	312	eP	06 51.50	0.5	
MEM	33.67	308	P	06 51.00	-0.6	
			id	06 52.21	4kmX	
ENN	33.75	308	iPc	06 52.60	0.4	
	1.0s	531.00nm			6.4mb	
NAO	34.04	327	P	06 53.40	-1.3	
GBA	34.17	126	Pd	06 55.40	-0.8	
	0.7s	7.80nm			4.7mb X	
DBN	34.39	310	eP+	07 01.00	3.2X	
	Z 23s	348.00um			7.0MszX	
			ePP	08 24.00		
			iS	12 35.00		
DOU	34.52	307	Pd	06 59.60	0.6	
			id	07 08.30	30kmX	
			S	12 46.00		
UCC	34.74	308	Pd	07 01.60	0.8	
			iS	12 43.00		
SNF	34.76	307	iP	07 01.31	0.4	
LBF	34.80	301	iPc	06 59.70	-1.7	
LOR	34.88	302	iPc	07 00.50	-1.6	
	1.0s	343.75nm			6.2mb	
SMF	34.89	301	iPc	07 00.90	-1.3	
KEV	35.02	347	eP	07 03.00	0.0	
	1.7s	3599.60nm			7.0mb	
			i	07 11.40	28km	
			i	07 19.00		
PLDF	35.06	300	P	07 05.33	1.6	
SSF	35.12	301	iPc	07 02.80	-1.3	
AVF	35.23	301	iPc	07 03.60	-1.4	
RGS	35.24	330	eP	07 06.00	1.1	
LBL	35.35	298	P	07 08.00	1.9	
AGO	35.40	300	P	07 08.51	2.0	
LSA	35.40	89	P	07 09.00	1.7	
	E 12s	344.00um				
NSS	35.43	333	iP	07 07.11	0.5	
PYM	35.49	299	P	07 06.99	-0.4	
BGF	35.58	301	iPc	07 06.90	-1.2	
MAF	35.78	300	iPc	07 09.00	-0.8	
ETER	35.90	293	eP	07 12.70	1.9	
KMY	36.01	322	eP	07 16.19	4.7X	
TCF	36.03	300	iPc	07 11.00	-0.9	
CAF	36.21	298	iPc	07 12.50	-0.9	
MOL	36.21	328	iP	07 13.48	0.3	
ESEL	36.27	289	iP+	07 12.70	-1.2	
BER	36.35	324	eP	07 14.43	0.1	
ASK	36.45	324	eP	07 20.14	5.0X	
LSF	36.50	300	iPc	07 14.70	-1.1	
RJF	36.57	298	iPc	07 15.90	-0.5	
TRO	36.64	343	eP	07 16.82	0.2	
KOD	36.73	129	eP	07 22.00	3.6X	
			eS	13 15.00		
SUE	36.85	325	eP	07 22.65	4.2X	
LPO	36.85	297	iPc	07 17.80	-1.0	
LOF	37.04	339	eP	07 24.48	4.5X	

LFF	37.14	298	iPc	07	20.50	-0.7	
LDF	37.55	304	iPc	07	23.60	-1.0	
MFF	37.64	301	iPc	07	24.20	-1.2	
EPF	37.64	295	iPc	07	22.70	-2.8	
	0.9s	89.60nm			5.6mb		
SHL	37.76	95	iP	07	26.50	-0.3	
			iS	13	08.50		
FLN	37.79	304	eP	07	25.50	-1.1	
	0.9s	371.10nm			6.2mb		
EBR	37.88	291	eP	07	27.00	-0.4	
			(S)	13	32.00		
EROQ	37.94	291	eP	07	26.30	-1.7	
			e	07	34.50	28km	
LPF	38.18	303	iPc	07	28.90	-0.9	
ACU	39.04	288	eP	07	34.50	-2.8	
ECHE	39.22	290	iPd	07	38.00	-0.8	
GTA	39.28	71	eP	07	40.40	1.0	
	1.8s	2310.00nm			6.6mb		
Z	24s	1234.00um			7.7MszX		
E	22s	1383.00um					
EKA	39.69	315	Pc	07	41.70	-0.7	
	0.8s	24.50nm			5.0mb	X	
ETOR	39.78	292	iP+	07	40.60	-2.8	
ECRI	39.78	295	iPd	07	41.20	-2.2	
NAI	39.80	200	iP	07	50.50	6.6X	
			i	07	56.30	20km	
			iS	14	08.00		
EALH	39.98	287	eP	07	44.00	-1.0	
YRH	40.42	311	eP	07	48.20	-0.3	
EVIA	40.61	289	iPd	07	49.20	-1.1	
ENIJ	40.82	286	iPd	07	50.40	-1.6	
IRK	40.95	50	ePd	07	54.50	1.7	
			eS	14	14.00		
GUD	41.37	292	iPd	07	54.80	-1.8	
ETA	41.38	311	eP	08	04.80	8.5X	
TOL	41.47	291	iPd	07	57.00	-0.2	
			iPP	09	41.00		
			iPcP	10	18.00		
			iS	14	14.00		
			iSSS	17	45.00		
ECP	41.49	310	eP	07	56.90	-0.3	
DLE	41.58	311	iPc	08	05.10	7.2X	
	1.0s	418.00nm			6.1mb		
EBAN	41.70	288	iPd	07	57.90	-1.2	
AFC	41.76	287	iPd	07	57.90	-2.0	
ECOG	41.77	287	eP	07	57.90	-2.0	
EMEL	41.89	284	e(P)	08	08.00	7.3X	
DCN	42.02	312	eP	08	08.60	7.0X	
	1.0s	487.00nm			6.2mb		
MAL	42.58	287	iPd	08	05.30	-1.0	
			iS	14	31.00		
EHOR	42.90	288	iPd	08	07.40	-1.6	
EPLA	42.94	292	iPc	08	07.40	-1.9	
BCAO	42.99	229	iPd	08	07.00	-2.9X	
	1.6s	65.00nm			5.1mb	X	
EMON	43.10	297	e(P)	08	08.90	-1.7	
EPRU	43.14	287	iPd	08	11.30	0.3	
ERUA	43.18	295	e(P)	08	16.30	5.1X	
LZH	43.25	74	Pd	08	16.00	4.0X	
	7.0s	******nm			7.3mb	X	
N	20s	875.00um					
E	18s	691.00um					
EJIF	43.47	287	iPd	08	11.30	-2.3	
ALJ	43.51	287	eP	08	18.00	3.9X	
OJEN	43.63	286	eP	08	21.00	6.0X	
GIBL	43.73	287	eP	08	21.50	5.8X	
VAL	43.89	310	iP	08	17.00	0.2	
			PP	10	18.00		
			SS	14	56.00		
CNIL	43.95	287	eP	08	16.00	-1.4	
STS	44.09	296	eP	08	17.11	-1.4	
EVAL	44.11	289	iPd	08	17.30	-1.5	
IFR	44.17	282	iPd	08	20.20	0.7	
			i	08	26.50	21km	
			i	08	29.00		
EZAM	44.36	295	e(P)	08	20.60	-0.2	
PTO	44.53	294	eP	08	19.20	-2.9X	
			i	08	28.50	31kmX	
			iS	15	04.00		
KBS	44.74	350	eP	08	24.00	0.6	
CD2	44.99	81	P	08	28.40	2.4	
E	14s	927.00um					
JNE	45.10	337	eP	08	37.80	11.5X	
JNW	45.16	337	iP	08	36.40	9.6X	
JMI	45.22	337	iP	08	37.40	10.1X	
RBA	45.33	284	eP	08	36.00	7.4X	
			e	08	38.00	7kmX	
LIS	45.59	291	iPd	08	31.40	0.8	
AVE	46.03	283	iP	08	34.00	-0.2	
			i	08	42.50	28km	
			i	08	56.00		
			i	10	37.50		
BTO	46.58	66	P	08	43.00	4.5X	
N	13s	127.00um					
E	13s	87.90um					
			sP	08	52.00		
KMI	46.66	89	Pd	08	45.00	5.5X	
	6.0s	*******nm			7.7mb	X	
Z	18s	868.00um			7.8Msz		
TIO	46.81	280	iP	08	40.00	-0.6	
			i	09	03.50	99kmX	
CHG	46.82	99	ePd	08	40.00	-0.6	
	1.2s	23.05nm			5.1mb	X	
			eS	15	20.00		
HHC	47.63	65	Pd	08	54.50	7.6X	
	1.8s	2900.00nm			7.0mb		
N	17s	624.00um					
			S	15	46.00		
AKU	47.80	329	iP	08	49.20	1.5	
	2.0s	5223.53nm			7.2mb		
			i	08	57.50	28km	
XAN	47.86	75	P	08	53.50	4.9X	
N	20s	202.00um					
E	14s	78.50um					
GYA	49.18	85	iPc	09	04.80	5.8X	
N	18s	712.00um					
E	18s	305.00um					
TIY	49.25	69	Pc	09	05.50	6.1X	
E	11s	84.10um					
			PP	09	13.00		
			S	16	07.00		
DAG	49.37	344	eP	08	59.40	-0.3	
	0.6s	600.00nm			6.8mb		
Z	23s	156.06um			6.9MszX		
E	23s	157.58um					
REY	49.42	327	eP	09	08.50	8.3X	
			i	09	16.10	25km	
NST	49.52	101	iPc	09	02.00	0.5	
LOE	49.80	98	eP	09	04.00	0.3	
NNT	51.03	105	eP	09	12.20	-0.9	
BJI	51.23	65	eP	09	20.50	6.2X	
	2.4s	1600.00nm			6.5mb		
N	14s	257.00um					
E	14s	357.00um					
TIK	52.11	23	eP	09	20.00	-0.6	
			eS	16	53.00		
BSI	52.26	115	eP	09	26.00	3.6X	
	0.5s	276.00nm			6.4mb		
NPA	52.64	192	eP	09	33.00	7.8X	
			e	09	33.30	1kmX	
			eS	28	06.30		
TIA	53.29	69	Pd	09	30.60	0.7	
	7.5s	*******nm			7.3mb	X	
E	16s	373.00um					
			PP	09	42.00		
WHN	53.46	77	Pc	09	35.00	3.9X	
	6.0s	5800.00nm			6.7mb	X	
N	20s	847.00um					
			PP	09	44.50		
GGC	54.61	281	iPc	09	39.40	-0.3	
			i	09	47.80	28km	
CTFE	54.94	281	iPc	09	43.40	1.3	
			i	09	50.10	22km	
SNG	55.09	109	eP	09	45.20	1.9	
	2.0s	705.88nm			6.3mb		
			eS	17	42.00		
QIZ	55.39	91	eP	09	50.80	5.3X	
E	19s	939.00um					
			PP	11	50.00		
DL2	55.58	64	eP	09	50.00	3.5X	
	7.0s	*******nm			7.4mb	X	
N	16s	412.00um					
E	15s	318.00um					
LSZ	55.67	205	iP	09	48.50	1.0	
			i	10	21.50	141kmX	
			i	12	53.20		
			i	18	11.50		
SNY	55.87	60	Pd	09	53.00	4.4X	
	1.6s	500.00nm			6.3mb		
N	15s	455.00um					
E	16s	214.00um					
			S	17	44.00		
GZH	56.12	85	P	09	53.00	2.4	
N	20s	500.00um					
E	22s	331.00um					
TBT	56.14	282	iP	09	52.20	1.5	
			i	09	58.00	19km	
NJ2	56.29	73	Pd	09	56.80	5.0X	
E	20s	705.00um					
CN2	56.44	57	Pd	09	56.00	3.3X	
	1.0s	400.00nm			6.4mb		
N	15s	250.00um					
E	15s	506.00um					
			PP	10	04.00		
			eS	17	45.00		
LKO	56.51	256	P	09	51.76	-1.8	
	1.5s	2002.50nm			6.9mb		
KRI	56.66	203	eP	10	11.30	16.7X	
			i	34	42.00		
MCO	56.77	86	eP	10	02.60	7.2X	
IPM	57.09	111	ePc	09	57.00	-0.7	
			e	10	03.90	23km	
HKC	57.17	86	P	10	05.00	6.8X	
KIC	57.85	252	Pc	10	01.34	-1.6	
	1.4s	1484.50nm			6.8mb		
TIC	57.88	253	P	10	01.50	-1.7	
	1.4s	1416.00nm			6.8mb		
PDA	58.10	296	iPd	10	12.80	8.4X	
LIC	58.15	252	P	10	03.44	-1.7	
	1.4s	1271.50nm			6.8mb		
			S	18	35.00		
SSE	58.50	73	P-	10	12.00	4.7X	
	1.0s	87.00nm			5.8mb		
N	16s	103.70um					
E	12s	41.90um					
			PcP	11	08.80		
			PP	12	28.00		
			PPP	13	56.00		
			S	18	20.00		
			sS	18	30.00		
KLM	58.53	112	eP	10	16.00	8.3X	
QZH	59.37	80	eP	10	18.50	5.0X	
	8.0s	*******nm			7.3mb	X	
N	31s	1960.00um					
			PP	10	26.00		
			PcP	10	56.50		
			ScS	20	08.50		
PPI	60.03	116	eP	10	22.60	4.5X	
CIR	60.06	199	eP	10	17.60	-0.6	
			ipP	10	23.90	21km	
			iP'P'	40	03.90		
BUL	60.09	203	iPc	10	17.30	-1.2	
			ipP	10	22.90	18km	
			iP'P'	40	03.50		
KGM	60.50	112	eP	10	24.50	3.2X	
ANP	61.56	79	iP	10	37.60	9.0X	
BAG	65.40	88	eP	11	00.00	5.9X	
			eS	19	40.00		
SLR	65.45	201	iPc	11	00.50	6.5X	
	1.2s	390.00nm			6.4mb		
			S	18	40.00		
SHK	65.46	64	eP	10	56.00	2.0	
BPI	65.94	201	eP	10	57.00	-0.2	
KSR	65.98	202	iPc	11	03.50	6.0X	
	1.0s	200.00nm			6.2mb		
YSS	66.11	48	iPc	11	04.00	6.1X	
			iS	20	00.00		
WIN	66.58	213	iPc	11	02.50	1.1	
	1.0s	480.00nm			6.6mb		
QCP	66.79	89	eP	11	14.00	11.3X	
PRY	66.81	201	iPc	11	08.00	5.3X	
	1.0s	310.00nm			6.4mb		
MBC	66.85	357	ePc	11	02.60	0.4	
BFS	66.99	202	iPc	10	58.00	-5.8X	
	1.0s	620.00nm			6.7mb		
SAP	67.20	53	eP	11	10.00	5.1X	
			eS	20	18.00		
MRRJ	67.35	53	eP	11	10.20	4.3X	
ASAJ	67.50	51	eP	11	11.50	4.7X	
SWZ	67.70	203	iPc	11	00.70	-7.6X	
	1.0s	450.00nm			6.6mb		
KKM	67.89	99	ePc	11	14.90	5.1X	
	1.2s	116.30nm			5.9mb		
SEK	68.08	201	eP	11	12.00	1.3	
	0.7s	100.00nm			6.1mb		
FRB	68.34	335	ePc	11	11.20	-0.5	
MAJO	68.38	60	ePd	11	15.57	3.0X	
			ec	11	20.37	15km	
			ed	11	23.02		
MAT	68.38	60	(P)	11	12.00	-0.5	
	0.8s	7.46nm			4.9mb	X	

20d 21h

			eS	20	14.00					1.2s	581.00nm		6.8mb		MHC	105.61	353	ePdiff	14	33.10	12.7X
HOOJ	68.78	52	eP	11	19.40	4.6X	BAL	92.10	127	eP	13	38.00	18.8X		FRI	105.73	351	ePdiff	14	37.80	17.1X
BLF	69.24	202	iPc	11	18.50	0.6	MUN	92.71	129	iPd	13	32.60	10.6X					ePKKP	30	03.00	
	1.0s	296.00nm				6.4mb		Z 20s	150.00um				7.4Msz		BMA	106.00	254	ePKP	18	54.30	19.6X
KUSJ	69.31	51	eP	11	23.80	5.7X		N 20s	176.50um						PRS	106.58	352	ePdiff	14	41.20	16.7X
ILT	69.41	18	iPc	11	18.00	-0.2		E 20s	125.00um						CLC	106.60	349	ePdiff	14	35.00	10.3X
			iS	20	36.00		BLA	92.82	322	eP-	13	24.00	1.3		PRI	106.69	352	ePdiff	14	40.20	15.0X
FRS	70.10	202	eP	11	30.00	7.2X		2.0s	1470.59nm				7.1mb					ePP	19	01.40	
	0.7s	111.00nm				6.1mb				ePP	17	28.30						ePKKP	30	04.80	
TSM	70.46	100	eP	11	34.00	8.5X	KLB	93.43	127	eP	13	35.00	9.7X		GSC	106.97	348	ePdiff	14	34.00	7.6X
HVD	70.85	202	eP	11	47.50	19.9X	PNT	93.55	353	eP	13	32.00	6.1X		CTA	107.11	102	iPdiff	14	47.00	19.8X
	1.0s	260.00nm						1.5s	470.00nm				6.7mb		SBB	107.74	349	ePdiff	14	41.00	11.2X
PET	71.49	37	iPc	11	39.00	7.9X	NEW	94.31	351	iPc	13	30.00	0.6		TPC	108.01	347	ePdiff	14	49.00	18.0X
			eS	20	58.00		PGC	94.53	355	eP	13	41.00	10.7X		MWC	108.23	349	ePdiff	14	49.00	16.8X
POF	71.55	207	eP	11	35.00	3.4X	COOL	95.16	125	eP	13	41.00	7.7X		RVR	108.35	348	ePdiff	14	50.00	17.6X
	1.0s	430.00nm				6.5mb	GMW	95.58	355	P	13	35.50	0.3		GLA	108.81	346	ePdiff	14	45.00	10.4X
GRM	73.08	200	iPc	11	45.00	4.2X	RMW	95.59	354	P	13	40.00	4.6X		PLM	108.89	348	ePdiff	14	46.00	10.9X
	1.0s	75.00nm				5.7mb	RSSD	95.78	341	P	13	36.00	-0.5		BAR	109.51	348	ePdiff	14	53.00	15.3X
SCH	73.53	327	ePc	11	42.60	-0.6	BPA	95.94	296	eP	13	40.00	2.7		STK	109.91	115	ePdiff	14	54.70	15.3X
	1.1s	359.00nm				6.3mb	LRM	95.99	347	eP	13	46.60	9.1X					ePP	17	55.20	
TRT	73.86	113	ePd	11	45.40	-0.2	SLM	96.08	329	P	13	40.00	2.4		RMQ	112.47	107	e(Pdif	15	03.00	12.0X
DAV	74.72	93	eP	12	02.80	12.1X		Z 20s	100.00um				7.3Msz					e	15	11.00	
INK	75.03	1	ePc	11	51.00	-0.5	PAG	96.48	295	eP	13	43.00	3.2X					e	18	34.00	
	1.1s	386.00nm				6.3mb	RSCP	96.57	325	P	13	45.50	5.5X		CMS	112.81	113	ePKP	18	40.50	-6.7X
CER	75.39	206	iPc	12	01.50	7.4X		1.5s	161.29nm				6.3mb		BOG	113.11	295	ePdiff	15	08.00	13.5X
	1.3s	520.00nm				6.4mb	BBL	96.67	295	eP	13	43.00	2.4					ePP	19	47.00	
IMA	75.76	9	ePc	11	56.50	0.5	WB5	97.82	109	eP	13	53.70	8.1X		UPA	113.86	303	ePdiff	15	04.00	6.6X
	1.6s	129.00nm				5.7mb				i	14	03.90	32kmX			Z 20s	244.33um			7.8Msz	
COL	77.58	7	ePc	12	10.59	4.6X				ePP	16	53.00			TOO	115.52	119	e(PKP)	19	02.00	9.6X
			ec	12	13.07	8kmX				e	17	57.30			SIV	115.69	269	ePdiff	15	25.00	19.5X
			ed	12	15.88					ePKKP	30	27.50			BRS	116.01	106	ePdiff	15	01.20	-5.6X
FBA	77.58	7	eP	12	07.30	1.3	WRA	97.84	109	Pc	13	53.90	8.3X					e	15	24.00	
TTA	78.39	12	P	12	11.00	0.5		1.0s	7.60nm				5.2mb X		BWA	116.14	115	ePKP	19	00.00	6.4X
SMY	78.58	31	eP	12	24.20	12.6X	CPD	98.15	300	P	13	53.00	5.7X					e	19	05.00	
Z	18s	424.00um				7.8Msz	BW06	98.36	345	P	13	52.00	3.8X					e	20	30.00	
CBM	79.50	322	iPd	12	16.80	0.0		2.0s	125.55nm				6.2mb		COO	116.89	109	ePKP	19	04.00	8.8X
YKA	80.06	353	eP	12	18.80	-0.6		Z 19s	303.03um				7.8Msz		CAN	116.98	115	ePKP	19	00.70	5.5X
	1.1s	28.20nm				5.2mb X	PORP	98.64	300	P	13	55.00	5.5X					e	19	06.10	
SVW	80.17	12	eP	12	26.70	6.5X	ASPA	99.70	112	iPKPc	13	57.30	3.3X					i	20	20.00	
TOA	80.48	7	ePc	12	28.50	6.7X		1.3s	61.00nm				6.0mb					e	29	30.00	
PMR	80.65	9	ePc	12	23.30	0.7				i	14	12.60	52kmX		PSO	117.82	295	ePKP	19	08.00	10.1X
	1.7s	287.00nm				6.0mb				iPP	16	41.70			CCH	120.51	271	(PKP)	19	03.00	0.3
Z	18s	138.00um				7.3Msz				iSKS	24	42.50						e	19	12.00	
HYT	82.40	3	P	12	33.60	1.6	GLD	100.18	340	Pdiff	14	06.00	9.8X		ZOBO	121.49	273	Pdiff	15	42.00	10.0X
ADK	82.79	27	eP	12	41.90	7.9X		2.0s	341.82nm				6.5mb			1.3s	70.98nm				
	1.4s	127.90nm				5.9mb		Z 20s	350.00um				7.9Msz					i	19	15.20	
Z	20s	525.00um				7.9Msz	GOL	100.27	340	Pdiff	14	02.00	5.3X					i	20	52.00	
CRZF	83.04	178	iPc	12	47.60	12.6X	LNO	100.63	332	ePdiff	14	07.80	9.9X		LPB	121.61	273	PKP	19	10.00	5.0X
			eS	23	00.00		TUL	100.63	332	ePdiff	14	03.40	5.4X			1.0s	60.00nm				
			eSP	24	10.00			1.3s	16.20nm				5.4mb					SSS	37	42.00	
			eSS	28	45.00					e	14	06.90						LR	58	59.00	
			eSSS	32	40.00					i	14	09.00			LPB	121.61	273	Pdiff	15	47.00	14.7X
AAI	83.27	100	eP	12	48.40	11.4X	LBFM	101.67	353	Pdiff	14	09.00	6.2X		LPA	122.50	248	Pdiff	15	47.00	11.7X
H8VT	83.76	323	P	12	40.00	0.9	OIS	102.21	107	ePdiff	14	14.00	8.6X		DZM	124.15	93	iPKPd	19	19.10	9.7X
WNY	84.13	323	P	12	41.00	0.0				e	18	05.90			ARE	124.28	275	ePKP	19	14.00	4.0X
HRV	84.36	320	ePc	12	47.24	5.1X	WDC	102.49	354	ePdiff	14	16.10	9.9X		PT08	125.70	283	ePKP	19	24.00	11.1X
			ec	12	51.88	15km				ePP	18	26.50			NNA	125.94	283	ePKP	19	23.20	10.2X
			ed	12	52.54					eSP	27	42.50				1.0s	18.00nm				
SDN	84.57	17	e(P)	12	52.30	9.4X				ePKKP	30	12.40			SPA	126.77	180	ePKP	19	17.80	4.7X
Z	20s	325.00um				7.7Msz	MIN	102.63	353	ePdiff	14	18.20	11.1X			1.2s	203.52nm				
FFC	85.43	344	eP	12	45.00	-2.3	ORV	103.40	353	ePdiff	14	19.90	9.6X			Z 20s	34.68um			7.0Msz	
	1.0s	26.00nm				5.4mb	KVN	103.50	350	Pdiff	14	16.00	5.0X		RTLL	129.07	257	ePKPd	19	25.20	6.7X
NANU	85.91	122	eP	12	56.00	6.0X	LLAV	103.88	295	iPdiff	14	29.10	16.0X					e	19	28.00	
SIT	86.26	3	P	12	50.00	-1.3	CAR	103.95	295	iPdiff	14	20.00	6.6X		RTRS	129.36	259	ePKP	19	30.00	11.0X
	1.3s	509.43nm				6.6mb				ePP	18	44.00						e	19	36.80	
GUA	86.30	76	e(P)	12	53.00	0.8	MAW	104.74	175	e(Pdif	14	23.00	7.5X		RTBS	129.97	257	e(PKP)	19	27.30	7.2X
PNJ	86.86	321	eP	12	59.90	5.3X		Z 18s	257.00um				7.8Msz		PEL	131.51	256	ePKP	19	23.00	-0.1
GMTN	86.89	321	eP	12	59.20	4.5X	CMB	104.79	352	ePdiff	14	23.70	7.1X			1.0s	55.00nm				
ELF	88.51	326	P	13	08.00	5.5X				ePP	18	47.20			SBA	131.53	165	e(PKP)	19	25.00	3.3X
LDN	88.57	326	P	13	08.10	5.3X				ePKKP	30	04.70			SVA	131.68	81	ePKP	19	35.90	12.2X
SCP	88.78	323	ePd	13	08.88	5.0X	ANMO	105.02	340	Pdiff	14	20.00	2.1		IHA	132.21	256	ePKP	19	32.00	7.7X
			ec	13	12.69	12km		Z 22s	166.67um				7.5Msz		LNV	132.37	255	ePKP	19	29.00	4.4X
			ed	13	13.35		ALQ	105.03	340	ePdiff	14	18.00	0.1		PMO	153.26	40	PKP	20	14.50	13.7X
			iS	24	00.21			Z 19s	250.00um				7.8Msz			1.2s	145.00nm				
			e	24	00.37		BAO	105.05	262	ePdiff	14	29.00	10.7X		TPT	153.38	39	PKP	20	14.60	13.6X
			eSP	24	18.42		BKS	105.14	353	ePdiff	14	37.20	19.1X			1.2s	240.00nm				
DLA	88.89	326	P	13	09.15	4.8X				e	14	50.00			VAH	153.59	39	PKP	20	14.80	13.5X
EDM	88.95	350	iPc	13	05.40	0.9				ePP	18	44.80				1.2s	95.00nm				
CBN	90.53	321	eP	13	19.00	7.0X				eSKS	25	12.00			RUV	153.67	39	PKP	20	16.20	14.8X
	1.0s	92.50nm				6.0mb				ePS	27	45.20				1.2s	115.00nm				
			e	18	00.00					e	29	38.00			AFR	154.30	46	PKP	20	17.20	15.0X
MEKA	90.64	123	eP	13	17.00	4.4X				ePKKP	30	43.20				1.2s	260.00nm				
CAI	91.13	263	eP	13	16.60	1.5				eSS	33	08.00			PPT	154.44	46	PKP	20	16.00	13.6X
MTN	91.13	105	e(P)	13	20.00	5.0X				eLQ	43	52.00				1.2s	395.00nm				
			e	13	34.00	47kmX				eLR	48	00.00			PPN	154.50	46	PKP	20	16.60	14.1X
CVL	91.24	321	P	13	14.00	-1.4	BRK	105.15	353	ePdiff	14	37.80	19.7X			1.2s	170.00nm				
SES	91.33	348	eP	13	17.00	1.4		Z 20s	169.00um				7.6Msz		PAE	154.51	46	PKP	20	17.60	15.1X

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      1.2s   250.00nm
TVO   154.80  46 PKP    20 18.30   15.4X
      1.2s   340.00nm
     S.D. = 1.2  on 352 of 568 obs.
-----------------------------------------
% JUN 20, 1990  21h 24m 21.54± 0.98s
  44.234 N ± 8.3km    8.244 E ± 8.2km
  DEPTH = 10.0km  (geophysicist)
 NORTHERN ITALY                    (545)
     ML 1.5 (GEN).

FIN     0.04 225 P      24 23.80    0.2
                S       24 24.74
ROB     0.27 283 P      24 27.61    0.3
                S       24 30.76
PCP     0.38  35 P      24 29.25    0.0
                S       24 34.70
IMI     0.41 218 P      24 29.97    0.0
                S       24 35.41
ENR     0.59 270 P      24 33.48   -0.1
STV     0.66 271 P      24 34.56   -0.2
     S.D. = 0.2  on   6 of   6 obs.
-----------------------------------------
? JUN 20, 1990  21h 30m 12.12± 1.36s
  37.495 N ±27.8km   48.792 E ±11.7km
  DEPTH = 10.0km  (geophysicist)
  4.7mb ( 13 obs.)
 NORTHWESTERN IRAN                 (345)

ALN    17.95 288 iPc    34 26.30    3.1
RDO    18.35 289 eP     34 30.50    2.3
OUR    19.50 286 ePc    34 42.60    0.4
SRS    19.81 288 ePd    34 45.90    0.3
ATH    19.83 279 eP     34 46.00    0.2
VAM    19.88 271 eP     34 45.00   -1.4
SOH    19.98 287 ePd    34 48.30    0.8
NEO    20.10 283 eP     34 48.00   -0.8
THE    20.27 287 ePd    34 51.20    0.7
KNT    20.34 288 ePc    34 50.60   -0.5
VAY    20.59 289 eP     34 54.40    0.7
VLI    20.62 276 eP     34 54.80    0.7
LIT    20.64 285 eP     34 54.40    0.1
GRG    20.71 288 eP     34 55.50    0.5
AGG    20.81 282 eP     34 56.30    0.2
ITM    21.34 277 eP     35 02.00    0.5
FNA    21.48 287 eP     35 03.60    0.6
OHR    21.92 288 eP     35 09.20    1.8
VLS    22.25 280 eP     35 10.10   -0.5
IGT    22.33 284 eP     35 12.00    0.7
KEK    22.73 285 eP     35 16.30    1.0
SOI    25.81 281 P      35 43.00   -2.0
DUI    26.68 290 P      35 44.00   -9.1X
SDI    27.16 290 P      35 57.00   -0.4
PGF    30.69 292 eP     36 27.80   -1.4
       0.6s     9.00nm          4.8mb
HFS    31.74 327 eP     36 39.20    1.1
       0.6s     3.40nm          4.4mb
     Z 12s     74.79um          6.6MszX
               epP      36 43.70   16kmX
               esP      36 46.50
SBF    31.75 295 eP     36 37.60   -0.8
       0.8s    24.20nm          5.2mb
LPG    32.19 298 eP     36 41.60   -0.9
       0.9s    14.75nm          4.9mb
LPL    32.20 298 eP     36 41.80   -0.8
       0.9s     9.85nm          4.7mb
BNI    32.25 297 P      36 42.80   -0.1
FRF    32.34 294 eP     36 42.50   -1.0
       0.9s    11.45nm          4.8mb
LOR    34.18 301 eP     36 58.40   -1.1
       0.7s     4.40nm          4.5mb
SMF    34.20 300 eP     36 58.80   -0.8
       0.8s     5.35nm          4.5mb
AVF    34.53 300 eP     37 01.30   -1.2
       1.0s    10.00nm          4.7mb
BGF    34.88 300 eP     37 04.40   -1.1
MAF    35.09 299 eP     37 06.80   -0.5
       1.0s    13.00nm          4.8mb
TCF    35.33 299 eP     37 08.80   -0.6
       0.9s     7.35nm          4.6mb
CAF    35.52 297 eP     37 10.00   -1.0
       1.1s    14.65nm          4.8mb
RJF    35.88 298 eP     37 13.90   -0.1
LFF    36.46 297 eP     37 18.30   -0.6
SSE    58.81  73 Pd     40 14.90    1.9
       1.2s    33.00nm          5.3mb
     S.D. = 1.1  on 40 of 41 obs.
-----------------------------------------
  JUN 20, 1990  21h 41m 32.48± 0.44s
  37.705 N ±12.3km   48.961 E ± 6.3km
  DEPTH = 10.0km  (geophysicist)
  4.5mb (  7 obs.)
 NORTHWESTERN IRAN                 (345)

KER    3.67 205 eP     42 30.00   -0.6
MHI    8.54  96 eP     43 38.00   -1.2
               eS      45 16.00
QUE   16.69 111 eP     45 31.00    2.9
MLR   18.85 302 eP     46 00.00    5.2X
               e       13 46.00
OHR   21.98 288 e(P)   46 24.50   -3.8X
SOI   25.90 281 P      47 06.50    0.3
DUI   26.74 289 P      47 15.50    1.5
SDI   27.22 290 P      47 17.50   -0.8
PGF   30.73 292 eP     47 49.40   -0.5
      0.6s     7.20nm          4.7mb
GKN   31.33  97 P      47 55.20   -0.2
HFS   31.64 327 eP     48 01.50    3.9X
      0.5s     1.50nm          4.2mb
    Z 15s     76.20um          6.5MszX
SBF   31.78 294 eP     47 59.30    0.2
      0.6s    12.65nm          5.0mb
DMN   31.88  98 P      48 00.20   -0.2
PKI   32.14  98 P      48 01.40   -1.3
LPG   32.21 298 eP     48 03.30    0.2
      0.6s     4.05nm          4.5mb
LPL   32.22 298 eP     48 03.40    0.3
FRF   32.37 294 eP     48 04.10   -0.1
LMR   32.49 294 eP     48 04.60   -0.6
SMF   34.21 300 eP     48 20.30    0.2
      0.8s     5.35nm          4.5mb
AVF   34.54 300 eP     48 22.80   -0.1
      0.8s     4.05nm          4.4mb
CAF   35.55 297 eP     48 31.50   -0.1
      0.7s     4.40nm          4.4mb
     S.D. = 1.0  on 18 of 21 obs.
-----------------------------------------
• JUN 20, 1990  22h 04m 06.98± 0.74s
  36.724 N ±20.8km   49.731 E ± 9.0km
  DEPTH = 10.0km  (geophysicist)
  4.6mb ( 17 obs.)
 WESTERN IRAN                      (347)

NUR   28.66 334 eP     10 11.00    5.4X
SUF   29.81 338 eP     10 15.00   -0.9
CLL   29.81 311 eP     10 16.00    0.0
SQTA  30.22 302 iPd    10 19.30   -0.6
      0.7s    16.00nm          5.0mb
GKN   30.61  96 P      10 23.80    0.3
DMN   31.15  97 P      10 28.00   -0.4
PGF   31.68 293 eP     10 32.40   -0.3
      0.6s     7.20nm          4.8mb
SBF   32.76 296 eP     10 42.10    0.0
      0.6s    14.45nm          5.1mb
HFS   32.79 327 eP     10 41.50   -0.6
      0.4s     3.50nm          4.6mb
    Z 16s     16.31um          5.8MszX
               epP      10 45.50   14kmX
               esP      10 47.20
LPG   33.21 299 eP     10 46.70    0.4
      0.6s     6.30nm          4.7mb
LPL   33.23 299 eP     10 46.20   -0.2
      0.6s     5.40nm          4.7mb
LBF   35.14 302 eP     11 02.60    0.0
      0.8s     4.05nm          4.3mb
SMF   35.23 301 eP     11 03.00   -0.4
      0.8s     6.05nm          4.5mb
AVF   35.57 301 eP     11 05.80   -0.4
      0.6s     4.50nm          4.5mb
MAF   36.12 300 eP     11 11.00    0.0
      0.8s     5.35nm          4.5mb
TCF   36.37 300 eP     11 13.20    0.2
      0.8s     6.05nm          4.5mb
LFF   37.48 298 eP     11 22.60    0.3
      0.6s     7.20nm          4.6mb
LDF   37.89 304 eP     11 25.60   -0.2
      0.6s     8.10nm          4.7mb
FLN   38.13 305 eP     11 27.20   -0.5
      0.6s    12.65nm          4.9mb
LPF   38.52 303 eP     11 30.80   -0.2
      0.7s     9.90nm          4.6mb
EKA   40.04 315 Pd     11 46.30    2.7
      0.7s     3.50nm          4.1mb
MBC   67.09 357 eP     15 02.00   -0.1
      0.5s     2.00nm          4.6mb
FRB   68.66 335 eP     15 13.00    1.0
     S.D. = 0.8  on 22 of 23 obs.
-----------------------------------------
• JUN 20, 1990  22h 20m 04.90± 0.61s
  37.055 N ±11.2km   49.226 E ± 9.5km
  DEPTH = 10.0km  (geophysicist)
  4.6mb (  3 obs.)
 CASPIAN SEA                       (338)

KER    3.20 213 eP     20 57.00    0.6
MHI    8.29  92 eP     22 13.00    4.9X
               eS      23 43.00
VRI   18.98 305 ePd    24 30.00    1.3
KRA   24.70 311 eP     25 33.20    6.0X
KSP   27.16 311 eP     25 54.50    4.4X
CLL   29.29 311 e(P)   26 09.00   -0.3
GKN   31.05  97 P      26 27.00    1.7
DMN   31.59  97 P      26 30.40    0.2
PKI   31.85  97 P      26 31.00   -1.6
HFS   32.30 327 eP     26 35.40   -0.3
      0.8s     8.10nm          4.7mb
    Z 19s     22.87um          5.9MszX
               epP      26 39.50   14kmX
               esP      26 42.20
NAO   33.87 327 P      26 49.00   -0.5
      0.7s     2.60nm          4.3mb
LIC   58.04 252 P      29 59.00   -1.6
MBC   66.74 357 ePc    30 58.20    0.4
      0.6s     3.00nm          4.7mb
FRB   68.19 335 eP     31 07.00    0.0
     S.D. = 1.2  on 11 of 14 obs.
-----------------------------------------
? JUN 20, 1990  22h 23m 42.68± 2.10s
  37.001 N ±19.9km   49.157 E ±34.4km
  DEPTH = 10.0km  (geophysicist)
  4.4mb (  4 obs.)
 CASPIAN SEA                       (338)

SQTA  29.68 302 e(P)   29 51.00    0.2
      0.6s     5.40nm          4.5mb
HFS   32.31 327 eP     30 13.40   -0.2
      0.9s     6.30nm          4.5mb
    Z 22s     9.60um           5.4Msz
NAO   33.89 327 P      30 27.40    0.0
      0.7s     2.20nm          4.2mb
KIC   57.67 252 P      33 35.60   -0.2
LIC   57.98 252 P      33 38.00    0.1
MBC   66.79 357 eP     34 36.00    0.1
      0.7s     1.00nm          4.1mb
     S.D. = 0.2  on   6 of   6 obs.
-----------------------------------------
• JUN 20, 1990  22h 54m 05.26± 0.91s
  31.274 S ±14.7km   68.474 W ±19.2km
  DEPTH = 110.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA      (137)

RTLL   0.06 176 iPc    54 20.60   -0.3
ZON    0.32 213 iPd    54 21.00   -0.4
               eS      54 33.00
CFA    0.39 149 iPc    54 22.10    0.4
               eS      54 34.50
RTCV   0.59 185 iPc    54 23.10    0.1
RTBS   0.92 245 eP     54 26.00    0.1
               S       54 41.00
RTRS   1.39 322 iPc    54 31.20    0.1
               eS      54 50.80
     S.D. = 0.4  on   6 of   6 obs.
-----------------------------------------
  JUN 20, 1990  22h 58m 51.72± 0.38s
  36.825 N ± 8.3km   49.473 E ± 5.0km
  DEPTH = 18.5km  (  2 depth phases)
  4.9mb ( 21 obs.)
 WESTERN IRAN                      (347)

TAB    2.79 297 eP     59 38.00    1.5
KER    3.13 219 eP     59 51.00    9.7X
MHI    8.08  91 eP     00 50.00   -1.1
MJMA  11.50 199 eP     01 34.00   -4.1X
QASM  11.84 207 eP     01 38.10   -4.5X
RYD   12.31 192 eP     01 45.00   -4.0X
BBTK  13.46 288 eP     02 07.00    2.7
PRNI  13.68 246 eP     02 17.00    9.9X
AFIF  13.79 205 ePd    02 08.70    0.1
MBH   14.08 244 eP     02 22.00    9.7X
HRT   15.94 291 eP     02 38.00    1.4
QUE   16.00 109 eP     02 41.50    3.9X
```

20d 23h

```
YLV     16.13 290 iP     02 43.50    4.5X
RDO     19.08 290 eP     03 16.00    0.3
VRI     19.27 305 ePc    03 19.00    1.0
VAM     20.45 274 eP     03 30.00   -0.8
ATH     20.48 281 eP     03 31.40    0.4
NEO     20.79 285 eP     03 33.50   -0.8
VAY     21.33 290 eP     03 40.50    0.8
ITM     21.98 279 eP     03 43.50   -2.8
SKO     22.21 292 eP     03 50.00    1.4
BZS     22.63 302 ePc    03 55.00    2.4
OHR     22.65 290 eP     03 55.50    2.5
KEK     23.43 286 eP     04 01.00    0.5
NDI     24.64 101 iPd    04 13.60    1.2
KRA     25.00 311 eP     04 15.10   -0.5
                  e      04 21.10   21km
                  e      06 01.10
SOI     26.48 283 P      04 29.00   -0.5
DUI     27.42 291 P      04 35.50   -2.7
KSP     27.47 311 eP     04 38.50    0.1
                  e      04 43.00   16km
                  e      06 24.50
SDI     27.90 291 P      04 41.00   -1.5
PRU     28.31 309 eP     04 44.50   -1.5
NUR     28.48 334 eP     04 47.00   -0.5
KHC     28.72 307 eP     04 50.50    0.7
CLL     29.59 311 iPd    04 57.20   -0.3
SUF     29.64 338 iP     04 57.30   -0.5
        0.5s      3.50nm          4.4mb
SOTA    29.99 302 iPd    05 02.20    0.9
        0.8s      9.60nm          4.7mb
                  i      05 21.50   83kmX
MDI     30.91 299 P      05 09.00   -0.3
DMN     31.37  97 Pd     05 14.60    0.8
        1.0s     68.00nm          5.5mb
KKN     31.43  96 Pd     05 09.40   -4.9X
        0.8s     30.00nm          5.2mb
PGF     31.45 293 eP     05 19.10    4.9X
        0.8s     13.45nm          4.9mb
PKI     31.63  97 Pd     05 16.60    0.4
        1.2s     48.00nm          5.3mb
GUN     31.85  96 Pd     05 18.70    0.5
        1.0s     52.00nm          5.4mb
SBF     32.53 296 eP     05 26.10    2.5
        0.8s     13.45nm          4.9mb
HFS     32.60 327 eP     05 22.50   -1.4
        0.7s     16.40nm          5.1mb
      Z 16s      3.82um           5.2MszX
LPG     32.98 299 eP     05 27.30   -0.5
        0.8s      5.35nm          4.5mb
BNI     33.04 298 P      05 27.00   -1.1
SOD     33.23 344 iP     05 28.80   -0.5
NAO     34.17 327 P      05 36.10   -1.5
        0.7s      6.00nm          4.6mb
KEV     35.16 347 eP     05 46.00    0.1
AVF     35.34 301 eP     05 46.90   -0.8
        0.8s      5.35nm          4.5mb
EKA     39.82 315 Pd     06 24.50   -0.7
        0.7s      4.80nm          4.3mb
BCAO    42.94 229 iPd    06 52.00    0.7
        0.9s     23.00nm          4.9mb
IFR     44.25 283 iPd    07 03.50    1.6
AVE     46.11 283 iP     07 15.00   -1.6
                  i      09 02.00  598kmX
KMI     46.61  89 Pd     07 21.50    0.7
CHG     46.75  99 eP     07 21.80    0.1
                  e      09 08.30  591kmX
CHTO    46.75  99 P      07 22.00    0.3
LKO     56.53 256 P      08 34.14   -1.3
        1.0s     16.00nm          5.0mb
KIC     57.86 252 P      08 44.04   -0.7
        0.8s     19.50nm          5.2mb
TIC     57.89 253 P      08 44.14   -0.9
        1.0s     15.50nm          5.0mb
LIC     58.16 252 P      08 46.14   -0.8
        0.8s     15.00nm          5.1mb
MBC     66.98 357 eP     09 44.50   -0.3
        0.6s      2.00nm          4.4mb
FRB     68.48 335 eP     09 54.00   -0.3
INK     75.16   1 eP     10 36.00    2.0
YKA     80.20 353 eP     11 01.60   -0.3
        0.8s      2.00nm          4.2mb
FFC     85.57 344 eP     11 29.00   -0.7
        0.8s      7.00nm          4.9mb
      S.D. = 1.2  on  56 of  66 obs.
```

```
  JUN  20, 1990  23h 00m 36.55± 0.49s
  36.891 N ±11.5km   49.591 E ± 6.3km
    DEPTH =  15.0km  (  2 depth phases)
    4.9mb ( 21 obs.)
 WESTERN IRAN                        (347)

MHI      7.99  91 eP     02 36.00    1.1
        0.8s     59.70nm          5.9mb
                  eS     04 14.00
QUE     15.93 110 eP     04 27.90    6.0X
OHR     22.72 290 eP     05 38.50   -0.4
        1.5s     80.00nm          5.0mb
SPC     24.55 309 eP     05 56.20   -0.6
BRT     25.44 289 P      06 06.00    0.8
TDS     26.17 286 P      06 14.00    2.1
ZST     26.28 306 eP     06 13.60    0.8
SOI     26.56 283 P      06 13.00   -2.5
ATN     27.01 283 P      06 19.00   -0.7
DUI     27.49 291 P      06 24.50    0.4
SDI     27.97 291 P      06 28.00   -0.4
AZI     28.24 292 P      06 30.00   -0.8
CRE     29.31 295 P      06 42.00    1.4
PGD     29.48 296 P      06 43.00    0.8
CLL     29.62 311 i(P)   06 43.20    0.1
        1.3s     21.00nm          4.8mb
SQTA    30.04 302 iPc    06 46.80   -0.2
        1.6s     40.70nm          5.0mb
                  i      06 52.20   19km
MDI     30.96 299 P      06 55.00    0.0
HFS     32.59 327 eP     07 08.20   -1.0
        0.8s     21.50nm          5.1mb
      Z 16s      4.29um           5.2MszX
                  epP    07 11.50   11km
                  esP    07 13.40
LPG     33.03 299 eP     07 14.20    0.7
        1.2s     14.90nm          4.8mb
LPL     33.05 299 eP     07 13.60    0.0
        1.2s     11.90nm          4.7mb
BNI     33.09 298 P      07 13.50   -0.4
NAO     34.17 327 P      07 22.40   -0.5
        0.8s      5.00nm          4.5mb
LBF     34.96 301 eP     07 30.10    0.3
        1.0s      8.00nm          4.6mb
LOR     35.04 302 eP     07 30.20   -0.3
        1.2s     19.35nm          4.9mb
SMF     35.05 301 eP     07 31.10    0.5
        1.0s      9.00nm          4.6mb
SSF     35.28 301 eP     07 32.70    0.2
        1.0s     10.00nm          4.7mb
AVF     35.39 301 eP     07 33.70    0.3
        1.0s     12.00nm          4.7mb
MAF     35.94 300 eP     07 39.00    0.8
        1.1s     14.65nm          4.8mb
MFF     37.80 301 eP     07 53.90    0.2
        1.2s     32.75nm          5.0mb
BCAO    43.06 229 iPd    08 39.00    1.5
        1.2s     28.00nm          4.9mb
CHTO    46.66  99 P      09 07.00    0.6
KIC     57.97 252 P      10 30.00   -0.9
        0.9s     23.00nm          5.2mb
TIC     58.00 253 P      10 30.10   -1.0
        1.0s     16.50nm          5.0mb
LIC     58.27 252 P      10 32.06   -1.0
        0.9s     21.50nm          5.2mb
SSE     58.38  73 eP     10 31.00   -2.5
MBC     66.92 357 eP     11 30.00    0.3
        0.4s      3.00nm          4.8mb
FRB     68.46 335 eP     11 39.00   -0.5
FFC     85.53 344 eP     13 16.00    1.1
        0.9s     13.00nm          5.1mb
      S.D. = 1.0  on  37 of  38 obs.
```

```
?  JUN  20, 1990  23h 01m 45.31± 1.13s
    2.381 N ±13.8km   98.462 E ±18.1km
    DEPTH = 115.2 ± 14.1 km
    4.0mb (  1 obs.)
 NORTHERN SUMATERA                   (706)

PSI      0.56  56 ePd    02 02.40   -0.9
IPM      3.36  49 ePc    02 41.70    4.6X
        0.8s    250.60nm
                  e      03 28.40
PPI      3.42 146 eP     02 38.70    0.9
BSI      4.42 315 eP     02 51.50    0.1
                  eS     03 43.00
SNG      5.23  24 eP     03 03.20    0.8
        1.0s    122.00nm          5.1mb X
WRA     41.62 124 P      09 23.00   -0.8
        0.6s     1.80nm           4.0mb
```

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  S.D. = 1.7  on  5 of  6 obs.
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•  JUN  20, 1990  23h 27m 43.81± 0.55s
   36.990 N ±11.2km   50.314 E ± 8.3km
   DEPTH =  10.0km  (geophysicist)
   4.7mb (  9 obs.)
 IRAN                                (348)

TAB      3.35 290 eP     28 41.00    3.6X
KER      3.71 226 eP     28 42.00   -0.5
MHI      7.41  93 eP     29 40.00    5.2X
                  eS     31 10.00
QUE     15.42 111 eP     31 31.30    8.0X
ITM     22.62 279 ePb    32 47.50    1.6
OHR     23.23 289 eP     32 45.00   -7.0X
KRA     25.41 311 eP     33 13.90    1.1
KSP     27.87 311 eP     33 26.00   -9.4X
                  e      33 37.00
PRU     28.73 308 eP     33 43.70    0.5
KHC     29.17 306 iP     33 48.00    0.8
CLL     29.99 310 iPc    33 55.70    1.2
        1.2s     19.00nm          4.8mb
GKN     30.17  97 P      33 57.20    0.7
SQTA    30.47 302 iPc    33 58.60   -0.4
        0.7s     16.10nm          5.0mb
GRF     30.78 307 ePc    34 02.60    1.1
MDI     31.42 299 P      34 07.00   -0.1
PGF     32.00 293 eP     34 11.40   -1.0
        1.0s     16.00nm          4.9mb
HFS     32.83 327 eP     34 17.50   -1.8
        0.7s      8.00nm          4.8mb
      Z 15s      2.49um           5.0MszX
                  e      34 20.50
                  e      34 22.40
SBF     33.06 296 eP     34 16.10   -5.5X
        0.8s     10.75nm          4.8mb
LPG     33.49 299 eP     34 24.50   -1.1
        0.8s      2.70nm          4.2mb
LPL     33.51 299 eP     34 25.00   -0.6
        0.8s      4.70nm          4.5mb
BNI     33.56 298 P      34 25.00   -1.0
GBA     33.60 127 P      34 27.00    0.6
        0.9s      7.10nm          4.6mb
BCAO    43.56 230 ePc    35 43.00   -6.7X
        1.0s      5.00nm          4.3mb
CHTO    46.11  99 P      36 09.20   -0.8
MBC     66.85 357 eP     38 37.00   -0.4
FRB     68.61 335 eP     38 44.00   -4.6X
      S.D. = 1.0  on  18 of  26 obs.
```

```
•  JUN  20, 1990  23h 33m 24.98± 0.72s
   37.100 N ±13.6km   49.736 E ± 9.7km
   DEPTH =  10.0km  (geophysicist)
   4.5mb ( 10 obs.)
 CASPIAN SEA                         (338)

KER      3.48 219 eP     34 20.00   -0.4
MHI      7.88  93 eP     35 20.00   -2.5
                  eS     36 54.00
QUE     15.90 111 eP     37 13.30    2.8
SKO     22.31 291 eP     38 26.00    2.0
KRA     24.98 311 eP     38 51.10    1.2
KHC     28.73 306 eP     39 25.00    0.6
SUF     29.46 338 iP     39 32.00    1.2
CLL     29.57 310 iPc    39 32.80    0.9
        0.9s     15.00nm          4.8mb
                  e      39 46.00
SQTA    30.02 302 iPd    39 35.30   -0.9
        0.5s      7.90nm          4.8mb
GRF     30.34 307 ePd    39 39.10    0.3
PGF     31.53 293 eP     39 52.50    3.0X
        0.8s      8.05nm          4.7mb
HFS     32.48 327 eP     39 57.50    0.1
        0.6s      6.70nm          4.7mb
      Z 16s      1.15um           4.7MszX
                  e      40 01.90
LPL     33.05 298 eP     40 02.30   -0.5
        0.8s      4.70nm          4.5mb
BNI     33.10 298 P      40 02.50   -0.6
NAO     34.06 327 P      40 11.00   -0.1
        0.7s      1.50nm          4.0mb
LBF     34.95 301 eP     40 18.10   -0.9
        0.6s      3.60nm          4.4mb
AVF     35.38 301 eP     40 20.60   -2.0
        0.8s      6.70nm          4.6mb
BCAO    43.28 229 ePd    41 22.00   -6.6X
        0.8s      4.00nm          4.2mb
```

MBC	66.72	357	eP	44 18.50	0.8
	0.4s		1.00nm		4.4mb
FRB	68.32	335	ePc	44 26.00	-1.9
S.D. = 1.5 on 18 of 20 obs.					

JUN 20, 1990 23h 48m 44.84± 0.40s
36.641 N ± 9.9km 49.830 E ± 4.9km
DEPTH = 15.6km (3 depth phases)
4.7mb (30 obs.) 5.1Msz (1 obs.)
WESTERN IRAN (347)

MHI	7.79	90	eP	50 40.00	-0.4
	0.8s		44.78nm		5.7mb X
			eS	52 16.00	
YLV	16.46	290	eP	52 39.00	2.3
RDO	19.41	291	eP	53 12.90	-0.3
VRI	19.61	305	ePc	53 15.50	0.1
VAM	20.75	274	eP	53 26.80	-0.6
KSH	20.76	74	P	53 29.00	1.4
ATH	20.80	282	eP	53 27.50	-0.3
VAY	21.66	291	eP	53 38.00	1.5
ITM	22.29	280	eP	53 42.00	-0.9
SKO	22.55	292	eP	53 48.50	3.1X
OHR	22.98	290	eP	53 50.00	0.3
KEK	23.75	287	eP	53 56.00	-1.2
KRA	25.34	311	eP	54 12.50	0.2
ZST	26.58	306	e(P)	54 26.00	2.2
SOI	26.80	283	P	54 27.00	1.0
DUI	27.76	291	P	54 35.00	0.3
KSP	27.80	311	eP	54 35.70	0.7
SDI	28.24	291	P	54 38.00	-1.1
NUR	28.77	334	eP	54 43.00	-0.6
ARV	28.87	295	P	54 45.00	0.3
KHC	29.06	307	P	54 48.40	2.0
ASS	29.07	294	P	54 49.50	2.9
WMO	29.59	64	P	54 51.60	0.4
PGD	29.76	296	P	54 56.00	3.1X
SUF	29.91	338	iP	54 52.70	-1.1
	0.4s		3.10nm		4.5mb
CLL	29.92	311	eP	54 53.00	-1.0
SOTA	30.33	303	iPd	54 56.60	-1.3
	0.6s		24.30nm		5.2mb
			i	54 59.00	8km
GRF	30.68	307	eP	55 02.70	1.9
MDI	31.25	300	P	55 05.00	-0.8
BOB	31.41	298	P	55 08.00	0.7
PGF	31.78	293	eP	55 09.90	-0.7
	0.8s		16.55nm		5.0mb
VAI	31.91	300	P	55 11.00	-0.6
SBF	32.86	296	eP	55 19.80	-0.2
	0.8s		21.50nm		5.1mb
HFS	32.91	327	eP	55 18.20	-1.9
	0.7s		5.60nm		4.6mb
Z	20s		3.69um		5.1Msz
			e	55 23.90	20km
			ePP	56 21.00	
DOI	32.98	297	P	55 21.00	-0.1
LPG	33.32	299	eP	55 24.30	0.0
	0.8s		13.45nm		4.9mb
LPL	33.34	299	eP	55 24.20	-0.1
	0.6s		7.20nm		4.8mb
BNI	33.38	298	P	55 24.00	-0.6
SOD	33.49	344	eP	55 21.00	-4.1X
HAU	33.67	304	eP	55 25.80	-1.2
	0.8s		8.05nm		4.7mb
GBA	33.71	126	Pd	55 28.30	0.8
	0.9s		11.70nm		4.8mb
WTS	33.84	311	eP	55 31.00	2.7
	1.0s		13.00nm		4.8mb
MEM	34.14	308	P	55 27.80	-3.0X
ENN	34.21	308	eP	55 34.50	3.0X
	1.0s		23.00nm		5.1mb
NAO	34.48	327	P	55 31.70	-2.1
	0.6s		1.80nm		4.2mb
DOU	34.98	307	Pc	55 40.50	2.4
	0.8s		8.30nm		4.7mb
L8F	35.25	302	eP	55 39.80	-0.7
	0.8s		6.05nm		4.5mb
LOR	35.33	302	eP	55 40.10	-1.1
	0.8s		7.40nm		4.6mb
SMF	35.34	301	eP	55 40.80	-0.5
	0.7s		5.50nm		4.6mb
KEV	35.40	347	eP	55 34.00	-7.5X
SSF	35.57	302	eP	55 42.30	-0.9
	0.6s		2.70nm		4.3mb
AVF	35.68	301	eP	55 43.20	-0.9
	0.7s		8.80nm		4.8mb
MAF	36.23	300	eP	55 48.60	-0.2
	0.8s		9.40nm		4.7mb
TCF	36.48	301	eP	55 50.60	-0.3
	0.6s		5.40nm		4.6mb
CAF	36.65	298	eP	55 52.00	-0.4
	0.6s		4.50nm		4.5mb
LFF	37.59	298	eP	56 00.20	0.0
	0.6s		7.20nm		4.6mb
LDF	38.01	304	eP	56 03.50	-0.2
	0.6s		12.65nm		4.9mb
MFF	38.09	301	eP	56 03.80	-0.6
	0.8s		16.10nm		4.9mb
FLN	38.24	305	eP	56 05.10	-0.5
	0.6s		10.80nm		4.8mb
LPF	38.63	303	eP	56 08.50	-0.4
	0.7s		9.90nm		4.6mb
EKA	40.15	315	Pd	56 23.70	2.2
	0.7s		4.40nm		4.3mb
BCAO	43.04	229	ePd	56 46.00	0.4
	0.9s		18.00nm		4.8mb
CD2	44.70	81	P	57 03.20	4.2X
KMI	46.32	89	eP	57 13.00	0.9
CHG	46.44	99	eP	57 12.00	-0.8
XAN	47.61	75	eP	57 22.40	0.4
GYA	48.87	85	eP	57 32.00	0.1
KIC	58.07	253	(P)	58 40.00	0.2
CIR	59.88	200	iPd	58 50.50	-1.7
BUL	59.93	203	iPd	58 41.00	-11.7X
			ipP	58 46.80	19km
MBC	67.18	357	eP	59 39.00	-0.6
	0.5s		7.00nm		5.1mb
FRB	68.76	335	eP	59 49.00	-0.6
YKA	80.41	353	eP	00 55.80	-0.8
	0.9s		2.20nm		4.2mb
S.D. = 1.2 on 65 of 73 obs.					

* JUN 20, 1990 23h 55m 46.87± 0.66s
37.420 N ±14.4km 50.006 E ± 9.2km
DEPTH = 10.0km (geophysicist)
4.4mb (3 obs.)
CASPIAN SEA (338)

KER	3.86	218	eP	56 47.00	-0.7
MHI	7.69	95	eP	57 42.00	0.3
	0.8s		44.78nm		5.7mb X
			eS	59 17.00	
OUE	15.81	112	eP	59 36.00	4.7X
KHC	28.72	306	eP	01 51.50	5.3X
CLL	29.53	310	eP	01 59.00	5.6X
GKN	30.47	98	P	02 02.00	-0.2
DMN	31.02	98	P	02 06.80	-0.4
PKI	31.28	98	P	02 09.20	-0.3
SBF	32.66	295	eP	02 19.10	-2.0
	0.6s		7.20nm		4.8mb
LPL	33.09	298	eP	02 24.10	-0.9
	0.5s		2.20nm		4.3mb
BNI	33.14	297	P	02 26.00	0.6
NAI	40.40	201	eP	03 29.50	2.5
CHTO	46.42	100	P	04 14.00	-1.6
MBC	66.41	357	eP	06 40.00	2.4
	0.7s		1.00nm		4.1mb
FRB	68.12	335	eP	06 49.00	0.4
S.D. = 1.5 on 12 of 15 obs.					

JUN 21, 1990 00h 12m 15.58± 0.64s
42.800 N ± 5.5km 12.582 E ±11.3km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

ASS	0.28	12	Pc	12 21.00	-0.4
			eSg	12 25.00	
ARV	0.75	21	Pd	12 29.00	-1.2
			eSg	12 40.90	
CRE	0.95	331	P	12 35.00	1.3
RMP	0.99	175	P	12 34.60	0.2
			eSg	12 49.00	
AZI	1.03	142	P	12 35.50	0.5
			eSg	12 50.50	
RDP	1.05	174	P	12 35.50	0.1
RSM	1.13	355	P	12 39.00	2.3
SFI	1.24	335	P	12 38.70	0.1
PGD	1.24	330	P	12 38.50	-0.3
			eSg	12 56.50	
SDI	1.43	140	P	12 41.00	-0.6
MME	1.95	316	P	12 47.30	-2.0
S.D. = 1.3 on 11 of 11 obs.					

JUN 21, 1990 00h 22m 33.47± 0.53s
37.326 N ± 8.7km 49.415 E ± 7.8km
DEPTH = 10.0km (geophysicist)
4.6mb (11 obs.)
CASPIAN SEA (338)

KER	3.51	213	eP	23 30.00	0.7
OUE	16.22	111	eP	26 22.60	-0.5
SDI	27.68	290	P	28 36.50	12.9X
AZI	27.95	291	P	28 30.50	4.6X
			eSg	28 45.00	
AOU	27.96	292	P	28 24.20	-1.9
ARV	28.29	294	Pd	28 24.80	-4.1X
			eSg	28 36.40	
KHC	28.39	306	eP	28 31.40	1.6
ASS	28.49	293	P	28 17.10	-13.8X
			eSg	28 21.50	
RDP	28.50	290	P	28 31.60	0.7
RMP	28.51	291	P	28 30.60	-0.4
CRE	29.01	294	P	28 31.00	-4.5X
			eSg	28 46.50	
SFI	29.08	295	P	28 36.50	0.5
			eSg	28 54.00	
CLL	29.23	310	ePd	28 38.00	0.7
	0.9s		9.00nm		4.6mb
SOTA	29.69	302	iPd	28 41.60	0.0
	0.6s		10.80nm		4.8mb
PGF	31.21	292	eP	28 54.50	-0.6
HFS	32.15	327	eP	29 03.10	0.0
	1.1s		9.00nm		4.6mb
SBF	32.27	295	eP	29 04.90	0.5
	0.7s		11.00nm		4.9mb
LPG	32.70	298	eP	29 08.70	0.3
LPL	32.72	298	eP	29 08.70	0.3
BNI	32.77	297	P	29 09.00	0.3
AVF	35.04	300	eP	29 27.70	-0.5
	1.0s		9.00nm		4.6mb
MAF	35.60	300	eP	29 32.90	-0.2
	0.7s		5.50nm		4.5mb
CAF	36.04	297	eP	29 35.70	-1.1
	0.8s		4.05nm		4.3mb
LFF	36.98	298	eP	29 43.70	-0.9
	0.6s		6.30nm		4.6mb
LDF	37.35	304	eP	29 47.60	-0.1
	0.8s		10.75nm		4.7mb
MFF	37.46	300	eP	29 48.40	-0.2
	0.7s		8.80nm		4.6mb
FLN	37.58	304	eP	29 49.40	-0.2
LPF	37.98	303	eP	29 52.40	-0.6
BCAO	43.24	228	ePc	30 23.00	-13.7X
	1.0s		6.00nm		
MBC	66.48	357	eP	33 25.50	0.8
	0.7s		1.00nm		4.1mb
FRB	68.00	335	eP	33 35.00	0.5
S.D. = 0.8 on 25 of 31 obs.					

* JUN 21, 1990 00h 35m 51.87± 0.93s
37.462 N ± 7.6km 48.961 E ±12.8km
DEPTH = 10.0km (geophysicist)
4.5mb (13 obs.)
NORTHWESTERN IRAN (345)

TAB	2.17	287	eP	36 28.00	-0.7
KER	3.45	206	eP	36 47.00	0.2
CLL	28.86	310	ePd	41 54.00	1.6
SUF	28.89	338	eP	41 53.00	0.4
PGF	30.82	292	eP	42 09.70	-0.4
HFS	31.84	327	eP	42 19.00	0.3
	0.5s		1.80nm		4.2mb
SBF	31.89	295	eP	42 19.40	0.0
	0.6s		4.50nm		4.6mb
LPG	32.32	298	eP	42 24.00	0.6
	0.6s		2.70nm		4.4mb
LPL	32.33	298	eP	42 23.80	0.3
	0.6s		2.70nm		4.4mb
BNI	32.38	297	P	42 24.50	0.7
FRF	32.47	294	eP	42 24.20	-0.2
	0.5s		8.00nm		4.9mb
HAU	32.65	303	eP	42 25.70	-0.2
	0.8s		5.35nm		4.5mb
LOR	34.31	301	eP	42 40.00	-0.4
SMF	34.33	300	eP	42 40.40	-0.1
AVF	34.66	300	eP	42 43.10	-0.3
	0.7s		3.85nm		4.4mb
MAF	35.22	299	eP	42 48.30	0.1
	0.7s		5.50nm		4.5mb
TCF	35.47	299	eP	42 50.30	0.0

21d 00h

	0.7s	2.75nm		4.2mb	
CAF	35.66	297 eP	42	51.10	-0.8
	0.7s	2.75nm		4.2mb	
RJF	36.01	298 eP	42	55.60	0.7
LFF	36.59	297 eP	43	00.00	0.3
LDF	36.97	303 eP	43	02.70	-0.2
	0.6s	7.20nm		4.6mb	
MFF	37.08	300 eP	43	03.60	-0.2
	0.8s	8.05nm		4.5mb	
FLN	37.21	304 eP	43	04.60	-0.3
	0.6s	9.00nm		4.7mb	
LPF	37.60	303 eP	43	08.20	0.0
MBC	66.33	357 eP	46	41.00	-1.1
	S.D. = 0.6	on 25 of 25 obs.			

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* JUN 21, 1990 00h 52m 35.36± 0.60s
36.804 N ±10.8km 49.568 E ± 7.3km
DEPTH = 10.0km (geophysicist)
4.8mb (30 obs.)
WESTERN IRAN (347)

TAB	2.87	297 iPc	53	25.00	2.8
KER	3.16	220 eP	53	36.00	9.7X
BBTK	13.54	288 eP	55	54.00	4.0X
QUE	15.92	109 eP	56	23.50	2.3
RDO	19.16	290 eP	57	02.00	0.6
KDZ	19.30	292 iPd	57	04.00	0.8
PVL	19.60	297 eP	57	07.00	0.4
MLR	19.74	303 eP	57	10.00	1.7
		e	02	00.00	
		e	09	40.00	
		e	20	39.00	
RZN	19.83	292 eP	57	10.00	0.7
VAM	20.53	274 eP	57	16.50	0.1
MMB	20.56	291 iPd	57	17.00	0.3
ATH	20.56	281 eP	57	16.50	-0.2
VTS	21.05	294 eP	57	23.00	1.1
VLI	21.32	278 eP	57	26.50	2.0
VAY	21.41	290 eP	57	27.00	1.7
ITM	22.06	279 eP	57	31.00	-0.9
OHR	22.73	290 eP	57	38.50	-0.1
KEK	23.51	286 eP	57	46.50	0.4
KRA	25.08	311 eP	58	01.60	0.4
	0.5s	36.00nm		5.3mb	
ZST	26.31	306 e(P)	58	14.40	1.6
SOI	26.56	283 P	58	14.50	-0.6
KSP	27.54	311 ePd	58	24.70	0.7
SDI	27.98	291 P	58	28.00	-0.2
AZI	28.26	292 P	58	31.00	0.5
PRU	28.38	309 eP	58	31.30	-0.3
KHC	28.80	307 iP	58	35.00	-0.4
CRE	29.34	295 P	58	41.50	1.1
PGD	29.50	296 P	58	42.50	0.5
CLL	29.66	311 iPc	58	43.10	0.0
	1.0s	24.00nm		5.0mb	
SUF	29.68	338 eP	58	43.00	-0.2
SQTA	30.07	302 iPc	58	46.20	-0.7
	0.6s	14.60nm		5.0mb	
GRF	30.41	307 ePc	58	50.00	0.2
BOB	31.15	297 P	58	57.00	0.6
PGF	31.52	293 eP	58	59.30	-0.5
	0.8s	13.45nm		4.9mb	
VAI	31.65	300 P	58	59.50	-1.2
SBF	32.60	296 eP	59	09.10	-0.1
	0.6s	21.65nm		5.3mb	
HFS	32.66	327 eP	59	08.20	-1.1
	1.1s	10.50nm		4.7mb	
DOI	32.72	297 P	59	08.50	-1.7
CDF	32.82	304 eP	59	09.00	-2.0
	0.7s	3.30nm		4.4mb	
LPG	33.06	299 eP	59	12.80	-0.6
	0.6s	10.80nm		5.0mb	
LPL	33.07	299 eP	59	12.80	-0.6
	0.6s	8.55nm		4.9mb	
BSF	33.10	303 eP	59	12.00	-1.5
	0.7s	4.40nm		4.5mb	
BNI	33.12	298 P	59	13.00	-0.7
FRF	33.19	295 eP	59	13.70	-0.5
	0.9s	16.40nm		5.0mb	
LMR	33.30	295 eP	59	14.30	-0.8
HAU	33.41	303 eP	59	15.20	-0.9
	0.7s	8.80nm		4.8mb	
WTS	33.57	311 eP	59	18.50	1.1
	0.8s	10.00nm		4.8mb	
MEM	33.87	308 P	59	20.70	0.8
ENN	33.94	308 eP	59	21.50	0.9
	0.8s	18.00nm		5.1mb	
NAO	34.23	327 P	59	22.20	-0.8
	1.1s	6.10nm		4.4mb	
DOU	34.72	307 Pc	59	28.40	1.1
		e	59	42.20	
LBF	34.99	301 eP	59	28.70	-1.0
	0.8s	6.70nm		4.6mb	
LOR	35.07	302 eP	59	29.40	-1.0
SMF	35.08	301 iPc	59	30.00	-0.5
	0.6s	5.85nm		4.6mb	
SSF	35.31	302 eP	59	32.30	-0.1
	0.6s	4.50nm		4.5mb	
AVF	35.41	301 iPc	59	32.50	-0.8
	0.9s	16.40nm		4.9mb	
MAF	35.97	300 eP	59	38.00	0.0
	0.8s	11.40nm		4.8mb	
TCF	36.22	300 eP	59	40.00	-0.1
	0.9s	11.45nm		4.7mb	
RJF	36.75	299 eP	59	45.00	0.4
	0.7s	6.60nm		4.5mb	
LPO	37.03	298 eP	59	46.80	-0.2
LFF	37.33	298 eP	59	49.40	0.0
	0.7s	11.00nm		4.7mb	
LDF	37.74	304 iPc	59	52.20	-0.7
	0.6s	14.45nm		4.9mb	
MFF	37.83	301 iPc	59	53.00	-0.6
	0.8s	17.45nm		4.9mb	
FLN	37.98	304 iPc	59	54.40	-0.4
	0.6s	14.45nm		4.9mb	
LPF	38.37	303 iPc	59	57.40	-0.7
	0.8s	21.50nm		4.9mb	
EKA	39.89	315 Pd	00	10.60	-0.1
	0.6s	5.40nm		4.4mb	
TOL	41.64	291 eP	00	25.00	-0.3
BCAO	42.99	229 iPc	00	35.00	-1.6
	1.1s	6.00nm		4.2mb	
MBC	67.01	357 eP	03	30.00	0.1
	0.6s	1.00nm		4.2mb	
FRB	68.53	335 ePc	03	39.30	-0.3
	S.D. = 1.0	on 68 of 70 obs.			

& JUN 21, 1990 00h 53m 59.40s
61.040 N 150.753 W
DEPTH = 39.4km
SOUTHERN ALASKA (2)
<AGS-P>.

SUA	0.43	1 iP	54	08.93	-0.3
		iS	54	17.06	
SLKM	0.59	154 eP	54	10.85	-0.6
		eS	54	20.90	
PMS	0.61	70 iP	54	11.28	-0.5
SPU	0.65	283 iP	54	11.63	-0.6
		iS	54	21.70	
CGLM	0.66	294 iP	54	12.03	-0.5
		eS	54	21.66	
CRP	0.72	289 iP	54	12.81	-0.5
		eS	54	23.77	
PWA	0.74	34 eP	54	13.02	-0.5
NCG	0.77	299 iP	54	13.38	-0.6
		iS	54	24.62	
RDT	0.94	241 iP	54	15.28	-1.0
PLRM	0.96	54 eP	54	15.47	-1.0
SKT	1.01	339 eP	54	16.51	-0.9
NNL	1.04	195 eP	54	18.24	0.6
SEW	1.14	145 eP	54	17.98	-1.1
GHO	1.15	49 iP	54	18.45	-0.8
RED	1.17	239 eP	54	18.64	-1.0
		eS	54	34.24	
SML	1.40	55 eP	54	21.79	-1.0
CNPM	1.54	189 eP	54	23.90	-0.9
GLI	1.79	94 eP	54	25.92	-2.5
SCM	1.83	63 eP	54	27.71	-1.3
VZW	2.04	88 eP	54	29.97	-2.1
VLZ	2.15	86 eP	54	31.63	-1.9
KLU	2.38	77 eP	54	34.70	-2.2
TOA	2.44	62 eP	54	36.72	-1.0
KTH	2.52	358 eP	54	38.65	-0.3
CDD	2.57	216 eP	54	38.91	-0.6
	25 obs. ossocioted				

? JUN 21, 1990 01h 11m 18.96± 3.34s
31.833 S ±10.6km 68.116 W ±28.9km
DEPTH = 113.1 ± 22.7 km
SAN JUAN PROVINCE, ARGENTINA (137)

CFA	0.25	335 iPd	11	35.50	0.1
		eS	11	46.50	
RTCV	0.36	265 ePc	11	36.00	0.4
ZON	0.56	301 iPd	11	36.00	-0.9
		eS	11	44.00	
RTLL	0.59	329 iPc	11	36.90	-0.1
RTBS	1.15	278 iPc	11	42.50	0.2
RTRS	2.02	325 iPc	11	53.10	0.3
JACH	2.26	247 iPd	11	56.50	0.4
PEL	2.53	238 iPd	11	59.60	0.0
		iS	12	30.00	
PCH	2.70	228 eP	12	02.50	0.7
ROCH	2.70	244 iP	12	02.00	0.0
		iS	12	33.80	
CHCH	2.99	225 eP	12	06.50	0.8
		i	24	50.00	
TACH	2.99	232 iP	12	05.50	-0.2
		iS	12	41.00	
LNV	3.49	232 eP	12	10.50	-1.8
		i	12	42.50	
	S.D. = 0.8	on 13 of 13 obs.			

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* JUN 21, 1990 01h 16m 09.66± 0.85s
37.369 N ±12.7km 49.357 E ±11.6km
DEPTH = 10.0km (geophysicist)
4.3mb (3 obs.)
CASPIAN SEA (338)

TAB	2.50	287 eP	16	49.00	-2.2
KER	3.52	212 eP	17	06.00	0.3
MHI	8.20	94 eP	18	07.00	-4.6X
		eS	19	42.00	
QUE	16.27	111 eP	19	59.40	-0.6
SKO	21.93	291 eP	21	08.50	3.6X
OHR	22.39	288 eP	21	11.50	2.0
HFS	32.09	327 eP	22	38.90	0.2
	1.3s	21.40nm		4.9mb	
BNI	32.71	297 P	22	32.00	-12.4X
NAO	33.67	327 P	22	52.70	0.3
	0.7s	2.40nm		4.2mb	
MBC	66.43	357 eP	27	01.00	0.4
	0.6s	1.00nm		4.2mb	
FRB	67.95	335 eP	27	10.00	-0.3
	S.D. = 1.4	on 8 of 11 obs.			

JUN 21, 1990 02h 08m 51.07± 0.16s
36.789 N ± 3.3km 49.789 E ± 2.0km
DEPTH = 10.0km (geophysicist)
5.4mb (70 obs.) 4.8Msz (8 obs.)
WESTERN IRAN (347)

TAB	3.04	296 iP-	09	43.00	2.8X
KER	3.27	223 eP	09	36.00	-7.5X
MHI	7.83	91 iPc	10	47.00	-0.8
	0.8s	122.39nm		6.2mb	
		eS	12	18.00	
GAZ	10.07	276 eP	11	27.00	8.2X
MJMA	11.56	201 ePc	11	34.00	-5.1X
BHL	11.90	260 P	11	48.00	4.2X
		S	15	22.00	
QASM	11.92	208 iPc	11	38.30	-5.8X
RYD	12.34	194 iPc	11	45.50	-4.2X
DSI	13.01	251 e(P)	11	51.00	-7.6X
LFK	13.25	268 iP	12	04.20	2.4
KAS	13.26	295 eP	12	05.00	3.0X
BBTK	13.71	288 iP	12	10.00	2.0
AFIF	13.86	206 ePc	12	09.90	-0.1
PRNI	13.90	247 eP	12	09.00	-1.4
MBH	14.29	245 eP	12	18.00	2.5X
BADA	14.92	241 eP	12	23.70	0.0
BCK	15.33	278 eP	12	31.80	2.6X
WAJH	15.45	231 ePc	12	32.30	1.7
GPA	15.64	289 iP	12	33.70	0.6
QUE	15.75	110 iPc	12	38.10	3.4X
	1.5s	608.33nm		5.6mb	
		e(S)	15	37.20	
		e	17	28.50	
ELL	15.94	276 iP	12	39.50	2.5
KHL	16.15	282 eP	12	41.00	1.3
HRT	16.19	291 eP	12	41.90	1.7
KSL	16.27	274 eP	12	42.50	1.3
IZI	16.28	289 eP	12	42.00	0.7
GBZT	16.35	290 eP	12	42.00	-0.2
YLV	16.38	290 eP	12	42.80	0.2
ITU	16.72	291 iPc	12	47.00	0.2
HLW	16.88	251 eP	12	49.00	0.1
		eS	16	05.30	
YER	17.19	278 eP	12	53.00	0.1
EDC	17.50	288 eP	12	56.80	0.1

DMK	17.76	293	eP	13	00.00	0.1
PSN	17.85	299	iPc	13	02.00	1.0
TLB	18.21	302	ePc	13	07.00	1.6
SMG	18.29	280	eP	13	08.00	1.5
EZN	18.65	287	iP	13	11.40	0.5
JMB	18.73	295	eP	13	14.00	2.2
ALN	18.93	290	eP	13	15.00	0.7
PPE	19.04	307	ePc	13	15.00	-0.6
RDO	19.33	290	iPd	13	19.00	-0.2
CLI	19.38	307	iPc	13	20.00	0.2
APE	19.39	278	eP	13	22.20	2.2
DIM	19.44	293	iPd	13	21.00	0.5
IAS	19.46	309	eP	13	18.00	-2.6X
ABHA	19.48	200	iPc	13	22.70	1.3
VRI	19.50	305	ePd	13	20.50	-0.7
AKSR	19.50	232	eP	13	22.00	0.7
KMTA	19.53	200	iPc	13	22.50	0.5
SRAT	19.57	199	iPc	13	22.70	0.2
AGRW	19.63	233	eP	13	23.00	0.3
AKRL	19.68	233	iPc	13	23.00	-0.3
PVL	19.77	297	iPd	13	24.00	0.0
AGAL	19.77	232	eP	13	25.00	0.8
MLR	19.90	303	iPd	13	26.00	0.4
RZN	20.00	292	ePd	13	26.00	-0.8
PLD	20.06	293	eP	13	46.00	18.9X
PTT	20.09	308	eP	13	27.50	0.0
MTUR	20.42	302	ePc	13	32.00	1.0
OUR	20.46	288	eP	13	31.30	-0.1
PGB	20.51	294	ePd	13	32.00	0.1
VAM	20.71	274	eP	13	33.50	-0.5
MMB	20.73	291	iPd	13	34.00	-0.2
ATH	20.74	281	eP	13	34.50	0.3
SRS	20.80	290	eP	13	35.00	0.1
SOH	20.96	289	eP	13	37.00	0.4
NEO	21.05	285	iPc	13	37.00	-0.5
VTS	21.21	294	eP	13	23.00	-16.3X
THE	21.25	289	eP	13	40.40	1.0
			iS	17	40.00	
KNT	21.32	290	eP	13	41.10	0.9
VLI	21.50	278	eP	13	40.00	-2.0
VAY	21.58	290	iP	13	42.60	-0.2
	1.1s	185.00nm			5.4mb	
		i		13	45.30	
LIT	21.60	287	eP	13	43.00	-0.1
GRG	21.69	289	eP	13	44.10	0.2
AGG	21.75	284	eP	13	46.60	2.0
DEV	22.05	303	ePc	13	50.00	2.5
ITM	22.23	279	eP	13	50.00	0.6
FNA	22.46	289	eP	13	52.00	0.3
SKO	22.46	292	iP	13	51.70	0.1
	1.0s	89.00nm			5.2mb	
Z	17s	5.29um			5.0MszX	
		i		13	54.20	
		i		14	17.60	
		iS		18	03.00	
		i(ScP)		21	09.00	
		LR		22	36.00	
VLS	23.17	282	eP	13	58.00	-0.7
IGT	23.28	286	eP	14	00.70	1.1
BEO	23.52	299	eP	14	02.00	0.1
KEK	23.68	286	eP	14	03.90	0.4
NDI	24.39	101	iPc	14	12.00	1.5
	0.7s	71.92nm			5.4mb	
		eS		18	40.00	
PSZ	24.58	306	eP	14	14.10	1.8
SPC	24.74	309	iP	14	14.10	0.2
BUD	25.04	305	eP	14	18.00	1.4
LCI	25.07	288	P	14	09.00	-7.9X
KRA	25.22	311	iPd	14	18.30	0.0
	0.7s	56.00nm			5.4mb	
Z	14s	1.30um			4.6MszX	
E	14s	1.80um				
		e		14	22.00	
SRO	25.58	305	iPd	14	22.70	1.0
BRT	25.63	289	P	14	21.00	-1.2
ARO	25.92	196	iP+	14	28.80	3.6X
ORI	26.24	287	P	14	27.80	-0.1
RAC	26.29	310	eP	14	29.00	0.8
		e		14	31.00	
TDS	26.35	287	P	14	32.50	3.6X
GRI	26.36	285	P	14	29.30	0.2
ZST	26.46	306	iP	14	29.80	-0.1
		i		14	44.10	
		i		14	53.90	
		i		15	28.80	
SOP	26.71	305	iPd	14	32.40	0.3
SOI	26.74	283	P	14	32.00	-0.5
ZAG	26.78	300	eP	14	32.50	-0.3
PTJ	26.81	300	eP	14	33.00	-0.2
VKA	26.99	306	iPd	14	34.90	0.2
	2.2s	246.00nm			5.5mb	
		i		14	38.30	
		e		15	49.00	
		e		16	12.00	
		e		19	40.00	
SGO	27.08	289	P	14	35.00	-0.5
ATN	27.19	283	P	14	36.00	-0.6
VBY	27.25	299	iPc	14	38.30	1.2
BSS	27.45	289	P	14	39.00	0.1
DUI	27.67	291	Pc	14	42.00	0.9
KSP	27.68	311	iPd	14	41.20	0.2
	1.3s	133.00nm			5.5mb	
		id		14	45.70	
		e		21	41.00	
MEU	27.77	281	P	14	44.10	2.1
LJU	27.82	301	ePd	14	42.80	0.5
MNO	27.82	283	P	14	44.00	1.4
CEY	27.86	300	ePd	14	43.10	0.4
RFI	28.04	290	P	14	44.90	0.6
SDI	28.15	291	Pc	14	45.50	0.1
VOY	28.26	300	eP	14	46.30	-0.1
TRI	28.32	300	iPd	14	46.50	-0.2
		iS		19	56.00	
GIB	28.34	283	P	14	48.00	0.9
KMR	28.38	305	iP-	14	47.40	0.0
		i		15	13.00	
		i		15	31.30	
AZI	28.43	292	Pc	14	48.90	1.1
AQU	28.44	293	P	14	48.70	0.7
PRU	28.53	309	Pd	14	47.60	-1.0
Z	20s	1.40um			4.6Msz	
N	19s	1.40um				
E	18s	1.30um				
		e		14	52.00	
NUR	28.63	334	iP	14	49.00	-0.4
	0.7s	53.40nm			5.4mb	
ARV	28.78	295	P	14	51.40	0.4
KHC	28.95	307	iPd	14	52.30	-0.2
	1.4s	58.50nm			5.2mb	
RMP	28.98	292	P	14	54.00	1.2
ASS	28.98	294	P	14	53.80	0.9
FVI	29.09	301	P	14	53.80	0.2
RSM	29.14	296	P	14	52.70	-1.5
BHG	29.16	304	iPd	14	54.30	-0.1
	0.8s	163.00nm			5.9mb	
WET	29.40	307	eP	14	55.90	-0.6
	1.2s	129.00nm			5.6mb	
CRE	29.50	295	P	14	58.50	0.9
WMQ	29.55	64	eP	14	58.50	0.5
Z	20s	1.40um			4.6Msz	
N	13s	1.30um				
E	12s	1.70um				
SFI	29.58	296	P	14	59.50	1.4
PGD	29.67	296	Pc	15	00.60	1.4
SUF	29.76	338	iP	14	59.10	-0.5
	0.7s	66.50nm			5.6mb	
CLL	29.80	311	iPd	15	00.00	-0.1
	1.0s	145.00nm			5.8mb	
		i		15	13.00	
		e(S)		20	15.00	
FIR	30.01	296	eP	15	01.00	-0.9
		iS		20	02.00	
SQTA	30.22	302	iPd	15	03.20	-0.8
	0.6s	115.00nm			5.9mb	
		i		15	08.50	
		i		16	19.00	
		i		18	04.80	
		i		20	02.00	
HOF	30.27	309	iPc	15	04.20	-0.1
FUR	30.29	304	eP	15	04.00	-0.5
OGA	30.31	302	iPd	15	04.50	-0.4
	1.2s	164.00nm			5.8mb	
MME	30.41	296	P	15	06.70	0.9
BDI	30.48	296	P	15	06.00	-0.3
MOX	30.50	309	iP	15	06.00	-0.3
		i		15	11.00	
PII	30.54	295	P	15	06.00	-0.6
GRF	30.57	307	eP	15	06.50	-0.4
	0.9s	28.00nm			5.1mb	
GKN	30.57	97	P	15	06.80	-0.5
SAL	30.57	299	P	15	07.10	0.2
OSS	30.90	301	ePd	15	10.00	-0.1
UPP	30.94	328	iP	15	08.60	-1.3
		i		21	03.00	
DMN	31.11	97	P	15	12.00	-0.2
MDI	31.15	299	P	15	11.50	-0.5
BOB	31.31	297	Pd	15	14.00	0.4
VDL	31.35	301	eP	15	14.30	0.2
PKI	31.37	97	P	15	14.20	-0.3
COP	31.48	319	eP	15	15.00	0.2
	0.8s	38.81nm			5.4mb	
SAX	31.49	302	ePd	15	14.50	-0.9
GUN	31.60	96	P	15	16.40	-0.2
PGF	31.69	293	P	15	16.50	-0.5
LLS	31.70	301	ePd	15	16.10	-1.0
TMA	31.75	300	eP	15	16.80	-0.7
CGL	31.79	287	P	15	18.50	0.6
VAI	31.81	300	Pd	15	16.70	-1.1
HYB	31.87	120	eP	15	18.50	-0.2
PCP	31.96	297	P	15	17.49	-1.7
SLE	32.11	303	eP	15	19.40	-1.1
CKI	32.15	297	P	15	18.70	-2.1
ZLA	32.16	303	eP	15	20.00	-0.9
FIN	32.20	296	P	15	19.43	-1.9
ORX	32.36	299	P	15	19.43	-3.3X
ORO	32.36	299	P	15	20.00	-2.8X
MMK	32.38	300	eP	15	22.00	-1.1
TNS	32.42	308	ePd	15	22.90	-0.3
FEL	32.44	303	P	15	22.00	-1.5
IMI	32.44	296	P	15	22.61	-0.8
ROB	32.44	297	P	15	22.51	-0.9
DIX	32.77	300	ePd	15	25.90	-0.6
HFS	32.77	327	eP	15	25.30	-0.7
	0.9s	121.30nm			5.8mb	
ENR	32.77	296	P	15	25.48	-0.8
SBF	32.77	296	eP	15	25.40	-0.9
GWF	32.80	305	P	15	25.00	-1.4
STV	32.84	297	P	15	25.38	-1.5
RSP	32.87	298	P	15	24.25	-2.9X
DOI	32.89	297	Pc	15	25.80	-1.5
TOUF	32.90	296	P	15	28.50	0.9
WLS	32.92	304	P	15	26.00	-1.6
LSD	32.94	299	P	15	26.92	-1.1
CDF	32.97	304	eP	15	25.60	-2.5
	0.9s	29.50nm			5.2mb	
PZZ	32.99	297	P	15	26.10	-2.2
EMS	33.10	300	eP	15	28.50	-0.8
CALN	33.17	296	P	15	30.00	0.1
RRL	33.21	298	P	15	29.79	-0.5
LOMF	33.21	302	P	15	29.00	-1.1
LPG	33.22	299	eP	15	29.30	-1.2
	0.7s	3.85nm			4.4mb	
LPL	33.24	299	iPc	15	29.10	-1.4
BSF	33.26	303	eP	15	28.20	-2.4
	1.1s	46.40nm			5.3mb	
BNI	33.28	298	P	15	29.60	-1.2
SOD	33.34	344	iP	15	32.10	1.2
FRF	33.36	295	eP	15	30.20	-1.1
	1.1s	107.45nm			5.7mb	
LMR	33.47	295	eP	15	30.80	-1.5
	0.9s	24.55nm			5.1mb	
HAU	33.57	303	eP	15	31.10	-2.0
	1.0s	80.00nm			5.6mb	
LRG	33.57	295	eP	15	31.90	-1.3
	1.5s	182.80nm			5.8mb	
WTS	33.72	311	eP	15	35.50	1.2
	1.0s	94.00nm			5.7mb	
		e		15	40.50	
GBA	33.82	126	Pd	15	35.80	0.2
	0.8s	16.90nm			5.0mb	
VITF	33.82	304	P	15	33.50	-1.8
WIT	33.95	312	eP	15	37.00	0.7
MEM	34.02	308	iPd	15	37.73	0.8
ENN	34.09	308	iPd	15	38.30	0.7
	1.0s	147.00nm			5.9mb	
NAO	34.34	327	P	15	39.00	-0.7
	0.8s	35.80nm			5.3mb	
DOU	34.87	307	P	15	45.00	0.7
	1.0s	105.50nm			5.7mb	
LSA	35.10	89	P	15	48.20	1.1
SNF	35.10	308	iPd	15	47.04	0.8
LBF	35.14	301	eP	15	45.10	-1.7
	1.1s	65.95nm			5.4mb	
LOR	35.23	302	eP	15	45.80	-1.6
	1.1s	67.15nm			5.4mb	
SMF	35.24	301	eP	15	46.10	-1.4
	1.4s	137.25nm			5.6mb	
KEV	35.25	346	iP	15	48.80	1.5
	0.7s	12.00nm			4.9mb	
PLDF	35.41	300	P	15	48.37	-0.7
KTK1	35.42	344	iP	15	49.90	1.1

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SSF	35.47	302	iPc	15 48.00	-1.5
	1.2s	87.75nm		5.5mb	
RGS	35.53	330	iP	15 51.40	1.6
AVF	35.57	301	iPc	15 48.90	-1.4
	1.0s	72.00nm		5.5mb	
L8L	35.70	298	P	15 50.92	-0.5
NSS	35.72	333	eP	15 51.66	0.3
AGO	35.74	300	P	15 51.46	-0.4
PYM	35.84	299	P	15 52.27	-0.5
8GF	35.93	301	iPc	15 51.90	-1.5
	1.3s	54.15nm		5.3mb	
MAF	36.13	300	eP	15 54.40	-0.7
TCF	36.38	300	iPc	15 56.40	-0.8
MOL	36.51	328	iPc	15 58.71	0.7
CAF	36.55	298	iPc	15 57.80	-0.9
	1.1s	50.05nm		5.2mb	
8ER	36.66	324	eP	16 04.20	4.9X
LSF	36.85	300	eP	16 00.00	-1.1
	1.2s	86.30nm		5.4mb	
TRO	36.89	343	iP	16 02.45	1.3
RJF	36.91	299	eP	16 01.30	-0.4
	1.3s	122.75nm		5.5mb	
LPO	37.20	298	eP	16 03.20	-0.8
LOF	37.31	339	eP	16 04.87	0.2
SHL	37.44	95	iP	16 06.30	-0.2
LFF	37.49	298	eP	16 05.70	-0.8
	1.1s	114.75nm		5.6mb	
LDF	37.90	304	eP	16 08.60	-1.3
	0.7s	74.95nm		5.6mb	
MFF	37.99	301	eP	16 09.40	-1.3
	1.1s	146.50nm		5.7mb	
FLN	38.13	304	eP	16 10.50	-1.3
	0.7s	50.70nm		5.4mb	
E8R	38.22	292	eP	16 13.00	0.3
EROQ	38.29	292	iPc	16 12.00	-1.2
LPF	38.52	303	iPc	16 14.10	-1.0
	1.2s	178.50nm		5.7mb	
GTA	39.05	70	iPc	16 21.00	1.2
	1.4s	100.00nm		5.3mb	
Z	20s	1.60um		4.8Msz	
N	12s	0.90um			
		S	22 18.00		
ACU	39.39	288	eP	16 21.70	-0.8
ECHE	39.57	290	iPc	16 24.40	0.4
NAI	39.75	201	iP	16 30.50	4.6X
EKA	40.03	315	Pd	16 28.30	0.7
	0.9s	39.90nm		5.1mb	
ECRI	40.13	295	eP	16 28.50	-0.1
YRH	40.76	311	eP	16 34.00	0.4
EVIA	40.95	289	iPd	16 35.20	-0.3
ENIJ	41.16	286	iPc	16 36.60	-0.5
GUD	41.72	292	eP	16 40.90	-0.9
TOL	41.81	291	eP	16 42.60	0.2
ECP	41.83	310	eP	16 43.20	0.9
DLE	41.92	312	eP	16 43.50	0.4
EBAN	42.04	289	iPd	16 44.10	-0.2
AFC	42.10	287	eP	16 44.10	-0.9
ECOG	42.11	287	eP	16 44.10	-1.0
DCN	42.36	312	eP	16 47.60	0.9
MAL	42.92	287	iPd	16 53.20	1.7
LZH	43.00	74	Pc	16 52.50	0.1
	2.5s	130.00nm		5.2mb	
Z	25s	2.40um		5.0MszX	
N	14s	1.20um			
E	13s	1.20um			
		PcP	18 40.50		
		eS	23 18.00		
8CAO	43.11	229	iPc	16 53.20	-0.1
	0.8s	39.00nm		5.2mb	
EHOR	43.25	289	iPd	16 53.30	-0.8
EPLA	43.28	292	iPc	16 54.10	-0.4
EPRU	43.48	287	iPc	16 56.50	0.4
VAL	44.23	310	eP	17 03.00	1.1
STS	44.44	297	eP	17 04.90	1.2
EVAL	44.45	289	eP	17 03.10	-0.8
IFR	44.50	283	iPd	17 05.00	0.4
CD2	44.71	81	P	17 05.40	-0.8
	0.8s	100.00nm		5.8mb	
Z	20s	0.90um		4.7Msz	
N	12s	0.80um			
PTO	44.88	294	eP	17 07.80	0.5
K8S	44.96	350	eP	17 11.50	4.0X
LIS	45.94	291	iPc	17 16.60	0.9
KMI	46.35	89	Pc	17 20.00	0.5
	1.5s	200.00nm		5.9mb	
Z	24s	1.50um		4.9MszX	
8TO	46.37	66	P	17 20.50	1.2
N	13s	0.90um			
E	13s	0.80um			
AVE	46.37	283	iP	17 18.50	-0.7
			i	17 49.00	
CHG	46.49	99	iPc	17 20.10	-0.3
	1.1s	39.87nm		5.4mb	
TIO	47.14	280	iP	17 28.50	0.9
			i	17 45.50	
BDT	47.41	101	iPc	17 27.00	-0.5
	1.0s	42.10nm		5.5mb	
HHC	47.43	65	P	17 28.00	0.3
Z	15s	1.50um		5.1MszX	
N	16s	1.70um			
E	13s	0.90um			
XAN	47.60	75	Pc	17 29.30	0.3
N	13s	1.80um			
E	14s	1.30um			
AKU	48.10	329	iP	17 34.60	2.2
	0.9s	47.06nm		5.6mb	
GYA	48.89	85	iPc	17 39.00	-0.2
E	16s	0.70um			
TIY	49.02	69	Pc	17 40.80	0.8
Z	28s	1.50um		4.8MszX	
E	17s	1.20um			
		S	24 40.00		
NST	49.19	102	eP	17 41.40	0.0
DAG	49.62	344	eP	17 44.00	0.0
	0.5s	17.61nm		5.3mb	
REY	49.73	327	iP	17 47.10	2.2
BJI	51.03	65	eP	17 55.00	-0.2
	0.9s	20.00nm		5.0mb	
Z	22s	1.05um		4.8Msz	
N	14s	1.38um			
E	13s	0.59um			
		eS	25 16.00		
TIA	53.07	69	eP	18 10.60	0.0
E	15s	1.10um			
WHN	53.20	77	eP	18 11.00	-0.7
QIZ	55.09	91	eP	18 25.30	-0.4
DL2	55.38	64	eP	18 27.00	-0.5
SNY	55.69	60	eP	18 32.80	3.1X
Z	17s	1.20um		5.0MszX	
N	13s	1.80um			
		eS	26 15.00		
NJ2	56.05	73	eP	18 31.50	-0.9
Z	18s	0.70um		4.8Msz	
CN2	56.27	58	Pc	18 33.00	-0.9
Z	18s	1.50um		5.1Msz	
N	13s	0.30um			
E	13s	0.60um			
		pP	18 43.00	33kmX	
		eS	26 26.00		
PSI	56.46	115	ePd	18 32.20	-3.4X
KIC	58.09	252	P	18 45.68	-1.4
	1.0s	61.50nm		5.6mb	
TIC	58.12	253	P	18 45.60	-1.7
SSE	58.26	73	Pc	18 48.00	-0.1
	1.0s	30.00nm		5.3mb	
LIC	58.39	253	P	18 47.80	-1.4
	0.9s	41.50nm		5.5mb	
Z	20s	1.00um		4.9Msz	
CIR	60.01	200	iPd	18 58.50	-1.7
BUL	60.05	203	iPd	18 56.90	-3.8X
	1.0s	10.00nm		4.9mb	
BFT	64.87	200	iPc	19 32.00	-0.8
	0.8s	18.66nm		5.3mb	
SLR	65.41	201	iPc	19 17.00	-19.2X
PRY	66.77	202	eP	19 47.00	2.1
MBC	67.03	357	eP	19 46.00	0.2
	0.7s	27.00nm		5.5mb	
SWZ	67.67	204	iPd	19 35.00	-15.6X
	1.2s	39.06nm			
MAT	68.20	60	eP	19 52.00	-1.9
	0.8s	10.45nm		5.1mb	
FRB	68.62	335	eP	19 56.00	0.1
HVD	70.80	202	eP	20 27.00	17.2X
SCH	73.84	327	eP	20 27.00	-0.4
INK	75.19	1	eP	20 35.00	0.1
IMA	75.88	10	eP	20 40.20	1.1
	1.8s	53.60nm		5.3mb	
FBA	77.71	8	ePc	20 50.20	1.1
TTA	78.49	12	eP	20 55.10	1.5
YKA	80.26	353	eP	21 02.90	-0.1
	1.0s	12.20nm		4.8mb	
TOA	80.61	8	eP	21 06.50	1.5
PMR	80.76	9	eP	21 06.80	1.1
	1.2s	35.20nm		5.3mb	
HBVT	84.08	323	P	21 24.00	0.8
WNY	84.45	323	P	21 26.20	1.1
RSNY	84.65	324	P	21 27.00	0.9
	1.1s	28.99nm		5.4mb	
FFC	85.68	344	iPc	21 31.50	0.5
	0.7s	15.00nm		5.3mb	
EDM	89.17	350	ePc	21 49.50	1.5
CAI	91.41	263	iPc	22 03.90	5.0X
SES	91.56	348	eP	22 01.00	1.8
PNT	93.76	353	eP	22 13.00	3.7X
NEW	94.52	351	eP	22 14.10	1.2
	1.0s	17.75nm		5.4mb	
ZOBO	121.80	273	PKP	27 51.50	3.5X

S.D. = 1.0 on 296 of 329 obs.

% JUN 21, 1990 02h 11m 55.04± 0.70s
42.846 N ± 9.2km 12.850 E ±15.5km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

ASS	0.26	328	P	12 00.50	-0.1
			eSg	12 04.40	
AQU	0.64	140	P	12 07.50	-0.4
			eSg	12 19.00	
ARV	0.66	6	P	12 08.20	0.1
			eSg	12 19.90	
AZI	0.96	153	P	12 13.00	-0.3
CRE	1.02	320	P	12 14.50	0.1
			eSg	12 29.00	
SDI	1.35	148	P	12 20.50	0.7

S.D. = 0.5 on 6 of 6 obs.

• JUN 21, 1990 02h 18m 49.25± 0.83s
37.424 N ±13.6km 49.799 E ± 9.6km
DEPTH = 10.0km (geophysicist)
CASPIAN SEA (338)

TAB	2.83	284	eP	19 35.00	-0.4
KER	3.77	216	eP	19 49.00	0.2
MHI	7.85	95	eP	20 46.00	-0.4
MBC	66.40	357	eP	29 41.00	1.1
FR8	68.05	335	eP	29 50.00	-0.5
	1.0s	82.00nm		5.9mb	X

S.D. = 0.9 on 5 of 5 obs.

? JUN 21, 1990 02h 39m 34.34± 4.05s
44.204 N ±17.4km 3.677 W ±30.6km
DEPTH = 10.0km (geophysicist)
BAY OF BISCAY (539)
ML 2.7 (LDG).

EPF	3.14	111	Pn	40 24.40	-0.5
			Sn	40 57.90	
LFF	3.24	75	Pn	40 27.30	1.1
			Sn	40 59.90	
MFF	3.45	45	Pn	40 30.20	1.0
			Sn	41 06.30	
LPO	3.52	80	Pn	40 31.40	1.3
			Sn	41 07.40	
RJF	3.86	72	Pn	40 34.60	-0.4
			Sn	41 16.40	
CAF	4.17	78	Pn	40 39.60	0.2
			Sn	41 21.70	
LSF	4.21	59	Pn	40 39.80	-0.2
			Sn	41 23.40	
TCF	4.65	61	Pn	40 45.80	-0.5
			Sn	41 34.20	
MAF	4.85	63	Pn	40 48.50	-0.6
			Sn	41 40.00	
LDF	5.03	28	Pn	40 51.80	0.2
			Sn	41 44.60	
FLN	5.06	25	Pn	40 52.00	-0.1
			Sn	41 45.70	
BGF	5.16	61	Pn	40 53.00	-0.5
			Sn	41 46.50	
AVF	5.58	60	Pn	40 58.20	-1.1

S.D. = 0.8 on 13 of 13 obs.

• JUN 21, 1990 03h 00m 18.83± 0.71s
37.092 N ±11.0km 50.117 E ± 8.9km
DEPTH = 10.0km (geophysicist)
4.3mb (3 obs.)
CASPIAN SEA (338)

TAB	3.16	289	eP	01 13.00	3.2X
KER	3.67	223	eP	01 17.00	0.0
MHI	7.58	93	eP	02 12.00	-0.1

		eS	03 48.00		
MLR	19.95	302 eP	04 54.00	0.1	
		e	14 30.00		
		e	18 18.00		
HFS	32.66	327 eP	06 52.40	-0.4	
	0.6s	4.40nm		4.6mb	
NAO	34.23	327 P	07 06.60	0.1	
	0.7s	1.80nm		4.1mb	
MBC	66.74	357 eP	11 12.00	0.3	
	0.5s	1.00nm		4.3mb	
S.D. = 0.3 on 6 of 7 obs.					

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* JUN 21, 1990 03h 10m 12.67± 0.67s
37.578 N ±13.0km 50.195 E ± 8.6km
DEPTH = 10.0km (geophysicist)
4.3mb (4 obs.)
CASPIAN SEA (338)

TAB	3.10	280 eP	11 05.00	2.3X	
KER	4.08	219 eP	11 17.00	0.4	
MHI	7.56	97 eP	12 06.00	0.4	
		eS	13 39.00		
KSP	27.42	310 ePc	15 39.40	-20.8X	
SQTA	30.09	301 iPc	16 22.50	-1.9	
	0.5s	10.00nm		4.9mb	
GKN	30.35	98 P	16 26.40	-0.5	
DMN	30.90	98 P	16 31.60	-0.3	
PKI	31.15	98 P	16 34.20	0.0	
HFS	32.29	326 eP	16 44.40	1.0	
	0.5s	3.20nm		4.5mb	
NAO	33.86	326 P	16 58.00	0.9	
	0.6s	1.00nm		3.9mb	
MBC	66.26	357 eP	21 08.00	5.5X	
	0.6s	1.00nm		4.2mb	
S.D. = 1.1 on 8 of 11 obs.					

? JUN 21, 1990 03h 28m 48.15± 4.44s
32.684 S ±26.1km 71.760 W ±28.1km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

ROCH	0.69	115 iP	29 02.20	0.5	
		iS	29 11.50		
LCCH	0.80	169 iPc	29 03.60	0.6	
		iS	29 13.70		
JACH	0.98	90 iP	29 05.60	-0.2	
		iS	29 18.00		
PEL	1.01	117 iPd	29 06.00	-0.1	
		iS	29 18.50		
TACH	1.19	145 iP	29 08.40	-0.1	
		iS	29 22.50		
SAN	1.20	130 eP	29 09.00	0.3	
		iS	29 23.00		
LNV	1.30	167 iPc	29 09.50	-0.6	
		i	29 24.00		
PCH	1.40	132 iP	29 11.30	-0.4	
		iS	29 27.50		
PCH	1.40	132 iP	29 11.50	-0.2	
		i	29 28.50		
CHCH	1.55	144 iPc	29 14.00	0.2	
		iS	29 32.00		
S.D. = 0.4 on 10 of 10 obs.					

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* JUN 21, 1990 03h 32m 54.68± 0.63s
46.002 N ±12.7km 152.085 E ±10.3km
DEPTH = 33.0km (normal)
4.7mb (17 obs.)
KURIL ISLANDS (221)

KUSJ	6.02	244 P	34 23.10	-0.6	
		eS	35 28.70		
ASAJ	6.95	258 eP	34 40.40	3.7X	
MRRJ	8.68	250 eP	35 02.10	1.3	
OFUJ	10.33	232 P	35 19.60	-4.0X	
		S	37 09.10		
MAT	14.06	233 eP	36 12.00	-1.6	
	0.7s	6.16nm		4.4mb	
CHTO	51.25	256 iP	41 58.50	1.2	
	1.0s	8.75nm		4.7mb	
YKA	51.95	36 eP	42 01.40	-0.7	
	0.7s	1.50nm		4.1mb	
PKI	54.89	275 P	42 24.60	-0.1	
DMN	55.08	275 P	42 26.20	0.2	
GKN	55.16	276 P	42 26.60	0.1	
KVN	63.15	61 eP	43 22.50	0.8	
TNP	64.30	61 eP	43 30.00	0.8	
	0.9s	11.33nm		5.0mb	
FRB	65.99	18 ePc	43 37.80	-1.6	
HFS	68.91	339 eP	43 55.00	-2.8X	
	0.5s	2.50nm		4.5mb	
NAO	68.98	341 P	43 48.90	-9.4X	
	0.8s	2.30nm		4.3mb	
KSP	76.25	333 eP	44 40.80	-0.4	
CLL	76.85	335 iPd	44 44.20	-0.3	
	0.9s	9.00nm		4.8mb	
MLR	77.26	324 eP	44 48.00	0.9	
PRU	77.54	333 eP	44 48.00	-0.4	
KHC	78.60	334 P	44 54.50	0.2	
GRF	78.81	335 ePc	44 55.80	0.4	
	0.7s	10.00nm		4.9mb	
CDF	81.07	337 eP	45 07.20	-0.5	
	0.7s	4.40nm		4.6mb	
HAU	81.70	338 eP	45 10.40	-0.4	
	0.7s	5.50nm		4.7mb	
BSF	81.74	337 eP	45 10.60	-0.5	
LOR	83.02	339 eP	45 17.50	-0.2	
	0.7s	5.50nm		4.8mb	
LBF	83.26	339 eP	45 18.80	-0.2	
	0.8s	5.35nm		4.7mb	
SSF	83.30	339 eP	45 19.20	0.1	
	1.0s	9.00nm		4.8mb	
AVF	83.59	339 eP	45 20.60	0.0	
	0.8s	6.05nm		4.8mb	
SMF	83.61	339 eP	45 20.80	0.1	
	0.8s	9.40nm		5.0mb	
LPL	83.88	336 eP	45 23.00	0.6	
MAF	84.32	339 eP	45 25.10	0.8	
	0.8s	7.40nm		4.9mb	
LMR	85.94	336 eP	45 32.70	0.3	
	0.8s	8.05nm		5.0mb	
S.D. = 0.7 on 28 of 32 obs.					

JUN 21, 1990 03h 56m 11.23± 0.55s
50.739 N ± 5.1km 129.922 W ± 6.6km
DEPTH = 10.0km (geophysicist)
4.1mb (8 obs.)
VANCOUVER ISLAND REGION (25)

PHC	1.58	90 Pc	56 39.72	0.4	
		S	57 01.19		
BBB	1.84	37 Pd	56 44.00	1.0	
EDB	1.99	115 P	56 43.47	-1.9	
ETB	2.57	121 P	56 51.29	-2.3	
GDR	2.66	110 P	56 53.81	-1.1	
CBB	3.00	102 P	56 59.44	-0.2	
BTB	3.11	112 P	56 59.74	-1.6	
OZB	3.37	120 P	57 02.88	-2.2	
MGB	3.80	115 P	57 09.89	-1.4	
OFK	4.58	125 P	57 21.58	-0.6	
STW	4.83	120 P	57 25.01	-0.7	
MCW	5.04	111 P	57 29.21	0.6	
OBH	5.25	128 P	57 30.93	-0.6	
BLN	5.30	118 P	57 32.47	0.1	
OHW	5.39	114 P	57 34.33	0.8	
HDW	5.46	122 P	57 34.49	-0.2	
M8W	5.56	108 P	57 36.58	0.5	
CMW	5.58	112 P	57 36.78	0.4	
JCW	5.80	113 P	57 39.01	-0.3	
RPW	5.93	110 P	57 41.18	0.0	
HTW	6.09	116 P	57 43.97	0.5	
RMW	6.26	118 P	57 45.96	0.1	
GSM	6.41	120 P	57 48.17	0.0	
RVC	6.48	123 P	57 49.11	0.1	
CZM	6.54	128 P	57 49.99	0.2	
FMW	6.64	122 P	57 51.06	-0.4	
KOSW	6.68	127 P	57 52.04	0.3	
LON	6.69	124 eP	57 51.00	-0.9	
ERK	6.71	128 P	57 52.16	-0.1	
TDL	6.74	128 P	57 53.33	0.6	
FL2	6.78	129 P	57 53.90	0.6	
PNT	6.79	98 P	57 53.00	-0.3	
NLW	6.80	109 P	57 53.21	-0.3	
STD	6.81	128 P	57 54.50	0.7	
SOSW	6.86	128 P	57 54.69	0.3	
TWW	6.97	118 P	57 56.96	1.1	
MTMW	6.97	130 P	57 56.77	0.9	
ETW	7.03	113 P	57 56.49	-0.2	
TBM	7.10	117 P	57 58.21	0.5	
ASR	7.19	126 P	57 59.18	0.1	
WTV	7.20	111 P	57 58.82	-0.3	
NAC	7.23	120 P	57 59.89	0.5	
EBG	7.27	118 P	58 00.71	0.7	
TDH	7.71	132 P	58 06.23	-0.1	
MDW	7.89	118 P	58 07.85	-0.8	
WAH2	7.92	116 P	58 08.40	-0.7	
DPW	8.18	106 eP	58 12.00	-0.8	
NEW	8.69	102 eP	58 21.00	1.1	
	1.0s	5.25nm		4.8mb	
LNOR	9.15	118 P	58 25.88	-0.4	
SES	12.01	84 eP	59 06.00	0.6	
KVN	14.36	140 e(P)	59 36.00	-0.6	
YKA	14.43	29 eP	59 35.70	-1.5	
	0.6s	4.70nm		4.3mb	
TNP	15.54	140 eP	59 53.00	0.9	
	0.8s	2.70nm		3.6mb	
BW06	16.03	112 eP	00 00.00	1.6	
FBA	16.99	333 eP	00 08.60	-1.5	
	0.7s	7.27nm		3.9mb	
FFC	17.33	66 iPc	00 15.50	1.0	
	0.8s	13.00nm		4.1mb	
MSU	17.52	127 eP	00 19.00	1.7	
INK	17.71	356 eP	00 19.00	-0.1	
TTA	18.61	321 eP	00 31.40	1.0	
RSSD	18.66	101 eP	00 32.80	1.5	
IMA	19.57	331 eP	00 40.90	-1.0	
ANMO	23.20	124 eP	01 20.00	0.8	
	1.0s	4.38nm		4.0mb	
ALQ	23.20	124 eP	01 20.00	0.8	
	1.2s	6.64nm		4.1mb	
MBC	25.94	6 eP	01 46.00	1.2	
	1.0s	8.00nm		4.4mb	
S.D. = 0.9 on 64 of 64 obs.					

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* JUN 21, 1990 04h 40m 26.22± 1.60s
37.508 N ±11.4km 49.630 E ±21.5km
DEPTH = 10.0km (geophysicist)
4.5mb (11 obs.)
CASPIAN SEA (338)

TAB	2.68	283 eP	41 12.00	1.7	
KER	3.76	214 eP	41 26.00	0.4	
MLR	19.40	302 eP	45 00.00	4.6X	
		e	00 40.00		
PGF	31.30	292 eP	46 47.70	-0.9	
	0.7s	6.60nm		4.6mb	
HFS	32.10	326 eP	46 57.10	1.8	
	0.6s	2.20nm		4.3mb	
SBF	32.35	295 eP	46 57.40	-0.4	
	0.6s	10.80nm		5.0mb	
LPG	32.77	298 eP	47 01.90	0.2	
	0.6s	2.70nm		4.4mb	
LPL	32.78	298 eP	47 01.80	0.1	
	0.5s	2.90nm		4.5mb	
BNI	32.84	297 P	47 02.00	-0.1	
FRF	32.94	294 eP	47 02.20	-0.6	
AVF	35.10	300 eP	47 20.70	-0.7	
	0.8s	8.05nm		4.6mb	
MAF	35.66	299 eP	47 26.30	0.0	
	0.9s	4.90nm		4.4mb	
CAF	36.11	297 eP	47 29.50	-0.6	
	0.7s	3.30nm		4.3mb	
LFF	37.04	297 eP	47 37.50	-0.4	
	0.6s	7.20nm		4.6mb	
LDF	37.39	303 eP	47 40.60	-0.2	
	0.5s	5.10nm		4.5mb	
MFF	37.51	300 eP	47 40.60	-1.2	
FLN	37.62	304 eP	47 42.50	-0.2	
	0.5s	5.85nm		4.6mb	
LPF	38.03	303 eP	47 45.80	-0.3	
FRB	67.91	335 eP	51 28.00	1.3	
S.D. = 0.9 on 18 of 19 obs.					

& JUN 21, 1990 04h 49m 57.13s
48.838 N 122.153 W
DEPTH = 1.5km
3.6mb (1 obs.)
WASHINGTON (29)
<SEA>. CL 3.6 (SEA). ML 3.2 (PGC). Felt (III) at Acme and Deming. Also felt at Rockport and Four Corners. Felt mildly at Abbotsford, British Columbia.

MBW	0.18	108 P	50 01.53	0.9	
CMW	0.42	177 Pd	50 04.80	-0.6	
MCW	0.48	251 Pc	50 05.99	-0.7	
HNB	0.52	327 Pd	50 06.80	-0.7	
OHW	0.57	206 Pd	50 08.15	-0.4	
RPW	0.58	132 Pd	50 08.02	-0.6	
JCW	0.66	167 Pd	50 09.38	-1.0	
SNB	0.68	265 Pc	50 09.76	-0.9	

21d 04h

PGC	0.88	258	Pc	50	12.65	-2.1
VGZ	0.89	242	Pc	50	12.82	-2.0
BIB	0.95	307	Pd	50	14.09	-1.9
BLN	0.99	214	Pc	50	15.26	-1.5
BLH	1.01	175	Pd	50	16.16	-0.8
PGW	1.06	196	P	50	16.89	-1.0
HTW	1.07	166	P	50	16.61	-1.4
STW	1.22	236	Pc	50	18.59	-2.1
NAB	1.28	288	Pc	50	19.40	-2.2
SPW	1.29	183	P	50	21.35	-0.4
HDW	1.33	207	P	50	20.56	-2.1
GMW	1.36	198	P	50	21.09	-1.9
SHB	1.36	305	P	50	21.18	-1.9
SHB	1.36	305	P	50	22.00	-1.1
WHB	1.39	338	P	50	22.00	-1.6
RMW	1.40	170	Pd	50	22.66	-1.1
NLW	1.43	122	ePd	50	23.46	-0.8
OSD	1.45	226	Pc	50	22.85	-1.8
PFB	1.54	261	P	50	23.31	-2.4
OTR	1.64	243	ePc	50	25.49	-1.7
GSM	1.65	171	Pd	50	26.49	-1.0
MEW	1.67	192	P	50	27.13	-0.4
MGB	1.68	276	P	50	25.85	-2.0
OFK	1.72	240	P	50	27.19	-1.0
ETW	1.73	135	P	50	28.50	-0.2
PNT	1.74	73	P	50	28.00	-0.6
OOW	1.75	232	Pc	50	28.42	-0.4
DHW2	1.80	117	P	50	29.68	0.1
WTV	1.86	127	P	50	31.19	0.8
OBH	1.90	218	Pc	50	30.45	-0.5
RVC	1.90	176	Pd	50	30.39	-0.6
TWW	1.91	153	P	50	31.75	0.6
FMW	1.93	170	Pd	50	30.87	-0.8
TBM	1.97	147	Pd	50	32.54	0.5
CPW	1.98	200	P	50	31.24	-0.9
LON	2.10	174	eP	50	33.50	-0.4
SAW	2.16	121	P	50	36.53	1.8
LMW	2.17	183	P	50	34.66	-0.3
WPW	2.18	169	P	50	34.94	-0.2
EBG	2.20	150	Pd	50	35.74	0.3
APW	2.21	189	P	50	34.88	-0.6
ONR	2.24	210	P	50	35.46	-0.4
EPH	2.27	130	P	50	37.93	1.6
NAC	2.29	156	P	50	37.06	0.5
BTB	2.30	287	P	50	35.74	-1.1
GLK	2.30	171	ePd	50	37.35	0.4
KOSW	2.38	181	P	50	37.81	-0.1
VTG	2.38	141	P	50	39.63	1.8
CZM	2.42	186	ePd	50	38.13	-0.3
BMW	2.47	197	P	50	38.95	-0.3
TDL	2.49	181	P	50	39.53	0.0
ERK	2.54	183	P	50	40.00	-0.2
MXC	2.59	150	P	50	40.78	0.0
STD	2.60	181	P	50	41.50	0.4
SOSW	2.60	180	P	50	41.41	0.3
YEL	2.63	181	P	50	42.14	0.5
FL2	2.65	183	P	50	41.90	0.1
HSR	2.67	180	P	50	43.14	1.0
JLK	2.69	180	P	50	43.25	0.8
ASR	2.72	172	P	50	43.87	1.1
WAH2	2.72	139	P	50	43.75	1.1
RVW	2.72	189	P	50	43.54	0.8
CDFW	2.72	178	P	50	43.43	0.6
MDW	2.75	143	P	50	43.15	0.0
LVP	2.78	184	P	50	43.93	0.3
DPW	2.81	109	eP	50	47.50	3.5
MTMW	2.81	181	P	50	44.94	0.8
GBL	2.89	140	P	50	49.57	4.5
NLO	2.89	198	P	50	45.26	0.1
GULW	2.94	172	P	50	47.53	1.6
GL2	3.02	162	P	50	50.46	3.5
APM	3.12	174	P	50	49.90	1.5
NEW	3.39	98	eP	50	53.50	1.2
YKA	14.32	14	eP	53	22.70	-0.1
	0.7s	0.80nm				3.6mb
	82 obs. ossociated					

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* JUN 21, 1990 04h 59m 55.27± 3.77s
16.584 S ±14.6km 175.940 W ±13.0km
DEPTH = 427.4 ± 41.0 km
4.4mb (13 obs.)
TONGA ISLANDS (173)

DZM	17.49	249	iPc	03	34.10	0.0
LTZ	27.99	199	eP	05	10.50	-0.7
CNB	36.10	232	iPc	06	22.00	1.5
	0.7s	45.00nm				5.0mb
TOO	39.83	231	iPc	06	52.90	1.8
	0.8s	44.00nm				4.9mb
WB5	47.18	258	iPd	07	48.30	-1.1
WRA	47.20	258	Pc	07	49.00	-0.5
	0.4s	7.20nm				4.4mb
ASPA	47.43	253	iPd	07	50.60	-0.6
	0.4s	88.00nm				5.5mb X
WARB	53.95	249	iPd	08	39.30	-0.2
	0.6s	53.00nm				5.0mb
NANU	64.37	253	eP	09	50.20	0.5
	0.5s	13.00nm				4.8mb
SPA	73.52	180	eP	10	42.80	-1.6
	0.9s	12.27nm				4.5mb
CMB	75.27	42	eP	10	54.60	0.1
WDC	75.42	39	eP	10	55.50	0.3
MIN	75.85	40	eP	10	57.90	0.1
KVN	77.32	43	P	11	05.80	-0.2
TNP	77.37	44	P	11	06.40	0.1
	0.7s	2.31nm				4.0mb
RMW	80.04	34	P	11	16.30	-3.8X
TTA	80.78	9	P	11	43.20	19.6X
	0.7s	3.63nm				
PNT	82.33	33	eP	11	32.00	0.3
ALQ	83.43	51	eP	11	38.00	0.2
	1.0s	3.25nm				4.0mb
ANMO	83.43	51	P	11	38.70	0.9
	1.0s	3.75nm				4.1mb
FBA	84.02	12	P	11	38.80	-1.1
	0.7s	17.44nm				4.9mb
IMA	84.09	9	P	11	39.70	-0.6
	0.7s	2.54nm				4.1mb
BW06	84.79	43	P	11	44.50	0.1
	0.6s	1.05nm				3.8mb
MAW	85.89	199	iP	11	53.10	4.0X
RSSD	88.98	43	P	12	04.50	0.1
YKA	92.16	24	eP	12	17.50	-0.7
	0.9s	0.70nm				3.7mb
KSP	144.44	347	iPKPd	18	42.90	0.0
MOX	145.48	352	ePKP	18	46.00	1.3
MLR	145.85	332	ePKPc	18	48.00	2.4X
			e	40	36.00	
DOU	146.57	359	PKP	18	49.30	2.9X
FLN	147.69	6	ePKP	18	51.70	3.4X
	0.7s	11.00nm				
LDF	147.89	5	ePKP	18	52.30	3.7X
CDF	148.15	356	ePKP	18	53.30	4.1X
	0.7s	6.60nm				
LPF	148.36	7	ePKP	18	53.90	4.6X
	0.7s	12.15nm				
HAU	148.61	357	ePKP	18	54.60	4.8X
BSF	148.76	356	ePKP	18	54.70	4.6X
LOR	149.40	0	ePKP	18	56.60	5.6X
	0.6s	4.50nm				
SSF	149.61	1	ePKP	18	57.20	5.9X
	0.7s	5.50nm				
LBF	149.69	0	ePKP	18	57.30	5.8X
	0.5s	3.65nm				
MFF	149.87	6	ePKP	18	57.50	5.8X
AVF	149.88	1	ePKP	18	57.30	5.6X
BGF	150.10	2	ePKP	18	58.20	6.1X
	0.6s	7.20nm				
TCF	150.34	3	ePKP	18	58.80	6.3X
	0.9s	5.75nm				
LSF	150.35	4	ePKP	18	58.60	6.1X
MAF	150.42	2	ePKP	18	59.30	6.7X
	0.8s	9.40nm				
LPL	151.07	356	ePKP	19	01.50	7.6X
	0.7s	4.40nm				
LPG	151.09	356	ePKP	19	01.80	7.8X
	0.8s	6.70nm				
RJF	151.29	4	ePKP	19	01.00	7.1X
BNI	151.53	356	PKP	19	02.50	8.1X
LFF	151.59	5	ePKP	19	01.80	7.5X
CAF	151.70	3	ePKP	19	02.00	7.5X
	0.8s	6.70nm				
LPO	151.88	4	ePKP	19	02.30	7.5X
	S.D. = 0.9	on	25 of	52	obs.	

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* JUN 21, 1990 05h 35m 58.23± 0.75s
37.146 N ±13.1km 49.882 E ± 9.6km
DEPTH = 10.0km (geophysicist)
4.6mb (8 obs.)
CASPIAN SEA (338)

TAB	2.97	289	e(P)	36	52.00	5.6X
KER	3.59	220	eP	36	56.00	0.8
MAIO	7.77	93	eP	37	53.00	-1.1
			eS	39	27.00	
CLL	29.63	310	eP	42	07.00	1.3
	1.4s	11.00nm				4.5mb
SQTA	30.10	302	i(P)	42	10.30	0.2
	0.9s	17.70nm				4.9mb
PGF	31.62	293	eP	42	22.50	-1.0
HFS	32.51	327	eP	42	31.10	0.2
	0.7s	4.70nm				4.5mb
SBF	32.68	295	eP	42	32.20	-0.5
	0.6s	11.70nm				5.0mb
LPG	33.12	298	eP	42	36.20	-0.5
	0.7s	4.40nm				4.5mb
LPL	33.13	298	eP	42	36.00	-0.8
SMF	35.12	300	eP	42	53.20	-0.5
AVF	35.45	301	eP	42	55.80	-0.7
MAF	36.02	300	eP	43	01.30	0.0
	1.1s	12.20nm				4.7mb
TCF	36.26	300	eP	43	03.10	-0.3
FBA	77.35	8	eP	47	57.00	2.7
	1.0s	7.50nm				4.7mb
YKA	79.92	353	eP	48	18.20	9.9X
	0.8s	0.80nm				3.7mb
	S.D. = 1.1	on	14 of	16	obs.	

? JUN 21, 1990 06h 19m 52.24± 6.00s
36.051 N ±50.8km 13.586 E ±13.8km
DEPTH = 33.0km (normal)
MEDITERRANEAN SEA (400)

PZI	1.45	47	(P)	20	17.22	0.8
MEU	1.51	46	iP	20	16.80	-0.5
			eS	20	34.00	
MCT	1.58	1	eP	20	19.80	1.4
CVT	1.74	339	(P)	20	21.04	0.4
GIB	1.97	10	P	20	23.70	-0.3
			eSg	20	46.40	
MNO	2.08	25	eP	20	26.00	0.4
LVI	2.17	333	P	20	26.50	-0.3
			eSn	20	50.70	
ATN	2.59	35	P	20	32.50	-0.2
USI	2.67	353	P	20	32.40	-1.4
SOI	2.82	44	P	20	36.00	0.0
TDS	4.21	30	P	20	55.00	-0.7
	S.D. = 0.9	on	11 of	11	obs.	

JUN 21, 1990 06h 40m 33.57± 0.67s
5.702 S ± 3.0km 149.315 E ± 4.9km
DEPTH = 165.9 ± 6.9 km
5.0mb (18 obs.)
NEW BRITAIN REGION (192)

RAB	3.22	62	iPc	41	24.50	-0.3
			iS	42	04.00	
KDB	4.31	210	iPc	41	39.00	0.0
			eS	42	12.00	
MNDI	5.64	265	eP	41	57.00	0.2
CTA	14.61	191	iPd	43	54.90	1.3
	1.0s	187.00nm				5.4mb
			iS	46	39.00	
QIS	17.52	212	ePc	44	29.00	-0.3
MTN	19.29	247	iPd	44	47.00	-1.0
			e	48	15.00	
WB5	20.25	225	eP	44	57.20	-0.6
			i	45	13.00	
			eS	48	34.00	
WRA	20.31	224	Pd	44	57.90	-0.5
	1.1s	63.00nm				5.0mb
RMO	20.68	181	iPd	45	02.90	0.8
			e	45	20.00	
QLP	21.32	193	eP	45	09.00	0.6
BRS	21.82	172	iPc	45	13.80	0.5
			e	45	44.00	
			eS	49	05.00	
DZM	23.22	136	iPd	45	27.20	0.2
COO	24.86	175	eP	45	43.00	0.5
	0.5s	31.00nm				5.1mb
CMS	25.86	187	iPd	45	50.90	-0.6
	1.0s	36.00nm				5.0mb
STK	27.03	195	eP	46	01.20	-1.0
	0.9s	8.00nm				4.4mb
			e	46	38.10	
BWA	28.59	182	eP	46	15.80	-0.5
CNB	29.47	180	iPd	46	24.10	0.1
WARB	29.73	224	eP	46	26.00	-0.4
TOO	31.91	186	iPc	46	45.80	0.4
	0.9s	63.00nm				5.4mb
NANU	36.66	239	iPd	47	25.40	-0.6

0.4s 10.00nm 4.9mb
THZ 41.60 153 P 48 07.00 0.3
TCW 41.80 151 P 48 08.80 0.5
NOZ 41.84 146 P 48 09.00 0.4
MRW 42.02 151 P 48 10.20 0.1
CAW 42.11 151 P 48 10.70 -0.1
LTZ 42.15 155 P 48 11.40 0.2
WDW 42.19 151 P 48 11.20 -0.2
MTW 42.36 150 P 48 12.50 -0.3
KHZ 42.41 153 P 48 12.50 -0.7
MOW 42.43 151 P 48 13.10 -0.3
BLW 42.50 151 P 48 13.10 -0.9
CHJJ 42.64 348 P 48 14.60 -0.6
QZH 42.68 317 eP 48 19.20 3.6X
TSRJ 42.89 344 P 48 17.60 0.4
MAT 43.29 347 eP 48 20.00 -0.4
1.1s 55.70nm 5.1mb
eS 54 34.00
MTMJ 43.42 346 P 48 21.50 -0.1
NIIJ 43.79 348 P 48 24.60 0.2
YAMJ 44.49 350 P 48 31.30 1.3
OFUJ 45.11 352 P 48 35.10 0.2
SSE 45.40 325 eP 48 37.50 0.2
Z 16s 0.40um 4.4MszX
E 12s 0.20um
sS 56 08.00
HOOJ 48.17 354 eP 48 59.60 0.9
MRRJ 48.48 352 eP 49 01.10 0.0
KUSJ 48.75 356 eP 49 03.30 0.1
ASAJ 49.95 354 P 49 13.30 0.9
SNY 52.82 336 eP 49 32.00 -1.8
MDJ 53.13 342 eP 49 34.00 -2.2
CN2 53.78 339 eP 49 39.60 -1.4
BJI 54.80 329 eP 49 48.00 -0.4
XAN 54.94 319 eP 49 48.00 -1.7
CHG 55.28 297 eP 50 07.00 14.7X
CD2 56.74 313 eP 50 04.10 1.6
LZH 59.51 318 eP 50 22.50 0.7
3.0s 80.00nm 5.1mb
ADK 64.28 23 eP 50 53.50 0.5
GUN 69.64 302 P 51 29.60 2.0
0.4s 19.00nm 5.2mb
PKI 69.93 302 P 51 21.60 -7.8X
0.4s 5.00nm 4.7mb
DMN 70.20 302 P 51 23.00 -7.9X
0.4s 15.00nm 5.1mb
GKN 70.72 302 P 51 35.60 1.7
0.4s 13.00nm 5.1mb
WMQ 74.08 319 P 51 54.50 1.3
SVW 79.02 24 eP 52 21.50 1.2
TTA 79.89 22 eP 52 25.40 0.4
PMR 81.95 25 eP 52 35.50 -0.1
0.9s 22.90nm 4.9mb
IMA 82.48 20 eP 52 38.30 -0.2
1.8s 119.00nm 5.4mb
TOA 83.44 25 eP 52 44.00 0.6
FBA 84.02 22 eP 52 44.90 -1.3
SPA 84.34 180 eP 52 42.10 -5.9X
1.0s 15.50nm 4.8mb
INK 90.54 21 eP 53 17.00 -0.4
MBC 95.82 14 eP 53 41.00 -0.6
0.6s 2.00nm 4.7mb
YKA 97.84 28 eP 53 50.20 -0.7
0.9s 1.50nm 4.5mb
BAO 152.74 141 ePKP 00 11.50 5.8X
S.D. = 0.8 on 63 of 69 obs.

• JUN 21, 1990 06h 49m 34.56± 0.52s
38.456 S ±13.1km 16.449 W ± 9.1km
DEPTH = 10.0km (geophysicist)
5.1mb (4 obs.) 4.3Msz (1 obs.)
SOUTH ATLANTIC RIDGE (410)

BAO 35.85 301 eP 56 36.20 -0.4
SLR 39.60 85 eP 57 06.50 -1.5
BUL 42.86 78 iPd 57 30.50 -4.3X
PCH 43.46 259 eP 57 40.00 0.4
TACH 43.78 259 eP 57 42.00 0.0
PEL 43.78 260 iPd 57 42.50 0.4
LNV 44.03 258 eP 57 43.90 -0.1
SIV 45.01 287 iP 57 55.00 2.9X
KRI 45.58 75 iPd 57 40.30 -16.5X
LIC 45.70 16 (P) 57 57.20 -0.3
CCH 48.02 282 P 58 17.00 0.8
LPB 50.03 281 P 58 31.00 -0.8
ZOBO 50.20 281 P 58 32.00 -1.4
LR 13 28.00

SPA 51.73 180 iPd 58 44.70 0.7
1.1s 34.52nm 5.2mb
LPG 86.14 16 eP 02 18.00 1.0
1.0s 8.00nm 4.9mb
LPL 86.15 16 eP 02 17.60 0.6
1.0s 10.00nm 4.9mb
OHR 86.18 27 eP 02 02.20 -14.8X
AVF 86.70 13 eP 02 20.10 0.8
1.2s 19.35nm 5.2mb
GRF 91.11 18 eP 02 41.00 0.8
Z 19s 0.10um 4.3Msz
PRU 92.21 19 eP 02 45.50 0.3
YKA 126.89 325 ePKP 08 36.70 -2.5X
0.8s 1.10nm
MBC 130.04 342 ePKP 08 43.50 -1.4
S.D. = 0.9 on 17 of 22 obs.

• JUN 21, 1990 07h 22m 30.62± 1.24s
36.401 N ±16.3km 70.941 E ±17.0km
DEPTH = 191.3 ± 13.4 km
4.4mb (7 obs.)
HINDU KUSH REGION (718)

NDI 9.34 144 iPc 24 42.50 0.2
eS 26 23.00
GKN 14.29 122 P 25 45.50 -0.2
DMN 14.86 122 P 25 53.20 0.3
0.6s 41.00nm 5.0mb
PKI 15.09 122 P 25 55.70 -0.1
GUN 15.21 120 P 25 57.00 -0.3
0.4s 25.00nm 5.0mb
NUR 37.88 324 eP 29 30.20 0.0
SUF 37.98 328 iP 29 31.00 0.0
0.5s 5.50nm 4.5mb
SOD 39.81 335 iP 29 46.30 0.3
KEV 40.88 338 eP 29 55.00 0.3
HFS 43.11 322 eP 30 12.50 -0.6
0.4s 9.50nm 4.7mb
MBC 67.44 3 eP 33 07.00 0.1
0.7s 3.00nm 4.1mb
YKA 81.35 3 eP 34 26.40 0.0
0.4s 1.10nm 3.9mb
WB5 81.96 122 eP 34 30.00 -0.3
WRA 81.98 122 Pd 34 30.40 0.0
0.5s 1.10nm 3.8mb
ASPA 84.23 125 eP 34 42.10 0.3
S.D. = 0.3 on 15 of 15 obs.

• JUN 21, 1990 07h 41m 50.18± 0.74s
29.019 N ± 9.7km 130.475 E ± 9.0km
DEPTH = 33.0km (normal)
4.6mb (13 obs.)
RYUKYU ISLANDS (238)

SSE 8.31 287 Pc 43 51.50 0.2
1.0s 10.00nm 4.9mb
E 14s 1.40um
MAT 9.93 39 eP 44 14.00 0.3
NJ2 10.47 290 Pd 44 20.60 -0.4
Z 16s 0.90um
TIA 13.34 306 eP 44 59.60 0.0
N 14s 1.00um
E 14s 1.60um
SNY 13.95 338 eP 45 07.00 -0.7
Z 14s 2.40um
N 13s 1.10um
E 12s 0.80um
CN2 15.29 346 eP 45 27.80 2.6
1.0s 100.00nm 5.0mb
Z 13s 1.60um 4.7Msz
N 13s 1.30um
E 13s 0.30um
epP 45 37.00
BJI 16.09 317 eP 45 35.00 -0.5
1.0s 18.00nm 4.2mb
Z 20s 1.80um 4.9Msz
N 14s 1.29um
E 12s 0.60um
TIY 17.37 305 Pc 45 54.00 2.4
Z 17s 1.80um
E 13s 0.80um
XAN 19.03 291 P 46 10.00 -2.1
N 12s 0.50um
E 12s 0.90um
HHC 19.44 312 eP 46 18.00 1.1
Z 18s 1.60um
BTO 20.33 310 eP 46 27.50 1.1

N 16s 0.90um
E 15s 0.70um
GYA 21.22 269 P 46 36.00 0.4
QIZ 21.28 247 eP 46 37.50 1.5
eS 50 21.00
CD2 23.21 281 eP 46 53.20 -2.0
Z 13s 0.90um 4.4MszX
E 12s 0.80um
eS 51 07.00
LZH 23.48 294 eP 46 56.00 -1.9
2.5s 64.00nm 4.7mb
Z 16s 1.20um 4.5MszX
E 15s 0.90um
pP 47 07.50 45kmX
KMI 24.98 268 Pc 47 13.50 1.0
GTA 27.27 300 P 47 36.40 2.8
0.8s 10.00nm 4.5mb
GUN 39.05 279 P 49 15.30 -0.9
0.8s 64.00nm 5.4mb
PKI 39.53 279 P 49 19.20 -0.9
0.8s 36.00nm 5.2mb
DMN 39.78 279 P 49 21.40 -0.8
GKN 40.10 280 P 49 24.00 -0.6
WB5 48.76 175 eP 50 35.00 1.1
WRA 48.82 175 Pd 50 35.10 0.8
0.7s 1.40nm 4.1mb
ASPA 52.48 176 eP 51 12.50 10.3X
1.0s 6.00nm
MBC 66.65 14 eP 52 37.50 -1.7
0.8s 4.00nm 4.6mb
YKA 75.16 26 eP 53 29.70 -0.9
0.7s 0.80nm 3.8mb
APO 76.94 333 eP 53 37.10 -3.6X
0.6s 3.40nm 4.6mb
NAO 77.97 334 P 53 46.90 0.5
0.8s 1.70nm 4.1mb
CLL 82.99 326 eP 54 12.00 -1.2
1.5s 12.00nm 4.8mb
FRB 86.33 8 eP 54 29.00 -0.7
S.D. = 1.4 on 28 of 30 obs.

JUN 21, 1990 07h 50m 23.08± 0.36s
36.988 N ± 9.1km 49.523 E ± 4.8km
DEPTH = 10.0km (geophysicist)
4.9mb (10 obs.) 3.6Msz (1 obs.)
WESTERN IRAN (347)

TEH 1.95 129 ePd 50 57.50 0.7
TAB 2.76 294 eP 51 10.00 1.7
KER 3.28 218 eP 51 17.00 1.3
MAIO 8.05 92 eP 52 22.00 -0.9
eS 53 57.00
PRNI 13.79 245 eP 53 51.00 10.1X
MBH 14.19 244 ePd 53 55.50 9.4X
RDO 19.06 290 eP 54 48.50 0.6
VRI 19.21 305 ePc 54 45.00 -4.7X
MLR 19.61 303 eP 54 55.00 0.4
CMP 20.16 302 ePc 55 02.00 1.8
VAM 20.48 273 eP 55 03.00 -0.7
NEO 20.79 284 eP 55 06.50 -0.4
VLI 21.26 277 eP 55 11.70 0.1
VAY 21.31 290 eP 55 13.20 1.1
ITM 21.99 279 eP 55 16.20 -2.8
SKO 22.19 292 eP 55 21.50 0.6
i 55 28.00
OHR 22.64 289 eP 55 27.00 1.6
KEK 23.42 286 eP 55 28.20 -4.8X
NDI 24.64 102 eP 55 45.50 0.6
TDS 26.09 286 P 55 59.00 0.5
SOI 26.49 283 P 55 59.50 -2.7
DUI 27.40 291 P 56 11.00 0.4
CLL 29.51 311 iPc 56 29.20 -0.3
1.1s 14.00nm 4.7mb
GKN 30.80 97 P 56 41.50 0.2
0.8s 35.00nm 5.3mb
DMN 31.35 97 P 56 46.60 0.3
0.8s 54.00nm 5.5mb
PKI 31.61 97 P 56 48.40 -0.2
0.8s 23.00nm 5.1mb
GUN 31.83 96 P 56 50.70 0.1
1.0s 68.00nm 5.5mb
HFS 32.48 327 eP 56 55.10 -0.4
1.1s 14.70nm 4.8mb
Z 19s 0.12um 3.6Msz
LR 08 29.00
BNI 33.00 298 P 56 59.50 -0.9
NAO 34.06 327 P 57 08.20 -1.0

21d 07h

0.9s 3.20nm 4.2mb
EKA 39.74 315 Pc 57 56.40 -0.8
0.6s 3.00nm 4.1mb
BCAO 43.08 229 iPc 58 23.30 -1.7
1.3s 32.00nm 4.9mb
KMI 46.56 89 eP 58 53.50 0.3
sP 59 08.00
CHG 46.73 99 eP 58 53.80 -0.5
LIC 58.25 252 (P) 00 16.60 -3.6X
MBC 66.82 357 eP 01 16.00 -0.5
FRB 68.35 335 ePd 01 26.00 -0.2
INK 75.00 1 eP 02 10.00 4.2X
FBA 77.54 7 eP 02 22.00 1.8
1.0s 9.00nm 4.8mb
YKA 80.04 353 eP 02 33.60 -0.2
0.9s 0.90nm 3.7mb X
S.D. = 1.1 on 34 of 40 obs.

JUN 21, 1990 09h 02m 14.62± 0.14s
36.636 N ± 2.9km 49.799 E ± 1.9km
DEPTH = 15.2km (geophysicist)
5.8mb (77 obs.) 5.3Msz (19 obs.)
WESTERN IRAN (347)
At leost 20 people killed and
additional damage in the
Lowshon-Manjil area. Depth from
broodbond displacement
seismograms.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike= 25 Dip=74 Slip= 90
NP2: 205 16 90
Principol Axes:
T Plg=61 Azm=295
P 29 115
Comment: The focol mechonism is
poorly controlled and
corresponds to reverse
foulting. The preferred foult
plone is NP2.
RADIATED ENERGY
No. of sta: 4 Focal mech. C
Energy 9.8±3.3*10**12 Nm
CENTROID, MOMENT TENSOR (HRV)
Dota Used: GDSN
L.P.B.: 16S, 36C
Centroid Location:
Origin Time 09:02:18.6 0.4
Lot 36.51N 0.05 Lon 49.77E 0.04
Dep 15.0 BDY Half-duration 2.8
Moment Tensor; Scale 10**17 Nm
Mrr= 2.69 0.10 Mtt= 1.70 0.15
Mff=-4.39 0.12 Mrt=-0.50 0.29
Mrf= 3.36 0.43 Mtf=-0.37 0.11
Principal Axes:
T Val= 4.17 Plg=64 Azm=237
N 1.56 13 356
P -5.73 22 91
Best Double Couple:Mo=4.9*10**17
NP1:Strike=204 Dip=26 Slip= 121
NP2: 351 68 76

TEH 1.57 124 iPd 02 43.50 1.5
TAB 3.11 298 iPc+ 03 06.00 1.8
KER 3.17 225 iP 03 08.50 3.6X
SHI 7.34 161 eP 04 04.00 0.1
MAIO 7.82 90 iPd- 04 10.00 -0.6
0.6s 84.18nm 6.1mb
eS 05 45.00
GAZ 10.10 277 iP 05 25.90 43.9X
DHR 10.30 178 eP 04 44.50 -0.3
BRF 10.55 176 ePn 04 43.80 -4.4X
eSn 06 42.60
MJMA 11.42 201 ePc 04 53.70 -6.4X
OASM 11.79 209 eP 05 00.00 -5.2X
BHL 11.88 261 Pd 05 10.00 3.6X
S 08 50.00
RYD 12.19 194 ePc 05 06.00 -4.6X
GLH 12.28 256 eP 05 12.00 0.3
UQSK 12.54 213 ePc 05 10.00 -5.3X
FAM 12.93 267 eP 05 18.50 -1.9
DSI 12.97 251 eP 05 22.00 1.1
LFK 13.25 269 iP 05 27.20 2.5
KAS 13.33 296 eP 05 30.00 4.2X
CSS 13.47 268 eP 05 30.00 2.4
AFIF 13.73 206 eP 05 30.70 -0.4
BBTK 13.77 289 iPc 05 34.00 2.4
PRNI 13.85 247 eP 05 33.00 0.4

MBH 14.24 246 eP 05 40.00 2.4
PPCY 14.28 268 eP 05 41.00 2.8X
WAJH 15.36 231 eP 05 51.70 -0.6
BCK 15.36 279 eP 05 55.70 3.3X
GPA 15.69 289 iP 05 57.80 1.2
ELL 15.96 276 iP 06 01.50 1.3
KHL 16.19 282 eP 06 04.00 1.0
HRT 16.25 291 iP 06 06.00 2.2
KSL 16.29 274 eP 06 06.00 1.7
GBZT 16.41 291 eP 06 06.00 0.2
ITU 16.78 292 iPc 06 08.00 -2.4
HLW 16.84 252 eP+ 06 12.00 0.7
eS 09 33.00
YER 17.22 278 eP 06 16.00 -0.1
BNT 17.52 289 iP 06 21.00 1.3
EDC 17.56 289 iP 06 20.50 0.3
DMK 17.83 294 iP 06 24.00 0.4
PSN 17.93 300 iPd 06 25.00 0.2
KGT 17.99 289 iP 06 28.00 2.4
TLB 18.30 302 ePc 06 31.00 1.7
SMG 18.33 280 eP 06 30.00 0.3
CFR 18.41 304 ePc 06 30.00 -0.7
EZN 18.70 287 iP 06 34.40 0.1
ALN 18.99 290 iPc 06 37.80 0.0
PPE 19.14 307 ePc 06 39.50 -0.1
ABHA 19.34 201 iPc 06 43.50 0.9
KMTA 19.39 200 ePc 06 42.70 -0.4
AKSR 19.41 233 iPc 06 44.00 1.0
APE 19.42 279 eP 06 44.00 0.9
ISR 19.48 303 ePc 06 45.00 1.3
CLI 19.48 308 iPc 06 44.00 0.3
DIM 19.50 294 iPd 06 44.00 0.0
KDZ 19.54 292 iP 06 45.00 0.6
AGRW 19.54 233 iPc 06 45.00 0.5
VRI 19.59 305 ePc 06 45.00 0.0
AKRL 19.60 233 iPc 06 47.00 1.9
BUC1 19.61 300 iPc 06 46.00 0.9
DHJN 19.71 198 ePc 06 46.30 -0.5
PVL 19.84 297 iPc 06 49.00 1.4
MLR 19.99 304 iPc 06 50.00 0.7
RZN 20.06 292 iPc 06 50.00 -0.2
PLD 20.12 293 eP 06 51.00 0.4
PTT 20.19 308 eP 06 51.00 -0.3
OUR 20.52 288 ePc 06 54.30 -0.4
CMP 20.53 303 iPc 06 56.00 1.1
PGB 20.58 295 iPc 06 55.00 -0.4
VAM 20.73 274 iPd 06 57.00 0.1
PAIG 20.74 287 ePc 06 56.80 -0.2
ATH 20.77 282 iPc 06 58.00 0.6
eS 10 51.20
KSH 20.79 74 Pd 06 59.20 1.5
8.0s ******nm 6.5mb X
MMB 20.79 292 iPc 06 58.00 0.4
SRS 20.86 290 ePc 06 58.20 0.0
DRA 20.92 300 eP 07 00.00 1.2
SOH 21.02 290 eP 07 00.80 0.9
NEO 21.10 285 iPd 07 00.00 -0.7
THE 21.31 289 eP 07 02.40 -0.4
iS 10 58.80
KNT 21.38 290 ePc 07 03.50 -0.1
VLI 21.52 278 iPc 07 06.00 1.0
VAY 21.64 291 iP 07 06.40 0.3
1.2s 486.00nm 5.8mb
LIT 21.66 288 ePc 07 05.50 -0.9
GRG 21.75 290 ePc 07 06.90 -0.4
AGG 21.80 285 ePd 07 07.40 -0.4
ITM 22.27 280 iPd 07 13.40 0.9
FNA 22.52 289 ePc 07 15.40 0.4
SKO 22.53 292 iPc 07 15.40 0.4
Z 17s 22.35um 5.7MszX
N 12s 15.88um
E 16s 21.18um
i 07 16.50
i 07 25.80
iS 11 26.50
i 11 28.50
LR 11 59.00
BZS 22.95 302 eP 07 11.00 -8.1
CEI 22.96 307 eP 07 22.00 2.8X
OHR 22.96 290 iPc 07 20.20 0.8
1.2s 365.00nm 5.8mb
i 07 29.50
i 07 54.20
VLS 23.22 283 iPd 07 21.50 -0.3
IGT 23.33 286 ePc 07 23.60 0.8
BEO 23.60 299 iPc 07 27.70 2.3
PVY 23.66 294 eP 07 27.30 1.1

KEK 23.73 287 iPc 07 27.00 0.2
IVA 23.74 294 eP 07 28.50 1.6
PLE 24.15 295 eP 07 32.50 1.6
ULC 24.16 292 eP 07 30.70 -0.2
TTG 24.17 293 eP 07 31.30 0.3
eS 11 54.00
NDI 24.35 101 iPd 07 34.00 1.2
1.5s 666.67nm 6.0mb
ePP 08 18.00
eS 11 54.00
NKY 24.39 294 eP 07 34.00 0.7
BDV 24.49 293 eP 07 33.50 -0.6
BRY 24.73 294 eP 07 37.30 0.7
HCY 24.74 293 eP 07 36.70 0.2
SPC 24.84 310 iP 07 38.40 0.7
LCI 25.13 288 P 07 38.36 -1.8
KRA 25.33 311 iPc 07 42.30 0.3
0.7s 144.00nm 5.8mb
Z 20s 4.00um 4.9Msz
E 18s 4.60um
i 07 49.50
i 07 54.30
iS 12 17.00
SRO 25.68 306 iPc 07 46.90 1.6
i 08 37.30
BRT 25.68 290 P 07 41.50 -4.0X
ARO 25.77 196 iP+ 07 48.50 2.0
BLY 25.89 298 eP 07 47.50 0.2
HVAR 26.28 295 iPc 07 49.80 -1.2
ORI 26.29 288 P 07 50.50 -0.6
TDS 26.40 287 P 07 52.00 -0.1
ZST 26.56 306 iPc 07 53.90 0.4
i 08 43.30
SOI 26.78 283 P 07 54.50 -1.1
SOP 26.80 305 iPc 07 55.60 -0.1
BOM 26.85 125 eP 07 55.40 -1.0
eS 12 39.20
ZAG 26.87 301 ePc 07 56.60 0.3
PTJ 26.90 301 ePc 07 56.70 0.0
GMB 26.92 284 P 07 55.88 -1.2
1.3s 35.70nm 4.9mb
VKA 27.09 306 iPc 08 03.70 5.4X
i 08 20.90
i 08 40.00
SGO 27.13 289 P 07 58.00 -0.8
VBY 27.33 300 iPc 08 01.40 0.8
BSS 27.50 289 P 08 02.50 0.3
DUI 27.74 291 P 08 05.10 0.7
KSP 27.79 311 iPc 08 04.80 0.1
1.7s 622.00nm 6.1mb
id 08 09.20
eS 13 12.00
POO 27.80 124 iP 08 10.00 4.9X
MEU 27.81 282 eP 08 05.00 -0.1
PZI 27.83 281 P 08 04.84 -0.4
1.5s 374.00nm 5.9mb
MNO 27.86 283 ePd 08 07.00 1.3
LJU 27.90 301 eP 08 06.00 0.2
e(S) 13 08.00
RIY 27.93 299 eP 08 06.40 0.5
CEY 27.94 300 eP 08 06.50 0.4
RFI 28.10 291 P 08 08.03 0.5
1.5s 3497.00nm 6.9mb X
SDI 28.22 291 P 08 08.80 0.1
VOY 28.34 301 ePc 08 09.30 -0.5
GIB 28.38 284 P 08 09.50 -0.7
TRI 28.40 300 iPc 08 09.50 -0.7
iS 13 12.00
iLR 16 40.00
KMR 28.48 305 iP+ 08 11.10 0.2
i 08 37.30
i 08 50.00
AZI 28.49 292 P 08 11.00 -0.1
AQU 28.51 293 P 08 12.30 1.0
PRU 28.63 309 Pc 08 11.50 -0.7
2.0s 136.70nm 5.4mb
Z 14s 4.30um 5.2MszX
N 16s 5.60um
e 08 16.80
MCT 28.74 283 eP 08 15.80 2.2
NUR 28.77 334 iP 08 13.30 0.0
0.8s 68.90nm 5.5mb
e 13 06.00
e 15 44.00
ARV 28.85 295 P 08 14.90 0.5
RDP 29.04 292 P 08 16.20 0.1
KHC 29.05 307 iPc 08 15.80 -0.3

	1.6s	347.00nm			5.9mb
Z	14s	3.00um			5.1MszX
N	14s	2.40um			
E	14s	3.20um			
			e	13 20.00	
ASS	29.05	294	P	08 16.90	0.7
FVI	29.17	302	P	08 14.50	-2.6
RSM	29.22	296	Pd	08 19.00	1.4
BRG	29.22	311	iPc	08 17.20	-0.4
	2.4s	280.00nm			5.6mb
N	18s	5.00um			
E	18s	6.00um			
			iPcP	11 24.00	
			iS	13 24.00	
			i	13 40.00	
AAE	29.25	203	iPc	08 21.50	3.0X
BHG	29.25	304	iPc	08 17.90	0.0
	1.0s	295.00nm			6.0mb
WET	29.50	307	eP	08 18.90	-1.2
	1.5s	341.00nm			5.9mb
CRE	29.57	295	Pd	08 21.90	0.9
WMO	29.61	64	ePd	08 22.65	1.4
	3.0s	1100.00nm			6.1mb
Z	12s	5.70um			5.4MszX
E	12s	4.80um			
			ed	08 27.06	
			eS	13 17.78	
SFI	29.65	296	P	08 22.90	1.4
PGD	29.74	296	iPd	08 23.50	0.9
SUF	29.91	338	iP	08 22.50	-1.1
	0.7s	67.40nm			5.6mb
CLL	29.91	311	iPc	08 23.90	0.2
	1.8s	630.00nm			6.1mb
			eS	13 22.00	
WATA	30.08	303	iPc	08 24.50	-1.0
	1.4s	574.00nm			6.2mb
			i	08 29.60	
FIR	30.08	296	iPc	08 27.00	1.7
			iS	13 28.00	
BRN	30.10	313	ePd	08 25.50	0.1
SOTA	30.31	303	iPc	08 26.80	-0.7
	0.9s	285.00nm			6.1mb
			i	08 31.70	
			i	08 47.00	
			i	09 39.20	
			i	13 24.80	
HOF	30.37	309	iPc	08 27.60	-0.3
FUR	30.38	304	iPc	08 27.70	-0.3
OGA	30.40	302	iPc	08 27.90	-0.5
	1.2s	209.00nm			5.9mb
MME	30.49	297	P	08 30.13	0.9
GKN	30.54	96	P	08 29.80	0.0
BDI	30.56	296	P	08 29.60	-0.1
MOX	30.60	309	iP	08 29.00	-0.9
	1.2s	45.00nm			5.2mb
PII	30.61	296	Pd	08 29.70	-0.3
SAL	30.65	299	P	08 30.70	0.4
GRF	30.66	307	ePc	08 30.50	0.0
	1.7s	181.00nm			5.7mb
Z	18s	1.30um			4.6Msz
			e	08 35.50	
OSS	30.99	301	ePc	08 33.40	-0.1
UPP	31.07	329	iP	08 32.70	-1.1
			i	08 38.10	
			iS	13 38.00	
DMN	31.09	97	P	08 34.80	0.1
MDI	31.23	300	Pd	08 35.70	0.3
PKI	31.34	96	P	08 37.00	0.0
BOB	31.39	298	Pd	08 37.90	0.9
VDL	31.44	301	eP	08 37.60	0.1
GUN	31.58	96	P	08 39.20	0.1
SAX	31.58	302	ePc	08 38.20	-0.7
PGF	31.76	293	P	08 39.90	-0.4
HYB	31.79	119	ePd	08 40.50	-0.2
	1.0s	80.00nm			5.6mb
			eS	13 48.00	
LLS	31.79	302	ePc	08 39.40	-1.2
TMA	31.83	300	ePc	08 40.20	-0.8
VAI	31.89	300	Pd	08 40.80	-0.4
SLE	32.20	303	ePc	08 42.80	-1.2
CKI	32.22	297	P	08 42.90	-1.3
ZLA	32.25	303	ePc	08 43.30	-1.1
ORO	32.44	299	P	08 44.00	-2.2
MMK	32.46	300	eP	08 45.30	-1.2
FEL	32.53	303	P	08 45.40	-1.6
BBS	32.84	303	P	08 48.30	-1.3
SBF	32.84	296	iPc	08 49.60	-0.1
AUTN	32.84	296	P	08 50.02	0.2
DIX	32.85	300	ePc	08 49.10	-0.8
GWF	32.89	305	P	08 48.72	-1.3
HFS	32.90	327	eP	08 49.10	-0.7
	0.9s	98.10nm			5.7mb
Z	19s	3.46um			5.1Msz
			LR	21 36.00	
REVF	32.90	296	P	08 49.87	-0.2
AURF	32.92	296	P	08 50.02	-0.3
DOI	32.96	297	Pd	08 49.40	-1.3
TOUF	32.97	296	P	08 51.06	0.1
WLS	33.02	304	P	08 49.58	-1.5
MVIF	33.05	296	P	08 51.56	0.0
CDF	33.07	304	P	08 50.17	-1.4
MOF	33.12	303	P	08 50.59	-1.5
ECH	33.13	304	P	08 51.03	-1.0
CALN	33.24	296	P	08 52.97	-0.3
LOMF	33.30	302	P	08 52.53	-1.1
BSF	33.35	303	P	08 52.63	-1.4
BNI	33.36	298	P	08 53.70	-0.5
FRF	33.43	296	iPc	08 54.50	-0.2
SOD	33.49	344	iP	08 55.30	0.4
			i	09 55.60	
LMR	33.54	295	iPc	08 55.20	-0.4
	1.1s	83.05nm			5.6mb
LRG	33.64	295	iPc	08 54.00	-2.5
	1.3s	394.85nm			6.2mb
HAU	33.66	304	iPc	08 55.40	-1.2
	1.5s	287.25nm			6.0mb
GBA	33.72	126	Pd	08 58.10	0.7
	0.9s	60.10nm			5.5mb
WTS	33.82	311	ePc	08 59.00	1.0
	1.0s	199.00nm			6.0mb
			ePP	10 12.00	
			ePcP	11 36.50	
VITF	33.91	304	P	08 57.72	-1.1
WIT	34.06	312	eP	09 00.50	0.5
MEM	34.12	308	iPc	09 01.77	1.2
ENN	34.19	308	ePc	09 02.00	0.8
	1.0s	310.00nm			6.2mb
			ePcP	11 37.50	
NAO	34.48	327	P	09 02.30	-1.2
	1.3s	122.60nm			5.7mb
KONO	34.53	325	iPc	09 02.92	-1.1
			epPc	09 09.32	22kmX
DBN	34.84	311	iP+	09 08.00	1.3
Z	16s	1.30um			4.8MszX
			ePP	10 26.00	
			eS	14 36.00	
DOU	34.96	307	Pc	09 08.90	1.1
			i	09 14.60	
			e	10 22.00	
			PcP	11 40.20	
			S	14 44.00	
LSA	35.09	89	P	09 10.90	1.2
Z	11s	2.10um			5.1MszX
E	11s	1.20um			
			PcP	11 45.00	
			S	14 45.00	
UCC	35.18	308	Pc+	09 10.70	1.1
SNF	35.20	308	iPc	09 10.77	1.0
LBF	35.23	302	iPc	09 09.40	-0.8
LOR	35.31	302	iPc	09 10.00	-0.9
	1.1s	133.55nm			5.7mb
SMF	35.32	301	iPc	09 10.40	-0.6
KEV	35.40	347	ePc	09 11.25	-0.1
Z	18s	3.40um			5.1Msz
			epPc	09 15.56	15kmX
			i	10 27.20	
			eS	14 45.83	
			e	17 07.64	
			LR	24 34.00	
SSF	35.55	302	iPc	09 12.20	-0.7
AVF	35.66	301	iPc	09 13.10	-0.7
RGS	35.67	330	iP	09 15.30	1.6
BGF	36.01	301	iPc	09 16.20	-0.6
	1.4s	119.80nm			5.6mb
MAF	36.21	300	iPc	09 18.50	0.0
KOD	36.29	129	iP	09 21.00	1.3
			eS	15 07.00	
ETER	36.31	294	iPc	09 17.90	-1.4
TCF	36.46	301	iPc	09 20.60	0.0
CAF	36.63	298	iPc	09 22.00	-0.1
ESEL	36.67	290	iPc	09 22.20	-0.2
BER	36.79	324	iP	09 24.00	0.9
LSF	36.93	300	iPc	09 24.30	-0.2
RJF	36.99	299	iPc	09 25.50	0.4
TRO	37.04	343	eP	09 26.00	0.9
LPO	37.27	298	iPc	09 27.40	0.0
	2.0s	664.75nm			6.1mb
LFF	37.57	298	iPc	09 30.00	0.1
LDF	37.99	304	iPc	09 32.80	-0.6
	1.6s	391.80nm			5.9mb
EPF	38.06	295	iPc	09 32.40	-1.7
MFF	38.07	301	iPc	09 33.60	-0.5
FLN	38.23	305	iPc	09 34.80	-0.5
	1.6s	437.25nm			6.0mb
EBR	38.29	292	iP	09 36.00	0.1
			e	11 05.00	
EROO	38.35	292	iPc	09 35.80	-0.7
LPF	38.62	303	iPc	09 38.20	-0.4
GTA	39.09	70	P	09 43.80	0.9
	1.8s	400.80nm			5.8mb
Z	14s	3.50um			5.3MszX
E	12s	2.10um			
			PP	11 21.00	
			S	15 42.00	
			SS	18 27.00	
ACU	39.44	288	iPc	09 45.50	-0.2
NAI	39.61	201	iP	09 51.50	4.1X
	1.0s	83.00nm			5.4mb
ECHE	39.63	290	iPc	09 47.10	-0.1
EKA	40.14	315	P	09 51.00	-0.2
	0.7s	39.10nm			5.2mb
ETOR	40.19	292	iPc	09 50.60	-1.3
ECRI	40.20	295	iPc	09 51.40	-0.5
EALH	40.37	288	iPd	09 53.60	0.3
YRH	40.87	311	eP	09 57.00	-0.2
EVIA	41.01	289	iPc	09 58.70	0.1
ENIJ	41.21	287	iPc	09 59.70	-0.6
GUD	41.78	293	iPc	10 04.40	-0.6
TOL	41.88	291	ePc	10 04.22	-1.4
	1.0s	300.00nm			6.0mb
			epPc	10 10.18	20kmX
			iPP	11 45.00	
			ePcS	15 40.00	
			eS	16 27.85	
			iSS	19 38.00	
ECP	41.94	310	iPd	10 05.80	-0.1
	0.6s	185.00nm			6.0mb
DLE	42.03	312	eP	10 06.80	0.1
	1.6s	268.00nm			5.7mb
EBAN	42.10	289	iPc	10 07.70	0.2
AFC	42.16	287	iPc	10 06.80	-1.4
ECOG	42.17	288	iPd	10 07.40	-0.8
DCN	42.47	312	eP	10 10.50	0.2
	1.6s	241.00nm			5.7mb
MAL	42.97	287	iPc	10 13.70	-0.9
			iPP	11 56.00	
			iS	16 30.00	
BCAO	43.02	229	iPc	10 14.00	-1.2
	1.6s	689.00nm			6.1mb
LZH	43.03	74	Pc	10 15.50	0.1
	2.0s	740.00nm			6.1mb
Z	16s	3.60um			5.4MszX
N	14s	3.50um			
E	14s	2.50um			
			pP	10 25.50	34kmX
			PcP	12 04.50	
			eS	16 44.00	
EHOR	43.30	289	iPc	10 16.60	-0.7
EPLA	43.35	292	iPc	10 17.40	-0.3
EMON	43.53	297	eP	10 18.90	-0.2
EPRU	43.53	288	iPc	10 17.10	-2.1
ERUA	43.60	296	iPc	10 19.00	-0.7
EJIF	43.87	287	iPc	10 20.30	-1.6
VAL	44.34	310	iP	10 25.80	0.3
EVAL	44.51	289	iPc	10 26.30	-0.8
STS	44.51	297	eP	10 27.20	0.1
IFR	44.55	283	iPc	10 28.00	0.3
CD2	44.73	81	iPd	10 28.60	-0.4
	1.4s	600.00nm			6.3mb
Z	16s	2.80um			5.3MszX
N	12s	2.50um			
EZAM	44.78	296	iPc	10 28.50	-0.8
KBS	45.11	350	iP	10 32.00	0.6
			i	12 14.70	
LIS	46.00	291	iPc	10 39.30	0.4
KMI	46.35	89	ePc	10 41.70	-0.4
	2.0s	500.00nm			6.2mb
Z	18s	2.60um			5.2Msz
N	12s	1.70um			
			epPc	10 46.00	14kmX
			iS	17 29.54	

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			sS	17 32.00			
AVE	46.41	284	iPc	10 42.50	0.2		
			i	11 15.00			
BTO	46.42	66	P	10 43.00	0.6		
N	13s	1.70um					
E	13s	3.10um					
			sP	10 47.50			
			S	17 30.50			
			eSS	20 46.00			
CHG	46.46	99	eP	10 42.40	-0.4		
	1.0s	24.50nm		5.2mb			
			eS	17 32.00			
CHTO	46.46	99	ePc	10 40.70	-2.1		
			epPc	10 45.33	15kmX		
TIO	47.18	281	iP	10 47.00	-1.5		
			i	11 05.00			
BDT	47.37	100	eP	10 49.50	-0.4		
	1.0s	55.20nm		5.6mb			
HHC	47.48	65	P	10 52.40	1.6		
Z	16s	5.10um		5.6MszX			
N	13s	1.70um					
E	13s	1.80um					
XAN	47.64	75	iPc	10 52.60	0.6		
	3.0s	1000.00nm		6.4mb			
N	14s	2.30um					
E	14s	1.40um					
			S	17 45.60			
AKU	48.23	329	iPc	10 57.60	1.5		
	1.4s	232.56nm		6.1mb			
			i	12 48.90			
GYA	48.90	85	P	11 02.00	0.1		
N	16s	1.50um					
E	16s	0.80um					
			S	18 07.00			
TIY	49.07	69	Pc	11 03.50	0.4		
Z	15s	3.30um		5.4MszX			
E	13s	1.90um					
			S	18 08.00			
NST	49.15	101	eP	11 02.40	-1.4		
DAG	49.77	344	iPc	11 07.50	-0.4		
	0.3s	149.35nm		6.5mb			
REY	49.86	327	iP	11 10.90	2.3		
			i	13 07.70			
NNT	50.65	105	eP	11 07.80	-7.4X		
BJI	51.08	65	ePc	11 17.10	-1.2		
	2.0s	190.00nm		5.7mb			
Z	16s	2.30um		5.3MszX			
N	15s	2.50um					
			epPc	11 21.73	15kmX		
			eS	18 40.00			
NPA	52.40	193	eP	11 30.00	1.6		
TIA	53.11	69	eP	11 33.00	-0.7		
	1.8s	100.00nm		5.5mb			
Z	16s	2.30um		5.3MszX			
N	16s	1.90um					
E	16s	1.50um					
			S	19 05.00			
WHN	53.23	77	eP	11 35.50	0.9		
	1.5s	200.00nm		5.8mb			
Z	12s	1.20um		5.2MszX			
N	12s	2.31um					
			pP	11 45.00	31kmX		
			iS	19 08.00			
QIZ	55.07	91	eP	11 49.00	0.7		
N	15s	1.20um					
E	14s	0.98um					
			PP	13 47.00			
DL2	55.44	64	P	11 51.00	0.4		
Z	14s	0.80um		5.0MszX			
N	13s	1.60um					
E	14s	1.10um					
			S	19 35.00			
SNY	55.76	60	Pc	11 49.50	-3.4X		
Z	14s	2.90um		5.5MszX			
N	13s	1.20um					
E	12s	2.00um					
			S	19 33.00			
			ScS	21 42.00			
GZH	55.83	85	P	11 54.10	0.4		
	5.0s	1500.00nm		6.3mb X			
Z	20s	2.10um		5.2Msz			
N	11s	0.80um					
E	12s	0.70um					
			S	19 44.00			
NJ2	56.09	73	Pc	11 54.00	-1.4		
	6.0s	700.00nm		5.9mb X			
Z	16s	0.90um		5.0MszX			

			S	19 47.00			
CN2	56.35	57	Pc	11 56.00	-1.1		
Z	16s	3.80um		5.6MszX			
N	13s	2.60um					
E	13s	0.90um					
			S	19 47.00			
			eSS	23 36.00			
PSI	56.39	115	ePd	11 55.40	-2.3		
KRI	56.49	203	iPc	12 10.00	11.5X		
IPM	56.68	112	ePd	12 01.90	2.0		
	1.0s	34.60nm		5.3mb			
KIC	58.05	253	Pc	12 08.00	-1.5		
	0.9s	176.50nm		6.1mb			
TIC	58.08	253	Pc	12 08.44	-1.3		
SSE	58.29	73	Pd	12 11.50	0.5		
	1.2s	97.00nm		5.7mb			
Z	20s	0.90um		4.9Msz			
			ePP	14 20.00			
LIC	58.36	253	Pc	12 01.16	-10.5X		
	0.8s	163.00nm					
			S	36 50.00			
MDJ	58.82	55	eP	12 17.00	2.5		
Z	20s	2.30um		5.3Msz			
			eS	20 16.00			
QZH	59.12	80	eP	12 16.00	-0.8		
Z	18s	2.20um		5.3Msz			
N	16s	1.40um					
			S	20 26.50			
CIR	59.86	200	iPd	12 21.00	-0.9		
BUL	59.91	203	iPd	12 18.90	-3.5X		
BFT	64.73	200	iPc	12 54.00	-0.6		
	0.8s	140.00nm		6.2mb			
BAG	65.11	88	eP	12 49.50	-7.8X		
SLR	65.27	201	iPc	12 57.00	-1.0		
	1.3s	100.00nm		5.8mb			
Z	19s	16.60um		6.3Msz			
BPI	65.76	201	iP	13 00.50	-0.6		
KSR	65.81	203	eP	12 59.50	-2.0		
WIN	66.49	213	iPc	13 05.50	-0.4		
	1.0s	120.00nm		6.0mb			
PRY	66.63	202	iPd	13 05.50	-1.2		
	0.8s	46.00nm		5.7mb			
BFS	66.81	202	iPd	12 55.50	-12.3X		
	0.9s	86.00nm					
MBC	67.18	357	ePc	13 09.30	-0.1		
SWZ	67.53	204	iPc	12 57.50	-14.9X		
	1.3s	270.00nm					
SEK	67.90	201	iPd	13 13.60	-1.1		
	0.7s	55.00nm		5.8mb			
MAT	68.27	60	eP	13 16.00	-1.0		
	2.0s	176.47nm		5.9mb			
Z	20s	0.71um		4.9Msz			
			eS	22 17.00			
FRB	68.76	335	ePc	13 19.00	-0.4		
	0.8s	109.00nm		6.1mb			
BLF	69.06	202	iPc	13 20.50	-1.4		
	0.8s	138.00nm		6.2mb			
HVD	70.66	202	iPc	13 48.00	16.3X		
	0.9s	54.00nm					
POF	71.40	207	iPc	13 37.50	1.6		
	0.6s	61.00nm		5.9mb			
GRM	72.89	200	iPc	13 44.50	-0.2		
	1.5s	200.00nm		6.0mb			
SCH	73.97	327	eP	13 50.00	-0.8		
INK	75.35	1	ePc	13 57.30	-1.1		
	1.3s	69.00nm		5.5mb			
IMA	76.03	10	P	14 02.30	-0.3		
	1.5s	104.73nm		5.7mb			
COL	77.86	8	ePc	14 12.30	-0.3		
			epPc	14 17.10	15kmX		
			iPP	17 07.11			
			iHPP	17 07.44			
			iS	24 07.10			
FBA	77.86	8	ePc	14 13.10	0.5		
TTA	78.64	12	ePc	14 17.60	0.6		
CBM	79.95	322	P	14 24.00	-0.3		
SVW	80.41	12	ePc	14 27.40	0.8		
YKA	80.42	353	eP	14 25.70	-0.8		
	1.1s	27.00nm		5.2mb			
TOA	80.76	8	ePc	14 30.00	1.6		
PMR	80.91	9	eP	14 29.60	0.5		
	1.0s	37.50nm		5.4mb			
Z	20s	1.50um		5.3Msz			
BNH	83.15	322	P	14 41.80	0.6		
HBVT	84.21	323	P	14 46.50	0.0		
WNY	84.57	323	P	14 48.00	-0.4		
RSNY	84.78	324	P	14 50.00	0.7		

	1.1s	35.20nm		5.5mb			
HRV	84.81	321	ePc	14 49.92	0.4		
			epPc	14 54.39	14kmX		
			eHPP	18 08.99			
			ePP	18 09.67			
FFC	85.82	344	iPc	14 54.70	0.3		
	0.7s	23.00nm		5.5mb			
TBR	87.16	321	P	15 00.80	-0.4		
PNJ	87.30	321	P	15 02.80	1.0		
GMTN	87.34	321	iP	15 01.50	-0.5		
SCP	89.22	323	ePc	15 10.26	-0.8		
			epPc	15 14.73	14kmX		
			iHPP	18 41.81			
			ePP	18 44.92			
EDM	89.32	350	iPc	15 11.60	0.2		
CLE	90.40	326	iP	15 17.60	1.0		
CAI	91.40	263	iPd	15 23.20	1.7		
SES	91.71	348	ePc	15 23.00	0.5		
BLA	93.26	322	ePc	15 30.00	0.1		
	1.6s	100.00nm		6.0mb			
Z	22s	0.74um		5.1Msz			
PNT	93.91	353	eP	15 33.00	0.4		
NEW	94.68	351	P	15 37.50	1.3		
	1.4s	40.76nm		5.7mb			
MCW	94.81	355	P	15 37.70	0.9		
RSSD	96.19	341	P	15 44.80	1.3		
LRM	96.37	348	eP	15 44.50	0.2		
FVM	97.14	329	P	15 47.40	-0.2		
WRA	97.44	109	P	15 59.00	10.0X		
	0.9s	1.80nm					
GLD	100.59	341	Pdiff	16 00.00	-3.2X		
Z	19s	2.38um		5.7Msz			
GOL	100.67	341	Pdiff	16 04.00	0.4		
Z	20s	1.40um		5.5Msz			
LNO	101.06	332	ePdiff	16 06.00	1.1		
TUL	101.06	332	ePdiff	16 05.50	0.4X		
	1.2s	15.00nm		5.4mb			
MEO	103.09	334	e(Pdif	16 14.70	0.5		
ANMO	105.43	340	Pdiff	16 27.20	2.4		
Z	18s	1.86um		5.7Msz			
ALQ	105.43	340	ePdiff	16 25.50	0.6		
Z	20s	1.17um		5.4Msz			
CLC	106.97	349	ePKP	20 43.00	1.7		
			e	20 59.00			
ISA	107.25	350	ePKP	20 58.00	16.2X		
GSC	107.35	349	ePKP	20 41.00	-1.1		
			e	21 01.00			
SBB	108.11	349	ePKP	20 47.00	3.5X		
MWC	108.60	349	ePKP	20 49.00	4.4X		
GLA	109.20	346	ePKP	21 03.00	17.4X		
			e	21 14.00			
SIV	115.99	269	PKP	20 57.40	-1.6		
HON	116.65	29	PKP	21 10.00	10.0X		
Z	20s	1.01um		5.4Msz			
CCH	120.82	271	ePKP	21 08.00	-0.5		
ZOBO	121.82	273	PKP	21 11.20	0.5		
Z	22s	0.87um		5.4Msz			
			LR	00 40.00			
LPB	121.94	273	PKP	21 10.00	-0.7		
Z	16s	1.35um		5.7MszX			
			eLR	02 20.00			
SPA	126.45	180	iPKPc	21 16.10	-1.6		
	1.5s	88.64nm					
S.D. = 1.1 on 366 of 400 obs.							

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* JUN 21, 1990 09h 44m 30.60± 0.88s
37.336 N ±13.3km 49.241 E ± 8.7km
DEPTH = 10.0km (geophysicist)
CASPIAN SEA (338)

TEH	2.35	132	iPc	45 11.00	1.0		
TAB	2.42	288	eP	45 11.00	0.0		
KER	3.45	211	eP	45 25.00	-0.5		
MAIO	8.29	94	eP	46 33.00	-0.8		
MLR	19.23	302	eP	48 58.00	0.4		
			e	54 39.00			
S.D. = 1.0 on 5 of 5 obs.							

JUN 21, 1990 10h 06m 19.71± 2.32s
4.725 N ± 7.0km 126.311 E ±11.1km
DEPTH = 93.7 ± 24.2 km
4.8mb (7 obs.)
TALAUD ISLANDS (263)

AAI	8.56	167	eP	08 22.80	0.0		
MTN	18.10	165	eP	10 26.00	-0.6		
			e	14 16.00			

QIZ	21.46	313	eP	11	02.80	0.7
KGM	23.11	264	ePc	11	21.50	3.2X
IPM	25.20	271	ePd	11	40.20	1.8
	0.9s		31.60nm			4.8mb
WB5	25.70	162	eP	11	42.60	-0.4
			eS	16	13.00	
WRA	25.75	162	Pd	11	42.90	-0.5
	0.4s		22.40nm			5.0mb
LOE	27.17	300	eP	11	56.00	-0.4
QIS	28.31	153	iPd	12	06.50	-0.2
	0.5s		10.00nm			4.7mb
NANU	29.10	201	iPd	12	14.30	0.6
ASPA	29.17	166	iPd	12	14.10	-0.3
	0.6s		16.00nm			4.8mb
CHG	30.16	300	eP	12	24.00	0.7
WARB	30.73	179	eP	12	28.70	0.6
MEKA	32.05	193	iPc	12	39.80	0.1
	0.3s		8.00nm			5.0mb
XAN	33.35	333	P	12	50.20	-0.7
CD2	33.60	323	eP	12	49.00	-4.2X
TIY	35.20	341	eP	13	07.30	0.5
BJI	36.33	347	eP	13	17.00	0.9
SNY	37.02	357	eP	13	22.40	0.4
LZH	37.44	329	Pc	13	24.00	-1.8
CN2	38.92	359	eP	13	37.00	-0.9
STK	39.20	159	eP	13	40.70	0.3
	1.0s		13.00nm			4.7mb
MDJ	39.83	4	eP	13	47.00	1.6
BRS	40.90	143	iPc	13	55.00	0.6
			i	14	11.00	
GUN	44.81	305	P	14	26.20	-0.4
PKI	45.06	305	P	14	30.20	1.6
DMN	45.32	305	P	14	28.00	-2.6
GKN	45.86	305	P	14	34.00	-0.7
GBA	48.97	284	Pc	14	57.90	-1.0
	0.5s		4.00nm			4.6mb
NAI	89.61	269	iP	19	14.00	4.8X
S.D. = 1.1 on 27 of 30 obs.						

• JUN 21, 1990 10h 09m 46.33± 0.72s
37.358 N ±11.0km 49.671 E ± 8.5km
DEPTH = 10.0km (geophysicist)
4.3mb (2 obs.)
CASPIAN SEA (338)

TAB	2.74	286	eP	10	32.00	0.6
KER	3.65	216	eP	10	44.00	-0.2
MAIO	7.95	95	iPc	11	45.00	0.2
	0.7s		13.66nm			5.3mb X
			eS	13	20.00	
HFS	32.24	327	eP	16	16.10	-0.6
	0.9s		11.00nm			4.8mb
NAO	33.82	326	P	16	30.20	-0.2
	0.7s		0.80nm			3.8mb
INK	74.63	1	eP	21	27.00	0.1
S.D. = 0.5 on 6 of 6 obs.						

? JUN 21, 1990 10h 12m 06.45± 3.09s
34.430 S ±30.1km 70.810 W ±16.1km
DEPTH = 80.0km (geophysicist)
CHILE-ARGENTINA BORDER REGION (127)

CHCH	0.51	15	iPc	12	20.40	-0.1
			iS	12	32.70	
LNV	0.69	313	iPc	12	22.20	0.1
			iS	12	36.00	
TACH	0.78	352	iPc	12	23.40	0.2
			iS	12	38.50	
PCH	0.84	17	iPc	12	24.00	0.0
			iS	12	38.70	
LCCH	1.14	326	iPd	12	27.50	0.0
			iS	12	46.00	
PEL	1.29	5	iPc	12	29.40	0.0
			iS	12	48.50	
ROCH	1.46	353	ePd	12	31.50	-0.4
			e	12	51.50	
JACH	1.75	6	eP	12	36.00	0.3
			iS	12	58.80	
S.D. = 0.3 on 8 of 8 obs.						

JUN 21, 1990 10h 12m 25.70± 0.92s
54.017 N ± 6.0km 165.449 W ± 5.4km
DEPTH = 73.0 ± 7.6 km
4.6mb (12 obs.)
FOX ISLANDS, ALEUTIAN ISLANDS (9)
Felt (IV) at Unalaska.

SDN	3.17	63	iPd	13	14.30	0.2
ADK	7.12	257	ePc	14	09.20	0.0
MCNL	8.02	45	eP	14	21.70	0.0
CDD	8.18	48	eP	14	23.16	-0.7
SVW	8.85	33	ePc	14	33.80	0.7
RED	9.39	42	eP	14	40.55	0.0
CNPM	9.55	49	eP	14	40.60	-2.0
SPU	10.14	40	eP	14	50.36	-0.4
CRP	10.16	39	eP	14	51.93	0.9
TTA	10.20	25	eP	14	52.20	0.7
CGLM	10.24	39	eP	14	52.12	0.0
NCG	10.25	38	eP	14	53.37	1.2
SLKM	10.49	46	eP	14	52.74	-2.6X
SEW	10.62	49	eP	14	54.03	-3.0X
SUA	10.82	41	eP	14	58.61	-1.3
SKT	10.85	37	eP	15	00.58	0.3
PMS	11.16	43	eP	15	01.70	-2.6X
PMR	11.52	42	eP	15	05.50	-3.6X
MID	11.79	55	eP	15	09.42	-3.3X
TOA	12.98	44	eP	15	25.70	-2.8X
IMA	13.41	21	eP	15	36.60	2.5
FBA	14.06	32	eP	15	43.00	0.5
PCA	14.93	56	eP	15	52.49	-1.4
BCPM	15.21	57	eP	15	56.10	-1.2
HQN	15.50	59	eP	15	59.88	-1.1
INK	20.67	34	ePd	16	57.80	-3.4X
YKA	27.37	52	eP	18	05.20	-0.2
	0.6s		2.80nm			4.0mb
MBC	28.14	21	eP	18	12.00	-0.2
	0.5s		4.00nm			4.3mb
NEW	30.37	81	eP	18	50.00	17.6X
	1.0s		3.75nm			
FHC	30.55	99	ePc	18	35.20	1.1
LBFM	31.43	96	eP	18	53.00	11.0X
WDC	31.53	97	ePc	18	43.30	0.6
MIN	32.23	97	ePc	18	49.00	0.0
ORV	32.80	98	ePc	18	53.50	-0.3
SES	32.85	74	eP	18	56.00	1.9
PCC	33.67	102	ePc	19	00.90	-0.4
MHC	34.21	101	ePc	19	06.20	0.1
GCC	34.21	102	ePc	19	05.90	-0.1
CMB	34.46	99	ePc	19	08.60	0.4
			ePcP	21	40.70	
			epPcP	22	01.00	
SAO	34.72	102	eP	19	09.90	-0.4
PRS	35.06	102	ePc	19	13.50	0.3
KVN	35.13	96	eP	19	14.50	0.5
FRI	35.57	100	ePc	19	17.80	0.3
			ePcP	21	43.60	
			epPcP	22	04.20	
PRI	35.60	102	ePc	19	18.70	0.7
TNP	36.29	96	eP	19	23.90	0.1
PLM	39.78	101	eP	19	53.00	0.0
GOL	42.21	84	eP	20	12.50	-0.5
FRB	46.25	38	ePd	20	44.10	-0.6
SCH	52.64	46	eP	21	33.00	-0.9
NAO	65.47	2	P	23	01.30	-1.1
	0.7s		3.00nm			4.3mb
HFS	66.20	0	eP	23	05.70	-1.4
	0.4s		8.50nm			5.0mb
LOR	78.68	7	eP	24	21.30	0.4
	0.6s		4.50nm			4.6mb
SSF	78.86	8	eP	24	22.30	0.4
	0.6s		5.85nm			4.7mb
LBF	78.97	7	eP	24	22.60	0.1
	0.6s		3.60nm			4.5mb
AVF	79.12	8	eP	24	23.60	0.4
	0.5s		3.65nm			4.6mb
SMF	79.30	7	eP	24	24.70	0.4
	0.4s		3.15nm			4.6mb
LSF	79.50	9	eP	24	25.50	0.2
	0.7s		6.60nm			4.7mb
TCF	79.52	9	eP	24	25.50	0.0
	0.6s		4.95nm			4.6mb
WRA	89.88	235	Pc	25	16.40	-1.1
	0.6s		2.00nm			4.5mb
BUL	144.51	337	iPKPd	31	51.50	-3.7X
SWZ	152.04	339	iPKPd	32	00.00	-6.9X
	1.0s		16.00nm			
			e	32	19.00	
S.D. = 0.9 on 50 of 61 obs.						

? JUN 21, 1990 10h 21m 35.03± 0.85s
56.066 S ±48.5km 128.494 W ±15.7km
DEPTH = 10.0km (geophysicist)
5.0mb (3 obs.)
SOUTH PACIFIC CORDILLERA (691)

LNV	44.47	85	iPc	29	48.50	0.7
TACH	44.96	85	eP	29	52.00	0.2
ROCH	45.42	84	eP	29	57.00	1.3
PEL	45.48	85	iPc	29	56.90	1.0
	1.0s		40.00nm			5.3mb
LPB	60.01	74	eP	31	44.00	-0.5
ZOBO	60.21	74	P	31	45.00	-1.1
	1.1s		15.95nm			5.1mb
SIV	64.29	80	iP	32	10.50	-2.2
WRA	77.59	253	P	33	34.00	1.2
	0.8s		2.00nm			4.3mb
WB5	77.63	253	eP	33	31.80	-1.2
KVN	95.16	8	e(P)	35	00.00	0.7
S.D. = 1.4 on 10 of 10 obs.						

& JUN 21, 1990 10h 26m 07.50s
40.298 N 124.565 W
DEPTH = 6.0km
NEAR COAST OF NORTHERN CALIF. (35)
<BRK>. ML 2.8 (BRK).

FHC	0.67	41	ePc	26	20.80	-0.1
			iS	26	29.90	
WDC	1.57	79	ePd	26	33.70	-2.3
			e	26	58.90	
MIN	2.26	88	eP	26	43.50	-2.7
ORV	2.47	106	eP	26	46.20	-2.8
4 obs. associated						

% JUN 21, 1990 10h 39m 39.53± 0.43s
41.796 N ± 4.5km 13.288 E ± 3.5km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

AZI	0.22	30	P	39	45.00	0.7
			eSg	39	48.50	
SDI	0.40	103	Pd	39	48.20	0.4
			eSg	39	54.70	
RDP	0.43	265	P	39	48.50	0.2
			eSg	39	55.50	
RMP	0.44	272	P	39	48.60	0.1
			eSg	39	56.10	
AQU	0.56	9	P	39	50.60	-0.4
			eSg	39	58.90	
DUI	0.89	98	P	39	56.50	-0.1
ASS	1.36	340	P	40	04.70	0.2
BSS	1.52	131	P	40	06.50	-0.3
ARV	1.72	352	P	40	09.00	-0.7
SGO	1.96	128	P	40	13.00	-0.2
CRE	2.08	332	P	40	15.00	0.0
SFI	2.37	334	P	40	19.00	0.0
S.D. = 0.4 on 12 of 12 obs.						

& JUN 21, 1990 10h 43m 20.79s
62.873 N 143.943 W
DEPTH = 2.8km
CENTRAL ALASKA (1)
<AGS-P>.

TMW	0.63	43	iP	43	32.34	-0.9
PAX	0.71	279	eP	43	34.37	-0.5
			iS	43	44.30	
DOT	0.78	356	iP	43	35.66	-0.7
			iS	43	47.17	
SDG	0.82	246	iP	43	36.43	-0.6
			iS	43	47.80	
TOA	1.29	234	iP	43	45.17	-0.2
			iS	44	03.09	
DMW	1.43	327	eP	43	47.20	-0.5
			eS	44	07.88	
KLU	1.67	215	iP	43	50.41	-0.7
			eS	44	12.26	
SCM	1.89	238	eP	43	54.47	0.1
BALM	1.99	157	eP	43	55.82	-0.1
			eS	44	21.07	
VLZ	2.08	214	eP	43	56.28	-0.7
TGL	2.19	166	eP	43	58.59	-0.1
VZW	2.20	215	eP	43	58.37	-0.4
SML	2.31	244	eP	44	00.87	0.5
DWY	2.35	58	P	43	59.00	-1.9
MCK	2.41	293	eP	44	04.60	2.7
CCB	2.47	318	eP	44	05.05	2.4
GLI	2.50	218	eP	44	02.58	-0.4
GHO	2.57	247	eP	44	05.25	1.1
GLM	2.61	326	eP	44	04.73	0.0
FBA	2.65	322	eP	44	05.75	0.5
PLRM	2.75	244	eP	44	08.30	1.7

21d 10h

PWA 3.03 249 eP 44 13.14 2.5
PMS 3.11 241 eP 44 14.61 2.9
SUA 3.49 249 eP 44 21.33 4.1
SKT 3.64 259 eP 44 22.01 2.8
25 obs. associated

& JUN 21, 1990 10h 46m 49.00s
33.160 N 115.630 W
DEPTH = 1.0km
SOUTHERN CALIFORNIA (43)
<SPEC>. Foreshock. Held to mainshock hypocenter.

GLA 0.68 99 eP 47 01.60 -1.0
PLM 1.05 281 P 47 07.90 -1.9
PEC 1.47 300 e(P) 47 15.90 -0.8
QSM 2.98 340 P 47 44.70 6.4
NOP 2.99 352 P 47 44.40 5.8
JON 3.30 353 P 47 50.60 7.7
ABL 3.43 300 eP 47 59.50 14.6
SPRG 3.53 358 P 47 55.00 8.8
YMT3 3.68 350 P 47 58.00 9.7
YMT6 3.74 350 P 47 59.30 10.0
BCH 4.21 300 eP 48 04.30 8.5
QCS 4.60 357 P 48 14.20 12.7
TNP 5.08 346 e(P) 48 20.00 11.7
MSU 6.03 27 e(P) 48 24.00 2.2
KVN 6.21 342 e(P) 48 35.00 10.8
ALQ 7.82 74 e(P) 49 14.00 27.1
16 obs. associated

& JUN 21, 1990 10h 47m 21.80s
33.160 N 115.630 W
DEPTH = 1.0km
SOUTHERN CALIFORNIA (43)
<PAS-P>. ML 3.9 (PAS), 4.0 (BRK). Felt (III) at Brawley. Felt throughout the Imperial Valley ond as far north as Banning.

HAY 0.55 359 iPc 47 32.60 -0.1
IKP 0.65 218 eP 47 34.10 -0.7
TPC 1.01 340 eP 47 40.00 -1.7
PLM 1.05 281 eP 47 40.70 -1.9
PEC 1.47 300 eP 47 49.00 -0.5
ABL 3.43 300 P 48 15.00 -2.7
FRI 5.08 320 eP 48 55.70 14.8
PRI 5.11 307 eP 48 55.90 14.5
MHC 6.45 312 eP 49 08.50 8.1
BW06 10.73 25 eP 50 03.50 3.6
1.0s 5.25nm 4.9mb X
10 obs. associated

& JUN 21, 1990 10h 51m 15.00s
33.160 N 115.640 W
DEPTH = 1.0km
SOUTHERN CALIFORNIA (43)
<PAS-P>. ML 3.3 (PAS).

GLA 0.69 99 eP 51 28.00 -0.8
CPBX 0.79 159 eP 51 31.40 0.6
S 51 43.50
BAR 0.99 241 eP 51 33.00 -1.6
TPC 1.00 340 iPc 51 33.50 -1.4
PLM 1.04 281 eP 51 33.20 -2.4
CBX 1.21 226 ePn 51 36.90 -1.5
S 51 53.70
EMX 1.22 164 eP 51 38.60 0.2
ENX 1.54 214 ePd 51 43.00 -0.7
S 52 04.50
PBX 1.69 213 eP 51 44.50 -1.2
ECBX 1.76 163 eP 51 47.50 0.8
ABL 3.42 301 eP 52 22.00 11.2
11 obs. associated

& JUN 21, 1990 10h 58m 59.00s
33.160 N 115.630 W
DEPTH = 1.0km
SOUTHERN CALIFORNIA (43)
<SPEC>. ML 3.3 (PAS). Held to mainshock hypocenter.

GLA 0.68 99 eP 59 12.30 -0.3
PLM 1.05 281 eP 59 18.30 -1.5
TNP 5.08 346 e(P) 00 18.50 0.2
3 obs. associated

& JUN 21, 1990 11h 03m 14.00s
33.160 N 115.630 W
DEPTH = 1.0km
SOUTHERN CALIFORNIA (43)
<SPEC>. ML 3.3 (PAS). Held to mainshock hypocenter.

GLA 0.68 99 eP 03 27.40 -0.2
PLM 1.05 281 eP 03 33.00 -1.8
2 obs. associated

& JUN 21, 1990 11h 08m 45.90s
33.160 N 115.640 W
DEPTH = 1.0km
SOUTHERN CALIFORNIA (43)
<PAS-P>. ML 3.6 (PAS).

HAY 0.55 0 iPc 08 56.80 0.0
IKP 0.64 218 eP 08 58.30 -0.5
GLA 0.69 99 iPc 08 59.00 -0.7
CPBX 0.79 159 eP 09 00.80 -0.9
S 09 13.80
TPC 1.00 340 eP 09 04.20 -1.6
PLM 1.04 281 eP 09 04.70 -1.8
LMX 1.19 151 eP 09 07.00 -2.0
CBX 1.21 226 ePn 09 07.60 -1.7
S 09 24.45
EMX 1.22 164 eP 09 08.00 -1.3
S 09 25.60
PEC 1.47 300 eP 09 10.80 -2.7
ENX 1.54 214 ePd 09 13.10 -1.5
S 09 34.00
PBX 1.69 213 eP 09 15.40 -1.2
S 09 39.10
ECBX 1.76 163 eP 09 17.00 -0.6
S 09 41.20
ABL 3.42 301 eP 09 46.50 4.8
BLP 4.20 291 e(P) 09 52.00 -0.5
BCH 4.20 300 e(P) 09 50.50 -2.1
TNP 5.08 346 eP 10 05.00 -0.2
KVN 6.21 342 eP 10 18.50 -2.6
ALQ 7.83 74 e(P) 10 45.00 1.1
BW06 10.73 25 iP 11 29.00 5.0
1.0s 2.50nm 4.6mb X
20 obs. associated

& JUN 21, 1990 11h 35m 29.00s
33.160 N 115.630 W
DEPTH = 1.0km
SOUTHERN CALIFORNIA (43)
<SPEC>. Held to mainshock hypocenter.

GLA 0.68 99 iPc 35 42.40 -0.2
PLM 1.05 281 eP 35 47.80 -2.0
2 obs. associated

& JUN 21, 1990 11h 36m 03.00s
33.160 N 115.630 W
DEPTH = 1.0km
SOUTHERN CALIFORNIA (43)
<SPEC>. ML 3.7 (PAS). Held to mainshock hypocenter.

GLA 0.68 99 iPc 36 16.40 -0.2
PLM 1.05 281 eP 36 32.40 8.6
ABL 3.43 300 eP 37 17.50 18.6
BCH 4.21 300 eP 37 29.70 19.9
4 obs. associated

JUN 21, 1990 12h 17m 27.54± 0.28s
36.732 N ± 6.0km 49.407 E ± 3.8km
DEPTH = 10.0km (geophysicist)
5.3mb (23 obs.) 4.2Msz (4 obs.)
WESTERN IRAN (347)

TEH 1.88 121 iPd 18 05.50 5.3X
TAB 2.79 299 iPd- 18 15.00 1.8
KER 3.03 219 eP 18 24.00 7.5X
MAIO 8.13 90 eP 19 29.00 0.4
0.8s 29.28nm 5.6mb
eS 21 05.00
MJMA 11.40 199 eP 20 11.30 -2.2
BHL 11.59 260 P 20 24.00 8.0X
S 20 50.00
QASM 11.73 207 eP 20 17.00 -1.0
UQSK 12.46 211 eP 20 26.00 -1.8
BBTK 13.44 288 eP 20 44.00 3.1X
e 22 08.00
AFIF 13.68 205 eP 20 46.70 2.6
BCK 15.04 278 eP 21 09.00 7.2X
KHL 15.86 282 eP 21 14.00 1.5
HRT 15.92 291 eP 21 16.90 3.7X
KSL 15.97 274 eP 21 17.50 3.7X
IZI 16.01 289 eP 21 19.40 5.0X
GBZT 16.09 291 eP 21 18.00 2.7X
YLV 16.11 290 iP 21 18.90 3.2X
DMK 17.50 294 iP 21 36.00 2.8
RDO 19.07 291 eP 21 53.30 0.9
ISR 19.16 303 eP 22 05.00 11.4X
CLI 19.17 308 eP 21 54.00 0.3
VRI 19.28 305 ePc 21 56.50 1.4
MLR 19.67 304 ePc 22 00.00 0.3
CMP 20.22 303 ePd 22 06.00 0.7
VAM 20.41 274 eP 22 07.50 0.2
ATH 20.45 281 eP 22 08.50 0.8
NEO 20.77 285 eP 22 10.00 -1.1
KSH 21.07 74 P 22 14.80 0.6
N 11s 1.90um
S 26 09.00
VLI 21.20 278 eP 22 07.50 -8.0X
ITM 21.94 279 eP 22 22.60 -0.4
SKO 22.20 292 eP 22 26.00 0.5
Z 20s 1.54um 4.4Msz
E 20s 1.54um
i 22 47.00
iS 26 36.00
LR 31 54.00
BZS 22.63 302 eP 22 27.00 -2.7
OHR 22.63 290 eP 22 27.70 -2.2
2.0s 222.00nm 5.3mb
e 22 48.70
KEK 23.40 286 eP 22 38.00 0.7
SPC 24.54 310 eP 22 49.00 0.5
KRA 25.03 311 eP 22 52.40 -0.5
BRT 25.35 289 P 22 57.50 1.4
TDS 26.07 287 P 23 04.00 1.2
ZST 26.25 306 eP 23 04.60 0.2
SOI 26.45 283 P 23 02.50 -3.8X
SGO 26.81 289 P 23 11.00 1.5
BSS 27.18 289 P 23 15.00 2.1
DUI 27.41 291 P 23 13.00 -2.2
KSP 27.49 311 ePc 23 15.30 -0.4
i 23 23.30
SDI 27.89 291 P 23 21.50 2.0
AZI 28.16 292 P 23 22.00 0.1
KHC 28.74 307 eP 23 26.20 -0.8
e 23 33.00
FVI 28.85 302 P 23 27.50 -0.5
CRE 29.25 295 P 23 29.50 -2.3
PGD 29.42 296 P 23 34.00 0.6
CLL 29.61 311 eP 23 34.00 -0.8
1.2s 16.00nm 4.7mb
WMQ 29.85 64 P 23 37.50 0.3
SQTA 30.00 303 iPd 23 37.90 -0.6
0.5s 9.70nm 4.9mb
UPP 30.82 329 iP 23 41.80 -3.6X
GKN 30.87 96 P 23 46.60 0.2
1.0s 72.00nm 5.5mb
MDI 30.91 300 P 23 44.00 -2.3
BOB 31.07 298 P 23 52.50 4.6X
DMN 31.41 96 P 23 52.40 1.1
0.8s 59.00nm 5.5mb
VAI 31.57 300 P 23 52.00 -0.2
PKI 31.67 96 P 23 54.40 0.8
1.4s 133.00nm 5.7mb
GUN 31.90 95 P 23 56.80 1.1
1.0s 68.00nm 5.5mb
DOI 32.64 297 P 23 59.00 -2.7
HFS 32.65 327 eP 23 59.80 -1.6
1.0s 41.90nm 5.3mb
Z 19s 0.24um 3.9Msz
LR 34 09.00
BNI 33.04 298 P 24 07.40 2.2
GBA 34.04 125 P 24 18.00 4.1X
0.7s 7.10nm 4.7mb
NAO 34.22 327 P 24 12.90 -2.2
0.9s 4.70nm 4.4mb
KOD 36.59 129 eP 24 38.80 2.8
GTA 39.36 70 eP 24 59.60 0.7
EKA 39.85 315 Pc 25 01.40 -1.2
0.9s 10.60nm 4.5mb
BCAO 42.84 229 iPc 25 28.50 0.9

	1.0s	55.00nm		5.2mb	
LZH	43.31	74 eP	25 23.50	-7.9X	
	Z 15s	0.40um		4.4MszX	
		pP	25 31.00	25kmX	
		i	26 56.50		
		i	27 22.50		
IFR	44.22	283 iP	25 40.50	1.7	
CD2	45.02	81 eP	25 44.60	-0.6	
AVE	46.08	283 iP	25 54.00	0.6	
KMI	46.66	89 eP	26 00.00	1.6	
	2.0s	90.00nm		5.5mb	
CHG	46.79	99 eP	25 59.00	-0.2	
TIO	46.85	280 iP	26 00.00	0.3	
BDT	47.70	100 eP	26 06.00	-0.3	
HHC	47.73	65 P	26 07.00	0.5	
XAN	47.92	75 P	26 08.00	0.0	
GYA	49.20	85 P	26 22.80	4.7X	
TIY	49.33	69 eP	26 17.40	-1.5	
	Z 20s	0.50um		4.5Msz	
	N 15s	0.30um			
NNT	50.97	105 eP	26 23.10	-8.4X	
LKO	56.45	256 P	27 11.50	-0.5	
	1.3s	49.00nm		5.4mb	
CN2	56.56	57 Pc	27 11.20	-1.2	
PSI	56.71	115 eP	27 12.40	-1.5	
KIC	57.78	252 P	27 21.12	-0.3	
	1.1s	53.50nm		5.5mb	
TIC	57.81	253 P	27 21.32	-0.3	
	1.1s	30.50nm		5.3mb	
LIC	58.08	252 P	27 23.28	-0.2	
	1.0s	40.00nm		5.4mb	
	Z 20s	0.14um		4.1Msz	
BUL	59.88	203 eP	27 34.10	-1.9	
MBC	67.07	357 ePc	28 21.90	-0.6	
	1.1s	13.00nm		5.0mb	
MAT	68.50	60 eP	28 31.00	-1.2	
	0.9s	10.92nm		5.0mb	
FRB	68.54	335 ePc	28 30.90	-1.0	
INK	75.26	1 eP	29 07.00	-4.7X	
IMA	75.98	9 ePc	29 16.00	-0.2	
	1.8s	47.60nm		5.3mb	
FBA	77.81	7 eP	29 26.50	0.4	
YKA	80.28	353 eP	29 38.60	-1.0	
	1.1s	5.50nm		4.5mb	
PMR	80.87	9 eP	29 43.00	0.3	
EDM	89.17	350 ePc	30 24.50	0.0	
SES	91.55	348 eP	30 36.00	0.4	
PNT	93.78	353 eP	30 46.00	0.2	
NEW	94.53	351 eP	30 50.00	0.6	
	1.1s	13.89nm		5.3mb	
	S.D. = 1.3	on 82 of 102 obs.			

JUN 21, 1990 14h 37m 12.40± 0.31s
17.876 N ± 5.1km 122.406 E ± 6.1km
DEPTH = 32.6km (6 depth phases)
5.2mb (27 obs.) 5.0Msz (10 obs.)
LUZON, PHILIPPINE ISLANDS (249)
Felt ot Tuguegoroo ond Looog.
CENTROID, MOMENT TENSOR (HRV)
Dato Used: GDSN
L.P.B.: 10S, 21C
Centroid Locotion:
Origin Time 14:37:12.0 0.7
Lot 17.81N 0.07 Lon 122.13E 0.08
Dep 46.1 5.5 Holf-durotion 1.8
Moment Tensor; Scale 10**17 Nm
Mrr= 0.67 0.07 Mtt= 0.81 0.09
Mff=-1.48 0.13 Mrt=-0.45 0.11
Mrf= 0.41 0.10 Mtf=-0.34 0.07
Principol Axes:
T Vol= 1.30 Plg=41 Azm=194
N 0.29 48 356
P -1.59 9 96
Best Double Couple:Mo=1.4*10**17
NP1:Strike=227 Dip=55 Slip= 155
NP2: 332 69 38

BAG	2.27	230 iPc+	37 50.00	1.4	
QCP	3.46	202 eP	37 51.00	-14.4X	
ANP	7.32	354 eP	39 06.00	6.2X	
QZH	7.88	334 eP	39 04.40	-3.2X	
	Z 20s	7.00um			
	N 12s	3.10um			
		S	40 29.30		
HKC	8.90	301 iP	39 18.70	-3.1X	
		iS	41 12.00		
MCO	9.33	298 eP	40 25.10	57.4X	
GZH	9.95	303 eP	39 32.80	-3.4X	
	Z 15s	10.70um			
	N 16s	6.90um			
	E 16s	10.20um			
DAV	11.16	164 eP	40 00.50	7.7X	
QIZ	11.98	277 eP	40 00.70	-3.2X	
	N 13s	3.80um			
	E 14s	3.10um			
		S	42 12.80		
SSE	13.21	355 P	40 17.50	-2.7X	
	1.0s	12.00nm		4.8mb	
TSM	14.22	198 ePc	40 33.00	-0.6	
NJ2	14.48	348 eP	40 34.70	-2.1	
	Z 18s	2.40um			
	N 16s	4.10um			
	E 14s	3.10um			
WHN	14.59	331 eP	40 36.00	-2.3	
	Z 12s	1.80um			
	N 13s	1.90um			
	E 13s	2.80um			
		sP	40 45.50		
		eS	43 18.00		
GYA	16.89	303 P	41 08.60	0.5	
	N 12s	3.40um			
	E 12s	3.30um			
		pP	41 19.00		
TIA	18.85	347 eP	41 32.10	-0.2	
	Z 16s	3.60um			
	N 12s	1.80um			
	E 12s	2.20um			
KMI	19.65	295 eP	41 43.00	1.1	
	2.5s	140.00nm		4.8mb	
	Z 16s	11.50um		4.7Msz	
	N 13s	5.30um			
	E 15s	6.90um			
		sP	41 52.00		
LOE	19.71	272 eP	41 41.00	-1.2	
XAN	20.12	326 P	41 45.50	-0.9	
	N 14s	4.80um			
	E 12s	1.50um			
DL2	20.97	358 eP	41 56.00	0.9	
	1.0s	100.00nm		5.2mb	
	N 14s	2.70um			
	E 14s	2.70um			
CD2	21.33	311 eP	41 57.20	-1.8	
	Z 14s	3.30um		4.9MszX	
	N 11s	3.60um			
NST	21.44	267 eP	42 00.50	0.5	
TIY	21.61	338 Pc	42 03.00	1.3	
	Z 15s	8.30um		5.3MszX	
	N 16s	6.20um			
GUMO	22.03	98 e(P)	42 06.20	0.2	
PJG	22.03	98 e(P)	42 03.70	-2.3	
AAI	22.17	165 ePd	42 11.70	4.3X	
CHG	22.29	276 iPc	42 08.20	-0.3	
	1.0s	62.25nm		5.0mb	
		eS	46 20.00		
BDT	22.32	272 ePd	42 08.50	-0.3	
	1.0s	82.80nm		5.1mb	
NNT	22.49	260 eP	42 04.00	-6.5X	
BJI	22.74	348 eP	42 13.50	0.8	
	1.2s	100.00nm		5.2mb	
	Z 17s	3.50um		4.9MszX	
	N 15s	2.00um			
		eS	46 16.00		
MKS	23.13	187 iPd	42 19.00	2.2	
MAT	23.25	34 eP	42 25.00	7.2X	
	2.0s	352.94nm		5.5mb	
	Z 20s	2.48um		4.7Msz	
		eS	46 20.00		
SNG	23.75	246 eP	42 24.90	2.1	
	1.3s	226.92nm		5.5mb	
		eS	46 33.00		
SNY	23.89	2 eP	42 24.00	0.0	
	1.0s	40.00nm		4.9mb	
	Z 18s	4.90um		5.0Msz	
	E 15s	5.60um			
		S	46 34.50		
LZH	24.47	322 Pd	42 31.00	1.1	
	2.0s	320.00nm		5.5mb	
	Z 18s	3.90um		4.9Msz	
	N 12s	2.20um			
	E 15s	2.90um			
		pP	42 39.50	30km	
		PP	43 02.50		
		PcP	46 07.00		
		S	46 46.00		
		sS	46 59.00		
		SS	47 42.00		
KGM	24.48	232 eP	42 31.00	1.0	
HHC	24.73	340 P	42 31.20	-1.0	
	1.0s	260.00nm		5.8mb	
	Z 20s	8.70um		5.3Msz	
	N 18s	8.00um			
	E 15s	1.90um			
		pP	42 42.00	41km	
		PP	43 14.00		
		S	46 50.00		
IPM	24.74	240 ePc	42 33.00	0.5	
	0.8s	50.30nm		5.2mb	
BTO	25.04	337 P	42 36.00	0.8	
	E 14s	2.10um			
		sP	42 45.00		
KLM	25.10	237 eP	42 37.00	1.2	
CN2	25.97	5 eP	42 43.00	-0.8	
	Z 18s	4.30um		5.0Msz	
	N 16s	2.60um			
	E 16s	2.00um			
MDJ	27.33	11 eP	42 58.00	1.7	
	Z 20s	2.30um		4.7Msz	
		eS	47 28.00		
PSI	27.53	239 ePd	42 51.40	-6.9X	
GTA	29.06	322 P	43 12.80	0.7	
	2.0s	100.00nm		5.2mb	
	Z 18s	3.10um		5.0Msz	
	E 12s	1.60um			
		S	48 01.50		
		SS	49 27.00		
SHL	29.32	290 iP	43 14.20	-0.4	
LSA	30.83	298 P	43 28.20	-0.1	
	N 13s	0.80um			
MTN	31.72	164 eP	43 33.00	-2.6	
GUN	34.98	293 P	44 03.00	-1.3	
	0.8s	81.00nm		5.7mb	
PKI	35.35	293 P	44 05.60	-1.8	
	0.6s	14.00nm		5.1mb	
DMN	35.62	293 P	44 07.40	-2.2	
GKN	36.09	293 P	44 11.40	-2.0	
	0.8s	46.00nm		5.5mb	
KDB	36.55	136 eP	44 18.00	0.8	
WMQ	39.00	319 iPd	44 39.40	1.8	
	Z 16s	1.70um		5.0MszX	
		eS	50 37.00		
WB5	39.31	162 eP	44 38.00	-2.3	
NANU	40.75	190 eP	44 51.00	-1.1	
HYB	41.72	276 eP	45 00.00	-0.3	
QIS	41.75	155 eP	44 59.00	-1.4	
ASPA	42.79	164 eP	45 07.30	-1.6	
	0.8s	35.00nm		5.1mb	
	Z 22s	0.86um		4.6Msz	
		LR	58 36.40		
GBA	43.41	271 Pc	45 12.30	-1.8	
	1.6s	67.40nm		5.2mb	
WARB	43.99	175 eP	45 17.00	-1.5	
KOD	44.16	266 eP	45 21.00	0.5	
CTA	44.40	147 iPc	45 23.80	1.9	
	1.1s	91.14nm		5.5mb	
KSH	45.47	308 eP	45 32.50	2.0	
MRWA	47.22	188 eP	45 41.50	-2.7X	
BRS	53.78	146 iP	46 36.50	2.4	
		i	46 48.00	40km	
MAIO	57.98	302 eP	47 02.00	-2.5	
		eS	55 08.00		
TAB	68.40	305 eP	48 15.00	1.6	
TTA	70.42	29 eP	48 25.10	-0.1	
SVW	70.65	31 eP	48 28.50	1.9	
IMA	71.35	25 eP	48 30.70	-0.2	
	0.8s	5.10nm		4.6mb	
PMR	73.73	30 eP	48 45.20	0.5	
TOA	75.04	29 eP	48 54.00	1.5	
KEV	75.24	339 eP	48 56.00	2.6X	
SOD	75.86	337 eP	48 56.00	-1.0	
SUF	77.12	332 eP	49 02.00	-2.0	
	0.5s	7.20nm		5.0mb	
NUR	78.37	330 iP	49 11.40	0.5	
	0.8s	14.70nm		5.1mb	
DSI	78.40	300 eP	49 12.00	0.3	
INK	78.63	22 eP	49 13.00	0.7	
LFK	79.00	304 eP	49 14.00	-1.1	
PRNI	79.01	298 iPc	49 17.00	1.8	
MBC	79.14	12 eP	49 13.00	-2.0	
	0.7s	6.00nm		4.7mb	
MLR	81.87	315 ePc	49 31.00	0.9	
UPP	81.91	330 iP	49 28.30	-1.5	

21d 14h

HLW 82.20 299 eP 49 35.50 3.5X
CMP 82.54 315 ePc 49 36.00 2.5X
HFS 83.61 332 eP 49 37.50 -1.1
0.7s 22.20nm 5.4mb
Z 18s 1.55um 5.4Msz
LR 25 33.00
KRA 84.22 321 eP 49 42.90 1.0
e 49 51.80 28km
NAO 84.59 333 P 49 42.00 -1.5
0.9s 23.10nm 5.4mb
VAY 85.52 312 eP 49 49.40 0.8
SRO 86.04 319 eP 49 52.90 1.9
KSP 86.08 322 ePd 49 52.40 1.2
id 50 02.00 30km
SKO 86.09 313 eP 49 51.00 -0.5
ZST 86.64 320 eP 49 56.10 2.1
BRG 87.42 323 eP 49 59.60 1.9
1.8s 18.00nm 5.0mb
PRU 87.45 322 eP 49 59.50 1.6
e 50 08.00 27km
CLL 87.77 324 eP 50 00.00 0.6
2.3s 51.00nm 5.4mb
Z 17s 1.50um 5.5MszX
e 50 49.00 198kmX
YKA 88.31 23 eP 49 49.30 -12.5X
0.4s 0.30nm
KHC 88.39 322 P 50 05.00 2.5X
GRF 89.51 323 e(P) 50 12.00 4.2X
Z 20s 1.00um 5.2Msz
e 01 03.00
e 13 55.00
LKO 121.87 294 PKP 56 06.06 0.2
KIC 122.55 290 (PKP) 56 06.10 -1.0
LIC 122.86 290 (PKP) 56 06.30 -1.4
UPA 145.62 41 (PKP) 56 50.50 0.5
ZOBO 169.80 83 PKP 57 22.80 3.8X
1.0s 7.50nm
eLR 55 30.00
SIV 176.18 61 ePKP 57 22.00 1.3
S.D. = 1.4 on 83 of 104 obs.

JUN 21, 1990 15h 15m 54.04± 0.24s
50.873 N ± 5.9km 172.575 W ± 2.7km
DEPTH = 33.0km (normal)
5.3mb (68 obs.) 4.7Msz (4 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS. (7)
Felt (III) on Adok.
CENTROID, MOMENT TENSOR (HRV)
Doto Used: GDSN
L.P.B.: 10S, 23C
Centroid Location:
Origin Time 15:15:53.7 1.1
Lat 51.26N 0.10 Lon 172.96W 0.28
Dep 15.0 FIX Half-durotion 1.5
Moment Tensor; Scole 10**16 Nm
Mrr=-3.96 0.37 Mtt= 4.72 0.41
Mff=-0.75 0.41 Mrt= 0.71 1.78
Mrf=-1.06 1.26 Mtf=-0.32 0.54
Principol Axes:
T Vol= 4.80 Plg= 5 Azm= 4
N -0.48 16 96
P -4.32 73 257
Best Double Couple:Mo=4.6*10**16
NP1:Strike= 77 Dip=42 Slip=-115
NP2: 289 52 -69

ADK 2.77 293 iPc 16 36.00 -1.0
SMY 8.47 288 eP 17 54.10 -3.1
SDN 8.53 54 eP 17 55.50 -2.6
SVW 13.92 36 eP 19 10.20 -0.8
TTA 15.03 30 ePc 19 24.00 -1.5
PMR 16.77 41 eP 19 44.20 -3.5X
Z 18s 1.20um
MID 17.17 50 eP 19 49.90 -2.7
IMA 18.03 25 ePc 20 02.40 -1.0
TOA 18.26 42 eP 20 02.60 -3.6X
FBA 19.07 33 eP 20 11.60 -4.4X
HYT 21.80 49 P 20 44.80 0.0
INK 25.69 33 eP 21 21.00 -1.2
0.4s 105.00nm 5.8mb
pP 21 33.00 47kmX
GMW 32.20 76 eP 22 21.60 0.7
BMW 32.39 78 eP 22 23.00 0.4
MBC 32.65 21 eP 22 23.00 -1.4
0.7s 16.00nm 5.0mb
YKA 32.73 47 eP 22 24.80 -0.5
0.4s 6.60nm 4.9mb

LON 33.14 77 eP 22 29.20 0.0
PNT 33.41 72 eP 22 32.00 0.6
0.6s 18.00nm 5.2mb
VGB 34.35 78 eP 22 39.70 0.1
FHC 34.74 88 ePd 22 42.30 -0.7
NEW 35.35 72 eP 22 48.00 -0.1
EDM 35.60 63 iPd 22 50.40 0.2
LBFM 35.77 85 eP 22 52.70 0.8
WDC 35.78 87 iPd 22 52.90 1.1
ePcP 25 18.20
MIN 36.50 87 ePd 22 58.50 0.5
ePcP 25 19.50
ORV 37.02 88 ePd 23 02.50 0.3
BRK 37.52 90 ePd 23 07.00 0.6
BKS 37.53 90 iPc 23 07.70 1.2
0.8s 72.00nm 5.6mb
MAT 37.63 267 eP 23 07.00 -0.4
1.4s 81.40nm 5.4mb
(S) 28 59.00
PCC 37.67 91 eP 23 07.40 -0.2
SES 38.03 66 ePd 23 10.00 -0.6
0.6s 26.00nm 5.3mb
GCC 38.20 91 eP 23 12.40 0.3
MHC 38.23 91 ePd 23 13.40 0.8
ARN 38.30 90 eP 23 13.80 0.8
MDJ 38.52 284 eP 23 14.00 -0.7
CMB 38.61 89 ePd 23 16.70 1.1
ePcP 25 27.10
SAO 38.71 91 e(P) 23 16.70 0.3
PRS 39.02 92 eP 23 20.00 1.0
ePcP 25 28.60
LLA 39.12 91 ePd 23 21.10 1.3
LRM 39.31 73 eP 23 21.10 -0.5
KVN 39.46 86 eP 23 23.50 0.6
PRI 39.59 91 ePd 23 25.10 1.2
ePcP 25 30.70
FRI 39.67 89 iPd 23 25.30 0.9
ePcP 25 30.30
BCH 40.55 92 eP 23 33.00 1.2
TNP 40.59 86 eP 23 33.00 0.8
PTI 40.90 77 eP 23 35.30 0.7
FFC 41.21 56 iPc 23 36.10 -0.7
0.6s 7.00nm 4.6mb
FFC 41.21 56 eP 23 42.00 5.2X
0.5s 21.00nm 5.1mb
ISA 41.27 90 eP 23 38.00 0.3
CN2 41.48 285 P 23 37.80 -1.4
CLC 41.73 89 eP 23 42.00 0.6
DUG 42.12 81 eP 23 45.00 0.4
1.2s 75.63nm 5.3mb
SBB 42.30 91 eP 23 47.00 0.9
MWC 42.45 91 eP 23 48.00 0.5
GSC 42.56 89 eP 23 49.00 0.8
BW06 42.68 75 eP 23 48.80 -0.5
1.0s 25.00nm 4.9mb
DAU 42.96 79 eP 23 52.00 0.2
RVR 43.03 91 eP 23 52.00 0.0
MSU 43.51 82 eP 23 56.30 0.2
SNY 43.72 284 eP 23 56.20 -1.2
sP 24 13.80
PLM 43.77 91 eP 23 58.00 -0.2
TPC 43.80 90 eP 23 58.00 -0.3
BAR 44.33 92 eP 24 03.00 0.4
GLA 45.26 90 eP 24 10.00 0.0
RSSD 45.28 71 eP 24 09.00 -1.3
DL2 46.64 282 eP 24 20.50 -0.3
GOL 47.03 76 eP 24 23.70 -0.5
1.0s 18.75nm 5.0mb
GLD 47.09 76 eP 24 24.50 -0.1
1.0s 72.32nm 5.6mb
BJI 49.30 286 eP 24 41.00 -0.5
1.0s 6.00nm 4.6mb
ANMO 49.32 82 eP 24 41.20 -0.8
1.3s 50.48nm 5.4mb
ALQ 49.32 82 eP 24 41.00 -1.0
1.0s 27.75nm 5.2mb
Z 18s 0.48um 4.5Msz
TIA 51.11 282 eP 24 54.00 -1.4
FRB 51.35 34 eP 24 56.00 -0.7
0.5s 24.00nm 5.4mb
HHC 51.58 290 Pc 24 58.80 -0.2
SSE 51.93 274 iPd 25 01.50 -0.1
1.0s 39.00nm 5.3mb
sP 25 19.50
BTO 52.65 291 eP 25 07.00 -0.1
NJ2 52.76 277 Pc 25 06.20 -1.6
TIY 53.03 287 Pc 25 10.00 0.1

Z 20s 0.60um 4.6Msz
MEO 54.33 77 iPd 25 18.30 -1.1
TUL 55.29 74 eP 25 24.30 -2.1
1.0s 17.70nm 5.0mb
Z 20s 0.70um 4.7Msz
LNO 55.29 74 eP 25 16.10 -10.2X
WHN 56.61 279 Pc 25 35.00 -0.9
pP 25 44.50 31kmX
FVM 57.14 69 eP 25 36.50 -3.2X
UYO 57.27 75 iPc 25 28.80 -11.8X
XAN 57.59 285 Pc 25 41.20 -1.7
SCH 57.92 41 ePd 25 43.90 -1.0
0.8s 72.00nm 5.8mb
pP 26 00.00 61kmX
OLY 58.18 72 eP 25 43.60 -3.3X
ELC 58.32 69 eP 25 45.30 -2.6
KEV 58.84 352 eP 25 51.00 -0.1
0.7s 24.00nm 5.4mb
i 26 04.20
i 26 54.50
LZH 59.26 291 Pd 25 53.50 -1.2
1.5s 91.00nm 5.7mb
Z 20s 0.70um 4.8Msz
pP 26 01.00 25kmX
GTA 59.36 296 iPd 25 53.90 -1.4
Z 16s 0.90um 5.0MszX
N 10s 0.30um
pP 26 09.80 59kmX
S 34 00.00
PWLA 60.57 70 eP 26 00.90 -2.5
WVLY 60.81 58 eP 26 03.50 -1.5
SOD 61.19 352 eP 26 06.00 -1.2
i 26 10.60
i 26 20.80
RSNY 61.48 54 eP 26 07.60 -1.9
1.1s 15.73nm 5.1mb
WNY 61.93 53 eP 26 10.80 -1.8
HBVT 62.36 53 eP 26 13.00 -2.4
GBTN 62.37 67 eP 26 12.80 -2.8
TKL 62.63 66 eP 26 14.50 -2.8
WMQ 62.85 307 iPd 26 18.00 -0.7
Z 24s 0.50um 4.6MszX
S 34 47.00
CD2 62.90 286 eP 26 15.80 -3.4X
NAV 63.17 63 eP 26 19.40 -1.5
BLA 63.46 63 eP 26 21.20 -1.6
1.0s 75.00nm 5.8mb
CVL 64.01 61 eP 26 25.00 -1.3
GMTN 64.26 56 iP 26 15.80 -12.1X
NA2 64.30 61 eP 26 26.50 -1.7
EMM 64.84 49 eP 26 30.00 -1.6
JSC 65.06 66 eP 26 31.10 -2.1
LHS 65.18 65 eP 26 32.00 -1.9
SUF 65.79 351 iP 26 36.70 -0.7
0.5s 14.60nm 5.3mb
KMI 67.67 283 eP 26 49.50 -0.7
NUR 68.11 351 iP 26 51.20 -0.9
0.8s 55.70nm 5.7mb
i 26 56.50
i 27 06.10
NAO 68.62 358 P 26 54.20 -1.1
0.8s 14.10nm 5.1mb
HFS 69.23 357 eP 26 57.70 -1.3
0.5s 15.00nm 5.3mb
HFS 69.23 357 eP 27 12.70 13.7X
0.5s 27.60nm
UPP 69.32 355 iP 26 57.50 -2.0
KSH 71.92 311 P 27 16.50 0.7
EKA 73.80 6 Pd 27 26.40 0.0
1.0s 22.50nm 5.1mb
SHL 73.93 291 iP 27 26.50 -1.4
LOE 74.01 278 eP 27 27.00 -1.2
CHG 74.70 281 eP 27 31.30 -0.9
DCN 75.42 9 eP 27 36.00 0.2
0.8s 119.00nm 5.9mb
DCN 75.42 9 eP 27 51.80 16.0X
0.8s 115.00nm
DLE 75.55 9 eP 27 36.80 0.3
0.8s 41.00nm 5.5mb
GUN 75.64 296 P 27 38.00 0.1
BDT 75.84 280 eP 27 37.70 -1.0
PKI 76.17 297 P 27 40.60 -0.3
GKN 76.27 297 P 27 41.20 0.0
1.2s 122.00nm 5.8mb
DMN 76.31 297 P 27 41.60 0.0
WIT 76.69 0 e(P) 27 48.00 5.2X
e 27 51.00

WTS	77.51	0	eP	27 48.00	0.6	
	0.9s	21.00nm		5.2mb		
			e	27 53.50		
			e	28 03.50		
CLL	78.08	356	iPd	27 50.90	0.3	
	1.4s	65.00nm		5.5mb		
			i	27 56.10		
			i	28 06.10		
KSP	78.38	354	iP	27 52.20	-0.1	
	1.0s	35.00nm		5.3mb		
			i	27 56.00		
			i	28 06.20		
BRG	78.48	356	iPKP	27 53.60	0.8	
			i	27 58.80		
			i	28 09.40		
ENN	78.73	1	eP	27 54.50	0.4	
	1.0s	63.00nm		5.6mb		
			e	28 01.00		
			e	28 10.50		
MOX	78.80	357	iP	27 55.00	0.4	
			i	28 01.00		
			i	28 11.00		
KRA	78.88	352	eP	27 55.20	0.2	
			e	28 00.20		
			e	28 10.70		
MEM	78.89	1	Pc	27 50.90	-4.1X	
			ed	28 10.90		
NNT	78.90	276	eP	27 54.00	-1.7	
TNS	79.28	359	ePd	27 57.50	0.2	
PRU	79.33	355	Pd	27 57.80	0.3	
	1.1s	12.20nm		4.8mb		
			e	28 03.50		
DOU	79.38	2	Pc	27 58.50	0.8	
			ed	28 04.50		
SPC	79.72	351	e(P)	28 01.00	1.2	
			e	28 05.80		
			i	28 15.00		
GRF	79.76	357	iPd	28 01.10	1.3	
	1.1s	62.00nm		5.5mb		
			e	28 06.30		
			id	28 16.80		
			e	28 26.10		
KHC	80.24	356	P	28 03.20	0.8	
			i	28 09.00		
			i	28 18.80		
WET	80.25	356	iPKPc	28 03.50	1.0	
FLN	80.51	5	eP	28 04.10	0.3	
	1.0s	28.00nm		5.2mb		
LDF	80.70	5	eP	28 05.10	0.3	
	1.0s	36.00nm		5.3mb		
ZST	80.96	353	eP	28 06.80	0.6	
			i	28 13.30		
			i	28 22.60		
CDF	81.10	0	eP	28 07.40	0.4	
	0.7s	11.00nm		5.0mb		
LPF	81.21	6	eP	28 08.30	0.8	
	1.0s	32.00nm		5.3mb		
SRO	81.25	353	eP	28 09.10	1.4	
			e	28 23.20		
HAU	81.50	1	eP	28 09.50	0.5	
	0.8s	18.80nm		5.2mb		
BSF	81.68	0	eP	28 10.40	0.3	
	0.9s	19.65nm		5.1mb		
SLE	81.74	359	ePc	28 10.90	0.6	
MAIO	81.87	320	iPd	28 11.40	0.1	
			e	31 19.00		
ZLA	82.02	359	ePc	28 12.70	0.9	
LOR	82.19	2	eP	28 13.20	0.6	
	0.8s	18.80nm		5.2mb		
SQTA	82.23	357	iPc	28 14.30	1.3	
	1.0s	37.50nm		5.4mb		
			i	28 20.20		
			i	28 30.20		
SSF	82.39	3	eP	28 14.40	0.7	
	0.8s	20.15nm		5.2mb		
LBF	82.48	2	eP	28 14.60	0.4	
	0.9s	16.40nm		5.1mb		
LLS	82.63	359	ePc	28 16.30	1.1	
AVF	82.66	3	eP	28 15.40	0.4	
	0.8s	17.45nm		5.2mb		
MLR	82.69	347	ePc	28 17.00	1.6	
OSS	82.79	358	eP	28 17.10	1.1	
FVI	82.81	356	P	28 11.00	-4.8X	
SMF	82.81	2	eP	28 16.50	0.6	
	0.8s	18.80nm		5.2mb		
BGF	82.87	3	eP	28 16.90	0.7	
	1.2s	44.65nm		5.4mb		

BZS	83.11	350	eP	28 19.00	1.6	
TCF	83.12	4	eP	28 17.90	0.4	
	0.9s	8.20nm		4.8mb		
LSF	83.13	4	eP	28 18.00	0.5	
	1.0s	50.00nm		5.6mb		
MAF	83.20	3	eP	28 18.70	0.8	
	1.0s	16.00nm		5.1mb		
TLB	83.25	345	eP	28 19.50	1.4	
TMA	83.40	359	ePc	28 19.90	0.8	
DIX	83.43	0	ePc	28 21.10	1.7	
MMK	83.46	360	ePc	28 21.20	1.7	
VAI	83.64	359	P	28 21.00	1.0	
MDI	83.71	358	P	28 20.00	-0.4	
SAL	83.86	358	P	28 19.00	-2.2	
ORX	83.88	360	P	28 21.88	0.4	
ORO	83.88	360	P	28 22.00	0.5	
LPL	83.99	0	eP	28 24.20	2.0	
	1.2s	19.35nm		5.1mb		
LPG	84.01	0	eP	28 25.10	2.7X	
	1.2s	44.65nm		5.5mb		
LSD	84.05	0	P	28 23.93	1.4	
RJF	84.07	4	eP	28 22.80	0.5	
	1.0s	22.00nm		5.3mb		
IPM	84.20	270	ePc	28 24.90	1.5	
RSP	84.36	0	P	28 24.65	0.8	
LFF	84.39	5	eP	28 24.70	0.8	
	0.8s	33.60nm		5.6mb		
BNI	84.45	1	P	28 26.50	2.1	
CAF	84.47	4	eP	28 25.10	0.7	
	1.0s	29.00nm		5.4mb		
RRL	84.59	0	P	28 27.21	2.0	
LPO	84.67	4	eP	28 26.00	0.7	
	0.9s	26.20nm		5.4mb		
BOB	84.73	359	P	28 27.10	1.4	
PCP	84.96	359	P	28 26.80	0.0	
PVL	85.00	347	iPc	28 28.00	1.0	
PZZ	85.00	0	P	28 27.32	0.2	
DOI	85.01	0	P	28 27.00	-0.1	
CKI	85.08	359	P	28 27.80	0.4	
ROB	85.21	360	P	28 28.24	0.1	
STV	85.27	0	P	28 27.62	-0.8	
MME	85.27	358	P	28 30.10	1.4	
ENR	85.28	0	P	28 27.52	-1.0	
FIN	85.30	359	P	28 28.24	-0.3	
BDI	85.41	358	P	28 28.50	-0.6	
TOUF	85.50	0	P	28 30.63	0.9	
SFI	85.51	357	P	28 31.00	1.5	
AUTN	85.51	360	P	28 30.67	0.8	
JMB	85.55	346	eP	28 31.00	1.2	
PGD	85.56	357	P	28 31.60	1.6	
IMI	85.60	360	P	28 30.19	0.1	
AURF	85.62	0	P	28 30.91	0.7	
SBF	85.65	360	eP	28 31.00	0.7	
	1.0s	56.00nm		5.7mb		
PII	85.75	358	P	28 30.00	-0.7	
CALN	85.76	0	P	28 31.51	0.6	
REVF	85.77	0	P	28 31.34	0.4	
CRE	85.80	357	P	28 31.00	-0.1	
ARV	85.89	356	P	28 31.50	0.0	
VTS	85.90	348	iP	28 32.00	0.3	
FRF	85.95	1	eP	28 32.30	0.6	
	1.0s	24.00nm		5.4mb		
HVAR	86.00	353	iP	28 31.20	-0.8	
LRG	86.05	1	eP	28 33.10	0.9	
	0.8s	13.45nm		5.2mb		
DIM	86.12	347	iPd	28 34.00	1.4	
LMR	86.17	1	eP	28 33.70	0.9	
	1.0s	20.00nm		5.3mb		
ASS	86.33	356	P	28 34.00	0.3	
KDZ	86.53	347	iP	28 36.00	1.4	
RZN	86.59	347	iPd	28 35.00	-0.2	
SKO	86.73	350	iPKPd	28 36.30	0.7	
	1.1s	153.00nm		6.1mb		
			i	28 42.40		
			i	28 51.30		
MMB	86.82	348	ePc	28 38.00	1.9	
PSI	86.98	271	iPc	28 37.30	0.1	
	1.0s	53.50nm		5.7mb		
ALN	87.17	346	eP	28 38.00	0.3	
VAY	87.24	349	iPKP	28 39.00	0.9	
			i	28 45.20		
			i	28 55.30		
AZI	87.37	356	P	28 39.00	0.4	
SDI	87.63	355	P	28 40.00	0.0	
DUI	87.64	355	P	28 40.50	0.4	
OHR	87.65	350	iPKP	28 40.70	0.5	
	1.1s	97.00nm		6.0mb		

		i	28 46.70		
		i	28 56.50		
ASPA	87.90	228	eP	28 38.10	-3.3X
	1.1s	17.00nm		5.3mb	
FNA	87.91	349	eP	28 41.00	-0.4
HYB	88.02	295	eP	28 41.50	-0.7
LIT	88.45	348	eP	28 37.00	-7.0X
USI	90.65	356	P	28 41.40	-12.8X
KIC	122.04	14	(PKP)	34 46.60	-0.1
KRI	141.67	324	iPKPd	35 31.50	7.6X
BUL	145.08	324	iPKPc	35 26.10	-3.6X
	1.0s	55.00nm			
		i		35 32.80	
		ipPKP		35 42.20	
MAW	148.46	217	iPKPd	35 37.60	4.1X
	1.0s	61.00nm			
BFT	149.46	317	iPKPd	35 41.00	4.3X
	0.7s	71.92nm			
SLR	150.24	320	iPKPd	35 43.00	5.2X
	1.2s	140.63nm			
	Z 18s	1.72um			5.9MszX
PRY	151.63	320	ePKP	35 41.50	1.6X
	1.0s	35.00nm			
SWZ	152.70	323	iPKPd	35 34.50	-6.9X
	0.9s	67.23nm			
SEK	152.80	318	iPKPd	35 48.00	6.5X
	1.0s	35.00nm			
BLF	154.08	320	iPKPc	35 51.00	7.8X
CER	160.46	329	ePKP	35 57.00	6.3X
	S.D. = 1.1	on 222 of 251 obs.			

% JUN 21, 1990 16h 44m 26.15± 2.80s
40.692 N ± 8.7km 22.705 E ±21.3km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 1.5 (THE).

KNT	0.49	17	ePgc	44 36.00	-0.1
			eSg	44 44.30	
SOH	0.51	75	ePg	44 36.80	0.3
			eSg	44 43.50	
SRS	0.80	57	ePg	44 41.80	0.2
			eSg	44 53.60	
OUR	1.04	110	ePgc	44 44.90	-0.8
PAIG	1.07	135	ePg	44 46.70	0.5
			eSg	45 00.80	
	S.D. = 0.7	on 5 of 5 obs.			

& JUN 21, 1990 16h 54m 51.10s
39.558 N 122.733 W
DEPTH = 22.0km
NORTHERN CALIFORNIA (36)
<BRK>. ML 2.6 (BRK).

LTCM	0.80	36	eP	55 07.00	0.8
ORV	0.95	90	ePd	55 08.00	-0.9
			iS	55 23.20	
WDC	1.03	8	ePd	55 08.90	-1.2
FHC	1.57	323	ePc	55 19.10	1.2
LBFM	1.90	20	eP	55 23.50	0.6
CMB	2.38	129	ePc	55 30.20	0.6
KVN	3.63	97	eP	55 47.70	0.2
	7 obs. associated				

% JUN 21, 1990 17h 10m 57.61± 1.40s
35.743 N ±13.2km 99.930 E ±13.4km
DEPTH = 10.0km (geophysicist)
QINGHAI PROVINCE, CHINA (325)
ML 3.4 (BJI).

GTA	3.66	359	Pn	11 56.40	0.8
			Pg	12 03.00	
			Sn	12 35.00	
			Sg	12 47.00	
CD2	5.79	145	ePn	12 25.60	0.0
BTO	9.30	56	eP	13 14.20	-0.6
TIY	10.23	75	eP	13 34.10	6.5X
HHC	10.46	57	eP	13 29.00	-1.8
WMQ	12.39	314	eP	13 56.50	-0.4
			S	16 12.80	
BJI	13.53	67	eP	14 14.00	2.1
	S.D. = 1.7	on 6 of 7 obs.			

? JUN 21, 1990 17h 23m 03.92± 2.70s
10.989 N ±17.2km 62.162 W ±17.6km
DEPTH = 83.4 ± 35.8 km
NEAR COAST OF VENEZUELA (97)

21d 17h

MD 3.6 (TRN).

TCE	0.50	126	iP	23 18.09	0.0
			eS	23 28.42	
TRN	0.82	114	iPd	23 21.16	-0.1
			eS	23 33.17	
TPP	0.97	134	eP	23 23.31	0.3
			eS	23 36.09	
TBH	1.19	115	eP	23 25.43	-0.3
			eS	23 43.13	
PIG	1.31	82	eP	23 27.67	0.4
			eS	23 46.08	
TPR	1.37	82	iP	23 28.11	0.0
			eS	23 47.52	
BOT	1.43	83	iP	23 28.60	-0.2
			eS	23 47.21	
MVM	3.75	19	eP	24 00.86	0.2
FDF	3.85	15	eP	24 02.01	0.0
CRM	3.93	18	eP	24 03.00	-0.2

S.D. = 0.3 on 10 of 10 obs.

% JUN 21, 1990 17h 50m 09.90± 0.72s
43.426 N ± 5.2km 5.458 E ± 6.3km
DEPTH = 10.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)
MD 2.5 (STR).

GELF	0.05	208	Pg	50 11.72	-0.4
BERF	0.20	124	Pg	50 14.79	0.4
TREF	0.21	345	Pg	50 14.22	-0.2
PRAF	0.43	331	Pg	50 19.29	0.5
VILF	0.47	24	Pg	50 19.00	-0.4
TAVF	0.48	66	Pg	50 19.52	-0.1
GANF	0.66	30	Pg	50 23.13	0.1

S.D. = 0.4 on 7 of 7 obs.

& JUN 21, 1990 18h 15m 00.00s
36.993 N 116.004 W
DEPTH = 0.0km
4.0mb (5 obs.)
CALIFORNIA-NEVADA BORDER REGION (40)
<DOE>. ML 4.3 (BRK). 36' 59' 34.21" N., 116' 00' 16.18" W., Surface Elev. 1202 m., Depth of Buriol 300 m., Shot Time 181500.000, "AUSTIN," Nevado Test Site (Dept. of Energy).

TNP	1.45	319	iPc	15 27.40	-0.3
CLC	1.74	228	iPc	15 30.70	-1.0
GSC	1.81	201	iPc	15 31.80	-0.9
KVN	2.64	322	iPc	15 44.00	-0.8
TPC	2.88	181	ePc	15 47.10	-1.0
FRI	2.97	271	ePc	15 48.80	-0.4
ABL	3.37	232	eP	15 54.50	-0.8
MSU	3.39	62	eP	15 54.70	-0.9
CMB	3.64	288	ePc	15 57.80	-1.0
PLM	3.70	191	ePc	15 59.00	-0.8
BCH	3.76	243	eP	16 00.00	-0.7
PRI	3.85	259	ePc	16 01.70	-0.2
LLA	3.98	266	e(P)	16 03.70	0.0
GLA	4.05	166	eP	16 03.30	-1.4
PRS	4.36	263	eP	16 08.20	-0.9
SAO	4.37	269	ePc	16 08.40	-0.8
ORV	5.02	302	eP	16 17.10	-1.4
BKS	5.04	282	ePc	16 31.70	13.0
MIN	5.51	309	e(P)	16 24.10	-1.5
ALQ	8.01	102	eP	16 58.60	-2.0
ANMO	8.01	102	eP	16 58.80	-1.8
LRM	9.21	16	eP	17 19.60	2.2
SES	13.87	13	eP	18 28.00	7.9
MEO	14.30	94	eP	18 27.70	1.8
TUL	16.30	88	eP	18 53.70	1.8
	0.7s		5.50nm		3.8mb
Z	20s		0.05um		4.2MszX
			i	20 06.10	
			eLg	23 46.20	
LNO	16.30	88	eP	18 35.70	-16.1
			e	20 07.40	
			eLg	23 46.00	
EDM	16.33	6	eP	18 52.50	0.3
UYO	17.75	93	e(P)	19 09.60	-0.5
FFC	20.18	24	eP	19 37.00	-1.8
	0.6s		11.00nm		4.4mb
YKA	25.54	2	eP	20 31.90	0.2
	0.4s		0.80nm		3.8mb
TTA	35.58	330	eP	21 58.40	-2.5
	1.0s		3.75nm		4.2mb
IMA	36.34	335	eP	22 05.50	-1.8
	0.8s		2.59nm		4.1mb
FR8	38.98	31	eP	22 29.00	-0.3

33 obs. ossociated

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* JUN 21, 1990 18h 22m 08.97± 0.58s
40.343 N ±11.6km 63.326 E ±10.4km
DEPTH = 10.0km (geophysicist)
4.5mb (8 obs.)
UZBEK SSR (339)
Felt (III) at Gazli.

MAIO	5.04	218	iPnc	23 26.20	-0.2
	0.8s		47.95nm		5.1mb
			eSn	24 22.00	
NDI	16.30	131	eP	25 57.00	-2.4
GKN	21.44	118	P	26 59.00	-0.5
	0.6s		14.00nm		4.5mb
DMN	22.01	119	P	27 07.60	2.2
	0.6s		13.00nm		4.5mb
PKI	22.24	118	P	27 07.40	-0.4
	0.6s		14.00nm		4.6mb
GUN	22.34	117	P	27 09.00	0.2
PRNI	25.08	255	e(P)	27 30.00	-5.0X
HYB	26.37	146	eP	27 49.00	1.8
MLR	27.68	293	ePc	28 01.00	1.9
APO	36.25	321	eP	29 12.90	-0.9
	0.4s		2.20nm		4.4mb
NAO	37.80	321	P	29 26.20	-0.6
	0.7s		2.10nm		4.0mb
MBC	63.68	1	eP	32 42.00	-0.1
	0.8s		2.00nm		4.4mb
KIC	69.22	260	(P)	33 17.10	-1.1
FRB	69.47	339	eP	33 19.00	0.0
YKA	77.50	359	eP	34 05.90	0.1
	0.6s		2.30nm		4.4mb

S.D. = 1.4 on 14 of 15 obs.

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* JUN 21, 1990 19h 38m 16.61± 0.52s
21.551 S ±15.7km 175.185 E ± 9.3km
DEPTH = 33.0km (normal)
4.8mb (5 obs.)
SOUTH OF FIJI ISLANDS (171)

SVA	4.60	43	iP	39 23.80	-1.9
			eS	40 22.30	
VUN	4.69	42	iP	39 24.80	-2.1
			eS	40 24.60	
SGE	4.71	34	eP	39 28.30	1.0
			eS	40 31.50	
DZM	8.14	265	iPd	40 16.10	0.6
			iS	41 50.90	
HNR	18.97	307	eP	42 40.00	2.0
BRS	21.20	250	iPc	43 02.00	0.3
RMQ	24.62	253	iPd	43 33.70	-1.6
ASPA	38.08	259	eP	45 31.80	-2.4
	1.0s		10.00nm		4.6mb
FORR	42.99	247	eP	46 11.00	-3.6X
	0.4s		20.00nm		5.2mb
PCC	83.03	45	ePc	50 40.20	0.1
SYP	83.06	49	eP	50 41.00	0.5
PRS	83.07	47	eP	50 40.90	0.5
PRI	83.45	47	eP	50 43.20	0.8
FRI	84.55	47	ePc	50 48.00	0.2
WDC	84.65	43	ePc	50 48.70	0.5
CMB	84.65	46	eP	50 48.40	0.0
SBB	84.67	50	eP	50 48.00	-0.5
CHTO	84.68	292	eP	50 46.00	-2.8
	1.0s		2.50nm		4.4mb
PLM	84.68	51	eP	50 50.00	1.2
ISA	84.71	49	eP	50 49.00	0.3
ORV	84.75	44	ePc	50 48.70	0.0
MIN	85.11	43	ePc	50 50.10	-0.7
CLC	85.40	49	eP	50 53.00	0.8
TPC	85.65	51	eP	50 53.00	-0.4
GLA	86.03	52	eP	50 56.00	0.7
KVN	86.71	46	eP	50 59.00	0.3
TNP	86.81	47	eP	50 59.00	-0.3
	1.0s		4.50nm		4.7mb
LZH	88.45	310	Pd	51 07.00	-0.1
	2.0s		39.00nm		5.4mb
			pP	51 14.00	22kmX
KSP	146.41	336	ePKPc	57 53.80	-0.5
CLL	147.20	339	iPKP	57 56.00	0.5
	1.1s		18.00nm		
BRG	147.25	338	iPKP	57 56.40	0.8
	1.2s		15.00nm		
			e	58 03.10	
PRU	147.76	336	ePKP	57 57.50	1.0
			e	58 05.00	
KHC	148.83	336	iPKP	58 01.00	2.7X
GRF	149.18	340	ePKP	58 01.60	2.8X
BCAO	151.67	236	iPKPc	58 05.00	1.4
	1.1s		33.00nm		

S.D. = 1.2 on 32 of 35 obs.

? JUN 21, 1990 19h 47m 15.84± 1.34s
30.576 S ±13.9km 69.839 W ±11.4km
DEPTH = 130.0km (geophysicist)
CHILE-ARGENTINA BORDER REGION (127)

RTRS	0.52	39	iPd	47 35.10	-0.1
RTBS	1.13	163	iPc	47 41.20	0.9
			S	47 58.80	
RTCB	1.27	136	eP	47 41.90	0.0
ZON	1.39	134	iPc	47 43.00	-0.1
RTLL	1.40	123	iPd	47 42.50	-0.7
			eS	48 01.80	
RTCV	1.70	139	eP	47 47.00	0.4
CFA	1.71	127	iPd	47 47.00	0.2
			eS	48 09.00	
JACH	2.20	197	eP	47 54.00	1.2
			eS	48 22.50	
ROCH	2.59	202	eP	47 58.70	0.8
			eS	48 30.50	
PCH	3.09	191	eP	48 02.50	-1.9
			iS	48 36.80	
TACH	3.21	197	iP	48 06.10	0.3
LNV	3.62	201	ePd	48 10.30	-1.0
			i	48 51.50	

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

% JUN 21, 1990 19h 58m 30.68± 0.86s
41.700 N ± 9.0km 13.420 E ± 4.7km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

AZI	0.29	2	P	58 36.60	-0.1
			eSg	58 40.90	
SDI	0.30	89	Pd	58 37.30	0.4
			eSg	58 42.50	
RDP	0.53	277	P	58 41.60	0.2
			eSg	58 48.50	
RMP	0.55	282	P	58 41.60	-0.2
			eSg	58 49.00	
AQU	0.65	359	P	58 43.90	0.2
DUI	0.78	93	P	58 45.50	-0.4

S.D. = 0.4 on 6 of 6 obs.

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* JUN 21, 1990 20h 15m 57.23± 1.07s
37.449 N ±15.6km 49.081 E ± 8.7km
DEPTH = 10.0km (geophysicist)
4.2mb (1 obs.)
CASPIAN SEA (338)

TAB	2.27	287	eP	16 35.00	-0.5
TEH	2.52	132	ePc	16 38.00	-1.0
KER	3.48	208	eP	16 53.00	0.4
MAIO	8.42	95	eP	18 03.00	0.7
BCAO	43.12	228	iPc	24 00.00	0.5
	1.0s		5.00nm		4.2mb

S.D. = 1.0 on 5 of 5 obs.

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* JUN 21, 1990 20h 19m 53.92± 0.72s
37.022 N ±11.7km 50.108 E ± 9.4km
DEPTH = 10.0km (geophysicist)
4.2mb (2 obs.)
CASPIAN SEA (338)

TEH	1.64	141	iPd	20 21.50	-1.6
TAB	3.18	290	eP	20 46.00	0.9
KER	3.62	223	eP	20 52.00	0.7
MAIO	7.58	93	eP	21 49.00	1.8
			eS	23 26.00	
MLR	19.99	303	eP	24 30.00	0.6
CMP	20.54	301	ePc	24 35.00	0.0
SPC	24.79	309	eP	25 16.70	-0.6
HFS	32.71	327	eP	26 27.50	-0.9
	0.7s		4.50nm		4.5mb
NAO	34.29	327	P	26 41.10	-1.0
	0.7s		1.00nm		3.8mb

S.D. = 1.3 on 9 of 9 obs.

% JUN 21, 1990 20h 27m 12.63± 0.72s
43.408 N ± 5.2km 5.447 E ± 6.2km
DEPTH = 10.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)
MD 2.6 (STR).

GELF	0.03	211	Pg	27 14.29	-0.4
BERF	0.20	118	Pg	27 17.43	0.3
TREF	0.22	34B	Pg	27 17.41	0.0
PRAF	0.44	333	Pg	27 22.02	0.3
VILF	0.48	24	Pg	27 22.25	-0.2
TAVF	0.49	65	Pg	27 22.48	-0.1
GANF	0.68	29	Pg	27 26.08	0.0

S.D. = 0.3 on 7 of 7 obs.

% JUN 21, 1990 20h 46m 30.97± 0.56s
40.100 N ± 5.0km 22.349 E ± 5.0km
DEPTH = 10.0km (geophysicist)
GREECE (364)

THE	0.71	41	ePg	46 45.30	0.4
GRG	0.86	3	ePg	46 48.20	0.7
			eSg	46 58.60	
FNA	1.01	313	ePg	46 50.20	0.1
PAIG	1.04	99	ePg	46 50.90	0.4
SOH	1.05	46	ePg	46 51.40	0.6
AGG	1.08	181	iPb	46 51.40	0.2
KNT	1.14	21	ePb	46 51.40	-0.9
OUR	1.27	79	ePb	46 54.00	-0.6
SRS	1.39	43	ePb	46 55.90	-0.5
IGT	1.65	251	ePb	46 59.90	-0.2

S.D. = 0.6 on 10 of 10 obs.

? JUN 21, 1990 21h 18m 14.19± 1.96s
51.661 N ±13.1km 7.695 E ±16.3km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
ML 2.6 (GSH). MD 2.6 (UCC).

WTS	0.64	302	ePg	18 27.00	-0.1
GSH	1.24	222	ePg	18 37.00	-0.3
			eSg	18 54.40	
MEM	1.50	226	P	18 41.40	0.3
			S	19 00.80	
TNS	1.52	161	ePnd	18 41.40	0.0
			eSn	18 59.90	
DOU	2.51	233	P	19 00.60	4.9X

S.D. = 0.4 on 4 of 5 obs.

JUN 21, 1990 21h 26m 29.80± 0.94s
19.134 N ± 9.2km 65.376 W ± 5.6km
DEPTH = 45.4 ± 12.3 km
4.6mb (7 obs.) 3.7Msz (1 obs.)
PUERTO RICO REGION (90)

LPR	0.95	210	P	26 46.40	-0.5
CPD	1.20	205	P	26 50.20	-0.3
PORP	1.61	228	P	26 56.10	-0.1
MGP	1.97	236	P	27 01.40	0.0
NEV	3.33	126	eP	27 22.00	1.3
CPB	3.68	113	eP	27 25.12	-0.6
			eS	28 13.66	
MGH	3.85	128	eP	27 28.00	-0.1
BPA	3.94	121	eP	27 29.50	0.1
PAG	4.69	131	eP	27 39.40	-0.5
BBL	5.17	133	eP	27 46.50	-0.2
TPR	9.06	150	eP	28 44.68	3.7X
TRN	9.27	155	eP	28 44.88	1.0
	1.0s	112.00nm			5.9mb X
BOG	16.73	212	e(P)	30 28.00	5.0X
BLA	22.31	327	eP	31 25.50	0.6
	1.0s	15.00nm			4.4mb
RSCP	24.22	317	eP	31 45.00	1.5
	1.0s	27.11nm			4.7mb
SIV	35.16	173	P	33 19.50	-2.0
ZOBO	35.28	185	P	33 25.00	1.8
Z	20s	0.13um			3.7Msz
		LR		45 16.00	
BW06	43.97	312	iP	34 35.00	0.4
	1.0s	16.25nm			4.7mb
FFC	45.12	331	eP	34 43.00	-0.3
	0.8s	8.00nm			4.6mb
SES	47.68	322	ePc	35 04.50	0.7
			pP	35 20.00	60kmX
NEW	50.69	317	iP	35 26.50	-0.4
	1.0s	33.75nm			5.3mb
YKA	54.88	335	eP	35 56.20	-1.6
	0.6s	3.30nm			4.5mb
MBC	63.29	347	eP	36 55.50	-0.3
	0.6s	1.00nm			4.1mb
INK	64.32	337	eP	37 02.00	-0.6

S.D. = 1.0 on 22 of 24 obs.

JUN 21, 1990 21h 27m 39.62± 0.31s
36.516 N ± 8.7km 49.661 E ± 4.1km
DEPTH = 10.0km (geophysicist)
4.9mb (32 obs.)
WESTERN IRAN (347)

TEH	1.60	119	iPd	28 54.30	46.2X
KER	3.00	225	eP	28 34.00	5.8X
TAB	3.08	301	eP	28 31.00	1.7
MAIO	7.93	89	iPd	29 36.00	-1.8
	0.8s	20.13nm			5.4mb
			eS	31 10.00	
DSI	12.83	252	eP	31 03.00	18.3X
PRNI	13.70	248	eP	31 07.00	10.7X
BBTK	13.70	289	eP	31 04.00	7.6X
MBH	14.09	246	eP	31 05.00	3.7X
HRT	16.19	291	eP	31 33.50	4.8X
YLV	16.38	290	iP	31 25.50	-5.6X
HLW	16.70	252	eP	31 40.00	4.8X
			e	35 08.00	
ISR	19.45	303	eP	32 10.00	0.8
CLI	19.46	308	ePd	32 10.00	0.7
MLR	19.96	304	ePc	32 15.50	0.7
			e	35 40.00	
CMP	20.50	303	ePc	32 20.00	-0.4
VAM	20.63	275	eP	32 23.00	1.3
KSH	20.93	74	eP	32 25.00	0.1
NEO	21.02	286	eP	32 26.00	0.3
THE	21.24	289	eP	32 30.00	2.1
VLI	21.43	279	eP	32 31.20	1.3
VAY	21.58	291	eP	32 32.60	1.3
			i	32 35.30	
LIT	21.59	288	eP	32 33.00	1.5
ITM	22.18	280	eP	32 38.00	0.6
FNA	22.45	290	eP	32 41.50	1.4
SKO	22.47	293	eP	32 42.00	1.7
OHR	22.90	290	eP	32 44.70	0.1
VLS	23.13	283	eP	32 47.70	0.9
KEK	23.66	287	iPc	32 52.30	0.4
SPC	24.83	310	iP	33 04.00	0.6
KRA	25.32	312	eP	33 08.50	0.7
ZST	26.54	306	eP	33 19.20	0.1
SOI	26.70	284	P	33 21.00	0.3
PTJ	26.86	301	eP	33 22.60	0.4
DUI	27.68	292	P	33 30.50	0.8
KSP	27.78	312	ePd	33 31.00	0.5
SDI	28.16	292	P	33 34.00	0.0
AZI	28.43	292	P	33 37.50	1.1
ARV	28.80	295	P	33 40.50	0.8
ASS	29.00	295	P	33 41.00	-0.6
KHC	29.03	307	P	33 41.90	0.2
	1.0s	6.50nm			4.4mb
FVI	29.14	302	P	33 42.00	-0.7
BRG	29.22	311	e(P)	33 43.40	0.1
BHG	29.23	304	iPd	33 44.00	0.5
	0.8s	31.00nm			5.2mb
WET	29.48	307	iPd	33 46.00	0.2
	0.7s	8.00nm			4.6mb
CRE	29.53	296	P	33 47.00	0.6
SFI	29.60	296	P	33 48.00	1.1
PGD	29.70	296	P	33 48.50	0.5
WMQ	29.76	64	iPc	33 47.30	-1.2
CLL	29.90	311	iP	33 49.80	0.3
	1.3s	31.00nm			5.0mb
SOTA	30.28	303	iPc	33 52.30	-0.8
	0.6s	17.50nm			5.1mb
			i	33 56.50	
GKN	30.64	96	P	33 59.00	2.5
	0.8s	15.00nm			4.9mb
GRF	30.65	308	eP	33 56.20	0.0
DMN	31.1B	96	P	34 02.00	0.6
	0.8s	25.00nm			5.2mb
PKI	31.44	96	P	34 04.20	0.5
	1.0s	12.00nm			4.8mb
GUN	31.67	95	P	34 06.20	0.4
PGF	31.71	294	eP	34 03.80	-1.8
	0.8s	36.25nm			5.3mb
VAI	31.86	300	P	34 06.00	-0.7
SBF	32.80	296	eP	34 13.50	-1.6
	0.8s	37.60nm			5.4mb
HFS	32.94	327	eP	34 14.90	-1.1
	0.7s	9.00nm			4.8mb
LPG	33.26	299	eP	34 19.10	-0.3
	0.8s	17.45nm			5.0mb
LPL	33.28	299	eP	34 19.10	-0.4
	0.8s	B.75nm			4.7mb
BNI	33.32	298	P	34 19.60	-0.1
FRF	33.38	296	eP	34 18.10	-2.0
	0.8s	18.80nm			5.1mb
GBA	33.75	125	Pd	34 25.80	2.3
	0.8s	7.40nm			4.7mb
NAO	34.51	327	P	34 28.40	-1.3
	0.8s	1.70nm			4.0mb
SMF	35.29	301	eP	34 34.50	-2.0
	1.0s	14.00nm			4.8mb
AVF	35.63	301	eP	34 38.00	-1.4
	0.8s	8.05nm			4.6mb
MAF	36.18	301	eP	34 41.80	-2.3
	0.8s	8.05nm			4.6mb
LDF	37.96	305	eP	34 57.50	-1.5
	0.6s	9.00nm			4.7mb
FLN	38.20	305	eP	34 58.50	-2.5
	0.7s	11.00nm			4.7mb
GRR	3B.46	304	eP	35 00.90	-2.2
	0.6s	18.05nm			5.0mb
GTA	39.24	70	eP	35 09.80	-0.2
	1.0s	10.00nm			4.4mb
EKA	40.15	315	P	35 17.00	-0.1
	0.7s	5.50nm			4.3mb
BCAO	42.85	229	iPc	35 39.50	-0.2
	1.4s	60.00nm			5.1mb
CD2	44.86	81	eP	35 54.30	-1.6
KMI	46.46	89	eP	36 11.00	2.1
CHG	46.55	99	eP	36 09.30	-0.1
XAN	47.7B	75	P	36 18.50	-0.5
GYA	49.02	85	P	36 28.80	0.1
TIY	49.22	69	eP	36 32.40	2.3
KRI	56.34	203	eP	37 37.00	13.7X
LKO	56.60	256	P	37 24.24	-0.9
	0.9s	11.00nm			4.9mb
KIC	57.91	253	P	37 33.76	-0.6
	0.8s	18.00nm			5.2mb
TIC	57.94	253	P	37 33.94	-0.7
	0.8s	9.50nm			4.9mb
LIC	58.21	253	P	37 35.78	-0.7
	0.8s	22.50nm			5.3mb
CIR	59.71	200	iPd	37 46.30	-0.5
BUL	59.76	203	iPc	37 44.20	-3.1
	0.9s	12.18nm			5.0mb
FRB	68.82	335	eP	38 45.00	-0.7
SCH	74.01	327	eP	39 17.00	0.1
YKA	80.52	353	eP	39 52.50	-0.4
	0.9s	2.10nm			4.1mb
RMO	112.14	107	iPKPd	46 12.90	-4.3X

S.D. = 1.2 on 80 of 91 obs.

• JUN 21, 1990 21h 31m 07.70± 0.51s
36.794 N ±15.6km 49.333 E ± 8.2km
DEPTH = 10.0km (geophysicist)
4.8mb (12 obs.)
WESTERN IRAN (347)

TEH	1.97	122	iPd	31 44.50	3.0
TAB	2.71	299	eP	31 55.00	2.8
KER	3.04	217	eP	32 07.00	10.2X
MAIO	8.19	90	eP	33 08.00	-1.6
	0.8s	27.45nm			5.6mb
			eS	34 41.00	
YLV	16.03	290	iP	35 00.00	5.2X
OHR	22.56	290	e(P)	36 07.70	-1.6
SOTA	29.91	302	e(P)	37 17.00	-0.9
	0.6s	5.00nm			4.5mb
			i	37 20.30	
GKN	30.93	96	P	37 27.10	0.0
DMN	31.48	97	P	37 32.20	0.2
	1.0s	40.00nm			5.3mb
PKI	31.73	96	P	37 34.40	0.0
GUN	31.96	95	P	37 36.40	0.0
HFS	32.56	327	eP	37 40.00	-0.8
	0.7s	12.40nm			4.9mb
GBA	34.12	125	Pd	37 55.20	0.4
	0.6s	3.20nm			4.4mb
NAO	34.14	327	P	37 55.20	0.7
	0.8s	3.30nm			4.3mb
EKA	39.76	315	P	38 44.00	2.0
	0.7s	4.40nm			4.2mb
BCAO	42.84	229	iPc	39 00.00	-7.7X
	1.2s	28.00nm			4.9mb

21d 21h

CHG	46.85	99	eP	39 39.40	-0.5
BDT	47.77	100	eP	39 46.00	-1.0
LKO	56.41	256	P	40 51.02	-0.9
	0.9s	11.50nm		4.9mb	
KIC	57.74	252	P	41 00.66	-0.6
	0.9s	15.00nm		5.0mb	
LIC	58.05	252	P	41 02.70	-0.7
	0.9s	12.50nm		5.0mb	
MBC	67.01	357	eP	42 02.50	0.2
	0.6s	2.00nm		4.5mb	
FRB	68.46	335	eP	42 11.00	-0.5

S.D. = 1.3 on 20 of 23 obs.

JUN 21, 1990 22h 26m 01.36± 1.74s
42.198 N ± 9.2km 45.607 E ± 5.7km
DEPTH = 89.1 ± 19.3 km
4.4mb (10 obs.)
EASTERN CAUCASUS (337)

TAB	4.16	172	eP	27 02.00	-1.9
MAIO	12.27	114	eP	28 55.00	0.8
MLR	14.56	290	eP	29 25.00	0.8
PRNI	14.58	219	eP	29 26.00	1.6
MBH	15.12	218	eP	29 22.00	-9.2X
CMP	15.18	289	ePc	29 39.00	7.0X
VAM	17.99	255	eP	30 06.50	-0.4
VLI	18.32	260	eP	30 15.50	4.5X
OHR	18.56	275	e(P)	30 13.20	-0.6
ITM	18.88	262	eP	30 16.00	-1.3
SPC	18.99	300	eP	30 16.80	-1.8
KRA	19.38	303	eP	30 20.20	-2.3
VLS	19.51	266	eP	30 25.50	1.5
KEK	19.63	271	eP	30 27.00	1.8
SRO	20.04	296	eP	30 29.70	0.3
ZST	20.89	296	eP	30 38.40	0.3
			i	30 52.10	
VKA	21.42	296	e(P)	30 45.00	1.6
			i	30 49.80	
PTJ	21.57	290	eP	30 46.70	1.7
KSP	21.83	303	eP	30 48.80	1.4
NUR	22.35	332	eP	30 53.00	0.6
PRU	22.78	301	eP	30 59.50	2.8X
			e	31 29.00	
DUI	23.12	279	P	31 03.50	3.3X
BRG	23.30	303	eP	31 04.00	2.3
	1.7s	32.00nm		4.4mb	
			e	31 21.20	
KHC	23.31	298	eP	31 06.50	4.6X
SUF	23.54	337	iP	31 03.20	-0.7
	0.6s	10.80nm		4.4mb	
SDI	23.58	280	P	31 04.50	-0.1
FVI	23.76	292	P	31 05.50	-0.7
AZI	23.80	280	P	31 13.50	6.8X
ARV	23.90	284	P	31 09.50	1.8
ASS	24.17	283	P	31 13.00	2.6
CRE	24.60	285	P	31 21.00	6.5X
SFI	24.63	286	P	31 20.00	5.4X
UPP	24.65	325	iP	31 13.00	-1.6
PGD	24.73	285	P	31 22.00	6.2X
SQTA	24.83	293	iPd	31 17.40	0.8
	0.6s	19.50nm		4.7mb	
			i	31 22.10	
			i	31 26.60	
			i	31 42.80	
GRF	24.89	299	e(P)	31 17.00	0.0
SAL	25.38	290	P	31 27.00	5.4X
HFS	26.48	324	eP	31 30.20	-1.4
	0.9s	11.30nm		4.4mb	
Z	16s	0.11um		3.5MszX	
		LR		41 09.00	
VAI	26.58	291	P	31 36.00	3.4X
SOD	27.25	344	iP	31 37.30	-1.2
			i	31 42.80	
			i	31 57.80	
NAO	28.06	324	P	31 43.80	-2.1
	0.9s	2.60nm		3.9mb	
BNI	28.14	289	P	31 41.50	-5.5X
KEV	29.25	347	eP	31 56.00	-0.5
			e	32 24.00	
WMO	30.58	72	P	32 07.50	-1.1
EKA	34.00	310	P	32 37.00	-1.1
	0.8s	4.60nm		4.4mb	
GKN	34.62	101	P	32 42.80	-1.1
DMN	35.18	102	P	32 49.50	0.6
PKI	35.42	101	P	32 50.60	-0.4
HYB	37.40	121	eP	33 10.00	2.7
GBA	39.62	126	Pc	33 29.00	3.2X
	1.1s	9.50nm		4.6mb	
GTA	40.55	75	eP	33 35.00	1.6
BCAO	44.68	220	iPc	34 04.50	-2.5
	0.8s	14.00nm		4.8mb	
HHC	48.26	68	eP	34 35.60	0.5
XAN	49.46	78	P	34 44.00	-0.3
TIY	50.24	72	eP	34 52.20	1.9
CHG	50.59	100	eP	34 52.10	-1.0
BDT	51.64	102	eP	35 04.00	3.0X
GYA	51.76	87	P	35 07.40	5.4X
DL2	56.04	66	eP	35 33.80	0.8
LIC	57.27	246	(P)	35 40.00	-2.0
MBC	61.45	356	eP	36 09.50	-0.5
	0.7s	3.00nm		4.5mb	
FRB	62.34	333	eP	36 16.00	-0.1
BUL	63.98	198	eP	36 26.20	-1.3
INK	69.82	360	eP	37 03.00	-0.4
YKA	74.45	351	eP	37 31.50	0.5
	0.6s	2.00nm		4.2mb	

S.D. = 1.4 on 49 of 65 obs.

JUN 21, 1990 22h 46m 31.00± 1.07s
26.985 N ± 6.0km 126.914 E ± 6.0km
DEPTH = 139.7 ± 8.7 km
5.0mb (28 obs.)
RYUKYU ISLANDS (238)

SSE	6.47	311	iPc	48 04.00	-1.1
	1.0s	210.00nm		5.4mb	
QZH	7.76	257	eP	48 23.20	0.7
NJ2	8.65	308	Pd	48 32.50	-1.8
	1.2s	200.00nm		5.6mb	
WHN	11.58	291	eP	49 13.20	0.2
	1.5s	100.00nm		5.2mb	
E	10s	0.50um			
DL2	12.69	341	Pd	49 27.00	-0.4
	1.7s	300.00nm		5.5mb	
MAT	13.52	42	eP	49 41.00	2.7
	1.1s	27.85nm		4.6mb	
SNY	15.06	350	eP	49 59.00	1.4
	1.2s	100.00nm		5.0mb	
BJI	15.78	328	eP	50 07.50	0.8
	1.1s	120.00nm		5.1mb	
TIY	16.23	315	Pd	50 13.50	1.2
	1.1s	100.00nm		5.0mb	
			S	53 08.50	
CN2	16.82	356	Pd	50 18.80	-0.6
	1.0s	100.00nm		5.1mb	
			eS	53 26.00	
XAN	17.01	299	Pd	50 22.00	0.1
QIZ	17.58	247	eP	50 30.80	1.9
MDJ	17.73	6	eP	50 29.30	-1.1
GYA	18.10	273	P	50 36.60	1.7
HHC	18.76	321	P	50 41.80	-0.1
	1.2s	300.00nm		5.5mb	
BTO	19.49	318	P	50 48.50	-0.9
N	13s	0.30um			
E	13s	0.30um			
CD2	20.63	286	eP	50 58.20	-2.9
LZH	21.61	300	Pd	51 10.00	-1.0
Z	15s	0.40um		3.9MszX	
		PcP		55 08.00	
GTA	25.74	306	iPd	51 48.80	-1.4
	0.6s	100.00nm		5.6mb	
Z	12s	0.50um		4.3MszX	
CHG	26.97	258	eP	52 02.10	0.6
WMO	35.73	308	iPc	53 17.00	-0.9
			pP	53 44.50	121kmX
GUN	36.31	281	P	53 24.60	1.3
PKI	36.77	281	P	53 26.80	-0.3
	0.6s	20.00nm		5.1mb	
DMN	37.03	281	P	53 29.20	0.0
	0.6s	14.00nm		4.9mb	
GKN	37.38	282	P	53 31.80	-0.3
NDI	43.73	284	eP	54 23.80	-0.2
WB5	47.14	170	iPc	54 49.40	-1.6
GBA	47.99	264	Pc	54 58.40	0.7
	0.9s	6.90nm		4.4mb	
QIS	48.83	164	iPc	55 02.90	-1.2
	0.8s	40.00nm		5.2mb	
KOD	49.40	260	eP	55 10.00	1.0
ASPA	50.81	172	iPc	55 18.20	-0.9
	1.0s	27.00nm		5.0mb	
WARB	52.86	180	eP	55 34.00	-0.4
MAIO	57.12	297	eP	56 06.00	0.8
			e	56 35.00	
FORR	57.52	179	eP	56 06.30	-1.4
TTA	60.49	31	ePd	56 26.90	-1.2
IMA	61.38	27	ePd	56 32.90	-1.3
	0.9s	10.40nm		4.8mb	
PMR	63.81	32	ePd	56 48.00	-2.0
TOA	65.11	31	ePd	56 57.70	-0.8
INK	68.66	23	ePd	57 19.70	-0.9
	0.8s	31.00nm		5.2mb	
MBC	69.37	14	ePd	57 23.40	-1.5
	0.5s	9.00nm		4.9mb	
UPP	76.06	331	iP	58 03.50	-0.7
			i	58 35.70	
HFS	77.60	332	eP	58 11.50	-1.3
	0.9s	11.60nm		4.6mb	
Z	18s	0.08um		4.1Msz	
		LR		33 38.00	
VRI	77.73	315	ePc	58 14.50	0.7
MLR	78.38	315	ePc	58 18.00	0.4
			e	17 40.00	
NAO	78.39	333	P	58 16.20	-0.9
	0.7s	5.20nm		4.4mb	
KRA	79.80	321	eP	58 24.70	-0.2
RDO	80.62	311	eP	58 29.20	-0.2
KSP	81.39	323	iP	58 33.30	0.1
			e	58 59.50	
VAY	82.51	313	eP	58 39.40	0.1
BRG	82.61	324	iP	58 40.20	0.6
PRU	82.79	323	eP	58 41.00	0.5
CLL	82.86	325	iPd	58 40.90	0.1
	1.0s	14.00nm		4.8mb	
SKO	82.92	314	iP	58 42.00	0.6
PNT	83.76	37	eP	58 47.00	1.5
OHR	83.77	313	eP	58 45.50	-0.3
KHC	83.79	323	P	58 46.50	0.8
VAM	84.27	307	eP	58 48.30	0.0
VLI	84.52	308	eP	58 48.00	-1.5
GRF	84.72	324	iPd	58 51.50	1.2
	1.2s	33.00nm		5.1mb	
Z	20s	0.10um		4.2Msz	
BHG	84.98	322	iPc	58 52.60	1.0
ITM	84.99	309	iPd	58 51.20	-0.7
KEK	85.14	312	eP	58 51.50	-1.1
VLS	85.40	311	iPc	58 53.20	-0.8
FUR	85.60	323	iPc	58 55.90	1.2
FVI	85.68	321	P	58 54.50	-0.6
WDC	86.91	46	ePc	59 03.50	2.2
ARV	87.38	318	P	59 04.50	1.0
TDS	87.43	314	P	59 04.50	0.7
CDF	87.56	325	eP	59 04.30	0.0
	0.8s	6.70nm		4.7mb	
SFI	87.77	319	P	59 07.00	1.7
ASS	87.79	318	P	59 06.00	0.5
DOU	87.82	327	Pd	59 05.80	0.4
PGD	87.88	319	P	59 08.00	1.9
SDI	87.88	316	P	59 04.50	-1.5
ORV	88.14	46	ePc	59 07.80	0.6
FFC	88.44	26	eP	59 08.00	-0.3
	0.6s	11.00nm		5.1mb	
SOI	88.49	312	P	59 09.00	0.2
FRB	88.75	7	eP	59 08.00	-1.6
ORO	88.94	322	P	59 10.50	-0.5
LPL	89.68	323	eP	59 14.70	0.0
	0.6s	3.60nm		4.6mb	
LPG	89.69	323	eP	59 15.00	0.2
	0.7s	6.60nm		4.8mb	
CMB	89.71	47	ePc	59 15.90	1.2
LRM	89.73	37	eP	59 17.50	2.6
PGF	90.27	319	eP	59 16.60	-0.6
	0.8s	13.45nm		5.1mb	
LKO	121.35	302	PKP	05 11.00	1.2
	0.8s	4.50nm			
KIC	122.67	298	(PKP)	05 13.00	0.7

S.D. = 1.1 on 86 of 86 obs.

? JUN 21, 1990 23h 13m 07.88± 1.03s
37.286 N ±13.0km 49.642 E ±10.6km
DEPTH = 10.0km (geophysicist)
4.5mb (1 obs.)
CASPIAN SEA (338)

TEH	2.09	137	eP	13 43.00	-0.5
TAB	2.74	288	eP	13 57.00	4.1X
KER	3.58	216	eP	14 05.00	0.3
MAIO	7.97	94	eP	15 07.00	0.4
HFS	32.29	327	eP	19 38.40	-0.2
	0.7s	4.60nm		4.5mb	

S.D. = 0.8 on 4 of 5 obs.

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* JUN 22, 1990 00h 58m 30.80± 1.41s
35.877 N ±16.0km 23.345 E ±13.3km
DEPTH = 10.0km (geophysicist)
CRETE (370)
ML 3.4 (ATH).

VAM	0.84	124	ePn	58 47.00	0.0
VLI	0.90	339	iPnc	58 47.70	-0.4
ITM	1.73	319	ePb	59 03.20	2.1
ATH	2.11	8	ePb	59 10.00	3.4X
APE	2.13	55	ePn	59 06.70	-0.2
VLS	3.18	317	ePn	59 21.20	-0.7
NEO	3.42	358	ePn	59 26.00	0.7
KEK	4.75	325	ePn	59 42.50	-1.6

S.D. = 1.4 on 7 of 8 obs.

% JUN 22, 1990 01h 51m 26.86± 0.58s
47.073 N ± 6.9km 0.923 E ± 5.9km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 3.0 (LDG).

MFF	0.87	238	Pg	51 43.40	-0.2
			Sg	51 55.10	
			Sn	51 57.40	
LSF	0.92	153	Pg	51 45.60	1.1
			Sn	51 57.80	
TCF	1.18	131	Pn	51 50.30	1.3
			Pg	51 50.90	
			Sg	52 06.20	
MAF	1.42	126	Pn	51 52.80	0.1
			Pg	51 55.10	
			Sg	52 13.40	
BGF	1.42	111	Pn	51 52.30	-0.4
			Pg	51 54.40	
			Sg	52 11.80	
LPF	1.64	307	Pg	51 57.10	1.3
			Sg	52 18.20	
LDF	1.68	336	Pg	51 58.00	1.6
			Sg	52 18.60	
AVF	1.69	99	Pn	51 56.80	0.3
			Sg	52 20.40	
SSF	1.77	89	Pn	51 58.00	0.3
			Pg	52 00.30	
			Sg	52 23.50	
GRR	1.78	318	Pn	51 55.60	-2.3
			Pg	51 59.30	
			Sg	52 21.70	
RJF	1.82	167	Pn	51 58.60	0.2
			Pg	52 01.90	
			Sg	52 24.50	
FLN	1.94	331	Pg	52 02.20	2.1X
			Sg	52 26.60	
LOR	2.01	83	Pn	52 00.80	-0.5
			Pg	52 04.40	
			Sg	52 31.00	
SMF	2.05	101	Pn	52 01.80	0.0
			Pg	52 05.40	
			Sg	52 31.40	
LBF	2.09	91	Pn	52 01.30	-1.1
			Pg	52 07.00	
			Sg	52 32.80	
LFF	2.14	183	Pg	52 08.70	5.7X
			Sg	52 35.80	
CAF	2.29	159	Pn	52 03.50	-1.8
			Pg	52 11.60	
			Sg	52 40.40	
LPO	2.40	175	Pg	52 13.00	6.2X
			Sg	52 44.20	
EPF	4.06	186	Pn	52 27.00	-3.4X
			Sn	53 13.30	
			Sg	53 36.80	

S.D. = 1.2 on 15 of 19 obs.

& JUN 22, 1990 02h 06m 46.62s
60.028 N 153.415 W
DEPTH = 177.2km
SOUTHERN ALASKA (2)
<AGS-P>.

RED	0.51	39	iP	07 10.52	0.6
AUE	0.67	178	iP	07 11.26	-0.9
RDT	0.74	42	iP	07 11.94	-0.7
NNL	1.06	88	eP	07 15.87	1.1
CDD	1.11	186	iP	07 14.02	-1.2
CNPM	1.21	114	iP	07 16.26	0.2
			eS	07 37.65	
BRLK	1.30	101	eP	07 17.33	0.5
SPU	1.34	30	eP	07 16.89	-0.3
CRP	1.39	26	eP	07 17.66	-0.2
SLKM	1.66	72	eP	07 20.22	-0.1
SUA	1.95	41	eP	07 23.48	0.1
			eS	07 50.49	
SEW	1.99	86	eP	07 24.10	0.4
SKT	2.16	24	eP	07 25.84	0.1
PMS	2.26	56	eP	07 26.44	-0.4
SML	3.06	52	eP	07 35.45	-0.9
GLI	3.25	72	eP	07 38.85	0.2
VZW	3.54	70	eP	07 42.12	-0.3
VLZ	3.67	69	eP	07 43.98	0.1
KTH	3.73	17	eP	07 44.70	-0.1
KLU	3.96	65	eP	07 47.84	0.1

20 obs. associated

JUN 22, 1990 03h 10m 27.59± 0.82s
34.156 N ±10.2km 26.686 E ± 6.5km
DEPTH = 68.0 ± 20.8 km
3.9mb (1 obs.)
CRETE (370)
MD 4.1 (HLW).

VAM	2.40	302	eP	11 07.40	2.1
APE	3.05	342	eP	11 15.50	0.9
KSL	3.08	50	eP	11 15.00	0.2
SMG	3.55	2	eP	11 37.00	15.6X
CIN	3.62	18	eP	11 21.00	-1.4
VLI	3.99	311	eP	11 27.00	-0.6
BCK	4.57	43	ePn	11 34.50	-1.4
ITM	4.91	309	eP	11 40.50	-0.1
CSS	5.54	80	eP	11 50.00	0.6
			eSn	12 48.50	
LFK	5.75	77	ePn	11 54.20	1.8
KOT	6.07	133	ePn	11 56.50	-0.2
			eSn	13 02.00	
VLS	6.36	311	eP	12 02.40	1.7
DSI	7.76	107	eP	12 19.00	-1.1
			eS	13 41.00	
KEK	7.82	317	eP	12 20.00	-1.0
PRNI	8.00	116	eP	12 23.00	-0.5
MBH	8.22	120	eP	12 27.00	0.5
SOI	9.45	297	P	12 41.50	-1.8
ATN	9.91	297	P	12 43.00	-6.7X
TDS	9.94	307	P	12 48.90	-1.1
HFS	27.35	346	eP	16 08.90	1.1
	0.5s		1.70nm		3.9mb

S.D. = 1.3 on 18 of 20 obs.

JUN 22, 1990 03h 24m 03.00± 0.44s
40.127 N ± 4.0km 21.201 E ± 4.6km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 2.5 (THE).

FNA	0.67	11	ePgc	24 15.60	-0.8
			eSg	24 25.60	
IGT	0.89	229	ePgd	24 19.20	-0.9
			eSg	24 33.20	
LIT	0.99	91	ePg	24 20.80	-1.0
			eSg	24 35.80	
OHR	1.03	343	iPg	24 22.90	0.4
			iSg	24 37.90	
			Lg	24 39.40	
KEK	1.15	249	eP	24 24.40	-0.2
GRG	1.23	47	ePbc	24 26.20	0.2
			eSb	24 43.60	
AGG	1.41	141	ePbc	24 28.20	-0.5
			eSb	24 48.50	
THE	1.44	69	ePb	24 29.00	-0.1
			eSb	24 49.90	
VAY	1.58	41	ePn	24 31.50	0.4
KNT	1.65	51	ePb	24 32.20	0.0
NEO	1.76	117	eP	24 33.00	-0.8
SOH	1.78	66	ePb	24 34.60	0.5
SKO	1.85	6	iPn	24 35.50	0.4
			iSn	25 00.00	
			iSg	25 03.50	
			Lg	25 05.00	
VLS	2.00	194	eP	24 15.30	-22.0X
ITM	3.00	169	eP	24 53.00	1.6
VLI	3.67	158	ePd	25 01.70	0.7

S.D. = 0.8 on 15 of 16 obs.

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* JUN 22, 1990 03h 32m 48.14± 0.63s
37.078 N ±19.3km 49.730 E ±11.3km
DEPTH = 10.0km (geophysicist)
4.7mb (5 obs.)
CASPIAN SEA (338)

TEH	1.89	135	iPd	33 20.80	-0.1
TAB	2.88	291	eP	33 36.00	1.0
KER	3.46	219	eP	33 47.00	3.8X
MAIO	7.88	93	eP	34 46.00	0.3
			eS	36 22.00	
HFS	32.50	327	eP	39 20.80	0.1
	0.5s		1.50nm		4.2mb
LDF	37.70	304	eP	40 05.50	0.2
	0.8s		9.40nm		4.6mb
FLN	37.93	304	eP	40 06.70	-0.5
	0.8s		16.10nm		4.8mb
GRR	38.19	304	eP	40 09.40	0.0
	0.4s		9.15nm		4.9mb
LPF	38.33	303	eP	40 09.50	-1.0
	0.8s		13.45nm		4.7mb

S.D. = 0.7 on 8 of 9 obs.

& JUN 22, 1990 05h 14m 04.90s
60.454 N 143.181 W
DEPTH = 8.5km
SOUTHERN ALASKA (2)
<AGS-P>.

TGL	0.35	30	iP	14 12.12	0.0
			iS	14 18.27	
BALM	0.71	35	iP	14 18.01	-1.2
			eS	14 28.75	
PCA	1.50	103	iP	14 30.45	-1.7
			eS	14 49.83	
VLZ	1.69	295	eP	14 32.72	-2.0
KLU	1.69	309	iP	14 33.26	-1.7
			eS	14 56.34	
VZW	1.76	292	eP	14 33.63	-2.3
			eS	14 57.36	
YKU	1.96	116	eP	14 37.06	-1.5
GLI	1.97	284	P	14 36.29	-2.6
TOA	2.20	320	eP	14 41.78	-0.4
SDG	2.37	332	eP	14 43.72	-0.9
SCM	2.44	306	eP	14 44.58	-1.1
PAX	2.75	338	eP	14 48.71	-1.4
HYT	2.82	80	P	14 53.40	2.2
SML	2.84	301	eP	14 50.35	-1.1

14 obs. associated

& JUN 22, 1990 05h 19m 18.45s
38.952 N 111.425 W
DEPTH = 0.4km
UTAH (478)
<SLC-P>. CL 2.9 (SLC).

MSU	0.73	233	eP	19 32.50	-0.6
DAU	1.46	5	eP	19 45.50	-0.9
DUG	1.64	320	eP	19 49.50	0.7

3 obs. associated

JUN 22, 1990 05h 57m 29.27± 1.05s
41.813 N ± 9.2km 22.727 E ± 6.8km
DEPTH = 5.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.3 (THE).

KNT	0.66	169	ePgc	57 41.80	-0.7
			iSg	57 51.80	
MMB	0.78	106	iPgc	57 43.00	-2.0
GRG	0.89	196	ePgd	57 46.60	-0.2
			eSg	57 58.90	
SRS	0.95	137	ePgd	57 47.90	0.0
			iSg	58 01.10	
SKO	0.97	280	ePg	57 47.00	-1.3
			iSg	58 05.00	
SOH	1.10	154	ePg	57 49.90	-0.5
			eSg	58 06.10	
THE	1.19	171	iPb	57 51.70	-0.3
FNA	1.45	225	ePb	57 57.40	1.2
RZN	1.49	94	iPd	57 56.00	-0.9
OHR	1.61	245	ePn	57 01.20	-57.3X
LIT	1.72	186	ePb	58 01.00	0.9
OUR	1.76	147	ePb	58 01.80	1.3
			eSb	58 25.60	
DIM	2.11	83	eP	58 08.00	2.4

S.D. = 1.4 on 12 of 13 obs.

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* JUN 22, 1990 06h 01m 37.34± 0.89s

22d 06h

19.310 S ± 8.7km 70.077 W ±11.5km
DEPTH = 128.8 ± 47.7 km
4.5mb (1 obs.)
NEAR COAST OF NORTHERN CHILE (122)

ARE	3.14	334	iPd	02	26.50	-0.2
			eS	03	09.00	
LPB	3.34	35	P	02	30.00	0.5
ZOBO	3.55	32	Pc	02	33.00	0.6
CCH	4.20	63	P	02	40.00	-0.9
			e	02	56.00	
ANT	4.38	184	e(P)	02	43.30	0.2
PT03	7.62	313	eP	03	26.40	-0.7
			iS	04	05.60	
PT06	8.10	311	e(P)	03	33.00	-0.6
			iS	05	26.00	
SIV	9.20	70	P	03	42.60	-5.7X
PT08	9.60	319	eP	03	55.20	1.1
			i(S)	05	50.60	
NNA	9.77	317	eP	04	01.00	5.0X
	0.6s		6.00nm			4.5mb
	S.D. = 0.9		on 8 of 10 obs.			

JUN 22, 1990 06h 07m 50.10± 0.44s
37.257 N ±10.7km 48.854 E ± 5.8km
DEPTH = 10.0km (geophysicist)
4.6mb (14 obs.) 4.6Msz (1 obs.)
NORTHWESTERN IRAN (345)

TAB	2.16	293	eP	08	29.00	2.2
			i	08	32.00	
TEH	2.54	126	ePd	08	33.50	1.3
KER	3.23	207	eP	08	47.00	5.1X
MAIO	8.59	93	eP	09	56.00	-1.5
	0.8s		24.16nm			5.6mb
			eS	11	27.00	
DSI	12.48	247	eP	10	55.00	4.4X
BBTK	12.86	287	eP	10	36.00	-19.8X
PRNI	13.42	243	eP	11	05.00	1.9
MBH	13.83	241	eP	11	10.00	1.5
DMK	16.89	292	eP	11	51.00	3.0X
VRI	18.62	304	ePc	12	10.50	1.0
MLR	19.01	303	eP	12	16.50	2.0
CMP	19.56	302	ePd	12	42.00	21.0X
KSH	21.36	76	P	12	41.50	1.7
SKO	21.60	291	eP	12	41.00	-1.0
OHR	22.04	289	eP	12	45.50	-1.1
	1.2s		73.00nm			5.0mb
SPC	23.87	309	eP	13	06.00	1.5
KRA	24.35	311	eP	13	09.80	0.9
			i	13	14.50	
NDI	25.21	102	eP	13	18.00	0.6
ZST	25.58	305	eP	13	22.70	2.0
DUI	26.81	290	P	13	32.50	0.3
SDI	27.29	290	P	13	37.00	0.4
KHC	28.07	306	eP	13	44.50	0.9
FVI	28.20	301	P	13	45.00	0.3
PGD	28.79	295	P	13	49.00	-1.3
CLL	28.93	311	eP	13	52.00	0.8
			e	14	19.00	
WMO	30.03	65	P	14	02.30	1.0
SBF	31.89	295	eP	14	15.60	-2.1
	0.8s		25.50nm			5.2mb
HFS	31.97	327	eP	14	17.80	-0.3
	0.5s		3.90nm			4.6mb
DOI	32.01	296	P	14	16.00	-2.7
LPG	32.34	298	eP	14	21.00	-0.9
	0.8s		6.05nm			4.6mb
LPL	32.35	298	eP	14	20.90	-1.0
	1.0s		12.00nm			4.8mb
BNI	32.40	297	P	14	21.00	-1.2
NAO	33.54	327	P	14	31.80	0.0
	0.7s		1.90nm			4.1mb
SMF	34.36	300	eP	14	36.30	-2.7
	0.8s		5.35nm			4.5mb
AVF	34.69	301	eP	14	39.60	-2.2
	0.8s		8.05nm			4.7mb
GBA	34.70	125	Pc	14	40.40	-1.8
	0.7s		7.60nm			4.7mb
KOD	37.26	129	eP	15	05.50	1.3
GTA	39.60	71	eP	15	18.40	-5.0X
BCAO	42.86	228	iPc	15	50.00	-0.3
	1.1s		11.00nm			4.5mb
CD2	45.38	81	eP	16	10.60	0.1
XAN	48.20	75	P	16	31.60	-1.2
TIY	49.55	69	eP	16	46.00	2.9X
	Z 20s		0.60um			4.6Msz
GYA	49.60	85	eP	16	42.20	-1.5
KIC	57.52	251	(P)	17	39.80	-2.3
SSE	58.83	73	Pc	17	52.50	1.4
	1.0s		10.00nm			4.9mb
MBC	66.53	357	eP	18	41.00	-0.6
	0.6s		2.00nm			4.5mb
FRB	67.88	335	eP	18	51.00	0.7
YKA	79.70	352	eP	20	01.00	2.0
	0.8s		1.20nm			3.9mb
	S.D. = 1.5		on 41 of 48 obs.			

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* JUN 22, 1990 06h 21m 51.51± 0.47s
36.827 N ±13.7km 49.359 E ± 6.5km
DEPTH = 10.0km (geophysicist)
4.9mb (6 obs.)
WESTERN IRAN (347)

TEH	1.97	123	iPc	22	33.80	8.5X
TAB	2.71	298	eP	22	40.00	3.9X
			e	22	45.00	
MAIO	8.17	91	eP	23	52.00	-1.1
	0.8s		20.50nm			5.4mb
			eS	25	25.00	
MLR	19.59	304	eP	26	28.00	5.2X
OHR	22.57	290	eP	26	58.20	5.0X
NDI	24.73	101	eP	27	10.00	-4.3X
GKN	30.91	96	P	28	11.40	0.6
	0.8s		20.00nm			5.1mb
DMN	31.46	97	P	28	16.20	0.5
	1.0s		48.00nm			5.4mb
PKI	31.72	96	P	28	18.20	0.2
GUN	31.95	96	P	28	20.40	0.3
HFS	32.55	327	eP	28	24.10	-0.4
	0.4s		1.80nm			4.4mb
BCAO	42.88	229	iPc	29	52.00	0.2
	1.2s		21.00nm			4.7mb
CHG	46.84	99	eP	30	23.10	-0.4
KIC	57.77	252	P	31	45.00	-0.3
LIC	58.08	252	P	31	47.20	-0.2
MBC	66.98	357	eP	32	46.50	0.6
	0.6s		1.00nm			4.2mb
FRB	68.44	335	eP	32	51.00	-4.2X
	S.D. = 0.6		on 11 of 17 obs.			

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* JUN 22, 1990 07h 13m 30.55± 1.24s
17.442 N ± 8.9km 61.137 W ±11.1km
DEPTH = 33.0km (normal)
4.0mb (1 obs.)
LEEWARD ISLANDS (92)
ML 3.8 (FDF). MD 3.8 (TRN).

CPB	0.69	287	iP	13	44.35	0.6
			eS	13	55.18	
BPA	0.79	240	iP	13	44.25	-1.1
			eS	13	54.65	
SEG	1.09	199	ePd	13	48.76	-0.8
			S	14	04.00	
SFG	1.18	183	eP	13	50.38	-0.4
MGH	1.26	235	ePd	13	51.54	-0.4
NEV	1.40	258	ePd	13	54.27	0.2
PAG	1.50	200	ePd	13	55.15	-0.3
			S	14	13.30	
SKI	1.53	266	eP	13	56.65	0.7
			eS	14	15.16	
BBL	1.94	190	eP	14	01.20	-0.6
MDN	2.13	187	eP	14	05.03	0.5
			eS	14	33.64	
DPMT	2.18	186	eP	14	07.59	2.3
FDF	2.69	180	eP	14	11.98	-0.6
			S	14	41.30	
MVM	2.88	175	eP	14	15.00	-0.2
BIM	2.91	179	eP	14	16.10	0.5
YKA	58.15	334	eP	23	22.60	-0.6
	0.7s		0.90nm			4.0mb
	S.D. = 0.9		on 15 of 15 obs.			

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* JUN 22, 1990 07h 22m 28.34± 1.38s
51.235 N ±14.7km 15.699 E ± 6.8km
DEPTH = 5.0km (geophysicist)
POLAND (548)
ML 3.7 (VKA).

KSP	0.54	136	iP	22	37.50	-1.7
			iS	22	46.20	
BRG	1.16	253	ePn	22	51.20	0.7
			iPg	22	52.80	
			iSg	23	12.20	
PRU	1.45	211	ePn	22	55.60	0.4
			Pg	22	57.10	
			Sg	23	20.80	
CLL	1.70	274	iPn	22	57.20	-1.5
			iPg	23	00.40	
			iSn	23	19.20	
			iSg	23	25.80	
KHC	2.51	214	iPn	23	10.90	0.4
			Pg	23	18.00	
			Sn	23	46.20	
			Sg	23	55.20	
HOF	2.60	251	ePn	23	11.30	-0.4
MOX	2.65	259	ePn	23	13.00	0.5
			iPg	23	20.00	
			iSg	24	00.00	
WET	2.77	222	iPnc	23	14.90	0.7
KRA	2.95	112	eP	23	18.20	1.6
			iS	23	58.10	
VKA	3.00	172	iPgd	23	25.60	8.2X
			iSg	24	08.60	
ZST	3.18	163	eP	24	05.30	45.4X
			e	24	15.40	
			i	24	29.10	
GRF	3.25	243	ePn	23	20.50	-0.5
			e(Pg)	23	32.00	
			eSg	24	19.00	
SPC	3.57	123	eP	23	33.70	8.1X
FVI	5.03	204	P	23	46.00	-0.1
VOY	5.34	194	e(Pn)	24	10.90	20.1X
			eSn	25	29.20	
	S.D. = 1.1		on 11 of 15 obs.			

& JUN 22, 1990 07h 35m 48.50s
59.913 N 153.260 W
DEPTH = 122.4km
3.4mb (2 obs.)
SOUTHERN ALASKA (2)
<AGS-P>.

AUL	0.54	190	eP	36	06.73	-0.5
AUE	0.56	186	iP	36	06.52	-0.8
			eS	36	22.05	
RED	0.56	25	iP	36	06.75	-0.7
			eS	36	21.35	
RDT	0.79	32	iP	36	08.47	-0.7
XLV	0.91	120	iP	36	09.22	-0.9
			eS	36	25.82	
MCNL	0.91	217	iP	36	08.96	-1.2
			eS	36	24.92	
NNL	1.00	82	eP	36	11.33	0.3
CDD	1.01	191	iP	36	09.93	-1.2
			iS	36	27.57	
CNPM	1.10	110	iP	36	11.20	-0.8
			eS	36	28.52	
SPU	1.41	25	iP	36	14.70	-0.7
			eS	36	35.08	
CRP	1.46	21	iP	36	15.83	-0.4
			eS	36	37.69	
CGLM	1.53	23	iP	36	16.35	-0.6
NCG	1.59	19	eP	36	17.18	-0.5
SLKM	1.63	67	eP	36	16.80	-1.2
			eS	36	38.12	
SVW	1.67	317	iPc	36	17.10	-1.5
SEW	1.92	83	eP	36	20.30	-1.2
SKT	2.24	21	iP	36	24.72	-0.9
PMS	2.26	52	iPc	36	24.80	-1.1
PWA	2.41	42	eP	36	27.90	0.2
PMR	2.64	48	eP	36	29.20	-1.5
GHO	2.83	47	eP	36	31.35	-1.9
SML	3.07	50	eP	36	34.05	-2.4
GLI	3.21	70	eP	36	35.19	-3.1
SCM	3.48	54	eP	36	39.66	-2.4
VZW	3.51	68	eP	36	40.05	-2.4
VLZ	3.64	67	eP	36	41.55	-2.4
KLU	3.94	63	eP	36	45.54	-2.7
TOA	4.09	54	iPd	36	48.60	-1.6
SDG	4.56	52	eP	36	55.19	-1.4
PAX	4.84	47	eP	36	58.12	-2.2
WRH	5.17	26	eP	37	02.24	-2.6
TGL	5.25	76	eP	37	04.24	-1.8
CCB	5.39	26	eP	37	05.11	-2.6
BALM	5.52	74	eP	37	07.83	-1.8
FBA	5.61	25	eP	37	08.30	-2.5
IMA	6.18	358	eP	37	17.30	-1.5
YKA	18.61	65	eP	39	56.00	-2.6
	0.6s		1.00nm			3.3mb
MBC	20.15	23	eP	40	11.00	-3.5

0.4s 1.00nm 3.5mb
38 obs. assaciated

JUN 22, 1990 07h 43m 36.21± 0.15s
14.558 S ± 5.0km 167.887 E ± 4.0km
DEPTH = 33.0km (narmal)
5.1mb (27 obs.)
VANUATU ISLANDS (186)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 29C
Centroid Location:
Origin Time 07:43:53.5 0.6
Lat 14.88S FIX;Lon 167.82E FIX
Dep 193.0 FIX Half-duration 2.1
Moment Tensor; Scale 10**17 Nm
Mrr= 2.09 0.11 Mtt=-0.75 0.19
Mff=-1.34 0.20 Mrt= 0.25 0.14
Mrf= 0.04 0.12 Mtf= 0.00 0.17
Principal Axes:
T Val= 2.11 Plg=85 Azm=352
N -0.77 5 180
P -1.34 1 90
Best Double Couple:Mo=1.7*10**17
NP1:Strike=175 Dip=45 Slip= 83
NP2: 5 46 97

PVC	3.19	173	iPc	44 27.00	1.8
			iS	45 05.00	
DZM	7.60	190	iPc	45 23.80	-3.7X
			iS	46 51.10	
HNR	9.29	302	eP	45 49.00	-1.9
NDF	9.72	110	eP	45 58.20	1.3
SGE	10.11	109	eP	46 07.30	5.0X
SVA	10.75	111	eP	46 16.80	5.9X
RAB	18.60	302	e(P)	47 52.00	-1.1
BRS	19.00	225	iPc	47 59.00	1.0
			i	48 06.00	
			eS	52 30.00	
KDB	20.89	282	eP	48 20.00	1.8
CTA	21.36	252	iPd	48 24.90	1.8
	1.0s	103.00nm			5.2mb
	Z 19s	11.67um			5.3MszX
			i	49 25.00	
			iS	52 25.00	
RMQ	21.46	233	iPd	48 25.40	1.4
COO	21.69	220	iPd	48 27.30	1.0
OLP	25.12	238	eP	49 01.00	1.2
CMS	26.30	226	iPd	49 11.00	0.3
	0.4s	21.00nm			5.1mb
BWA	26.46	218	iPc	49 10.80	-1.4
CNB	26.54	216	eP	49 13.50	0.5
CAN	26.75	216	eP	49 14.60	-0.3
QIS	27.59	253	iPd	49 22.60	0.0
STK	29.56	230	eP	49 40.50	0.2
	1.0s	71.00nm			5.4mb
			ePP	50 25.10	
			eS	56 04.00	
TOO	30.34	217	iPd	49 47.30	0.1
WB5	32.41	256	eP	50 04.00	-1.5
WRA	32.44	256	Pc	50 04.00	-1.8
	1.3s	27.20nm			5.0mb
ADE	33.19	227	e(P)	50 07.50	-4.7X
	0.9s	47.06nm			5.4mb
ASPA	33.29	249	iPd	50 11.90	-1.3
	0.8s	74.00nm			5.6mb X
			eS	55 29.40	
FORR	39.88	239	eP	51 08.70	0.0
	0.4s	17.00nm			5.2mb
WARB	40.20	247	eP	51 11.00	-0.4
PMO	42.70	96	iP	51 39.90	7.9X
	0.9s	35.00nm			5.1mb
VAH	42.94	97	iP	51 41.50	7.5X
	0.9s	20.00nm			4.8mb
TPT	42.97	96	iP	51 41.90	7.7X
	0.9s	20.00nm			4.8mb
RUV	43.18	97	iP	51 43.50	7.6X
	0.9s	35.00nm			5.1mb
COOL	45.73	241	eP	51 56.00	-0.3
HON	48.91	44	P	52 20.00	-1.2
	Z 20s	2.39um			5.2MszX
MRWA	49.93	244	iPd	52 28.50	-0.6
	0.7s	14.00nm			5.1mb
NANU	50.06	253	eP	52 30.00	-0.2
MUN	50.07	240	eP	52 30.00	-0.1
TRT	54.53	271	iPd	53 03.10	-0.6
	0.6s	60.90nm			5.8mb X

KKM	55.17	288	eP	53 09.20	0.7
SBA	63.31	180	e(P)	54 02.80	-0.9
SSE	63.81	316	Pc	54 07.20	-0.4
KGM	65.99	279	ePc	54 23.80	1.7
QIZ	66.18	299	eP	54 24.50	1.3
WHN	68.27	312	Pd	54 36.50	0.3
MDJ	68.41	332	Pc	54 36.60	-0.2
	1.2s	40.00nm			5.4mb
	Z 28s	0.80um			4.8MszX
			eS	03 26.00	
IPM	68.93	281	ePd	54 42.20	1.6
	1.2s	57.10nm			5.5mb
SNY	69.40	326	eP	54 39.60	-3.3X
			eS	03 36.00	
TIA	69.61	318	Pd	54 44.10	-0.3
CN2	69.81	329	Pc	54 45.00	-0.4
	4.0s	400.00nm			5.8mb X
PSI	70.39	278	ePd	54 49.80	0.2
GYA	72.11	304	iPd	55 00.60	0.8
BJI	72.51	321	eP	55 02.50	0.8
	1.5s	********	nm		7.8mb X
LOE	72.58	294	eP	55 03.00	0.4
TIY	73.54	317	Pc	55 09.00	1.1
	Z 24s	1.60um			5.2MszX
	N 16s	0.80um			
XAN	74.02	312	Pd	55 11.50	0.8
BSI	74.66	280	eP	55 16.00	1.3
KMI	74.72	301	Pd	55 16.00	0.7
	2.8s	180.00nm			5.6mb X
BDT	74.94	293	eP	55 16.20	-0.1
SPA	75.54	180	eP	55 16.40	-2.7
	1.1s	29.76nm			5.2mb
CHG	75.55	294	ePc	55 20.50	0.7
	1.1s	21.52nm			5.1mb
CHTO	75.55	294	iP	55 21.00	1.2
	1.0s	15.00nm			4.9mb
HHC	75.84	319	eP	55 22.00	0.8
	Z 22s	2.20um			5.4MszX
CD2	76.38	307	eP	55 25.10	0.8
BTO	76.69	318	P	55 25.50	-0.4
LZH	78.65	312	Pd	55 38.00	1.1
	3.0s	250.00nm			5.7mb X
TTA	82.19	16	P	56 00.00	4.9X
	1.2s	18.94nm			5.0mb
MAW	82.27	202	iP	55 54.00	-1.3
GTA	82.98	314	P	56 01.00	1.3
	1.6s	100.00nm			5.7mb X
	Z 18s	0.60um			5.0MszX
	E 10s	0.20um			
PMR	83.14	19	eP	55 59.50	-0.4
	1.2s	48.48nm			5.5mb
			e	56 06.00	
PCC	83.37	49	ePc	56 02.60	1.0
GCC	83.47	49	eP	56 02.40	0.4
BRK	83.61	48	eP	56 03.00	0.2
BKS	83.63	48	iPd	56 00.70	-2.2
	0.9s	33.00nm			5.5mb
	Z 20s	1.80um			5.4MszX
	N 20s	0.70um			
	E 20s	2.00um			
			eLR	21 37.60	
			e	22 44.80	
PRS	83.65	50	eP	56 03.50	0.4
SAO	83.77	50	eP	56 03.70	0.1
MHC	83.85	49	ePc	56 04.70	0.5
ARN	83.93	49	P	56 04.90	0.4
PRI	84.11	50	eP	56 06.30	0.8
BCH	84.18	52	P	56 06.40	0.5
WDC	84.52	46	ePc	56 07.70	0.4
ABL	84.71	52	P	56 08.80	0.1
ORV	84.83	47	eP	56 08.90	0.0
CMB	85.04	49	eP	56 09.90	-0.1
MIN	85.07	46	ePc	56 09.60	-0.7
FRI	85.14	50	ePc	56 10.60	0.2
PAS	85.26	53	eP	56 12.00	0.8
LBFM	85.28	45	P	56 11.20	-0.2
IMA	85.33	15	eP	56 11.20	0.2
	1.7s	45.50nm			5.4mb
MWC	85.38	53	eP	56 12.00	0.0
ISA	85.58	52	eP	56 13.00	0.2
SBB	85.72	53	eP	56 14.00	0.5
RVR	85.83	53	eP	56 14.00	0.0
BAR	85.93	55	eP	56 14.00	-0.5
PLM	86.01	54	eP	56 15.00	-0.1
FBA	86.01	17	eP	56 12.90	-1 3
CLC	86.30	52	eP	56 17.00	0.7
GSC	86.72	52	eP	56 19.00	0.5

TPC	86.90	54	eP	56 20.00	0.7
KVN	87.08	49	iP	56 20.50	0.2
			i	56 27.00	
GMW	87.26	39	P	56 20.90	0.2
TNP	87.38	50	iP	56 21.50	-0.2
	1.5s	31.82nm			5.4mb
			i	56 27.00	
GLA	87.51	55	eP	56 23.00	0.7
MCW	87.71	38	P	56 23.00	0.2
GUN	89.84	299	Pd	56 34.40	0.6
PNT	89.90	39	eP	56 33.00	-0.2
PKI	90.14	298	Pd	56 35.60	0.4
	1.2s	71.00nm			5.8mb X
DMN	90.41	298	Pd	56 37.20	0.8
	1.2s	109.00nm			6.0mb X
GKN	90.92	299	Pd	56 38.60	0.0
	1.0s	40.00nm			5.7mb X
NEW	91.05	40	P	56 38.60	0.0
	1.0s	10.00nm			5.1mb
MSU	91.27	51	P	56 41.00	0.9
DUG	91.31	49	P	56 40.70	0.6
	0.8s	4.17nm			4.9mb
WMQ	93.04	314	P	56 48.30	0.4
	Z 20s	0.65um			5.1MszX
PV09	93.55	51	eP	56 51.00	0.3
BW06	94.40	47	eP	56 54.00	-0.4
	1.1s	3.27nm			4.7mb
ALQ	94.71	55	eP	56 56.00	0.1
	Z 22s	1.85um			5.5MszX
ANMO	94.71	55	eP	56 56.00	0.1
GOL	96.69	51	eP	57 07.00	2.1
	0.8s	2.98nm			4.8mb
GLD	96.81	51	eP	57 07.70	2.3
	1.3s	25.29nm			5.6mb X
YKA	97.12	27	eP	57 03.90	-2.1
	1.0s	4.40nm			4.9mb
TUL	103.44	56	e(Pdif	57 37.70	2.6X
	1.2s	2.30nm			4.8mb
	Z 20s	1.99um			5.6MszX
			LR	31 00.00	
ZOBO	116.77	117	PKP	02 21.00	0.5
	Z 24s	0.49um			5.0MszX
			SKS	13 16.00	
			LR	38 48.00	
CCH	117.97	119	ePKP	02 22.00	-0.5
SIV	122.90	120	PKP	02 30.00	-1.5
CIR	124.41	231	iPKPc	02 33.50	-0.9
BUL	127.15	230	iPKPc	02 36.30	-3.6X
KRI	128.33	234	iPKPd	02 54.00	11.8X
HFS	130.73	343	ePKP	02 44.70	-0.5
	0.7s	2.20nm			
NAO	130.89	345	PKP	02 45.00	-0.6
	0.8s	3.00nm			
KRA	136.05	330	ePKP	03 02.30	6.6X
			e	05 36.70	
			e	06 23.80	
BZS	138.00	324	ePKP	03 00.00	0.5
BRG	138.11	335	ePKP	03 01.60	2.1
CLL	138.14	336	ePKP	02 58.00	-1.6
PRU	138.54	334	PKPd	02 54.50	-5.8X
ZST	138.68	330	ePKP	03 02.30	1.6
KHC	139.60	334	PKP	03 01.80	-0.5
SKO	140.19	320	ePKP	03 03.00	-0.6
OHR	141.06	319	ePKP	02 58.00	-7.3X
FVI	141.87	332	PKP	03 04.00	-2.4
SAL	143.63	333	PKP	03 04.50	-5.0X
MDI	143.85	334	PKP	03 06.50	-3.3X
ARV	144.06	328	PKP	03 08.00	-2.3
VAI	144.18	335	PKP	03 07.80	-2.6X
SFI	144.30	330	PKP	03 09.70	-0.9
ORI	144.37	321	PKP	03 10.00	-1.0
PGD	144.40	330	PKP	03 09.90	-1.2
CRE	144.46	329	PKP	03 09.00	-2.1
ASS	144.51	328	PKP	03 10.00	-1.2
DUI	144.52	325	PKP	03 09.00	-2.2
AQU	144.63	327	PKP	03 10.20	-1.2
TDS	144.69	320	PKP	03 10.10	-1.4
ORX	144.69	335	PKP	03 09.91	-1.5
FIR	144.69	330	ePKP	03 10.50	-0.8
SGO	144.75	323	PKP	03 10.50	-1.0
BOB	144.77	333	PKP	03 09.00	-2.6
LOR	144.77	341	ePKP	03 10.40	-1.0
	1.0s	23.00nm			
BDI	144.79	331	PKP	03 09.60	-2.0
SDI	144.85	325	PKP	03 09.50	-2.3
AZI	144.86	326	PKP	03 11.00	-0.7
BSS	144.89	323	PKP	03 10.00	-1.8

22d 08h

LBF	144.99	341	ePKP	03 11.20	-0.6
	1.0s	28.00nm			
GRR	145.01	347	ePKP	03 11.20	-0.5
	1.2s	53.55nm			
SSF	145.07	341	ePKP	03 11.60	-0.3
	0.9s	50.80nm			
PII	145.08	331	PKP	03 10.50	-1.5
LSD	145.16	336	PKP	03 12.89	0.4
LPL	145.28	337	ePKP	03 12.90	0.3
	0.8s	21.50nm			
LPG	145.29	336	ePKP	03 13.20	0.5
	0.8s	25.50nm			
SMF	145.33	341	ePKP	03 12.30	-0.1
	1.2s	58.00nm			
PCP	145.34	334	PKP	03 12.27	-0.2
AVF	145.36	341	ePKP	03 12.20	-0.2
	1.3s	39.70nm			
RSP	145.38	336	PKP	03 12.07	-0.6
RMP	145.38	326	PKP	03 12.10	-0.5
LPF	145.39	347	ePKP	03 12.60	0.2
	1.2s	77.35nm			
RDP	145.41	326	PKP	03 13.00	0.3
CKI	145.54	334	PKP	03 12.00	-0.8
BNI	145.69	336	PKP	03 13.10	-0.1
BGF	145.72	342	ePKP	03 13.40	0.4
	1.0s	33.00nm			
FIN	145.75	334	PKP	03 13.19	0.0
RRL	145.76	336	PKP	03 14.63	1.2
SOI	145.80	318	PKP	03 08.50	-4.9X
ROB	145.82	334	PKP	03 13.50	0.1
DOI	145.91	335	PKP	03 12.50	-1.0
PZZ	145.97	335	PKP	03 14.94	1.2
ENR	146.07	334	PKP	03 15.14	1.3
STV	146.09	335	PKP	03 14.42	0.6
MAF	146.11	342	ePKP	03 15.10	1.4
	0.8s	10.05nm			
IMI	146.13	334	PKP	03 14.73	0.8
TCF	146.16	342	ePKP	03 15.00	1.2
	0.8s	13.45nm			
SBF	146.36	334	ePKP	03 15.20	0.9
	0.8s	37.60nm			
LSF	146.39	343	ePKP	03 15.20	1.0
	1.0s	26.00nm			
MFF	146.52	345	ePKP	03 16.00	1.7
	0.9s	26.20nm			
PGF	146.70	331	ePKP	03 16.50	1.6
	1.0s	76.00nm			
MNO	146.75	319	PKP	03 16.50	1.2
FRF	146.93	335	ePKP	03 17.10	2.0
	0.9s	42.60nm			
LRG	147.14	335	ePKP	03 17.80	2.4X
	1.2s	53.55nm			
LMR	147.18	335	ePKP	03 17.70	2.2
	0.8s	28.20nm			
USI	147.20	322	PKP	03 14.40	-1.2
RJF	147.25	342	ePKP	03 18.10	2.5X
	1.0s	36.00nm			
CAF	147.43	341	ePKP	03 18.90	3.0X
	0.8s	10.75nm			
LPO	147.92	342	ePKP	03 20.20	3.6X
	1.0s	40.00nm			
BCAO	148.19	255	iPKPc	03 17.50	-0.5
			ic	03 19.50	
			id	03 30.00	
EPF	149.67	342	ePKP	03 24.50	5.0X
	1.0s	20.00nm			
STS	151.61	354	ePKP	03 29.50	7.2X
ETOR	152.40	343	ePKP	03 31.60	7.9X
GUD	153.10	347	ePKP	03 33.00	8.3X
TOL	153.80	346	ePKP	03 35.00	9.4X
KIC	169.10	222	(PKP)	03 36.50	-5.3X
LKO	171.90	233	PKP	03 41.92	-1.3

S.D. = 1.1 on 175 of 205 obs.

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* JUN 22, 1990 07h 44m 23.58± 0.37s
14.676 S ±12.8km 167.832 E ±10.2km
DEPTH = 33.0km (normal)
5.2mb (2 obs.) 5.3Msz (5 obs.)
VANUATU ISLANDS (186)
Ms 5.5 (BRK).

BRS	18.88	226	iP	48 45.00	1.1
	Z 19s	58.00um			
			i	48 58.00	
RMQ	21.35	234	eP	49 15.00	4.8X
QLP	25.01	238	eP	49 46.50	0.4
CMS	26.18	227	eP	49 58.00	1.0
CNB	26.41	216	eP	49 59.00	-0.2
STK	29.45	230	eP	50 25.10	-1.5
TOO	30.22	217	eP	50 32.00	-1.5
WB5	32.33	256	eP	50 51.40	-0.8
ASPA	33.20	249	iP	50 59.20	-0.6
GUMO	36.13	320	eP	51 27.00	2.2
SSE	63.86	316	eP	54 53.50	-1.8
	Z 20s	0.50um		4.7Msz	
WHN	68.31	312	P	55 22.50	-1.3
IPM	68.90	281	eP	55 28.90	1.1
SNY	69.46	326	eP	55 25.00	-5.7X
	Z 24s	0.70um		4.8MszX	
	E 24s	0.70um			
CN2	69.88	329	eP	55 29.00	-4.2X
BJI	72.57	321	eP	55 43.00	-6.4X
	Z 24s	3.82um		5.6MszX	
KMI	74.74	302	eP	56 02.50	-0.2
	Z 26s	1.30um		5.1MszX	
CHTO	75.55	294	iP	56 08.50	1.3
	1.1s	25.03nm		5.1mb	
LZH	78.69	312	eP	56 24.00	-0.5
	Z 26s	0.80um		4.9MszX	
PMR	83.27	19	eP	56 48.00	0.1
	Z 22s	1.29um		5.3Msz	
PRI	84.22	50	eP	56 53.80	0.4
			e	57 07.50	
WDC	84.64	46	eP	56 55.40	0.2
			e	57 09.30	
ORV	84.95	47	eP	56 56.70	-0.2
			e	57 10.30	
CMB	85.16	49	eP	56 57.90	-0.1
MIN	85.19	46	eP	56 57.00	-1.2
			e	57 11.50	
FRI	85.26	50	eP	56 57.40	-1.0
			e	57 12.00	
MWC	85.49	53	eP	57 02.00	2.1
ISA	85.69	52	eP	57 01.00	0.3
SBB	85.84	53	eP	57 01.00	-0.5
RVR	85.94	53	eP	57 01.00	-0.9
BAR	86.04	55	eP	57 06.00	3.5X
PLM	86.12	54	eP	57 03.00	-0.1
FBA	86.14	17	iP	57 01.00	-1.2
	1.2s	26.52nm		5.3mb	
CLC	86.41	52	eP	57 07.00	2.7
GSC	86.84	52	eP	57 06.00	-0.4
TPC	87.01	54	eP	57 07.00	-0.2
KVN	87.20	49	eP	57 08.00	-0.2
TNP	87.50	50	eP	57 08.00	-1.7
GLA	87.62	55	eP	57 10.00	-0.2
NEW	91.17	40	eP	57 24.30	-2.2
PV09	93.67	51	e(P)	57 39.00	0.4
BW06	94.52	47	eP	57 40.00	-2.3
ANMO	94.82	55	eP	57 46.00	2.2
	Z 20s	1.60um		5.5Msz	
SES	95.62	39	eP	57 53.00	6.1X
GOL	96.80	51	eP	57 56.00	3.2X
	Z 20s	1.10um		5.3Msz	
GLD	96.93	51	eP	57 56.00	2.7
	Z 20s	1.30um		5.4Msz	
BRG	138.19	335	ePKP	03 47.20	0.1
SKO	140.25	320	iPKP	03 52.00	0.9
BCAO	148.10	254	iPKP	04 06.50	1.3
			ic	04 14.50	
			ic	04 21.50	

S.D. = 1.3 on 42 of 49 obs.

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* JUN 22, 1990 09h 22m 40.23± 1.83s
8.971 S ±13.3km 117.833 E ±11.3km
DEPTH = 71.4 ± 20.2 km
5.2mb (6 obs.)
SUMBAWA ISLAND REGION (285)

TRT	5.30	283	iPc	23 59.20	0.6
			iS	25 01.70	
KUG	5.80	102	ePd	24 20.50	14.9X
			eS	25 30.00	
MTN	13.61	108	eP	25 51.00	-0.6
			eS	28 12.00	
NANU	13.69	189	eP	25 46.50	-6.1X
	0.5s	39.00nm		5.2mb	
			eS	28 03.00	
MEKA	17.56	178	eP	26 28.30	-13.5X
			eS	29 34.00	
WARB	19.05	155	eP	26 58.30	-1.4
			eS	30 16.00	
WB5	19.32	126	eP	27 01.20	-1.4
			i	27 03.80	
			eS	30 23.80	
WRA	19.33	126	Pd	27 04.10	1.3
	0.5s	2.20nm		3.7mb	X
MRWA	20.22	185	eP	27 12.40	0.5
			eS	30 35.50	
ASPA	21.21	135	iPc	27 21.80	-0.3
	0.6s	35.00nm		4.9mb	
			eS	31 07.90	
BAL	21.55	183	eP	27 30.00	4.6X
			eS	31 07.00	
COOL	22.02	172	eP	27 39.00	8.9X
			eS	31 18.00	
KLB	22.51	180	eP	27 45.00	10.1X
			eS	31 27.00	
MUN	22.94	184	eP	27 51.00	11.9X
			eS	31 38.00	
FORR	23.78	158	eP	27 46.70	-0.5
QIS	23.96	121	eP	27 50.00	0.9
BRS	37.73	124	iP	29 53.00	2.1
GUN	47.96	321	P	31 14.40	0.2
	0.6s	22.00nm		5.3mb	
PKI	48.01	320	P	31 14.00	-0.6
	0.4s	8.00nm		5.0mb	
DMN	48.23	320	P	31 16.00	-0.2
	0.4s	13.00nm		5.2mb	
GKN	48.80	320	P	31 20.00	-0.5
	0.4s	21.00nm		5.5mb	
ZOBO	154.24	167	PKP	42 52.00	25.3X

S.D. = 1.1 on 14 of 22 obs.

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* JUN 22, 1990 09h 35m 36.69± 0.68s
14.769 S ±16.2km 168.043 E ±17.5km
DEPTH = 33.0km (normal)
4.9mb (3 obs.)
VANUATU ISLANDS (186)

PVC	2.97	175	iP	36 29.00	6.5X
DZM	7.42	192	iPc	37 24.40	-1.1
			iS	38 49.20	
RMQ	21.46	234	eP	40 26.00	1.5
QLP	25.14	238	eP	41 01.50	1.1
CMS	26.26	227	eP	41 12.00	1.1
STK	29.54	230	eP	41 40.30	-0.3
	1.1s	9.00nm		4.4mb	
WB5	32.51	256	eP	42 05.00	-1.8
ASPA	33.36	249	eP	42 12.80	-1.4
	1.5s	25.00nm		4.9mb	
	Z 23s	0.65um		4.3MszX	
			LR	54 18.50	
LZH	78.90	312	Pd	47 39.00	0.2
	2.5s	53.00nm		5.1mb	
			pP	47 49.00	32kmX
ISA	85.59	52	eP	48 13.00	-0.3
CLC	86.31	52	eP	48 18.00	1.1
KVN	87.11	48	eP	48 20.00	-0.9
GLA	87.51	55	eP	48 27.00	4.3X
PGD	144.65	330	PKP	55 11.50	-0.5
TDS	144.94	320	PKP	55 12.00	-0.4
AZI	145.12	326	PKP	55 11.50	-1.1
BNI	145.94	336	PKP	55 08.50	-5.6X
BCAO	148.28	254	iPKPd	55 21.30	2.7

S.D. = 1.4 on 15 of 18 obs.

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* JUN 22, 1990 09h 55m 00.44± 0.87s
31.640 S ± 8.2km 68.777 W ± 6.5km
DEPTH = 10.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

ZON	0.13	42	iPc	55 04.00	0.4
			eS	55 08.00	
RTCV	0.30	137	e(P)	55 06.90	0.2
RTLL	0.41	41	iPc	55 08.60	-0.2
CFA	0.46	86	ePd	55 09.50	-0.3
			eS	55 16.00	
RTBS	0.58	268	iPd	55 12.00	-0.1

S.D. = 0.4 on 5 of 5 obs.

% JUN 22, 1990 10h 20m 09.17± 1.10s
44.157 N ± 8.7km 8.190 E ± 8.1km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.5 (GEN).

FIN	0.05	14	P	20 11.33	-0.1
			S	20 12.59	
ROB	0.27	301	P	20 15.19	0.3
			S	20 18.58	

IMI	0.33 221	P	20 16.12	0.1		
		S	20 21.11			
PCP	0.46 33	P	20 18.58	0.0		
ENR	0.56 277	P	20 20.45	-0.1		
		S	20 28.24			
STV	0.63 278	P	20 21.58	-0.3		
	S.D. = 0.3	on	6 of 6 obs.			

? JUN 22, 1990 10h 31m 04.01± 0.99s
40.046 N ±10.6km 21.365 E ± 9.1km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 2.6 (THE).

FNA	0.74 1	ePg	31 18.30	-0.2		
		eSg	31 28.20			
LIT	0.86 86	ePg	31 20.50	-0.2		
		eSg	31 33.60			
IGT	0.95 238	ePg	31 22.10	0.0		
		eSg	31 34.60			
OHR	1.15 338	eP	31 31.00	5.5X		
GRG	1.21 41	ePb	31 26.80	0.3		
		eSb	31 44.30			
	S.D. = 0.4	on	4 of 5 obs.			

JUN 22, 1990 11h 48m 45.53± 0.16s
19.648 S ± 3.1km 69.128 W ± 4.7km
DEPTH = 103.0km (40 depth phases)
5.3mb (36 obs.)
NORTHERN CHILE (123)
Felt (IV) at Arica. Felt (IV) at Tocna, Peru.
CENTROID, MOMENT TENSOR (HRV)
Doto Used: GDSN
L.P.8.: 13S, 28C
Centroid Location:
Origin Time 11:48:51.6 0.3
Lot 19.59S 0.04 Lon 69.30W 0.06
Dep 111.1 3.6 Holf-duration 2.0
Moment Tensor; Scole 10**17 Nm
Mrr=-1.03 0.07 Mtt=-0.30 0.12
Mff= 1.33 0.11 Mrt= 0.58 0.07
Mrf=-1.50 0.07 Mtf=-0.45 0.11
Principol Axes:

	Val=	Plg=	Azm=
T	2.23	26	74
N	-0.40	5	341
P	-1.84	63	240

Best Double Couple:Mo=2.0*10**17
NP1:Strike=176 Dip=19 Slip= -74
NP2: 339 71 -96

LPB	3.25 18	iPc	49 41.20	5.3X		
ZOBO	3.49 16	iPc	49 44.80	5.4X		
		i	04 08.00			
CCH	3.62 52	iPc	49 46.10	5.2X		
ARE	3.88 324	iPc	49 42.90	-1.6		
		i(S)	50 24.80			
ANT	4.21 196	iP	49 45.50	-3.1X		
SIV	8.49 66	iPc	50 46.90	-0.6		
PT03	8.51 310	iPd	50 42.80	-4.9X		
		eS	52 01.10			
PT06	9.00 309	iPd	50 50.00	-4.4X		
		iS	52 22.00			
PT02	9.68 312	e(P)	50 59.60	-4.0X		
		iS	52 37.20			
PT08	10.46 316	iPc	51 10.90	-3.5X		
		iS	52 58.50			
RTRS	10.48 182	e(P)	51 10.80	-3.4X		
		e	51 17.00			
NNA	10.63 315	iP	51 11.00	-5.4X		
	0.7s 4.79nm		4.5mb			
		i	51 13.20			
		eS	52 59.00			
PT10	10.65 314	eP	51 10.50	-6.2X		
		eS	53 06.00			
RTLL	11.65 177	ePd	51 24.70	-5.1X		
ZON	11.85 178	eP	51 33.00	0.5		
CFA	11.94 176	e(P)	51 29.50	-4.0X		
RTBS	11.97 181	e(P)	51 35.00	1.1		
JACH	13.05 185	iPc	51 48.50	0.3		
ROCH	13.38 187	iPc	51 52.30	-0.3		
IHA	13.51 189	eP	51 53.00	-1.1		
		e(S)	53 47.00			
SAN	13.82 185	ePc	51 57.70	-0.4		
LCCH	13.94 188	ePc	51 58.40	-1.3		
PCH	13.97 185	eP	51 59.50	-0.7		
TACH	14.04 186	iPc	51 59.60	-1.4		

CHCH	14.29 185	ePc	52 02.70	-1.6		
LNV	14.39 188	ePc	52 03.90	-1.6		
BAO	20.53 82	eP	53 17.10	-0.8		
BMA	23.48 102	eP	53 47.80	1.0		
		e	53 55.30	27kmX		
		e	54 04.00			
BMG	26.83 351	eP	54 20.00	1.6		
TOV	29.26 359	eP	54 42.50	2.4		
OLLA	29.57 5	eP	54 41.50	-1.4		
LLAV	30.02 5	eP	54 46.00	-0.9		
UPA	30.24 339	ePd	54 49.00	0.3		
FISA	30.72 360	eP	54 52.10	-0.9		
PPM	48.14 321	(P)	57 19.00	1.2		
LHS	54.96 348	P	58 07.50	-0.6		
RSCP	57.11 344	P	58 21.70	-1.8		
	1.0s 130.15nm		5.9mb			
		pP	58 48.10	108km		
PWLA	57.23 342	P	58 21.90	-2.4		
BLA	57.55 349	eP	58 26.10	-0.4		
	1.3s 73.08nm		5.5mb			
		e	58 52.00	106km		
UYO	58.70 335	iPc	58 33.20	-1.4		
OLY	58.80 339	P	58 32.90	-2.4		
ELC	59.71 341	P	58 39.60	-1.9		
		pP	59 06.00	107km		
FVM	60.72 341	P	58 46.60	-1.8		
TUL	60.75 335	iPd	58 47.40	-1.2		
	1.3s 47.50nm		5.4mb			
		i	59 13.50	106km		
LNO	60.75 335	iPd	58 31.70	-16.8X		
		i	59 13.60	180kmX		
CLE	61.90 349	iP	58 55.80	-0.5		
WVLY	62.42 352	P	58 59.40	-0.3		
ACO	62.80 333	eP	59 00.70	-1.6		
	1.2s 30.90nm		5.1mb			
HBVT	63.80 357	P	59 04.00	-4.7X		
WNY	63.87 356	P	59 09.00	-0.2		
RSNY	64.07 356	P	59 10.20	-0.3		
	1.1s 53.83nm		5.4mb			
ALQ	64.84 327	iPd	59 15.00	-0.9		
	1.2s 46.88nm		5.3mb			
		epP	59 40.50	102km		
ANMO	64.84 327	P	59 15.60	-0.3		
	1.6s 50.00nm		5.2mb			
CBM	66.27 1	P	59 24.20	-0.3		
GLD	68.02 331	P	59 35.80	-0.2		
	1.6s 87.96nm		5.4mb			
		pP	00 02.70	107km		
LIC	68.08 75	Pc	59 35.72	-0.9		
	Z 21s 0.52um		4.7Msz			
GLA	68.20 320	eP	59 37.00	0.0		
		e	00 03.00	103km		
TIC	68.26 74	Pc	59 36.86	-0.9		
KIC	68.40 75	Pc	59 37.90	-0.7		
		S	08 30.00			
LKO	68.95 71	Pc	59 41.12	-0.9		
BAR	69.09 318	eP	59 42.00	-0.5		
		e	00 08.00	102km		
PLM	69.65 319	eP	59 47.00	0.9		
		e	00 09.00	84kmX		
RVR	70.40 319	eP	59 51.00	0.6		
		e	00 17.00	102km		
SPA	70.47 180	eP	59 51.00	0.3		
	1.4s 110.78nm		5.5mb			
MSU	70.54 325	P	59 52.00	0.5		
GSC	70.93 320	eP	59 54.00	0.3		
		e	00 18.00	93kmX		
MWC	70.98 319	eP	59 55.00	0.8		
		e	00 18.00	88kmX		
SBB	71.14 319	eP	59 55.00	0.0		
		e	00 21.00	102km		
DAU	71.46 327	P	59 57.30	0.2		
		pP	00 23.50	102km		
CLC	71.75 320	eP	59 58.00	-0.6		
		e	00 25.00	106km		
DUG	72.11 326	P	00 01.10	0.4		
	1.1s 17.11nm		4.8mb			
ISA	72.18 320	eP	00 02.00	0.8		
		e	00 27.00	97km		
SYP	72.38 318	eP	00 02.00	-0.4		
BLP	72.67 318	P	00 04.40	0.5		
BCH	72.87 318	P	00 06.00	0.7		
		pP	00 31.80	100km		
TNP	73.05 322	P	00 06.90	0.5		
	1.0s 21.67nm		4.9mb			
		pP	00 33.30	103km		
PHAM	73.48 319	P	00 09.40	0.7		

FRI	73.80 320	ePd	00 09.50	-1.0		
		epP	00 35.80	102km		
PRI	73.84 319	ePd	00 11.20	0.3		
		ipP	00 37.70	103km		
SCH	74.19 1	eP	00 12.00	-0.3		
RUV	74.20 259	iP	00 14.40	1.2		
	1.2s 60.00nm		5.3mb			
		ipP	00 40.50	101km		
KVN	74.21 322	iPd	00 13.40	0.3		
		ipP	00 39.80	102km		
		isP	00 50.70			
LLA	74.32 319	ePd	00 14.10	0.6		
		ipP	00 40.20	101km		
PRS	74.40 318	ePd	00 14.50	0.5		
		epP	00 40.80	102km		
VAH	74.42 259	iP	00 15.60	1.1		
	1.2s 85.00nm		5.4mb			
		ipP	00 41.60	101km		
TPT	74.48 259	iP	00 16.10	1.3		
	1.2s 95.00nm		5.5mb			
		ipP	00 42.30	102km		
SAO	74.72 319	eP	00 15.90	0.0		
PMO	74.73 259	iP	00 17.60	1.3		
	1.2s 90.00nm		5.5mb			
		ipP	00 43.80	101km		
CM8	74.89 320	iPd	00 16.90	0.1		
		epP	00 43.20	102km		
ARN	75.15 319	P	00 19.10	0.8		
		pP	00 45.70	103km		
MHC	75.21 319	ePd	00 19.50	0.7		
		ipP	00 40.60	79kmX		
GCC	75.23 319	ePd	00 19.10	0.4		
		epP	00 45.50	102km		
PCC	75.77 319	ePd	00 22.00	0.3		
		epP	00 48.70	103km		
BKS	75.91 319	iPd	00 23.20	0.6		
	0.5s 27.00nm		5.3mb			
		epP	00 49.60	102km		
BRK	75.93 319	ePd	00 23.00	0.4		
		epP	00 48.60	98km		
LRM	76.08 330	ePd	00 23.90	0.2		
		e	00 50.90	105km		
ORV	76.53 321	iPd	00 26.70	0.7		
		ipP	00 53.20	102km		
SBA	77.60 190	e(P)	00 29.30	-2.1		
WDC	77.80 321	iPd	00 31.80	-1.2		
		ipP	00 58.30	102km		
TIO	77.82 51	iP	00 34.60	1.1		
		i	01 02.80	110km		
CER	78.19 121	iPc	00 35.50	0.0		
	1.0s 50.00nm		5.3mb			
		i	01 05.00	116kmX		
FHC	78.80 321	ePd	00 39.50	1.0		
		epP	01 06.00	102km		
SES	78.93 334	ePd	00 39.00	0.0		
	1.4s 174.00nm		5.7mb			
		pP	01 06.00	104km		
AVE	78.96 49	iP	00 40.50	1.0		
		i	01 08.00	106km		
FFC	79.22 341	iPd	00 39.80	-0.6		
	0.9s 19.00nm		4.9mb			
DPW	80.30 329	P	00 47.00	0.6		
		pP	01 13.30	101km		
IFR	80.71 50	iPd	00 50.50	1.4		
		i	00 55.00	14kmX		
		i	01 18.50			
EVAL	81.71 45	eP	00 55.50	1.5		
PNT	81.97 329	ePd	00 55.00	0.0		
	0.9s 21.00nm		5.0mb			
EJIF	81.98 47	eP	01 01.50	6.1X		
EDM	82.00 335	iPd	00 54.30	-0.9		
		pP	01 21.20	103km		
FRB	83.12 0	eP	01 00.00	-0.5		
MCW	83.14 327	P	01 01.80	0.7		
PGC	83.43 327	eP	01 03.00	0.5		
EPLA	83.48 44	e(P)	01 09.00	5.9X		
EBAN	84.01 46	e(P)	01 06.80	1.0		
ERUA	84.06 41	eP	01 06.50	0.6		
FRS	84.18 119	iPc	01 18.00	11.2X		
	0.9s 26.89nm					
TOL	84.71 44	iPd	01 10.30	1.1		
	1.2s 78.13nm		5.5mb			
		eS	11 30.00			
		ePS	12 40.00			
SWZ	85.03 117	iPd	00 58.50	-12.8X		
	0.9s 42.02nm					
		i	01 09.00	33kmX		

22d 12h

GUD	85.04	44	eP	01	12.00	1.0
BLF	85.10	119	iPc	01	12.00	0.3
	0.9s	46.15nm			5.4mb	
			i	01	40.00	107km
EVIA	85.12	46	e(P)	01	12.00	0.6
MAW	86.16	163	iP	01	17.60	1.6
ETOR	86.50	44	eP	01	25.00	6.8X
SEK	86.56	119	eP	01	20.50	1.6
			i	01	30.50	31kmX
ECHE	86.63	46	e(P)	01	16.50	-2.2
PRY	86.92	117	iPc	01	21.00	0.3
	0.8s	18.75nm			5.2mb	
SLR	88.01	116	iPc	01	25.60	-0.3
	0.9s	42.02nm			5.5mb	
			i	01	38.00	41kmX
BCAO	89.28	85	iPc	01	31.40	-0.5
	1.6s	78.00nm			5.6mb	
			ic	04	54.00	
YKA	89.38	341	eP	01	30.80	-0.5
	0.7s	32.20nm			5.6mb	
BFT	89.51	117	iPc	01	34.00	0.9
	1.0s	35.00nm			5.4mb	
BUL	90.28	111	iPc	01	34.90	-1.7
			ipP	01	45.40	33kmX
			i	05	06.00	
CIR	92.55	113	iPd	01	47.80	0.9
			ipP	02	00.00	40kmX
			iPP	05	27.00	
AVF	92.74	41	eP	01	46.30	-0.8
	1.1s	20.75nm			5.4mb	
SMF	92.98	41	eP	01	47.90	-0.4
	0.9s	20.45nm			5.5mb	
LBF	93.22	41	iPc	01	48.30	-1.1
	0.9s	11.45nm			5.2mb	
LOR	93.26	41	eP	01	48.60	-1.0
	0.8s	8.05nm			5.1mb	
BNI	94.12	44	P	02	00.50	6.8X
LPL	94.35	43	eP	01	55.10	0.2
	1.0s	12.00nm			5.3mb	
LPG	94.35	43	eP	01	55.40	0.4
	0.9s	9.85nm			5.2mb	
ARV	97.74	47	P	02	20.00	10.0X
SDI	97.75	49	P	02	20.50	10.3X
DUI	98.19	49	P	02	24.00	11.8X
FVI	98.66	44	P	02	20.50	6.5X
INK	99.14	340	eP	02	16.00	0.2
CLL	100.32	39	ePdiff	02	13.00	-8.6X
MBC	100.38	349	ePdiff	02	21.50	0.2
	0.6s	1.00nm			4.6mb	
NB2	102.42	29	Pdiff	02	33.50	2.7X
	1.0s	4.80nm			5.2mb	
MLR	107.23	47	ePKP	07	11.00	9.6X
ASPA	131.44	209	ePKP	07	47.20	-1.0
	0.9s	20.00nm				
			iPP	10	03.30	
			iSKP	11	02.60	
			iPKS	11	12.20	
WRA	134.43	212	PKPc	07	50.80	-3.1X
	0.7s	1.40nm				
WB5	134.47	212	ePKP	07	47.80	-6.2X
			i	07	53.70	
			iSKP	11	13.70	
KUSJ	143.22	317	ePKP	08	05.10	-4.1X
ASAJ	144.00	320	ePKP	08	08.80	-1.7
KSH	144.10	49	PKP	08	11.00	0.0
HOOJ	144.49	317	ePKP	08	10.40	-1.0
POO	145.04	86	iPKPd	08	13.20	0.1
MRRJ	145.87	318	ePKP	08	14.60	0.9
KOD	146.45	101	ePKP	08	18.00	2.1
GUA	146.86	265	ePKP	08	17.90	1.8
GUMO	146.91	265	ePKP	08	17.80	1.6
	1.4s	692.31nm				
OFUJ	147.14	313	PKP	08	18.30	2.4X
GBA	147.44	95	PKPd	08	16.50	-0.5
	1.1s	35.70nm				
NDI	148.09	67	iPKPc	08	19.50	1.7
	0.7s	17.12nm				
YAMJ	148.69	312	ePKP	08	22.60	4.2X
WMQ	149.07	34	ePKP	08	22.00	3.0X
HYB	149.30	89	ePKP	08	22.00	2.0
	1.0s	60.00nm				
			e	08	25.00	
			e	08	54.00	
KAKJ	149.46	309	PKP	08	24.50	4.8X
NIIJ	149.85	311	PKP	08	25.50	5.3X
CHJJ	150.39	309	PKP	08	27.40	6.3X
MDJ	150.63	332	ePKP	08	26.00	4.8X
MTMJ	151.00	311	PKP	08	28.10	6.0X
IIDJ	151.43	309	ePKP	08	29.30	6.6X
TRT	152.77	184	ePKPd	08	32.60	7.5X
CN2	153.00	336	ePKP	08	31.20	6.6X
SNY	155.40	337	iPKPc	08	30.40	2.5X
GTA	158.12	23	PKP	08	32.80	1.1
HHC	158.86	359	ePKP	08	35.00	2.6X
BJI	159.17	348	ePKP	08	34.00	1.4
TIY	161.95	356	iPKPd	08	38.30	2.6X
TIA	162.61	343	ePKP	08	37.00	0.7
CD2	167.08	28	ePKP	08	40.00	-0.4
CHG	168.70	92	ePKP	08	46.00	4.3X
	S.D. = 1.0	on 138 of 184 obs.				

& JUN 22, 1990 12h 00m 18.86s
60.059 N 153.462 W
DEPTH = 145.0km
SOUTHERN ALASKA (2)
<AGS-P>.

RED	0.50	43	iP	00	39.15	-0.8
			eS	00	55.31	
AUE	0.70	176	iP	00	40.25	-0.8
RDT	0.74	45	iP	00	40.63	-0.8
			iS	00	57.77	
MCNL	0.98	207	iP	00	42.11	-1.2
XLV	1.07	124	eP	00	42.85	-1.2
			eS	01	02.30	
NNL	1.09	90	eP	00	44.14	-0.1
CDD	1.14	185	iP	00	43.46	-1.3
			iS	01	03.59	
CNPM	1.25	114	iP	00	44.78	-1.0
SPU	1.32	31	iP	00	45.73	-0.8
BRLK	1.33	102	iP	00	45.90	-0.7
			eS	01	06.48	
CRP	1.37	27	iP	00	46.67	-0.5
CGLM	1.44	29	iP	00	47.06	-0.8
NCG	1.49	25	iP	00	47.93	-0.5
SVW	1.50	316	iP	00	47.22	-1.2
			eS	01	09.37	
SLKM	1.68	73	eP	00	48.91	-1.4
			eS	01	12.31	
SUA	1.94	42	iP	00	52.32	-1.2
			eS	01	19.20	
SEW	2.01	87	eP	00	52.27	-1.9
SKT	2.15	25	eP	00	54.74	-1.1
PMS	2.26	57	eP	00	55.27	-2.0
PWA	2.37	46	eP	00	56.56	-2.0
			eS	01	28.56	
PLRM	2.62	52	eP	00	58.71	-3.0
GHO	2.80	50	iP	01	01.39	-2.8
SML	3.06	53	iP	01	04.48	-2.9
GLI	3.26	73	eP	01	07.08	-2.9
SCM	3.48	57	eP	01	10.13	-2.8
VZW	3.56	71	eP	01	10.86	-3.0
VLZ	3.68	70	eP	01	12.52	-2.8
KTH	3.71	18	eP	01	14.21	-1.7
KLU	3.97	65	eP	01	16.32	-3.0
TOA	4.09	57	eP	01	18.79	-2.2
MCK	4.26	28	eP	01	21.15	-2.0
SDG	4.55	54	eP	01	24.73	-2.3
PAX	4.81	49	eP	01	28.21	-2.4
NEA	4.97	22	eP	01	30.24	-2.4
WRH	5.09	27	eP	01	31.52	-2.7
CCB	5.30	27	eP	01	34.19	-2.9
TGL	5.32	78	eP	01	35.00	-2.4
FBA	5.52	26	eP	01	37.37	-2.6
BALM	5.57	75	eP	01	39.12	-1.7
GLM	5.69	27	eP	01	39.61	-2.7
	40 obs. associated					

• JUN 22, 1990 13h 56m 11.82± 0.74s
36.991 N ±11.1km 50.107 E ± 8.7km
DEPTH = 10.0km (geophysicist)
4.0mb (2 obs.)
IRAN (348)

TEH	1.62	140	iPc	56	40.00	-0.7
TAB	3.19	291	eP	57	04.00	0.9
			e	57	08.00	
KER	3.59	224	eP	57	09.00	0.2
MAIO	7.58	92	iPc	58	06.00	0.9
			eS	59	40.00	
HFS	32.74	327	eP	02	45.70	-0.8
	0.7s	2.20nm			4.2mb	
NB2	34.24	327	P	02	59.10	-0.5
	0.7s	1.10nm			3.9mb	
BAO	105.61	262	e(PKP)	14	31.00	-6.4X
	S.D. = 1.0	on 6 of 7 obs.				

? JUN 22, 1990 15h 04m 37.98± 2.59s
5.738 S ±32.0km 146.645 E ±17.9km
DEPTH = 230.1 ± 10.3 km
4.9mb (3 obs.)
EAST PAPUA NEW GUINEA REGION (207)

LAT	0.98	159	iP	05	10.90	-0.1
			eS	05	37.00	
MNDI	3.00	262	eP	05	30.00	0.1
KDB	3.74	172	iPd	05	38.50	0.2
			eS	06	27.00	
QIS	16.24	204	eP	08	15.00	-0.3
WB5	18.44	219	iPd	08	38.50	-0.4
			i	08	42.20	
			eS	11	58.50	
WRA	18.51	219	Pd	08	39.10	-0.5
	0.4s	7.80nm			4.6mb	
RMQ	20.73	175	iPd	09	02.80	0.8
	0.3s	11.00nm			4.9mb	
ASPA	21.64	213	iPd	09	11.90	1.1
	0.5s	41.00nm			5.2mb	
			eS	12	57.20	
			i	17	21.40	
BRS	22.31	166	iP	09	16.50	-0.8
	S.D. = 0.8	on 9 of 9 obs.				

? JUN 22, 1990 15h 25m 54.97± 2.29s
5.582 S ±32.6km 104.974 E ±30.1km
DEPTH = 105.2 ± 18.6 km
4.8mb (6 obs.)
SOUTHERN SUMATERA (274)

PPI	6.84	318	e(P)	27	35.00	0.7
TRT	7.90	106	ePc	27	47.20	-1.6
CHTO	24.96	346	eP	31	13.00	2.8
	0.8s	2.20nm			3.6mb	X
WB5	31.92	119	eP	32	13.50	0.7
WRA	31.92	119	Pd	32	13.60	0.8
	0.4s	2.70nm			4.3mb	
ASPA	33.14	126	iPc	32	23.80	0.3
	1.0s	7.00nm			4.4mb	
PKI	37.99	331	P	33	04.00	-0.8
GUN	38.06	332	P	33	05.20	-0.2
	0.4s	9.00nm			5.0mb	
DMN	38.17	331	P	33	06.20	0.0
GKN	38.73	331	P	33	10.20	-0.6
	0.4s	7.00nm			4.9mb	
STK	43.08	132	iPc	33	47.30	1.1
	1.0s	13.00nm			4.7mb	
NDI	43.30	323	iPd	33	46.50	-1.5
	0.6s	33.33nm			5.3mb	
LNO	144.29	30	e(PKP)	45	19.50	-1.0
TUL	144.29	30	ePKP	45	20.00	-0.6
	0.5s	26.20nm				
	S.D. = 1.3	on 14 of 14 obs.				

• JUN 22, 1990 16h 18m 22.00± 0.77s
26.701 N ±13.5km 127.828 E ±13.6km
DEPTH = 33.0km (normal)
4.4mb (5 obs.)
RYUKYU ISLANDS (238)
Felt at Naha and Nago, Okinawa.

CHG	27.72	260	eP	24	09.80	0.3
PKI	37.63	281	P	25	36.00	-0.1
	0.4s	10.00nm			5.0mb	
DMN	37.89	281	P	25	38.20	0.0
GKN	38.24	282	P	25	41.00	0.0
	0.4s	11.00nm			5.0mb	
WRA	46.80	172	Pc	26	50.30	-0.1
	0.9s	2.10nm			4.1mb	
MBC	69.46	14	eP	29	29.00	0.5
HFS	78.24	332	eP	30	19.40	-0.3
	0.4s	0.70nm			4.0mb	
NB2	78.73	334	P	30	22.10	-0.4
	0.8s	1.70nm			4.1mb	
	S.D. = 0.3	on 8 of 8 obs.				

• JUN 22, 1990 16h 49m 17.23± 1.59s
45.563 N ±19.7km 14.815 E ± 8.9km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
MD 2.3 (LJU).

VBY	0.32	100	ePg	49 23.30	-0.5
			iSg	49 29.70	
CEY	0.32	303	ePg	49 23.40	-0.6
			eSg	49 29.50	
LJU	0.52	338	e(Pg)	49 27.50	-0.3
			eSg	49 36.90	
TRI	0.75	282	iP	49 41.00	9.1X
VOY	0.80	306	ePg	49 31.80	-1.0
			eSg	49 45.50	
PTJ	0.87	67	ePg	49 34.40	0.4
			eSg	49 49.70	
FVI	1.75	307	P	49 49.70	1.9
			eSn	50 14.50	

S.D. = 1.3 on 6 of 7 obs.

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* JUN 22, 1990 17h 22m 16.95± 1.06s
38.532 N ± 8.1km 15.476 E ±10.6km
DEPTH = 199.7 ± 10.7 km
3.8mb (1 obs.)
SICILY (398)

ATN	0.37	182	P	22 43.20	-0.5
			eSn	23 01.50	
SOI	0.65	135	Pd	22 45.20	0.4
			iSg	23 03.50	
MNO	0.86	226	P	22 46.50	0.2
GIB	1.26	245	P	22 48.40	-0.6
TDS	1.31	31	Pd	22 49.70	0.4
			eSn	23 10.80	
MEU	1.49	197	P	22 51.30	0.3
ORI	1.71	26	P	22 52.20	-0.6
			eSn	23 16.70	
SGO	2.03	356	P	22 56.50	0.5
BSS	2.31	347	P	22 57.70	-1.4
LCI	2.63	46	P	23 03.50	0.9
			eSg	23 38.20	
BRT	2.69	29	P	23 02.50	-0.9
			eSn	23 36.20	
DUI	3.22	346	P	23 09.50	-0.2
SDI	3.42	339	P	23 13.00	0.9
AZI	3.79	336	P	23 17.50	1.0
HFS	21.65	358	eP	26 51.50	-0.3
	0.4s		1.40nm		3.8mb

S.D. = 0.8 on 15 of 15 obs.

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* JUN 22, 1990 17h 54m 44.41± 0.79s
37.274 N ±11.4km 49.735 E ± 8.2km
DEPTH = 10.0km (geophysicist)
4.1mb (1 obs.)
CASPIAN SEA (338)

TEH	2.03	139	iPd	55 19.00	-0.2
TAB	2.82	287	eP	55 30.00	-0.5
KER	3.61	217	eP	55 42.00	0.3
MAIO	7.89	94	eP	56 42.00	0.0
			eS	58 19.00	
HFS	32.34	327	eP	01 16.00	0.4
	0.4s		0.90nm		4.1mb

S.D. = 0.5 on 5 of 5 obs.

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* JUN 22, 1990 19h 04m 25.38± 0.79s
37.320 N ±11.4km 49.576 E ± 8.2km
DEPTH = 10.0km (geophysicist)
4.1mb (1 obs.)
CASPIAN SEA (338)

TEH	2.15	137	iPd	05 01.90	0.0
TAB	2.68	287	eP	05 10.00	0.5
			i	05 14.00	
KER	3.58	215	ePd	05 22.00	-0.2
MAIO	8.02	94	eP	06 25.00	0.2
			eS	07 57.00	
APO	32.33	327	eP	10 56.00	-0.5
	0.5s		1.20nm		4.1mb

S.D. = 0.5 on 5 of 5 obs.

JUN 22, 1990 19h 56m 20.31± 1.30s
14.659 S ± 6.1km 167.909 E ± 4.7km
DEPTH = 39.5 ± 11.0 km
5.4mb (23 obs.) 5.1Msz (1 obs.)
VANUATU ISLANDS (186)

PVC	3.09	173	iP	57 12.80	5.0X
DZM	7.50	190	iPd	58 07.20	-2.9
			iS	59 32.00	
HNR	9.36	303	eP	58 35.00	-0.8
			eS	00 21.00	
SVA	10.69	110	eP	5B 55.60	1.6
KDB	20.93	282	eP	01 02.00	-0.2
CTA	21.35	252	iPc	01 07.30	0.8
	1.0s		92.00nm		5.1mb
RMQ	21.42	234	iPc	01 08.50	1.4
			e	01 11.00	
COO	21.63	220	iPd	01 10.90	1.7
QLP	25.08	238	iPc	01 44.70	1.8
BWA	26.40	218	iPc	01 54.00	-1.1
CNB	26.47	216	iPc	01 56.70	0.9
CAN	26.68	216	eP	01 57.90	0.2
QIS	27.58	254	iPc	02 06.00	0.0
			e	12 20.00	
STK	29.52	230	iPc	02 24.40	1.1
	0.8s		49.00nm		5.3mb
TOO	30.28	217	iPd	02 30.80	0.7
WB5	32.41	256	eP	02 47.70	-1.2
WRA	32.44	256	Pc	02 47.70	-1.5
	1.3s		25.90nm		4.9mb
ADE	33.14	227	e(P)	02 55.20	0.0
ASPA	33.28	249	iPc	02 55.50	-1.0
	0.8s		59.00nm		5.5mb
Z	22s		1.80um		4.7MszX
			LR	14 59.80	
GUA	36.10	320	eP	03 41.00	20.4X
GUMO	36.16	320	eP	03 41.50	20.4X
PJG	36.16	320	eP	03 41.30	20.2X
FORR	39.85	239	eP	03 52.30	0.4
	0.4s		21.00nm		5.3mb
WARB	40.18	247	iPc	03 55.10	0.4
COOL	45.70	241	eP	04 39.00	-0.5
MEKA	47.45	247	eP	04 53.50	0.1
KLB	48.67	241	eP	05 02.00	-0.8
MUN	50.04	240	eP	05 13.00	-0.3
NANU	50.05	253	eP	05 13.60	0.1
	0.6s		32.00nm		5.5mb
TRT	54.56	271	iPc	05 46.60	-0.7
	0.6s		53.80nm		5.8mb
KKM	55.23	288	ePc	05 53.00	0.7
	1.1s		93.50nm		5.7mb
IIDJ	57.40	331	P	06 06.60	-0.8
MTMJ	58.35	332	P	06 13.20	-0.9
SSE	63.90	316	Pd	06 51.00	-0.6
	1.0s		29.00nm		5.3mb
KGM	66.03	279	eP	07 06.80	1.1
NJ2	66.06	315	Pd	07 06.40	0.9
QIZ	66.25	299	eP	07 07.80	0.8
WHN	68.36	312	eP	07 19.50	-0.6
MDJ	68.51	332	Pc	07 21.00	0.2
DL2	68.62	323	eP	07 21.10	-0.4
	1.2s		100.00nm		5.7mb
IPM	68.97	281	ePc	07 25.50	1.3
	1.2s		50.70nm		5.4mb
SNY	69.49	326	Pc	07 26.20	-0.6
TIA	69.70	318	Pc	07 27.50	-0.7
CN2	69.91	329	iPc	07 29.50	0.2
PSI	70.43	278	eP	07 33.00	-0.1
	1.0s		34.50nm		5.3mb
GYA	72.18	304	iPc	07 44.00	0.4
BJI	72.60	321	eP	07 46.00	0.4
	1.5s		55.00nm		5.3mb
LOE	72.64	294	iPc	07 46.40	0.1
TIY	73.63	317	iPc	07 52.20	0.4
XAN	74.10	312	P	07 54.20	-0.4
KMI	74.80	302	Pc	08 00.00	1.0
	1.5s		70.00nm		5.4mb
CHG	75.61	294	iPc	08 04.30	0.8
	1.0s		20.25nm		5.0mb
			e	18 18.40	
HHC	75.93	319	P	08 06.00	1.0
CD2	76.46	307	eP	08 08.70	0.6
BTO	76.78	319	eP	08 11.00	1.2
LZH	78.73	312	Pc	08 21.50	0.8
	2.0s		89.00nm		5.4mb
GTA	83.07	314	iPc	08 44.80	1.3
	1.4s		100.00nm		5.7mb
PMR	83.23	19	eP	08 43.00	-0.6
	1.6s		56.50nm		5.4mb
PRS	83.70	50	ePc	08 47.20	0.6
MHC	83.90	49	ePc	08 48.50	0.7
ARN	83.98	49	eP	08 49.00	0.9
PRI	84.15	50	ePc	08 50.20	1.2
BCH	84.22	52	eP	08 50.20	0.8
WDC	84.57	46	ePc	08 51.40	0.5
			e(S)	18 51.20	
ORV	84.88	47	e(P)	08 52.20	-0.3
			e(S)	19 07.00	
CMB	85.09	49	ePc	08 53.70	0.1
			e(S)	19 08.40	
MIN	85.13	46	e(P)	08 53.80	-0.1
IMA	85.42	15	eP	08 54.70	-0.1
SBB	85.77	53	eP	08 58.00	0.9
RVR	85.87	53	eP	08 58.00	0.5
PLM	86.05	54	eP	08 59.00	0.4
CLC	86.34	52	eP	09 00.00	0.1
GSC	86.77	52	eP	09 03.00	1.0
TPC	86.94	54	eP	09 03.00	0.2
KVN	87.13	49	eP	09 02.60	-1.2
TNP	87.43	50	eP	09 05.30	0.0
	1.5s		17.68nm		5.1mb
GLA	87.55	55	eP	09 07.00	1.2
GUN	89.90	299	P	09 18.00	0.5
PNT	89.97	39	eP	09 17.00	0.2
PKI	90.21	298	P	09 19.00	0.1
	0.8s		28.00nm		5.6mb
DMN	90.48	298	P	09 20.60	0.6
	0.8s		51.00nm		5.9mb
GKN	90.99	299	P	09 22.20	0.0
NEW	91.11	40	eP	09 21.00	-1.2
	1.0s		6.25nm		5.0mb
MSU	91.32	51	eP	09 24.10	0.5
WMQ	93.12	314	iPc	09 32.00	0.4
ALQ	94.75	55	e(P)	09 37.00	-2.4
Z	18s		0.57um		5.1Msz
YKA	97.20	27	eP	09 48.20	-1.4
	1.0s		4.10nm		4.9mb
ZOBO	116.70	117	PKP	15 04.00	0.3
Z	24s		0.10um		4.4MszX
			LR	43 32.00	
SUF	124.99	340	ePKP	15 16.00	-1.4
	1.0s		9.10nm		
NUR	127.03	338	ePKP	15 19.00	-2.4
BUL	127.11	230	iPKPc	15 19.70	-3.3X
KRI	128.29	234	ePKP	15 37.50	12.1X
APO	130.43	343	ePKP	15 22.00	-5.9X
	0.4s		0.70nm		
NB2	130.72	345	PKP	15 27.90	-0.6
	1.0s		5.00nm		
BRG	138.21	335	ePKP	15 45.40	2.4
CLL	138.24	336	ePKP	15 44.00	1.0
	1.5s		25.00nm		
ZST	138.78	330	ePKP	15 22.10	-22.0X
KHC	139.70	334	ePKP	15 45.60	-0.2
SKO	140.28	320	ePKP	15 40.00	-7.0X
FVI	141.97	332	PKP	15 50.00	0.2
CDF	142.74	339	ePKP	15 46.80	-4.5X
ARV	144.16	328	PKP	15 52.50	-1.3
VAI	144.28	335	PKP	15 52.10	-1.7
SFI	144.40	330	PKP	15 52.10	-2.0
ORI	144.46	321	PKP	15 53.10	-1.3
CRE	144.56	329	PKP	15 53.50	-1.1
ASS	144.61	328	PKP	15 52.50	-2.1
FLN	144.67	347	ePKP	15 52.00	-2.4
	0.9s		19.65nm		
MME	144.74	331	PKP	15 54.90	-0.1
LDF	144.75	346	ePKP	15 53.20	-1.4
TDS	144.78	320	PKP	15 54.10	-0.8
ORX	144.79	335	PKP	15 53.43	-1.5
ORO	144.80	335	PKP	15 53.50	-1.4
SGO	144.84	322	PKP	15 54.00	-0.9
LOR	144.88	341	iPKPc	15 54.20	-0.7
	0.8s		10.05nm		
BDI	144.89	331	PKP	15 52.90	-2.2
SDI	144.94	325	PKP	15 53.50	-1.7
AZI	144.96	326	PKP	15 54.00	-1.1
BSS	144.99	323	PKP	15 51.20	-4.0X
LBF	145.09	341	ePKP	15 54.90	-0.4
	1.2s		40.15nm		
GRR	145.11	347	ePKP	15 54.70	-0.5
	0.7s		19.85nm		
SSF	145.17	341	iPKPc	15 55.50	0.2
	1.1s		75.70nm		
LSD	145.26	336	PKP	15 56.20	0.3
LPL	145.38	336	iPKPc	15 56.70	0.6
	0.8s		19.50nm		
LPG	145.39	336	iPKPc	15 57.00	0.8
	0.8s		26.20nm		
SMF	145.43	341	iPKPc	15 56.00	0.2
	1.3s		61.35nm		
PCP	145.44	334	PKP	15 55.48	-0.5
AVF	145.46	341	iPKPc	15 55.80	0.0
	1.2s		32.75nm		
RMP	145.48	326	PKP	15 54.60	-1.4
RSP	145.48	336	PKP	15 55.68	-0.4

22d 20h

LPF	145.49	347	ePKP	15 56.20	0.4
	1.3s	108.30nm			
RDP	145.50	326	PKP	15 56.30	0.1
BNI	145.79	336	PKP	15 54.60	-2.1
BGF	145.82	342	iPKPc	15 57.30	0.8
	0.8s	18.80nm			
FIN	145.85	334	PKP	15 56.30	-0.3
RRL	145.86	336	PKP	15 57.74	0.8
SOI	145.89	318	PKPc	15 58.20	1.4
ROB	145.92	334	PKP	15 56.61	-0.2
PZZ	146.07	335	PKP	15 57.33	0.2
PLDF	146.10	340	PKP	15 58.44	1.4
ENR	146.17	334	PKP	15 56.30	-0.9
AGO	146.19	341	PKP	15 57.97	0.9
STV	146.19	335	PKP	15 56.71	-0.6
MAF	146.21	342	iPKPc	15 58.70	1.6
	0.9s	10.65nm			
ATN	146.22	319	PKP	15 57.50	0.1
IMI	146.22	334	PKP	15 57.12	-0.2
TCF	146.26	342	ePKP	15 58.60	1.4
SBF	146.46	334	iPKPc	15 59.00	1.3
	0.7s	49.60nm			
LSF	146.49	343	ePKP	15 59.10	1.5
PYM	146.50	341	PKP	15 59.67	2.0
MFF	146.62	345	iPKPc	15 59.60	1.9
	0.8s	14.80nm			
PGF	146.80	331	iPKPc	16 00.50	2.2X
	1.0s	72.00nm			
LBL	146.88	340	PKP	16 01.07	2.9X
FRF	147.03	335	iPKPc	16 00.80	2.3X
	1.0s	56.00nm			
LRG	147.24	335	iPKPc	16 01.60	2.8X
	0.8s	24.20nm			
LMR	147.28	334	iPKPc	16 01.50	2.6X
	1.2s	65.45nm			
USI	147.29	322	PKP	16 01.00	2.0
RJF	147.36	342	ePKP	16 01.90	2.9X
CAF	147.53	341	iPKPc	16 02.70	3.4X
	0.8s	9.40nm			
LFF	147.92	343	iPKPc	16 03.60	3.7X
	0.7s	20.95nm			
LPO	148.02	342	iPKPc	16 03.80	3.7X
	0.9s	31.10nm			
BCAO	148.18	254	iPKPc	16 03.50	2.3X
	1.5s	175.00nm			
EPF	149.78	342	iPKPc	16 08.20	5.3X
	0.9s	13.90nm			
STS	151.71	355	ePKP	16 12.80	7.1X
ETOR	152.51	343	ePKP	16 15.00	7.9X
GUD	153.20	347	ePKP	16 17.80	9.7X
LKO	171.86	232	PKP	16 26.40	-0.1
	1.0s	13.50nm			

S.D. = 1.1 on 142 of 167 obs.

JUN 22, 1990 20h 06m 33.30± 0.27s
14.688 S ± 6.4km 167.886 E ± 7.0km
DEPTH = 33.0km (normal)
5.2mb (12 obs.)
VANUATU ISLANDS (186)

PVC	3.06	172	iP	07 25.00	4.5X
DZM	7.47	190	iPd	08 21.10	-1.7
			iS	09 44.10	
HNR	9.36	303	eP	08 49.00	0.0
			eS	10 35.00	
KDB	20.91	282	eP	11 05.00	-10.6X
CTA	21.32	252	iPc	11 21.90	2.1
	1.0s	50.00nm		4.9mb	
			iS	15 23.00	
RMQ	21.38	234	eP	11 21.00	0.7
			e	11 26.00	
COO	21.59	220	eP	11 24.00	1.6
OLP	25.05	238	eP	11 57.50	1.3
CMS	26.21	227	eP	12 07.50	0.5
	1.0s	48.00nm		5.1mb	
BWA	26.36	218	eP	12 06.90	-1.5
CNB	26.44	216	eP	12 10.00	0.9
CAN	26.65	216	eP	12 11.19	0.2
STK	29.48	230	iPd	12 37.50	0.9
	1.3s	49.00nm		5.1mb	
TOO	30.24	217	eP	12 43.00	-0.4
WB5	32.38	256	eP	13 01.10	-1.2
WRA	32.41	256	Pd	13 01.80	-0.8
	1.2s	13.60nm		4.7mb	
ASPA	33.25	249	iPc	13 08.70	-1.2
	1.6s	69.00nm		5.3mb	
Z	22s	3.52um			5.0MszX
			LR	25 12.70	
FORR	39.81	239	eP	14 06.00	0.7
WARB	40.14	247	eP	14 08.00	-0.1
MRWA	49.87	244	eP	15 25.40	-0.4
NANU	50.02	253	eP	15 26.50	-0.5
KKM	55.21	288	ePd	16 01.00	-4.9X
NJ2	66.06	315	Pc	17 19.80	0.5
WHN	68.36	312	eP	17 33.50	-0.3
MDJ	68.53	332	eP	17 34.00	-0.6
TIA	69.70	318	eP	17 41.20	-0.8
CN2	69.92	329	Pd	17 42.60	-0.5
PSI	70.41	278	ePc	17 46.80	0.0
GYA	72.18	304	P	17 57.40	0.0
BJI	72.61	321	eP	17 59.00	-0.4
	1.7s	35.00nm		5.1mb	
TIY	73.63	317	eP	18 05.00	-0.6
XAN	74.10	312	P	18 08.00	-0.3
KMI	74.79	302	Pc	18 14.50	1.8
	2.2s	70.00nm		5.3mb	
HHC	75.94	319	P	18 19.40	0.6
CD2	76.46	307	eP	18 22.80	0.9
BTO	76.78	319	eP	18 25.00	1.4
LZH	78.73	312	Pd	18 35.00	0.5
	2.5s	95.00nm		5.4mb	
			pP	18 44.50	30kmX
			sP	18 49.50	
GTA	83.07	314	P	18 57.80	0.5
	1.6s	100.00nm		5.7mb	
SBB	85.80	53	eP	19 12.00	1.0
RVR	85.90	53	eP	19 13.00	1.6
PLM	86.08	54	eP	19 13.00	0.4
CLC	86.38	52	eP	19 14.00	0.2
GSC	86.80	52	eP	19 18.00	2.1
TPC	86.98	54	eP	19 17.00	0.2
GLA	87.59	55	eP	19 21.00	1.3
GUN	89.90	299	P	19 31.60	0.4
PKI	90.20	298	P	19 31.60	-1.0
	0.8s	16.00nm		5.4mb	
DMN	90.47	298	P	19 33.00	-0.7
	1.0s	45.00nm		5.7mb	
GKN	90.98	299	P	19 35.80	-0.1
WMO	93.12	314	P	19 45.50	0.1
YKA	97.24	27	eP	20 02.10	-1.5
	0.9s	1.50nm		4.5mb	
ZOBO	116.71	117	Pdiff	21 18.00	-14.3X
ARV	144.17	328	PKP	26 07.00	-0.6
VAI	144.29	335	PKP	26 05.40	-2.2
SFI	144.41	330	PKP	26 07.50	-0.4
ORI	144.47	321	PKP	26 04.80	-3.4X
PGD	144.51	330	PKP	26 08.50	0.1
CRE	144.57	329	PKP	26 08.00	-0.4
ASS	144.62	328	PKP	26 07.00	-1.4
DUI	144.63	325	PKP	26 08.00	-0.5
MME	144.76	331	PKP	26 05.60	-3.3X
TDS	144.78	320	PKP	26 07.30	-1.4
ORO	144.81	335	PKP	26 07.50	-1.2
SGO	144.85	322	PKP	26 08.00	-0.8
BOB	144.88	333	PKP	26 08.00	-0.8
LOR	144.90	341	ePKP	26 07.10	-1.6
BDI	144.90	331	PKP	26 07.00	-1.9
SDI	144.95	325	PKP	26 06.50	-2.5X
AZI	144.97	326	PKP	26 08.50	-0.4
BSS	145.00	323	PKP	26 07.50	-1.5
LBF	145.11	341	ePKP	26 07.80	-1.3
	1.1s	13.45nm			
SSF	145.19	341	ePKP	26 08.40	-0.8
	1.1s	26.85nm			
PIL	145.20	331	PKP	26 07.50	-1.8
LPL	145.40	336	ePKP	26 09.60	-0.3
	0.8s	8.75nm			
LPG	145.41	336	ePKP	26 09.80	-0.2
	0.8s	11.40nm			
SMF	145.45	340	ePKP	26 09.00	-0.7
	1.3s	32.50nm			
AVF	145.48	341	ePKP	26 08.90	-0.8
	1.3s	18.05nm			
RMP	145.49	326	PKP	26 09.50	-0.4
LPF	145.51	347	ePKP	26 09.10	-0.6
RDP	145.52	326	PKP	26 06.10	-3.9X
BNI	145.81	336	PKP	26 11.10	0.6
BGF	145.84	342	ePKP	26 10.30	0.0
	1.0s	16.00nm			
SOI	145.90	318	PKP	26 11.50	0.9
ATN	146.23	319	PKP	26 12.00	0.8
MAF	146.23	342	ePKP	26 11.40	0.4
TCF	146.28	342	ePKP	26 11.90	0.8
SBF	146.47	334	ePKP	26 11.90	0.4
	0.8s	32.25nm			
LSF	146.51	343	ePKP	26 11.80	0.4
MFF	146.64	345	ePKP	26 13.40	1.8
PGF	146.81	331	ePKP	26 13.30	1.1
	1.0s	36.00nm			
LMR	147.29	334	ePKP	26 14.50	1.8
CAF	147.55	341	ePKP	26 15.50	2.3
	1.2s	17.85nm			
LPO	148.04	342	ePKP	26 16.70	2.8X
BCAO	148.15	254	iPKPc	26 17.50	2.5
	1.5s	163.00nm			

S.D. = 1.1 on 85 of 94 obs.

JUN 22, 1990 20h 39m 28.64± 0.33s
41.591 N ± 4.0km 20.865 E ± 3.1km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)
ML 3.2 (THE). MD 3.1 (TTG).

OHR	0.48	186	iPgc	39 37.70	-0.7
			iSg	39 45.70	
SKO	0.57	48	iPg	39 39.60	-0.7
			iSg	39 47.60	
			Lg	39 49.00	
FNA	0.89	154	ePgd	39 49.50	3.7X
PVY	1.20	327	ePg	39 50.50	-0.6
			eSg	40 07.50	
ULC	1.26	288	ePg	39 51.50	-0.6
			eSg	40 10.20	
VAY	1.31	101	iPn	39 50.80	-2.1
			iPg	39 51.40	
			iSg	40 09.40	
			i	40 11.20	
			Lg	40 14.30	
TTG	1.46	306	ePg	39 54.30	-0.7
			eSg	40 16.60	
IVA	1.47	331	ePg	39 55.10	-0.1
			eSg	40 17.50	
KNT	1.59	105	ePb	39 56.40	-0.5
			eSb	40 19.20	
BDV	1.67	295	ePn	39 58.00	-0.1
			eSn	40 25.00	
NKY	1.85	312	ePn	40 03.00	2.3
			eSn	40 30.00	
LIT	1.93	140	ePnd	40 02.70	0.8
			eSn	40 30.00	
HCY	1.96	297	ePn	40 03.00	0.7
			eSn	40 30.00	
VTS	2.01	59	iP	40 04.00	0.9
PLE	2.05	328	ePn	40 04.50	0.8
			eSn	40 31.80	
IGT	2.10	191	ePnd	40 06.20	2.0
			eSn	40 34.40	
SRS	2.11	102	ePn	40 04.90	0.5
MMB	2.15	89	ePc	40 06.00	1.0
BRY	2.16	308	ePn	40 06.50	1.1
			eSn	40 37.50	
LCI	2.54	241	P	40 10.00	-0.5
BRT	2.85	257	P	40 16.00	1.0
BEO	3.24	355	e(Pn)	40 22.50	2.0
HVAR	3.64	297	iPn	40 26.20	0.1
ALN	3.97	98	ePn	40 30.50	-0.3
BZS	4.06	7	ePc	40 31.00	-1.1
SGO	4.32	258	P	40 36.50	0.6
			eSn	41 25.00	
BSS	4.64	262	P	40 40.50	0.1
DUI	4.80	273	P	40 42.70	-0.1
			eSn	41 37.40	
SOI	5.10	228	P	40 46.00	-0.9
			eSn	41 42.00	
SDI	5.28	274	P	40 49.20	-0.4
			eSn	41 48.50	
PTJ	5.58	322	eP	40 57.50	3.7X
ARV	6.15	291	P	41 00.50	-1.3
ASS	6.26	286	P	41 02.50	-0.8
LJU	6.39	316	e(Pn)	41 10.00	4.9X
			e	42 54.00	
VOY	6.72	314	ePn	41 08.80	-1.0
			eSn	42 25.70	
CRE	6.88	290	P	41 12.00	-0.2
FVI	7.67	313	P	41 22.00	-1.0
			eSn	42 46.00	

S.D. = 1.0 on 34 of 37 obs.

JUN 22, 1990 20h 49m 27.06± 0.68s
38.300 N ± 5.9km 21.857 E ± 9.2km
DEPTH = 10.0km (geophysicist)

GREECE (364)
MD 3.0 (ATH). ML 2.7 (THE).

VLS	1.01	263	ePb	49 45.50	-0.6
ITM	1.12	177	ePn	49 48.00	-0.1
NEO	1.47	46	ePn	49 52.00	-1.6
IGT	1.71	316	ePn	50 00.20	3.1X
VLI	1.80	151	ePn	49 59.00	0.7
LIT	1.86	15	ePn	49 59.60	0.3
			eSn	50 29.00	
FNA	2.51	352	ePn	50 10.00	1.4
OHR	2.92	344	e(Pn)	50 14.00	-0.5
KNT	2.97	15	ePn	50 15.40	0.3

S.D. = 1.1 on 8 of 9 obs.

JUN 22, 1990 21h 16m 52.62± 0.24s
11.915 N ± 6.3km 85.798 W ± 7.2km
DEPTH = 28.4km (8 depth phases)
5.0mb (14 obs.) 4.6Msz (5 obs.)

NICARAGUA (75)
MD 5.1 (HDC).
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 17C
Centroid Location:
Origin Time 21:17: 4.7 1.2
Lat 11.64N FIX;Lon 86.15W FIX
Dep 15.0 FIX Half-duration 2.0
Moment Tensor; Scale 10**17 Nm
Mrr= 0.72 0.10 Mtt=-0.35 0.10
Mff=-0.37 0.17 Mrt= 1.16 0.27
Mrf=-0.81 0.26 Mtf= 0.40 0.09
Principal Axes:
T Val= 1.59 Plg=58 Azm= 30
N 0.02 5 127
P -1.61 31 220
Best Double Couple:Mo=1.6*10**17
NP1:Strike=326 Dip=14 Slip= 109
NP2: 126 76 85

RIN3	1.19	160	iPd	17 13.00	-0.5
JUD	1.76	172	iPd	17 14.50	-7.2X
JTS	1.82	153	iPd	17 21.40	-1.1
EPA	2.25	148	iPc	17 29.70	1.0
POA2	2.30	139	iPd	17 33.80	4.1X
CAO	2.30	163	iPd	17 23.20	-6.2X
HDC2	2.49	139	eP	17 34.10	1.8
			S	18 13.80	
PTCR	2.51	147	iPc	17 33.70	1.2
IRZ2	2.69	136	iPd	17 38.10	2.8X
OCM	2.70	138	eP	17 37.20	1.9
OPS	2.99	147	ePd	17 38.20	-0.9
CDM	3.08	139	iPd	17 42.60	1.7
UPA	6.82	115	ePc	18 41.20	7.9X
TPX	6.95	296	(P)	18 36.50	1.2
			(S)	19 46.00	
SCX	8.18	307	(P)	18 57.00	4.6X
OXX	11.76	297	(P)	19 40.00	-1.8
LVVM	12.86	309	(P)	19 56.50	0.2
IIT	13.97	302	(P)	20 11.00	-0.2
PPM	14.26	301	(P)	20 15.00	-0.3
ACX	14.48	292	(P)	20 21.00	3.3X
III	14.67	298	(P)	20 19.50	-0.9
CRX	15.29	301	(P)	20 30.00	1.3
IIJ	15.49	302	(P)	20 32.00	0.6
MRX	16.70	300	(P)	20 46.50	0.1
UYO	23.52	342	iPd	22 04.00	2.8X
NNA	25.36	159	iP	22 15.00	-4.1X
	0.9s	10.08nm		4.4mb	
TUL	25.54	341	iPc	22 22.00	1.4
	0.7s	125.70nm		5.6mb	
			LR	30 00.00	
BLA	25.65	10	P	22 27.80	6.1X
FVM	26.29	352	P	22 28.00	0.5
ALQ	29.62	324	eP	22 57.30	-0.7
	1.0s	34.50nm		5.1mb	
	Z 18s	0.52um		4.2Msz	
			e	23 06.50	32km
ANMO	29.62	324	P	22 58.40	0.4
	1.2s	33.20nm		5.0mb	
			pP	23 07.00	30km
GOL	32.65	331	P	23 24.80	0.1
	0.9s	14.20nm		4.9mb	
	Z 20s	1.00um		4.5Msz	
			pP	23 33.80	31km
ZOBO	33.01	148	P	23 25.00	-3.4X
	Z 20s	0.96um		4.5Msz	
			LR	34 34.00	
LPB	33.25	148	eP	23 29.00	-1.2
	Z 22s	2.22um		4.8Msz	
			e	26 05.00	
			LR	33 54.00	
CNCB	33.54	148	P	23 31.00	-1.9
			i	26 11.00	
GLA	33.89	313	eP	23 35.00	-0.3
RSNY	33.93	14	P	23 40.00	4.6X
	Z 19s	3.59um		5.1Msz	
BAR	35.05	311	eP	23 46.00	0.8
TPC	35.31	314	eP	23 47.00	-0.5
MSU	35.40	323	P	23 49.40	1.0
			pP	23 57.00	26km
PLM	35.51	312	eP	23 50.00	0.6
RSSD	35.73	337	P	23 52.00	0.9
DAU	36.18	326	P	23 55.40	0.4
			pP	24 04.40	30km
RVR	36.20	313	eP	23 55.00	0.0
GSC	36.47	315	eP	23 58.00	0.7
PAS	36.85	312	eP	23 53.00	-7.4X
SBB	36.87	313	eP	24 01.00	0.3
DUG	36.89	325	P	24 01.80	1.0
SIV	36.98	138	iPc	23 58.50	-3.1X
BW06	37.03	330	P	24 01.70	-0.3
	0.9s	12.71nm		4.8mb	
CLC	37.29	315	eP	24 05.00	0.9
			e	26 22.00	
TNP	38.27	318	P	24 12.20	-0.3
	0.8s	7.35nm		4.6mb	
SYP	38.35	312	eP	24 13.00	-0.2
BCH	38.73	312	P	24 15.90	-0.4
PHAM	39.27	313	P	24 21.00	0.3
FRI	39.35	315	e(P)	24 19.90	-1.4
KVN	39.39	319	P	24 20.50	-1.4
HPI	39.47	328	P	24 23.60	1.0
			pP	24 31.60	27km
PRI	39.60	313	eP	24 23.70	0.1
PRS	40.20	313	ePc	24 28.00	-0.3
CMB	40.35	316	eP	24 30.00	0.4
			e	24 37.40	25km
SAO	40.45	314	eP	24 31.30	0.9
ARN	40.80	315	P	24 33.40	0.1
MHC	40.87	314	ePc	24 34.70	0.7
GCC	40.97	314	ePc	24 33.90	-0.7
BRK	41.55	315	eP	24 40.20	0.8
ORV	41.88	317	eP	24 42.70	0.6
			e	24 50.80	27km
MIN	42.36	318	e(P)	24 48.40	2.2
WDC	43.09	318	e(P)	24 53.30	1.3
SES	43.60	337	ePc	24 56.30	0.3
	0.7s	34.00nm		5.2mb	
FHC	44.15	318	ePc	25 04.60	4.0X
FFC	44.57	347	ePc	25 04.60	0.8
	0.9s	25.00nm		5.1mb	
NEW	44.66	330	P	25 04.00	-0.6
	0.9s	14.25nm		4.9mb	
DPW	44.92	329	P	25 06.20	-0.6
SCH	45.34	15	eP	25 12.00	2.0
LON	46.11	326	P	25 15.70	-0.4
8AO	46.36	125	eP	25 16.00	-2.6
PNT	46.59	330	eP	25 19.00	-0.9
	0.7s	24.00nm		5.3mb	
EDM	46.71	338	iPc	25 20.10	-0.7
GMW	47.12	326	P	25 23.00	-1.1
FRB	53.17	9	eP	26 10.00	0.0
YKA	54.56	344	eP	26 18.70	-1.6
	0.9s	10.30nm		4.9mb	
INK	64.20	342	eP	27 26.00	-0.8
PMS	67.12	332	eP	27 44.00	-1.7
	1.3s	70.80nm		5.6mb	
FBA	67.57	336	P	27 46.90	-1.5
TTA	70.49	333	eP	28 04.30	-2.2
SDN	71.58	324	eP	28 11.70	-1.4
DAG	73.29	13	eP	28 23.20	0.4
LKO	78.58	83	P	28 52.72	-1.2
	0.7s	6.00nm		4.7mb	
KHC	87.14	40	eP	29 53.60	16.3X
ASPA	140.56	247	ePKP	36 18.10	-3.9X
	1.6s	16.00nm			
WB5	140.65	253	ePKP	36 18.20	-4.0X
WRA	140.66	253	PKPc	36 18.60	-3.6X
	0.8s	6.90nm			
GBA	149.68	34	PKPd	36 36.70	-0.6
	0.7s	2.90nm			
LOE	149.93	346	iPKPc	36 41.00	3.3X
BDT	150.64	351	ePKP	36 42.00	3.3X
	0.9s	44.20nm			
MUN	151.56	222	ePKP	36 41.00	1.3

S.D. = 1.1 on 76 of 97 obs.

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* JUN 22, 1990 21h 20m 06.59± 0.77s
37.341 N ±11.2km 49.496 E ± 8.0km
DEPTH = 10.0km (geophysicist)
4.4mb (1 obs.)

CASPIAN SEA (338)
Felt at Rasht, Iran.

TEH	2.21	136	eP	20 44.00	0.0
TA8	2.62	287	eP	20 50.00	0.2
			e	20 55.00	
KER	3.56	214	eP	21 03.00	-0.1
MAIO	8.09	94	eP	22 07.00	0.1
			eS	23 43.00	
APO	32.27	327	eP	26 37.00	-0.2
	0.4s	1.80nm		4.4mb	

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

JUN 22, 1990 21h 20m 43.54± 0.15s
14.640 S ± 4.4km 167.934 E ± 3.5km
DEPTH = 19.1km (4 depth phases)
5.6mb (28 obs.) 5.3Msz (8 obs.)

VANUATU ISLANDS (186)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 31C
Centroid Location:
Origin Time 21:20:48.5 0.4
Lat 14.61S FIX;Lon 167.95E FIX
Dep 15.0 BDY Half-duration 2.1
Moment Tensor; Scale 10**17 Nm
Mrr= 1.85 0.08 Mtt= 0.32 0.10
Mff=-2.17 0.11 Mrt= 0.10 0.23
Mrf= 0.98 0.23 Mtf=-0.26 0.08
Principal Axes:
T Val= 2.07 Plg=77 Azm=276
N 0.35 0 186
P -2.43 13 96
Best Double Couple:Mo=2.2*10**17
NP1:Strike=186 Dip=32 Slip= 90
NP2: 6 58 90

PVC	3.10	173	iP	21 36.70	4.2X
DZM	7.52	191	iPc	22 32.90	-2.2
			iS	23 53.90	
HNR	9.37	303	eP	23 03.00	2.4
			eS	24 48.00	
SGE	10.04	108	ePd	23 11.60	1.6
VUN	10.65	110	eP	23 19.10	0.9
SVA	10.67	110	eP	23 20.20	1.6
RAB	18.68	302	eP	25 04.00	1.1
KDB	20.95	282	eP	25 29.50	1.6
CTA	21.38	252	iPc	25 33.90	1.6
	1.0s	98.00nm		5.2mb	
	Z 20s	13.12um		5.3Msz	
			iS	29 34.00	
RMQ	21.45	234	iPd	25 34.70	1.8
			e	25 39.00	16km
COO	21.66	220	eP	25 36.00	1.0
QLP	25.11	238	Pc	26 10.20	1.4
CMS	26.27	227	iPc	26 20.00	0.4
	1.0s	65.00nm		5.2mb	
BWA	26.43	218	iPc	26 19.90	-1.1
			PPc	54 45.30	
CNB	26.50	216	iPc	26 22.70	1.0
CAN	26.71	216	eP	26 23.90	0.3
SNZO	27.22	169	P	26 44.00	15.9X
			S	31 20.00	
QIS	27.61	254	eP	26 31.50	-0.5
STK	29.55	230	iPc	26 50.10	0.8
	1.0s	64.00nm		5.4mb	
TOO	30.31	217	ePd	26 56.50	0.5
WB5	32.44	256	iPc	27 13.00	-1.9
			i	30 02.00	
WRA	32.47	256	P	27 15.00	-0.2
	1.1s	22.30nm		5.0mb	
ADE	33.17	227	e(P)	27 22.00	0.9
	0.8s	29.85nm		5.3mb	
ASPA	33.31	249	iPc	27 20.30	-2.2
	1.3s	136.00nm		5.7mb	
	Z 22s	10.10um		5.5MszX	
			LR	39 27.50	
FORR	39.88	239	eP	28 18.00	0.1
WARB	40.21	247	eP	28 21.00	0.3

22d 21h

COOL	45.73	241	eP	29	05.00	-0.6				e	58	44.00		VOY	141.86	330	e(PKP)	40	09.00	-7.0X
MEKA	47.48	247	eP	29	19.30	-0.1	PRS	83.67	50	ePc	33	13.30	0.8	FVI	141.96	332	PKP	40	10.50	-5.5X
MKS	48.55	276	ePd	29	30.00	2.1	SAO	83.79	50	e(P)	33	14.20	1.1	SOTA	142.17	334	ePKP	40	11.50	-5.1X
KLB	48.70	241	eP	29	29.00	0.1	MHC	83.87	49	ePc	33	14.20	0.5		1.0s		8.00nm			
MRWA	49.94	244	eP	29	27.50	-10.9X	ARN	83.95	49	eP	33	14.60	0.6				ic	40	13.10	
MUN	50.07	240	eP	29	38.00	-1.3	SYP	84.03	52	eP	33	15.00	0.5				i	40	25.30	
NANU	50.08	253	eP	29	39.00	-0.5	PRI	84.12	50	ePc	33	15.70	0.8	OGA	142.53	334	ePKP	40	14.00	-3.3X
TRT	54.58	271	ePc	30	12.50	-0.8	BCH	84.19	52	eP	33	15.50	0.2	CDF	142.73	339	ePKP	40	13.70	-3.8X
	0.8s	99.00nm			5.9mb		WDC	84.54	46	ePc	33	17.30	0.5	HAU	143.40	339	ePKP	40	14.90	-3.6X
KKM	55.24	288	ePc	30	18.20	-0.1	ORV	84.85	47	ePc	33	18.20	-0.2	SAL	143.73	333	PKP	40	14.00	-5.1X
	1.1s	100.20nm			5.8mb		CMB	85.06	49	ePc	33	19.40	-0.1	MDI	143.95	334	PKP	40	15.00	-4.4X
KAKJ	56.97	333	P	30	25.60	-4.6X	MIN	85.10	46	e(P)	33	19.80	0.0	ARV	144.16	328	PKP	40	18.00	-1.9
CHJJ	57.36	332	P	30	33.40	0.4	FRI	85.16	50	ePc	33	19.90	0.0	VAI	144.27	335	PKP	40	17.90	-2.1
IIDJ	57.39	331	P	30	33.00	-0.2	MWC	85.39	53	eP	33	22.00	0.6	SFI	144.39	330	PKP	40	19.40	-0.8
MTMJ	58.35	332	P	30	39.30	-0.6	IMA	85.40	15	eP	33	20.70	0.0	ORI	144.46	321	PKP	40	18.80	-1.8
NIIJ	58.35	333	P	30	39.40	-0.4		1.8s	71.60nm			5.6mb		PGD	144.49	330	PKP	40	19.80	-0.9
TSRJ	58.36	330	P	30	39.90	0.0	ISA	85.59	52	eP	33	23.00	0.8	CRE	144.56	329	PKP	40	19.00	-1.7
SHK	59.28	326	eP	30	45.50	-0.9	SBB	85.74	53	eP	33	23.00	0.0	ASS	144.60	328	PKP	40	18.50	-2.3
HOOJ	61.11	339	eP	30	55.10	-3.6X	RVR	85.84	53	eP	33	23.00	-0.4	DUI	144.61	325	PKP	40	19.00	-1.9
KUSJ	61.28	341	eP	30	58.80	-1.1	BAR	85.94	55	eP	33	25.00	1.0	FLN	144.66	347	ePKP	40	18.80	-1.8
ASAJ	62.86	340	eP	31	11.20	0.7	PLM	86.02	54	eP	33	25.00	0.4		1.5s	88.80nm				
SBA	63.23	180	eP	31	12.60	0.2	CLC	86.31	52	eP	33	26.00	0.2	AQU	144.72	327	PKP	40	19.90	-1.1
SSE	63.90	316	P	31	17.00	-0.5	GSC	86.74	52	eP	33	28.00	0.1	MME	144.74	331	PKP	40	20.80	-0.4
	1.0s	29.00nm			5.4mb		TPC	86.91	54	eP	33	29.00	0.3	LDF	144.74	346	ePKP	40	19.20	-1.5
KGM	66.05	279	eP	31	32.50	0.7	KVN	87.10	49	eP	33	29.20	-0.5		0.7s	11.00nm				
QIZ	66.26	299	eP	31	34.40	1.4	TNP	87.40	50	eP	33	30.80	-0.4	TDS	144.78	320	PKP	40	20.30	-0.8
ADK	67.58	10	e(P)	31	39.80	-1.0		1.6s	49.38nm			5.5mb		ORX	144.78	335	PKP	40	19.02	-2.0
WHN	68.36	312	Pc	31	46.00	-0.1	GLA	87.52	55	eP	33	33.00	1.3	ORO	144.79	335	PKP	40	18.50	-2.6X
	1.0s	30.00nm			5.4mb		GUN	89.92	299	P	33	43.80	0.2	SGO	144.84	323	PKP	40	20.00	-1.1
MDJ	68.51	332	Pc	31	46.70	0.0	PNT	89.94	39	ePc	33	43.00	0.2	BOB	144.86	333	PKP	40	18.50	-2.7X
	1.4s	70.00nm			5.6mb		PKI	90.22	298	P	33	45.00	0.0	LOR	144.87	341	ePKP	40	20.00	-1.0
Z	28s	0.80um			4.8MszX			1.2s	62.00nm			5.7mb			1.5s	73.10nm				
		eS	40	44.00			DMN	90.49	298	P	33	46.50	0.4	BDI	144.88	331	PKP	40	19.00	-2.2
DL2	68.62	323	Pc	31	47.00	-0.5		1.4s	173.00nm			6.1mb		SDI	144.94	325	PKP	40	19.00	-2.4X
	3.0s	400.00nm			6.0mb		GKN	91.00	299	P	33	47.80	-0.5	AZI	144.96	326	PKP	40	20.50	-0.8
IPM	68.99	281	ePc	31	51.40	1.1	NEW	91.08	40	eP	33	47.00	-1.1	BSS	144.99	323	PKP	40	19.80	-1.6
	1.4s	112.30nm			5.8mb			1.2s	17.05nm			5.3mb		LBF	145.08	341	iPKPc	40	20.70	-0.7
SNY	69.49	326	Pc	31	52.00	-0.8	MSU	91.29	51	eP	33	50.30	0.8		1.3s	57.75nm				
	5.0s	700.00nm			6.1mb	X				epP	33	57.40	22km	GRR	145.10	347	iPKPc	40	20.70	-0.6
Z	22s	0.90um			5.0Msz		DUG	91.33	49	eP	33	50.20	0.6		0.8s	30.90nm				
E	22s	0.60um								epP	33	56.70	20km	SSF	145.16	341	iPKPc	40	21.20	-0.3
		S	40	53.00			WMQ	93.12	314	iPc	33	58.00	0.3		1.2s	92.25nm				
		SS	45	22.00			ALQ	94.72	55	eP	34	03.50	-1.9	PII	145.18	331	PKP	40	20.00	-1.6
TIA	69.70	318	Pc	31	53.40	-0.8	Z	20s	1.01um			5.3Msz		LSD	145.26	336	PKP	40	21.99	-0.1
CN2	69.90	329	Pc	31	55.00	-0.3	YKA	97.17	27	eP	34	13.70	-1.9	LPL	145.37	337	iPKPc	40	22.40	0.2
	1.0s	100.00nm			5.9mb			0.9s	3.50nm			4.9mb			1.0s	32.00nm				
Z	20s	0.60um			4.8Msz		ZOBO	116.69	117	PKP	39	30.00	0.2	LPG	145.38	336	iPKPc	40	22.60	0.3
		eS	41	05.00			Z	25s	0.40um			4.9MszX			0.7s	28.10nm				
PSI	70.45	278	ePd	31	58.90	-0.3				i	40	35.00		SMF	145.42	341	iPKPc	40	21.80	-0.2
GYA	72.19	304	P	32	10.00	0.3				LR	15	42.00			1.4s	102.40nm				
BJI	72.60	321	eP	32	11.50	-0.1	SIV	122.82	120	PKP	39	39.20	-1.6	PCP	145.43	334	PKP	40	21.38	-0.7
	1.8s	100.00nm			5.6mb		8UL	127.14	230	iPKPc	39	45.30	-4.0X	AVF	145.45	341	iPKPc	40	21.70	-0.3
Z	24s	1.59um			5.2MszX		KRI	128.32	234	iPKPd	40	03.90	12.3X		1.4s	87.15nm				
NST	73.45	291	eP	32	18.20	1.2	APO	130.42	343	ePKP	39	53.70	-0.4	RSP	145.47	336	PKP	40	20.76	-1.5
TIY	73.63	317	iPc	32	17.80	0.0		0.6s	2.40nm					RMP	145.47	326	PKP	40	21.90	-0.3
	1.4s	100.00nm			5.7mb		NB2	130.70	345	PKP	39	54.20	-0.5	LPF	145.47	347	iPKPc	40	22.00	0.0
Z	28s	1.20um			5.0MszX			0.9s	4.50nm						1.4s	165.55nm				
		PP	35	04.00			MLR	135.64	322	ePKP	40	04.00	-0.7	RDP	145.50	326	PKP	40	22.10	-0.2
XAN	74.10	312	P	32	20.50	-0.1	KRA	136.15	330	ePKP	40	05.30	0.0	CKI	145.64	334	PKP	40	21.00	-1.4
SDN	74.63	18	eP	32	21.20	-1.9				e	42	45.40		BNI	145.78	336	PKP	40	23.20	0.4
KMI	74.81	301	Pc	32	26.50	1.4	SPC	136.57	329	ePKP	40	08.00	1.6	BGF	145.81	342	iPKPc	40	23.10	0.5
	1.6s	110.00nm			5.6mb		KSP	137.24	334	ePKP	40	07.80	0.4		1.3s	77.60nm				
Z	28s	1.30um			5.1MszX		BZS	138.09	324	ePKP	40	09.50	0.4	FIN	145.84	334	PKP	40	22.30	-0.5
SPA	75.45	180	iPc	32	27.00	-1.0				e	08	34.00		RRL	145.85	336	PKP	40	23.53	0.5
	1.7s	76.56nm			5.5mb		BRG	138.20	335	ePKP	40	08.80	-0.4	SOI	145.89	318	PKP	40	23.00	0.0
HHC	75.93	319	P	32	31.60	0.6		1.2s	22.00nm					ROB	145.92	334	PKP	40	22.61	-0.4
Z	28s	1.50um			5.2MszX		CLL	138.23	336	ePKP	40	10.00	0.8	PZZ	146.06	335	PKP	40	22.61	-0.7
CD2	76.47	307	eP	32	34.50	0.3		1.6s	21.00nm					PLDF	146.09	340	PKP	40	23.44	0.2
BTO	76.78	318	P	32	36.50	0.7				e	40	26.00		ENR	146.16	334	PKP	40	22.51	-0.9
LZH	78.74	312	Pc	32	47.00	0.2	SRO	138.45	329	ePKP	40	11.40	1.7	AGO	146.18	341	PKP	40	24.14	0.9
	2.0s	150.00nm			5.7mb					e	43	01.60		STV	146.19	335	PKP	40	23.33	-0.1
Z	20s	0.80um			5.0Msz					e	08	34.00		MAF	146.20	342	iPKPc	40	24.40	1.1
SVW	80.87	17	eP	32	57.10	-0.5				e	11	09.30		IMI	146.22	334	PKP	40	23.84	0.4
GTA	83.07	314	iPc	33	10.80	1.3				e	11	24.50		ATN	146.22	319	PKP	40	23.00	-0.6
	1.6s	100.00nm			5.7mb		PRU	138.63	334	PKP	40	12.00	2.0	TCF	146.25	342	iPKPc	40	24.40	1.0
PMR	83.20	19	eP	33	09.00	-0.5	Z	18s	1.00um			5.6Msz		SBF	146.45	334	iPKPc	40	24.80	0.9
	1.5s	83.30nm			5.7mb		E	20s	0.60um						0.7s	48.50nm				
PCC	83.39	49	e(P)	33	11.30	0.3	ZST	138.78	330	ePKP	40	10.40	0.1	LSF	146.48	343	iPKPc	40	24.90	1.1
GCC	83.49	49	e(P)	33	13.50	2.0	KHC	139.69	334	ePKP	40	10.90	-1.1	PYM	146.49	341	PKP	40	23.74	-0.1
BRK	83.63	48	e(P)	33	12.60	0.4	Z	19s	0.80um			5.5Msz		MFF	146.61	345	ePKP	40	25.50	1.6
FHC	83.64	45	eP	33	13.20	0.9	E	19s	0.50um						1.1s	46.40nm				
BKS	83.65	48	ePc	33	12.80	0.4	VAY	139.91	318	ePKP	40	03.50	-9.0X	PGF	146.79	331	iPKPc	40	26.20	1.7
	1.3s	90.00nm			5.8mb		SKO	140.28	320	ePKP	40	05.00	-8.2X		1.3s	151.65nm				
Z	20s	2.00um			5.5Msz		OHR	141.16	319	ePKP	40	06.50	-8.4X	MNO	146.84	319	PKP	40	27.00	2.2
N	20s	0.50um					LJU	141.54	330	e(PKP)	40	11.00	-4.4X	LBL	146.87	340	PKP	40	26.84	2.5X
E	20s	0.70um					VBY	141.57	329	e(PKP)	40	11.50	-3.9X	FRF	147.03	335	iPKPc	40	26.60	1.9
		epP	33	18.70	19km		CEY	141.81	330	e(PKP)	40	09.50	-6.4X		0.8s	24.20nm				

```
LRG   147.23 335 iPKPc 40 27.50   2.5X
       1.5s   151.45nm
LMR   147.27 335 iPKPc 40 27.40   2.3
       1.5s   125.35nm
USI   147.29 322 PKP   40 26.70   1.5
RJF   147.35 342 iPKPc 40 27.80   2.6X
       1.3s    83.05nm
CAI   147.44 129 iPKPd 40 26.10  -0.1
CAF   147.52 341 iPKPc 40 28.50   3.0X
LFF   147.91 343 iPKPc 40 29.40   3.4X
       0.7s    24.25nm
LPO   148.01 342 ePKP  40 29.80   3.6X
       0.8s    21.50nm
BCAO  148.21 254 iPKPc 40 29.50   2.0
       0.1s   108.00nm
EPF   149.77 342 ePKP  40 34.00   4.9X
STS   151.69 355 ePKP  40 39.00   7.1X
ETOR  152.50 343 ePKP  40 41.00   7.7X
GUD   153.19 347 ePKP  40 42.00   7.7X
TOL   153.89 346 ePKP  40 50.00  14.9X
KIC   169.07 222 (PKP) 40 50.66  -0.6
LIC   169.15 220 (PKP) 40 50.66  -0.6
       1.5s    52.50nm
LKO   171.89 232 PKP   40 52.28  -0.4
     S.D. = 1.0  on 187 of 222 obs.
-------------------------------------
*  JUN  22, 1990  21h 48m 43.15± 0.83s
   14.566 S ±11.4km  168.034 E ±16.0km
   DEPTH =  33.0km  (normal)
   4.7mb (  3 obs.)
 VANUATU ISLANDS                 (186)

DZM     7.62 191 iPc    50 32.40  -2.3
HNR     9.41 302 eP     51 00.00   0.4
                eS      51 26.00
RMQ    21.57 234 e(P)   53 33.00   1.0
                i       53 59.70
COO    21.78 220 eP     53 36.00   1.9
CMS    26.39 227 eP     54 19.00   0.5
WB5    32.55 256 eP     55 12.80  -0.9
WRA    32.58 256 P      55 14.00   0.1
       0.5s     0.70nm          3.8mb
ASPA   33.42 249 eP     55 19.60  -1.7
       1.2s    17.00nm          4.8mb
WARB   40.32 247 eP     56 20.00   0.6
                e       56 46.00
SBA    63.30 180 e(P)   59 12.00   1.4
LZH    78.76 312 eP     00 41.50  -3.0
       3.0s    76.00nm          5.2mb
PKI    90.27 298 P      01 43.00   0.2
DMN    90.54 298 P      01 44.80   0.9
VOY   141.84 331 e(PKP)08 19.00   5.5X
                e       08 40.50
VAI   144.24 335 PKP    08 16.50  -0.9
ORI   144.47 321 PKP    08 18.00  -0.1
TDS   144.78 321 PKP    08 19.00   0.4
SDI   144.94 325 PKP    08 18.00  -0.9
BNI   145.75 336 PKP    08 21.00   0.7
SOI   145.90 319 PKP    08 22.00   1.5
BCAO  148.32 254 iPKPd 08 28.50   3.4X
       1.1s   242.00nm
                ic      08 54.50
     S.D. = 1.4  on  19 of  21 obs.
-------------------------------------
   JUN  22, 1990  21h 49m 08.64± 0.12s
   14.607 S ± 3.3km  167.939 E ± 3.1km
   DEPTH =  22.4km  (  5 depth phases)
   5.7mb ( 39 obs.)  5.4Msz (  6 obs.)
 VANUATU ISLANDS                 (186)
      Ms 5.6 (BRK).
      CENTROID, MOMENT TENSOR    (HRV)
      Data Used: GDSN
      L.P.B.: 15S, 32C
      Centroid Location:
      Origin Time        21:49:13.6 0.4
      Lat 14.53S  FIX;Lon 167.90E  FIX
      Dep  15.0 FIX Half-duration  2.6
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 3.11 0.12  Mtt= 0.64 0.15
        Mff=-3.75 0.17  Mrt= 0.64 0.34
        Mrf= 2.49 0.32  Mtf= 0.20 0.13
       Principal Axes:
        T  Val=  4.05  Plg=69  Azm=303
        N        0.51      11      183
        P       -4.56      18       90
      Best Double Couple:Mo=4.3*10**17
       NP1:Strike=163 Dip=29 Slip=  67

       NP2:          9      64       102
PVC     3.14 173 iPc    50 02.00   4.2X
                iS      50 39.20
DZM     7.56 191 iPd    50 58.70  -1.7
                iS      52 23.40
SGE    10.04 109 ePd    51 36.30   1.5
VUN    10.65 110 eP     51 44.10   1.0
SVA    10.68 110 eP     51 45.10   1.6
BRS    19.01 226 iPd+   53 33.00   1.4
                i       53 40.00
                e       54 08.00
                eS      56 57.00
KDB    20.95 282 eP     53 54.50   1.9
CTA    21.40 252 iPc    53 58.30   1.2
       1.0s   226.00nm          5.5mb
     Z 20s     23.40um          5.6Msz
                iS      57 59.00
COO    21.69 220 iP     54 02.00   2.0
PUZ    25.10 161 P      54 33.20   0.0
QLP    25.13 238 ePc    54 35.00   1.3
NOZ    25.53 161 eP     54 38.50   1.3
CMS    26.30 227 iPc    54 45.60   1.1
       0.9s   139.00nm          5.6mb
CNB    26.53 216 iPc    54 48.00   1.3
CAN    26.74 216 Pc     54 49.20   0.6
TCW    27.08 169 P      54 51.30  -0.2
CAW    27.12 168 P      54 50.90  -1.1
MRW    27.17 169 P      54 52.40   0.0
MTW    27.26 167 P      54 51.50  -1.7
WDW    27.26 168 P      54 52.40  -0.8
BLW    27.46 168 P      54 53.70  -1.3
MOW    27.46 168 P      54 53.70  -1.4
QIS    27.63 254 iPc    54 56.90   0.1
LTZ    28.32 173 P      55 02.30  -0.6
STK    29.57 230 iPc    55 15.00   0.8
       1.4s   154.00nm          5.6mb
TOO    30.34 217 ePc    55 21.20   0.2
       1.0s    88.00nm          5.5mb
WB5    32.45 256 iP     55 38.00  -1.7
WRA    32.48 256 Pc     55 45.30   5.4X
       1.3s    75.20nm          5.5mb
ADE    33.20 227 eP     55 47.00   1.0
ASPA   33.32 249 iPc    55 46.30  -1.0
       1.1s   127.00nm          5.8mb
     Z 22s     19.32um          5.8MszX
                iPcP    58 27.80
                eS      01 05.70
                LR      07 52.40
MTN    35.78 268 eP     56 09.00   0.6
FORR   39.90 239 eP     56 43.00   0.3
       0.5s    73.00nm          5.7mb
TVO    41.17 100 eP     56 59.00   5.6X
       1.2s    80.00nm          5.3mb
PMO    42.65  96 iP     57 14.00   8.6X
       1.2s    70.00nm          5.3mb
VAH    42.88  97 iP     57 15.80   8.4X
       1.2s    55.00nm          5.2mb
TPT    42.91  96 iP     57 16.30   8.7X
       1.2s    60.00nm          5.2mb
RUV    43.12  97 iP     57 17.80   8.5X
       1.2s    75.00nm          5.3mb
COOL   45.75 241 eP     57 30.00  -0.4
MEKA   47.50 247 iPc    57 44.20   0.0
MKS    48.56 276 ePd    57 54.50   1.9
KLB    48.72 241 eP     57 53.00  -0.7
MRWA   49.96 244 iPd    58 02.00  -1.2
MUN    50.09 240 eP     58 04.00  -0.1
NANU   50.10 253 eP     58 04.60   0.3
TSM    52.84 287 ePc    58 27.70   2.5
TRT    54.58 271 ePc    58 36.70  -1.3
       0.7s   113.90nm          6.0mb
KKM    55.24 288 ePc    58 43.40   0.5
       1.1s   192.10nm          6.0mb
BAG    56.01 302 eP     58 48.00  -0.5
KAKJ   56.94 333 P      58 54.00  -0.6
CHJJ   57.33 332 P      58 56.70  -0.7
IIDJ   57.37 331 P      58 57.00  -0.7
WKYJ   57.49 328 eP     58 58.30  -0.3
TKSJ   58.11 327 eP     59 01.70  -1.1
MTMJ   58.32 332 P      59 03.80  -0.6
NIIJ   58.32 333 P      59 03.70  -0.6
TSRJ   58.34 330 P      59 03.90  -0.5
YAMJ   58.66 334 P      59 06.70   0.0
OFUJ   58.78 336 P      59 06.90  -0.5
SHK    59.26 326 ePc    59 09.80  -1.1
YONJ   59.34 327 eP     59 10.80  -0.6

HOOJ   61.08 339 eP     59 23.30   0.2
KUSJ   61.25 341 eP     59 23.40  -0.9
MRRJ   61.90 338 eP     59 29.00   0.3
QZH    62.13 309 eP     59 31.00   0.4
ASAJ   62.83 340 eP     59 34.50  -0.4
SSE    63.88 316 iPc    59 41.50  -0.5
       1.1s   100.00nm          5.9mb
                pP      59 47.50  19km
HKC    64.19 304 iP     59 45.40   1.2
GZH    65.24 304 P      59 52.20   1.2
NJ2    66.04 315 iPd    59 57.00   1.0
       1.2s   170.00nm          6.1mb
                pP      00 03.50  21km
KGM    66.05 279 ePd    59 57.50   1.1
QIZ    66.25 299 eP     59 57.00  -0.6
                PP      02 29.00
WHN    68.34 312 Pc     00 10.50  -0.1
       1.2s   100.00nm          5.8mb
                pP      00 17.00  21km
MDJ    68.48 332 iPc    00 11.50   0.3
       1.2s   100.00nm          5.8mb
DL2    68.59 323 Pc     00 11.00  -1.0
       1.5s   200.00nm          6.0mb
IPM    68.99 281 ePd    00 16.20   1.3
       1.2s   150.10nm          6.0mb
SNY    69.46 326 iPc    00 16.00  -1.2
       5.0s  1100.00nm          6.2mb X
     Z  20s     1.20um          5.1Msz
     N  24s     1.00um
                S       09 27.00
TIA    69.68 318 Pc     00 17.70  -1.0
CN2    69.88 329 iPc    00 19.20  -0.5
       1.0s   100.00nm          5.9mb
                eS      09 32.00
SNG    70.17 283 eP     00 22.60   0.5
                eS      09 39.00
GYA    72.18 304 P      00 34.80   0.6
BJI    72.58 321 eP     00 36.00  -0.1
       1.4s   140.00nm          5.8mb
     Z  26s     2.20um          5.3MszX
                eS      10 02.00
LOE    72.64 294 iPc    00 37.00   0.1
NNT    72.74 288 eP     00 33.40  -4.1X
NST    73.44 291 eP     00 43.00   1.4
TIY    73.61 317 iPc    00 43.00   0.7
       1.4s   200.00nm          6.0mb
     Z  25s     1.90um          5.3MszX
     E  19s     0.80um
                S       10 09.00
XAN    74.09 312 Pc     00 45.00  -0.1
SDN    74.60  18 eP     00 45.90  -1.6
KMI    74.79 301 Pc     00 50.50   0.9
       1.5s   220.00nm          6.0mb
     Z  32s     1.90um          5.2MszX
BDT    75.01 293 eP     00 50.80   0.2
SPA    75.49 180 iPc    00 51.10  -1.7
       1.1s    34.52nm          5.3mb
CHG    75.62 294 ePc    00 54.90   0.7
       1.1s    62.66nm          5.6mb
HHC    75.91 319 P      00 56.20   0.7
       1.4s   100.00nm          5.7mb
     Z  28s     3.00um          5.5MszX
CD2    76.45 307 P      00 58.90   0.2
       1.3s   100.00nm          5.7mb
                eS      10 43.00
BTO    76.76 318 P      01 01.00   0.7
     N  15s     0.80um
     E  18s     0.80um
                pP      01 07.00  19km
LZH    78.72 312 Pc     01 12.00   0.7
       1.5s   200.00nm          5.9mb
     Z  32s     1.30um          5.1MszX
                pP      01 22.00  32km
                eS      11 08.00
                sS      11 28.00
SVW    80.84  17 eP     01 21.90  -0.1
TTA    82.23  16 eP     01 29.00  -0.2
MAW    82.24 202 iPd    01 30.00   0.8
GTA    83.05 314 iPc    01 35.00   0.9
       1.4s   200.00nm          6.1mb
     Z  22s     0.90um          5.1Msz
     N  10s     0.30um
PMR    83.17  19 eP     01 33.40  -0.6
       0.1s   154.20nm          7.0mb X
PCC    83.37  49 ePc    01 36.00   0.5
GCC    83.46  49 ePc    01 36.60   0.6
BRK    83.61  48 eP     01 37.30   0.6
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22d 22h

FHC	83.61	45	eP	01	37.90	1.1	CIR	124.42	231	iPKPd	08	07.50	-0.9	BSS	144.96	323	PKP	08	44.50	-1.5
BKS	83.63	48	iPd	01	38.10	1.2				ipP	08	14.30		LBF	145.05	341	iPKPc	08	45.40	-0.6
	1.1s	133.00nm			6.0mb		SUF	124.95	340	iPKP	08	08.50	0.4		1.2s	92.25nm				
Z	20s	3.00um			5.7Msz			1.2s	42.80nm					GRR	145.07	347	iPKPc	08	45.20	-0.7
N	20s	1.60um					NUR	127.00	338	iPKP	08	11.60	-0.6		1.1s	73.25nm				
E	20s	2.30um						1.0s	32.00nm					SSF	145.13	341	ePKP	08	45.80	-0.3
		eLR	26	44.00		BUL	127.16	230	iPKPc	08	10.30	-3.6X	PII	145.15	331	PKP	08	44.00	-2.2
PRS	83.65	50	ePc	01	37.60	0.6				ipP	08	20.70		LSD	145.23	336	PKP	08	45.87	-0.8
BLP	83.69	52	eP	01	38.00	0.8	KRI	128.35	234	iPKPd	08	28.90	12.7X	LPL	145.34	337	ePKP	08	47.00	0.2
SAO	83.76	50	eP	01	37.80	0.2	NB2	130.67	345	PKP	08	18.00	-1.2		1.3s	113.70nm				
MHC	83.84	49	ePc	01	38.90	0.8		1.0s	9.20nm					LPG	145.35	336	ePKP	08	47.10	0.2
ARN	83.93	49	eP	01	39.20	0.7	HFS	130.79	343	ePKP	08	16.00	-3.4X		1.3s	131.75nm				
SYP	84.00	52	eP	01	40.00	1.0		1.0s	15.70nm					SMF	145.39	341	ePKP	08	46.40	-0.1
LLA	84.07	50	e(P)	01	39.80	0.6	BBTK	133.52	312	iPKPc	08	25.00	-0.4	PCP	145.40	334	PKP	08	45.05	-1.6
PRI	84.10	50	ePc	01	40.20	0.8	PRNI	134.12	298	ePKP	08	27.00	0.3	AVF	145.42	341	iPKPc	08	46.30	-0.2
BCH	84.17	52	eP	01	40.70	0.9	MLR	135.62	322	ePKPc	08	29.00	-0.2		1.2s	95.20nm				
PHAM	84.18	51	eP	01	40.60	0.9	KRA	136.12	330	ePKP	08	29.00	-0.8	RSP	145.44	336	PKP	08	45.46	-1.3
TOA	84.50	20	eP	01	41.20	0.3		1.2s	58.00nm					LPF	145.44	347	iPKPc	08	46.60	0.1
WDC	84.51	46	ePc	01	41.70	0.4				e	11	09.80			1.2s	163.65nm				
LTCM	84.65	46	eP	01	42.60	0.7	LWI	136.21	251	e(PKP)	08	29.00	-2.4	RMP	145.45	326	PKPc	08	46.60	-0.2
ABL	84.70	52	eP	01	43.20	0.6	SPC	136.55	329	ePKP	08	31.30	0.3	RDP	145.48	326	PKP	08	46.60	-0.3
ORV	84.83	47	ePc	01	43.20	0.3				e	11	11.70		CKI	145.61	334	PKP	08	46.00	-1.0
CMB	85.03	49	ePc	01	44.20	0.2	KSP	137.22	334	ePKP	08	32.40	0.5	BGF	145.78	342	ePKP	08	47.60	0.4
MIN	85.07	46	ePc	01	43.90	-0.3	BRG	138.17	335	iPKP	08	34.00	0.3		1.3s	119.15nm				
FRI	85.13	50	ePc	01	44.70	0.3		1.0s	12.00nm					FIN	145.81	334	PKP	08	44.95	-2.4
PAS	85.25	53	eP	01	45.00	-0.1				i	08	36.40		RRL	145.82	336	PKP	08	48.13	0.5
LBFM	85.28	45	eP	01	46.00	0.7				e	11	21.80		ROB	145.89	334	PKP	08	47.00	-0.5
IMA	85.37	15	eP	01	45.10	-0.1				e	14	30.00		DOI	145.98	335	PKP	08	46.00	-1.7
	1.6s	41.40nm			5.4mb		CLL	138.20	336	ePKP	08	29.00	-4.7X	PZZ	146.04	335	PKP	08	46.79	-1.1
MWC	85.37	53	eP	01	46.00	0.1		1.3s	26.00nm					PLDF	146.06	340	PKP	08	48.85	1.1
ISA	85.57	52	eP	01	47.00	0.3				i	08	35.40		ENR	146.13	335	PKP	08	46.90	-1.1
SBB	85.71	53	eP	01	48.00	0.5	PRU	138.60	334	PKP	08	34.10	-0.4	AGO	146.15	341	PKP	08	48.73	0.9
RVR	85.82	53	eP	01	48.00	0.1	Z	19s	0.60um			5.4Msz		STV	146.16	335	PKP	08	46.79	-1.2
BAR	85.91	55	eP	01	49.00	0.5				e	08	36.00		MAF	146.17	342	iPKPc	08	49.10	1.2
PLM	85.99	54	eP	01	50.00	0.9	ZST	138.75	330	ePKP	08	34.70	-0.1		1.5s	114.90nm				
FBA	86.04	17	eP	01	47.10	-1.3				e	11	25.80		IMI	146.19	334	PKP	08	47.61	-0.4
LSA	86.05	302	P	01	51.00	1.3	MOX	139.26	337	e(PKP)	08	36.00	0.3	ATN	146.20	319	PKP	08	47.50	-0.7
CLC	86.29	52	eP	01	51.00	0.7	KHC	139.66	334	iPKP	08	36.00	-0.5	TCF	146.22	342	ePKP	08	49.00	1.0
GSC	86.71	52	eP	01	53.00	0.6		1.1s	7.50nm						1.5s	127.95nm				
TPC	86.89	54	eP	01	54.00	0.7				e	11	31.60		SBF	146.42	334	ePKP	08	49.40	1.0
KVN	87.07	49	eP	01	53.00	-1.2	VAY	139.89	318	ePKP	08	28.70	-8.4X		0.9s	104.85nm				
GMW	87.26	39	eP	01	54.60	-0.1	GRF	140.18	336	e(PKP)	08	32.00	-5.4X	LSF	146.45	343	ePKP	08	49.40	1.1
GLA	87.50	55	eP	01	57.00	0.8	SKO	140.26	320	ePKP	08	29.00	-8.8X		1.1s	63.50nm				
LON	87.54	40	eP	01	56.00	-0.1				i	08	37.20		PYM	146.46	341	PKP	08	50.23	1.8
MCW	87.71	38	eP	01	57.10	0.2				i	11	30.00		MFF	146.58	345	iPKPc	08	50.00	1.5
RMW	87.83	40	eP	01	57.40	-0.1	PTJ	140.91	329	ePKP	08	32.90	-6.0X		0.9s	42.60nm				
GUN	89.90	299	Pd	02	09.00	0.8	OHR	141.13	319	ePKP	08	32.00	-7.4X	PGF	146.77	331	iPKPc	08	50.80	1.8
PNT	89.91	39	ePc	02	07.00	-0.3		1.1s	76.00nm					MNO	146.82	319	PKP	08	51.50	2.1
	1.3s	62.00nm			5.7mb					i	08	39.00		LBL	146.84	340	PKP	08	51.58	2.7X
PKI	90.21	298	Pd	02	10.00	0.5	MEM	141.22	342	PKP	08	42.00	2.8X	FRF	147.00	335	ePKP	08	51.20	2.0
DMN	90.48	298	Pd	02	11.40	0.7	LJU	141.52	330	e(PKP)	08	35.50	-4.4X	LRG	147.20	335	iPKPc	08	52.00	2.5X
GKN	90.99	299	Pd	02	13.00	0.1	VBY	141.54	329	ePKP	08	36.50	-3.5X		1.1s	119.65nm				
NEW	91.05	40	eP	02	12.30	-0.3	CEY	141.79	330	e(PKP)	08	36.50	-3.9X	LMR	147.24	335	iPKPc	08	51.90	2.3
	1.3s	33.02nm			5.5mb		FVI	141.93	332	PKP	08	39.50	-1.1		1.1s	117.20nm				
MSU	91.26	51	eP	02	14.40	0.4	DOU	142.10	343	PKPc	08	42.10	1.3	USI	147.27	322	PKP	08	51.00	1.2
DUG	91.30	49	eP	02	14.50	0.4				e	09	12.50		RJF	147.32	342	iPKPc	08	52.30	2.6X
	1.3s	21.14nm			5.3mb		SQTA	142.15	334	iPKPc	08	35.90	-5.3X		1.2s	89.25nm				
HPI	92.19	45	eP	02	19.00	0.8		1.0s	26.80nm					CAI	147.45	128	iPKPd	08	50.90	0.1
DAU	92.50	49	eP	02	20.00	0.2				i	08	40.70		CAF	147.49	341	iPKPc	08	53.00	3.0X
KOD	92.99	280	eP	02	24.00	1.5	CDF	142.70	339	ePKP	08	37.20	-4.8X		1.1s	52.50nm				
WMO	93.10	314	iPc	02	22.20	0.0		1.0s	10.00nm					LFF	147.87	343	iPKPc	08	53.80	3.2X
HYB	93.71	287	eP	02	25.50	0.1	BSF	143.37	339	ePKP	08	39.20	-4.0X		1.2s	101.15nm				
GBA	93.83	283	Pc	02	26.60	0.7	HAU	143.37	339	ePKP	08	39.40	-3.7X	LPO	147.98	342	iPKPc	08	54.30	3.5X
	1.0s	20.40nm			5.5mb			0.9s	16.40nm						1.1s	83.05nm				
BW06	94.39	47	eP	02	27.70	-0.7	SAL	143.70	333	PKP	08	41.00	-2.6	CVT	148.16	321	PKP	08	54.20	3.0
ALQ	94.70	55	eP	02	29.00	-0.9	MDI	143.92	334	PKP	08	41.00	-3.0X	EPF	149.73	342	ePKP	08	58.60	5.0X
	1.3s	12.98nm			5.2mb		RSM	144.07	329	PKP	08	43.40	-0.9		1.1s	40.30nm				
Z	20s	2.25um			5.6Msz		ARV	144.13	328	PKP	08	43.00	-1.5	ECRI	150.91	345	e(PKP)	09	02.50	7.1X
SES	95.50	39	eP	02	35.00	2.0	SFI	144.36	330	PKP	08	44.40	-0.4	EMON	150.98	353	ePKP	09	02.00	6.5X
GOL	96.68	51	eP	02	39.30	0.4	PGD	144.46	330	PKP	08	44.40	-0.9	STS	151.66	355	ePKP	09	03.50	7.0X
YKA	97.14	27	eP	02	38.60	-1.5	CRE	144.53	329	PKP	08	44.00	-1.3	EROQ	151.71	340	ePKP	09	03.00	6.4X
	1.0s	10.50nm			5.3mb		ASS	144.58	328	PKP	08	43.50	-1.8	ETOR	152.47	343	ePKP	09	06.00	8.2X
NDI	97.49	298	iPd	02	41.80	-0.6	DUI	144.59	325	PKP	08	43.50	-1.9	GUD	153.16	347	ePKP	09	07.50	8.6X
RSSD	98.62	47	e(P)	02	35.00	-12.5X	FLN	144.63	347	iPKPc	08	43.10	-2.0	TOL	153.86	346	ePKP	09	08.50	8.8X
TUL	103.42	56	e(Pdif	03	10.20	1.2		1.1s	43.95nm					EVIA	154.62	342	ePKP	09	10.50	9.7X
	0.9s	2.80nm			5.0mb		AQU	144.70	327	PKP	08	44.80	-0.7	KIC	169.10	222	PKP	09	15.80	0.0
		LR	37	00.00		LDF	144.71	346	ePKP	08	43.50	-1.8		1.1s	30.00nm				
MAIO	113.27	303	ePKP	07	47.00	0.2		1.2s	53.55nm					LIC	169.18	220	PKP	09	15.72	-0.2
CNCB	116.59	117	PKP	07	54.50	0.3	MME	144.71	331	PKP	08	44.80	-1.0		1.3s	42.00nm				
LPB	116.61	117	ePKP	08	04.00	9.9X	ORX	144.75	335	PKP	08	43.10	-2.5	TIC	169.49	222	PKP	09	16.00	-0.1
ZOBO	116.70	117	PKP	07	54.00	-0.5	ORO	144.76	335	PKP	08	42.00	-3.6X	LKO	171.92	232	PKP	09	17.08	-0.2
FRB	117.53	25	ePKP	07	49.00	-4.9X	SGO	144.82	323	PKP	08	45.00	-0.7		1.2s	45.00nm				
DAG	117.73	2	ePKP	07	52.20	-1.8	BOB	144.83	333	PKP	08	45.50	-0.2		S.D. = 1.0 on 244 of 290 obs.					
KEV	119.77	345	ePKP	07	57.00	-1.0	LOR	144.84	341	ePKP	08	44.50	-1.1							
SOD	121.57	344	ePKP	08	08.00	6.5X		1.2s	59.50nm											
SIV	122.83	120	PKP	08	04.50	-0.9	BDI	144.86	331	PKP	08	43.70	-2.1		JUN 22, 1990 23h 00m 08.98± 1.01s					
TAB	123.67	306	ePKP	08	07.00	0.3	AZI	144.93	326	PKPc	08	45.20	-0.6		1.670 N ± 3.7km 127.238 E ± 5.9km					
															DEPTH = 140.0 ± 10.1 km					

5.1mb (20 obs.)
HALMAHERA (267)

AAI	5.41	170	ePd	01	29.20	0.6
			eS	02	16.50	
TSM	9.50	286	ePd	02	24.80	1.1
	0.5s	443.90nm			6.4mb X	
MKS	10.35	229	iPc	02	36.40	1.5
			iS	04	26.50	
KKM	11.82	292	ePc	02	53.20	-1.2
	0.7s	51.80nm			5.2mb	
			e	03	11.00	
MTN	14.93	165	eP	03	32.50	-1.7
TRT	17.29	237	ePc	04	02.80	-0.6
	0.7s	112.20nm			5.3mb	
WB5	22.53	162	iPc	04	58.00	0.1
			iPcP	07	36.00	
			eS	08	53.50	
WRA	22.58	162	Pc	04	58.20	-0.2
	0.7s	140.20nm			5.5mb	
KGM	23.91	271	ePc	05	12.70	1.4
QIZ	24.25	316	eP	05	14.40	-0.1
QZH	24.60	341	eP	05	17.80	0.2
QIS	25.20	152	iPc	05	20.00	-3.3X
ASPA	26.01	166	iPc	05	29.80	-0.9
	0.8s	73.00nm			5.3mb	
			eS	10	04.30	
IPM	26.33	277	ePc	05	34.50	0.7
	0.9s	38.30nm			5.0mb	
NANU	26.66	205	iPd	05	37.00	0.4
	0.6s	42.00nm			5.2mb	
WARB	27.70	181	iPd	05	46.00	0.0
PSI	28.31	273	ePd	05	31.30	-20.4X
MEKA	29.35	196	iPd	06	00.40	-0.4
SSE	29.82	350	P	06	04.50	-0.4
WHN	31.21	338	Pd	06	18.00	0.9
	0.6s	20.00nm			5.0mb	
GYA	31.60	323	P	06	20.00	-0.7
BDT	31.78	301	eP	06	20.00	-2.2
FORR	32.35	179	eP	06	25.50	-1.5
MRWA	32.54	198	iPd	06	28.50	-0.3
COOL	32.89	190	eP	06	31.00	-0.8
KMI	33.20	317	Pc	06	35.50	0.7
BAL	33.63	197	eP	06	38.00	-0.1
KLB	34.28	194	iPc	06	43.00	-0.7
	0.6s	45.00nm			5.4mb	
MUN	35.06	196	eP	06	50.00	-0.3
TIA	35.62	346	eP	06	53.70	-1.3
STK	36.04	159	iPc	06	58.70	0.2
	0.8s	68.00nm			5.5mb	
			iPP	08	21.70	
CD2	36.60	325	eP	07	02.80	-0.6
CMS	37.41	153	eP	07	10.00	0.0
	0.7s	19.00nm			5.0mb	
			epP	07	37.00	118kmX
BRS	37.94	141	iPd	07	14.30	-0.3
			i	07	47.50	
			e	08	23.00	
ADE	38.00	165	e(P)	07	14.10	-0.9
	0.9s	48.74nm			5.3mb	
TIY	38.37	341	iPd	07	18.40	0.3
BJI	39.49	347	eP	07	27.00	-0.3
	1.2s	26.00nm			4.9mb	
COO	39.75	146	iPd	07	30.30	0.7
SNY	40.11	356	Pd	07	32.00	-0.3
LZH	40.53	330	eP	07	36.50	0.5
	2.0s	39.00nm			4.8mb	
BWA	41.05	153	iPc	07	42.30	2.1
			e	09	16.80	
HHC	41.50	342	P	07	44.40	0.5
CN2	41.98	358	eP	07	47.40	-0.2
CAN	42.05	153	iPc	07	49.20	0.8
			e	09	27.70	
CNB	42.22	153	iPc	07	51.00	1.2
TOO	42.55	158	eP	07	52.00	-0.4
			e	09	26.00	
MDJ	42.81	2	eP	07	53.50	-0.9
LSA	44.19	313	P	08	07.40	1.1
GTA	45.12	330	P	08	13.60	0.5
GUN	47.35	307	P	08	31.40	0.1
PKI	47.58	307	P	08	32.80	-0.2
	0.8s	13.00nm			4.7mb	
DMN	47.84	307	P	08	34.80	-0.1
	0.8s	30.00nm			5.1mb	
GKN	48.39	307	P	08	38.80	-0.2
	1.0s	300.00nm			6.0mb	
KOD	50.17	282	eP	08	57.00	4.1X
HYB	50.31	291	iPd	08	53.60	0.0
	1.0s	60.00nm			5.3mb	
GBA	50.65	286	Pd	08	55.10	-1.1
	0.8s	14.10nm			4.8mb	
NDI	54.68	304	iPd	09	14.60	-11.3X
WMQ	54.70	326	iPd	09	25.80	-0.1
SDN	78.60	34	eP	11	56.30	-0.1
MAW	82.01	200	iP	12	15.90	1.7
TTA	82.50	27	eP	12	17.80	0.8
IMA	84.05	24	eP	12	25.70	0.8
	0.9s	5.60nm			4.4mb	
PMR	85.50	28	eP	12	32.10	0.1
	0.7s	12.80nm			4.9mb	
MBC	93.84	13	eP	13	11.00	0.0
TUL	125.19	43	(PKP)	18	39.00	-15.9X
			LR	57	00.00	
ZOBO	159.04	135	ePKP	20	13.00	20.1X

S.D. = 0.9 on 60 of 66 obs.

? JUN 23, 1990 00h 20m 02.95± 4.40s
31.450 S ±52.5km 178.911 E ±34.1km
DEPTH = 455.6 ± 47.9 km
4.1mb (1 obs.)
KERMADEC ISLANDS REGION (177)

PUZ	6.63	184	eP	21	44.80	-0.2
			S	23	04.50	
NOZ	7.19	185	P	21	51.00	0.1
KHZ	11.76	200	P	22	40.70	0.0
WRA	41.51	275	Pd	27	10.40	0.1
	0.4s	2.90nm			4.1mb	
SUF	144.19	339	iPKP	38	41.50	-4.9X
	0.6s	22.90nm				
NUR	146.32	337	ePKP	38	47.80	-2.2
NB2	149.31	348	PKP	38	55.80	1.0
	0.7s	3.50nm				
HFS	149.66	345	ePKP	38	56.30	1.1
	0.9s	5.90nm				

S.D. = 1.5 on 7 of 8 obs.

• JUN 23, 1990 00h 29m 11.66± 2.36s
31.435 S ±10.7km 69.020 W ±15.4km
DEPTH = 125.2 ± 25.3 km
SAN JUAN PROVINCE, ARGENTINA (137)

ZON	0.31	111	eP	29	29.00	-0.8
RTBS	0.43	239	iPd	29	30.00	0.0
RTLL	0.48	78	iPc	29	30.00	-0.4
RTCV	0.59	136	ePc	29	31.50	0.4
CFA	0.69	105	iPd	29	32.10	0.3
			eS	29	46.80	
RTRS	1.32	343	iPc	29	38.00	0.3
JACH	1.82	227	iPd	29	44.50	0.7
			iS	30	10.00	
PEL	2.21	219	eP	29	48.50	-0.1
			i(S)	30	17.10	
ROCH	2.28	227	iPd	29	49.50	-0.1
			iS	30	18.60	
PCH	2.52	210	iPc	29	53.80	1.3
			iS	30	25.50	
TACH	2.74	216	iP	29	54.80	-0.6
			iS	30	29.00	
CHCH	2.85	208	iPd	29	57.30	0.5
			i	30	28.20	
			iS	30	32.50	
LNV	3.22	218	iP	30	00.00	-1.7
			i	30	32.10	
			iS	30	38.00	

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

• JUN 23, 1990 00h 37m 57.13± 1.15s
37.365 N ±12.8km 50.087 E ±14.5km
DEPTH = 10.0km (geophysicist)
4.4mb (2 obs.)
CASPIAN SEA (338)
Felt at Rudbar.

TEH	1.93	147	iPd	38	30.50	0.0
TAB	3.06	284	eP	38	47.00	0.4
KER	3.86	220	eP	38	58.00	0.0
MAIO	7.62	95	eP	39	55.00	4.1X
			eS	41	23.00	
SQTA	30.12	302	iPc	44	08.00	-1.2
	0.7s	6.20nm			4.6mb	
			i	44	13.80	
HFS	32.42	326	eP	44	29.70	0.7
	0.6s	2.10nm			4.2mb	

S.D. = 1.0 on 5 of 6 obs.

? JUN 23, 1990 01h 00m 23.04± 1.04s
27.977 S ± 9.2km 66.738 W ±20.6km
DEPTH = 200.0km (geophysicist)
CATAMARCA PROVINCE, ARGENTINA (130)

RTRS	3.23	227	iPc	01	17.00	1.1
RTLL	3.67	204	iPd	01	21.50	0.3
CFA	3.85	199	iPd	01	23.90	0.4
			eS	02	08.80	
RTCV	4.17	202	ePd	01	27.90	0.3
RTBS	4.36	212	ePd	01	27.90	-2.0
ANT	5.39	321	e(P)	01	43.00	-0.1
SIV	13.03	25	eP	03	22.00	0.0

S.D. = 1.2 on 7 of 7 obs.

JUN 23, 1990 01h 39m 43.89± 0.40s
39.164 N ± 4.8km 20.560 E ± 3.4km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)
MD 3.5 (ATH). ML 2.8 (THE).

VLS	0.99	179	ePb	40	03.00	0.4
LIT	1.76	57	ePnd	40	14.60	0.0
			eSn	40	42.00	
OHR	1.95	5	iPn	40	18.00	0.5
NEO	2.07	85	ePn	40	20.00	0.8
ITM	2.25	151	ePg	40	26.00	4.2X
LCI	2.32	301	P	40	24.00	1.2
			eSn	40	50.00	
THE	2.36	51	ePn	40	23.10	-0.2
VAY	2.65	35	ePn	40	26.40	-0.9
KNT	2.68	41	ePn	40	28.00	0.1
SKO	2.88	13	ePn	40	30.00	-0.7
			iSg	41	08.50	
			Lg	41	21.00	
SRS	3.03	49	ePn	40	32.60	-0.2
VLI	3.08	142	ePn	40	34.00	0.5
BRT	3.09	305	P	40	35.50	1.8
			eSn	41	12.00	
TDS	3.31	280	P	40	37.00	0.2
SOI	3.69	254	P	40	41.00	-1.2
			eSn	41	20.00	
VTS	3.97	30	iP	40	46.00	-0.2
RZN	4.05	50	eP	40	47.00	-0.4
ATN	4.11	258	P	40	46.50	-1.7
SGO	4.27	291	P	40	50.00	-0.4
BSS	4.71	292	P	40	56.50	-0.2
DUI	5.28	300	P	41	05.00	0.1
SDI	5.74	298	P	41	11.50	0.3

S.D. = 0.8 on 21 of 22 obs.

% JUN 23, 1990 02h 49m 39.63± 1.17s
46.403 N ± 9.8km 3.472 E ± 7.0km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 1.6 (LDG).

SMF	0.35	46	Pg	49	47.20	0.3
			Sg	49	52.20	
AVF	0.40	348	Pg	49	47.90	0.2
			Sg	49	53.30	
BGF	0.46	290	Pg	49	49.10	0.1
			Sg	49	55.30	
MAF	0.65	254	Pg	49	52.60	-0.1
			Sg	50	01.90	
SSF	0.66	2	Pg	49	52.60	-0.2
			Sg	50	01.50	
LBF	0.68	31	Pg	49	52.90	-0.2
			Sg	50	02.00	
TCF	0.88	263	Pg	49	56.60	0.0
			Sg	50	08.30	
LOR	0.91	17	Pg	49	56.80	-0.2
			Sg	50	08.60	

S.D. = 0.2 on 8 of 8 obs.

• JUN 23, 1990 02h 57m 19.13± 1.19s
5.872 S ±15.1km 151.177 E ±15.0km
DEPTH = 64.4 ± 15.4 km
4.3mb (2 obs.)
NEW BRITAIN REGION (192)

RAB	1.94	31	iPc	57	50.60	0.2
			iS	58	22.00	
KDB	5.35	228	eP	58	38.00	-0.4
WB5	21.47	228	eP	02	04.00	-0.2

23d 03h

WRA 21.53 228 Pd 02 04.50 -0.3
0.5s 4.60nm 4.1mb
DZM 21.85 139 iPc 02 07.90 -0.2
ASPA 24.28 221 eP 02 33.10 1.3
0.4s 8.00nm 4.5mb
APO 116.71 338 ePKP 15 57.00 -0.4
0.3s 1.20nm
S.D. = 0.9 on 7 of 7 obs.

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* JUN 23, 1990 03h 22m 00.76± 0.46s
14.849 S ±12.0km 66.030 E ± 9.1km
DEPTH = 10.0km (geophysicist)
4.9mb (8 obs.)
MID-INDIAN RISE (429)

KRI 35.06 262 eP 29 10.00 13.7X
BUL 36.02 256 iPc 29 03.00 -1.5
DMN 46.08 24 P 30 27.00 -0.2
PKI 46.17 24 P 30 27.60 -0.3
GKN 46.26 23 P 30 27.60 -0.8
GUN 46.66 24 P 30 31.00 -0.8
ASPA 64.17 109 eP 32 37.90 -0.4
1.1s 13.00nm 5.0mb
WRA 65.00 105 Pd 32 43.90 0.2
1.0s 10.70nm 5.0mb
WB5 65.04 105 eP 32 44.20 0.3
KHC 78.75 328 eP 34 06.50 1.5
PRU 78.80 329 eP 34 05.50 0.2
LBF 82.84 322 eP 34 26.30 -0.4
0.9s 7.35nm 4.9mb
LOR 83.05 323 eP 34 27.40 -0.4
0.7s 2.75nm 4.6mb
SSF 83.16 322 eP 34 29.00 0.7
1.0s 8.00nm 4.9mb
BGF 83.30 322 eP 34 28.40 -0.6
0.8s 6.05nm 4.9mb
LPO 83.41 319 eP 34 30.90 1.2
1.1s 19.55nm 5.2mb
RJF 83.50 320 eP 34 29.40 -0.7
LSF 83.94 321 eP 34 33.30 1.0
0.8s 6.05nm 4.9mb
MAT 84.99 50 eP 34 38.00 0.2
INK 125.12 9 ePKP 40 54.00 -8.4X
YKA 132.42 0 ePKP 41 16.30 -0.3
0.8s 1.00nm
PNT 145.32 6 ePKP 41 40.00 -0.5
NEW 146.58 4 ePKP 41 44.00 1.4
1.0s 19.50nm
RSSD 149.62 346 ePKP 41 53.00 5.2X
BW06 151.91 353 lPKPc 41 58.20 6.9X
UYO 153.91 321 e(PKP) 41 54.20 0.1
S.D. = 0.8 on 22 of 26 obs.

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* JUN 23, 1990 03h 55m 20.90± 2.39s
16.456 N ±15.4km 61.649 W ±19.7km
DEPTH = 125.6 ± 22.7 km
LEEWARD ISLANDS (92)

SEG 0.15 111 ePd 55 38.37 -0.9
S 55 49.90
PAG 0.43 184 eP 55 39.68 0.3
S 55 52.60
SFG 0.48 115 eP 55 40.12 0.6
MGH 0.60 296 eP 55 40.66 0.3
S 55 54.00
BPA 0.62 341 iPd 55 40.52 0.0
S 55 53.50
BBL 0.94 170 ePc 55 43.14 0.0
S 55 58.50
NEV 1.11 308 ePc 55 44.74 -0.1
S 56 01.00
FDF 1.78 164 ePd 55 51.89 -0.5
S 56 16.30
CRM 1.83 157 iPd 55 53.11 0.1
BIM 2.01 164 eP 55 55.48 0.3
MVM 2.03 159 iPd 55 55.49 0.1
S 56 21.50
S.D. = 0.5 on 11 of 11 obs.

? JUN 23, 1990 04h 27m 42.47± 0.95s
62.867 S ±18.6km 157.837 W ±16.6km
DEPTH = 10.0km (geophysicist)
4.9mb (3 obs.)
SOUTH PACIFIC CORDILLERA (691)

SBA 18.61 203 eP 32 02.20 0.8
SPA 27.29 180 eP 33 27.70 -1.0
1.2s 30.99nm 4.9mb
WRA 62.34 280 P 38 07.00 -0.2
1.6s 10.90nm 4.8mb
ARE 73.84 94 eP 39 10.00 -9.2X
CNCB 75.14 98 Pd 39 27.30 0.2
LPB 75.33 97 P 39 28.00 0.0
CCH 75.47 100 Pc 39 29.80 1.2
ZOBO 75.54 97 Pc 39 30.00 0.6
1.0s 22.50nm 5.2mb
SIV 78.97 103 P 39 46.10 -1.6
MBC 140.98 14 ePKP 47 05.50 -7.0X
1.0s 2.00nm
S.D. = 1.1 on 8 of 10 obs.

JUN 23, 1990 05h 01m 44.51± 0.11s
0.611 S ± 2.7km 146.473 E ± 3.1km
DEPTH = 23.9km (geophysicist)
5.9mb (58 obs.) 6.0Msz (24 obs.)
ADMIRALTY ISLANDS REGION (199)
Ms 5.8 (BRK), 5.6 (PAS). Depth from broadband displacement seismograms.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=235 Dip=90 Slip= 16
NP2: 145 74 180
Principal Axes:
T Plg=11 Azm=101
P 11 9
Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting with a moderate normal component. The preferred fault plane is not determined.
RADIATED ENERGY
No. of sta: 5 Focal mech. C
Energy 1.1±0.3*10**13 Nm
MOMENT TENSOR SOLUTION
Dep 17 No. of sta: 13
Moment Tensor; Scale 10**18 Nm
Mrr=-0.53 Mtt=-1.39
Mff= 1.92 Mrt=-0.30
Mrf=-0.21 Mtf= 1.44
Principal axes:
T Val= 2.49 Plg= 6 Azm=111
N -0.53 80 235
P -1.96 8 20
Best Double Couple:Mo=2.2*10**18
NP1:Strike=156 Dip=80 Slip=-178
NP2: 65 88 -10
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 31C M.W.: 10S, 21C
Centroid Location:
Origin Time 05:01:53.7 0.2
Lat 0.35S 0.02 Lon 146.36E 0.02
Dep 24.1 2.0 Half-duration 4.6
Moment Tensor; Scale 10**18 Nm
Mrr=-0.88 0.03 Mtt=-1.00 0.03
Mff= 1.88 0.03 Mrt=-0.77 0.10
Mrf=-0.06 0.11 Mtf= 1.32 0.02
Principal Axes:
T Val= 2.43 Plg= 6 Azm=112
N -0.46 56 211
P -1.97 33 18
Best Double Couple:Mo=2.2*10**18
NP1:Strike=161 Dip=62 Slip=-159
NP2: 61 72 -29

LAT 6.03 175 iPd 03 19.40 4.9X
MNDI 6.18 207 eP 03 20.00 3.1X
RAB 6.71 122 iPc+ 03 21.50 -2.7X
iS 05 24.00
KDB 8.83 176 eP 03 54.00 0.3
GUA 14.14 354 eP 05 04.00 -1.6
1.0s 440.00nm 6.1mb
eS 07 33.50
GUMO 14.20 354 eP 05 04.90 -1.4
1.5s 810.81nm 6.2mb
PJG 14.20 354 eP 05 05.00 -1.3
HNR 16.02 124 eP 05 26.00 -4.0X
eS 07 15.00
CTA 19.36 181 iPd 06 11.90 0.4
1.0s 450.00nm 5.7mb
iS 09 51.00
MTN 19.47 231 iPd 06 12.50 -0.3
QIS 20.93 198 iPd 06 27.60 -0.5
0.6s 144.00nm 5.6mb
MNI 21.73 275 ePd 06 34.00 -2.2
1.0s 554.50nm 5.9mb
DAV 22.21 291 eP 06 42.10 1.1
WB5 22.52 211 iPd 06 44.00 -0.1
eS 10 37.00
e 38 28.90
WRA 22.59 211 Pd 06 44.30 -0.4
0.9s 268.60nm 5.7mb
RMQ 25.82 175 iPd 07 15.40 -0.4
1.0s 196.00nm 5.7mb
e 07 32.00 72kmX
e 10 48.00
ASPA 25.96 207 ePd 07 17.10 -0.1
0.9s 662.00nm 6.3mb
Z 16s 36.66um 6.0MszX
eS 11 51.40
LR 18 48.60
BRS 27.31 168 iPc 07 28.00 -1.5
i 07 37.00 32kmX
i 07 40.00
MKS 27.35 260 ePc 07 31.70 1.8
PVC 27.40 130 iPc 07 34.00 3.6X
TSM 28.78 280 ePd 07 45.00 2.1
DZM 28.87 139 iPc 07 42.00 -1.7
QCP 29.34 302 eP 07 47.50 -0.4
COO 30.24 171 eP 07 55.00 -0.9
BAG 30.64 305 eP 08 00.00 0.3
CMS 30.71 181 eP 07 58.00 -1.9
e 08 32.00 162kmX
WARB 31.80 215 iPd 08 09.20 -0.4
0.5s 29.00nm 5.4mb
BWA 33.69 177 iPd 08 25.00 -1.0
e 11 08.70
e 23 32.30
TRT 34.45 257 ePd 08 35.20 2.4
CAN 34.61 176 eP 08 32.80 -1.1
i 11 10.90
e 23 33.20
CNB 34.63 176 eP 08 33.00 -1.1
e 10 05.00 531kmX
FORR 34.76 208 eP 08 33.80 -1.4
KAGJ 34.91 336 eP 08 36.40 -0.1
ADE 34.94 191 e(P) 08 36.40 -0.4
SGE 35.23 120 eP 08 38.10 -1.4
VUN 35.87 121 ePd 08 44.90 0.0
SVA 35.91 121 eP 08 44.60 -0.6
WKYJ 36.12 345 P 08 46.00 -0.8
KUMJ 36.13 337 eP 08 46.50 -0.3
TKSJ 36.34 342 eP 08 46.30 -2.2
TOO 36.79 181 eP 08 51.50 -0.8
QZH 37.07 315 P 08 56.80 2.0
Z 20s 13.00um 5.7Msz
E 18s 12.40um
pP 09 07.00 35kmX
S 14 34.00
NANU 37.17 232 iPd 08 55.80 0.1
0.4s 20.00nm 5.3mb
MEKA 37.29 224 iPc 08 56.30 -0.4
MAJO 37.75 349 ePd 08 57.45 -3.0
epPc 09 05.17 26kmX
esPd 09 08.49
MAT 37.75 349 (P) 08 59.00 -1.4
1.8s 818.18nm 6.3mb
Z 19s 11.11um 5.7Msz
eS 14 42.00
COOL 38.51 216 iPd 09 06.20 -0.7
1.0s 128.00nm 5.7mb
HKC 38.86 308 iP 09 12.00 2.2
iS 15 08.00
SSE 39.63 325 iPd 09 17.00 0.8
1.0s 210.00nm 5.8mb
Z 20s 18.90um 5.9Msz
N 18s 14.50um
E 16s 5.00um
eScP 15 12.00
S 15 14.00
eScS 19 20.00
GZH 39.92 308 P 09 18.00 -0.6
Z 20s 19.30um 5.9Msz
N 16s 9.20um
E 18s 16.30um
S 15 25.00
MRWA 40.67 223 iPd 09 24.50 -0.3
QIZ 40.91 300 P 09 27.60 0.7
N 17s 8.50um

	E	20s	14.20um			
			pP	09	36.00	28kmX
			PP	11	00.00	
KLB		41.07	219 iPd	09	27.00	-1.0
BAL		41.08	221 eP	09	28.00	-0.2
NJ2		41.69	324 Pd	09	35.00	1.9
	Z	18s	7.70um			5.6Msz
	N	17s	9.30um			
	E	18s	9.80um			
			S	15	52.00	
MUN		42.31	220 eP	09	38.00	-0.2
RKG		43.23	217 eP	09	48.00	2.3
WHN		43.51	318 eP	09	49.20	1.2
		1.0s	100.00nm			5.6mb
	Z	20s	10.60um			5.7Msz
	E	20s	17.90um			
			pP	09	56.00	23kmX
			eS	16	16.00	
SAP		43.72	355 eP	09	48.00	-1.4
DL2		45.46	333 Pd	10	03.00	-0.6
		1.2s	700.00nm			6.5mb
	Z	20s	10.30um			5.8Msz
	N	16s	6.10um			
			sP	10	18.00	
			S	16	43.00	
TIA		45.68	326 Pd	10	04.40	-1.0
	Z	22s	14.80um			5.9Msz
	N	15s	6.80um			
	E	17s	10.40um			
			S	16	46.00	
			SS	19	59.00	
IPM		45.69	277 ePc	10	06.40	0.6
		1.2s	159.60nm			5.8mb
PPI		46.07	270 eP	10	09.00	0.2
		1.0s	83.20nm			5.6mb
SNG		46.39	280 eP	10	11.00	-0.3
		1.0s	150.00nm			5.9mb
			eS	16	24.80	
GYA		46.85	308 P	10	15.40	0.5
	N	18s	5.30um			
	E	18s	14.70um			
			pP	10	24.00	29kmX
			sP	10	31.00	
			S	17	06.00	
			sS	17	21.00	
SNY		47.04	337 iPd	10	15.00	-1.0
		1.2s	200.00nm			6.0mb
	Z	26s	15.90um			5.9MszX
	N	18s	6.50um			
	E	17s	5.30um			
			S	17	03.00	
			sS	17	25.00	
PUZ		47.36	146 P	10	20.50	1.8
MDJ		47.47	344 Pd	10	19.00	-0.4
		1.2s	200.00nm			6.0mb
	Z	40s	9.00um			5.4MszX
	N	16s	3.90um			
			iS	17	13.00	
YSS		47.55	357 P	10	17.00	-2.9X
LOE		47.55	294 eP	10	20.00	-0.4
TCW		47.60	152 P	10	20.60	0.2
PSI		47.65	274 ePc	10	20.40	-0.9
		1.2s	168.30nm			6.0mb
MSZ		47.82	159 P	10	26.30	4.2X
MRW		47.82	151 P	10	22.60	0.4
SNZO		47.88	151 P	10	23.00	0.4
			PP	12	28.00	
			S	17	21.00	
CAW		47.90	151 P	10	22.70	-0.1
LTZ		47.93	154 P	10	22.20	-0.9
WDW		47.99	151 P	10	23.00	-0.5
CN2		48.05	340 iPc	10	23.60	-0.3
		1.0s	100.00nm			5.8mb
	Z	20s	17.00um			6.0Msz
	N	18s	10.40um			
	E	18s	6.00um			
			pP	10	36.00	45kmX
			PcP	11	52.00	
			ePP	12	17.00	
			ScP	15	39.00	
			S	17	17.00	
			ScS	20	10.00	
			SS	20	42.00	
MTW		48.15	151 P	10	23.60	-1.2
NNT		48.18	287 eP	10	25.40	0.0
KHZ		48.20	153 P	10	25.30	0.2
MOW		48.23	151 P	10	24.90	-0.5
BLW		48.30	151 P	10	25.00	-0.9
NST		48.54	292 eP	10	29.00	0.9
BJI		49.00	329 iPd	10	30.07	-1.2
		1.2s	120.00nm			5.8mb
	Z	12s	16.60um			6.2MszX
	N	20s	8.05um			
			ec	10	37.68	25kmX
			ed	10	40.33	
			ePP	12	20.00	
			eS	17	28.00	
XAN		49.28	318 P	10	31.60	-2.0
	N	18s	12.10um			
	E	18s	6.80um			
			pP	10	47.20	60kmX
			PP	12	24.00	
			S	17	36.00	
TIY		49.41	324 eP	10	32.50	-2.1
	Z	14s	23.80um			6.3MszX
	N	19s	11.30um			
			S	17	39.00	
KMI		49.42	304 Pc	10	35.00	-0.1
		1.8s	170.00nm			5.8mb
			PcP	11	56.50	
			sS	17	56.00	
BDT		50.00	293 eP	10	38.80	-0.5
		1.0s	77.30nm			5.7mb
CHG		50.49	295 iPc	10	43.00	-0.1
		1.2s	69.92nm			5.5mb
			eS	18	08.00	
CHTO		50.49	295 ePc	10	42.34	-0.8
			ed	10	47.15	
			epPc	10	50.29	27kmX
CD2		51.24	312 eP	10	47.80	-0.9
	Z	24s	13.10um			5.9MszX
	N	15s	8.80um			
			pP	10	58.50	37kmX
			S	18	05.00	
			SS	21	37.00	
BSI		51.46	277 ePd	10	50.00	-0.5
HHC		52.04	327 Pd	10	54.00	-0.6
		0.6s	100.00nm			5.9mb
	Z	20s	18.70um			6.1Msz
	N	17s	8.10um			
	E	16s	2.90um			
			pP	11	03.00	30kmX
			S	18	12.00	
BTO		52.73	325 iPd	10	59.00	-0.8
	N	18s	10.10um			
	E	18s	10.70um			
			pP	11	13.00	52kmX
			S	18	22.00	
			eSS	22	00.50	
LZH		53.86	317 ePc	11	06.46	-1.8
		1.5s	230.00nm			6.0mb
	Z	30s	9.00um			5.7MszX
	N	20s	6.90um			
	E	16s	3.30um			
			ec	11	10.43	
			epPc	11	13.25	22kmX
			esPd	11	17.05	
			sP	11	24.00	
			PcP	12	12.50	
			PP	13	10.00	
			iS	18	43.42	
			sS	18	56.00	
SMY		57.97	19 eP	11	36.30	-1.0
GTA		58.33	319 iPc	11	39.60	-0.7
		1.0s	200.00nm			6.1mb
	Z	25s	9.60um			5.8MszX
	E	17s	4.20um			
			PP	13	48.00	
			S	19	38.00	
			ScS	21	28.00	
			SS	23	27.00	
OPA		58.49	64 P	11	44.00	2.5X
SHL		58.75	301 iP	11	42.50	-1.0
			iS	19	48.00	
LSA		60.67	305 eP	11	56.00	-1.0
	N	17s	1.50um			
			S	20	15.00	
ADK		60.81	25 eP	11	56.40	-0.5
		1.4s	855.70nm			6.7mb
GUN		64.56	301 P	12	21.60	-1.2
AFR		64.84	109 iP	12	24.40	0.1
		0.9s	125.00nm			6.0mb
PKI		64.87	301 P	12	23.40	-1.4
PPT		65.04	109 iP	12	25.60	0.0
		0.9s	110.00nm			6.0mb
PAE		65.04	109 iP	12	25.60	0.0
		0.9s	75.00nm			5.8mb
DMN		65.14	301 P	12	25.60	-0.9
PPN		65.17	109 iP	12	26.40	0.0
		0.9s	130.00nm			6.1mb
TVO		65.37	109 iP	12	28.00	0.2
		0.9s	125.00nm			6.0mb
GKN		65.64	301 P	12	28.40	-1.2
TBI		66.04	115 iP	12	32.30	0.4
		0.8s	135.00nm			6.1mb
PMO		66.33	106 iP	12	33.70	-0.2
		0.9s	150.00nm			6.1mb
TPT		66.60	106 iP	12	35.30	-0.3
		0.9s	70.00nm			5.8mb
VAH		66.61	106 iP	12	35.20	-0.5
		0.9s	65.00nm			5.8mb
RUV		66.84	106 iP	12	36.80	-0.3
		0.9s	85.00nm			5.9mb
WMQ		68.42	318 iPd	12	46.92	0.2
		6.0s	16.00nm			4.3mb X
	Z	20s	9.00um			6.0Msz
	N	19s	3.80um			
	E	18s	3.00um			
			epPc	12	54.04	23kmX
			esPd	12	57.68	
			iS	21	48.33	
			SS	26	14.00	
HYB		69.16	289 eP	12	48.00	-3.7X
		1.0s	100.00nm			5.9mb
			i	12	51.00	10kmX
KOD		69.47	281 eP	12	56.30	2.4
			eS	22	37.00	
GBA		69.80	285 Pc	12	54.30	-1.2
		1.1s	42.50nm			5.5mb
SDN		70.44	29 eP	12	58.20	-0.5
NDI		72.17	300 iPc	13	08.20	-1.6
			eS	22	33.00	
POO		73.74	289 iPc	13	18.70	-0.4
			iS	22	47.50	
ANM		73.83	20 eP	13	19.90	1.2
BOM		74.75	290 eP	13	23.50	-1.4
			eS	23	00.00	
KSH		75.42	311 P	13	31.60	3.0X
			S	23	04.00	
KDC		75.48	29 P	13	45.30	17.0X
SVW		75.60	25 eP	13	29.80	0.7
TTA		76.33	23 eP	13	32.40	-0.8
SBA		77.93	176 P	13	42.80	1.1
PMR		78.62	26 P	13	45.30	-0.4
		0.9s	30.00nm			5.3mb
IMA		78.74	21 eP	13	46.70	0.1
RKT		79.23	113 iP	13	50.60	0.8
		1.3s	125.00nm			5.8mb
TOA		80.11	26 eP	13	54.20	0.3
COL		80.46	23 ePd	13	54.31	-1.3
			ec	13	57.62	11kmX
			ed	14	07.56	
			eS	23	58.62	
			eSP	24	34.54	
FBA		80.46	23 P	13	54.40	-1.2
		0.8s	18.28nm			5.2mb
			pP	14	06.80	42kmX
QUE		81.25	301 iP-	14	01.10	0.3
		1.1s	1924.05nm			7.0mb X
			eS	24	13.90	
SIT		84.10	33 eP	14	16.00	1.5
INK		86.87	22 eP	14	28.00	-0.1
		1.1s	195.00nm			6.2mb
			pP	14	46.00	64kmX
MAW		86.99	202 iP	14	28.90	0.2
MAIO		87.92	306 iPc-	14	36.00	2.0
		0.8s	18.30nm			5.5mb
			eS	25	18.00	
SPA		89.39	180 eP	14	40.40	-0.1
		1.3s	51.67nm			5.7mb
FHC		90.05	49 e(P)	14	44.60	0.7
WDC		91.15	50 ePd	14	49.20	0.3
PCC		91.28	53 eP	14	48.80	-0.8
BRK		91.37	52 eP	14	49.80	-0.2
BKS		91.39	52 iPc	14	52.00	1.9
		1.3s	276.00nm			6.5mb
	Z	20s	3.40um			5.8Msz
	N	20s	1.10um			
	E	20s	3.40um			
			eS	25	46.80	
			eLQ	38	23.20	

23d 05h

			eLR	42	28.00		BZS	114.12	321	ePKP	20	26.00	2.3	CDF	120.81	330	ePKP	20	35.90	-0.6
MBC	91.59	14	ePc	14	49.20	-1.1				e	50	58.50		SDI	120.96	320	PKP	20	36.00	-1.0
	1.2s	198.00nm				6.4mb	UYO	114.13	53	iPKPc	20	24.70	0.6	ASS	120.96	322	PKP	20	36.50	-0.4
GCC	91.59	53	eP	14	50.50	-0.5	VTS	114.34	317	iPKP	20	25.00	0.5	DOU	120.98	332	PKPc	20	37.70	1.1
LON	91.62	43	eP	14	47.97	-3.1X	KSP	114.66	328	ePdiff	16	36.00	1.6	Z	20s	4.20um				6.1Msz
			esPd	14	57.24		KSP	114.66	328	ePKP	20	26.50	1.9				e	32	05.00	
MIN	91.86	50	eP	14	51.80	-0.6	BUD	114.85	324	ePKP	20	25.50	0.4	SFI	120.99	323	PKP	20	38.00	1.2
MHC	91.87	53	ePd	14	52.20	-0.3	SRO	115.10	324	ePKP	20	26.70	1.2	AZI	121.05	321	PKP	20	36.50	-0.5
ORV	91.95	51	ePd	14	52.50	-0.2	VAY	115.28	316	ePdiff	16	37.70	0.3	CRE	121.09	323	PKP	20	36.00	-1.2
ARN	91.96	53	P	14	55.00	2.2	VAY	115.28	316	iPKP	20	25.60	-0.5	PGD	121.09	323	PKP	20	37.00	-0.3
SAO	92.03	53	eP	14	52.40	-0.7	ZST	115.61	325	ePKP	20	27.40	0.9	FIR	121.43	323	e(PKP)	20	38.00	0.3
PRS	92.10	54	ePd	14	53.40	0.0	SKO	115.79	317	iPKP	20	27.50	0.4	BSF	121.43	329	ePKP	20	37.40	-0.3
LLA	92.44	54	eP	14	54.60	-0.4		1.0s	71.00nm						1.2s	41.65nm				
PRI	92.67	54	ePd	14	56.50	0.3				i	20	34.00		HAU	121.55	330	ePKP	20	37.60	-0.2
CMB	92.85	52	ePd	14	56.10	-0.8				i	20	40.30		VAI	121.63	326	PKP	20	37.20	-0.8
			ec	14	59.41		BUL	115.81	247	ePKP	20	21.10	-6.8X	RDP	121.63	321	PKP	20	38.00	-0.2
			ePPd	15	04.54	26kmX	BRG	115.88	329	ePdiff	16	41.20	1.4	BDI	121.66	324	PKP	20	37.50	-0.7
PNT	93.02	41	iPc	14	59.40	2.0		1.0s	16.00nm					PII	121.89	324	PKP	20	38.50	-0.1
	1.2s	126.00nm				6.2mb	BRG	115.88	329	ePKP	20	27.20	0.3	DLE	122.92	341	ePKP	20	42.00	1.8
BCH	93.17	55	eP	14	59.30	0.8		1.1s	21.00nm					LPL	122.96	327	ePKP	20	40.90	0.0
SYP	93.27	56	eP	15	02.00	3.0X				i	20	47.50			0.9s	12.30nm				
FRI	93.42	53	ePd	14	59.00	-0.4				e	21	31.50		LPG	122.96	327	ePKP	20	41.10	0.1
ISA	94.47	54	eP	15	07.00	2.6X				e	22	48.60			1.0s	19.00nm				
KVN	94.61	51	eP	15	05.60	0.5	FVM	115.98	47	PKP	20	28.00	0.5	DCN	123.11	342	ePKP	20	41.80	1.2
			PcP	15	08.20		VKA	116.02	325	e(PKP)	20	28.00	0.7	RSNY	123.16	34	ePKP	20	41.90	0.9
			pP	15	19.90	48kmX		4.8s	501.00nm						1.0s	21.69nm				
YKA	94.67	27	eP	15	03.90	-0.7	Z	22s	3.30um				5.9Msz	BNI	123.29	327	PKP	20	38.90	-2.5
	1.3s	57.90nm				5.8mb				i	21	34.70		LOR	123.29	330	ePKP	20	41.20	0.0
NEW	94.73	42	eP	15	04.00	-1.3				LR	10	00.00			1.2s	37.20nm				
	0.9s	2.63nm				4.7mb X	PRU	116.07	328	ePdiff	16	42.50	1.9	DOI	123.32	326	PKP	20	34.00	-7.4X
PAS	94.78	56	eP	15	06.00	0.2	PRU	116.07	328	ePKP	20	27.50	0.2	SCP	123.36	39	ePKPd	20	39.41	-2.1
			ePP	19	23.00		Z	20s	8.60um				6.4Msz	LBF	123.42	330	ePKP	20	41.30	-0.2
			eS	26	24.00		N	20s	3.90um						1.3s	27.10nm				
			ePS	27	40.00		E	20s	6.30um					PGF	123.48	323	iPKPc	20	41.70	-0.1
			ePKKP	32	16.00		CLL	116.11	330	ePdiff	16	42.00	1.2		1.2s	71.40nm				
			eSS	32	18.00			1.3s	11.00nm					BLA	123.50	44	ePKP	20	41.80	-0.2
			eSSS	36	03.00		CLL	116.11	330	e(PKP)	20	28.00	0.7		1.0s	52.00nm				
			RScS	38	44.00			1.1s	14.00nm								e	22	13.50	
			eLg	41	00.00		Z	20s	7.00um				6.3Msz	SSF	123.61	330	ePKP	20	41.90	0.1
			eLR	44	50.00		OHR	116.59	317	iPKP	20	29.30	0.6		1.2s	44.65nm				
MWC	94.87	56	eP	15	07.00	0.5		1.2s	91.00nm					SBF	123.61	325	iPKPc	20	41.60	-0.4
SBB	95.04	55	eP	15	08.00	0.9	KHC	117.07	327	Pdiff	16	47.50	2.3		1.1s	68.35nm				
CLC	95.17	54	eP	15	09.00	1.4	KHC	117.07	327	iPKP	20	29.80	0.5	SMF	123.72	330	ePKP	20	41.90	-0.2
			e	16	52.00	450kmX		1.1s	15.00nm						1.2s	46.10nm				
RVR	95.45	56	eP	15	09.00	0.1	Z	20s	7.20um				6.3Msz	AVF	123.87	330	ePKP	20	42.00	-0.3
PLM	95.91	57	eP	15	11.00	-0.3	N	20s	3.50um						1.1s	11.00nm				
BAR	96.11	57	eP	15	13.00	1.0	E	20s	4.60um					LDF	124.20	334	ePKP	20	42.70	-0.2
EDM	96.59	37	ePc	15	15.00	1.3				S	31	26.00			1.1s	29.30nm				
GLA	97.63	57	eP	15	19.00	0.2	MOX	117.21	330	ePKP	20	31.00	1.5	FLN	124.23	334	iPKPc	20	42.80	-0.2
LRM	98.16	44	eP	15	22.20	1.0	Z	20s	7.10um				6.3Msz		1.1s	48.85nm				
TAB	98.37	308	eP	15	21.00	-1.2	N	20s	3.80um					FRF	124.24	325	ePKP	20	43.10	-0.1
SES	98.42	39	eP	15	23.00	1.0	E	20s	3.10um						1.2s	53.55nm				
	1.3s	127.00nm				6.3mb				e	31	20.00		BGF	124.28	330	ePKP	20	43.20	0.0
KEV	100.44	342	ePdiff	15	26.79	-3.8X	WET	117.44	328	iPKPc	20	31.00	1.0		1.0s	24.00nm				
			ec	15	31.76			1.2s	22.00nm					LMR	124.46	325	ePKP	20	43.40	-0.2
			esP	15	37.72		Z	20s	7.00um				6.3Msz		1.0s	36.00nm				
			iSKSpc	26	08.77		LWI	117.62	267	i(PKP)	20	34.20	2.6X	LRG	124.47	325	iPKPc	20	43.60	0.0
			eSDIF	27	09.68		GRF	117.99	329	ePdiff	16	52.00	2.8X		1.2s	80.35nm				
BW06	100.66	47	ePdiff	15	32.00	-0.6	GRF	117.99	329	ePKP	20	31.50	0.5	MAF	124.65	330	ePKP	20	44.00	0.1
	1.2s	24.32nm				5.6mb				e	20	44.10			1.3s	23.45nm				
SOD	101.67	340	iPdiff	15	36.30	0.1	VBY	118.09	323	ePKP	20	33.40	2.1	GRR	124.68	334	ePKP	20	43.90	0.1
FFC	102.81	34	ePdiff	15	40.00	-1.5	WIT	118.17	334	ePKP	20	34.00	2.8X		1.2s	53.55nm				
	1.4s	35.00nm				5.9mb	LJU	118.24	324	ePKP	20	32.50	0.9	TCF	124.78	330	ePKP	20	44.20	0.0
DAG	103.48	357	iPdiff	15	43.00	-1.0	BHG	118.25	326	ePKP	20	32.00	0.4		1.2s	50.60nm				
	0.9s	26.05nm				6.0mb		1.0s	28.00nm					LPF	125.03	334	iPKPc	20	44.80	0.3
SUF	104.01	336	ePdiff	15	45.50	-1.1	CEY	118.46	324	ePKP	20	32.60	0.5		1.2s	98.20nm				
	1.1s	18.60nm				5.8mb	VOY	118.62	324	ePKP	20	30.80	-1.6	CBN	125.08	42	ePKP	20	46.00	1.1
GOL	104.31	49	ePdiff	15	48.20	-0.7	WTS	118.66	333	ePKP	20	34.00	1.9		1.0s	37.00nm				
	1.2s	12.30nm				5.6mb		1.0s	13.00nm					LSF	125.14	331	ePKP	20	44.70	-0.1
ALQ	104.31	54	ePdiff	15	50.00	1.0				e	21	50.00			1.2s	25.30nm				
Z	18s	2.58um				5.8Msz	FUR	118.87	327	iPKPc	20	34.90	2.1	MFF	125.69	332	ePKP	20	45.90	0.0
ANMO	104.31	54	ePdiff	15	51.80	2.8X	Z	20s	6.00um				6.2Msz		1.2s	35.70nm				
RSSD	104.34	44	ePdiff	15	51.30	2.4X	FVI	118.95	325	PKP	20	33.00	0.2	CAF	125.81	329	ePKP	20	46.60	0.4
NUR	105.67	334	ePdiff	15	52.00	-2.1	BRT	119.13	318	PKP	20	34.50	1.0		1.2s	28.25nm				
APO	110.09	337	ePKP	20	14.80	-0.7	SCH	119.51	21	ePKP	20	34.00	0.3	RJF	125.82	330	ePKP	20	46.40	0.2
	1.2s	18.90nm					OGA	119.78	326	ePKP	20	35.50	0.7		1.1s	19.55nm				
MLR	111.40	319	ePKP	20	18.00	-0.7	ENN	119.90	332	ePKP	20	35.00	0.5	LPO	126.43	330	ePKP	20	47.80	0.4
TUL	112.58	51	ePKP	20	21.50	0.5		1.1s	28.00nm						1.2s	59.50nm				
	1.3s	22.30nm					MEM	119.97	332	PKP	20	36.70	2.0	LFF	126.47	330	ePKP	20	47.80	0.4
			LR	54	40.00		ORI	120.02	317	PKP	20	37.00	1.8		1.2s	32.75nm				
LNO	112.58	51	(PKP)	20	22.50	1.6	EKA	120.11	340	PKP	20	36.00	1.2	BCAO	127.86	275	iPKPc	20	51.90	0.9
PVL	112.66	317	iPKPd	20	22.00	1.1		1.2s	27.10nm						1.2s	49.00nm				
KRA	113.07	326	ePdiff	16	27.70	0.4	TDS	120.29	317	PKP	20	36.70	1.0	ETOR	130.86	328	ePKP	20	59.70	3.7X
KRA	113.07	326	ePKP	20	22.60	1.1	SGO	120.55	318	PKP	20	37.00	0.9	GUD	132.06	330	ePKP	21	02.00	3.6X
			e	21	08.00		ARV	120.56	322	PKP	20	37.00	0.9	NNA	135.21	108	ePKP	21	05.20	0.2
SPC	113.31	325	ePKP	20	23.50	1.2	BSS	120.77	319	PKP	20	37.00	0.5		1.0s	16.00nm				
RZN	113.65	316	iPKPc	20	23.00	-0.2	SAL	120.80	325	PKP	20	37.50	1.1	Z	18s	0.69um				5.4Msz

EPRU	135.36	327	ePKP	21	06.50	1.8
IFR	137.79	324	iPKP	21	12.00	2.4X
ARE	138.89	116	ePKP	21	08.00	-4.1X
AVE	139.27	326	ePKP	21	05.00	-7.0X
			i	21	36.00	
TIO	140.90	323	iPKP	21	10.00	-5.2X
			i	21	16.50	
CNCB	141.88	119	PKP	21	15.20	-2.7
LPB	141.88	118	PKP	21	16.10	-1.6
	1.0s	50.00nm				
	Z 20s	3.19um				6.1Msz
			LR	09	32.00	
ZOBO	141.96	118	ePKP	21	15.00	-3.0X
	1.2s	32.09nm				
			i	21	17.00	
			LR	09	30.00	
SDV	142.15	76	ePKP	21	14.80	-3.2X
MGP	142.77	60	PKP	21	12.50	-6.1X
TOV	142.79	75	ePKP	21	17.50	-1.4
FISA	142.90	72	ePKP	21	15.70	-3.3X
PORP	143.14	60	PKP	21	16.00	-3.3X
CCH	143.24	121	PKP	21	19.50	-0.3
CPD	143.77	60	PKP	21	19.30	-1.1
CAR	145.38	72	ePKP	21	24.40	1.1
LLAV	145.50	72	ePKP	21	24.00	0.5
OLLA	145.61	73	ePKP	21	24.00	0.3
ITB7	147.54	143	e(PKP)	21	30.20	3.8X
GGC	147.72	329	iPKP	21	32.60	5.9X
CTFE	147.74	331	ePKP	21	34.50	7.8X
ITB	147.76	143	e(PKP)	21	31.40	4.6X
ITB1	147.76	143	e(PKP)	21	31.80	5.1X
SIV	148.19	122	PKP	21	26.50	-1.2
TBT	148.35	333	ePKP	21	32.70	5.1X
CHIE	149.18	332	ePKP	21	34.50	5.5X
SLB	149.77	63	ePKP	21	36.51	6.3X
TCE	150.21	69	ePKP	21	36.56	5.7X
TRN	150.56	69	ePKP	21	37.27	5.9X
TPP	150.61	70	ePKP	21	38.21	6.8X
KIC	150.72	282	PKP	21	36.68	5.0X
	1.2s	399.50nm				
LKO	150.82	289	PKP	21	36.88	5.1X
TBH	150.92	69	ePKP	21	38.33	6.4X
TIC	150.94	283	PKP	21	37.18	5.2X
	1.2s	361.50nm				
TPR	150.97	68	ePKP	21	38.61	6.6X
LIC	151.02	282	PKP	21	37.24	5.2X
	1.2s	520.00nm				
	Z 20s	2.25um				6.0Msz
PPD	151.58	143	(PKP)	21	41.00	8.3X
BMA	154.63	157	ePKP	21	46.60	9.6X
BAO	158.44	139	ePKP	21	44.50	2.4X
	S.D. = 1.0	on 287 of 340 obs.				

JUN 23, 1990 05h 31m 21.33± 0.29s
21.037 S ± 9.0km 173.902 E ± 7.5km
DEPTH = 33.0km (normal)
5.1mb (10 obs.) 5.3Msz (2 obs.)
VANUATU ISLANDS REGION (185)

SGE	5.12	49	eP	32	32.30	-5.5X
SVA	5.19	57	eP	32	32.10	-6.6X
VUN	5.25	56	ePc	32	31.90	-7.7X
DZM	7.02	260	iPc	33	03.90	-0.7
WEL	20.20	178	P	35	56.00	-0.1
BRS	20.27	248	iPc	35	57.50	0.6
COO	21.94	240	iPd	36	16.00	2.0
RMQ	23.63	252	eP	36	32.00	1.5
	1.5s	350.00nm				5.7mb
CNB	25.80	231	iPc	36	52.10	0.9
CAN	26.07	232	eP	36	54.10	0.4
BWA	26.12	234	iPc	36	52.80	-1.4
CMS	27.17	242	ePd	37	04.20	0.4
TOO	29.60	230	eP	37	26.00	0.3
ADE	33.84	238	e(P)	38	03.00	0.1
ASPA	37.01	258	eP	38	28.90	-1.0
	1.3s	26.00nm				4.9mb
	Z 21s	3.30um				5.1Msz
			LR	52	10.50	
WRA	37.01	264	Pc	38	28.60	-1.4
	1.6s	29.00nm				4.9mb
TPT	37.02	87	eP	38	20.00	-10.0X
	1.2s	75.00nm				
SBA	56.97	182	eP	41	03.30	-2.2
MAT	66.46	329	(P)	42	09.00	-0.7
SPA	69.09	180	iPc	42	25.90	-0.2
	1.6s	81.94nm				5.5mb
WHN	76.82	310	eP	43	12.00	0.3
MDJ	76.84	329	eP	43	10.50	-1.1
TIA	78.23	316	eP	43	17.00	-2.4
CN2	78.32	326	P	43	19.00	-0.7
MAW	78.40	201	eP	43	19.00	-0.8
BJI	81.13	319	eP	43	33.50	-1.4
TIY	82.15	315	Pc	43	41.20	0.8
KMI	82.95	300	eP	43	47.00	2.0
CHG	83.38	293	eP	43	48.90	1.9
PRS	83.60	47	e(P)	43	48.00	0.2
BCH	83.90	49	eP	43	49.10	-0.4
MHC	83.94	46	eP	43	48.20	-1.5
PRI	83.98	48	e(P)	43	50.20	0.3
ARN	84.02	46	eP	43	50.00	0.0
HHC	84.46	318	P	43	53.80	1.6
CD2	84.82	306	eP	43	58.20	4.1X
FRI	85.08	47	eP	43	55.00	-0.2
WDC	85.09	43	eP	43	54.20	-1.0
CMB	85.16	46	eP	43	55.30	-0.3
ORV	85.21	44	e(P)	43	55.50	-0.3
PLM	85.30	52	eP	43	57.00	0.4
MIN	85.57	44	eP	43	59.60	1.8
GLA	86.66	53	eP	44	04.10	0.9
LZH	87.20	310	eP	44	04.00	-1.9
	1.5s	37.00nm				5.4mb
	Z 20s	1.70um				5.5Msz
			pP	44	12.00	25kmX
KVN	87.22	46	eP	44	05.80	-0.1
TNP	87.34	47	eP	44	07.30	0.7
	1.2s	11.42nm				5.0mb
GMW	88.75	37	eP	44	13.80	0.9
RMW	89.26	38	eP	44	15.50	0.1
MSU	91.05	49	eP	44	25.80	1.7
PNT	91.48	37	eP	44	27.00	1.5
GTA	91.56	312	P	44	26.80	0.5
	1.2s	10.00nm				5.1mb
ALQ	93.75	54	eP	44	36.00	-0.5
	1.2s	8.59nm				5.1mb
ANMO	93.76	54	eP	44	37.00	0.5
	1.1s	7.12nm				5.0mb
YKA	100.28	27	ePdiff	45	03.80	-1.5
	0.9s	0.80nm				4.3mb
MLR	144.16	320	ePKP	50	53.00	-2.6X
KRA	144.47	331	ePKP	50	52.30	-3.5X
CTT	144.60	312	iPKP	50	54.20	-2.1
DMK	144.78	314	ePKP	50	54.00	-2.6X
KHL	144.85	307	ePKP	50	54.00	-2.9X
SPC	144.94	330	ePKP	50	55.00	-1.9
KSP	145.44	335	ePKP	50	56.30	-1.1
EKA	145.68	357	PKPc	50	56.60	-1.1
	1.0s	10.60nm				
CLL	146.29	338	ePKP	50	58.00	-0.8
	1.1s	13.00nm				
BRG	146.32	337	ePKP	50	57.60	-1.3
	1.3s	23.00nm				
			e	51	20.50	
PRU	146.81	335	PKP	51	00.00	0.3
SRO	146.82	329	e(PKP)	51	06.60	6.9X
ZST	147.11	331	ePKP	51	01.80	1.6
MOX	147.32	339	e(PKP)	51	17.00	16.5X
VTS	147.37	318	iPKP	51	02.00	1.0
MMB	147.56	316	iPKPc	51	03.00	1.8
KHC	147.87	335	iPKPc	51	04.00	2.5X
	1.2s	10.00nm				
GRF	148.27	338	ePKP	51	04.70	2.7X
VAY	148.44	316	ePKP	51	04.50	2.0
SKO	148.81	318	ePKP	51	02.50	-0.6
OHR	149.68	317	iPKP	51	08.40	3.8X
	1.5s	89.00nm				
LJU	149.88	331	ePKP	51	08.50	3.9X
VBY	149.95	329	ePKP	51	09.40	4.7X
CEY	150.16	330	ePKP	51	08.50	3.4X
VOY	150.18	331	ePKP	51	08.90	3.7X
FVI	150.23	333	PKP	51	06.50	1.4
SOTA	150.35	336	iPKPc	51	09.80	4.3X
	1.0s	19.60nm				
			i	51	11.00	
			i	51	18.20	
CDF	150.65	342	ePKP	51	10.20	4.4X
	1.1s	19.55nm				
BCAO	150.93	239	iPKPc	51	12.00	4.8X
	1.2s	21.00nm				
HAU	151.28	342	ePKP	51	11.60	4.9X
BSF	151.31	342	ePKP	51	11.60	4.7X
	1.1s	14.65nm				
VAI	152.40	337	PKP	51	14.00	5.7X
LOR	152.61	345	ePKP	51	14.80	6.2X
SSF	152.89	346	ePKP	51	15.40	6.4X
SDI	153.41	325	PKP	51	14.00	4.0X
	S.D. = 1.2	on 62 of 89 obs.				

? JUN 23, 1990 05h 45m 39.81± 5.17s
16.123 S ±77.7km 74.388 W ±47.1km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF PERU (115)

PT03	2.52	327	iP	46	20.80	-0.7
			iS	46	56.20	
PT06	2.95	320	iP	46	28.10	0.5
			iS	47	06.90	
PT02	3.73	328	iP	46	37.30	-1.5
			iS	47	22.70	
PT08	4.64	333	eP	46	52.10	0.2
			eS	47	45.00	
NNA	4.75	330	eP	46	54.80	1.5
			iS	47	54.80	
ZOBO	6.02	92	P	47	11.50	-0.1
LPB	6.05	95	P	47	12.00	0.1
			eS	48	29.00	
CNCB	6.19	97	iP	47	14.00	0.0
			S	48	30.00	
	S.D. = 1.0	on 8 of 8 obs.				

% JUN 23, 1990 06h 02m 37.93± 0.75s
37.899 N ± 7.1km 4.083 W ± 6.5km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
mbLg 2.8 (MDD).

EBAN	0.35	41	iP	02	45.96	0.7
			eS	02	51.00	
ECOG	0.74	146	eP	02	52.28	-0.3
			eS	03	02.10	
AFC	0.77	146	eP	02	53.44	0.3
			eS	03	05.50	
EHOR	0.92	265	eP	02	55.22	-0.4
			eS	03	07.30	
EPRU	1.31	225	eP	03	02.56	0.5
			eS	03	19.50	
EVIA	1.44	59	iP	03	03.42	-0.8
			eS	03	21.10	
GUD	2.74	359	eP	03	31.45	8.6X
			eS	04	02.60	
	S.D. = 0.8	on 6 of 7 obs.				

JUN 23, 1990 06h 32m 03.99± 0.29s
6.828 N ± 2.9km 72.989 W ± 2.9km
DEPTH = 155.5 ± 3.5 km
5.2mb (21 obs.)
NORTHERN COLOMBIA (99)
Felt at Bucaramanga.

BMG	0.26	340	eP	32	27.00	0.4
FUQ	1.54	209	eP	32	36.50	1.4
BOG	2.44	206	iPc	32	47.00	1.6
			iS	33	17.00	
HOBC	3.98	232	iPd	33	04.45	-0.5
BUGC	4.37	228	iPd	33	09.69	-0.4
CLMC	4.61	231	iPd	33	12.72	-0.6
DIAC	4.75	222	ePd	33	14.57	-0.6
HOQC	4.93	228	iPd	33	16.33	-1.4
ANCC	5.07	230	iPd	33	18.58	-0.8
SILC	5.30	219	eP	33	22.98	0.3
SALC	5.32	224	iPd	33	22.10	-0.7
PURC	5.60	217	iPd	33	27.68	0.9
UPA	6.83	289	iPc	33	41.20	-1.6
			S	34	52.00	
PSO	7.07	218	eP	33	46.50	-0.1
CUMC	7.60	220	eP	33	53.22	-0.4
CAYA	8.35	217	eP	34	04.00	0.3
COTA	8.37	220	eP	34	03.70	-0.3
GECU	8.79	216	eP	34	10.00	0.4
QUR	8.88	219	eP	34	10.50	-0.2
QTO	8.91	219	eP	34	11.70	0.7
GGP	8.93	219	P+	34	10.70	-0.7
VC1	9.18	216	eP	34	14.30	-0.3
TCE	11.75	70	eP	34	49.22	1.3
TPP	11.92	72	eP	34	51.62	1.5
TRN	12.06	71	eP	34	52.04	0.1
			e	35	00.70	
MGP	12.51	27	P	34	55.90	-1.9
PORP	12.76	28	P	35	00.80	-0.2
CPD	13.10	31	P	35	06.00	0.5
SVB	13.21	60	eP	35	06.77	0.0
SLB	13.65	58	eP	35	12.50	0.0

23d 06h

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FDF     14.03   55 eP      35 16.85   -0.4
MVM     14.14   56 eP      35 16.66   -2.0
PT08    19.00  191 iPc     36 16.90    0.2
                   i(S)    39 50.80
NNA     19.08  192 iPc     36 16.30   -0.9
        0.7s     10.27nm              4.3mb
ARE     23.19  176 eP      36 58.00   -0.3
ZOBO    23.45  168 eP      37 04.00    2.9
                   i       37 35.00
                   i       44 12.50
LP8     23.71  168 eP      36 58.00   -5.5X
                   i       37 05.00
                   eS      41 05.00
CNCB    24.00  168 iPc     37 07.10    0.7
                   i       37 40.50
                   S       41 07.00
CCH     24.99  164 Pc      37 16.40    1.1
OXX     25.33  296 (P)     37 21.50    3.1X
SIV     25.56  153 P       37 19.50   -0.8
                   i       37 53.30
RSCP    30.88  340 eP      38 09.30    1.5
        0.7s     69.20nm              5.5mb
BLA     30.99  348 iP      38 10.40    1.6
        0.7s     28.77nm              5.1mb
BAO     33.33  132 eP      38 29.50    0.1
UYO     33.67  327 iPd     38 31.70   -0.3
PPD     35.69  144 (P)     38 49.00   -0.3
LNO     35.70  327 iPc     38 48.80   -0.3
                   e       38 54.60
                   e       41 15.20
TUL     35.70  327 iPc     38 49.00   -0.2
        0.9s     50.90nm              5.2mb
                   i       38 54.40
                   e       41 14.20
MEO     36.47  323 iPc     38 55.00   -0.7
ALO     41.60  317 ePc     39 39.00    0.6
ANMO    41.60  317 eP      39 39.50    1.1
        1.2s     11.72nm              4.4mb
GLD     43.71  323 eP      39 56.70    1.2
        1.7s    221.74nm              5.5mb
GOL     43.77  323 iPd     39 57.10    1.0
        0.6s    109.46nm              5.7mb
                   pP      40 40.90  203kmX
RSSD    46.00  329 eP      40 13.90    0.3
                   pP      41 06.00  245kmX
GLA     46.73  310 eP      40 20.00    0.6
BAR     48.00  308 eP      40 30.00    0.8
SCH     48.11    5 ePc     40 30.50    0.8
        0.5s     32.00nm              5.3mb
BW06    48.15  324 iPc     40 30.70    0.2
        1.0s     58.50nm              5.2mb
                   pP      41 15.70  205kmX
PLM     48.41  309 eP      40 33.00    0.4
RVR     49.06  310 eP      40 37.00   -0.3
GSC     49.15  312 eP      40 39.00    0.9
SBB     49.67  310 eP      40 42.00   -0.1
CLC     49.96  312 eP      40 44.00   -0.2
ISA     50.55  311 eP      40 48.00   -0.7
LTMT    50.68  324 ePc     40 51.20    1.3
MEMT    50.69  326 ePc     40 50.60    0.8
BGMT    51.06  325 iPc     40 53.40    0.7
SXM     51.15  326 iPc     40 53.90    0.6
MCMT    51.29  324 iPc     40 55.20    0.8
LRM     51.64  325 iPc     40 57.30    0.2
KVN     51.70  315 iPd     40 57.80    0.3
HRY     51.84  327 iPc     40 58.80    0.5
FRI     51.99  312 ePc     40 58.20   -1.2
PRI     52.37  311 e(P)    41 01.40   -1.0
CMB     52.90  313 ePc     41 06.00   -0.2
PRS     52.97  311 ePc     41 06.60   -0.1
FFC     53.13  339 iPc     41 07.00   -0.5
        0.6s     30.00nm              5.3mb
SAO     53.19  311 eP      41 07.90   -0.4
MHC     53.55  312 ePc     41 11.70    0.6
SES     53.76  331 iPc     41 12.50    0.2
        0.7s     53.00nm              5.5mb
PCC     54.15  312 ePc     41 11.20   -4.1X
BRK     54.20  312 eP      41 16.80    0.3
ORV     54.30  315 ePc     41 16.40    0.0
MIN     54.70  315 ePc     41 18.60   -0.9
WDC     55.44  315 iPc     41 22.30   -2.3
NEW     55.66  326 eP      41 25.60   -0.5
        0.8s     21.46nm              5.1mb
FHC     56.54  315 ePc     41 33.00    0.5
EDM     56.68  332 iPc     41 32.20   -1.1
FRB     56.90    2 ePc     41 33.40   -1.1
PNT     57.62  326 ePc     41 40.00    0.1
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        0.8s     41.00nm              5.4mb
PGC     59.50  324 eP      41 53.00    0.2
YKA     63.30  340 eP      42 17.20   -0.9
        0.5s     57.90nm              5.8mb
LKO     66.68   83 P       42 40.16   -0.5
        0.6s      7.50nm              4.7mb
TIC     67.44   86 P       42 44.36   -1.1
LIC     67.47   86 P       42 44.68   -0.9
        0.6s     18.00nm              5.1mb
KIC     67.74   86 P       42 46.44   -0.9
        0.6s     30.00nm              5.3mb
INK     73.07  340 iPc     43 18.60    0.2
        0.6s     31.00nm              5.2mb
MBC     73.82  350 iPc     43 23.30    0.7
        0.6s     61.00nm              5.5mb
DAG     75.60   11 eP      43 32.40   -0.4
        0.5s     18.31nm              5.1mb
FBA     77.42  335 eP      43 43.60    0.5
        0.6s      2.60nm              4.1mb X
PMR     77.44  332 eP      43 43.70    0.5
        0.7s      3.70nm              4.2mb
NB2     81.26   29 P       44 04.70    0.9
        0.6s      2.10nm              4.0mb X
HFS     82.47   30 eP      44 10.10    0.1
        0.7s      2.50nm              4.1mb X
      Z  19s      0.71um              5.1Msz
                    LR     12 03.00
BCAO    90.99   85 iPc     44 51.00   -1.3
GKN    139.18   31 PKP     51 00.00  -15.0X
GBA    144.30   55 PKPc    51 22.80   -1.2
        0.8s      4.50nm
SHL    144.60   24 iPKP    51 22.80   -1.7
QIS    145.61  243 iPKPc   51 26.00   -0.2
KMI    147.97    7 ePKP    51 34.00    3.9X
ASPA   149.22  234 iPKPc   51 35.80    3.9X
        0.6s     40.00nm
WRA    150.45  241 PKPd    51 34.50    0.7
        0.2s      3.10nm
WB5    150.45  241 ePKP    51 34.20    0.4
                    i       51 38.90
CHG    153.31   17 ePKP    51 46.00    8.1X
      S.D. = 0.9  on 106 of 113 obs.
-------------------------------------------
   JUN 23, 1990  06h 35m 52.99± 0.36s
   59.939 N ± 5.1km  141.702 W ± 2.7km
   DEPTH =  10.0km  (geophysicist)
   3.7mb (  2 obs.)
 SOUTHEASTERN ALASKA                ( 19)
     ML 4.4 (PMR).

PCA     0.74   77 iP      36 07.33   -0.3
YKU     1.07  110 eP      36 14.60    1.5
BALM    1.15  344 iP      36 13.60   -0.9
HQN     1.51  108 eP      36 19.33   -0.8
                  eS      36 39.96
HYT     2.27   65 P       36 31.80    0.6
MID     2.41  260 eP      36 36.75    3.8X
VLZ     2.58  300 eP      36 35.31   -0.2
KLU     2.59  309 iP      36 36.28    0.5
VZW     2.65  297 eP      36 36.35   -0.2
GLI     2.84  292 eP      36 38.46   -0.7
TOA     3.07  317 eP      36 43.60    1.1
SDG     3.19  326 eP      36 45.13    0.9
SCM     3.34  307 eP      36 46.23   -0.2
WHC     3.38   73 P       36 46.30   -0.6
                  S       37 27.00
PAX     3.54  331 eP      36 49.71    0.5
SML     3.74  303 eP      36 51.07   -1.0
SEW     3.89  276 eP      36 53.50   -0.6
GHO     3.98  301 eP      36 56.02    0.6
PLRM    4.00  298 eP      36 56.24    0.6
PMR     4.00  298 eP      36 56.20    0.6
PMS     4.09  292 eP      36 57.10    0.2
DWY     4.27   14 P       36 59.00   -0.4
SLKM    4.29  281 eP      36 58.40   -1.4
PWA     4.36  297 eP      37 01.32    0.6
SIT     4.42  128 eP      37 01.20   -0.4
SUA     4.70  293 eP      37 04.84   -0.9
CUT     4.83  304 eP      37 08.69    1.3
CNPM    4.84  269 iP      37 08.36    0.7
SKT     5.21  297 eP      37 12.08   -0.7
KTH     5.68  314 eP      37 19.43   -0.1
FBA     5.72  333 eP      37 20.30    0.3
CDD     6.18  266 iP      37 26.70    0.3
TTA     7.48  300 eP      37 44.00   -0.8
INK     9.12   20 P       38 07.00   -0.4
YKA    13.26   67 eP      39 01.50   -2.1X
```

```
        0.8s      1.10nm              4.0mb
MBC     18.13   17 eP      40 03.00   -2.9X
        0.9s      3.00nm              3.4mb
      S.D. = 0.8  on 33 of 36 obs.
-------------------------------------------
   JUN 23, 1990  06h 57m 03.73± 0.53s
   40.813 N ± 5.1km   27.909 E ± 4.5km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)

BNT     0.46  179 iPg     57 12.80   -0.2
                  iSg     57 15.80
EDC     0.47  184 iPg     57 13.10   -0.1
KGT     0.59  232 iPg     57 14.70   -0.9
ITU     0.89   70 ePg     57 20.00   -0.7
                  iSg     57 32.00
ISK     0.91   73 iPg     57 20.70   -0.4
DMK     1.01  354 iPg     57 23.30    0.4
                  iSg     57 36.30
YLV     1.14  102 iPn     57 24.20   -0.9
GBZT    1.17   91 ePn     57 25.80    0.3
                  iSg     57 43.20
HRT     1.33   89 iPn     57 27.30   -1.1
ALN     1.42  274 eP      57 29.00   -0.5
                  eS      57 51.50
EZN     1.56  231 iPn     57 31.70    0.2
GPA     1.90  105 ePn     57 37.00    0.5
ALT     2.44  135 ePn     57 47.00    2.7
KHL     2.78  153 ePn     57 56.00    6.8X
KNT     3.81  277 eP      58 10.00    6.3X
VAY     4.07  279 ePn     58 20.40   13.1X
MLR     4.89  344 eP      58 20.00    0.8
      S.D. = 1.0  on 14 of 17 obs.
-------------------------------------------
   JUN 23, 1990  06h 57m 49.55± 0.65s
   40.775 N ± 6.2km   27.979 E ± 5.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)

BNT     0.42  186 ePg     57 59.30    1.1
EDC     0.44  192 iPg     57 58.60    0.1
KGT     0.61  238 iPg     58 00.70   -1.1
ITU     0.85   67 ePg     58 07.00    1.0
                  iSg     58 18.00
ISK     0.87   70 ePg     58 06.20    0.0
DMK     1.06  351 iPg     58 09.80    0.3
                  iSg     58 22.80
YLV     1.08  101 ePg     58 08.70   -1.2
GBZT    1.11   89 ePn     58 13.90    3.5X
                  iSg     58 30.40
HRT     1.28   87 ePn     58 13.00   -0.4
EZN     1.58  234 ePn     58 17.70    0.1
      S.D. = 0.9  on  9 of 10 obs.
-------------------------------------------
% JUN 23, 1990  06h 59m 31.36± 0.57s
   40.779 N ± 5.7km   27.976 E ± 4.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)

BNT     0.42  186 iPg     59 40.30    0.3
                  iSg     59 45.30
KGT     0.61  238 iPg     59 43.20   -0.4
                  eSg     59 50.70
ISK     0.87   70 ePg     59 48.20    0.1
DMK     1.05  351 iPg     59 51.30    0.1
                  iSg     00 04.80
YLV     1.08  101 ePn     59 51.70   -0.1
IZI     1.22  111 ePn     59 54.00   -0.2
HRT     1.29   88 ePn     59 55.20    0.0
EZN     1.58  234 iPn     59 59.70    0.2
      S.D. = 0.3  on  8 of  8 obs.
-------------------------------------------
% JUN 23, 1990  07h 30m 49.06± 1.06s
   40.781 N ± 7.0km   27.949 E ± 9.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)

BNT     0.43  183 iPg     30 57.80    0.1
                  iSg     31 04.30
DMK     1.05  352 iPg     31 08.80    0.0
                  iSg     31 21.80
YLV     1.10  101 iPn     31 09.70   -0.1
IZI     1.24  110 ePn     31 12.00   -0.2
HRT     1.31   88 ePn     31 13.60    0.4
      S.D. = 0.3  on  5 of  5 obs.
-------------------------------------------
   JUN 23, 1990  07h 30m 53.25± 0.86s
```

32.657 S ± 6.4km 70.392 W ± 7.5km
DEPTH = 87.7 ± 13.7 km
CHILE-ARGENTINA BORDER REGION (127)

JACH	0.17	262	iPd	31 06.00	-0.4
			iS	31 16.00	
PEL	0.54	207	iP	31 08.50	0.1
			i(S)	31 20.00	
ROCH	0.61	239	iPc	31 09.10	-0.1
			iS	31 21.00	
SAN	0.83	196	eP	31 11.00	-0.1
			iS	31 26.10	
PCH	0.97	186	iPd	31 13.20	0.4
			iS	31 29.00	
TACH	1.09	205	iPd	31 14.30	0.1
			iS	31 31.00	
IHA	1.11	250	eP	31 14.00	-0.4
			i(S)	31 29.30	
RTBS	1.27	39	eP	31 17.20	0.8
LCCH	1.28	230	iPd	31 16.80	0.3
			iS	31 34.00	
CHCH	1.29	190	iPd	31 16.80	0.1
			iS	31 36.00	
LNV	1.55	213	iP	31 19.50	-0.4
			i	31 40.00	
RTCV	1.76	64	iPd	31 23.00	0.2
ZON	1.83	53	eP	31 23.00	-0.7
			eS	31 49.00	
RTLL	2.10	52	iPd	31 27.00	-0.4
CFA	2.11	61	iPc	31 27.00	-0.4
			eS	31 53.10	
RTRS	2.60	18	ePd	31 34.50	0.4

S.D. = 0.5 on 16 of 16 obs.

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* JUN 23, 1990 08h 59m 01.39± 0.86s
30.866 S ± 9.3km 69.118 W ±12.9km
DEPTH = 33.0km (normol)
CHILE-ARGENTINA BORDER REGION (127)

RTLL	0.72	130	iPd	59 15.90	0.7
RTRS	0.75	337	iPd	59 15.50	0.0
ZON	0.78	151	eP	59 16.00	0.1
RTBS	0.84	200	ePd	59 17.00	0.2
CFA	1.05	135	iPd	59 19.50	-0.4
			eS	59 36.80	
RTCV	1.11	154	ePc	59 20.20	-0.5

S.D. = 0.6 on 6 of 6 obs.

% JUN 23, 1990 09h 14m 55.19± 1.07s
39.667 N ± 8.5km 29.416 E ±11.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZI	0.67	4	iPg	15 08.00	-0.6
			eSg	15 18.00	
ALT	0.81	138	ePg	15 11.00	0.0
YLV	0.90	358	ePn	15 12.00	-0.5
HRT	1.17	9	ePn	15 18.00	0.9
BNT	1.34	301	ePn	15 20.00	0.1

S.D. = 0.9 on 5 of 5 obs.

% JUN 23, 1990 09h 52m 22.18± 0.72s
40.794 N ± 6.2km 27.928 E ± 5.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

BNT	0.44	181	ePg	52 31.00	-0.1
KGT	0.59	234	iPg	52 34.00	0.0
			iSg	52 41.00	
ISK	0.90	72	iPg	52 39.50	0.1
DMK	1.03	353	iPg	52 41.80	0.1
			iSg	52 55.30	
YLV	1.12	101	iPn	52 43.00	-0.3
IZI	1.26	111	ePn	52 46.50	0.8
HRT	1.32	88	ePn	52 46.00	-0.6

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

% JUN 23, 1990 10h 29m 13.81± 1.10s
44.864 N ±10.3km 26.418 E ± 6.5km
DEPTH = 10.0km (geophysicist)
ROMANIA (358)

ISR	0.29	18	iPc	29 20.00	0.1
MLR	0.71	332	iPd	29 28.00	0.1
MTUR	1.03	291	ePd	29 35.00	1.7
VRI	1.03	12	ePc	29 33.00	-0.3
CMP	1.06	293	ePc	29 33.00	-0.8
TLB	1.18	103	iPc	29 36.00	0.1
DRA	1.55	264	eP	30 00.00	18.5X
BZS	3.47	284	ePc	30 08.00	-1.0

S.D. = 1.1 on 7 of 8 obs.

JUN 23, 1990 10h 32m 20.51± 0.29s
44.307 N ± 2.2km 7.218 E ± 3.0km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.3 (LDG), 2.1 (GEN).

STV	0.10	130	P	32 23.47	0.2
			S	32 24.99	
ENR	0.17	119	P	32 24.39	0.0
			S	32 26.73	
DOI	0.20	6	P	32 25.40	0.5
			eSg	32 28.10	
PZZ	0.21	337	P	32 25.50	0.2
			S	32 28.77	
ROB	0.47	91	P	32 30.34	0.3
			S	32 37.31	
SBF	0.47	161	Pg	32 29.90	-0.2
			Sg	32 35.00	
IMI	0.63	129	P	32 32.80	-0.3
			S	32 41.62	
RRL	0.69	333	P	32 33.74	-0.5
FIN	0.72	98	P	32 34.56	-0.1
RSP	0.84	2	P	32 37.00	0.1
FRF	0.85	209	Pg	32 37.20	0.3
			Sg	32 47.40	
PCP	0.98	76	P	32 39.05	-0.1
			S	32 51.97	
LRG	1.05	216	Pg	32 40.20	-0.2
			Sg	32 54.70	
LMR	1.10	208	Pg	32 41.40	0.2
			Sg	32 55.30	
LSD	1.15	358	P	32 41.92	-0.3
LPG	1.24	345	Pg	32 43.80	0.1
LPL	1.26	344	Pg	32 43.80	-0.2

S.D. = 0.3 on 17 of 17 obs.

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* JUN 23, 1990 10h 41m 08.26± 0.89s
37.129 N ±20.5km 49.725 E ±13.3km
DEPTH = 10.0km (geophysicist)
4.6mb (3 obs.)
CASPIAN SEA (338)

TEH	1.93	136	iPd	41 41.50	-0.1
TAB	2.86	290	eP	41 55.00	0.1
KER	3.49	218	eP	42 08.00	4.1X
MAIO	7.89	93	eP	43 06.00	0.1
	0.8s		10.98nm		5.1mb
			eS	44 41.00	
HFS	32.45	327	eP	47 39.30	-1.2
	0.9s		7.50nm		4.6mb
NB2	33.96	327	P	47 54.60	1.0
	0.7s		1.60nm		4.1mb

S.D. = 1.1 on 5 of 6 obs.

? JUN 23, 1990 10h 51m 21.92± 4.38s
2.240 N ±17.9km 97.290 E ±41.9km
DEPTH = 33.0km (normol)
3.7mb (1 obs.)
NORTHERN SUMATERA (706)

PSI	1.69	74	ePc	51 50.40	0.8
PPI	4.10	131	eP	52 24.00	0.1
	0.8s		73.00nm		
IPM	4.39	58	ePd	52 28.10	0.0
	0.5s		15.60nm		
			e	52 42.20	
			e	53 18.80	
KLM	4.43	79	eP	52 27.80	-0.8
SNG	5.92	34	eP	52 57.80	8.2X
	0.8s		65.67nm		5.3mb X
			e	55 06.00	
KGM	6.03	92	eP	52 55.50	4.3X
			e	53 46.60	
GBA	22.65	301	Pc	56 57.10	35.5X
	0.7s		2.70nm		
WRA	42.52	123	Pc	59 16.20	-0.1
	0.2s		0.30nm		3.7mb

S.D. = 0.8 on 5 of 8 obs.

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* JUN 23, 1990 10h 57m 04.87± 2.78s
33.765 S ±11.5km 71.852 W ±22.4km
DEPTH = 33.0km (normol)

NEAR COAST OF CENTRAL CHILE (135)

LCCH	0.37	39	iP	57 14.00	0.4
LNV	0.41	117	iPd	57 14.50	0.3
			iS	57 23.00	
IHA	0.76	13	iPc	57 18.70	-0.4
			iS	57 29.70	
TACH	0.77	82	iPd	57 19.00	-0.3
			iS	57 30.50	
CHCH	1.01	100	iPd	57 22.50	-0.3
			iS	57 36.50	
SAN	1.04	73	iPd	57 23.30	0.1
			iS	57 37.50	
ROCH	1.06	42	iPd	57 23.30	-0.3
			iS	57 37.50	
PCH	1.12	83	iPd	57 24.50	0.1
			iS	57 39.50	
PEL	1.16	58	iPd	57 25.10	0.3
			iS	57 41.00	
JACH	1.51	45	iPc	57 29.60	-0.4
			iS	57 49.00	
RTBS	2.91	45	e(P)	57 51.60	1.7
CFA	3.73	56	ePd	58 01.10	-0.5
			S	58 37.90	
RTLL	3.75	51	ePc	58 01.10	-0.7
			eS	58 45.00	
RTRS	4.12	30	eP	58 07.20	0.1

S.D. = 0.6 on 14 of 14 obs.

% JUN 23, 1990 11h 03m 44.33± 1.63s
40.836 N ±15.4km 27.934 E ±10.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

BNT	0.48	181	iPg	03 54.60	0.5
			eSg	04 00.10	
KGT	0.61	232	iPg	03 56.40	-0.3
			iSg	04 04.40	
ISK	0.88	75	ePn	04 01.90	0.6
YLV	1.13	103	iPn	04 04.40	-1.1
HRT	1.32	90	ePn	04 08.90	0.2

S.D. = 1.0 on 5 of 5 obs.

JUN 23, 1990 11h 14m 13.93± 0.55s
40.767 N ± 6.3km 27.993 E ± 4.5km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

EDC	0.43	193	iPg	14 23.40	0.7
KGT	0.61	239	iPg	14 25.40	-0.9
			iSg	14 32.40	
ISK	0.86	69	ePg	14 30.40	-0.1
			eSg	14 44.40	
YLV	1.07	100	iPg	14 33.40	-0.7
DMK	1.07	350	iPg	14 34.80	0.8
			iSg	14 47.80	
IZI	1.21	110	ePn	14 36.90	0.4
HRT	1.27	87	ePn	14 37.40	-0.2
ALN	1.48	276	eP	14 40.00	-0.6
EZN	1.58	234	ePn	14 42.70	0.6

S.D. = 0.7 on 9 of 9 obs.

JUN 23, 1990 11h 24m 28.96± 0.56s
40.786 N ± 6.2km 27.941 E ± 4.8km
DEPTH = 13.5 ± 5.3 km
TURKEY (366)

BNT	0.43	182	iPg	24 37.50	-0.3
			eSg	24 42.50	
EDC	0.44	188	iPg	24 38.40	0.3
			iSg	24 43.40	
KGT	0.59	236	iPg	24 40.40	-0.2
			iSg	24 47.40	
ISK	0.89	71	iPg	24 45.40	-0.3
			iSg	24 57.90	
DMK	1.04	352	iPg	24 48.30	0.0
			iSg	25 01.30	
YLV	1.11	101	iPn	24 48.40	-1.1
GBZT	1.14	89	ePn	24 51.40	1.4
			iSg	25 08.30	
HRT	1.31	88	ePn	24 52.90	0.0
ALN	1.44	275	eP	24 54.50	-0.1
			eS	25 15.00	
EZN	1.56	233	iPn	24 56.70	0.3

S.D. = 0.8 on 10 of 10 obs.

% JUN 23, 1990 11h 29m 08.37± 1.39s

23d 11h

40.755 N ±29.7km 27.946 E ±11.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

KGT	0.58	238	iPg	29 19.40	-0.6
			iSg	29 26.40	
ISK	0.90	69	ePg	29 25.40	-0.2
			eSg	29 38.90	
YLV	1.10	99	iPn	29 28.90	-0.2
HRT	1.31	87	ePn	29 32.90	0.3
EZN	1.55	234	ePn	29 36.70	0.7

S.D. = 0.7 on 5 of 5 obs.

JUN 23, 1990 12h 24m 55.63± 0.41s
40.806 N ± 3.9km 27.923 E ± 3.5km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

BNT	0.45	180	ePg	25 05.50	0.7
EDC	0.46	186	iPg	25 04.90	-0.1
			iSg	25 10.40	
CTT	0.51	48	iPg	25 05.50	-0.5
KGT	0.59	233	iPg	25 06.90	-0.7
ITU	0.88	70	ePg	25 13.00	0.5
			iSg	25 24.00	
ISK	0.90	73	iPg	25 12.60	-0.2
			iSg	25 25.20	
DMK	1.02	353	iPg	25 15.20	0.3
			iSg	25 28.20	
YLV	1.13	102	iPn	25 15.80	-1.0
GBZT	1.16	90	ePn	25 18.40	1.2
			iSg	25 35.40	
IZI	1.27	111	ePn	25 18.90	-0.4
HRT	1.32	89	ePn	25 19.40	-0.7
ALN	1.43	274	eP	25 21.30	-0.2
			eS	25 42.50	
EZN	1.57	232	iPn	25 23.70	0.2
GPA	1.89	105	ePn	25 29.00	0.7
ALT	2.43	135	ePn	25 27.00	-9.1X
KHL	2.77	153	ePn	25 46.00	5.0X
VAY	4.08	279	ePn	26 45.40	46.0X
MLR	4.90	343	ePc	26 11.50	0.3

S.D. = 0.7 on 15 of 18 obs.

& JUN 23, 1990 13h 15m 57.71s
61.826 N 150.670 W
DEPTH = 54.0km
SOUTHERN ALASKA (2)
<AGS-P>.

SUA	0.37	186	iP	16 08.10	0.1
			eS	16 16.03	
PWA	0.42	115	eP	16 08.09	-0.3
SKT	0.44	291	iP	16 07.90	-0.7
CUT	0.61	18	iP	16 09.83	-0.8
			eS	16 19.73	
PLRM	0.77	107	iP	16 11.72	-0.9
			eS	16 24.18	
PMS	0.79	137	eP	16 12.14	-0.8
			eS	16 24.83	
CGLM	0.82	231	iP	16 12.84	-0.6
NCG	0.83	240	iP	16 12.69	-0.8
GHO	0.83	93	iP	16 13.05	-0.5
CRP	0.91	232	eP	16 14.01	-0.6
			eS	16 27.12	
SPU	0.93	226	iP	16 14.30	-0.5
			iS	16 27.62	
SML	1.11	90	iP	16 16.51	-0.8
HUR	1.25	22	eP	16 18.61	-0.6
SLKM	1.34	170	eP	16 19.70	-0.8
SCM	1.59	88	eP	16 23.55	-0.4
KTH	1.74	356	eP	16 25.24	-0.8
RED	1.74	217	eP	16 25.83	-0.3
SEW	1.83	160	eP	16 28.42	1.2
GLI	1.97	117	eP	16 27.31	-1.9
VZW	2.12	109	eP	16 32.71	1.3
TOA	2.14	81	iP	16 31.50	-0.2
KLU	2.29	96	eP	16 32.03	-1.8

22 obs. associated

JUN 23, 1990 13h 17m 55.35± 1.51s
0.810 N ± 5.9km 123.115 E ± 7.9km
DEPTH = 38.8 ± 14.3 km
5.1mb (14 obs.) 3.7Msz (1 obs.)
MINAHASSA PENINSULA (265)

TSM	6.07	304	ePd	19 26.00	0.9
	0.2s		269.30nm		6.5mb X
MKS	7.01	211	iPc	19 42.50	4.3X
			iS	20 06.00	
KKM	8.63	307	eP	20 00.00	-0.9
	0.5s		82.10nm		6.1mb X
TRT	13.44	231	ePc	21 11.50	5.5X
MTN	15.73	150	eP	21 37.00	1.1
MBL	22.07	188	iPc	22 48.20	-0.5
	0.6s		26.00nm		4.8mb
QIZ	22.30	325	P	22 50.40	-0.6
IPM	22.38	280	ePd	22 55.90	4.1X
	0.7s		60.40nm		5.2mb
PPI	22.75	267	eP	22 56.50	1.0
SNG	23.31	286	eP	23 07.50	6.6X
WB5	23.34	152	eP	23 01.00	-0.2
PSI	24.25	275	ePd	23 11.90	1.8
NANU	24.38	197	iPc	23 11.20	-0.1
	0.4s		22.00nm		5.1mb
			e	23 22.00	
TSI	24.68	277	eP	23 06.00	-8.2X
NNT	25.97	298	eP	23 14.20	-12.1X
KDB	26.03	114	eP	23 26.00	-0.9
ASPA	26.49	157	eP	23 30.00	-1.2
	0.8s		28.00nm		4.9mb
Z	20s		0.25um		3.7Msz
			LR	35 12 30	
LOE	26.73	309	eP	23 34.00	0.6
MEKA	27.62	189	iPd	23 40.30	-1.1
BDT	28.80	306	eP	23 52.00	-0.1
CHG	29.70	308	iPd	24 04.90	4.6X
	1.0s		17.50nm		4.8mb
GYA	30.02	330	eP	24 05.00	1.9
MRWA	30.62	192	eP	24 07.00	-1.3
FORR	31.84	172	iPd	24 17.20	-1.7
			e	24 32.00	
KLB	32.62	188	eP	24 24.00	-1.7
MUN	33.26	191	eP	24 30.00	-1.3
CD2	35.11	330	eP	24 46.70	-0.6
XAN	35.63	340	P	24 50.90	-0.8
RMQ	36.71	140	iPd	25 00.20	-0.6
			e	26 25.00	
			e	27 23.40	
STK	36.93	153	iPc	25 02.80	0.3
	0.9s		38.00nm		5.3mb
TIY	38.02	346	Pc	25 11.50	-0.3
Z	16s		0.60um		4.5MszX
MAT	38.20	20	(P)	25 11.00	-2.3
	0.7s		6.16nm		4.6mb
ADE	38.47	159	iPc	25 16.30	0.8
	0.6s		73.33nm		5.7mb
CMS	38.68	148	eP	25 18.00	0.7
SHL	38.90	312	iP	25 19.50	0.1
LZH	39.39	335	eP	25 24.00	0.6
	2.5s		53.00nm		4.9mb
Z	25s		0.40um		4.2MszX
BRS	39.99	137	iPc	25 28.00	-0.3
			i	25 37.00	
COO	41.52	141	eP	25 42.00	1.2
LSA	41.84	316	P	25 45.80	1.8
BWA	42.32	148	iPc	25 49.50	2.2
			e	26 04.60	
			ePcP	27 40.90	
CAN	43.32	149	iPc	25 56.50	1.1
			i	26 11.70	
			iPcP	27 43.80	
TOO	43.44	154	eP	25 57.00	0.7
			i	27 44.90	
CNB	43.50	148	eP	25 58.00	1.0
GTA	43.92	334	P	26 00.80	0.5
	0.8s		20.00nm		4.9mb
GUN	44.68	310	P	26 07.60	0.6
	0.6s		47.00nm		5.5mb
PKI	44.87	310	P	26 08.20	-0.3
DMN	45.12	310	P	26 10.00	-0.4
GKN	45.68	310	P	26 14.60	-0.1
	0.8s		36.00nm		5.3mb
HYB	46.82	293	eP	26 24.00	0.4
	1.0s		60.00nm		5.5mb
			e	26 35.00	
GBA	46.96	288	Pd	26 24.30	-0.4
	0.6s		8.50nm		4.9mb
DZM	47.98	121	iPc	26 32.10	-0.7
NDI	51.82	307	iPc	27 00.00	-2.0
WMQ	53.17	328	eP	27 11.50	-0.4
QUE	60.72	304	eP	28 04.60	-1.3
			ePP	28 15.10	
MAIO	68.46	309	eP	28 55.00	-1.0
			i	29 06.00	
MAW	79.79	200	eP	30 01.00	0.2
BUL	94.50	250	iPc	31 09.10	-4.6X
CNCB	160.71	146	PKP	37 54.00	0.2
LPB	160.86	145	ePKP	37 55.00	1.3
ZOBO	161.06	145	PKP	37 55.80	1.7
CCH	161.18	152	(PKP)	37 51.00	-2.9X

S.D. = 1.1 on 52 of 61 obs.

• JUN 23, 1990 13h 57m 21.56± 1.13s
22.294 S ±20.3km 175.048 E ±17.6km
DEPTH = 33.0km (normal)
5.0mb (2 obs.) 4.4Msz (2 obs.)
SOUTH OF FIJI ISLANDS (171)

SVA	5.25	38	eP	58 38.60	-1.2
			eS	58 40.90	
VUN	5.34	38	eP	58 39.30	-1.7
			eS	59 41.90	
SGE	5.41	31	iP	58 43.00	0.9
			eS	59 49.60	
DZM	7.98	270	iPc	59 17.50	-0.7
			iS	00 47.60	
HNR	19.33	309	eP	01 47.00	-0.1
BRS	20.83	251	iP	02 03.00	0.1
COO	22.29	243	eP	02 19.00	1.4
RMQ	24.29	255	iPc	02 37.90	0.8
CAN	26.17	235	eP	02 55.60	0.8
BWA	26.28	237	eP	02 54.30	-1.6
CMS	27.55	244	e(P)	03 06.00	-1.5
ASPA	37.81	260	iPc	04 35.80	-1.1
	0.9s		21.00nm		5.0mb
Z	22s		0.69um		4.4Msz
			LR	19 13.00	
WB5	37.95	266	eP	04 35.60	-2.5
MAT	68.08	329	(P)	08 21.00	0.9
CHG	84.85	293	eP	09 56.90	2.3
FRI	85.15	47	eP	10 03.10	7.4X
CMB	85.26	46	eP	09 59.80	3.5X
KVN	87.32	46	eP	10 10.00	3.4X
LZH	88.82	310	eP	10 16.00	2.1
Z	25s		0.50um		4.8MszX
			pP	10 24.00	25kmX
			i	10 44.00	
FBA	91.51	15	eP	10 32.50	7.0X
	1.0s		5.50nm		4.9mb
ZOBO	107.24	116	ePdiff	11 49.00	10.7X
Z	22s		0.12um		4.4Msz
			LR	47 22.00	
KRA	146.09	331	ePKP	17 00.10	1.4
SPC	146.56	330	ePKP	17 03.30	3.5X
KSP	147.03	335	ePKP	17 04.00	3.8X
CLL	147.85	339	iPKPc	17 06.00	4.5X
			i	17 19.10	
BRG	147.88	337	ePKP	17 05.60	4.0X
PRU	148.39	336	ePKP	17 07.10	4.7X
			e	17 15.00	
SRO	148.44	329	ePKP	17 10.00	7.5X
ZST	148.72	331	ePKP	17 07.70	4.7X
KHC	149.45	336	PKP	17 10.50	6.3X
VAY	150.08	316	ePKP	17 10.60	5.3X
SKO	150.45	318	iPKP	17 12.10	6.3X
BCAO	151.15	235	iPKPc	17 13.40	5.7X
	1.1s		22.00nm		
OHR	151.33	317	ePKP	17 14.00	6.8X

S.D. = 1.6 on 17 of 34 obs.

JUN 23, 1990 14h 10m 43.19± 0.35s
39.032 N ± 3.7km 22.249 E ± 3.3km
DEPTH = 21.4 ± 3.3 km
4.0mb (4 obs.) 3.1Msz (1 obs.)
GREECE (364)
ML 3.6 (THE), 3.6 (TTG), 3.5 (ATH).

AGG	0.06	99	ePg	10 46.60	-0.6
NEO	0.81	70	ePn	10 58.30	-0.1
LIT	1.08	10	ePgc	11 01.80	-1.3
PAIG	1.42	51	iPbd	11 08.50	0.6
			eSb	11 26.70	
VLS	1.55	237	ePn	11 09.00	-0.8
ATH	1.56	132	ePb	11 11.50	1.6
IGT	1.57	289	ePb	11 11.60	1.6
THE	1.69	19	ePb	11 11.60	-0.1
ITM	1.87	188	ePb	11 16.20	1.9
GRG	1.93	3	ePb	11 15.10	-0.1
KEK	2.02	290	ePn	11 18.00	1.5

KNT	2.19	13	iPn	11	19.40	0.5
VAY	2.30	6	iPn	11	21.30	0.8
			i	11	23.00	
			iSn	11	44.00	
			iSg	11	48.40	
			Lg	11	51.40	
OHR	2.36	332	iPn	11	22.70	1.3
			iSg	11	51.60	
			Lg	11	54.00	
VLI	2.37	167	ePn	11	21.00	-0.6
MMB	2.79	23	iPc	11	28.00	0.4
SKO	3.00	348	iPn	11	31.00	0.5
			iPg	11	38.50	
			i	11	44.50	
			iSn	12	06.80	
			iSb	12	12.40	
			iSg	12	19.00	
			i	12	26.50	
			Lg	12	30.70	
APE	3.25	126	ePn	11	34.20	0.1
RZN	3.25	35	iPc	11	35.00	0.7
RDO	3.29	49	ePn	11	33.60	-1.0
LCI	3.56	293	P	11	38.50	0.1
KDZ	3.56	42	iP	11	38.00	-0.5
VTS	3.63	11	iP	11	40.00	0.4
VAM	3.94	156	ePn	11	45.50	1.7
PVY	3.96	335	ePn	11	45.00	0.9
			eSn	12	30.00	
TTG	4.08	327	ePn	11	46.50	0.7
			eSn	12	33.00	
BRT	4.29	297	P	11	50.00	1.1
NKY	4.51	328	ePn	11	52.60	0.6
			eSn	12	43.00	
ORI	4.60	285	P	11	53.50	0.2
TDS	4.63	280	P	11	53.50	-0.1
SOI	4.95	261	P	11	57.00	-1.1
			eSn	12	51.00	
			e	15	20.50	
ATN	5.39	263	P	12	03.00	-1.4
SGO	5.56	288	P	12	08.00	1.3
			eSn	13	08.50	
BSS	5.99	289	P	12	13.50	0.8
			eSn	13	18.50	
HVAR	6.03	315	eP	12	12.60	-0.7
			iSn	13	38.80	
MEU	6.09	254	P	12	11.30	-3.0
ALT	6.12	87	ePn	12	15.00	0.2
DUI	6.50	296	P	12	20.50	0.3
			eSn	13	32.50	
CMP	6.57	17	ePc	12	35.00	14.0X
SDI	6.97	295	P	12	27.00	0.3
			eSn	13	44.50	
MLR	7.01	22	eP	12	28.00	0.7
VRI	7.59	24	ePd	12	35.50	0.2
			ed	34	54.00	
RDP	7.77	294	P	12	38.00	0.1
ASS	8.29	302	P	12	47.50	2.3
CRE	9.00	304	P	12	55.00	0.0
VOY	9.32	321	e(P)	12	57.20	-2.2
			eS	14	40.10	
KHC	11.86	331	eP	13	33.60	-0.3
HFS	21.80	348	eP	15	34.20	-1.2
	0.3s		1.00nm			3.7mb
	Z 18s		0.07um			3.1Msz
			LR	19	00.00	
NB2	23.08	346	P	15	46.40	-1.7
	0.8s		3.30nm			3.9mb
EKA	23.55	322	P	15	54.00	1.4
	0.8s		6.50nm			4.2mb
YKA	73.04	341	eP	22	11.50	-1.4
	0.5s		1.10nm			4.2mb
	S.D. = 1.1		on 50 of 51 obs.			

JUN 23, 1990 14h 25m 42.44± 0.49s
38.984 N ± 4.5km 22.255 E ± 4.9km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 3.1 (ATH), 2.3 (THE).

AGG	0.07	57	ePg	25	45.80	1.0
NEO	0.82	67	ePg	25	58.50	0.2
LIT	1.13	9	ePg	26	02.50	-1.1
			eSg	26	17.50	
PAIG	1.45	49	ePb	26	08.40	-0.3
			eSb	26	27.30	
ATH	1.53	131	ePn	26	10.50	0.7
VLS	1.53	239	ePb	26	09.00	-0.9
IGT	1.59	291	ePb	26	12.40	1.7
OUR	1.90	44	ePb	26	15.10	0.0
FNA	1.92	340	ePb	26	15.20	-0.3
GRG	1.97	3	ePb	26	16.50	0.2
SOH	2.02	24	ePb	26	17.00	0.0
KEK	2.04	292	ePb	26	20.40	3.2X
VLI	2.33	166	ePn	26	20.60	-0.7
VAY	2.35	6	ePn	26	21.50	-0.1
SRS	2.37	25	ePn	26	21.70	-0.2
OHR	2.40	333	iPn	26	22.80	0.4
SKO	3.05	348	iPn	26	31.20	-0.4
	S.D. = 0.8		on 16 of 17 obs.			

JUN 23, 1990 14h 33m 42.15± 0.71s
41.586 N ± 6.1km 23.783 E ± 6.4km
DEPTH = 10.0km (geophysicist)
GREECE-BULGARIA BORDER REGION (363)
ML 2.9 (THE).

SRS	0.49	197	ePgc	33	52.00	-0.1
			eSg	34	00.60	
KNT	0.79	238	ePgc	33	56.70	-0.8
			eSg	34	08.70	
SOH	0.83	203	ePgc	33	58.00	-0.2
VAY	0.95	254	ePn	34	00.50	0.3
THE	1.14	213	iPb	34	03.50	0.1
			iSb	34	20.30	
GRG	1.22	239	ePbc	34	04.30	-0.5
			eSb	34	22.10	
OUR	1.26	173	ePbc	34	05.40	-0.1
PAIG	1.66	183	ePb	34	12.30	0.9
			iSb	34	37.40	
LIT	1.78	214	ePb	34	14.00	0.8
			eSb	34	39.00	
SKO	1.79	283	ePn	34	12.00	-1.4
ALN	1.84	111	ePb	34	14.00	0.0
OHR	2.30	259	ePn	34	23.00	2.3
EZN	2.61	131	iPn	34	23.60	-1.5
MLR	4.21	21	eP	34	50.00	2.1
BZS	4.33	339	ePc	34	47.50	-1.9
	S.D. = 1.3		on 15 of 15 obs.			

JUN 23, 1990 14h 46m 35.63± 0.22s
14.556 S ± 5.4km 167.937 E ± 5.3km
DEPTH = 33.0km (normal)
5.4mb (17 obs.) 5.0Msz (3 obs.)
VANUATU ISLANDS (186)

PVC	3.19	174	iP	47	25.50	0.9
DZM	7.61	191	iPc	48	22.90	-4.2X
			iS	49	46.60	
HNR	9.33	302	eP	48	51.00	0.1
			eS	49	39.00	
SVA	10.70	111	eP	49	04.30	-5.4X
BRS	19.04	225	iPc	50	59.00	1.2
KDB	20.93	282	eP	51	16.00	-2.1
CTA	21.41	252	iPc	51	24.00	1.0
	1.0s		89.00nm			5.1mb
			iS	55	25.00	
RMQ	21.50	233	iPd	51	25.10	1.3
COO	21.72	220	eP	51	28.00	1.9
CMS	26.33	226	eP	52	10.00	-0.4
	0.9s		44.00nm			5.1mb
BWA	26.49	218	eP	52	10.30	-1.6
CNB	26.57	216	eP	52	13.00	0.3
CAN	26.78	216	eP	52	15.80	1.2
OIS	27.64	253	eP	52	22.00	-0.5
STK	29.60	230	eP	52	40.10	0.0
	1.5s		59.00nm			5.1mb
TOO	30.37	217	eP	52	46.00	-0.9
WB5	32.46	256	eP	53	04.00	-1.4
ASPA	33.34	249	iPd	53	11.60	-1.4
	1.1s		70.00nm			5.5mb
	Z 23s		3.41um			5.0MszX
			LR	05	09.60	
FORR	39.92	239	eP	54	06.50	-2.0
	0.5s		26.00nm			5.2mb
MBL	46.12	255	eP	54	58.70	-0.2
KLB	48.75	241	eP	55	18.00	-1.4
MUN	50.11	240	eP	55	29.00	-0.8
NANU	50.11	253	eP	55	30.00	0.1
TRT	54.58	271	iPd	56	02.80	-0.7
KKM	55.22	288	ePd	56	08.50	0.2
CHJJ	57.29	332	eP	56	23.20	0.6
IIDJ	57.32	331	eP	56	22.60	-0.3
MAT	58.05	332	(P)	56	26.00	-1.9
	1.8s		72.73nm			5.4mb
MTMJ	58.27	332	eP	56	28.60	-1.0
NIIJ	58.28	333	eP	56	29.80	0.3
TSRJ	58.29	330	eP	56	29.30	-0.3
SBA	63.31	180	e(P)	57	01.20	-1.9
NJ2	66.00	315	Pd	57	21.30	0.1
KGM	66.04	279	eP	57	23.40	1.6
ADK	67.50	10	eP	57	29.30	-1.0
	1.6s		236.07nm			6.0mb
WHN	68.31	312	eP	57	36.50	0.7
MDJ	68.43	332	eP	57	36.20	-0.2
IPM	68.98	281	ePd	57	41.90	1.6
	1.4s		78.60nm			5.5mb
SNY	69.42	326	eP	57	42.30	-0.2
TIA	69.64	318	Pd	57	43.80	-0.2
CN2	69.83	329	Pc	57	44.00	-0.9
	1.0s		30.00nm			5.3mb
PSI	70.44	278	ePd	57	49.00	-0.3
GYA	72.15	304	P	58	00.80	1.3
BJI	72.54	321	eP	58	01.00	-0.3
	2.0s		120.00nm			5.5mb
TIY	73.57	317	Pd	58	08.60	1.1
	Z 20s		0.60um			4.9Msz
XAN	74.05	312	Pd	58	11.00	0.7
KMI	74.77	301	Pd	58	16.50	1.6
CHG	75.60	294	iPd	58	20.90	1.4
	0.9s		14.71nm			5.0mb
HHC	75.87	319	eP	58	22.80	2.0
CD2	76.42	307	eP	58	25.00	1.0
BTO	76.72	318	eP	58	25.70	0.2
LZH	78.68	312	Pc	58	37.50	1.0
	2.0s		110.00nm			5.5mb
GTA	83.01	314	iPd	59	00.60	1.3
	1.6s		100.00nm			5.7mb
PMR	83.12	19	eP	58	57.90	-1.3
	2.0s		114.80nm			5.6mb
MHC	83.81	49	eP	59	04.30	0.9
SHL	84.05	298	iP	59	06.00	1.1
PRI	84.07	50	eP	59	06.80	2.1
WDC	84.48	46	eP	59	06.10	-0.4
ORV	84.80	47	e(P)	59	09.20	1.1
CMB	85.00	49	eP	59	08.60	-0.7
MIN	85.04	46	e(P)	59	15.50	6.0X
FRI	85.10	50	eP	59	09.50	-0.2
IMA	85.32	15	eP	59	10.70	0.3
	2.2s		42.90nm			5.3mb
MWC	85.34	53	eP	59	13.00	1.8
SBB	85.68	53	eP	59	13.00	0.2
RVR	85.79	53	eP	59	14.00	0.8
PLM	85.97	54	eP	59	14.00	-0.4
FBA	85.99	17	eP	59	12.80	-0.8
CLC	86.26	52	eP	59	15.00	-0.6
GSC	86.68	52	eP	59	16.00	-1.7
TPC	86.86	54	eP	59	20.00	1.5
KVN	87.04	49	eP	59	18.00	-1.5
TNP	87.34	50	eP	59	20.20	-0.8
	2.0s		67.86nm			5.6mb
GLA	87.47	55	eP	59	22.00	0.5
PNT	89.87	39	eP	59	33.00	0.5
GUN	89.88	299	P	59	34.20	0.7
PKI	90.18	298	P	59	35.20	0.4
GKN	90.96	299	P	59	36.60	-1.6
NEW	91.02	40	eP	59	36.00	-1.8
	1.3s		16.51nm			5.2mb
WMQ	93.07	314	eP	59	47.00	-0.4
ALQ	94.67	55	eP	59	45.00	-10.2X
	Z 20s		0.53um			5.0Msz
GOL	96.65	51	eP	00	00.00	-4.2X
	Z 20s		0.75um			5.2Msz
BUL	127.19	230	iPKPc	05	35.20	-4.2X
ZST	138.71	330	ePKP	06	01.40	1.3
OHR	141.09	319	ePKP	06	01.50	-3.2X
MDI	143.87	334	PKP	06	14.00	4.7X
ARV	144.09	328	PKP	06	08.50	-1.3
VAI	144.20	335	PKP	06	08.40	-1.4
SFI	144.32	330	PKP	06	10.00	-0.1
ORI	144.40	321	PKP	06	10.10	-0.3
PGD	144.42	330	PKP	06	09.00	-1.5
CRE	144.49	329	PKP	06	09.00	-1.6
ASS	144.54	328	PKP	06	09.50	-1.1
DUI	144.55	325	PKP	06	08.50	-2.2
AQU	144.65	327	PKP	06	10.60	-0.2
FIR	144.71	330	ePKP	06	10.00	-0.8
TDS	144.71	321	PKP	06	10.70	-0.2
SGO	144.78	323	PKP	06	10.50	-0.5
BOB	144.79	333	PKP	06	09.50	-1.5
LOR	144.79	341	ePKP	06	10.10	-0.8
	1.4s		30.50nm			

23d 15h

BDI	144.81	331	PKP	06	09.50	-1.6
SDI	144.87	325	PKP	06	10.20	-1.0
AZI	144.89	326	PKP	06	11.00	-0.1
BSS	144.92	323	PKP	06	10.90	-0.3
LBF	145.00	341	ePKP	06	10.90	-0.4
	1.4s		34.85nm			
GRR	145.02	347	ePKP	06	10.60	-0.6
	0.8s		10.75nm			
SSF	145.08	341	ePKP	06	11.30	0.0
	1.4s		67.55nm			
LPL	145.30	337	ePKP	06	12.70	0.6
	1.3s		25.25nm			
LPG	145.30	337	ePKP	06	12.60	0.4
	1.4s		47.90nm			
SMF	145.35	341	ePKP	06	11.90	0.1
	1.6s		80.85nm			
AVF	145.37	341	ePKP	06	11.90	0.1
	1.2s		31.25nm			
LPF	145.39	347	ePKP	06	12.20	0.4
	1.2s		44.65nm			
RMP	145.40	327	PKP	06	12.90	0.8
RDP	145.43	326	PKP	06	12.90	0.7
BNI	145.71	336	PKP	06	13.70	1.0
BGF	145.74	342	ePKP	06	13.30	0.8
	1.2s		28.25nm			
SOI	145.83	319	PKP	06	13.50	0.6
PLDF	146.01	340	PKP	06	09.70	-3.4X
AGO	146.10	341	PKP	06	09.34	-3.8X
MAF	146.12	342	ePKP	06	14.90	1.7
	1.6s		43.55nm			
TCF	146.17	342	ePKP	06	14.80	1.6
	1.4s		41.40nm			
LSF	146.40	343	ePKP	06	15.20	1.6
PYM	146.41	341	PKP	06	09.34	-4.4X
MFF	146.53	345	ePKP	06	15.30	1.6
	1.2s		26.80nm			
LBL	146.79	340	PKP	06	10.98	-3.2X
RJF	147.27	342	ePKP	06	18.30	3.3X
	1.4s		34.85nm			
CAI	147.48	128	iPKPd	06	17.70	1.5
LFF	147.83	343	ePKP	06	19.40	3.5X
	1.4s		56.65nm			
LPO	147.93	342	ePKP	06	20.10	4.0X
	1.0s		12.00nm			

S.D. = 1.1 on 114 of 129 obs.

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* JUN 23, 1990 14h 48m 45.86± 0.82s
37.335 N ±11.7km 48.945 E ±11.9km
DEPTH = 10.0km (geophysicist)
4.2mb (4 obs.)
NORTHWESTERN IRAN (345)

TAB	2.20	290	eP	49	23.50	0.4
TEH	2.53	128	ePd	49	27.50	-0.3
KER	3.33	207	eP	49	40.00	0.8
MLR	19.03	303	eP	52	51.00	-19.5X
VAY	20.76	289	eP	53	27.00	-2.2
SKO	21.64	291	eP	53	37.70	-0.5
OHR	22.09	289	eP	53	42.00	-0.8
KRA	24.35	311	eP	54	06.10	1.4
			e	54	09.10	
GKN	31.30	97	P	55	00.00	-8.5X
HFS	31.94	327	eP	55	14.70	1.1
	0.7s		4.70nm			4.5mb
NB2	33.45	327	P	55	27.70	0.9
	0.8s		1.30nm			3.9mb
EKA	39.16	314	P	56	18.00	2.8X
	0.7s		3.00nm			4.1mb
MBC	66.45	357	eP	59	36.00	-0.9
	0.5s		1.00nm			4.3mb

S.D. = 1.3 on 10 of 13 obs.

? JUN 23, 1990 14h 49m 29.48± 2.02s
42.221 N ±18.6km 7.440 W ± 9.8km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
mbLg 2.7 (MDD).

ERUA	0.28	52	iP	49	35.20	-0.2
			eS	49	39.20	
EZAM	0.94	266	eP	49	47.50	0.2
			eS	49	58.30	
STS	1.06	309	iP	49	49.00	-0.4
			eS	50	02.50	
EMON	1.22	4	eP	49	52.50	0.4
			eS	50	07.60	

S.D. = 0.6 on 4 of 4 obs.

& JUN 23, 1990 15h 30m 08.20s
51.114 N 124.410 W
DEPTH = 5.0km (geophysicist)
BRITISH COLUMBIA (23)
<PGC>. ML 3.0 (PGC). Second event, ML 2.9, occurred about 19 seconds later (PGC).

CBB	1.24	210	Pd	30	29.42	-2.3
			S	30	45.03	
WHB	1.35	136	P	30	31.73	-2.0
			S	30	48.53	
SHB	1.56	167	Pd	30	34.21	-2.5
			S	30	53.90	
WPB	1.65	152	Pd	30	36.43	-1.5
			S	30	56.92	
GDR	1.69	218	Pd	30	37.12	-1.4
			S	30	58.09	
BTB	1.80	204	Pd	30	38.52	-1.7
			S	31	01.69	
BIB	1.85	157	Pd	30	39.14	-1.7
			S	31	02.50	
ALB	1.86	188	P	30	38.96	-2.1
			S	31	03.63	
NAB	1.91	172	P	30	39.76	-2.0
PHC	1.96	259	P	30	41.69	-0.6
MGB	2.12	185	P	30	43.01	-1.9
			S	31	09.79	
EDB	2.13	235	P	30	43.81	-1.1
			S	31	11.83	
HNB	2.19	147	P	30	43.68	-2.0
OZB	2.27	198	P	30	45.54	-1.4
			S	31	14.90	
SNB	2.47	161	P	30	48.28	-1.6
PGC	2.54	166	P	30	49.14	-1.6
PFB	2.55	180	P	30	49.46	-1.4
VDB	2.56	144	P	30	48.93	-2.2
MCW	2.64	157	P	30	50.37	-1.9
VGZ	2.79	165	P	30	52.64	-1.7
OSP	2.83	182	P	30	56.77	1.7
MBW	2.84	144	P	30	53.41	-1.8
STW	3.01	171	P	30	56.53	-0.8
OTR	3.03	179	P	30	57.39	-0.4
OHW	3.05	156	P	30	57.18	-0.7
CMW	3.08	150	P	30	56.98	-1.4
OFK	3.17	179	P	30	58.74	-0.9
BLN	3.25	163	P	31	00.45	-0.4
RPW	3.26	144	P	31	00.10	-1.0
OSD	3.33	172	P	31	01.28	-0.9
JCW	3.34	150	P	31	00.53	-1.6
OOW	3.38	177	P	31	01.77	-1.1
HDW	3.58	165	P	31	04.78	-0.8
HTW	3.73	152	P	31	06.73	-1.1
NLW	4.03	137	P	31	10.17	-1.9
GSM	4.27	155	P	31	14.00	-1.5
ETW	4.41	141	P	31	17.08	-0.4
WTV	4.49	138	P	31	18.37	-0.1
FMW	4.56	156	P	31	18.00	-1.6
TBM	4.67	146	P	31	20.82	-0.3
MDW	5.45	144	P	31	30.76	-1.3

41 obs. associated

? JUN 23, 1990 15h 53m 07.98± 5.68s
18.458 N ±38.5km 65.743 W ±35.1km
DEPTH = 33.0km (normal)
PUERTO RICO REGION (90)

LPR	0.19	219	P	53	14.60	0.0
CPD	0.45	202	P	53	17.80	0.0
SJG	0.52	228	iP	53	19.00	0.1
PORP	0.94	245	P	53	24.70	-0.1
MGP	1.36	251	P	53	30.80	0.1

S.D. = 0.1 on 5 of 5 obs.

JUN 23, 1990 16h 35m 13.62± 0.54s
6.806 N ± 5.9km 72.949 W ± 9.5km
DEPTH = 158.9 ± 5.6 km
4.7mb (10 obs.)
NORTHERN COLOMBIA (99)

BMG	0.29	335	eP	35	36.50	-0.3
FUQ	1.54	211	eP	35	44.50	-0.5
BOG	2.44	207	iPc	35	56.50	1.3
			iS	36	25.50	
UPA	6.87	289	(P)	36	44.00	-9.0X
PSO	7.08	218	eP	36	55.50	-0.8
ZOBO	23.42	168	P	40	10.00	-0.2
	1.0s		32.50nm			4.8mb
			i	40	44.00	
LPB	23.68	168	eP	40	06.00	-6.5X
			e	40	41.00	
			e	47	25.00	
CNCB	23.97	168	P	40	16.00	0.5
			i	40	51.00	
			i	47	13.00	
CCH	24.96	164	(P)	40	08.40	-16.0X
SIV	25.52	153	(P)	40	46.00	16.7X
			i	41	02.20	
RSCP	30.91	340	iP	41	18.50	1.1
	0.8s		20.03nm			4.9mb
GOL	43.81	323	iP	43	06.00	0.3
	1.0s		50.00nm			5.1mb
SCH	48.13	5	eP	43	40.00	0.9
BW06	48.20	324	iP	43	40.00	-0.1
	1.1s		8.93nm			4.4mb
TNP	50.69	315	eP	43	59.50	0.3
	1.0s		4.50nm			4.1mb
LRM	51.69	325	eP	44	06.50	-0.1
KVN	51.74	315	iP	44	07.00	-0.1
FFC	53.16	339	iPc	44	16.30	-0.7
	0.4s		8.00nm			4.9mb
SES	53.80	331	eP	44	22.00	0.1
NEW	55.70	326	iP	44	35.00	-0.7
	1.0s		3.25nm			4.2mb
YKA	63.34	340	eP	45	26.60	-1.0
	0.5s		11.90nm			5.1mb
LIC	67.43	86	P	45	54.20	-0.4
	0.6s		4.50nm			4.5mb
KIC	67.71	86	P	45	56.10	-0.3
INK	73.10	340	eP	46	28.00	0.2
MBC	73.85	350	ePc	46	32.40	0.4
	0.6s		11.00nm			4.8mb
WB5	150.48	241	ePKP	54	48.10	5.1X

S.D. = 0.7 on 21 of 26 obs.

JUN 23, 1990 16h 39m 56.82± 0.83s
36.434 N ±10.8km 27.330 E ± 6.5km
DEPTH = 33.0km (normal)
DODECANESE ISLANDS (369)

YER	1.04	47	ePn	40	14.90	-0.2
CIN	1.31	27	eP	40	19.00	0.1
SMG	1.33	343	eP	40	20.20	1.0
APE	1.58	294	eP	40	21.60	-1.3
KSL	1.85	99	eP	40	27.00	0.3
ELL	2.10	81	ePn	40	30.00	-0.5
VAM	2.74	249	eP	40	40.00	0.6

S.D. = 0.9 on 7 of 7 obs.

JUN 23, 1990 16h 40m 33.36± 0.87s
38.570 N ± 6.1km 24.649 E ± 8.7km
DEPTH = 33.0km (normal)
AEGEAN SEA (365)
ML 3.4 (ATH).

ATH	0.95	231	ePn	40	50.40	0.1
			eSn	41	03.50	
NEO	1.33	304	ePn	40	55.00	-0.8
PAIG	1.55	331	ePgc	40	57.00	-1.9
EZN	1.81	46	iPn	41	02.60	-0.1
OUR	1.84	344	ePb	41	02.90	-0.2
			eSb	41	18.20	
AGG	1.87	285	ePbd	41	06.50	2.9X
			eSb	41	27.60	
LIT	2.27	313	ePb	41	10.20	0.9
VLI	2.29	217	ePn	41	09.00	-0.6
SOH	2.46	336	ePb	41	11.70	-0.4
			iSb	41	35.70	
ALN	2.56	24	ePn	41	18.40	5.0X
			eSn	41	46.90	
ITM	2.56	238	ePn	41	13.60	0.1
RDO	2.66	15	ePn	41	16.00	1.2
SRS	2.67	343	ePn	41	14.90	-0.1
			iSn	41	42.60	
KNT	2.92	333	ePn	41	18.50	0.0
			eSn	41	47.40	
GRG	2.95	325	ePnc	41	18.80	-0.1
			eSn	41	46.50	
VAY	3.18	330	ePn	41	22.50	0.3
IGT	3.50	287	ePn	41	28.40	1.7
OHR	3.90	312	ePn	41	35.20	2.7X
SKO	4.19	325	ePn	41	30.00	-6.6X

S.D. = 0.9 on 15 of 19 obs.

JUN 23, 1990 16h 51m 32.01± 0.50s
37.169 N ± 9.4km 49.922 E ± 7.5km
DEPTH = 10.0km (geophysicist)
4.5mb (9 obs.)
CASPIAN SEA (338)

TEH	1.85	140	iPd	52 05.00	0.8
TAB	2.99	289	eP	52 23.00	2.5
			i	52 29.00	
KER	3.63	220	eP	52 29.00	-0.5
MAIO	7.74	94	iPc	53 27.40	-0.1
	0.7s		7.94nm	5.0mb	
			eS	55 02.00	
QUE	15.78	111	eP	55 20.70	4.6X
CLL	29.64	310	iPd	57 40.70	1.2
	1.3s		14.00nm	4.6mb	
SQTA	30.11	302	iPc	57 43.30	-0.7
	0.6s		12.90nm	4.9mb	
HFS	32.51	327	eP	58 05.40	0.7
	0.5s		1.30nm	4.1mb	
LPG	33.13	298	eP	58 10.50	-0.2
	0.6s		3.60nm	4.5mb	
LPL	33.15	298	eP	58 10.50	-0.2
BNI	33.20	298	P	58 11.00	0.0
LOR	35.12	302	eP	58 27.20	-0.2
	0.7s		2.20nm	4.1mb	
SMF	35.14	300	eP	58 26.80	-0.8
AVF	35.47	301	eP	58 29.60	-0.8
MAF	36.03	300	eP	58 35.00	-0.2
	0.9s		6.55nm	4.5mb	
TCF	36.28	300	eP	58 37.00	-0.3
	0.7s		2.20nm	4.1mb	
LDF	37.77	304	eP	58 49.20	-0.6
GRR	38.27	304	eP	58 53.60	-0.3
	0.5s		5.85nm	4.6mb	
LPF	38.41	303	eP	58 54.80	-0.3
BCAO	43.44	229	iPc	59 30.50	-6.4X
S.D. = 0.9 on 18 of 20 obs.					

JUN 23, 1990 17h 40m 33.73± 1.11s
15.033 N ± 2.9km 60.399 W ±12.9km
DEPTH = 33.0km (normal)
LEEWARD ISLANDS (92)
ML 3.7 (FDF). MD 3.6 (TRN). Felt (II) on Martinique.

CRM	0.57	241	iPd	40 45.69	0.3
MVM	0.68	225	iPd	40 47.21	0.4
FDF	0.79	248	iPd	40 48.09	-0.3
			S	40 57.60	
BIM	0.83	232	iPd	40 49.05	0.1
			S	40 59.30	
SLW	1.13	207	eP	40 53.36	0.0
			eS	41 07.08	
BBL	1.15	295	ePd	40 53.30	-0.3
			S	41 06.60	
MGG	1.25	315	iPd	40 54.83	-0.1
			S	41 08.30	
SLB	1.35	207	eP	40 56.33	-0.2
			eS	41 11.69	
SFG	1.44	328	ePd	40 57.80	0.1
			S	41 13.30	
DOG	1.54	310	ePd	40 59.00	-0.2
			S	41 15.90	
PAG	1.58	309	ePd	40 59.60	-0.3
			S	41 17.30	
SEG	1.73	322	eP	41 02.39	0.5
			S	41 22.40	
SOA	1.80	204	eP	41 03.38	0.4
			eS	41 24.30	
SVV	1.88	205	eP	41 03.97	-0.2
SVB	1.94	205	eP	41 04.56	-0.4
MGH	2.42	314	eP	41 12.60	0.7
BPA	2.44	325	eP	41 11.70	-0.5
			S	41 38.00	
NEV	2.96	315	eP	41 19.42	0.0
			S	41 52.00	
SKI	3.21	316	eP	41 22.96	0.0
			eS	41 58.97	
S.D. = 0.3 on 19 of 19 obs.					

* JUN 23, 1990 17h 46m 53.59± 1.70s
17.409 S ± 7.8km 174.495 W ±10.5km
DEPTH = 231.3 ± 16.6 km
4.4mb (3 obs.)
TONGA ISLANDS (173)

VUN	6.74	264	ePd	48 31.30	-0.1
DZM	18.53	252	iPc	50 56.00	0.6
PUZ	21.55	196	P	51 25.30	0.0
NOZ	22.12	196	P	51 30.90	0.2
WLZ	22.14	201	P	51 30.70	-0.3
TAZ	22.19	199	P	51 31.60	0.1
UTU	22.24	200	P	51 32.80	0.8
LTZ	27.69	201	eP	52 21.40	-0.9
BRS	31.76	246	iPd	52 58.20	-0.1
RMQ	35.16	249	eP	53 27.50	0.2
WB5	48.37	259	eP	55 13.50	-0.8
ASPA	48.52	254	iPc	55 15.80	0.4
	0.7s		72.00nm	5.2mb	
KVN	77.00	42	eP	58 22.00	-0.7
TNP	77.02	43	eP	58 23.10	0.3
	1.2s		4.84nm	4.1mb	
BW06	84.46	42	iP	59 02.00	0.3
	1.0s		4.50nm	4.2mb	
SES	87.44	35	eP	59 16.00	0.2
CLL	145.65	352	e(PKP)	06 11.00	5.4X
KHC	147.69	350	ePKP	06 17.50	8.5X
S.D. = 0.5 on 16 of 18 obs.					

& JUN 23, 1990 18h 04m 29.94s
41.907 N 112.402 W
DEPTH = 9.6km
UTAH (478)
<SLC-P>. ML 2.7 (SLC).

PTI	0.96	1	eP	04 48.40	0.0
DAU	1.73	150	eP	05 01.50	1.0
DUG	1.74	190	eP	05 00.00	-0.5
HPI	1.87	344	eP	05 03.50	0.9
BW06	2.28	67	eP	05 10.70	2.2
5 obs. ossociated					

& JUN 23, 1990 18h 11m 34.51s
41.903 N 112.405 W
DEPTH = 8.1km
UTAH (478)
<SLC-P>. ML 2.3 (SLC).

PTI	0.97	2	eP	11 52.80	-0.4
DAU	1.72	149	eP	12 06.70	1.5
DUG	1.73	190	eP	12 04.60	-0.6
HPI	1.88	344	eP	12 11.00	3.6
4 obs. ossociated					

& JUN 23, 1990 18h 31m 31.06s
41.909 N 112.403 W
OEPTH = 9.8km
UTAH (478)
<SLC-P>. ML 2.4 (SLC).

PTI	0.96	1	eP	31 49.30	-0.2
DAU	1.73	150	eP	32 03.00	1.3
DUG	1.74	190	eP	32 01.50	-0.2
HPI	1.87	344	eP	32 06.30	2.6
4 obs. ossociated					

? JUN 23, 1990 18h 45m 22.60± 1.19s
37.094 N ±13.1km 50.262 E ±13.7km
DEPTH = 10.0km (geophysicist)
4.3mb (1 obs.)
CASPIAN SEA (338)

TEH	1.63	146	iPd	45 51.50	-0.1
TAB	3.27	288	eP	46 15.00	-0.1
KER	3.75	224	eP	46 22.00	0.1
MAIO	7.46	93	eP	47 21.00	6.8X
			eS	48 49.00	
QUE	15.50	112	eP	49 10.90	7.9X
HFS	32.72	327	eP	51 57.20	0.1
	0.6s		2.50nm	4.3mb	
S.D. = 0.2 on 4 of 6 obs.					

JUN 23, 1990 18h 53m 27.96± 0.73s
37.840 N ± 6.5km 22.994 E ± 7.9km
DEPTH = 10.0km (geophysicist)
SOUTHERN GREECE (368)
ML 2.6 (ATH).

ATH	0.59	77	ePg	53 39.20	-0.6
ITM	1.08	232	ePb	53 47.00	-1.2
VLI	1.12	182	ePb	53 48.50	-0.5
AGG	1.29	336	ePd	53 52.30	0.4
VLS	1.93	281	ePb	54 02.00	0.9
LIT	2.29	350	ePd	54 05.90	-0.5
VAM	2.62	158	ePn	54 12.50	1.5
S.D. = 1.2 on 7 of 7 obs.					

* JUN 23, 1990 19h 45m 43.88± 1.17s
28.401 N ±11.4km 140.068 E ±14.7km
DEPTH = 443.9 ± 9.9 km
4.2mb (4 obs.)
BONIN ISLANDS REGION (212)

CHJJ	7.68	353	eP	47 35.80	-1.1
KAKJ	7.78	1	eP	47 37.30	-0.7
TSRJ	7.91	335	eP	47 40.50	1.0
MAT	8.27	350	(P)	47 44.00	0.6
	0.5s		3.52nm	3.9mb	
			(S)	49 15.00	
MTMJ	8.38	347	eP	47 45.10	0.3
NIIJ	8.86	354	eP	47 49.10	-0.9
YAMJ	9.75	360	P	48 00.20	0.3
			eS	49 49.70	
OFUJ	10.73	7	P	48 11.60	0.8
			eS	50 09.40	
GUN	47.43	283	P	53 39.00	0.2
PKI	47.92	283	P	53 42.20	-0.2
DMN	48.17	283	P	53 44.00	-0.3
WB5	48.31	187	eP	53 45.20	0.2
GKN	48.47	283	P	53 46.20	-0.2
KEV	71.13	340	eP	56 18.00	0.8
SOD	72.50	338	iP	56 25.30	0.1
SUF	75.21	334	eP	56 40.50	-0.1
	0.5s		4.70nm	4.4mb	
NUR	77.05	333	eP	56 51.00	0.3
HFS	81.48	336	eP	57 13.50	-0.6
	0.5s		4.40nm	4.4mb	
NB2	81.70	337	P	57 14.90	-0.4
	0.8s		2.90nm	4.0mb	
S.D. = 0.6 on 19 of 19 obs.					

* JUN 23, 1990 20h 21m 12.10± 0.83s
32.103 N ±17.3km 131.114 E ±14.3km
DEPTH = 117.0 ± 8.4 km
4.4mb (5 obs.)
KYUSHU, JAPAN (235)

KUMJ	0.49	331	iPd	21 29.60	-0.3
			S	21 41.30	
KAGJ	0.93	192	iP+	21 33.30	-0.2
			eS	21 47.30	
MAT	7.35	51	(P)	22 59.00	0.7
			iS	23 07.60	
TIY	16.31	295	eP	24 43.60	-11.9X
LZH	22.90	287	Pd	26 07.50	1.0
	1.5s		37.00nm	4.5mb	
GUN	39.18	276	P	28 30.80	0.2
PKI	39.68	276	P	28 35.20	0.5
MBC	63.54	15	eP	31 32.00	0.4
	0.7s		3.00nm	4.3mb	
HFS	74.80	333	eP	32 38.90	-1.8
	0.5s		1.00nm	3.9mb	
NB2	75.16	334	P	32 41.80	-1.1
	0.9s		4.00nm	4.2mb	
CLL	80.75	326	iP	33 14.10	0.6
	1.0s		9.00nm	4.5mb	
S.D. = 1.1 on 10 of 11 obs.					

% JUN 23, 1990 20h 52m 58.74± 0.78s
40.812 N ± 5.4km 28.009 E ± 6.5km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

BNT	0.46	189	iPg	53 08.20	0.1
			eSg	53 13.70	
EDC	0.48	194	iPg	53 08.30	-0.1
ISK	0.83	72	ePg	53 14.50	-0.4
DMK	1.03	349	iPg	53 18.20	0.1
YLV	1.07	103	iPn	53 18.70	-0.2
IZI	1.21	113	ePn	53 21.50	0.1
HRT	1.26	89	ePn	53 22.50	0.3
S.D. = 0.3 on 7 of 7 obs.					

* JUN 23, 1990 21h 20m 58.04± 1.01s
7.340 N ±11.8km 77.894 W ±10.4km
DEPTH = 33.0km (normal)
PANAMA-COLOMBIA BORDER REGION (82)

UPA	2.30	315	iPd	21 34.50	0.1
			S	22 05.00	

23d 21h

FUQ	4.53	114	eP	22	21.00	14.6X
BOG	4.67	125	eP	22	13.00	4.6X
			eS	23	14.00	
BMG	4.79	93	iPd	22	13.00	3.2X
SDV	7.35	77	iPnd	22	48.20	2.2
			iSn	24	10.60	
TOV	8.37	73	ePn	23	01.60	1.4
FISA	9.30	65	eP	23	13.00	0.0
MORO	10.09	69	eP	23	23.00	-0.9
OLLA	11.28	76	eP	23	38.50	-1.7
LLAV	11.39	73	eP	23	40.70	-0.9
ZOBO	25.37	158	P	26	26.00	1.3
CCH	27.17	155	eP	26	40.00	-1.0
SIV	28.54	144	P	26	52.60	-0.5

S.D. = 1.4 on 10 of 13 obs.

JUN 23, 1990 21h 38m 18.75± 0.08s
21.568 S ± 2.7km 176.483 W ± 2.6km
DEPTH = 180.5km (geophysicist)
6.4mb (60 obs.)

FIJI ISLANDS REGION (181)

mb 6.5 (BRK), 6.4 (PAS).
Mo=5.0•10••19 Nm (PPT). Depth from broadband displacement seismograms.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike= 20 Dip=85 Slip= -90
NP2: 200 5 -90
Principal Axes:
T Plg=40 Azm=110
P 50 290
Comment: The focal mechanism is poorly controlled and corresponds to normal faulting. The preferred fault plane is NP1.
RADIATED ENERGY
No. of sta: 5 Focal mech. F
Energy 7.7±3.3•10••13 Nm
MOMENT TENSOR SOLUTION
Dep 186 No. of sta: 14
Moment Tensor; Scale 10••19 Nm
Mrr=-0.53 Mtt= 0.70
Mff=-0.17 Mrt=-0.82
Mrf=-2.20 Mtf= 0.80
Principal axes:
T Val= 2.56 Plg=36 Azm=130
N 0.00 20 25
P -2.56 48 272
Best Double Couple:Mo=2.6•10••19
NP1:Strike=276 Dip=21 Slip= -18
NP2: 23 84 -110
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 17S, 45C M.W.: 16S, 41C
Centroid Location:
Origin Time 21:38:29.4 0.1
Lat 21.29S 0.01 Lon 176.22W 0.01
Dep 194.8 0.6 Half-duration 10.0
Moment Tensor; Scale 10••19 Nm
Mrr=-0.34 0.01 Mtt= 0.20 0.01
Mff= 0.13 0.02 Mrt=-0.69 0.01
Mrf=-1.98 0.01 Mtf= 0.49 0.01
Principal Axes:
T Val= 2.23 Plg=39 Azm=119
N -0.12 11 20
P -2.11 49 278
Best Double Couple:Mo=2.2•10••19
NP1:Strike=264 Dip=12 Slip= -26
NP2: 19 85 -101

TVI	5.71	323	iP	39	43.90	1.1
KRO	5.75	317	eP	39	44.50	1.2
SVA	5.87	305	iPd	39	48.00	3.2X
			eS	41	02.00	
OVA	5.90	310	ePc	39	47.90	2.7
VUN	5.93	306	iPd	39	48.10	2.4
			eS	41	02.30	
UDU	6.33	328	eP	39	51.80	1.0
MBU	6.43	314	eP	39	53.90	1.6
SGE	6.59	306	ePc	39	58.00	3.5X
			eS	41	26.60	
NDF	6.86	302	iP	40	04.00	6.1X
YSA	7.42	310	eP	40	06.90	1.6
RAO	7.76	189	eP	40	13.20	3.4X
			iS	41	39.20	
PVC	14.82	282	iPd	41	46.00	5.2X
DZM	15.86	265	iPd	41	58.10	4.3X
			iS	44	35.50	
			ScP	50	00.90	
			ScS	53	43.10	
PUZ	17.06	194	eP	42	06.60	-1.5
			S	45	02.80	
WLZ	17.61	201	P	42	15.70	1.4
NOZ	17.64	194	P	42	11.90	-2.7
TAZ	17.67	198	P	42	14.80	-0.2
			S	45	27.50	
UTU	17.72	199	P	42	17.60	2.1
TUTZ	18.27	199	P	42	21.80	0.4
RATZ	18.48	199	P	42	22.70	-0.9
CNZ	18.86	199	P	42	26.30	-1.3
DRZ	18.92	199	P	42	28.10	-0.4
PGZ	19.96	196	P	42	38.60	-0.1
	0.4s		68.00nm			5.5mb
MTW	20.68	197	P	42	42.80	-3.1X
CAW	20.75	198	P	42	43.80	-2.8X
BLW	20.88	197	P	42	45.90	-2.0
WDW	20.92	198	P	42	46.50	-1.8
MRW	20.97	199	P	42	46.50	-2.3
			S	46	24.50	
MOW	20.99	198	P	42	44.80	-4.2X
WEL	21.00	199	P	42	48.00	-1.1
			S	46	24.90	
SNZO	21.05	199	P-	42	48.00	-1.5
			S	46	33.00	
			ScP	50	14.00	
			ScS	53	53.00	
TCW	21.09	200	P	42	47.30	-2.6X
CCW	21.60	199	P	42	53.70	-1.2
THZ	22.03	202	P	42	58.60	-0.6
			S	46	48.90	
KHZ	22.41	200	P	43	01.80	-1.0
LTZ	23.15	201	P	43	09.10	-1.0
			S	47	02.60	
MQZ	23.86	200	P	43	16.90	0.2
TBI	25.02	99	iP	43	27.30	-0.5
	1.7s		5025.00nm			6.8mb
AFR	25.47	86	iP	43	30.10	-1.8
PAE	25.62	86	iP	43	31.40	-1.9
PPT	25.65	86	iP	43	31.80	-1.8
	1.3s		3085.00nm			6.8mb
HNR	25.67	294	eP	43	32.00	-1.8
PPN	25.79	86	iP	43	33.10	-1.7
TVO	25.90	86	iP	43	34.10	-1.8
MHZ	26.20	203	P	43	37.60	-0.9
MMCZ	26.20	204	P	43	37.70	-0.8
TLC	26.39	203	P	43	39.70	-0.5
MSZ	26.39	206	P	43	40.50	0.4
PMO	27.89	81	iP	43	51.40	-2.4X
	1.3s		2205.00nm			6.7mb
VAH	28.06	82	iP	43	52.60	-2.8X
	1.3s		990.00nm			6.4mb
TPT	28.15	81	iP	43	53.80	-2.4X
	1.3s		2080.00nm			6.7mb
RUV	28.30	82	iP	43	55.20	-2.4X
	1.3s		1650.00nm			6.6mb
8RS	28.53	252	iPc+	44	00.90	1.3
			epP	44	28.00	126kmX
			ePcP	47	04.00	
			e	47	50.00	
			iS	48	46.00	
			iScP	50	35.00	
			iScS	54	28.00	
COO	29.71	246	eP	44	11.00	1.0
RIV	31.01	240	eP	44	24.00	2.6
Z	18s		14.78um			5.7Msz
			e	54	40.00	
RMO	32.06	254	iPd	44	31.60	1.0
			e	44	45.00	53kmX
			e	45	53.00	
			e	49	31.00	
			e	50	47.00	
CNB	32.83	238	iPc	44	38.00	0.7
			e	44	52.00	55kmX
			e	44	58.00	
			e	49	41.00	
			i	50	48.00	
CAN	33.12	238	iPd	44	48.10	0.4
BWA	33.36	240	iPd	44	48.10	-1.7
			e	49	51.50	
			i	50	48.30	
CTA	34.81	266	iPd-	44	54.10	-0.1
			i	45	58.00	328kmX
			iS	50	05.00	
			iScP	50	54.00	
			iScS	54	57.00	
CMS	34.99	246	iPd	44	56.00	0.4
			e	50	56.00	
TOO	36.44	235	iPd	45	08.80	1.0
			i	46	00.00	244kmX
			e	51	02.00	
KDB	36.94	283	iPd	45	12.30	0.2
MCO	37.75	203	iPc	45	22.00	3.5X
LAT	38.26	287	iP	45	23.40	0.2
RKT	38.33	100	iP	45	23.80	0.1
	1.8s		1890.00nm			6.5mb
STK	38.62	246	iPd	45	26.70	0.6
	1.1s		818.00nm			6.3mb
			iS	55	25.50	
ADE	41.33	241	iPd-	45	48.20	-0.2
MNDI	41.46	286	eP	45	50.00	0.2
ASPA	45.67	258	iPd	46	22.90	-0.4
	1.0s		1915.00nm			6.6mb
Z	22s		32.71um			6.2MszX
			eScP	51	35.30	
			eS	52	49.50	
			iScS	56	00.70	
			LR	02	36.00	
WB5	45.85	263	iPd	46	23.50	-1.3
			iScP	51	37.50	
			iS	52	53.00	
HON	46.29	24	P	46	27.80	-0.2
KIP	46.38	24	ePc	46	28.77	0.0
			iS	52	32.49	
			isS	52	33.67	
			iSS	52	35.68	
OPA	46.62	24	P	46	29.20	-1.5
FORR	50.14	247	iPd	46	57.00	-0.7
MTN	50.59	271	iP	47	00.00	-1.4
			e	53	59.00	
GUA	51.51	309	eP	47	06.70	-1.5
			eS	54	15.00	
GUMO	51.57	309	eP	47	07.40	-1.3
PJG	51.57	309	eP	47	07.40	-1.3
COOL	56.10	247	eP	47	40.00	-1.7
	1.0s		750.00nm			6.5mb
SBA	56.91	184	iPc+	47	49.90	3.3X
KLB	58.89	245	eP	47	59.00	-2.1
MBL	58.91	258	iPd	47	59.70	-1.7
MEKA	58.99	251	eP	48	00.00	-1.8
RKG	59.22	242	eP	48	02.10	-1.2
	0.7s		1063.00nm			6.8mb
BAL	59.92	246	eP	48	07.00	-1.1
	0.4s		105.00nm			6.0mb
MUN	60.15	245	iPc	48	08.80	-0.8
	0.8s		444.00nm			6.3mb
MRWA	60.75	248	eP	48	12.50	-1.3
MNI	61.67	284	ePc	48	19.00	-1.1
NANU	62.49	255	iPd	48	24.70	-0.7
DAV	63.54	290	eP	48	31.00	-1.4
			eS	56	51.00	
MKS	63.98	275	ePc	48	35.00	-0.3
SPA	68.56	180	iPc	49	05.10	1.4
	0.9s		305.00nm			6.1mb
Z	18s		6.59um			5.9Msz
			i	17	05.70	
TSM	68.96	284	ePd	49	08.90	2.3
TRT	69.46	270	iPd	49	07.90	-1.9
	0.7s		510.00nm			6.4mb
OCP	71.03	295	iP	49	08.00	-11.1X
KKM	71.40	285	iPd	49	20.30	-1.2
	1.2s		834.90nm			6.4mb
MAJO	71.91	323	iPd	49	21.44	-2.6
			ipPd	50	03.98	177kmX
			esPc	50	23.84	
MAT	71.91	323	eP	49	22.00	-2.0
	1.4s		1186.05nm			6.4mb
			eS	58	26.00	
BAG	72.31	296	ePd-	49	24.00	-3.0X
	1.2s		1068.75nm			6.4mb
			eS	58	32.00	
ADK	73.13	360	eP	49	28.40	-2.3
	0.8s		624.10nm			6.4mb
SMY	74.43	354	ePd	49	35.70	-2.6
SAP	75.11	329	iP	49	41.70	-0.6
ANP	76.04	304	eP	49	48.00	-0.1
BLP	77.16	45	P	49	54.80	0.8
SYP	77.41	45	eP	49	55.00	-0.6
			e	59	36.00	
SCI	77.45	47	eP	49	58.90	3.3X
YSS	77.55	333	iPd	49	55.00	-0.8

			iS	59	29.00				N	16s	7.80um					PMR	85.73	13	eP	50	36.80	-1.2
PRS	77.62	43	iPc	49	56.50	0.0			E	16s	5.00um						1.4s	1258.90nm			6.5mb	
GCC	77.67	42	ePc	49	56.40	-0.3					PcP	50	16.00			TTA	85.76	9	ePd	50	37.80	-0.4
PCC	77.73	41	ePc	49	56.50	-0.5					pP	50	50.00	189kmX		UNM	85.81	67	(P)	50	41.00	1.3
BCH	77.74	44	P	49	57.40	0.1					sP	51	12.00			PSI	85.95	274	ePd	50	40.40	0.2
CIS	77.79	47	eP	50	00.70	3.1X					S	59	48.00				1.1s	485.60nm			6.2mb	
SDN	77.80	9	eP	49	55.30	-1.7					SKS	59	56.00			SNG	86.06	279	iPc	50	41.60	1.0
SAO	77.85	42	eP	49	57.10	-0.7	ORV	79.56	40	ePc	50	06.00	-1.0				1.2s	937.50nm			6.5mb	
PRI	77.95	43	ePc	49	58.40	-0.1				eSKPP'	20	15.20						eS	00	49.00		
			eP'P'	17	11.80		WDC	79.60	39	ePc	50	06.30	-0.9			PPM	86.18	68	(P)	50	43.00	1.2
			eSKPP'	20	23.00					eS	59	52.00				ANM	86.28	5	eP	50	40.50	-0.2
BRK	78.04	41	ePc	49	58.50	-0.2				eSKPP'	20	18.00				IIT	86.44	68	(P)	50	44.00	1.3
			ipP	50	42.00	178kmX	CLC	79.75	45	eP	50	08.00	-0.1			DAU	86.46	44	P	50	42.20	-0.3
			iS	59	42.00					e	59	59.00				TSI	86.58	275	eP	50	44.00	0.8
			eLR	13	47.00		TPC	79.80	47	eP	50	08.00	-0.4			PNT	86.75	33	ePc	50	43.00	-0.3
BKS	78.06	41	iPc	49	58.60	-0.3				e	00	02.00				TOA	86.82	14	eP	50	43.50	0.1
	0.9s	989.00nm			6.5mb		HAY	79.85	48	eP	50	12.10	3.4X			PV09	86.86	46	P	50	44.00	-0.5
Z	20s	6.00um			5.9Msz		GSC	79.97	46	eP	50	09.00	-0.4			ALQ	86.97	51	iPc+	50	44.60	-0.3
N	20s	2.50um								e	00	01.00					1.5s	694.44nm			6.3mb	
E	20s	4.50um					GLA	80.05	49	eP	50	09.00	-0.8				Z 18s	4.30um			5.9Msz	
		i	50	09.00						e	00	06.00						epP	51	32.00	192kmX
		i	50	12.50			HKC	80.44	299	i(P)	50	12.40	0.5			ANMO	86.97	51	iPc	50	44.58	-0.3
		e	50	40.80			MCO	80.85	298	iP	50	15.10	1.0				2.0s	1382.35nm			6.5mb	
		e	50	44.00			MAW	81.04	199	iPc-	50	16.40	2.1					ipPc	51	28.77	177kmX
		ipP	50	52.80	226kmX					eS	00	12.00						iS	01	12.07		
		iS	59	40.00			TNP	81.32	43	iPc	50	16.20	-0.3					isS	02	33.18		
		e	00	18.80			KVN	81.33	42	iPc	50	16.00	-0.5			OXX	87.04	70	(P)	50	46.50	0.9
		e	00	28.80			GZH	81.48	299	Pd	50	18.00	0.7			HPI	87.09	40	P	50	45.90	0.5
		eSP	00	35.60			Z	36s	18.10um			6.2MszX				NEW	87.42	35	iPc	50	45.00	-1.5
		epSS	00	50.00						pP	51	03.00	183kmX				1.5s	896.50nm			6.4mb	
		e	01	16.40						S	00	13.00				BJI	87.64	315	iPd	50	47.37	-0.3
		e	01	22.80						sS	01	40.00					2.0s	1990.00nm			6.7mb	
		e	01	30.00			KGM	81.63	275	ePd	50	18.90	0.5				Z 30s	11.20um			6.1MszX	
		esSP	02	00.00				0.8s	942.50nm			6.6mb					N 20s	6.90um				
		e	04	38.00						e	51	05.00	188kmX					ipPd	51	33.88	187kmX
		esSS	07	53.20			NJ2	81.65	309	Pd	50	17.60	-0.4					esPc	51	52.09		
		ePKKP	09	13.60				1.2s	400.00nm			6.0mb				LVVM	88.33	68	(P)	50	52.00	0.6
		e	10	28.00			Z	32s	9.10um			5.9MszX				GYA	88.40	299	iPd	50	51.60	-0.3
		e	10	40.80						pP	51	04.00	189kmX				4.0s	2600.00nm			6.5mb X	
		e	11	09.60			MDJ	82.20	324	iPd	50	20.80	0.1					pP	51	39.00	191kmX
LLA	78.07	43	eP	49	58.80	-0.2		1.0s	500.00nm			6.2mb						sP	52	03.00		
MHC	78.08	42	iPc	49	59.10	-0.1				pP	51	10.00	202kmX					PP	54	23.00		
ARN	78.16	42	P	49	59.50	0.0				esP	51	31.00				LRM	88.64	39	eP	50	52.00	-0.7
QZH	78.18	303	iPd	49	59.50	-0.3	QIZ	82.58	294	P	50	23.40	0.3			EVV	88.79	70	(P)	50	54.00	0.4
	1.0s	900.00nm			6.5mb		BMW	83.07	34	P	50	25.50	0.4			NNT	88.90	284	iPc	50	55.20	1.0
Z	24s	15.00um			6.2MszX		DL2	83.48	316	iPd	50	26.00	-1.3			LOE	88.95	289	iPd	50	54.00	-0.4
		pP	50	45.00	187kmX		Z	30s	8.10um			5.9MszX				COL	88.98	12	ePd	50	51.49	-2.1
		sP	51	09.50			N	18s	8.10um							FBA	88.98	12	ePd	50	52.10	-1.5
		S	59	37.00			E	17s	4.50um							TIY	89.04	311	Pd	50	54.50	-0.1
PAS	78.39	46	ePc	49	59.76	-1.0				S	00	28.00					1.6s	1100.00nm			6.6mb	
		epPc	50	42.80	176kmX					sS	01	54.00						pP	51	40.00	182kmX
		esP	51	09.00			KLM	83.58	276	eP	50	28.50	0.1					sP	52	02.00		
		epPP	53	30.00			VGB	83.75	36	P	50	28.30	-0.3			IMA	89.06	9	eP	50	53.20	-0.9
		esPP	54	05.00			SNY	83.93	319	iPd	50	28.50	-1.0				1.2s	242.90nm			6.0mb	
		iS	59	12.50				1.8s	1060.00nm			6.3mb				ILT	89.22	359	iP	50	53.00	-1.5
		esS	59	13.81						PcP	50	32.00						eS	01	03.00		
		eSKS	59	46.00						PP	53	42.50				NST	89.70	287	eP	51	00.00	2.1
		ePS	00	38.00						SKS	00	31.00				LNV	89.89	127	iPd	50	59.00	0.4
		ePcS	00	51.00						iS	00	38.00				XAN	89.90	307	iPd	50	58.60	0.0
		eSS	04	12.00			LON	83.99	34	P	50	29.60	-0.2				7.0s	3900.00nm			6.5mb X	
		esSS	05	04.00			GMW	84.00	33	P	50	30.30	0.6				N 12s	16.40um				
		eSSS	07	42.00			CN2	84.01	322	iPd	50	29.00	-0.8				E 10s	8.00um				
		eLg	09	28.00				1.0s	500.00nm			6.2mb						pP	51	48.00	199kmX	
		eLR	12	10.00						pP	51	14.00	182kmX			LCCH	89.98	126	iP	51	00.10	1.1
MWC	78.51	46	eP	50	01.00	-0.7	SVW	84.09	10	eP	50	29.10	-0.8			GOL	90.00	47	eP	50	58.70	-0.5
		e	50	50.00	203kmX		WHN	84.21	306	Pd	50	31.00	-0.1				1.1s	257.05nm			6.1mb	
		e	59	58.00				1.5s	300.00nm			5.8mb					Z 18s	3.90um			5.9Msz	
BAR	78.56	48	eP	50	01.00	-0.8	Z	22s	4.60um			5.8Msz						pP	51	50.50	210kmX	
PLM	78.81	47	eP	50	06.80	3.5X				PP	53	48.50				DWY	90.08	15	P	50	58.20	-0.5
RVR	78.83	47	eP	50	02.00	-1.2				S	00	36.00				IHA	90.12	126	ePKP	51	01.50	1.8
		e	59	53.00			ACX	84.22	69	(P)	50	35.00	3.6X			GLD	90.13	47	P	50	58.20	-1.5
FHC	78.91	38	ePc	50	03.60	0.1	AGX	84.24	64	(P)	50	35.00	3.6X				1.4s	1135.14nm			6.7mb	
SBB	78.93	46	eP	50	02.00	-1.8	MRX	84.25	66	(P)	50	33.00	1.5					pP	51	49.80	209kmX	
		e	59	52.00			PGC	84.39	32	eP	50	32.00	0.4			TPX	90.16	74	(P)	51	01.00	1.0
ISA	79.08	45	eP	50	04.00	-0.6		1.1s	1006.00nm			6.5mb				BSI	90.35	276	ePc	51	02.00	1.0
FRI	79.08	43	ePc	50	03.90	-0.5	IPM	84.71	277	ePd	50	35.00	1.0				0.6s	940.60nm			7.0mb	
		eP'P'	17	08.10						e	51	24.00	200kmX			TACH	90.37	127	iPd	51	02.00	1.1
		eSKPP'	20	19.90			MCW	84.72	32	P	50	34.20	0.9			CHCH	90.46	127	ePd	51	02.00	0.7
CMB	79.30	42	iPc	50	04.72	-0.9	MSU	84.84	45	P	50	37.00	2.6X			SCX	90.52	72	(P)	51	05.00	3.4X
		epPc	50	47.10	173kmX		TIA	85.04	312	Pd	50	34.20	-1.0			SAN	90.67	126	eP	51	03.00	0.7
		eS	59	51.00			Z	38s	14.00um			6.1MszX				PCH	90.70	127	iPd	51	03.60	1.1
		eP'P'	17	08.30						pP	51	21.00	190kmX			PEL	90.79	126	iPd	51	04.20	1.3
		eSKPP'	20	16.20						S	00	39.00					1.1s	139.24nm			5.9mb	
AIA	79.44	157	eP	50	02.50	-3.4X	III	85.18	68	(P)	50	36.50	0.1			JACH	91.06	126	iPc	51	06.30	2.1
SSE	79.46	309	Pd	50	04.00	-2.6	CRX	85.42	67	(P)	50	39.00	1.2			KMI	91.09	296	iPd	51	05.09	0.6
	1.1s	240.00nm			5.8mb		IIJ	85.51	67	(P)	50	38.50	0.0				Z 18s	9.20um			6.3Msz	
Z	20s	6.90um			6.0Msz		SIT	85.59	21	eP	50	37.80	0.4				N 18s	6.30um				

23d 21h

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                  ipPd   51 51.11 184kmX
                  esPc   52 08.33
                  eHPP   54 41.18
                  ePP    54 45.48
HHC     91.11 314 Pd     51 04.00   -0.1
        0.6s   300.00nm           6.5mb
      Z  40s    20.10um           6.3MszX
                  pP     51 52.50 195kmX
                  PP     54 42.00
                  SKS    01 17.00
                  sS     03 14.00
BDT     91.30 288 eP     51 04.90   -0.3
        0.8s   317.70nm           6.4mb
SES     91.90  36 ePc    51 06.60   -0.8
        1.0s   580.00nm           6.6mb
                  pP     51 57.00 203kmX
CHG     91.94 289 iPd    51 09.00    0.8
CHTO    91.94 289 ePd    51 09.18    1.0
                  ipPd   51 55.86 187kmX
                  esPc   52 13.24
                  eHPP   54 50.73
                  ePP    54 52.55
BTO     92.04 313 iPd    51 08.00   -0.4
      N  17s     5.10um
      E  17s     3.30um
                  pP     51 57.00 197kmX
                  SKS    01 12.00
EDM     92.24  32 iPc    51 07.90   -1.0
RTBS    92.38 125 e(P)   51 12.20    2.1
CD2     92.55 302 P      51 10.50   -0.4
                  pP     52 00.00 199kmX
                  sP     52 24.00
MEO     92.69  54 iPc    51 10.50   -0.9
ZON     93.02 126 e(P)   51 12.00   -1.2
RTRS    93.05 124 eP     51 14.70    1.5
RTLL    93.28 125 ePd    51 14.50    0.1
CFA     93.33 126 e(P)   51 16.00    1.4
PT10    94.27 105 eP     51 20.50    1.4
                  e      55 09.00
PT02    94.41 106 eP     51 21.90    2.1
NNA     94.42 105 iPc    51 20.00    0.2
        1.1s    73.42nm           5.8mb
      Z  20s     2.66um           5.7Msz
                  e(S)   07 41.00
LZH     94.54 307 iPd    51 20.01    0.0
        2.0s   820.00nm           6.6mb
                  ipPd   52 06.03 184kmX
                  esPc   52 24.90
                  eHPP   55 09.51
PT03    94.57 107 e(P)   51 24.40    3.9X
PT08    94.70 105 iPc    51 24.00    2.5
                  iS     55 08.60
INK     94.93  15 eP     51 19.00   -1.9
        0.7s    95.00nm           6.2mb
                  pP     52 12.00 215kmX
ANT     95.17 118 eP     51 26.00    2.9X
TUL     95.23  54 eP     51 22.00   -1.0
        1.5s   332.00nm           6.4mb
      Z  17s     1.03um           5.4MszX
LNO     95.23  54 eP     51 23.10    0.2
UYO     95.58  56 iPc    51 23.20   -1.4
YKA     96.89  24 eP     51 28.60   -1.3
        0.8s    46.40nm           5.9mb
ARE     97.36 111 eP     51 35.00    1.6
        0.9s   201.68nm           6.5mb
OLY     98.35  55 P      51 37.40    0.3
GTA     98.74 309 P      51 38.00   -1.0
        0.8s   100.00nm           6.3mb
      Z  55s    48.60um           6.6MszX
      E  15s     2.50um
POW     98.79  55 P      51 39.00   -0.1
FFC     98.83  34 eP     51 37.00   -1.8
        1.4s    76.00nm           6.0mb
LPA     99.06 133 eP+    51 39.00   -1.5
      Z  20s     8.51um           6.2Msz
                  eSKS   02 02.00
CCM     99.40  53 ePd    51 40.11   -1.7
                  epPc   52 25.80 182kmX
                  esPd   52 46.16
                  iSKSpc02 02.78
                  iSDIF  02 59.89
                  esS    04 22.66
CRZF    99.44 212 iPd    51 45.00    3.0
                  ePP    55 55.00
                  eS     02 10.00
                  eSS    09 55.00
UPA     99.67  84 iP+    51 44.00    0.5
FVM      99.99  53 P      51 44.00   -0.5
CNCB    100.25 113 Pdiff  51 48.80    1.9
                   S      54 23.00
LPB     100.27 112 Pdiffc51 48.50    1.7
          1.0s    88.00nm          6.2mb
                   PP     55 54.00
                   SKS    02 08.00
                   S      03 17.00
                   LR     25 10.00
ZOBO    100.36 112 iPdiff51 49.43    2.0X
          1.0s    70.00nm          6.1mb
                   ipPc   52 33.46
                   isPd   52 56.47
                   SKS    22 05.00
                   eLR    25 24.00
SHL     100.42 293 iPdiff51 46.00   -1.0
                   iS     02 05.00
LSA     102.33 297 Pdiff  51 56.40    0.6
RSCP    102.94  57 Pdiff  51 54.30   -3.5X
BOG     103.23  90 ePdiff52 02.00    2.1
                   ePP    56 20.00
MBC     103.53  12 ePdiff51 58.50   -0.9
          0.6s    14.00nm          6.0mb
SIV     106.51 115 ePdiff52 14.00    0.0
PKI     106.55 294 Pdiff  52 15.20    0.8
          0.8s    27.00nm          6.4mb
DMN     106.82 293 Pdiff  52 16.00    0.5
          0.6s    43.00nm          6.8mb
GKN     107.32 294 Pdiff  52 17.00   -0.6
          0.6s    23.00nm          6.5mb
BLA     107.37  56 ePdiff52 18.00    0.5
        Z  18s     4.10um          6.0Msz
WMQ     108.69 311 ePdiff52 24.69    1.5X
        Z  44s    20.50um          6.3MszX
        N  12s     2.85um
                   iSKSpc02 43.36
                   iSDIF  04 17.72
                   isS    05 42.14
HYB     109.77 281 ePdiff52 30.00    1.5
                   e      53 18.00
HYB     109.77 281 ePKP   56 29.00   -1.5
          1.2s   136.40nm
GMTN    112.87  54 ePKP   56 34.80   -0.9
                   i      57 25.60
PNJ     112.89  53 i(PKP) 56 33.40   -2.3
                   (pP)   57 26.65
NDI     113.83 293 iPKPd  56 36.60   -1.4
          0.7s   102.74nm
                   eS     03 04.00
POO     114.37 281 iPKPc  56 38.20   -1.1
                   iS     03 09.00
BOM     115.42 281 ePKP   56 48.50    7.3X
                   eS     03 09.50
KSH     116.65 304 PKP    56 43.00   -0.2
        Z  60s    29.50um          6.4MszX
        E  18s     5.90um
                   PP     57 53.00
TRN     117.06  89 ePKP   56 44.14   -0.3
                   e      56 45.99
BAO     117.41 122 ePKP   56 43.20   -2.1
FRU     117.99 308 iPKP   56 44.00   -1.5
SCH     118.66  38 ePKPd  56 45.00   -1.4
          0.8s    41.00nm
DSH     122.16 303 iPKPd  56 54.00    0.4
                   eS     01 30.00
KBS     122.46 358 iPKP   56 52.20   -0.7
QUE     122.91 293 e(Pdif53 28.00    1.2
QUE     122.91 293 ePKP   56 55.90    0.4
                   eSKS   03 44.00
CER     123.34 196 iPKPc  56 55.50   -0.5
          1.0s   440.00nm
                   i      57 50.00
DAG     123.64   6 iPKPc  56 53.70   -1.6
          0.4s    77.12nm
JOZ     123.99 211 ePKPc  56 56.00   -1.4
          1.0s    96.00nm
HVD     123.99 203 iPKPd  57 15.90   18.3X
          1.0s   100.00nm
                   i      58 11.50
FRS     124.83 203 iPKPd  57 08.00    9.1X
          1.0s   344.00nm
                   i      58 01.50
BLF     125.08 204 iPKPd  57 00.00    0.3
          1.0s   292.00nm
                   i      57 52.30
SEK     125.21 206 iPKPd  57 00.20    0.2
          1.0s   164.00nm
                   i      57 53.60
BFT     126.44 210 ePKP   57 03.00    0.5
          1.0s   380.00nm
PRY     126.50 207 iPKPc  57 02.50    0.0
          1.0s   270.00nm
BFS     126.81 206 iPKPd  57 01.50   -1.6
          1.0s   380.00nm
BPI     126.92 208 iPKP   57 04.30    0.9
SWZ     127.14 205 iPKPc  56 51.00  -12.7X
          1.0s   660.00nm
                   i      57 42.00
SLR     127.20 208 iPKPd  57 03.50   -0.4
          1.5s   347.22nm
        Z  18s     9.97um          6.5Msz
                   i      57 56.00
KSR     127.68 207 iPKPd  57 04.50   -0.3
          1.0s   170.00nm
NPA     129.44 227 iPKPc  57 07.00   -1.2
                   iPP    00 17.00
                   i      00 34.00
MAIO    129.50 300 iPKPd  57 07.70   -0.2
          0.1s   286.02nm
                   e      59 19.00
                   i      00 15.00
CIR     129.58 215 iPKPc  57 08.10   -0.3
                   iPcP   58 02.50
                   iPP    59 15.20
KEV     129.77 350 iPKPd  57 06.25   -1.0
                   iSKP   00 12.00
                   iSKSpc03 58.18
JNW     130.03   5 ePKP   57 09.20    1.5
APA     130.36 345 iPKPd  57 07.90   -0.5
TRO     131.03 353 ePKP   57 08.65   -0.9
KTK1    131.04 351 ePKP   56 54.39  -15.3X
CAI     131.33 120 e(PKP)57 02.00   -9.9X
BUL     131.83 212 ePKP   56 53.00  -19.8X
                   iPcP   57 10.10
                   i      58 00.10
                   iPP    59 27.00
SOD     131.93 348 iPKP   56 57.40  -14.0X
                   i      59 30.10
                   iSKP   00 21.00
LOF     133.02 355 ePKP   57 01.40  -12.0X
AKU     133.70  12 ePKP   57 14.30   -0.5
          0.9s    90.76nm
WIN     134.18 198 iPKPc  57 04.00  -13.3X
          1.5s   330.00nm
        Z  20s    13.30um          6.7Msz
                   i      59 43.50
REY     134.20  15 e(PKP)57 17.00    1.3
SUF     136.07 345 iPKP   57 04.50  -14.9X
          0.7s   114.40nm
TEH     136.10 300 ePKP   57 22.00    1.5
NSS     136.69 355 iPKP   57 07.87  -12.6X
DHR     137.30 286 ePKP   57 20.00   -2.8X
PUL     137.36 340 ePKP   57 14.00   -7.9X
RGS     138.30 355 iPKP   57 14.60   -8.9X
                   i      00 44.70
NUR     138.35 344 iPKP   57 11.20  -12.5X
          0.6s   144.70nm
                   i      57 16.00
                   iSKP   00 41.90
OBN     138.36 332 ePKPd  57 13.00  -10.9X
        Z  22s     3.80um          6.1Msz
MOL     138.93 357 iPKP   57 13.99  -10.7X
KER     139.74 298 ePKP   57 18.00   -9.3X
TAB     139.76 304 ePKP-  57 16.00  -11.2X
                   e      00 15.00
                   e      00 46.00
NB2     140.19 354 PKP    57 17.30   -9.8X
NAI     140.34 239 iPKPd  57 24.00   -5.0X
RYD     140.37 283 ePKP   57 20.00   -8.5X
                   eS     00 58.50
UPP     140.45 349 iPKP   57 17.60   -9.9X
                   i      57 20.30
                   iPP    00 48.20
                   iS     06 58.30
SUE     140.53 359 iPKP   57 21.65   -5.9X
HFS     140.80 352 ePKP   57 18.70   -9.4X
          0.5s    92.90nm
        Z  19s     3.24um          6.1Msz
                   LR     52 36.00
BKR     140.90 310 iPKPd  57 18.00  -11.1X
ARO     141.10 262 ePKPd  57 21.00   -9.1X
ASK     141.10 359 ePKP   57 19.50   -9.1X
BER     141.20 359 iPKPc  57 22.40   -6.4X
ODD1    141.63 357 ePKP   57 22.65   -7.1X
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MJMA	141.63	285	ePKPd	57	25.30	-5.5X	
BLS1	142.14	357	iPKP	57	24.98	-5.7X	
DHJN	142.22	271	ePKPc	57	28.70	-3.6X	
BLS2	142.23	357	iPKP	57	25.58	-5.3X	
KMY	142.37	359	iPKP	57	25.71	-5.2X	
SRAT	142.60	272	ePKP	57	29.10	-3.8X	
KMTA	142.91	272	ePKP	57	30.50	-2.9X	
ABHA	143.03	272	ePKPc	57	31.90	-1.7	
OASM	143.22	285	ePKPd	57	29.70	-3.8X	
AFIF	143.44	282	ePKPd	57	31.30	-2.7	
COP	145.29	351	iPKPd-	57	35.30	-0.7	
	0.9s	2252.10nm					
BSD	145.43	348	iPKPd	57	35.10	-1.1	
	0.6s	350.00nm					
LWI	145.78	229	iPKPd	57	39.30	0.9	
EKA	145.91	7	PKP	57	36.00	-1.1	
	1.7s	1167.40nm					
GAZ	146.98	306	iPKP	57	39.50	0.2	
DCN	147.22	12	ePKP	57	39.70	0.5	
	0.6s	375.00nm					
DLE	147.41	11	ePKP	57	40.30	0.8	
	0.7s	276.00nm					
KAS	147.76	315	iPKPd	57	40.60	0.0	
IAS	147.89	328	ePKP	57	47.00	6.5X	
ETA	148.03	11	ePKP	57	42.00	1.5	
YRH	148.16	9	ePKP	57	42.60	1.8	
BRN	148.31	349	ePKPd	57	41.50	0.6	
CLI	148.47	328	ePKPc	57	42.50	1.0	
ECP	148.50	12	ePKP	57	43.50	2.3	
PPE	148.54	327	ePKPc	57	46.00	4.4X	
PTT	148.64	329	ePKP	57	43.00	1.3	
WIT	148.71	356	ePKP	57	43.00	1.4	
			e	58	38.00		
			e	01	15.00		
KRA	148.75	339	ePKP	57	41.50	-0.3	
	1.0s	918.00nm					
			i	57	46.00		
			i	57	55.30		
			i	58	58.00		
CFR	148.95	325	ePKPc	57	42.50	0.3	
UZH	149.10	335	iPKPc	57	45.00	2.7X	
KSP	149.11	344	iPKPc	57	42.70	0.4	
			id	57	47.30		
			i	58	39.50		
			i	01	12.00		
			e	07	55.00		
			e	20	04.00		
BHL	149.15	300	PKPd	57	43.00	0.0	
			S	01	28.00		
BBTK	149.15	313	iPKP	57	48.00	5.1X	
VRI	149.23	327	ePKPc	57	43.00	0.3	
HRI	149.23	299	ePKPd	57	44.70	1.5	
SPC	149.39	338	iPKPd	57	42.80	-0.3	
			i	57	47.60		
			i	58	42.60		
CLL	149.40	348	iPKP	57	42.30	-0.4	
	2.2s	1350.00nm					
			i	57	47.60		
			pPKP	58	37.00		
			SKKS	07	54.00		
TLB	149.41	324	ePKPc	57	54.40	11.5X	
GLH	149.43	298	ePKPd	57	45.20	1.9	
DBN	149.49	358	ePKP-	57	40.00	-2.8X	
	Z 20s	2.20um			6.0Msz		
			e	58	37.00		
WTS	149.52	356	iPKPd	57	43.00	0.2	
	0.8s	614.00nm					
			i	57	48.00		
			e	58	41.00		
BRG	149.63	347	ePKPd	57	41.60	-1.5	
			i	57	47.40		
			ipPKP	58	40.20		
			eSKKS	07	54.50		
CEI	149.80	334	ePKP	57	51.00	7.6X	
ISR	149.83	327	ePKPc	57	45.00	1.4	
JVI	149.86	297	ePKPd	57	45.40	1.4	
MLR	149.88	328	iPKPc	57	43.50	-0.3	
PSN	149.91	323	iPKPc	57	44.00	0.3	
ZNT	150.05	297	ePKP	57	46.00	1.7	
PDA	150.11	51	iPKPd	57	46.00	1.8	
FAM	150.14	303	ePKP	57	44.50	0.2	
MOX	150.29	350	iPKPd-	57	44.00	-0.1	
	2.2s	5088.00nm					
			e	58	40.00		
PRU	150.33	346	PKPd	57	44.00	-0.2	
			i	57	50.00		
LFK	150.41	304	ePKP	57	43.90	-0.9	
PRNI	150.45	294	ePKPd	57	46.40	1.4	
CMP	150.49	328	iPKPc	57	48.00	3.4X	
MTUR	150.51	328	ePKPd	57	40.50	-4.2X	
BUC	150.56	326	iPKPd	57	40.00	-4.6X	
HOF	150.56	349	iPKPd	57	44.40	-0.2	
GPA	150.57	315	ePKP	57	44.00	-0.9	
PSZ	150.59	337	iPKP	57	44.90	0.2	
BUC1	150.64	326	ePKPd	57	44.00	-0.8	
CSS	150.67	304	ePKP	57	44.50	-0.7	
HRT	150.70	317	ePKP	57	44.00	-1.1	
RMN	150.74	294	ePKP	57	46.60	1.1	
ENN	150.80	357	iPKPd	57	44.90	0.1	
	0.8s	453.00nm					
			i	57	51.00		
			e	58	41.00		
UCC	150.82	359	PKPd-	57	45.10	0.3	
			e	57	50.90		
			e	58	38.00		
			e	00	22.00		
			S	08	04.00		
GBZT	150.86	317	ePKP	57	46.70	1.5	
MEM	150.95	357	iPKPd	57	45.22	0.2	
			ic	57	51.22		
ISK	150.95	318	ePKP	57	44.50	-0.9	
ITU	150.96	318	iPKPd	57	44.00	-1.4	
DEV	151.03	331	iPKPc	57	57.00	11.7X	
YLV	151.03	317	iPKP	57	44.20	-1.4	
IZI	151.09	316	ePKP	57	45.00	-0.7	
TNS	151.14	353	ePKPd	57	45.20	-0.3	
			i	57	52.10		
SRO	151.23	339	ePKP	57	45.70	0.1	
			i	57	52.70		
			i	58	41.60		
BUD	151.27	338	iPKP	57	46.00	0.4	
GRF	151.28	350	iPKPd	57	46.20	0.6	
	Z 22s	4.00um			6.2Msz		
			e(SKS)	08	05.00		
ZST	151.28	341	iPKPd	57	46.40	0.8	
			i	57	53.10		
			i	58	44.30		
			e	01	12.90		
			e	01	31.60		
CTT	151.30	319	iPKP	57	44.70	-1.2	
DRA	151.30	328	ePKP	57	53.00	7.2X	
ALT	151.33	313	ePKP	57	44.00	-2.2	
KHC	151.35	346	iPKP	57	46.30	0.5	
	Z 18s	2.40um			6.0Msz		
	N 20s	3.80um					
	E 20s	8.40um					
			i	57	53.50		
VKA	151.45	342	iPKPd	57	46.30	0.4	
	2.4s	4710.00nm					
	Z 17s	3.80um			6.3MszX		
			i	57	53.90		
			i	58	03.10		
			i	58	34.50		
			i	58	38.10		
			i	58	45.70		
			i	01	33.90		
			LR	18	09.00		
PPCY	151.46	304	ePKP	57	45.50	-0.8	
WET	151.49	347	iPKPd	57	46.20	0.2	
DOU	151.52	359	PKPc	57	46.50	0.6	
			e	57	52.20		
			e	58	43.00		
			i	58	47.10		
			S	08	07.00		
			e	09	34.00		
			e	11	48.00		
			e	20	34.00		
JMB	151.59	322	ePKP	57	47.00	0.7	
BCK	151.75	310	iPKP	57	45.40	-1.4	
PVL	151.78	325	iPKPd	57	46.00	-0.5	
BZS	151.80	333	ePKP	57	47.00	0.5	
WLF	151.88	356	iPKPd	57	53.82	7.4X	
BNT	152.07	318	iPKP	57	46.20	-0.9	
KHL	152.09	313	iPKP	57	46.10	-1.2	
EDC	152.11	318	iPKP	57	46.10	-1.0	
KMR	152.23	345	iPKP-	57	47.40	0.3	
			i	57	55.70		
			ipPKP	58	47.00		
			isPKP	59	19.00		
KGT	152.40	318	iPKP	57	48.20	0.7	
GWF	152.45	354	PKP	57	47.00	-0.4	
ELL	152.55	309	iPKP	57	48.50	0.5	
BST	152.64	11	PKP	57	47.19	-0.4	
FLN	152.68	6	ePKP	57	57.30	9.7X	
	1.8s	674.35nm					
AKSR	152.71	280	iPKPc	57	49.50	1.1	
FUR	152.74	349	ePKP	57	48.00	0.2	
KDZ	152.78	322	iPKP	57	48.00	0.0	
STR	152.83	354	PKP	57	49.07	1.2	
BHG	152.84	346	iPKPd	57	47.50	-0.4	
PGB	152.86	325	iPKPc	57	48.00	-0.2	
LDF	152.88	5	ePKP	57	47.70	-0.2	
AGAL	152.88	280	ePKP	57	50.00	1.3	
ALN	152.89	320	iPKP	57	48.60	0.4	
			eSn	59	31.00		
AGRW	152.90	280	iPKPc	57	50.50	1.8	
BEO	152.93	333	ePKP	57	47.00	-1.1	
			i	57	56.00		
AKRL	152.99	280	iPKPc	57	50.00	1.2	
GRR	153.01	6	ePKP	57	48.20	0.1	
	1.6s	298.50nm					
WLS	153.04	354	PKP	57	48.86	0.6	
CDF	153.05	354	PKP	57	48.80	0.5	
RZN	153.15	323	iPKPd	57	48.00	-0.8	
ECH	153.25	355	PKP	57	49.07	0.6	
VTS	153.33	326	iPKP	57	49.00	0.0	
VITF	153.34	356	PKP	57	49.60	1.1	
LPF	153.34	7	ePKP	57	48.60	0.0	
	1.8s	431.60nm					
EZN	153.37	318	iPKP	57	48.50	-0.4	
FEL	153.50	353	PKP	57	48.37	-0.6	
HAU	153.52	356	ePKP	57	48.60	-0.3	
	1.9s	362.35nm					
YER	153.53	311	ePKP	57	48.50	-0.8	
SLE	153.56	352	ePKPc	57	49.10	0.1	
MOF	153.62	355	PKP	57	49.73	0.6	
HLW	153.66	294	ePKP	57	49.20	-0.4	
			eS	08	12.00		
SOTA	153.66	348	iPKPd	57	49.00	-0.2	
	2.2s	809.00nm					
			i	57	57.50		
			i	58	09.60		
			i	58	47.00		
BSF	153.66	355	PKP	57	49.85	0.6	
PTJ	153.68	340	iPKPd	57	49.10	-0.2	
ZAG	153.75	340	iPKPd	57	49.50	0.3	
ZLA	153.85	352	ePKPc	57	48.90	-0.5	
FVI	153.92	345	PKP	57	48.70	-0.7	
SAX	153.95	351	ePKPd	57	49.90	0.1	
LJU	153.98	342	iPKPd	57	49.60	0.0	
			eS	08	17.00		
OGA	154.03	348	iPKPd	57	50.30	0.4	
LOMF	154.14	355	PKP	57	50.39	0.6	
SRS	154.15	323	ePKPd	57	54.40	4.4X	
VOY	154.17	343	iPKP	57	49.00	-0.9	
VBY	154.25	341	iPKPd	57	50.30	0.4	
BLY	154.28	337	ePKP	58	03.00	13.0X	
CEY	154.29	342	ePKPd	57	49.90	-0.1	
LOR	154.36	359	ePKP	57	50.00	0.0	
	2.0s	546.65nm					
OSS	154.37	349	ePKPd	57	50.50	0.2	
LLS	154.37	351	ePKPd	57	50.40	0.1	
OUR	154.46	322	ePKPc	57	43.20	-7.1X	
TRI	154.50	343	iPKPd	57	49.70	-0.5	
			i	58	41.00		
			i	01	04.00		
			i	05	40.00		
			i	09	24.00		
			i	11	53.00		
KNT	154.50	324	ePKPd	57	56.90	6.5X	
SSF	154.57	0	ePKP	57	50.40	0.1	
VAY	154.57	325	iPKP	57	49.40	-1.0	
			i	57	57.70		
			i	58	11.30		
LBF	154.64	359	ePKP	57	50.50	0.1	
RIY	154.66	342	iPKP	57	51.20	0.8	
SKO	154.68	328	iPKPd	57	50.00	-0.6	
	2.0s	1407.00nm					
			i	58	00.50		
			i	58	14.00		
			i	59	12.00		
			i	01	52.00		
			i	02	38.00		
IVA	154.73	331	ePKP	57	51.00	0.3	
THE	154.83	323	ePKPd	57	50.10	-0.7	
			eSn	59	35.70		
AVF	154.84	0	ePKP	57	50.20	-0.4	
	1.9s	241.55nm					
MFF	154.85	6	ePKP	57	50.80	0.1	
	1.5s	224.60nm					
PVY	154.91	330	ePKP	57	51.00	0.0	

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SMF	154.98	359	ePKP	57	50.80	-0.1
BGF	155.07	1	ePKP	57	51.00	0.0
TMA	155.13	351	ePKPc	57	50.90	-0.4
NKY	155.17	332	ePKP	57	51.00	-0.4
MMK	155.31	353	ePKPd	57	51.30	-0.3
TCF	155.32	2	ePKP	57	51.20	-0.2
MDI	155.32	350	PKP	57	51.40	0.1
LSF	155.33	3	ePKP	57	51.20	-0.1
DIX	155.34	353	ePKPd	57	51.60	-0.1
SAL	155.34	348	PKP	57	52.00	0.7
TTG	155.36	331	ePKP	57	51.70	0.2
VAI	155.38	351	PKP	57	51.00	-0.4
MAF	155.40	2	ePKP	57	52.00	0.6
LIT	155.46	323	ePKPd	57	45.10	-6.6X
AGO	155.57	1	PKP	57	51.68	-0.1
FNA	155.58	326	ePKPd	57	58.20	6.2X
OHR	155.64	327	iPKPd	57	51.70	-0.3
	2.3s	2222.00nm				
			i	57	59.60	
			i	58	18.30	
PLDF	155.66	360	PKP	57	51.69	-0.2
BDV	155.67	332	ePKP	57	51.40	-0.6
ORX	155.72	352	PKP	57	52.08	0.0
ORO	155.73	352	PKP	57	52.20	0.1
ULC	155.74	331	ePKP	57	51.50	-0.6
PYM	155.87	1	PKP	57	52.44	0.2
HVAR	155.90	336	iPKPd	57	51.20	-1.0
LPL	155.97	354	ePKP	57	52.90	0.3
LPG	155.98	354	ePKP	57	53.00	0.3
	1.8s	269.75nm				
LSD	155.98	354	PKP	57	53.21	0.6
RJF	156.27	4	ePKP	57	53.10	0.4
	1.6s	186.55nm				
RSP	156.28	353	PKP	57	52.90	0.1
BOB	156.35	349	PKP	57	52.70	-0.2
EMON	156.39	20	iPKPd	57	53.30	0.4
LBL	156.40	0	PKP	57	53.34	0.6
BNI	156.43	354	PKP	57	53.70	0.6
STS	156.47	23	iPKPd	57	53.30	0.3
RSM	156.50	344	PKP	57	53.30	0.4
RRL	156.55	354	PKP	57	53.83	0.5
LFF	156.58	5	ePKP	57	53.80	0.8
	1.5s	167.15nm				
SFI	156.66	345	PKP	57	53.50	0.4
MME	156.66	347	PKP	57	54.60	1.1
CAF	156.67	3	ePKP	57	53.50	0.3
	1.9s	261.70nm				
PCP	156.71	351	PKP	57	52.70	-0.6
PGD	156.73	345	PKP	57	53.90	0.4
ARV	156.76	342	PKP	57	53.30	-0.1
BDI	156.81	347	PKP	57	53.00	-0.5
CKI	156.87	351	PKP	57	53.20	-0.3
LPO	156.87	4	ePKP	57	54.20	0.8
	1.8s	328.00nm				
CRE	156.91	344	PKP	57	54.40	0.7
DOI	156.92	353	PKP	57	53.20	-0.4
PZZ	156.93	353	PKP	57	53.42	-0.3
FIR	156.94	346	ePKP	57	53.50	0.0
			i	58	25.00	
			iPP	02	05.00	
			iSKKS	08	35.00	
IGT	157.04	325	ePKPd	57	48.70	-5.1X
			eSn	58	32.60	
ROB	157.05	352	PKP	57	53.42	-0.3
EZAM	157.06	24	iPKPc	57	55.00	1.2
FIN	157.09	351	PKP	57	53.01	-0.8
PII	157.15	347	PKP	57	53.60	-0.2
STV	157.17	353	PKP	57	53.11	-0.8
ENR	157.17	353	PKP	57	53.31	-0.7
ASS	157.24	342	PKP	57	54.20	0.2
ERUA	157.39	21	iPKPc	57	55.50	1.3
SAOF	157.39	352	PKP	57	55.00	0.8
AUTN	157.40	353	PKP	57	54.46	0.0
TOUF	157.40	353	PKP	57	55.43	1.0
IMI	157.42	352	PKP	57	53.01	-1.2
AURF	157.52	353	PKP	57	55.30	0.9
BRT	157.52	332	PKP	57	54.00	-0.4
MVIF	157.53	353	PKP	57	55.54	1.1
SBF	157.53	353	ePKP	57	53.80	-0.6
FG2	157.56	337	PKP	57	56.08	1.7
BCAO	157.58	223	iPKPc	57	54.30	-0.9
	1.6s	550.00nm				
			id	58	31.50	
			id	59	00.50	
			id	02	08.00	
			iS	12	04.50	
LCI	157.62	330	PKP	57	54.40	0.0
REVF	157.66	353	PKP	57	55.32	0.8
AQU	157.67	340	PKP	57	55.80	1.2
CALN	157.70	354	PKP	57	55.93	1.3
FRF	157.91	354	ePKP	57	54.80	0.1
	1.8s	448.85nm				
DUI	157.94	338	PKP	57	54.90	0.0
PTO	157.96	25	ePKP	57	53.50	-1.3
			i	58	30.30	
AZI	157.99	340	PKP	57	54.90	0.1
LRG	158.05	354	ePKP	57	55.00	0.2
	1.8s	466.10nm				
SDI	158.12	339	PKP	57	54.40	-0.7
ELYF	158.13	9	PKP	57	55.88	1.8
LMR	158.15	354	ePKP	57	55.10	0.1
	1.8s	397.05nm				
MADF	158.18	9	PKP	57	56.58	1.5
BOH	158.20	9	PKP	57	57.29	2.1
OGE	158.20	8	PKP	57	56.08	1.0
ATE	158.25	8	PKP	57	56.88	1.7
ESCF	158.28	8	PKP	57	56.77	1.6
ISSF	158.30	9	PKP	57	55.95	0.6
JAU	158.35	8	PKP	57	57.10	1.6
RMP	158.38	341	PKP	57	56.30	1.0
RDP	158.43	341	PKP	57	56.60	1.2
RFI	158.43	338	PKP	57	56.25	0.9
EPF	158.43	6	ePKP	57	55.90	0.5
	1.2s	116.20nm				
ORI	158.52	332	PKP	57	55.90	0.4
BSS	158.58	336	PKP	57	55.90	0.4
PGF	158.58	349	PKP	57	56.04	0.4
SGO	158.58	335	PKP	57	57.00	1.5
MGR	158.84	334	PKP	57	54.70	-1.2
TDS	158.90	332	PKP	57	55.90	0.0
ETER	159.32	1	ePKP	57	57.60	1.3
TBT	159.36	66	ePKP	58	01.60	4.8X
GRI	159.55	330	PKP	57	56.95	0.2
CHIE	159.55	68	iPKPd	58	01.00	4.0X
LIS	159.74	30	iPKPd	57	58.50	1.6
EPLA	159.83	22	iPKPd	57	57.90	0.9
GUD	159.90	17	iPKPc	57	57.90	0.7
ETOR	160.23	13	iPKPc	57	58.10	0.6
SOI	160.31	329	PKP	57	57.00	-0.5
GMB	160.33	330	PKP	58	01.94	4.2X
ATN	160.52	331	PKP	57	56.00	-1.7
EROQ	160.62	7	ePKP	57	58.50	0.8
EBR	160.64	7	ePKP	57	57.00	-0.7
			iPKKP	58	41.00	
			ePP	02	24.00	
TOL	160.64	18	iPKPd	57	58.41	0.6
	1.0s	140.00nm				
			ePKKP	58	41.30	
			iPP	02	25.00	
			eSKS	04	15.00	
			iPPS	16	20.00	
			iSS	22	08.00	
CTFE	160.81	65	ePKP	58	01.00	2.7X
USI	161.01	336	PKP	57	58.10	0.0
MNO	161.05	332	PKP	57	55.00	-3.5X
MEU	161.62	330	PKP	58	00.20	1.2
ECHE	161.63	11	ePKP	58	00.10	1.3
PZI	161.69	330	PKP	58	00.00	1.0
EVAL	161.73	27	iPKPc	58	00.10	1.2
MCT	161.76	334	PKP	58	02.00	2.8X
ERC	161.82	336	PKP	58	00.20	1.1
ESEL	161.85	2	ePKP	57	59.80	0.8
LVI	161.95	337	PKP	57	59.60	0.5
CVT	162.05	335	PKP	58	01.30	2.1
EHOR	162.12	23	ePKP	58	00.60	1.3
EVIA	162.22	16	iPKPd	58	02.80	3.3X
EBAN	162.30	19	iPKPd	58	00.60	1.1
LIC	162.65	150	PKPc	57	59.64	-0.9
	0.8s	178.50nm				
GIBL	162.71	26	ePKP	58	02.00	2.0
ACU	162.78	10	ePKP	58	03.90	3.9X
EPRU	162.88	24	iPKPc	58	01.20	1.0
KIC	162.90	151	PKP	57	59.64	-1.1
	1.0s	329.50nm				
ALJ	162.98	26	ePKP	58	03.00	2.6X
TIC	163.02	150	PKPc	57	59.98	-0.9
	1.0s	318.00nm				
CNIL	163.06	27	ePKP	58	04.50	4.2X
PTS	163.12	336	PKP	58	00.70	0.4
AFC	163.21	20	iPKPd	58	00.90	0.3
EJIF	163.23	26	iPKPc	58	02.80	2.3X
PLAT	163.39	27	ePKP	58	04.50	3.8X
MAL	163.39	23	iPKP	58	01.40	0.8
OJEN	163.50	27	ePKP	58	05.00	4.1X
ENIJ	163.86	17	ePKP	58	03.60	2.5X
AVE	164.83	37	iPKP	58	02.00	-0.1
			i	58	55.50	
			i	02	43.50	
LKO	165.18	142	PKP	58	02.52	-0.4
	1.1s	196.00nm				
TAF	165.81	20	iPKPd	58	05.00	2.1
			i	58	58.00	
IFR	165.85	31	iPKPc	58	04.50	1.4
			i	59	06.00	
TIO	166.58	44	iPKP	58	04.50	0.7
			i	58	54.50	

S.D. = 1.0 on 537 of 643 obs.

• JUN 23, 1990 23h 07m 31.64± 1.44s
13.384 S ± 8.8km 166.281 E ± 8.4km
DEPTH = 79.3 ± 12.4 km
4.9mb (7 obs.)
VANUATU ISLANDS (186)

PVC	4.75	156	iP	08	44.00	1.7
HNR	7.35	302	eP	09	16.00	-2.3
DZM	8.64	179	iPd	09	30.10	-6.1X
NDF	11.61	113	eP	10	16.00	-0.2
BRS	18.80	220	iPc	11	46.00	-1.7
CTA	20.29	248	iPc	12	04.00	0.5
	1.0s	41.50nm				4.7mb
RMQ	20.98	229	iPc	12	11.20	0.8
			e	12	14.00	
COO	21.66	216	eP	12	18.00	0.8
CMS	26.03	223	eP	13	00.00	0.8
	0.6s	22.00nm				4.9mb
QIS	26.47	251	eP	13	03.00	-0.3
BWA	26.48	215	eP	13	03.00	-0.3
CAN	26.84	213	eP	13	11.90	5.3X
WB5	31.22	254	eP	13	43.80	-2.0
MAT	56.28	333	eP	17	06.00	-0.3
	1.4s	34.88nm				5.2mb
MDJ	66.65	332	Pc	18	16.50	0.6
SNY	67.56	327	eP	18	22.20	0.5
CN2	68.01	329	Pc	18	24.50	0.1
PSI	68.68	278	eP	18	25.00	-4.2X
GYA	70.16	305	P	18	40.40	2.2
BJI	70.62	321	eP	18	40.00	-0.5
	1.5s	13.00nm				4.6mb
TIY	71.63	318	eP	18	48.00	1.3
XAN	72.08	313	P	18	50.00	0.5
CD2	74.43	308	eP	19	04.50	1.2
SPA	76.70	180	iPc	19	15.00	-0.7
	1.1s	26.19nm				5.1mb
LZH	76.71	312	eP	19	18.00	1.8
	2.5s	53.00nm				5.0mb
			pP	19	37.50	72kmX
GTA	81.05	314	P	19	41.20	1.6
	1.4s	20.00nm				4.8mb
PKI	88.21	299	P	20	17.50	1.5
DMN	88.48	299	P	20	18.90	1.7
GKN	88.99	299	P	20	20.40	0.9
WMQ	91.11	315	P	20	30.50	1.7
ZOBO	118.69	117	PKP	26	17.00	3.2
SUF	123.25	339	ePKP	26	19.00	-1.3
	0.7s	5.40nm				
SIV	124.83	120	ePKP	26	23.00	-1.9
NUR	125.27	338	iPKP	26	24.00	-0.3
	0.7s	17.40nm				
NB2	129.08	345	PKP	26	30.90	-0.8
	1.0s	5.30nm				
BRG	136.39	335	ePKP	26	45.50	-0.4
			e	30	20.50	
KHC	137.86	333	PKP	26	49.90	1.1
SKO	138.29	320	iPKP	26	49.80	0.0
OHR	139.16	319	ePKP	26	51.00	-0.4
ARV	142.25	328	PKP	26	56.50	-0.3
VAI	142.45	334	PKP	26	53.00	-4.0X
ORI	142.48	321	PKP	26	57.00	-0.3
ASS	142.69	328	PKP	26	53.00	-4.6X
TDS	142.79	320	PKP	26	54.50	-3.3X
BOB	143.01	332	PKP	26	55.50	-2.7X
LBF	143.36	340	ePKP	26	57.20	-1.4
	0.8s	4.70nm				
SSF	143.45	340	ePKP	26	57.70	-1.0
	1.0s	11.00nm				
RDP	143.57	326	PKP	26	57.00	-2.2
LPL	143.58	336	ePKP	26	57.50	-1.8
	1.2s	10.40nm				
LPG	143.59	336	ePKP	26	57.70	-1.7
	1.0s	8.00nm				

LPF	143.88	346	ePKP	26	59.10	-0.3
	1.0s	12.00nm				
SOI	143.89	318	PKP	26	58.50	-1.2
BNI	143.98	335	PKP	26	56.50	-3.4X
BGF	144.11	340	ePKP	26	58.50	-1.4
	1.0s	10.00nm				
ATN	144.22	319	PKP	26	53.00	-7.3X
PLDF	144.36	339	PKP	26	59.68	-0.7
AGO	144.46	340	PKP	26	59.58	-0.9
MAF	144.50	340	ePKP	26	59.90	-0.6
	1.0s	14.00nm				
TCF	144.56	341	ePKP	26	59.90	-0.8
	1.0s	11.00nm				
SBF	144.62	333	ePKP	27	00.10	-0.8
	1.0s	64.00nm				
PYM	144.77	340	PKP	27	00.89	-0.2
LSF	144.80	342	ePKP	27	00.60	-0.5
	1.0s	24.00nm				
PGF	144.92	330	ePKP	27	01.40	-0.1
	1.0s	58.00nm				
MFF	144.97	344	ePKP	27	01.10	-0.2
	1.0s	32.00nm				
LBL	145.13	339	PKP	27	02.53	1.0
FRF	145.20	334	ePKP	27	02.20	0.4
	0.8s	26.85nm				
LRG	145.41	334	ePKP	27	03.10	1.0
	1.0s	26.00nm				
RJF	145.65	341	ePKP	27	04.00	1.5
	1.0s	20.00nm				
CAF	145.81	340	ePKP	27	03.30	0.4
	1.0s	15.00nm				
LPO	146.31	341	ePKP	27	05.60	2.0
	1.0s	16.00nm				
BCAO	146.96	257	iPKPd	27	05.00	-0.6
	1.2s	84.00nm				
STS	150.27	352	ePKP	27	16.00	6.1X
ETOR	150.82	342	ePKP	27	18.00	7.1X
GUD	151.58	345	ePKP	27	19.50	7.4X
TOL	152.27	344	ePKP	27	21.50	8.5X

S.D. = 1.2 on 62 of 75 obs.

JUN 23, 1990 23h 35m 00.68± 0.67s
36.452 N ± 4.3km 70.578 E ± 3.1km
DEPTH = 204.6 ± 7.1 km
4.7mb (62 obs.)
HINDU KUSH REGION (718)

KSH	5.22	53	Pc	36	19.20	0.5
			S	37	13.50	
QUE	6.94	207	iPd-	36	41.20	0.1
	1.2s	6375.00nm			6.7mb	X
			e(S)	37	59.00	
MAIO	8.94	272	eP	37	05.00	-2.1
	0.8s	14.64nm			4.3mb	
			eS	38	29.00	
NDI	9.56	142	iPc	37	14.00	-1.0
	0.6s	133.33nm			5.4mb	
			eS	38	53.00	
GKN	14.57	121	P	38	17.60	-1.1
WMQ	15.00	55	iPd	38	22.60	-1.3
DMN	15.14	122	P	38	25.40	-0.4
PKI	15.37	121	P	38	27.80	-0.9
GUN	15.49	119	P	38	29.60	-0.6
POO	18.08	170	iPd	39	00.00	0.4
LSA	18.49	105	P	39	01.00	-3.3X
	4.0s	300.00nm			5.1mb	X
TAB	19.36	282	eP	39	14.00	1.2
HYB	20.23	157	eP	39	22.00	0.4
	1.0s	200.00nm			5.6mb	
			i	39	25.00	
			eS	42	57.00	
SHL	21.20	115	iP	39	31.40	0.2
			eS	43	14.20	
GTA	23.21	74	P	39	51.30	0.7
GBA	23.57	163	Pd	39	55.40	1.4
	0.7s	31.40nm			5.0mb	
LZH	26.75	81	eP	40	23.50	0.1
			PP	41	12.50	
CD2	28.07	92	iPd	40	36.20	1.1
CHG	30.50	118	eP	40	56.00	-0.6
	1.0s	14.75nm			4.7mb	
XAN	31.27	83	P	41	03.30	0.0
BDT	31.58	120	eP	41	05.20	-0.8
	1.1s	70.70nm			5.2mb	
HHC	32.10	69	eP	41	11.60	1.1
GYA	32.19	98	iPd	41	12.00	0.5
			PcP	43	54.40	
			S	46	09.60	
ELL	32.48	283	eP	41	15.00	1.2
TIY	33.22	75	eP	41	20.80	0.7
			S	46	27.00	
LOE	33.42	116	eP	41	41.00	19.1X
VRI	33.96	300	ePd	41	28.00	1.7
MLR	34.51	299	iPc	41	33.00	1.9
CMP	35.15	299	ePc	41	43.00	6.6X
WHN	36.74	86	eP	41	51.50	1.7
VAY	37.31	293	eP	41	55.00	0.5
BZS	37.54	300	eP	41	58.50	2.1
NUR	37.67	324	iP	41	57.80	0.5
SUF	37.78	328	iP	41	58.50	0.3
	0.6s	25.30nm			5.0mb	
SKO	38.05	294	eP	41	54.00	-6.7X
			i	42	44.60	
SPC	38.36	306	iP	42	04.70	1.2
			i	42	47.40	
QIZ	38.53	106	eP	42	06.00	1.1
KRA	38.57	307	eP	42	05.40	0.5
	0.8s	61.00nm			5.3mb	
			e	42	49.00	
GZH	39.13	98	P	42	11.00	1.2
SOD	39.64	335	iP	42	14.10	0.7
SRO	39.68	303	iP	42	15.80	1.7
			e	42	47.40	
SNG	40.00	129	iPc	42	18.20	1.2
ZST	40.47	304	e(P)	42	20.90	0.3
			e	43	04.00	
			e	44	11.90	
			e	47	47.90	
KEV	40.72	338	eP	42	22.00	-0.3
	0.7s	24.00nm			4.8mb	
KSP	40.90	308	eP	42	25.00	1.0
			e	43	08.50	
			e	44	04.30	
UPP	40.90	322	iP	42	23.50	-0.4
PRU	42.05	307	Pc	42	34.30	0.9
			e	43	18.00	
ORI	42.11	292	P	42	37.00	2.9
IPM	42.29	131	ePc	42	37.20	1.5
	1.0s	130.20nm			5.4mb	
BRG	42.38	308	iP	42	35.70	-0.4
	0.8s	30.00nm			4.9mb	
			i	43	20.50	
			i	44	38.70	
			e	45	44.50	
PSI	42.57	135	ePd	42	37.80	-0.2
	0.8s	51.30nm			5.1mb	
KHC	42.74	306	iP	42	40.00	0.9
			e	43	24.00	
SGO	42.85	293	P	42	41.00	1.0
HFS	42.89	322	eP	42	39.70	-0.4
	0.5s	24.80nm			5.0mb	
CLL	42.96	309	iPd	42	41.00	0.2
	1.1s	18.00nm			4.5mb	
BSS	43.17	293	P	42	43.50	0.9
DUI	43.24	295	P	42	45.00	1.7
FVI	43.56	302	P	42	45.50	-0.1
SDI	43.70	295	P	42	47.00	0.0
MOX	43.88	308	eP	42	49.00	0.8
	1.1s	22.00nm			4.6mb	
			e	43	33.00	
AZI	43.91	295	P	42	50.00	1.4
ARV	43.96	298	P	42	39.00	-10.0X
NB2	44.21	323	P	42	50.20	-0.6
	0.5s	14.60nm			4.7mb	
GRF	44.22	307	iPc	42	52.40	1.5
	1.6s	33.00nm			4.6mb	
			e	43	30.50	
			ec	43	36.70	
ASS	44.25	297	P	42	52.00	0.7
SFI	44.65	299	P	42	55.50	1.1
PGD	44.76	298	P	42	57.00	1.6
KGM	45.70	131	eP	43	04.00	1.1
SAX	45.78	304	ePd	43	03.10	-0.6
PPI	45.99	136	eP	43	05.50	0.3
	0.7s	34.50nm			4.9mb	
LLS	46.08	303	ePd	43	04.20	-1.7
TMA	46.31	302	ePd	43	05.80	-1.9
VAI	46.42	302	P	43	07.00	-1.3
MMK	46.94	302	ePc	43	12.70	0.0
CDF	46.96	305	eP	43	12.90	0.2
	0.8s	5.35nm			4.0mb	
ORO	47.01	302	P	43	10.50	-2.6
DIX	47.31	302	ePd	43	15.50	-0.1
BSF	47.38	305	eP	43	15.50	-0.5
	0.8s	16.10nm			4.5mb	
MEM	47.43	309	P	43	16.50	0.4
HAU	47.65	305	eP	43	17.60	-0.3
	0.8s	10.75nm			4.3mb	
LPG	47.88	302	eP	43	20.10	0.0
	0.8s	17.45nm			4.5mb	
LPL	47.89	302	eP	43	20.00	0.0
	0.8s	16.10nm			4.5mb	
BNI	48.04	301	P	43	21.00	0.0
DOU	48.40	308	Pd	43	24.20	0.6
	0.9s	20.00nm			4.5mb	
SNF	48.53	309	P	43	24.60	0.0
NAI	48.93	227	iPd	43	31.00	2.7
LBF	49.43	304	eP	43	30.80	-0.8
	0.6s	3.15nm			4.0mb	
LOR	49.44	305	eP	43	30.80	-0.8
	0.8s	2.70nm			3.8mb	
SMF	49.60	304	eP	43	32.30	-0.5
	0.8s	18.80nm			4.6mb	
SSF	49.73	304	eP	43	33.30	-0.5
	0.9s	7.35nm			4.2mb	
AVF	49.89	304	eP	43	34.40	-0.6
	0.8s	16.10nm			4.6mb	
BGF	50.28	304	eP	43	37.20	-0.8
	1.0s	12.00nm			4.4mb	
MAF	50.56	304	eP	43	40.10	0.0
	0.8s	10.75nm			4.4mb	
TCF	50.78	304	eP	43	41.50	-0.3
	0.8s	9.40nm			4.4mb	
CAF	51.23	302	eP	43	45.20	-0.1
	0.8s	9.40nm			4.4mb	
LSF	51.24	304	eP	43	44.40	-0.9
	0.8s	8.05nm			4.3mb	
KKM	51.50	115	ePd	43	48.80	1.2
RJF	51.51	303	eP	43	46.60	-0.7
	0.8s	5.35nm			4.2mb	
LDF	51.74	307	eP	43	48.10	-0.8
	0.6s	4.50nm			4.2mb	
LPO	51.90	302	eP	43	49.90	-0.3
	0.8s	6.70nm			4.3mb	
FLN	51.92	307	eP	43	49.30	-1.0
	0.6s	6.30nm			4.4mb	
EKA	52.09	316	Pc	43	49.90	-1.5
	0.9s	18.20nm			4.7mb	
LFF	52.13	302	eP	43	51.70	-0.2
	0.6s	8.10nm			4.5mb	
GRR	52.26	307	eP	43	51.80	-1.0
	0.6s	7.20nm			4.5mb	
MFF	52.27	305	eP	43	51.90	-0.9
	0.6s	5.40nm			4.3mb	
EPF	52.98	300	eP	43	57.20	-1.0
	1.0s	6.00nm			4.2mb	
MAT	53.29	68	(P)	43	45.00	-15.5X
DAG	54.71	344	iPc	44	10.00	-0.3
	0.3s	20.78nm			5.3mb	
			i	44	55.50	
TOL	57.16	298	ePKP	44	28.00	-0.2
			iPKKP	45	15.00	
BCAO	57.33	249	iPc	44	27.30	-2.3
KRI	65.61	224	iPc	45	09.60	-15.3X
MBC	67.40	3	ePc	45	35.50	0.2
	0.6s	15.00nm			4.9mb	
CIR	68.00	219	iPd	45	39.20	-0.5
BUL	68.85	222	iPd	45	41.00	-4.1X
	1.0s	60.00nm			5.3mb	
IMA	72.27	17	eP	46	04.20	-0.9
	1.2s	25.57nm			4.8mb	
BFT	72.67	218	iPc	46	09.00	1.1
	1.0s	80.00nm			5.4mb	
LKO	73.29	270	P	46	09.78	-1.8
	0.4s	6.00nm			4.7mb	
SLR	73.59	219	iPd	46	13.00	-0.2
INK	74.01	9	eP	46	15.00	0.1
TTA	74.19	20	eP	46	16.40	0.3
	1.0s	25.00nm			4.9mb	
KIC	74.44	266	P	46	17.24	-1.0
	0.5s	14.00nm			4.9mb	
TIC	74.50	267	P	46	17.50	-1.1
FBA	74.61	16	eP	46	18.50	0.1
	1.0s	65.00nm			5.3mb	
LIC	74.75	266	P	46	18.92	-1.1
	0.5s	10.50nm			4.8mb	
PRY	74.98	219	iPd	46	20.50	-0.7
	1.2s	56.00nm			5.2mb	
FRB	75.01	342	eP	46	20.50	-0.1
MTN	75.17	119	iPc	46	21.80	-0.5
SWZ	76.30	221	iPc	46	15.00	-13.6X

23d 23h

	0.9s	142.86nm			
PMR	77.12	18 eP	46 31.60	-0.8	
	1.0s	33.75nm	5.0mb		
BLF	77.41	219 iPd	46 34.20	-0.5	
FRS	78.37	219 iPc	46 49.50	9.8X	
	0.9s	42.02nm	5.2mb		
HVD	78.98	218 iPd	47 00.00	16.8X	
YKA	81.31	2 eP	46 54.50	-0.3	
	0.7s	14.10nm	4.8mb		
SCH	82.00	337 eP	46 59.00	0.3	
WB5	82.23	122 iPc	46 58.90	-1.4	
WRA	82.26	122 Pc	46 59.00	-1.4	
	0.7s	31.00nm	5.1mb		
CER	84.36	221 iPd	47 12.50	1.7	
ASPA	84.50	125 eP	47 10.40	-1.3	
	0.9s	38.00nm	5.1mb		
QIS	86.33	119 eP	47 19.00	-1.8	
FFC	88.96	356 eP	47 32.00	-0.9	
	1.2s	28.00nm	5.1mb		
EDM	90.63	2 eP	47 41.00	0.3	
SES	93.52	1 eP	47 54.00	0.0	
PNT	94.13	7 eP	47 57.00	0.1	
	0.8s	8.00nm	4.9mb		
NEW	95.38	5 eP	48 01.60	-1.1	
	1.0s	6.25nm	4.8mb		
GMW	95.53	9 eP	48 03.80	0.5	
LON	96.43	9 eP	48 07.00	-0.5	
RSSD	99.66	356 e(P)	48 18.00	-4.4X	
SPA	126.27	180 iPKPc	53 38.50	-0.9	
	0.7s	16.02nm			
SIV	132.63	282 ePKP	53 51.00	-1.9	
CCH	137.40	285 PKP	54 18.50	16.2X	
ZOBO	138.29	288 PKP	54 04.50	0.2	
LPB	138.42	287 ePKP	54 01.00	-3.3X	
CNCB	138.50	287 PKP	54 05.00	0.4	
	S.D. = 1.0	on 139 of 153 obs.			

? JUN 23, 1990 23h 35m 25.79± 13.30s
12.676 S ±84.8km 168.075 E ±150.km
DEPTH = 113.6 ± 24.5 km
4.0mb (1 obs.)
SANTA CRUZ ISLANDS REGION (183)

HNR	8.60	291 eP	37 29.00	-0.1	
DZM	9.47	189 iPd	37 41.00	0.1	
		iS	39 24.80		
BRS	20.48	222 iPc	39 56.00	-0.7	
RMQ	22.76	230 iPc	40 19.00	-0.2	
		e	40 28.00		
CMS	27.75	224 eP	41 08.00	2.3	
BWA	28.06	216 eP	41 07.00	-1.5	
WB5	33.09	253 eP	41 53.00	0.0	
WRA	33.13	253 Pc	41 53.30	0.0	
	0.7s	1.90nm	4.0mb		
	S.D. = 1.4	on 8 of 8 obs.			

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* JUN 24, 1990 00h 10m 08.19± 0.89s
36.918 N ±14.8km 70.882 E ±10.5km
DEPTH = 33.0km (normal)
4.1mb (5 obs.)
HINDU KUSH REGION (718)

QUE	7.47	207 iPd	11 58.50	0.7	
		eS	13 22.30		
MAIO	9.18	270 eP	12 19.00	-2.4	
		eS	13 57.00		
NDI	9.79	145 eP	12 33.50	3.8X	
		eS	14 13.00		
GKN	14.61	124 P	13 34.40	-0.1	
	0.4s	9.00nm	4.6mb		
DMN	15.18	124 P	13 41.00	-1.1	
	0.4s	10.00nm	4.4mb		
PKI	15.41	123 P	13 44.60	-0.5	
GUN	15.51	121 P	13 45.80	-0.6	
GBA	23.95	164 Pc	15 22.40	2.1	
	0.7s	3.20nm	4.0mb		
HFS	42.68	322 eP	18 04.40	1.3	
	0.4s	0.90nm	3.9mb		
NB2	43.99	323 P	18 14.40	0.6	
	0.7s	1.40nm	3.9mb		
MBC	66.93	3 eP	21 10.00	11.2X	
	S.D. = 1.6	on 9 of 11 obs.			

JUN 24, 1990 00h 29m 11.33± 0.26s
2.479 S ± 4.6km 139.716 E ± 6.8km
DEPTH = 24.1km (3 depth phases)
5.1mb (19 obs.) 4.7Msz (1 obs.)

NEAR N. COAST OF WEST IRIAN (197)

MNDI	5.37	133 eP	30 38.00	5.8X	
KDB	10.15	134 eP	31 39.00	0.3	
MTN	13.35	219 Pc	32 20.30	-1.7	
MNI	15.37	285 eP	32 52.70	4.2X	
QIS	17.97	180 eP	33 19.00	-2.4	
		i	33 22.90		
WB5	18.07	196 eP	33 19.90	-2.7	
		i	33 23.10		
		eS	36 40.70		
WRA	18.14	196 Pc	33 21.10	-2.3	
	0.7s	20.20nm	4.4mb		
CTA	18.63	160 iPd	33 31.90	2.4	
	0.9s	40.34nm	4.6mb		
ASPA	21.80	194 eP	34 02.70	-1.0	
	0.9s	114.00nm	5.3mb		
		eS	38 02.90		
KKM	24.95	290 ePc	34 35.20	0.6	
RMQ	25.40	161 iPc	34 40.00	1.3	
MBL	26.83	225 eP	34 53.00	1.1	
BRS	27.75	154 iPc	35 00.50	0.2	
		i	35 06.00	19km	
CMS	29.42	169 eP	35 16.00	0.7	
COO	30.23	159 eP	35 24.00	1.4	
DZM	32.46	129 iPc	35 40.50	-1.8	
BWA	32.80	167 eP	35 46.20	1.1	
COOL	33.26	210 eP	35 49.00	-0.1	
	0.5s	22.00nm	5.3mb		
CAN	33.80	166 eP	35 54.10	0.4	
		i	35 56.80	9kmX	
CNB	33.88	166 iPd	35 55.90	1.5	
		i	35 57.70	6kmX	
MRWA	34.87	218 iPc	36 03.00	0.0	
KLB	35.60	213 iPd	36 09.50	0.4	
	0.4s	17.00nm	5.3mb		
QIZ	36.33	307 eP	36 17.20	1.8	
MUN	36.75	215 eP	36 19.70	0.8	
SSE	37.76	334 eP	36 24.50	-2.8	
MAT	38.84	358 eP	36 34.00	-2.4	
	0.6s	8.67nm	4.7mb		
SNG	40.18	284 eP	36 48.00	0.3	
PSI	41.10	277 ePc	36 55.80	0.5	
	0.9s	30.20nm	5.0mb		
LOE	42.35	299 eP	37 06.00	0.5	
GYA	42.97	314 P	37 12.60	1.9	
		pP	37 20.00	25km	
TIA	43.89	333 eP	37 17.50	-0.2	
KMI	45.14	310 Pd	37 30.00	1.7	
XAN	46.47	324 P	37 38.80	0.3	
TIY	47.31	330 eP	37 41.40	-3.7X	
	Z 20s	0.80um	4.7Msz		
BJI	47.50	335 eP	37 46.00	-0.4	
	2.0s	39.00nm	5.1mb		
CD2	47.69	317 eP	37 48.50	0.3	
MDJ	47.75	350 eP	37 48.00	-0.4	
CN2	47.82	346 P	37 48.40	-0.5	
BTO	50.73	331 eP	38 11.00	-0.5	
LZH	50.91	322 Pc	38 12.50	-0.5	
	2.0s	32.00nm	4.9mb		
		pP	38 21.00	28km	
SHL	54.03	304 iP	38 41.50	5.0X	
GTA	55.49	323 P	38 47.00	0.1	
GUN	59.89	304 P	39 19.00	0.7	
	1.0s	34.00nm	5.4mb		
PKI	60.15	304 P	39 20.00	-0.1	
	1.0s	29.00nm	5.4mb		
DMN	60.42	304 P	39 22.40	0.5	
	1.0s	82.00nm	5.8mb		
GKN	60.95	304 P	39 25.80	0.5	
GBA	63.78	286 Pc	39 41.70	-2.5	
	0.7s	9.30nm	5.0mb		
WMQ	65.46	321 iPc	39 55.00	0.3	
NDI	67.37	302 iP	40 06.50	-0.6	
	1.2s	39.06nm	5.4mb		
KSH	71.63	313 eP	40 35.50	2.2	
SDN	75.41	31 eP	40 53.90	-0.8	
QUE	76.42	302 eP	41 02.60	1.3	
SVW	80.21	26 eP	41 22.00	0.8	
TTA	80.78	25 eP	41 24.30	0.1	
IMA	82.96	22 eP	41 35.70	0.1	
	1.1s	6.50nm	4.7mb		
PMR	83.30	27 eP	41 36.20	-1.0	
	0.7s	17.80nm	5.3mb		
MAIO	83.58	307 eP	41 41.00	1.6	
TOA	84.79	27 eP	41 45.10	0.2	
FBA	84.87	24 eP	41 43.90	-1.2	
INK	91.08	22 eP	42 15.00	0.2	
MBC	94.99	14 eP	42 31.50	-1.2	
	0.8s	4.00nm	4.9mb		
ORV	98.35	51 eP	42 48.20	-0.4	
ARN	98.46	53 eP	42 49.70	0.5	
YKA	99.40	27 eP	42 55.70	2.8X	
	0.9s	1.50nm	4.5mb		
KVN	101.02	51 ePdiff43	00.80	-0.2	
TNP	101.81	52 ePdiff43	03.40	-1.2	
	0.7s	0.83nm	4.5mb		
GLA	104.30	57 ePdiff43	16.00	0.4	
KIC	144.36	277 PKP	48 46.46	-1.8	
	0.7s	58.50nm			
TIC	144.61	278 PKP	48 47.36	-1.3	
	0.7s	61.50nm			
LIC	144.66	277 PKP	48 47.48	-1.3	
	0.7s	47.00nm			
LKO	144.81	283 PKP	48 47.66	-1.4	
	0.7s	60.00nm			
CNCB	146.61	126 PKP	48 54.00	1.4	
LPB	146.66	125 PKP	48 54.00	1.5	
ZOBO	146.78	125 PKP	48 54.90	2.0	
	1.0s	65.00nm			
SIV	152.45	132 PKP	49 01.60	0.7	
		i	49 07.80		
	S.D. = 1.3	on 70 of 75 obs.			

& JUN 24, 1990 00h 49m 33.59s
41.908 N 112.405 W
DEPTH = 7.9km
UTAH (478)
<SLC-P>. ML 2.3 (SLC).

PTI	0.96	2 eP	49 51.80	-0.4	
DAU	1.73	149 eP	50 05.30	0.9	
DUG	1.74	190 eP	50 03.00	-1.4	
HPI	1.87	344 eP	50 07.00	0.5	
	4 obs. associoted				

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* JUN 24, 1990 01h 13m 29.78± 0.57s
37.259 N ± 7.8km 72.327 E ±10.8km
DEPTH = 33.0km (normal)
4.5mb (7 obs.) 3.8Msz (1 obs.)
TAJIK SSR (715)
Felt (III) at Khorog.

QUE	8.35	214 eP	15 31.90	0.2	
		e(S)	17 03.70		
NDI	9.49	153 eP	15 47.00	-0.1	
	0.8s	14.93nm	5.3mb		
		eS	17 28.00		
MAIO	10.34	269 eP	15 55.00	-4.0X	
		eS	17 48.00		
GKN	13.87	128 P	16 42.00	-4.4X	
DMN	14.44	128 P	16 49.20	-4.8X	
	0.4s	11.00nm	4.7mb		
PKI	14.66	127 P	16 51.60	-5.4X	
GUN	14.73	125 P	16 58.40	0.5	
HYB	20.51	163 eP	18 07.50	-0.4	
GBA	24.00	168 Pc	18 42.20	-0.1	
	0.3s	1.40nm	4.0mb		
HFS	43.13	321 eP	21 28.50	0.1	
	0.5s	6.30nm	4.6mb		
	Z 18s	0.10um	3.8Msz		
		LR	37 48.00		
NB2	44.42	322 P	21 39.10	0.2	
	0.8s	4.60nm	4.4mb		
MBC	66.53	3 eP	24 17.50	-0.4	
	0.8s	6.00nm	4.7mb		
YKA	80.43	3 eP	25 44.20	5.1X	
	0.5s	0.60nm	3.8mb		
	S.D. = 0.4	on 8 of 13 obs.			

& JUN 24, 1990 01h 27m 43.71s
41.897 N 112.399 W
DEPTH = 7.5km
UTAH (478)
<SLC-P>. ML 3.1 (SLC).

PTI	0.97	1 eP	28 01.90	-0.6	
DAU	1.72	149 eP	28 15.00	0.6	
DUG	1.73	191 eP	28 13.80	-0.6	
HPI	1.88	344 eP	28 17.30	0.5	
BW06	2.28	66 eP	28 24.00	1.4	
LTMT	2.64	4 ePn	28 32.10	4.5	
MCMT	2.95	354 ePn	28 35.10	3.1	
BGMT	3.35	4 ePn	28 41.80	4.2	

LRM	3.92	359	ePn	28	52.90	7.1
SXM	4.34	11	ePn	29	01.40	9.7

10 obs. associated

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* JUN 24, 1990 02h 35m 15.60± 0.79s
22.767 N ±24.1km 93.859 E ±21.3km
DEPTH = 87.9 ± 13.4 km
4.3mb (1 obs.)
BURMA-INDIA BORDER REGION (294)

SHL	3.32	327	iP	36	07.00	0.5
			iS	36	40.00	
CHG	6.17	129	eP	36	45.00	-1.0
BDT	7.32	138	eP	37	02.50	0.8
GUN	8.85	307	P	37	23.00	-0.1
PKI	9.02	304	P	37	25.80	0.4
DMN	9.28	303	P	37	28.80	0.0
GKN	9.83	304	P	37	35.60	-0.6
WB5	57.97	134	eP	45	01.80	0.4
HFS	65.67	327	eP	45	52.10	-0.3
	0.7s		2.80nm			4.3mb

S.D. = 0.7 on 9 of 9 obs.

& JUN 24, 1990 03h 00m 34.72s
41.902 N 112.400 W
DEPTH = 7.6km
UTAH (478)
<SLC-P>. ML 2.6 (SLC).

PTI	0.97	1	eP	00	52.90	-0.6
DAU	1.72	149	eP	01	05.50	0.0
DUG	1.73	191	eP	01	04.60	-0.9
HPI	1.88	344	eP	01	09.50	1.8
BW06	2.28	67	eP	01	14.70	1.1

5 obs. associated

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* JUN 24, 1990 03h 33m 31.33± 1.81s
40.168 N ±13.1km 21.912 E ± 8.6km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 2.2 (THE).

LIT	0.45	98	ePg	33	40.60	0.1
			eSg	33	47.10	
FNA	0.74	327	ePgd	33	45.60	-0.3
			eSg	33	57.40	
GRG	0.87	25	ePg	33	48.30	0.2
			eSg	34	01.40	
THE	0.93	60	ePg	33	49.00	0.0
KNT	1.24	37	ePb	33	54.80	0.4
VAY	1.26	23	ePn	33	54.40	-0.2
SOH	1.28	59	ePb	33	54.60	-0.5
SKO	1.84	349	ePn	34	03.50	0.3
			iSg	34	31.50	

S.D. = 0.4 on 8 of 8 obs.

% JUN 24, 1990 03h 47m 32.61± 2.24s
15.586 N ± 7.6km 60.475 W ±23.5km
DEPTH = 33.0km (normal)
LEEWARD ISLANDS (92)
ML 2.8 (FDF).

CRM	0.93	207	eP	47	49.10	-0.2
			S	48	01.70	
BBL	0.97	266	eP	47	49.73	-0.2
			S	48	02.50	
FDF	1.07	218	eP	47	51.54	0.2
			S	48	05.60	
MVM	1.10	202	eP	47	51.75	-0.1
			S	48	06.70	
DOG	1.19	292	eP	47	53.20	0.2
BIM	1.21	208	eP	47	53.48	0.2
PAG	1.24	291	eP	47	53.80	0.0
			S	48	09.00	
SEG	1.28	309	eP	47	54.02	-0.3
			S	48	09.30	
BPA	1.97	318	eP	48	04.42	0.1

S.D. = 0.2 on 9 of 9 obs.

JUN 24, 1990 04h 12m 57.43± 0.72s
39.199 N ± 5.8km 20.505 E ± 6.5km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)
MD 3.1 (ATH). ML 2.7 (THE).

IGT	0.36	338	ePg	13	03.90	-0.9
			iSg	13	11.20	
KEK	0.75	313	ePg	13	12.00	-0.1
VLS	1.02	176	ePb	13	17.20	0.4
			eSb	13	33.50	
AGG	1.43	97	ePb	13	22.40	-1.1
			iSb	13	43.20	
FNA	1.72	23	ePnd	13	28.80	1.2
			eSn	13	55.60	
LIT	1.78	59	ePnc	13	28.20	-0.2
			eSn	13	56.10	
OHR	1.92	7	ePn	13	31.00	0.4
GRG	2.28	39	ePn	13	36.50	0.8
			eSn	14	09.00	
ITM	2.31	150	ePn	13	41.20	5.1X
THE	2.37	52	iPn	13	36.90	-0.1
VAY	2.64	36	ePn	13	40.60	-0.2
SOH	2.72	53	ePn	13	41.90	-0.2
SKO	2.86	14	ePn	13	52.00	8.1X
			eSn	14	20.00	

S.D. = 0.8 on 11 of 13 obs.

JUN 24, 1990 04h 47m 53.70± 0.40s
38.142 N ± 3.6km 23.466 E ± 3.7km
DEPTH = 30.6 ± 3.5 km
3.8mb (2 obs.)
GREECE (364)
MD 3.6 (ATH). ML 3.5 (THE).

NEO	1.18	351	iPnc	48	14.00	-0.2
AGG	1.25	315	iPgd	48	15.20	0.0
			eSg	48	29.90	
VLI	1.48	197	ePn	48	18.10	-0.4
ITM	1.55	232	ePn	48	20.00	0.4
PAIG	1.79	5	iPb	48	23.20	0.2
			eSb	48	43.60	
APE	1.96	123	ePn	48	25.70	0.2
LIT	2.10	339	ePbc	48	27.50	0.1
			eSb	48	52.90	
OUR	2.23	10	ePn	48	29.40	0.2
VLS	2.27	272	ePn	48	31.00	1.2
THE	2.52	351	ePn	48	33.40	0.1
			eSn	49	03.10	
SOH	2.68	358	ePnc	48	35.90	0.2
SMG	2.70	98	ePn	48	36.50	0.6
EZN	2.79	52	iPn	48	45.50	8.3X
VAM	2.79	168	ePn	48	37.50	0.3
IGT	2.81	301	ePnc	48	39.10	1.6
			eSn	49	13.70	
GRG	2.93	344	ePn	48	39.50	0.3
SRS	2.97	2	ePnc	48	39.60	-0.2
KNT	3.05	352	ePnc	48	41.40	0.5
			iSn	49	16.50	
FNA	3.09	329	ePnd	48	42.10	0.5
VAY	3.25	348	ePn	48	42.70	-1.0
KEK	3.26	300	ePn	48	44.60	0.7
ALN	3.40	35	ePn	48	46.20	0.3
RDO	3.40	27	ePn	48	45.30	-0.6
MMB	3.45	3	ePc	48	46.00	-0.6
OHR	3.61	326	iPn	48	50.80	1.9
RZN	3.67	15	eP	48	50.00	0.1
KDZ	3.81	23	eP	48	51.00	-0.7
EDC	4.06	56	ePn	49	01.00	5.7X
PLD	4.07	13	eP	48	57.00	1.6
SKO	4.13	339	iPn	48	56.60	0.4
VTS	4.45	358	eP	49	02.00	1.1
			eSg	49	51.00	
LCI	4.81	299	P	49	03.70	-2.1
			eSn	49	55.40	
DMK	4.94	41	ePn	49	07.00	-0.7
PVL	5.26	15	eP	49	10.00	-2.3
TDS	5.76	287	P	49	19.20	-0.2
ATN	6.31	273	P	49	27.60	0.5
MGR	6.46	290	Pd	49	28.60	-0.7
MEU	6.85	264	P	49	33.60	-1.2
			eSn	50	46.00	
BSS	7.20	294	P	49	38.50	-1.1
CMP	7.22	9	ePc	49	45.00	5.2X
VRI	8.09	16	ePd	49	53.00	1.0
HFS	22.87	347	eP	52	54.60	-0.7
	0.5s		1.80nm			3.8mb
NB2	24.17	345	P	53	07.30	-0.7
	0.8s		2.80nm			3.9mb

S.D. = 0.9 on 40 of 43 obs.

JUN 24, 1990 05h 08m 44.12± 0.41s
32.400 N ± 7.1km 49.978 E ± 4.8km
DEPTH = 33.0km (normal)
4.5mb (24 obs.) 4.3Msz (4 obs.)

WESTERN IRAN (347)
Felt in the Farsan area.

KER	3.09	310	iPc	09	34.00	2.1
TEH	3.53	19	eP	09	41.00	2.9X
BRF	6.33	175	iPn	10	42.50	25.0X
			eSn	11	27.60	
TAB	6.39	333	eP	10	36.00	17.4X
MAIO	8.78	61	eP	10	52.00	0.2
			eS	12	47.00	
HRI	12.01	278	eP	11	34.70	-1.3
BHL	12.10	281	P	11	38.00	0.8
			S	15	28.00	
DSI	12.42	270	eP	11	41.20	-0.2
MBH	13.20	263	eP	11	50.00	-1.8
RMN	13.24	266	eP	11	51.50	-0.9
QUE	14.68	94	eP	12	19.50	8.1X
HLW	16.16	266	eP	12	13.00	-17.3X
			e	17	44.00	
ELL	17.08	290	eP	12	46.00	3.9X
AKSR	17.31	244	iPd	12	44.00	-0.9
	1.0s		••••••nm			7.7mb X
ALT	17.43	298	eP	12	45.00	-1.4
AKRL	17.54	245	iPd	12	52.00	4.4X
AGAL	17.58	244	iPd	12	52.50	4.3X
HRT	18.31	303	eP	12	58.00	0.8
YLV	18.44	302	eP	12	59.00	0.2
ALN	20.94	301	ePc	13	26.20	-0.2
JMB	21.06	305	eP	13	31.00	3.4X
KDZ	21.62	302	eP	13	25.00	-8.2X
DIM	21.65	303	eP	13	35.00	1.4
RZN	22.13	302	iPd	13	40.00	1.4
KSH	22.16	64	P	13	44.00	5.2X
PVL	22.19	306	eP	13	43.00	4.1X
OUR	22.33	298	eP	13	41.60	1.3
VRI	22.40	314	ePd	13	42.00	1.0
MLR	22.71	312	ePc	13	47.50	3.3X
PGB	22.77	304	eP	13	45.00	0.2
SRS	22.79	300	eP	13	45.80	0.9
MMB	22.81	301	eP	13	46.00	0.9
SOH	22.90	299	eP	13	47.70	1.7
CMP	23.18	311	ePc	13	56.00	7.3X
LIT	23.40	297	eP	13	51.60	0.8
VTS	23.46	303	eP	13	53.00	1.4
VAY	23.59	300	eP	13	54.60	2.0
GRG	23.63	299	eP	13	53.40	0.3
FNA	24.36	298	ePd	14	02.20	2.0
SKO	24.57	301	eP	14	02.50	0.4
IGT	24.95	295	eP	14	06.50	0.7
BZS	25.54	309	eP	14	13.00	1.8
LCI	26.87	296	P	14	23.80	0.2
BRT	27.50	297	P	14	32.00	2.6
SPC	27.82	316	eP	14	43.70	11.3X
BUD	27.88	312	eP	14	42.50	9.8X
ORI	27.98	295	P	14	39.00	5.2X
TDS	28.04	295	P	14	43.50	9.3X
SOI	28.18	291	P	14	36.00	0.5
KRA	28.39	317	eP	14	36.30	-1.0
SRO	28.45	312	eP	14	54.00	16.1X
ATN	28.65	291	P	14	40.50	0.7
SGO	28.90	296	P	14	43.50	1.6
BSS	29.30	297	P	14	46.00	0.4
ZST	29.35	312	eP	14	44.60	-1.3
			e	15	21.40	
DUI	29.65	298	P	14	50.00	1.1
SDI	30.13	298	P	14	52.00	-1.1
LJU	30.38	307	e(P)	14	55.50	0.3
VOY	30.81	307	e(P)	14	58.50	-0.6
KSP	30.83	317	eP	14	58.50	-0.6
ASS	31.14	301	P	15	02.50	0.5
FVI	31.69	307	P	15	06.30	-0.4
CRE	31.73	302	P	15	07.50	0.3
SFI	31.84	302	P	15	10.00	2.0
KHC	31.86	312	Pd	15	07.50	-0.7
	1.2s		10.00nm			4.6mb
PGD	31.93	302	P	15	11.60	2.6
BRG	32.22	316	eP	15	10.80	-0.5
BDI	32.76	302	P	15	17.30	1.2
SQTA	32.88	308	iPc	15	15.60	-1.6
	0.7s		64.70nm			5.6mb X
			i	15	20.20	
			i	15	29.20	
			i	15	41.00	
CLL	32.93	316	eP	15	16.00	-1.4
OGA	32.93	307	eP	15	17.20	-0.6
OSS	33.49	307	ePd	15	22.50	-0.1
GRF	33.50	313	eP	15	21.90	-0.5

24d 05h

	Z 21s	0.20um		3.8Msz	
MDI	33.63	305 P	15 24.20	0.7	
SUF	33.92	341 eP	15 25.00	-0.8	
SAX	34.13	308 ePd	15 26.90	-1.4	
TMA	34.26	306 ePd	15 28.20	-1.0	
VAI	34.29	305 P	15 29.20	-0.1	
LLS	34.30	307 ePd	15 28.10	-1.5	
ZLA	34.82	308 ePc	15 30.60	-3.3X	
SBF	35.01	302 eP	15 35.10	-0.5	
	1.0s	36.00nm		5.3mb	
DIX	35.26	305 ePd	15 37.10	-0.8	
LPG	35.65	304 eP	15 40.80	-0.5	
	1.0s	12.00nm		4.8mb	
BNI	35.66	303 P	15 40.50	-0.6	
HAU	36.26	308 eP	15 44.30	-1.8	
	0.8s	8.05nm		4.7mb	
HFS	36.59	330 eP	15 46.60	-2.0	
	0.4s	3.30nm		4.6mb	
	Z 18s	0.27um		4.1Msz	
		LR	30 05.00		
WTS	36.81	315 eP	15 51.00	0.4	
	0.7s	22.00nm		5.1mb	
MEM	36.97	313 P	15 52.60	0.7	
ENN	37.06	313 eP	15 53.50	0.8	
	0.7s	4.00nm		4.4mb	
		e	16 13.50		
SOD	37.60	345 eP	15 56.00	-1.0	
LBF	37.72	306 eP	15 57.30	-1.1	
	1.0s	6.00nm		4.4mb	
DOU	37.76	312 P	15 58.80	0.2	
	0.8s	10.00nm		4.7mb	
		S	24 44.00		
SMF	37.78	306 eP	15 57.80	-1.0	
	0.9s	13.90nm		4.8mb	
SSF	38.05	306 eP	16 00.10	-1.0	
	0.8s	7.40nm		4.6mb	
NB2	38.11	330 P	16 00.50	-0.9	
	0.9s	2.30nm		4.0mb	
AVF	38.13	306 eP	16 01.00	-0.7	
	0.8s	5.35nm		4.4mb	
MAF	38.62	305 eP	16 04.50	-1.4	
	1.0s	6.00nm		4.3mb	
TCF	38.88	305 eP	16 07.40	-0.7	
	0.8s	2.70nm		4.1mb	
EBR	40.15	297 eP	16 20.00	1.4	
MFF	40.52	305 eP	16 20.30	-1.3	
	0.6s	3.60nm		4.3mb	
GTA	40.55	66 eP	16 21.60	-0.5	
	Z 16s	0.60um		4.5MszX	
	E 12s	0.30um			
LDF	40.62	309 eP	16 21.30	-1.1	
	0.7s	4.40nm		4.3mb	
FLN	40.87	309 eP	16 22.90	-1.5	
	0.6s	5.40nm		4.5mb	
GRR	41.09	308 eP	16 25.40	-0.9	
	0.8s	10.75nm		4.6mb	
LPF	41.19	308 eP	16 26.00	-1.1	
	0.6s	5.40nm		4.5mb	
EKA	43.31	318 P	16 44.00	-0.3	
	0.9s	4.30nm		4.2mb	
LZH	44.21	70 Pd	16 54.50	2.4	
		pP	17 01.00	22kmX	
MAL	44.50	291 P	16 54.00	-0.2	
CHG	45.81	95 eP	17 05.30	0.5	
XAN	48.74	71 eP	17 27.00	-0.7	
TIY	50.58	66 eP	17 43.00	1.3	
	Z 18s	0.80um		4.8Msz	
	E 13s	0.30um			
CIR	55.95	201 iPc	18 23.00	1.5	
LKO	55.97	259 P	18 22.00	0.1	
BUL	56.10	204 iPd	18 20.90	-1.9	
	1.0s	9.00nm		4.8mb	
KIC	57.02	255 P	18 29.72	0.3	
	0.8s	17.00nm		5.1mb	
LIC	57.33	255 P	18 31.78	0.2	
	Z 18s	0.45um		4.6Msz	
SWZ	63.73	204 eP	19 14.00	-1.0	
SEK	64.02	202 eP	19 27.20	10.3X	
MBC	71.41	357 eP	20 01.00	-1.4	
	0.8s	2.00nm		4.2mb	
FRB	72.67	336 eP	20 09.00	-1.0	
SCH	77.62	328 eP	20 38.00	-0.5	
ZOBO	122.09	270 ePKP	27 39.00	0.9	
CNCB	122.22	270 PKP	27 40.00	1.6	
	S.D. = 1.1	on 102 of 123 obs.			

JUN 24, 1990 05h 29m 26.69± 0.75s
0.483 N ± 4.9km 122.389 E ± 6.3km
DEPTH = 153.3 ± 8.1 km
5.1mb (14 obs.)
MINAHASSA PENINSULA (265)

MNI	2.63	69 iPc	30 08.00	-2.0	
		eS	30 38.40		
TSM	5.69	311 iPd	30 49.90	-0.3	
	0.2s	426.00nm		6.3mb X	
BKB2	5.76	252 iPd	30 51.50	0.4	
MKS	6.37	207 ePc	31 00.00	0.6	
AAI	7.13	126 eP	31 13.00	3.4X	
KKM	8.28	312 ePc	31 25.00	0.0	
	0.6s	75.20nm		5.5mb	
		e	32 55.50		
MTN	15.83	147 eP	33 05.00	2.5	
KGM	19.13	275 ePc	33 39.60	-0.8	
MBL	21.65	186 eP	34 05.40	-0.5	
	0.5s	27.00nm		4.9mb	
IPM	21.72	281 ePc	34 07.20	0.6	
	0.9s	55.30nm		5.0mb	
PPI	22.01	268 eP	34 10.50	1.1	
QIZ	22.16	327 eP	34 12.40	1.5	
		S	38 11.50		
SNG	22.71	288 eP	34 14.00	-2.1	
	1.0s	100.00nm		5.2mb	
WB5	23.40	151 eP	34 23.00	0.1	
		e	34 53.90		
WRA	23.44	151 P	34 25.00	1.7	
PSI	23.56	276 ePd	34 24.20	-0.2	
	0.8s	73.60nm		5.2mb	
NANU	23.86	196 eP	34 27.10	-0.2	
	0.5s	62.00nm		5.4mb	
NNT	25.48	299 eP	34 42.90	0.4	
		e	49 06.40		
LOE	26.38	311 eP	34 50.50	-0.2	
ASPA	26.48	156 eP	34 52.40	0.8	
QIS	26.86	142 eP	34 55.50	0.5	
		e	35 26.50		
MEKA	27.19	188 iPc	34 57.00	-1.0	
BDT	28.41	307 eP	35 09.30	0.3	
CHG	29.34	310 ePc	35 18.00	0.6	
	1.1s	33.54nm		5.0mb	
MRWA	30.16	191 iPc	35 23.40	-1.0	
BAL	31.39	189 eP	35 34.00	-1.1	
	0.4s	18.00nm		5.2mb	
KLB	32.20	187 iPc	35 41.10	-1.1	
	0.5s	27.00nm		5.3mb	
MUN	32.81	190 eP	35 46.00	-1.5	
CD2	35.04	331 eP	36 06.80	0.1	
XAN	35.69	341 Pc	36 12.50	0.4	
TIY	38.17	347 eP	36 32.80	-0.1	
SHL	38.58	313 iP	36 36.90	0.3	
MAT	38.76	21 eP	36 36.00	-1.8	
	1.0s	26.00nm		4.9mb	
BJI	39.78	353 eP	36 46.00	0.0	
	Z 16s	0.29um		4.2MszX	
BTO	41.48	346 eP	37 01.60	1.4	
CAN	43.42	148 eP	37 17.90	1.9	
GTA	43.89	335 P	37 21.20	1.4	
	1.0s	20.00nm		4.7mb	
GUN	44.34	311 P	37 24.60	0.8	
	0.8s	83.00nm		5.4mb	
MDJ	44.41	7 eP	37 23.80	0.2	
PKI	44.52	310 P	37 25.60	0.3	
	0.8s	32.00nm		5.0mb	
GKN	45.33	310 P	37 32.00	0.6	
HYB	46.28	294 eP	37 39.00	0.1	
GBA	46.37	288 Pc	37 39.10	-0.5	
	0.6s	45.60nm		5.3mb	
QUE	60.31	305 eP	39 20.50	-1.4	
KIC	126.80	278 (PKP)	48 14.30	-0.4	
LKO	127.27	282 PKP	48 15.78	0.1	
	0.7s	8.50nm			
CNCB	160.83	148 ePKP	49 08.00	-2.8	
ZOBO	161.20	147 PKP	49 14.00	2.8X	
	S.D. = 1.1	on 46 of 48 obs.			

JUN 24, 1990 05h 37m 14.08± 0.40s
44.714 N ± 4.2km 13.406 E ± 6.6km
DEPTH = 10.0km (geophysicist)
ADRIATIC SEA (382)
ML 3.2 (VIE). MD 2.7 (TRI).

TRI	1.03	14 iPgd	37 33.30	-0.2	
		iSg	37 47.00		
RSM	1.04	221 Pc	37 34.00	0.3	
		eSg	37 51.20		
CEY	1.25	35 ePn	37 36.90	-0.5	
		eSg	37 55.00		
ARV	1.26	196 P	37 37.40	-0.1	
		eSg	37 55.00		
VOY	1.36	14 iPnc	37 38.60	-0.6	
		eSn	37 57.50		
SFI	1.37	235 P	37 39.10	0.0	
		eSg	37 58.50		
PGD	1.47	236 P	37 40.90	0.1	
		eSg	38 01.50		
CRE	1.51	224 P	37 41.20	0.0	
		eSg	38 02.30		
VBY	1.53	58 ePn	37 42.70	1.2	
		iSn	38 04.20		
LJU	1.55	30 ePn	37 42.00	0.3	
		iSg	38 04.50		
ASS	1.73	198 P	37 44.70	0.3	
		eSg	38 06.40		
FVI	1.93	347 P	37 46.40	-0.8	
		eSn	38 10.00		
PTJ	2.16	56 iPnc	37 55.10	4.5X	
		eSn	38 27.50		
OGA	2.72	323 eP	38 05.60	6.8X	
SQTA	2.94	329 iPnd	38 02.60	0.8	
		iPg	38 08.40		
		iSn	38 34.30		
		iSg	38 46.30		
SDI	3.02	174 P	38 02.00	-0.9	
KHC	4.42	1 eP	38 17.50	-5.2X	
	S.D. = 0.6	on 14 of 17 obs.			

JUN 24, 1990 05h 38m 30.00± 0.41s
44.793 N ± 5.5km 13.254 E ± 8.2km
DEPTH = 10.0km (geophysicist)
ADRIATIC SEA (382)
ML 3.0 (VIE). MD 2.5 (TRI).

TRI	0.98	21 iPg	38 48.70	0.0	
		iSg	39 03.00		
RSM	1.04	214 Pc	38 49.70	0.1	
		eSg	39 06.10		
CEY	1.26	41 ePn	38 52.50	-0.9	
		iSg	39 10.90		
ARV	1.31	190 P	38 53.20	-1.1	
		eSg	39 11.80		
VOY	1.32	20 ePn	38 54.50	0.1	
		eSn	39 13.70		
SFI	1.33	230 P	38 54.70	0.2	
		eSg	39 14.00		
PGD	1.43	231 P	38 55.50	-0.7	
CRE	1.49	219 P	38 57.40	0.4	
		eSg	39 17.40		
LJU	1.54	35 ePn	38 58.10	0.6	
		eSg	39 20.50		
VBY	1.59	63 ePn	38 58.40	0.2	
		eSn	39 20.20		
ASS	1.77	194 P	39 01.20	0.2	
		eSg	39 23.20		
FVI	1.83	350 P	39 01.10	-0.6	
PTJ	2.20	59 ePn	39 11.30	4.0X	
		eSn	39 43.70		
SQTA	2.82	330 iPgc	39 24.00	8.0X	
		iSn	39 50.50		
		iSg	40 02.50		
PRU	5.27	9 eP	39 56.50	5.8X	
		e	40 33.50		
	S.D. = 0.6	on 12 of 15 obs.			

? JUN 24, 1990 05h 45m 56.44± 1.28s
31.738 S ±18.4km 69.212 W ±16.2km
DEPTH = 100.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTBS	0.22	290 iPd	46 11.00	-0.1	
RTCV	0.59	102 iPc	46 13.30	0.1	
RTLL	0.75	57 iPc	46 14.50	-0.2	
CFA	0.84	81 eP	46 15.50	0.0	
		eS	46 30.20		
RTRS	1.58	352 iPc	46 24.10	0.1	
	S.D. = 0.2	on 5 of 5 obs.			

JUN 24, 1990 05h 52m 30.75± 0.41s
43.097 N ± 4.2km 10.713 E ± 3.4km
DEPTH = 6.1 ± 2.4 km
CENTRAL ITALY (381)
MD 3.1 (ROM). ML 3.1 (LDG).

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PII      0.64 348 Pc    52 43.80   0.3
                  eSg   52 52.70
MAO      0.75 154 P     52 44.24  -1.5
BDI      0.97 355 Pc    52 49.50  -0.1
                  eSg   53 02.90
CRE      1.05  59 Pc    52 50.20  -0.7
PGD      1.07  43 Pc    52 50.90  -0.5
                  eSg   53 05.70
MME      1.10 360 P     52 52.10   0.2
                  eSg   53 07.10
SFI      1.17  45 P     52 52.50  -0.4
                  eSg   53 08.00
PGF      1.37 247 Pn    52 57.80   1.3
                  Sn    53 13.40
ASS      1.43  90 P     52 57.00  -0.3
RSM      1.51  56 P     52 59.40   1.1
ARV      1.68  75 P     53 00.50  -0.2
BOB      1.90 332 P     53 05.00   0.9
RMP      1.95 130 P     53 06.40   1.6
RDP      2.00 131 P     53 06.50   1.1
AQU      2.12 110 P     53 08.50   1.3
CKI      2.21 308 P     53 08.00  -0.4
AZI      2.30 118 P     53 10.50   0.8
SBF      2.51 289 Pn    53 12.30  -0.4
                  Sn    53 40.00
SAL      2.51 357 P     53 12.10  -0.6
SDI      2.69 120 P     53 15.50   0.2
MDI      2.77 345 P     53 16.50   0.0
DOI      2.88 300 P     53 17.80  -0.3
FRF      3.00 280 Pn    53 19.10  -0.6
                  Sn    53 53.00
LMR      3.08 276 Pn    53 20.20  -0.6
                  Sn    53 55.00
VAI      3.10 334 P     53 21.60   0.6
LRG      3.20 278 Pn    53 22.30  -0.2
TMA      3.28 337 ePd   53 24.40   0.5
TRI      3.41  39 ePc   53 34.00   8.6X
                  e     54 10.00
VDL      3.50 346 ePc   53 29.30   2.3
BNI      3.51 305 P     53 26.50  -0.5
MMK      3.55 327 ePd   53 30.00   2.3
OSS      3.61 354 ePd   53 29.90   1.4
VOY      3.71  37 e(P)  53 28.60  -1.3
LPG      3.72 312 Pn    53 32.70   2.4
LPL      3.74 312 Pn    53 33.00   2.5
                  Sn    54 12.60
OGA      3.78   3 eP    53 32.80   1.8
FVI      3.79  22 P     53 29.80  -1.1
DIX      3.80 323 ePc   53 33.50   2.1
LLS      3.96 343 ePc   53 34.90   1.3
LJU      4.02  41 e(P)  53 34.00  -0.1
VBY      4.05  52 eP    53 52.50  17.9X
SOTA     4.14   5 iPc   53 36.30   0.4
       0.6s     73.10nm
                  ic    53 38.00
                  i     53 51.00
                  i     54 47.60
SAX      4.27 347 ePc   53 40.00   2.1
PTJ      4.68  51 eP    53 46.00   2.3
SLE      4.92 342 ePc   53 45.30  -1.7
BSF      5.48 331 Pn    53 54.40  -0.6
HAU      5.79 330 Pn    53 58.40  -0.8
LBF      6.15 311 Pn    54 04.20  -0.2
KHC      6.35  17 P     54 05.90  -1.3
                  e     54 20.20
LOR      6.39 313 Pn    54 07.10  -0.7
SSF      6.46 310 Pn    54 08.70   0.0
CAF      6.50 289 Pn    54 08.20  -1.1
BGF      6.58 304 Pn    54 09.30  -1.1
GRF      6.61   3 e(P)  54 09.00  -1.8
LPO      7.06 286 Pn    54 15.70  -1.5
PRU      7.38  20 eP    54 49.50  27.9X
                  e     54 56.50
CLL      8.36  10 e(P)  54 34.00  -1.3
     S.D. = 1.2  on  54 of  57 obs.
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   JUN  24, 1990  06h 10m 37.77± 1.26s
   37.519 N ± 8.5km   20.622 E ±11.3km
   DEPTH =  10.0km  (geophysicist)
   3.7mb (  2 obs.)
 IONIAN SEA                        (399)
     ML 3.6 (ATH), 3.3 (THE).

VLS      0.66 358 ePg   10 51.20   0.3
ITM      1.09 108 ePg   10 56.70  -1.6
AGG      2.02  41 ePnd  11 13.40   1.2
                  eSn   11 39.70
VLI      2.02 113 ePn   11 13.70   1.5
IGT      2.02 354 ePn   11 13.00   0.7
KEK      2.28 344 ePg   11 24.00   7.9X
ATH      2.49  79 ePb   11 19.50   0.5
NEO      2.71  48 ePn   11 21.70  -0.5
LIT      2.96  29 ePnd  11 26.60   0.9
FNA      3.31  10 ePnd  11 31.60   0.9
                  iSn   12 10.10
VAM      3.57 125 ePn   11 34.60   0.3
OHR      3.59   2 iPn   11 35.80   1.1
THE      3.60  30 ePn   11 34.20  -0.6
GRG      3.70  21 ePn   11 35.60  -0.6
SOH      3.92  32 ePn   11 39.10  -0.3
KNT      4.04  25 ePn   11 40.70  -0.3
VAY      4.09  21 ePn   11 40.30  -1.3
SKO      4.49   8 ePn   11 47.00  -0.4
                  eSg   12 37.00
HFS     23.06 351 eP    15 43.00  -1.0
       0.4s      1.10nm          3.7mb
NB2     24.28 349 P     15 55.30  -0.6
       0.8s      1.60nm          3.7mb
     S.D. = 1.0  on  19 of  20 obs.
-------------------------------------
?  JUN  24, 1990  06h 51m 27.80± 4.30s
   34.162 S ±25.2km  179.202 W ±51.1km
   DEPTH = 344.3 ± 17.6 km
   3.2mb (  1 obs.)
 SOUTH OF KERMADEC ISLANDS         (179)

PUZ      4.41 207 eP    52 39.20  -2.1
                  S     53 40.40
NOZ      4.97 206 eP    52 48.80   1.5
                  S     53 51.30
WLZ      5.60 228 eP    52 54.00  -0.3
TUTZ     5.97 219 P     52 59.30   0.6
HATZ     6.05 217 P     52 59.40  -0.2
RATZ     6.20 219 P     53 01.90   0.5
KETZ     6.43 219 P     53 04.70   0.5
CNZ      6.56 218 P     53 06.00   0.3
DRZ      6.61 218 P     53 07.10   0.7
PGZ      7.38 208 P     53 16.60   1.4
CAW      8.29 212 eP    53 25.10  -0.9
BLW      8.34 209 eP    53 27.10   0.5
WDW      8.45 211 eP    53 27.00  -0.9
MOW      8.47 210 eP    53 28.40   0.2
MRW      8.55 213 eP    53 28.20  -0.9
                  eS    55 07.70
WEL      8.56 212 eP    53 29.10  -0.2
TCW      8.73 214 eP    53 30.00  -1.3
THZ      9.82 217 P     53 44.10  -0.3
                  eS    55 35.00
KHZ     10.02 213 eP    53 47.10   0.3
LTZ     10.89 215 P     53 57.20  -0.2
MQZ     11.44 211 eP    54 04.70   0.7
WRA     43.37 277 P     58 59.00   0.0
       0.4s      0.60nm          3.2mb
     S.D. = 0.9  on  22 of  22 obs.
-------------------------------------
&  JUN  24, 1990  07h 19m 02.10s
   41.905 N          112.404 W
   DEPTH =   7.9km
 UTAH                              (478)
      <SLC-P>. ML 2.4 (SLC).

PTI      0.97   1 eP    19 20.20  -0.6
DAU      1.72 149 eP    19 33.80   0.9
DUG      1.74 190 eP    19 33.30   0.4
HPI      1.88 344 eP    19 35.50   0.5
BW06     2.28  67 eP    19 42.50   1.6
       5 obs. associated
-------------------------------------
?  JUN  24, 1990  07h 20m 56.24± 3.55s
   30.767 S ±13.6km  118.058 E ±31.7km
   DEPTH =  10.0km  (geophysicist)
 WESTERN AUSTRALIA                 (590)

KLB      0.86 197 eP    21 12.40  -0.4
                  iS    21 25.00
BAL      1.17 278 eP    21 17.70  -0.5
                  iS    21 33.80
MUN      1.99 232 eP    21 31.00   0.7
                  iS    21 55.00
MRWA     2.36 310 eP    21 35.80   0.1
                  iS    22 05.60
     S.D. = 1.0  on   4 of   4 obs.
-------------------------------------
%  JUN  24, 1990  08h 01m 55.02± 0.95s
   39.679 N ± 8.0km   29.537 E ±13.4km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)

IZI      0.66 356 iPg   02 07.90  -0.3
ALT      0.77 144 ePg   02 10.00   0.0
YLV      0.90 352 iPn   02 11.90  -0.3
HRT      1.15   5 ePn   02 17.00   0.5
BNT      1.41 299 iPn   02 20.90   0.1
     S.D. = 0.5  on   5 of   5 obs.
-------------------------------------
*  JUN  24, 1990  08h 22m 11.89± 0.80s
   37.131 N ±13.1km   50.028 E ±11.3km
   DEPTH =  10.0km  (geophysicist)
   4.4mb (  4 obs.)
 CASPIAN SEA                       (338)

TEH      1.77 141 iPd   22 41.50  -1.4
TAB      3.08 289 eP    23 05.00   3.3X
                  e     23 08.00
KER      3.65 221 eP    23 11.00   1.2
MAIO     7.65  93 eP    24 07.00   0.9
                  eS    25 45.00
CLL     29.73 310 eP    28 24.00   3.8X
HFS     32.59 327 eP    28 45.20   0.0
       0.7s      3.10nm          4.3mb
AVF     35.56 301 eP    29 12.50   1.4
       0.8s      4.05nm          4.3mb
MFF     37.98 301 eP    29 29.60  -1.8
GRR     38.36 304 eP    29 33.20  -1.4
       0.8s      8.05nm          4.5mb
MBC     66.70 357 eP    33 05.50   1.0
       0.8s      2.00nm          4.4mb
     S.D. = 1.6  on   8 of  10 obs.
-------------------------------------
   JUN  24, 1990  08h 35m 24.98± 0.11s
   21.610 S ± 3.0km  176.582 W ± 2.9km
   DEPTH = 193.2km  ( 13 depth phases)
   5.6mb ( 61 obs.)
 FIJI ISLANDS REGION               (181)
      CENTROID, MOMENT TENSOR      (HRV)
      Doto Used: GDSN
      L.P.B.: 16S, 33C
      Centroid Locotion:
      Origin Time        08:35:32.3 0.5
      Lot 21.38S 0.05 Lon 176.62W 0.03
      Dep 201.3 1.4 Half-duration  3.0
      Moment Tensor;   Scale 10**17 Nm
        Mrr=-4.53 0.14  Mtt= 0.27 0.27
        Mff= 4.26 0.24  Mrt=-0.33 0.16
        Mrf=-2.81 0.17  Mtf= 2.30 0.20
       Principal Axes:
        T  Val=  6.01  Plg=14  Azm=113
        N       -0.64      10       20
        P       -5.37      73      258
      Best Double Couple:Mo=5.7*10**17
       NP1:Strike=216 Dip=32 Slip= -72
       NP2:        15     60     -101

TVI      5.73 324 iPc   36 49.20  -0.3
KRO      5.77 317 iPc   36 49.70  -0.2
SVA      5.88 305 iPc   36 53.80   2.5
OVA      5.91 310 iP    36 52.70   0.9
VUN      5.94 306 iPc   36 53.40   1.3
UDU      6.35 328 iP    36 54.50  -3.0
MBU      6.45 315 iPc   36 58.80   0.0
SGE      6.60 306 iPc   37 03.60   2.7X
NDF      6.87 303 eP    37 07.00   2.8X
YSA      7.43 310 ePc   37 11.70  -0.1
RAO      7.72 189 eP    37 17.80   2.3
                  iS    38 42.00
PVC     14.81 282 iPc   38 51.00   4.6X
DZM     15.84 265 iPd   39 03.10   3.9X
                  iS    42 05.40
PUZ     17.02 194 eP    39 10.90  -2.3
                  eS    42 05.90
WLZ     17.56 201 P     39 20.50   1.4
NOZ     17.59 194 eP    39 18.00  -1.4
CNZ     18.81 199 eP    39 30.40  -2.0
PGZ     19.92 196 eP    39 43.70   0.2
MTW     20.63 197 eP    39 49.30  -1.3
BLW     20.83 197 eP    39 51.60  -1.0
WDW     20.88 198 eP    39 51.60  -1.4
MRW     20.93 199 eP    39 51.20  -2.3
WEL     20.96 199 eP    39 52.80  -1.1
SNZO    21.00 199 eP    39 56.00   1.8
                  eS    43 33.00
```

24d 08h

Sta	Dist / Per	Az	Phase / Amp	Time		Res / Mag
			ScS	52	33.00	
TCW	21.04	200	eP	39	51.80	-2.9
THZ	21.99	202	eP	40	03.40	-0.6
			eS	43	52.50	
KHZ	22.37	200	eP	40	06.60	-0.9
	0.2s		20.00nm			5.3mb
LTZ	23.11	201	eP	40	13.90	-0.9
MQZ	23.81	200	eP	40	23.20	1.8
TBI	25.03	99	iP	40	34.80	1.8
	1.0s		85.00nm			5.3mb
AFR	25.49	86	iP	40	36.20	-1.0
	1.1s		220.00nm			5.7mb
PAE	25.64	86	iP	40	37.40	-1.2
	1.1s		85.00nm			5.3mb
PPT	25.67	86	iP	40	37.80	-1.1
	1.1s		240.00nm			5.8mb
HNR	25.67	295	eP	40	40.00	1.1
PPN	25.81	86	iP	40	38.90	-1.2
	1.1s		125.00nm			5.5mb
TVO	25.92	86	iP	40	41.50	0.3
	1.1s		165.00nm			5.7mb
MHZ	26.15	203	eP	40	41.90	-1.3
MMCZ	26.16	204	eP	40	42.60	-0.6
MSZ	26.35	206	eP	40	46.50	1.7
VAH	28.09	82	iP	40	58.00	-2.7
	1.1s		80.00nm			5.4mb
TPT	28.17	81	iP	40	59.90	-1.6
	1.1s		115.00nm			5.5mb
RUV	28.33	82	iP	41	01.10	-1.8
	1.1s		130.00nm			5.6mb
BRS	28.50	252	iPc+	41	06.00	1.6
			e	41	24.00	78kmX
			i	41	50.00	
			ePP	42	08.00	
			i(S)	44	12.00	
			e	48	30.00	
COO	29.68	246	eP	41	16.00	1.2
RMQ	32.04	254	iPd	41	36.70	1.3
	1.0s		559.00nm			6.2mb
			e	41	50.50	55kmX
			e	44	22.00	
CNB	32.79	238	iPc	41	43.00	1.0
	0.9s		178.00nm			5.7mb
			i	44	24.80	
CAN	33.08	238	iPd	41	45.20	0.7
			iPcP	44	24.70	
			eScP	47	53.00	
BWA	33.33	240	iPd	41	45.10	-1.5
			iPcP	44	24.30	
			iScP	47	53.30	
CTA	34.79	266	iPd	41	59.80	0.7
	0.9s		185.71nm			5.7mb
			iPcP	44	28.30	
			iS	47	24.00	
CMS	34.96	246	iPd	42	01.00	0.6
	1.0s		411.00nm			6.0mb
			e	42	12.00	40kmX
			e	42	24.00	
			e	44	30.90	
TOO	36.40	236	iPd	42	13.70	1.2
	0.5s		119.00nm			5.8mb
			i	44	34.00	
KDB	36.93	283	iPd	42	17.40	0.3
LAT	38.26	287	iPc	42	28.70	0.5
STK	38.59	246	iPd	42	31.50	0.7
	0.7s		58.00nm			5.3mb
			iPcP	44	40.40	
			eS	48	29.90	
QIS	40.87	263	iPd	42	49.20	-0.5
ADE	41.30	241	iPd	42	53.10	0.0
	0.8s		97.01nm			5.4mb
ASPA	45.64	258	iPd	43	27.00	-1.1
	1.0s		398.00nm			5.8mb
Z	20s		2.19um			5.1Msz
			ePcP	45	02.90	
			iPcS	48	55.40	
			eS	49	51.30	
			eScS	53	04.90	
			LR	00	16.20	
WRA	45.84	263	Pc	43	28.70	-1.0
	0.6s		70.80nm			5.3mb
FORR	50.11	247	iPd	44	01.80	-0.7
	0.5s		232.00nm			6.0mb
MTN	50.58	271	iPd	44	05.00	-1.2
GUA	51.52	309	eP	44	13.00	-0.3
	0.8s		1158.21nm			6.5mb
GUMO	51.58	309	eP	44	13.20	-0.5
	0.7s		635.32nm			6.3mb
			eS	50	25.00	
PJG	51.58	309	eP	44	13.20	-0.5
COOL	56.07	247	eP	44	45.00	-1.3
	0.4s		19.00nm			5.2mb
SBA	56.87	184	iPd	44	55.10	3.9X
KLB	58.86	245	iPd	45	04.70	-1.1
	0.6s		78.00nm			5.6mb
MBL	58.89	258	iPd	45	04.90	-1.2
	0.5s		137.00nm			6.0mb
MEKA	58.96	251	iPc	45	05.30	-1.2
RKG	59.18	242	eP	45	07.10	-0.8
	0.5s		63.00nm			5.6mb
BAL	59.89	246	eP	45	11.60	-1.2
MUN	60.11	245	iPd	45	13.60	-0.7
	0.7s		65.00nm			5.5mb
MRWA	60.72	248	iPd	45	17.50	-1.0
MNI	61.66	284	eP	45	23.20	-1.7
NANU	62.46	255	iPd	45	29.70	-0.4
	0.5s		110.00nm			6.0mb
DAV	63.54	290	eP	45	27.50	-9.8X
SPA	68.52	180	iPd	46	10.40	2.1
	0.8s		188.33nm			5.9mb
KKM	71.39	285	iPd	46	25.50	-0.9
	0.9s		58.30nm			5.3mb
MAT	71.93	323	iPd	46	27.00	-2.0
	1.6s		183.33nm			5.6mb
			eS	55	32.00	
BAG	72.31	296	eP	46	28.00	-3.8X
ADK	73.17	360	iPd	46	33.80	-2.0
	0.6s		239.30nm			6.1mb
SMY	74.47	354	eP	46	41.10	-2.2
BLP	77.20	45	P	46	59.00	0.0
SYP	77.45	45	eP	47	01.00	0.4
PRS	77.67	43	iPd	47	02.20	0.6
GCC	77.71	42	ePd	47	02.10	0.3
PCC	77.77	41	ePd	47	02.40	0.3
BCH	77.78	44	P	47	03.00	0.6
SDN	77.85	9	ePd	47	00.30	-1.8
SAO	77.89	42	ePd	47	02.90	0.1
PHAM	77.98	44	P	47	03.70	0.3
PRI	78.00	43	iPd	47	04.30	0.7
			epP	47	52.90	201km
BRK	78.08	41	ePd	47	04.00	0.2
BKS	78.10	41	iPd	47	04.30	0.4
	0.7s		108.00nm			5.7mb
MHC	78.13	42	ePd	47	04.90	0.6
ABL	78.15	45	P	47	05.00	0.4
OZH	78.19	303	iPc	47	04.50	-0.2
	0.9s		100.00nm			5.5mb
			sP	48	10.00	
			S	56	44.00	
ARN	78.20	42	P	47	05.20	0.6
PAS	78.43	46	eP	47	05.00	-0.8
MWC	78.55	46	eP	47	06.00	-0.7
BAR	78.60	48	eP	47	07.00	0.2
PLM	78.85	47	eP	47	08.00	-0.4
RVR	78.87	47	eP	47	08.00	-0.2
FHC	78.96	38	ePd	47	09.20	0.6
SBB	78.98	46	eP	47	08.00	-0.9
ISA	79.12	45	eP	47	10.00	0.4
FRI	79.12	43	iPd	47	09.20	-0.3
			epP	47	56.60	195km
CMB	79.34	42	iPd	47	10.70	0.0
			epP	47	58.00	195km
AIA	79.40	157	eP	47	12.70	2.2
SSE	79.47	309	Pd	47	08.00	-3.5X
	1.0s		32.00nm			5.0mb
Z	20s		0.50um			4.9Msz
ORV	79.61	40	ePd	47	12.00	-0.1
WDC	79.65	39	iPd	47	12.40	0.2
			epP	47	59.60	194km
LTCM	79.65	39	P	47	11.60	-0.7
CLC	79.79	45	eP	47	13.00	-0.2
TPC	79.84	47	eP	47	13.00	-0.5
GSC	80.01	46	eP	47	14.00	-0.4
MIN	80.04	39	iPd	47	13.90	-0.6
			epP	48	01.40	195km
GLA	80.09	49	eP	47	15.00	0.2
HKC	80.44	299	iP	47	17.80	1.0
LBFM	80.52	38	P	47	17.60	0.5
MAW	80.99	200	iPd	47	21.50	2.6
	1.0s		178.00nm			5.8mb
TNP	81.36	43	P	47	22.00	0.5
KVN	81.38	42	P	47	21.80	0.2
GZH	81.48	299	P	47	21.60	-0.6
KDC	81.56	13	P	47	21.40	-0.4
	1.1s		112.50nm			5.5mb
KGM	81.61	276	ePd	47	23.70	0.6
NJ2	81.66	309	Pc	47	22.50	-0.4
MDJ	82.23	324	eP	47	25.80	0.2
N	14s		1.10um			
			epP	48	10.00	179kmX
			S	57	27.00	
QIZ	82.58	294	eP	47	28.50	0.5
BMW	83.11	34	P	47	30.80	0.6
PPI	83.42	272	eP	47	32.00	-0.4
DL2	83.49	316	P	47	32.00	-0.2
	1.0s		100.00nm			5.5mb
VGB	83.79	36	P	47	34.00	0.4
SNY	83.95	319	iPd	47	33.00	-1.4
	7.0s		500.00nm			5.4mb X
			pP	48	23.00	204kmX
			sP	48	44.00	
			S	57	40.00	
			sS	59	00.00	
CN2	84.03	322	iPd	47	34.20	-0.5
	1.0s		100.00nm			5.5mb
			pP	48	18.00	177kmX
			sP	48	37.00	
			eS	57	42.00	
			sS	59	00.00	
LON	84.03	34	P	47	35.00	0.2
GMW	84.05	33	P	47	35.50	0.7
SVW	84.14	10	eP	47	33.90	-1.1
WHN	84.22	306	ePc	47	36.00	0.0
PGC	84.44	32	eP	47	37.00	0.4
RMW	84.49	34	P	47	37.60	0.5
			pP	48	25.60	195km
IPM	84.69	277	ePd	47	40.00	1.3
	0.9s		224.80nm			5.9mb
MCW	84.77	32	P	47	39.00	0.6
MSU	84.88	45	P	47	40.40	0.9
TIA	85.05	312	eP	47	39.40	-0.7
SIT	85.64	21	e(P)	47	41.80	-0.6
PMR	85.78	13	iPd	47	42.20	-0.8
	0.9s		118.60nm			5.7mb
TTA	85.80	9	iPd	47	43.20	-0.1
SNG	86.04	279	iPd	47	46.50	1.1
	0.9s		126.05nm			5.7mb
DAU	86.50	44	P	47	48.00	0.5
DPW	86.65	35	P	47	47.80	0.1
PNT	86.80	33	iPd	47	48.70	0.4
	0.9s		107.00nm			5.7mb
TOA	86.87	14	ePd	47	48.40	-0.1
			e	48	37.80	201km
ALQ	87.01	51	iPd	47	49.20	-0.7
	1.0s		25.00nm			5.0mb
			epP	48	35.50	187km
ANMO	87.01	51	P	47	49.40	-0.5
	1.2s		34.18nm			5.1mb
			pP	48	31.00	166kmX
NEW	87.46	35	P	47	51.20	-0.3
	1.0s		35.00nm			5.2mb
			pP	48	36.00	180kmX
BJI	87.66	315	eP	47	52.50	-0.1
	1.0s		36.00nm			5.2mb
GYA	88.41	299	P	47	57.00	0.3
LRM	88.68	39	ePd	47	57.60	-0.1
BW06	88.82	43	P	47	57.40	-1.0
	1.3s		40.98nm			5.2mb
			pP	48	43.50	185km
LOE	88.95	289	eP	48	00.00	0.8
FBA	89.03	12	iPd	47	57.50	-1.1
TIY	89.06	311	Pd	47	59.40	0.0
	1.2s		100.00nm			5.6mb
Z	24s		0.80um			5.1MszX
E	12s		0.30um			
IMA	89.11	9	iPd	47	58.50	-0.6
	0.9s		28.30nm			5.2mb
			e	48	48.30	201km
XAN	89.91	307	Pd	48	03.50	0.1
GOL	90.04	47	P	48	04.20	0.0
	1.0s		25.00nm			5.1mb
GLD	90.17	47	P	48	05.50	0.8
	1.0s		70.00nm			5.6mb
BSI	90.33	276	ePc	48	07.50	1.8
	0.9s		243.30nm			6.2mb
HHC	91.13	314	Pd	48	09.00	0.1
Z	32s		0.80um			5.0MszX
			PP	51	46.00	
BDT	91.29	288	iPd	48	10.00	0.0
	0.8s		77.90nm			5.8mb
CHG	91.93	289	iPd	48	14.00	1.0

0.9s 48.74nm 5.5mb
SES 91.95 36 iPd 48 12.60 0.2
1.2s 166.00nm 6.0mb
pP 49 00.00 190km
BTO 92.06 313 eP 48 13.00 -0.2
EDM 92.28 32 iPd 48 13.60 -0.3
CD2 92.56 302 eP 48 16.10 0.4
MEO 92.73 54 iPd 48 16.00 -0.3
RSSD 92.99 43 P 48 17.40 -0.2
pP 49 03.50 184km
LZH 94.55 307 eP 48 25.50 0.6
2.5s 90.00nm 5.5mb
Z 15s 0.50um 5.1MszX
INK 94.98 15 iPd 48 24.80 -1.1
1.0s 55.00nm 5.8mb
pP 49 12.00 189km
TUL 95.27 54 eP 48 28.20 0.2
1.2s 13.20nm 5.1mb
LNO 95.27 54 eP 48 27.40 -0.5
YKA 96.94 24 eP 48 33.70 -1.2
0.8s 13.30nm 5.3mb
ARE 97.36 111 eP 48 41.00 2.8
GTA 98.76 309 P 48 42.40 -1.4
CNCB 100.25 113 Pdiff 48 55.00 3.3X
LPB 100.27 112 ePdiff48 54.00 2.4
ZOBO 100.36 112 Pdiff 48 55.20 3.0X
Z 20s 0.32um 4.8Msz
LR 01 44.00
CCH 101.56 114 ePdiff49 01.50 4.3X
MBC 103.57 12 ePdiff49 04.00 -0.4
0.7s 3.00nm 5.3mb
GUN 106.24 294 PKP 53 27.80 -0.9
PKI 106.55 294 PKP 53 28.40 -0.9
1.0s 52.00nm
DMN 106.82 293 PKP 53 29.00 -0.7
GKN 107.32 294 PKP 53 29.20 -1.3
0.8s 24.00nm
WMQ 108.71 311 Pdiffc49 31.60 3.5X
KSH 116.65 304 PKP 53 48.70 0.8
FRB 117.10 28 ePKP 53 47.00 -0.8
BAO 117.40 122 ePKP 53 39.00 -11.0X
SCH 118.71 38 ePKP 53 50.00 -1.2
CER 123.30 196 iPKPd 54 01.00 0.4
i 55 47.00
HVD 123.95 203 iPKPc 54 21.00 18.8X
BLF 125.04 204 iPKPc 54 04.30 0.0
SWZ 127.10 205 iPKPc 53 55.00 -13.3X
1.3s 211.54nm
CIR 129.53 215 iPKPd 54 13.20 0.2
iPP 56 22.90
KEV 129.81 350 ePKP 54 11.00 -1.0
BUL 131.78 212 iPKPc 54 13.50 -3.9X
iPP 56 32.00
iSKP 57 25.30
i 58 33.20
SOD 131.97 348 iPKP 54 13.00 -3.2X
SUF 136.11 345 ePKP 54 17.50 -6.6X
0.6s 6.10nm
NUR 138.38 344 ePKP 54 16.00 -12.5X
0.7s 40.00nm
i 54 20.20
TAB 139.77 304 ePKP 54 29.00 -2.9
NB2 140.23 354 PKP 54 22.50 -9.4X
0.6s 21.70nm
NAI 140.30 239 iPKPc 54 29.00 -4.6X
UPP 140.49 349 iPKP 54 22.90 -9.3X
HFS 140.84 352 ePKP 54 24.00 -8.9X
0.4s 32.40nm
COP 145.33 351 iPKPd-54 40.80 0.1
0.6s 669.33nm
i 54 43.00
i 54 49.00
BSD 145.47 348 iPKPd 54 40.00 -1.0
0.4s 297.50nm
EKA 145.96 7 PKPd 54 41.90 0.1
1.3s 163.80nm
GAZ 146.99 306 iPKP 54 46.50 2.4
DCN 147.26 12 iPKPd 54 46.10 2.1
0.6s 140.00nm
DLE 147.45 11 iPKPd 54 46.60 2.3
0.9s 134.00nm
IAS 147.92 328 ePKP 54 46.00 0.8
YRH 148.21 9 ePKP 54 48.00 2.5
BRN 148.34 349 ePKP 54 49.00 3.3X
CLI 148.50 328 iPKPd 54 50.00 3.8X
ECP 148.54 12 ePKP 54 45.00 -1.0
PPE 148.56 327 iPKPc 54 51.00 4.7X
PTT 148.67 329 ePKP 54 51.00 4.5X
WIT 148.76 356 ePKP 54 48.00 1.7
e 54 51.00
e 54 55.00
KRA 148.78 339 ePKP 54 46.20 -0.3
0.9s 264.00nm
i 54 50.70
CFR 148.98 325 ePKP 54 47.00 0.1
KSP 149.15 344 ePKP 54 47.10 0.0
ic 54 51.90
BHL 149.15 300 PKPc 54 52.00 4.3X
HRI 149.24 299 ePKP 54 53.40 5.5X
VRI 149.25 327 ePKPd 54 52.50 5.1X
SPC 149.42 338 ePKP 54 47.50 -0.3
i 54 52.90
TLB 149.43 324 iPKPd 54 53.00 5.3X
CLL 149.44 348 iPKP 54 47.10 -0.4
1.3s 570.00nm
i 54 52.10
pPKP 55 38.00
DBN 149.54 358 ePKP 54 52.00 4.5X
e 55 38.00
WTS 149.56 356 ePKP 54 48.00 0.4
0.8s 243.00nm
id 54 52.50
e 54 56.00
BRG 149.67 347 iPKPd 54 47.60 -0.2
i 54 53.20
i 54 57.20
ipPKP 55 44.20
ISR 149.85 327 iPKPd 54 54.00 5.6X
DSI 149.91 296 ePKP 54 54.00 5.2X
MLR 149.91 328 iPKPc 54 49.00 0.4
MOX 150.33 350 ePKP 54 49.00 0.1
1.9s 509.00nm
Z 14s 1.00um 5.8MszX
N 20s 2.00um
E 18s 0.80um
i 54 55.00
e 55 43.00
PRU 150.37 346 PKPd 54 48.60 -0.3
LFK 150.42 304 iPKP 54 49.20 -0.4
PRNI 150.45 294 ePKP 54 55.00 5.3X
MTUR 150.53 328 ePKPc 54 55.00 5.5X
GPA 150.59 315 iPKP 54 55.00 5.4X
HOF 150.60 349 iPKPc 54 49.80 0.5
PSZ 150.62 337 iPKP 54 54.90 5.4X
MBH 150.65 293 ePKP 54 54.80 4.9X
CSS 150.68 303 ePKP 54 50.00 0.1
HRT 150.72 317 iPKP 54 55.70 5.9X
RMN 150.74 294 ePKP 54 55.30 5.1X
ENN 150.84 357 ePKP 54 50.00 0.4
0.7s 237.00nm
id 54 55.50
e 55 01.00
UCC 150.86 359 iPKPd 54 55.80 6.2X
e 55 44.00
GBZT 150.88 317 iPKPd 54 58.20 8.2X
ISK 150.97 318 iPKP 54 55.90 5.8X
ITU 150.98 318 ePKP 54 55.50 5.4X
MEM 150.99 357 PKP 54 50.10 0.3
id 54 55.90
YLV 151.05 317 ePKP 54 49.90 -0.5
DEV 151.06 331 ePKPc 54 50.00 -0.1
IZI 151.11 316 ePKP 54 56.40 5.9X
SNF 151.15 359 PKP 54 50.70 0.7
id 54 56.39
i 55 04.39
TNS 151.18 353 iPKPd 54 56.10 5.9X
ic 55 04.80
SRO 151.26 339 iPKP 54 55.90 5.6X
BUD 151.31 338 e(PKP)54 50.00 -0.4
ZST 151.31 341 ePKP 54 50.70 0.3
i 54 57.40
GRF 151.32 350 ePKPd 54 50.50 0.1
Z 20s 0.60um 5.4Msz
id 54 57.10
e 55 05.10
e 55 42.00
DMK 151.33 320 iPKP 54 56.60 6.0X
DRA 151.33 328 ePKP 54 58.00 7.5X
ALT 151.35 313 ePKP 54 55.00 4.1X
KHC 151.39 346 iPKPd 54 50.50 0.0
1.1s 142.00nm
Z 14s 1.20um 5.9MszX
N 16s 1.40um
E 17s 0.90um
i 54 57.10
i 55 05.70
VKA 151.49 342 ePKP 54 51.00 0.3
1.8s 443.00nm
i 54 57.40
i 55 06.00
e 55 39.00
DOU 151.56 359 PKP 54 52.90 2.2
id 54 57.30
i 55 03.60
e 55 49.00
e 58 39.30
JMB 151.61 322 ePKP 54 52.00 1.0
BCK 151.76 310 ePKP 54 50.30 -1.2
PVL 151.80 325 iPKPd 54 51.00 -0.3
SOP 151.94 341 ePKP 54 51.90 0.6
BNT 152.09 318 ePKP 54 57.90 6.1X
KHL 152.11 312 ePKP 54 51.60 -0.4
EDC 152.13 318 iPKP 54 58.20 6.4X
KMR 152.26 345 iPKP- 54 52.00 0.2
i 54 59.40
i 55 08.00
KGT 152.42 318 iPKP 54 59.40 7.2X
DIM 152.47 323 ePKP 54 52.00 -0.3
GWF 152.49 354 PKP 54 52.04 -0.1
ELL 152.57 309 iPKP 55 00.00 7.3X
BST 152.69 11 PKP 54 48.37 -4.0X
FLN 152.72 6 ePKP 54 52.30 -0.1
1.0s 18.00nm
FUR 152.78 349 iPKPc 54 53.20 0.7
i 55 00.00
i 55 11.50
KDZ 152.80 322 iPKPd 54 53.00 0.2
STR 152.87 354 PKP 54 52.72 0.1
BHG 152.87 346 ePKP 54 52.80 0.1
PGB 152.88 325 ePKP 55 00.00 7.1X
BEO 152.96 333 iPKPd 55 00.70 7.9X
RDO 153.05 321 ePKP 55 00.00 6.9X
KSL 153.07 308 ePKP 55 00.50 7.2X
WLS 153.08 354 PKP 54 52.12 -0.9
CDF 153.09 354 PKP 54 51.78 -1.3
RZN 153.17 323 iPKPd 54 53.00 -0.5
ECH 153.29 355 PKP 54 53.57 0.3
VTS 153.36 326 iPKP 54 54.00 0.3
VITF 153.38 356 PKP 54 53.24 0.0
LPF 153.39 7 ePKP 54 53.30 0.0
0.8s 5.35nm
EZN 153.39 318 iPKP 55 00.40 6.8X
CIN 153.45 312 ePKP 55 01.00 7.2X
YER 153.54 311 iPKP 55 01.00 7.0X
FEL 153.54 353 PKP 54 53.40 -0.4
SOTA 153.70 348 iPKPd 54 53.70 -0.3
1.8s 67.40nm
i 55 01.80
i 55 15.20
BSF 153.70 355 PKP 54 53.40 -0.6
PTJ 153.72 340 ePKP 54 53.60 -0.4
MMB 153.78 324 ePKP 54 54.00 -0.2
ZAG 153.78 340 ePKP 54 54.20 0.3
FVI 153.96 345 PKP 54 53.80 -0.3
BBS 154.00 354 PKP 54 56.38 2.1
OGA 154.07 348 iPKPc 54 55.00 0.4
SRS 154.18 323 ePKPd 55 04.30 9.6X
LOMF 154.18 355 PKP 54 56.13 1.5
VOY 154.20 343 ePKP 54 53.40 -1.3
e 55 03.20
e 55 15.80
SMG 154.25 314 ePKP 55 02.00 7.2X
VBY 154.29 341 ePKP 54 55.50 0.8
i 55 03.60
LOR 154.40 359 ePKP 54 55.10 0.3
1.2s 22.30nm
OUR 154.48 322 ePKP 55 02.90 7.9X
SOH 154.51 323 ePKPd 55 02.80 7.6X
KNT 154.53 324 ePKP 55 02.80 7.7X
TRI 154.53 343 PKP 54 54.50 -0.4
VAY 154.59 325 ePKP 54 54.70 -0.5
i 55 03.70
SSF 154.61 360 ePKP 54 55.50 0.5
1.2s 20.85nm
LBF 154.68 359 ePKP 54 55.50 0.3
1.2s 17.85nm
RIY 154.69 342 ePKP 55 03.70 8.5X
SKO 154.71 327 ePKP 54 54.00 -1.3
1.0s 128.00nm
i 55 04.50
i 55 17.40

24d 08h

THE	154.86	323	ePKP	55	02.20	6.7X
AVF	154.88	0	ePKP	54	55.30	-0.1
	1.0s	6.00nm				
MFF	154.89	6	ePKP	54	55.50	0.1
	1.0s	8.00nm				
PAIG	154.92	321	iPKP	55	03.60	8.0X
GRG	154.94	325	iPKP	55	03.90	8.2X
SMF	155.02	359	ePKP	54	55.70	0.1
	1.0s	14.00nm				
BGF	155.11	1	ePKP	54	55.90	0.2
	0.8s	9.40nm				
TCF	155.36	2	ePKP	54	56.40	0.3
	1.2s	14.90nm				
MDI	155.36	350	PKP	54	54.50	-1.5
LSF	155.37	3	ePKP	54	56.00	-0.1
	0.8s	6.05nm				
VAI	155.42	351	PKP	54	56.00	-0.1
LIT	155.48	323	ePKPd	55	02.80	6.3X
FNA	155.61	326	ePKPd	55	05.70	9.0X
AGO	155.62	1	PKP	55	06.10	9.6X
OHR	155.67	327	iPKPd	54	56.50	-0.3
	1.2s	189.00nm				
			i	55	06.60	
			i	55	10.70	
PLDF	155.70	360	PKP	55	06.02	9.3X
PYM	155.92	1	PKP	55	06.92	9.9X
HVAR	155.93	336	iPKPc	55	06.30	9.3X
LPL	156.01	354	ePKP	54	57.90	0.6
	0.8s	4.05nm				
LPG	156.02	354	ePKP	54	58.10	0.7
	0.8s	5.35nm				
AGG	156.30	321	ePKPd	55	06.60	9.0X
RJF	156.31	3	ePKP	54	57.70	0.3
	1.0s	8.00nm				
LBL	156.44	0	PKP	55	09.37	11.8X
BNI	156.47	354	PKP	54	58.40	0.6
SFI	156.69	345	PKP	54	58.00	0.1
CAF	156.72	3	ePKP	54	58.30	0.3
	1.0s	8.00nm				
PGD	156.77	345	PKP	54	58.30	0.0
ARV	156.80	342	PKP	54	57.50	-0.6
CKI	156.91	351	PKP	55	09.50	11.3X
LPO	156.91	4	ePKP	54	58.90	0.7
	1.0s	8.00nm				
CRE	156.94	344	PKP	55	04.30	5.9X
DOI	156.96	353	PKP	55	08.50	10.1X
IGT	157.06	325	ePKPd	55	13.10	14.5X
KEK	157.21	326	ePKP	55	09.70	11.0X
VLI	157.38	316	ePKP	55	08.50	9.5X
BCAO	157.54	223	iPKPd	54	50.50	-9.4X
			id	55	33.50	
BRT	157.55	332	PKP	54	59.00	-0.1
LCI	157.65	330	PKP	55	10.50	11.3X
AQU	157.71	340	PKP	55	11.90	12.6X
ITM	157.74	318	ePKP	55	09.70	10.3X
DUI	157.98	338	PKP	55	03.00	3.3X
AZI	158.03	340	PKP	54	59.00	-0.5
SDI	158.16	339	PKP	54	58.00	-1.8
EPF	158.48	6	ePKP	55	00.70	0.6
	1.1s	7.35nm				
ORI	158.55	332	PKP	55	02.50	2.2
BSS	158.61	336	PKP	55	10.00	9.7X
SGO	158.61	335	PKP	55	00.50	0.3
MGR	158.87	334	PKP	55	08.20	7.6X
TDS	158.93	331	PKP	55	01.00	0.3
EPLA	159.87	22	e(PKP)	55	03.50	1.8
GUD	159.94	17	e(PKP)	55	04.00	2.1
ETOR	160.28	13	e(PKP)	55	03.00	0.8
SOI	160.34	329	PKP	55	04.00	1.8
EBR	160.68	7	ePKP	55	04.00	1.6
TOL	160.68	18	ePKP	55	04.00	1.5
			iPKKP	55	46.50	
			ePP	59	49.00	
EVIA	162.26	16	e(PKP)	55	06.00	1.7
LIC	162.62	150	PKP	55	05.78	0.6
	1.1s	85.50nm				
KIC	162.87	151	PKPd	55	05.92	0.5
	1.0s	72.00nm				
TIC	162.99	150	PKPd	55	06.16	0.6
	1.0s	60.00nm				
AFC	163.26	20	e(PKP)	55	05.00	-0.4
EJIF	163.28	26	e(PKP)	55	09.00	3.8X
MAL	163.44	23	iPKPd	55	06.00	0.7
			iPP	59	52.00	
ENIJ	163.91	17	e(PKP)	55	07.50	1.6
S.D. = 1.0 on 299 of 393 obs.						

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* JUN 24, 1990 08h 51m 54.99± 1.78s
8.904 S ±15.3km 119.515 E ±21.6km
DEPTH = 196.0 ± 23.4 km
4.5mb (3 obs.)
FLORES ISLAND REGION (286)

MKS	3.66	359	iPd	52	53.00	0.0
			iS	53	40.00	
MBL	12.19	179	iPd	54	33.70	-9.7X
	0.3s	21.00nm			5.1mb	X
			eS	56	21.00	
NANU	14.11	195	eP	54	51.80	-15.8X
	0.3s	11.00nm				
			eS	57	03.00	
MEKA	17.64	183	eP	55	51.00	1.1X
			eS	58	31.50	
WB5	18.04	129	eP	55	53.30	-0.9
			eS	59	02.30	
WRA	18.05	129	Pc	55	54.80	0.5
	0.5s	3.00nm			4.0mb	
ASPA	20.12	139	iPd	56	16.00	0.4
	0.8s	22.00nm			4.7mb	
			eS	59	50.30	
MRWA	20.48	189	eP	56	17.60	-1.4
			eS	59	35.00	
BAL	21.75	187	eP	56	33.00	1.5
COOL	21.92	176	eP	56	38.00	4.8X
	0.4s	8.00nm			4.6mb	
			eS	00	08.00	
KLB	22.63	184	eP	56	45.00	4.9X
			eS	00	25.00	
MUN	23.16	187	eP	56	53.00	7.8X
			eS	00	38.00	
GUN	48.97	319	P	00	25.20	1.2
PKI	49.04	319	P	00	22.54	-2.0
DMN	49.27	319	P	00	27.00	0.8
S.D. = 1.5 on 9 of 15 obs.						

JUN 24, 1990 09h 45m 57.00± 0.19s
36.863 N ± 5.1km 49.405 E ± 2.2km
DEPTH = 10.0km (geophysicist)
5.1mb (63 obs.) 4.7Msz (6 obs.)
WESTERN IRAN (347)
Felt in Gilon Province.
Additional landslides in the
Rostamabad area blocked the
Rasht-Rudbar road.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 29C
Centroid Location:
Origin Time 09:45:55.6 1.2
Lat 36.08N 0.12 Lon 48.91E 0.12
Dep 15.0 FIX Half-duration 1.5
Moment Tensor; Scale 10**17 Nm
Mrr= 0.15 0.06 Mtt= 0.89 0.09
Mff=-1.04 0.07 Mrt= 0.04 0.20
Mrf= 0.76 0.28 Mtf=-0.18 0.07
Principal Axes:
T Val= 0.91 Plg= 4 Azm=187
N 0.51 64 284
P -1.42 26 95
Best Double Couple:Mo=1.2*10**17
NP1:Strike=234 Dip=69 Slip=-163
NP2: 138 75 -22

TEH	1.95	124	ePd	46	33.50	2.8
TAB	2.73	297	eP	46	43.00	1.2
			i	46	45.00	
KER	3.13	217	iPc	46	50.70	3.3X
MAIO	8.14	91	iPd	47	57.00	-1.1
	0.9s	87.81nm			6.0mb	
			eS	49	33.00	
BHL	11.61	259	P	48	48.00	2.2
			S	52	16.00	
LFK	12.94	268	eP	48	49.00	-14.7X
KAS	12.95	295	eP	49	10.50	6.7X
CSS	13.17	266	eP	49	08.70	2.0
PRNI	13.65	246	e(P)	49	13.00	0.0
MBH	14.05	244	e(P)	49	29.00	10.8X
BCK	15.02	278	eP	49	35.80	4.8X
GPA	15.32	289	eP	49	34.00	-0.9
ALT	15.38	284	eP	49	37.00	1.3
ELL	15.62	275	eP	49	41.00	2.1
KHL	15.83	281	eP	49	43.00	1.4
HRT	15.87	290	eP	49	43.00	0.9
IZI	15.96	289	eP	49	47.80	4.6X

KSL	15.96	273	eP	49	46.20	3.0X
GBZT	16.04	290	iPd	49	51.30	7.2X
QUE	16.06	109	iP-	49	48.00	3.3X
			eSS	50	32.00	
YLV	16.06	289	iP	49	45.40	0.8
ISK	16.37	291	eP	49	51.80	3.5X
ITU	16.40	291	eP	49	53.00	4.2X
HLW	16.62	250	eP	49	52.00	0.5
			eS	53	17.00	
BNT	17.15	288	iP	49	58.90	0.7
DMK	17.45	293	iP	50	02.60	0.7
PSN	17.54	299	iPc	50	06.00	2.9X
KGT	17.62	288	iP	50	06.40	2.3
TLB	17.91	302	ePd	50	10.00	2.4
CFR	18.03	304	eP	50	11.00	2.0
JMB	18.42	295	iPd	50	16.00	2.1
ALN	18.61	290	ePd	50	27.50	11.2X
PPE	18.75	307	eP	50	17.50	-0.5
RDO	19.02	290	eP	50	21.70	0.4
ISR	19.09	303	eP	50	24.00	1.8
CLI	19.09	307	ePc	50	22.50	0.4
KDZ	19.16	292	iPc	50	23.00	0.0
BUC	19.19	300	iPc	50	24.00	0.7
VRI	19.20	305	ePd	50	24.50	1.0
BUC1	19.22	300	ePc	50	24.00	0.3
PVL	19.46	296	iPc	50	30.00	3.4X
MLR	19.60	303	ePc	50	09.00	-19.4X
RZN	19.69	292	iPc	50	29.00	-0.4
PLD	19.74	293	eP	50	29.00	-0.8
PTT	19.81	308	eP	50	31.00	0.6
PGB	20.20	294	iPc	50	35.00	0.4
VAM	20.40	273	eP	50	36.00	-0.7
MMB	20.41	291	ePc	50	37.00	0.1
ATH	20.42	281	eP	50	40.00	3.1X
SRS	20.48	290	eP	50	37.50	0.0
DRA	20.53	300	eP	50	40.00	2.0
VTS	20.90	294	iP	50	43.00	0.9
THE	20.93	288	eP	50	41.50	-0.7
KSH	21.03	75	P	50	44.00	0.6
VLI	21.18	278	eP	50	42.70	-2.0
VAY	21.26	290	iP	50	46.00	0.5
	1.3s	211.00nm			5.4mb	
			i	50	48.80	
LIT	21.29	287	eP	50	45.00	-0.8
DEV	21.75	303	ePc	50	51.00	0.6
ITM	21.92	279	eP	50	50.00	-2.2
FNA	22.14	289	ePd	50	54.50	0.0
SKO	22.15	292	eP	50	54.00	-0.4
	1.0s	124.00nm			5.3mb	
Z	18s	4.76um			5.0Msz	
N	13s	2.94um				
E	16s	4.26um				
			i	51	02.00	
			iS	55	04.00	
			LQ	00	25.00	
OHR	22.59	290	iP	50	59.70	0.8
	1.6s	177.00nm			5.3mb	
			i	51	04.50	
VLS	22.86	282	eP	50	59.00	-2.5
IGT	22.96	286	eP	51	02.00	-0.5
BEO	23.21	299	eP	51	06.00	1.2
KEK	23.37	286	eP	51	05.50	-0.9
PSZ	24.29	306	eP	51	17.00	1.6
SPC	24.46	309	eP	51	17.20	0.1
NDI	24.70	101	iPd	51	19.60	0.1
	0.7s	34.25nm			5.1mb	
			iS	55	42.00	
LCI	24.76	288	P	51	18.10	-1.8
KRA	24.94	311	iPd	51	22.60	1.1
	1.1s	72.00nm			5.3mb	
Z	18s	1.50um			4.5Msz	
E	18s	2.40um				
			e	51	28.70	
			eS	56	00.00	
SRO	25.29	305	iP	51	25.70	0.8
BRT	25.31	289	P	51	25.00	-0.2
HVAR	25.90	294	iPd	51	30.30	-0.4
ORI	25.92	287	P	51	31.00	0.1
ZST	26.17	306	iP	51	33.60	0.5
SOP	26.41	305	eP	51	36.80	1.4
SOI	26.42	283	P	51	35.50	0.0
ZAG	26.48	300	eP	51	36.50	0.5
PTJ	26.51	300	eP	51	34.50	-1.9
VKA	26.70	306	eP	51	38.50	0.5
Z	13s	1.00um			4.6MszX	
			i	52	23.30	
			e	56	27.00	

LR 05 05.00
SGO 26.76 288 P 51 38.50 -0.1
ATN 26.87 283 P 51 39.00 -0.7
VBY 26.95 299 e(P) 51 41.50 1.2
BSS 27.13 289 P 51 43.10 1.1
DUI 27.36 291 Pd 51 45.10 0.9
KSP 27.40 311 ePc 51 45.00 0.6
e 51 52.20
eS 56 44.00
MEU 27.45 281 Pd 51 45.50 0.4
MNO 27.51 283 P 51 47.50 1.8
CEY 27.55 300 e(P) 51 46.50 0.7
SDI 27.84 291 P 51 48.00 -0.5
VOY 27.96 300 e(P) 51 49.70 0.1
GIB 28.02 283 P 51 48.50 -1.7
AZI 28.11 292 P 51 51.50 0.6
AQU 28.13 292 P 51 52.20 1.1
PRU 28.24 309 ePc 51 51.00 -1.0
e 53 30.50
NUR 28.43 334 iP 51 53.60 0.1
0.8s 17.60nm 4.9mb
e 56 44.00
ARV 28.47 295 P 51 54.50 0.4
KHC 28.66 307 Pd 51 56.10 0.3
1.2s 15.00nm 4.7mb
RDP 28.66 291 P 51 55.50 -0.4
RMP 28.67 291 P 51 55.50 -0.4
ASS 28.67 294 P 51 57.00 1.0
FVI 28.78 301 P 51 56.70 -0.1
BRG 28.83 310 eP 51 57.40 0.1
1.1s 12.00nm 4.6mb
i 52 04.20
i 52 28.00
i 53 16.40
eS 56 52.00
WET 29.11 307 iPd 51 59.70 -0.1
1.0s 26.00nm 5.0mb
CRE 29.19 295 P 51 59.50 -1.2
SFI 29.27 296 P 52 02.00 0.8
PGD 29.36 296 Pd 52 03.90 1.6
CLL 29.52 311 iP 52 03.00 -0.5
1.3s 57.00nm 5.2mb
eS 57 02.00
SUF 29.58 338 iP 52 03.50 -0.4
0.5s 9.60nm 4.9mb
WMQ 29.80 64 iPc 52 03.70 -2.5
Z 14s 1.10um 4.6MszX
N 10s 0.70um
E 11s 1.00um
S 57 06.00
SQTA 29.92 302 iPc 52 06.20 -1.1
0.9s 29.70nm 5.1mb
i 52 09.50
i 52 18.60
BDI 30.17 296 P 52 10.00 0.5
PII 30.23 295 P 52 08.00 -1.8
SAL 30.27 299 P 52 05.00 -5.2X
GRF 30.28 307 eP 52 09.00 -1.2
OSS 30.60 301 ePd 52 13.40 0.1
UPP 30.71 329 iP 52 12.70 -1.2
MDI 30.85 299 Pd 52 15.00 -0.2
GKN 30.88 96 P 52 15.80 -0.2
BOB 31.00 297 P 52 17.30 0.5
VDL 31.05 301 ePd 52 17.60 0.3
SAX 31.19 302 ePd 52 18.20 -0.5
PGF 31.38 293 eP 52 19.70 -0.5
0.9s 47.50nm 5.4mb
LLS 31.40 301 ePc 52 19.30 -1.1
DMN 31.43 97 P 52 20.80 -0.1
TMA 31.45 300 ePd 52 19.60 -1.2
VAI 31.51 299 P 52 20.70 -0.3
PCP 31.65 297 P 52 21.63 -0.8
PKI 31.68 97 P 52 22.80 -0.4
FIN 31.89 296 P 52 22.76 -1.8
GUN 31.91 96 P 52 25.00 -0.3
1.2s 167.00nm 5.8mb
ORX 32.05 299 P 52 25.43 -0.6
MMK 32.07 300 ePc 52 25.50 -0.9
IMI 32.13 296 P 52 26.56 -0.1
ROB 32.13 296 P 52 26.56 -0.1
HYB 32.17 119 eP 52 26.50 -0.8
eS 57 44.00
ENR 32.46 296 P 52 29.12 -0.4
DIX 32.46 300 ePd 52 29.30 -0.5
SBF 32.46 296 eP 52 29.40 -0.1
0.8s 55.05nm 5.5mb
STV 32.53 296 P 52 29.22 -0.9
HFS 32.54 327 eP 52 28.80 -1.1
0.7s 41.70nm 5.5mb
Z 18s 0.80um 4.5Msz
LR 05 06.00
RSP 32.56 298 P 52 28.09 -2.4
DOI 32.58 297 P 52 29.10 -1.5
LSD 32.63 299 P 52 31.27 0.0
CDF 32.68 304 eP 52 29.80 -1.6
1.0s 8.00nm 4.6mb
PZZ 32.68 297 P 52 29.84 -1.7
RRL 32.90 298 P 52 33.32 -0.2
LPG 32.92 299 eP 52 33.20 -0.6
1.0s 20.00nm 5.0mb
LPL 32.93 299 eP 52 33.10 -0.7
1.0s 16.00nm 4.9mb
BSF 32.96 303 eP 52 32.20 -1.7
1.0s 12.00nm 4.8mb
BNI 32.97 298 Pd 52 33.80 -0.3
FRF 33.05 295 eP 52 34.10 -0.4
1.0s 48.00nm 5.4mb
SOD 33.18 344 iP 52 35.20 -0.3
HAU 33.27 303 eP 52 35.10 -1.4
1.0s 16.00nm 4.9mb
WTS 33.44 311 eP 52 39.00 1.2
1.0s 31.00nm 5.2mb
MEM 33.73 308 iPd 52 41.70 1.3
ENN 33.80 308 ePc 52 41.50 0.5
1.0s 56.00nm 5.4mb
e 52 45.00
NB2 34.05 327 P 52 42.10 -1.0
0.9s 13.80nm 4.9mb
GBA 34.11 125 Pd 52 43.90 -0.1
1.2s 25.10nm 5.0mb
DOU 34.58 307 Pd 52 48.80 1.1
S 58 22.00
SNF 34.81 308 iPd 52 50.79 1.1
LBF 34.84 301 eP 52 49.10 -1.0
1.2s 20.85nm 4.9mb
LOR 34.93 302 eP 52 49.70 -1.1
1.0s 19.00nm 4.9mb
SMF 34.94 301 eP 52 50.10 -0.8
1.2s 23.80nm 4.9mb
KEV 35.11 347 eP 52 52.00 0.0
SSF 35.17 302 eP 52 52.10 -0.7
1.0s 20.00nm 4.9mb
AVF 35.27 301 eP 52 52.90 -0.8
1.2s 35.70nm 5.1mb
RGS 35.32 330 eP 52 55.50 1.6
LSA 35.40 89 eP 52 56.40 0.8
BGF 35.62 301 eP 52 55.90 -0.8
MAF 35.83 300 eP 52 58.20 -0.3
1.1s 31.75nm 5.1mb
TCF 36.07 300 eP 53 00.40 -0.2
1.1s 24.40nm 5.0mb
CAF 36.25 298 eP 53 01.80 -0.3
0.9s 16.40nm 4.9mb
LSF 36.55 300 eP 53 04.10 -0.4
1.0s 21.00nm 4.9mb
RJF 36.61 299 eP 53 05.40 0.4
1.0s 32.00nm 5.1mb
TRO 36.73 343 eP 53 07.00 1.3
LPO 36.89 298 eP 53 07.30 -0.1
0.9s 11.45nm 4.7mb
LFF 37.18 298 eP 53 09.80 0.0
0.8s 30.90nm 5.1mb
LDF 37.60 304 eP 53 12.80 -0.5
0.6s 11.70nm 4.8mb
EPF 37.68 295 eP 53 15.00 0.9
0.8s 4.05nm 4.2mb
MFF 37.68 301 eP 53 13.40 -0.6
1.0s 44.00nm 5.2mb
SHL 37.76 95 iP 53 14.50 -0.6
FLN 37.84 304 eP 53 14.50 -0.8
0.8s 26.85nm 5.1mb
EBR 37.91 291 eP 53 16.00 0.0
GRR 38.09 304 eP 53 17.10 -0.3
1.0s 108.00nm 5.6mb
LPF 38.23 303 eP 53 18.00 -0.6
1.0s 56.00nm 5.3mb
ECHE 39.25 290 iPd 53 27.60 0.3
GTA 39.32 70 P 53 28.80 0.8
Z 14s 1.50um 5.0MszX
N 10s 0.70um
EKA 39.76 315 Pd 53 31.10 -0.2
0.9s 17.80nm 4.7mb
YRH 40.48 311 eP 53 41.00 3.7X
EVIA 40.63 289 iPd 53 39.00 0.2
ENIJ 40.85 286 eP 53 39.80 -0.7
GUD 41.41 292 iPd 53 44.40 -0.8
ETA 41.44 311 eP 53 40.00 -5.1X
TOL 41.50 291 iPd 53 46.00 0.2
1.0s 80.00nm 5.4mb
eS 59 38.00
ECP 41.55 310 eP 53 42.00 -3.9X
EBAN 41.73 289 iPc 53 47.60 -0.1
AFC 41.79 287 iPc 53 47.20 -1.2
ECOG 41.80 287 eP 53 47.60 -0.8
EHOR 42.93 288 iPc 53 56.70 -0.8
EPLA 42.97 292 iPd 53 57.40 -0.5
EMON 43.14 297 eP 53 58.50 -0.7
EPRU 43.16 287 eP 53 58.40 -1.1
LZH 43.27 74 eP 54 01.00 0.4
2.0s 43.00nm 4.9mb
EJIF 43.50 287 iPd 54 01.00 -1.1
STS 44.13 297 eP 54 07.20 0.0
EVAL 44.14 289 iPc 54 06.60 -0.7
IFR 44.19 283 iPd 54 08.50 0.5
EZAM 44.40 296 iPd 54 09.80 0.4
CD2 45.00 81 eP 54 15.10 0.6
AVE 46.05 283 iPd 54 23.00 0.3
BTO 46.62 66 eP 54 28.00 0.8
N 14s 0.70um
E 14s 0.70um
CHG 46.81 99 ePc 54 27.90 -0.9
1.0s 27.75nm 5.3mb
TIO 46.83 280 iPd 54 20.00 -9.0X
HHC 47.68 65 eP 54 35.50 0.0
Z 20s 1.00um 4.8Msz
N 12s 0.50um
E 10s 0.30um
BDT 47.72 100 eP 54 35.00 -1.0
1.1s 58.30nm 5.6mb
XAN 47.88 75 P 54 36.00 -1.2
N 10s 0.70um
S 01 39.00
GYA 49.19 85 P 54 48.40 1.0
TIY 49.28 69 eP 54 48.40 0.4
Z 17s 1.20um 5.0MszX
E 13s 0.70um
NST 49.50 101 eP 54 50.00 0.3
LOE 49.79 98 eP 54 52.20 0.2
BJI 51.27 65 eP 55 03.50 0.5
Z 20s 0.36um 4.4Msz
eS 02 24.00
TIA 53.33 69 eP 55 20.50 2.0
WHN 53.48 77 eP 55 24.00 4.4X
QIZ 55.40 91 eP 55 34.20 0.3
CN2 56.49 57 eP 55 41.60 0.2
Z 20s 1.40um 5.1Msz
N 12s 0.70um
E 12s 0.50um
pP 55 50.80 30kmX
eS 03 30.00
KIC 57.82 252 P 55 49.68 -1.4
0.9s 30.50nm 5.3mb
TIC 57.85 253 P 55 49.84 -1.5
0.9s 19.00nm 5.1mb
LIC 58.12 252 P 55 51.70 -1.5
0.9s 38.00nm 5.4mb
CIR 59.97 199 iPd 56 07.30 1.4
BUL 60.00 203 eP 56 01.00 -5.3X
MBC 66.94 357 eP 56 51.00 -0.2
0.6s 5.00nm 4.9mb
KKM 67.88 99 ePd 56 57.50 -0.6
FRB 68.42 335 eP 57 00.00 -0.6
MAT 68.43 60 eP 57 00.00 -1.2
1.2s 12.50nm 5.0mb
(S) 06 03.00
SCH 73.61 327 eP 57 32.00 0.0
INK 75.13 1 eP 57 39.00 -1.5
IMA 75.85 9 eP 57 45.20 0.3
1.2s 4.90nm 4.5mb
FBA 77.68 7 P 57 55.30 0.4
0.9s 22.92nm 5.3mb
CBM 79.57 322 P 58 06.50 0.9
YKA 80.15 353 eP 58 07.60 -0.7
1.0s 6.20nm 4.5mb
TOA 80.57 7 eP 58 11.70 1.0
PMR 80.74 9 P 58 11.10 -0.4
1.1s 28.13nm 5.2mb
HBVT 83.84 323 P 58 28.60 0.7
WNY 84.20 323 P 58 30.40 0.6
RSNY 84.41 323 P 58 31.80 1.0
1.0s 14.46nm 5.2mb

24d 09h

FFC	85.52	344	eP	58	36.00	-0.2
	0.9s	18.00nm			5.3mb	
EDM	89.04	350	eP	58	54.00	0.6
SES	91.42	348	eP	59	05.00	0.5
PNT	93.65	353	eP	59	15.00	0.3
NEW	94.40	351	P	59	19.50	1.3
	1.1s	21.60nm			5.5mb	
WRA	97.81	109	Pd	59	36.20	2.3
	0.6s	1.80nm			4.9mb	
LPB	121.61	273	ePKP	04	55.00	1.6
CNCB	121.67	272	PKP	04	54.00	0.3
S.D. = 1.0 on 232 of 255 obs.						

? JUN 24, 1990 10h 48m 40.30±13.96s
18.156 N ±79.6km 67.571 W ±106.km
DEPTH = 10.0km (geophysicist)
MONA PASSAGE (89)

MGP	0.48	108	P	48	50.00	-0.1
PORP	0.89	96	P	48	57.60	0.1
SJG	1.35	92	iP	49	05.20	0.0
CPD	1.58	94	P	49	08.50	0.1
LPR	1.62	84	P	49	09.00	-0.1
S.D. = 0.2 on 5 of 5 obs.						

? JUN 24, 1990 11h 27m 16.69± 3.18s
39.309 N ±26.1km 27.750 E ±11.5km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

EDC	1.04	5	ePn	27	36.50	0.2
KCT	1.05	26	ePn	27	37.30	0.8
BNT	1.05	7	ePn	27	35.80	-0.8
EZN	1.22	296	ePn	27	39.40	0.1
YLV	1.77	44	ePn	27	47.30	-0.3
S.D. = 0.8 on 5 of 5 obs.						

* JUN 24, 1990 11h 37m 00.88± 1.25s
44.052 N ±21.1km 149.171 E ±15.4km
DEPTH = 33.0km (normol)
4.8mb (6 obs.) 3.7Msz (1 obs.)
KURIL ISLANDS (221)

MAT	11.23	232	eP	39	41.00	-1.1
	0.8s	5.97nm			4.8mb	
MDJ	14.03	279	eP	40	20.00	0.7
SNY	18.85	272	eP	41	17.80	-2.6
BJI	24.73	272	eP	42	21.00	0.6
TIY	28.32	270	Pc	42	58.20	4.7X
Z	14s	0.48um			4.2MszX	
BTO	28.97	277	eP	43	04.80	5.4X
LZH	35.22	273	Pc	43	54.50	0.3
	1.5s	40.00nm			5.1mb	
		pP		44	08.00	51kmX
GTA	36.68	280	P	44	07.60	1.1
IMA	37.61	34	eP	44	14.40	0.5
	0.9s	3.00nm			4.2mb	
F8A	39.99	36	e(P)	44	33.70	0.1
WMQ	43.34	292	iPc	45	02.50	1.1
CHG	48.77	255	eP	45	48.10	3.5X
GUN	52.45	274	P	46	13.80	0.8
PKI	52.99	274	P	46	17.80	0.8
DMN	53.18	275	P	46	19.40	1.1
GKN	53.29	275	P	46	19.00	0.0
SUF	64.29	335	eP	47	33.30	-1.4
	0.5s	2.20nm			4.5mb	
WB5	65.05	195	eP	47	53.90	13.9X
NUR	66.43	334	eP	47	47.00	-1.4
NB2	69.84	340	P	48	08.60	-1.2
	0.9s	9.30nm			4.9mb	
HFS	69.97	338	eP	48	09.60	-0.9
	1.1s	12.70nm			4.9mb	
Z	18s	0.04um			3.7Msz	
		LR		18	30.00	
CLL	77.71	334	iP	48	56.00	0.5
		e		49	20.00	
KHC	79.39	332	P	49	06.00	1.1
S.D. = 1.2 on 19 of 23 obs.						

* JUN 24, 1990 11h 58m 04.92± 0.64s
17.699 S ± 6.7km 27.604 E ±12.9km
DEPTH = 10.0km (geophysicist)
4.4mb (3 obs.)
ZIMBABWE (580)
mbLg 4.0 (BUL).

KRI	2.11	66	iPg	58	54.50	13.7X
BUL	2.61	159	iPnc	58	47.90	-0.1
			iPg	58	51.80	
			iSg	59	13.60	
CIR	5.00	132	iP*	59	21.00	-0.8
			iPg	59	25.00	
			iSg	00	12.50	
SLR	8.02	176	iPc	00	04.50	0.1
	0.9s	67.23nm			5.9mb X	
			S	01	35.50	
BFT	8.27	165	iPc	00	09.50	1.6
			S	01	34.00	
PRY	9.19	181	iPc	00	20.50	-0.1
	0.7s	195.00nm			6.6mb X	
			S	02	05.00	
SWZ	9.67	192	iPc	00	13.50	-13.8X
	1.0s	275.00nm				
			S	02	00.20	
SEK	10.57	180	iPd	00	39.00	-0.7
	0.9s	105.04nm			6.2mb X	
			S	02	35.00	
BLF	11.43	186	iPc	00	49.50	-1.9
			S	03	02.50	
FRS	12.18	189	iPc	01	09.50	8.2X
			S	03	20.00	
HVD	12.99	188	iPc	01	28.50	16.1X
	0.9s	100.84nm				
LWI	15.41	5	iPd	01	50.50	6.2X
CER	17.29	204	iPd	02	10.00	1.9
NAI	18.66	30	iP	02	26.00	0.7
BCAO	23.74	337	iPc	03	16.50	-1.8
			iS	07	41.50	
			Lg	10	35.00	
KIC	39.90	304	P	05	40.90	-0.1
	0.6s	5.50nm			4.4mb	
TIC	40.29	304	P	05	44.30	0.1
	0.6s	9.50nm			4.7mb	
NB2	79.56	352	P	10	14.60	1.3
	0.7s	2.20nm			4.3mb	
S.D. = 1.3 on 13 of 18 obs.						

JUN 24, 1990 12h 16m 31.89± 0.35s
6.810 N ± 3.3km 72.967 W ± 4.2km
DEPTH = 167.0 ± 4.1 km
4.7mb (19 obs.)
NORTHERN COLOMBIA (99)

BMG	0.28	338	eP	16	56.50	0.5
FUQ	1.54	210	iP	17	54.00	50.2X
BOG	2.43	207	iPd	17	14.00	0.2
			iS	17	44.00	
SDV	3.10	48	iPnd	17	23.00	1.1
			iSn	18	01.00	
TOV	4.31	47	iPn	17	37.80	0.4
			iSn	18	26.40	
FISA	5.70	39	iPc	17	54.70	-1.0
MORO	6.12	48	eP	18	01.00	-0.3
UPA	6.85	289	iPc	18	06.80	-4.2X
			S	19	23.00	
OLLA	6.88	62	iPc	18	10.60	-0.9
PSO	7.07	218	eP	18	13.00	-1.3
LLAV	7.09	59	iP	18	13.40	-0.9
CAYA	8.35	217	P	18	30.30	-1.1
COTA	8.37	220	P	18	33.00	1.3
GGP	8.93	219	eP	18	34.50	-4.6X
VC1	9.17	216	P	18	41.20	-1.1
TCE	11.74	70	eP	19	24.31	9.0X
TPP	11.91	72	eP	19	27.63	10.1X
TRN	12.05	71	eP	19	26.97	7.6X
TBH	12.32	72	eP	19	31.59	8.7X
SLB	13.64	58	eP	19	40.68	0.9
PT08	18.98	191	iP	20	43.90	0.4
NNA	19.07	192	eP	20	45.50	1.5
	0.7s	7.53nm			4.2mb	
ZOBO	23.43	168	P	21	29.00	1.2
	1.0s	11.50nm			4.4mb	
			i	25	31.20	
LPB	23.69	168	P	21	31.00	0.8
			i	25	34.00	
CNCB	23.98	168	P	21	33.00	-0.1
			i	25	38.00	
CCH	24.96	164	eP	21	43.00	1.0
			e	22	17.00	
SIV	25.53	153	P	21	45.70	-1.2
			i	22	19.00	
GBTN	30.52	342	P	22	32.60	1.2
RSCP	30.90	340	P	22	35.70	0.9
	0.7s	44.98nm			5.3mb	

PWLA	31.29	336	P	22	38.80	0.6
OLY	33.23	332	P	22	54.80	-0.2
POW	33.63	333	P	22	58.90	0.5
LVNJ	33.89	358	P	23	08.00	7.4X
TBR	34.20	358	P	23	04.50	1.2
FVM	34.84	335	P	23	09.20	0.5
MIM	38.44	4	P	23	45.00	6.2X
ALQ	41.62	317	eP	24	05.80	0.4
	1.2s	9.77nm			4.3mb	
ANMO	41.62	317	P	24	06.00	0.6
	1.4s	14.53nm			4.4mb	
GLD	43.74	323	P	24	23.40	0.9
	1.0s	35.00nm			4.9mb	
GOL	43.80	323	P	24	23.70	0.6
	0.7s	9.71nm			4.5mb	
RSSD	46.03	329	P	24	40.60	0.0
GLA	46.76	310	eP	24	46.00	-0.3
MSU	47.41	318	P	24	52.30	0.7
DAU	47.84	320	P	24	55.40	0.4
SCH	48.13	5	eP	24	57.00	0.5
	0.6s	53.00nm			5.3mb	
BW06	48.18	324	P	24	57.00	-0.4
	1.0s	8.00nm			4.3mb	
PLM	48.44	309	eP	25	01.00	1.5
DUG	48.72	319	P	25	01.70	0.2
GSC	49.18	312	eP	25	05.00	-0.1
SBB	49.70	310	eP	25	09.00	0.0
PTI	49.91	322	P	25	10.60	0.0
ISA	50.57	311	eP	25	15.00	-0.6
TNP	50.68	315	P	25	17.70	1.1
HPI	50.83	323	P	25	18.20	0.5
LRM	51.67	325	iPc	25	23.90	-0.1
KVN	51.73	315	P	25	24.00	-0.5
FRI	52.02	312	eP	25	24.90	-1.5
CMB	52.92	313	ePc	25	32.40	-0.7
FFC	53.15	339	iPc	25	33.60	-0.8
	0.4s	9.00nm			4.9mb	
MHC	53.58	312	ePc	25	38.10	0.1
SES	53.78	331	ePc	25	39.00	-0.2
		pP		26	16.00	161kmX
ORV	54.33	315	ePc	25	43.10	-0.3
MIN	54.72	315	ePc	25	45.20	-1.2
WDC	55.47	315	ePc	25	48.70	-2.8
NEW	55.69	326	P	25	52.20	-0.8
	0.8s	8.33nm			4.6mb	
DPW	56.09	325	P	25	55.60	-0.3
VGB	56.45	321	P	25	59.00	0.5
EDM	56.70	332	iPc	25	59.10	-1.0
PNT	57.65	326	ePd	26	07.00	0.2
	0.8s	14.00nm			4.9mb	
LON	57.66	322	P	26	06.40	-0.6
YKA	63.33	340	eP	26	43.70	-1.2
	0.6s	22.00nm			5.2mb	
TIC	67.42	86	P	27	10.90	-1.1
LIC	67.45	86	Pc	27	11.30	-0.8
	0.6s	16.00nm			5.0mb	
KIC	67.72	86	Pc	27	13.22	-0.6
	0.7s	18.50nm			5.0mb	
AIA	72.16	176	eP	27	46.40	6.8X
INK	73.09	340	eP	27	44.00	-1.1
MBC	73.84	350	ePc	27	50.00	0.6
	0.6s	19.00nm			5.0mb	
PMR	77.47	332	P	28	10.40	0.5
	0.8s	12.07nm			4.7mb	
IMA	80.04	336	P	28	24.70	0.6
NB2	81.26	29	P	28	31.80	1.4
	0.8s	2.90nm			4.1mb	
HFS	82.48	30	eP	28	37.20	0.6
	0.4s	1.00nm			3.9mb	
CIN	94.57	51	eP	29	27.00	-7.9X
SHL	144.61	24	iPKP	35	49.40	-1.6
OIS	145.62	243	iPKPc	35	52.80	0.1
	0.8s	45.90nm				
ASPA	149.23	234	iPKPc	36	02.40	4.0X
	0.6s	40.00nm				
WRA	150.46	241	PKPd	36	01.00	0.7
	0.2s	3.60nm				
WB5	150.46	241	ePKP	36	00.80	0.5
			i	36	05.80	
			e	36	45.90	
S.D. = 0.9 on 75 of 87 obs.						

* JUN 24, 1990 12h 24m 06.42± 2.80s
16.957 N ±19.7km 61.555 W ±19.9km
DEPTH = 10.0km (geophysicist)
LEEWARD ISLANDS (92)
ML 2.6 (FDF).

BPA	0.30	287	iPc	24 13.28	0.5
			S	24 17.20	
SEG	0.55	175	ePc	24 18.09	0.5
			S	24 24.70	
MGH	0.68	250	eP	24 19.78	-0.1
			S	24 28.20	
PAG	0.93	187	eP	24 24.10	-0.1
			S	24 37.00	
NEV	0.99	281	eP	24 24.65	-0.5
			S	24 37.70	
MGG	1.06	168	eP	24 26.31	0.0
			S	24 40.30	
BBL	1.43	177	eP	24 32.15	-0.2

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

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* JUN 24, 1990 12h 46m 42.02± 0.72s
14.215 S ±22.9km 74.471 W ±13.0km
DEPTH = 10.0km (geophysicist)
PERU (116)

PT06	1.85	282	iPd	47 14.00	0.0
			iS	47 34.00	
PT02	2.29	303	iPc	47 20.30	-0.2
			iS	47 44.70	
PT08	3.02	318	iPc	47 31.20	0.1
			iS	48 07.80	
NNA	3.20	314	eP	47 32.30	-1.1
			i	47 35.30	
			eS	47 59.20	
PT10	3.23	311	eP	47 35.00	1.2
			e(S)	48 16.50	
ZOBO	6.46	109	P	48 20.50	0.4
LPB	6.56	111	P	48 21.00	-0.4
CNCB	6.77	113	P	48 24.40	0.0

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

% JUN 24, 1990 13h 02m 18.59± 0.83s
39.353 N ± 6.5km 29.198 E ± 8.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

ALT	0.77	112	ePg	02 32.50	-1.2
IZI	1.01	12	ePg	02 38.20	0.5
KHL	1.06	166	iPg	02 39.40	0.8
			iSg	02 52.10	
KCT	1.11	324	iPg	02 39.30	0.0
YLV	1.22	6	iPn	02 40.80	-0.5
GPA	1.27	42	ePn	02 43.00	0.9
BNT	1.40	316	ePn	02 43.80	-0.4

S.D. = 0.9 on 7 of 7 obs.

& JUN 24, 1990 15h 10m 28.64s
64.045 N 148.102 W
DEPTH = 11.6km
CENTRAL ALASKA (1)
<AGS-P>.

WRH	0.43	1	iP	10 37.21	-0.2
MCK	0.48	230	iP	10 37.90	-0.7
			eS	10 44.90	
CCB	0.62	12	iP	10 40.35	-0.6
			eS	10 48.27	
NEA	0.68	322	iP	10 41.70	-0.3
			iS	10 50.99	
FBA	0.87	9	iP	10 45.19	0.0
			eS	10 58.29	
GLM	1.00	18	eP	10 47.36	0.0
			Sn	11 00.51	
DMW	1.04	88	eP	10 48.23	0.1
			eS	11 02.90	
HUR	1.27	213	eP	10 52.24	0.1
			eS	11 08.62	
KTH	1.35	250	eP	10 52.45	-0.8
			iS	11 11.41	
PAX	1.60	131	iP	10 57.66	0.7
			eS	11 18.27	
DOT	1.83	101	eP	11 02.60	2.3
SDG	1.91	142	eP	11 02.66	1.3
CUT	1.92	212	iP	11 03.50	2.1
SCM	2.25	171	eP	11 08.58	2.3
GHO	2.31	190	iP	11 06.68	-0.6
SKT	2.60	219	eP	11 10.96	-0.2
KLU	2.75	158	iP	11 15.20	1.7

17 obs. associated

? JUN 24, 1990 15h 25m 42.72±12.99s
29.713 S ±101.km 68.219 W ±89.2km
DEPTH = 100.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTRS	1.17	247	iPc	26 05.30	0.0
RTLL	1.63	188	iPd	26 10.90	-0.1
			eS	26 32.60	
RTCB	1.84	196	iPc	26 13.90	0.1
			S	26 37.20	
CFA	1.89	181	iPc	26 14.50	0.1
			eS	26 38.90	
RTCV	2.16	187	e(P)	26 17.80	-0.1

S.D. = 0.2 on 5 of 5 obs.

% JUN 24, 1990 15h 25m 55.73± 0.58s
39.581 N ± 5.0km 29.038 E ± 5.5km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

KCT	0.85	322	iPg	26 12.20	0.1
ALT	0.98	122	iPn	26 14.50	0.0
YLV	1.02	15	iPn	26 15.20	0.2
BNT	1.16	312	iPn	26 17.70	0.3
EDC	1.18	311	ePn	26 17.40	-0.4
GPA	1.21	54	ePn	26 18.00	-0.2
KHL	1.31	163	ePn	26 20.10	0.1
HRT	1.33	21	ePn	26 20.60	0.3
ISK	1.48	1	ePn	26 22.00	-0.4

S.D. = 0.3 on 9 of 9 obs.

% JUN 24, 1990 16h 04m 03.81± 0.75s
47.028 N ± 8.7km 1.444 E ± 5.6km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.3 (LDG).

LSF	0.78	176	Pg	04 19.70	0.7
			Sg	04 29.30	
			Sn	04 32.90	
TCF	0.91	144	Pg	04 21.50	0.3
			Sg	04 33.70	
			Sn	04 36.20	
BGF	1.07	116	Pg	04 23.60	-0.4
			Sg	04 38.20	
MAF	1.12	136	Pn	04 24.20	-0.6
			Pg	04 25.20	
			Sg	04 40.50	
MFF	1.17	249	Pg	04 25.30	-0.4
			Sg	04 39.80	
AVF	1.33	100	Pn	04 26.50	-1.8
			Pg	04 28.40	
			Sg	04 47.00	
SSF	1.41	88	Pg	04 29.40	-0.1
			Sg	04 49.10	
LOR	1.67	81	Pg	04 34.20	1.0
			Sg	04 56.40	
SMF	1.69	102	Pg	04 34.90	1.4
			Sg	04 57.10	
RJF	1.73	178	Pg	04 36.80	2.8X
			Sg	04 59.00	
LBF	1.73	91	Pn	04 36.20	2.0X
			Sg	04 58.30	
LPF	1.96	302	Pg	04 37.30	-0.1
			Sg	05 03.00	
CAF	2.15	168	Pg	04 43.00	2.8X
			Sn	05 06.20	
			Sg	05 12.20	

S.D. = 1.0 on 10 of 13 obs.

? JUN 24, 1990 18h 02m 28.86± 2.48s
15.223 S ±45.6km 74.518 W ±27.1km
DEPTH = 33.0km (normal)
NEAR COAST OF PERU (115)

PT06	2.24	308	iP	03 04.50	0.2
			iS	03 34.80	
PT02	2.93	320	iPd	03 13.60	-0.7
			iS	03 53.20	
PT08	3.80	328	iP	03 26.80	0.0
			eS	04 10.20	
NNA	3.93	325	iP	03 29.00	0.5
	0.4s		8.47nm		
			e	03 30.80	
			eS	04 19.00	
PT10	3.93	322	iPc	03 31.70	3.2X
			eS	04 22.70	
ZOBO	6.24	100	P	04 01.70	0.0

S.D. = 0.6 on 5 of 6 obs.

% JUN 24, 1990 18h 22m 23.88± 0.79s
45.015 N ± 6.4km 10.276 E ± 9.1km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)

BOB	0.64	247	P	22 36.60	-0.1
			eSg	22 46.50	
MDI	0.86	333	Pd	22 40.60	0.2
			eSn	22 54.00	
BDI	0.98	166	P	22 43.20	0.7
PII	1.31	172	P	22 47.50	-0.5
			eSg	23 05.50	
FVI	2.36	47	P	23 03.00	-0.2

S.D. = 0.6 on 5 of 5 obs.

JUN 24, 1990 19h 05m 21.44± 0.48s
37.222 N ±10.9km 49.647 E ± 6.3km
DEPTH = 10.0km (geophysicist)
4.8mb (4 obs.)
CASPIAN SEA (338)

TEH	2.04	136	iPd	05 56.70	0.4
KER	3.53	217	eP	06 17.00	-0.6
MAIO	7.96	94	eP	07 20.00	0.0
	0.8s		11.35nm		5.1mb
			eS	08 59.00	
QUE	16.01	111	eP	09 10.40	2.0
YLV	16.13	288	iP	09 11.50	1.6
VRI	19.16	304	ePc	09 48.50	1.1
MLR	19.57	302	eP	09 52.50	0.0
VAY	21.32	289	eP	10 09.30	-1.3
SKO	22.20	291	eP	10 19.00	-0.4
GKN	30.73	97	P	11 38.60	-0.5
	0.6s		9.00nm		4.8mb
DMN	31.28	97	P	11 43.80	-0.2
	0.6s		9.00nm		4.8mb
PKI	31.54	97	P	11 45.60	-0.8
HFS	32.34	327	eP	11 52.00	-0.7
	0.5s		1.90nm		4.3mb
CHG	46.67	99	eP	13 51.30	-0.8

S.D. = 1.0 on 14 of 14 obs.

JUN 24, 1990 19h 05m 23.67± 0.89s
38.721 N ± 6.6km 27.371 E ± 9.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

CIN	1.25	153	ePg	05 47.00	0.1
			iSg	06 05.00	
EZN	1.37	324	iPn	05 48.90	0.1
EDC	1.67	13	iPn	05 53.30	0.3
BNT	1.69	14	ePn	05 53.00	-0.3
KGT	1.73	358	iPn	05 53.50	-0.4
KHL	1.73	103	ePn	05 59.00	4.9X
ALT	2.16	80	ePn	06 00.00	-0.3
YLV	2.41	39	ePn	06 04.00	0.2
HRT	2.75	39	ePn	06 09.00	0.4

S.D. = 0.4 on 8 of 9 obs.

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* JUN 24, 1990 19h 12m 03.53± 3.61s
41.410 N ±24.5km 23.416 E ±14.5km
DEPTH = 10.0km (geophysicist)
GREECE-BULGARIA BORDER REGION (363)
ML 1.1 (THE).

SRS	0.32	155	ePg	12 10.10	-0.1
			iSg	12 16.90	
KNT	0.46	238	ePg	12 12.30	-0.6
			eSg	12 20.40	
SOH	0.59	185	ePg	12 15.30	-0.2
VAY	0.64	262	ePn	12 16.30	-0.1
THE	0.85	204	ePg	12 20.30	0.4
GRG	0.89	240	ePg	12 21.20	0.6
			eSg	12 34.40	

S.D. = 0.6 on 6 of 6 obs.

JUN 24, 1990 19h 34m 05.00± 0.66s
32.442 N ± 8.7km 49.898 E ± 7.4km
DEPTH = 33.0km (normal)
4.5mb (9 obs.)
WESTERN IRAN (347)
Felt at Forsan.

KER	3.01	310	ePd	35 02.50	10.8X
TEH	3.51	20	eP	34 59.00	0.3
BRF	6.37	174	ePn	35 39.60	0.6

24d 19h

			eSn	36	51.10	
MAIO	8.82	61	eP	36	13.00	-0.2
			eS	38	15.00	
HRI	11.94	278	eP	36	55.00	-0.9
PRNI	12.90	265	eP	37	08.00	-0.7
MBH	13.14	262	eP	37	11.00	-0.8
ELL	17.01	290	eP	38	07.00	5.0X
VRI	22.32	314	ePc	39	02.00	0.9
MLR	22.63	312	ePc	39	08.50	4.2X
VAY	23.51	300	eP	39	14.20	1.5
SKO	24.49	301	eP	39	24.50	2.3
OHR	24.77	299	eP	39	25.30	0.2
BRT	27.42	297	P	39	53.00	3.4X
DUI	29.57	298	P	40	09.00	0.0
ARV	30.92	302	P	40	15.50	-5.4X
PKI	31.04	90	P	40	00.00	-22.5X
ASS	31.06	301	P	40	23.00	0.8
FVI	31.61	307	P	40	27.00	0.2
CRE	31.65	302	P	40	28.00	0.6
SFI	31.76	302	P	40	30.00	1.8
KHC	31.78	312	eP	40	30.50	2.1
PGD	31.85	302	P	40	31.00	1.8
BDI	32.68	302	P	40	36.50	0.2
SQTA	32.81	308	iPd	40	36.40	-1.0
	0.6s	24.80nm			5.3mb	
			id	40	37.00	
			i	40	47.40	
CLL	32.85	316	eP	40	37.00	-0.6
MDI	33.55	305	P	40	43.50	-0.2
VAI	34.21	305	P	40	49.00	-0.5
CKI	34.38	303	P	40	45.00	-5.9X
SBF	34.93	301	eP	40	55.10	-0.7
	0.6s	7.20nm			4.8mb	
LPG	35.57	304	eP	41	01.40	-0.1
	0.8s	4.05nm			4.4mb	
BNI	35.58	303	P	41	00.90	-0.5
LPL	35.58	304	eP	41	00.80	-0.7
	0.8s	8.05nm			4.7mb	
HFS	36.52	330	eP	41	07.20	-1.7
	0.8s	4.20nm			4.4mb	
LBF	37.64	306	eP	41	17.40	-1.2
	0.6s	1.80nm			4.1mb	
SMF	37.70	306	eP	41	18.20	-0.8
	0.8s	5.35nm			4.5mb	
SSF	37.97	306	eP	41	20.30	-1.0
	0.8s	4.05nm			4.3mb	
FLN	40.79	309	eP	41	44.00	-0.7
	0.6s	3.60nm			4.3mb	
LIC	57.28	255	(P)	44	00.50	8.5X
MBC	71.37	357	eP	45	22.00	-1.0
S.D. = 1.1		on	32 of	40	obs.	

JUN 24, 1990 19h 34m 36.08± 0.39s
44.601 N ± 2.9km 7.287 E ± 3.8km
DEPTH = 5.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.0 (LDG), 2.0 (GEN).

PZZ	0.16	234	P	34	39.60	0.1
			S	34	41.34	
STV	0.36	176	P	34	43.09	-0.2
			S	34	47.29	
ENR	0.39	166	P	34	43.39	-0.5
			S	34	48.32	
RRL	0.48	312	P	34	45.34	-0.4
			S	34	52.21	
ROB	0.52	126	P	34	46.98	0.5
			S	34	54.37	
RSP	0.55	358	P	34	47.29	0.2
			S	34	54.06	
SBF	0.75	172	Pg	34	51.80	0.8
			Sg	34	59.90	
FIN	0.77	120	P	34	50.88	-0.6
			S	35	00.62	
IMI	0.81	148	P	34	51.80	-0.6
			S	35	02.26	
LSD	0.86	354	P	34	53.44	0.1
			S	35	04.52	
PCP	0.90	93	P	34	54.16	0.3
FRF	1.14	204	Pg	34	57.40	-0.4
			Sg	35	11.60	
LRG	1.33	211	Pg	35	01.60	0.6
			Sg	35	18.40	
LMR	1.39	204	Pg	35	02.20	0.2
			Sg	35	18.80	
S.D. = 0.5		on	14 of	14	obs.	

? JUN 24, 1990 20h 02m 21.99± 5.23s
31.226 S ±22.3km 68.431 W ±37.7km
DEPTH = 93.4 ± 49.7 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.11	198	iPc	02	35.40	-0.3
			eS	02	46.20	
RTCB	0.41	230	iPd	02	37.00	0.2
CFA	0.41	157	ePd	02	37.00	0.3
			eS	02	49.00	
RTCV	0.64	188	e(P)	02	38.30	-0.2
RTRS	1.38	320	ePd	02	46.70	0.0
S.D. = 0.5		on	5 of	5	obs.	

% JUN 24, 1990 20h 15m 11.72± 0.87s
40.940 N ± 7.6km 22.569 E ± 6.8km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 1.0 (THE).

GRG	0.13	277	ePg	15	14.70	-0.2
			eSg	15	17.10	
KNT	0.33	48	ePg	15	18.70	0.1
			eSg	15	23.40	
THE	0.43	136	iPg	15	20.10	-0.4
SOH	0.61	101	iPg	15	24.10	0.1
			eSg	15	32.20	
LIT	0.84	184	ePg	15	28.30	0.3
S.D. = 0.4		on	5 of	5	obs.	

JUN 24, 1990 20h 17m 37.65± 0.91s
46.065 N ±10.1km 14.266 E ± 5.6km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.3 (LJU).

LJU	0.19	97	iPgd	17	40.60	-1.2
			iSg	17	43.50	
VOY	0.26	263	iPgc	17	42.80	-0.4
			eSg	17	47.50	
CEY	0.35	161	iPg	17	44.40	-0.4
			eSg	17	49.40	
TRI	0.50	225	ePg	17	48.30	0.5
			iSg	17	55.00	
VBY	0.89	129	eP	18	00.00	5.3X
			iSg	18	09.80	
FVI	1.16	298	P	17	59.30	0.1
			eSg	18	18.20	
PTJ	1.19	97	eP	18	01.40	1.5
S.D. = 1.2		on	6 of	7	obs.	

% JUN 24, 1990 20h 54m 58.92± 0.99s
30.509 S ± 9.9km 116.894 E ± 8.8km
DEPTH = 10.0km (geophysicist)
WESTERN AUSTRALIA (590)

BAL	0.19	239	iPd	55	02.30	-0.8
KLB	1.31	146	eP	55	24.20	1.0
			iS	55	41.30	
MRWA	1.50	329	iPd	55	26.60	0.7
			eS	55	45.00	
MUN	1.58	202	eP	55	27.20	0.2
			iS	55	47.00	
COOL	3.68	97	eP	55	56.00	-1.1
			iS	56	38.50	
S.D. = 1.3		on	5 of	5	obs.	

% JUN 24, 1990 21h 09m 08.88± 2.43s
38.783 N ±20.7km 27.439 E ±12.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

EZN	1.35	321	iPn	09	33.30	-0.4
EDC	1.60	12	iPn	09	37.70	0.5
BNT	1.61	13	ePn	09	37.40	-0.1
KCT	1.63	26	iPn	09	37.40	-0.3
KGT	1.67	356	ePn	09	39.00	0.7
ALT	2.10	82	ePn	09	45.00	0.3
YLV	2.32	39	ePn	09	47.00	-0.8
HRT	2.66	39	ePn	09	57.00	4.4X
S.D. = 0.7		on	7 of	8	obs.	

& JUN 24, 1990 21h 17m 46.33s
62.033 N 149.809 W
DEPTH = 41.5km
CENTRAL ALASKA (1)
<AGS-P>. ML 3.8 (PMR). Felt (III) at Willow.

PWA	0.39	185	iP	17	55.78	0.1
CUT	0.43	330	iP	17	55.77	-0.5
GHO	0.49	122	iP	17	56.60	-0.6
			eS	18	05.17	
PLRM	0.55	144	iP	17	56.97	-0.8
			eS	18	06.96	
PMR	0.55	144	iPc	17	57.00	-0.7
SUA	0.72	218	iP	18	00.15	-0.2
			iS	18	09.97	
SML	0.73	107	iP	17	59.31	-1.1
PMS	0.80	171	eP	18	00.64	-0.7
SKT	0.81	267	iP	18	00.60	-0.9
			eS	18	12.57	
HUR	0.95	5	iP	18	02.60	-0.8
			eS	18	15.45	
SCM	1.19	99	iP	18	06.06	-0.8
CGLM	1.28	236	iP	18	07.46	-0.6
NCG	1.28	242	iP	18	07.31	-0.9
CRP	1.36	237	iP	18	08.81	-0.5
SPU	1.37	232	iP	18	08.84	-0.6
SLKM	1.54	188	eP	18	11.09	-0.7
KTH	1.61	342	iP	18	12.02	-0.8
			eS	18	32.64	
TOA	1.71	86	iPc	18	14.40	0.1
GLI	1.74	130	iP	18	13.87	-0.8
			eS	18	33.99	
MCK	1.75	13	eP	18	14.16	-0.6
VZW	1.84	121	iP	18	15.22	-0.8
			eS	18	37.22	
VLZ	1.89	117	iP	18	15.60	-1.1
			eS	18	39.78	
KLU	1.93	105	iP	18	16.40	-0.9
RDT	1.93	222	iP	18	16.89	-0.4
SEW	1.94	175	eP	18	17.42	0.0
SDG	2.05	74	iP	18	19.06	-0.1
NNL	2.12	201	eP	18	21.95	1.8
RED	2.16	223	eP	18	20.31	-0.4
PAX	2.22	63	iP	18	21.31	-0.3
HIN	2.29	134	iP	18	21.17	-1.4
CVA	2.46	125	eP	18	23.57	-1.3
WRH	2.57	17	eP	18	24.74	-1.6
NEA	2.58	7	eP	18	24.53	-1.9
CNPM	2.61	196	eP	18	27.52	0.5
SGAM	2.70	123	eP	18	26.70	-1.6
DMW	2.75	41	eP	18	29.66	0.7
CCB	2.78	18	eP	18	27.43	-1.9
SVW	2.93	254	iPc	18	30.30	-1.3
RAGM	2.98	121	eP	18	30.70	-1.7
FBA	3.02	17	eP	18	31.10	-1.7
TTA	3.02	290	eP	18	30.90	-2.0
DOT	3.09	56	eP	18	33.55	-0.4
MID	3.12	145	eP	18	33.48	-0.7
GLM	3.16	19	eP	18	32.86	-2.0
			eS	19	08.44	
AUE	3.20	215	eP	18	35.57	0.2
TMW	3.40	65	eP	18	38.85	0.7
MCNL	3.63	220	eP	18	41.18	-0.3
CDD	3.65	213	eP	18	40.36	-1.4
BALM	3.71	102	iP	18	40.26	-2.5
WAX	3.72	112	eP	18	39.90	-2.9
IMA	4.39	339	ePd	18	50.00	-2.4
KDC	4.51	199	eP	18	50.70	-3.2
	0.6s	22.17nm				
FYU	4.96	22	eP	18	58.78	-1.5
HYT	6.03	96	P	19	12.00	-3.4
INK	9.28	40	P	19	58.00	-2.4
55 obs. associated						

• JUN 24, 1990 21h 31m 24.39± 0.73s
38.473 N ±10.8km 100.096 E ± 7.2km
DEPTH = 33.0km (normal)
4.3mb (2 obs.)
GANSU PROVINCE, CHINA (322)
ML 4.7 (BJI).

GTA	0.96	347	Pg	31	43.00	1.3
LZH	3.82	127	ePn	32	27.50	5.0X
			Pg	32	32.50	
			Sn	33	05.50	
BTO	7.96	71	ePn	33	20.00	-0.7
N	13s	0.70um				
E	13s	0.90um				
CD2	8.12	157	eP	33	29.80	6.8X
XAN	8.39	119	eP	33	28.30	1.6
N	10s	2.10um				

```
HHC      9.16   71 eP     33 35.60   -1.7
      Z  14s      1.20um
TIY      9.76   91 eP     33 45.50   -0.1
      Z  12s      1.00um
WMO     10.77  304 eP     34 07.00    7.6X
      Z  11s      1.40um
      N  10s      1.10um
WHN     14.16  120 eP     34 45.20    0.7
PKI     16.41  233 P      35 13.00   -1.1
        0.8s     15.00nm          4.2mb
DMN     16.57  234 P      35 15.40   -0.7
GKN     16.60  236 P      35 17.00    0.7
        1.0s     32.00nm          4.4mb
CHG     19.61  183 ePd    35 43.50   -9.6X
CN2     19.79   66 eP     35 58.20    3.5X
      Z  16s      0.70um
NDI     21.37  250 iPd    36 21.80   10.7X
        1.0s     20.00nm
      S.D. = 1.3  on   9 of  15 obs.
-------------------------------------------
*  JUN  24, 1990  23h 02m 27.17± 1.91s
   38.146 N ±10.7km   15.011 E ±13.4km
   DEPTH = 152.0 ± 19.4 km
 SICILY                              (398)

MNO      0.33  229 P      02 48.50    0.1
ATN      0.36   88 P      02 48.00   -0.2
                 eSg      03 02.50
GIB      0.79  259 P      02 49.80   -1.1
                 eSn      03 05.50
SOI      0.83   95 Pc     02 51.20    0.2
                 iSg      03 08.50
MEU      1.05  184 Pd     02 53.90    1.0
TDS      1.83   34 P      03 00.70   -0.1
                 eSg      03 24.50
ORI      2.22   30 P      03 05.50    0.1
SGO      2.42    5 P      03 08.00    0.2
BRT      3.21   31 P      03 18.50    0.7
                 eSn      03 53.50
IGT      4.38   70 eP     03 31.50   -1.7
OHR      5.36   55 eP     03 46.50    0.2
FNA      5.59   60 eP     03 50.00    0.7
LIT      6.13   69 eP     03 56.50   -0.1
      S.D. = 0.8  on  13 of  13 obs.
-------------------------------------------
   JUN  24, 1990  23h 06m 23.63± 0.88s
   21.537 S ± 8.9km   68.669 W ± 8.1km
   DEPTH = 131.0 ±  8.3 km
   4.5mb (  8 obs.)
 CHILE-BOLIVIA BORDER REGION         (124)

ANT      2.69  216 iPc    07 06.80   -0.1
                 iS       07 34.70
CNCB     4.75    8 iPc    07 35.00    0.1
CCH      4.77   30 Pc     07 35.10    0.2
LPB      5.01    6 P      07 34.00   -4.2X
        1.0s     64.00nm          4.8mb
                 i        08 15.00
ZOBO     5.27    6 P      07 42.00    0.1
      Z  20s      0.12um           4.2MszX
                 LR       09 16.00
ARE      5.71  332 eP     07 42.00   -5.7X
                 iS       08 46.00
SIV      9.06   54 iPc    08 28.60   -4.2X
NNA     12.30  319 eP     09 15.50    0.0
        1.0s     13.00nm          4.5mb
PPD     16.13   95 eP     10 05.30    1.1
                 e        10 07.10
                 e        10 12.70
VAO     20.14   98 (P)    10 48.00   -1.6
BAO     20.45   77 eP     10 51.30   -1.5
FVM     62.64  341 P      16 33.90   -2.3
        0.7s     18.37nm          5.1mb
ALQ     66.65  327 eP     17 02.20   -0.2
        0.8s      2.43nm          4.1mb
ANMO    66.65  327 P      17 02.80    0.4
        0.6s      2.00nm          4.2mb
KIC     68.50   74 (P)    17 16.70    2.6
        0.5s      9.00nm          4.9mb
GOL     69.90  331 P      17 22.50    0.0
RSSD    72.93  334 P      17 39.80   -0.6
BW06    74.26  330 P      17 49.00    0.8
TNP     74.80  322 P      17 52.00    0.6
        0.6s      1.85nm          4.0mb
KVN     75.97  322 P      17 57.80   -0.2
ORV     78.27  321 P      18 11.40    1.0
WDC     79.54  321 ePc    18 17.00   -0.3

YKA     91.30  341 eP     19 15.10    0.2
        0.7s      1.90nm          4.4mb
      S.D. = 1.1  on  20 of  23 obs.
-------------------------------------------
   JUN  25, 1990  00h 01m 16.14± 0.55s
   40.334 N ± 5.0km   22.066 E ± 4.7km
   DEPTH =  10.0km  (geophysicist)
 GREECE                              (364)
      ML 2.2 (THE).

LIT      0.40  125 ePg    01 24.00   -0.3
                 eSg      01 28.80
GRG      0.67   22 ePg    01 29.60    0.1
                 eSg      01 39.60
FNA      0.69  311 ePgd   01 29.10   -0.8
                 eSg      01 39.70
THE      0.75   66 iPgd   01 30.20   -0.6
                 eSg      01 42.70
KNT      1.04   37 ePg    01 36.60    0.8
                 eSg      01 52.40
SOH      1.10   63 ePb    01 36.90    0.1
OHR      1.24  309 iPn    01 38.20   -1.0
AGG      1.33  171 iPb    01 40.10   -0.5
SRS      1.40   56 ePb    01 41.90    0.2
                 eSb      02 01.10
IGT      1.55  240 ePb    01 45.40    1.5
SKO      1.70  344 ePn    01 46.50    0.5
      S.D. = 0.8  on  11 of  11 obs.
-------------------------------------------
%  JUN  25, 1990  00h 34m 02.55± 0.85s
   37.721 N ± 7.1km   29.179 E ± 9.7km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                              (366)

KHL      0.66   24 iPg    34 14.10   -1.6
                 iSg      34 24.60
YER      0.92  231 iPg    34 19.20   -1.0
                 iSg      34 34.20
ELL      1.13  149 iPn    34 24.00    0.2
BCK      1.15  103 iPn    34 25.00    0.9
ALT      1.52   29 iPn    34 29.80   -0.1
IZI      2.62    5 ePn    34 46.00    0.3
GPA      2.71   19 ePn    34 51.00    4.0X
BNT      2.81  340 ePn    34 50.00    1.7
EDC      2.81  339 ePn    34 50.00    1.6
YLV      2.85    3 ePn    34 47.00   -1.9
HRT      3.12    7 ePn    34 57.00    4.3X
ISK      3.34  358 ePn    35 02.00    6.2X
      S.D. = 1.5  on   9 of  12 obs.
-------------------------------------------
   JUN  25, 1990  00h 42m 30.48± 0.57s
   38.248 N ± 6.3km  140.780 E ±10.6km
   DEPTH = 114.0 ±  4.7 km
   4.0mb (  3 obs.)
 HONSHU, JAPAN                       (227)

YAMJ     0.59  263 iPd    42 47.60   -1.0
                 S        42 59.80
OFUJ     1.08   40 iP+    42 53.30    0.2
                 S        43 09.00
NIIJ     1.73  235 P      43 00.80    0.1
KAKJ     2.10  194 P      43 04.70   -0.6
                 S        43 28.10
AOMJ     2.33  352 P      43 09.20    0.8
CHJJ     2.62  214 P      43 13.00    0.8
MTMJ     2.89  236 P      43 16.70    0.7
MRRJ     4.18    3 eP     43 32.80   -0.4
GUN     46.55  274 P      50 49.20    0.4
PKI     47.08  274 P      50 52.80   -0.1
DMN     47.30  274 P      50 54.40   -0.2
GKN     47.48  275 P      50 55.00   -0.9
WRA     58.20  187 Pc     52 14.90    0.1
        0.7s      2.00nm          4.2mb
HFS     72.78  335 eP     53 47.70    0.0
        0.4s      0.80nm          3.9mb
NB2     72.88  337 P      53 48.50    0.2
        0.8s      2.20nm          4.0mb
ZOBO   146.48   57 PKP    02 03.50    4.2X
LPB    146.68   57 (PKP)  01 54.00   -5.4X
CNCB   146.96   58 PKP    02 03.90    3.9X
      S.D. = 0.6  on  15 of  18 obs.
-------------------------------------------
*  JUN  25, 1990  00h 57m 32.24± 1.17s
   38.593 N ± 8.2km   27.428 E ±14.4km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                              (366)

CIN      1.12  152 ePg    57 53.00   -0.2
                 iSg      58 09.00
EZN      1.50  326 iPn    57 59.80    0.6
EDC      1.78   11 iPn    58 02.60   -0.7
BNT      1.80   12 ePn    58 03.30   -0.3
KCT      1.80   23 ePn    58 02.30   -1.3
IZI      2.35   42 ePn    58 12.80    1.2
YLV      2.48   37 ePn    58 14.00    0.6
      S.D. = 1.1  on   7 of   7 obs.
-------------------------------------------
?  JUN  25, 1990  01h 20m 01.56± 1.01s
   42.222 N ±10.8km    6.907 W ± 9.9km
   DEPTH =  10.0km  (geophysicist)
 SPAIN                               (377)
      mbLg 2.6 (MDD).

ERUA     0.24  315 iP     20 06.60   -0.2
                 eS       20 11.20
EMON     1.25  346 eP     20 25.00    0.1
                 eS       20 41.00
EZAM     1.33  267 eP     20 26.20    0.1
                 eS       20 43.70
GUD      2.60  126 eP     20 44.50    0.0
                 eS       21 15.40
      S.D. = 0.2  on   4 of   4 obs.
-------------------------------------------
   JUN  25, 1990  01h 57m 57.12± 0.61s
   42.474 N ± 5.3km   19.036 E ± 4.8km
   DEPTH =   6.6 ±  7.0 km
 YUGOSLAVIA                          (383)
      MD 2.7 (TTG). Felt (III) at
      Titograd.

TTG      0.17  105 iPgc   58 01.50    0.7
                 iSg      58 05.00
BDV      0.25  219 iPgd   58 02.60    0.4
                 iSg      58 07.70
NKY      0.34  355 ePg    58 04.50    0.5
                 iSg      58 10.50
HCY      0.40  266 ePg    58 05.40    0.2
                 iSg      58 12.20
ULC      0.53  163 ePg    58 06.20   -1.7
                 eSg      58 14.50
BRY      0.56  320 iPgc   58 08.50    0.1
                 iSg      58 18.50
PVY      0.70   80 iPgd   58 10.10   -1.1
                 iSg      58 21.00
IVA      0.75   58 ePg    58 11.40   -0.7
                 iSg      58 22.00
PLE      0.89   17 ePg    58 14.50   -0.2
                 eSg      58 29.00
SKO      1.85  105 iPn    58 31.00    1.4
                 iSg      58 53.70
OHR      1.90  135 iPn    58 31.50    1.2
HVAR     2.03  291 i(Pn)  58 35.20    3.0X
                 iSn      59 01.60
BRT      2.10  221 P      58 31.50   -1.8
LCI      2.29  201 P      58 37.80    1.9
VAY      2.88  112 ePn    58 48.80    4.5X
SGO      3.39  237 P      58 44.00   -7.5X
MGR      3.51  229 P      58 51.30   -2.0
SDI      3.96  261 P      59 01.58    1.8
VOY      5.13  316 e(Pn)  59 15.40   -0.9
                 eSg      00 16.28
      S.D. = 1.4  on  16 of  19 obs.
-------------------------------------------
*  JUN  25, 1990  02h 40m 27.45± 2.37s
   41.427 N ±17.5km   23.383 E ± 9.5km
   DEPTH =  10.0km  (geophysicist)
 GREECE-BULGARIA BORDER REGION       (363)
      ML 2.5 (THE).

SRS      0.35  153 iPgc   40 34.20   -0.4
                 eSg      40 41.00
KNT      0.45  234 ePgd   40 36.40   -0.2
                 eSg      40 44.10
SOH      0.61  182 ePgd   40 39.50   -0.2
                 eSg      40 49.50
VAY      0.62  260 ePn    40 40.30    0.4
THE      0.85  202 ePgc   40 44.10    0.2
                 eSg      40 57.70
GRG      0.88  238 ePg    40 44.30    0.0
                 eSg      40 57.90
OUR      1.18  157 iPbc   40 49.90    0.4
                 eSb      41 07.20
LIT      1.49  207 ePb    40 54.60    0.3
                 eSb      41 17.10
```

25d 02h

FNA 1.65 248 ePb 40 55.90 -0.7
IGT 3.00 232 ePn 41 16.10 0.2
S.D. = 0.4 on 10 of 10 obs.

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* JUN 25, 1990 02h 44m 08.21± 1.19s
38.652 N ± 8.5km 27.473 E ±12.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

CIN	1.16	155	ePg	44 30.00	0.2
			iSg	44 47.00	
EZN	1.47	323	iPn	44 35.30	0.6
KHL	1.64	101	iPn	44 39.10	1.8
YER	1.64	157	ePn	44 42.00	4.7X
EDC	1.72	10	iPn	44 38.00	-0.3
KCT	1.73	23	iPn	44 38.90	0.3
BNT	1.74	11	ePn	44 37.30	-1.3
ALT	2.10	78	ePn	44 44.00	0.1
IZI	2.29	42	ePn	44 49.70	3.1X
YLV	2.41	37	ePn	44 49.00	0.6
ISK	2.70	26	ePn	44 47.00	-5.4X
BCK	2.73	115	ePn	44 51.00	-2.0
GPA	2.74	52	ePn	44 59.00	6.0X
HRT	2.75	37	ePn	44 57.00	3.8X
DMK	3.17	4	ePn	45 11.00	11.9X

S.D. = 1.3 on 9 of 15 obs.

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* JUN 25, 1990 02h 52m 19.44± 1.31s
6.224 S ±11.7km 76.136 W ±15.0km
DEPTH = 33.0km (normal)
4.8mb (1 obs.)
NORTHERN PERU (111)

PT08	5.71	184	iPd	53 45.80	1.2
			iS	54 43.00	
NNA	5.77	187	eP	53 44.00	-1.1
			eS	54 25.00	
PT10	5.87	188	eP	53 51.00	4.5X
			eS	54 43.50	
PT02	6.68	183	eP	53 57.20	-0.7
			iS	54 00.30	
PT06	7.56	181	iP	54 11.20	1.0
			iS	55 17.90	
ZOBO	12.70	142	P	55 21.00	-0.1
CNCB	13.20	144	eP	55 27.00	-0.8
			i	55 38.00	
CCH	14.78	139	P	55 54.50	6.3X
SIV	17.67	125	P	56 25.50	0.7
MBC	86.05	351	eP	04 57.50	-0.1
	0.6s		4.00nm		4.8mb

S.D. = 1.0 on 8 of 10 obs.

JUN 25, 1990 03h 02m 53.62± 0.47s
43.182 N ± 3.8km 12.813 E ± 6.0km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

ASS	0.16	225	Pc	02 57.10	-0.2
			eSg	02 59.90	
ARV	0.33	17	Pc	03 00.10	-0.4
			eSg	03 05.40	
CRE	0.77	306	P	03 08.90	0.2
			eSg	03 20.00	
RSM	0.79	341	P	03 09.10	0.1
			eSg	03 20.50	
AQU	0.93	152	Pd	03 11.90	0.4
			eSg	03 27.00	
SFI	1.02	317	P	03 13.30	0.5
			eSg	03 27.30	
PGD	1.05	312	P	03 14.10	0.5
			eSg	03 28.50	
AZI	1.28	159	P	03 17.50	0.2
RDP	1.42	183	P	03 19.50	-0.1
SDI	1.65	153	P	03 22.50	-0.3
BDI	1.83	299	P	03 24.50	-1.0

S.D. = 0.5 on 11 of 11 obs.

? JUN 25, 1990 03h 03m 12.42± 0.96s
45.815 N ±11.5km 26.663 E ±13.3km
DEPTH = 90.0km (geophysicist)
ROMANIA (358)

MLR	0.60	238	iPd	03 28.00	-0.4
ISR	0.68	187	ePc	03 30.00	0.9
PPE	0.78	59	eP	03 31.00	1.1
CLI	0.85	30	iPc	03 30.00	-0.8
CFR	1.22	120	iPc	03 35.00	0.0
TLB	1.56	141	iPd	03 38.50	-0.8

S.D. = 1.1 on 6 of 6 obs.

JUN 25, 1990 03h 20m 01.42± 0.33s
45.215 N ± 2.9km 7.243 E ± 3.4km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.7 (LDG), 2.5 (GEN).

RSP	0.06	171	P	20 03.84	0.0
			S	20 04.96	
LSD	0.25	346	P	20 05.89	-1.0
			S	20 08.66	
BNI	0.43	248	Pd	20 09.50	-0.8
			eSg	20 15.10	
RRL	0.44	228	P	20 09.78	-0.7
			S	20 15.42	
LPG	0.45	309	Pg	20 09.60	-1.0
			Sg	20 15.10	
LPL	0.47	310	Pg	20 09.90	-1.1
			Sg	20 15.50	
ORO	0.66	51	P	20 14.50	-0.2
			eSg	20 24.00	
ORX	0.67	51	P	20 13.88	-0.9
			S	20 23.63	
DOI	0.71	180	P	20 15.50	0.0
			eSg	20 25.30	
PZZ	0.72	188	P	20 15.53	-0.1
			S	20 24.86	
STV	0.97	177	P	20 20.55	0.6
			S	20 32.34	
ENR	1.00	173	P	20 19.32	-1.1
ROB	1.02	154	P	20 21.16	0.4
			S	20 34.91	
PCP	1.14	126	P	20 23.32	0.4
			S	20 38.70	
FIN	1.22	145	P	20 24.55	0.4
			S	20 39.21	
VAI	1.26	58	P	20 24.90	0.2
			eSg	20 42.80	
SBF	1.36	174	Pg	20 31.40	5.0X
			Sg	20 47.10	
IMI	1.38	160	P	20 26.50	-0.3
			S	20 43.21	
FRF	1.71	195	Pg	20 34.60	3.2X
			Sg	20 56.50	
LRG	1.87	200	Pg	20 36.60	2.9X
			Sg	21 02.20	
LMR	1.95	196	Pg	20 38.80	3.9X
			Sg	21 04.00	
SMF	2.77	302	Pn	20 48.00	1.3
			Pg	20 54.60	
			Sg	21 28.20	
LBF	2.88	309	Pn	20 49.50	1.3
			Pg	20 56.10	
LOR	3.12	312	Pn	20 52.40	0.8
			Pg	21 01.80	
AVF	3.14	302	Pg	21 01.30	9.5X
SSF	3.19	307	Pn	20 53.50	1.0
			Pg	21 01.70	
BGF	3.35	295	Pn	20 55.60	0.7
			Pg	21 05.30	
			Sg	21 46.20	
MAF	3.43	289	Pg	21 06.40	10.4X
			Sg	21 48.90	

S.D. = 0.8 on 22 of 28 obs.

% JUN 25, 1990 04h 05m 25.23± 0.56s
40.453 N ± 6.4km 15.570 E ± 7.8km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

SGO	0.23	298	Pc	05 29.50	-0.6
			iSg	05 34.00	
MGR	0.32	182	Pc	05 32.50	0.7
BSS	0.67	300	P	05 38.50	-0.1
			eSg	05 50.00	
ORI	0.78	120	P	05 40.00	-0.4
TDS	0.99	143	P	05 44.40	0.4
DUI	1.47	325	P	05 52.00	0.2
SDI	1.82	314	P	05 57.20	0.3
			eSn	06 20.00	
AZI	2.22	314	P	06 03.00	0.4
ATN	2.29	182	P	06 03.00	-0.7
			eSn	06 32.00	
SOI	2.41	171	P	06 05.00	-0.3

S.D. = 0.5 on 10 of 10 obs.

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* JUN 25, 1990 04h 12m 06.49± 0.81s
5.256 S ± 6.8km 79.235 W ±19.9km
DEPTH = 33.0km (normal)
4.4mb (3 obs.)
NORTHERN PERU (111)

TUNG	3.89	12	iP	13 05.00	-0.8
VC1	4.66	10	eP	13 17.60	0.7
QTO	5.07	8	eP	13 23.00	0.4
GGP	5.09	7	eP	13 23.30	0.3
CAYA	5.45	13	eP	13 27.20	-0.8
			eS	14 49.50	
COTA	5.63	9	P	13 31.50	1.0
PSO	6.68	17	eP	13 39.50	-5.8X
NNA	7.09	161	iPc	13 49.50	-1.3
	0.9s		12.60nm		4.9mb X
			eS	15 16.50	
PT10	7.14	162	i(P)	13 54.80	3.5
			eS	15 13.00	
PT08	7.17	158	iPc	13 52.50	0.4
			iS	15 06.90	
PT02	8.12	160	e(P)	14 03.30	-1.9
			i(S)	15 37.60	
BOG	11.09	28	eP	14 51.00	4.8X
ZOBO	15.45	136	P	15 43.00	-1.3
	Z 16s		0.27um		
			LR	20 46.00	
LPB	15.65	137	P	15 48.00	1.3
CNCB	15.92	137	eP	15 48.00	-2.4
			i	15 52.00	
CCH	17.59	134	eP	16 13.00	1.8
SIV	20.77	122	P	16 41.30	-6.1X
LNO	43.80	340	eP	20 11.30	0.4
TUL	43.80	340	eP	20 10.30	-0.7
	1.0s		8.00nm		4.5mb
			e	20 17.70	
YKA	72.76	344	eP	23 31.90	-1.2
	0.6s		1.10nm		4.0mb
INK	82.43	342	eP	24 27.00	0.5
MBC	84.61	351	eP	24 37.50	0.1
	0.6s		3.00nm		4.7mb
GKN	152.67	32	PKP	32 00.00	5.1X

S.D. = 1.5 on 19 of 23 obs.

JUN 25, 1990 04h 16m 35.99± 0.55s
42.486 N ± 5.9km 19.070 E ± 4.5km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
MD 2.2 (TTG).

TTG	0.15	112	iPg	16 40.00	0.5
			iSg	16 43.70	
BDV	0.27	222	ePg	16 41.70	0.0
			eSg	16 47.00	
NKY	0.33	351	ePg	16 43.40	0.5
			eSg	16 49.50	
HCY	0.42	265	ePg	16 44.40	-0.3
			eSg	16 51.10	
BRY	0.57	317	ePg	16 47.50	-0.1
			eSg	16 57.20	
PVY	0.68	80	ePg	16 49.00	-0.5
			eSg	16 59.50	
SKO	1.83	105	ePn	17 07.00	-0.8
OHR	1.89	136	ePn	17 09.30	0.7

S.D. = 0.6 on 8 of 8 obs.

? JUN 25, 1990 05h 04m 45.26± 2.92s
44.174 N ±14.8km 8.559 E ±19.1km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.8 (GEN).

FIN	0.25	278	P	04 51.00	0.3
			S	04 55.00	
PCP	0.37	358	P	04 52.85	0.0
			S	04 57.98	
ROB	0.51	284	P	04 55.31	-0.3
			S	05 03.21	
IMI	0.55	242	P	04 56.44	0.0
			S	05 04.03	

S.D. = 0.4 on 4 of 4 obs.

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* JUN 25, 1990 05h 16m 25.05± 1.54s
40.432 N ±12.7km 21.540 E ± 9.6km
DEPTH = 10.0km (geophysicist)
GREECE (364)

ML 2.5 (THE), 2.5 (SKO).

FNA	0.37	340	iPg	16	32.50	-0.2
			eSg	16	38.10	
LIT	0.80	114	ePg	16	40.50	-0.1
			eSg	16	52.50	
GRG	0.84	51	ePg	16	41.20	-0.1
			eSg	16	52.10	
OHR	0.88	321	iPg	16	42.20	0.2
			iSg	16	55.40	
KNT	1.26	54	ePb	16	48.70	0.2
			eSb	17	05.50	

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

? JUN 25, 1990 05h 45m 56.08± 6.62s
36.505 N ±49.3km 28.225 E ±37.4km
DEPTH = 33.0km (normal)
DODECANESE ISLANDS (369)

YER	0.63	4	iPn	46	09.00	0.4
			iSg	46	16.00	
CIN	1.10	354	ePg	46	15.00	-0.2
			iSg	46	27.00	
ELL	1.38	79	ePn	46	19.00	-0.3
KHL	2.09	29	ePn	46	29.00	-0.5
BCK	2.12	63	ePn	46	30.50	0.5

S.D. = 0.6 on 5 of 5 obs.

JUN 25, 1990 06h 34m 51.49± 0.42s
43.186 N ± 4.6km 0.113 E ± 3.8km
DEPTH = 5.0km (geophysicist)
FRANCE (538)
ML 3.4 (LDG). Felt (III) ot Bogneres de Bigorre ond (II) ot Campon.

EPF	0.23	133	Pg	34	55.10	-1.0
			Sg	34	57.70	
JAU	0.38	248	Pg	34	59.15	-0.1
			Sg	35	05.44	
OGE	0.43	268	Pg	35	01.09	1.0
			Sg	35	09.16	
ESCF	0.51	258	Pg	35	01.99	0.2
			Sg	35	09.68	
LHE	0.60	243	Pg	35	02.86	-0.7
			Sg	35	10.62	
ATE	0.61	261	Pg	35	04.05	0.4
			Sg	35	12.65	
ISSF	0.68	257	Pg	35	04.96	-0.2
			Sg	35	15.06	
MADF	0.68	267	Pg	35	06.04	0.9
			Sg	35	16.59	
BOH	0.83	265	Pg	35	08.56	0.5
LPO	1.69	27	Pn	35	21.40	-0.3
			Pg	35	25.10	
			Sg	35	48.80	
LFF	1.81	14	Pg	35	28.10	4.6X
			Sg	35	52.60	
ETER	2.20	113	ePn	35	31.60	2.3
			eSn	36	00.00	
CAF	2.24	38	Pn	35	29.50	-0.3
			Pg	35	34.80	
			Sg	36	04.60	
RJF	2.35	25	Pn	35	31.60	0.3
			Pg	35	37.40	
			Sg	36	08.50	
EROQ	2.37	175	ePn	35	33.30	1.6
			eSn	36	02.00	
EBR	2.38	173	ePn	35	32.00	0.2
			eSg	36	02.00	
ETOR	2.86	215	ePn	35	37.00	-1.8
			eSn	36	13.50	
LSF	3.23	18	Pn	35	42.40	-1.4
			Pg	35	54.20	
			Sg	36	35.30	
MFF	3.42	357	Pn	35	47.80	1.2
			Pg	35	58.50	
			Sg	36	42.20	
TCF	3.44	25	Pn	35	47.00	0.1
			Pg	35	58.20	
			Sn	36	27.00	
			Sg	36	43.30	
MAF	3.50	29	Pn	35	46.90	-0.8
			Pg	35	59.40	
			Sg	36	45.30	
ECHE	3.68	193	ePg	36	03.00	12.6X
			eSg	36	44.50	
BGF	3.89	29	Pn	35	53.10	-0.1
			Pg	36	06.10	
			Sg	36	57.20	
GUD	4.07	233	ePn	35	54.00	-1.9
			eSn	36	39.00	

S.D. = 1.1 on 22 of 24 obs.

& JUN 25, 1990 06h 43m 34.70s
38.385 N 118.332 W
DEPTH = 22.0km
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 3.7 (BRK). Felt (III) ot Mino, Nevodo.

KVN	0.69	15	iPd	43	47.50	-0.6
TNP	0.93	109	iPc	43	52.30	0.1
CMB	1.65	258	iPc	44	03.10	0.3
			i	44	04.30	
			iS	44	25.60	
FRI	1.77	219	ePd	44	05.40	1.1
			i	44	06.60	
			iS	44	29.10	
LLA	2.73	230	ePc	44	22.60	4.5
			iS	44	57.60	
ORV	2.73	296	ePc	44	18.30	0.1
ARN	2.74	249	eP	44	21.50	3.3
MHC	2.82	249	eP	44	20.50	1.0
			eS	44	57.70	
			iSg	45	02.30	
PRI	2.91	220	eP	44	25.70	4.9
SAO	2.95	238	eP	44	25.40	4.1
PHAM	3.03	214	eP	44	26.00	3.6
BKS	3.12	262	ePc	44	29.30	5.6
			eS	45	12.30	
ZSP	3.12	263	ePc	44	30.00	6.3
BRK	3.14	262	eP	44	27.10	3.2
PRS	3.17	231	e(P)	44	30.30	5.9
MIN	3.20	309	ePc	44	25.70	0.7
GCC	3.21	246	e(P)	44	28.40	3.5
LTCM	3.46	303	eP	44	30.00	1.5
BCH	3.49	204	eP	44	29.70	0.7
ABL	3.60	192	eP	44	34.50	3.8
WDC	3.92	305	ePc	44	34.80	-0.2
LBFM	4.03	318	eP	44	37.50	0.7
PLM	5.16	166	eP	44	57.50	4.7
GLA	6.04	151	e(P)	45	13.00	8.0

24 obs. associated

JUN 25, 1990 06h 48m 49.87± 0.62s
42.925 N ± 6.6km 18.354 E ± 5.9km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 3.0 (TTG).

BRY	0.14	100	iPgd	48	53.60	0.3
			iSg	48	56.90	
NKY	0.49	103	ePg	48	59.00	-0.8
			eSg	49	07.00	
HCY	0.49	167	ePg	48	58.80	-1.0
			iSg	49	06.50	
TTG	0.83	126	ePg	49	04.70	-1.2
			eSg	49	18.50	
PLE	0.86	62	ePg	49	06.10	-0.5
			eSg	49	20.30	
IVA	1.14	92	ePg	49	11.00	-0.2
			eSg	49	28.20	
ULC	1.17	145	ePg	49	11.00	-0.7
			eSg	49	28.50	
PVY	1.24	105	ePg	49	12.60	-0.4
			eSg	49	32.00	
SDA	1.24	137	ePg	49	13.80	0.9
HVAR	1.42	281	iPn	49	14.70	-1.0
			iSg	49	35.20	
PUK	1.44	127	ePn	49	17.30	1.3
LACI	1.63	142	ePn	49	21.00	2.3
TIR	1.94	144	ePn	49	28.50	5.4X
SKO	2.47	112	ePn	49	21.50	-9.4X
OHR	2.57	134	ePn	49	37.00	4.7X
VBY	3.41	320	eP	50	00.20	16.1X
			eSn	50	47.90	
PTJ	3.43	331	eP	49	45.10	0.5
TRI	4.31	312	eP	50	46.00	49.1X
			e	51	08.00	
VOY	4.45	316	ePn	49	59.30	0.3
			eSn	50	53.20	

S.D. = 1.1 on 14 of 19 obs.

JUN 25, 1990 07h 19m 05.11± 0.23s
56.115 N ± 6.4km 164.572 E ± 3.8km
DEPTH = 30.5km (16 depth phases)
5.0mb (43 obs.) 4.9Msz (14 obs.)
KOMANDORSKY ISLANDS REGION (4)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 28C
Centroid Location:
Origin Time 07:19: 6.9 0.4
Lat 56.38N 0.07 Lon 164.45E 0.10
Dep 28.4 7.3 Half-duration 1.6
Moment Tensor; Scale 10**16 Nm
Mrr=-0.34 0.29 Mtt=-6.16 0.42
Mff= 6.50 0.34 Mrt=-0.66 0.92
Mrf=-0.23 1.28 Mtf=-3.26 0.49
Principal Axes:

	Val=	Plg=	Azm=
T	7.29	0	256
N	-0.27	84	166
P	-7.02	6	346

Best Double Couple:Mo=7.2*10**16
NP1:Strike= 31 Dip=86 Slip= -4
NP2: 122 86 -176

ADK	11.80	103	P	21	51.50	-2.7
ANM	16.95	48	eP	23	02.40	1.1
KUSJ	18.22	233	eP	23	11.70	-5.4X
ASAJ	18.39	238	eP	23	18.50	-0.7
HOOJ	19.43	234	eP	23	27.10	-4.5X
SDN	19.57	78	eP	23	35.30	2.3
TTA	20.84	55	eP	23	46.60	0.2
			e	23	55.30	32km
IMA	22.06	46	eP	23	58.60	-0.1
	1.3s		21.30nm			4.4mb
OFUJ	22.82	231	P	24	06.80	0.5
KDC	23.20	68	eP	24	09.80	0.0
PMR	24.13	58	P	24	20.00	1.2
	1.0s		17.00nm			4.5mb
Z	20s		2.30um			4.7Msz
YAMJ	24.29	233	eP	24	24.40	3.8X
FBA	24.46	50	eP	24	22.40	0.4
MDJ	24.82	257	eP	24	22.50	-3.1X
Z	12s		5.40um			5.3MszX
N	16s		2.90um			
E	16s		2.40um			
NIIJ	25.52	233	P	24	32.50	0.2
KAKJ	25.88	230	P	24	35.90	0.3
CHJJ	26.52	232	P	24	42.30	0.8
MTMJ	26.60	234	eP	24	45.10	2.7
CN2	27.62	260	eP	24	49.50	-2.0
Z	14s		2.10um			4.9MszX
N	14s		3.00um			
E	14s		1.00um			
			pP	24	55.00	19kmX
			eS	29	34.00	
TSRJ	28.30	235	P	24	57.90	0.2
INK	29.88	41	eP	25	10.50	-1.0
SNY	29.96	259	eP	25	12.00	-0.5
Z	14s		3.10um			5.1MszX
E	13s		2.10um			
			S	30	10.00	
MBC	33.22	25	eP	25	40.00	-0.7
	1.0s		11.00nm			4.7mb
BJI	35.28	264	eP	25	56.50	-2.3
	0.8s		1000.00nm			6.8mb X
Z	13s		4.10um			5.4MszX
N	14s		1.46um			
E	14s		0.99um			
			PP	27	20.00	
			eS	31	28.00	
HHC	37.31	269	P	26	17.00	0.9
Z	18s		2.40um			5.0Msz
N	15s		2.60um			
E	16s		2.70um			
			SS	34	28.00	
BTO	38.34	270	eP	26	24.00	-0.8
N	16s		3.70um			
E	16s		3.00um			
			pP	26	32.00	27km
TIY	38.99	264	eP	26	30.90	0.7
Z	14s		3.10um			5.3MszX
YKA	39.18	47	eP	26	30.60	-0.7
	0.6s		1.40nm			3.9mb X
NJ2	39.68	252	Pc	26	33.50	-2.3
Z	16s		0.70um			4.6MszX
WHN	43.28	255	eP	27	01.00	-4.3X
			pP	27	12.00	39km

25d 07h

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XAN     43.61 264 eP     27 07.50   -0.6
      N  14s      2.40um
      E  14s      2.20um
KBS     44.23 353 iP     27 13.50    1.0
PNT     44.25  65 eP     27 13.00   -0.1
HON     44.42 126 P      27 16.00    1.4
      Z  20s      0.53um          4.5Msz
GTA     44.86 277 iPc    27 17.20   -1.0
        1.0s   100.00nm          5.7mb
      Z  14s      2.30um          5.3MszX
      E  13s      1.80um
EDM     44.90  58 eP     27 18.00   -0.3
LZH     44.96 270 eP     27 19.50    0.4
        1.5s   110.00nm          5.5mb
      Z  15s      3.50um          5.4MszX
      N  14s      2.20um
      E  14s      2.20um
                  pP     27 28.00   28km
NEW     46.20  65 P      27 27.60   -1.0
        0.9s    10.96nm          4.8mb
DAG     47.36   1 iPd    27 35.90   -1.5
        0.8s    7.46nm           4.8mb
SES     47.81  59 eP     27 41.00   -0.3
                  pP     27 52.00   38km
WMO     48.42 290 P      27 46.00   -0.2
      Z  18s      1.40um          5.0Msz
      N  17s      3.30um
      E  17s      2.50um
                  eS     34 46.00
WDC     48.52  76 ePc    27 47.40    0.5
                  epP    28 01.40   53kmX
CD2     48.84 265 eP     27 48.30   -1.1
FFC     49.06  50 eP     27 51.00    0.2
        1.2s    18.00nm          5.0mb
MIN     49.20  76 eP     27 52.30    0.1
                  epP    28 06.70   54kmX
LRM     50.20  65 eP     27 59.70   -0.3
GYA     50.66 259 P      28 05.40    1.8
KEV     50.75 342 eP     28 05.00    1.5
BGMT    50.82  65 eP     28 04.70    0.0
MHC     51.32  79 eP     28 08.80    0.4
                  epP    28 23.60   56kmX
CMB     51.51  77 e(P)   28 09.90    0.1
                  epP    28 24.60   55kmX
BAG     51.73 238 eP     28 11.00   -0.8
KVN     52.01  75 P      28 14.30    0.5
FRI     52.63  78 eP     28 18.30    0.1
                  epP    28 32.50   53kmX
SOD     52.92 341 eP     28 18.00   -1.9
TNP     53.19  75 P      28 22.20   -0.4
        1.5s    46.97nm          5.2mb
FRB     53.67  26 eP     28 25.00   -0.4
BW06    53.82  65 P      28 25.00   -2.2
        1.5s    48.63nm          5.3mb
KMI     53.88 262 eP     28 34.00    6.3X
      Z  20s      1.30um          5.0Msz
      N  15s      1.30um
      E  15s      0.80um
                  eS     36 02.00
KMI     53.88 262 eP     28 30.00    2.3
      Z  20s      1.30um          5.0Msz
      N  15s      1.30um
      E  15s      0.80um
                  eS     36 02.00
ISA     54.28  78 eP     28 46.00   15.6X
CLC     54.65  77 eP     28 33.00   -0.1
                  e      28 49.00   61kmX
QIZ     54.94 251 eP     28 36.20    0.9
      N  15s      0.99um
      E  13s      0.59um
SBB     55.36  78 eP     28 40.00    1.7
                  e      28 50.00   33km
GSC     55.46  77 eP     28 40.00    0.9
PAS     55.57  79 eP     28 56.00   16.2X
MWC     55.58  79 eP     28 47.00    6.9X
RSSD    55.60  61 P      28 33.70   -6.5X
TPC     56.77  77 eP     29 03.00.  14.6X
LSA     56.81 275 eP     28 49.00   -0.3
PLM     56.89  78 eP     29 03.00   13.5X
SUF     57.17 339 eP     28 49.50   -1.3
        1.1s    14.90nm          4.9mb
PV09    57.18  69 P      28 51.30   -0.4
BAR     57.50  79 eP     29 10.00   16.4X
KSH     57.66 294 eP     28 55.50    0.8
      E  12s      2.00um
GOL     58.22  65 P      28 59.00    0.1
        1.5s    27.52nm          5.1mb

      Z  19s      0.90um          4.9Msz
GLA     58.23  77 eP     29 09.00   10.3X
GLD     58.26  65 P      29 05.00    6.0X
      Z  20s      1.40um          5.1Msz
NUR     59.48 338 eP     29 06.00   -1.0
LOE     60.63 257 eP     29 14.00   -1.3
CHG     61.02 261 iPc    29 17.50   -0.5
        0.9s    32.77nm          5.5mb
GUN     61.12 278 P      29 17.80   -1.2
ANMO    61.27  69 P      29 20.00    0.2
        0.9s    3.15nm           4.4mb
ALO     61.28  69 eP     29 18.00   -1.8
        1.0s    5.50nm           4.6mb
      Z  22s      0.37um          4.5Msz
NB2     61.31 346 P      29 18.00   -1.6
        0.9s    22.40nm          5.3mb
PKI     61.65 278 P      29 21.40   -1.2
GKN     61.74 279 P      29 22.00   -1.0
DMN     61.79 278 P      29 23.20   -0.2
BDT     62.26 259 eP     29 20.50   -5.8X
KKM     62.82 237 ePc    29 35.00    4.9X
NST     62.92 257 eP     29 31.00    0.3
MEO     65.45  64 eP     29 46.30   -0.7
NNT     65.68 256 eP     29 46.10   -2.5
TUL     65.94  61 e(P)   29 44.50   -5.6X
        0.7s    1.70nm           4.3mb
FVM     66.85  56 P      29 53.80   -2.1
        0.8s    18.94nm          5.3mb
UYO     67.99  61 e(P)   30 02.20   -1.0
RSNY    68.07  41 P      30 00.00   -3.5X
      Z  20s      1.58um          5.2Msz
MAIO    68.25 303 eP     30 05.00    0.2
                  eS     39 12.00
OLY     68.36  58 P      30 03.00   -2.4
EKA     68.46 352 Pc     30 14.60    8.9X
        1.0s    21.60nm          5.2mb
QUE     69.50 294 eP     30 13.30    0.5
KRA     70.19 337 eP     30 16.60    0.3
        0.8s    38.00nm          5.5mb
      Z  20s      1.30um          5.2Msz
                  e      30 26.30   31km
KSP     70.21 339 eP     30 16.50    0.0
                  e      30 25.30   28km
CLL     70.38 342 eP     30 17.00   -0.5
        1.1s    22.00nm          5.2mb
                  i      30 26.40   30km
BRG     70.63 341 eP     30 18.30   -0.7
                  i      30 27.50   30km
DCN     70.70 355 eP     30 25.00    5.6X
WTS     70.70 346 eP     30 28.00    8.6X
        1.0s    26.00nm          5.3mb
DLE     70.72 354 eP     30 24.10    4.6X
MOX     71.26 342 eP     30 23.00    0.1
                  i      30 32.00   29km
PRU     71.37 340 eP     30 24.00    0.5
      Z  16s      0.80um          5.1MszX
      N  14s      0.50um
      E  14s      0.80um
                  e      30 32.70   28km
ENN     72.02 346 eP     30 36.00    8.6X
        0.9s    13.00nm          4.9mb
GRF     72.25 342 eP     30 29.00    0.2
      Z  21s      0.40um          4.7Msz
                  e      30 38.40   30km
                  e      30 44.00
KHC     72.37 340 iP     30 30.60    1.0
      Z  18s      0.80um          5.0Msz
                  i      30 39.50   29km
BUD     72.82 336 eP     30 34.00    1.9
DOU     72.86 347 P      30 41.10    8.8X
SOP     73.16 338 eP     30 34.80    0.7
CMP     73.40 331 ePc    30 42.00    6.4X
HYB     73.53 277 eP     30 36.00   -0.7
                  i      30 44.50   27km
BZS     73.96 334 eP     30 39.00    0.2
CDF     74.13 344 eP     30 48.90    9.0X
        0.8s    8.05nm           4.8mb
SQTA    74.64 342 iPc    30 43.50    0.6
        1.9s    54.10nm          5.2mb
                  i      30 52.80   30km
HAU     74.66 345 eP     30 51.80    8.9X
        0.8s    10.75nm          4.9mb
FLN     74.75 350 eP     30 52.00    8.7X
        1.0s    22.00nm          5.1mb
BSF     74.77 345 eP     30 52.30    8.7X
        1.0s    10.00nm          4.8mb
LDF     74.88 350 eP     30 52.90    8.8X

        0.8s    8.05nm           4.8mb
FVI     74.96 340 P      30 54.00    9.5X
GRR     75.16 350 eP     30 54.80    9.1X
        1.0s    26.00nm          5.2mb
LPF     75.53 350 eP     30 56.30    8.5X
        1.0s    20.00nm          5.1mb
LOR     75.73 347 eP     30 58.10    9.1X
        1.4s    21.80nm          5.0mb
SSF     75.98 347 eP     30 58.80    8.4X
        1.4s    13.05nm          4.7mb
LBF     75.99 346 eP     30 59.20    8.7X
        1.4s    13.05nm          4.7mb
AVF     76.26 347 eP     31 01.10    9.1X
        1.0s    12.00nm          4.9mb
MDI     76.30 342 P      31 00.00    7.9X
SAL     76.32 342 P      31 01.00    8.7X
SMF     76.34 346 eP     31 01.60    9.2X
        1.0s    10.00nm          4.8mb
VAI     76.37 343 P      31 01.50    9.0X
MFF     76.85 349 eP     31 04.90    9.6X
        1.0s    12.00nm          4.9mb
LPL     77.04 344 eP     31 06.80   10.2X
        0.8s    10.75nm
LPG     77.05 344 eP     31 07.20   10.4X
        1.4s    13.05nm
GBA     77.24 275 Pc     30 57.10   -0.7
        0.8s    23.40nm          5.3mb
BOB     77.33 342 P      30 59.40    1.4
SKO     77.42 333 eP     31 03.00    4.5X
BNI     77.50 344 P      31 09.60   10.6X
RSM     77.59 340 P      31 02.10    2.8X
MME     77.66 341 P      31 02.20    2.1
SFI     77.71 340 P      31 02.00    2.0
VAY     77.74 332 eP     31 09.70    9.5X
PGD     77.78 340 P      31 02.70    2.1
BDI     77.81 341 P      31 05.10    4.4X
CKI     77.85 343 P      31 10.00    9.2X
ARV     77.90 339 P      31 02.00    0.9
CRE     77.97 340 P      31 11.00    9.4X
CAF     78.26 347 eP     31 12.90    9.8X
        1.2s    14.90nm          4.9mb
ASS     78.37 339 P      31 07.00    3.2X
LFF     78.40 348 eP     31 13.60    9.8X
        1.2s    23.80nm          5.1mb
LPO     78.60 348 eP     31 14.70    9.8X
        1.0s    16.00nm          5.0mb
DUI     79.36 338 P      31 09.00   -0.2
SDI     79.45 338 P      31 10.00    0.4
WB5     79.89 209 eP     31 13.00    0.9
WRA     79.96 209 Pc     31 15.40    2.9X
        1.1s    5.80nm           4.5mb
BSS     80.12 337 P      31 18.00    4.9X
ORI     80.44 336 P      31 19.00    4.1X
MGR     80.57 336 P      31 18.20    2.6
TDS     80.85 336 P      31 22.00    4.9X
ADI     81.27 319 eP     31 22.00    2.6X
DSI     82.56 318 eP     31 31.00    4.9X
ASPA    83.62 208 iPc    31 33.20    1.7
        1.3s    13.00nm          4.9mb
PRNI    83.80 318 eP     31 40.00    7.4X
CMS     88.71 196 eP     32 07.00   10.7X
STK     89.81 199 eP     32 11.70   10.2X
        1.5s    13.00nm
ZOBO   123.83  67 ePKP   38 10.00    7.9X
      Z  22s      0.21um          4.8Msz
                   LR    21 12.00
SIV    127.12  60 (PKP)  38 11.00    3.2X
SPA    145.94 180 ePKP   38 43.50    2.5
        1.3s    55.00nm
      S.D. = 1.2  on 106 of 173 obs.
-------------------------------------------
&  JUN  25, 1990  07h 25m 41.25s
   41.083 N           110.364 W
   DEPTH =   0.6km
 WYOMING                          (460)
      <SLC-P>. ML 2.1 (SLC).

DAU      0.95 226 eP     25 59.20   -1.3
BW06     1.80  19 eP     26 12.30   -1.6
        2 obs. associated
-------------------------------------------
?  JUN  25, 1990  07h 39m 10.32± 0.87s
   41.153 N ±19.1km   28.722 E ± 8.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)

CTT      0.22 269 iPg    39 15.10    0.0
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ISK	0.27	109	iPg	39	16.10	0.1
			iSg	39	20.60	
HRT	0.79	115	ePn	39	25.60	-0.1
DMK	0.99	313	iPn	39	29.00	0.0
IZI	1.00	145	Pn	39	39.10	9.8X

S.D. = 0.1 on 4 of 5 obs.

? JUN 25, 1990 11h 21m 43.38± 4.12s
14.077 S ±72.2km 75.631 W ±59.8km
DEPTH = 33.0km (normal)
NEAR COAST OF PERU (115)

PT02	1.37	325	iPc	22	05.80	-0.7
			iS	22	28.20	
PT08	2.29	337	iPc	22	19.50	-0.4
			eS	22	56.70	
PT10	2.38	327	i(P)	22	22.00	1.1
			eS	22	55.00	
NNA	2.39	330	iPd	22	25.00	3.9X
			iS	22	54.50	
ARE	4.65	121	eP	22	47.00	-6.4X
			eS	23	55.00	
ZOBO	7.57	108	P	23	35.70	0.9
LPB	7.67	110	eP	23	36.00	0.0
CNCB	7.86	111	P	23	38.00	-0.9
CCH	9.71	111	(P)	23	31.00	-33.2X

S.D. = 1.1 on 6 of 9 obs.

? JUN 25, 1990 12h 16m 03.36± 3.88s
12.517 S ±38.3km 121.413 E ±19.6km
DEPTH = 33.0km (normal)
4.1mb (3 obs.)
SOUTH OF TIMOR (293)

KNA	7.82	115	eP	17	58.80	1.0
			eS	19	20.00	
MBL	8.73	190	eP	18	10.00	-0.3
	0.3s	9.00nm			5.5mb X	
			eS	19	43.00	
MTN	9.49	93	eP	18	21.00	0.2
			eS	20	01.00	
NANU	11.45	209	eP	18	47.20	-0.5
	0.3s	12.00nm			5.6mb X	
			eS	20	48.00	
MEKA	14.28	191	eP	19	25.00	-0.3
			eS	21	54.00	
WB5	14.43	122	eP	19	25.90	-1.4
			eS	21	56.80	
WRA	14.44	122	Pd	19	26.20	-1.2
	0.6s	4.40nm			4.2mb	
ASPA	16.23	135	iPc	19	52.10	1.5
	0.5s	12.00nm			4.3mb	
			eS	22	41.60	
MRWA	17.37	196	eP	20	06.00	1.1
	0.3s	3.00nm			3.9mb	
			eS	23	04.00	

S.D. = 1.2 on 9 of 9 obs.

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* JUN 25, 1990 13h 03m 33.14± 1.06s
1.369 N ±13.3km 122.877 E ± 9.7km
DEPTH = 58.4 ± 17.1 km
4.6mb (1 obs.)
MINAHASSA PENINSULA (265)

MNI	1.96	88	iPc	04	04.00	-0.6
			eS	04	27.00	
TSM	5.57	301	eP	04	56.00	0.5
AAI	7.31	133	eP	05	21.00	1.2
MKS	7.37	207	ePd	05	20.30	-0.3
KKM	8.11	305	ePc	05	30.50	-0.4
WB5	23.94	152	iPd	08	42.00	-1.0
WRA	23.98	153	Pd	08	42.40	-1.0
	0.7s	14.00nm			4.6mb	
QIS	27.26	144	iPc	09	12.90	-1.2
BWA	42.92	148	eP	11	29.80	1.9
CAN	43.92	149	eP	11	36.70	0.7

S.D. = 1.3 on 10 of 10 obs.

% JUN 25, 1990 13h 50m 19.67± 0.97s
44.418 N ±10.4km 7.403 E ± 6.5km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.6 (GEN).

STV	0.18	198	P	50	23.83	0.0
			S	50	26.39	
PZZ	0.23	292	P	50	24.75	0.0
			S	50	28.95	
ROB	0.36	110	P	50	27.21	0.2
			S	50	33.26	
FIN	0.61	110	P	50	31.93	-0.1
IMI	0.62	145	P	50	32.08	-0.1

S.D. = 0.2 on 5 of 5 obs.

& JUN 25, 1990 13h 59m 34.29s
32.330 N 115.310 W
DEPTH = 4.9km
CALIFORNIA-MEXICO BORDER REGION (45)
<ECX>. MD 2.7 (ECX).

CPBX	0.09	3	iPc	59	37.40	1.1
			S	59	39.50	
EMX	0.35	170	eP	59	41.20	0.0
			S	59	47.20	
LMX	0.37	127	eP	59	42.00	0.3
			S	59	48.30	
ECBX	0.88	165	eP	59	50.30	-1.4
			S	00	02.80	

4 obs. associated

? JUN 25, 1990 14h 02m 11.61± 3.62s
31.031 S ±15.9km 68.096 W ±33.9km
DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.44	227	iPc	02	23.20	1.9
CFA	0.59	192	iPc	02	24.00	0.5
			eS	02	36.00	
RTCB	0.75	233	iPd	02	26.00	0.1
RTCV	0.91	204	ePc	02	26.80	-1.3
RTBS	1.32	241	e(P)	02	32.60	-1.2
			(S)	02	50.70	
RTRS	1.46	306	iPc	02	35.90	0.1

S.D. = 1.5 on 6 of 6 obs.

JUN 25, 1990 14h 34m 18.24± 0.39s
50.226 N ± 9.0km 176.897 E ± 4.5km
DEPTH = 33.0km (normal)
4.6mb (10 obs.)
RAT ISLANDS, ALEUTIAN ISLANDS (6)
ML 4.9 (PMR).

SMY	3.06	326	eP	35	04.20	-1.1
ADK	4.38	65	eP	35	23.20	-0.9
SVW	18.79	44	eP	38	36.60	-0.3
TTA	19.41	39	eP	38	43.50	-0.8
IMA	21.88	33	eP	39	09.50	-0.2
	0.8s	6.20nm			4.1mb	
PMR	21.90	46	e(P)	39	07.80	-2.0
INK	29.96	35	eP	40	25.50	0.3
CN2	35.07	280	eP	41	08.80	-1.1
MBC	35.69	22	eP	41	15.50	0.7
	0.9s	31.00nm			5.2mb	
YKA	37.99	45	eP	41	34.70	0.5
	0.7s	2.60nm			4.2mb	
PNT	39.90	66	eP	41	52.00	1.6
	0.6s	5.00nm			4.5mb	
EDM	41.75	58	iPd	42	06.30	0.8
NEW	41.85	66	eP	42	05.50	-0.9
WDC	42.52	79	eP	42	12.80	0.9
MIN	43.24	79	eP	42	18.20	0.2
ORV	43.76	80	eP	42	22.00	0.0
BRK	44.26	82	eP	42	26.50	0.4
SES	44.31	61	eP	42	26.00	-0.5
PCC	44.40	83	eP	42	30.80	3.5X
CMB	45.35	81	ePd	42	35.50	0.6
SAO	45.44	83	e(P)	42	33.90	-1.7
PRS	45.75	83	eP	42	38.40	0.3
PRI	46.32	83	eP	42	37.20	-5.5X
FRI	46.41	81	eP	42	43.50	0.3
BTO	46.46	285	eP	42	44.20	0.5
TIY	46.65	280	eP	42	45.50	0.3
FFC	47.02	52	iPd	42	47.50	-0.3
	0.8s	11.00nm			4.9mb	
SBB	49.04	82	eP	43	04.00	0.1
BW06	49.26	69	eP	43	05.00	-0.7
GSC	49.30	81	eP	43	06.00	0.1
GLA	52.00	82	eP	43	42.00	15.6X
GTA	53.43	290	eP	43	35.80	-1.2
FRB	55.41	29	eP	43	50.00	-1.0
WMQ	57.64	301	P	44	06.70	-0.7
TUL	61.83	67	eP	44	35.50	-0.7
	1.0s	6.00nm			4.7mb	
NUR	67.37	346	iP	45	11.10	-0.6
	0.8s	14.70nm			5.1mb	
NB2	68.49	353	P	45	18.50	-0.3
	0.9s	11.30nm			5.0mb	
GUN	69.71	289	P	45	26.80	-0.3
PKI	70.24	289	P	45	29.80	-0.5
GKN	70.39	290	P	45	31.00	0.0
DMN	70.40	290	P	45	31.10	-0.1
EKA	74.81	0	Pc	45	57.40	1.0
	0.8s	4.20nm			4.5mb	
SPC	78.96	345	eP	46	20.30	0.4
PRU	79.03	349	eP	46	21.00	0.9
WB5	79.26	220	eP	46	19.90	-1.7
WRA	79.33	220	Pd	46	22.90	0.9
	0.5s	0.90nm			4.0mb	
KHC	79.99	349	eP	46	27.00	1.7
ZST	80.43	346	eP	46	29.20	1.6
			e	55	09.80	
PTJ	82.84	347	eP	46	41.50	1.1
BNI	84.72	353	P	46	52.50	2.5
BDI	85.34	350	P	46	51.50	-1.5
PGD	85.39	349	P	46	55.00	1.6
MAW	143.92	216	iPKP	53	47.00	-3.3X

S.D. = 1.0 on 49 of 53 obs.

? JUN 25, 1990 15h 22m 28.98± 2.17s
32.136 S ±27.3km 68.976 W ±16.0km
DEPTH = 100.0km (geophysicist)
MENDOZA PROVINCE, ARGENTINA (139)

RTCV	0.46	54	iPc	22	44.70	-0.1
RTBS	0.62	319	iPc	22	45.90	0.0
			(S)	22	57.20	
RTCB	0.66	13	iPc	22	46.50	0.1
CFA	0.82	50	ePc	22	48.00	0.2
			eS	23	07.80	
RTLL	0.91	28	iPc	22	48.60	-0.2
RTRS	2.00	348	ePc	23	02.10	0.0

S.D. = 0.2 on 6 of 6 obs.

JUN 25, 1990 16h 14m 49.32± 0.46s
42.530 N ± 4.7km 19.153 E ± 4.1km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
MD 2.7 (TTG). Felt (III) at Donilovgrad and Titograd.

TTG	0.13	142	iPgd	14	53.70	1.3
			iSg	14	57.50	
NKY	0.30	338	iPgc	14	56.50	0.8
			iSg	15	01.80	
BDV	0.34	224	ePg	14	57.30	0.9
			eSg	15	03.00	
HCY	0.49	261	ePg	14	59.50	0.2
			eSg	15	08.40	
SDA	0.57	153	ePg	15	00.40	-0.5
BRY	0.58	310	ePg	15	01.30	0.1
			eSg	15	11.00	
PVY	0.61	84	ePg	15	01.20	-0.5
			eSg	15	11.20	
IVA	0.65	58	ePg	15	02.10	-0.2
			eSg	15	11.50	
PUK	0.73	131	iPgc	15	04.30	0.6
LAC1	0.98	155	ePg	15	08.00	0.0
TIR	1.30	156	e(Pn)	15	14.60	1.3
SKO	1.79	107	ePn	15	19.00	-1.4
			eSn	15	45.00	
OHR	1.88	139	ePn	15	24.80	3.0X
HVAR	2.09	289	iPn	15	24.90	0.1
			iSn	15	51.30	
BRT	2.20	222	P	15	53.50	27.0X
SGO	3.49	237	P	15	42.50	-2.2
			eSg	15	46.50	
MGR	3.61	230	P	15	45.80	-0.7
			eSg	15	53.30	
VOY	5.15	315	e(Pn)	16	08.80	0.4
			eSn	17	09.30	

S.D. = 1.0 on 16 of 18 obs.

& JUN 25, 1990 17h 15m 33.54s
38.952 N 110.828 W
DEPTH = 11.5km
UTAH (478)
<SLC-P>. CL 3.0 (SLC).

MSU	1.14	248	eP	15	54.80	-0.1
DAU	1.50	347	eP	16	01.00	0.5
ANMO	5.31	137	eP	16	53.00	-1.9

25d 16h

3 obs. associated

JUN 25, 1990 17h 28m 02.21± 0.76s
20.378 S ± 7.3km 68.898 W ± 9.9km
DEPTH = 136.6 ± 9.5 km
4.8mb (5 obs.)
CHILE-BOLIVIA BORDER REGION (124)

ANT	3.60	203	iP	28	56.50	-1.0
CNCB	3.65	14	iPd	28	59.20	0.3
LPB	3.90	11	iPd	29	02.00	0.0
	1.0s	700.00nm				
CCH	3.96	42	Pc	29	02.80	0.1
ZOBO	4.15	10	iPd	29	06.20	0.7
			S	30	00.00	
ARE	4.61	327	eP	29	17.00	5.6X
			iS	29	59.00	
SIV	8.62	61	iP	30	01.00	-4.4X
PT06	9.64	311	iP	30	25.00	6.1X
			iS	31	45.20	
PT08	11.14	318	eP	30	36.90	-2.1
			e(S)	32	43.70	
NNA	11.30	316	eP	30	42.00	1.1
	1.0s	18.00nm			4.7mb	
			i	30	53.30	
			eS	32	47.50	
PEL	12.81	187	iPc	31	10.40	9.9X
CHCH	13.59	186	eP	31	12.00	1.4
BAO	20.43	80	eP	32	29.90	-0.8
FVM	61.48	341	eP	38	06.00	-0.5
	1.0s	8.00nm			4.6mb	
			epP	38	34.00	114kmX
LIC	68.07	74	P	38	48.80	-0.7
KIC	68.38	74	Pc	38	51.40	0.0
	0.7s	25.00nm			5.2mb	
LKO	68.98	71	Pc	38	54.90	-0.2
	0.5s	14.50nm			5.0mb	
YKA	90.14	341	eP	40	49.20	1.7
	0.8s	1.30nm			4.1mb	
WRA	133.92	211	PKP	47	10.00	4.6X
	0.8s	1.00nm				

S.D. = 1.2 on 14 of 19 obs.

% JUN 25, 1990 17h 35m 02.98± 1.81s
17.437 N ±19.7km 94.606 W ±13.6km
DEPTH = 121.6 ± 36.2 km
CHIAPAS, MEXICO (61)

EVV	1.24	325	iP	35	28.50	0.6
			iS	35	47.00	
SCX	2.01	110	iP	35	37.16	0.1
			iS	36	03.00	
OXX	2.05	260	iP	35	37.52	-0.4
			iS	36	03.36	
LVVM	2.88	323	iP	35	46.65	-1.7
			iS	36	20.00	
IIT	3.85	295	(P)	36	02.88	1.1
			(S)	36	36.70	
PPM	4.15	294	iP	36	06.50	0.5
			(S)	36	39.45	
III	4.72	282	iP	36	12.00	-1.5
			(S)	36	53.50	
IIJ	5.37	296	iP	36	23.80	1.2

S.D. = 1.5 on 8 of 8 obs.

? JUN 25, 1990 17h 51m 46.46± 3.84s
41.254 N ±28.2km 29.345 E ±15.4km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

ISK	0.29	229	iPg	51	52.70	0.2
HRT	0.50	150	iPg	51	56.80	0.3
			iSg	52	04.20	
YLV	0.69	178	ePg	51	59.70	-0.4
CTT	0.70	262	iPg	52	00.20	-0.1
			iSg	52	09.70	

S.D. = 0.6 on 4 of 4 obs.

* JUN 25, 1990 18h 02m 59.68± 1.80s
33.112 S ±12.1km 67.092 W ±13.5km
DEPTH = 13.2 ± 4.2 km
MENDOZA PROVINCE, ARGENTINA (139)

RTCV	1.75	315	e(P)	03	29.50	-0.4
CFA	1.79	327	ePd	03	31.00	0.5
			i	03	38.30	
			eS	03	53.10	
RTLL	2.13	326	iPc	03	35.00	-0.4
RTCB	2.17	318	iPd	03	36.00	-0.1
RTBS	2.47	305	e(P)	03	40.20	0.1
PEL	3.02	268	iPd	03	48.00	0.0
			iS	04	29.00	
CHCH	3.09	254	eP	03	49.00	0.0
			i	04	28.60	
			i	04	31.60	
RTRS	3.56	325	iPc	03	55.90	0.2
			e	03	56.90	
CCH	15.69	3	P	06	36.00	-6.3X
CNCB	16.25	357	P	07	02.00	12.2X
ZOBO	16.80	357	eP	07	02.00	5.3X
SIV	17.90	19	iP	07	09.90	0.0

S.D. = 0.4 on 9 of 12 obs.

? JUN 25, 1990 18h 34m 59.31± 1.09s
1.454 S ±17.1km 77.933 W ±50.1km
DEPTH = 193.0 ± 33.9 km
4.5mb (1 obs.)
ECUADOR (107)

TUNG	0.51	274	P	35	45.50	17.9X
VC1	0.94	330	P	35	27.80	-1.0
GECU	1.16	347	eP	35	30.30	-0.2
QTO	1.38	334	iPd	35	32.00	-0.1
QUR	1.41	335	iPd	35	32.00	-0.4
GGP	1.43	332	iPd	35	32.60	-0.2
			S	36	12.80	
CAYA	1.52	358	P	35	34.20	0.7
COTA	1.82	347	P	35	37.50	1.1
NNA	10.52	174	iP	37	27.50	1.1
	0.5s	10.56nm			4.5mb	
			eS	39	06.50	
ZOBO	17.61	147	P	38	54.00	-0.8
LPB	17.84	148	(P)	38	57.00	-0.1
CNCB	18.13	148	P	38	59.50	-0.8
CCH	19.62	144	P	39	16.00	0.6
SIV	22.02	132	P	39	39.00	0.2

S.D. = 0.8 on 13 of 14 obs.

? JUN 25, 1990 18h 39m 57.44± 4.17s
22.689 N ±35.3km 121.004 E ±14.7km
DEPTH = 10.0km (geophysicist)
TAIWAN REGION (243)

TWG	0.15	25	iPd	39	59.80	-1.0
			eS	40	02.40	
TWM1	0.55	284	iPd	40	08.10	-0.6
			eS	40	17.10	
TWF1	0.71	22	ePc	40	10.50	-1.0
			eS	40	21.70	
TWK	0.75	321	eP	40	12.30	0.2
TWQ	1.59	354	ePc	40	26.50	0.8
TWC	2.06	22	eP	40	33.20	0.7
ANP	2.53	11	eP	40	43.00	3.7X

S.D. = 1.1 on 6 of 7 obs.

? JUN 25, 1990 19h 06m 23.31± 1.94s
20.611 S ±27.5km 178.507 W ±22.4km
DEPTH = 548.0 ± 17.8 km
5.0mb (7 obs.)
FIJI ISLANDS REGION (181)

VUN	3.86	312	iPc	07	44.60	0.0
DZM	14.10	261	iPc	09	25.20	1.6
BRS	27.05	250	iPd	11	24.50	0.6
RMQ	30.52	253	eP	11	54.50	0.7
	0.6s	43.00nm			5.3mb	
CMS	33.69	244	iPc	12	21.40	1.0
	0.6s	14.00nm			4.8mb	
QLP	34.57	253	iPd	12	28.40	0.5
STK	37.32	244	eP	12	50.20	-0.2
	0.8s	10.00nm			4.5mb	
ASPA	44.03	257	ePb	13	43.90	-0.4
	0.6s	89.00nm			5.5mb	
			e	19	35.60	
WB5	44.10	262	iPd	13	43.50	-1.3
WRA	44.11	262	Pc	13	44.30	-0.7
	0.3s	10.90nm			4.9mb	
MTN	48.69	271	iPd	14	18.50	-1.4
FORR	48.78	247	iPd	14	19.50	-0.9
	0.4s	35.00nm			5.2mb	
MBL	57.27	258	eP	15	19.30	-1.8
NANU	60.91	255	eP	15	38.00	-7.3X
			e	15	44.00	
SPA	69.52	180	iPc	16	37.80	-0.7
	0.8s	18.75nm			4.7mb	
PNT	87.01	34	eP	18	09.00	-2.4
NB2	139.03	353	PKP	24	38.00	-10.7X
	0.6s	1.50nm				
EKA	145.15	5	PKPc	24	57.10	-2.4
	0.9s	5.30nm				
HRI	147.12	300	ePKP	25	04.50	1.0
KRA	147.18	338	ePKP	25	03.60	0.7
KSP	147.65	342	iPKP	25	05.00	1.4
JVI	147.74	297	iPKPc	25	06.50	2.2X
SPC	147.79	337	ePKP	25	05.20	1.0
CLL	148.06	346	iPKPc	25	06.10	1.9
	0.9s	30.00nm				
			i	25	10.60	
PRNI	148.34	295	ePKP	25	08.00	2.6X
WTS	148.40	354	ePKP	25	06.50	1.8
	0.7s	16.00nm				
PRU	148.91	344	PKPc	25	08.30	2.7X
	1.0s	14.50nm				
			e	25	14.00	
			Sg	39	48.60	
MOX	148.98	347	ePKP	25	09.00	3.3X
SRO	149.64	337	e(PKP)	25	10.40	3.6X
ENN	149.70	354	ePKP	25	10.00	3.3X
	0.9s	11.00nm				
			e	25	17.50	
ZST	149.74	339	ePKP	25	09.90	3.0X
MEM	149.85	354	PKP	25	10.40	3.5X
KHC	149.95	344	PKP	25	11.00	3.7X
	1.0s	9.00nm				
			e	25	19.10	
			Sg	40	13.00	
GRF	149.97	347	ePKPc	25	11.30	4.1X
	Z 22s	0.40um			5.2Msz	
			ec	25	18.70	
DOU	150.48	356	PKP	25	12.30	4.4X
FLN	151.87	3	ePKP	25	13.40	3.4X
	0.6s	4.50nm				
LDF	152.05	2	ePKP	25	14.50	4.2X
	0.6s	3.60nm				
GRR	152.22	3	ePKP	25	14.60	4.1X
	0.6s	4.50nm				
LPF	152.57	4	ePKP	25	16.40	5.4X
	0.8s	5.35nm				
TCF	154.38	359	ePKP	25	36.30	22.7X
	0.8s	2.70nm				
LSF	154.43	360	ePKP	25	35.40	21.8X
	0.8s	8.05nm				
MAF	154.44	358	ePKP	25	37.00	23.3X
	0.8s	6.05nm				

S.D. = 1.4 on 22 of 42 obs.

JUN 25, 1990 19h 53m 39.53± 1.18s
3.458 S ± 3.8km 131.000 E ± 5.0km
DEPTH = 33.5 ± 11.2 km
5.3mb (27 obs.) 4.9Msz (6 obs.)
WEST IRIAN REGION (196)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 30C
Centroid Location:
Origin Time 19:53:46.1 0.8
Lat 2.82S 0.06 Lon 130.78E 0.05
Dep 15.0 FIX Half-duration 2.5
Moment Tensor; Scale 10**17 Nm
Mrr= 1.69 0.08 Mtt=-0.87 0.08
Mff=-0.83 0.13 Mrt=-0.86 0.20
Mrf= 2.84 0.20 Mtf= 0.95 0.06
Principal Axes:

	Val=	Plg=	Azm=
T	3.55	57	265
N	-0.23	12	155
P	-3.32	30	58

Best Double Couple:Mo=3.4*10**17

NP1:Strike=	116	Dip=	19
NP2:	338	76	102

Slip= 50

AAI	2.81	265	ePd	54	25.60	2.5
MTN	9.33	179	iPc	55	52.60	-2.2
KUPT	9.90	227	ePc	56	19.50	16.8X
MKS	11.63	261	ePd	56	29.00	2.7X
DAV	11.79	333	eP	56	17.10	-11.4X
KNA	12.41	190	eP	56	32.40	-4.4X
			eS	58	47.00	
BKB2	14.26	278	iPc	57	10.00	8.8X
TSM	15.00	300	eP	57	12.50	1.6
WB5	16.65	169	eP	57	25.30	-6.8X
			i	57	28.90	

		eS	00	27.50		
WRA	16.71	169	Pd	57	26.90	-5.9X
	1.0s	22.50nm			4.3mb	X
KDB	17.13	111	eP	57	38.00	-0.1
KKM	17.52	303	ePd	57	43.70	0.6
	0.9s	125.20nm			5.0mb	
TRT	18.75	256	ePc	57	56.10	-2.1
QIS	18.95	154	eP	57	57.50	-3.1X
			i	57	59.80	
			eS	01	19.50	
MBL	20.68	211	iPd	58	17.30	-2.1
	0.6s	109.00nm			5.4mb	
RAB	21.14	93	iPd	58	25.70	1.6
			iS	02	20.00	
GUMO	21.82	39	eP	58	29.70	-1.2
	1.2s	366.67nm			5.7mb	
			eS	02	33.00	
PJG	21.82	39	eP	58	29.80	-1.2
CTA	22.24	139	iPc	58	35.20	0.1
	1.0s	92.00nm			5.2mb	
			iS	02	40.00	
BAG	22.27	333	eP	58	34.00	-1.6
			eS	02	34.00	
NANU	24.20	217	iPd	58	53.40	-0.8
	0.4s	28.00nm			5.2mb	
MEKA	25.94	206	iPd	59	09.70	-1.0
	0.4s	24.00nm			5.1mb	
QLP	26.26	152	iPc	59	14.80	1.2
FORR	27.38	185	iPd	59	23.10	-0.7
	0.3s	23.00nm			5.3mb	
KGM	28.20	281	eP	59	33.00	1.6
RMO	28.53	145	eP	59	34.00	-0.3
COOL	28.82	198	eP	59	35.20	-1.7
	0.7s	27.00nm			5.1mb	
MRWA	29.31	208	eP	59	40.30	-1.0
HNR	29.36	103	eP	59	41.00	-0.9
STK	29.98	162	iPc	59	47.00	-0.2
	0.9s	32.00nm			5.1mb	
			iS	06	03.20	
KLM	30.05	282	eP	59	37.00	-11.1X
BAL	30.19	205	eP	59	48.00	-1.2
KLB	30.64	203	iPc	59	51.90	-1.2
	0.8s	95.00nm			5.6mb	
QZH	30.70	338	eP	59	53.00	-0.6
Z	24s	2.70um			4.8MszX	
E	28s	3.70um				
PPI	30.73	275	ePc	59	54.00	0.0
	1.2s	423.20nm			6.1mb	
IPM	30.99	285	ePc	59	57.00	0.6
	1.0s	83.10nm			5.5mb	
CMS	31.18	155	eP	59	58.00	0.2
	0.8s	27.00nm			5.1mb	
GZH	31.51	328	eP	00	01.00	0.2
Z	28s	3.40um			4.9MszX	
N	14s	1.10um				
		S	05	04.00		
MUN	31.59	204	eP	00	00.20	-1.3
SNG	32.11	289	eP	00	06.50	0.3
		eS	05	36.20		
ADE	32.16	168	iPc	00	07.30	0.9
	0.9s	141.18nm			5.9mb	
PSI	32.64	280	ePc	00	11.00	0.2
	1.1s	101.40nm			5.6mb	
RKG	33.13	202	eP	00	19.00	4.2X
TSI	33.14	282	ePc	00	16.00	0.8
BWA	34.81	154	iPc	00	31.90	2.5
NNT	34.91	298	eP	00	26.20	-4.3X
BFD	35.19	164	eP	00	32.00	-0.6
SSE	35.61	345	P	00	35.00	-1.2
Z	20s	0.90um			4.5Msz	
N	14s	0.70um				
E	18s	1.90um				
		pP	00	42.00	24kmX	
		sP	00	52.50		
		S	06	08.00		
		PcS	06	48.00		
		SS	08	32.00		
CAN	35.82	154	iPc	00	39.30	1.3
NST	35.97	303	eP	00	40.50	1.1
CNB	35.98	154	eP	00	40.00	0.6
TOO	36.46	160	eP	00	45.00	1.7
	0.8s	71.00nm			5.6mb	
WHN	37.37	336	eP	00	51.50	0.6
Z	20s	1.20um			4.7Msz	
E	14s	1.00um				
		pP	00	57.50	20kmX	
BDT	37.69	304	eP	00	55.10	1.3
	1.0s	44.20nm			5.3mb	
GYA	37.93	323	P	00	56.00	0.1
E	16s	1.40um				
		S	06	47.00		
CHG	38.54	306	iPc	01	02.00	1.0
	1.0s	40.50nm			5.2mb	
		eS	07	20.00		
TSRJ	39.07	6	P	01	04.10	-1.1
KMI	39.49	318	Pc	01	09.00	-0.1
Z	20s	2.30um			5.0Msz	
N	13s	0.80um				
E	13s	0.70um				
		S	07	12.00		
MTMJ	40.34	8	P	01	13.90	-1.9
NIIJ	41.17	10	eP	01	23.90	1.4
TIA	41.54	343	eP	01	24.40	-1.2
Z	24s	1.10um			4.6MszX	
N	16s	0.80um				
E	16s	0.90um				
		S	07	34.00		
YAMJ	42.26	11	eP	01	30.80	-0.6
XAN	42.71	333	eP	01	34.50	-0.8
N	16s	1.20um				
CD2	42.93	325	eP	01	36.40	-0.7
Z	13s	1.50um			5.1MszX	
DL2	43.03	349	eP	01	40.00	2.3
Z	24s	1.40um			4.8MszX	
		S	08	00.00		
OFUJ	43.46	12	eP	01	46.40	5.3X
TIY	44.44	339	Pd	01	48.80	-0.5
N	19s	1.70um				
E	20s	2.40um				
		S	08	19.00		
BJI	45.38	344	eP	01	56.00	-0.6
	1.0s	18.00nm			4.9mb	
Z	21s	1.27um			4.8Msz	
		PP	03	39.00		
		eS	08	32.00		
		eSS	11	46.00		
SNY	45.57	352	Pc	01	57.40	-0.7
Z	28s	2.40um			5.0MszX	
N	28s	2.50um				
E	22s	2.10um				
		S	08	38.00		
LZH	46.82	330	Pc	02	07.50	-0.8
	2.0s	130.00nm			5.6mb	
Z	25s	1.50um			4.9MszX	
N	14s	0.80um				
E	14s	0.70um				
		sP	02	26.50		
		S	08	56.00		
CN2	47.31	355	eP	02	11.70	-0.1
	1.0s	10.00nm			4.8mb	
Z	22s	1.70um			5.0Msz	
N	13s	0.60um				
E	13s	0.90um				
		eS	09	00.00		
		ScS	12	03.00		
HHC	47.54	340	P	02	14.00	0.1
Z	30s	3.00um			5.1MszX	
N	21s	1.20um				
E	20s	2.10um				
		S	09	06.00		
BTO	47.87	338	eP	02	17.00	0.6
N	14s	0.70um				
E	14s	0.70um				
		eS	09	10.00		
MDJ	47.87	359	eP	02	16.20	0.0
N	10s	0.90um				
		S	09	15.00		
LSA	50.41	314	eP	02	37.50	0.9
GTA	51.41	329	P	02	43.40	-0.2
Z	24s	2.10um			5.1MszX	
N	15s	0.60um				
		S	10	00.00		
GUN	53.46	309	P	02	58.80	-0.6
	0.8s	73.00nm			5.7mb	
PKI	53.67	308	P	03	00.00	-0.9
DMN	53.92	308	P	03	02.00	-0.7
	0.8s	55.00nm			5.6mb	
GKN	54.47	308	P	03	05.80	-0.8
HYB	55.73	294	ePc	03	14.50	-1.3
GBA	55.78	289	Pd	03	12.80	-3.2X
	1.0s	23.00nm			5.2mb	
WMQ	61.02	325	iPc	03	51.80	-0.5
Z	28s	1.40um			5.0MszX	
		S	12	09.00		
KSH	66.10	316	P	04	27.20	1.3
QUE	69.62	304	eP	04	48.00	-0.2
SBA	76.69	173	P	05	31.00	2.5X
MAIO	77.26	308	iPc	05	23.70	-8.9X
	0.7s	7.94nm			4.9mb	
		eS	15	28.00		
MAW	78.59	201	iPc	05	40.70	1.6
SPA	86.56	180	iPc	06	21.40	0.9
	1.0s	16.50nm			5.2mb	
NAI	94.11	268	iPc	07	01.00	4.0X
INK	95.22	22	eP	07	00.50	-0.2
MBC	97.96	13	eP	07	12.50	-0.5
	0.9s	8.00nm			5.2mb	
BUL	100.41	249	iPdiff	07	22.20	-3.3X
BCAO	112.64	273	ePKPc	12	15.50	0.1
	1.0s	5.00nm				
ALQ	118.38	52	ePKP	12	26.00	0.0
Z	19s	0.94um			5.4Msz	
LKO	136.48	280	PKP	13	03.48	2.5X
NNA	148.35	119	ePKP	13	25.40	3.8X
	0.9s	15.13nm				
ARE	150.24	132	iPKPd	13	32.90	8.2X
CNCB	152.48	138	PKPc	13	31.00	2.6X
LPB	152.60	137	ePKP	13	29.00	0.6
			e	13	37.00	
ZOBO	152.77	137	PKP	13	32.00	3.2X
	1.0s	37.50nm				
			i	13	39.40	
CCH	153.26	141	(PKP)	13	28.50	-0.6
			i	13	40.60	
SIV	157.28	149	iPKP	13	35.90	1.7
BAO	161.00	183	ePKP	13	40.50	2.1
S.D. = 1.1	on	82	of	104	obs.	

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* JUN 25, 1990 20h 29m 31.05± 1.18s
3.437 S ±14.3km 131.130 E ±16.3km
DEPTH = 33.0km (normal)
4.1mb (2 obs.)
WEST IRIAN REGION (196)

AAI	2.94	265	eP	30	17.10	0.6
MTN	9.35	180	eP	31	45.00	-1.6
			eS	33	26.00	
WB5	16.65	169	eP	33	20.00	-3.6X
			e	33	32.10	
			eS	36	16.10	
WRA	16.70	169	P	33	27.00	2.7X
	0.6s	3.30nm			3.6mb	
QIS	18.91	155	eP	33	52.00	0.3
ASPA	20.29	173	eP	34	07.19	0.2
	0.6s	20.00nm			4.6mb	
			eS	37	40.40	
BWA	34.77	154	eP	36	23.70	3.0X
CAN	35.79	155	eP	36	30.60	1.3
CHG	38.63	306	eP	37	08.00	14.6X
BJI	45.39	344	eP	37	47.50	-0.8
CNCB	152.41	137	PKP	49	29.80	9.9X
LPB	152.53	137	(PKP)	49	24.00	4.1X
ZOBO	152.69	136	ePKP	49	28.00	7.7X
CCH	153.19	141	(PKP)	49	18.00	-2.6X
S.D. = 1.3	on	6	of	14	obs.	

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* JUN 25, 1990 20h 50m 34.48± 0.81s
37.124 N ±11.5km 72.558 E ±10.9km
DEPTH = 33.0km (normal)
4.4mb (5 obs.)
TAJIK SSR (715)

QUE	8.35	216	eP	52	36.10	-0.2
			eS	54	14.50	
MAIO	10.52	269	eP	53	02.00	-4.2X
			eS	54	55.00	
GKN	13.64	128	P	53	48.80	0.7
	0.4s	14.00nm			5.2mb	
DMN	14.22	128	P	53	55.80	0.1
	0.4s	6.00nm			4.6mb	
PKI	14.43	128	P	53	58.20	-0.5
	0.6s	5.00nm			4.2mb	
GBA	23.83	168	Pc	55	57.60	12.2X
	0.8s	3.70nm				
NB2	44.64	323	P	58	46.20	0.8
	0.7s	1.40nm			3.9mb	
PPI	45.41	139	ePc	59	01.70	9.8X
MBC	66.65	3	eP	01	22.50	-0.9
	0.5s	2.00nm			4.5mb	
S.D. = 0.9	on	6	of	9	obs.	

25d 21h

* JUN 25, 1990 21h 04m 47.76± 1.18s
7.070 S ±10.2km 129.737 E ±17.1km
DEPTH = 160.5 ± 14.5 km
4.9mb (8 obs.)
BANDA SEA (280)

AAI	3.69	335	ePd	05	46.20	1.2
MTN	5.90	167	eP	06	15.00	0.9
KNA	8.68	186	eP	06	50.00	-1.2
			eS	08	20.00	
WB5	13.50	161	eP	07	52.20	-1.9
			eS	11	14.10	
WRA	13.56	161	Pd	07	53.00	-1.8
	0.9s	40.90nm			4.8mb	
QIS	16.47	145	eP	08	31.50	0.4
			eS	11	26.50	
TRT	16.97	267	ePd	08	35.50	-1.7
ASPA	16.98	167	iPd	08	38.70	1.4
	0.7s	75.00nm			5.2mb	
			eS	11	38.90	
CTA	20.59	131	iP	09	23.00	7.1X
	0.7s	15.75nm			4.6mb	
NANU	20.61	220	iPd	09	17.20	1.2
	0.4s	17.00nm			4.8mb	
FORR	23.71	184	eP	09	48.00	1.8
	0.4s	26.00nm			5.1mb	
MRWA	25.56	209	eP	10	04.40	0.9
PSI	32.25	286	ePc	11	04.60	1.4
CHG	39.79	311	eP	12	06.80	0.0
GUN	54.80	311	P	14	02.80	-1.1
	0.4s	10.00nm			5.0mb	
PKI	54.97	311	P	14	04.60	-0.5
	0.4s	5.00nm			4.7mb	
DMN	55.22	311	P	14	06.60	-0.2
GKN	55.78	311	P	14	09.60	-1.1
	0.4s	13.00nm			5.2mb	
CNCB	150.50	144	iPKPc	24	27.40	9.6X
ZOBO	150.84	143	PKP	24	22.00	3.7X

S.D. = 1.4 on 17 of 20 obs.

? JUN 25, 1990 21h 21m 23.42± 3.25s
40.663 N ± 8.3km 29.772 E ±26.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

HRT	0.18	334	iPg	21	27.40	0.0
			eSg	21	30.60	
YLV	0.32	253	iPg	21	30.00	-0.1
			iSg	21	36.50	
IZI	0.40	215	iPg	21	31.60	0.0
			iSg	21	38.60	
CTT	1.13	296	ePn	21	44.60	0.1

S.D. = 0.1 on 4 of 4 obs.

& JUN 25, 1990 21h 26m 38.60s
40.323 N 124.512 W
DEPTH = 21.0km
NEAR COAST OF NORTHERN CALIF. (35)
<BRK>. ML 3.3 (BRK).

WDC	1.53	80	iPc	27	02.90	-1.9
			eS	27	23.20	
LTCM	1.83	93	eP	27	07.60	-1.6
MIN	2.22	88	iPd	27	12.90	-2.2
L8FM	2.24	62	eP	27	14.10	-1.2
ORV	2.44	107	eP	27	15.80	-2.2
			e	27	42.60	
			iS	27	44.70	
PCC	3.27	149	eP	27	26.20	-3.6
ARN	3.77	141	eP	27	34.20	-2.7
GCC	3.83	148	eP	27	33.90	-3.8
SAO	4.29	145	eP	27	39.70	-4.5
KVN	5.11	102	eP	27	53.30	-2.7

10 obs. associated

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* JUN 25, 1990 21h 41m 08.81± 2.74s
14.933 S ±17.3km 177.394 W ±14.4km
DEPTH = 429.0 ± 28.0 km
4.4mb (7 obs.)
FIJI ISLANDS REGION (181)

DZM	16.88	243	iPc	44	42.30	0.8
WB5	46.17	257	eP	48	55.00	0.0
WRA	46.20	257	Pc	48	56.00	0.8
	0.5s	4.30nm			4.1mb	
ASPA	46.60	251	eP	48	57.80	-0.5
	0.4s	78.00nm			5.4mb	X
FORR	52.17	242	eP	49	38.00	-1.9
PRI	73.81	45	ePd	52	00.00	0.2
CMB	75.02	43	ePd	52	06.20	-0.3
WDC	75.05	40	eP	52	06.70	0.1
ORV	75.13	41	ePd	52	06.80	-0.2
SPA	75.16	180	iPd	52	06.40	-0.6
	1.1s	20.24nm			4.7mb	
KVN	77.07	43	iP	52	18.00	0.0
TNP	77.17	45	iP	52	11.85	-6.7X
PNT	81.74	34	eP	52	42.00	-0.1
	0.7s	10.00nm			4.6mb	
NEW	82.54	36	iP	52	46.00	-0.3
	0.9s	6.14nm			4.3mb	
PV09	82.98	47	iP	52	49.50	0.5
ANMO	83.49	51	iP	52	52.50	1.0
	1.0s	6.25nm			4.3mb	
LRM	84.07	40	eP	52	54.30	0.1
BW06	84.54	43	iP	52	56.00	-0.6
	1.0s	7.00nm			4.4mb	
MAW	86.97	199	iP	53	08.50	0.8
SES	87.05	36	eP	53	08.00	-0.3
RSSD	88.75	44	iP	53	16.50	-0.2
MBC	97.25	12	eP	53	54.00	-0.6
	0.4s	1.00nm			4.4mb	
CLL	142.76	349	ePKP	59	52.00	-1.4
PRU	143.71	347	PKP	59	54.10	-1.0
ENN	144.16	356	ePKP	59	55.00	-0.8
	0.7s	11.00nm				
MEM	144.31	356	PKP	59	55.70	-0.3
SNF	144.49	358	PKPd	59	56.30	-0.1
GRF	144.63	350	iPKPd	59	57.60	0.9
	1.0s	36.00nm				
SRO	144.73	342	iPKP	59	58.90	2.0
KHC	144.73	347	iPKPd	59	57.60	0.7
	1.0s	14.00nm				
ZST	144.74	343	ePKP	59	57.60	0.7
DOU	144.89	358	PKPc	59	57.80	0.7
ADI	145.36	307	iPKPd	00	01.80	3.3X
DSI	145.81	305	iPKPd	00	03.00	3.8X
FLN	146.17	4	iPKPd	00	01.20	2.0X
	0.6s	10.80nm				
LDF	146.36	3	iPKPd	00	01.70	2.1X
	0.8s	8.05nm				
CDF	146.40	354	iPKPd	00	02.40	2.6X
	0.8s	12.10nm				
GRR	146.52	4	iPKPd	00	02.50	2.7X
	0.8s	18.80nm				
LPF	146.86	4	iPKPd	00	03.70	3.4X
	0.8s	32.25nm				
HAU	146.88	355	ePKP	00	03.60	3.2X
	0.8s	5.35nm				
BSF	147.01	355	ePKP	00	03.80	3.0X
	0.6s	3.60nm				
SQTA	147.02	349	iPKPd	00	04.10	3.3X
	0.5s	3.60nm				
			i	00	11.60	
FVI	147.31	347	PKP	00	04.00	2.9X
LOR	147.74	358	iPKPd	00	05.90	4.0X
	1.0s	14.00nm				
SSF	147.96	359	iPKPd	00	06.60	4.4X
	0.8s	10.05nm				
LBF	148.03	358	iPKPd	00	06.70	4.4X
	0.8s	9.40nm				
AVF	148.23	359	iPKPd	00	06.80	4.2X
	0.8s	9.40nm				
MFF	148.34	4	iPKPd	00	07.20	4.4X
	0.8s	8.05nm				
SMF	148.37	358	ePKP	00	07.40	4.5X
	1.0s	9.00nm				
BGF	148.47	360	iPKPd	00	07.70	4.7X
	0.9s	14.75nm				
VAI	148.73	352	PKP	00	08.20	4.8X
TCF	148.74	1	iPKPd	00	08.20	4.7X
	0.8s	6.05nm				
LSF	148.77	1	iPKPd	00	08.00	4.5X
	0.8s	10.75nm				
MAF	148.81	0	iPKPd	00	08.90	5.4X
	0.8s	7.40nm				
ORO	149.07	353	PKP	00	06.00	1.9X
LPL	149.32	354	iPKPd	00	10.80	6.2X
	0.8s	6.05nm				
LPG	149.33	354	iPKPd	00	11.10	6.4X
	0.8s	6.70nm				
BOB	149.70	350	PKP	00	11.00	6.0X
RJF	149.71	2	ePKP	00	10.60	5.7X
	0.8s	5.35nm				
BNI	149.78	354	PKP	00	12.10	6.9X
LFF	150.05	3	iPKPd	00	11.60	6.2X
	0.8s	6.70nm				
SFI	150.05	347	PKP	00	12.50	7.1X
CAF	150.10	1	iPKPd	00	12.00	6.4X
	0.6s	4.95nm				
PGD	150.12	347	PKP	00	12.00	6.2X
ARV	150.19	345	PKP	00	12.00	6.3X
FIR	150.32	347	ePKP	00	10.00	4.2X
LPO	150.32	2	iPKPd	00	12.30	6.4X
	0.6s	5.40nm				
SBF	150.87	353	ePKP	00	13.30	6.5X
	0.7s	6.60nm				
FRF	151.26	354	ePKP	00	14.30	7.0X
	0.9s	6.55nm				
LRG	151.39	354	ePKP	00	14.70	7.2X
	0.8s	5.35nm				
DUI	151.46	341	PKP	00	12.00	4.3X
LMR	151.50	354	ePKP	00	14.90	7.3X
SDI	151.61	342	PKP	00	14.50	6.6X
PGF	151.94	350	ePKP	00	15.90	7.4X
	0.8s	10.75nm				
SGO	152.17	339	PKP	00	11.00	2.4X

S.D. = 0.8 on 31 of 75 obs.

& JUN 25, 1990 22h 06m 59.65s
41.901 N 112.406 W
DEPTH = 5.7km
UTAH (478)
<SLC-P>. ML 3.4 (SLC). Felt in the epicentral orea.

PTI	0.97	2	eP	07	18.00	-0.6
HPI	1.88	345	eP	07	32.50	-0.4
BW06	2.29	67	eP	07	40.00	1.2
MCMT	2.94	354	ePn	07	50.80	2.7
BGMT	3.34	4	ePn	07	57.50	3.8
LRM	3.92	360	ePn	08	07.40	5.4
HRY	4.83	5	ePn	08	18.60	3.9

7 obs. associated

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* JUN 25, 1990 22h 46m 28.66± 2.39s
4.452 N ±12.6km 127.396 E ±18.7km
DEPTH = 135.7 ± 21.9 km
5.0mb (4 obs.)
TALAUD ISLANDS (263)

MNI	3.93	221	ePc	47	28.70	0.3
			eS	48	16.00	
MTN	17.58	168	eP	50	25.50	-1.3
QIZ	22.44	312	eP	51	18.00	1.0
WB5	25.13	164	eP	51	43.10	0.3
WRA	25.19	164	Pd	51	43.60	0.3
	0.5s	38.20nm			5.2mb	
ASPA	28.66	167	eP	52	15.30	0.5
	0.4s	10.00nm			4.9mb	
CHG	31.23	300	eP	52	37.50	-0.1
XAN	34.08	332	P	52	56.00	-6.1X
CD2	34.47	322	eP	53	05.00	-0.5
FORR	35.11	179	iPc	53	11.10	0.3
	0.4s	42.00nm			5.6mb	X
BJI	36.85	346	eP	53	25.50	0.2
BRS	40.03	144	iPd	53	52.00	0.0
GTA	42.83	328	P	54	15.30	0.4
GUN	45.85	305	P	54	39.60	0.1
	0.4s	23.00nm			5.2mb	
PKI	46.10	305	P	54	40.40	-1.1
DMN	46.37	304	P	54	43.80	0.3
GKN	46.90	305	P	54	46.80	-0.8
	0.4s	8.00nm			4.8mb	

S.D. = 0.7 on 16 of 17 obs.

JUN 26, 1990 00h 04m 12.01± 0.68s
18.785 S ± 9.2km 169.206 E ± 6.3km
DEPTH = 253.1 ± 6.1 km
4.9mb (11 obs.)
VANUATU ISLANDS (186)

PVC	1.34	321	iPc	04	49.50	-0.2
			iS	05	18.00	
DZM	4.17	218	iPc	05	18.30	-0.2
			iS	06	11.40	
HNR	12.92	315	eP	07	09.00	0.9
BRS	17.36	237	iPc	08	01.50	1.4
CTA	21.68	263	iPc	08	44.80	1.4
	1.0s	80.00nm			5.2mb	
KDB	23.27	290	eP	09	00.00	1.2
CMS	24.59	235	eP	09	11.00	0.1

	1.0s	48.00nm			5.0mb	
QIS	27.91	261	eP	09	40.50	-0.6
STK	28.07	237	iPc	09	42.70	0.3
	0.6s	21.00nm			4.9mb	
		e		10	27.10	
WB5	32.86	262	iPd	10	22.90	-1.4
		e		15	21.30	
WRA	32.88	262	Pd	10	23.10	-1.4
	0.7s	27.70nm			5.0mb	
ASPA	33.21	255	iPd	10	26.60	-0.8
	0.4s	513.00nm			6.5mb	X
		eS		15	27.10	
MTN	37.05	273	iPc	10	59.50	-0.3
FORR	38.99	244	eP	11	15.20	-0.4
MBL	46.32	258	iPd	12	14.30	-0.5
	0.3s	26.00nm			5.0mb	
NANU	50.15	256	eP	12	43.70	-0.4
KDC	82.62	20	P	16	07.30	-0.5
	0.9s	25.00nm			4.9mb	
GCC	85.28	48	ePc	16	21.70	0.1
PRS	85.41	49	ePc	16	22.70	0.4
BRK	85.49	48	eP	16	22.50	-0.1
SAO	85.55	49	eP	16	23.00	0.0
MHC	85.68	48	eP	16	24.20	0.5
ARN	85.76	48	P	16	24.20	0.2
BCH	85.83	51	P	16	24.50	0.0
PRI	85.83	50	ePc	16	25.00	0.5
TTA	85.91	15	P	16	23.30	-0.9
	0.8s	12.07nm			4.8mb	
ABL	86.32	51	P	16	25.90	-1.1
WDC	86.56	45	ePc	16	28.00	0.2
ORV	86.79	46	ePc	16	29.00	0.1
PAS	86.80	52	eP	16	29.00	-0.1
CMB	86.88	48	ePc	16	29.50	0.1
MWC	86.92	52	eP	16	30.00	0.1
MIN	87.08	46	eP	16	30.00	-0.5
ISA	87.22	51	eP	16	32.00	0.9
SBB	87.29	52	eP	16	32.00	0.5
BAR	87.33	54	eP	16	32.00	0.3
RVR	87.33	53	eP	16	32.00	0.4
LBFM	87.36	45	P	16	31.80	-0.1
PLM	87.46	54	eP	16	33.00	0.5
CLC	87.93	51	eP	16	34.00	-0.5
GSC	88.30	52	eP	16	36.00	-0.4
TPC	88.38	53	eP	16	36.00	-0.7
GLA	88.90	55	eP	16	40.00	0.8
KVN	88.93	48	P	16	38.50	-0.9
IMA	89.09	14	P	16	38.30	-1.1
	0.7s	2.91nm			4.3mb	
TNP	89.15	49	P	16	40.00	-0.4
	1.0s	13.33nm			4.8mb	
FBA	89.65	17	P	16	40.00	-1.9
	0.9s	16.67nm			5.0mb	
PNT	92.41	38	eP	16	55.00	0.1
MBC	103.80	14	ePdiff	17	45.00	-0.7X
	0.7s	1.00nm			4.7mb	
NB2	135.00	345	PKP	23	01.70	-0.5X
	0.6s	0.90nm				
KHC	143.92	333	iPKPd	23	17.00	-1.6
	1.0s	7.00nm				
SKO	144.18	317	iPKP	23	18.50	-0.8
GRF	144.47	335	ePKPc	23	18.30	-1.2
	1.2s	24.00nm				
	Z 20s	0.10um			4.6Msz	
OHR	145.03	316	ePKP	23	20.50	-0.3
DCN	145.40	356	iPKPd	23	20.60	-0.3
	0.8s	80.00nm				
DLE	145.41	356	ePKP	23	21.20	0.3
MEM	145.54	341	PKPc	23	22.40	1.2
FVI	146.16	330	PKP	23	23.00	0.6
SQTA	146.40	333	iPKPc	23	24.00	1.0
	0.5s	7.20nm				
		i		23	26.20	
		i		24	28.50	
DOU	146.42	342	PKPc	23	23.80	1.1
CDF	147.01	338	ePKP	23	25.60	1.7
	0.8s	10.75nm				
BSF	147.67	338	ePKP	23	27.00	2.0
	0.8s	5.35nm				
HAU	147.68	338	ePKP	23	27.30	2.4X
	0.6s	6.30nm				
BCAO	148.01	247	iPKPd	23	30.10	3.7X
	0.5s	5.00nm				
		id		24	33.00	
ARV	148.28	326	PKP	23	29.50	3.6X
VAI	148.51	333	PKP	23	28.90	2.8X
SFI	148.55	328	PKP	23	30.70	4.4X
PGD	148.65	328	PKP	23	29.00	2.3X
TDS	148.69	317	PKP	23	31.00	4.3X
CRE	148.71	327	PKP	23	29.00	2.3X
ASS	148.72	326	PKP	23	27.00	0.3X
SGO	148.82	320	PKP	23	30.50	3.7X
FLN	148.95	347	ePKP	23	30.10	3.3X
	0.8s	13.45nm				
BSS	148.98	320	PKP	23	30.00	2.9X
SDI	148.99	323	PKP	23	30.50	3.3X
LDF	149.03	346	ePKP	23	30.40	3.5X
	0.8s	8.05nm				
ORO	149.04	334	PKP	23	31.00	3.8X
BDI	149.07	329	PKP	23	29.50	2.3X
BOB	149.07	331	PKP	23	31.50	4.3X
LOR	149.16	340	ePKP	23	30.90	3.7X
	0.6s	9.90nm				
PII	149.35	329	PKP	23	30.00	2.5X
LBF	149.37	340	ePKP	23	31.80	4.2X
	0.9s	6.55nm				
GRR	149.39	347	ePKP	23	31.60	4.1X
	0.8s	13.45nm				
SSF	149.45	341	ePKP	23	31.90	4.3X
	0.8s	14.10nm				
RDP	149.58	324	PKP	23	32.00	4.0X
LPL	149.63	335	ePKP	23	33.00	4.8X
	0.7s	5.50nm				
LPG	149.64	335	ePKP	23	33.10	4.8X
	0.8s	9.40nm				
SMF	149.71	340	ePKP	23	32.30	4.3X
	0.8s	5.35nm				
SOI	149.73	315	PKP	23	33.00	4.7X
AVF	149.74	341	ePKP	23	31.90	3.9X
	0.8s	3.35nm				
LPF	149.77	347	ePKP	23	32.60	4.6X
	0.8s	18.80nm				
BNI	150.04	335	PKP	23	33.80	5.1X
BGF	150.11	341	ePKP	23	33.30	4.7X
	0.6s	6.30nm				
MAF	150.50	341	ePKP	23	34.40	5.2X
	0.6s	2.70nm				
TCF	150.55	341	ePKP	23	34.30	5.0X
	0.7s	5.50nm				
SBF	150.68	332	ePKP	23	34.30	4.7X
	0.8s	8.05nm				
MNO	150.71	316	PKP	23	39.00	8.9X
LSF	150.78	342	ePKP	23	34.50	4.9X
	0.6s	6.30nm				
MFF	150.90	345	ePKP	23	35.10	5.3X
	0.6s	5.40nm				
PGF	150.97	329	ePKP	23	35.40	5.2X
	0.6s	17.15nm				
FRF	151.26	333	ePKP	23	35.80	5.4X
	0.6s	3.60nm				
LRG	151.47	333	ePKP	23	36.40	5.7X
	0.8s	5.35nm				
LMR	151.51	333	ePKP	23	36.30	5.5X
	0.7s	4.40nm				
LFF	152.20	342	ePKP	23	38.20	6.5X
	0.6s	3.60nm				
LPO	152.30	341	ePKP	23	38.30	6.4X
	0.6s	3.60nm				

S.D. = 0.9 on 60 of 105 obs.

JUN 26, 1990 00h 53m 55.17± 1.61s
3.390 S ± 7.9km 100.799 E ± 7.1km
DEPTH = 57.6 ± 12.5 km
5.4mb (20 obs.) 4.7Msz (6 obs.)
SOUTHERN SUMATERA (274)

PPI	2.94	352	ePc	54	40.20	-0.3
			eS	55	28.50	
KGM	5.93	25	ePd	55	23.10	0.6
			e	56	35.80	
KLM	6.50	7	eP	55	42.00	11.5X
IPM	7.92	2	ePc	55	50.00	-0.2
	1.0s	59.50nm			5.3mb	
			e	56	03.30	
SNG	10.50	359	eP	56	21.80	-3.8X
	1.0s	88.00nm			5.8mb	
			eS	59	20.80	
TRT	12.53	110	ePd	56	47.80	-5.1X
KKM	18.02	59	ePd	58	04.70	1.3
MKS	18.71	96	ePc	58	12.50	0.9
TSM	18.84	66	eP	58	13.50	0.2
LOE	20.68	3	eP	58	30.00	-2.9
CHG	22.14	355	eP	58	46.00	-1.5
	1.0s	45.25nm			4.9mb	

OIZ	23.99	21	P	59	06.90	1.3
	N 13s	1.30um				
	E 13s	1.40um				
			pP	59	15.00	29kmX
BAG	27.74	44	eP	59	40.00	-0.7
GYA	30.21	10	P	00	02.80	0.1
	E 16s	2.10um				
OZH	33.04	31	eP	00	25.00	-2.3
	Z 18s	1.20um			4.6Msz	
PKI	34.17	335	P	00	37.60	0.1
	0.7s	33.00nm			5.4mb	
CD2	34.22	5	eP	00	36.50	-1.1
	Z 16s	1.00um			4.6MszX	
	N 12s	1.30um				
			eS	06	02.00	
GUN	34.28	336	P	00	39.20	0.8
DMN	34.33	335	P	00	39.00	0.2
	0.9s	79.00nm			5.6mb	
GKN	34.88	335	P	00	43.00	-0.3
WHN	36.14	20	eP	00	54.00	0.2
	Z 16s	1.19um			4.8MszX	
	N 14s	2.31um				
	E 14s	1.00um				
WB5	36.61	119	eP	00	57.20	-0.8
WRA	36.61	119	Pc	00	56.90	-1.1
	1.1s	23.70nm			5.0mb	
ASPA	37.80	125	iPc	01	07.80	-0.1
	1.0s	25.00nm			5.1mb	
	Z 21s	1.19um			4.7Msz	
			i	01	11.60	
			LR	18	04.50	
XAN	38.01	11	P	01	08.40	-1.1
	1.0s	200.00nm			6.0mb	
	N 12s	0.80um				
	E 13s	1.20um				
NJ2	39.20	25	Pc	01	20.70	1.3
	Z 18s	0.90um			4.6Msz	
LZH	39.37	4	iPc	01	22.00	1.0
	2.0s	180.00nm			5.6mb	
	Z 19s	1.90um			4.9Msz	
	N 14s	1.10um				
			eS	07	25.00	
			ScS	11	26.00	
SSE	39.42	28	Pd	01	23.00	1.8
	1.0s	39.00nm			5.2mb	
	Z 20s	0.92um			4.6Msz	
	N 14s	1.10um				
	E 14s	1.00um				
			pP	01	31.00	27kmX
OIS	41.45	117	ePc	01	37.50	-0.7
TIA	42.25	20	eP	01	45.00	0.5
TIY	42.30	14	Pc	01	45.00	0.1
	1.0s	100.00nm			5.5mb	
	Z 16s	1.40um			4.9MszX	
	N 16s	1.30um				
			S	08	07.00	
			sS	08	21.00	
GTA	42.60	359	iPc	01	48.00	0.6
	1.2s	100.00nm			5.5mb	
	Z 16s	0.90um			4.8MszX	
	E 16s	1.00um				
BTO	44.58	10	P	02	04.00	0.5
	N 13s	1.50um				
	E 13s	0.50um				
			pP	02	12.00	27kmX
			eS	08	36.00	
HHC	45.11	12	Pc	02	09.40	1.7
	1.2s	200.00nm			5.8mb	
BJI	45.47	17	eP	02	11.50	1.2
	1.2s	91.00nm			5.5mb	
	Z 16s	2.00um			5.1MszX	
	N 14s	1.29um				
OUE	46.49	318	eP	02	17.60	-1.3
CTA	47.29	114	iPd	02	25.30	0.1
	1.0s	23.00nm			5.1mb	
WMQ	48.45	347	iPc	02	34.60	0.7
	Z 24s	0.40um			4.3MszX	
			S	09	34.00	
SNY	49.54	22	Pc	02	41.50	-0.7
	Z 20s	0.90um			4.8Msz	
	N 20s	1.20um				
	E 19s	1.20um				
			eS	09	53.00	
TSRJ	50.84	37	eP	02	52.60	0.4
CN2	51.94	23	Pc	03	00.00	-0.4
	1.0s	100.00nm			5.8mb	
	Z 14s	1.30um			5.1MszX	

26d 01h

N 14s 1.10um
E 14s 0.40um
pP 03 06.80 23kmX
SS 14 00.00
MTMJ 52.64 38 eP 03 05.60 -0.3
MAT 52.86 38 eP 03 06.00 -1.4
1.2s 46.88nm 5.4mb
CHJJ 53.03 39 eP 03 08.10 -0.5
MDJ 54.29 25 eP 03 18.00 0.3
BRS 55.00 121 iPc 03 23.50 0.2
MAIO 55.17 319 eP 03 23.00 -1.4
eS 11 20.00
KRI 71.02 253 iPc 04 53.00 -16.6X
PRNI 71.08 304 eP 05 10.00 0.3
BUL 72.12 250 iPd 05 09.90 -6.3X
ipP 05 21.20 37kmX
BBTK 75.52 312 eP 05 34.00 -1.6
VRI 81.41 317 ePc 06 08.50 1.1
MLR 81.85 317 iPd 06 10.00 0.2
1.0s 16.30nm 5.0mb
SUF 86.01 334 iP 06 30.30 0.0
0.9s 0.70nm 3.8mb X
NUR 86.15 331 eP 06 31.00 0.0
KRA 86.71 320 eP 06 42.50 8.5X
e 06 49.70
SOD 87.06 338 eP 06 36.00 0.6
SRO 87.44 318 eP 06 38.50 0.9
e 06 46.10
TDS 87.88 310 P 06 42.00 2.1
ZST 88.30 318 eP 06 41.60 -0.1
e 06 57.60
SGO 88.75 311 P 06 50.00 6.0X
KSP 89.13 321 eP 06 46.00 0.4
LJU 89.82 316 eP 06 49.00 0.0
SDI 89.98 312 P 06 54.00 4.1X
PRU 90.16 320 eP 06 51.00 0.6
e 07 02.00
AZI 90.28 312 P 07 02.00 10.9X
KHC 90.72 319 P 06 54.00 0.9
ARV 90.75 313 P 06 54.00 0.6
CLL 91.24 321 eP 07 13.00 17.6X
HFS 91.47 330 eP 06 55.20 -1.0
1.0s 5.20nm 4.9mb
Z 24s 0.06um 4.0MszX
SFI 91.57 314 P 07 06.50 9.5X
NB2 92.74 331 P 07 01.90 -0.2
0.9s 3.60nm 4.8mb
PNT 122.81 30 ePKP 12 47.00 0.7
ALQ 139.69 36 ePKP 13 13.00 -6.1X
BAO 143.79 238 ePKP 13 14.50 -12.2X
MEO 143.95 28 iPKPd 13 24.20 -2.1
LNO 144.19 23 iPKPc 13 25.00 -1.5
e 13 33.60
TUL 144.19 23 iPKPc 13 25.00 -1.7
1.0s 42.70nm
e 13 33.50
CBN 145.31 357 ePKP 13 29.00 0.5
UYO 146.24 23 iPKPd 13 30.60 0.4
SIV 153.69 222 PKP 13 49.00 7.0X
CCH 155.67 212 PKP 14 03.50 18.5X
CNCB 157.07 209 ePKP 14 04.00 16.9X
LPB 157.37 209 ePKP 13 58.00 10.7X
ZOBO 157.61 209 ePKP 13 50.00 2.2
S.D. = 1.1 on 68 of 85 obs.

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* JUN 26, 1990 01h 39m 51.95± 1.47s
36.603 N ±13.9km 71.043 E ± 7.9km
DEPTH = 185.6 ± 19.3 km
4.5mb (8 obs.)
AFGHANISTAN-USSR BORDER REGION (717)

QUE 7.25 209 iPc 41 38.00 1.5
e 54 25.70
MAIO 9.31 272 ePn 42 02.00 -1.4
eSn 43 35.00
GKN 14.33 123 P 43 08.00 0.2
DMN 14.90 123 P 43 14.20 -0.7
PKI 15.13 122 P 43 17.60 -0.3
GUN 15.24 120 P 43 19.20 0.0
MLR 34.76 299 Pd 46 28.00 1.7
0.7s 4.20nm 4.2mb
NUR 37.76 324 iP 46 51.60 0.5
SUF 37.85 328 iP 46 52.20 0.4
0.5s 12.70nm 4.8mb
SOD 39.66 335 iP 47 07.50 0.8
HFS 43.01 322 eP 47 33.50 -0.6
0.6s 12.80nm 4.7mb

Z 14s 0.05um 3.6MszX
NB2 44.32 323 P 47 44.00 -0.7
0.6s 9.00nm 4.5mb
BCAO 57.73 249 iPd 49 24.00 -1.7
0.2s 8.00nm 5.2mb
MBC 67.23 3 ePc 50 27.60 0.1
0.8s 13.00nm 4.7mb
INK 73.80 9 eP 51 07.00 0.0
YKA 81.14 3 eP 51 47.00 -0.3
0.5s 1.70nm 4.0mb
WRA 82.02 122 P 51 53.00 0.5
0.5s 0.60nm 3.6mb
S.D. = 1.0 on 17 of 17 obs.

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* JUN 26, 1990 01h 46m 18.76± 1.20s
47.057 N ±11.6km 1.372 E ± 6.4km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 1.9 (LDG).

LSF 0.81 172 Pg 46 34.10 -0.4
Sg 46 46.00
Sn 46 48.50
TCF 0.96 143 Pg 46 37.00 -0.1
Sg 46 49.40
Sn 46 51.70
BGF 1.13 116 Pg 46 40.20 0.3
Sg 46 54.30
MFF 1.14 247 Pg 46 40.20 0.2
Sg 46 55.30
MAF 1.17 135 Pg 46 41.00 0.3
Sg 46 56.80
AVF 1.38 100 Pg 46 44.40 0.3
Sg 47 01.60
SSF 1.46 89 Pg 46 44.50 -0.6
Sg 47 04.80
S.D. = 0.5 on 7 of 7 obs.

% JUN 26, 1990 01h 57m 26.56± 0.65s
43.111 N ±10.0km 0.655 W ± 4.7km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
MD 1.0 (STR).

ATE 0.04 235 Pg 57 28.70 0.0
Sg 57 30.34
ESCF 0.07 119 Pg 57 28.80 -0.1
Sg 57 30.47
MADF 0.13 286 Pg 57 29.91 0.2
Sg 57 32.42
ISSF 0.13 231 Pg 57 29.93 0.1
Sg 57 32.83
OGE 0.14 66 Pg 57 29.97 0.0
ELYF 0.25 284 Pg 57 31.77 -0.2
Sg 57 36.12
BOH 0.26 268 Pg 57 32.01 -0.1
Sg 57 36.30
S.D. = 0.2 on 7 of 7 obs.

JUN 26, 1990 02h 36m 21.72± 2.67s
1.158 N ± 6.5km 122.980 E ± 7.7km
DEPTH = 31.1 ± 20.4 km
5.1mb (9 obs.) 4.4Msz (5 obs.)
MINAHASSA PENINSULA (265)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 28C
Centroid Location:
Origin Time 02:36:28.9 1.4
Lat 1.94N 0.10 Lon 123.01E 0.08
Dep 15.0 FIX Half-duration 1.5
Moment Tensor; Scale 10**16 Nm
Mrr= 6.60 0.59 Mtt=-6.26 0.51
Mff=-0.34 0.92 Mrt=-4.68 2.21
Mrf= 4.78 1.56 Mtf=-0.20 0.47
Principal Axes:
T Val= 10.16 Plg=61 Azm=238
N -2.12 19 110
P -8.04 21 12
Best Double Couple:Mo=9.1*10**16
NP1:Strike= 72 Dip=29 Slip= 49
NP2: 297 68 110

MNI 1.88 81 ePc 36 52.50 0.2
eS 37 13.00
TSM 5.77 302 iPd 37 48.00 0.5
0.2s 81.60nm 6.0mb X

e 42 42.00
DAV 6.43 24 eP 37 56.10 -0.7
1.3s 3384.61nm 7.0mb X
AAI 7.09 133 eP 38 14.40 8.3X
MKS 7.24 209 ePd 38 13.20 5.1X
KKM 8.31 306 ePc 38 21.80 -1.4
QCP 13.52 352 eP 39 22.00 -11.9X
BAG 15.34 351 eP 39 52.00 -5.9X
MTN 16.09 150 eP 40 09.00 1.6
QIZ 21.94 325 eP 41 15.00 0.4
N 15s 1.60um
IPM 22.19 279 ePd 41 18.30 1.2
MBL 22.39 188 eP 41 16.00 -3.1X
SNG 23.08 286 eP 41 27.60 1.7
e 45 37.10
WB5 23.70 152 eP 41 32.00 0.1
i 41 43.70 46kmX
GZH 23.72 337 P 41 40.20 8.2X
Z 16s 1.30um 4.5MszX
S 45 48.00
WRA 23.75 153 P 41 34.00 1.7
0.7s 17.10nm 4.7mb
PSI 24.09 274 ePc 41 36.80 1.1
1.2s 136.80nm 5.4mb
NANU 24.67 197 eP 41 40.60 -0.6
GUMO 24.93 59 eP 41 40.50 -3.3X
Z 23s 0.68um 4.1MszX
eS 46 14.00
NNT 25.69 297 eP 41 49.20 -1.7
LOE 26.41 309 eP 41 56.00 -1.6
ASPA 26.86 157 eP 42 02.00 0.2
Z 21s 0.93um 4.3Msz
LR 52 51.90
GYA 29.65 329 eP 42 28.60 1.6
S 47 23.00
SSE 29.82 357 P 42 31.00 2.7
1.5s 49.00nm 5.1mb
Z 20s 0.60um 4.2Msz
N 14s 0.30um
S 47 20.00
WHN 30.35 345 eP 42 34.00 1.0
Z 18s 0.70um 4.4Msz
N 14s 1.20um
KMI 30.82 322 eP 42 41.50 4.0X
FORR 32.20 172 eP 42 47.00 -2.2
CD2 34.75 330 eP 43 11.00 -0.4
sS 48 59.50
XAN 35.26 340 P 43 16.00 0.2
E 14s 0.70um
S 48 47.00
STK 37.29 153 eP 43 30.30 -2.6
0.9s 13.00nm 4.8mb
TIY 37.65 346 eP 43 34.50 -1.4
Z 22s 1.00um 4.6Msz
N 16s 0.80um
S 49 23.00
MAT 37.93 20 eP 43 45.00 6.8X
1.5s 69.44nm 5.3mb
eS 49 25.00
LZH 39.02 335 eP 43 53.50 5.9X
2.5s 90.00nm 5.1mb
Z 23s 0.90um 4.5MszX
E 12s 0.40um
PP 45 21.50
S 49 45.00
BJI 39.19 352 eP 43 49.00 0.3
1.7s 53.00nm 5.0mb
Z 20s 0.60um 4.4Msz
SNY 40.49 1 eP 43 56.50 -2.8
BTO 40.98 345 eP 44 07.00 3.4X
N 15s 0.80um
E 15s 0.60um
eS 50 16.00
CN2 42.51 3 eP 44 19.40 3.5X
Z 25s 0.50um 4.3MszX
eS 50 36.00
BWA 42.69 148 eP 44 15.90 -1.7
GTA 43.55 334 P 44 26.00 1.4
Z 24s 0.60um 4.4MszX
E 14s 0.40um
CAN 43.68 149 eP 44 26.60 1.0
GUN 44.35 310 P 44 32.00 0.4
PKI 44.55 309 P 44 33.20 0.1
DMN 44.80 309 P 44 35.40 0.3
GKN 45.35 310 P 44 39.00 -0.4
HYB 46.56 293 eP 44 48.00 -0.8
GBA 46.72 288 Pc 44 49.50 -0.6

1.0s 11.70nm 4.8mb
WMO 52.80 328 eP 45 37.50 1.0
Z 24s 0.50um 4.5MszX
S 53 04.90
KSH 57.27 318 eP 46 09.50 0.4
QUE 60.41 304 eP 46 30.00 -1.1
MAIO 68.14 309 iPc 47 21.00 -0.3
eS 56 24.00
MAW 80.07 200 iP 48 30.10 0.4
PRNI 87.68 300 eP 49 08.00 -1.0
SPA 91.15 180 iPc 49 25.30 0.6
1.2s 27.46nm 5.5mb
KRI 93.55 253 iPd 49 20.50 -16.2X
INK 93.91 21 eP 49 36.00 -1.2
BUL 94.50 250 iPc 49 35.10 -5.9X
MBC 95.26 12 eP 49 49.00 5.7X
CNCB 161.07 146 PKP 56 22.00 0.5
ZOBO 161.42 145 PKP 56 24.00 2.1
Z 24s 0.18um 5.0Msz
S.D. = 1.3 on 44 of 59 obs.

% JUN 26, 1990 03h 03m 27.91± 2.57s
53.188 N ±18.9km 4.913 W ±15.8km
DEPTH = 10.0km (geophysicist)
UNITED KINGDOM (533)

YRH 0.39 154 eP 03 35.80 -0.2
ETA 0.93 238 eP 03 45.80 0.2
eS 04 00.90
DLE 0.99 276 eP 03 45.30 -1.3
eS 03 59.10
ECP 1.34 222 eP 03 52.70 0.1
eS 04 11.50
DCN 1.43 277 eP 03 55.00 1.2
e 04 12.00
S.D. = 1.2 on 5 of 5 obs.

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* JUN 26, 1990 03h 12m 59.46± 1.81s
41.269 N ±11.7km 29.364 E ±10.7km
DEPTH = 11.6 ± 7.1 km
TURKEY (366)

ISK 0.31 229 iPg 13 05.90 0.0
iSg 13 09.90
GBZT 0.48 173 ePg 13 09.00 -0.4
iSg 13 15.50
HRT 0.50 153 iPg 13 10.00 0.3
eSg 13 16.90
YLV 0.70 179 iPg 13 12.90 -0.3
CTT 0.72 261 iPg 13 12.90 -0.5
iSg 13 22.40
KCT 1.27 217 iPn 13 23.90 0.9
DMK 1.33 295 iPn 13 24.00 0.2
BNT 1.43 231 ePn 13 25.00 -0.2
S.D. = 0.6 on 8 of 8 obs.

? JUN 26, 1990 03h 24m 58.15± 0.56s
14.990 S ±27.8km 173.667 W ±20.1km
DEPTH = 33.0km (normal)
4.9mb (2 obs.)
SAMOA ISLANDS REGION (169)

DZM 20.12 247 iPc 29 38.80 6.5X
WB5 49.66 257 eP 33 48.80 -0.3
WRA 49.69 256 Pd 33 48.30 -1.0
0.5s 3.60nm 4.7mb
ASPA 50.00 252 iPd 33 51.00 -0.6
1.0s 24.00nm 5.2mb
CMB 72.63 42 e(P) 36 24.00 -0.5
e 36 36.00
WDC 72.82 38 eP 36 25.20 -0.3
e 36 37.50
PNT 79.81 33 eP 37 04.00 -0.7
LRM 81.86 38 eP 37 15.20 -0.6
SES 85.01 35 ePc 37 31.00 -0.5
pP 37 42.00 35kmX
MEO 86.63 53 iPd 37 38.20 -1.7
INK 87.93 14 eP 37 45.50 0.1
MAW 88.10 199 eP 37 46.00 -0.3
YKA 89.83 23 eP 38 05.90 11.4X
0.9s 1.30nm
SPC 144.04 344 ePKP 44 30.30 -2.0
e 48 44.20
PRU 144.46 351 PKP 44 32.20 -0.5
e 44 42.20
VRI 144.77 335 ePKP 44 33.00 -0.4
GRF 145.16 354 ePKPc 44 33.90 0.0

1.5s 43.00nm
e 44 40.90
e 44 44.60
MLR 145.39 335 ePKPd 44 35.50 0.9
KHC 145.44 352 PKP 44 35.20 0.8
1.2s 16.00nm
e 48 49.00
ZST 145.71 347 ePKP 44 35.70 0.8
SRO 145.80 346 iPKP 44 37.20 2.2X
e 48 50.80
FLN 145.86 8 ePKP 44 34.80 -0.3
CMP 145.93 336 ePKPc 44 40.00 4.6X
GRR 146.17 9 ePKP 44 36.50 0.9
SOP 146.32 348 ePKP 44 38.80 2.9X
LPF 146.49 9 ePKP 44 37.00 0.9
1.1s 19.55nm
CDF 146.66 359 ePKP 44 37.90 1.3
1.2s 17.85nm
HAU 147.08 360 ePKP 44 39.00 1.9X
HRI 147.74 310 e(PKP) 44 42.00 3.2X
LOR 147.75 3 ePKP 44 40.70 2.5X
1.1s 9.75nm
SSF 147.94 4 ePKP 44 41.30 2.8X
FVI 148.03 352 PKP 44 45.00 6.4X
MAF 148.71 5 ePKP 44 42.30 2.5X
1.0s 6.00nm
DSI 148.77 307 ePKP 44 46.00 5.7X
VAI 149.15 357 PKP 44 45.00 4.6X
MDI 149.18 355 PKP 44 44.50 4.0X
LPL 149.57 359 ePKP 44 46.60 5.2X
1.1s 9.75nm
PRNI 149.57 305 ePKP 44 47.00 5.4X
LPG 149.59 359 ePKP 44 46.90 5.4X
1.1s 7.35nm
BNI 150.03 360 PKP 44 48.50 6.5X
PGD 150.85 352 PKP 44 49.50 6.2X
ORI 153.50 342 PKP 44 56.00 9.0X
S.D. = 0.9 on 22 of 42 obs.

? JUN 26, 1990 04h 20m 14.31±21.91s
39.274 N ±176.km 23.745 E ±34.1km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)

LIT 1.27 311 eP 20 38.50 0.6
eS 20 56.50
THE 1.48 336 eP 20 41.50 0.5
SRS 1.84 356 eP 20 47.50 1.2
VAY 2.23 337 ePn 20 50.00 -1.9
MMB 2.31 360 iPd 20 53.00 -0.1
RZN 2.52 17 ePd 20 56.00 -0.1
S.D. = 1.4 on 6 of 6 obs.

? JUN 26, 1990 04h 21m 27.82± 5.05s
18.388 N ±26.2km 67.097 W ±26.7km
DEPTH = 10.0km (geophysicist)
MONA PASSAGE (89)

MGP 0.38 179 P 21 35.60 0.0
S 21 39.14
PORP 0.55 127 P 21 39.00 0.1
SJG 0.94 107 iP 21 45.90 0.1
S 21 58.11
LPR 1.17 94 P 21 49.80 0.1
CPD 1.18 107 P 21 49.50 -0.3
S.D. = 0.2 on 5 of 5 obs.

JUN 26, 1990 04h 40m 14.72± 0.44s
34.464 N ± 6.4km 140.226 E ± 5.9km
DEPTH = 71.6km (7 depth phases)
4.4mb (9 obs.)
NEAR EAST COAST OF HONSHU, JAPAN(228)

KAKJ 1.74 359 P 40 42.00 -1.3
CHJJ 1.87 328 P 40 44.80 -0.4
S 41 05.80
IIDJ 2.15 299 P 40 50.20 1.0
S 41 17.00
MAT 2.65 322 eP 40 56.00 0.0
eS 41 26.00
MTMJ 2.89 318 P 40 44.30 -15.2X
NIIJ 2.94 341 P 40 59.00 -1.1
S 41 32.90
TSRJ 3.64 288 P 41 09.80 -0.1
YAMJ 3.71 358 P 41 10.70 0.0
WKYJ 3.84 268 P 41 13.10 0.4
OFUJ 4.75 14 P 41 23.20 -2.2

eS 42 16.40
TKSJ 5.14 266 eP 41 31.70 0.8
YONJ 5.61 279 P 41 37.80 0.3
KUMJ 8.08 259 P 42 12.30 0.7
KUSJ 9.30 21 eP 42 24.40 -3.9X
eS 44 01.50
IMA 49.39 29 P 49 00.00 1.2
1.2s 3.79nm 4.3mb
PMR 51.27 35 P 49 12.50 -0.4
1.0s 7.50nm 4.7mb
pP 49 31.70 77km
WB5 54.33 187 iPc 49 34.60 -1.5
WRA 54.39 187 Pc 49 34.70 -1.8
0.6s 17.20nm 5.3mb
ASPA 58.12 187 iPd 50 02.10 -1.0
0.8s 10.00nm 5.0mb
MBC 59.26 16 eP 50 10.50 0.0
0.7s 1.00nm 4.1mb
FORR 65.96 191 eP 50 54.40 -0.9
0.4s 28.00nm 5.6mb X
YKA 66.52 29 eP 50 43.00 -15.6X
0.3s 0.10nm
GMW 69.74 46 P 51 20.00 1.1
pP 51 39.80 75km
SUF 69.84 333 eP 51 18.60 -0.6
0.6s 0.30nm 3.4mb X
CMB 76.16 53 P 51 58.00 1.2
1.1s 9.80nm 4.7mb
pP 52 17.00 70km
NB2 76.18 337 P 51 56.20 -0.2
0.4s 1.00nm 4.1mb
LRM 76.67 43 eP 52 01.00 1.3
e 52 20.30
KVN 77.10 51 P 52 03.50 1.3
pP 52 22.80 71km
TNP 78.22 52 P 52 10.00 1.7
1.0s 5.00nm 4.4mb
pP 52 28.70 69km
BW06 80.16 45 P 52 19.80 1.0
0.6s 0.93nm 3.9mb
pP 52 38.60 69km
DAU 80.60 47 P 52 22.50 1.2
pP 52 42.00 72km
CMP 81.34 320 eP 52 41.00 16.3X
RSSD 82.39 41 P 52 28.80 -1.6
LKO 125.55 317 Pdiff 56 02.08 14.6X
ZOBO 148.79 62 PKP 59 58.00 5.4X
LPB 148.98 62 (PKP) 00 05.00 12.3X
CNCB 149.24 62 PKP 59 59.40 6.1X
S.D. = 1.1 on 29 of 37 obs.

JUN 26, 1990 04h 48m 13.95± 0.37s
37.323 N ± 3.2km 29.234 E ± 3.1km
DEPTH = 29.3 ± 3.5 km
4.1mb (17 obs.)
TURKEY (366)
ML 4.4 (ATH).

YER 0.78 256 iPg 48 27.20 -1.7
ELL 0.79 137 iPg 48 28.00 -1.0
CIN 0.95 287 iPnd 48 30.00 -1.3
KHL 1.02 13 iPg 48 32.50 0.1
BCK 1.09 82 iPn 48 34.70 1.4
KSL 1.23 167 ePn 48 35.70 0.4
ALT 1.86 21 iPn 48 45.80 1.3
SMG 1.94 282 ePn 48 45.30 -0.2
APE 2.97 266 ePn 49 00.20 0.0
KCT 3.00 347 iPn 49 01.00 0.4
IZI 3.02 3 ePn 49 01.90 1.0
GPA 3.08 16 ePn 49 03.00 1.3
BNT 3.20 342 iPn 49 02.90 -0.5
EDC 3.20 341 iPn 49 03.20 -0.2
YLV 3.24 2 iPn 49 04.40 0.4
EZN 3.38 319 ePn 49 05.50 -0.5
GBZT 3.47 3 ePn 49 12.20 5.0X
PPCY 3.50 133 eP 49 09.50 1.8
HRT 3.51 5 iPn 49 07.90 0.0
BBTK 3.74 47 eP 49 14.00 2.9X
ISK 3.74 358 ePn 49 15.00 4.0X
MFT 3.78 337 iPn 49 10.90 -0.8
ITU 3.78 357 ePn 49 25.00 13.4X
iSg 50 18.00
CTT 3.87 351 iPn 49 11.30 -1.6
LFK 4.03 119 ePn 49 16.00 0.8
CSS 4.07 124 eP 49 17.30 1.5
eSn 50 12.50
ATH 4.43 280 ePn 49 21.50 0.7

26d 04h

VAM	4.49	246	ePn	49	21.50	-0.3
DMK	4.64	346	iPn	49	23.00	-0.8
RDO	4.78	324	ePn	49	25.00	-0.7
VLI	5.07	265	ePn	49	30.00	0.0
NEO	5.12	295	ePn	49	30.20	-0.6
KDZ	5.23	327	iPc	49	32.00	-0.3
RZN	5.59	323	iPc	49	37.00	-0.4
ITM	5.83	271	ePn	49	42.30	1.6
PLD	5.92	325	ePc	49	41.00	-0.9
LIT	5.96	300	eP	49	42.50	0.0
MMB	6.02	317	ePd	49	43.00	-0.4
ADI	6.48	129	eP	49	49.00	-0.8
			eS	50	10.00	
VAY	6.53	310	eP	49	51.00	0.5
PVL	6.60	334	iPd	49	51.00	-0.4
ATZ	6.68	130	eP	49	52.00	-0.7
			eS	51	05.00	
ZNT	6.96	135	eP	49	56.40	-0.2
			eS	51	45.00	
OHR	7.56	303	eP	50	02.00	-3.0X
SKO	7.60	310	eP	50	03.00	-2.4
			i	50	09.50	
HLW	7.65	166	eP	50	05.20	-1.0
			eS	51	25.00	
PRNI	8.45	144	eP	50	15.00	-2.4
MLR	8.53	344	ePd	50	18.00	-0.5
VRI	8.74	348	eP	50	21.50	0.1
SOI	10.47	278	P	50	45.00	-0.2
SGO	11.32	291	P	50	55.00	-1.7
MEU	11.41	273	P	50	59.30	1.2
BSS	11.74	292	P	50	58.50	-3.9X
DUI	12.21	295	P	51	11.00	2.2
CRE	14.57	301	P	51	47.00	7.0X
PGD	14.81	302	P	51	51.40	8.1X
PGF	16.36	295	eP	52	06.60	3.4X
	1.2s	17.85nm			4.1mb	
KHC	16.38	321	P	52	08.00	4.8X
SOTA	16.57	312	iPc	52	09.00	3.2X
	0.4s	4.60nm			4.0mb	
			i	52	10.60	
			i	52	16.20	
			i	52	34.20	
BRG	17.39	326	eP	52	23.70	7.8X
	1.5s	15.00nm			3.9mb	
SBF	17.77	298	eP	52	21.30	0.5
CLL	18.12	326	eP	52	32.00	7.1X
FRF	18.26	297	eP	52	28.30	1.6
LRG	18.44	297	eP	52	29.60	0.7
LPG	18.69	303	eP	52	34.30	1.9
	0.8s	10.05nm			4.1mb	
LPL	18.71	303	eP	52	33.80	1.3
CDF	19.47	312	eP	52	41.50	0.2
	0.7s	9.90nm			4.2mb	
BSF	19.51	310	eP	52	41.20	-0.7
	0.7s	4.40nm			3.8mb	
HAU	19.86	310	eP	52	45.30	-0.1
	0.5s	10.20nm			4.4mb	
SMF	20.97	304	eP	52	56.60	-0.4
	0.7s	11.00nm			4.4mb	
LOR	21.15	306	eP	52	58.30	-0.5
MEM	21.24	316	P	53	06.60	7.0X
SSF	21.32	305	eP	53	01.30	0.8
	1.1s	14.65nm			4.3mb	
AVF	21.34	304	eP	53	01.30	0.7
	0.7s	6.05nm			4.1mb	
BGF	21.61	304	eP	53	03.80	0.4
MAF	21.70	303	eP	53	05.60	1.2
	1.0s	6.00nm			4.0mb	
DOU	21.79	314	P	53	09.10	3.9X
	0.4s	7.10nm			4.4mb	
TCF	21.96	303	eP	53	07.50	0.6
MFF	23.62	302	eP	53	24.00	0.9
	0.7s	5.50nm			4.2mb	
LDF	24.11	307	eP	53	28.30	0.4
FLN	24.39	307	eP	53	30.40	-0.2
GRR	24.52	306	eP	53	31.00	-0.9
	0.6s	6.30nm			4.4mb	
LPF	24.55	305	eP	53	31.50	-0.6
EKA	28.35	320	P	54	11.00	3.9X
	0.9s	2.90nm			4.0mb	
BCAO	34.17	199	iPd	55	00.20	1.4
	0.5s	10.00nm			5.0mb	
GKN	46.98	85	P	56	43.60	-0.9
DMN	47.53	85	P	56	48.20	-0.7
YKA	76.36	344	eP	00	01.00	-0.6
	1.2s	1.80nm			4.0mb	

S.D. = 1.0 on 72 of 88 obs.

JUN 26, 1990 04h 59m 01.48± 0.30s
28.542 N ± 7.3km 59.065 E ± 3.9km
DEPTH = 33.0km (normal)
4.9mb (25 obs.) 4.8Msz (6 obs.)
SOUTHERN IRAN (353)
Felt at Bam.

QUE	7.07	75	eP	00	44.70	-0.9
	0.8s	1802.24nm			7.1mb X	
			e(S)	02	38.30	
MAIO	7.74	3	iPc	00	56.00	1.2
	1.0s	24.50nm			5.2mb	
			eS	03	16.00	
DHR	8.24	256	iPc	00	59.50	-2.1
TEH	9.68	320	eP	01	50.00	28.3X
RYD	11.77	254	ePc	01	43.50	-6.7X
QASM	14.02	264	eP	02	14.70	-5.3X
AFIF	14.91	256	ePc	02	31.10	-0.6
UQSK	15.12	263	eP	02	30.10	-4.3X
POO	16.81	123	eP	02	54.50	-1.5
KSH	17.72	48	P	03	08.00	0.6
DHJN	17.94	236	eP	03	05.00	-5.4X
SRAT	17.94	238	eP	03	04.30	-6.1X
KMTA	18.09	239	ePc	03	08.00	-4.1X
ABHA	18.12	239	eP	03	09.30	-3.3X
WAJH	20.12	269	ePc	03	36.00	0.6
AYN	20.23	276	eP	03	37.30	0.8
BHL	20.71	291	P	03	42.00	0.4
			S	11	12.00	
HYB	21.05	118	eP	03	42.00	-3.1X
			eS	07	28.00	
BADA	21.14	276	eP	03	45.90	0.0
GKN	22.52	85	P	03	59.20	-0.7
GBA	22.64	127	Pd	03	59.80	-1.1
	1.2s	21.60nm			4.5mb	
LFK	22.66	294	eP	04	03.50	2.4
DMN	22.99	86	P	04	04.20	-0.4
PKI	23.26	86	P	04	06.20	-1.1
GUN	23.62	85	P	04	10.40	-0.5
AKSR	23.87	264	eP	04	14.50	1.6
AGRW	24.06	264	eP	04	17.00	2.3
AGAL	24.11	264	iPd	04	17.90	2.7X
AKRL	24.14	264	eP	04	17.80	2.3
HLW	24.22	280	eP	04	18.00	1.8
			eS	08	40.00	
AGMR	24.32	264	eP	04	21.00	3.7X
ELL	25.81	296	eP	04	33.00	1.6
ALT	26.15	301	eP	04	34.00	-0.5
WMQ	27.51	49	eP	04	47.00	0.1
Z	18s	2.20um			4.8Msz	
N	11s	0.60um				
E	11s	0.90um				
LSA	28.01	80	P	04	47.50	-4.5X
E	10s	3.00um				
			eS	09	39.00	
MLR	31.11	312	Pd	05	25.00	5.8X
	1.5s	31.80nm			4.9mb	
SKO	33.25	304	eP	05	38.00	0.3
GTA	35.22	61	eP	05	53.60	-1.3
Z	16s	2.00um			5.0MszX	
E	11s	0.80um				
KRA	36.55	317	eP	06	05.00	-0.8
			e	06	13.70	
			e	06	34.80	
SOI	36.90	296	P	06	08.00	-0.9
MGR	37.40	300	P	06	13.70	0.6
SGO	37.62	300	P	06	15.50	0.6
CHG	37.64	96	eP	06	17.00	1.7
BSS	38.02	301	P	06	12.00	-6.3X
LZH	38.32	67	P	06	23.50	2.4
	1.6s	100.00nm			5.4mb	
Z	21s	1.30um			4.7Msz	
N	11s	0.60um				
E	13s	1.00um				
			eS	12	18.00	
DUI	38.36	302	P	06	21.00	-0.3
CD2	38.69	75	eP	06	23.50	-0.6
Z	14s	0.70um			4.6MszX	
N	12s	0.90um				
SDI	38.84	302	P	06	18.50	-6.8X
KMI	38.96	85	Pd	06	26.00	-0.7
	2.0s	220.00nm			5.6mb	
KSP	39.01	317	eP	06	27.50	1.0
			e	06	48.00	
NUR	39.45	334	iP	06	32.40	2.5
	0.7s	16.00nm			4.9mb	
ASS	39.82	304	P	06	33.00	-0.4
KHC	40.22	314	eP	06	35.50	-1.1
			e	06	57.90	
SUF	40.34	337	iP	06	38.70	1.4
	0.7s	0.40nm			3.3mb X	
BHG	40.37	311	eP	06	43.50	5.7X
	0.8s	24.00nm			5.0mb	
CRE	40.40	305	P	06	38.00	-0.1
BRG	40.44	316	eP	06	48.80	10.5X
SFI	40.50	305	P	06	41.00	2.2
PGD	40.59	305	P	06	41.20	1.4
CLL	41.13	317	e(P)	06	37.00	-6.9X
			e	06	57.00	
			e	07	19.00	
SOTA	41.39	310	i(P)	06	46.80	0.5
	0.6s	8.95nm			4.7mb	
			i	06	53.50	
			i	07	07.00	
			i	07	15.40	
BDI	41.41	305	P	06	44.50	-1.9
GRF	41.85	314	e(P)	06	54.00	4.2X
GYA	42.06	81	P	06	53.60	1.6
BOB	42.30	306	P	06	57.00	3.3X
XAN	42.62	70	P	06	53.00	-3.4X
N	12s	1.00um				
E	12s	1.00um				
BTO	43.10	60	eP	07	01.50	1.1
N	16s	0.90um				
E	16s	1.10um				
SOD	43.48	342	iP	07	04.20	1.3
SBF	43.68	305	eP	07	03.40	-1.5
	0.6s	11.70nm			4.8mb	
HFS	43.87	329	eP	07	05.50	-0.7
	0.6s	4.40nm			4.4mb	
Z	19s	0.62um			4.5Msz	
			e	07	07.30	
			e	07	09.50	
			e	07	12.10	
			LR	25	26.00	
LPG	44.26	307	eP	07	08.50	-1.4
	0.7s	4.40nm			4.4mb	
LPL	44.27	307	eP	07	08.30	-1.7
BNI	44.29	306	P	07	09.00	-0.9
TIY	45.10	64	eP	07	16.30	-0.2
Z	24s	1.10um			4.7MszX	
N	17s	1.50um				
BCAO	45.31	246	iPd	07	18.40	0.1
NB2	45.37	330	P	07	17.70	-0.5
	1.1s	7.40nm			4.5mb	
LBF	46.28	309	eP	07	24.20	-1.4
SMF	46.35	309	eP	07	24.80	-1.4
	0.8s	7.70nm			4.7mb	
LOR	46.37	309	eP	07	24.70	-1.7
SSF	46.60	309	eP	07	26.80	-1.3
	0.7s	5.50nm			4.6mb	
QIZ	47.13	90	eP	07	32.30	-0.4
N	17s	1.30um				
CAF	47.55	306	eP	07	34.40	-1.3
	0.7s	4.40nm			4.6mb	
WHN	47.73	73	eP	07	36.00	-1.2
N	14s	0.80um				
BJI	47.83	60	eP	07	40.00	2.1
	1.5s	29.00nm			5.1mb	
Z	18s	1.17um			4.9Msz	
N	14s	0.86um				
			eS	14	30.00	
RJF	47.94	307	eP	07	37.80	-0.9
LFF	48.49	306	eP	07	42.00	-1.0
	0.7s	7.70nm			4.8mb	
TIA	49.00	65	eP	07	44.90	-2.1
NJ2	51.17	70	Pc	08	04.80	1.2
SNY	53.22	57	eP	08	16.90	-1.9
SSE	53.33	71	eP	08	18.50	-1.3
	0.9s	35.00nm			5.3mb	
Z	20s	0.60um			4.6Msz	
N	15s	0.90um				
KRI	53.35	216	iPc	08	02.10	-18.0X
CN2	54.33	55	eP	08	28.40	1.4
Z	24s	1.40um			4.9MszX	
N	13s	0.50um				
E	13s	0.40um				
			pP	08	38.00	31kmX
CIR	55.96	211	iPd	08	41.00	2.0
BUL	56.64	215	iPd	08	36.30	-7.8X
DAG	59.65	345	iPd	09	02.40	-1.9
	0.7s	13.70nm			5.2mb	
SLR	61.54	212	eP	09	18.00	0.1

LKO	63.27	266	P	09	27.06	-2.5	
	1.0s	39.00nm			5.5mb		
KIC	64.00	263	P	09	33.00	-1.4	
SEK	64.06	211	iPd	09	33.00	-1.6	
	0.9s	27.73nm			5.4mb		
		i		09	37.00		
TIC	64.11	263	P	09	33.80	-1.3	
LIC	64.32	263	P	09	35.00	-1.4	
Z	20s	0.77um			4.9Msz		
BLF	65.38	212	iPc	09	45.00	1.9	
MAT	65.47	60	eP	09	44.00	0.5	
	1.1s	21.52nm			5.2mb		
MBC	75.46	360	eP	10	41.50	-1.9	
	0.7s	6.00nm			4.7mb		
FRB	79.23	339	eP	11	07.00	2.5	
INK	82.99	5	eP	11	26.00	1.8	
WB5	87.17	114	eP	11	47.00	1.2	
WRA	87.18	114	Pc	11	47.70	1.8	
	0.9s	5.90nm			4.8mb		
ASPA	88.78	118	eP	11	55.50	2.0	
YKA	89.14	357	eP	11	53.70	-0.9	
	0.8s	3.20nm			4.7mb		
LPB	130.11	272	ePdiff	14	41.00	-18.8X	
	S.D. = 1.4	on	87 of 111 obs.				

JUN 26, 1990 07h 14m 20.35± 0.22s
4.552 N ± 4.0km 95.238 E ± 3.7km
DEPTH = 59.8km (8 depth phases)
5.0mb (40 obs.)
NORTHERN SUMATERA (706)

BSI	0.94	3	ePc	14	40.00	2.3	
			e(S)	14	50.00		
TSI	3.48	107	eP	15	14.00	0.8	
PSI	4.12	117	ePd	15	22.80	0.6	
IPM	5.77	90	ePc	15	47.90	2.5	
			eS	16	47.40		
SNG	5.95	64	eP	15	48.90	0.9	
KLM	6.55	102	eP	15	57.00	0.7	
PPI	7.16	134	ePd	16	03.50	-1.4	
	0.7s	474.90nm			6.3mb X		
KGM	8.45	107	iPd	16	22.90	0.2	
NNT	9.14	29	eP	16	27.20	-4.9X	
NST	12.05	23	eP	17	14.00	2.4	
BDT	13.14	16	eP	17	29.50	3.5X	
LOE	14.27	26	eP	17	45.00	4.2X	
GBA	19.73	298	Pd	18	48.30	0.3	
	1.0s	32.10nm			4.6mb		
QIZ	20.26	44	P	18	53.60	0.1	
N	14s	0.70um					
			PP	19	14.50		
			eS	22	32.00		
HYB	20.75	309	iPd	18	59.50	0.9	
	1.0s	80.00nm			5.0mb		
KKM	20.94	85	ePc	19	01.80	1.2	
TRT	21.20	125	iPc	19	02.60	-0.5	
	0.6s	60.90nm			5.1mb		
KMI	21.69	19	Pc	19	09.00	0.8	
Z	14s	0.80um			4.3MszX		
			pP	19	22.50	58km	
			PP	19	33.00		
GYA	24.37	25	P	19	34.60	0.3	
	1.2s	100.00nm			5.2mb		
			pP	19	53.00	82kmX	
PKI	24.73	339	P	19	36.00	-2.0	
	0.6s	28.00nm			4.9mb		
DMN	24.88	338	P	19	37.80	-1.5	
	0.6s	37.00nm			5.1mb		
GUN	24.88	340	P	19	37.60	-1.8	
LSA	25.31	352	P	19	44.20	0.6	
GKN	25.41	338	P	19	43.40	-0.8	
CD2	27.42	16	iPc	20	01.00	-1.5	
QZH	30.24	46	Pd	20	28.00	0.2	
WHN	31.51	33	eP	20	39.20	0.3	
	1.0s	30.00nm			5.0mb		
LZH	32.37	13	Pc	20	43.60	-2.9	
	1.5s	42.00nm			5.0mb		
Z	20s	0.40um			4.1Msz		
NANU	33.46	144	iPd	20	55.60	-0.4	
GTA	34.95	6	Pc	21	06.90	-1.8	
	1.0s	37.00nm			5.3mb		
MBL	35.14	138	iPd	21	09.70	-0.7	
NJ2	35.19	36	Pc	21	10.40	-0.3	
SSE	35.96	40	P	21	17.00	-0.2	
	1.0s	23.00nm			5.1mb		
TIY	36.55	23	Pc	21	21.80	-0.5	
Z	18s	0.70um			4.5Msz		
N	16s	0.50um					
QUE	36.92	317	eP	21	26.50	1.0	
TIA	37.39	30	P	21	28.60	-0.6	
BTO	38.27	18	eP	21	35.50	-1.2	
N	13s	0.30um					
E	13s	0.30um					
MEKA	38.32	145	eP	21	37.50	0.4	
HHC	39.00	20	P	21	43.20	0.4	
	1.4s	150.00nm			5.7mb		
MRWA	39.05	151	eP	21	43.90	0.7	
WMO	39.67	351	iPd	21	48.50	0.2	
BJI	40.06	25	eP	21	52.50	1.1	
	1.0s	160.00nm			5.8mb		
DL2	41.75	31	P	22	05.20	0.0	
	1.0s	200.00nm			5.8mb		
KLB	41.86	151	eP	22	06.20	-0.1	
COOL	43.06	147	eP	22	16.10	0.0	
SNY	44.92	30	Pc	22	30.00	-0.9	
	0.7s	100.00nm			5.7mb		
WB5	45.48	124	iPd	22	35.20	-0.5	
WRA	45.49	124	Pc	22	36.00	0.2	
	0.7s	101.00nm			5.8mb		
ASPA	46.98	128	iPd	22	47.20	-0.4	
	0.4s	79.00nm			6.0mb		
FORR	47.16	140	eP	22	48.40	-0.4	
	0.5s	36.00nm			5.6mb		
CN2	47.30	30	iPc	22	49.00	-0.8	
	0.8s	100.00nm			5.8mb		
TSRJ	48.58	45	P	22	59.90	0.1	
IIDJ	49.93	46	P	23	08.80	-1.5	
MDJ	49.99	32	Pc	23	10.50	0.0	
QIS	50.19	121	iPb	23	11.90	-0.5	
	0.3s	16.00nm			5.5mb		
MTMJ	50.38	45	P	23	15.90	2.2	
MAT	50.64	45	(P)	23	15.00	-0.6	
CHJJ	50.97	46	P	23	17.00	-1.1	
NIIJ	51.53	45	P	23	21.20	-1.2	
YAMJ	52.70	44	P	23	30.60	-0.5	
OFUJ	54.25	44	P	23	41.60	-0.9	
CTA	55.77	118	iPc	23	53.30	-0.5	
	0.8s	19.78nm			5.2mb		
STK	57.05	133	eP	24	02.10	-0.7	
	1.1s	7.00nm			4.6mb		
BRS	63.92	123	iPc	24	49.20	-0.4	
CIR	67.34	245	eP	25	12.00	0.3	
			ipP	25	29.60	65km	
BUL	69.84	247	iPd	25	23.00	-4.3X	
VRI	71.85	317	iPc	25	40.00	1.1	
MLR	72.30	316	ePd	25	42.00	0.3	
	1.4s	87.30nm			5.5mb		
BCAO	76.43	273	iPc	26	06.00	0.0	
	0.5s	13.00nm			5.1mb		
			ic	26	20.30	50km	
SUF	76.47	334	iP	26	03.90	-1.3	
	0.9s	0.70nm			3.6mb X		
NUR	76.56	331	eP	26	05.00	-0.7	
SPC	76.77	319	eP	26	07.20	-0.2	
KRA	77.09	320	eP	26	09.20	0.3	
			e	26	25.70	59km	
SOD	77.68	338	iP	26	11.90	0.1	
ZST	78.71	318	iP	26	17.70	-0.1	
			i	26	34.80	62km	
SGO	79.40	310	P	26	40.00	18.3X	
KSP	79.50	321	eP	26	22.00	-0.1	
			e	26	39.00	61km	
VBY	79.75	315	e(P)	26	24.20	0.7	
LJU	80.29	316	eP	26	44.00	17.6X	
CEY	80.34	315	e(P)	26	44.80	18.1X	
PRU	80.55	320	eP	26	28.00	0.3	
			e	26	45.00	61km	
VOY	80.73	316	e(P)	26	28.70	-0.2	
BRG	80.99	321	eP	26	30.40	0.4	
	0.9s	12.00nm			4.8mb		
			i	26	47.80	63km	
KHC	81.12	319	eP	26	32.00	1.3	
ARV	81.30	313	P	26	32.00	0.2	
FVI	81.53	316	P	26	29.00	-3.8X	
CLL	81.61	321	eP	26	34.00	0.8	
HFS	81.86	330	eP	26	34.00	-0.3	
	0.5s	10.50nm			5.1mb		
Z	19s	0.08um			4.1Msz		
			e	26	39.50	17kmX	
			e	26	50.80		
			ePP	29	40.10		
			LR	02	50.00		
CRE	82.02	313	P	26	33.00	-2.6	
SFI	82.10	314	P	26	36.50	0.7	
PGD	82.19	314	P	26	38.00	1.4	
SQTA	82.62	317	iP	26	38.80	0.1	
	0.6s	12.50nm			5.1mb		
			i	26	51.70	43kmX	
			i	26	55.80		
NB2	83.14	331	P	26	40.70	-0.3	
	0.9s	6.00nm			4.6mb		
MDI	83.64	315	P	26	44.00	0.2	
PGF	84.18	312	eP	26	48.70	2.0	
	0.8s	5.35nm			4.6mb		
SBF	85.29	314	eP	26	54.20	2.0	
	0.8s	8.05nm			4.9mb		
LPG	85.72	315	eP	26	55.20	0.6	
	0.8s	4.05nm			4.6mb		
BNI	85.79	315	P	26	57.50	2.7X	
HAU	85.91	318	eP	26	55.00	-0.1	
	0.8s	5.35nm			4.7mb		
LBF	87.57	317	eP	27	03.50	0.3	
	0.8s	4.05nm			4.7mb		
LOR	87.63	317	eP	27	03.60	0.1	
	0.7s	4.40nm			4.8mb		
SMF	87.68	316	eP	27	04.10	0.3	
	0.9s	4.90nm			4.7mb		
AVF	88.01	317	eP	27	05.40	0.1	
	0.8s	4.05nm			4.7mb		
MAF	88.60	316	eP	27	08.70	0.5	
	0.6s	1.80nm			4.5mb		
LDF	90.16	319	eP	27	16.10	0.7	
	1.0s	8.00nm			5.0mb		
FLN	90.38	319	eP	27	16.20	-0.2	
	0.8s	5.35nm			4.9mb		
DAG	90.96	348	iPd	27	17.60	-1.0	
	0.7s	4.79nm			5.0mb		
EKA	91.06	326	Pc	27	20.00	0.6	
	0.8s	4.50nm			4.9mb		
IMA	94.26	22	eP	27	34.40	0.2	
MBC	96.88	8	eP	27	45.50	-0.3	
SIV	154.10	242	PKP	34	15.40	8.0X	
			i	34	30.00		
CNCB	159.52	232	ePKP	34	19.00	4.2X	
			i	34	55.00		
ZOBO	159.94	233	PKP	34	20.00	4.7X	
	S.D. = 1.0	on	101 of 113 obs.				

? JUN 26, 1990 07h 42m 50.88± 6.28s
38.608 N ±49.7km 22.473 E ±24.7km
DEPTH = 33.0km (normal)
GREECE (364)
ML 2.4 (THE).

AGG	0.43	345	ePg	43	00.40	-0.1	
			eSg	43	05.40		
LIT	1.49	1	ePb	43	15.40	-0.2	
			eSb	43	32.00		
IGT	1.90	300	ePb	43	21.60	0.0	
SOH	2.31	17	ePn	43	27.60	0.1	
FNA	2.33	339	ePn	43	28.00	0.2	
GRG	2.35	359	ePn	43	27.90	0.0	
S.D. = 0.2	on	6 of	6 obs.				

JUN 26, 1990 07h 54m 17.77± 0.59s
45.801 N ± 4.7km 26.808 E ± 5.8km
DEPTH = 113.6 ± 8.9 km
3.6mb (1 obs.)
ROMANIA (358)

VRI	0.09	320	iPc	54	31.50	-1.4	
MLR	0.68	243	iPc	54	35.00	-1.8	
PPE	0.70	53	iPd	54	38.00	1.3	
CLI	0.82	24	iPc	54	39.00	1.2	
CFR	1.13	123	iPd	54	41.00	0.1	
PTT	1.17	346	iPd	54	41.50	0.1	
CMP	1.35	247	ePd	54	45.00	1.5	
IAS	1.49	20	iPd	54	44.00	-1.0	
TLB	1.49	144	iPd	54	45.00	0.0	
BUC1	1.56	201	iPc	55	04.00	18.2X	
TNR	1.78	266	ePd	54	45.00	-3.7X	
PSN	2.33	155	iPd	54	56.00	0.3	
DEV	2.73	273	iP	55	01.50	0.5	
PVL	2.79	203	iPd	55	03.00	1.3	
BZS	3.64	269	eP	55	12.50	-0.7	
PGB	3.76	211	eP	55	15.00	0.0	
DMK	4.04	170	iPn	55	18.50	-0.1	
VTS	4.12	220	iP	55	20.00	0.1	
KDZ	4.27	194	iPc	55	22.00	0.2	
CTT	4.80	165	iPn	55	28.20	-0.8	
ALN	4.93	187	eP	55	30.50	-0.3	

26d 07h

ISK	5.01	160	ePn	55 31.80	-0.1
HRT	5.40	156	iPn	55 37.00	-0.2
VAY	5.43	216	eP	56 03.00	25.3X
HFS	16.34	336	eP	58 01.20	-0.2
	0.4s		1.50nm		3.6mb
	Z 10s		0.05um		4.2MszX
	S.D. = 0.9		on 22 of 25 obs.		

• JUN 26, 1990 09h 18m 08.23± 0.85s
43.976 N ±10.6km 87.107 E ± 9.9km
DEPTH = 33.0km (normal)
4.4mb (6 obs.)
NORTHERN XINJIANG, CHINA (332)

WMO	0.45	110	iPg	18 18.70	0.5
			Sg	18 26.20	
GTA	10.54	111	eP	20 38.60	-1.5
LZH	15.03	116	Pc	21 40.00	0.0
	2.0s		29.00nm		4.2mb
GKN	16.06	188	P	21 54.40	1.0
	0.5s		15.00nm		4.4mb
DMN	16.41	186	P	21 57.00	-0.9
	0.6s		22.00nm		4.5mb
PKI	16.43	185	P	21 54.20	-4.0X
	0.7s		55.00nm		4.8mb
TIY	20.11	99	eP	22 43.20	1.2
WHN	25.36	113	eP	23 38.50	4.8X
HFS	45.40	318	eP	26 24.70	-0.3
	0.4s		0.90nm		4.0mb
	Z 12s		0.05um		3.7MszX
			e	26 30.30	
MBC	58.86	7	eP	28 05.50	0.1
			pP	28 15.50	33kmX
YKA	72.46	10	eP	29 42.90	10.1X
	0.9s		1.60nm		
WB5	76.87	135	eP	30 07.60	9.0X
WRA	76.91	135	Pd	30 08.70	9.9X
	0.6s		3.20nm		4.5mb
	S.D. = 1.1		on 8 of 13 obs.		

JUN 26, 1990 09h 24m 10.45± 0.67s
37.357 N ±17.5km 48.831 E ±10.2km
DEPTH = 10.0km (geophysicist)
4.4mb (12 obs.) 3.5Msz (1 obs.)
NORTHWESTERN IRAN (345)

TAB	2.11	290	eP	24 46.00	-0.4
			e	24 49.00	
TEH	2.62	127	eP	24 55.00	1.4
KER	3.31	206	eP	25 09.00	5.5X
MAIO	8.62	94	iPnd	26 17.00	-1.2
	0.8s		11.71nm		5.2mb
			eSn	27 54.00	
MLR	18.95	303	ePc	28 37.50	3.5X
	1.0s		18.70nm		4.3mb
VAY	20.66	289	eP	28 54.40	1.6
SPC	23.79	309	eP	29 25.00	0.9
KRA	24.27	311	eP	29 31.90	3.4X
			e	29 36.40	
ZST	25.51	305	eP	29 44.60	4.2X
KSP	26.73	311	eP	29 52.50	0.8
NUR	27.78	334	eP	30 05.00	3.9X
KHC	27.99	306	eP	30 06.50	3.2X
CLL	28.85	310	eP	30 12.00	1.1
	1.0s		9.00nm		4.5mb
SUF	28.95	338	eP	30 16.00	4.3X
PGF	30.77	292	eP	30 27.90	-0.3
	0.6s		4.50nm		4.5mb
SBF	31.84	295	eP	30 37.20	-0.3
	0.6s		9.00nm		4.9mb
HFS	31.87	327	eP	30 37.50	-0.1
	1.0s		8.60nm		4.6mb
	Z 18s		0.09um		3.5Msz
			e	30 40.10	
			e	30 42.20	
			e	30 43.60	
			e	30 45.80	
			LR	37 26.00	
BNI	32.34	297	P	30 44.80	2.8
SOD	32.58	344	eP	30 43.00	-0.7
NB2	33.38	327	P	30 54.40	3.6X
	0.8s		2.90nm		4.3mb
AVF	34.63	300	eP	30 59.10	-2.5
	0.7s		2.75nm		4.3mb
MAF	35.18	299	eP	31 05.80	-0.7
	0.9s		6.55nm		4.5mb
LDF	36.94	304	eP	31 20.30	-0.9
MFF	37.04	300	eP	31 21.60	-0.5
FLN	37.18	304	eP	31 22.30	-0.9
EKA	39.08	314	Pc	31 39.80	0.7
	0.7s		3.00nm		4.1mb
KMI	47.11	89	eP	32 50.00	5.2X
KIC	57.54	251	(P)	34 01.00	-1.6
MBC	66.42	357	eP	35 02.00	0.7
	0.5s		2.00nm		4.6mb
YKA	79.60	352	eP	36 25.00	6.2X
	1.1s		2.00nm		4.0mb
	S.D. = 1.3		on 20 of 30 obs.		

? JUN 26, 1990 09h 59m 02.14±17.60s
51.367 N ±74.6km 16.793 E ±130.km
DEPTH = 33.0km (normal)
POLAND (548)

KSP	0.61	211	iP	59 14.00	-0.3
	0.5s		66.00nm		
			iS	59 22.20	
BRG	1.86	256	iPg	59 31.50	-0.7
			iSg	59 51.00	
PRU	1.99	227	ePg	59 34.80	0.7
			eSn	59 52.00	
			eSg	59 59.00	
CLL	2.38	270	ePg	59 40.00	0.4
			iSg	00 07.00	
	S.D. = 1.1		on 4 of 4 obs.		

? JUN 26, 1990 11h 06m 52.09± 4.22s
48.231 N ±85.3km 154.357 E ±30.7km
DEPTH = 33.0km (normal)
4.5mb (10 obs.)
KURIL ISLANDS (221)

INK	39.95	33	eP	14 25.00	0.6
MBC	42.92	21	eP	14 48.50	-0.1
	0.6s		2.00nm		4.0mb
YKA	49.23	38	eP	15 38.20	-0.6
	0.9s		1.50nm		4.0mb
EKA	75.09	347	Pd	18 31.50	-0.5
	0.5s		3.70nm		4.6mb
CDF	79.60	338	eP	18 56.80	-0.4
LOR	81.48	340	eP	19 06.70	-0.4
	0.7s		4.40nm		4.6mb
LBF	81.72	340	eP	19 07.80	-0.5
	0.7s		2.75nm		4.4mb
SSF	81.75	340	eP	19 08.20	-0.3
	0.9s		4.10nm		4.5mb
AVF	82.04	340	eP	19 09.90	0.0
	0.8s		2.70nm		4.3mb
SMF	82.07	340	eP	19 10.10	0.0
LPL	82.43	338	eP	19 13.00	0.7
LPG	82.44	338	eP	19 13.00	0.5
	0.8s		5.35nm		4.7mb
MAF	82.76	341	eP	19 14.30	0.6
	0.8s		6.70nm		4.8mb
TCF	82.77	341	eP	19 14.00	0.2
	0.9s		4.10nm		4.5mb
LSF	82.96	341	eP	19 14.70	0.0
MFF	82.97	343	eP	19 14.80	0.0
	S.D. = 0.5		on 16 of 16 obs.		

JUN 26, 1990 12h 08m 29.39± 0.09s
22.015 S ± 2.8km 179.473 W ± 2.7km
DEPTH = 586.8km (geophysicist)
6.0mb (57 obs.)
SOUTH OF FIJI ISLANDS (171)
mb 5.8 (PAS), 5.6 (BRK). Depth from broadband displacement seismagrams.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike= 13 Dip=84 Slip= -50
NP2: 110 40 -171
Principal Axes:
T Plg=28 Azm= 72
P 38 318
Comment: The focal mechanism is moderately well controlled and corresponds to normal faulting with a large left-lateral strike-slip component. The preferred fault plane is NP1.
RADIATED ENERGY
No. of sta: 6 Focal mech. F
Energy 4.9±0.6•10••12 Nm
MOMENT TENSOR SOLUTION
Dep 581 No. of sta: 12
Moment Tensor; Scale 10••18 Nm
Mrr=-0.73 Mtt=-0.54
Mff= 1.26 Mrt=-0.71
Mrf=-1.97 Mtf= 1.40
Principal axes:

T	Val= 3.14	Plg=28	Azm=116
N	-1.18	20	15
P	-1.96	54	255

Best Double Couple:Mo=2.6•10••18
NP1:Strike=247 Dip=24 Slip= -36
NP2: 10 76 -110
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 17S, 43C
Centroid Location:
Origin Time 12:00:38.5 0.3
Lat 21.71S 0.03 Lon 179.60W 0.02
Dep 613.8 1.2 Half-duration 5.1
Moment Tensor; Scale 10••18 Nm
Mrr= 0.17 0.03 Mtt=-0.53 0.04
Mff= 0.36 0.04 Mrt=-1.10 0.04
Mrf=-2.35 0.04 Mtf=-0.57 0.05
Principal Axes:

T	Val= 2.66	Plg=45	Azm=100
N	0.08	15	206
P	-2.74	41	309

Best Double Couple:Mo=2.7•10••18
NP1:Strike=107 Dip=15 Slip= 172
NP2: 205 88 75

SVA	4.34	333	iPc	09 58.60	1.8
			eS	11 10.90	
VUN	4.43	334	eP	09 58.30	0.7
			eS	11 12.40	
OVA	4.61	339	iP	10 01.40	2.5
KRO	4.80	347	iPc	10 01.90	1.5
SGE	5.04	330	iPc	10 05.10	2.7X
TVI	5.09	354	iPc	10 04.90	2.1
NDF	5.13	325	iP	10 06.20	3.2X
			eS	11 24.80	
MBU	5.30	341	iPc	10 06.90	2.4
UDU	5.85	355	eP	10 11.00	1.9
YSA	5.98	332	iP	10 12.30	2.1
PVC	12.25	288	iPc	11 15.30	4.7X
			iS	13 31.30	
DZM	13.06	267	iPd	11 21.00	2.2
			iS	13 37.30	
			ScP	18 42.80	
			ScS	22 23.70	
HBZ	15.65	187	P	11 45.10	1.3
PUZ	16.12	186	P	11 49.20	0.8
			S	14 28.90	
WLZ	16.34	194	P	11 54.50	4.0X
			S	14 40.80	
TAZ	16.53	191	P	11 53.70	1.4
UTU	16.53	192	P	11 55.80	3.4X
NOZ	16.69	187	P	11 54.30	0.5
PGZ	18.89	190	P	12 14.10	-0.6
MNG	19.03	192	P	12 14.80	-1.2
			S	15 13.90	
MTW	19.55	191	P	12 20.00	-0.8
CAW	19.59	192	P	12 20.30	-0.8
WDW	19.76	192	P	12 22.40	-0.3
BLW	19.76	191	P	12 22.50	-0.2
MRW	19.78	193	P	12 23.00	0.1
WEL	19.82	193	P	12 23.30	0.1
MOW	19.85	192	P	12 23.70	0.1
TCW	19.85	194	P	12 23.40	-0.2
CCW	20.38	194	P	12 29.20	0.8
THZ	20.71	196	P	12 31.40	-0.1
			S	15 41.90	
KHZ	21.17	194	P	12 34.90	-0.6
LTZ	21.83	197	P	12 41.00	-0.6
			S	15 58.60	
MQZ	22.60	195	P	12 47.90	-0.5
HNR	23.39	299	eP	12 54.00	-1.8
			eS	16 24.00	
MMCZ	24.77	200	P	13 08.20	0.3
MHZ	24.77	199	P	13 07.40	-0.6
TLC	24.96	199	P	13 10.00	0.4
BRS	25.75	252	iPc+	13 18.70	2.1
			e(PP)	13 38.00	
			i(PPP)	13 50.00	
			ipP	14 48.50	
			e(sP)	15 58.00	
			iS	17 08.00	

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              iScP  19 12.00
              iScS  23 06.00
TBI   27.70  99 iP     13 34.30   0.7
      1.2s  1805.00nm        6.6mb
              iScP  19 16.20
AFR   28.27  86 iP     13 38.30  -0.3
              iScP  19 17.50
PAE   28.43  87 iP     13 39.60  -0.3
              iScP  19 17.80
PPT   28.45  86 iP     13 39.90  -0.3
      1.2s  1805.00nm        6.6mb
              iScP  19 18.20
PPN   28.59  86 iP     13 41.10  -0.3
              iScP  19 18.60
TVO   28.70  87 iP     13 42.20  -0.2
RMQ   29.27 255 iPb    13 48.80   1.7
              e     15 11.00
              e     18 03.00
CNB   30.25 237 iPc    13 57.60   2.1
              e     14 19.00
              e     15 35.00
              e     18 21.00
              e     19 26.70
CAN   30.53 237 iPd    13 59.50   1.6
              iPP   15 27.90
              iScP  18 23.00
              i(S)  19 26.50
PMO   30.70  82 iP     13 59.20  -0.2
      1.2s  2615.00nm        6.7mb
              iScP  19 25.90
BWA   30.74 239 iPd    13 59.10  -0.6
              iPP   15 28.00
              iScP  18 22.80
              i(S)  19 26.30
VAH   30.88  83 iP     14 00.50  -0.3
      1.2s  1895.00nm        6.6mb
              iScP  19 26.30
TPT   30.96  82 iP     14 01.50  -0.1
      1.2s  3425.00nm        6.9mb
              iScP  19 26.60
RUV   31.12  83 iP     14 02.80  -0.1
      1.2s  3515.00nm        6.9mb
              iScP  19 27.00
CTA   32.01 267 iPd-   14 11.00   0.7
              iPcP  16 42.00
              iS    18 40.00
              iScP  19 31.00
              iScS  23 33.70
CTAO  32.01 267 iPd    14 10.16  -0.2
              epPd  15 44.84
              esPc  16 54.04
CMS   32.28 246 iPd    14 04.00  -8.5X
      0.8s   319.00nm        6.0mb
              e     15 01.00
              e     18 46.50
              e     19 33.00
RAB   32.70 299 iPd-   14 14.00  -2.2
              eS    18 36.00
OLP   33.32 255 iPd    14 22.50   1.2
              e     15 53.00
              e     19 14.00
TOO   33.90 235 iPd    14 28.00   1.9
      0.8s   339.00nm        6.0mb
              e     14 37.60
KDB   34.36 286 iPd    14 30.10   0.0
LAT   35.77 290 eP     14 42.00   0.3
STK   35.91 246 iPd    14 44.50   1.8
      0.6s   493.00nm        6.3mb
              eS    19 40.40
              iScS  23 53.30
BFD   36.06 237 iPc    14 43.90   0.1
      1.0s   192.00nm        5.7mb
QIS   38.08 264 iPd    15 00.40  -0.2
      0.4s    93.00nm        5.7mb
              iPcP  19 54.20
ADE   38.68 241 eP     15 01.00  -4.4X
      0.8s   194.03nm        5.7mb
MNDI  38.94 288 eP     15 09.50   1.7
RKT   40.99 100 iP     15 24.60   0.7
ASPA  42.86 258 iPd    15 39.10   0.3
   Z  17s    5.43um          5.5MszX
              iScP  20 13.30
              eS    21 20.40
              eScS  24 34.50
              LR    32 02.70
WB5   43.04 264 iPd    15 39.80  -0.4
              iScP  20 14.20
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              iS    21 23.50
FORR  47.41 248 iPd    16 13.40  -0.1
MTN   47.83 272 iPd    16 15.90  -1.0
KNA   49.19 268 eP     16 26.50  -0.5
GUMO  49.75 312 ePd    16 30.40  -0.7
      1.2s  3144.44nm        6.7mb
              eS    22 50.00
PJG   49.75 312 ePd    16 30.40  -0.7
COOL  53.37 247 iPd    16 56.30  -0.9
      0.4s    85.00nm        5.5mb
AAI   53.86 282 eP     16 59.50  -1.3
MBL   56.10 259 iPd    17 15.70  -0.6
KLB   56.17 246 iPd    17 16.30  -0.4
      0.3s    70.00nm        5.5mb
MEKA  56.21 252 eP     17 15.80  -1.2
      0.3s    60.00nm        5.4mb
SBA   56.28 183 iPc    17 19.70   3.0
RKG   56.54 243 iPd    17 19.10  -0.1
      0.5s   286.00nm        5.8mb
MUN   57.44 245 iPd    17 25.20  -0.1
      1.0s   810.00nm        5.9mb
MRWA  58.01 249 iPd    17 29.00  -0.2
MNI   59.10 286 ePc    17 35.60  -1.0
NANU  59.69 256 iPd    17 40.40   0.0
DAV   61.11 292 eP     17 49.00  -0.8
MKS   61.26 276 ePd    17 50.50  -0.3
TSM   66.38 285 ePc    18 24.90   1.8
      1.2s  1222.60nm        6.3mb
TRT   66.69 271 iPd    18 24.10  -1.0
      0.7s   296.00nm        5.9mb
SPA   68.12 180 iPc    18 34.50   1.3
      0.8s   163.33nm        5.6mb
              i     20 36.70
KKM   68.84 286 ePd    18 37.80  -0.4
      0.8s   557.50nm        6.1mb
              ed    20 40.00
KAKJ  69.34 326 P      18 39.90  -0.7
CHJJ  69.84 325 P      18 42.90  -0.7
IIDJ  70.00 324 P      18 43.80  -0.8
BAG   70.04 298 ePd-   18 44.00  -1.3
      1.2s  1600.00nm        6.4mb
              eS    27 10.00
WKYJ  70.38 322 iPd    18 46.80   0.0
MAJO  70.63 325 iPd    18 46.61  -1.6
              ipPd  20 46.13 581kmX
MAT   70.63 325 iPd    18 47.20  -1.0
      1.1s   645.57nm        6.1mb
              eS    27 14.00
NIIJ  70.74 326 P      18 48.00  -0.7
OFUJ  70.83 329 P      18 48.70  -0.5
MTMJ  70.88 325 P      18 49.20  -0.5
YAMJ  70.92 327 P      18 49.70  -0.1
TSRJ  71.11 323 P      18 50.70  -0.2
TKSJ  71.12 320 iPd    18 50.90  -0.1
KAGJ  71.16 316 eP     18 51.30   0.0
KUMJ  72.09 317 eP     18 56.10  -0.6
YONJ  72.30 321 iPd    18 57.70  -0.2
AOMJ  72.60 329 P      18 59.30  -0.1
KUSJ  72.70 333 iPd    18 59.60  -0.3
HOOJ  72.72 332 iPd    19 00.70   0.7
SHNJ  72.98 319 P      19 01.00  -0.7
ADK   73.62   2 iPd    19 03.60  -1.3
      0.9s   452.70nm        6.0mb
MRRJ  73.74 331 P      19 05.80   0.0
SAP   74.12 331 iP     19 08.70   0.8
ASAJ  74.40 333 P      19 10.60   1.2
SMY   74.64 356 iPd    19 09.20  -1.3
QZH   76.11 304 iPd    19 19.50   0.2
      1.1s  1000.00nm        6.2mb
              pP    21 17.50 556kmX
              S     28 14.00
SSE   77.62 311 iPd    19 27.00  -0.3
      1.2s   290.00nm        5.6mb
              PP    22 26.00
              sP    22 28.00
              S     28 36.00
HKC   78.23 300 iP     19 32.00   1.3
              iS    28 41.00
MCO   78.63 299 iP     19 33.80   1.0
SDN   78.73  11 iPd    19 31.40  -1.2
KGM   78.91 277 ePd    19 35.30   0.8
      1.2s  1658.10nm        6.3mb
              e     21 38.90
GZH   79.28 300 Pd     19 37.50   1.3
      5.0s  4100.00nm        6.1mb X
              pP    21 38.00 564kmX
              S     28 51.00
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MAW   79.68 200 iPd    19 39.40   1.9
      0.8s    51.00nm        5.0mb
              eS    21 49.00
SYP   79.71  46 eP     19 40.00   1.6
NJ2   79.80 311 iPd    19 39.70   1.0
      1.1s   800.00nm        6.1mb
              pP    21 40.00 562kmX
              S     28 55.00
PRS   79.86  44 ePc    19 39.90   1.0
              epP   21 45.20 592kmX
GCC   79.88  43 ePc    19 39.80   0.8
PCC   79.92  43 ePc    19 39.90   0.7
BCH   80.02  46 P      19 41.00   1.0
              pP    21 47.40 598kmX
SAO   80.07  44 ePc    19 40.60   0.6
AIA   80.11 157 eP     19 41.90   2.1
PRI   80.20  45 ePc    19 41.90   1.0
              epP   21 47.40 592kmX
BRK   80.22  42 ePc    19 41.50   0.8
              ipP   21 47.00 592kmX
              esP   22 47.00
QIZ   80.24 295 iPd    19 42.00   0.8
      6.0s  1700.00nm        5.7mb X
              PP    22 50.00
              S     29 00.00
BKS   80.24  42 eP     19 41.20   0.3
      0.9s   182.00nm        5.5mb
              epP   21 46.00 588kmX
              ePP   22 45.60
              eS    28 59.60
              eSP   29 52.40
              esS   32 44.30
              esPS  33 46.80
              esSS  37 51.40
MHC   80.29  43 ePc    19 42.40   1.1
              epP   21 48.10 593kmX
LLA   80.30  44 ePc    19 42.10   0.8
              epP   23 47.40
ARN   80.36  43 P      19 42.60   1.0
              pP    21 47.40 588kmX
ABL   80.41  46 P      19 43.70   1.6
PPI   80.68 273 ePd    19 43.00  -0.6
      0.8s    83.40nm        5.3mb
PAS   80.72  47 iPc    19 42.77  -0.7
              ipPc  21 48.25 591kmX
              isPd  22 46.52
              iS    29 05.77
              eScS  29 07.00
              esP   30 02.00
              ePcS  31 29.00
              eSSP  32 40.00
              isS   32 48.01
              esSS  37 14.00
              eLg   41 12.00
MWC   80.84  47 eP     19 45.00   0.7
              e     21 55.00
BAR   80.94  49 eP     19 45.00   0.4
              e     21 51.00
MDJ   80.98 326 iPd    19 45.20   0.7
      5.0s  3600.00nm        6.2mb X
              pP    21 51.00 592kmX
              S     29 03.00
              SS    32 48.00
              SS    34 35.00
RVR   81.18  48 eP     19 46.00   0.2
              e     21 52.00
PLM   81.18  49 eP     19 47.00   1.0
              e     21 53.00
SBB   81.26  47 eP     19 46.00  -0.3
              e     21 53.00
ISA   81.37  46 eP     19 47.00   0.2
              e     21 55.00
CMB   81.50  43 iPc    19 46.71  -0.7
              ipPc  21 51.52 585kmX
              isPd  22 51.12
              iS    29 14.14
              isS   32 58.44
              eP'P' 46 24.30
WDC   81.71  40 ePc    19 49.00   0.7
              ipP   21 55.80 597kmX
ORV   81.72  41 ePc    19 49.00   0.6
              epP   21 55.40 594kmX
DL2   81.90 318 iPd    19 49.00  -0.3
      1.8s  1800.00nm        6.3mb
              pP    21 54.00 586kmX
              sP    22 54.00
              PP    23 07.00
```

26d 12h

			iS	29	10.00			IIT	89.19	69	(P)	20	26.33	1.3		CCM	101.90	54	ePdiff	21	22.08	0.1X
IPM	82.01	278	ePd	19	52.10	1.7		PTI	89.27	43	P	20	25.70	0.9					epPc	23	30.20	
			e	21	57.00			NEW	89.40	36	P	20	25.10	0.0					esPd	24	28.47	
MIN	82.13	41	ePc	19	50.60	0.0			1.1s		15.43nm			4.8mb X					iSKSpc	31	02.44	
TPC	82.16	49	eP	19	51.00	0.2		ALQ	89.42	52	iPc	20	26.00	0.3					eSKKS	31	42.17	
			e	22	02.00				1.2s		136.72nm			5.8mb					eSDIF	32	17.62	
WHN	82.25	307	iPd	19	52.50	1.3					ePP	22	55.00	595kmX					ePPS	33	52.95	
	1.5s		660.00nm			5.9mb		ANMO	89.42	52	iPc	20	26.10	0.4					eSS	36	09.37	
			S	29	12.00				1.4s		196.22nm			5.8mb		CNCB	102.62	114	Pdiff	21	30.00	3.7X
GSC	82.29	47	eP	19	52.00	0.5					ipPc	22	33.90	588kmX					S	25	49.00	
			e	22	03.00						esPd	23	33.16			ZOBO	102.75	113	Pdiff	21	30.00	3.1X
GLA	82.45	50	eP	19	53.00	0.8					iS	30	01.52				1.1s		20.88nm			5.7mb
			e	22	01.00						isS	30	05.32				Z 24s		0.48um			4.9MszX
SNY	82.49	321	iPd	19	52.00	-0.1		HHC	89.43	315	Pd	20	26.40	0.9					i	21	32.10	
	1.2s		300.00nm			5.7mb			1.0s		500.00nm			6.4mb					S	25	21.00	
			pP	21	57.00	584kmX					PP	24	05.00						LR	34	12.00	
			sP	22	55.00						SKS	30	00.00			GUN	103.89	295	Pdiff	21	32.60	1.1
			iS	29	14.00						S	30	30.00			CCH	103.90	115	ePdiff	21	36.00	4.3X
			sS	33	00.00			CHG	89.47	290	iPd	20	27.50	1.5		PKI	104.19	294	Pdiff	21	33.00	0.2
LBFM	82.57	40	P	19	53.80	0.9					eS	29	56.00			DMN	104.45	294	Pdiff	21	34.40	0.5
KDC	82.60	14	iPd	19	52.10	-0.2		CHTO	89.47	290	iPd	20	27.01	1.0		MBC	104.55	12	ePdiff	21	31.50	-1.3
CN2	82.67	323	iPd	19	53.00	0.0					ipPd	22	31.49	569kmX			1.0s		5.00nm			5.3mb
	1.0s		500.00nm			6.0mb					esPc	23	30.75			GKN	104.97	294	Pdiff	21	35.60	-0.5
			pP	21	57.00	578kmX					eHPP	24	09.22			WMQ	106.88	311	Pdiff	21	44.00	-0.1
			sP	22	56.00						iPP	24	09.88			SIV	108.81	117	Pdiff	21	56.30	3.1X
TIA	83.29	313	Pd	19	56.80	0.5		OXX	89.82	72	(P)	20	29.86	2.0					S	26	27.00	
	5.5s		2800.00nm			6.0mb X		IMA	89.97	10	iPd	20	26.90	-0.6		QUE	120.52	293	iPKPd	26	17.10	0.1
			pP	22	01.00	578kmX			0.9s		44.70nm			5.4mb			1.1s		136.08nm			
			sP	23	01.00			MCMT	89.99	41	iPc	20	28.70	0.5					(S)	32	21.00	
			S	29	21.00			FBA	90.01	13	iPd	20	26.00	-1.5		CER	122.10	199	ePKP	26	20.00	0.3
SNG	83.39	280	iPd	19	58.80	1.6		LTMT	90.28	41	eP	20	30.60	1.0		HVD	122.45	206	ePKP	26	38.20	17.6X
	1.0s		796.00nm			6.2mb					epP	22	42.60	611kmX		KBS	122.80	357	iPKP	26	19.50	-0.2
			eS	29	26.60			BTO	90.33	314	iPd	20	30.00	0.3		BLF	123.48	207	iPKPc	26	23.00	0.3
KVN	83.55	43	P	19	58.20	0.4					pP	22	39.00	594kmX		SEK	123.53	209	iPKPd	26	22.50	-0.3
			pP	22	05.20	594kmX					sP	23	37.00				0.9s		43.00nm			
TNP	83.57	45	P	19	58.40	0.5					SKS	30	03.00			DAG	124.36	5	iPKPd	26	20.20	-2.5
			pP	22	05.60	595kmX					S	30	33.00				1.0s		37.00nm			
COR	83.77	37	ePc	19	59.11	0.6		CD2	90.46	303	eP	20	31.60	1.2		BFT	124.61	213	iPKPc	26	26.00	0.9
			epPc	22	05.25	588kmX			4.0s		1200.00nm			6.2mb X			0.7s		55.00nm			
			esPd	23	04.84						pP	22	37.00	573kmX		PRY	124.80	210	iPKPc	26	24.50	-0.8
			iS	29	36.37						sP	23	38.00				0.5s		20.00nm			
			isS	33	21.50						PP	24	15.00			BFS	125.13	209	iPKPd	26	21.50	-4.5X
TSI	83.86	276	ePc	19	59.50	-0.1					SKS	30	04.00			BPI	125.18	211	iPKPd	26	25.90	-0.2
SVW	85.04	11	ePd	20	03.50	-0.9					S	30	40.00			SWZ	125.53	207	ePKP	26	12.60	-14.1X
PCT	85.66	288	ePd	20	09.50	1.4		BGMT	90.69	41	ePc	20	32.00	0.6		NPA	127.08	229	iPKP	26	31.00	1.3
	0.5s		4.50nm			4.4mb X		LRM	90.75	40	ePc	20	31.50	-0.2					e	28	36.50	
BJI	86.01	316	iPd	20	09.61	0.2					ipP	22	44.00	614kmX		MAIO	127.31	300	iPKPd	26	15.80	-14.0X
	1.7s		850.00nm			6.2mb		BW06	91.01	44	P	20	32.70	-0.2					i	26	29.00	
			ipPd	22	14.75	578kmX			1.2s		44.11nm			5.4mb					e	28	35.00	
			isPc	23	14.02			LVVM	91.09	69	(P)	20	33.79	0.4		CIR	127.58	217	iPKPc	26	29.50	-1.1
			eSKS	29	36.00			EVV	91.55	71	(P)	20	37.00	1.5					iPP	28	39.00	
			eS	29	58.19			HRY	91.58	40	iPc	20	35.30	0.0					iSKP	28	58.90	
GYA	86.21	300	iPd	20	11.60	0.7					epP	22	47.50	611kmX		BUL	129.91	215	iPKPd	26	29.90	-5.3X
	1.4s		500.00nm			6.1mb		SXM	91.66	40	iPc	20	36.30	0.5					iPP	28	58.10	
PGC	86.27	33	eP	20	11.00	0.6					ipP	22	48.60	612kmX		SOD	131.77	347	ePKP	26	29.00	-8.1X
NNT	86.32	285	iPd	20	12.40	1.0		GOL	92.35	48	P	20	39.40	0.2					iSKP	29	03.40	
LOE	86.48	290	iPd	20	13.00	0.9			0.8s		8.48nm			4.8mb X		KRI	132.02	219	ePKP	26	24.20	-15.1X
TTA	86.67	11	iPd	20	11.80	-0.4		CHCH	92.40	128	eP	20	40.00	0.6					iSKP	28	57.00	
PMR	86.81	14	iPd	20	11.90	-0.8		GLD	92.48	48	P	20	40.40	0.7		WIN	132.84	201	ePKP	26	40.00	-0.8
	1.3s		406.20nm			6.0mb			1.3s		100.57nm			5.7mb		SHI	132.90	291	ePKP	26	28.00	-12.7X
AGX	86.95	65	(P)	20	17.00	2.8X		LZH	92.60	308	iPd	20	41.21	0.9		CAI	133.46	123	ePKP	26	30.50	-11.4X
ACX	86.98	71	(P)	20	15.98	1.5			1.5s		410.00nm			6.3mb		LSZ	134.08	219	ePKP	26	31.00	-12.2X
SJT	87.04	22	ePd	20	14.10	0.2					epPd	22	46.03	568kmX					i	26	43.90	
MSU	87.14	46	P	20	16.10	0.9					esPc	23	43.96						e	29	06.00	
NST	87.18	288	iPd	20	17.50	2.1					pP	24	30.00						iSn	29	17.50	
TIY	87.27	313	iPd	20	16.00	0.4					SKS	30	16.00						iSg	29	21.00	
	1.4s		900.00nm			6.3mb					S	30	58.00			TAB	137.69	303	ePKP	26	38.00	-11.4X
			sP	23	19.00			PEL	92.75	127	iPc	20	42.00	0.9		NAI	137.70	242	iPKPd	26	33.00	-17.2X
			ScS	30	12.50				1.0s		160.00nm			6.0mb		RYD	137.76	283	ePKP	26	41.00	-8.8X
YKU	87.56	19	eP	20	17.00	0.7		SES	93.90	37	ePc	20	45.30	-0.5		NUR	137.98	342	ePKP	26	40.00	-9.0X
III	87.93	69	(P)	20	20.23	1.1		RSSD	95.19	44	P	20	51.60	-0.4			0.6s		61.30nm			
TOA	87.94	15	eP	20	18.00	-0.2		INK	96.09	16	eP	20	54.00	-1.1					i	26	48.00	
XAN	87.97	308	iPd	20	19.00	0.1		GTA	96.87	310	iPd	20	59.80	0.3					iSKP	29	27.00	
	1.0s		400.00nm			6.2mb			1.6s		200.00nm			6.2mb		KMTA	140.14	272	ePKPc	26	48.70	-5.8X
CRX	88.16	68	(P)	20	22.00	1.7					PP	25	01.00			ABHA	140.27	272	ePKP	26	50.30	-4.5X
IIJ	88.25	68	(P)	20	21.76	0.8		TUL	97.74	55	eP	21	02.00	-1.4		UPP	140.30	347	iPKP	26	45.00	-8.2X
IIC	88.67	68	(P)	20	23.12	0.4			1.2s		10.50nm			5.0mb					i	29	32.10	
PNT	88.67	34	eP	20	22.00	0.3					e	21	10.20						i	29	52.20	
	0.8s		68.00nm			5.6mb					e	25	08.70			NB2	140.30	352	PKP	26	45.20	-8.1X
DAU	88.72	45	P	20	23.10	0.5		LNO	97.74	55	eP	21	05.50	2.2			0.9s		62.10nm			
BDT	88.80	289	iPd	20	25.00	2.1					e	21	10.50			QASM	140.65	285	ePKP	26	49.30	-5.7X
	1.0s		586.50nm			6.4mb					e	25	07.50			HFS	140.79	350	ePKP	26	46.60	-7.5X
KMI	88.82	298	iPd	20	24.80	1.6		UYO	98.13	57	e(P)	21	04.50	-0.7			1.1s		160.60nm			
	2.0s		1200.00nm			6.5mb		YKA	98.46	25	eP	21	04.80	-1.2					e	26	54.70	
			ipPd	22	29.29	569kmX			0.9s		3.70nm			4.8mb X		AFIF	140.81	282	iPKPc	26	50.70	-4.7X
			ec	23	26.23			LSA	100.07	298	Pdiff	21	15.80	1.1		UQSK	141.68	284	iPKPd	26	53.30	-3.6X
			eS	30	24.80						S	31	54.00			LWI	143.34	232	iPKP-	26	59.60	-0.6

GAZ	144.95	304	iPKP	27	01.90	0.0
COP	145.23	348	iPKPd	27	02.10	0.3
	1.3s	953.85nm				
EDU	145.41	3	ePKP	27	00.70	-1.4
	0.6s	277.00nm				
ELO	145.45	4	ePKP	27	00.90	-1.3
EBH	145.68	4	ePKP	27	01.50	-1.0
	0.7s	292.00nm				
EAB	145.68	5	ePKP	27	01.40	-1.1
KAS	146.05	312	ePKP	27	03.50	-0.2
ESY	146.06	3	ePKP	27	02.20	-1.0
EAU	146.09	4	ePKP	27	02.80	-0.4
	0.6s	249.00nm				
EBL	146.18	4	ePKP	27	03.00	-0.4
EKA	146.62	4	PKPc	27	00.50	-3.6X
	0.9s	4.00nm				
IAS	146.75	326	ePKP	27	04.00	-0.5
WAJH	146.91	284	ePKP	27	05.00	-0.4
HRI	147.00	298	iPKPd	27	05.20	-0.3
CLI	147.31	325	iPKPd	27	09.50	4.0X
PPE	147.34	324	ePKPc	27	08.50	3.0X
BBTK	147.37	310	iPKPd	27	09.00	3.1X
PTT	147.53	326	ePKP	27	10.00	4.2X
DSI	147.58	295	iPKPd	27	07.00	0.7
CFR	147.66	322	ePKP	27	06.00	0.0
FAM	148.02	301	ePKP	27	06.00	-0.9
VRI	148.04	324	iPKPd	27	10.00	3.3X
PRNI	148.07	292	iPKPd	27	07.00	-0.2
TLB	148.09	321	ePKPc	27	07.00	0.3
KRA	148.11	336	ePKP	27	05.70	-0.9
	1.5s	675.00nm				
			i	27	10.40	
			i	27	15.20	
			e	29	22.00	
BRN	148.11	345	ePKPc	27	06.00	-0.5
			id	27	11.50	
			ePP	29	28.50	
HQL	148.13	290	ePKP	27	07.30	0.0
DCN	148.16	9	ePKP	27	05.60	-1.0
	1.0s	111.00nm				
BADA	148.23	289	ePKP	27	06.80	-0.7
DLE	148.31	8	ePKP	27	06.20	-0.6
	1.1s	73.00nm				
LFK	148.32	302	iPKP	27	05.70	-1.8
CSS	148.56	301	ePKP	27	06.50	-1.3
SPC	148.69	335	iPKP	27	07.50	-0.3
			i	27	12.10	
			i	29	32.60	
KSP	148.69	341	ePKPd	27	07.20	-0.3
MLR	148.70	324	iPKPd	27	06.70	-1.2
	1.4s	772.90nm				
			e	27	31.20	
			e	29	35.20	
			e	37	29.70	
GPA	148.88	313	ePKP	27	07.00	-1.2
WIT	148.89	353	ePKPc	27	08.50	0.8
ETA	148.94	8	ePKP	27	12.00	4.2X
YRH	148.98	6	ePKP	27	11.70	3.8X
	1.0s	181.00nm				
VAL	148.99	13	iPKP	27	12.80	5.0X
HRT	149.07	314	iPKP	27	11.60	3.1X
CLL	149.19	345	iPKP	27	07.20	-1.0
	1.6s	1150.00nm				
			i	27	13.00	
			pPKP	29	30.00	
			SKKS	36	42.00	
GBZT	149.23	314	ePKP	27	13.00	4.4X
BUC	149.30	323	iPKPd	27	12.00	3.4X
CMP	149.33	325	iPKPc	27	05.00	-3.7X
BRG	149.34	343	iPKP	27	07.70	-0.8
			i	27	13.20	
			i	27	19.80	
			iSKP	30	28.00	
			eSKKS	36	43.20	
			ipPKP	44	32.60	
ISK	149.35	315	ePKP	27	13.00	4.2X
ITU	149.36	315	ePKP	27	13.00	4.2X
PPCY	149.36	302	ePKP	27	13.00	4.0X
BUC1	149.38	323	ePKPd	27	12.00	3.3X
YLV	149.39	314	iPKP	27	08.00	-1.0
ECP	149.42	8	ePKP	27	13.00	4.5X
	1.0s	313.00nm				
IZI	149.43	313	ePKP	27	13.60	4.5X
TNR	149.48	326	ePKPc	27	11.00	2.1
ALT	149.56	311	ePKP	27	07.00	-2.3
WTS	149.68	352	iPKPc	27	09.10	0.2
	1.0s	57.00nm				

CTT	149.73	315	iPKP	27	14.10	4.7X
DBN	149.75	354	ePKP	27	10.00	1.0
			e	29	32.00	
			e	30	27.00	
DMK	149.80	317	iPKP	27	14.50	5.0X
PSZ	149.84	334	iPKP	27	14.60	5.2X
BCK	149.86	307	iPKP	27	14.60	4.8X
PRU	149.97	342	PKPd	27	08.60	-0.8
PRU	149.97	342	iPKP	27	15.00	5.6X
DEV	150.01	328	ePKPd	27	10.00	0.4
AKSR	150.04	279	iPKPc	27	10.50	0.2
MOX	150.13	346	iPKP	27	09.00	-0.7
	1.3s	451.00nm				
			i	27	15.50	
			i	27	23.00	
AGAL	150.21	279	ePKP	27	11.00	0.4
AGRW	150.23	279	ePKP	27	11.00	0.4
KHL	150.29	310	ePKP	27	09.00	-1.4
AKRL	150.33	279	ePKP	27	11.00	0.3
HOF	150.38	345	iPKPc	27	10.00	-0.1
			i	27	15.90	
			i	27	24.90	
BNT	150.46	315	ePKP	27	15.00	4.5X
EDC	150.50	315	iPKP	27	15.50	4.9X
BUD	150.55	334	ePKP	27	08.80	-1.6
SRO	150.56	335	iPKP	27	16.80	6.4X
ELL	150.63	307	ePKP	27	12.00	1.0
ZST	150.70	337	ePKP	27	10.60	0.0
			i	27	17.10	
			i	27	26.70	
			i	29	40.40	
			e	34	23.50	
			e	40	27.70	
BZS	150.83	329	ePKP	27	07.50	-3.3X
VKA	150.92	338	ePKP	27	09.00	-1.9
ENN	150.99	353	iPKPc	27	11.00	0.1
	0.8s	18.00nm				
KHC	151.02	342	PKP	27	10.70	-0.4
			i	27	18.00	
			i	27	28.70	
KSL	151.10	306	ePKP	27	17.50	5.9X
GRF	151.11	346	ePKPd	27	11.10	-0.1
	Z 22s		0.30um			5.1Msz
			id	27	17.90	
			e	27	28.20	
			e(PP)	29	30.00	
			e(PKS)	30	57.00	
UCC	151.12	355	iPKPd-	27	17.80	6.7X
			e	27	27.00	
			e	29	36.00	
MEM	151.14	353	PKPc	27	11.20	0.1
			id	27	17.55	
			e	29	39.30	
TNS	151.16	349	ePKPd	27	10.80	-0.5
			id	27	17.70	
			e	27	20.50	
			e	27	25.70	
			ed	29	36.40	
WET	151.20	343	iPKPc	27	11.50	0.1
			i	27	17.90	
			i	27	28.90	
HLW	151.27	292	ePKP	27	11.70	-0.3
			e	27	19.00	
			e	27	30.00	
			e	29	35.50	
SOP	151.33	337	iPKP	27	12.30	0.8
SNF	151.41	355	iPKPc	27	11.79	0.3
			id	27	18.12	
			ic	27	28.90	
RDO	151.57	318	ePKP	27	18.00	5.9X
CIN	151.62	309	ePKP	27	18.00	5.7X
EZN	151.78	315	ePKP	27	18.40	6.0X
DOU	151.79	354	PKP	27	12.50	0.4
			id-	27	19.00	
			e	27	31.00	
			e	29	37.70	
			e	29	53.00	
KMR	151.82	340	iPKP-	27	11.60	-0.6
			i	27	19.30	
			i	27	32.20	
			ipPKP	29	34.40	
BEO	151.97	329	iPKP	27	19.50	7.0X
			i(S)	29	41.00	
WLF	152.05	352	iPKPd	27	20.28	7.8X
SMG	152.47	310	ePKP	27	20.50	7.1X
BHG	152.49	342	iPKPc	27	13.10	-0.1
			i	27	20.90	

			i	27	34.90	
FUR	152.52	344	iPKPc	27	13.30	0.0
			i	27	20.70	
			i	27	34.70	
SRS	152.78	320	ePKPc	27	20.40	6.6X
			eS	28	05.00	
OUR	153.00	318	ePKPc	27	27.00	12.9X
PTJ	153.05	336	iPKPd	27	13.00	-1.2
SOH	153.10	319	ePKPc	27	20.90	6.6X
			iS	28	03.60	
CDF	153.11	350	ePKP	27	13.30	-0.9
	1.4s	34.85nm				
ZAG	153.11	336	iPKPd	27	13.50	-0.6
KNT	153.16	320	ePKPc	27	15.20	0.8
			eS	27	53.80	
VAY	153.25	321	iPKP	27	13.30	-1.1
	1.2s	31.00nm				
			i	27	22.00	
			i	27	37.40	
FLN	153.30	1	ePKP	27	13.60	-0.7
	1.1s	48.85nm				
SQTA	153.41	344	iPKPd	27	13.90	-0.8
	1.2s	61.70nm				
			i	27	22.30	
			i	27	38.20	
			ipPKP	29	38.80	
			i	29	45.60	
			i	29	55.00	
			i	30	04.20	
			iPP	31	12.40	
			i	34	43.90	
PAIG	153.43	317	ePKP	27	27.00	12.3X
LJU	153.45	338	ePKPd	27	14.00	-0.6
			e	29	39.50	
SKO	153.47	323	iPKP	27	13.00	-1.7
	1.5s	108.00nm				
			iP'P'	27	22.50	
			i	27	38.50	
			i	29	34.00	
			iPP	31	14.00	
			i	40	00.00	
LDF	153.47	1	ePKP	27	13.80	-0.7
	1.1s	36.65nm				
SLE	153.52	348	ePKPd	27	14.00	-0.6
FVI	153.54	341	PKP	27	13.70	-0.9
GRG	153.58	321	ePKPc	27	12.50	-2.4
HAU	153.65	351	ePKP	27	14.40	-0.4
VBY	153.65	336	ePKPd	27	14.70	-0.1
			i	27	23.30	
GRR	153.66	2	ePKP	27	14.10	-0.6
	1.0s	18.00nm				
VOY	153.68	339	ePKPd	27	13.50	-1.5
			e	27	38.10	
			e	29	37.70	
CEY	153.75	338	ePKPd	27	14.40	-0.6
			i	27	38.80	
			e	29	47.00	
BSF	153.75	350	ePKP	27	14.40	-0.7
	1.2s	35.70nm				
OGA	153.79	344	iPKPd	27	15.30	0.0
ZLA	153.81	348	ePKPd	27	14.50	-0.6
SAX	153.84	346	ePKPd	27	14.80	-0.6
TRI	154.01	339	iPKPd	27	14.50	-0.8
			i	27	23.50	
			i	27	39.30	
			e	31	10.00	
			e	33	20.00	
			e	34	12.00	
			e	40	24.00	
			e	42	28.00	
			e	49	42.00	
			e	55	44.00	
LPF	154.01	2	ePKP	27	14.80	-0.4
	1.0s	24.00nm				
LIT	154.06	319	ePKPd	27	18.60	3.0X
			iS	27	59.90	
RIY	154.11	337	ePKP	27	14.10	-1.3
OSS	154.18	345	ePKPd	27	15.20	-0.6
PUK	154.26	325	ePKP	27	10.20	-5.5X
LLS	154.27	347	ePKPd	27	15.50	-0.4
FNA	154.29	321	ePKPc	27	07.10	-8.8X
OHR	154.40	323	iPKPd	27	15.40	-0.7
	1.5s	134.00nm				
			i	27	24.70	
			i	27	42.30	
LACI	154.64	325	ePKP	27	14.00	-2.3
LOR	154.66	355	ePKP	27	15.80	-0.4

26d 12h

	1.3s	39.70nm				
TIR	154.76	324	ePKP	27	16.00	-0.5
AGG	154.80	317	ePKPd	27	27.40	10.7X
SSF	154.90	355	ePKP	27	16.20	-0.3
	1.2s	41.65nm				
LBF	154.93	354	ePKP	27	16.10	-0.5
	1.3s	45.15nm				
TMA	155.02	346	ePKPd	27	16.20	-0.7
SAL	155.09	343	PKP	27	16.80	0.1
MDI	155.14	345	PKP	27	15.50	-1.3
AVF	155.18	355	ePKP	27	15.90	-0.9
	1.3s	21.65nm				
MMK	155.27	348	ePKPd	27	17.30	0.0
VAI	155.27	346	PKP	27	16.00	-1.0
SMF	155.28	355	ePKP	27	16.30	-0.7
	1.2s	29.75nm				
BCAO	155.30	228	iPKPd	27	18.00	0.0
	0.6s	154.00nm				
			ic	27	40.20	
			id	31	06.70	
DIX	155.35	348	ePKPd	27	17.60	0.1
TPE	155.40	322	ePKP	27	18.50	1.1
BGF	155.44	356	ePKP	27	16.80	-0.4
	1.3s	52.35nm				
MFF	155.47	1	ePKP	27	16.70	-0.6
	1.1s	41.50nm				
ORO	155.67	347	PKP	27	16.90	-0.8
IGT	155.71	320	ePKP	27	13.50	-4.3X
TCF	155.75	357	ePKP	27	17.00	-0.7
	1.2s	47.60nm				
MAF	155.80	357	ePKP	27	17.40	-0.4
	1.5s	36.55nm				
LSF	155.81	358	ePKP	27	16.90	-0.9
	1.1s	36.65nm				
LPL	156.01	349	ePKP	27	18.40	0.0
RSM	156.02	338	PKP	27	18.60	0.6
LPG	156.03	349	ePKP	27	18.40	-0.1
	1.3s	43.30nm				
BOB	156.15	344	PKP	27	17.50	-0.8
ARV	156.22	337	PKP	27	18.00	-0.4
SFI	156.22	339	PKP	27	17.50	-0.8
PGD	156.31	340	PKP	27	18.40	-0.3
CRE	156.45	339	PKP	27	17.50	-1.3
BNI	156.47	349	PKP	27	19.00	0.2
BDI	156.49	342	PKP	27	17.00	-1.8
BRT	156.49	327	PKP	27	17.50	-1.3
LCI	156.50	325	PKP	27	18.00	-0.8
FIR	156.54	340	ePKP	27	17.00	-1.7
			i	27	51.50	
			i	31	26.00	
			iSKKS	37	20.00	
ASS	156.69	337	PKP	27	18.00	-1.1
RJF	156.76	358	ePKP	27	18.80	-0.2
	1.2s	47.60nm				
PII	156.82	341	PKP	27	17.00	-2.1
DOI	156.90	348	PKP	27	16.50	-2.8
AQU	157.03	335	PKP	27	19.20	-0.3
CAF	157.11	357	ePKP	27	19.20	-0.3
	1.3s	36.10nm				
LFF	157.13	360	ePKP	27	19.10	-0.3
	1.2s	35.70nm				
DUI	157.17	332	PKP	27	18.00	-1.7
AZI	157.33	334	PKP	27	19.30	-0.4
LPO	157.39	359	ePKP	27	19.80	0.1
	1.2s	35.70nm				
SDI	157.41	333	PKP	27	19.00	-0.9
SBF	157.47	347	ePKP	27	19.10	-0.9
	1.1s	39.05nm				
ORI	157.48	327	PKP	27	19.50	-0.5
SGO	157.67	329	PKP	27	19.00	-1.1
BSS	157.72	330	PKP	27	19.00	-1.2
TDS	157.84	326	PKP	27	19.80	-0.6
FRF	157.92	348	ePKP	27	19.80	-0.6
	1.3s	36.10nm				
LRG	158.08	349	ePKP	27	20.20	-0.3
	1.2s	41.65nm				
LMR	158.17	348	ePKP	27	20.10	-0.5
	1.3s	36.10nm				
PGF	158.33	343	ePKP	27	20.20	-0.8
	1.2s	47.60nm				
ERUA	158.69	16	iPKPc	27	22.00	0.7
			ic	28	00.70	
SOI	159.15	324	PKP	27	21.40	-0.5
ATN	159.41	325	PKP	27	19.50	-2.7X
GUD	161.01	11	iPKPc	27	25.00	1.1
			ic	28	10.50	
ETOR	161.13	6	ePKP	27	24.90	0.9
			ic	28	11.20	
EPLA	161.15	16	ePKP	27	25.20	1.3
			ic	28	11.60	
EROQ	161.25	0	ePKP	27	24.60	0.7
			ic	28	11.50	
EBR	161.25	0	(PKP)	27	24.00	0.1
			i	28	12.00	
TOL	161.77	11	ePKP	27	26.00	1.5
			iPKKP	28	14.50	
			ePKS	30	25.00	
			ePP	31	30.00	
			ePPP	35	06.00	
			eSS	51	28.00	
ECHE	162.44	4	ePKP	27	26.50	1.3
			ic	28	17.30	
EVIA	163.23	8	ePKP	27	27.20	1.0
			ic	28	20.80	
EVAL	163.26	20	ePKP	27	27.60	1.5
			ic	28	20.80	
LIC	163.41	160	PKP	27	26.66	-0.2
	0.8s	28.50nm				
KIC	163.63	161	PKP	27	26.84	-0.3
	0.8s	34.50nm				
TIC	163.81	160	PKP	27	27.00	-0.3
	0.8s	35.00nm				
EJIF	164.70	19	ePKP	27	29.00	1.6
			ic	28	28.30	
MAL	164.73	15	ePKP	27	27.50	0.1
			iPP	32	16.00	
LKO	166.28	154	PKPd	27	28.98	-0.4
	0.7s	14.50nm				
AVE	166.75	30	iPKP	27	30.20	1.1
			i	28	36.00	
			i	32	45.00	
TIO	168.72	37	iPKP	27	31.50	0.8
			i	28	46.00	
			i	30	59.00	

S.D. = 1.0 on 406 of 487 obs.

% JUN 26, 1990 15h 33m 12.88± 2.45s
43.070 N ±23.9km 0.548 W ±14.4km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
MD 1.0 (STR).

ESCF	0.02	294	Pg	33	14.34	-0.5
			Sg	33	15.96	
OGE	0.11	29	Pg	33	15.81	0.0
ATE	0.11	278	Pg	33	15.57	-0.3
			Sg	33	17.41	
ISSF	0.19	257	Pg	33	17.41	0.3
			Sg	33	20.82	
MADF	0.21	291	Pg	33	17.41	-0.1
			Sg	33	20.86	

S.D. = 0.4 on 5 of 5 obs.

& JUN 26, 1990 17h 34m 57.45s
60.109 N 152.948 W
DEPTH = 125.1km
SOUTHERN ALASKA (2)
<AGS-P>.

RED	0.32	16	iP	35	14.61	0.8
			iS	35	28.42	
RDT	0.54	30	iP	35	15.81	-0.7
			iS	35	30.78	
AUE	0.78	196	eP	35	17.18	-1.0
NNL	0.83	94	iP	35	18.94	0.3
XLV	0.90	136	iP	35	18.40	-0.9
			iS	35	35.15	
CNPM	1.04	123	iP	35	20.16	-0.5
			eS	35	37.36	
SPU	1.16	22	iP	35	21.41	-0.5
			iS	35	39.93	
MCNL	1.16	218	iP	35	20.53	-1.4
			eS	35	38.13	
CRP	1.23	18	iP	35	22.49	-0.2
			iS	35	42.01	
CDD	1.23	197	iP	35	21.18	-1.5
CGLM	1.29	21	iP	35	22.84	-0.5
SLKM	1.42	72	eP	35	23.61	-1.0
SVW	1.66	308	eP	35	25.94	-1.5
			Sn	35	48.25	
SUA	1.74	38	iP	35	28.16	-0.3
			eS	35	51.98	
SEW	1.75	89	eP	35	27.22	-1.3
SKT	2.00	20	iP	35	30.96	-0.7
PMS	2.02	54	eP	35	30.91	-1.0
PWA	2.16	43	eP	35	32.40	-1.1
KDC	2.38	174	iP	35	33.80	-2.6
			eS	36	02.51	
PLRM	2.39	50	eP	35	35.19	-1.3
GHO	2.58	48	eP	35	37.50	-1.6
CUT	2.64	28	eP	35	38.96	-0.8
			eS	36	10.76	
SML	2.82	51	iP	35	40.34	-1.9
GLI	3.00	73	eP	35	41.70	-2.8
SCM	3.24	55	eP	35	45.90	-1.9
VZW	3.30	70	eP	35	45.97	-2.6
VLZ	3.42	70	eP	35	47.89	-2.2
KTH	3.59	15	eP	35	51.38	-1.1
KLU	3.71	65	iP	35	51.96	-2.2
TOA	3.85	56	iP	35	54.54	-1.4
WRH	4.93	25	eP	36	08.83	-1.7
TGL	5.06	78	eP	36	08.68	-3.6
CCB	5.14	25	eP	36	11.52	-1.9

33 obs. associated

JUN 26, 1990 17h 59m 58.25± 0.17s
22.215 S ± 5.0km 138.841 W ± 6.4km
DEPTH = 0.0km (geophysicist)
5.5mb (26 obs.) 4.2Msz (1 obs.)
TUAMOTU ARCHIPELAGO REGION (631)

DZM	50.43	259	iPc	09	00.50	0.4
BAR	58.55	22	eP	10	01.00	1.9
PLM	59.10	21	eP	10	04.00	0.9
PAS	59.40	20	eP	10	06.00	1.1
MWC	59.51	20	eP	10	06.00	0.1
RVR	59.51	21	eP	10	06.00	0.3
GLA	59.55	23	eP	10	06.00	0.0
BCH	59.79	18	P	10	08.50	0.7
SBB	60.01	20	eP	10	10.00	0.8
TPC	60.06	22	eP	10	10.00	0.4
PEL	60.41	116	iPd	10	11.90	-0.2
	0.9s	29.41nm				5.4mb
PRS	60.53	16	eP	10	13.50	0.9
PRI	60.53	17	eP	10	14.40	1.6
GSC	60.90	21	eP	10	16.00	0.7
SAO	60.92	16	eP	10	15.80	0.5
GCC	61.03	15	eP	10	16.70	0.7
CLC	61.12	20	eP	10	17.00	0.3
PCC	61.38	15	eP	10	19.00	0.6
MHC	61.41	16	ePc	10	19.80	1.0
ARN	61.45	16	P	10	19.80	0.9
BRK	61.77	15	eP	10	21.80	0.8
BKS	61.78	15	eP	10	22.20	1.1
	1.0s	78.00nm				5.9mb
CMB	62.39	16	ePc	10	25.60	0.3
TNP	63.33	19	P	10	31.40	-0.2
	1.2s	20.16nm				5.2mb
ARE	63.37	98	eP	10	32.00	-0.5
ORV	63.55	15	eP	10	33.20	0.4
KVN	63.96	18	P	10	35.70	-0.1
WDC	64.29	14	ePc	10	37.70	0.1
ALQ	64.62	29	iPc	10	40.00	-0.2
	1.3s	42.79nm				5.5mb
ANMO	64.63	29	P	10	40.20	0.0
	1.4s	55.23nm				5.6mb
LBFM	65.16	14	P	10	43.10	-0.5
RMO	65.30	250	eP	10	45.09	0.5
MSU	65.38	23	P	10	45.70	0.6
LPB	66.46	99	P	10	53.60	1.0
CNCB	66.48	99	iPc	10	53.90	0.9
ZOBO	66.51	99	iPc	10	54.20	1.0
	1.0s	88.75nm				5.9mb
DUG	66.66	21	P	10	53.00	-0.1
	1.1s	19.74nm				5.3mb
CMS	66.68	244	eP	10	54.00	0.6
DAU	67.39	23	P	10	58.40	0.4
SPA	67.92	180	iPc	11	01.00	0.1
	0.9s	41.82nm				5.7mb
CCH	67.99	100	P	11	03.70	1.5
MEO	68.37	35	iPc	11	02.20	-1.6
	1.3s	63.00nm				5.7mb
RRO	69.00	35	eP	11	12.50	4.8X
GOL	69.07	27	P	11	08.00	-0.4
	1.2s	15.37nm				5.1mb
GLD	69.18	27	P	11	09.20	0.3
	1.5s	87.50nm				5.7mb
CTA	69.20	256	iPc	11	09.90	0.6
	1.0s	110.00nm				6.0mb
QLP	69.20	249	eP	11	10.00	0.7
VGB	69.38	13	P	11	09.10	-0.8

HPI	69.73	20 P	11	12.90	0.5
BMW	69.81	11 P	11	11.00	-1.5
BW06	70.08	23 P	11	13.20	-1.3
	1.4s	27.61nm		5.2mb	
STK	70.10	243 iPc	11	14.60	-0.1
	1.7s	16.00nm		4.9mb	
LON	70.35	12 P	11	14.80	-1.0
TUL	70.72	36 iP	11	17.60	-0.6
	1.1s	22.90nm		5.2mb	
LNO	70.72	36 eP+	11	11.40	-6.7X
GMW	70.93	11 P	11	18.00	-1.3
PGC	71.87	11 eP	11	25.00	0.2
NEW	72.81	15 P	11	29.80	-0.7
	1.4s	135.87nm		5.9mb	
SIV	73.04	101 iPc	11	31.80	-0.7
PNT	73.24	13 ePc	11	32.00	-1.0
RSSD	73.31	25 P	11	32.00	-1.7
SES	76.36	18 ePc	11	51.00	0.1
	1.5s	204.00nm		6.0mb	
		pP	12	08.00	62kmX
RSCP	76.48	42 P	11	50.10	-1.8
	1.4s	108.06nm		5.8mb	
EDM	78.31	15 iPc	12	01.40	-0.3
ASPA	79.01	249 eP	12	05.80	-0.4
	1.6s	49.00nm		5.3mb	
SIT	79.02	2 eP	12	05.80	0.5
SDN	79.43	348 eP	12	07.00	-0.6
WB5	79.87	253 iPc	12	11.00	0.1
WRA	79.87	253 Pc	12	10.90	0.0
	0.8s	23.90nm		5.2mb	
KDC	80.47	353 eP	12	13.20	0.1
ADK	80.87	337 eP	12	16.10	0.7
FFC	82.88	21 eP	12	25.00	-0.8
	0.5s	6.00nm		5.1mb	
PMR	83.92	355 eP	12	31.00	0.1
	1.0s	94.90nm		6.0mb	
SVW	84.13	352 eP	12	31.70	-0.4
TOA	84.23	357 eP	12	33.00	0.4
TTA	85.94	352 eP	12	41.30	0.1
YKA	86.59	11 eP	12	43.20	-1.1
	1.0s	38.10nm		5.5mb	
FBA	87.11	356 e(P)	12	46.20	-0.5
RSNY	88.60	40 P	12	53.00	-1.4
	1.2s	43.73nm		5.6mb	
IMA	88.73	354 eP	12	54.30	-0.4
	1.4s	11.80nm		5.0mb	
MAW	89.01	188 iP	12	56.30	0.3
INK	90.34	2 eP	13	01.00	-0.9
MBC	98.97	5 eP	13	41.00	-0.2
	1.0s	6.00nm		5.3mb	
TIY	117.70	302 ePKP	18	47.90	-0.5
LZH	124.39	299 PKP	19	00.00	-1.4
BDT	125.59	276 ePKP	19	04.60	0.6
CHG	126.05	278 ePKPc	19	05.10	0.2
	0.9s	27.94nm			
GTA	127.67	303 PKPc	19	07.50	-0.1
LIC	132.71	102 (PKP)	19	17.40	-0.3
KIC	133.03	102 (PKP)	19	17.80	-0.5
NB2	135.99	20 PKP	19	22.60	0.0
	1.2s	7.50nm			
CIR	136.03	167 iPKPd	19	22.30	-1.6
WMO	136.12	311 PKP	19	23.00	-0.4
BUL	136.15	163 iPKPd	19	18.50	-5.8X
HFS	137.47	20 ePKP	19	12.20	-13.2X
	0.4s	0.80nm			
	Z 12s	0.04um			4.4MszX
TOL	137.94	55 ePKP	19	29.00	2.0
SUF	138.25	10 ePKP	19	24.90	-1.8
	0.6s	7.10nm			
GUN	139.26	287 PKP	19	21.00	-9.1X
KRI	139.58	163 ePKP	19	11.00	-19.7X
PKI	139.67	287 PKP	19	22.00	-8.9X
	0.8s	21.00nm			
SNF	139.69	36 iPKPd	19	30.18	0.5
DMN	139.94	287 PKP	19	23.40	-7.8X
	0.6s	17.00nm			
NUR	140.02	13 iPKP	19	30.20	0.2
	0.7s	17.40nm			
DOU	140.08	37 PKPc	19	31.00	0.6
WTS	140.22	33 ePKP	19	31.00	0.4
	1.3s	58.00nm			
ENN	140.45	35 ePKP	19	31.00	0.0
	1.5s	47.00nm			
MEM	140.58	35 PKP	19	32.30	1.0
LSZ	140.63	160 iPKP	19	25.70	-6.9X
		i	19	35.00	
MOX	143.43	32 iPKPc	19	33.50	-2.8X
	1.2s	30.00nm			
CLL	143.65	30 iPKPc	19	33.60	-3.1X
	1.7s	44.00nm			
BNI	143.76	43 PKP	19	35.40	-1.9
GRF	143.84	33 iPKPc	19	34.80	-2.3X
	1.3s	77.00nm			
	Z 19s	0.04um			4.2Msz
LSD	143.87	42 PKP	19	35.03	-2.6X
RRL	143.89	43 PKP	19	34.93	-2.7X
RSP	144.08	42 PKP	19	35.23	-2.5X
PZZ	144.28	43 PKP	19	36.26	-1.9
ORX	144.30	41 PKP	19	35.23	-2.9X
ORO	144.30	41 PKP	19	36.00	-2.1X
DOI	144.38	43 PKP	19	37.00	-1.3
BRG	144.39	30 iPKP	19	35.70	-2.2X
	1.3s	80.00nm			
		i	20	06.70	
GBA	144.51	262 PKPd	19	37.90	-1.2
	1.5s	108.20nm			
STV	144.55	44 PKP	19	35.75	-2.8X
HYB	144.56	269 ePKPd	19	39.00	-0.2
	1.0s	80.00nm			
ENR	144.62	44 PKP	19	35.85	-2.8X
VAI	144.65	40 PKP	19	36.70	-1.8
FUR	144.80	35 ePKP	19	37.30	-1.5
	1.6s	152.00nm			
ROB	144.87	43 PKPc	19	37.49	-1.6
WET	145.02	33 iPKPc	19	38.10	-1.0
IMI	145.06	44 PKP	19	37.59	-1.8
CKI	145.07	43 PKP	19	38.30	-1.0
FIN	145.13	43 PKPc	19	38.00	-1.5
PCP	145.18	42 PKPc	19	38.21	-1.4
MDI	145.26	40 PKP	19	38.50	-1.0
PRU	145.27	31 PKPc	19	38.50	-1.0
	1.3s	148.00nm			
		e	19	47.50	
SOTA	145.32	37 iPKPc	19	39.40	-0.4
	1.5s	126.00nm			
		i	19	59.00	
KHC	145.38	32 iPKP	19	39.50	-0.2
	2.2s	85.00nm			
OGA	145.42	37 iPKPc	19	40.30	0.2
KSP	145.46	28 iPKPc	19	39.50	-0.3
	1.1s	94.00nm			
BOB	145.63	42 PKP	19	40.10	-0.3
SAL	145.84	40 PKP	19	41.10	0.6
BHG	145.92	35 iPKPc	19	41.20	0.5
	1.3s	235.00nm			
KMR	146.36	33 iPKP+	19	43.00	1.6
FVI	146.56	36 PKP	19	42.60	0.9
BDI	146.69	42 PKP	19	42.10	0.0
PII	146.82	42 PKP	19	43.00	0.8
VKA	147.31	31 ePKP	19	44.00	1.1
	1.5s	146.00nm			
PGD	147.48	41 PKP	19	45.90	2.4X
VOY	147.51	36 ePKP	19	43.50	0.1
SFI	147.54	41 PKP	19	46.00	2.7X
KRA	147.59	26 ePKP	19	43.90	0.7
	1.3s	192.00nm			
		e	19	46.10	
TRI	147.64	37 iPKPc	19	46.00	2.6X
ZST	147.73	31 ePKP	19	44.60	1.1
		i	19	47.30	
CRE	147.76	42 PKP	19	45.80	1.9
LJU	147.86	36 ePKP	19	44.50	0.7
RSM	147.90	41 PKP	19	47.50	3.6X
CEY	147.99	36 ePKP	19	47.30	3.2X
SPC	148.39	27 iPKP	19	45.00	0.2
ARV	148.43	41 PKP	19	48.50	3.7X
ASS	148.49	42 PKP	19	47.50	2.5X
SRO	14B.57	30 ePKP	19	45.50	0.6
		i	19	49.90	
VBY	148.59	36 ePKPc	19	49.20	4.2X
PTJ	148.71	35 e(PKP)	19	45.30	0.0
ZAG	148.78	35 iPKPc	19	49.70	4.4X
BUD	149.14	30 ePKP	19	45.50	-0.3
POO	149.17	269 iPKPc	19	49.60	2.9X
RMP	149.17	44 PKP	19	51.00	4.9X
RDP	149.21	44 PKP	19	51.20	5.0X
AQU	149.34	43 PKP	19	54.20	7.9X
AZI	149.55	43 PKP	19	51.30	4.8X
SDI	149.94	43 PKP	19	52.00	4.7X
DUI	150.37	43 PKP	19	50.30	2.4X
HVAR	150.70	39 iPKP	19	53.50	5.2X
BSS	151.06	44 PKP	19	54.50	5.6X
SGO	151.50	44 PKP	19	51.00	1.5
BZS	151.72	30 ePKP	19	50.00	0.3
BEO	151.76	32 e(PKP)	19	50.50	0.7
MCT	151.76	51 PKP	19	53.00	2.7X
GIB	151.89	50 PKP	19	57.00	6.6X
ORI	152.50	44 PKP	19	51.00	-0.1
TDS	152.65	45 PKP	19	51.70	0.4
LWI	152.86	152 iPKPc	19	54.60	2.0
SOI	153.27	48 PKP	19	52.50	0.4
CMP	153.48	26 ePKPc	19	46.00	-6.3X
MLR	153.66	25 ePKPd	19	52.50	-0.2
	1.3s	58.50nm			
SKO	154.28	35 ePKP	19	57.00	3.5X
OHR	154.51	38 ePKP	19	48.50	-5.3X
	1.5s	116.00nm			
		i	20	16.20	
VAY	155.34	35 ePKP	19	56.00	1.2
QUE	155.57	294 ePKP	19	57.00	1.2
ADI	167.97	25 ePKP	20	02.00	-6.0X
PRNI	170.20	33 ePKP	20	03.70	-5.7X
MBH	170.59	36 ePKP	20	06.30	-3.2X

S.D. = 0.9 on 145 of 191 obs.

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* JUN 26, 1990 18h 23m 37.13± 1.32s
36.190 N ±13.5km 29.147 E ± 7.1km
DEPTH = 12.7 ± 6.1 km
TURKEY (366)

KSL	0.36	101 ePb	23	44.70	0.0
ELL	0.83	48 iPn	23	53.00	0.0
YER	1.17	324 iPn	24	00.20	1.4
CIN	1.64	329 ePn	24	06.00	0.2
		iSg	24	29.00	
BCK	1.72	42 iPn	24	08.00	1.0
KHL	2.15	8 iPn	24	14.50	1.2
SMG	2.39	310 ePn	24	15.50	-1.1
ALT	2.96	15 ePn	24	23.00	-1.8
VLI	5.03	278 ePn	24	54.50	0.4

S.D. = 1.3 on 9 of 9 obs.

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* JUN 26, 1990 18h 34m 32.94± 2.61s
35.522 N ±25.3km 23.577 E ±17.0km
DEPTH = 10.0km (geophysicist)
CRETE (370)

VAM	0.52	103 ePb	34	43.20	-0.3
VLI	1.30	337 ePb	34	57.20	0.2
ITM	2.12	322 ePn	35	09.50	0.6
APE	2.21	45 ePn	35	11.20	1.0
NEO	3.79	356 ePn	35	31.20	-1.4

S.D. = 1.3 on 5 of 5 obs.

? JUN 26, 1990 18h 41m 23.20± 9.55s
22.741 N ±75.4km 121.431 E ±34.4km
DEPTH = 10.0km (geophysicist)
TAIWAN REGION (243)

TWG	0.34	284 iPc	41	30.30	0.0
		eS	41	37.60	
TWK	1.01	301 ePc	41	42.20	-0.2
TWQ	1.62	340 iPc	41	52.70	0.8
		eS	42	16.30	
TWC	1.90	12 eP	41	56.50	0.6
ANP	2.43	2 eP	42	02.50	-1.2

S.D. = 1.1 on 5 of 5 obs.

% JUN 26, 1990 18h 46m 44.82± 0.82s
41.115 N ±11.8km 28.950 E ± 8.0km
DEPTH = 5.0km (geophysicist)
TURKEY (366)

ISK	0.10	121 iPg	46	46.90	-0.1
		iSg	46	48.40	
CTT	0.39	275 ePg	46	52.90	0.2
HRT	0.62	118 iPg	46	57.40	0.2
YLV	0.63	149 iPg	46	57.40	-0.1
IZI	0.87	153 iPn	47	02.10	0.0
DMK	1.14	309 iPn	47	06.50	-0.1

S.D. = 0.2 on 6 of 6 obs.

& JUN 26, 1990 18h 49m 05.41s
62.713 N 150.828 W
DEPTH = 84.9km
CENTRAL ALASKA (1)
<AGS-P>.

CUT	0.40	140 iP	49	18.94	-0.1
MUR	0.61	64 iP	49	20.56	-0.2
		iS	49	31.92	

26d 18h

SKT	0.81	204	iP	49 22.43	-0.4
KTH	0.84	357	iP	49 23.20	-0.1
			eS	49 36.29	
PWA	1.16	157	eP	49 26.81	-0.1
SUA	1.25	178	eP	49 27.86	-0.4
GHO	1.30	136	eP	49 28.63	-0.2
			eS	49 46.78	
PLRM	1.38	144	eP	49 29.36	-0.3
			eS	49 48.81	
NCG	1.46	206	eP	49 30.00	-0.9
SML	1.48	127	iP	49 30.89	-0.2
CGLM	1.52	202	iP	49 30.98	-0.6
CRP	1.58	204	iP	49 32.13	-0.4
PMS	1.59	157	eP	49 32.36	-0.2
SPU	1.64	201	iP	49 32.69	-0.6
SLKM	2.23	172	iP	49 41.19	0.0
RDT	2.28	200	eP	49 41.46	-0.3
PAX	2.47	82	eP	49 44.28	-0.2
RED	2.48	203	eP	49 44.52	-0.1
GLI	2.56	134	iP	49 44.23	-1.3
KLU	2.61	116	eP	49 44.57	-1.9
CNPM	3.20	184	eP	49 54.11	-0.4

21 obs. ossociated

JUN 26, 1990 19h 03m 10.38± 0.60s
36.895 N ± 9.7km 50.069 E ± 7.9km
DEPTH = 10.0km (geophysicist)
4.2mb (5 obs.)
IRAN (348)

Felt ot Lowshon, Manjil, Rosht ond Rudbor.

TEH	1.57	137	iPc	03 38.00	-0.5
TAB	3.20	293	eP	04 03.00	1.2
			e	04 06.00	
KER	3.50	224	eP	04 06.00	-0.1
MAIO	7.61	92	ePn	05 05.00	1.0
			eSn	06 39.00	
QUE	15.57	111	eP	07 02.90	11.1X
MLR	20.03	303	eP	07 47.00	0.7
SUF	29.75	338	eP	09 17.50	-1.3
	0.8s		0.50nm	3.4mb	
CLL	29.90	311	i(P)	09 20.60	0.3
SQTA	30.36	302	iPd	09 23.40	-1.1
	0.6s		7.70nm	4.7mb	
			i	09 24.40	
			i	09 25.10	
			i	09 31.30	
HFS	32.80	327	eP	09 45.50	-0.1
	0.6s		6.40nm	4.7mb	
Z	12s		0.06um	3.5MszX	
			epP	09 48.70	11kmX
			esP	09 50.50	
			e	10 03.50	
			ePcP	12 29.40	
NB2	34.31	327	P	09 58.50	-0.2
	0.8s		2.70nm	4.2mb	
EKA	40.11	315	P	10 54.00	6.4X
	0.5s		1.00nm	3.7mb	

S.D. = 0.9 on 10 of 12 obs.

• JUN 26, 1990 19h 55m 05.32± 0.92s
7.414 S ±14.0km 128.780 E ±21.0km
DEPTH = 187.4 ± 37.6 km
3.7mb (1 obs.)
BANDA SEA (280)

AAI	3.75	351	e(P)	56 04.00	0.0
MTN	5.87	157	iPc	56 32.00	0.5
			iS	57 35.80	
KNA	8.28	180	eP	57 02.70	-0.6
			eS	58 18.00	
WB5	13.53	157	eP	58 11.00	0.0
			eS	00 32.20	
WRA	13.57	157	Pd	58 11.40	-0.2
	0.2s		0.70nm	3.7mb	
MBL	16.17	211	eP	58 44.00	0.3
WARB	18.78	186	eP	59 17.00	4.2X

S.D. = 0.6 on 6 of 7 obs.

• JUN 26, 1990 20h 30m 42.93± 0.92s
19.288 S ±12.4km 126.898 E ± 9.7km
DEPTH = 10.0km (geophysicist)
WESTERN AUSTRALIA (590)

KNA	3.94	27	eP	31 45.50	0.7
			eS	32 22.00	
WARB	6.87	182	eP	32 32.30	6.1X
	0.2s		5.00nm	5.3mb X	
			eS	33 52.00	
MBL	6.89	253	eP	32 27.00	0.5
	0.3s		2.00nm	4.8mb X	
			eS	33 41.00	
WB5	7.07	96	eP	32 28.00	-1.0
			e	32 29.50	
			i	32 32.80	
			eS	33 47.30	
MTN	7.59	33	eP	32 33.00	-3.2X
			eS	33 50.00	
NANU	11.11	251	eP	33 23.80	-1.2
	0.3s		2.00nm	4.9mb X	
			eS	35 21.00	
FORR	11.56	175	eP	33 32.00	1.0
			eS	35 37.00	
MRWA	14.01	223	eP	34 01.40	-2.4X
			eS	36 31.00	

S.D. = 1.4 on 5 of 8 obs.

% JUN 26, 1990 20h 37m 24.87± 0.56s
60.913 N ± 4.8km 6.786 E ± 5.2km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 2.0 (BER).

HYA	0.39	311	iP	37 32.49	-0.3
			iS	37 38.43	
BER	0.89	234	eP	37 41.85	-0.1
			eS	37 54.24	
ASK	0.89	242	eP	37 41.89	-0.1
			eS	37 53.56	
SUE	1.00	279	iPd	37 43.83	0.1
			iS	37 57.30	
ODD1	1.01	185	eP	37 43.64	-0.3
			eS	37 57.65	
BLS1	1.53	179	iPc	37 52.82	0.5
			eS	38 11.23	
MOL	1.70	12	iPd	37 55.14	0.4
			eS	38 15.26	
KMY	1.87	205	eP	37 57.33	0.2
			eS	38 20.47	
NRA0	2.34	92	Pn	38 03.50	-0.4
			Lg	38 35.80	

S.D. = 0.4 on 9 of 9 obs.

• JUN 26, 1990 21h 24m 37.48± 0.89s
4.170 S ± 9.0km 136.019 E ±17.5km
DEPTH = 33.0km (normal)
5.1mb (3 obs.)
WEST IRIAN REGION (196)

MTN	9.88	209	eP	27 00.00	-0.4
			eS	28 50.00	
KNA	13.54	211	eP	27 48.50	-1.2
			eS	30 12.00	
WB5	15.70	186	eP	28 13.20	-4.7X
			i	28 22.10	
			eS	31 07.60	
WRA	15.76	186	Pd	28 20.10	1.3
	0.6s		2.40nm	3.5mb X	
QIS	16.66	168	eP	28 26.00	-4.2X
			eS	31 23.00	
CTA	18.70	149	eP	28 54.00	-1.6
ASPA	19.49	186	iPc	29 04.60	-0.3
	0.6s		64.00nm	5.1mb	
			eS	32 42.40	
WARB	23.66	201	eP	29 48.80	1.8
LZH	50.10	326	P	33 32.00	0.3
	1.0s		20.00nm	5.1mb	
			sP	33 35.60	
GUN	57.85	307	P	34 28.80	-0.3
DMN	58.35	306	P	34 32.00	-0.4
GKN	58.89	306	P	34 35.60	-0.5
	0.8s		9.00nm	4.9mb	
ZOBO	148.65	131	ePKP	44 22.00	1.3

S.D. = 1.2 on 11 of 13 obs.

JUN 26, 1990 21h 54m 45.73± 0.36s
34.858 N ± 3.2km 138.990 E ± 2.8km
DEPTH = 149.7 ± 2.9 km
5.2mb (90 obs.)
NEAR S. COAST OF HONSHU, JAPAN (230)
CENTROID, MOMENT TENSOR (HRV)
Doto Used: GDSN
L.P.B.: 9S, 17C

Centroid Locotion:
Origin Time 21:54:49.3 0.7
Lat 34.91N 0.08 Lon 138.61E 0.06
Dep 152.5 3.0 Holf-duration 1.7
Moment Tensor; Scole 10**17 Nm
Mrr= 0.29 0.07 Mtt= 0.26 0.10
Mff=-0.55 0.08 Mrt= 0.02 0.08
Mrf=-1.18 0.07 Mtf=-0.50 0.08
Principal Axes:

	T	Val=	1.22	Plg=48	Azm= 61
	N		0.25	23	180
	P		-1.47	33	285

Best Double Couple:Mo=1.4**17
NP1:Strike= 67 Dip=25 Slip= 160
NP2: 176 82 67

IIDJ	1.08	305	iP+	55 12.40	0.9
			S	55 32.40	
CHJJ	1.19	0	iPd	55 12.30	-0.1
			S	55 31.60	
KAKJ	1.65	35	iPd	55 15.30	-1.9
			S	55 37.00	
MAT	1.80	339	iPd	55 18.30	-0.6
			eS	55 42.00	
MTMJ	1.97	331	iPd	55 21.30	0.3
			eS	55 47.80	
NIIJ	2.38	0	iP+	55 24.60	-1.1
			S	55 54.10	
TSRJ	2.55	286	iPd	55 29.20	1.3
			S	56 01.50	
WKYJ	2.88	258	iP+	55 34.60	2.5
			S	56 11.20	
YAMJ	3.41	14	P	55 37.30	-1.7
TKSJ	4.18	259	iPd	55 51.10	2.1
			S	56 44.80	
YONJ	4.55	276	iPd	55 56.10	2.2
			S	56 50.70	
OFUJ	4.73	26	P	55 52.50	-3.8X
			eS	56 43.10	
AOMJ	5.80	10	eP	56 08.90	-1.7
SHNJ	6.55	266	iP	56 23.10	2.3
KUMJ	7.19	253	eP	56 31.80	2.4
SAP	8.39	12	eP	56 40.00	-5.4X
MDJ	12.13	326	Pd	57 35.00	0.4
Z	12s		1.80um		
N	14s		1.40um		
			S	59 48.00	
CN2	13.76	315	Pd	57 53.00	-2.5
	1.0s		100.00nm	5.1mb	
SNY	13.94	304	iPd	57 58.00	0.1
	1.2s		100.00nm	5.0mb	
			sP	58 40.00	
			S	00 34.00	
DL2	14.47	291	iPd	58 06.00	1.5
	1.8s		130.00nm	5.0mb	
Z	16s		1.30um	4.2Msz	
N	10s		0.90um		
E	12s		0.90um		
			iS	00 48.00	
SSE	15.41	261	iPd	58 18.00	1.7
	1.2s		170.00nm	5.3mb	
NJ2	17.04	266	Pd	58 36.80	0.5
TIA	17.85	281	P	58 43.40	-2.5
	1.4s		100.00nm	5.0mb	
Z	18s		0.80um	4.1MszX	
N	13s		0.50um		
E	13s		0.70um		
			sP	59 32.50	
BJI	18.82	293	eP	58 53.00	-3.3X
	1.5s		130.00nm	5.0mb	
			epP	59 14.00	
			eS	02 16.00	
			eScP	06 39.00	
QZH	20.22	246	Pc	59 08.00	-2.8
	1.0s		100.00nm	5.2mb	
			eS	02 40.00	
WHN	21.16	265	Pc	59 20.50	0.4
	1.0s		100.00nm	5.2mb	
N	12s		0.90um		
E	12s		0.30um		
TIY	21.57	285	iPc	59 21.70	-2.6
Z	17s		1.30um	4.4MszX	
E	13s		0.60um		
			PP	59 52.00	
			S	03 13.00	
			SS	04 03.00	
PJG	21.83	164	eP	59 26.80	-0.1

GUMO 21.83 164 eP 59 27.00 0.1
GUA 21.89 164 eP 59 27.70 0.3
0.5s 73.24nm 5.4mb
HHC 22.42 294 eP 59 29.00 -3.5X
Z 15s 1.20um 4.4MszX
N 12s 0.50um
E 12s 0.80um
BTO 23.56 293 eP 59 40.00 -3.6X
N 13s 0.60um
E 13s 0.80um
eS 03 44.00
BAG 24.68 227 eP 59 52.00 -2.4
XAN 24.77 277 P 59 52.50 -2.5
GZH 25.24 249 P 59 59.40 0.0
LZH 28.56 283 Pd 00 27.50 -2.1
2.0s 120.00nm 5.3mb
Z 14s 0.90um 4.5MszX
E 11s 0.60um
PP 01 25.00
ScP 07 03.00
ScS 10 56.00
GYA 28.94 262 iPd 00 31.00 -2.1
1.2s 100.00nm 5.4mb
PcP 03 39.00
S 05 10.00
ScP 07 06.00
PcS 07 20.00
CD2 29.75 272 eP 00 38.00 -2.1
N 10s 1.10um
QIZ 30.25 246 P 00 44.80 0.4
N 12s 0.60um
PP 01 55.00
GTA 31.39 290 Pd 00 52.80 -1.7
N 10s 0.40um
S 05 47.00
KMI 32.71 263 Pd 01 04.50 -1.7
1.8s 200.00nm 5.6mb
Z 16s 0.90um 4.6MszX
PP 02 24.50
eS 06 08.00
ADK 35.79 48 P 01 30.70 -1.2
1.2s 212.12nm 5.7mb
LOE 37.43 252 iPd 01 44.50 -1.5
CHG 38.86 256 iPd 01 57.50 -0.5
1.2s 68.36nm 5.3mb
e 07 41.60
eS 11 15.00
WMQ 40.11 299 iPd 02 08.20 0.1
3.0s 1400.00nm 6.2mb
ScP 07 45.00
S 08 04.00
ScS 11 56.00
LSA 40.47 276 P 02 13.00 1.3
eS 08 09.00
NNT 41.85 248 eP 02 21.20 -1.3
ANM 44.47 31 eP 02 43.60 0.5
SNG 44.74 241 eP 02 45.70 -0.1
GUN 45.43 277 Pd 02 51.00 -0.6
SDN 45.72 44 eP 02 51.00 -2.0
PKI 45.95 276 Pd 02 54.60 -1.1
DMN 46.18 276 Pd 02 56.50 -0.9
IPM 46.26 238 ePd 02 58.50 0.7
0.7s 30.20nm 5.0mb
GKN 46.41 277 Pd 02 58.20 -0.9
MTN 48.02 190 ePc 03 10.50 -1.0
TTA 48.32 34 eP 03 13.30 -0.1
SVW 48.42 36 eP 03 15.00 0.8
TRT 49.11 216 iPc 03 17.40 -2.5
IMA 49.55 30 iPc 03 22.60 -0.3
1.1s 28.70nm 4.9mb
KDC 50.08 41 ePc 03 25.90 -0.9
PMR 51.54 35 iPc 03 36.70 -1.1
1.1s 184.90nm 5.7mb
FBA 51.98 31 iPc 03 40.50 -0.6
TOA 52.90 35 eP 03 48.20 0.2
WB5 54.61 185 eP 04 00.10 -0.7
WRA 54.68 185 Pd 04 00.50 -0.8
1.0s 67.80nm 5.4mb
CTA 55.08 172 iPd 04 04.00 -0.2
1.0s 32.00nm 5.1mb
QIS 55.11 179 iPd 04 03.90 -0.5
0.9s 47.00nm 5.3mb
HYB 56.18 268 iPd 04 11.00 -1.4
0.6s 37.50nm 5.5mb
YKU 56.42 37 e(P) 04 14.00 0.6
INK 57.21 26 eP 04 18.00 -0.9
0.7s 65.00nm 5.7mb

ASPA 58.40 185 iPc 04 27.70 0.0
0.6s 34.00nm 5.5mb
MBL 58.61 201 eP 04 27.00 -2.1
0.4s 13.00nm 5.2mb
GBA 59.08 265 Pc 04 31.70 -0.9
0.5s 42.90nm 5.6mb
MBC 59.16 16 iPc 04 31.30 -1.0
0.9s 52.00nm 5.5mb
SIT 59.32 39 P 04 33.80 0.2
1.3s 122.64nm 5.7mb
POO 59.48 272 iPd 04 33.20 -2.2
QUE 59.72 287 iPd 04 36.60 -0.4
e(S) 12 38.30
NANU 61.30 205 eP 04 46.70 -0.7
0.4s 7.00nm 4.9mb
WARB 61.82 193 eP 04 51.40 0.5
0.3s 8.00nm 5.1mb
DZM 62.33 151 iPc 04 55.10 0.7
MAIO 62.84 297 iPd 04 57.80 0.1
eS 13 20.00
BRS 63.27 166 iP 05 01.00 0.6
FORR 66.16 190 eP 05 10.90 -8.0X
0.5s 63.00nm 5.8mb
SOD 66.20 337 iP 05 18.70 -0.2
STK 66.43 178 eP 05 20.90 0.3
0.9s 12.00nm 4.8mb
YKA 66.67 29 eP 05 20.00 -1.9
0.9s 32.20nm 5.2mb
DAG 67.77 355 iPc 05 27.00 -1.6
1.0s 32.00nm 5.1mb
SUF 69.03 333 iP 05 35.60 -0.9
0.6s 28.30nm 5.3mb
PGC 69.26 45 eP 05 38.00 -0.1
BWA 69.48 172 eP 05 39.80 0.2
CAN 70.44 171 eP 05 46.00 0.6
NUR 70.93 332 iP 05 48.00 0.0
0.5s 49.10nm 5.6mb
PNT 71.10 43 iPc 05 49.30 -0.1
0.8s 56.00nm 5.4mb
TAB 71.39 304 eP 05 51.00 -0.4
EDM 72.27 37 iPc 05 55.90 -0.3
NEW 73.06 43 P 06 00.00 -0.9
1.1s 108.02nm 5.5mb
WDC 73.95 52 ePc 06 06.80 0.6
LBFM 73.96 51 P 06 07.00 0.5
UPP 74.03 333 iPc 06 05.60 -0.6
BRF 74.38 291 iP 06 07.00 -1.8
0.5s 187.00nm 6.1mb
LTCM 74.42 52 P 06 09.30 0.4
DHR 74.60 291 ePd 06 09.50 -0.6
SES 75.08 39 iPc 06 12.40 -0.2
0.5s 41.00nm 5.4mb
ORV 75.18 52 ePc 06 13.30 0.1
HFS 75.24 335 eP 06 12.40 -0.8
0.6s 15.40nm 4.9mb
Z 17s 0.14um 4.3MszX
epP 06 16.20 12kmX
esP 06 18.40
ePP 08 58.00
LR 34 13.00
NB2 75.41 337 P 06 13.90 -0.3
0.8s 27.70nm 5.0mb
BRK 75.59 54 eP 06 16.00 0.4
BKS 75.61 54 eP 06 16.20 0.5
0.9s 189.00nm 5.8mb
PCC 75.71 54 ePc 06 16.10 -0.1
MHC 76.29 54 ePc 06 20.00 0.3
ARN 76.36 54 P 06 20.20 0.2
FFC 76.59 31 iPc 06 20.50 -0.3
0.8s 79.00nm 5.5mb
CMB 76.74 53 ePc 06 22.60 0.5
HRY 76.88 42 iPc 06 23.20 0.4
BUT 76.90 43 eP 06 24.00 1.1
LRM 77.08 43 iPc 06 24.40 0.4
e 07 02.10
MCMT 77.45 44 ePc 06 26.00 -0.1
SXM 77.57 42 ePc 06 26.90 0.2
KVN 77.65 51 P 06 27.50 0.3
BGMT 77.66 43 iPc 06 27.50 0.3
LTMT 78.05 44 ePc 06 30.60 1.1
RYD 78.14 292 iPd 06 29.30 -0.6
BSD 78.41 331 iPc 06 29.90 -0.9
0.4s 23.00nm 5.3mb
MJMA 78.53 293 iPd 06 31.50 -0.5
TNP 78.77 51 P 06 33.70 0.3
1.0s 88.75nm 5.4mb
COP 78.96 332 iPc 06 34.30 0.6

0.7s 90.41nm 5.6mb
VRI 79.09 319 ePc 06 35.50 0.8
BBTK 79.28 311 eP 06 36.00 0.0
ABL 79.31 55 P 06 36.50 0.1
RUWJ 79.55 302 Pd 06 44.30 6.8X
QASM 79.72 295 ePd 06 38.00 -0.5
MLR 79.75 319 iPc 06 38.80 0.4
0.6s 7.10nm 4.6mb
KRA 79.77 325 eP 06 38.20 0.0
0.8s 57.00nm 5.4mb
CLC 79.84 53 eP 06 39.00 0.0
SPC 80.22 324 eP 06 40.70 -0.2
e 09 45.40
SBB 80.34 54 eP 06 42.00 0.3
CMP 80.38 319 ePc 06 37.00 -4.6X
MWC 80.46 55 eP 06 43.00 0.6
HRT 80.56 313 eP 06 44.00 1.3
BW06 80.59 44 P 06 42.30 -0.7
GSC 80.66 53 eP 06 44.00 0.6
UQSK 80.76 295 iPd 06 44.50 0.5
QTFJ 80.86 302 Pc 06 50.00 5.6X
KSP 80.89 327 iPc 06 45.20 1.1
e 07 20.00
e 09 50.00
RVR 81.05 55 eP 06 45.00 -0.3
AFIF 81.09 293 iPd 06 48.00 2.3
HRI 81.22 304 iPd 06 48.00 1.7
ALT 81.38 312 eP 06 47.00 -0.1
BURJ 81.77 304 Pd 06 47.70 -1.5
PLM 81.77 55 eP 06 50.00 0.7
TPC 81.87 54 eP 06 49.00 -0.6
BRG 81.90 328 iPc 06 58.00 0.7
1.8s 52.00nm 5.0mb
e 07 26.50
e 10 02.00
BZS 81.96 321 eP 06 50.00 0.2
CLL 81.98 329 iPd 06 49.50 -0.2
1.2s 51.00nm 5.1mb
ipP 07 26.10 146kmX
SALJ 81.99 303 Pd 06 50.50 0.2
KFNJ 82.08 303 Pc 06 51.90 1.3
SRO 82.10 324 eP 06 51.40 1.0
PRU 82.28 328 P 06 52.20 0.8
1.6s 40.00nm 4.9mb
e 07 29.50
BAR 82.30 56 eP 06 52.00 0.1
ZST 82.40 325 eP 06 53.00 1.0
DSI 82.46 303 iPd 06 54.30 1.7
KDZ 82.52 316 ePd 06 54.00 1.2
RZN 82.89 317 iPd 06 56.00 1.1
MOX 83.05 329 iP 06 56.00 0.6
BEO 83.10 321 e(P) 06 56.00 0.3
HOF 83.20 329 iPc 06 56.90 0.8
GLA 83.32 54 eP 06 58.00 0.9
WIT 83.34 333 eP 06 58.00 1.3
KHC 83.34 327 P 06 57.50 0.6
1.0s 28.50nm 5.1mb
PRNI 83.45 302 iPd 06 59.50 1.7
MMB 83.51 317 ePd 06 59.00 1.1
PV09 83.55 47 P 06 58.50 0.0
AYN 83.62 301 ePd 06 58.70 0.1
WET 83.64 328 iPc 06 59.50 1.1
MBH 83.87 302 iPd 07 01.40 1.6
WTS 83.93 333 eP 07 00.50 0.8
0.7s 7.00nm 4.6mb
GRF 83.94 329 ePd 07 01.00 1.1
1.1s 84.00nm 5.5mb
Z 20s 0.10um 4.2Msz
HQL 84.05 302 ePd 07 01.30 0.6
VAY 84.34 317 eP 07 02.80 0.8
DHJN 84.47 288 eP 07 04.78 1.4
EKA 84.50 339 Pd 07 02.80 0.3
0.7s 6.90nm 4.6mb
SRAT 84.51 288 ePd 07 04.90 1.4
SKO 84.52 318 iPd 07 04.50 1.6
BADA 84.53 301 ePd 07 03.70 0.6
BHG 84.70 327 eP 07 04.50 0.8
1.0s 64.00nm 5.4mb
WAJH 84.80 298 ePd 07 04.90 0.3
GLD 85.04 44 P 07 06.40 0.6
1.4s 135.14nm 5.6mb
FUR 85.08 328 iPc 07 06.80 1.2
0.8s 40.00nm 5.3mb
LJU 85.17 325 eP 07 06.00 -0.1
VBY 85.22 324 ePc 07 07.30 1.0
ENN 85.25 332 iPc 07 06.90 0.6
0.9s 37.00nm 5.2mb

26d 22h

MEM 85.34 332 P 07 07.30 0.5
CEY 85.45 325 eP 07 07.40 -0.1
OHR 85.46 318 eP 07 05.50 -2.2
0.6s 58.00nm 5.6mb
VOY 85.48 325 eP 07 06.80 -1.0
FVI 85.58 326 Pc 07 07.70 -0.4
TRI 85.78 325 iPd 07 08.50 -0.6
SOTA 85.82 327 iPc 07 09.90 0.5
0.6s 8.90nm 4.8mb
i 07 11.40
i 07 13.80
SNF 86.07 333 iPd 07 10.64 0.2
OGA 86.17 327 iPc 07 11.90 0.6
DOU 86.29 333 iPc 07 11.80 0.3
CDF 86.58 330 eP 07 13.00 -0.1
1.0s 20.00nm 5.0mb
SLE 86.58 329 ePc 07 13.20 0.2
SAX 86.62 328 ePc 07 13.80 0.3
OSS 86.70 328 ePc 07 14.30 0.5
ZLA 86.84 329 ePc 07 14.60 0.3
LLS 87.06 328 ePc 07 15.60 0.0
BSF 87.24 330 eP 07 16.00 -0.3
DLE 87.25 340 eP 07 16.80 0.7
HAU 87.28 330 eP 07 16.10 -0.3
0.5s 3.65nm 4.6mb
SAL 87.36 327 P 07 16.50 -0.2
DCN 87.41 341 eP 07 17.60 0.8
ANMO 87.50 48 P 07 18.00 0.1
1.0s 6.25nm 4.5mb
ALQ 87.50 48 eP 07 18.10 0.2
1.2s 15.63nm 4.9mb
MDI 87.59 327 P 07 17.00 -0.8
TMA 87.71 328 ePc 07 18.60 -0.1
RSM 87.73 324 P 07 19.50 1.0
ARV 87.82 324 P 07 19.00 0.0
VAI 87.94 328 P 07 19.00 -0.5
SCH 87.98 15 ePc 07 20.20 0.6
0.8s 33.00nm 5.4mb
SFI 88.02 325 P 07 21.00 1.1
PGD 88.12 325 P 07 21.50 0.8
MMK 88.15 328 ePc 07 21.50 0.6
CRE 88.20 325 P 07 21.00 0.0
ASS 88.27 324 P 07 21.00 -0.3
MME 88.36 326 P 07 22.60 0.7
DIX 88.36 329 ePc 07 22.40 0.5
DUI 88.43 322 P 07 22.50 0.4
ORX 88.47 328 P 07 20.58 -1.7
ORO 88.47 328 P 07 21.50 -0.8
BOB 88.49 327 P 07 22.60 0.3
BDI 88.51 326 P 07 22.10 -0.3
AZI 88.70 323 P 07 24.00 0.8
SDI 88.72 322 P 07 23.00 -0.4
SGO 88.80 321 P 07 24.00 0.3
PII 88.80 325 P 07 23.00 -0.7
LOR 88.87 331 eP 07 23.60 -0.4
0.7s 6.60nm 4.8mb
TDS 88.90 319 P 07 25.00 0.7
LSD 88.96 328 P 07 25.19 0.4
LBF 89.06 331 eP 07 24.60 -0.3
PCP 89.07 327 P 07 24.47 -0.6
LPL 89.10 329 eP 07 25.50 0.1
0.8s 10.05nm 4.9mb
LPG 89.11 329 eP 07 25.60 0.1
0.8s 14.80nm 5.1mb
RSP 89.16 328 P 07 24.17 -1.4
SSF 89.18 331 eP 07 25.40 0.0
0.5s 4.75nm 4.8mb
RDP 89.23 323 P 07 26.00 0.2
FLN 89.26 335 eP 07 25.50 -0.2
0.5s 3.65nm 4.7mb
LDF 89.27 334 eP 07 25.60 -0.2
SMF 89.39 331 eP 07 26.10 -0.3
0.6s 4.50nm 4.7mb
AVF 89.46 331 eP 07 26.50 -0.2
0.5s 10.95nm 5.1mb
FIN 89.48 327 P 07 25.09 -1.8
BNI 89.49 328 P 07 27.40 0.3
RRL 89.55 328 P 07 27.55 0.0
ROB 89.57 327 P 07 26.11 -1.3
GRR 89.71 335 eP 07 28.00 0.2
0.8s 14.80nm 5.1mb
PZZ 89.74 328 P 07 28.57 0.3
ENR 89.82 327 P 07 26.32 -2.3
STV 89.85 328 P 07 26.73 -2.0
BGF 89.85 331 eP 07 28.50 -0.1
IMI 89.86 327 P 07 27.65 -1.1
LPF 90.07 334 eP 07 30.10 0.6
0.8s 25.50nm 5.3mb
SBF 90.10 327 eP 07 29.20 -0.6
0.7s 11.00nm 5.0mb
SOI 90.20 319 P 07 30.00 -0.3
MAF 90.24 331 eP 07 30.70 0.3
TCF 90.32 332 eP 07 30.90 0.1
0.8s 6.70nm 4.8mb
PGF 90.41 326 eP 07 30.90 -0.5
1.0s 12.00nm 4.9mb
LSF 90.62 332 eP 07 32.10 0.0
0.8s 17.45nm 5.2mb
FRF 90.69 327 eP 07 32.10 -0.4
0.8s 12.10nm 5.0mb
LRG 90.90 328 eP 07 33.40 0.0
0.8s 18.80nm 5.3mb
LMR 90.93 327 eP 07 33.40 -0.2
0.9s 19.65nm 5.2mb
MFF 90.96 333 eP 07 34.30 0.6
0.8s 20.15nm 5.3mb
RJF 91.41 331 eP 07 36.40 0.6
0.9s 14.75nm 5.1mb
CAF 91.51 331 eP 07 36.90 0.6
0.9s 18.00nm 5.2mb
LFF 92.02 332 eP 07 39.40 0.9
0.6s 22.55nm 5.5mb
LPO 92.06 331 eP 07 39.40 0.6
0.4s 5.75nm 5.1mb
MEO 92.28 44 eP 07 40.30 0.3
LNO 93.03 42 eP 07 29.50 -13.7X
TUL 93.03 42 eP 07 43.70 0.3
1.3s 21.20nm 5.2mb
EPF 93.78 331 eP 07 46.80 0.0
0.8s 6.70nm 4.9mb
TIC 126.56 313 PKP 13 33.50 0.3
KIC 126.61 313 PKP 13 33.40 0.2
LIC 126.89 313 PKP 13 34.00 0.2
ARE 147.17 64 ePKP 14 14.00 3.0X
ZOBO 149.48 60 PKP 14 16.50 1.5
1.0s 45.00nm
i 14 21.20
LPB 149.67 60 PKP 14 16.00 0.9
1.0s 100.00nm
i 14 21.00
CNCB 149.94 60 PKP 14 16.00 0.4
CCH 151.63 59 PKP 14 25.70 7.9X
SIV 153.99 49 PKP 14 21.20 0.4
i 14 28.90
(S) 18 20.00
S.D. = 1.0 on 277 of 289 obs.

? JUN 26, 1990 22h 06m 06.60± 6.20s
37.876 N ±45.5km 25.598 E ±27.4km
DEPTH = 33.0km (normal)
DODECANESE ISLANDS (369)
ML 2.0 (THE).

ALN 3.04 6 ePn 06 53.40 0.0
LIT 3.29 313 ePnd 06 57.40 0.4
eSn 07 37.80
SOH 3.42 330 ePn 06 59.50 0.6
SRS 3.59 335 ePn 07 01.30 0.0
KNT 3.89 328 ePn 07 04.90 -0.6
GRG 3.95 322 ePnc 07 06.30 -0.1
FNA 4.38 313 ePn 07 12.20 -0.3
IGT 4.44 293 ePn 07 13.40 0.0
S.D. = 0.5 on 8 of 8 obs.

JUN 26, 1990 23h 34m 38.85± 0.43s
16.447 S ±11.1km 176.314 W ± 5.8km
DEPTH = 390.9 ± 4.4 km
4.6mb (12 obs.)
FIJI ISLANDS REGION (181)

NDE 4.19 267 eP 35 52.20 -0.6
KRO 4.20 258 iPc 35 52.70 -0.2
MBU 4.79 263 eP 35 58.50 -0.3
OVA 4.85 255 eP 35 59.50 0.1
VUN 5.23 252 iPd 36 03.90 0.5
SVA 5.26 251 iPd 36 04.20 0.5
SGE 5.63 258 ePd 36 08.40 0.6
DZM 17.21 248 iPc 38 16.60 -0.3
PMO 27.38 91 iP 39 52.60 0.4
0.8s 30.00nm 4.7mb
VAH 27.61 92 iP 39 54.20 -0.1
0.8s 20.00nm 4.5mb
TPT 27.65 91 iP 39 52.90 -1.7
0.8s 25.00nm 4.6mb
RUV 27.85 91 iP 39 56.60 0.2
0.8s 25.00nm 4.6mb
CAN 36.18 232 eP 41 08.20 0.6
BWA 36.29 234 eP 41 07.80 -0.8
TOO 39.64 230 eP 41 37.00 1.0
STK 41.09 240 iPd 41 48.50 0.7
0.8s 8.00nm 4.1mb
WB5 46.86 258 iPd 42 32.80 -0.7
WRA 46.88 258 Pd 42 32.70 -1.0
0.3s 14.30nm 4.8mb
ASPA 47.13 253 iPd 42 35.60 0.0
0.4s 196.00nm 5.8mb X
eS 48 57.60
MTN 50.86 267 iPc 43 03.50 -0.4
FORR 52.41 244 iPd 43 14.50 -0.5
COOL 58.39 244 iPd 43 56.30 -1.0
MBL 60.29 255 Pd 44 10.10 0.0
0.4s 35.00nm 5.2mb
MEKA 60.90 248 eP 44 13.80 -0.3
KLB 61.27 243 iPd 44 16.30 -0.2
0.4s 10.00nm 4.7mb
MUN 62.57 242 eP 44 25.50 0.4
MRWA 62.93 245 eP 44 27.60 0.2
NANU 64.06 253 iPc 44 35.80 1.1
0.4s 42.00nm 5.4mb
MHC 74.20 43 eP 45 36.70 0.9
CMB 75.41 43 eP 45 42.80 0.3
WDC 75.55 39 ePc 45 43.50 0.4
ORV 75.58 41 ePc 45 43.50 0.2
PNT 82.41 33 eP 46 19.00 -0.4
0.7s 5.00nm 4.4mb
ALQ 83.62 51 eP 46 26.60 0.6
1.0s 7.00nm 4.4mb
SES 87.67 36 eP 46 45.00 -0.1
YKA 92.18 24 eP 47 04.50 -1.1
0.6s 0.70nm 3.8mb
KSP 144.22 346 ePKP 53 29.20 -1.0
CLL 144.43 350 iPKPd 53 29.90 -0.6
MOX 145.29 351 ePKP 53 33.50 1.5
PRU 145.41 348 PKPc 53 33.30 1.1
MEM 145.87 357 PKP 53 36.70 3.8X
KHC 146.42 348 ePKP 53 36.60 2.7X
DOU 146.43 359 PKP 53 37.00 3.2X
ZST 146.47 344 ePKP 53 37.30 3.3X
FLN 147.59 5 ePKP 53 38.80 3.1X
0.5s 6.55nm
LDF 147.79 5 ePKP 53 39.40 3.3X
0.5s 2.90nm
CDF 147.99 355 ePKP 53 39.80 3.3X
0.8s 5.35nm
LPF 148.26 6 ePKP 53 40.90 4.1X
0.5s 9.50nm
HAU 148.45 357 ePKP 53 41.40 4.2X
0.8s 5.35nm
BSF 148.60 356 ePKP 53 41.50 4.0X
0.8s 5.35nm
FVI 149.00 348 PKP 53 42.00 4.0X
LOR 149.27 360 ePKP 53 43.80 5.4X
0.8s 6.70nm
SSF 149.47 0 ePKP 53 44.40 5.7X
0.9s 9.00nm
LBF 149.55 360 ePKP 53 44.40 5.5X
0.7s 5.50nm
TRI 149.63 346 PKP 53 44.40 5.4X
AVF 149.74 0 ePKP 53 43.80 4.7X
MFF 149.76 5 ePKP 53 44.90 5.7X
0.6s 3.60nm
BGF 149.97 1 ePKP 53 45.30 5.8X
0.9s 9.05nm
TCF 150.22 2 ePKP 53 46.00 6.1X
0.9s 4.90nm
LSF 150.23 3 ePKP 53 45.80 5.9X
0.8s 10.75nm
MAF 150.30 2 ePKP 53 46.20 6.2X
0.9s 7.35nm
MDI 150.33 351 PKP 53 45.00 5.0X
VAI 150.36 353 PKP 53 46.40 6.4X
ORO 150.69 354 PKP 53 47.00 6.3X
LPL 150.91 356 ePKP 53 48.30 7.1X
0.8s 6.05nm
LPG 150.92 356 ePKP 53 48.60 7.2X
0.7s 5.50nm
RJF 151.17 3 ePKP 53 48.10 6.8X
BNI 151.37 356 PKP 53 49.70 7.9X
LFF 151.49 4 ePKP 53 49.30 7.5X
CAF 151.58 2 ePKP 53 49.20 7.2X
0.7s 3.85nm

SFI	151.75	347	PKP	53 49.50	7.3X
LPO	151.77	4	ePKP	53 49.30	7.1X
	0.6s	4.50nm			
PGD	151.82	348	PKP	53 51.00	8.4X
ARV	151.91	346	PKP	53 50.50	8.0X
SDI	153.36	343	PKP	53 52.00	7.4X

S.D. = 0.7 on 40 of 75 obs.

% JUN 27, 1990 00h 49m 30.65± 0.70s
43.557 N ± 6.7km 12.577 E ± 6.3km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

ARV	0.27	102	Pc	49 36.50	0.1
			eSg	49 41.50	
RSM	0.38	346	Pd	49 38.50	0.0
CRE	0.46	279	P	49 40.50	0.5
ASS	0.49	173	P	49 40.50	-0.1
			eSg	49 49.50	
SFI	0.64	305	P	49 43.50	0.1
			eSg	49 53.50	
PGD	0.70	297	Pd	49 44.00	-0.6
			eSg	49 54.50	

S.D. = 0.4 on 6 of 6 obs.

& JUN 27, 1990 01h 14m 39.71s
63.136 N 150.617 W
DEPTH = 121.2km
CENTRAL ALASKA (1)
<AGS-P>.

KTH	0.44	342	iP	14 57.63	-0.2
			iS	15 10.79	
HUR	0.47	109	iP	14 57.40	-0.5
			eS	15 11.08	
CUT	0.75	168	iP	14 59.63	-0.2
			Sn	15 14.60	
MCK	0.96	51	iP	15 01.33	-0.5
SKT	1.23	200	iP	15 04.24	-0.4
			iS	15 23.52	
PWA	1.53	167	eP	15 07.60	-0.3
GHO	1.58	149	iP	15 08.08	-0.5
			eS	15 30.44	
NEA	1.60	25	iP	15 07.63	-1.1
			iS	15 27.99	
SUA	1.68	182	eP	15 09.63	-0.2
			eS	15 33.53	
PMR	1.70	155	iPd	15 08.90	-1.0
PLRM	1.70	155	iP	15 08.89	-1.0
			eS	15 32.10	
SML	1.70	140	iP	15 09.08	-1.0
			eS	15 32.54	
WRH	1.75	39	iP	15 09.70	-0.8
NCG	1.88	203	eP	15 11.86	-0.5
CGLM	1.95	200	eP	15 13.16	0.0
CCB	1.96	38	iP	15 12.20	-1.0
PMS	1.96	165	eP	15 12.50	-0.7
SCM	2.01	129	eP	15 12.51	-1.4
			iS	15 39.57	
SPU	2.07	200	eP	15 15.06	0.4
FBA	2.16	34	iP	15 14.90	-0.8
TOA	2.30	115	eP	15 17.30	-0.3
GLM	2.34	36	iP	15 17.05	-1.0
PAX	2.35	92	iP	15 17.54	-0.7
SDG	2.41	102	eP	15 18.02	-0.9
TTA	2.47	268	iPd	15 19.00	-0.8
SLKM	2.64	176	eP	15 21.10	-0.9
RDT	2.71	199	eP	15 23.33	0.4
KLU	2.74	125	eP	15 21.53	-1.9
GLI	2.81	142	iP	15 22.31	-1.8
VZW	2.83	136	eP	15 22.34	-2.1
VLZ	2.85	133	eP	15 22.34	-2.3
RED	2.91	202	iP	15 26.34	0.7
DOT	2.99	77	iP	15 25.24	-1.4
SVW	3.11	231	eP	15 27.70	-0.5
NNL	3.12	186	eP	15 28.71	0.4
IMA	3.23	337	iPd	15 28.50	-1.3
CNPM	3.64	185	eP	15 34.27	-1.0
BALM	4.42	115	eP	15 43.75	-2.2
DWY	5.08	75	P	15 52.80	-2.0

39 obs. associated

JUN 27, 1990 01h 18m 28.87± 0.92s
0.120 N ± 9.1km 123.556 E ±11.5km
DEPTH = 181.0 ± 11.5 km
4.8mb (8 obs.)
MINAHASSA PENINSULA (265)

MNI	1.84	44	ePc	19 03.50	-1.1
			eS	19 34.30	
KKM	9.40	309	ePc	20 44.00	2.4
	0.5s	94.70nm		5.5mb	
MTN	14.91	150	eP	21 52.00	-0.1
WB5	22.52	153	eP	23 13.90	-0.3
			e	27 06.80	
WRA	22.57	153	Pc	23 14.80	0.1
	0.4s	11.10nm		4.7mb	
IPM	22.94	281	ePd	23 19.60	1.3
	1.0s	69.30nm		5.2mb	
QIZ	23.11	325	P	23 20.30	0.3
NANU	23.86	199	eP	23 25.40	-1.7
	0.4s	9.00nm		4.7mb	
SNG	23.93	288	eP	23 27.50	-0.3
ASPA	25.69	158	eP	23 43.70	-0.4
	0.9s	18.00nm		4.7mb	
QIS	25.86	144	iPd	23 45.70	0.0
BDT	29.56	306	eP	24 18.10	-0.8
CHG	30.48	309	iPd	24 26.80	-0.2
	0.9s	17.23nm		4.8mb	
GYA	30.83	329	P	24 30.40	0.3
CD2	35.93	330	P	25 14.00	0.3
STK	36.12	153	iPd	25 15.40	0.2
	0.6s	18.00nm		4.9mb	
			eS	36 49.30	
TIY	38.79	346	P	25 38.00	0.4
BRS	39.19	137	iPd	25 41.80	0.8
BWA	41.51	148	eP	26 02.10	2.2
CAN	42.50	149	eP	26 08.00	0.0
GTA	44.73	334	P	26 26.40	0.5
	0.8s	13.00nm		4.5mb	
GUN	45.46	311	P	26 31.40	-0.7
PKI	45.65	310	P	26 32.40	-1.2
DMN	45.90	310	P	26 34.60	-0.9
GKN	46.45	310	P	26 38.40	-1.4
KRI	93.81	253	iPc	31 20.50	-6.8X
BUL	94.68	250	iPc	31 24.90	-6.4X

S.D. = 1.1 on 25 of 27 obs.

JUN 27, 1990 02h 00m 45.82± 0.23s
52.364 N ± 5.9km 173.953 W ± 3.3km
DEPTH = 33.0km (normal)
4.9mb (43 obs.) 5.1Msz (21 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS. (7)
ML 5.1 (PMR). Ms 5.0 (BRK). Felt (IV) on Adak and Atka.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 31C
Centroid Location:
Origin Time 02:00:46.9 0.6
Lat 52.47N 0.08 Lon 174.26W 0.10
Dep 15.0 FIX Half-duration 1.9
Moment Tensor; Scale 10**17 Nm
Mrr=-0.19 0.06 Mtt= 0.18 0.09
Mff= 0.00 0.06 Mrt=-0.07 0.25
Mrf=-0.50 0.19 Mtf=-1.21 0.06
Principal Axes:
T Val= 1.36 Plg=11 Azm= 45
N -0.08 66 161
P -1.27 21 310
Best Double Couple:Mo=1.3*10**17
NP1:Strike= 89 Dip=67 Slip=-173
NP2: 356 83 -23

ADK	1.75	255	iPd	01 11.60	-2.7
SMY	7.30	278	eP	02 27.70	-5.0X
SDN	8.50	64	eP	02 49.00	-0.4
SVW	13.29	42	eP	03 54.90	0.3
KDC	13.40	58	eP	03 55.20	-0.7
TTA	14.23	35	eP	04 06.60	-0.3
PMR	16.28	46	eP	04 34.30	1.0
	1.1s	116.10nm		4.9mb	
IMA	17.09	29	eP	04 44.40	0.9
TOA	17.78	46	eP	04 52.60	0.6
FBA	18.34	37	eP	04 59.10	0.2
SIT	22.58	63	eP	05 44.00	-0.2
INK	24.93	35	ePc	06 06.00	-0.8
	0.9s	90.00nm		5.4mb	
MBC	31.57	22	ePc	07 07.00	0.2
	0.6s	22.00nm		5.2mb	
YKA	32.35	48	eP	07 14.10	0.3
	0.9s	3.30nm		4.2mb	
GMW	32.70	78	eP	07 17.50	0.5
BMW	32.94	80	eP	07 19.80	0.6
HON	33.35	152	P	07 30.00	7.2X
	Z 20s	0.96um			4.5Msz
LON	33.66	78	eP	07 25.50	0.1
PNT	33.77	73	eP	07 25.00	-1.3
	0.6s	18.00nm			5.2mb
EDM	35.69	64	ePc	07 41.50	-1.2
NEW	35.72	73	eP	07 42.30	-0.7
	0.9s	35.09nm			5.3mb
KAKJ	35.92	262	eP	07 46.00	1.3
NIIJ	35.96	264	eP	07 42.90	-2.1
LBFM	36.51	86	eP	07 51.00	1.0
WDC	36.57	88	eP	07 51.00	0.8
CHJJ	36.74	263	eP	07 49.60	-2.0
MAT	36.89	264	eP	07 50.00	-2.9)
	0.8s	29.85nm			5.2mb
	Z 20s	1.06um			4.6Msz
		(S)	13 32.00		
MTMJ	37.11	264	eP	07 55.10	0.2
MIN	37.28	87	eP	07 57.40	1.1
IIDJ	37.77	263	eP	08 00.10	-0.3
ORV	37.82	88	ePc	08 01.00	0.3
SES	38.22	67	eP	08 03.00	-1.0
	0.8s	33.00nm			5.2mb
BRK	38.40	91	eP	08 06.00	0.5
BKS	38.41	91	eP	08 06.50	0.8
	0.8s	63.00nm			5.5mb
	Z 20s	1.50um			4.8Msz
	N 20s	1.40um			
	E 20s	1.90um			
		e(S)	14 02.40		
		eLR	17 12.00		
MHC	39.11	91	eP	08 12.60	0.9
ARN	39.18	91	eP	08 12.50	0.4
CMB	39.45	89	eP	08 15.50	1.1
LRM	39.71	74	eP	08 16.30	-0.4
KVN	40.21	86	eP	08 20.70	-0.2
CN2	40.29	283	eP	08 26.00	4.8X
	Z 18s	2.90um			5.2Msz
	N 17s	2.20um			
	E 17s	1.80um			
PRI	40.49	92	eP	08 24.00	1.0
FFC	41.11	57	eP	08 27.00	-0.7
	0.6s	7.00nm			4.6mb
TNP	41.36	87	eP	08 30.50	0.2
SNY	42.55	281	eP	08 40.00	0.3
	Z 18s	2.00um			5.0Msz
	N 13s	0.70um			
	E 13s	0.70um			
		esP	09 00.00		
		S	15 00.00		
		SS	18 09.00		
CLC	42.58	90	eP	08 41.00	0.9
SHNJ	42.83	267	P	08 40.80	-1.3
BW06	43.15	76	eP	08 43.80	-1.1
	1.0s	55.00nm			5.3mb
SBB	43.19	91	eP	08 46.00	0.9
MWC	43.35	92	eP	08 47.00	0.4
GSC	43.40	90	eP	08 47.00	0.1
RVR	43.93	92	eP	08 56.00	5.0X
KUMJ	44.09	266	eP	08 52.20	-0.1
TPC	44.66	90	eP	08 58.00	0.9
PLM	44.67	92	eP	08 58.00	0.7
KAGJ	44.99	264	eP	08 58.80	-0.8
BAR	45.25	92	eP	09 03.00	1.3
RSSD	45.60	71	eP	09 03.00	-1.6
GLA	46.13	91	eP	09 09.00	0.4
GOL	47.52	77	P	09 25.00	5.1X
	Z 20s	1.65um			5.0Msz
GLD	47.58	77	eP	09 20.00	-0.2
	1.2s	70.71nm			5.6mb
	Z 20s	3.10um			5.3Msz
BJI	48.07	284	eP	09 28.00	4.2X
	1.0s	8.00nm			4.7mb
	Z 19s	1.74um			5.1Msz
ANMO	49.97	82	eP	09 38.00	-0.7
ALQ	49.97	82	eP	09 37.20	-1.5
	1.0s	11.25nm			4.9mb
	Z 18s	1.49um			5.0Msz
DAG	50.17	7	iPd	09 42.40	2.9
	0.9s	15.13nm			5.0mb
	Z 20s	2.13um			5.1Msz
	N 19s	0.69um			
	E 18s	3.16um			
HHC	50.27	288	eP	09 42.00	1.1
	Z 24s	1.40um			4.9MszX
	N 14s	1.10um			
	E 14s	1.10um			
		eS	16 54.00		

27d 02h

PJG		50.71	236	eP	09	41.10	-3.2X
SSE		50.99	272	P	09	50.50	4.2X
		0.8s		8.00nm			4.7mb
	Z	20s		0.90um			4.8Msz
	N	14s		0.70um			
				eS	17	08.00	
BTO		51.33	289	P	09	50.00	1.1
	N	16s		2.00um			
				sP	10	05.00	
				eS	17	14.00	
NJ2		51.76	275	eP	09	54.00	1.9
	Z	18s		0.45um			4.5Msz
TIY		51.80	285	eP	09	57.80	5.3X
	Z	24s		1.80um			5.0MszX
	N	17s		2.00um			
MEO		54.82	77	e(P)	10	12.50	-2.3
TUL		55.71	74	eP	10	19.50	-1.7
		1.0s		7.70nm			4.7mb
	Z	18s		1.67um			5.2Msz
XAN		56.39	284	P	10	26.50	0.4
	N	14s		0.70um			
	E	15s		1.20um			
KEV		57.24	351	iP	10	36.90	5.3X
		0.7s		16.00nm			5.2mb
SCH		57.36	41	eP	10	30.00	-2.7X
UYO		57.71	75	e(P)	10	33.30	-2.1
GTA		57.95	294	eP	10	38.00	0.8
	Z	16s		2.04um			5.3MszX
	E	14s		1.42um			
LZH		57.95	289	eP	10	36.50	-0.8
		2.5s		53.00nm			5.2mb
	Z	20s		1.90um			5.2Msz
	N	17s		1.80um			
	E	17s		1.90um			
SOD		59.59	351	eP	10	48.00	-0.1
WMO		61.28	305	eP	10	58.00	-2.0
	Z	18s		1.50um			5.2Msz
	N	15s		0.90um			
	E	16s		1.00um			
RSNY		61.29	54	eP	10	59.50	-0.5
	Z	20s		4.29um			5.6Msz
CD2		61.68	285	eP	11	04.00	1.2
	Z	18s		1.00um			5.0Msz
RSCP		61.84	68	eP	11	00.50	-3.4
	Z	22s		2.65um			5.4Msz
GYA		63.17	279	P	11	14.20	1.3
BLA		63.54	63	eP	11	13.10	-2.0
		0.9s		21.85nm			5.3mb
	Z	20s		1.28um			5.1Msz
SUF		64.17	350	eP	11	18.20	-0.6
		0.8s		10.50nm			5.0mb
NUR		66.49	350	eP	11	37.00	3.3X
KMI		66.53	281	eP	11	36.00	1.3
	Z	20s		0.80um			4.9Msz
				pP	11	51.50	56kmX
				eS	20	22.00	
				ScS	21	26.00	
NB2		66.87	357	P	11	35.70	-0.5
		0.7s		9.20nm			5.0mb
HFS		67.69	356	eP	11	40.00	-1.2
		0.7s		7.50nm			4.9mb
	Z	17s		0.72um			5.0MszX
				epP	11	44.40	14kmX
				esP	11	47.00	
				ePcP	12	03.50	
				LR	38	06.00	
UPP		67.74	354	iP	11	44.80	3.2X
RUV		71.10	153	eP	12	05.00	2.4
		1.1s		20.00nm			5.1mb
GUN		74.22	295	P	12	23.20	1.7
PKI		74.74	295	P	12	26.40	1.9
GKN		74.83	296	P	12	24.00	-0.8
DZM		76.07	199	iPc	12	33.00	1.4
CLL		76.54	356	eP	12	36.00	2.2
KSP		76.80	353	eP	12	38.50	3.1X
BRG		76.92	355	eP	12	35.80	-0.2
				e	12	41.00	
PRU		77.77	354	eP	12	42.50	1.8
				e	13	09.50	
DOU		77.91	1	P	12	45.80	4.4X
				S	22	37.00	
SPC		78.11	351	eP	12	46.50	3.7X
GRF		78.23	357	eP	12	43.00	-0.2
	Z	19s		0.50um			4.9Msz
KHC		78.68	355	P	12	46.00	0.2
	Z	16s		0.90um			5.2MszX
	N	16s		0.50um			
	E	16s		0.40um			
ZST		79.38	352	e(P)	12	51.80	2.3
				e	13	15.40	
GRR		79.45	5	eP	12	49.40	-0.5
		0.9s		6.55nm			4.6mb
LPF		79.80	5	eP	12	51.50	-0.3
		0.9s		6.55nm			4.6mb
HAU		80.01	360	eP	12	52.50	-0.4
		0.6s		4.50nm			4.6mb
BSF		80.18	359	eP	12	53.20	-0.8
		0.6s		4.50nm			4.6mb
LOR		80.73	2	eP	12	56.60	-0.2
		0.7s		4.40nm			4.6mb
LBF		81.02	1	eP	12	57.80	-0.5
		0.7s		2.20nm			4.3mb
AVF		81.20	2	eP	12	58.80	-0.4
		0.8s		4.05nm			4.5mb
FVI		81.25	355	P	13	03.50	4.1X
MFF		81.27	4	eP	12	59.40	-0.2
		0.9s		6.55nm			4.6mb
SMF		81.35	2	eP	12	59.80	-0.2
		0.8s		5.35nm			4.6mb
TCF		81.67	3	eP	13	01.40	-0.3
		0.7s		2.20nm			4.3mb
LSF		81.69	3	eP	13	01.60	-0.2
		0.7s		7.70nm			4.8mb
MAF		81.75	2	eP	13	02.20	0.1
		0.6s		3.60nm			4.6mb
VAI		82.12	358	P	13	08.00	4.0X
LPG		82.52	360	eP	13	06.10	-0.4
		0.7s		3.30nm			4.5mb
BNI		82.96	360	P	13	12.50	3.9X
OIS		83.09	223	eP	13	09.50	0.2
BOB		83.21	358	P	13	10.00	0.2
SFI		83.96	356	P	13	17.00	3.5X
PGD		84.02	356	P	13	15.00	1.0
SBF		84.15	359	eP	13	14.40	-0.1
		0.8s		5.35nm			4.8mb
ARV		84.33	355	P	13	17.00	1.6
FRF		84.45	360	eP	13	15.80	-0.2
		0.9s		6.55nm			4.8mb
LMR		84.68	360	eP	13	17.30	0.2
		0.9s		6.55nm			4.8mb
ASS		84.77	355	P	13	19.50	1.8
WB5		84.79	228	eP	13	16.80	-1.1
WRA		84.86	228	Pc	13	16.10	-2.1
		0.9s		7.90nm			4.9mb
RMQ		85.02	213	eP	13	19.00	0.1
PGF		85.43	358	eP	13	20.80	-0.3
		0.9s		9.85nm			5.0mb
VAY		85.60	348	eP	13	21.00	-0.8
AZI		85.81	354	P	13	27.00	4.2X
OHR		86.03	349	eP	13	21.50	-2.5
SDI		86.07	354	P	13	24.00	-0.2
ASPA		88.30	226	eP	13	35.40	0.4
		1.1s		39.00nm			5.6mb
SLR		148.55	319	ePKP	20	20.00	-6.9X
		1.5s		69.44nm			
MAW		149.11	219	iPKP	20	29.90	3.6X
SEK		151.11	318	ePKP	20	39.00	8.2X
		0.9s		8.40nm			
BLF		152.39	319	iPKPd	20	43.00	10.4X

S.D. = 1.2 on 117 of 143 obs.

JUN 27, 1990 02h 57m 08.53± 0.78s
40.251 N ±10.8km 25.145 E ± 4.8km
DEPTH = 5.7 ± 4.9 km
AEGEAN SEA (365)
ML 3.0 (THE).

EZN		1.00	115	iPg	57	27.30	-0.6
				iSg	57	41.80	
SRS		1.46	307	ePbd	57	35.00	-0.5
				eSb	57	58.00	
RZN		1.47	347	eP	57	36.00	0.2
THE		1.71	284	ePn	57	39.50	0.5
MMB		1.71	322	ePd	57	39.00	-0.1
KNT		1.94	299	ePn	57	42.50	0.2
				eSn	58	10.40	
LIT		2.04	267	ePn	57	43.50	-0.4
EDC		2.08	86	iPn	57	45.90	1.5
BNT		2.12	86	ePn	57	45.00	-0.1
VAY		2.23	299	ePn	57	47.00	0.4
DMK		2.52	51	ePn	57	50.00	-0.8

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

? JUN 27, 1990 03h 13m 52.71± 0.95s
20.772 S ±11.8km 68.470 W ±18.1km
DEPTH = 124.0 ± 15.1 km
4.1mb (1 obs.)
CHILE-BOLIVIA BORDER REGION (124)

ANT		3.43	211	iP	14	45.50	0.0
CNCB		3.97	7	iPc	14	53.20	-0.1
CCH		4.03	34	eP	14	57.30	3.4X
LPB		4.23	5	P	14	56.90	0.1
		1.0s		180.00nm			
SIV		8.48	57	iPc	15	54.20	0.0
YKA		90.64	340	eP	26	41.80	0.0
		0.8s		1.30nm			4.1mb

S.D. = 0.2 on 5 of 6 obs.

JUN 27, 1990 03h 56m 20.54± 0.27s
37.007 N ± 8.9km 49.785 E ± 4.3km
DEPTH = 10.0km (geophysicist)
4.8mb (40 obs.)
CASPIAN SEA (338)

TEH		1.81	134	iPd	56	53.30	1.2
TAB		2.95	292	eP	57	11.00	2.6
MAIO		7.84	92	iPnc	58	17.00	-0.4
		0.8s		25.99nm			5.5mb
				eSn	59	51.00	
BBTK		13.65	287	eP	59	39.00	2.4
ALT		15.64	283	eP	00	04.00	1.3
QUE		15.83	110	eP	00	07.30	2.1
HRT		16.11	290	eP	00	10.00	1.3
IZI		16.21	288	eP	00	11.00	1.1
KDZ		19.39	291	iPc	00	51.00	1.6
MLR		19.78	303	eP	00	57.00	3.2X
RZN		19.92	291	iPc	00	57.00	1.6
CMP		20.33	302	ePc	00	41.00	-18.5X
MMB		20.65	291	iPc	01	03.00	0.2
VTS		21.12	294	iP	01	09.00	1.2
VAY		21.50	290	eP	01	14.00	2.6
OHR		22.83	289	eP	01	26.50	1.7
NDI		24.43	102	eP	01	41.50	1.1
SPC		24.60	309	eP	01	44.10	2.0
KRA		25.07	311	eP	01	46.10	-0.3
BRT		25.55	289	P	01	50.00	-1.0
ZST		26.33	305	eP	02	01.60	3.4X
				e	02	10.20	
SOI		26.69	283	P	01	59.00	-2.5
SGO		27.01	288	P	02	03.00	-1.4
ATN		27.14	283	P	02	05.50	-0.1
KSP		27.53	311	eP	02	10.00	0.9
DUI		27.59	291	P	02	10.40	0.6
SDI		28.07	291	P	02	13.00	-1.1
AZI		28.34	291	P	02	17.50	1.0
NUR		28.43	334	eP	02	18.00	0.9
KHC		28.82	306	P	02	21.50	0.8
ASS		28.89	294	P	02	23.00	1.5
FVI		28.97	301	P	02	22.00	-0.1
CRE		29.41	295	P	02	26.80	0.6
SFI		29.48	295	P	02	28.00	1.3
SUF		29.56	338	iP	02	27.90	0.7
		0.7s		13.30nm			4.9mb
PGD		29.57	295	P	02	28.40	0.6
CLL		29.66	311	iPc	02	29.10	0.9
		1.4s		23.00nm			4.8mb
SOTA		30.11	302	iPc	02	32.00	-0.4
		0.6s		28.40nm			5.3mb
				i	02	35.60	
BDI		30.39	296	P	02	35.00	0.1
GRF		30.43	307	eP	02	35.50	0.3
PII		30.44	295	P	02	34.50	-0.7
GKN		30.60	97	P	02	37.00	0.0
OSS		30.79	301	ePc	02	38.80	0.3
MDI		31.04	299	P	02	40.00	-0.5
DMN		31.14	97	P	02	41.60	-0.3
BOB		31.21	297	P	02	42.50	0.4
SAX		31.37	302	ePc	02	43.30	-0.5
PKI		31.40	97	P	02	44.20	-0.1
LLS		31.59	301	ePc	02	44.60	-1.0
PGF		31.60	293	eP	02	45.10	-0.6
		0.7s		16.55nm			5.1mb
GUN		31.62	96	P	02	46.20	-0.1
TMA		31.64	300	ePc	02	45.60	-0.4
VAI		31.70	299	P	02	45.50	-0.8
ORO		32.25	299	P	02	48.00	-3.3X
MMK		32.27	300	ePc	02	50.30	-1.3
HFS		32.58	327	eP	02	53.80	0.0
		0.5s		7.80nm			4.9mb
	Z	14s		0.04um			3.3MszX

		e	02 58.60		
		e	03 00.50		
		e	03 04.30		
		e	03 06.80		
DIX	32.65	300 ePc	02 54.60	-0.4	
SBF	32.67	295 eP	02 54.60	-0.3	
	0.7s	35.55nm		5.4mb	
DOI	32.78	297 P	02 54.00	-1.9	
CDF	32.85	304 eP	02 55.00	-1.4	
	0.9s	4.90nm		4.4mb	
LPG	33.11	299 eP	02 58.20	-0.8	
	1.0s	20.00nm		5.0mb	
LPL	33.13	299 eP	02 58.40	-0.7	
	1.0s	18.00nm		5.0mb	
BSF	33.14	303 eP	02 57.30	-1.7	
	0.9s	6.55nm		4.6mb	
BNI	33.18	298 Pc	02 59.00	-0.4	
FRF	33.26	295 eP	02 59 40	-0.6	
	0.7s	13.25nm		5.0mb	
LMR	33.38	295 eP	03 00.10	-0.8	
	0.6s	3.60nm		4.5mb	
HAU	33.44	303 eP	03 00.80	-0.7	
	0.9s	11.45nm		4.8mb	
LRG	33.48	295 eP	03 01.20	-0.6	
	1.0s	14.00nm		4.8mb	
GBA	33.95	126 Pd	03 05.40	-0.8	
	0.7s	8.30nm		4.8mb	
ENN	33.95	308 eP	03 07.00	1.1	
	1.0s	19.00nm		5.0mb	
NB2	34.09	327 P	03 06.90	-0.1	
	0.7s	2.20nm		4.2mb	
DOU	34.73	307 Pc	03 13.70	1.1	
	0.8s	13.30nm		4.9mb	
LBF	35.03	301 eP	03 14.30	-0.9	
	0.9s	4.90nm		4.4mb	
LOR	35.11	302 eP	03 14.90	-1.0	
	0.9s	11.45nm		4.7mb	
SMF	35.13	301 eP	03 15.40	-0.6	
	0.9s	9.00nm		4.6mb	
SSF	35.35	301 eP	03 17.70	-0.2	
	0.9s	8.20nm		4.6mb	
AVF	35.46	301 eP	03 18.10	-0.7	
	0.9s	16.40nm		4.9mb	
MAF	36.02	300 eP	03 23.30	-0.3	
	1.0s	21.00nm		5.0mb	
TCF	36.26	300 eP	03 25.50	-0.2	
	0.9s	11.45nm		4.7mb	
CAF	36.45	298 eP	03 27.00	-0.3	
	0.7s	6.05nm		4.5mb	
LSF	36.74	300 eP	03 29.30	-0.4	
	1.0s	14.00nm		4.7mb	
RJF	36.81	298 eP	03 30.60	0.3	
	0.8s	10.75nm		4.7mb	
LPO	37.09	297 eP	03 32.10	-0.5	
	0.7s	4.40nm		4.3mb	
LFF	37.39	298 eP	03 35.00	-0.1	
	0.7s	14.35nm		4.9mb	
LDF	37.77	304 iPd	03 37.80	-0.5	
	0.7s	13.25nm		4.8mb	
MFF	37.87	301 eP	03 38.70	-0.5	
	0.7s	12.15nm		4.8mb	
FLN	38.01	304 iPd	03 39.80	-0.5	
	0.7s	13.25nm		4.8mb	
EBR	38.14	291 eP	03 41.00	-0.4	
		eSg	08 52.00		
EROQ	38.20	291 eP	03 41.60	-0.4	
GRR	38.27	304 eP	03 42.20	-0.2	
	0.7s	39.70nm		5.3mb	
LPF	38.40	303 eP	03 43.20	-0.4	
	0.7s	13.25nm		4.8mb	
EKA	39.87	315 P	03 56.00	0.3	
	1.3s	11.30nm		4.4mb	
EVIA	40.87	289 eP	04 04.00	-0.3	
ENIJ	41.10	286 eP	04 05.40	-0.7	
GUD	41.63	292 eP	04 09.80	-0.8	
TOL	41.73	291 iPc	04 11.00	-0.2	
	1.1s	50.63nm		5.2mb	
EBAN	41.97	288 iPd	04 12.80	-0.4	
EHOR	43.17	288 eP	04 22.40	-0.6	
EPLA	43.20	292 eP	04 22.70	-0.6	
BCAO	43.25	229 iPc	04 24.80	0.9	
	0.8s	14.00nm		4.8mb	
EJIF	43.75	287 e(P)	04 31.00	3.3X	
IFR	44.45	283 iPc	04 34.50	0.8	
AVE	46.32	283 iP	04 48.00	-0.3	
KMI	46.35	89 Pd	04 49.50	0.5	
	1.5s	0.06nm		2.4mb X	

CHG	46.53	99 eP	04 49.50	-0.6	
LKO	56.81	256 P	06 05.04	-2.6	
MBC	66.81	357 eP	07 15.00	1.1	
	0.7s	2.00nm		4.4mb	
YKA	80.05	353 eP	08 30.00	-1.3	
	0.5s	0.50nm		3.7mb X	
	S.D. = 1.0	on 103 of 108 obs.			

JUN 27, 1990 05h 10m 13.46± 0.21s
21.734 S ± 4.9km 176.451 W ± 4.7km
DEPTH = 189.1km (12 depth phases)
5.1mb (30 obs.)

FIJI ISLANDS REGION (181)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 25C
Centroid Location:
Origin Time 05:10:17.2 1.1
Lat 21.99S 0.12 Lon 176.28W 0.08
Dep 183.4 2.6 Half-duration 1.8
Moment Tensor; Scale 10**17 Nm
Mrr=-0.47 0.07 Mtt= 0.40 0.13
Mff= 0.06 0.12 Mrt=-0.50 0.07
Mrf=-1.26 0.07 Mtf= 0.24 0.11
Principal Axes:
T Val= 1.35 Plg=36 Azm=126
N 0.16 12 27
P -1.52 52 282
Best Double Couple:Mo=1.4*10**17
NP1:Strike=261 Dip=14 Slip= -35
NP2: 26 82 -102

SVA	5.99	306 ePc	11 42.20	1.0	
		eS	12 56.30		
VUN	6.05	307 ePc	11 42.10	0.1	
SGE	6.71	307 ePd	11 53.00	2.2	
		eS	13 16.20		
PVC	14.88	283 iPc	13 40.50	4.6X	
RAR	15.54	91 P	13 45.00	1.1	
		S	16 29.00		
DZM	15.88	266 iPc	13 52.40	4.1X	
WLZ	17.46	201 P	14 08.50	1.7	
NOZ	17.48	195 P	14 09.50	2.5	
		S	17 20.00		
PGZ	19.81	197 P	14 31.00	-0.2	
	0.4s	41.00nm		5.3mb	
MNG	20.03	198 eP	14 31.00	-2.5	
		eS	18 00.20		
CAW	20.61	198 P	14 37.50	-1.7	
BLW	20.73	197 eP	14 40.20	-0.2	
WDW	20.77	198 eP	14 40.00	-0.8	
MRW	20.83	199 eP	14 39.70	-1.6	
		eS	18 19.40		
TCW	20.94	200 eP	14 39.80	-2.7	
THZ	21.89	202 eP	14 51.50	-0.4	
		eS	18 40.60		
KHZ	22.27	200 eP	14 55.10	-0.3	
LTZ	23.01	202 eP	15 03.20	0.5	
		eS	18 57.70		
PPN	25.77	85 eP	15 29.00	0.4	
	0.8s	40.00nm		5.2mb	
TVO	25.88	86 eP	15 30.00	0.3	
	0.8s	40.00nm		5.2mb	
MHZ	26.06	203 eP	15 31.10	-0.1	
MMCZ	26.06	204 P	15 30.90	-0.3	
TLC	26.25	204 P	15 33.10	0.2	
PMO	27.88	81 iP	15 46.80	-0.9	
	0.8s	10.00nm		4.6mb	
VAH	28.06	82 iP	15 47.70	-1.6	
	0.8s	15.00nm		4.8mb	
TPT	28.14	81 iP	15 48.70	-1.4	
	0.8s	25.00nm		5.0mb	
RUV	28.30	82 iP	15 49.80	-1.7	
	0.8s	30.00nm		5.1mb	
BRS	28.51	252 iPc	15 55.00	1.7	
		i	16 36.00	203kmX	
RMO	32.05	255 ePd	16 25.50	1.1	
	1.1s	426.00nm		6.0mb	
		i	16 40.00	5BkmX	
		i	19 10.70		
CNB	32.77	238 eP	16 22.00	-8.6X	
CTA	34.82	266 iPd	16 48.50	0.2	
	0.9s	134.45nm		5.6mb	
QLP	36.10	254 eP	17 00.00	1.1	
TOO	36.37	236 eP	17 02.50	1.4	
KDB	37.00	283 eP	17 06.50	-0.1	
STK	38.58	246 eP	17 20.00	0.4	

	1.0s	49.00nm		5.1mb	
QIS	40.90	263 eP	17 39.00	0.2	
ASPA	45.66	258 iPd	18 16.50	-0.6	
	0.6s	99.00nm		5.5mb	
Z	18s	0.49um		4.5Msz	
		iPP	18 57.50		
		iS	24 42.50		
		LR	35 10.30		
WB5	45.86	263 iPd	18 17.50	-1.2	
WRA	45.87	263 Pd	18 17.40	-1.4	
	0.6s	23.20nm		4.8mb	
MTN	50.63	271 iPc	18 54.20	-1.3	
GUA	51.63	309 eP	19 02.30	-0.7	
	0.8s	298.51nm		6.0mb	
GUMO	51.70	309 eP	19 02.70	-0.8	
	0.7s	152.48nm		5.7mb	
PJG	51.70	309 eP	19 02.20	-1.3	
WARB	51.85	253 iPd	19 03.40	-1.2	
	0.5s	31.00nm		5.2mb	
KNA	52.00	267 eP	19 04.50	-1.3	
SBA	56.75	184 e(P)	19 44.10	4.8X	
MBL	58.91	258 iPd	19 53.60	-1.5	
	0.5s	43.00nm		5.5mb	
RKG	59.17	242 eP	19 57.50	0.8	
	0.4s	34.00nm		5.5mb	
MRWA	60.72	248 iPc	20 06.50	-0.9	
	0.5s	17.00nm		5.1mb	
NANU	62.48	255 iPd	20 18.30	-0.8	
	0.5s	65.00nm		5.7mb	
SPA	68.40	180 iPd	20 59.30	2.8	
	0.8s	13.75nm		4.8mb	
		i	21 12.60	46kmX	
MAT	72.06	323 eP	21 17.00	-1.7	
	1.8s	104.55nm		5.3mb	
ADK	73.30	360 eP	21 23.20	-2.2	
	0.7s	53.70nm		5.4mb	
PRS	77.72	43 e(P)	21 52.00	1.2	
BCH	77.84	44 P	21 52.80	1.2	
SDN	77.96	9 eP	21 49.50	-2.2	
PRI	78.05	43 eP	21 51.90	-0.9	
ARN	78.26	42 P	21 54.30	0.5	
SBB	79.03	46 eP	22 03.00	4.9X	
CMB	79.40	42 eP	22 00.30	0.3	
		epP	22 46.90	191km	
WDC	79.71	39 ePc	22 02.10	0.6	
		epP	22 48.20	189km	
CLC	79.84	45 eP	22 03.00	0.6	
		e	22 47.00	180km	
TPC	79.89	47 eP	22 03.00	0.3	
		e	22 48.00	184km	
GSC	80.07	46 eP	22 05.00	1.4	
		e	22 50.00	184km	
MIN	80.11	39 eP	22 03.70	-0.1	
		epP	22 50.60	192km	
GLA	80.14	49 eP	22 05.00	1.0	
		e	22 49.00	179km	
MAW	80.89	199 iP	22 09.80	2.5	
TNP	81.42	43 P	22 10.50	-0.3	
	1.0s	5.42nm		4.2mb	
KVN	81.44	42 P	22 10.70	-0.1	
KGM	81.67	276 eP	22 12.50	0.2	
NJ2	81.77	309 Pc	22 12.00	-0.4	
MDJ	82.36	324 eP	22 17.50	2.3	
SNY	84.08	319 Pc	22 20.80	-3.1X	
CN2	84.16	322 Pd	22 23.60	-0.7	
		pP	23 12.00	197km	
WHN	84.33	306 eP	22 25.50	0.0	
		pP	23 13.50	195km	
IPM	84.76	277 ePd	22 29.20	1.2	
	0.9s	35.90nm		5.1mb	
TIA	85.17	312 eP	22 28.40	-1.2	
PMR	85.89	13 ePd	22 31.50	-1.0	
	0.8s	11.90nm		4.8mb	
TTA	85.91	9 eP	22 32.20	-0.6	
PSI	86.00	274 ePd	22 32.60	-1.5	
SNG	86.11	279 eP	22 35.40	0.8	
PNT	86.88	33 ePd	22 38.00	0.4	
	0.8s	11.00nm		4.8mb	
TOA	86.98	14 eP	22 37.60	-0.3	
ALO	87.05	51 eP	22 39.70	0.7	
	0.8s	5.04nm		4.4mb	
		epP	23 24.00	178kmX	
BJI	87.78	315 eP	22 42.00	-0.1	
	1.8s	57.00nm		5.1mb	
		pP	23 30.50	196km	
		eSKS	32 52.00		
GYA	88.51	299 P	22 47.00	0.9	

27d 05h

FBA	89.14	12	iPd	22	46.80	-1.3
			e	23	34.90	194km
IMA	89.22	9	eP	22	37.50	-11.1X
XAN	90.03	307	P	22	52.50	-0.4
CHG	92.02	289	iPd	23	03.50	1.2
	0.9s		8.40nm			4.8mb
SES	92.02	36	eP	23	02.00	0.3
			pP	23	49.00	188km
MEO	92.76	54	iPd	23	06.20	0.8
INK	95.09	15	eP	23	14.00	-1.3
YKA	97.03	24	eP	23	23.30	-0.9
	0.8s		1.40nm			4.4mb
MAIO	129.61	300	ePKP	29	03.00	1.2
BUL	131.71	212	ePKP	29	02.10	-4.1X
KRI	133.94	216	iPKPd	29	06.20	-4.4X
			i	32	23.00	
LSZ	135.99	215	ePKP	29	16.00	1.5
SUF	136.24	345	ePKP	29	02.50	-10.9X
NB2	140.36	354	PKP	29	12.30	-8.8X
	0.7s		3.00nm			
HFS	140.97	352	ePKP	29	13.80	-8.3X
	0.4s		4.90nm			
	Z 11s		0.03um			4.3MszX
			e	29	16.60	
UQSK	144.34	284	iPKPd	29	28.30	-0.8
BSD	145.60	348	iPKPc	29	30.00	-0.2
	0.7s		74.00nm			
LWI	145.69	229	ePKPc	29	34.00	2.1
EKA	146.07	7	PKPd	29	30.90	-0.1
	0.8s		10.00nm			
DCN	147.37	12	ePKP	29	35.40	2.3
	0.7s		32.00nm			
DLE	147.56	11	ePKP	29	35.90	2.5
WIT	148.88	356	ePKP	29	40.00	4.5X
KRA	148.92	339	iPKPd	29	39.80	4.1X
	0.7s		51.00nm			
KSP	149.28	344	ePKP	29	36.50	0.3
BBTK	149.29	313	ePKP	29	42.00	5.2X
HRI	149.34	299	ePKP	29	48.00	11.0X
VRI	149.38	327	ePKPc	29	41.00	4.4X
SPC	149.56	338	ePKP	29	41.60	4.6X
			e	30	32.30	
CLL	149.57	348	iPKPd	29	41.60	5.0X
	1.6s		120.00nm			
			epP	30	31.00	
WTS	149.69	356	ePKP	29	42.00	5.2X
	0.8s		18.00nm			
			e	30	31.50	
BRG	149.80	347	iPKP	29	52.20	15.2X
	2.1s		170.00nm			
			i	29	59.60	
			i	30	32.20	
AYN	149.88	290	ePKPd	29	43.50	5.7X
JVI	149.96	296	iPKPd	29	49.40	11.6X
MLR	150.04	328	iPKPd	29	44.00	6.3X
MOX	150.46	350	ePKP	29	44.00	6.0X
	2.2s		138.00nm			
			e	30	34.00	
PRU	150.50	346	PKP	29	36.00	-2.1
			e	29	44.60	
PRNI	150.55	293	iPKPd	29	51.00	12.2X
CMP	150.64	328	ePKPc	29	38.00	-0.5
HQL	150.66	291	ePKPd	29	45.10	6.1X
GPA	150.71	315	ePKP	29	44.00	5.2X
MBH	150.74	292	iPKPd	29	51.40	12.4X
BADA	150.79	290	ePKPd	29	45.50	6.3X
ENN	150.96	357	ePKP	29	44.50	5.8X
	0.8s		29.00nm			
			e	29	56.50	
			e	30	34.00	
TNS	151.31	353	ePKPd	29	45.50	6.1X
SRO	151.40	339	ePKP	29	40.40	0.9
			e	29	47.00	
BUD	151.44	338	e(PKP)	29	44.00	4.5X
GRF	151.44	350	ePKP	29	46.10	6.6X
			e	29	54.00	
			e(pPKP	30	36.00	
			e	30	42.30	
ZST	151.45	341	ePKP	29	40.30	0.8
			e	29	47.30	
			e	30	45.30	
ALT	151.47	313	ePKP	29	45.00	5.0X
KHC	151.52	346	ePKP	29	42.60	2.9X
			i	29	46.90	
WET	151.66	347	ePKP	29	46.80	6.9X
	2.0s		90.00nm			
DOU	151.68	359	PKPc	29	46.50	6.7X
			e	30	37.70	
BCK	151.88	310	iPKP	29	47.00	6.3X
SOP	152.07	341	ePKP	29	47.90	7.4X
KHL	152.22	312	ePKP	29	47.50	6.4X
KDZ	152.92	322	iPKPc	29	50.00	8.1X
CDF	153.21	354	ePKP	30	01.60	19.4X
	0.8s		12.10nm			
RZN	153.29	323	iPKPc	29	50.00	7.3X
VTS	153.48	326	iPKPc	29	51.00	8.2X
MMB	153.91	324	iPKPc	29	51.00	7.7X
FVI	154.09	345	PKP	29	52.50	9.2X
LJU	154.15	342	ePKP	29	45.00	1.6
VOY	154.33	343	e(PKP)	29	43.00	-0.8
TRI	154.67	343	ePKP	29	52.90	8.8X
			e	30	07.00	
ORO	155.89	352	PKP	30	00.00	14.0X
BOB	156.52	349	PKP	30	03.00	16.2X
BNI	156.60	354	PKP	30	02.00	15.1X
KIC	162.74	151	(PKP)	29	54.10	-0.2

S.D. = 1.2 on 103 of 154 obs.

? JUN 27, 1990 05h 27m 06.87± 3.65s
2.728 S ± 8.1km 79.711 W ±64.9km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF ECUADOR (105)

TUNG	1.81	44	iP	27	33.70	-5.0X
VC1	2.45	32	iP+	27	46.80	-1.3
			S	28	14.00	
GGP	2.77	24	eP	27	52.90	0.2
			S	28	21.70	
OTO	2.77	25	eP	27	51.70	-0.9
			iS	28	20.40	
QUR	2.80	25	eP	27	53.10	0.1
			eS	28	24.30	
GECU	2.84	32	eP	27	53.20	-0.4
CAYA	3.28	32	P	28	11.40	11.6X
COTA	3.34	24	eP	28	02.50	1.8
NNA	9.63	163	eP	29	28.00	-0.6
	0.4s		5.08nm			5.3mb X
			eS	31	23.50	
LPB	17.85	141	eP	31	00.00	-17.5X
CNCB	18.13	141	P	31	27.00	5.9X
SIV	22.59	127	eP	32	10.00	0.9

S.D. = 1.2 on 8 of 12 obs.

• JUN 27, 1990 05h 55m 39.97± 1.31s
34.653 N ±18.3km 26.243 E ±11.1km
DEPTH = 10.0km (geophysicist)
CRETE (370)

VAM	1.84	295	ePn	56	12.00	0.2
APE	2.48	347	ePn	56	19.50	-1.6
KSL	3.10	61	ePn	56	31.00	1.3
VLI	3.39	308	ePn	56	29.40	-4.6X
ITM	4.32	307	ePn	56	48.00	0.8
BCK	4.50	50	ePn	56	57.00	7.2X
PRNI	8.55	118	eP	57	46.00	-0.7

S.D. = 1.6 on 5 of 7 obs.

? JUN 27, 1990 06h 00m 32.72± 2.26s
31.476 S ±14.1km 65.883 W ±29.4km
DEPTH = 126.2 ± 36.7 km
CORDOBA PROVINCE, ARGENTINA (141)

CFA	2.02	266	iPd	01	07.20	0.0
			eS	01	30.00	
RTLL	2.22	273	iPd	01	09.70	0.0
RTCV	2.30	260	iPd	01	11.00	0.3
ZON	2.39	268	iPc	01	12.00	0.1
			eS	01	34.00	
RTRS	3.34	292	iPc	01	23.90	-0.5
CHCH	4.71	237	eP	01	42.80	-0.1
			i	02	19.20	
CCH	14.03	359	eP	03	48.00	0.6
CNCB	14.73	352	P	03	56.50	0.0
LPB	15.01	352	P	04	00.00	0.0
SIV	16.03	17	P	04	11.80	-0.5

S.D. = 0.4 on 10 of 10 obs.

% JUN 27, 1990 06h 13m 09.01± 1.42s
45.426 N ± 5.5km 6.594 E ±11.6km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.4 (GEN).

LPG	0.13	57	Pg	13	12.50	0.0
			Sg	13	14.80	
LPL	0.13	47	Pg	13	12.30	-0.1
BNI	0.38	171	Pc	13	16.60	-0.2
			eSg	13	22.10	
LSD	0.40	85	P	13	16.90	-0.3
			S	13	21.76	
RRL	0.52	165	P	13	19.76	0.1
			S	13	26.79	
RSP	0.54	120	P	13	20.02	0.0
			S	13	26.79	
PZZ	0.99	158	P	13	28.02	0.1
			S	13	40.33	
ORX	1.00	78	P	13	28.34	0.3
			S	13	40.57	
DOI	1.03	153	P	13	29.00	0.4
			eSg	13	43.00	
STV	1.29	156	P	13	32.94	-0.1
ENR	1.34	154	P	13	33.34	-0.4

S.D. = 0.3 on 11 of 11 obs.

? JUN 27, 1990 07h 04m 29.51± 1.00s
31.682 S ±20.1km 68.963 W ±19.0km
DEPTH = 120.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

ZON	0.28	61	iPd	04	45.50	-1.4
			eS	04	57.50	
RTCV	0.40	116	iPc	04	47.90	0.7
RTBS	0.42	273	iPc	04	47.20	0.0
			(S)	04	58.00	
RTLL	0.55	50	iPc	04	48.00	-0.1
CFA	0.62	83	iPd	04	49.00	0.4
			eS	05	02.90	
RTRS	1.57	344	iPc	04	58.40	0.3
			eS	05	18.80	

S.D. = 1.0 on 6 of 6 obs.

? JUN 27, 1990 07h 30m 47.44±11.60s
43.600 N ±80.3km 7.661 E ±10.6km
DEPTH = 10.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)
ML 1.9 (GEN).

IMI	0.35	28	P	30	54.80	0.1
			S	31	00.23	
ENR	0.65	345	P	30	59.92	-0.6
			S	31	09.38	
STV	0.69	339	P	31	00.86	-0.3
			S	31	09.92	
ROB	0.71	12	P	31	01.58	0.1
			S	31	11.52	
FIN	0.73	33	P	31	01.58	-0.2
PZZ	0.99	336	P	31	06.91	0.6
			S	31	20.03	

S.D. = 0.5 on 6 of 6 obs.

& JUN 27, 1990 08h 53m 39.57s
62.510 N 151.323 W
DEPTH = 94.3km
CENTRAL ALASKA (1)
<AGS-P>.

CUT	0.50	102	iP	53	54.99	0.0
			Sn	54	05.98	
SKT	0.54	190	iP	53	55.27	-0.1
HUR	0.91	58	iP	53	58.63	-0.2
			iS	54	12.60	
KTH	1.06	10	iP	54	00.20	-0.5
			iS	54	15.08	
SUA	1.09	165	eP	54	00.95	0.0
PWA	1.10	141	iP	54	01.13	0.2
			iS	54	17.35	
NCG	1.18	200	iP	54	01.79	-0.3
			iS	54	18.86	
CGLM	1.25	195	iP	54	02.57	-0.3
CRP	1.31	198	iP	54	03.60	-0.1
			iS	54	21.72	
GHO	1.35	122	eP	54	04.23	0.1
SPU	1.38	195	eP	54	04.03	-0.4
			eS	54	23.15	
PLRM	1.38	131	eP	54	03.96	-0.5
PMR	1.38	131	iPd	54	03.90	-0.5
PMS	1.52	146	eP	54	05.70	-0.5
			iS	54	27.10	
SML	1.57	115	iP	54	06.59	-0.3
MCK	1.64	40	iP	54	07.42	-0.3
			iS	54	28.90	

SCM	1.99	108	iP	54	11.67	-0.8
RDT	2.01	195	eP	54	12.58	-0.1
SLKM	2.08	165	eP	54	13.37	-0.1
TTA	2.20	283	eP	54	14.00	-1.2
RED	2.21	199	eP	54	15.34	0.0
NEA	2.31	25	eP	54	15.06	-1.5
TOA	2.44	97	eP	54	18.40	0.0
WRH	2.45	35	eP	54	17.34	-1.1
NNL	2.48	180	eP	54	21.29	2.4
SVW	2.48	237	ePc	54	18.20	-0.7
SEW	2.58	159	eP	54	20.44	0.3
GLI	2.60	127	eP	54	19.03	-1.4
CCB	2.66	35	iP	54	20.21	-1.1
SDG	2.68	87	eP	54	21.13	-0.5
VZW	2.69	121	eP	54	20.76	-1.1
PAX	2.73	78	eP	54	22.25	-0.2
VLZ	2.74	118	eP	54	20.60	-1.8
KLU	2.75	109	iP	54	20.95	-1.6
FBA	2.87	32	iPc	54	23.20	-1.0
DMW	2.96	56	eP	54	26.12	0.6
CNPM	3.00	179	eP	54	25.81	-0.1
GLM	3.04	33	iP	54	25.63	-1.0
DOT	3.49	68	eP	54	31.63	-1.2
IMA	3.72	345	iPd	54	34.70	-1.3
TGL	4.42	110	eP	54	44.61	-1.0
BALM	4.51	105	eP	54	44.74	-2.2
INK	9.40	44	eP	55	52.00	-1.8

43 obs. ossociated

% JUN 27, 1990 09h 06m 09.07± 1.15s
36.682 N ± 6.6km 6.128 W ± 9.9km
DEPTH = 10.0km (geophysicist)
STRAIT OF GIBRALTAR (385)
mbLg 2.7 (MDD). Felt (III) ot Jerez and Puerto Santa Maria, Spain.

GIBL	0.20	44	iP	06	11.00	-2.5
CNIL	0.32	169	iP	06	15.00	-0.7
ALJ	0.42	91	iP	06	18.00	0.3
EJIF	0.58	113	eP	06	21.20	0.4
			eS	06	30.20	
PLAT	0.63	152	iP	06	25.00	3.2X
OJEN	0.75	140	iP	06	24.00	0.2
EPRU	0.77	68	eP	06	25.20	1.0
			eS	06	37.00	
EVAL	1.03	331	eP	06	28.90	0.4
			eS	06	44.40	
EHOR	1.34	32	eP	06	34.50	0.8
			eS	06	53.00	

S.D. = 1.3 on 8 of 9 obs.

• JUN 27, 1990 09h 08m 02.26± 0.80s
32.611 S ±14.6km 69.821 W ±15.2km
OEPTH = 10.0km (geophysicist)
MENDOZA PROVINCE, ARGENTINA (139)

PEL	0.90	234	iPd	08	21.00	1.4
			iS	08	36.00	
RTBS	1.00	18	iPd	08	24.70	3.6X
			(S)	08	37.00	
RTCV	1.32	56	iPc	08	27.50	0.8
ZON	1.44	43	iPd	08	29.00	0.6
			eS	08	42.00	
CHCH	1.49	208	iP	08	27.70	-1.4
			iS	08	48.00	
CFA	1.67	54	iPd	08	31.70	-0.1
			eS	08	54.20	
RTLL	1.72	42	iPc	08	32.00	-0.4
RTRS	2.45	7	iPd	08	42.00	-0.9
			eS	09	12.90	

S.D. = 1.2 on 7 of 8 obs.

JUN 27, 1990 09h 20m 37.40± 0.38s
51.414 N ±10.6km 178.883 E ± 4.1km
DEPTH = 42.3km (8 depth phases)
4.6mb (10 obs.)
RAT ISLANDS, ALEUTIAN ISLANDS (6)

ADK	2.80	79	eP	21	22.30	1.5
SMY	3.23	296	eP	21	28.00	1.2
TTA	17.69	40	eP	24	44.00	2.0
PMR	20.16	47	eP	25	12.00	1.5
IMA	20.19	33	eP	25	10.00	-0.9
FBA	21.82	39	eP	25	27.70	0.4
INK	28.27	35	eP	26	28.00	-0.2
MBC	34.12	22	eP	27	19.50	-0.1
	0.7s		4.00nm			4.5mb
CN2	36.11	279	eP	27	36.40	-0.5
YKA	36.26	46	eP	27	37.30	-0.6
	0.6s		4.80nm			4.6mb
SNY	38.34	278	eP	27	55.20	-0.4
EDM	40.06	60	eP	28	09.00	-0.8
NEW	40.23	68	eP	28	10.50	-0.8
	0.7s		6.00nm			4.5mb
			epP	28	22.20	42km
LBFM	41.03	80	eP	28	19.00	0.8
ORV	42.32	82	eP	28	29.20	0.7
SES	42.64	63	eP	28	30.00	-1.0
			pP	28	42.00	44km
ARN	43.65	85	eP	28	40.50	1.1
KVN	44.73	80	eP	28	49.00	0.7
TNP	45.87	81	eP	28	58.00	0.6
	0.9s		10.09nm			4.7mb
			epP	29	10.00	43km
HHC	46.28	284	eP	29	01.40	1.0
SSE	46.55	267	P	29	03.50	1.0
	1.0s		19.00nm			5.0mb
BTO	47.37	285	eP	29	10.00	1.0
BW06	47.67	71	eP	29	10.50	-1.1
			epP	29	22.80	45km
TIY	47.67	280	Pc	29	12.20	0.8
RSSD	50.08	66	eP	29	29.00	-1.1
			epP	29	40.00	38km
PV09	50.56	75	eP	29	33.00	-0.9
			epP	29	45.00	43km
LZH	53.97	285	P	29	59.00	-0.3
	1.8s		38.00nm			5.1mb
GTA	54.20	290	eP	30	00.00	-0.8
ANMO	54.50	77	eP	30	03.20	0.0
			epP	30	15.00	41km
ALQ	54.51	77	eP	30	02.30	-1.0
	0.9s		6.30nm			4.6mb
			epP	30	14.50	43km
CD2	57.54	280	P	30	24.00	-0.9
SCH	60.90	37	eP	30	46.00	-1.7
SUF	64.19	346	eP	31	08.80	-0.6
	0.5s		2.90nm			4.6mb
GUN	70.49	290	P	31	50.00	0.1
PKI	71.02	290	P	31	53.00	-0.1
GKN	71.15	291	P	31	53.60	-0.1
DMN	71.17	291	P	31	54.00	0.1
QUE	79.19	305	eP	32	50.00	10.4X
WRA	81.05	222	Pd	32	49.40	0.2
	0.5s		1.20nm			4.1mb
GBA	86.48	287	Pc	33	15.70	-1.2
	0.6s		3.50nm			4.8mb
SLR	145.97	308	ePKP	40	13.60	0.4
	0.6s		12.00nm			
SEK	148.44	306	iPKPd	40	21.50	4.4X
BLF	149.80	307	ePKP	40	23.00	3.8X
FRS	150.76	308	ePKP	40	12.00	-8.3X
HVD	151.36	306	ePKP	40	37.00	15.5X

S.D. = 0.9 on 40 of 45 obs.

• JUN 27, 1990 12h 07m 56.86± 2.95s
25.146 S ±14.9km 177.373 W ±12.1km
DEPTH = 143.4 ± 24.2 km
4.9mb (12 obs.)
SOUTH OF FIJI ISLANDS (171)

VUN	8.09	331	ePc	09	52.40	-0.3
DZM	15.15	278	iPc	11	30.10	5.5X
RMQ	30.47	260	eP	14	00.50	2.3
CTA	33.88	271	iPc	14	29.00	1.1
	0.9s		61.34nm			5.3mb
QIS	39.79	268	iPc	15	18.20	0.8
ASPA	44.20	261	eP	15	52.90	-0.6
	0.4s		27.00nm			5.3mb
			i	16	32.00	
WB5	44.71	267	eP	15	57.20	-0.3
WRA	44.71	267	Pc	15	56.80	-0.7
	0.6s		48.70nm			5.3mb
WARB	50.13	256	eP	16	39.00	-0.6
NANU	60.84	257	eP	17	56.00	-0.4
SPA	65.00	180	iPc	18	21.50	-1.9
	0.9s		12.73nm			4.9mb
ADK	76.70	0	ePd	19	31.50	-1.6
	0.4s		35.10nm			5.5mb
SDN	81.45	10	eP	19	57.40	-1.3
CMB	82.49	42	eP	20	05.50	0.9
ORV	82.81	40	eP	20	06.80	0.6
WDC	82.89	39	eP	20	07.50	1.0
GLA	83.02	49	P	20	09.20	1.8
MIN	83.27	40	eP	20	08.90	0.2
LBFM	83.77	39	P	20	11.80	0.6
TNP	84.47	43	P	20	15.20	0.4
	1.0s		5.42nm			4.3mb
KVN	84.52	42	P	20	14.90	-0.2
KDC	85.17	13	eP	20	17.30	-0.3
PMR	89.39	13	eP	20	37.20	-0.6
	0.8s		22.70nm			5.3mb
TTA	89.40	10	eP	20	38.00	0.0
ALQ	89.86	51	eP	20	41.00	0.1
	1.0s		4.25nm			4.4mb
ANMO	89.86	51	P	20	41.50	0.6
	1.0s		2.50nm			4.2mb
PNT	90.18	34	ePc	20	42.00	0.2
	0.9s		12.00nm			5.0mb
TOA	90.48	14	eP	20	43.10	0.1
BW06	91.95	43	P	20	49.80	-0.6
	0.9s		4.87nm			4.7mb
FBA	92.64	12	eP	20	51.90	-0.9
IMA	92.71	9	eP	20	52.50	-0.7
	0.5s		1.40nm			4.4mb
SES	95.27	36	eP	21	05.00	-0.2
INK	98.59	15	eP	21	19.00	-0.7
KOD	107.93	273	ePKP	26	03.00	-7.0X
CIR	126.18	214	iPdiff	23	27.20	3.5X
BUL	128.38	212	ePdiff	23	16.00	-17.6X
NB2	143.64	353	PKP	27	11.70	-4.0X
	0.5s		2.90nm			
UPP	143.77	347	iPKP	27	11.10	-4.7X
HFS	144.20	351	ePKP	27	13.20	-3.4X
	0.9s		40.50nm			
	Z 12s		0.03um			4.3MszX
			e	27	19.50	
EKA	149.55	7	PKPc	27	29.80	4.4X
	0.8s		10.30nm			
ADI	150.53	293	iPKPd	27	34.00	6.4X
JVI	150.54	291	ePKP	27	34.20	6.6X
PRNI	150.95	288	iPKPd	27	37.00	8.7X
NOH	150.96	288	iPKPd	27	34.30	5.9X
DLE	151.06	11	ePKP	27	18.90	-8.8X
MBH	151.07	286	iPKPd	27	35.00	6.6X
KRA	151.74	336	iPKPd	27	35.40	6.6X
	0.6s		53.00nm			
			e	27	41.10	
WIT	152.20	355	ePKP	27	38.00	8.6X
			e	27	45.00	
KSP	152.27	341	iPKPd	27	37.00	7.4X
	0.7s		35.00nm			
			i	27	42.80	
			i	27	46.70	
SPC	152.33	335	e(PKP)	27	36.30	6.3X
			e	27	41.90	
MLR	152.35	323	ePKPd	27	36.50	6.4X
CLL	152.69	346	iPKP	27	30.60	0.5
BRG	152.87	344	iPKPd	27	37.70	7.3X
			i	27	44.00	
			i	27	48.50	
WTS	153.00	354	iPKPc	27	38.40	7.9X
	0.7s		22.00nm			
			e	27	45.00	
PRU	153.53	343	ePKP	27	39.00	7.6X
			e	27	45.50	
BCAO	154.35	219	iPKPc	27	50.20	16.6X
	0.5s		10.00nm			
KHC	154.57	343	ePKP	27	33.50	0.7
			e	27	42.00	
			i	27	56.50	

S.D. = 0.9 on 34 of 57 obs.

• JUN 27, 1990 12h 17m 22.39± 1.15s
17.046 N ±17.5km 95.057 W ± 8.9km
DEPTH = 33.0km (normal)
OAXACA, MEXICO (60)
Felt on the Isthmus of Tehuantepec.

EVV	1.43	349	iP	17	47.00	0.8
			(S)	18	03.00	
OXX	1.59	272	iP	17	50.25	1.4
			iS	18	12.44	
SCX	2.34	97	iP	17	59.11	-0.2
			iS	18	23.96	
LVVM	2.99	334	iP	18	04.71	-3.8X
			(S)	18	35.82	
TPX	3.43	128	(P)	18	30.00	15.1X
IIT	3.66	303	(P)	18	17.06	-1.3
PPM	3.95	301	iP	18	23.00	0.4

27d 12h

		(S)	18 58.91		
III	4.41	288 iP	18 27.86	-1.1	
ACX	4.60	269 (P)	18 18.95	-12.5X	
		(S)	18 51.48		
IIJ	5.18	302 (P)	18 40.28	0.1	
S.D. = 1.2		on 7 of 10 obs.			

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* JUN 27, 1990 13h 04m 09.07± 2.44s
48.555 N ± 9.2km 8.241 E ±19.3km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
MD 2.2 (STR).

GWF	0.59	316 Pg	04 21.05	0.0	
WLS	0.61	257 Pg	04 21.57	0.2	
		Sg	04 31.60		
CDF	0.66	258 Pg	04 21.91	-0.3	
FEL	0.70	193 Pg	04 22.86	-0.1	
MOF	1.02	227 Pg	04 28.65	0.2	
S.D. = 0.3		on 5 of 5 obs.			

& JUN 27, 1990 15h 47m 53.62s
63.256 N 150.488 W
DEPTH = 8.6km
CENTRAL ALASKA (1)
<AGS-P>.

KTH	0.36	327 iP	48 00.54	-0.4	
		eS	48 05.50		
HUR	0.48	125 eP	48 02.74	-0.5	
		eS	48 09.09		
CUT	0.86	173 iP	48 09.97	-0.3	
		eS	48 21.73		
SKT	1.37	201 iP	48 18.42	-0.5	
		Sn	48 39.01		
PWA	1.64	170 eP	48 21.80	-0.9	
GHO	1.66	153 eP	48 22.44	-0.6	
SML	1.76	145 eP	48 23.43	-1.2	
PLRM	1.79	159 iP	48 24.30	-0.5	
SUA	1.80	184 eP	48 25.69	0.4	
NCG	2.02	203 eP	48 28.59	0.3	
PMS	2.07	167 iP	48 28.64	-0.3	
11 obs. ossocioted					

& JUN 27, 1990 15h 52m 50.10s
36.652 N 121.288 W
DEPTH = 5.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.7 (BRK).

SAO	0.17	312 iPc	52 53.50	-0.1	
LLA	0.28	97 iPc	52 55.70	-0.1	
PRS	0.33	192 iPd	52 56.70	0.0	
GCC	0.68	304 ePc	53 03.10	-0.6	
PRI	0.72	135 ePd	53 04.90	0.5	
ARN	0.72	344 eP	53 04.30	-0.3	
MHC	0.74	338 iPd	53 05.20	0.2	
		iS	53 18.20		
PHAM	1.09	138 eP	53 10.50	-0.5	
PKEM	1.12	121 eP	53 11.50	-0.1	
PCC	1.22	314 ePd	53 13.20	0.0	
CMB	1.56	27 ePc	53 17.70	-0.8	
		eS	53 37.30		
BCH	1.76	146 eP	53 20.20	-1.3	
KVN	3.48	46 eP	53 52.50	6.3	
TNP	3.54	65 eP	53 50.50	3.4	
14 obs. ossocioted					

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* JUN 27, 1990 16h 20m 32.68± 1.14s
18.711 N ±10.5km 66.745 W ±11.1km
DEPTH = 75.0 ± 8.7 km
PUERTO RICO REGION (90)

PORP	0.66	171 P	20 48.00	0.3	
MGP	0.77	205 P	20 49.50	0.6	
SJG	0.82	136 P	20 49.80	0.2	
LPR	0.92	116 P	20 51.00	0.2	
CPD	1.03	130 P	20 52.40	0.3	
MORO	7.94	191 iPc	22 27.90	0.2	
CAR	8.16	181 iPd	22 30.00	-0.8	
		iS	23 50.50		
LLAV	8.19	180 iPc	22 29.10	-2.1	
		eS	23 51.10		
GUAC	8.48	184 eP	22 35.60	0.3	
OLLA	8.64	180 iPd	22 36.20	-1.2	
PLAV	8.82	185 eP	22 42.00	2.1	
TCE	9.31	148 eP	22 47.00	0.5	
TRN	9.54	146 eP	22 49.23	-0.3	
		eS	24 25.00		
SDV	10.47	202 eP	23 03.10	0.7	
SIV	34.93	170 iP	27 15.40	-4.0X	
CNCB	35.32	182 P	27 15.00	-8.3X	
CCH	35.87	179 P	27 27.00	-0.7	
MBC	63.43	348 eP	30 56.00	-0.2	
S.D. = 1.0		on 16 of 18 obs.			

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* JUN 27, 1990 16h 54m 36.45± 1.22s
38.660 N ± 7.6km 20.335 E ±17.7km
DEPTH = 10.0km (geophysicist)
GREECE (364)

VLS	0.52	157 ePg	54 46.00	-1.0	
IGT	0.87	360 eP	54 51.50	-1.7	
KEK	1.13	339 ePb	54 58.50	0.9	
ITM	1.94	139 ePn	55 11.00	1.2	
LIT	2.20	49 eP	55 13.50	-0.1	
		eS	55 47.50		
OHR	2.47	8 ePn	55 18.00	0.5	
VLI	2.83	132 ePb	55 27.50	5.0X	
VAY	3.16	32 ePn	55 27.50	0.3	
SKO	3.41	14 ePn	55 52.00	21.2X	
S.D. = 1.3		on 7 of 9 obs.			

& JUN 27, 1990 17h 04m 52.30s
36.652 N 121.290 W
DEPTH = 5.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.1 (BRK).

SAO	0.17	312 iPc	04 55.60	-0.2	
LLA	0.28	97 iPc	04 57.90	-0.1	
PRS	0.33	191 iPc	04 58.80	-0.1	
GCC	0.68	304 iPd	05 05.30	-0.6	
PRI	0.72	135 iPd	05 07.00	0.4	
ARN	0.72	344 iPc	05 06.40	-0.3	
MHC	0.74	338 iPd	05 06.80	-0.4	
PHAM	1.09	138 eP	05 12.20	-1.0	
PKEM	1.12	121 eP	05 13.80	0.0	
PCC	1.22	314 eP	05 14.80	-0.6	
BKS	1.44	329 eP	05 18.70	-0.3	
BRK	1.44	328 e(P)	05 18.70	-0.4	
CMB	1.56	27 ePc	05 19.70	-1.0	
		iS	05 39.40		
BCH	1.76	146 eP	05 21.70	-2.1	
ABL	2.46	136 eP	05 31.50	-2.5	
ORV	2.90	357 eP	05 39.20	-0.8	
KVN	3.48	46 eP	05 48.00	-0.4	
TNP	3.54	65 eP	05 49.00	-0.3	
18 obs. ossocioted					

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* JUN 27, 1990 17h 16m 42.93± 0.82s
9.503 S ± 9.3km 119.056 E ±10.2km
DEPTH = 33.0km (normol)
3.8mb (2 obs.)
SUMBA ISLAND REGION (287)

MKS	4.28	6 iPc	17 48.50	1.1	
TRT	6.60	285 ePc	18 19.00	-1.1	
MBL	11.61	176 eP	19 30.00	0.5	
	0.3s	21.00nm		5.9mb X	
		eS	21 30.00		
MTN	12.30	107 eP	19 37.00	-1.8	
		eS	21 44.00		
NANU	13.42	194 eP	19 54.00	0.5	
	0.3s	6.00nm		5.1mb X	
		eS	22 11.00		
MEKA	17.03	182 eP	20 46.00	5.8X	
		eS	23 41.00		
WRA	18.05	127 Pd	20 53.30	0.3	
	0.7s	2.60nm		3.5mb	
WARB	18.08	158 eP	20 56.00	2.6X	
MRWA	19.82	188 eP	21 17.00	3.2X	
		eS	24 40.00		
ASPA	19.99	137 eP	21 16.20	0.5	
	0.8s	8.00nm		4.1mb	
		eS	24 57.80		
S.D. = 1.3		on 7 of 10 obs.			

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* JUN 27, 1990 17h 22m 48.52± 0.92s
18.476 S ±10.2km 71.943 W ±11.2km
DEPTH = 33.0km (normol)
4.3mb (1 obs.)
OFF COAST OF NORTHERN CHILE (121)

ARE	2.05	12 eP	23 22.00	0.4	
		iS	23 45.50		
LPB	4.15	63 P	23 50.00	-1.5	
	1.0s	200.00nm			
		i	24 48.00		
ANT	5.39	165 e(P)	24 08.20	-0.6	
CCH	5.63	80 eP	24 13.00	0.6	
PT06	6.25	317 iP	24 20.00	-1.0	
		iS	25 49.40		
NNA	8.00	323 eP	25 24.00	38.6X	
	0.7s	7.53nm			
		eS	26 27.00		
SIV	10.68	78 P	25 15.60	-6.8X	
YKA	87.42	342 eP	35 34.50	1.2	
	0.6s	1.00nm		4.3mb	
BCAO	91.84	86 iPd	35 56.10	0.9	
	0.5s	5.00nm		5.2mb X	
S.D. = 1.3		on 7 of 9 obs.			

? JUN 27, 1990 17h 39m 06.10± 5.45s
0.460 N ±26.9km 79.056 W ±29.2km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF ECUADOR (105)

COTA	0.73	100 iP+	39 21.00	0.2	
		eS	39 34.00		
GGP	0.78	144 eP	39 22.20	0.5	
		eS	39 36.60		
QUR	0.82	140 iP+	39 22.30	0.0	
		iS	39 34.60		
QTO	0.84	141 eP	39 23.10	0.5	
		eS	39 37.90		
CAYA	1.14	109 iPd	39 27.60	-0.1	
		iS	39 45.60		
GECU	1.16	132 eP	39 27.50	-0.7	
		eS	39 45.60		
VC1	1.27	149 iP+	39 29.80	-0.3	
		iS	39 50.30		
TUNG	1.96	162 eP	39 40.00	-0.1	
		eS	40 08.00		
S.D. = 0.5		on 8 of 8 obs.			

? JUN 27, 1990 18h 00m 52.46± 0.82s
32.154 S ±12.8km 69.842 W ±13.5km
DEPTH = 120.0km (geophysicist)
MENDOZA PROVINCE, ARGENTINA (139)

RTBS	0.59	34 iPc	01 11.20	0.0	
		S	01 24.20		
RTCV	1.15	76 e(P)	01 16.30	0.0	
ZON	1.16	59 eP	01 16.50	0.0	
		eS	01 33.50		
PEL	1.22	216 iPd	01 17.10	0.0	
		iS	01 36.50		
RTLL	1.43	55 iP	01 14.00	-5.5X	
CFA	1.47	69 ePc	01 20.00	0.1	
		eS	01 40.10		
RTRS	2.00	10 ePc	01 26.40	0.0	
S.D. = 0.0		on 6 of 7 obs.			

JUN 27, 1990 21h 25m 00.16± 0.86s
34.089 N ±11.8km 25.183 E ± 6.5km
DEPTH = 99.2 ± 30.2 km
CRETE (370)

VAM	1.54	329 ePb	25 27.50	0.2	
VLI	3.20	326 ePn	25 49.50	0.1	
KSL	4.14	59 ePn	26 01.00	-1.2	
CIN	4.22	33 iPd	26 03.00	-0.4	
ELL	4.68	54 ePn	26 11.00	1.1	
BCK	5.53	51 ePn	26 22.00	0.3	
KOT	7.00	124 ePn	26 41.50	-0.3	
		eSn	27 55.00		
VAY	7.51	345 eP	26 57.80	9.1X	
SOI	8.39	301 P	26 59.50	-1.2	
ATN	8.85	300 P	27 08.00	1.0	
PRNI	9.11	112 eP	27 11.00	0.4	
MBH	9.30	115 eP	27 13.00	0.0	
S.D. = 0.9		on 11 of 12 obs.			

? JUN 27, 1990 21h 25m 07.98± 7.06s
44.044 N ±57.2km 6.925 E ±18.1km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.3 (LDG).

SBF	0.41	116 Pg	25 16.40	0.0	

			Sg	25 22.40		
FRF	0.52	203	Pg	25 18.60	0.0	
			Sg	25 26.60		
LRG	0.72	215	Pg	25 22.10	0.0	
			Sg	25 33.00		
LMR	0.77	203	Pg	25 23.00	0.0	
			Sg	25 33.80		

S.D. = 0.0 on 4 of 4 obs.

JUN 27, 1990 21h 28m 03.29± 0.32s
44.096 N ± 2.3km 6.927 E ± 2.9km
DEPTH = 8.2 ± 3.3 km
FRANCE (538)
ML 2.3 (GEN), 2.7 (LDG).

TOUF	0.25	109	Pg	28 08.37	-0.1	
MVIF	0.26	141	Pg	28 09.00	0.3	
			Sg	28 13.35		
STV	0.32	62	P	28 09.64	-0.3	
			S	28 13.84		
CALN	0.34	185	Pg	28 10.69	0.3	
AURF	0.36	126	Pg	28 10.88	0.3	
			Sg	28 16.13		
ENR	0.38	70	P	28 10.77	-0.2	
			S	28 15.99		
PZZ	0.43	17	P	28 11.69	-0.3	
			S	28 17.64		
SBF	0.43	122	Pg	28 12.20	0.1	
			Sg	28 18.30		
SAOF	0.47	103	Pg	28 12.64	-0.1	
			Sg	28 19.18		
FRF	0.57	201	Pg	28 14.70	-0.1	
			Sg	28 22.60		
IMI	0.72	105	P	28 17.12	-0.6	
			S	28 26.56		
LRG	0.76	213	Pg	28 17.90	-0.4	
			Sg	28 29.30		
LMR	0.82	202	Pg	28 19.00	-0.3	
			Sg	28 30.20		
RRL	0.83	353	P	28 18.87	-0.8	
			S	28 29.84		
FIN	0.93	83	P	28 21.12	-0.1	
			S	28 32.50		
BNI	0.97	349	P	28 25.50	3.4X	
PCP	1.24	68	P	28 26.86	0.2	
LSD	1.37	7	P	28 29.22	0.3	
LPG	1.41	355	Pg	28 29.80	0.3	
LPL	1.43	354	Pg	28 30.00	0.3	
PGF	2.16	135	Pn	28 39.60	-0.6	
			Sn	29 04.40		

S.D. = 0.4 on 20 of 21 obs.

• JUN 27, 1990 22h 18m 52.82± 1.84s
14.905 S ± 8.0km 167.358 E ±10.6km
DEPTH = 136.3 ± 15.2 km
5.0mb (14 obs.)
VANUATU ISLANDS (186)

DZM	7.18	187	iPc	20 36.80	0.2	
			iS	21 55.90		
HNR	9.06	306	eP	21 02.00	0.2	
			eS	22 39.00		
BRS	18.40	225	iP	23 01.00	0.8	
CTA	20.77	253	iPd	23 25.20	0.5	
	0.9s		44.12nm	4.9mb		
RMQ	20.84	233	iPd	23 26.40	1.0	
PUZ	25.01	159	eP	24 05.50	-0.1	
PGZ	26.77	165	P	24 20.30	-1.4	
	0.6s		36.00nm	5.2mb		
QIS	27.00	254	eP	24 27.50	3.5X	
THZ	27.19	171	P	24 25.20	-0.3	
LTZ	28.10	172	P	24 33.20	-0.5	
STK	28.95	230	iPc	24 42.00	0.6	
	0.5s		11.00nm	4.8mb		
			ePP	25 26.20		
			iPcP	27 46.70		
WRA	31.86	256	Pd	25 05.60	-1.6	
	0.6s		2.40nm	4.2mb		
ASPA	32.69	249	eP	25 12.60	-1.8	
	0.7s		10.00nm	4.7mb		
			eS	30 16.90		
NANU	49.47	253	iPd	27 31.20	-0.1	
SBA	62.96	180	iPc	29 07.10	0.6	
WHN	68.12	312	eP	29 39.00	-1.2	
MDJ	68.47	332	eP	29 38.70	-3.4X	
CN2	69.84	329	eP	29 50.00	-0.4	
GYA	71.88	305	P	30 03.00	-0.3	
TIY	73.45	317	eP	30 11.00	-1.1	
KMI	74.47	302	eP	30 19.00	0.5	
	1.5s		50.00nm	5.1mb		
SPA	75.19	180	iPc	30 21.80	0.0	
	1.0s		49.50nm	5.2mb		
CHG	75.23	294	eP	30 23.50	0.8	
CD2	76.18	308	P	30 28.00	0.1	
LZH	78.50	312	Pc	30 41.50	0.8	
	1.8s		38.00nm	4.9mb		
MAW	81.76	202	iPd	30 58.20	1.0	
GTA	82.85	314	P	31 04.40	0.9	
GUN	89.56	299	P	31 36.60	-0.2	
	0.8s		19.00nm	5.2mb		
PKI	89.86	298	P	31 38.00	-0.2	
	0.8s		23.00nm	5.3mb		
DMN	90.12	298	P	31 39.20	-0.1	
	1.0s		37.00nm	5.4mb		
GKN	90.63	299	P	31 40.80	-0.7	
	0.8s		20.00nm	5.3mb		
WMQ	92.91	315	iPd	31 52.20	0.6	
GBA	93.35	283	Pd	31 54.30	0.3	
	1.0s		5.00nm	4.7mb		
YKA	97.66	27	eP	32 12.80	0.2	
	0.8s		0.80nm	4.3mb		
FRS	122.46	219	ePKP	37 32.50	-1.4X	
CIR	123.79	232	iPKPc	37 56.30	19.5X	
BUL	126.54	230	iPKPc	37 36.00	-6.3X	
KRI	127.72	235	iPKPd	37 39.30	-5.3X	
NB2	130.81	345	PKP	37 48.80	-0.3	
	0.7s		1.80nm			
HFS	130.91	343	ePKP	37 48.20	-1.0	
	0.6s		1.10nm			
	Z 19s		0.03um	4.0Msz		
			ePP	41 02.40		
CLL	138.25	336	ePKP	38 05.00	1.6	
KHC	139.68	333	ePKP	38 06.00	-0.1	
CDF	142.77	338	ePKP	38 07.60	-4.1X	
	0.6s		3.60nm			
OSS	143.04	334	ePKPc	38 09.80	-2.5	
LLS	143.37	335	ePKPc	38 10.40	-2.5	
BSF	143.43	338	ePKP	38 10.60	-2.3	
	0.6s		3.60nm			
SAL	143.70	332	PKP	38 11.00	-2.2	
MDI	143.93	333	PKP	38 10.50	-3.1X	
TMA	144.03	334	ePKPc	38 12.30	-1.7	
ARV	144.08	328	PKPc	38 12.80	-1.2	
VAI	144.27	334	PKPc	38 12.60	-1.5	
ORI	144.31	320	PKP	38 13.50	-1.0	
SFI	144.33	329	PKP	38 14.00	-0.3	
PGD	144.43	329	PKPc	38 14.50	-0.3	
MMK	144.45	335	ePKPc	38 14.40	-0.4	
CRE	144.50	329	PKPc	38 13.80	-1.0	
DUI	144.50	324	PKP	38 13.60	-1.2	
ASS	144.53	327	PKP	38 14.00	-0.8	
TDS	144.62	320	PKPc	38 14.50	-0.5	
AQU	144.63	326	PKP	38 15.20	0.2	
DIX	144.65	336	ePKPc	38 15.00	-0.2	
MME	144.69	330	PKP	38 14.80	-0.5	
SGO	144.71	322	PKPc	38 14.00	-1.1	
ORX	144.79	335	PKP	38 13.96	-1.3	
FLN	144.79	346	iPKPc	38 14.30	-0.7	
	0.6s		26.15nm			
ORO	144.79	335	PKP	38 14.20	-1.0	
BOB	144.84	332	PKPc	38 14.90	-0.4	
SDI	144.84	325	PKPc	38 14.20	-1.2	
BDI	144.84	330	PKPc	38 14.70	-0.6	
AZI	144.86	325	PKPc	38 15.00	-0.3	
LDF	144.86	346	iPKPc	38 14.60	-0.5	
	0.7s		20.95nm			
BSS	144.86	323	PKPc	38 14.20	-1.2	
LOR	144.93	340	iPKPc	38 15.20	-0.1	
	1.1s		72.05nm			
PII	145.13	330	PKPc	38 14.50	-1.2	
LBF	145.14	340	iPKPc	38 16.00	0.3	
	1.3s		113.70nm			
GRR	145.22	346	iPKPc	38 16.10	0.4	
	0.7s		50.70nm			
SSF	145.23	341	iPKPc	38 16.60	0.8	
LSD	145.27	335	PKP	38 16.94	0.7	
RMP	145.38	326	PKPc	38 16.20	0.0	
LPL	145.39	336	iPKPc	38 17.40	1.0	
LPG	145.39	336	iPKPc	38 17.40	0.9	
	0.6s		42.25nm			
RDP	145.41	326	PKP	38 16.00	-0.3	
PCP	145.41	333	PKP	38 15.91	-0.4	
SMF	145.48	340	iPKPc	38 16.80	0.5	
	0.1s		104.70nm			
AVF	145.52	340	iPKPc	38 16.60	0.3	
	1.2s		53.55nm			
LPF	145.60	346	iPKPc	38 17.50	1.1	
	0.9s		80.25nm			
CKI	145.62	333	PKP	38 15.50	-1.1	
SOI	145.72	318	PKP	38 17.50	0.6	
BNI	145.79	335	PKP	38 18.20	1.2	
FIN	145.83	333	PKP	38 16.94	0.0	
RRL	145.86	335	PKP	38 18.37	1.1	
BGF	145.88	341	iPKPc	38 18.30	1.4	
BST	145.95	350	PKP	38 17.84	0.9	
DOI	146.00	334	PKP	38 16.50	-0.8	
ATN	146.05	318	PKP	38 17.50	0.0	
PZZ	146.06	334	PKP	38 17.45	0.0	
PLDF	146.15	339	PKP	38 19.32	1.8	
ENR	146.15	334	PKP	38 17.04	-0.5	
STV	146.18	334	PKP	38 17.14	-0.5	
IMI	146.20	333	PKP	38 18.37	0.7	
AGO	146.24	340	PKP	38 19.34	1.8	
MAF	146.27	341	iPKPc	38 19.70	2.1	
	0.8s		22.15nm			
TCF	146.32	341	iPKPc	38 19.60	1.9	
	1.0s		35.00nm			
SBF	146.44	333	iPKPc	38 19.40	1.4	
	0.7s		46.30nm			
PYM	146.55	340	PKP	38 20.39	2.3	
LSF	146.57	342	iPKPc	38 20.00	2.0	
	0.8s		43.00nm			
MFF	146.71	344	iPKPc	38 20.70	2.5	
	0.7s		56.20nm			
PGF	146.75	330	iPKPc	38 20.60	2.0	
	0.9s		42.60nm			
LBL	146.92	339	PKP	38 21.77	3.2X	
FRF	147.02	334	iPKPc	38 21.30	2.5	
	0.9s		32.75nm			
LRG	147.23	334	iPKPc	38 22.10	3.0X	
	0.8s		20.15nm			
LMR	147.26	334	iPKPc	38 21.90	2.7X	
	0.9s		24.55nm			
RJF	147.42	341	iPKPc	38 22.80	3.4X	
	0.7s		22.05nm			
CAF	147.59	340	iPKPc	38 23.40	3.6X	
	0.7s		9.90nm			
BCAO	147.60	254	iPKPc	38 23.00	2.3	
	0.3s		83.00nm			
			id	38 50.10		
LFF	147.99	342	iPKPc	38 24.20	3.9X	
	0.7s		41.90nm			
LPO	148.08	341	iPKPc	38 24.60	4.1X	
	0.7s		30.85nm			
EPF	149.84	341	ePKP	38 28.80	5.5X	
	0.8s		12.10nm			
TIC	168.89	223	(PKP)	38 45.00	-0.2	
LKO	171.29	233	PKP	38 46.26	-0.2	
	0.7s		11.50nm			

S.D. = 1.1 on 104 of 120 obs.

JUN 27, 1990 22h 20m 25.23± 0.47s
45.347 N ± 4.3km 14.602 E ± 4.2km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
MD 3.0 (LJU), 2.8 (TRI). ML 3.1 (VIE). Felt (IV) at Rijeka, Novi Vinodolski and Crikvenico. Also felt at Omisolj.

RIY	0.15	269	iPg	20 28.20	-0.6	
			iSg	20 31.30		
CEY	0.41	343	iPg	20 33.40	-0.2	
			eSg	20 41.40		
VBY	0.49	71	ePg	20 33.70	-1.4	
			iSg	20 40.00		
TRI	0.69	302	ePgd	20 37.90	-1.0	
			iSg	20 50.00		
LJU	0.70	356	iPg	20 39.10	0.1	
			eSg	20 50.50		
VOY	0.85	324	ePg	20 40.80	-0.8	
			eSg	20 55.40		
ZAG	1.08	64	i(Pn)	20 46.00	0.5	
			iSg	21 01.50		
PTJ	1.10	59	iPgc	20 46.50	0.5	
			eSg	21 03.40		
FVI	1.78	315	P	20 57.00	0.8	
			eSn	21 21.50		
ARV	2.20	213	P	21 02.50	0.2	
			eSn	21 30.00		
SFI	2.43	235	P	21 06.00	0.5	

27d 22h

PGD	2.53	235	P	21 07.80	0.6
			eSn	21 38.00	
CRE	2.56	229	P	21 07.00	-0.5
ASS	2.67	212	P	21 09.50	0.4
SAL	2.88	277	P	21 46.50	34.5X
			eSn	22 00.00	
SOTA	3.01	310	ePn	21 15.50	1.6
			iPg	21 22.30	
			iSn	21 50.40	
			iSg	22 03.20	
BDI	3.13	247	P	21 14.50	-1.1
MDI	3.46	279	P	22 01.50	41.3X
			eSn	22 25.00	
BOB	3.70	263	P	22 02.00	38.3X
			eSn	22 26.00	
KHC	3.85	350	ePg	21 26.30	0.5
			eSg	22 13.00	

S.D. = 0.9 on 17 of 20 obs.

JUN 27, 1990 22h 42m 48.38± 0.40s
46.037 N ± 3.2km 2.792 E ± 3.6km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.0 (LDG).

AGO	0.24	86	Pg	42 52.98	-0.5
MAF	0.24	320	Pg	42 53.60	0.1
			Sg	42 57.00	
PYM	0.32	152	Pg	42 54.77	-0.4
			Sg	42 59.16	
TCF	0.48	302	Pg	42 57.90	-0.2
			Sg	43 04.40	
BGF	0.52	4	Pg	42 59.30	0.4
			Sg	43 05.50	
AVF	0.85	27	Pg	43 04.40	-0.3
			Sg	43 15.00	
LBL	0.87	158	Pg	43 04.95	-0.1
			Sg	43 16.25	
LSF	0.90	284	Pg	43 05.00	-0.7
			Sg	43 17.60	
SMF	0.95	50	Pg	43 06.60	0.2
			Sg	43 18.80	
SSF	1.14	25	Pg	43 09.60	-0.1
			Sg	43 24.30	
CAF	1.22	205	Pg	43 12.10	0.9
			Sg	43 27.20	
LBF	1.25	40	Pg	43 12.00	0.3
			Sg	43 27.60	
LOR	1.43	30	Pg	43 14.80	0.4
			Sg	43 33.00	

S.D. = 0.5 on 13 of 13 obs.

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* JUN 27, 1990 23h 01m 57.18± 3.31s
39.244 N ±22.5km 20.456 E ±20.4km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)
ML 2.8 (THE).

IGT	0.30	342	ePg	02 02.70	-0.8
			eSg	02 07.90	
AGG	1.47	98	iPbd	02 23.90	0.1
			eSb	02 43.70	
FNA	1.69	24	ePb	02 27.50	0.5
LIT	1.79	61	ePbd	02 27.90	-0.4
OHR	1.88	8	iPn	02 31.10	1.4
GRG	2.27	40	ePn	02 35.40	0.1
VAY	2.63	37	ePn	02 39.60	-0.8
SOH	2.73	54	ePnc	02 41.80	0.0
			eS	03 16.60	
SKO	2.83	15	ePn	02 53.00	9.8X

S.D. = 0.9 on 8 of 9 obs.

& JUN 27, 1990 23h 56m 21.50s
40.375 N 124.568 W
DEPTH = 23.0km
NEAR COAST OF NORTHERN CALIF. (35)
<BRK>. ML 3.4 (BRK).

WDC	1.56	82	iPc	56 45.90	-2.2
			iS	57 04.50	
LTCM	1.88	94	eP	56 50.50	-2.1
LBFM	2.25	64	eP	56 55.50	-2.7
MIN	2.26	90	iPc	56 55.90	-2.5
ORV	2.50	108	ePc	56 59.50	-2.0
BRK	3.08	144	ePc	57 07.10	-2.6
BKS	3.08	143	eP	57 07.40	-2.5
PCC	3.34	149	ePc	57 10.50	-2.9
			eS	57 48.20	
MHC	3.79	142	ePc	57 17.50	-2.5
ARN	3.84	141	eP	57 18.00	-2.6
GCC	3.90	148	ePc	57 19.40	-2.0
SAO	4.36	145	ePc	57 24.00	-3.9
PRS	4.76	147	ePc	57 31.00	-2.6

13 obs. associated

& JUN 28, 1990 00h 05m 13.45s
41.895 N 112.404 W
DEPTH = 9.3km
3.5mb (2 obs.)
UTAH (478)
<SLC-P>. ML 3.9 (SLC). mbLg 3.5 (TUL). Felt (III) at Garland and Portage.

PTI	0.98	1	ePd	05 31.80	-0.4
DAU	1.72	149	eP	05 44.70	0.8
DUG	1.73	190	ePd	05 43.70	-0.2
HPI	1.89	345	P	05 46.40	0.0
BW06	2.29	66	eP	05 53.20	1.0
BGMT	3.35	4	ePn	06 11.60	4.4
MSU	3.38	177	eP	06 07.70	0.0
MEMT	3.85	15	ePn	06 17.70	3.4
LRM	3.93	360	ePn	06 20.50	5.1
BUT	4.12	358	ePn	06 27.20	9.2
PV09	4.22	142	eP	06 19.80	0.2
SXM	4.34	11	ePn	06 28.50	7.3
HRY	4.83	5	ePn	06 30.30	2.2
KVN	5.19	239	eP	06 32.50	-0.8
TNP	5.31	226	eP	06 35.30	0.3
GLD	5.85	109	eP	06 43.50	0.9
ALQ	8.36	144	e(P)	07 12.00	-5.9
SES	8.56	6	P	07 23.00	2.7
TUL	14.24	109	(Pn)	08 40.50	3.2
	0.8s		1.50nm		3.8mb
			eLg	12 34.60	
UYO	16.09	113	(Pn)	09 04.60	3.3
			Lg	13 40.80	
YKA	20.67	357	eP	09 56.10	0.3
	0.7s		1.00nm		3.3mb

21 obs. associated

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* JUN 28, 1990 00h 32m 02.15± 0.69s
4.316 S ± 8.4km 131.418 E ±17.9km
DEPTH = 33.0km (normal)
4.2mb (2 obs.)
BANDA SEA (280)

MTN	8.48	182	iPd	34 05.70	0.0
			eS	35 47.00	
KNA	11.66	193	eP	34 44.70	-4.6X
	0.3s		15.00nm		5.6mb X
WB5	15.74	170	eP	35 39.20	-3.9X
			eS	38 39.00	
WRA	15.79	170	P	35 44.00	0.2
	0.4s		1.40nm		3.5mb
QIS	18.00	154	eP	36 13.00	1.4
ASPA	19.39	173	iPd	36 27.40	-1.0
	0.5s		35.00nm		4.9mb
	Z 21s		0.51um		4.7Msz
			eS	40 08.70	
			LR	45 41.80	
GUMO	22.24	37	eP	36 57.50	-0.3
CAN	34.87	154	iPd	38 51.70	-0.9
CHG	39.38	307	eP	39 31.00	0.3
CNCB	151.57	138	PKP	51 50.50	0.7
LPB	151.69	137	ePKP	51 54.00	4.2X
ZOBO	151.86	137	PKP	51 50.00	-0.2

S.D. = 0.9 on 9 of 12 obs.

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* JUN 28, 1990 01h 40m 31.14± 3.22s
39.149 N ±21.6km 23.706 E ±19.4km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
ML 2.5 (THE).

AGG	1.08	264	iPgc	40 51.50	0.1
			eSg	41 07.30	
OUR	1.20	10	ePb	40 54.00	0.5
LIT	1.34	316	iPbd	40 56.10	0.3
			eSb	41 13.68	
THE	1.59	339	ePbd	40 58.80	-0.5
SOH	1.69	351	ePbd	41 00.80	-0.1
SRS	1.97	357	ePn	41 04.60	-0.3
GRG	2.06	331	ePn	41 06.30	0.0
			eSn	41 32.30	

S.D. = 0.4 on 7 of 7 obs.

& JUN 28, 1990 02h 06m 05.32s
61.099 N 150.515 W
DEPTH = 44.0km
SOUTHERN ALASKA (2)
<AGS-P>.

SUA	0.38	343	iP	06 14.25	-0.7
			iS	06 22.64	
PMS	0.49	72	iP	06 15.65	-0.5
			iS	06 23.96	
SLKM	0.61	166	iP	06 16.93	-0.8
			iS	06 26.91	
PWA	0.63	29	iP	06 17.40	-0.6
			iS	06 27.47	
SPU	0.75	277	iP	06 18.82	-0.9
			iS	06 29.70	
CGLM	0.75	287	iP	06 19.07	-0.7
CRP	0.81	283	eP	06 19.96	-0.7
			iS	06 32.19	
PLRM	0.83	53	iP	06 19.84	-0.9
			iS	06 32.15	
NCG	0.85	292	iP	06 20.41	-0.7
			iS	06 32.20	
SKT	1.01	332	eP	06 22.54	-0.7
			eS	06 37.14	
GHO	1.02	48	iP	06 22.78	-0.7
			Sn	06 37.30	
RDT	1.07	241	iP	06 23.09	-1.0
			eS	06 37.51	
NNL	1.13	200	eP	06 25.54	0.6
SEW	1.13	152	eP	06 25.07	0.2
			eS	06 40.99	
SML	1.27	55	eP	06 26.22	-0.7
RED	1.30	239	iP	06 26.51	-0.9
			iS	06 44.17	
CUT	1.32	5	eP	06 26.93	-0.6
			Sn	06 44.52	
CNPM	1.62	193	iP	06 31.35	-0.5
GLI	1.68	96	eP	06 30.90	-1.9
SCM	1.70	63	eP	06 32.69	-0.4
VZW	1.93	89	iP	06 34.77	-1.5
VLZ	2.03	87	eP	06 36.29	-1.4
KLU	2.25	78	iP	06 39.45	-1.5
TOA	2.31	62	eP	06 41.49	-0.3

24 obs. associated

& JUN 28, 1990 02h 35m 14.66s
62.842 N 150.617 W
DEPTH = 89.4km
CENTRAL ALASKA (1)
<AGS-P>.

CUT	0.47	160	iP	35 29.21	-0.1
			eS	35 39.91	
HUR	0.47	73	iP	35 28.99	-0.4
			eS	35 39.60	
KTH	0.73	349	iP	35 31.55	-0.2
			eS	35 44.04	
SKT	0.96	207	iP	35 33.93	-0.3
PWA	1.24	164	eP	35 37.42	-0.1
GHO	1.33	143	eP	35 38.62	-0.1
			eS	35 57.39	
SUA	1.38	183	eP	35 39.39	0.0
PLRM	1.43	150	eP	35 39.66	-0.2
SML	1.49	133	eP	35 40.20	-0.5
			eS	36 00.26	
NCG	1.61	207	eP	35 42.11	-0.3
CGLM	1.67	204	eP	35 43.17	0.0
PMS	1.68	162	eP	35 43.56	0.4
CRP	1.74	205	eP	35 44.65	0.6
SPU	1.80	203	eP	35 44.76	0.0
SCM	1.84	122	eP	35 46.25	0.9
WRH	1.99	33	eP	35 45.88	-1.3
TOA	2.19	108	eP	35 49.46	-0.6
CCB	2.20	33	eP	35 49.41	-0.7
SLKM	2.35	175	eP	35 51.76	-0.4
PAX	2.36	85	eP	35 51.75	-0.6
SDG	2.36	95	eP	35 51.51	-0.8
RDT	2.43	201	eP	35 53.71	0.4
KLU	2.59	119	eP	35 53.67	-1.7

23 obs. associated

JUN 28, 1990 02h 38m 42.58± 0.44s
42.580 N ± 4.1km 0.158 E ± 3.9km

DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 3.4 (LDG).

EPF	0.47	17	Pn	39	22.00	29.9X
			Sn	39	52.00	
ESCF	0.73	313	Pg	38	56.42	-0.6
			Sg	39	08.57	
OGE	0.75	322	Pg	38	56.85	-0.4
ATE	0.81	309	Pg	38	57.85	-0.5
			Sg	39	10.11	
ISSF	0.83	303	Pg	38	58.37	-0.4
			Sg	39	11.50	
ELYF	1.03	305	Pg	39	01.70	-0.4
EROQ	1.77	174	iPc	39	14.20	0.8
			eS	39	38.50	
EBR	1.78	172	ePn	39	14.00	0.5
			eSg	39	40.00	
ETER	2.02	97	eP	39	17.10	0.1
			eS	39	45.40	
LPO	2.23	19	Pn	39	22.00	1.9
			Sn	39	52.00	
LFF	2.40	10	Pn	39	23.00	0.6
			Sn	39	55.60	
ETOR	2.42	224	eP	39	23.30	0.4
CAF	2.72	30	Pn	39	28.40	1.2
			Sn	40	03.00	
RJF	2.89	19	Pn	39	30.40	0.8
			Sn	40	07.00	
ECHE	3.11	196	eP	39	42.00	9.4X
			eS	40	18.80	
LSF	3.80	15	Pn	39	42.40	0.0
			Sn	40	28.60	
TCF	3.99	21	Pn	39	44.60	-0.5
MFF	4.03	357	Pn	39	45.00	-0.6
			Pg	39	57.20	
			Sn	40	33.00	
MAF	4.03	25	Pn	39	46.20	0.6
BGF	4.42	25	Pn	39	50.60	-0.5
			Pg	40	06.20	
			Sn	40	44.00	
AVF	4.79	27	Pn	39	56.00	-0.4
SMF	4.84	32	Pn	39	57.00	-0.2
FRF	4.85	76	Pn	39	56.00	-1.4
SSF	5.07	27	Pn	40	02.00	1.6
			Sn	40	59.00	
LBF	5.17	30	Pn	40	02.00	0.1
LOR	5.37	28	Pn	40	04.00	-0.7
LPL	5.57	56	Pn	40	08.00	0.2
LPG	5.58	56	Pn	40	08.00	0.1
PGF	6.53	87	Pn	40	18.60	-2.5

S.D. = 0.9 on 27 of 29 obs.

JUN 28, 1990 03h 20m 35.08± 0.29s
37.085 N ± 8.3km 49.642 E ± 4.2km
DEPTH = 10.0km (geophysicist)
4.8mb (29 obs.) 4.1Msz (4 obs.)
CASPIAN SEA (338)

TEH	1.95	133	eP	21	08.00	-0.6
KER	3.42	218	eP	21	29.00	-0.6
MAIO	7.95	93	iPc	22	33.80	0.2
	1.0s		37.50nm			5.6mb
			eS	24	08.00	
BBTK	13.51	287	eP	23	51.00	1.6
PRNI	13.91	245	eP	23	59.00	4.4X
MBH	14.31	244	eP	24	02.00	2.2
ALT	15.51	283	eP	24	16.00	0.5
QUE	15.96	110	eP	24	24.70	3.2X
			e(S)	27	37.00	
HRT	15.98	290	eP	24	21.00	-0.5
IZI	16.07	288	eP	24	25.00	2.3
YLV	16.17	289	iP	24	28.30	4.3X
ALN	18.72	289	eP	24	56.70	1.0
VRI	19.23	304	ePc	25	04.00	2.0
KDZ	19.25	291	iPd	25	03.00	0.6
MLR	19.64	303	eP	25	07.80	0.9
RZN	19.78	291	iPd	25	10.00	1.5
OUR	20.26	287	eP	25	02.70	-10.6X
MMB	20.51	291	ePc	25	16.00	0.0
SRS	20.58	289	eP	25	16.50	-0.2
SOH	20.75	288	eP	25	19.10	0.6
VTS	20.99	293	eP	25	22.00	1.0
KKB	21.01	291	iPc	25	21.00	-0.1
VAY	21.36	290	eP	25	25.00	0.4
LIT	21.41	286	eP	25	24.70	-0.4
GRG	21.48	289	eP	25	27.50	1.6
SKO	22.24	291	eP	25	33.00	-0.5
Z	19s		2.42um			4.6Msz
N	13s		1.14um			
E	18s		2.06um			
			iS	29	41.00	
			LO	35	11.00	
OHR	22.69	289	eP	25	34.70	-3.3X
	1.6s		72.00nm			4.9mb
IGT	23.09	285	eP	25	41.20	-0.6
SPC	24.46	309	eP	25	57.60	2.3
NDI	24.56	102	iPc	25	58.30	2.1
	0.5s		17.61nm			5.0mb
LCI	24.87	287	P	26	01.00	2.0
KRA	24.94	311	eP	26	00.40	0.8
Z	20s		0.80um			4.2Msz
			e	26	09.30	
			eS	30	35.00	
SRO	25.32	305	eP	26	07.20	4.0X
BRT	25.42	289	P	26	06.00	1.7
TDS	26.15	286	P	26	11.50	0.4
ZST	26.20	305	eP	26	12.00	0.6
			e	45	00.80	
SOI	26.56	282	P	26	14.50	-0.3
SGO	26.87	288	P	26	19.00	1.3
BSS	27.24	289	P	26	22.00	0.9
KSP	27.40	311	eP	26	22.50	0.1
DUI	27.46	291	P	26	24.00	0.9
LJU	27.57	300	e(P)	26	25.00	1.0
CEY	27.61	299	e(P)	26	25.50	1.1
SDI	27.94	291	P	26	27.50	0.0
VOY	28.01	300	eP	26	27.50	-0.6
TRI	28.07	299	eP	26	28.80	0.3
			e	31	42.00	
AZI	28.21	291	P	26	31.00	1.2
ARV	28.55	294	P	26	33.50	0.6
KHC	28.68	306	P	26	34.60	0.6
ASS	28.76	294	P	26	36.00	1.2
FVI	28.83	301	P	26	37.50	2.2
CRE	29.27	295	P	26	40.00	0.5
SFI	29.34	295	P	26	41.00	1.0
PGD	29.44	295	P	26	42.40	1.3
CLL	29.52	311	iPd	26	42.10	0.6
	1.7s		41.00nm			5.0mb
SQTA	29.97	302	iPd	26	43.90	-1.9
GRF	30.29	307	eP	26	48.50	0.0
Z	18s		0.30um			4.0Msz
GKN	30.72	97	P	26	52.80	0.2
MDI	30.90	299	P	26	53.50	-0.3
BOB	31.07	297	P	26	56.00	0.6
DMN	31.26	97	P	26	58.00	0.5
PGF	31.47	293	eP	26	57.40	-1.6
PKI	31.52	97	P	27	00.00	0.1
	0.8s		40.00nm			5.4mb
GUN	31.75	96	P	27	02.20	0.3
	0.8s		78.00nm			5.7mb
HY8	32.12	120	eP	27	03.50	-1.3
HFS	32.45	327	eP	27	06.50	-0.8
	1.1s		28.90nm			5.1mb
Z	19s		0.32um			4.0Msz
			LR	37	32.00	
SBF	32.54	295	eP	27	07.10	-1.2
	0.7s		14.35nm			5.0mb
DOI	32.65	297	P	27	08.00	-1.3
LPG	32.98	298	eP	27	10.80	-1.6
	1.3s		19.85nm			4.9mb
LPL	32.99	298	eP	27	10.50	-1.9
BNI	33.04	298	P	27	12.00	-0.7
FRF	33.12	295	eP	27	12.00	-1.3
LRG	33.34	295	eP	27	13.70	-1.4
NB2	33.96	327	P	27	19.90	-0.5
	0.8s		5.00nm			4.5mb
GBA	34.09	126	Pc	27	20.70	-1.2
	0.6s		2.90nm			4.4mb
LBF	34.89	301	eP	27	26.70	-1.9
	1.4s		15.25nm			4.7mb
LOR	34.97	302	eP	27	27.20	-2.0
	1.3s		16.25nm			4.7mb
SMF	34.99	301	eP	27	27.80	-1.6
	1.2s		16.35nm			4.8mb
SSF	35.21	301	eP	27	29.70	-1.6
	1.2s		13.40nm			4.7mb
AVF	35.32	301	eP	27	30.40	-1.8
	1.3s		16.25nm			4.7mb
MAF	35.88	300	eP	27	35.80	-1.2
	1.2s		17.85nm			4.8mb
TCF	36.13	300	eP	27	37.90	-1.2
	1.3s		23.45nm			4.9mb
CAF	36.31	298	eP	27	39.40	-1.3
	1.1s		11.00nm			4.6mb
LSF	36.60	300	eP	27	41.60	-1.4
RJF	36.67	298	eP	27	42.90	-0.7
LPO	36.96	297	eP	27	44.60	-1.4
LFF	37.25	298	eP	27	47.40	-1.1
	1.2s		29.75nm			4.9mb
SHL	37.59	95	iP	27	52.50	0.7
LDF	37.63	304	eP	27	50.50	-1.2
	0.5s		5.10nm			4.5mb
MFF	37.73	301	eP	27	50.90	-1.6
	1.2s		23.80nm			4.8mb
FLN	37.87	304	eP	27	52.30	-1.3
	0.5s		5.85nm			4.6mb
GRR	38.13	304	eP	27	54.30	-1.5
	0.8s		20.15nm			4.9mb
LPF	38.26	303	eP	27	55.60	-1.4
	1.2s		32.75nm			4.9mb
EKA	39.74	315	P	28	09.00	-0.2
	0.9s		6.70nm			4.3mb
YRH	40.48	311	eP	28	15.00	-0.3
ECP	41.55	310	eP	28	23.60	-0.5
TOL	41.60	291	eP	28	24.50	-0.2
			eS	34	40.00	
8CAO	43.22	229	iPc	28	30.80	-7.3X
	0.6s		11.00nm			4.8mb
IFR	44.33	282	iP	28	46.00	-1.2
AVE	46.19	283	iP	29	00.00	-1.8
KMI	46.47	89	eP	29	06.00	1.6
	1.5s		0.05nm			2.3mb X
			sP	29	19.00	
CHG	46.65	99	eP	29	05.00	-0.6
TIO	46.98	280	iP	29	09.00	0.8
BDT	47.58	101	eP	29	13.00	0.1
KIC	58.06	252	(P)	30	27.20	-3.7X
MBC	66.73	357	eP	31	28.00	0.1
	0.6s		3.00nm			4.7mb
FRB	68.30	335	eP	31	28.00	-9.9X
IMA	75.60	10	eP	32	22.70	1.1
FBA	77.43	8	eP	32	33.30	1.7
YKA	79.96	353	eP	32	46.70	1.3
	0.8s		1.10nm			3.9mb

S.D. = 1.2 on 101 of 110 obs.

& JUN 28, 1990 04h 20m 35.05s
41.895 N 112.395 W
DEPTH = 7.7km
UTAH (478)
<SLC-P>. ML 2.6 (SLC).

PTI	0.97	1	eP	20	53.30	-0.6
DAU	1.71	149	eP	21	06.30	0.6
DUG	1.73	191	eP	21	05.00	-0.7
HPI	1.89	344	eP	21	10.00	1.8
BW06	2.28	66	eP	21	15.00	1.1
	5 obs. associated					

& JUN 28, 1990 04h 51m 48.40s
36.223 N 120.835 W
DEPTH = 5.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.8 (BRK).

PRI	0.16	120	iPd	51	52.10	0.3
LLA	0.40	347	iPd	51	56.40	-0.1
PRS	0.45	284	iPc	51	56.90	-0.4
PHAM	0.52	137	iPd	51	58.50	-0.4
PKEM	0.61	105	eP	52	01.30	0.7
SAO	0.73	318	iPd	52	02.00	-1.0
BCH	1.20	149	eP	52	09.80	-1.6
GCC	1.23	311	ePd	52	11.50	-0.3
ARN	1.26	334	eP	52	10.50	-1.7
MHC	1.29	330	ePc	52	11.50	-1.4
			iS	52	28.90	
PCC	1.78	316	ePd	52	20.80	0.8
CMB	1.84	11	ePd	52	19.50	-1.5
BRK	2.00	326	ePc	52	32.10	8.9
TNP	3.43	56	eP	52	46.00	2.1
	14 obs. associated					

? JUN 28, 1990 04h 55m 24.65± 6.61s
31.248 S ±51.0km 68.940 W ±18.1km
DEPTH = 110.5 ± 48.2 km
SAN JUAN PROVINCE, ARGENTINA (137)

ZON	0.37	143	iPd	55	41.50	0.4
			eS	55	53.50	

28d 04h

RTLL	0.41	102	iPc	55 41.20	-0.1
RTBS	0.60	227	iPd	55 42.30	-0.2
CFA	0.70	121	iPc	55 43.30	0.0
			eS	55 57.30	
RTCV	0.70	151	iPc	55 43.20	-0.2
PEL	2.40	218	ePc	56 03.50	0.1
			iS	56 30.40	

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

• JUN 28, 1990 04h 58m 11.69± 1.60s
17.082 N ±12.6km 100.271 W ±13.5km
DEPTH = 33.0km (normal)
3.8mb (3 obs.)
GUERRERO, MEXICO (59)
Felt at Acopulco and Chilpancingo.

ACX	0.45	118	iP	58 22.85	1.3
			iS	58 29.02	
III	1.50	31	iP	58 37.33	0.6
			(S)	59 08.90	
CRX	2.38	14	eP	58 51.30	1.8
			(S)	59 35.05	
UNM	2.47	25	iP	58 52.00	1.3
			(S)	59 22.00	
PPM	2.52	38	iP	58 50.93	-0.7
			(S)	59 21.44	
IIT	2.68	44	iP	58 52.45	-1.3
			iS	59 30.55	
IIJ	2.69	11	iP	58 55.34	1.3
			(S)	59 33.55	
MRX	2.75	342	iP	58 58.00	3.6X
IIC	2.84	20	eP	58 55.63	-0.4
			iS	59 35.88	
OXX	3.39	89	iP	59 03.78	-0.1
			(S)	59 50.89	
LVVM	4.49	53	(P)	58 50.80	-28.4X
EVV	4.89	73	(P)	59 24.00	-0.8
AGX	5.14	338	(P)	58 57.00	-31.4X
ALQ	18.63	344	eP	02 29.70	0.8
	0.8s		2.24nm		3.4mb
Z	18s		1.55um		4.7MszX
TUL	19.17	11	e(P)	02 33.30	-2.0
	0.7s		4.50nm		3.8mb
YKA	46.46	351	eP	06 35.90	-1.2
	0.7s		1.70nm		4.1mb
MBC	60.01	355	eP	08 16.50	-0.6
TEH	121.00	27	ePdiff	13 46.00	17.1X

S.D. = 1.3 on 14 of 18 obs.

JUN 28, 1990 05h 39m 00.69± 0.29s
45.632 N ± 3.2km 10.120 E ± 3.1km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 3.0 (LDG).

SAL	0.29	95	P	39 06.20	-0.5
			eSg	39 11.80	
MDI	0.32	297	Pc	39 07.10	-0.2
			eSg	39 12.90	
VDL	0.97	332	ePc	39 19.60	0.4
VAI	0.97	284	P	39 20.50	1.3
			eSg	39 35.00	
BOB	0.99	209	P	39 20.30	0.8
			eSg	39 35.00	
TMA	0.99	299	ePc	39 20.50	0.9
OSS	1.05	1	ePd	39 21.20	0.5
LLS	1.46	328	ePc	39 28.60	1.3
MME	1.50	164	P	39 27.90	0.1
ORO	1.50	270	P	39 28.90	1.1
MMK	1.56	286	ePc	39 29.40	0.6
BDI	1.61	168	P	39 29.60	0.4
			eSg	39 50.80	
SAX	1.71	342	ePc	39 35.20	4.3X
PII	1.93	171	P	39 34.20	0.3
			eSg	39 58.40	
DIX	1.95	284	ePd	39 36.80	2.4X
FVI	2.09	62	P	39 36.40	0.3
			eSn	40 02.80	
PGD	2.09	146	P	39 36.80	0.4
SFI	2.11	144	P	39 36.50	0.1
DOI	2.33	242	P	39 39.00	-0.7
LPG	2.37	268	Pn	39 41.00	0.5
CRE	2.39	146	P	39 40.30	-0.3
			eSn	40 09.10	
SLE	2.41	333	ePc	39 41.00	0.2
TRI	2.56	87	P	39 42.00	-0.8
SBF	2.61	228	Pn	39 43.40	-0.2
ARV	2.94	136	P	39 48.50	0.2
BSF	3.17	315	Pn	39 51.20	-0.5
			Sn	40 28.40	
PGF	3.19	195	Pn	39 51.55	-0.4
			Sn	40 26.60	
CDF	3.39	326	Pn	39 54.50	-0.3
			Sn	40 34.40	
KHC	4.22	33	ePg	40 23.10	16.7X
			eSg	41 16.30	
LBF	4.47	290	Pn	40 08.80	-1.2
			Sn	40 58.40	
LOR	4.63	293	Pn	40 10.80	-1.5
			Sn	41 02.20	
AVF	4.84	286	Pn	40 13.60	-1.7
BGF	5.14	283	Pn	40 18.40	-1.2
CCH	93.01	248	P	51 59.30	-16.6X

S.D. = 0.8 on 30 of 34 obs.

• JUN 28, 1990 06h 03m 18.41± 1.45s
44.225 N ± 6.9km 6.297 E ±12.6km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.3 (LDG), 2.0 (GEN).

PZZ	0.64	64	P	03 31.97	0.6
			S	03 40.68	
FRF	0.71	159	Pg	03 32.00	-0.4
			Sg	03 40.40	
STV	0.74	88	P	03 32.58	-0.4
			S	03 42.17	
LRG	0.77	177	Pg	03 33.30	-0.1
			Sg	03 43.00	
RRL	0.78	26	P	03 33.71	0.0
ENR	0.81	89	P	03 33.02	-1.1
SBF	0.90	113	Pg	03 36.80	1.2
			Sg	03 48.80	
LMR	0.90	170	Pn	03 36.00	0.3
			Pg	03 36.80	
			Sg	03 48.20	

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

? JUN 28, 1990 06h 05m 01.70± 5.14s
33.451 S ±54.4km 69.747 W ±20.9km
DEPTH = 33.0km (normal)
CHILE-ARGENTINA BORDER REGION (127)

PEL	0.84	291	iPc	05 17.20	0.0
			iS	05 29.70	
RTBS	1.80	8	eP	05 31.20	0.3
			S	05 54.40	
RTCV	1.89	33	ePd	05 33.00	0.8
CFA	2.24	35	e(P)	05 37.20	0.0
			S	06 06.00	
RTLL	2.38	27	iPc	05 38.20	-1.0
			eS	06 07.80	

S.D. = 0.9 on 5 of 5 obs.

• JUN 28, 1990 07h 27m 34.92± 2.52s
39.253 N ±20.0km 27.905 E ± 8.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

DST	0.66	58	ePg	27 48.20	0.1
EDC	1.09	358	iPn	27 54.90	-0.5
BNT	1.10	1	ePn	27 55.70	0.1
KGT	1.28	339	iPn	27 59.20	0.5
EZN	1.35	296	ePn	27 59.60	-0.1

S.D. = 0.5 on 5 of 5 obs.

JUN 28, 1990 08h 05m 31.43± 0.58s
40.518 N ± 6.5km 21.907 E ± 5.0km
DEPTH = 10.0km (geophysicist)
GREECE (364)

FNA	0.48	303	iPgc	05 41.50	0.2
			eSg	05 49.50	
GRG	0.58	40	ePg	05 42.40	-0.7
SOH	1.14	74	ePd	05 53.20	0.4
SRS	1.41	64	ePbd	05 57.50	0.3
			eSb	06 17.00	
PAIG	1.48	113	ePb	05 58.40	0.3
			eSb	06 18.00	
AGG	1.53	168	ePbc	05 58.50	-0.3
			iSb	06 18.20	
IGT	1.56	231	ePbc	05 59.20	0.0
			eSb	06 21.60	
OUR	1.59	96	ePbd	05 59.60	-0.1

S.D. = 0.5 on 8 of 8 obs.

• JUN 28, 1990 08h 09m 18.35± 1.11s
17.128 N ± 9.7km 99.804 W ±14.3km
DEPTH = 33.0km (normal)
GUERRERO, MEXICO (59)

ACX	0.26	191	iP	09 25.00	-0.7
			iS	09 31.00	
III	1.28	14	iP	09 39.50	-0.7
			iS	09 55.00	
PPM	2.23	30	iP	09 52.50	-1.7
			iS	10 24.00	
IIT	2.36	37	(P)	10 04.00	8.1X
			(S)	10 39.00	
IIJ	2.59	1	iP	10 00.00	0.7
			iS	10 30.00	
MRX	2.88	333	eP	10 04.00	1.1
			(S)	10 40.50	
OXX	2.95	90	iP	10 05.50	1.4
			iS	10 41.00	

S.D. = 1.6 on 6 of 7 obs.

• JUN 28, 1990 08h 56m 42.28± 1.17s
5.874 S ±18.2km 148.518 E ±14.2km
DEPTH = 33.0km (normal)
4.3mb (3 obs.)
NEW BRITAIN REGION (192)

KDB	3.82	201	iPd	57 42.00	1.8
			eS	58 18.00	
RAB	4.00	65	iPc	57 43.00	0.1
			iS	58 03.00	
MNDI	4.84	266	eP	57 55.50	0.6
QIS	16.97	210	eP	00 37.00	-1.9
			e	07 57.00	
WB5	19.57	223	eP	01 05.70	-4.9X
WRA	19.63	223	P	01 08.00	-3.3X
	0.5s		2.80nm		3.8mb
BRS	21.78	170	iPc	01 39.50	6.2X
ASPA	22.60	217	eP	01 41.80	0.3
	0.4s		12.00nm		4.7mb
WARB	29.05	224	eP	02 41.00	-0.9
	0.3s		2.00nm		4.4mb
			eS	06 55.00	

S.D. = 1.6 on 6 of 9 obs.

& JUN 28, 1990 10h 10m 07.20s
61.868 N 151.188 W
DEPTH = 93.0km
SOUTHERN ALASKA (2)
<AGS-P>.

SKT	0.20	305	iP	10 20.06	1.0
SUA	0.46	152	iP	10 22.47	0.2
			eS	10 34.20	
NCG	0.66	225	iP	10 23.27	-0.7
			Sn	10 36.10	
PWA	0.66	109	iP	10 23.49	-0.3
CGLM	0.69	215	iP	10 23.50	-0.7
			eS	10 36.39	
CUT	0.69	38	iP	10 23.31	-0.8
CRP	0.76	218	iP	10 24.40	-0.6
			Sn	10 37.92	
SPU	0.80	211	iP	10 24.58	-0.7
			iS	10 38.12	
PMS	1.00	128	iP	10 26.82	-0.6
			eS	10 42.51	
PLRM	1.02	105	iP	10 26.39	-1.2
GHO	1.08	94	iP	10 27.38	-1.0
			eS	10 44.52	
HUR	1.33	32	eP	10 30.06	-1.3
			iS	10 47.32	
SML	1.36	91	iP	10 30.49	-1.2
RDT	1.43	205	iP	10 32.03	-0.6
SLKM	1.44	161	eP	10 32.06	-0.7
RED	1.64	209	iP	10 34.92	-0.5
KTH	1.70	4	eP	10 34.55	-1.5
			iS	10 55.63	
SCM	1.83	89	iP	10 36.57	-1.3
			eS	11 00.81	
NNL	1.83	182	eP	10 38.60	0.8
SEW	1.96	154	eP	10 38.83	-0.7
MCK	2.14	28	iP	10 40.61	-1.3
GLI	2.21	115	iP	10 40.65	-2.2
CNPM	2.35	181	eP	10 43.79	-1.0

VZW	2.37	108	eP	10 42.95	-2.1
TOA	2.38	82	iP	10 44.26	-0.9
VLZ	2.44	105	iP	10 43.79	-2.2
KLU	2.54	96	iP	10 45.49	-1.9
SDG	2.73	73	eP	10 49.04	-0.8
PAX	2.88	65	iP	10 50.80	-1.3
WRH	2.97	27	iP	10 50.82	-2.3
CCB	3.18	27	iP	10 53.57	-2.5
CDD	3.19	204	eP	10 55.38	-0.8
DMW	3.32	46	eP	10 57.60	-0.4
FBA	3.41	25	iP	10 56.96	-2.2
TGL	4.18	102	eP	11 07.67	-2.3
BALM	4.33	97	eP	11 09.30	-2.7

36 obs. associated

? JUN 28, 1990 11h 43m 11.94± 5.19s
0.033 S ±35.1km 80.917 W ±39.5km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF ECUADOR (105)

GGP	2.33	93	eP	43 50.80	-0.6
OTO	2.39	94	eP	43 51.60	-0.6
OUR	2.39	93	eP+	43 51.30	-0.9
			S	44 18.30	
VC1	2.59	103	P	43 55.20	0.1
			eS	44 28.50	
COTA	2.61	82	P	43 55.80	0.5
			eS	44 26.40	
TUNG	2.83	119	eP	43 59.00	0.6
CAYA	2.94	88	eP	44 01.00	1.0
			eS	44 34.20	
ZOBO	20.48	143	P	47 58.00	4.6X
LPB	20.70	143	eP	47 54.00	-1.5
CNCB	20.99	143	eP	48 00.00	1.4

S.D. = 1.1 on 9 of 10 obs.

? JUN 28, 1990 12h 06m 46.28± 1.84s
40.924 N ±21.1km 21.736 E ± 8.4km
DEPTH = 10.0km (geophysicist)
GREECE (364)

FNA	0.31	243	ePgd	06 52.00	-0.7
GRG	0.51	86	iPg	06 56.60	0.1
LIT	1.00	145	ePg	07 04.90	-0.4
			eSg	07 18.30	
IGT	1.76	218	ePb	07 18.00	1.0

S.D. = 1.3 on 4 of 4 obs.

JUN 28, 1990 12h 14m 10.85± 0.26s
56.134 N ± 7.0km 164.580 E ± 4.3km
DEPTH = 29.7km (4 depth phases)
4.8mb (15 obs.) 5.3Msz (7 obs.)
KOMANDORSKY ISLANDS REGION (4)

SMY	6.52	118	eP	15 45.50	-1.6
			e	16 04.30	
ADK	11.80	103	eP	16 58.30	-1.7
YSS	16.31	245	P	18 07.00	8.0X
ANM	16.94	48	eP	18 15.60	8.7X
KUSJ	18.24	233	P	18 17.30	-5.8X
ASAJ	18.41	238	P	18 24.30	-0.9
HOOJ	19.44	234	eP	18 33.80	-3.8X
SDN	19.56	78	eP	18 36.60	-2.2
			e	18 49.50	63kmX
MRRJ	20.44	238	eP	18 45.60	-2.5
TTA	20.82	55	eP	18 52.50	0.4
SVW	21.06	60	e(P)	18 54.90	0.4
IMA	22.04	46	eP	19 04.90	0.5
	1.2s	12.50nm			4.2mb
			e	19 12.10	26km
			i	19 23.80	
OFUJ	22.84	231	eP	19 12.20	-0.1
OFUJ	22.84	231	eP	19 13.80	1.5
KDC	23.19	68	e(P)	19 12.00	-3.5X
YAMJ	24.31	233	eP	19 36.80	10.2X
FBA	24.44	50	eP	19 28.90	1.2
NIIJ	25.54	233	eP	19 39.00	0.7
KAKJ	25.89	230	eP	19 43.50	1.9
MAT	26.47	233	eP	19 47.00	0.0
	1.6s	90.00nm			5.1mb
Z	20s	4.96um			5.1Msz
			eS	24 12.00	
MTMJ	26.62	234	eP	19 49.80	1.4
IIDJ	27.49	233	eP	19 59.20	2.9X
INK	29.86	41	eP	20 16.00	-1.2
SIT	32.17	63	P	20 39.40	1.8
	1.0s	38.00nm			5.3mb

MBC	33.20	25	eP	20 45.50	-0.9
	1.0s	16.00nm			4.9mb
BJI	35.29	264	eP	21 09.00	4.3X
Z	16s	12.20um			5.8MszX
N	14s	7.74um			
			esP	21 20.00	
			eS	26 42.00	
HHC	37.31	269	eP	21 23.00	1.1
N	15s	6.40um			
E	15s	6.20um			
BTO	38.34	270	eP	21 32.00	1.4
N	14s	7.00um			
E	14s	8.40um			
			eS	27 34.00	
YKA	39.16	47	eP	21 36.90	-0.2
	0.9s	2.40nm			3.9mb
SSE	39.21	249	eP	21 54.00	16.2X
Z	20s	3.20um			5.1Msz
N	13s	2.20um			
E	12s	1.70um			
			i	22 03.00	30km
			PP	23 36.00	
			S	27 56.00	
			ScS	31 48.00	
PNT	44.24	65	eP	22 27.00	8.1X
	0.9s	23.00nm			5.0mb
GTA	44.86	277	P	22 23.50	-0.6
N	13s	5.40um			
EDM	44.89	58	eP	22 24.50	0.5
LZH	44.96	270	eP	22 26.50	1.5
	6.0s	300.00nm			5.4mb X
Z	15s	9.40um			5.8MszX
N	14s	7.00um			
E	14s	7.00um			
NEW	46.19	65	P	22 34.90	0.5
	1.0s	13.88nm			4.9mb
SES	47.80	59	eP	22 47.00	-0.1
WMQ	48.42	290	eP	22 52.50	0.5
Z	18s	6.70um			5.7Msz
WDC	48.51	76	ePc	22 53.10	0.4
CD2	48.84	265	eP	22 56.40	1.1
Z	16s	4.30um			5.5MszX
N	15s	5.50um			
FFC	49.05	50	P	22 57.00	0.4
MIN	49.19	76	e(P)	23 03.30	5.3X
ORV	49.80	77	e(P)	23 09.90	7.3X
LRM	50.19	65	eP	23 06.00	0.2
CMB	51.50	77	eP	23 22.40	6.8X
BAG	51.74	238	eP	23 15.00	-2.7X
			eS	30 56.00	
KVN	52.01	75	P	23 19.80	0.2
PRI	52.72	79	e(P)	23 39.00	14.1X
OCP	53.05	236	eP	23 09.00	-18.3X
TNP	53.18	75	P	23 28.70	0.3
	1.0s	21.08nm			5.1mb
FRB	53.65	26	eP	23 30.00	-1.1
BW06	53.81	65	P	23 33.00	0.0
	1.0s	5.00nm			4.5mb
DUG	54.00	70	P	23 35.00	0.8
	1.0s	7.50nm			4.7mb
ISA	54.27	78	eP	23 37.00	0.8
SBB	55.35	78	eP	23 45.00	0.9
GSC	55.45	77	eP	23 46.00	1.1
MSU	55.56	71	P	23 46.40	0.6
MWC	55.57	79	eP	23 46.00	0.1
RVR	56.12	78	eP	24 01.00	11.4X
TPC	56.76	77	eP	24 02.00	7.8X
BAR	57.49	79	eP	23 54.00	-5.4X
GLA	58.22	77	eP	24 05.00	0.5
AKU	58.49	1	e(P)	24 17.10	11.3X
	1.0s	20.00nm			
SHL	59.60	271	eP	24 13.00	-1.3
			eS	32 48.00	
LOE	60.64	257	eP	24 19.00	-2.3
CHG	61.03	261	eP	24 23.30	-0.6
GUN	61.13	278	P	24 23.40	-1.5
ALQ	61.27	70	eP	24 25.00	-0.6
	1.0s	11.25nm			5.0mb
NB2	61.30	346	P	24 23.70	-1.6
	0.8s	6.50nm			4.8mb
PKI	61.65	278	P	24 26.60	-1.9
GKN	61.74	279	P	24 25.80	-3.1X
DMN	61.79	278	P	24 26.80	-2.5
HFS	61.80	344	eP	24 26.00	-2.6
	0.4s	3.40nm			4.8mb
Z	21s	1.92um			5.2Msz
			LR	45 45.00	

HFS	61.80	344	eP	24 45.60	17.0X
	0.6s	7.90nm			
BDT	62.27	259	eP	24 51.00	18.8X
NDI	65.27	285	eP	25 10.00	18.2X
			eS	33 48.00	
MEO	65.44	64	e(P)	24 53.50	0.7
LNO	65.93	61	e(P)	24 54.50	-1.3
TUL	65.93	61	eP	24 55.00	-0.9
	1.0s	2.30nm			4.2mb
			LR	47 00.00	
UYO	67.98	61	e(P)	25 26.50	17.6X
MAIO	68.24	303	eP	25 20.00	9.3X
			eS	34 32.00	
EKA	68.44	353	P	25 11.00	-0.5
	0.7s	2.40nm			4.4mb
QUE	69.50	294	eP	25 19.70	1.1
			e	25 38.70	71kmX
KRA	70.17	337	eP	25 03.40	-18.7X
			e	25 17.60	50kmX
KSP	70.19	339	eP	25 22.00	-0.3
			ec	25 41.40	73kmX
CLL	70.37	342	e(P)	25 25.00	1.7
			e	25 54.00	116kmX
BRG	70.61	341	eP	25 42.60	17.8X
			e	26 25.00	177kmX
			e	26 39.00	
SPC	70.92	336	eP	25 27.70	0.8
			e	26 08.60	170kmX
MOX	71.25	342	eP	25 47.00	18.3X
PRU	71.35	340	eP	25 29.50	0.2
			e	25 39.00	30km
KHC	72.35	340	Pc	25 35.80	0.5
Z	19s	1.90um			5.4Msz
N	19s	1.50um			
E	18s	1.00um			
			e	25 45.80	32km
			S	35 22.00	
ZST	72.54	338	eP	25 55.40	19.0X
			e	26 37.80	176kmX
HYB	73.53	277	eP	26 02.00	19.4X
FVI	74.94	340	P	26 02.00	11.7X
TRI	75.60	339	eP	26 14.00	19.9X
			e	28 56.00	
			e	36 00.00	
			e	42 12.00	
			e	44 58.00	
			e	50 48.00	
VAI	76.35	343	P	25 58.50	0.2
BOB	77.31	342	P	26 04.00	0.2
BNI	77.48	344	P	26 05.00	0.2
SFI	77.69	340	P	26 05.00	-0.7
VAY	77.72	332	eP	26 24.60	18.6X
PGD	77.76	340	P	26 08.00	1.6
ARV	77.89	339	P	26 08.00	1.1
DZM	77.91	178	iPc	26 25.50	18.3X
ASS	78.36	339	P	26 10.50	1.0
OHR	78.38	333	eP	26 28.50	18.8X
AZI	79.24	339	P	26 12.50	-1.8
SDI	79.43	338	P	26 10.50	-4.9X
WB5	79.91	209	eP	26 18.70	0.6
			e	26 39.00	75kmX
WRA	79.98	209	Pd	26 21.10	2.7X
TOL	83.87	351	eP	26 48.00	9.4X
			eS	37 20.00	
WARB	88.10	214	eP	27 00.00	0.6
ZOBO	123.82	67	ePKP	33 15.00	7.0X
Z	22s	0.91um			5.4Msz
			LR	16 20.00	
LPB	124.05	67	(PKP)	32 55.00	-13.2X
Z	22s	1.85um			5.7Msz
			eLR	16 24.00	
CNCB	124.34	67	ePKP	33 15.00	6.0X
SIV	127.10	60	(PKP)	33 32.00	18.4X
SPA	145.95	180	ePKP	33 54.70	7.8X
	1.0s	12.00nm			

S.D. = 1.2 on 71 of 115 obs.

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* JUN 28, 1990 12h 48m 12.34± 0.63s
20.993 S ±21.5km 179.009 W ± 7.0km
DEPTH = 639.3 ± 9.9 km
4.9mb (13 obs.)
FIJI ISLANDS REGION (181)

SVA	3.73	320	ePc	49 39.10	-0.1
VUN	3.81	321	ePc	49 39.20	-0.6
OVA	3.89	327	eP	49 40.40	0.1
KRO	3.96	337	ePc	49 40.20	-0.6

28d 12h

SGE	4.46	319	iPc	49	44.30	0.1
			eS	51	02.50	
MBU	4.54	331	ePc	49	44.90	0.2
NDF	4.64	313	eP	49	47.10	1.7
NDE	4.66	340	ePc	49	45.40	-0.3
DZM	13.58	263	iPd	51	07.90	1.5
BRS	26.48	251	iPc	53	04.50	0.8
PPN	28.11	88	iP	53	17.50	-0.3
	0.8s	20.00nm			4.8mb	
TVO	28.23	89	iP	53	18.60	-0.3
	0.8s	50.00nm			5.2mb	
RMO	29.96	253	iPd	53	34.10	0.6
	0.7s	25.00nm			5.0mb	
PMO	30.15	84	iP	53	35.00	-0.1
	0.8s	15.00nm			4.7mb	
VAH	30.33	84	iP	53	36.10	-0.5
	0.8s	20.00nm			4.8mb	
TPT	30.41	84	iP	53	37.10	-0.2
	0.8s	30.00nm			5.0mb	
RUV	30.58	84	iP	53	38.60	-0.1
	0.8s	35.00nm			5.0mb	
STK	36.73	245	iPd	54	30.70	1.1
	0.6s	7.00nm			4.4mb	
ASPA	43.49	257	iPd	55	23.30	-0.3
	0.7s	56.00nm			5.1mb	
			iS	01	05.70	
WB5	43.58	263	iPd	55	23.20	-1.1
			eS	01	06.00	
WRA	43.60	263	Pd	55	23.20	-1.2
	0.4s	11.40nm			4.7mb	
MTN	48.23	271	iPc	55	58.00	-1.6
	0.9s	300.00nm			5.7mb	
KNA	49.66	267	iPd	56	09.00	-1.1
WARB	49.78	253	iPd	56	10.20	-0.7
	0.3s	7.00nm			4.5mb	
MRWA	58.79	248	eP	57	13.00	-0.6
NANU	60.36	255	iPd	57	23.70	-0.3
	0.4s	25.00nm			4.8mb	
SSE	77.28	311	eP	59	02.60	-1.6
EKA	145.57	4	PKPc	06	40.40	0.1
	0.7s	7.70nm				
MML	147.34	298	iPKPd	06	47.60	3.6X
VRI	147.45	326	ePKPc	06	46.00	2.3
DSI	147.54	296	ePKP	06	47.60	3.4X
PRNI	148.07	294	iPKPd	06	49.40	4.2X
MLR	148.11	326	ePKP	06	48.00	3.1
FLN	152.27	2	ePKP	06	56.70	5.9X
LDF	152.45	2	ePKP	06	57.20	6.2X
	0.4s	3.45nm				
GRR	152.63	3	ePKP	06	57.80	6.5X
	0.6s	3.60nm				
LPF	152.97	3	ePKP	06	58.70	6.9X
MFF	154.44	2	ePKP	07	01.70	7.9X
	S.D. = 1.1	on	30 of	38	obs.	

? JUN 28, 1990 12h 51m 31.76± 5.03s
38.853 N ±41.3km 23.177 E ±20.3km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 2.7 (THE).

AGG	0.68	285	ePgc	51	45.40	0.1
			eSg	51	55.40	
PAIG	1.14	20	iPbc	51	53.10	0.0
			eSb	52	09.10	
LIT	1.36	337	ePb	51	56.20	-0.5
			iSb	52	16.70	
OUR	1.60	23	ePbc	51	59.80	-0.4
SOH	1.97	4	ePn	52	06.40	0.8
GRG	2.18	344	ePnd	52	08.60	-0.1
	S.D. = 0.6	on	6 of	6	obs.	

? JUN 28, 1990 13h 09m 48.62± 6.31s
15.405 N ±55.6km 98.459 W ±15.6km
DEPTH = 33.0km (normal)
OFF COAST OF GUERRERO, MEXICO (65)

ACX	1.98	317	iP	10	20.50	0.0
			iS	10	43.00	
OXX	2.36	45	iP	10	26.00	0.0
			iS	10	47.50	
III	3.11	342	iP	10	37.00	0.3
			iS	11	05.00	
IIT	3.60	2	(P)	10	45.00	1.3
			(S)	11	18.00	
PPM	3.64	358	iP	10	43.00	-1.6
			iS	11	17.50	
IIJ	4.47	344	eP	11	01.00	4.6X
			(S)	11	33.00	
LVVM	4.72	24	(P)	11	06.00	6.7X
MRX	5.01	329	(P)	11	07.00	3.6X
	S.D. = 1.5	on	5 of	8	obs.	

? JUN 28, 1990 15h 42m 23.31± 5.15s
44.038 N ±18.1km 6.869 E ±30.5km
DEPTH = 10.0km (geophysicist)
FRANCE (538)

STV	0.39	58	P	42	31.19	-0.1
			S	42	35.39	
ENR	0.44	64	P	42	32.11	-0.2
			S	42	37.13	
PZZ	0.50	20	P	42	33.34	-0.1
			S	42	39.39	
IMI	0.75	99	P	42	37.85	-0.2
			S	42	47.49	
PCP	1.31	67	P	42	48.00	0.5
	S.D. = 0.4	on	5 of	5	obs.	

JUN 28, 1990 16h 01m 08.47± 0.54s
39.848 N ± 4.5km 28.880 E ± 5.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

DST	0.31	219	iPg	01	14.40	-0.6
			iSg	01	19.00	
IZI	0.67	43	iPg	01	21.10	-0.7
YLV	0.81	28	iPg	01	23.40	-0.8
			iSg	01	33.90	
BNT	0.89	305	ePg	01	25.00	-0.6
EDC	0.93	303	iPg	01	27.00	0.8
GBZT	1.03	24	ePg	01	29.50	1.5
			iSg	01	44.00	
HRT	1.14	31	ePn	01	29.40	-0.5
GPA	1.18	68	ePn	01	30.90	0.4
ISK	1.22	6	ePn	01	31.60	0.4
ALT	1.24	129	ePn	01	31.00	-0.6
CTT	1.34	345	iPn	01	32.80	-0.4
KGT	1.35	297	iPn	01	34.90	1.6X
KHL	1.60	162	iPn	01	38.00	1.0
	S.D. = 0.9	on	12 of	13	obs.	

& JUN 28, 1990 16h 33m 16.20s
37.080 N 121.975 W
DEPTH = 5.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.4 (BRK). Felt in Sonto Cruz County.

GCC	0.05	199	iPd	33	17.50	-0.2
MHC	0.37	45	iPd	33	23.85	0.1
			i	33	25.75	
ARN	0.44	53	iPc	33	24.90	-0.2
SAO	0.53	126	iP	33	26.50	-0.3
PCC	0.53	322	eP	33	25.90	-0.9
BRK	0.82	344	e(P)	33	32.10	-0.5
PRS	0.89	147	ePc	33	33.10	-0.7
			eS	33	47.00	
ZSP	0.89	346	ePd	33	33.20	-0.5
			eS	33	45.30	
LLA	0.95	119	iPd	33	33.90	-0.8
PRI	1.41	131	e(P)	33	41.60	-1.1
CMB	1.58	52	iPd	33	45.30	0.3
PHAM	1.78	134	eP	33	46.80	-1.0
KVN	3.64	56	eP	34	21.50	7.0
	13 obs. associated					

% JUN 28, 1990 17h 16m 20.92± 0.78s
40.335 N ± 5.6km 29.472 E ± 9.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZI	0.00	24	iPg	16	21.50	-1.3
YLV	0.24	342	iPg	16	26.40	0.3
GBZT	0.45	357	ePg	16	30.20	0.1
			iSg	16	37.30	
HRT	0.51	17	iPg	16	31.60	0.4
DST	0.98	222	ePn	16	40.40	0.9
BNT	1.19	272	ePn	16	42.40	-0.7
ALT	1.37	159	ePn	16	46.00	-0.1
	S.D. = 0.9	on	7 of	7	obs.	

JUN 28, 1990 17h 21m 03.84± 0.38s
36.751 N ±10.4km 49.852 E ± 6.3km
DEPTH = 10.0km (geophysicist)
4.7mb (22 obs.)
WESTERN IRAN (347)
Felt at Tehran.

TEH	1.60	129	iPd	21	34.50	2.1
TAB	3.10	296	eP	21	01.00	-52.8X
KER	3.28	224	eP	22	04.00	7.6X
MAIO	7.78	90	eP	23	01.00	1.1
	0.8s	9.15nm			5.0mb	
			eS	24	33.00	
QUE	15.69	110	eP	24	53.30	6.6X
VRI	19.56	305	ePd	25	36.50	1.8
MLR	19.96	303	eP	25	40.00	1.0
VAY	21.64	291	eP	25	59.00	2.9
SKO	22.52	292	eP	26	07.00	2.0
OHR	22.96	290	eP	26	09.50	0.1
SPC	24.80	309	eP	26	29.20	1.9
KRA	25.28	311	eP	26	30.60	-1.0
			e	26	37.60	
ZST	26.53	306	e(P)	26	49.00	5.8X
			e	43	01.70	
DUI	27.73	291	P	26	55.00	0.6
KSP	27.74	311	eP	26	54.00	-0.3
			e	27	00.70	
NUR	28.68	334	eP	27	02.00	-0.6
KHC	29.01	307	eP	27	06.60	0.8
			e	27	13.00	
FVI	29.15	301	P	27	09.00	2.0
BRG	29.18	310	e(P)	27	26.90	19.7X
CRE	29.56	295	P	27	12.00	1.1
PGD	29.73	296	P	27	14.00	1.5
SUF	29.82	338	eP	27	13.00	0.1
	0.7s	5.00nm			4.4mb	
CLL	29.87	311	iP	27	13.00	-0.4
	1.2s	12.00nm			4.6mb	
			e	27	18.00	
GKN	30.51	97	P	27	18.60	-1.0
GRF	30.63	307	eP	27	21.00	0.8
DMN	31.06	97	P	27	24.60	0.1
MDI	31.21	299	P	27	25.50	0.2
PKI	31.31	97	P	27	24.20	-2.6
PGF	31.75	293	eP	27	29.70	-0.6
	0.9s	11.45nm			4.8mb	
HFS	32.83	327	eP	27	39.20	-0.1
	0.8s	11.60nm			4.9mb	
SBF	32.83	296	eP	27	39.40	-0.2
	0.8s	13.45nm			4.9mb	
LPG	33.28	299	eP	27	43.20	-0.6
	0.7s	7.70nm			4.7mb	
LPL	33.30	299	eP	27	43.00	-0.9
	1.1s	13.45nm			4.8mb	
BNI	33.34	298	P	27	44.00	-0.1
FRF	33.42	295	eP	27	44.00	-0.6
	0.9s	9.85nm			4.7mb	
GBA	33.76	126	P	27	49.00	1.2
	0.9s	2.80nm			4.2mb	
NB2	34.33	327	P	27	51.70	-0.7
	0.9s	4.80nm			4.4mb	
LOR	35.29	302	eP	27	59.60	-1.1
	1.1s	7.35nm			4.5mb	
SMF	35.30	301	eP	28	00.20	-0.7
	1.0s	10.00nm			4.6mb	
SSF	35.53	302	eP	28	02.20	-0.6
	1.2s	11.90nm			4.6mb	
AVF	35.64	301	eP	28	02.80	-0.9
	0.9s	6.55nm			4.5mb	
MAF	36.19	300	eP	28	08.10	-0.3
	1.0s	10.00nm			4.6mb	
TCF	36.44	300	eP	28	10.20	-0.3
CAF	36.62	298	eP	28	11.80	-0.2
LSF	36.91	300	eP	28	14.00	-0.4
RJF	36.98	299	eP	28	15.30	0.3
LFF	37.55	298	eP	28	19.70	-0.1
LDF	37.96	304	eP	28	22.50	-0.7
MFF	38.05	301	eP	28	23.10	-0.9
	1.1s	17.10nm			4.7mb	
FLN	38.20	305	eP	28	24.40	-0.7
GRR	38.45	304	eP	28	26.70	-0.6
	0.8s	14.80nm			4.8mb	
LPF	38.59	303	eP	28	27.80	-0.6
EKA	40.09	315	P	28	46.00	5.2X
	1.0s	5.30nm			4.2mb	
BCAO	43.12	229	iPd	29	05.70	-0.5
	0.3s	8.00nm			4.9mb	
KIC	58.12	253	P	30	58.50	-1.6
	0.7s	6.00nm			4.7mb	

LIC	58.43	253	P	31	00.40	-1.8
	0.7s		9.00nm			5.0mb
MBC	67.07	357	eP	31	59.00	0.2
FRB	68.67	335	eP	32	09.00	0.0

S.D. = 1.1 on 52 of 58 obs.

JUN 28, 1990 18h 57m 00.11± 0.45s
45.854 N ± 5.1km 12.368 E ± 4.2km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
MD 2.8 (TRI).

FVI	0.79	21	P	57	14.80	-0.7
			eSg	57	25.50	
TRI	0.99	98	iPgd	57	19.00	0.2
			iSg	57	32.80	
VOY	1.08	80	ePg	57	20.10	-0.4
			eSg	57	35.70	
SAL	1.31	260	P	57	25.00	0.6
			eSn	57	43.00	
OGA	1.38	318	eP	57	25.40	-0.1
CEY	1.44	94	ePn	57	27.30	1.0
			eSg	57	47.00	
LJU	1.52	82	ePn	57	27.70	0.3
			eSn	57	48.30	
MDI	1.86	269	P	57	32.50	0.3
			eSn	57	56.50	
SFI	1.97	191	P	57	34.50	0.7
PGD	2.03	193	P	57	34.00	-0.9
VBY	2.05	99	eP	57	40.40	5.3X
			eSn	58	07.80	
CRE	2.25	188	P	57	37.00	-1.0
ARV	2.39	170	P	57	40.00	0.0
PTJ	2.51	88	eP	57	47.10	5.4X
KHC	3.38	14	ePg	58	02.00	8.0X
			Sg	58	47.40	

S.D. = 0.7 on 12 of 15 obs.

JUN 28, 1990 19h 30m 11.08± 0.33s
45.885 N ± 3.2km 12.369 E ± 3.1km
DEPTH = 24.3 ± 3.7 km
NORTHERN ITALY (545)
MD 3.2 (TRI), ML 2.8 (LJU), 3.2 (ZAG), 3.4 (GRF), 3.2 (LDG).

FVI	0.76	22	P	30	25.20	-0.4
			eSg	30	35.60	
TRI	0.99	100	iPgd	30	29.20	-0.2
			iSg	30	43.00	
VOY	1.07	82	ePgd	30	30.70	0.0
			eSg	30	46.50	
SAL	1.32	259	P	30	35.00	1.0
			eSn	30	54.00	
OGA	1.35	317	eP	30	34.70	0.0
CEY	1.45	95	ePn	30	36.50	0.6
			eSg	30	57.40	
RIY	1.52	110	iPn	30	37.50	0.6
			iSn	30	58.50	
LJU	1.52	83	iPnd	30	38.50	1.6
			eSn	30	58.60	
OSS	1.74	298	eP	30	42.10	1.8
MDI	1.86	268	P	30	44.10	2.3
			eSn	31	07.60	
BHG	1.87	11	ePn	30	44.10	2.1
RSM	1.96	178	P	30	43.70	0.4
SFI	2.00	191	P	30	45.00	1.1
			eSn	31	11.00	
VBY	2.06	100	ePg	30	49.20	4.4X
			iSg	31	16.90	
PGD	2.06	193	P	30	45.10	0.1
MME	2.06	216	P	30	46.80	1.7
VDL	2.10	288	eP	30	48.80	3.2X
BDI	2.21	215	P	30	48.40	1.4
			eSn	31	16.50	
CRE	2.28	188	P	30	49.00	1.1
BOB	2.34	243	P	30	50.50	1.6
			eSn	31	18.50	
FUR	2.40	342	iPnc	30	53.80	4.2X
ARV	2.42	170	P	30	50.00	0.1
			eSn	31	20.50	
TMA	2.45	276	eP	30	51.90	1.5
SAX	2.49	304	eP	30	53.20	2.0
PTJ	2.51	88	ePn	30	56.20	5.0X
			eSn	31	28.30	
VAI	2.51	271	P	30	51.50	0.3
			eSn	31	23.00	
ZAG	2.53	90	ePn	30	56.70	5.3X
			eSg	31	33.00	
PII	2.53	212	P	30	52.50	1.0
LLS	2.53	294	eP	30	56.70	5.0X
ASS	2.82	176	P	30	56.50	0.9
PCP	3.02	245	P	30	59.34	0.9
MMK	3.08	275	eP	31	04.40	5.0X
ORX	3.08	267	P	31	03.33	3.9X
ORO	3.08	267	P	31	00.50	1.1
GRC1	3.17	350	ePn	31	00.30	-0.2
			ec	31	02.10	
ZLA	3.17	302	eP	31	09.60	9.0X
SLE	3.26	307	eP	31	02.20	0.4
WET	3.28	6	ePn	31	02.40	0.3
FIN	3.39	242	P	30	59.83	-3.9X
DIX	3.46	275	eP	31	07.30	2.3
VKA	3.60	47	e(P)	32	05.00	58.3X
			i	32	08.20	
IMI	3.75	240	P	31	05.66	-3.1X
ENR	3.88	246	P	31	09.29	-1.4
STV	3.93	247	P	31	09.33	-2.1
LPG	3.96	266	Pn	31	13.00	1.1
			Sn	32	01.40	
LPL	3.97	267	Pn	31	13.00	1.0
PZZ	3.97	252	P	31	11.14	-0.9
ZST	3.98	53	e(P)	32	17.10	65.1X
			e	40	46.40	
			i	41	02.60	
HVAR	3.98	131	iPn	31	11.60	-0.4
SBF	4.05	242	Pn	31	13.60	0.5
RRL	4.05	258	P	31	13.16	-0.1
BNI	4.09	260	P	31	13.50	-0.3
PGF	4.12	217	Pn	31	14.00	-0.2
			Sn	32	00.80	
BSF	4.29	299	Pn	31	16.00	-0.6
			Sn	32	06.00	
CDF	4.30	308	Pn	31	16.30	-0.3
			Pg	31	29.80	
SDI	4.31	165	P	31	17.00	0.3
PRU	4.36	19	ePn	31	32.00	14.6X
			Pg	31	41.00	
			Sg	32	30.20	
DUI	4.49	160	P	31	18.00	-1.3
HAU	4.64	299	Pn	31	21.50	0.1
			Pg	31	36.20	
			Sn	32	15.50	
FRF	4.69	242	Pn	31	21.30	-0.9
MOX	4.79	354	ePn	31	23.00	-0.5
			(Sg)	32	50.00	
			eSg	42	30.00	
LRG	4.93	243	Pn	31	24.00	-1.4
			Sn	32	21.20	
BRG	5.10	11	e(P)	32	23.00	55.1X
			e	32	43.00	
			e	32	55.00	
LBF	5.90	284	Pn	31	38.40	-0.9
			Sn	32	44.80	
SMF	5.96	280	Pn	31	38.70	-1.4
LOR	6.03	286	Pn	31	40.40	-0.6
			Sn	32	47.40	
AVF	6.31	281	Pn	31	43.60	-1.3
BGF	6.64	279	Pn	31	48.40	-1.2
			Sn	33	04.00	
MAF	6.83	276	Pn	31	51.60	-0.7
CAF	7.32	266	Pn	31	58.00	-1.1

S.D. = 1.1 on 55 of 70 obs.

? JUN 28, 1990 20h 14m 17.86± 2.95s
4.999 S ±22.0km 129.761 E ±31.0km
DEPTH = 175.0 ± 28.7 km
4.3mb (5 obs.)
BANDA SEA (280)

MTN	7.91	170	eP	16	10.50	-0.5
			eS	17	33.50	
KNA	10.73	185	eP	16	47.00	-1.0
			eS	18	36.00	
WB5	15.46	164	eP	17	47.10	-1.0
			e	17	50.10	
			eS	20	29.50	
WRA	15.51	164	P	17	50.00	1.3
	0.5s		3.50nm			4.0mb
KKM	17.41	309	ePd	18	13.70	1.8
	0.8s		45.90nm			4.9mb
OIS	18.19	149	eP	18	20.00	-0.1
			eS	21	34.00	
ASPA	18.98	168	iPd	18	29.20	0.7
	0.6s		21.00nm			4.7mb
			eS	21	52.00	
WARB	21.28	188	eP	18	53.00	1.4
	0.3s		1.00nm			3.8mb
CHG	38.49	309	eP	21	25.80	1.0
GUN	53.48	310	P	23	22.50	-0.3
PKI	53.66	310	P	23	23.30	-0.9
DMN	53.91	309	P	23	25.50	-0.5
GKN	54.47	310	P	23	29.40	-0.5
GBA	55.12	290	Pc	23	33.00	-1.5
	1.1s		6.20nm			4.3mb

S.D. = 1.2 on 14 of 14 obs.

JUN 28, 1990 20h 48m 33.88± 0.57s
40.314 N ± 5.1km 22.023 E ± 4.8km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 2.7 (THE).

LIT	0.42	121	ePg	48	41.50	-0.9
			eSg	48	49.90	
FNA	0.68	314	ePgd	48	47.60	0.2
			eSg	48	57.60	
GRG	0.70	24	ePgd	48	48.20	0.4
			eSg	48	58.80	
THE	0.79	66	ePg	48	48.90	-0.3
			eSg	49	00.70	
KNT	1.08	38	iPbd	48	54.90	0.8
			eSb	49	10.10	
VAY	1.09	22	ePg	48	53.20	-1.1
SOH	1.13	63	eP	48	55.90	0.7
OHR	1.22	311	iPgc	48	55.40	-1.3
			iSg	49	16.00	
			Lg	49	17.60	
AGG	1.31	169	ePbc	48	57.90	-0.3
			eSb	49	15.80	
SRS	1.44	56	ePb	49	00.70	0.7
			eSb	49	19.80	
OUR	1.50	89	ePb	49	00.60	-0.2
IGT	1.52	240	ePb	49	02.30	1.2
SKO	1.71	345	ePn	48	57.50	-6.4X
			iSg	49	31.00	

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

JUN 28, 1990 22h 03m 47.60± 0.40s
76.148 N ± 8.8km 134.051 E ± 9.3km
DEPTH = 10.0km (geophysicist)
4.4mb (7 obs.)
LAPTEV SEA (655)

MBC	22.20	37	eP	08	44.50	-0.4
	0.7s		4.00nm			4.0mb
IMA	23.65	76	eP	08	58.70	-0.6
MDJ	31.69	186	Pc	10	12.50	-0.4
BJI	37.07	203	eP	10	58.50	-0.5
NB2	38.35	319	P	11	10.30	0.6
	0.6s		1.80nm			4.0mb
HFS	38.80	316	eP	11	12.50	-1.0
	1.2s		13.80nm			4.5mb
GTA	39.83	223	eP	11	23.40	1.1
LZH	42.46	217	P	11	45.20	1.2
	1.5s		37.00nm			4.9mb
FFC	44.57	43	eP	12	02.00	1.3
	0.9s		7.00nm			4.5mb
SES	47.10	52	eP	12	21.00	0.1
GUN	53.55	235	P	13	10.30	-0.4
GKN	53.71	236	P	13	11.30	-0.4
	0.9s		33.00nm			5.3mb
PKI	53.97	235	P	13	13.40	-0.4
DMN	54.00	236	P	13	13.80	-0.1
WRA	95.88	180	P	17	15.00	0.0
	0.3s		0.20nm			4.1mb

S.D. = 0.8 on 15 of 15 obs.

% JUN 28, 1990 23h 57m 54.42± 0.91s
41.580 N ±19.0km 28.134 E ±18.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

DMK	0.37	311	iPg	58	02.10	0.0
			iSg	58	08.60	
CTT	0.49	153	iPg	58	04.20	-0.1
			iSg	58	11.20	
ISK	0.87	126	ePg	58	11.70	0.6
HRT	1.38	123	ePn	58	19.10	-0.7
IZI	1.60	140	ePn	58	23.00	0.1

S.D. = 0.7 on 5 of 5 obs.

29d 00h

* JUN 29, 1990 00h 16m 38.75± 1.00s
8.524 S ±13.4km 121.529 E ±11.5km
DEPTH = 161.0 ± 25.0 km
4.7mb (4 obs.)
FLORES ISLAND REGION (286)

KUG	2.61	129	ePd	17	40.50	18.4X
			eS	18	15.00	
MKS	3.87	328	ePd	17	38.00	-0.2
KNA	10.08	136	eP	19	00.50	-0.2
			eS	20	49.00	
MTN	10.37	115	iPc	19	05.00	0.6
			eS	20	55.50	
MBL	12.67	187	eP	19	33.00	-1.4
			eS	21	49.00	
NANU	15.10	202	eP	20	07.00	1.9
			eS	22	44.00	
WB5	16.79	134	iPc	20	25.90	-0.1
			eS	23	27.20	
WRA	16.81	134	Pd	20	26.30	0.1
	0.4s		5.40nm			4.3mb
WARB	18.22	165	iPc	20	41.80	-0.6
	0.5s		23.00nm			4.8mb
ASPA	19.16	143	eP	20	51.60	-0.7
	0.7s		61.00nm			5.1mb
			eS	24	16.80	
QIS	21.17	126	iPd	21	13.10	0.6
	0.3s		9.00nm			4.7mb
S.D. = 1.1 on 10 of 11 obs.						

JUN 29, 1990 00h 52m 36.70± 0.59s
44.617 N ± 3.6km 7.198 E ± 6.4km
DEPTH = 8.2 ± 6.0 km
NORTHERN ITALY (545)
ML 1.9 (LDG), 2.0 (GEN).

DOI	0.12	163	Pc	52	39.80	0.3
			eSg	52	42.00	
PZZ	0.13	212	P	52	39.44	-0.4
			S	52	40.97	
STV	0.38	166	P	52	44.30	-0.2
			S	52	49.25	
ENR	0.42	158	P	52	44.87	-0.4
			S	52	50.29	
RRL	0.42	316	P	52	44.46	-0.9
			S	52	50.10	
SBF	0.77	167	Pg	52	53.00	1.0
FIN	0.83	119	P	52	52.56	-0.4
LSD	0.84	358	P	52	52.73	-0.6
IMI	0.86	145	P	52	53.18	-0.4
			S	53	04.25	
LPG	0.94	340	Pg	52	55.60	0.7
			Sg	53	06.00	
LPL	0.96	340	Pg	52	55.80	0.5
			Sg	53	06.60	
FRF	1.13	201	Pg	52	57.60	-0.4
			Sg	53	12.00	
LRG	1.31	208	Pg	53	01.40	0.3
			Sg	53	18.40	
LMR	1.38	201	Pg	53	02.20	0.1
			Sg	53	20.00	
S.D. = 0.6 on 14 of 14 obs.						

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* JUN 29, 1990 00h 58m 40.02± 1.46s
32.778 S ±14.9km 71.441 W ±15.3km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF CENTRAL CHILE (135)

IHA	0.30	214	iPd	58	46.30	0.0
			iS	58	52.10	
PEL	0.73	120	iPd	58	54.10	-0.3
			iS	59	06.00	
RTBS	2.02	57	ePd	59	14.20	-0.3
			S	59	44.00	
RTCV	2.62	70	e(P)	59	24.70	1.5
ZON	2.65	63	eP	59	24.50	1.0
			eS	00	00.50	
RTLL	2.91	61	ePd	59	25.10	-2.1
			i	59	26.10	
CFA	2.96	68	e(P)	59	28.10	0.2
S.D. = 1.4 on 7 of 7 obs.						

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* JUN 29, 1990 01h 06m 04.10± 0.85s
37.382 N ±12.2km 49.690 E ± 8.8km
DEPTH = 10.0km (geophysicist)
4.4mb (1 obs.)
CASPIAN SEA (338)

TEH	2.13	140	ePd	06	39.50	-0.9
TAB	2.75	285	eP	06	49.00	-0.3
KER	3.68	216	ePc	07	03.00	0.6
MAIO	7.94	95	eP	08	03.00	0.7
			eS	09	37.00	
HFS	32.23	327	eP	12	34.20	-0.1
	0.8s		4.10nm			4.4mb
S.D. = 0.9 on 5 of 5 obs.						

? JUN 29, 1990 01h 12m 43.40± 3.05s
16.182 S ±60.5km 73.344 W ±31.3km
DEPTH = 110.4 ± 13.6 km
4.5mb (6 obs.)
NEAR COAST OF PERU (115)

ARE	1.80	99	iPc	13	12.40	-2.3
			iS	13	30.00	
ZOBO	5.02	92	iPc	13	59.20	1.0
LPB	5.05	95	P	14	00.00	1.5
	1.5s		177.78nm			5.1mb X
CNCB	5.18	98	P	14	01.30	0.8
PT10	5.39	319	e(P)	14	03.50	0.7
			eS	15	07.00	
CCH	7.00	101	P	14	28.00	2.8X
SIV	11.80	91	P	15	26.00	-3.4X
			(S)	17	50.00	
BAO	24.39	92	eP	17	51.00	-2.0
RSCP	52.78	347	eP	21	48.00	-1.3
	0.9s		10.22nm			4.8mb
TUL	56.00	338	eP	22	11.40	-1.3
	1.1s		24.80nm			5.1mb
LNO	56.00	338	eP	22	11.70	-0.9
ANMO	59.78	329	eP	22	39.00	-0.4
	1.0s		2.00nm			4.2mb
DAU	66.42	329	eP	23	23.10	-0.1
TNP	67.88	324	eP	23	32.00	-0.3
	0.8s		2.50nm			4.2mb
KVN	69.05	324	eP	23	40.00	0.5
ORV	71.34	323	eP	23	54.20	1.1
PNT	76.98	331	eP	24	27.00	1.6
	0.5s		3.00nm			4.4mb
YKA	84.83	342	eP	25	05.60	-0.7
	0.7s		5.80nm			4.6mb
TOL	85.15	46	eP	25	10.50	2.0
WRA	134.96	218	PKP	31	55.00	3.1X
	0.6s		1.40nm			
GBA	151.66	91	PKPc	32	28.50	8.0X
S.D. = 1.4 on 17 of 21 obs.						

JUN 29, 1990 01h 19m 10.82± 0.16s
44.183 N ± 1.7km 6.330 E ± 1.5km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 3.1 (LDG).

GANF	0.36	239	Pg	19	18.06	-0.1
			Sg	19	24.42	
VILF	0.55	233	Pg	19	21.80	-0.3
			Sg	19	31.41	
CALN	0.59	137	Pg	19	22.86	0.0
TAVF	0.60	199	Pg	19	22.85	-0.1
			Sg	19	32.37	
PZZ	0.64	60	Pc	19	23.47	-0.3
MVIF	0.66	116	Pg	19	23.92	-0.1
FRF	0.66	160	Pg	19	24.00	0.0
			Sg	19	33.40	
TOUF	0.68	104	Pg	19	24.03	-0.5
			Sg	19	33.41	
STV	0.72	85	Pc	19	24.70	-0.3
			S	19	34.59	
LRG	0.73	178	Pg	19	24.90	-0.2
			Sg	19	35.50	
DOI	0.73	64	Pc	19	24.80	-0.4
			eSg	19	35.80	
AURF	0.78	112	Pg	19	26.20	0.2
			Sg	19	37.68	
ENR	0.79	86	Pc	19	25.91	-0.3
			S	19	36.64	
PUYF	0.79	215	Pg	19	26.58	0.3
			Sg	19	38.21	
RRL	0.81	24	Pd	19	26.59	0.0
			S	19	36.64	
AUTN	0.81	103	Pg	19	26.50	-0.2
			Sg	19	37.33	
LMR	0.86	171	Pn	19	27.00	-0.4
			Pg	19	28.00	
			Sg	19	39.80	
SBF	0.86	111	Pg	19	27.40	0.0
			Sg	19	39.60	
REVF	0.87	120	Pg	19	28.19	0.6
			Sg	19	41.04	
TREF	0.88	231	Pg	19	29.10	1.3
			Sg	19	42.23	
BNI	0.90	16	Pc	19	28.30	0.1
			eSg	19	39.90	
SAOF	0.90	102	Pg	19	28.15	0.0
			Sg	19	40.78	
PRAF	0.92	246	Pg	19	29.53	1.1
			Sg	19	43.55	
BERF	0.99	208	Pg	19	29.97	0.4
			Sg	19	44.11	
GELF	1.03	220	Pg	19	31.43	1.1
			Sg	19	45.42	
IMI	1.16	103	P	19	32.61	0.1
			S	19	47.65	
LPG	1.35	13	Pn	19	36.40	0.6
			Sg	19	55.20	
FIN	1.35	88	P	19	35.86	0.2
			S	19	53.07	
LPL	1.36	12	Pn	19	36.70	0.6
			Sg	19	56.00	
LSD	1.40	24	Pd	19	37.11	0.4
			S	19	55.19	
CKI	1.42	80	P	19	37.00	0.3
PCP	1.63	77	P	19	40.81	1.1
			S	20	00.14	
ORO	1.86	39	P	19	43.00	-0.1
			eSn	20	05.50	
ORX	1.86	38	P	19	43.61	0.4
			S	20	05.21	
DIX	2.05	22	eP	19	48.50	2.6
MMK	2.20	31	eP	19	51.60	3.5X
BOB	2.31	74	P	19	49.90	0.3
			eSn	20	17.00	
VAI	2.41	45	P	19	50.00	-0.9
LBL	2.44	297	Pg	19	51.10	-0.1
			Sg	19	58.23	
PGF	2.54	129	Pn	19	51.85	-1.0
PLDF	2.62	314	Pg	19	53.97	0.0
			Sg	20	01.31	
TMA	2.63	42	eP	19	55.60	1.3
PYM	2.83	305	Pg	19	56.58	-0.4
			Sg	20	05.38	
MDI	2.88	55	P	19	57.50	-0.1
AGO	2.94	311	Pg	19	58.76	0.4
SMF	3.02	325	Pn	19	59.60	0.0
			Pg	20	09.00	
			Sn	20	35.20	
			Sg	20	45.40	
BDI	3.08	91	P	20	00.50	0.1
			eSn	20	35.50	
CAF	3.14	285	Pn	20	00.80	-0.5
			Sn	20	37.00	
MME	3.14	88	P	20	00.90	-0.6
LBF	3.25	330	Pn	20	02.60	-0.3
			Pg	20	12.00	
			Sn	20	53.20	
LLS	3.28	34	eP	20	09.50	6.1X
AVF	3.34	322	Pn	20	04.00	-0.2
			Sn	20	56.40	
MAF	3.35	309	Pn	20	04.00	-0.3
BGF	3.42	315	Pn	20	05.00	-0.2
			Sg	20	59.90	
SSF	3.49	326	Pn	20	05.40	-0.9
			Pg	20	18.00	
			Sg	21	02.40	
LOR	3.54	332	Pn	20	06.80	-0.1
			Pg	20	18.00	
			Sn	20	44.00	
			Sg	21	01.80	
TCF	3.59	307	Pn	20	07.40	-0.3
RJF	3.61	290	Pn	20	07.90	0.0
BSF	3.66	5	Pn	20	09.00	0.2
			Pg	20	20.20	
			Sn	21	08.40	
LPO	3.72	280	Pn	20	09.40	-0.1
SAX	3.72	33	eP	20	15.10	5.2X
HAU	3.82	0	Pn	20	10.04	-1.0
			Pg	20	22.60	
			Sg	21	11.00	
PGD	3.90	93	P	20	12.00	-0.2
LSF	3.97	303	Pn	20	12.70	-0.4
LFF	4.07	283	Pn	20	14.30	-0.1

CRE 4.10 96 P 20 15.00 0.0
CDF 4.28 8 Pn 20 16.00 -1.6
Pg 20 31.60
EPF 4.50 257 Pn 20 18.70 -1.9
FVI 5.14 60 P 20 28.30 -1.3
DOU 6.03 349 Pc 20 44.00 1.8
S.D. = 0.7 on 67 of 70 obs.

JUN 29, 1990 01h 46m 29.58± 0.81s
45.034 N ± 7.4km 27.152 E ± 8.0km
DEPTH = 10.0km (geophysicist)
ROMANIA (358)

ISR 0.44 284 iPd 46 37.50 -1.1
CFR 0.72 78 iPd 46 42.00 -1.8
VRI 0.89 340 ePc 46 48.00 1.4
MLR 0.97 299 iPd 46 47.50 -0.6
PPE 1.23 15 ePc 46 53.00 0.6
CMP 1.51 280 ePd 47 02.00 5.2X
CLI 1.52 3 iPc 46 57.00 0.2
DMK 3.24 172 ePn 47 21.00 -0.5
BZS 3.95 280 ePc 47 27.50 -4.0X
CTT 4.00 166 ePn 47 34.00 1.8
S.D. = 1.5 on 8 of 10 obs.

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* JUN 29, 1990 02h 07m 48.46± 0.66s
32.729 N ±13.5km 71.928 E ± 8.9km
DEPTH = 33.0km (normol)
4.4mb (4 obs.)
PAKISTAN (710)

QUE 4.95 241 eP 09 02.00 -0.7
eS 09 59.20
NDI 6.08 130 iPnc 09 21.00 2.6
iSn 10 28.00
iSg 11 03.50
GKN 11.94 110 P 10 39.20 -0.3
DMN 12.49 111 P 10 46.40 -0.5
0.6s 28.00nm 5.6mb X
PKI 12.75 110 P 10 49.00 -1.4
0.5s 24.00nm 5.5mb X
GUN 12.97 108 P 10 52.80 -0.6
0.4s 15.00nm 5.4mb X
UPP 44.54 324 iP 15 58.20 -0.3
HFS 46.53 324 eP 16 14.50 0.2
0.4s 9.80nm 5.1mb
NB2 47.88 325 P 16 25.10 0.1
0.5s 5.10nm 4.8mb
MBC 71.06 3 eP 19 05.50 0.9
0.9s 1.00nm 3.9mb
WB5 79.33 122 eP 19 55.70 3.0X
e 21 32.50
WRA 79.35 122 Pc 20 00.50 7.7X
0.7s 1.00nm 3.9mb
S.D. = 1.2 on 10 of 12 obs.

? JUN 29, 1990 02h 13m 57.02± 1.67s
47.451 N ±27.4km 5.957 E ±17.8km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.0 (LDG).

HAU 0.61 25 Pg 14 09.20 -0.2
Sg 14 19.80
BSF 0.68 56 Pg 14 10.80 0.2
Sg 14 21.20
LBF 1.43 252 Pg 14 22.40 -0.6
Sg 14 43.00
LOR 1.44 263 Pg 14 23.80 0.7
Sg 14 43.70
S.D. = 1.0 on 4 of 4 obs.

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* JUN 29, 1990 02h 54m 30.65± 3.24s
14.937 S ±24.8km 167.281 E ± 9.7km
DEPTH = 111.1 ± 28.6 km
5.0mb (8 obs.)
VANUATU ISLANDS (186)

PVC 2.96 161 iP 55 16.50 -0.3
iS 55 53.50
DZM 7.14 186 iPc 56 14.00 -0.1
iS 57 30.60
COO 21.03 220 eP 59 09.00 1.8
CMS 25.61 226 iPc 59 52.30 1.0
0.4s 12.00nm 4.8mb
WB5 31.76 256 eP 00 45.80 -0.7
WRA 31.78 256 Pd 00 46.40 -0.3
0.6s 2.20nm 4.1mb
ASPA 32.61 249 iPc 00 53.70 -0.2
0.7s 28.00nm 5.2mb
PMO 43.24 96 iP 02 23.10 0.3
1.1s 35.00nm 5.1mb
VAH 43.47 97 iP 02 24.70 0.0
1.1s 30.00nm 5.0mb
TPT 43.51 96 iP 02 25.10 0.1
1.1s 30.00nm 5.0mb
RUV 43.72 96 iP 02 26.60 0.0
1.1s 30.00nm 5.0mb
SPA 75.16 180 iPc 06 00.50 -1.8
0.8s 25.00nm 5.1mb
APO 130.52 343 ePKP 13 28.50 -0.9
0.4s 2.40nm
NB2 130.83 345 PKP 13 29.90 -0.2
0.7s 2.00nm
CDF 142.77 338 ePKP 13 49.60 -3.0X
0.8s 5.35nm
SAX 142.92 335 ePKPc 13 50.30 -2.9X
OSS 143.03 334 ePKPc 13 50.80 -2.5
LLS 143.37 335 ePKPc 13 51.50 -2.4
HAU 143.45 338 ePKP 13 51.20 -2.5X
0.8s 6.70nm
MDI 143.93 333 PKP 13 51.00 -3.5X
TMA 144.03 334 ePKPc 13 53.50 -1.5
ARV 144.07 328 PKPc 13 54.00 -0.9
VAI 144.26 334 PKPc 13 53.70 -1.4
ORI 144.29 320 PKPc 13 55.00 -0.4
SFI 144.32 329 PKP 13 55.00 -0.2
PGD 144.42 329 PKP 13 55.50 -0.2
MMK 144.45 335 ePKPc 13 55.40 -0.4
CRE 144.49 329 PKP 13 55.00 -0.7
DUI 144.49 324 PKP 13 53.50 -2.3
ASS 144.52 327 PKP 13 54.50 -1.2
TDS 144.60 320 PKP 13 55.00 -0.9
DIX 144.65 336 ePKPc 13 56.00 -0.2
MME 144.69 330 PKP 13 55.90 -0.3
SGO 144.69 322 PKPc 13 55.20 -0.8
ORX 144.78 335 PKP 13 54.96 -1.2
ORO 144.79 335 PKP 13 55.00 -1.2
FLN 144.80 346 iPKPc 13 55.10 -0.8
0.8s 24.20nm
SDI 144.82 325 PKPc 13 55.50 -0.8
BOB 144.83 332 PKP 13 55.90 -0.4
BSS 144.84 322 PKP 13 55.50 -0.8
AZI 144.84 325 PKP 13 55.50 -0.7
LDF 144.87 345 iPKPc 13 55.70 -0.4
0.8s 16.10nm
LOR 144.94 340 iPKPc 13 56.20 -0.1
1.0s 36.00nm
PII 145.12 330 PKP 13 45.50 -11.1X
LBF 145.15 340 iPKPc 13 57.10 0.4
1.0s 36.00nm
GRC 145.16 341 PKP 13 57.39 0.8
SSF 145.23 340 iPKPc 13 57.50 0.7
GRR 145.24 346 iPKPc 13 57.20 0.5
0.8s 29.55nm
LSD 145.26 335 PKPc 13 57.72 0.5
LPL 145.39 336 ePKP 13 58.50 1.1
1.0s 21.00nm
LPG 145.39 336 ePKP 13 58.40 0.9
0.8s 20.15nm
PCP 145.41 333 PKPc 13 56.90 -0.3
SMF 145.49 340 iPKPc 13 57.90 0.7
1.1s 24.40nm
AVF 145.52 340 iPKPc 13 57.70 0.5
0.8s 8.05nm
LPF 145.61 346 iPKPc 13 58.50 1.2
0.8s 32.25nm
SOI 145.69 318 PKP 13 58.50 0.7
BNI 145.79 335 PKP 13 56.50 -1.5
FIN 145.82 333 PKP 13 57.83 -0.1
RRL 145.85 335 PKPc 13 59.36 1.2
BGF 145.89 341 ePKP 13 59.20 1.3
0.6s 28.85nm
PZZ 146.06 334 PKP 13 58.03 -0.4
ENR 146.15 334 PKP 13 58.13 -0.4
PLDF 146.15 339 PKP 14 00.33 1.9
STV 146.18 334 PKP 13 58.13 -0.4
IMI 146.20 333 PKP 13 59.36 0.8
AGO 146.24 340 PKP 14 00.33 1.8
MAF 146.28 341 ePKP 14 00.60 2.0
0.7s 11.00nm
TCF 146.33 341 iPKPc 14 00.50 1.8
0.9s 20.45nm
SBF 146.43 333 iPKPc 14 00.40 1.5
0.8s 18.80nm
PYM 146.55 340 PKP 14 01.31 2.2
LSF 146.57 342 iPKPc 14 00.90 1.9
MFF 146.72 344 iPKPc 14 01.50 2.3
0.6s 34.25nm
PGF 146.74 330 iPKPc 14 01.70 2.2X
0.8s 16.10nm
LBL 146.92 339 PKP 14 02.78 3.3X
FRF 147.02 334 iPKPc 14 02.20 2.4X
0.8s 13.45nm
LRG 147.23 334 iPKPc 14 02.90 2.8X
1.0s 16.00nm
LMR 147.26 334 iPKPc 14 02.90 2.7X
0.8s 12.10nm
RJF 147.43 341 iPKPc 14 03.70 3.3X
0.6s 10.80nm
BCAO 147.52 254 iPKP 14 04.00 2.5X
0.4s 43.00nm
CAF 147.59 340 iPKPc 14 04.20 3.5X
0.8s 8.05nm
LFF 147.99 342 iPKPc 14 05.10 3.8X
0.7s 22.05nm
LPO 148.09 341 iPKPc 14 05.60 4.1X
0.6s 15.35nm
EPF 149.84 341 iPKPc 14 10.90 6.6X
0.8s 5.35nm
S.D. = 1.2 on 67 of 83 obs.

? JUN 29, 1990 03h 28m 49.72± 1.80s
35.783 N ±11.8km 99.935 E ±18.8km
DEPTH = 33.0km (normol)
QINGHAI PROVINCE, CHINA (325)
ML 3.7 (BJI).

LZH 3.19 83 ePn 29 39.00 0.2
1.5s 600.00nm
Pg 29 43.00
Sn 30 14.50
Sg 30 21.00
GTA 3.62 359 Pn 29 45.00 0.0
0.6s 100.00nm
Pg 29 50.40
CD2 5.82 146 ePn 30 16.00 0.0
XAN 7.58 101 Pn 30 37.00 -3.8X
TIY 10.21 75 Pc 31 17.00 -0.2
CHG 16.93 183 eP 32 56.00 10.3X
S.D. = 0.2 on 4 of 6 obs.

JUN 29, 1990 03h 53m 28.76± 0.11s
21.552 S ± 3.2km 179.332 W ± 3.0km
DEPTH = 616.3km (5 depth phases)
5.7mb (56 obs.)
FIJI ISLANDS REGION (181)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 29C
Centroid Location:
Origin Time 03:53:37.8 0.5
Lat 21.18S 0.05 Lon 179.42W 0.03
Dep 631.0 2.2 Half-duration 2.8
Moment Tensor; Scale 10**17 Nm
Mrr= 1.56 0.09 Mtt=-2.56 0.12
Mff= 1.00 0.13 Mrt=-3.05 0.13
Mrf=-2.49 0.13 Mtf=-0.83 0.13
Principal Axes:
T Val= 4.32 Plg=53 Azm=119
N 0.53 19 236
P -4.85 30 338
Best Double Couple:Mo=4.6*10**17
NP1:Strike=111 Dip=23 Slip= 148
NP2: 232 78 71

SVA 4.00 328 ePd 54 55.90 0.1
VUN 4.09 329 iPc 54 54.60 -1.8
OVA 4.23 335 ePc 54 54.60 -2.8
KRO 4.38 344 iPc 54 56.90 -1.6
SGE 4.72 326 iPc 55 01.00 0.0
NDF 4.84 321 iP 55 02.60 0.8
MBU 4.91 338 iPc 55 01.90 -0.6
NDE 5.10 345 iPc 55 03.90 -0.1
DZM 13.22 265 iPc 56 20.40 1.0
iS 58 39.60
ScP 03 38.90
ScS 07 20.00
HBZ 16.12 187 P 56 47.20 0.0
PUZ 16.60 187 eP 56 51.60 -0.1
S 59 31.70

29d 03h

WLZ	16.82	194	P	56	56.50	2.7X				iPcP	04	50.00		MHC	79.86	43	ePc	04	37.00	1.0
TAZ	17.01	191	eP	56	56.80	1.2	RKT	40.94	101	iP	00	21.40	0.2	ARN	79.94	43	P	04	36.80	0.5
NOZ	17.16	187	eP	56	58.00	1.0	ASPA	43.08	258	iPd	00	38.10	0.0	ABL	79.99	46	P	04	37.10	0.2
PGZ	19.37	190	eP	57	15.80	-1.7		0.9s		436.00nm			6.0mb	MAW	80.16	200	iPc	04	38.60	1.7
MNG	19.51	192	eP	57	17.20	-1.6		Z 18s		0.70um			4.6Msz		0.9s		127.00nm			5.4mb
	0.2s		35.00nm			5.5mb				eScP	05	09.50		PAS	80.31	47	eP	04	39.00	0.7
			eS	00	17.60					iS	06	18.80		MWC	80.43	47	eP	04	39.00	-0.1
MTW	20.03	191	eP	57	21.40	-2.1				iScS	09	31.70		AIA	80.49	157	iP	04	40.50	1.9
WDW	20.23	192	eP	57	24.10	-1.3				LR	17	45.40		BAR	80.54	49	eP	04	40.00	0.5
			e	57	35.10	46kmX	JAY	43.22	290	ePd	00	37.80	-1.5	MDJ	80.67	326	iPd	04	40.30	0.4
MRW	20.26	193	eP	57	24.50	-1.1		0.6s		549.90nm			6.2mb		1.2s		300.00nm			5.7mb
			eS	00	29.80		WB5	43.22	264	iPd	00	38.80	-0.4				pP	06	47.00	598kmX
WEL	20.30	193	P	57	25.00	-0.9				i	03	42.00					sP	07	47.00	
			S	00	33.00					i	05	10.80					S	14	00.00	
			ScS	07	32.00					iS	06	16.20		RVR	80.77	48	eP	04	41.00	0.4
TCW	20.33	194	P	57	25.70	-0.6				i	06	27.20		PLM	80.78	49	eP	04	41.00	0.1
			e	57	34.40	32kmX	WRA	43.23	263	Pd	00	38.80	-0.5	SBB	80.85	47	eP	04	41.00	-0.1
			eS	00	31.70			0.9s		267.00nm			5.7mb	ISA	80.96	46	eP	04	42.00	0.4
THZ	21.19	196	eP	57	33.20	-0.9	MTN	47.94	272	iPd	01	14.00	-1.3	CMB	81.08	43	ePc	04	42.60	0.4
			e	57	45.40	51kmX	WARB	49.33	253	iPd	01	25.10	-0.4	WDC	81.28	40	ePc	04	43.50	0.5
			S	00	45.40			0.4s		42.00nm			5.3mb	ORV	81.28	41	eP	04	43.20	0.1
KHZ	21.65	194	P	57	36.90	-1.2	KNA	49.34	267	eP	01	25.10	-0.4	CLC	81.63	46	eP	04	45.00	0.0
	0.2s		19.00nm			5.3mb		0.5s		253.00nm			6.0mb				e	06	54.00	610km
			e	57	49.00	50kmX	GUA	49.47	312	eP	01	25.70	-0.8	DL2	81.65	317	P	04	44.00	-0.9
LTZ	22.31	196	P	57	42.50	-1.7		0.8s		1361.19nm			6.5mb		1.0s		200.00nm			5.6mb
HNR	23.28	298	eP	57	47.00	-6.0X	GUMO	49.54	312	eP	01	25.90	-1.1				S	14	06.00	
MMCZ	25.25	199	eP	58	08.90	-1.3		0.8s		983.89nm			6.3mb	MIN	81.70	41	ePd	04	45.80	0.4
MHZ	25.25	199	eP	58	08.20	-2.1				eS	07	51.00		TPC	81.75	48	eP	04	46.00	0.3
			e	58	22.00	57kmX	PJG	49.54	312	eP	01	25.90	-1.1	GSC	81.88	47	eP	04	47.00	0.7
TLC	25.43	199	eP	58	11.40	-0.5	AAI	53.90	282	iPd	01	56.90	-1.5	GLA	82.05	50	eP	04	48.00	0.8
			e	58	25.00	56kmX	S8A	56.75	183	iPc	02	20.20	3.0X	WHN	82.07	307	iPd	04	48.30	1.1
COO	27.31	245	iPd	58	29.70	1.4	MNI	59.10	285	iPd	02	32.10	-1.7		1.0s		100.00nm			5.3mb
TBI	27.64	99	iP	58	31.40	0.3	DAV	61.06	292	eP	02	46.00	-0.7	IPM	82.07	278	ePd	04	49.40	1.8
	1.1s		590.00nm			6.1mb		0.7s		575.34nm			6.0mb		0.8s		412.70nm			6.0mb
AFR	28.11	87	iP	58	34.30	-0.9	MKS	61.34	276	ePc	02	48.00	-0.5	KDC	82.12	14	ePd	04	46.40	-0.4
			iScP	04	12.90		BKB2	65.21	279	iPc	03	18.30	5.2X	LBFM	82.13	40	P	04	48.00	0.4
PAE	28.27	87	iP	58	35.60	-1.0	TSM	66.38	285	ePd	03	21.50	1.2	SNY	82.22	321	iPd	04	47.40	-0.3
	0.9s		185.00nm			5.7mb	TRT	66.81	271	iPd	03	21.80	-1.1		0.8s		100.00nm			5.4mb
			iScP	04	13.40		SPA	68.58	180	iPc	03	34.80	1.8				S	14	08.00	
PPT	28.30	87	iP	58	35.90	-0.9		1.0s		368.00nm			5.8mb	CN2	82.38	323	iPd	04	48.60	0.1
	0.9s		300.00nm			5.9mb	QCP	68.63	296	eP	03	37.00	3.2X		1.0s		400.00nm			5.9mb
			iScP	04	13.50		KKM	68.83	286	ePd	03	34.30	-0.9				pP	06	55.00	593kmX
PPN	28.44	87	iP	58	37.00	-1.0		0.7s		189.80nm			5.7mb				sP	07	55.00	
			iScP	04	13.90		KAKJ	69.03	326	iPd	03	35.00	-0.8				S	14	06.00	
TVO	28.55	88	iP	58	38.10	-1.0	CHJJ	69.54	325	iPd	03	38.00	-0.8	TIA	83.07	313	Pd	04	52.20	0.1
			iScP	04	14.30		IIDJ	69.71	324	iPd	03	39.00	-0.9		1.2s		400.00nm			5.9mb
PMO	30.51	83	iP	58	54.90	-0.8	BAG	69.94	298	eP	03	40.00	-1.8	KVN	83.12	43	P	04	52.50	-0.1
	0.9s		350.00nm			6.0mb	WKYJ	70.10	321	iPd	03	42.10	-0.2	TNP	83.15	45	P	04	52.60	-0.1
			iScP	04	21.30		NIIJ	70.43	326	iPd	03	43.00	-1.0	PSI	83.31	276	iPd	04	54.40	0.6
CNB	30.61	237	iPd	58	58.60	2.1	OFUJ	70.50	329	P	03	43.60	-0.7		0.8s		141.00nm			5.6mb
			e	59	05.50	24kmX	OFUJ	70.50	329	iPd	03	44.70	0.4	SNG	83.44	280	iPd	04	56.20	1.8
			e	04	23.90		MTMJ	70.58	325	P	03	44.30	-0.7		0.8s		231.34nm			5.8mb
VAH	30.69	84	iP	58	56.10	-1.1	YAMJ	70.61	327	P	03	44.60	-0.4				eS	14	15.00	
	0.9s		400.00nm			6.0mb	TSRJ	70.82	323	iPd	03	46.00	-0.3	SVW	84.57	11	ePd	04	58.10	-0.9
			iScP	04	21.60		TKSJ	70.85	320	iPd	03	46.30	-0.2	GMW	85.47	35	P	05	00.40	-3.1X
TPT	30.77	83	iP	58	57.00	-0.9	KAGJ	70.91	316	P	03	46.60	-0.3	LON	85.49	36	P	05	03.50	-0.2
	0.9s		645.00nm			6.3mb	KUMJ	71.84	317	P	03	51.60	-0.7	BJI	85.77	316	eP	05	05.50	0.4
			iScP	04	22.10		YONJ	72.03	321	iPd	03	52.90	-0.4		1.5s		310.00nm			5.6mb
CAN	30.89	237	eP	58	59.40	0.6	AOMJ	72.28	329	P	03	54.80	0.2				epP	07	14.00	598kmX
			iPcP	01	01.80		KUSJ	72.34	333	iPd	03	54.40	-0.5				eSKS	14	31.50	
			iScP	04	24.00		HOOJ	72.37	332	P	03	55.60	0.5				eS	14	52.00	
RUV	30.93	84	iP	58	58.40	-0.8	SHNJ	72.72	319	P	03	56.00	-1.3	PGC	85.82	33	eP	05	06.00	0.9
	0.9s		795.00nm			6.3mb	ADK	73.15	2	P	03	57.10	-2.2	RMW	85.93	35	P	05	06.00	0.1
			iScP	04	22.50		MRRJ	73.40	330	P	04	00.60	-0.3	GYA	86.09	300	iPd	05	08.00	0.8
BWA	31.09	239	eP	58	59.00	-1.5	ASAJ	74.05	333	P	04	05.40	0.9		1.0s		100.00nm			5.5mb
			iScP	04	23.80		SMY	74.19	356	eP	04	03.50	-1.5	MCW	86.15	34	P	05	07.30	0.5
CTA	32.16	266	iPd	59	09.90	0.3	QZH	75.96	304	Pd	04	15.50	0.1	TTA	86.19	10	ePd	05	06.30	-0.5
	0.9s		388.24nm			6.0mb		0.7s		300.00nm			5.9mb		1.1s		81.80nm			5.4mb
			iS	03	40.00		SSE	77.42	311	iPc	04	22.50	-0.7	NNT	86.32	285	iPd	05	10.70	2.4
			iScP	04	27.50			1.0s		140.00nm			5.4mb	PMR	86.33	14	ePd	05	06.40	-0.9
			iScS	08	30.00		HKC	78.11	300	iP	04	28.60	1.6		0.4s		66.00nm			5.7mb
CMS	32.59	245	iP	59	14.20	1.2	SDN	78.25	11	ePd	04	25.50	-1.5	LOE	86.45	290	eP	05	10.00	1.2
	0.6s		52.00nm			5.3mb	MCO	78.52	299	iP	04	30.40	1.2	SIT	86.56	22	ePd	05	08.60	0.1
			e	59	29.50	62kmX	KGM	78.99	277	ePd	04	32.80	1.0	MRX	86.68	67	(P)	05	11.50	1.6
			eScP	04	30.00		BLP	79.03	46	P	04	31.90	0.3	MSU	86.73	46	P	05	10.60	0.5
QLP	33.57	254	iPd	59	22.10	0.9	GZH	79.16	300	Pd	04	34.00	1.5	TIY	87.06	312	eP	05	12.00	0.6
			i	00	30.80	358kmX	SYP	79.30	46	eP	04	34.00	0.8		1.2s		200.00nm			5.7mb
			e	00	59.00		GCC	79.45	43	ePc	04	33.80	0.1				pP	07	20.00	593kmX
TOO	34.28	234	eP	59	28.60	1.5	PCC	79.49	43	ePc	04	33.80	-0.1	NST	87.17	288	iPd	05	14.50	2.3
			e	04	34.00		NJ2	79.60	310	iPd	04	35.00	0.4	TOA	87.46	15	ePd	05	12.60	-0.2
PMG	34.39	285	eP	59	28.00	-0.2		1.0s		300.00nm			5.7mb	XAN	87.78	308	iPd	05	15.00	0.1
STK	36.22	245	iPd	59	44.60	1.6	BCH	79.61	46	P	04	35.40	0.7	CRX	87.87	68	(P)	05	18.00	2.2
	0.9s		38.00nm			5.0mb	SAO	79.64	44	ePc	04	35.00	0.2	IIJ	87.95	68	(P)	05	17.50	1.0
			PcS	04	41.80		PRI	79.78	45	ePc	04	36.10	0.5	PNT	88.22	34	eP	05	16.00	-0.5
			i	08	50.60		BRK	79.79	42	eP	04	36.10	0.6		0.8s		22.00nm			5.0mb
QIS	38.26	264	iPd	59	59.10	-0.7	BKS	79.81	42	eP	04	36.40	0.8	DAU	88.31	45	P	05	17.40	-0.1
	0.4s		38.00nm			5.3mb		1.0s		83.00nm			5.2mb	PPM	88.65	69	(P)	05	21.00	1.3

29d 04h

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KMI     88.72 298 Pd      05 21.00    1.4
BDT     88.78 289 eP      05 21.80    2.2
        0.8s   232.10nm            6.1mb
PTI     88.84  43 P       05 20.00    0.3
ALQ     89.03  52 ePc     05 20.90    0.1
        1.0s    44.50nm            5.3mb
                  epP     07 33.00 614km
ANMO    89.03  52 P       05 21.00    0.2
        0.9s    33.61nm            5.2mb
                  pP      07 33.50 616km
HHC     89.20 315 P       05 21.60    0.3
        1.0s   300.00nm            6.2mb
CHG     89.44 290 iPd     05 24.40    1.7
        1.0s   182.00nm            5.9mb
IMA     89.49  10 iPd     05 21.40   -0.7
        0.8s    27.60nm            5.2mb
FBA     89.53  13 iPd     05 20.40   -1.8
OXX     89.55  72 (P)     05 25.00    1.6
BTO     90.11 314 P       05 26.00    0.5
                  S       15 27.00
LRM     90.31  40 eP      05 26.90    0.4
BW06    90.58  44 P       05 27.00   -0.8
        0.9s    14.41nm            4.9mb
GLD     92.07  48 P       05 35.00    0.4
        0.9s    47.37nm            5.5mb
                  pP      07 49.00 622km
LZH     92.42 308 iPd     05 37.50    1.2
        1.2s   170.00nm            6.0mb
                  PP      09 30.00
                  SKS     15 10.00
PEL     92.92 127 iPc     05 39.60    0.9
        0.8s   138.06nm            6.1mb
SES     93.45  37 eP      05 41.00    0.5
RSSD    94.77  44 P       05 46.10   -0.8
                  pP      08 00.00 620km
MEO     94.83  55 iPd     05 46.70   -0.4
INK     95.61  16 eP      05 48.00   -1.8
GTA     96.68 310 iPd     05 55.60    0.1
SHL     97.98 294 iP      06 02.60    0.8
YKA     97.98  25 eP      05 59.50   -1.2
        0.7s     3.70nm            4.8mb
ARE     99.84 112 eP      06 13.00    2.6
CNCB   102.69 114 Pdiff   06 27.00    3.5X
                  i       10 37.00
LPB    102.72 114 Pdiff   06 27.00    3.6X
ZOBO   102.81 113 Pdiffc06 28.20      4.2X
        1.0s    19.50nm            5.6mb
                  i       10 33.00
GUN    103.82 295 Pdiff   06 29.20    1.2
CCH    103.98 115 Pdiff   06 32.50    3.6X
MBC    104.07  12 ePdiff06 26.00     -1.5
        0.5s     1.00nm            4.8mb
PKI    104.12 294 Pdiff   06 29.80    0.5
DMN    104.38 294 Pdiff   06 31.20    0.8
GKN    104.90 295 Pdiff   06 32.20   -0.3
WMO    106.67 311 ePdiff06 40.50      0.5
SIV    108.90 116 ePdiff06 50.00     -0.4
SIV    108.90 116 iPKP    10 50.40   -1.1
                  i       11 21.40
PPD    113.32 127 ePKP    10 59.60   -0.2
FRB    118.30  28 ePKPc   11 06.30   -1.6
OUE    120.46 293 ePKP    11 13.50    0.1
HVD    122.92 206 iPKPd   11 36.00   17.9X
FRS    123.74 206 iPKPd   11 18.50   -1.0
        0.9s    63.03nm
BLF    123.95 207 iPKPc   11 19.50   -0.6
        1.0s    60.00nm
SLR    125.89 211 iPKPd   11 21.80   -2.2
        0.9s    37.82nm
CIR    128.03 218 iPKPd   11 17.30  -10.7X
                  iPP     13 28.00
KEV    129.25 348 ePKP    11 28.00   -0.8
                  iSKP    13 54.00
BUL    130.37 215 iPKPd   11 25.50   -7.1X
                  iSKP    13 54.30
KRI    132.46 219 iPKPd   11 32.00   -4.7X
                  iPP     14 03.90
CAI    133.60 123 ePKP    11 23.60  -15.2X
SUF    135.35 344 ePKP    11 25.60  -15.0X
        0.5s     6.60nm
NUR    137.58 343 ePKP    11 34.00  -10.8X
                  iSKP    14 21.80
NB2    139.86 352 PKP     11 40.20   -8.8X
        0.6s    19.90nm
UPP    139.88 347 iPKP    11 39.60   -9.4X
                  i       14 27.00
                  i       14 48.30

HFS    140.36 350 ePKP    11 41.60   -8.3X
        0.7s    66.90nm
AFIF   140.84 282 ePKPd   11 48.30   -3.7X
UQSK   141.70 285 ePKPd   11 50.10   -3.3X
EDR    144.60   3 ePKPd   11 56.30   -1.0
        0.5s   101.00nm
BSD    144.82 346 iPKPd   11 56.80   -0.9
        1.0s   682.00nm
EDU    144.94   4 ePKPd   11 57.60   -0.3
ELO    144.98   4 ePKPd   11 57.70   -0.3
        0.7s   102.00nm
EAB    145.21   5 ePKPd   11 58.40    0.1
EBH    145.21   4 ePKPd   11 58.50    0.2
EDI    145.56   4 ePKP    11 59.30    0.4
ESY    145.59   3 ePKPc   11 59.40    0.4
        0.5s    68.00nm
EAU    145.62   4 ePKP    11 59.60    0.6
EBL    145.71   4 ePKP    12 00.10    0.9
        0.5s    58.00nm
KAS    145.83 313 ePKP    12 02.00    2.1
EKA    146.15   4 PKP     11 59.00   -0.8
        0.7s    45.20nm
BHL    146.84 299 PKPc    12 04.00    2.2
HRI    146.90 298 ePKP    12 06.40    4.5X
CLI    147.00 325 iPKPd   12 04.50    3.0X
PPE    147.04 325 ePKPc   12 04.50    2.9X
BBTK   147.17 311 ePKP    12 05.00    2.8X
                  e       14 28.00
CFR    147.38 323 ePKPd   12 05.00    2.9X
JVI    147.47 296 iPKPd   12 08.00    5.3X
DCN    147.68   9 ePKP    12 05.70    3.3X
ZNT    147.68 297 iPKPd   12 08.50    5.4X
VRI    147.74 325 ePKPd   12 06.50    3.8X
KRA    147.74 337 iPKPd   12 06.00    3.4X
        0.5s    68.00nm
                  i       12 10.80
TLB    147.80 322 iPKPd   12 06.50    3.7X
DLE    147.84   8 ePKP    12 06.20    3.6X
LFK    148.18 303 iPKP    12 08.00    4.2X
ISR    148.30 324 ePKPc   12 08.00    4.3X
KSP    148.30 341 ePKP    12 03.70    0.3
SPC    148.33 335 iPKPd   12 08.60    4.8X
                  i       12 13.10
                  e       14 29.20
                  e       15 39.30
MLR    148.40 325 ePKP    12 08.00    4.0X
CSS    148.43 302 ePKP    12 07.70    3.5X
WIT    148.45 353 ePKP    12 08.50    5.0X
                  e       12 14.00
                  e       14 30.00
ETA    148.46   8 ePKP    12 13.00    9.4X
        0.5s    91.00nm
YRH    148.51   6 ePKP    12 13.20    9.5X
GPA    148.67 313 iPKP    12 08.70    4.3X
CLL    148.77 345 ePKP    12 04.00   -0.1
        1.2s   115.00nm
                  i       12 08.80
                  pPKP    14 31.30
                  iSKP    14 49.40
HRT    148.84 315 iPKP    12 09.00    4.4X
BRG    148.94 344 ePKP    12 04.60    0.2
                  i       12 09.20
                  i       12 15.30
                  pPKP    14 32.50
                  eSKP    14 50.00
                  e       15 43.00
ECP    148.94   8 ePKP    12 09.70    5.4X
        0.7s    95.00nm
GBZT   149.00 315 iPKPd   12 09.00    4.2X
CMP    149.03 326 ePKPc   12 16.00   11.2X
ISK    149.12 316 ePKP    12 09.00    4.0X
YLV    149.16 314 iPKP    12 09.00    3.8X
IZI    149.21 314 ePKP    12 10.30    5.0X
WTS    149.24 353 ePKP    12 05.00    0.2
        0.7s    84.00nm
                  i       12 09.70
                  e       12 15.50
                  e       14 34.00
                  e       14 50.50
ALT    149.36 311 ePKP    12 09.00    3.4X
DMK    149.55 318 ePKP    12 10.50    4.9X
PRU    149.58 342 PKPd    12 10.70    5.3X
        1.0s    50.60nm
                  e       12 18.20
                  PP      14 32.50
BCK    149.68 308 iPKP    12 11.70    5.6X
MOX    149.71 346 iPKP    12 11.50    5.9X

        1.2s    67.00nm
                  i       12 19.00
                  e       14 36.00
JMB    149.91 320 ePKPd   12 12.00    5.9X
AKSR   150.09 280 iPKPc   12 14.00    7.1X
KHL    150.09 310 ePKP    12 12.00    5.3X
DST    150.13 313 iPKP    12 12.50    5.9X
BUD    150.19 335 iPKPd   12 11.80    5.4X
PVL    150.19 322 ePKP    12 12.00    5.5X
SRO    150.20 336 iPKPd   12 12.60    6.2X
                  i       12 21.70
                  i       14 36.60
AGAL   150.26 280 iPKPc   12 14.00    6.8X
ZST    150.32 338 iPKP    12 13.00    6.4X
                  i       12 22.20
                  e       14 30.70
                  i       14 37.70
                  e       22 43.30
                  e       23 02.50
AKRL   150.38 280 iPKPc   12 14.50    7.2X
ELL    150.46 307 ePKP    12 14.00    6.7X
BZS    150.50 329 ePKP    12 13.00    6.1X
AGMR   150.53 280 ePKP    12 16.00    8.4X
VKA    150.54 339 iPKPd   12 13.10    6.2X
        0.8s   119.00nm
                  i       12 23.10
                  i       12 28.70
                  e       14 29.00
ENN    150.55 353 ePKP    12 07.50    0.7
        0.7s   185.00nm
                  e       12 13.00
                  i       12 22.10
                  e       14 37.00
                  e       15 49.00
KHC    150.62 343 ePKP    12 06.50   -0.6
                  i       12 13.50
                  i       12 23.40
GRF    150.70 346 iPKPd   12 13.70    6.6X
        0.9s    20.00nm
      Z  22s     0.10um            4.6Msz
                  e       12 23.40
                  e       14 33.00
                  e       15 52.00
MEM    150.70 353 iPKPd   12 13.24    6.2X
TNS    150.73 350 iPKPd   12 13.50    6.3X
                  ic      12 22.60
DIM    150.78 320 ePKP    12 14.00    6.6X
KSL    150.94 306 ePKP    12 13.20    5.3X
SOP    150.95 338 ePKP    12 16.70    9.2X
SNF    150.96 355 iPKP    12 12.92    5.5X
                  i       12 23.69
KDZ    151.09 320 iPKPd   12 14.00    6.0X
HLW    151.22 293 ePKP    12 15.00    6.5X
RDO    151.31 319 ePKP    12 14.20    6.0X
DOU    151.35 355 PKP     12 14.90    6.9X
                  i       12 25.00
KMR    151.43 341 ePKP    12 07.00   -1.2
                  i       12 15.20
                  i       12 27.00
                  ipPKP   14 40.80
                  e       15 24.00
CIN    151.43 310 ePKP    12 15.00    6.5X
RZN    151.49 320 iPKPd   12 15.00    6.2X
EZN    151.55 316 iPKP    12 14.90    6.3X
VTS    151.79 323 iPKPd   12 16.00    6.9X
BHG    152.10 342 ePKP    12 16.10    6.9X
                  i       12 29.40
FUR    152.11 345 iPKPc   12 17.00    7.8X
                  i       12 29.60
MMB    152.13 321 iPKPd   12 16.00    6.5X
KKB    152.33 322 iPKPd   12 17.00    7.3X
CDF    152.68 350 ePKP    12 09.60   -0.5
PTJ    152.68 336 ePKP    12 13.40    3.2X
ZAG    152.74 336 ePKP    12 18.20    8.1X
FLN    152.83   2 ePKP    12 09.80   -0.4
        1.0s    12.00nm
VAY    152.97 322 iPKP    12 09.00   -1.6
        1.1s     0.23nm
                  iP'P'   12 17.40
                  i       12 33.00
LDF    153.01   1 ePKP    12 09.90   -0.5
        0.8s     5.35nm
LJU    153.07 338 ePKP    12 10.50   -0.1
                  e       12 18.40
                  e       14 43.00
FVI    153.15 341 PKP     12 18.00    7.4X
SKO    153.18 324 ePKP    12 10.00   -0.9
```

29d 04h

	1.0s	97.00nm			
		iP'P'	12	18.60	
		i	12	34.50	
GRR	153.20	2 ePKP	12	10.30	-0.4
	0.8s	5.35nm			
HAU	153.21	352 ePKP	12	10.30	-0.5
VBY	153.28	337 e(PKP)	12	19.30	8.4X
		i	12	33.80	
		e	14	43.00	
VOY	153.30	339 ePKP	12	11.30	0.3
		e	12	18.40	
		i	12	33.20	
BSF	153.32	351 ePKP	12	10.60	-0.4
CEY	153.37	338 e(PKP)	12	19.00	7.9X
		i	12	34.00	
OGA	153.38	344 ePKP	12	11.50	0.2
LPF	153.54	3 ePKP	12	11.70	0.6
	0.8s	8.05nm			
TRI	153.62	339 PKP	12	18.30	7.0X
		i	12	34.70	
		e	14	45.50	
LIT	153.79	320 ePKP	12	18.00	6.2X
OHR	154.11	323 ePKP	12	11.00	-1.2
	1.0s	196.00nm			
		i	12	21.30	
		i	12	37.80	
		i	12	46.20	
LOR	154.21	355 ePKP	12	11.90	-0.2
	0.8s	5.35nm			
SSF	154.45	355 ePKP	12	12.50	0.1
	1.0s	8.00nm			
LBF	154.49	355 ePKP	12	12.60	0.1
	0.8s	4.05nm			
SAL	154.68	344 PKP	12	27.00	14.3X
AVF	154.73	356 ePKP	12	12.30	-0.5
	1.2s	5.95nm			
SMF	154.83	355 ePKP	12	12.50	-0.5
	1.0s	6.00nm			
VAI	154.86	347 PKP	12	12.00	-0.9
MFF	155.00	1 ePKP	12	12.90	-0.3
	0.8s	8.05nm			
TCF	155.29	357 ePKP	12	13.30	-0.3
	1.0s	8.00nm			
LSF	155.35	359 ePKP	12	13.30	-0.4
	0.9s	9.85nm			
LPL	155.58	350 ePKP	12	14.40	0.1
	1.0s	4.00nm			
LPG	155.60	350 ePKP	12	14.60	0.2
	1.0s	4.00nm			
BCAO	155.71	228 iPKPc	12	15.20	0.1
	0.7s	171.00nm			
		id	12	47.00	
BOB	155.74	345 PKP	12	26.40	12.1X
SFI	155.84	340 PKP	12	14.50	0.2
ARV	155.85	338 PKP	12	14.00	-0.4
ITM	155.88	315 ePKP	12	26.50	11.8X
PGD	155.92	340 PKP	12	24.00	9.3X
MME	155.94	342 PKP	12	33.40	18.6X
BNI	156.04	349 PKP	12	15.00	0.2
FIR	156.15	341 ePKP	12	29.00	14.3X
		i	12	46.00	
		iSKKS	22	14.00	
RJF	156.30	359 ePKP	12	15.00	0.1
	1.2s	11.90nm			
CAF	156.66	357 ePKP	12	15.70	0.3
	1.2s	11.90nm			
LFF	156.67	360 ePKP	12	15.40	0.0
	1.0s	8.00nm			
SBF	157.05	347 ePKP	12	15.40	-0.6
	0.8s	9.40nm			
SDI	157.05	334 PKP	12	14.50	-1.5
SGO	157.34	330 PKP	12	16.00	-0.3
STS	157.37	18 ePKP	12	17.00	0.7
		e	12	52.00	
TDS	157.53	327 PKP	12	16.50	-0.1
PGF	157.93	343 ePKP	12	16.60	-0.5
	0.8s	9.40nm			
EPF	158.58	1 ePKP	12	18.40	0.7
	1.0s	9.00nm			
SOI	158.85	325 PKP	12	17.00	-1.1
GUD	160.53	11 iPKPd	12	21.00	1.0
		ic	13	05.40	
ETOR	160.65	6 ePKP	12	21.00	1.0
		e	13	06.00	
EPLA	160.67	16 ePKP	12	21.30	1.3
		e	13	06.40	
TOL	161.29	11 ePKP	12	22.50	1.9
EVIA	162.75	8 e(PKP)	12	23.20	1.0
EVAL	162.78	20 ePKP	12	23.80	1.7
EBAN	163.00	12 ePKP	12	23.50	1.2
		e	13	16.80	
AFC	163.93	12 ePKP	12	24.00	0.5
EJIF	164.22	18 ePKP	12	25.00	1.5
		ic	13	22.80	
ENIJ	164.43	9 ePKP	12	25.60	1.9
		e	13	22.00	
AVE	166.28	30 iPKPd	12	26.00	0.7
LKO	166.63	152 PKPc	12	25.88	-0.2
	0.8s	38.50nm			
IFR	167.02	22 iPKPd	12	27.50	1.4
TIO	168.27	36 iPKPd	12	28.00	1.1
	S.D. = 1.0	on 274 of 375 obs.			

JUN 29, 1990 05h 11m 38.87± 0.67s
39.246 N ± 5.2km 23.705 E ± 7.7km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
MD 3.2 (ATH).

NEO	0.38	279 eP	11	46.30	-0.4
		eS	11	51.70	
LIT	1.27	313 ePbc	12	01.80	-0.6
		eSb	12	21.20	
ATH	1.27	180 eP	12	03.50	1.0
THE	1.50	338 ePb	12	06.50	0.8
SRS	1.87	357 ePn	12	11.50	0.3
KNT	2.01	342 ePnc	12	13.00	-0.2
		eSn	12	42.10	
EZN	2.11	73 eP	12	19.40	4.8X
VAY	2.25	338 ePn	12	16.30	-0.3
FNA	2.36	311 ePn	12	17.90	-0.4
ALN	2.44	47 ePn	12	18.50	-0.8
VLI	2.60	194 eP	12	20.70	-0.9
OHR	2.90	311 ePn	12	39.00	13.0X
SKO	3.22	328 ePn	12	32.00	1.5
	S.D. = 0.9	on 11 of 13 obs.			

* JUN 29, 1990 05h 17m 22.58± 1.76s
46.258 N ±10.4km 1.089 W ±18.4km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.5 (LDG).

MFF	0.74	62 Pg	17	36.00	-1.0
		Sg	17	48.00	
LPF	1.78	1 Pg	17	53.20	-0.3
		Sg	18	16.60	
LSF	1.82	89 Pg	17	55.40	1.3
		Sg	18	20.00	
LFF	1.84	135 Pg	17	52.80	-1.6
		Sg	18	19.00	
RJF	2.06	117 Pg	17	58.00	0.4
		Sg	18	26.60	
GRR	2.14	4 Pg	17	59.20	0.5
		Sg	18	27.20	
LPO	2.25	134 Pg	18	01.20	0.9
		Sg	18	32.00	
TCF	2.29	88 Pg	18	04.20	3.2X
		Sg	18	36.00	
MAF	2.54	90 Pg	18	08.40	3.9X
		Sg	18	42.70	
CAF	2.58	120 Pg	18	08.60	3.4X
		Sg	18	42.40	
BGF	2.74	82 Pg	18	13.00	5.6X
		Sg	18	50.00	
	S.D. = 1.3	on 7 of 11 obs.			

* JUN 29, 1990 06h 06m 27.28± 1.44s
24.000 N ±11.2km 122.787 E ±17.5km
DEPTH = 33.0km (normal)
3.9mb (1 obs.)
TAIWAN REGION (243)

TWC	1.05	306 iPd	06	45.80	0.1
		eS	06	58.90	
TWF1	1.51	245 ePc	06	51.30	-1.0
TWZ	1.55	315 eP	06	54.50	1.6
ANP	1.65	316 eP	06	54.50	0.1
		eS	07	21.70	
SSE	7.21	349 P	08	11.60	-1.4
		sP	08	18.50	
		eLg	10	19.50	
WRA	45.11	165 P	14	43.00	0.6
	0.7s	1.30nm		3.9mb	
	S.D. = 1.4	on 6 of 6 obs.			

* JUN 29, 1990 06h 25m 48.00± 0.50s
36.691 N ±14.0km 49.816 E ± 9.0km
DEPTH = 10.0km (geophysicist)
4.5mb (11 obs.)
WESTERN IRAN (347)

TEH	1.59	126 iPd	26	16.80	0.5
TAB	3.10	297 eP	26	40.00	2.0
KER	3.21	224 eP	26	46.00	6.4X
MAIO	7.81	90 ePn	27	45.00	0.6
		eSn	29	17.00	
QUE	15.70	109 eP	29	37.80	6.8X
VRI	19.57	305 ePd	30	20.00	1.1
MLR	19.97	304 eP	30	24.00	0.7
KSP	27.76	311 eP	31	39.50	0.9
KHC	29.02	307 eP	31	50.70	0.6
CLL	29.88	311 eP	31	58.00	0.3
	1.1s	11.00nm		4.6mb	
GKN	30.53	96 P	32	00.00	-3.9X
PGF	31.75	293 eP	32	13.80	-0.6
	1.0s	10.00nm		4.7mb	
SBF	32.83	296 eP	32	22.70	-1.1
	1.0s	12.00nm		4.8mb	
HFS	32.86	327 eP	32	23.80	0.1
	0.4s	1.00nm		4.1mb	
GBA	33.75	126 Pd	32	31.20	-0.6
	0.5s	2.60nm		4.4mb	
NB2	34.37	327 P	32	36.10	-0.8
	0.9s	3.70nm		4.3mb	
SMF	35.31	301 eP	32	44.00	-1.1
	1.0s	7.00nm		4.5mb	
AVF	35.64	301 eP	32	46.10	-1.8
	1.0s	4.00nm		4.2mb	
MAF	36.20	300 eP	32	51.40	-1.2
	1.0s	4.00nm		4.2mb	
GRR	38.46	304 eP	33	10.80	-0.8
	0.9s	14.75nm		4.7mb	
BCAO	43.06	229 iPd	33	50.60	0.8
	0.5s	5.00nm		4.5mb	
FRB	68.71	335 eP	36	54.00	0.6
PPM	117.04	326 (Pdiff40	52.50		1.0X
MRX	117.58	329 (Pdiff41	04.50		11.3X
	S.D. = 1.0	on 19 of 24 obs.			

? JUN 29, 1990 06h 28m 05.07± 1.29s
39.364 N ±16.8km 20.935 E ± 7.7km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)
ML 3.2 (THE).

IGT	0.50	290 iPgc	28	15.10	0.0
AGG	1.14	107 iPbc	28	26.50	0.1
		eSb	28	43.50	
LIT	1.41	58 ePb	28	30.30	-0.5
		eSb	28	49.30	
GRG	1.95	35 ePbd	28	38.90	0.4
		eSb	29	04.40	
	S.D. = 0.6	on 4 of 4 obs.			

JUN 29, 1990 06h 31m 25.89± 0.19s
28.578 S ± 4.3km 68.746 W ± 6.0km
DEPTH = 123.0km (12 depth phases)
5.2mb (34 obs.)
LA RIOJA PROVINCE, ARGENTINA (138)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 20C
Centroid Location:
Origin Time 06:31:30.3 0.7
Lat 28.66S 0.06 Lon 68.83W 0.09
Dep 117.3 3.5 Half-duration 1.7
Moment Tensor; Scale 10**16 Nm
Mrr=-9.60 0.59 Mtt= 4.81 1.20
Mff= 4.79 1.30 Mrt=-3.02 0.57
Mrf= 1.31 0.70 Mtf=-3.84 0.92
Principal Axes:

	Val=	Plg=	Azm=
T	9.15	9	224
N	1.08	6	133
P	-10.22	79	12

Best Double Couple:Mo=9.7*10**16
NP1:Strike=321 Dip=36 Slip= -80
NP2: 129 55 -97

RTRS	1.71	201 iPc	31	55.10	-1.2
RTLL	2.75	175 iPd	32	08.40	-1.3

ZON	2.96	179	iPc	32	11.00	-1.5
CFA	3.05	172	iPd	32	12.00	-1.7
RTBS	3.13	191	iPc	32	13.60	-1.1
RTCV	3.28	177	iPd	32	15.40	-1.3
PEL	4.85	200	iPc	32	33.70	-4.2X
ANT	5.08	342	eP	32	35.00	-6.0X
			i	32	36.50	
			iS	33	28.40	
IHA	5.09	209	eP	32	35.50	-5.6X
			e(S)	33	19.50	
CCH	11.40	13	P	34	02.00	-4.4X
CNCB	11.73	4	P	34	06.40	-4.7X
LPB	12.00	3	P	34	11.00	-3.5X
	1.0s	70.00nm			5.3mb	
ZOBO	12.26	3	P	34	14.00	-4.0X
			i	34	15.20	
			S	36	38.00	
ARE	12.32	348	eP	34	12.00	-6.5X
			eS	36	22.00	
SIV	14.39	31	P	34	40.00	-5.0X
PPD	17.05	71	eP	35	16.30	-1.9
			e	35	22.40	
			e	35	27.70	
NNA	18.16	334	iPc	35	33.70	2.1
	0.7s	10.96nm			4.2mb	
VAO	20.37	79	eP	35	53.70	-1.1
CAI	37.06	60	eP	38	25.70	-0.1
TOV	38.15	358	eP	38	39.80	4.9X
OLLA	38.41	3	eP	38	35.30	-1.9
GUAC	38.57	2	iP	38	36.80	-1.7
LLAV	38.87	3	iPc	38	39.10	-1.8
CAR	38.89	3	eP	38	39.90	-1.2
OXX	52.84	326	(P)	40	31.50	0.3
SPA	61.58	180	eP	41	32.60	0.3
	0.9s	69.55nm			5.6mb	
HBF	62.16	349	P	41	37.00	0.9
			pP	42	07.30	125km
LHS	63.74	349	P	41	34.60	-11.9X
TKL	65.44	347	P	41	54.40	-3.1X
			pP	42	25.90	129km
GBTN	65.54	346	P	41	56.00	-2.1
RSCP	65.78	345	P	41	57.00	-2.6
			pP	42	28.40	129km
BLA	66.35	350	P	42	01.80	-1.5
	0.8s	21.81nm			5.1mb	
			pP	42	31.70	121km
CBN	66.92	353	eP	42	07.00	0.2
LST	67.70	342	P	42	10.40	-1.3
ELC	68.28	343	P	42	12.80	-2.5
SBA	68.93	191	e(P)	42	20.80	1.9
LNO	69.02	337	iP	42	18.00	-1.8
TUL	69.02	337	iPc	42	18.20	-1.7
	1.0s	126.70nm			5.7mb	
MEO	69.04	334	e(P)	42	17.80	-2.3
LIC	70.37	71	P	42	28.24	-0.4
TIC	70.61	71	P	42	29.60	-0.5
KIC	70.68	71	P	42	30.30	-0.2
WVLY	71.27	352	P	42	32.10	-1.4
LKO	71.74	68	P	42	36.50	-0.4
	0.9s	126.50nm			5.7mb	
ALQ	72.52	328	eP	42	40.30	-1.0
	0.8s	54.10nm			5.4mb	
			i	42	42.00	
			epP	43	10.00	118km
ANMO	72.53	328	P	42	41.00	-0.3
	0.9s	50.95nm			5.3mb	
WNY	72.76	356	P	42	41.00	-1.2
BNH	72.85	358	P	42	43.00	0.3
RSNY	72.96	356	P	42	42.40	-0.9
	0.7s	27.68nm			5.2mb	
EMM	72.97	1	P	42	43.50	0.2
CER	73.40	119	iPc	42	47.00	0.6
	1.0s	90.00nm			5.5mb	
MIM	73.47	360	P	42	45.90	-0.3
CBM	75.16	0	P	42	55.10	-0.8
GLA	75.28	321	eP	42	58.00	0.9
GLD	75.99	332	P	43	01.50	0.4
	1.2s	75.76nm			5.4mb	
			pP	43	32.20	121km
BAR	76.04	320	eP	43	02.00	0.7
PLM	76.64	320	eP	43	06.00	1.1
RVR	77.40	320	eP	43	10.00	1.2
MAW	77.54	163	iP	43	09.80	0.7
			e	43	39.00	114km
MWC	77.95	320	eP	43	13.00	0.9
PAS	77.96	320	eP	43	13.00	1.1
GSC	78.05	322	eP	43	13.00	0.5
MSU	78.11	327	P	43	12.80	-0.1
SBB	78.16	320	eP	43	13.00	-0.1
CLC	78.86	321	eP	43	17.00	0.1
			e	43	47.00	118km
ABL	79.07	320	P	43	18.00	-0.2
DAU	79.18	328	P	43	19.30	0.5
RSSD	79.23	335	P	43	17.60	-1.3
			pP	43	49.80	127km
ISA	79.24	321	eP	43	20.00	1.1
SYP	79.27	319	eP	43	21.00	1.8
HVD	79.34	119	iPd	43	39.00	19.1X
	1.2s	125.00nm				
KIM	79.62	117	iPd	43	22.50	1.2
DUG	79.74	327	P	43	21.20	-0.4
BCH	79.80	319	P	43	22.80	0.8
BW06	80.32	331	P	43	23.40	-1.3
	0.9s	28.81nm			5.1mb	
TNP	80.34	323	P	43	24.40	-0.5
	0.8s	21.32nm			5.0mb	
PHAM	80.44	320	P	43	26.40	1.1
BLF	80.55	118	iPc	43	25.50	-0.8
	1.0s	84.00nm			5.5mb	
PRI	80.81	320	eP	43	28.00	0.7
KVN	81.52	323	P	43	30.20	-0.8
SAO	81.70	320	eP	43	32.30	0.6
IMW	81.82	331	P	43	37.80	5.2X
CMB	82.01	321	eP	43	32.50	-0.9
ARN	82.16	320	P	43	35.30	1.1
GCC	82.20	320	eP	43	35.00	0.7
MHC	82.21	320	eP	43	35.30	0.7
HPI	82.62	329	P	43	36.70	-0.1
BKS	82.93	320	eP	43	39.10	1.0
	0.6s	35.00nm			5.4mb	
BRK	82.94	320	eP	43	38.80	0.7
TIO	83.25	49	iPc	43	42.00	1.9
			i	44	15.00	129km
ORV	83.70	322	eP	43	42.40	0.4
SLR	83.77	116	iPc	43	39.80	-3.2X
	0.9s	54.62nm			5.4mb	
			i	43	43.50	12kmX
LRM	84.00	331	ePd	43	43.50	-0.2
MIN	84.32	322	e(P)	43	44.00	-1.2
AVE	84.64	48	eP	43	30.00	-16.8X
			i	43	48.00	65kmX
WDC	84.99	322	eP	43	47.00	-1.4
LBFM	85.18	323	P	43	48.70	-0.9
IFR	86.28	49	iP	43	57.50	2.3
BUL	86.73	111	iPd	43	51.00	-6.7X
	0.9s	19.33nm			5.1mb	
SES	87.09	334	eP	43	57.00	-1.5
	0.7s	37.00nm			5.5mb	
			pP	44	29.00	124km
FFC	87.76	341	iPc	44	01.60	0.0
	1.0s	22.00nm			5.1mb	
DPW	88.10	329	P	44	02.60	-0.9
CIR	88.72	113	iPc	43	58.00	-9.1X
LON	88.97	327	P	44	07.00	-0.6
HBZ	89.04	227	P	44	11.00	2.7
KRI	89.17	109	iPc	44	06.80	-2.6
BMW	89.47	326	P	44	09.70	-0.3
RMW	89.48	327	P	44	08.80	-1.2
			pP	44	40.50	122km
BCAO	89.71	85	iPd	44	13.10	1.3
	0.7s	42.00nm			5.6mb	
PNT	89.81	329	eP	44	11.00	-0.4
	0.6s	6.00nm			4.9mb	
GMW	90.01	327	P	44	12.30	-0.1
EDM	90.21	335	eP	44	12.50	-0.7
MCW	90.83	328	P	44	16.50	0.4
PGC	91.10	327	eP	44	18.00	0.7
LFF	96.67	42	eP	44	43.70	0.8
	0.8s	10.75nm			5.4mb	
LPO	96.79	42	eP	44	44.40	0.9
	0.8s	5.40nm			5.1mb	
MFF	97.09	40	eP	44	45.50	0.7
	1.0s	14.00nm			5.4mb	
CAF	97.44	43	eP	44	47.30	0.8
	1.0s	7.00nm			5.1mb	
LSF	97.85	41	eP	44	48.80	0.6
YKA	97.88	340	eP	44	47.20	-0.8
	0.7s	5.70nm			5.2mb	
TCF	98.27	41	eP	44	50.50	0.4
	0.8s	2.70nm			4.8mb	
MAF	98.44	42	eP	44	51.70	0.8
	0.9s	4.90nm			5.1mb	
BGF	98.79	41	eP	44	53.20	0.7
AVF	99.21	41	eP	44	54.80	0.5
	1.0s	4.00nm			5.0mb	
SMF	99.41	42	eP	44	56.20	0.9
	0.8s	9.40nm			5.4mb	
SSF	99.44	41	eP	44	55.80	0.4
	1.0s	6.00nm			5.1mb	
LBF	99.67	42	eP	44	56.80	0.2
	1.0s	6.00nm			5.1mb	
LOR	99.75	41	eP	44	57.00	0.1
	0.8s	4.05nm			5.1mb	
LPL	100.56	44	ePdiff45	02.30		1.3
LPG	100.57	44	ePdiff45	02.20		1.1
	1.0s	6.00nm			5.2mb	
BSF	101.75	42	ePdiff45	06.30		0.3
CDF	102.32	41	ePdiff45	08.90		0.4
MBC	109.17	349	ePKP	49	42.00	0.4
SOH	109.53	54	ePdiff45	56.50		15.8X
OUR	109.80	54	ePdiff45	56.70		14.9X
APO	110.99	32	ePKP	49	43.80	-1.7
	0.6s	3.00nm				
ASPA	123.66	205	ePKP	50	08.80	-2.1
	0.5s	16.00nm				
WRA	126.86	207	PKPc	50	16.00	-1.2
	0.7s	21.80nm				
WB5	126.90	208	ePKP	50	16.20	-1.1
MAID	136.08	66	iPKPc	50	35.40	1.0
KOD	143.46	113	ePKP	50	47.00	-1.5
GBA	145.25	108	PKPd	50	49.90	-1.2
	0.7s	119.10nm				
GUA	145.36	251	ePKP	50	51.60	0.3
	0.8s	149.25nm				
GUMO	145.42	252	ePKP	50	51.60	0.2
PJG	145.42	252	ePKP	50	51.80	0.4
HYB	148.01	103	ePKP	50	57.00	1.4
	1.0s	140.00nm				
			i	50	59.00	
PPI	149.31	158	ePKP	51	08.70	11.0X
KUSJ	149.48	307	ePKP	50	57.60	0.5
NDI	150.18	82	ePKP	50	59.50	0.9
ASAJ	150.56	310	ePKP	51	00.20	1.5
HOOJ	150.69	307	ePKP	51	00.30	1.4
PSI	151.71	153	ePKPc	51	07.80	6.5X
WMQ	155.77	45	ePKP	51	08.00	1.8
GKN	156.57	85	PKP	51	08.60	0.8
DMN	156.92	86	PKP	51	09.40	1.0
PKI	157.18	86	PKP	51	09.40	0.6
GUN	157.64	86	PKP	51	10.20	0.8
CHG	165.13	128	ePKP	51	18.10	1.3
GTA	165.63	38	iPKPc	51	18.80	2.0
BJI	167.87	342	ePKP	51	20.00	1.8
TIY	170.84	354	ePKP	51	21.00	0.9
TIA	170.92	328	PKPc	51	21.40	1.3
XAN	174.20	20	PKP	51	22.50	1.0

S.D. = 1.2 on 141 of 163 obs.

JUN 29, 1990 06h 52m 29.65± 0.67s
44.988 N ± 5.5km 10.349 E ± 8.1km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)

BOB	0.68	251	P	52	42.80	-0.4
			eSg	52	54.10	
MME	0.83	162	P	52	45.80	-0.1
MDI	0.91	331	P	52	46.80	-0.2
			eSg	53	00.40	
BDI	0.94	169	P	52	48.70	1.0
PII	1.27	174	P	52	52.50	-0.8
			eSn	53	11.00	
VAI	1.42	309	P	52	56.00	0.6
FVI	2.34	46	P	53	08.50	-0.2

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

& JUN 29, 1990 07h 06m 44.08s
62.930 N 149.453 W
DEPTH = 78.4km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.10	300	eP	06	55.36	1.6
			eS	07	03.69	
CUT	0.65	216	iP	06	59.03	-0.2
			eS	07	09.97	
MCK	0.84	16	iP	07	01.39	0.0
KTH	0.91	314	eP	07	02.16	-0.2
GHO	1.19	168	eP	07	05.80	0.1
			eS	07	23.51	
SML	1.24	155	eP	07	06.35	0.0
			eS	07	24.74	

29d 07h

PWA	1.30	189	iP	07 07.08	0.0
PLRM	1.35	173	eP	07 08.01	0.3
			eS	07 27.73	
SKT	1.36	226	eP	07 07.35	-0.5
			eS	07 25.00	
SUA	1.59	203	eP	07 11.29	0.2
			eS	07 34.20	
NEA	1.66	6	eP	07 10.95	-0.9
WRH	1.66	21	iP	07 11.28	-0.6
PMS	1.69	182	eP	07 13.43	1.1
			eS	07 36.53	
TOA	1.73	117	eP	07 12.15	-0.8
PAX	1.82	87	eP	07 14.82	0.7
			eS	07 36.85	
SDG	1.85	101	eP	07 15.41	1.0
CCB	1.87	22	iP	07 13.90	-0.8
NCG	1.99	221	eP	07 16.67	0.2
CGLM	2.02	218	eP	07 17.22	0.3
FBA	2.11	20	iP	07 17.27	-0.7
KLU	2.20	129	eP	07 21.27	2.0
GLI	2.34	150	eP	07 22.97	1.8
SLKM	2.46	189	eP	07 23.30	0.5
CNPM	3.52	195	eP	07 37.03	-0.5

24 obs. associated

• JUN 29, 1990 07h 24m 35.01± 0.50s
10.133 N ±12.3km 57.424 E ± 8.1km
DEPTH = 10.0km (geophysicist)
4.8mb (11 obs.) 3.9Msz (1 obs.)
CARLSBERG RIDGE (421)

QUE	21.84	23	eP	29 36.90	7.1X
MAIO	26.12	4	eP	30 16.00	5.0X
PKI	31.54	53	P	31 00.00	-0.2
BCAO	38.96	265	iPc	32 03.10	-0.3
	0.9s		14.00nm	4.6mb	
SBF	54.65	317	eP	34 06.70	0.3
FRF	55.07	317	eP	34 09.90	0.5
LMR	55.08	316	eP	34 09.70	0.2
	0.9s		13.10nm	5.0mb	
LRG	55.22	316	eP	34 10.90	0.4
LPL	55.75	319	eP	34 14.10	-0.5
CDF	56.58	322	eP	34 20.30	-0.1
	0.9s		9.85nm	4.8mb	
BSF	56.64	321	eP	34 20.40	-0.4
HAU	56.98	321	eP	34 22.60	-0.5
LBF	58.07	320	eP	34 30.70	-0.1
	0.9s		8.20nm	4.8mb	
LOR	58.25	320	eP	34 31.80	-0.2
	0.8s		9.40nm	4.9mb	
SSF	58.40	320	eP	34 32.80	-0.3
	0.8s		6.70nm	4.8mb	
BGF	58.65	319	eP	34 34.90	0.1
	0.9s		13.10nm	5.0mb	
DOU	58.88	323	Pc	34 37.40	1.0
HFS	59.51	336	eP	34 40.50	-0.1
	0.8s		7.60nm	4.9mb	
Z	19s		0.09um	3.9Msz	
			LR	01 31.00	
LDF	61.22	320	eP	34 52.10	-0.3
	0.7s		11.00nm	5.1mb	
FLN	61.50	320	eP	34 53.80	-0.5
TOL	61.74	310	eP	34 57.00	0.8
EKA	65.18	327	Pc	35 18.50	0.1
	0.8s		4.70nm	4.7mb	
WRA	81.35	112	Pc	36 53.80	0.0
	0.9s		6.70nm	4.7mb	
WB5	81.36	112	eP	36 54.00	0.2

S.D. = 0.4 on 22 of 24 obs.

• JUN 29, 1990 08h 04m 10.38± 1.00s
44.793 N ± 6.5km 7.234 E ±12.4km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.9 (GEN).

PZZ	0.30	198	P	04 17.53	0.8
			S	04 21.32	
RRL	0.34	292	P	04 17.22	-0.4
			S	04 20.81	
STV	0.55	173	P	04 21.12	-0.6
			S	04 29.12	
ENR	0.58	167	P	04 22.11	-0.1
LSD	0.67	355	P	04 24.11	0.3

S.D. = 0.7 on 5 of 5 obs.

JUN 29, 1990 08h 55m 19.95± 0.24s
44.183 N ± 2.3km 6.357 E ± 2.1km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.8 (LDG). MD 2.4 (STR).

GANF	0.37	240	Pg	55 27.00	-0.6
			Sg	55 33.26	
VILF	0.57	235	Pg	55 31.93	0.4
CALN	0.58	138	Pg	55 32.47	0.7
			Sg	55 41.18	
TAVF	0.61	201	Pg	55 31.66	-0.6
			Sg	55 41.40	
PZZ	0.62	59	P	55 32.27	-0.3
			S	55 42.08	
MVIF	0.64	116	Pg	55 32.81	-0.1
FRF	0.66	161	Pg	55 32.80	-0.2
			Sg	55 42.40	
TOUF	0.66	104	Pg	55 33.03	-0.3
STV	0.70	85	P	55 33.39	-0.4
			S	55 43.44	
LRG	0.73	180	Pg	55 33.90	-0.3
			Sg	55 46.00	
AURF	0.76	113	Pg	55 35.01	0.1
			Sg	55 46.07	
ENR	0.77	86	P	55 34.62	-0.3
			S	55 45.49	
AUTN	0.79	103	Pg	55 35.35	-0.2
RRL	0.80	22	P	55 35.34	-0.3
			S	55 45.90	
PUYF	0.81	216	Pg	55 35.06	-0.5
			Sg	55 47.49	
SBF	0.84	112	Pg	55 36.60	0.4
			Sg	55 49.20	
REVF	0.85	121	Pg	55 37.41	1.0
			Sg	55 50.28	
LMR	0.86	173	Pn	55 36.00	-0.4
			Pg	55 37.00	
			Sg	55 48.00	
SAOF	0.89	102	Pg	55 37.00	0.0
BNI	0.90	15	P	55 37.00	-0.3
			eSg	55 49.50	
TREF	0.90	232	Pg	55 37.57	0.4
PRAF	0.94	247	Pg	55 38.43	0.6
			Sg	55 52.10	
BERF	0.99	209	Pg	55 39.83	1.0
			Sg	55 53.67	
GELF	1.05	220	Pg	55 40.21	0.5
			Sg	55 54.33	
IMI	1.14	103	P	55 41.60	0.3
			S	55 56.34	
FIN	1.33	88	P	55 44.78	0.2
			S	56 01.00	
LPG	1.34	12	Pn	55 45.30	0.4
			Sg	56 03.60	
LPL	1.36	11	Pn	55 45.60	0.5
			Sg	56 04.80	
LSD	1.40	24	P	55 46.21	0.5
PCP	1.61	76	P	55 49.49	1.0
			S	56 09.00	
ORX	1.85	38	P	55 51.75	-0.4
PGF	2.53	129	Pn	56 00.03	-1.7
BGF	3.43	315	Pn	56 13.60	-0.9
			Sg	57 05.60	

S.D. = 0.6 on 33 of 33 obs.

JUN 29, 1990 09h 07m 00.30± 0.68s
40.640 N ± 5.7km 22.942 E ± 6.2km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 1.5 (THE).

THE	0.02	114	iPgc	07 01.90	-0.3
			eSg	07 02.80	
SOH	0.36	60	ePg	07 07.30	-0.5
GRG	0.52	308	ePg	07 10.70	-0.1
KNT	0.52	356	ePgd	07 11.30	0.4
			eSg	07 18.90	
LIT	0.64	213	ePg	07 12.90	-0.2
PAIG	0.91	141	ePg	07 18.30	0.6

S.D. = 0.6 on 6 of 6 obs.

JUN 29, 1990 10h 53m 34.38± 0.32s
52.762 N ± 7.9km 171.940 E ± 3.8km
DEPTH = 33.0km (normal)
4.6mb (30 obs.)
NEAR ISLANDS, ALEUTIAN ISLANDS (5)

SMY	1.32	91	eP	53 56.70	0.2
ADK	7.03	93	eP	55 18.50	1.0
SVW	19.39	52	eP	58 02.30	2.2
TTA	19.64	46	eP	58 02.90	0.0
KDC	20.71	62	eP	58 13.60	-0.3
IMA	21.62	39	ePc	58 24.70	1.4
	0.9s		7.80nm	4.1mb	
PMR	22.55	52	eP	58 33.20	0.8
FBA	23.64	43	eP	58 42.80	-0.2
	1.1s		52.60nm	5.0mb	
TOA	23.99	51	eP	58 47.40	0.9
INK	29.74	38	eP	59 39.00	-0.3
MBC	34.52	23	eP	00 19.50	-1.5
	0.6s		3.00nm	4.4mb	
YKA	38.40	46	eP	00 53.50	-0.3
	0.8s		6.30nm	4.5mb	
PNT	41.70	66	eP	01 21.00	-0.3
	0.6s		5.00nm	4.4mb	
EDM	43.04	58	eP	01 32.00	-0.2
TIY	43.25	274	eP	01 35.60	1.4
LBFM	44.97	77	eP	01 48.20	0.0
SES	45.77	61	eP	01 54.00	-0.2
WHN	46.95	265	eP	02 04.20	0.5
FFC	47.86	51	eP	02 13.00	2.5
	0.7s		7.00nm	4.8mb	
KVN	48.67	77	eP	02 16.20	-1.0
LZH	49.51	279	P	02 24.30	0.6
	1.5s		34.00nm	5.2mb	
GTA	49.71	285	Pd	02 25.00	-0.2
Z	30s		2.40um	5.0MszX	
TNP	49.82	77	eP	02 25.50	-0.6
	0.7s		2.22nm	4.3mb	
DUG	51.02	72	eP	02 34.60	-0.5
BW06	51.20	68	eP	02 35.50	-1.1
	0.7s		2.05nm	4.2mb	
MSU	52.50	74	eP	02 46.00	-0.5
RSSD	53.38	63	eP	02 51.50	-1.4
ALO	58.28	73	eP	03 27.50	-0.7
	0.9s		2.52nm	4.3mb	
CHG	64.98	268	eP	04 13.10	-0.1
NB2	65.51	350	P	04 15.00	-1.0
	0.6s		8.60nm	5.0mb	
GUN	66.00	285	P	04 20.00	0.0
	0.6s		22.00nm	5.4mb	
HFS	66.11	348	eP	04 18.20	-1.6
	0.5s		9.20nm	5.1mb	
PKI	66.53	285	P	04 23.00	-0.4
	0.6s		16.00nm	5.3mb	
GKN	66.66	286	P	04 23.60	-0.4
	0.8s		15.00nm	5.1mb	
DMN	66.68	285	P	04 24.00	-0.3
	0.6s		11.00nm	5.1mb	
EKA	72.20	357	P	04 57.00	-0.3
	0.9s		9.80nm	4.8mb	
KHC	76.83	346	P	05 25.00	0.8
CDF	78.36	350	eP	05 32.30	-0.4
FLN	78.65	355	eP	05 33.70	-0.4
	0.6s		3.60nm	4.6mb	
LDF	78.80	355	eP	05 35.10	0.2
	0.8s		5.35nm	4.6mb	
HAU	78.86	350	eP	05 35.20	-0.1
	0.8s		5.35nm	4.6mb	
BSF	78.99	350	eP	05 35.70	-0.4
GRR	79.04	355	eP	05 36.10	-0.1
	0.7s		6.60nm	4.7mb	
WB5	79.35	216	eP	05 38.10	-0.1
LPF	79.41	355	eP	05 38.20	0.0
	0.6s		3.60nm	4.5mb	
WRA	79.42	216	Pc	05 38.90	0.4
	0.9s		5.70nm	4.6mb	
SSF	80.07	352	eP	05 41.80	0.0
	0.6s		3.60nm	4.5mb	
AVF	80.35	352	eP	05 43.40	0.1
	0.8s		4.05nm	4.5mb	
SMF	80.45	352	eP	05 43.40	-0.4
TCF	80.94	353	eP	05 46.50	0.0
	0.6s		1.80nm	4.2mb	
MAF	80.98	353	eP	05 47.10	0.5
	0.6s		2.70nm	4.4mb	
LPG	81.30	350	eP	05 49.10	0.4
	0.8s		4.70nm	4.5mb	
CAF	82.30	353	eP	05 54.40	0.8
	0.7s		4.40nm	4.6mb	
PGF	83.93	347	eP	06 02.80	0.7
	0.8s		9.40nm	5.0mb	

S.D. = 0.8 on 54 of 54 obs.

& JUN 29, 1990 12h 02m 27.75s
64.525 N 147.870 W
DEPTH = 8.6km
CENTRAL ALASKA (1)
<AGS-P>.

WRH	0.11	241	iP	02 31.30	0.9
CCB	0.13	13	iP	02 30.74	0.1
			eS	02 32.58	
FBA	0.38	5	iP	02 34.95	-0.5
			eS	02 39.64	
GLM	0.51	24	eP	02 37.22	-0.8
			eS	02 43.52	
NEA	0.52	276	iP	02 38.00	-0.3
			eS	02 46.10	
MCK	0.92	211	eP	02 45.99	0.5
			eS	02 58.29	
DMW	1.04	116	eP	02 47.79	0.2
KTH	1.66	235	eP	02 58.33	1.1
			eS	03 20.12	
DOT	1.89	116	eP	03 02.81	2.3
			eS	03 26.35	
PAX	1.89	145	eP	03 02.83	2.2
			eS	03 27.22	
SDG	2.26	151	eP	03 10.15	4.2
			Sn	03 38.20	
FYU	2.32	27	eP	03 10.76	4.0
			eS	03 38.95	
CUT	2.39	208	eP	03 12.44	4.8
			Sn	03 41.41	
TOA	2.55	162	eP	03 15.53	5.5
SCM	2.71	175	eP	03 17.57	5.1
SML	2.74	185	eP	03 14.89	2.2
			eS	03 50.72	
GHO	2.80	190	eP	03 16.44	2.7
IMA	2.89	305	eP	03 22.82	7.9
			Sn	03 52.73	
PLRM	3.00	192	eP	03 20.91	4.6
			eS	03 59.56	
PWA	3.03	198	eP	03 22.15	5.5
SKT	3.04	215	eP	03 20.65	3.7
KLU	3.17	163	eP	03 21.83	3.0
DWY	3.71	94	P	03 24.80	-1.7

23 obs. associated

• JUN 29, 1990 12h 07m 39.70± 1.49s
44.865 N ± 7.5km 34.741 E ±16.1km
DEPTH = 33.0km (normal)
3.9mb (3 obs.)
CRIMEA REGION (361)

KAS	3.56	192	ePn	08 36.50	2.4
			iSg	09 17.00	
TLB	4.79	269	ePc	08 51.50	0.2
CLI	5.49	291	eP	09 02.50	1.2
HRT	5.50	224	iPn	09 01.70	0.3
GBZT	5.64	226	ePn	09 03.00	-0.3
ISK	5.64	230	iPn	09 02.80	-0.5
VRI	5.74	283	ePd	09 06.00	1.2
YLV	5.84	224	ePn	09 05.00	-1.3
DMK	5.93	242	ePn	09 05.90	-1.6
CTT	5.93	233	eP	09 06.50	-1.1
MLR	6.25	279	iPd	09 13.00	0.8
SUF	18.56	348	eP	11 54.10	-1.5
	0.6s		4.00nm		3.8mb
HFS	19.81	328	eP	12 09.20	-0.8
	0.7s		10.90nm		4.3mb
NB2	21.33	328	P	12 26.60	0.9
	0.5s		2.50nm		3.9mb

S.D. = 1.3 on 14 of 14 obs.

• JUN 29, 1990 12h 10m 28.72± 1.60s
44.901 N ± 8.4km 34.245 E ±21.1km
DEPTH = 33.0km (normal)
3.7mb (2 obs.)
CRIMEA REGION (361)

KAS	3.55	186	ePn	11 23.00	0.1
			iSg	12 06.50	
HRT	5.28	221	ePn	11 48.70	1.2
ISK	5.40	227	ePn	11 48.00	-1.0
YLV	5.62	221	ePn	11 51.00	-1.3
DMK	5.64	239	ePn	11 52.80	0.4
CTT	5.68	231	eP	11 53.50	0.6
HFS	19.59	328	eP	14 56.80	0.1
	0.4s		3.40nm		4.0mb
NB2	21.11	328	P	15 12.40	-0.1
	0.6s		1.00nm		3.4mb

S.D. = 1.0 on 8 of 8 obs.

JUN 29, 1990 12h 17m 05.68± 0.68s
40.520 N ± 5.7km 23.701 E ± 7.2km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 2.0 (THE).

OUR	0.28	131	ePgd	17 11.80	0.2
SOH	0.40	319	ePgc	17 13.90	0.0
			eSg	17 18.90	
PAIG	0.59	182	iPgc	17 17.20	-0.4
SRS	0.60	352	ePg	17 18.00	0.2
			eSg	17 26.90	
KNT	0.88	317	ePg	17 22.50	-0.2
			eSn	17 35.50	
LIT	1.02	246	ePg	17 25.50	0.6
GRG	1.08	294	ePg	17 25.70	-0.3
			eS	17 40.60	

S.D. = 0.4 on 7 of 7 obs.

% JUN 29, 1990 12h 38m 50.18± 0.75s
40.441 N ± 7.0km 23.589 E ± 8.9km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 1.5 (THE).

OUR	0.32	109	ePgc	38 57.40	0.6
SOH	0.42	335	ePg	38 58.80	0.0
			eSg	39 05.40	
PAIG	0.52	172	ePg	39 00.10	-0.6
			eSg	39 08.60	
SRS	0.68	0	ePg	39 03.00	-0.6
KNT	0.89	324	ePg	39 06.90	-0.4
			eSg	39 20.30	
GRG	1.04	300	ePg	39 10.70	0.9
			eSg	39 25.30	

S.D. = 0.8 on 6 of 6 obs.

• JUN 29, 1990 12h 40m 08.74± 1.65s
35.510 N ±23.2km 27.073 E ± 8.6km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)

YER	1.89	31	iPn	40 41.70	0.3
APE	1.99	322	ePn	40 47.00	4.1X
KSL	2.13	73	ePn	40 43.50	-1.3
SMG	2.20	355	ePb	40 52.50	6.7X
CIN	2.24	21	eP	40 48.00	1.6
VAM	2.35	268	iPbd	40 49.70	1.7
ELL	2.61	61	iPn	40 52.50	0.7
KHL	3.43	34	ePn	41 02.00	-1.3
BCK	3.44	54	ePn	41 04.60	1.1
VLI	3.56	291	ePn	41 03.30	-1.8
ITM	4.48	293	ePn	41 18.30	0.1

S.D. = 1.5 on 9 of 11 obs.

JUN 29, 1990 13h 29m 48.81± 0.38s
39.144 N ± 4.1km 20.502 E ± 3.2km
DEPTH = 56.6 ± 13.1 km
3.8mb (2 obs.)
GREECE-ALBANIA BORDER REGION (392)
MD 3.9 (ATH).

IGT	0.41	341	ePgd	30 09.70	10.0X
KEK	0.79	316	eP	30 01.70	-2.4
VLS	0.97	176	eP	30 06.80	0.3
LSK	1.01	4	iPgd	30 04.50	-2.6
AGG	1.43	94	ePb	30 14.00	1.2
			eSb	30 35.70	
KBN	1.50	9	ePn	30 15.30	1.6
VLO	1.53	330	ePn	30 14.70	0.5
BERA	1.61	345	iPnd	30 16.10	0.8
FNA	1.77	22	ePbd	30 20.30	2.7X
			eSb	30 45.60	
LIT	1.81	57	iPbd	30 18.30	0.2
			eSb	30 43.70	
OHR	1.98	7	iPn	30 22.00	1.5
			iSg	30 51.20	
TIR	2.25	348	ePn	30 25.50	1.2
ITM	2.26	150	eP	30 25.50	1.1
LCI	2.30	302	P	30 26.50	1.6
GRG	2.32	38	ePn	30 25.50	0.1
LACI	2.56	347	iPn	30 29.00	0.4
VAY	2.69	35	iPn	30 30.30	-0.2
			iPg	30 33.70	
			iSg	31 05.70	
KNT	2.73	42	iPnc	30 30.70	-0.3
SOH	2.76	52	ePnc	30 30.70	-0.8
ATH	2.78	114	eP	30 32.50	0.7
SKO	2.91	14	iPnd	30 34.00	0.3
			i	30 40.50	
			i	30 47.00	
			i	30 59.00	
			i	31 16.00	
			i	31 19.50	
SDA	2.97	345	ePn	30 35.00	0.5
ULC	2.97	342	iPnd	30 33.60	-1.0
BRT	3.07	305	P	30 37.50	1.6
SRS	3.08	49	iPnd	30 34.80	-1.3
VLI	3.09	141	eP	30 37.50	1.2
BCI	3.24	354	iPnc	30 39.50	1.3
ORI	3.26	288	P	30 40.50	1.8
TDS	3.27	280	P	30 40.50	1.8
KKB	3.36	35	iP	30 40.00	0.0
BDV	3.38	338	ePn	30 39.00	-1.4
			eSn	31 17.20	
TTG	3.42	344	ePn	30 39.50	-1.3
			eSn	31 17.50	
HCY	3.63	336	iPnc	30 41.70	-2.1
			eSn	31 22.10	
SOI	3.64	254	P	30 43.00	-1.0
NKY	3.84	343	ePn	30 45.60	-1.2
MGR	3.95	286	P	30 48.00	-0.3
VTS	4.01	30	iPg	30 50.00	0.7
ATN	4.07	258	P	30 49.50	-0.5
RZN	4.10	50	iP	30 51.00	0.4
SGO	4.24	291	P	30 53.00	0.6
RDO	4.35	61	eP	30 52.50	-1.4
KDZ	4.51	55	eP	30 53.00	-3.2X
BSS	4.68	292	P	30 59.50	1.0
VAM	4.75	141	eP	30 57.30	-2.3
MEU	4.84	247	P	30 58.80	-2.2
			eSn	31 54.30	
HVAR	5.06	324	iPn	31 10.60	6.7X
DUI	5.25	301	P	31 06.50	-0.3
PVL	5.46	40	iPc	31 07.00	-2.5X
JMB	5.68	52	eP	31 14.00	1.3
SDI	5.71	299	P	31 13.60	0.5
BUC1	6.64	37	eP	31 05.00	-21.0X
ASS	7.10	306	P	31 32.50	-0.1
ARV	7.16	310	P	31 32.00	-1.3
ALT	7.47	88	eP	31 37.00	-0.8
MLR	7.51	31	eP	31 29.00	-9.3X
PTJ	7.54	335	e(P)	31 29.70	-8.9X
CRE	7.83	308	P	31 42.50	-0.2
CEY	7.97	328	e(P)	31 42.00	-2.5X
			e(Sn)	33 12.00	
SFI	8.05	309	P	31 46.00	0.4
PGD	8.11	308	P	31 47.00	0.4
VRI	8.14	32	ePd	31 48.00	1.2
LJU	8.18	329	eP	31 44.50	-2.8X
			e(S)	33 03.50	
VOY	8.43	327	ePn	31 48.10	-2.8X
			eSn	33 19.60	
FVI	9.35	325	P	32 04.00	0.5
EKA	22.64	323	Pd	34 46.10	0.4
	0.9s		4.50nm		3.9mb
NB2	22.67	348	P	34 44.60	-1.4
	1.0s		2.90nm		3.7mb

S.D. = 1.2 on 55 of 66 obs.

• JUN 29, 1990 14h 41m 45.52± 1.08s
7.598 S ± 9.1km 128.273 E ±19.7km
DEPTH = 168.6 ± 17.7 km
4.7mb (6 obs.)
BANDA SEA (280)

AAI	3.89	359	eP	42 46.10	0.7
KUG	5.28	241	ePd	43 49.00	45.3X
			eS	44 19.50	
MTN	5.92	152	eP	43 12.00	-0.2
			eS	44 15.00	
KNA	8.12	177	eP	43 40.60	-0.8
	0.2s		48.00nm		5.6mb
			eS	45 06.00	
WB5	13.56	155	eP	44 50.10	-2.2
			eS	47 14.00	
WRA	13.61	155	Pd	44 49.80	-3.1X
	0.6s		14.50nm		4.5mb
MBL	15.76	210	eP	45 20.00	0.3
			eS	48 04.00	
ASPA	16.87	162	eP	45 33.90	0.6

29d 14h

	0.7s	28.00nm		4.7mb	
		eS	48 35.00		
OIS	16.92	141 eP	45 35.00	1.1	
		eS	48 33.00		
WARB	18.55	185 eP	45 54.00	1.9	
	0.4s	6.00nm		4.3mb	
GUN	54.07	313 P	50 55.00	-0.5	
	0.6s	11.00nm		4.8mb	
PKI	54.23	312 P	50 56.00	-0.6	
GKN	55.04	312 P	51 02.00	-0.2	
	0.5s	7.00nm		4.7mb	
CNCB	150.90	147 PKPc	01 24.50	9.4X	
ZOBO	151.26	146 PKP	01 26.00	10.3X	
	S.D. = 1.3	on 11 of 15 obs.			

? JUN 29, 1990 17h 00m 04.38± 1.48s
7.726 S ±14.7km 128.443 E ±32.8km
DEPTH = 120.1 ± 34.8 km
4.2mb (3 obs.)
BANDA SEA (280)

AAI	4.02	356 ePc	01 05.00	-0.1	
MTN	5.73	153 eP	01 30.00	1.5	
		eS	02 33.00		
KNA	7.98	178 eP	01 59.10	0.0	
		eS	03 23.00		
WB5	13.38	155 eP	03 08.80	-1.9	
		eS	05 30.00		
WRA	13.42	155 Pc	03 09.30	-2.0	
	0.6s	5.60nm		4.2mb	
ASPA	16.69	162 eP	03 53.20	0.7	
	0.8s	21.00nm		4.5mb	
		eS	06 42.30		
OIS	16.71	141 eP	03 54.00	1.2	
		eS	06 50.00		
WARB	18.44	185 eP	04 14.00	0.6	
	0.5s	3.00nm		3.8mb	
CNCB	150.70	146 PKP	19 45.00	5.3X	
LPB	150.86	146 (PKP)	19 47.00	7.3X	
ZOBO	151.06	146 ePKP	19 29.00	-11.2X	
	S.D. = 1.7	on 8 of 11 obs.			

? JUN 29, 1990 17h 16m 08.78± 1.54s
35.795 N ±17.2km 23.497 E ±15.2km
DEPTH = 10.0km (geophysicist)
CRETE (370)

VAM	0.69	124 iPbc	16 22.20	-0.3	
		eSb	16 31.00		
VLI	1.03	334 ePb	16 27.20	-1.0	
ITM	1.87	318 ePn	16 42.00	0.8	
APE	2.08	52 ePn	16 44.50	0.4	
	S.D. = 1.4	on 4 of 4 obs.			

JUN 29, 1990 18h 01m 15.74± 0.40s
39.858 N ± 3.6km 28.913 E ± 3.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

DST	0.33	221 iPg	01 22.50	-0.2	
KCT	0.58	313 iPg	01 26.50	-1.0	
IZI	0.64	42 iPg	01 27.80	-0.9	
YLV	0.79	26 iPg	01 31.00	-0.2	
		iSg	01 41.50		
BNT	0.91	303 iPg	01 32.00	-1.1	
EDC	0.94	302 iPg	01 34.40	0.7	
		iSg	01 48.40		
GBZT	1.01	23 ePn	01 35.30	0.4	
HRT	1.12	31 iPn	01 36.80	0.0	
GPA	1.15	68 iPn	01 38.00	0.6	
ISK	1.21	5 ePn	01 38.00	-0.3	
ALT	1.23	130 iPn	01 38.70	0.1	
ITU	1.25	4 ePg	01 39.00	0.1	
		iSg	01 57.00		
CTT	1.34	344 ePn	01 40.50	0.1	
KGT	1.37	296 iPn	01 41.00	0.2	
KHL	1.60	163 iPn	01 44.00	-0.3	
EZN	1.99	270 iPn	01 50.20	0.4	
DMK	2.15	336 iPn	01 51.40	-0.7	
SMG	2.69	218 ePn	02 05.80	6.0X	
RDO	2.88	298 ePn	02 10.00	7.5X	
		eSn	02 49.50		
JMB	3.14	327 eP	02 08.00	1.8	
KDZ	3.20	305 eP	02 16.00	8.9X	
DIM	3.37	312 eP	02 21.00	11.6X	
RZN	3.67	301 ePd	02 14.00	0.0	
PVL	4.30	322 eP	02 18.00	-4.6X	
MMB	4.30	295 eP	02 23.00	0.2	
	S.D. = 0.7	on 20 of 25 obs.			

* JUN 29, 1990 18h 08m 11.17± 1.26s
44.196 N ± 6.0km 6.248 E ±14.5km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.4 (LDG).

FRF	0.70	155 Pg	08 24.80	-0.2	
		Sg	08 34.00		
LRG	0.75	174 Pg	08 25.60	-0.2	
		Sg	08 36.80		
LMR	0.88	168 Pn	08 28.40	0.3	
		Pg	08 29.40		
		Sg	08 40.40		
SBF	0.92	111 Pg	08 28.80	0.0	
		Sg	08 41.00		
LPG	1.35	15 Pn	08 36.20	0.0	
		Sg	08 54.50		
PGF	2.60	128 Pn	08 54.00	0.0	
		Sn	09 22.80		
	S.D. = 0.2	on 6 of 6 obs.			

JUN 29, 1990 18h 10m 19.26± 0.71s
39.867 N ± 5.7km 28.947 E ± 7.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

DST	0.36	223 iPg	10 26.50	-0.2	
IZI	0.62	40 iPg	10 31.70	-0.1	
		iSg	10 41.00		
YLV	0.77	25 ePg	10 34.00	-0.4	
HRT	1.10	30 ePn	10 40.00	0.0	
ALT	1.21	132 ePn	10 42.00	0.1	
CTT	1.34	343 ePn	10 44.20	0.3	
	S.D. = 0.3	on 6 of 6 obs.			

JUN 29, 1990 18h 13m 23.57± 0.57s
39.868 N ± 5.0km 28.935 E ± 5.2km
DEPTH = 14.1 ± 4.8 km
TURKEY (366)

DST	0.35	222 iPg	13 29.50	-1.6	
		iSg	13 32.50		
KCT	0.58	311 iPg	13 33.50	-1.6	
YLV	0.77	26 iPg	13 37.50	-0.8	
		iSg	13 48.00		
BNT	0.92	302 ePg	13 41.50	0.7	
EDC	0.95	301 iPg	13 42.40	1.1	
		iSg	13 56.40		
GBZT	1.00	23 ePg	13 42.40	0.3	
HRT	1.10	30 iPn	13 43.50	-0.5	
GPA	1.14	68 ePn	13 45.00	0.5	
ISK	1.20	4 ePn	13 45.50	0.0	
ALT	1.22	131 iPn	13 46.00	0.0	
CTT	1.33	343 ePn	13 47.00	-0.7	
KGT	1.38	296 iPn	13 49.50	1.2	
KHL	1.61	163 iPn	13 52.50	0.8	
DMK	2.15	336 ePn	13 59.90	0.5	
	S.D. = 1.0	on 14 of 14 obs.			

% JUN 29, 1990 18h 24m 46.35± 0.83s
43.897 N ± 8.9km 11.965 E ± 5.4km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

SFI	0.09	287 Pc	24 48.80	-0.1	
		eSg	24 51.20		
PGD	0.18	263 Pc	24 50.50	0.1	
		eSg	24 54.00		
CRE	0.27	182 P	24 51.80	-0.3	
		eSg	24 56.80		
RSM	0.35	85 P	24 53.80	0.2	
		eSg	24 59.90		
ARV	0.81	119 P	25 01.50	-0.6	
		eSg	25 13.50		
ASS	0.97	148 P	25 05.50	0.7	
	S.D. = 0.6	on 6 of 6 obs.			

JUN 29, 1990 18h 58m 13.91± 0.38s
39.150 N ± 3.9km 20.489 E ± 2.5km
DEPTH = 53.1 ± 9.5 km
4.2mb (4 obs.)
GREECE-ALBANIA BORDER REGION (392)
MD 4.3 (ATH).

IGT	0.40	342 iPgc	58 19.90	-4.5X	
KEK	0.78	317 ePg	58 27.20	-1.7	
VLS	0.97	175 ePg	58 30.70	-0.9	
LSK	1.00	5 ePg	58 38.00	6.0X	
TPE	1.20	342 iPgd	58 33.50	-1.2	
KBN	1.49	10 ePb	58 39.10	0.4	
VLO	1.52	330 iPn	58 40.90	1.8	
BERA	1.61	345 iPnc	58 39.50	-0.8	
FNA	1.77	22 ePnd	58 43.90	1.3	
LIT	1.81	58 iPnc	58 44.00	0.7	
		eSn	59 11.00		
OHR	1.97	7 iPnd	58 47.70	2.2	
		iSg	59 16.80		
TIR	2.25	348 iPnd	58 51.20	1.9	
ITM	2.27	150 iPgc	58 55.00	5.3X	
LCI	2.28	302 P	58 49.30	-0.5	
GRG	2.33	39 ePn	58 51.80	1.3	
		eSn	59 24.00		
THE	2.41	51 ePnc	58 52.00	0.4	
		eSn	59 25.40		
LACI	2.55	347 iPnc	58 54.60	1.0	
VAY	2.69	36 iPn	58 55.70	0.1	
		iSn	59 29.60		
		iSg	59 31.30		
KNT	2.73	42 ePnd	58 56.70	0.5	
ATH	2.79	114 iPnd	58 57.90	0.8	
SKO	2.91	14 iPnd	58 59.00	0.2	
		iPb	59 04.50		
		i	59 24.50		
		i	59 31.50		
		iSn	59 41.50		
		i	59 45.00		
SDA	2.96	346 ePn	59 00.50	1.0	
ULC	2.96	342 iPnd	58 59.30	-0.3	
		eSn	59 31.60		
BRT	3.06	305 P	59 02.00	1.1	
SRS	3.09	49 ePnd	59 01.50	0.2	
		eSn	59 42.20		
VLI	3.10	141 ePg	59 11.30	9.7X	
GRI	3.19	265 P	59 03.88	1.1	
BCI	3.23	354 iPnc	59 05.10	1.8	
ORI	3.25	288 P	59 03.90	0.2	
TDS	3.26	280 P	59 05.30	1.6	
KKB	3.36	35 ePd	59 05.00	-0.1	
BDV	3.37	339 iPnd	59 04.50	-0.9	
		eSn	59 42.60		
TTG	3.41	345 iPnd	59 05.30	-0.5	
		eSn	59 44.80		
PVY	3.46	354 ePn	59 07.30	0.6	
		eSn	59 49.00		
MMB	3.47	44 ePd	59 07.00	0.2	
HCY	3.62	336 iPnd	59 07.40	-1.5	
		eSn	59 48.70		
SOI	3.64	254 P	59 09.00	0.0	
IVA	3.74	353 ePn	59 11.20	0.6	
		eSn	59 54.50		
NKY	3.83	343 ePn	59 11.30	-0.6	
		eSn	59 54.30		
MGR	3.94	286 P	59 15.46	2.2	
VTS	4.01	30 ePd	59 15.00	0.6	
BRY	4.03	339 ePn	59 13.30	-1.3	
		eSn	00 00.00		
ATN	4.06	257 P	59 15.00	0.0	
RZN	4.10	50 iPd	59 16.00	0.2	
SGO	4.23	291 P	59 19.50	2.2	
PLE	4.26	349 ePn	59 18.00	0.1	
RDO	4.35	61 ePn	59 18.20	-0.9	
PLD	4.36	46 eP	59 21.00	1.8	
APE	4.49	116 ePn	59 20.00	-1.0	
KDZ	4.51	55 iPd	59 20.00	-1.4	
EZN	4.57	80 IP	59 22.20	0.1	
ALN	4.61	66 ePn	59 22.20	-0.5	
BSS	4.66	292 P	59 24.00	0.5	
		eSn	00 18.60		
MNO	4.70	257 P	59 23.00	-1.3	
VAM	4.77	140 ePn	59 25.50	0.5	
DIM	4.81	51 eP	59 24.00	-1.6	
MEU	4.84	247 P	59 24.70	-1.4	
		eSn	00 19.80		
PZI	4.88	246 P	59 23.47	-3.2X	
HVAR	5.05	324 iPn	59 27.40	-1.5	
		iSn	00 24.90		
SMG	5.19	104 ePn	59 30.00	-0.9	
GIB	5.20	259 P	59 34.00	2.9X	
DUI	5.24	300 P	59 32.80	1.0	
PVL	5.46	40 eP	59 31.00	-3.7X	
BEO	5.67	360 ePn	59 35.50	-2.1	

JMB	5.69	52	eP	59	38.00	0.1
SDI	5.70	299	P	59	38.90	0.8
			eSn	00	43.70	
AZI	6.07	300	P	59	44.50	1.2
DMK	6.15	62	eP	59	43.00	-1.4
DST	6.32	83	iP	59	48.50	1.6
CTT	6.40	69	eP	59	46.00	-1.9
BZS	6.52	7	ePc	59	49.00	-0.4
BUC1	6.64	37	eP	00	20.00	28.8X
MTUR	6.96	28	eP	00	00.00	4.3X
CMP	6.98	27	ePc	59	45.00	-11.0X
ASS	7.09	306	P	59	57.60	0.0
			eSn	01	17.60	
ARV	7.15	310	P	59	58.00	-0.4
PSN	7.34	49	eP	59	59.00	-2.0
ZAG	7.45	335	ePn	00	01.00	-1.4
ALT	7.48	88	eP	00	04.00	0.9
ISR	7.48	35	eP	00	00.00	-3.0X
MLR	7.51	31	eP	00	04.00	0.5
PTJ	7.53	335	ePn	00	00.70	-3.0X
RIY	7.67	326	ePn	00	03.30	-2.2
RSM	7.69	311	P	00	05.60	-0.2
CRE	7.82	308	P	00	07.00	-0.8
CEY	7.96	328	ePn	00	07.80	-1.8
			eSn	01	34.90	
SFI	8.04	309	P	00	11.00	0.3
			eSn	01	39.20	
PGD	8.10	308	P	00	12.00	0.4
			eSn	01	40.00	
VRI	8.14	32	ePd	00	13.50	1.5
LJU	8.17	329	ePn	00	10.00	-2.4
			eSn	01	38.50	
TRI	8.22	325	iPnc	00	09.40	-3.8X
			iSn	01	36.20	
VOY	8.42	327	ePnc	00	13.60	-2.4
			eSn	01	44.00	
SRO	8.80	350	eP	00	44.30	23.2X
CLI	8.92	32	eP	00	29.00	6.2X
FVI	9.34	325	P	00	28.00	-0.5
ZST	9.37	346	eP	00	31.20	2.3
BOB	9.95	308	P	00	37.10	0.1
SQTA	10.53	323	iPc	00	44.20	-0.7
			iPP	00	52.80	
			iPPP	00	58.90	
			i	01	05.80	
			iS	02	37.80	
			iSS	02	53.20	
KHC	11.14	336	eP	00	51.00	-2.1
			e	01	01.60	
CLL	13.24	339	e(P)	01	31.00	10.0X
HFS	21.44	351	eP	02	57.40	-1.8X
	1.1s		9.60nm			4.1mb
	Z 15s		0.03um			2.8MszX
			LR	08	33.00	
EKA	22.63	323	Pd	03	12.00	1.0
	0.7s		7.70nm			4.2mb
NB2	22.66	348	P	03	12.70	1.3
	0.5s		1.90nm			3.8mb
SUF	23.85	6	iP	03	23.40	0.6
	0.7s		10.80nm			4.5mb
TEH	24.71	88	eP	03	49.00	17.5X
MAIO	30.82	83	eP	04	27.00	0.0
	S.D. = 1.2		on 88 of 106 obs.			

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* JUN 29, 1990 20h 07m 19.46± 1.82s
45.767 N ±11.9km 26.802 E ± 9.5km
DEPTH = 93.7 ± 21.2 km
ROMANIA (358)

VRI	0.12	332	iPd	07	33.00	0.8
ISR	0.65	196	iPc	07	36.50	0.3
MLR	0.66	246	iPd	07	35.00	-1.3
PPE	0.72	51	iPc	07	37.50	0.7
CLI	0.85	23	iPd	07	37.50	-0.6
CFR	1.11	121	iPc	07	40.00	-1.0
CMP	1.34	249	ePc	07	35.00	-8.8X
MTUR	1.34	247	eP	07	44.50	0.7
IAS	1.52	20	eP	08	00.00	14.0X
PSN	2.31	154	eP	07	57.00	0.6
PVL	2.76	203	eP	08	02.00	-0.5
RZN	4.35	201	eP	08	25.00	0.4
	S.D. = 1.0		on 10 of 12 obs.			

JUN 29, 1990 20h 20m 48.19± 0.74s
2.696 N ± 8.9km 123.836 E ± 9.8km
DEPTH = 414.0 ± 8.3 km
4.8mb (14 obs.)

CELEBES SEA (262)

MNI	1.60	141	ePd	21	42.50	-1.1
			eS	22	26.50	
TSM	5.95	285	iPd	22	22.80	1.3
AAI	7.69	145	eP	22	34.00	-6.8X
BKB2	7.97	241	iPc	22	46.00	2.0
KKM	8.29	294	ePd	22	47.00	-0.7
	0.8s		93.80nm			5.1mb
TRT	15.22	227	iPc	24	02.00	-2.5
	0.6s		193.60nm			5.7mb X
MTN	17.06	155	iP	24	23.10	-0.2
KNA	18.97	165	eP	24	39.00	-3.2X
	0.3s		19.00nm			5.1mb
IPM	22.84	275	ePc	25	20.50	1.4
	0.8s		27.10nm			4.8mb
WB5	24.70	156	iPc	25	35.10	-0.9
			eS	29	24.20	
WRA	24.75	156	Pd	25	36.00	-0.4
	0.3s		9.00nm			4.7mb
LOE	26.17	305	eP	25	48.00	-1.2
NANU	26.38	197	eP	25	50.00	-1.0
QIS	27.81	147	iPd	26	03.50	-0.2
	0.2s		13.00nm			5.0mb
ASPA	27.98	160	iPc	26	04.70	-0.5
	0.3s		36.00nm			5.2mb
			iS	30	17.10	
BDT	28.35	302	eP	26	08.50	0.1
WARB	28.84	175	eP	26	12.50	-0.1
	0.4s		18.00nm			4.8mb
CHG	29.16	305	eP	26	16.00	0.4
MAT	36.20	20	eP	27	15.00	-0.2
	1.0s		10.00nm			4.1mb
STK	38.30	155	iPc	27	34.00	1.5
	0.7s		27.00nm			4.7mb
BRS	40.90	139	iPd	27	55.00	1.1
COO	42.56	143	Pc	28	09.80	2.6X
BWA	43.56	150	iPc	28	18.20	3.1X
GUN	44.05	308	P	28	19.40	0.0
	0.4s		32.00nm			5.0mb
PKI	44.26	308	P	28	20.80	-0.3
	0.4s		9.00nm			4.5mb
DMN	44.52	308	P	28	23.00	0.0
	0.5s		9.00nm			4.4mb
CAN	44.56	150	iPc	28	25.00	2.0
GKN	45.06	308	P	28	27.40	0.2
	0.6s		19.00nm			4.6mb
GBA	47.10	286	Pc	28	42.10	-0.7
	0.4s		4.90nm			4.2mb
SUF	91.15	333	eP	33	07.90	-0.2
	S.D. = 1.1		on 26 of 30 obs.			

JUN 29, 1990 20h 27m 36.26± 0.72s
39.417 N ± 6.9km 27.377 E ± 7.8km
DEPTH = 23.8 ± 8.5 km
TURKEY (366)

EZN	0.91	297	ePg	27	52.00	-1.2
DST	0.99	79	iPg	27	53.50	-1.1
			iSg	28	07.50	
EDC	1.00	22	iPg	27	54.30	-0.4
			iSg	28	09.80	
BNT	1.03	24	iPn	27	54.90	-0.2
KGT	1.04	357	iPn	27	54.40	-0.8
KCT	1.12	42	iPn	27	56.50	0.0
SMG	1.76	194	ePb	28	06.50	0.9
IZI	1.86	60	ePn	28	08.00	0.9
CIN	1.90	163	ePn	28	06.00	-1.6
			iSg	28	31.00	
CTT	1.91	25	ePn	28	07.00	-0.8
ALT	2.15	99	ePn	28	09.00	-2.4
RDO	2.23	321	ePn	28	16.50	4.1X
			eSn	28	44.00	
HRT	2.25	51	ePn	28	14.00	1.3X
GPA	2.42	68	ePn	28	22.00	6.9X
DMK	2.42	7	ePn	28	13.30	-1.8
	S.D. = 1.2		on 12 of 15 obs.			

JUN 29, 1990 21h 30m 46.27± 0.56s
37.641 N ± 8.8km 72.066 E ± 7.5km
DEPTH = 33.0km (normal)
4.4mb (4 obs.)
TAJIK SSR (715)

QUE	8.56	211	eP	32	50.50	-0.6
			eS	34	18.00	
NDI	9.92	153	eP	33	11.00	1.4
			eS	34	49.00	
MAIO	10.15	266	eP	33	13.00	0.1
	0.8s		16.84nm			5.3mb
			eS	34	56.00	
GKN	14.27	129	P	34	08.20	0.0
DMN	14.84	129	P	34	16.00	0.3
PKI	15.06	128	P	34	18.20	-0.4
GUN	15.12	126	P	34	18.40	-1.1
HFS	42.71	321	eP	38	41.20	-0.2
	0.9s		5.60nm			4.3mb
NB2	43.99	322	P	38	51.80	-0.1
	0.7s		1.10nm			3.8mb
MBC	66.16	3	eP	41	32.50	0.5
	0.6s		3.00nm			4.6mb
	S.D. = 0.8		on 10 of 10 obs.			

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* JUN 29, 1990 21h 50m 55.19± 0.92s
29.876 N ±14.2km 57.423 E ±10.9km
DEPTH = 33.0km (normal)
3.8mb (3 obs.)
SOUTHERN IRAN (353)

MAIO	6.64	15	ePn	52	31.00	-2.1
			eSn	54	06.00	
BRF	7.13	240	ePn	52	40.20	0.3
			eSn	54	04.80	
QUE	8.27	85	eP	52	56.00	0.1
			e(S)	53	17.60	
KER	9.82	300	eP	54	02.00	44.7X
MJMA	11.46	252	eP	53	37.70	-1.9
UQSK	13.93	257	eP	54	11.70	-0.9
AFIF	13.94	249	ePc	54	16.70	4.1X
GKN	23.87	88	P	56	00.00	-6.8X
KHC	38.27	313	P	58	15.00	1.0
CLL	39.18	316	eP	58	23.00	1.5
HFS	42.00	329	eP	58	44.20	-0.4
	0.5s		1.00nm			3.8mb
NB2	43.49	329	P	58	58.20	1.4
	0.7s		0.60nm			3.5mb
KIC	62.76	261	(P)	01	21.00	1.1
YKA	87.73	356	eP	03	41.40	-0.2
	0.9s		1.20nm			4.2mb
	S.D. = 1.4		on 11 of 14 obs.			

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* JUN 29, 1990 23h 05m 09.97± 0.50s
16.027 S ±14.0km 177.854 W ± 7.8km
DEPTH = 439.0 ± 6.3 km
4.4mb (7 obs.)
FIJI ISLANDS REGION (181)

NDE	2.77	258	ePc	06	14.80	-0.4
KRO	2.93	244	ePc	06	15.90	-0.4
OVA	3.62	242	iPc	06	26.20	4.4X
VUN	4.04	240	iPc	06	26.20	0.8
SVA	4.09	239	iPc	06	26.60	0.7
			eS	06	31.20	
DZM	16.01	246	iPc	08	35.20	1.9
PMO	26.87	92	iP	10	32.60	-0.4
	0.8s		15.00nm			4.5mb
VAH	29.10	93	iP	10	34.40	-0.6
	0.8s		5.00nm			4.0mb
TPT	29.14	92	iP	10	34.80	-0.5
	0.8s		10.00nm			4.3mb
RUV	29.35	93	iP	10	36.50	-0.6
	0.8s		10.00nm			4.3mb
BRS	29.46	242	iPc	10	38.00	-0.1
TOO	38.78	229	eP	11	56.40	0.1
STK	40.02	239	eP	12	06.30	-0.2
WB5	45.50	258	eP	12	48.50	-1.7
WRA	45.52	258	Pc	12	48.90	-1.5
	0.7s		8.70nm			4.3mb
ASPA	45.84	252	iPd	12	51.50	-1.3
	0.6s		52.00nm			5.1mb
			eS	19	06.20	
WARB	52.43	249	iPc	13	41.30	-0.9
PCC	74.50	43	ePd	16	04.00	0.3
PRS	74.52	44	ePd	16	04.40	0.5
SAO	74.71	44	eP	16	05.00	0.0
BRK	74.80	43	eP	16	04.20	-1.2
PRI	74.89	45	ePd	16	06.70	0.6
MHC	74.90	43	ePd	16	06.60	0.4
CMB	76.11	43	ePd	16	12.70	-0.1
WDC	76.17	40	ePd	16	13.00	0.1
ORV	76.24	42	ePd	16	13.30	0.0
PNT	82.89	34	eP	16	48.00	-0.1
	0.7s		10.00nm			4.6mb
LRM	85.19	40	eP	17	00.00	0.1

29d 23h

MAW	85.80	200	iPc	17 03.80	1.6
SES	88.19	36	eP	17 14.00	0.1
GRF	145.62	350	ePKP	23 59.30	0.9
FLN	147.28	3	ePKP	24 03.10	2.0
	0.9s	11.45nm			
CDF	147.43	354	ePKP	24 03.90	2.4X
	0.7s	5.50nm			
LDF	147.47	3	ePKP	24 03.60	2.2X
GRR	147.63	4	ePKP	24 04.30	2.7X
	0.6s	3.60nm			
HAU	147.92	355	ePKP	24 05.20	3.0X
LPF	147.98	4	ePKP	24 05.40	3.2X
	0.7s	11.00nm			
BSF	148.05	354	ePKP	24 05.40	2.9X
LOR	148.82	358	ePKP	24 07.50	3.9X
	0.8s	5.35nm			
SSF	149.04	358	ePKP	24 08.30	4.4X
LBF	149.10	358	ePKP	24 08.20	4.1X
	0.7s	3.85nm			
AVF	149.31	358	ePKP	24 08.50	4.2X
SMF	149.44	358	ePKP	24 09.10	4.6X
	0.7s	3.30nm			
BGF	149.55	359	ePKP	24 09.20	4.5X
	0.6s	4.95nm			
TCF	149.83	360	ePKP	24 09.90	4.7X
LSF	149.86	1	ePKP	24 09.80	4.6X
	0.8s	6.05nm			
MAF	149.89	359	ePKP	24 10.40	5.2X
OHR	150.25	331	ePKP	24 11.30	5.3X
LPL	150.35	353	ePKP	24 12.20	6.0X
	0.8s	5.35nm			
LPG	150.37	353	ePKP	24 12.30	6.0X
	0.8s	4.70nm			
RJF	150.81	1	ePKP	24 12.30	5.7X
LFF	151.15	2	ePKP	24 13.20	6.1X
CAF	151.19	0	ePKP	24 13.30	6.0X
	1.0s	8.00nm			
LPO	151.42	1	ePKP	24 13.90	6.4X

S.D. = 0.9 on 31 of 54 obs.

JUN 29, 1990 23h 25m 34.30± 0.32s
15.729 N ± 5.4km 147.811 E ± 5.9km
DEPTH = 30.8km (3 depth phases)
5.0mb (21 obs.) 4.4Msz (5 obs.)
MARIANA ISLANDS REGION (215)

GUA	3.55	233	eP	26 29.30	0.6
			eS	27 09.50	
GUMO	3.56	234	eP	26 29.30	0.6
PJG	3.56	234	eP	26 29.50	0.8
KAKJ	21.50	343	eP	30 22.90	0.3
IIDJ	21.57	338	eP	30 23.90	0.4
CHJJ	21.71	340	P	30 25.20	0.4
TSRJ	22.38	334	eP	30 33.20	1.7
MAT	22.42	339	eP	30 32.00	0.1
	1.0s	73.00nm		5.1mb	
			eS	34 42.00	
NIIJ	22.81	342	P	30 36.60	1.0
YAMJ	23.39	344	P	30 42.80	1.5
DAV	23.41	251	eP	30 41.00	-0.6
OFUJ	23.88	348	P	30 47.60	1.6
BAG	26.17	275	eP	31 08.00	-0.2
SSE	28.72	307	P	31 29.50	-1.5
	0.8s	10.00nm		4.6mb	
Z	20s	0.50um		4.1Msz	
E	16s	0.70um			
			sP	31 41.20	
			eS	36 20.00	
MDJ	32.66	336	eP	32 05.70	0.0
SNY	33.35	326	eP	32 10.00	-1.7
Z	26s	0.70um		4.3MszX	
N	22s	0.80um			
CN2	33.83	330	eP	32 15.50	-0.4
Z	20s	0.60um		4.3Msz	
			epP	32 24.00	29km
WHN	33.97	302	eP	32 17.00	-0.2
QIZ	36.34	281	eP	32 38.20	0.6
BJI	36.67	318	eP	32 39.50	-0.6
	2.0s	110.00nm		5.4mb	
Z	24s	0.38um		4.1MszX	
WB5	37.77	201	eP	32 48.50	-1.1
			i	32 58.00	32km
WRA	37.84	201	Pc	32 49.10	-1.1
	0.9s	31.50nm		5.2mb	
TIY	38.11	312	Pc	32 53.00	0.6
XAN	39.42	305	P	33 02.30	-1.0
GYA	39.69	293	P	33 07.20	1.4
BTO	41.05	315	eP	33 17.00	0.2
ASPA	41.45	199	iPd	33 18.00	-2.0
	1.2s	33.00nm		4.9mb	
CD2	42.90	299	eP	33 30.80	-1.1
KMI	43.09	290	Pc	33 36.00	2.2
	2.5s	140.00nm		5.3mb	
Z	20s	0.50um		4.4Msz	
LZH	43.99	306	iPd	33 42.00	1.1
	1.8s	170.00nm		5.6mb	
Z	17s	0.70um		4.6MszX	
E	15s	0.40um			
			pP	33 46.00	13kmX
LOE	44.12	279	eP	33 42.00	0.1
WARB	46.47	207	eP	34 00.00	-0.5
	0.4s	5.00nm		4.8mb	
BDT	46.73	279	eP	34 03.00	0.3
GTA	47.96	309	Pd	34 12.40	0.0
	1.0s	30.00nm		5.3mb	
Z	20s	0.60um		4.6Msz	
E	17s	0.60um			
PSI	49.82	260	ePc	34 29.30	2.5
SHL	52.92	290	iP	34 49.60	-0.8
LSA	53.61	295	P	34 57.00	1.3
WMQ	57.78	312	eP	35 25.00	-0.1
Z	22s	0.30um		4.4Msz	
GUN	58.23	293	P	35 28.80	-0.1
PKI	58.66	293	P	35 31.20	-0.7
	0.6s	25.00nm		5.5mb	
NDI	65.81	295	eP	36 18.50	-0.6
HYB	66.06	282	eP	36 21.00	0.1
GBA	67.82	279	Pc	36 30.90	-1.2
	0.7s	5.70nm		4.8mb	
KOD	68.51	275	eP	36 34.00	-2.8X
PMO	70.47	113	iP	36 50.10	1.8
	1.2s	30.00nm		5.3mb	
TPT	70.70	112	iP	36 51.50	1.8
	1.2s	15.00nm		5.0mb	
VAH	70.79	113	iP	36 51.70	1.4
	1.2s	15.00nm		5.0mb	
RUV	70.99	112	iP	36 53.20	1.7
	1.2s	30.00nm		5.3mb	
INK	71.31	23	eP	36 51.00	-1.6
MBC	75.51	14	eP	37 16.50	-0.5
	0.8s	7.00nm		4.7mb	
MAIO	79.53	305	eP	37 41.00	0.9
			e	40 44.00	
YKA	79.65	28	eP	37 38.50	-1.6
	0.6s	2.10nm		4.3mb	
WDC	79.69	51	eP	37 44.20	3.5X
ORV	80.68	52	eP	37 46.20	0.1
CMB	81.87	53	ePc	37 52.10	-0.3
SES	84.96	39	eP	38 08.00	0.1
			pP	38 18.00	31km
LRM	85.49	44	eP	38 10.10	-0.8
FFC	88.48	33	eP	38 24.00	-0.9
	1.2s	14.00nm		5.2mb	
SUF	89.65	337	iP	38 29.10	-1.2
	0.6s	6.70nm		5.1mb	
HFS	95.87	339	eP	38 56.50	-2.5
	0.4s	1.20nm		4.7mb	
Z	17s	0.09um		4.3MszX	
			LR	21 30.00	
NB2	96.04	340	P	38 57.80	-2.1
	0.8s	1.60nm		4.5mb	
SKO	104.26	322	ePdiff	39 37.00	0.0X
			e	39 39.80	
LKO	143.61	312	PKP	45 04.92	-3.9X
KIC	145.06	307	PKPd	45 10.32	-0.9
	0.8s	490.00nm			
TIC	145.10	308	PKPd	45 10.24	-1.1
LIC	145.37	307	PKPd	45 11.22	-0.5
ZOBO	145.48	96	PKP	45 13.00	0.4
	1.5s	52.69nm			
LPB	145.52	96	PKP	45 14.00	1.5
CNCB	145.65	97	PKP	45 13.00	0.1
SIV	152.22	95	ePKP	45 17.00	-5.4X
			i	45 38.60	

S.D. = 1.1 on 65 of 70 obs.

% JUN 29, 1990 23h 46m 01.37± 1.27s
38.173 N ±13.8km 14.912 E ± 6.7km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO	0.30	215	P	46 08.00	0.4
			eSg	46 12.50	
ATN	0.43	92	P	46 10.50	0.3
			eSg	46 17.50	
GIB	0.72	256	P	46 15.50	-0.1
			eSg	46 27.50	
SOI	0.91	96	P	46 18.50	-0.2
			eSg	46 32.00	
MEU	1.07	179	P	46 21.30	-0.3
			eSg	46 36.20	

S.D. = 0.4 on 5 of 5 obs.

? JUN 30, 1990 00h 09m 08.58± 3.16s
11.018 N ±20.1km 61.736 W ±26.0km
DEPTH = 33.0km (normal)
WINDWARD ISLANDS (95)
MD 3.1 (TRN).

TCE	0.32	183	eP	09 16.82	0.2
			eS	09 26.23	
TRN	0.49	138	iP	09 19.44	0.4
			eS	09 30.26	
TPP	0.75	158	eP	09 22.16	-0.5
			eS	09 37.04	
TPR	0.96	80	eP	09 25.81	0.1
BOT	1.01	82	eP	09 26.26	-0.2

S.D. = 0.5 on 5 of 5 obs.

& JUN 30, 1990 00h 11m 23.67s
38.677 N 112.585 W
DEPTH = 0.0km
UTAH (478)
<SLC-P>. ML 2.8 (SLC).

MSU	0.36	117	iPd	11 31.20	0.3
DUG	1.53	353	eP	11 51.50	-0.9
DAU	2.01	30	eP	12 01.00	1.4

3 obs. associated

? JUN 30, 1990 01h 07m 39.09± 1.75s
47.209 N ±32.8km 152.698 E ±34.5km
DEPTH = 33.0km (normal)
4.5mb (3 obs.)
KURIL ISLANDS (221)

KUSJ	6.98	237	eP	09 21.30	-0.3
			eS	10 35.20	
ASAJ	7.69	250	eP	09 36.50	4.9X
HOOJ	8.25	238	eP	09 39.60	0.3
			eS	11 10.80	
YKA	50.73	37	eP	16 37.20	0.0
	0.6s	1.20nm		4.1mb	
GKN	55.46	275	P	17 00.00	-13.0X
NB2	67.70	341	P	18 34.90	0.1
	0.7s	3.00nm		4.5mb	
HFS	67.93	339	eP	18 36.00	-0.1
	0.6s	7.00nm		4.9mb	

S.D. = 0.3 on 5 of 7 obs.

? JUN 30, 1990 01h 20m 12.33± 5.74s
44.038 N ±35.0km 6.467 E ±29.0km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 1.8 (LDG).

FRF	0.49	165	Pg	20 22.60	0.2
			Sg	20 32.00	
LRG	0.59	188	Pg	20 24.70	0.5
			Sg	20 34.80	
LMR	0.70	177	Pn	20 25.50	-0.7
			Pg	20 26.40	
			Sg	20 38.80	
SBF	0.72	104	Pg	20 26.60	0.0
			Sg	20 39.20	

S.D. = 0.9 on 4 of 4 obs.

• JUN 30, 1990 01h 22m 55.78± 1.03s
23.632 S ±24.7km 13.413 W ±14.3km
DEPTH = 10.0km (geophysicist)
4.6mb (3 obs.)
SOUTH ATLANTIC RIDGE (410)

BAO	33.46	277	eP	29 37.20	-0.3
LKO	33.85	14	P	29 39.16	-1.5
SIV	45.31	271	iP	31 17.00	1.0
LWI	46.03	69	iPd	31 21.20	-0.7
CNCB	51.40	267	P	32 04.20	0.3
LPB	51.59	267	eP	32 04.00	-1.2
ZOBO	51.69	268	P	32 06.00	-0.2
TDS	68.82	24	P	34 03.00	0.7

SDI	69.73	21	P	34 08.00	0.1	
BOB	71.20	17	P	34 17.50	0.7	
LPG	71.21	15	eP	34 17.20	0.1	
	0.7s	3.30nm		4.6mb		
LPL	71.22	15	eP	34 17.20	0.1	
	0.7s	4.95nm		4.7mb		
SMF	71.67	12	eP	34 19.30	-0.2	
	0.7s	3.30nm		4.5mb		
AVF	71.71	12	eP	34 19.50	-0.2	
FVI	73.81	18	P	34 33.00	1.0	
GRF	76.21	16	e(P)	34 46.00	0.1	
KHC	76.33	18	eP	34 47.00	0.4	
S.D. = 0.7		on	17 of	17 obs.		

? JUN 30, 1990 01h 38m 49.28± 7.69s
32.834 S ±21.5km 71.692 W ±63.6km
DEPTH = 33.0km (normol)
NEAR COAST OF CENTRAL CHILE (135)

PEL	0.90	110	iPd	39 05.60	0.0	
			iS	39 21.50		
RTBS	2.23	59	eP	39 25.00	0.4	
			S	39 56.00		
RTCV	2.84	71	e(P)	39 36.30	3.0X	
ZON	2.86	64	eP	39 32.50	-1.1	
RTLL	3.12	62	ePd	39 37.10	-0.2	
CFA	3.17	68	e(P)	39 39.00	0.9	
RTRS	3.27	36	e(P)	39 39.40	0.0	
S.D. = 0.9		on	6 of	7 obs.		

JUN 30, 1990 01h 46m 45.25± 1.74s
33.743 S ±15.5km 68.348 W ±10.4km
DEPTH = 10.0km (geophysicist)
MENDOZA PROVINCE, ARGENTINA (139)

RTCV	1.88	355	eP	47 17.10	-0.7	
CFA	2.13	3	iPd	47 22.50	1.1	
			(S)	47 48.10		
ZON	2.21	353	iPc	47 21.50	-1.0	
			eS	47 48.50		
RTBS	2.28	336	eP	47 23.20	-0.2	
RTLL	2.41	358	iPd	47 25.40	0.0	
IHA	2.85	284	eP	47 31.50	0.0	
			i	48 06.40		
RTRS	3.69	345	iPc	47 44.10	0.6	
ANT	10.16	349	e(P)	48 49.00	-25.2X	
CNCB	16.87	1	P	50 44.00	0.4	
LPB	17.14	1	P	50 50.00	3.1X	
ZOBO	17.40	1	P	50 51.00	0.7	
Z 16s	0.20um					
			LR	57 52.00		
ARE	17.44	350	eP	50 56.00	5.5X	
SIV	18.86	22	P	51 06.80	-1.0	
BAO	25.74	51	e(P)	52 18.00	0.2	
S.D. = 0.8		on	11 of	14 obs.		

? JUN 30, 1990 02h 28m 13.45± 2.07s
23.808 N ±26.7km 93.761 E ±15.6km
DEPTH = 170.2 ± 30.8 km
4.2mb (1 obs.)
BURMA-INDIA BORDER REGION (294)

SHL	2.45	316	iP	28 55.50	-0.1	
			iS	29 22.00		
GUN	8.19	302	P	30 11.60	1.0	
PKI	8.41	298	P	30 13.60	0.0	
DMN	8.67	298	P	30 17.00	0.0	
GKN	9.21	299	P	30 23.00	-1.0	
HYB	15.59	249	eP	31 45.50	0.0	
NDI	15.61	292	eP	31 50.00	4.3X	
			eS	34 29.50		
WB5	58.75	134	eP	37 55.00	-0.9	
WRA	58.78	134	P	37 57.00	0.9	
0.4s	1.50nm			4.2mb		
S.D. = 0.9		on	8 of	9 obs.		

& JUN 30, 1990 03h 33m 53.59s
60.092 N 152.773 W
DEPTH = 103.0km
SOUTHERN ALASKA (2)
<AGS-P>.

RED	0.33	0	iP	34 08.20	-0.8	
RDT	0.52	21	iP	34 09.45	-0.7	
NNL	0.74	93	iP	34 12.59	0.7	
AUE	0.80	203	eP	34 11.24	-1.1	
CNPM	0.96	126	eP	34 13.30	-0.8	
			eS	34 28.74		
SPU	1.15	18	iP	34 15.81	-0.4	
CRP	1.22	14	iP	34 16.91	-0.2	
CDD	1.25	201	eP	34 16.05	-1.3	
CGLM	1.28	17	iP	34 17.49	-0.3	
			eS	34 35.89		
SLKM	1.34	71	eP	34 17.83	-0.6	
NCG	1.35	13	eP	34 18.39	-0.3	
SEW	1.67	88	eP	34 21.45	-1.0	
			eS	34 42.09		
SUA	1.70	35	iP	34 22.92	-0.1	
			eS	34 45.62		
SVW	1.74	307	iP	34 21.90	-1.5	
PMS	1.96	52	iP	34 26.07	-0.2	
			eS	34 50.38		
SKT	1.99	17	iP	34 26.09	-0.6	
PWA	2.11	41	eP	34 27.88	-0.3	
PLRM	2.33	48	eP	34 29.89	-1.3	
GHO	2.52	46	eP	34 32.60	-1.2	
CUT	2.62	26	eP	34 35.07	0.1	
SML	2.77	50	eP	34 35.62	-1.4	
GLI	2.92	72	eP	34 36.49	-2.6	
VZW	3.22	70	eP	34 41.00	-2.2	
VLZ	3.34	69	eP	34 42.62	-2.1	
KLU	3.64	64	eP	34 46.88	-2.1	
TOA	3.79	55	eP	34 49.37	-1.6	
26 obs. associated						

• JUN 30, 1990 03h 42m 01.94± 0.73s
37.079 N ±10.8km 50.147 E ± 9.6km
DEPTH = 10.0km (geophysicist)
4.7mb (4 obs.)
CASPIAN SEA (338)

TEH	1.67	143	iPd	42 31.40	-0.1	
TAB	3.19	289	eP	42 58.00	4.7X	
KER	3.68	223	eP	43 00.00	-0.2	
MAIO	7.55	93	ePn	43 55.00	0.2	
0.9s	9.38nm			5.0mb		
			eSn	55 38.00		
QUE	15.58	111	eP	45 51.50	8.1X	
KHC	29.01	306	eP	48 07.90	4.0X	
CLL	29.83	310	iP	48 16.00	4.8X	
SQTA	30.31	302	iPd	48 17.00	1.3	
0.9s	15.40nm			4.9mb		
			i	48 19.30		
HFS	32.68	327	eP	48 35.80	-0.3	
0.9s	6.50nm			4.6mb		
NB2	34.19	327	P	48 48.30	-0.9	
0.6s	0.90nm			3.9mb		
KIC	58.45	253	(P)	51 55.00	-5.5X	
S.D. = 1.0		on	6 of	11 obs.		

? JUN 30, 1990 04h 25m 52.13± 3.14s
31.047 S ±46.2km 68.483 W ±20.5km
DEPTH = 100.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.28	178	iPd	26 07.00	0.1	
ZON	0.52	199	iPc	26 08.20	-0.2	
			eS	26 19.70		
CFA	0.60	160	ePd	26 09.00	0.1	
			eS	26 21.30		
RTCV	0.81	183	eP	26 10.90	0.0	
RTBS	1.03	233	ePc	26 13.20	0.1	
			S	26 28.50		
S.D. = 0.2		on	5 of	5 obs.		

JUN 30, 1990 04h 42m 33.38± 0.72s
39.040 N ± 5.5km 27.968 E ± 7.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

DST	0.76	42	iPg	42 48.60	0.3	
			iSg	43 02.60		
KCT	1.24	14	iPn	42 57.20	0.7	
			iSg	43 11.20		
EDC	1.31	357	iPn	42 57.60	0.0	
BNT	1.32	358	ePn	42 57.20	-0.5	
KHL	1.41	120	iPn	42 59.00	-0.2	
CIN	1.44	176	ePg	42 59.00	-0.5	
			iSg	43 17.00		
EZN	1.49	302	ePn	43 01.00	0.8	
ALT	1.67	89	ePn	43 04.00	1.1	
YLV	1.87	35	iPn	43 04.70	-1.1	
CTT	2.13	9	ePn	43 08.80	-0.7	
ISK	2.19	22	ePn	43 13.00	2.7X	
HRT	2.21	36	ePn	43 14.00	3.4X	
S.D. = 0.8		on	10 of	12 obs.		

JUN 30, 1990 06h 16m 45.71± 0.41s
44.152 N ± 3.7km 12.159 E ± 4.5km
DEPTH = 19.2 ± 4.3 km
NORTHERN ITALY (545)
ML 3.2 (LDG), 3.3 (VIE).

RSM	0.31	136	Pc	16 52.90	0.4	
			eSg	16 57.30		
SFI	0.32	224	Pc	16 52.80	0.1	
			eSg	16 57.50		
PGD	0.42	229	Pc	16 54.40	-0.1	
			eSg	17 00.40		
CRE	0.54	196	P	16 56.20	-0.3	
			eSg	17 05.30		
ARV	0.86	139	Pd	17 02.20	0.3	
			eSg	17 16.20		
MME	1.05	273	P	17 06.20	0.9	
			eSg	17 22.90		
BDI	1.13	266	P	17 07.00	0.6	
			eSn	17 23.50		
ASS	1.14	161	P	17 06.90	0.3	
			eSn	17 24.50		
PII	1.26	251	P	17 09.20	1.0	
			eSn	17 27.00		
TRI	1.93	36	iPc	17 16.90	-1.0	
			i	17 41.10		
			i(Sg)	17 49.00		
AQU	2.01	153	P	17 21.50	2.3	
BOB	2.04	289	P	17 21.10	1.5	
VOY	2.25	33	iPn	17 22.50	-0.1	
			eSn	17 48.50		
CEY	2.26	45	e(Pn)	17 28.10	5.4X	
			e(Sn)	17 53.00		
			e	18 55.00		
AZI	2.36	156	P	17 25.00	1.0	
MDI	2.38	314	P	17 25.20	0.9	
FVI	2.48	10	P	17 26.90	1.1	
LJU	2.53	41	e(Pn)	17 33.50	7.0X	
			eSn	17 58.00		
PGF	2.81	236	Pn	17 31.00	0.5	
			Sn	18 04.50		
OGA	2.83	344	ePn	17 40.90	9.9X	
VAI	2.95	307	P	17 33.00	0.6	
VDL	3.01	322	eP	17 35.20	1.7	
TMA	3.04	311	eP	17 34.80	0.9	
SQTA	3.14	348	iPnc	17 38.10	2.8	
			iPg	17 47.00		
			iSn	18 16.20		
			iSg	18 29.90		
PTJ	3.21	56	ePn	17 47.00	10.7X	
			eSn	18 31.00		
SBF	3.42	267	Pn	17 40.00	0.8	
			Sn	18 19.60		
LLS	3.51	322	eP	17 42.70	2.1	
MMK	3.53	304	eP	17 41.10	0.2	
SAX	3.67	329	eP	17 45.40	2.4	
DIX	3.87	302	eP	17 46.80	0.9	
FRF	4.03	263	Pn	17 48.00	0.2	
			Sn	18 33.50		
LPG	4.08	291	Pn	17 46.20	-2.5	
LMR	4.17	261	Pn	17 50.40	0.5	
			Sn	18 38.00		
ZLA	4.25	323	eP	17 52.10	1.2	
LRG	4.25	263	Pn	17 51.80	0.8	
			Sn	18 40.00		
SLE	4.43	326	eP	17 53.50	0.1	
KHC	5.08	11	ePg	18 01.60	-1.0	
			Sg	18 58.90		
BSF	5.25	316	Pn	18 04.60	-0.5	
			Sn	19 00.60		
CDF	5.44	323	Pn	18 07.40	-0.5	
HAU	5.58	316	Pn	18 09.20	-0.6	
			Sn	19 10.40		
SMF	6.36	296	Pn	18 19.80	-1.0	
LBF	6.48	299	Pn	18 20.50	-0.9	
LOR	6.59	301	Pn	18 23.00	-1.1	
			Sn	19 33.60		
SSF	6.73	299	Pn	18 24.80	-1.2	
BGF	6.99	293	Pn	18 27.60	-2.0	
S.D. = 1.2		on	41 of	45 obs.		

• JUN 30, 1990 06h 22m 54.24± 2.02s
32.943 S ±12.8km 72.493 W ±17.5km
DEPTH = 33.0km (normol)

30d 06h

4.4mb (2 obs.)
OFF COAST OF CENTRAL CHILE (134)

IHA	0.72	97	iPc	23	08.80	0.9
			iS	23	15.80	
PEL	1.53	98	iPd	23	20.50	0.9
CHCH	1.83	123	iPd	23	22.40	-1.5
RTBS	2.87	64	eP	23	39.00	0.3
RTCV	3.52	73	ePc	23	48.50	0.5
ZON	3.52	68	eP	23	47.50	-0.5
RTRS	3.79	44	ePc	23	50.90	-0.8
			e	23	51.90	
CFA	3.84	71	e(P)	23	52.00	-0.5
			eS	24	39.10	
ANT	9.38	12	eP	25	25.10	14.9X
ARE	16.43	3	eP	26	48.00	3.7X
CNCB	16.57	15	P	26	45.00	-1.3
LPB	16.82	15	P	26	51.00	1.8
ZOBO	17.07	14	P	26	52.00	-0.5
	1.0s		11.25nm			4.0mb
	Z 18s		0.28um			4.9Msz
			LR	32	24.00	
SIV	19.79	34	P	27	19.00	-5.8X
PPD	21.67	65	(P)	27	39.00	-5.0X
LKO	76.34	69	P	34	43.00	0.9
	0.8s		11.00nm			4.9mb

S.D. = 1.1 on 12 of 16 obs.

JUN 30, 1990 07h 44m 56.82± 0.72s
24.402 N ± 8.5km 123.418 E ± 8.8km
DEPTH = 33.0km (normal)
4.3mb (5 obs.) 3.8Msz (1 obs.)
SOUTHWESTERN RYUKYU ISLANDS (246)

TWC	1.44	279	iPd	45	20.80	-0.1
TWZ	1.81	293	eP	45	27.40	1.2
TWQ	2.36	267	iPd	45	35.10	1.0
TWK	2.91	248	ePc	45	42.70	0.8
			eS	46	13.30	
QZH	4.42	278	P	46	01.40	-2.0
			S	46	44.50	
SSE	6.95	344	P	46	41.00	2.0
	0.8s		64.00nm			5.6mb X
			pP	46	47.50	
NJ2	8.62	333	Pc	47	02.00	-0.2
WHN	10.11	309	eP	47	22.50	-0.3
			pP	47	29.70	
			eS	49	10.00	
GYA	15.28	281	P	48	32.00	0.1
XAN	15.87	311	P	48	40.50	1.1
CD2	18.57	295	eP	49	11.50	-1.7
GTA	24.91	313	eP	50	18.80	0.5
WB5	45.29	165	eP	53	13.50	0.2
WRA	45.34	165	Pc	53	14.00	0.2
	0.9s		11.40nm			4.8mb
ASPA	48.85	167	eP	53	41.90	0.6
	0.5s		7.00nm			4.9mb
HFS	78.36	331	eP	56	53.30	-1.9
	0.5s		0.70nm			3.9mb
	Z 21s		0.05um			3.8Msz
			LR	25	52.00	
NB2	78.98	333	P	56	57.00	-1.6
	0.5s		0.60nm			3.8mb
YKA	81.97	23	eP	57	14.60	0.2
	0.8s		2.40nm			4.3mb

S.D. = 1.2 on 18 of 18 obs.

% JUN 30, 1990 08h 33m 52.04± 0.62s
40.190 N ± 5.0km 29.367 E ± 5.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZI	0.17	29	iPg	33	56.20	0.3
YLV	0.38	1	iPg	34	00.10	0.3
			iSg	34	04.10	
GBZT	0.60	6	ePg	34	03.50	-0.7
HRT	0.67	20	iPg	34	05.00	-0.4
GPA	0.73	82	iPg	34	06.90	0.5
DST	0.81	225	iPg	34	08.00	0.1
			iSg	34	19.50	
ISK	0.91	345	ePg	34	08.50	-0.9
			eSg	34	21.00	
BNT	1.12	279	iPn	34	13.50	0.5
EDC	1.16	278	iPn	34	13.00	-0.7
CTT	1.19	324	ePn	34	13.50	-0.8
ALT	1.27	153	ePn	34	15.20	-0.5
OMK	2.04	324	ePn	34	29.00	2.3

S.D. = 1.0 on 12 of 12 obs.

% JUN 30, 1990 08h 33m 52.70± 1.49s
39.538 N ±15.3km 22.339 E ± 8.4km
DEPTH = 33.0km (normal)
GREECE (364)

LIT	0.57	12	iPg	34	06.20	1.8
			eSg	34	17.90	
PAIG	1.10	69	ePb	34	12.70	0.8
			eSb	34	27.90	
GRG	1.42	2	ePb	34	17.00	0.6
			eSb	34	33.70	
FNA	1.45	330	ePb	34	16.70	-0.2
OUR	1.49	57	iPb	34	16.90	-0.5
SOH	1.50	31	iPb	34	16.80	-0.8
IGT	1.55	270	ePb	34	18.20	-0.1
			eSb	34	37.10	
KNT	1.68	15	ePb	34	18.80	-1.3
			eSb	34	40.70	
SRS	1.85	31	ePb	34	22.30	-0.3
			eSb	34	44.80	

S.D. = 1.1 on 9 of 9 obs.

• JUN 30, 1990 08h 44m 46.07± 1.28s
39.521 N ± 7.6km 15.134 E ±11.5km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

MGR	0.70	28	P	44	59.50	-0.3
TDS	0.94	81	P	45	04.70	0.7
			eSg	45	16.00	
SGO	1.05	7	P	45	06.00	0.2
			eSn	45	20.50	
ORI	1.15	61	P	45	07.00	-0.6
BSS	1.29	349	P	45	10.10	0.1
			eSn	45	26.50	
SOI	1.62	153	P	45	14.50	-0.2

S.D. = 0.6 on 6 of 6 obs.

• JUN 30, 1990 09h 27m 12.89± 0.81s
37.646 N ±11.5km 69.328 E ±13.7km
DEPTH = 33.0km (normal)
4.0mb (4 obs.)
AFGHANISTAN-USSR BORDER REGION (717)

QUE	7.70	196	eP	29	05.50	-0.2
			e(S)	30	38.40	
MAIO	7.98	263	ePn	29	05.00	-4.6X
			eSn	30	37.00	
NDI	11.11	141	eP	29	53.00	0.5
			eS	31	47.00	
GKN	16.05	122	P	30	51.20	-6.6X
DMN	16.62	122	P	31	02.00	-3.1X
PKI	16.84	122	P	31	05.00	-3.1X
GUN	16.95	120	P	31	09.00	-0.4
HYB	21.72	156	eP	32	08.00	4.7X
GBA	25.01	161	Pd	32	39.40	4.2X
	0.8s		4.90nm			4.2mb
HFS	41.34	321	eP	34	56.80	0.0
	0.5s		2.50nm			4.2mb
NB2	42.66	322	P	35	07.80	0.1
	0.7s		0.50nm			3.4mb
YKA	80.16	2	eP	39	24.00	3.3X
	0.9s		1.20nm			3.9mb

S.D. = 0.5 on 5 of 12 obs.

JUN 30, 1990 09h 41m 02.28± 0.21s
28.453 N ± 5.2km 43.735 W ± 2.4km
DEPTH = 10.0km (geophysicist)
5.1mb (52 obs.) 5.1Msz (16 obs.)
NORTH ATLANTIC RIDGE (403)

Ms 5.3 (BRK).
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 27C
Centroid Location:
Origin Time 09:41: 7.4 0.4
Lat 28.63N 0.05 Lon 43.24W 0.04
Dep 15.0 FIX Half-duration 2.0
Moment Tensor; Scale 10**17 Nm
Mrr=-1.27 0.05 Mtt=-0.50 0.09
Mff= 1.77 0.08 Mrt= 0.00 0.00
Mrf= 0.00 0.00 Mtf= 0.20 0.05
Principal Axes:

T	Val= 1.79	Plg= 0	Azm= 95
N	-0.52	0	5
P	-1.27	90	185

Best Double Couple:Mo=1.5*10**17
NP1:Strike=185 Dip=45 Slip= -90
NP2: 5 45 -90

TBH	24.16	226	eP	46	24.67	5.1X
TRN	24.25	227	eP	46	24.19	3.7X
TPP	24.53	226	eP	46	25.05	1.9
CBM	26.52	321	P	46	42.40	0.7
RSNY	29.29	312	P	47	10.00	3.2X
	Z 22s		3.17um			4.9Msz
PTO	31.29	57	eP	47	23.50	-1.1
BLA	31.88	295	P	47	31.80	1.9
	1.1s		25.00nm			5.1mb
JSC	32.43	290	P	47	34.90	0.2
ERUA	32.64	55	eP	47	37.00	0.6
EJIF	33.09	66	eP	47	42.50	2.1
EHOR	33.36	64	eP	47	44.00	1.3
MAL	33.96	66	iPc	47	50.00	2.1
			iS	53	20.00	
TOL	34.50	60	eP	47	54.00	1.4
			ePP	49	02.00	
			eS	53	10.00	
TKL	34.51	292	P	47	53.70	1.0
RSCP	35.97	292	P	48	06.40	1.2
	1.2s		174.93nm			5.8mb
	Z 22s		4.23um			5.2Msz
ETOR	36.12	59	eP	48	08.00	1.5
EROQ	37.99	59	eP	48	23.50	1.5
PWLA	38.03	291	P	48	23.40	1.0
EBR	38.05	59	eP	48	24.00	1.5
			eS	54	20.00	
EPF	38.17	56	eP	48	23.40	-0.3
	1.3s		37.90nm			5.0mb
LPF	38.21	47	eP	48	23.50	-0.3
	1.3s		72.20nm			5.3mb
GRR	38.42	47	eP	48	25.10	-0.5
	1.3s		43.30nm			5.0mb
MFF	38.46	50	eP	48	25.70	-0.2
	1.3s		43.30nm			5.0mb
LFF	38.75	53	eP	48	27.60	-0.8
	1.0s		30.00nm			4.9mb
FLN	38.76	46	eP	48	27.80	-0.7
LDF	38.95	47	eP	48	29.40	-0.6
	1.4s		56.65nm			5.1mb
LPO	39.02	53	eP	48	30.10	-0.6
RJF	39.35	52	eP	48	32.60	-0.8
LSF	39.53	51	eP	48	34.30	-0.6
CAF	39.68	53	eP	48	35.30	-0.9
	1.3s		25.25nm			4.7mb
FVM	39.85	296	P	48	38.20	0.6
TCF	40.00	51	eP	48	38.20	-0.6
	1.4s		37.05nm			4.9mb
LKO	40.44	110	P	48	42.10	-0.6
	1.3s		63.50nm			5.2mb
POW	40.51	293	P	48	43.60	0.5
OLY	40.78	292	P	48	45.60	0.3
AVF	40.86	50	eP	48	45.20	-0.6
	1.1s		20.75nm			4.8mb
SSF	41.01	50	eP	48	46.40	-0.6
	1.1s		30.50nm			4.9mb
SMF	41.17	51	eP	48	47.90	-0.5
	1.1s		53.70nm			5.2mb
LOR	41.28	50	eP	48	48.50	-0.8
	1.4s		58.80nm			5.1mb
LBF	41.31	50	eP	48	48.70	-0.9
	1.1s		23.20nm			4.8mb
SNF	42.20	45	iP	48	56.79	0.1
DOU	42.30	46	Pc	48	58.80	1.2
	Z 19s		1.70um			5.0Msz
			e	49	09.00	
			S	55	20.00	
TIC	42.52	113	P	48	58.78	-1.0
LRG	42.59	56	eP	49	00.30	0.2
	1.3s		50.55nm			5.1mb
LMR	42.69	56	eP	49	00.70	-0.2
	1.2s		32.75nm			4.9mb
LIC	42.76	114	P	49	00.80	-0.9
FRF	42.81	55	eP	49	01.70	-0.1
	1.3s		39.70nm			5.0mb
KIC	42.91	113	P	49	02.10	-0.9
BNI	42.94	53	P	49	04.00	0.9
LPL	43.02	53	eP	49	04.20	0.4
	1.1s		17.10nm			4.7mb
LPG	43.03	53	eP	49	04.50	0.5
	1.2s		28.25nm			4.9mb
HAU	43.06	49	eP	49	03.10	-0.8

1.3s 54.15nm 5.1mb
DBN 43.11 43 eP 49 04.00 -0.1
Z 20s 0.60um 4.5Msz
eS 55 33.00
ENN 43.27 45 eP 49 06.00 0.5
1.5s 40.00nm 5.0mb
DOI 43.30 54 P 49 07.40 1.5
BSF 43.33 49 eP 49 05.20 -1.0
1.2s 32.75nm 5.0mb
UYO 43.35 291 iPc 49 06.60 0.2
DIX 43.55 52 ePc 49 09.60 1.4
CDF 43.73 49 eP 49 08.40 -1.0
1.3s 46.95nm 5.1mb
ORO 43.90 53 P 49 13.50 2.7
MMK 43.93 52 ePc 49 13.20 2.0
WTS 44.07 43 eP 49 13.00 1.1
1.3s 29.00nm 5.0mb
WIT 44.17 42 eP 49 09.50 -3.2X
LNO 44.25 293 iPc 49 14.10 0.6
TUL 44.25 293 ePd 49 13.20 -0.4
1.0s 95.70nm 5.6mb
LR 01 00.00
ZLA 44.36 50 ePc 49 14.80 0.3
SLE 44.46 50 ePc 49 16.50 1.3
VAI 44.47 52 P 49 15.40 0.1
PGF 44.49 57 eP 49 14.90 -0.8
1.2s 38.70nm 5.2mb
TMA 44.56 52 ePc 49 17.10 0.8
LLS 44.71 51 ePc 49 19.10 1.6
TNS 44.76 46 ePc 49 18.30 0.6
BOB 44.89 54 P 49 18.80 0.0
SAX 44.98 50 ePc 49 20.30 0.5
MDI 45.12 52 P 49 19.70 -0.8
OSS 45.48 51 ePc 49 24.60 1.0
PII 45.63 55 P 49 23.00 -1.5
BDI 45.69 55 P 49 25.50 0.4
SAL 45.69 53 P 49 25.50 0.5
MME 45.76 55 P 49 25.70 -0.2
OGA 46.10 51 eP 49 29.40 0.9
SQTA 46.25 51 iPc 49 30.10 0.5
1.4s 104.00nm 5.7mb
i 49 51.00
PGD 46.49 55 P 49 30.80 -0.8
SFI 46.59 55 P 49 33.00 0.9
MEO 46.65 292 iPd 49 32.90 0.1
CRE 46.66 56 P 49 32.00 -0.9
MOX 46.83 46 eP 49 34.00 0.1
1.6s 28.00nm 5.1mb
Z 18s 2.70um 5.2Msz
E 18s 1.90um
HOF 46.95 46 eP 49 35.00 0.0
ASS 47.19 56 P 49 36.70 -0.3
SIV 47.26 203 P 49 36.00 -1.7
RDP 47.27 58 P 49 37.50 -0.2
FVI 47.29 52 P 49 35.50 -2.1
ARV 47.38 56 P 49 36.60 -1.9
BHG 47.41 50 eP 49 38.70 0.1
WET 47.50 48 eP 49 39.30 0.0
AQU 47.76 57 P 49 40.30 -1.2
CLL 47.77 45 iP 49 50.00 8.6X
Z 19s 1.00um 4.8Msz
eS 56 40.00
AZI 47.80 58 P 49 42.00 0.3
KHC 47.95 48 iPc 49 43.00 0.1
1.2s 35.00nm 5.3mb
Z 20s 0.90um 4.7Msz
N 18s 0.80um
E 18s 0.80um
S 56 46.00
TRI 47.96 53 i(P)c 49 42.00 -0.9
e 51 44.00
e(S) 56 43.00
e(SS) 00 16.00
eLR 04 10.00
VOY 48.05 52 eP 49 43.70 -0.1
SDI 48.09 58 P 49 44.00 -0.1
BRG 48.32 46 eP 49 45.10 -0.6
1.4s 21.00nm 5.0mb
Z 20s 2.50um 5.2Msz
N 20s 1.00um
E 20s 2.00um
e 56 46.00
CEY 48.42 53 eP 49 47.00 0.4
LJU 48.50 52 eP 49 47.00 -0.1
DUI 48.58 58 P 49 48.00 0.1
PRU 48.63 47 Pc 49 48.50 0.4
1.5s 46.90nm 5.3mb

Z 17s 2.10um 5.2MszX
N 16s 0.50um
E 17s 1.30um
S 56 50.00
NB2 48.69 32 P 49 48.00 -0.4
1.4s 22.10nm 5.0mb
BSS 48.90 59 P 49 49.50 -0.8
FFC 49.09 319 iPd 49 51.20 -0.3
0.8s 25.00nm 5.3mb
PTJ 49.49 52 eP 49 54.20 -0.7
ZAG 49.51 53 eP 49 56.00 1.1
HFS 49.64 34 eP 49 55.00 -0.7
1.0s 12.80nm 4.9mb
KSP 49.80 46 eP 49 56.50 -0.6
e 50 02.00
SOP 49.89 50 eP 50 01.20 3.4X
TDS 50.18 61 P 49 59.30 -0.8
ZST 50.26 49 eP 50 00.50 -0.1
ZOBO 50.33 211 Pd 50 02.50 0.4
1.0s 3.75nm 4.3mb
Z 20s 1.40um 5.0Msz
S 57 24.00
LR 05 18.00
LPB 50.55 211 P 50 03.50 -0.1
1.2s 125.00nm 5.7mb
Z 20s 1.42um 5.0Msz
LR 05 15.00
BRT 50.70 59 P 50 02.00 -2.1
CNCB 50.74 211 iPd 50 05.00 -0.2
SRO 51.07 50 eP 50 06.40 -0.4
GLD 51.25 300 P 50 20.00 11.5X
Z 20s 6.00um 5.6Msz
NNA 51.40 223 eP 50 06.50 -3.1X
1.0s 13.00nm 4.8mb
BUD 51.56 50 eP 50 10.00 -0.5
KRA 52.12 47 eP 50 14.50 -0.1
1.3s 67.00nm 5.4mb
Z 18s 2.50um 5.3Msz
E 18s 4.40um
e 50 20.70
e 57 47.00
SPC 52.33 48 eP 50 17.00 0.5
ANMO 53.00 294 P 50 22.40 0.7
1.2s 64.45nm 5.4mb
Z 22s 2.22um 5.2Msz
ALQ 53.00 294 ePd 50 22.10 0.3
1.3s 77.88nm 5.5mb
Z 21s 4.75um 5.5Msz
OHR 53.38 58 eP 50 25.10 0.9
1.9s 145.00nm 5.6mb
BZS 53.46 53 eP 50 25.00 0.3
SKO 53.74 57 eP 50 27.00 0.2
Z 25s 1.45um 4.9MszX
N 24s 0.82um
E 25s 1.21um
i(S) 58 04.00
BW06 54.11 304 P 50 29.30 -0.5
1.2s 64.38nm 5.5mb
SES 54.44 313 ePd 50 30.80 -1.1
VAY 54.67 58 eP 50 33.40 -0.2
VTS 54.95 56 iP 50 36.00 0.1
KKB 54.97 57 eP 50 36.00 0.2
MMB 55.49 57 eP 50 40.00 0.4
EDM 55.73 317 eP 50 40.00 -1.2
DAU 55.73 301 P 50 41.00 -0.7
LRM 55.78 308 eP 50 41.30 -0.7
PLD 56.12 56 eP 50 43.00 -1.1
RZN 56.20 57 ePd 50 45.00 0.1
YKA 56.38 328 eP 50 43.70 -2.0
1.1s 15.00nm 4.9mb
PVL 56.40 55 iPc 50 50.00 3.9X
MLR 56.50 52 eP 50 46.00 -1.0
KDZ 56.73 57 iP 50 48.00 -0.5
BUC 56.76 54 eP 50 49.00 0.3
MSU 56.79 299 P 50 49.50 0.3
DUG 56.94 301 P 50 50.00 -0.2
1.2s 55.04nm 5.5mb
VRI 56.99 52 ePc 50 50.00 -0.3
JMB 57.44 56 eP 50 53.00 -0.4
PSN 58.37 54 eP 51 01.00 1.1
MBC 59.17 344 eP 51 05.00 -0.2
1.6s 31.00nm 5.2mb
PNT 60.07 313 eP 51 11.00 -0.7
1.0s 26.00nm 5.3mb
GLA 60.20 294 eP 51 13.00 0.1
TNP 60.75 300 P 51 16.50 -0.2
1.0s 15.50nm 5.1mb

ALT 60.78 59 eP 51 15.00 -1.8
TPC 60.89 295 eP 51 18.00 0.5
GSC 61.16 297 eP 51 20.00 0.6
KVN 61.17 301 P 51 17.80 -1.8
CLC 61.64 297 eP 51 23.00 0.4
PLM 61.75 295 eP 51 24.00 0.4
BAR 61.80 294 eP 51 24.00 0.3
RVR 61.98 295 eP 51 25.00 0.1
SBB 62.13 296 eP 51 26.00 0.0
ISA 62.36 298 eP 51 28.00 0.5
MWC 62.45 296 eP 51 26.00 -2.3
BBTK 62.56 58 eP 51 29.00 0.2
CMB 63.17 301 ePd 51 33.00 0.2
LBFM 63.38 304 P 51 33.70 -0.7
MIN 63.45 303 ePd 51 34.00 -0.7
BCAO 63.58 100 iPd 51 34.00 -1.8
1.2s 14.00nm 5.0mb
ORV 63.58 302 ePd 51 34.70 -0.7
INK 63.82 336 ePd 51 35.50 -1.1
SYP 63.88 297 eP 51 44.00 6.4X
LLA 64.00 299 eP 51 40.90 2.6X
WDC 64.07 304 ePd 51 36.20 -2.4
PRS 64.42 299 eP 51 41.00 0.1
BKS 64.62 301 e(P) 51 43.60 1.4
1.0s 96.00nm 5.9mb
Z 20s 1.40um 5.2Msz
N 20s 1.20um
E 20s 1.20um
eS 00 30.20
eLQ 11 00.00
eLR 12 00.00
PCC 64.84 301 eP 51 44.50 0.9
FHC 65.06 304 eP 51 45.30 0.2
PEL 66.38 205 eP 51 52.00 -1.6
DSI 67.12 65 e(P) 51 58.00 -0.3
PRNI 67.23 67 eP 51 59.50 0.3
FBA 70.28 334 eP 52 17.00 -0.4
TOA 70.79 331 eP 52 19.90 -0.7
IMA 71.93 336 eP 52 27.90 0.4
PMR 72.28 331 eP 52 29.00 -0.4
1.3s 80.20nm 5.7mb
SVW 75.23 332 eP 52 46.00 -0.7
LWI 75.78 100 ePc 52 52.60 1.8
MAIO 83.31 52 iPd 53 32.00 1.1
eS 04 04.00
SLR 87.68 121 eP 53 53.60 0.9
QUE 91.84 54 eP 54 14.40 2.0
HON 99.57 300 P 55 00.00 12.5X
Z 22s 1.11um 5.3Msz
DZM 152.02 276 iPKPc 01 01.10 8.0X
WB5 171.29 12 ePKP 01 13.30 1.1
WRA 171.35 12 PKP 01 14.00 1.8
0.9s 4.00nm
S.D. = 0.9 on 185 of 198 obs.

• JUN 30, 1990 10h 17m 45.43± 0.98s
5.270 N ±11.0km 32.380 E ±23.0km
DEPTH = 10.0km (geophysicist)
3.9mb (1 obs.)
SUDAN (557)

NAI 7.86 146 iPc 19 42.10 -0.7
S 21 19.00
LWI 8.27 206 iPc 19 47.20 -1.4
KRI 22.13 187 iPc 22 43.00 -0.1
iSn 26 30.00
iLR 28 56.00
BUL 25.52 188 iPc 23 18.30 2.2
iSn 27 54.00
iLR 30 42.30
CIR 26.13 182 iPc 23 22.00 0.4
iSn 27 13.00
iLR 30 59.00
KHC 46.53 343 eP 26 15.40 0.5
NB2 57.88 348 P 27 38.80 -0.9
0.9s 1.20nm 3.9mb
S.D. = 1.5 on 7 of 7 obs.

• JUN 30, 1990 11h 15m 44.46± 1.06s
5.157 S ± 8.4km 129.791 E ±14.8km
DEPTH = 206.8 ± 10.7 km
4.9mb (11 obs.)
BANDA SEA (280)

AAI 2.16 312 ePd 16 27.00 1.5
eS 16 48.30
MTN 7.75 170 ePd 17 34.50 -1.0

30d 11h

KNA	10.57	185	eP	18	10.90	-1.1
	0.3s	25.00nm			5.1mb	
			eS	20	02.00	
WB5	15.30	163	eP	19	10.00	-1.4
			i	19	13.80	
			eS	21	51.10	
WRA	15.35	164	Pc	19	10.60	-1.4
	0.7s	6.90nm			4.2mb	
KKM	17.54	309	ePd	19	37.70	0.1
MBL	18.61	210	iPc	19	49.00	0.2
	0.3s	20.00nm			5.1mb	
ASPA	18.82	168	eP	19	50.50	-0.6
	0.6s	109.00nm			5.5mb	
			eS	23	11.80	
WARB	21.12	188	eP	20	16.00	1.9
	0.3s	7.00nm			4.7mb	
NANU	22.12	217	iPc	20	25.00	1.2
	0.3s	15.00nm			5.0mb	
MEKA	23.89	206	eP	20	41.00	0.2
	0.3s	11.00nm			5.0mb	
MRWA	27.26	207	eP	21	11.30	-0.2
BWA	33.85	152	eP	22	11.80	2.5
CAN	34.86	152	eP	22	19.60	1.8
MAT	42.22	10	eP	23	18.00	-0.7
	0.9s	5.88nm			4.1mb	
GUN	53.60	310	P	24	47.00	-0.1
PKI	53.79	310	P	24	48.00	-0.5
	0.6s	19.00nm			4.9mb	
DMN	54.04	310	P	24	50.00	-0.2
	0.5s	36.00nm			5.2mb	
KOD	54.31	286	eP	24	52.00	-0.4
GKN	54.59	310	P	24	53.90	-0.2
GBA	55.21	290	Pc	24	56.90	-1.5
	0.6s	6.00nm			4.5mb	
CNCB	151.98	142	iPKPc	35	20.20	9.1X
LPB	152.12	141	(PKP)	35	02.00	-9.1X
ZOBO	152.30	141	PKP	35	21.20	9.6X
S.D. = 1.3 on 21 of 24 obs.						

? JUN 30, 1990 12h 08m 51.64± 2.99s
40.978 N ±24.5km 21.511 E ±16.9km
DEPTH = 10.0km (geophysicist)
GREECE (364)

FNA	0.22	208	eP	08	56.40	0.0
			eS	08	58.70	
GRG	0.67	92	iP	09	04.90	-0.2
LIT	1.15	139	eP	09	13.20	0.0
SOH	1.41	96	eP	09	17.50	0.2
S.D. = 0.2 on 4 of 4 obs.						

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* JUN 30, 1990 12h 33m 40.15± 1.17s
31.230 S ±11.4km 68.654 W ±13.8km
DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)

ZON	0.32	184	iPd	33	49.50	1.3
			eS	34	01.50	
CFA	0.52	137	ePc	33	51.00	-0.1
RTCV	0.64	171	iPc	33	51.80	-0.9
RTBS	0.81	238	eP	33	54.70	-0.3
			S	34	08.60	
RTRS	1.26	326	iPc	34	01.60	0.0
			eS	34	20.90	
S.D. = 1.2 on 5 of 5 obs.						

& JUN 30, 1990 12h 38m 08.94s
63.494 N 150.787 W
DEPTH = 8.8km
CENTRAL ALASKA (1)
<AGS-P>.

KTH	0.08	315	iP	38	11.34	-0.1
			eS	38	13.11	
HUR	0.73	134	eP	38	22.72	-0.8
			eS	38	32.28	
MCK	0.86	73	eP	38	25.33	-0.3
			eS	38	36.23	
CUT	1.12	168	eP	38	29.86	-0.1
			eS	38	45.70	
WRH	1.54	49	eP	38	37.57	0.9
SKT	1.56	193	eP	38	36.75	-0.1
CCB	1.75	47	eP	38	39.79	0.2
PWA	1.90	167	eP	38	42.23	0.5
GHO	1.93	153	eP	38	41.84	-0.5
SML	2.04	145	eP	38	42.93	-0.9
PLRM	2.06	157	eP	38	43.32	-0.8
NCG	2.19	197	eP	38	45.90	-0.3
CGLM	2.27	195	eP	38	47.59	0.3
PMS	2.33	165	eP	38	48.98	0.9
TOA	2.54	121	eP	38	51.69	0.7
KLU	3.02	129	eP	38	56.87	-1.0
16 obs. associated						

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* JUN 30, 1990 13h 09m 51.73± 1.21s
10.330 S ±14.4km 120.048 E ±11.5km
DEPTH = 33.0km (normal)
4.0mb (2 obs.)
SUMBA ISLAND REGION (287)

KNA	10.06	123	eP	12	35.80	18.8X
	0.3s	66.00nm				
			eS	14	28.00	
MBL	10.77	181	eP	12	27.10	0.3
			eS	14	27.00	
MTN	11.14	104	eP	12	31.00	-0.9
			e	14	37.00	
NANU	12.91	199	eP	12	55.00	-0.6
			eS	15	13.00	
WB5	16.76	126	eP	13	46.70	1.0
WRA	16.77	126	P	13	49.00	3.1X
	0.5s	0.90nm			3.2mb	
GBA	48.51	299	P	18	34.00	0.2
	0.6s	5.40nm			4.8mb	
S.D. = 1.1 on 5 of 7 obs.						

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* JUN 30, 1990 13h 58m 41.21± 1.39s
39.371 N ±11.9km 21.989 E ±11.8km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 2.9 (ATH). ML 3.0 (THE).

LIT	0.82	28	eP	58	56.00	-1.2
			eS	59	09.40	
IGT	1.29	278	eP	59	04.00	-1.2
			eS	59	23.60	
FNA	1.49	342	eP	59	07.80	-0.2
VLS	1.62	223	ePn	59	10.00	0.1
			eSn	59	35.50	
KEK	1.73	282	ePn	59	12.30	0.8
			eSn	59	37.50	
KNT	1.92	21	eP	59	13.90	-0.3
OHR	1.96	333	ePn	59	15.20	0.3
VAY	2.00	13	ePn	59	17.00	1.7
SKO	2.63	351	ePn	59	30.00	5.5X
S.D. = 1.1 on 8 of 9 obs.						

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* JUN 30, 1990 14h 03m 00.17± 3.15s
51.281 N ±24.8km 15.931 E ±17.1km
DEPTH = 10.0km (geophysicist)
POLAND (548)

KSP	0.49	152	iP	03	10.20	0.0
	0.3s	34.00nm				
			iS	03	19.10	
BRG	1.32	253	iPg	03	24.50	0.0
			iSg	03	43.50	
PRU	1.57	215	Pn	03	28.20	0.1
			Pg	03	30.00	
			Sn	03	47.00	
			Sg	03	53.50	
CLL	1.84	272	iPg	03	32.00	0.0
			eSg	03	57.00	
KHC	2.63	216	ePn	03	43.30	-0.1
			Pg	03	49.50	
			Sg	04	26.00	
MOX	2.80	259	ePg	03	52.00	6.2X
			iSg	04	31.00	
S.D. = 0.1 on 5 of 6 obs.						

JUN 30, 1990 14h 10m 30.74± 1.02s
6.154 S ± 5.7km 130.423 E ± 7.8km
DEPTH = 153.6 ± 12.1 km
4.9mb (12 obs.)
BANDA SEA (280)

AAI	3.31	318	ePd	11	24.30	1.6
MTN	6.69	174	iP	12	06.90	-0.8
MKS	10.94	274	e(P)d	13	16.50	12.4X
WB5	14.17	165	eP	13	43.80	-2.0
			i	13	46.10	
			eS	16	15.50	
WRA	14.23	165	Pc	13	44.80	-1.7
	0.7s	12.20nm			4.3mb	
OIS	16.86	149	eP	14	19.00	-0.2
			eS	17	16.50	
TRT	17.73	264	ePc	14	28.30	-1.2
ASPA	17.73	169	eP	14	29.80	0.2
	0.7s	20.00nm			4.6mb	
			iS	17	36.20	
MBL	18.10	214	iPd	14	34.10	0.4
	0.4s	25.00nm			4.9mb	
			eS	17	42.00	
KKM	18.65	310	ePc	14	39.70	0.1
	0.9s	85.10nm			5.1mb	
WARB	20.24	190	iPd	14	57.50	1.6
	0.3s	7.00nm			4.7mb	
			eS	18	35.00	
CTA	20.70	133	iPd	15	02.60	2.1
	1.0s	21.00nm			4.5mb	
NANU	21.74	220	Pc	15	13.00	2.3
	0.3s	11.00nm			4.8mb	
MEKA	23.29	208	eP	15	26.00	0.2
GUA	24.28	36	eP	15	35.80	0.4
	0.7s	60.27nm			5.2mb	
GUMO	24.30	36	eP	15	35.80	0.3
PJG	24.30	36	eP	15	35.60	0.1
MRWA	26.68	209	eP	15	58.30	1.0
PSI	32.66	285	ePd	16	49.50	-0.9
MAT	43.09	9	eP	18	16.00	-1.2
LZH	48.86	331	eP	19	02.50	-0.4
GUN	54.72	310	P	19	46.90	-0.1
	0.6s	56.00nm			5.6mb	
PKI	54.90	310	P	19	47.80	-0.5
	0.6s	15.00nm			5.0mb	
DMN	55.15	310	P	19	49.80	-0.2
	0.6s	23.00nm			5.2mb	
GKN	55.71	310	P	19	53.70	-0.2
GBA	56.14	291	Pd	19	56.10	-0.8
	0.5s	5.50nm			4.7mb	
HYB	56.33	296	eP	19	58.00	-0.2
CHCH	135.42	155	ePKP	29	28.00	-6.6X
PEL	136.08	154	ePKP	29	25.00	-10.9X
CNCB	150.82	142	PKP	30	11.00	8.9X
ZOBO	151.13	141	PKP	30	12.00	9.4X
S.D. = 1.1 on 26 of 31 obs.						

% JUN 30, 1990 14h 47m 17.49± 0.86s
37.758 N ± 8.1km 15.125 E ± 6.6km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO	0.38	297	P	47	25.50	0.1
			eSg	47	32.00	
ATN	0.48	34	P	47	26.50	-0.8
MEU	0.67	193	P	47	30.60	-0.3
			eSg	47	43.00	
SOI	0.80	67	P	47	33.80	0.8
GIB	0.90	285	P	47	35.00	0.2
			eSg	47	49.00	
S.D. = 0.9 on 5 of 5 obs.						

JUN 30, 1990 14h 51m 07.94± 0.53s
9.857 N ± 5.1km 84.392 W ± 3.4km
DEPTH = 8.1 ± 3.3 km
5.2mb (50 obs.) 5.2Msz (14 obs.)
COSTA RICA (78)
Ms 5.0 (BRK). Slight damage at Santiago de Puriscol and San Jose. Felt throughout most of Costa Rica.
CENTROID, MOMENT TENSOR (HRV)
Dota Used: GDSN
L.P.B.: 14S, 33C
Centroid Location:
Origin Time 14:51:16.3 0.8
Lot 9.99N 0.06 Lon 84.66W 0.06
Dep 15.0 FIX Half-durotion 2.0
Moment Tensor; Scale 10**17 Nm
Mrr=-0.44 0.06 Mtt=-1.01 0.06
Mff= 1.45 0.09 Mrt=-1.03 0.16
Mrf= 0.31 0.22 Mtf= 1.13 0.06
Principal Axes:

	Val=	Plg=	Azm=
T	1.89	2	112
N	0.24	57	206
P	-2.13	32	21

Best Double Couple:Mo=2.0**17
NP1:Strike=161 Dip=66 Slip=-157
NP2: 62 70 -26

PTCR	0.07	206	P	51	09.80	-0.4

EPA	0.24	303	P	51 13.00	0.1
HDC2	0.31	57	P	51 14.80	0.5
OCM	0.43	85	P	51 15.80	-0.8
IRZ2	0.50	77	P	51 18.10	0.0
QPS	0.52	150	P	51 17.90	-0.5
CDM	0.69	116	P	51 21.00	-1.0
JTS	0.70	308	P	51 22.20	0.2
JUD	1.18	285	P	51 29.40	-0.8
RIN3	1.34	314	P	51 32.70	-0.2
DVD	2.38	126	iPc	51 48.00	0.1
UPA	4.87	100	e(P)	52 23.50	0.2
			i	53 20.00	
			iS	53 21.00	
BOG	11.49	116	eP	53 58.00	2.3
			eS	56 12.00	
BMG	11.53	103	iPd	53 57.00	0.9
SDV	13.61	93	eP	54 23.00	-1.0
			iS	56 50.50	
TOV	14.39	89	eP	54 34.00	-0.1
FISA	14.87	83	iP	54 41.40	1.0
MORO	15.85	85	iP	54 53.60	0.4
PLAV	16.64	88	iP	55 04.20	0.7
GUAC	16.86	87	iPd	55 07.50	1.3
			eS	58 23.50	
CAR	17.20	86	iPc	55 10.50	0.1
			iS	58 24.00	
OLLA	17.33	88	iP	55 11.60	-0.4
PORP	19.05	63	eP	55 35.00	1.8
SJG	19.50	63	e(P)	55 40.00	1.3
NNA	22.96	161	eP	56 11.50	-2.6
	1.0s	38.00nm			4.9mb
			eS	00 28.50	
SGS	23.50	8	P	56 21.00	1.9
JSC	24.48	6	P	56 28.70	0.1
LHS	24.73	7	P	56 31.00	0.0
PT06	24.85	161	iPc	56 35.70	3.3X
RSCP	25.65	358	P	56 41.30	1.5
TKL	25.69	1	P	56 40.80	0.6
GBTN	25.69	0	P	56 41.10	0.9
UYO	25.90	341	e(P)	56 41.70	-0.4
OLY	26.33	347	P	56 45.00	-1.1
BLA	27.47	7	eP	56 58.80	2.2
	1.4s	55.81nm			5.1mb
Z	20s	2.84um			4.8Msz
NAV	27.53	6	P	56 58.60	1.5
LNO	27.93	340	e(P)	57 00.00	-0.6
TUL	27.93	340	eP	56 59.20	-1.5
	1.3s	41.30nm			5.1mb
			LR	06 00.00	
MEO	28.00	335	e(P)	57 01.00	-0.4
CBN	28.92	11	eP	57 10.00	0.4
ARE	29.10	154	eP	57 14.00	2.2
ZOBO	30.55	148	P	57 26.00	1.0
	1.0s	13.00nm			4.8mb
Z	24s	1.76um			4.6MszX
			S	02 32.00	
			LR	08 08.00	
LPB	30.78	148	eP	57 08.00	-18.9X
Z	15s	5.00um			5.3MszX
			LR	06 34.00	
CNCB	31.07	148	P	57 31.00	1.4
			i	00 27.00	
ALQ	32.09	324	eP	57 36.50	-1.5
	1.0s	13.25nm			4.8mb
Z	19s	1.74um			4.8Msz
ANMO	32.09	324	P	57 36.40	-1.6
	1.0s	9.75nm			4.7mb
WVLY	32.89	8	P	57 44.30	-0.3
SIV	34.53	138	Pc	57 58.00	-1.2
GLD	35.08	332	P	58 01.90	-1.9
	1.2s	22.22nm			4.9mb
GOL	35.11	331	P	58 02.00	-2.1
Z	20s	1.00um			4.6Msz
RSNY	35.60	12	P	58 07.20	-0.8
	1.4s	39.29nm			5.1mb
Z	20s	5.08um			5.3Msz
GLA	36.30	314	eP	58 16.00	1.9
BAR	37.44	312	eP	58 25.00	1.4
TPC	37.73	315	eP	58 27.00	0.9
			e	03 45.00	
MSU	37.87	323	P	58 27.00	-0.4
PLM	37.91	313	eP	58 29.00	1.2
			e	02 46.00	
RVR	38.61	314	eP	58 33.00	-0.4
GSC	38.89	316	eP	58 37.00	1.1
MWC	39.21	313	eP	58 33.00	-5.7X
SBB	39.28	314	eP	58 41.00	1.9

BW06	39.49	331	P	58 38.70	-2.2
	1.0s	4.00nm			4.0mb X
CLC	39.72	316	eP	58 44.00	1.3
			e	03 01.00	
ISA	40.24	315	eP	58 49.00	2.0
TNP	40.72	319	P	58 51.00	-0.1
	0.8s	13.73nm			4.7mb
SYP	40.75	313	eP	58 55.00	3.7X
BCH	41.14	313	P	58 56.50	2.0
KVN	41.84	320	P	58 59.70	-0.6
PRI	42.02	314	eP	59 03.70	2.0
PRS	42.61	314	eP	59 07.50	1.1
CMB	42.78	317	eP	59 10.40	2.6
SAO	42.87	315	eP	59 10.70	2.2
LRM	43.14	331	eP	59 10.80	-0.1
MHC	43.29	315	eP	59 13.80	1.7
GCC	43.39	315	eP	59 14.20	1.5
BKS	43.96	316	e(P)	59 19.50	2.2
	0.8s	38.00nm			5.3mb
Z	20s	2.20um			5.1Msz
N	20s	1.10um			
E	20s	2.00um			
			e(S)	06 19.60	
BRK	43.98	316	eP	59 20.30	2.9
BAO	44.06	125	eP	59 18.00	-0.5
ORV	44.32	318	eP	59 21.90	1.7
MIN	44.81	319	e(P)	59 24.00	-0.4
LBFM	45.53	320	P	59 29.60	-0.5
WDC	45.54	319	eP	59 27.00	-3.0
SES	46.02	336	eP	59 36.00	2.3
FFC	46.89	346	eP	59 39.00	-1.4
	0.7s	14.00nm			5.2mb
NEW	47.12	330	P	59 40.50	-1.9
	1.2s	0.57nm			3.5mb X
PNT	49.05	330	eP	59 56.00	-1.4
	0.8s	10.00nm			4.9mb
FRB	54.97	9	eP	00 38.00	-3.6X
YKA	56.91	344	eP	00 51.50	-4.1X
	0.9s	13.20nm			5.0mb
INK	66.57	342	eP	01 58.00	-2.4
MBC	69.00	352	eP	02 13.50	-2.0
PMR	69.48	332	P	02 16.00	-2.7
	0.7s	7.27nm			5.0mb
Z	20s	1.20um			5.1Msz
PMS	69.57	332	eP	02 18.00	-1.3
FBA	70.00	336	P	02 19.60	-2.2
	0.8s	7.76nm			4.9mb
IMA	72.69	336	P	02 36.00	-2.2
	1.1s	6.25nm			4.6mb
PTO	72.89	50	eP	02 37.00	-2.6
AVE	73.81	58	iP	02 46.50	1.4
TIO	74.00	61	iP	02 48.00	1.5
IFR	75.71	58	iPd	02 57.50	1.2
MAL	76.17	55	iPc	03 00.80	2.2
TOL	76.36	51	eP	03 01.00	1.3
EKA	76.97	35	Pd	03 00.30	-2.4
	1.0s	20.70nm			5.2mb
LKO	77.48	82	P	03 05.58	-0.8
	1.0s	32.50nm			5.4mb
LPF	78.31	43	eP	03 09.40	-0.8
	1.1s	29.30nm			5.3mb
GRR	78.42	43	eP	03 10.10	-0.7
	1.1s	36.65nm			5.4mb
TIC	78.46	85	P	03 12.62	0.9
LIC	78.51	86	P	03 12.64	0.6
Z	20s	0.74um			5.0Msz
FLN	78.66	42	eP	03 11.30	-0.8
	0.9s	14.75nm			5.0mb
KIC	78.77	85	P	03 14.42	1.0
LDF	78.90	42	eP	03 12.80	-0.7
	1.2s	44.65nm			5.4mb
MFF	78.97	44	eP	03 13.10	-0.8
EPF	79.51	48	eP	03 16.80	-0.2
	1.1s	43.95nm			5.4mb
LFF	79.68	46	eP	03 17.00	-0.8
	1.1s	29.30nm			5.2mb
EBR	79.78	50	eP	03 19.00	0.6
LPO	80.02	46	eP	03 18.90	-0.7
	1.1s	41.50nm			5.3mb
LSF	80.15	45	eP	03 19.20	-1.1
RJF	80.21	46	eP	03 19.90	-0.7
	1.1s	26.85nm			5.1mb
TCF	80.62	45	eP	03 21.60	-1.2
	0.9s	9.00nm			4.8mb
CAF	80.62	46	eP	03 22.10	-0.7
	1.2s	38.70nm			5.3mb
MAF	80.87	45	eP	03 23.10	-1.0

	1.1s	18.30nm			5.0mb
BGF	81.03	44	eP	03 23.90	-1.0
	1.1s	26.85nm			5.2mb
AVF	81.36	44	eP	03 25.20	-1.4
	1.1s	13.45nm			4.9mb
SSF	81.44	44	eP	03 25.80	-1.2
	1.1s	17.10nm			5.0mb
LOR	81.66	43	eP	03 26.80	-1.4
	1.1s	19.55nm			5.1mb
SMF	81.71	44	eP	03 27.10	-1.4
	1.1s	17.10nm			5.0mb
LBF	81.77	44	eP	03 27.10	-1.7
DOU	81.88	41	P	03 28.50	-0.7
ENN	82.65	40	eP	03 33.00	-0.2
	1.0s	19.00nm			5.2mb
WIT	82.87	38	eP	03 35.00	0.7
WTS	83.06	39	eP	03 35.50	0.2
	1.1s	44.00nm			5.6mb
HAU	83.25	43	eP	03 35.50	-1.0
BSF	83.57	43	eP	03 37.00	-1.2
	1.0s	14.00nm			5.1mb
CDF	83.82	42	eP	03 38.40	-1.0
LRG	83.85	47	eP	03 39.10	-0.4
	1.0s	28.00nm			5.4mb
LMR	83.97	47	eP	03 39.40	-0.8
	0.9s	14.75nm			5.2mb
FRF	84.04	47	eP	03 40.00	-0.5
NB2	84.16	29	P	03 40.60	-0.2
	1.1s	25.10nm			5.4mb
DOI	84.34	46	P	03 44.00	1.9
SBF	84.57	47	eP	03 42.60	-0.6
	1.2s	59.50nm			5.7mb
MMK	84.62	44	ePd	03 44.60	0.9
ORO	84.69	45	P	03 45.00	1.1
ZLA	84.69	43	ePd	03 44.60	0.8
SLE	84.72	43	ePd	03 43.90	0.0
LLS	85.20	43	ePd	03 47.00	0.5
VAI	85.20	44	P	03 47.50	1.3
TMA	85.23	44	ePd	03 46.70	0.0
SAX	85.37	43	ePd	03 47.80	0.3
HFS	85.54	30	eP	03 45.70	-1.9
	0.9s	17.30nm			5.2mb
Z	19s	0.88um			5.2Msz
			LR	31 51.00	
BOB	85.85	45	P	03 51.00	1.3
MDI	85.86	44	P	03 48.00	-1.6
PGF	85.90	48	eP	03 49.30	-0.7
	1.1s	34.20nm			5.4mb
OSS	86.00	43	ePd	03 51.00	0.5
GRF	86.17	40	ePd	03 51.80	0.7
	1.2s	45.00nm			5.5mb
Z	19s	0.90um			5.2Msz
MOX	86.25	39	eP	03 52.00	0.6
	1.4s	34.00nm			5.3mb
SAL	86.46	44	P	03 53.50	1.0
SOTA	86.62	43	iPd	03 53.40	-0.1
	1.3s	48.30nm			5.5mb
			i	03 55.60	
			i	04 07.50	
			i	04 19.70	
CLL	86.97	39	iPd	03 55.00	0.1
	1.4s	45.00nm			5.5mb
Z	18s	1.00um			5.3Msz
WET	87.34	41	eP	03 57.00	0.2
	1.4s	104.00nm			5.9mb
UPP	87.52	30	iP	03 57.10	-0.2
PGD	87.62	46	P	03 57.90	-0.5
BHG	87.64	42	eP	03 59.00	0.8
BRG	87.65	39	eP	03 58.40	0.2
	1.4s	30.00nm			5.4mb
			e	04 10.40	
			e	04 26.40	
SFI	87.70	46	P	03 58.00	-0.5
KHC	87.79	41	Pd	03 59.50	0.5
	1.2s	20.00nm			5.3mb
Z	18s	0.90um			5.2Msz
N	18s	0.40um			
E	18s	0.80um			
FVI	87.80	43	P	03 59.10	0.1
CRE	87.83	46	P	03 58.50	-0.9
PRU	88.22	40	eP	04 02.00	1.1
Z	18s	0.80um			5.2Msz
N	18s	0.50um			
E	18s	0.50um			
ASS	88.45	47	P	03 59.50	-2.8
ARV	88.56	46	P	04 03.00	0.2
TRI	88.66	44	P	04 02.50	-0.6

30d 15h

KSP	89.10	39	eP	04 05.30	0.1	
AZI	89.24	48	P	04 04.50	-1.4	
SDI	89.58	48	P	04 07.00	-0.7	
PTJ	90.11	43	eP	04 10.10	0.0	
ZST	90.29	41	eP	04 11.80	1.1	
SGO	90.94	49	P	04 12.50	-1.4	
KRA	91.56	39	eP	04 18.20	1.6	
	Z 19s		1.30um		5.4Msz	
	E 19s		1.30um			
TDS	91.92	49	P	04 19.80	1.3	
SPC	92.01	39	e(P)	04 20.00	1.1	
OHR	94.80	47	eP	04 33.30	1.5	
			e	08 45.70		
SKO	95.00	46	eP	04 33.50	0.9	
WMQ	126.10	7	ePKP	10 15.50	2.6X	
TIY	130.13	343	ePKP	10 24.60	3.9X	
	Z 25s		1.00um		5.4MszX	
	E 20s		1.00um			
GTA	130.83	356	ePKP	10 23.50	1.4X	
	Z 22s		1.20um		5.6Msz	
WB5	141.32	251	ePKP	10 36.50	-5.5X	
			i	10 45.50		
WRA	141.34	250	PKPc	10 36.50	-5.6X	
	0.7s		2.70nm			
SHL	144.61	6	iPKP	10 46.80	-1.0	
MTN	145.06	262	ePKP	10 48.50	0.0	
HYB	148.09	32	ePKP	10 56.00	2.5X	
GBA	150.53	38	PKP	11 01.00	3.8X	
	1.1s		24.20nm			
KOD	153.09	43	ePKP	11 09.00	7.6X	
	S.D. = 1.3		on 175 of 189 obs.			

? JUN 30, 1990 14h 53m 10.40± 2.79s
16.722 N ±23.3km 99.837 W ±21.9km
DEPTH = 33.0km (normal)
NEAR COAST OF GUERRERO, MEXICO (58)
Felt at Acapulco.

ACX	0.15	352	iP	53 16.42	-0.1	
			iS	53 17.07		
III	1.68	12	iP	53 37.77	-0.3	
			iS	53 56.18		
PPM	2.60	26	iP	53 53.09	1.6	
			iS	54 25.96		
UNM	2.67	13	iP	53 55.00	2.7X	
			(S)	54 23.00		
CRX	2.67	3	eP	53 58.35	6.0X	
IIT	2.71	32	iP	53 51.45	-1.4	
			(S)	54 30.00		
IIJ	3.00	2	iP	54 00.96	3.8X	
			iS	54 31.26		
OXX	3.00	83	(P)	53 57.00	0.0	
			(S)	54 31.00		
MRX	3.23	337	eP	54 04.62	4.6X	
			(S)	54 40.00		
	S.D. = 1.5		on 5 of 9 obs.			

JUN 30, 1990 14h 55m 23.69± 0.55s
9.981 N ±11.5km 84.109 W ± 7.4km
DEPTH = 10.0km (geophysicist)
4.8mb (23 obs.)
COSTA RICA (78)

DVD	2.24	133	iPc	56 02.00	0.6	
OXX	14.15	301	(P)	58 44.00	-2.6	
PPM	16.69	304	(P)	59 21.00	1.1	
III	17.06	301	(P)	59 24.50	0.3	
CRX	17.72	304	(P)	59 33.00	0.3	
IIJ	17.93	305	(P)	59 34.00	-1.4	
MRX	19.12	302	(P)	59 51.00	1.5	
JSC	24.33	6	P	00 43.60	1.0	
LHS	24.57	7	P	00 46.50	1.5	
RSCP	25.54	357	P	00 58.10	3.9X	
TKL	25.56	1	P	00 56.00	1.6	
GBTN	25.57	360	P	00 53.20	-1.3X	
POW	26.83	347	P	01 04.90	-1.3X	
BLA	27.31	6	P	01 12.60	2.0	
	1.0s		10.00nm		4.5mb	
ALQ	32.15	324	eP	01 55.00	1.0	
	0.9s		3.57nm		4.3mb	
ANMO	32.15	324	P	01 55.70	1.7	
	0.9s		2.31nm		4.1mb	
PLM	38.04	313	P	02 40.60	-3.7X	
RSSD	38.15	337	P	03 00.00	14.9X	
BW06	39.52	330	P	02 57.20	0.6	
	1.2s		4.11nm		4.0mb	
TNP	40.81	319	P	03 06.10	-1.2	
	0.6s		2.78nm		4.2mb	
KVN	41.93	319	P	03 12.00	-4.4X	
BAO	43.90	125	eP	03 32.50	-0.2	
FFC	46.83	346	eP	03 55.00	-0.4	
	0.9s		12.00nm		5.0mb	
INK	66.54	342	eP	06 16.00	0.4	
MBC	68.92	351	eP	06 29.00	-1.4	
	0.7s		13.00nm		5.2mb	
LKO	77.19	82	P	07 21.80	1.7	
	0.6s		11.00nm		5.1mb	
GRR	78.14	43	eP	07 24.10	-0.6	
	0.7s		9.90nm		5.0mb	
TIC	78.17	85	(P)	07 27.44	1.9	
LIC	78.23	86	(P)	07 28.28	2.4	
	0.9s		25.00nm		5.3mb	
FLN	78.38	42	eP	07 25.60	-0.4	
	0.8s		14.80nm		5.1mb	
KIC	78.49	86	(P)	07 29.40	2.1	
	0.9s		16.50nm		5.1mb	
LDF	78.62	42	eP	07 26.90	-0.5	
	0.7s		5.50nm		4.7mb	
MFF	78.69	44	eP	07 27.20	-0.6	
EPF	79.23	48	eP	07 31.00	0.1	
	0.9s		13.10nm		4.9mb	
LFF	79.40	46	eP	07 31.30	-0.3	
	0.8s		16.10nm		5.1mb	
LPO	79.73	46	eP	07 33.10	-0.4	
LSF	79.86	45	eP	07 33.30	-0.9	
	1.0s		13.00nm		4.9mb	
RJF	79.92	46	eP	07 33.80	-0.7	
TCF	80.33	45	eP	07 35.90	-0.8	
	0.8s		6.70nm		4.7mb	
CAF	80.33	46	eP	07 36.20	-0.6	
MAF	80.58	45	eP	07 37.40	-0.6	
	0.8s		6.05nm		4.7mb	
AVF	81.08	44	eP	07 39.40	-1.2	
	0.9s		4.90nm		4.5mb	
SSF	81.16	44	eP	07 40.00	-1.0	
	0.7s		4.95nm		4.7mb	
LOR	81.38	44	eP	07 41.00	-1.2	
	0.8s		6.70nm		4.7mb	
SMF	81.43	44	eP	07 41.10	-1.3	
LBF	81.49	44	eP	07 41.40	-1.4	
	0.8s		4.05nm		4.5mb	
HAU	82.97	43	eP	07 49.80	-0.7	
BSF	83.29	43	eP	07 51.10	-1.1	
CDF	83.54	42	eP	07 52.50	-0.9	
LPL	83.55	45	eP	07 53.80	0.0	
LPG	83.57	45	eP	07 53.80	-0.1	
NB2	83.92	29	P	07 55.20	0.2	
	1.2s		15.30nm		5.1mb	
PGF	85.61	48	eP	08 03.70	-0.3	
WB5	141.63	251	ePKP	14 53.90	-4.1X	
WRA	141.64	251	PKPd	14 58.60	0.6	
HYB	147.83	32	ePKP	15 10.00	1.5X	
	S.D. = 1.2		on 48 of 56 obs.			

• JUN 30, 1990 14h 59m 07.63± 0.88s
10.264 N ±20.0km 83.923 W ±12.0km
DEPTH = 10.0km (geophysicist)
4.9mb (5 obs.)
COSTA RICA (78)

OXX	14.16	300	(P)	02 30.00	-0.7	
PPM	16.69	303	(P)	03 04.00	0.2	
III	17.07	300	(P)	03 09.00	0.6	
CRX	17.72	303	(P)	03 18.00	1.4	
IIJ	17.93	304	(P)	03 20.50	1.2	
PLM	37.98	312	eP	06 28.20	0.5	
TNP	40.72	318	eP	06 50.00	-0.5	
KVN	41.83	319	eP	06 57.00	-2.6	
BAO	43.91	125	eP	07 17.00	0.3	
FFC	46.61	346	eP	07 39.00	1.4	
	1.0s		16.00nm		5.0mb	
FRB	54.51	8	eP	08 38.00	0.5	
YKA	56.65	344	eP	08 51.20	-1.9	
	0.8s		4.00nm		4.5mb	
INK	66.33	342	eP	09 56.00	-2.2	
MBC	68.67	351	eP	10 13.00	0.2	
	0.4s		3.00nm		4.8mb	
NB2	83.58	29	P	11 38.60	1.3	
	1.0s		7.80nm		4.9mb	
HFS	84.95	30	eP	11 44.40	0.3	
	0.6s		5.00nm		4.9mb	
CLL	86.37	39	e(P)	11 52.00	0.7	
WB5	141.89	251	ePKP	18 43.20	0.8	
WRA	141.91	251	PKP	18 41.00	-1.5	
	0.8s		2.30nm			
HYB	147.50	32	ePKP	18 56.00	4.1X	
	S.D. = 1.3		on 19 of 20 obs.			

% JUN 30, 1990 15h 05m 01.32± 0.78s
37.781 N ± 7.6km 15.085 E ± 6.0km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO	0.34	296	P	05 08.60	0.1	
			eSg	05 14.60		
ATN	0.48	38	Pd	05 11.00	-0.1	
			eSg	05 18.00		
MEU	0.69	190	P	05 15.00	0.0	
			eSg	05 24.70		
SOI	0.82	69	P	05 17.30	0.1	
			eSg	05 30.40		
GIB	0.86	284	P	05 17.90	-0.1	
			eSg	05 31.40		
	S.D. = 0.2		on 5 of 5 obs.			

& JUN 30, 1990 15h 17m 55.74s
31.830 N 116.200 W
DEPTH = 4.0km
BAJA CALIFORNIA (48)
<ECX>. MD 3.0 (ECX).

ENX	0.40	278	iPc	18 03.20	-0.5	
			S	18 08.80		
PBX	0.46	259	iPc	18 04.50	-0.4	
			S	18 10.80		
CBX	0.62	321	iPc	18 06.20	-2.0	
			S	18 15.00		
CPBX	0.96	52	ePc	18 12.50	-2.1	
			S	18 25.70		
SPX	1.00	141	ePc	18 13.40	-2.1	
			S	18 26.60		
ECBX	1.04	110	ePc	18 13.70	-2.3	
			S	18 27.70		
LMX	1.09	75	ePc	18 14.00	-2.7	
	7 obs. associated					

? JUN 30, 1990 15h 38m 51.21± 1.94s
37.851 N ±28.5km 15.058 E ± 7.1km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO	0.30	286	P	38 57.40	-0.1	
			eSg	39 04.00		
ATN	0.44	46	P	39 00.30	0.0	
			eSg	39 10.00		
SOI	0.82	74	P	39 07.00	0.0	
			eSg	39 21.00		
GIB	0.83	280	P	39 07.40	0.1	
			eSg	39 21.00		
	S.D. = 0.2		on 4 of 4 obs.			

JUN 30, 1990 16h 00m 45.39± 0.41s
47.995 N ± 3.5km 7.507 E ± 3.2km
DEPTH = 10.0km (geophysicist)
SWITZERLAND (544)
ML 2.8 (LDG).

MOF	0.29	240	Pg	00 51.67	0.2	
ECH	0.32	314	Pg	00 52.19	0.1	
			Sg	00 56.54		
FEL	0.36	109	Pg	00 52.92	0.1	
			Sg	00 57.68		
WLS	0.43	346	Pg	00 54.20	0.0	
			Sg	00 59.61		
CDF	0.45	340	Pg	00 54.55	0.1	
			Sg	01 00.26		
BSF	0.51	252	Pg	00 55.60	-0.1	
			Sg	01 02.40		
SLE	0.70	109	ePd	00 59.40	0.1	
HAU	0.78	271	Pg	01 00.70	0.1	
			Sg	01 10.80		
LOMF	0.79	216	Pg	01 00.70	-0.1	
			Sg	01 13.20		
GWF	0.99	4	Pg	01 03.85	-0.3	
			Sg	01 17.31		
VITF	1.05	283	Pg	01 05.37	0.3	
			Sg	01 19.50		
LPG	2.55	192	Pg	01 34.20	6.4X	
			Sg	02 07.00		
LOR	2.57	255	Pn	01 27.40	-0.4	
			Pg	01 34.00		

		Sg	02 06.60			
LBF	2.60	248 Pg	01 34.60	6.4X		
		Sg	02 06.90			
SMF	2.84	243 Pg	01 38.60	7.0X		
		Sg	02 16.00			
SSF	2.87	252 Pg	01 40.00	8.0X		
		Sg	02 15.00			
AVF	3.07	248 Pg	01 43.20	8.4X		
		Sg	02 22.80			
BGF	3.48	247 Pg	01 51.00	10.3X		
		Sg	02 35.00			
MAF	3.81	244 Pg	01 57.20	11.8X		
		Sg	02 45.00			

S.D. = 0.2 on 12 of 19 obs.

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* JUN 30, 1990 17h 18m 43.82± 1.31s
36.538 N ±12.7km 70.802 E ± 8.2km
DEPTH = 168.2 ± 16.0 km
4.5mb (9 obs.)
HINDU KUSH REGION (718)

QUE	7.10	208 iPd	20 27.00	0.6		
	0.8s	69.40nm	5.1mb			
		eS	21 45.00			
MAIO	9.12	272 ePn	20 52.00	-1.0		
		eSn	22 25.00			
NDI	9.52	144 eP	20 58.00	-0.1		
		eS	22 37.00			
GKN	14.46	122 P	22 01.40	-0.5		
DMN	15.03	122 P	22 09.20	0.1		
	0.6s	33.00nm	4.9mb			
PKI	15.26	122 P	22 12.10	0.0		
GUN	15.37	120 P	22 14.00	0.5		
	0.5s	16.00nm	4.6mb			
GBA	23.60	164 Pd	23 41.60	1.1		
	0.5s	2.90nm	4.1mb			
HFS	42.94	322 eP	26 27.50	0.4		
	0.5s	13.10nm	4.8mb			
NB2	44.25	323 P	26 37.80	0.0		
	0.6s	7.60nm	4.5mb			
MBC	67.31	3 eP	29 22.50	0.8		
	0.8s	7.00nm	4.5mb			
YKA	81.22	3 eP	30 42.00	0.5		
	0.6s	2.70nm	4.2mb			
WB5	82.12	122 eP	30 45.50	-1.4		
WRA	82.15	122 Pd	30 46.10	-1.0		
	0.7s	3.30nm	4.2mb			

S.D. = 0.8 on 14 of 14 obs.

JUN 30, 1990 17h 46m 37.47± 0.78s
40.219 N ±10.1km 24.887 E ± 4.7km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
ML 3.0 (THE).

OUR	0.70	280 eP	46 51.50	0.2		
		eS	47 01.60			
ALN	1.11	52 eP	46 58.60	0.3		
		eS	47 16.30			
EZN	1.17	109 iPn	46 57.50	-1.8		
SOH	1.31	298 eP	47 01.60	-0.2		
		eS	47 22.00			
SRS	1.33	313 eP	47 03.10	1.0		
		eS	47 22.80			
RZN	1.47	355 iPc	47 04.00	-0.2		
		iS	47 27.00			
KDZ	1.49	15 iPc	47 03.00	-1.2		
THE	1.52	286 eP	47 04.90	0.2		
		eS	47 28.00			
MMB	1.63	328 ePc	47 06.00	-0.3		
		iS	47 31.00			
KNT	1.78	303 eP	47 08.60	0.1		
		eS	47 34.50			
LIT	1.84	267 eP	47 08.10	-1.3		
PLD	1.89	356 iPd	47 14.00	4.0X		
		iS	47 40.00			
DIM	1.89	15 eP	47 14.00	3.9X		
		S	47 43.00			
GRG	2.03	292 eP	47 12.70	0.5		
		eS	47 40.30			
VAY	2.08	303 ePn	47 17.60	4.8X		
KKB	2.14	321 eP	47 15.00	1.3		
		iS	47 45.00			
EDC	2.28	86 ePn	47 19.00	3.3		
BNT	2.32	86 iPn	47 17.80	1.4		
JMB	2.58	29 eP	47 28.00	8.0X		
		eS	48 03.00			
VTS	2.69	333 eP	47 28.00	6.4X		
DMK	2.70	53 ePn	47 27.10	5.4X		
FNA	2.74	283 eP	47 22.00	-0.3		
CTT	2.85	70 ePn	47 22.00	-1.8		
PVL	3.01	6 eP	47 25.00	-1.1		

S.D. = 1.3 on 18 of 24 obs.

? JUN 30, 1990 18h 05m 59.13± 1.94s
37.847 N ±27.7km 15.087 E ± 7.4km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO	0.32	285 P	06 05.50	-0.4		
		eSg	06 12.00			
ATN	0.43	43 P	06 08.00	0.1		
		eSg	06 16.50			
SOI	0.80	73 P	06 14.50	-0.1		
GIB	0.85	280 P	06 16.00	0.4		
		eSg	06 29.00			

S.D. = 0.6 on 4 of 4 obs.

% JUN 30, 1990 18h 34m 52.18± 1.36s
39.347 N ± 6.3km 15.234 E ±14.7km
DEPTH = 13.3 ± 8.9 km
SOUTHERN ITALY (390)

MGR	0.83	17 P	35 07.90	0.0		
		eSg	35 19.60			
TDS	0.91	70 Pc	35 09.20	-0.1		
		eSg	35 22.90			
ORI	1.18	52 P	35 14.10	0.2		
		eSn	35 29.50			
ATN	1.20	171 P	35 14.50	0.3		
SGO	1.21	3 P	35 14.30	-0.1		
		eSn	35 30.50			
SOI	1.43	153 P	35 17.30	-0.3		
		eSn	35 35.80			

S.D. = 0.4 on 6 of 6 obs.

JUN 30, 1990 18h 49m 18.08± 0.33s
44.290 N ± 6.8km 149.179 E ± 4.8km
DEPTH = 8.8km (5 depth phases)
5.2mb (59 obs.) 4.9Msz (9 obs.)
KURIL ISLANDS (221)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 22C
Centroid Location:
Origin Time 18:49:24.7 0.7
Lat 44.25N 0.06 Lon 149.70E 0.09
Dep 35.1 4.0 Half-duration 1.7
Moment Tensor; Scale 10**16 Nm
Mrr= 6.89 0.29 Mtt=-2.26 0.40
Mff=-4.64 0.40 Mrt= 1.52 0.78
Mrf= 1.95 0.98 Mtf=-5.84 0.47
Principal Axes:

	Val=	Plg=	Azm=
T	7.26	82	309
N	2.51	0	219
P	-9.77	8	129

Best Double Couple:Mo=8.5*10**16
NP1:Strike=219 Dip=37 Slip= 90
NP2: 39 53 90

KUSJ	3.45	251 iP+	50 13.40	0.3		
		S	50 53.90			
SAP	5.82	261 eP	50 50.00	3.4X		
		eS	52 08.00			
MAT	11.39	231 eP	52 02.00	-1.9		
	0.8s	9.70nm	5.2mb			
Z	19s	3.82um	3.9Msz			
		(S)	54 10.00			
MDJ	14.00	278 eP	52 39.50	0.8		
	1.0s	100.00nm	5.6mb			
CN2	17.06	277 Pc	53 17.00	-1.3		
	1.0s	100.00nm	4.9mb			
Z	16s	5.30um	4.6Msz			
N	13s	2.20um				
E	13s	1.90um				
		pP	53 27.00			
SNY	18.85	271 iPc	53 39.50	-0.9		
	1.0s	100.00nm	5.0mb			
Z	20s	4.40um	4.7Msz			
N	12s	1.50um				
E	14s	2.50um				
		sP	53 52.00			
		S	57 02.00			
DL2	21.24	265 eP	54 06.00	-0.5		
	1.0s	100.00nm	5.2mb			
Z	20s	1.80um	4.5Msz			
N	13s	1.20um				
E	15s	1.10um				
BJI	24.73	272 eP	54 41.50	0.7		
	1.1s	35.00nm	4.9mb			
Z	20s	4.49um	5.0Msz			
E	14s	1.49um				
		eS	59 04.00			
SSE	25.63	249 P	54 50.00	0.6		
Z	20s	2.80um	4.8Msz			
E	18s	3.20um				
		eS	59 24.00			
TIA	25.64	263 eP	54 49.90	0.4		
Z	20s	1.50um	4.5Msz			
E	18s	2.20um				
NJ2	26.63	253 Pc	55 02.80	4.1X		
Z	17s	2.20um	4.8MszX			
N	15s	2.10um				
E	13s	1.90um				
HHC	27.75	276 P	55 09.80	0.8		
Z	16s	4.60um	5.2MszX			
N	14s	1.30um				
E	14s	2.30um				
		pP	55 13.00	11km		
TIY	28.33	269 eP	55 14.70	0.5		
Z	21s	2.00um	4.7Msz			
N	15s	1.10um				
BTO	28.94	276 eP	55 21.00	1.3		
N	13s	2.20um				
E	15s	2.20um				
		eS	00 14.00			
WHN	30.63	255 eP	55 35.00	0.3		
Z	18s	2.40um	4.9Msz			
N	16s	1.90um				
E	16s	2.30um				
		eS	00 44.00			
XAN	32.56	266 P	55 50.50	-1.2		
E	13s	0.90um				
LZH	35.21	272 iPc	56 15.50	0.7		
	1.5s	130.00nm	5.6mb			
		pP	56 19.00	12km		
		sP	56 22.00			
TTA	36.09	39 eP	56 21.90	0.2		
GTA	36.65	280 Pc	56 27.20	0.4		
Z	16s	2.70um	5.1MszX			
N	12s	1.00um				
		eS	02 08.00			
IMA	37.41	34 eP	56 32.50	-0.4		
	0.9s	20.80nm	4.9mb			
CD2	37.91	265 P	56 37.80	0.4		
	0.8s	100.00nm	5.6mb			
Z	15s	0.80um	4.6MszX			
GYA	38.47	257 P	56 42.40	0.2		
E	16s	2.30um				
FBA	39.80	36 eP	56 53.30	0.6		
KMI	42.06	259 eP	57 12.50	0.5		
	1.5s	70.00nm	5.2mb			
Z	16s	3.50um	5.3MszX			
		eS	03 34.00			
WMQ	43.26	292 iPc	57 22.10	0.7		
Z	18s	3.80um	5.3Msz			
N	15s	2.00um				
E	16s	2.20um				
		eS	03 46.00			
INK	45.20	31 eP	57 36.00	-0.6		
MBC	47.83	19 eP	57 59.00	1.6		
	0.8s	3.00nm	4.4mb			
SHL	49.52	268 iP	58 10.50	-0.8		
GUN	52.44	274 P	58 33.60	0.0		
	0.9s	108.00nm	5.8mb			
PKI	52.98	274 P	58 37.00	-0.6		
	0.9s	41.00nm	5.4mb			
DMN	53.17	274 P	58 38.80	-0.2		
	0.9s	65.00nm	5.6mb			
GKN	53.27	275 P	58 39.50	-0.1		
YKA	54.53	35 eP	58 53.50	5.3X		
	0.9s	8.30nm	4.8mb			
NDI	58.15	280 iPc	59 14.00	-0.5		
		eS	07 33.00			
EDM	60.01	44 eP	59 26.00	-1.2		
SOD	60.52	338 eP	59 29.00	-1.4		
PSI	60.58	242 ePd	59 31.50	0.1		
WDC	62.14	59 ePc	59 42.60	0.9		
SUF	64.07	335 eP	59 51.60	-2.5		
	0.6s	10.50nm	5.2mb			
HYB	64.25	270 eP	59 55.00	-0.9		

30d 18h

FFC	64.39	38 eP	59	55.00	-1.3	
	0.9s	14.00nm			5.2mb	
QUE	64.39	288 eP	59	56.90	0.0	
LRM	64.89	50 eP	59	59.10	-1.0	
CMB	65.00	61 eP	00	01.40	0.8	
WB5	65.28	195 eP	00	01.00	-1.3	
WRA	65.35	195 P	00	03.00	0.2	
	0.7s	2.20nm			4.5mb	
MAIO	65.58	297 eP	00	06.00	1.6	
		eS	09	11.00		
NUR	66.21	334 eP	00	06.00	-1.9	
	0.7s	16.00nm			5.3mb	
GBA	67.58	267 Pd	00	16.10	-1.1	
	0.6s	5.20nm			4.9mb	
CLC	68.12	61 eP	00	35.00	14.5X	
FRB	68.24	17 ePc	00	19.50	-1.2	
SBB	68.70	62 eP	00	26.00	1.9	
UPP	68.88	336 iP	00	23.20	-1.5	
GSC	68.95	61 eP	00	41.00	15.3X	
NB2	69.62	340 P	00	27.70	-1.6	
	0.6s	19.20nm			5.4mb	
HFS	69.75	338 eP	00	28.00	-2.0	
	0.6s	27.00nm			5.6mb	
Z	17s	0.43um			4.8MszX	
		LR	26	45.00		
PLM	70.17	63 eP	00	43.00	9.7X	
ALQ	75.50	55 eP	01	03.50	-1.2	
	0.8s	4.10nm			4.5mb	
CLI	76.01	323 iPd	01	07.50	0.4	
KRA	76.16	329 eP	01	06.30	-1.5	
	0.8s	47.00nm			5.6mb	
Z	18s	1.40um			5.3Msz	
E	18s	1.30um				
		e	01	07.60	4km	
		e	01	10.80		
SPC	76.76	328 eP	01	12.00	0.5	
VRI	76.79	323 ePd	01	13.50	2.0	
KSP	76.80	332 ePc	01	11.40	-0.1	
	1.1s	26.00nm			5.2mb	
MLR	77.42	323 eP	01	15.50	0.3	
CLL	77.50	334 iP	01	15.00	-0.3	
	1.4s	48.00nm			5.4mb	
BRG	77.57	333 iP	01	15.00	-0.7	
	1.3s	22.00nm			5.1mb	
PSN	77.84	320 eP	01	18.00	0.7	
EKA	78.02	344 Pc	01	17.90	-0.2	
	1.3s	19.20nm			5.0mb	
PRU	78.12	332 Pc	01	18.50	-0.2	
	1.5s	22.30nm			5.0mb	
Z	17s	1.30um			5.3MszX	
N	16s	1.00um				
E	16s	0.50um				
MOX	78.51	334 eP	01	21.00	0.1	
	1.6s	34.00nm			5.2mb	
Z	16s	1.00um			5.2MszX	
BBTK	78.58	315 eP	01	22.00	0.4	
SRO	78.62	329 eP	01	23.60	2.1	
BUD	78.63	328 eP	01	22.00	0.5	
HOF	78.72	334 eP	01	21.70	-0.3	
WTS	78.74	337 eP	01	22.00	-0.1	
	0.8s	16.00nm			5.1mb	
ZST	78.75	330 eP	01	22.70	0.5	
BZS	79.14	325 eP	01	24.00	-0.4	
KHC	79.18	332 Pc	01	25.10	0.5	
SOP	79.37	330 eP	01	29.00	3.4X	
WET	79.40	333 eP	01	26.10	0.3	
GRF	79.47	334 eP	01	26.80	0.7	
	1.4s	43.00nm			5.3mb	
Z	18s	0.70um			5.0Msz	
		e	01	29.50	9km	
		e	01	34.80		
		e	01	40.30		
ENN	80.09	337 eP	01	30.00	0.6	
	1.0s	27.00nm			5.2mb	
MEO	80.13	51 e(P)	01	30.70	0.8	
DLE	80.59	346 eP	01	32.70	0.7	
	0.9s	48.00nm			5.5mb	
YRH	80.67	344 eP	01	34.00	1.6	
KDZ	80.70	321 iP	01	34.00	1.2	
VTS	80.93	323 iPd	01	35.00	0.8	
RZN	80.99	321 iP	01	35.00	0.4	
ETA	81.10	345 eP	01	35.30	0.6	
PTJ	81.10	329 e(P)	01	34.50	-0.5	
MMB	81.51	322 eP	01	28.00	-9.1X	
KKB	81.57	322 eP	01	38.00	0.6	
ECP	81.62	345 eP	01	38.20	0.8	
SQTA	81.63	333 eP	01	36.00	-1.8	
	0.8s	21.20nm			5.3mb	
		id	01	38.60	8km	
		i	01	48.90		
		i	02	17.50		
FVI	81.65	331 P	01	37.00	-0.6	
VOY	81.74	330 e(P)	01	36.50	-1.8	
VOY	81.74	330 eP	01	37.50	-0.8	
CEY	81.80	330 e(P)	01	38.00	-0.5	
CDF	81.81	335 eP	01	38.10	-0.6	
	0.8s	10.75nm			5.0mb	
OGA	82.00	332 eP	01	40.00	0.2	
	1.0s	24.00nm			5.2mb	
TRI	82.06	330 P	01	39.00	-0.8	
SKO	82.19	323 iP	01	41.00	0.4	
VAY	82.23	322 eP	01	41.00	0.2	
HAU	82.45	336 eP	01	41.00	-0.9	
BSF	82.48	335 eP	01	42.00	-0.2	
	0.8s	6.70nm			4.8mb	
JVI	83.13	308 eP	01	47.00	1.4	
OHR	83.17	323 eP	01	40.50	-5.3X	
SAL	83.27	332 P	01	46.00	-0.1	
FLN	83.59	340 eP	01	47.20	-0.5	
	0.9s	24.55nm			5.4mb	
VAI	83.62	333 P	01	47.80	-0.1	
LDF	83.66	340 eP	01	47.40	-0.7	
LOR	83.84	337 eP	01	48.20	-0.8	
	0.9s	17.20nm			5.3mb	
GRR	84.03	340 eP	01	49.50	-0.4	
	0.9s	32.75nm			5.6mb	
LBF	84.06	337 eP	01	49.50	-0.7	
	0.8s	6.70nm			4.9mb	
ORO	84.09	334 P	01	52.00	1.6	
SSF	84.12	337 eP	01	50.00	-0.5	
	0.7s	6.05nm			4.9mb	
ARV	84.27	330 P	01	48.00	-3.3X	
SFI	84.29	331 P	01	52.50	1.2	
BOB	84.37	332 P	01	53.40	1.6	
PGD	84.38	331 P	01	53.40	1.4	
LPF	84.41	340 eP	01	51.70	-0.1	
	0.9s	26.20nm			5.5mb	
SMF	84.41	337 eP	01	51.60	-0.3	
	0.9s	18.85nm			5.3mb	
AVF	84.41	337 eP	01	51.50	-0.4	
	1.0s	17.00nm			5.2mb	
CRE	84.51	330 P	01	52.50	-0.1	
PRNI	84.52	308 eP	01	54.00	1.2	
LPL	84.58	335 eP	01	53.10	0.1	
	0.9s	15.55nm			5.2mb	
LPG	84.59	334 eP	01	53.30	0.1	
	0.9s	15.55nm			5.2mb	
BDI	84.61	331 P	01	53.00	0.0	
ASS	84.74	330 P	01	54.00	0.3	
BRT	84.87	326 P	01	54.00	-0.3	
BNI	85.01	334 P	01	56.10	1.0	
MBH	85.02	307 eP	01	56.50	1.3	
MAF	85.15	337 eP	01	56.10	0.5	
	0.9s	31.10nm			5.5mb	
TCF	85.19	338 eP	01	55.90	0.0	
	0.9s	13.10nm			5.2mb	
DUI	85.29	328 P	01	56.50	0.0	
DOI	85.32	334 P	01	54.50	-2.1	
AZI	85.39	329 P	01	57.00	0.2	
LSF	85.41	338 eP	01	56.90	0.0	
	0.9s	32.75nm			5.5mb	
SDI	85.49	328 P	01	57.00	-0.5	
MFF	85.52	339 eP	01	57.60	0.2	
	1.0s	34.00nm			5.5mb	
RJF	86.29	338 eP	02	01.40	0.1	
	0.9s	13.10nm			5.1mb	
FRF	86.36	334 eP	02	01.20	-0.5	
	1.1s	19.55nm			5.2mb	
CAF	86.48	337 eP	02	02.80	0.5	
	0.9s	15.55nm			5.2mb	
LRG	86.55	334 eP	02	02.40	-0.2	
	0.9s	22.95nm			5.4mb	
LMR	86.61	334 eP	02	02.50	-0.4	
	0.9s	24.55nm			5.4mb	
LFF	86.83	338 eP	02	03.50	-0.4	
	0.9s	18.00nm			5.3mb	
LPO	86.95	338 eP	02	05.20	0.7	
	1.0s	16.00nm			5.2mb	
ZOBO	137.94	60 ePKP	08	45.00	-0.9	
LPB	138.15	61 (PKP)	08	50.00	3.9X	
CNCB	138.43	61 PKP	08	47.00	0.2	
SIV	141.92	52 (PKP)	08	54.00	1.6X	
BAO	147.94	32 ePKP	09	05.00	2.5	
	S.D. = 0.9	on 140 of 152 obs.				

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* JUN 30, 1990 18h 57m 49.40± 1.30s
44.864 N ±28.4km 148.856 E ±13.8km
DEPTH = 33.0km (normal)
4.7mb (17 obs.)
KURIL ISLANDS (221)

MAT	11.58	228 eP	00	26.00	-9.5X
		(S)	02	36.00	
MDJ	13.70	276 eP	01	05.00	1.4
CN2	16.77	275 eP	01	44.80	1.5
		esP	01	57.00	
SNY	18.61	270 eP	02	05.00	-1.1
BJI	24.49	270 eP	03	06.00	-0.6
	1.5s	26.00nm			4.6mb
HHC	27.47	275 eP	03	36.00	1.5
BTO	28.66	275 eP	03	45.20	0.0
LZH	34.96	271 Pc	04	40.00	-0.6
	1.5s	28.00nm			5.0mb
		pP	04	48.00	27kmX
GTA	36.32	279 eP	04	52.20	0.2
CD2	37.74	264 P	05	02.00	-1.9
FBA	39.47	37 eP	05	18.00	0.1
	1.0s	11.00nm			4.6mb
WMQ	42.83	291 iPc	05	46.50	0.6
INK	44.82	31 eP	06	03.00	1.5
CHTO	48.76	255 eP	06	36.00	2.9
	1.0s	3.75nm			4.4mb
PKI	52.71	273 P	07	01.40	-2.1
DMN	52.90	274 P	07	03.40	-1.4
	0.6s	10.00nm			5.0mb
GKN	53.00	274 P	07	03.90	-1.5
YKA	54.19	35 eP	07	11.80	-1.7
	0.5s	0.70nm			3.9mb
SUF	63.46	334 eP	08	11.30	-6.6X
FFC	64.07	38 eP	08	20.00	-2.1
	0.7s	6.00nm			4.8mb
NUR	65.60	333 eP	08	29.00	-2.7X
KVN	65.69	59 eP	08	35.00	2.0
NB2	69.00	339 P	08	52.20	-1.0
	0.6s	7.20nm			4.9mb
HFS	69.13	338 eP	08	52.50	-1.5
	0.4s	9.20nm			5.2mb
CLL	76.88	333 e(P)	09	39.00	-0.6
		eSg	31	03.00	
KHC	78.57	332 eP	09	49.30	0.3
DLE	79.98	345 eP	09	56.70	0.3
LOR	83.22	337 eP	10	13.80	0.3
	0.8s	5.35nm			4.7mb
LBF	83.44	337 eP	10	15.40	0.7
	0.8s	5.35nm			4.7mb
SSF	83.51	337 eP	10	15.60	0.6
	0.7s	3.30nm			4.6mb
SMF	83.79	337 eP	10	16.40	-0.1
	0.9s	7.35nm			4.8mb
LPL	83.96	334 eP	10	17.80	0.2
	0.9s	5.75nm			4.7mb
LPG	83.97	334 eP	10	18.00	0.2
BGF	84.15	337 eP	10	18.80	0.5
MAF	84.54	337 eP	10	20.70	0.5
	0.7s	4.40nm			4.8mb
TCF	84.57	337 eP	10	21.40	1.0
	0.9s	4.90nm			4.7mb
LSF	84.79	338 eP	10	21.60	0.1
	0.9s	9.00nm			5.0mb
	S.D. = 1.3	on 34 of 37 obs.			

JUN 30, 1990 19h 02m 21.90± 0.45s
1.419 N ± 7.1km 123.596 E ± 9.4km
DEPTH = 33.0km (normal)
4.5mb (5 obs.)
MINAHASSA PENINSULA (265)

DAV	5.97	19 eP	03	51.90	1.6
TSM	6.18	297 ePc	03	52.20	-1.1
MKS	7.77	212 e(P)d	04	16.80	1.2
IPM	22.75	278 ePd	07	22.10	-0.6
WB5	23.66	154 eP	07	30.00	-1.4
WRA	23.70	154 Pc	07	31.50	-0.3
	0.6s	14.10nm			4.7mb
PSI	24.69	273 ePd	07	40.60	-0.8
ASPA	26.87	159 eP	08	03.10	1.3
	1.1s	13.00nm			4.5mb
Z	26s	0.23um			3.6MszX
		LR	26	28.10	
QIS	26.89	145 iPc	08	01.10	-0.8
CHTO	29.71	307 e(P)	08	30.00	2.5

1.0s 2.50nm 3.9mb
MAT 37.47 20 (P) 09 32.00 -2.3
0.9s 5.04nm 4.4mb
TIY 37.55 345 eP 09 35.60 0.6
CMS 38.94 149 eP 09 46.00 -0.6
BJI 39.03 351 eP 09 47.00 -0.2
BRS 40.11 138 Pc 09 56.30 -0.1
BWA 42.59 149 eP 10 18.70 2.0
CAN 43.59 149 iPc 10 25.30 0.5
GTA 43.59 333 eP 10 25.00 0.1
HYB 47.02 293 eP 11 05.00 12.6X
WMQ 52.91 328 eP 11 37.00 -0.2
SPA 91.41 180 eP 15 25.10 -0.7
1.0s 10.50nm 5.2mb
CNCB 160.93 144 ePKP 22 38.00 16.7X
ZOBO 161.26 143 ePKP 22 21.00 -0.6
S.D. = 1.3 on 21 of 23 obs.

? JUN 30, 1990 19h 26m 57.72± 1.38s
21.321 S ±12.6km 67.921 W ±22.6km
DEPTH = 74.4 ± 43.9 km
CHILE-BOLIVIA BORDER REGION (124)

ANT 3.31 224 eP 27 48.20 0.0
CNCB 4.49 359 Pc 28 05.20 -0.1
LPB 4.77 358 P 27 53.00 -16.1X
ZOBO 5.03 358 P 28 13.00 0.1
Z 20s 0.18um
LR 55 18.00
ARE 5.90 324 eP 28 16.00 -8.8X
iS 29 16.00
SIV 8.38 52 iPc 28 58.80 0.0
BAO 19.72 77 eP 31 24.20 0.0
S.D. = 0.2 on 5 of 7 obs.

• JUN 30, 1990 19h 31m 25.98± 1.02s
5.225 S ±10.2km 147.126 E ± 8.4km
DEPTH = 192.9 ± 8.8 km
4.9mb (8 obs.)
EAST PAPUA NEW GUINEA REGION (207)

LAT 1.42 185 iPc 31 58.00 -0.7
MNDI 3.57 255 eP 32 24.50 1.5
eS 33 07.00
HNR 13.38 109 eP 34 29.00 -0.6
CTA 14.80 183 iPd 34 46.70 -0.6
0.6s 34.33nm 4.9mb
QIS 16.90 205 eP 35 11.50 -1.5
0.7s 60.00nm 5.1mb
MTN 17.51 243 eP 35 19.50 -0.2
WB5 19.14 219 iPd 35 36.30 -0.6
WRA 19.21 219 Pc 35 37.30 -0.2
0.8s 90.70nm 5.3mb
RMQ 21.20 176 eP 35 58.00 0.5
ASPA 22.33 214 iPd 36 09.60 1.1
0.4s 150.00nm 5.9mb
iS 39 58.80
DZM 25.10 134 iPc 36 36.50 1.7
COO 25.61 170 eP 36 40.00 0.6
STK 27.02 190 eP 37 02.30 10.2X
1.0s 9.00nm
WARB 28.60 221 eP 37 06.00 -0.4
0.4s 8.00nm 4.8mb
MEKA 34.60 229 eP 37 59.00 0.5
GYA 50.27 311 P 40 12.00 7.0X
GUN 67.55 303 P 42 03.20 -1.1
PKI 67.84 302 P 42 06.80 0.8
0.7s 8.00nm 4.6mb
DMN 68.10 302 P 42 08.60 1.0
0.8s 19.00nm 4.9mb
GKN 68.62 303 P 42 09.00 -1.6
0.7s 15.00nm 4.8mb
SIV 145.02 128 PKPc 50 42.60 -0.1
S.D. = 1.1 on 19 of 21 obs.

• JUN 30, 1990 19h 32m 50.45± 0.75s
44.114 N ±14.5km 149.310 E ± 9.2km
DEPTH = 33.0km (normal)
4.8mb (18 obs.)
KURIL ISLANDS (221)

MAT 11.35 232 (P) 35 32.00 -1.3
0.7s 2.05nm 4.4mb
MDJ 14.12 279 eP 36 10.30 0.2
CN2 17.17 277 Pd 36 49.20 -0.1
SNY 18.95 272 eP 37 09.80 -1.4
BJI 24.83 272 eP 38 11.00 0.1
0.8s 7.00nm 4.3mb
HHC 27.87 277 eP 38 41.00 1.9
TIY 28.42 270 eP 38 44.50 0.5
BTO 29.06 277 eP 38 50.00 0.2
LZH 35.32 273 Pc 39 45.00 0.4
1.5s 40.00nm 5.1mb
pP 39 52.50 25kmX
GTA 36.77 280 eP 39 57.00 0.2
CD2 37.99 265 P 40 07.20 0.2
KMI 42.12 259 eP 40 42.50 1.1
WMQ 43.41 292 iPc 40 52.20 0.7
YKA 54.63 34 eP 42 19.40 1.7
0.6s 1.00nm 4.0mb
FFC 64.47 38 eP 43 25.00 -0.6
1.0s 14.00nm 5.0mb
LRM 64.93 50 eP 43 29.10 0.0
WRA 65.20 196 Pd 43 46.70 16.1X
0.7s 4.20nm
GBA 67.67 267 Pd 43 45.80 -0.7
0.9s 3.50nm 4.5mb
NB2 69.82 340 P 43 56.60 -2.6
0.7s 4.00nm 4.6mb
HFS 69.95 338 eP 43 57.50 -2.4
0.5s 7.20nm 5.0mb
TEH 71.18 302 eP 43 54.00 -14.1X
TAB 72.65 306 eP 44 11.00 -5.8X
KER 74.71 303 eP 44 22.00 -6.8X
KRA 76.36 329 eP 44 36.90 -0.8
KSP 77.00 332 eP 44 40.50 -0.8
CLL 77.70 334 iP 44 45.00 0.0
BRG 77.76 333 e(P) 44 49.00 3.6X
KHC 79.38 332 P 44 54.50 0.1
GRF 79.67 334 eP 44 56.20 0.3
0.7s 5.00nm 4.6mb
e 45 10.70
SQTA 81.83 333 iPc 45 07.50 0.0
0.7s 7.20nm 4.8mb
id 45 08.00
i 45 16.50
CDF 82.01 336 eP 45 07.90 -0.5
SKO 82.39 324 eP 45 11.00 0.7
FLN 83.79 340 eP 45 17.20 -0.2
0.8s 8.05nm 4.9mb
LOR 84.04 337 eP 45 18.40 -0.3
GRR 84.23 341 eP 45 19.80 0.2
SSF 84.32 337 eP 45 20.00 -0.1
0.8s 4.70nm 4.7mb
LPF 84.60 341 eP 45 22.00 0.5
0.8s 10.75nm 5.1mb
SMF 84.61 337 eP 45 21.60 0.0
0.8s 6.70nm 4.9mb
AVF 84.61 337 eP 45 21.30 -0.2
LPL 84.78 335 eP 45 23.00 0.3
LPG 84.79 335 eP 45 23.10 0.3
0.7s 3.30nm 4.6mb
MAF 85.35 338 eP 45 26.10 0.8
0.7s 4.40nm 4.8mb
LSF 85.61 338 eP 45 27.00 0.4
MFF 85.72 339 eP 45 27.60 0.5
LRG 86.75 334 eP 45 32.40 0.2
1.0s 18.00nm 5.3mb
LMR 86.81 334 eP 45 32.60 0.1
0.9s 9.85nm 5.0mb
S.D. = 0.9 on 41 of 46 obs.

? JUN 30, 1990 19h 50m 06.27± 1.61s
43.965 N ±25.5km 148.885 E ±18.2km
DEPTH = 33.0km (normal)
3.8mb (1 obs.)
KURIL ISLANDS REGION (222)

KUSJ 3.16 256 P 50 53.20 -1.6
S 51 24.70
HOOJ 4.39 251 P 51 13.60 1.3
S 52 01.90
ASAJ 4.50 274 eP 51 13.80 -0.1
MRRJ 5.91 258 P 51 34.50 0.7
eS 52 37.20
OFUJ 7.29 230 P 51 52.80 -0.3
S 53 09.00
YKA 54.92 34 eP 59 35.70 0.0
0.7s 0.70nm 3.8mb
S.D. = 1.3 on 6 of 6 obs.

& JUN 30, 1990 20h 23m 53.97s
62.759 N 150.876 W
DEPTH = 96.3km

CENTRAL ALASKA (1)
<AGS-P>.

CUT 0.45 141 iP 24 09.05 -0.2
eS 24 20.41
HUR 0.61 68 iP 24 10.19 -0.3
eS 24 22.26
KTH 0.80 359 iP 24 12.07 -0.3
eS 24 25.53
SKT 0.84 202 iP 24 12.31 -0.4
PWA 1.21 157 iP 24 16.67 -0.1
SUA 1.30 177 eP 24 17.72 -0.4
eS 24 35.83
GHO 1.35 136 eP 24 18.54 -0.1
eS 24 37.27
PLRM 1.43 144 eP 24 18.66 -0.8
NCG 1.49 204 eP 24 19.78 -0.6
SML 1.52 128 eP 24 20.14 -0.6
eS 24 40.92
CGLM 1.55 201 eP 24 21.21 0.0
CRP 1.61 203 eP 24 21.76 -0.3
PMS 1.64 157 eP 24 21.42 -0.9
SPU 1.68 200 eP 24 21.93 -0.8
NEA 1.99 23 eP 24 25.87 -1.0
SLKM 2.28 172 eP 24 29.52 -1.2
TOA 2.28 105 eP 24 31.64 0.9
RDT 2.31 199 eP 24 31.94 0.8
SDG 2.47 93 eP 24 34.61 1.3
GLI 2.60 135 eP 24 33.44 -1.6
KLU 2.65 116 eP 24 33.86 -1.9
21 obs. associated

JUN 30, 1990 20h 38m 36.53± 0.66s
37.785 N ± 6.6km 15.076 E ± 5.2km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO 0.34 296 P 38 43.60 0.1
eSg 38 49.50
ATN 0.48 39 Pd 38 46.40 0.0
iSg 38 55.00
MSI 0.56 42 Pd 38 48.20 0.2
eSg 38 57.60
MEU 0.69 190 P 38 50.20 -0.1
eSg 39 00.90
SOI 0.83 69 Pd 38 52.70 0.2
eSg 39 06.00
GIB 0.85 284 P 38 53.20 0.1
eSg 39 06.70
TDS 2.12 27 P 39 11.80 -0.6
S.D. = 0.4 on 7 of 7 obs.

• JUN 30, 1990 20h 46m 15.75± 0.81s
37.755 N ±12.8km 68.695 E ±11.3km
DEPTH = 33.0km (normal)
3.8mb (3 obs.)
AFGHANISTAN-USSR BORDER REGION (717)

MAIO 7.50 262 eP 48 04.00 -1.7
eS 49 48.00
QUE 7.69 191 eP 48 10.00 1.6
DMN 17.10 121 P 50 13.40 -0.7
PKI 17.33 121 P 50 16.20 -0.8
HFS 40.94 321 eP 53 57.20 0.8
0.4s 0.70nm 3.7mb
NB2 42.27 322 P 54 07.20 -0.2
0.9s 2.10nm 3.9mb
YKA 80.06 2 eP 58 24.00 0.9
0.5s 0.40nm 3.7mb
S.D. = 1.4 on 7 of 7 obs.

JUN 30, 1990 20h 51m 45.60± 1.83s
44.149 N ± 9.6km 149.233 E ± 8.4km
DEPTH = 50.2 ± 14.0 km
5.0mb (30 obs.) 4.1Msz (4 obs.)
KURIL ISLANDS (221)

SAP 5.84 262 eP 53 14.00 2.2
MAT 11.33 232 eP 54 25.00 -2.5X
0.7s 10.96nm 5.1mb
(S) 56 35.00
MDJ 14.06 279 eP 55 03.00 -0.6
CN2 17.17 277 P 55 42.20 -0.5
Z 16s 0.70um
pP 55 52.00
SNY 18.89 272 eP 56 03.00 -1.5
Z 20s 0.80um

30d 20h

N 19s 0.60um
E 20s 0.60um
BJI 24.77 272 eP 57 03.50 -0.3
1.5s 55.00nm 4.9mb
Z 20s 0.60um 4.1Msz
TIA 25.66 263 eP 57 12.40 0.2
NJ2 26.63 253 eP 57 25.00 3.9X
HHC 27.81 276 eP 57 32.00 0.0
TIY 28.36 270 eP 57 37.30 0.4
Z 24s 0.50um 4.0MszX
BTO 29.00 277 eP 57 43.00 0.3
N 14s 0.40um
eS 02 29.50
WHN 30.63 256 eP 57 57.50 0.4
XAN 32.59 266 P 58 13.00 -1.3
LZH 35.26 273 iPc 58 38.00 0.5
1.5s 74.00nm 5.4mb
Z 20s 0.44um 4.2Msz
GTA 36.71 280 Pc 58 50.00 0.4
CD2 37.94 265 P 59 00.00 0.1
0.4s 46.00nm 5.8mb
GYA 38.48 257 eP 59 04.60 0.0
WMQ 43.34 292 iPc 59 44.50 0.2
INK 45.30 31 eP 59 59.00 -0.6
SHL 49.56 268 iP 00 38.00 4.3X
GUN 52.49 274 P 00 56.00 -0.1
PKI 53.03 274 P 00 59.80 -0.3
DMN 53.22 275 P 01 01.60 0.2
0.7s 34.00nm 5.5mb
GKN 53.33 275 P 01 02.00 0.0
0.9s 46.00nm 5.5mb
YKA 54.63 34 eP 01 10.80 -0.2
0.6s 2.20nm 4.4mb
NDI 58.22 281 iPc 01 36.00 -1.0
SOD 60.66 338 eP 01 53.00 -0.4
SUF 64.22 335 eP 02 14.20 -2.8
HYB 64.29 270 eP 02 17.50 -0.6
QUE 64.47 288 eP 02 18.40 -1.0
FFC 64.48 37 eP 02 27.00 8.2X
0.8s 9.00nm 4.9mb
LRM 64.95 50 eP 02 22.00 -0.4
WB5 65.15 195 eP 02 21.80 -1.7
WRA 65.22 195 P 02 29.00 5.1X
0.5s 0.90nm 4.1mb
MAIO 65.68 298 eP 02 27.00 0.0
NUR 66.36 334 eP 02 29.00 -1.8
NB2 69.76 340 P 02 50.00 -2.0
0.9s 10.20nm 4.8mb
HFS 69.89 338 eP 02 50.20 -2.6
0.4s 9.80nm 5.1mb
Z 18s 0.07um 4.0Msz
LR 29 02.00
KRA 76.30 329 eP 03 30.20 -0.2
1.0s 50.00nm 5.4mb
SPC 76.90 328 eP 03 25.00 -9.1X
KSP 76.95 332 ePc 03 33.70 -0.3
CLL 77.64 334 iPc 03 37.00 -0.8
1.0s 21.00nm 5.1mb
BRG 77.71 333 eP 03 38.00 -0.2
1.0s 10.00nm 4.8mb
PRU 78.27 332 P 03 41.50 0.2
e 03 45.60
SRO 78.76 329 eP 03 44.80 0.8
ZST 78.89 330 eP 03 44.50 -0.2
KHC 79.33 332 P 03 47.50 0.3
WET 79.55 333 eP 03 48.80 0.4
GRF 79.61 334 eP 03 49.10 0.4
0.8s 10.00nm 4.8mb
Z 18s 0.10um 4.2Msz
e 03 54.30
e 04 04.00
DLE 80.74 346 eP 03 54.50 0.0
FVI 81.79 331 P 04 01.00 0.9
CDF 81.96 336 eP 04 00.80 -0.4
TRI 82.21 330 P 04 01.50 -0.8
SKO 82.33 324 iP 04 03.50 0.4
VAY 82.37 322 eP 04 04.00 0.7
OHR 83.31 323 eP 04 08.00 -0.2
FLN 83.74 340 eP 04 10.10 -0.1
0.9s 16.40nm 5.1mb
VAI 83.76 333 P 04 10.00 -0.3
LDF 83.81 340 eP 04 10.80 0.3
LOR 83.98 337 eP 04 11.30 -0.2
1.0s 11.00nm 4.8mb
GRR 84.18 340 eP 04 12.60 0.2
1.0s 30.00nm 5.3mb
LBF 84.21 337 eP 04 13.20 0.5

SSF 84.27 337 eP 04 13.00 0.1
ARV 84.41 330 P 04 14.00 0.3
SFI 84.43 331 P 04 14.50 0.8
BOB 84.52 332 P 04 15.00 0.7
PGD 84.52 331 P 04 15.50 1.1
LPF 84.55 340 eP 04 14.10 -0.2
1.0s 16.00nm 5.1mb
SMF 84.56 337 eP 04 14.50 0.1
1.1s 23.20nm 5.2mb
AVF 84.56 337 eP 04 14.30 0.0
0.9s 7.35nm 4.8mb
PRNI 84.64 308 iPc 04 16.00 0.9
CRE 84.65 330 P 04 15.50 0.5
LPL 84.72 335 eP 04 15.80 0.3
0.9s 7.35nm 4.8mb
LPG 84.73 335 eP 04 16.10 0.5
0.8s 8.05nm 4.9mb
BDI 84.75 331 P 04 16.00 0.6
ASS 84.88 330 P 04 16.50 0.4
BRT 85.01 326 P 04 17.00 0.3
MAF 85.30 337 eP 04 18.90 0.8
0.9s 13.90nm 5.1mb
DUI 85.43 328 P 04 19.00 0.1
AZI 85.53 329 P 04 20.40 1.1
LSF 85.56 338 eP 04 20.10 0.7
1.1s 22.00nm 5.3mb
SDI 85.63 328 P 04 19.50 -0.4
MFF 85.67 339 eP 04 20.30 0.4
0.9s 11.45nm 5.1mb
RMP 85.96 329 P 04 22.00 0.5
SBF 85.98 333 eP 04 21.20 -0.4
0.7s 8.80nm 5.1mb
ORI 86.00 326 P 04 23.00 1.3
TDS 86.39 325 P 04 24.50 0.9
RJF 86.43 338 eP 04 24.20 0.5
FRF 86.50 334 eP 04 23.30 -0.8
CAF 86.63 337 eP 04 25.70 1.0
1.0s 14.00nm 5.1mb
LRG 86.69 334 eP 04 24.40 -0.6
0.9s 11.45nm 5.1mb
LMR 86.75 334 eP 04 24.60 -0.7
0.9s 16.40nm 5.3mb
LFF 86.98 338 eP 04 27.20 0.8
LPO 87.09 338 eP 04 27.70 0.8
SOI 87.85 325 P 04 30.50 -0.1
LPB 138.19 61 ePKP 11 05.00 -2.6X
CNCB 138.47 61 PKP 11 09.00 0.7
BAO 148.03 33 e(PKP)11 24.00 -0.2
S.D. = 0.8 on 91 of 98 obs.

JUN 30, 1990 21h 24m 16.06± 0.53s
38.132 N ± 5.5km 20.259 E ± 3.5km
DEPTH = 22.5 ± 3.8 km
3.9mb (2 obs.)
GREECE (364)
ML 3.7 (ATH).

VLS 0.26 80 iPgd 24 20.00 -2.4
IGT 1.40 2 iP 24 42.10 1.8
iS 25 05.50
KEK 1.62 347 iPbc 24 45.00 1.5
ITM 1.63 125 ePb 24 43.50 -0.2
AGG 1.85 61 eP 24 48.60 1.7
LSK 2.03 7 iPnc 24 55.50 5.9X
VLI 2.56 123 ePg 25 04.50 7.5X
BERA 2.58 355 ePn 24 57.00 -0.3
LIT 2.62 41 eP 24 59.60 1.7
eS 25 36.00
ATH 2.73 92 ePb 25 02.00 2.5
FNA 2.79 18 eP 25 01.90 1.6
LCI 2.84 322 Pd 25 00.90 0.0
OHR 3.00 8 iPn 25 05.10 1.8
iSg 25 39.70
TIR 3.23 355 ePn 25 07.50 1.1
THE 3.26 39 eP 25 08.10 1.2
GRG 3.27 30 eP 25 07.70 0.6
eS 25 52.50
SOI 3.32 270 P 25 08.00 0.3
TDS 3.42 298 P 25 10.80 1.6
eSn 25 53.10
ORI 3.54 304 P 25 12.30 1.4
eSn 25 56.00
BRT 3.62 320 P 25 13.00 0.9
OUR 3.63 52 eP 25 13.00 0.8
VAY 3.65 28 ePn 25 12.40 -0.1
ATN 3.78 272 P 25 14.50 0.1
SDA 3.92 352 ePn 25 16.60 0.3

SRS 3.94 40 eP 25 16.80 0.3
SKO 3.94 13 iPn 25 17.00 0.4
i 25 29.50
i 26 01.50
MGR 4.17 300 P 25 21.10 1.2
VAM 4.17 129 ePn 25 20.00 0.1
KKB 4.31 29 iP 25 22.00 0.1
APE 4.32 103 ePn 25 22.50 0.5
MEU 4.35 258 Pc 25 21.70 -0.9
eSn 26 11.90
MMB 4.36 37 ePd 25 22.00 -0.6
SGO 4.54 304 P 25 26.50 1.4
RZN 4.93 43 eP 25 31.00 0.1
BSS 4.99 304 P 25 32.50 1.1
VTS 4.99 26 iP 25 22.00 -9.6X
RDO 5.07 52 iPnd 25 31.20 -1.3
PLD 5.23 39 eP 25 43.00 8.2X
ALN 5.26 57 eP 25 35.70 0.4
KDZ 5.30 47 iP 25 34.00 -1.9
DUI 5.68 310 P 25 41.00 -0.4
HVAR 5.81 331 iPn 25 41.10 -2.0
SDI 6.10 308 P 25 47.50 0.2
PVL 6.38 36 eP 25 54.00 3.0X
ASS 7.60 313 P 26 08.50 0.3
ARV 7.71 316 P 26 09.50 -0.3
KSL 7.71 102 ePn 26 10.00 0.2
PTJ 8.39 339 e(P) 26 16.40 -2.9
CEY 8.75 332 ePn 26 23.00 -1.2
e(Sn) 28 01.00
LJU 8.98 334 ePn 26 25.60 -1.7
e(Sn) 28 04.00
TRI 8.98 329 P 26 26.00 -1.3
VRI 9.10 30 ePd 26 29.00 -0.1
FVI 10.10 329 P 26 42.00 -0.7
HFS 22.41 351 eP 29 13.70 -0.5
0.6s 5.40nm 4.2mb
NB2 23.62 349 P 29 26.00 -0.1
0.6s 1.10nm 3.6mb
S.D. = 1.2 on 50 of 55 obs.

& JUN 30, 1990 22h 17m 37.34s
31.650 N 115.920 W
DEPTH = 4.0km
BAJA CALIFORNIA (48)
<ECX>. MD 3.0 (ECX).

EMX 0.67 60 iPc 17 49.00 -1.7
S 17 58.00
ENX 0.68 290 iPc 17 49.40 -1.4
S 17 58.80
PBX 0.69 278 iPc 17 49.70 -1.5
S 17 59.20
SPX 0.72 147 ePd 17 49.80 -1.9
S 17 59.50
ECBX 0.76 103 iPc 17 50.90 -1.7
S 18 01.50
CBX 0.91 317 ePc 17 53.20 -2.3
S 18 05.10
CPBX 0.93 34 ePc 17 54.00 -1.6
S 18 06.20
LMX 0.94 60 ePc 17 54.10 -1.6
8 obs. associated

? JUN 30, 1990 22h 33m 56.07± 8.42s
46.726 N ±26.6km 4.222 E ±56.6km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 1.5 (LDG).

SMF 0.27 253 Pg 34 01.20 -0.7
Sg 34 06.00
LBF 0.31 327 Pg 34 01.00 -1.5
Sg 34 08.00
SSF 0.59 305 Pg 34 08.20 0.1
Sg 34 18.00
LOR 0.60 336 Pg 34 09.20 1.1
Sg 34 17.80
AVF 0.60 276 Pg 34 08.90 0.7
Sg 34 18.40
BGF 0.96 260 Pg 34 14.40 0.0
Sg 34 28.40
S.D. = 1.2 on 6 of 6 obs.

& JUN 30, 1990 23h 46m 53.83s
32.370 N 115.120 W
DEPTH = 1.7km
CALIFORNIA-MEXICO BORDER REGION (45)

<ECX>. ML 3.2 (ECX), 3.0 (PAS).

CPBX	0.16	287	iPc	46	58.25	1.2
LMX	0.29	153	ePn	47	00.92	1.2
			S	47	06.76	
EMX	0.39	195	ePd	47	01.46	-0.2
			S	47	09.50	
GLA	0.72	20	iPd	47	07.90	-0.4
RDX	0.83	238	eP	47	09.14	-1.2
			S	47	20.61	
IKP	0.88	289	eP	47	10.10	-1.4
ECBX	0.90	176	ePn	47	10.40	-1.4
			S	47	23.39	
CBX	1.31	268	ePn	47	16.76	-2.1
			S	47	34.24	
BAR	1.35	284	eP	47	17.90	-1.6
SPX	1.35	193	ePn	47	17.39	-2.5
			S	47	35.31	
ENX	1.40	250	ePn	47	18.28	-2.1
			S	47	36.30	
PBX	1.50	246	ePn	47	19.00	-2.9
			S	47	39.30	
PLM	1.76	304	eP	47	22.00	-3.8

13 obs. associated

JUN 30, 1990 23h 49m 29.28± 0.26s
1.320 N ± 4.3km 122.924 E ± 5.9km
DEPTH = 33.0km (normal)
5.0mb (15 obs.) 4.7Msz (1 obs.)
MINAHASSA PENINSULA (265)

TSM	5.64	301	eP	50	53.00	0.0
			e	55	54.00	
DAV	6.31	25	eP	51	03.00	0.5
	1.2s	775.00nm			6.3mb X	
AAI	7.24	133	eP	51	17.70	2.1
MKS	7.35	208	e(P)	51	23.00	5.9X
			e(S)	52	52.50	
KKM	8.17	305	ePc	51	32.80	4.1X
QCP	13.36	352	eP	52	40.00	0.9
BAG	15.17	351	eP	53	02.00	-1.1
MTN	16.26	150	eP	53	16.00	-0.9
KNA	17.92	161	eP	53	38.00	0.3
IPM	22.10	279	ePd	54	25.10	1.5
MBL	22.55	188	iPd	54	27.00	-0.9
PPI	22.59	266	eP	54	30.50	2.1
QZH	23.85	350	eP	54	41.50	0.9
Z	17s	1.40um			4.5MszX	
WB5	23.87	153	eP	54	40.70	-0.2
WRA	23.92	153	P	54	42.00	0.7
	0.4s	8.90nm			4.6mb	
PSI	24.02	274	ePd	54	43.70	1.4
NANU	24.81	196	eP	54	49.00	-0.9
	0.4s	10.00nm			4.8mb	
GUMO	24.90	60	eP	54	51.00	0.2
			eS	59	14.00	
GUA	24.92	60	eP	54	51.50	0.5
ASPA	27.03	157	eP	55	09.60	-1.0
	1.1s	15.00nm			4.5mb	
QIS	27.20	144	ePc	55	11.00	-1.1
	1.0s	43.00nm			5.0mb	
WARB	27.58	173	eP	55	15.00	-0.5
	0.4s	4.00nm			4.4mb	
MEKA	28.09	188	eP	55	18.50	-1.7
	0.4s	16.00nm			5.1mb	
KMI	30.65	322	eP	55	44.50	1.1
	2.0s	60.00nm			5.0mb	
N	13s	0.30um				
CTA	31.24	134	P	55	48.00	-0.3
	1.2s	35.94nm			5.1mb	
			iS	01	14.00	
CD2	34.58	330	eP	56	16.40	-0.9
XAN	35.09	340	P	56	20.00	-1.6
TIY	37.48	346	eP	56	42.30	0.5
N	19s	2.10um				
			S	02	31.50	
MAT	37.79	20	eP	56	44.00	-0.4
SHL	38.42	311	iP	56	49.50	-0.4
			iS	02	46.00	
LZH	38.86	335	Pc	56	55.50	2.1
	1.5s	25.00nm			4.8mb	
Z	18s	0.97um			4.7Msz	
E	14s	0.72um				
			pP	57	04.00	29kmX
			sP	57	06.50	
			PP	58	25.00	
BJI	39.03	352	eP	56	54.00	-0.6
	1.0s	12.00nm			4.6mb	
CMS	39.21	148	eP	56	36.00	-20.2X
SNY	40.33	1	eP	57	03.80	-1.5
BWA	42.86	148	eP	57	28.29	2.1
GTA	43.38	334	P	57	31.30	0.8
CAN	43.85	149	iPc	57	35.20	0.9
GUN	44.21	310	P	57	37.40	-0.3
PKI	44.40	309	P	57	38.60	-0.6
DMN	44.65	309	P	57	40.60	-0.6
GKN	45.21	309	P	57	45.00	-0.5
	1.1s	46.00nm			5.3mb	
DZM	48.40	121	iPc	58	10.70	0.0
WMQ	52.63	328	eP	58	41.50	-1.0
QUE	60.28	304	eP	59	36.20	-1.3
PRNI	87.55	300	eP	02	16.00	0.3
PMO	89.54	105	iP	02	29.50	4.2X
	1.1s	45.00nm			5.7mb	
VAH	89.81	105	iP	02	30.60	4.1X
	1.1s	25.00nm			5.4mb	
TPT	89.81	105	iP	02	30.80	4.2X
	1.1s	25.00nm			5.4mb	
RUV	90.04	105	iP	02	31.80	4.1X
	1.1s	25.00nm			5.4mb	
INK	93.78	21	eP	02	43.00	-0.9
KRA	97.31	321	eP	03	11.30	10.9X
CHCH	145.15	160	ePKP	09	05.00	-0.7
SAN	145.59	160	ePKP	09	07.00	0.5
PEL	145.86	159	ePKP	09	07.50	0.5
CNCB	161.23	146	ePKP	09	22.00	-7.0X
LPB	161.39	145	ePKP	09	23.00	-5.9X
ZOBO	161.58	144	PKP	09	32.00	2.7X
Z	20s	0.09um				
			LR	42	00.00	
SIV	164.90	165	ePKP	09	32.00	0.1
			i	10	28.70	

S.D. = 1.0 on 47 of 58 obs.

% JUN 30, 1990 23h 52m 04.06± 0.43s
46.985 N ± 5.0km 1.459 E ± 4.2km
DEPTH = 10.7 ± 3.7 km
FRANCE (538)
ML 2.9 (LDG).

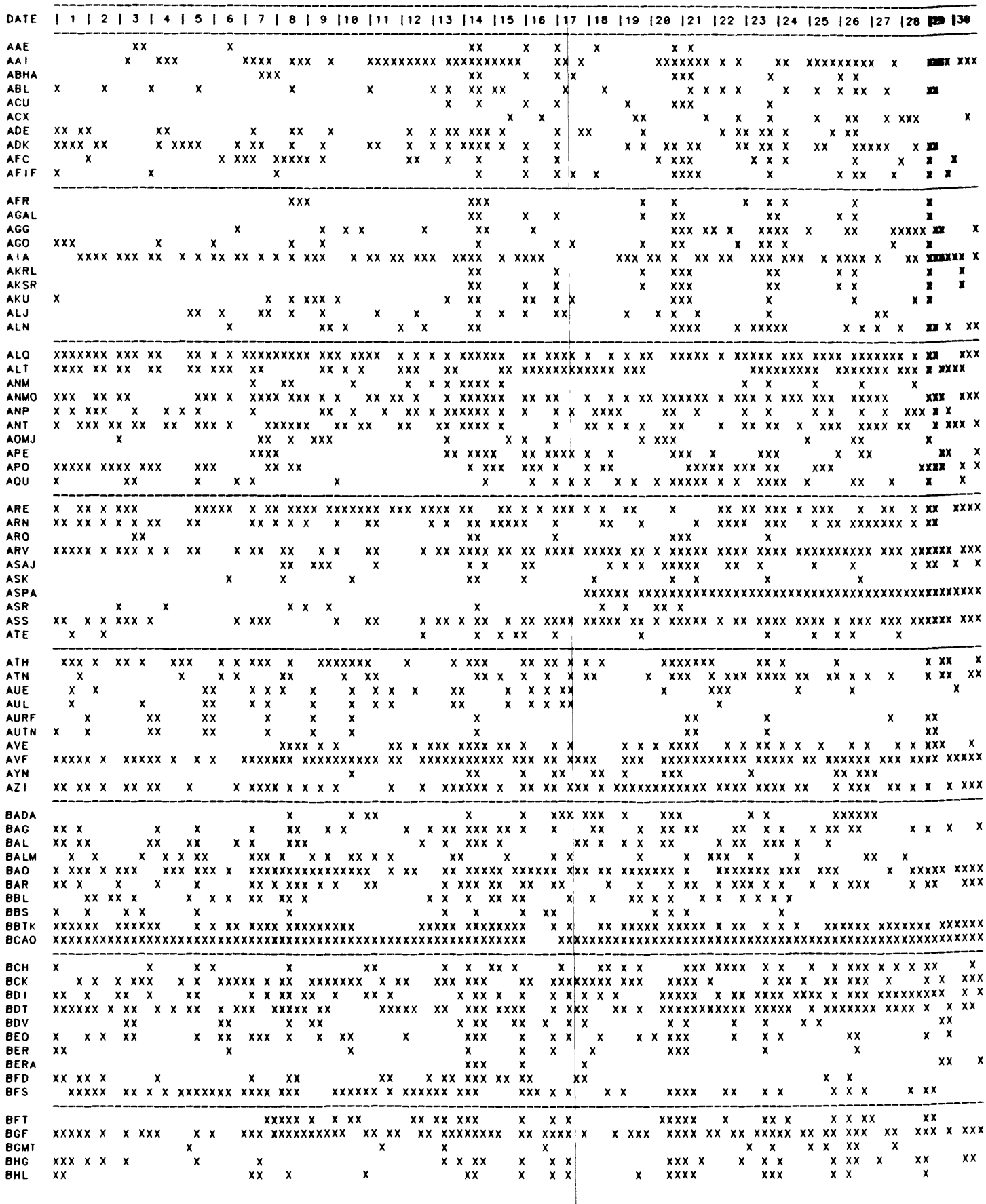
LSF	0.74	176	Pg	52	19.00	0.5
			Sg	52	29.20	
TCF	0.87	143	Pg	52	21.40	0.7
			Sg	52	34.40	
BGF	1.04	114	Pg	52	24.00	0.3
			Sg	52	38.80	
MAF	1.08	135	Pg	52	25.20	0.9
			Sg	52	40.60	
MFF	1.17	251	Pg	52	25.00	-0.8
			Sg	52	39.20	
AVF	1.31	98	Pn	52	27.80	-0.4
			Pg	52	28.50	
			Sg	52	45.70	
SSF	1.40	86	Pn	52	28.70	-0.9
			Pg	52	29.80	
			Sg	52	49.00	
LOR	1.66	79	Pn	52	32.60	-0.7
			Pg	52	34.00	
			Sg	52	55.40	
SMF	1.67	101	Pn	52	32.70	-0.7
			Pg	52	34.80	
			Sg	52	56.80	
RJF	1.68	179	Pn	52	33.50	-0.1
			Pg	52	36.40	
			Sg	52	58.20	
LBF	1.72	89	Pg	52	36.00	1.8
			Sg	52	58.00	
LDF	1.93	327	Pg	52	37.00	-0.1
			Sg	53	01.20	
LPF	1.99	303	Pg	52	38.20	0.2
			Sg	53	02.00	
CAF	2.10	168	Pn	52	39.40	-0.3
			Sg	53	12.00	
GRR	2.10	313	Pg	52	40.20	0.6
			Sg	53	05.40	
LFF	2.11	194	Pg	52	44.20	4.5X
			Sg	53	13.00	
FLN	2.21	324	Pg	52	42.00	0.8
			Sg	53	08.80	
LPO	2.31	185	Pg	52	47.80	5.1X
			Sg	53	18.00	

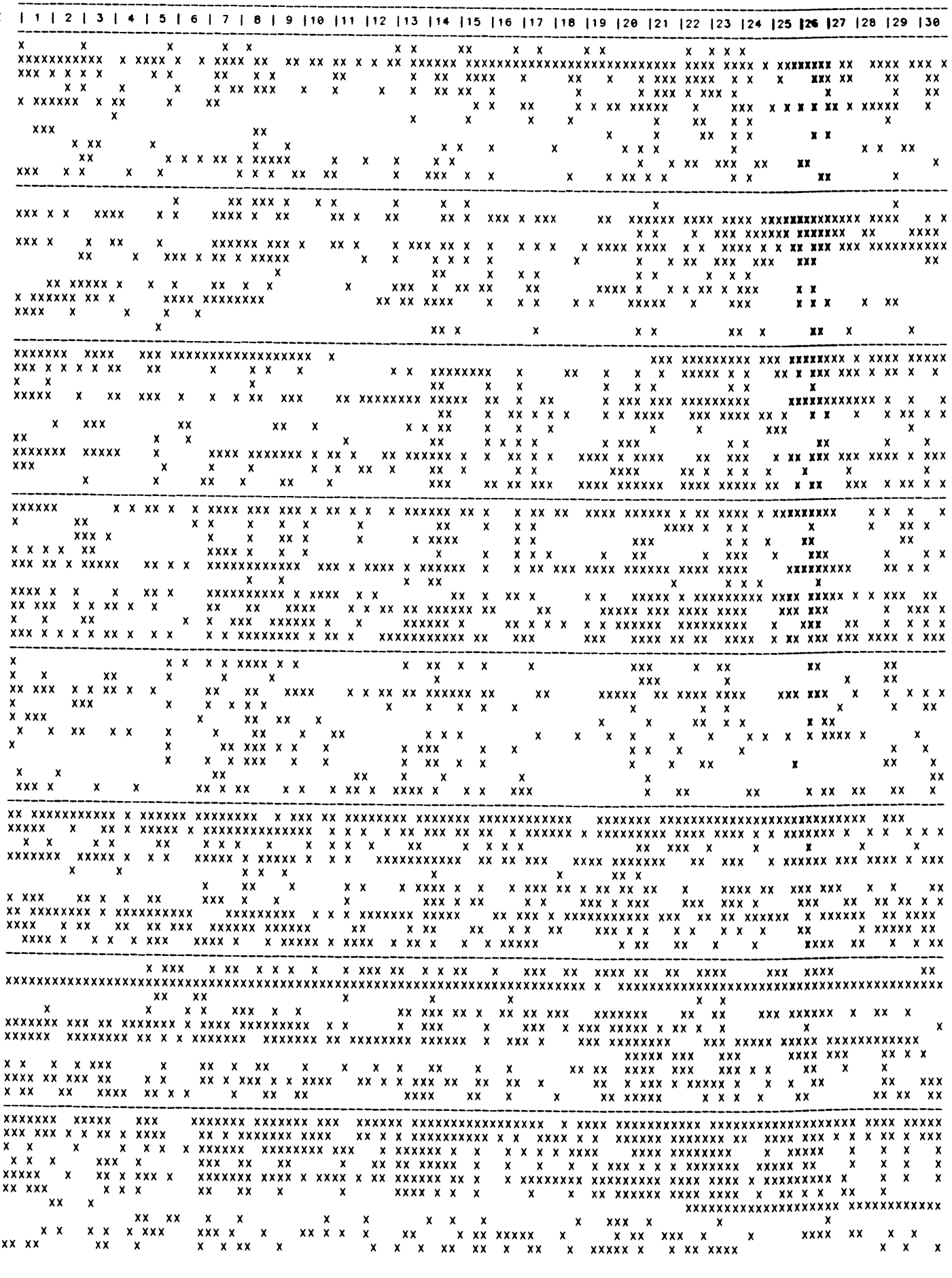
S.D. = 0.8 on 16 of 18 obs.

STATION DATA REPORT FOR JUNE, 1990

1344 stations reported 64177 reading arrivol groups

X = dota received for this 6-hour time period

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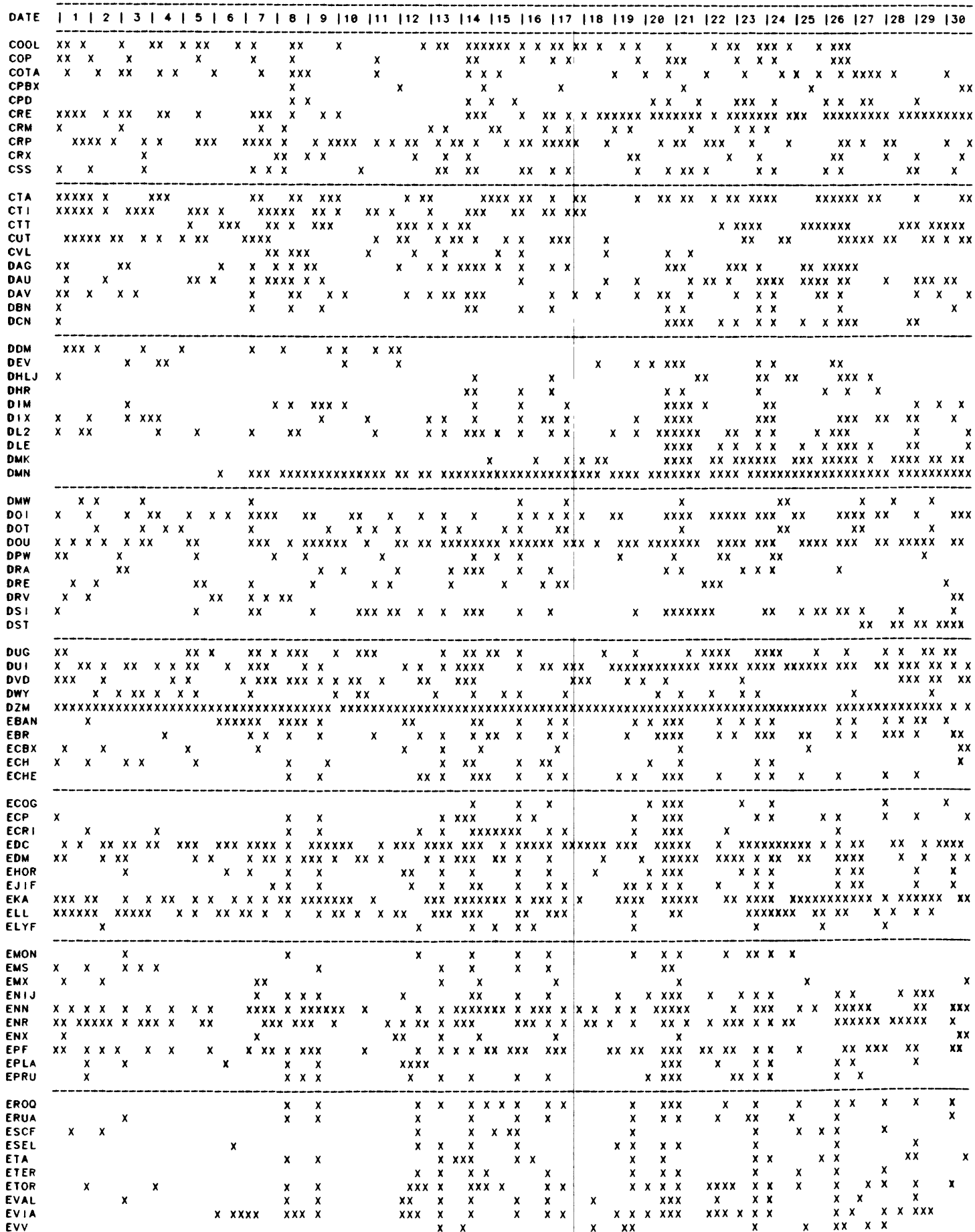
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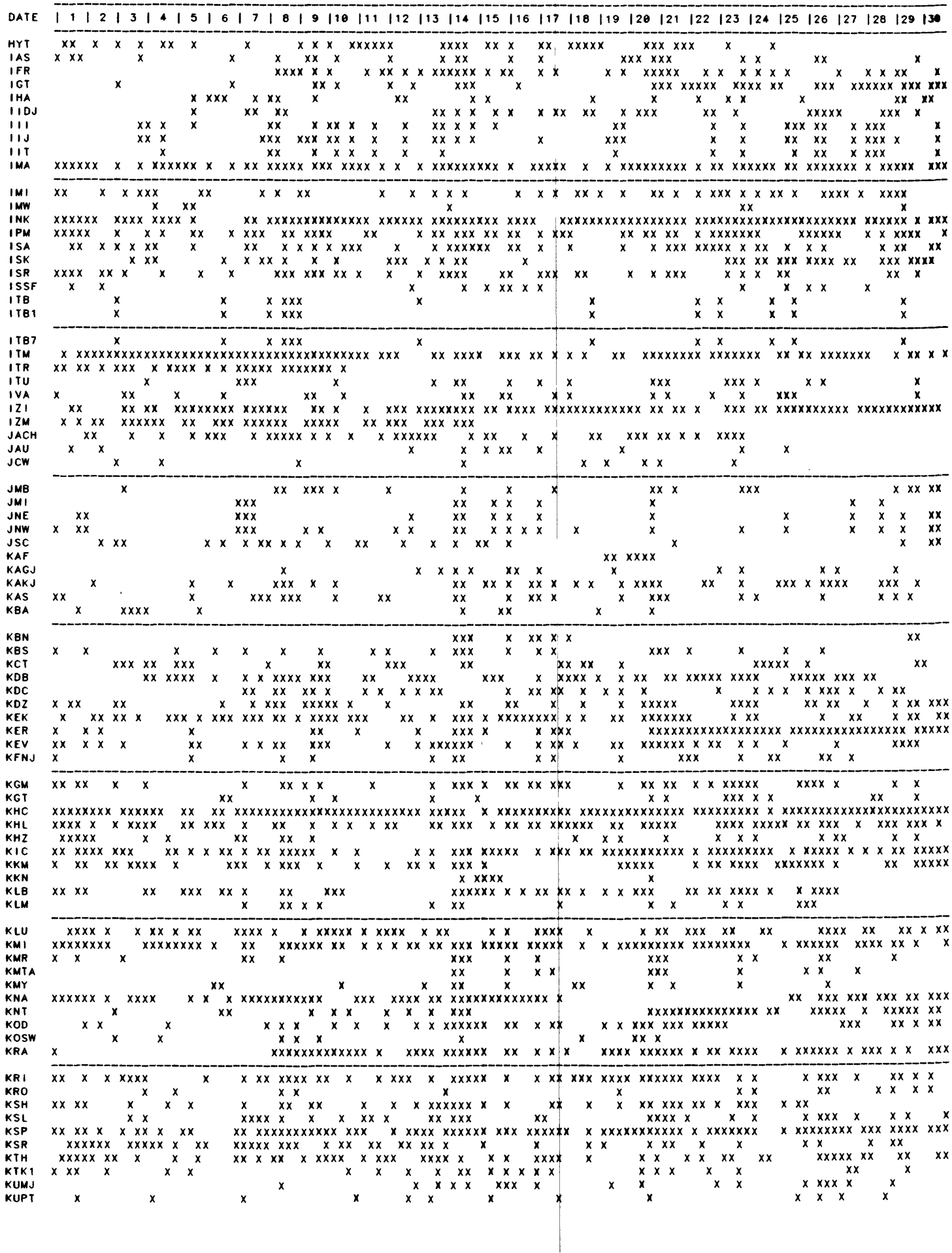
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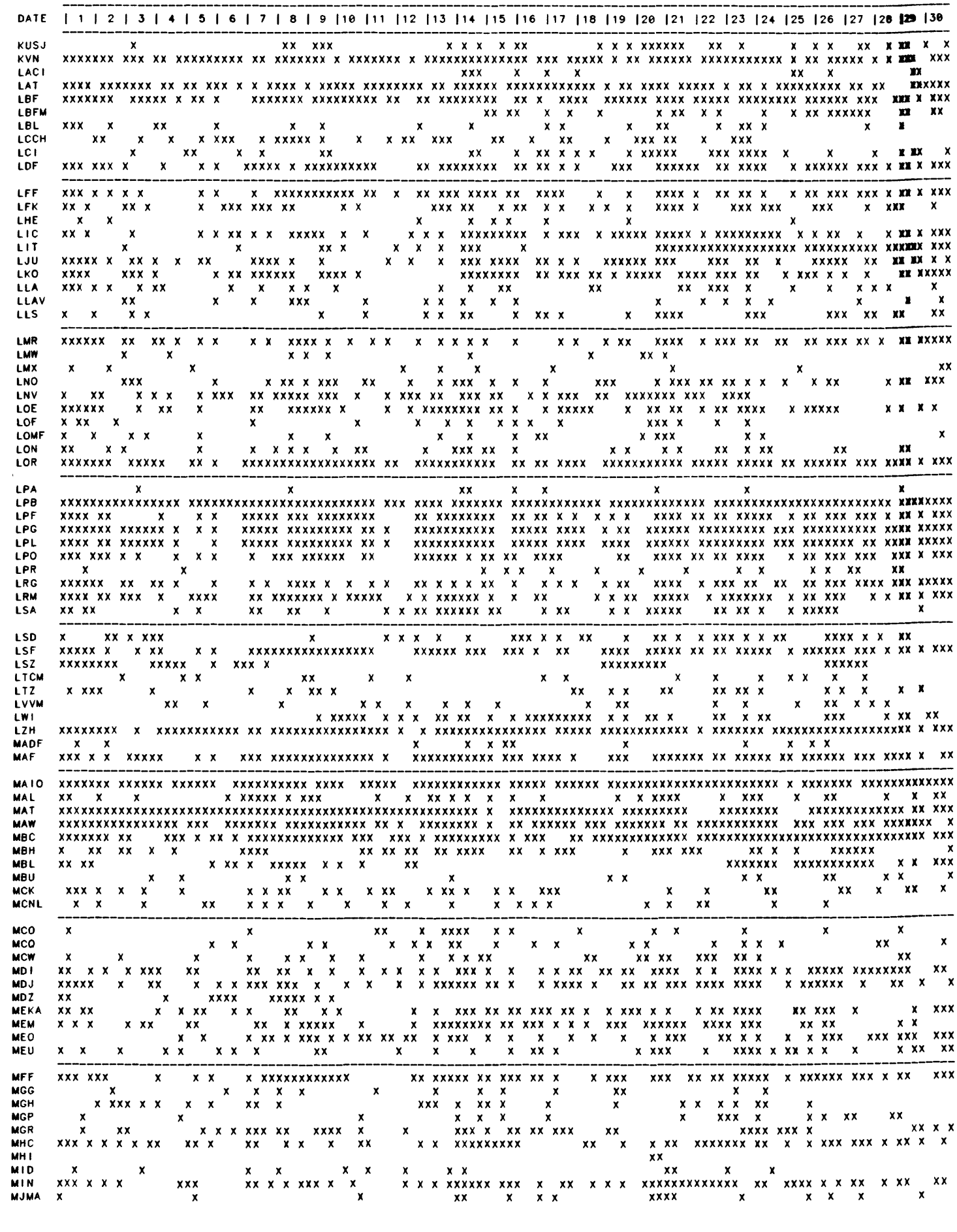
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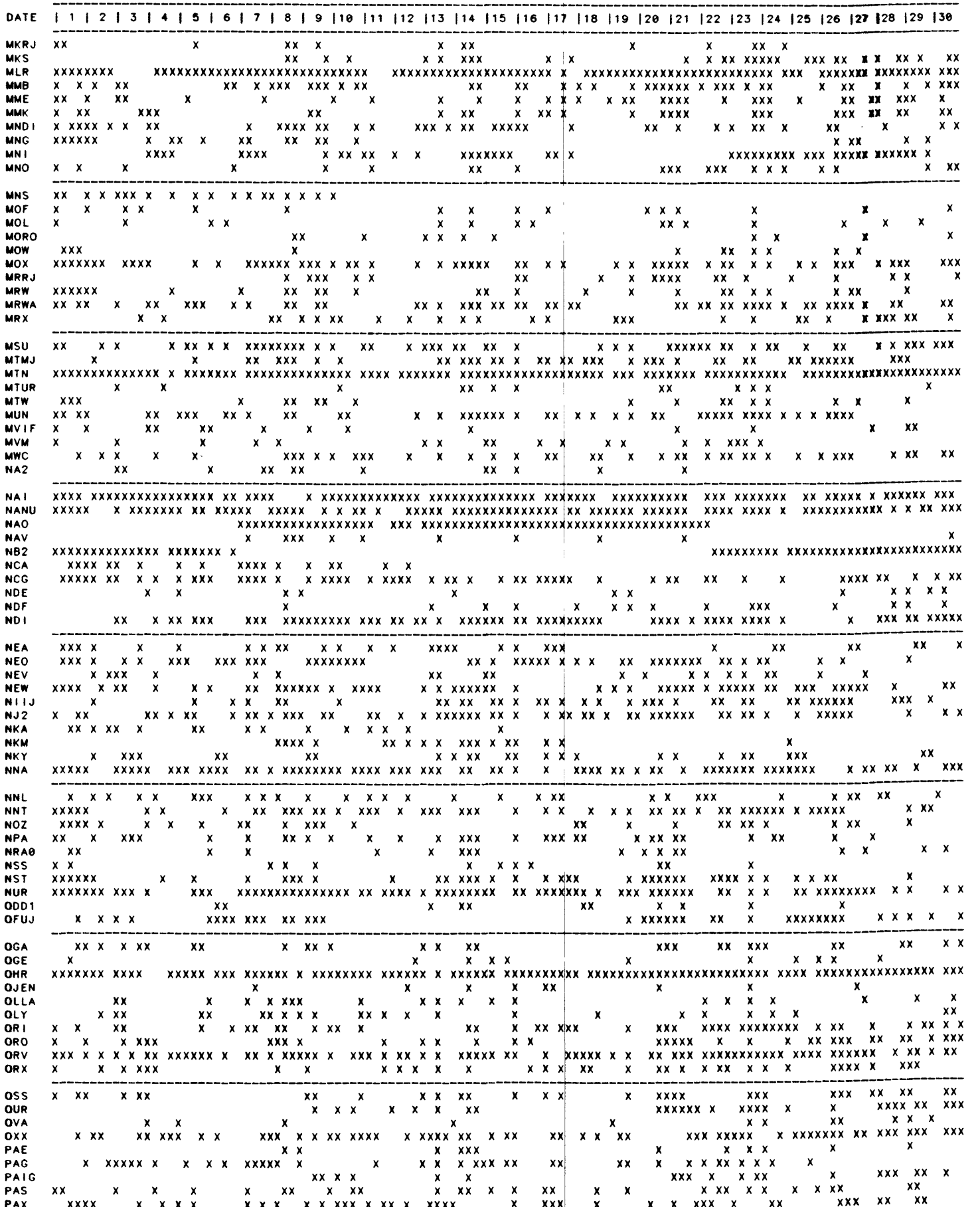
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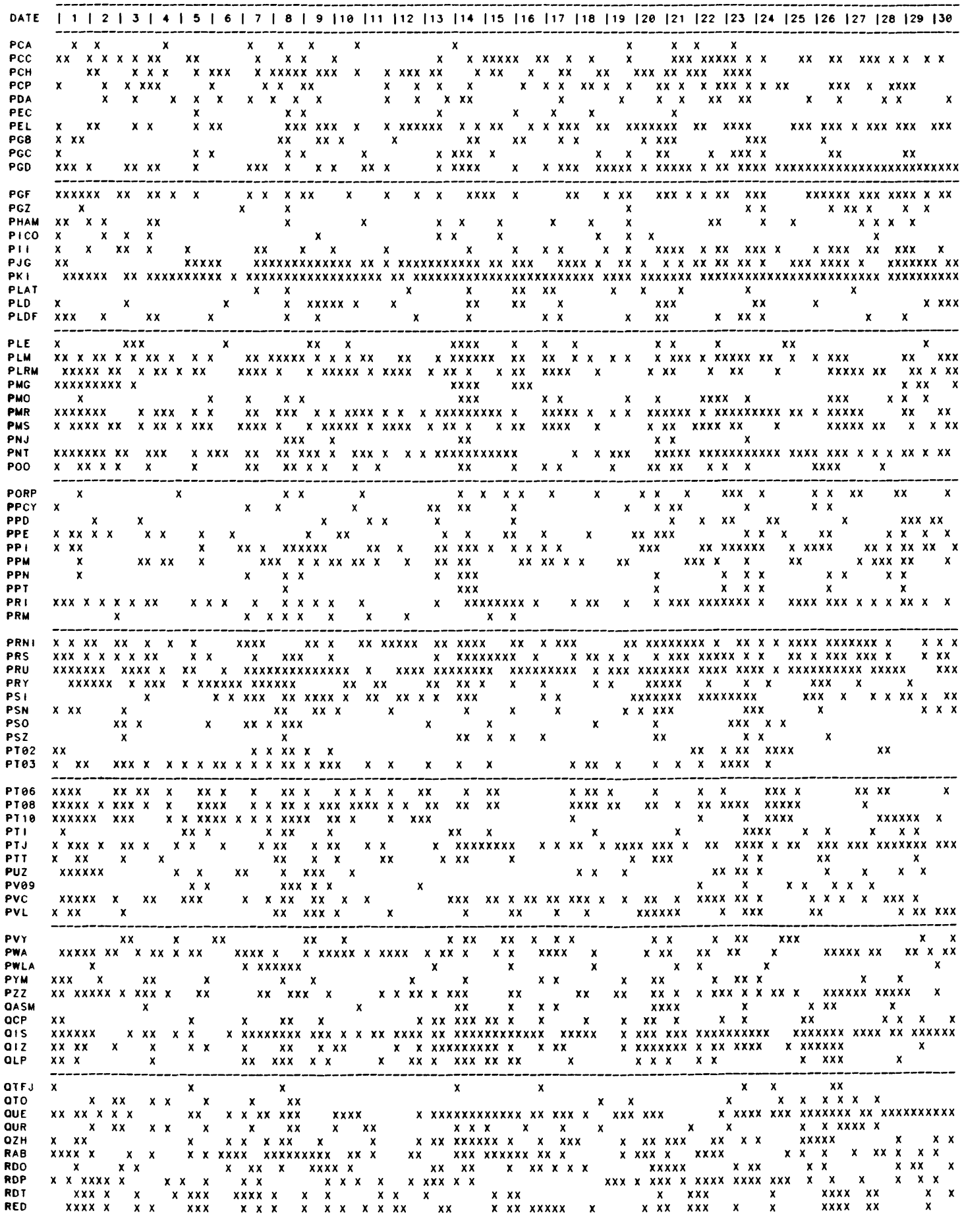
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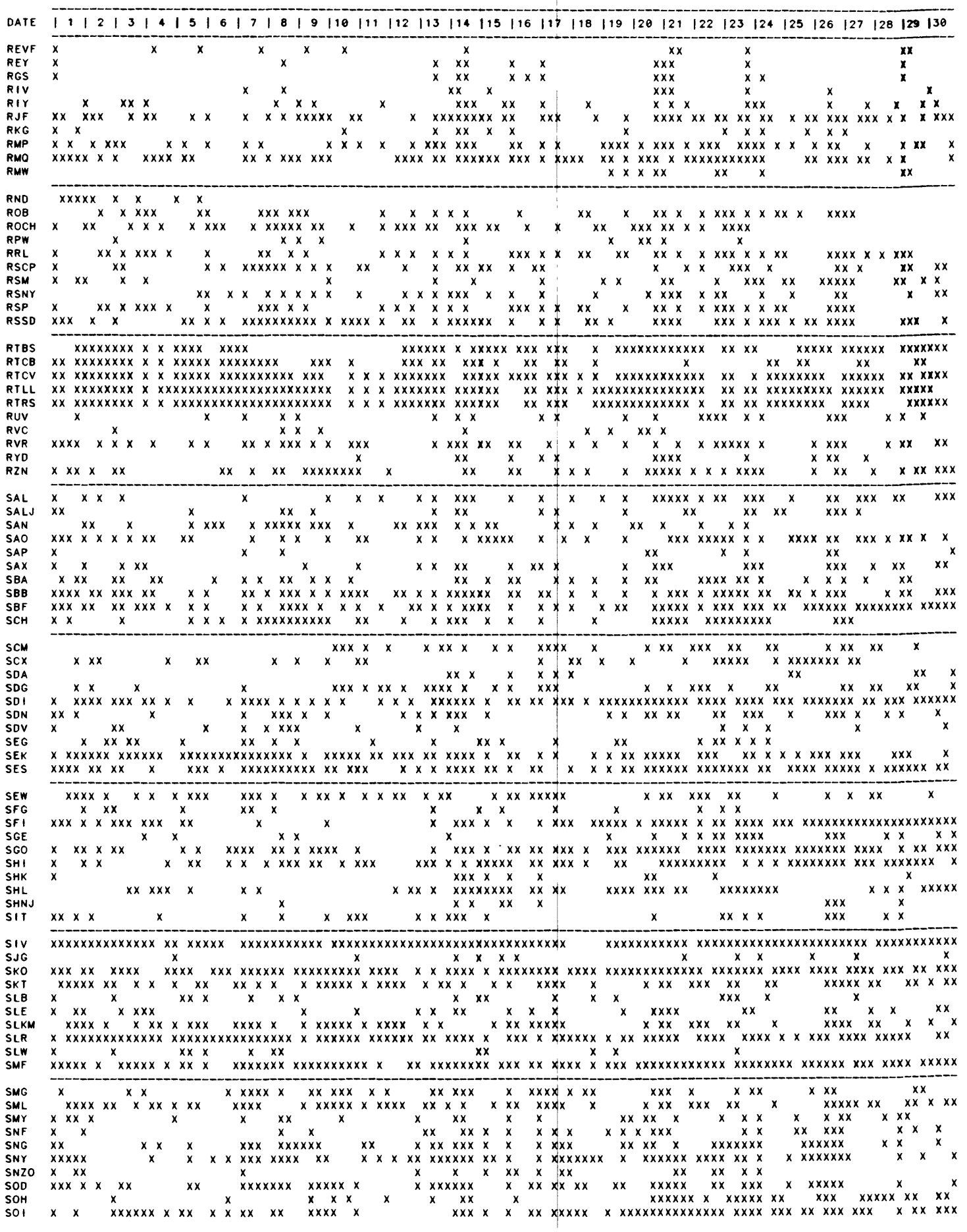
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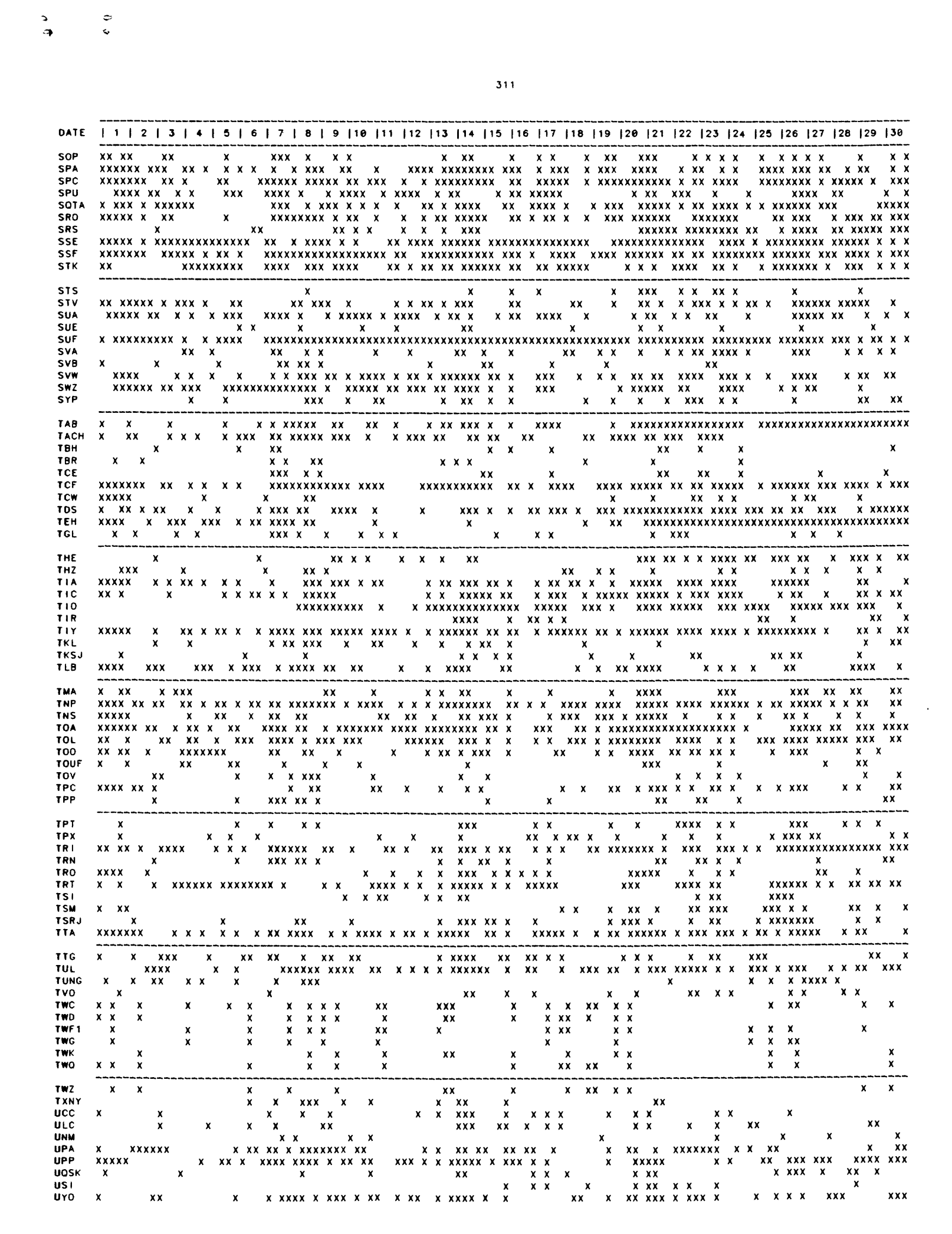
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USI
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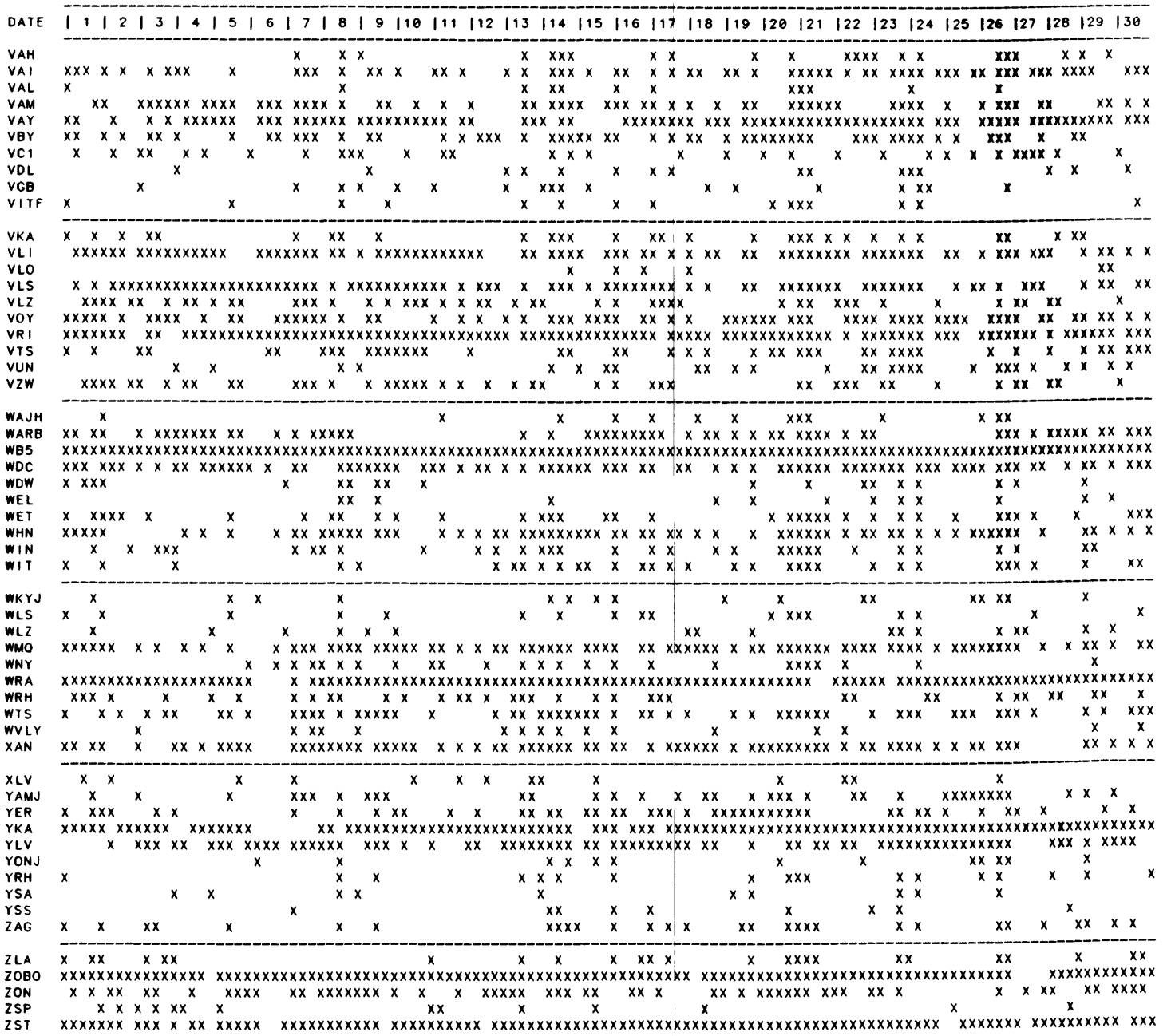

The following stations each reported less than 10 readings:

ACO	ADH	ADI	AGMR	AGRW	AGX	AHA	AIN	ALB	AN11	AN3	AN9	ANCC	APA	APM	APW	ASW	ATA
ATZ	AVN	AWKL	BBB	BCI	BCPM	BEE	BERF	BGB	BGIO	BIB	BKB2	BKR	BLH	BLN	BLS1	BLS2	BMA
BMR	BNAB	BNS	BOA	BOH	BOT	BRLK	BRVW	BST	BTB	BUGC	BUT	BVW	CALA	CAO	CBB	CCM	CCW
CDM	CEI	CFTV	CGL	CIS	CIW	CKL	CLE	CLK	CLMC	CMW	CNZ	COL	COR	CPB	CPE	CPH	CPK
CPW	CRF	CRI	CROR	CRQ	CRZF	CSI	CSTJ	CTAO	CTCR	CTFE	CUMC	CUSS	CVA	CVD	CVT	CYK	CZI
CZM	DAF	DAH	DAQ	DES	DHJN	DHW2	DIAC	DLA	DOG	DPMT	DPQ	DRZ	DSH	EAB	EALH	EAU	EBG
EBH	EBL	EDB	EDI	EDR	EDU	ELC	ELF	ELO	EMEL	EMM	EPA	EPH	ERC	ERK	ESD	ESK	ESR
ESY	ETB	ETW	EVR	FAI	FAM	FG2	FKO	FL2	FMA	FOO	FRO	FRU	FYU	GANF	GBL	GBR	GDH
GDR	GELF	GGC	GHW	GL2	GLH	GLK	GLR	GMB	GMO	GMR	GRA4	GRC	GRC1	GRI	GROR	GRQ	GRW
GSH	GT2	GUAC	GUAN	GULW	GVR	HATZ	HAY	HBF	HDC2	HDW	HIA	HIL	HIN	HLBJ	HLD	HLP	HMH
HNB	HOBC	HOQC	HOR	HPU	HQN	HRV	HRY	HSR	HTC	HUH	HUL	HYF	IIC	IKP	ILT	IRK	IRZ2
JARJ	JAY	JBO	JLK	JON	JOZ	JTS	JUD	JVI	KAE	KBR	KETZ	KFH	KHU	KIH	KIM	KIP	KIW
KKB	KKS	KKU	KLN	KMOR	KNH	KOH	KONO	KOT	KPO	KTK2	KUG	KUH	KVT	LCL	LDN	LFU	LHS
LIS	LISJ	LML	LMN	LNOR	LSK	LST	LTMT	LVI	LVNJ	LVP	MAJO	MAO	MASJ	MBO	MBW	MBZ	MCMT
MCT	MDN	MDSJ	MDW	MEMT	MEW	MFT	MGB	MHZ	MIM	MKA	MLH	MLX	MMCZ	MML	MOA	MOH	MOMI
MOR	MQZ	MSI	MSTB	MSZ	MTMW	MTU	MVH	MWH	MXC	NAB	NAC	NBO	NDB	NGH	NGZ	NLO	NLW
NOH	NOP	NPH	NWRM	OBC	OBH	OBN	OCM	OFK	OHW	OMR	OOW	OPA	OSD	OSP	OTR	OUT	OZB
PATW	PBC	PCF	PCT	PEM	PET	PFB	PGO	PGW	PHC	PHP	PIG	PKEM	PKL	PLAV	PLG	PLH	PLL
POA2	POF	POH	POW	PPL	PRAF	PRJ	PRW	PSM	PTCR	PTO	PTS	PUH	PUK	PUL	PURC	PUYF	PVPS
PWH	PZI	QCS	QPS	QSM	QZA	RAC	RAGM	RAO	RAR	RATZ	RBA	RBL	RDX	REMW	RFI	RIM	RIN3
RKT	RMN	RRO	RSON	RSW	RUB	RUWJ	RVW	SALC	SAOF	SAW	SCE	SCI	SCP	SCY	SFS	SGAM	SGH
SGS	SHB	SHBJ	SHMJ	SHU	SHW	SILC	SIM	SJAS	SKI	SLD	SLL	SLM	SNB	SOA	SONG	SOSW	SPRG
SPT	SPW	SPX	SRAT	SRN	SSB	SSS	STD	STR	STU	STW	SVV	SWH	SXM	TAC	TAF	TAIF	TATO
TAU	TAVF	TAZ	TBI	TBM	TBT	TCO	TDD	TDH	TDL	THI	TIG	TIK	TIM	TLC	TLG	TME	TMP

TMW	TNR	TPE	TPR	TREF	TRH	TRQ	TTH	TUH	TUTZ	TVI	TWL	TWM1	TWW	UDU	UTO	UTU	UWE
UZH	VAN	VAO	VBEM	VDB	VFP	VGZ	VILF	VIPM	VLL	VLMM	VPD	VRAC	VSM	VTG	VTHM	VTU	WAH2
WATA	WAX	WG2	WHA	WHB	WHC	WHH	WIH	WIW	WKH	WLF	WOB	WOH	WPB	WPW	WRD	WTV	YAKW
YEL	YKR1	YKU	YMT3	YMT6	YPE	ZGN	ZNT										