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GEOLOGICAL SURVEY

EARTHQUAKE DATA REPORT
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by

U.S. Geological Survey
NATIONAL EARTHQUAKE INFORMATION CENTER¹

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1990

¹USGS, Denver, Colorado

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 (i.e., 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 Bayesian 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 $20^\circ \leq \Delta \leq 160^\circ$, 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 $\Delta \leq 5^\circ$. 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 ($^{\circ}$) 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, pRPPK represents the phase pPKPPK and RPPG 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.

? MAY 01, 1990 00h 07m 02.64±1.79s
50.990 N ±30.0km 169.472 W ±11.9km
DEPTH = 33.0km (normal)
4.8mb (3 obs.)

ALEUTIAN ISLANDS REGION (16)

ADK	4.60	284 (P)	08 10.80	-0.8
IMA	17.13	22 e(P)	10 59.50	-1.4
INK	24.55	32 eP	12 21.00	1.0
YKA	31.21	47 eP	13 19.50	-1.1
	0.8s	0.80nm	3.6mb X	
MBC	31.85	20 eP	13 27.00	0.9
SES	36.18	67 eP	14 03.00	-0.7
SOD	61.34	353 eP	17 37.00	20.2X
SUF	65.96	352 eP	17 47.00	-0.1
NUR	68.27	353 eP	18 03.00	1.3
NB2	68.32	360 P	18 02.20	0.1
	0.6s	1.90nm	4.4mb	
HFS	69.20	358 eP	18 07.10	-0.3
	0.6s	5.80nm	4.8mb	
EKA	73.43	8 P	18 34.00	1.1
	1.9s	29.60nm	5.0mb	

S.D. = 1.1 on 11 of 12 obs.

? MAY 01, 1990 00h 08m 28.59±0.88s
54.880 S ±23.9km 129.536 W ±16.0km
DEPTH = 10.0km (geophysicist)
5.2mb (3 obs.) 5.1MsZ (1 obs.)

SOUTH PACIFIC CORDILLERA (691)

SPA	35.30	180 iPc	15 25.60	0.2
	1.0s	20.50nm	5.0mb	
TACH	45.47	87 eP	16 49.00	-0.4
SAN	45.77	87 eP	16 52.00	0.2
PEL	45.98	87 iPc	16 54.00	0.5
	0.8s	33.58nm	5.4mb	
FCH	46.08	87 eP	16 55.00	0.4
LPB	60.28	76 eP	18 41.00	1.0
	Z 20s	1.42um	5.1MsZ	
		eLR	34 34.00	
ZOBO	60.47	76 P	18 41.00	-0.5
	1.2s	21.96nm	5.2mb	
	Z 24s	0.50um	4.6MsZ	
		LR	34 24.00	
CCH	60.70	78 P	18 43.00	0.3
SIV	64.69	82 Pd	19 07.40	-1.5
WB5	77.40	254 eP	20 25.00	-0.3
PDCR	80.10	98 eP	20 39.20	-0.9
YKA	117.62	8 ePKP	27 21.30	6.4X
	0.4s	0.10nm		
BCAO	123.48	141 ePKPd	27 37.10	9.5X
	0.4s	3.00nm		
EPF	145.75	89 ePKP	28 09.20	1.1
	0.8s	6.70nm		
DAG	147.28	23 ePKP	28 14.00	4.5X
MFF	147.56	83 ePKP	28 14.00	3.2X
	0.8s	5.35nm		
RJF	147.78	87 ePKP	28 14.20	2.9X
	0.8s	5.35nm		
CAF	147.88	88 ePKP	28 15.00	3.5X
	0.8s	4.05nm		
LSF	148.33	85 ePKP	28 15.70	3.6X
	1.0s	6.00nm		
TCF	148.74	86 ePKP	28 16.70	3.9X
	1.0s	6.00nm		
BGF	149.26	86 ePKP	28 18.20	4.6X
	0.8s	7.40nm		
AVF	149.68	86 ePKP	28 19.00	4.9X
	0.8s	3.35nm		
SMF	149.88	86 ePKP	28 19.60	5.1X
	1.0s	6.00nm		
EKA	149.95	67 PKPc	28 19.80	5.5X
	1.0s	8.20nm		
LBF	150.14	86 ePKP	28 20.00	5.1X
	1.0s	6.00nm		
LOR	150.23	85 ePKP	28 20.20	5.2X
	1.0s	9.00nm		
LPL	150.92	90 ePKP	28 23.90	7.5X
	0.8s	2.70nm		
LPG	150.92	90 ePKP	28 24.00	7.5X
	0.8s	4.70nm		
CKI	151.18	94 PKP	28 22.50	6.0X
BOB	152.05	94 PKP	28 36.00	18.1X
DOU	152.06	81 PKP	28 36.00	18.4X
BSF	152.21	86 ePKP	28 25.20	7.1X
	0.8s	5.35nm		

VAI 152.29 92 PKP 28 24.50 6.5X
MDI 152.79 92 PKP 28 30.00 11.3X
MEM 153.10 81 PKP 28 29.80 10.8X
CTI 154.06 94 PKP 28 26.50 5.8X
CLL 157.41 84 ePKP 28 42.00 17.2X
S.D. = 0.8 on 12 of 37 obs.

* MAY 01, 1990 01h 12m 33.73±0.90s
36.257 N ±12.8km 27.186 E ±6.5km
DEPTH = 10.0km (geophysicist)

DODECANESE ISLANDS (369)

SMG	1.48	349 ePn	13 00.00	-0.3
CIN	1.52	28 eP	13 01.00	0.0
APE	1.56	302 ePn	13 02.00	0.4
KSL	1.94	93 ePn	13 06.80	-0.3
ELL	2.25	77 ePn	13 12.00	0.3
VAM	2.57	252 ePn	13 16.50	0.4
KHL	2.78	41 ePn	13 23.00	3.8X
BCK	2.98	65 ePn	13 27.00	5.0X
VLI	3.45	279 ePn	13 26.50	-2.1
ITM	4.32	284 ePn	13 42.50	1.5

S.D. = 1.2 on 8 of 10 obs.

% MAY 01, 1990 02h 08m 19.96±0.86s
43.214 N ±6.6km 11.042 E ±8.7km
DEPTH = 10.0km (geophysicist)

CENTRAL ITALY (381)

PII	0.63	324 P	08 32.70	0.1
		eSg	08 40.00	
CRE	0.78	58 P	08 35.30	0.0
		eSg	08 49.40	
MAO	0.80	174 Pd	08 35.50	0.0
		eSg	08 46.60	
PGD	0.83	37 P	08 36.00	0.0
		eSg	08 50.00	
BDI	0.91	339 P	08 37.30	-0.1
		eSg	08 50.50	

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

MAY 01, 1990 04h 07m 21.27±0.52s
40.814 N ±5.1km 23.880 E ±4.4km
DEPTH = 10.0km (geophysicist)

GREECE (364)

ML 3.1 (THE), 2.7 (SKO).

SRS	0.37	324 ePg	07 28.10	-0.8
		eSg	07 32.60	
SOH	0.40	271 ePg	07 29.00	-0.5
		eSg	07 34.50	
DUR	0.49	171 ePg	07 31.00	-0.1
THE	0.72	256 ePg	07 35.30	-0.1
		eSg	07 44.90	
KNT	0.82	295 ePg	07 38.50	1.3
		eSg	07 50.50	
PAIG	0.90	190 ePg	07 38.30	-0.2
		eSg	07 50.90	
VAY	1.11	298 iPg	07 42.30	0.2
		iSg	07 57.50	
GRG	1.13	278 ePg	07 42.30	-0.2
		eSg	07 57.30	
LIT	1.28	237 ePb	07 44.30	-0.7
		eSb	08 03.50	
RDO	1.30	75 ePb	07 44.50	-0.8
		eSb	08 03.00	
NEO	1.59	199 ePn	07 48.50	-1.0
ALN	1.64	86 ePn	07 49.70	-0.6
		eSn	08 13.00	
EZN	2.11	117 eP	07 59.50	2.4
SKO	2.17	303 ePn	07 59.30	1.3
OHR	2.35	278 ePn	08 01.50	0.9
CMP	4.53	10 ePc	09 21.00	49.5X
MLR	4.91	17 eP	08 50.00	13.0X
BZS	5.08	342 ePc	08 38.00	-1.2

S.D. = 1.1 on 16 of 18 obs.

& MAY 01, 1990 04h 43m 05.00s
38.842 N 122.805 W
DEPTH = 2.0km
NORTHERN CALIFORNIA (36)
<BRK>. ML 3.2 (BRK).
Mo=3.1+10+14 Nm (BRK).

NWRM	0.39	190 eP	43 13.00	0.2
ZSP	0.99	154 iPd	43 23.90	-0.7
		iS	43 39.70	

BRK	1.06	156 ePd	43 24.30	-1.4
BKS	1.06	155 iPd	43 24.50	-1.3
		iS	43 41.00	
ORV	1.24	54 ePc	43 26.80	-2.0
PCC	1.38	166 ePd	43 29.00	-2.2
LTCM	1.46	21 eP	43 31.00	-1.4
WDC	1.75	7 e(P)	43 33.00	-3.5
		e	43 37.40	
MHC	1.76	148 eP	43 34.80	-2.0
		i	43 41.40	
MIN	1.76	31 eP	43 35.20	-1.7
ARN	1.80	146 eP	43 35.80	-1.5
GCC	1.92	160 ePc	43 37.20	-1.8
CMB	2.06	112 ePc	43 39.80	-1.4
LLA	2.67	146 e(P)	43 46.80	-3.0
PRS	2.75	155 ePd	43 48.50	-2.5
FRI	3.07	126 ePd	43 54.20	-1.2
PRI	3.19	147 e(P)	43 58.50	1.3
KVN	3.67	85 eP	44 02.20	-2.1
TNP	4.45	98 eP	44 15.00	-0.3
ISA	4.69	131 eP	44 18.00	-0.6
SBB	5.76	135 eP	44 30.00	-3.7
GSC	5.96	125 eP	44 53.00	16.5
MWC	5.99	139 eP	44 37.00	0.0
PAS	5.99	140 eP	44 37.00	0.2
RVR	6.52	136 eP	44 37.00	-7.4
TPC	7.21	129 eP	44 51.00	-3.0

26 obs. associated

* MAY 01, 1990 05h 26m 13.87±1.17s
52.226 N ±18.0km 168.512 W ±12.1km
DEPTH = 33.0km (normal)
4.7mb (5 obs.)

FOX ISLANDS, ALEUTIAN ISLANDS (9)

ADK	5.06	269 eP	27 28.90	-0.4
SDN	5.68	54 eP	27 32.00	-6.1X
TTA	12.62	27 eP	29 13.20	-0.6
IMA	15.76	23 eP	29 55.30	0.5
FBA	16.56	32 eP	30 01.20	-3.6X
INK	23.18	33 eP	31 12.00	-6.0X
YKA	29.94	49 eP	32 23.80	3.1X
	0.5s	0.40nm	3.5mb X	
MBC	30.48	21 eP	32 24.00	-1.3
	0.5s	2.00nm	4.2mb	
KVN	36.88	91 e(P)	33 21.00	-0.1
DAG	49.85	9 iPd	35 04.90	-0.1
	0.3s	7.79nm	5.2mb	
NB2	67.09	0 P	37 07.00	1.4
	0.8s	1.80nm	4.2mb	
HFS	67.98	359 eP	37 11.60	0.5
	0.5s	3.90nm	4.8mb	
GUN	77.25	299 P	38 16.80	10.1X
PKI	77.77	299 P	38 19.40	9.8X
GKN	77.84	300 P	38 19.50	9.8X
	0.6s	14.00nm	5.2mb	
DMN	77.91	299 P	38 20.60	10.4X

S.D. = 1.0 on 8 of 16 obs.

? MAY 01, 1990 06h 12m 09.02±11.33s
7.782 S ±91.3km 129.236 E ±18.5km
DEPTH = 111.7 ±54.2 km
4.5mb (2 obs.)

BANDA SEA (280)

MTN	5.37	160 eP	13 30.00	1.9
		eS	14 30.00	
KNA	7.93	183 eP	14 03.00	-0.2
	0.2s	35.00nm	5.6mb X	
		eS	15 30.00	
WB5	13.01	158 eP	15 09.10	-1.8
		eS	17 29.00	
WRA	13.06	158 Pc	15 10.70	-0.8
	0.4s	6.60nm	4.5mb	
MBL	16.11	213 eP	15 49.20	-1.1
		eS	18 38.50	
QIS	16.19	143 eP	15 51.00	-0.3
		eS	18 42.00	
ASPA	16.42	165 eP	15 55.20	1.0
	0.6s	13.00nm	4.4mb	
		eS	18 47.00	
WARB	18.47	187 eP	16 20.00	0.9
NANU	19.75	220 iPc	16 33.00	0.5
		eS	20 10.00	

S.D. = 1.5 on 9 of 9 obs.

% MAY 01, 1990 07h 16m 56.57±0.67s

01d 07h

42.023 N \pm 6.4km 13.143 E \pm 5.1km
 DEPTH = 10.0km (geophysicist)
 CENTRAL ITALY (381)

AZI 0.22 99 P 17 00.80 -0.5
 eSg 17 05.80
 AQU 0.38 30 P 17 04.70 0.3
 eSg 17 10.90
 RMP 0.39 237 P 17 05.20 0.6
 eSg 17 10.60
 RDP 0.41 230 P 17 04.50 -0.6
 eSg 17 13.00
 MNS 0.50 317 P 17 06.50 -0.2
 eSg 17 13.90
 SDI 0.59 122 P 17 09.00 0.4
 eSg 17 18.00

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

* MAY 01, 1990 08h 39m 23.20 \pm 2.55s
 51.102 N \pm 24.2km 15.932 E \pm 14.0km
 DEPTH = 10.0km (geophysicist)

POLAND (548)

KSP 0.35 138 iP 39 30.00 -0.3
 0.6s 37.00nm
 iS 39 39.20
 eLR 39 46.00
 BRG 1.28 260 iPg 39 45.50 -1.4
 iSg 40 05.00
 PRU 1.42 219 Pg 39 50.20 1.1
 e 39 54.70
 Sn 40 07.00
 Sg 40 14.00
 i 40 21.20
 CLL 1.85 278 e(Pg) 39 56.00 0.7
 eSg 40 19.00
 KHC 2.49 218 Pn 40 04.00 -0.4
 Pg 40 11.50
 Sg 40 48.00
 Sg 41 43.30
 GRF 3.33 247 e(Pg) 40 26.00 9.7X
 e 40 29.70
 eSg 41 13.00

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

* MAY 01, 1990 08h 40m 08.16 \pm 1.52s
 51.627 N \pm 17.4km 16.708 E \pm 7.3km
 DEPTH = 10.0km (geophysicist)

POLAND (548)

KSP 0.83 199 iP 40 24.60 0.4
 0.6s 37.00nm
 iS 40 33.70
 eLR 40 40.50
 BRG 1.89 248 iPg 40 40.00 -0.8
 iSg 41 00.00
 PRU 2.14 221 ePg 40 44.00 -0.4
 e 40 48.50
 Sn 41 02.00
 Sg 41 08.00
 i 41 16.20
 CLL 2.34 264 e(Pg) 40 48.00 0.8
 iSg 41 15.00
 KRA 2.58 126 eP 40 51.00 0.3
 CLI 8.60 122 iPc 42 20.00 4.5X
 MLR 8.67 131 iPc 42 14.50 -2.1X
 VRI 8.77 127 iPc 42 14.50 -3.4X
 PPE 8.99 123 P 42 20.50 -0.4

S.D. = 0.8 on 6 of 9 obs.

* MAY 01, 1990 08h 41m 02.60s
 32.110 N 117.630 W
 DEPTH = 6.0km (geophysicist)

CALIFORNIA-MEXICO BORDER REGION (45)
 <PAS-P>. ML 3.7 (PAS). Felt in
 the San Diego area, California.

CPE 0.89 30 iPd 41 19.50 -0.5
 BAR 0.99 55 iPc 41 20.90 -0.9
 SCI 1.16 318 eP 41 24.20 -0.5
 IKP 1.40 67 eP 41 27.40 -1.3
 eS 41 45.00
 PLM 1.40 27 iPd 41 27.10 -1.7
 CIS 1.45 333 eP 41 28.00 -1.4
 PEC 1.82 12 eP 41 33.10 -1.6
 GLA 2.55 68 eP 41 43.50 -1.7
 ABL 3.04 334 eP 41 52.50 0.2

BCH 3.69 327 eP 42 00.50 -1.0
 PRI 4.74 329 e(P) 42 17.10 0.6
 FRI 5.16 341 e(P) 42 18.00 -3.4
 PRS 5.23 325 e(P) 42 22.90 -0.3
 SAO 5.61 327 eP 42 27.80 -0.8
 TNP 5.97 3 eP 42 32.50 -1.3
 KVN 6.94 357 eP 42 46.00 -1.5
 ALQ 9.74 70 eP 43 26.20 -0.3
 0.9s 2.94nm 4.7mb X
 PNT 17.25 356 eP 45 08.00 2.4
 SES 18.91 13 eP 45 27.00 0.8
 19 obs. associated

* MAY 01, 1990 09h 05m 04.72 \pm 1.40s
 14.891 N \pm 13.3km 148.910 E \pm 18.1km
 DEPTH = 33.0km (normal)
 4.5mb (4 obs.)

MARIANA ISLANDS REGION (215)

GUA 4.10 251 eP 06 06.80 0.1
 eS 06 43.40
 GUMO 4.13 252 eP 06 07.10 0.0
 PJG 4.13 252 eP 06 07.30 0.2
 MAT 23.58 338 eP 10 13.00 -0.4
 WRA 37.46 203 Pc 12 28.70 11.6X
 0.6s 2.40nm
 GYA 40.99 293 P 12 47.60 1.0
 ASPA 41.03 201 iPc 12 46.80 0.0
 0.5s 17.00nm 5.0mb
 CD2 44.23 299 P 13 12.20 -0.7
 LZH 45.34 306 eP 13 22.50 0.6
 CHTO 47.86 282 eP 13 39.00 -2.8
 0.7s 1.59nm 4.2mb
 pP 13 55.70 66kmX
 GTA 49.31 309 eP 13 53.10 0.2
 NANU 49.54 222 eP 14 02.70 8.1X
 GUN 59.54 294 P 15 08.70 0.6
 PKI 59.97 293 P 15 11.20 0.2
 0.4s 4.00nm 4.9mb
 DMN 60.23 293 P 15 13.00 0.3
 GKN 60.63 294 P 15 15.80 0.5
 INK 71.67 22 eP 16 34.00 9.1X
 MBC 76.06 14 eP 16 59.00 8.8X
 YKA 79.89 28 eP 17 20.90 9.4X
 0.7s 0.50nm 3.6mb
 KIC 146.41 307 PKPd 24 51.10 7.5X
 0.7s 9.50nm
 TIC 146.45 308 PKP 24 51.08 7.4X
 LIC 146.72 307 PKPd 24 52.02 7.9X
 0.7s 11.00nm
 S.D. = 1.0 on 14 of 22 obs.

? MAY 01, 1990 09h 31m 26.55 \pm 2.34s
 2.708 S \pm 17.8km 139.185 E \pm 32.6km
 DEPTH = 33.0km (normal)
 3.7mb (2 obs.)

NEAR N. COAST OF WEST IRIAN (197)

MTN 12.85 218 eP 34 29.00 -0.6
 eS 36 45.00
 WB5 17.70 195 eP 35 32.90 0.5
 eS 38 33.80
 QIS 17.75 179 eP 35 32.00 -0.9
 eS 38 09.00
 WRA 17.77 195 P 35 34.00 0.8
 0.7s 1.70nm 3.3mb
 ASPA 21.45 193 eP 36 14.50 0.1
 0.7s 5.00nm 4.0mb
 eS 40 04.70
 GBA 63.34 287 Pc 41 55.20 0.0
 0.2s 3.30nm 5.1mb X
 S.D. = 0.8 on 6 of 6 obs.

MAY 01, 1990 09h 37m 14.27 \pm 1.20s
 51.235 N \pm 11.3km 15.726 E \pm 6.3km
 DEPTH = 5.0km (geophysicist)

POLAND (548)

ML 3.7 (VKA), 3.6 (GRF), 2.9 (KRA).
 KSP 0.53 137 iPc 37 23.10 -1.8
 0.7s 138.00nm
 iS 37 32.60
 eLR 37 38.00
 BRG 1.18 253 iPn 37 36.80 0.1
 iPg 37 38.40
 iSg 37 58.50

PRU 1.46 212 Pn 37 41.60 0.3
 Pg 37 43.90
 eSn 38 00.00
 Sg 38 07.20
 i 38 14.50
 CLL 1.71 274 iPn 37 42.80 -2.1
 iPg 37 46.00
 iSg 38 12.00
 KHC 2.52 214 iPn 37 56.80 0.2
 Pg 38 03.50
 Sn 38 33.20
 Sg 38 43.30

MOX 2.67 259 ePn 37 59.00 0.4
 iPg 38 06.00
 iSg 38 45.00
 WET 2.78 222 ePn 38 01.00 0.7
 KRA 2.93 112 eP 38 04.00 1.6
 eS 38 40.80

VKA 3.00 172 iPg 38 11.00 7.7X
 iSg 38 53.40

ZST 3.17 163 eP 38 30.70 25.0X
 i 38 53.90
 i 39 03.10

GRC1 3.51 232 ePn 38 11.00 0.4
 ePg 38 23.70
 eSg 39 13.00

SPC 3.55 123 eP 38 19.00 7.6X
 i 39 03.50
 SRO 3.82 153 eP 39 06.00 51.0X
 e 39 09.50
 e 39 26.40
 e 39 49.80

SQTA 4.99 218 ePn 38 32.00 0.3
 e 39 43.00

RBL 5.00 197 P 38 31.50 -0.4
 eSn 39 44.00

FVI 5.03 204 P 38 32.00 -0.2
 eSn 39 49.00

OGA 5.35 217 eP 38 37.40 0.5
 CTI 5.85 209 P 38 43.50 -0.3
 MEM 6.18 268 P 38 48.60 0.3

DOU 7.17 265 iP 39 05.60 3.4X
 S.D. = 1.0 on 15 of 20 obs.

? MAY 01, 1990 09h 37m 44.26 \pm 1.45s
 31.443 S \pm 14.7km 68.331 W \pm 16.9km
 DEPTH = 33.0km (normal)

SAN JUAN PROVINCE, ARGENTINA (137)

RTLL 0.16 314 iPd 37 52.30 1.7
 CFA 0.18 154 iPd 37 50.50 -0.2
 eS 38 02.60

ZON 0.31 251 iPd 37 52.20 -0.1
 eS 38 06.00
 RTCB 0.40 264 iPc 37 53.50 0.0
 S 38 06.80

RTRS 1.60 322 ePc 38 09.20 -1.3
 eS 38 35.80

S.D. = 1.5 on 5 of 5 obs.

? MAY 01, 1990 09h 48m 01.73 \pm 0.78s
 9.570 S \pm 11.7km 109.914 E \pm 11.8km
 DEPTH = 33.0km (normal)

4.6mb (2 obs.)

SOUTH OF JAVA (282)

KHKI 5.75 78 ePc 49 27.40 0.3
 eS 50 31.60
 e 52 36.10

NANU 14.00 158 eP 51 20.20 0.3
 eS 53 46.00
 MBL 14.96 141 eP 51 32.30 -0.4
 eS 54 06.00

WB5 25.74 116 eP 53 31.00 -0.2
 ASPA 26.86 124 iPc 53 46.60 5.1X
 0.6s 7.00nm 4.5mb

GBA 39.61 305 Pc 55 32.90 0.7
 GUN 43.93 329 P 56 07.00 -0.8
 0.5s 8.00nm 4.8mb

S.D. = 0.7 on 6 of 7 obs.

? MAY 01, 1990 10h 01m 14.16 \pm 1.79s
 5.688 S \pm 18.6km 130.746 E \pm 46.5km
 DEPTH = 33.0km (normal)

4.2mb (3 obs.)

BANDA SEA (280)

MTN 7.12 177 eP 03 01.00 2.2
 KNA 10.19 191 eP 03 40.20 -1.0
 0.3s 19.00nm 5.9mb X
 WB5 14.54 166 eP 04 38.70 -0.9
 WRA 14.60 166 P 04 45.00 4.7X
 0.3s 1.20nm 3.8mb
 ASPA 18.13 171 eP 05 24.80 -0.5
 0.8s 13.00nm 4.1mb
 GUN 54.67 310 P 08 32.00
 0.6s 8.00nm 4.9mb
 PKI 54.85 309 P 10 44.20 -0.1
 DMN 55.11 309 P 10 46.20 0.1
 GKN 55.66 309 P 10 50.00 0.1
 S.D. = 1.2 on 8 of 9 obs.

? MAY 01, 1990 10h 37m 11.18±2.74s
 25.428 S ±46.1km 175.601 W ±38.7km
 DEPTH = 33.0km (normol)
 5.1mb (7 obs.)

SOUTH OF TONGA ISLANDS (175)

DZM 16.77 278 iPc 41 14.10 8.8X
 COO 29.10 252 iPc 43 15.00 3.9X
 CTA 35.49 271 iPd 44 07.20 0.2
 0.5s 63.38nm 5.8mb
 ASPA 45.75 261 iPd 45 32.10 0.6
 0.5s 21.00nm 5.3mb
 WB5 46.29 266 eP 45 35.20 -0.6
 WRA 46.30 266 Pd 45 33.40 -2.4
 0.8s 18.40nm 5.1mb
 FORR 49.50 250 iPd 46 02.20 1.6
 0.3s 16.00nm 5.5mb
 WARB 51.62 256 iPd 46 17.40 0.5
 0.3s 4.00nm 4.9mb
 KNA 52.65 269 eP 46 24.40 -0.3
 SPA 64.72 180 iPc 47 47.80 -0.5
 1.0s 4.50nm 4.5mb
 CHTO 93.96 289 eP 50 28.00 0.7
 1.0s 1.25nm 4.3mb
 HFS 144.72 352 ePKP 57 01.70 16.1X
 0.5s 2.20nm
 S.D. = 1.3 on 9 of 12 obs.

MAY 01, 1990 10h 52m 16.06±0.39s
 40.839 N ±3.3km 23.897 E ±3.6km
 DEPTH = 10.0km (geophysicist)
 GREECE (364)
 ML 2.6 (THE), 2.5 (SKO).

SRS 0.36 320 ePgc 52 23.20 -0.3
 SOH 0.41 268 ePgc 52 24.20 -0.3
 OUR 0.51 173 ePgc 52 26.20 -0.1
 THE 0.74 254 ePgD 52 30.20 -0.3
 MMB 0.76 350 iPgc 52 30.00 -0.9
 PAIG 0.93 190 ePgc 52 33.40 -0.3
 RZN 1.05 36 iPc 52 36.00 0.0
 VAY 1.11 296 iPn 52 37.40 0.5
 GRG 1.14 276 ePgc 52 38.20 0.8
 KKB 1.20 329 iPgc 52 38.00 -0.4
 LIT 1.30 236 ePbc 52 39.60 -0.6
 KDZ 1.40 54 iPgd 52 41.00 -0.7
 ALN 1.63 87 ePnc 52 45.60 0.7
 PGB 1.72 7 iP 52 47.00 0.7
 SKO 2.17 302 ePn 52 53.50 0.8
 AGG 2.18 214 ePn 52 53.40 0.5
 S.D. = 0.6 on 16 of 16 obs.

MAY 01, 1990 11h 44m 34.44±0.82s
 14.056 N ±5.4km 91.690 W ±4.9km
 DEPTH = 41.0 ±7.1 km
 5.0mb (45 obs.) 5.4Msz (13 obs.)
 GUATEMALA (70)
 Ms 5.4 (BRK), 5.0 (PAS). Felt in
 southwestern Guatemala and ot

Guatemala City.
 CENTROID, MOMENT TENSOR (HRV)
 Dato Used: GDSN
 L.P.B.: 14S, 29C
 Centroid Location:
 Origin Time 11:44:41.5 0.7
 Lot 14.24N 0.05 Lon 92.04W 0.04
 Dep 29.8 BDY Half-duration 3.1
 Moment Tensor: Scale 10**17 Nm
 Mrr= 4.91 0.19 Mtt=-3.94 0.19
 Mff=-0.96 0.33 Mrt= 1.71 0.43
 Mrf=-2.24 0.35 Mtf= 1.82 0.16
 Principal Axes:
 T Vol= 5.79 Plg=72 Azm= 68
 N -0.35 11 302
 P -5.44 14 209
 Best Double Couple: Mo=5.6*10**17
 NP1: Strike=284 Dip=32 Slip= 69
 NP2: 128 60 103

TPX 1.01 327 iP 44 52.00 -0.3
 (S) 45 06.46
 SCX 2.82 341 eP 45 22.00 4.0X
 iS 45 53.00
 PSM 4.17 310 eP 45 35.50 -1.8
 iS 46 21.00
 EVV 5.61 322 eP 45 56.50 -1.1
 iS 46 59.50
 OXX 5.71 302 iP 45 59.00 -0.2
 iS 46 59.50
 LVVM 7.26 322 eP 46 16.00 -4.7X
 iS 47 37.50
 IIT 8.04 309 iP 46 33.50 1.6
 iS 47 55.00
 PPM 8.31 308 iP 46 36.50 0.6
 (S) 48 08.50
 ACX 8.36 291 iP 46 33.50 -2.6
 (S) 48 11.00
 III 8.62 301 iP 46 38.50 -1.3
 iS 48 10.50
 UNM 8.89 307 (P) 46 46.50 2.8X
 CRX 9.32 306 (P) 46 48.00 -1.6
 iS 48 28.00
 IJJ 9.55 307 eP 46 54.50 1.6
 AGX 12.74 309 (P) 47 41.00 5.3X
 UPA 12.93 112 iPd 47 41.00 2.7
 1.0s 40.00nm 5.4mb
 Z 20s 8.87um
 MZX 16.65 305 (P) 48 25.00 -1.5
 PSO 19.11 131 eP 49 00.00 2.7
 BMG 19.56 109 eP 49 04.00 1.9
 BOG 19.74 117 iPc 49 08.00 3.7X
 iS 52 54.00
 UYO 20.18 353 iPc 49 08.00 -0.3
 OLY 21.36 0 P 49 21.80 1.4
 MEO 21.56 344 iPc 49 21.50 -0.9
 PRM 21.66 21 P 49 24.80 1.4
 TUL 22.07 351 eP+ 49 27.90 0.4
 0.6s 36.30nm 5.0mb
 Z 19s 3.86um 4.8Msz
 e 49 37.80
 eS 53 33.00
 LR 58 00.00
 RSCP 22.15 13 P 49 29.60 1.3
 GBTN 22.54 16 P 49 34.10 1.9
 ALQ 24.70 330 iPc 49 54.50 1.1
 0.8s 106.34nm 5.4mb
 Z 18s 3.73um 4.9Msz
 ANMO 24.70 330 P 49 54.60 1.2
 0.8s 76.49nm 5.3mb
 NAV 25.12 21 P 49 57.60 0.4
 BLA 25.16 22 P 49 59.30 1.8
 GLD 28.22 338 P 50 28.00 2.2
 0.9s 31.58nm 5.0mb
 GOL 28.24 337 P 50 27.00 1.0
 0.9s 45.45nm 5.1mb
 GLA 28.30 316 eP 50 27.00 0.6
 BAR 29.36 313 eP 50 37.00 1.0
 TPC 29.74 316 eP 50 40.00 0.6
 NNA 29.77 150 eP 50 46.00 6.3X
 Z 20s 1.42um 4.6Msz
 eS 55 36.00
 PLM 29.87 314 P 50 41.40 0.7
 GSC 30.95 318 eP 50 51.00 0.9
 e 53 46.00
 TBR 30.98 26 P 50 51.60 1.5
 PAS 31.21 314 eP 50 54.00 1.7

ePP 52 06.00
 ePcP 52 48.00
 eS 56 08.00
 eLg 58 00.00
 eLR 59 24.00
 DAU 31.35 331 P 50 54.50 0.8
 CLC 31.78 318 eP 50 58.00 0.7
 ISA 32.27 317 eP 51 02.00 0.4
 BW06 32.50 335 P 51 03.00 -0.7
 TNP 32.94 321 P 51 08.50 1.0
 RSNY 33.72 22 P 51 13.00 -1.0
 1.0s 50.61nm 5.4mb
 FRI 33.85 318 eP 51 14.50 -0.7
 PRI 34.01 315 e(P) 51 17.10 0.3
 KVN 34.08 322 P 51 17.60 0.1
 LLA 34.46 316 e(P) 51 20.20 -0.3
 PRS 34.60 315 eP 51 21.40 -0.3
 CMB 34.89 318 eP 51 24.50 0.3
 BKS 36.01 317 eP 51 32.00 -1.6
 Z 20s 5.00um 5.3Msz
 N 20s 3.50um
 E 20s 5.00um
 i 54 22.00
 iS 57 17.00
 eLO 59 33.00
 eLR 01 00.00
 ORV 36.48 320 e(P) 51 38.60 1.0
 RSON 36.74 358 P 51 38.80 -0.8
 0.8s 34.05nm 5.3mb
 MIN 37.01 321 eP 51 42.40 0.2
 WDC 37.73 320 eP 51 46.50 -1.5
 ZOBO 38.08 141 P 51 51.00 -0.9
 S 57 48.00
 LR 02 06.00
 CBM 38.25 26 P 51 52.00 -0.3
 LPB 38.30 142 P 51 54.00 0.4
 Z 16s 5.05um 5.4Msz
 LR 02 56.00
 FHC 38.75 320 eP 51 57.70 1.0
 SES 39.52 341 eP 52 04.00 1.1
 NEW 40.08 334 P 52 07.40 -0.2
 0.8s 29.17nm 5.1mb
 CCH 40.14 140 P 52 08.90 0.1
 DPW 40.26 332 P 52 10.20 1.1
 LON 41.20 328 P 52 17.60 0.8
 FFC 41.37 351 iPd 52 18.60 0.6
 0.6s 8.00nm 4.6mb
 PNT 41.96 333 ePc 52 24.00 1.0
 GMW 42.23 329 P 52 24.80 -0.4
 SIV 42.51 134 P 52 27.00 -0.9
 EDM 42.68 341 eP 52 28.00 -0.9
 PGC 43.30 329 eP 52 35.00 1.2
 SCH 45.07 20 eP 52 47.00 -1.1
 0.9s 83.00nm 5.6mb
 YKA 51.04 347 eP 53 33.30 -1.1
 0.6s 25.50nm 5.4mb
 PEL 51.04 157 eP 53 34.00 -0.8
 SAN 51.33 157 eP 53 36.00 -1.0
 LNV 51.50 158 eP 53 37.00 -1.2
 FRB 52.19 13 eP 53 41.00 -2.1
 PDCR 58.40 114 eP 54 26.20 -2.5
 e 54 29.50
 e 54 33.40
 e 54 40.30
 INK 60.47 343 eP 54 41.00 -1.1
 0.8s 48.00nm 5.7mb
 pP 55 27.50 202kmx
 TOA 61.44 334 ePc 54 49.00 0.1
 PMR 62.50 333 eP 54 55.50 -0.4
 1.2s 70.30nm 5.7mb
 Z 20s 2.00um 5.3Msz
 KDC 62.77 328 eP 54 58.80 1.1
 FBA 63.31 337 ePc 55 00.30 -1.0
 MBC 63.89 353 eP 55 04.00 -0.9
 0.6s 16.00nm 5.3mb
 SVW 65.29 331 ePc 55 13.10 -1.1
 TTA 65.98 333 ePc 55 17.50 -1.2
 IMA 66.03 337 eP 55 18.00 -1.0
 0.9s 22.90nm 5.2mb
 SDN 66.52 324 eP 55 21.90 -0.2
 BRW 68.87 342 eP 55 36.40 -0.2
 ADK 76.00 320 eP 56 19.90 0.8
 EKA 77.74 36 Pd 56 27.30 -1.4
 0.7s 25.70nm 5.4mb
 TOL 79.35 51 eP 56 40.00 2.2
 ePS 06 29.00
 eSS 11 56.00

			pP	22	50.00	217kmX		N	14s	2.30um		2.2s	2100.00nm		6.5mb
			sP	23	15.50			E	14s	4.00um			sP	24	23.00
			iS	29	52.00					PcP	23	08.00	eS	32	04.00
			sS	31	19.00					pP	23	22.00	sS	33	31.00
FOO	59.08	10	eP	22	00.41	-0.5				S	30	50.00	P'P'	51	07.00
SUE	59.58	10	iPd	22	04.34	0.0	EBL	63.83	16	eP	22	32.00	iPc	23	10.00
HYA	59.60	9	iPd	22	04.59	0.1		1.0s	609.00nm				iPd	23	11.06
EVV	59.72	105	(P)	22	05.99	0.2	TPX	64.28	104	(P)	22	36.00	e	52	03.70
SSE	59.91	281	Pd	22	06.00	-0.9	LZH	64.35	298	eP	22	35.67	e	54	28.10
	4.0s	2400.00nm			6.3mb X			4.0s	3970.00nm				FRU	70.10	322 iPd
Z	20s	4.10um			5.6Msz			Z	36s	16.60um			iS	32	10.00
E	15s	3.90um						N	12s	3.00um			P-	23	12.70
			pP	22	52.00	200kmX		E	15s	9.80um			P'P'	51	06.40
			iS	30	00.00					id	22	38.82	iP	23	13.20
			sS	31	25.00					pP	23	30.00			6.4mb
			ScS	31	36.00					PP	24	58.00	i	23	34.00
			SS	34	04.00					S	30	55.00	i	24	06.30
NB2	60.10	7	P	22	06.70	-1.3				sS	32	25.00	i	24	32.00
ASK	60.19	10	iP	22	08.79	0.3	ANP	64.53	277	eP	22	40.00	i	25	00.00
OXX	60.20	107	(P)	22	11.40	2.1				eS	31	00.00	i	25	58.70
BER	60.30	10	eP	22	08.53	-0.7	WMQ	64.68	314	iPd	22	39.75	i	26	34.40
NJ2	60.33	283	iPd	22	08.80	-1.0				id	22	42.06	e	32	12.00
	4.0s	1300.00nm			6.0mb X		TATO	64.71	277	isPc	23	51.92	e	33	08.00
Z	21s	4.90um			5.6Msz					ePc	22	39.19	e	33	36.00
N	15s	6.90um								ipPc	23	26.86	e	41	48.00
E	15s	5.90um					COP	65.51	7	esPd	23	51.53	eP	23	14.60
			PP	24	28.30					iPd	22	43.90			0.3
			eScP	26	33.00					0.9s	675.63nm				6.4mb X
			iS	30	04.00							22	44.00		0kmX
			ScS	31	37.00							i	22	48.00	
ODD1	60.88	9	iP	22	12.71	-0.6						i	23	36.20	
NUR	60.98	359	iPd	22	13.00	-0.9						i	23	56.00	
			i	23	06.00	232kmX	OBN	65.90	352	iPd	22	44.90	iPd-	23	14.00
			e	25	30.00		Z	18s	6.00um			iS	31	12.00	-0.1
			e	26	40.00										6.6mb
			e	30	16.00		BSD	66.21	5	iPd	22	47.30			5.6MszX
			e	31	40.00										
HFS	61.13	5	eP	22	12.90	-2.0	OZH	66.23	279	P	22	47.30			

[illegible]

IVA	78.62	2	eP	24 01.00	0.3			eS	33 57.80		TBI	82.11	173	eP	24 21.00	2.0	
MAO	78.62	9	Pd	24 01.00	0.4	SRS	80.41	360	ePc	24 10.50	0.4		1.0s	55.00nm		5.2mb	
MNS	78.77	8	P	24 00.70	-0.8	FDF	80.45	77	eP	24 10.07	-0.7	EJIF	82.11	23	iPc	24 21.00	1.9
AQU	78.85	7	P	24 02.50	0.6	BSS	80.49	6	P	24 10.60	0.0	GUAN	82.19	84	eP	24 20.00	0.1
SEG	78.86	77	eP	24 01.90	-0.4	MAIO	80.49	331	iPc	24 12.20	1.4	NEO	82.21	360	eP	24 18.30	-1.3
PVY	78.89	2	eP	24 02.50	0.3		1.3s	245.10nm			5.8mb	ENIJ	82.23	20	eP	24 20.00	0.3
EROO	78.91	17	eP	24 02.20	0.0			eS	34 00.00			ALT	82.29	355	eP	24 21.10	1.0
EBR	78.93	17	eP	24 03.00	0.7	SDV	80.51	89	eP	24 10.30	-1.0	BOG	82.33	94	iPd	24 21.00	0.0
			e	25 20.00	334kmX	BRT	80.52	5	Pd	24 10.90	0.2			iS	34 14.00		
			e	27 04.00		HRT	80.55	355	eP	24 12.00	1.0	OJEN	82.44	23	iP	24 22.50	1.6
VTS	78.93	360	iP	24 03.00	0.5	CRM	80.56	77	eP	24 10.80	-0.5	AGG	82.50	1	ePc	24 20.50	-0.6
PGB	78.97	359	iP	24 02.00	-0.6	EVIA	80.56	20	iPd	24 12.50	1.4	CUM	82.52	82	iPc	24 21.50	0.0
HCY	79.00	3	eP	24 02.50	-0.2	GRG	80.56	1	ePc	24 11.70	0.7			i	34 19.00		
JMB	79.02	357	iP	24 03.00	0.3	GBZT	80.60	355	eP	24 12.70	1.6	GRI	82.54	5	P	24 21.02	-0.3
TTG	79.04	3	eP	24 02.30	-0.5	ALN	80.60	358	ePc	24 11.10	0.0		0.7s	357.30nm		6.2mb	
			eS	33 42.00		BIM	80.68	78	eP	24 11.70	-0.2	TEH	82.88	337	eP	24 25.00	1.8
TOL	79.07	21	iPd	24 04.45	1.3	SOH	80.70	360	ePc	24 12.10	0.4	KHL	83.05	355	iP	24 24.50	0.5
			iD	24 06.27		FNA	80.73	1	ePc	24 11.60	-0.3	IZM	83.06	357	iP	24 23.70	-0.3
			iPP	25 14.00	297kmX	MVM	80.74	77	eP	24 09.87	-2.4	ERC	83.08	8	P	24 24.30	0.2
			iSP	25 57.00		SGO	80.75	6	P	24 12.50	0.6	LVI	83.11	9	P	24 25.20	1.0
			ePP	27 02.72		EVAL	80.76	24	eP	24 13.20	1.2	ATN	83.15	6	P	24 22.60	-1.8
			e	28 20.00		BMG	80.77	92	iPc	24 11.50	-1.1	GMB	83.16	6	P	24 23.76	-0.9
			iS	33 45.00		BERA	80.78	2	eP	24 12.40	0.4		0.4s	56.50nm		5.7mb	
			ePS	34 54.00		EBAN	80.78	21	eP	24 13.80	1.6	GIB	83.23	7	P	24 24.90	0.0
PAG	79.09	77	eP	24 03.04	-0.5	YLV	80.82	355	iP	24 13.00	0.6	KKM	83.28	271	ePd	24 26.00	0.5
BCI	79.13	2	iP	24 03.40	0.1	EHOR	80.84	22	eP	24 13.60	1.2		1.1s	567.90nm		6.2mb	
SFG	79.15	77	eP	24 04.30	0.5	KBN	80.88	2	iPc	24 12.70	0.2			e	25 18.00	214kmX	
LIS	79.15	25	iPd	24 04.70	1.2	THE	80.89	0	ePc	24 14.00	1.4	NST	83.31	289	iPd	24 27.50	2.1
BDV	79.18	3	eP	24 03.2													

CHIE	87.25	36	iPc	24 46.40	1.6	1.0s	17.00nm	5.4mb	SYP	0.33	104	iPc	24 31.80	-0.4			
			i	25 43.30	234kmX			215kmX	BCH	0.62	22	iPd	24 36.90	-0.9			
GGC	87.57	34	iPc	24 47.30	0.9				ABL	0.98	75	eP	24 43.50	-0.6			
			i	25 51.30	266kmX	MBO	100.05	39	iPd	125 46.50	2.9X	PHAM	1.22	359	eP	24 46.40	-1.8
CFTV	87.73	32	iPc	24 47.70	0.6	ARE	101.55	103	ePd	125 52.00	1.3	PKEM	1.46	8	eP	24 50.00	-1.9
			i	25 54.50	278kmX	ZOBO	103.11	100	ePd	125 55.87	-2.1	SAO	2.32	338	eP	25 01.20	-3.1
SHMJ	88.17	349	Pd	24 52.20	3.0X				ePP	30 08.85					eS	25 28.90	
JARJ	88.64	349	Pd	24 51.60	0.1	LPB	103.34	100	Pd	diff 26 00.00	1.2X	ARN	2.89	341	eP	25 09.30	-3.1
88.89	349	Pd	24 52.70	0.0	Z	19s	2.78um		S	30 20.00	5.8msz	PLM	3.17	112	eP	25 13.50	-3.0
KFNJ	89.04	349	Pd	24 53.30	0.1				LR	39 54.00		CMB	3.42	360	eP	25 18.50	-1.4
MKRJ	89.35	349	Pd	24 54.70	-0.1	BWA	103.44	224	ePd	diff 26 01.10	2.7X	TNP	4.30	35	e(P)	25 35.00	2.5
LISJ	89.67	349	Pd	24 56.30	0.2				e	26 52.90		KVN	4.79	22	eP	25 40.00	0.5
SNG	90.34	284	iPc	25 01.20	1.8				e	30 09.20							
	1.1s	420.25nm		6.3mb		CAN	104.04	223	ePd	diff 26 07.30	6.3X						
			e	25 54.80	218kmX				e	26 55.80							
DHLJ	90.48	354	Pc	24 58.40	-1.5				e	30 05.20							
KOT	91.27	352	eP	25 02.00	-1.6				e	36 16.80							
HLW	91.38	353	iP-	25 05.70	1.6	CCH	105.06	99	Pd	diff 26 06.90	0.7						
			e	26 25.00	335kmX	SIV	106.52	94	Pd	diff 26 11.60	-0.8						
			ePP	28 09.80		TIC	110.93	30	PKP	30 29.56	-1.1	PAIG	0.20	267	ePg	53 16.10	0.1
			i	28 37.70		KIC	111.27	30	PKP	30 30.34	-1.0						
			e	29 20.00		LIC	111.33	30	PKP	30 30.38	-1.0	OUR	0.40	5	ePg	53 20.40	0.7
			ePPP	30 00.00		KUK	112.50	25	ePKP	30 33.70	0.1	NEO	0.84	221	ePb	53 27.50	-0.3
			e	33 14.00		KOGH	112.62	25	ePKP	30 32.70	-1.2	SOH	0.99	333	ePg	53 30.50	0.1
			eS	35 14.70		LEGH	113.06	25	ePKP	30 34.00	-0.7						
			ePS	35 45.00		TEGH	113.11	25	ePKP	30 34.00	-0.8	THE	1.02	313	ePg	53 31.40	0.6
CTA	91.41	232	iPd	25 03.80	-0.3	BAL	113.88	250	ePKP	30 34.50	-1.4						
	0.9s	163.87nm		6.0mb		PDCR	114.86	72	ePd	diff 26 50.70	1.3	LIT	1.12	279	ePg	53 32.80	0.1
			i	25 58.80	224kmX				e	30 37.30							
			iS	29 26.00		MUN	115.25	250	ePKP	30 37.00	-1.5	SRS	1.21	347	ePb	53 34.00	-0.1
			i	35 45.00		RTCB											

SIV 37.67 137 P 49 53.80 -0.2
 FFC 44.42 348 eP 50 49.00 -0.1
 0.8s 10.00nm 4.7mb
 SCH 45.76 16 eP 51 00.00 0.3
 BAO 47.24 124 eP 51 11.50 -0.5
 YKA 54.35 345 eP 52 03.00 -2.3
 0.8s 1.30nm 4.0mb
 INK 63.96 343 eP 53 11.00 -0.6
 MBC 66.72 352 eP 53 28.00 -1.3
 WB5 139.52 253 ePKP 02 06.70 0.1
 WRA 139.54 253 PKPc 02 08.10 1.5
 0.6s 6.30nm
 HYB 147.63 26 ePKP 02 20.50 0.0
 CHG 149.02 349 ePKP 02 27.00 4.3X
 GBA 150.39 32 PKPc 02 25.80 1.0
 0.8s 3.30nm
 S.D. = 1.0 on 18 of 19 obs.

? MAY 01, 1990 21h 18m 06.79±1.09s
 29.694 S ±13.4km 71.054 W ±21.4km
 DEPTH = 208.8 ±34.9 km
 NEAR COAST OF CENTRAL CHILE (135)

RTBS 2.40 145 ePc 18 50.50 0.1
 RTCB 2.64 133 eP 18 52.90 -0.4
 ZON 2.76 133 eP 18 57.00 2.4X
 RTLL 2.76 127 ePc 18 53.50 -1.1
 RTCV 3.06 136 ePc 18 58.50 0.4
 S 19 39.00
 CFA 3.08 129 ePc 18 58.10 -0.3
 IHA 3.36 188 eP 19 04.50 3.0X
 S 19 57.90
 PEL 3.45 175 iPd 19 02.60 -0.2
 i(S) 20 50.80
 FCH 3.68 170 eP 19 07.70 1.9
 i 19 53.00
 TACH 3.95 179 eP 19 09.00 0.2
 iS 19 58.00
 LNV 4.26 184 eP 19 11.50 -1.1
 i 20 10.00
 ANT 5.99 6 e(P) 19 36.00 1.3
 ZOBD 13.63 12 P 21 11.00 -2.5
 SIV 16.44 36 P 21 49.00 1.6
 S.D. = 1.5 on 12 of 14 obs.

? MAY 01, 1990 21h 43m 55.64±2.73s
 32.641 S ±20.1km 177.055 E ±35.0km
 DEPTH = 33.0km (normol)
 4.0mb (1 obs.)
 NORTH OF NEW ZEALAND (176)

HBZ 5.05 169 eP 45 11.20 0.2
 NOZ 6.02 173 eP 45 23.70 -1.0
 eS 46 32.00
 PGZ 7.99 184 eP 45 54.00 1.7
 MNG 8.06 189 eP 45 54.00 0.7
 MTW 8.59 188 eP 46 00.20 -0.5
 CAW 8.60 190 eP 46 00.30 -0.5
 TCW 8.84 194 eP 46 05.00 0.9
 KHZ 10.15 195 eP 46 20.40 -1.7
 eS 48 13.10
 WRA 40.08 278 P 51 29.90 0.1
 0.4s 1.30nm 4.0mb
 WB5 40.08 278 eP 51 29.70 -0.1
 S.D. = 1.1 on 10 of 10 obs.

& MAY 01, 1990 22h 30m 11.78s
 60.646 N 151.034 W
 DEPTH = 46.4km
 KENAI PENINSULA, ALASKA (14)
 <AGS-P>.

NKA 0.14 314 iP 30 21.08 3.3
 SLKM 0.42 109 iP 30 21.70 -0.3
 RDT 0.68 264 iP 30 24.58 -0.7
 eS 30 35.32
 SPU 0.73 318 iP 30 25.36 -0.6
 iS 30 36.39
 CGLM 0.82 325 iP 30 26.61 -0.6
 iS 30 38.57
 CRP 0.83 319 iP 30 27.00 -0.4
 SUA 0.83 10 iP 30 26.68 -0.7
 iS 30 39.48
 RED 0.89 256 iP 30 27.29 -0.9
 iS 30 40.14
 NCG 0.94 325 iP 30 28.36 -0.5
 iS 30 41.94

PMS 0.94 49 iP 30 28.06 -0.7
 iS 30 40.73
 SEW 0.96 124 eP 30 27.79 -1.2
 CNPM 1.13 185 iP 30 30.62 -0.8
 iS 30 45.64
 PWA 1.15 29 eP 30 31.52 -0.2
 eS 30 47.62
 PLRM 1.32 43 iP 30 33.20 -0.9
 eS 30 50.79
 SKT 1.36 350 iP 30 34.17 -0.5
 eS 30 52.42
 KNK 1.47 57 iP 30 35.26 -1.0
 GHO 1.52 41 iP 30 36.10 -1.0
 SML 1.75 47 eP 30 39.02 -1.2
 CUT 1.80 11 eP 30 40.77 -0.1
 GLI 1.95 81 iP 30 40.15 -2.9
 CDD 2.17 219 eP 30 45.71 -0.4
 VZW 2.23 77 iP 30 44.54 -2.5
 SVW 2.29 284 iP 30 45.89 -2.0
 VLZ 2.35 76 eP 30 46.37 -2.3
 NCA 2.44 55 eP 30 48.85 -1.2
 KLU 2.63 69 eP 30 50.39 -2.4
 TOA 2.76 56 eP 30 53.26 -1.4
 KTH 2.92 1 eP 30 57.48 0.6
 TTA 3.29 316 iP 31 00.74 -1.4
 GLB 3.60 74 eP 31 03.45 -3.1
 30 obs. associated

* MAY 01, 1990 22h 54m 17.36±1.81s
 44.234 N ±13.1km 8.431 E ±13.6km
 DEPTH = 10.0km (geophysicist)
 NORTHERN ITALY (545)
 ML 2.3 (GEN).

FIN 0.16 261 P 54 21.08 0.0
 S 54 25.59
 PCP 0.32 15 P 54 23.95 0.0
 S 54 30.00
 ROB 0.41 279 P 54 25.59 -0.1
 S 54 33.18
 ENR 0.73 270 P 54 31.13 -0.6
 S 54 42.21
 STV 0.80 271 P 54 33.69 0.8
 S 54 45.28
 SBF 0.81 243 Pg 54 32.70 -0.4
 Sg 54 53.73
 FRF 1.45 243 Pg 54 44.00 0.3
 Sg 55 04.00
 S.D. = 0.6 on 7 of 7 obs.

MAY 02, 1990 01h 01m 24.93±0.16s
 49.268 N ±3.8km 155.624 E ±3.0km
 DEPTH = 94.5km (11 depth phases)
 5.2mb (62 obs.)
 KURIL ISLANDS (221)
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 16S, 29C
 Centroid Location:
 Origin Time 01:01:20.6 0.4
 Lat 49.21N 0.03 Lon 155.95E 0.08
 Dep 39.8 3.1 Half-duration 2.0
 Moment Tensor: Scale 10¹⁷ Nm
 Mrr = 1.31 0.04 Mtt = -0.44 0.05
 Mff = -0.87 0.07 Mrt = 0.04 0.10
 Mrf = 0.87 0.11 Mtf = -0.68 0.06
 Principal Axes:
 T Val = 1.63 Plg = 69 Azm = 254
 N -0.07 15 27
 P -1.56 15 121
 Best Double Couple: Mo = 1.6 × 10¹⁷ Nm
 NP1: Strike = 232 Dip = 33 Slip = 118
 NP2: 19 62 73

KUSJ 9.76 235 P 03 37.40 -6.7X
 S 05 20.60
 ASAJ 10.29 245 P 03 50.10 -1.2X
 HOOJ 11.01 236 P 03 55.80 -5.1X
 S 05 54.40
 SMY 12.14 66 P 04 09.00 -6.7X
 MRRJ 12.23 241 eP 04 11.70 -5.2X
 S 06 26.10
 NIJJ 17.02 231 P 05 12.40 -5.8X
 KAKJ 17.25 227 P 05 17.50 -3.6X
 ADK 17.74 71 P 05 23.00 -3.9X
 CHJJ 17.95 229 P 05 26.10 -3.5X
 MAT 17.96 231 eP 05 26.00 -3.7X

1.1s 96.20nm 4.9mb
 Z 20s 3.55um
 eS 08 44.00
 MTMJ 18.13 232 P 05 29.10 -2.8X
 MDJ 18.33 265 Pc 05 32.70 -1.6X
 1.0s 100.00nm 5.0mb
 Z 14s 4.50um
 E 12s 0.90um
 eS 05 46.00
 iS 08 54.00
 IIDJ 18.94 230 P 05 39.00 -2.0X
 TSRJ 19.89 234 P 05 48.60 -2.3X
 WKYJ 21.10 232 P 06 02.30 -1.1X
 CN2 21.38 267 P 06 02.00 -4.0X
 Z 22s 3.50um 4.7msz
 N 16s 1.60um
 E 16s 1.50um
 YONJ 21.51 237 eP 06 06.70 -0.7
 TKSJ 22.10 234 P 06 13.40 0.2
 SNY 23.51 264 eP 06 23.00 -3.8X
 Z 20s 2.10um 4.6msz
 N 18s 1.90um
 E 18s 1.60um
 SHNJ 23.60 239 eP 06 28.40 0.6
 KUMJ 24.94 237 eP 06 41.40 0.8
 KAGJ 25.94 235 eP 06 50.50 0.6
 BJI 29.25 267 eP 07 18.50 -1.2
 1.2s 23.00nm 4.7mb
 Z 20s 2.10um 4.8msz
 N 15s 1.02um
 TTA 29.43 44 iPc 07 20.30 -0.9
 SVW 29.51 48 ePc 07 21.80 -0.2
 IMA 30.78 38 iPc 07 32.00 -1.2
 BRW 30.95 28 iPc 07 33.30 -1.1
 SSE 31.60 240 P 07 40.00 -0.5
 Z 20s 1.40um 4.6msz
 N 14s 0.80um
 eS 12 46.00
 eSS 14 36.00
 HHC 31.85 272 P 07 41.00 -1.8
 NJ2 32.37 252 Pc 07 46.60 -0.6
 1.2s 100.00nm 5.5mb
 Z 22s 0.80um 4.4msz
 32.63 47 ePc 07 49.50 0.3
 Z 20s 1.10um 4.6msz
 TIY 32.96 266 Pd 07 51.20 -1.2
 1.2s 100.00nm 5.5mb
 Z 30s 1.60um 4.5msz
 E 21s 1.70um
 BTO 32.99 272 eP 07 51.00 -1.7
 N 15s 0.80um
 E 15s 1.60um
 FBA 33.15 41 iPc 07 53.10 -0.5
 TOA 33.99 46 iPc 08 00.70 -0.4
 WHN 36.22 254 Pd 08 19.50 -0.6
 1.0s 100.00nm 5.7mb
 GUMO 36.66 198 eP 08 24.00 0.0
 XAN 37.44 264 P 08 28.50 -1.9
 N 19s 1.60um
 E 15s 0.50um
 QZH 37.66 243 eP 08 32.30 0.0
 INK 38.62 34 iPc 08 40.00 0.1
 0.8s 49.00nm 5.4mb
 LZH 39.52 270 P 08 47.50 -0.5
 1.4s 98.00nm 5.5mb
 Z 24s 2.40um 5.0msz
 N 15s 1.30um
 E 13s 0.90um
 pP 08 56.00 29kmX
 eS 14 41.00
 GTA 40.28 278 eP 08 53.40 -0.7
 Z 16s 3.50um 5.3msz
 E 16s 2.20um
 MBC 41.65 21 eP 09 04.50 -0.2
 0.5s 12.00nm 5.0mb
 GZH 42.19 247 eP 09 08.60 -1.1
 CD2 42.79 264 P 09 14.40 -0.2
 GYA 43.91 257 iPc 09 24.00 0.1
 S 15 50.00
 WMO 45.61 290 P 09 37.90 0.7
 Z 14s 1.53um 5.1msz
 E 12s 0.86um
 KMI 47.36 259 Pd 09 51.00 -0.4
 Z 20s 0.90um 4.7msz
 sP 10 10.00
 QIZ 47.39 247 P 09 52.70 1.4

02d 01h

N	15s	1.10um				0.7s	15.50nm	5.0mb		0.8s	13.45nm	4.8mb
YKA	47.90	39 eP	09 54.00	-0.8		Z	22s	1.00um		ZLA	79.54 338 ePd	13 22.20 -0.2
	0.7s	7.20nm		4.6mb				e	13 30.90 154kmX	COO	79.55 183 eP	13 24.00 1.5
LSA	51.83	273 P	10 25.40	-0.4	KSP	74.38	335 eP	12 53.00 -0.6	BSF	79.59 339 P	13 22.24 -0.5	
PNT	52.38	55 eP	10 29.00	-0.1			e	13 18.30 97km	RSCP	79.59 47 P	13 22.00 -0.9	
	0.9s	27.00nm		5.3mb	KOD	74.59	268 eP	12 56.00 0.3	ALT	79.74 334 eP	13 22.40 -1.0	
EDM	53.37	49 iPc	10 35.70	-0.6	CLL	74.84	337 iPd	12 56.30 0.1	BBS	79.76 320 eP	13 23.00 -0.7	
DAG	54.19	358 eP	10 40.00	-2.0			1.3s	22.00nm	OSS	79.77 339 P	13 23.28 -0.3	
NEW	54.33	55 P	10 42.60	-0.9			pP	13 20.00 90km	NANU	79.84 337 ePd	13 24.60 0.4	
	0.9s	14.25nm		5.0mb			eSg	30 22.00	LLS	79.92 217 iPd	13 26.00 1.4	
CHG	54.33	257 iPc	10 43.90	0.1	WIT	74.94	341 eP	13 00.00 3.2X	CTI	79.96 337 ePd	13 25.00 0.2	
	1.0s	192.50nm		6.1mb			e	13 23.00 87km	LOMF	80.03 335 P	13 24.50 -0.6	
CHTO	54.33	257 iPc	10 43.70	-0.1	BRG	74.99	336 eP	12 57.80 0.7	FLN	80.04 339 P	13 24.79 -0.3	
FHC	54.91	66 eP	10 48.70	0.9			e	13 17.60 74kmX		80.20 344 eP	13 25.70 -0.1	
KEV	55.53	341 eP	10 53.00	1.2	ASPA	75.15	201 iPd	12 59.10 0.8	LDF	80.8s 37.60nm	5.3mb	
WDC	55.91	66 eP	10 55.70	0.7			1.0s	21.00nm		80.30 344 eP	13 26.20 -0.1	
NST	55.92	253 eP	10 58.50	3.3X	FVM	75.35	48 P	12 59.00 -0.4	SRS	80.8s 32.25nm	5.2mb	
GUN	56.46	275 P	10 58.20	-1.3	PRU	75.63	335 eP	13 00.00 -0.8	SKO	80.58 325 eP	13 28.00 0.0	
PKI	57.00	275 P	11 02.00	-1.3			Z	20s 2.20um		80.62 327 eP	13 28.50 0.4	
	0.6s	26.00nm		5.5mb			N	20s 1.60um				
DMN	57.17	275 P	11 03.60	-0.8			E	19s 0.70um				
	1.0s	85.00nm		5.8mb				e	13 26.00 100km			
ORV	57.18	66 eP	11 04.00	0.0	WTS	75.68	341 eP	13 01.50 0.5	GRR	80.63 344 eP	13 28.30 0.2	
GKN	57.21	276 P	11 03.50	-1.0			1.0s	13.00nm		0.9s 72.05nm	5.5mb	
SOD	57.51	339 eP	11 04.00	-1.9				e	13 25.50 92km	TMA	80.70 337 ePd	13 28.80 0.1
FFC	57.73	42 eP	11 07.00	-0.7	MOX	75.80	337 eP	13 02.50 0.7	SAL	80.73 336 P	13 28.30 -0.3	
	0.9s	23.00nm		5.2mb			Z	24s 1.30um	LOR	80.78 341 eP	13 28.90 0.0	
SXM	58.81	54 eP	11 15.70	0.1	MLR	75.95	326 ePc	13 16.50 13.7X		1.0s 32.00nm	5.1mb	
CMB	58.82	67 eP	11 16.20	0.7	CMP	76.47	327 ePc	13 00.00 -5.6X	VAY	80.78 326 eP	13 29.00 0.0	
PRS	59.33	69 eP	11 19.30	0.3	SRO	76.49	332 iP	13 06.30 0.7	MDI	80.79 337 P	13 36.50 7.6X	
KVN	59.52	64 P	11 20.00	-0.6			i	13 32.20 100km	CVL	80.83 40 P	13 30.00 0.7	
GDH	59.86	12 eP	11 20.00	-2.2	ZST	76.52	333 eP	13 06.20 0.5	GRC	80.92 341 P	13 29.57 0.0	
FRI	59.91	67 e(P)	11 22.90	0.0			e	13 30.50 93km	SOH	80.93 325 eP	13 29.60 -0.3	
TNP	60.68	65 P	11 28.40	-0.1	KHC	76.68	335 iP	13 07.50 0.8	VAI	80.95 337 P	13 30.00 0.2	
	0.8s	13.73nm		5.1mb			1.0s	14.00nm	MMK	80.98 338 ePd	13 31.10 0.8	
		pP	11 42.00	49kmX			Z	20s 1.80um	LPF	81.00 344 eP	13 30.60 0.6	
SUF	61.40	336 eP	11 28.00	-4.7X			N	20s 1.20um		1.0s 60.00nm	5.4mb	
BW06	61.92	56 P	11 36.50	-0.3			E	18s 0.70um	LBF	81.02 341 eP	13 29.90 -0.3	
CLC	61.96	67 eP	11 37.00	0.1				e	13 32.60 96km		1.0s 16.00nm	4.8mb
		e	11 50.00	46kmX	GRF	76.78	337 iPc	13 07.10 -0.1	SSF	81.05 341 eP	13 30.20 -0.1	
FRB	62.11	21 eP	11 35.00	-2.4			Z	19s 0.80um		0.8s 14.10nm	4.9mb	
	0.6s	32.00nm		5.5mb				e	13 08.60 5kmX	DIX	81.09 338 ePd	13 31.60 0.7
SNG	62.19	247 eP	11 39.20	0.7	WET	76.85	336 eP	13 08.20 0.6	OUR	81.12 325 eP	13 31.20 0.5	
PAS	62.73	69 eP	11 55.00	13.0X	YRH	76.91	348 eP	13 08.00 0.2	EMS	81.21 339 ePd	13 31.90 0.5	
MWC	62.75	68 eP	11 51.00	8.7X	ENN	77.03	341 eP	13 08.50 0.0	THE	81.24 326 eP	13 30.00 -1.4	
GSC	62.78	67 eP	11 43.00	0.6			1.0s	35.00nm	AVF	81.34 341 eP	13 31.90 0.1	
		e	11 56.00	46kmX				e	13 33.50 96km		0.9s 36.05nm	5.2mb
RVR	63.32	68 eP	11 45.00	-0.9	SOP	77.14	333 eP	13 12.60 3.4X	SMF	81.37 341 eP	13 32.10 0.1	
NUR	63.64	335 eP	11 44.00	-3.5X	MEM	77.16	341 P	13 09.80 0.6		1.0s 36.00nm	5.2mb	
RSSD	63.93	52 P	11 49.50	-0.5	ETA	77.25	349 eP	13 11.10 1.4	OHR	81.61 327 eP	13 32.50 -0.9	
RSON	64.03	41 P	11 48.80	-1.5	BZS	77.36	329 eP	13 10.50 0.1		0.7s 460.00nm	6.4mb X	
	0.8s	10.02nm		4.8mb	KMR	77.50	335 iP+	13 11.00 -0.2	BGF	81.67 341 eP	13 33.80 0.2	
TPC	64.05	67 eP	11 51.00	0.3				iP	13 38.30 106kmX		0.8s 17.45nm	5.0mb
PLM	64.07	68 P	11 50.00	-1.0	SNF	77.61	342 iP	13 11.20 -0.4	FNA	81.69 327 eP	13 34.20 0.4	
		pP	12 04.00	50kmX	ECF	77.78	349 eP	13 14.00 1.4	LSO	81.73 338 P	13 34.62 0.4	
BAR	64.65	69 eP	11 55.00	0.5	DOU	77.94	341 P	13 13.60 0.0	RSM	81.75 334 P	13 34.90 1.0	
KGM	64.74	241 eP	11 57.00	1.7	BBTK	77.97	319 eP	13 00.00 -14.0X	ELL	81.78 319 eP	13 34.00 -0.5	
GLA	65.51	67 P	12 00.00	-0.1	BBTK	77.97	319 iPc	13 16.00 2.0	LPL	81.78 338 eP	13 35.40 0.9	
UPP	66.01	338 iP	12 05.30	2.6	BHG	78.15	335 iPd	13 16.30 1.5		0.8s 43.00nm	5.4mb	
GOL	66.32	56 P	12 06.00	0.5	GWf	78.32	339 P	13 15.13 -0.6	LPG	81.79 338 eP	13 35.50 0.9	
	0.9s	22.73nm		5.1mb	KBA	78.61	335 iPd	13 18.50 1.0		1.0s 66.00nm	5.4mb	
NB2	66.37	342 P	12 03.50	-1.7			0.6s	46.70nm	BOB	81.80 336 Pc	13 34.90 0.5	
	0.7s	4.20nm		4.5mb				i	13 21.20 9kmX	LIT	81.88 326 eP	13 34.40 -0.4
HFS	66.67	340 eP	12 05.00	-2.0				i	13 31.20	SFI	81.93 334 P	13 37.00 2.1
	0.5s	5.20nm		4.7mb				i	13 45.70	MME	82.00 335 P	13 36.80 1.2
MAIO	67.12	299 eP	12 12.00	1.7	WLS	78.92	339 P	13 18.68 -0.3	RSP	82.00 338 P	13 34.83 -0.6	
		eS	21 04.00		PTJ	78.92	333 eP	13 18.60 -0.5	PGD	82.01 335 P	13 36.70 1.1	
HYB	68.61	272 iPc	12 19.00	-0.8	CDF	78.93	339 P	13 18.75 -0.4	MAF	82.05 341 eP	13 36.30 0.7	
	1.0s	70.00nm		5.5mb	ZAG	78.99	333 eP	13 18.70 -0.6		0.8s 23.50nm	5.1mb	
ANMO	69.10	61 P	12 23.00	0.2	SQTA	79.06	336 iPd	13 21.60 1.7	TCF	82.06 342 eP	13 35.90 0.3	
ALO	69.10	61 ePc	12 23.00	0.2			1.5s	100.00nm		0.9s 20.45nm	5.0mb	
	0.9s	11.76nm		4.7mb				i	13 45.80 92km	PLDF	82.06 341 P	13 36.21 0.5
SCH	70.35	24 eP	12 29.00	-0.8	RBL	79.13	334 P	13 19.70 -0.5	AGO	82.09 341 P	13 36.56 0.8	
POO	70.87	276 eP	12 33.50	-0.1	ECH	79.15	339 P	13 19.79 -0.4	BDI	82.15 335 P	13 36.40 0.2	
BOM	71.28	277 eP	12 34.00	-1.9	FVI	79.21	335 P	13 20.00 -0.5	CRE	82.17 334 P	13 37.00 0.7	
WB5	71.39	201 eP	12 35.50	-0.9	LJU	79.22	334 eP	13 21.00 0.4	MFF	82.22 343 eP	13 37.00 0.6	
WRA	71.46	201 Pc	12 36.00	-0.8	SLE	79.25	338 ePd	13 20.50 -0.3		1.0s 32.00nm	5.1mb	
	1.0s	15.20nm		4.8mb	FEL	79.26	338 P	13 20.31 -0.7	BNI	82.23 338 P	13 37.40 0.7	
DZM	71.67	169 iPc	12 36.20	-1.9	VOY	79.41	334 eP	13 20.70 -1.1	LSF	82.23 342 eP	13 36.70 0.2	
TEH	72.04	304 eP	13 00.00	19.5X	VITF	79.41	340 P	13 21.43 -0.2	PCP	82.24 337 P	13 36.16 -0.5	
GBA	72.12	270 Pc	12 40.40	-0.6	WARB	79.44	206 eP	13 23.00 1.1	PYM	82.40 341 P	13 37.91 0.4	
	1.2s	73.30nm		5.4mb	VBY	79.49	333 e(P)	13 23.20 1.1	CKI	82.42 337 P	13 37.40 -0.1	
TAB	72.96	309 eP	12 44.00	-1.8	MOF	79.49	339 P	13 21.64 -0.6	SHMJ	82.44 312 Pd	13 39.00 1.2	
KRA	74.00	332 eP	12 51.80	0.4	CEY	79.52	333 eP	13 22.60 0.3	ASS	82.48 334 P	13 38.00 0.1	
TUL	74.23	53 eP	12 53.00	0.0	HAU	79.53	340 eP	13 22.10 -0.2	PII	82.48 335 P	13 38.00 0.2	

DOI	82.61	338	P	13	37.70	-0.9	40.852 N ± 4.8km	24.236 E ± 4.5km	eS	31	34.00									
FIN	82.64	337	P	13	37.18	-1.5	DEPTH = 10.0km	(geophysicist)	CFA	2.03	48	ePc	31	12.80	-0.2					
ROB	82.65	337	P	13	38.11	-0.6	AEGEAN SEA	(365)	(S)				31	39.10						
JSC	82.69	44	P	13	39.00	0.0	ML 2.4 (THE).		RTLL	2.10	39	iPd	31	13.50	-0.5					
BURJ	82.81	312	Pc	13	40.00	0.1			eS				31	40.00						
ENR	82.82	338	P	13	37.80	-1.9	OUR	0.55	201	ePg	16	43.50	-0.5	S.D. = 1.4	on	9 of 11 obs.				
STV	82.83	338	P	13	38.00	-1.7			eSg	16	51.50									
LBL	82.85	341	P	13	40.36	0.7	SRS	0.55	299	ePg	16	43.70	-0.4	* MAY 02, 1990	04h	13m	48.95 ± 0.75s			
BRT	83.05	330	P	13	41.50	0.7			eSg	16	51.20		17.212 N ± 14.4km	94.844 W ± 9.2km						
SALJ	83.06	312	Pd	13	42.00	0.9	SOH	0.67	268	ePg	16	45.50	-0.6	DEPTH = 129.3 ± 12.3 km						
MNS	83.10	333	P	13	40.90	-0.2			eSg	16	54.70		3.4mb (1 obs.)							
RJF	83.14	342	eP	13	41.60	0.4	MMB	0.83	333	iPgc	16	48.00	-0.9	CHIAPAS, MEXICO			(61)			
	0.8s	24.20nm			5.2mb		RZN	0.91	23	iP	16	51.00	0.7							
SBF	83.16	337	eP	13	41.50	0.1	THE	0.99	258	ePg	16	51.30	-0.3	PSM	0.54	201	iP	14	07.00	-1.5
	0.8s	34.85nm			5.3mb				eSg	17	05.90		iS	14	20.00					
DUI	83.22	332	P	13	42.00	0.2	PAIG	1.02	205	ePg	16	52.00	0.0	EVV	1.33	339	eP	14	14.68	-0.7
AZI	83.24	333	P	13	43.00	1.3			eSg	17	05.40		iS	14	35.91					
LCI	83.28	329	P	13	42.00	0.0	KDZ	1.20	48	ePg	16	55.00	-0.1	OXX	1.80	266	iP	14	20.07	-1.1
SDI	83.38	332	P	13	42.50	0.0	PLD	1.30	16	iP	17	00.00	3.1X	iS	14	44.53				
CAF	83.39	341	eP	13	43.50	1.0	VAY	1.34	291	ePn	16	58.40	0.9	SCX	2.17	102	iP	14	26.31	0.9
	1.0s	39.00nm			5.3mb		ALN	1.37	88	ePb	16	57.70	-0.2	iS	14	52.33				
RMP	83.62	333	P	13	44.50	0.8			eSb	17	19.60		LVVM	2.94	329	iP	14	32.50	-2.8X	
FRF	83.64	338	eP	13	44.20	0.4	GRG	1.39	275	ePb	16	58.70	0.4	(S)	15	07.43				
	0.8s	17.45nm			5.1mb				eSb	17	17.80		TPX	3.38	132	eP	14	42.00	0.8	
LFF	83.65	342	eP	13	44.60	0.8	LIT	1.53	241	ePb	17	01.30	1.1	iS	15	22.50				
	0.8s	32.25nm			5.3mb				eSb	17	23.10		IIT	3.75	299	iP	14	47.65	1.1	
RDP	83.66	333	P	13	45.00	1.0	S.D. = 0.7	on	12 of 13 obs.				iS	15	31.50					
LPO	83.80	342	eP	13	45.40	0.8							PPM	4.04	298	iP	14	51.82	1.2	
	0.8s	32.25nm			5.3mb		MAY 02, 1990	03h	28m	46.62 ± 0.45s			iS	15	38.00	</				

02d 04h

0.7s 22.71nm 5.1mb
 KMI 41.56 321 Pd 21 27.50 0.2
 MAT 44.07 10 eP 21 47.00 -0.3
 0.9s 14.29nm 4.7mb
 XAN 45.50 335 Pd 21 59.00 0.4
 TIY 47.47 341 eP 22 13.00 -1.2
 Z 22s 0.90um 4.7MsZ
 N 15s 0.40um
 BJI 48.58 346 eP 22 22.50 -0.1
 1.0s 13.00nm 4.7mb
 GUN 54.98 311 P 23 00.00 -11.1X
 GBA 56.06 292 Pc 23 15.50 -3.1X
 0.4s 2.50nm 4.5mb
 YKA 107.83 26 ePKP 32 04.90 1.3
 0.8s 0.80nm
 NNA 147.29 125 ePKP 33 25.00 6.3X
 0.8s 11.19nm
 LPB 150.50 143 PKPc 33 34.00 9.9X
 ZOBO 150.69 142 PKP 33 29.00 4.4X
 CCH 150.94 147 PKP 33 35.40 10.8X
 SIV 154.60 155 PKP 33 32.00 2.6X
 S.D. = 1.3 on 22 of 33 obs.

MAY 02, 1990 04h 19m 40.79±0.30s
 0.019 N ± 3.9km 124.252 E ± 5.6km
 DEPTH = 103.2 ± 2.5 km
 5.3mb (21 obs.)

MINAHASSA PENINSULA (265)
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 15S, 26C
 Centroid Location:
 Origin Time 04:19:39.4 0.4
 Lot 0.015 0.06 Lon 124.44E 0.06
 Dep 73.3 3.8 Half-duration 1.7
 Moment Tensor: Scale 10**16 Nm
 Mrr= 9.93 0.79 Mtt=-0.57 0.97
 Mff=-9.36 1.45 Mrt=-1.37 0.71
 Mrf= 4.55 0.64 Mtf=-3.37 0.97
 Principal Axes:
 T Vol= 11.32 Plg=73 Azm=233
 N -0.09 14 14
 P -11.23 11 106
 Best Double Couple: Mo=1.1*10**17
 NP1: Strike=213 Dip=36 Slip= 113
 NP2: 5 57 74

MNI 1.53 23 ePd 20 06.00 -2.0
 eS 20 28.50
 DAV 7.14 11 eP 21 24.00 -0.3
 TSM 7.45 304 iPd 21 19.00 -9.6X
 0.2s 292.20nm 6.5mb X
 KKM 10.01 307 ePc 22 03.50 0.2
 0.7s 122.50nm 5.9mb
 eS 22 25.50
 PPR 11.14 331 ePc 22 20.00 1.7
 KHK 11.98 226 ePc 22 38.50 9.1X
 e 25 55.00
 PGP 13.79 346 ePc 22 55.00 1.9
 1.0s 83.00nm 5.0mb
 TRT 13.89 236 ePc 22 35.20 -19.2X
 CVP 17.74 352 ePc 23 44.00 1.3
 SZP 17.82 348 eP 23 46.00 2.3
 0.8s 83.00nm 5.0mb
 PIP 18.54 349 ePd 23 41.00 -11.3X
 1.0s 180.00nm
 KGM 21.02 276 ePc 24 19.60 1.6
 MBL 21.49 191 eP 24 21.00 -1.6
 WB5 22.12 154 eP 24 28.00 -0.1
 eS 28 23.80
 DIZ 23.60 324 P 24 44.70 1.4
 N 13s 0.60um
 E 12s 0.50um
 eS 28 49.50
 SNG 24.62 287 eP 24 54.40 1.3
 e 35 46.80
 GZH 25.26 336 eP 24 59.00 0.0
 ASPA 25.34 159 eP 24 58.60 -1.2
 0.6s 73.00nm 5.3mb
 iS 29 20.90
 DIS 25.37 145 iPc 24 59.20 -0.9
 0.6s 122.00nm 5.6mb
 OZH 25.37 348 eP 25 01.40 1.4
 NST 28.44 304 eP 25 31.00 2.9X
 SSE 31.04 355 eP 25 49.60 -1.3
 CHG 31.08 308 ePc 25 51.50 0.0
 1.0s 87.00nm 5.4mb

CHTO 31.08 308 iPc 25 51.50 0.0
 0.9s 53.50nm 5.3mb
 GYA 31.27 329 iPd 25 54.40 1.2
 PcP 28 46.00
 WHN 31.78 344 eP 25 59.20 1.8
 NJ2 32.27 351 eP 26 03.00 1.4
 Z 20s 0.30um 4.0MsZ
 KMI 32.49 322 Pc 26 05.00 1.0
 1.5s 100.00nm 5.4mb
 SHNJ 34.53 10 eP 26 20.30 -0.9
 TKSJ 35.01 14 P 26 24.70 -0.6
 WKYJ 35.64 16 P 26 30.30 -0.4
 YONJ 36.03 13 P 26 33.70 -0.2
 CD2 36.36 330 P 26 37.00 0.2
 XAN 36.77 338 P 26 39.00 -1.2
 TSRJ 36.99 16 P 26 41.40 -0.5
 IIOJ 37.51 18 P 26 45.80 -0.5
 CHJJ 38.38 19 P 26 51.90 -1.7
 MTMJ 38.49 18 P 26 53.90 -0.8
 MAT 38.58 18 iPc 26 53.70 -1.6
 1.0s 197.00nm 5.9mb
 eS 32 43.00
 BRS 38.64 137 iPc 26 54.50 -1.4
 0.5s 6.00nm 4.7mb
 KAKJ 38.92 21 eP 26 56.00 -2.1
 TIY 39.06 345 eP 26 58.20 -1.1
 NIJJ 39.47 19 P 27 01.00 -1.6
 COO 40.20 142 eP 27 10.00 1.3
 SHL 40.27 312 iP 27 09.00 -0.6
 iS 32 55.60
 BJI 40.51 350 eP 27 10.00 -1.1
 1.2s 57.00nm 5.3mb
 eS 33 10.00
 eSS 36 05.00
 LZH 40.59 334 P 27 11.70 -0.3
 1.4s 91.00nm 5.4mb
 Z 22s 0.80um 4.5MsZ
 pP 27 33.50 92kmX
 BWA 41.06 149 eP 27 17.00 1.2
 SNY 41.62 359 Pc 27 19.60 -0.5
 Z 26s 0.80um 4.5MsZ
 N 26s 0.70um
 OFUJ 42.02 20 eP 27 24.70 1.2
 CAN 42.06 149 eP 27 24.20 0.3
 TOO 42.23 155 eP 27 26.00 0.7
 HHC 42.24 346 eP 27 26.00 0.5
 BTO 42.41 344 eP 27 27.20 0.3
 CN2 43.60 1 P 27 35.00 -1.3
 Z 24s 0.50um 4.3MsZ
 MDJ 44.66 5 Pc 27 44.50 -0.3
 1.2s 100.00nm 5.5mb
 MRRJ 44.85 18 eP 27 46.40 0.1
 GTA 45.13 333 Pc 27 48.20 -0.6
 1.0s 100.00nm 5.6mb
 HOOJ 45.52 20 eP 27 53.20 1.6
 GUN 46.05 310 P 27 56.10 -0.4
 PKI 46.25 310 P 27 57.50 -0.5
 DMN 46.50 309 P 27 59.60 -0.4
 KUSJ 46.65 21 eP 28 01.10 0.6
 ASAJ 46.87 18 eP 28 02.30 0.0
 GKN 47.05 310 P 28 03.60 -0.6
 KOD 47.62 284 eP 28 08.00 -1.0
 HYB 48.17 294 eP 28 11.00 -1.9
 0.8s 69.20nm 5.5mb
 GBA 48.28 288 Pd 28 10.30 -3.4X
 0.9s 20.70nm 5.0mb
 POO 52.78 293 iPd 28 45.30 -2.6
 WMO 54.43 328 P 28 58.10 -1.6
 Z 22s 0.67um 4.7MsZ
 KSH 58.97 318 P 29 31.90 -0.1
 MAIO 69.84 309 eP 30 41.00 -1.5
 eS 39 40.00
 MAW 79.44 200 eP 31 38.00 1.2
 SVW 85.21 29 iPc 32 07.80 1.1
 TTA 85.31 27 iPc 32 08.10 0.9
 BRW 86.45 18 iPc 32 13.80 1.2
 IMA 86.76 24 iPc 32 15.00 0.6
 SPA 90.02 180 eP 32 31.40 1.5
 1.0s 20.00nm 5.2mb
 KEV 92.50 340 eP 32 41.00 0.0
 SOD 92.92 337 eP 32 42.00 -1.0
 SUF 93.71 333 iP 32 45.50 -1.2
 0.5s 9.80nm 5.5mb
 NUR 94.72 331 eP 32 50.00 -1.4
 MBC 96.09 12 eP 32 58.00 0.6
 HFS 100.10 332 ePd 33 13.30 -2.5X
 0.7s 5.80nm 5.3mb

Z 19s 0.20um 4.6MsZ
 LR 15 46.00
 DAG 100.58 352 iPd 33 16.50 -1.1
 NB2 100.96 333 Pd 33 17.40 -2.3X
 1.0s 4.10nm 5.0mb
 YKA 103.88 24 ePd 33 32.90 0.4
 0.8s 1.00nm 4.8mb
 BSF 108.09 321 ePKP 37 58.80 0.4
 0.8s 5.35nm
 LPG 108.94 319 ePKP 38 01.10 0.8
 0.8s 3.35nm
 LPL 108.94 319 ePKP 38 01.00 0.8
 0.6s 2.70nm
 LBF 110.18 321 ePKP 38 02.90 0.7
 0.6s 1.80nm
 SMF 110.40 321 ePKP 38 03.00 0.4
 0.6s 2.70nm
 SSF 110.44 321 ePKP 38 03.40 0.7
 0.6s 3.60nm
 AVF 110.65 321 ePKP 38 03.40 0.3
 0.6s 1.80nm
 BGF 111.06 321 ePKP 38 04.70 0.8
 0.6s 5.40nm
 KVN 111.17 48 PKP 38 05.20 0.6
 TCF 111.57 321 ePKP 38 05.50 0.6
 0.6s 2.70nm
 TNP 112.13 48 PKP 38 06.80 0.4
 CAF 112.22 319 ePKP 38 07.00 0.8
 1.0s 6.00nm
 LPO 112.89 320 ePKP 38 08.40 1.0
 0.6s 5.40nm
 MFF 112.91 322 ePKP 38 07.70 0.3
 0.8s 6.70nm
 LFF 113.07 320 ePKP 38 08.70 1.0
 0.6s 3.60nm
 FFC 113.64 27 ePKP 38 09.00 0.4
 0.6s 9.00nm
 PTI 113.84 42 PKP 38 11.20 1.6
 DUG 114.60 45 PKP 38 12.50 1.4
 FRB 115.68 6 ePKP 38 12.00 -0.1
 MSU 115.70 47 PKP 38 14.90 1.5
 BW06 115.76 41 PKP 38 13.80 0.5
 RSSD 118.62 38 PKP 38 17.90 -0.8
 APHE 119.49 313 iPKPc 38 19.50 -1.0
 AAPN 119.66 314 iPKPc 38 19.60 -1.1
 ALOJ 119.73 314 iPKPc 38 20.50 -0.4
 ATEJ 119.75 314 iPKPc 38 21.00 0.0
 GOL 119.97 43 PKP 38 21.50 0.0
 ANMO 121.33 48 PKP 38 24.40 0.3
 ALO 121.34 48 ePKP 38 24.20 0.1
 SCH 124.60 8 ePKP 38 30.00 0.5
 TUL 128.41 42 ePKP 38 38.50 1.0
 1.3s 16.20nm
 UYO 130.30 43 ePKP 38 42.00 0.9
 RSNY 132.59 18 PKP 38 44.80 -0.3
 BNH 133.49 15 PKP 38 48.50 1.6
 EMM 134.23 12 PKP 38 51.50 3.3X
 TBR 135.74 20 PKP 38 51.50 0.3
 TACH 143.63 158 ePKP 39 04.40 -1.3
 SAN 143.91 159 ePKP 39 05.00 -1.2
 FCH 144.15 159 ePKP 39 07.10 0.1
 PEL 144.18 158 iPKPc 39 05.50 -1.2
 0.7s 23.97nm
 PDCR 159.35 232 (PKP) 39 30.00 1.1
 ZOBO 159.76 143 PKP 39 32.50 2.4X
 SIV 163.28 162 PKP 39 34.60 1.7
 S.D. = 1.1 on 120 of 130 obs.

? MAY 02, 1990 04h 24m 31.04±6.75s
 31.458 S ±20.1km 67.894 W ±42.8km
 DEPTH = 10.8km (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA (137)

CFA 0.33 243 ePc 24 38.10 0.2
 RTLL 0.51 284 iPc 24 41.00 -0.4
 ZON 0.68 262 eP 24 44.00 -0.5
 eS 25 01.00
 RTCV 0.68 234 iPc 24 44.30 -0.3
 RTCB 0.77 268 iPc 24 46.80 0.6
 RTBS 1.35 261 ePd 24 56.20 0.4
 S 25 20.00
 PEL 2.90 234 eP 25 18.00 -0.1
 i(S) 26 01.10

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

MAY 02, 1990 04h 59m 02.49±0.77s
 37.666 N ± 6.4km 14.903 E ± 7.0km

02d 08h

0.6s 1.00nm 4.1mb
 YKA 60.84 31 eP 03 07.00 11.5X
 0.6s 0.40nm
 GBA 62.33 265 P 03 07.00 0.8
 NB2 71.80 337 P 04 04.60 -0.8
 0.7s 1.20nm 4.0mb
 S.D. = 1.2 on 8 of 10 obs.

% MAY 02, 1990 07h 55m 41.87±1.07s
 41.064 N ±15.9km 14.559 E ±23.7km
 DEPTH = 10.0km (geophysicist)
 SOUTHERN ITALY (390)

BSS 0.33 145 Pc 55 50.00 1.3
 eSg 55 55.50
 DUI 0.60 353 P 55 54.50 0.4
 eSg 56 04.00
 SGO 0.76 131 P 55 56.10 -0.6
 eSg 56 08.50
 SDI 0.85 319 P 55 58.00 -0.3
 eSn 56 11.00
 MGR 1.20 140 Pc 56 03.40 -0.8
 eSg 56 17.40
 S.D. = 1.2 on 5 of 5 obs.

MAY 02, 1990 08h 13m 09.15±0.75s
 38.967 N ±4.9km 23.378 E ±10.3km
 DEPTH = 10.0km (geophysicist)
 GREECE (364)
 ML 2.9 (ATH).

NEO 0.36 341 iPbc 13 16.10 -0.5
 AGG 0.82 274 eP 13 24.20 -0.8
 PAIG 0.99 14 eP 13 28.30 0.4
 eS 13 43.30
 ATH 1.03 165 ePb 13 27.50 -1.1
 LIT 1.32 329 ePc 13 33.90 0.3
 eS 13 55.00
 ITM 2.12 213 ePn 13 46.50 1.4
 VLI 2.27 189 ePn 13 47.50 0.2
 VAY 2.43 346 ePn 13 49.50 0.0
 S.D. = 0.9 on 8 of 8 obs.

% MAY 02, 1990 08h 16m 51.47±1.27s
 40.237 N ±13.6km 21.490 E ±11.6km
 DEPTH = 10.0km (geophysicist)
 GREECE (364)

GRG 1.00 44 ePg 17 10.20 -0.2
 eSg 17 25.70
 IGT 1.14 232 ePg 17 12.70 0.0
 AGG 1.38 152 ePb 17 16.90 0.2
 PAIG 1.71 100 ePn 17 20.00 -1.4
 OUR 1.91 86 ePn 17 25.80 1.5
 S.D. = 1.5 on 5 of 5 obs.

? MAY 02, 1990 08h 35m 52.35±4.41s
 47.531 N ±7.4km 2.889 W ±38.2km
 DEPTH = 10.0km (geophysicist)
 FRANCE (538)
 ML 3.4 (LDG).

LPF 1.34 67 Pg 36 17.40 0.3
 Sg 36 32.30
 GRR 1.61 57 Pn 36 21.10 0.2
 Pg 36 22.50
 Sg 36 40.80
 FLN 2.03 52 Pn 36 26.70 -0.2
 Pg 36 29.80
 Sg 36 53.00
 MFF 2.09 115 Pg 36 31.80 3.9X
 Sg 36 57.00
 LDF 2.14 59 Pn 36 28.40 -0.2
 Pg 36 31.30
 Sg 36 56.00
 LSF 3.29 111 Pn 36 45.30 0.3
 Sg 37 34.00
 LFF 3.61 135 Pg 37 01.40 11.9X
 Sg 37 46.80
 TCF 3.71 108 Pn 36 50.50 -0.5
 Sg 37 46.70
 RJF 3.77 125 Pn 36 52.00 0.2
 Pg 37 03.00
 Sg 37 49.40
 MAF 3.96 107 Pn 36 54.20 -0.3
 Sg 37 54.80
 LPO 4.02 134 Pg 37 09.00 13.8X

CAF 4.31 125 Pn 36 59.50 0.0
 Sg 38 07.00
 S.D. = 0.3 on 9 of 12 obs.

MAY 02, 1990 09h 16m 07.74±0.20s
 15.976 N ±4.9km 147.395 E ±4.0km
 DEPTH = 33.0km (normal)
 4.8mb (13 obs.)

MARIANA ISLANDS REGION (215)

GUMO 3.41 226 eP 17 00.20 0.3
 PJG 3.41 226 eP 17 00.30 0.4
 eS 17 37.00
 GUA 3.41 225 eP 17 00.40 0.4
 MAT 22.05 340 (P) 21 01.00 -0.4
 1.1s 17.72nm 4.4mb
 BJI 36.22 318 eP 23 09.00 -0.5
 WB5 37.86 200 eP 23 22.20 -1.3
 WRA 37.93 200 Pc 23 22.90 -1.2
 1.1s 6.40nm 4.4mb
 GYA 39.23 292 P 23 36.00 0.9
 CD2 42.43 298 eP 24 01.00 -0.3
 KMI 42.63 290 eP 24 03.50 0.3
 LZH 43.52 306 eP 24 10.00 -0.3
 1.5s 37.00nm 4.9mb
 pP 24 19.00 30kmX
 CHG 46.21 281 eP 24 31.50 -0.3
 CHTO 46.21 281 eP 24 31.90 0.1
 1.3s 9.40nm 4.6mb
 WARB 46.51 206 eP 24 33.80 -0.2
 SNG 46.56 265 eP 24 35.90 1.3
 GTA 47.50 309 eP 24 43.20 1.3
 WMO 57.32 312 P 25 55.00 0.0
 GUN 57.77 293 P 25 58.60 -0.2
 PKI 58.20 293 P 26 00.70 -1.0
 DMN 58.47 293 P 26 02.80 -0.7
 0.5s 14.00nm 5.3mb
 GKN 58.86 293 P 26 05.70 -0.5
 IMA 63.11 23 P 26 33.50 -0.8
 1.0s 5.63nm 4.6mb
 PMR 63.53 29 P 26 35.40 -1.5
 1.2s 22.73nm 5.2mb
 BRW 64.34 17 P 26 42.20 0.1
 FBA 65.04 25 P 26 45.70 -1.0
 INK 71.24 23 eP 27 25.00 -0.3
 MBC 75.37 14 eP 27 50.00 0.7
 1.3s 11.00nm 4.7mb
 BMW 78.17 45 P 28 06.50 0.9
 GMW 78.27 44 P 28 06.90 0.9
 RMW 78.94 44 P 28 10.00 0.2
 MAIO 79.07 305 eP 28 11.00 0.3
 LON 79.08 44 P 28 10.50 0.0
 YKA 79.62 28 eP 28 11.80 -1.2
 1.0s 6.50nm 4.6mb
 PNT 79.98 42 eP 28 15.00 -0.3
 VGB 80.04 46 P 28 16.10 0.4
 MIN 80.59 51 eP 28 18.70 -0.2
 ORV 80.84 52 eP 28 20.00 0.0
 ARN 81.32 54 P 28 23.00 0.4
 PRS 81.69 55 eP 28 24.90 0.4
 NEW 81.83 42 P 28 24.20 -0.9
 1.1s 17.75nm 5.0mb
 CMB 82.04 53 eP 28 26.70 0.3
 FRI 82.82 54 eP 28 30.70 0.3
 KVN 83.52 51 P 28 33.50 -0.7
 TNP 84.45 52 P 28 39.50 0.6
 0.9s 3.42nm 4.5mb
 LRM 85.59 44 ePc 28 45.20 0.7
 PEC 85.65 56 P 28 44.60 -0.2
 HPI 85.81 46 P 28 46.10 0.4
 IMW 87.23 45 P 28 53.50 0.9
 MSU 88.11 51 P 28 57.20 0.3
 DAU 88.16 49 P 28 57.50 0.3
 FFC 88.50 33 eP 28 58.00 -0.1
 1.1s 22.00nm 5.4mb
 BW06 88.56 46 P 28 59.00 0.0
 RSSD 91.77 43 P 29 14.00 0.1
 GOL 92.63 48 P 29 18.60 0.6
 0.9s 6.63nm 5.1mb
 LPB 145.95 96 PKP 35 49.00 2.7X
 CCH 147.86 97 PKP 35 53.80 4.6X
 SIV 152.64 94 PKP 36 03.40 7.3X
 i 36 21.40
 S.D. = 0.7 on 54 of 57 obs.

& MAY 02, 1990 10h 21m 49.34s
 38.733 N 111.523 W

DEPTH = 0.0km
 UTAH (478)
 <SLC-P>. ML 2.6 (SLC).

MSU 0.56 247 eP 22 00.20 -0.2
 DAU 1.69 7 eP 22 20.50 -0.1
 DUG 1.77 326 eP 22 20.60 -1.0
 BW06 4.31 20 eP 22 59.00 1.2
 4 obs. associated

MAY 02, 1990 10h 43m 13.87±0.15s
 36.416 N ±3.7km 71.124 E ±2.7km
 DEPTH = 254.0km (2 depth phases)
 4.6mb (55 obs.)
 AFGHANISTAN-USSR BORDER REGION (717)
 Felt (11) at Khorog and Kulyab, USSR.

KSH 4.89 50 P 44 27.50 -1.6
 S 45 22.50
 QUE 7.13 211 iPc 44 57.00 0.0
 eS 46 16.50
 NDI 9.26 145 iPd 45 23.40 -0.6
 0.8s 216.42nm 5.3mb
 MAIO 9.38 273 iPd 45 24.00 -1.6
 0.8s 31.48nm 4.4mb
 eS 47 11.00
 GKN 14.17 122 P 46 23.80 -1.5
 WMO 14.66 55 P 46 29.60 -1.5
 S 49 09.70
 DMN 14.74 123 P 46 31.00 -1.4
 PKI 14.98 122 P 46 33.80 -1.4
 GUN 15.09 120 P 46 35.00 -1.6
 BOM 17.52 175 iP 47 04.50 1.1
 eS 50 22.00
 POO 17.98 172 iPd 47 08.80 0.6
 iS 50 31.00
 HYB 20.04 159 iPd 47 30.30 1.2
 0.8s 84.60nm 5.3mb
 eS 51 13.00
 DHR 20.52 246 ePc 47 22.80 -10.9X
 SHL 20.78 116 iP 47 36.50 0.0
 iS 51 14.00
 GTA 22.79 74 iPd 47 57.50 1.6
 GBA 23.41 164 Pd 48 02.90 1.2
 0.5s 21.00nm 4.9mb
 RYD 24.04 248 iPc 48 05.70 -1.9
 MJMA 24.42 252 ePc 48 11.10 0.0
 QASM 25.66 254 eP 48 23.30 0.9
 LZH 26.32 81 P 48 29.50 1.0
 KOD 26.69 166 eP 48 33.00 0.9
 CD2 27.63 92 P 48 41.00 0.9
 KMSA 28.23 243 iPc 48 45.30 -0.3
 KMI 29.28 104 Pd 48 55.00 0.0
 CHG 30.09 118 eP 49 03.00 1.1
 CHTO 30.09 118 iP 49 02.60 0.7
 0.6s 7.86nm 4.5mb
 pP 49 53.70 259km
 BTO 30.55 70 eP 49 06.00 0.2
 XAN 30.84 83 P 49 08.40 0.0
 GYA 31.75 98 P 49 17.00 0.5
 TIY 32.80 75 eP 49 25.90 0.5
 ELL 32.92 283 eP 49 27.30 0.9
 KHL 32.92 286 eP 49 27.10 0.7
 LOE 33.01 117 eP 49 27.00 -0.2
 VRI 34.36 300 eP 49 51.50 13.1X
 i 12 10.70
 MLR 34.91 299 ePc 49 57.00 13.8X
 NUR 37.95 324 iP 50 08.00 -0.3
 0.6s 87.40nm 5.5mb
 SUF 38.05 328 iP 50 09.70 0.6
 0.6s 63.50nm 5.3mb
 GZH 38.69 98 Pc 50 16.00 1.2
 KRA 38.94 307 iPd 50 17.50 0.9
 0.8s 42.00nm 5.0mb
 SOD 39.86 335 iP 50 24.70 0.8
 SRO 40.07 303 iP 50 27.60 1.7
 e 51 21.20
 e 51 46.40
 KEV 40.92 338 iP 50 33.00 0.5
 0.7s 37.40nm 4.9mb
 UPP 41.20 322 iP 50 35.10 0.2
 KSP 41.27 308 ePc 50 36.00 0.3
 e 52 17.60
 VBY 42.40 300 e(P) 50 46.00 1.1
 PRU 42.42 307 Pc 50 46.00 0.9
 1.2s 21.50nm 4.4mb

TIY 22.88 296 Pd 01 39.30 0.5
 XAN 25.39 286 P 02 02.00 0.4
 GYA 28.37 270 P 02 28.20 0.0
 CD2 29.97 280 P 02 41.40 -0.6
 GTA 32.90 297 eP 03 06.60 -0.5
 CHG 37.74 262 iPd 03 48.30 0.8
 0.8s 25.19nm 4.6mb
 CHTO 37.74 262 iPd 03 48.20 0.7
 0.5s 19.52nm 4.7mb
 WMO 42.17 303 P 04 23.60 0.2
 SNG 42.49 245 eP 04 27.00 1.0
 GUN 45.83 281 P 04 53.00 0.3
 0.6s 24.00nm 4.7mb
 PKI 46.33 280 P 04 56.00 -0.5
 DMN 46.57 281 P 04 58.20 -0.1
 GKN 46.86 281 P 05 00.40 0.0
 WB5 50.17 185 eP 05 25.00 -0.2
 ASPA 53.96 185 iPd 05 52.70 -0.2
 0.5s 20.00nm 4.7mb
 MBL 54.38 202 iPd 05 55.80 -0.1
 GBA 58.54 268 Pd 06 24.50 -0.4
 0.7s 4.20nm 4.0mb
 FORR 61.75 190 iPc 06 45.60 -0.3
 MBC 63.50 15 eP 06 57.00 0.2
 KEV 68.83 340 eP 07 35.00 4.9X
 SOD 70.19 338 eP 07 38.00 -0.3
 YKA 70.69 28 eP 07 40.50 -0.8
 0.8s 2.00nm 3.8mb
 SUF 72.87 334 iP 07 54.00 0.0
 0.5s 5.00nm 4.4mb
 NUR 74.71 332 iP 08 04.00 -0.4
 HFS 79.15 335 eP 08 28.00 -0.6
 0.4s 5.50nm 4.6mb
 NB2 79.38 337 P 08 29.70 -0.2
 0.6s 2.50nm 4.1mb
 FFC 80.52 31 eP 08 36.00 0.2
 0.7s 8.00nm 4.5mb
 ALQ 90.64 48 eP 09 27.50 1.7
 0.9s 2.31nm 4.1mb
 S.D. = 0.5 on 33 of 34 obs.

* MAY 02, 1990 20h 24m 01.53±0.85s
 36.886 N ± 7.4km 29.892 E ± 10.3km
 DEPTH = 10.0km (geophysicist)
 TURKEY (366)

ELL 0.14 174 iPg 24 04.90 0.0
 iSg 24 16.90
 BCK 0.80 44 ePn 24 17.20 0.1
 KHL 1.46 349 ePn 24 28.30 0.2
 CIN 1.61 297 eP 24 30.00 0.0
 ALT 2.17 4 ePn 24 38.00 -0.3
 S.D. = 0.3 on 5 of 5 obs.

? MAY 02, 1990 20h 34m 03.18±1.23s
 46.830 N ± 24.0km 154.248 E ± 16.4km
 DEPTH = 33.0km (normol)
 4.8mb (21 obs.)

KURIL ISLANDS REGION (222)

MAT 15.76 235 (P) 37 43.00 -1.2X
 CN2 20.43 272 eP 38 36.20 -3.9X
 FBA 35.62 38 eP 40 59.50 0.2
 XAN 36.30 266 P 41 05.00 -0.5
 LZH 38.66 273 eP 41 25.40 0.0
 GTA 39.73 280 eP 41 33.70 -0.5
 CD2 41.66 266 P 41 50.00 -0.1
 GYA 42.49 258 P 41 57.40 0.4
 WMO 45.62 292 P 42 20.70 -1.3
 KMI 46.02 260 eP 42 25.00 -0.6
 YKA 50.39 37 eP 42 57.60 -1.1
 0.7s 0.40nm 3.5mb X
 LSA 51.05 274 P 43 05.40 0.7
 CHTO 52.90 258 eP 43 19.00 0.8
 0.8s 1.46nm 4.0mb
 GUN 55.77 276 P 43 28.90 33kmX
 PKI 56.31 276 P 43 38.80 -0.8
 0.6s 23.00nm 5.4mb
 DMN 56.49 276 P 43 44.00 -0.7
 GKN 56.56 277 P 43 44.40 -0.6
 DAG 56.60 358 iPd 43 42.30 -2.2
 0.3s 16.88nm 5.6mb
 KEV 57.53 341 eP 43 52.00 0.9
 SOD 59.46 339 iP 44 02.20 -2.4
 KVN 61.44 62 eP 44 17.80 -1.0
 SUF 63.26 336 iP 44 28.90 -1.3

NUR 0.3s 5.00nm 5.1mb
 65.47 335 iP 44 43.00 -1.6
 0.6s 17.00nm 5.3mb
 UPP 67.93 338 iP 44 58.10 -2.1
 NB2 68.40 342 P 45 01.50 -1.7
 0.8s 6.00nm 4.7mb
 HFS 68.65 340 eP 45 02.70 -2.0
 0.5s 8.40nm 5.1mb
 EKA 76.44 347 Pc 45 52.10 1.4
 0.5s 4.10nm 4.7mb
 TUL 76.45 52 e(P) 45 48.80 -2.3
 0.5s 4.60nm 4.7mb
 CLL 76.71 336 iP 45 51.30 -1.0
 0.9s 15.00nm 5.0mb
 PRU 77.45 335 eP 45 56.00 -0.4
 KHC 78.50 335 eP 46 02.40 0.1
 GRF 78.66 337 iPc 46 02.60 -0.5
 0.6s 04.80 4.6mb
 MEM 79.14 340 P 46 06.90 1.3
 DOU 79.95 341 P 46 11.60 1.6
 CDF 80.87 338 eP 46 16.40 1.3
 0.6s 3.60nm 4.5mb
 LOR 82.77 340 eP 46 26.70 1.8
 0.6s 7.20nm 4.9mb
 LBF 83.01 340 eP 46 27.70 1.5
 0.6s 3.15nm 4.6mb
 SSF 83.05 340 eP 46 28.20 1.9
 0.6s 3.15nm 4.6mb
 AVF 83.34 340 eP 46 29.80 2.0
 0.6s 3.60nm 4.7mb
 SMF 83.36 340 eP 46 29.90 2.0
 0.8s 8.05nm 4.9mb
 BGF 83.68 341 eP 46 32.20 2.7
 0.4s 2.30nm 4.7mb
 MAF 84.06 341 eP 46 34.30 2.8X
 0.4s 5.15nm 5.0mb
 TCF 84.07 341 eP 46 33.90 2.3
 0.6s 2.25nm 4.5mb
 RJF 85.16 341 eP 46 39.70 2.7
 CAF 85.40 341 eP 46 41.20 3.0X
 0.8s 4.05nm 4.7mb
 LFF 85.68 341 eP 46 43.30 3.7X
 0.6s 3.60nm 4.8mb
 S.D. = 1.5 on 41 of 46 obs.

* MAY 02, 1990 21h 15m 02.42±0.85s
 54.068 N ± 12.6km 159.587 E ± 20.0km
 DEPTH = 33.0km (normol)
 4.5mb (18 obs.)
 NEAR EAST COAST OF KAMCHATKA (218)

KUSJ 14.71 228 eP 18 27.10 -2.6
 eS 20 59.40
 ASAJ 14.87 235 eP 18 36.60 4.8X
 HOJ 15.91 229 eP 18 44.20 -1.0
 eS 21 31.30
 MRRJ 16.90 234 eP 18 57.70 -0.1
 NIJJ 22.01 228 P 19 55.80 0.5
 MAT 22.94 229 iPc 20 05.10 0.6
 1.1s 101.27nm 5.2mb
 CHJJ 23.01 227 P 20 06.80 1.6
 MTMJ 23.08 230 P 20 07.20 1.2
 IIDJ 23.96 228 P 20 15.20 0.8
 MBC 36.27 24 eP 22 04.00 0.2
 YKA 42.65 43 eP 22 55.50 -1.4
 0.7s 2.70nm 4.1mb
 CHTO 57.81 257 eP 24 51.70 -1.1
 0.6s 0.70nm 3.9mb
 SUF 57.98 337 eP 24 53.00 -0.5
 NB2 62.52 343 P 25 24.30 -0.3
 0.7s 3.80nm 4.6mb
 HFS 62.93 342 eP 25 25.90 -1.3
 0.4s 1.30nm 4.4mb
 TUL 69.46 57 e(P) 26 00.70 -8.4X
 0.6s 3.20nm 4.6mb
 EKA 70.04 350 P 26 12.00 -0.4
 0.6s 2.70nm 4.5mb
 CLL 71.33 339 iP 26 20.20 -0.1
 1.1s 11.00nm 4.8mb
 PRU 72.23 337 P 26 26.20 0.5
 GRF 73.24 339 eP 26 32.00 0.4
 0.8s 9.00nm 4.8mb
 KHC 73.26 337 eP 26 32.50 0.8
 MEM 73.36 343 P 26 32.30 0.1
 DOU 74.10 344 P 26 36.60 0.1
 GRR 76.59 347 eP 26 50.40 -0.3
 0.6s 3.60nm 4.6mb

LOR 76.96 343 eP 26 52.70 -0.2
 0.8s 4.05nm 4.5mb
 LBF 77.22 343 eP 26 53.80 -0.5
 0.6s 1.80nm 4.3mb
 SSF 77.22 343 eP 26 54.10 -0.2
 0.8s 3.35nm 4.4mb
 TCF 78.19 344 eP 26 59.60 0.0
 0.8s 2.70nm 4.3mb
 CAF 79.54 344 eP 27 07.60 0.6
 0.8s 2.70nm 4.3mb
 LPO 79.91 345 eP 27 09.50 0.5
 0.8s 5.35nm 4.6mb
 FRF 80.03 340 eP 27 10.80 1.1
 LRG 80.19 341 eP 27 11.00 0.5
 0.6s 6.30nm 4.8mb
 LMR 80.28 340 eP 27 11.50 0.6
 0.8s 5.35nm 4.6mb
 S.D. = 0.9 on 31 of 33 obs.

% MAY 02, 1990 22h 03m 01.06±1.00s
 41.199 N ± 10.0km 14.869 E ± 15.6km
 DEPTH = 10.0km (geophysicist)
 SOUTHERN ITALY (390)

BSS 0.41 187 P 03 09.80 0.3
 eSg 03 15.50
 DUI 0.56 326 P 03 13.00 0.6
 eSg 03 21.50
 SGO 0.72 152 P 03 15.20 0.0
 eSg 03 27.20
 SDI 0.94 303 P 03 18.90 -0.1
 eSg 03 33.40
 MGR 1.18 154 Pc 03 22.90 -0.2
 eSg 03 39.50
 TDS 1.90 143 Pc 04 07.10 33.2X
 MNS 2.02 307 P 03 35.00 -0.6
 S.D. = 0.5 on 6 of 7 obs.

% MAY 02, 1990 22h 46m 24.26±1.48s
 40.610 N ± 16.6km 27.201 E ± 12.7km
 DEPTH = 10.0km (geophysicist)
 TURKEY (366)

EDC 0.57 117 iPg 46 35.00 -0.8
 iSg 46 43.00
 EZN 1.03 221 iPn 46 43.70 0.0
 CTT 1.08 60 iPn 46 44.10 -0.4
 ISK 1.48 71 ePn 46 50.30 -0.6
 YLV 1.65 91 iPn 46 55.20 1.7
 HRT 1.89 83 ePn 46 57.00 0.1
 S.D. = 1.2 on 6 of 6 obs.

MAY 02, 1990 22h 50m 29.56±0.09s
 5.604 S ± 2.5km 150.164 E ± 2.6km
 DEPTH = 81.6km (geophysicist)
 6.2mb (47 obs.)

NEW BRITAIN REGION (192)

Mo=6.0*10**18 Nm (PPT). Depth
 from broadband displacement
 seismograms.
 FAULT PLANE SOLUTION: P-Waves
 NP1: Strike= 45 Dip=82 Slip=-105
 NP2: 288 17 -29
 Principal Axes:
 T P1g=35 Azm=148
 P 51 298

Comment: The focal mechanism is
 moderately well controlled and
 corresponds to normal faulting
 with a small strike-slip
 component. The preferred fault
 plane is not determined.

MOMENT TENSOR SOLUTION
 Dep 83 No. of sto: 16
 Moment Tensor; Scale 10**18 Nm
 Mrr=-3.63 Mtt= 3.60
 Mff= 0.03 Mrt=-3.63
 Mrf=-2.72 Mtf= 1.26
 Principal axes:

T Val= 5.99 P1g=25 Azm=156
 N -0.09 10 61
 P -5.89 63 310
 Best Double Couple: Mo=5.9*10**18
 NP1: Strike=268 Dip=22 Slip=-62
 NP2: 58 70 -101
 CENTROID. MOMENT TENSOR (HRV)
 Data Used: GDSN

				epP	00 08.00	98kmX	N	16s	3.70um		BRW	84.21	15 iPd	02 52.90	0.2
				esP	00 20.00		E	15s	4.10um		SPA	84.43	180 iPc	02 55.20	1.0
				ePP	01 48.00				epPd	00 53.16	85kmX		1.0s	212.00nm	6.1mb
				iS	07 08.00				esPc	01 01.11		Z	20s	3.87um	5.8msz
				sS	07 50.00				PcP	01 16.00				i	03 16.00
				SS	10 48.00				ePP	02 40.75		SIT	86.33	32 iPd	03 04.30
CN2	54.00	338	iPd	59 48.80	1.4				e	03 10.05		DSH	86.75	309 iP	03 06.00
	5.0s	*****nm			7.1mb X				S	08 29.00				iS	13 25.00
Z	40s	25.00um			6.0MszX				SS	12 30.00		QUE	86.95	301 iP-	03 06.10
				sP	00 20.00		PPN	60.13	107 iP	00 31.90	0.7			eS	13 27.10
				PP	01 55.00		TVO	60.32	107 iP	00 33.20	0.7	INK	90.14	21 iPd	03 20.50
BJI	55.15	328	iPd	59 57.26	1.4			1.2s	415.00nm		6.4mb		1.2s	217.00nm	6.2mb
	6.0s	7300.00nm			6.9mb X		TBI	60.63	114 iP	00 36.40	1.9	BKS	91.51	52 eP	03 28.90
Z	36s	49.00um			6.3MszX		HIA	60.73	338 iPd	00 36.43	1.6		Z	20s	3.20um
N	16s	6.03um							esPd	00 58.94	89kmX		E	20s	3.00um
				esPc	00 26.73				isPc	01 05.57					e(SKKS)13 58.00
				eScP	04 47.00		DRV	61.36	185 eP	00 39.20	0.4			iS	14 22.00
				eS	07 30.00		PMO	61.48	104 iP	00 41.20	0.8			iS	15 03.00
				esS	08 12.00			1.2s	540.00nm		6.5mb			i(SS)	20 33.00
KMI	55.29	306	iPd	59 58.00	0.6		SMY	61.56	16 iPc	00 40.40	0.1			iS	21 05.00
	7.0s	4100.00nm			6.6mb X		VAH	61.75	104 iP	00 42.60	0.4			e(SSS)23 58.00	
Z	40s	59.80um			6.4MszX			1.2s	220.00nm		6.1mb			iLO	27 04.00
N	14s	3.30um					TPT	61.75	104 iP	00 42.90	0.7			iLO	28 22.00
E	16s	4.50um						1.2s	450.00nm		6.4mb			eLR	32 00.00
				esPc	00 28.13		RUV	61.99	104 iP	00 44.20	0.4	WDC	91.55	50 eP	03 28.60
				iPP	01 59.23			1.2s	360.00nm		6.4mb	BMW	91.69	44 P	03 29.40
				iS	07 37.00		ADK	63.87	22 iPd	00 54.50	-1.1	PGC	91.78	41 eP	03 30.00
XAN	55.43	318	P	59 58.00	-0.1		SHL	64.47	302 iP	00 58.50	-1.7	MHC	91.93	53 eP	03 30.60
	9.0s	5700.00nm			6.6mb X		GTA	64.49	319 iPd	01 01.00	0.9	ARN	92.01	53 P	03 31.80
N	13s	4.40um							iS	09 32.00		PRS	92.05	54 eP	03 31.40
E	16s	3.90um					Z	7.0s	5300.00nm		6.6mb X	MCW	92.19	41 P	03 31.80
				pP	00 19.00	84kmX		42s	24.20um		6.1MszX	MIN	92.24	50 eP	03 31.00
				PP	02 04.00		N	14s	2.40um			ORV	92.25	51 eP	03 31.80
				S	07 32.00				S	09 31.00		LLA	92.41	54 eP	03 32.90
				SS	1										

CTI	126.08	325	PKP	09 24.10	-0.2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			</
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03d 05h

38.733 N 111.515 W
 DEPTH = 1.0km
 UTAH (478)
 <SLC-P>. CL 2.7 (SLC).
 MSU 0.56 247 eP 52 33.00 -0.5
 DAU 1.69 7 eP 52 53.00 -0.3
 DUG 1.77 326 eP 52 53.40 -1.0
 3 obs. associated

MAY 03, 1990 06h 33m 44.65±0.38s
 53.996 N ±15.0km 35.246 W ±4.8km
 DEPTH = 15.8km (3 depth phases)
 4.4mb (18 obs.)
 NORTH ATLANTIC OCEAN (402)

EKA 18.52 73 P 38 02.00 0.1
 1.1s 9.50nm 3.9mb
 FRB 19.55 313 eP 38 15.00 0.9
 CBM 21.94 265 P 38 39.00 0.1
 LPF 22.18 92 eP 38 41.60 0.4
 0.8s 5.35nm 4.0mb
 TCF 24.97 93 eP 39 09.00 0.5
 1.0s 9.00nm 4.4mb
 BGF 25.21 91 eP 39 10.00 0.1
 1.0s 22.00nm 4.8mb
 MAF 25.22 92 eP 39 11.30 0.5
 1.0s 12.00nm 4.5mb
 TOL 25.30 111 eP 39 10.50 -1.2
 SSF 25.34 90 eP 39 12.30 0.4
 1.0s 11.00nm 4.5mb
 AVF 25.38 91 eP 39 12.60 0.2
 1.0s 10.00nm 4.4mb
 LOR 25.44 89 eP 39 13.00 0.0
 1.0s 8.00nm 4.3mb
 LBF 25.65 90 eP 39 15.00 0.0
 0.8s 5.35nm 4.3mb
 RSON 34.91 289 P 40 40.00 2.9
 0.7s 5.19nm 4.5mb
 MBC 37.05 337 eP 40 55.00 0.1
 1.0s 6.00nm 4.3mb
 FFC 37.56 299 eP 40 59.00 -0.4
 0.6s 5.00nm 4.5mb
 FVM 40.44 270 eP 41 24.00 0.3
 0.7s 13.61nm 4.8mb
 OLY 42.74 268 P 41 42.00 -0.5
 INK 44.14 328 eP 41 52.00 -1.4
 MEO 47.44 273 iPc 42 20.00 -0.1
 GOL 48.06 283 eP 42 25.70 0.5
 ipP 42 30.30 15km
 8W06 48.42 289 eP 42 26.40 -1.5
 0.7s 2.63nm 4.4mb
 epP 42 31.00 15km
 PNT 49.60 301 eP 42 44.00 7.4X
 ANMO 51.94 279 P 42 55.80 0.9
 0.7s 1.71nm 4.1mb
 ALO 51.95 279 P 42 55.20 0.3
 1.0s 3.25nm 4.2mb
 KVN 55.70 291 P 43 21.00 -1.5
 TNP 55.89 289 iP 43 23.60 -0.3
 0.7s 3.33nm 4.5mb
 epP 43 28.70 17km
 BCAO 65.81 118 ePc 44 35.30 4.1X
 0.9s 9.00nm 4.9mb
 GKN 83.29 51 P 46 00.00 -11.9X
 WRA 145.08 17 PKPc 53 21.30 -1.4
 0.7s 1.60nm

S.D. = 1.0 on 26 of 29 obs.

% MAY 03, 1990 06h 57m 12.36±1.82s
 41.299 N ±13.9km 14.994 E ±20.3km
 DEPTH = 10.0km (geophysicist)
 SOUTHERN ITALY (390)

BSS 0.53 196 P 57 23.60 0.6
 eSg 57 28.90
 DUI 0.54 312 P 57 24.50 1.2
 eSg 57 31.00
 SGO 0.78 162 P 57 27.50 0.0
 eSg 57 38.60
 SDI 0.97 295 P 57 29.50 -1.4
 eSg 57 42.50
 MGR 1.24 160 P 57 35.00 -0.3
 eSg 57 52.00

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

MAY 03, 1990 07h 03m 27.50±0.82s

40.317 N ±5.5km 22.018 E ±7.1km
 DEPTH = 10.0km (geophysicist)
 GREECE (364)
 ML 2.6 (THE).

LIT 0.42 121 ePg 03 35.10 -1.0
 eSg 03 41.90
 GRG 0.70 24 ePg 03 40.80 -0.6
 eSg 03 52.30
 KNT 1.08 38 ePg 03 47.70 -0.1
 eSg 04 05.00
 VAY 1.09 23 ePn 03 48.40 0.5
 SOH 1.14 63 ePg 03 49.10 0.3
 OHR 1.22 311 iPn 03 49.70 -0.5
 0.4s 83.00nm

AGG 1.32 169 ePb 03 52.70 0.9
 eSb 04 12.10
 PAIG 1.33 106 ePb 03 51.60 -0.5
 eSb 04 10.40
 SRS 1.44 56 ePb 03 54.60 1.0
 eSb 04 15.10
 SKO 1.71 345 ePn 03 53.00 -4.5X
 S.D. = 0.8 on 9 of 10 obs.

MAY 03, 1990 07h 22m 32.84±0.33s
 40.305 N ±3.5km 22.069 E ±2.8km
 DEPTH = 10.0km (geophysicist)
 GREECE (364)
 ML 3.3 (THE), 2.8 (SKO).

LIT 0.38 122 ePg 22 39.60 -1.1
 eSg 22 44.10
 GRG 0.70 21 ePg 22 45.40 -1.3
 eSg 22 58.70
 THE 0.76 64 ePg 22 47.30 -0.3
 eSg 22 58.60
 KBN 1.01 289 iPg 22 51.00 -0.9
 KNT 1.06 36 ePg 22 52.60 -0.3
 eSg 23 09.30
 VAY 1.08 20 iPn 22 53.00 -0.2
 iSn 23 10.30
 SOH 1.11 62 ePg 22 54.00 0.4
 eSg 23 09.50
 LSK 1.14 263 ePg 22 53.60 -0.6
 OHR 1.26 310 iPnc 22 55.00 -1.3
 0.8s 553.00nm
 iSg 23 14.80
 Lg 23 20.60
 PAIG 1.29 106 ePbd 22 56.50 -0.3
 eSb 23 14.60
 AGG 1.30 171 ePbd 22 57.50 0.6
 eSb 23 15.60
 NEO 1.34 138 ePn 22 57.00 -0.5
 SRS 1.41 54 ePbd 22 59.90 1.3
 eSb 23 19.10
 OUR 1.46 88 ePbd 23 00.40 1.2
 eSb 23 19.40
 IGT 1.54 241 ePbd 23 02.90 2.5X
 eSb 23 25.70
 TPE 1.57 270 iPnc 23 01.50 0.6
 BERA 1.66 285 ePn 23 03.10 1.0
 SKO 1.73 344 iPn 23 02.90 -0.3
 0.6s 185.00nm
 iSn 23 24.00
 i 23 27.00
 Lg 23 31.50

KKB 1.74 26 iPc 23 04.00 0.7
 MMB 1.80 44 ePd 23 04.00 -0.1
 KEK 1.84 252 ePn 23 06.00 1.3
 PHP 1.85 319 iPnc 23 04.70 -0.1
 TIR 1.97 303 ePn 23 09.20 2.6X
 VTS 2.44 20 iP 23 14.00 0.5
 SDA 2.59 312 ePn 23 14.90 -0.5
 RDO 2.77 71 ePn 23 17.00 -1.0
 TTG 3.00 316 ePn 23 22.10 0.9
 eSn 24 02.00
 ALN 3.08 78 ePn 23 23.70 1.2
 eSn 24 01.10
 ITM 3.12 182 ePb 23 26.60 3.6X
 VLI 3.65 169 ePn 23 29.50 -1.0

S.D. = 0.9 on 27 of 30 obs.

% MAY 03, 1990 07h 23m 00.58±1.01s
 41.257 N ±9.7km 14.968 E ±13.3km
 DEPTH = 10.0km (geophysicist)
 SOUTHERN ITALY (390)

BSS 0.48 195 P 23 10.00 -0.4
 eSg 23 17.10
 DUI 0.56 317 P 23 11.80 -0.1
 eSg 23 20.70
 SGO 0.74 160 P 23 16.10 1.0
 eSg 23 26.50
 SDI 0.98 298 P 23 19.00 -0.2
 eSg 23 33.50
 MGR 1.20 158 P 23 23.20 0.2
 eSg 23 40.10
 AZI 1.36 303 P 23 26.00 0.5
 eSn 23 44.50
 TDS 1.91 146 P 23 32.50 -0.9
 S.D. = 0.7 on 7 of 7 obs.

MAY 03, 1990 07h 45m 43.02±0.81s
 36.439 N ±3.4km 140.510 E ±3.0km
 DEPTH = 64.2 ±6.8 km
 5.4mb (94 obs.)

NEAR EAST COAST OF HONSHU, JAPAN(228)
 Felt (IV JMA) at Mito; (III JMA)
 at Tokyo, Choshi, Onahama and
 Utsunomiya; (II JMA) at Chiba
 and Yokohama.

CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 10S, 21C
 Centroid Location:
 Origin Time 07:45:50.3 0.6
 Lat 36.25N 0.07 Lon 140.35E 0.05
 Dep 43.7 6.3 Half-duration 1.6
 Moment Tensor: Scale 10¹⁶ Nm
 Mrr=5.61 0.38 Mtt=0.97 0.52
 Mff=-6.58 0.49 Mrt=2.73 0.71
 Mrf=3.06 0.85 Mtf=-3.76 0.55

Principal Axes:
 T Val=7.01 P1g=68 Azm=342
 N 2.15 15 208
 P -9.16 15 114
 Best Double Couple: Mo=8.1*10¹⁶
 NP1: Strike=183 Dip=33 Slip= 61
 NP2: 37 62 107

MAT 1.86 274 iPd- 46 14.70 1.5
 eS 46 30.00
 SHK 6.67 256 eP 47 21.80 1.2
 MDJ 11.64 318 eP 48 28.60 0.1
 1.0s 200.00nm 6.1mb
 Z 28s 2.80um
 E 12s 0.60um

epP 48 33.00
 ePP 48 40.00
 SS 50 45.00
 CN2 13.66 307 Pd 48 55.20 0.1
 1.0s 200.00nm 5.7mb
 Z 30s 2.30um
 N 10s 0.50um
 E 10s 0.70um

pP 49 02.00
 sP 49 08.00
 SNY 14.20 297 iPd 49 03.80 1.7
 1.6s 200.00nm 5.3mb
 Z 30s 2.60um
 N 11s 0.80um
 E 13s 1.10um

DL2 15.16 285 P 51 43.00
 1.0s 100.00nm 5.0mb
 Z 18s 1.20um
 E 16s 1.50um

pP 49 27.00
 sP 49 34.00
 SSE 16.92 257 eP 49 37.00 0.1
 1.40um
 Z 20s 0.50um
 E 12s 0.50um

sP 49 55.00
 sS 53 04.00
 NJ2 18.42 263 Pd 49 54.50 -0.9
 0.9s 100.00nm 5.0mb
 Z 18s 0.70um
 TIA 18.84 276 Pd 49 58.50 -2.0
 Z 28s 1.10um
 N 12s 0.50um

pP 50 13.00
 S 53 30.00
 BJ1 19.43 288 eP 50 04.00 -2.9

03d 12h

FIN 0.17 123 P 59 19.21 0.0
S 59 21.37
ENR 0.43 260 P 59 24.65 0.4
S 59 31.62
PCP 0.45 58 P 59 24.54 0.0
S 59 31.72
STV 0.50 264 P 59 24.75 -0.8
S 59 32.13
S.D. = 0.7 on 5 of 5 obs.

* MAY 03, 1990 13h 11m 31.16 \pm 0.93s
5.897 S \pm 10.4km 147.692 E \pm 9.4km
DEPTH = 108.5 \pm 9.4 km
4.3mb (5 obs.)

EAST PAPUA NEW GUINEA REGION (207)

LAT 1.02 222 iPc 11 52.70 0.0
PMG 3.53 189 iPc 12 23.80 -1.2
eS 13 04.00
MNDI 4.02 266 eP 12 34.00 2.0
RAB 4.77 69 iPd 12 41.70 -0.4
0.7s 1369.86nm
QIS 16.55 208 eP 15 18.00 -0.2
eS 18 18.00
MTN 17.73 246 eP 15 32.00 -0.7
e 18 50.00
WB5 19.00 222 eP 15 46.00 -1.1
eS 19 11.40
WRA 19.06 222 Pc 15 46.50 -1.3
0.4s 4.60nm 4.2mb
RMQ 20.50 177 eP 16 05.00 2.3
KNA 20.99 241 eP 16 06.50 -1.1
BRS 21.92 168 iPc 16 17.50 0.7
0.8s 2.00nm 3.5mb
WARB 28.48 223 eP 17 19.00 0.8
0.4s 4.00nm 4.4mb
FORR 30.90 214 eP 17 39.70 0.2
MBL 30.96 238 eP 17 40.20 0.0
0.4s 3.00nm 4.4mb
NANU 35.18 239 iPc 18 17.10 0.4
0.4s 17.00nm 5.3mb
MAT 43.14 349 eP 19 22.00 -0.5
SIV 144.17 128 PKP 30 54.60 -2.2X
S.D. = 1.2 on 16 of 17 obs.

% MAY 03, 1990 13h 16m 42.67 \pm 0.85s
39.290 N \pm 6.5km 29.415 E \pm 9.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

ALT 0.59 113 ePg 16 55.00 0.3
eSg 17 03.40
KHL 0.97 175 iPn 17 00.90 -0.3
GPA 1.21 34 ePn 17 05.00 -0.3
KCT 1.26 320 iPn 17 06.30 0.2
YLV 1.28 359 iPn 17 06.30 -0.1
S.D. = 0.4 on 5 of 5 obs.

? MAY 03, 1990 13h 25m 28.00 \pm 11.04s
11.718 S \pm 53.0km 78.239 W \pm 73.7km
DEPTH = 10.0km (geophysicist)
OFF COAST OF PERU (114)
Felt (III) at Limo.

PT10 1.29 106 iPd 25 52.50 0.5
i(S) 26 00.00
NNA 1.39 101 iPc 25 53.00 -0.5
eS 26 00.00
PT08 1.67 98 iPc 25 56.90 -0.9
PT02 2.14 125 iPd 26 03.20 -1.1
PT06 2.81 139 iP 26 13.60 -0.1
iS 26 41.00
PT03 3.28 134 iPc 26 20.10 -0.5
eS 26 48.60
ZOBO 10.81 116 P 28 09.00 2.5
S.D. = 1.5 on 7 of 7 obs.

? MAY 03, 1990 14h 02m 37.65 \pm 5.00s
59.011 N \pm 43.3km 5.932 E \pm 9.7km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 1.3 (BER).

KMY 0.41 300 iP 02 45.92 0.0
eS 02 50.87
BLS1 0.60 50 eP 02 49.80 0.0

ODD1 0.97 21 eS 02 57.28
eP 02 56.00 -0.1
eS 03 08.01
HYA 2.17 3 eP 03 14.40 0.2
eS 03 40.65
S.D. = 0.2 on 4 of 4 obs.

* MAY 03, 1990 14h 26m 45.43 \pm 1.16s
17.078 N \pm 14.7km 62.585 W \pm 17.2km
DEPTH = 33.0km (normal)

LEEWARD ISLANDS (92)

SKI 0.29 330 eP 26 53.16 0.0
eS 27 04.57
MGH 0.50 135 eP 26 59.00 2.9X
S 27 15.70
BPA 0.70 93 eP 26 58.50 -0.3
S 27 14.10
SEG 1.23 123 eP 27 07.00 0.6
PAG 1.36 140 eP 27 08.80 0.5
S 27 33.50
BBL 1.88 145 eP 27 15.00 -0.8
S.D. = 0.8 on 5 of 6 obs.

% MAY 03, 1990 17h 54m 56.60 \pm 1.69s
47.251 N \pm 10.6km 0.836 W \pm 20.0km
DEPTH = 10.0km (geophysicist)

FRANCE (538)

ML 3.0 (LDG).

LPF 0.79 350 Pg 55 11.60 -0.4
Sg 55 20.90
MFF 0.80 144 Pg 55 12.00 -0.2
GRR 1.14 359 Pg 55 17.80 -0.1
Sg 55 31.50
LDF 1.43 19 Pg 55 22.80 0.3
Sg 55 40.40
FLN 1.53 9 Pg 55 24.50 0.5
Sg 55 43.40
LSF 1.91 121 Pg 55 32.30 2.8
Sg 55 57.20
TCF 2.30 114 Pn 55 39.50 4.3X
Sg 56 07.70
RJF 2.54 139 Pg 55 43.00 4.5X
Sg 56 16.40
MAF 2.56 113 Pn 55 38.20 -0.6
Pg 55 43.50
Sg 56 14.90
LFF 2.56 154 Pg 55 45.60 6.8X
Sg 56 19.60
BGF 2.62 104 Pg 55 45.40 5.7X
Sg 56 16.90
AVF 2.90 98 Pn 55 42.70 -1.0
Pg 55 49.60
Sg 56 24.00
LPO 2.93 150 Pg 55 52.40 8.3X
Sg 56 30.50
SSF 2.97 92 Pg 55 52.30 7.7X
Sg 56 26.40
CAF 3.08 138 Pn 55 45.20 -1.0
Pg 55 54.50
Sg 56 33.50
LOR 3.20 88 Pn 55 47.50 -0.4
Pg 55 55.80
Sg 56 34.90
SMF 3.26 99 Pg 55 55.70 6.9X
Sg 56 35.10
LBF 3.30 93 Pg 55 57.60 8.2X
Sg 56 36.00
S.D. = 1.2 on 10 of 18 obs.

MAY 03, 1990 17h 56m 20.69 \pm 0.67s
38.939 N \pm 6.0km 22.043 E \pm 4.6km
DEPTH = 12.7 \pm 3.1 km

GREECE (364)

ML 3.1 (THE).

AGG 0.24 70 ePg 56 26.40 0.4
NEO 0.99 68 eP 56 40.20 1.0
eS 56 57.30
LIT 1.21 16 ePbc 56 43.30 0.3
eSb 57 02.60
IGT 1.45 295 ePb 56 45.80 -0.9
eSb 57 06.40
PAIG 1.61 52 ePnd 56 48.60 -0.2
eSn 57 11.50
ITM 1.76 183 eP 56 51.00 -0.1

THE 1.83 22 ePn 56 51.60 -0.5
KEK 1.90 295 eP 56 54.00 0.8
FNA 1.91 345 ePnd 56 53.20 -0.1
GRG 2.03 8 ePn 56 55.10 0.0
eSn 57 25.20

OUR 2.05 46 ePn 56 54.30 -0.9
eSn 57 23.10
TPE 2.07 311 ePn 56 56.00 0.4
SOH 2.13 28 ePnd 56 56.80 0.3
eSn 57 25.30
KNT 2.32 16 ePnd 56 59.20 0.1
eSn 57 31.30
OHR 2.37 337 ePn 57 01.50 1.6
BERA 2.39 318 ePn 57 04.50 4.4X
VAY 2.41 9 ePn 57 01.70 1.2
SRS 2.48 28 ePn 57 01.00 -0.4
eSn 57 33.30
TIR 2.93 326 ePn 57 15.00 7.3X
MMB 2.94 25 iPd 57 08.00 0.0
SKO 3.06 352 ePn 57 08.00 -1.7
RZN 3.42 36 iP 57 15.00 0.0
S.D. = 0.8 on 20 of 22 obs.

? MAY 03, 1990 18h 41m 13.45 \pm 2.89s
37.558 N \pm 15.6km 15.896 E \pm 25.1km
DEPTH = 33.0km (normal)

SICILY (398)

ATN 0.69 330 Pc 41 27.00 0.2
eSn 41 37.10
MEU 0.90 240 Pc 41 29.80 0.0
eSn 41 39.90
MNO 1.02 292 P 41 31.60 -0.1
eSn 41 43.20
GIB 1.54 287 P 41 39.00 0.0
eSn 41 57.00
MGR 2.59 354 P 41 53.80 -0.1
eSn 42 23.50
S.D. = 0.2 on 5 of 5 obs.

MAY 03, 1990 19h 14m 26.05 \pm 0.28s
0.439 S \pm 4.7km 132.820 E \pm 7.8km
DEPTH = 22.7km (5 depth phases)
5.2mb (16 obs.) 4.3msz (3 obs.)

WEST IRIAN REGION (196)

MTN 12.44 188 eP 17 23.00 -1.7
eS 19 39.00
KNA 15.73 195 iPd 18 07.00 -1.0
0.7s 352.00nm 5.7mb
eS 20 49.00
PMG 16.82 122 eP 18 12.20 -9.7X
KKM 17.78 291 ePd 18 35.50 1.5
PGP 18.17 320 eP 18 52.50 13.8X
GUA 18.34 40 eP 18 36.00 -4.8X
GUMO 18.35 40 eP 18 36.70 -4.2X
e 18 43.00
QCP 18.96 323 eP 18 32.40 -16.0X
WB5 19.38 176 eP 18 52.30 -1.2
eS 22 22.30
WRA 19.44 176 Pc 18 53.30 -0.9
0.5s 30.70nm 4.8mb
BAG 20.64 325 eP 19 09.00 1.9
eS 22 56.00
QIS 21.07 162 iPc 19 10.10 -1.1
e 19 14.00 14km
e 23 03.00
CTA 23.54 147 iPd 19 37.60 1.8
1.0s 97.00nm 5.3mb
eS 23 56.00
i 27 37.50
MBL 24.19 211 eP 19 43.40 1.4
NANU 27.69 216 iPd 20 16.30 1.6
0.5s 33.00nm 5.3mb
RMQ 30.10 151 eP 20 35.00 -1.4
IPM 32.15 279 ePd 20 56.10 1.5
MRWA 32.82 208 eP 21 00.00 -0.1
BRS 32.94 146 iPc 21 00.50 -0.8
1.0s 7.00nm 4.5mb
i 21 07.50 24km
e 25 00.00
e 29 36.00
SSE 33.25 342 eP 21 04.50 0.7
Z 22s 0.50um 4.2msz
eS 26 22.00
NJ2 34.91 339 eP 21 19.00 0.8
COO 35.02 151 eP 21 19.00 -0.2

LOE	35.38	302	iPc	21	22.00	-0.4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			</
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SDI 0.91 306 P eSg 10 54.50
10 47.10 0.1
MGR 1.19 151 P eSg 11 01.20
10 51.40 -0.2
eSg 11 08.60
S.D. = 0.3 on 5 of 5 obs.

% MAY 03, 1990 22h 13m 27.18 ± 1.23s
41.242 N ± 11.4km 14.881 E ± 17.8km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

BSS 0.45 187 P 13 36.90 0.5
eSg 13 42.60
DUI 0.53 323 P 13 38.50 0.7
eSg 13 45.90
SGO 0.76 154 P 13 41.90 0.0
eSg 13 53.40
SDI 0.92 300 P 13 44.10 -0.8
eSg 13 58.00
MGR 1.22 155 P 13 49.50 -0.3
eSg 14 06.00
S.D. = 0.8 on 5 of 5 obs.

* MAY 03, 1990 22h 25m 38.76 ± 2.99s
34.517 N ± 23.5km 120.523 W ± 11.4km
DEPTH = 5.0km (geophysicist)
SOUTHERN CALIFORNIA (43)
ML 2.5 (BRK).

BCH 0.76 28 iPd 25 54.10 0.1
ABL 1.12 72 eP 26 00.30 -0.1
PHAM 1.32 4 eP 26 03.00 -0.6
PRI 1.62 356 eP 26 08.40 0.2
PRS 1.94 339 eP 26 12.90 0.2
LLA 2.12 351 eP 26 15.00 0.3
SAO 2.37 342 eP 26 18.40 -0.5
FRI 2.56 15 eP 26 21.80 0.3
eS 26 50.40
KVN 4.92 23 eP 27 05.00 9.6X
S.D. = 0.4 on 8 of 9 obs.

% MAY 03, 1990 22h 34m 06.41 ± 0.87s
41.165 N ± 10.6km 14.766 E ± 17.3km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

BSS 0.38 175 P 34 14.30 0.2
eSg 34 21.00
DUI 0.55 335 P 34 17.60 0.1
eSg 34 26.10
SGO 0.73 146 P 34 21.20 0.4
eSg 34 31.30
SDI 0.90 307 P 34 23.50 -0.1
eSg 34 37.50
MGR 1.19 149 Pc 34 28.00 -0.6
eSg 34 45.00
S.D. = 0.5 on 5 of 5 obs.

MAY 03, 1990 22h 39m 50.87 ± 0.80s
24.674 N ± 7.5km 122.521 E ± 9.1km
DEPTH = 33.0km (normal)
4.4mb (2 obs.)
TAIWAN REGION (243)

TWC 0.61 264 ePc 40 02.20 -0.9
eS 40 11.20
TWZ 0.95 296 ePc 40 08.20 0.3
eS 40 21.90
TWD 1.03 235 ePc 40 09.40 0.4
ANP 1.04 299 eP 40 10.00 0.7
eS 40 23.00
TWK 2.33 233 eP 40 30.20 2.5X
QZH 3.58 275 Pn 40 46.00 0.6
S 41 28.50
SSE 6.50 350 eP 41 22.00 -4.7X
Z 10s 0.50um
N 12s 0.40um
sP 41 36.00
NJ2 8.03 337 Pc 41 46.80 -1.3
N 10s 0.40um
E 10s 0.60um
GYA 14.42 280 eP 43 10.20 -4.6X
TIY 15.59 329 eP 43 29.00 -0.8
Z 14s 0.70um
N 16s 0.80um
BTO 19.02 330 eP 44 16.50 3.8X

N 13s 0.30um
E 13s 0.60um
CN2 19.23 6 P 44 16.40 1.3
LZH 19.69 310 eP 44 16.80 -3.6X
2.0s 33.00nm 4.3mb
Z 12s 0.30um
E 10s 0.20um
WB5 45.76 164 eP 48 10.90 -0.2
WRA 45.82 164 Pc 48 11.40 -0.2
0.9s 5.90nm 4.5mb
S.D. = 0.9 on 10 of 15 obs.

% MAY 03, 1990 23h 14m 50.50 ± 1.08s
41.219 N ± 10.8km 14.846 E ± 17.2km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

BSS 0.43 184 P 14 59.50 0.2
eSg 15 06.00
DUI 0.53 327 P 15 01.50 0.3
eSg 15 10.50
SGO 0.75 152 P 15 05.50 0.4
eSg 15 16.20
SDI 0.91 302 P 15 07.70 -0.3
eSg 15 21.50
MGR 1.21 153 P 15 12.40 -0.6
eSg 15 29.00
S.D. = 0.6 on 5 of 5 obs.

MAY 04, 1990 00h 19m 33.39 ± 0.56s
43.073 N ± 7.2km 0.651 W ± 4.3km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
MD 1.0 (STR).

ATE 0.04 290 Pg 19 35.35 -0.2
Sg 19 37.18
ESCF 0.06 84 Pg 19 35.51 -0.1
Sg 19 37.33
ISSF 0.11 247 Pg 19 37.11 0.7
Sg 19 39.75
MADF 0.14 301 Pg 19 36.11 -0.7
Sg 19 38.82
LHE 0.16 172 Pg 19 37.62 0.5
OGE 0.16 54 Pg 19 36.29 -0.8
JAU 0.21 99 Pg 19 37.51 -0.5
BOH 0.27 277 Pg 19 38.41 -0.6
EPF 0.73 93 Pg 19 47.50 -0.2
Sg 19 56.60
LFF 2.12 28 Pg 20 11.30 2.0
Sg 20 38.10
S.D. = 1.0 on 10 of 10 obs.

% MAY 04, 1990 00h 37m 55.66 ± 1.00s
41.173 N ± 10.0km 14.855 E ± 16.0km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

BSS 0.38 185 P 38 03.70 0.2
eSg 38 10.20
DUI 0.57 329 P 38 07.50 0.2
eSg 38 15.50
SGO 0.70 151 P 38 09.80 0.3
eSg 38 20.80
SDI 0.95 305 P 38 13.50 -0.2
eSg 38 29.00
MGR 1.16 153 P 38 17.00 -0.4
eSn 38 33.30
S.D. = 0.4 on 5 of 5 obs.

* MAY 04, 1990 01h 22m 29.01 ± 0.78s
39.621 N ± 16.6km 70.607 E ± 13.9km
DEPTH = 33.0km (normal)
4.1mb (10 obs.)
TAJIK SSR (715)
Felt (V) at Dushanbe.

MAIO 9.38 253 eP 24 46.00 1.0
eS 26 35.00
GKN 16.41 131 P 26 20.00 1.4
0.8s 40.00nm 4.6mb
GUN 17.22 128 P 26 34.20 5.2X
0.8s 43.00nm 4.6mb
GBA 26.61 165 Pd 28 05.30 -0.9
0.7s 1.40nm 3.7mb
CHTO 32.05 122 e(P) 28 54.10 -0.8
0.5s 0.38nm 3.6mb

HFS 40.45 320 ePKP 30 06.70 1.0
0.6s 1.20nm 3.0mb
NB2 41.73 321 P 30 17.80 1.6
0.8s 2.00nm 3.9mb
AVF 48.19 302 eP 31 06.70 -1.3
0.8s 2.70nm 4.3mb
MAF 48.88 301 eP 31 12.60 -0.7
0.8s 3.35nm 4.0mb
TCF 49.09 301 eP 31 13.80 -1.2
0.6s 2.25nm 4.0mb
MBC 64.24 3 eP 33 10.50 8.1X
YKA 78.15 2 eP 34 32.50 6.6X
0.6s 0.90nm 4.0mb
S.D. = 1.4 on 9 of 12 obs.

? MAY 04, 1990 02h 00m 01.04 ± 1.41s
85.312 N ± 23.3km 91.040 E ± 16.1km
DEPTH = 10.0km (geophysicist)
4.0mb (4 obs.)
NORTH OF SEVERNAYA ZEMLYA (651)

DAG 15.55 306 iPc 03 41.20 -0.2
0.8s 7.46nm 4.0mb
MBC 18.07 23 eP 04 15.00 1.8
KEV 18.77 257 eP 04 28.00 6.3X
SUF 25.76 254 eP 05 32.00 -0.9
FBA 27.97 51 eP 05 54.00 1.0
1.0s 1.00nm 3.6mb
NUR 28.07 254 eP 05 38.00 -15.9X
YKA 31.98 22 eP 06 27.20 -1.5
0.9s 1.90nm 4.0mb
EKA 35.47 281 Pc 07 00.20 1.3
1.1s 2.60nm 4.0mb
KRA 38.82 257 eP 07 27.80 0.7
RSSD 50.64 14 eP 09 01.00 -1.0
ALO 59.75 17 eP 10 06.80 -1.3
S.D. = 1.4 on 9 of 11 obs.

* MAY 04, 1990 02h 09m 50.14 ± 0.94s
50.696 N ± 12.0km 5.701 E ± 6.7km
DEPTH = 10.0km (geophysicist)
BELGIUM (541)
ML 2.7 (LDG).

ENN 0.16 63 iPg 09 53.20 -0.6
0.5s 35.00nm
iSg 09 57.00
MEM 0.21 114 iPc 09 55.71 1.0
SNF 0.92 259 iP 10 09.58 1.9
iS 10 25.60
DOU 0.93 230 P 10 11.10 3.2X
iS 10 27.90
LOR 3.64 200 Pn 10 47.60 -0.1
SSF 3.92 203 Pn 10 51.70 0.1
FLN 4.45 247 Pn 10 58.70 -0.5
Sn 11 46.80
BGF 4.55 206 Pn 11 00.00 -0.6
GRR 4.86 244 Pn 11 03.80 -1.1
S.D. = 1.2 on 8 of 9 obs.

MAY 04, 1990 02h 59m 23.86 ± 2.26s
1.481 N ± 4.9km 123.585 E ± 6.4km
DEPTH = 30.0 ± 17.0 km
5.0mb (12 obs.) 4.4Msz (3 obs.)
MINAHASSA PENINSULA (265)

DAV 5.91 20 eP 00 52.00 0.3
TSM 6.14 296 iPd 00 55.20 0.2
KKM 8.64 302 eP 01 30.00 0.0
KNA 17.87 164 eP 03 32.60 0.6
OIZ 22.03 323 eP 04 21.70 3.9X
N 13s 1.60um
eS 08 19.00
sS 08 25.00
SS 08 57.00
IPM 22.73 278 ePd 04 26.00 1.2
MBL 22.80 189 eP 04 23.80 -1.6
GZH 23.67 336 eP 04 37.00 3.2X
N 13s 1.10um
E 13s 1.40um
WB5 23.72 154 eP 04 34.00 -0.3
WRA 23.76 154 Pc 04 34.60 -0.2
0.7s 37.60nm 5.0mb
GUA 24.27 59 eP 04 19.70 -20.0X
NANU 25.15 198 eP 04 47.00 -1.1
0.3s 9.00nm 4.9mb
PMG 25.85 115 eP 04 54.00 -0.7

04d 03h

OIS 26.94 145 iPc 05 04.20 -0.6
0.8s 40.00nm 5.1mb
CHG 29.67 307 ePc 05 29.80 0.4
0.9s 12.60nm 4.7mb
CHTO 29.67 307 eP 05 29.00 -0.4
GYA 29.69 328 P 05 36.20 6.5X
N 15s 1.30um
E 15s 0.70um
S 10 30.00
CD2 34.77 329 P 06 14.00 0.1
Z 20s 0.50um 4.3msz
S 11 44.00
XAN 35.18 339 P 06 18.00 0.7
N 14s 1.20um
S 11 50.00
MAT 37.42 20 eP 06 35.00 -1.2
1.6s 60.00nm 5.2mb
Z 20s 0.71um 4.5msz
(S) 12 18.00
TIY 37.49 345 Pd 06 37.60 0.8
Z 16s 0.80um 4.6mszX
N 12s 0.80um
S 12 29.00
SHL 38.81 311 iP 06 48.00 -0.2
BJI 38.97 351 eP 06 49.00 -0.1
1.0s 16.00nm 4.7mb
Z 16s 0.35um 4.3mszX
N 15s 1.02um
eS 12 44.00
eSS 15 32.00
LZH 38.99 334 P 06 50.70 1.1
2.0s 47.00nm 4.9mb
Z 14s 1.20um 4.9mszX
N 15s 0.70um
E 13s 0.60um
PP 08 22.50
eS 12 46.00
eSS 15 29.00
BRS 40.16 138 iPc 06 59.00 -0.2
0.8s 4.00nm 4.2mb
SNY 40.17 360 eP 06 57.20 -1.7
Z 22s 0.80um 4.5msz
N 24s 0.80um
HHC 40.67 346 eP 07 04.30 1.0
BTO 40.83 344 eP 07 03.50 -1.1
N 15s 0.80um
E 12s 0.30um
eS 13 13.00
BWA 42.65 149 eP 07 21.80 2.3
GTA 43.53 333 Pc 07 28.00 1.2
Z 15s 0.90um 4.8mszX
E 13s 0.50um
CAN 43.65 149 eP 07 28.30 0.7
GUN 44.61 310 P 07 35.80 -0.2
0.6s 23.00nm 5.2mb
PKI 44.81 309 P 07 43.80 6.2X
0.6s 23.00nm 5.2mb
DMN 45.07 309 P 07 40.00 0.5
KOD 46.64 283 eP 07 51.80 -0.3
HYB 46.99 293 eP 07 54.50 -0.1
GBA 47.20 287 Pc 07 55.20 -1.0
0.8s 6.20nm 4.7mb
QUE 60.73 304 eP 09 34.50 -1.1
MAIO 68.41 309 iPc 10 25.00 -0.3
eS 19 32.00
MAW 80.58 200 iP 11 35.10 0.5
KEV 90.91 340 eP 12 33.00 7.3X
SPA 91.47 180 eP 12 29.10 0.6
1.5s 22.73nm 5.3mb
SUF 92.11 333 eP 12 30.00 -1.3
PEL 145.77 158 ePKP 19 02.80 1.0
ZOBO 161.32 143 PKP 19 25.00 0.9
S.D. = 0.9 on 39 of 45 obs.

* MAY 04, 1990 04h 00m 45.33±1.05s
38.805 N ± 7.5km 31.297 E ± 10.7km
DEPTH = 10.0km (geophysicist)

TURKEY (366)

ALT 0.96 285 iPg 01 02.70 -0.9
iSg 01 15.00
BCK 1.45 203 ePn 01 11.30 -0.4
KHL 1.47 251 ePn 01 11.00 -1.0
BBTK 1.54 47 eP 01 12.00 -0.9
iS 01 38.00
GPA 1.67 333 iPn 01 14.10 -0.6
YLV 2.30 320 iPn 01 23.40 -0.6

ELL 2.33 209 ePn 01 26.00 1.6
HRT 2.37 329 ePn 01 24.50 -0.4
GBZT 2.44 325 eP 01 28.30 2.5
KCT 2.69 303 iPn 01 36.40 6.9X
ISK 2.84 323 ePn 01 33.00 1.5
EZN 3.99 286 ePn 01 47.00 -0.8
S.D. = 1.4 on 11 of 12 obs.

& MAY 04, 1990 04h 03m 08.09s
39.527 N 111.101 W
DEPTH = 1.3km
UTAH (478)
<SLC-P>. CL 3.0 (SLC).

DAU 0.89 352 eP 03 25.00 -0.9
MSU 1.31 220 eP 03 32.00 -1.4
DUG 1.48 297 eP 03 35.30 -0.7
3 obs. associated

? MAY 04, 1990 04h 17m 26.68±2.73s
17.356 S ± 38.0km 72.638 W ± 15.2km
DEPTH = 33.0km (normal)
4.4mb (2 obs.)
NEAR COAST OF PERU (115)
Felt (11) at Arequipo.

ARE 1.41 51 iPd 17 49.50 -1.1
i(S) 18 01.80
LPB 4.42 80 P 18 40.00 6.4X
ZOBO 4.46 77 eP 18 35.80 1.5
Z 20s 0.09um
i 18 39.00
LR 19 12.00
CCH 6.20 91 P 19 04.70 6.0X
i 19 34.00
NNA 6.71 322 eP 19 06.50 0.9
0.7s 18.49nm 5.0mb
eS 20 23.70
SIV 11.17 85 P 20 07.00 -0.2
YKA 86.15 342 eP 30 04.20 -1.2
0.5s 0.30nm 3.8mb
S.D. = 1.7 on 5 of 7 obs.

? MAY 04, 1990 04h 28m 49.21±2.43s
12.057 N ± 27.4km 92.592 E ± 13.4km
DEPTH = 33.0km (normal)
4.1mb (2 obs.)
ANDAMAN ISLANDS REGION (703)

CHG 9.09 42 eP 31 03.00 1.8
CHTO 9.09 42 eP 31 00.30 -0.9
SHL 13.46 357 eP 31 58.60 -1.9
iS 34 19.00
HYB 14.58 293 eP 32 15.00 -0.2
GBA 14.86 278 Pd 32 19.20 0.5
0.5s 4.50nm 4.1mb
DMN 16.99 337 P 32 46.80 0.5
GKN 17.53 336 P 32 54.20 1.3
QUE 29.84 311 eP 35 08.30 12.3X
NB2 75.36 330 P 40 29.90 -1.2
0.7s 1.30nm 4.0mb
EKA 83.44 325 P 41 27.00 12.4X
1.0s 2.40nm
S.D. = 1.5 on 8 of 10 obs.

% MAY 04, 1990 05h 51m 21.98±1.40s
1.083 S ± 9.9km 78.298 W ± 28.4km
DEPTH = 33.0km (normal)
ECUADOR (107)

TUNG 0.36 204 iP 51 30.80 -0.1
S 51 30.20
VC1 0.45 347 iP+ 51 30.80 -1.6
eS 51 36.00
GECU 0.77 8 eP 51 36.20 -0.7
eS 51 45.60
QUR 0.93 346 eP 51 39.60 0.5
eS 51 51.70
GGP 0.95 342 eP 51 40.60 1.1
eS 51 52.80
CAYA 1.20 15 P 51 43.60 0.6
S.D. = 1.2 on 6 of 6 obs.

MAY 04, 1990 06h 57m 41.86±0.34s
38.926 N ± 3.5km 15.806 E ± 3.0km
DEPTH = 105.6 ± 5.7 km
3.5mb (3 obs.)

SICILY (398)

MSI 0.75 195 Pd 58 00.00 -0.4
ATN 0.81 200 Pd 57 59.90 -1.2
eSg 58 13.60
TDS 0.84 29 Pd 58 01.80 0.5
iSg 58 14.50
MGR 1.23 351 Pc 58 05.70 0.2
eSg 58 23.50
ORI 1.24 23 Pd 58 05.90 0.2
eSg 58 24.50
MNO 1.32 222 Pd 58 07.10 0.2
eSg 58 24.00
SGO 1.67 347 P 58 12.20 1.3
GIB 1.68 237 Pc 58 10.80 -0.4
eSg 58 32.50
MEU 1.95 201 P 58 14.10 -0.5
BSS 2.01 338 P 58 16.00 0.7
LCI 2.17 49 Pc 58 18.40 1.0
eSg 58 44.10
BRT 2.23 28 Pd 58 17.10 -1.0
eSg 58 43.30
BAI 2.34 20 P 58 19.00 -0.5
DUI 2.92 340 P 58 28.50 1.0
SDI 3.17 332 P 58 31.50 0.7
KEK 3.19 75 eP 58 31.60 0.5
eS 59 05.60
SRN 3.39 72 ePn 58 34.00 0.3
TPE 3.52 66 ePn 58 34.40 -1.2
AZI 3.55 330 P 58 35.50 -0.5
IGT 3.57 79 ePgD 58 36.70 0.5
TIR 3.94 51 iPnd 58 40.70 -0.6
ULC 4.01 40 ePn 58 40.80 -1.5
eSn 59 20.00
LACI 4.03 47 ePn 58 42.50 0.0
BDV 4.07 33 ePn 58 41.40 -1.6
eSn 59 22.00
HCY 4.07 29 ePn 58 41.20 -1.8
eSn 59 23.50
SDA 4.18 41 ePn 58 43.80 -0.7
TTG 4.38 36 ePn 58 46.30 -0.9
eSn 59 32.80
OHR 4.41 59 iPn 58 48.30 0.5
BRY 4.48 27 ePn 58 47.50 -1.3
eSn 59 34.00
FNA 4.67 65 ePbd 58 52.30 0.9
ASS 4.77 331 P 58 52.50 -0.3
PVY 4.84 39 ePn 58 53.80 0.0
eSn 59 42.00
ARV 5.05 336 P 58 58.00 1.4
AGG 5.09 87 ePbc 58 58.80 1.7
ITM 5.14 108 eP 58 58.00 0.2
PLE 5.17 30 ePn 58 58.60 0.4
eSn 59 50.00
LIT 5.30 75 ePbc 59 00.50 0.4
GRG 5.46 66 ePnc 59 02.50 0.2
VAY 5.71 63 ePn 59 05.60 0.0
THE 5.77 71 ePnc 59 06.20 -0.3
NEO 5.78 84 eP 59 07.00 0.3
KNT 5.88 65 ePnc 59 08.10 0.0
VLI 6.06 109 iPc 59 12.00 1.5
PAIG 6.18 78 ePnc 59 11.10 -1.0
ATH 6.28 96 eP 59 14.50 1.0
eS 00 20.00
KKB 6.28 60 iPc 59 14.00 0.4
SRS 6.36 67 ePnc 59 13.80 -0.9
OUR 6.47 75 ePnd 59 15.80 -0.2
MMB 6.62 64 iPd 59 19.00 0.8
VTS 6.71 55 iP 59 20.00 0.5
PTJ 6.97 1 eP 59 50.50 27.5X
PGB 7.31 58 iP 59 27.00 -0.6
RZN 7.35 65 iPd 59 29.00 0.7
VAM 7.57 115 eP 59 30.00 -1.1
ALN 8.11 73 eP 59 37.80 -0.7
HFS 21.27 357 eP 02 21.20 0.3
0.4s 1.50nm 3.7mb
NB2 22.32 354 P 02 31.80 0.5
0.7s 1.60nm 3.5mb
YKA 71.37 338 eP 08 50.70 -1.0
0.4s 0.20nm 3.3mb
S.D. = 0.9 on 57 of 58 obs.

& MAY 04, 1990 07h 09m 58.40s
60.907 N 150.732 W
DEPTH = 40.4km
KENAI PENINSULA, ALASKA (14)
<AGS-P>. ML 3.5 (PMR).

NKA	0.30	237	iP	10	08.32	1.7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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05d 05h

HYB 70.87 274 eP 57 28.80 0.7
EKA 72.56 350 Pc 57 40.70 3.0X
0.6s 3.50nm 4.5mb
KSP 73.34 337 eP 57 42.50 0.2
CLL 73.69 339 eP 57 44.00 -0.3
1.5s 17.00nm 4.8mb
BRG 73.88 338 e(P) 57 48.20 2.8X
GBA 74.45 272 Pd 57 49.50 0.3
1.0s 8.20nm 4.7mb
PRU 74.56 337 P 57 49.50 0.1
KHC 75.59 338 Pd 57 56.60 1.3
1.1s 6.00nm 4.5mb
MEM 75.80 343 P 57 57.70 1.3
DOU 76.54 344 P 58 03.50 2.9X
KBA 77.56 337 eP 58 07.50 0.9
1.1s 19.80nm 5.1mb

CDF 77.65 341 eP 58 07.10 0.2
HAU 78.23 342 eP 58 10.10 0.1
LOR 79.40 343 eP 58 16.30 -0.1
1.0s 6.00nm 4.5mb
LBF 79.65 343 eP 58 17.80 0.0
SSF 79.66 343 eP 58 18.00 0.2
AVF 79.95 343 eP 58 19.60 0.3
1.1s 6.10nm 4.5mb
SMF 80.01 343 eP 58 19.90 0.3
BGF 80.27 344 eP 58 21.60 0.6
LPL 80.53 341 eP 58 25.50 2.8
0.9s 6.55nm 4.6mb
LPG 80.54 341 eP 58 26.00 3.1X
1.2s 14.90nm 4.9mb
TCF 80.64 344 eP 58 23.40 0.4
MAF 80.64 344 eP 58 24.00 1.0
OHR 80.97 330 eP 58 24.00 -0.9
CAF 81.98 344 eP 58 31.20 1.1
1.0s 6.00nm 4.6mb
LFF 82.19 345 eP 58 32.00 0.9
LPO 82.37 344 eP 58 32.90 0.8
S.D. = 1.0 on 49 of 57 obs.

? MAY 05, 1990 05h 51m 51.98 ± 0.94s
51.620 N ± 15.3km 158.642 E ± 20.5km
DEPTH = 33.0km (normal)
4.6mb (12 obs.)
NEAR EAST COAST OF KAMCHATKA (218)

MAT 20.93 232 iPd 56 35.10 1.0
1.3s 69.23nm 4.9mb
INK 35.58 36 eP 58 43.00 -4.7X
pP 59 02.00 78kmX
SOD 55.98 340 eP 01 28.00 -0.9
CHTO 56.73 258 eP 01 36.20 1.4
0.7s 5.56nm 4.7mb
KVN 56.80 68 eP 01 36.10 0.7
SUF 60.01 337 eP 01 56.00 -1.2
NUR 62.28 336 eP 02 12.00 -0.5
UPP 64.51 339 iP 02 26.20 -0.9
NB2 64.70 343 P 02 27.10 -1.4
0.7s 3.70nm 4.6mb
HFS 65.07 342 eP 02 29.60 -1.2
0.6s 5.40nm 4.8mb
HYB 70.42 273 eP 03 05.50 0.6
EKA 72.35 349 Pc 03 18.00 2.1
0.5s 3.80nm 4.6mb
GBA 74.01 272 Pc 03 25.10 -1.0
0.5s 6.30nm 4.9mb
PRU 74.27 337 eP 03 27.00 -0.1
WB5 74.30 204 eP 03 25.20 -2.4
WRA 74.37 204 Pc 03 37.10 9.1X
0.8s 2.00nm 4.2mb
KHC 75.30 337 P 03 33.70 0.6
MEM 75.53 342 P 03 34.80 0.5
KBA 77.26 336 eP 03 45.00 0.6
0.8s 9.00nm 4.9mb
i 03 47.50
CDF 77.38 341 eP 03 45.00 0.1
LOR 79.14 343 eP 03 56.50 2.0
0.9s 4.10nm 4.4mb
AVF 79.69 343 eP 03 59.90 2.5X
0.8s 3.35nm 4.4mb
LPL 80.26 340 eP 04 03.70 3.0X
0.9s 4.90nm 4.5mb
LPG 80.27 340 eP 04 04.00 3.1X
0.9s 4.90nm 4.5mb
MAF 80.39 343 eP 04 04.30 3.2X
S.D. = 1.3 on 19 of 25 obs.

* MAY 05, 1990 05h 54m 43.42 ± 1.44s
51.649 N ± 23.5km 159.138 E ± 24.0km
DEPTH = 33.0km (normal)
4.7mb (17 obs.)
OFF EAST COAST OF KAMCHATKA (219)

MAT 21.20 233 iPd 59 26.40 -1.8
1.1s 58.23nm 4.9mb
CN2 23.81 264 eP 59 52.80 -1.1
SNY 26.04 262 eP 00 14.00 -1.1
INK 35.38 36 eP 01 36.00 -1.4
MBC 38.60 22 eP 02 04.50 0.1
XAN 39.93 264 P 02 15.50 -0.5
LZH 41.75 270 P 02 31.80 0.7
1.5s 33.00nm 4.8mb
YKA 44.63 41 eP 03 04.50 10.6X
1.0s 1.70nm
CD2 45.25 265 P 03 00.20 0.9
GYA 46.62 258 P 03 11.00 0.7
KMI 50.00 260 Pc 03 37.50 0.8
DAG 51.85 359 ePd 03 49.30 -0.5
0.4s 11.02nm 5.2mb
SHL 56.41 270 iP 04 23.50 -0.6
LOE 56.43 255 eP 04 26.40 2.3
CHTO 57.04 258 eP 04 27.70 -0.8
0.8s 8.60nm 4.8mb
SUF 60.10 337 eP 04 49.00 -0.3
NUR 62.37 337 eP 05 03.00 -1.6
UPP 64.59 340 iP 05 18.40 -0.7
NB2 64.76 343 P 05 18.70 -1.6
0.7s 5.60nm 4.8mb
HFS 65.14 342 ePKP 05 21.00 -1.7
1.2s 21.40nm 5.1mb
HYB 70.73 274 eP 05 57.00 -1.2
EKA 72.38 349 P 06 05.00 -2.5
POO 72.80 278 eP 06 11.50 0.9
CLL 73.49 339 eP 06 14.00 0.0
GBA 74.32 272 Pd 06 19.50 0.2
0.9s 5.20nm 4.5mb
PRU 74.36 337 eP 06 20.00 0.9
WB5 74.45 204 eP 06 15.00 -4.9X
WRA 74.52 204 Pc 06 29.80 9.5X
1.1s 4.20nm 4.3mb
KHC 75.39 337 Pd 06 26.30 1.2
1.1s 6.00nm 4.5mb
KBA 77.36 337 eP 06 37.00 0.7
0.9s 20.00nm 5.1mb
i 06 38.20
CDF 77.45 341 eP 06 37.40 0.7
LOR 79.20 343 eP 06 46.60 0.4
0.7s 4.40nm 4.6mb
SSF 79.47 343 eP 06 48.10 0.5
0.7s 2.75nm 4.4mb
AVF 79.76 343 eP 06 49.70 0.5
0.8s 4.70nm 4.5mb
LPG 80.34 341 eP 06 54.10 1.4
1.0s 9.00nm 4.7mb
TCF 80.44 344 eP 06 53.60 0.7
0.7s 2.20nm 4.3mb
MAF 80.44 344 eP 06 54.10 1.2
0.7s 3.30nm 4.4mb
CAF 81.79 344 eP 07 01.30 1.3
1.1s 8.55nm 4.7mb
LPO 82.17 344 eP 07 03.20 1.3
S.D. = 1.2 on 36 of 39 obs.

* MAY 05, 1990 06h 11m 13.72 ± 0.69s
40.744 N ± 7.2km 15.762 E ± 5.6km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

SGO 0.39 242 Pc 11 22.60 0.9
eSg 11 29.60
MGR 0.63 195 P 11 24.90 -1.4
eSg 11 35.00
BSS 0.73 274 P 11 29.00 1.0
eSg 11 40.60
BAI 0.92 66 P 11 32.00 0.8
eSg 11 45.00
BRT 1.10 83 P 11 34.00 -0.4
eSg 11 48.50
TDS 1.17 158 P 11 36.20 0.6
eSg 11 52.30
DUI 1.34 313 P 11 38.50 0.0
SDI 1.75 304 P 11 43.00 -1.4
eSg 12 08.50
S.D. = 1.2 on 8 of 8 obs.

* MAY 05, 1990 06h 14m 02.66 ± 0.97s
13.778 N ± 10.3km 120.723 E ± 12.1km
DEPTH = 139.9 ± 9.9 km
4.3mb (8 obs.)

MINDORO, PHILIPPINE ISLANDS (250)

CVP 4.04 15 eP 15 04.00 0.0
PPR 4.43 206 iPd 15 09.00 -0.2
iS 16 00.00
CHTO 21.49 286 eP 18 41.90 0.5
1.0s 6.75nm 4.0mb
SHL 29.51 298 iP 19 55.00 -1.2
GUN 35.33 299 P 20 47.30 0.5
PKI 35.63 298 P 20 49.40 0.1
0.4s 11.00nm 5.0mb
DMN 35.90 298 P 20 51.80 0.3
0.5s 11.00nm 4.9mb
GKN 36.41 299 P 20 55.60 0.0
0.5s 9.00nm 4.8mb
GBA 42.01 275 Pc 21 42.60 0.6
0.5s 2.20nm 4.1mb
MAIO 58.85 304 eP 23 49.00 -0.1
INK 83.02 21 eP 26 14.00 0.9
HFS 86.42 331 eP 26 29.50 -0.7
0.5s 1.80nm 4.2mb
NB2 87.20 333 P 26 33.00 -1.1
0.7s 1.30nm 4.0mb
YKA 92.70 22 eP 26 59.90 0.2
0.6s 0.50nm 3.9mb
S.D. = 0.7 on 14 of 14 obs.

MAY 05, 1990 07h 21m 18.00 ± 0.26s
40.744 N ± 2.2km 15.853 E ± 1.5km
DEPTH = 12.7 ± 1.8 km
4.6mb (11 obs.)
SOUTHERN ITALY (390)

Fore shock.

SGO 0.45 246 P 21 27.20 -0.1
MGR 0.65 201 Pc 21 29.50 -1.2
BSS 0.80 274 P 21 34.10 0.9
BAI 0.86 64 Pc 21 35.50 1.3
BRT 1.03 82 P 21 37.60 0.3
TDS 1.15 161 Pd 21 38.50 -0.7
DUI 1.40 312 P 21 45.90 2.7
LCI 1.65 104 P 21 50.40 3.6X
SDI 1.81 303 Pc 21 50.70 1.5
GRI 1.97 167 P 21 51.95 0.4
AZI 2.20 305 P 21 56.90 2.1
LPI 2.36 198 P 21 57.02 -0.1
HVAR 2.47 10 ePn 21 59.30 0.7
i 22 08.20
MSI 2.55 185 P 21 59.80 0.1
RDP 2.57 294 P 22 01.50 1.4
ATN 2.60 187 Pd 22 00.10 -0.3
RMP 2.60 295 P 22 01.80 1.3
HCY 2.61 49 ePn 22 01.00 0.3
eSn 22 41.00
BDV 2.71 54 ePn 22 02.20 0.1
eSn 22 44.00
VLO 2.79 94 iPn 22 04.20 1.1
ULC 2.83 63 ePn 22 04.10 0.3
eSn 22 46.00
MNS 2.89 306 Pd 22 07.00 2.4
BRY 2.95 42 ePn 22 06.50 1.0
eSn 22 50.00
MNO 2.95 198 P 22 06.20 0.6
SDA 3.02 64 iPnc 22 07.50 1.1
LACI 3.04 72 ePn 22 07.40 0.7
TTG 3.06 56 ePn 22 08.00 1.1
eSn 22 52.00
GIB 3.09 208 P 22 08.00 0.5
TIR 3.10 77 iPnd 22 08.00 0.6
BERA 3.11 89 ePn 22 07.90 0.2
NKY 3.13 48 ePn 22 09.20 1.1
eSn 22 54.00
KEK 3.19 108 iPc 22 09.50 0.6
TPE 3.20 97 iPnc 22 08.00 -1.0
SRN 3.29 104 iPn 22 11.00 0.8
ASS 3.33 315 Pc 22 13.90 3.0X
ARV 3.50 323 P 22 14.70 1.5
BCI 3.55 61 ePn 22 15.60 1.6
MCT 3.55 210 P 22 16.40 2.2
PHP 3.59 73 iPnc 22 14.90 0.5
PVY 3.60 58 ePn 22 16.00 1.2
eSn 23 05.00

05d 07h

	0.9s	113.00nm	6.1mb	X	KEV	29.66	8 eP	27 25.00	-0.1			PP	35 16.00	
		e	24 24.50		Z	18s	15.80um		5.7MsZ	TIY	70.92	56 P	32 40.80	3.9X
DOU	12.23	324 Pc	24 15.10	0.4			e	32 44.00		Z	14s	3.60um		5.8MsZ X
		i	24 25.20		RYD	30.21	112 ePc	27 31.50	1.0	N	14s	3.40um		
SNF	12.67	324 P	24 19.60	-0.9	MAIO	34.17	83 eP	28 05.00	0.0	E	14s	2.80um		
		i	24 31.90				e	28 26.00				pP	32 48.00	23kmX
BBTK	12.94	88 eP	24 25.00	0.6	BCAO	36.23	175 ePd	28 21.20	-1.4	FFC	71.11	327 eP	32 38.00	0.3
MFF	12.97	302 Pn	24 25.30	0.7		0.7s	92.00nm		5.7mb X		1.0s	12.00nm		5.0mb X
DBN	13.52	331 eP	24 35.00	3.3X			ic	28 38.00		BJI	71.02	53 eP	32 42.50	0.3
	4.0s	4.10nm	3.8mb	X			ic	29 48.90		Z	15s	3.79um		5.8MsZ X
Z	14s	26.60um			LKO	36.42	217 P	28 23.48	-0.8	N	14s	3.87um		
		e	24 45.00		KUK	37.35	207 eP	28 31.00	-1.0	E	14s	3.38um		
		iS	27 47.00		KOGH	37.40	207 eP	28 31.80	-0.7	KMI	71.83	72 Pd	32 47.00	4.2X
KAS	13.54	81 eP	24 33.00	0.8	DAG	39.04	348 iPc	28 52.20	6.6X		1.5s	100.00nm		5.7mb X
ETOR	13.58	276 iPc	24 35.00	2.3		0.7s	28.77nm		5.1mb X	Z	20s	1.20um		5.2MsZ X
WIT	13.60	336 eP	24 35.00	2.2		Z	20s	3.83um	5.2MsZ X	N	17s	0.80um		
		e	24 46.00			N	21s	3.15um		E	15s	0.90um		
LDF	13.80	310 Pn	24 37.30	1.8	QUE	42.40	88 eP	29 12.20	-1.9	CHG	72.84	80 eP	32 59.00	
FLN	14.09	310 Pn	24 39.60	0.3			eS	35 48.00				e	32 48.20	-0.4
LPF	14.09	307 Pn	24 39.30	0.0	KSH	45.21	71 eP	29 37.00	0.4			e	40 28.00	
GRR	14.13	308 Pn	24 39.80	-0.1	NAI	45.97	150 eP	29 36.50	-6.4X	CHTO	72.84	80 eP	32 48.20	-0.4
PPCY	14.28	109 eP	24 45.00	3.1X	NDI	50.92	83 eP	30 21.50	0.5		1.1s	5.59nm		4.6mb
CSS	14.96	107 eP	24 47.00	-3.8X		0.8s	18.66nm		5.1mb X			pP	32 52.70	14kmX
LFK	14.96	106 eP	24 47.60	-3.2X	WMQ	51.69	61 eP	30 28.00	1.3	IMA	73.21	356 eP	32 52.20	2.0
GUD	15.18	276 iPc	25 00.20	6.4X	FRB	52.03	326 eP	30 28.00	-0.9		0.7s	8.60nm		4.9mb
FAM	15.43	106 eP	24 53.30	-3.6X	POO	54.02	96 eP	30 44.00	-0.3	JSC	73.34	301 P	33 03.70	
HLW	16.64	126 eP	25 07.00	-5.4X	SCH	54.09	315 eP	30 43.00	-1.3	GYA	73.83	69 P	32 59.20	4.8X
		e(S)	27 55.00			0.5s	21.00nm		5.4mb X	N	20s	1.10um		
EPLA	16.72	275 iPc	25 17.70	4.2X	GKN	56.85	80 P	31 04.20	-0.8	E	20s	3.10um		
EVAL	17.80	267 iPc	25 33.70	6.8X	DMN	57.41	80 P	31 08.50	-0.5	FBA	73.92	353 eP	32 58.00	3.9X
BURJ	18.12	112 Pd	25 27.40	-3.6X	PKI	57.66	80 P	31 09.80	-1.1		1.0s	0.30nm		3.3mb X
SALJ	18.16	112 Pd	25 28.00	-3.6X	GUN	57.83	79 P	31 11.40	-0.7	CN2	74.70	45 eP	33 03.00	4.0X
DSI	18.20													

PNT	82.12 332 eP	33 46.00	6.6X		eS	26 06.00		CTFE	28.91 255 iPc	27 29.90	-0.8
	1.0s 48.00nm		5.5mb X	VRI	9.47 54 ePd	23 49.50	0.6		i	27 36.00	
LRM	82.22 326 eP	33 42.00	1.7	BRD	9.51 56 eP	23 48.00	-1.5	TBT	30.02 257 iP	27 39.20	-1.4
IMW	83.09 324 P	33 44.00	-1.0	BSF	9.54 321 Pn	23 47.30	-2.7		i	27 48.80	
BW06	83.35 323 eP	33 46.40	0.2		Sn	25 28.80		CHIE	30.57 255 eP	27 42.30	-3.2X
	0.8s 3.39nm		4.6mb	KRA	9.73 16 eP	23 53.80	1.3		i	27 52.90	
GLD	83.58 318 eP	33 48.40	1.0	CDF	9.74 324 Pn	23 50.20	-2.5	AKU	31.43 334 eP	27 52.00	-0.7
	1.3s 13.79nm		5.0mb		Sn	25 35.80			1.0s 64.00nm		5.5mb
MEO	83.66 311 e(P)	33 49.00	1.3	TLB	9.80 63 ePd	23 53.00	-0.5	REY	31.97 330 iP	28 00.00	2.6
GOL	83.70 318 eP	33 49.00	0.9	HAU	9.88 320 Pn	23 51.90	-2.7	SHGH	37.48 206 eP	28 42.60	-2.4
	0.9s 3.03nm		4.5mb		Sn	25 37.60		KBS	38.29 359 iP	28 52.50	1.3
GMW	84.73 333 P	33 53.00	0.2	ESEL	9.89 268 e(P)	23 54.20	-0.6	LWI	44.43 161 iPc	29 39.30	-3.3X
LON	85.08 332 P	33 54.00	-0.6	PPE	10.18 54 eP	24 01.50	2.8X	WMQ	51.73 61 eP	30 44.00	5.0X
MAT	86.68 43 (P)	34 07.00	4.3X	GBZT	10.38 85 eP	24 07.40	6.0X	Z	12s 3.19um		5.6MsZx
	1.4s 39.53nm		5.4mb X	SMF	10.43 308 Pn	24 01.70	-0.5	BOM	53.09 97 iPc	30 47.30	-2.1
Z	20s 2.48um		5.6MsZx	LBF	10.53 310 Pn	24 01.40	-2.1		eS	30 27.80	
	eS	45 08.00			Sn	25 55.90		CBM	58.05 307 P	31 20.00	-4.9X
ALQ	87.88 316 eP	34 10.00	1.2	LOR	10.75 311 Pn	24 06.00	-0.5	HVB	58.32 94 eP	31 23.00	-4.2X
	1.0s 8.75nm		5.0mb		Sn	26 00.60			1.0s 60.00nm		5.6mb
KVN	90.15 326 P	34 20.00	0.5	AVF	10.80 308 Pn	24 06.60	-0.5	GBA	59.84 98 P	31 36.00	-1.6
MIN	90.49 329 e(P)	34 23.10	2.1	SSF	10.84 309 Pn	24 07.20	-0.6		1.0s 20.20nm		5.2mb
CMB	91.97 327 eP	34 29.00	1.3		Sn	26 04.20		BUL	61.77 166 eP	31 51.10	0.3
	1.0s 0.30nm		3.6mb	CAF	10.88 297 Pn	24 08.10	-0.3	WIN	63.03 179 iPd	32 00.50	1.4
SPA	130.55 180 ePKP	40 32.00	2.8X	BGF	10.99 306 Pn	24 09.40	-0.5		1.2s 54.69nm		5.6mb
	1.0s 2.50nm			MAF	11.02 304 Pn	24 10.40	0.2	Z	20s 3.19um		5.5MsZ
	S.D. = 1.3 on 293 of 354 obs.			TCF	11.27 304 Pn	24 14.70	1.0	RSNY	63.13 307 eP	32 00.90	1.4
				RJF	11.37 298 Pn	24 15.10	0.1		0.9s 5.58nm		4.8mb
				LPO	11.41 295 Pn	24 14.90	-0.7	Z	21s 2.93um		5.4MsZ
				EBR	11.58 275 eP	24 16.00	-1.8	PNJ	64.84 303 iP	32 11.90	1.2
					eS	26 24.00		RSON	69.95 320 eP	32 44.20	1.5
					eSS	26 38.00			1.0s 22.23nm		5.2mb
				EROQ	11.64 275 iPd	24 16.40	-2.3	Z	21s 1.63um		5.3MsZ
				LSF	11.69 303 Pn	24 20.60	1.2	BLF	70.20 170 iPd	32 46.50	2.0
				EPF	11.72 286 Pn	24 21.00	1.2	FFC	71.05 327 eP	32 52.00	2.7X
				BRN	11.78 352 ePc	24 24.00	3.6X		0.8s 36.00nm		5.6mb
				LFF	11.79 296 Pn	24 22.20	1.6				

05d 07h

0.8s 30.00nm
TVO 153.70 326 ePKP 41 28.00 5.6X
0.8s 35.00nm
S.D. = 1.4 on 110 of 142 obs.

% MAY 05, 1990 07h 27m 29.29±1.80s
40.744 N ±16.3km 15.766 E ± 9.9km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

SGO 0.39 242 Pc 27 37.70 0.3
eSg 27 44.50
MGR 0.63 195 P 27 40.20 -1.7
eSg 27 51.10
BRT 1.10 83 P 27 49.60 -0.3
eSg 28 05.00
TDS 1.17 158 P 28 02.00 0.9
eSg 28 07.80
ATN 2.59 185 P 28 12.50 0.5
S.D. = 1.4 on 5 of 5 obs.

MAY 05, 1990 07h 33m 57.50±0.46s
40.648 N ± 4.5km 15.765 E ± 5.0km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

SGO 0.36 256 P 34 05.20 0.3
eSg 34 12.00
MGR 0.53 198 Pc 34 08.00 -0.3
eSg 34 16.50
TDS 1.08 156 P 34 17.00 -0.8
BRT 1.12 78 P 34 17.60 -0.8
eSg 34 33.40
DUI 1.41 316 P 34 23.90 0.6
LCI 1.70 100 P 34 28.00 0.7
SDI 1.81 306 P 34 29.90 0.9
AZI 2.21 308 P 34 35.00 0.3
ATN 2.50 185 P 34 38.10 -0.7
HVAR 2.58 11 ePn 34 41.40 1.4
eSn 35 11.40
MNO 2.84 197 P 34 44.50 0.6
MNS 2.89 308 P 34 45.50 1.0
GIB 2.98 207 P 34 46.50 0.8
ARV 3.54 325 P 34 52.50 -1.1
OHR 3.84 81 e(Pn) 34 58.70 0.7
PGD 4.40 318 P 35 03.50 -2.6
PTJ 5.25 1 eP 35 13.50 -4.5X
CTI 6.17 332 P 35 30.00 -1.0
S.D. = 1.1 on 17 of 18 obs.

* MAY 05, 1990 07h 34m 32.33±1.20s
0.018 N ± 8.1km 123.566 E ±13.0km
DEPTH = 213.4 ± 13.4 km
4.8mb (11 obs.)
MINAHASSA PENINSULA (265)

TSM 6.90 307 eP 36 11.00 -1.1
0.2s 179.60nm 5.9mb X
KKM 9.47 309 ePc 36 46.20 0.6
0.5s 136.70nm 5.5mb X
PPR 10.82 334 ePd 37 05.00 2.1
MTN 14.82 150 eP 37 51.00 -2.1
e 37 53.00
KNA 16.49 162 iPd 38 12.70 -0.8
0.5s 48.00nm 5.2mb
CVP 17.66 355 eP 38 25.50 -0.7
1.0s 86.00nm 5.2mb
MBL 21.36 190 iPd 39 03.90 0.1
0.4s 7.00nm 4.5mb
WRA 22.47 153 Pc 39 12.90 -1.7
0.5s 24.30nm 5.0mb
OIZ 23.20 325 Pd 39 22.80 1.2
NANU 23.77 199 iPc 39 27.20 0.3
0.4s 20.00nm 5.1mb
SNG 23.97 288 eP 39 29.80 0.9
OIS 25.77 143 iPd 39 46.60 1.1
WARB 26.22 174 iPd 39 50.30 0.8
0.4s 4.00nm 4.5mb
CHTO 30.55 309 iP 40 27.90 -0.2
0.8s 9.33nm 4.5mb
CD2 36.02 330 eP 41 14.80 -0.1
XAN 36.53 339 P 41 18.50 -0.6
MAT 38.80 19 eP 41 37.00 -1.0
0.9s 18.49nm 4.7mb
LZH 40.30 335 P 41 52.00 1.5
1.2s 34.00nm 4.7mb
BFD 40.96 157 eP 41 57.60 1.9

BWA 41.42 148 iPd 42 03.80 4.3X
CAN 42.41 149 iPd 42 10.30 2.7
GUN 45.53 311 P 42 32.20 -0.9
PKI 45.72 310 P 42 34.40 -0.1
DMN 45.97 310 P 42 36.40 0.0
GKN 46.53 310 P 42 39.70 -1.0
BUL 94.66 250 iPc 47 29.90 -1.0
INK 94.75 21 ePc 47 31.10 0.9
HFS 99.78 331 ePKP 47 51.20 -2.0
0.9s 4.00nm 4.8mb
BRT 102.32 312 Pd diff 48 20.00 15.1X
eSg 48 34.80
ORI 103.04 311 Pd diff 48 14.80 6.6X
eSg 48 25.60
TDS 103.21 311 Pd diff 48 19.70 10.8X
MGR 103.70 311 Pd diff 48 10.40 -0.7
eSg 48 18.00
SGO 103.80 312 Pd diff 48 07.50 -3.9X
eSg 48 14.40
BSS 104.12 312 Pd diff 48 15.90 3.0X
eSg 48 26.40
YKA 104.16 24 ePd diff 48 14.80 2.3X
0.4s 0.20nm 4.4mb
DUI 104.19 313 Pd diff 48 26.50 13.2X
eSn 48 45.00
SDI 104.65 313 Pd diff 48 33.50 18.2X
S.D. = 1.3 on 28 of 37 obs.

MAY 05, 1990 07h 38m 12.33±0.36s
40.750 N ± 2.5km 15.814 E ± 1.9km
DEPTH = 15.0 ± 3.8 km
4.5mb (9 obs.)
SOUTHERN ITALY (390)
MD 5.0 (TRI), ML 4.7 (THE), 4.5
(TTG), 4.4 (LDG), 3.9 (LJU).
Felt in the Potenza area.

SGO 0.43 244 Pc 38 21.10 0.0
MGR 0.64 198 Pc 38 23.60 -1.1
BAI 0.88 65 P 38 30.00 1.3
BRT 1.06 83 P 38 30.50 -1.4
TDS 1.16 160 P 38 32.60 -1.0
DUI 1.37 312 P 38 39.40 2.5
LCI 1.68 104 P 38 44.00 2.7
SDI 1.78 303 P 38 44.20 1.4
AZI 2.18 305 P 38 50.80 2.4
eSn 39 19.10
HVAR 2.47 11 ePn 38 52.80 0.2
iPg 39 00.10
i(Sn) 39 24.80
MSI 2.55 185 P 38 53.70 -0.1
RMP 2.57 295 P 38 55.50 1.4
ATN 2.60 186 P 38 55.80 -0.7
HCY 2.63 49 ePn 38 56.10 1.1
eSn 39 35.00
ULC 2.86 64 ePn 39 00.10 1.9
eSn 39 40.00
MNS 2.86 306 P 39 00.10 1.8
MNO 2.95 197 P 38 58.80 -0.8
SDA 3.05 64 iPnd 39 02.00 1.2
TTG 3.08 56 ePn 39 02.00 0.7
eSn 39 45.30
GIB 3.09 207 P 39 01.50 0.1
TIR 3.12 78 ePn 39 05.00 3.1X
BERA 3.14 90 iPnd 39 07.50 5.4X
NKY 3.15 48 ePn 39 03.40 1.0
eSn 39 48.20
KEK 3.22 107 eP 39 04.30 1.0
TPE 3.23 97 ePn 39 03.60 0.1
ASS 3.30 316 P 39 07.40 2.9X
SRN 3.32 104 ePn 39 05.00 0.4
ARV 3.48 323 P 39 08.10 1.1
MCT 3.55 209 P 39 10.40 2.3
BCI 3.58 62 iPn 39 09.80 1.5
PVY 3.62 58 ePn 39 10.40 1.3
eSn 39 59.00
PLE 3.71 45 ePn 39 12.00 1.6
eSn 40 01.50
MEU 3.71 191 P 39 10.60 0.2
eSn 39 50.70
IVA 3.72 54 ePn 39 12.50 2.0
eSn 40 03.00
OHR 3.79 83 iPn 39 12.50 1.0
iSn 40 12.00
KBN 3.80 90 ePn 39 13.50 1.9
FAI 3.85 206 P 39 15.50 3.3X
LVI 3.86 225 P 39 12.80 0.5

CVT 3.86 218 P 39 13.20 0.8
RSM 4.04 323 P 39 17.20 2.4
SFI 4.32 318 P 39 21.40 2.5
PGD 4.35 317 P 39 22.00 2.5
SKO 4.41 72 iPn 39 20.50 0.4
RIY 4.71 348 ePn 39 23.20 -1.2
iPg 39 40.90
iSn 40 18.40
VBY 4.77 355 iPnc 39 26.10 0.8
PTS 4.94 218 P 39 27.80 0.1
GRG 5.00 85 ePd 39 28.10 -0.5
ZAG 5.07 1 iPn 39 30.00 0.6
iSn 40 32.00
CEY 5.09 349 ePn 39 31.30 1.5
MME 5.11 314 P 39 32.60 2.2
LIT 5.14 95 ePd 39 30.90 0.4
VAY 5.14 81 ePn 39 29.40 -1.1
PTJ 5.15 1 iPnc 39 31.40 0.7
e(Sn) 40 25.60
TRI 5.18 344 ePnd 39 30.20 -0.8
iPg 39 50.80
iSn 40 32.00
iSg 41 03.50
BEO 5.31 38 ePn 39 33.00 0.1
iPg 39 53.50
LJU 5.37 350 ePn 39 33.30 -0.5
eSn 40 33.10
PGF 5.41 292 Pn 39 34.80 0.3
THE 5.44 89 iPc 39 32.80 -1.9
VOY 5.46 346 ePn 39 34.50 -0.6
eSn 40 39.50
KKB 5.59 76 iP 39 37.00 0.1
SOH 5.72 87 ePn 39 38.40 -0.4
eSn 40 42.50
VTS 5.83 69 iP 39 40.00 -0.5
NEO 5.87 102 eP 39 41.00 0.2
SRS 5.90 84 ePc 39 39.40 -1.9
ITM 5.95 125 eP 39 40.30 -1.6
MMB 6.03 79 ePd 39 44.00 0.9
PAIG 6.07 95 ePd 39 43.30 -0.3
CTI 6.10 332 P 39 42.50 -1.6
eSn 40 50.10
BOB 6.17 313 P 39 45.50 0.4
SAL 6.20 323 P 39 44.70 -0.8
OUR 6.24 91 eP 39 44.70 -1.2
FVI 6.24 340 P 39 45.10 -0.8
eSn 40 56.50
PGB 6.51 71 iP 39 51.00 1.1
KBA 6.57 345 iPnc 39 50.40 -0.5
i 39 59.50
i 40 10.20
iPgPg 40 25.50
iSn 41 05.20
i 41 55.70
CKI 6.66 306 P 39 53.50 1.5
MDI 6.71 320 P 39 51.80 -0.9
ATH 6.72 112 eP 39 53.00 0.2
RZN 6.78 79 iP 39 54.00 0.2
PLD 6.82 76 eP 39 59.00 4.8X
VLI 6.87 124 eP 39 55.00 0.1
SBF 6.95 299 Pn 39 56.10 0.0
SCE 6.95 336 eP 39 57.00 0.8
SOP 6.95 4 ePn 39 57.30 1.3
OGA 7.03 332 eP 39 56.60 -0.7
VAI 7.25 317 P 39 58.20 -1.9
BHG 7.28 344 eP 40 00.50 -0.1
SRO 7.29 13 iPn 40 04.50 3.8X
i 40 14.50
i 40 34.60
i 40 52.30
i 41 20.40
KDZ 7.30 80 iPc 40 00.00 -0.9
DOI 7.35 304 P 40 01.60 -0.1
VDL 7.35 323 ePc 40 01.40 -0.4
TMA 7.36 319 ePd 40 00.40 -1.5
FRF 7.37 295 Pn 40 00.80 -1.1
RDO 7.37 84 eP 40 03.50 1.6
LMR 7.39 293 Pn 40 01.30 -0.9
KMR 7.40 351 iPn+ 40 03.00 0.7
iSn 41 22.20
DIM 7.42 77 iP 40 02.00 -0.6
ZST 7.50 7 e(Pn) 40 04.70 1.0
i 40 15.00
i 40 21.70
i(Sn) 41 07.60
i 41 24.20
PVL 7.51 68 eP 40 03.00 -0.8

0.7s	23.00nm	5.2mb	TIY	55.43	55	Pc	28	34.40	-0.8	PKI	13.99	127	P	49	12.20	-0.8				
GUN	31.64	62	P	25	23.80	-0.3	LKO	58.48	272	P	28	57.62	0.4	0.6s	11.00nm	4.8mb				
BCAO	36.82	256	iPc	26	09.20	0.9	0.6s	13.50nm	5.2mb	GUN	14.07	125	P	49	13.00	-1.0				
0.6s	36.00nm	5.3mb	SSE	62.46	63	Pc	29	24.50	0.5	G8A	23.43	169	Pc	51	07.30	5.6X				
MLR	37.82	327	eP	26	35.00	18.5X	WB5	86.43	112	eP	31	41.00	-1.5	0.6s	2.90nm	4.0mb				
WMQ	39.77	39	P	26	34.00	1.2	S.D.	= 1.0	on 74 of 77 obs.	HFS	43.80	322	eP	53	57.50	-1.1				
KRI	40.56	218	iPd	26	38.30	-1.3	% MAY 05, 1990	17h	41m	37.70±0.71s	NB2	45.09	323	P	54	09.80	0.7			
MGR	41.30	314	P	26	46.50	1.2	40.629 N ± 8.7km	15.773 E ± 6.1km	0.8s	1.10nm	3.8mb	M8C	66.98	3	ePc	56	45.50	-0.1		
SDI	43.15	315	P	26	58.00	-2.5	DEPTH = 28.1 ± 9.4 km	(390)	0.9s	4.00nm	4.5mb	WRA	80.84	123	Pc	58	09.40	2.6		
BUL	43.76	216	eP	27	03.30	-2.4	SOUTHERN ITALY	(390)	0.6s	1.20nm	4.1mb	YKA	80.88	4	eP	58	06.00	-0.3		
VBY	43.93	320	e(P)d	27	08.10	1.4	SGO	0.36	259	P	41	45.50	-0.3	0.6s	0.70nm	3.8mb				
ZST	44.27	325	e(P)	27	10.00	0.6	MGR	0.52	199	Pc	41	47.90	-0.4	S.D.	= 1.2	on 10 of 12 obs.				
e	27	39.40					BSS	0.75	283	P	41	53.10	0.9	MAY 05, 1990	19h	47m	02.42±0.43s			
ARV	44.49	317	P	27	13.00	1.7	ORI	0.77	137	P	41	52.80	0.4	38.019 N ± 4.0km	22.737 E ± 5.4km					
ASS	44.49	316	P	27	15.00	3.6X	BAI	0.96	59	P	41	55.00	-0.3	DEPTH = 10.9 ± 3.4 km						
LJU	44.64	321	e(P)	27	13.50	1.0	BRT	1.12	77	P	41	57.70	0.2	3.4mb (1 obs.)						
TRI	44.95	320	P	27	15.50	0.6	DUI	1.43	317	P	42	01.50	-0.5	GREECE			(364)			
VOY	45.02	320	e(P)	27	15.60	-0.1	S.D.	= 0.7	on 7 of 7 obs.	ATH	0.78	93	ePb	47	19.00	1.6				
SFI	45.38	317	P	27	18.50	0.1	& MAY 05, 1990	18h	01m	43.71s	AGG	1.05	342	ePgc	47	22.60	0.4			
PGD	45.45	317	P	27	20.00	0.8	59.493 N	152.992 W		ITM	1.06	218	ePn	47	22.00	-0.3				
FVI	45.97	321	P	27	24.00	1.1	DEPTH = 105.9km			VLI	1.31	173	ePn	47	26.00	-0.5				
KMI	46.19	70	Pc	27	25.00	-0.3	2.9mb (1 obs.)			NEO	1.34	16	ePn	47	27.00	0.0				
pP	27	30.50	18kmX				SOUTHERN ALASKA	(2)		PAIG	2.04	21	ePn	47	36.40	-0.7				
KSP	46.20	327	eP	27	25.20	0.4	<AGS-P>			LIT	2.09	355	ePnd	47	37.80	0.0				
BDI	46.27	317	P	27	26.50	1.0	AUE	0.24	235	iP	01	58.03	0.7	APE	2.41	112	ePn	47	43.50	1.0
CTI	46.42	319	P	27	27.00	0.3	AUL	0.25	244	iP	01	58.32	0.9	OUR	2.51	22	ePnd	47	42.70	-1.0
PRU	46.66	326	eP	27	28.50	0.1	XLV	0.65	93	iP	02	00.91	-0.6	eSn	48	11.30				

7d 00h

i 13 33.90
BOB 150.18 356 PKP 13 34.00 7.9X
VAY 150.26 335 ePKP 13 33.30 7.1X
DOI 150.55 359 PKP 13 41.50 14.8X
CKI 150.59 357 PKP 13 33.00 6.4X
SFI 150.78 352 PKP 13 35.50 8.6X
BDI 150.78 354 PKP 13 34.00 7.0X
PGD 150.84 352 PKP 13 36.00 8.7X
ARV 151.03 350 PKP 13 37.00 9.7X
CRE 151.05 352 PKP 13 37.50 10.0X
OHR 151.13 337 ePKP 13 30.00 2.4X
1.2s 61.00nm

e 13 58.20
PII 151.13 354 PKP 13 35.50 8.1X
FNA 151.19 336 ePKP 13 31.00 3.3X
ASS 151.49 350 PKP 13 34.50 6.4X
MNS 152.16 350 PKP 13 37.50 8.4X
AGG 152.27 333 ePKP 13 15.20 -14.1X
AZI 152.41 349 PKP 13 39.00 9.7X
DUI 152.51 347 PKP 13 31.50 1.8X
BRT 152.54 342 PKP 13 37.50 7.9X
SDI 152.61 348 PKP 13 39.00 9.3X
BSS 153.26 346 PKP 13 23.50 -7.1X
SGO 153.36 345 PKP 13 34.50 3.8X
MGR 153.69 344 PKP 13 26.00 -5.2X
TDS 153.92 343 PKP 13 32.00 0.4
BCAO 164.19 230 ePKPc 13 51.30 7.3X
0.6s 2.00nm

S.D. = 1.1 on 27 of 108 obs.

? MAY 07, 1990 00h 01m 41.43±1.36s
7.065 N ±19.6km 82.424 W ±15.3km
DEPTH = 10.0km (geophysicist)
SOUTH OF PANAMA (83)

DVD 1.36 359 P 02 07.00 0.6
CUM 18.35 78 eP 05 57.00 -0.9
iS 09 31.00
CJM 25.20 302 (P) 07 08.50 -0.4
CAI 47.15 106 eP 10 17.40 1.1
PDA 59.62 50 iPd 11 53.50 5.4X
TOL 76.59 51 eP 13 54.00 19.9X
STU 85.81 42 iPd 14 22.00 -0.5
1.0s 210.00nm 6.3mb X
Z 20s 12.77um 6.3MszX
BUC1 98.07 43 eP 15 24.50 4.9X
S.D. = 1.2 on 5 of 8 obs.

MAY 07, 1990 00h 12m 01.66±0.62s
36.273 N ±7.5km 27.114 E ±5.1km
DEPTH = 10.0km (geophysicist)
4.2mb (2 obs.)
DODECANESE ISLANDS (369)
ML 4.1 (ATH).

YER 1.27 47 iPn 12 24.00 -1.3
SMG 1.45 351 ePb 12 26.50 -1.4
APE 1.50 302 ePb 12 28.30 -0.4
KSL 2.00 94 ePn 12 35.60 -0.3
IZM 2.12 3 ePn 12 38.30 0.6
ELL 2.30 77 ePn 12 40.50 0.2
VAM 2.52 251 ePn 12 44.50 1.2
KHL 2.81 42 ePn 12 49.20 1.7
BCK 3.03 66 ePn 12 52.10 1.5
ATH 3.20 303 ePb 12 57.50 4.5X
VLI 3.39 279 ePn 12 55.50 -0.2
VLI 3.39 279 ePn 12 55.50 -0.2
EZN 3.60 350 ePn 12 56.90 -1.7
ALT 3.66 40 ePn 12 59.00 -0.6
EDC 4.11 8 ePn 13 06.70 0.9
ITM 4.26 284 ePn 13 11.00 2.9X
NEO 4.32 316 ePn 13 08.30 -0.6
GPA 4.73 31 ePn 13 26.00 11.2X
HRT 4.96 23 ePn 13 27.00 9.0X
RDO 5.02 346 ePn 13 17.20 -1.5
ISK 5.02 17 ePn 13 29.00 10.2X
LKF 5.31 99 ePn 13 21.30 -1.7
HRI 7.70 110 eP 13 58.00 1.3
DSI 8.32 122 eP 14 00.00 -5.1X
TAB 15.42 78 eP 15 44.00 3.0X
BRG 17.40 331 e(P) 16 12.20 6.4X
2.0s 22.00nm 3.9mb
CLL 18.11 331 e(P) 16 17.00 2.3
MEM 20.88 320 P 16 49.30 3.2X
DOU 21.35 317 P 16 53.00 2.0
MAIO 26.04 80 eP 17 37.00 0.2
BCAO 32.65 196 ePc 18 34.10 -1.9

0.7s 4.00nm 4.5mb
S.D. = 1.4 on 22 of 31 obs.

* MAY 07, 1990 00h 29m 00.62±1.21s
36.202 N ±15.7km 27.136 E ±6.9km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)

YER 1.31 44 ePn 29 24.00 -0.9
SMG 1.52 351 eP 29 28.09 0.2
eS 29 50.00
APE 1.55 304 eP 29 29.30 0.9
eS 29 55.00
KSL 1.98 92 eP 29 34.50 0.0
IZM 2.19 3 ePn 29 41.00 3.3X
ELL 2.30 75 ePn 29 40.00 0.7
VAM 2.52 252 eP 29 40.50 6.3X
VLI 3.42 280 eP 29 54.20 -0.9
S.D. = 1.0 on 6 of 8 obs.

% MAY 07, 1990 00h 41m 37.26±0.93s
40.563 N ±10.0km 15.831 E ±6.3km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

SGO 0.40 269 P 41 44.60 -0.8
eSg 41 49.80
MGR 0.47 206 P 41 46.60 -0.3
eSg 41 54.00
ORI 0.69 136 P 41 51.50 0.6
eSg 42 02.00
BSS 0.81 287 P 41 54.00 1.0
eSg 42 04.50
BRT 1.09 73 P 41 57.20 -0.5
eSg 42 10.00
S.D. = 1.1 on 5 of 5 obs.

% MAY 07, 1990 00h 42m 15.16±0.56s
40.625 N ±6.1km 15.866 E ±4.6km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

SGO 0.43 261 Pc 42 23.30 -0.6
eSg 42 30.80
MGR 0.54 206 Pc 42 25.30 -0.8
eSg 42 35.50
ORI 0.72 141 P 42 29.30 0.0
eSg 42 40.10
BSS 0.82 282 P 42 31.90 0.8
eSg 42 43.30
BAI 0.91 57 P 42 32.00 -0.5
eSg 42 45.00
TDS 1.03 159 P 42 35.30 0.7
BRT 1.05 76 P 42 35.80 -1.1
eSg 42 48.90
DUI 1.48 315 P 42 43.00 1.0
eSn 43 00.50
LCI 1.62 100 P 42 45.00 1.2
SDI 1.89 306 P 42 47.00 -0.8
S.D. = 1.0 on 10 of 10 obs.

* MAY 07, 1990 01h 16m 54.15±0.90s
36.398 N ±12.2km 27.270 E ±6.8km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)

YER 1.10 48 ePn 17 14.00 -0.8
SMG 1.35 345 ePn 17 19.50 0.5
APE 1.55 296 ePn 17 21.50 -0.4
KSL 1.89 98 ePn 17 26.00 -0.7
ELL 2.15 80 ePn 17 32.00 1.3
VAM 2.68 249 ePn 17 38.20 0.1
BCK 2.86 67 ePn 17 47.00 6.2X
S.D. = 1.0 on 6 of 7 obs.

* MAY 07, 1990 01h 18m 40.22±1.23s
24.350 N ±14.8km 123.570 E ±11.7km
DEPTH = 10.0km (geophysicist)
4.1mb (2 obs.)
SOUTHWESTERN RYUKYU ISLANDS (246)

TWC 1.59 280 ePc 19 07.00 -1.4
eS 19 20.30
TWD 1.82 262 ePd 19 11.20 -0.6
eS 19 27.40
TWZ 1.96 293 P 19 13.10 -0.7
ANP 2.04 294 eP 19 17.30 2.2

eS 19 40.00
TWK 3.02 250 ePc 19 29.20 0.2
TWM1 3.26 243 eP 19 33.00 0.6
WRA 45.26 166 Pd 26 59.90 0.1
0.5s 1.00nm 4.0mb
YKA 81.96 23 eP 31 01.00 -0.3
0.6s 1.40nm 4.2mb
S.D. = 1.3 on 8 of 8 obs.

MAY 07, 1990 02h 04m 10.18±0.48s
36.972 N ±7.9km 72.944 E ±7.6km
DEPTH = 33.0km (normol)
4.4mb (10 obs.) 3.8Msz (1 obs.)
AFGHANISTAN-USSR BORDER REGION (717)

KSH 3.44 43 Pn 05 08.00 5.0X
QUE 8.41 218 eP 06 12.20 -0.7
e(S) 07 50.50
NDI 9.01 155 eP 06 20.00 -1.0
eS 08 00.00
MAIO 10.83 270 eP 06 44.00 -2.1
eS 08 44.00
WMO 13.15 54 P 07 15.90 -1.3
S 09 36.50
DMN 13.88 129 P 07 21.40 -5.6X
GUN 14.16 126 P 07 24.00 -6.8X
HYB 20.10 164 eP 08 44.00 0.0
GTA 21.23 75 P 08 54.80 -0.8
GBA 23.62 169 P 09 21.00 1.9
0.6s 3.40nm 4.0mb
LZH 24.80 83 eP 09 30.50 -0.1
2.5s 54.00nm 4.7mb
Z 20s 0.30um 3.8Msz
pP 09 37.50 25kmX
PP 10 10.00
eS 13 48.00

CD2 26.20 94 eP 09 43.00 -0.7
CHTO 29.10 121 eP 10 12.70 2.7
0.7s 1.43nm 3.8mb
TIY 31.25 76 eP 10 28.20 -0.8
N 12s 0.30um
SUF 38.36 327 iP 11 30.50 1.1
0.5s 3.50nm 4.4mb
NUR 38.37 323 eP 11 31.00 1.5
HFS 43.66 321 eP 12 13.40 0.3
0.9s 5.80nm 4.4mb
Z 17s 0.07um 3.6MszX
LR 19 26.00
NB2 44.95 323 P 12 23.40 -0.1
0.9s 4.90nm 4.4mb
MBC 66.79 3 ePc 15 00.50 0.6
0.9s 19.00nm 5.2mb
YKA 80.69 4 eP 16 20.10 -0.8
0.9s 3.50nm 4.4mb
WB5 80.90 123 eP 16 22.00 -0.7
WRA 80.93 123 Pd 16 26.20 3.4X
0.8s 2.10nm 4.2mb
FFC 88.57 357 iPc 17 01.70 1.1
0.9s 10.00nm 5.1mb
SPA 126.79 180 ePd 19 59.00 7.2X
0.9s 7.73nm
S.D. = 1.3 on 19 of 24 obs.

? MAY 07, 1990 02h 36m 52.80±1.10s
18.474 S ±13.1km 85.847 E ±23.4km
DEPTH = 10.0km (geophysicist)
4.7mb (5 obs.)
SOUTH INDIAN OCEAN (425)

CHG 39.22 20 eP 44 24.00 0.8
CHTO 39.22 20 eP 44 24.00 0.8
1.0s 5.25nm 4.2mb
WRA 45.69 100 Pc 45 16.20 0.2
0.7s 4.40nm 4.5mb
WB5 45.73 100 eP 45 16.20 -0.1
GUN 46.11 0 P 45 18.60 -0.8
0.6s 14.00nm 5.1mb
BRS 61.65 112 eP 47 13.00 -0.5
BJI 64.72 25 eP 47 32.50 -0.8
1.0s 6.00nm 4.7mb
SPA 71.64 180 iPc 48 16.90 0.4
1.0s 10.00nm 4.9mb
MLR 83.63 322 eP 49 36.00 13.1X
e 55 32.00
FRI 150.96 45 ePKPc 56 48.20 6.5X
S.D. = 0.8 on 8 of 10 obs.

SKO	59.57	302	iP	27	40.00	-0.3		MEM	65.65	316	P	28	33.00	0.9s	29.50nm	5.4mb		
	1.2s	57.00nm				5.6mb		MDI	65.66	310	P	28	20.50	0.0	70.73	134 ePc	28 51.50 -1.0	
KSP	59.59	313	ePc	27	40.20	-0.1		ZLA	65.69	312	ePc	28	19.50	-1.2	CAF	70.77	312 iPc	28 53.20 0.5
	1.3s	51.00nm				5.5mb		FEL	65.74	312	eP	28	20.84	-0.5	LPF	1.2s	44.65nm	5.4mb
NANU	60.02	164	eP	27	44.00	0.5		WLS	65.88	313	P	28	21.53	-0.6	MFF	70.93	316 eP	28 53.40 -0.1
COP	60.04	319	iPd	27	44.00	0.7		BDI	65.89	308	P	28	22.50	0.2		71.19	314 iPc	28 54.90 -0.2
	0.9s	131.09nm				6.1mb		CDF	65.93	313	P	28	22.07	-0.5	LPO	1.1s	61.05nm	5.6mb
ZST	60.06	310	iP	27	44.10	0.5		TMA	66.03	310	ePc	28	22.70	-0.6		71.43	312 eP	28 56.90 0.3
BRW	60.27	21	P	27	44.20	-0.5		ECH	66.09	313	P	28	22.93	-0.5	LFF	1.1s	34.20nm	5.3mb
OHR	60.34	301	eP	27	44.00	-1.7		PII	66.10	308	P	28	18.00	-5.5X		71.56	312 eP	28 57.80 0.5
VKA	60.52	310	iPc	27	47.60	0.9		VAI	66.21	310	P	28	23.50	-0.7	EPF	0.9s	27.85nm	5.3mb
	2.5s	187.00nm				5.8mb		BBS	66.23	312	P	28	24.15	-0.3		72.84	311 eP	29 04.60 -0.4
Z	19s	1.80um				5.2msz		MOF	66.28	313	P	28	24.11	-0.6	ESEL	1.2s	22.30nm	5.0mb
		LR	55	13.00				BOB	66.29	309	P	28	25.00	0.1	GDH	73.01	307 eP	29 07.50 1.5
BRG	60.96	314	iPc	27	50.20	0.5		FBA	66.36	26	ePc	28	24.70	-0.2		73.27	351 ePd	29 06.00 -1.0
	1.8s	85.00nm				5.6mb		GIB	66.41	301	P	28	20.00	-5.8X		1.0s	20.00nm	5.1mb
		i	28	00.60				BSF	66.49	313	P	28	25.36	-0.8	EBR	73.97	309 eP	29 12.00 0.5
		e	28	33.80				MMK	66.62	311	ePc	28	27.20	0.0	ECRI	74.82	312 eP	29 18.20 1.7
CLL	61.34	314	iPc	27	52.20	-0.1		HAU	66.67	313	eP	28	26.70	-0.5	ETOR	75.56	310 eP	29 21.60 0.7
	1.7s	69.00nm				5.5mb			1.1s	19.55nm			5.1mb	GUD	76.96	311 eP	29 31.00 2.2	
DAG	61.38	347	iPc	27	49.80	-2.4		WARB	66.68	154	eP	28	27.50	0.2	RMQ	77.15	137 iPd	29 31.20 1.5
	1.3s	25.00nm				5.2mb			0.5s	5.00nm			4.9mb	EMON	77.17	315 eP	29 30.80 1.1	
KHC	61.86	312	iPc	27	56.00	0.1		DOU	66.69	316	P+	28	27.60	0.4	TOL	77.35	310 iPd	29 32.00 1.2
	1.4s	29.00nm				5.2mb				S	38	37.00			1.3s	230.77nm	6.0mb	
Z	15s	2.40um				5.5msz		LOMF	66.69	312	P	28	26.87	-0.6	YKA	77.87	16 eS	29 25.00 -0.6
N	16s	1.10um						VITF	66.78	313	P	28	27.16	-0.7		0.8s	9.00nm	4.9mb
E	16s	1.50um						ORX	66.80	310	P	28	27.81	-0.4	EPLA	78.48	311 e(P)	29 39.00 2.0
		e	28	06.00				DIX	66.94	3								

[illegible]

OHR	26.84	301	eP	53	45.50	2.5	CN2	59.81	335	Pc	02	56.80	-0.4
	1.2s		67.00nm			5.1mb X	Z	16s		0.60um			4.8MszX
GUN	29.84	87	P	54	10.00		N	11s		0.30um			
KRA	30.43	318	eP	54	17.90	-10.7X	E	11s		0.30um			
			e	54	20.80	2.7X	BJI	61.41	326	eP	03	08.50	0.4
			i	54	29.70			1.5s		16.00nm		4.9mb	
WMQ	31.08	55	P	54	20.50	-0.5	Z	18s		0.59um		4.8Msz	
E	20s		0.70um				KMI	61.96	305	Pd	03	14.00	1.5
VBY	31.79	308	e(P)c	54	29.50	2.3		2.0s		70.00nm		5.4mb	
CEY	32.42	308	eP	54	33.00	0.3	Z	20s		1.10um		5.0Msz	
LJU	32.42	308	e(P)	54	31.50	-1.2	TII	61.99	322	eP	03	12.00	-0.3
VOY	32.85	308	eP	54	36.20	-0.3	Z	14s		1.10um		5.2MszX	
KSP	32.88	317	eP	54	38.70	2.1	E	13s		0.60um			
			e	54	50.80		CHTO	62.56	297	eP	03	15.00	-1.3
			e	55	36.50			1.6s		17.72nm		4.9mb	
KBA	33.47	310	iP	54	41.40	-0.7	CD2	63.94	311	eP	03	22.10	23km
PRU	33.60	315	eP	54	47.50	4.6X	BTO	65.28	323	eP	03	33.00	-0.8
KHC	33.91	313	P	54	44.40	-1.2	N	14s		0.90um			
Z	15s		0.60um			4.4MszX	E	14s		0.70um			
N	16s		0.60um				LZH	66.58	316	Pc	03	42.50	0.2
E	16s		0.60um					2.5s		94.00nm		5.5mb	
PGD	33.94	304	P	54	46.40	0.3	Z	18s		0.60um		4.8Msz	
MME	34.72	304	P	54	55.50	2.6	E	13s		0.50um			
CLL	34.97	317	eP	54	57.00	2.3			pP	03	48.50	19km	
BOB	35.68	305	P	54	59.70	-1.2	SHL	71.11	301	iP	04	10.00	-0.6
VAI	36.32	307	P	55	07.30	1.2	GUN	76.95	302	P	04	45.20	0.6
BNI	37.67	305	P	55	15.30	-2.5		1.0s		52.00nm		5.5mb	
SOD	39.35	345	eP	55	31.00	-0.3	DMN	77.51	301	P	04	47.40	-0.2
DOU	39.80	313	P	55	39.00	3.7X		1.0s		71.00nm		5.7mb	
GTA	39.80	64	eP	55	35.60	0.0	SPA	80.42	180	eP	05	03.70	1.2
Z	16s		1.00um			4.8MszX		1.1s		11.31nm		4.8mb	
E	11s		0.50um				WMQ	81.12	317	P	05	07.50	0.9
NB2	40.06	331	P	55	34.00	-3.3X	TTA	81.31	20	eP	05	08.40	1.3
	0.8s		2.50nm			4.0mb	IMA	84.13	19	eP	05	22.10	0.4
BCAO	40.88	236	ePc	55	48.30	3.8X		0.7s		1.40nm		4.3mb	
	0.5s		2.00nm			4.1mb	FBA	85.38	21	eP	05	26.90	-0.9
KEV	41.25	347	eP	55	43.00	-3.9X	BRK	89.77	52	e(P)	05	56.60	7.1X
LZH	43.33	69	eP	56	11.50	7.0X	BKS	89.79	52	e(P)	05	53.00	3.4X
CHG	44.22	94	eP	56	12.80	1.0	SAO	90.17	53	ePc	05	55.20	3.8X
			e	03	16.50		PRI	90.6					

? MAY 08, 1990 17h 20m 58.62±1.98s
29.153 S ±15.2km 70.414 W ±52.6km
DEPTH = 10.0km (geophysicist)
CENTRAL CHILE (136)

RTBS 2.63 162 eP 21 42.00 0.1
(S) 22 24.00
RTCB 2.71 149 eP 21 43.00 -0.1
RTLL 2.75 143 ePd 21 43.80 0.2
RTCV 3.15 150 e(P) 21 49.00 -0.2
ANT 5.43 360 e(P) 22 21.50 0.0
S.D. = 0.3 on 5 of 5 obs.

& MAY 08, 1990 18h 30m 00.70s
37.085 N 121.833 W
DEPTH = 6.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.6 (BRK).
Mo=1.3*10**13 Nm (BRK).

GCC 0.14 247 iPd 30 03.80 0.1
MHC 0.30 31 iPd 30 07.00 0.2
ARN 0.36 42 iPd 30 07.90 0.0
SAO 0.45 136 iPd 30 09.20 -0.5
PCC 0.60 314 iPd 30 12.00 -0.8
PRS 0.84 154 iPd 30 16.40 -0.9
iS 30 27.80
BKS 0.85 338 eP 30 16.90 -0.6
LLA 0.85 123 iPd 30 16.80 -0.7
BRK 0.86 337 ePd 30 17.40 -0.2
e 30 27.80
ZSP 0.92 339 iPd 30 18.60 -0.1
eS 30 32.30
PRI 1.33 135 e(P) 30 24.00 -1.7
CMB 1.49 50 iPd 30 27.20 -0.9
iS 30 46.00
FRI 1.70 92 e(P) 30 29.50 -1.6
KVN 3.54 55 eP 30 56.00 -1.5
14 obs. associated

MAY 08, 1990 18h 40m 53.24±0.65s
30.607 S ±6.7km 117.324 E ±7.3km
DEPTH = 10.0km (geophysicist)
3.9mb (1 obs.)
WESTERN AUSTRALIA (590)
Felt strongly in the Codoux
area.

BAL 0.53 270 iPd 41 03.70 -0.3
KLB 1.05 159 iPd 41 14.50 1.4
MRWA 1.80 320 iPd 41 27.60 3.0X
NWA0 2.31 182 iPd 41 30.70 -1.3
COOL 3.30 96 iPd 41 48.30 2.3X
RKG 3.46 184 eP 41 54.00 5.7X
MEKA 4.12 15 eP 42 01.00 3.4X
0.3s 61.00nm
NANU 8.17 348 eP 42 55.20 0.5
0.3s 17.00nm 5.9mb X
eS 44 20.00
FORR 9.28 94 eP 43 09.00 -1.0
0.3s 102.00nm 6.7mb X
eS 44 48.00
WARB 9.31 64 iPd 43 10.80 0.3
0.2s 54.00nm 6.6mb X
eS 44 51.40
MBL 9.67 14 iPd 43 14.30 -1.2
0.2s 11.00nm 5.9mb X
eS 44 57.00
KNA 18.13 38 eP 45 07.20 0.5
eS 48 17.00
WRA 18.67 59 P 45 18.00 4.6X
0.5s 4.60nm 3.9mb
WB5 18.73 59 eP 45 12.00 -2.2X
eS 48 32.00
i 51 19.00
OIS 22.41 69 eP 45 56.00 2.5X
eS 49 59.00
GUN 65.48 330 P 51 40.20 1.1
S.D. = 1.1 on 9 of 16 obs.

* MAY 08, 1990 19h 24m 23.73±1.01s
36.387 N ±13.0km 27.305 E ±7.7km
DEPTH = 33.0km (normal)
DODECANESE ISLANDS (369)

YER 1.08 46 ePn 24 44.50 1.8
CIN 1.36 27 eP 24 47.00 0.4

SMG 1.37 344 ePb 24 46.00 -0.7
APE 1.58 296 ePn 24 48.70 -1.1
KSL 1.86 98 ePn 24 53.00 -0.8
ELL 2.13 79 ePn 24 57.00 -0.8
VAM 2.70 250 ePn 25 07.00 1.2
BCK 2.84 67 eP 25 15.00 7.2X
S.D. = 1.4 on 7 of 8 obs.

MAY 08, 1990 19h 40m 48.63±0.69s
43.600 N ±6.5km 12.132 E ±5.0km
DEPTH = 5.0km (geophysicist)
CENTRAL ITALY (381)

SFI 0.38 328 P 40 55.60 -0.6
eSg 41 01.90
RSM 0.40 35 Pc 40 57.10 0.4
eSg 41 07.30
PGD 0.41 313 P 40 56.60 -0.2
eSg 41 03.80
ARV 0.60 100 Pc 40 59.40 -1.2
eSg 41 09.30
PII 1.17 276 P 41 11.00 0.0
eSg 41 26.80
MME 1.19 300 P 41 11.80 0.3
eSg 41 31.00
BDI 1.20 293 P 41 11.00 -0.6
eSg 41 27.30
MNS 1.28 161 P 41 13.60 0.7
BOB 2.26 302 P 41 31.40 4.2X
VOY 2.74 27 e(Pn) 41 33.30 -0.8
eSn 42 10.20
KBA 3.58 13 e(Pn) 41 48.00 1.9
iSn 42 28.40
S.D. = 1.0 on 10 of 11 obs.

MAY 08, 1990 19h 47m 45.24±0.61s
43.578 N ±5.9km 12.162 E ±5.2km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

CRE 0.16 288 Pc 47 48.20 -0.8
eSg 47 51.30
RSM 0.41 31 Pc 47 53.50 -0.1
eSg 47 57.40
SFI 0.41 327 P 47 52.10 -1.5
eSg 47 58.20
PGD 0.44 313 P 47 53.00 -1.2
eSg 48 00.30
ARV 0.57 98 Pc 47 55.90 -1.0
eSg 48 05.80
ASS 0.62 144 P 47 57.50 -0.4
eSg 48 08.70
PII 1.20 277 P 48 07.40 -0.1
eSg 48 23.80
MME 1.22 301 P 48 08.30 0.1
eSg 48 27.40
BDI 1.23 294 P 48 08.50 0.3
eSg 48 23.80
MNS 1.25 162 P 48 09.00 0.5
BOB 2.29 302 P 48 25.80 2.1
CTI 2.50 352 P 48 26.90 0.3
VOY 2.75 26 ePn 48 29.40 -0.8
eSg 49 14.50
LJU 2.99 34 eP 48 43.00 9.5X
e(Sn) 49 09.50
FVI 3.05 8 P 48 34.10 -0.2
PTJ 3.56 48 eP 48 53.30 11.5X
KBA 3.60 13 e(Pn) 48 45.00 2.6
iSn 49 24.70
S.D. = 1.2 on 15 of 17 obs.

MAY 08, 1990 19h 58m 29.09±0.36s
43.588 N ±3.8km 12.106 E ±3.0km
DEPTH = 9.0 ± 2.6 km
CENTRAL ITALY (381)
ML 3.2 (LDG), 3.1 (KBA).

CRE 0.12 290 Pc 58 32.30 0.2
eSg 58 39.10
SFI 0.38 331 P 58 36.10 -0.7
eSg 58 44.40
PGD 0.40 316 P 58 37.10 -0.2
eSg 58 46.10
RSM 0.42 36 Pc 58 37.50 -0.2
eSg 58 48.70
ARV 0.61 98 Pc 58 39.90 -1.6

eSg 58 50.00
ASS 0.66 142 P 58 41.20 -1.1
eSg 58 52.50
PII 1.16 277 P 58 51.30 0.5
eSg 59 07.80
MME 1.18 301 P 58 52.10 0.7
eSg 59 09.50
BDI 1.19 294 P 58 51.20 -0.2
eSg 59 06.40
MNS 1.27 161 P 58 53.40 0.5
eSg 59 13.70
AQU 1.56 142 P 58 59.30 2.3
BOB 2.25 303 P 59 10.60 3.5X
SDI 2.26 146 P 59 13.90 6.6X
TRI 2.43 29 e(P) 59 09.20 -0.3
i 59 47.60
CTI 2.48 353 P 59 11.20 0.8
PGF 2.50 247 Pn 59 10.40 -0.3
Sn 59 41.10
CEY 2.71 37 eP 59 19.00 5.3X
e(Sn) 59 47.00
VOY 2.75 27 ePn 59 13.80 -0.5
eSn 59 58.10
MDI 2.78 323 P 59 15.90 1.4
CKI 2.88 288 P 59 13.90 -2.2
eSn 59 48.10
VBY 2.96 49 ePn 59 28.50 11.5X
eSn 00 11.40
LJU 3.00 34 e(Pn) 59 17.00 -0.7
eSn 59 53.50
FVI 3.04 9 P 59 18.30 0.1
HVAR 3.19 96 ePn 59 20.50 0.1
SBF 3.40 276 Pn 59 22.70 -0.7
PTJ 3.59 49 eP 59 27.70 1.6
KBA 3.60 14 iPnd 59 26.90 0.6
iSn 00 07.90
FRF 3.97 271 Pn 59 31.00 -0.4
LRG 4.18 270 Pn 59 33.70 -0.7
Sn 00 22.00
LPG 4.28 298 Pn 59 36.20 0.1
Sn 00 25.60
KHC 5.64 10 eP 00 08.00 12.9X
e 01 44.80
BSF 5.64 321 Pn 59 54.80 -0.5
Sn 00 56.60
CDF 5.88 327 Pn 59 57.60 -0.9
Sn 01 02.70
HAU 5.98 320 Pn 59 59.40 -0.4
Sn 01 04.10
SMF 6.60 300 Pn 00 08.40 -0.2
Sn 01 20.10
LOR 6.87 305 Pn 00 12.70 0.3
Sn 01 25.90

S.D. = 0.9 on 31 of 36 obs.

MAY 08, 1990 20h 16m 18.94±0.50s
43.614 N ±4.8km 12.125 E ±4.1km
DEPTH = 10.0km (geophysicist)

CENTRAL ITALY (381)
CRE 0.13 276 P 16 21.70 -0.4
eSg 16 27.40
SFI 0.37 327 P 16 25.70 -0.7
eSg 16 33.40
PGD 0.39 312 P 16 26.50 -0.5
eSg 16 34.10
RSM 0.39 37 P 16 26.90 -0.1
eSg 16 32.10
ARV 0.60 101 P 16 29.40 -1.8
eSg 16 39.50
ASS 0.67 144 P 16 33.20 0.9
eSg 16 41.90
PII 1.17 276 P 16 40.80 0.1
MME 1.18 300 P 16 41.90 0.7
BDI 1.19 293 P 16 41.10 -0.1
eSg 16 58.20
MNS 1.29 161 P 16 43.00 0.1
AQU 1.57 143 P 16 50.90 4.0X
TRI 2.40 29 P 16 57.30 -1.5
CTI 2.46 352 P 17 00.50 0.7
CEY 2.68 37 e(Pn) 17 04.40 1.4
eSn 17 39.00
VOY 2.73 27 ePn 17 03.70 0.1
eSg 17 47.50
VBY 2.93 49 eP 17 20.50 14.1X
e(Sn) 18 00.70
LJU 2.97 34 e(Pn) 17 08.00 1.0

08d 23h

RSM 0.42 35 P eSg 20 55.60
 ARV 0.60 98 P eSg 21 00.40
 ASS 0.65 142 P eSg 21 01.60
 MNS 1.27 161 P eSg 21 03.80
 S.D. = 0.5 on 6 of 7 obs.

MAY 08, 1990 23h 21m 33.94 ± 0.94s
 43.562 N ± 9.6km 12.121 E ± 7.5km
 DEPTH = 10.0km (geophysicist)
 CENTRAL ITALY (381)

CRE 0.14 299 P eSg 21 36.00
 SFI 0.41 332 P eSg 21 43.60
 PGD 0.43 317 P eSg 21 53.10
 RSM 0.44 33 P eSg 21 55.80
 ARV 0.60 96 P eSg 21 57.20
 ASS 0.63 141 P eSg 21 59.50
 PII 1.17 278 P eSn 22 15.10
 MME 1.21 302 P eSn 22 00.10
 BDI 1.21 295 P eSn 22 12.30
 MNS 1.25 161 P eSn 22 01.00
 VOY 2.77 26 e(Pn) 22 24.00
 PTJ 3.60 48 eP 22 45.20
 KBA 3.62 13 e(Pn) 22 34.00
 S.D. = 1.5 on 7 of 13 obs.

MAY 08, 1990 23h 27m 52.57 ± 0.66s
 35.985 N ± 7.9km 27.075 E ± 5.3km
 DEPTH = 10.0km (geophysicist)
 4.1mb (3 obs.)
 DODECANESE ISLANDS (369)
 ML 4.1 (ATH).

YER 1.50 40 iPn 28 17.80
 APE 1.65 311 ePb 28 21.40
 SMG 1.73 354 ePb 28 19.50
 CIN 1.80 26 ePn 28 22.00
 KSL 2.04 85 ePn 28 28.60
 ELL 2.41 71 ePn 28 34.50
 VAM 2.41 257 ePn 28 37.00
 IZM 2.41 3 iPn 28 33.30
 KHL 3.04 39 ePn 28 41.10
 BCK 3.18 61 ePn 28 45.00
 ATH 3.34 307 ePn 28 54.00
 VLI 3.42 284 ePn 28 48.00
 EZN 3.88 351 iPn 28 50.00
 ALT 3.90 37 ePn 28 54.00
 ITM 4.31 288 ePn 29 03.00
 EDC 4.40 8 iPn 29 14.90
 PPCY 4.44 103 eP 29 02.00
 AGG 4.84 310 eP 29 11.80
 YLV 4.92 21 ePn 29 15.00
 CSS 5.21 99 eP 29 12.50
 LFK 5.31 96 eP 29 15.50
 ITU 5.33 16 eP 29 33.00
 BBTK 5.92 48 eP 29 22.00
 VAY 6.39 328 eP 29 28.70
 FNA 6.56 319 eP 29 31.30
 OHR 7.10 318 eP 29 40.00
 HRI 7.64 108 eP 29 45.00
 DSI 8.19 120 eP 29 54.00
 PRNI 8.70 128 eP 30 00.00
 MBH 9.02 131 eP 29 59.50
 KBA 15.09 321 eP 31 33.00
 1.0s 11.60nm 4.3mb
 KHC 16.44 327 P e 31 45.00
 SMF 20.37 309 eP 32 30.70

1.2s 5.95nm 3.8mb
 SSF 20.75 309 eP 32 34.80
 1.2s 11.90nm 4.1mb
 S.D. = 1.2 on 23 of 34 obs.
 % MAY 08, 1990 23h 32m 54.19 ± 1.51s
 43.552 N ± 13.8km 12.142 E ± 7.2km
 DEPTH = 10.0km (geophysicist)
 CENTRAL ITALY (381)

CRE 0.16 299 P eSg 32 58.10
 SFI 0.43 330 P eSg 33 02.20
 RSM 0.44 31 P eSg 33 03.40
 PGD 0.44 317 P eSg 33 03.60
 ARV 0.58 95 P eSg 33 05.90
 S.D. = 0.6 on 5 of 5 obs.

% MAY 08, 1990 23h 38m 18.69 ± 1.51s
 39.384 N ± 11.7km 23.283 E ± 10.8km
 DEPTH = 10.0km (geophysicist)
 AEGEAN SEA (365)
 ML 2.3 (THE).

PAIG 0.62 29 ePg 38 31.60
 AGG 0.82 244 ePg 38 34.60
 LIT 0.94 320 ePg 38 37.20
 OUR 1.09 29 ePg 38 39.00
 THE 1.27 349 ePb 38 41.80
 GRG 1.71 337 ePn 38 48.40
 S.D. = 0.5 on 6 of 6 obs.

MAY 08, 1990 23h 42m 31.54 ± 0.39s
 43.624 N ± 4.2km 12.106 E ± 3.8km
 DEPTH = 13.7 ± 3.1 km
 CENTRAL ITALY (381)
 ML 3.0 (LDG).

CRE 0.11 272 P eSg 42 34.30
 SFI 0.35 328 P eSg 42 38.00
 PGD 0.38 312 P eSg 42 38.80
 RSM 0.39 39 P eSg 42 39.50
 ARV 0.62 101 P eSg 42 42.70
 ASS 0.69 144 P eSg 42 39.20
 PII 1.15 275 P eSg 42 53.30
 MME 1.16 300 P eSg 42 54.10
 BDI 1.18 292 P eSg 42 53.80
 MNS 1.31 161 P eSn 43 17.20
 AQU 1.59 143 P eSn 43 00.10
 BOB 2.23 302 P eSg 43 11.20
 SDI 2.29 146 P eSg 43 10.70
 RIY 2.37 43 e(Pn) 43 10.00
 CTI 2.45 353 P eSg 43 12.40
 PGF 2.52 246 Pn 43 12.30
 VOY 2.72 27 ePn 43 15.20
 MDI 2.75 322 P eSn 44 02.30
 CKI 2.87 288 P eSg 43 19.00
 LJU 2.97 35 eP e(Sn) 43 29.00
 FVI 3.01 9 P 43 20.40
 SBF 3.39 276 Pn 43 24.80
 KBA 3.56 14 ePn 43 28.00
 PTJ 3.56 49 eP 43 32.70
 FRF 3.97 271 Pn 43 31.70
 LRG 4.18 270 Pn 43 35.20

LPG 4.26 298 Pn 44 24.00
 KHC 5.60 10 ePg 44 02.00
 BSF 5.62 320 Pn 44 57.00
 CDF 5.85 327 Pn 44 59.70
 HAU 5.95 319 Pn 44 01.10
 SMF 6.58 300 Pn 44 10.40
 LBF 6.64 303 Pn 44 10.10
 LOR 6.85 305 Pn 44 13.70
 S.D. = 0.9 on 29 of 34 obs.

* MAY 08, 1990 23h 45m 49.87 ± 0.89s
 36.373 N ± 12.3km 27.179 E ± 6.3km
 DEPTH = 10.0km (geophysicist)
 DODECANESE ISLANDS (369)
 ML 4.0 (ATH).

YER 1.17 49 iPn 46 11.30
 SMG 1.36 348 ePg 46 15.00
 CIN 1.42 30 ePn 46 16.00
 APE 1.50 298 ePb 46 16.50
 KSL 1.96 97 ePb 46 22.40
 IZM 2.02 2 ePn 46 29.30
 ELL 2.23 80 ePn 46 28.00
 VAM 2.60 249 ePn 46 34.50
 KHL 2.70 43 ePn 46 39.00
 BCK 2.94 67 ePn 46 40.50
 ATH 3.19 301 ePb 46 46.00
 VLI 3.43 277 ePn 46 42.00
 ALT 3.55 40 ePn 46 47.00
 ITM 4.29 282 ePn 46 57.50
 S.D. = 1.3 on 10 of 14 obs.

% MAY 08, 1990 23h 53m 19.86 ± 0.79s
 43.579 N ± 7.7km 12.108 E ± 6.6km
 DEPTH = 10.0km (geophysicist)
 CENTRAL ITALY (381)

CRE 0.12 294 P eSg 53 23.50
 SFI 0.39 332 P eSg 53 26.60
 PGD 0.41 317 P eSg 53 27.50
 RSM 0.43 35 P eSg 53 33.40
 ARV 0.61 97 P eSg 53 38.00
 ASS 0.65 141 P eSg 53 35.30
 S.D. = 0.4 on 6 of 6 obs.

% MAY 08, 1990 23h 54m 08.58 ± 0.52s
 43.593 N ± 5.4km 12.170 E ± 4.6km
 DEPTH = 10.0km (geophysicist)
 CENTRAL ITALY (381)

CRE 0.16 283 P eSg 54 11.90
 RSM 0.39 31 P eSg 54 14.30
 SFI 0.40 325 P eSg 54 17.00
 PGD 0.43 311 P eSg 54 16.60
 ARV 0.57 99 P eSg 54 23.20
 ASS 0.63 145 P eSg 54 17.10
 PII 1.20 277 P eSg 54 23.90
 BDI 1.23 293 P eSg 54 19.70
 MNS 1.26 163 P eSg 54 29.50
 S.D. = 0.6 on 9 of 9 obs.

% MAY 08, 1990 23h 57m 57.53 ± 1.19s
 43.606 N ± 11.5km 12.105 E ± 6.6km
 DEPTH = 10.0km (geophysicist)

09d 01h

ARN 1.13 335 eP 24 05.80 -0.8
 MHC 1.17 331 eP 24 06.60 -0.6
 IS 24 25.20
 FRI 1.18 55 ePc 24 05.80 -1.7
 IS 24 21.50
 BCH 1.33 149 eP 24 08.60 -1.4
 PCC 1.65 316 e(P) 24 13.70 -0.9
 CMB 1.76 14 e(P) 24 14.90 -1.3
 TNP 3.44 58 eP 24 47.50 7.1
 KVN 3.53 39 eP 24 48.00 6.4
 13 obs. associated

MAY 09, 1990 01h 23m 52.59±0.61s
 43.607 N ± 6.0km 12.160 E ± 5.5km
 DEPTH = 10.0km (geophysicist)
 CENTRAL ITALY (381)
 ML 2.5 (KBA).

CRE 0.15 278 Pc 23 55.40 -0.8
 eSg 23 57.10
 RSM 0.38 33 Pc 24 00.50 0.0
 eSg 24 04.40
 SFI 0.38 325 P 23 59.30 -1.2
 eSg 24 05.40
 PGD 0.42 310 P 24 00.00 -1.1
 eSg 24 06.90
 ARV 0.58 101 P 24 03.10 -1.2
 eSg 24 12.70
 ASS 0.65 146 P 24 04.40 -1.2
 eSg 24 14.50
 PII 1.19 276 Pc 24 14.50 -0.3
 eSg 24 27.80
 MME 1.21 300 P 24 17.70 2.5
 BDI 1.22 292 P 24 15.40 0.1
 eSg 24 30.30
 MNS 1.28 162 P 24 16.20 -0.2
 eSg 24 34.40
 AQU 1.55 144 P 24 22.60 2.3
 BOB 2.27 302 P 24 34.40 3.6X
 eSn 25 10.90
 TRI 2.39 28 eP 25 10.70 38.3X
 VOY 2.72 26 e(Pn) 24 37.10 -0.1
 eSg 25 20.50
 FVI 3.02 8 P 24 42.80 1.6
 PTJ 3.55 48 eP 25 02.70 13.8X
 KBA 3.57 13 e(Pn) 24 49.00 -0.3
 eSn 25 29.50

S.D. = 1.4 on 14 of 17 obs.

? MAY 09, 1990 02h 08m 46.34±8.35s
 0.603 N ± 43.0km 79.184 W ± 44.4km
 DEPTH = 10.0km (geophysicist)
 NEAR COAST OF ECUADOR (105)

COTA 0.89 107 iP+ 09 03.40 -0.3
 eS 09 16.50
 GGP 0.97 143 eP 09 05.00 -0.2
 QUR 1.01 140 eP 09 05.70 -0.1
 eS 09 26.70
 CAYA 1.31 113 eP 09 11.20 0.3
 eS 09 38.20
 GECU 1.35 133 eP 09 12.00 0.3
 VC1 1.46 148 eP 09 13.30 0.1

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

% MAY 09, 1990 02h 12m 12.10±0.64s
 43.595 N ± 6.3km 12.158 E ± 5.0km
 DEPTH = 10.0km (geophysicist)
 CENTRAL ITALY (381)

CRE 0.15 282 Pc 12 15.60 -0.1
 eSg 12 18.30
 SFI 0.39 326 Pc 12 19.30 -0.9
 eSg 12 25.00
 RSM 0.39 33 P 12 20.80 0.6
 eSg 12 27.50
 PGD 0.42 312 P 12 20.30 -0.5
 eSg 12 26.90
 ARV 0.58 99 P 12 23.60 -0.2
 eSg 12 33.00
 PII 1.19 277 P 12 34.80 0.5
 eSg 12 50.70
 BDI 1.22 293 P 12 35.70 0.8
 eSg 12 50.60
 MNS 1.27 162 P 12 35.50 -0.2
 eSg 12 58.10

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

% MAY 09, 1990 02h 20m 41.23±0.79s
 43.564 N ± 7.7km 12.135 E ± 6.7km
 DEPTH = 10.0km (geophysicist)
 CENTRAL ITALY (381)

CRE 0.15 296 Pc 20 45.10 0.3
 eSg 20 47.50
 SFI 0.41 330 P 20 49.10 -0.5
 eSg 21 00.00
 RSM 0.43 32 P 20 50.20 0.2
 PGD 0.43 316 P 20 50.20 0.1
 eSg 20 57.00
 ARV 0.59 96 P 20 53.20 0.0
 eSg 21 02.50
 ASS 0.62 142 P 20 53.70 -0.1
 eSg 21 04.50

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

MAY 09, 1990 02h 34m 49.80±0.73s
 43.249 N ± 5.8km 19.865 E ± 6.5km
 DEPTH = 10.0km (geophysicist)
 YUGOSLAVIA (383)
 ML 2.7 (TTG).

PLE 0.35 283 iPgc 34 55.90 -1.2
 iSg 35 00.20
 IVA 0.38 176 ePg 34 57.60 0.0
 iSg 35 04.00
 PVY 0.66 173 ePg 35 02.20 -0.8
 eSg 35 13.00
 NKY 0.77 236 ePg 35 04.00 -0.9
 eSg 35 16.50
 TTG 0.93 209 ePg 35 07.00 -0.6
 eSg 35 22.00
 BRY 1.03 251 ePg 35 08.20 -1.1
 eSg 35 24.00
 BDV 1.23 219 ePg 35 13.40 0.7
 eSg 35 33.00
 HCY 1.29 232 ePg 35 14.00 0.4
 eSg 35 34.00
 ULC 1.36 200 ePg 35 15.00 0.2
 eSg 35 36.20
 BEO 1.63 15 ePn 35 19.50 0.9
 e(Sg) 35 39.50
 SKO 1.73 137 iPn 35 21.00 1.0
 HVAR 2.50 270 ePn 35 33.40 2.3
 iSn 36 05.90
 BZS 2.68 27 ePc 35 32.00 -1.7
 VAY 2.78 133 ePn 35 42.00 6.8X
 MLR 4.90 61 eP 36 20.00 14.6X
 e 50 56.50
 RSM 5.43 280 P 36 21.00 8.3X
 CRE 5.77 276 P 36 15.80 -1.9
 eSg 36 18.30
 SFI 5.86 279 P 36 20.10 1.4
 PGD 5.95 279 P 36 21.60 1.4
 eSg 36 23.80

S.D. = 1.3 on 16 of 19 obs.

% MAY 09, 1990 02h 38m 39.54±1.47s
 43.555 N ± 13.5km 12.143 E ± 7.0km
 DEPTH = 10.0km (geophysicist)
 CENTRAL ITALY (381)

CRE 0.16 298 P 38 43.30 0.1
 eSg 38 45.90
 SFI 0.42 330 P 38 47.60 -0.6
 RSM 0.44 31 P 38 48.60 0.2
 eSg 38 54.00
 PGD 0.44 316 P 38 49.00 0.4
 eSg 38 51.50
 ARV 0.58 95 Pd 38 51.30 -0.1
 eSg 39 02.10

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

MAY 09, 1990 02h 38m 57.42±0.16s
 57.502 N ± 2.5km 155.695 W ± 2.5km
 DEPTH = 77.2km (7 depth phases)
 5.2mb (64 obs.)
 ALASKA PENINSULA (12)
 Felt (V) at Naknek and (III) at
 King Salmon.

KDC 1.74 81 iPd 39 24.50 -1.7
 CDD 1.80 36 iP 39 27.28 0.2
 MCNL 1.83 22 iP 39 28.41 0.9

AUE 2.23 32 iP 39 33.96 1.1
 AUL 2.23 31 eP 39 33.82 0.9
 XLV 2.86 45 eP 39 41.85 0.2
 eS 40 12.57
 CNPM 3.10 47 iP 39 44.34 -0.6
 eS 40 18.73
 RED 3.29 26 iP 39 48.57 0.8
 eS 40 26.31
 NNL 3.43 40 iP 39 49.96 0.4
 SDN 3.44 233 iP 39 51.19 1.6
 RDT 3.52 27 iP 39 51.12 0.2
 SVW 3.62 1 iP 39 53.33 1.1
 NKA 3.98 33 iP 39 58.55 1.3
 SLKM 4.13 41 eP 39 57.79 -1.7X
 SPU 4.13 25 iP 39 59.66 0.1
 SEW 4.17 49 eP 39 57.62 -2.2X
 CRP 4.19 24 eP 40 00.69 0.3
 CGLM 4.26 25 eP 40 01.98 0.7
 NCG 4.31 23 eP 40 02.43 0.4
 SUA 4.71 30 eP 40 06.87 -0.7
 MTU 4.87 56 eP 40 08.03 -1.8X
 PMS 4.89 37 iPc 40 08.60 -1.5X
 SKT 4.96 23 eP 40 10.43 -0.6
 PWA 5.10 33 iPc 40 11.60 -1.4X
 MID 5.28 65 eP 40 12.96 -2.4X
 PLRM 5.29 36 eP 40 13.70 -1.8X
 PMR 5.29 36 iPc 40 13.20 -2.3X
 TTA 5.45 358 iPd 40 18.60 0.7
 GHO 5.49 36 eP 40 16.45 -2.0X
 GLI 5.57 49 eP 40 16.08 -3.4X
 CUT 5.62 27 eP 40 19.97 -0.2
 SML 5.71 38 eP 40 19.77 -1.7X
 VZW 5.89 49 eP 40 21.01 -2.9X
 VLZ 6.02 49 eP 40 22.93 -2.7X
 NCA 6.35 41 eP 40 27.89 -2.5X
 KLU 6.38 47 iP 40 28.37 -2.5X
 KTH 6.51 19 eP 40 31.41 -1.2X
 TOA 6.66 42 iPd 40 32.50 -2.1X
 RND 6.82 27 eP 40 34.24 -2.6X
 GLB 7.22 52 eP 40 39.14 -3.3X
 TGL 7.38 58 iP 40 41.96 -2.6X
 PAX 7.48 39 eP 40 43.63 -2.3X
 BALM 7.70 57 eP 40 46.29 -2.7X
 eS 42 07.66
 NEA 7.79 22 eP 40 46.90 -3.2X
 WRH 7.90 25 eP 40 48.25 -3.5X
 CCB 8.12 25 eP 40 51.04 -3.6X
 HDA 8.12 28 eP 40 51.66 -3.0X
 FBA 8.34 24 iPc 40 53.90 -3.8X
 DOT 8.40 38 eP 40 57.33 -1.3X
 PCA 8.42 66 eP 40 54.98 -4.0X
 GLM 8.50 25 eP 40 56.50 -3.5X
 IMA 8.65 5 iPc 41 02.00 -0.1
 HYT 9.91 63 P 41 17.00 -2.2X
 DWY 10.29 44 P 41 22.20 -2.0X
 SIT 11.03 84 eP 41 28.70 -5.5X
 ADK 13.35 254 eP 42 09.00 4.2X
 INK 14.70 34 P 42 20.00 -2.2X
 YKA 20.86 59 eP 43 32.80 -1.8X
 0.5s 3.50nm 3.9mb X

PGC 21.12 101 eP 43 37.00 -0.2
 MCW 21.43 100 eP 43 40.50 0.1
 GMW 22.15 103 eP 43 48.00 0.4
 BMW 22.61 105 eP 43 52.40 0.3
 RMW 22.72 102 eP 43 53.80 0.6
 PNT 22.78 95 ePd 43 55.00 1.3
 0.9s 18.00nm 4.5mb
 MBC 22.87 21 eP 43 53.00 -1.3
 0.5s 26.00nm 4.9mb
 LON 23.17 103 eP 43 59.00 1.4
 SHW 23.31 105 eP 44 01.00 2.0
 EDM 24.15 82 iPd 44 07.30 0.3
 NEW 24.73 95 eP 44 13.00 0.4
 0.8s 15.10nm 4.5mb
 FHC 26.29 116 e(P) 44 27.90 0.8
 eP 44 47.40 87km
 SES 26.80 86 eP 44 31.00 -0.7
 WDC 27.17 114 ePd 44 35.80 0.7
 eP 44 53.10 74km
 MIN 27.81 113 ePd 44 41.00 0.0
 eP 44 58.70 77km
 ORV 28.46 114 ePd 44 46.10 -0.7
 eP 45 03.70 76km
 LRM 28.75 95 eP 44 49.00 -0.6
 HPI 29.80 99 eP 44 59.00 0.0
 CMB 30.19 115 ePd 45 02.30 0.0
 KVN 30.54 111 eP 45 05.20 -0.3

PTI	30.76	99 eP	45 21.50	68km	MOX	71.71	8 iPc	50 17.80	21kmX	VAI	76.19	11 Pc	50 38.60	0.4
IMW	30.82	97 eP	45 07.50	0.2		1.0s	65.00nm	50 12.50	0.1	CAF	76.26	16 eP	50 38.70	-0.1
PRS	31.07	118 ePd	45 09.90	0.0	KSP	71.82	5 iPc	50 12.50	-0.5		0.9s	24.55nm	50 38.70	5.1mb
FRI	31.34	115 eP	45 12.20	-0.1			e	50 34.00	82km	LPL	76.31	13 eP	50 40.00	0.7
PRI	31.56	117 ePd	45 15.10	0.7	TNS	71.85	11 iPc	50 13.50	0.3	LPG	0.7s	6.05nm	50 40.40	4.6mb
TNP	31.73	111 eP	45 15.70	-0.3	GYA	72.02	291 P	50 14.80	0.1		1.2s	22.30nm	50 40.40	5.0mb
	1.0s	12.50nm	4.7mb		HOF	72.06	8 iPc	50 14.50	0.0	ORX	76.34	12 P	50 39.92	0.6
BW06	32.33	97 eP	45 20.50	-0.6		0.7s	20.00nm	50 14.50	5.1mb	LPO	76.37	17 eP	50 39.20	-0.1
DUG	32.42	104 eP	45 21.60	-0.3	ABH	72.09	11 eP	50 14.55	-0.1		0.5s	18.20nm	50 39.20	5.3mb
	0.7s	4.43nm	4.4mb		FLN	72.13	17 eP	50 14.20	-0.7	LSD	76.41	12 P	50 40.85	0.9
BCH	32.61	118 eP	45 24.00	0.5		0.8s	28.20nm	50 14.20	5.2mb	VOY	76.47	7 iPd	50 39.20	-0.8
ISA	33.00	115 eP	45 44.00	17.1X	RUP	72.22	12 eP	50 15.34	-0.1	RSP	76.73	12 P	50 42.18	0.7
DAU	33.08	102 eP	45 27.80	0.0	LDF	72.35	17 eP	50 15.60	-0.6	CEY	76.88	7 eP	50 41.00	-0.7
MSU	33.99	105 eP	45 36.00	0.4		0.8s	17.45nm	50 16.30	-0.4	RRL	76.90	13 P	50 44.13	1.5
SB8	34.10	116 eP	45 36.00	-0.4	GRR	72.44	17 eP	50 16.30	-0.4	VBY	77.08	7 eP	50 43.70	0.4
GSC	34.11	114 eP	45 37.00	0.5		0.8s	20.15nm	50 16.30	5.1mb	BOB	77.35	11 Pc	50 45.60	0.8
RSSD	34.39	90 eP	45 38.30	-0.7	TOD	72.49	11 eP	50 17.07	0.0	PZZ	77.35	13 P	50 45.56	0.6
RVR	34.88	116 eP	45 43.00	0.0	PRU	72.57	7 Pc	50 17.30	-0.1	PCP	77.47	11 P	50 45.05	-0.5
TPC	35.44	114 eP	45 48.00	0.2		1.2s	16.50nm	50 17.30	4.8mb	STV	77.63	12 P	50 45.15	-1.3
PLM	35.65	116 eP	45 49.00	-0.7	KTD	72.70	11 eP	50 18.37	0.1	ROB	77.64	12 P	50 46.08	-0.4
RSON	35.73	73 eP	45 49.20	-0.8	KRA	72.75	3 eP	50 17.20	-1.2	ENR	77.66	12 P	50 45.36	-1.2
BAR	36.29	116 eP	45 56.00	1.1		0.9s	48.00nm	50 17.20	5.4mb	FIN	77.77	12 P	50 46.38	-0.7
GOL	36.73	97 eP	45 58.90	0.1	LPF	72.75	18 eP	50 18.40	-0.1	EPF	77.84	18 eP	50 47.10	-0.5
	0.9s	10.61nm	4.8mb			0.9s	24.55nm	50 18.40	5.1mb		0.9s	6.55nm	50 47.10	4.6mb
GLA	36.89	114 eP	46 01.00	1.0	WET	73.30	8 iPc	50 22.00	0.3	SBF	78.02	12 eP	50 48.60	0.1
ALO	39.69	103 eP	46 23.00	-0.5	KHC	73.36	7 iPc	50 22.70	0.6		0.9s	40.95nm	50 48.60	5.3mb
	1.0s	2.00nm	4.0mb	X		0.9s	24.50nm	50 22.70	5.1mb	FRF	78.23	13 eP	50 49.80	0.2
FRB	40.01	44 eP	46 25.00	-0.6	CDF	73.51	12 eP	50 22.90	-0.2		0.9s	14.75nm	50 49.80	4.9mb
	0.5s	29.00nm	5.5mb			0.5s	13.10nm							

09d 03h

SFI 0.39 326 P 33 23.40 -1.1
 RSM 0.40 33 P 33 24.70 0.1
 PGD 0.42 312 P 33 24.10 -1.0
 ARV 0.58 100 P 33 27.00 -1.4
 ASS 0.65 145 P 33 28.20 -1.3
 PII 1.19 277 P 33 38.70 0.0
 MME 1.21 300 P 33 40.10 0.9
 BDI 1.22 293 P 33 39.60 0.4
 MNS 1.27 162 P 33 42.10 1.9
 VOY 2.73 26 P 34 01.90 0.6
 KBA 3.58 13 P 34 15.00 1.6

S.D. = 1.2 on 12 of 12 obs.

* MAY 09, 1990 03h 34m 06.43 ± 1.51s
 41.552 N ± 13.8km 23.826 E ± 6.8km
 DEPTH = 10.0km (geophysicist)
 GREECE-BULGARIA BORDER REGION (363)

SOH 0.81 206 ePg 34 22.00 -0.2
 VAY 0.97 257 ePn 34 25.00 0.1
 THE 1.13 216 ePb 34 27.40 -0.1
 OUR 1.22 174 ePb 34 29.40 0.3
 GRG 1.23 242 ePb 34 29.30 0.0
 ALN 1.80 111 ePn 34 37.60 -0.1

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

% MAY 09, 1990 03h 34m 46.40 ± 0.77s
 43.617 N ± 8.4km 12.130 E ± 6.1km
 DEPTH = 10.0km (geophysicist)
 CENTRAL ITALY (381)

CRE 0.13 275 P 34 49.80 0.2
 SFI 0.36 327 P 34 53.80 -0.1
 RSM 0.39 37 P 34 54.90 0.6
 PGD 0.39 311 P 34 54.50 0.0
 ARV 0.60 101 P 34 57.10 -1.5
 ASS 0.67 144 P 35 01.00 1.2
 PII 1.17 276 P 35 06.70 -1.5
 BDI 1.20 292 P 35 09.90 1.2

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

? MAY 09, 1990 03h 42m 21.74 ± 14.56s
 34.256 S ± 87.6km 71.614 W ± 83.3km
 DEPTH = 33.0km (normal)
 NEAR COAST OF CENTRAL CHILE (135)

LNV 0.34 29 eP 42 29.50 -0.5
 TACH 0.82 43 eP 42 35.50 -1.4
 CHCH 0.86 68 eP 42 37.50 0.0
 PCH 1.11 56 eP 42 42.00 0.9
 SAN 1.13 45 eP 42 42.00 0.7
 PEL 1.35 35 eP 42 45.50 1.0
 FCH 1.44 50 eP 42 45.00 -1.1

S.D. = 1.2 on 7 of 7 obs.

* MAY 09, 1990 03h 47m 47.23 ± 0.55s
 11.786 S ± 13.0km 66.129 E ± 6.6km
 DEPTH = 10.0km (geophysicist)
 4.8mb (16 obs.)
 MID-INDIAN RISE (429)

DMN 43.27 25 P 55 52.20 1.1
 GUN 43.86 26 P 55 57.00 1.1
 CHG 44.40 47 eP 56 01.00 0.9

CHTO 44.40 47 eP 56 00.90 0.8
 SHL 44.81 34 iP 56 04.00 0.5
 GYA 54.75 46 P 57 19.00 -0.6
 CD2 55.75 39 eP 57 25.10 -1.6
 WMO 58.73 18 P 57 47.00 -0.6
 GTA 59.81 30 eP 57 54.60 -0.6
 XAN 61.08 40 P 58 02.50 -1.4
 WRA 65.75 107 P 58 34.90 0.0
 WB5 65.78 107 eP 58 35.20 0.1
 MLR 67.54 331 ePd 58 59.00 13.0X
 SPC 72.90 330 eP 59 18.00 -0.6
 SRO 72.94 329 eP 59 18.30 -0.3
 ZST 73.81 328 eP 59 23.00 -0.7
 LJU 73.85 325 e(P) 59 24.00 0.0
 VOY 74.20 325 eP 59 26.00 -0.1
 KHC 76.23 328 P 59 38.00 0.4
 PRU 76.25 329 eP 59 38.50 0.9
 BRG 77.09 329 eP 59 43.50 1.2

CLL 77.83 329 eP 59 47.00 0.6
 LPG 78.08 322 eP 59 47.10 -1.2
 LPL 78.10 322 eP 59 47.00 -1.3
 MOX 78.15 328 eP 59 49.00 0.8
 NUR 79.24 341 eP 59 53.00 -0.9
 BSF 79.25 324 eP 59 53.70 -0.7
 CDF 79.27 325 eP 59 54.00 -0.5
 SMF 80.41 322 eP 00 00.10 -0.4
 LBF 80.49 322 eP 00 00.60 -0.4
 CAF 80.71 320 eP 00 02.50 0.3
 AVF 80.77 322 eP 00 01.90 -0.5
 SSF 80.81 322 eP 00 02.60 0.0
 BGF 80.97 321 eP 00 04.00 0.5
 LPO 81.16 319 eP 00 04.80 0.3
 RJF 81.23 320 eP 00 05.30 0.4
 TCF 81.24 321 eP 00 05.00 0.1
 LFF 81.56 319 eP 00 07.20 0.6
 LSF 81.64 321 eP 00 07.20 0.2
 MFF 82.84 320 eP 00 01.35 -11.8X
 HFS 82.93 336 eP 00 13.60 0.2
 LDF 83.68 322 eP 00 17.70 0.2
 LPF 84.00 322 eP 00 19.30 0.3
 NB2 84.45 336 P 00 21.60 0.4
 INK 122.09 8 ePKP 06 43.00 -0.1
 YKA 129.37 0 ePKP 06 56.30 -1.0

RSSD 146.68 347 PKP 07 31.50 1.8
 IMW 147.90 356 PKP 07 28.00 -3.8X
 HPI 148.18 359 PKP 07 37.00 4.8X
 BW06 148.90 354 PKP 07 37.30 4.0X
 WDC 150.32 13 ePKP 07 40.70 5.5X
 MIN 150.75 12 e(PKP) 07 42.10 6.1X
 TUL 150.95 329 ePKP 07 43.40 7.1X
 GLD 151.11 346 PKP 07 44.00 7.3X
 GOL 151.20 346 PKP 07 42.80 5.9X
 DAU 151.39 356 PKP 07 44.40 7.2X
 DUG 151.69 358 PKP 07 44.20 6.7X
 KVN 152.59 7 PKP 07 46.50 7.7X
 PV09 153.06 352 PKP 07 58.00 18.3X
 TNP 153.64 6 PKP 07 50.00 9.6X

S.D. = 0.8 on 45 of 60 obs.
 MAY 09, 1990 04h 21m 10.19 ± 0.14s
 56.381 S ± 4.2km 27.058 W ± 4.6km
 DEPTH = 33.0km (normal)
 6.0mb (22 obs.) 5.4msz (8 obs.)
 SOUTH SANDWICH ISLANDS REGION (153)
 FAULT PLANE SOLUTION: P-Waves
 NP1: Strike=305 Dip=83 Slip= 90
 NP2: 125 7 90

Principal Axes:

T P1g=52 Azm=215
 P 38 35

Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.

MOMENT TENSOR SOLUTION

Dep 102 No. of sta: 7
 Moment Tensor: Scale 10¹⁸ Nm
 Mrr= 0.09 Mtt=-0.03
 Mff=-0.06 Mrt=-0.82
 Mrf= 0.69 Mtf= 0.05

Principal axes:

T Vol= 1.07 P1g=47 Azm=219
 N 0.01 1 310
 P -1.08 42 41

Best Double Couple: Mo=1.1¹⁰ 18
 NP1: Strike=156 Dip= 3 Slip= 116
 NP2: 310 87 89

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN
 L.P.B.: 19S, 43C

Centroid Location:

Origin Time 04:21:26.7 0.2
 Lot 56.57S 0.03 Lon 26.37W 0.05

Dep 112.8 1.8 Half-duration 3.7
 Moment Tensor: Scale 10¹⁷ Nm

Mrr=-1.72 0.27 Mtt= 7.60 0.44
 Mff=-5.88 0.50 Mrt=-8.45 0.26
 Mrf= 5.54 0.24 Mtf= 1.95 0.38

Principal Axes:

T Vol= 12.67 P1g=32 Azm=185
 N -0.57 34 299
 P -12.10 40 63

Best Double Couple: Mo=1.2¹⁰ 18
 NP1: Strike=219 Dip=34 Slip=-171
 NP2: 122 85 -56

AIA 19.90 228 eP 25 45.00 3.7X
 SPA 33.80 180 iPc 27 51.00 0.1
 SPA 33.80 180 iPc 27 51.30 0.4X
 1.0s 499.00nm 6.4mb
 Z 20s 8.78um 5.5msz

CHCH 37.18 288 eP 28 20.50 0.7
 PCH 37.35 289 eP 28 22.50 1.3
 FCH 37.46 289 eP 28 23.50 1.1
 TACH 37.55 288 eP 28 22.50 -0.3
 SAN 37.56 289 eP 28 21.50 -1.4
 LNV 37.57 288 eP 28 22.00 -0.9
 PEL 37.81 289 iPc 28 25.20 0.1
 0.7s 61.64nm 5.6mb
 ZON 38.03 293 eP 28 26.00 -0.9
 RTLL 38.10 293 ePc 28 26.10 -1.4
 RTCB 38.14 293 eP 28 27.40 -0.5
 CER 39.09 74 iPc 28 37.00 1.3
 1.0s 230.00nm 5.9mb
 MAW 39.84 143 iP 28 42.50 1.0
 0.9s 226.00nm 5.9mb

POF 42.55 71 iPd 29 06.00 1.9
 1.0s 115.00nm 5.6mb
 BAO 43.69 330 iPc 29 15.00 1.4
 SBA 45.76 184 P 29 31.00 1.6
 BLF 46.10 77 iPc 29 32.50 -0.3
 0.9s 123.00nm 5.8mb
 BFS 48.16 75 iPd 29 40.00 -9.1X
 1.0s 590.00nm 6.6mb
 KSR 49.05 75 iPd 29 54.00 -2.0
 1.0s 215.00nm 6.1mb
 SLR 49.89 76 iPd 29 55.50 -7.0X
 1.5s 763.89nm 6.5mb
 Z 18s 15.12um 6.0msz
 LPB 50.40 305 P 30 03.50 -3.2X
 1.2s 437.50nm 6.3mb
 Z 24s 5.04um 5.4mszX

S 37 06.00
 LR 41 41.00
 BFT 50.89 78 iPd 30 10.00 -0.1
 ARE 52.04 302 eP 30 18.00 -1.0
 BUL 54.60 72 iPc 30 31.50 -6.3X
 i 38 01.80
 i 40 20.00
 PT03 56.24 299 eP 30 43.90 -5.6X
 DRV 56.89 174 eP 30 53.80 0.3

PT08	57.45	299	iPd	30	58.00	-0.1	CMS	92.27	174	eP	34	18.00	0.1	MSU	118.57	297	ePKP	39	55.00	-0.7
PT10	58.35	299	iP	31	06.20	1.4	MEKA	92.33	150	eP	34	18.30	0.1				iPKKP	50	13.80	
NNA	58.46	299	eP	31	05.00	-0.1	NKM	93.31	18	iP	34	25.00	2.8X	RSSD	119.09	307	ePKP	39	54.20	-2.3X
	58.47	299	iP	31	06.00	0.7				i	34	26.00					iPKKP	50	10.40	
	0.9s	50.42nm			5.6mb		COO	93.38	179	eP	34	20.00	-3.1X	SYP	119.49	289	ePKP	39	58.00	0.5
LIC	64.97	24	Pd	31	48.22	-0.5	EJIF	94.28	17	eP	34	24.00		ISA	119.57	291	ePKP	39	58.00	0.5
	0.8s	39.50nm			5.6mb		MAL	94.72	18	eP	34	30.00	1.4				e	43	23.00	
	0.20s	0.93um			5.0Msz					eSKS	44	52.00		BCH	120.05	289	PKP	39	59.00	0.5
				40	21.00					iS	45	38.00		RSON	120.20	318	PKP	39	54.50	-3.6X
KIC	65.16	25	Pd	31	49.60	-0.4	EPRU	94.82	17	eP	34	32.50	3.4X	HFS	120.57	22	ePKP	39	56.30	-2.2X
TIC	65.37	24	Pd	31	50.80	-0.6	EVAL	95.18	16	eP	34	33.80	3.1X		0.7s	12.00nm				
WEGH	65.54	29	eP	31	52.00	-0.4	EHOR	95.65	17	eP	34	36.00	3.1X	TNP	120.77	293	ePKP	39	59.80	-0.1
LEGH	65.63	30	eP	31	53.00	0.0	EBAN	96.23	18	e(P)	34	37.50	1.9	NB2	120.89	21	PKP	39	58.30	-0.9
SHGH	65.94	30	eP	31	55.50	0.6	BRS	96.56	180	iPc	34	37.50	-0.2		0.9s	20.90nm				
KOGH	66.04	29	eP	31	56.00	0.4		0.8s	8.00nm			5.3mb		PRI	121.08	289	ePKPd	40	01.10	0.7
KUK	66.10	29	eP	31	53.00	-3.0X	RMO	97.39	176	iPd	34	42.10	0.7				eSKP	43	25.90	
MCQ	69.37	184	eP	32	17.00	1.0	TOL	97.86	18	eP	34	46.00	3.2X	FRI	121.23	291	ePKPd	40	00.50	0.0
LWI	69.87	62	iP-	32	20.70	0.9				ePP	38	42.00					eSKP	43	25.60	
LWI	69.87	62	iP-	32	21.00	2.0				eS	45	13.00					ePKKP	50	03.00	
PSO	70.23	305	eP	32	23.00	0.8				ePS	47	22.00		LLA	121.59	290	ePKP	40	01.80	0.6
MBO	71.01	10	iPd	32	28.20	1.9	DZM	101.03	193	iPd	34	59.90	2.1X				eSKP	43	27.00	
BCAO	71.08	49	iPd	32	26.10	-0.8	WRA	102.37	162	Pd	35	03.10	-0.6	PRS	121.60	289	ePKPd	40	01.80	0.5
	0.6s	185.00nm			6.3mb			1.0s	9.30nm			5.4mb					eSKP	43	26.40	
				33	00.60		WB5	102.44	162	ePd	35	03.00	-1.0	KVN	121.96	293	ePKP	40	01.70	-0.4
BOG	71.85	310	eP	32	33.00	1.1				e	39	14.80					iPKKP	50	00.20	
			eS	41	44.00		LSF	105.03	20	ePKP	39	36.80	7.4X	SAO	121.96	289	ePKP	40	01.90	0.0
CUM	73.36	322	iP	32	42.0															

09d 04h

LZH 141.48 101 PKPc 43 17.00
 GTA 141.63 93 PKPc 40 33.00 -7.1X
 XAN 142.67 108 PKP 44 03.20 -6.2X
 WHN 142.68 117 ePKP 40 35.50 -5.6X
 E 4.0s 600.00nm
 10s 0.40um
 MBC 144.31 336 ePKP 40 40.00 -2.5X
 0.7s 71.00nm
 INK 146.10 320 ePKP 40 43.00 -2.7X
 0.6s 134.00nm
 NJ2 146.11 121 PKPc 40 47.00 0.1
 SSE 146.39 125 PKP 40 46.50 -0.8
 Z 20s 0.90um 5.5MsZ
 PP 44 15.00
 TIY 147.31 107 ePKP 40 48.00 -0.7
 Z 18s 1.00um 5.6MsZ
 N 18s 1.50um
 BTO 148.09 101 ePKP 40 49.00 -0.9
 N 14s 0.60um
 E 14s 0.70um
 HHC 149.10 102 PKP 40 50.00 -1.6
 TOA 149.39 306 ePKPd 40 49.50 -1.8
 PMR 150.58 304 ePKPd 40 49.90 -3.0X
 FBA 150.80 311 ePKP 40 49.30 -3.9X
 KDC 150.97 296 PKP 40 49.20 -4.4X
 BJI 151.00 109 ePKP 40 52.00 -2.2X
 Z 28s 0.48um 5.2MsZ
 DL2 152.95 117 PKP 40 54.50 -2.6X
 SS 04 14.00
 IMA 153.39 313 ePKPd 40 54.00 -3.1X
 TTA 154.02 306 ePKPd 40 55.00 -3.0X
 SHK 154.12 139 iPKPc 40 45.40 -13.5X
 0.6s 1786.67nm
 BRW 154.31 325 PKP 40 53.40 -4.6X
 SNY 156.13 115 ePKP 40 57.20 -4.1X
 Z 28s 1.10um 5.5MsZ
 E 28s 0.90um
 MAT 157.80 147 (PKP) 40 58.00 -5.7X
 CN2 158.51 114 PKP 41 02.00 -2.2X
 Z 24s 0.90um 5.5MsZ
 e 41 37.00
 ePP 45 17.00
 MDJ 161.16 119 ePKP 41 05.00 -2.0
 S.D. = 1.0 on 154 of 221 obs.
 MAY 09, 1990 04h 42m 49.69±0.69s
 5.989 S ± 3.7km 147.586 E ± 4.0km
 DEPTH = 69.2 ± 6.2 km
 5.5mb (21 obs.)
 EAST PAPUA NEW GUINEA REGION (207)
 LAT 0.88 221 iPd 43 08.30 1.4
 PMG 3.43 187 iPd+ 43 40.80 -1.0
 MNDI 3.91 267 eP 43 53.50 4.7X
 RAB 4.90 69 iPd 44 02.00 -0.6
 HNR 12.72 106 eP 45 49.00 -0.4
 CTA 14.07 185 iPc 46 07.80 0.6
 0.8s 16.42nm 4.5mb
 QIS 16.42 207 eP 46 36.00 -1.3
 e 46 49.00
 MTN 17.60 246 iPc 46 53.40 1.5
 WB5 18.86 222 iPd 47 05.50 -1.7
 eS 50 38.50
 WRA 18.93 222 Pc 47 06.40 -1.6
 0.7s 74.70nm 5.0mb
 RMO 20.42 177 iPd 47 23.90 0.2
 i 47 27.00
 OLP 20.73 189 iPd 47 26.50 -0.3
 KNA 20.85 241 eP 47 27.70 -0.4
 PVC 23.37 122 iPc 48 06.50 13.5X
 DZM 24.25 133 iPc 48 00.60 -1.0
 COO 24.79 171 eP 48 07.00 0.3
 e 48 20.00
 CMS 25.42 183 eP 48 13.00 0.5
 BWA 28.31 179 eP 48 36.50 -2.4
 e 48 42.30
 WARB 28.34 223 iPc 48 40.30 1.0
 0.6s 57.00nm 5.4mb
 CAN 29.22 178 eP 48 43.10 -4.0X
 e 48 46.90
 FORR 30.76 214 eP 49 00.30 -0.4
 MBL 30.82 238 eP 49 01.40 0.0
 MEKA 34.46 230 iPc 49 33.40 0.4

NANU 0.9s 155.00nm 5.9mb
 35.04 239 iPd 49 38.70 0.7
 0.5s 24.00nm 5.4mb
 COOL 35.06 222 eP 49 38.10 0.0
 0.5s 21.00nm 5.3mb
 MRWA 37.73 228 iPc 50 02.00 1.5
 0.6s 29.00nm 5.4mb
 KLB 37.78 224 iPc 50 01.10 0.1
 0.5s 44.00nm 5.6mb
 BAL 37.96 226 eP 50 02.50 0.0
 NWA0 38.93 223 iPd 50 11.10 0.5
 0.5s 16.00nm 5.2mb
 MUN 39.08 225 eP 50 12.30 0.5
 RKG 39.77 221 eP 50 21.00 3.5X
 IIDJ 42.24 348 P 50 38.60 0.8
 TCW 42.40 150 P 50 38.90 -0.1
 MSZ 42.43 158 P 50 40.00 0.8
 MNG 42.58 148 P 50 40.10 -0.4
 i 51 01.00
 CHJJ 42.58 350 P 50 40.90 0.4
 LTZ 42.65 153 P 50 40.90 -0.2
 CAW 42.72 149 P 50 41.60 0.0
 TSRJ 42.72 346 eP 50 41.90 0.3
 WDW 42.80 149 P 50 41.60 -0.6
 MTW 42.98 149 P 50 43.00 -0.7
 BLW 43.12 149 eP 50 43.80 -1.1
 MAT 43.21 349 iPd 50 45.50 -0.1
 1.1s 96.20nm 5.5mb
 MTMJ 43.33 349 P 50 47.20 0.5
 NIJJ 43.74 350 eP 50 51.30 1.4
 SSE 44.68 327 eP 51 13.00 15.4X
 IPM 47.66 282 ePd 51 20.90 -0.5
 LOE 50.91 298 P 52 03.00 16.7X
 GYA 51.11 311 eP 52 04.60 16.8X
 N 10s 0.80um
 E 10s 1.00um
 KMI 53.45 307 eP 52 22.50 17.1X
 CHTO 53.89 298 e(P) 52 07.80 -0.7
 1.2s 2.43nm 4.1mb X
 BJI 54.18 330 eP 52 09.00 -1.2
 TIY 54.42 326 eP 52 12.00 -0.2
 HHC 57.13 328 eP 52 29.00 -2.7
 BTO 57.78 327 P 52 36.20 0.0
 LZH 58.58 319 Pc 52 41.50 -0.5
 1.6s 39.00nm 5.3mb
 DRV 60.80 183 eP 52 57.20 0.7
 AFR 62.15 107 iP 53 07.00 0.7
 1.0s 45.00nm 5.5mb
 PPN 62.48 107 iP 53 09.40 0.9
 1.0s 55.00nm 5.6mb
 SHL 62.50 303 iP 53 10.50 1.7
 TVO 62.66 107 iP 53 11.00 1.2
 1.0s 70.00nm 5.7mb
 TBI 62.84 113 iP 53 12.10 1.3
 0.9s 75.00nm 5.8mb
 PMO 63.88 104 iP 53 19.10 1.3
 1.0s 85.00nm 5.7mb
 VAH 64.14 104 iP 53 20.20 0.7
 1.0s 40.00nm 5.3mb
 TPT 64.15 104 iP 53 20.50 0.9
 1.0s 55.00nm 5.5mb
 RUV 64.38 104 iP 53 21.90 0.8
 1.0s 55.00nm 5.5mb
 MAW 82.48 203 iP 55 06.40 0.8
 PMR 82.94 25 eP 55 07.50 -0.6
 IMA 83.34 21 eP 55 10.20 -0.1
 SPA 84.05 180 iPc 55 15.10 1.2
 1.0s 69.00nm 5.6mb
 i 55 30.50
 QUE 84.94 301 eP 55 05.20 -13.9X
 FBA 84.95 23 eP 55 16.50 -1.7
 INK 91.43 21 ePc 55 49.00 0.0
 PNT 96.32 41 eP 56 12.00 0.1
 0.7s 6.00nm 5.2mb
 MBC 96.51 14 eP 56 04.00 -8.2X
 BRG 121.00 328 e(PKP) 01 35.00 -0.8
 CLL 121.26 328 ePKP 01 36.00 -0.3
 KHC 122.14 326 PKP 01 39.00 0.9
 LNV 125.80 140 ePKP 01 45.50 -0.1
 PEL 126.78 140 iPKP 01 48.00 0.3
 1.0s 25.00nm
 BCAO 129.25 271 ePKPd 01 53.00 0.1
 0.7s 2.00nm
 id 05 13.70
 LPB 138.21 123 PKP 01 56.00 -14.2X
 i 02 07.00
 ZOBO 138.32 123 PKP 01 58.00 -12.6X

1.1s 31.90nm
 CCH 139.39 125 ePKP 02 11.00
 i 02 03.80 -8.4X
 02 14.80
 SDV 142.01 83 ePKP 02 12.30 -4.6X
 MGP 144.12 67 ePKP 02 16.50 -3.5X
 MORO 144.18 80 iPKPd 02 18.00 -2.4X
 SIV 144.20 128 iPKPd 02 18.80 -1.5
 AVE 144.25 323 ePKP 02 18.50 -1.4
 i 02 33.50
 PORP 144.52 67 ePKP 02 18.70 -2.1X
 PLAV 145.05 81 ePKP 02 21.00 -1.1
 CPD 145.19 67 ePKP 02 21.00 -0.9
 GUAC 145.25 81 iPKPc 02 22.30 0.0
 LLAV 145.68 80 iPKP 02 22.40 -0.6
 OLLA 145.72 81 iPKPc 02 23.30 0.2
 TIO 145.76 320 iPKPd 02 23.40 0.7
 i 02 37.50
 KUK 148.14 272 ePKP 02 27.00 0.2
 TCE 150.61 79 ePKP 02 35.64 5.0X
 TPP 150.95 80 ePKP 02 36.84 5.8X
 TRN 150.96 79 ePKP 02 36.75 5.7X
 TBH 151.30 79 ePKP 02 39.31 7.7X
 KIC 152.49 272 PKP 02 40.40 7.0X
 TIC 152.77 273 PKP 02 40.78 7.0X
 LIC 152.77 272 PKP 02 40.92 7.2X
 BAO 153.55 144 iPKPc 02 35.70 0.7
 S.D. = 0.9 on 81 of 105 obs.
 % MAY 09, 1990 04h 50m 06.38±1.49s
 39.089 N ± 13.8km 22.644 E ± 9.4km
 DEPTH = 10.0km (geophysicist)
 GREECE (364)
 AGG 0.25 255 ePg 50 11.60 -0.2
 eSg 50 15.00
 LIT 1.02 353 ePg 50 25.60 0.0
 eSg 50 38.10
 PAIG 1.16 43 ePg 50 28.20 0.2
 OUR 1.62 39 ePb 50 34.60 -0.4
 IGT 1.85 285 ePn 50 38.90 0.5
 GRG 1.87 354 ePn 50 39.60 0.8
 FNA 1.95 330 ePn 50 39.00 -0.9
 S.D. = 0.7 on 7 of 7 obs.
 MAY 09, 1990 04h 55m 34.77±0.62s
 37.263 N ± 6.6km 29.471 E ± 5.0km
 DEPTH = 10.0km (geophysicist)
 TURKEY (366)
 ELL 0.62 146 iPg 55 47.20 -0.2
 BCK 0.91 77 iPn 55 52.50 0.2
 YER 0.96 263 iPn 55 53.00 0.0
 KHL 1.06 2 ePn 55 54.60 -0.2
 CIN 1.15 287 ePg 55 56.00 -0.3
 iSg 56 11.00
 ALT 1.86 16 ePn 56 07.00 0.0
 IZM 2.08 304 ePn 56 13.50 3.3X
 SMG 2.14 283 ePn 56 11.50 0.5
 S.D. = 0.3 on 7 of 8 obs.
 * MAY 09, 1990 05h 24m 23.13±1.57s
 29.390 N ± 24.7km 66.925 E ± 16.0km
 DEPTH = 33.0km (normol)
 4.2mb (4 obs.)
 PAKISTAN (710)
 QUE 0.80 2 iPd 24 38.10 0.0
 NDI 9.04 92 iPd 26 35.00 0.7
 0.7s 27.40nm 5.5mb X
 iS 28 17.50
 MAIO 9.30 320 eP 26 40.00 2.0
 eS 28 30.00
 DMN 16.08 92 P 28 08.20 -0.5
 GUN 16.71 90 P 28 15.80 -0.9
 SHL 22.45 94 iP 29 23.50 2.6X
 CHTO 30.97 103 eP 30 41.00 1.3
 0.7s 1.11nm 3.8mb
 HFS 46.83 327 eP 32 49.80 -1.6
 1.4s 17.50nm 4.9mb
 NB2 48.26 327 P 33 01.00 -1.6
 0.7s 1.80nm 4.2mb
 YKA 88.43 1 eP 37 13.30 0.5
 0.7s 0.90nm 4.2mb
 S.D. = 1.4 on 9 of 10 obs.
 MAY 09, 1990 06h 20m 22.19±0.82s

Mrr= 2.21 0.26 Mtt=-1.28 0.51
 Mff=-0.94 0.44 Mrt= 2.59 0.69
 Mrf=-1.12 0.74 Mtf= 0.56 0.28
 Principal Axes:
 T Vol= 3.71 Plg=62 Azm= 20
 N -0.57 3 116
 P -3.14 28 208
 Best Double Couple: Ma=3.4*10**16
 NP1: Strike=307 Dip=18 Slip= 101
 NP2: 115 73 87

HNR 6.84 287 eP 35 18.00 1.6
 eS 36 31.00
 DZM 10.53 181 iPc 36 09.80 2.2
 iS 38 01.00
 BRS 20.46 217 iPd 38 04.80 -8.5X
 0.5s 6.00nm 4.2mb
 CTA 21.33 244 iPd 38 25.00 2.7X
 1.0s 53.00nm 4.9mb
 RMQ 22.47 226 iPc 38 35.00 1.4
 COO 23.38 213 eP 38 45.00 2.5
 CMS 27.64 221 eP 39 22.00 -0.4
 e 39 26.00 14kmX
 MNG 30.06 166 P 39 43.30 -0.8
 0.4s 7.00nm 4.8mb
 PGZ 30.25 165 eP 39 44.70 -1.1
 0.4s 23.00nm 5.3mb
 THZ 30.67 171 eP 39 49.40 -0.1
 LTZ 31.57 172 P 39 57.20 -0.2
 WB5 32.07 251 eP 40 00.20 -1.9
 WRA 32.11 251 Pd 40 00.90 -1.5
 0.8s 18.50nm 5.0mb
 TOO 32.14 213 eP 40 02.50 0.1
 MQZ 32.53 172 P 40 05.60 -0.1
 ADE 34.46 223 iPc 40 22.70 0.0
 MTN 34.67 264 eP 40 24.00 -0.6
 MBL 45.74 252 iPc 41 55.90 -0.1
 COOL 46.18 238 eP 41 58.20 -1.2
 MEKA 47.56 244 eP 42 10.20 -0.2
 NANU 49.83 250 eP 42 28.00 0.1
 0.5s 13.00nm 5.2mb
 NWA0 49.91 237 eP 42 27.70 -0.7
 MUN 50.54 238 eP 42 32.30 -0.9
 PPR 52.05 292 ePc 42 46.00 1.2
 KKM 53.05 287 ePc 42 52.00 -0.5
 NJ2 62.91 315 Pc 44 01.00 -0.2
 CN2 66.54 329 P 44 24.30 -0.3
 sP 44 40.20
 BJI 69.34 321 eP 44 42.00 -0.1
 pP 44 51.00 29km
 LOE 70.19 293 eP 44 47.00 -0.8
 TIY 70.44 317 P 44 49.30 0.3
 XAN 71.02 312 Pc 44 52.50 -0.1
 KMI 72.05 301 Pd 45 00.00 0.8
 sP 45 14.50
 CHG 73.15 294 ePc 45 05.50 0.0
 1.1s 16.77nm 4.9mb
 CHTO 73.15 294 iPc 45 05.80 0.3
 1.2s 62.71nm 5.5mb
 pP 45 19.90 49kmX
 CD2 73.52 307 P 45 07.00 -0.5
 1.0s 13.00nm 4.9mb
 LZH 75.66 312 Pc 45 20.00 0.1
 1.2s 38.00nm 5.3mb
 pP 45 31.50 38km
 SPA 78.59 180 iPc 45 35.40 -0.2
 1.0s 30.00nm 5.3mb
 GTA 79.95 314 Pc 45 44.30 0.9
 SHL 81.45 298 iP 45 41.50 -0.1
 GUN 87.25 299 P 46 21.20 0.1
 0.8s 13.00nm 5.2mb
 DMN 87.84 299 P 46 23.80 0.0
 0.8s 32.00nm 5.7mb
 WMO 99.99 315 P 46 33.20 -0.2
 GBA 91.84 283 Pd 46 47.80 5.5X
 0.9s 1.70nm 4.5mb
 YKA 94.98 27 eP 46 56.70 0.9
 0.5s 0.30nm 4.0mb X
 BCAO 147.62 260 iPKPc 53 19.00 2.4X
 0.2s 92.00nm
 ic 53 34.40
 ic 53 36.50
 S.D. = 0.9 an 41 of 45 abs.

% MAY 09, 1990 15h 10m 51.81 ± 0.98s
 40.649 N ± 9.4km 15.850 E ± 6.9km
 DEPTH = 10.0km (geophysicist)

SOUTHERN ITALY

(390)

SGO 0.42 258 Pc 10 59.80 -0.6
 MGR 0.56 204 P 11 01.90 -1.2
 eSg 11 10.50
 ORI 0.74 142 P 11 06.30 -0.1
 eSg 11 19.80
 BSS 0.81 280 P 11 08.60 1.2
 eSg 11 20.70
 BAI 0.90 58 P 11 08.50 -0.6
 eSg 11 22.00
 TDS 1.06 159 P 11 13.10 1.4
 S.D. = 1.4 an 6 af 6 obs.

% MAY 09, 1990 15h 11m 56.16 ± 1.00s
 40.646 N ± 9.6km 15.852 E ± 7.1km
 DEPTH = 10.0km (geophysicist)

SOUTHERN ITALY

(390)

SGO 0.42 258 Pc 12 04.10 -0.7
 eSg 12 12.30
 MGR 0.56 204 P 12 06.50 -0.9
 eSg 12 14.80
 ORI 0.74 142 P 12 09.90 -0.8
 eSg 12 22.40
 BSS 0.81 281 P 12 12.80 1.0
 eSg 12 25.10
 BAI 0.90 58 P 12 13.00 -0.4
 eSg 12 26.00
 TDS 1.05 159 P 12 17.80 1.8
 S.D. = 1.4 on 6 af 6 obs.

* MAY 09, 1990 16h 08m 33.80 ± 0.66s
 12.812 N ± 11.0km 88.353 W ± 8.8km
 DEPTH = 58.4km (5 depth phases)
 5.0mb (18 obs.)

OFF COAST OF CENTRAL AMERICA (76)
 Felt (III) at San Salvador, El
 Salvador.

QZA 0.95 319 iPc 08 51.20 0.0
 SJAS 1.16 317 iPd 08 54.50 0.3
 LFU 1.19 322 iPd 08 56.00 1.4
 SSS 1.19 316 iPd 08 54.60 0.0
 eS 09 07.80
 VSS 1.27 317 iPc 08 56.50 0.8
 YPE 1.83 315 iPd 09 04.30 0.7
 CUSS 1.90 305 eP 09 04.20 -0.2
 TPX 4.33 299 iP 09 39.20 0.6
 iS 10 19.50
 SCX 5.69 314 eP 10 15.50 17.8X
 (S) 11 17.00
 OXX 9.13 299 eP 10 47.50 1.7
 (S) 12 27.00
 UPA 9.46 113 eP 10 53.70 3.7X
 0.8s 19.40nm 5.2mb
 Z 18s 0.24um 3.8msz
 e 11 09.80
 PPM 11.67 304 iP 11 21.80 1.2
 (S) 13 44.50
 PRM 21.87 13 P 13 25.50 2.3
 UYO 21.97 346 eP 13 25.30 1.0
 JSC 22.32 16 P 13 30.00 2.3
 LHS 22.63 16 P 13 33.30 2.5
 RSCP 22.83 6 P 13 34.00 1.3
 TKL 23.12 10 P 13 37.00 1.5
 MEO 23.76 339 e(P) 13 43.00 1.2
 CVL 26.57 18 P 14 09.00 0.8
 ALQ 27.46 326 eP 14 16.00 -0.6
 0.7s 6.34nm 4.3mb
 ANMO 27.47 326 P 14 18.90 2.3
 0.6s 4.42nm 4.2mb
 GLD 30.69 334 P 14 45.40 0.0
 0.9s 38.16nm 5.1mb
 GOL 30.71 334 P 14 45.20 -0.5
 0.8s 44.64nm 5.2mb
 GLA 31.47 314 P 14 52.30 0.1
 pP 15 07.00 60km
 TPC 32.90 315 eP 15 19.00 14.3X
 PLM 33.07 313 P 15 07.50 1.2
 pP 15 21.00 53km
 RSSD 33.98 340 P 15 14.00 -0.1
 DAU 34.07 328 P 15 15.00 0.0
 MWC 34.37 313 eP 15 33.00 15.4X
 SBB 34.45 314 eP 15 17.00 -1.1
 BW06 35.05 332 P 15 22.00 -1.3
 ZOBO 35.14 145 iPc 15 27.00 2.3

Z 24s

0.20um

3.8mszX

TNP 35.96 320 P 15 04.00 0.2
 0.7s 2.67nm 4.3mb
 IMW 36.55 332 P 15 35.80 -0.2
 KVN 37.09 320 P 15 40.50 0.0
 CCH 37.16 143 (P) 15 46.00 4.6X
 RSON 38.19 355 P 15 47.60 -1.7
 0.6s 19.63nm 5.2mb
 pP 16 03.30 62km
 LRM 38.72 333 iPc 15 59.70 5.5X
 SIV 39.33 136 P 16 01.00 1.7
 NEW 42.67 332 P 16 25.00 -1.4
 0.8s 5.21nm 4.3mb
 FFC 43.16 348 iPc 16 30.10 -0.1
 0.5s 24.00nm 5.2mb
 LON 43.98 327 P 16 35.70 -1.3
 BMW 44.58 326 P 16 40.80 -1.1
 EDM 44.96 339 iPc 16 44.30 -0.5
 0.5s 82.00nm 5.8mb
 SCH 45.19 17 ePc 16 45.90 -0.7
 0.6s 25.00nm 5.2mb
 MCW 45.74 328 P 16 50.00 -1.0
 BAO 48.92 124 eP 17 14.70 -1.7
 FRB 52.74 11 eP 17 42.00 -2.5
 YKA 53.03 345 eP 17 44.90 -1.9
 0.8s 24.00nm 5.3mb
 INK 62.60 343 eP 18 52.00 -1.8
 0.8s 27.00nm 5.4mb
 pP 19 08.00 59km
 PMR 65.09 333 P 19 08.50 -1.7
 0.6s 7.64nm 4.9mb
 MBC 65.54 352 eP 19 12.00 -0.9
 0.5s 6.00nm 4.8mb
 pP 19 28.00 59km
 FBA 65.74 336 P 19 12.20 -2.2
 0.6s 9.85nm 5.0mb
 IMA 68.45 337 P 19 29.30 -2.3
 0.6s 1.54nm 4.1mb
 TTA 68.56 333 P 19 29.50 -2.7
 NB2 83.48 29 P 20 54.80 -1.5
 0.8s 1.70nm 4.1mb
 BUL 119.41 106 iPKPc 27 14.60 -4.7X
 WB5 138.50 254 ePKP 27 48.20 -7.4X
 e 27 56.60
 e 28 12.80
 WRA 138.52 254 PKPc 27 46.70 -8.9X
 0.6s 0.70nm
 CHG 147.76 347 ePKP 28 12.60 1.1
 CHTO 147.76 347 ePKP 28 12.60 1.1
 0.8s 4.03nm
 LOE 148.37 341 ePKP 28 14.00 1.5
 GBA 150.21 29 PKPc 28 19.80 4.5X
 0.6s 5.00nm
 MUN 150.47 226 ePKP 28 22.00 6.7X
 MBL 151.83 249 iPKPc 28 25.20 7.6X
 S.D. = 1.4 on 54 of 66 abs.

MAY 09, 1990 16h 44m 54.69 ± 1.37s
 13.158 S ± 4.3km 167.219 E ± 6.4km
 DEPTH = 195.3 ± 12.0 km
 4.9mb (17 obs.)

VANUATU ISLANDS

(186)

HNR 8.04 297 eP 46 49.00 -0.5
 DZM 8.89 185 iPc 47 09.00 8.4X
 iS 48 49.00
 BRS 19.57 221 iPc 49 11.00 1.3
 1.0s 5.50nm 4.0mb
 PMG 20.02 279 eP 49 15.00 0.7
 CTA 21.22 248 iPd 49 28.60 2.3
 1.1s 40.51nm 4.9mb
 iS 53 16.00
 RMQ 21.81 230 iPc 49 34.00 2.0
 0.9s 183.00nm 5.6mb
 HBZ 26.27 160 eP 50 12.30 -1.4
 CMS 26.82 224 eP 50 19.00 0.2
 CNZ 26.96 166 eP 50 21.60 1.5
 BWA 27.18 216 eP 50 21.00 -1.1
 ePcP 53 37.20
 CAN 27.52 214 eP 50 25.30 0.2
 ePcP 53 38.30
 MNG 28.30 167 eP 50 31.00 -1.0
 0.4s 11.00nm 4.9mb
 PGZ 28.49 165 eP 50 32.10 -1.5
 0.5s 43.00nm 5.4mb
 THZ 28.93 171 P 50 38.00 0.4

09d 19h

KFNJ 150.01 302 PKPc 14 48.30 4.5X
 BHG 150.19 351 iPKPc 14 49.10 5.5X
 1.0s 20.00nm
 DSI 150.34 302 ePKP 14 46.00 1.7
 FEL 150.53 357 ePKP 14 49.80 5.5X
 SOTA 150.91 353 ePKP 14 45.00 0.1
 0.9s 23.10nm
 i 14 50.50
 i 15 16.30
 i 15 19.20
 PRNI 151.04 300 ePKP 14 52.00 6.5X
 LOR 151.14 3 ePKP 14 45.30 0.2
 0.9s 6.55nm
 FVI 151.30 350 PKP 14 50.70 5.4X
 MBH 151.31 299 iPKPc 14 52.50 6.7X
 PTJ 151.32 345 ePKP 14 45.10 -0.4
 SSF 151.33 3 ePKP 14 45.70 0.3
 1.0s 7.00nm
 KHL 151.40 319 ePKP 14 52.00 6.1X
 MFF 151.42 9 ePKP 14 45.60 0.1
 LBF 151.43 3 ePKP 14 45.90 0.3
 1.0s 6.00nm
 LJU 151.51 347 e(PKP) 14 46.00 0.3
 e 14 52.00
 VOY 151.65 348 ePKP 14 46.20 0.2
 e 14 51.70
 SMF 151.76 3 ePKP 14 46.40 0.4
 0.7s 2.75nm
 CEY 151.82 347 e(PKP) 14 52.60 6.4X
 VBY 151.86 346 iPKPc 14 53.50 7.3X
 LSF 151.97 6 ePKP 14 46.40 0.0
 TCF 152.00 5 ePKP 14 46.70 0.3
 1.0s 5.00nm
 ELL 152.07 316 ePKP 14 53.50 6.5X
 MAF 152.10 5 ePKP 14 47.20 0.7
 VAI 152.49 356 PKPc 14 54.10 7.1X
 SKO 153.02 334 ePKP 14 47.60 -0.3
 i 14 55.40
 i 15 07.00
 CAF 153.34 6 ePKP 14 49.00 0.7
 BNI 153.40 359 PKP 14 50.50 1.9
 FNA 154.02 332 ePKP 14 56.80 7.3X
 EPF 154.98 10 ePKP 14 51.50 0.9
 0.9s 4.10nm
 BCAO 161.44 223 iPKPd 14 59.40 0.4
 0.5s 3.00nm
 id 15 44.20
 S.D. = 1.3 on 102 of 150 obs.

& MAY 09, 1990 19h 44m 08.47s
 60.204 N 152.883 W
 DEPTH = 108.2km
 SOUTHERN ALASKA (2)
 <AGS-P>.

RED 0.22 14 iP 44 23.15 0.7
 eS 44 35.30
 RDT 0.44 32 iP 44 24.27 -0.8
 eS 44 36.70
 >NNL 0.81 101 iP 44 28.19 0.3
 AUL 0.87 199 iP 44 27.57 -0.9
 NKA 0.98 56 eP 44 30.70 1.2
 SPU 1.06 22 iP 44 30.11 -0.4
 CNPM 1.07 129 iP 44 30.00 -0.6
 iS 44 46.35
 CRP 1.13 18 eP 44 28.35 -3.0
 iS 44 48.61
 NCG 1.26 16 eP 44 32.77 0.0
 MCNL 1.26 216 eP 44 30.88 -1.8
 CDD 1.34 197 iP 44 31.80 -1.8
 SLKM 1.36 76 eP 44 33.14 -0.7
 SUA 1.64 39 eP 44 37.26 -0.2
 SEW 1.72 92 eP 44 37.45 -0.8
 SKT 1.90 20 iP 44 40.51 -0.1
 PMS 1.94 56 iP 44 40.63 -0.5
 GHO 2.49 49 eP 44 46.77 -1.6
 CUT 2.54 29 eP 44 48.77 -0.2
 MTU 2.63 92 eP 44 49.34 -0.8
 SML 2.74 52 iP 44 49.94 -1.7
 GLI 2.94 74 eP 44 51.01 -3.3
 VZW 3.23 72 iP 44 55.92 -2.4
 VLZ 3.36 71 eP 44 57.38 -2.5
 MID 3.40 100 iP 44 59.41 -1.1
 NCA 3.45 56 eP 44 59.35 -1.9
 KLU 3.64 66 iP 45 01.42 -2.5
 26 obs. associated

MAY 09, 1990 19h 46m 43.11 ± 0.30s
 2.813 S ± 4.6km 119.729 E ± 6.5km
 DEPTH = 33.0km (normol)
 5.5mb (23 obs.) 4.6Msz (11 obs.)
 SULAWESI (268)
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 12S, 26C
 Centroid Location:
 Origin Time 19:46:42.8 0.5
 Lot 2.84S FIX; Lon 119.57E FIX
 Dep 15.0 FIX Half-duration 1.7
 Moment Tensor; Scale 10**16 Nm
 Mrr=-2.59 0.60 Mtt= 0.62 0.46
 Mff= 1.97 0.82 Mrt= 0.21 1.11
 Mrf=-4.14 1.28 Mtr= 6.80 0.54
 Principal Axes:
 T Vol= 8.91 Plg=15 Azm=129
 N -1.40 52 19
 P -7.51 34 229
 Best Double Couple: Mo=8.2*10**16
 NP1: Strike=264 Dip=55 Slip=-15
 NP2: 3 78 -144

TSM 7.18 347 ePc 48 28.80 0.3
 1.0s 938.30nm 6.7mb X
 KKM 9.47 338 ePd 49 00.00 -0.5
 0.9s 94.80nm 6.0mb
 e 50 46.50
 DAV 11.43 31 eP 49 30.00 2.8
 PPR 12.55 355 ePd 49 42.00 -0.2
 MTN 15.05 132 eP 50 13.00 -2.2
 e 50 25.00
 PGP 16.25 4 eP 50 34.50 3.8X
 0.8s 73.00nm 4.9mb
 KGM 17.09 286 eP 50 44.00 2.7
 MBL 18.24 180 iPd 50 55.40 -0.1
 1.0s 76.00nm 4.8mb
 NANU 20.05 191 eP 51 17.10 0.6
 IPM 20.08 291 ePc 51 17.20 0.4
 1.5s 377.70nm 5.5mb
 CVP 20.49 6 iP 51 22.00 0.9
 1.8s 416.00nm 5.5mb
 PIP 21.02 2 eP 51 26.50 0.0
 SNG 21.50 298 eP 51 31.10 -0.3
 1.2s 253.13nm 5.5mb
 eS 55 38.70
 WRA 22.21 141 Pd 51 38.00 -0.5
 1.8s 370.00nm 5.5mb
 OIZ 23.78 336 P 51 55.00 1.2
 N 16s 2.20um
 eS 56 05.50
 SS 56 56.00
 WARB 24.17 165 eP 51 58.00 0.5
 0.8s 26.00nm 4.8mb
 HKC 25.55 348 eP 52 12.00 1.3
 OIS 26.20 134 eP 52 16.00 -0.8
 i 55 45.00
 GZH 26.48 347 eP 52 19.00 -0.3
 E 11s 0.66um
 eS 56 55.00
 LOE 26.81 319 eP 52 22.00 -0.4
 OZH 27.61 358 eP 52 28.00 -1.6
 CHG 29.67 317 ePc 52 48.30 0.0
 1.3s 72.12nm 5.3mb
 CHTO 29.67 317 eP 52 48.20 -0.1
 GUMO 29.79 56 eP 52 51.40 2.0
 PJG 29.79 56 eP 52 51.10 1.7
 GYA 31.72 337 iPc 53 06.80 0.4
 Z 20s 0.90um 4.4Msz
 N 15s 1.00um
 E 15s 0.70um
 KMI 32.29 330 Pc 53 13.00 1.4
 3.0s 500.00nm 5.9mb
 Z 16s 1.50um 4.8MszX
 N 13s 0.50um
 E 13s 0.60um
 WHN 33.56 352 ePc 53 23.50 1.3
 3.0s 900.00nm 6.2mb
 Z 20s 1.30um 4.6Msz
 N 14s 0.80um
 E 11s 0.20um
 SSE 33.75 2 eP 53 24.00 0.2
 Z 20s 0.70um 4.4Msz
 N 12s 0.40um

NJ2 34.68 359 Pc 53 32.00 0.1
 3.0s 400.00nm 5.0mb
 Z 20s 0.60um 4.3Msz
 pP 53 37.80 20kmX
 ePP 54 50.00
 S 59 04.00
 RMO 36.45 133 eP 53 48.00 1.0
 CD2 36.83 337 P 53 50.00 -0.2
 1.6s 200.00nm 5.7mb
 Z 20s 0.60um 4.4Msz
 PP 55 17.00
 S 59 38.00
 XAN 38.04 345 P 54 00.00 -0.3
 N 13s 0.60um
 TIA 38.90 357 eP 54 06.70 -0.7
 1.8s 100.00nm 5.3mb
 eS 00 00.00
 BRS 39.94 131 iPc 54 21.00 4.8X
 e(PP) 55 42.00
 TIY 40.88 351 Pc 54 23.50 -0.4
 Z 21s 1.40um 4.8Msz
 N 15s 1.10um
 sP 54 32.50
 PP 56 07.00
 S 00 29.50
 COO 41.07 136 eP 54 29.00 3.5X
 BWA 41.26 143 eP 54 30.30 3.3X
 LZH 41.45 340 Pc 54 28.00 -0.6
 4.0s 590.00nm 5.7mb X
 pP 54 38.00 34kmX
 PP 56 05.00
 CAN 42.22 143 eP 54 35.20 0.3
 LSA 42.34 322 Pc 54 36.90 0.5
 BJI 42.77 356 eP 54 38.00 -1.2
 1.0s 54.00nm 5.2mb
 Z 24s 0.64um 4.4MszX
 N 15s 0.61um
 eS 01 00.00
 MAT 42.78 22 (P) 54 32.00 -7.3X
 2.0s 70.59nm 5.0mb
 Z 20s 0.71um 4.6Msz
 (S) 00 56.00
 HHC 44.09 351 eP 54 50.00 0.0
 Z 24s 1.40um 4.8MszX
 BTO 44.11 349 P 54 48.00 -2.2
 N 13s 0.50um
 E 13s 0.60um
 PP 56 35.00
 S 01 26.00
 SNY 44.57 4 Pc 54 51.50 -2.2
 Z 22s 0.90um 4.6Msz
 N 24s 1.00um
 S 01 22.00
 SS 04 42.00
 GUN 44.65 315 P 54 55.40 0.3
 GBA 45.01 292 Pd 54 57.40 -0.3
 1.1s 40.80nm 5.2mb
 HYB 45.31 298 eP 54 59.50 -0.6
 1.6s 400.00nm 6.1mb
 GTA 45.84 338 iPc 55 04.80 0.7
 1.8s 500.00nm 6.1mb
 Z 20s 1.20um 4.8Msz
 E 14s 0.70um
 S 01 50.00
 CN2 46.69 6 eP 55 09.50 -1.0
 Z 20s 2.00um 5.1Msz
 N 20s 1.20um
 eS 02 00.00
 MDJ 48.03 9 Pc 55 20.00 -1.1
 Z 25s 1.10um 4.7MszX
 eS 02 20.00
 NDI 51.42 311 iPc 55 45.00 -2.3
 1.1s 37.97nm 5.3mb
 eS 03 08.00
 WMO 54.60 332 iPc 56 10.50 -0.3
 1.5s 100.00nm 5.6mb
 Z 20s 0.70um 4.7Msz
 N 12s 0.40um
 pP 56 20.50 33kmX
 PP 58 16.00
 S 03 49.00
 ScS 05 47.00
 KSH 58.15 321 P 56 37.20 0.9
 4.0s 1100.00nm 6.3mb X
 S 04 39.00
 QUE 60.08 307 eP 56 48.00 -2.0
 MAIO 60.17 311 iPd 57 42.70 0.1

09d 19h

MAW 75.27 199 iPc 58 26.00 1.7 1.0s 61.00nm 5.6mb	SMG 1.21 343 ePn 55 23.00 0.9 1.23 31 eP 55 25.00 2.7X	1.0s 13.50nm 4.7mb Z 20s 18.24um 5.7msz
SPA 87.21 180 eP 59 28.20 0.9 1.6s 52.78nm 5.5mb	APE 1.51 291 ePb 55 25.30 -1.5 IZM 1.85 359 ePn 55 39.00 7.3X	MAW 38.07 218 iPc 45 42.20 3.4X Z 16s 19.00um 6.0mszX
BUL 90.09 250 iPc 59 36.00 -5.9X SLR 90.10 244 eP 59 35.00 -6.8X	ELL 2.11 84 ePn 55 35.50 -0.2 KHL 2.51 44 ePn 55 44.00 2.7X	CTA 43.17 339 iPc 57 45.00 -0.3 1.2s 70.31nm 5.3mb
KSR 91.34 244 eP 59 47.50 -0.1 INK 98.76 21 eP 00 19.00 -1.3	VAM 2.76 246 ePn 55 45.70 0.9 BCK 2.79 70 ePn 55 48.00 2.7X	iS 52 52.00 iSS 56 00.00
VAI 106.53 317 PKP 05 22.30 15.9X LKO 125.28 280 PKP 05 43.96 0.7 0.9s 25.00nm	VLI 3.51 274 ePn 55 50.00 -5.4X S.D. = 1.4 on 5 of 10 obs.	WRA 46.02 323 P 46 44.00 -0.2 1.3s 20.00nm 4.9mb
ALO 126.57 48 ePKP 05 46.00 0.5 LPB 159.28 158 PKP 06 40.00 -0.6	MAY 09, 1990 21h 40m 22.77 ± 0.76s 36.110 N ± 7.7km 27.078 E ± 5.2km DEPTH = 23.9 ± 6.3 km 4.1mb (2 obs.) DODECANESE ISLANDS (369) ML 4.0 (ATH).	WB5 46.07 324 eP 46 43.00 -1.6 AIA 48.65 156 eP 47 04.70 0.4 SNG 83.16 299 eP 50 45.00 -1.3 SLR 84.88 221 eP 50 51.00 -4.2X LPB 92.56 133 P 51 32.00 -0.2 Z 24s 2.71um 5.6mszX
ZOBO 159.51 158 PKP 06 44.00 2.9X 1.1s 13.63nm	YER 1.41 43 iPn 40 46.50 -0.6 APE 1.57 308 ePb 40 50.00 0.6	ZOBO 92.80 133 P 51 33.00 -0.5 1.5s 18.82nm 5.3mb
SIV 161.30 178 PKP 06 41.00 -1.2 i 07 28.00 S.D. = 1.1 on 60 of 69 obs.	SMG 1.61 353 ePg 40 49.00 -0.9 CIN 1.69 28 eP 40 51.00 -0.1	CHG 94.35 303 eP 51 41.00 1.3 CHTO 94.35 303 eP 51 39.10 -0.6 0.9s 2.56nm 4.6mb
MAY 09, 1990 20h 27m 32.33 ± 0.70s 40.620 N ± 8.4km 15.871 E ± 5.4km DEPTH = 10.0km (geophysicist) SOUTHERN ITALY (390)	KSL 2.03 89 ePn 40 57.20 1.2 eSn 41 24.50	SIV 95.37 139 P 51 44.00 -0.7 BW06 126.19 66 ePKP 57 21.20 -1.5
SGO 0.43 262 P 27 40.60 -0.5 eSg 27 47.70	IZM 2.29 4 iPn 41 03.80 4.0X ELL 2.37 74 iPn 41 03.00 2.0X	MAIO 126.76 279 ePKP 57 26.00 2.3X LRM 127.42 61 ePKP 57 27.40 2.5X
MGR 0.54 207 Pc 27 42.50 -0.7 eSg 27 52.00	VAM 2.44 254 ePn 41 07.00 5.0X KHL 2.95 41 ePn 41 09.00 -0.1	RSSD 129.67 69 ePKP 57 26.00 -2.4X FVM 131.03 84 ePKP 57 40.00 8.3X
ORI 0.71 141 P 27 46.40 0.1 eSg 27 59.00	BCK 3.12 63 ePn 41 13.50 1.8 ATH 3.27 306 ePg 41 25.00 11.4X	SES 131.62 59 ePKP 57 34.00 1.5 TAB 134.38 270 ePKP 57 51.00 12.8X
BSS 0.83 282 Pc 27 49.10 0.8 eSg 27 59.70	EZN 3.76 351 ePn 41 20.70 0.2 ALT 3.80 38 ePn 41 21.30 0.0	INK 138.09 30 ePKP 57 47.00 2.9X YKA 139.25 45 ePKP 57 38.10 -8.3X
BAI 0.91 56 P 27 48.50 -1.1 TDS 1.02 159 P 27 54.50 2.8X	ITM 4.28 286 ePn 41 32.00 4.0X NEO 4.42 317 ePn 41 30.00 0.0	0.8s 0.80nm
BRT 1.04 75 Pc 27 51.20 -0.8 eSg 28 06.90	PPCY 4.47 104 eP 41 31.00 0.3 YLV 4.80 21 ePn 41 43.00 7.5X	IZM 143.49 251 ePKP 57 52.80 -1.9 RSNY 143.63 92 ePKP 58 04.30 9.6X
LCI 1.61 100 P 28 03.00 2.1 SDI 1.89 306 P 28 05.40 0.4	CSS 5.23 101 eP 41 40.80 -0.6 LFK 5.32 97 ePn 41 43.60 0.8	HRT 144.36 256 ePKP 57 53.00 -3.1X MBC 146.58 25 ePKP 57 59.00 0.3
HVAR 2.59 9 e(Pn) 28 20.80 5.8X OHR 3.77 81 ePn 28 36.50 4.7X	BBTK 5.83 49 eP 41 51.00 0.9 OHR 7.01 317 e(P) 42 11.00 4.5X	VAY 147.96 249 ePKP 58 02.00 0.1 TIO 148.07 199 iPKP 58 10.00 7.4X
VOY 5.60 346 e(Pn) 29 55.80 58.1X eSg 30 40.90	HRI 7.68 109 eP 42 14.00 -2.0 eS 43 35.00	CFR 148.45 260 ePKP 58 04.00 1.5 OHR 148.57 247 ePKP 58 05.00 2.0X
S.D. = 1.3 on 8 of 12 obs.	DSI 8.26 121 eP 42 19.00 -4.9X MBH 9.10 132 eP 42 34.00 -1.7	1.5s 89.00nm
% MAY 09, 1990 20h 33m 53.79 ± 0.80s 40.703 N ± 8.3km 15.817 E ± 5.6km DEPTH = 10.0km (geophysicist) SOUTHERN ITALY (390)	KHC 16.34 327 P 44 11.50 -0.6 HFS 25.54 344 eP 45 49.90 -1.1 0.5s 1.20nm 3.8mb	SKO 148.99 249 ePKP 58 05.00 1.4 2.0s 181.00nm
SGO 0.41 250 P 34 02.30 0.1 eSg 34 09.40	BCAO 32.49 196 ePc 46 55.40 1.7 0.4s 2.00nm 4.4mb	i 58 18.50 i 58 22.50
MGR 0.60 200 Pc 34 04.40 -1.5 eSg 34 13.00	S.D. = 1.1 on 20 of 28 obs.	VRI 149.63 259 ePKPc 58 07.50 3.1X
BSS 0.77 277 P 34 09.30 0.4 eSg 34 20.30	MAY 09, 1990 22h 38m 19.07 ± 0.36s 61.979 S ± 6.2km 161.434 E ± 10.8km DEPTH = 10.0km (geophysicist) 5.0mb (5 obs.) 5.7msz (3 obs.) BALLENY ISLANDS REGION (702) CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 16S, 32C Centroid Location: Origin Time 22:38:30.8 0.4 Lat 61.84S 0.05 Lon 160.51E 0.08 Dep 15.0 FIX Half-duration 2.9 Moment Tensor: Scale 10**17 Nm Mrr=0.20 0.13 Mtt= 4.66 0.16 Mff=-4.86 0.17 Mrt= 1.40 0.39 Mrf=-1.22 0.46 Mtf=-1.81 0.14 Principal Axes: T Vol= 5.48 Plg=17 Azm= 12 N -0.12 70 159 P -5.36 10 279 Best Double Couple: Mo=5.4*10**17 NP1: Strike= 55 Dip=71 Slip= 175 NP2: 146 85 19	MLR 149.70 258 ePKPd 58 20.00 15.3X CLI 149.87 261 ePKP 58 20.00 15.2X CMP 149.95 257 ePKPc 58 12.00 7.1X TNR 150.59 256 ePKPd 58 16.00 10.1X BEO 151.68 251 ePKP 58 14.00 6.5X SPC 155.05 257 e(PKP) 58 24.00 11.7X LJU 155.23 245 e(PKP) 58 16.50 4.1X KRA 155.80 258 ePKP 58 14.00 1.0 KHC 158.02 249 ePKP 58 19.30 3.4X Z 19s 1.60um 5.9msz N 19s 0.80um E 18s 1.20um
ORI 0.80 143 P 34 10.10 0.7 eSg 34 20.50	TDS 0.33 267 Pd 39 46.60 -0.7 eSg 39 53.20	KSP 158.02 256 e(PKP) 58 13.00 -2.8X e 58 55.00
BAI 0.90 62 P 34 11.00 0.0 eSg 34 24.00	BRT 1.07 80 Pd 34 13.20 -0.7 eSg 34 28.50	PRU 158.21 252 ePKP 58 25.00 9.0X e 58 50.50
BSS 0.77 277 P 34 09.30 0.4 eSg 34 20.30	TDS 1.12 159 P 34 15.50 0.8 S.D. = 1.0 on 7 of 7 obs.	BRG 159.11 253 e(PKP) 58 35.00 18.0X Z 20s 1.00um 5.7msz N 20s 1.50um E 20s 1.00um
SGO 0.41 250 P 34 02.30 0.1 eSg 34 09.40	BAI 1.44 3 P 40 08.00 1.4 S.D. = 1.3 on 6 of 6 obs.	DOU 162.54 238 PKP 58 15.00 -5.5X e 59 25.70
MGR 1.04 297 P 40 00.90 0.8 LCI 1.12 54 P 40 01.40 0.0	* MAY 09, 1990 20h 54m 59.10 ± 1.12s 36.550 N ± 13.6km 27.293 E ± 8.2km DEPTH = 5.0km (geophysicist) DODECANESE ISLANDS (369)	S.D. = 1.1 on 25 of 52 obs.
BRT 1.25 15 P 40 02.20 -1.4 eSg 40 20.10	YER 1.14 48 iPn 07 00.00 -0.1 SMG 1.37 347 ePn 07 03.00 -0.4	
BAI 1.44 3 P 40 08.00 1.4 S.D. = 1.3 on 6 of 6 obs.	SPA 28.18 180 iPc 44 12.60 -0.8	
YER 0.99 53 ePn 55 18.20 -0.1	DRV 10.38 234 eP 40 51.80 0.9 SBA 16.04 176 iPc 42 06.00 0.1 S 45 23.20	
	MHZ 17.56 19 P 42 25.60 0.4 MMCZ 17.59 18 P 42 26.40 0.7 MSZ 17.75 15 P 42 28.40 0.9 WEL 22.23 27 P 43 16.00 -1.0 S 47 28.00	

09d 23h

KSL 1.92 97 ePn 07 10.50 -0.9
 IZM 2.02 1 ePn 07 18.80 5.9X
 ELL 2.19 79 iPn 07 15.70 0.4
 VAM 2.64 249 ePn 07 22.50 0.8
 KHL 2.67 43 ePn 07 23.00 0.9
 BCK 2.90 67 ePn 07 25.50 0.1
 ATH 3.23 301 ePb 07 37.30 7.4X
 VLI 3.47 277 ePn 07 30.00 -3.5X
 ITM 4.33 282 ePn 07 44.80 -0.9
 S.D. = 0.8 on 9 of 12 obs.

& MAY 09, 1990 23h 17m 40.38s
 60.550 N 151.089 W
 DEPTH = 14.8km
 3.0mb (1 obs.)
 KENAI PENINSULA, ALASKA (14)
 <AGS-P>. ML 3.7 (PMR). Felt (1)
 at Kenai.

NKA 0.21 339 iP 17 47.17 1.9
 SLKM 0.43 95 iP 17 48.69 -0.5
 eS 17 54.91
 >NNL 0.52 192 iP 17 51.76 1.1
 RDT 0.65 273 iP 17 52.56 -0.4
 SPU 0.79 324 iP 17 54.69 -0.7
 BRK 0.80 173 eP 17 54.87 -0.5
 iS 18 05.44
 RED 0.84 262 iP 17 55.54 -0.7
 CRP 0.89 325 iP 17 56.64 -0.4
 SEW 0.93 118 eP 17 56.71 -1.0
 eS 18 09.25
 SUA 0.93 10 eP 17 56.93 -0.9
 eS 18 10.90
 NCG 1.00 329 iP 17 58.28 -0.7
 eS 18 11.21
 PMS 1.02 46 iPc 17 57.60 -1.7
 CNPM 1.03 184 iP 17 58.59 -0.8
 eS 18 12.01
 XLV 1.14 196 eP 17 59.84 -1.5
 PWA 1.25 27 iPc 18 02.00 -1.1
 PLRM 1.41 41 eP 18 03.77 -1.7
 PMR 1.41 41 iPc 18 04.00 -1.5
 SKT 1.45 352 iP 18 05.49 -0.6
 GHO 1.61 40 eP 18 07.35 -1.1
 AUE 1.66 225 eP 18 08.54 -0.4
 AUL 1.66 226 eP 18 08.63 -0.5
 eS 18 30.37
 SML 1.84 45 iP 18 11.12 -0.6
 CUT 1.90 12 eP 18 12.64 0.1
 GLI 1.99 79 iP 18 12.61 -1.3
 CDD 2.08 220 iP 18 14.68 -0.4
 MCNL 2.14 232 eP 18 15.07 -0.9
 VZW 2.28 75 iP 18 17.17 -0.9
 SVW 2.29 286 iPd 18 16.70 -1.5
 VLZ 2.40 74 eP 18 18.91 -0.8
 NCA 2.52 53 eP 18 21.41 0.0
 HUR 2.53 15 eP 18 22.85 1.2
 KLU 2.69 67 iP 18 23.43 -0.5
 TOA 2.84 55 iPc 18 26.30 0.3
 KDC 2.90 195 iPd 18 26.30 -0.5
 KTH 3.02 1 eP 18 29.11 0.6
 RND 3.05 19 eP 18 29.96 0.9
 TTA 3.34 318 iPd 18 32.20 -1.0
 PAX 3.61 45 eP 18 37.11 0.1
 GLB 3.66 73 eP 18 36.25 -1.4
 TGL 4.07 84 eP 18 41.10 -2.4
 WRH 4.17 18 eP 18 45.29 0.4
 BALM 4.31 80 eP 18 43.90 -3.1
 CCB 4.38 19 eP 18 46.27 -1.6
 IMA 5.66 349 ePc 19 04.30 -1.8
 YKA 17.36 68 eP 21 42.00 -1.2
 0.6s 0.70nm 3.0mb
 45 obs. associated

& MAY 10, 1990 00h 16m 38.21s
 58.183 N 142.557 W
 DEPTH = 10.0km (geophysicist)
 GULF OF ALASKA (15)
 <AGS-P>.

YAH 2.23 10 iP 17 10.70 -5.2
 eS 17 37.79
 PCA 2.26 31 iP 17 11.09 -5.1
 HQN 2.30 55 eP 17 11.52 -5.2
 eS 17 37.31
 BCPM 2.33 39 eP 17 12.23 -5.0
 4 obs. associated

* MAY 10, 1990 00h 21m 21.98 ± 1.24s
 36.182 N ± 15.9km 27.138 E ± 7.0km
 DEPTH = 10.0km (geophysicist)
 DODECANESE ISLANDS (369)
 ML 3.9 (ATH).

YER 1.32 44 ePn 21 45.70 -0.8
 SMG 1.54 351 ePb 21 49.50 0.0
 APE 1.57 305 ePn 21 51.00 1.1
 KSL 1.98 91 ePn 21 55.70 -0.2
 ELL 2.30 75 ePn 22 01.50 0.8
 VAM 2.51 253 ePn 22 08.00 4.5X
 BCK 3.05 64 ePn 22 15.00 3.8X
 ATH 3.27 304 ePb 22 22.60 8.4X
 VLI 3.43 280 ePn 22 15.60 -0.9
 S.D. = 1.0 on 6 of 9 obs.

& MAY 10, 1990 00h 42m 25.22s
 59.326 N 153.274 W
 DEPTH = 88.4km
 SOUTHERN ALASKA (2)
 <AGS-P>.

AUE 0.06 303 iP 42 37.45 1.2
 AUL 0.10 304 iP 42 37.64 1.3
 OPT 0.33 4 iP 42 37.70 -1.2
 CDD 0.44 206 iP 42 38.76 -0.8
 eS 42 49.21
 MCNL 0.56 256 iP 42 39.88 -0.7
 eS 42 51.17
 XLV 0.80 80 eP 42 42.10 -0.8
 eS 42 55.04
 CNPM 1.06 78 eP 42 44.88 -1.0
 iS 43 00.29
 RED 1.13 13 iP 42 45.91 -0.8
 >NNL 1.23 54 eP 42 47.85 -0.1
 RDT 1.33 19 iP 42 48.18 -1.0
 eS 43 06.09
 NKA 1.75 35 eP 42 55.34 0.8
 SLKM 1.94 51 eP 42 55.70 -1.5
 SPU 1.96 18 iP 42 56.56 -0.8
 CRP 2.03 15 iP 42 57.76 -0.7
 SEW 2.09 66 eP 42 57.59 -1.5
 SVW 2.14 328 eP 42 58.74 -1.1
 NCG 2.16 14 iP 42 59.46 -0.7
 SUA 2.49 29 eP 43 04.03 -0.6
 PMS 2.67 42 iP 43 05.73 -1.3
 SKT 2.80 17 eP 43 07.53 -1.3
 PWA 2.87 34 eP 43 09.09 -0.7
 PLRM 3.06 40 eP 43 10.12 -2.3
 GHO 3.26 39 eP 43 13.27 -2.0
 CUT 3.42 24 eP 43 16.43 -0.9
 GLI 3.46 61 eP 43 14.40 -3.6
 VZW 3.78 60 eP 43 19.12 -3.2
 26 obs. associated

MAY 10, 1990 00h 50m 41.96 ± 0.80s
 40.655 N ± 8.8km 15.835 E ± 5.8km
 DEPTH = 10.0km (geophysicist)
 SOUTHERN ITALY (390)

SGO 0.41 257 Pc 50 49.80 -0.6
 eSg 50 56.60
 MGR 0.56 203 Pd 50 52.10 -1.2
 eSg 51 01.40
 ORI 0.75 141 P 50 56.10 -0.6
 eSg 51 07.50
 BSS 0.79 280 P 50 58.40 1.0
 eSg 51 08.70
 BAI 0.91 59 P 50 59.00 -0.3
 eSg 51 13.50
 BRT 1.06 77 P 51 00.90 -1.1
 eSg 51 16.40
 TDS 1.07 159 P 51 03.50 1.4
 eSg 51 19.30
 LCI 1.65 101 P 51 12.20 1.2
 eSg 51 35.70
 HVAR 2.56 10 ePn 51 30.80 6.6X
 S.D. = 1.3 on 8 of 9 obs.

MAY 10, 1990 00h 58m 48.66 ± 0.24s
 54.824 S ± 5.2km 146.247 E ± 4.6km
 DEPTH = 10.0km (geophysicist)
 5.5mb (15 obs.) 5.5MsZ (18 obs.)
 WEST OF MACQUARIE ISLAND (701)
 CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 16S, 31C

Centroid Location:

Origin Time 00:59:02.0.5

Lat 54.73S Lon 145.91E 0.06

Dep 15.0 FIX Half-duration 3.2

Moment Tensor; Scale 10¹⁷ Nm

Mrr=-0.29 0.17 Mtt= 2.79 0.20

Mff=-2.50 0.23 Mrt= 0.00 0.00

Mrf= 0.00 0.00 Mtf=-6.31 0.20

Principal Axes:

T Val= 6.99 P1g= 0 Azm=214

N -0.29 90 180

P -6.69 0 124

Best Double Couple: Mo=6.8*10¹⁷

NP1: Strike=259 Dip=90 Slip=-180

NP2: 349 90 0

MCQ 7.38 93 eP 00 33.00 -5.9X
 DRV 12.26 192 eP 01 50.00 4.1X
 MSZ 17.23 63 P 02 53.00 2.3
 TOO 17.27 358 eP 02 51.00 -0.2
 e 02 54.00
 TLC 17.48 66 P 02 54.20 0.2
 MMCZ 17.64 66 P 02 56.20 0.3
 MHZ 17.68 66 P 02 57.70 1.3
 BFD 17.83 350 eP 03 00.00 1.7
 e 03 03.60
 CAN 19.60 7 iPc 03 19.30 -0.5
 CNB 19.63 8 eP 03 20.00 -0.2
 e 03 26.00
 ADE 20.54 342 eP 03 30.00 0.3
 RIV 21.27 11 eP 03 38.00 0.9
 eS 07 40.00
 KHZ 21.74 66 P 03 42.80 1.0
 1.1s 81.00nm 5.1mb
 THZ 21.86 64 P 03 43.50 0.4
 TCW 22.98 65 P 03 54.40 0.3
 WEL 23.18 66 P 03 54.00 -2.1
 S 08 12.00
 WDW 23.32 66 P 03 58.10 0.7
 CMS 23.33 359 eP 04 01.00 3.4X
 KIW 23.56 66 P 03 59.50 -0.3
 MTW 23.66 67 P 04 01.70 0.9
 MNG 24.04 66 P 04 04.20 -0.2
 SBA 24.24 170 P 04 05.80 -0.2
 S 08 32.00
 COO 24.57 12 eP 03 49.00 -20.7X
 i 04 11.20
 FORR 27.24 324 eP 04 34.00 -0.5
 HBZ 27.74 65 eP 04 37.00 -2.0
 BRS 27.82 13 iPd 04 39.00 -0.9
 i 04 46.70
 e 06 54.00
 iS 09 21.00
 e 09 42.00
 OLP 28.25 356 eP 04 44.00 0.3
 RMO 28.37 5 ePd 04 44.70 -0.1
 e 04 51.60
 NWA0 29.91 305 eP 04 58.40 -0.2
 KLB 30.77 307 eP 05 06.20 0.0
 MUN 31.18 305 eP 05 09.00 -0.8
 Z 20s 19.90um 5.8MsZ
 BAL 32.09 307 eP 05 17.50 -0.3
 QIS 34.58 349 iPc 05 38.00 -1.5
 CTA 34.68 0 iPc+ 05 40.10 -0.2
 1.5s 206.94nm 5.8mb
 iPP 07 00.00
 iS 11 12.00
 MEKA 34.71 313 eP 05 40.50 -0.1
 SPA 35.36 180 iPd 05 44.30 -1.7
 1.2s 59.86nm 5.3mb
 Z 18s 9.88um 5.6MsZ
 i 05 53.80
 WRA 35.98 341 Pd 05 50.10 -1.3
 0.8s 62.20nm 5.5mb
 WB5 36.04 341 eP 05 50.20 -1.7
 DZM 36.05 33 iPc 05 50.00 -2.1
 MAW 38.84 217 eP- 06 15.00 0.1
 Z 19s 14.00um 5.8MsZ
 MBL 39.07 319 iPd 06 18.00 0.7
 0.9s 68.00nm 5.3mb
 NANU 39.56 312 eP 06 22.30 0.9
 PVC 40.70 33 iPc 06 33.10 2.3
 KNA 41.28 334 eP 06 34.80 -0.7
 MTN 43.53 338 eP 06 53.00 -0.9
 PMG 45.30 1 eP 07 07.50 -0.7

TRT	50.71	8 eP	07 48.00	-2.3	ZOBO	103.40	146 Pd	diff 12	50.00	-1.1		i	18 43.80		
DAV	54.11	317 ePc	08 14.40	-1.3	Z	22s	1.53um		5.5Msz		KEV	149.65	323 ePKP	18 37.00	3.5X
KKM	0.7s	64.70nm		5.8mb			LR	47 06.00				e	18 42.00		
IPM	64.06	337 eP	09 24.00	-0.7	FRI	121.42	69 e(PKP)	17 45.30	2.3X		PGF	149.71	264 ePKP	18 33.40	-1.2
QCP	65.61	327 eP	09 39.00	4.1X	WDC	122.53	65 ePKP	17 47.40	2.4X			0.7s	16.55nm		
SNG	70.02	311 ePd	10 03.30	0.9	TNP	123.57	70 PKP	17 50.10	2.7X		FVI	149.90	274 PKP	18 39.30	4.8X
	72.41	334 eP	10 07.00	-9.7X	KVN	123.79	69 PKP	17 47.90	0.1		KMR	149.90	277 (PKP)	18 45.00	10.5X
	72.52	312 eP	10 17.40	0.0	TTA	125.72	28 PKP	17 50.00	-0.7		KSP	150.03	283 ePKP	18 38.80	4.2X
		eS	19 46.50		TTA	125.72	28 ePKPc	17 56.00	5.3X			0.9s	22.00nm		
BAG	74.24	334 eP	10 26.00	-1.6	MSU	126.65	73 PKP	17 53.50	0.1		TBR	150.11	100 PKP	18 40.80	5.7X
QIZ	79.85	325 eP	11 00.00	1.4	PMR	126.70	33 PKP	17 50.80	-1.6		PRU	150.62	281 ePKP	18 40.00	4.5X
	N 18s	2.50um			Z	22s	3.98um		6.0Msz			e	18 45.50		
		eS	21 06.00		PMR	126.70	33 iPKPd	18 02.90	10.5X		SAL	150.65	270 PKP	18 42.20	6.5X
NST	80.36	315 eP	11 05.00	3.7X	ALO	127.32	81 ePKP	17 53.00	-1.8		KHC	150.76	279 PKP	18 41.50	5.7X
BLF	81.89	230 iPc	11 01.50	-8.1X	Z	20s	2.22um		5.8Msz			Z 19s	1.00um		5.6Msz
	1.0s	30.00nm		5.3mb	DUG	127.47	71 PKP	17 54.50	-0.3			N 19s	0.60um		
GZH	82.56	330 eP	11 14.00	1.3	TOA	128.02	33 iPKPd	18 06.10	11.0X				e	18 47.40	
	Z 22s	1.50um		5.3Msz	PV09	128.33	75 PKP	17 55.50	-1.2		IFR	150.76	235 iPKP	18 43.00	6.5X
	E 14s	0.80um			DAU	128.48	72 PKP	17 57.30	0.3		SQTA	151.14	274 iPKPc	18 38.50	1.9
		eS	21 26.00		IMA	128.82	27 ePKPd	17 56.00	-0.6			0.7s	45.80nm		
QZH	82.92	335 eP	11 15.00	0.5	NEW	130.65	61 PKP	18 06.50	6.0X				i	18 41.40	
	N 10s	1.10um			BW06	131.02	71 PKP	18 01.50	-0.1				i	18 43.00	
	E 10s	0.70um			GOL	131.27	77 PKP	18 06.90	4.7X				i	18 47.10	
BFS	83.52	231 iPc	11 10.00	-8.1X	Z	18s	1.39um		5.7Msz				i	19 38.80	
	0.6s	13.33nm		5.3mb	MEO	131.74	87 e(PKP)	18 02.00	-0.9				i	22 24.10	
CHG	83.67	316 ePd	11 19.00	0.4	RSSD	134.94	73 PKP	18 05.00	-4.0X		FIN	151.18	266 PKP	18 41.80	5.2X
	1.0s	19.75nm		5.3mb	SES	135.08	62 ePKP	18 08.00	-0.8		CKI	151.27	266 PKP	18 43.80	7.1X
CHTO	83.67	316 eP	11 18.90	0.4	INK	136.10	32 ePKP	18 08.00	-2.1X		BRG	151.37	282 iPKP	18 43.00	6.4X
	1.0s	19.25nm		5.3mb	YKA	139.91	45 ePKP	18 08.30	-9.0X			0.9s	10.00nm		
SLR	83.83	233 iPd	11 15.50	-4.2X		0.7s	1.40nm								

SVW 1.92 296 eP 40 20.43 -2.4
 PLRM 1.93 47 eP 40 21.57 -1.3
 GHO 2.12 45 eP 40 24.08 -1.6
 SML 2.36 49 iP 40 27.23 -1.7
 GLI 2.52 75 eP 40 27.86 -3.3
 VZW 2.82 72 eP 40 32.48 -2.8
 VLZ 2.94 71 eP 40 34.21 -2.7
 KLU 3.23 66 iP 40 38.50 -2.7
 26 obs. associated

* MAY 10, 1990 04h 43m 24.17±1.62s
 47.884 N ±18.2km 113.045 W ±11.7km
 DEPTH = 5.0km (geophysicist)
 MONTANA (456)
 ML 3.6 (BUT).

HRY 1.43 144 iPd 43 50.80 -0.2
 BUT 1.90 170 ePn 43 57.80 0.1
 iPg 43 59.30
 eSn 44 21.20
 iSg 44 24.00
 LRM 2.10 169 iPnd 44 00.60 -0.1
 SXM 2.14 143 ePn 44 02.10 0.8
 LCCM 2.20 158 iPnd 44 02.00 0.0
 EBI 2.34 245 iPnc 44 04.70 0.7
 MEMT 2.69 147 ePn 44 09.00 -0.1
 BGMT 2.74 165 ePn 44 09.20 -0.6
 NEW 2.76 279 eP 44 10.00 0.1
 DPW 3.47 272 eP 44 19.50 -0.5
 S.D. = 0.5 on 10 of 10 obs.

? MAY 10, 1990 05h 01m 44.84±5.64s
 48.802 N ±42.7km 0.642 W ±20.7km
 DEPTH = 10.0km (geophysicist)
 FRANCE (538)
 ML 2.7 (LDG).

FLN 0.11 110 Pg 01 47.70 0.0
 Sg 01 49.90
 LDF 0.40 121 Pg 01 53.10 0.0
 Sg 01 58.80
 GRR 0.44 199 Pg 01 53.70 -0.1
 Sg 02 00.00
 LPF 0.82 199 Pg 02 00.70 0.1
 Sg 02 12.00
 MFF 2.23 171 Pg 02 26.00 3.7X
 Sg 02 55.00
 BGF 3.26 132 Pg 02 45.50 8.6X
 Sg 03 27.00
 S.D. = 0.1 on 4 of 6 obs.

MAY 10, 1990 05h 35m 35.43±1.43s
 10.678 N ±11.7km 67.062 W ±7.0km
 DEPTH = 10.0km (geophysicist)
 NEAR COAST OF VENEZUELA (97)
 Felt at Caracas and Miranda.

CAR 0.22 142 iPc 35 40.50 0.3
 iS 35 43.50
 LLAV 0.32 129 iPc 35 41.90 -0.2
 iS 35 46.90
 GUAC 0.53 203 iPd 35 46.20 0.1
 iS 35 52.10
 OLLA 0.70 159 iPd 35 49.30 -0.1
 PLAV 0.91 209 iPd 35 52.80 -0.2
 MORO 1.25 279 iPd 35 58.70 0.0
 iS 36 14.10
 TOV 2.83 252 ePn 36 30.70 9.1X
 eSn 37 06.90
 SDV 3.94 243 ePn 36 47.50 10.0X
 iSn 37 39.40
 S.D. = 0.3 on 6 of 8 obs.

MAY 10, 1990 08h 14m 35.35±0.67s
 6.176 S ±3.2km 146.807 E ±4.0km
 DEPTH = 100.8 ± 6.5 km
 5.4mb (38 obs.)
 EAST PAPUA NEW GUINEA REGION (207)
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 13S, 25C
 Centroid Location:
 Origin Time 08:14:41.5 0.4
 Lat 6.31S 0.04 Lon 146.76E 0.04
 Dep 104.0 1.9 Half-duration 2.1
 Moment Tensor: Scale 10**17 Nm
 Mrr=-0.03 0.05 Mtt=1.81 0.08

Mff=-1.78 0.09 Mrt=-0.02 0.05
 Mrr= 0.49 0.05 Mtt=-1.11 0.07
 Principal Axes:
 T Vol= 2.14 Plg= 4 Azm=196
 N 0.06 77 305
 P -2.20 12 105
 Best Double Couple: Mo=2.2*10**17
 NP1: Strike=242 Dip=78 Slip=-174
 NP2: 150 84 -12

LAT 0.51 158 iPc 14 52.80 1.3
 RAB 5.69 70 iPd 15 59.50 0.5
 iS 16 02.00
 HNR 13.41 105 eP 17 42.00 -0.9
 eS 20 12.00
 CTA 13.84 182 iP 17 47.70 -0.7
 1.0s 380.00nm 5.6mb
 iS 20 20.00
 QIS 15.91 205 eP 18 13.00 -1.8
 0.6s 79.00nm 5.1mb
 e 21 15.00
 MTN 16.82 246 iPc 18 26.10 0.0
 eS 21 24.00
 WRA 18.28 220 Pd 18 42.10 -1.9
 0.9s 370.90nm 5.6mb
 AAI 18.71 277 ePc 18 49.50 0.6
 1.0s 305.00nm 5.6mb
 GUA 19.68 355 eP 18 58.90 -0.2
 1.2s 500.00nm 5.7mb
 GUMO 19.73 354 eP 18 59.10 -0.5
 1.1s 358.07nm 5.6mb
 eS 22 36.00
 PJG 19.73 354 eP 18 59.00 -0.6
 RMO 20.29 175 eP 19 05.00 -0.3
 0.9s 413.00nm 5.8mb
 QLP 20.44 187 iPc 19 06.20 -0.7
 BRS 21.85 166 iPd 19 20.00 -1.0
 0.8s 9.00nm 4.2mb X
 i 19 33.00
 i 19 40.50
 i 19 51.00
 iS 23 17.00

KUPT 23.30 259 ePc 19 48.50 13.4X
 PVC 23.94 121 iPc 19 42.90 1.6
 DZM 24.69 132 iPc 19 47.90 -0.7
 DAV 24.95 302 eP 19 56.00 5.0X
 CMS 25.20 182 iPc 19 52.60 -0.5
 1.2s 548.00nm 5.9mb
 WARB 27.68 222 iPc 20 16.00 0.1
 BWA 28.15 177 iPc 20 19.70 -0.4
 CAN 29.07 176 iPc 20 27.90 -0.5
 CNB 29.09 176 ePd 20 28.30 -0.3
 ADE 29.61 194 iPc 20 32.50 -0.7
 1.2s 281.25nm 5.8mb
 MBL 30.07 238 iPc 20 37.00 -0.3
 FORR 30.18 213 eP 20 37.00 -1.2
 0.4s 24.00nm 5.3mb
 TSM 30.50 289 ePd 20 43.10 2.0
 0.9s 477.90nm 6.2mb
 BFD 31.10 187 iPc 20 45.20 -1.0
 TOO 31.27 182 iPc 20 47.60 -0.2
 1.0s 235.00nm 5.9mb
 KKM 32.86 291 ePd 21 01.00 -0.9
 0.8s 90.70nm 5.6mb
 MEKA 33.74 230 iPc 21 09.50 0.1
 0.5s 41.00nm 5.5mb
 NANU 34.28 238 iPc 21 14.20 0.2
 0.5s 32.00nm 5.4mb
 BAG 34.31 311 eP 21 13.00 -1.5
 COOL 34.40 221 iPc 21 09.50 -5.5X
 0.8s 107.00nm 5.8mb
 MRWA 37.02 228 iPc 21 37.20 0.1
 KLB 37.11 223 iPc 21 37.30 -0.5
 BAL 37.27 226 iPc 21 39.00 -0.2
 NWA0 38.27 222 iPc 21 47.40 -0.1
 MUN 38.41 224 iPc 21 49.00 0.3
 1.2s 9.00nm 4.5mb
 RKG 39.12 221 iPc 21 58.00 3.4X
 0.6s 207.00nm 6.1mb
 QZH 41.36 319 eP 22 13.50 0.4
 pP 22 42.00 126kmX
 S 28 20.00
 sS 29 08.00
 CNZ 41.87 146 eP 22 19.10 1.9
 MSZ 42.55 158 P 22 23.00 0.5
 TCW 42.63 149 P 22 24.00 0.7
 CHJJ 42.64 351 eP 22 23.10 -0.3

PUZ 42.69 143 P 22 23.90 0.1
 MNG 42.83 148 P 22 25.40 0.4
 0.7s 33.00nm 5.3mb
 LTZ 42.84 152 P 22 25.40 0.4
 NOZ 42.91 143 P 22 26.00 0.5
 WDW 43.04 149 eP 22 26.30 -0.3
 MTW 43.23 148 P 22 28.40 0.3
 MAT 43.25 350 iPc 22 27.10 -1.3
 1.3s 67.31nm 5.3mb
 eS 28 40.00
 PGZ 43.26 147 eP 22 28.50 0.1
 MTMJ 43.36 349 eP 22 28.50 -0.9
 KGM 44.18 279 eP 22 37.80 1.6
 QIZ 44.20 305 eP 22 34.00 -2.3
 N 12s 0.80um
 S 29 02.50
 SSE 44.43 328 P 22 35.80 -2.1
 1.0s 26.00nm 5.0mb
 Z 20s 0.50um 4.4MsZ
 E 12s 0.30um
 pP 23 04.90 128kmX
 S 29 04.00
 sS 29 51.00
 OFUJ 45.28 354 P 22 44.50 0.0
 NJ2 46.42 327 eP 22 54.00 0.4
 pP 23 20.00 111kmX
 S 29 35.00
 IPM 46.94 282 ePd 23 00.00 1.9
 0.9s 112.40nm 5.7mb
 WHN 47.95 321 Pc 23 08.00 2.3
 N 10s 0.50um
 SNG 47.96 285 eP 23 07.10 1.1
 1.1s 126.58nm 5.7mb
 LOE 50.31 299 eP 23 24.00 0.0
 TIA 50.53 329 eP 23 24.00 -1.4
 pP 23 52.10 120kmX
 GYA 50.65 312 eP 23 30.00 3.3X
 pP 23 56.00 109kmX
 S 30 38.00
 NST 51.06 296 iPc 23 34.00 4.3X
 SNY 52.28 338 Pc 23 37.60 -0.9
 1.0s 20.00nm 5.1mb
 Z 22s 0.80um 4.7MsZ
 pP 24 07.00 125kmX
 S 30 51.50
 sS 31 41.00
 MDJ 52.88 345 Pd 23 42.00 -0.9
 KMI 52.95 308 Pc 23 46.00 2.0
 pP 24 12.50 111kmX
 CHG 53.30 299 iPc 23 48.00 1.6
 1.0s 15.00nm 5.0mb
 CHTO 53.30 299 eP 23 48.00 1.6
 CN2 53.36 341 iPc 23 45.20 -1.2
 Z 22s 0.40um 4.4MsZ
 BJI 53.96 331 eP 23 50.00 -0.9
 1.0s 18.00nm 5.1mb
 Z 20s 30.00um 6.4MsZ
 TIY 54.14 326 iPd 23 52.20 -0.2
 Z 16s 1.00um 5.0MsZ
 N 13s 0.30um
 S 31 19.00
 CD2 55.26 314 P 24 00.00 -0.6
 HHC 56.88 328 eP 24 10.20 -1.9
 BTO 57.52 327 eP 24 17.00 0.4
 pP 24 45.50 118kmX
 eS 32 03.00
 LZH 58.22 320 eP 24 23.00 1.4
 Z 30s 0.60um 4.5MsZ
 pP 24 50.50 113kmX
 eS 32 16.00
 GTA 62.75 320 eP 24 52.20 -0.1
 PPN 63.16 106 eP 24 56.00 0.8
 1.0s 40.00nm 5.3mb
 LSA 64.19 307 P 25 03.20 0.8
 PMO 64.59 104 iP 25 05.60 1.1
 1.0s 55.00nm 5.4mb
 VAH 64.85 104 iP 25 07.00 0.8
 1.0s 30.00nm 5.2mb
 TPT 64.86 104 iP 25 07.20 0.9
 1.0s 55.00nm 5.4mb
 RUV 65.09 104 iP 25 08.40 0.7
 1.0s 30.00nm 5.2mb
 GUN 67.80 303 P 25 25.10 -0.2
 DMN 68.34 303 P 25 28.50 -0.1
 0.8s 61.00nm 5.5mb
 KOD 70.95 283 eP 25 46.00 1.3
 HYB 71.34 291 ePc 25 47.00 0.3

ZST	1.0s	8.50nm	4.7mb	BCH	41.07	92 eP	26 43.00	e	56 28.50
MAIO	80.12 353 eP	36 14.80	-1.5	FFC	41.24	57 iPc	26 32.50	1.0	30 57.90 0.2
MFF	80.94 319 eP	36 20.00	-1.0		1.0s	20.00nm	26 32.90	0.4	4.7mb
	81.95 5 iPc	36 26.60	0.7	SBB	42.80	91 eP	26 46.00	0.4	0.7s
	0.6s	5.40nm	4.8mb	BW06	42.99	76 eP	26 47.60	0.4	0.8s
SMF	82.05 2 iPc	36 27.00	0.6		0.8s	4.21nm	26 48.00	0.4	0.7s
	0.8s	11.40nm	5.0mb	GSC	43.04	89 eP	26 48.00	0.4	0.8s
TCF	82.36 3 eP	36 28.60	0.5	SNY	43.08	283 Pc	26 47.60	-0.1	BSF
LSF	82.37 4 iPc	36 28.70	0.6		1.2s	40.00nm	26 50.80	0.7	MAIO
MAF	82.44 3 iPc	36 29.40	0.9	DAU	43.33	80 eP	27 03.00	11.5X	81.03 319 eP
	0.5s	4.35nm	4.8mb	RVR	43.54	91 eP	26 55.10	0.4	81.52 357 i(P)
LFF	83.65 4 iPc	36 35.60	0.9	MSU	43.91	82 eP	26 59.00	1.2	1.0s
LPO	83.92 4 iPc	36 36.80	0.7	PLM	44.28	92 eP	27 03.00	0.8	17.90nm
WB5	84.58 228 eP	36 41.00	1.4	BAR	44.85	92 eP	27 09.00	-0.4	2 iPc
	0.8s	3.30nm	10.5X	RSSD	45.52	71 eP	27 09.00	-0.4	0.8s
WRA	84.64 228 Pc	36 50.40	10.5X	GLA	45.75	90 eP	27 21.90	-0.3	81.81 2 eP
	0.8s	19.65nm	5.3mb	GOL	47.35	77 eP	27 22.00	-1.0	0.8s
SBF	84.86 359 eP	36 41.60	0.7	RSN	47.52	58 eP	27 32.00	0.2	2 iPc
	0.9s	13.45nm	5.2mb	BJI	48.64	285 eP	27 39.90	-0.5	0.7s
FRF	85.16 360 eP	36 43.20	0.9		1.0s	12.00nm	27 47.00	-1.8	82.05 5 eP
	0.8s	13.45nm	5.2mb	ALQ	49.71	82 eP	27 49.00	-0.9	0.7s
LRG	85.27 0 eP	36 44.10	1.3		1.2s	6.25nm	27 54.00	1.0	82.15 2 eP
	0.9s	13.10nm	5.1mb	DAG	50.93	7 eP	27 57.00	-0.2	82.21 3 eP
LMR	85.39 0 eP	36 44.50	1.1	FRB	51.05	34 eP	28 00.00	1.0	0.7s
	0.9s	14.75nm	5.2mb	SSE	51.39	273 P	28 00.30	-0.1	4.40nm
SKO	85.86 349 iP	36 46.60	0.7	BTO	51.95	290 eP	28 15.50	58kmX	82.46 3 eP
	1.1s	62.00nm	5.7mb	NJ2	52.19	276 eP	28 29.20	5.3X	0.7s
PGF	86.15 358 eP	36 48.10	0.7	TIY	52.37	285 P	28 32.50	-1.2	3.30nm
	1.1s	29.30nm	5.4mb		1.4s	47.00nm	28 34.00	-2.5	4 eP
VAY	86.36 348 eP	36 49.40	1.1			pP	28 44.00	-1.2	4 eP
OHR	86.78 349 iP	36 51.00	0.5	TUL	55.58	74 e(P)	28 44.00	-1.2	83.75 4 eP
	1.2s	85.00nm	5.9mb		0.8s	6.20nm	28 44.00	-1.2	83.82 3 eP
POO	88.94 299 iPc	37 00.60	-0.4	XAN	56.94	284 P	28 44.00	-1.2	84.02 4 eP
BUL	144.14 323 iPKPd	43 35.00	-7.6X	FVM	57.35	69 eP	28 44.00	-1.2	84.52 228 eP
	0.9s	15.55nm		LZH	58.57	290 Pc	28 44.00	-1.2	84.59 228 P
	S.D. = 1.0 on 109 of 120 obs.				1.4s	47.00nm	28 44.00	-1.2	0.8s
	MAY 10, 1990 11h 18m 49.45 ± 0.25s			GTA	58.62	295 iPc	28 44.30	-1.2	85.26 360 eP
	51.558 N ± 6.3km 173.361 W ± 2.9km			RSNY	61.47	54 eP	29 03.40	-1.5	0.9s
	DEPTH = 33.0km (normal)				1.0s	21.69nm	29 06.50	-1.4	13.10nm
	4.8mb (42 obs.) 4.5msz (2 obs.)			WNY	61.92	53 eP	29 05.00	-3.8X	0 eP
	AND								

11d 05h

SSF 0.8s 10.75nm 4.9mb
79.68 344 eP 15 36.20 0.1
0.8s 4.05nm 4.5mb
AVF 79.97 344 eP 15 38.00 0.3
0.6s 7.20nm 4.8mb
SKO 80.00 330 eP 15 38.30 0.4
16 09.60
SMF 80.02 343 eP 15 38.10 0.1
0.8s 8.05nm 4.7mb
VAY 80.23 328 eP 15 39.40 0.3
16 11.30
BGF 80.28 344 eP 15 39.80 0.4
1.2s 23.80nm 5.1mb
LPL 80.55 341 eP 15 41.80 0.7
0.8s 11.40nm 4.9mb
LPG 80.56 341 eP 15 42.10 0.8
1.0s 21.00nm 5.1mb
TCF 80.65 344 eP 15 41.90 0.5
0.8s 6.70nm 4.7mb
MAF 80.65 344 eP 15 42.30 0.9
1.0s 24.00nm 5.2mb
MFF 80.73 346 eP 15 42.60 0.9
0.6s 5.40nm 4.7mb
MME 80.93 338 P 15 45.90 2.8
OHR 80.99 330 eP 15 42.80 -0.4
1.1s 470.00nm 6.4mb X
e 16 14.70
BDI 81.08 338 P 15 45.50 1.8
LFK 81.44 318 eP 15 44.30 -1.4
SBF 81.98 340 eP 15 48.40 0.0
0.8s 10.75nm 5.0mb
CAF 82.00 344 eP 15 49.60 1.2
1.2s 20.85nm 5.1mb
MNS 82.14 336 P 15 49.30 0.1
LFF 82.21 345 eP 15 51.10 1.6
1.0s 20.00nm 5.2mb
LPO 82.38 344 eP 15 51.40 1.0
1.2s 35.70nm 5.4mb
LRG 82.60 341 eP 15 51.90 0.4
0.8s 8.05nm 4.9mb
LMR 82.68 340 eP 15 52.30 0.3
0.8s 9.40nm 5.0mb
PGF 82.88 338 eP 15 53.00 -0.2
0.6s 7.20nm 5.0mb
MGR 83.46 333 P 15 56.40 0.4
EPF 84.13 345 eP 16 01.40 1.9
0.8s 6.70nm 4.9mb
BLF 138.79 284 ePKP 22 57.00 1.7
S.D. = 1.0 on 119 of 136 obs.

* MAY 11, 1990 05h 03m 59.41 ± 0.60s
51.708 N ± 12.4km 159.224 E ± 10.5km
DEPTH = 10.0km (geophysicist)
5.3mb (4 obs.) 4.7MsZ (3 obs.)
OFF EAST COAST OF KAMCHATKA (219)

MAT 21.27 233 (P) 08 48.00 0.0
1.2s 176.56nm 5.3mb
Z 20s 3.55um 4.8MsZ
eS 12 49.00
SSE 34.64 248 P 10 50.50 -0.2
Z 20s 0.90um 4.5MsZ
N 13s 0.80um
E 13s 0.60um

i 13 25.00
sP 15 28.00
S 16 28.00
e 17 02.00
i 20 18.00

SOD 56.02 340 iP 13 40.80 0.9
CHTO 57.10 258 P 13 48.90 0.6
GUN 58.51 276 P 13 58.10 -0.4
ISA 58.52 71 eP 13 58.00 -0.1
BW06 58.67 60 (P) 14 06.10 6.8X
DMN 59.20 276 P 14 03.40 0.2
MSU 60.17 65 P 14 10.00 0.2
NUR 62.34 337 iP 14 24.00 0.2
0.7s 17.40nm 5.4mb
NB2 64.72 343 P 14 39.70 0.2
1.0s 22.10nm 5.3mb
HFS 65.10 342 eP 14 41.80 -0.1
0.5s 16.80nm 5.5mb

MAIO 67.89 301 eP 14 56.00 -4.0X
eS 24 20.00

TUL 70.94 56 eP 15 37.30 18.6X
1.1s 20.20nm
Z 21s 0.66um 4.9MsZ

LR 39 00.00
FVM 72.01 51 P 15 30.00 4.9X
VOY 78.17 336 e(P) 15 59.00 -1.1
VBY 78.31 335 e(P) 16 00.30 -0.5
KRI 127.24 292 iPKPd 23 18.80 12.9X
BUL 130.43 290 ePKP 23 28.80 16.9X
S.D. = 0.6 on 13 of 19 obs.

* MAY 11, 1990 05h 22m 24.16 ± 0.46s
7.553 N ± 8.1km 126.693 E ± 11.4km
DEPTH = 30.7km (3 depth phases)
4.7mb (6 obs.)

MINDANAO, PHILIPPINE ISLANDS (259)

DAV 1.20 247 iPd- 22 45.00 0.1
MNI 6.34 197 eP 24 03.00 4.9X
TRT 20.64 223 ePd 27 11.90 7.9X
MTN 20.74 168 eP 27 05.00 0.0
SSE 23.98 348 eP 27 43.00 6.1X
LOE 26.23 294 eP 28 02.00 3.5X
WBS 28.29 165 eP 28 19.90 2.8
WRA 28.34 165 P 28 23.00 5.4X
0.4s 2.10nm 4.2mb
KMI 28.78 310 Pc 28 22.50 0.6
CHTO 29.19 295 (P) 28 26.20 0.8
pP 28 34.30 28km
QIS 30.68 156 eP 28 37.90 -0.7
XAN 31.05 331 eP 28 49.00 7.3X
CD2 31.62 320 eP 28 46.80 0.0
BJI 33.69 345 eP 29 12.00 7.4X
LZH 35.25 327 P 29 23.60 5.3X
1.0s 23.00nm 5.1mb
pP 29 33.50 34km

MRWA 37.98 195 eP 29 40.00 -1.1
FORR 38.21 178 eP 29 42.00 -0.9
0.3s 15.00nm 5.3mb
KLB 39.85 192 eP 29 56.00 -0.7
GTA 39.86 327 eP 30 03.80 6.9X
LSA 39.98 308 eP 30 01.00 2.6

Z 15s 3.30um 5.3MsZ
E 13s 1.00um
MUN 40.56 194 eP 30 02.00 -0.6
GUN 43.54 303 P 30 26.80 -0.7
DMN 44.09 302 P 30 38.40 6.6X
BWA 46.54 155 eP 30 52.00 1.1
e 31 01.20 31km

MAIO 67.21 306 eP 33 17.00 -1.0
FBA 81.31 25 e(P) 34 18.20 -0.5
INK 86.64 22 eP 35 06.00 0.3
MBC 88.25 13 eP 35 14.00 0.6
1.0s 5.00nm 4.8mb

HFS 94.64 332 eP 35 41.00 -2.2
0.4s 1.10nm 4.6mb
YKA 96.05 24 eP 35 48.70 -1.0
0.7s 0.70nm 4.2mb

LKO 129.52 289 PKP 41 42.06 9.3X
KIC 129.62 285 PKP 41 32.50 -0.4
TIC 129.82 285 PKP 41 33.00 -0.3
LIC 129.93 285 PKP 41 33.00 -0.5
ZOBO 163.12 122 PKP 42 27.90 1.8
S.D. = 1.2 on 24 of 35 obs.

% MAY 11, 1990 05h 45m 55.75 ± 2.27s
44.137 N ± 25.9km 7.611 E ± 6.0km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.0 (GEN).

ENR 0.16 303 P 45 59.53 0.0
S 46 04.04
STV 0.23 298 P 46 00.66 -0.1
S 46 04.86
ROB 0.24 50 P 46 00.86 -0.1
S 46 05.68
FIN 0.44 80 P 46 04.76 0.1
PZZ 0.52 315 P 46 06.50 0.2
S 46 15.22
S.D. = 0.2 on 5 of 5 obs.

* MAY 11, 1990 05h 51m 24.65 ± 1.66s
51.577 N ± 34.6km 159.246 E ± 24.6km
DEPTH = 10.0km (geophysicist)
4.7mb (11 obs.)

OFF EAST COAST OF KAMCHATKA (219)

FBA 29.88 43 e(P) 57 34.00 -0.1
INK 35.40 36 eP 58 21.00 -1.0

MBC 38.64 22 eP 58 49.00 -0.2
LZH 41.82 271 eP 59 16.00 -0.1
1.0s 16.00nm 4.7mb
YKA 44.64 41 eP 59 38.00 -0.5
0.6s 0.40nm 3.5mb X

KMI 50.05 260 Pc 00 21.50 -0.1
CHG 57.09 259 eP 01 13.90 0.5
CHTO 57.09 259 ePc 01 13.90 0.5
pP 01 16.70 9kmX

GUN 58.54 276 P 01 22.80 -1.1
NUR 62.47 337 eP 01 48.00 -1.8
APO 64.81 342 eP 02 03.60 -1.7
0.8s 7.70nm 4.9mb

NB2 64.85 343 P 02 04.60 -1.0
0.8s 3.80nm 4.6mb

EKA 72.46 350 Pd 02 54.90 2.3
0.5s 2.50nm 4.6mb

GBA 74.39 272 Pc 03 03.20 -1.2
0.5s 23.10nm 5.5mb

AVF 79.84 343 eP 03 35.80 1.4
1.2s 8.95nm 4.6mb

LPL 80.42 341 eP 03 41.00 3.2X
1.0s 8.00nm 4.7mb

LPG 80.44 341 eP 03 40.10 2.1
1.0s 9.00nm 4.7mb

MAF 80.53 344 eP 03 40.20 2.1
1.0s 6.00nm 4.6mb

CAF 81.88 344 eP 03 49.00 3.8X
0.8s 5.35nm 4.7mb

LPO 82.26 344 eP 03 50.50 3.4X
0.8s 6.70nm 4.8mb
S.D. = 1.4 on 17 of 20 obs.

? MAY 11, 1990 06h 33m 46.80 ± 1.12s
51.427 N ± 24.3km 159.483 E ± 21.4km
DEPTH = 10.0km (geophysicist)
4.5mb (4 obs.)

OFF EAST COAST OF KAMCHATKA (219)

MAT 21.24 234 (P) 38 36.00 1.0
1.0s 9.00nm 4.1mb

FBA 29.89 43 e(P) 39 57.00 0.7
INK 35.43 36 eP 40 45.00 0.6
MBC 38.73 22 eP 41 12.00 -0.1

CHTO 57.21 259 eP 43 37.80 1.4
pP 43 40.80 10kmX

GUN 58.70 277 P 43 47.00 -0.2
DMN 59.40 277 P 43 50.20 -1.7
NB2 65.04 344 P 44 28.20 -0.7

0.7s 2.60nm 4.5mb
HFS 65.42 342 eP 44 30.30 -1.0
0.6s 5.40nm 4.9mb

EKA 72.63 350 Pd 45 18.60 2.8X
0.5s 2.50nm 4.6mb

KHC 75.68 338 eP 45 35.50 1.9
AIA 153.86 139 ePKP 53 36.10 -1.8
S.D. = 1.4 on 11 of 12 obs.

MAY 11, 1990 07h 04m 50.41 ± 0.51s
51.497 N ± 8.9km 159.282 E ± 9.2km
DEPTH = 10.0km (geophysicist)
4.8mb (16 obs.)

OFF EAST COAST OF KAMCHATKA (219)

NIIJ 20.23 233 eP 09 28.30 0.1
MDJ 20.90 262 eP 09 33.00 -2.1
MAT 21.18 233 iPc 09 38.10 0.1

0.9s 37.82nm 4.8mb
Z 20s 0.35um 3.7MsZ
eS 13 39.00

CHJJ 21.18 231 eP 09 38.90 0.9
IIDJ 22.16 232 eP 09 57.70 9.8X

TSRJ 23.09 235 eP 09 58.20 1.2
CN2 23.89 265 P 10 03.80 -0.9

SNY 26.11 262 Pc 10 25.80 0.0
FBA 29.92 43 eP 11 00.20 0.0
TJA 33.50 260 Pd 11 31.20 -0.6

INK 35.45 36 eP 11 47.00 -1.2
pP 12 08.00 88kmX

TIY 35.46 266 eP 11 49.00 0.2
Z 14s 0.80um 4.6MsZ
N 15s 0.60um

MBC 38.71 22 eP 12 15.00 -0.5
XAN 40.00 264 P 12 26.00 -0.8

LZH 41.84 271 P 12 41.50 -0.6
1.5s 33.00nm 4.8mb
GTA 42.31 278 eP 12 45.60 -0.2

YKA 44.69 41 eP 13 03.10 -1.5
0.8s 0.80nm 3.7mb X
CD2 45.32 265 eP 13 10.10 -0.1
GYA 46.68 258 iPc 13 21.60 0.6
WMO 47.04 290 P 13 24.00 0.3
KMI 50.06 261 Pc 13 52.50 5.0X
DAG 52.00 359 iPd 14 00.00 -1.2
1.0s 10.00nm 4.7mb
CHG 57.10 259 eP 14 40.00 0.8
0.9s 13.03nm 5.0mb
CHTO 57.10 259 eP 14 39.70 0.5
pP 14 42.50 9kmX
GUN 58.57 276 P 14 49.20 -0.7
DMN 59.26 277 P 14 54.40 -0.2
NB2 64.94 343 P 15 30.70 -1.2
0.9s 6.90nm 4.8mb
HFS 65.32 342 eP 15 32.70 -1.5
0.9s 11.30nm 5.1mb
ALO 65.99 64 e(P) 15 44.00 4.8X
HYB 70.83 274 ePc 16 08.50 -0.8
EKA 72.54 350 Pd 16 20.70 1.8
0.8s 6.60nm 4.8mb
KSP 73.31 337 eP 16 23.00 -0.5
CLL 73.66 339 eP 16 25.00 -0.5
1.0s 10.00nm 4.8mb
SPC 73.78 333 eP 16 26.80 0.4
WB5 74.35 204 eP 16 28.20 -1.6
GBA 74.42 272 Pd 16 30.10 -0.3
WRA 74.42 204 P 16 31.00 0.8
1.0s 2.30nm 4.2mb
PRU 74.53 337 eP 16 30.50 -0.1
MLR 75.35 328 eP 16 36.00 0.5
ZST 75.54 335 eP 16 37.30 0.9
KHC 75.56 338 P 16 37.30 0.7
1.0s 7.00nm 4.7mb
CDF 77.63 341 eP 16 48.20 0.8
HAU 78.20 342 eP 16 51.20 0.8
LOR 79.37 343 eP 16 57.50 -0.2
0.8s 5.35nm 4.6mb
AVF 79.93 343 eP 17 00.80 0.2
0.8s 6.05nm 4.6mb
SMF 79.98 343 eP 17 01.10 0.2
LPL 80.50 341 eP 17 04.70 0.7
0.8s 5.35nm 4.6mb
LPG 80.52 341 eP 17 05.00 0.8
1.1s 13.45nm 4.9mb
TCF 80.61 344 eP 17 04.60 0.3
MAF 80.62 344 eP 17 05.10 0.8
LSF 80.76 345 eP 17 05.50 0.4
CAF 81.96 344 eP 17 12.40 1.0
0.8s 5.35nm 4.7mb
LPO 82.34 344 eP 17 14.10 0.8
LMR 82.64 340 eP 17 17.10 2.2
PGF 82.84 338 eP 17 18.80 2.7X
1.0s 8.00nm 4.8mb
S.D. = 0.9 on 51 of 55 obs.

? MAY 11, 1990 07h 51m 16.30 ± 3.66s
36.988 N ± 11.2km 13.853 W ± 36.8km
DEPTH = 33.0km (normol)
NORTH ATLANTIC OCEAN (402)

EVAL 5.70 82 ePn 52 41.00 0.2
eSn 53 36.30
EPLA 6.82 61 ePn 52 56.60 -0.1
eSn 54 03.60
STS 7.16 33 ePn 53 02.00 0.7
eSn 54 11.00
EMON 8.14 36 ePn 53 14.50 -0.7
eSn 54 35.00
TIO 8.15 136 iPn 53 15.40 0.0
iSn 54 40.00
S.D. = 0.7 on 5 of 5 obs.

& MAY 11, 1990 08h 28m 50.47s
62.099 N 150.314 W
DEPTH = 8.1km
CENTRAL ALASKA (1)
<AGS-P>.

CUT 0.31 4 iP 28 56.83 0.1
eS 29 01.91
PWA 0.49 155 iP 29 00.83 0.4
iS 29 08.14
SKT 0.59 259 iP 29 02.17 -0.1
iS 29 10.66
SUA 0.67 198 iP 29 04.17 0.2

GH0 0.73 116 iP 29 04.26 -0.9
eS 29 15.11
PLRM 0.76 132 iP 29 04.99 -0.4
iS 29 15.23
PMS 0.93 157 eP 29 07.95 -0.5
eS 29 20.84
HUR 0.94 19 eP 29 07.34 -1.2
eS 29 19.45
SML 0.98 106 iP 29 08.49 -0.8
eS 29 21.88
CRP 1.21 227 eP 29 13.44 0.1
eS 29 30.18
SPU 1.24 223 eP 29 13.00 -0.7
iS 29 30.01
RND 1.47 26 eP 29 16.49 -0.9
iS 29 35.58
KTH 1.49 349 eP 29 17.47 -0.1
SLKM 1.60 178 eP 29 19.15 0.1
NCA 1.65 92 eP 29 19.65 -0.2
RDT 1.83 214 eP 29 23.22 0.7
TOA 1.95 88 eP 29 24.72 0.5
GLI 1.97 127 eP 29 25.13 0.7
RED 2.06 216 eP 29 26.95 1.1
VZW 2.08 118 eP 29 27.14 1.0
VLZ 2.14 115 eP 29 27.35 0.5
KLU 2.17 104 iP 29 27.69 0.2
PAX 2.41 67 eP 29 32.33 1.4
23 obs. associated

? MAY 11, 1990 10h 33m 18.02 ± 0.92s
37.011 N ± 8.2km 22.775 E ± 8.4km
DEPTH = 5.0km (geophysicist)
SOUTHERN GREECE (368)
ML 3.0 (ATH).

VLI 0.32 156 iPg 33 24.00 -0.5
ITM 0.70 284 ePg 33 32.00 0.0
eSg 33 42.00
ATH 1.22 38 Pb 33 41.00 -0.1
VAM 1.97 144 ePn 33 53.00 0.6
VLS 2.09 305 ePg 33 59.70 5.5X
S.D. = 0.7 on 4 of 5 obs.

* MAY 11, 1990 10h 36m 22.22 ± 2.70s
3.860 S ± 16.6km 141.195 E ± 13.7km
DEPTH = 68.8 ± 31.4 km
4.9mb (2 obs.)
PAPUA NEW GUINEA (202)

MNDI 3.35 133 eP 37 15.50 2.0
LAT 6.41 116 eP 37 55.50 -0.7
PMG 8.09 133 eP 38 18.00 -1.4
MTN 13.37 227 eP 39 30.00 -0.5
eS 41 55.00
QIS 16.67 185 eP 40 11.00 -1.9
eS 43 10.00
WB5 17.26 202 eP 40 21.20 0.9
eS 43 30.00
WRA 17.33 202 Pd 40 22.10 1.0
0.4s 3.00nm 3.9mb
BRS 25.88 156 eP 41 50.00 0.5
SSE 39.66 333 eP 43 44.00 -5.1X
1.0s 225.00nm 6.0mb
Z 10s 5.20um 5.7MsZx
CHTO 47.30 300 e(P) 44 49.80 -1.3
GUN 61.88 304 P 46 37.80 0.3
DMN 62.41 304 P 46 41.90 1.0
S.D. = 1.5 on 11 of 12 obs.

* MAY 11, 1990 12h 42m 41.31 ± 1.01s
36.557 N ± 15.2km 27.333 E ± 8.3km
DEPTH = 33.0km (normol)
DODECANESE ISLANDS (369)

YER 0.96 53 ePn 42 58.00 -0.5
SMG 1.22 341 eP 43 03.00 1.0
APE 1.53 290 eP 43 05.00 -1.7
eS 43 27.50
KSL 1.87 103 eP 43 10.30 -1.2
ELL 2.08 84 ePn 43 16.00 1.3
VAM 2.79 247 eP 43 25.70 1.1
S.D. = 1.7 on 6 of 6 obs.

MAY 11, 1990 13h 10m 20.29 ± 0.08s
41.820 N ± 2.0km 130.858 E ± 1.9km
DEPTH = 578.5km (geophysicist)

5.7mb (99 obs.)
NORTH KOREA (659)
mb 6.3 (BRK), 6.2 (PAS). Two
events about 2.2 seconds apart.
Depth from broadband
displacement seismograms, based
on first event.
FAULT PLANE SOLUTION: P-Waves
NP1: Strike=180 Dip=76 Slip= 90
NP2: 360 14 90
Principal Axes:
T P1g=59 Azm= 90
P 31 270
Comment: The focal mechanism is
moderately well controlled and
corresponds to reverse
faulting. The preferred fault
plane is NP2.
RADIATED ENERGY
No. of sta: 5 Focal mech. F
Energy 3.2 ± 1.2 × 10¹³ Nm
MOMENT TENSOR SOLUTION
Dep 584 No. of sta: 17
Moment Tensor: Scale 10¹⁸ Nm
Mrr=1.21 Mtt=-0.01
Mff=-1.19 Mrt=0.27
Mrf=-2.92 Mtf=-0.83
Principal axes:
T Val= 3.30 P1g=53 Azm= 70
N -0.06 15 182
P -3.24 32 282
Best Double Couple: Mo=3.3 × 10¹⁸
NP1: Strike= 54 Dip=19 Slip= 144
NP2: 179 79 74
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 30C
Centroid Location:
Origin Time 13:10:27.1 0.2
Lat 41.49N 0.02 Lon 130.42E 0.04
Dep 586.0 1.9 Half-duration 5.0
Moment Tensor: Scale 10¹⁸ Nm
Mrr=1.26 0.04 Mtt=-0.07 0.06
Mff=-1.19 0.07 Mrt=0.39 0.07
Mrf=-1.95 0.06 Mtf=-1.23 0.06
Principal Axes:
T Val= 2.68 P1g=52 Azm= 56
N -0.08 28 189
P -2.60 23 292
Best Double Couple: Mo=2.6 × 10¹⁸
NP1: Strike= 64 Dip=33 Slip= 149
NP2: 180 74 61

MDJ 2.94 342 Pc 11 39.00 1.2
8.0s *****nm
S 12 38.00
ScS 23 53.00
CN2 4.44 298 iPd 11 48.00 0.0
4.0s *****nm
iS 12 57.00
PcS 21 11.00
ScS 23 50.00
SNY 5.44 273 iPc 11 58.00 2.0
1.4s 2100.00nm 5.9mb
ScS 23 52.00
YONJ 6.93 162 P 12 09.40 0.1
SHK 7.42 168 iPd 12 13.10 -0.8
0.6s 1600.00nm 6.3mb
S 13 46.20
TSRJ 7.44 146 iPd 12 13.40 -0.7
S 13 45.40
MTMJ 7.51 132 iPd 12 13.50 -1.4
MRRJ 7.62 82 iPd 12 13.10 -2.7
eS 13 44.00
DL2 7.62 251 iPc 12 17.00 1.2
4.0s *****nm 6.4mb X
eS 13 53.00
iScS 23 57.00
SHNJ 7.68 178 P 12 16.70 0.3
eS 13 52.70
MAJO 7.77 130 iPd 12 14.95 -2.3
MAT 7.77 130 iPd- 12 15.00 -2.3
iS 13 48.60
NIJ 7.78 123 iPd 12 14.90 -2.4
S 13 49.00
SAP 7.85 77 iP 12 16.10 -1.9
iS 13 48.40

11d 13h

HIA	10.77	317	iPd	12	48.08	1.2		3.5s	1800.00nm	6.1mb	X		0.6s	463.90nm	6.0mb						
BJI	11.25	266	eP	12	52.80	1.3			epP	17	30.95		MAIO	54.23	289 iPd-	18	55.20	0.7			
			esP	14	44.00				iS	20	28.00			0.7s	71.47nm			5.1mb			
			eS	14	52.00				eScP	21	16.88				eS	25	46.00				
			eScP	20	30.00				ScP	21	18.00		MBC	54.24	16 iPc	18	53.40	-0.5			
			eScS	24	03.00				ScS	25	16.00			0.4s	211.00nm			5.8mb			
TIA	12.06	247	Pd	13	00.70	1.1	LSA	34.13	262	iP	16	20.00	0.3	MTN	54.39	180 eP	18	54.00	-1.5		
	4.0s	6500.00nm				6.3mb	X		PP	18	04.00		KBS	54.42	348 iP	18	55.20	0.0			
			sP	14	59.50				S	21	08.00		YKU	54.86	39 iPc	18	59.30	0.9			
			S	15	11.00			LOE	34.82	234	iPd	16	24.50	-0.5	HYT	55.35	37 Pc	19	02.60	0.6	
			ScP	20	29.00			CHG	35.52	240	iPd	16	31.60	0.8	KEV	55.91	336 iPd	19	05.20	-0.4	
			ScS	24	07.00				e	21	28.00			0.7s	25.90nm			4.7mb	X		
SSE	13.22	219	Pc	13	11.00	-0.1			eS	24	12.00				e	21	16.00	739kmX			
	3.0s	2900.00nm				6.1mb		SHL	35.91	256	iP	16	34.50	0.4		e	22	52.00			
NJ2	13.67	228	iPd	13	16.00	0.5			iS	21	32.00				e	26	08.00				
	0.6s	100.00nm				5.3mb		ADK	36.52	56	iPc	16	37.40	-1.2		e	27	10.00			
			S	15	42.50				0.7s	914.30nm				6.5mb		e	27	50.00			
			iScP	20	32.60			NST	37.13	235	iPd	16	49.00	5.1X		e	27	10.00			
			ScS	24	09.60			KKM	37.93	204	ePc	16	51.50	0.9		e	29	40.00			
HHC	14.53	273	iPd	13	26.20	2.1			1.0s	110.80nm				5.4mb		e	31	48.00			
	1.2s	210.00nm				5.4mb			e	18	30.00	566kmX	KOD	56.22	252 iPc	19	08.30	-0.4			
			sP	15	31.00			GUN	38.99	264	P	17	00.40	0.9		0.7s	242.47nm		5.6mb		
			S	15	57.00			TSM	39.14	200	ePc	17	01.00	0.7	SOD	57.22	334 iP	19	13.40	-1.1	
TIY	14.75	260	iPd	13	28.40	2.2			1.0s	480.60nm				6.0mb	KTK1	57.44	336 iPd	19	15.15	-0.9	
	6.0s	*****nm				6.6mb	X	DMN	39.73	264	P	17	06.10	0.7	HNR	57.57	145 eP	19	16.00	-1.4	
			sP	15	35.50			KSH	41.12	286	P	17	19.00	2.9X		e	26	30.00			
			iS	16	03.00				5.0s	5800.00nm				6.4mb	X	SIT	58.05	40 iPc	19	21.20	0.9
			ScS	24	10.00				epP	19	03.00	599kmX	TRO	58.36	338 eP	19	21.26	-1.0			
BTO	15.73	272	iPd	13	37.50	1.7			S	22	54.00		SUF	59.86	329 iP	19	31.30	-1.0			
	6.0s	*****nm				6.7mb	X	SNG	43.68	226											

DBN	75.29	329	eP	21	07.00	1.4			0.5s	211.27nm	5.8mb	TNP	79.18	48	P	21	28.20	1.2				
			e	23	09.00	583kmX		OGA	76.81	322	iPd	21	14.50	0.1		EMS	79.26	324	ePd	21	27.20	-0.1
			iS	29	58.00				1.5s	378.00nm	5.6mb	AZI	79.27	318	P	21	28.00	0.9				
IYA	75.30	315	eP	21	06.50	0.5		KOT	76.82	298	eP	21	14.50	0.1		SDI	79.29	317	P	21	27.30	0.0
BHG	75.33	322	iPd	21	06.90	0.9		HVAR	76.88	317	iP	21	13.60	-0.9		BFD	79.34	171	eP	21	27.50	0.2
	1.6s	657.00nm			5.9mb			SNF	76.89	328	iPc	21	13.73	-0.6		SGO	79.36	316	P	21	28.10	0.5
TNS	75.42	326	ePd	21	06.70	0.2		MEMT	76.98	39	ePc	21	16.20	0.9		PII	79.41	320	P	21	27.40	-0.4
NWAO	75.43	192	iPc	21	06.70	0.2		DOU	77.09	328	Pc	21	15.40	-0.1		BSS	79.45	316	P	21	28.10	0.0
PVY	75.45	315	eP	21	07.00	0.1				pP	23	21.00	600kmX		TDS	79.47	314	P	21	29.00	0.8	
BADA	75.61	295	iPd	21	08.10	0.3				PP	24	27.00			MGR	79.54	315	P	21	28.20	-0.4	
NWRM	75.69	51	P	21	08.00	-0.1				pPP	26	11.00			BCH	79.56	52	P	21	29.70	0.7	
FUR	75.73	323	iPd	21	09.00	0.8				S	30	16.00					pP	23	33.00	581kmX		
	1.5s	536.00nm			5.8mb					sS	33	57.00			LOR	79.63	326	iPd	21	28.70	-0.2	
TOD	75.73	325	eP	21	08.37	0.2		CTI	77.14	321	P	21	14.80	-1.2			1.4s	374.40nm			5.6mb	
ORV	75.75	49	iPc	21	08.40	0.0		GCC	77.17	52	iPc	21	16.40	0.2		LSD	79.63	323	P	21	29.90	0.6
			epP	23	11.00	585kmX				epP	23	20.00	588kmX		PCP	79.71	322	P	21	28.67	-0.8	
			ePP	24	12.50			HLW	77.19	299	eP	21	16.50	0.1		BW06	79.76	41	P	21	30.00	0.0
			eS	30	08.00					e	23	18.00	575kmX		LPL	79.77	324	iPd	21	30.40	0.4	
HRY	75.76	39	iPc	21	09.40	0.9				i	24	20.50			LPG	79.78	324	iPd	21	30.60	0.5	
LJU	75.77	320	ePd	21	08.00	-0.4				i	24	26.00				1.2s	441.65nm			5.8mb		
			epP	23	09.50	579kmX				e	26	14.20			LBF	79.80	326	iPd	21	29.60	-0.3	
			eS	30	00.00					eS	30	17.00			RDP	79.81	318	P	21	30.20	0.2	
			esS	33	37.00			ARN	77.23	51	P	21	17.00	0.4		BLP	79.81	53	P	21	30.00	-0.1
LIT	75.79	311	ePd	21	07.70	-1.0				pP	23	20.00	584kmX		RSP	79.82	323	P	21	29.80	-0.3	
VBY	75.81	319	iPd	21	08.90	0.3		SLE	77.27	324	ePd	21	16.00	-0.6		RSON	79.85	27	P	21	28.80	-1.2
NKY	75.82	315	eP	21	08.60	-0.3		SAX	77.28	323	ePd	21	16.90	-0								

11d 14h

SWITZERLAND (544)
ML 2.7 (LDG), 2.6 (VIE).

OSS 0.21 128 iP 19 40.20 0.0
VDL 0.44 222 iP 19 43.80 -0.8
SAX 0.58 319 iP 19 47.00 -0.4
LLS 0.62 275 eP 19 46.70 -1.5
OGA 0.77 86 ePg 19 50.50 -0.2
SOTA 0.98 65 iPgc 19 54.00 -0.2

TMA 1.01 225 eP 19 54.00 -0.7
MDI 1.05 187 P 19 55.60 0.4
VAI 1.23 220 P 19 58.60 0.2

SLE 1.35 315 iP 20 01.80 1.4
MMK 1.54 241 iP 20 03.40 0.1
FEL 1.67 310 ePn 20 05.12 0.2
DIX 1.87 248 eP 20 10.30 2.2
BSF 2.35 297 Pn 20 14.60 -0.2

CDF 2.39 313 Pn 20 15.20 -0.2
LPG 2.56 240 Pg 20 22.40 4.5X
HAU 2.69 298 Pn 20 19.40 -0.2

KHC 3.39 45 ePg 20 38.50 9.0X
S.D. = 0.9 on 16 of 18 obs.

* MAY 11, 1990 14h 53m 26.22 ± 1.05s
36.107 N ± 11.3km 27.309 E ± 8.0km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)

YER 1.29 37 iPn 53 49.40 -0.8
CIN 1.62 22 eP 53 54.00 -0.8
SMG 1.64 347 Pb 53 55.00 -0.2
APE 1.72 304 ePn 53 57.00 0.5
KSL 1.84 89 ePn 54 01.90 3.8X
ELL 2.19 72 ePn 54 06.90 3.6X
VAM 2.62 255 ePn 54 15.00 5.6X
KHL 2.83 38 ePn 54 14.00 1.6
BCK 2.96 62 ePn 54 22.50 8.3X
VLI 3.58 281 ePn 54 21.00 -1.9
ALT 3.69 36 ePn 54 28.00 3.4X
ITM 4.46 285 ePn 54 37.00 1.6
PRNI 8.63 130 eP 55 34.00 -0.1

S.D. = 1.4 on 8 of 13 obs.
* MAY 11, 1990 16h 45m 46.51s
58.339 N 154.205 W
DEPTH = 65.4km
ALASKA PENINSULA (12)
<AGS-P>.

CDD 0.66 26 iP 46 00.12 -0.8
KDC 1.09 122 eP 46 05.18 -1.0
AUE 1.11 23 iP 46 05.65 -0.8

AUL 1.12 21 eP 46 05.61 -1.0
CNPM 1.95 51 eP 46 16.34 -1.6
RED 2.21 19 eP 46 19.77 -1.9
RDT 2.42 22 eP 46 22.65 -2.0
7 obs. associated

% MAY 11, 1990 17h 14m 39.39 ± 1.01s
47.364 N ± 6.7km 6.751 E ± 11.6km
DEPTH = 5.0km (geophysicist)
FRANCE (538)
ML 2.3 (LDG).

BSF 0.47 3 Pg 14 49.60 0.8
HAU 0.70 337 Pg 14 52.80 -0.5
CDF 1.11 18 Pg 15 00.40 -0.3
LPG 1.87 180 Pg 15 12.30 -0.3

LOR 1.97 268 Pg 15 13.00 -0.8
SMF 2.12 251 Pg 15 17.00 1.1
AVF 2.39 257 Pg 15 22.40 2.5X
S.D. = 1.0 on 6 of 7 obs.

* MAY 11, 1990 17h 59m 26.80 ± 1.10s
35.935 N ± 11.2km 28.979 E ± 8.5km
DEPTH = 33.0km (normal)
EASTERN MEDITERRANEAN SEA (371)

KSL 0.52 69 eP 59 38.00 0.3
ELL 1.11 42 ePn 59 46.00 -0.1
YER 1.32 335 iPn 59 47.20 -1.9
BCK 2.00 40 iPn 00 01.50 2.5
KHL 2.42 10 ePn 00 05.00 0.0
SMG 2.47 316 eP 00 06.00 0.5
IZM 2.81 331 ePn 00 10.70 0.2
ALT 3.24 16 ePn 00 15.00 -1.6
VAM 3.93 264 eP 00 32.20 5.9X
VLI 4.94 281 eP 00 41.80 1.1
PRNI 7.52 136 eP 01 16.00 -0.9
S.D. = 1.5 on 10 of 11 obs.

* MAY 11, 1990 18h 23m 33.95s
32.951 N 80.155 W
DEPTH = 6.1km
SOUTH CAROLINA (511)
<GLD>. MD 2.6 (GLD).

MGS 0.06 168 iPc 23 35.61 0.0
RGRS 0.06 216 iPc 23 35.63 0.0
SVS 0.08 283 iPc 23 36.15 0.2

BCS 0.08 69 iPd 23 35.99 0.0
WSS 0.14 224 iPc 23 37.22 0.3
TWB 0.17 15 iPd 23 37.63 0.1
HBF 0.19 265 iPc 23 37.29 -0.6

HWD 0.24 207 eP 23 39.91 1.1
DRC 0.25 309 eP 23 39.49 0.4
CFS 0.33 358 eP 23 42.98 0.1

SGS 0.38 309 P 23 41.91 0.2
MTT 1.47 303 eP 24 00.34 -0.7
JSC 1.61 326 eP 24 01.94 -1.0

LHS 1.62 341 eP 24 01.71 -1.4
14 obs. associated

* MAY 11, 1990 18h 34m 35.07 ± 1.06s
36.438 N ± 15.4km 27.357 E ± 8.4km
DEPTH = 33.0km (normal)
DODECANESE ISLANDS (369)

YER 1.02 47 ePn 34 53.00 -0.1
SMG 1.33 342 eP 34 58.00 0.5
APE 1.60 294 eP 35 00.00 -1.4
KSL 1.83 99 eP 35 03.00 -1.7
ELL 2.08 81 ePn 35 10.00 1.6
VAM 2.76 249 eP 35 19.00 1.0
BCK 2.78 68 ePn 35 25.00 6.7X
S.D. = 1.7 on 6 of 7 obs.

? MAY 11, 1990 18h 49m 03.19 ± 1.66s
31.576 S ± 44.3km 69.440 W ± 26.2km
DEPTH = 120.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTBS 0.09 187 iPd 49 19.90 -0.1
RTCB 0.55 81 iPd 49 22.00 0.2
ZON 0.65 88 eP 49 23.00 0.5
RTCV 0.82 111 ePc 49 23.70 -0.2

RTLL 0.86 74 iPc 49 38.20 -0.4
CFA 1.03 92 iPd 49 38.90 -4.9X
S.D. = 0.5 on 5 of 6 obs.

MAY 11, 1990 18h 59m 07.47 ± 0.58s
39.753 N ± 9.0km 143.224 E ± 9.2km
DEPTH = 31.5km (2 depth phases)
4.8mb (20 obs.)
OFF EAST COAST OF HONSHU, JAPAN (229)

MAT 5.09 233 iPc 00 25.50 1.9
CN2 13.87 293 eP 02 24.50 0.5
N 13s 0.30um
E 18s 0.70um

SSE 19.89 251 eP 03 37.50 -1.6
BJI 20.73 280 eP 03 44.00 -3.8X
Z 16s 0.41um 3.9MsZ
TIA 20.85 269 Pc 03 46.90 -2.1

TIY 24.05 275 eP 04 23.30 2.6
Z 28s 0.90um 4.1MsZ
HHC 24.11 283 P 04 19.80 -1.5
WHN 25.25 258 Pc 04 33.00 0.8

BTO 25.31 283 eP 04 31.00 -1.8
XAN 27.91 269 P 04 55.20 -1.5
GYA 33.14 258 P 05 42.00 -0.5
CD2 33.17 267 eP 05 42.00 -1.2
GTA 33.22 284 eP 05 43.60 -0.1

KMI 36.83 259 Pc 06 15.00 0.2
WMO 40.95 294 Pc 06 49.00 0.3
CHG 43.37 254 eP 07 09.10 0.4
CHTO 43.37 254 ePc 07 09.20 0.6

LSA 43.43 273 eP 07 10.00 0.4
SHL 44.90 268 eP 07 23.00 1.8
GUN 48.34 274 P 07 48.40 -0.1
DMN 49.08 274 P 07 54.60 0.5

MBG 53.52 17 eP 08 26.00 -0.6
WB5 59.90 190 eP 09 11.80 -0.8
WRA 59.96 190 Pc 09 12.10 -1.0
YKA 60.75 31 eP 09 23.90 5.9X

SOD 63.02 337 eP 09 32.00 -1.2
SUF 66.20 333 iP 09 53.20 -0.6
NUR 68.22 332 iP 10 06.00 -0.6
HFS 72.19 336 eP 10 29.70 -1.1

Z 0.4s 4.70nm 4.8mb
17s 0.09um 4.1MsZ
LR 42 27.00

NB2 72.22 338 P 10 30.10 -0.9
KSP 78.53 329 eP 11 07.20 0.2
PRU 79.89 329 eP 11 14.80 0.4
KHC 80.96 329 P 11 20.40 0.3

GRF 81.41 331 ePd 11 23.80 1.4
LOR 86.10 334 eP 11 46.50 0.1
LBF 86.31 333 eP 11 47.40 0.0
SSF 86.40 334 eP 11 48.10 0.3

LPL 86.57 331 eP 11 49.40 0.4
LPG 86.58 331 eP 11 49.40 0.3
GRR 86.64 337 eP 11 49.30 0.4
SMF 86.65 333 eP 11 49.30 0.3
AVF 86.69 334 eP 11 49.60 0.4
LPF 87.01 337 eP 11 51.20 0.5
MAF 87.45 334 eP 11 53.80 0.9

11d 19h

TCF 0.8s 5.35nm 4.9mb
87.52 334 eP 11 53.70 0.4
0.8s 2.70nm 4.6mb
LSF 87.78 335 eP 11 54.90 0.4
0.8s 8.05nm 5.1mb
MFF 88.01 336 eP 11 55.90 0.3
1.0s 8.00nm 5.0mb
S.D. = 1.0 on 45 of 48 obs.

MAY 11, 1990 19h 42m 23.34 ± 0.21s
1.329 N ± 3.7km 123.590 E ± 4.8km
DEPTH = 21.5km (4 depth phases)
5.3mb (15 obs.) 4.8msz (10 obs.)
MINAHASSA PENINSULA (265)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 145, 30C
Centroid Location:
Origin Time 19:42:24.8 0.5
Lot 1.54N 0.06 Lon 123.36E 0.07
Dep 41.3 5.9 Half-duration 1.7
Moment Tensor: Scale 10¹⁶ Nm
Mrr = 5.67 0.79 Mtt = -4.91 0.66
Mtf = -0.76 1.17 Mrt = -8.86 1.42
Mrf = -3.42 0.90 Mtr = -3.84 0.80
Principal Axes:
T Val = 10.81 Plg = 61 Azm = 167
N 1.36 6 66
P -12.17 28 333
Best Double Couple: Mo = 1.1 × 10¹⁷
NP1: Strike = 47 Dip = 18 Slip = 70
NP2: 248 73 96

MNI 1.25 85 ePc 42 45.50 -0.1
eS 43 06.00
DAV 6.05 19 eP 43 54.00 0.1
TSM 6.22 298 eP 43 56.00 -0.2
AAI 6.78 137 ePc 44 06.60 2.4
eS 45 16.50
MKS 7.70 212 iPc 44 21.50 4.5X
i(S) 45 52.50
KKM 8.72 303 ePc 44 29.20 -2.2
e 50 01.50
TRT 14.14 230 iPc 45 45.50 0.9
BAG 15.28 349 eP 46 00.00 0.3
MTN 15.95 152 iPd 46 08.80 0.6
KGM 20.27 272 eP 47 01.00 0.5
KLM 22.00 275 eP 47 22.00 4.0X
QIZ 22.16 323 P 47 19.00 -0.6
N 13s 4.30um
S 51 13.00
sS 51 24.50

MBL 22.65 189 eP 47 21.00 -3.5X
IPM 22.76 279 ePd 47 26.80 1.2
HKC 22.77 337 iP 47 26.00 0.4
iS 51 36.00

WB5 23.58 154 eP 47 33.00 -0.6
eS 51 52.20
SNG 23.63 285 eP 47 35.00 1.0
1.2s 159.38nm 5.4mb
eS 51 52.80

WRA 23.63 154 Pc 47 33.40 -0.6
0.9s 46.90nm 5.0mb
GZH 23.81 336 Pd 47 36.00 0.3
Z 16s 3.00um 4.9mszX
N 14s 2.10um
E 13s 2.50um

OZH 23.97 349 P 47 37.50 0.3
6.0s 1400.00nm 5.7mb X
N 13s 0.90um
Z 22s 0.78um 4.2msz

GUMO 24.32 59 eP 47 41.00 0.2
eS 51 56.50
GUA 24.34 59 eP 47 41.50 0.5
LAT 24.67 109 eP 47 47.50 3.3X
NANU 25.01 198 eP 47 46.00 -1.4
0.4s 12.00nm 4.9mb

PMG 25.78 115 eP 47 53.00 -1.7
OIS 26.82 145 iPd 48 03.40 -0.8
1.2s 228.00nm 5.7mb
NST 27.17 303 eP 48 10.80 3.3X
WARB 27.51 174 eP 48 09.00 -1.5
0.5s 7.00nm 4.6mb

MEKA 28.20 190 eP 48 14.50 -2.2
RAB 29.08 101 eP 48 26.00 1.2
eS 53 20.00
SSE 29.69 356 P 48 31.50 1.5

1.5s 18.00nm 4.7mb
Z 20s 1.40um 4.6msz
N 13s 0.50um
E 13s 0.60um
sP 48 46.50
S 53 24.00

CHG 29.76 307 ePd 48 30.80 -0.1
1.5s 38.89nm 5.0mb
GYA 29.82 328 P 48 32.00 0.6
Z 16s 1.10um 4.6mszX
N 12s 1.40um
E 12s 0.90um

S 53 28.00
sS 53 46.00
ScS 59 08.00
WHN 30.35 344 eP 48 34.00 -1.9
Z 16s 2.40um 4.9mszX
N 12s 0.90um
E 11s 1.60um

S 53 38.00
CTA 30.77 135 iPc 48 39.90 0.1
1.3s 77.88nm 5.4mb
iS 53 59.00

NJ2 30.88 352 Pd 48 41.30 0.8
Z 20s 0.70um 4.3msz
S 53 45.00

KMI 31.06 321 Pd 48 43.00 0.5
Z 20s 100.00nm 5.3mb
Z 16s 2.20um 4.9mszX
N 13s 0.60um
E 15s 1.20um

pP 48 50.00 24km
S 53 51.00
MRWA 31.23 193 eP 48 40.50 -3.2X
FORR 32.29 173 eP 48 50.30 -2.6
NWA0 34.60 189 eP 49 12.00 -0.9
CD2 34.91 329 eP 49 15.00 -0.7
Z 14s 1.30um 4.8mszX
N 12s 1.50um

TIA 35.22 351 Pc 49 18.00 -0.2
E 14s 0.70um
S 54 48.00
XAN 35.32 339 P 49 18.30 -0.9
N 15s 2.00um
E 11s 0.50um

S 54 51.00
TSRJ 35.93 17 P 49 24.10 -0.2
IIDJ 36.50 20 eP 49 32.20 3.1X
RMQ 36.80 140 eP 49 31.00 -0.7
e 51 00.00 474kmX
CHJJ 37.38 21 P 49 36.00 -0.5
DL2 37.44 357 eP 49 36.00 -0.9
Z 15s 0.60um 4.5mszX
N 14s 0.90um

eS 49 52.00
eS 55 22.00
MTMJ 37.47 19 P 49 36.40 -0.9
MAT 37.56 19 eP 49 36.00 -2.0
1.2s 54.69nm 5.2mb
Z 20s 1.77um 4.9msz

(S) 55 21.00
TIY 37.64 345 eP 49 38.70 0.0
Z 19s 2.30um 5.0msz
N 18s 2.20um
S 55 23.00
sS 55 36.00

ADE 38.78 160 iPc 49 49.30 1.0
1.0s 64.00nm 5.3mb
CMS 38.87 149 eP 49 49.00 0.0
SHL 38.91 311 iP 49 49.50 -0.2
eS 55 47.00
BJI 39.12 351 eP 49 51.00 0.1
6.0s 430.00nm 5.3mb X
Z 20s 0.90um 4.6msz
N 11s 0.71um

ePP 51 26.00
eS 55 46.00
eSS 58 32.00
eScS 59 57.00
LZH 39.13 334 Pd 49 52.00 0.6
1.6s 62.00nm 5.1mb
Z 18s 2.60um 5.1msz
N 16s 1.50um
E 15s 1.30um

PP 51 27.00
S 55 53.00

sS 56 10.00
SS 58 40.00
BRS 40.05 138 eP 49 57.00 -1.9
e 51 30.00 510kmX
SNY 40.32 360 Pd 50 00.00 -0.8
Z 20s 1.60um 4.9msz
N 20s 1.50um
E 20s 1.30um

HHC 40.82 346 Pc 50 07.00 1.8
Z 24s 1.40um 4.7mszX
N 15s 0.80um
E 14s 0.50um

S 56 18.00
BTO 40.98 344 P 50 07.00 0.5
N 15s 1.40um
E 15s 0.80um
sP 50 19.00
S 56 20.50
LSA 41.80 316 P 50 14.00 0.2
CN2 42.32 2 eP 50 17.00 -0.3
7.0s 500.00nm 5.4mb X
Z 20s 1.10um 4.7msz
E 13s 0.70um

PP 52 00.00
eS 56 35.00
ScS 00 16.00
BWA 42.52 149 eP 50 21.00 1.9
i 52 01.20 559kmX
CAN 43.51 149 eP 50 28.00 0.8
i 50 36.50 28km
e 52 13.80

GTA 43.67 333 eP 50 29.40 0.9
1.2s 100.00nm 5.5mb
Z 14s 2.50um 5.3mszX
N 15s 1.40um

pP 50 35.00 19km
eS 56 55.00
ScS 00 24.40
TOO 43.69 155 eP 50 29.00 0.4
CNB 43.70 149 eP 50 30.00 1.3
KOD 46.68 283 eP 50 54.00 0.9
HYB 47.05 293 eP 50 56.10 0.4
1.0s 40.00nm 5.4mb

POO 51.66 293 eP 51 42.00 10.8X
NDI 51.90 306 eP 51 42.00 9.2X
WMO 52.98 328 P 51 41.80 1.1
Z 20s 1.08um 4.9msz
pP 51 46.20 15km
S 59 11.50
ScS 01 23.00

MSZ 60.39 145 P 52 34.00 0.7
MAIO 68.51 309 eP 53 26.00 -0.6
eS 02 31.00
TAB 79.16 308 eP 54 33.00 4.4X
MAW 80.44 200 iPd 54 35.30 0.7
SPA 91.32 180 iPc 55 30.80 2.2
1.3s 41.67nm 5.6mb

INK 93.53 21 eP 55 38.00 -0.5
MLR 94.43 316 eP 55 42.00 -1.3
BUL 95.13 250 iPc 55 40.30 -6.7X
LNV 144.63 158 ePKP 02 00.00 -0.5
TACH 145.08 159 ePKP 02 01.20 -0.2
PCH 145.26 159 ePKP 02 02.00 0.2
SAN 145.36 159 ePKP 02 02.00 0.1
FCH 145.61 159 ePKP 02 04.00 1.3
PEL 145.63 159 iPKPc 02 02.60 0.2
1.1s 63.29nm

ZOBO 161.20 143 PKP 02 26.90 2.1
SIV 164.72 163 ePKP 02 25.00 -2.6
i 02 28.40

S.D. = 1.1 on 77 of 88 obs.

? MAY 11, 1990 19h 48m 36.12 ± 0.70s
12.370 N ± 14.5km 125.449 E ± 32.0km
DEPTH = 33.0km (normal)
4.6mb (2 obs.)

SAMAR, PHILIPPINE ISLANDS (251)

WB5 33.23 165 eP 55 15.00 2.6
WARB 38.34 178 iPd 55 55.40 -0.4
0.5s 16.00nm 5.1mb
FORR 43.05 177 eP 56 33.10 -1.4
BRS 47.59 146 eP 57 10.00 -0.9
MAIO 63.44 304 eP 59 05.00 -0.3
INK 82.64 22 eP 00 57.00 -0.2
SUF 83.33 333 eP 01 02.00 1.2
MBC 83.85 13 eP 01 03.00 -0.3

11d 20h

0.7s 1.00nm 4.1mb
NUR 84.58 331 iP 01 07.00 -0.2
S.D. = 1.4 on 9 of 9 obs.

* MAY 11, 1990 20h 21m 30.30±1.07s
3.250 S ±11.5km 135.977 E ±21.3km
DEPTH = 33.0km (normal)
4.5mb (2 obs.)

WEST IRIAN REGION (196)

MTN 10.67 206 eP 24 05.00 1.0
e 26 04.00
WB5 16.60 185 eP 25 21.00 -1.3
i 25 27.20
eS 28 21.00
WRA 16.67 185 Pc 25 23.60 0.5
0.6s 4.80nm 3.8mb
OIS 17.56 169 eP 25 33.00 -1.3
eS 28 41.00
CTA 19.51 150 eP 26 02.00 4.1X
BRS 28.88 148 iPc 27 29.00 0.7
CHTO 42.53 302 eP 29 24.80 0.0
pP 29 37.00 45kmX
GUN 57.28 306 P 31 17.50 -0.4
DMN 57.78 306 P 31 20.80 -0.5
SPA 86.77 180 eP 34 13.80 1.4
0.6s 8.13nm 5.1mb
ZOBO 149.28 130 PKP 41 20.20 5.7X
S.D. = 1.1 on 9 of 11 obs.

MAY 11, 1990 20h 33m 23.91±0.42s
39.002 N ±3.7km 24.736 E ±4.4km
DEPTH = 5.0km (geophysicist)

AEGEAN SEA (365)

ML 3.0 (ATH).
NEO 1.21 285 ePb 33 46.90 -0.1
PAIG 1.23 319 eP 33 47.70 0.4
ATH 1.30 218 ePb 33 49.50 1.0
eSb 34 08.00
OUR 1.45 337 eP 33 50.10 -0.7
EZN 1.48 56 iPn 33 51.20 0.0
AGG 1.87 271 eP 33 57.30 0.4
APE 2.03 162 ePn 33 58.80 -0.4
LIT 2.05 303 ePd 33 59.10 -0.4
IZM 2.07 106 ePn 34 04.80 5.1X
SMG 2.10 127 Pg 34 04.00 3.9X
SOH 2.11 330 ePc 34 00.10 -0.2
THE 2.12 321 ePd 34 00.40 -0.1
ALN 2.14 28 eP 34 06.10 5.3X
SRS 2.29 338 eP 34 01.90 -1.0
KGT 2.45 53 iPn 34 05.70 0.5
RZN 2.68 360 iPc 34 08.00 -0.7
VLI 2.69 213 Pn 34 07.00 -1.6
KDZ 2.70 11 eP 34 08.00 -0.7
iS 34 49.00
ITM 2.87 231 Pn 34 11.50 0.3
DIM 3.11 11 eP 34 16.00 1.6
Sg 34 47.00
KKB 3.13 337 iPc 34 14.00 -0.8
FNA 3.14 306 eP 34 15.10 0.1
PGB 3.57 353 eP 34 21.00 -0.1
VAM 3.61 187 ePn 34 21.00 -0.7
VTS 3.77 343 eP 34 24.00 -0.1
KEK 3.89 282 ePn 34 28.00 2.3
YLV 3.90 65 ePn 34 27.00 1.1
S.D. = 0.9 on 24 of 27 obs.

* MAY 11, 1990 21h 05m 33.11±2.32s
12.311 N ±7.8km 125.425 E ±11.9km
DEPTH = 39.8 ±21.2 km
5.1mb (3 obs.) 4.2MsZ (2 obs.)

SAMAR, PHILIPPINE ISLANDS (251)

BAG 6.22 312 eP 07 05.00 0.0
SSE 19.10 349 eP 09 54.60 -0.8
eS 13 26.00
NJ2 20.56 344 eP 10 13.60 2.6
WHN 20.84 332 eP 10 14.00 0.1
GYA 22.57 311 iPd 10 33.80 2.4
N 15s 0.50um
E 15s 0.40um
KMI 24.93 304 Pd 10 56.00 1.5
Z 18s 0.70um 4.2MsZ
pP 11 03.50 27kmX
TIA 24.95 344 eP 10 53.60 -0.7
CHG 26.30 288 eP 11 06.20 -0.9

CHTO 26.30 288 eP 11 06.00 -1.0
e 11 19.20
XAN 26.34 328 P 11 07.00 -0.4
CD2 27.26 316 eP 11 15.20 -0.6
TIY 27.84 338 eP 11 20.60 -0.4
Z 18s 0.60um 4.2MsZ
N 16s 0.50um
BJI 28.80 345 eP 11 28.00 -1.5
LZH 30.64 324 P 11 47.00 0.8
Z 16s 0.60um 4.3MsZ
N 15s 0.60um
BTO 31.27 337 eP 11 50.20 -1.4
WB5 33.18 164 eP 12 08.00 -0.3
SHL 34.24 298 iP 12 16.80 -1.0
GTA 35.24 325 eP 12 26.30 0.2
LSA 36.19 304 P 12 35.00 0.4
WARB 38.28 178 iPd 12 52.10 0.5
0.6s 25.00nm 5.3mb
GUN 40.04 299 P 13 06.80 0.0
DMN 40.63 298 P 13 11.20 -0.3
1.1s 66.00nm 5.3mb
FORR 42.99 177 eP 13 30.20 -0.1
WMQ 45.12 321 P 13 47.80 0.2
BRS 47.56 146 iP 14 07.00 0.1
INK 82.70 22 eP 17 54.00 0.3
MBC 83.91 13 eP 18 00.00 0.2
0.8s 3.00nm 4.5mb
S.D. = 1.0 on 27 of 27 obs.

% MAY 11, 1990 21h 58m 37.34±0.90s
40.621 N ±8.0km 15.701 E ±6.4km
DEPTH = 10.0km (geophysicist)

SOUTHERN ITALY (390)

SGO 0.31 258 P 58 43.80 0.1
eSg 58 49.40
MGR 0.50 193 P 58 47.00 -0.4
eSg 58 54.50
ORI 0.80 134 P 58 53.10 0.2
BAI 1.01 60 P 58 57.00 0.5
TDS 1.08 153 P 58 58.00 0.4
BRT 1.17 77 P 58 58.40 -0.8
eSg 59 16.10
S.D. = 0.6 on 6 of 6 obs.

? MAY 11, 1990 22h 08m 40.27±4.04s
47.310 N ±8.7km 2.290 W ±35.7km
DEPTH = 10.0km (geophysicist)

FRANCE (538)

ML 3.1 (LDG).

LPF 1.11 49 Pg 09 02.10 1.0
Sg 09 16.40
GRR 1.45 41 Pn 09 06.40 -0.1
Pg 09 08.00
Sg 09 26.00
MFF 1.63 115 Pg 09 11.80 2.7
Sg 09 32.80
FLN 1.89 39 Pn 09 12.60 -0.3
Pg 09 15.50
Sg 09 38.60
LDF 1.94 48 Pn 09 13.50 -0.1
Pg 09 16.40
Sg 09 40.80
LSF 2.83 111 Pn 09 26.60 0.2
Pg 09 34.30
Sg 10 09.60
LFF 3.17 137 Pg 09 42.00 10.9X
Sg 10 22.40
TCF 3.26 107 Pn 09 32.20 -0.2
Pg 09 43.20
Sg 10 22.60
RJF 3.31 126 Pn 09 33.00 -0.2
Pg 09 42.20
Sg 10 25.00
MAF 3.51 106 Pn 09 36.00 0.0
Pg 09 46.20
Sg 10 30.80
LPO 3.57 136 Pg 09 47.80 10.9X
Sg 10 33.60
BGF 3.60 100 Pn 09 37.00 -0.2
Pg 09 48.40
Sg 10 33.00
CAF 3.85 127 Pn 09 40.20 -0.7
Sg 10 42.80
AVF 3.89 96 Pn 09 40.80 -0.6
Sg 10 41.60

SMF 4.25 97 Pn 09 46.00 -0.5
Sg 10 52.40
LBF 4.29 92 Pn 09 46.00 -1.1
Sn 10 32.00
Sg 10 54.40
S.D. = 1.0 on 14 of 16 obs.

% MAY 11, 1990 22h 09m 26.95±0.69s
43.090 N ±6.0km 12.960 E ±8.1km
DEPTH = 10.0km (geophysicist)

CENTRAL ITALY (381)

ASS 0.22 265 Pc 09 31.10 -0.6
eSg 09 36.20
ARV 0.41 358 P 09 34.00 -1.3
eSg 09 40.50
ALP 0.55 124 P 09 37.50 -0.6
eSg 09 47.00
MNS 0.73 196 P 09 40.90 -0.5
eSg 09 52.30
AQU 0.81 156 P 09 42.50 -0.1
RSM 0.91 336 P 09 45.90 1.5
SFI 1.16 316 P 09 48.80 0.3
eSg 10 06.20
SDI 1.52 155 P 09 55.70 1.4
S.D. = 1.2 on 8 of 8 obs.

& MAY 11, 1990 22h 18m 17.01s
63.120 N 150.370 W
DEPTH = 108.5km
CENTRAL ALASKA (1)
<AGS-P>.

HUR 0.36 113 iP 18 32.84 -0.3
iS 18 44.95
KTH 0.50 330 eP 18 33.90 -0.1
iS 18 46.17
CUT 0.72 176 iP 18 35.48 -0.1
eS 18 49.79
RND 0.74 67 iP 18 35.52 -0.4
iS 18 50.58
MCK 0.89 46 iP 18 36.92 -0.4
eS 18 51.26
SKT 1.26 206 iP 18 40.68 -0.6
PWA 1.49 171 eP 18 43.90 -0.1
iS 19 04.75
GHO 1.51 153 eP 18 44.05 -0.3
iS 19 05.37
SML 1.62 143 iP 18 44.99 -0.7
PLRM 1.64 159 eP 18 45.51 -0.3
iS 19 06.55
SUA 1.67 186 eP 18 46.22 -0.1
WRH 1.69 36 iP 18 45.69 -0.8
PMS 1.92 168 eP 18 48.53 -0.9
HDA 1.99 48 eP 18 49.35 -1.0
NCA 1.99 123 eP 18 49.82 -0.6
CRP 2.04 205 eP 18 50.62 -0.5
SPU 2.10 203 eP 18 51.39 -0.4
DDM 2.13 70 eP 18 51.59 -0.6
TOA 2.19 116 eP 18 52.63 -0.4
PAX 2.24 92 eP 18 53.09 -0.5
SLKM 2.62 178 eP 18 58.43 -0.2
GLI 2.73 144 eP 18 58.31 -1.7
RDT 2.73 202 eP 19 00.43 0.3
VZW 2.74 137 eP 18 58.59 -1.6
VLZ 2.75 135 eP 18 58.33 -2.0
SEW 3.06 171 eP 19 03.53 -0.9
GLB 3.50 116 eP 19 08.89 -1.6
CNPM 3.63 187 eP 19 10.95 -1.3
28 obs. associated

? MAY 11, 1990 22h 26m 08.53±2.23s
40.496 N ±14.2km 15.243 E ±23.9km
DEPTH = 33.0km (normal)

SOUTHERN ITALY (390)

SGO 0.08 39 P 26 14.10 -0.1
eSg 26 21.30
MGR 0.43 146 P 26 18.30 0.2
eSg 26 27.20
ORI 1.02 115 P 26 26.20 -0.3
BRT 1.54 75 P 26 34.20 0.2
eSg 26 42.90
S.D. = 0.5 on 4 of 4 obs.

* MAY 11, 1990 23h 08m 09.26±1.04s
19.468 S ±10.9km 69.372 W ±11.5km

11d 23h

NUR 90.96 24 iP 56 52.60 -0.4
BRG 91.36 35 eP 56 55.40 0.3
1.3s 20.00nm 5.3mb
e 00 32.00 25km
iSg 12 55.00
e 57 03.50
WET 91.61 37 eP 56 56.60 0.3
1.5s 35.00nm 5.5mb
KHC 92.02 37 P 56 58.80 0.6
Z 18s 0.80um 5.2MsZ
N 18s 0.40um
E 18s 0.30um
PRU 92.14 36 eP 56 58.50 -0.1
e 57 27.50 110kmX
KSP 92.66 34 eP 57 00.00 -1.0
TIC 93.42 82 P 57 05.00 -0.2
LIC 93.54 82 P 57 05.60 -0.1
Z 20s 0.32um 4.8MsZ
KIC 93.77 82 P 57 06.80 0.0
ZST 94.50 36 eP 57 10.50 0.9
KRA 95.05 34 eP 57 12.20 0.2
e 57 20.90 27km
SRO 95.40 36 iP 57 14.20 0.5
SPC 95.70 34 eP 57 14.70 -0.6
e 00 43.00
LZH 122.07 337 ePKP 02 43.50 -1.1
1.5s 29.00nm
MAIO 123.51 19 ePKP 02 48.00 0.7
e 04 29.00
WRA 127.98 258 PKPd 02 55.20 -1.1
0.8s 7.80nm
CHG 139.27 331 ePKP 03 14.00 -3.6X
HYB 145.51 1 iPKPc 03 27.40 -1.2
1.0s 120.00nm
NANU 145.61 255 ePKP 03 27.00 -1.5
SNG 147.85 317 ePKP 03 34.90 2.5
GBA 149.26 4 PKPd 03 34.10 -0.4
0.8s 19.50nm
IPM 149.48 313 ePKPd 03 40.20 5.2X
S.D. = 1.1 on 140 of 150 obs.

MAY 12, 1990 00h 36m 48.97 ± 0.58s
36.370 N ± 7.9km 100.034 E ± 6.7km
DEPTH = 33.0km (normal)
3.6mb (1 obs.)
QINGHAI PROVINCE, CHINA (325)
ML 3.8 (BJI).

GTA 3.04 357 Pn 37 42.00 6.0X
Pg 37 48.60
Sg 38 30.20
LZH 3.09 94 Pnc 37 36.50 -0.3
Pg 37 42.00
Sg 38 19.50
XAN 7.64 105 eP 38 35.40 -5.4X
BTO 8.89 59 eP 38 58.00 -0.3
N 10s 0.20um
E 10s 0.20um
TIY 10.00 79 eP 39 13.40 -0.2
N 15s 0.70um
WMO 12.02 312 P 39 40.50 -0.4
S 42 02.40
GUN 14.65 239 P 40 15.70 -0.3
CHG 17.52 183 eP 40 52.80 0.5
CHTO 17.52 183 eP 40 52.00 -0.3
YKA 77.61 16 eP 48 44.20 1.2
0.8s 0.50nm 3.6mb
S.D. = 0.7 on 8 of 10 obs.

? MAY 12, 1990 00h 38m 53.94 ± 1.54s
31.456 S ± 40.3km 69.339 W ± 20.9km
DEPTH = 120.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTBS 0.23 205 ePd 39 11.00 0.0
S 39 23.70
RTCB 0.46 94 iPd 39 12.00 0.0
S 39 23.80
ZON 0.57 99 eP 39 13.00 0.3
eS 39 26.00
RTLL 0.75 81 iPc 39 13.90 -0.2
RTCV 0.79 121 ePd 39 14.30 -0.1
S 39 28.80
CFA 0.95 99 iPc 39 15.80 0.0
S 39 31.10
S.D. = 0.2 on 6 of 6 obs.

MAY 12, 1990 01h 26m 20.69 ± 0.57s
45.601 N ± 8.6km 5.330 E ± 4.0km
DEPTH = 5.0km (geophysicist)
FRANCE (538)
ML 2.8 (LDG). MD 2.6 (STR).

LPL 0.99 94 Pg 26 39.50 -0.6
LPG 1.00 95 Pg 26 39.80 -0.6
Sg 26 53.20
BNI 1.10 120 P 26 41.50 -0.3
eSg 26 55.30
EMS 1.21 67 eP 26 44.10 0.2
PLDF 1.25 288 Pn 26 44.25 -0.2
Pg 26 45.70
Sg 27 02.65
SMF 1.47 316 Pg 26 50.00 2.1
Sg 27 08.00
LBL 1.51 257 Pn 26 47.71 -0.7
Pg 26 50.43
DIX 1.53 71 eP 26 49.90 0.9
AGO 1.60 287 Pg 26 51.54 1.8
PYM 1.63 276 Pg 26 52.51 2.2
Sg 27 13.86
LBF 1.67 326 Pn 26 50.30 -0.5
Pg 26 53.00
Sg 27 14.10
AVF 1.82 312 Pg 26 56.00 3.2X
Sg 27 18.60
MMK 1.90 75 eP 26 56.10 1.9
SSF 1.93 320 Pg 26 58.40 3.9X
Sg 27 22.00
LOR 1.95 329 Pn 26 53.60 -1.2
Sg 27 23.20
BGF 1.98 300 Pn 26 54.60 -0.6
Sg 27 24.40
MAF 2.03 289 Pg 27 00.30 4.4X
Sg 27 25.00
TCF 2.28 289 Pn 26 59.20 -0.4
Pg 27 04.80
Sg 27 33.00
SBF 2.30 138 Pg 27 03.00 3.1X
Sg 27 31.00
CAF 2.40 255 Pn 27 00.20 -1.2
Pg 27 07.20
Sg 27 36.80
BSF 2.45 24 Pn 27 00.80 -1.3
Pg 27 05.80
Sg 27 36.40
HAU 2.51 16 Pn 27 02.20 -0.6
Pg 27 07.20
Sg 27 37.80
RJF 2.70 265 Pg 27 13.20 7.6X
Sg 27 45.40
LSF 2.73 285 Pn 27 04.90 -1.1
Pg 27 13.20
Sg 27 47.80
SLE 3.07 44 eP 27 17.40 6.6X
CDF 3.11 25 Pn 27 08.00 -3.4X
Sg 27 56.00
S.D. = 1.3 on 19 of 26 obs.

MAY 12, 1990 04h 50m 08.71 ± 0.07s
49.037 N ± 1.7km 141.847 E ± 1.6km
DEPTH = 605.7km (geophysicist)
6.5mb (65 obs.)
SAKHALIN ISLAND (662)
mb 6.8 (BRK). 6.2 (PAS).
Mo=6.0*10**19 Nm (PPT). Felt (V)
at Aniva, Oganki and
Peschonskoye; (IV) in the
Korsakov-Nevelsk-Tomori areo;
(III) in the
Uglegorsk-Paronaysk-Makorov
areo, Sakhalin. Felt (II) at
Komsomolsk-na-Amure, USSR. Felt
(III JMA) at Kushiro, Hokkaido.
Also felt (III JMA) at Hachinohe
and Morioka; (II JMA) at Tokyo
and Yokohama, Honshu. Depth from
broadband displacement
seismograms.
FAULT PLANE SOLUTION: P-Waves
NP1: Strike=55 Dip=80 Slip=-73
NP2: 175 20 -149
Principal Axes:
T P1g=33 Azm=131

P 52 345
Comment: The focal mechanism is moderately well controlled and corresponds to normal faulting with a moderate strike-slip component. The preferred fault plane is not determined.

RADIATED ENERGY
No. of sta: 11 Focal mech. M
Energy 6.5±1.8*10**14 Nm

MOMENT TENSOR SOLUTION
Dep 609 No. of sta: 22
Moment Tensor: Scale 10**19 Nm
Mrr=-3.26 Mtt=-3.20
Mff=6.45 Mrt=-2.86
Mrf=-4.22 Mtf=3.74

Principal axes:
T Vol=9.63 P1g=21 Azm=111
N -3.52 34 216
P -6.11 48 356

Best Double Couple: Mo=7.9*10**19
NP1: Strike=158 Dip=39 Slip=-154
NP2: 47 74 -54

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 135, 34C M.W.: 11S, 26C
Centroid Location:
Origin Time 04:50:16.6 0.2
Lot 48.94N 0.02 Lon 141.38E 0.03
Dep 612.5 1.6 Half-duration 15.0
Moment Tensor: Scale 10**19 Nm
Mrr=-3.57 0.08 Mtt=-0.87 0.11
Mff=4.43 0.12 Mrt=-6.12 0.09
Mrf=-2.66 0.09 Mtf=2.47 0.10

Principal Axes:
T Vol=7.85 P1g=27 Azm=126
N 0.66 25 229
P -8.51 52 356

Best Double Couple: Mo=8.2*10**19
NP1: Strike=172 Dip=29 Slip=-151
NP2: 56 76 -64

YSS 2.10 164 iPd 51 26.00 2.5
iS 52 24.00
SAP 5.99 184 iP 51 49.90 -0.6
iS 53 10.00
MDJ 9.49 247 iPc 52 22.90 0.1
iS 54 04.00
ScS 03 47.50
PET 11.30 63 iPc 52 40.00 -0.4
eS 54 32.00
CN2 12.46 251 iPc 52 51.00 -0.7
4.0s *****nm 6.9mb X
esP 54 48.00
MAT 12.77 193 iPd 52 54.80 0.0
eS 55 11.00
TSRJ 14.16 200 iPd 53 08.50 0.2
S 55 36.70
HIA 14.46 279 iPc 53 11.54 0.3
SNY 14.69 247 iPc 53 13.50 0.1
6.5s *****nm 6.7mb X
sP 55 24.00
iScS 03 54.20
YONJ 15.16 207 iPd 53 19.30 1.4
WKYJ 15.52 200 iP+ 53 22.30 0.8
SHK 16.01 208 iPc 53 26.90 0.8
TKSJ 16.12 204 iP+ 53 28.30 1.1
SHNJ 16.90 212 iP+ 53 34.70 0.1
iS 56 21.60
DL2 17.68 243 P 53 42.00 0.1
5.0s *****nm 6.8mb X
BJI 20.31 253 eP 54 07.12 1.0
esP 56 36.00
eS 57 16.00
eScS 04 14.00
SMY 20.59 67 ePc 54 08.70 0.2
TIA 22.14 244 Pc 54 22.10 -0.6
9.0s 6900.00nm 6.3mb X
ScP 00 35.00
ScS 04 15.90
HHC 22.83 260 iPd 54 29.60 0.5
3.0s *****nm 7.2mb
TIK 23.45 350 iPd 54 33.00 -1.2
iS 57 15.00
SSE 23.77 229 Pd 54 36.00 -1.3
sP 57 20.00
S 58 15.00

IRK	23.84	292	iPd	54	38.00	0.2				e	59	07.00	576kmX		OBN	58.89	320	iPd	59	11.00	-1.3	
			eS	57	20.00		YKU	44.34	46	ePd	57	28.40	0.8			Z	18s	46.00um	iS	06	29.00	6.6Msz
BTO	23.96	261	iPd	54	38.00	-1.1	HYT	44.87	43	Pd	57	32.70	0.8						eS	06	29.00	
	4.0s	*****nm				6.9mb X	MBC	45.01	20	iPc	57	32.50	-0.1		MAIO	59.03	291	iPd-	59	13.50	-0.1	
TIY	24.04	253	iPd	54	40.00	0.2		0.5s	294.00nm				6.1mb					eS	06	36.00		
	7.0s	*****nm				6.7mb X	SHL	45.13	257	iP	57	34.00	-0.3		GMW	59.19	52	iPd	59	14.30	-0.2	
			pP	54	44.00	14kmX				iS	03	16.00			HYB	59.58	262	iPd	59	16.20	-1.1	
			sP	57	19.00		LOE	45.22	240	iPd	57	34.00	-0.9			1.0s	890.00nm		e	59	56.20	5.9mb
			sS	58	20.00		CHG	45.74	244	iPd	57	39.00	0.2					e	00	24.20	172kmX	
NJ2	24.21	234	iPd	54	40.50	-0.7				eS	02	30.00						e	00	56.20		
	4.0s	3500.00nm				6.3mb X	FRU	45.78	289	iPd	57	39.80	0.9					e	01	20.20		
ADK	26.30	68	eP	54	55.90	-3.4X				eS	03	37.00						e	02	12.20		
	1.3s	2339.60nm				6.7mb	KSH	46.78	284	iPc	57	48.00	1.4					eS	06	32.00		
ILT	27.22	32	iPd	55	05.20	-2.0				S	03	57.00						i	01	14.00		
			iS	59	00.00		GUN	47.43	265	P	57	51.40	-0.6		NUR	59.64	329	iPd	59	16.00	-1.2	
WHN	27.83	239	iPd	55	12.50	-0.3	SIT	47.51	47	iPd	57	52.80	1.1					i	59	55.80	171kmX	
	4.0s	7700.00nm				6.7mb X	NST	47.52	240	iPd	57	55.50	3.2X					i	01	35.40		
			iS	59	12.00					e	59	46.40	625kmX					e	02	14.00		
XAN	28.57	251	iPd	55	19.00	-0.3	KKM	48.02	215	iPc	57	56.20	0.0					e	03	16.00		
	5.0s	*****nm				6.7mb X				i	59	46.00	611kmX					e	04	28.00		
			PcP	58	10.00					i	02	08.80						e	06	38.00		
QZH	30.16	226	Pc	55	32.00	-0.8	DMN	48.14	265	P	57	56.50	-0.7					e	08	00.00		
	4.0s	3100.00nm				6.3mb X	KBS	48.93	349	iPd	58	02.00	-0.1					e	10	12.00		
			sP	58	20.00		TSM	49.03	212	ePd	58	03.00	-0.5					e	59	16.70	-0.7	
LZH	30.51	259	iPd	55	37.07	1.2				e	02	13.20			PNT	59.64	49	iPd	59	17.50	-0.1	
			epPd	57	14.07					iS	58	24.00	-0.1		BMW	59.66	53	iPc	59	18.00	-0.3	
			iSPc	58	25.25		DSH	51.86	288	iPd	58	23.70	-1.3		RMW	59.76	51	iPc	59	18.00	-0.3	
			iS	59	54.00</																	

12d 04h

				epPc	01	46.05	581kmX			iSp	03	20.00		MLR	70.55	318	iPd	00	25.00	-0.3
SUE	64.95	339		esPc	02	53.59				ePPP	04	30.00					e	28	09.00	
FRB	65.04	14		iPd	59	50.70	-0.5			eS	08	27.00		SBB	70.77	59	iPd	00	27.00	0.4
HRY	65.22	47		eP	59	50.00	-1.7			eSP	08	51.00					e	02	30.00	602kmX
NWRM	65.23	59	P	iPd	59	53.20	-0.1			eScS	09	07.50					e	08	51.00	
ORV	65.25	58		P	59	52.80	-0.4			ePS	09	14.00					e	30	08.00	
				iPd	59	52.80	-0.6			esS	12	10.50					e	30	31.00	
				eS	07	47.70			TNP	68.66	56			EDU	70.80	340	iPd	00	25.80	-0.5
				eP'P'	27	43.40			CTA	68.92	176			RSSD	70.81	44	iPd	00	26.30	-0.6
				e	30	41.30				iPc+	00	14.20	-1.5	GSC	70.90	58	iPd	00	27.00	-0.4
ASK	65.35	338		iPd	59	53.20	-0.4			iPP	02	14.00					e	02	33.00	622kmX
BER	65.40	338		iPd	59	53.50	-0.4			iS	08	31.00					eS	08	52.00	
ODD1	65.48	337		iP	59	54.20	-0.3			i(sS)	09	18.00					e	30	05.00	
KNA	65.53	194		iPc	59	54.40	-0.8			iSS	12	00.00					e	30	36.00	
LRM	65.56	48		iPd	59	55.50	-0.1		CTAO	68.92	176			CLL	70.91	329	iPd	00	26.50	-0.5
KOD	65.61	257		iP	59	55.00	-1.2			iPc	00	14.29	-1.4				iP	02	30.50	609kmX
				eS	07	51.00				esPd	03	19.69					iS	08	53.00	
TAB	65.65	300		iP-	59	57.00	1.0		W85	68.93	188						(SKS)	09	25.00	
LCCM	65.83	47		iPd	59	57.00	-0.1			iPc	00	14.70	-1.0				P'P'	28	09.00	
BLS1	65.88	337		iPd	59	56.90	-0.2			eS	08	36.00					iPd	00	28.00	0.7
OSG	65.89	339		iP	59	53.00	-3.9x			eSKKP	25	42.00					iPd	00	27.00	-0.3
BRK	65.99	60		ePd	59	57.70	-0.2		KVT	69.06	309			BRG	70.95	328	iPd	00	27.00	
				epP	02	00.00	614kmX		BCH	69.13	60				1.2s	1300.00nm				6.3mb
				esP	03	04.00				iS	08	35.00					i	00	41.70	52kmX
				iS	07	59.00			CLI	69.14	318						i	02	30.50	
				i(sS)	11	04.00			BW06	69.21	48						i	03	06.00	
PCC	66.19	60		ePd	59	58.70	-0.4		PTT	69.24	319						i	06	12.00	
BGMT	66.19	48		iPd	59	59.40	0.0		PPE	69.25	317						i	08	56.00	
MEMT	66.44	47		ePd	00	01.20	0.4		QIS	69.30	182						i	12	36.00	
KMY	66.44	337		iPd	00	00.30	0.0			e	08	33								

VAY 4.05 21 ePn 53 11.30 -6.3X
SKO 4.46 8 ePn 53 24.50 1.1
S.D. = 1.1 on 6 of 9 obs.

% MAY 12, 1990 10h 04m 49.62±1.14s
40.734 N ±11.1km 15.809 E ±6.5km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

SGO 0.42 245 P 04 58.00 -0.2
eSg 05 04.60
MGR 0.63 198 P 05 00.80 -1.4
eSg 05 10.60
BSS 0.76 275 P 05 05.20 0.7
eSg 05 16.70
ORI 0.83 144 P 05 06.20 0.5
eSg 05 18.40
BRT 1.07 82 P 05 09.10 -0.6
eSg 05 23.70
TDS 1.15 159 P 05 12.10 1.0
eSg 05 27.60
S.D. = 1.2 on 6 of 6 obs.

? MAY 12, 1990 14h 36m 45.09±0.60s
55.332 S ±16.5km 26.131 W ±20.3km
DEPTH = 33.0km (normal)
5.1mb (6 obs.)
SOUTH SANDWICH ISLANDS REGION (153)

SPA 34.85 180 iPc 43 32.20 -2.7
0.6s 21.95nm 5.3mb
MAW 40.37 144 iP 44 23.40 2.6X
SIV 47.53 312 P 45 19.40 0.4
ZOBO 50.48 304 P 45 42.70 0.3
BUL 53.78 72 iPd 46 08.80 2.2
LIC 63.79 24 P 47 14.00 -2.0
0.7s 10.00nm 5.0mb
KIC 63.99 24 P 47 15.40 -1.9
0.8s 8.50nm 4.9mb
TIC 64.20 23 P 47 16.80 -1.9
0.7s 10.00nm 5.0mb
LKO 66.88 22 Pc 47 43.68 7.7X
0.5s 14.00nm 5.4mb
BCAO 69.99 48 iPc 48 03.00 7.8X
0.4s 5.00nm 4.9mb
MUN 87.24 149 iPd 49 29.50 0.3
COOL 89.66 152 eP 49 40.80 0.0
NB2 119.72 20 PKP 55 32.80 0.9
0.7s 1.00nm
KVN 122.02 293 ePKP 55 37.00 -0.2
FRB 123.19 339 ePKP 55 48.00 9.7X
DMN 124.19 90 PKP 55 42.60 0.8
GUN 124.86 90 PKP 55 44.20 1.0
SOD 128.53 23 ePKP 55 50.00 1.5
YKA 136.04 318 ePKP 55 56.80 -6.1X
0.5s 3.00nm
MBC 143.56 336 ePKP 56 15.00 -1.2
0.4s 7.00nm
INK 145.62 321 ePKP 56 21.00 1.1
OWY 146.76 313 PKPc 56 23.20 1.3
FBA 150.48 313 ePKPc 56 32.90 5.3X
pP 56 41.00
S.D. = 1.5 on 17 of 23 obs.

% MAY 12, 1990 14h 54m 23.32±0.92s
36.918 N ±8.6km 22.690 E ±8.5km
DEPTH = 5.0km (geophysicist)
SOUTHERN GREECE (368)
ML 3.1 (ATH).

VLI 0.28 135 iPgd 54 28.80 -0.2
ITM 0.66 293 iPgc 54 36.80 0.2
eSg 54 45.00
ATH 1.33 38 ePn 54 49.80 1.4
eSb 55 05.00
VAM 1.94 141 ePn 54 57.80 0.5
VLS 2.09 308 ePg 55 04.00 4.6X
APE 2.28 85 ePn 55 01.50 -0.7
NEO 2.42 10 ePn 55 03.00 -1.2
S.D. = 1.2 on 6 of 7 obs.

* MAY 12, 1990 15h 05m 53.64±1.05s
3.181 S ±10.9km 137.520 E ±16.9km
DEPTH = 33.0km (normal)
4.6mb (2 obs.)
WEST IRIAN (201)

MTN 11.50 213 iPd 08 40.00 1.4
eS 10 42.00
KNA 15.17 214 eP 09 27.80 0.5
WB5 16.88 190 eP 09 47.80 -1.3
i 09 53.40
eS 12 46.00
QIS 17.39 173 iPd 09 54.50 -1.0
eS 12 55.00
CTA 18.84 154 iP 10 15.00 1.5
WARB 25.14 204 iPc 11 17.60 0.2
0.4s 6.00nm 4.5mb
COOL 31.60 208 eP 12 14.40 -1.3
0.4s 4.00nm 4.6mb
GUN 58.49 306 P 15 49.70 0.0
DMN 59.00 305 P 15 53.20 0.0
HYT 90.30 29 P 18 44.20 -8.3X
ZOBO 148.12 128 PKP 25 36.00 0.0
S.D. = 1.1 on 10 of 11 obs.

* MAY 12, 1990 15h 18m 22.63s
59.830 N 139.801 W
DEPTH = 0.0km
SOUTHEASTERN ALASKA (19)
<AGS-P>.

BCPM 0.15 34 iP 18 25.81 0.2
eS 18 28.51
PCA 0.35 320 iP 18 29.93 0.3
eS 18 36.83
HQN 0.60 129 iP 18 35.05 0.4
eS 18 45.50
YAH 1.11 300 iP 18 43.66 -0.9
eS 18 59.35
BALM 1.75 315 iP 18 51.20 -3.3
KLU 3.44 302 iP 19 16.00 -2.7
DWY 4.24 2 P 19 24.00 -5.9
INK 8.94 15 eP 20 39.00 3.1
8 obs. associated

* MAY 12, 1990 15h 45m 17.97±1.67s
38.098 N ±13.7km 20.231 E ±11.4km
DEPTH = 5.0km (geophysicist)
GREECE (364)
MD 3.5 (ATH).

VLS 0.29 74 iPgd 45 22.60 -1.3
ITM 1.63 124 ePb 45 48.00 0.6
KEK 1.65 348 ePb 45 47.00 -0.7
eSb 46 12.00
VLI 2.56 122 ePg 46 07.00 6.2X
NEO 2.63 62 ePn 46 00.80 -1.1
LIT 2.66 41 eP 46 04.20 1.9
FNA 2.83 18 eP 46 03.80 -0.9
LCI 2.85 322 P 46 04.40 -0.5
(Sn) 46 53.80
OHR 3.04 8 ePn 46 08.00 0.3
VAY 3.69 29 ePn 46 18.50 1.6
i 46 31.00
S.D. = 1.4 on 9 of 10 obs.

? MAY 12, 1990 15h 52m 02.89±2.66s
35.889 N ±33.7km 141.841 E ±19.5km
DEPTH = 10.0km (geophysicist)
3.9mb (3 obs.)
NEAR EAST COAST OF HONSHU, JAPAN(228)

KAKJ 1.39 284 P 52 27.60 -0.6
S 52 42.80
CHJJ 2.31 275 P 52 40.70 -0.9
NIIJ 2.65 301 P 52 47.30 0.8
MAT 3.01 284 eP 52 52.00 0.5
(S) 53 26.00
IIDJ 3.22 264 P 52 55.70 1.1
S 53 28.80
MTMJ 3.34 283 P 52 56.80 0.6
TSRJ 4.78 267 P 53 17.10 0.5
BJI 20.63 289 eP 56 42.00 -2.9
1.2s 6.00nm 3.8mb
YKA 64.63 30 eP 02 50.90 8.5X
0.7s 0.40nm 3.7mb
SUF 69.16 334 eP 03 12.00 0.9
NUR 71.12 332 eP 03 27.00 3.9X
NB2 75.37 338 P 03 48.10 0.0
0.9s 2.10nm 4.2mb
S.D. = 1.4 on 10 of 12 obs.

% MAY 12, 1990 16h 04m 02.46±0.99s

36.959 N ±9.0km 22.736 E ±9.4km
DEPTH = 5.0km (geophysicist)
SOUTHERN GREECE (368)
ML 3.2 (ATH).

VLI 0.29 146 iPgd 04 08.00 -0.3
ITM 0.68 289 iPgc 04 16.00 -0.1
eSg 04 25.00
ATH 1.28 37 ePn 04 28.20 1.6
eSn 04 44.50
VAM 1.95 142 ePg 04 37.80 1.3
VLS 2.09 306 ePg 04 42.20 3.5X
APE 2.24 86 ePn 04 39.00 -1.8
NEO 2.38 9 ePn 04 42.00 -0.7
S.D. = 1.6 on 6 of 7 obs.

? MAY 12, 1990 16h 47m 40.78±2.56s
15.520 N ±15.6km 147.099 E ±21.8km
DEPTH = 54.0 ±21.1 km
3.6mb (1 obs.)
MARIANA ISLANDS REGION (215)

GUMO 2.89 229 eP 48 25.30 -0.1
PJG 2.89 229 eP 48 25.30 -0.1
GUA 2.89 227 eP 48 25.70 0.3
eS 48 57.80
MAT 22.38 341 eP 52 35.00 -0.7
LZH 43.56 306 P 55 42.50 1.1
GUN 57.69 293 P 57 28.90 0.0
DMN 58.38 293 P 57 33.20 -0.4
YKA 80.16 28 eP 59 47.10 0.7
0.9s 0.70nm 3.6mb
KIC 144.63 306 (PKP) 07 13.20 -0.8
TIC 144.68 307 (PKP) 07 13.90 -0.2
LIC 144.94 306 (PKP) 07 14.70 0.2
S.D. = 0.7 on 11 of 11 obs.

? MAY 12, 1990 17h 00m 18.08±1.29s
15.569 N ±17.4km 147.073 E ±23.7km
DEPTH = 33.0km (normal)
3.6mb (1 obs.)
MARIANA ISLANDS REGION (215)

PJG 2.91 228 eP 01 03.50 0.4
GUMO 2.91 228 eP 01 02.80 -0.3
GUA 2.91 226 eP 01 03.20 0.1
eS 01 37.50
CHTO 45.99 281 P 08 41.10 0.8
GUN 57.64 293 P 10 07.90 -0.3
DMN 58.34 293 P 10 12.60 -0.4
YKA 80.13 28 eP 12 27.10 1.0
0.8s 0.60nm 3.6mb
KIC 144.58 306 (PKP) 19 52.50 -1.4
S.D. = 0.9 on 8 of 8 obs.

MAY 12, 1990 17h 23m 42.24±0.41s
15.619 N ±5.5km 147.776 E ±8.7km
DEPTH = 33.0km (normal)
4.7mb (6 obs.)
MARIANA ISLANDS REGION (215)

GUMO 3.47 235 eP 24 35.50 0.3
PJG 3.47 235 eP 24 35.70 0.5
eS 25 11.00
KAKJ 21.59 343 eP 28 31.80 0.6
IIDJ 21.66 338 eP 28 32.10 0.1
CHJJ 21.80 341 eP 28 33.80 0.4
TSRJ 22.47 334 eP 28 39.30 -0.7
MAT 22.51 340 eP 28 41.00 0.6
1.5s 55.56nm 4.8mb
MTMJ 22.69 339 eP 28 41.60 -0.7
NIIJ 22.90 342 eP 28 44.80 0.6
BJI 36.73 318 eP 30 48.00 -0.2
1.5s 26.00nm 4.9mb
WB5 37.66 201 eP 30 56.10 -0.2
WRA 37.73 201 Pd 30 56.30 -0.5
0.8s 7.30nm 4.6mb
CHTO 46.64 281 eP 32 10.00 0.3
pP 32 19.50 32kmX
YKA 79.77 28 eP 35 47.70 -0.6
0.7s 1.20nm 4.0mb
SES 85.07 39 eP 36 17.00 1.0
KEV 85.45 343 eP 36 17.00 -0.5
SOD 86.91 341 eP 36 25.00 0.2
FFC 88.59 33 eP 36 34.00 0.9
APO 95.59 339 eP 37 04.00 -1.4
0.7s 2.70nm 4.8mb

MBL	9.88	292	eP	15	06.70	0.9	MEKA	36.10	232	eP	22	25.00	0.0	E	20s	1.70um					
			eS		16	52.00		BAG	36.51	308	eP	22	26.00	-2.7		PP	26	43.00			
MEKA	10.12	259	eP	15	07.20	-2.0	NANU	36.87	240	iPc	22	31.90	0.4		sS	32	34.00				
			eS		16	56.00			0.3s	13.00nm			5.3mb		LOE	52.87	297	eP	24	37.00	-2.1
MTN	12.34	7	iPd	15	37.70	-1.6	TRT	36.90	265	ePc	22	30.30	-1.5		SNY	53.34	336	iPc	24	41.00	-1.0
			eS		17	53.00		KLB	39.26	226	iPc	22	51.00	-0.4			6.0s	900.00nm			6.0mb X
NANU	13.18	278	eP	15	52.30	1.7	NWAO	40.37	224	eP	23	02.00	1.5		Z	30s	3.80um			5.3msz X	
			eS		18	10.00			0.8s	19.00nm			5.0mb		N	31s	3.50um				
	S.D. = 1.6	on	7	of	8	obs.		Z	20s	6.60um			5.5msz		E	27s	2.20um				
								N	20s	6.10um						S	32	11.00			
								E	20s	4.50um											
MAY	12, 1990	21h	15m	28.24±	0.12s		MUN	40.57	226	eP	23	02.30	0.1		MDJ	53.62	342	Pc	24	44.00	-0.1
	6.070 S ± 2.7km		149.775 E ± 3.5km				THZ	41.07	153	P	23	05.90	-0.3			1.0s	100.00nm			5.8mb	
DEPTH =	74.2km	(4	depth	phases)		RKG	41.17	223	eP	23	10.00	2.9X		Z	30s	4.60um			5.4msz X	
	5.6mb	(29	obs.)			KAGJ	41.21	335	eP	23	08.50	1.1		N	18s	1.40um				
NEW BRITAIN REGION					(192)		TCW	41.27	152	P	23	07.90	0.2		NST	53.69	294	eP	24	48.60	3.6X
CENTROID, MOMENT TENSOR					(HRV)		ANP	41.48	320	eP	23	05.00	-4.7X		CN2	54.29	338	Pc	24	48.20	-0.8
Data Used: GDSN																5.0s	700.00nm			5.9mb X	
L.P.B.: 15S, 35C															Z	20s	3.00um			5.4msz	
Centroid Location:															N	15s	0.90um				
Drigin Time	21:15:30.0	0.2					SNZO	41.54	151	P	23	24.00	14.1X		E	15s	0.80um				
Lat	6.14S	0.02	Lon	149.90E	0.04												pP	25	05.00	64km	
Dep	79.0	FLX	Half-duration	3.1													S	29	28.00		
Moment Tensor: Scale	10**17	Nm					LTZ	41.62	155	P	23	12.20	1.5		KMI	55.25	306	Pd	24	58.00	1.4
Mrr=	3.55	0.14	Mtt=-	5.33	0.27		WDW	41.65	151	P	23	10.90	0.1		BJI	55.35	329	eP	24	56.50	-0.2
Mff=	1.78	0.30	Mrt=	4.01	0.19		MTW	41.81	151	P	23	11.10	-1.1			4.0s	400.00nm			5.8mb X	
Mrf=	0.46	0.19	Mtf=-	1.46	0.21		MOW	41.89	151	P	23	12.50	-0.4		Z	24s	4.14um			5.4msz X	
Principal Axes:							BLW	41.96	151	P	23	12.80	-0.6		N	17s	1.71um				
T Val=	5.09	Plg=69	Azm=	5			KUMJ														

[illegible]

12d 22h

LFF 1.72 271 Pg 50 46.40 2.4
Sg 51 08.80
LSF 1.75 320 Pn 50 44.40 -0.1
Pg 50 47.00
Sg 51 08.60
SMF 1.79 15 Pn 50 44.70 -0.3
Pg 50 47.60
Sg 51 10.00
AVF 1.87 4 Pn 50 46.00 -0.2
Pg 50 49.80
Sg 51 12.00
LBF 2.14 15 Pn 50 50.40 0.3
Pg 50 54.70
Sg 51 20.40
SSF 2.15 6 Pn 50 50.60 0.3
Pg 50 55.00
Sg 51 21.00
LOR 2.39 11 Pn 50 53.00 0.0
Pg 50 59.60
Sg 51 28.20
LPL 2.59 76 Pn 50 58.00 2.0
Pg 51 04.60
Sg 51 36.00
LPG 2.60 76 Pn 50 59.10 2.1
Pg 51 05.20
Sg 51 36.40
LRG 2.73 121 Pn 50 59.00 0.4
Pg 51 06.90
EPF 2.78 228 Pn 50 58.40 -0.9
Pg 51 07.00
Sg 51 43.00
FRF 2.85 117 Pn 51 00.40 0.1
Pg 51 08.50
Sg 51 45.60
MFF 2.86 307 Pn 50 59.80 -0.6
Pg 51 07.20
Sg 51 43.00
LMR 2.89 122 Pg 51 09.60 8.8X
Sg 51 47.20
HAU 3.79 34 Pn 51 11.20 -2.4
Pg 51 26.00
BSF 3.84 40 Pn 51 12.40 -2.1
Pg 51 26.60
Sg 52 15.50
LPF 4.25 318 Pn 51 19.60 -0.5
Sg 52 26.00
LDF 4.31 330 Pn 51 19.60 -1.3
Sg 52 28.00
GRR 4.43 323 Pn 51 22.00 -0.7
Sg 52 32.60
FLN 4.58 328 Pn 51 23.80 -1.0
PGF 4.85 117 Pn 51 26.80 -2.0
S.D. = 1.2 on 30 of 31 obs.

? MAY 12, 1990 23h 08m 15.15±1.62s
31.368 S ±41.2km 69.197 W ±20.4km
DEPTH = 120.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB 0.36 109 iPc 08 32.50 -0.2
S 08 45.00
RTBS 0.37 217 ePc 08 32.50 0.0
S 08 44.00
ZON 0.48 112 eP 08 34.00 0.7
eS 08 47.00
RTLL 0.62 87 iPd 08 34.00 -0.2
eS 08 47.20
RTCV 0.75 131 ePd 08 35.00 -0.2
S 08 50.00
CFA 0.85 107 iPc 08 36.10 0.0
(S) 08 51.20
S.D. = 0.5 on 6 of 6 obs.

? MAY 12, 1990 23h 29m 58.31±2.88s
16.859 N ±21.9km 100.161 W ±22.4km
DEPTH = 33.0km (normal)
3.8mb (1 obs.)
NEAR COAST OF GUERRERO, MEXICO (58)

ACX 0.29 88 iPd 30 07.00 1.0
iS 30 14.00
III 1.65 24 iPd 30 24.70 -0.8
iS 30 42.00
CRX 2.57 10 (P) 30 42.50 3.6X
(S) 31 24.00
UNM 2.63 21 iP 30 41.25 1.6
iS 31 09.50

IIT 2.78 39 iPc 30 41.00 -0.7
iS 31 11.00
IIJ 2.89 8 (P) 30 47.00 3.5X
(S) 31 20.40
OXX 3.30 86 iP 30 48.30 -0.8
(S) 31 28.00
LVVM 4.54 50 (P) 31 17.50 11.0X
YKA 46.70 351 eP 38 25.20 -0.4
0.7s 0.80nm 3.8mb
S.D. = 1.4 on 6 of 9 obs.

% MAY 12, 1990 23h 30m 20.92±2.75s
45.528 N ±13.4km 26.606 E ±10.8km
DEPTH = 95.4 ± 31.4 km
ROMANIA (358)

BRD 0.31 92 ePc 30 36.50 1.3
VRI 0.35 14 iPc 30 35.00 -0.5
MLR 0.47 266 iPc 30 35.00 -1.4
PPE 0.99 45 eP 30 42.00 0.9
CLI 1.13 25 iPc 30 42.00 -0.8
CMP 1.13 257 ePc 30 44.00 1.1
CFR 1.14 107 iPc 30 43.00 0.1
TLB 1.38 132 iPc 30 45.00 -0.8
S.D. = 1.3 on 8 of 8 obs.

& MAY 13, 1990 00h 07m 44.26s
61.455 N 141.635 W
DEPTH = 0.0km
SOUTHERN ALASKA (2)
<AGS-P>.

BALM 0.54 220 iP 07 55.37 0.3
eS 08 05.32
TGL 0.91 220 iP 08 02.10 -0.3
iS 08 16.35
PCA 1.52 153 eP 08 10.86 -2.0
eS 08 32.59
HYT 2.10 106 P 08 17.00 -4.3
TOA 2.25 289 eP 08 23.96 0.5
VLZ 2.29 264 eP 08 24.39 0.5
PAX 2.35 312 eP 08 23.83 -1.1
VZW 2.41 263 eP 08 26.92 1.2
GLI 2.71 260 eP 08 30.53 0.7
DWY 2.80 20 Pc 08 25.50 -5.6
10 obs. associated

? MAY 13, 1990 00h 49m 09.47±2.79s
31.153 S ±41.7km 68.278 W ±37.3km
DEPTH = 100.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL 0.24 223 iPc 49 24.00 -0.3
CFA 0.45 176 iPd 49 25.50 0.3
ZON 0.52 221 iPd 49 26.00 0.3
eS 49 38.00
RTCB 0.56 233 iPd 49 26.10 0.1
S 49 37.70
RTCV 0.74 197 ePc 49 27.20 -0.3
S 49 40.20
S.D. = 0.5 on 5 of 5 obs.

? MAY 13, 1990 02h 26m 51.60±0.92s
31.888 N ±15.4km 141.780 E ±17.7km
DEPTH = 33.0km (normal)
4.2mb (3 obs.)
SOUTH OF HONSHU, JAPAN (211)

MAT 5.50 328 eP 28 14.00 0.6
0.7s 20.55nm 4.8mb X
eS 29 15.00
GUN 48.18 280 P 35 31.20 -0.1
WRA 52.03 189 Pd 36 00.30 0.1
0.5s 2.10nm 4.4mb
FBA 53.34 30 (P) 36 11.40 1.9
INK 58.85 26 eP 36 48.00 -1.0
MBC 61.38 16 eP 37 04.00 -2.2
YKA 68.12 29 eP 37 49.70 -0.3
0.9s 0.60nm 3.7mb
LRM 77.64 44 eP 38 47.70 1.2
NB2 79.05 338 P 38 53.50 -0.2
0.9s 2.60nm 4.2mb
KRA 83.53 327 eP 39 20.70 3.3X
ZOBO 148.72 67 PKP 46 38.00 3.6X
S.D. = 1.4 on 9 of 11 obs.

% MAY 13, 1990 02h 35m 44.81±0.76s

40.711 N ± 8.5km 15.831 E ± 5.5km
DEPTH = 5.0km (geophysicist)
SOUTHERN ITALY (390)

SGO 0.43 249 Pc 35 53.70 0.3
eSg 36 01.80
MGR 0.61 200 P 35 55.80 -1.2
eSg 36 04.50
BSS 0.78 276 P 36 00.60 0.1
eSg 36 13.10
BAI 0.89 62 P 36 02.00 -0.2
BRT 1.06 80 P 36 04.50 -0.7
eSg 36 18.70
TDS 1.12 160 P 36 07.20 0.9
LCI 1.66 102 P 36 15.40 0.7
S.D. = 0.9 on 7 of 7 obs.

? MAY 13, 1990 03h 34m 14.53±1.49s
45.028 N ± 6.9km 7.291 E ±16.5km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.1 (GEN).

RSP 0.13 349 P 34 18.15 0.4
S 34 20.20
RRL 0.38 253 P 34 22.36 0.0
S 34 27.89
LSD 0.44 347 P 34 23.18 -0.4
S 34 28.82
PZZ 0.54 195 P 34 25.43 -0.1
S 34 33.02
S.D. = 0.6 on 4 of 4 obs.

% MAY 13, 1990 04h 03m 00.87±2.02s
43.843 N ± 9.0km 13.548 E ±17.1km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

ARV 0.56 232 P 03 12.50 0.3
eSg 03 19.10
SFI 1.23 274 P 03 23.70 0.0
eSg 03 39.40
PGD 1.32 272 P 03 25.20 -0.2
eSn 03 41.30
MNS 1.59 204 P 03 29.00 -0.2
eSn 03 48.10
CTI 2.58 329 P 03 43.60 0.1
S.D. = 0.3 on 5 of 5 obs.

MAY 13, 1990 04h 23m 09.60±0.11s
40.296 S ± 2.8km 176.064 E ± 3.1km
DEPTH = 20.6km (geophysicist)
6.0mb (42 obs.) 6.3Msz (31 obs.)
NORTH ISLAND, NEW ZEALAND (159)
Ms 6.1 (BRK). ML 6.7 (WEL).
Mo=5.0±10±18 Nm (PPT). Some
damage (VIII) in the Donnevirk
area. Felt at Wellington. Depth
from broadband displacement
seismograms.
RADIATED ENERGY
No. of sta: 5 Focal mech. M
Energy 1.3±0.3×10±13 Nm
MOMENT TENSOR SOLUTION
Dep 23 No. of sta: 14
Moment Tensor; Scale 10±18 Nm
Mrr= 2.78 Mtt= 1.69
Mff=-4.47 Mrt=-1.83
Mrf= 1.40 Mtf=-0.92
Principal axes:
T Vol= 4.46 Plg=52 Azm=198
N 0.32 36 359
P -4.78 9 96
Best Double Couple: Mo=4.6±10±18
NP1: Strike=220 Dip=48 Slip= 143
NP2: 337 63 49
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 36C M.W.: 11S, 23C
Centroid Location:
Origin Time 04:23:16.0 0.2
Lat 40.23S 0.03 Lon 176.53E 0.03
Dep 15.8 BDY Half-duration 5.5
Moment Tensor; Scale 10±18 Nm
Mrr= 1.89 0.04 Mtt= 1.29 0.05
Mff=-3.18 0.05 Mrt=-1.61 0.22
Mrf= 3.30 0.38 Mtf=-0.54 0.04

13d 04h

Principal Axes:
 T Val= 4.42 Plg=53 Azm=219
 N 0.39 24 345
 P -4.82 27 88
 Best Double Couple: Mo=4.6*10**18
 NP1: Strike=220 Dip=28 Slip= 149
 NP2: 338 76 65

CTAO 32.46 299 iPc 29 42.09 1.3
 epPd 29 48.22 21kmX
 ePP 30 53.52
 DRV 33.15 205 iPc 29 47.80 1.6
 HNR 33.91 331 eP 29 53.00 -0.3
 eS 35 16.00
 QIS 36.74 291 iPc 30 17.10 -0.3
 AFR 37.17 62 iP 30 22.60 1.6
 1.5s 245.00nm 5.8mb
 PPN 37.41 63 iP 30 24.50 1.5
 1.5s 175.00nm 5.6mb
 SBA 37.87 183 iPc 30 29.10 2.9X
 S 36 24.00
 PMG 40.07 312 iPc 30 47.00 1.8
 1.2s 656.25nm 6.2mb
 PMO 40.24 62 iP 30 48.50 1.9
 1.5s 310.00nm 5.8mb
 VAH 40.25 62 iP 30 48.20 1.5
 1.5s 260.00nm 5.7mb
 TPT 40.44 62 iP 30 49.90 1.7
 1.5s 290.00nm 5.8mb
 RUV 40.45 62 iP 30 49.90 1.6
 1.5s 280.00nm 5.8mb
 WRA 40.93 287 Pc 30 51.70 -0.6
 0.8s 271.20nm 6.0mb
 WB5 40.95 287 iPc 30 52.10 -0.4
 RAB 41.91 323 e(P) 31 01.00 0.7
 iS 37 16.00
 LAT 42.42 314 eP 31 07.00 2.5
 WARB 43.13 273 eP 31 10.00 -0.3
 0.4s 18.00nm 5.2mb
 RKT 44.45 83 eP 31 27.00 6.0X
 1.7s 205.00nm 5.7mb
 MNDI 44.71 311 eP 31 24.50 1.1
 COOL 45.01 264 iPc 31 24.90 -0.6
 0.4s 50.00nm 5.8mb
 RKG 46.71 258 eP 31 36.00 -2.8X
 NWA0 47.04 260 iPc 31 40.81 -0.6
 0.7s 44.00nm 5.6mb
 i 31 43.30
 epPd 31 46.94 20kmX
 ePP 33 33.67
 ePP 33 33.78
 e 33 41.01
 e 33 41.07
 eS 38 40.00
 KLB 47.25 261 iPc 31 43.00 -0.1
 0.4s 107.00nm 6.2mb
 KNA 47.68 287 eP 31 46.80 0.2
 MTN 47.90 292 eP 31 47.00 -1.4
 e 34 10.00
 MUN 48.25 260 eP 31 50.50 -0.6
 0.9s 210.00nm 6.2mb
 Z 20s 58.80um 6.6msz
 N 20s 27.90um
 E 20s 38.10um
 BAL 48.51 262 eP 31 52.00 -1.0
 0.3s 15.00nm 5.5mb
 MEKA 49.11 268 eP 31 56.00 -1.6
 0.5s 64.00nm 5.9mb
 MRWA 49.72 263 iPd 32 02.80 0.5
 SPA 49.89 180 iPc 32 03.80 0.4
 1.7s 721.88nm 6.4mb
 Z 20s 31.76um 6.3msz
 MBL 51.10 274 eP 32 11.70 -1.1
 0.7s 113.00nm 5.9mb
 AAI 56.41 297 eP 32 48.90 -3.2X
 GUA 60.87 325 eP 33 18.40 -4.6X
 0.8s 137.31nm 6.1mb
 Z 23s 12.39um 6.0mszX
 GUMO 60.94 325 eP 33 18.50 -5.1X
 0.9s 170.50nm 6.2mb
 MAW 61.34 204 iPc+ 33 25.20 -0.5
 Z 18s 53.00um 6.7msz
 AIA 64.85 156 eP 33 49.40 0.5
 TRT 64.86 282 iPd 33 48.80 -0.8
 1.3s 1081.80nm 6.8mb
 HON 65.89 27 P 34 09.50 13.6X
 Z 20s 5.32um 5.7msz
 DAV 66.17 303 eP 33 56.00 -2.0
 TSM 69.07 295 ePd 34 17.20 1.0

KKM 1.2s 652.10nm 6.7mb
 71.66 295 ePc 34 31.00 -1.1
 0.9s 182.20nm 6.2mb
 BAG 76.40 306 eP+ 34 57.00 -2.6
 eS 44 37.00
 KGM 78.22 283 ePc 35 10.20 0.7
 1.1s 628.40nm 6.6mb
 PPI 78.79 279 eP 35 11.20 -1.4
 1.2s 296.20nm 6.2mb
 IPM 81.62 283 ePc 35 27.40 -0.3
 0.8s 309.50nm 6.4mb
 PSI 81.95 280 ePc 35 27.70 -1.7
 1.5s 119.50nm 5.7mb
 TATO 82.42 312 iPc 35 30.71 -0.9
 epPd 35 36.50 18kmX
 esPd 35 40.92
 KAGJ 82.52 322 P 35 31.80 -0.2
 ANP 82.57 312 eP 35 32.00 -0.5
 eS 45 46.40
 KAKJ 82.97 331 P 35 33.90 -0.3
 WKYJ 83.02 327 eP 35 34.80 0.2
 IIDJ 83.18 329 P 35 35.10 -0.3
 CHJJ 83.27 331 P 35 34.50 -1.2
 LNV 83.42 129 iPd 35 38.00 1.2
 TKSJ 83.47 326 P 35 37.00 0.2
 SNG 83.64 285 iPc 35 37.50 -0.6
 1.1s 455.70nm 6.6mb
 eS 45 58.00
 e 47 20.30
 KUMJ 83.67 323 eP 35 37.60 -0.3
 CHCH 83.88 130 eP 35 41.50 2.3
 TACH 83.91 129 eP 35 40.00 0.7
 TSRJ 84.00 328 P 35 38.60 -0.8
 MAJO 84.00 330 iPc 35 38.56 -0.9
 epPd 35 44.08 17kmX
 esPd 35 48.77
 MAT 84.00 330 eP 35 39.00 -0.5
 1.2s 198.44nm 6.2mb
 Z 20s 4.61um 5.9msz
 eS 45 57.00
 QZH 84.08 310 Pc 35 40.00 0.0
 6.0s 1800.00nm 6.5mb X
 Z 42s 8.40um 5.8mszX
 E 22s 5.90um
 PP 38 58.00
 S 46 04.00
 sS 46 16.00
 SS 51 38.00
 PCH 84.18 130 eP 35 42.00 1.2
 MTMJ 84.20 330 P 35 40.70 0.2
 SAN 84.22 129 eP 35 41.50 0.6
 NIJJ 84.32 331 P 35 40.70 -0.3
 PEL 84.42 129 iPc 35 43.00 1.0
 1.3s 163.46nm 6.1mb
 FCH 84.52 130 eP 35 44.70 1.9
 YONJ 84.74 326 P 35 43.50 0.3
 YAMJ 84.78 332 eP 35 42.70 -0.6
 HKC 84.80 305 iP 35 44.80 1.1
 SHNJ 84.88 324 P 35 43.00 -0.8
 OFUJ 85.02 334 P 35 44.50 0.0
 QIZ 85.24 300 Pc 35 47.00 1.0
 7.5s 1300.00nm 6.2mb X
 N 17s 8.20um
 E 18s 4.70um
 SKS 46 09.00
 eS 46 18.00
 GZH 85.89 305 Pc 35 50.00 0.8
 8.0s 1800.00nm 6.3mb X
 Z 18s 6.40um 6.1msz
 E 17s 8.20um
 eS 46 16.00
 BSI 86.51 280 ePc 35 52.00 -0.4
 RTCB 86.72 129 eP 35 55.00 1.5
 ZON 86.75 129 e(P) 35 55.00 1.4
 CFA 86.96 130 ePd 35 55.60 1.0
 RTLL 87.03 129 ePd 35 55.30 0.4
 SSE 87.34 315 Pc 35 54.00 -2.0
 6.0s 1700.00nm 6.5mb X
 Z 20s 8.50um 6.2msz
 N 20s 6.00um
 E 20s 3.80um
 HOOJ 87.49 336 P 35 58.30 1.8
 KUSJ 87.71 338 eP 35 57.70 0.1
 MRRJ 88.23 335 eP 36 00.30 0.3
 ASAJ 89.26 337 P 36 06.30 1.3
 NJ2 89.34 314 iPc 36 05.00 -0.6
 8.0s 900.00nm 6.1mb X

N	18s		5.10um			eSSS	58	21.00		e	40	48.00			
E	19s		3.60um			eLQ	01	41.00		e	41	28.00			
			SKS	46	35.00	e	02	52.00		ePdiff	37	24.80	-0.5		
			S	46	55.00	eLR	06	45.00		GOL	107.03	52 PKP	41 40.00 4.4X		
NST	89.65	291	eP	36	08.10	P	36	35.00	-1.9	Z	18s	11.70um	6.5Msz		
LOE	89.68	293	eP	36	07.50	eP	36	37.20	0.4	GLD	107.15	52 PKP	41 40.00 4.3X		
WHN	90.75	311	P	36	11.60	9.00um			6.2Msz	Z	18s	18.40um	6.7Msz		
	1.0s		100.00nm		6.1mb	N	20s	2.90um		SWZ	107.56	207 ePdiff	37 25.40 -3.1X		
	Z	20s	5.00um		5.9Msz	E	20s	2.90um			1.5s	100.00nm	6.7mb		
	N	18s	6.10um			ePP	40	36.80		SLR	107.79	210 iPKPd	41 46.50 9.2X		
	E	18s	2.00um			e	46	53.60			1.4s	69.77nm			
			pP	36	20.00	e(S)	48	06.00		KSR	108.19	209 ePKP	41 52.00 13.9X		
			PP	39	52.00	ePS	49	27.20			1.0s	16.00nm			
			SKS	46	44.00	eSS	54	57.60		MEO	108.35	60 e(PKP)	41 39.00 1.1		
			S	47	08.00	eLQ	03	50.80		IMA	108.58	13 PKP	41 32.80 -4.7X		
ANT	91.28	123	eP	36	17.00	XAN	96.44	310 P	-0.6	FBA	108.61	15 PKP	41 30.00 -7.4X		
GYA	92.53	303	iPc	36	20.00	N	17s	4.60um		SES	110.55	41 ePKP	41 41.00 -0.6		
	Z	20s	4.90um		6.0Msz	E	18s	6.10um				pP	42 24.00		
	N	20s	8.80um					PP	40 35.50	UYO	110.75	62 iPKPc	41 41.50 -0.9		
	E	20s	6.30um					eP	36 39.50	TUL	110.86	60 ePKP	41 43.00 0.4		
			PP	40	02.00			1.2s	23.00nm		1.2s	9.10nm			
			SKS	46	53.00			N	20s		Z	19s	31.62um	6.9Msz	
			S	47	24.00				ePP	40 36.00		LR	15 00.00		
			SS	53	38.00				eSKS	47 12.00	POO	110.92	277 ePKP	41 48.50 5.3X	
CHTO	92.58	292	iPc	36	21.42				eS	47 52.00	EDM	111.21	37 ePKP	41 41.50 -1.3	
			e	36	23.08				eP	36 41.80	BUL	112.66	213 iPKPc	41 40.40 -6.2X	
			epPd	36	27.55				ePP	40 35.70		1.0s	13.00nm		
			esP	36	31.19				Pc	36 41.00	INK	114.63	18 ePKP	41 47.00 -1.8	
			iPP	40	02.47							1.3s	55.00nm		
			e	40	07.77						WMQ	115.39	307 ePKP	41 50.50 -0.6	
SMY	92.67	359	P	36	15.00							6.0s	1000.00nm		
	Z	20s	7.00um		6.1Msz						Z	19s	5.70um	6.2Msz	
DL2	93.20	321	P	36	23.00								PP	42 53.00	
	8.0s		400.00nm		5.9mb X						YKA	116.44	29 ePKP	41 49.70 -2.7	
	E	22s	9.70um									1.3s	26.70nm		
			PP	40	04.00						FFC	117.56	40 ePKP	41 54.00 -0.8	
			S	47	30.00							0.7s	9.00nm		
TIA	93.43	316	P	36	24.70						RSCP	117.65	66 PKP	41 53.00 -2.6	
	Z	21s	6.50um		6.1Msz			</							

			i	46	17.00		UPP	156.22	333	iPKP	43	01.50	-1.2			e	14	40.00		
			i	52	29.00					i	43	12.20		PRU	163.80	313	ePKPc	43	10.30	-1.0
SLY	141.14	279	iPKPd	42	39.00	-1.1				i	43	28.60		Z	19s	8.00um				
TAB	141.40	283	e(PKP)	42	31.00	-9.7X	MOL	156.65	347	iPP	47	04.00		N	20s	6.30um				
DAG	142.86	6	ePKP	42	36.00	-5.9X	EZN	156.88	279	iPKP	43	03.50	-0.7	E	20s	3.10um				
	1.0s	57.00nm					VRI	157.01	294	ePKPc	43	05.00	0.8			e	44	03.50		
	Z	20s	8.51um		6.5Msz		HFS	157.30	337	ec	47	07.00		CLL	163.89	319	iPKP	43	10.20	-1.1
	N	21s	3.73um											1.8s	89.00nm					
	E	20s	2.41um				VAM	157.30	267	ePKP	43	05.80	0.9	PTJ	164.44	298	ePKP	43	11.60	-0.5
MSL	143.20	279	ePKPd	42	39.50	-4.2X	MLR	157.57	293	iPKPd	43	04.00	-1.1	TDS	164.44	274	PKP	43	12.50	0.3
			ePKS	46	22.00		RDO	157.69	282	ePKP	43	04.20	-1.0	ZAG	164.44	297	iPKPc	43	11.70	-0.3
			eSKKKS52	44	50		CMP	158.22	293	ePKPc	43	11.00	5.3X	KHC	164.76	311	PKP	43	12.00	-0.3
WAJH	143.64	260	ePKPc	42	42.30	-2.4	ATH	158.46	273	ePKP	43	06.40	0.2		1.4s	43.00nm				
RUWJ	144.97	271	PKPd	42	47.90	1.0	VLI	158.70	269	ePKP	43	06.40	-0.1	Z	18s	5.10um				
AGRW	144.98	253	iPKPd	42	44.80	-2.2	TNR	158.74	294	ePKPd	43	08.00	1.7	N	19s	3.90um				
AKRL	145.06	253	iPKPd	42	46.50	-0.7	ITM	159.61	270	ePKP	43	06.10	-1.4	E	19s	4.00um				
AAHD	145.08	253	iPKPd	42	46.60	-0.6	LIT	159.83	278	ePKP	43	06.60	-1.1			i	44	08.70		
AGMR	145.11	253	iPKPd	42	47.50	0.3	VAY	159.93	282	iPKP	43	06.60	-1.1	KMR	164.92	307	iPKP+	43	11.00	-1.4
ASKD	145.30	253	iPKPd	42	47.50	-0.1									i	44	09.30			
WEGH	145.30	186	ePKP	42	47.50	-0.4									iPP	47	54.00			
TEGH	145.31	187	ePKP	42	49.00	1.1								ESK	164.96	358	ePKP	43	10.82	-1.3
LEGH	145.34	187	ePKP	42	47.50	-0.4									eSKP	46	31.38			
AYN	145.47	263	ePKPc	42	47.30	-0.4	KRA	160.62	308	ePKPc	43	07.20	-0.9		ePP	47	50.56			
SHGH	145.61	187	ePKP	42	49.50	1.1								MOX	164.99	319	ePKP+	43	11.50	-0.9
KUK	145.89	186	iPKPd	42	49.20	0.3									1.7s	51.00nm				
CSTJ	146.03	267	PKPd	42	49.30	0.6	SPC	160.73	305	ePKP	43	08.00	-0.5	Z	18s	7.20um				
BADA	146.05	262	ePKPc	42	48.80	0.1	SKO	160.83	283	iPKP	43	08.40	-0.2	N	20s	6.00um				
LIC	146.06	178	PKP	42	49.08	-0.1								E	19s	2.90um				
	1.5																			

PFI	168.71	292 PKP	43	14.00	-1.3
BOB	169.16	299 PKP	43	14.60	-1.1
VAI	169.17	305 PKP	43	14.60	-0.9
BSF	169.22	318 ePKP	43	14.90	-0.7
	1.4 s	61.00nm			
HAU	169.33	320 ePKP	43	15.00	-0.6
	1.4 s	52.30nm			
ORX	169.77	305 PKP	43	14.30	-1.8
PCP	169.84	299 PKP	43	14.71	-1.3
PGF	170.03	287 ePKP	43	15.90	-0.4
	1.4 s	122.00nm			
CKI	170.06	299 PKP	43	15.50	-0.6
FIN	170.18	297 PKP	43	15.64	-0.6
TIO	170.27	163 iPKPc	43	18.20	1.4
LSD	170.36	306 PKP	43	16.76	0.2
ROB	170.38	298 PKP	43	15.94	-0.4
RSP	170.44	304 PKP	43	15.43	-1.0
LPG	170.59	307 ePKP	43	16.70	0.0
	1.4 s	52.30nm			
LPL	170.60	307 ePKP	43	16.60	0.0
	1.4 s	41.40nm			
ENR	170.71	299 PKP	43	15.64	-0.9
DOI	170.72	301 PKP	43	15.80	-0.8
STV	170.77	299 PKP	43	15.43	-1.1
PZZ	170.82	301 PKP	43	15.53	-1.1
SBF	170.82	297 ePKP	43	16.40	-0.2
	1.4 s	143.75nm			
RRL	170.85	304 PKP	43	16.76	0.0
BNI	170.85	305 PKP	43	16.80	0.1
LOR	171.04	324 ePKP	43	16.20	-0.3
	1.3 s	34.30nm			
FLN	171.18	345 ePKP	43	16.20	-0.3
	1.2 s	47.60nm			
LBF	171.19	322 ePKP	43	16.30	-0.3
	1.6 s	118.15nm			
LDF	171.27	343 ePKP	43	16.10	-0.4
	1.2 s	35.70nm			
SSF	171.35	324 ePKP	43	16.40	-0.2
	1.4 s	65.35nm			
FRF	171.46	296 ePKP	43	16.80	0.0
	1.4 s	104.55nm			
SMF	171.50	321 ePKP	43	16.30	-0.4
	1.4 s	47.90nm			
GRR	171.61	346 ePKP	43	16.70	0.0
	1.2 s	29.75nm			
AVF	171.63	323 ePKP	43	16.40	-0.3
	1.4 s	30.50nm			
LMR	171.63	295 ePKP	43	16.80	0.0
	1.2 s	53.55nm			
LRG	171.70	296 ePKP	43	17.10	0.3
	1.4 s	113.25nm			
LPF	171.99	346 ePKP	43	17.00	0.2
	1.2 s	35.70nm			
BGF	172.03	324 ePKP	43	16.80	-0.1
	1.4 s	87.15nm			
MAF	172.41	323 ePKP	43	17.70	0.6
	1.4 s	17.45nm			
AVE	172.48	157 iPKP	43	16.50	-1.0
		i	48	32.50	
TCF	172.52	325 ePKP	43	17.20	0.0
	1.4 s	39.20nm			
LSF	172.84	328 ePKP	43	17.20	0.0
	1.6 s	59.10nm			
MFF	173.12	338 ePKP	43	17.50	0.2
	1.4 s	56.65nm			
IFR	173.17	172 iPKPc	43	19.50	1.5
RJF	173.59	323 ePKP	43	18.10	0.5
	1.5 s	83.55nm			
CAF	173.60	318 ePKP	43	18.40	0.8
	1.4 s	56.65nm			
LPO	174.21	321 ePKP	43	18.60	0.8
	1.4 s	95.85nm			
LFF	174.22	325 ePKP	43	18.30	0.5
	1.4 s	69.70nm			
NKM	175.02	166 iPKPc	43	20.00	1.7
		i	44	56.00	
STS	175.68	52 iPKPd	43	19.40	1.2
EPF	175.79	312 ePKP	43	19.10	0.8
	1.4 s	126.35nm			
EMON</					

13d 05h

ALT 2.34 85 iPn 47 31.30 -0.9
 CTT 2.47 24 ePn 47 33.00 -0.8
 ISK 2.63 34 ePn 47 43.00 6.8X
 HRT 2.75 45 ePn 47 43.00 5.0X
 S.D. = 1.4 on 7 of 9 obs.

? MAY 13, 1990 05h 56m 01.86±4.23s
 20.419 S ±45.7km 178.627 W ±38.2km
 DEPTH = 646.0 ± 41.5 km
 3.7mb (2 obs.)

FIJI ISLANDS REGION (181)

DZM 14.02 261 iPc 59 01.10 1.1
 WBS 44.01 262 eP 03 16.10 -0.7
 WRA 44.03 262 Pc 03 16.20 -0.7
 0.4s 1.80nm 3.9mb
 MTN 48.57 271 iPc 03 50.30 -1.0
 0.8s 57.00nm 5.1mb X
 MBL 57.20 257 eP 04 51.20 -1.0
 NANU 60.85 255 eP 05 16.50 0.2
 MAT 69.80 324 eP 06 11.00 -0.2
 FBA 88.29 13 eP 07 46.70 -0.4
 CHTO 89.66 290 eP 07 56.90 2.6
 YKA 96.69 25 eP 08 24.50 -0.9
 0.8s 0.30nm 3.6mb
 SUF 134.44 344 ePKP 14 09.00 -0.2
 NUR 136.69 343 iPKP 14 14.00 0.5
 NB2 138.83 353 PKP 14 09.10 -8.4X
 0.6s 1.20nm
 EKA 144.97 5 PKPc 14 28.90 0.6
 1.0s 7.50nm
 CLL 147.85 346 iPKP 14 37.80 4.8X
 0.8s 24.00nm
 PRU 148.69 344 PKP 14 39.90 5.5X
 MOX 148.77 347 ePKP 14 40.00 5.5X
 ENN 149.50 354 ePKP 14 42.00 6.5X
 0.9s 9.00nm
 MEM 149.65 354 PKP 14 42.20 6.5X
 KHC 149.73 344 PKP 14 42.50 6.5X
 e 14 50.60
 S.D. = 1.2 on 13 of 20 obs.

* MAY 13, 1990 06h 17m 31.37±1.09s
 15.645 N ±18.6km 147.680 E ±22.9km
 DEPTH = 33.0km (normal)
 3.6mb (1 obs.)

MARIANA ISLANDS REGION (215)

GUMO 3.41 233 eP 18 23.40 -0.1
 PJG 3.41 233 eP 18 23.50 0.0
 MAT 22.46 340 eP 22 29.00 0.0
 YKA 79.79 28 eP 29 37.30 -0.2
 0.6s 0.40nm 3.6mb
 KIC 145.01 307 (PKP) 37 08.00 0.1
 TIC 145.05 307 (PKP) 37 08.20 0.2
 S.D. = 0.2 on 6 of 6 obs.

* MAY 13, 1990 08h 08m 40.68±0.36s
 36.340 N ± 6.5km 100.225 E ± 5.1km
 DEPTH = 33.0km (normal)
 4.6mb (13 obs.)

QINGHAI PROVINCE, CHINA (325)
 ML 4.3 (BJI).

LZH 2.94 94 ePn 09 27.70 1.4
 Pg 09 30.50
 Sg 10 09.30
 GTA 3.08 354 Pn 09 33.00 4.7X
 Pg 09 40.40
 Sg 10 24.00
 CD2 6.17 150 ePn 10 13.70 1.8
 Z 10s 1.10um
 eSn 11 20.00
 XAN 7.48 105 Pn 10 28.80 -1.5
 Pg 10 57.80
 BTO 8.78 58 eP 10 47.50 -0.9
 N 12s 0.60um
 E 12s 0.30um
 eS 12 35.00
 TIY 9.86 78 eP 11 03.40 0.1
 Z 10s 1.00um
 N 10s 1.10um
 HHC 9.95 60 eP 11 04.10 -0.5
 Z 14s 0.60um
 GYA 11.28 149 P 11 21.60 -1.1
 WMO 12.15 312 P 11 32.50 -1.9

S 13 47.50
 BJI 13.08 69 P 11 52.00 5.3X
 GUN 14.76 239 P 12 01.00 -8.2X
 CHG 17.50 184 eP 12 42.60 -1.2
 0.8s 8.40nm 3.9mb
 SNY 18.92 66 eP 13 00.60 -0.5
 CN2 20.64 61 Pc 13 25.00 6.0X
 SOD 50.78 331 eP 17 40.00 0.7
 NUR 52.25 323 eP 18 10.00 19.5X
 UPP 55.82 323 iP 18 16.00 0.2
 HFS 57.64 324 eP 18 28.50 -1.1
 0.7s 2.20nm 4.3mb
 NB2 58.52 325 P 18 35.40 -0.5
 0.9s 3.40nm 4.4mb
 FBA 66.13 26 eP 19 27.00 1.4
 LPG 67.36 310 eP 19 35.60 0.7
 0.8s 6.05nm 4.7mb
 LPL 67.36 311 eP 19 35.50 0.6
 0.8s 5.35nm 4.7mb
 PGF 67.37 307 eP 19 35.10 0.2
 0.9s 8.20nm 4.8mb
 INK 68.27 19 ePc 19 40.10 0.2
 SMF 68.54 313 eP 19 41.90 -0.1
 0.8s 4.05nm 4.6mb
 AVF 68.76 313 eP 19 43.20 -0.1
 0.8s 3.35nm 4.5mb
 MAF 69.52 313 eP 19 48.60 0.6
 0.8s 6.05nm 4.7mb
 TCF 69.70 313 eP 19 49.50 0.4
 0.8s 4.05nm 4.5mb
 GRR 70.35 316 eP 19 53.20 0.3
 0.8s 5.35nm 4.7mb
 MFF 70.91 314 eP 19 56.70 0.3
 1.0s 16.00nm 5.0mb
 YKA 77.60 16 eP 20 34.90 0.2
 0.8s 1.00nm 3.9mb
 S.D. = 1.0 on 26 of 31 obs.

? MAY 13, 1990 08h 32m 58.28±17.91s
 34.150 S ±96.7km 70.329 W ±118.km
 DEPTH = 33.0km (normal)

CHILE-ARGENTINA BORDER REGION (127)

CHCH 0.34 309 iPc 33 06.00 -0.7
 iS 33 14.00
 PCH 0.55 344 iPc 33 09.60 -0.1
 iS 33 20.50
 TACH 0.71 314 iPc 33 12.00 0.2
 iS 33 25.00
 LNV 0.92 282 iPd 33 15.00 0.2
 iS 33 30.00
 ROCH 1.31 334 iPc 33 13.30 -7.2X
 eS 33 26.60
 S.D. = 0.7 on 4 of 5 obs.

* MAY 13, 1990 10h 36m 55.66s
 63.088 N 150.594 W
 DEPTH = 117.7km

CENTRAL ALASKA (1)
 <AGS-P>.

KTH 0.49 343 iP 37 13.30 -0.3
 iS 37 26.25
 CUT 0.70 168 iP 37 14.99 0.0
 eS 37 30.10
 RND 0.85 67 iP 37 15.94 -0.5
 eS 37 32.31
 MCK 0.99 48 eP 37 17.21 -0.5
 SKT 1.19 202 iP 37 19.51 -0.3
 eS 37 37.75
 GH0 1.53 149 iP 37 23.71 -0.1
 eS 37 46.14
 SUA 1.63 183 eP 37 26.23 1.2
 iS 37 47.96
 PLRM 1.65 155 eP 37 24.95 -0.1
 SML 1.66 140 iP 37 24.76 -0.5
 WRH 1.78 38 eP 37 25.59 -1.1
 PMS 1.91 165 eP 37 28.38 0.0
 iS 37 53.04
 CCB 1.99 37 iP 37 28.16 -1.2
 SPU 2.03 200 iP 37 30.42 0.5
 TOA 2.27 114 eP 37 31.65 -1.4
 PAX 2.34 91 iP 37 33.68 -0.3
 KLU 2.71 124 eP 37 37.67 -1.1
 16 obs. associated

% MAY 13, 1990 10h 42m 18.58±0.80s

40.546 N ±11.3km 15.651 E ± 7.4km
 DEPTH = 33.0km (normal)
 SOUTHERN ITALY (390)

SGO 0.26 273 P 42 25.30 -0.5
 eSg 42 31.70
 MGR 0.41 190 Pc 42 28.00 0.1
 eSg 42 37.50
 BSS 0.69 291 P 42 32.30 0.5
 eSg 42 43.60
 ORI 0.78 128 P 42 33.20 0.1
 eSg 42 44.20
 BRT 1.23 74 P 42 39.40 -0.1
 eSg 42 53.90
 S.D. = 0.5 on 5 of 5 obs.

* MAY 13, 1990 10h 48m 38.99±1.65s
 36.527 N ±13.8km 21.642 E ±13.3km
 DEPTH = 63.0 ± 13.5 km
 3.6mb (1 obs.)

SOUTHERN GREECE (368)
 MD 3.6 (ATH).

ITM 0.69 19 iPnd 48 52.00 -1.5
 VLI 1.06 79 iPnd 48 58.50 0.3
 VLS 1.85 333 ePb 49 11.00 2.0
 ATH 2.20 48 ePn 49 13.90 0.1
 VAM 2.36 118 ePn 49 16.20 0.1
 AGG 2.55 12 ePn 49 20.40 1.6
 APE 3.17 79 ePb 49 31.10 3.5X
 IGT 3.17 341 ePn 49 27.20 -0.4
 KEK 3.50 336 ePn 49 30.60 -1.5
 LIT 3.63 10 ePn 49 34.60 0.6
 PAIG 3.75 25 ePn 49 37.90 2.2
 FNA 4.26 357 ePn 49 43.00 0.1
 GRG 4.46 7 ePn 49 45.20 -0.5
 SOH 4.49 17 ePn 49 45.90 -0.3
 OHR 4.62 352 ePn 49 49.50 1.5
 SRS 4.83 18 ePn 49 50.00 -0.9
 VAY 4.84 8 ePn 49 49.60 -1.4
 SKO 5.44 358 ePn 49 57.50 -1.9
 KSL 6.42 91 ePn 50 12.60 -0.5
 NUR 24.08 4 eP 53 50.00 0.8
 HFS 24.17 350 eP 53 49.80 -0.4
 0.4s 1.00nm 3.6mb
 S.D. = 1.3 on 20 of 21 obs.

* MAY 13, 1990 10h 56m 52.97±1.41s
 36.452 N ±11.2km 21.496 E ±10.3km
 DEPTH = 33.0km (normal)
 3.8mb (1 obs.)

SOUTHERN GREECE (368)
 ML 3.5 (ATH).

ITM 0.80 25 iPnd 57 07.90 0.0
 VLI 1.19 77 iPnd 57 14.50 1.1
 VLS 1.87 338 ePn 57 23.40 0.2
 ATH 2.33 49 ePn 57 30.20 0.4
 VAM 2.43 115 ePn 57 32.00 0.8
 AGG 2.65 14 ePn 57 35.90 1.6
 eSn 58 07.60
 NEO 3.16 25 ePn 57 40.70 -0.9
 IGT 3.21 344 ePn 57 43.00 0.8
 APE 3.30 78 ePb 57 49.20 5.6X
 KEK 3.52 338 ePn 57 47.00 0.3
 LIT 3.73 12 ePn 57 50.20 0.6
 PAIG 3.87 26 ePn 57 51.10 -0.5
 FNA 4.33 359 ePn 57 58.00 -0.2
 GRG 4.55 9 ePn 58 01.60 0.2
 OHR 4.68 354 ePn 58 03.30 0.1
 VAY 4.93 9 ePn 58 06.40 -0.3
 SRS 4.94 19 ePn 58 05.70 -1.1
 SKO 5.51 360 ePn 58 19.00 4.1X
 KSL 6.54 91 ePn 58 27.80 -1.6
 HFS 24.23 350 eP 02 05.70 -1.8
 0.4s 1.10nm 3.8mb
 S.D. = 1.0 on 18 of 20 obs.

MAY 13, 1990 11h 25m 13.34±0.69s
 40.451 N ± 8.3km 139.801 E ± 6.2km
 DEPTH = 188.8 ± 7.0 km
 4.4mb (8 obs.)

NEAR WEST COAST OF HONSHU, JAPAN(226)

AOMJ 0.45 76 iPd 25 37.90 -1.0
 S 25 56.40
 MAT 4.10 198 iPc 26 17.70 1.1

ORV 3.11 104 eP 23 10.80 -2.8
eS 23 42.20
PCC 3.72 140 eP 23 20.50 -1.8
ARN 4.28 134 eP 23 28.00 -2.2
SAO 4.76 138 eP 23 34.10 -3.0
KVN 5.79 101 eP 23 49.00 -2.7
8 obs. associated

* MAY 13, 1990 15h 34m 50.91 ± 0.79s
31.806 N ± 10.0km 87.896 E ± 11.1km
DEPTH = 33.0km (normal)
4.3mb (5 obs.)

TIBET (306)

LSA 3.50 126 iPg 35 42.80 -2.0
Sn 36 26.20
GUN 4.26 205 P 35 56.00 0.6
PKI 4.74 208 P 36 02.80 0.5
DMN 4.84 211 P 36 04.60 1.1
SHL 7.13 150 eP 36 31.00 -4.8X
NDI 9.75 254 eP 37 17.00 5.1X
eS 39 09.00
CHG 16.33 140 eP 38 39.90 0.6
CHTO 16.33 140 eP 38 38.80 -0.5
e 38 44.50
HYB 16.64 213 eP 38 46.50 3.2X
1.0s 35.00nm 4.4mb
GBA 20.50 210 Pd 39 27.80 -1.0
0.6s 5.60nm 4.1mb
TIY 20.98 67 eP 39 36.40 2.7
BJI 24.26 62 eP 40 11.00 5.1X
CN2 31.73 57 Pc 41 19.40 5.5X
SUF 49.37 328 eP 43 30.00 -8.8X
NUR 49.80 325 iP 43 40.00 -2.2
UPP 53.28 324 iP 44 10.20 1.8
HFS 55.24 324 eP 44 21.90 -0.9
0.4s 1.10nm 4.2mb
NB2 56.38 325 P 44 37.60 6.5X
0.8s 2.50nm 4.3mb
YKA 84.30 10 eP 47 23.70 3.3X
0.7s 3.20nm 4.6mb
ZOBO 153.28 300 PKP 54 39.80 -0.6
S.D. = 1.6 on 12 of 20 obs.

MAY 13, 1990 16h 40m 27.47 ± 1.00s
8.815 S ± 5.2km 118.571 E ± 7.0km
DEPTH = 153.7 ± 11.2 km
5.0mb (18 obs.)

SUMBAWA ISLAND REGION (285)

MKS 3.68 14 iPc 41 26.50 2.2
TRT 5.98 280 iPc 41 53.70 -1.1
eS 43 04.60
AAI 10.84 63 eP 43 00.00 0.5
KNA 12.11 126 eP 43 14.10 -2.0
eS 45 20.00
MBL 12.33 174 eP 43 17.20 -1.8
0.3s 16.00nm 5.1mb
eS 45 25.00
MTN 12.97 109 iPd 43 24.70 -2.6
eS 45 37.00
NANU 13.98 192 eP 43 40.40 0.3
0.2s 16.00nm 5.0mb
e 43 44.00
eS 46 03.00
KKM 14.95 351 eP 43 55.50 3.1X
0.8s 55.20nm 4.9mb
WARB 18.90 157 eP 44 39.00 0.2
0.4s 10.00nm 4.5mb
eS 48 07.00
MRWA 20.44 186 eP 44 55.00 0.5
eS 48 32.00
BAL 21.75 184 eP 45 06.00 -1.5
e 45 22.00
eS 49 04.00
IPM 21.98 307 ePd 45 12.00 2.1
COOL 22.09 174 iPc 45 11.60 0.8
0.4s 14.00nm 4.8mb
eS 49 13.00
KLB 22.68 182 eP 45 18.00 1.5
e 45 37.00
eS 49 24.00
PSH 22.68 299 ePc 45 17.40 0.8
1.0s 108.70nm 5.2mb
MUN 23.15 185 eP 45 22.00 0.9
e 45 40.00
eS 49 36.00

QIS 23.42 122 iPd 45 24.40 0.5
0.5s 39.00nm 5.1mb
eS 49 45.00
FORR 23.66 159 eP 45 26.60 0.6
NWA0 24.03 183 eP 45 31.30 1.8
eS 49 56.00
PMG 28.23 93 eP 46 07.50 -0.6
QIZ 28.97 343 Pd 46 15.70 0.9
NST 30.42 323 eP 46 28.80 1.3
RMO 33.57 125 eP 46 56.00 1.1
CHG 33.59 325 ePc 46 55.60 0.5
1.0s 14.00nm 4.6mb

GYA 36.92 342 P 47 24.40 1.1
KMI 37.09 336 Pc 47 27.00 2.1
1.5s 100.00nm 5.3mb
pP 47 44.50 71kmX

BRS 37.21 124 iPc 47 27.30 1.6
0.7s 19.50nm 4.9mb
BWA 37.41 137 eP 47 31.00 3.7X
COO 37.88 130 iPc 47 34.30 3.0X
CAN 38.32 138 eP 47 36.70 1.8
WHN 39.34 354 P 47 45.00 1.8
1.0s 100.00nm 5.5mb

SSE 39.76 4 P 47 47.80 1.1
1.0s 10.00nm 4.5mb
NJ2 40.64 0 Pc 47 55.50 1.7
HNR 40.84 94 eP 47 55.00 -0.9
CO2 41.98 341 iPc 48 05.40 0.4
XAN 43.59 348 P 48 18.00 0.0
LSA 46.51 326 P 48 41.80 0.1
GBA 46.51 298 Pc 48 38.70 -2.7
0.9s 12.10nm 4.5mb

TIY 46.64 353 eP 48 41.40 -0.8
HYB 47.36 303 eP 48 46.00 -2.1
DZM 47.79 112 iPc 48 52.10 0.6
GUN 48.30 320 P 48 54.80 -0.8
PKI 48.37 319 P 48 54.60 -1.5
0.6s 23.00nm 5.1mb

DMN 48.59 319 P 48 56.70 -1.0
0.8s 57.00nm 5.3mb
BJI 48.66 358 eP 48 58.00 0.4
1.0s 24.00nm 4.9mb
MAT 48.75 21 eP 48 56.00 -2.5
1.2s 14.06nm 4.5mb

BTO 49.80 351 eP 49 06.40 -0.1
HHC 49.84 353 P 49 06.00 -0.8
SNY 50.60 5 eP 49 09.80 -2.6
GTA 51.04 341 iPc 49 16.60 0.5
1.0s 50.00nm 5.2mb

CN2 52.74 6 eP 49 27.40 -1.0
MDJ 54.11 10 eP 49 37.90 -0.6
WMO 59.40 334 P 50 15.50 -0.5
KSH 62.16 324 eP 50 35.50 0.8
QUE 62.93 310 eP 50 38.20 -1.9
MAIO 71.30 313 iPd 51 32.00 -0.4
SLR 86.49 245 iPc 52 51.00 -3.7X
BUL 86.97 250 iPc 52 53.00 -4.1X
YKA 114.20 24 ePKP 58 49.20 -0.6
0.4s 0.40nm

S.D. = 1.4 on 54 of 59 obs.

* MAY 13, 1990 16h 50m 56.11 ± 0.72s
8.331 S ± 9.3km 117.630 E ± 10.3km
DEPTH = 33.0km (normal)
4.7mb (1 obs.)

SUMBAWA ISLAND REGION (285)

TRT 4.99 277 iPd 52 09.70 -1.0
eS 53 29.50
MBL 12.93 171 eP 53 59.00 -1.3
0.3s 8.00nm 5.3mb X
eS 56 14.00

MTN 14.01 110 eP 54 13.00 -1.5
eS 56 42.00
NANU 14.29 188 eP 54 17.80 -0.4
0.3s 7.00nm 4.7mb
eS 56 46.00

WARB 19.71 155 eP 55 27.00 1.0
WB5 19.86 127 eP 55 25.90 -1.6
MRWA 20.83 184 eP 55 39.00 1.5
eS 59 21.00
BAL 22.18 182 eP 55 51.00 -0.1
e 56 05.00
COOL 22.68 172 eP 55 57.00 1.0
KLB 23.14 180 eP 55 59.00 -1.5
e 56 19.00
eS 00 18.00

MUN 23.57 183 eP 56 04.00 -0.6
e 56 23.00
eS 00 25.00
FORR 24.45 158 eP 56 14.00 0.9
NWA0 24.48 181 eP 56 14.50 1.0
eS 00 47.00

CHTO 32.67 326 e(P) 57 28.00 0.4
BRS 38.25 124 iPc 58 17.20 2.1
BWA 38.40 137 eP 58 19.80 3.5X
BJI 48.14 359 eP 59 35.00 0.0
S.D. = 1.3 on 16 of 17 obs.

? MAY 13, 1990 17h 04m 49.93 ± 1.50s
61.177 N ± 17.5km 4.945 E ± 14.5km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)

MD 2.0 (BER).

SUE 0.15 217 eP 04 53.50 0.1
eS 04 57.00
HYA 0.60 91 eP 05 03.20 1.1
eS 05 13.80
MOL 1.86 40 iP 05 22.14 0.0
iS 05 46.35
NRA0 3.25 95 Pn 05 40.60 -1.3
Sn 06 18.20
Lg 06 35.50

S.D. = 1.7 on 4 of 4 obs.

* MAY 13, 1990 17h 23m 48.44 ± 1.12s
40.506 N ± 9.2km 142.275 E ± 8.7km
DEPTH = 70.6 ± 9.8 km
4.7mb (18 obs.)

NEAR EAST COAST OF HONSHU, JAPAN(228)

AOMJ 1.45 273 iPd 24 13.10 0.0
S 24 35.40
OFUJ 1.50 198 P 24 13.10 -0.7
S 24 34.30
MAT 5.08 220 iPc 25 04.80 1.0
0.7s 51.37nm 4.9mb X
eS 26 08.00

MDJ 10.22 298 eP 26 15.50 0.9
CN2 12.91 290 eP 26 51.40 0.9
BJI 19.90 277 eP 28 14.00 -2.7
1.2s 16.00nm 4.2mb
NJ2 20.64 253 eP 28 23.00 -1.3
XAN 27.21 267 P 29 27.30 -0.1

GTA 32.34 282 eP 30 12.40 -0.6
GYA 32.60 256 iPd 30 15.20 -0.2
WMO 39.98 293 P 31 18.00 0.4
CHG 42.88 253 eP 31 42.70 1.2
FBA 45.83 34 e(P) 32 05.00 0.4
GUN 47.57 273 P 32 19.00 -0.2
PKI 48.10 273 P 32 24.70 1.4
DMN 48.31 273 P 32 24.90 0.0

MBG 53.01 17 eP 32 58.50 -1.1
KEV 60.45 339 eP 33 55.00 2.6
YKA 60.48 31 eP 33 58.80 6.0X
0.9s 0.50nm 3.6mb X
SOD 62.04 337 iP 34 01.80 -1.4
GBA 62.20 264 Pd 34 04.60 -0.3
1.0s 4.80nm 4.6mb

DAG 62.39 355 iPd 34 03.30 -2.1
0.6s 4.00nm 4.7mb
SUF 65.20 333 iP 34 23.00 -0.9
0.3s 6.00nm 5.0mb
NUR 67.21 332 iP 34 36.00 -0.7
HFS 71.21 336 eP 35 00.00 -1.3
0.5s 4.90nm 4.7mb

NB2 71.25 337 P 35 00.40 -1.2
0.8s 5.00nm 4.5mb
KVN 72.14 54 e(P) 35 08.00 0.5
PRU 78.87 329 eP 35 45.30 0.1
KHC 79.94 329 Pd 35 51.70 0.7
CDF 82.92 332 eP 36 06.70 0.1
LOR 85.10 333 eP 36 17.50 -0.1
0.6s 3.60nm 4.6mb

LBF 85.31 333 eP 36 18.40 -0.2
0.8s 4.05nm 4.5mb
SSF 85.40 333 eP 36 19.10 0.0
0.6s 2.25nm 4.4mb
LPL 85.56 330 eP 36 20.60 0.4
0.8s 5.35nm 4.7mb
LPG 85.57 330 eP 36 20.80 0.5
0.6s 4.50nm 4.7mb

SMF 85.65 333 eP 36 20.40 0.1

DOU	40.96	283 P	02	43.20	1.2	BBTK	48.61	253 eP	03	45.00	1.5	ALQ	70.96	59 eP	17	41.60	-0.4
		e	02	50.00				e	03	52.00			0.8s	1.49nm			4.1mb
KHC	41.11	274 P	02	44.20	0.9	LRM	48.78	31 eP	03	45.00	0.1	LBF	81.13	339 eP	18	38.30	-0.6
	1.0s	10.00nm			4.5mb	RFI	48.84	272 P	03	47.81	2.7X	SSF	81.17	339 eP	18	39.50	0.4
WMO	41.32	195 P	02	45.00	-0.1		1.5s	106.40nm			5.7mb	SMF	81.48	339 eP	18	40.60	-0.1
EDM	41.35	31 eP	02	46.00	0.8	LZH	48.89	177 eP	03	41.70	-4.1X		0.9s	6.55nm			4.6mb
CN2	41.69	153 eP	02	48.00	0.0	TIA	48.98	163 P	03	46.40	0.1	BGF	81.80	340 eP	18	40.60	-1.7
ZST	41.72	270 eP	02	49.20	0.9	MAIO	50.08	224 eP	03	55.00	0.2		0.6s	2.25nm			4.4mb
CDF	42.39	280 eP	02	54.60	0.7			eS	11	12.00		LPL	81.82	337 eP	18	43.00	0.3
	1.0s	18.00nm			4.8mb	IMW	50.77	30 P	04	01.40	1.2		0.5s	1.45nm			4.3mb
HAU	42.88	280 eP	02	58.50	0.7	RSSD	50.82	23 P	04	00.10	-0.5	LPG	81.83	337 eP	18	43.50	0.6
	0.9s	27.85nm			5.0mb	XAN	50.98	172 P	04	01.50	-0.1		0.6s	2.25nm			4.4mb
BSF	43.01	280 eP	02	59.10	0.1	GRI	51.08	269 P	04	02.35	0.0	MAF	82.18	340 eP	18	44.20	-0.2
	0.8s	8.05nm			4.5mb		0.8s	11.70nm			4.9mb		0.5s	1.45nm			4.3mb
GRR	43.13	288 eP	02	59.70	-0.1	BW06	51.94	29 P	04	08.30	-0.8	S.D. = 0.8 on 21 of 21 obs.					
VR1	43.16	260 ePc	03	08.50	8.4X	CD2	54.06	177 eP	04	24.60	0.0	? MAY 14, 1990 02h 11m 18.99±1.00s					
SQTA	43.22	276 e(P)	03	00.00	-0.7	DAU	54.23	30 P	04	25.80	-0.4	37.063 N ±11.9km 28.985 E ± 6.4km					
	1.2s	11.40nm			4.5mb	DUG	54.37	32 P	04	27.00	0.0	DEPTH = 10.0km (geophysicist)					
		e	03	26.00		GLD	55.14	25 P	04	32.50	-0.2	TURKEY (366)					
MLR	43.60	260 eP	03	05.00	1.2		1.3s	31.61nm			5.2mb	YER	0.57	277 ePg	11	29.90	-0.6
FVI	43.70	274 P	03	05.50	1.1	GOL	55.19	25 P	04	32.40	-0.8	ELL	0.80	113 ePg	11	34.70	0.0
LOR	43.83	283 eP	03	05.40	-0.1		1.2s	22.54nm			5.1mb		eSg	11	47.70		
	1.2s	19.35nm			4.8mb	KVN	55.24	37 P	04	32.20	-1.3	CIN	0.89	307 ePg	11	37.00	0.9
BZS	43.87	265 eP	03	06.00	0.2	MSU	56.08	31 P	04	39.50	-0.1		iSg	11	51.00		
CMP	43.90	261 ePc	03	15.00	8.8X	TNP	56.25	36 P	04	40.50	-0.3	KHL	1.33	19 ePn	11	43.00	-0.6
SSF	44.07	283 eP	03	07.30	-0.1		1.1s	7.41nm			4.6mb	BCK	1.34	72 iPn	11	44.00	0.3
	1.1s	15.85nm			4.8mb	GUN	57.23	196 P	04	46.80	-1.3	S.D. =					

14d 04h

0.7s 3.30nm 4.5mb
LPG 71.31 312 eP 39 43.70 0.8
0.7s 3.30nm 4.5mb
LPL 71.32 312 eP 39 43.70 0.9
0.7s 2.75nm 4.4mb
FRF 71.85 310 eP 39 46.40 0.7
0.8s 5.35nm 4.6mb
LOR 72.82 315 eP 39 50.20 -1.2
0.9s 4.90nm 4.5mb
SSF 73.11 314 eP 39 52.50 -0.6
AVF 73.28 314 eP 39 54.70 0.7
0.8s 2.70nm 4.3mb
BCAO 73.56 268 ePc 39 56.60 0.3
0.6s 2.00nm 4.3mb
TCF 74.17 314 eP 39 59.70 0.4
0.9s 3.30nm 4.3mb
YKA 92.38 12 eP 41 31.50 -0.8
0.9s 0.50nm 3.9mb

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

? MAY 14, 1990 04h 46m 58.74±10.22s
37.531 N ±86.1km 4.087 E ±13.5km
DEPTH = 10.0km (geophysicist)
WESTERN MEDITERRANEAN SEA (387)

ESEL 2.42 338 eP 47 39.80 0.8
eS 48 09.00
LMR 6.08 17 Pn 48 31.00 0.2
Sn 49 40.00
LRG 6.17 16 Pn 48 32.00 0.0
EPF 6.19 334 Pn 48 32.00 -0.5
Sn 49 37.20
PGF 6.27 35 Pn 48 33.60 0.0
Sn 49 43.60
CAF 7.54 349 Pn 48 51.50 0.1
TCF 8.86 352 Pn 49 09.60 -0.1
BGF 9.07 355 Pn 49 12.00 -0.6

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

% MAY 14, 1990 04h 47m 41.75±1.21s
17.253 N ±7.2km 99.868 W ±17.7km
DEPTH = 10.0km (geophysicist)
GUERRERO, MEXICO (59)

ACX 0.38 179 ePd 47 49.23 -0.4
iS 47 56.19
III 1.18 19 P 48 03.01 -0.9
eS 48 21.38
CRX 2.15 5 (P) 48 20.00 1.6
IIT 2.30 40 (P) 48 19.50 -1.1
IIJ 2.47 3 P 48 22.97 -0.2
iS 48 58.19
OXX 3.01 93 (P) 48 31.50 0.9
(S) 49 19.50

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

? MAY 14, 1990 05h 23m 32.17±0.78s
15.312 S ±36.3km 174.017 W ±24.5km
DEPTH = 33.0km (normal)
4.6mb (10 obs.)
TONGA ISLANDS (173)

DZM 19.68 247 iPc 27 59.00 -2.8
WRA 49.28 257 P 32 18.00 -2.2
CMB 73.09 42 ePc 35 02.60 1.3
ORV 73.29 40 eP 35 02.10 -0.2
MIN 73.70 39 ePc 35 04.60 -0.3
GLA 74.18 49 P 35 17.00 9.3X
KVN 75.14 42 P 35 12.50 -0.8
TNP 75.18 43 P 35 12.70 -0.9
0.8s 3.92nm 4.5mb
BMW 76.59 33 P 35 21.20 0.1
RMW 77.97 33 P 35 28.20 -0.6
MSU 78.79 45 P 35 33.50 -0.2
PMR 79.16 12 P 35 34.50 -0.3
TTA 79.25 8 P 35 36.90 1.4
1.0s 9.13nm 4.7mb
DPW 80.15 34 P 35 39.80 -0.8
PNT 80.26 33 eP 35 41.00 -0.1
0.8s 10.00nm 4.9mb
DAU 80.34 44 P 35 41.00 -1.1
ALQ 81.20 50 eP 35 45.20 -1.4
1.0s 4.00nm 4.4mb
ANMO 81.20 50 P 35 45.90 -0.7
1.3s 9.62nm 4.6mb
IMW 82.27 41 P 35 51.00 -1.1
LRM 82.32 38 eP 35 51.50 -0.7

FBA 82.42 11 P 35 52.30 0.3
0.9s 18.75nm 5.1mb
IMA 82.56 8 P 35 53.50 0.6
0.8s 2.37nm 4.3mb
BW06 82.60 42 P 35 52.20 -1.6
0.9s 4.87nm 4.6mb
GOL 84.02 46 P 35 59.50 -1.6
1.0s 8.75nm 4.9mb
SES 85.47 35 ePd 36 07.20 -0.6
RSSD 86.80 43 P 36 10.20 -4.6X
YKA 90.25 24 eP 36 29.00 -1.5
1.0s 1.20nm 4.1mb
KOD 110.36 275 ePd 38 03.50 0.8
FLN 146.22 8 ePKP 43 08.40 -1.3
0.7s 13.25nm
LDF 146.43 7 ePKP 43 09.00 -1.1
0.8s 6.70nm
GRR 146.54 8 ePKP 43 09.60 -0.6
0.8s 10.75nm
LPF 146.86 9 ePKP 43 10.60 -0.1
1.0s 28.00nm
CDF 146.98 358 ePKP 43 11.40 0.3
0.8s 5.35nm
HAU 147.40 360 ePKP 43 12.40 0.7
0.8s 8.05nm
BSF 147.57 359 ePKP 43 12.40 0.3
0.7s 3.30nm
LOR 148.09 3 ePKP 43 14.40 1.6
0.8s 7.40nm
SSF 148.28 3 ePKP 43 14.80 1.7
0.8s 10.75nm
LBF 148.38 3 ePKP 43 14.80 1.5
0.6s 5.40nm
MFF 148.39 8 ePKP 43 14.40 1.2
0.8s 8.05nm
AVF 148.54 3 ePKP 43 15.20 1.7
0.6s 3.15nm
SMF 148.71 3 ePKP 43 15.80 2.0
BGF 148.74 4 ePKP 43 15.50 1.7
0.8s 8.05nm
LSF 148.93 6 ePKP 43 15.60 1.4
0.8s 10.75nm
TCF 148.96 5 ePKP 43 16.00 1.8
0.8s 4.05nm
MAF 149.05 5 ePKP 43 16.30 1.9
1.0s 12.00nm
RJF 149.87 6 ePKP 43 18.20 2.6X
0.8s 5.35nm
LPG 149.90 359 ePKP 43 19.70 3.7X
0.8s 6.05nm
LFF 150.14 7 ePKP 43 18.80 2.8X
0.8s 10.75nm
CAF 150.30 6 ePKP 43 19.40 3.1X
0.8s 4.05nm
LPO 150.44 7 ePKP 43 19.40 2.9X
0.8s 8.05nm
EPF 151.96 9 ePKP 43 22.80 3.9X

S.D. = 1.3 on 43 of 51 obs.

% MAY 14, 1990 05h 49m 23.77±1.37s
33.526 S ±10.3km 71.262 W ±13.7km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

TACH 0.30 115 iP 49 35.50 4.0X
LNV 0.45 196 iPd 49 34.00 0.5
SAN 0.51 82 eP 49 35.50 1.0
ROCH 0.59 21 eP 49 35.50 -0.4
PCH 0.63 99 eP 49 36.40 0.1
CHCH 0.65 129 eP 49 35.50 -1.1

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

MAY 14, 1990 06h 52m 11.84±0.33s
37.283 S ±8.9km 47.736 E ±6.6km
DEPTH = 10.0km (geophysicist)
5.4mb (31 obs.) 5.2msz (3 obs.)
ATLANTIC-INDIAN RISE (428)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.8.: 13S, 21C
Centroid Location:
Origin Time 06:52:15.6 0.5
Lat 37.13S 0.10 Lon 48.11E 0.09
Dep 15.0 FIX Half-duration 2.0
Moment Tensor: Scale 10**16 Nm
Mrr=-7.71 0.70 Mtt=-2.00 0.99
Mff=-5.70 0.66 Mrt=8.95 2.16

Mrf=-3.24 1.97 Mtf= 7.61 0.72
Principal Axes:
T Vol= 13.12 Plg=57 Azm=352
N 1.66 24 126
P -14.77 21 226
Best Double Couple: Mo=1.4*10**17
NP1: Strike=351 Dip=32 Slip= 140
NP2: 117 70 64

PRY 19.99 295 eP 56 44.60 -2.9
FRS 20.11 285 iPc 56 49.50 1.0
0.6s 10.00nm 4.3mb X
KSR 21.04 297 iPc 56 57.00 -1.4
1.0s 120.00nm 5.2mb
TUH 23.63 271 iPc 57 25.50 1.7
1.1s 177.22nm 5.5mb
BUL 23.86 310 iPc 57 20.00 -6.3X
1.0s 35.00nm 4.9mb
iP 57 30.90 42kmX
POF 24.45 281 iPd 57 34.00 2.1
0.5s 28.17nm 5.2mb
MAW 31.55 169 eP 58 36.00 0.0
NAI 37.22 342 iP 59 28.50 3.0X
1.0s 20.00nm 4.8mb
LWI 38.99 329 eP+ 59 41.00 0.7
BCAO 49.62 320 iPc 01 04.70 -0.8
0.9s 80.00nm 5.7mb
i 01 12.50
SPA 52.90 180 eP 01 28.30 -1.8
0.7s 18.75nm 5.1mb
GBA 57.81 35 Pc 02 02.40 -3.4X
1.6s 82.80nm 5.5mb
POO 60.73 29 eP 02 25.00 -0.9
HYB 61.67 34 eP 02 32.00 -0.4
PSI 61.89 62 ePd 02 36.00 2.1
IPM 64.69 62 ePc 02 54.10 1.6
1.1s 74.30nm 5.8mb
KIC 65.39 300 (P) 02 56.80 -0.1
TRT 65.44 81 ePd 02 56.60 -0.6
LIC 65.49 300 (P) 02 58.04 0.5
SNG 66.25 60 eP 03 11.90 9.5X
MBH 67.78 348 eP 03 12.00 0.2
LKO 68.25 302 P 03 14.90 -0.2
PRNI 68.32 348 eP 03 16.00 0.8
DSI 69.46 349 eP 03 23.00 0.9
QUE 69.49 18 eP 03 23.10 0.5
NNT 69.59 55 eP 03 23.30 0.0
NDI 71.21 27 eP 03 32.00 -0.9
CHG 73.74 50 eP 03 47.00 -1.0
MAIO 74.02 10 eP 03 49.00 -0.4
eS 13 28.00
TAB 74.99 359 eP 03 56.00 1.0
WRA 75.58 104 Pd 03 58.70 -0.1
1.4s 46.00nm 5.4mb
WB5 75.64 104 eP 03 58.30 -0.8
ALT 77.68 346 eP 04 10.00 -0.1
BBTK 77.97 348 iPc 04 13.00 1.3
e 04 20.00
LSA 78.07 38 eP 04 12.00 -0.9
KSH 80.66 22 eP 04 28.00 1.7
eS 14 38.00
KMI 80.79 49 eP 04 26.00 -1.4
Z 20s 1.20um 5.2msz
VAY 81.55 341 eP 04 30.50 -0.2
OHR 81.82 340 eP 04 32.50 0.3
1.3s 76.00nm 5.6mb
TDS 81.83 336 P 04 34.20 2.0
SKO 82.45 341 iP 04 35.00 -0.4
i 04 47.30
CFR 83.97 346 eP 04 42.00 -1.1
GYA 84.16 51 P 04 45.00 0.4
N 20s 0.20um
E 20s 0.40um
CTA 84.56 111 eP 04 46.00 -0.7
MLR 84.71 345 ePc 04 47.00 0.0
VRI 84.91 345 ePd 04 48.00 0.2
TIO 85.14 315 iP 04 50.40 0.9
i 05 01.00
CD2 85.71 46 eP 04 51.50 -0.7
1.1s 100.00nm 5.9mb
eS 15 22.50
BZS 85.81 342 eP 04 53.00 0.7
PGF 86.94 332 eP 04 57.00 -1.0
1.4s 34.85nm 5.4mb
CEY 87.92 337 eP 05 03.80 1.2
BUD 88.21 341 eP 05 04.00 0.1

14d 08h

HCY 1.31 230 eSg 52 52.00
ePg 52 33.50 -0.1
eSg 52 53.00
ULC 1.40 199 ePg 52 35.40 0.3
eSg 52 57.00
BEO 1.59 15 ePn 52 39.00 1.3
i(Sg) 52 59.50
SKO 1.76 138 ePn 52 40.50 0.4
iSg 53 06.80
OHR 2.29 162 ePn 52 49.50 1.6
HVAR 2.50 269 ePn 52 53.10 2.3
BZS 2.64 28 ePc 52 51.00 -1.8
GZR 2.96 44 ePd 52 57.00 -0.5
S.D. = 1.2 on 15 of 15 obs.

? MAY 14, 1990 08h 54m 10.59±2.75s
7.535 S ±17.9km 129.073 E ±20.3km
DEPTH = 189.1 ± 37.5 km
4.6mb (5 obs.)

BANDA SEA (280)

MTN 5.65 159 eP 55 35.00 1.1
eS 56 38.00
KUPT 6.00 244 eP 55 47.00 8.6X
eS 56 59.00
KNA 8.17 182 iPd 56 06.50 -0.7
0.3s 61.00nm 5.4mb
eS 57 33.00
WB5 13.30 158 eP 57 13.40 0.0
eS 59 34.80
WRA 13.35 158 Pd 57 13.30 -0.7
0.7s 8.50nm 4.3mb
MBL 16.22 212 eP 57 48.60 -0.9
0.3s 7.00nm 4.6mb
QIS 16.48 143 eP 57 57.00 4.4X
eS 00 52.00
WARB 18.69 187 eP 58 21.00 3.9X
0.4s 6.00nm 4.4mb
NANU 19.83 220 eP 58 30.20 1.5
CHTO 39.60 312 eP 01 25.70 0.4
GUN 54.62 312 P 03 22.20 -0.2
0.6s 16.00nm 4.9mb
PKI 54.78 311 P 03 23.20 -0.4
DMN 55.03 311 P 03 25.10 -0.1
S.D. = 1.0 on 10 of 13 obs.

? MAY 14, 1990 08h 57m 13.47±1.05s
40.568 N ±14.6km 15.828 E ± 9.4km
DEPTH = 33.0km (normol)

SOUTHERN ITALY (390)

SGO 0.40 269 P 57 21.60 -0.9
eSg 57 29.70
MGR 0.48 206 P 57 24.00 0.2
eSg 57 32.10
BSS 0.81 286 P 57 29.20 0.8
eSg 57 42.30
BRT 1.09 73 P 57 32.40 -0.1
eSg 57 47.20
S.D. = 1.2 on 4 of 4 obs.

* MAY 14, 1990 09h 11m 11.54±0.77s
36.153 N ±9.5km 99.927 E ± 8.7km
DEPTH = 10.0km (geophysicist)
4.2mb (3 obs.)

QINGHAI PROVINCE, CHINA (325)

ML 4.6 (BJI).

LZH 3.17 90 Pn 12 03.60 1.0
Pg 12 09.00
Sn 12 40.70
Sg 12 46.80
GTA 3.25 358 Pn 12 07.60 3.9X
Pg 12 16.00
Sg 12 59.80
CD2 6.13 147 ePg 13 02.30 17.9X
XAN 7.67 103 Pn 13 02.20 -3.8X
Pg 13 32.80
Sn 14 26.00
Sg 15 05.20
BTO 9.08 58 eP 13 26.00 0.3
E 10s 0.70um
TIY 10.13 77 eP 13 34.80 -5.4X
Z 10s 1.30um
N 12s 2.80um
HHC 10.25 59 P 13 40.60 -1.3
Z 15s 1.20um

GYA 11.25 147 P 13 54.40 -1.1
KMI 11.26 167 eP 13 55.50 -0.2
WMO 12.10 313 P 14 05.70 -1.3
E 10s 1.20um
GUN 14.46 239 P 14 39.40 0.8
CHG 17.29 183 ePc 15 18.70 4.0X
1.0s 42.50nm 4.5mb
GBA 30.19 228 Pc 17 26.80 2.5X
0.4s 1.50nm 4.2mb
YKA 77.84 16 eP 23 12.00 1.7
0.5s 0.30nm 3.6mb
S.D. = 1.3 on 8 of 14 obs.

? MAY 14, 1990 10h 43m 48.77±0.97s
37.287 N ±23.1km 73.876 E ±30.2km
DEPTH = 10.0km (geophysicist)
4.0mb (4 obs.)

TAJIK SSR (715)

NDI 9.03 161 eP 46 03.00 0.9
eS 47 40.50
PKI 13.73 132 P 47 05.40 -0.7
GUN 13.76 129 P 47 06.00 -0.6
HFS 43.88 321 eP 51 55.80 -0.9
0.5s 1.30nm 4.0mb
NB2 45.15 322 P 52 06.20 -0.8
0.8s 1.40nm 4.0mb
MBC 66.43 3 eP 54 43.00 3.3X
0.6s 4.00nm 4.8mb
INK 72.74 10 eP 55 22.00 3.6X
YKA 80.33 4 eP 56 03.20 2.2
0.6s 0.90nm 3.9mb
S.D. = 1.6 on 6 of 8 obs.

% MAY 14, 1990 11h 01m 02.93±0.83s
42.452 N ±7.1km 7.097 W ± 8.0km
DEPTH = 5.0km (geophysicist)

SPAIN (377)

mbLg 2.7 (MDD).
ERUA 0.07 209 iPg 01 04.00 -0.7
eSg 01 08.00
EMON 1.00 350 ePg 01 21.60 -0.7
eSg 01 37.00
STS 1.16 292 ePn 01 26.00 1.0
eSn 01 45.00
EZAM 1.22 256 ePn 01 26.00 -0.2
eSn 01 45.00
EPLA 2.50 162 ePg 01 45.20 0.2
eSg 02 14.00
GUD 2.85 128 ePg 01 50.50 0.4
eSg 02 22.00
S.D. = 0.9 on 6 of 6 obs.

MAY 14, 1990 11h 54m 30.19±0.17s
23.789 S ±7.5km 179.890 E ± 4.8km
DEPTH = 539.6km (2 depth phases)
5.0mb (22 obs.)

SOUTH OF FIJI ISLANDS (171)

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 15C
Centroid Location:
Origin Time 11:54:38.2 1.5
Lot 23.86S 0.13 Lon 179.74E 0.11
Dep 542.9 5.0 Half-duration 1.6
Moment Tensor: Scale 10¹⁶ Nm
Mrr= 5.99 0.52 Mtt= 1.14 0.97
Mff=-7.13 0.93 Mrt=-0.83 0.95
Mrf=-5.09 0.89 Mtf=-3.00 0.82
Principal Axes:
T Vol= 7.74 Plg=71 Azm= 85
N 2.02 7 195
P -9.76 18 287
Best Double Couple: Mo=8.8*10¹⁶
NP1: Strike= 28 Dip=28 Slip= 105
NP2: 191 63 82

DZM 12.51 275 iPc 57 17.40 2.8
iS 59 40.90
HNR 23.81 304 eP 58 54.00 -8.5X
BRS 24.70 256 iP 59 11.00 0.6
COO 25.77 249 iPd 59 21.00 1.1
RMQ 28.28 258 iPd 59 43.40 1.6
1.0s 253.00nm 5.8mb
CAN 29.11 240 iPd 59 49.80 0.8
BWA 29.36 242 eP 59 49.30 -1.9

CMS 31.04 248 iPd 00 06.20 0.7
CTA 31.37 270 iPd 00 09.20 0.8
0.8s 203.73nm 5.8mb
i 01 22.00 391kmX
iS 04 40.00
PMG 34.37 289 iPd 00 34.00 0.4
1.0s 230.00nm 5.7mb
BFD 34.61 239 iPc 00 36.00 0.5
QIS 37.36 267 iPd 00 58.30 0.1
e 02 25.00 457kmX
e 06 04.00
WB5 42.30 266 iPd 01 37.20 -0.9
eScP 06 23.10
eS 07 19.00

MTN 47.35 274 eP 02 16.00 -1.2
WARB 48.04 255 iPd 02 21.70 -0.7
0.3s 19.00nm 5.1mb
KNA 48.56 270 iPd 02 26.20 -0.1
0.3s 40.00nm 5.4mb

COOL 52.16 249 eP 02 51.20 -1.4
SBA 54.48 183 eP 03 09.40 1.0
KLB 54.93 247 iPd 03 11.40 -0.9
MEKA 55.12 253 eP 03 13.00 -0.7
NWA0 55.19 245 eP 03 13.10 -0.9
MBL 55.20 260 iPd 03 13.30 -1.0
0.3s 8.00nm 4.5mb
RKG 55.23 244 iPc 03 13.30 -1.0
BAL 55.98 248 iPd 03 18.70 -0.9
0.4s 17.00nm 4.7mb
MUN 56.18 246 iPd 03 20.20 -0.7
0.4s 98.00nm 5.5mb
MRWA 56.83 250 iPd 03 24.70 -0.7
0.3s 9.00nm 4.6mb

NANU 58.71 257 iPd 03 38.20 0.0
0.3s 30.00nm 5.1mb
TRT 66.14 272 ePd 04 26.50 0.2
SPA 66.35 180 iPc 04 27.00 0.0
1.1s 76.79nm 5.2mb

MAW 77.82 200 iP 05 33.50 1.0
AIA 78.71 157 eP 05 37.30 0.0
BLP 81.09 46 P 05 50.70 0.6
SYP 81.35 46 eP 05 53.00 1.4
PRS 81.53 44 eP 05 52.70 0.3
GCC 81.56 43 eP 05 52.60 0.1
PCC 81.61 43 eP 05 52.80 0.1
BCH 81.67 46 P 05 53.50 0.3
SAO 81.75 44 eP 05 53.20 -0.2
PHAM 81.86 45 P 05 54.00 0.0
PRI 81.87 45 eP 05 54.60 0.4
NWRM 81.90 42 P 05 54.30 0.2
BRK 81.92 43 eP 05 54.50 0.3
BKS 81.94 43 eP 05 55.20 0.9
0.7s 61.00nm 5.2mb

MHC 81.98 43 eP 05 55.10 0.4
ABL 82.05 47 P 05 55.20 -0.1
ARN 82.05 43 P 05 55.00 0.0
PAS 82.34 48 eP 05 56.00 -0.5
MWC 82.46 48 eP 05 57.00 -0.3
BAR 82.54 50 eP 05 58.00 0.5
PLM 82.78 49 eP 05 59.00 0.1
RVR 82.79 48 eP 05 59.00 0.3
PEC 82.88 48 P 05 58.70 -0.5
SBB 82.89 47 eP 05 58.00 -1.3
FRI 83.00 45 eP 05 59.60 0.0
ISA 83.02 46 eP 06 01.00 1.1
CMB 83.19 43 iPc 06 00.70 0.0
ORV 83.43 42 eP 06 01.60 -0.2
WDC 83.44 40 ePc 06 02.00 0.2
LTCM 83.45 41 P 06 02.10 0.2
CLC 83.69 47 eP 06 03.00 -0.2
TPC 83.77 49 eP 06 03.00 -0.6
MIN 83.85 41 eP 06 03.50 -0.6
GSC 83.92 47 eP 06 04.00 -0.4
GLA 84.03 50 eP 06 06.00 1.0
KVN 85.23 44 P 06 10.00 -0.9
TNP 85.24 45 P 06 10.50 -0.4
BMW 86.79 35 P 06 18.30 0.3
SHW 87.14 36 P 06 20.60 0.8
VGB 87.52 37 P 06 22.20 0.8
GMW 87.71 35 P 06 22.50 0.3
PGC 88.07 34 eP 06 24.00 0.2
RMW 88.17 35 P 06 22.00 -2.5
MCW 88.40 34 P 06 26.00 0.5
TTA 88.52 11 P 06 25.50 -0.2
1.1s 18.75nm 4.9mb
PMR 88.66 14 P 06 25.00 -1.3
0.8s 21.55nm 5.1mb

14d 15h

				Sg			
AURF	0.45	261	Pg	56	13.90		
			Sg	56	10.60	0.2	
			Sg	56	16.24		
TOUF	0.51	276	Pg	56	11.58	0.1	
			Sg	56	17.80		
MVIF	0.58	264	Pg	56	11.77	-1.1	
			Sg	56	19.50		
CALN	0.79	255	Pg	56	17.34	0.1	
			Sg	56	27.07		
FRF	1.02	247	Pg	56	21.60	0.5	
			Sg	56	34.60		
LMR	1.22	240	Pg	56	24.00	-0.4	
			Sg	56	39.20		
LRG	1.26	247	Pg	56	25.40	0.4	
			Sg	56	42.00		
PGF	1.61	151	Pn	56	30.40	-0.1	
			Sn	56	50.80		

S.D. = 0.5 on 10 of 10 obs.

MAY 14, 1990 17h 04m 21.63 ± 0.19
40.680 N ± 2.7km 19.812 E ± 1.8km
DEPTH = 9.0km (3 depth phases,
4.7mb (14 obs.)

ALBANIA (391
ML 5.2 (ATH), 4.5 (THE), MD 4.5
(TTG). Felt (III) at Skopje,
Yugoslavia.

QHR	0.86	60	iPg	04	37.10	-1.3
			iSg	04	50.00	
KEK	0.97	181	ePn	04	40.50	0.4
			eSn	05	03.00	
FNA	1.19	84	ePbd	04	42.50	-1.5
IGT	1.21	161	ePb	04	44.70	0.4
	1.35	342	iPgc	04	49.00	2.4
			eSg	05	09.00	
LCI	1.46	257	Pd	04	48.80	0.7
BDV	1.76	336	iPnc	04	54.50	2.0
			eSn	05	21.00	
SKO	1.78	43	iPn	04	53.50	0.7
	1.1s	*****nm				

			i	04	55.00	
			iSn	05	14.50	
			iSg	05	17.50	
TTG	1.80	347	iPnc	04	55.30	2.3
			eSn	05	20.50	
PVY	1.92	4	ePn	04	57.50	2.6
			eSn	05	22.50	
GRG	1.98	81	ePnd	04	56.30	0.5
BRT	1.99	277	P	04	58.50	2.7
HCY	2.02	331	ePn	04	57.70	1.4
			eSn	05	27.00	
LIT	2.13	105	ePnc	04	58.50	0.7
			eSn	05	26.90	

AY	2.18	72	iPnd	04	58.80	0.2
IVA	2.19	2	ePn	05	02.40	3.6X
			eSn	05	29.00	
YNKY	2.22	344	ePn	05	00.60	1.4
			eSn	05	30.00	
BAI	2.28	282	Pd	05	01.00	1.1
KNT	2.39	77	ePnc	05	01.80	0.2
			eSn	05	33.00	
THE	2.40	90	ePn	05	02.00	0.3
			eSn	05	33.30	
RY	2.41	337	iPn	05	07.20	5.2X
RY	2.41	337	ePn	05	04.00	2.0
			eSn	05	36.00	
CC	2.55	170	P	05	35.00	0.2

AGG	2.55	130	ePn	05	05.60	1.8
			eSn	05	38.10	
VLS	2.57	166	iPnd	05	04.00	-0.1
ORI	2.64	258	P	05	06.70	1.5
PLE	2.67	353	ePn	05	08.50	2.9X
			eSn	05	41.50	
SOH	2.69	06	ePnc	05	06.60	0.6
TDS	2.85	250	P	05	09.70	1.6
			eSn	05	44.10	
SRS	2.90	80	ePn	05	08.80	0.0
			eSn	05	44.80	
NEO	2.96	117	ePn	05	10.10	0.5
			eSn	05	57.00	
PAIG	3.05	103	ePn	05	10.90	0.0

OUR	3.20	95	ePnc	05	13.00	0.0
GRI	3.21	236	P	05	13.72	0.5
SGO	3.43	269	P	05	17.90	1.6
MYAR	3.54	316	iPn	05	18.10	0.3
			iSn	05	58.00	
SSS	3.80	273	P	05	24.10	2.4

ITM	3.86	154	ePn	05	22.50	0.0
ATH	4.06	131	ePn	05	26.20	1.0
			eSn	06	25.60	
MSI	4.12	234	P	05	27.00	0.9
DUI	4.16	285	P	05	28.70	2.0
BEO	4.17	6	ePn	05	27.40	0.7
RDO	4.36	82	ePn	05	28.20	-1.4
			eSn	06	23.10	
SDI	4.64	285	P	05	35.60	2.0
			eSn	06	26.10	
VLI	4.65	147	ePn	05	33.00	-0.7
ALN	4.74	85	ePnc	05	34.20	-0.7
EZN	5.06	98	iPn	05	39.00	-0.4
AQU	5.09	291	P	05	41.60	1.6
			eSn	06	37.50	
BZS	5.11	14	ePc	05	39.50	-0.6
DRA	5.17	38	P	05	48.00	7.1

RDP	5.46	284	P	05	46.40	1.2
RMP	5.48	284	P	05	45.30	-0.1
MNS	5.62	290	P	05	49.00	1.6
DEV	5.67	22	ePd	05	51.00	3.0X
KGT	5.71	90	iP	05	48.20	-0.4
APE	5.74	127	ePn	05	48.20	-0.9
ARV	5.84	301	P	05	50.30	-0.1
			eSn	06	53.60	
ZAG	5.85	333	ePn	05	52.00	1.5
			iSn	07	01.10	

ASS	5.85	296	P	05	51.30	0.7
			eSn	06	55.00	
VBV	5.86	327	ePnd	05	51.40	0.7
			iSn	06	59.00	
PTJ	5.93	333	ePn	05	50.90	-0.8
			e	06	40.00	
			eSn	06	59.00	
TNR	5.94	32	ePc	05	53.00	1.1
CMP	5.98	38	ePc	05	57.00	4.6X
DMK	6.10	77	iP	05	52.10	-2.0
RIY	6.13	321	iPnd	05	54.30	-0.1
			iSn	07	03.70	
			iSq	07	40.20	

EDC	6.15	90	eP	05	55.70	0.9
IZM	6.19	109	iP	05	56.20	0.7
SMG	6.21	116	ePn	05	56.50	0.9
VAM	6.30	145	ePn	05	55.00	-2.0
RSM	6.35	303	P	05	57.40	-0.2
CEY	6.41	324	ePn	05	58.00	-0.5
			eSn	07	12.00	
CRE	6.54	299	P	06	00.60	0.1
			eSn	07	10.00	
CTT	6.55	83	eP	06	00.00	-0.5
MLR	6.58	41	ePd	06	02.00	1.0
LJU	6.60	326	ePnc	06	00.60	-0.5
			eSn	07	16.60	

TRI	6.69	321	ePnd	06 01.30	-1.1
			iSn	07 17.00	
MAO	6.72	288	P	06 03.40	0.4
SFI	6.73	301	P	06 03.40	0.4
PGD	6.80	301	P	06 04.50	0.4
			eSn	07 17.20	
VOY	6.87	323	iPnc	06 04.20	-0.8
			eSn	07 24.80	
ITU	6.99	84	eP	06 07.00	0.4
ISK	7.02	84	iP	06 07.20	0.1
CIN	7.13	113	eP	06 10.00	1.4
TLB	7.21	54	eP	06 10.00	0.3
SRO	7.21	352	e(Pn)	06 14.00	4.3X

	1.2 s	0.30 nm	3.5 Mb	x
		i	06 16.40	
		i	06 31.60	
		i	07 43.90	
		i	08 30.20	
VRI	7.23	42 ePd	06 11.50	1.4
PSZ	7.24	0 iP	06 12.10	1.9
YLV	7.27	88 eP	06 01.20	-9.5X
GBZT	7.32	86 eP	06 11.00	-0.2
SOP	7.38	343 eP	06 13.40	1.3
HRT	7.49	86 eP	06 12.20	-1.5
PII	7.54	297 P	06 13.60	-0.7
CFR	7.60	51 eP	06 23.00	7.9X
MME	7.60	301 P	06 14.90	-0.5

BDI	7.61	299	P	06	14.20	-1.3
			eSn	07	35.70	
ZST	7.76	346	ePn	06	17.40	0.0
			i	06	25.80	
			i	06	44.80	

			i	07 04.90	
			i	07 44.40	
FVI	7.80	322	P	06 16.50	-1.5
KHL	7.87	104	eP	06 20.00	0.9
VKA	7.98	343	e(P)	06 24.00	3.5X
			i	06 37.60	
			i	06 49.00	
			i	07 18.00	
			i	07 32.00	
			LR	10 07.00	
CLI	7.99	40	ePc	06 22.00	1.4
CTI	8.01	315	P	06 19.30	-1.7
			eSn	07 46.00	
GPA	8.01	89	eP	06 19.00	-2.0
ALT	8.09	98	eP	06 22.20	0.1
PGF	8.31	287	Pn	06 26.00	0.7
KMR	8.42	333	ePn	06 26.00	-0.6

	RMR	1.62	0.05nm	i	07 47.00	
SPC	8.51	2	e(P)	06 29.40	1.3	
	1.6 s		0.05nm		2.6mb X	
BHG	8.62	327	iPc	06 28.80	-0.6	
SCE	8.64	320	iPc	06 28.80	-1.0	
BOB	8.65	302	P	06 29.50	-0.5	
ELL	8.81	113	eP	06 36.70	4.5X	
OGA	8.87	317	iPc	06 32.50	-0.5	
KSL	8.92	118	ePn	06 34.20	0.7	
MDI	8.96	308	P	06 33.00	-1.1	

BCK	8.98	108	iP	06	36.50	2.1
SQTA	9.01	319	iPc	06	34.30	-0.6
	0.4 s	99.20 nm			6.5 mb	x
			i	06	35.40	
			i	06	43.40	
			i	06	52.40	
			i	08	04.20	
			iS	08	16.20	
			i	08	24.00	
PCP	9.16	299	P	06	35.29	-1.7
OSS	9.22	314	ePd	06	37.70	-0.2
FIN	9.27	296	P	06	36.73	-1.8
CKI	9.30	298	P	06	37.00	-1.8

KRA	9.38	1	eSn	08	16.10	1.3
			eP	06	41.10	
			e	06	45.30	
			e	06	49.80	
VDL	9.48	311	e	08	57.00	0.3
			ePd	06	41.80	
ROB	9.53	296	P	06	40.31	-1.8
KHC	9.53	334	P	06	40.00	-2.0
			e	06	53.40	
VAI	9.57	306	P	06	40.90	-1.7
			eSn	08	24.00	
TMA	9.63	308	ePd	06	41.90	-1.6
SBF	9.71	293	Pn	06	45.00	0.4

		Sn	08	29.80	
STV	9.89	295	P	06	46.67 -0.4
8BTk	9.94	91	eP	06	49.00 1.3
ORX	9.96	304	P	06	44.11 -3.9x
LLS	9.97	312	ePd	06	47.70 -0.5
SAX	10.00	315	ePd	06	49.00 0.3
PRU	10.02	340	ePc	06	47.80 -0.8
	Z	13s	2.30um		
	N	15s	2.90um		
	E	15s	4.30um		
			e	06	55.30
DOI	10.02	297	P	06	48.10 -0.8
PZZ	10.12	296	P	06	49.24 -1.1
MMK	10.16	306	ePd	06	47.80 -3.1x

MMK	10.10	300	eP	06	40.60	-0.6
FRF	10.20	291	Pn	06	50.60	-0.6
RSP	10.23	300	P	06	48.72	-3.1
LMR	10.25	289	Pn	06	52.00	0.0
LRG	10.38	290	Pn	06	54.00	0.3
LSD	10.42	301	P	06	50.16	-4.3
KSP	10.46	348	eP	07	50.80	7.1
RRL	10.47	298	P	06	53.85	-1.3
DIX	10.51	305	ePd	06	54.00	-1.8
BNI	10.58	299	P	06	55.90	-0.7
LPG	10.69	301	Pn	06	55.00	-3.3
			Sn	08	48.00	
LPL	10.71	301	Pn	06	56.00	-2.5
SLE	10.77	315	ePd	06	57.90	-1.1

EMS	10.81	304	ePd	06	58.50	-1.3
GRF	10.85	329	eP	06	57.00	-3.1X
			e(S)	08	57.00	
BRG	10.98	340	ePn	07	01.00	-0.8
			i	07	21.00	
				09	33.00	

SOD	125.63	28	iPKP	52	56.60	-0.7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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TCF 2.71 294 Pn 22 03.40 -0.1
Sg 22 44.70
S.D. = 1.0 on 18 of 22 obs.

& MAY 14, 1990 22h 31m 29.90s
37.632 N 122.473 W
DEPTH = 8.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.8 (BRK).
Mo=2.9*10**13 Nm (BRK). Felt at
Daly City, San Francisco, South
San Francisco and San Mateo.

PCC 0.15 151 iPc 31 32.90 -0.3
iS 31 35.30
BRK 0.29 35 iPc 31 35.80 -0.1
iS 31 40.60
BKS 0.31 38 iPc 31 36.20 0.0
iS 31 41.10
GCC 0.71 148 e(P) 31 42.70 -1.4
eS 31 53.60
MHC 0.72 113 iPc 31 43.80 -0.6
iS 31 54.40
ARN 0.80 110 eP 31 45.10 -0.5
NWRM 0.89 338 eP 31 45.60 -1.5
SAO 1.19 136 iPd 31 50.40 -1.9
KVN 3.72 66 eP 32 26.00 -3.1
9 obs. associated

? MAY 14, 1990 23h 23m 55.93±1.08s
44.425 N ±12.7km 7.187 E ±13.6km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.8 (GEN).

PZZ 0.10 322 P 23 58.79 0.0
S 24 00.96
STV 0.21 151 P 24 00.43 -0.1
S 24 03.47
ENR 0.26 140 P 24 01.56 0.1
S 24 05.11
ROB 0.51 105 P 24 06.22 0.0
S.D. = 0.1 on 4 of 4 obs.

? MAY 15, 1990 01h 30m 48.68±4.31s
21.214 S ±20.3km 177.483 W ±18.0km
DEPTH = 428.0 ±45.7 km
3.9mb (3 obs.)
FIJI ISLANDS REGION (181)

DZM 14.97 264 iPc 34 01.10 -0.7
WB5 44.97 263 eP 38 26.00 0.3
WRA 44.98 263 P 38 26.20 0.4
0.6s 1.90nm 3.7mb
NANU 61.68 255 eP 40 26.40 0.7
SPA 68.92 180 iPc 41 10.80 0.1
0.8s 10.42nm 4.5mb
PRS 78.00 43 eP 42 03.00 0.3
PRI 78.34 44 eP 42 05.00 0.3
FRI 79.46 44 eP 42 09.50 -0.9
CMB 79.66 42 eP 42 11.50 0.0
ORV 79.90 41 eP 42 12.60 -0.1
WDC 79.92 39 eP 42 13.00 0.3
KVN 81.70 43 eP 42 21.70 -0.6
TNP 81.71 44 eP 42 21.90 -0.4
PNT 86.98 34 eP 42 49.00 1.2
ANMO 87.47 51 eP 42 51.00 0.3
LRM 88.95 39 eP 42 58.10 0.6
YKA 96.96 25 eP 43 33.50 0.2
0.8s 0.50nm 3.8mb

CLL 148.86 347 iPKPd 49 50.90 7.6X
0.8s 13.00nm
BRG 149.07 346 e(PKP) 49 41.60 -2.0
1.4s 12.00nm
PRU 149.75 345 PKP 49 53.00 8.3X
KHC 150.78 345 PKP 49 55.50 9.2X
FLN 152.41 4 ePKP 49 58.10 9.5X
0.6s 3.60nm

LDF 152.60 4 ePKP 49 58.60 9.7X
0.4s 2.30nm
GRR 152.75 5 ePKP 49 58.90 9.8X
0.4s 2.30nm
LPF 153.09 5 ePKP 49 59.70 10.1X
0.4s 4.00nm
S.D. = 0.8 on 18 of 25 obs.

? MAY 15, 1990 02h 57m 26.41±7.98s

8.472 S ±72.0km 124.015 E ±21.4km
DEPTH = 150.7 ±42.9 km
4.4mb (2 obs.)

TIMOR (289)

MTN 8.23 122 iPd 59 24.30 0.2
eS 00 54.00
KNA 8.60 148 eP 59 28.00 -0.9
0.3s 34.00nm 5.4mb X
eS 01 02.00
WB5 15.13 140 eP 00 53.90 0.2
eS 03 33.50
WRA 15.16 140 P 00 55.20 1.1
0.3s 2.40nm 4.0mb
NANU 16.21 209 eP 01 07.10 0.1
eS 04 01.00
QIS 19.27 130 iPd 01 41.20 -0.7
0.3s 12.00nm 4.7mb
S.D. = 1.1 on 6 of 6 obs.

? MAY 15, 1990 03h 00m 17.31±2.78s
2.348 S ±36.9km 80.792 W ±16.0km
DEPTH = 33.0km (normal)
3.4mb (1 obs.)
NEAR COAST OF ECUADOR (105)

TUNG 2.52 69 P 00 56.80 -0.4
S 01 24.00
VC1 2.93 55 eP 01 03.80 0.6
eS 01 35.50
GGP 3.08 46 eP 01 04.50 -0.8
eS 01 39.50
QTO 3.11 47 eP 01 05.00 -0.6
eS 01 40.20
OUR 3.13 46 eP 01 05.50 -0.4
eS 01 41.00
COTA 3.62 43 eP 01 13.20 0.2
CAYA 3.70 49 P 01 15.30 1.2
YKA 69.55 344 eP 11 24.70 0.0
0.5s 0.20nm 3.4mb
S.D. = 0.8 on 8 of 8 obs.

% MAY 15, 1990 05h 02m 10.06±1.09s
40.685 N ±10.1km 15.763 E ±6.2km
DEPTH = 5.0km (geophysicist)
SOUTHERN ITALY (390)

SGO 0.37 250 P 02 17.30 -0.2
eSg 02 23.80
MGR 0.57 196 P 02 20.50 -1.0
eSg 02 28.60
BSS 0.73 279 P 02 25.30 0.6
eSg 02 34.60
ORI 0.81 140 P 02 27.90 1.6
BRT 1.11 80 P 02 30.50 -0.9
eSg 02 45.90
TDS 1.12 157 P 02 31.30 -0.1
S.D. = 1.2 on 6 of 6 obs.

MAY 15, 1990 05h 07m 04.29±0.28s
4.974 S ±4.4km 81.041 W ±5.6km
DEPTH = 31.9km (3 depth phases)
5.0mb (15 obs.)
NEAR COAST OF NORTHERN PERU (109)
Felt (IV) at Piuro and (III) at
Toloro.

TUNG 4.38 36 iP+ 08 11.80 1.1
VC1 5.05 32 iP+ 08 21.40 1.1
QTO 5.36 28 eP 08 26.30 1.4
OUR 5.39 28 eP 08 26.30 1.3
eS 09 28.70
CAYA 5.88 31 eP 08 31.80 -0.2
COTA 5.92 27 P 08 32.70 0.0
PSO 7.16 31 eP 08 50.00 0.1
NNA 8.11 149 eP 09 02.00 -0.9
0.8s 4.48nm 4.6mb
e 09 09.50
eS 10 27.00

PT10 8.12 151 e(P) 09 04.00 1.0
e 09 10.00
PT08 8.24 148 eP 09 05.10 0.1
eS 10 37.90
PT03 10.34 150 eP 09 35.90 2.2
eS 11 47.10
ARE 14.77 141 eP 10 38.00 4.9X
ZOBO 16.93 133 P 11 02.00 0.9

1.0s 30.00nm 4.4mb
Z 22s 0.40um 4.0mszx

LPB 17.12 133 P 14 28.00
CCH 19.10 131 P 17 32.00
OLLA 20.57 44 eP 11 00.00 -3.3X
LLAV 20.89 43 eP 11 27.90 0.3
SIV 22.45 121 P 11 42.00 -1.3
UYO 40.94 343 eP 11 44.00 -2.6
MEQ 42.86 339 iPd 12 02.00 -0.2
ALQ 46.36 331 iPc 14 46.30 0.7
1.0s 26.50nm 15 02.30 0.9
ANMO 46.36 331 P 15 30.80 1.2
1.0s 22.50nm 5.1mb
GLA 49.56 322 eP 15 55.00 0.5
GLD 49.77 336 P 15 56.70 0.5
0.8s 28.24nm 5.3mb
GOL 49.79 335 P 15 56.80 0.4
1.0s 46.75nm 5.5mb

BAR 50.46 320 eP 16 02.00 0.7
TPC 51.02 322 eP 16 06.00 0.4
PLM 51.02 321 eP 16 06.00 0.2
RVR 51.76 321 eP 16 11.00 -0.2
MSU 52.00 329 P 16 13.10 -0.1
GSC 52.29 323 eP 16 16.00 0.8
MWC 52.34 321 eP 16 17.00 1.2
SBB 52.50 322 eP 16 17.00 0.2
DAU 53.00 331 P 16 21.70 0.9
CLC 53.11 323 eP 16 21.00 -0.3
ISA 53.54 322 eP 16 25.00 0.5
DUG 53.60 330 P 16 25.90 1.0
0.8s 7.22nm 4.7mb
BW06 54.11 334 P 16 28.00 -0.7
0.9s 11.02nm 4.9mb
TNP 54.43 325 P 16 31.60 0.5
0.8s 9.56nm 4.9mb
KVN 55.60 325 P 16 39.00 -0.6
HPI 56.43 332 P 16 45.60 0.0
RSON 56.67 350 ePd 16 45.60 -1.3
pP 16 55.00 31km
LRM 57.79 334 eP 16 54.70 -0.5
SCH 60.75 9 eP 17 13.00 -2.2
SES 60.92 339 eP 17 16.00 -0.4
pP 17 26.00 33km
NEW 61.71 333 ePd 17 20.90 -0.9
pP 17 30.90 33km

PNT 63.60 333 eP 17 35.00 0.7
1.0s 34.00nm 5.4mb
EDM 64.05 339 iPc 17 36.30 -1.0
YKA 71.99 344 eP 18 24.30 -2.3
0.9s 3.30nm 4.3mb
LKO 76.55 79 P 18 53.18 -0.7
KIC 76.99 82 (P) 18 56.00 -0.3
INK 81.63 343 eP 19 20.00 -0.2
MBC 84.06 351 ePc 19 33.30 0.7
0.8s 13.00nm 5.2mb
SPA 85.06 180 iPd 19 38.30 0.3
1.0s 26.00nm 5.4mb
EKA 87.20 34 P 19 49.00 0.5
0.9s 7.20nm 4.9mb
DAG 88.68 12 iPd 19 55.00 -0.3
0.9s 10.08nm 5.1mb

WRA 137.30 233 PKPd 26 26.50 -0.8
0.7s 4.40nm
WB5 137.32 234 ePKP 26 26.20 -1.1
MTN 143.46 241 iPKPd 26 34.50 -3.9X
TIA 144.71 334 PKP 26 37.40 -2.6
TIY 145.17 341 ePKP 26 38.00 -2.8
GTA 145.71 359 PKPc 26 41.00 -0.8
SSE 146.66 324 PKPc 26 44.20 0.9
MBL 146.93 218 ePKP 26 45.10 1.0
LZH 148.71 352 PKP 26 50.00 3.2X
pPKP 26 55.00
XAN 149.64 343 PKP 26 52.00 3.9X
GUN 154.02 27 PKP 27 00.00 5.0X
S.D. = 1.1 on 61 of 67 obs.

? MAY 15, 1990 05h 10m 50.65±1.24s
49.557 N ±18.4km 18.695 E ±9.4km
DEPTH = 10.0km (geophysicist)
CZECHOSLOVAKIA (547)
SPC 1.08 109 iPnd 11 11.20 0.1
i(Sg) 11 31.30
ZST 1.72 218 eP 11 20.20 -0.6
e 11 29.20

15d 05h

PRU 2.73 281 i Pg 11 44.90 -7.3X
Sg 12 11.00
BRG 3.32 295 ePg 11 43.00 -0.7
iSg 12 25.00
KHC 3.37 265 ePg 11 45.60 1.2
Sg 12 26.50
S.D. = 1.5 on 4 of 5 obs.

* MAY 15, 1990 05h 31m 47.43 ± 1.53s
0.716 S ± 10.5km 122.609 E ± 11.7km
DEPTH = 33.6 ± 19.3 km
4.1mb (2 obs.)
MINAHASSA PENINSULA (265)

MNI 3.09 46 eP 32 35.00 -0.1
MKS 5.46 215 iPc 33 08.10 -0.5
BKB2 5.74 265 iPc 33 16.60 4.1X
AAI 6.31 118 eP 33 21.00 0.3
TSM 6.68 317 eP 33 29.50 3.7X
MTN 14.72 145 ePd 35 19.20 4.1X
WB5 22.25 150 eP 36 42.80 -0.4
WRA 22.30 150 P 36 44.00 0.4
0.9s 9.00nm 4.2mb
PSI 23.92 278 ePd 37 00.80 1.4
CHG 30.28 311 eP 38 00.00 2.0
GUN 45.30 312 P 40 04.30 -0.2
PKI 45.47 311 P 40 05.40 -0.4
DMN 45.72 311 P 40 05.30 -2.4
GBA 46.96 289 P 40 23.00 5.6X
0.6s 0.90nm 3.9mb
S.D. = 1.4 on 10 of 14 obs.

? MAY 15, 1990 08h 00m 14.60 ± 4.50s
31.069 S ± 79.2km 68.396 W ± 22.7km
DEPTH = 100.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL 0.27 194 iPc 00 29.50 -0.1
RTCB 0.54 220 eP 00 31.00 0.0
CFA 0.55 166 iPd 00 31.00 -0.1
RTCV 0.80 189 e(P) 00 27.00 -6.3X
S 00 45.60
RTBS 1.08 237 ePc 00 36.10 -0.1
S 00 51.00
S.D. = 0.0 on 4 of 5 obs.

* MAY 15, 1990 09h 49m 48.28 ± 0.96s
8.746 S ± 12.9km 118.413 E ± 10.1km
DEPTH = 128.2 ± 21.4 km
4.6mb (5 obs.)
SUMBAWA ISLAND REGION (285)

KHKI 2.80 278 iPc 50 32.10 -0.7
iS 51 06.00
e 56 08.00
MKS 3.66 17 iPd 50 44.50 0.3
TRT 5.81 280 iPc 51 14.00 0.6
iS 52 21.00
KNA 12.28 126 iPd 52 39.40 -0.5
0.3s 6.00nm 4.7mb
eS 54 50.00
MBL 12.42 174 iPd 52 42.10 0.3
0.4s 9.00nm 4.7mb
eS 54 52.00
MTN 13.14 109 iPd 52 50.20 -1.0
eS 55 09.00
NANU 14.01 191 eP 53 03.50 1.1
eS 55 28.00
MEKA 17.77 180 eP 53 50.30 1.1
eS 56 56.00
WB5 18.99 127 iPc 54 01.80 -0.8
eS 57 27.00
WRA 19.01 128 Pd 54 02.20 -0.6
0.5s 9.10nm 4.4mb
WARB 19.02 157 iPc 54 05.00 2.1
0.4s 4.00nm 4.1mb
MRWA 20.49 186 eP 54 19.10 1.1
eS 57 58.00
BAL 21.81 184 eP 54 29.00 -2.1
eS 58 29.00
COOL 22.17 174 eP 54 32.70 -2.0
eS 58 37.00
KLB 22.74 181 eP 54 38.30 -1.8
eS 58 50.00
QIS 23.59 122 iPc 54 49.30 0.8
0.7s 30.00nm 4.8mb

BRS 37.37 124 iPc 56 52.40 2.0
S.D. = 1.5 on 17 of 17 obs.

? MAY 15, 1990 10h 45m 15.98 ± 1.09s
39.107 N ± 8.2km 27.590 E ± 13.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZM 0.75 200 iPg 45 30.70 -0.1
eSg 45 41.70
EZM 1.21 307 iPn 45 38.70 0.1
EDC 1.26 10 iPn 45 38.80 -0.5
KCT 1.28 27 ePn 45 40.20 0.4
S.D. = 0.7 on 4 of 4 obs.

* MAY 15, 1990 11h 12m 53.29 ± 2.33s
31.897 S ± 14.4km 71.392 W ± 18.7km
DEPTH = 33.0km (normol)
NEAR COAST OF CENTRAL CHILE (135)

JACH 1.03 139 iPd 13 11.60 0.0
iS 13 24.50
ROCH 1.12 163 iP 13 13.00 0.1
iS 13 27.90
PEL 1.38 155 iPd 13 16.50 0.0
iS 13 31.30
LCCH 1.58 185 eP 13 20.00 0.7
iS 13 35.60
RTBS 1.67 82 eP 13 21.50 0.9
FCH 1.70 147 iPd 13 21.40 0.0
iS 13 41.50
TACH 1.79 168 iP 13 22.50 0.1
iS 13 41.50
PCH 1.87 157 iP 13 23.50 -0.1
i 13 40.00
i 13 49.00
LNV 2.05 180 iPc 13 25.50 -0.6
i 13 43.50
CHCH 2.12 163 iP 13 27.00 -0.2
i 13 45.00
i 13 53.50
RTCV 2.43 90 e(P) 13 32.00 0.4
RTLL 2.56 78 iPc 13 32.50 -0.9
CFA 2.70 85 iPc 13 35.00 -0.4
S.D. = 0.5 on 13 of 13 obs.

* MAY 15, 1990 12h 17m 05.07 ± 1.87s
14.987 S ± 10.2km 167.381 E ± 12.4km
DEPTH = 121.4 ± 15.0 km
4.4mb (2 obs.)
VANUATU ISLANDS (186)

PVC 2.88 162 iP 18 02.00 11.5X
iS 18 28.50
DZM 7.10 187 iPc 18 47.90 0.0
iS 20 07.20
HNR 9.12 306 eP 19 15.00 -0.2
CTA 20.77 253 eP 21 40.00 1.8
RMO 20.81 234 eP 21 39.70 1.1
WB5 31.84 256 eP 23 19.00 -1.6
WRA 31.87 256 Pd 23 19.20 -1.6
0.8s 2.60nm 4.0mb
FORR 39.24 239 eP 24 23.00 -0.3
NANU 49.47 253 iPd 25 45.10 0.0
KMI 74.53 302 eP 28 33.50 0.7
SPA 75.11 180 iPc 28 34.80 -0.5
0.8s 10.83nm 4.7mb
CHTO 75.28 294 e(P) 28 37.00 0.1
FLN 144.87 346 ePKP 36 27.60 -1.6
1.2s 26.80nm
LDF 144.94 346 ePKP 36 28.10 -1.2
1.0s 8.00nm
LOR 145.02 340 ePKP 36 28.70 -0.8
1.2s 17.85nm
LBF 145.23 340 ePKP 36 29.50 -0.4
1.2s 23.80nm
GRR 145.31 346 ePKP 36 29.50 -0.4
1.0s 20.00nm
SSF 145.31 341 ePKP 36 29.90 -0.1
1.2s 23.80nm
LPL 145.47 336 ePKP 36 31.00 0.3
1.2s 14.90nm
LPG 145.48 336 ePKP 36 31.00 0.2
1.2s 17.85nm
SMF 145.57 340 ePKP 36 30.20 -0.3
1.2s 14.90nm
AVF 145.60 340 ePKP 36 30.60 0.1

1.0s 6.00nm
LPF 145.69 346 ePKP 36 31.00 0.4
1.2s 26.80nm
BGF 145.97 341 ePKP 36 31.50 0.3
1.0s 12.00nm
MAF 146.36 341 ePKP 36 33.00 1.2
1.2s 8.95nm
TCF 146.41 341 ePKP 36 33.00 1.1
1.2s 7.45nm
MFF 146.80 344 ePKP 36 33.90 1.4
1.2s 17.85nm
PGF 146.83 330 ePKP 36 33.00 0.2
1.0s 12.00nm
S.D. = 1.0 on 27 of 28 obs.

* MAY 15, 1990 12h 27m 36.25 ± 1.81s
39.385 N ± 17.8km 20.646 E ± 10.5km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)
ML 2.5 (THE).

IGT 0.28 301 ePg 27 41.80 -0.4
eSg 27 48.20
AGG 1.36 105 ePb 28 01.90 0.7
eSb 28 12.24
FNA 1.51 22 ePb 28 02.20 -1.1
eSb 28 23.80
LIT 1.59 63 ePb 28 03.00 -1.5
eSb 28 24.80
OHR 1.73 4 e(Pn) 28 08.00 1.4
GRG 2.07 40 ePb 28 12.30 0.9
S.D. = 1.5 on 6 of 6 obs.

* MAY 15, 1990 12h 52m 25.20 ± 3.05s
41.301 N ± 22.3km 23.433 E ± 10.8km
DEPTH = 10.0km (geophysicist)
GREECE-BULGARIA BORDER REGION (363)
ML 2.1 (THE).

SRS 0.22 147 iPg 52 30.10 0.1
eSg 52 34.50
KNT 0.43 251 ePg 52 33.50 -0.4
eSg 52 39.90
SOH 0.48 187 ePg 52 35.00 0.0
eSg 52 43.40
THE 0.76 208 ePg 52 40.10 0.1
eSg 52 51.20
GRG 0.85 247 ePg 52 42.10 0.5
PAIG 1.39 172 ePb 52 50.20 -0.3
S.D. = 0.4 on 6 of 6 obs.

* MAY 15, 1990 13h 58m 38.63s
62.591 N 151.442 W
DEPTH = 88.9km
CENTRAL ALASKA (1)
<AGS-P>.

CUT 0.58 108 iP 58 54.05 0.0
SKT 0.61 184 iP 58 54.40 -0.1
eS 59 06.23
HUR 0.92 64 iP 58 57.32 -0.3
eS 59 11.29
KTH 0.99 14 iP 58 58.33 -0.2
eS 59 12.80
SUA 1.18 163 eP 59 00.27 -0.5
PWA 1.20 141 eP 59 00.37 -0.5
eS 59 17.82
CRP 1.37 195 eP 59 02.86 -0.4
RND 1.44 54 iP 59 03.46 -0.5
eS 59 23.34
GHO 1.44 124 iP 59 03.76 -0.3
eS 59 24.42
SPU 1.44 192 eP 59 03.71 -0.4
eS 59 23.46
PLRM 1.48 132 iP 59 03.76 -0.7
MCK 1.61 44 eP 59 05.70 -0.5
PMS 1.62 146 eP 59 05.52 -0.8
eS 59 27.18
SML 1.66 117 eP 59 06.10 -0.7
RDT 2.08 193 eP 59 12.11 -0.3
SLKM 2.17 164 eP 59 13.09 -0.6
NCA 2.24 103 iP 59 13.56 -1.1
WRH 2.41 37 eP 59 15.62 -1.3
TOA 2.51 99 iP 59 17.46 -0.8
CCB 2.63 37 eP 59 18.51 -1.3
GLI 2.69 128 eP 59 18.59 -2.1
HDA 2.71 46 eP 59 19.65 -1.4

PAX 2.77 79 eP 59 21.15 -0.8
 VZW 2.78 121 eP 59 20.01 -2.0
 KLU 2.83 111 iP 59 20.33 -2.3
 VLZ 2.83 119 eP 59 20.08 -2.5
 GLM 3.00 35 eP 59 20.24 -4.8
 CNPM 3.08 178 eP 59 26.00 -0.1
 GLB 3.78 104 eP 59 33.46 -2.3
 BALM 4.59 106 eP 59 43.82 -3.2

30 obs. associated

? MAY 15, 1990 13h 59m 12.68±1.30s
 45.561 N ±25.8km 14.989 E ±13.3km
 DEPTH = 10.0km (geophysicist)

YUGOSLAVIA (383)
 MD 2.4 (LJU).

VBY 0.20 107 iPgC 59 17.00 0.0
 iSg 59 20.80
 CEY 0.43 295 ePg 59 21.50 0.0
 e(Sg) 59 29.00
 eRg 59 30.90

LJU 0.58 327 ePg 59 24.40 0.0
 eSg 59 34.00
 VOY 0.90 302 ePg 59 30.00 0.0
 e(Sg) 59 45.20
 eRg 59 52.70

S.D. = 0.0 on 4 of 4 obs.

MAY 15, 1990 14h 25m 20.69±0.10s
 36.043 N ±2.7km 70.428 E ±1.5km
 DEPTH = 113.1km (geophysicist)
 5.9mb (90 obs.)

HINDU KUSH REGION (718)
 Felt (V) at Ishkashim and
 Khorog; (IV) at Dushonbe,
 Komsomolobad, Kulyob, Nurek,
 Obigarm, Pyandzh, Rogun and
 Sultonobod; (III) at Dzhirgatal,
 Garm, Leninobod and Samarkond;
 (II) at Toshkent, USSR. Felt at
 Islomobod, Lahore and
 Rowalpindi, Pakistan. Depth from
 broadband displacement
 seismograms.

FAULT PLANE SOLUTION: P-Waves
 NP1:Strike=70 Dip=63 Slip= 90
 NP2: 250 27 90

Principal Axes:
 T Plg=72 Azm=340
 P 18 160

Comment: The focal mechanism is
 poorly controlled and
 corresponds to reverse
 faulting. The preferred fault
 plane is NP2.

RADIATED ENERGY
 No. of sto: 5 Focal mech. M
 Energy 7.3±3.1*10**12 Nm

MOMENT TENSOR SOLUTION
 Dep 109 No. of sto: 15
 Moment Tensor; Scale 10**17 Nm

Mrr=-7.58 Mtt=-7.19
 Mff=-0.39 Mrt= 5.51
 Mrf=-1.15 Mtf=-3.24

Principal axes:
 T Vol= 9.86 Plg=67 Azm= 32
 N -0.04 17 258
 P -9.82 16 163

Best Double Couple:Mo=9.8*10**17
 NP1:Strike=230 Dip=33 Slip= 58
 NP2: 87 63 109

CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 12S, 31C

Centroid Location:
 Origin Time 14:25:24.9 0.4
 Lat 35.44N 0.04 Lon 70.09E 0.04
 Dep 113.1 1.9 Half-duration 3.9

Moment Tensor; Scale 10**17 Nm
 Mrr= 8.35 0.34 Mtt=-7.82 0.54
 Mff=-0.52 0.54 Mrt= 6.84 0.35
 Mrf=-1.07 0.33 Mtf=-5.95 0.49

Principal Axes:
 T Vol= 11.69 Plg=62 Azm= 34
 N 0.96 23 252
 P -12.65 15 155

Best Double Couple:Mo=1.2*10**18

NP1:Strike=216 Dip=36 Slip= 48
 NP2: 84 64 116

DSH 2.84 333 iPd 26 06.00 0.7
 iS 26 40.00

KSH 5.56 51 P 26 44.50 2.0
 QUE 6.53 208 iPd- 26 54.20 -1.7
 e(S) 28 04.50

FRU 7.51 24 iPd 27 09.00 -0.1
 iS 28 28.00

MHI 8.85 275 ePn 27 25.00 -2.3
 0.6s 37.33nm 5.3mb

NDI 9.31 140 iPd 27 30.30 -3.2X
 0.6s 606.67nm 6.6mb

DMN 15.03 120 Pd 28 44.00 -4.6X
 PKI 15.27 119 Pd 28 46.60 -5.0X

WMO 15.34 54 iPc 28 50.67 -1.5
 5.5s 2700.00nm 5.7mb X

PP 29 06.00
 S 31 34.00
 PcP 33 48.00

GUN 15.40 117 Pd 28 48.20 -5.1X
 POO 17.70 169 iPd 29 17.80 -3.7X

1.4s 2046.51nm 6.2mb
 LSA 18.51 104 iP 29 30.00 -1.3

sP 30 03.00
 iS 32 55.00

TAB 19.33 283 iP+ 29 41.00 1.3
 e 33 14.00

BRF 19.66 245 eP 29 41.90 -1.0
 BJA 19.69 245 eP 29 40.70 -2.5

BEE 19.74 245 iP 29 41.40 -2.3
 0.5s 296.00nm 5.9mb

DHR 19.86 246 iPc 29 45.00 0.0
 HYB 19.90 157 iPd 29 45.50 -0.1

1.0s 1510.00nm 6.3mb
 iS 30 18.00
 iS 33 22.00

SLY 20.21 276 iPd 29 50.00 1.4
 iPP 30 02.50
 iPPP 30 16.00

iS 33 24.00
 iSS 34 02.50
 iSSS 34 13.00

eLR 37 27.00
 BHD 21.58 270 iPd 30 03.00 0.7
 e 30 15.00 49kmX

iPP 30 27.00
 iPPP 30 38.00
 i 30 58.00

iS 33 55.00
 iSSS 34 29.00
 eLR 37 05.00

MSL 21.99 279 ePd 30 07.00 0.6
 ePP 30 32.50
 ePPP 30 43.00

e 31 00.00
 eS 34 01.50
 eSS 34 42.00

GBA 23.21 162 Pc 30 20.40 2.0
 1.1s 415.00nm 5.7mb

RYD 23.38 248 iPc 30 20.00 0.0
 GTA 23.44 73 iPc 30 22.60 2.0

Z 18s 7.06um 5.2Msz
 N 10s 8.52um

sP 30 59.90
 iS 34 29.50

MJMA 23.77 252 eP 30 23.10 -0.7
 QASM 25.01 254 iPc 30 36.30 0.7

RUWJ 26.30 271 Pd 30 52.30 4.9X
 AFIF 26.32 251 eP 30 50.70 3.0X

KOD 26.48 164 iPd 30 50.40 1.0
 1.0s 390.00nm 5.9mb

GAZ 26.62 282 iP 30 57.00 6.8X
 LZH 26.94 80 iPc 30 54.75 1.4

Z 17s 4.20um 5.1MszX
 E 10s 4.60um

PP 31 20.00
 SP 31 30.00
 PP 31 45.00

iS 35 24.00
 sS 35 58.00
 SS 36 48.00

CD2 28.18 91 iPc 31 05.30 0.8
 4.0s 1500.00nm 6.0mb X

N 12s 7.50um

iS 35 44.00
 HRI 28.58 275 eP 31 10.00 1.9

MDSJ 28.64 271 Pd 31 09.20 0.6
 JARJ 28.70 273 Pd 31 09.40 0.2

BURJ 28.82 273 Pc 31 10.10 -0.1
 KAS 28.95 292 iPc 31 12.30 1.0

SALJ 28.98 272 Pc 31 12.00 0.3
 KFNJ 29.03 272 Pd 31 12.50 0.5

MKRJ 29.16 271 Pc 31 13.50 0.2
 DSI 29.36 272 eP 31 12.00 -2.9X

LISJ 29.39 271 Pd 31 15.90 0.8
 KMI 29.74 102 iPc 31 18.59 -0.1

4.0s 1300.00nm 6.0mb X
 sP 31 52.50
 iS 36 07.00

BBTK 29.80 289 iPc 31 19.00 0.1
 i 31 36.00 72kmX

AYN 29.81 266 ePc 31 19.30 0.4
 LFK 29.88 280 iP 31 19.30 -0.2

CSS 30.11 279 eP 31 21.80 0.3
 CHG 30.42 117 ePc 31 24.50 0.1

1.0s 43.00nm 5.1mb
 eS 36 12.00

CHTO 30.42 117 ePc 31 23.74 -0.7
 HOL 30.42 267 ePc 31 24.70 0.4

WAJH 30.49 261 eP 31 24.70 -0.2
 BADA 30.75 266 ePc 31 27.70 0.5

PPCY 30.91 279 eP 31 29.00 0.4
 BTO 31.21 69 iPc 31 32.00 0.7

3.0s 3100.00nm 6.5mb
 N 13s 3.40um
 E 13s 4.60um

sP 32 10.00
 iS 36 31.50
 sS 37 16.00

XAN 31.45 82 iPc 31 33.10 -0.2
 3.0s 2200.00nm 6.4mb

sP 32 09.00
 PP 32 42.50
 S 36 34.00

sS 37 16.00
 ScP 37 48.00

BDT 31.49 119 eP 31 35.00 1.3
 1.2s 273.80nm 5.9mb

GPA 31.64 290 iP 31 35.00 0.1
 BCK 31.79 285 iP 31 36.50 0.2

ALT 31.93 288 eP 31 36.00 -1.5
 HRT 32.08 291 eP 31 39.50 0.8

GBZT 32.25 291 iPc 31 39.80 -0.4
 GYA 32.26 97 P 31 41.00 0.4

N 12s 4.10um
 E 12s 3.40um

S 36 44.00
 sS 37 33.00

YLV 32.32 291 iP 31 41.50 0.6
 HHC 32.36 69 Pc 31 42.10 0.8

4.0s 2400.00nm 6.3mb X
 sP 32 19.50
 PP 32 59.00

S 36 50.00
 ELL 32.45 283 iP 31 42.50 0.3

KHL 32.48 286 iP 31 42.40 0.0
 ISK 32.51 292 eP 31 43.00 0.5

ITU 32.54 292 iP 31 40.00 -2.7
 KOT 32.79 271 ePd 31 46.50 1.5

KSL 32.84 282 iPd 31 44.90 -0.4
 CIT 32.98 292 eP 31 47.00 0.4

PSN 33.02 296 iPd 31 49.00 2.1
 CFR 33.04 299 eP 31 46.00 -1.0

TLB 33.12 298 ePd 31 48.50 0.8
 HLW 33.21 271 eP 31 49.00 0.3

ePPP 33 03.30
 eS 37 03.30
 eSS 39 03.00

NST 33.35 120 iPd 31 51.70 1.8
 LOE 33.35 116 eP 31 49.00 -1.0

DMK 33.43 293 iP 31 51.10 0.7
 TIY 33.44 74 iPc 31 50.90 0.2

3.0s 3800.00nm 6.7mb
 sP 32 28.00
 iS 37 05.00

sS 37 50.00
 PPE 33.45 301 ePc 31 51.00 0.5

EDC 33.49 290 iP 31 51.70 0.7
 IAS 33.54 303 eP 31 50.00 -1.3

YER 33.66 285 eP 31 53.00 0.5
 BRD 33.83 300 ePd 31 57.00 3.2X

15d 14h

RRI	34.06	300	ePc	31	57.00	1.2						i	35	11.00									
ISR	34.18	299	ePc	31	59.00	2.1						e	42	11.00									
Izm	34.23	287	iP	31	56.70	-0.7						iPc	32	54.90	0.1								
JMB	34.25	294	iPc	31	58.00	0.5						i	32	55.90									
ASW	34.41	260	iPd	32	00.00	1.0						iP	33	20.80	112kmX								
			eS	37	21.00							iPP	34	35.30									
AKSR	34.52	259	iPd	32	02.10	2.2						iS	38	58.00									
MLR	34.60	300	iPc	32	02.00	1.4																	
SMG	34.68	286	eP	32	02.40	1.3																	
EZN	34.73	290	iP	32	02.20	0.7																	
ALN	34.80	292	ePc	32	01.60	-0.6	FNA	38.33	292	ePc	32	32.10	0.2										
ARO	34.88	233	iP+	32	04.50	1.4	SPC	38.50	306	iPc	32	35.20	1.8										
ANMR	34.88	260	iPd	32	04.20	1.2																	
ASKD	35.01	260	iPd	32	06.70	2.6																	
DIM	35.06	294	iPd	32	05.00	0.6																	
PVL	35.12	296	iPc	32	07.00	2.2	BEO	38.51	299	iP	32	34.50	1.2	BRT	41.43	293	P	32	57.70	0.3			
RDO	35.15	292	eP	32	05.70	0.5	OIZ	38.54	105	Pc	32	34.00	0.2	TSI	41.51	135	eP	32	59.00	0.8			
KDZ	35.19	293	iPc	32	06.00	0.5							sP	33	11.00		ZAG	41.56	301	iPc	32	59.00	0.6
MTUR	35.23	299	ePd	32	07.50	1.6							PP	34	09.00		PTJ	41.57	301	iPc	32	58.90	0.3
NNT	35.23	124	iPd	32	07.20	1.2							S	38	22.00		HVAR	41.58	297	iP	32	58.40	-0.2
CMP	35.24	299	iPc	32	09.00	3.1X							sS	39	09.00		BAI	41.63	294	P	32	58.00	-1.0
PLD	35.67	294	eP	32	10.00	0.5							SS	41	06.00		TKT1	41.85	337	iPd	33	01.34	0.8
RZN	35.71	293	iPc	32	10.00	-0.1	ITM	38.61	287	eP	32	32.60	-1.7	VBY	42.10	301	iPc	33	03.70	0.9			
TNR	35.78	300	ePc	32	12.00	1.6	OHR	38.71	293	iPc	32	34.20	-0.9	IPM	42.11	131	ePd	33	05.40	2.2			
DRA	35.82	298	ePd	32	13.00	2.3																	
APE	35.83	285	eP	32	11.00	0.0																	
BJI	35.95	70	iPc	32	12.78	1.0																	
	6.0s	2000.00nm																					
Z	18s	22.40um																					
			iSpd	32	50.69																		
			ePP	33	37.12																		
			e	34	14.86																		
			eS	37	37.00																		

BRN	42.96	311	ePc	33	11.00	1.3			ePP	35	13.00		RRL	48.10	301	P	33	50.13	-0.7	
			i	33	37.00	113kmX			iS	39	58.00		BNI	48.14	301	P	33	50.20	-0.9	
			i	34	16.00				sS	40	46.00		CALN	48.29	300	P	33	51.56	-0.7	
GMB	43.04	290	P	33	11.26	0.5	KONO	45.15	321	ePc	33	26.63	-0.6	BAG	48.48	100	ePc+	33	54.00	0.0
	0.8s	91.10nm			5.6mb				eSpc	34	05.37			1.8s	490.91nm			6.0mb		
TRI	43.11	301	ePc	33	11.10	0.1	SAL	45.37	301	P	33	29.94	0.8			eS	40	48.00		
			e	33	47.00	162kmX			1.4s	1974.10nm		6.7mb	FRF	48.51	299	iPc	33	53.00	-0.7	
			e	35	30.00		OSS	45.46	303	ePc	33	29.70	-0.3	DOU	48.56	308	Pc+	33	54.30	0.3
			e	39	22.00		MME	45.51	299	P	33	31.40	0.9			e	34	21.90	118kmX	
			e	43	07.00		CVT	45.51	290	P	33	30.60	0.3			S	40	56.00		
			e	47	20.00		KGM	45.53	130	ePc	33	32.00	1.4	UCC	48.60	309	iP+	33	54.00	-0.3
			eLR	52	20.00				e	34	10.80	176kmX			i	36	11.00			
CLL	43.12	309	iPc	33	11.20	0.2	MAO	45.55	297	P	33	30.70	0.1	LMR	48.66	299	eP	33	54.10	-0.8
	1.7s	270.00nm			5.7mb		BDI	45.61	299	P	33	30.60	-0.5		1.7s	220.55nm		5.7mb		
			iP	33	38.20	118kmX	PII	45.73	299	P	33	31.50	-0.4	SNF	48.69	309	eP	34	04.00	9.0X
			e(S)	39	28.00		PPi	45.78	136	ePc	33	33.40	0.8			i	34	22.70	75kmX	
HFS	43.14	322	eP	33	10.50	-0.6		0.8s	208.60nm		6.0mb		LRG	48.73	299	iPc	33	55.00	-0.4	
	0.4s	134.00nm			6.1mb		MDI	45.90	302	P	33	32.90	-0.4		1.4s	252.70nm		5.9mb		
Z	16s	4.51um			5.5MszX		SAX	45.91	304	ePc	33	33.50	-0.2	KBS	48.95	347	iPc	33	57.90	1.2
			LR	48	55.00		VDL	45.95	303	ePc	33	34.10	0.2	SHNJ	48.98	73	eP	33	58.00	0.6
BSS	43.22	294	P	33	12.10	0.1	TNS	46.09	308	ePc	33	35.10	0.3	KUMJ	49.33	76	P	34	00.00	-0.2
DUI	43.30	295	P	33	13.40	0.7	LLS	46.20	303	ePc	33	35.30	-0.7	LBF	49.56	304	iPc	34	00.90	-0.9
WET	43.33	306	iPc	33	13.30	0.5	BOB	46.27	300	P	33	37.00	0.6	LOR	49.58	305	iPc	34	01.00	-0.9
	1.8s	241.00nm			5.7mb		MOL	46.35	325	iPd	33	37.02	0.4		1.6s	180.35nm		5.7mb		
ATN	43.35	290	P	33	13.10	0.0	TIK	46.36	22	iPc	33	37.00	0.4	SMF	49.72	304	iPc	34	02.70	-0.3
BHG	43.47	304	iPc	33	14.30	0.3			eS	40	15.00		SSF	49.86	305	iPc	34	03.30	-0.7	
	1.8s	659.00nm			6.1mb		SLE	46.40	305	ePc	33	36.90	-0.4	QCP	49.87	102	eP	34	02.50	-1.9
TRO	43.50	337	iPd	33	14.67	0.8	TMA	46.42	302	ePc	33	36.80	-0.9	KAGJ	49.89	77	P	34	03.40	-1.0
KLM	43.65	131	eP	33	17.50	1.8	ZLA	46.51	304	ePc	33	37.60	-0.6	AVF	50.02	304	iPc	34	04.80	-0.4
FVI	43.67	302	Pc	33	15.50	0.0	VAI	46.53	302	Pc	33	37.70	-0.6	PLDF	50.03	303	P	34	04.96	-0.5
RFI	43.72	295	P	33	16.54	0.5	BLS1	46.55	321	iPd	33	39.27	0.8	SHK	50.05	72	eP	34	05.00	-0.7
	1.9s	2635.20nm			6.7mb		ODD1	46.66	322	iP	33	39.87	0.7	GRC	50.09	305	P	34	05.38	-0.4
SDI	43.76	295	Pc	33	16.20	-0.2	FEL	46.70	305	P	33	39.50	-0.3	AGO	50.34	303	P	34	07.64	-0.1
HOF	43.89	308	iPc	33	17.90	0.6	GWf	46.79	306	P	33	40.00	-0.3	BGF	50.41	304	eP	34	07.80	-0.5
	1.7s	225.00nm			5.7mb		HYA	46.91	323	iP	33	41.71	0.6	LBL	50.46	302	P	34	08.70	0.1
AQU	43.93	296	P	33	18.40	0.6	WTS	46.92	311	ePc	33	41.50	0.3	PYM	50.50	303	P	34	08.75	-0.2
AZI	43.98	296	Pc	33	19.10	1.0		1.2s	296.00nm		5.9mb		MAF	50.68	304	iPc	34	10.30	0.0	
MNO	43.99	290	P	33	20.00	1.5			epP	34	08.00	114kmX	TCF	50.90	304	iPc	34	11.80	-0.2	
MOX	44.03	308	iPc+	33	19.00	0.5			esP	34	24.00		TKSJ	51.31	73	P	34	15.10	-0.1	
	1.9s	483.00nm			6.0mb		WIT	46.92	312	ePc	33	41.00	-0.2	CAF	51.35	302	eP	34	15.40	0.0
			iP	33	46.00	117kmX			epP	34	08.50	119kmX	LSF	51.37	304	iPc	34	14.80	-0.7	
			eS	39	35.00		PCP	46.95	300	P	33	40.39	-1.3	KKM	51.44	114	ePc	34	17.00	0.5
MEU	44.04	289	P	33	18.70	-0.1	MMK	47.05	302	ePc	33	41.80	-0.9		1.0s	318.60nm		6.2mb		
ARV	44.04	298	P	33	19.10	0.4	PGF	47.07	298	iPc	33	42.10	-0.7	ETER	51.52	299	iPc	34	15.60	-1.1
PZI	44.07	288	P	33	19.02	0.0	CDF	47.10	306	P	33	42.68	-0.2	RJF	51.62	303	iPc	34	17.40	-0.1
	1.2s	575.70nm			6.2mb		ORX	47.12	302	P	33	41.01	-2.1	LDF	51.89	307	iPc	34	18.50	-0.9
RSM	44.32	299	P	33	21.90	1.1	CKI	47.16	300	P	33	41.80	-1.5	LPO	52.02	302	iPc	34	20.20	-0.2
ASS	44.33	297	P	33	21.10	0.1	FIN	47.26	300	P	33	42.55	-1.6		1.4s	191.70nm		5.9mb		
SCE	44.34	303	eP	33	20.40	-0.8	MOF	47.29	305	P	33	43.74	-0.6	FLN	52.08	308	iPc	34	19.80	-1.0
GRF	44.36	307	iPc	33	22.50	1.3	BER	47.32	322	iP	33	44.08	-0.2		1.3s	202.15nm		5.9mb		
	1.6s	654.00nm			6.2mb		KMY	47.36	321	iP	33	44.61	0.0	TSRJ	52.23	70	P	34	22.40	0.3
Z	18s	3.00um			5.3Msz		ASK	47.39	322	iPd	33	45.05	0.3	LFF	52.25	303	iPc	34	21.80	-0.3
			epP	33	48.10	110kmX	DIX	47.43	303	ePc	33	45.30	-0.4	ESEL	52.27	296	iPc	34	21.80	-0.6
			e(SP)	34	04.00		ROB	47.48	300	P	33	44.29	-1.6	EKA	52.29	316	Pd	34	18.80	-3.5X
			eS	39	52.00		BSF	47.52	305	eP	33	45.20	-1.0		1.2s	194.30nm		5.9mb		
WATA	44.39	304	iPc	33	20.90	-0.7	IMI	47.55	300	P	33	45.72	-0.7	ESK	52.32	316	iPd	34	21.30	-1.2
	1.3s	188.00nm			5.7mb		LOMF	47.58	304	P	33	46.00	-0.7			epPd	34	47.29	109kmX	
			i	33	21.60	2kmX	MEM	47.59	309	P	33	42.70	-3.8X			esPc	34	58.38		
			i	33	47.10				i	33	46.70	13kmX	MFF	52.40	305	iPc	34	22.30	-0.9	
MNS	44.45	297	Pc	33	21.70	-0.3	SUE	47.60	323	iP	33	47.32	0.9	GRR	52.41	307	iPc	34	22.10	-1.2
NB2	44.47	323	P	33	20.90	-1.0	ENN	47.62	309	ePc	33	46.50	-0.3	WKYJ	52.41	72	eP	34	23.40	-0.2
GIB	44.49	290	P	33	21.60	-0.8		1.2s	113.00nm		5.5mb		LPF	52.62	307	iPc	34	23.80	-1.0	
FUR	44.49	305	iPc	33	23.10	0.9			epP	34	13.50	116kmX		1.3s	115.55nm		5.7mb			
	1.7s	695.00nm			6.2mb				esP	34	28.00		JNW	52.78	336	iPd	34	27.80	2.1	
CTI	44.52	302	P	33	22.30	-0.3	CGL	47.67	293	P	33	47.06	-0.4	EPF	53.08	300	eP	34	27.20	-1.1
RMP	44.55	296	P	33	22.50	-0.3		1.8s	213.30nm		5.6mb			1.4s	136.15nm		5.7mb			
RDP	44.55	296	P	33	22.90	0.1	LSD	47.73	302	P	33	47.16	-0.9	MTMJ	53.23	68	P	34	28.60	-1.0
SOTA	44.66	304	iPc	33	23.00	-0.7	EMS	47.75	303	ePc	33	47.90	-0.2	MAJO	53.55	68	iPc	34	29.95	-1.9
	1.5s	281.00nm			5.8mb		ENR	47.81	300	P	33	47.47	-1.0			epPd	34	58.59	121kmX	
			i	33	23.90	3kmX	STV	47.87	300	P	33	47.36	-1.6			esPd	35	09.35		
			i	33	49.20		SBF	47.88	300	iPc	33	48.80	-0.2			e	36	03.72		
			i	34	41.80		DBN	47.90	311	iP+	33	49.00	0.1	MAT	53.55	68	iPc	34	30.00	-1.8
			i	35	13.70			Z	20s	2.50um		5.2Msz			1.8s	1045.45nm		6.5mb		
SFI	44.74	299	P	33	24.60	0.4			epP	34	17.00	120kmX	JAU	53.57	501	P	34	32.01	-0.1	
OGA	44.83	303	iPc	33	24.40	-0.7			iPP	35	42.00		SAP	53.64	309	eP	34	30.00	-2.3	
PGD	44.84	299	iPd	33	25.90	0.7			eS	40	40.00		MRRJ	53.66	60	eP	34	30.80	-1.6	
			iP	33	53.80	121kmX			e(S)	41	26.00		EBR	53.67	298	ePc	34	32.00	-0.5	
LOF	44.85	334	iPd	33	24.40	-0.3	AURF	47.95	300	P	33	49.39	-0.2	YRH	53.67	313	eP	34	31.40	-1.0
MCT	44.																			

15d 14h

ISF	53.87	301 P	34 33.50	-0.7			pP	36 46.00	159kmX	COOL	81.84	138 eP	37 28.00	-0.4		
NIIJ	53.90	67 P	34 33.40	-0.9	KUPT	67.93	122 eP	36 20.60	11.2X		0.7s	106.00nm		5.8mb		
ELYF	53.97	301 P	34 33.48	-1.3		1.0s	554.70nm			WB5	82.12	121 iP	37 29.10	-1.0		
BOH	54.00	301 P	34 34.26	-0.9	BUL	68.47	222 iPd	36 06.00	-6.8X		i		37 58.30	113kmX		
TSM	54.03	114 ePc	34 34.00	-1.5		1.2s	31.25nm		5.1mb		e		39 41.50			
ASAJ	54.22	58 eP	34 34.40	-2.2			iPp	36 34.50	114kmX				47 34.40			
CHJJ	54.32	68 P	34 36.60	-0.9			i	44 58.00		WRA	82.15	121 Pd	37 30.30	0.1		
YAMJ	54.33	65 P	34 36.50	-1.0			i	45 45.50			0.6s	24.60nm		5.2mb		
LWI	54.37	235 eP+	34 38.20	-0.1	GUMO	69.62	88 eP	36 18.50	-1.4	RKG	82.20	143 eP	37 33.00	2.8X		
		i	35 05.80	115kmX			eS	45 15.00			0.5s	58.00nm		5.7mb		
ECP	54.86	313 iPd	34 40.80	-0.3	GUA	69.69	88 eP	36 17.70	-2.6	SCH	82.33	337 ePc	37 31.00	0.3		
DAG	55.06	344 iPc	34 41.60	-0.7	CFTV	69.78	291 iPd	36 21.00	0.3		1.0s	103.00nm		5.6mb		
Z	20s	1538.46nm		6.8mb	SHGH	70.76	263 eP	36 26.00	-0.7	TUH	84.00	221 iPc	38 12.60	168kmX		
N	20s	2.13um		5.2Msz			e	36 58.00	129kmX		1.0s	180.00nm		5.9mb		
E	20s	0.28um			KOGH	70.83	263 eP	36 33.00	5.8X		i		47 57.50			
		0.71um			KUK	70.87	264 eP	36 18.00	-9.4X	SIT	84.73	14 eP	37 43.80	1.0		
ACU	55.11	295 eP	34 43.40	0.1	TEGH	70.89	263 eP	36 23.00	-4.6X	FORR	85.77	133 eP	37 48.00	-0.2		
ECHE	55.14	297 iPc	34 43.40	0.0	LEGH	71.03	263 eP	36 17.00	-11.4X		0.4s	52.00nm		5.8mb		
KAKJ	55.15	68 P	34 42.40	-1.0			e	37 00.00	179kmX	QIS	86.25	119 iPc	37 49.80	-1.0		
ECRI	55.20	301 iPc	34 43.70	-0.2	GGC	71.11	291 iPd	36 29.00	0.2		i		38 19.60	114kmX		
OFUJ	55.20	64 P	34 43.00	-0.8	WEGH	71.18	263 eP	36 29.00	-0.3	FFC	89.36	356 iPc	38 05.20	-0.1		
ETOR	55.49	299 iPc	34 44.70	-1.3			e	37 01.00	129kmX		1.3s	182.00nm		6.0mb		
KUSJ	55.97	58 eP	34 46.70	-2.5	CTFE	71.39	292 ePd	36 31.00	0.6	CTA	90.77	114 iPc	38 11.80	-0.5		
EALH	56.09	295 iPd	34 50.50	0.3	NANU	72.22	137 eP	36 35.40	0.2		1.2s	157.81nm		6.1mb		
EVIA	56.60	296 iPc	34 53.10	-0.8	IMA	72.70	17 ePc	36 37.20	-0.5		i		38 41.80	114kmX		
ENB2	56.96	120 ePc	35 01.50	4.9X			epP	37 06.80	117kmX		iSKS		48 40.00			
KBJ	57.02	294 iPc	34 55.80	-1.0	CHIE	73.06	292 iPc	36 40.60	0.4		e		49 23.00			
GUD	57.04	299 iPc	34 56.00	-1.1	LKO	73.16	270 Pc	36 39.04	-2.0	CTAO	90.77	114 iPc	38 11.30	-1.0		
BCAO	57.07	249 iPc	34 55.71	-1.7	MBL	73.62	132 iPc	36 43.10	-0.3		iPPd		38 41.42	115kmX		
	0.7s	110.0														

NNA	142.00	301	ePKP	44	36.00	-5.5X	BBTK	42.94	357	eP	29	29.00	1.0	LOMF	56.41	337	P	31	11.10	-0.1
	1.1s		27.85nm				GPA	43.59	354	eP	29	34.00	0.9	DMN	56.54	54	P	31	11.20	-1.5
PT03	142.62	297	e(PKP)	44	39.30	-3.2X	KOD	43.64	72	eP	29	33.00	-1.3		0.8s	23.00nm				5.3mb
CFA	145.56	265	iPKPc	44	47.00	-0.1	GBA	44.61	67	Pd	29	39.80	-1.9	CAF	56.57	332	eP	31	10.40	-1.9
ZON	145.90	266	ePKP	44	48.00	0.3		1.3s	65.50nm				5.4mb		1.2s	26.80nm				5.1mb
RTCB	145.98	266	iPKPd	44	49.00	1.1	QUE	44.65	40	eP	29	41.50	-0.6	MOF	56.70	337	P	31	12.93	-0.3
RTBS	146.56	266	e(PKP)	44	50.20	1.6			ePP	31	28.00		PKI	56.77	54	P	31	12.40	-2.1	
PCH	147.99	263	ePKP	44	52.50	1.4	CTT	44.66	352	eP	29	43.00	1.2	GRF	56.81	341	eP	31	13.90	0.0
PEL	148.00	264	iPKPd	44	52.00	1.0	LIT	44.80	346	ePc	29	39.50	-3.4X		Z	19s	0.60um			4.7MsZ
	2.2s		346.15nm				MAIO	45.14	27	eP	29	41.00	-4.8X			e		31	23.50	
			i	45	22.10				e	31	30.00				e			31	48.70	
SAN	148.07	263	ePKP	44	52.00	0.9	SOH	45.28	347	ePc	29	47.50	0.7	LPO	56.81	331	eP	31	12.00	-2.0
ROCH	148.21	264	ePKP	44	52.50	0.9	SRS	45.50	347	ePc	29	48.60	0.1		1.2s	23.80nm				5.1mb
TACH	148.34	263	ePKP	44	52.50	1.0	GRG	45.63	346	ePc	29	50.60	1.1	BSF	56.81	337	P	31	12.95	-1.2
IHA	148.74	264	e(PKP)	44	52.50	0.4	KDZ	45.64	349	eP	29	50.00	0.4	ECH	56.99	338	P	31	14.81	-0.4
LNV	148.80	262	ePKP	44	53.00	0.8	KNT	45.70	346	ePc	29	50.90	0.8	BRG	57.03	344	eP	31	15.80	0.3
LCCH	148.80	263	ePKP	44	54.00	1.8	FNA	45.73	345	ePc	29	51.40	1.1		1.8s	42.00nm				5.2mb
	S.D. = 1.0	on 492 of 525 obs.					MNB	45.92	347	eP	29	52.00	0.1		eS		39	16.00		
							VAY	45.93	346	iP	29	53.00	1.1	SMF	57.08	334	eP	31	13.30	-2.6
	MAY 15, 1990	15h 21m 26.26±0.42s					DIM	46.01	349	eP	29	50.00	-2.4		1.2s	26.80nm				5.1mb
		3.225 S ± 7.2km 35.744 E ± 6.1km					OHR	46.19	344	eP	29	55.00	1.1	CDF	57.10	338	P	31	15.07	-1.1
	DEPTH = 5.0km (geophysicist)							0.8s	41.00nm				5.5mb	RJF	57.11	332	eP	31	13.80	-2.3
	5.3mb (36 obs.) 4.8MsZ (3 obs.)						PLD	46.22	349	eP	29	56.00	1.9		1.0s	20.00nm				5.1mb
TANZANIA						(573)	TDS	46.25	339	P	29	58.60	4.2X	LFF	57.21	331	eP	31	14.80	-2.0
	Felt at Nairobi, Kenya.						SKO	46.82	345	eP	30	00.50	1.6		1.2s	35.70nm				5.3mb
	CENTROID, MOMENT TENSOR (HRV)								i	30	02.50		LBF	57.29	335	eP	31	14.40	-3.0X	
	Data Used: GDSN								i	31	52.00			1.2s	23.80nm					5.1mb
	L.P.B.: 12S, 19C								i	36	51.00		GUN	57.29	54	P	31	16.00	-2.2	
	Centroid Location:								i	39	59.00		MAF	57.32	333	eP	31	15.90	-1.7	
	Origin Time	15:21:28.4	1.7						i	40	28.00			1.2s	35.70nm					5.3mb
	Lot 3.43S 0.14 Lon 35.77E 0.10						HYB	46.95	63	eP	30	00.00	-0.3	AVF	57.40	334	eP	31	15.60	-2.5
	Dep 15.0 BDY Half-duration 2.0						BUC1	48.15	351	ePc	30	12.00	2.7X		1.2s	32.75nm				5.2mb
	Moment Tensor: Scale 10**17 Nm						CFR	48.67	353	eP	30	13.00	-0.3	GWf	57.44	338	P	31	17.46	-1.0
	Mrr=-1.52 0.10 Mtt= 0.57 0.10						CMP	49.21	350	ePc	30	21.00	3.5X	VITF	57.44	337	P	31	16.83	-1.5
	Mff= 0.95 0.15 Mrt= 0.06 0.42						MLR	49.28	351	ePc	30	19.50	1.3	BGF	57.45	334	eP	31	16.10	-2.4
	Mrf= 0.87 0.39 Mtf=-0.23 0.10						BEO	49.75	346	eP	30	22.50	0.9		0.8s	13.45nm				5.0mb
	Principal Axes:						MNS	49.98	338	Pc	30	24.40	0.9	MOX	57.52	342	eP	31	19.00	0.1
	T Vol= 1.29 Plg=16 Azm=253						BZS	50.23	347	eP	30	24.00	-1.2		2.0s	108.00nm				5.5mb
	N 0.52 8 346						NDI	50.90	49	eP	30	30.50	-0.2	TCF	57.53	333	eP	31	17.30	-1.8
	P -1.81 72 100						VBY	51.83	342	e(P)	30	39.00	1.6		1.2s	56.55nm				5.5mb
	Best Double Couple: Mo=1.5*10**17						ZAG	51.89	343	eP	30	39.70	1.8	SSF	57.55	334	eP	31	16.20	-3.0X
	NP1: Strike=332 Dip=29 Slip=-106						RIY	51.96	341	eP	30	39.40	1.0		1.2s	14.90nm				4.9mb
	NP2: 170 62 -81						PTJ	51.97	343	eP	30	39.50	0.9	LOR	57.56	335	eP	31	16.50	-2.8
							CEY	52.30	341	eP	30	41.50	0.4		1.2s	26.80nm				5.1mb
NAI	2.21	29	iPd	21	59.80	-4.5X	TRI	52.49	341	eP	30	45.00	2.6X	CLL	57.69	343	iPc	31	19.70	-0.4
	1.0s	1050.00nm					LJU	52.54	341	e(P)	30	44.00	1.2		2.0s	86.00nm				5.4mb
LWI	7.01	278	iP+	23	10.40	-1.9	VOY	52.73	341	eP	30	45.00	0.6			e		39	22.00	
		iS	24	15.40			SRO	53.07	345	eP	30	47.00	0.3			eSg		59	12.00	
KRI	14.80	204	iPn	24	48.10	-10.2X			i	59	07.00		LSF	57.81	333	eP	31	19.00	-2.0	
		iSn	27	30.00					i	59	24.60			1.2s	32.75nm					5.2mb
		iSg	29	02.00			SOP	53.42	344	eP	30	50.00	0.7	DOU	59.50	337	P	31	34.00	1.3
ARO	16.27	26	iPd	25	15.50	-1.8	FVI	53.59	340	Pc	30	52.10	1.6			S		39	50.00	
BUL	18.20	202	iPn	25	42.00	0.4	ZST	53.74	345	eP	30	51.90	0.3	LDF	60.30	333	eP	31	35.60	-2.7
		iSn	29	05.30			SPC	53.91	347	eP	30	54.00	0.9		0.8s	13.45nm				5.1mb
		iSg	31	12.90			APHE	54.24	321	iPd	30	59.20	3.5X	LPF	60.31	332	eP	31	35.80	-2.5
BCAO	18.80	294	iPc	25	48.90	-0.1	VAI	54.42	337	P	30	58.70	2.1		0.8s	13.45nm				5.1mb
	1.1s	464.00nm				5.6mb	ATEJ	54.43	321	iPc	30	58.60	1.5	GRR	60.49	333	eP	31	36.40	-3.1X
		i	27	12.90			ASMO	54.53	322	iPc	31	00.70	2.9X		1.2s	26.80nm				5.2mb
		i	28	49.80			BHG	54.55	341	eP	30	57.60	0.0	NUR	64.14	354	iP	32	03.80	0.2
		i	30	24.70			ALOJ	54.60	321	iPc	31	00.00	1.7	UPP	64.49	350	iP	32	06.20	0.2
		i	32	00.70			SQTA	54.67	340	eP	30	59.00	0.3			iS		40	48.00	
PRY	24.86	198	eP	26	53.00	1.6			i	31	11.50		HFS	65.49	348	eP	32	12.00	-0.5	
ASW	27.28	354	iPc	27	08.00	-5.7X			i	33	04.50			1.7s	101.10nm					5.8mb
		eS	32	00.00			AAPN	54.74	321	iPc	31	01.00	1.7	Z	18s	0.41um				4.7MsZ
MBH	32.82	359	e(P)	28	02.00	-0.9	KRA	54.79	348	eP	30	59.60	0.3			LR		57	42.00	
HLW	33.16	353	eP	28	06.00	0.1		1.8s	160.00nm				5.7mb	SNG	65.56	81	eP	32	12.90	-0.8
		eS	33	30.00				Z	15s	1.10um			5.1MsZ	IPM	65.68	84	ePc	32	15.40	0.8
KOT	33.18	354	eP	28	06.50	0.5	LPG	54.93	335	eP	30	59.00	-1.8		1.2s	90.90nm				5.9mb
PRNI	33.39	359	eP	28	20.00	12.1X		1.0s	20.00nm				5.1mb	CHG	65.89	68	eP	32	15.20	-0.5
TUH	33.70	206	eP	28	10.00	-0.6	LPL	54.96	335	eP	30	59.60	-1.3	WMO	65.99	39	Pd	32	15.00	-1.1
	1.0s	20.00nm				5.0mb		1.2s	32.75nm				5.2mb		E	24s	1.20um			
		(S)	34	33.50			KHC	55.58	343	iPc	31	05.20	0.0			PP		34	35.20	
BHD	37.21	12	ePc	28	41.00	0.6		1.4s	44.00nm				5.3mb	SUF	66.17	355	iP	32	16.90	0.2
SLY	39.69	12	ePc	29	02.50	1.4		Z	11s	1.10um			5.2MsZ		0.7s	29.60nm				5.6mb
		e	39	15.00					e	33	06.50			NB2	66.84	347	P	32	20.40	-0.8
		e	43	18.00			EPF	56.03	329	eP	31	06.50	-2.0		1.4s	51.50nm				5.5mb
MSL	40.00	9	ePd	29	07.00	3.2X		1.4s	34.85nm				5.2mb	MAW	66.91	169	eP	32	25.00	3.6X
		e	39	19.50			PRU	56.07	344	eP	31	07.80	-0.8	KMI	70.72	62	Pc	32	46.50	0.4
		e	42	37.50					e	31	20.00				3.0s	0.20nm				2.7mb X
ELL	40.14	353	eP	29	07.00	2.0			e	31	09.70	-0.2		Z						

BRG	56.93 344 eP	34 07.20 -0.8	1.3s	69.50nm	5.7mb	CHTO	29.59 298 eP	39 40.80 0.9	
	1.8s	52.00nm				NANU	30.01 200 eP	39 43.50 -0.1	
	e	34 44.00				BJI	35.32 347 eP	40 30.00 0.4	
	i	35 04.00					0.7s	9.00nm	4.8mb
	e	36 14.50				MRWA	36.12 195 iPd	40 36.40 -0.1	
	e	42 20.00				FORR	36.43 177 iPd	40 38.00 -0.2	
SMF	57.01 334 eP	34 08.10 -0.6	Z	25s	0.70um		0.3s	28.00nm	5.6mb
	1.2s	72.90nm				BAL	37.27 194 eP	40 45.00 -1.2	
CDF	57.02 338 eP	34 07.63 -1.2	GTA	72.16 47 Pd	35 47.10 -0.5	KLB	37.99 192 eP	40 52.00 -0.2	
HOF	57.05 342 iPd	34 08.10 -0.8		1.4s	57.00nm	MUN	38.71 194 iPd	40 58.20 0.0	
RJF	57.05 332 eP	34 08.90 -0.1	E	12s	0.40um	BRS	41.76 143 iPd	41 22.80 -0.7	
	1.1s	51.30nm	CD2	72.77 56 eP	35 50.40 -0.9	ADE	42.17 165 iPd	41 27.20 0.4	
GUN	57.09 54 P	34 08.00 -2.0		eS	45 21.50	GUN	44.15 305 P	41 43.40 0.0	
LFF	57.15 331 eP	34 09.00 0.1	CAI	72.80 264 eP	35 52.20 0.5		0.6s	32.00nm	5.3mb
	1.2s	68.45nm	KEV	72.93 357 iPd	35 52.00 0.7	PKI	44.41 304 P	41 45.00 -0.5	
LBF	57.21 334 eP	34 09.50 -0.6		1.2s	124.30nm	DMN	44.68 304 P	41 47.40 -0.2	
	1.2s	46.10nm	LZH	74.19 51 eP	35 58.50 -1.1		0.8s	23.00nm	5.1mb
MAF	57.25 333 eP	34 10.50 0.1		7.0s	740.00nm	CAN	46.13 154 iPd	41 59.00 0.3	
	1.2s	86.30nm	Z	26s	0.90um	GBA	48.64 283 Pd	42 31.40 12.8X	
AVF	57.33 334 eP	34 10.40 -0.5	E	14s	0.40um		0.7s	3.70nm	
	1.2s	77.35nm				TIO	122.52 312 iPKP	52 46.50 16.6X	
GWF	57.36 338 eP	34 10.32 -0.8					i	53 05.00	
VITF	57.36 337 eP	34 10.28 -0.8	GYA	74.27 62 P	35 00.00 -0.2	BAO	168.65 210 e(PKP)	53 44.00 3.1X	
BGF	57.38 333 eP	34 11.00 -0.3	QIZ	75.88 70 P	36 12.00 2.6X		S.D. = 0.8 on 19 of 22 obs.		
MOX	57.42 342 iPd	34 11.00 -0.5	TRT	76.47 97 ePd	36 11.70 -1.1				
	1.8s	100.00nm	XAN	77.74 54 iPd	36 19.50 -0.1				
TCF	57.46 333 eP	34 12.00 0.1	AKU	78.78 340 iPd	36 27.30 2.7X				
SSF	57.48 334 eP	34 11.10 -0.8		1.5s	77.78nm				
	1.2s	31.25nm	BTO	80.01 48 iPd	36 33.00 1.1				
LOR	57.49 335 eP	34 11.20 -0.8	HHC	81.21 48 P	36 40.20 1.9				
	1.2s	59.50nm		6.0s	1100.00nm				
CLL	57.59 343 eP	34 11.00 -1.6	TIY	81.27 51 Pd	36 39.60 1.1				
	1.7s	80.00nm	Z	19s	1.50um	PT02	1.26 249 iPd	11 52.20 -2.5	
	i		E	19s	1.10um	PT08	1.39 292 iPd	11 57.90 0.9	
LSF	57.75 332 eP	34 13.80 0.0	KBS	82.86 355 iPd	36 48.00 2.1	PT03	1.60 200 iPd	12 01.10 1.5	
	1.2s	53.55nm	BJI	84.53 49 eP	36 56.50 1.4		iS	12 11.00	
MFF	58.79 332 eP	34 21.00 -0.1		5.0s	810.00nm	NNA	1.65 287 iPd	12 00.60 0.2	
	1.2s	44.65nm	Z	19s	0.95um		iS	12 21.50	
MEM	59.30 338 P	34 24.70 0.2				PT06	1.71 219 iPd	12 01.90 0.6	
DOU	59.42 337 P	34 25.80 0.4					iS	12 23.30	
	S	42 41.00	TIA	84.74 53 Pd	36 57.40 1.1	PT10	1.75 283 iPd	12 02.00 0.2	
ENN	59.46 338 eP	34 25.50 -0.1		1.5s	100.00nm		iS	12 24.50	
	1.1s	24.00nm	DAG	85.34 349 iPd	36 59.00 0.5	ZOBO	7.84 119 Pd	13 27.80 -0.9	
SNF	59.87 337 P	34 28.70 0.2		1.1s	94.94nm		Z	22s	0.40um
WTS	60.15 340 eP	34 31.00 0.6	NJ2	85.66 58 Pd	37 01.50 0.6	LPB	7.99 121 P	13 44.00 13.4X	
	1.0s	29.00nm		6.5s	600.00nm		Z	18s	1.72um
LDF	60.24 333 eP	34 30.50 -0.5	SSE	87.54 59 P	37 08.00 -2.2		LR	17 16.00	
	1.2s	53.55nm	MDJ	94.78 46 eP	37 44.00 0.4		S.D. = 1.6 on 7 of 8 obs.		
LPF	60.25 332 eP	34 30.80 -0.3	WRA	96.89 110 Pd	37 54.10 0.4				
	1.1s	53.70nm		1.0s	9.40nm				
GRR	60.42 333 eP	34 31.70 -0.6	WB5	96.92 110 eP	37 54.70 0.8				
	1.2s	29.75nm	MBC	105.59 354 ePKP	42 43.00 -1.8				
FLN	60.52 333 eP	34 32.20 -0.8	INK	114.48 356 ePKP	43 02.00 0.1				
	1.0s	16.00nm	YKA	116.79 345 ePKP	43 06.00 -0.4				
DBN	60.82 339 eP	34 36.00 1.1		0.9s	1.50nm				
Z	18s	0.90um	SES	125.21 335 ePKP	43 23.00 0.0				
	ePP	36 52.00	RSSD	125.97 325 PKP	43 25.70 0.7				
	eS	43 04.00	LRM	129.23 332 ePKP	43 32.50 1.3				
	eSS	47 08.00	PNT	129.42 339 ePKP	43 33.00 1.9				
WIT	60.88 340 eP	34 36.50 1.2	BW06	129.91 327 PKP	43 32.40 -0.1				
LSA	62.04 54 P	34 43.00 -1.2	ANMO	132.83 317 PKP	43 38.90 0.6				
NUR	64.00 354 eP	34 55.00 -1.0	ALO	132.84 317 ePKP	43 38.60 0.3				
UPP	64.37 350 iPd	34 52.70 -5.7X		Z	20s	0.80um			
	i	35 33.40	KVN	137.07 330 PKP	43 47.10 0.9				
	iS	43 40.00	TNP	137.35 328 PKP	43 48.50 1.7				
HFS	65.38 348 eP	35 03.50 -1.5	CMB	138.99 331 ePKP	43 50.20 0.6				
	1.1s	49.20nm	GSC	139.15 325 ePKP	43 52.00 2.0				
Z	17s	0.41um	CLC	139.23 326 ePKP	43 52.00 1.9				
	LR	00 49.00	FRI	139.47 329 ePKP	43 52.40 2.0				
SNG	65.39 81 eP	35 05.10 -0.7	TPC	139.54 323 ePKP	43 53.00 2.3				
IPM	65.52 84 ePd	35 07.10 0.3	ISA	139.82 327 ePKP	43 53.00 1.8				
	1.0s	105.30nm	SBB	140.17 325 ePKP	43 54.00 2.2				
CHG	65.70 68 ePd	35 06.90 -0.9	RVR	140.41 324 ePKP	43 53.00 0.8				
	1.4s	45.35nm		S.D. = 1.1 on 187 of 194 obs.					
WMO	65.78 39 iPd	35 07.50 -0.5							
	7.0s	1000.00nm							
Z	17s	1.39um							
	pP	35 11.70							
	PcP	35 36.00							
	ScS	45 05.00							
SUF	66.03 355 iPd	35 09.00 -0.1							
	1.0s	100.90nm							
NST	66.19 71 eP	35 11.00 0.1							
EKA	66.46 337 P	35 12.00 0.0							
	1.2s	14.10nm							
NB2	66.73 347 P	35 12.80 -0.9							

15d 17h

SSF 20.74 309 eP 20 19.90 -2.6
0.8s 8.05nm 4.2mb
MAIO 26.04 80 eP 21 15.00 0.6
BCAO 32.48 196 ePc 22 13.20 1.1
0.5s 3.00nm 4.5mb
S.D. = 1.5 on 27 of 32 obs.

* MAY 15, 1990 17h 19m 22.04 ± 0.55s
29.178 N ± 11.2km 76.730 E ± 8.5km
DEPTH = 33.0km (normal)
4.1mb (3 obs.)

NORTHERN INDIA (308)
MD 3.8 (NDI).

NDI 0.65 139 iPg 19 35.00 0.2
DMN 7.54 100 P 21 12.60 -0.1
0.3s 9.00nm 5.3mb X
PKI 7.81 100 P 21 15.40 -1.2
0.3s 13.00nm 5.5mb X
GUN 8.15 97 P 21 20.60 -0.7
QUE 8.57 279 eP 21 27.70 0.8
eS 22 52.60
HYB 11.83 171 eP 22 10.00 -1.4
eS 24 10.00
CHTO 22.73 112 e(P) 24 24.90 2.5
NUR 46.57 327 iP 27 48.00 -0.2
SUF 46.66 331 eP 27 49.00 0.1
HFS 51.80 325 eP 28 27.70 -0.9
0.5s 1.20nm 4.1mb
NB2 53.12 326 P 28 37.30 -1.2
0.5s 0.80nm 3.9mb
WB5 73.94 124 eP 30 56.00 -0.1
WRA 73.96 124 Pc 30 57.50 1.3
YKA 88.20 5 eP 32 11.50 0.8
0.6s 1.00nm 4.3mb
S.D. = 1.2 on 14 of 14 obs.

? MAY 15, 1990 18h 25m 11.83 ± 1.14s
31.442 S ± 14.3km 68.641 W ± 10.4km
DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL 0.18 53 ePc 25 18.80 0.4
CFA 0.38 116 eP 25 20.00 -0.7
iS 25 22.90
RTCV 0.43 168 ePd 25 22.00 0.6
S 25 35.00
RTBS 0.73 252 eP 25 25.30 -0.3
S 25 40.80
S.D. = 1.1 on 4 of 4 obs.

MAY 15, 1990 18h 31m 39.68 ± 0.16s
1.158 N ± 3.2km 123.869 E ± 3.9km
DEPTH = 29.7km (4 depth phases)
5.6mb (37 obs.) 5.6Msz (19 obs.)
MINAHASSA PENINSULA (265)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 34C
Centroid Location:
Origin Time 18:31:42.4 0.3
Lat 1.19N 0.04 Lon 123.29E 0.05
Dep 15.0 FLX Half-duration 3.8
Moment Tensor: Scole 10**17 Nm
Mrr= 9.38 0.36 Mtl=-6.31 0.36
Mff=-3.07 0.49 Mrl=-3.94 1.40
Mrf=-5.00 1.16 Mlf=-3.62 0.36
Principal Axes:
T Vol= 11.52 Plg=71 Azm=118
N -1.00 8 231
P -10.52 17 323
Best Double Couple: Mo=1.1*10**18
NP1: Strike= 65 Dip=29 Slip= 106
NP2: 227 63 81

MNI 1.01 74 iPc 31 58.50 0.7
eS 32 14.40
DAV 6.13 16 ePd- 33 11.50 0.8
1.0s 1368.00nm 6.6mb
AAI 6.47 138 eP 33 17.00 1.6
0.5s 96.00nm 5.9mb
TSM 6.54 298 ePd 33 16.00 -0.4
0.3s 104.70nm 6.1mb
BKB2 7.37 251 iPc 33 38.50 10.4X
MKS 7.71 215 iPc 33 36.50 3.7X
KKM 9.05 303 ePc 33 51.00 -0.5
e 34 07.00

KHKI 12.54 221 eS 34 22.50
ePd 34 42.70 3.7X
e 43 40.00
TRT 14.25 232 ePc 35 03.30 1.7
0.9s 54.70nm 5.2mb
BAG 15.50 348 ePd- 35 17.00 -1.1
eS 39 15.00
MTN 15.67 153 iPd 35 19.90 -0.2
KNA 17.48 164 eP 35 43.00 -0.1
1.0s 833.00nm 5.8mb
KGM 20.56 273 ePc 36 18.90 0.1
MNDI 21.05 110 eP 36 25.00 0.9
KLM 22.29 275 eP 36 41.00 4.7X
OIZ 22.46 323 Pd 36 37.50 -0.4
N 15s 23.00um
sP 36 50.50
SS 41 22.00
MBL 22.53 190 eP 36 37.00 -1.6
0.6s 67.00nm 5.3mb
HKC 23.04 337 iP 36 44.00 0.5
iS 41 00.00
IPM 23.06 279 ePd 36 37.00 -6.9X
0.9s 99.00nm 5.3mb
e 37 11.00 175kmX
WB5 23.31 154 iPc 36 45.20 -1.0
eS 40 57.00
WRA 23.35 154 Pc 36 47.40 0.8
0.8s 301.80nm 5.9mb
PPI 23.53 266 eP 36 51.00 2.7
1.0s 346.60nm 5.8mb
GZH 24.08 336 Pd 36 54.00 0.4
6.0s 6000.00nm 6.3mb X
Z 18s 22.30um 5.7Msz
N 14s 12.40um
E 13s 8.70um
GUMO 24.17 58 eP 36 54.50 -0.1
0.8s 163.98nm 5.6mb
eS 41 06.00
GUA 24.19 58 eP 36 55.00 0.2
Z 17s 5.43um 5.1MszX
OZH 24.19 348 iPd 36 55.00 0.3
6.0s 5000.00nm 6.2mb X
Z 22s 14.30um 5.4Msz
E 16s 6.10um
LAT 24.36 109 eP 36 59.00 2.6
NANU 24.94 199 iPd 37 01.40 -0.5
0.5s 69.00nm 5.5mb
PSI 24.98 274 eP 37 04.00 1.6
1.1s 330.20nm 5.9mb
TSI 25.39 276 ePd 37 09.00 2.7
PMG 25.46 115 iPc 37 07.00 0.1
1.1s 278.48nm 5.8mb
NNT 26.48 296 iPd 37 16.40 0.0
OIS 26.52 145 iPc 37 16.40 -0.3
LOE 27.10 308 iPd 37 22.00 -0.1
NST 27.50 303 eP 37 26.00 0.3
MEKA 28.09 190 eP 37 29.20 -1.7
RAB 28.78 101 iP+ 37 38.00 0.7
iS 42 30.00
BDT 29.22 305 ePd 37 41.20 0.0
1.0s 75.90nm 5.4mb
SSE 29.88 355 eP 37 47.00 0.0
Z 20s 7.40um 5.3Msz
N 15s 3.50um
E 15s 3.30um
S 42 40.00
CHG 30.09 307 ePd 37 49.00 0.0
1.1s 69.62nm 5.4mb
eS 42 50.00
GYA 30.11 328 iPd 37 50.00 0.7
N 15s 10.10um
E 15s 9.50um
pP 38 00.00 35km
PP 38 46.00
S 42 42.00
ScS 48 25.00
CTA 30.45 135 iPc+ 37 52.10 -0.1
1.0s 68.00nm 5.4mb
iS 43 02.00
WHN 30.59 344 Pd 37 53.50 0.3
6.0s 1500.00nm 6.0mb X
Z 20s 10.70um 5.5Msz
N 15s 10.90um
E 16s 7.00um
S 42 54.00
NJ2 31.09 352 Pd 37 58.00 0.4
6.5s 1100.00nm 5.8mb X

Z 18s 3.60um 5.1Msz
N 15s 5.40um
E 13s 1.60um
S 43 00.00
MRWA 31.13 193 iPd 37 56.70 -1.3
0.8s 55.00nm 5.4mb
KMI 31.37 321 Pd 38 01.50 1.0
2.5s 400.00nm 5.8mb
Z 18s 14.20um 5.7Msz
N 14s 2.80um
E 16s 6.80um
iS 43 10.00
COOL 31.97 184 eP 38 03.00 -2.4
FORR 32.08 173 eP 38 05.50 -0.9
0.4s 55.00nm 5.8mb
BAL 32.32 192 iPd 38 07.00 -1.4
KLB 33.08 190 iPd 38 13.90 -1.2
0.6s 58.00nm 5.7mb
QLP 33.86 146 eP 38 22.00 0.1
TIA 35.43 351 P 38 34.00 -1.3
Z 40s 12.00um 5.3MszX
E 12s 2.90um
S 44 06.50
XAN 35.58 338 Pd 38 36.00 -0.6
6.0s 1400.00nm 6.1mb X
N 16s 15.40um
E 14s 5.20um
S 44 05.00
RKG 35.63 190 eP 38 40.00 3.0X
RMO 36.49 141 eP 38 44.00 -0.4
HNR 37.44 107 eP 38 52.00 -0.4
MTMJ 37.54 19 P 38 53.90 0.8
DL2 37.62 357 eP 38 53.00 -0.6
6.0s 1300.00nm 6.0mb X
Z 20s 4.20um 5.2Msz
N 14s 4.50um
MAT 37.63 19 eP 38 52.00 -1.8
1.8s 427.27nm 6.0mb
Z 21s 7.53um 5.5Msz
eS 44 13.00
TIY 37.87 345 eP 38 55.00 -0.9
Z 22s 11.70um 5.6Msz
N 16s 10.90um
sP 39 13.00
ADE 38.53 160 iPc+ 39 02.00 0.6
1.0s 400.00nm 6.2mb
CMS 38.58 149 iPd 39 02.90 1.1
BJI 39.33 351 eP 39 07.00 -0.9
5.0s 810.00nm 5.7mb X
Z 32s 10.60um 5.5MszX
N 16s 3.62um
eS 45 00.00
LZH 39.41 334 iPd 39 10.50 1.6
6.0s 2040.00nm 6.1mb X
Z 20s 14.60um 5.8Msz
N 14s 4.30um
E 14s 4.10um
pP 39 19.00 29km
sP 39 25.50
PP 40 38.00
S 45 04.00
eSS 47 48.00
BRS 39.73 138 iP 39 11.10 -0.4
e 39 18.50 25km
e 40 45.00
SNY 40.49 360 iPd 39 16.00 -1.4
6.5s 800.00nm 5.6mb X
Z 25s 14.20um 5.7MszX
N 16s 3.40um
E 16s 6.30um
pP 39 28.50 46kmX
HHC 41.05 346 Pd 39 22.00 -0.3
N 15s 6.10um
E 17s 3.20um
BTO 41.22 344 iPd 39 23.50 -0.2
N 15s 7.60um
E 14s 6.40um
pP 41 05.00
S 45 38.00
COO 41.32 142 iPc 39 26.50 1.9
BFD 41.89 157 eP 39 29.00 0.0
e 40 57.00 467kmX
LSA 42.12 315 iP 39 32.00 0.4
S 45 50.00
CN2 42.48 2 Pd 39 32.00 -1.8
Z 25s 11.00um 5.6MszX
N 14s 3.00um

Z	10s		4.50um						IPM	31.39	178	ePc	36	22.20	0.2				i	40	19.40	14km
		S	34	50.00						1.1s	41.80nm			5.2mb		DAG	61.26	347	iPc	40	13.40	-2.3
	11.18	168	Pd	32	41.00	-0.9	MRRJ	32.09	66	eP	36	26.20	-1.7				1.0s	27.00nm			5.3mb	
	2.0s	100.00nm					MAIO	32.61	283	iPc	36	34.60	2.0			PTJ	61.48	308	eP	40	17.80	0.1
Z	20s	9.70um					KOD	32.95	224	eP	36	36.80	0.8			ZAG	61.49	308	iP	40	18.10	0.4
		eS	34	48.00			ASAJ	33.19	63	eP	36	37.40	0.0			KHC	61.67	312	iPc	40	19.50	0.6
	12.24	313	iPc	32	53.80	-2.3	PSI	33.27	182	eP	36	38.00	-0.3				1.2s	16.00nm			5.1mb	
		S	35	10.00			HOOJ	33.73	66	eP	36	42.90	0.8				N	18s	1.40um			5.2MsZ
	13.13	111	eP	33	04.00	-3.8X	KUSJ	34.73	65	eP	36	50.60	-0.2			E	18s	0.50um				
Z	10s	12.10um					TAB	42.45	289	eP	37	57.00	1.5									
E	10s	15.50um					BRF	43.19	271	iP	38	02.70	1.3			KMR	61.76	311	iP+	40	20.10	0.6
		eS	35	30.00				0.7s	117.00nm			5.7mb			VBY	62.09	308	ePc	40	22.00	0.3	
	13.24	68	Pd	33	08.00	-1.3	BJA	43.20	271	iP	38	02.90	1.4			WET	62.09	312	iPc	40	21.80	0.1
	1.0s	74.00nm						0.6s	107.00nm			5.8mb					1.3s	48.00nm			5.5mb	
	13.75	85	eP	33	12.90	-3.1X	TRT	45.14	162	ePd	38	17.40	0.2			HOF	62.21	314	eP	40	22.60	0.1
	1.1s	100.00nm					RYD	47.00	272	iPc	38	31.70	-0.3				1.0s	33.00nm			5.5mb	
Z	14s	7.50um					KAS	50.89	297	iPd	39	03.20	1.4			MOX	62.23	314	eP	40	22.00	-0.6
E	12s	7.50um					SOD	50.94	331	iP	39	01.50	-0.3				1.4s	49.00nm			5.5mb	
	14.58	240	Pd	33	24.10	-3.2X	SUF	51.41	325	iP	39	05.60	0.3			HVAR	62.27	305	eP	40	21.90	-1.0
	15.11	240	Pd	33	31.80	-2.5		0.5s	15.10nm			5.2mb			LJU	62.33	308	eP	40	23.00	-0.3	
	15.30	241	Pd	33	34.20	-2.5	BBTK	52.09	296	iPc	39	12.00	1.0			CEY	62.52	308	eP	40	24.40	-0.2
	16.04	99	Pd	33	43.00	-2.9	HRI	52.14	287	iPc	39	12.00	0.5			BHG	62.67	311	eP	40	26.30	0.7
Z	12s	3.20um					CSTJ	52.25	284	Pd	39	12.00	-0.3				0.2s	70.00nm			6.6mb X	
	17.26	184	iPc	34	04.20	2.7	MDSJ	52.38	285	Pc	39	13.00	-0.2			GRF	62.85	313	iPc	40	27.40	0.7
	0.8s	179.10nm					NUR	52.38	323	iP	39	12.60	-0.1				1.2s	88.00nm			5.8mb	
	17.29	74	eP	34	01.30	-0.4		0.9s	65.90nm			5.6mb			TRI							

RRX	66.62	310	P	40	50.13	-1.2	EROO	73.83	309	eP	41	35.70	0.5	eSg	01	22.70	
MRWA	66.68	165	iPd	40	52.00	0.4	ECRI	74.63	312	eP	41	41.30	1.5		01	13.50	-0.1
DIX	66.76	311	ePc	40	52.70	0.2	ETOR	75.38	310	eP	41	44.50	0.3		01	25.90	
PCP	66.78	309	P	40	51.57	-0.8	SIT	76.09	28	ePc	41	48.70	1.0	S.D. = 0.3	on	4 of	4 obs.
EMS	67.05	311	ePc	40	54.40	0.1	EALH	76.68	307	eP	41	52.50	1.0				
FIN	67.15	309	P	40	52.90	-1.8	GUD	76.77	311	eP	41	53.00	0.8				
LSD	67.21	310	P	40	55.67	0.3	EVIA	76.92	308	eP	41	54.50	1.5				
RSP	67.29	310	P	40	53.41	-2.3	TOL	77.16	310	iPc	41	55.50	1.4				
ROB	67.32	309	P	40	54.75	-1.1		1.0s	160.00nm			6.0mb					
LPG	67.44	311	iPc	40	57.30	0.5	RMO	77.33	136	iPc	41	56.30	1.2				
	0.8s	52.45nm			5.8mb			0.7s	131.00nm			6.1mb					
PGF	67.44	307	iPc	40	57.00	0.4	YKA	77.84	16	eP	41	57.10	-0.3				
	0.8s	34.90nm			5.6mb			0.8s	19.60nm			5.2mb					
LPL	67.44	311	iPc	40	57.20	0.4	EPLA	78.30	311	eP	42	02.00	1.6				
IMI	67.50	309	P	40	56.90	0.0	ASMO	78.47	308	iPd	42	01.50	0.0				
QIS	67.62	140	iPc	40	56.30	-1.5	ACHM	78.67	308	iPd	42	02.60	0.0				
	1.0s	45.00nm			5.6mb		APHE	78.67	307	iPd	42	03.00	0.3				
ENR	67.64	309	P	40	55.87	-2.0	AAPN	78.74	308	iPd	42	03.00	0.0				
STV	67.69	309	P	40	56.08	-2.1	ALQJ	78.85	308	iPc	42	03.00	-0.6				
RRL	67.70	310	P	40	58.03	-0.4	ATEJ	78.90	308	iPd	42	03.80	-0.2				
BNI	67.70	310	P	40	56.90	-1.4	ADE	79.34	149	iPc	42	07.10	1.1				
PMR	67.78	29	ePc	40	57.80	-0.5		0.5s	140.85nm			6.2mb					
	0.8s	78.80nm			5.9mb		EPRU	79.65	308	eP	42	08.20	0.4				
SBF	67.81	309	iPc	40	58.70	-0.2	FRB	80.07	355	eP	42	09.00	-0.5				
	0.8s	83.30nm			6.0mb		EJIF	80.12	308	eP	42	11.00	0.7				
AKU	67.94	337	iP	41	01.00	1.8	EVAL	80.23	100	eP	42	12.00	1.1				
	1.1s	30.38nm			5.4mb		BCAO	80.61	269	iPc	42	13.50	0.2				
EKA	67.96	323	Pd	40	59.60	0.1		0.8s	70.00nm			5.7mb					
	1.0s	31.20nm			5.4mb							15km					
BAL	68.17	165	eP	41	00.50	-0.5	NKM	80.69	307	iP	42	13.50	0.2				
LOR	68.31	313	iPc	41	01.20	-0.7	BFD	82.86	147	eP	42	25.00	0.6				
	0.9s	14.75nm			5.2mb		AVE	83									

MTMJ	43.59	345	P	32	17.70	0.6	Z	40s	1.80um	4.9MszX	NDI	26.27	42	eP	41	45.50	1.8			
NIJ	43.94	347	P	32	19.70	0.0			pP	34	43.00	85km	MAIO	26.35	4	iPc	41	46.00	1.4	
HKC	44.91	309	iP	32	30.20	2.4			eS	42	20.00			0.8s	16.47nm			4.8mb		
SSE	45.88	325	P	32	35.50	0.2	DRV	61.33	185	eP	34	28.80	0.6	SLY	27.85	339	ePKPd	41	54.00	-4.1X
	1.4s	140.00nm			5.7mb		GTA	64.57	319	P	34	50.60	0.3	MBH	28.99	316	e(P)	42	11.00	2.6
Z	20s	1.10um			4.8Msz			0.8s	20.00nm			5.1mb		PRNI	29.27	317	eP	42	18.00	7.0X
E	16s	0.50um					LSA	66.63	306	eP	35	03.00	-1.1	DMN	31.36	52	P	42	31.00	1.1
		pP	33	56.00	85km		GUN	70.39	302	P	35	25.50	-1.7	PKI	31.58	52	P	42	32.40	0.5
		sP	33	09.00				0.5s	23.00nm			5.3mb			1.0s	24.00nm			5.1mb	
		S	39	08.00			PKI	70.68	302	P	35	27.90	-1.1	GUN	32.11	52	P	42	37.40	0.8
		sS	39	51.00				0.4s	4.00nm			4.7mb			1.2s	92.00nm			5.6mb	
GZH	45.98	310	iPc	32	38.60	2.4	DMN	70.95	302	P	35	29.40	-1.2	CHG	40.98	73	eP	43	52.50	1.1
OIZ	46.73	303	eP	32	39.00	-3.2X		0.5s	14.00nm			5.1mb		WMO	42.73	32	eP	44	05.50	0.0
NJ2	47.94	323	Pc	32	52.00	0.5	WMO	74.65	318	P	35	51.50	-0.2			sP	44	12.50		
	3.5s	700.00nm			6.0mb X			pP	36	14.50	88km			MLR	44.65	328	eP	44	23.00	1.9
Z	20s	0.50um			4.5Msz			PP	38	40.00				KMI	45.44	64	eP	44	28.50	0.7
		S	39	44.00			GBA	74.73	286	P	35	50.20	-2.3	GYA	49.17	64	P	44	56.00	-0.9
		sS	40	23.00				0.9s	5.40nm			4.5mb X		VBY	50.67	322	e(P)	45	08.30	0.3
MRRJ	48.57	351	eP	32	56.90	0.8	NDI	77.95	301	eP	36	09.50	-0.9	LJU	51.38	323	e(P)	45	13.00	-0.4
WHN	49.74	319	iPc	33	07.50	2.1	SVW	78.60	24	iPc	36	13.10	-0.3	VOY	51.76	322	e(P)	45	16.20	-0.2
	1.0s	100.00nm			5.8mb		TTA	79.50	22	iPc	36	17.40	-0.9	XAN	52.70	55	P	45	24.50	0.9
Z	20s	0.60um			4.6Msz		PMS	81.17	25	ePd	36	25.10	-2.0	TIY	56.39	51	eP	45	50.00	-0.5
E	16s	0.70um					PMR	81.52	25	ePd	36	26.60	-2.2	HHC	56.60	47	eP	45	56.00	4.0X
		pP	33	28.00	83km			0.6s	5.50nm			4.6mb		CDF	56.86	322	eP	45	52.50	-1.2
		eS	40	05.00			IMA	82.11	20	eP	36	30.60	-1.4		1.0s	12.00nm			4.9mb	
		sS	40	44.00				0.9s	8.30nm			4.6mb		LBF	58.34	320	eP	46	12.80	8.7X
ASAJ	50.01	353	eP	33	06.															

16d 06h

SOH 0.41 28 ePg 27 44.20 0.3
 LIT 0.59 233 ePg 27 47.30 -0.1
 KNT 0.72 348 ePg 27 49.50 -0.5
 GRG 0.73 313 ePg 27 50.80 0.6
 eSg 28 02.80

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

* MAY 16, 1990 07h 27m 59.28 ± 2.06s
 24.462 N ± 8.8km 122.573 E ± 21.0km
 DEPTH = 55.6 ± 22.3 km
 3.7mb (2 obs.)

TAIWAN REGION (243)

TWC 0.68 283 iPd 28 13.50 0.4
 eS 28 23.10
 TWD 0.97 247 iPd 28 15.80 -1.1
 TWZ 1.10 305 eP 28 19.70 1.0
 eS 28 34.70
 ANP 1.20 307 eP 28 21.40 1.3
 iS 28 38.50
 TWK 2.25 238 ePc 28 34.80 0.0
 QZH 3.65 278 Pnd 28 53.00 -1.6
 Sn 29 32.00
 SSE 6.72 350 P 29 37.50 -0.1
 NJ2 8.24 337 Pc 29 57.80 -0.9
 S 31 29.60
 BJI 16.44 342 eP 31 51.50 3.9X
 CD2 17.85 295 P 32 06.40 1.1
 CN2 19.44 6 eP 32 24.00 0.1
 WB5 45.55 164 eP 36 14.40 -1.0
 WRA 45.60 164 Pc 36 18.00 2.2
 0.7s 1.10nm 3.9mb
 YKA 82.22 23 eP 40 14.40 -1.1
 0.6s 0.30nm 3.5mb
 S.D. = 1.3 on 13 of 14 obs.

& MAY 16, 1990 08h 52m 40.60s
 40.505 N 121.562 W
 DEPTH = 4.0km
 NORTHERN CALIFORNIA (36)
 <BRK>. ML 2.6 (BRK).

M1N 0.16 192 iPc 52 43.30 -0.7
 iS 52 45.90
 LTCM 0.52 236 eP 52 50.50 -0.5
 WDC 0.75 276 iPc 52 54.20 -1.4
 eS 53 04.10
 ORV 0.95 177 eP 52 57.20 -2.1
 e 53 10.40
 KVN 3.04 117 eP 53 30.00 -0.5
 5 obs. associated

& MAY 16, 1990 09h 03m 08.33s
 58.401 N 154.212 W
 DEPTH = 86.8km
 ALASKA PENINSULA (12)
 <AGS-P>.

CDD 0.61 29 iP 03 23.14 -0.8
 iS 03 34.47
 MCNL 0.79 355 iP 03 24.82 -0.9
 eS 03 37.47
 AUL 1.06 22 iP 03 28.14 -0.7
 KDC 1.12 125 iPc 03 28.40 -1.1
 CNPM 1.91 53 eP 03 38.37 -1.4
 eS 04 01.39
 RED 2.15 19 iP 03 41.79 -1.3
 RDT 2.37 22 eP 03 44.31 -1.7
 NKA 2.79 32 eP 03 51.40 -0.4
 SVW 2.81 346 iPc 03 50.20 -1.8
 SLKM 2.94 42 eP 03 51.36 -2.4
 SEW 2.98 53 iP 03 51.47 -2.9
 SPU 3.00 20 eP 03 52.89 -1.7
 CRP 3.06 19 eP 03 54.14 -1.4
 SUA 3.53 28 eP 04 00.29 -1.8
 PMS 3.69 37 iPc 04 02.00 -2.3
 PLRM 4.09 36 eP 04 06.67 -3.1
 PMR 4.09 36 iPd 04 06.90 -2.8
 GHO 4.29 36 eP 04 09.55 -3.1
 GLI 4.38 52 eP 04 09.63 -4.2
 SML 4.51 38 eP 04 11.96 -3.7
 VZW 4.70 52 eP 04 14.52 -3.8
 FBA 7.20 22 ePd 04 48.80 -3.9
 PCA 7.35 71 eP 04 51.91 -3.1
 BCPM 7.65 72 eP 04 55.60 -3.3
 HQN 8.01 76 eP 05 00.31 -3.5
 25 obs. associated

? MAY 16, 1990 09h 09m 42.58 ± 2.11s
 31.959 S ± 40.2km 68.443 W ± 22.0km
 DEPTH = 100.0km (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA (137)

RTCV 0.13 320 ePc 09 57.00 -0.1
 S 10 09.30
 CFA 0.39 26 eP 09 58.00 0.1
 iS 10 10.80
 RTLL 0.63 358 iPd 09 59.60 -0.1
 RTBS 0.91 289 ePc 10 02.30 0.0
 (S) 10 18.00

S.D. = 0.1 on 4 of 4 obs.

? MAY 16, 1990 09h 41m 20.27 ± 1.07s
 31.647 S ± 38.0km 68.923 W ± 18.5km
 DEPTH = 100.0km (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA (137)

RTCV 0.39 123 e(P) 41 35.00 -0.6
 S 41 49.70
 RTBS 0.45 268 ePd 41 36.10 0.2
 S 41 48.00
 RTLL 0.50 51 iPc 41 35.80 -0.5
 CFA 0.58 86 e(P) 41 37.90 0.9
 S 41 50.50

S.D. = 1.3 on 4 of 4 obs.

% MAY 16, 1990 10h 07m 05.40 ± 0.92s
 59.339 N ± 8.2km 6.089 E ± 5.4km
 DEPTH = 5.0km (geophysicist)
 SOUTHERN NORWAY (535)
 MD 1.6 (BER).

BLS1 0.38 82 iPc 07 13.43 0.3
 eSg 07 18.74
 KMY 0.45 254 iPc 07 14.29 -0.1
 iSg 07 20.23
 ODD1 0.64 25 iP 07 17.60 -0.5
 iSg 07 26.03
 BER 1.11 340 iP 07 26.98 0.2
 iSg 07 42.75
 ASK 1.23 339 iP 07 28.60 -0.2
 iSg 07 45.27
 HYA 1.83 1 iPc 07 38.39 0.6
 iSg 08 03.39
 NRA0 3.07 61 Pn 07 55.10 -0.4
 Lg 08 38.80

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

* MAY 16, 1990 11h 12m 33.21 ± 0.62s
 32.345 N ± 11.7km 92.782 E ± 8.4km
 DEPTH = 33.0km (normal)
 4.0mb (4 obs.)

TIBET (306)

GUN 7.43 235 P 14 23.40 1.0
 PKI 7.97 235 P 14 30.60 0.6
 0.4s 16.00nm 5.5mb X
 DMN 8.16 237 P 14 32.60 0.1
 0.4s 7.00nm 5.1mb X
 GTA 9.07 37 eP 14 43.80 -1.1
 CD2 9.47 96 P 14 50.40 0.0
 LZH 9.89 65 P 15 10.50 14.2X
 Z 10s 0.30um
 GYA 13.44 112 iPd 15 42.00 -2.2
 XAN 13.62 79 eP 15 42.00 -4.5X
 BTO 16.11 54 eP 16 21.00 2.2
 HHC 17.28 55 eP 16 34.00 0.4
 BJI 20.35 61 eP 17 11.50 2.2
 GBA 23.35 220 Pc 17 44.50 5.0X
 0.5s 2.00nm 3.9mb
 HFS 57.24 324 eP 22 18.10 -1.3
 0.5s 1.70nm 4.3mb
 Z 16s 0.04um 3.6mszx
 LR 47 41.00
 NB2 58.30 326 P 22 25.60 -1.2
 0.7s 1.60nm 4.2mb
 WRA 65.46 137 Pd 23 15.00 -0.3
 0.2s 42.40nm 6.2mb X
 YKA 82.96 12 eP 24 55.50 -0.3
 0.8s 0.40nm 3.6mb
 S.D. = 1.4 on 13 of 16 obs.

MAY 16, 1990 11h 49m 03.06 ± 0.74s
 39.899 N ± 6.4km 21.448 E ± 6.7km

DEPTH = 5.0km (geophysicist)
 GREECE (364)
 ML 2.6 (THE).

LIT 0.83 76 ePg 49 20.20 0.7
 eSg 49 34.20
 FNA 0.89 356 ePg 49 20.20 -0.4
 eSg 49 34.30
 IGT 0.93 247 ePg 49 21.40 0.0
 eSg 49 35.70
 AGG 1.11 142 ePb 49 24.10 -0.3
 eSb 49 40.60
 GRG 1.28 34 ePbc 49 26.80 -0.5
 eSb 49 47.30
 OHR 1.31 338 ePn 49 28.20 0.4
 VAY 1.66 31 ePn 49 36.50 3.6X
 S.D. = 0.6 on 6 of 7 obs.

& MAY 16, 1990 11h 49m 27.00s
 36.645 N 121.312 W
 DEPTH = 7.0km
 CENTRAL CALIFORNIA (39)
 <BRK>. ML 2.9 (BRK).

SAO 0.16 318 iPc 49 30.10 -0.4
 LLA 0.30 95 iPc 49 32.80 -0.3
 iS 49 37.50
 PRS 0.32 189 iPd 49 33.30 -0.1
 GCC 0.67 305 ePc 49 39.40 -1.1
 PRI 0.72 134 iPc 49 40.90 -0.6
 ARN 0.72 346 iPc 49 41.20 -0.3
 MHC 0.74 339 ePd 49 41.50 -0.3
 eS 49 53.10
 PHAM 1.09 137 eP 49 47.00 -0.8
 PKEM 1.13 121 iPc 49 49.00 0.5
 FRI 1.33 74 ePc 49 50.20 -1.7
 iS 50 07.60
 BKS 1.43 329 e(P) 49 53.10 -0.3
 CMB 1.57 28 iPc 49 54.30 -1.1
 eS 50 12.70
 KVN 3.50 46 eP 50 27.00 3.9
 13 obs. associated

* MAY 16, 1990 11h 59m 45.39 ± 1.23s
 66.023 N ± 9.1km 6.376 E ± 16.3km
 DEPTH = 33.0km (normal)
 NORWEGIAN SEA (642)
 MD 3.6 (BER).

MOL 3.51 171 iPd 00 39.51 0.7
 eS 01 18.25
 LOF 3.51 50 iP 00 39.04 0.1
 eS 01 15.81
 HYA 4.88 181 iPd 00 58.00 -0.3
 eS 01 50.56
 SUE 5.04 189 iP 01 01.36 0.8
 eS 01 54.50
 ASK 5.59 186 iPd 01 08.51 0.2
 eS 02 04.91
 ASK 5.59 186 eP 01 08.35 0.1
 NRA0 5.79 154 Pn 01 10.60 -0.6
 Sn 02 13.70
 ODD1 6.14 179 eP 01 15.83 -0.3
 eS 02 18.65
 BLS1 6.66 178 eP 01 22.99 -0.5
 eS 02 33.89
 HFS 6.78 147 eP 01 25.60 0.6
 0.3s 9.00nm 5.1mb
 KMY 6.86 185 iP 01 25.57 -0.6
 eS 02 36.21
 KTK1 7.12 58 eP 01 29.92 0.2
 eS 02 40.96
 KEV 8.61 55 iP 01 50.20 -0.3
 eS 03 21.00

S.D. = 0.5 on 13 of 13 obs.

& MAY 16, 1990 12h 00m 22.47s
 60.093 N 152.562 W
 DEPTH = 88.1km
 SOUTHERN ALASKA (2)
 <AGS-P>.

RED 0.34 342 iP 00 35.40 -0.8
 eS 00 46.24
 RDT 0.49 9 iP 00 36.34 -0.9
 CNPM 0.88 130 eP 00 39.85 -1.1
 iS 00 54.05

NKA	0.93	45	iP	00 42.54	-1.1
SPU	1.12	13	iP	00 43.25	-0.6
			iS	00 58.95	
CRP	1.19	9	eP	00 44.53	-0.3
SLKM	1.24	69	iP	00 44.44	-0.8
CDD	1.29	206	eP	00 44.27	-1.6
SEW	1.56	88	eP	00 47.54	-1.7
			eS	01 07.46	
SUA	1.64	32	eP	00 50.27	-0.2
			eS	01 12.09	
SVW	1.82	305	iPd	00 51.20	-1.6
PMS	1.88	51	iPd	00 53.10	-0.4
SKT	1.96	14	eP	00 53.75	-0.9
PWA	2.04	39	iPd	00 55.40	-0.3
PLRM	2.25	47	eP	00 57.03	-1.5
PMR	2.25	47	iPd	00 57.30	-1.3
KDC	2.35	179	iPd	00 56.90	-3.0
GHO	2.45	45	eP	00 59.77	-1.5
			eS	01 29.22	
CUT	2.57	25	eP	01 02.69	-0.2
SML	2.69	48	eP	01 02.92	-1.6
GLI	2.82	71	eP	01 02.78	-3.5
VZW	3.12	69	eP	01 07.45	-3.0
VLZ	3.24	69	eP	01 09.31	-2.8
TTA	3.29	331	iP	01 11.40	-1.5
KLU	3.55	64	iP	01 13.72	-2.7
TOA	3.70	54	iPd	01 17.20	-1.3
26 obs. associated					
& MAY 16, 1990 12h 26m 48.86s					
61.964 N 149.576 W					
DEPTH = 46.2km					
SOUTHERN ALASKA (2)					
<AGS-P>. ML 3.2 (PMR).					
PWA	0.35	205	iPd	26 58.00	-0.1
GHO	0.36	122	iP	26 57.83	-0.6
			eS	27 05.38	
PLRM	0.43	150	iP	26 58.02	-1.0
			iS	27 06.37	
PMR	0.43	150	iPc	26 58.20	-0.8
CUT	0.55	324	iP	27 00.05	-0.5
			eS	27 08.72	
SML	0.61	104	iP	27 00.46	-0.9
PMS	0.72	179	iPc	27 02.30	-0.6
SUA	0.75	228	eP	27 02.93	-0.4
			eS	27 14.73	
SKT	0.92	272	iP	27 04.87	-0.8
HUR	1.02	358	eP	27 07.88	0.9
			eS	27 20.76	
NCA	1.30	87	iP	27 10.56	-0.4
			eS	27 27.56	
CRP	1.42	242	eP	27 12.08	0.2
SPU	1.42	238	eP	27 12.59	-0.1
			iS	27 31.73	
RND	1.49	13	eP	27 13.13	-0.5
SLKM	1.49	192	eP	27 13.58	-0.1
TOA	1.61	83	iPc	27 15.80	0.4
GLI	1.61	131	eP	27 15.04	-0.3
			eS	27 35.55	
VZW	1.71	121	eP	27 16.42	-0.3
			eS	27 38.19	
KTH	1.71	339	eP	27 16.51	-0.3
VLZ	1.76	117	eP	27 16.72	-0.7
KLU	1.80	104	iP	27 17.53	-0.6
			eS	27 40.16	
RDT	1.95	226	eP	27 19.56	-0.7
PAX	2.16	60	eP	27 23.52	0.4
RED	2.19	226	eP	27 23.18	-0.4
GLB	2.80	98	eP	27 31.09	-1.2
SVW	3.02	256	eP	27 34.40	-1.0
FBA	3.05	14	iPc	27 35.10	-0.7
TTA	3.14	291	iPc	27 36.40	-0.8
28 obs. associated					
MAY 16, 1990 12h 32m 26.75 ± 0.22s					
46.979 N ± 2.4km 10.226 E ± 2.0km					
DEPTH = 5.0km (geophysicist)					

16d 12h

FLN 7.42 288 Pn 34 16.80 -1.5
 GRR 7.61 285 Pn 34 19.20 -1.8
 S.D. = 1.1 on 100 of 108 obs.

? MAY 16, 1990 12h 33m 54.50±15.58s
 42.375 N ±81.0km 24.391 E ±103.3km
 DEPTH = 5.0km (geophysicist)
 BULGARIA (359)

SRS 1.39 206 ePb 34 22.00 1.4
 eSb 34 44.28
 VAY 1.72 233 ePn 34 25.00 -0.2
 SOH 1.74 207 ePb 34 24.40 -1.1
 eSb 34 54.60
 GRG 2.06 227 ePb 34 30.20 0.0
 OUR 2.06 189 ePn 34 36.00 5.8X
 eSn 35 06.80
 SKO 2.23 261 ePn 34 32.80 0.1
 S.D. = 1.3 on 5 of 6 obs.

? MAY 16, 1990 12h 39m 55.36±3.36s
 61.940 N ±15.7km 4.593 E ±30.3km
 DEPTH = 5.0km (geophysicist)
 SOUTHERN NORWAY (535)
 MD 2.1 (BER).

SUE 0.89 175 iP 40 12.99 0.1
 iSg 40 25.65
 HYA 1.09 135 eP 40 16.32 0.1
 iS 40 32.78
 eSg 40 43.41
 MOL 1.52 64 iPc 40 23.22 0.0
 iSg 40 44.19
 BLS1 2.78 156 iP 40 41.31 -0.2
 NRA0 3.56 107 Pn 40 57.20 4.8X
 Sn 41 31.70
 Lg 41 51.80
 S.D. = 0.3 on 4 of 5 obs.

* MAY 16, 1990 13h 07m 37.68±2.20s
 15.684 N ±27.6km 98.357 W ±8.1km
 DEPTH = 16.9km (3 depth phases)
 4.0mb (4 obs.)
 OFF COAST OF GUERRERO, MEXICO (65)

ACX 1.86 309 iPc 08 08.50 -0.6
 iS 08 32.80
 OXX 2.10 48 iPc 08 12.75 0.1
 iS 08 42.63
 III 2.88 338 iP 08 25.00 1.2
 iS 09 02.18
 IIT 3.32 1 eP 08 33.31 3.2X
 eS 09 16.00
 PSM 3.34 72 iP 08 31.51 1.2
 (S) 09 26.91
 UNM 3.71 348 (P) 08 42.50 6.7X
 EVV 3.98 46 eP 08 38.00 -1.3
 IJJ 4.24 342 (P) 08 46.00 2.6X
 (S) 09 42.50
 TUL 20.27 6 e(P) 12 12.30 -2.9X
 1.0s 6.70nm 3.9mb
 ALQ 20.51 341 eP 12 17.50 -0.4
 1.0s 8.25nm 4.1mb
 ANMO 20.51 341 ePd 12 18.20 0.3
 e 12 23.00 18km
 RSCP 22.90 28 eP 12 41.00 -0.7
 pP 12 46.00 18km
 GOL 24.70 347 ePd 13 00.90 1.4
 iPP 13 05.10 15km
 BW06 28.66 343 eP 13 35.60 -0.3
 PNT 37.76 337 eP 14 55.00 0.5
 YKA 48.14 350 eP 16 17.30 -1.2
 0.7s 1.00nm 4.0mb
 INK 57.17 345 eP 17 25.00 -0.7
 MBC 61.57 354 eP 17 56.50 0.6
 0.7s 3.00nm 4.6mb
 S.D. = 1.0 on 14 of 18 obs.

MAY 16, 1990 13h 13m 25.98±0.50s
 16.166 N ±7.3km 98.225 W ±4.4km
 DEPTH = 18.5km (3 depth phases)
 4.8mb (22 obs.)
 NEAR COAST OF GUERRERO, MEXICO (58)

OXX 1.70 57 iPc 13 57.99 2.8
 eS 14 20.41
 ACX 1.72 294 iP 13 52.29 -2.9
 eS 14 16.06
 III 2.50 332 iP 14 06.80 0.2
 IIT 2.84 358 iP 14 12.70 1.2
 eS 14 52.00
 PSM 3.10 80 iP 14 15.39 0.3
 (S) 15 08.51
 UNM 3.28 344 (P) 14 24.50 6.7X
 EVV 3.57 50 iPd 14 21.60 0.0
 (S) 15 27.18
 IJJ 3.83 338 (P) 14 22.50 -3.3X
 (S) 15 24.00
 LVVM 3.93 25 (P) 14 26.00 -0.8
 SCX 5.39 83 (P) 14 56.00 8.5X
 UYO 18.24 10 iPc 17 37.70 -2.2
 MEO 18.54 359 e(P) 17 43.30 -0.3
 TUL 19.78 6 eP 17 56.00 -2.2
 1.0s 16.70nm 4.3mb
 ALQ 20.10 340 eP 18 01.30 -0.5
 1.0s 39.25nm 4.7mb
 ANMO 20.11 340 P 18 02.40 0.6
 0.8s 24.63nm 4.6mb
 PWLA 20.83 24 P 18 09.00 -0.1
 RSCP 22.41 28 P 18 24.50 -0.5
 0.8s 188.30nm 5.6mb
 GLA 22.54 321 eP 18 27.00 0.7
 FVM 22.80 16 P 18 27.70 -1.1
 PRM 22.85 36 P 18 29.20 -0.1
 GBTN 23.10 30 P 18 31.10 -0.7
 TKL 23.31 31 P 18 33.60 -0.2
 BAR 23.44 318 eP 18 36.00 0.9
 JSC 23.62 37 P 18 36.50 -0.3
 PLM 24.00 319 eP 18 42.00 1.3
 e 18 48.00 21km
 TPC 24.00 321 eP 18 42.00 1.4
 LHS 24.02 37 P 18 41.20 0.5
 GOL 24.26 346 iPc 18 44.40 1.1
 iPP 18 49.40 18km
 GLD 24.28 347 P 18 45.10 1.7
 1.3s 90.23nm 5.2mb
 RVR 24.74 319 eP 18 49.00 1.3
 GSC 25.28 322 eP 18 54.00 1.1
 MWC 25.32 319 eP 18 54.00 0.6
 SBB 25.48 320 eP 18 55.00 0.2
 CLC 26.10 322 eP 19 01.00 0.4
 BLA 26.22 34 P 19 01.40 -0.3
 0.8s 20.13nm 4.8mb
 ABL 26.46 319 P 19 04.60 0.5
 DAU 26.68 337 P 19 06.70 0.5
 DUG 27.10 335 P 19 10.60 0.8
 0.6s 2.30nm 4.0mb
 TNP 27.50 326 P 19 13.50 0.0
 1.0s 14.17nm 4.6mb
 BW06 28.24 342 P 19 19.20 -1.0
 1.4s 13.81nm 4.5mb
 KVN 28.68 327 P 19 25.40 1.2
 CMB 29.25 322 ePc 19 29.10 0.0
 IMW 29.68 341 P 19 33.00 -0.2
 LRM 31.88 341 eP 19 33.00 0.5
 TBR 32.40 35 P 19 56.50 -0.3
 RSNY 34.65 30 P 20 15.70 -0.6
 1.2s 16.52nm 4.8mb
 RSON 34.80 5 eP 20 16.20 -1.3
 pP 20 21.00 16km
 WNY 34.87 31 P 20 16.30 -1.9
 HBVT 35.25 32 P 20 29.70 8.3X
 SES 35.68 346 eP 20 25.00 -0.1
 BNH 36.34 33 P 20 31.50 0.8
 PNT 37.37 337 ePc 20 40.00 0.7
 1.0s 17.00nm 4.8mb
 SCH 45.56 25 eP 21 46.00 -0.4
 YKA 47.69 350 eP 22 01.20 -1.9
 1.0s 5.40nm 4.6mb
 INK 56.74 345 eP 23 10.00 -0.7
 PMR 57.81 334 P 23 17.70 -0.6
 0.8s 14.66nm 5.1mb
 BAO 58.79 120 e(P) 23 25.00 -1.0
 FBA 58.93 338 P 23 25.30 -0.8
 0.9s 14.06nm 5.1mb
 MBC 61.11 354 ePc 23 40.60 -0.3
 1.1s 20.00nm 5.2mb
 TTA 61.29 334 P 23 41.00 -1.4
 1.0s 20.00nm 5.2mb
 LPF 82.85 42 eP 25 50.90 0.3
 GRR 82.87 42 eP 25 51.30 0.6

FLN 83.00 41 eP 25 52.00 0.6
 LDF 83.28 41 eP 25 53.50 0.6
 LSF 85.05 43 eP 26 02.20 0.3
 NB2 85.06 27 P 26 02.60 0.9
 0.7s 2.50nm 4.6mb
 EPF 85.23 47 eP 26 03.80 0.9
 TCF 85.49 43 eP 26 04.50 0.4
 1.0s 8.00nm 4.9mb
 MAF 85.74 43 eP 26 05.80 0.5
 0.9s 12.30nm 5.1mb
 BGF 85.82 43 eP 26 06.00 0.3
 0.7s 5.50nm 4.9mb
 SSF 86.08 42 eP 26 07.10 0.1
 1.0s 8.00nm 4.9mb
 KEV 86.19 17 eP 26 07.00 -0.1
 LOR 86.24 42 eP 26 08.20 0.4
 0.8s 8.75nm 5.0mb
 LBF 86.41 42 eP 26 08.60 -0.1
 SOD 87.56 19 eP 26 13.00 -0.8
 WB5 130.01 257 ePKP 32 36.30 -0.8
 WRA 130.04 257 PKPd 32 36.10 -1.0
 0.2s 0.80nm
 GBA 150.11 8 PKPd 33 17.00 4.2X
 0.7s 5.30nm
 S.D. = 1.0 on 73 of 78 obs.

? MAY 16, 1990 13h 25m 27.02±7.88s
 34.929 N ±23.7km 4.063 W ±72.9km
 DEPTH = 33.0km (normal)
 MOROCCO (395)
 MD 3.4 (RBA).

NKM 1.22 296 iPc 25 47.80 0.0
 eS 25 59.50
 i 26 02.00
 i 26 03.50
 IFR 1.66 212 iP 25 55.00 0.6
 iS 26 16.00
 AVE 3.22 241 eP 26 16.50 0.1
 i 26 22.00
 eS 26 51.00
 i 26 54.00
 TIO 4.81 215 iP 26 38.50 -0.7
 iS 27 33.40
 S.D. = 0.9 on 4 of 4 obs.

MAY 16, 1990 13h 32m 36.06±0.22s
 10.940 N ±4.6km 85.475 W ±3.8km
 DEPTH = 73.3km (7 depth phases)
 5.1mb (48 obs.)
 COSTA RICA (78)
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 10S, 22C
 Centroid Location:
 Origin Time 13:32:36.9 0.8
 Lat 10.41N 0.09 Lon 86.27W 0.09
 Dep 15.0 FIX Half-duration 2.0
 Moment Tensor; Scale 10**17 Nm
 Mrr=0.57 0.06 Mtt=0.00 0.07
 Mff=-0.57 0.09 Mrt=1.29 0.14
 Mrf=-1.12 0.18 Mtf=0.44 0.07
 Principal Axes:
 T Vol= 1.79 Plg=54 Azm= 29
 N 0.13 10 134
 P -1.91 34 231
 Best Double Couple: Mo=1.9*10**17
 NP1: Strike=358 Dip=15 Slip= 135
 NP2: 132 80 80

DVD 3.88 130 iPc 33 35.80 1.2
 UPA 6.17 108 iPd 34 08.00 1.4
 1.5s 288.89nm 5.4mb
 BMG 12.83 106 iPd 35 38.50 1.2
 BOG 12.93 118 eP 35 42.00 3.3X
 eS 38 06.00
 SDV 14.76 97 eP 36 05.10 2.6
 TOV 15.47 93 eP 36 17.40 5.9X
 FISA 15.84 87 eP 36 17.20 1.0
 MORO 16.85 89 iPc 36 32.00 3.1X
 GUAC 17.91 91 eP 36 46.50 4.4X
 CAR 18.23 90 eP 36 47.00 1.1
 iS 40 56.00
 LLAV 18.35 90 iPd 36 47.50 0.1
 OLLA 18.38 91 iP 36 48.00 0.2
 MGP 19.13 66 P 36 57.50 1.2
 PORP 19.55 67 P 37 01.50 0.8

16d 13h

SPC 91.85 39 eP 45 56.80 19.3X
 OHR 94.84 47 eP 45 51.00 -0.3
 WMO 125.15 6 ePKP 51 30.00 0.0
 Z 23s 1.10um 5.5mszx
 BJI 125.45 340 ePKP 51 31.00 0.5
 HHC 126.12 344 ePKP 51 32.00 -0.1
 RMO 126.74 245 ePKP 51 34.50 1.0
 e 51 49.00
 TIY 128.78 342 PKPc 51 37.80 0.7
 Z 20s 1.00um 5.5msz
 CTA 129.50 253 ePKPd 51 39.50 0.6
 1.0s 25.00nm
 e 54 57.00
 e 55 22.00
 GTA 129.67 355 ePKP 51 38.40 -0.5
 Z 22s 0.90um 5.4msz
 PP 53 57.20
 LZH 132.41 350 ePKP 51 45.50 1.3
 XAN 133.22 344 PKP 51 48.80 3.1X
 GUN 140.48 12 PKP 51 56.20 -3.6X
 WB5 140.66 252 ePKP 51 51.90 -8.0X
 e 52 00.10
 e 55 20.30
 WRA 140.68 252 PKPd 51 52.80 -7.1X
 1.0s 6.40nm
 PKI 140.71 13 PKP 51 59.20 -1.0
 KMI 143.27 347 ePKP 52 05.00 0.4
 pPKP 52 20.50
 MTN 144.15 263 ePKP 52 05.00 -1.0
 e 52 19.00
 WARB 146.11 239 ePKP 52 10.00 0.9
 e 52 24.00
 OIZ 146.61 333 PKP 52 12.70 2.7
 MNI 147.44 290 ePKPd 52 15.00 3.5X
 HYB 147.71 29 ePKP 52 11.00 -0.9
 e 53 25.00
 COOL 148.33 227 ePKP 52 17.00 4.5X
 CHG 150.12 352 ePKP 52 16.20 0.6
 KLB 150.27 223 ePKP 52 15.00 -0.4
 GBA 150.30 35 PKPd 52 15.70 -0.2
 1.0s 12.00nm
 LOE 150.95 346 ePKP 52 18.00 1.2
 MUN 151.04 220 ePKP 52 17.00 0.4
 0.7s 86.00nm
 e 52 23.00
 e 52 36.00
 BDT 151.65 351 ePKP 52 23.80 6.0X
 S.D. = 1.1 on 182 of 213 obs.
 ? MAY 16, 1990 14h 08m 28.45 ± 4.30s
 24.064 S ± 53.9km 179.854 E ± 29.9km
 DEPTH = 575.5 ± 43.9 km
 4.6mb (3 obs.)
 SOUTH OF FIJI ISLANDS (171)
 DZM 12.50 276 iPc 11 10.50 -1.9
 CTA 31.34 271 IPd 14 05.50 1.1
 0.4s 101.69nm 5.8mb X
 PMG 34.42 289 eP 14 31.00 0.7
 OIS 37.31 267 IPd 14 54.50 0.5
 WB5 42.25 266 IPd 15 34.20 0.5
 eScP 20 26.50
 eS 21 21.80
 WRA 42.26 266 Pc 15 33.80 0.0
 0.6s 7.10nm 4.4mb
 FORR 46.09 250 eP 16 03.00 -0.3
 0.4s 19.00nm 5.0mb
 NANU 58.62 257 eP 17 34.30 1.1
 0.4s 11.00nm 4.5mb
 PRS 81.75 44 eP 19 53.10 4.5X
 PRI 82.09 45 eP 19 52.00 1.6
 MHC 82.20 43 e(P) 19 49.80 -1.2
 FIRI 83.21 45 eP 19 57.00 1.1
 CMB 83.41 43 eP 19 56.50 -0.4
 ORV 83.65 42 eP 19 58.40 0.4
 WDC 83.67 40 eP 19 58.50 0.4
 MIN 84.08 41 eP 20 01.10 0.8
 KVN 85.45 44 eP 20 06.20 -0.8
 ANMO 91.16 52 eP 20 34.30 0.6
 NUR 139.72 341 ePKP 26 56.00 3.7X
 NB2 142.22 351 PKP 26 54.50 -2.2
 0.9s 4.70nm
 HFS 142.68 349 ePKP 26 55.40 -2.1
 0.4s 7.70nm
 KSP 150.39 339 iPKPc 27 19.30 9.1X
 CLL 150.97 343 ePKP 27 11.00 0.0
 BRG 151.10 341 iPKP 27 20.00 8.8X

0.6s 12.00nm
 MEM 153.07 351 PKP 27 20.90 6.9X
 S.D. = 1.2 on 20 of 25 obs.
 ? MAY 16, 1990 14h 10m 50.90 ± 6.60s
 17.278 S ± 82.3km 73.202 W ± 28.4km
 DEPTH = 33.0km (normol)
 OFF COAST OF PERU (114)
 ARE 1.83 64 iP 11 20.50 -0.3
 iS 11 37.40
 PT03 4.11 322 eP 11 52.90 -0.2
 eS 12 34.60
 PT06 4.57 318 iP 12 10.60 11.1X
 iS 12 48.70
 ZOBO 4.97 79 P 12 06.00 0.3
 i 12 30.00
 PT02 5.32 324 IPd 12 09.40 -0.8
 eS 13 02.00
 PT08 6.20 328 eP 12 24.00 1.1
 iS 13 23.10
 NNA 6.33 326 eP 12 32.50 8.0X
 0.6s 5.33nm 4.5mb X
 e 13 32.00
 S.D. = 1.0 on 5 of 7 obs.
 ? MAY 16, 1990 16h 13m 35.67 ± 0.79s
 38.223 N ± 10.0km 28.771 E ± 7.6km
 DEPTH = 10.0km (geophysicist)
 TURKEY (366)
 KHL 0.60 80 iPg 13 47.50 -0.4
 eSg 13 55.70
 CIN 0.82 221 ePg 13 51.00 -0.6
 iSg 14 02.00
 YER 1.15 200 ePn 13 57.90 0.6
 IZM 1.20 279 ePn 13 58.10 0.1
 ALT 1.34 51 IPn 14 00.70 0.3
 S.D. = 0.7 on 5 of 5 obs.
 * MAY 16, 1990 17h 09m 56.13 ± 2.15s
 0.358 S ± 14.6km 99.144 E ± 14.6km
 DEPTH = 68.2 ± 16.6 km
 5.0mb (5 obs.)
 SOUTHERN SUMATERA (274)
 TSI 3.88 351 eP 10 55.00 0.4
 KLM 4.25 36 eP 11 01.00 1.1
 KGM 4.79 61 eP 11 07.00 -0.5
 IPM 5.25 21 iPc 11 14.90 0.9
 0.5s 64.70nm 5.1mb
 e 11 41.90
 BSI 6.97 327 iP 11 36.00 -1.8
 iS 12 49.50
 SNG 7.63 11 eP 11 47.10 0.2
 CHG 19.05 359 eP 14 15.00 -1.0
 LSA 30.85 346 Pd 16 18.60 10.0X
 GUN 30.86 337 P 16 09.20 0.6
 0.4s 11.00nm 4.9mb
 CD2 31.40 8 P 16 11.80 -1.2
 WB5 39.56 122 eP 17 21.20 -1.4
 WRA 39.57 122 Pc 17 21.90 -0.7
 0.5s 3.00nm 4.5mb
 GTA 39.58 1 iPc 17 23.00 0.4
 FORR 40.92 141 eP 17 35.00 1.5
 0.3s 10.00nm 5.1mb
 WMO 45.16 348 P 18 09.30 1.4
 CN2 49.85 25 eP 18 42.40 -2.0
 NUR 82.71 331 eP 22 14.00 0.5
 HFS 88.03 330 eP 22 41.00 1.1
 1.1s 9.60nm 4.9mb
 S.D. = 1.3 on 17 of 18 obs.
 * MAY 16, 1990 17h 17m 23.12 ± 1.13s
 11.893 N ± 16.2km 41.755 E ± 13.8km
 DEPTH = 10.0km (geophysicist)
 4.5mb (1 obs.)
 ETHIOPIA (558)
 MD 4.0 (ARO).
 HLD 0.73 114 eP+ 17 37.65 0.3
 KSU 0.77 119 iP+ 17 38.27 0.1
 DAF 0.81 110 IPd 17 38.93 0.1
 SGH 0.97 118 IP+ 17 41.54 -0.1
 GBR 1.01 137 ePd 17 42.11 -0.2
 S 17 56.84
 ARO 1.13 109 IP+ 17 44.40 0.1

TDD 1.13 94 eP+ 17 44.11 -0.2
 ZST 41.64 335 eP 25 14.40 1.3
 APO 52.71 343 eP 26 38.50 -1.4
 0.9s 5.10nm 4.5mb
 S.D. = 0.8 on 9 of 9 obs.
 & MAY 16, 1990 17h 18m 13.60s
 36.272 N 120.257 W
 DEPTH = 5.0km
 CENTRAL CALIFORNIA (39)
 <BRK>. ML 3.2 (BRK), 3.2 (PAS).
 PKEM 0.24 150 iPc 18 20.70 2.2
 PRI 0.35 249 IPd 18 21.10 0.3
 iS 18 26.70
 PHAM 0.45 195 iPc 18 23.70 1.1
 LLA 0.65 302 IPd 18 26.20 -0.4
 FRI 0.84 31 IPd 18 29.80 -0.5
 PRS 0.90 274 iPc 18 30.40 -0.9
 SAO 1.08 298 ePc 18 33.20 -1.1
 BCH 1.09 173 eP 18 33.90 -0.8
 ARN 1.48 317 eP 18 39.50 -1.5
 MHC 1.54 314 ePc 18 40.40 -1.5
 ISA 1.57 112 eP 18 41.80 -0.4
 GCC 1.59 299 ePc 18 40.40 -2.1
 ABL 1.65 149 eP 18 41.80 -1.8
 BLP 1.71 184 eP 18 44.00 -0.2
 CMB 1.76 357 IPd 18 44.40 -0.6
 iS 19 07.90
 BKS 2.25 316 iPc 18 50.20 -1.9
 TNP 3.03 52 eP 19 03.00 -0.3
 KVN 3.26 31 eP 19 06.70 0.1
 18 obs. associated
 ? MAY 16, 1990 18h 38m 59.32 ± 9.35s
 8.339 S ± 83.8km 129.570 E ± 17.4km
 DEPTH = 181.8 ± 40.5 km
 4.2mb (1 obs.)
 TIMOR SEA (290)
 MTN 4.73 161 eP 40 11.00 0.4
 e 41 12.00
 KNA 7.41 186 eP 40 46.00 0.2
 0.2s 58.00nm 5.6mb X
 eS 42 14.00
 WB5 12.38 158 eP 41 49.10 -1.5
 i 41 52.10
 eS 44 10.80
 WRA 12.43 159 Pd 41 50.40 -0.9
 0.3s 2.70nm 4.2mb
 OIS 15.54 142 eP 42 31.30 1.0
 eS 45 02.00
 MBL 15.84 215 eP 42 34.20 0.3
 WAR8 17.96 189 eP 43 00.00 1.3
 NANU 19.55 222 eP 43 14.20 -1.0
 S.D. = 1.3 on 8 of 8 obs.
 * MAY 16, 1990 18h 59m 51.21 ± 4.55s
 44.547 N ± 16.1km 129.433 W ± 33.0km
 DEPTH = 10.0km (geophysicist)
 OFF COAST OF OREGON (30)
 CL 4.0 (SEA).
 GROR 4.18 77 P 00 56.15 -0.3
 KMOR 4.35 73 P 00 57.79 -1.1
 NLO 4.49 68 P 01 01.17 0.2
 ONR 4.60 58 P 01 01.99 -0.4
 BMW 4.77 64 P 01 04.19 -0.7
 OBH 4.78 52 P 01 04.36 -0.6
 OOW 4.84 47 P 01 05.88 0.0
 OFK 4.90 44 P 01 06.61 0.1
 RVW 4.98 69 P 01 07.46 -0.3
 OTR 4.99 43 P 01 08.15 0.2
 CPW 5.03 59 P 01 08.38 -0.1
 PGO 5.03 77 P 01 09.57 1.0
 SMW 5.07 55 P 01 08.54 -0.6
 OBC 5.09 45 P 01 09.52 0.1
 GT2 5.13 81 P 01 10.09 0.1
 OSD 5.15 49 P 01 10.09 -0.3
 LVP 5.18 70 P 01 10.50 -0.3
 APW 5.21 64 P 01 10.50 -0.5
 CZM 5.22 66 P 01 10.86 -0.4
 FL2 5.26 69 P 01 11.72 -0.1
 ERK 5.29 68 P 01 11.81 -0.5
 MTMW 5.31 71 P 01 12.36 -0.1
 SHW 5.33 69 P 01 13.12 0.2
 VLMM 5.33 77 P 01 13.28 0.4

16d 22h

eSn 56 27.40
S.D. = 1.1 on 5 of 5 obs.
? MAY 16, 1990 23h 30m 43.67±3.30s
31.026 S ±49.9km 68.385 W ±23.5km
DEPTH = 110.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL 0.31 193 iPc 30 59.90 0.1
ZON 0.58 206 iPd 31 02.00 0.6
eS 31 14.00
CFA 0.59 168 eP 31 02.00 0.5
RTCV 0.84 189 ePc 31 03.70 0.1
RTBS 1.11 235 ePd 31 06.60 0.3
S.D. = 0.3 on 5 of 5 obs.

% MAY 16, 1990 23h 39m 20.90±2.34s
39.198 N ±16.7km 23.488 E ±13.9km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
ML 2.3 (THE).

PAIG 0.74 11 ePg 39 36.20 0.8
AGG 0.92 259 ePg 39 38.50 0.0
eSg 39 52.30
LIT 1.19 320 ePbc 39 42.90 -0.1
OUR 1.20 18 ePbc 39 43.00 -0.2
THE 1.49 344 ePb 39 47.80 0.2
SRS 1.92 2 ePn 39 53.20 -0.7
GRG 1.94 335 ePn 39 53.80 -0.5
KNT 2.01 347 ePn 39 55.50 0.2
FNA 2.27 315 ePn 39 59.40 0.4
S.D. = 0.5 on 9 of 9 obs.

MAY 17, 1990 01h 02m 46.87±0.38s
30.244 S ±4.5km 72.257 W ±7.8km
DEPTH = 31.4km (3 depth phases)
5.2mb (9 obs.)
OFF COAST OF CENTRAL CHILE (134)

RTBS 2.79 121 ePc 03 32.00 1.7
JACH 2.82 150 eP 03 31.00 0.2
iS 04 13.40
IHA 2.82 169 eP 03 30.50 -0.2
e(S) 04 15.00
PEL 3.19 156 iP 03 35.60 -0.4
LCCH 3.27 170 eP 03 35.90 -1.3
iS 04 29.00
ZON 3.34 114 eP 03 39.00 0.8
eS 04 29.00
RTLL 3.43 109 ePd 03 39.80 0.2
SAN 3.48 157 eP 03 39.50 -0.6
iS 04 32.50
FCH 3.50 152 iPd 03 40.70 -0.1
iS 04 35.10
RTCV 3.58 118 ePd 03 43.80 2.2
TACH 3.58 162 iP 03 41.00 -0.6
i 04 20.40
iS 04 33.50
PCH 3.68 157 iPc 03 42.70 -0.3
iS 04 28.50
CFA 3.71 112 iPc 03 44.00 0.6
LNV 3.77 169 eP 03 42.50 -1.7
i 03 51.50
iS 04 39.00
CHCH 3.92 160 eP 03 47.00 0.6
i 04 30.00
i 04 47.00
ANT 6.72 15 e(P) 04 26.50 0.6
ARE 13.74 3 eP 06 08.00 5.9X
CCH 13.97 25 P 06 02.60 -2.5
LPB 14.17 17 P 06 04.00 -3.9X
LR 10 48.00
ZOBO 14.42 16 P 06 10.00 -1.3
1.0s 22.50nm 4.7mb X
Z 18s 0.80um 5.7msz
LR 10 28.00
TKL 66.44 350 P 13 33.80 -1.4
GBTN 66.52 349 P 13 34.70 -1.0
RSCP 66.68 348 P 13 36.00 -0.8
0.9s 33.46nm 5.4mb
NAV 67.68 353 P 13 42.20 -0.8
ALO 72.41 331 eP 14 13.00 0.9
1.1s 4.11nm 4.3mb
ANMO 72.41 331 P 14 13.30 1.2
1.2s 7.81nm 4.6mb

LIC 73.80 73 Pc 14 19.50 -0.9
1.0s 20.00nm 5.1mb
TIC 74.04 72 Pc 14 21.00 -0.8
1.2s 38.00nm 5.3mb
KIC 74.11 73 Pc 14 21.20 -1.0
0.9s 31.50nm 5.3mb
LKO 75.20 70 Pc 14 27.66 -0.9
0.9s 44.00nm 5.5mb
GOL 76.09 334 P 14 34.00 0.6
MAW 76.83 164 iPc 14 41.50 4.7X
MSU 77.88 329 P 14 44.80 1.5
DAU 79.05 331 P 14 51.20 1.4
RSSD 79.51 337 P 14 52.80 0.7
TNP 79.90 325 P 14 56.00 1.7
1.0s 5.58nm 4.5mb
KVN 81.09 326 P 15 01.80 1.3
e 15 12.90 36km
RSON 82.94 346 P 15 09.80 0.1
pP 15 19.90 32km
MIN 83.82 324 ePc 15 19.20 4.6X
BCAO 92.89 87 iPc 15 58.70 0.3
0.5s 9.00nm 5.5mb
id 16 07.20 27km
GBA 147.51 114 PKP 22 31.00 3.7X
1.0s 9.80nm
HYB 150.50 109 ePKP 22 37.00 5.1X
S.D. = 1.1 on 36 of 42 obs.

MAY 17, 1990 01h 04m 07.59±0.10s
37.060 N ±2.3km 136.880 E ±2.2km
DEPTH = 267.0km (28 depth phases)
5.2mb (100 obs.)
NEAR WEST COAST OF HONSHU, JAPAN(226)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 23C
Centroid Location:
Origin Time 01:04:12.1 0.6
Lat 37.20N 0.05 Lon 136.79E 0.09
Dep 274.4 3.0 Half-duration 2.0
Moment Tensor: Scale 10¹⁷ Nm
Mrr=-0.12 0.08 Mtt=1.12 0.10
Mff=-1.00 0.12 Mrt=0.38 0.10
Mrf=-1.19 0.09 Mtf=0.33 0.10
Principal Axes:
T Val=1.23 Plg=16 Azm=0
N 0.68 51 110
P -1.91 35 259
Best Double Couple: Mo=1.6*10¹⁷
NP1:Strike=45 Dip=53 Slip=-165
NP2: 306 78 -37

MTMJ 0.88 122 iPd 04 44.50 0.3
S 05 13.10
SHK 4.25 235 iPc 05 18.40 2.9
0.7s 602.74nm
S 06 12.00
SAP 6.89 28 eP 05 45.00 -2.7
eS 07 00.00
CN2 11.01 311 Pd 06 40.80 1.4
4.0s 500.00nm 5.0mb X
sP 07 42.00
S 08 43.00
PcP 12 12.50
ScS 18 48.00
SNY 11.33 299 iPd 06 45.40 1.9
3.0s 2600.00nm 5.9mb
iS 08 53.00
DL2 12.18 283 iPd 06 56.00 2.0
5.0s 4700.00nm 6.0mb X
Z 16s 1.10um 4.6mszX
iS 09 12.50
SSE 14.30 250 Pc 07 21.00 1.1
3.0s 7400.00nm 6.5mb X
Z 16s 1.30um 5.3mszX
N 12s 0.60um
S 10 00.00
NJ2 15.66 257 iPd 07 36.00 -0.4
3.5s 1500.00nm 5.8mb X
S 10 25.00
TIA 15.89 273 Pd 07 38.00 -0.8
eS 10 28.50
BJI 16.47 287 eP 07 44.00 -1.0
3.0s 1620.00nm 5.9mb
eS 10 42.00
eScP 15 30.00
ePcS 15 54.00

eScS 19 08.00
ANP 17.67 232 eP 07 56.00 -1.9
TIY 19.43 279 iPd 08 14.40 -1.3
1.2s 200.00nm 5.5mb
E 10s 0.80um
S 11 38.00
QZH 19.75 237 Pd 08 18.00 -0.8
iS 11 44.00
i 12 56.00
WHN 19.80 257 Pd 08 19.00 -0.3
1.0s 200.00nm 5.5mb
S 11 48.00
HHC 20.03 289 Pd 08 20.00 -1.7
Z 14s 1.60um 4.5mszX
N 10s 0.30um
S 11 50.00
BTO 21.19 288 iPd 08 31.50 -1.6
N 10s 0.90um
E 10s 0.80um
S 12 09.00
XAN 22.91 271 iPd 08 48.50 -1.2
5.0s 1300.00nm 5.7mb X
N 10s 0.60um
sP 10 13.00
GUMO 24.44 161 eP 09 02.50 -1.4
PJG 24.44 161 eP 09 02.90 -1.0
GUA 24.50 161 eP 09 03.30 -1.2
1.3s 2061.54nm 6.5mb X
pP 09 06.60 12kmX
HKC 24.52 239 iPc 09 05.80 1.2
GZH 24.59 242 Pd 09 21.40 16.2X
2.0s 400.00nm
Z 18s 1.00um 4.4msz
sP 10 43.50
BAG 25.12 219 eP 09 08.80 -1.6
eS 13 13.00
QCP 26.40 216 eP 09 16.00 -5.7X
GYA 27.67 256 iPd 09 32.00 -1.3
1.2s 300.00nm 5.8mb
PP 10 39.00
PcP 12 42.80
S 13 52.80
SS 15 46.00
ScP 15 58.80
PcS 16 24.00
ScS 19 50.00
CD2 28.05 267 P 09 35.00 -1.5
0.8s 100.00nm 5.5mb
N 12s 0.10um
GTA 29.08 286 iPd 09 44.20 -1.4
0.8s 100.00nm 5.5mb
PP 10 55.00
PcP 12 46.80
S 14 13.00
ScP 16 03.40
SS 16 16.00
ScS 19 56.00
QIZ 29.71 240 Pd 09 52.00 0.8
N 11s 0.90um
eS 14 31.00
KMI 31.40 258 Pd 10 05.00 -1.1
1.0s 250.00nm 5.8mb
Z 14s 0.80um 4.5mszX
PP 11 23.00
ADK 35.65 50 iPc 10 40.00 -1.7
KKM 36.18 216 ePd 10 48.50 1.8
1.0s 318.60nm 5.8mb
e 10 53.00 15kmX
LOE 36.59 247 iPc 10 49.00 -1.0
TSM 36.96 212 ePd 10 54.30 1.3
1.0s 1373.10nm 6.4mb X
MNI 37.14 200 eP 10 55.20 0.6
WMO 37.58 296 iPd 10 58.00 -0.2
pP 11 55.80 286kmX
PP 12 36.50
S 16 26.00
SS 19 12.00
ScS 20 39.00
CHG 37.82 252 ePd 11 00.40 0.1
1.0s 57.50nm 5.0mb
eS 16 32.00
LSA 38.59 273 P 11 07.00 -0.1
BOT 38.72 250 eP 11 08.00 0.3
0.7s 38.70nm 5.0mb
GUN 43.54 273 Pd 11 47.60 0.3
PKI 44.06 273 Pd 11 51.40 0.0
DMN 44.29 273 Pd 11 53.30 0.2

17d 03h

ZAG 0.14 250 iPg 04 59.20 -0.1
 iSg 05 03.30
 PTJ 0.15 284 iPg 04 58.50 -1.1
 eSg 05 01.90
 LJU 1.15 280 e(Pg) 05 18.00 0.3
 eSg 05 34.40
 VOY 1.59 277 ePn 05 25.20 0.7
 eSn 05 50.70
 S.D. = 1.4 on 4 of 4 obs.

* MAY 17, 1990 03h 29m 50.63±2.31s
 51.065 N ±23.4km 15.913 E ±12.6km
 DEPTH = 5.0km (geophysicist)
 POLAND (548)

KSP 0.33 133 iPd 29 57.00 -0.2
 iS 30 05.50
 e 30 11.00
 BRG 1.26 262 iPg 30 13.20 -1.2
 iSg 30 33.40
 PRU 1.39 220 ePg 30 18.00 1.4
 e 30 22.00
 eSn 30 34.50
 Sg 30 41.50
 CLL 1.85 279 (Pg) 30 24.00 0.8
 eSg 30 51.00
 KHC 2.45 219 ePn 30 31.30 -0.7
 Pg 30 38.00
 eSg 31 05.00
 MOX 2.76 263 ePg 30 42.00 5.7x
 eSg 31 23.00
 S.D. = 1.5 on 5 of 6 obs.

? MAY 17, 1990 04h 15m 55.45±1.44s
 29.530 S ±33.5km 177.841 W ±24.8km
 DEPTH = 33.0km (normal)
 5.3mb (3 obs.)
 KERMADEC ISLANDS (178)

CAN 28.50 250 eP 21 49.20 -0.6
 BWA 28.95 252 eP 21 44.90 -9.1x
 CTA 33.81 278 iPc 22 39.00 2.3
 0.8s 44.78nm 5.4mb
 WRA 44.21 271 Pc 24 02.50 -0.9
 0.3s 6.30nm 4.9mb
 WB5 44.21 271 eP 24 02.60 -0.8
 SPA 60.64 180 eP 26 05.90 0.5
 0.8s 20.83nm 5.3mb
 SUF 143.33 342 iPKP 35 25.60 -1.7
 0.4s 2.30nm
 NUR 145.54 340 iPKP 35 32.40 1.3
 0.6s 11.70nm
 i 35 37.20
 NB2 147.91 352 PKP 35 38.50 3.4x
 0.9s 4.70nm
 HFS 148.42 349 ePKP 35 39.80 4.0x
 0.4s 2.10nm
 BCAO 150.62 215 iPKPc 35 44.20 3.6x
 0.6s 6.00nm
 S.D. = 1.7 on 7 of 11 obs.

MAY 17, 1990 04h 45m 32.56±0.64s
 44.375 N ±4.3km 6.831 E ±5.1km
 DEPTH = 10.0km (geophysicist)
 FRANCE (538)
 ML 2.1 (GEN), 2.0 (LDG).

PZZ 0.23 56 P 45 38.19 0.6
 S 45 41.98
 STV 0.38 110 P 45 40.24 -0.1
 S 45 45.36
 ENR 0.45 109 P 45 41.51 -0.2
 S 45 47.01
 RRL 0.55 357 P 45 43.42 -0.2
 S 45 50.08
 SBF 0.67 139 Pg 45 45.60 -0.4
 Sg 45 54.80
 ROB 0.75 96 P 45 47.42 0.1
 S 45 56.54
 FRF 0.83 189 Pg 45 48.00 -0.5
 Sg 45 59.20
 IMI 0.89 121 P 45 49.57 -0.2
 S 45 59.51
 LRG 0.98 200 Pg 45 51.70 0.5
 Sg 46 05.00
 LMR 1.07 193 Pg 45 52.80 0.2
 Sg 46 07.00

S.D. = 0.4 on 10 of 10 obs.
 & MAY 17, 1990 06h 02m 57.67s
 59.691 N 138.993 W
 DEPTH = 5.9km
 4.0mb (3 obs.)
 SOUTHEASTERN ALASKA (19)
 <AGS-P>. ML 4.2 (PMR). Felt (IV)
 at Yakutat.

HON 0.25 166 iP 03 03.02 0.3
 iS 03 06.80
 YKU 0.40 250 iPd 03 05.90 0.2
 BCPM 0.42 309 iP 03 06.28 0.2
 PCA 0.76 303 iP 03 11.70 -1.1
 HYT 1.36 32 Pc 03 24.20 1.0
 YAH 1.54 297 iP 03 24.40 -1.5
 eS 03 44.04
 SIT 3.27 142 iPd 03 46.10 -4.4
 VLZ 3.92 295 eP 03 57.86 -1.7
 eS 04 46.70
 VZW 4.00 293 eP 03 57.84 -3.0
 eS 04 43.25
 GLI 4.21 290 eP 04 00.55 -3.2
 TOA 4.26 308 iPc 04 03.80 -0.8
 DWY 4.38 357 Pc 04 05.40 -0.9
 NCA 4.47 304 eP 04 06.01 -1.6
 eS 04 56.42
 PAX 4.53 319 eP 04 07.38 -1.1
 SML 5.05 299 eP 04 12.86 -2.9
 SEW 5.28 279 eP 04 14.13 -4.8
 GH0 5.30 297 eP 04 17.38 -2.0
 PMR 5.34 295 iPc 04 18.20 -1.6
 PMS 5.46 291 iPd 04 19.30 -2.2
 SLKM 5.68 283 eP 04 19.23 -5.4
 PWA 5.70 295 iP 04 24.00 -0.9
 RND 6.01 313 eP 04 28.57 -0.7
 SUA 6.06 292 eP 04 26.88 -3.2
 CUT 6.11 301 eP 04 29.30 -1.4
 NKA 6.19 285 eP 04 30.73 -1.1
 NNL 6.21 279 eP 04 27.95 -4.1
 CNPM 6.22 274 eP 04 28.52 -3.7
 SKT 6.54 296 eP 04 33.63 -3.2
 SPU 6.64 289 eP 04 34.21 -3.9
 FBA 6.64 326 eP 04 36.70 -1.5
 RDT 6.70 289 eP 04 34.93 -4.2
 CRP 6.76 283 eP 04 34.60 -5.3
 KTH 6.88 309 eP 04 38.64 -2.9
 RED 6.94 282 eP 04 37.48 -4.9
 KDC 7.29 260 iPc 04 42.40 -4.9
 CDD 7.54 271 eP 04 46.26 -4.5
 MCNL 7.84 273 eP 04 50.40 -4.6
 SVW 8.35 287 ePc 04 57.30 -4.9
 TTA 8.80 299 iPc 05 04.20 -4.2
 INK 8.97 13 P 05 08.00 -2.6
 IMA 9.25 320 iPc 05 12.90 -1.7
 YKA 12.10 66 eP 05 50.20 -3.2
 0.7s 3.60nm 4.8mb x
 SDN 12.33 259 iPc 05 52.80 -3.7
 PNT 15.25 124 eP 06 40.00 5.0
 EDM 15.52 103 eP 06 37.00 -1.5
 MBC 17.99 15 eP 07 08.00 -1.5
 1.0s 8.00nm 3.8mb
 SES 18.39 108 eP 07 22.00 7.3
 FFC 20.46 88 eP 07 36.00 -2.2
 1.0s 12.00nm 4.2mb
 LRM 21.03 119 eP 07 45.70 1.1
 ALO 32.58 125 eP 09 30.00 -1.9
 1.0s 1.75nm 3.9mb
 KHC 69.26 19 eP 14 05.50 -1.6
 51 obs. associated

* MAY 17, 1990 06h 09m 09.99±1.02s
 1.186 N ±15.2km 124.106 E ±11.5km
 DEPTH = 33.0km (normal)
 4.3mb (1 obs.)
 MINAHASSA PENINSULA (265)

MNI 0.78 71 ePd 09 24.50 0.0
 eS 09 37.00
 WB5 23.23 155 eP 14 14.80 -0.5
 WRA 23.27 155 Pc 14 16.50 0.7
 0.6s 6.80nm 4.3mb
 PSI 25.21 274 ePc 14 34.50 0.0
 OIS 26.41 146 eP 14 45.40 -0.2
 S.D. = 0.7 on 5 of 5 obs.

MAY 17, 1990 06h 44m 24.56±0.49s
 39.831 N ±4.5km 22.348 E ±4.8km
 DEPTH = 5.0km (geophysicist)
 GREECE (364)
 MD 3.4 (ATH). ML 3.2 (THE).

LIT 0.29 22 ePg 44 30.10 -0.3
 eSg 44 36.10
 AGG 0.81 181 ePg 44 39.20 -1.5
 eSg 44 52.00
 NEO 0.86 127 ePb 44 41.20 -0.3
 THE 0.93 30 ePg 44 41.50 -1.2
 eSg 44 57.40
 PAIG 1.03 84 ePb 44 45.40 0.9
 eSb 45 00.40
 GRG 1.13 2 ePb 44 45.00 -1.1
 eSb 45 03.70
 FNA 1.21 322 ePb 44 46.20 -1.4
 eSb 45 04.40
 SOH 1.25 38 ePb 44 48.60 0.3
 eSb 45 08.00
 OUR 1.35 68 ePb 44 50.90 1.0
 eSb 45 10.10
 KNT 1.39 17 ePb 44 50.40 -0.3
 eSb 45 09.70
 VAY 1.50 6 ePn 44 52.60 0.5
 IGT 1.58 260 ePb 44 53.80 0.5
 SRS 1.60 36 ePb 44 53.30 -0.2
 eSb 45 16.90
 OHR 1.74 318 ePn 44 55.70 0.0
 0.8s 102.00nm
 eSg 45 22.00
 KEK 1.97 267 ePn 44 59.50 0.6
 VLS 2.15 220 ePn 45 02.10 0.6
 SKO 2.25 342 ePn 45 05.00 2.0
 i 45 08.30
 eSn 45 36.00
 iSg 45 39.00
 MLR 6.25 24 eP 46 03.00 3.3x
 S.D. = 1.0 on 17 of 18 obs.

? MAY 17, 1990 07h 18m 08.37±20.01s
 34.580 S ±139.km 71.974 W ±92.0km
 DEPTH = 60.0km (geophysicist)
 NEAR COAST OF CENTRAL CHILE (135)

LNV 0.78 37 iPc 18 21.50 -2.2
 iS 18 38.00
 LOCH 1.15 17 eP 18 27.50 -1.1
 iS 18 48.00
 TACH 1.26 43 eP 18 29.00 -1.1
 iS 18 54.10
 CHCH 1.27 60 iPc 18 30.50 0.2
 iS 18 53.50
 PCH 1.54 52 iPc 18 34.50 0.4
 iS 19 01.00
 SAN 1.57 44 ePc 18 35.00 0.7
 iS 19 01.50
 IHA 1.58 10 eP 18 36.00 1.6
 iS 19 03.30
 PEL 1.79 37 iPd 18 38.10 0.6
 iS 19 08.00
 FCH 1.88 49 iPd 18 39.90 1.0
 iS 19 11.00
 RTBS 3.60 37 e(P) 19 09.00 6.1x
 (S) 20 07.00
 RTCV 3.96 48 e(P) 19 11.00 3.0x
 CFA 4.31 48 eP 19 13.00 0.0
 S.D. = 1.3 on 10 of 12 obs.

% MAY 17, 1990 08h 35m 31.96±1.77s
 41.401 N ±12.4km 29.297 E ±11.4km
 DEPTH = 10.0km (geophysicist)
 TURKEY (366)

ISK 0.38 208 ePg 35 39.80 0.0
 GBZT 0.62 170 eP 35 44.00 -0.5
 HRT 0.64 154 ePg 35 45.30 0.4
 CTT 0.70 249 iPg 35 46.00 0.2
 YLV 0.84 176 ePg 35 48.10 -0.1
 DMK 1.23 291 ePn 35 54.70 -0.1
 S.D. = 0.4 on 6 of 6 obs.

% MAY 17, 1990 08h 36m 14.85±1.88s
 41.406 N ±12.9km 29.293 E ±12.3km
 DEPTH = 10.0km (geophysicist)
 TURKEY (366)

17d 10h

BSS 6.24 295 P 28 47.00 -0.3
 DUI 6.83 301 P 28 55.40 -0.3
 SDI 7.28 300 P 29 03.20 1.2
 AZI 7.66 301 P 29 08.50 1.3
 VRI 8.22 22 ePc 29 15.00 0.0
 ASS 8.67 306 P 29 21.50 0.2
 ARV 8.72 309 P 29 21.00 -1.0
 VOY 9.86 324 eP 29 37.00 -0.7
 eS 31 23.80
 EKA 24.09 323 P 32 29.00 0.0
 0.8s 3.80nm 4.0mb
 S.D. = 1.0 on 38 of 38 obs.

& MAY 17, 1990 10h 31m 14.20s
 40.822 N 124.300 W
 DEPTH = 23.0km
 NEAR COAST OF NORTHERN CALIF. (35)
 <BRK>. ML 2.9 (BRK).

FHC 0.24 95 iPc 31 19.90 -0.3
 iS 31 24.70
 WDC 1.36 100 iPd 31 36.40 -1.5
 LTCM 1.77 110 eP 31 42.20 -1.6
 MIN 2.11 102 iPc 31 46.20 -2.6
 ORV 2.49 120 eP 31 50.90 -3.3
 GCC 4.19 154 eP 32 17.20 -1.1
 KVN 5.08 108 eP 32 28.40 -2.7
 7 obs. associated

MAY 17, 1990 10h 40m 17.55±0.79s
 40.453 N ± 6.9km 21.833 E ± 6.5km
 DEPTH = 10.0km (geophysicist)
 GREECE (364)
 ML 3 0 (THE).

FNA 0.48 314 ePgc 40 26.80 -0.5
 LIT 0.61 125 ePg 40 28.70 -1.2
 GRG 0.66 41 ePg 40 29.50 -1.3
 OHR 1.02 310 ePn 40 37.00 0.1
 VAY 1.03 33 ePn 40 38.50 1.5
 KNT 1.07 48 ePb 40 37.70 -0.1
 SOH 1.21 72 ePb 40 40.80 0.6
 AGG 1.48 165 ePb 40 45.30 1.0
 PAIG 1.51 110 ePb 40 44.50 -0.1
 S.D. = 1.1 on 9 of 9 obs.

MAY 17, 1990 11h 03m 24.75±0.14s
 18.080 S ± 3.0km 69.626 W ± 3.4km
 DEPTH = 105.9km (39 depth phases)
 5.6mb (61 obs.)

NORTHERN CHILE (123)
 mb 5.8 (BRK). Felt (V) at Arico,
 (IV) at Putre and (III) at
 Iquique. Landslides occurred in
 the Arico area. Also felt (IV)
 at Tacna and (III) at Arequipa,
 Peru.
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 13S, 28C
 Centroid Location:
 Origin Time 11:03:34.9 0.3
 Lat 17.90S 0.04 Lon 69.71W 0.04
 Dep 126.2 1.9 Half-duration 2.1
 Moment Tensor: Scale 10**17 Nm
 Mrr=-1.81 0.17 Mtt=-0.32 0.25
 Mff= 2.14 0.25 Mrt= 2.29 0.14
 Mrf=-3.92 0.15 Mtf=-0.48 0.28
 Principal Axes:
 T Val= 5.07 Plg=33 Azm= 69
 N -0.17 9 333
 P -4.90 55 230
 Best Double Couple: Ma=5.0*10**17
 NP1: Strike=190 Dip=14 Slip=-52
 NP2: 331 79 -99

LPB 2.12 44 iPc 04 01.10 1.0
 ZOBO 2.30 39 iPc 04 07.50 4.9X
 ARE 2.40 312 iPc 04 04.50 0.8
 CCH 3.39 79 iPc 04 21.40 4.4X
 ANT 5.65 187 iPd 04 43.50 -4.2X
 i 05 20.00
 iS 05 41.00
 PT03 7.19 304 iP 05 05.70 -3.3X
 eS 06 05.80
 PT06 7.71 302 iP 05 12.50 -3.5X
 e(S) 06 20.60

SIV 8.44 77 iPc 05 24.40 -1.6
 PT08 9.04 311 eP 05 31.70 -2.7
 eS 06 58.80
 NNA 9.23 310 iPc 05 34.00 -2.7
 0.7s 32.88nm 5.3mb X
 eS 07 18.00
 PT10 9.27 309 e(P) 05 37.50 0.3
 eS 07 18.00
 RTLL 13.23 176 ePc 06 23.70 -6.0X
 ZON 13.44 177 eP 06 26.00 -6.3X
 eS 08 56.00
 JACH 14.57 183 iP 06 45.30 -1.7
 IHA 14.99 187 eP 06 49.50 -2.7
 e(S) 09 50.00
 PEL 15.03 183 iPd 06 50.50 -2.3
 1.5s 819.44nm 5.7mb
 FCH 15.20 182 iPd 06 54.00 -1.2
 SAN 15.34 183 iP 06 54.60 -2.1
 LCCH 15.43 186 iPd 06 55.00 -2.8
 PCH 15.50 183 iPc 06 56.90 -1.8
 TACH 15.55 184 iPd 06 56.10 -3.3X
 CHCH 15.82 183 eP 07 00.50 -2.2
 LNV 15.89 185 iPd 07 05.50 2.0
 VCI 19.36 333 P 07 46.70 1.4
 QTO 19.81 333 eP 07 50.60 0.7
 CAYA 19.83 335 eP 07 51.20 1.0
 OUR 19.83 333 eP 07 50.10 0.0
 GGP 19.86 333 eP 07 51.40 0.8
 COTA 20.21 334 eP 07 55.00 0.9
 PSO 20.60 338 eP 07 58.50 0.6
 BOG 22.98 349 eP 08 22.00 0.7
 eS 12 22.00
 BMG 25.22 352 eP 08 40.00 -2.5
 SDV 26.81 358 eP 08 55.50 -1.7
 TOV 27.69 360 eP 08 58.70 -6.3X
 OLLA 28.06 6 iPc 09 06.60 -1.8
 GUAC 28.19 5 eP 09 08.40 -1.2
 LLAV 28.51 6 iPc 09 10.80 -1.6
 CAR 28.53 6 iP 09 11.00 -1.6
 iS 13 47.00
 UPA 28.61 339 iPd 09 14.00 0.8
 0.6s 33.33nm 5.2mb
 MORO 28.80 3 eP 09 16.00 1.0
 CUM 28.87 11 iP 09 14.50 -1.0
 FISA 29.16 1 eP 09 16.00 -2.2
 AIA 47.27 177 eP 11 49.40 0.6
 JSC 53.23 348 P 12 33.80 -0.5
 PRM 53.27 347 P 12 33.30 -1.4
 LHS 53.34 348 P 12 32.80 -2.3
 TKL 55.10 346 P 12 45.80 -2.3
 GBTN 55.21 346 P 12 46.80 -2.0
 RSCP 55.48 344 P 12 49.20 -1.6
 PWLA 55.60 342 P 12 49.30 -2.3
 BLA 55.93 350 P 12 53.70 -0.3
 1.2s 140.15nm 5.9mb
 CBN 56.45 353 eP 12 56.00 -1.7
 UYO 57.09 335 iPc 13 01.30 -0.9
 OLY 57.17 339 P 13 01.40 -1.4
 TBR 59.07 356 P 13 14.90 -1.0
 MEO 59.34 332 iPd 13 16.40 -1.6
 WVLY 60.81 352 P 13 26.30 -1.5
 MBO 61.13 62 iPc 13 30.30 -0.1
 DLA 61.62 350 P 13 30.80 -2.5
 LDN 61.74 350 P 13 31.70 -2.4
 ELF 61.91 350 P 13 32.80 -2.4
 HBVT 62.21 357 P 13 36.00 -1.2
 WNY 62.28 357 P 13 36.30 -1.4
 BNH 62.38 359 P 13 37.70 -0.6
 ALO 63.28 327 ePd 13 43.80 -0.9
 1.0s 35.75nm 5.3mb
 epP 14 10.00 105km
 ANMO 63.28 327 P 13 44.00 -0.7
 0.8s 7.28nm 4.7mb
 CBM 64.72 1 P 13 52.90 -0.6
 GLD 66.43 331 P 14 04.70 -0.2
 1.1s 16.39nm 4.9mb
 GOL 66.46 331 P 14 04.20 -1.0
 1.1s 60.58nm 5.4mb
 GLA 66.70 320 eP 14 07.00 0.4
 e 14 33.00 103km
 BAR 67.61 318 eP 14 13.00 0.7
 e 14 39.00 103km
 LIC 68.13 75 Pc 14 14.16 -1.7
 0.9s 150.00nm 5.9mb
 Z 22s 0.85um 4.9Msz
 TPC 68.17 320 eP 14 15.00 -0.7
 e 14 43.00 112km

PLM 68.17 319 eP 14 16.00 0.0
 e 14 41.00 98km
 TBT 68.25 48 iP 14 15.80 -0.5
 TIC 68.30 75 P 14 15.32 -1.6
 1.0s 193.00nm 6.0mb
 KIC 68.45 75 Pc 14 16.34 -1.5
 0.7s 235.00nm 6.2mb
 RVR 68.92 319 eP 14 20.00 -0.3
 e 14 46.00 102km
 MSU 68.99 325 P 14 21.20 0.2
 CTFE 69.31 49 iP 14 23.20 0.4
 GSC 69.43 320 eP 14 24.00 0.5
 e 14 51.00 107km
 MWC 69.49 319 eP 14 24.00 -0.1
 e 14 50.00 102km
 PAS 69.52 318 eP 14 24.00 0.0
 e 14 50.00 102km
 GGC 69.55 50 iP 14 24.00 -0.4
 SBB 69.65 319 eP 14 25.00 0.1
 e 14 51.00 102km
 CLC 70.25 320 eP 14 28.00 -0.5
 e 14 55.00 106km
 ABL 70.63 318 P 14 31.90 0.9
 pP 14 58.30 104km
 ISA 70.69 319 eP 14 32.00 0.8
 e 14 58.00 102km
 BW06 70.83 330 P 14 31.70 -0.4
 1.1s 8.93nm 4.5mb X
 CFTV 70.85 50 iP 14 32.00 -0.2
 SYP 70.91 318 eP 14 33.00 0.4
 BCH 71.39 318 P 14 36.80 1.3
 TNP 71.53 322 P 14 36.80 0.4
 pP 15 04.00 107km
 RSON 71.83 344 P 14 36.00 -1.6
 1.0s 31.18nm 5.1mb
 PHAM 72.00 319 P 14 39.60 0.7
 SPA 72.03 180 iPd 14 38.70 -0.2
 1.2s 77.46nm 5.4mb
 i 15 06.10 108km
 WEGH 72.25 78 eP 14 39.00 -1.8
 FRI 72.31 320 eP 14 39.40 -1.3
 IMW 72.34 330 P 14 41.00 -0.1
 PRI 72.36 319 eP 14 41.60 0.4
 epP 15 10.00 112km
 LEGH 72.41 78 eP 14 40.50 -1.2
 KUK 72.43 77 iPc 14 32.50 -9.4X
 KOGH 72.51 77 eP 14 40.50 -1.9
 TEGH 72.57 78 eP 14 42.00 -0.7
 SHGH 72.64 78 eP 14 42.50 -0.6
 SCH 72.64 2 ePc 14 41.30 -1.0
 1.0s 83.00nm 5.5mb
 pP 15 13.00 127kmX
 KVN 72.69 322 P 14 43.40 0.2
 pP 15 10.50 106km
 LLA 72.83 319 ePd 14 44.20 0.4
 epP 15 11.00 105km
 PRS 72.92 318 ePd 14 44.80 0.5
 epP 15 11.90 106km
 CMB 73.39 320 ePd 14 47.40 0.4
 epP 15 13.40 101km
 ARN 73.66 319 P 14 50.20 1.6
 pP 15 16.20 101km
 MHC 73.72 319 eP 14 50.00 0.9
 epP 15 17.20 106km
 GCC 73.75 319 eP 14 49.70 0.6
 epP 15 16.70 105km
 RUV 74.03 259 iP 14 52.80 1.6
 1.2s 85.00nm 5.4mb
 ipP 15 52.80 256kmX
 VAH 74.25 259 iP 14 54.00 1.6
 1.2s 145.00nm 5.7mb
 ipP 15 19.80 100km
 TPT 74.31 259 iP 14 54.50 1.8
 1.2s 180.00nm 5.8mb
 ipP 15 20.30 100km
 BKS 74.42 319 ePd 14 53.60 0.6
 0.7s 53.00nm 5.5mb
 epP 15 22.30 113km
 iS 24 24.00
 BRK 74.44 319 eP 14 53.60 0.6
 epP 15 18.80 97km
 LRM 74.49 330 eP 14 53.80 0.3
 PMO 74.56 259 iP 14 56.00 1.8
 1.2s 125.00nm 5.6mb
 ipP 15 21.70 99km
 ORV 75.02 321 ePd 14 57.00 0.6
 epP 15 24.40 107km

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 Bayesian 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 $20^\circ \leq \Delta \leq 160^\circ$, 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 $\Delta \leq 5^\circ$. 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 ($^{\circ}$) 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, pRPPK represents the phase pPKPPK and RPPG represents PgPgPg.

References

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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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	S	31	54.00			eP	37	12.00		ZST	41.91	303	iP	28	48.10	0.2				
AFIF	30.07	251	eP	27	11.00	2.9X	BSI	37.89	145	eP	28	15.00	-0.1							
BDT	30.17	128	eP	27	07.90	-0.9	ASW	37.91	260	iPc	28	16.00	0.8							
KAS	31.08	288	iPc	27	17.20	0.4				eS	34	04.00								
HRI	31.57	273	eP	27	21.00	-0.1	PGB	37.95	293	iPc	28	17.00	1.6	BRY	41.92	295	eP	28	48.60	0.4
MDSJ	31.77	269	Pc	27	23.80	0.9	AKSR	38.04	259	iPc	28	18.50	2.2	HCY	42.06	294	eP	28	49.50	0.3
JARJ	31.78	271	P	27	23.90	0.9	APE	38.28	284	eP	28	18.50	0.3	KSP	42.10	307	iPc	28	49.60	0.2
LOE	31.79	124	eP	27	21.50	-1.6	DEV	38.30	298	ePc	28	20.00	1.8		0.9s	60.00nm			5.4mb	
BURJ	31.89	271	Pd	27	23.30	-0.7	CN2	38.36	65	P	28	19.40	0.7			id	29	16.30	116km	
NST	32.06	128	eP	27	26.00	0.6				pP	28	42.00	96kmX			i	30	33.00		
SALJ	32.07	270	Pd	27	25.90	0.4				sP	28	56.00				e	37	32.50		
BBTK	32.10	286	iPc	27	26.00	0.3				PP	29	51.00		SOP	42.35	302	iPc	28	53.00	1.5
KFNJ	32.13	270	Pc	27	26.40	0.5				PcP	30	31.00		VKA	42.42	303	iPc	28	52.80	0.7
BJI	32.22	74	eP	27	27.00	0.5				S	34	06.00			3.0s	515.00nm			5.8mb	
	1.0s	42.00nm			5.2mb		MMB	38.46	291	ePc	28	20.00	0.3			i	28	54.70	6kmX	
Z	12s	1.51um			4.9MsZx		OUR	38.56	289	ePc	28	20.52	0.1			i	29	19.30		
			eP	27	53.00	118km	VTs	38.63	293	iPc	28	22.00	0.7			i	29	35.40		
			esP	28	04.00		SRS	38.67	290	ePc	28	21.70	0.3			e	30	36.00		
			PcP	30	14.00		ARO	38.82	235	iP+	28	24.20	1.3			i	30	55.80		
			eS	32	34.00		SSE	38.82	86	eP	28	23.70	1.0			e	32	30.00		
			esS	33	08.00			Z	16s	0.90um		4.7MsZx		TRO	42.62	335	iPd	28	53.50	0.1
			eScP	33	45.00			N	11s	1.00um				LCI	43.01	291	Pc	28	54.50	-2.4
MKRJ	32.28	270	Pd	27	27.90	0.6		E	11s	0.70um				PTJ	43.08	299	eP	28	55.10	-2.5
DSI	32.48	270	ePc	27	30.00	1.1				pP	28	50.00	115km	ZAG	43.08	299	iPc	28	58.00	0.6
LISJ	32.53	269	Pc	27	30.00	0.7				sP	29	00.00		KLM	43.09	138	eP	28	59.00	1.2
AYN	33.13	265	iPc	27	35.70	1.1				PcP	30	34.00		HFS	43.24	320	eP	28	58.20	-0.4
MBH	33.61	267	iPc	27	40.00	1.2				S	34	14.00			0.5s	199.70nm			6.1mb	
WHN	33.68	91	Pd	27	40.00	0.6	KKB	38.88	292	iPc	28	23.00	-0.1		Z	18s	1.23um			4.9MsZ
	1.2s	100.00nm																		

MUN 80.15 145 eP 33 06.00 -0.2
 KLB 80.54 144 eP 33 07.00 -1.2
 WB5 80.78 124 iPd 33 09.00 -0.7
 WARB 80.79 134 eP 33 10.00 0.3
 WRA 80.80 124 Pd 33 09.30 -0.6
 0.7s 27.50nm 5.2mb
 SCH 81.33 338 eP 33 09.00 -3.2X
 COOL 81.59 141 eP 33 14.00 0.3
 SIT 81.63 16 iPc 33 15.70 2.1
 PMG 82.60 108 eP 33 19.50 0.2
 OIS 84.71 121 iPd 33 29.10 -0.8
 1.1s 15.00nm 4.8mb
 FORR 85.20 136 iPc 33 32.00 0.0
 0.4s 65.00nm 5.9mb
 FFC 87.16 358 iPc 33 41.70 0.2
 0.9s 55.00nm 5.6mb
 EDM 88.48 5 eP 33 48.50 0.6
 CBM 88.63 335 eP 33 50.00 1.3
 epP 35 19.20 383kmX
 CTA 88.96 117 iPd 33 50.50 0.0
 0.9s 34.45nm 5.5mb
 RSON 90.47 352 P 33 56.80 -0.4
 1.2s 34.62nm 5.4mb
 PNT 91.76 9 eP 34 04.00 0.8
 0.8s 38.00nm 5.7mb
 MCW 91.94 11 P 34 05.70 1.6
 HBVT 92.49 337 P 34 07.80 1.2
 WNY 92.70 338 eP 34 08.00 0.3
 epP 34 37.90 114km
 RSNY 92.76 338 P 34 09.00 1.1
 1.0s 24.58nm 5.5mb
 GMW 93.04 12 P 34 10.40 1.2
 NEW 93.08 8 iP 34 09.80 0.4
 0.9s 23.03nm 5.5mb
 ipP 34 39.70 113km
 RMW 93.28 11 P 34 11.80 1.5
 LON 93.97 11 P 34 14.00 0.5
 LRM 95.91 5 eP 34 23.20 0.6
 RSSD 97.82 359 P 34 31.80 0.6
 IMW 97.91 4 iP 34 33.10 1.3
 epP 35 02.10 110km
 DAU 101.37 4 Pd iff 34 51.40 4.2X
 ALQ 106.99 1 e(PKP) 39 16.00 -5.4X
 SPA 128.24 180 iPKPc 40 01.60 0.6
 1.0s 16.50nm
 SIV 135.04 287 PKP 40 13.00 -2.2
 AIA 144.06 208 ePKP 40 29.30 -0.7
 RTLL 148.85 272 ePKPc 40 41.20 2.2
 e 40 43.60
 RTCB 149.17 272 iPKPd 40 45.20 5.6X
 FCH 151.03 269 ePKP 40 51.00 8.4X
 PEL 151.27 270 ePKP 40 50.50 7.9X
 TACH 151.65 269 ePKP 40 51.00 7.9X
 LNV 152.12 269 ePKP 40 51.20 7.5X
 S.D. = 0.9 on 364 of 391 obs.

& MAY 17, 1990 13h 59m 46.20s
 39.717 N 122.727 W
 DEPTH = 4.0km
 NORTHERN CALIFORNIA (36)
 <BRK>. ML 2.7 (BRK).

LTCM 0.67 43 eP 59 59.00 -0.7
 WDC 0.87 9 iPd 00 01.50 -2.0
 iS 00 14.20
 ORV 0.96 99 eP 00 03.80 -1.3
 eS 00 19.20
 FHC 1.45 319 eP 00 12.70 -0.6
 CMB 2.48 132 eP 00 28.50 0.4
 KVN 3.65 99 eP 00 44.00 -0.8
 6 obs. associated

MAY 17, 1990 15h 59m 56.53±0.14s
 25.398 S ± 4.3km 178.101 E ± 3.0km
 DEPTH = 613.5km (13 depth phases)
 5.8mb (55 obs.)
 SOUTH OF FIJI ISLANDS (171)
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 12S, 29C
 Centroid Location:
 Origin Time 16:00: 5.9 0.4
 Lot 25.40S 0.04 Lon 177.63E 0.03
 Dep 629.3 2.1 Half-duration 3.5
 Moment Tensor; Scale 10**17 Nm

Mrr= 0.44 0.15 Mtt= 4.02 0.23
 Mff=-4.46 0.22 Mrt=-0.67 0.22
 Mrf=-4.72 0.21 Mtf=-5.95 0.21
 Principal Axes:
 T Val= 7.52 Plg=15 Azm= 32
 N 2.06 61 151
 P -9.58 24 295
 Best Double Couple: Mo=8.6*10**17
 NP1: Strike= 75 Dip=61 Slip=-173
 NP2: 342 84 -29

SVA 7.25 3 ePc 01 48.40 -1.4
 VUN 7.36 3 ePc 01 48.50 -2.3
 NDF 7.63 355 iPd 01 53.00 -0.2
 OVA 7.70 5 ePc 01 48.40 -5.5X
 SGE 7.77 359 iPc 01 54.00 -0.7
 KRO 8.13 9 ePc 01 57.30 -0.7
 TVI 8.61 12 ePc 02 01.60 -0.9
 NDE 8.84 8 eP 02 04.20 -0.5
 DZM 11.18 285 iPd 02 29.10 1.8
 iS 04 35.00
 PVC 11.87 308 iPc 02 36.00 2.1
 HBZ 12.17 179 P 02 33.00 -3.7X
 S 04 37.00
 WEL 16.09 189 Pd 03 14.00 -0.6
 1.3s 843.08nm 6.0mb
 S 05 53.00
 ScS 13 47.00
 MSZ 20.93 201 P 03 57.20 -2.2
 S 07 14.50
 BRS 22.76 259 iPc 04 17.00 0.8
 0.6s 28.00nm 5.0mb
 i 04 25.00 29kmX
 i 07 47.10
 i 10 27.80
 HNR 23.45 309 eP 04 20.00 -2.3
 eS 07 54.00
 COO 23.69 251 iPd 04 25.60 1.2
 RIV 24.83 244 eP 04 35.30 0.9
 eS 08 18.70
 RMO 26.39 261 iPd 04 49.40 1.3
 CAN 26.90 242 iPd 04 53.50 0.9
 i 08 51.90
 CMS 28.95 250 iPd 05 10.70 0.5
 0.9s 367.00nm 6.0mb
 TBI 29.58 93 iP 05 15.20 -0.4
 0.7s 170.00nm 5.8mb
 CTA 29.80 274 iPd- 05 18.10 0.6
 1.0s 470.00nm 6.1mb
 i 05 30.00 45kmX
 i 06 46.00
 i 07 02.90
 iS 09 33.00
 iScP 10 48.10
 iSS 12 32.00
 iScS 14 46.00
 TOO 30.19 238 iPd 05 22.00 1.3
 0.6s 210.00nm 5.9mb
 QLP 30.42 260 iPd 05 23.20 0.5
 e 05 46.00 102kmX
 AFR 30.84 82 iP 05 25.70 -0.6
 PAE 30.97 82 iP 05 26.20 -1.2
 1.1s 360.00nm 5.9mb
 PPT 31.01 82 iP 05 26.60 -1.1
 1.1s 445.00nm 6.0mb
 PPN 31.15 82 iP 05 27.80 -1.1
 TVO 31.23 83 iP 05 28.30 -1.3
 BFD 32.40 240 iPd 05 40.00 0.8
 RAB 32.62 306 eP 05 40.00 -1.3
 1.0s 1720.00nm 6.6mb
 PMG 33.42 293 iPd+ 05 48.00 0.1
 2.0s 6235.29nm 6.9mb X
 PMO 33.46 79 iP 05 47.50 -0.7
 1.1s 515.00nm 6.1mb
 VAH 33.60 79 iP 05 48.50 -0.9
 1.1s 370.00nm 5.9mb
 TPT 33.71 79 iP 05 49.80 -0.5
 1.1s 740.00nm 6.2mb
 RUV 33.84 79 iP 05 50.60 -0.8
 1.1s 665.00nm 6.2mb
 LAT 35.07 297 eP 06 02.50 0.9
 ADE 35.17 245 iPd 06 03.00 0.7
 0.6s 333.33nm 6.1mb
 OIS 35.68 270 iPd 06 06.30 -0.3
 eS 11 02.60
 MNDI 38.09 294 eP 06 27.50 0.9
 WB5 40.60 269 iPd 06 46.10 -0.4

WRA 40.61 269 Pd 06 46.00 -0.6
 1.0s 463.60nm 5.9mb
 RKT 42.67 97 iP 07 02.40 -0.4
 0.8s 40.00nm 5.0mb
 FORR 44.14 251 iPd 07 13.20 -0.9
 MTN 45.80 277 eP 07 26.00 -1.6
 WARB 46.09 257 iPd 07 27.60 -1.5
 0.3s 42.00nm 5.4mb
 KNA 46.95 272 iPd 07 35.20 -0.5
 0.4s 237.00nm 6.0mb
 DRV 47.56 199 eP 07 38.80 -0.8
 COOL 50.07 250 eP 07 57.00 -1.8
 GUA 50.44 316 eP 08 01.10 -0.4
 0.8s 1211.94nm 6.4mb
 GUMO 50.50 316 eP 08 00.60 -1.4
 1.1s 1517.08nm 6.3mb
 eS 14 31.00
 PJG 50.50 316 eP 08 00.50 -1.5
 HON 51.91 29 P 08 10.80 -1.2
 OPA 52.24 28 P 08 13.40 -1.0
 SBA 52.79 183 iPc 08 18.00 0.3
 KLB 52.82 249 iPd 08 17.30 -1.3
 0.7s 326.00nm 5.8mb
 MEKA 53.12 255 iPd 08 18.90 -1.8
 0.3s 22.00nm 5.0mb
 MBL 53.34 262 iPd 08 20.80 -1.5
 0.3s 44.00nm 5.3mb
 KUPT 53.71 276 ePc 08 38.10 13.1X
 BAL 53.88 250 eP 08 24.00 -2.0
 MUN 54.06 248 eP 08 26.00 -1.2
 0.9s 605.00nm 5.9mb
 MRWA 54.76 251 iPd 08 30.80 -1.4
 0.3s 30.00nm 5.1mb
 NANU 56.78 259 iPd 08 45.40 -0.7
 0.3s 67.00nm 5.4mb
 DAV 60.41 295 eP 09 08.00 -2.3
 0.9s 672.27nm 5.9mb
 eS 16 40.00
 TRT 64.59 273 iPd 09 35.80 -1.4
 0.9s 498.20nm 5.9mb
 SPA 64.75 180 iPc 09 38.80 1.1
 0.8s 125.83nm 5.4mb
 TSM 65.20 288 ePd 09 42.10 1.2
 1.1s 598.40nm 5.9mb
 KKM 67.71 289 ePd 09 56.00 -0.4
 1.2s 534.80nm 5.9mb
 e 10 08.00 41kmX
 BAG 69.73 300 ePd- 10 06.00 -2.5
 1.1s 506.33nm 5.9mb
 eS 18 28.00
 KAKJ 70.96 328 P 10 15.00 0.0
 CHJJ 71.41 327 P 10 16.80 -0.8
 IIDJ 71.49 326 P 10 17.50 -0.7
 WKYJ 71.72 324 eP 10 18.80 -0.7
 KAGJ 72.14 319 eP 10 21.40 -0.5
 NIJJ 72.35 328 P 10 23.00 0.0
 TKSJ 72.37 323 eP 10 22.30 -0.9
 MTMJ 72.41 327 P 10 22.90 -0.6
 TSRJ 72.52 325 P 10 24.40 0.4
 YAMJ 72.62 329 eP 10 23.90 -0.6
 OFUJ 72.63 331 P 10 24.50 0.0
 KUMJ 73.14 320 eP 10 26.90 -0.7
 YONJ 73.59 323 eP 10 29.10 -1.0
 SHNJ 74.12 321 eP 10 32.20 -0.8
 HOOJ 74.71 334 eP 10 38.10 2.0
 KUSJ 74.77 335 eP 10 37.70 1.3
 MRRJ 75.65 333 eP 10 42.10 0.9
 MAW 75.74 201 iPd 10 41.30 -0.2
 0.7s 60.00nm 5.2mb
 QZH 76.25 306 Pd 10 45.00 0.1
 1.2s 400.00nm 5.8mb
 iS 19 41.00
 ASAJ 76.43 335 eP 10 47.60 2.1
 ADK 77.08 3 iPc 10 48.60 -0.2
 KGM 77.15 278 ePc 10 50.90 0.8
 1.0s 909.10nm 6.2mb
 SSE 78.21 313 Pd 10 55.00 -0.3
 sP 14 02.30
 S 20 00.00
 PPI 78.70 275 eP 10 57.50 -0.7
 1.0s 152.50nm 5.4mb
 QIZ 79.70 297 Pc 11 04.30 1.0
 IPM 80.34 280 ePd 11 07.70 1.0
 0.9s 523.20nm 6.0mb
 NJ2 80.36 312 iPd 11 06.50 0.1

OUR 153.77 311 ePKPc 18 48.00 8.4X
 PAIG 154.16 310 ePKPc 18 48.10 8.0X
 VAY 154.24 314 ePKP 18 40.00 -0.2
 SKO 154.62 316 ePKP 18 40.00 -0.7
 PTJ 155.03 330 ePKP 18 40.50 -0.8
 VAM 155.44 300 ePKP 18 53.10 11.0X
 OHR 155.49 315 ePKP 18 42.50 0.5
 LJU 155.55 332 ePKP 18 42.00 0.1
 e 19 12.00
 VBY 155.65 330 ePKP 18 42.60 0.6
 e 19 12.80
 FVI 155.82 335 PKP 18 37.00 -5.2X
 e 19 12.00
 VOY 155.83 332 ePKP 18 41.40 -1.0
 e 19 12.60
 CEY 155.83 331 ePKP 18 42.40 0.1
 e 19 13.00
 ITM 156.56 306 ePKP 18 54.00 10.5X
 VAI 157.85 340 PKP 18 43.30 -1.3
 e 19 21.60
 BNI 159.20 343 PKP 18 45.00 -1.4
 i 19 29.00
 KIC 160.88 171 PKP 18 49.40 0.6
 TIC 161.11 170 PKP 18 49.70 0.6
 LKO 163.85 167 PKP 18 51.94 0.2
 0.3s 18.50nm
 IFR 171.44 18 ePKP 19 13.00 16.5X
 i 19 23.00
 S.D. = 1.0 on 229 of 276 obs.

? MAY 17, 1990 16h 15m 12.88 ± 8.34s
 16.706 N ± 26.5km 60.632 W ± 68.5km
 DEPTH = 33.0km (normal)
 LEeward ISLANDS (92)
 ML 2.6 (FDF).

SFG 0.70 230 eP 15 26.59 0.2
 SEG 0.89 250 eP 15 28.73 -0.3
 MGG 1.02 220 eP 15 31.83 0.9
 S 15 41.20
 PAG 1.21 236 eP 15 33.50 -0.1
 S 15 45.20
 BPA 1.22 286 eP 15 33.80 0.1
 S 15 45.60
 BBL 1.43 215 eP 15 35.90 -0.9
 S.D. = 0.8 on 6 of 6 obs.

? MAY 17, 1990 16h 42m 00.26 ± 1.51s
 42.479 N ± 38.2km 45.178 E ± 22.7km
 DEPTH = 33.0km (normal)
 3.9mb (3 obs.)
 EASTERN CAUCASUS (337)

NUR 21.95 332 iP 46 53.20 0.8
 KHC 22.90 298 eP 47 03.10 1.1
 SUF 23.16 338 eP 47 08.00 3.7X
 CLL 23.53 303 eP 47 07.00 -1.1
 eSg 08 12.00
 HFS 26.07 324 eP 47 31.70 -0.4
 0.5s 2.10nm 4.0mb
 NB2 27.58 324 P 47 45.60 -0.4
 0.9s 3.60nm 4.0mb
 GUN 35.94 100 P 49 00.00 0.0
 BCAA 44.69 219 ePd 50 25.00 13.1X
 0.8s 11.00nm
 id 51 30.00
 YKA 74.12 350 eP 53 38.50 4.0X
 0.8s 0.50nm 3.6mb
 S.D. = 1.1 on 6 of 9 obs.

& MAY 17, 1990 17h 02m 40.70s
 32.860 N 115.680 W
 DEPTH = 7.0km
 CALIFORNIA-MEXICO BORDER REGION (45)
 <PAS-P>. ML 3.5 (PAS). Felt (IV)
 at Imperial and Seeley; (III) at
 El Centro, California.

IKP 0.42 240 iPd 02 48.90 -0.3
 GLA 0.74 75 iPc 02 54.00 -1.5
 HAY 0.85 2 ePc 02 56.40 -0.9
 BAR 0.85 258 iPc 02 56.60 -0.9
 PLM 1.11 297 eP 03 00.30 -1.6
 PEC 1.61 310 eP 03 08.80 -0.9
 6 obs. associated

? MAY 17, 1990 17h 06m 04.17 ± 1.37s
 50.319 N ± 24.4km 19.036 E ± 10.9km
 DEPTH = 10.0km (geophysicist)
 POLAND (548)
 ML 2.9 (KRA).

KRA 0.64 114 iPg 06 17.00 0.0
 iSg 06 26.50
 SPC 1.38 145 iPn 06 29.50 -0.1
 i(Sg) 06 49.80
 KSP 1.83 288 ePn 06 35.80 0.0
 0.8s 27.00nm
 iPg 06 38.00
 iS 07 01.90
 i 07 04.30
 ZST 2.47 212 eP 06 35.80 -9.3X
 e 07 16.30
 e 07 33.00
 PRU 2.91 265 Pg 06 57.80 6.5X
 eSg 07 34.50
 BRG 3.29 282 e(Pg) 07 06.00 9.2X
 e 07 50.00
 KHC 3.74 254 ePn 07 03.20 0.1
 ePg 07 08.60
 Sg 07 57.00
 eSg 38 37.20
 S.D. = 0.1 on 4 of 7 obs.

MAY 17, 1990 17h 37m 55.21 ± 0.30s
 14.931 N ± 5.6km 147.423 E ± 5.6km
 DEPTH = 34.9km (2 depth phases)
 4.8mb (6 obs.) 4.8Msz (1 obs.)
 MARIANA ISLANDS REGION (215)

GUA 2.80 241 eP 38 37.70 -1.0
 eS 39 13.60
 GUMO 2.82 242 eP 38 38.70 -0.2
 PJG 2.82 242 eP 38 38.70 -0.2
 IIDJ 22.17 339 P 42 50.40 0.5
 CHJJ 22.34 342 P 42 50.30 -1.2
 MTMJ 23.21 340 P 42 58.50 -1.6
 NIJJ 23.45 343 P 43 02.10 -0.2
 PMG 24.18 181 eP 43 10.00 0.4
 SSE 28.91 308 eP 43 51.80 -1.4
 pP 44 00.20 29km
 QIS 36.09 192 eP 44 55.50 -0.4
 WB5 36.90 201 eP 45 02.50 -0.1
 WRA 36.97 201 P 45 03.00 -0.2
 0.8s 13.90nm 4.9mb
 BJI 37.01 319 eP 45 05.00 1.6
 TIY 38.37 313 eP 45 16.20 1.2
 XAN 39.57 306 P 45 25.60 0.6
 GYA 39.66 294 P 45 29.80 3.9X
 BTO 41.35 316 eP 45 37.90 -1.7
 CD2 42.96 299 eP 45 54.20 1.4
 LZH 44.16 307 eP 46 05.50 2.8
 2.0s 28.00nm 4.7mb
 CHTO 46.45 282 eP 46 20.90 0.0
 e 46 32.40 41km
 GTA 48.18 310 eP 46 35.40 0.9
 Z 20s 1.00um 4.8Msz
 LSA 53.62 296 P 47 16.40 0.2
 WMQ 58.04 313 eP 47 47.00 -0.3
 GUN 58.21 294 P 47 49.20 0.1
 PKI 58.63 293 P 47 51.60 -0.4
 0.8s 17.00nm 5.2mb
 DMN 58.90 293 P 47 52.80 -1.0
 HYB 65.87 283 eP 48 40.50 0.4
 INK 72.19 23 eP 49 18.00 -0.2
 MBC 76.37 14 eP 49 42.00 -0.2
 0.8s 6.00nm 4.7mb
 MAIO 79.68 305 eP 50 03.00 1.7
 WDC 80.48 51 eP 50 05.60 0.3
 YKA 80.53 28 eP 50 04.00 -1.1
 0.7s 4.50nm 4.6mb
 PNT 80.74 41 eP 50 06.00 -0.5
 ORV 81.47 51 eP 50 10.50 0.0
 PRS 82.27 55 eP 50 15.10 0.3
 CM8 82.65 53 eP 50 16.90 0.1
 FRI 83.42 54 eP 50 20.80 0.1
 KVN 84.15 51 eP 50 25.00 0.4
 TNP 85.07 52 eP 50 29.80 0.6
 SES 85.81 39 ePd 50 32.50 0.0
 LRM 86.32 44 eP 50 35.40 0.0
 SUF 90.23 337 eP 50 52.00 -1.4
 HFS 96.48 339 eP 51 20.90 -1.2
 1.6s 32.90nm 5.6mb

KIC 145.23 306 PKP 57 31.60 -0.3
 TIC 145.27 306 PKP 57 31.80 -0.2
 LIC 145.54 306 PKP 57 32.60 0.2
 ZOBO 145.76 97 PKP 57 35.00 1.6
 LPB 145.80 98 PKP 57 33.00 -0.3
 SIV 152.52 96 PKP 57 50.00 6.8X
 S.D. = 0.9 on 47 of 49 obs.

? MAY 17, 1990 17h 58m 07.65 ± 1.06s
 19.460 S ± 51.5km 176.769 W ± 25.5km
 DEPTH = 33.0km (normal)
 4.6mb (3 obs.)
 FIJI ISLANDS REGION (181)

PMG 36.27 281 eP 05 10.50 0.5
 WB5 45.88 261 eP 06 29.60 0.5
 WRA 45.90 261 P 06 29.70 0.5
 0.3s 2.00nm 4.5mb
 WARB 52.25 252 eP 07 19.00 0.8
 MBL 59.12 257 iPd 08 06.00 -1.7
 NANU 62.79 254 iPd 08 31.40 -1.1
 0.3s 7.00nm 5.3mb
 FRI 77.74 43 eP 10 07.10 4.1X
 CMB 77.92 42 eP 10 07.90 3.8X
 PNT 85.15 33 eP 10 43.00 1.4
 YKA 95.09 24 eP 11 25.60 -2.5
 0.5s 0.50nm 4.2mb
 CLL 147.29 349 iPKPd 17 42.60 -4.1X
 0.9s 11.00nm
 FLN 150.61 5 ePKP 17 51.70 -0.3
 0.6s 5.40nm
 LDF 150.81 5 ePKP 17 51.50 -0.8
 0.6s 3.60nm
 CDF 150.93 354 ePKP 17 52.20 -0.4
 GRR 150.95 6 ePKP 17 52.70 0.2
 0.4s 2.30nm
 LPF 151.29 6 ePKP 17 53.60 0.6
 0.4s 2.30nm
 LOR 152.26 359 ePKP 17 55.50 1.0
 0.6s 2.70nm
 SSF 152.47 360 ePKP 17 56.10 1.3
 0.8s 2.70nm
 S.D. = 1.2 on 15 of 18 obs.

& MAY 17, 1990 18h 49m 48.80s
 37.372 N 121.753 W
 DEPTH = 7.0km
 CENTRAL CALIFORNIA (39)
 <BRK>. ML 3.6 (BRK).
 Mo=5.0*10**14 Nm (BRK). Felt at
 Milpitas and San Jose.

MHC 0.09 109 iPc 49 51.10 -0.1
 ARN 0.18 97 iPd 49 52.30 -0.3
 GCC 0.39 210 iPd 49 56.90 0.2
 PCC 0.52 285 iPc 49 58.90 -0.3
 BKS 0.63 323 iPc 50 01.30 -0.2
 iS 50 12.30
 BRK 0.64 321 ePc 50 01.30 -0.4
 SAO 0.65 158 iPd 50 01.70 -0.2
 LLA 0.99 139 iPc 50 06.70 -1.2
 PRS 1.08 163 ePd 50 08.10 -1.3
 CMB 1.27 58 ePd 50 11.20 -1.5
 eS 50 25.40
 NWRM 1.41 321 eP 50 12.50 -2.3
 FRI 1.68 102 ePd 50 16.50 -2.2
 PKEM 1.86 134 eP 50 19.50 -1.8
 PHAM 1.88 144 eP 50 19.70 -2.0
 ORV 2.19 5 eP 50 24.00 -2.1
 BCH 2.57 148 eP 50 28.60 -3.0
 ABL 3.25 140 eP 50 38.30 -3.0
 KVN 3.33 59 eP 50 42.00 -0.5
 TNP 3.66 77 eP 50 46.50 -0.8
 PLM 5.66 134 eP 51 15.50 -0.1
 GLA 7.12 125 eP 51 33.30 -2.7
 21 obs. associated

* MAY 17, 1990 18h 54m 11.19 ± 0.72s
 4.243 N ± 11.0km 96.034 E ± 9.1km
 DEPTH = 33.0km (normal)
 4.7mb (5 obs.) 4.6Msz (1 obs.)
 NORTHERN SUMATERA (706)

IPM 4.99 86 eP 55 24.10 -1.7
 0.7s 98.80nm
 e 56 16.90
 e 56 45.00

TDS 2.19 31 P 22 01.70 0.3
eSn 22 29.50
MGR 2.40 13 Pc 22 03.00 -1.4
ORI 2.58 28 P 22 07.50 0.5
eSn 22 38.00
SGO 2.78 7 P 22 09.50 -0.2
eSn 22 41.50
BSS 2.99 359 P 22 13.00 0.2
LCI 3.49 43 P 22 21.00 1.1
SDI 3.99 349 P 22 27.00 0.0

S.D. = 0.8 on 14 of 14 obs.

& MAY 17, 1990 22h 35m 32.21s
58.776 N 153.872 W
DEPTH = 119.0km
KODIAK ISLAND REGION (13)
<AGS-P>.

RDT 1.95 22 iP 36 04.48 -1.1
SLKM 2.54 45 eP 36 13.12 0.0
eS 36 42.67
SPU 2.58 20 iP 36 12.05 -1.6
CRP 2.64 18 iP 36 13.23 -1.4
NCG 2.77 17 eP 36 14.55 -1.7
PMS 3.29 39 eP 36 21.64 -1.4
SML 4.10 40 eP 36 31.80 -2.3
7 obs. associated

% MAY 17, 1990 22h 41m 07.89 ± 1.06s
37.916 N ± 14.6km 14.771 E ± 9.8km
DEPTH = 10.0km (geophysicist)
SICILY (398)

GIB 0.59 277 P 41 20.50 0.6
eSg 41 30.00
ATN 0.60 66 P 41 20.20 0.2
eSg 41 29.50
FAI 1.08 234 P 41 27.80 -0.4
eSg 41 42.80
TDS 2.13 35 P 41 44.50 0.6
MGR 2.30 15 P 41 45.50 -0.9
S.D. = 0.9 on 5 of 5 obs.

% MAY 17, 1990 23h 02m 22.53 ± 0.74s
37.736 N ± 7.3km 14.841 E ± 7.2km
DEPTH = 18.5 ± 11.6 km
SICILY (398)

MNO 0.23 329 P 02 27.90 -0.3
eSg 02 33.30
MEU 0.64 174 Pd 02 34.00 -0.9
eSg 02 45.50
ATN 0.65 49 P 02 35.40 0.3
eSg 02 44.40
GIB 0.69 292 P 02 35.70 -0.1
eSg 02 46.40
MSI 0.73 50 P 02 38.20 1.8
eSn 02 47.40
FAI 1.03 244 P 02 42.80 1.2
eSn 02 57.00
TDS 2.25 31 P 02 58.60 -0.8
eSn 03 25.60
MGR 2.46 13 P 03 01.90 -0.5
eSn 03 30.50
ORI 2.64 28 P 03 04.50 -0.5
S.D. = 1.2 on 9 of 9 obs.

* MAY 17, 1990 23h 25m 50.88 ± 0.48s
39.508 N ± 9.5km 143.267 E ± 10.6km
DEPTH = 33.0km (normal)
4.8mb (18 obs.)
OFF EAST COAST OF HONSHU, JAPAN (229)

BJI 20.81 280 eP 30 29.00 -2.7
1.1s 21.00nm 4.4mb
LZH 31.17 276 eP 32 09.50 0.4
1.5s 38.00nm 5.0mb
pP 32 24.00 59kmX
MBC 53.74 17 eP 35 11.00 -0.5
0.7s 2.00nm 4.2mb
WB5 59.66 190 eP 35 53.80 -0.4
WRA 59.73 190 Pc 35 54.00 -0.7
0.3s 1.70nm 4.7mb
HYB 59.74 268 eP 35 54.50 -0.5
YKA 60.94 31 eP 36 00.40 -2.1
0.8s 0.70nm 3.8mb
QUE 61.61 287 eP 36 08.00 0.2

GBA 62.87 265 Pc 36 15.20 -0.8
0.9s 8.70nm 4.9mb
SOD 63.25 337 iP 36 17.00 -1.0
PNT 65.39 46 eP 36 41.00 8.8X
SUF 66.43 333 iP 36 37.90 -0.6
0.5s 5.00nm 4.9mb
WARB 67.17 196 eP 36 44.00 0.4
NUR 68.45 332 iP 36 51.00 -0.3
FFC 70.84 34 eP 37 05.00 -1.0
0.9s 9.00nm 4.8mb
LRM 71.37 46 eP 37 09.60 -0.1
HFS 72.43 336 eP 37 14.50 -0.9
0.5s 8.20nm 5.0mb
NB2 72.46 338 P 37 15.00 -0.7
0.8s 9.60nm 4.8mb
FRB 74.03 14 eP 37 23.50 -1.1
KRA 77.85 327 eP 37 59.00 12.6X
KSP 78.76 329 eP 37 51.70 0.3
BRG 79.65 330 eP 37 56.20 -0.1
CLL 79.66 331 iP 37 56.50 0.2
0.9s 10.00nm 4.8mb
PRU 80.12 329 eP 38 00.00 1.2
KHC 81.19 329 eP 38 05.50 1.0
HRI 81.33 306 iPd 38 07.00 1.4
GRF 81.64 331 iPc 38 08.10 1.3
1.1s 17.00nm 5.0mb
SKO 83.23 320 iP 38 16.70 1.5
CDF 84.16 332 eP 38 20.50 0.6
OHR 84.19 320 eP 38 19.80 -0.3
MBH 84.21 304 ePc 38 21.00 0.7
VAI 85.73 330 Pc 38 27.50 -0.1
LOR 86.34 334 eP 38 31.00 0.3
0.8s 6.70nm 4.9mb
LBF 86.54 333 eP 38 32.00 0.3
0.8s 4.70nm 4.8mb
SSF 86.64 334 eP 38 32.50 0.4
0.8s 6.05nm 4.9mb
LPL 86.80 331 eP 38 33.90 0.6
0.8s 4.05nm 4.7mb
LPG 86.81 331 eP 38 34.20 0.8
0.8s 4.05nm 4.7mb
AVF 86.92 334 eP 38 34.10 0.6
0.8s 9.40nm 5.1mb
SIV 148.37 49 PKP 45 34.20 2.0
S.D. = 1.0 on 37 of 39 obs.

MAY 17, 1990 23h 28m 00.12 ± 0.12s
26.619 N ± 2.6km 127.846 E ± 2.5km
DEPTH = 32.6km (geophysicist)
6.0mb (88 obs.) 5.7msz (18 obs.)
RYUKYU ISLANDS (238)

Ms 5.3 (BRK). Felt (111 JMA) at
Naha; (1 JMA) at Naze and on
Miyako-jima and Kume-jima. Depth
from broadband displacement
seismograms.

FAULT PLANE SOLUTION: P-Waves
NP1: Strike=55 Dip=64 Slip=90
NP2: 235 26 90
Principal Axes:

T P1g=71 Azm=325
P 19 145

Comment: The focal mechanism is
poorly controlled and
corresponds to reverse
faulting. The preferred fault
plane is NP2.

RADIATED ENERGY

No. of sta: 5 Focal mech. C

Energy 6.0 ± 2.2 × 10¹² Nm

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 11S, 26C

Centroid Location:

Origin Time 23:28: 3.3 0.4

Lat 26.31N 0.05 Lon 127.42E 0.07

Dep 48.6 4.1 Half-duration 3.0

Moment Tensor; Scale 10¹⁷ Nm

Mrr= 4.74 0.28 Mtt=-2.25 0.38

Mff=-2.49 0.52 Mrt= 2.07 0.44

Mrf= 2.96 0.42 Mtf=-3.13 0.30

Principal Axes:

T Val= 5.92 P1g=72 Azm=295

N 0.71 5 41

P -6.63 17 133

Best Double Couple: Ma=6.3 × 10¹⁷

NP1: Strike=231 Dip=28 Slip=101

NP2: 38 63 84

NAH 0.43 200 P 28 12.90 3.3X
S 28 20.30
KAGJ 5.27 30 P 29 19.70 1.0
ANP 5.88 257 eP 29 30.00 2.7
eS 29 44.00
KUMJ 6.44 23 P 29 36.20 1.0
SSE 7.35 309 P 29 49.20 1.4
1.0s 830.00nm 6.7mb
Z 20s 24.10um
N 10s 16.60um
E 10s 15.00um

SHNJ 7.99 20 eP 29 57.40 0.5
QZH 8.51 261 Pc 30 04.00 0.0
8.0s 7300.00nm 6.9mb X
Z 24s 14.20um 5.3msz X
S 31 38.00
SHK 8.92 27 eP 30 09.10 -0.6
TKSJ 9.09 35 P 30 08.40 -3.6X
eS 31 46.80
NJ2 9.53 307 Pc 30 20.00 1.9
Z 12s 13.50um
E 10s 19.50um
sP 30 37.00

BAG 12.20 215 eP 30 56.00 1.3
WHN 12.49 291 Pc 31 01.00 2.7
1.4s 500.00nm 6.4mb
Z 18s 6.10um 4.1msz X
sP 31 14.00

TIA 13.23 319 Pc 31 11.40 3.2X
Z 18s 14.40um
N 12s 5.20um
E 12s 2.40um
pP 31 21.40

MAJO 13.25 39 iPc 31 18.38 9.9X
DL2 13.32 338 iPc 31 13.00 3.7X
3.0s 1500.00nm 6.4mb
Z 20s 10.00um 4.2msz
N 12s 3.40um
E 14s 10.10um

SNY 15.57 348 iPc 31 40.00 1.2
7.0s 3700.00nm 5.7mb X
Z 20s 16.70um 5.0msz
N 16s 7.90um
E 11s 3.60um
pP 31 50.00
sP 31 55.00

BJI 16.54 327 ePc 31 53.11 2.0
9.0s 8040.00nm 5.9mb X
Z 15s 18.40um 4.6msz X
E 13s 4.68um

TIY 17.08 314 iPc 32 01.00 2.9
8.0s 3700.00nm 5.6mb X
N 12s 17.30um
PP 32 17.00

CN2 17.25 354 iPc 32 01.00 0.9
5.0s 3000.00nm 5.7mb X
Z 18s 9.00um 4.1msz
N 12s 6.00um
E 12s 1.40um
pP 32 11.00
sP 32 17.00
S 35 12.00
sS 35 26.00
PcP 36 40.00

XAN 17.92 299 iPd 32 10.00 1.5
5.0s 2600.00nm 5.6mb X
N 11s 6.00um
E 10s 2.20um
sP 32 25.00

OIZ 18.22 249 P 32 13.00 0.8
E 15s 7.80um

GYA 18.95 274 iPc 32 22.80 1.5
5.0s 2400.00nm 5.7mb X
Z 16s 11.10um 5.0msz X
N 12s 5.90um
E 12s 8.60um
sP 32 36.00

DAV 19.54 187 eP 32 27.20 -0.9
HHC 19.57 321 iPc 32 28.50 0.2
1.0s 330.00nm 5.6mb
Z 18s 17.90um 4.8msz
BTO 20.31 318 iPc 32 36.00 -0.2
N 15s 8.40um
E 15s 7.30um
pP 32 51.50 74kmX

17d 23h

TPT	91.84	106	iP	41	21.20	14.7X	TIC	123.62	299	PKP	46	56.06	-0.7	LIT	0.65	255	ePg	40	15.40	0.0
	1.3s	70.00nm					LIC	123.89	299	PKP	46	56.54	-0.7	SRS	0.87	14	ePg	40	20.10	0.5
LDF	91.86	328	eP	41	05.70	-0.5		0.9s	54.50nm								eSg	40	32.80	
	1.0s	36.00nm				5.7mb	Z	20s	0.55um				5.2msz	KNT	0.94	341	ePg	40	20.60	-0.2
FLN	91.90	329	eP	41	05.60	-0.8	PT10	152.55	63	e(PKP)	47	50.00	1.8				eSg	40	34.00	
	1.0s	24.00nm				5.6mb	NNA	152.60	63	iPKPd	47	48.70	0.4	GRG	0.97	315	ePg	40	22.00	0.7
ECP	91.91	334	eP	41	05.90	-0.4		1.0s	28.00nm								eSg	40	36.60	
	1.3s	144.00nm				6.2mb								S.D. = 0.5 on 7 of 7 obs.						
ABL	91.91	49	P	41	07.30	0.3	ARE	159.39	65	ePKP	47	59.00	1.7	7 MAY 18, 1990 00h 48m 08.94±0.86s						
		pP				42kmX	ZOBO	161.93	58	iPKPc	48	01.43	1.2	31.531 S ±29.4km 68.579 W ±21.1km						
VAH	91.94	106	iP	41	21.60	14.6X		1.5s	88.71nm					DEPTH = 100.0km (geophysicist)						
	1.3s	70.00nm												SAN JUAN PROVINCE, ARGENTINA (137)						
ISA	91.96	48	eP	41	06.00	-1.0	LPB	162.11	59	PKPc	47	58.00	-2.2	ZON	0.09	260	iPd	48	23.50	0.1
LMR	92.01	321	eP	41	06.70	-0.3			LR	44	08.00						eS	48	33.00	
	1.0s	88.00nm				6.1mb	CCH	164.11	57	PKP	48	03.50	1.5	RTCB	0.19	283	iPd	48	23.80	0.1
LRG	92.01	322	eP	41	06.80	-0.2			LR	46	44.00			RTLL	0.22	25	iPc	48	23.60	-0.1
	1.0s	88.00nm				6.1mb	SIV	166.56	40	PKP	48	04.40	0.7	RTCV	0.33	174	iPc	48	23.90	0.0
RUV	92.13	106	iP	41	22.40	14.6X			i	48	56.00						S	48	34.20	
	1.3s	75.00nm					BAO	168.40	340	ePKP	48	06.00	0.8	RTBS	0.76	260	eP	48	27.00	-0.1
MAF	92.19	325	eP	41	07.40	-0.4											(S)	48	39.60	
	0.8s	13.45nm				5.4mb	S.D. = 0.9 on 389 of 412 obs.						S.D. = 0.2 on 5 of 5 obs.							
TCF	92.33	326	eP	41	08.00	-0.5	* MAY 17, 1990 23h 33m 18.87±1.03s						* MAY 18, 1990 01h 44m 21.00±0.35s							
	1.2s	13.40nm				5.2mb	40.670 N ±11.6km 21.574 E ±6.3km						15.196 S ±9.1km 168.018 E ±10.9km							
GRR	92.35	329	eP	41	08.00	-0.4	DEPTH = 5.0km (geophysicist)						DEPTH = 33.0km (normal)							
	1.0s	34.00nm				5.7mb	GREECE							5.0mb (4 obs.)						
CLC	92.45	48	eP	41	10.00	0.7		ML 2.1 (SKO), 1.9 (THE).						VANUATU ISLANDS (186)						
LPF	92.69	328	eP	41	09.80	-0.2	FNA	0.19	307	iPgc	33	23.20	0.4	PVC	2.55	174	iPc	45	03.60	2.7
	1.0s	64.00nm				6.0mb			eSg	33	26.30					iS	45	41.00		
LSF	92.70	326	eP	41	09.00	-1.1	GRG	0.69	65	ePg	33	32.40	-0.3	DZM	7.00	192	iPc	46	01.00	-2.9
	1.1s	24.40nm				5.5mb			eSg	33	42.70					iS	47	18.00		
DUG	92.84	42	P	41	12.10	1.0	OHR	0.73	307	iPg	33	33.10	-0.5	PMG	21.17	283	eP	49	07.00	1.1
	1.2s	57.77nm				5.9mb			iSg	33	45.10		RMQ	21.19	235	eP	49	07.00	0.9	
SBB	92.95	49	eP	41	12.00	0.4	LIT	0.90	129	ePg	33	36.60	0.0	WB5	32.39	257	eP	50	48.70	-1.4
PAS	93.02	49	iPc	41	12.43	0.6			eSg	33	51.00		WRA	32.42	257	Pd	50	49.20	-1.1	
		esPd					KNT	1.12	63	ePb	33	40.60	0.3		0.8s	13.60nm			4.9mb	
MWC	93.06	49	eP	41	13.00	0.7	S.D. = 0.5 on 5 of 5 obs.						FORR	39.67	240	iPd	51	52.20	0.4	
BW06	93.07	38	P	41	12.50	0.3	MAY 18, 1990 00h 23m 55.21±1.11s								0.4s	15.00nm			5.1mb	
	1.0s	34.25nm				5.7mb	40.971 N ±8.8km 12.671 E ±8.2km						WARB	40.06	247	eP	51	55.00	-0.2	
GSC	93.28	48	eP	41	14.00	0.9	DEPTH = 10.0km (geophysicist)						KKM	55.49	288	ePc	53	55.50	-0.1	
MFF	93.28	327	eP	41	12.30	-0.5	TYRRHENIAN SEA							MDJ	69.03	332	Pd	55	25.20	-0.2
	1.0s	24.00nm				5.6mb							TIY	74.09	317	eP	55	55.40	-0.5	
CAF	93.34	325	eP	41	13.20	0.0							SPA	74.90	180	iPc	55	59.90	-0.4	
	1.1s	31.75nm				5.7mb	RDP	0.79	3	P	24	10.50	-0.1		1.3s	22.50nm			5.0mb	
RJF	93.36	325	eP	41	12.90	-0.3			eSn	24	20.50		KMI	75.16	302	eP	56	03.50	0.9	
	1.0s	24.00nm				5.6mb	RMP	0.84	2	P	24	12.00	0.6	CHG	75.93	294	eP	56	07.00	0.3
VAL	93.58	336	eP	41	14.00	0.0			eSn	24	23.50		HHC	76.41	319	eP	56	10.00	0.9	
DAU	93.63	41	P	41	16.00	1.1	SDI	1.13	49	P	24	15.60	-0.8	GTA	83.51	314	eP	56	48.00	0.8
RVR	93.65	49	eP	41	14.00	-0.8			eSg	24	32.00		CMB	85.36	49	eP	56	55.80	-0.6	
PEC	93.86	49	P	41	16.20	0.4	AZI	1.17	29	P	24	17.00	0.0	FRI	85.45	50	e(P)	56	50.30	-6.5X
		pP				39kmX			eSg	24	33.00		KVN	87.41	48	P	57	06.50	-0.1	
LPO	93.96	325	eP	41	15.60	-0.4	MNS	1.41	0	P	24	22.00	1.0	TNP	87.69	50	P	57	07.90	-0.1
	1.2s	17.85nm				5.4mb			eSg	24	38.70				e			57	17.90	
LFF	94.01	325	eP	41	16.10	-0.1	BSS	1.63	96	P	24	25.00	1.0	WMO	93.57	314	eP	57	35.00	-0.1
	1.1s	24.40nm				5.5mb	ASS	2.10	360	P	24	31.00	0.1	YKA	97.63	27	eP	57	51.20	-1.8
MSU	94.28	43	P	41	19.00	1.1			eSn	24	54.50			0.9s	0.60nm				4.1mb	
PLM	94.37	49	eP	41	19.00	0.7	MGR	2.35	110	P	24	34.00	-0.5	ARV	144.67	328	PKP	03	54.00	-2.1
		e				45	ARV	2.53	4	P	24	36.00	-1.0	VAI	144.80	335	PKPc	03	54.00	-2.2
TPC	94.48	48	eP	41	19.00	0.4	PGF	3.17	301	Pn	24	45.80	-0.3	SFI	144.91	329	PKPc	03	56.50	0.1
RSON	94.58	25	P	41	17.70	-1.0			Sn	25	22.00		ORI	144.94	320	PKPd	03	55.60	-1.1	
		pP				39kmX	S.D. = 0.8 on 10 of 10 obs.						PGD	145.01	330	PKP	03	56.00	-0.9	
BAR	94.90	50	eP	41	21.00	0.5	7 MAY 18, 1990 00h 29m 24.69±2.08s						DUI	145.11	324	PKP	03	56.00	-1.0	
RSSD	95.10	35	iPc	41	21.60	0.1	31.217 S ±39.2km 68.484 W ±25.3km						ASS	145.12	328	PKP	03	55.00	-2.0	
		iPP				45	DEPTH = 100.0km (geophysicist)						TDS	145.25	320	PKP	03	57.50	0.3	
GLA	95.93	49	eP	41	27.00	1.7	SAN JUAN PROVINCE, ARGENTINA (137)						LDF	145.29	346	ePKP	03	55.00	-1.2	
PV09	96.11	41	eP	41	26.90	0.5	RTLL	0.11	174	iPc	29	39.20	0.0		0.8s	8.05nm				
EBR	97.01	323	eP	41	30.00	0.1	RTCB	0.38	225	iPd	29	40.00	0.0	SGO	145.33	322	PKP	03	56.00	-1.3
		ePP				45	RTCV	0.64	184	ePc	29	41.90	0.0	BOB	145.39	333	PKP	03	56.50	-0.9
SCH	97.93	8	eP	41	33.00	-0.9			S	29	54.40		LOR	145.41	341	ePKP	03	56.80	-0.5	
ALQ	100.08	43	ePdiff	41	44.00	-0.2	RTBS	0.94	242	eP	29	44.70	0.0		1.3s	25.25nm				
	1.0s	11.25nm				5.4mb			S	29	59.00		SDI	145.44	325	PKP	03	56.50	-1.1	
Z	22s	0.52um				5.0msz	S.D. = 0.0 on 4 of 4 obs.						MGR	145.44	321	PKP	03	55.60	-1.9	
TOL	100.10	324	iPdiff	41	43.50	-0.4	* MAY 18, 1990 00h 40m 02.40±0.74s						AZI	145.46	326	PKP	03	57.00	-0.4	
	1.1s	113.92nm				6.3mb	40.275 N ±5.4km 23.309 E ±6.5km						BSS	145.48	323	PKP	03	49.00	-8.6X	
BUL	106.71	256	ePKP	46	21.00	-2.7	DEPTH = 5.0km (geophysicist)						MNS	145.59	327	PKP	03	52.00	-5.8X	
UYO	107.45	36	e(PKP)	46	24.00	-1.3	GREECE						LBF	145.63	341	ePKP	03	57.50	-0.2	
TIO	108.49	320	iPKP	46	45.															

LPF	1.2s	20.85nm	03 58.80	0.6
CKI	146.03	347 ePKP	03 58.80	-0.6
BN1	146.32	336 PKP	04 00.00	1.0
BGF	146.36	341 ePKP	03 59.70	0.8
MAF	0.8s	7.40nm	04 01.00	1.5
TCF	146.75	341 ePKP	04 01.10	1.5
LSF	1.0s	8.00nm	04 01.50	1.5
MFF	147.03	343 ePKP	04 01.90	1.8
PGF	1.0s	14.00nm	04 02.30	1.6
FRF	147.16	345 ePKP	04 02.80	1.9
LMR	147.56	334 ePKP	04 03.60	2.4
RJF	1.0s	5.35nm	04 04.43	3.1X
CAF	147.90	342 ePKP	04 05.10	3.4X
BCAO	1.0s	12.00nm	04 05.00	2.3
LFF	148.07	341 ePKP	04 05.90	3.7X
LPO	148.46	343 ePKP	04 06.30	3.9X
S.D. = 1.3 on 53 of 60 obs.				

% MAY 18, 1990 02h 21m 51.53 ± 2.75s
45.154 N ± 6.3km 6.524 E ± 21.0km
DEPTH = 5.0km (geophysicist)

FRANCE				(538)			
BN1	0.15	133	Pc	21	54.60	0.0	
			iSg	21	57.00		
RRL	0.30	142	P	21	57.64	0.0	
			S	22	02.25		
LPG	0.38	25	Pg	21	59.20	0.0	
			Sg	22	05.00		
RSP	0.52	90	P	22	01.95	0.0	
			S	22	08.92		
			S	22	11.58		
LSD	0.54	56	P	22	02.36	0.0	
			S	22	09.53		
S.D. = 0.0 on				5 of	5 obs.		

* MAY 18, 1990 02h 38m 50.51 ± 1.02s
14.903 S ± 10.1km 71.809 W ± 13.1km
DEPTH = 33.0km (normol)

PERU					(116)
ARE	1.58	169	iPd	39 16.50	-0.3
ZOBO	3.80	111	P	39 49.00	0.3
PT03	3.97	283	ePc	39 51.00	0.4
			iS	40 35.00	
PT06	4.51	283	iP	39 58.50	0.2
			e(S)	40 46.50	
PT02	4.90	293	eP	40 05.30	1.5
			e(S)	40 55.70	
NNA	5.69	300	eP	40 15.00	0.0
	0.4 s	12.71nm			4.8mb X
			eS	41 17.50	
PT10	5.75	299	e(P)	40 14.00	-1.9
			e(S)	41 19.00	
S.D. = 1.2 on 7 of 7 obs.					

* MAY 18, 1990 02h 52m 10.38 ± 0.96s
40.119 N ± 16.2km 19.631 E ± 6.1km
DEPTH = 10.0km (geophysicist)

OHR	1.33	42	iPn	52	35.00	0.0
			iSg	52	57.10	
LIT	2.19	90	eP	52	48.10	0.7
SKO	2.30	36	ePn	52	48.90	0.0
BAI	2.33	296	P	52	57.00	7.7X
ORI	2.44	270	P	52	50.00	-0.9
VAY	2.54	61	ePn	52	51.50	-0.7
MGR	3.12	272	P	53	00.00	-0.6
SGO	3.33	279	P	53	04.50	0.9
DUI	4.21	293	P	53	30.00	13.9X

SDI 4.68 292 P 53 23.50 0.7
S.D. = 0.8 on 8 of 10 obs.

& MAY 18, 1990 03h 01m 06.80s
36.638 N 121.312 W
DEPTH = 6.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.1 (BRK).

SAO	0.17 320 iP	01 10.00	-0.3
LLA	0.30 94 iPc	01 12.70	-0.1
GCC	0.67 306 iPc	01 19.20	-1.1
PRI	0.72 133 eP	01 20.50	-0.7
ARN	0.73 346 iPc	01 21.00	-0.4
MHC	0.75 340 iPd	01 21.40	-0.5
PHAM	1.09 137 ePc	01 27.00	-0.7
PKEM	1.13 120 iPc	01 28.90	0.6
PCC	1.21 315 ePd	01 27.90	-1.8
FRI	1.33 74 ePc	01 30.10	-1.7
BRK	1.45 329 ePc	01 31.40	-2.1
CMB	1.58 28 iPc	01 34.20	-1.2
BCH	1.76 145 eP	01 36.00	-2.1
KVN	3.50 46 eP	02 06.00	2.9
14 obs. associated			

& MAY 18, 1990 03h 02m 39.40s
36.635 N 121.307 W
DEPTH = 7.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.9 (BRK).

SAO	0.17 320 eP	02 42.40	-0.7
LLA	0.29 93 iPc	02 45.30	-0.1
GCC	0.68 306 eP	02 51.50	-1.5
PRI	0.71 133 eP	02 54.20	0.5
ARN	0.74 346 iPc	02 53.50	-0.6
MHC	0.75 339 e(P)	02 54.00	-0.5
PHAM	1.08 137 eP	03 00.30	0.2
PKEM	1.12 120 eP	03 01.20	0.5
PCC	1.22 315 eP	03 00.40	-1.9
FRI	1.33 74 iPd	03 02.90	-1.3
CMB	1.58 27 eP	03 06.70	-1.2
BCH	1.75 145 eP	03 09.30	-1.2
12 obs. associated			

MAY 18, 1990 03h 30m 43.53 ± 1.21s
4.157 S ± 7.3km 102.475 E ± 6.8km
DEPTH = 77.7 ± 9.7 km
5.2mb (21 obs.)
SOUTHERN SUMATERA (274)

PPI	4.22 330 eP	31 46.00	-0.8
KGM	6.19 8 ePc	32 15.60	1.3
PSI	7.68 332 eP	32 32.00	-2.8
IPM	8.80 351 ePc	32 52.20	2.0
TRT	10.70 110 ePc	33 17.10	1.0
SNG	11.41 351 eP	33 25.40	-0.2
KKM	17.06 54 ePd	34 41.00	2.4
TSM	17.67 62 ePd	34 48.00	1.9
LOE	21.44 358 eP	35 25.50	-1.6
BDT	21.54 351 eP	35 27.00	-1.1
NANU	22.24 147 eP	35 35.30	0.3
QIZ	24.15 17 P	35 56.50	2.8
KMI	29.11 0 Pd	36 40.00	0.6
MTN	29.60 109 eP	36 40.00	-3.6X
GBA	30.48 306 P	36 53.00	1.6

GYA	30.70	7	P	36	53.20	-0.2
WARB	31.87	136	eP	37	02.00	-1.6
WB5	34.78	119	iPc	37	26.80	-2.0
			eS	42	51.30	
CD2	34.89	2	P	37	28.20	-1.4
LSA	35.37	343	P	37	33.00	-1.2
POO	36.11	310	iPd	37	39.30	-0.8
OIS	39.62	117	iPc	38	08.00	-1.4
	0.4s		15.00nm			5.3mb
LZH	40.05	2	eP	38	12.50	-0.4
	1.3s		35.00nm			5.1mb
NDI	40.69	325	iPc	38	18.00	-0.1
	1.0s		150.00nm			5.8mb
TIY	42.67	12	iPd	38	34.30	0.0

GTA	0.8s	40.00nm	5.3mb
Z	20s	0.60um	4.5msz
BTO	43.42 357 iPd	38 40.20	-0.2
CTA	0.8s	30.00nm	5.2mb
HHC	45.07 8 eP	38 53.00	-0.6
BJI	45.46 114 iPc	38 55.50	-1.4
QUE	1.0s	72.00nm	5.5mb
WMO	45.55 10 Pd	39 06.00	36kmX
KSH	45.75 15 eP	38 58.20	0.7
CN2	0.8s	29.00nm	5.2mb
MAT	20s	0.30um	4.2msz
BRS	48.18 318 eP	39 17.80	-0.6
MDJ	49.58 346 iPc	39 28.00	-0.8
MAIO	49.79 333 eP	39 31.00	0.5
MBH	52.03 21 Pc	39 45.00	-2.3
PRNI	1.0s	100.00nm	5.8mb
DSI	52.46 36 eP	40 57.00	-2.6
BUL	1.0s	15.00nm	5.0mb
YLV	53.17 121 iP	39 56.00	-0.1
MLR	54.29 24 eP	40 02.70	-1.3
BCAO	56.84 319 eP	40 21.00	-1.6
VAY	72.84 303 iPc	42 06.50	0.4
DEV	72.90 303 iP	42 07.00	0.5
OHR	72.91 305 eP	42 07.00	0.5
SUF	73.43 250 iPc	42 01.90	-8.0X
NUR	1.0s	6.50nm	4.5mb
SPC	79.97 312 iP	42 45.00	-0.6
KRA	83.56 316 ePc	43 05.40	0.4
SOD	84.29 275 ePc	43 08.70	-0.1
LCI	0.7s	4.00nm	4.5mb
KEV	85.16 312 eP	43 12.00	-0.6
SRO	85.72 316 ePc	43 17.00	1.7
ORI	86.45 311 eP	43 18.50	-0.5
TDS	87.43 333 iP	43 23.70	0.5
ZST	0.6s	11.80nm	5.2mb
MGR	87.62 331 iP	43 24.00	-0.1
SGO	0.7s	24.00nm	5.4mb
PTJ	88.04 319 eP	43 26.80	0.1
KSP	88.37 320 eP	43 28.10	0.1
UPP	88.40 338 iP	43 27.80	0.0
VBY	88.49 310 P	43 28.00	-0.7
LJU	88.88 340 eP	43 30.20	0.2
VOY	0.8s	23.50nm	5.4mb
BRG	89.13 318 iP	43 32.20	0.6
HFS	89.61 310 Pd	43 35.60	1.5
GRF	89.65 310 P	43 35.00	0.7
NB2	89.98 318 eP	43 35.80	0.2
IMA	90.30 310 P	43 36.80	-0.5
YKA	90.52 310 P	43 39.00	0.8
PNT	90.53 316 e(P)	43 39.00	0.7
NEW	90.78 321 eP	43 40.00	0.8
FFC	90.97 330 iP	43 40.00	0.1
MSU	90.98 315 e(P)	43 40.50	0.2
RSSD	91.53 316 ePd	43 44.00	1.2
MEO	91.97 316 eP	43 45.00	0.0
BAO	92.26 321 iP	43 47.00	0.9
OLY	0.6s	10.00nm	5.4mb
CVL	92.96 330 eP	43 48.80	-0.3
NAV	0.8s	15.60nm	5.5mb
BLA	93.95 319 iPc	43 54.20	0.3
RSCP	0.9s	5.00nm	4.9mb
GBTN	94.22 331 P	43 54.00	-0.9
TKL	0.8s	4.70nm	5.0mb
LHS	99.39 24 P	44 17.90	-0.6
JSC	0.8s	2.59nm	4.9mb
	115.67 18 ePKP	49 15.70	-2.4
	0.8s	0.80nm	
	122.60 31 ePKP	49 32.00	0.3
	124.55 31 PKP	49 36.50	0.9
	125.83 17 ePKP	49 37.00	-0.9
	0.7s	6.00nm	
	133.50 38 PKP	49 53.80	0.5
	133.85 26 PKP	49 45.60	-8.2X
	143.81 30 iPKPd	50 08.40	-3.5X
	144.77 235 ePKP	50 14.70	0.5
	146.25 21 PKP	50 15.60	-0.4
	146.32 1 PKP	50 16.10	0.1
	146.86 5 PKP	50 17.30	0.3
	147.00 4 PKP	50 17.50	0.3
	147.84 12 PKP	50 19.90	1.3
	148.04 10 PKP	50 20.70	1.8
	148.13 10 PKP	50 21.20	2.2
	149.68 5 PKP	50 25.30	3.9X
	149.83 6 PKP	50 25.80	4.2X

18d 03h

PRM 149.89 8 PKP 50 25.80 4.0X
 SGS 150.98 5 PKP 50 28.90 5.5X
 SIV 154.20 219 PKP 50 28.40 -0.1
 LPB 157.43 204 PKP 50 41.00 7.8X
 e 51 15.00
 ZOBO 157.68 204 PKP 50 34.00 0.3
 1.0s 7.50nm
 i 51 23.00
 S.D. = 1.1 on 85 of 94 obs.

% MAY 18, 1990 03h 44m 34.27 ± 1.04s
 37.988 N ± 13.1km 14.769 E ± 10.0km
 DEPTH = 10.0km (geophysicist)
 SICILY (398)

ATN 0.57 72 Pd 44 47.00 1.1
 eSg 44 56.50
 GIB 0.59 270 P 44 47.20 1.0
 eSg 44 56.00
 FAI 1.12 231 P 44 54.50 -0.8
 eSg 45 09.30
 TDS 2.07 36 P 45 08.00 -1.5
 MGR 2.23 16 P 45 12.00 0.2
 SGO 2.60 9 P 45 17.00 0.0
 S.D. = 1.3 on 6 of 6 obs.

% MAY 18, 1990 04h 04m 25.52 ± 1.32s
 37.854 N ± 8.6km 15.228 E ± 11.4km
 DEPTH = 10.0km (geophysicist)
 SICILY (398)

MNO 0.43 281 P 04 35.10 0.8
 eSg 04 40.40
 MEU 0.79 198 Pd 04 41.20 0.3
 eSg 04 49.00
 GIB 0.96 278 P 04 43.30 -0.6
 eSg 04 53.50
 FAI 1.36 245 P 04 50.00 -0.5
 eSg 05 04.50
 MGR 2.29 6 P 05 04.00 0.0
 S.D. = 0.8 on 5 of 5 obs.

% MAY 18, 1990 05h 07m 23.87 ± 0.80s
 37.726 N ± 6.9km 14.896 E ± 7.4km
 DEPTH = 10.0km (geophysicist)
 SICILY (398)

MNO 0.26 322 Pc 07 30.00 0.6
 eSg 07 34.00
 ATN 0.62 46 P 07 37.20 0.8
 eSg 07 47.00
 MEU 0.62 178 Pd 07 36.20 -0.3
 eSg 07 44.90
 GIB 0.74 291 P 07 38.00 -0.4
 eSg 07 48.50
 FAI 1.07 246 P 07 44.50 0.5
 eSg 08 01.00
 TDS 2.24 30 P 08 02.00 0.5
 eSn 08 28.00
 MGR 2.46 12 P 08 03.00 -1.7
 eSn 08 33.00
 S.D. = 1.1 on 7 of 7 obs.

MAY 18, 1990 06h 21m 13.35 ± 0.47s
 40.660 N ± 5.0km 15.712 E ± 4.1km
 DEPTH = 10.0km (geophysicist)
 SOUTHERN ITALY (390)

SGO 0.32 252 Pc 21 20.40 0.3
 eSg 21 24.80
 MGR 0.54 193 Pd 21 23.60 -0.6
 eSg 21 31.00
 BSS 0.70 281 P 21 27.10 -0.1
 eSg 21 37.00
 ORI 0.82 136 P 21 29.60 0.4
 BAI 0.99 62 P 21 31.30 -0.8
 eSg 21 46.00
 TDS 1.11 154 P 21 34.50 0.3
 eSn 21 49.00
 BRT 1.15 79 Pd 21 34.00 -0.9
 eSg 21 51.00
 DUI 1.38 317 P 21 39.00 0.4
 LCI 1.74 100 P 21 45.50 1.7
 SDI 1.77 307 P 21 44.10 -0.2
 eSn 22 07.00
 ATN 2.50 185 P 21 54.00 -0.8
 HVAR 2.58 12 ePn 22 01.30 5.5X

MNS 2.86 308 P 22 00.00 0.2
 S.D. = 0.8 on 12 of 13 obs.
 % MAY 18, 1990 06h 23m 04.69 ± 0.77s
 37.342 N ± 7.2km 2.568 W ± 6.5km
 DEPTH = 10.0km (geophysicist)
 SPAIN (377)
 mbLg 2.7 (MDD).

ENIJ 0.46 143 iPg 23 14.00 -0.1
 eSg 23 19.60
 AFC 0.78 264 ePg 23 20.20 0.1
 eSg 23 32.00
 EALH 1.05 60 ePg 23 24.70 0.3
 eSg 23 38.00
 EBAN 1.27 311 ePn 23 28.20 0.0
 eSn 23 46.00
 EVIA 1.29 2 ePn 23 28.50 -0.2
 eSn 23 44.00
 S.D. = 0.3 on 5 of 5 obs.

? MAY 18, 1990 06h 32m 11.58 ± 3.32s
 13.546 N ± 44.9km 90.435 W ± 34.4km
 DEPTH = 33.0km (normal)
 4.0mb (3 obs.)
 NEAR COAST OF GUATEMALA (71)

UYO 20.85 351 e(P) 36 53.30 0.2
 MEO 22.39 342 e(P) 37 08.70 0.1
 ALQ 25.76 329 eP 37 41.00 -0.3
 0.9s 2.52nm 3.8mb
 ANMO 25.76 329 P 37 41.20 -0.1
 KVN 35.24 321 P 39 05.30 0.0
 PNT 42.98 332 eP 40 10.00 0.7
 0.7s 9.00nm 4.6mb
 YKA 51.82 346 eP 41 17.40 -0.9
 0.7s 1.20nm 4.0mb
 INK 61.31 343 eP 42 26.00 0.1
 MBC 64.55 353 eP 42 47.50 0.3
 S.D. = 0.5 on 9 of 9 obs.

MAY 18, 1990 08h 30m 04.04 ± 0.91s
 29.948 N ± 7.9km 138.824 E ± 6.3km
 DEPTH = 421.6 ± 9.1 km
 4.5mb (17 obs.)
 SOUTH OF HONSHU, JAPAN (211)

MAT 6.60 356 iPc 31 44.70 0.1
 0.7s 82.88nm 5.0mb
 YAMJ 8.27 7 P 32 03.00 -0.2
 S 33 36.60
 OFUJ 9.41 14 P 32 16.30 0.1
 eS 34 00.50
 SSE 15.25 279 P 33 16.00 -4.1X
 0.7s 15.00nm 4.6mb
 BJI 21.06 305 eP 34 17.50 0.0
 1.0s 48.00nm 4.9mb
 CHG 37.80 262 iPd 36 45.10 1.3
 0.9s 43.28nm 4.8mb
 BDT 38.43 260 eP 36 50.20 1.4
 SNG 42.41 246 eP 37 21.90 0.7
 GUN 46.04 281 Pd 37 50.80 0.7
 PSI 46.50 242 eP 37 52.40 -0.8
 0.8s 25.10nm 4.6mb
 PKI 46.54 281 Pd 37 54.00 0.2
 DMN 46.78 281 Pd 37 56.00 0.3
 GKN 47.07 282 Pd 37 58.20 0.4
 SDN 49.42 41 eP 38 13.50 -1.5
 WBS 49.72 186 iPd 38 17.00 -0.6
 i 39 32.00
 WRA 49.79 186 Pc 38 17.80 -0.3
 0.8s 12.70nm 4.3mb
 SVW 52.51 34 eP 38 38.50 0.7
 NDI 53.15 285 iPd 38 42.50 -0.2
 1.0s 45.00nm 4.8mb
 IMA 53.91 28 eP 38 47.90 -0.1
 1.1s 10.90nm 4.1mb
 PMR 55.66 33 eP 38 59.10 -1.0
 1.0s 20.00nm 4.4mb
 FBA 56.28 29 eP 39 04.90 0.4
 WARB 57.02 193 eP 39 10.00 0.0
 TOA 57.05 33 eP 39 10.10 0.2
 GBA 58.65 268 Pc 39 18.80 -2.6
 0.9s 21.00nm 4.6mb
 POO 59.65 275 iPd 39 27.20 -1.0
 0.8s 34.33nm 4.8mb

KOD 60.19 265 eP 39 32.00 -0.1
 QUE 61.17 290 iPd 39 48.10 9.9X
 INK 61.69 25 iPc 39 40.40 -0.5
 MBC 63.91 15 eP 39 55.00 -0.2
 0.6s 3.00nm 4.1mb
 KEV 69.31 340 eP 40 44.00 15.3X
 SOD 70.66 338 iP 40 47.80 11.0X
 YKA 71.04 28 eP 40 37.90 -1.1
 0.7s 3.50nm 4.1mb
 SUF 73.34 334 iP 40 52.40 0.0
 0.5s 5.30nm 4.4mb
 NUR 75.18 332 eP 40 55.00 -7.7X
 ORV 78.33 51 eP 41 20.40 0.0
 BKS 78.64 53 iPd 41 22.30 0.2
 SES 79.02 38 ePc 41 24.30 0.4
 HFS 79.63 335 eP 41 26.20 -0.6
 0.6s 7.30nm 4.5mb
 CMB 79.84 52 eP 41 29.30 0.9
 FRI 80.83 53 eP 41 34.20 0.7
 FFC 80.85 31 eP 41 33.00 -0.3
 1.0s 15.00nm 4.6mb
 KVN 80.87 50 eP 41 35.00 1.1
 TNP 81.96 51 eP 41 40.20 0.6
 ALQ 90.86 48 eP 42 23.00 0.5
 1.0s 3.25nm 4.2mb
 S.D. = 0.8 on 39 of 44 obs.

* MAY 18, 1990 08h 59m 34.86 ± 1.32s
 36.319 N ± 12.6km 22.385 E ± 7.8km
 DEPTH = 5.0km (geophysicist)
 SOUTHERN GREECE (368)
 ML 3.3 (ATH).

VLI 0.60 48 iPg 59 45.60 -1.2
 ITM 0.93 337 ePg 59 53.00 -0.2
 VAM 1.73 121 ePn 00 06.90 1.1
 ATH 1.96 32 ePg 00 11.10 2.0
 VLS 2.34 323 ePn 00 16.00 1.3
 APE 2.64 73 ePn 00 17.10 -1.7
 AGG 2.70 359 eP 00 19.30 -0.4
 NEO 3.06 12 ePn 00 26.20 1.5
 PAIG 3.74 15 eP 00 32.30 -2.2
 LIT 3.78 1 ePc 00 37.10 2.1
 KEK 3.96 330 ePn 00 37.50 0.0
 SOH 4.56 9 eP 00 47.80 1.7
 OHR 4.94 346 ePn 01 02.50 10.9X
 VAY 5.00 2 ePn 00 50.40 -1.9
 SKO 5.69 353 ePn 01 18.00 15.9X
 ATN 5.82 290 P 01 03.00 -0.9
 TDS 5.82 307 P 01 06.00 2.0
 MGR 6.59 307 P 01 14.00 -0.8
 SGO 6.98 309 P 01 18.00 -2.3
 eSn 02 39.00
 DUI 8.16 313 P 01 33.00 -3.8X
 S.D. = 1.7 on 17 of 20 obs.

* MAY 18, 1990 10h 57m 25.90 ± 1.10s
 40.410 N ± 12.0km 27.061 E ± 9.7km
 DEPTH = 10.0km (geophysicist)
 TURKEY (366)

KGT 0.19 77 iPg 57 29.60 -0.5
 EDC 0.62 96 iPg 57 37.40 -0.9
 eSg 57 46.40
 EZN 0.81 224 iPg 57 41.40 -0.2
 iSg 57 52.90
 KCT 1.00 99 iPn 57 44.10 -0.8
 CTT 1.27 54 ePn 57 48.60 -0.9
 DMK 1.50 20 iPn 57 52.90 0.0
 ITU 1.64 64 iPnc 57 56.00 1.2
 iSg 58 23.00
 ISK 1.65 66 ePn 57 53.00 -2.0
 YLV 1.77 84 iPn 57 58.60 1.8
 GBZT 1.85 77 ePn 57 59.50 1.5
 iSg 58 24.00
 HRT 2.03 77 ePn 58 01.50 1.0
 ALT 2.71 119 ePn 58 14.00 3.6X
 VAY 3.53 286 eP 58 36.40 14.6X
 S.D. = 1.4 on 11 of 13 obs.

* MAY 18, 1990 11h 04m 56.02 ± 0.59s
 45.824 N ± 12.6km 149.616 E ± 11.6km
 DEPTH = 33.0km (normal)
 4.8mb (22 obs.)
 KURIL ISLANDS (221)
 FBA 38.38 38 P 12 17.90 2.5

INK	43.72	32	eP	13	01.00	1.8	KMI	36.76	252	Pd	29	47.00	1.0	ZST	76.14	325	i(P)	34	23.70	0.8
MBC	46.28	19	eP	13	20.00	0.4	WMQ	38.33	289	iPd	29	59.50	0.7	BZS	76.20	321	eP	34	23.50	0.2
	0.5s		1.00nm			4.0mb			eS		35	42.00		MOX	76.28	330	iPd	34	24.00	0.3
GUN	52.65	273	P	14	10.60	1.0	IMA	40.74	34	eP	30	17.40	-1.0		1.0s		22.00nm			4.8mb
	0.6s		17.00nm			5.2mb			18.30nm			4.8mb		GLA	76.47	57	P	34	26.00	0.9
YKA	53.10	35	eP	14	11.60	-0.4	KDC	42.06	47	e(P)	30	30.30	1.3	EKA	76.70	340	Pd	34	25.70	-0.2
	0.6s		1.90nm			4.2mb	LSA	42.24	268	P	30	30.70	-0.8		0.5s		8.40nm			4.7mb
PKI	53.19	273	P	14	14.50	1.0	LOE	42.76	245	eP	30	35.00	-0.2	SOP	76.77	325	iPd	34	29.10	2.7
DMN	53.37	274	P	14	16.20	1.4	PMR	43.10	41	eP	30	37.50	0.1	KHC	76.78	328	iPd	34	27.30	0.7
	0.6s		15.00nm			5.2mb			9.80nm			4.5mb			1.0s		30.00nm			5.0mb
GKN	53.46	274	P	14	16.50	1.2	FBA	43.26	36	eP	30	38.80	0.1	WTS	76.80	333	eP	34	26.50	0.0
	0.5s		19.00nm			5.3mb			pP		31	29.80	242kmX		0.8s		34.00nm			5.1mb
SOD	59.21	338	eP	15	04.00	8.2X	CHG	43.61	249	iPd	30	43.00	1.0	ALT	76.87	312	eP	34	27.00	-0.3
FFC	62.99	38	eP	15	21.00	-0.4		1.0s		27.25nm			4.7mb	WET	77.04	328	iPd	34	28.50	0.6
	0.6s		6.00nm			4.9mb	TOA	44.39	40	eP	30	48.70	0.8		0.9s		36.00nm			5.1mb
NUR	64.98	333	eP	15	38.00	3.7X	GUN	47.06	269	P	31	09.40	-0.3	GRF	77.21	330	iPd	34	29.60	0.8
TNP	65.88	60	(P)	15	40.60	-0.2	PKI	47.60	269	P	31	13.40	-0.4		0.8s		53.00nm			5.3mb
WB5	66.84	196	eP	15	46.30	-0.3	NNT	47.61	242	eP	31	11.00	-2.5	LFK	77.68	307	iP	34	31.90	0.2
WRA	66.91	196	Pc	15	46.20	-0.9	DMN	47.80	270	P	31	15.10	-0.1	KHL	77.72	312	eP	34	32.20	0.2
	0.6s		1.20nm			4.2mb			42.00nm			5.0mb	ENN	78.14	333	iPd	34	34.00	0.1	
NB2	68.29	340	P	15	53.00	-2.4	GKN	47.91	270	P	31	15.60	-0.4		0.7s		32.00nm			5.2mb
	0.8s		4.20nm			4.6mb	KSH	48.11	289	P	31	18.00	0.7	BHG	78.20	327	eP	34	35.00	0.6
HFS	68.44	338	eP	15	53.20	-3.1X	INK	48.21	30	ePd	31	16.80	-0.7		0.7s		40.00nm			5.3mb
	0.5s		5.00nm			4.9mb			30.00nm			4.9mb	MEM	78.25	333	P	34	34.70	0.3	
LDF	82.32	340	eP	17	14.50	-0.9	MBC	49.86	18	eP	31	29.00	-1.1	ELL	78.66	310	eP	34	36.00	-1.2
	0.8s		7.40nm			4.8mb			6.00nm			4.5mb	SCH	78.67	16	eP	34	36.00	-0.8	
LOR	82.54	337	eP	17	15.70	-0.9	SNG	51.24	237	eP	31	42.00	0.8	SNF	78.89	334	iP	34	38.04	0.1
	0.8s		5.35nm			4.7mb	NDI	52.87	276	iPd	31	52.80	-0.3	VAY	79.04	318	eP	34	39.60	0.6
GRR	82.69	341	eP	17	16.70	-0.6		0.7s		34.25nm			5.1mb	SKO	79.08	319	iP	34	40.00	0.8
	0.6s		5.40nm			4.8mb	KEV	57.09	338	iP	32	21.00	-2.0		0.6s		45.00nm			5.4mb
LBF	82.77	337	eP	17	16.80	-1.0		0.6s		11.70nm			4.8mb	DOU	79.15	333	P	34	39.70	0.3
SSF	82.83	337	eP	17	17.20	-0.8	YKA	57.79	32	eP	32	26.70	-1.2	FVI	79.17	327	P	34	39.00	-0.5
	0.8s		4.05nm			4.6mb		0.5s		4.80nm			4.5mb	DSI	79.22	303	iP	34	41.00	1.0
LPF	83.06	341	eP	17	18.90	-0.3	SOD	58.71	336	iP	32	32.80	-1.5	SQTA	79.26	328	iPd	34	40.70	0.5
	0.6s		5.40nm			4.8mb	HYB	58.85	264	eP	32	35.00	-0.9		0.5s		14.10nm			5.0mb
AVF	83.12	337	eP	17	19.00	-0.5			e		33	22.30	207km							4kmX
	0.8s		4.05nm			4.6mb	QUE	59.30	284	eP	32	38.30	-0.7	YRH	79.33	340	eP	34	40.50	0.2
SMF	83.12	337	eP	17	18.80	-0.8	MAIO	60.87	294	iPd	32	49.40	-0.1	OGA	79.62	328	iPd	34	42.90	0.7
	0.8s		7.40nm			4.8mb	POO	61.51	269	iPc	32	53.30	-0.7		1.2s		38.00nm			5.0mb
LPG	83.34	335	eP	17	20.90	-0.1	SUF	61.95	332	iP	32	54.80	-1.4	CDF	79.69	331	iPd	34	42.40	0.0
	0.9s		4.90nm			4.6mb		0.7s		60.30nm			5.5mb		0.7s		15.45nm			4.8mb
BGF	83.47	338	eP	17	21.20	-0.1	GBA	62.18	262	Pd	32	56.90	-1.4	SLE	79.81	330	ePd	34	42.80	-0.2
	0.8s		8.05nm			4.9mb		1.0s		15.70nm			4.8mb	ETA	79.84	341	eP	34	44.40	1.4
MAF	83.85	338	eP	17	23.30	0.0	PNT	63.16	46	eP	33	04.00	-0.4	SAX	79.93	329	ePd	34	43.90	-0.1
TCF	83.89	338	eP	17	23.80	0.3	WB5	63.87	188	eP	33	08.50	-0.6	ANMO	80.01	51	P	34	45.40	0.9
	0.8s		4.05nm			4.6mb	WRA	63.93	188	Pc	33	09.10	-0.5		0.8s		4.43nm			4.2mb
LSF	84.10	338	eP	17	24.40	-0.1		0.4s		2.20nm			4.3mb	ALQ	80.01	51	eP	34	45.00	0.5
MFF	84.19	340	eP	17	24.70	-0.3	NUR	63.99	331	iP	33	08.00	-1.5		0.9s		4.83nm			4.2mb
	0.6s		6.30nm			5.0mb		0.5s		64.60nm			5.7mb	OHR	80.05	319	eP	34	44.50	0.1
LFF	85.52	338	eP	17	32.30	0.6	NEW	65.11	46	P	33	16.90	-0.1		0.7s		57.00nm			5.4mb
	0.8s		9.40nm			5.1mb		0.7s		5.50nm			4.5mb	CTI	80.06	327	P	34	43.00	-1.5
LPO	85.65	338	eP	17	33.10	0.8	SES	66.79	42	ePd	33	27.20	-0.4	OSS	80.11	328	ePd	34	44.90	0.1
	0.8s		5.35nm			4.8mb	UPP	66.87	333	iP	33	26.60	-1.3	PRNI	80.31	303	iP	34	47.00	1.0
	S.D. = 1.0 on 29 of 32 obs.						FFC	67.82	34	iPd	33	33.60	-0.3	BSF	80.36	331	iPd	34	45.50	-0.5
								0.6s		12.00nm			4.8mb		0.7s		6.60nm			4.5mb
	MAY 18, 1998 11h 22m 56.05±0.22s						HFS	67.90	335	eP	33	32.60	-1.7	ECP	80.36	341	iPc	34	46.30	0.6
	43.949 N ± 4.7km 141.693 E ± 3.5km							0.6s		47.90nm			5.4mb	HAU	80.36	331	iPd	34	45.70	-0.2
	DEPTH = 200.6km (2 depth phases)						NB2	67.92	336	P	33	33.30	-1.2		0.7s		11.00nm			4.7mb
	4.9mb (73 obs.)							0.9s		50.00nm			5.2mb	LLS	80.38	329	ePd	34	46.30	0.0
	HOKKAIDO, JAPAN REGION (224)						LRM	69.12	46	eP	33	42.60	0.2	MBH	80.79	303	eP	34	49.00	0.6
							AKU	69.58	351	iP	33	46.00	1.5	SAL	80.86	328	P	34	49.00	0.5
MAT	7.86	201	iPd	24	47.50	-1.1		1.0s		28.00nm			4.9mb	MDI	81.03	328	P	34	49.00	-0.3
	0.6s		30.67nm			4.7mb	FRB	70.01	14	eP	33	46.00	-1.1	TMA	81.07	329	ePd	34	49.50	-0.3
			eS				HPI	70.20	48	P	33	50.00	1.0	MMK	81.46	329	ePd	34	52.20	0.3
CN2	11.73	275	iPc	25	37.80	-0.6	KVN	70.47	54	eP	33	51.00	0.4	DIX	81.63	330	ePd	34	53.20	0.3
	1.0s		100.00nm			5.2mb			e		34	37.20	194km	ARV	81.64	325	P	34	53.00	0.4
SNY	13.45	267	iPd	26	00.80	0.7	TNP	71.63	55	P	33	58.20	0.7	SFI	81.74	326	P	34	54.80	1.7
	0.8s		100.00nm			5.3mb	BW06	72.72	47	P	34	03.90	0.0	PGD	81.83	326	P	34	55.50	1.7
DL2	15.86	258	eP	26	30.00	0.2		0.7s		5.85nm			4.4mb	LOR	81.85	332	iPd	34	53.60	0.0
	1.0s		100.00nm			5.2mb	DUG	72.73	51	P	34	04.70	0.8		0.7s		19.85nm			5.0mb
BJI	19.34	267	eP	27	09.00	1.0	KAS	73.26	312	eP	33	59.50	-7.3X	FLN	81.89	336	iPd	34	53.50	-0.3
	1.0s		30.00nm			4.8mb	VRI	73.64	319	ePc	34	09.50	0.7		0.5s		8.75nm			4.7mb
			eS				RSON	74.04	33	P	34	09.80	-1.2	LDF	81.94	336	iPd	34	53.90	-0.2
TIA	20.28	256	Pc	27	16.70	-0.8		0.7s		14.71nm			4.8mb		0.5s		8.75nm			4.7mb
SSE	20.65	238	eP	27	23.50	2.3	MSU	74.25	52	P	34	13.70	0.9	CRE	81.94	326	P	34	54.50	0.2
NJ2	21.49	244	Pc	27	29.10	-0.3	MLR	74.29	319	eP	34	13.00	0.3	BOB	81.98	328	P	34	55.00	0.5
HHC	22.41	273	P	27	40.00	1.6	KSP	74.36	328	iPd	34	13.00	0.1	LCI	82.00	320	P	34	54.00	-0.5
BTO	23.60	273	P	27	51.00	1.1														

18d 11h

LPG	0.7s	14.35nm	4.8mb	
	82.37	330 iPd	34 57.20	0.5
	0.7s	19.30nm	4.9mb	
SMF	82.40	332 iPd	34 56.20	-0.3
	0.8s	27.55nm	5.0mb	
AVF	82.43	333 iPd	34 56.70	0.1
	0.8s	34.90nm	5.1mb	
RSP	82.48	329 P	34 56.67	-0.4
DUI	82.50	323 P	34 58.00	0.8
PCP	82.52	328 P	34 56.47	-0.7
MNS	82.67	325 P	34 58.00	0.0
AZI	82.67	324 P	34 58.00	0.1
LPF	82.71	336 iPd	34 58.50	0.4
	0.5s	10.20nm	4.8mb	
CKI	82.72	328 P	34 58.00	-0.2
SDI	82.74	323 P	34 58.50	0.1
BNI	82.78	330 P	34 59.00	0.4
BGF	82.81	333 iPd	34 58.60	0.0
	0.7s	7.70nm	4.5mb	
RRL	82.85	330 P	34 59.13	0.0
ORI	82.91	321 P	35 00.00	0.8
FIN	82.93	328 P	34 57.80	-1.5
ROB	82.98	329 P	34 58.52	-1.1
SGO	83.02	322 P	35 00.00	0.3
MAF	83.19	333 iPd	35 01.30	0.7
	0.7s	37.50nm	5.2mb	
ENR	83.21	329 P	34 58.83	-2.0
STV	83.23	329 P	34 58.62	-2.3
MGR	83.25	321 P	35 00.00	-0.9
TCF	83.25	333 iPd	35 01.30	0.4
	0.7s	7.70nm	4.5mb	
TDS	83.28	321 P	35 00.00	-1.1
AUTN	83.41	329 P	35 01.91	0.0
TOUF	83.46	329 P	35 01.95	-0.2
LSF	83.51	333 iPd	35 02.40	0.3
	0.7s	29.75nm	5.1mb	
SBF	83.52	329 iPd	35 02.00	-0.3
	0.6s	14.45nm	4.9mb	
AURF	83.54	329 P	35 02.11	-0.3
MVIF	83.59	329 P	35 02.41	-0.4
REVIF	83.65	329 P	35 02.69	-0.2
MFF	83.72	335 iPd	35 03.80	0.6
	0.6s	18.05nm	5.0mb	
CALN	83.82	329 P	35 03.54	-0.4
PGF	84.03	327 P	35 04.72	-0.2
FRF	84.07	329 iPd	35 04.70	-0.3
	0.6s	7.20nm	4.6mb	
LRG	84.27	329 iPd	35 06.10	0.2
	0.6s	21.65nm	5.1mb	
LMR	84.32	329 iPd	35 06.10	-0.1
	0.6s	19.85nm	5.0mb	
RJF	84.35	333 eP	35 06.90	0.5
	0.6s	5.40nm	4.5mb	
CAF	84.50	332 iPd	35 08.20	1.0
	0.6s	8.55nm	4.7mb	
LFF	84.93	333 eP	35 10.20	1.0
	0.9s	19.65nm	4.8mb	
LPO	85.01	333 iPd	35 10.60	0.9
	0.6s	9.00nm	4.7mb	
EPF	86.76	333 iPd	35 18.60	0.3
	0.6s	10.80nm	4.9mb	
OLY	87.33	41 P	35 21.40	0.2
RSCP	89.92	37 P	35 33.50	0.0
	0.8s	39.06nm	5.4mb	
GBTN	90.45	36 P	35 36.20	0.4
TIC	121.35	320 PKP	41 26.00	-0.9
KIC	121.47	320 PKP	41 26.00	-1.1
SIV	146.09	42 PKP	42 13.00	0.2
S.D. = 0.8 on 183 of 184 obs.				

* MAY 18, 1990 12h 05m 22.50±1.53s
13.744 N ± 0.0km 60.940 W ± 33.5km
DEPTH = 33.0km (nrmol)
WINDWARD ISLANDS (95)
MD 3.4 (TRN). ML 2.9 (FDF).

SVV	0.50	212 eP	05 32.99	-0.2
		eS	05 41.65	
SVB	0.56	213 eP	05 34.10	0.1
		eS	05 43.25	
FCV	0.65	207 eP	05 35.28	0.0
		eS	05 44.63	
BIM	0.78	351 eP	05 36.91	-0.2
		S	05 47.00	
MVM	0.81	3 iPc	05 37.39	-0.1
		S	05 47.00	
CRM	1.00	1 iPc	05 40.40	0.1

FDF	1.00	348 eP	05 53.30	0.0
	0.1s	1.30nm		
PML	1.06	347 iPc	05 53.40	-3.7X
		eS	05 47.95	
CXM	1.08	348 eP	05 41.58	0.0
PCM	1.10	346 eP	05 41.81	0.2
SVN	1.11	349 eP	05 41.65	-0.2
S.D. = 0.2 on 10 of 11 obs.				

MAY 18, 1990 12h 37m 35.72±0.54s
42.496 N ± 5.9km 24.218 E ± 5.9km
DEPTH = 10.0km (geophysicist)

BULGARIA (359)
ML 2.9 (THE).

SRS	1.46	199 ePb	38 02.90	0.8
		eSb	38 24.30	
KNT	1.66	217 ePb	38 05.20	0.2
VAY	1.70	227 ePn	38 05.50	-0.1
SOH	1.79	201 ePb	38 06.80	-0.2
GRG	2.05	222 ePn	38 09.90	-0.8
ALN	2.10	139 ePn	38 11.80	0.4
SKO	2.13	257 ePn	38 10.00	-1.8
		eSn	38 40.00	
PAIG	2.60	189 ePn	38 17.60	-0.9
DMK	2.72	103 eP	38 20.50	0.3
FNA	2.73	232 ePn	38 20.10	-0.4
OHR	2.91	243 ePn	38 25.80	2.9
MLR	3.24	22 eP	38 28.00	0.2
CTT	3.42	112 eP	38 29.50	-0.7
BZS	3.64	330 ePc	38 33.00	-0.2
VRI	3.82	27 ePc	38 36.00	0.1
S.D. = 1.1 on 15 of 15 obs.				

% MAY 18, 1990 13h 07m 06.72±0.70s
40.830 N ± 6.8km 29.469 E ± 5.3km
DEPTH = 10.0km (geophysicist)

TURKEY (366)

GBZT	0.05	204 iPc	07 08.00	-0.8
HRT	0.15	93 ePc	07 10.30	0.0
YLV	0.27	196 iPc	07 12.90	0.4
ISK	0.39	307 ePc	07 14.40	-0.3
GPA	0.84	130 ePc	07 23.00	0.1
CTT	0.85	292 iPc	07 23.40	0.3
EDC	1.31	249 ePn	07 31.30	0.3
S.D. = 0.5 on 7 of 7 obs.				

% MAY 18, 1990 13h 21m 55.48±2.98s
42.876 N ± 20.8km 0.725 W ± 7.8km
DEPTH = 5.0km (geophysicist)

PYRENEES (378)
MD 1.7 (STR).

LHE	0.08	64 Pg	21 57.48	0.0
		Sg	21 58.93	
ISSF	0.16	341 Pg	21 58.86	0.0
		Sg	22 01.36	
ATE	0.21	4 Pg	21 59.80	0.0
		Sg	22 03.05	
ESCF	0.23	29 Pg	22 00.16	0.0
		Sg	22 03.50	
JAU	0.31	58 Pg	22 01.77	0.1
		Sg	22 06.25	
BOH	0.31	317 Pg	22 01.75	0.0
		Sg	22 06.84	
S.D. = 0.0 on 6 of 6 obs.				

& MAY 18, 1990 14h 36m 31.10s
36.643 N 121.315 W

DEPTH = 6.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.1 (BRK).

SAO	0.16	319 eP	36 34.20	-0.3
LLA	0.30	95 iPc	36 37.10	-0.1
GCC	0.67	305 eP	36 43.20	-1.3
		eS	36 54.30	
PRI	0.72	133 eP	36 44.90	-0.7
ARN	0.73	346 iPc	36 45.20	-0.4
MHC	0.74	340 ePd	36 45.60	-0.4
		eS	36 58.50	
PHAM	1.09	137 eP	36 51.20	-0.8
PKEM	1.13	120 eP	36 52.80	0.1
PCC	1.21	315 eP	36 52.10	-1.9

FRI	1.34	74 eP	36 54.30	-1.8
		eS	37 11.70	
BKS	1.43	329 eP	36 58.30	0.6
BRK	1.44	329 e(P)	36 58.20	0.5
CMB	1.57	28 eP	36 58.10	-1.6
		eS	37 18.00	
BCH	1.76	145 eP	37 00.00	-2.5
KVN	3.50	46 eP	37 29.00	1.6
15 obs. associated				

* MAY 18, 1990 15h 11m 19.26±2.68s
51.248 N ± 21.2km 15.918 E ± 14.1km
DEPTH = 10.0km (geophysicist)

POLAND (548)

KSP	0.47	149 iPd	11 28.80	0.0
	0.3s	58.00nm		
		iS	11 37.80	
		eLR	11 44.00	
BRG	1.30	254 iPg	11 43.30	0.0
		iSg	12 02.20	
PRU	1.54	215 Pn	11 46.80	0.1
		Pg	11 48.30	
		Sn	12 05.60	
		Sg	12 12.60	
CLL	1.83	273 (Pg)	11 51.00	0.0
		eSg	12 17.00	
KHC	2.60	216 ePg	12 02.00	-0.1
		e	12 08.40	
		eSn	12 34.50	
		Sg	12 46.00	
MOX	2.79	259 ePg	12 10.00	5.3X
		iSg	12 50.00	
WET	2.87	224 iPnc	12 05.90	0.0
S.D. = 0.1 on 6 of 7 obs.				

% MAY 18, 1990 16h 06m 01.54±0.82s
37.700 N ± 6.7km 14.827 E ± 7.9km
DEPTH = 10.0km (geophysicist)

SICILY (398)

MNO	0.25	336 Pc	06 07.00	0.0
		eSg	06 10.50	
MEU	0.60	172 P	06 13.20	-0.6
		eSg	06 24.90	
ATN	0.68	47 P	06 16.00	0.9
		eSg	06 26.50	
GIB	0.70	295 P	06 15.00	-0.4
		eSg	06 26.00	
FAI	1.01	246 P	06 21.50	0.9
		eSg	06 35.00	
MGR	2.50	13 P	06 42.00	-0.9
		eSn	07 11.00	
S.D. = 1.0 on 6 of 6 obs.				

? MAY 18, 1990 16h 43m 00.41±8.93s
2.500 N ± 41.3km 79.563 W ± 97.3km
DEPTH = 32.1 ± 11.1 km

SOUTH OF PANAMA (83)

COTA	2.48	150 eP	43 39.30	-0.6
GGP	2.83	160 iP+	43 44.20	-0.7
		S	44 16.50	
OUR	2.85	159 iP+	43 44.50	-0.5
		eS	44 19.00	
CAYA	2.88	147 eP	43 46.00	0.5
QTO	2.88	159 eP	43 45.40	0.0
		S	44 20.30	
VC1	3.33	160 eP	43 52.70	0.7
ZOBO	21.81	149 P	47 53.00	0.5
SIV	25.92	136 P	48 31.20	-0.5
S.D. = 0.8 on 8 of 8 obs.				

% MAY 18, 1990 17h 14m 59.68±0.98s
37.699 N ± 7.7km 14.864 E ± 8.9km
DEPTH = 10.0km (geophysicist)

SICILY (398)

MNO	0.27	330 Pc	15 04.80	-0.6
		eSg	15 10.10	
MEU	0.60	175 P	15 11.00	-0.8
		eSg	15 21.00	
ATN	0.66	46 P	15 13.50	0.7
		eSg	15 22.70	
GIB	0.72	294 P	15 13.50	-0.5
		eSg	15 23.50	
FAI	1.04	246 P	15 20.50	1.3

eSg 15 34.00
S.D. = 1.3 on 5 of 5 obs.

MAY 18, 1990 18h 25m 41.11±0.67s
37.652 N ± 5.8km 22.753 E ± 8.8km
DEPTH = 33.0km (normol)

SOUTHERN GREECE (368)
ML 2.8 (ATH), 2.8 (THE).

ITM	0.81	235	iPbc	25	55.90	-0.2
ATH	0.83	67	ePb	25	58.00	1.7
VLI	0.94	171	Pnd	25	57.10	-0.9
AGG	1.41	346	ePg	26	04.50	-0.2
NEO	1.69	12	ePn	26	08.50	-0.3
VLS	1.79	288	ePn	26	12.00	1.8
PAIG	2.38	17	ePb	26	17.80	-0.9
LIT	2.45	355	ePb	26	18.80	-0.9
			eSb	26	47.00	
VAM	2.53	152	Pn	26	20.50	-0.2
OUR	2.84	19	ePn	26	25.50	0.4
SOH	3.20	8	ePn	26	29.50	-0.8
FNA	3.31	342	ePn	26	32.60	0.8
GRG	3.31	355	ePn	26	33.40	1.5
KNT	3.51	2	ePn	26	35.20	0.6
SRS	3.52	10	ePn	26	33.60	-1.2
VAY	3.67	358	eP	26	34.00	-2.8
ALN	4.13	37	ePn	26	44.90	1.5

S.D. = 1.3 on 17 of 17 obs.

% MAY 18, 1990 18h 27m 47.22±2.50s
44.883 N ±19.9km 3.028 E ±15.1km
DEPTH = 10.0km (geophysicist)

FRANCE (538)
ML 2.5 (LDG).

CAF	0.69	274	Pg	27	59.60	-1.2
			Sg	28	08.00	
RJF	1.15	292	Pg	28	08.60	-0.1
			Sg	28	21.50	
LPO	1.33	262	Pg	28	12.20	0.5
			Sg	28	29.00	
MAF	1.38	347	Pg	28	12.00	-0.5
			Sg	28	29.00	
TCF	1.52	338	Pg	28	14.40	-0.1
			Sg	28	31.80	
LFF	1.63	273	Pg	28	16.60	0.6
			Sg	28	37.00	
BGF	1.68	356	Pg	28	17.20	0.4
			Sg	28	37.00	
LSF	1.73	323	Pg	28	18.00	0.6
			Sg	28	40.00	
SMF	1.85	18	Pg	28	20.00	0.7
			Sg	28	43.20	
AVF	1.92	7	Pg	28	21.20	0.9
			Sg	28	44.90	
LBF	2.20	17	Pn	28	22.60	-1.8
			Sg	28	54.00	

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

* MAY 18, 1990 18h 27m 51.27±2.17s
31.713 N ±20.1km 24.796 E ±15.8km
DEPTH = 10.0km (geophysicist)

NEAR COAST OF LIBYA (401)
MD 4.3 (HLW).

VAM	3.72	352	eP	28	51.10	1.1
VLI	5.22	343	eP	29	12.80	1.5
HLW	5.93	106	eP	29	23.50	2.3
			eS	30	32.00	
ITM	5.95	337	eP	29	21.00	-0.5
ELL	6.57	39	ePn	29	30.00	-0.4
VLS	7.31	333	eP	29	38.80	-1.9
BCK	7.46	38	ePn	29	43.50	0.7
LFK	8.12	62	iPn	29	53.10	1.1
ZNT	8.71	84	eP	29	58.80	-1.4
MBH	8.89	100	eP	30	02.70	0.0
DSI	9.02	88	eP	30	03.50	-1.0
HRI	9.37	78	iP	30	08.00	-1.5

S.D. = 1.5 on 12 of 12 obs.

& MAY 18, 1990 19h 06m 11.06s
46.442 N 122.338 W

DEPTH = 18.9km
WASHINGTON (29)
<SEA>. CL 2.9 (SEA).

KOSW	0.10	79	P	06	14.23	-0.8
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CZM	0.12	267	P	06	14.95	-0.2
TDL	0.12	137	P	06	15.12	-0.2
			S	06	18.22	
ERK	0.14	181	P	06	15.03	-0.4
			S	06	17.87	
STD	0.22	159	P	06	16.16	-0.4
LMW	0.23	8	P	06	16.70	0.0
FL2	0.25	182	P	06	16.39	-0.6
SOSW	0.25	146	P	06	16.42	-0.6
YEL	0.25	156	P	06	16.84	-0.3
			S	06	20.97	
SHW	0.26	164	P	06	16.82	-0.4
REMW	0.27	156	P	06	17.09	-0.3
ESD	0.28	152	P	06	17.18	-0.3
HSR	0.29	158	P	06	17.44	-0.3
APW	0.30	315	P	06	17.56	-0.2
JLK	0.32	156	P	06	17.73	-0.4
LVP	0.38	187	P	06	18.47	-0.6
CDFW	0.38	148	P	06	18.65	-0.5
RVW	0.41	224	P	06	18.68	-0.8
MTMW	0.43	168	P	06	19.30	-0.6
LON	0.48	50	eP	06	20.00	-0.7
GLK	0.52	76	P	06	20.80	-0.7
RVC	0.56	27	P	06	21.61	-0.5
ASR	0.59	119	P	06	22.09	-0.6
GHW	0.60	4	P	06	21.97	-0.8
WPW	0.60	65	P	06	22.13	-0.8
BMW	0.62	273	P	06	22.23	-0.8
FMW	0.67	43	P	06	23.43	-0.7
GULW	0.73	135	P	06	24.31	-0.7
CPW	0.76	314	P	06	24.89	-0.7
APM	0.84	147	P	06	26.12	-0.8
GSM	0.85	26	P	06	26.26	-0.8
NLO	0.85	246	P	06	26.50	-0.5
PGO	0.98	185	P	06	28.29	-0.9
ONR	1.08	294	P	06	30.16	-0.7
VLL	1.08	155	P	06	30.60	-0.4
RMW	1.08	20	P	06	30.00	-1.0
NAC	1.08	74	P	06	31.27	0.3
SPW	1.11	3	P	06	31.02	-0.4
SMW	1.12	322	P	06	30.68	-0.9
KMOR	1.14	225	P	06	30.45	-1.5
GMW	1.15	345	P	06	30.83	-1.2
GL2	1.16	114	P	06	31.79	-0.5
TDH	1.21	161	P	06	32.28	-0.9
HDW	1.30	338	P	06	33.31	-1.0
OBH	1.37	311	P	06	34.84	-0.4
PGW	1.39	353	P	06	35.26	-0.2
HTW	1.42	16	P	06	35.37	-0.6
VGB	1.43	130	eP	06	36.00	-0.1
VBEM	1.48	159	P	06	37.14	0.2
BRVW	1.62	88	P	06	38.90	0.0
BLN	1.62	345	P	06	38.26	-0.6
OSD	1.66	326	P	06	40.01	0.3
CROR	1.74	147	P	06	41.76	1.1
VTHM	1.77	135	P	06	41.54	0.5
JCW	1.77	9	P	06	41.20	0.1
MDW	1.79	84	P	06	41.16	-0.1
ETW	1.80	49	P	06	42.64	1.1
MCW	2.26	352	eP	06	49.00	0.8
BW06	9.82	107	eP	08	32.00	-2.6

59 obs. associated

& MAY 18, 1990 20h 00m 09.06s
48.826 N 122.130 W

DEPTH = 1.8km
WASHINGTON (29)
<SEA>. CL 2.5 (SEA). Felt (III)
ot Deming.

MBW	0.16	105	Pd	00	12.99	0.7
CMW	0.40	179	Pd	00	16.49	-0.6
RPW	0.56	133	P	00	19.32	-0.9
OHW	0.57	208	P	00	20.16	-0.3
JCW	0.65	168	Pd	00	21.02	-1.0
BLN	0.99	215	P	00	27.08	-1.6
HTW	1.05	167	P	00	28.58	-1.1
STW	1.23	237	P	00	30.34	-2.3
HDW	1.33	208	Pd	00	32.52	-1.9
RMW	1.38	171	P	00	34.12	-1.3
NLW	1.41	121	P	00	35.01	-0.8
OSD	1.45	227	Pd	00	34.69	-1.9
GSM	1.64	172	P	00	38.64	-0.5
DHW2	1.78	117	P	00	42.69	1.5
WTV	1.84	127	P	00	42.41	0.4
RVC	1.89	177	P	00	42.37	-0.4
FMW	1.92	171	P	00	42.52	-0.8

TBM	1.95	148	P	00	45.01	1.4
LMW	2.16	183	P	00	46.70	0.0
NAC	2.27	157	P	00	48.72	0.5
ASR	2.70	172	P	00	57.74	3.3
CDFW	2.71	179	P	00	55.61	1.1

22 obs. associated

& MAY 18, 1990 20h 40m 32.19s
59.805 N 152.900 W

DEPTH = 95.1km
SOUTHERN ALASKA (2)
<AGS-P>.

AUL	0.50	213	eP	40	47.10	-0.6
AUE	0.51	208	iP	40	47.01	-0.7
			iS	40	57.61	
RED	0.62	6	iP	40	47.96	-0.8
			iS	41	00.19	
PDB	0.65	269	iP	40	48.16	-0.8
XLV	0.69	120	iP	40	48.68	-0.7
RDT	0.81	18	iP	40	49.78	-0.8
			iS	41	03.34	
NNL	0.84	73	iP	40	51.22	0.4
CNPM	0.89	108	iP	40	50.67	-0.7
CDD	0.96	204	eP	40	50.96	-1.1
MCNL	0.96	230	iP	40	51.11	-1.0
NKA	1.25	41	eP	40	56.53	1.1
SPU	1.44	16	iP	40	57.21	-0.7
SLKM	1.51	61	eP	40	58.14	-0.7
NCG	1.65	13	eP	41	00.19	-0.4
SEW	1.76	79	eP	41	00.94	-1.0
SUA	1.97	32	eP	41	04.56	-0.3
PMS	2.19	47	eP	41	07.05	-0.7
PLRM	2.58	44	eP	41	11.69	-1.1

18 obs. associated

? MAY 18, 1990 21h 58m 44.91±17.88s
41.635 N ±120.km 12.710 E ±107.km

DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

RDP	0.12	2	Pd	58	47.70	-0.3
			eSg	58	54.00	
RMP	0.18	358	P	58	48.50	-0.4
			eSg	58	55.00	
MNS	0.75	358	P	59	00.00	0.4
			eSg	59	11.50	
SDI	0.83	85	P	59	01.00	0.0
			eSn	59	14.00	

S.D. = 0.6 on 4 of 4 obs.

% MAY 18, 1990 22h 03m 50.40±1.42s
40.216 N ±12.5km 29.277 E ±7.3km

DEPTH = 10.0km (geophysicist)
TURKEY (366)

YLV	0.36	12	iPg	03	58.70	0.9
HRT	0.67	26	ePg	04	02.90	-0.9
GPA	0.79	84	ePn	04	06.00	0.2
EDC	1.09	277	ePn	04	11.00	0.1
CTT	1.13	326	ePn	04	11.30	-0.3

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

MAY 18, 1990 23h 00m 26.22±0.51s
43.954 N ±5.2km 18.307 E ±5.0km

DEPTH = 5.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.5 (TTG).

PLE	1.01	128	ePg	00	44.50	-1.3
			eSg	00	59.50	
BRY	1.07	171	ePg	00	44.90	-2.0
			eSg	01	01.00	
NKY	1.25	156	ePg	00	49.00	-0.9

18d 23h

PTJ 2.56 320 e(Pn) 01 09.10 -0.1
 VBY 2.67 307 eP 01 16.90 6.3X
 e(Sn) 01 58.40
 BZS 2.88 54 ePc 01 12.00 -1.7
 SKO 3.03 130 ePn 01 16.00 0.2
 BRT 3.18 195 P 01 28.50 10.6X
 OHR 3.39 146 ePn 01 21.00 0.1
 LJU 3.40 309 eP 01 20.00 -0.2
 e(Sg) 02 22.00
 LCI 3.63 184 P 01 32.00 7.8X
 TRI 3.68 300 P 01 32.00 7.1X
 VOY 3.76 305 eP 01 25.70 -0.5
 eS 02 42.30
 ARV 3.92 265 P 01 30.00 1.7
 SDI 3.99 237 P 01 29.50 0.0
 SGO 4.06 214 P 01 31.50 1.2
 ORI 4.13 200 P 01 32.50 1.2
 ASS 4.20 260 P 01 31.00 -1.4
 MGR 4.33 209 P 01 34.00 -0.2
 eSn 02 20.00
 CRE 4.61 268 P 01 38.00 -0.3
 FVI 4.71 306 P 01 40.00 0.4
 S.D. = 1.2 on 23 of 27 obs.

? MAY 18, 1990 23h 40m 28.77 ± 3.43s
 42.896 N ± 17.3km 8.810 W ± 24.3km
 DEPTH = 10.0km (geophysicist)
 SPAIN (377)
 mbLg 2.8 (MDD).

STS 0.19 93 iPgc 40 33.10 0.1
 eSg 40 35.50
 EZAM 0.75 173 iPg 40 43.50 0.0
 eSg 40 53.20
 EMON 1.21 63 iPg 40 51.30 0.0
 eSg 41 06.00
 ERUA 1.33 112 ePn 40 53.20 -0.1
 eSn 41 09.20
 S.D. = 0.1 on 4 of 4 obs.

MAY 18, 1990 23h 45m 01.65 ± 0.63s
 39.330 N ± 5.5km 21.660 E ± 7.8km
 DEPTH = 33.0km (normal)
 GREECE (364)
 ML 3.2 (ATH), 2.9 (THE).

AGG 0.60 120 ePg 45 11.50 -2.3
 eSg 45 23.00
 LIT 1.00 39 ePb 45 19.50 0.1
 eSb 45 36.40
 NEO 1.21 91 ePn 45 22.50 0.1
 VLS 1.42 216 ePn 45 22.70 -2.7
 FNA 1.47 352 ePb 45 26.00 -0.1
 eSb 45 46.40
 KEK 1.49 285 ePn 45 26.10 -0.3
 THE 1.64 37 ePb 45 28.20 -0.4
 GRG 1.72 19 ePn 45 29.30 -0.5
 OHR 1.90 340 iPn 45 34.70 2.4
 iSg 46 00.10
 Lg 46 02.00
 SOH 1.98 41 ePn 45 33.70 0.2
 KNT 2.06 27 ePn 45 34.80 0.2
 ATH 2.10 129 ePn 45 36.00 0.8
 VAY 2.11 19 ePn 45 35.00 -0.3
 ITM 2.16 174 ePb 45 38.00 2.0
 SRS 2.32 39 ePn 45 37.60 -0.7
 SKO 2.64 356 ePn 45 42.70 -0.2
 VLI 2.80 158 ePb 45 46.70 1.7
 S.D. = 1.4 on 17 of 17 obs.

MAY 19, 1990 00h 17m 47.80 ± 0.78s
 40.225 N ± 5.7km 23.916 E ± 6.1km
 DEPTH = 5.0km (geophysicist)
 GREECE (364)
 ML 2.3 (THE).

OUR 0.12 25 iPg 17 50.50 0.2
 PAIG 0.35 211 ePg 17 54.90 0.1
 eSg 17 59.50
 SOH 0.73 324 ePg 18 01.90 -0.6
 eSg 18 12.00
 THE 0.83 300 ePg 18 03.40 -0.9
 eSg 18 14.80
 SRS 0.92 345 ePg 18 06.90 1.0
 eSg 18 18.40
 LIT 1.10 264 ePb 18 09.40 0.5
 eSb 18 24.10

KNT 1.21 321 ePb 18 10.90 0.0
 eSb 18 28.10
 VAY 1.50 317 ePn 18 15.60 0.3
 ALN 1.76 67 ePb 18 18.60 -0.5
 S.D. = 0.7 on 9 of 9 obs.

* MAY 19, 1990 00h 36m 54.44 ± 1.63s
 5.604 S ± 19.0km 145.853 E ± 10.1km
 DEPTH = 111.3 ± 11.6 km
 3.8mb (1 obs.)

EAST PAPUA NEW GUINEA REGION (207)

LAT 1.54 132 iPc 37 22.90 0.7
 MNDI 2.25 256 eP 37 31.00 -0.5
 PMG 3.99 161 iPd 37 53.90 -0.8
 0.9s 151.26nm
 eS 38 42.00
 CTA 14.40 178 iPc 40 20.00 5.7X
 e 43 11.00
 QIS 16.06 202 eP 40 35.10 0.0
 MTN 16.21 243 eP 40 37.50 0.4
 WB5 18.06 217 eP 41 01.00 1.2
 WRA 18.13 217 Pd 40 59.80 -0.8
 0.7s 4.30nm 3.8mb
 RMO 20.95 173 eP 41 35.00 4.8X
 NAI 108.82 267 iPKPd 55 20.00 6.5X
 SIV 145.78 129 PKP 56 22.20 -0.3
 S.D. = 1.0 on 8 of 11 obs.

? MAY 19, 1990 01h 30m 20.24 ± 0.77s
 31.548 S ± 34.1km 68.870 W ± 20.5km
 DEPTH = 110.0km (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA (137)

RTCB 0.09 44 iPd 30 36.00 0.0
 ZON 0.16 89 iPd 30 35.70 -0.4
 eS 30 48.00
 RTLL 0.41 58 iPc 30 37.00 0.2
 RTCV 0.42 138 iPc 30 37.00 0.1
 RTBS 0.51 257 iPd 30 37.40 0.1
 S.D. = 0.3 on 5 of 5 obs.

% MAY 19, 1990 01h 43m 10.59 ± 2.01s
 39.686 N ± 17.5km 16.816 E ± 8.9km
 DEPTH = 5.0km (geophysicist)
 SOUTHERN ITALY (390)

TDS 0.37 266 Pd 43 16.90 -1.1
 eSg 43 23.20
 ORI 0.47 323 P 43 19.90 -0.1
 MGR 1.07 295 P 43 32.10 0.9
 LCI 1.09 53 P 43 32.00 0.5
 eSn 43 49.00
 BRT 1.23 14 P 43 32.60 -1.3
 eSn 43 50.00
 SGO 1.45 307 P 43 38.50 1.1
 S.D. = 1.3 on 6 of 6 obs.

& MAY 19, 1990 02h 11m 30.28s
 61.731 N 149.588 W
 DEPTH = 36.9km
 SOUTHERN ALASKA (2)
 <AGS-P>. ML 3.3 (PMR). Felt (11)
 at Palmer.

PWA 0.16 240 iPc 11 37.20 0.3
 PLRM 0.26 122 eP 11 37.35 -0.5
 eS 11 43.53
 PMR 0.26 122 iPc 11 37.40 -0.4
 GHO 0.32 82 iP 11 38.10 -0.5
 eS 11 44.86
 PMS 0.49 178 iPd 11 40.40 -0.4
 SML 0.60 82 iP 11 41.29 -1.1
 eS 11 50.20
 SUA 0.61 245 eP 11 42.05 -0.6
 eS 11 51.52
 CUT 0.75 335 iP 11 43.65 -0.7
 iS 11 53.64
 SKT 0.95 286 iP 11 46.55 -0.8
 iS 12 00.16
 HUR 1.25 359 eP 11 51.28 -0.3
 eS 12 07.42
 SLKM 1.27 194 eP 11 51.08 -0.7
 NCG 1.27 256 eP 11 51.92 -0.1
 NKA 1.27 220 eP 11 53.58 1.7
 SPU 1.31 246 iP 11 52.43 0.0
 eS 12 09.34

CRP 1.32 250 eP 11 52.95 0.3
 eS 12 10.71
 NCA 1.34 77 iP 11 52.57 -0.3
 GLI 1.48 124 iP 11 54.42 -0.4
 iS 12 15.12
 SEW 1.63 178 eP 11 56.15 -0.9
 TOA 1.66 75 iPc 11 58.00 0.5
 VLZ 1.68 110 iP 11 57.13 -0.6
 iS 12 19.48

RND 1.72 11 iP 11 58.00 -0.4
 eS 12 20.53
 RDT 1.79 231 iP 11 59.20 -0.3
 >NNL 1.89 207 eP 12 01.41 0.7
 KTH 1.93 342 eP 12 01.24 -0.1
 eS 12 25.48
 MCK 2.03 8 eP 12 02.85 0.1
 RED 2.03 231 iP 12 02.62 -0.2
 eS 12 29.39
 SDG 2.06 65 eP 12 03.60 0.4
 eS 12 30.25
 PAX 2.29 55 eP 12 06.98 0.5
 CNPM 2.36 201 eP 12 08.07 0.6
 DDM 2.68 38 eP 12 12.28 0.2
 WRH 2.83 13 eP 12 13.21 -1.0
 HDA 2.94 23 eP 12 14.61 -1.1
 PDB 2.98 231 eP 12 15.40 -0.9
 CCB 3.04 15 eP 12 15.81 -1.2
 DOT 3.19 51 eP 12 21.03 1.7
 TTA 3.23 295 eP 12 18.70 -1.2
 FBA 3.28 13 iPd 12 19.40 -1.1
 TGL 3.41 104 eP 12 21.24 -1.2
 GLM 3.42 16 eP 12 21.07 -1.4
 CDD 3.46 217 eP 12 23.71 0.7
 IMA 4.71 339 eP 12 39.40 -1.6
 INK 9.44 39 eP 13 47.00 0.2
 42 obs. associated

* MAY 19, 1990 02h 18m 55.70 ± 0.88s
 25.517 N ± 15.6km 91.063 E ± 7.5km
 DEPTH = 33.0km (normal)

INDIA-BANGLADESH BORDER REGION (315)

SHL 0.74 86 iP 19 09.90 0.0
 iS 19 20.40
 GUN 5.21 298 P 20 14.00 0.2
 PKI 5.46 293 P 20 17.20 0.0
 0.4s 19.00nm 5.0mb
 DMN 5.73 293 P 20 21.40 0.5
 0.4s 27.00nm 5.2mb
 GKN 6.25 295 P 20 27.60 -0.7
 HYB 14.15 238 eP 22 16.00 0.0
 S.D. = 0.5 on 6 of 6 obs.

& MAY 19, 1990 02h 29m 51.21s
 60.067 N 151.987 W
 DEPTH = 72.1km
 KENAI PENINSULA, ALASKA (14)
 <AGS-P>.

NNL 0.35 94 iP 30 04.15 1.0
 RED 0.53 312 iP 30 04.05 -0.7
 eS 30 13.91
 RDT 0.55 338 iP 30 04.14 -0.8
 CNPM 0.66 145 eP 30 04.49 -1.6
 eS 30 18.52
 NKA 0.77 28 iP 30 08.56 1.3
 SLKM 0.98 63 eP 30 09.48 -0.4
 SPU 1.12 358 eP 30 10.93 -0.7
 eS 30 26.17
 PDB 1.15 257 eP 30 11.22 -0.7
 eS 30 26.76
 CRP 1.21 356 eP 30 12.41 -0.5
 eS 30 29.15
 SEW 1.27 87 eP 30 13.05 -0.5
 NCG 1.34 357 eP 30 14.03 -0.6
 eS 30 32.13
 SUA 1.53 23 iP 30 17.02 -0.1
 PMS 1.68 44 iP 30 19.10 0.0
 13 obs. associated

& MAY 19, 1990 03h 10m 44.58s
 61.717 N 148.072 W
 DEPTH = 34.3km
 SOUTHERN ALASKA (2)
 <AGS-P>.

SML 0.15 307 iP 10 50.48 -0.5

19d 03h

GHO	0.41	278	iS	10 55.77	
			iP	10 53.13	-0.8
			eS	11 00.30	
PLRM	0.52	257	iP	10 54.39	-1.0
			eS	11 02.04	
NCA	0.65	64	eP	10 56.61	-0.8
			eS	11 06.23	
PMS	0.86	237	iP	10 59.88	-0.4
			eS	11 11.40	
PWA	0.86	266	eP	10 59.37	-0.9
GLI	0.96	150	iP	11 01.12	-0.7
			eS	11 14.69	
TOA	0.98	66	eP	11 02.12	0.0
VZW	0.98	131	eP	11 01.05	-1.1
			eS	11 14.48	
VLZ	1.02	124	iP	11 01.24	-1.3
CUT	1.24	305	iP	11 05.41	-0.4
SUA	1.30	260	eP	11 06.31	-0.5
HUR	1.46	331	eP	11 08.76	-0.2
			eS	11 27.73	
HIN	1.53	149	eP	11 10.17	0.2
SLKM	1.60	222	eP	11 11.10	0.1
CVA	1.63	135	eP	11 11.91	0.6
SKT	1.66	281	iP	11 11.92	0.0
PAX	1.75	43	eP	11 13.16	0.0
SEW	1.75	203	eP	11 13.21	0.1
SGAM	1.85	130	eP	11 15.23	0.7
NCG	1.98	263	eP	11 16.73	0.3
SPU	1.99	256	eP	11 16.57	0.1
CRP	2.01	259	eP	11 17.61	0.7
RAGM	2.12	127	eP	11 20.20	1.7
KTH	2.26	326	eP	11 20.45	-0.1
RDY	2.39	243	eP	11 21.65	-0.7
TGL	2.71	109	eP	11 25.04	-1.8
GLM	3.30	5	eP	11 35.07	-0.1

28 obs. associated

* MAY 19, 1990 04h 36m 06.26 ± 1.38s
33.746 N ± 13.3km 89.755 E ± 16.3km
DEPTH = 33.0km (normal)
4.1mb (1 obs.)

TIBET (306)

GUN	6.70	211	P	37 44.00	-1.3
	0.6s	15.00nm			5.0mb X
GKN	7.22	219	P	37 53.00	0.7
DMN	7.31	214	P	37 54.20	0.5
	0.6s	8.00nm			4.9mb X
CHTO	16.99	149 (P)		40 03.10	0.1
NB2	55.70	325 P		45 41.40	-0.1
	0.8s	1.50nm			4.1mb

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

& MAY 19, 1990 05h 29m 21.13s
61.612 N 149.804 W
DEPTH = 50.1km
SOUTHERN ALASKA (2)
<AGS-P>.

PWA	0.05	318	iP	29 28.47	1.3
PLRM	0.32	93	iP	29 29.77	-0.7
			iS	29 37.51	
PMS	0.39	162	iP	29 30.92	-0.3
			iS	29 38.74	
GHO	0.45	69	iP	29 31.19	-0.8
			eS	29 40.04	
SUA	0.47	252	iP	29 31.91	-0.4
			iS	29 41.32	
SML	0.73	74	iP	29 34.49	-0.9
			eS	29 44.94	
CUT	0.83	345	iP	29 36.23	-0.4
SKT	0.90	295	iP	29 36.85	-0.9
SLKM	1.13	191	eP	29 39.90	-1.0
NCG	1.15	261	iP	29 40.86	-0.4
SPU	1.17	249	iP	29 40.83	-0.6
			eS	29 56.52	
CRP	1.18	254	eP	29 41.48	-0.3
			eS	29 57.02	
NCA	1.47	74	eP	29 44.90	-0.7
GLI	1.50	118	eP	29 44.61	-1.5
			iS	30 03.41	
SEW	1.52	173	eP	29 46.12	-0.2
RDY	1.64	232	eP	29 46.81	-1.2
VZW	1.66	108	eP	29 47.21	-1.2
VLZ	1.74	105	eP	29 47.82	-1.6
TOA	1.79	72	eP	29 50.16	-0.1
RED	1.88	232	eP	29 50.39	-1.1

20 obs. associated
* MAY 19, 1990 05h 29m 45.20 ± 1.11s
34.176 N ± 12.4km 26.786 E ± 9.8km
DEPTH = 33.0km (normal)

CRETE (370)

VAM	2.46	301	eP	30 23.10	-0.7
KSL	3.00	49	eP	30 31.00	-0.5
APE	3.06	341	eP	30 33.50	1.1
ELL	3.62	44	ePn	30 40.30	-0.1
DSI	7.68	107	eP	31 37.00	-0.5
			eS	33 00.00	
MBH	8.16	120	eP	31 45.00	0.8

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

* MAY 19, 1990 05h 30m 48.43 ± 1.41s
36.979 N ± 14.5km 21.570 E ± 7.1km
DEPTH = 10.0km (geophysicist)
SOUTHERN GREECE (368)
ML 3.3 (ATH).

ITM	0.35	55	ePq	30 55.00	-0.6
VLI	1.13	103	ePb	31 10.00	0.5
VLS	1.43	327	ePb	31 14.00	-0.4
ATH	1.97	59	ePq	31 27.00	4.8X
NEO	2.66	29	ePn	31 32.10	-0.1
KEK	3.06	334	ePb	31 40.50	2.7
VAY	4.41	10	ePn	31 56.40	-0.4
SKO	4.99	359	ePn	32 05.00	-0.1
ORI	5.06	309	P	32 06.00	-0.1
MGR	5.67	306	P	32 13.50	-1.3
			eSn	33 16.50	
SGO	6.06	308	P	32 20.00	-0.2
			eSn	33 25.00	

S.D. = 1.2 on 10 of 11 obs.

? MAY 19, 1990 06h 04m 05.87 ± 2.80s
37.834 N ± 24.1km 20.726 E ± 31.9km
DEPTH = 5.0km (geophysicist)
IONIAN SEA (399)
ML 3.4 (ATH).

VLS	0.36	343	ePg	04 13.00	-0.1
ITM	1.16	124	ePb	04 27.00	-1.0
KEK	2.01	339	ePg	04 46.00	5.2X
VLI	2.09	122	Pn	04 42.90	1.0
ATH	2.37	86	ePn	04 46.10	0.1
OHR	3.27	1	e(Pn)	05 03.00	4.1X

S.D. = 1.4 on 4 of 6 obs.

MAY 19, 1990 06h 46m 35.81 ± 0.24s
40.213 N ± 4.6km 143.253 E ± 4.0km
DEPTH = 26.5km (7 depth phases)
5.4mb (70 obs.) 4.8Msz (11 obs.)
OFF EAST COAST OF HONSHU, JAPAN (229)

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 9S, 15C

Centroid Location:

Origin Time 06:46:38.6 0.7

Lat 39.99N 0.10 Lon 142.96E 0.14

Dep 15.0 FLX Half-duration 1.7

Moment Tensor; Scale 10¹⁷ Nm

Mrr = 0.28 0.04 Mtt = 0.06 0.04

Mff = -0.35 0.06 Mrt = 0.01 0.10

Mrf = 1.11 0.12 Mtf = -0.07 0.05

Principal Axes:

T Vol = 1.12 Plg = 53 Azm = 267

N 0.06 3 1

P -1.19 37 94

Best Double Couple: Mo = 1.1 × 10¹⁷

NP1: Strike = 204 Dip = 9 Slip = 113

NP2: 1 82 87

OFUJ	1.67	228	iP+	47 04.90	1.3
			eS	47 26.70	
HOJ	2.17	1	P	47 10.70	-0.1
			S	47 36.50	
AOMJ	2.23	280	P	47 14.00	2.3
SAP	3.19	334	eP	47 25.00	-0.3
			eS	48 10.00	
YAMJ	3.22	232	P	47 26.80	0.9
MAT	5.40	229	iPc	47 57.80	1.1
	1.0s	565.00nm			6.1mb
			eS	49 02.00	
SHK	10.14	239	eP	49 04.50	1.7

MDJ	11.01	298	Pc	49 15.10	0.4
Z	25s	4.12um			
N	14s	4.15um			
E	16s	7.94um			
CN2	13.72	291	Pc	49 50.00	-0.8
	1.0s	100.00nm			5.6mb
Z	17s	5.00um			5.7MszX
N	15s	3.00um			
E	15s	1.70um			
		pP	49 59.00		
		eS	52 16.00		
SNY	14.94	283	Pc	50 06.00	-0.9
	1.0s	30.00nm			4.6mb
Z	17s	6.20um			5.3Msz
N	13s	2.10um			
E	15s	4.10um			
		sP	50 17.40		
		PP	50 19.00		
DL2	16.73	272	P	50 28.00	-1.8
	3.0s	1100.00nm			5.5mb
Z	20s	1.50um			3.8Msz
N	14s	1.80um			
		eS	53 35.50		
SSE	20.07	250	P	51 06.50	-3.3X
	1.2s	50.00nm			4.7mb
Z	16s	1.80um			4.5MszX
N	13s	1.00um			
E	13s	0.80um			
		pP	51 13.00	25km	
		sS	55 06.00		
		eSS	55 21.00		
BJI	20.68	278	eP	51 12.50	-3.7X
	4.0s	400.00nm			5.2mb X
Z	16s	3.50um			4.8MszX
N	14s	1.29um			
TIA	20.89	267	P	51 15.20	-3.2X
Z	15s	4.20um			4.9MszX
E	14s	3.20um			
		eS	55 02.00		
NJ2	21.28	255	Pc	51 19.50	-2.8
	1.2s	100.00nm			5.1mb
Z	18s	1.40um			4.4Msz
N	13s	1.40um			
E	15s	1.80um			
HHC	24.03	282	P	51 48.00	-1.5
Z	16s	6.00um			5.2MszX
N	13s	0.90um			
E	17s	3.50um			
TIY	24.04	274	eP	51 46.00	-3.6X
Z	20s	2.20um			4.6Msz
N	17s	1.80um			
E	16s	1.40um			
		pP	51 53.00	25km	
		sP	52 03.00		
BTO	25.23	282	P	52 00.00	-1.1
N	15s	1.70um			
E	16s	3.80um			
		PP	52 39.00		
		S	56 26.50		
WHN	25.37	257	Pc	52 02.00	-0.3
	1.0s	100.00nm			5.4mb
Z	16s	3.00um			4.9MszX
N	13s	1.00um			
E	15s	4.00um			
		pP	52 10.00	28km	
		eS	56 24.00		
QZH	25.65	241	eP	52 08.80	3.9X
Z	16s	1.80um			4.7MszX
E	16s	1.80um			
GUMO	26.56	176	eP	52 09.00	-4.4X
Z	21s	0.64um			4.1Msz
		eS	56 51.00		
XAN	27.94	268	P	52 23.50	-2.5
N	14s	1.70um			
E	13s	1.20um			
GZH	30.46	245	P	52 48.80	0.3
Z	15s	2.10um			4.9MszX
N	13s	1.80um			
E	14s	2.20um			
		S	57 52.00		
LZH	31.09	275	eP	52 53.50	-0.7
	2.0s	70.00nm			5.1mb
Z	18s	1.90um			4.8Msz
N	15s	0.90um			
E	14s	1.10um			
		pP	53 02.50	31km	
		sP	53 06.50		

			PP	53	53.50		CMB	70.88	56	eP	57	52.00	-0.5	KKB	81.94	319	iPc	58	55.00	0.6
GTA	33.13	283	eS	58	00.00		LRM	70.89	46	eP	57	52.10	-0.5	BHG	81.99	329	iPc	58	55.30	0.8
	1.0s	100.00nm		53	11.50	-0.5	KVN	71.71	54	P	57	56.70	-0.9		1.3s	73.00nm			5.5mb	
Z	18s	5.70um				5.7mb	HFS	71.78	336	eP	57	55.70	-1.7	ELL	81.99	312	eP	58	55.00	0.1
E	16s	3.00um				5.3MsZ		1.2s	66.00nm			5.6mb	ENN	82.00	334	eP	58	54.00	-0.5	
			S	58	30.00		Z	18s	0.61um			4.9MsZ		1.0s	31.00nm				5.3mb	
CD2	33.21	266	P	53	10.80	-1.9	NB2	71.81	338	P	57	56.80	-0.8	MEM	82.10	334	P	58	53.00	-2.0
Z	15s	1.80um				4.9MsZx		1.1s	40.80nm			5.4mb	FUR	82.25	330	eP	58	56.50	0.6	
N	14s	2.80um					TNP	72.85	55	P	58	04.20	-0.2		1.0s	37.00nm			5.4mb	
GYA	33.26	257	iPc	53	12.00	-1.2		1.2s	14.92nm			4.9mb	DSI	82.27	305	eP	58	57.00	0.8	
	1.2s	200.00nm				5.9mb	FRB	73.35	14	eP	58	06.00	-0.5	VAY	82.61	319	iP	58	58.80	1.0
Z	18s	1.80um				4.8MsZ	AKU	73.44	352	eP	58	08.70	1.7	SKO	82.68	320	iPc	58	59.00	0.8
N	15s	2.60um						1.3s	38.46nm			5.3mb		1.2s	66.00nm				5.6mb	
E	15s	2.10um					ISA	73.53	57	eP	58	02.00	-6.2X	SNF	82.75	335	iP	58	58.28	-0.1
			S	58	30.60		CLC	74.00	57	eP	58	10.00	-0.9	VBY	82.78	326	e(P)	58	59.30	0.6
OIZ	35.59	244	P	53	35.10	1.9	BW06	74.42	47	P	58	12.00	-1.5	GWf	82.93	332	P	58	59.56	0.1
	17s	2.40um						1.4s	21.20nm			5.0mb	FVI	82.94	328	P	59	01.00	1.6	
KMI	36.94	258	Pc	53	44.00	-0.7	SBH	74.55	58	eP	58	19.00	4.9X	CEY	82.95	327	e(P)	58	59.10	-0.5
	1.5s	240.00nm				5.8mb	GSC	74.82	57	eP	58	21.00	5.3X	DOU	83.01	335	P	59	00.40	0.6
Z	16s	5.10um				5.4MsZx	RVR	75.27	58	eP	58	13.00	-5.2X	SOTA	83.05	329	eP	59	00.00	-0.2
N	15s	2.40um					KVT	75.54	312	iP	58	20.20	0.5		1.2s	38.60nm			5.4mb	
E	15s	1.40um					PLM	76.00	58	eP	58	28.00	5.4X	TRI	83.25	327	P	59	01.00	0.0
			pP	53	52.00	27km	TPC	76.06	57	eP	58	28.00	5.3X	OGA	83.41	329	eP	59	02.50	0.3
WMQ	40.78	294	iPc	54	16.40	0.1	RSSD	76.51	43	P	58	24.30	-1.1		1.3s	51.00nm			5.5mb	
	20s	1.80um				4.9MsZ	RSON	76.54	33	P	58	29.00	3.9X	WLS	83.50	332	P	59	02.42	0.0
	13s	1.00um						1.3s	27.03nm			5.1mb	CDF	83.53	332	P	59	02.62	0.0	
			pP	54	25.00	29km	VRI	77.23	320	ePd	58	30.00	1.0	SLE	83.63	331	ePc</			

			S	46	36.00	
KOD	64.91	275	eP	38	08.80	0.4
IMA	67.11	23	P	38	22.70	1.4
	0.7s	2.98nm				
POO	67.21	285	iPc	38	20.00	-2.6
PMR	67.71	28	P	38	23.20	-1.7
	0.9s	26.67nm				
FBA	69.11	25	P	38	33.50	0.0
	0.6s	13.55nm				
QUE	72.31	298	eP	38	53.30	-0.4
	1.0s	445.00nm				
INK	75.22	22	eP	39	08.00	-1.5
	0.7s	20.00nm				
MAIO	77.87	305	iPc+	39	26.00	1.0
	1.0s	17.50nm				
		eS		49	12.00	
MBC	79.00	14	eP	39	29.00	-1.3
	0.5s	66.00nm				
PGC	82.08	42	eP	39	47.00	0.0
MCW	82.48	42	P	39	49.30	0.2
BMW	82.64	44	P	39	49.50	-0.6
GMW	82.73	43	P	39	50.40	0.0
FHC	83.20	50	eP	39	54.00	1.0
SHW	83.37	44	P	39	55.00	1.1
RMW	83.40	43	P	39	53.40	-0.5
LON	83.54	44	P	39	54.40	-0.2
WDC	84.33	50	iPc	39	59.10	0.5
PNT	84.41	41	ePc	39	59.00	0.1
NWRM	84.51	52	P	40	00.00	0.5
LTCM	84.72	50	P	40	00.90	0.3
MIN	85.07	50	ePc	40	02.20	-0.4
PCC	85.11	53	eP	40	02.50	-0.1
BRK	85.12	52	ePc	40	03.00	0.4
BKS	85.14	52	ePc	40	03.40	0.7
	0.7s	169.00nm				
		e(S)		50	16.40	
ORV	85.33	51	ePc	40	03.60	-0.1
GCC	85.51	53	ePc	40	04.80	0.2
DPW	85.67	42	P	40	05.30	0.0
MHC	85.72	53	eP	40	06.20	0.4
ARN	85.80	53	P	40	06.60	0.5
SAO	86.00	53	eP	40	07.20	0.1
NEW	86.27	41	P	40	08.20	0.0
	1.0s	270.00nm				
LLA	86.43	53	eP	40	09.80	0.6
CMB	86.53	52	iPc	40	10.00	0.3
KEY	86.69	342	eP	40	12.00	2.3
PRI	86.76	54	ePc	40	11.80	0.9
PHAM	87.04	54	P	40	12.80	0.7
EDM	87.15	36	iP	40	11.80	-0.5
PKEM	87.22	54	P	40	14.30	1.4
FRI	87.30	53	iPc	40	13.70	0.4
BCH	87.45	55	P	40	15.20	1.0
SYF	87.69	55	eP	40	16.00	0.6
SOD	88.00	340	iP	40	15.60	-0.5
KVN	88.01	50	P	40	17.60	0.7
ABL	88.22	55	P	40	18.70	0.6
ISA	88.60	54	eP	40	20.80	1.1
TNP	88.93	51	P	40	24.00	2.6
PAS	89.23	55	eP	40	23.00	0.4
		e		42	38.00	
CLC	89.25	53	eP	40	23.00	0.3
		e		42	48.00	
MWC	89.31	55	eP	40	23.00	-0.2
		e		42	37.00	
SBB	89.37	55	eP	40	24.00	0.7
		e		42	40.00	
SES	89.42	38	ePc	40	22.60	-0.6
	0.6s	32.00nm				
RVR	89.91	55	eP	40	25.00	-0.8
		e		42	30.00	
GSC	90.01	54	eP	40	26.00	-0.3

ZOBO 30.69 194 P 50 18.30 -1.2
Z 24s 0.20um 3.7mszx
LR 01 22.00
ANMO 45.99 305 P 52 30.90 3.8X
FRB 50.17 356 eP 53 01.00 2.1
FFC 51.80 331 eP 53 10.00 -1.5
0.7s 6.00nm 4.6mb
LKO 54.32 88 P 53 30.80 -0.1
LSF 61.20 45 eP 54 26.40 7.6X
AVF 62.53 44 eP 54 26.50 -1.3
SMF 62.84 44 eP 54 28.50 -1.3
LOR 62.95 44 eP 54 25.90 -4.6X
LPG 64.70 46 eP 54 43.20 0.8
0.8s 2.70nm 4.5mb
BSF 65.00 43 eP 54 43.00 -1.1
0.7s 4.40nm 4.7mb
MBC 69.39 347 eP 55 11.00 -0.1
0.6s 9.00nm 5.1mb
NB2 69.42 30 P 55 12.40 0.8
0.9s 2.80nm 4.4mb
INK 70.83 338 eP 55 19.00 -1.0
FBA 76.27 334 P 55 53.20 1.4
SOD 76.46 23 eP 55 49.00 -3.8X
BCAO 78.79 88 ePd 56 07.70 1.0
0.5s 2.00nm 4.4mb
S.D. = 0.8 on 38 of 43 obs.

& MAY 19, 1990 17h 55m 59.30s
36.297 N 120.358 W
DEPTH = 12.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.7 (BRK), 3.2 (PAS).

PRI 0.29 238 iPd 56 05.00 -0.6
PKEM 0.31 139 iPc 56 05.70 -0.2
PHAM 0.46 184 iPd 56 07.70 -1.1
LLA 0.57 304 iPc 56 09.50 -1.2
FRI 0.87 37 iPd 56 13.70 -2.1
SAO 0.99 298 ePc 56 16.20 -1.7
BCH 1.13 169 iPc 56 18.30 -2.1
ARN 1.41 318 eP 56 22.50 -2.3
MHC 1.47 316 ePc 56 23.00 -2.6
GCC 1.51 300 ePc 56 23.00 -3.1
ISA 1.65 112 iPc 56 26.10 -2.2
ABL 1.72 147 eP 56 26.00 -3.3
CMB 1.73 359 iPd 56 27.60 -1.9
iS 56 50.10
PCC 2.02 307 ePc 56 30.00 -3.5
BKS 2.18 317 ePd 56 33.50 -2.3
BRK 2.19 317 ePc 56 33.40 -2.6
ZSP 2.24 318 ePc 56 34.30 -2.4
TNP 3.08 54 eP 56 47.20 -1.6
KVN 3.28 32 eP 56 50.00 -1.7
ORV 3.38 345 eP 56 51.40 -1.5
MIN 4.16 347 eP 57 10.30 6.2
21 obs. associated

% MAY 19, 1990 19h 27m 44.68±0.86s
44.411 N ± 6.2km 7.312 E ± 8.7km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.0 (GEN).

DOI 0.10 333 P 27 49.00 1.5
eSg 27 51.50
STV 0.17 177 P 27 48.40 -0.2
S 27 50.55
ENR 0.20 157 P 27 49.19 0.1
S 27 51.79
ROB 0.42 106 P 27 53.83 0.6
S 28 00.40
IMI 0.65 140 P 27 57.16 -0.6
FIN 0.67 107 P 27 57.94 -0.2
S 28 07.16
RSP 0.74 357 P 27 57.72 -1.6
PCP 0.89 81 P 28 02.14 0.3
S.D. = 1.0 on 8 of 8 obs.

% MAY 19, 1990 19h 41m 12.36±0.76s
43.847 N ± 14.9km 11.169 E ± 4.6km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

PGD 0.40 86 P 41 20.30 -0.3
eSg 41 26.70
BDI 0.47 298 P 41 22.00 0.1
eSg 41 29.50

PII 0.48 255 P 41 22.00 -0.2
eSg 41 29.00
SFI 0.50 81 P 41 22.50 0.0
iSg 41 29.50
CRE 0.61 111 P 41 25.00 0.3
eSg 41 33.50
S.D. = 0.3 on 5 of 5 obs.

? MAY 19, 1990 19h 48m 14.45±1.02s
43.420 N ± 9.7km 12.160 E ± 11.2km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

CRE 0.26 324 P 48 20.00 0.1
ASS 0.51 134 P 48 25.00 0.3
eSg 48 32.00
ARV 0.57 82 P 48 26.00 -0.1
eSg 48 34.00
MNS 1.10 160 P 48 35.00 -0.2
eSg 48 50.00
S.D. = 0.4 on 4 of 4 obs.

? MAY 19, 1990 19h 54m 01.91±1.85s
51.580 N ± 13.4km 7.690 E ± 16.8km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
MD 2.5 (UCC).

WTS 0.69 308 ePgc 54 15.50 0.0
ENN 1.38 235 iPn 54 27.10 0.0
iPgc 54 28.90
iSn 54 46.00
eSg 54 49.50
MEM 1.44 228 iP 54 28.00 0.0
iS 54 48.00
TNS 1.44 160 ePnc 54 28.10 0.0
eSn 54 47.40
DOU 2.46 234 P 54 49.20 6.5X
iS 55 18.90
S.D. = 0.0 on 4 of 5 obs.

& MAY 19, 1990 20h 48m 57.00s
36.687 N 121.467 W
DEPTH = 6.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.3 (BRK).
Mo=1.4+10+14 Nm (BRK). Some
readings obscured by a small
event 1.6 seconds earlier (BRK).

SAO 0.08 13 iPd 48 57.10 -1.9
LLA 0.43 99 ePd 49 06.40 0.8
GCC 0.55 309 eP 49 08.20 0.3
ARN 0.66 355 iPc 49 09.90 -0.4
MHC 0.67 348 iPd 49 10.40 0.0
PRI 0.85 130 eP 49 14.80 1.0
iS 49 30.00
PCC 1.09 318 eP 49 17.30 -0.6
PHAM 1.21 134 eP 49 20.00 0.1
PKEM 1.26 119 eP 49 22.00 1.2
BKS 1.34 333 iP 49 20.60 -1.4
eS 49 40.40
BRK 1.34 332 eP 49 21.20 -0.9
ZSP 1.40 334 ePc 49 21.90 -1.2
FRI 1.44 77 eP 49 22.00 -1.7
iS 49 39.90
CMB 1.60 32 iPd 49 24.30 -1.6
BCH 1.87 143 eP 49 29.40 -0.6
ORV 2.86 359 ePc 49 43.00 -1.1
i 49 53.10
KVN 3.56 47 eP 49 52.00 -2.1
17 obs. associated

? MAY 19, 1990 22h 27m 07.50±5.67s
34.351 N ± 55.4km 25.216 E ± 14.9km
DEPTH = 10.0km (geophysicist)
CRETE (370)

VAM 1.34 322 ePb 27 33.40 1.1
APE 2.72 5 ePn 27 52.10 0.0
VLI 3.01 322 ePn 27 54.90 -1.1
ITM 3.89 317 ePn 28 16.00 7.4X
ELL 4.51 57 ePn 28 18.00 0.5
BCK 5.35 53 ePn 28 29.00 -0.4
S.D. = 1.2 on 5 of 6 obs.

& MAY 19, 1990 22h 41m 42.53s

58.872 N 152.263 W
DEPTH = 59.5km
KODIAK ISLAND REGION (13)
<AGS-P>.

XLV 0.65 25 eP 41 55.09 -1.1
eS 42 05.38
CDD 0.72 275 iP 41 56.30 -0.8
iS 42 07.30
AUE 0.75 311 eP 41 56.90 -0.6
eS 42 07.56
CNPM 0.84 38 eP 41 57.98 -0.7
iS 42 10.38
MCNL 1.12 287 eP 42 01.45 -0.8
eS 42 15.27
KDC 1.13 186 eP 42 02.43 0.0
NNL 1.27 22 eP 42 04.18 -0.2
PDB 1.35 314 eP 42 04.26 -1.2
eS 42 21.26
RED 1.57 351 eP 42 07.41 -1.2
eS 42 27.63
RDT 1.71 358 eP 42 09.27 -1.2
eS 42 30.90
SLKM 1.94 31 eP 42 13.13 -0.6
NKA 1.95 15 eP 42 14.42 0.7
SPU 2.32 2 eP 42 17.46 -1.6
CRP 2.40 1 eP 42 19.74 -0.6
SUA 2.71 16 eP 42 23.54 -1.1
PMS 2.74 28 eP 42 23.13 -1.8
16 obs. associated

* MAY 19, 1990 23h 33m 04.28±0.98s
36.570 N ± 10.9km 71.526 E ± 12.9km
DEPTH = 33.0km (normal)
4.0mb (2 obs.)
AFGHANISTAN-USSR BORDER REGION (717)

QUE 7.43 212 eP 34 53.00 -0.3
eS 36 33.60
NDI 9.21 147 eP 35 18.00 0.2
0.5s 10.56nm 5.3mb X
eS 36 51.00
MAIO 9.70 272 eP 35 25.00 0.3
HFS 43.27 322 eP 41 03.90 -0.1
0.7s 1.90nm 4.0mb
NB2 44.58 323 P 41 14.60 -0.1
0.8s 1.70nm 4.0mb
S.D. = 0.3 on 5 of 5 obs.

* MAY 20, 1990 01h 25m 14.07±0.82s
16.343 N ± 8.9km 145.829 E ± 25.2km
DEPTH = 33.0km (normal)
4.0mb (2 obs.)
MARIANA ISLANDS (216)

PJG 2.89 199 eP 25 58.50 -0.4
eS 26 34.00
GUMO 2.89 199 eP 25 59.30 0.4
MAT 21.23 343 eP 30 13.00 13.6X
0.7s 5.48nm
SSE 26.83 308 eP 30 53.50 0.1
Lg 32 50.50
WRA 37.79 198 P 32 20.90 -8.3X
0.6s 1.20nm 3.9mb
MBC 75.39 14 eP 36 56.00 0.2
0.8s 2.00nm 4.2mb
KIC 143.16 305 PKP 44 47.00 -0.5
TIC 143.21 306 PKP 44 47.50 0.0
LIC 143.47 306 PKP 44 48.10 0.1
S.D. = 0.4 on 7 of 9 obs.

% MAY 20, 1990 01h 31m 29.47±0.77s
40.646 N ± 7.7km 15.855 E ± 5.4km
DEPTH = 5.0km (geophysicist)
SOUTHERN ITALY (390)

SGO 0.43 258 P 31 37.60 -0.4
iSg 31 45.70
MGR 0.56 204 P 31 39.80 -0.8
eSg 31 49.00
ORI 0.74 142 P 31 44.00 -0.2
iSg 31 54.50
BSS 0.81 281 P 31 46.40 0.7
eSg 31 57.20
BAI 0.90 58 P 31 47.00 -0.2
BRT 1.05 77 Pd 31 48.30 -1.4
eSg 32 04.50

20d 01h

TDS 1.05 159 P 31 50.50 0.7
 eSg 32 03.50
 LCI 1.63 100 P 32 00.50 1.6
 eSg 32 22.30
 S.D. = 1.2 on 8 of 8 obs.

& MAY 20, 1990 02h 02m 32.46s
 59.100 N 153.730 W
 DEPTH = 97.2km
 SOUTHERN ALASKA (2)
 <AGS-P>.

CDD 0.18 165 iP 02 45.61 0.7
 AUE 0.32 35 iP 02 46.54 -0.4
 AUL 0.32 28 iP 02 46.46 -0.6
 MCNL 0.32 286 iP 02 46.18 -0.9
 iS 02 56.22
 PDB 0.73 341 iP 02 49.04 -1.1
 iS 03 02.28
 XLV 1.09 70 eP 02 53.04 -0.9
 iS 03 09.17
 CNPM 1.35 70 iP 02 55.96 -1.1
 iS 03 13.98
 RED 1.41 20 iP 02 56.97 -0.9
 iS 03 15.78
 KDC 1.50 154 iP 02 57.73 -1.2
 iS 03 17.53
 >NNL 1.56 52 eP 02 59.55 -0.1
 RDT 1.62 24 iP 02 59.38 -1.2
 iS 03 20.48
 NKA 2.07 36 eP 03 06.61 0.3
 SVW 2.23 336 iP 03 07.06 -1.4
 eS 03 29.58
 SPU 2.25 21 iP 03 07.58 -1.2
 iS 03 35.05
 SLKM 2.27 50 eP 03 07.85 -1.2
 CRP 2.31 19 eP 03 08.73 -1.0
 SEW 2.40 63 eP 03 09.37 -1.3
 SUA 2.80 31 eP 03 15.40 -0.9
 PMS 2.99 42 eP 03 17.61 -1.3
 SKT 3.09 20 eP 03 18.71 -1.4
 PLRM 3.39 40 eP 03 22.39 -1.8
 GHO 3.59 40 eP 03 24.95 -2.1
 CUT 3.73 26 eP 03 27.58 -1.3
 GLI 3.78 59 eP 03 25.76 -3.9
 SML 3.81 42 eP 03 27.84 -2.2
 VZW 4.10 58 eP 03 30.92 -3.1
 26 obs. associated

MAY 20, 1990 02h 22m 01.62±0.16s
 5.121 N ± 2.7km 32.145 E ± 2.6km
 DEPTH = 14.9km (geophysicist)
 6.7mb (72 obs.) 7.1MsZ (23 obs.)
 SUDAN (557)

Ms 7.4 (BRK), 7.2 (PAS).
 Mo=1.6*10**20 Nm (PPT). Some
 buildings damaged in the Juba
 oreo. Also some damage in the
 Moyo oreo, Uganda. Felt in the
 Nakuru area, Kenya and in
 Uganda. Believed to be the
 largest earthquake ever recorded
 in Sudan. Depth from broadband
 displacement seismograms.
 FAULT PLANE SOLUTION: P-Waves
 NP1:Strike=250 Dip=80 Slip= 176
 NP2: 341 86 10
 Principal Axes:
 T Plg=10 Azm=206
 P 4 115
 Comment: The focal mechanism is
 moderately well controlled and
 corresponds to strike-slip
 faulting. The preferred fault
 plane is not determined.

RADIATED ENERGY
 No. of sta: 5 Focal mech. F
 Energy 1.4±0.2*10**15 Nm
 MOMENT TENSOR SOLUTION
 Dep 12 No. of sta: 12
 Moment Tensor: Scale 10**19 Nm
 Mrr=-0.39 Mtt=6.25
 Mff=-6.64 Mrt=-1.16
 Mrf=0.03 Mtf=-3.37
 Principal axes:
 T Vol= 7.26 Plg= 9 Azm=194
 N 0.21 80 25

P -7.47 2 284
 Best Double Couple: Mo=7.4*10**19
 NP1:Strike=329 Dip=82 Slip= 5
 NP2: 238 85 172
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 14S, 40C M.W.: 11S, 29C
 Centroid Location:
 Origin Time 02:22: 7.5 0.2
 Lot 5.32N 0.01 Lon 32.29E 0.02
 Dep 15.0 FIX Half-duration 20.0
 Moment Tensor: Scale 10**19 Nm
 Mrr=-1.50 0.06 Mtt= 5.50 0.05
 Mff=-4.00 0.05 Mrt=-2.73 0.36
 Mrf= 0.49 0.34 Mtf=-0.17 0.05
 Principal Axes:
 T Vol= 6.44 Plg=19 Azm=182
 N -2.34 66 324
 P -4.11 13 87
 Best Double Couple: Mo=5.3*10**19
 NP1:Strike=224 Dip=67 Slip= 176
 NP2: 315 86 23

NAI 7.87 144 iPc 23 56.50 -2.1
 1.2s 640.63nm 6.7mb
 iS 25 03.00
 LWI 8.04 205 iPc 23 56.90 -4.0X
 GBR 11.84 59 ePd 24 53.36 0.4
 KSU 12.01 57 ePd 24 55.62 0.4
 DAF 12.12 57 ePd 24 56.89 0.1
 SGH 12.13 58 ePd 24 57.55 0.7
 ARO 12.35 58 ePd 25 00.61 0.7
 TDD 12.54 57 ePd 25 02.54 0.2
 ATA 12.62 59 ePd 25 04.67 1.2
 TAIF 17.94 26 iPc 26 14.00 1.6
 AWAL 18.16 1 iPc 26 15.30 0.4
 ANAL 18.19 2 iPc 26 15.00 0.5
 AWKL 18.20 1 iPc 26 15.10 -0.3
 AGAL 18.21 2 iPc 26 16.00 0.4
 AGMR 18.31 1 iPc 26 17.60 0.8
 AGRW 18.43 2 iPc 26 18.60 0.4
 AKSR 18.43 3 iPc 26 18.60 0.4
 ASKC 18.43 1 iPc 26 18.80 0.5
 AKRL 18.44 2 eP 26 19.00 0.6
 ANMR 18.45 1 iPc 26 19.10 0.6
 AAHD 18.53 2 iPc 26 19.60 0.2
 AKUR 18.67 2 iPc 26 21.00 0.4
 AMAN 18.72 2 iPc 26 22.00 0.2
 ASW 18.86 2 iPc 26 23.00 -0.6
 eS 31 16.00

KMSA 19.34 37 iPc 26 30.00 0.5
 WAJH 21.36 11 iPc 26 50.00 -0.6
 AFIF 21.65 28 iPc 26 50.00 -3.7X
 BADA 23.43 6 iPc 27 12.00 0.9
 QASM 23.53 26 iPc 27 13.30 1.2
 AYN 23.90 8 iPc 27 15.30 -0.3
 RYD 23.93 34 iPc 27 18.00 1.9
 MJMA 24.15 30 iPc 27 20.00 1.8
 HOL 24.18 6 iPc 27 20.00 1.7
 HLW 24.62 358 iPc 27 23.00 0.4
 MBH 24.65 6 iPc 27 24.70 1.8
 KOT 24.68 359 iPc 27 23.90 0.7
 PRNI 25.23 6 iPc 27 29.80 1.2
 BUL 25.34 188 iPd 27 19.70 -10.1X
 DHLJ 25.62 357 Pc 27 33.00 0.9
 LISJ 26.17 6 Pc 27 37.30 0.1
 DSI 26.49 6 iPc 27 41.10 1.0
 MKRJ 26.50 7 Pd 27 39.80 -0.6
 MDSJ 26.65 8 Pc 27 41.80 0.0
 KFNJ 26.81 7 Pc 27 42.00 -1.1
 SALJ 26.95 7 Pd 27 43.20 -1.3
 ZNT 27.11 5 iPc 27 47.00 1.1
 DHR 27.20 37 iPc 27 47.10 0.4
 BURJ 27.20 7 Pd 27 46.30 -0.5
 JARJ 27.21 7 Pc 27 46.30 -0.6
 BRJ 27.30 38 iP 27 48.50 0.9
 1.1s 715.00nm 6.3mb
 BBU 27.32 38 iP 27 48.00 0.1
 1.1s 610.00nm 6.2mb
 SHMJ 27.67 7 Pc 27 51.30 0.3
 ATZ 27.71 6 iPc 27 52.40 1.0
 HRI 28.21 6 iPc 27 56.50 0.6
 PPCY 29.62 0 eP 28 08.00 -0.5
 CSS 29.71 2 eP 28 08.50 -0.9
 FAM 29.78 3 eP 28 09.00 -0.9
 LFK 30.04 2 iP 28 03.10 -9.2X
 BHD 30.24 21 iPd 28 15.00 0.9

iPp 29 22.00 356kmX
 iPPP 29 48.00
 iPcP 30 12.00
 iS 33 29.50
 iSS 35 39.50
 iSSS 36 08.00
 iLO 39 35.00
 SLR 30.90 187 iPc 28 18.20 -1.9
 KSL 30.94 356 eP 28 20.00 -0.1
 VAM 31.02 347 eP 28 21.00 0.1
 ELL 31.54 357 eP 28 25.60 0.0
 YER 32.06 354 iP 28 31.50 1.4
 PRY 32.18 188 iPd 28 30.00 -1.4
 1.0s 150.00nm 5.9mb
 LEGH 32.19 272 eP 28 28.50 -2.9X
 BCK 32.22 358 iP 28 32.40 0.9
 GAZ 32.23 8 iP 28 34.00 2.5
 BFS 32.25 189 iPc 28 15.00 -16.9X
 WEGH 32.33 272 eP 28 30.00 -2.7
 APE 32.37 350 eP 28 32.00 -0.8
 KUK 32.37 273 eP 28 32.00 -1.0
 VLI 32.56 346 eP 28 34.00 -0.4
 MSL 32.71 17 ePd 28 35.50 -0.2
 eS 34 03.00
 e 34 53.00
 eLO 37 27.00
 eLR 40 27.00
 SLV 32.74 20 iPd 28 35.50 -0.4
 i 28 43.00 26kmX
 iPP 29 52.50
 iPcP 31 00.00
 i 33 09.50
 iS 34 02.50
 iScP 34 43.00
 iSS 36 11.00
 iSSS 36 41.50
 SMG 32.79 352 eP 28 36.10 -0.3
 KHL 33.13 356 iP 28 40.20 0.7
 ITM 33.25 345 eP 28 40.00 -0.4
 IZM 33.42 353 iP 28 42.50 0.6
 ATH 33.59 348 iPd 28 43.00 0.5
 ALT 33.83 357 eP 28 45.50 0.0
 BLF 34.51 189 iPc 28 50.00 -1.6
 1.0s 320.00nm 6.2mb
 VLS 34.54 344 eP 28 51.80 0.2
 BBTK 34.57 1 eP 28 52.00 0.1
 EZN 34.95 352 iP 28 55.90 0.9
 NEO 34.98 348 eP 28 54.00 -1.3
 GPA 35.05 358 eP 28 56.00 0.1
 IZI 35.14 356 eP 28 57.40 0.6
 LPD 35.21 332 eP 28 57.00 -0.3
 TAB 35.25 20 iP+ 28 58.00 0.2
 TEH 35.25 28 eP 29 00.00 2.2
 EDC 35.28 354 iP 28 59.00 1.1
 YLV 35.38 356 iP 28 57.90 -0.9
 KGT 35.44 354 iP 29 04.00 4.8X
 MEU 35.52 336 P 29 00.90 0.9
 ISK 35.89 356 eP 29 03.60 0.6
 LIT 35.89 347 ePc 29 02.70 -0.4
 ITU 35.94 356 iPc 29 04.00 0.6
 KVT 35.97 5 iP 29 03.90 0.1
 CTT 36.02 355 iP 29 03.40 -0.7
 HVD 36.09 190 iPc 29 20.50 15.5X
 FAI 36.19 335 P 29 07.00 1.4
 KEK 36.20 344 eP 29 06.00 0.4
 ATN 36.22 337 ePc 29 06.00 0.1
 ePP 30 28.00
 THE 36.30 348 eP 29 05.50 -1.0
 MNO 36.33 336 P 29 09.10 2.1
 RDO 36.35 352 eP 29 07.00 0.1
 MCT 36.50 335 iPc 29 10.50 2.1
 PTS 36.55 332 P 29 10.00 1.4
 GIB 36.65 336 P 29 10.80 1.3
 SRS 36.65 349 eP 29 09.40 0.0
 KIC 36.72 274 Pd 29 09.38 -1.0
 S 34 50.00
 DMK 36.75 355 iP 29 10.10 -0.2
 KDZ 36.86 352 iPd 29 11.00 -0.2
 CVT 36.91 334 P 29 13.00 1.4
 TIC 36.99 274 P 29 12.26 -0.4
 LIC 37.00 274 Pd 29 12.14 -0.6
 RZN 37.01 351 iPd 29 13.00 0.3
 VAY 37.05 348 iPc 29 13.70 1.0
 i 29 34.00 84kmX
 MMB 37.08 350 iPc 29 12.00 -1.1
 TDS 37.23 340 P 29 16.00 1.7
 DIM 37.24 352 iP 29 14.00 -0.3

JAU	47.46	328 P	30	38.69	0.8			iPcP	30	54.10	30kmX	EKA	57.50	337 P	31	51.00	-1.4
KSP	47.46	346 ePd	30	36.00	-1.6			eS	32	12.40		BLS1	2.3s	875.00nm			6.4mb
	2.0s	3449.00nm			7.1mb			P*P*	01	38.00		SUF	57.53	345 iP	31	53.00	0.3
		ic	30	37.10	4kmX			eP	30	47.30	-0.7		57.64	357 iP	31	51.50	-1.8
		iPP	32	31.50		LSF	48.80	332 eP				ESY	0.6s	155.50nm			6.2mb
LHE	47.51	327 P	30	38.60	0.4	EPLA	1.5s	1958.70nm			6.9mb		57.73	338 ePd	31	53.70	-0.3
TOL	47.53	322 iPd	30	38.59	0.3	MBO	48.90	321 iPd	30	48.10	-0.9	EBL	57.78	337 ePd	31	53.70	-0.7
		e	30	41.24	9kmX		49.17	285 iPP	30	52.30	1.0	NB2	1.6s	811.00nm			6.5mb
		iSpC	30	45.04				iS	36	49.30		ODD1	57.98	348 P	31	53.20	-2.5
		iPcP	31	55.00		BRN	49.68	345 ePd	30	53.80	-0.8	EBH	58.03	345 eP	32	03.00	6.9X
		iPP	32	36.20				ePP	32	51.00		VAL	58.31	338 ePd	31	57.40	-0.7
		iPcS	35	50.00				eS	38	02.00			58.33	331 iP	31	58.60	0.4
		iS	37	29.00		MFF	49.85	331 eP	30	55.00	-1.1	EDU		S	39	58.00	
CAF	47.57	331 eP	30	37.90	-0.7		1.7s	1723.20nm			6.8mb	ELO	58.34	338 ePd	31	57.20	-1.1
	1.4s	1055.10nm			6.7mb	OBN	49.96	3 iPc	30	56.20	-0.6		58.55	338 ePd	31	58.70	-1.1
ESCF	47.60	328 P	30	38.75	0.0	Z	18s	150.00um			7.0msz	EAB	1.6s	828.00nm			6.6mb
OGE	47.60	328 P	30	39.47	0.7			iS	38	08.00			58.58	337 ePd	31	59.10	-0.9
PLDF	47.63	333 P	30	38.37	-0.7	LIS	50.16	318 iPd	30	58.20	-0.4	BER	2.2s	1920.00nm			6.8mb
MOF	47.66	337 P	30	39.03	-0.3	MEM	50.35	339 Pd	30	58.70	-1.1	ASK	58.77	345 iP	32	01.00	-0.2
ATE	47.67	327 P	30	39.32	0.0	PLH	50.39	339 ePd	30	59.90	-0.2	HYA	58.89	345 eP	32	03.00	1.0
STU	47.68	340 iPd-	30	37.50	-1.8	DOU	50.46	337 P	30	59.00	-1.7	SUE	59.22	346 iP	32	06.00	1.7
	3.0s	*****nm			7.4mb			e	33	08.00	778kmX	MOL	59.49	345 eP	32	08.00	1.8
ISSF	47.68	327 P	30	40.01	0.5			S	37	58.00		LSA	60.13	347 eP	32	09.59	-1.0
PYM	47.74	333 P	30	39.53	-0.4	ENN	50.51	339 ePd	31	00.00	-1.1		60.66	59 P	32	13.50	-1.8
MADF	47.77	327 P	30	39.81	-0.4		1.7s	2000.00nm			6.8mb		4.0s	2200.00nm			6.6mb X
BSF	47.78	337 P	30	39.99	-0.3			ePP	33	00.00		Z	14s	35.60um			6.7mszX
GRF	47.81	342 iPd	30	39.00	-1.3	JCK	50.55	339 ePd	31	00.20	-1.1	N	16s	118.00um			
	Z	16s			7.2mszX	GCG	50.75	302 iPd	31	04.90	1.6	E	15s	31.30um			
		e	30	43.30	14kmX	ERUA	50.90	323 iPc	31	04.00	-0.2		S		40	30.00	
		ePP	32	38.00		SN											

COO	74.19	176	eP	55	24.00	1.5	1.0s	99.30nm	5.8mb	RRL	84.97	333	P	56	21.35	0.5				
MSL	74.81	306	iPd	55	27.00	0.7		i	56 04.40	16km	PLDF	85.02	336	P	56	20.66	-0.2			
			eS	04	56.50		KHL	80.88	315	iP	55	59.90	0.2	DUI	85.03	327	Pd	56	21.00	0.0
KVT	75.46	313	iP	55	31.00	1.0	BCK	80.98	314	iP	55	59.40	-0.9	AGO	85.09	336	P	56	21.77	0.6
KRA	75.93	328	iPc	55	32.40	0.0	DOU	81.01	337	P	56	00.00	-0.1	MAF	85.10	336	iPc	56	22.10	0.9
	0.8s	141.00nm			6.1mb		LFK	81.05	311	iP	56	01.50	0.8	MNS	85.10	328	P	56	20.50	-0.8
Z	18s	1.20um			5.2Msz		GWf	81.11	335	P	56	00.46	-0.3	FIN	85.13	332	P	56	19.60	-1.8
			i	55	51.10	69kmX	MMB	81.13	321	ePc	56	02.00	1.0	KMSA	85.13	294	ePc	56	22.00	0.2
BHD	76.21	303	iPd	55	35.00	0.8	ETA	81.20	344	eP	56	01.20	0.1	TCF	85.14	337	iPc	56	21.80	0.4
			eS	05	13.00			0.8s	66.00nm	5.7mb					0.8s	30.90nm			5.6mb	
			eScS	05	44.00		KKB	81.20	321	eP	56	01.00	-0.3	AZI	85.15	328	Pc	56	21.50	0.1
CFR	76.31	321	eP	55	34.00	-0.6	WATA	81.25	331	iPc	56	01.80	0.2	ROB	85.17	332	P	56	20.73	-0.9
BRN	76.35	333	iPc	55	35.50	0.8		1.0s	86.80nm	5.7mb	DOI	85.19	333	P	56	20.00	-1.8			
KAS	76.43	315	iPc	55	37.10	1.6	MEO	81.25	50	iPc	56	02.00	0.3	BADA	85.22	305	ePc	56	22.30	0.3
SPC	76.52	328	iP	55	36.60	0.6	EZN	81.30	318	iP	56	02.00	0.2	SDI	85.24	327	P	56	21.50	-0.5
KSP	76.63	331	iPc	55	36.40	0.1	FVI	81.46	330	P	56	03.00	0.5	LSF	85.37	337	iPc	56	22.90	0.4
	0.9s	69.00nm			5.7mb		SQTA	81.47	332	iPc	56	02.90	0.1	ENR	85.38	333	P	56	20.85	-1.9
ANMO	76.65	54	eP	55	37.90	0.9		0.8s	43.00nm	5.5mb	STV	85.39	333	P	56	20.83	-2.0			
	1.1s	9.49nm			4.8mb		WLS	81.69	335	P	56	03.81	0.0	PYM	85.40	336	P	56	23.14	0.4
			pP	55	44.30	21km	CDF	81.72	335	P	56	03.47	-0.5	IMI	85.50	332	P	56	22.78	-0.5
ALO	76.65	54	ePc	55	37.20	0.2	ECP	81.72	344	eP	56	04.20	0.5	MFF	85.50	338	iPc	56	23.90	0.7
	1.0s	14.00nm			5.0mb			0.8s	134.00nm	6.0mb					0.8s	61.80nm			5.9mb	
MLR	77.07	322	iPc	55	39.00	0.0	OGA	81.84	332	iPc	56	05.00	0.2	ORI	85.56	325	P	56	24.00	0.4
CLL	77.36	333	iPc	55	40.10	-0.2		0.8s	68.00nm	5.8mb	SGO	85.62	326	P	56	23.50	-0.3			
	1.2s	130.00nm			5.9mb		SKO	81.85	323	iPc	56	05.00	0.4	BSS	85.63	326	P	56	23.50	-0.4
			eS	05	22.00			N	21s	1.04um										

20d 07h

from broadband displacement
seismograms.

FAULT PLANE SOLUTION: P-Waves

NP1: Strike= 20 Dip=67 Slip=-110

NP2: 243 30 -51

Principal Axes:

T P1g=20 Azm=125

P 63 258

Comment: The focal mechanism is
poorly controlled and
corresponds to normal faulting
with a moderate strike-slip
component. The preferred fault
plane is NP1.

MOMENT TENSOR SOLUTION

Dep 242 No. of sto: 11

Moment Tensor: Scale 10**18 Nm

Mrr=-1.43 Mtt= 2.09

Mff=-0.66 Mrt=-0.41

Mrf=-1.82 Mtf= 1.51

Principal axes:

T Val= 3.07 P1g=16 Azm=151

N -0.07 39 48

P -2.99 47 258

Best Double Couple: Mo=3.0*10**18

NP1: Strike=281 Dip=45 Slip= -28

NP2: 32 71 -131

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 10S, 24C

Centroid Location:

Origin Time 07:32:46.1 0.5

Lat 18.10S 0.05 Lon 175.42W 0.04

Dep 246.7 2.1 Half-duration 4.9

Moment Tensor: Scale 10**18 Nm

Mrr=-0.99 0.07 Mtt= 0.34 0.12

Mff= 0.64 0.13 Mrt=-0.36 0.09

Mrf=-2.07 0.09 Mtf= 1.54 0.09

Principal Axes:

T Val= 2.91 P1g=26 Azm=124

N -0.39 29 19

P -2.53 50 249

Best Double Couple: Mo=2.7*10**18

NP1: Strike=260 Dip=32 Slip= -25

NP2: 12 77 -119

TVI 4.83 283 iPc 33 54.00 2.9

AFI 5.27 38 P 33 51.00 -5.6X

KRO 5.28 278 ePc 33 58.70 2.0

NDE 5.51 285 ePc 34 02.40 2.7

OVA 5.81 273 eP 34 05.90 2.6

VUN 6.10 270 ePc 34 10.00 3.1X

SVA 6.10 269 ePc 34 10.00 3.1X

SGE 6.64 273 ePc 34 16.80 2.9

NDF 7.07 272 iP 34 24.00 4.6X

RAR 14.79 105 P 35 52.00 -5.0X

PVC 15.76 269 iPd 36 10.50 1.7

DZM 17.75 254 iPc 36 28.70 -2.2

HBZ 20.26 195 P 36 57.00 0.7

AFR 24.14 93 iP 37 32.20 -1.6

PAE 24.32 93 iP 37 34.20 -1.2

PPT 24.33 93 iP 37 34.40 -1.1

PPN 24.47 93 iP 37 35.70 -1.1

TBI 24.55 107 iP 37 38.00 0.4

TVO 24.62 93 iP 37 37.10 -1.2

WEL 24.68 198 P 37 35.00 -3.6X

HNR 25.67 286 eP 37 42.00 -5.8X

PMO 26.28 87 iP 37 52.20 -1.1

VAH 26.49 88 iP 37 53.70 -1.5

TPT 26.54 87 iP 37 54.50 -1.2

RUV 26.73 88 iP 37 56.00 -1.4

COO 32.39 241 iPc 38 45.40 256kmX

RMQ 34.35 249 iPd 39 03.00 -1.1

0.7s 308.00nm 6.0mb

CNB 35.81 234 eP 39 13.00 35kmX

0.3s 105.00nm 5.9mb

CAN 36.10 234 eP 39 17.10 -1.6

BWA 36.27 236 eP 39 16.80 -3.4X

CTA 36.49 261 iPd- 39 19.80 -2.4

1.0s 535.00nm 6.1mb

CTAO 36.49 261 iPd 39 20.60 -1.6

1.0s 535.00nm 6.1mb

PMG 37.58 278 iPd- 39 30.00 -1.3

CMS 37.66 242 eP 39 30.00 -1.9

RKT 37.83 105 iP 39 33.40 0.1

QLP 38.39 250 iPd 39 36.30 -1.6

LAT 38.61 282 eP 39 40.00 0.1

TOO 39.50 232 iPc 39 45.90 -1.0

MCQ 41.42 203 eP 40 04.00 1.6

BFD 41.63 234 eP 40 03.00 -1.4

QIS 42.68 259 eP 40 10.30 -2.8X

ADE 44.17 238 iPd 40 23.10 -1.9

WB5 47.64 259 iPd 40 49.00 -3.3X

WRA 47.66 259 Pd 40 50.80 -1.6

GUA 50.42 306 eP 41 12.70 -0.8

GUMO 50.48 306 eP 41 11.80 -2.1

PJG 50.48 306 eP 41 12.00 -1.9

MTN 51.91 268 iPd 41 21.90 -2.8X

FORR 52.71 245 eP 41 38.00 7.7X

AAI 57.24 277 ePd 42 01.30 -1.8

COOL 58.69 244 iPc 42 09.90 -3.1X

KLB 61.53 243 eP 42 29.40 -2.8X

BAL 62.52 244 eP 42 36.00 -2.7X

MUN 62.81 243 eP 42 38.40 -2.2

DAV 63.63 288 eP- 42 44.00 -2.1

NANU 64.66 253 iPd 42 50.80 -1.9

MKS 65.03 273 iPd 42 55.00 -0.1

ADK 69.70 359 ePc 43 21.00 -2.4

MAJO 69.96 321 iPd 43 24.10 -1.3

MAT 69.96 321 iPd- 43 23.40 -2.0

TRT 70.81 268 iPc 43 28.40 -2.6X

KKM 71.82 283 ePd 43 35.50 -1.5

BAG 71.98 295 eP 43 36.00 -2.0

SPA 72.01 180 iPd 43 37.80 0.4

SHK 72.12 317 eP 43 37.10 -1.2

SYN 74.07 45 eP 43 50.00 0.2

SDN 74.20 9 eP 43 48.40 -1.4

GCC 74.25 42 eP 43 51.20 0.7

PCC 74.29 41 eP 43 51.40 0.6

BCH 74.38 44 eP 43 52.30 0.8

SAO 74.44 42 eP 43 52.10 0.4

PRI 74.57 43 eP 43 53.70 1.1

BRK 74.60 41 eP 43 53.40 0.9

BKS 74.62 41 ePd 43 52.80 0.1

1.2s 206.00nm 5.7mb

MHC 74.66 42 eP 43 54.10 1.0

LLA 74.67 43 eP 43 53.90 0.9

PAS 75.08 46 eP 43 54.00 -1.4

MWC 75.20 46 eP 43 56.00 -0.3

BAR 75.31 48 eP 43 57.00 0.3

RVR 75.54 47 eP 43 58.00 0.0

PLM 75.54 47 eP 43 58.00 -0.2

SBB 75.62 46 eP 43 58.00 -0.5

PEC 75.63 47 eP 43 58.60 0.1

FRI 75.69 43 eP 43 59.30 0.6

ISA 75.73 45 eP 43 59.00 -0.1

CMB 75.87 42 ePd 43 59.42 -0.4

ORV 76.10 40 eP 44 01.40 0.4

WDC 76.11 39 eP 44 01.70 0.7

CLC 76.41 45 eP 44 03.00 0.2

TPC 76.52 47 eP 44 04.00 0.5

GSC 76.65 46 eP 44 03.00 -1.2

GLA 76.82 49 eP 44 06.00 0.9

QZH 77.42 302 Pd 44 07.00 -1.5

KDC 77.87 12 eP 44 09.30 -1.0

KVN 77.92 42 iP 44 11.20 -0.1

TNP 77.93 43 iP 44 11.90 0.5

SSE 78.29 308 P 44 12.00 -1.2

MDJ 80.17 323 Pd 44 23.40 0.5

SVW 80.48 9 eP 44 23.00 -1.3

NJ2 80.49 308 iPd 44 25.00 0.1

PGC 80.80 32 eP 44 26.00 0.0

GZH 80.96 298 Pd 44 27.90 0.4

DL2 81.90 315 Pd 44 32.00 0.0

SIT 81.92 21 eP 44 31.20 -0.5

PMR 82.09 12 eP 44 31.10 -1.4

				i	44	32.20	4kmX			4.0s	3400.00nm	6.6mb X				i	54	52.00			
				i	45	31.00				15s	1.80um	5.6MszX	SLY	140.11	304	iPKPd	51	39.50	-0.5		
CN2	82.11	321	Pd	44	32.40	-0.6					sP	46	31.00			ePP	54	56.00			
	5.0s	3900.00nm					6.4mb X	NST	89.93	286	eP	45	13.80	2.1		iPKS	55	15.00			
			S	54	30.00			BTO	90.63	313	iPd	45	16.00	1.4		iPKPd	51	38.00	-4.8X		
SNY	82.17	319	iPd	44	33.00	-0.4				6.0s	2000.00nm	6.2mb X	BHD	141.57	301	i	51	44.00			
	6.0s	4000.00nm					6.3mb X			14s	0.50um					ePKS	55	15.00			
			sP	45	53.00					14s	0.40um					e	55	38.50			
			PP	47	39.00						SKS	55	25.00			e	56	25.00			
			iS	54	32.00			KMI	90.71	296	Pd	45	17.00	1.6	MSL	141.71	306	ePKPd	51	37.50	-5.5X
QIZ	82.39	293	Pd	44	35.00	0.0				Z	24s	1.90um	5.4MszX			ePP	54	47.00			
	6.0s	2800.00nm					6.2mb X	LNV	90.91	126	iPd	45	17.50	1.5		e	55	20.00			
			sP	45	59.00						e	46	12.50	224kmX	MJMA	141.85	289	ePKPd	51	38.00	-5.6X
			S	54	35.00			INK	91.28	14	eP	45	16.00	-0.8	EKA	142.33	8	PKPc	51	36.60	-6.8X
KGM	82.60	275	ePc	44	36.10	-0.1				0.9s	93.00nm	5.8mb			0.8s	10.90nm					
	1.0s	476.70nm					6.2mb				pP	46	16.00	246kmX	NAI	143.15	242	iPKPc	51	40.50	-5.8X
PNT	83.17	33	eP	44	38.00	-0.4		TACH	91.39	126	eP	45	20.00	1.7	QASM	143.41	290	ePKP	51	42.30	-3.9X
	0.9s	116.00nm					5.6mb	BDT	91.46	288	eP	45	19.00	0.3	AFIF	143.84	286	iPKPd	51	45.10	-2.0
WHN	83.25	305	Pd	44	40.00	0.9				0.7s	111.30nm	6.0mb		VAL	144.19	16	iPKP	51	45.90	-0.7	
	5.0s	3200.00nm					6.3mb X	CHCH	91.50	126	eP	45	20.00	1.2	ETA	144.40	12	ePKP	51	44.60	-2.4
			sP	46	02.00						eP	45	21.00	1.4		0.9s	177.00nm				
			eS	54	38.00			SAN	91.68	126	eP	45	21.00	1.1	KVT	144.82	317	iPKP	51	47.00	-1.2
PV09	83.56	46	eP	44	42.90	1.9		PCH	91.72	126	eP	45	21.00	1.1	ECP	144.86	12	ePKP	51	46.10	-1.7
			pP	45	38.20	228kmX		PEL	91.78	126	iPd	45	22.00	1.9		1.0s	302.00nm				
TIA	83.70	311	eP	44	40.60	-0.7				1.0s	35.00nm	5.3mb		BRN	145.13	351	ePKPd	51	47.50	-0.7	
	6.5s	2600.00nm					6.1mb X	CD2	91.81	302	eP	45	20.60	0.4	WIT	145.33	358	ePKP	51	49.00	0.5
			sP	46	00.00					6.0s	1500.00nm	6.2mb X				e(pP)	52	49.00			
			S	54	44.00			CHG	92.00	289	iPd	45									

20d 09h

[illegible]

20d 10h

RSP	166.05	337	PKP	13	10.53	-1.3	HYT	1.96	64	P	eS	15	25.46		FFC	64.81	37	eP	05	28.50	-0.6
RDP	166.07	315	PKP	13	13.50	1.6	SGAM	2.10	285	eP	15	03.70	-0.7		0.7s	8.00nm				4.8mb	
TCF	166.09	353	iPKPc	13	11.50	-0.2				eS	15	04.13	-2.1	WRA	65.07	195	P	05	33.00	1.9	
	1.2s	38.70nm							eS	15	32.45			0.9s	1.40nm				3.9mb		
PCP	166.11	332	PKP	13	10.74	-1.1	CVA	2.37	285	eP	15	07.54	-2.6	KVN	66.30	58	P	05	39.00	-0.1	
MAF	166.11	351	ePKP	13	11.70	0.0				eS	15	40.85		NB2	69.58	339	P	05	57.60	-1.4	
	1.1s	12.20nm					HIN	2.72	280	eP	15	12.29	-2.8		0.8s	2.00nm			4.1mb		
LSF	166.19	354	iPKPc	13	11.40	-0.3	TOA	3.23	313	eP	15	21.62	-0.7	HFS	69.70	338	eP	05	57.50	-2.1	
	1.2s	32.75nm					NCA	3.41	308	eP	15	25.11	0.1		0.8s	3.60nm			4.4mb		
AGO	166.20	350	PKP	13	10.92	-0.9	PAX	3.62	327	eP	15	28.35	0.4	CLL	77.40	333	eP	06	44.00	-0.6	
PLDF	166.20	348	PKP	13	11.30	-0.6	DOT	3.90	340	eP	15	31.09	-0.8	SSF	84.06	337	eP	07	21.00	1.9	
CKI	166.31	333	PKP	13	11.50	-0.4	SML	3.96	300	eP	15	31.20	-1.5	SMF	84.35	336	eP	07	20.70	-0.6	
BNI	166.32	338	PKPc	13	12.50	0.4	DWY	4.13	10	Pc	15	33.40	-1.6	MAF	85.10	337	eP	07	27.10	2.0	
RRL	166.41	338	PKP	13	12.07	-0.2	SEW	4.18	275	eP	15	31.92	-3.8		0.8s	2.70nm			4.4mb		
PYM	166.51	350	PKP	13	11.80	-0.3	GHO	4.20	298	eP	15	34.33	-1.8								
FIN	166.52	333	PKP	13	11.25	-0.9	PLRM	4.23	295	eP	15	34.74	-1.7								
ROB	166.58	334	PKP	13	11.25	-0.9	SIT	4.24	132	eP	15	34.17	-2.5								
DOI	166.62	336	PKP	13	13.00	0.7	PMS	4.34	290	eP	15	35.40	-2.7								
ENR	166.80	335	PKP	13	10.74	-1.7	DDM	4.40	331	eP	15	39.77	0.8								
STV	166.82	335	PKP	13	11.15	-1.3	SLKM	4.56	280	eP	15	36.72	-4.5								
IMI	166.90	333	PKP	13	11.25	-1.2	PWA	4.59	295	eP	15	42.38	0.8								
LBL	166.98	349	PKP	13	12.37	0.0	CNPM	5.14	269	eP	15	46.95	-2.5	ACX	0.33	0	iPc	57	36.80	-0.8	
SBF	167.11	334	ePKP	13	11.90	-0.7	SKT	5.44	296	eP	15	51.71	-2.0				iS	57	40.50		
	1.1s	92.80nm					RDT	5.65	281	eP	15	53.90	-2.7	III	1.87	11	iP	57	59.80	-4.2X	
RJF	167.13	354	iPKPc	13	12.80	0.3	CDD	6.48	266	iP	16	05.40	-3.0				iS	58	22.00		
	1.2s	53.55nm					INK	8.95	18	P	16	42.00	-0.7	UNM	2.86	13	eP	58	17.70	-0.5	
CAF	167.45	352	iPKPc	13	13.20																

21d 06h

TUNG 0.69 254 iP 34 43.40 -0.1
 VC1 0.86 313 iPd 34 46.20 -0.2
 S 34 56.80
 GECU 1.00 336 eP 34 48.00 -0.8
 eS 35 00.30
 QTO 1.27 324 eP 34 54.00 0.5
 iS 35 09.60
 OUR 1.29 324 eP 34 53.70 -0.1
 iS 35 10.80
 CAYA 1.32 351 P 34 53.80 -0.5
 eS 35 09.50
 GGP 1.33 322 eP 34 54.60 0.0
 iS 35 17.30
 COTA 1.65 340 eP 35 00.00 0.9
 S.D. = 0.7 on 8 of 8 obs.

% MAY 21, 1990 07h 13m 27.38 ± 0.85s
 38.303 N ± 9.1km 22.691 E ± 8.4km
 DEPTH = 10.0km (geophysicist)
 GREECE (364)
 ML 2.8 (ATH).

ATH 0.87 112 ePb 13 45.00 0.8
 NEO 1.08 22 ePb 13 47.00 -0.8
 ITM 1.27 209 ePb 13 47.00 -4.1X
 VLI 1.59 173 ePb 13 55.00 -0.7
 VLS 1.66 266 ePn 13 56.30 -0.3
 KEK 2.66 303 ePb 14 12.00 1.0
 S.D. = 1.2 on 5 of 6 obs.

% MAY 21, 1990 07h 34m 08.30 ± 1.15s
 40.549 N ± 7.7km 23.884 E ± 10.5km
 DEPTH = 10.0km (geophysicist)
 GREECE (364)

OUR 0.23 161 ePd 34 12.90 -0.3
 eS 34 34.70
 SOH 0.49 304 iPd 34 17.80 -0.4
 iS 34 21.80
 SRS 0.61 339 iPc 34 21.20 0.6
 eS 34 29.00
 THE 0.70 277 eP 34 21.30 -0.9
 eS 34 28.60
 KNT 0.97 310 ePc 34 26.30 -0.4
 eS 34 37.90
 LIT 1.16 248 eP 34 30.90 1.0
 GRG 1.20 290 eP 34 31.00 0.4
 eS 34 44.80
 S.D. = 0.8 on 7 of 7 obs.

MAY 21, 1990 07h 48m 49.01 ± 0.53s
 39.994 N ± 5.3km 20.610 E ± 5.4km
 DEPTH = 10.0km (geophysicist)
 GREECE-ALBANIA BORDER REGION (392)
 MD 3.8 (ATH).

IGT 0.51 205 iPd 48 58.30 -1.0
 eS 49 05.70
 KEK 0.68 246 ePb 49 01.50 -1.1
 eSn 49 20.80
 FNA 0.98 36 ePc 49 07.80 0.1
 iS 49 21.70
 OHR 1.13 7 iPg 49 12.00 1.9
 iSg 49 29.00
 Lg 49 29.50
 LIT 1.45 85 eP 49 15.10 -0.2
 eS 49 34.80
 AGG 1.65 126 iPc 49 17.90 -0.2
 eS 49 40.10
 GRG 1.67 54 ePc 49 18.00 -0.5
 eS 49 41.00
 VLS 1.81 181 ePn 49 21.00 0.5
 THE 1.91 70 eP 49 21.70 -0.2
 eS 49 46.90
 VAY 1.99 48 ePn 49 22.00 -1.1
 LCI 2.06 280 P 49 29.00 4.9X
 eSn 49 55.00
 SKO 2.07 17 iPn 49 25.00 0.7
 eSn 49 47.80
 i 49 52.00
 KNT 2.10 55 eP 49 24.50 -0.1
 eS 49 52.50
 NEO 2.13 108 ePn 49 25.00 -0.1
 SOH 2.25 68 eP 49 26.20 -0.7
 eS 49 55.90
 PAIG 2.36 91 eP 49 27.80 -0.6

SRS 2.53 63 eS 49 57.60
 eP 49 30.60 -0.3
 OUR 2.61 81 eP 49 31.30 -0.6
 eS 50 02.10
 BRT 2.75 290 P 49 42.00 8.1X
 ITM 2.99 159 ePn 49 40.50 3.1X
 ORI 3.20 273 P 49 49.50 9.2X
 TDS 3.31 266 P 49 17.00 -24.9X
 VLI 3.75 150 ePn 49 51.50 3.4
 SGO 4.09 280 P 49 53.00 0.0
 S.D. = 1.1 on 19 of 24 obs.

? MAY 21, 1990 08h 16m 42.75 ± 12.03s
 33.545 N ± 109 km 32.305 E ± 17.9km
 DEPTH = 10.0km (geophysicist)
 EASTERN MEDITERRANEAN SEA (371)
 Felt at Pophos, Cyprus.

LFK 2.01 30 ePn 17 17.10 0.0
 ELL 3.75 329 ePn 17 43.50 1.5
 BCK 4.15 341 ePn 17 46.70 -0.9
 YER 4.86 319 iPn 17 57.00 -0.7
 CIN 5.31 321 eP 18 04.00 0.0
 S.D. = 1.3 on 5 of 5 obs.

* MAY 21, 1990 08h 40m 59.70 ± 2.03s
 41.398 N ± 9.7km 141.949 E ± 10.3km
 DEPTH = 82.6 ± 17.4 km
 4.8mb (24 obs.)
 HOKKAIDO, JAPAN REGION (224)

MAT 5.66 212 eP 42 24.00 1.0
 0.8s 38.06nm 4.7mb
 MDJ 9.61 294 eP 43 18.00 0.8
 SNY 13.76 278 Pc 44 13.40 1.2
 BJI 19.57 275 eP 45 21.00 -2.4
 0.8s 39.00nm 4.8mb
 SSE 19.60 245 Pd 45 26.50 2.7
 0.8s 10.00nm 4.2mb
 TIA 20.00 263 eP 45 25.70 -2.3
 NJ2 20.68 251 eP 45 33.30 -1.6
 TIY 23.00 271 eP 45 56.00 -2.0
 XAN 27.02 265 P 46 34.40 -1.4
 GTA 31.92 281 eP 47 17.80 -1.7
 GYA 32.60 254 P 47 25.00 -0.4
 WMO 39.41 292 P 48 23.60 0.7
 CHG 42.92 252 eP 48 53.00 1.2
 GUN 47.28 272 P 49 27.60 0.6
 PKI 47.81 272 P 49 32.40 1.3
 0.6s 23.00nm 5.3mb
 DMN 48.02 272 P 49 34.20 1.6
 0.7s 33.00nm 5.3mb
 INK 50.34 29 iPc 49 49.10 -0.4
 0.5s 15.00nm 5.3mb
 MBC 52.24 17 eP 50 02.50 -1.3
 YKA 59.85 31 eP 50 56.70 -1.7
 0.8s 1.30nm 4.1mb
 SOD 61.12 336 iP 51 05.40 -1.6
 WB5 61.37 188 eP 51 08.20 -0.9
 WRA 61.43 188 Pc 51 08.80 -0.7
 0.5s 2.60nm 4.6mb
 GBA 62.05 264 Pc 51 12.60 -1.2
 0.7s 7.90nm 4.9mb
 SUF 64.29 333 eP 51 26.00 -2.0
 NUR 66.31 331 iP 51 40.00 -0.9
 0.6s 13.00nm 5.0mb
 FFC 69.83 34 eP 52 03.00 0.1
 0.8s 11.00nm 4.8mb
 HFS 70.29 335 eP 52 04.50 -1.1
 0.4s 7.30nm 4.9mb
 Z 19s 0.04um 3.7msz
 LR 20 48.00
 NB2 70.33 337 P 52 05.00 -0.9
 0.6s 5.40nm 4.6mb
 BW06 74.33 46 eP 52 30.00 -0.1
 1.0s 2.75nm 4.1mb
 KRA 75.72 326 eP 52 37.60 0.0
 PRU 77.99 328 ePc 52 50.70 0.6
 e 53 10.00
 KHC 79.05 328 P 52 57.00 1.0
 EKA 79.16 341 Pc 52 56.10 -0.4
 0.5s 1.80nm 4.2mb
 CDF 82.02 331 eP 53 11.70 -0.1
 HAU 82.70 332 eP 53 14.70 -0.5
 PGD 84.05 326 P 53 24.00 1.6

LOR 84.20 333 eP 53 23.20 0.3
 0.7s 4.40nm 4.6mb
 BOB 84.25 328 P 53 23.00 -0.2
 ASS 84.31 325 P 53 18.50 -5.1X
 LDF 84.34 336 eP 53 24.10 0.6
 LPL 84.66 330 eP 53 26.40 0.9
 0.7s 6.60nm 4.7mb
 LPG 84.67 330 eP 53 26.30 0.7
 0.7s 6.60nm 4.7mb
 AVF 84.79 333 eP 53 25.70 -0.1
 0.8s 8.05nm 4.8mb
 CKI 84.99 329 P 53 27.00 0.1
 BNI 85.08 330 P 53 28.00 0.5
 MAF 85.55 333 eP 53 30.80 1.1
 0.7s 7.70nm 4.8mb
 TCF 85.61 333 eP 53 31.30 1.3
 LSF 85.87 334 eP 53 31.80 0.5
 0.7s 7.70nm 4.8mb
 MFF 86.11 335 eP 53 33.10 0.7
 0.8s 8.05nm 4.8mb
 RJF 86.71 333 eP 53 36.20 0.8
 CAF 86.85 333 eP 53 37.60 1.5
 0.8s 12.10nm 5.8mb
 LFF 87.29 334 eP 53 39.60 1.5
 LPO 87.37 333 eP 53 39.80 1.3
 0.8s 10.75nm 5.8mb
 SIV 147.81 45 PKP 00 37.00 3.2X
 S.D. = 1.2 on 52 of 54 obs.

MAY 21, 1990 09h 49m 18.50 ± 0.48s
 40.633 N ± 4.4km 23.145 E ± 4.5km
 DEPTH = 10.0km (geophysicist)
 GREECE (364)
 MD 2.9 (THE). ML 2.9 (SKO).

THE 0.14 270 iPd 49 21.60 -0.1
 eS 49 23.40
 SOH 0.25 40 iPc 49 23.90 0.1
 eS 49 27.70
 KNT 0.56 341 iPc 49 29.00 -0.9
 SRS 0.59 35 ePc 49 29.50 -1.0
 iS 49 38.20
 GRG 0.65 300 eP 49 30.60 -0.9
 eS 49 39.80
 OUR 0.70 115 ePc 49 32.80 0.4
 eS 49 41.90
 LIT 0.73 223 ePc 49 32.60 -0.3
 eS 49 43.50
 VAY 0.81 328 iPg 49 33.80 -0.5
 i 49 44.20
 i 49 45.80
 PAIG 0.81 150 ePd 49 33.90 -0.4
 eS 49 46.80
 MMB 1.05 25 iPg 49 39.00 0.6
 KKB 1.23 358 iPg 49 41.00 -0.4
 FNA 1.35 277 eP 49 43.60 0.2
 eS 50 01.30
 AGG 1.73 202 eP 49 49.20 0.4
 OHR 1.84 286 e(Pn) 49 58.50 8.0X
 SKO 1.86 317 ePn 49 53.00 2.4
 PLD 1.88 38 ePg 49 55.00 4.1X
 PGB 2.06 21 iP 49 56.00 2.3
 ALN 2.22 82 eP 49 55.50 -0.4
 IGT 2.42 244 eP 49 58.40 -0.4
 PVL 3.05 32 eP 50 06.00 -1.7
 S.D. = 1.1 on 18 of 20 obs.

* MAY 21, 1990 09h 50m 12.70 ± 0.66s
 36.440 N ± 8.8km 72.269 E ± 11.0km
 DEPTH = 33.0km (normol)
 4.3mb (5 obs.)
 AFGHANISTAN-USSR BORDER REGION (717)

QUE 7.67 217 eP 52 05.20 0.2
 eS 53 35.00
 NDI 8.79 150 eP 52 20.50 0.0
 eS 53 54.00
 MAJO 10.30 273 eP 52 41.00 -0.4
 eS 54 36.00
 DMN 14.00 125 P 53 24.80 -6.3X
 0.5s 26.00nm 5.2mb
 PKI 14.22 125 P 53 27.20 -6.9X
 GUN 14.32 123 P 53 27.40 -8.0X
 HFS 43.74 322 eP 58 16.20 0.0
 0.5s 3.00nm 4.3mb
 NB2 45.04 323 P 58 27.70 0.9
 0.7s 1.90nm 4.1mb

MBC 67.34 3 eP 01 05.00 -1.0
0.6s 2.00nm 4.4mb
INK 73.79 10 eP 01 46.00 1.0
YKA 81.25 3 eP 02 25.60 -0.7
0.8s 1.10nm 3.9mb
S.D. = 0.8 on 8 af 11 abs.

& MAY 21, 1990 10h 49m 16.70s
37.500 N 118.420 W
DEPTH = 4.0km
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 3.6 (BRK). 3.1 (PAS).

FRI 1.15 244 iPc 49 37.60 -1.1
iS 49 52.30
CMB 1.65 290 iPc 49 46.20 -0.4
eS 50 08.20
CLC 1.81 158 eP 49 49.00 0.1
ISA 1.83 181 eP 49 49.50 0.2
LLA 2.20 247 e(P) 49 55.80 1.2
PRI 2.25 234 eP 49 56.10 0.6
iS 50 27.20
SAO 2.53 254 eP 49 59.90 0.7
MHC 2.57 267 ePd 50 01.20 1.3
eS 50 39.10
BKS 3.05 278 e(P) 50 57.70 51.1
PCC 3.15 271 e(P) 50 08.10 0.1
10 obs. associated

* MAY 21, 1990 11h 19m 03.23±1.34s
34.630 S ±13.9km 71.526 W ±13.9km
DEPTH = 75.8 ± 10.9 km
4.8mb (1 abs.)
NEAR COAST OF CENTRAL CHILE (135)

LNV 0.68 8 iPd 19 18.50 0.0
CHCH 1.00 46 iPd 19 21.40 -1.0
TACH 1.09 27 iP 19 22.20 -1.2
LCCH 1.15 358 iPc 19 24.00 -0.2
iS 19 39.80
PCH 1.31 40 iPd 19 25.50 -0.9
iS 19 42.50
SAN 1.38 32 iPd 19 26.40 -0.8
iS 19 44.10
i 19 45.50
IHA 1.60 357 iPd 19 30.80 0.6
iS 19 46.40
PEL 1.64 25 iPd 19 30.60 -0.1
FCH 1.66 39 iPd 19 30.50 -0.7
iS 19 50.50
ROCH 1.71 15 iPd 19 31.90 0.1
iS 19 54.00
JACH 2.09 22 iP 19 37.50 0.5
iS 20 02.00
RTBS 3.43 31 eP 19 57.00 1.6
RTCV 3.73 43 e(P) 20 00.50 0.9
RTCB 3.88 37 eP 20 03.00 1.2
ZON 3.89 39 eP 20 04.00 2.0
CFA 4.09 43 e(P) 20 05.10 0.4
RTLL 4.17 39 ePd 20 04.90 -1.0
eS 21 01.50
LPB 18.28 11 P 23 10.00 -3.8X
ZOB0 18.54 10 P 23 17.00 0.0
SIV 20.80 29 P 23 38.20 -2.3
SPA 55.55 180 iPc 28 34.00 1.2
0.9s 0.64nm 4.8mb
GBA 145.00 119 PKPc 38 32.90 -0.8
0.7s 3.60nm
S.D. = 1.2 on 21 af 22 obs.

MAY 21, 1990 13h 00m 09.75±0.14s
53.558 N ± 3.4km 163.537 W ± 2.0km
DEPTH = 33.0km (normal)
5.7mb (86 obs.) 5.3MsZ (18 abs.)
UNIMAK ISLAND REGION (10)
ML 5.7 (PMR). Ms 5.4 (BRK).
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.8.: 12S, 25C
Centroid Location:
Origin Time 13:00:11.0 0.6
Lat 53.48N 0.06 Lon 163.19W 0.06
Dep 31.2 4.2 Half-duration 2.2
Moment Tensor; Scale 10¹⁷ Nm
Mrr=-1.31 0.07 Mtt=-1.15 0.09
Mff=-0.15 0.09 Mrt=1.25 0.26
Mrf=-0.06 0.19 Mtf=-1.46 0.11

Principal Axes:

T Val= 2.06 Plg=55 Azm= 35
N 0.41 31 247
P -2.47 15 148
Best Double Couple: Mo=2.3*10¹⁷
NP1:Strike=203 Dip=40 Slip= 38
NP2: 82 67 124

SDN 2.52 44 iPc 00 48.90 -0.3
KDC 7.52 52 eP 01 55.50 -4.3X
ADK 8.16 263 eP 02 08.00 -0.7
SVW 8.69 26 eP 02 14.70 -1.4
TTA 10.19 20 eP 02 34.50 -2.3
PMS 10.76 39 eP 02 40.20 -4.3X
ANM 11.08 356 P 02 48.50 -0.3
PMR 11.14 38 eP 02 45.30 -4.3X
TOA 12.57 40 eP 03 03.80 -5.1X
SMY 13.44 275 eP 03 18.70 -1.6
IMA 13.47 17 ePc 03 19.00 -1.8
DWY 16.20 40 P 03 52.80 -3.4X
SIT 16.38 66 eP 03 56.50 -2.0
1.2s 275.76nm 5.3mb
INK 20.43 32 eP 04 41.00 -5.4X
0.4s 21.00nm 4.8mb
GMW 26.30 87 eP 05 44.50 0.7
BMW 26.56 89 eP 05 47.20 0.9
YKA 26.78 51 eP 05 48.40 0.4
0.7s 37.80nm 5.1mb

RMW 26.92 86 eP 05 50.00 0.4
LON 27.27 87 eP 05 54.00 1.3
PNT 27.37 81 ePc 05 54.00 0.4
0.9s 58.00nm 5.2mb
MBC 28.16 21 iPc 05 59.40 -1.0
0.6s 25.00nm 5.1mb
VGB 28.52 89 eP 06 04.20 0.2
NEW 29.32 81 eP 06 10.50 -0.7
1.0s 32.50nm 5.0mb
FHC 29.36 100 eP 06 12.70 1.1
eP 06 26.70 56kmX
EDM 29.43 70 iPc 06 11.50 -0.7
pP 06 23.50 46kmX
WDC 30.35 99 ePd 06 21.00 0.7
eP 06 34.70 54kmX
ePcP 09 18.50
eScP 12 59.00
MIN 31.05 98 ePd 06 26.80 0.1
eP 06 40.70 56kmX
ePcP 09 20.70
ORV 31.61 99 eP 06 31.20 -0.3
ePcP 09 23.20
SES 31.89 74 eP 06 33.00 -0.8
0.7s 27.00nm 5.2mb
pP 06 45.00 46kmX
BRK 32.28 102 eP 06 37.50 0.2
Z 18s 6.00um 5.3MsZ
ePcP 09 22.80
BKS 32.29 102 eP 06 37.30 -0.1
0.9s 33.00nm 5.2mb
Z 20s 12.00um 5.6MsZ
N 20s 7.00um
E 20s 8.00um

e 06 41.70
e 06 56.10
e 07 13.50
eS 11 56.00
e 12 06.80
e 12 09.20
eLQ 14 06.00
eLR 15 10.80
MHC 33.00 102 eP 06 43.00 -0.8
Z 20s 2.00um 4.8MsZ
N 20s 0.80um
E 20s 2.50um

ePcP 09 26.30
eS 12 10.00
eLQ 14 32.00
eLR 15 40.00
ARN 33.06 102 eP 06 44.00 -0.2
CMB 33.27 100 ePd 06 46.50 0.5
ePcP 09 26.50
eScP 13 10.00

LRM 33.31 82 eP 06 45.90 -0.6
LLA 33.90 103 ePd 06 52.00 0.5
KVN 33.95 97 eP 06 52.40 0.3
eP 07 07.00 58kmX
HPI 34.09 86 eP 06 53.50 0.1
FRI 34.37 101 eP 06 55.80 0.4

PRI 34.40 103 ePcP 09 30.20
eP 06 56.50 0.7
ePcP 09 30.70
PTI 35.01 87 eP 07 02.00 0.9
FFC 35.06 63 eP 07 00.00 -1.2
0.9s 15.00nm 4.9mb
TNP 35.11 97 eP 07 01.80 -0.2
0.8s 6.37nm 4.6mb X

epP 07 16.00 55kmX
KUSJ 35.23 274 eP 07 00.50 -2.2
IMW 35.27 84 eP 07 03.00 -0.4
ASAJ 35.87 277 P 07 07.70 -0.4
ISA 36.01 101 eP 07 09.00 -0.5
DUG 36.37 91 eP 07 12.70 0.1
0.8s 31.94nm 5.3mb
CLC 36.41 100 eP 07 13.00 0.1
HOOJ 36.49 274 P 07 12.40 -1.0
BW06 36.74 85 eP 07 15.20 -0.6
SBB 37.07 102 eP 07 19.00 0.6
DAU 37.16 89 eP 07 19.60 0.1
GSC 37.24 100 eP 07 20.00 0.2
MWC 37.26 103 eP 07 20.00 -0.2
MRRJ 37.79 276 eP 07 22.00 -1.6
TPC 38.52 101 eP 07 31.00 0.4
PLM 38.58 102 eP 07 33.00 1.8
BAR 39.17 103 eP 07 36.00 0.0
AOMJ 39.34 274 eP 07 37.00 -0.3
OFUJ 39.50 271 P 07 38.30 -0.4
GLA 39.98 101 eP 07 43.00 0.3
YAMJ 41.06 272 P 07 51.30 -0.2
GOL 41.12 85 eP 07 53.00 0.7

Z 20s 2.00um 5.0MsZ
GLD 41.17 85 eP 07 53.00 0.4
1.0s 50.00nm 5.2mb
RSON 41.31 64 eP 07 52.50 -0.9
1.2s 158.53nm 5.6mb
epP 08 04.00 41kmX
KAKJ 42.29 269 P 08 01.50 0.0
NIIJ 42.30 271 P 08 01.80 0.2
CHJJ 43.10 270 P 08 08.40 0.2
MDJ 43.19 286 Pd 08 07.30 -1.5
0.8s 30.00nm 5.1mb
Z 23s 4.40um 5.3MsZ
esP 08 20.00
S 14 36.00

MAT 43.23 271 iPc 08 09.70 0.4
1.2s 376.56nm 6.0mb
Z 20s 3.19um 5.2MsZ
eS 14 34.00
MTMJ 43.45 272 P 08 11.00 -0.1
ALQ 43.62 92 eP 08 12.00 -0.7
1.0s 28.75nm 5.0mb
Z 20s 2.43um 5.1MsZ
iPcP 10 00.00
IIDJ 44.13 270 P 08 16.90 0.3
TSRJ 45.24 272 P 08 25.60 0.1
CN2 46.05 288 iPc 08 30.60 -1.1
5.0s 600.00nm 5.8mb X
Z 20s 2.80um 5.2MsZ
N 14s 1.90um
E 14s 1.10um

pP 08 42.00 40kmX
PP 10 18.00
eS 15 09.00
WKYJ 46.38 271 eP 08 34.80 0.3
YONJ 46.98 273 eP 08 38.90 -0.3
TKSJ 47.46 272 P 08 43.10 0.1
KBS 47.75 1 iPc 08 44.40 -0.4
SNY 48.36 287 iPc 08 49.50 -0.4
1.3s 200.00nm 6.0mb
Z 22s 3.90um 5.3MsZ
N 15s 1.50um
E 14s 1.50um

pP 09 00.00 36kmX
PP 10 42.50
S 15 48.00
ScS 18 42.50

MEO 48.42 85 iPc 08 50.00 -0.5
FVM 51.04 77 eP 09 08.30 -2.2
UYO 51.30 83 iPd 09 10.50 -2.0
DL2 51.41 286 eP 09 12.00 -1.3
6.0s 500.00nm 5.7mb X
Z 24s 2.30um 5.1MsZ
E 18s 2.50um
S 16 29.00
POW 51.85 79 eP 09 13.00 -3.6X
OLY 52.13 80 eP 09 15.40 -3.4X

21d 13h

SCH	52.13	47 ePc	09 17.20	-1.4	QZH	63.23	276 eP	10 37.00	0.0	1.0s	164.00nm	6.0mb		
	1.1s	181.00nm		5.9mb		Z 28s	2.23um		5.2MszX		e	12 03.00		
		pP	09 28.00	37kmX		E 16s	3.02um			SNF	75.80	8 iPc	11 53.56	0.0
BJI	53.74	290 eP	09 30.00	-0.5	LZH	63.35	295 Pc	10 36.00	-1.9	BRG	75.92	2 iPc	11 54.20	-0.1
	5.0s	480.00nm		5.8mb X		1.4s	330.00nm		6.3mb		1.3s	110.00nm		5.7mb
	Z 20s	3.05um		5.4Msz		Z 16s	5.20um		5.8MszX			i	12 03.10	
	N 17s	2.14um				N 16s	3.70um					e	21 48.00	
		eSP	09 39.00			E 14s	2.10um			KSP	75.97	0 iPc	11 54.30	-0.3
		ePP	11 32.00				sP	10 45.00			1.3s	74.00nm		5.5mb
		eS	17 00.00				ScS	20 29.00				i	12 05.00	
		eS	17 14.00		SUF	63.82	355 iP	10 39.00	-1.3	MOX	76.09	3 iP	11 55.30	0.0
JNW	54.45	10 eP	09 34.50	-0.9		0.5s	22.80nm		5.5mb		1.3s	184.00nm		5.9mb
RSCP	55.50	75 eP	09 40.80	-2.8	WMO	65.49	311 iPc	10 51.10	-0.5		Z 24s	1.10um		5.1MszX
	0.8s	4.01nm		4.5mb X		6.0s	900.00nm		6.0mb X		N 24s	0.70um		
HHC	55.73	294 Pc	09 44.80	-0.5		Z 15s	2.80um		5.6MszX		E 20s	0.50um		
	1.0s	200.00nm		6.1mb			S	19 32.00				iP	12 05.00	31kmX
	Z 20s	5.50um		5.6Msz	NB2	65.67	3 P	10 50.70	-1.7	DOU	76.24	8 iPc+	11 56.20	0.1
	N 16s	4.20um				1.3s	155.00nm		5.9mb		1.0s	97.20nm		5.8mb
	E 15s	2.50um			ASK	65.95	6 iPc	10 54.00	-0.1			S	21 42.00	
		pP	09 57.00	43kmX	BER	66.06	6 iP	10 54.20	-0.6	TNS	76.37	5 iPc	11 57.00	0.1
		PcP	10 42.00		NUR	66.10	356 iP	10 54.00	-1.0	HOF	76.43	3 iPc	11 57.10	-0.1
		S	17 31.50			1.1s	148.80nm		6.0mb		1.2s	55.00nm		5.4mb
WNY	55.81	60 eP	09 43.10	-2.7		Z 16s	2.00um		5.4MszX	KRA	76.72	358 ePc	11 57.80	-1.0
TIA	55.85	286 Pc	09 44.90	-1.2	HFS	66.64	2 eP	10 56.60	-1.9		1.1s	100.00nm		5.7mb
	8.0s	700.00nm		5.7mb X		1.2s	169.00nm		6.0mb		Z 15s	2.00um		5.6MszX
	Z 22s	2.60um		5.3Msz		Z 16s	0.97um		5.1MszX		E 15s	1.80um		
	N 16s	1.80um					LR	41 28.00				e	12 14.50	
	E 16s	0.90um			UPP	66.93	359 iP	10 58.90	-1.5	PRU	76.82	1 iPc	11 59.40	0.1
		eS	17 32.00		CD2	67.29	291 iPc	11 03.00	-0.2		Z 16s	1.70um		5.5MszX
HBVT	56.24	60 eP	09 44.20	-4.6X		Z 17s	1.80um		5.4MszX		N 16s	1.70um		
TKL	56.49	74 eP	09 47.50	-3.2X		N 13s	1.50um				E 16s	0.50um		
BTO	56.74	295 iPc	09 52.00	-0.6			S	19 56.00		GRF	77.03	3 iPc	12 01.10	0.5
	N 15s	4.00um			GZH	67.75	279 Pd	11 06.00	0.0		1.2s	156.00nm		5.9mb
	E 15s	3.70um				Z 24s	2.30um		5.3MszX		Z 22s	1.10um		5.1Msz
		pP	10 03.00	37kmX		N 14s	1.70um							

22d 13h

Origin Time 13:25:37.6 0.2
 Lat 36.39S 0.03 Lon 98.01W 0.03
 Dep 15.0 FIX Half-duration 4.4
 Moment Tensor: Scale 10**18 Nm
 Mrr=-0.27 0.03 Mtt=-0.15 0.03
 Mff=0.42 0.04 Mrt=0.70 0.07
 Mrf=-0.38 0.10 Mtf=-1.65 0.03
 Principal Axes:
 T Val= 2.05 Plg=18 Azm= 48
 N -0.44 67 269
 P -1.61 14 143
 Best Double Couple: Mo=1.8*10**18
 NP1: Strike=186 Dip=67 Slip= 3
 NP2: 95 87 157

LNW 21.75 92 eP 30 27.00 0.2
 CHCH 22.37 92 eP 30 34.00 0.9
 PEL 22.54 90 ePd 30 26.00 -8.8X
 1.4s 58.14nm 4.9mb
 RTCB 24.56 87 e(P) 30 56.00 1.5
 RTLL 24.88 87 ePc 30 49.00 -8.5X
 CFA 24.97 88 e(P) 30 57.30 -1.1
 ANT 26.79 70 eP 31 12.00 -3.2X
 ARE 30.64 57 eP 31 50.00 -0.2
 LPB 32.94 61 P 32 08.00 -2.5
 38 28.00
 ZOBO 33.10 61 P 32 07.00 -5.1X
 1.1s 105.86nm 5.7mb
 Z 24s 3.22um 5.0MsZ
 i 32 12.00
 LR 37 36.00
 SIV 38.42 68 P 32 55.40 -1.3
 UPA 48.23 25 eP+ 34 08.00 -7.9X
 Z 19s 7.64um 5.7MsZ
 iS 41 08.00
 BAO 48.75 79 eP 34 19.50 -0.7
 SPA 53.89 180 eP 34 57.60 -0.8
 1.0s 17.00nm 5.0mb
 Z 20s 2.61um 5.3MsZ
 e 36 21.70
 CAR 54.93 38 eP 35 08.00 1.5
 eS 42 47.00
 SBA 55.94 195 e(P) 35 11.30 -1.7
 SNZO 65.48 236 P 36 10.00 -8.2X
 S 45 12.00
 SS 49 04.00
 UYO 70.17 3 e(P) 36 48.80 1.3
 MEO 70.72 359 e(P) 36 50.00 -0.8
 GLA 70.79 345 eP 36 56.00 4.6X
 BAR 70.84 343 eP 36 56.00 4.3X
 ALO 71.33 353 eP 36 55.00 0.2
 1.5s 34.72nm 5.2mb
 Z 18s 3.78um 5.7MsZ
 PLM 71.53 343 P 36 57.80 1.8
 JSC 71.91 14 P 36 58.00 0.0
 TPC 72.07 344 eP 37 04.00 5.0X
 LHS 72.19 15 P 37 01.00 1.3
 PAS 72.60 342 eP 37 01.00 -1.1
 eSKS 46 27.00
 eS 47 07.00
 ePS 47 23.00
 eSS 51 19.00
 eSSS 54 43.00
 eLg 56 35.00
 eLR 59 45.00
 MWC 72.64 343 eP 37 11.00 8.4X
 SBB 73.03 343 eP 37 04.00 -0.7
 GSC 73.38 344 eP 37 09.00 2.2
 CLC 74.06 343 eP 37 16.00 5.4X
 ISA 74.12 343 eP 37 16.00 5.0X
 NAV 74.94 14 P 37 15.00 -0.7
 PRI 75.12 341 ePc 37 17.20 0.3
 MSU 75.60 348 P 37 21.20 1.5
 LLA 75.64 341 ePc 37 18.00 -1.7
 FRI 75.68 342 ePc 37 19.00 -0.8
 SAO 75.92 341 e(P) 37 21.80 0.6
 GLD 75.98 354 P 37 30.00 8.3X
 Z 18s 2.30um 5.5MsZ
 TNP 76.14 344 P 37 22.00 -0.7
 GCC 76.31 340 eP 37 21.60 -1.8
 NA2 76.36 16 P 37 24.00 0.4
 MHC 76.51 341 eP 37 23.90 -0.8
 CMB 76.84 342 eP 37 25.10 -1.3
 BKS 77.17 340 eP 37 28.90 0.7
 iS 47 23.00
 eSS 52 24.00
 iLO 58 21.00

eLR 01 34.00
 e 04 56.00
 BRK 77.18 340 eP 37 28.60 0.4
 KVN 77.27 344 P 37 27.60 -1.4
 DAU 77.32 350 P 37 29.00 -0.4
 DUG 77.35 348 P 37 32.90 3.6X
 ORV 78.56 342 e(P) 37 36.30 0.5
 BW06 79.42 351 P 37 41.00 0.3
 WDC 79.79 341 ePc 37 42.20 -0.3
 TBR 80.06 18 P 37 45.00 1.1
 RSSD 80.24 356 P 37 43.80 -1.2
 FNC 80.38 340 e(P) 37 45.30 -0.4
 LRM 82.80 350 eP 38 01.10 2.7X
 WNY 83.22 17 P 37 58.00 -2.3
 HBVT 83.38 18 P 38 02.00 0.9
 NEW 85.92 347 P 38 14.30 0.5
 0.8s 41.67nm 5.7mb
 SES 87.10 352 eP 38 24.00 4.5X
 PNT 87.40 346 eP 38 25.00 4.0X
 FFC 90.73 358 eP 38 39.00 2.5X
 1.7s 51.00nm 5.6mb
 BNI 124.03 56 PKP 44 40.00 7.3X
 PGF 124.78 59 ePKP 44 36.00 1.9
 0.9s 13.10nm
 SOTA 127.68 54 e(PKP) 44 42.00 2.4X
 1.3s 34.50nm
 i 44 43.60
 i 45 04.50
 MOX 128.77 50 ePKP 44 45.00 3.6X
 Z 27s 2.00um 5.7MsZ
 KHC 129.68 53 ePKP 44 46.30 3.1X
 Z 20s 0.80um 5.4MsZ
 N 20s 0.50um
 E 20s 0.70um
 e 45 07.50
 CLL 129.76 50 ePKP 44 46.00 2.8X
 1.6s 24.00nm
 NB2 130.05 37 PKP 44 46.40 2.8X
 1.4s 10.20nm
 BRG 130.26 50 ePKP 44 50.80 6.6X
 1.5s 16.00nm
 e 45 08.10
 PRU 130.47 52 ePKP 44 50.00 5.4X
 Z 22s 1.30um 5.6MsZ
 N 20s 0.30um
 E 22s 0.80um
 e 47 12.00
 OHR 132.76 65 ePKP 44 54.00 4.6X
 SKO 133.44 64 ePKP 44 55.00 4.4X
 Z 20s 1.22um 5.6MsZ
 E 20s 1.22um
 LR 42 54.00
 KRA 133.92 52 ePKP 45 03.00 11.8X
 MLR 137.33 60 ePKP 45 10.00 12.0X
 BBTk 141.37 69 ePKP 44 52.00 -13.5X
 MDJ 143.38 298 ePKP 45 11.20 2.6X
 Z 32s 2.40um 5.8MsZ
 ePP 48 28.00
 SKKS 55 17.00
 SS 07 08.00
 KVT 144.04 68 ePKP 45 10.00 0.0
 CN2 146.31 296 PKPc 45 13.00 -0.6
 Z 20s 1.30um 5.7MsZ
 N 20s 1.40um
 E 20s 1.70um
 ePP 48 45.00
 SKKS 55 31.00
 SNG 146.44 215 ePKP 45 15.10 0.4
 SSE 147.24 272 PKP 45 17.50 2.0
 Z 20s 0.80um 5.5MsZ
 E 16s 0.50um
 e 45 24.00
 SS 07 48.00
 SNY 147.58 293 ePKP 45 15.40 -0.3
 Z 30s 2.90um 5.9MsZ
 N 30s 1.00um
 E 30s 2.00um
 PP 48 48.00
 MSL 148.75 78 ePKP 45 19.50 1.7
 e 45 42.50
 e 47 02.00
 DL2 148.76 287 PKP 45 18.00 0.3
 BHD 148.99 84 ePKPc 45 25.50 7.3X
 e 46 36.00
 GZH 149.99 253 PKP 45 26.00 6.0X
 SLY 150.45 80 ePKPd 45 29.00 8.7X
 TAB 151.53 76 ePKP 45 28.00 5.9X

TIA 151.87 280 ePKP 45 27.30 4.8X
 WHN 152.58 267 ePKP 45 32.00 8.4X
 Z 24s 1.40um 5.7MsZ
 BJI 153.07 288 ePKP 45 28.00 4.0X
 Z 24s 1.27um 5.7MsZ
 ePP 49 24.00
 eSKKS 56 04.00
 eSS 08 48.00
 LOE 154.40 228 ePKP 45 19.20 -7.3X
 TIY 155.80 282 ePKP 45 34.00 6.0X
 Z 23s 1.90um 5.9MsZ
 E 25s 2.90um
 HHC 156.60 290 PKP 45 35.00 6.0X
 N 24s 1.30um
 E 20s 1.90um
 GYA 156.92 252 ePKP 45 33.00 3.2X
 CHG 157.13 225 ePKP 45 40.00 9.9X
 BTO 157.78 290 ePKP 45 35.20 4.8X
 N 17s 0.70um
 E 17s 0.70um
 XAN 158.00 272 PKP 45 35.70 4.9X
 KMI 159.11 244 ePKP 45 39.50 7.0X
 Z 25s 1.90um 5.8MsZ
 PP 49 54.00
 CD2 161.21 260 ePKP 45 39.60 5.3X
 MAIO 161.76 83 ePKP 45 42.00 7.2X
 e 46 28.00
 LZH 162.47 276 ePKP 45 41.50 5.9X
 e 46 30.00
 GTA 165.68 288 PKP 45 40.40 2.0
 Z 26s 3.00um
 E 20s 1.90um
 e 45 43.80
 e 46 43.20
 SKKS 57 10.00
 QUE 165.92 111 ePKP 45 51.20 12.3X
 NDI 171.35 150 e(PKP) 45 49.00 6.9X
 WMO 171.36 332 ePKP 45 41.00 -0.8
 Z 26s 2.60um
 ePP 50 53.00
 SS 11 56.00
 KSH 174.21 55 PKP 45 48.00 4.9X
 N 22s 3.30um
 PP 51 08.00
 S.D. = 1.2 on 54 of 107 obs.
 % MAY 22, 1990 14h 16m 16.99 ± 0.75s
 40.411 N ± 8.4km 15.474 E ± 8.2km
 DEPTH = 10.0km (geophysicist)
 SOUTHERN ITALY (390)
 SGO 0.19 320 P 16 21.00 -0.3
 eSg 16 27.50
 MGR 0.28 167 P 16 22.80 -0.1
 eSg 16 27.00
 BSS 0.63 307 P 16 30.00 0.3
 eSg 16 40.00
 ORI 0.82 115 P 16 33.00 0.1
 eSg 16 45.30
 BRT 1.40 70 P 16 42.50 0.0
 S.D. = 0.3 on 5 of 5 obs.
 % MAY 22, 1990 14h 21m 56.85 ± 0.80s
 43.929 N ± 9.2km 11.913 E ± 4.7km
 DEPTH = 10.0km (geophysicist)
 CENTRAL ITALY (381)
 SFI 0.04 260 Pc 21 58.90 0.0
 eSg 22 01.20
 PGD 0.15 249 Pc 22 00.70 0.3
 eSg 22 04.10
 CRE 0.30 175 P 22 03.00 -0.2
 eSg 22 07.50
 RSM 0.39 90 P 22 05.00 0.2
 ARV 0.86 120 P 22 13.00 -0.4
 eSg 22 26.00
 BDI 0.96 278 P 22 15.00 -0.2
 eSg 22 30.00
 ASS 1.02 147 P 22 16.50 0.4
 eSg 22 30.00
 S.D. = 0.4 on 7 of 7 obs.
 % MAY 22, 1990 14h 28m 26.96 ± 1.23s
 43.923 N ± 12.6km 11.924 E ± 7.0km
 DEPTH = 10.0km (geophysicist)
 CENTRAL ITALY (381)

SFI 0.05 268 Pc 28 28.90 -0.2
eSg 28 31.20
PGD 0.15 252 Pc 28 30.60 0.0
eSg 28 33.00
CRE 0.30 176 P 28 33.00 -0.2
eSg 28 39.00
ARV 0.85 120 P 28 43.00 -0.4
eSg 28 55.00
BDI 0.97 279 P 28 46.00 0.6
eSg 28 59.00
ASS 1.01 148 P 28 47.00 0.9
PII 1.03 259 P 28 46.00 -0.4
eSg 29 01.00
MNS 1.63 160 P 28 55.50 -0.4
eSn 29 16.00
S.D. = 0.6 on 8 of 8 obs.

? MAY 22, 1990 14h 32m 20.77±4.29s
51.210 N ±30.9km 16.085 E ±27.5km
DEPTH = 10.0km (geophysicist)
POLAND (548)

KSP 0.39 160 iP 32 28.70 -0.1
0.3s 121.00nm
iS 32 37.00
iLR 32 43.00
BRG 1.39 257 iPg 32 45.60 -0.6
iSg 33 06.10
PRU 1.57 219 iPg 32 50.00 1.3
e 32 53.80
Sg 33 06.50
Sg 33 13.50
i 33 19.90
CLL 1.94 274 iPg 32 54.40 0.3
eSg 33 19.00
KHC 2.63 219 ePn 33 03.10 -1.0
Pg 33 09.90
Sn 33 34.80
Sg 33 47.50
MOX 2.88 260 ePg 33 14.00 6.4X
iSg 33 54.00
ZST 3.09 167 eP 34 03.00 52.6X
GRF 3.46 246 e(Pg) 33 09.70 -6.1X
eSg 34 13.00
S.D. = 1.2 on 5 of 8 obs.

% MAY 22, 1990 14h 37m 20.54±1.36s
43.914 N ±12.8km 11.821 E ±8.6km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

SFI 0.02 73 Pc 37 21.80 -0.7
eSg 37 24.10
PGD 0.08 242 P 37 23.60 0.4
eSg 37 26.70
CRE 0.30 162 P 37 26.00 -0.9
eSg 37 31.50
RSM 0.46 88 P 37 29.70 -0.1
eSg 37 34.90
ARV 0.91 117 P 37 39.00 1.0
eSg 37 50.00
S.D. = 1.1 on 5 of 5 obs.

MAY 22, 1990 15h 05m 49.40±0.57s
43.964 N ±6.0km 11.916 E ±4.0km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

SFI 0.06 227 Pc 05 51.70 0.0
eSg 05 53.40
PGD 0.17 238 P 05 53.00 -0.3
eSg 05 55.70
CRE 0.34 176 Pc 05 55.60 -0.8
eSg 06 00.80
RSM 0.39 95 P 05 57.40 0.0
eSg 06 05.30
ARV 0.88 122 P 06 07.20 0.9
eSg 06 18.70
MME 0.91 285 P 06 06.90 0.0
BDI 0.96 276 P 06 08.50 0.8
eSg 06 21.00
PII 1.04 257 P 06 09.00 0.1
eSg 06 23.90
ASS 1.04 149 P 06 10.10 0.9
eSg 06 23.70
MNS 1.67 160 P 06 18.00 -0.9
eSg 06 40.00

VOY 2.50 33 e(Pn) 06 30.00 -0.8
eSn 07 13.10
S.D. = 0.8 on 11 of 11 obs.

? MAY 22, 1990 15h 30m 51.36±2.46s
43.965 N ±19.3km 11.827 E ±11.6km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

SFI 0.05 158 Pc 30 52.60 -0.9
eSg 30 54.50
PGD 0.12 220 Pc 30 54.50 0.0
eSg 30 57.00
CRE 0.35 165 P 30 58.50 -0.1
eSg 31 02.60
RSM 0.45 95 P 31 00.60 0.0
S.D. = 0.8 on 4 of 4 obs.

? MAY 22, 1990 15h 54m 28.56±0.80s
64.586 S ±13.2km 175.385 E ±25.6km
DEPTH = 10.0km (geophysicist)
4.6mb (2 obs.) 4.7Msz (1 obs.)
BALLENY ISLANDS REGION (702)

SBA 13.59 188 e(P) 57 41.80 -1.6
SPA 25.56 180 eP 00 01.20 2.3
1.3s 18.33nm 4.6mb
Z 20s 2.48um 4.7Msz
e 00 24.90
WRA 52.26 309 P 03 42.20 0.3
0.9s 8.50nm 4.7mb
WB5 52.31 309 eP 03 42.20 -0.1
PMG 58.56 327 eP 04 27.50 0.1
LAT 61.25 327 eP 04 56.00 10.1X
ZOBO 86.20 121 P 07 12.00 0.1
LR 34 56.00
SES 127.95 51 ePKP 13 34.00 -0.9
YKA 136.93 40 ePKP 14 06.00 14.5X
0.3s 0.10nm
MBC 146.37 23 ePKP 14 07.50 -0.3
1.0s 14.00nm
FRB 153.17 62 ePKP 14 22.00 3.6X
S.D. = 1.3 on 8 of 11 obs.

* MAY 22, 1990 16h 44m 41.72±0.58s
53.687 S ±8.6km 140.012 E ±25.3km
DEPTH = 10.0km (geophysicist)
4.7mb (3 obs.)
WEST OF MACQUARIE ISLAND (701)

TOO 16.56 15 eP 48 36.00 0.6
BFD 16.61 7 eP 48 35.20 -0.8
CAN 19.42 23 eP 49 12.00 1.1
BWA 20.15 21 eP 49 18.70 -0.1
CMS 22.58 13 eP 49 45.00 1.7
1.2s 26.00nm 4.6mb
SBA 26.08 167 e(P) 50 16.00 -0.6
RMQ 27.93 17 eP 50 33.20 -0.8
QIS 33.07 359 eP 51 19.00 -0.5
WRA 33.96 350 Pd 51 26.60 -0.6
0.6s 6.10nm 4.7mb
WB5 34.02 350 eP 51 26.70 -1.1
SPA 36.50 180 eP 51 49.00 0.3
1.0s 14.50nm 4.8mb
CHG 80.38 321 eP 57 03.80 9.2X
GUN 93.78 314 P 58 00.00 -0.1
KRA 143.78 289 ePKP 04 27.00 9.4X
MBC 143.78 23 ePKP 04 15.00 -1.9
MNS 143.82 274 PKP 04 18.00 0.0
ZST 144.45 285 ePKP 04 23.50 4.7X
FFC 144.77 63 ePKP 04 18.00 -1.2
0.8s 7.00nm
LJU 144.81 280 e(PKP) 04 25.00 5.5X
TRI 145.08 279 ePKP 04 21.90 1.9
VOY 145.18 280 e(PKP) 04 22.20 1.9
SFI 145.21 275 PKP 04 23.00 2.8X
PGD 145.26 275 PKPd 04 26.00 5.4X
NUR 145.55 308 ePKP 04 28.00 7.7X
FVI 146.13 280 PKP 04 26.00 4.3X
KSP 146.20 289 ePKP 04 27.70 6.0X
SOD 146.37 320 ePKP 04 25.00 3.5X
PRU 146.80 286 PKP 04 31.60 8.9X
KHC 146.95 284 PKP 04 29.50 6.5X
BOB 147.11 275 PKP 04 36.00 12.5X
SOTA 147.38 280 ePKP 04 30.00 6.1X
1.1s 24.40nm
i 04 33.20

i 04 35.80
MDI 147.50 277 PKP 04 29.00 5.1X
BRG 147.54 287 iPKP 04 33.00 9.2X
0.9s 10.00nm
i 04 36.40
CLL 148.27 288 ePKP 04 34.00 9.0X
1.5s 14.00nm
GRF 148.57 284 ePKP 04 35.50 9.9X
MOX 148.77 286 ePKP 04 37.00 11.1X
BNI 148.91 273 PKP 04 20.00 -6.4X
LPG 149.11 274 ePKP 04 37.00 10.1X
1.2s 74.50nm
LPL 149.13 274 ePKP 04 37.20 10.3X
1.1s 6.10nm
BSF 150.28 278 ePKP 04 40.00 11.6X
HAU 150.62 278 ePKP 04 41.10 12.3X
1.0s 8.00nm
NB2 152.08 306 PKP 04 49.80 19.2X
1.0s 4.20nm
S.D. = 1.2 on 17 of 42 obs.

% MAY 22, 1990 17h 13m 24.52±1.11s
44.024 N ±9.8km 11.873 E ±5.2km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)

SFI 0.10 189 Pc 13 27.30 0.0
eSg 13 28.80
PGD 0.19 216 Pc 13 29.10 0.4
eSg 13 31.50
CRE 0.40 172 P 13 32.50 -0.2
eSg 13 37.00
RSM 0.43 103 P 13 33.60 0.3
eSg 13 38.60
BDI 0.92 273 P 13 42.00 -0.2
eSg 13 56.00
ARV 0.94 124 P 13 42.00 -0.4
eSg 13 55.00
ASS 1.11 149 P 13 45.50 0.1
S.D. = 0.4 on 7 of 7 obs.

* MAY 22, 1990 17h 38m 21.38±1.24s
37.314 N ±14.0km 72.602 E ±18.8km
DEPTH = 33.0km (normol)
4.0mb (4 obs.)
TAJIK SSR (715)

QUE 8.52 215 eP 40 25.90 0.3
MAIO 10.56 268 eP 40 53.00 -0.6
eS 42 50.00
HFS 43.23 321 eP 46 21.50 0.7
0.7s 3.20nm 4.2mb
NB2 44.51 322 P 46 31.60 0.4
0.8s 1.50nm 3.9mb
MBC 66.46 3 eP 49 09.00 -0.1
0.7s 3.00nm 4.5mb
YKA 80.37 3 eP 50 29.60 -0.7
0.7s 1.00nm 3.9mb
S.D. = 0.7 on 6 of 6 obs.

% MAY 22, 1990 17h 41m 01.89±1.49s
67.029 N ±11.8km 20.853 E ±17.8km
DEPTH = 10.0km (geophysicist)
SWEDEN (536)

MD 2.6 (BER).
KTK1 2.19 23 iPc 41 39.33 0.6
eS 42 07.56
TRO 2.71 346 eP 41 45.48 -0.8
eS 42 27.78
LOF 3.01 295 eP 41 50.52 0.1
eS 42 36.48
NSS 4.44 240 eP 42 11.75 1.1
eS 43 01.22
NRA0 7.53 217 Pn 42 53.30 -0.9
S.D. = 1.2 on 5 of 5 obs.

MAY 22, 1990 17h 59m 44.15±1.33s
4.691 S ±7.9km 103.173 E ±8.2km
DEPTH = 87.8 ±11.3 km
5.1mb (16 obs.)
SOUTHERN SUMATERA (274)

KGM 6.66 1 iPc 01 22.80 1.5
KLM 7.89 349 eP 01 39.50 1.3
PSI 8.48 330 ePc 01 43.60 -2.6
TSI 9.35 330 eP 01 58.00 -0.1

ARN 3.63 149 eP 08 29.60 -1.6
SAO 4.18 152 e(P) 08 36.00 -3.0
KVN 4.66 106 eP 08 43.20 -2.8
9 obs. associated

% MAY 23, 1990 02h 32m 32.44 ± 0.81s
42.299 N ± 7.2km 13.341 E ± 8.6km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

AQU 0.07 40 P 32 34.20 -0.7
eSg 32 38.60
AZI 0.32 167 P 32 39.10 0.1
eSg 32 43.70
MNS 0.50 280 P 32 41.90 -0.6
eSg 32 50.00
SDI 0.69 149 P 32 46.40 0.3
eSg 32 56.00
ASS 0.92 327 P 32 51.00 0.9
eSn 33 05.00
S.D. = 1.0 on 5 of 5 obs.

? MAY 23, 1990 02h 35m 14.55 ± 1.71s
27.296 N ± 23.7km 129.678 E ± 21.4km
DEPTH = 33.0km (normal)
3.8mb (3 obs.)
RYUKYU ISLANDS (238)

BJI 16.94 322 eP 39 10.50 0.0
1.0s 17.00nm 4.1mb
KMI 24.25 271 eP 40 30.20 0.3
GBA 50.47 265 Pc 44 11.30 -0.3
MBC 68.49 14 eP 46 36.00 20.9X
0.6s 2.00nm
YKA 77.01 25 eP 47 05.50 0.1
0.6s 0.40nm 3.6mb
HFS 78.48 333 eP 47 09.00 -4.5X
0.4s 0.40nm 3.8mb
NB2 78.93 334 P 47 29.00 12.9X
0.9s 1.10nm
S.D. = 0.4 on 4 of 7 obs.

MAY 23, 1990 03h 10m 04.85 ± 0.62s
43.946 N ± 2.9km 128.358 W ± 6.0km
DEPTH = 10.0km (geophysicist)
4.4mb (7 obs.) 4.2Msz (1 obs.)
OFF COAST OF OREGON (30)

KMOR 3.86 62 P 11 04.48 -1.1
NLO 4.09 57 P 11 09.55 0.8
ONR 4.36 46 P 11 14.17 1.5
BMW 4.42 53 P 11 12.85 -0.7
PGO 4.48 68 P 11 14.63 0.4
FHC 4.51 133 eP 11 14.00 -0.8
GT2 4.52 72 P 11 14.72 -0.2
RVW 4.55 59 P 11 14.89 -0.4
LVP 4.72 61 P 11 17.59 -0.3
CPW 4.76 49 P 11 18.52 0.1
VLMW 4.77 68 P 11 18.38 -0.3
FL2 4.81 60 P 11 19.10 -0.1
CZM 4.83 57 P 11 18.60 -0.7
MTMW 4.83 62 P 11 19.25 -0.2
APW 4.85 54 P 11 19.29 -0.4
ERK 4.87 59 P 11 20.05 0.1
TDH 4.88 72 P 11 19.33 -0.8
SHW 4.88 60 P 11 20.36 0.2
HSR 4.91 61 P 11 20.13 -0.5
STD 4.91 60 P 11 20.61 0.0
JLK 4.92 61 P 11 20.68 0.1
YEL 4.92 60 P 11 20.85 0.1
ESD 4.94 61 P 11 21.04 0.0
SOSW 4.96 60 P 11 21.34 0.0
TDL 4.97 59 P 11 21.15 -0.2
VBEM 4.97 75 P 11 21.50 0.1
CDFW 4.97 62 P 11 21.33 0.0
VLL 5.00 70 P 11 21.81 0.1
KOSW 5.03 58 P 11 22.64 0.4
LMW 5.07 55 P 11 22.45 -0.3
APM 5.07 67 P 11 23.12 0.3
VFP 5.11 72 P 11 23.04 -0.3
GULW 5.19 65 P 11 24.61 0.1
HDW 5.24 43 P 11 26.06 0.9
ASR 5.28 63 P 11 25.64 -0.1
LON 5.40 56 eP 11 26.50 -0.9
RVC 5.40 54 P 11 27.28 -0.2
GLK 5.44 59 P 11 28.08 0.1
WDC 5.47 126 eP 11 36.40 8.0X

WPW 5.53 58 P 11 29.29 -0.1
FMW 5.57 55 P 11 29.63 -0.4
VGB 5.62 71 eP 11 29.90 -0.7
GL2 5.71 67 P 11 31.24 -0.6
MCW 6.09 37 P 11 38.11 1.1
JCW 6.17 44 P 11 39.28 1.1
MXC 6.27 62 P 11 39.33 -0.3
RPW 6.54 44 P 11 43.87 0.3
ORV 6.75 128 ePd 11 46.60 0.2
e 11 52.70
GBL 6.81 64 P 11 47.25 0.0
PNT 8.06 45 eP 12 06.00 1.2
0.5s 4.00nm 4.9mb

MHC 8.34 140 eP 12 05.80 -3.0
CMB 8.44 132 ePc 12 09.60 -0.4
KVN 9.12 119 eP 12 19.80 0.2
LLA 9.25 140 eP 12 21.60 0.3
FRI 9.57 134 eP 12 25.20 -0.4
ISA 11.23 134 eP 12 50.00 1.6
CLC 11.58 131 eP 12 53.00 -0.2
SBB 12.32 135 eP 13 09.00 5.8X
GSC 12.39 130 eP 13 04.00 -0.2
MSU 13.33 108 eP 13 16.00 -0.8
SES 13.42 55 eP 13 29.00 11.3X
TPC 13.70 132 eP 13 24.00 2.5
BW06 13.73 88 eP 13 22.50 0.4
GLA 15.16 131 eP 13 41.00 0.3
RSSD 17.48 81 eP 14 10.50 0.1
ALO 19.11 111 eP 14 30.00 -0.5
1.5s 20.83nm 4.2mb
FFC 20.17 48 iPc 14 41.50 -0.4
0.9s 18.00nm 4.4mb
YKA 20.24 19 eP 14 41.20 -1.4
1.2s 3.50nm 3.6mb
MEO 24.66 102 iPd 15 28.50 1.7
TTA 24.82 330 eP 15 28.00 -0.1
1.0s 12.50nm 4.5mb
TUL 26.10 97 eP 15 42.50 2.1
1.1s 8.40nm 4.3mb
Z 18s 0.60um 4.2Msz

LNO 26.10 97 e(P) 15 47.30 7.0X
IMA 26.14 337 eP 15 40.00 -0.6
1.6s 14.34nm 4.4mb
S.D. = 0.8 on 69 of 73 obs.
? MAY 23, 1990 03h 29m 32.14 ± 8.16s
32.548 N ± 23.6km 2.646 W ± 68.6km
DEPTH = 10.0km (geophysicist)
MOROCCO (395)
MD 4.4 (RBA).

IFR 2.30 296 iPn 30 10.70 -0.1
iSn 30 38.00
i 30 39.00
NKM 3.69 322 ePn 30 30.50 0.0
eSn 31 10.00
AVE 4.08 282 iPnd 30 36.00 0.1
i 30 37.00
i 30 39.50
eSn 31 23.00
i 31 29.50
i 31 35.50
TIO 4.25 249 iPnc 30 38.50 0.0
iSn 31 33.00
S.D. = 0.2 on 4 of 4 obs.

MAY 23, 1990 03h 45m 26.05 ± 0.44s
15.264 N ± 8.9km 147.588 E ± 10.0km
DEPTH = 33.0km (normal)
4.4mb (5 obs.)
MARIANA ISLANDS REGION (215)

GUA 3.11 237 eP 46 14.50 0.6
eS 46 50.30
GUMO 3.12 238 eP 46 13.80 -0.3
PJG 3.12 238 eP 46 13.80 -0.3
MAT 22.78 340 eP 50 26.00 -0.9
0.8s 8.96nm 4.3mb
WB5 37.26 201 eP 52 36.80 0.0
WRA 37.33 201 Pd 52 37.00 -0.3
0.8s 5.80nm 4.5mb
LZH 44.09 306 Pc 53 34.00 0.8
2.0s 28.00nm 4.7mb
pP 18 35.00
sP 18 42.00
i 18 58.00

INK 71.82 23 eP 19 13.50
MBC 76.01 14 eP 56 47.00 -0.1
0.8s 4.00nm 4.5mb
YKA 80.16 28 eP 57 33.50 -0.7
0.7s 0.80nm 3.8mb
SES 85.46 39 eP 58 03.00 1.2
BCAO 125.89 287 iPdiff 00 44.90 -20.5X
0.6s 14.00nm
KIC 145.17 306 PKP 05 02.60 -0.3
0.6s 9.50nm
TIC 145.21 307 PKP 05 02.80 -0.1
LIC 145.47 306 PKP 05 03.80 0.4
ZOBO 145.64 97 PKP 05 04.00 -0.3
S.D. = 0.6 on 15 of 16 obs.

MAY 23, 1990 03h 55m 00.16 ± 0.50s
4.213 S ± 7.0km 136.249 E ± 10.3km
DEPTH = 33.0km (normal)
5.1mb (3 obs.)
WEST IRIAN REGION (196)

MTN 9.96 210 eP 57 24.10 0.0
0.3s 77.00nm 6.4mb X
PMG 11.99 116 eP 57 51.00 -0.8
KNA 13.62 212 eP 58 12.80 -0.7
WB5 15.68 187 eP 58 35.80 -4.6X
i 58 44.80
eS 01 25.80
WRA 15.75 187 Pd 58 39.50 -1.8
0.4s 1.40nm 3.5mb X
OIS 16.57 169 eP 58 47.00 -4.8X
e 02 47.00
CTA 18.55 149 eP 59 17.00 0.6
e(S) 03 07.00
i 07 14.00
KKM 22.45 297 eP 00 00.50 2.5
QLP 23.52 162 eP 00 09.30 1.0
WARB 23.71 202 eP 00 11.00 0.9
WHN 40.41 330 eP 02 38.00 1.0
pP 02 49.50 41kmX
KMI 43.70 314 Pd 03 04.50 0.2
1.0s 30.00nm 5.0mb
XAN 45.97 328 P 03 20.70 -1.4
CD2 46.71 321 eP 03 27.40 -0.6
LZH 50.26 326 eP 03 55.50 -0.2
1.5s 27.00nm 5.0mb
GTA 54.87 326 Pd 04 29.40 -0.6
GUN 58.06 307 P 04 52.60 -0.6
0.7s 19.00nm 5.3mb
PKI 58.30 306 P 04 54.00 -0.9
WMO 64.69 323 P 05 36.50 -0.9
ARE 145.73 128 ePKP 14 39.00 0.7
LPB 148.31 131 PKP 14 44.00 1.4
ZOBO 148.45 131 PKP 14 46.50 3.4X
1.1s 11.60nm
i 14 49.90
CCH 149.19 135 ePKP 14 48.00 4.1X
S.D. = 1.1 on 19 of 23 obs.

& MAY 23, 1990 05h 49m 52.66s
62.491 N 148.350 W
DEPTH = 6.5km
CENTRAL ALASKA (1)
<AGS-P>.

SML 0.69 179 iP 50 06.27 -0.1
eS 50 16.48
HUR 0.77 310 iP 50 07.47 -0.5
iS 50 18.84
GHO 0.77 201 iP 50 07.39 -0.7
iS 50 19.00
NCA 0.87 124 iP 50 08.86 -0.9
eS 50 21.82
CUT 0.90 265 iP 50 09.29 -0.9
eS 50 21.54
RND 0.95 346 iP 50 09.89 -1.2
iS 50 21.82
PLRM 0.97 203 iP 50 10.05 -1.4
iS 50 24.14
TOA 1.09 110 eP 50 12.37 -1.1
PWA 1.11 221 iP 50 12.65 -1.1
eS 50 29.31
MCK 1.27 348 eP 50 14.81 -1.8
eS 50 30.99
SDG 1.30 87 eP 50 15.17 -1.9
PMS 1.38 205 eP 50 16.39 -2.0

BJI 48.67 334 eP 13 04.50 06 02.50 0.0
 2.0s 55.00nm 5.2mb
 Z 20s 0.60um 4.6Msz
 N 12s 0.32um
 eS 13 00.00
 CN2 48.71 344 Pc 06 01.80 -0.9
 Z 18s 0.40um 4.4Msz
 eS 13 04.00
 CD2 49.27 316 eP 06 07.70 0.3
 HHC 51.45 331 eP 06 24.20 0.4
 BTO 52.02 330 eP 06 28.00 -0.2
 N 18s 0.70um
 E 18s 0.80um
 eS 13 44.00
 LZH 52.38 321 Pd 06 31.50 0.4
 2.5s 100.00nm 5.4mb
 Z 30s 1.00um 4.7MszX
 pP 06 36.50 17kmX
 S 13 58.00
 GTA 56.95 322 Pc 07 04.40 0.2
 GUN 61.65 304 P 07 36.60 -0.6
 DMN 62.19 303 P 07 40.00 -0.7
 GBA 65.66 286 Pc 08 00.80 -2.3
 0.7s 3.70nm 4.5mb
 WMO 66.95 321 P 08 12.00 0.9
 Z 16s 0.30um 4.6MszX
 eS 17 05.00
 TTA 80.42 24 P 09 27.60 -1.4
 1.1s 12.50nm 4.8mb
 IMA 82.68 22 P 09 39.50 -1.3
 1.1s 9.69nm 4.7mb
 PMR 82.86 27 P 09 39.60 -2.0
 1.0s 14.75nm 5.0mb
 FBA 84.53 24 P 09 48.00 -2.0
 0.6s 6.16nm 4.9mb
 MAIO 85.31 307 eP 09 56.00 1.3
 eS 20 29.00
 SPA 87.10 180 eP 10 02.90 0.0
 0.9s 8.18nm 4.9mb
 INK 90.81 22 eP 10 17.00 -3.1X
 YKA 98.96 27 eP 10 54.20 -3.3X
 1.1s 1.70nm 4.5mb
 LPB 144.91 124 ePKP 16 36.00 -20.0X
 ZOBO 145.02 124 PKP 16 55.70 -0.7
 Z 20s 0.18um 4.8Msz
 LR 05 30.00
 CCH 146.04 127 PKP 17 00.80 3.0X
 TIC 146.49 278 PKP 16 59.40 1.1
 LIC 146.53 277 PKP 16 59.40 1.1
 LKO 146.70 283 (PKP)d 16 59.98 1.4
 0.6s 14.00nm
 SIV 150.79 131 PKP 17 09.60 4.7X
 S.D. = 1.2 on 58 of 69 obs.
 ? MAY 23, 1990 10h 37m 25.62±1.43s
 21.757 S ±48.5km 174.669 W ±25.1km
 DEPTH = 33.0km (normal)
 4.8mb (5 obs.)
 TONGA ISLANDS (173)
 DZM 17.53 265 iPc 41 34.60 5.3X
 RMO 33.64 255 iPc 44 07.00 1.5
 WB5 47.50 263 eP 45 59.10 -0.7
 WRA 47.51 262 Pd 45 59.30 -0.6
 0.9s 9.40nm 4.8mb
 MTN 52.28 270 eP 46 35.90 -0.6
 MAT 73.09 322 eP 48 55.00 0.5
 1.1s 15.19nm 4.9mb
 ALO 85.79 50 eP 50 02.70 -0.7
 1.0s 5.00nm 4.7mb
 PNT 86.00 33 eP 50 04.00 0.2
 0.8s 6.00nm 4.9mb
 SES 91.08 35 eP 50 29.00 1.1
 KMI 92.69 296 Pd 50 39.50 3.4X
 Z 25s 0.60um 4.9MszX
 pP 50 50.00 33kmX
 YKA 96.37 24 eP 50 51.20 -0.7
 1.0s 0.60nm 4.0mb
 KSP 149.73 346 ePKP 57 12.00 3.5X
 CLL 149.90 350 ePKP 57 14.00 5.3X
 BRG 150.17 349 ePKP 57 14.40 5.2X
 1.5s 64.00nm
 PRU 150.90 348 ePKP 57 17.00 6.7X
 e 57 28.50
 KHC 151.91 348 ePKP 57 17.00 5.1X
 S.D. = 1.0 on 9 of 16 abs.

MAY 23, 1990 10h 50m 55.10±0.51s
 8.289 S ±6.9km 156.268 E ±7.1km
 DEPTH = 33.0km (normal)
 4.7mb (8 obs.)
 SOLOMON ISLANDS (193)
 HNR 3.81 108 eP 51 52.00 -0.9
 eS 52 28.00
 RAB 5.76 315 e(P) 52 20.00 -0.6
 PMG 9.07 262 eP 53 05.00 -1.9
 CTA 15.22 219 iPc 54 30.00 0.7
 1.3s 76.92nm 4.8mb
 i 54 35.00
 i 54 42.50
 DZM 16.84 146 iPc 54 51.00 0.8
 RMO 19.46 201 iPc 55 21.30 -0.8
 1.3s 113.00nm 5.0mb
 QIS 20.20 231 iPd 55 30.00 -0.1
 0.9s 31.00nm 4.7mb
 WB5 24.13 239 eP 56 10.00 0.8
 WRA 24.18 239 Pc 56 11.00 1.3
 1.3s 58.50nm 5.0mb
 GUMO 24.50 332 eP 56 13.50 0.7
 PJG 24.50 332 eP 56 13.50 0.7
 CMS 25.05 201 eP 56 17.30 -0.6
 0.9s 21.00nm 4.7mb
 CHTO 62.60 296 eP 01 19.00 0.2
 1.1s 5.30nm 4.6mb
 FBA 83.86 21 eP 03 21.50 -1.0
 1.0s 5.00nm 4.6mb
 YKA 96.88 28 eP 04 24.50 0.6
 1.1s 0.90nm 4.2mb
 S.D. = 1.0 on 15 of 15 abs.
 * MAY 23, 1990 10h 51m 49.44±0.86s
 39.948 N ±17.2km 76.624 E ±25.8km
 DEPTH = 33.0km (normal)
 4.4mb (6 obs.)
 SOUTHERN XINJIANG, CHINA (321)
 NDI 11.25 177 eP 54 31.00 0.1
 0.5s 14.00nm 5.4mb
 eS 56 26.00
 DMN 14.17 148 P 55 10.00 -0.2
 0.4s 8.00nm 4.7mb
 GUN 14.24 145 P 55 12.00 0.9
 PKI 14.33 147 P 55 11.60 -0.7
 0.5s 8.00nm 4.6mb
 HFS 43.22 319 eP 59 48.70 0.0
 0.7s 4.70nm 4.3mb
 NB2 44.41 321 P 59 58.40 0.0
 0.7s 2.40nm 4.1mb
 YKA 77.51 5 eP 03 47.80 5.0X
 0.6s 0.50nm 3.7mb
 S.D. = 0.7 on 6 of 7 abs.
 ? MAY 23, 1990 12h 26m 49.73±2.00s
 5.494 N ±30.4km 31.681 E ±11.8km
 DEPTH = 10.0km (geophysicist)
 4.9mb (11 abs.)
 SUDAN (557)
 AAE 7.86 63 P 28 48.00 0.9
 PRNI 24.92 7 eP 32 16.00 1.6
 DSI 26.17 7 eP 32 17.00 -9.1X
 LKO 37.15 279 P 34 03.74 0.8
 VOY 43.23 342 e(P) 34 53.60 0.7
 ZST 44.33 346 e(P) 35 02.60 0.9
 LPG 45.37 335 eP 35 10.40 0.0
 1.1s 14.65nm 4.8mb
 KRA 45.50 349 eP 35 10.30 -0.7
 KSP 47.00 347 eP 35 23.00 0.2
 SMF 47.52 334 eP 35 27.30 0.3
 0.8s 8.75nm 4.9mb
 LBF 47.72 335 eP 35 28.80 0.1
 1.2s 11.90nm 4.9mb
 AVF 47.84 334 eP 35 30.00 0.5
 0.7s 4.95nm 4.7mb
 TCF 47.97 333 eP 35 31.70 1.1
 1.0s 14.00nm 5.0mb
 LOR 47.99 335 eP 35 30.90 0.1
 1.3s 21.65nm 5.1mb
 MOX 48.04 343 eP 35 31.00 0.0
 CLL 48.24 344 iP 35 31.60 -1.0
 1.2s 12.00nm 4.8mb
 LSF 48.26 332 eP 35 33.00 0.2

NUR 1.1s 18.00nm 5.1mb
 55.14 356 iP 36 27.80 3.4X
 0.7s 50.70nm 5.7mb
 SUF 57.25 357 iP 36 38.30 -1.1
 0.5s 4.30nm 4.7mb
 NB2 57.52 348 P 36 40.00 -1.5
 1.1s 6.30nm 4.6mb
 SOD 61.87 358 eP 37 10.00 -1.2
 KEV 64.25 358 eP 37 25.00 -1.8
 RMO 116.63 117 ePdiff42 01.30 10.1X
 0.6s 8.00nm
 BRS 120.04 118 iPdiff42 16.50 10.2X
 S.D. = 1.0 on 20 of 24 abs.
 MAY 23, 1990 12h 52m 25.15±0.13s
 20.634 N ±2.4km 120.894 E ±3.4km
 DEPTH = 35.3km (16 depth phases)
 5.5mb (50 obs.) 4.6Msz (4 obs.)
 PHILIPPINE ISLANDS REGION (248)
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 8S, 15C
 Centroid Location:
 Origin Time 12:52:24.8 0.7
 Lat 20.40N 0.16 Lon 120.42E 0.25
 Dep 28.3 7.8 Half-duration 1.5
 Moment Tensor; Scale 10**16 Nm
 Mrr=-3.73 0.86 Mtt=-1.00 0.76
 Mff=4.73 1.04 Mrt=2.32 1.37
 Mrf=-2.83 1.54 Mtf=5.01 0.87
 Principal Axes:
 T Val=7.79 Plg=7 Azm=118
 N -0.49 45 21
 P -7.30 44 215
 Best Double Couple: Mo=7.5*10**16
 NP1:Strike=246 Dip=55 Slip=-30
 NP2: 354 66 -141
 TWG 2.18 4 eP 52 58.40 -1.4
 eS 53 11.50
 TWf1 2.73 8 eP 53 07.50 -0.1
 eS 53 28.50
 TWD 3.49 11 eP 53 18.10 -0.2
 TWQ 3.62 359 eP 53 19.90 -0.4
 BAG 4.21 184 eP 53 27.80 -1.1
 ANP 4.56 7 eP 53 18.00 -15.7X
 QCP 5.97 178 eP 53 28.00 -25.5X
 HKC 6.48 286 iP 53 55.90 -4.7X
 MCO 6.99 284 iP 54 03.00 -4.9X
 eS 55 18.10
 GZH 7.42 291 iPc 54 08.80 -5.1X
 Z 14s 8.70um
 N 14s 5.00um
 E 14s 8.90um
 SSE 10.42 1 P 54 54.30 -1.0
 Z 20s 4.60um
 N 14s 2.20um
 E 14s 3.20um
 QIZ 10.52 263 P 54 51.40 -5.4X
 N 13s 4.30um
 E 14s 4.40um
 eS 56 56.80
 WHN 11.50 330 Pc 55 06.00 -3.9X
 Z 16s 6.50um
 N 18s 5.30um
 E 14s 5.00um
 NJ2 11.52 351 eP 55 08.00 -2.2
 Z 18s 1.40um
 N 13s 2.20um
 E 14s 3.10um
 DAV 14.21 161 eP 55 47.00 0.9
 GYA 14.28 297 iPd 55 43.00 -4.0X
 Z 15s 2.90um
 N 13s 3.30um
 E 13s 3.60um
 pP 55 55.00
 KKM 15.20 198 ePc 56 03.50 4.4X
 1.0s 110.80nm 5.1mb
 TIA 15.87 349 eP 56 08.80 1.3
 Z 16s 3.40um
 N 14s 2.60um
 E 14s 2.40um
 TSM 16.54 190 eP 56 16.00 -0.2
 XAN 17.05 324 Pd 56 22.20 -0.4
 1.5s 200.00nm 5.0mb
 N 13s 5.00um
 E 10s 1.70um

KMI	17.31	288 Pd	56 24.20	-1.9	1.2s	64.30nm	5.3mb	PRU	84.41	322 Pd	04 55.80	0.5	
	2.5s	100.00nm		4.5mb X		e	01 39.00	570kmX		1.5s	75.90nm	5.6mb	
Z	15s	4.30um		4.1Msz	GBA	42.02 268 Pd	00 14.50	-0.6	Z	16s	0.70um	5.1MszX	
N	12s	0.90um				1.2s	50.70nm	5.1mb	N	15s	0.60um		
DL2	18.22	2 eP	56 29.00	0.0	WB5	42.37 161 iPd	00 17.00	-0.9	E	14s	0.40um		
		pP	56 37.00			eScP	06 34.50				e	05 05.90	32km
Z	18s	2.10um			WRA	42.42 161 Pd	00 17.20	-1.1	CLL	84.71 323 iPd	04 57.00	0.3	
N	12s	2.00um				1.1s	274.20nm	5.9mb		1.7s	89.00nm	5.7mb	
		eSP	56 47.00		KSH	42.67 306 P	00 23.00	2.6X			eP	05 08.00	35km
		eS	59 57.00		E	13s	2.60um		PTJ	85.29 317 eP	05 00.20	0.3	
		eSS	00 12.00		KOD	43.00 263 eP	00 24.00	0.5	ZAG	85.31 317 eP	05 00.00	0.2	
LOE	18.40	263 eP	56 39.00	-0.3	NANU	43.25 187 iPd	00 24.70	-0.3	KHC	85.35 321 Pd	05 00.90	0.8	
CD2	18.49	307 eP	56 38.70	-1.8		0.6s	34.00nm	5.3mb		1.2s	30.00nm	5.4mb	
	Z	15s	6.20um		POO	44.25 276 iPd	00 33.50	0.1			e	05 10.50	30km
	N	12s	5.46um		QIS	44.84 155 iPd	00 37.00	-1.0	WET	85.76 321 eP	05 02.90	0.8	
		eS	00 03.00			0.6s	73.00nm	5.7mb		1.6s	71.00nm	5.6mb	
TIY	18.54	338 Pd	56 41.60	0.6	CTA	47.48 147 iPc	00 59.20	0.4	MOX	85.80 323 ePd	05 03.00	0.8	
	Z	18s	6.80um			1.1s	193.67nm	6.0mb		1.8s	77.00nm	5.6mb	
	N	15s	5.70um			i	01 08.00	29km	HOF	85.80 323 iPd	05 02.60	0.3	
BJI	19.76	349 iPd	56 54.50	-0.6		i	01 35.50			1.0s	39.00nm	5.6mb	
	1.2s	230.00nm		5.4mb	QLP	52.11 153 iPd	01 34.10	-0.1	VBY	85.90 317 eP	05 04.20	1.4	
Z	12s	2.70um		5.4Msz	RMQ	54.08 149 iPc	01 48.80	0.1	LJU	86.12 318 eP	05 04.00	0.1	
N	13s	1.47um				0.9s	68.00nm	5.7mb	CEY	86.32 318 eP	05 05.00	0.0	
		S	00 34.00		MAIO	55.34 300 iPd	01 58.20	0.0	YKA	86.33 23 eP	05 03.80	-0.8	
NST	20.33	259 eP	57 02.00	0.8		eS	09 44.00			1.0s	12.80nm	5.1mb	
CHG	20.74	269 iPd	57 04.80	-0.6	BRS	56.85 146 iPc	02 09.40	0.5	BHG	86.40 320 iPc	05 06.30	1.0	
	1.0s	68.50nm		5.0mb		i	02 30.00	81kmX		1.6s	91.00nm	5.8mb	
SNY	21.25	6 eP	57 08.40	-2.0	CMS	57.08 155 iPc	02 10.50	0.1	GRF	86.47 322 iPd	05 06.40	0.8	
Z	16s	2.80um		4.7MszX		1.0s	28.00nm	5.3mb		1.9s	96.00nm	5.7mb	
N	16s	2.00um			ADE	57.83 163 iPd	02 15.30	-0.3	Z	19s	0.50um	4.9Msz	
E	14s	1.70um				1.0s	58.00nm	5.6mb			e	05 19.40	43km
		pP	57 18.00	36km	COO	59.00 149 eP	02 25.20	1.3	VOY	86.53 318 eP	05 05.90	-0.1	
		PP	57 40.00		BFD	61.02 160 iPd	02 36.90	-0.6	FVI	86.97 319 Pd	05 17.50	9.5X	
		S	01 00.00			1.1s	43.00nm	5.5mb	FUR	87.15 321 iPc	05 10.40	1.5	
LZH	21.44	319 Pd	57 11.50	-1.2		eP	02 47.30	34km	ORI	87.40 312 P	05 11.00	0.7	
	4.0s	780.00											

LAT	18.07	89	eP	39	22.00	2.7		1.0s	202.50nm	5.8mb	GBA	55.08	292	Pd	44	33.80	-2.2			
PMG	18.27	98	iPd	39	22.70	1.3			eS	48	24.00		0.8s	27.40nm			5.2mb			
	1.1s	493.67nm					CHTO	39.27	312	iPc	42	33.80	1.0	GKN	55.26	311	Pc	44	37.20	-0.1
KKM	18.29	316	ePc	39	22.70	0.9		1.0s	87.50nm	5.5mb	HYB	55.40	297	eP	44	36.50	-1.9			
	1.2s	475.60nm							i	43	03.50	133km	1.0s	100.00nm			5.7mb			
NANU	19.81	219	iPd	39	37.80	0.2	GYA	39.88	328	iPc	42	38.60	0.8	POO	59.98	296	eP	45	08.50	-1.9
			eS	43	15.00			3.0s	800.00nm	6.0mb	NDI	61.26	308	iPc	45	16.40	-2.5			
CTA	21.13	129	iPc	39	51.60	0.6			pP	43	09.00	136km	0.7s	47.95nm			5.6mb			
	1.7s	261.54nm							PcP	44	42.00			eS	53	29.00				
			i	39	59.00	27kmX			S	48	28.00		WMO	63.04	328	iPc	45	30.50	0.0	
			i	40	08.00				ScS	52	30.00		Z	16s	0.40um			4.7MsZ X		
			i	40	25.00		WHN	40.14	340	iPc	42	41.00	1.3		sP	46	01.40	127km		
			iS	43	37.00			1.0s	100.00nm	5.5mb		eS	53	48.00						
			e	43	59.00				PcP	44	42.60			eS	53	48.00				
MEKA	21.51	206	eP	39	55.10	0.4	NJ2	40.31	347	iPc	42	41.60	0.6	KSH	67.44	318	P	46	00.50	1.6
	0.4s	29.00nm						1.0s	100.00nm	5.5mb	SBA	73.16	172	e(P)	46	33.80	1.2			
			eS	43	51.00				pP	43	11.80	135km	MAW	74.20	201	iPc	46	40.10	1.3	
OCP	23.14	341	eP	40	14.00	3.4X			PcP	44	43.40			1.0s	87.00nm			5.5mb		
FORR	23.40	182	iPd	40	13.80	0.8			ScP	48	19.50		MAIO	77.98	309	iPc	47	01.40	0.7	
OLP	24.12	144	iPd	40	20.40	0.4	KMI	41.05	323	iPc	42	49.50	2.0		1.0s	38.50nm			5.1mb	
			e	40	47.60	132km		1.5s	0.70nm			3.2mb X	SPA	82.71	180	iPc	47	25.20	-0.1	
COOL	24.49	196	eP	40	23.70	0.1	KMI	41.05	323	iP+	42	50.00	2.5		1.0s	39.00nm			5.2mb	
			eS	44	54.80			2.0s	1.10nm			3.2mb X		i	47	56.40	122km			
BAG	24.96	341	eP	40	28.00	-0.3			pP	43	01.50	41kmX	TEH	84.15	307	eP	47	48.00	14.8X	
BAL	25.77	205	eP	40	35.20	-0.2			sP	43	33.00		RYD	86.00	295	iPc	47	42.50	0.0	
			e	41	01.00	122km			i	45	14.00		TAB	88.59	308	eP	47	55.00	0.2	
			eS	45	24.00		TSRJ	43.18	9	eP	43	04.30	-0.2	TTA	89.82	26	P	47	59.80	-0.1
GUA	26.20	38	eP	40	38.50	-0.9	IIDJ	43.45	11	eP	43	06.00	-0.7		1.0s	31.25nm			5.3mb	
	0.8s	89.55nm					CHJJ	44.21	12	eP	43	11.10	-1.7	IMA	91.63	23	P	48	07.60	-0.7

LPB	6.64	11 P	48 53.00	0.8		0.5s	30.00nm	4.8mb	PTI	85.69	42 P	18 11.00	0.5	
ARE	6.87	343 eP	48 54.00	-1.3	NANU	61.58	254 iPd	15 54.50	-0.8	IMA	85.81	10 P	18 09.50	-1.1
		iS	50 09.00			0.5s	55.00nm	5.2mb		0.8s	4.74nm		4.3mb	
		iS	04 06.00		KAKJ	66.49	324 P	16 25.40	-0.4	FBA	85.86	13 P	18 09.30	-1.3
ZOBO	6.89	10 P	48 20.00	-35.8X	CHJJ	67.04	324 P	16 28.70	-0.5		0.7s	26.16nm		5.1mb
RTCB	8.39	176 eP	49 15.00	-1.1	IJDJ	67.26	322 P	16 30.10	-0.5	ALO	86.22	52 ePc	18 13.20	-0.1
SIV	10.57	50 P	49 45.40	-0.5	MAT	67.84	323 eP	16 33.00	-1.1		1.0s	17.50nm		4.7mb
BAO	21.52	74 eP	52 01.50	1.1	TSRJ	68.43	321 P	16 37.40	-0.2	LRM	87.08	40 eP	18 17.30	0.1
YKA	92.51	341 eP	00 19.50	0.0	KKM	68.61	284 iPd	16 38.70	-0.6	IMW	87.09	42 P	18 17.50	0.1
	0.7s	0.20nm		3.7mb		0.6s	53.00nm	5.3mb	BW06	87.47	43 P	18 18.50	-0.6	
SUF	112.78	30 iPKP	05 29.10	-16.0X	SPA	72.19	180 iPd	16 59.20	-0.2		0.9s	15.25nm		4.8mb
	0.5s	2.80nm				1.0s	21.50nm	4.6mb	KMI	87.71	297 Pd	18 22.00	1.4	
	S.D. = 1.4	on 7 of 10 obs.								1.5s	100.00nm		5.4mb	
	MAY 24, 1998	04h 06m 32.07 ± 0.27s			OZH	74.57	303 P	17 13.50	0.3	CHG	88.87	290 ePd	18 26.90	1.2
	17.927 S ± 5.9km	178.557 W ± 4.0km			SSE	75.64	310 P	17 18.50	-0.5		0.9s	26.68nm		5.2mb
	DEPTH = 590.3 ± 2.8 km					1.0s	20.00nm	4.6mb	CD2	88.96	303 P	18 27.20	1.3	
	5.2mb (47 obs.)				BLP	76.01	46 P	17 21.30	0.3	GOL	88.98	48 P	18 26.10	0.0
	FIJI ISLANDS REGION	(181)			GCC	76.33	43 ePc	17 22.80	0.1		1.0s	26.25nm		5.1mb
					PRS	76.34	44 ePc	17 23.40	0.6	GLD	89.10	48 P	18 27.40	0.8
TVI	1.73	305 iPc	07 45.40	-0.5	PCC	76.35	43 eP	17 23.00	0.2		1.3s	57.47nm		5.3mb
KRO	2.05	287 iPc	07 46.20	-0.9	SAO	76.54	44 eP	17 23.80	0.0	SES	90.12	36 iPc	18 30.70	-0.1
UDU	2.23	322 eP	07 46.90	0.0	BCH	76.57	46 P	17 24.50	0.3		0.7s	34.00nm		5.4mb
NDE	2.43	303 iPc	07 48.40	0.4	BRK	76.64	43 eP	17 24.50	0.2	LZH	90.79	308 Pd	18 35.50	1.1
OYA	2.54	275 eP	07 48.90	0.5	BKS	76.66	43 iPd	17 25.10	0.6		1.0s	45.00nm		5.4mb
MBU	2.77	290 iPc	07 50.30	0.7		0.7s	47.00nm	5.1mb	RSSD	91.68	44 P	18 37.80	-0.6	
VUN	2.84	268 ePc	07 50.00	0.0	PRI	76.70	45 eP	17 25.50	0.6	INK	91.94	15 eP	18 37.40	-1.4
SVA	2.85	266 eP	07 49.80	-0.2	MHC	76.74	43 ePc	17 25.40	0.3		1.0s	30.00nm		5.3mb
PVC	12.51	269 iPc	09 18.30	2.5	LLA	76.79	44 ePc	17 25.40	0.2	MEO	92.14	54 iPc	18 40.30	-0.1
DZM	14.69	251 iPc	09 37.90	0.6	ARN	76.81	43 eP	17 25.50	0.1	YKA	94.41	25 eP	18 48.80	-1.3
		iS	12 14.00		ABL	76.98	47 P	17 26.40	-0.2		0.8s	5.90nm		4.9mb
		ScP	16 49.00		FHC	77.30	39 eP	17 28.30	0.4	MBC</				

				e	56	08.00	
FRI	130.26	330	ePKP	53	56.20	0.5	
TPC	130.45	325	ePKP	53	58.00	1.7	
GLA	130.47	323	ePKP	53	58.00	1.7	
			e	56	16.00		
BKS	130.75	333	ePd	50	59.00	11.8X	
BKS	130.75	333	ePKP	54	03.10	6.4X	
			iPP	56	04.00		
			iPKS	57	24.00		
			ePPP	57	30.00		
			eSKS	01	11.00		
			iSKKS	03	10.00		
			e	03	17.00		
			ePKKP	03	57.00		
			eSKSP	06	06.00		
			e	06	07.00		
			iPPS	08	08.00		
			eSKKP	08	09.00		
			eSPP	09	19.00		
			eSS	13	26.00		
			eSSP	14	32.00		
			eSSS	18	16.00		
ARN	130.86	332	PKP	53	57.00	0.1	
SNZO	131.16	143	Pd	51	08.00	19.1X	
SNZO	131.16	143	PKP	54	08.00	10.7X	
			PP	56	22.00		
			e	57	24.00		
			ePPP	59	16.00		
			PS	06	22.00		
			e	08	25.00		
			SS	14	12.00		
RVR	131.29	326	ePKP	54	02.00	4.2X	
PLM	131.46	325	ePKP	53	59.00	0.6	
ABL	131.66	328	PKP	53	59.00	0.2	
BAR	131.83	324	ePKP	54	01.00	2.1	
DZM	133.07	115	iPKPc	54	02.80	1.2	
HON	151.86	20	PKP	54	20.00	-13.9X	
Z 20s 15.32um 6.8Msz							
S.D. = 1.1 on 380 of 441 obs.							

MAY 24, 1990 19h 37m 21.27± 1.11s							
37.631 N ±11.2km 20.924 E ± 4.6km							
DEPTH = 45.3 ± 10.0 km							
4.1mb (2 obs.)							
IONIAN SEA						(399)	
AGG	1.78	38	ePd	37	52.10	2.0	
			eS	38	11.80		
IGT	1.95	346	eP	37	53.50	0.9	
			iS	38	17.30		
ATH	2.24	80	eP	37	59.00	2.4	
LIT	2.75	26	ePd	38	04.00	0.0	
			iS	38	36.70		
FNA	3.17	6	iPd	38	09.70	-0.2	
			eS	38	46.20		
THE	3.39	27	ePd	38	13.00	0.0	
			eS	38	52.30		
OHR	3.48	358	iPn	38	13.50	-0.8	
GRG	3.51	19	ePc	38	14.90	0.2	
LCI	3.55	320	P	38	16.00	0.7	
			eSn	38	28.00		
OUR	3.60	41	eP	38	15.80	-0.1	
SOH	3.70	30	ePd	38	17.70	0.3	
KNT	3.84	23	eP	38	19.30	-0.1	
			eS	39	03.60		
SOI	3.88	278	P	38	18.40	-1.5	
VAY	3.90	19	ePn	38	19.70	-0.5	
SRS	4.05	30	ePc	38	21.90	-0.5	
TDS	4.12	301	P	38	22.80	-0.6	
ORI	4.25	306	P	38	26.90	1.6	
SKO	4.35	5	iPn	38	25.00	-1.6	
			iPg	38	39.50		
			iSn	39	14.50		
			i	39	25.00		
			LR	40	12.00		
MMB	4.51	28	iPc	38	28.00	-0.8	

DIM	5.66	37	eP	38	45.00	0.0
BSS	5.70	305	P	38	46.70	1.1
DUI	6.41	311	P	38	56.00	0.4
CTT	6.79	57	iPg	39	46.70	45.8X
			eSg	39	49.20	
SDI	6.83	309	P	39	03.00	1.6
PTJ	9.05	337	e(P)	39	37.70	5.4X
			e	42	43.40	
TRI	9.68	329	eP	40	19.50	38.7X
SQTA	11.96	326	e(P)	40	13.00	1.1
			e(S)	42	19.00	
GRF	13.94	333	e(P)	40	45.70	7.8X
	1.0s	11.00nm				4.6mb X
UPP	22.35	356	iP	42	15.20	-1.1
NUR	23.02	5	eP	42	23.00	0.1
EKA	24.06	325	Pc	42	34.80	1.8
	0.8s	6.10nm				4.2mb
NB2	24.22	348	P	42	33.80	-0.8
	0.7s	3.10nm				4.0mb
SUF	25.32	6	eP	42	45.00	0.0
CFTV	30.61	263	ePc	43	49.20	15.9X
			i	43	56.90	
S.D. = 1.1 on 38 of 44 obs.						
<hr/>						
?	MAY 24, 1990	19h	39m	07.99±	1.59s	
	31.283 S	±37.0km		68.652 W	±22.3km	
DEPTH = 100.8km (geophysicist)						
SAN JUAN PROVINCE, ARGENTINA (137)						
RTLL	0.16	107	iPc	39	22.90	0.3
RTCB	0.24	212	iPd	39	23.10	0.2
			(S)	39	33.90	
ZON	0.26	185	eP	39	22.00	-0.9
			eS	39	34.00	
RTCV	0.58	170	iPc	39	25.00	0.3
			(S)	39	37.80	
RTBS	0.78	241	ePd	39	26.50	0.1
			(S)	39	40.00	
S.D. = 0.8 on 5 of 5 obs.						
<hr/>						
?	MAY 24, 1990	19h	40m	10.90±	1.41s	
	38.045 N	±14.1km		21.224 E	±13.9km	
DEPTH = 10.0km (geophysicist)						
GREECE (364)						
ML 3.4 (ATH).						
VLI	1.90	134	ePn	40	43.50	-0.2
ATH	1.97	91	ePn	40	45.00	0.4
KEK	2.00	327	ePn	40	45.20	0.1
NEO	2.01	51	ePn	40	45.00	-0.3
S.D. = 0.5 on 4 of 4 obs.						
<hr/>						
	MAY 24, 1990	19h	59m	04.28±	0.75s	
	37.760 N	± 8.0km		20.808 E	± 4.3km	
DEPTH = 10.0km (geophysicist)						
4.4mb (2 obs.)						
IONIAN SEA (399)						
ML 4.3 (ATH).						
VLS	0.45	338	ePg	59	14.20	0.7
AGG	1.74	43	eP	59	37.60	2.9X
			eS	00	00.90	
IGT	1.81	348	eP	59	40.00	4.3X
			eS	00	05.10	
VLI	1.99	121	ePb	59	44.00	5.6X
KEK	2.10	338	ePg	59	47.70	7.7X
ATH	2.31	84	ePn	59	43.20	0.2
NEO	2.44	50	ePn	59	45.00	0.1
LIT	2.68	29	eP	59	50.40	2.1

SKO	4.24	6	eP	00 16.00	5.7X	BRF	27.30	39	eP	05 57.60	3.5X				e(S)	13 09.00	
ATN	4.24	277	P	00 11.20	0.8		0.4s	215.00nm			6.2mb	HCY	38.79	344	eP	07 34.50	0.7
MMB	4.44	30	ePd	00 13.00	-0.2	HRI	28.01	7	eP	06 00.70	0.1	IVA	38.83	346	eP	07 35.50	1.3
KKB	4.46	22	iP	00 14.00	0.5	BHD	30.13	21	iPc	06 20.00	0.5	NKY	39.00	345	eP	07 37.00	1.3
BAI	4.53	319	P	00 15.00	0.5	VAM	30.72	348	eP	06 25.20	0.5	BUC1	39.17	353	iPd	07 40.00	3.1X
MEU	4.72	264	P	00 14.90	-2.5	ELL	31.29	357	eP	06 30.50	0.6	RFI	39.19	339	P	07 38.47	1.3
MGR	4.73	302	P	00 18.60	1.2	VLI	32.26	347	eP	06 38.40	0.2	BRY	39.20	344	eP	07 38.50	1.1
SMG	4.78	89	ePn	00 19.30	1.3	CIN	32.27	354	eP	06 40.00	1.7	DUI	39.34	339	Pd	07 39.10	0.6
RZN	4.95	36	iP	00 20.00	-0.5	SMG	32.52	353	eP	06 41.00	0.6	CGL	39.51	332	P	07 41.08	1.1
RDO	4.98	46	ePn	00 20.00	-0.9	MSL	32.57	17	iPc	06 41.00	0.1		1.7s	224.90nm		5.6mb	
SGO	5.11	305	P	00 24.00	1.4				eS	12 01.00		SDI	39.61	339	P	07 41.08	0.4
ALN	5.13	51	eP	00 22.20	-0.7				e	15 21.00			1.7s	1750.70nm		6.5mb	
VTS	5.16	20	iP	00 24.00	0.4				e	17 02.50		CFR	39.80	356	ePd	07 43.00	0.9
KDZ	5.26	41	eP	00 23.00	-1.9	SLY	32.62	21	iPc	06 41.00	-0.3	ISR	39.89	354	ePd	07 44.50	1.5
GIB	5.37	275	P	00 25.00	-1.5				iS	11 41.00		AZI	39.99	339	P	07 44.80	1.0
PGB	5.43	27	eP	00 22.00	-5.3X	KHL	32.88	357	eP	06 44.40	0.7	HVAR	40.05	342	iPd	07 45.00	0.7
BSS	5.55	305	P	00 31.80	2.8X	ITM	32.95	345	iPd	06 45.00	0.8	RDP	40.06	338	P	07 45.40	1.0
DIM	5.62	39	eP	00 29.00	-0.8	ATH	33.30	348	iPd	06 48.00	0.8	BRD	40.22	355	ePd	07 49.00	3.4X
HUI	6.26	310	P	00 41.00	2.1	ALT	33.58	358	eP	06 50.30	0.5	MLR	40.31	354	iPd	07 46.50	0.0
HVAR	6.35	330	i(Pn)	00 39.80	-0.4	SEK	33.73	187	eP	06 51.50	0.2	AQU	40.32	339	P	07 47.90	1.3
			iSn	01 49.50		NEO	34.68	348	iPd	06 59.00	-0.2	VRI	40.60	354	ePd	07 48.50	-0.2
PVL	6.45	31	eP	00 39.00	-2.6	GPA	34.80	358	iP	07 01.70	1.5	MNS	40.61	338	Pd	07 49.20	0.2
SDI	6.68	308	P	00 48.00	3.2X	IZI	34.89	357	eP	07 04.00	3.0X	PPE	40.87	356	ePd	07 53.00	2.1
AZI	7.07	309	P	00 55.00	4.8X	YLV	35.12	357	iP	07 05.10	2.1	BZS	41.08	349	iPc	07 54.00	1.4
ELL	7.33	95	eP	00 57.00	2.9X	PZI	35.13	336	P	07 04.10	1.0	DEV	41.11	350	iPc	07 40.00	-12.9X
MNS	7.76	309	P	01 03.00	3.1X	TAB	35.13	20	ePd	07 04.00	0.8	ASS	41.22	339	P	07 46.20	-7.7X
GPA	7.82	68	eP	01 03.00	2.2	KGT	35.18	354	iP	07 04.60							

ETOR	46.51	324	iPc	24	33.50	0.6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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25d 06h

CLL 49.16 345 e(P) 21 39.00 4.2X
1.5s 17.00nm 4.8mb
GKN 55.60 59 P 22 23.30 -0.3
DMN 55.90 60 P 22 26.00 0.1
1.0s 31.00nm 5.3mb
PKI 56.15 60 P 22 28.00 0.2
1.0s 12.00nm 4.9mb
GUN 56.64 59 P 22 31.20 -0.1
HFS 57.15 350 eP 22 34.30 0.3
0.4s 0.80nm 4.1mb
Z 18s 0.12um 4.0msz
LR 49 44.00
SUF 58.24 357 iP 22 41.20 -0.3
0.6s 4.70nm 4.7mb
NB2 58.46 349 P 22 42.30 -0.9
0.9s 5.70nm 4.6mb
KEV 65.24 358 eP 23 29.00 0.6
S.D. = 0.5 on 10 of 12 obs.

* MAY 25, 1990 06h 31m 52.10 ± 3.09s
2.936 N ± 11.7km 127.288 E ± 23.6km
DEPTH = 64.0 ± 29.4 km
4.7mb (3 obs.)
MOLUCCA PASSAGE (266)

MNI 2.86 239 ePc 32 36.30 0.0
eS 33 09.50
WB5 23.72 163 iPc 36 59.00 -0.3
WRA 23.77 163 Pc 37 00.20 0.4
0.4s 11.40nm 4.7mb
MBL 25.04 197 eP 37 12.10 0.2
OIS 26.29 153 iPd 37 23.40 -0.2
0.3s 4.00nm 4.4mb
WARB 28.95 181 iPc 37 47.80 0.1
MUN 36.28 196 eP 38 51.00 -0.3
BJI 38.28 346 eP 39 08.00 0.0
1.0s 15.00nm 4.9mb
YKA 99.98 25 eP 45 41.70 10.4X
1.0s 0.50nm
S.D. = 0.3 on 8 of 9 obs.

MAY 25, 1990 07h 17m 07.46 ± 0.65s
40.180 N ± 5.3km 29.363 E ± 5.4km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
YLV 0.39 1 iPg 17 15.60 0.2
GBZT 0.61 6 ePg 17 20.00 0.2
iSg 17 35.00
HRT 0.68 20 iPg 17 21.20 0.2
GPA 0.73 81 iPn 17 21.30 -0.6
KCT 0.77 275 iPn 17 21.60 -1.0
ISK 0.91 345 ePn 17 24.60 -0.3
eSg 17 39.60
EDC 1.16 279 iPn 17 29.60 0.5
CTT 1.20 324 ePn 17 30.00 0.2
KHL 1.86 176 ePn 17 40.20 0.5
S.D. = 0.6 on 9 of 9 obs.

* MAY 25, 1990 07h 51m 32.81 ± 1.85s
32.199 S ± 9.5km 71.526 W ± 15.3km
DEPTH = 7.3 ± 3.8 km
NEAR COAST OF CENTRAL CHILE (135)
ROCH 0.89 151 iP 51 50.50 0.3
i 52 04.80
JACH 0.92 122 iPd 51 51.00 0.2
iS 52 04.40
PEL 1.18 143 iPc 51 54.70 -0.4
iS 52 11.10
LCCH 1.27 182 iPd 51 57.50 0.8
iS 52 15.80
FCH 1.53 138 eP 52 00.50 -0.4
i 52 23.00
TACH 1.53 161 eP 52 00.50 -0.1
i 52 24.00
PCH 1.65 149 iP 52 02.50 0.1
i 52 12.50
i 52 25.60
LNV 1.75 177 iPc 52 03.00 -0.8
iS 52 27.50
RTBS 1.84 74 ePd 52 04.00 -1.0
S 52 27.60
RTCB 2.43 74 eP 52 14.50 0.9
RTCV 2.56 83 eP 52 15.80 0.4
RTLL 2.74 72 e(P) 52 18.00 -0.1
S.D. = 0.7 on 12 of 12 obs.

* MAY 25, 1990 08h 17m 57.70 ± 0.98s
31.548 S ± 11.2km 68.727 W ± 12.4km
DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)
RTCB 0.09 315 iPd 18 05.10 1.5
RTLL 0.31 45 iPc 18 04.70 -0.9
RTCV 0.35 153 iPc 18 07.00 0.8
RTBS 0.63 259 ePc 18 09.50 -0.6
(S) 18 21.80
MDZ 1.34 184 eP 18 19.50 -0.8
iS 18 41.10
S.D. = 1.6 on 5 of 5 obs.

? MAY 25, 1990 08h 38m 01.52 ± 2.19s
32.321 S ± 15.3km 69.617 W ± 32.1km
DEPTH = 120.0km (geophysicist)
MENDOZA PROVINCE, ARGENTINA (139)
RTBS 0.67 12 ePd 38 20.00 -0.1
S 38 35.00
MDZ 0.86 131 iP 38 22.60 0.0
iS 38 39.70
RTCV 1.02 64 iPc 38 24.00 -0.1
RTCB 1.08 40 iPd 38 25.00 0.2
eS 38 43.50
RTLL 1.39 45 iPc 38 28.10 0.0
eS 38 49.70
S.D. = 0.2 on 5 of 5 obs.

MAY 25, 1990 10h 00m 13.14 ± 0.41s
6.469 S ± 3.1km 129.043 E ± 5.5km
DEPTH = 289.6 ± 4.6 km
4.8mb (21 obs.)
BANDA SEA (280)

AAI 2.89 343 iPd 01 09.50 2.0
iS 01 55.00
MTN 6.66 162 iPc 01 50.40 -0.5
MNI 8.91 332 iPc 02 20.30 1.6
1.0s 554.50nm 5.5mb
KNA 9.23 182 eP 02 21.90 -0.7
eS 04 02.00
WB5 14.30 159 iPd 03 23.20 -1.8
eS 05 55.50
iScP 11 25.80
WRA 14.35 159 Pd 03 23.60 -2.0
0.6s 143.00nm 5.5mb
MBL 17.11 211 eP 03 55.60 -0.6
0.3s 13.00nm 4.8mb
eS 07 11.00
OIS 17.35 145 iPd 03 57.90 -0.8
e 07 03.60
eS 07 33.80
KKM 17.84 314 ePc 04 03.70 -0.3
PMG 18.17 100 eP 04 07.00 -0.2
WARB 19.74 186 iPd 04 23.90 1.0
0.3s 16.00nm 4.9mb
NANU 20.64 218 iPd 04 32.50 0.8
eS 05 00.50
CTA 21.50 131 iPd 04 41.80 1.6
1.1s 150.63nm 5.3mb
MEKA 22.40 205 eP 04 48.90 0.2
0.4s 10.00nm 4.6mb
eS 09 13.00
FORR 24.27 182 iPd 05 05.30 -0.8
QLP 24.69 146 eP 05 10.00 0.0
MRWA 25.76 207 iPd 05 19.20 -0.6
0.4s 11.00nm 4.7mb
e 05 58.00
BAL 26.66 204 eP 05 27.00 -0.9
KLB 27.13 201 iPd 05 31.50 -0.6
0.3s 13.00nm 4.9mb
RMO 27.37 139 eP 05 34.00 -0.3
MUN 28.07 204 eP 05 40.00 -0.4
e 06 33.00
ADE 29.73 164 iPd 05 55.00 -0.1
1.0s 72.00nm 5.2mb
BRS 30.68 135 iPc 06 03.20 -0.2
i 17 14.00
COO 32.18 141 iPc 06 17.40 1.0
BFD 32.95 160 iPd 06 23.30 0.4
0.6s 39.00nm 5.1mb
BWA 33.08 150 iPd 06 26.10 2.0
CAN 34.08 150 iPd 06 33.50 0.9
CNB 34.26 150 eP 06 35.00 0.9

TOO 34.39 157 iPd 06 36.70 1.6
0.6s 36.00nm 5.1mb
e 08 00.50
BDT 37.90 309 eP 07 06.20 1.5
SSE 38.10 349 Pd 07 06.50 0.4
0.9s 40.00nm 4.9mb
CHTO 38.88 311 iP 07 13.10 0.4
0.8s 24.71nm 4.6mb
WHN 39.40 340 ePc 07 17.70 0.8
1.0s 30.00nm 4.6mb
NJ2 39.52 346 iPc 07 18.40 0.6
IIDJ 42.55 11 P 07 42.10 -0.5
CHJJ 43.31 12 P 07 47.20 -1.4
MTMJ 43.61 10 P 07 50.50 -0.6
MAT 43.64 11 iPc 07 50.10 -1.1
0.9s 57.14nm 4.9mb
KAKJ 43.72 13 P 07 50.30 -1.5
CD2 44.35 328 P 07 56.50 -0.5
NIJ 44.47 11 P 07 56.80 -0.9
XAN 44.56 336 P 07 57.50 -1.1
YAMJ 45.58 12 P 08 06.90 0.4
TIY 46.60 342 eP 08 14.00 -0.6
OFUJ 46.81 13 eP 08 16.10 0.1
SNY 48.32 355 Pd 08 27.00 -0.6
LZH 48.49 333 Pc 08 29.00 -0.3
2.0s 57.00nm 4.6mb
CN2 50.14 357 Pc 08 40.70 -0.7
MDJ 50.85 1 Pc 08 47.00 0.2
MSZ 50.92 145 P 08 47.80 0.5
GTA 53.05 332 iPc 09 03.20 -0.1
GUN 53.89 311 P 09 09.00 -0.8
PKI 54.06 311 P 09 10.00 -1.1
0.6s 18.00nm 4.7mb
DMN 54.31 311 P 09 12.10 -0.6
0.6s 20.00nm 4.7mb
GKN 54.87 311 P 09 16.00 -0.7
MAIO 77.61 309 eP 11 40.00 0.6
SDN 84.38 33 eP 12 14.20 0.2
TTA 88.94 26 eP 12 36.60 0.6
IMA 90.74 23 eP 12 44.50 0.2
PMR 91.76 28 eP 12 48.50 -0.4
1.1s 12.50nm 4.8mb
FBA 92.91 25 eP 12 53.00 -1.2
TOA 93.23 28 eP 12 56.40 0.7
INK 98.73 22 eP 13 20.00 -0.5
MBC 101.32 13 ePd 13 32.00 0.1
0.6s 1.00nm 4.5mb
YKA 107.69 26 ePd 14 00.50 0.0
0.6s 0.40nm 4.8mb
YKA 107.69 26 ePKP 18 06.10 -0.8
0.6s 0.50nm
YKA 107.69 26 ePKP 18 32.40 25.5X
0.6s 0.30nm
BSF 116.10 321 ePKP 18 23.70 0.1
LPL 116.94 318 ePKP 18 25.40 0.0
0.5s 2.55nm
LBF 118.19 321 ePKP 18 27.60 0.1
0.6s 2.70nm
SSF 118.46 321 ePKP 18 28.10 0.1
0.5s 1.80nm
BGF 119.08 320 ePKP 18 29.70 0.5
0.6s 6.30nm
TCF 119.59 320 ePKP 18 30.30 0.1
0.6s 1.80nm
LIC 134.36 272 PKP 19 00.40 1.1
TIC 134.38 273 PKP 19 00.80 1.4
ZOBO 151.73 143 PKP 19 31.00 1.4
e 20 54.00
S.D. = 0.9 on 75 of 76 obs.

* MAY 25, 1990 10h 27m 00.37 ± 1.10s
37.090 N ± 10.1km 29.399 E ± 8.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
ELL 0.53 130 iPn 27 11.10 -0.1
YER 0.89 273 iPn 27 17.50 0.0
BCK 1.02 68 iPn 27 19.40 -0.3
KHL 1.23 5 ePn 27 22.00 -1.4
ALT 2.04 16 ePn 27 37.00 1.8
S.D. = 1.6 on 5 of 5 obs.
* MAY 25, 1990 10h 40m 49.41 ± 0.57s
18.378 S ± 12.3km 168.075 E ± 16.1km
DEPTH = 10.0km (geophysicist)
3.4mb (1 obs.)
VANUATU ISLANDS (186)

PVC	0.67	20	iPd	41 02.20	-0.6
DZM	3.98	202	iPd	41 50.20	-1.7
BRS	16.70	235	eP	44 46.00	0.9
RMO	19.58	242	eP	45 21.30	0.6
CTA	20.67	262	iP	45 31.60	-0.6
BWA	23.71	224	iPd	46 02.30	-0.1
CAN	23.89	221	eP	46 05.30	1.1
WRA	31.87	262	P	47 16.00	-1.2
ZST	142.04	328	ePKP	00 23.00	-0.5
CDF	146.22	337	ePKP	00 28.00	-2.7X
LOR	148.41	339	ePKP	00 32.80	-1.3
LBF	148.62	339	ePKP	00 33.20	-1.3
SSF	148.71	339	ePKP	00 34.70	0.1
LPG	148.82	334	ePKP	00 35.00	-0.2
LPF	149.12	346	ePKP	00 35.70	0.5
BGF	149.37	340	ePKP	00 35.60	0.0
TCF	149.81	340	ePKP	00 37.50	1.2
LSF	150.06	341	ePKP	00 37.70	1.0
MFF	150.22	344	ePKP	00 37.00	0.1
RJF	150.91	340	ePKP	00 40.00	2.0
CAF	151.06	339	ePKP	00 42.60	4.3X
LFF	151.48	341	ePKP	00 41.90	3.1X
S.D.	= 1.1	on	19 of	22 obs.	
? MAY 25, 1990	10h 58m 58.74±1.56s				
50.399 N ±27.9km	18.813 E ±12.0km				
DEPTH = 10.0km	(geophysicist)				
POLAND	(548)				
ML 2.8 (KRA).					
KRA	0.80	115	iPg	59 13.70	-0.6
SPC	1.53	142	ePn	59 27.00	0.8
KSP	1.67	286	ePn	59 28.50	0.4
PRU	2.78	263	ePg	59 51.00	7.0X
KHC	3.62	252	Pn	59 55.50	-0.6
S.D.	= 1.2	on	4 of	5 obs.	
% MAY 25, 1990	11h 57m 30.02±0.91s				
40.655 N ±9.2km	15.804 E ±5.7km				
DEPTH = 10.0km	(geophysicist)				
SOUTHERN ITALY	(390)				
SGO	0.39	256	Pc	57 37.70	-0.3
MGR	0.55	200	Pc	57 40.50	-0.7
ORI	0.77	140	P	57 45.10	0.1
BSS	0.77	280	P	57 45.50	0.5
TDS	1.08	157	P	57 51.00	0.7
BRT	1.09	78	P	57 50.00	-0.4
S.D.	= 0.7	on	6 of	6 obs.	
? MAY 25, 1990	13h 12m 12.44±7.82s				
18.811 N ±58.4km	66.242 W ±11.9km				
DEPTH = 10.0km	(geophysicist)				
PUERTO RICO REGION	(90)				
LPR	0.61	145	P	12 25.40	0.6
SJC	0.70	173	iP	12 26.50	0.2
CPD	0.83	158	P	12 27.50	-1.0
PORP	0.84	207	P	12 29.00	0.3
MGP	1.13	225	P	12 33.40	-0.3
S.D.	= 0.9	on	5 of	5 obs.	
% MAY 25, 1990	13h 15m 43.65±0.94s				
16.118 N ±7.4km	61.272 W ±13.0km				
DEPTH = 33.0km	(normal)				
LEEWARD ISLANDS	(92)				
ML 2.2 (FDF).					
SFG	0.15	28	iPc	15 49.44	-0.4
MGG	0.20	192	eP	15 50.00	-0.3
SEG	0.36	322	eP	15 51.75	-0.5
PAG	0.40	257	eP	15 52.40	-0.5
BBL	0.62	199	eP	15 56.56	0.5
BPA	1.08	329	eP	16 03.40	0.9
MGH	1.09	304	eP	15 57.70	-4.9X
S.D.	= 0.7	on	6 of	7 obs.	
? MAY 25, 1990	13h 44m 51.36±3.27s				
31.565 S ±11.8km	68.141 W ±29.7km				
DEPTH = 14.6 ±11.3 km					
SAN JUAN PROVINCE, ARGENTINA	(137)				
CFA	0.09	243	iPd	44 54.80	0.1
RTL	0.37	310	iPc	44 58.90	-0.2
RTC	0.45	229	eP	44 59.90	-0.6
ZON	0.46	272	iPd	45 00.50	-0.2
RTBS	1.12	265	ePd	45 11.00	0.6

N 10s 0.60um
E 10s 0.60um
BRS 40.01 143 iPc 38 30.00 2.1
GBA 49.57 284 Pc 39 43.20 -1.2
0.7s 8.70nm 4.9mb
INK 89.98 21 eP 43 52.00 0.9
SOD 90.29 338 eP 43 53.00 0.5
SUF 91.38 333 eP 43 58.00 0.4
NUR 92.54 331 eP 44 03.00 0.1
NB2 98.62 334 P 44 31.80 1.0
0.9s 1.90nm 4.6mb
S.D. = 1.2 on 24 of 25 obs.

& MAY 25, 1990 16h 59m 56.44s
58.188 N 142.651 W
DEPTH = 10.0km
GULF OF ALASKA (15)
<AGS-P>

CYK 1.90 3 eP 00 24.73 -4.5
eS 00 46.93
WAX 2.27 357 eP 00 29.44 -5.2
eS 00 55.08
PCA 2.28 32 eP 00 28.93 -5.8
HMT 2.31 340 eP 00 29.93 -5.2
RAGM 2.44 336 eP 00 31.69 -5.3
SGAM 2.66 332 eP 00 35.09 -5.1
CVA 2.85 327 eP 00 36.96 -5.8
BALM 2.86 3 iP 00 37.60 -5.5
eS 01 10.00
HIN 2.97 320 eP 00 38.98 -5.5
eS 01 10.64
9 obs. associated

? MAY 25, 1990 17h 08m 04.52±2.31s
31.334 S ±45.2km 69.460 W ±24.2km
DEPTH = 120.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTBS 0.33 179 iPd 08 22.00 0.0
S 08 34.00
RTCB 0.58 105 iPd 08 23.70 0.3
S 08 37.10
ZON 0.70 108 eP 08 24.00 -0.2
eS 08 38.00
RTLL 0.85 90 iPc 08 25.20 -0.3
eS 08 40.20
RTCV 0.95 124 ePd 08 26.20 -0.2
S 08 41.80
CFA 1.08 105 e(P) 08 28.00 0.3
S 08 44.00
S.D. = 0.3 on 6 of 6 obs.

* MAY 25, 1990 17h 38m 35.51±2.27s
3.828 N ±11.1km 126.525 E ±17.3km
DEPTH = 73.9 ±19.1 km
4.8mb (3 obs.)
TALAUD ISLANDS (263)

MNI 2.91 215 ePc 39 20.70 0.3
eS 39 58.00
MTN 17.19 165 eP 42 31.70 -0.6
WB5 24.79 162 eP 43 51.90 -0.2
WRA 24.84 162 Pd 43 52.40 -0.2
0.8s 19.30nm 4.6mb
MEKA 31.23 194 eP 44 50.20 -0.1
MRWA 34.38 196 eP 45 18.00 0.4
MUN 36.93 195 eP 45 40.00 0.8
BJI 37.24 347 eP 45 42.00 0.4
0.8s 12.00nm 4.9mb
GBA 49.39 285 Pd 47 19.20 -0.9
1.0s 10.10nm 4.8mb
QUE 61.92 302 eP 48 49.50 -0.8
SUF 91.37 333 eP 51 35.00 0.8
NUR 92.52 331 eP 51 30.00 -9.5X
S.D. = 0.7 on 11 of 12 obs.

MAY 25, 1990 18h 28m 53.36±0.29s
15.715 N ±4.6km 147.382 E ±5.6km
DEPTH = 34.6km (13 depth phases)
5.0mb (18 obs.) 4.2MsZ (1 obs.)
MARIANA ISLANDS REGION (215)

PJG 3.22 229 eP 29 43.30 0.4
eS 30 23.50
GUA 3.22 228 eP 29 42.90 0.0
GUMO 3.22 229 eP 29 43.80 0.9

KAKJ 21.40 344 P 33 39.90 -0.3
IIDJ 21.43 338 P 33 40.70 0.0
CHJJ 21.59 341 P 33 42.30 0.1
MAT 22.29 340 eP 33 47.00 -2.2
0.7s 32.19nm 4.9mb
MTMJ 22.47 339 P 33 50.20 -0.8
NIIJ 22.69 342 P 33 53.30 0.2
PMG 24.96 181 eP 34 15.00 -0.3
HOOJ 26.81 353 eP 34 32.70 0.5
MRRJ 27.17 350 eP 34 36.40 1.0
KUSJ 27.39 356 eP 34 37.10 -0.4
SSE 28.40 307 P 34 45.50 -1.3
ASAJ 28.60 353 eP 34 49.40 1.0
SNY 33.13 327 eP 35 25.30 -3.2X
WHN 33.62 302 eP 35 32.50 -0.4
CN2 33.64 331 Pd 35 32.20 -0.7
BJI 36.40 318 eP 35 56.00 -0.5
1.4s 35.00nm 5.1mb

QIS 36.85 192 eP 35 59.40 -1.0
WB5 37.61 200 eP 36 05.50 -1.3
WRA 37.68 200 Pc 36 06.80 -0.6
0.7s 4.90nm 4.5mb
TIY 37.81 312 eP 36 09.70 1.2
Z 15s 0.70um 4.6MsZ
GYA 39.32 293 P 36 23.00 1.7
BTO 40.77 315 eP 36 33.00 0.0
CD2 42.54 299 P 36 47.80 0.2
KMI 42.71 290 Pc 36 50.00 0.7
BRS 43.17 173 eP 36 52.00 -0.6
i 37 04.00 43km
LZH 43.67 306 Pd 36 57.50 0.6
3.0s 290.00nm 5.5mb
Z 20s 0.30um 4.2MsZ

CHTO 46.25 281 iP 37 18.20 0.7
0.6s 11.92nm 5.0mb
WARB 46.28 206 iPc 37 18.00 0.4
0.5s 10.00nm 5.0mb
BDT 46.32 279 eP 37 20.10 2.0
PSI 49.42 260 ePc 37 43.20 0.9
ADE 51.07 189 eP 38 04.70 10.1X
LSA 53.24 295 P 38 12.10 0.5
WMO 57.48 312 iPd 38 41.60 0.0
Z 16s 0.35um 4.6MsZ

GUN 57.86 293 P 38 44.20 -0.6
0.6s 23.00nm 5.4mb
PKI 58.29 293 P 38 46.80 -1.0
0.6s 18.00nm 5.3mb
DMN 58.55 293 P 38 48.80 -0.8
0.6s 26.00nm 5.5mb
GKN 58.96 293 P 38 51.60 -0.6
0.4s 20.00nm 5.6mb
TTA 61.19 26 P 39 05.20 -1.7
1.0s 7.50nm 4.8mb
MSZ 62.94 164 P 39 27.80 9.2X
IMA 63.36 23 P 39 20.20 -1.2
1.0s 5.00nm 4.6mb

PMR 63.77 28 P 39 32.10 40km
pP 39 23.50 -0.4
FBA 65.28 25 P 39 33.60 33km
pP 39 33.00 -0.7
0.8s 7.24nm 4.8mb
HYB 65.66 282 ePd 39 37.00 0.1
e 39 49.50 43km
KSH 65.91 307 eP 39 39.90 1.5
GBA 67.42 278 Pd 39 46.90 -1.2
0.8s 6.10nm 4.7mb
POO 69.87 284 eP 40 02.00 -1.3
INK 71.48 23 eP 40 11.00 -1.2
pP 40 23.00 40km
QUE 74.14 297 eP 40 29.00 0.2
MBC 75.63 14 eP 40 36.00 -0.2
0.6s 5.00nm 4.7mb

GMW 78.47 44 P 40 53.70 1.2
pP 41 03.30 31km
MAIO 79.20 305 eP 40 58.00 1.1
ORV 81.01 51 eP 41 07.50 1.1
e 41 17.20 31km
ARN 81.49 54 P 41 10.00 1.1
NEW 82.03 42 P 41 13.00 1.5
pP 41 22.30 29km
CMB 82.21 53 eP 41 14.70 2.0
e 41 24.00 29km
FRI 82.99 54 eP 41 17.30 0.7
e 41 27.60 33km

KVN 83.70 51 P 41 20.00 -0.5
pP 41 31.40 37km
TNP 84.62 52 P 41 25.80 0.6
1.0s 4.42nm 4.6mb
pP 41 36.00 32km
KEV 85.25 342 iP 41 28.60 1.2
SOD 86.70 341 iP 41 34.40 -0.2
DAU 88.34 48 P 41 45.00 1.5
pP 41 54.40 29km
SUF 89.50 337 eP 41 47.00 -1.1
NUR 91.36 335 eP 41 48.00 -8.8X
0.6s 7.80nm 5.3mb
NB2 95.91 340 P 42 16.30 -1.5
0.9s 3.60nm 4.8mb
AVE 125.64 334 iPd 44 34.00 3.1X
KIC 144.74 306 PKPd 48 27.94 -1.3
0.6s 14.50nm
LIC 145.05 307 PKP 48 28.94 -0.8
0.6s 29.00nm
SIV 152.63 95 PKP 48 48.00 6.5X
S.D. = 1.0 on 65 of 71 obs.

% MAY 25, 1990 18h 35m 28.44±1.48s
23.000 N ±11.2km 120.750 E ±10.9km
DEPTH = 10.0km (geophysicist)
TAIWAN (244)

TWG 0.35 121 iPd 35 35.50 -0.1
eS 35 40.40
TWK 0.36 318 iPd 35 35.80 0.0
eS 35 40.70
TWQ 1.27 4 iPd 35 51.90 -0.2
TWD 1.33 36 eP 35 52.40 -0.5
TWC 1.89 32 ePd 36 01.80 0.8
S.D. = 0.7 on 5 of 5 obs.

MAY 25, 1990 18h 37m 24.64±0.38s
0.536 S ±6.5km 19.757 W ±6.5km
DEPTH = 10.0km (geophysicist)
4.6mb (17 obs.)
CENTRAL MID-ATLANTIC RIDGE (406)

MBO 15.09 10 eP 40 59.30 -0.3
eS 43 29.30
LIC 16.16 65 P 41 13.68 0.1
KIC 16.48 65 P 41 17.76 0.1
ITR 20.31 246 eP 42 02.60 -1.1
e 42 23.20
WEGH 20.34 72 eP 42 05.00 1.0
KUK 20.47 71 eP 42 03.50 -1.9
LEGH 20.49 72 eP 42 09.00 3.4X
TEGH 20.66 72 eP 42 06.00 -1.3
SHGH 20.70 72 eP 42 07.00 -0.8
BCAO 38.58 82 iPc 44 52.60 2.8
0.5s 5.00nm 4.5mb
ATEJ 40.02 20 iPc 45 02.50 0.8
ALOJ 40.17 20 iPc 45 03.00 0.1
APHE 40.17 20 eP 45 03.20 0.3
AAPN 40.34 19 eP 45 04.60 0.3
ASMO 40.51 20 eP 45 05.50 -0.2
TOL 42.71 18 eP 45 24.50 0.9
SIV 43.54 247 P 45 30.50 -0.1
EPF 46.98 20 eP 45 58.50 0.7
0.8s 6.70nm 4.8mb
LPO 48.72 20 eP 46 11.70 0.4
0.7s 4.40nm 4.6mb
LFF 48.80 19 eP 46 12.30 0.4
0.7s 6.60nm 4.8mb
CAF 49.24 20 eP 46 15.30 0.0
0.8s 5.35nm 4.6mb
ZOBO 50.16 249 P 46 22.50 -1.0
e 48 32.00
LPB 50.20 249 eP 46 28.00 4.4X
e 48 41.00
SBF 50.44 25 eP 46 24.50 0.0
BUL 51.15 116 iPd 46 19.30 -11.1X
AVF 51.30 20 eP 46 31.50 0.5
GRR 51.41 16 eP 46 32.50 0.7
LPL 51.49 24 eP 46 33.20 0.5
0.7s 4.40nm 4.5mb
SSF 51.59 20 eP 46 33.30 0.1
0.7s 4.40nm 4.5mb
LBF 51.69 21 eP 46 34.00 0.0
0.7s 3.85nm 4.4mb
LOR 51.89 20 eP 46 35.40 -0.1
0.7s 4.40nm 4.5mb
PRY 52.38 124 eP 46 39.50 -0.2

25d 18h

SLR 52.62 122 iPd 46 40.50 -1.0
1.0s 25.00nm 5.1mb
SEK 53.04 126 iPd 46 44.00 -0.6
HAU 53.41 22 eP 46 46.50 -0.3
0.7s 8.80nm 4.8mb
BSF 53.43 22 eP 46 46.40 -0.6
0.7s 2.20nm 4.2mb
CDF 54.09 22 eP 46 51.30 -0.6
0.7s 3.30nm 4.5mb
DOU 54.58 19 P 46 54.90 -0.4
KHC 57.20 25 P 47 13.50 -0.8
ZST 58.10 28 iP 47 19.60 -1.0
PRU 58.26 25 eP 47 21.00 -0.6
HFS 65.83 18 eP 48 10.40 -1.7
0.6s 2.30nm 4.5mb
Z 17s 0.08um 4.0mszX

NR2 65.85 16 P 48 11.10 -1.2
0.9s 3.40nm 4.5mb
SUF 71.80 20 eP 48 49.00 -0.1
0.8s 6.00nm 4.7mb
KEV 76.72 15 eP 49 18.00 0.6
MAIO 81.65 53 eP 49 45.00 0.1
SPA 89.47 180 iPd 50 24.90 1.8
1.0s 15.00nm 5.2mb
MBC 92.81 346 eP 50 40.00 1.8
WRA 147.47 130 PKPd 57 10.90 2.1
0.7s 3.00nm
WB5 147.52 130 ePKP 57 13.90 5.0X
GUMO 160.00 49 ePKP 57 18.70 -7.4X
S.D. = 1.0 on 46 of 51 obs.

? MAY 25, 1990 18h 48m 38.69±1.24s
23.039 N ±10.2km 120.786 E ±10.4km
DEPTH = 10.0km (geophysicist)
TAIWAN (244)
TWG 0.34 130 iPd 48 45.80 0.1
eS 48 50.50
TWK 0.36 310 iPd 48 45.90 -0.1
eS 48 51.70
TWO 1.23 2 ePc 49 02.00 0.4
TWD 1.27 35 ePc 49 02.00 -0.3
S.D. = 0.5 on 4 of 4 obs.

* MAY 25, 1990 19h 45m 04.14±0.62s
36.608 N ±10.0km 69.161 E ±9.9km
DEPTH = 33.0km (normol)
4.4mb (4 obs.)
HINDU KUSH REGION (718)
QUE 6.66 197 eP 46 42.00 -0.5
e(S) 48 27.60
MAIO 7.80 271 ePn 46 53.00 -5.2X
eSn 48 12.00
NDI 10.41 137 eP 47 38.00 3.7X
0.6s 14.67nm 5.4mb
GKN 15.63 119 P 48 43.20 -0.6
DMN 16.20 119 P 48 51.10 0.0
PKI 16.44 119 P 48 53.80 -0.4
GUN 16.57 117 P 48 56.00 0.1
HY8 20.84 154 eP 49 47.00 1.4
eS 53 34.00
GBA 24.08 160 P 50 21.00 3.5X
0.6s 1.90nm 3.8mb
NUR 36.88 325 eP 52 21.00 10.0X
SOD 39.02 335 eP 52 30.00 1.1
HFS 42.07 322 eP 52 53.40 -0.7
0.7s 5.00nm 4.4mb
Z 17s 0.05um 3.5mszX
LR 10 05.00

NR2 43.40 323 P 53 04.50 -0.5
0.6s 4.90nm 4.4mb
S.D. = 0.9 on 9 of 13 obs.
? MAY 25, 1990 19h 57m 06.48±6.83s
31.351 S ±33.5km 68.651 W ±16.7km
DEPTH = 75.4 ±55.6 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL 0.16 82 iPd 57 18.00 0.0
RTCB 0.19 223 iPd 57 18.40 0.2
eS 57 30.10
ZON 0.20 187 eP 57 18.00 -0.2
eS 57 30.00
CFA 0.43 126 iPd 57 19.50 0.0
RTCV 0.52 169 iPd 57 20.20 0.0

(S) 57 31.70
RTBS 0.75 245 eP 57 22.50 0.0
S 57 36.90
S.D. = 0.2 on 6 of 6 obs.

* MAY 25, 1990 21h 04m 47.52±0.69s
15.664 N ±6.9km 147.625 E ±12.0km
DEPTH = 33.0km (normol)
4.8mb (10 obs.)

MARIANA ISLANDS REGION (215)

GUA 3.37 232 eP 05 38.80 -0.4
eS 06 17.20
GUMO 3.38 233 eP 05 40.10 0.9
PJG 3.38 233 eP 05 39.90 0.7
eS 06 16.40
KAKJ 21.51 343 P 09 36.00 0.3
IIDJ 21.56 338 P 09 35.90 -0.4
CHJJ 21.71 341 P 09 38.20 0.4
MAT 22.42 340 (P) 09 44.00 -0.8
0.8s 14.18nm 4.5mb
MTMJ 22.60 339 P 09 45.30 -1.3
NIJ 22.81 342 P 09 48.50 -0.1
CN2 33.80 331 eP 11 26.80 -1.8
WB5 37.65 201 eP 11 58.70 -2.8
WRA 37.72 201 Pd 12 01.70 -0.3
0.9s 6.80nm 4.5mb
TIY 38.02 312 eP 12 05.50 1.0
GYA 39.55 293 iPd 12 19.00 1.4
BTO 40.97 315 eP 12 29.20 0.2
CD2 42.77 299 P 12 44.00 0.2
LZH 43.89 306 Pd 12 51.50 -1.5
2.0s 46.00nm 4.9mb
CHTO 46.49 281 P 13 14.10 0.3
0.8s 8.24nm 4.7mb

GTA 47.87 309 iPd 13 25.00 0.5
LSA 53.47 295 P 14 08.40 0.8
WMO 57.69 312 P 14 37.50 0.1
sP 14 49.30

GUN 58.10 293 P 14 40.80 0.0
0.6s 10.00nm 5.1mb
PKI 58.52 293 P 14 43.20 -0.6
0.6s 5.00nm 4.8mb
DMN 58.79 293 P 14 45.00 -0.6
0.6s 9.00nm 5.1mb
GKN 59.19 293 P 14 48.00 -0.2
0.6s 12.00nm 5.2mb
MBC 75.62 14 ePc 16 32.20 1.7
0.8s 3.00nm 4.3mb
MAIO 79.42 305 eP 16 54.00 1.6
NB2 96.04 340 P 18 12.10 -0.7
0.7s 1.60nm 4.6mb
KIC 144.96 307 PKP 24 23.60 -0.4
0.8s 18.00nm
TIC 144.99 307 PKP 24 23.80 -0.2
LIC 145.26 307 PKP 24 24.50 0.0
0.8s 23.00nm
ZOBO 145.65 96 PKP 24 28.00 2.2
S.D. = 1.1 on 32 of 32 obs.

? MAY 25, 1990 21h 05m 44.19±0.81s
27.374 N ±10.5km 142.890 E ±29.9km
DEPTH = 33.0km (normol)
3.9mb (2 obs.)

BONIN ISLANDS REGION (212)

GUMO 13.84 172 eP 09 00.20 -0.1
PJG 13.84 172 eP 09 00.20 -0.1
GUA 13.89 172 eP 09 00.90 -0.2
WB5 47.69 191 eP 14 20.00 0.3
WRA 47.76 191 P 14 21.00 0.8
0.4s 0.50nm 3.9mb
INK 62.52 25 eP 16 06.00 -0.5
pP 16 18.00 41kmX
QUE 65.43 293 eP 16 25.40 -0.9
SOD 74.37 339 iP 17 30.30 10.3X
SUF 77.20 335 eP 17 42.00 5.9X
HFS 83.42 337 ePKP 18 11.40 2.1
0.6s 0.60nm 3.9mb

BCAO 117.73 292 ePKPd 24 28.00 -1.5
1.0s 15.00nm
id 25 18.50
S.D. = 1.2 on 9 of 11 obs.

& MAY 25, 1990 21h 23m 08.84s
61.243 N 151.694 W
DEPTH = 78.0km

SOUTHERN ALASKA (2)
<AGS-P>. Felt (III) at
Anchorage, Skwentna and Susitna
Landing.

SPU 0.18 251 iP 23 20.14 1.2
CRP 0.22 276 iP 23 20.52 -0.4
NCG 0.28 306 eP 23 20.63 -0.4
SUA 0.51 64 iP 23 22.55 -0.3
eS 23 33.80
NKA 0.55 156 eP 23 24.43 1.5
SKT 0.74 6 iP 23 24.07 -1.0
eS 23 36.38
RDT 0.76 208 iP 23 24.52 -0.7
eS 23 38.31
PWA 0.96 64 iPd 23 27.30 -0.3
RED 0.98 213 iP 23 27.04 -0.9
SLKM 1.03 135 eP 23 27.60 -0.9
PMS 1.03 89 iPd 23 28.10 -0.4
NNL 1.22 171 iP 23 31.14 0.3
PLRM 1.28 73 iP 23 30.20 -1.4
eS 23 47.45
PMR 1.28 73 iPd 23 30.10 -1.5
iS 23 47.70
CUT 1.35 29 eP 23 31.63 -0.8
eS 23 49.33
GHO 1.43 67 iP 23 32.17 -1.5
eS 23 51.03
BRLK 1.54 165 eP 23 33.94 -1.1
SEW 1.59 135 eP 23 33.72 -1.9
SML 1.71 69 iP 23 35.39 -1.9
CNPM 1.74 172 iP 23 36.38 -1.3
XLV 1.79 180 eP 23 36.83 -1.6
SVW 1.91 268 iP 23 38.30 -1.7
PDB 1.91 221 eP 23 38.49 -1.5
eS 24 02.43
HUR 1.99 28 eP 23 39.84 -1.3
eS 24 05.05
AUL 2.06 206 eP 23 41.18 -0.9
AUE 2.07 205 eP 23 41.05 -1.1
GLI 2.27 97 iP 23 41.64 -3.3
eS 24 08.92
KTH 2.35 8 eP 23 44.18 -1.9
MTU 2.36 121 eP 23 43.75 -2.4
NCA 2.45 70 iP 23 45.34 -2.1
MCNL 2.45 214 eP 23 46.00 -1.4
eS 24 15.16
VZW 2.50 92 iP 23 45.25 -2.9
CDD 2.52 204 eP 23 46.90 -1.5
RND 2.54 30 eP 23 47.00 -1.8
VLZ 2.60 90 iP 23 46.60 -2.8
TTA 2.64 312 iPd 23 48.00 -2.2
TOA 2.77 69 iPd 23 50.30 -1.6
KLU 2.79 82 iP 23 49.24 -3.0
eS 24 21.93
MCK 2.81 26 eP 23 50.68 -1.7
MID 3.23 122 eP 23 56.70 -1.4
PAX 3.40 57 eP 23 58.58 -2.1
RAGM 3.54 101 eP 24 00.88 -1.8
NEA 3.55 19 eP 23 59.31 -3.4
WRH 3.64 25 eP 24 00.79 -3.1
DDM 3.72 44 eP 24 04.70 -0.4
HDA 3.85 32 eP 24 04.01 -2.8
CCB 3.85 26 eP 24 03.42 -3.4
FBA 4.08 24 eP 24 07.30 -2.8
DOT 4.29 52 eP 24 10.43 -2.7
TGL 4.34 93 eP 24 09.66 -4.3
WAX 4.40 97 eP 24 10.36 -4.3
BALM 4.54 89 eP 24 12.58 -4.1
IMA 4.92 351 ePd 24 18.30 -3.7
FYU 6.05 25 eP 24 34.53 -3.0
HYT 6.91 87 P 24 46.20 -3.3
SDN 7.51 222 e(P) 24 56.50 -1.2
INK 10.46 40 P 25 36.00 -1.9
57 obs. associated

% MAY 25, 1990 21h 45m 39.27±0.86s
1.167 S ±5.5km 78.366 W ±18.4km
DEPTH = 10.0km (geophysicist)
ECUADOR (107)

TUNG 0.26 198 iP 45 44.90 0.0
S 45 47.50
VC1 0.53 356 iP+ 45 50.00 -0.1
S 45 56.70
GECU 0.86 12 eP 45 56.10 -0.2
iS 46 08.00

25d 21h

OTO 0.97 350 eP 45 57.90 -0.1
 OUR 1.00 351 Pd 45 58.60 0.1
 GGP 1.01 347 iP+ 45 58.80 0.0
 CAYA 1.30 17 eP 46 03.60 0.0
 COTA 1.49 1 eP 46 07.00 0.4
 S.D. = 0.2 on 8 of 8 obs.

* MAY 25, 1990 22h 09m 11.83±1.32s
 50.448 N ±17.4km 18.908 E ±7.7km
 DEPTH = 10.0km (geophysicist)

POLAND (548)
 ML 3.4 (KRA).

RAC 0.59 232 ePg 09 24.00 0.3
 KRA 0.77 120 iPg 09 26.50 -0.3
 SPC 1.53 145 ePn 09 39.80 0.4
 KSP 1.71 284 ePn 09 42.50 0.7
 ZST 2.54 208 eP 09 35.70 -18.1X
 PSZ 2.61 165 eP 10 02.80 7.9X
 SRO 2.67 189 eP 10 04.60 9.0X
 PRU 2.84 262 Pn 09 57.40 -0.7
 BRG 3.19 280 ePg 10 11.00 8.1X
 KHC 3.70 251 ePg 10 09.80 -0.4
 CLL 3.84 285 ePg 10 26.00 13.8X
 S.D. = 0.7 on 6 of 11 obs.

MAY 25, 1990 22h 22m 49.82±0.69s
 36.856 N ±7.5km 28.585 E ±7.4km
 DEPTH = 10.0km (geophysicist)
 4.2mb (2 obs.)

DODECANESE ISLANDS (369)

YER 0.37 319 iPn 22 56.50 -0.9
 CIN 0.84 332 ePg 23 06.00 -0.1
 ELL 1.07 95 iPn 23 10.20 0.2
 KSL 1.09 132 ePn 23 11.50 1.2
 SMG 1.63 302 ePn 23 20.20 1.5
 BCK 1.71 69 iPn 23 21.60 1.7
 IZM 1.86 326 iPn 23 22.20 0.1
 ALT 2.50 28 ePn 23 31.30 0.0
 EZN 3.46 330 ePn 23 45.00 0.3
 EDC 3.53 351 ePn 23 46.70 0.9
 PPCY 3.63 122 eP 23 48.50 1.2
 GPA 3.68 21 ePn 23 48.00 -0.1
 KGT 3.73 345 iPn 23 48.50 -0.1
 YLV 3.76 9 ePn 23 47.00 -2.1
 VAM 3.83 249 ePn 23 55.30 5.2X
 CSS 4.29 115 eP 23 57.50 0.8
 LFK 4.31 110 ePn 23 57.20 0.3
 BBTk 4.43 46 iPd 23 59.00 0.3
 VLI 4.54 270 ePn 24 06.00 5.9X
 RDO 4.90 332 ePn 24 08.00 2.8X
 VAY 6.46 315 eP 24 33.60 6.3X
 HRI 6.87 119 eP 24 31.00 -2.2
 DSI 7.71 131 eP 24 43.00 -1.8
 MBH 8.81 142 eP 25 18.00 17.9X
 GBA 49.25 105 Pc 31 39.10 -1.5
 MBC 65.34 352 eP 33 34.00 0.2
 S.D. = 1.2 on 21 of 26 obs.

? MAY 25, 1990 22h 25m 01.09±6.63s
 36.667 N ±41.3km 28.256 E ±39.0km
 DEPTH = 10.0km (geophysicist)

DODECANESE ISLANDS (369)

YER 0.47 3 iPg 25 10.50 -0.1

CIN 0.94 352 ePg 25 19.00 0.0
 ELL 1.33 86 ePn 25 25.70 0.0
 BCK 2.03 66 ePn 25 35.70 -0.1
 ALT 2.80 31 ePn 25 47.00 0.2
 S.D. = 0.2 on 5 of 5 obs.

* MAY 25, 1990 22h 29m 28.87±0.79s
 27.854 N ±8.3km 142.876 E ±14.3km
 DEPTH = 33.0km (normal)
 4.3mb (4 obs.)

BONIN ISLANDS REGION (212)

KAKJ 8.64 345 P 31 33.00 -1.5
 IIDJ 8.70 332 P 31 37.30 1.9
 CHJJ 8.81 339 P 31 36.20 -0.7
 MAT 9.52 337 iPd 31 46.20 -0.5
 NIJJ 9.91 342 P 31 50.30 -1.8
 KMI 35.92 275 eP 36 27.50 -1.0
 CHTO 41.15 267 eP 37 11.00 -0.9
 WB5 48.16 191 eP 38 06.90 -1.1
 WRA 48.23 191 Pd 38 07.50 -1.0
 GUN 49.97 284 P 38 23.60 1.2
 PKI 50.46 284 P 38 26.80 0.7
 DMN 50.71 284 P 38 29.20 1.3
 GKN 51.01 285 P 38 31.00 0.9
 MBC 65.00 15 eP 40 08.50 1.1
 LRM 79.90 43 eP 41 36.70 0.5
 FFC 80.78 32 eP 41 41.00 0.7
 ZOBO 149.13 75 PKP 49 18.00 5.6X
 S.D. = 1.2 on 16 of 17 obs.

* MAY 25, 1990 22h 35m 25.61±0.88s
 36.965 N ±13.4km 71.393 E ±10.4km
 DEPTH = 33.0km (normal)
 4.0mb (3 obs.)

AFGHANISTAN-USSR BORDER REGION (717)

QUE 7.71 210 eP 37 19.10 0.6
 MAIO 9.59 270 eP 37 43.00 -1.5
 NDI 9.60 148 eP 37 46.50 2.0
 GKN 14.30 125 P 38 55.20 7.4X
 DMN 14.87 125 P 38 55.20 -0.2
 PKI 15.09 124 P 38 56.90 -1.5
 GUN 15.19 122 P 38 58.70 -0.9
 HFS 42.90 322 eP 43 26.20 3.9X
 NB2 44.20 323 P 43 33.40 0.5
 MBC 66.86 3 eP 46 17.00 1.2
 S.D. = 1.5 on 8 of 10 obs.

? MAY 25, 1990 22h 56m 50.59±14.37s
 36.630 N ±52.6km 28.047 E ±107.7km
 DEPTH = 10.0km (geophysicist)

DODECANESE ISLANDS (369)

YER 0.54 21 iPg 57 01.50 0.0
 ELL 1.50 85 iPn 57 17.70 0.0
 IZM 1.87 341 ePn 57 32.20 9.2X
 BCK 2.20 67 ePn 57 27.70 0.0
 ALT 2.92 33 ePn 57 38.00 0.0
 S.D. = 0.0 on 4 of 5 obs.

MAY 25, 1990 23h 04m 00.77±0.47s
 40.587 N ±5.3km 28.754 E ±3.8km
 DEPTH = 10.0km (geophysicist)

TURKEY (366)

KCT 0.45 222 iPg 04 10.00 0.0
 YLV 0.47 92 iPg 04 09.50 -0.9
 ISK 0.53 26 iPg 04 11.00 -0.5
 GBZT 0.56 69 iPg 04 13.90 1.7

CTT 0.61 336 ePg 04 12.70 -0.4
 EDC 0.72 251 iPg 04 14.70 -0.3
 HRT 0.73 71 iPg 04 14.00 -1.2
 KGT 1.11 263 iPn 04 22.00 0.3
 GPA 1.22 104 ePn 04 24.00 0.4
 DMK 1.44 329 iPn 04 27.70 0.8
 ALT 1.85 145 iPn 04 33.10 0.2
 EZN 2.01 249 iPn 04 34.80 -0.3
 S.D. = 0.9 on 12 of 12 obs.

? MAY 25, 1990 23h 48m 23.08±3.52s
 36.872 N ±32.7km 28.508 E ±20.2km
 DEPTH = 10.0km (geophysicist)

DODECANESE ISLANDS (369)

YER 0.32 326 iPg 48 29.50 -0.2
 CIN 0.80 335 ePg 48 39.00 0.4
 ELL 1.13 96 iPn 48 43.70 -0.6
 BCK 1.76 70 iPn 48 55.20 1.3
 IZM 1.82 327 ePn 48 59.20 4.5X
 ALT 2.52 30 ePn 49 04.00 -0.8
 S.D. = 1.2 on 5 of 6 obs.

? MAY 26, 1990 00h 03m 29.66±3.11s
 7.603 S ±22.0km 128.456 E ±14.8km
 DEPTH = 174.9 ±37.7 km
 3.5mb (1 obs.)

BANDA SEA (280)

MTN 5.84 153 eP 04 55.50 0.2
 KNA 8.10 178 eP 05 25.00 -0.3
 WB5 13.48 155 eP 06 35.00 -0.2
 WRA 13.53 156 Pd 06 35.30 -0.5
 MBL 15.85 211 eP 07 05.00 0.4
 OIS 16.80 141 eP 07 16.90 0.6
 WARB 18.56 185 eP 07 40.00 4.2X
 GUN 54.21 312 P 12 40.00 0.0
 GKN 55.17 312 P 12 46.60 -0.1
 S.D. = 0.5 on 8 of 9 obs.

& MAY 26, 1990 00h 27m 07.84s
 37.278 N 113.351 W
 DEPTH = 0.9km

UTAH (478)
 <SLC-P>. CL 2.8 (SLC). Felt of Hurricane and La Verkin.

MSU 1.55 37 eP 27 36.50 -0.3
 1 obs. associated

MAY 26, 1990 00h 51m 42.10±1.15s
 27.624 N ±7.2km 139.713 E ±5.5km
 DEPTH = 491.5 ±12.9 km
 4.3mb (13 obs.)

BONIN ISLANDS REGION (212)

MAT 8.98 352 eP 53 50.00 0.1
 SSE 16.52 287 P 55 07.00 -1.0
 NJ2 18.62 289 Pd 55 29.00 0.5
 OZH 19.13 267 eP 55 34.00 0.6
 SNY 19.36 321 iPd 55 35.40 -0.2
 CN2 19.82 328 iPc 55 41.80 1.8
 WHN 22.34 284 eP 56 04.00 0.5
 BJI 23.07 309 eP 56 08.50 -1.5
 TIY 24.99 301 Pd 56 26.90 -0.6
 XAN 27.14 291 Pd 56 46.10 -0.3
 GYA 29.41 275 P 57 07.00 0.5
 CD2 31.45 285 iPc 57 24.00 0.2
 GTA 35.02 300 Pd 57 53.80 0.0
 CHC 38.34 266 ePd 58 22.00 0.8
 WMO 44.48 305 eP 59 10.20 0.0
 PSI 46.16 245 ePc 59 23.50 0.1
 GUN 47.30 284 Pd 59 33.00 0.6
 WB5 47.51 187 iPd 59 32.70 -0.7

26d 00h

WRA 47.57 187 Pc 59 33.30 -0.6
0.3s 1.70nm 4.0mb
PKI 47.78 283 Pd 59 36.00 0.0
DMN 48.04 283 Pd 59 38.10 0.2
GKN 48.35 284 Pd 59 40.30 0.2
SVW 54.02 33 eP 00 20.90 -0.1
IMA 55.61 27 eP 00 31.90 -0.3
0.8s 4.30nm 3.8mb
PMR 57.17 33 eP 00 41.20 -1.7
0.8s 8.60nm 4.1mb
FBA 57.93 29 eP 00 47.00 -1.0
GBA 59.39 270 Pd 00 57.70 -0.9
0.6s 6.80nm 4.3mb
MBC 65.95 15 eP 01 39.00 -1.0
MAIO 66.82 300 eP 01 47.00 0.9
KEV 71.75 340 eP 02 16.00 1.2
SOD 73.10 338 iP 02 22.20 -0.4
GMW 74.88 44 P 02 33.70 0.7
BMW 75.05 45 P 02 34.60 0.6
RMW 75.52 44 P 02 37.20 0.5
SUF 75.77 334 iP 02 37.30 -0.2
0.5s 9.40nm 4.6mb
PNT 76.04 42 eP 02 39.00 -0.4
NUR 77.59 333 eP 02 47.00 -0.5
NEW 77.99 42 eP 02 50.00 0.0
WDC 78.01 50 eP 02 50.50 0.3
ORV 79.18 51 eP 02 56.20 -0.2
CMB 80.65 52 eP 03 04.30 0.2
PRS 80.74 54 eP 03 05.00 0.4
FR1 81.61 53 eP 03 09.10 0.1
KVN 81.75 50 P 03 10.50 0.5
LRM 81.97 42 eP 03 10.80 -0.2
HFS 82.06 336 eP 03 09.50 -1.3
0.4s 1.90nm 4.0mb
NB2 82.29 337 P 03 10.80 -1.3
0.7s 4.60nm 4.1mb
FFC 82.44 31 eP 03 13.00 0.2
1.1s 10.00nm 4.3mb
TNP 82.82 51 P 03 15.90 0.5
1.0s 9.58nm 4.3mb
BW06 85.36 44 P 03 28.00 0.1
RSSD 87.86 40 P 03 40.80 1.0
ANMO 91.81 49 P 03 59.50 1.4
ALQ 91.81 49 eP 03 58.00 -0.1
1.0s 5.50nm 4.5mb
S.D. = 0.7 on 53 of 53 obs.

* MAY 26, 1990 01h 19m 46.38 ± 1.05s
36.906 N ± 13.2km 28.601 E ± 9.2km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)

YER 0.34 312 iPg 19 51.50 -2.0
iSg 19 58.50
ELL 1.06 98 ePn 20 05.70 -0.8
KSL 1.12 134 ePb 20 07.20 -0.1
SMG 1.62 300 ePn 20 16.20 1.2
BCK 1.68 70 iPn 20 16.80 0.8
IZM 1.83 325 ePn 20 19.20 1.1
ALT 2.45 29 ePn 20 27.00 -0.2
VAM 3.86 249 ePn 20 51.70 4.6X
S.D. = 1.4 on 7 of 8 obs.

MAY 26, 1990 02h 30m 54.93 ± 0.53s
16.754 N ± 4.9km 61.525 W ± 7.1km
DEPTH = 24.6 ± 3.8 km
LEEWARD ISLANDS (92)
ML 3.6 (FDF).

SEG 0.35 177 iPc 31 02.67 0.0
S 31 06.90
BPA 0.43 313 iPc 31 04.12 0.1
S 31 10.00
SFG 0.59 148 iPc 31 06.36 -0.2
S 31 14.50
MGH 0.66 267 iPd 31 07.32 -0.5
PAG 0.74 192 iPc 31 08.20 -0.9
S 31 17.50
MGG 0.85 166 ePc 31 10.46 -0.6
CPB 0.93 342 iP 31 11.77 -0.4
S 31 26.94
NEV 1.07 291 iPc 31 13.86 -0.5
S 31 28.10
BBL 1.22 178 ePc 31 15.73 -0.8
S 31 30.30
SKI 1.30 297 iP 31 17.34 -0.2
eS 31 35.98

DBCT 1.48 174 eP 31 20.35 0.0
eS 31 40.89
DPMT 1.49 175 eP 31 20.39 0.0
eS 31 40.79
FDF 2.04 170 eP 31 28.31 -0.1
S 31 58.30
CRM 2.07 163 eP 31 27.48 -1.3
BIM 2.27 169 eP 31 30.54 -1.0
S 31 56.60
MVM 2.27 164 eP 31 30.34 -1.3
SLW 2.78 168 eP 31 37.74 -1.1
SLB 2.95 171 eP 31 41.04 -0.2
eS 32 19.22
SVV 3.43 175 eP 31 47.96 -0.1
SVB 3.47 176 eP 31 48.52 -0.2
eS 32 30.97

S.D. = 0.5 on 20 of 20 obs.
MAY 26, 1990 02h 56m 29.26 ± 0.27s
63.057 N ± 6.7km 24.734 W ± 4.3km
DEPTH = 10.0km (geophysicist)
4.6mb (28 obs.) 3.9MsZ (2 obs.)
ICELAND REGION (637)

AKU 3.91 45 iP 57 28.80 -1.7
1.0s 328.00nm
NB2 16.83 81 P 00 27.00 0.8
1.2s 5.70nm 3.6mb
FRB 19.35 292 eP 00 56.00 -1.2
DOU 20.48 116 P 01 11.90 2.5
e 16 38.00
ENN 20.52 113 eP 01 09.00 -0.9
1.0s 28.00nm 4.6mb
e 01 15.00
MEM 20.68 113 P 01 09.80 -1.6
KEV 21.14 49 eP 01 18.00 2.0
SOD 21.42 56 eP 01 17.00 -1.9
MFF 21.51 129 eP 01 18.00 -1.1
0.7s 15.45nm 4.5mb
TNS 22.00 110 ePc 01 26.10 1.1
LSF 22.41 126 eP 01 28.40 -0.6
1.2s 31.25nm 4.7mb
LOR 22.44 121 eP 01 28.40 -0.9
1.2s 41.65nm 4.8mb
SSF 22.48 122 eP 01 28.60 -1.0
1.2s 25.30nm 4.6mb
TCF 22.63 125 eP 01 30.50 -0.7
1.2s 23.80nm 4.6mb
AVF 22.64 123 eP 01 30.20 -1.1
1.2s 31.25nm 4.7mb
BGF 22.64 124 eP 01 31.00 -0.3
1.0s 36.00nm 4.8mb
SUF 22.71 68 eP 01 33.00 1.2
LBF 22.72 122 eP 01 31.30 -0.8
1.2s 26.80nm 4.6mb
MAF 22.82 125 eP 01 33.00 -0.1
1.0s 16.00nm 4.5mb
HAU 22.84 117 eP 01 33.50 0.3
0.8s 18.80nm 4.7mb
CDF 22.90 115 eP 01 34.00 0.1
1.2s 20.85nm 4.5mb
SMF 22.95 122 eP 01 33.40 -0.9
1.2s 34.20nm 4.7mb
NUR 23.03 74 eP 01 35.00 0.1
MOX 23.06 106 eP 01 36.00 0.6
BSF 23.16 116 eP 01 36.40 -0.1
1.2s 26.80nm 4.7mb
CLL 23.20 103 iP 01 36.80 0.1
1.6s 24.00nm 4.5mb
RJF 23.21 128 eP 01 37.60 0.7
1.2s 26.80nm 4.7mb
LFF 23.25 129 eP 01 37.70 0.4
1.2s 23.80nm 4.6mb
GRF 23.59 108 eP 01 41.60 1.1
Z 21s 0.20um 3.6MsZ
LPO 23.63 129 eP 01 41.60 0.6
1.2s 20.85nm 4.6mb
CAF 23.74 127 eP 01 42.20 0.2
1.2s 11.90nm 4.3mb
BRG 23.93 103 eP 01 50.80 7.0X
PRU 24.83 103 P 01 52.00 -0.5
Z 17s 0.90um 4.3MsZ
N 16s 0.60um
E 17s 0.80um
KSP 25.00 100 iPc 01 54.00 -0.1

LPG 25.04 120 eP 01 56.40 1.5
1.0s 11.00nm 4.5mb
KHC 25.04 106 P 01 55.00 0.4
1.2s 10.50nm 4.4mb
Z 20s 0.80um 4.2MsZ
N 16s 0.50um
E 18s 0.50um
BHG 25.80 109 iPc 02 02.00 0.3
KRA 27.20 98 eP 02 17.90 3.4X
FFC 38.42 294 eP 03 52.00 -0.1
1.1s 13.00nm 4.6mb
SES 45.35 296 eP 04 49.00 0.1
FBA 45.64 330 P 04 51.10 0.2
0.8s 8.62nm 4.8mb
IMA 45.90 334 P 04 53.80 0.7
0.8s 3.02nm 4.3mb
LRM 49.53 293 eP 05 22.20 0.3
PNT 49.63 301 eP 05 23.00 0.7
PRNI 49.76 102 e(P) 05 23.00 -0.5
BW06 50.75 289 P 05 30.30 -0.9
0.8s 3.35nm 4.3mb
GOL 51.42 283 P 05 36.50 0.1
0.7s 3.64nm 4.4mb
ALQ 55.84 281 e(P) 06 09.00 0.0
0.7s 1.37nm 4.1mb
KVN 57.47 293 P 06 20.50 -0.1
TNP 57.91 291 P 06 23.50 -0.2
WMO 60.76 50 P 06 47.50 4.3X
Z 21s 2.56um 5.3MsZ
S 14 19.00
GLA 61.14 286 P 06 46.00 0.2
SIV 83.73 215 P 09 00.80 1.4
S.D. = 0.9 on 50 of 53 obs.

MAY 26, 1990 02h 57m 34.82 ± 0.23s
1.342 N ± 4.6km 123.371 E ± 6.2km
DEPTH = 33.8km (2 depth phases)
5.2mb (21 obs.) 5.2MsZ (12 obs.)
MINAHASSA PENINSULA (265)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 31C
Centroid Location:
Origin Time 02:57:35.0 0.5
Lat 1.33N FIX; Lon 123.36E FIX
Dep 33.0 FIX Half-duration 2.6
Moment Tensor: Scale 10¹⁷ Nm
Mrr = 1.95 0.18 Mtt = -1.56 0.21
Mff = -0.39 0.31 Mrt = -4.37 0.35
Mrf = 0.62 0.28 Mtf = 0.54 0.16
Principal Axes:
T Vol = 4.91 Plg = 56 Azm = 184
N -0.25 4 280
P -4.67 34 13
Best Double Couple: Mo = 4.8 × 10¹⁷
NP1: Strike = 119 Dip = 12 Slip = 109
NP2: 279 79 86

TSM 6.02 299 ePc 59 04.00 0.1
DAV 6.12 21 ePc- 59 04.00 -1.3
QCP 13.40 350 eP 00 29.00 -16.2X
BAG 15.22 350 eP- 01 08.00 -1.3
MTN 16.06 152 eP 01 19.40 -0.5
KNA 17.80 163 eP 01 40.70 -1.0
KGM 20.05 272 eP 02 18.00 9.8X
QIZ 22.02 324 Pd 02 27.50 -0.7
N 15s 6.10um
E 14s 4.40um
pP 02 40.00 52kmX
IPM 22.54 279 ePd 02 35.10 1.7
MBL 22.63 189 eP 02 32.30 -1.9
0.5s 13.00nm 4.7mb
HKC 22.68 337 iP 02 36.00 1.4
S 06 48.00
SNG 23.41 285 iPd 02 43.60 1.7
1.0s 114.00nm 5.3mb
WB5 23.69 153 eP 02 43.50 -1.0
i 03 31.00
GZH 23.71 336 Pc 02 46.20 1.6
Z 18s 6.80um 5.2MsZ
N 13s 5.30um
E 12s 2.60um
WRA 23.73 154 P 02 46.00 1.0
0.5s 33.30nm 5.1mb
ANP 23.77 356 eP 02 44.00 -1.4
QZH 23.91 349 Pd 02 47.00 0.4

	5.0s	2200.00nm	5.9mb X		sP	05 14.00	IMA	85.91	24 eP	10 14.00	1.4
N	12s	2.00um			PP	06 35.00		1.3s	16.50nm		5.1mb
E	12s	2.50um			S	11 01.60	BTK	89.62	310 eP	10 36.00	5.1X
PSI	24.47	274 ePc	02 52.90 0.8		SS	11 16.00	KEV	90.96	340 eP	10 41.00	4.7X
	1.4s	95.90nm	5.2mb		ScS	15 06.50	SPA	91.33	180 eP	10 33.00	-4.5X
GUMO	24.50	59 eP	02 53.50 1.0		eP	05 01.00 0.6		1.2s	42.96nm		5.7mb
	0.7s	57.18nm	5.2mb				SOD	91.37	337 eP	10 43.00	4.7X
PJG	24.51	59 eP	02 53.20 0.7				SUF	92.14	333 eP	10 40.00	-1.8
GUA	24.52	59 eP	02 53.30 0.6				NUR	93.14	331 eP	10 54.00	7.5X
	0.5s	73.24nm	5.5mb		ePP	06 36.00	INK	93.00	21 eP	10 46.00	-2.5
LAT	24.89	109 iPc	02 58.50 2.3X		ePCp	07 11.00	BUL	94.93	250 iPd	10 43.20	-12.5X
NNT	25.95	297 eP	03 08.20 2.0		eS	10 54.00	MBC	94.99	12 eP	11 00.00	5.2X
PMG	25.98	115 eP	03 07.00 0.5		eScS	15 08.00		0.7s	1.00nm		4.4mb
	1.0s	100.00nm	5.4mb		iPc	05 09.90 -0.1	KRA	97.58	321 eP	11 09.90	2.9X
LOE	26.60	308 eP	03 19.00 6.9X		e(P)	05 18.80	NB2	99.39	333 P	11 13.00	-1.3
QIS	26.95	145 iPc	03 13.90 -1.4		e(S)	06 54.00		1.2s	10.50nm		5.2mb
	1.0s	160.00nm	5.6mb		eS	11 12.00	CLL	101.55	323 e(Pdiff11	25.00	0.1
		eS	07 39.20		0 Pd	05 09.00 -1.5	Z	18s	1.00um		5.4msz
NST	26.98	303 eP	03 20.00 4.4X				KHC	101.82	321 e(Pdiff11	38.50	12.3X
WARB	27.55	174 eP	03 19.00 -1.7				MOX	102.59	323 e(Pdiff11	30.00	0.5
BDT	28.71	305 eP	03 34.00 2.8X				ALQ	121.10	47 ePKP	16 22.50	-4.0X
RAB	29.30	101 eP	03 36.00 -0.7					1.1s	6.33nm		
		eS	08 30.00		sP	05 24.00	SCH	123.41	7 ePKP	16 30.00	0.0
CHG	29.58	307 eP	03 40.00 0.9				TUL	128.00	41 e(PKP)	16 39.20	-0.3
SSE	29.66	356 Pd	03 38.50 -1.2					1.2s	10.00nm		
	4.0s	600.00nm	5.7mb X				LNV	144.73	158 iPKPc	17 10.10	-0.2
Z	20s	3.70um	5.0msz				CHCH	145.02	159 ePKP	17 11.50	0.6
N	13s	2.00um					PCH	145.35	159 iPKPc	17 12.90	1.3
E	12s	1.20um					SAN	145.45	159 ePKPd	17 12.00	0.4
		S	08 30.00				IHA	145.47	157 ePKP	17 12.00	0.4
GYA	29.69	329 P	03 40.00 -0.2				FCH	145.70	159 ePKP	17 13.50	1.0
Z	18s	2.10um	4.8msz				PEL	145.72	159 iPKPd	17 13.10	1.0
N	13s	3.20um						1.2s	109.38nm		
E	13s	2.50um					ROCH	145.76	158 ePKP	17 14.20	1.8
		S	08 36.00				JACH	146.17	159 ePKP	17 12.00	-1.0
WHN	30.28	344 eP	03 46.50 1.4				MDZ	146.59	161 ePKP	17 15.60	2.0
Z	17s	6.00um	5.3mszX				RTCB	147.89	160 ePKPd	17 19.50	3.8X
N	15s	6.80um					RTL	148.14	161 ePKPc	17 19.30	3.2X
E	12s	2.50um					NNA	157.33	119 e(PKP)	17 31.50	1.

26d 07h

eSn 31 45.00
 MGR 2.30 6 P 31 23.20 -2.1
 eSn 31 51.00
 S.D. = 1.1 on 9 of 9 obs.
 & MAY 26, 1990 07h 34m 37.06s
 59.846 N 153.210 W
 DEPTH = 110.2km
 4.2mb (1 obs.)
 SOUTHERN ALASKA (2)
 <AGS-P>. Felt (III) at Anchor Point.
 AUL 0.48 194 iP 34 53.61 -0.4
 eS 35 06.13
 AUE 0.50 190 iP 34 53.57 -0.5
 eS 35 05.88
 PDB 0.50 264 iP 34 53.34 -0.8
 eS 35 06.42
 RED 0.62 21 iP 34 54.42 -0.7
 eS 35 08.01
 RDT 0.83 28 iP 34 56.15 -0.8
 eS 35 10.98
 XLV 0.85 117 eP 34 56.26 -0.8
 eS 35 11.89
 MCNL 0.88 221 eP 34 56.28 -1.0
 eS 35 11.61
 CDD 0.95 194 iP 34 56.97 -1.1
 eS 35 12.49
 NNL 0.98 78 iP 34 58.58 0.2
 CNPM 1.05 107 iP 34 58.20 -0.9
 eS 35 14.81
 BRK 1.18 93 eP 34 59.58 -0.9
 eS 35 17.68
 NKA 1.33 47 eP 35 03.01 0.8
 SPU 1.46 23 iP 35 02.69 -1.1
 eS 35 23.49
 CRP 1.52 20 eP 35 03.80 -0.9
 SLKM 1.63 65 eP 35 04.40 -1.5
 eS 35 25.40
 NCG 1.65 18 eP 35 05.22 -1.0
 SVW 1.74 318 iPc 35 05.50 -1.8
 SEW 1.91 81 eP 35 07.30 -2.0
 SUA 2.03 36 iP 35 09.90 -1.1
 eS 35 35.70
 KDC 2.14 170 iPd 35 09.50 -2.8
 PMS 2.28 51 iP 35 12.70 -1.6
 SKT 2.29 20 iP 35 12.81 -1.6
 PWA 2.44 41 iPc 35 14.60 -1.7
 PLRM 2.66 47 eP 35 16.37 -2.8
 PMR 2.66 47 iPd 35 16.40 -2.8
 MTU 2.80 85 eP 35 19.60 -1.5
 GHO 2.85 46 eP 35 19.06 -2.8
 CUT 2.94 28 eP 35 21.06 -1.8
 eS 35 55.19
 SML 3.09 48 iP 35 22.18 -2.9
 GLI 3.21 69 eP 35 23.65 -3.0
 eS 35 59.88
 TTA 3.38 338 iPd 35 26.40 -2.5
 MID 3.51 94 eP 35 28.92 -1.8
 VZW 3.51 67 eP 35 27.40 -3.4
 eS 36 08.40
 HUR 3.58 27 eP 35 29.79 -1.9
 VLZ 3.64 66 eP 35 29.18 -3.2
 NCA 3.79 53 eP 35 31.49 -3.0
 KTH 3.88 15 eP 35 33.10 -2.6
 KLU 3.95 62 iP 35 33.51 -3.2
 TOA 4.11 54 iPc 35 36.60 -2.3
 RND 4.13 28 eP 35 36.16 -3.1
 MCK 4.40 26 eP 35 40.35 -2.4
 PAX 4.86 47 eP 35 46.17 -3.1
 NEA 5.13 20 eP 35 49.19 -3.6
 WRH 5.22 25 eP 35 50.56 -3.6
 TGL 5.24 76 eP 35 51.69 -2.8
 DDM 5.27 38 eP 35 52.77 -2.0
 eS 36 51.36
 HDA 5.43 30 eP 35 53.26 -3.8
 CCB 5.44 25 eP 35 53.14 -3.9
 eS 36 52.02
 DMW 5.50 37 eP 35 56.36 -1.6
 BALM 5.51 73 eP 35 55.55 -2.6
 eS 36 55.80
 FBA 5.66 24 ePc 35 56.60 -3.5
 DOT 5.78 45 eP 35 57.47 -4.3
 SDN 5.98 224 eP 36 00.40 -4.0
 IMA 6.25 358 eP 36 05.30 -3.1
 INK 12.03 37 eP 37 23.00 -2.7

MBC 20.20 23 eP 39 01.00 -3.6
 0.4s 5.00nm 4.2mb
 56 obs. associated
 ? MAY 26, 1990 07h 34m 40.84± 8.29s
 31.856 S ±16.9km 67.459 W ±70.9km
 DEPTH = 33.0km (normal)
 SAN JUAN PROVINCE, ARGENTINA (137)
 RTCV 0.92 269 iPd 34 58.30 0.9
 RTLL 1.01 301 iPd 34 59.00 0.2
 ZON 1.08 286 iPc 34 59.50 -0.3
 eS 35 18.00
 RTCB 1.20 287 iPc 35 01.50 0.0
 S 35 20.20
 MDZ 1.56 229 eP 35 06.60 -0.1
 i(S) 35 27.60
 RTBS 1.71 276 ePc 35 08.00 -0.7
 S 35 32.00
 S.D. = 0.7 on 6 of 6 obs.
 * MAY 26, 1990 07h 59m 45.57± 2.34s
 1.135 N ±12.2km 123.300 E ±13.0km
 DEPTH = 64.8 ± 24.5 km
 4.7mb (3 obs.)
 MINAHASSA PENINSULA (265)
 KKM 8.59 305 eP 01 50.90 1.1
 MTN 15.92 151 eP 03 26.40 -0.6
 MBL 22.42 189 eP 04 39.20 -0.8
 SNG 23.40 285 eP 04 49.10 -0.5
 WB5 23.54 153 eP 04 50.00 -0.9
 i 05 03.90
 WRA 23.58 153 Pd 05 05.80 -0.6
 0.4s 12.30nm 4.7mb
 PSI 24.41 274 ePd 04 59.90 0.5
 GUMO 24.67 59 eP 05 06.80 4.9X
 Z 22s 0.11um 3.3MsZ
 eS 09 32.00
 NANU 24.74 197 iPd 05 02.00 -0.5
 PMG 25.96 114 eP 05 07.50 -6.5X
 QIS 26.83 144 iPc 05 21.10 -0.8
 0.7s 27.00nm 4.9mb
 e 05 36.00
 MAT 37.84 20 (P) 06 57.00 -0.7
 ADE 38.70 160 eP 07 06.00 1.0
 BWA 42.50 149 iPc 07 38.70 2.4
 CAN 43.50 149 iPc 07 45.30 0.9
 HYB 46.86 293 eP 08 16.00 4.6X
 GBA 47.04 288 Pc 08 11.20 -1.6
 0.7s 5.10nm 4.6mb
 MAW 80.16 200 iPd 11 51.10 1.2
 SEK 95.54 242 eP 13 00.40 -5.1X
 FRS 97.49 240 e(P) 13 09.60 -4.4X
 CDF 106.12 321 ePKP 18 14.50 10.3X
 BSF 106.63 321 ePKP 18 16.60 11.4X
 LOR 108.68 321 ePKP 18 25.00 16.0X
 0.8s 4.05nm
 LBF 108.72 321 ePKP 18 26.40 17.3X
 SMF 108.94 321 ePKP 18 28.00 18.5X
 0.8s 2.70nm
 SSF 108.98 321 ePKP 18 26.60 17.1X
 0.8s 4.05nm
 AVF 109.19 321 ePKP 18 28.00 18.1X
 0.8s 5.35nm
 FLN 110.68 324 ePKP 18 24.40 11.7X
 0.7s 7.70nm
 GRR 111.07 324 ePKP 18 26.70 13.3X
 0.7s 8.80nm
 MFF 111.45 322 ePKP 18 34.40 20.2X
 0.7s 5.50nm
 SIV 164.62 164 PKP 19 33.80 -10.1X
 S.D. = 1.2 on 15 of 31 obs.
 MAY 26, 1990 07h 59m 57.82± 0.13s
 41.566 N ± 3.1km 88.688 E ± 2.4km
 DEPTH = 0.0km (geophysicist)
 5.4mb (66 obs.)
 SOUTHERN XINJIANG, CHINA (321)
 WMO 2.37 342 Pn 00 42.30 3.6X
 Pg 00 42.60
 GTA 8.75 101 Pd 02 07.60 -1.1
 PP 02 20.60
 KSH 9.91 262 P 02 25.00 0.3
 LSA 12.01 170 P 02 55.00 1.3
 LZH 13.02 110 P 03 04.50 -2.5

1.0s 100.00nm 6.0mb
 Z 12s 0.50um
 pP 03 10.80
 PP 03 18.00
 GUN 13.82 190 P 03 15.90 -1.8
 GKN 13.93 195 P 03 17.60 -1.4
 PKI 14.22 192 P 03 21.20 -1.8
 DMN 14.23 193 P 03 21.20 -1.9
 NDI 15.89 220 eP 03 42.00 -2.5
 BTO 16.11 86 eP 03 49.00 1.6
 CD2 16.13 126 P 03 50.40 2.9
 HHC 17.23 85 Pc 04 01.00 -0.5
 XAN 17.64 109 P 04 04.30 -2.4
 TIY 18.67 94 eP 04 19.00 -0.4
 Z 11s 0.90um
 KMI 20.12 140 Pd 04 35.50 -1.0
 BJI 20.83 85 eP 04 44.00 0.5
 0.7s 88.00nm 5.2mb
 QUE 20.90 244 iPd 04 44.50 0.1
 eS 08 29.50
 GYA 21.13 130 P 04 46.40 -0.3
 TIA 22.72 94 eP 05 03.30 0.8
 MAIO 23.25 267 eP 05 09.00 1.2
 0.7s 28.59nm 4.9mb
 WHN 23.40 110 Pc 05 10.50 1.4
 CHG 24.31 156 ePd 05 19.90 1.8
 0.9s 10.00nm 4.5mb
 DL2 25.20 85 P 05 27.60 1.1
 1.0s 200.00nm 5.8mb
 HYB 25.59 203 iPd 05 30.00 -0.4
 0.8s 26.90nm 5.0mb
 e 05 46.50
 BDT 25.81 157 eP 05 34.00 1.7
 NJ2 25.84 102 eP 05 33.00 0.4
 Z 20s 0.20um 3.6MsZ
 SNY 25.95 78 Pc 05 33.60 0.1
 0.8s 100.00nm 5.6mb
 Z 20s 0.60um 4.1MsZ
 E 20s 0.60um
 POO 26.23 213 eP 05 33.00 -3.3X
 CN2 26.98 73 P 05 42.80 -0.1
 Z 16s 0.60um 4.2MsZ
 NST 27.63 156 eP 06 10.00 20.9X
 GBA 29.53 203 Pd 06 04.30 -1.9
 0.4s 3.10nm 4.5mb
 MDJ 29.81 70 eP 06 08.00 -0.5
 SUF 41.75 322 iP 07 50.20 0.3
 0.5s 16.50nm 5.0mb
 SOD 41.79 329 iP 07 50.30 0.1
 HRI 42.29 276 iPc 07 57.00 2.1
 NUR 42.53 319 iP 07 56.20 -0.1
 0.7s 24.00nm 5.0mb
 MDSJ 42.68 274 Pc 08 00.10 2.1
 SALJ 42.92 275 Pd 08 01.10 1.1
 KFNJ 43.00 275 Pc 08 01.80 1.3
 MASJ 43.03 274 Pc 08 02.30 1.4
 LFK 43.04 280 iP 08 02.90 2.0
 KTK1 43.20 331 iPd 08 01.97 0.2
 DSI 43.36 274 iPc 08 06.00 2.6X
 VRI 44.00 297 ePd 08 09.00 0.5
 PRNI 44.24 273 iPc 08 12.00 1.3
 BCK 44.29 285 iP 08 11.40 0.4
 MLR 44.64 297 eP 08 15.00 1.1
 TRO 44.76 332 iPd 08 14.56 0.2
 ELL 45.08 284 iP 08 17.80 0.3
 UPP 46.09 319 iP 08 24.50 -0.5
 KDZ 46.33 292 eP 08 29.00 1.9
 LOF 46.77 330 iPc 08 29.28 -1.0
 RZN 46.80 293 iPc 08 32.00 0.9
 PGB 46.85 294 eP 08 33.00 1.7
 KRA 47.10 305 eP 08 32.40 -0.7
 e 08 39.50
 SPC 47.18 304 iP 08 35.30 1.3
 KKB 47.86 293 iPc 08 40.00 0.8
 NSS 47.89 325 iP 08 38.49 -0.7
 HFS 47.97 319 iPc 08 39.20 -0.7
 0.5s 46.70nm 5.9mb
 VAY 48.42 293 iP 08 44.60 1.0
 SKO 48.94 294 iPd 08 49.00 1.4
 NB2 48.96 321 P 08 46.70 -0.8
 0.5s 27.60nm 5.5mb
 KSP 49.08 307 iPd 08 49.00 0.5
 e 10 12.70
 AKSR 49.33 267 eP 08 53.00 2.2
 ZST 49.47 303 eP 08 52.40 0.8
 e 18 06.80
 AKRL 49.55 267 eP 08 55.00 2.5

26d 14h

NB2 57.89 348 P 32 33.80 -1.4
0.9s 13.40nm 5.0mb
SOD 62.23 358 iP 33 03.70 -1.1
WMO 62.27 43 eP 33 05.00 -0.6
Z 21s 2.27um 5.3msz
PP 35 24.00
KEV 64.61 358 iP 33 21.60 1.3
0.7s 12.00nm 5.2mb
GTA 69.84 50 eP 33 53.70 -0.4
CD2 71.93 59 eP 34 07.00 0.1
LZH 72.52 54 eP 34 10.60 0.2
1.8s 51.00nm 5.3mb
Z 20s 0.40um 4.7msz
E 14s 0.30um
GYA 74.21 64 P 34 20.40 0.0
XAN 76.50 56 P 34 33.50 0.3
HHC 78.94 50 P 34 47.80 1.1
TIY 79.50 53 eP 34 52.00 2.3
Z 18s 0.70um 5.0msz
N 11s 0.20um
SKS 44 56.00
BJI 82.44 50 eP 35 07.00 2.0
1.7s 35.00nm 5.2mb
TIA 83.25 54 eP 35 10.00 0.7
NJ2 84.84 58 eP 35 19.60 2.2
CN2 89.14 46 eP 35 35.00 -3.1X
S.D. = 1.0 on 68 of 73 obs.

? MAY 26, 1990 14h 39m 51.57±1.40s
4.835 N ± 9.3km 33.638 E ± 41.6km
DEPTH = 10.0km (geophysicist)
4.6mb (7 obs.)

SUDAN (557)

LWI 8.53 215 iPc 41 59.30 1.0
KRI 21.89 190 iP 44 46.00 -0.9
iSn 48 56.00
BUL 25.31 191 iP 45 20.00 -0.2
iSn 50 06.20
LPL 46.82 334 eP 48 22.00 -1.6
0.8s 4.05nm 4.5mb
KHC 47.32 342 iP 48 28.40 1.1
SMF 48.97 333 eP 48 41.20 1.1
1.0s 6.00nm 4.6mb
MAF 49.24 332 eP 48 41.20 -1.0
BGF 49.36 332 eP 48 43.00 0.7
LOR 49.43 334 eP 48 42.00 -1.7
0.8s 5.35nm 4.6mb
TCF 49.46 332 eP 48 42.90 -1.0
0.8s 4.05nm 4.5mb
NUR 55.96 355 eP 50 04.00 31.9X
HFS 57.23 348 eP 49 42.00 0.8
0.6s 1.10nm 4.1mb
SUF 58.02 356 iP 49 51.70 5.0X
0.6s 6.30nm 4.8mb
NB2 58.57 347 P 49 52.40 1.7
0.8s 6.30nm 4.8mb
S.D. = 1.3 on 12 of 14 obs.

% MAY 26, 1990 14h 48m 03.42±0.38s
42.822 N ± 3.3km 12.799 E ± 5.5km
DEPTH = 10.0km (geophysicist)

CENTRAL ITALY (381)

ASS 0.27 338 P 48 08.80 -0.3
eSg 48 13.40
MNS 0.45 191 Pc 48 12.00 -0.5
iSg 48 18.80
AQU 0.65 136 P 48 15.90 -0.5
eSg 48 26.00
ARV 0.68 9 P 48 16.50 -0.5
eSg 48 28.70
AZI 0.96 150 P 48 22.00 0.4
eSg 48 35.70
RMP 1.01 184 P 48 22.40 -0.2
eSg 48 36.90
CRE 1.02 323 P 48 23.90 1.2
eSg 48 40.00
RDP 1.06 183 P 48 23.40 -0.1
eSg 48 39.00
MAO 1.28 252 P 48 27.60 0.4
SFI 1.30 328 P 48 28.00 0.6
eSn 48 46.00
PGD 1.31 324 P 48 28.00 0.2
eSn 48 46.30
SDI 1.35 146 P 48 28.50 0.3
eSn 48 47.20

DUI 1.69 133 P 48 34.00 0.8
BDI 2.03 308 Pd 48 36.70 -1.4
FVI 3.77 360 P 49 02.50 -0.3
MNO 5.10 163 P 49 37.50 15.7X
eSg 49 41.30

S.D. = 0.7 on 15 of 16 obs.

MAY 26, 1990 14h 58m 56.76±0.65s
31.636 S ± 5.4km 68.651 W ± 6.3km
DEPTH = 9.9 ± 4.9 km
SAN JUAN PROVINCE, ARGENTINA (137)

ZON 0.09 345 iPd 58 59.50 0.1
RTCB 0.20 320 iPc 59 01.00 -0.1
RTCV 0.24 157 e(P) 59 00.70 -1.3
RTLL 0.34 27 iPc 59 03.90 0.1
CFA 0.35 85 iPd 59 04.30 0.3
RTBS 0.68 268 iPd 59 06.00 -3.5X
MDZ 1.26 188 eP 59 21.20 1.0
eS 59 32.70
JACH 1.95 237 iPd 59 28.50 -1.8
iS 00 00.30
FCH 2.18 219 iP 59 32.80 -1.1
PEL 2.29 228 iPc 59 34.50 -0.7
iS 00 07.00
ROCH 2.40 236 iPc 59 36.00 -0.2
iS 00 10.00
SAN 2.48 223 eP 59 38.00 0.1
i 00 08.50
i 00 10.90
PCH 2.53 218 eP 59 39.00 0.4
i 00 12.50
i 00 14.50
TACH 2.79 223 iP 59 43.50 1.2
iS 00 18.50
CHCH 2.84 216 iPc 59 45.20 2.1
i 00 20.50
IHA 2.89 241 eP 59 44.00 0.4
eS 00 20.00
LCCH 3.07 233 iPd 59 47.50 1.3
iS 00 27.00
LNV 3.28 224 eP 59 47.50 -1.7
iS 00 28.00

S.D. = 1.2 on 17 of 18 obs.

? MAY 26, 1990 15h 51m 30.86±6.88s
30.958 S ± 57.1km 68.858 W ± 14.3km
DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL 0.50 138 iPc 51 41.50 0.0
RTCB 0.53 175 iPc 51 43.00 1.0
ZON 0.61 165 iPc 51 43.00 0.0
eS 51 58.00
RTBS 0.87 216 ePc 51 46.80 0.2
RTCV 0.94 163 e(P) 51 47.60 -0.2
MDZ 1.92 180 eP 52 00.70 -1.2
e 52 26.00
i(S) 52 30.70

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

* MAY 26, 1990 16h 18m 14.01±1.56s
5.569 N ± 13.2km 95.553 E ± 14.7km
DEPTH = 132.5 ± 18.0 km
3.9mb (2 obs.)
NORTHERN SUMATERA (706)

PSI 4.41 130 iPd 19 19.80 -0.3
SNG 5.28 72 eP 19 41.30 9.4X
IPM 5.54 100 ePd 19 36.00 0.6
0.4s 15.30nm 4.6mb X
NNT 8.11 30 eP 20 10.00 -0.3
GBA 19.55 295 P 22 34.00 0.2
0.6s 1.80nm 3.6mb
WB5 45.79 125 iPd 26 24.00 -0.3
WRA 45.80 125 Pc 26 24.60 0.2
0.5s 3.10nm 4.3mb
S.D. = 0.6 on 6 of 7 obs.

% MAY 26, 1990 16h 43m 06.46±2.05s
37.195 N ± 16.9km 28.148 E ± 17.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

YER 0.12 119 iPg 43 08.00 -1.6
IZM 1.39 330 ePn 43 32.40 0.5
ELL 1.48 107 iPn 43 34.30 1.1

KHL 1.57 44 ePn 43 33.50 -1.0
BCK 1.96 82 ePn 43 41.90 1.7
ALT 2.42 39 ePn 43 46.00 -0.7
S.D. = 1.6 on 6 of 6 obs.

MAY 26, 1990 16h 48m 48.50±2.95s
37.602 N ± 17.3km 20.603 E ± 27.2km
DEPTH = 10.0km (geophysicist)
IONIAN SEA (399)
ML 3.5 (ATH).

VLS 0.57 359 ePg 48 59.20 -0.9
eSg 49 07.00
ITM 1.14 111 ePg 49 08.50 -1.3
VLI 2.06 115 ePg 49 26.40 2.8X
KEK 2.20 344 ePg 49 33.50 7.9X
ATH 2.49 81 ePb 49 31.70 1.9
NEO 2.67 50 ePn 49 31.20 -1.1
OHR 3.51 2 ePn 49 45.00 0.8
VAM 3.63 126 ePn 49 46.20 0.2
VAY 4.01 22 ePn 49 51.70 0.4
SKO 4.41 8 ePn 50 13.70 16.7X

S.D. = 1.5 on 7 of 10 obs.

MAY 26, 1990 17h 34m 47.95±0.54s
36.815 N ± 5.5km 28.612 E ± 5.5km
DEPTH = 11.9 ± 3.2 km
4.1mb (8 obs.)
DODECANESE ISLANDS (369)
Felt in the Mugla area, Turkey.

YER 0.41 321 iPg 34 54.60 -1.9
ELL 1.04 93 iPn 35 08.30 0.8
KSL 1.05 131 eP 35 10.00 2.5
eS 35 33.50
KHL 1.67 25 iPn 35 17.20 0.0
SMG 1.67 303 eP 35 17.70 0.6
eS 35 49.70
BCK 1.71 67 iPn 35 20.40 2.7X
IZM 1.91 326 iPn 35 20.40 -0.2
ALT 2.53 27 ePn 35 29.50 -0.1
EZN 3.50 330 iPn 35 43.40 0.1
EDC 3.57 351 ePn 35 44.10 -0.2
PPCY 3.59 121 eP 35 47.00 2.4
GPA 3.71 20 ePn 35 46.00 -0.4
KGT 3.77 345 iPn 35 46.50 -0.7
YLV 3.79 9 ePn 35 47.00 -0.5
VAM 3.84 250 eP 35 53.00 4.9X
GBZT 4.02 9 ePn 36 36.70 46.1X
HRT 4.08 11 ePn 35 52.00 0.4
CSS 4.25 114 eP 35 55.00 1.0
LFK 4.27 110 ePn 35 56.20 1.9
CTT 4.33 358 iPn 35 55.20 0.2
BBTK 4.45 46 eP 35 57.00 0.2
eS 36 21.00
VLI 4.56 270 eP 36 04.50 6.2X
ITM 5.36 276 eP 36 15.50 5.7X
KDZ 5.43 334 iP 36 10.00 -0.6
RZN 5.73 329 eP 36 14.00 -1.0
MMB 6.09 323 eP 36 20.00 0.0
VAY 6.51 316 ePn 36 30.50 4.7X
HRI 6.83 119 eP 36 30.00 -0.5
PVL 6.87 340 eP 36 30.00 -0.9
VTS 7.11 326 eP 36 36.00 1.5
BURJ 7.48 125 Pd 36 39.20 -0.4
SALJ 7.56 127 Pd 36 39.10 -1.5
KFNJ 7.65 128 Pd 36 41.00 -0.8
DSI 7.67 131 eP 36 41.00 -1.1
MASJ 7.77 129 Pd 36 42.20 -1.4
MKRJ 7.84 130 Pd 36 43.10 -1.5
MBH 8.77 141 eP 36 56.00 -1.4
KHC 16.47 323 eP 38 45.40 5.1X
MOX 18.43 324 e(P) 39 07.00 2.3
LPG 18.56 305 eP 39 08.20 1.5
0.8s 6.05nm 3.8mb
CDF 19.44 313 eP 39 18.00 0.8
0.9s 6.55nm 3.9mb
SMF 20.86 306 eP 39 31.80 -0.2
0.8s 16.80nm 4.5mb
LOR 21.06 307 eP 39 34.40 0.3
0.8s 5.35nm 4.0mb
SSF 21.21 307 eP 39 35.80 0.2
0.8s 6.70nm 4.1mb
AVF 21.22 306 eP 39 35.70 0.0
0.8s 5.35nm 4.0mb
GBA 49.22 105 Pc 43 37.50 -0.7
0.8s 5.10nm 4.6mb

27d 08h

KSP 76.72 345 eP 59 28.20 0.7
 PRU 77.82 346 eP 59 34.00 0.4
 WB5 78.45 217 eP 59 36.80 -0.6
 WRA 78.52 217 Pc 59 37.40 -0.4
 0.6s 1.30nm 4.1mb
 KHC 78.80 347 P 59 40.40 1.4
 ZST 79.14 344 eP 59 42.70 1.8
 GBA 83.28 283 P 00 03.00 -0.1
 0.9s 3.90nm 4.5mb
 S.D. = 1.1 on 22 of 23 obs.

? MAY 27, 1990 09h 10m 50.21±7.87s
 23.913 N ±48.1km 121.828 E ±30.1km
 DEPTH = 10.0km (geophysicist)
 TAIWAN (244)

TWD 0.27 308 iPd 10 55.80 -0.1
 eS 10 59.90
 TWC 0.69 2 ePc 11 03.80 -0.1
 eS 11 13.70
 TWQ 0.98 292 ePd 11 08.80 0.0
 TWZ 1.20 349 eP 11 12.20 -0.4
 ANP 1.30 347 eP 11 14.80 0.5
 eS 11 22.80
 S.D. = 0.5 on 5 of 5 obs.

% MAY 27, 1990 09h 17m 27.17±1.75s
 16.702 N ±18.0km 99.005 W ±10.8km
 DEPTH = 33.0km (normal)
 NEAR COAST OF GUERRERO, MEXICO (58)

ACX 0.83 282 iP 17 42.78 0.3
 iS 17 50.09
 III 1.72 345 iP 17 55.50 0.0
 iS 18 17.71
 OXX 2.22 80 iP 18 02.30 -0.2
 iS 18 32.80
 PPM 2.38 9 iP 18 06.50 1.3
 iS 18 38.08
 IIT 2.40 16 eP 18 08.00 2.8X
 iS 18 36.93
 UNM 2.62 356 (P) 18 14.00 5.6X
 (S) 18 47.00
 CRX 2.77 347 (P) 18 09.00 -1.4
 IIC 3.06 356 (P) 18 22.60 8.0X
 iS 18 52.48
 IJJ 3.09 347 (P) 18 20.00 4.7X
 (S) 19 01.66
 MRX 3.64 325 (P) 18 27.90 5.4X
 (S) 19 09.00
 LVVM 3.88 38 (P) 18 33.75 7.9X
 S.D. = 1.4 on 5 of 11 obs.

& MAY 27, 1990 09h 43m 48.69s
 64.839 N 147.384 W
 DEPTH = 15.1km
 CENTRAL ALASKA (1)
 <AGS-P>.

FBA 0.19 290 iP 43 53.10 -0.2
 eS 43 56.03
 CCB 0.26 223 iP 43 54.27 -0.4
 eS 43 58.14
 HDA 0.47 157 iP 43 58.08 -0.1
 eS 44 04.63
 WRH 0.48 220 iP 43 58.19 -0.1
 eS 44 04.79
 NEA 0.77 251 eP 44 03.29 0.0
 eS 44 14.15
 DMW 1.06 137 eP 44 08.08 -0.2
 eS 44 22.73
 DDM 1.25 147 eP 44 10.95 -0.5
 eS 44 29.55
 MCK 1.30 212 eP 44 12.26 0.0
 eS 44 30.50
 RND 1.58 205 eP 44 16.02 -0.2
 eS 44 38.58
 FYU 1.95 26 eP 44 23.98 2.5
 eS 44 48.61
 KTH 2.02 232 eP 44 24.77 2.2
 eS 44 51.24
 CUT 2.76 209 eP 44 36.97 3.8
 eS 45 13.46
 TOA 2.80 168 eP 44 34.31 0.6
 IMA 2.90 298 eP 44 35.16 -0.1
 eS 45 13.20
 SML 3.07 188 eP 44 39.37 1.8

KLU eS 45 18.83
 3.42 168 eP 44 40.15 -2.4
 16 obs. associated

* MAY 27, 1990 10h 01m 39.63±3.52s
 20.912 S ±16.2km 178.702 W ±11.5km
 DEPTH = 601.0 ±42.1 km
 4.5mb (11 obs.)

FIJI ISLANDS REGION (181)

WB5 43.88 263 iPd 08 55.20 -0.9
 WRA 43.89 263 Pc 08 55.70 -0.5
 0.9s 24.00nm 4.7mb
 SPA 69.22 180 iPc 11 49.40 0.5
 0.9s 11.82nm 4.4mb
 MAT 70.15 324 eP 11 54.00 -0.5
 0.7s 6.85nm 4.3mb
 NJ2 79.64 310 Pc 12 48.20 1.3
 MDJ 80.48 325 eP 12 51.50 0.5
 CN2 82.23 323 P 13 00.00 0.1
 KVN 82.26 43 P 13 00.20 -0.2
 TNP 82.28 44 P 13 00.80 0.2
 0.7s 7.44nm 4.3mb
 TIA 83.07 313 eP 13 04.90 0.6
 SHW 84.06 36 P 13 09.20 0.1
 GMW 84.61 34 P 13 12.20 0.6
 RMW 85.08 35 P 13 14.10 0.2
 MCW 85.30 33 P 13 15.60 0.7
 TTA 85.46 10 P 13 15.50 0.0
 1.1s 17.97nm 4.7mb
 PMR 85.57 14 P 13 14.90 -1.0
 1.1s 20.31nm 4.7mb
 MSU 85.87 46 P 13 19.00 0.9
 DPW 87.27 36 P 13 23.80 -0.6
 PNT 87.36 34 eP 13 26.00 1.3
 0.9s 18.00nm 4.8mb
 ALQ 88.17 52 eP 13 29.00 0.0
 1.0s 5.75nm 4.4mb
 ANMO 88.17 52 P 13 29.20 0.2
 1.0s 6.25nm 4.4mb
 IMA 88.76 10 P 13 30.00 -1.0
 0.8s 5.17nm 4.5mb
 FBA 88.78 13 P 13 29.50 -1.4
 0.9s 25.52nm 5.1mb
 KMI 88.95 297 eP 13 35.00 2.2
 BW06 89.72 43 P 13 35.50 -0.5
 GOL 91.08 48 P 13 42.60 0.2
 SES 92.59 36 eP 13 49.00 0.2
 RSSD 93.91 44 P 13 54.50 -0.7
 SOD 130.86 347 ePKP 19 43.00 -1.3
 SUF 134.90 344 ePKP 19 50.00 -2.1
 NUR 137.14 343 ePKP 19 57.00 0.6
 NB2 139.31 353 PKP 19 51.20 -9.2X
 0.7s 2.20nm
 HFS 139.84 350 ePKP 19 52.00 -9.3X
 0.9s 8.80nm
 EKA 145.47 4 PKPc 20 11.80 0.7
 0.8s 10.10nm
 KRA 147.38 338 ePKP 20 17.40 3.1X
 e 20 21.90
 KSP 147.88 342 iPKPd 20 19.30 4.1X
 e 20 24.30
 SPC 147.99 336 ePKP 20 19.20 3.6X
 CLL 148.31 346 ePKP 20 15.00 -0.8
 LFK 148.33 304 iPKP 20 21.10 4.7X
 BRG 148.49 345 iPKPd 20 20.00 3.9X
 1.4s 29.00nm
 PRU 149.14 343 PKPd 20 26.00 4.9X
 1.0s 14.50nm
 e 20 29.00
 MOX 149.23 347 e(PKP) 20 22.00 4.8X
 SRO 149.85 337 ePKP 20 23.90 5.7X
 ZST 149.95 339 ePKP 20 24.20 5.8X
 e 20 33.00
 ENN 149.98 354 ePKP 20 23.50 5.2X
 0.9s 15.00nm
 e 20 32.00
 e 20 39.00
 MEM 150.13 354 PKP 20 24.40 5.9X
 KHC 150.18 344 PKP 20 24.50 5.8X
 1.0s 10.50nm
 e 20 33.70
 TNS 150.21 351 ePKPc 20 24.80 6.0X
 GRF 150.22 347 ePKP 20 25.00 6.3X
 e 20 34.00
 BZS 150.24 331 ePKP 20 24.50 5.6X

SNF 150.37 356 PKP 20 24.90 6.0X
 DOU 150.76 356 PKP 20 25.90 6.4X
 CDF 152.15 351 ePKP 20 29.10 7.4X
 0.6s 3.60nm
 BSF 152.78 352 ePKP 20 26.00 3.4X
 0.6s 2.70nm
 S.D. = 0.9 on 33 of 54 obs.

* MAY 27, 1990 10h 12m 37.05±2.01s
 14.637 N ±16.6km 23.524 W ±26.4km
 DEPTH = 10.0km (geophysicist)
 4.2mb (11 obs.)

NORTH ATLANTIC OCEAN (402)

MBO 6.37 91 iPc 14 12.30 -0.9
 iS 15 19.20
 TIO 22.04 40 iP 17 34.50 0.8
 KUK 24.25 108 eP 17 56.00 0.6
 WEGH 24.52 109 eP 17 57.00 -1.0
 LEGH 24.63 109 eP 17 59.00 0.0
 SHGH 24.65 108 eP 18 01.00 1.8
 TEGH 24.80 109 eP 18 00.00 -0.7
 EPF 34.93 31 eP 19 31.60 0.5
 0.8s 4.05nm 4.3mb
 LFF 36.53 29 eP 19 44.90 0.3
 0.8s 8.05nm 4.6mb
 LPO 36.56 30 eP 19 45.10 0.3
 0.8s 5.35nm 4.4mb
 MFF 37.39 27 eP 19 51.30 -0.5
 0.6s 2.70nm 4.2mb
 GRR 38.50 24 eP 20 00.20 -0.9
 BGF 38.72 29 eP 20 03.20 0.2
 0.7s 4.95nm 4.3mb
 AVF 39.13 29 eP 20 06.30 -0.1
 0.6s 1.80nm 3.9mb
 SMF 39.26 30 eP 20 07.40 -0.1
 0.6s 1.80nm 3.9mb
 SSF 39.40 29 eP 20 08.20 -0.4
 0.7s 2.75nm 4.0mb
 LPG 39.96 34 eP 20 14.60 0.9
 0.7s 3.30nm 4.1mb
 LPL 39.97 33 eP 20 14.50 0.9
 0.7s 3.85nm 4.2mb
 HFS 52.90 22 eP 21 53.60 -1.7
 1.5s 20.40nm 4.8mb
 S.D. = 0.9 on 19 of 19 obs.

? MAY 27, 1990 11h 13m 19.68±1.07s
 39.231 N ±8.7km 27.826 E ±11.5km
 DEPTH = 10.0km (geophysicist)

TURKEY (366)

IZM 0.94 208 iPg 13 37.60 -0.1
 eSg 13 50.60
 EDC 1.12 1 ePn 13 40.40 -0.2
 EZN 1.30 298 iPn 13 43.90 0.1
 YLV 1.79 41 ePn 13 51.00 0.1
 S.D. = 0.3 on 4 of 4 obs.

MAY 27, 1990 12h 24m 46.57±0.19s
 15.544 N ±4.2km 147.740 E ±3.9km
 DEPTH = 35.6km (4 depth phases)
 5.1mb (19 obs.) 4.7MsZ (5 obs.)

MARIANA ISLANDS REGION (215)
 CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN
 L.P.B.: 12S, 21C
 Centroid Location:
 Origin Time 12:24:45.9 0.8
 Lat 15.50N 0.07 Lon 147.96E 0.10
 Dep 15.0 FIX Half-duration 1.5
 Moment Tensor; Scale 10**16 Nm
 Mrr=-4.11 0.53 Mtt= 2.07 0.54
 Mff= 2.04 0.50 Mrt= 0.00 0.00
 Mrf= 0.00 0.00 Mtf= 2.99 0.66
 Principal Axes:
 T Val= 5.04 P1g= 0 Azm=135
 N -0.93 0 45
 P -4.11 90 180
 Best Double Couple: Mo=4.6*10**16
 NP1: Strike=225 Dip=45 Slip= -90
 NP2: 45 45 -90

GUA 3.39 234 eP 25 38.70 0.3
 eS 26 26.70
 GUMO 3.39 235 eP 25 38.50 0.0
 RAB 20.09 167 e(P) 29 18.00 -2.2

27d 12h

MAT	22.57 340 eP	29 43.00 -2.1	1.0s	7.50nm	4.8mb	MAY 27, 1990 13h 17m 43.27± 3.17s	
	1.0s 48.00nm	4.9mb	PMR	63.75 28 eP	35 15.40 -1.5	35.132 N ±35.5km	24.380 E ±15.7km
DAV	23.28 251 eP	29 54.00 1.8	FBA	65.29 25 eP	35 25.50 -1.3	DEPTH = 10.2 ± 7.5 km	
PMG	24.80 181 eP	30 07.00 0.2	NDI	65.82 295 iPd	35 30.50 -0.4	CRETE	(370)
QCP	25.75 272 eP	30 11.00 -4.9X	HYB	66.03 282 iPd	35 32.00 -0.4		
BAG	26.12 276 eP	30 20.00 0.5	GBA	1.0s 40.00nm	5.5mb	VAM	0.31 332 ePg
SSE	28.78 307 Pc	30 41.50 -1.8		67.78 279 Pd	35 42.60 -0.9	VLI	1.97 324 ePn
	0.6s 20.00nm	5.0mb	POO	1.0s 13.80nm	5.0mb	ITM	2.85 317 ePn
E	14s 1.38um		INK	70.25 284 iPd	35 57.00 -1.7	SMC	3.25 37 ePb
QZH	28.85 294 eP	30 43.00 -1.0	MBC	71.51 23 eP	36 05.00 -0.4	YER	3.74 57 iPg
MDJ	32.80 336 eP	31 18.00 -0.7		75.71 14 ePd	36 30.00 0.2	KSL	4.35 75 ePn
	Z 24s 1.20um	4.5MszX	MAIO	1.0s 14.00nm	4.9mb	ELL	4.77 69 ePn
N	14s 0.70um		WDC	79.58 305 eP	36 54.00 1.9	BCK	5.53 63 ePn
	eS	36 28.00	PNT	79.85 51 e(P)	36 54.50 1.2	OHR	6.60 336 eP
SNY	33.47 326 eP	31 23.00 -1.5		80.08 42 eP	36 54.00 -0.3	KHC	16.10 334 P
	N 30s 1.80um		ORV	80.9s 12.00nm	4.9mb	PRU	16.50 337 eP
E	30s 1.10um		PRS	80.85 52 eP	36 58.60 0.0	GRF	17.46 330 e(P)
CN2	33.96 331 eP	31 27.80 -0.9	NEW	81.66 55 eP	37 03.50 0.6	HFS	25.96 348 ePKP
	Z 26s 1.60um	4.6MszX		81.93 42 eP	37 03.50 -0.6		2.1s 94.40nm
WHN	34.01 302 eP	31 29.00 -0.3		1.1s 10.80nm	4.8mb	S.D. = 1.0 on 9 of 13 obs.	
QIZ	36.31 281 eP	31 50.20 1.2	CMB	82.04 53 eP	37 15.00 38km		
QIS	36.75 193 iPd	31 52.00 -0.7	FRI	82.81 54 eP	37 05.30 0.4	MAY 27, 1990 14h 00m 36.37± 0.23s	
	1.5s 76.00nm	5.4mb	BCH	82.95 56 eP	37 19.00 10.2X	12.703 N ± 3.5km	120.933 E ± 5.2km
BJI	36.76 318 eP	31 52.00 -0.6	KVN	83.53 51 eP	37 11.10 1.3	DEPTH = 33.0km (normol)	
	Z 24s 0.96um	4.5MszX	ISA	84.10 55 eP	37 13.00 0.2	5.1mb (19 obs.)	4.7Msz (8 obs.)
	eS	37 34.00	TNP	84.45 52 eP	37 17.00 -0.4	MINDORO, PHILIPPINE ISLANDS	(250)
WB5	37.58 201 eP	31 59.00 -0.6	CLC	1.0s 3.00nm	4.4mb	QCP	1.93 4 iP
WRA	37.65 201 Pd	31 59.80 -0.4	MWC	84.75 54 eP	37 19.00 0.2	BAG	3.70 355 eP
TIY	38.18 312 eP	32 05.00 0.3	SBB	84.80 56 eP	37 21.00 1.7	DAV	7.21 140 eP
	Z 28s 1.50um	4.7MszX	SES	84.87 56 eP	37 19.00 -0.4	KKM	8.09 216 ePc
N	13s 0.40um		RVR	85.15 39 eP	37 21.00 0.5	TSM	8.89 199 ePc
XAN	39.47 305 Pc	32 15.10 -0.3	GSC	85.41 56 eP	37 17.00 -5.0X	HKC	11.52 327 iP
	S	38 15.00	KEV	85.51 55 eP	37 23.00 0.3	QZH	12.37 350 P
GYA	39.70 293 iPd	32 18.80 1.2	PEC	85.52 343 eP	37 23.00 1.1		4.0s 900.00nm
	S	38 22.00	LRM	85.61 56 eP	37 24.00 0.9	N	14s 1.80um
HHC	40.20 316 eP	32 21.00 -0.5	PLM	85.67 44 eP	37 23.60 0.2		pP
BTO	41.13 315 eP	32 30.00 0.9	TPC	86.00 57 eP	37 26.00 0.8	QIZ	12.38 302 eP
DZM	41.63 153 iPc	32 32.50 -0.9	SOD	86.44 56 eP	37 28.00 0.8	N	15s 1.90um
CD2	42.93 299 eP	32 43.70 -0.2	GLA	86.97 341 iP	37 29.00 -0.1	E	17s 3.30um
	Z 22s 0.50um	4.4Msz	FFC	87.72 56 eP	37 34.00 0.6	GZH	12.60 326 eP
	S	39 06.00	BW06	88.62 46 eP	37 39.00 1.2	Z	12s 2.40um
KMI	43.09 290 Pd	32 47.00 1.5	FFC	88.68 33 eP	37 37.00 -0.5	N	11s 1.00um
	Z 20s 0.80um	4.6Msz		1.8s 55.00nm	5.6mb	E	12s 2.30um
	pP	32 57.00 34km	SUF	89.79 337 eP	37 42.00 -0.6	SSE	18.31 1 P
	sP	33 03.00	NUR	91.66 335 eP	37 51.00 -0.2		4.0s 600.00nm
	eS	39 13.00	RSSD	91.85 43 eP	37 52.50 -0.3	Z	20s 1.50um
LZH	44.05 306 iPc	32 54.00 0.9	GOL	92.67 48 eP	38 03.00 33km	N	13s 0.70um
	1.5s 190.00nm	5.7mb	HFS	96.02 339 eP	38 09.80 -1.6	E	13s 0.80um
	Z 20s 0.80um	4.6Msz		0.6s 2.50nm	4.9mb		sS
N	15s 1.00um		NB2	96.19 340 P	38 11.40 -0.8	WHN	18.77 342 Pc
E	15s 70.00um			0.7s 2.50nm	4.8mb	Z	20s 1.90um
	pP	33 05.00 38km	SLR	122.86 249 ePKP	43 42.00 0.6	N	16s 2.70um
	sP	33 09.00	LKO	143.68 312 PKP	44 17.58 -3.0X	E	12s 1.50um
	PP	34 36.00	KIC	145.12 307 PKPd	44 22.88 -0.1		eS
	eS	39 22.50		0.5s 14.50nm		LOE	19.12 287 eP
	sS	39 39.00	TIC	145.16 307 PKP	44 22.94 -0.1	GYA	19.16 318 P
	eSS	42 30.00	LIC	145.43 307 PKP	44 23.86 0.4	N	13s 1.90um
LOE	44.08 279 eP	32 53.50 0.2	ZOBO	145.53 96 PKP	44 25.00 0.7	E	13s 1.00um
NST	45.77 277 eP	33 08.50 1.6		1.2s 27.03nm			pP
NNT	46.59 273 eP	33 07.70 -5.6X	LPB	145.57 97 PKP	44 22.00 -2.2	NJ2	19.35 355 Pc
CHG	46.62 281 eP	33 14.00 0.4		S.D. = 0.9 on 89 of 95 obs.			4.5s 700.00nm
	0.8s 14.55nm	5.0mb		MAY 27, 1990 12h 45m 03.57± 0.62s		Z	16s 0.90um
BDT	46.69 279 eP	33 15.00 0.9		42.141 N ± 6.2km	19.168 E ± 6.9km	N	14s 1.00um
IPM	47.16 262 ePc	33 20.80 2.9X		DEPTH = 10.0km (geophysicist)		E	12s 0.50um
GTA	48.03 309 eP	33 24.80 0.2		YUGOSLAVIA	(383)	NST	20.38 281 eP
	Z 20s 1.50um	5.0Msz		MD 2.4 (TTG).		KGM	20.42 240 eP
E	15s 0.50um					NNT	20.69 272 eP
BWA	49.69 179 eP	33 37.10 -0.1	ULC	0.19 161 iPg	45 06.90 -0.9		e
PSI	49.73 260 ePc	33 38.80 1.0	BDV	0.29 299 ePg	45 10.50 0.9	SNG	20.74 257 eP
CAN	50.60 179 eP	33 44.20 0.1	TTG	0.30 13 iPg	45 09.70 0.0		1.3s 1819.23nm
BFD	52.66 185 eP	33 59.00 -0.6					eS
TOO	52.87 182 eP	34 01.60 0.4	HCY	0.58 302 ePg	45 15.30 -0.1	KMI	21.15 308 Pc
MRWA	54.04 215 eP	34 09.00 -0.9					2.00um
WMO	57.85 312 P	34 38.00 0.7	NKY	0.68 349 ePg	45 16.40 -0.8	Z	18s 2.00um
	Z 20s 0.65um	4.7Msz				N	10s 0.80um
	eS	42 35.00	BRY	0.89 329 ePg	45 20.50 -0.2	E	10s 0.50um
GUN	58.24 293 P	34 40.50 -0.1					pP
PKI	58.67 293 P	34 43.00 -0.6	OHR	1.60 130 ePn	45 32.50 0.5	IPM	21.26 249 ePd
	0.7s 23.00nm	5.4mb	SKO	1.70 95 ePn	45 34.00 0.6		0.9s 35.20nm
DMN	58.94 293 P	34 45.00 -0.4				BDT	21.65 285 eP
	0.6s 37.00nm	5.7mb					1.1s 50.80nm
GKN	59.34 294 P	34 47.70 -0.3				CHG	22.01 289 ePd
IMA	63.38 23 eP	35 14.00 -0.6					1.0s 48.75nm
							eS
						TIA	23.66 352 eP
							1.0s 48.75nm
							eS
							09 32.00
							05 44.40 -1.3
							4.4Msz
							0.70um

XAN	E	14s	0.80um			COOL	43.34	180	eP	08	36.80	-0.3	GTA	47.93	309	eP	12	42.40	0.3		
	N	23.89	335	P	05	47.60	-0.4	KLB	44.15	184	eP	08	43.10	-0.6	LSA	53.53	296	P	13	26.10	1.0
		14s	2.10um			MUN	44.66	186	eP	08	47.00	-0.8	WMQ	57.76	312	P	13	55.50	0.5		
			S		09	58.00		POO	45.61	284	eP	08	53.50	-2.2	GUN	58.14	293	P	13	58.20	0.0
PSI		23.94	247	eP	05	49.40	0.8	CMS	50.01	152	iPc	09	30.00	0.3	PKI	58.57	293	P	14	00.70	-0.5
CD2		24.08	322	eP	05	49.70	-0.2	ADE	50.32	161	iPc	09	32.00	-0.1	DMN	58.84	293	P	14	02.60	-0.4
	Z	16s	1.30um				4.5MszX		0.8s	35.82nm		5.4mb			0.5s	29.00nm			5.7mb		
	N	13s	2.50um			COO	52.33	146	eP	09	47.00	-0.4	GKN	59.24	294	P	14	05.40	-0.3		
			eS		10	05.50		BFD	53.62	159	eP	09	56.00	-0.7	FBA	65.29	25	eP	14	44.00	-1.2
TIY		26.04	345	Pd	06	08.20	-0.3		1.0s	20.00nm		5.1mb			0.8s	3.45nm			4.5mb		
	Z	17s	2.40um			BWA	53.65	152	eP	09	58.40	1.3	NDI	65.72	295	iPc	14	40.50	-0.1		
	N	13s	1.20um			CAN	54.66	152	eP	10	04.70	0.2	HYB	65.94	282	iPc	14	50.00	-0.1		
			pP		06	14.00	21kmX	CNB	54.83	152	iPc	10	06.10	0.3		1.0s	35.00nm		5.4mb		
			eS		10	33.00			1.1s	47.00nm		5.4mb		GBA	67.69	279	Pc	15	00.50	-0.7	
			sS		10	52.00		MAIO	59.62	305	eP	10	39.00	-0.9		0.5s	3.80nm		4.7mb		
DL2		26.10	1	eP	06	10.50	1.6		0.8s	9.88nm		5.0mb		POO	70.15	284	eP	15	14.50	-2.0	
	Z	16s	1.00um				4.4MszX			eS		19	02.00		MBC	75.69	14	eP	15	48.00	0.0
	N	14s	1.40um			IMA	76.61	25	eP	12	26.40	1.1		0.6s	7.00nm			4.8mb			
	E	14s	1.40um				1.3s	14.20nm			4.8mb		GMW	78.39	44	P	16	03.30	-0.2		
			eS		10	40.00		QTFJ	77.91	300	Pd	12	33.70	0.6	SHW	79.01	45	P	15	56.60	-10.5X
MTN		27.32	158	iPd	06	19.00	-1.3	FBA	79.14	26	eP	12	39.00	-0.1	LON	79.19	44	P	16	07.80	-0.2
		1.1s	86.00nm				5.3mb	SALJ	79.40	301	Pc	12	41.90	0.7	MAIO	79.48	305	iPd	16	11.00	1.1
BJI		27.55	352	eP	06	21.00	-1.2	KFNJ	79.43	300	Pc	12	42.50	1.3		1.0s	10.00nm		4.8mb		
		1.8s	48.00nm			KEV	79.54	339	eP	12	44.00	2.9	BKS	80.70	53	e(P)	16	17.70	1.5		
	Z	17s	1.23um			LISJ	79.69	300	Pc	12	43.00	0.4	ORV	80.90	52	eP	16	17.00	-0.2		
	N	14s	0.77um			DSI	79.72	300	eP	12	44.00	1.1	ARN	81.36	54	P	16	19.00	0.1		
			PP		07	10.00	</														

1.0s	13.00nm	4.3mb																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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KHC	41.96 334 iPd	04 43.50 -0.8	1.0s 12.00nm	4.6mb	LSA	50.05 62 P	05 48.80 -0.3	MBL	13.66 182 iPc	36 51.50 -0.1
TMA	42.03 328 ePd	04 45.10 0.1	04 57.90 55km		SUF	50.48 352 iP	05 51.20 -0.1	NANU	0.4s 13.00nm	34 26.10 4.5mb
PRU	42.23 336 P	04 46.20 -0.2	04 59.70 51km		HFS	50.75 343 eP	05 51.00 -2.4	WB5	15.76 197 iPc	34 46.50 0.2
KSP	42.24 338 eP	04 46.30 -0.1	04 59.70 51km		2	16s 0.07um	3.8MszX	WRA	0.8s 329.00nm	35 10.20 5.6mb X
MMK	42.47 327 ePd	04 48.50 -0.3	04 59.70 51km		WMO	50.97 44 P	05 55.60 0.1	PSI	18.33 134 iPc	35 11.00 0.7
LLS	42.48 329 ePd	04 48.60 -0.1	04 59.70 51km		2	14s 0.35um	4.5MszX	BDT	18.35 134 Pc	35 10.20 -0.3
BNI	42.55 325 P	04 49.50 0.2	04 59.70 51km		NB2	52.19 343 P	06 03.00 -1.4	CHG	0.5s 18.10nm	35 10.20 4.7mb
SAX	42.56 329 ePd	04 49.10 -0.4	04 59.70 51km		EKA	53.72 331 Pc	06 14.80 -0.8	GBA	23.70 294 ePd	35 58.40 -0.3
LPG	42.78 325 eP	04 50.40 -0.9	04 59.70 51km		DCN	54.73 327 eP	06 23.00 -0.1	GUN	32.40 319 eP	37 14.00 0.7
DIX	42.79 327 ePd	04 51.00 -0.4	04 59.70 51km		SOD	54.90 354 iP	06 23.70 -0.5	PKI	33.60 321 eP	37 23.90 0.5
EMS	43.04 326 ePd	04 52.60 -0.7	04 59.70 51km		KEV	57.17 355 iP	06 41.00 0.6	DMN	47.52 296 P	39 14.00 0.3
BRG	43.16 336 iP	04 53.20 -0.7	04 59.70 51km		GTA	58.58 52 eP	06 51.40 0.5	GKN	0.6s 2.30nm	39 20.80 -0.2
ZLA	43.19 329 ePd	04 53.80 -0.6	04 59.70 51km		CD2	61.01 62 eP	07 07.20 -0.5	PKI	0.7s 20.00nm	39 21.20 -0.5
SLE	43.33 329 ePd	04 54.90 -0.5	04 59.70 51km		LZH	61.36 56 P	07 10.00 -0.1	DMN	48.56 317 P	39 21.20 -0.5
GRF	43.40 333 iPd	04 55.10 -0.9	04 59.70 51km		2	1.5s 35.00nm	5.3mb	GKN	0.5s 11.00nm	39 23.00 -0.3
CLL	43.87 336 iPc	04 59.00 -0.7	04 59.70 51km		GYA	63.58 67 P	07 19.00 29kmX	PKI	49.36 317 P	39 27.10 -0.2
MOX	43.94 334 eP	05 00.00 -0.3	04 59.70 51km		XAN	65.43 58 P	07 24.80 -0.2	PKI	0.4s 10.00nm	4.6mb
GKN	44.14 63 P	05 00.80 -1.7	04 59.70 51km		HHC	67.67 51 eP	07 37.10 0.3	PKI	0.5s 11.00nm	4.6mb
BSF	44.24 328 eP	05 02.30 -0.6	04 59.70 51km		TIY	68.30 54 eP	07 55.00 0.1	PKI	0.6s 2.30nm	3.8mb
CDF	44.37 329 eP	05 03.20 -0.7	04 59.70 51km		WHN	70.13 62 Pc	08 07.50 1.3	PKI	0.7s 20.00nm	4.7mb
KIC	44.48 266 P	05 05.44 0.2	04 59.70 51km		BJI	71.19 52 eP	08 14.00 1.6	PKI	0.8s 20.00nm	4.7mb
DMN	44.49 64 P	05 03.60 -1.8	04 59.70 51km		TIA	72.10 56 eP	08 18.70 0.7	PKI	0.9s 20.00nm	4.7mb
HAU	44.58 328 eP	05 05.00 -0.5	04 59.70 51km		CN2	77.83 48 iPc	08 52.10 1.6	PKI	1.0s 32.00nm	5.0mb
PKI	44.74 64 P	05 04.60 -2.9	04 59.70 51km		MAT	88.81 53 eP	09 47.00 0.2	PKI	1.1s 62.00nm	5.3mb
LIC	44.79 266 P	05 07.76 0.1	04 59.70 51km		MBC	89.94 355 eP	09 52.50 1.2	PKI	1.2s 65.00nm	5.3mb
INS	45.04 332 ePc	05 09.00 -0.2	04 59.70 51km		ZOBO	110.66 257 iPd	11 18.90 -7.7X	PKI	1.3s 65.00nm	5.3mb
SMF	45.09 325 eP	05 08.30 -1.3	04 59.70 51km		LPB	110.67 257 ePd	11 57.00 -29.5X	PKI	1.4s 65.00nm	5.3mb
CAF	45.15 322 eP	05 10.40 0.2	04 59.70 51km					PKI	1.5s 65.00nm	5.3mb
GUN	45.21 64 P	05 09.60 -1.7	04 59.70 51km					PKI	1.6s 65.00nm	5.3mb
LBF	45.21 326 eP	05 09.60 -1.0	04 59.70 51km					PKI	1.7s 65.00nm	5.3mb
AVF	45.45 325 eP	05 11.50 -0.9	04 59.70 51km					PKI	1.8s 65.00nm	5.3mb
LOR	45.45 326 eP	05 11.60 -0.8	04 59.70 51km					PKI	1.9s 65.00nm	5.3mb
SSF	45.52 325 eP	05 12.10 -0.9	04 59.70 51km					PKI	2.0s 65.00nm	5.3mb
LPO	45.55 321 eP	05 13.70 0.4	04 59.70 51km					PKI	2.1s 65.00nm	5.3mb
APHE	45.56 309 eP	05 15.00 1.3	04 59.70 51km					PKI	2.2s 65.00nm	5.3mb
MAF	45.57 324 eP	05 13.20 -0.2	04 59.70 51km					PKI	2.3s 65.00nm	5.3mb
BGF	45.60 324 eP	05 13.40 -0.2	04 59.70 51km					PKI	2.4s 65.00nm	5.3mb
RJF	45.68 322 eP	05 14.40 0.1	04 59.70 51km					PKI	2.5s 65.00nm	5.3mb
ASMO	45.74 310 iPc	05 15.00 -0.1	04 59.70 51km					PKI	2.6s 65.00nm	5.3mb
ATEJ	45.80 309 iPd	05 15.50 0.0	04 59.70 51km					PKI	2.7s 65.00nm	5.3mb
ALOJ	45.93 309 iPc	05 14.00 -2.6	04 59.70 51km					PKI	2.8s 65.00nm	5.3mb
LFF	45.96 321 eP	05 16.90 0.4	04 59.70 51km					PKI	2.9s 65.00nm	5.3mb
AAPN	46.01 310 iPc	05 17.00 -0.2	04 59.70 51km					PKI	3.0s 65.00nm	5.3mb
LSF	46.18 323 eP	05 18.00 -0.3	04 59.70 51km					PKI	3.1s 65.00nm	5.3mb
MEM	46.45 331 Pd	05 20.50 0.3	04 59.70 51km					PKI	3.2s 65.00nm	5.3mb
ENN	46.59 331 eP	05 21.50 0.2	04 59.70 51km					PKI	3.3s 65.00nm	5.3mb
DOU	46.80 329 Pc	05 22.40 -0.6	04 59.70 51km					PKI	3.4s 65.00nm	5.3mb
WTS	47.01 332 ePc	05 25.00 0.4	04 59.70 51km					PKI	3.5s 65.00nm	5.3mb
NUR	48.61 350 iP	05 46.60 9.6X	04 59.70 51km					PKI	3.6s 65.00nm	5.3mb
FLN	48.70 325 eP	05 36.70 -1.2	04 59.70 51km					PKI	3.7s 65.00nm	5.3mb

27d 20h

LBF 79.68 6 eP 27 14.90 -0.1
0.6s 2.70nm 4.4mb
AVF 79.83 7 eP 27 15.80 0.1
0.6s 1.80nm 4.2mb
SMF 80.01 7 eP 27 16.90 0.2
0.6s 1.80nm 4.2mb
LSF 80.22 8 eP 27 18.10 0.2
0.9s 8.20nm 4.7mb
TCF 80.24 8 eP 27 18.20 0.2
MAF 80.34 8 eP 27 19.80 1.3
0.6s 1.80nm 4.2mb
QUE 84.62 315 eP 27 41.00 -0.1
BUL 144.75 334 iPKPc 34 31.80 -12.8X
SLR 150.16 332 iPKPc 34 57.00 3.8X
S.D. = 0.7 on 18 of 21 obs.

MAY 27, 1990 20h 44m 57.98±0.49s
41.909 N ± 2.3km 126.738 W ± 5.2km
DEPTH = 10.0km (geophysicist)
4.3mb (4 obs.) 4.2Msz (1 obs.)
OFF COAST OF NORTHERN CALIFORNIA(34)

FHC 2.35 117 ePc 45 36.50 -0.8
WDC 3.43 111 iPc 45 52.50 -0.1
GROR 4.10 32 P 46 02.84 0.7
MIN 4.18 110 ePc 46 03.10 -0.2
TCO 4.36 58 P 46 06.14 0.1
KMOR 4.41 31 P 46 05.97 -0.5
GT2 4.59 44 P 46 08.87 -0.2
ORV 4.62 119 eP 46 08.30 -1.2
eS 47 04.10
PGO 4.72 40 P 46 12.37 1.5
NLO 4.80 28 P 46 12.08 -0.1
GMO 4.93 57 P 46 13.79 -0.2
TDH 4.93 45 P 46 13.80 -0.2
VLMW 4.98 42 P 46 14.60 0.0
VLL 5.11 44 P 46 17.29 0.9
RVW 5.12 33 P 46 16.85 0.3
VFP 5.12 47 P 46 17.55 0.8
VJPM 5.17 58 P 46 16.86 -0.6
CROR 5.19 52 P 46 17.06 -0.6
LVP 5.20 35 P 46 17.67 -0.1
BMW 5.22 28 P 46 17.22 -0.7
MTMW 5.25 37 P 46 18.12 -0.4
APM 5.29 42 P 46 19.65 0.6
BRK 5.30 138 e(P) 46 17.70 -1.4
BKS 5.31 138 eP 46 18.60 -0.6
FL2 5.33 35 P 46 19.74 0.2
SHW 5.37 36 P 46 21.17 0.9
HSR 5.38 36 P 46 20.90 0.5
CDFW 5.40 37 P 46 20.16 -0.3
REMW 5.40 36 P 46 23.07 2.4
ESD 5.41 36 P 46 21.87 1.0
STD 5.41 35 P 46 20.84 0.0
ERK 5.42 34 P 46 20.83 0.0
SOSW 5.45 36 P 46 21.82 0.5
CZM 5.45 32 P 46 21.25 0.0
GULW 5.47 41 P 46 21.41 -0.2
TDL 5.51 35 P 46 22.18 0.1
PCC 5.54 141 e(P) 46 22.60 0.2
VTHM 5.55 52 P 46 22.80 0.1
APW 5.58 30 P 46 24.19 1.2
KOSW 5.60 34 P 46 23.63 0.2
VGB 5.63 48 P 46 23.47 -0.3
ASR 5.63 39 P 46 23.55 -0.3
CPW 5.68 26 P 46 23.45 -1.1
LMW 5.73 32 P 46 25.47 0.3
GL2 5.88 45 P 46 27.03 -0.3
GLK 5.94 37 P 46 27.90 -0.2
LON 5.99 34 eP 46 29.00 0.2
MHC 6.02 138 e(P) 46 29.20 -0.2
WPW 6.07 36 P 46 29.83 -0.1
ARN 6.07 137 eP 46 29.20 -0.8
RVC 6.08 33 P 46 30.43 0.3
GCC 6.10 141 e(P) 46 33.10 2.8
OOW 6.10 16 P 46 29.31 -1.1
JBO 6.13 52 P 46 30.51 -0.3
FMW 6.19 34 P 46 32.10 0.3
CMB 6.23 126 e(P) 46 31.30 -0.9
GSM 6.36 32 P 46 34.40 0.2
RMW 6.57 31 P 46 37.18 0.1
MXC 6.57 43 P 46 36.64 -0.4
STW 6.61 18 P 46 37.47 0.0
PRW 6.66 47 P 46 37.50 -0.7
BRVW 6.67 44 P 46 38.03 -0.4
RSW 6.82 47 P 46 39.74 -0.8
TBM 6.85 38 P 46 41.22 0.3

HTW 6.87 29 P 46 40.82 -0.4
MDW 6.87 44 P 46 41.58 0.4
WIW 7.01 47 P 46 42.17 -0.9
GBL 7.02 46 P 46 42.70 -0.6
WAH2 7.07 44 P 46 43.50 -0.4
JCW 7.15 27 P 46 44.25 -0.8
KVN 7.18 111 eP 46 45.30 -0.4
CRF 7.20 44 P 46 44.97 -0.8
LNOR 7.28 54 P 46 46.57 -0.4
ETW 7.29 36 P 46 47.25 0.0
FRI 7.33 130 ePc 46 48.70 1.1
EPH 7.45 41 P 46 49.38 0.0
SAW 7.79 40 P 46 53.37 -0.8
PNT 8.93 32 eP 47 11.00 1.1
0.8s 18.00nm 5.5mb X

LRM 11.03 64 eP 47 39.20 0.1
MSU 11.64 102 eP 47 49.00 1.6
SES 13.78 47 eP 48 15.00 -0.6
GOL 16.33 91 eP 48 48.50 -0.6
ALO 17.33 107 eP 49 05.00 3.4X
MEO 23.13 99 e(P) 50 16.60 11.5X
PMR 23.87 333 eP 50 11.70 -0.3
0.8s 9.91nm 4.4mb

TUL 24.73 94 e(P) 50 25.50 4.9X
1.2s 9.10nm 4.3mb
Z 18s 0.75um 4.2Msz

UYO 26.46 96 e(P) 50 38.60 1.8
IMA 28.48 337 eP 50 53.50 -1.5
0.8s 2.59nm 4.1mb
MBC 34.59 3 eP 51 47.50 -0.9
1.0s 5.00nm 4.4mb
BRG 81.43 24 e(P) 57 17.60 1.4
SPC 84.75 21 eP 57 34.00 0.5
e 20 13.10
ZST 84.76 23 eP 57 34.00 0.7
SRO 85.46 23 eP 57 37.00 0.2
S.D. = 0.8 on 90 of 93 obs.

MAY 27, 1990 21h 16m 12.34±0.67s
30.781 N ± 9.1km 103.231 E ± 7.6km
DEPTH = 33.0km (normal)
4.3mb (2 obs.)
SICHUAN PROVINCE, CHINA (307)
ML 3.9 (BJI).

CD2 0.47 74 ePg 16 22.10 -0.5
Sg 16 31.30
GYA 5.26 144 ePn 17 30.40 -0.4
Sn 18 28.80
Sg 19 00.20
LZH 5.32 5 ePn 17 30.00 -1.7
KMI 5.65 185 ePn 17 36.00 -0.4
Sn 18 37.50
XAN 5.81 54 Pn 17 40.50 2.0
Pg 18 01.00
Sn 18 48.50
Sg 19 21.20
GUN 15.40 264 P 19 50.20 1.0
PKI 15.89 263 P 19 56.30 0.8
0.6s 14.00nm 4.3mb
GKN 16.44 265 P 20 01.40 -0.9
WB5 58.59 145 eP 26 07.20 -1.2
WRA 58.63 145 P 26 10.00 1.3
0.6s 1.60nm 4.3mb
S.D. = 1.4 on 10 of 10 obs.

MAY 27, 1990 21h 49m 35.46±0.12s
74.225 N ± 1.8km 8.828 E ± 2.6km
DEPTH = 29.1km (9 depth phases)
5.5mb (61 obs.) 5.7Msz (26 obs.)
GREENLAND SEA (640)
Ms 6.3 (PAS), 6.0 (BRK),
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 32C
Centroid Location:
Origin Time 21:49:35.8 0.4
Lat 73.86N 0.07 Lon 7.78E 0.06
Dep 15.0 FIX Half-duration 3.5
Moment Tensor: Scale 10**17 Nm
Mrr=-4.10 0.17 Mtt=-1.07 0.29
Mff= 5.17 0.18 Mrt= 0.00 0.00
Mrf= 0.00 0.00 Mtf= 1.78 0.14
Principal Axes:
T Vol= 5.65 Plg= 0 Azm=105
N -1.55 0 15

P -4.10 90 180
Best Double Couple: Mo=4.9*10**17
NP1: Strike=195 Dip=45 Slip= -90
NP2: 15 45 -90

KBS 4.77 7 iPc 50 44.20 -3.0X
eS 51 33.50
TRO 5.57 141 iPd 50 54.75 -3.7X
eS 51 51.01
JNW 6.07 247 eP 51 00.80 -4.6X
LOF 6.31 164 iPd 51 04.59 -4.3X
eS 52 10.03
KTK1 6.92 132 iPd 51 14.16 -3.2X
eS 52 29.88
KEV 7.17 120 iP 51 17.30 -3.6X
0.7s 114.80nm 6.0mb
i 51 28.30
e 53 20.00
e 54 16.00
SOD 8.99 131 iP 51 41.60 -4.6X
i 51 46.20
NSS 9.80 172 eP 51 53.69 -3.7X
eS 53 32.77
MOL 11.72 183 iPd 52 18.94 -4.6X
eS 54 22.04
AKU 12.44 241 eP 52 33.20 0.1
1.7s 261.54nm 6.1mb
SUF 13.10 143 iP 52 38.00 -3.8X
0.6s 35.10nm 5.6mb
NB2 13.28 175 P 52 38.80 -5.5X
0.7s 6.90nm 4.8mb
NRA0 13.59 174 Pn 52 45.10 -3.3X
Sn 55 10.30
HFS 14.27 170 eP 52 54.50 -2.8X
0.7s 16.50nm 4.8mb
Z 18s 15.18um 4.9Msz X
LR 56 05.00
UPP 14.80 162 iPc 53 02.70 -1.5
iS 55 32.00
NUR 14.96 148 iP 53 02.00 -4.3X
1.0s 206.00nm 5.4mb
e 53 12.80
e 56 08.00
e 57 04.00
e 59 24.00
EKA 19.56 201 P 54 03.00 -0.4
2.9s 852.80nm 5.5mb
WIT 21.51 184 eP 54 25.00 1.4
BRN 21.97 173 eP 54 28.00 -0.1
DCN 21.97 206 eP 54 29.30 1.1
YRH 22.18 202 eP 54 28.30 -1.9
1.3s 137.00nm 5.2mb
DBN 22.26 186 eP 54 32.00 1.0
Z 20s 4.00um 4.8Msz
eS 58 38.00
WTS 22.33 183 eP 54 33.00 1.3
2.0s 723.00nm 5.8mb
ETA 22.48 204 eP 54 31.50 -1.7
ECP 23.01 204 eP 54 38.60 0.2
1.1s 128.00nm 5.3mb
CLL 23.07 173 iPc 54 39.80 0.8
i 54 46.60 24km
eS 58 52.00
BRG 23.54 172 iPc 54 44.60 1.1
2.2s 660.00nm 5.8mb
i 54 54.20 35km
i 55 10.20
i 55 22.40
iS 58 58.00
e 03 06.00
ENN 23.58 185 iPd 54 44.50 0.6
2.0s 1167.00nm 6.1mb
UCC 23.59 187 Pd- 54 44.30 0.3
S 59 02.00
KSP 23.68 168 eP 54 45.30 0.4
eS 59 02.00
e 03 13.50
MOX 23.70 176 ePc- 54 46.50 1.4
2.4s 1106.00nm 6.0mb
Z 18s 10.70um 5.4Msz
N 18s 8.90um
E 18s 2.90um
VAL 23.73 210 eP 54 45.00 -0.4
S 59 06.00
MEM 23.73 184 iPd 54 45.72 0.3
SNF 23.88 187 iPd 54 47.00 0.2
TNS 24.09 181 ePd 54 49.10 0.1

OFUJ	62.67	40	P	59	58.30	-0.9
CMB	63.03	317	eP	59	57.00	-4.6X
			eP'P'	29	06.70	
ANMO	63.10	304	P	00	02.60	0.3
	2.0s	117.65nm				5.7mb
ALO	63.10	304	eP	00	01.10	-1.2
	1.7s	93.27nm				5.6mb
Z	18s	10.48um				6.1MsZ
YAMJ	63.26	42	P	00	02.30	-0.8
BRK	63.53	318	ePc	00	07.00	2.2
Z	20s	10.00um				6.0MsZ
		ePPP	04	12.00		
		eS	08	43.00		
		e	14	10.00		
		eLR	20	06.00		
FRI	63.91	316	ePc	00	08.40	1.0
MAT	64.51	44	eP	00	10.00	-1.3
	1.8s	190.91nm				5.9mb
Z	20s	2.84um				5.5MsZ
		eS	08	54.00		
NJ2	64.63	62	Pd	00	09.50	-2.6
Z	18s	1.80um				5.3MsZ
N	15s	2.70um				
E	14s	0.90um				
		S	08	55.00		
CLC	64.64	314	eP	00	13.00	0.8
PRI	64.92	316	ePc	00	16.00	1.9
ISA	64.96	314	eP	00	15.00	0.7
WHN	64.96	67	eP	00	13.00	-1.2
Z	20s	3.10um				5.5MsZ
N	13s	3.00um				
		sP	00	26.00		
		eS	08	56.00		
GSC	64.98	313	eP	00	15.00	0.5
POO	65.58	109	iPc	00	17.80	-0.6
SB8	65.77	314	eP	00	20.00	0.5
TPC	65.98	312	eP	00	22.00	1.2
SSE	66.11	60	P	00	20.00	-1.6
	4.0s	600.00nm				6.1mb X
Z	20s	4.50um				5.7MsZ
E	18s	6.80um				
		S	09	10.00		
MWC	66.27	314	eP	00	23.00	0.1
SYP	66.35	315	eP	00	25.00	1.7
RVR	66.36	313	eP	00	23.00	-0.2
PAS	66.37	314	eP	00	23.00	-0.2
		ePP	04	33.00		
		eS	09	24.00		
		eSS	13	27.00		
		eLR	20	45.00		
GLA	66.75	310	eP	00	27.00	1.3
GYA	66.87	75	iPd	00	26.00	-0.7
Z	28s	3.60um				5.4MsZ X
N	20s	3.00um				
		S	09	17.00		
PLM	66.87	312	eP	00	27.00	0.3
KMI	67.10	79	Pc	00	27.50	-0.7
	1.5s	250.00nm				6.1mb
Z	20s	11.00um				6.1MsZ
N	17s	2.80um				
E	17s	2.20um				
		pP	00	37.50		32km
		iS	09	25.00		
BAR	67.49	312	eP	00	33.00	2.6
HYB	67.87	105	iPd	00	32.00	-0.9
	1.2s	71.40nm				5.7mb
GBA	71.23	107	Pd	00	51.80	-1.6
	1.7s	88.30nm				5.6mb
QZH	71.37	64	eP	00	52.00	-2.2
E	18s	3.80um				
		eS	10	12.00		
		sS	10	16.00		
GZH	71.83	70	P	00	58.00	1.0
Z	18s	6.80um				6.0MsZ
N	17s	6.80um				
		S	10	16.00		
CHG	72.07	85	ePd	00	58.10	-0.4

27d 22h

1.0s 25.00nm 5.3mb
 NEW 77.74 318 P 04 55.00 0.3
 1.1s 18.52nm 5.1mb
 RVR 77.80 303 eP 05 01.00 5.8X
 CLC 77.95 305 eP 05 06.00 9.9X
 SBB 78.16 304 eP 05 01.00 3.7X
 KVN 78.31 308 P 04 56.60 -1.6
 ISA 78.67 305 eP 05 04.00 3.9X
 PNT 79.41 319 eP 05 06.00 2.2
 1.0s 17.00nm 5.0mb
 FRI 79.62 306 e(P) 05 09.80 4.6X
 SYP 79.94 304 eP 05 25.00 17.9X
 BCH 80.00 304 P 05 10.60 3.2X
 TAB 80.02 53 eP 05 10.00 2.5
 CMB 80.13 307 eP 05 09.80 1.9
 epP 06 00.50 209kmX
 esP 06 26.00
 MBC 80.74 346 eP 05 12.00 1.6
 1.0s 28.00nm 5.2mb
 ORV 80.94 309 ePd 05 15.00 2.9X
 MIN 80.98 310 e(P) 05 18.60 6.1X
 MHC 81.15 307 eP 05 19.10 5.6X
 WDC 81.68 310 e(P) 05 22.60 6.6X
 FBA 91.70 336 P 06 14.00 9.5X
 1.0s 7.50nm 5.0mb
 BJI 126.39 26 ePKP 12 07.00 6.1X
 KKM 149.96 64 ePKP 12 54.00 9.9X
 TOO 150.20 184 ePKP 12 53.90 10.2X
 S.D. = 1.5 on 132 of 167 obs.

? MAY 27, 1990 21h 57m 44.22±5.96s
 8.469 N ±80.9km 37.499 W ±43.1km
 DEPTH = 10.0km (geophysicist)
 4.7mb (15 obs.)
 CENTRAL MID-ATLANTIC RIDGE (406)

MBO 20.97 72 eP 02 30.30 0.2
 EPF 47.75 37 eP 06 24.40 0.9
 0.9s 12.30nm 5.0mb
 LFF 49.09 36 eP 06 34.10 0.4
 0.9s 14.75nm 5.0mb
 LPO 49.20 36 eP 06 34.70 0.1
 0.9s 6.55nm 4.6mb
 MFF 49.60 33 eP 06 37.60 0.8
 0.8s 5.35nm 4.6mb
 CAF 49.85 36 eP 06 39.70 0.1
 0.9s 6.55nm 4.6mb
 LPF 50.02 31 eP 06 41.50 0.7
 0.8s 10.75nm 4.9mb
 LSF 50.31 35 eP 06 43.00 -0.1
 GRR 50.34 31 eP 06 43.30 0.0
 FLN 50.78 31 eP 06 46.40 -0.1
 LDF 50.85 31 eP 06 47.10 0.0
 ETA 50.91 24 eP 06 48.10 0.7
 BGF 51.23 35 eP 06 50.20 0.1
 0.9s 10.65nm 4.8mb
 AVF 51.65 35 eP 06 53.00 -0.2
 0.9s 5.75nm 4.5mb
 YRH 51.65 25 eP 06 52.60 -0.6
 SSF 51.89 35 eP 06 54.70 -0.4
 LBF 52.11 35 eP 06 56.60 -0.2
 0.9s 6.55nm 4.6mb
 LOR 52.21 35 eP 06 57.20 -0.3
 HAU 54.02 35 eP 07 10.10 -0.7
 0.9s 8.20nm 4.8mb
 EKA 54.07 23 P 07 11.00 -0.1
 1.0s 4.50nm 4.5mb
 BSF 54.18 35 eP 07 11.50 -0.6
 0.9s 8.20nm 4.8mb
 DOU 54.22 32 P 07 11.90 -0.3
 MEM 55.25 32 P 07 19.60 -0.2
 GRF 57.65 35 eP 07 36.10 -0.9
 NB2 63.54 24 P 08 16.70 -0.3
 0.9s 5.30nm 4.7mb
 HFS 64.09 26 ePKP 08 22.20 1.7
 0.7s 4.50nm 4.8mb
 SES 73.04 320 eP 09 20.00 3.7X
 MBC 79.89 346 eP 10 04.00 9.7X
 1.0s 5.00nm 4.4mb
 INK 84.42 338 eP 10 30.00 12.1X
 S.D. = 0.6 on 26 of 29 obs.

% MAY 27, 1990 22h 20m 14.89±1.70s
 44.542 N ±8.9km 6.882 E ±16.5km
 DEPTH = 10.0km (geophysicist)
 FRANCE (538)
 ML 2.3 (GEN).

PZZ 0.16 103 P 20 18.52 -0.2
 S 20 20.78
 RRL 0.38 350 P 20 22.31 -0.5
 S 20 28.26
 STV 0.44 133 P 20 23.65 -0.1
 S 20 30.52
 ENR 0.50 129 P 20 24.88 -0.1
 S 20 32.16
 RSP 0.66 23 P 20 27.85 -0.4
 S 20 36.57
 ROB 0.75 109 P 20 29.39 -0.2
 S 20 39.95
 LSD 0.94 12 P 20 33.90 1.0
 S 20 45.49
 IMI 0.96 131 P 20 33.80 0.6
 S 20 46.82
 FIN 1.01 109 P 20 34.00 0.0
 S 20 47.13
 S.D. = 0.6 on 9 of 9 obs.

* MAY 27, 1990 23h 11m 20.65±0.68s
 3.606 N ±14.0km 122.736 E ±16.6km
 DEPTH = 33.0km (normal)
 4.7mb (4 obs.)

CELEBES SEA (262)

WB5 25.99 154 eP 16 52.20 -0.2
 WRA 26.03 154 Pd 16 53.20 0.4
 0.6s 2.30nm 4.0mb
 MAT 35.74 22 (P) 18 18.00 -0.5
 0.7s 4.11nm 4.5mb
 GUN 42.62 308 P 19 16.60 0.4
 PKI 42.84 308 P 19 18.50 0.6
 DMN 43.09 308 P 19 20.40 0.5
 GKN 43.64 308 P 19 24.60 0.4
 0.5s 11.00nm 4.9mb
 GBA 45.80 285 Pd 19 39.90 -1.5
 0.7s 11.00nm 4.9mb
 S.D. = 0.9 on 8 of 8 obs.

MAY 27, 1990 23h 55m 31.08±1.19s
 7.739 S ±5.8km 127.893 E ±11.2km
 DEPTH = 97.4 ±13.3 km
 4.9mb (7 obs.)

BANDA SEA (280)

AAI 4.04 4 ePd 56 33.50 1.7
 MTN 5.99 148 iPc 56 57.20 -1.7
 KNA 8.01 174 iPd 57 24.80 -1.7
 0.3s 96.00nm 6.0mb X
 WB5 13.60 153 eP 58 36.00 -5.2X
 eS 00 59.00
 WRA 13.65 153 Pd 58 36.60 -5.2X
 1.1s 241.50nm 5.5mb
 MBL 15.45 209 eP 59 03.00 -1.9
 0.3s 22.00nm 4.9mb
 OIS 17.05 140 iPd 59 21.20 -3.7X
 eS 02 18.00
 i 59 24.00
 KKM 17.98 319 eP 59 39.00 2.7
 WARB 18.38 184 iPd 59 40.20 -1.0
 NANU 18.94 218 iPc 59 48.00 0.7
 eS 03 10.00
 MEKA 20.77 204 eP 00 07.00 0.8
 eS 03 45.00
 CTA 21.61 126 iP 00 20.00 5.3X
 e(S) 04 11.00
 FORR 22.99 180 iPd 00 19.40 -8.7X
 eS 04 43.00
 COOL 23.88 194 eP 00 37.50 0.8
 eS 05 02.00
 MRWA 24.12 206 eP 00 40.80 1.7
 eS 05 06.00
 QLP 24.34 142 iPd 00 41.20 0.0
 BAL 25.05 203 eP 00 48.50 0.7
 eS 05 25.00
 KLB 25.55 200 eP 00 53.10 0.7
 eS 05 36.00
 MUN 26.46 203 eP 01 00.50 -0.3
 eS 05 58.00
 IPM 29.47 294 ePc 01 28.50 0.3
 0.9s 27.30nm 4.9mb
 PSI 30.70 289 iPc 01 39.00 0.0
 0.8s 59.60nm 5.4mb
 BFD 32.19 158 ePd 01 52.20 0.4

e 02 15.00
 BWA 32.60 147 eP 01 56.90 1.5
 CAN 33.59 148 eP 02 04.90 0.9
 TOO 33.72 154 iPd 02 06.50 1.4
 0.6s 9.00nm 4.8mb
 CHTO 38.87 313 eP 02 50.00 1.2
 1.0s 3.00nm 4.1mb
 GYA 39.75 329 P 02 56.40 0.3
 CD2 44.85 330 eP 03 36.50 -0.9
 TIY 47.47 343 Pd 03 57.00 -1.0
 BJI 48.76 348 eP 04 06.00 -1.8
 GTA 53.64 333 eP 04 43.80 -1.0
 GUN 53.89 313 P 04 45.80 -1.3
 PKI 54.04 312 P 04 46.70 -1.5
 GKN 54.85 312 P 04 52.40 -1.5
 MAIO 77.53 310 eP 07 18.00 -0.1
 SPA 82.31 180 eP 07 43.00 -0.1
 1.0s 8.00nm 4.5mb
 BAO 109.74 272 ePd 09 54.80 4.0X
 0.6s 2.00nm
 LPB 151.16 147 PKP 15 12.00 2.3X
 ZOBO 151.36 146 PKP 15 16.90 6.7X
 CCH 151.44 151 PKP 15 16.50 6.5X
 S.D. = 1.3 on 31 of 40 obs.

& MAY 27, 1990 23h 57m 34.59s
 63.467 N 150.861 W
 DEPTH = 11.4km
 CENTRAL ALASKA (1)
 <AGS-P>.

KTH 0.09 343 iP 57 37.26 -0.2
 HUR 0.74 131 eP 57 48.94 -0.1
 eS 57 58.84
 MCK 0.90 72 eP 57 51.20 -0.5
 RND 0.90 93 iP 57 51.49 -0.4
 eS 58 03.17
 CUT 1.10 166 eP 57 55.81 0.7
 eS 58 09.61
 SKT 1.52 192 iP 58 02.54 0.8
 WRH 1.58 49 eP 58 01.97 -0.6
 CCB 1.79 47 eP 58 03.80 -1.8
 GHO 1.92 151 iP 58 07.94 0.4
 SML 2.03 144 iP 58 09.28 0.1
 PLRM 2.05 156 iP 58 09.37 0.1
 NCG 2.16 197 iP 58 11.86 0.9
 PMS 2.31 164 eP 58 14.35 1.2
 SPU 2.36 194 eP 58 14.61 0.8
 PAX 2.49 99 eP 58 16.64 0.9
 15 obs. associated

* MAY 28, 1990 00h 35m 50.79±0.73s
 55.257 N ±7.4km 58.699 E ±10.6km
 DEPTH = 33.0km (normal)
 4.5mb (12 obs.)

URAL MOUNTAINS REGION (335)

SUF 18.19 307 eP 40 02.00 0.0
 NUR 18.70 300 iP 40 05.00 -3.2X
 0.7s 12.00nm 4.2mb
 MAIO 18.97 178 iPd 40 11.00 -0.8
 SOD 19.31 322 iP 40 13.80 -1.7
 KEV 20.25 328 eP 40 26.00 0.5
 BBTK 23.13 239 eP 40 57.00 2.1
 KRA 23.85 274 eP 41 07.50 6.0X
 HFS 24.16 300 eP 41 05.20 0.7
 0.5s 6.50nm 4.4mb
 NB2 25.24 303 P 41 14.10 -0.8
 0.6s 11.60nm 4.7mb
 KSP 25.57 278 eP 41 18.50 0.5
 BRG 26.88 279 e(P) 41 47.00 16.9X
 CLL 27.22 281 eP 41 33.00 -0.1
 e 41 48.00
 KHC 27.92 276 P 41 40.40 0.8
 HAU 32.61 279 eP 42 21.00 -0.1
 LPL 33.80 275 eP 42 31.80 0.1
 0.7s 5.50nm 4.6mb
 LPG 33.80 275 eP 42 32.00 0.2
 0.7s 4.40nm 4.5mb
 EKA 34.19 296 P 42 35.00 0.3
 0.9s 3.30nm 4.3mb
 PGF 34.31 269 eP 42 35.90 -0.1
 SBF 34.38 272 eP 42 36.00 -0.6
 0.7s 14.35nm 5.0mb
 LOR 34.42 280 eP 42 36.30 -0.5
 LBF 34.51 279 eP 42 37.10 -0.6
 SSF 34.74 280 eP 42 39.00 -0.5

SMF 34.78 279 eP 42 40.70 0.7
 FRF 35.02 273 eP 42 41.40 -0.6
 0.7s 6.60nm 4.7mb
 LMR 35.24 272 eP 42 43.60 -0.2
 LRG 35.25 273 eP 42 43.60 -0.3
 0.7s 7.70nm 4.7mb
 BGF 35.40 280 eP 42 45.10 -0.1
 0.7s 6.05nm 4.6mb
 MAF 35.75 279 eP 42 48.20 0.0
 CAF 36.80 278 eP 42 57.90 0.9
 0.7s 3.30nm 4.3mb
 EPF 38.95 277 eP 43 14.70 -0.4
 0.7s 3.85nm 4.3mb
 INK 56.42 5 eP 45 32.00 1.3
 LKO 67.66 254 (P) 46 46.20 -0.5
 SPA 145.08 180 iPKPd 55 24.70 -0.2
 0.9s 13.64nm
 AIA 151.03 227 e(PK) 55 38.00 3.9X
 S.D. = 0.8 on 30 of 34 obs.

? MAY 28, 1990 00h 39m 28.63±3.19s
 15.883 N ±29.0km 98.685 W ±10.0km
 DEPTH = 33.0km (normal)
 OFF COAST OF GUERRERO, MEXICO (65)

ACX 1.49 311 iP 39 53.56 0.1
 iS 40 11.05
 OXX 2.23 57 iP 40 04.00 -0.2
 iS 40 31.98
 III 2.59 343 iP 40 09.00 -0.3
 iS 40 39.51
 IIT 3.14 7 (P) 40 17.00 -0.2
 iS 40 54.00
 PPM 3.17 1 iP 40 17.96 0.2
 (S) 40 56.04
 UNM 3.46 352 (P) 40 29.00 7.2X
 (S) 41 06.00
 CRX 3.63 345 (P) 40 28.50 4.3X
 (S) 41 14.00
 IIC 3.90 352 (P) 40 34.87 6.8X
 (S) 41 23.44
 IJJ 3.96 346 iP 40 33.86 4.8X
 (S) 41 18.02
 LVVM 4.39 29 (P) 40 35.00 0.4
 (S) 41 24.00
 MRX 4.49 328 (P) 40 41.00 4.9X
 (S) 41 25.00
 S.D. = 0.3 on 6 of 11 obs.

? MAY 28, 1990 01h 08m 48.86±2.09s
 37.667 N ±16.1km 21.043 E ±20.3km
 DEPTH = 10.0km (geophysicist)
 SOUTHERN GREECE (368)
 ML 3.5 (ATH).

VLS 0.62 325 ePg 08 56.20 -5.2X
 eSg 09 04.20
 ITM 0.86 124 ePg 09 05.50 0.1
 VLI 1.78 121 ePg 09 24.30 4.4X
 ATH 2.14 81 ePg 09 32.00 6.9X
 KEK 2.26 335 ePb 09 26.50 -0.4
 NEO 2.37 46 ePn 09 27.50 -0.9
 VAY 3.84 17 ePn 09 50.30 1.1
 S.D. = 1.5 on 4 of 7 obs.

% MAY 28, 1990 01h 11m 56.55±0.70s
 37.711 N ±6.6km 14.886 E ±5.9km
 DEPTH = 10.0km (geophysicist)
 SICILY (398)

MNO 0.27 326 Pc 12 02.00 -0.3
 eSg 12 07.00
 MEU 0.61 177 P 12 08.40 -0.5
 eSg 12 18.60
 ATN 0.64 45 P 12 09.00 -0.4
 eSg 12 19.00
 GIB 0.73 292 P 12 11.00 0.0
 eSg 12 22.50
 SOI 0.99 68 P 12 16.00 0.7
 FAI 1.06 246 P 12 17.00 0.6
 eSg 12 32.50
 S.D. = 0.6 on 6 of 6 obs.

MAY 28, 1990 01h 11m 57.21±0.40s
 5.462 N ±6.6km 31.847 E ±6.0km
 DEPTH = 10.0km (geophysicist)
 4.8mb (29 obs.) 4.0Msz (2 obs.)

SUDAN (557)

NAI 8.32 143 iPc 14 01.50 0.4
 1.0s 110.00nm 6.1mb X
 BCAO 13.30 266 iPd 15 05.90 -2.9
 0.6s 69.00nm 5.9mb X
 id 16 30.50
 id 18 17.70
 AWKL 17.87 2 iPd 16 19.00 11.4X
 AGAL 17.89 3 iPd 16 19.00 11.2X
 AKSR 18.11 3 iPd 16 22.00 11.5X
 AKRL 18.11 3 iPc 16 23.00 12.4X
 ASW 18.54 3 eP 16 24.00 8.1X
 KRI 22.26 186 iP 16 46.10 -10.1X
 iSn 20 55.00
 HLW 24.27 359 eP 17 25.00 9.4X
 BUL 25.64 187 iP 17 19.00 -10.0X
 iSn 22 07.50
 BCK 31.87 358 eP 18 26.80 2.0
 SEK 33.83 187 eP 18 43.00 0.9
 S 24 17.00
 KIC 36.40 273 Pd 19 04.70 0.6
 1.1s 25.00nm 5.0mb
 TIC 36.68 274 P 19 07.26 0.9
 0.6s 23.50nm 5.1mb
 LIC 36.69 273 P 19 07.14 0.7
 Z 20s 0.38um 4.2Msz
 LKO 37.32 279 Pd 19 12.54 0.7
 MAIO 39.82 36 eP 19 35.00 2.5
 QUE 41.19 49 eP 19 46.00 2.0
 SRO 43.76 347 eP 20 05.60 1.1
 LMR 43.85 333 eP 20 05.60 0.3
 FRF 43.97 334 eP 20 06.20 0.0
 0.9s 9.85nm 4.6mb
 LRG 44.01 333 eP 20 06.70 0.1
 0.9s 13.10nm 4.8mb
 ZST 44.40 346 eP 20 10.40 0.7
 e 22 13.60
 TIO 44.59 309 iP 20 12.50 0.8
 LPG 45.47 335 eP 20 18.10 -0.6
 0.8s 6.05nm 4.6mb
 LPL 45.49 335 eP 20 18.20 -0.6
 KRA 45.56 349 eP 20 19.40 0.5
 KHC 46.19 343 iPd 20 24.30 0.3
 1.0s 8.00nm 4.7mb
 ETOR 46.48 324 eP 20 28.00 1.6
 EPF 46.63 328 eP 20 27.70 0.1
 KSP 47.07 347 eP 20 31.50 0.7
 TOL 47.08 322 eP 20 32.00 0.8
 CAF 47.13 331 eP 20 32.00 0.5
 1.0s 9.00nm 4.8mb
 BSF 47.35 337 eP 20 32.80 -0.5
 1.0s 8.00nm 4.8mb
 LPO 47.38 330 eP 20 33.90 0.5
 0.9s 11.45nm 5.0mb
 GRF 47.39 342 ePd 20 33.60 0.1
 Z 18s 0.10um 3.8Msz
 e 20 40.70
 GUD 47.61 323 eP 20 36.00 0.5
 SMF 47.62 334 eP 20 34.90 -0.4
 0.9s 16.40nm 5.1mb
 CDF 47.64 338 eP 20 34.60 -1.0
 HAU 47.66 337 eP 20 35.20 -0.5
 RJF 47.67 331 eP 20 35.90 0.2
 LFF 47.78 330 eP 20 36.80 0.2
 0.9s 9.85nm 4.9mb
 LBF 47.82 334 eP 20 36.40 -0.5
 0.9s 8.20nm 4.8mb
 MAF 47.86 333 eP 20 37.80 0.6
 0.9s 15.55nm 5.1mb
 AVF 47.94 334 eP 20 37.50 -0.3
 0.9s 10.65nm 4.9mb
 BGF 47.99 333 eP 20 38.10 -0.1
 0.8s 6.70nm 4.8mb
 TCF 48.07 333 eP 20 39.40 0.5
 0.9s 19.65nm 5.2mb
 SSF 48.08 334 eP 20 38.30 -0.6
 0.8s 5.35nm 4.7mb
 LOR 48.09 335 eP 20 38.40 -0.6
 0.9s 9.85nm 4.9mb
 LSF 48.36 332 eP 20 41.10 0.0
 0.9s 15.55nm 5.1mb
 MFF 49.41 331 eP 20 49.00 -0.1
 0.9s 8.20nm 4.7mb
 LDF 50.85 333 eP 20 59.50 -0.6
 0.6s 7.20nm 4.8mb
 LPF 50.86 332 eP 20 59.80 -0.4

GRR 0.9s 14.75nm 4.9mb
 51.03 332 eP 21 00.80 -0.7
 0.7s 8.80nm 4.8mb
 FLN 51.13 333 eP 21 01.60 -0.6
 0.5s 2.90nm 4.5mb
 GKN 54.80 60 P 21 28.70 -1.4
 DMN 55.11 60 P 21 31.40 -1.1
 NUR 55.19 356 eP 21 32.00 -0.2
 PKI 55.36 60 P 21 32.90 -1.5
 GUN 55.84 60 P 21 36.40 -1.5
 APO 56.60 350 eP 21 40.70 -1.7
 0.5s 1.90nm 4.4mb
 EKA 57.08 337 Pc 21 46.00 0.1
 1.1s 10.10nm 4.8mb
 SUF 57.29 357 iP 21 47.00 -0.2
 0.5s 9.90nm 5.1mb
 NB2 57.59 348 P 21 48.40 -1.0
 0.9s 8.00nm 4.7mb
 SOD 61.91 358 iP 22 18.40 -0.6
 KEV 64.28 358 eP 22 34.00 -0.6
 WRA 103.57 109 Pdffd25 53.30 -7.3X
 0.8s 2.10nm 5.0mb
 S.D. = 1.0 on 58 of 67 obs.

% MAY 28, 1990 01h 45m 26.13±0.70s
 37.691 N ±6.4km 14.857 E ±5.9km
 DEPTH = 10.0km (geophysicist)
 SICILY (398)

MNO 0.27 332 Pc 45 32.00 0.1
 eSg 45 36.50
 MEU 0.59 174 Pd 45 37.80 -0.4
 eSg 45 47.20
 ATN 0.67 45 P 45 39.00 -0.5
 eSg 45 49.00
 GIB 0.72 295 P 45 40.10 -0.3
 eSg 45 52.00
 SOI 1.02 68 P 45 46.00 0.6
 eSg 46 00.50
 FAI 1.03 247 P 45 46.00 0.5
 S.D. = 0.6 on 6 of 6 obs.

MAY 28, 1990 02h 41m 28.26±0.29s
 55.225 N ±7.1km 58.676 E ±4.4km
 DEPTH = 33.0km (normal)
 4.5mb (18 obs.)
 URAL MOUNTAINS REGION (335)

SUF 18.20 307 eP 45 34.00 -5.6X
 NUR 18.70 300 iP 45 45.00 -0.8
 0.7s 14.70nm 4.3mb
 MAIO 18.94 178 eP 45 48.00 -0.9
 0.7s 7.94nm 4.0mb
 SOD 19.32 322 iP 45 51.20 -1.9
 KEV 20.27 328 iP 46 04.00 0.8
 WMO 21.85 109 P 46 19.50 -0.1
 BBTk 23.11 239 eP 46 33.00 0.9
 KRA 23.84 274 eP 46 39.30 0.4
 e 46 44.30
 SPC 24.08 272 eP 46 42.70 1.2
 HFS 24.16 300 eP 46 40.30 -1.7
 0.6s 9.40nm 4.5mb
 BZS 25.22 263 eP 46 53.00 0.8
 KSP 25.56 278 eP 46 56.00 0.6
 SRO 25.88 270 eP 47 12.30 13.9X
 ZST 26.38 272 eP 47 03.50 0.6
 BRG 26.88 279 e(P) 47 09.00 1.5
 e 47 23.00
 PRU 26.95 277 eP 47 08.00 -0.2
 e 47 28.50
 CLL 27.21 281 eP 47 10.00 -0.6
 e 47 25.00
 KHC 27.91 276 eP 47 17.70 0.7
 e 47 38.00
 CDF 31.86 279 eP 47 51.90 -0.3
 HAU 32.60 279 eP 47 58.40 -0.2
 GKN 33.04 135 P 48 02.80 0.1
 GUN 33.63 133 P 48 08.20 0.1
 PKI 33.74 134 P 48 09.20 0.2
 LPG 33.79 275 eP 48 09.30 0.1
 0.7s 6.05nm 4.6mb
 LPL 33.79 275 eP 48 09.30 0.2
 0.7s 6.60nm 4.7mb
 EKA 34.19 296 P 48 12.00 -0.2
 0.9s 6.60nm 4.6mb
 PGF 34.29 269 eP 48 12.20 -1.2
 1.1s 22.00nm 5.0mb

0.5s 15.00nm 5.3mb
 INK 72.46 10 eP 27 15.00 -0.5
 pP 27 27.00 40kmX
 WRA 80.95 124 P 28 10.00 6.2X
 0.9s 3.30nm 4.3mb
 S.D. = 1.2 on 20 of 31 obs.

* MAY 28, 1990 08h 23m 35.51±2.20s
 27.388 S ± 8.4km 114.102 E ±26.5km
 DEPTH = 10.0km (geophysicist)
 WESTERN AUSTRALIA (590)

MRWA 2.47 138 iPc 24 18.50 2.0
 eS 24 48.00
 BAL 3.94 145 eP 24 37.70 0.4
 iS 25 22.30
 MEKA 4.03 80 eP 24 42.00 3.4X
 eS 25 30.00
 MUN 4.93 159 eP 24 50.10 -1.3
 eS 25 43.00
 NANU 4.98 15 eP 24 52.00 0.0
 eS 25 55.00
 COOL 7.08 121 eP 25 20.80 -0.9
 eS 26 37.00
 MBL 8.11 41 eP 25 36.50 0.4
 0.2s 1.00nm 4.7mb X
 eS 27 00.00
 WARB 11.27 87 eP 26 19.00 -0.7
 eS 28 49.00
 FORR 12.71 109 eP 26 36.00 -3.1X
 eS 28 52.00
 S.D. = 1.3 on 7 of 9 obs.

* MAY 28, 1990 09h 55m 39.93±1.34s
 30.212 S ± 8.2km 72.487 W ±14.6km
 DEPTH = 36.9 ± 19.6 km
 4.7mb (1 obs.)
 OFF COAST OF CENTRAL CHILE (134)

IHA 2.90 166 eP 56 31.50 6.8X
 i(S) 57 13.30
 JACH 2.95 147 iPd 56 26.80 1.2
 iS 57 01.00
 RTBS 2.98 120 e(P) 56 08.00 -17.9X
 PEL 3.30 153 iPc 56 30.50 0.0
 iS 57 12.80
 LCCH 3.35 167 eP 56 31.00 -0.1
 iS 57 11.50
 RTCB 3.42 113 ePd 56 32.50 0.3
 FCH 3.63 150 eP 56 35.00 -0.4
 i 57 21.90
 i 57 31.50
 RTLL 3.63 109 ePc 56 34.70 -0.6
 TACH 3.68 159 eP 56 37.00 1.2
 i 57 17.00
 i 57 26.00
 PCH 3.79 154 eP 56 37.50 0.0
 i 57 26.00
 LNV 3.84 167 eP 56 36.50 -1.6
 iS 57 22.00
 CFA 3.91 112 iPc 56 38.70 -0.4
 LPB 14.20 17 P 59 00.00 -1.0
 ZOBO 14.44 17 P 59 05.20 0.9
 LKO 75.37 70 (P) 07 22.28 0.4
 0.7s 5.50nm 4.7mb
 S.D. = 0.9 on 13 of 15 obs.

* MAY 28, 1990 11h 23m 36.79±1.16s
 14.836 N ± 9.1km 98.964 E ±18.1km
 DEPTH = 33.0km (normol)
 4.1mb (1 obs.)
 SOUTH BURMA (298)

KBR 0.98 146 iPnd 23 16.00 -38.3X
 ePg 23 17.00
 eSg 23 23.00
 NST 1.40 53 eP 23 59.00 -1.2
 NNT 2.35 161 ePn 24 14.00 0.0
 ePg 24 21.60
 eSg 24 45.00
 BDT 2.40 1 eP 24 15.90 1.4
 LOE 3.69 46 ePn 24 34.20 1.3
 ePg 24 39.20
 eSg 25 22.00
 CHG 3.96 360 iPn 24 36.90 0.2
 iPg 24 50.80
 iSg 25 40.00

CHTO 3.96 360 ePn 24 35.00 -1.7
 iPg 24 50.00
 iSg 25 40.00
 SNG 7.78 168 eP 26 00.20 29.6X
 WRA 49.04 134 P 32 28.00 5.1X
 0.7s 1.30nm 4.1mb
 ZOBO 167.48 262 PKP 43 42.00 0.0
 i 51 56.00
 S.D. = 1.4 on 7 of 10 obs.

MAY 28, 1990 11h 28m 47.69±0.09s
 20.874 S ± 2.6km 177.987 W ± 2.5km
 DEPTH = 485.8km (geophysicist)
 5.9mb (51 obs.)
 FIJI ISLANDS REGION (181)

Depth from broodbond
 displacement seismograms.
 RADIATED ENERGY
 No. of sta: 7 Focal mech. C
 Energy 2.6±0.6*10**12 Nm
 MOMENT TENSOR SOLUTION
 Dep 466 No. of sta: 10
 Moment Tensor; Scale 10**17 Nm
 Mrr=-6.42 Mtt= 1.40
 Mff= 5.02 Mrt=-0.26
 Mrf=-4.02 Mtf= 3.15
 Principal axes:
 T Vol= 7.79 Plg=15 Azm=117
 N -0.04 12 24
 P -7.75 71 255
 Best Double Couple: Mo=7.8*10**17
 NP1: Strike=224 Dip=32 Slip=-67
 NP2: 17 61 -104
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 16S, 40C
 Centroid Location:
 Origin Time 11:28:54.7 0.5
 Lat 20.68S 0.05 Lon 178.01W 0.03
 Dep 493.8 1.7 Half-duration 3.5
 Moment Tensor; Scale 10**17 Nm
 Mrr=-7.01 0.19 Mtt= 1.24 0.33
 Mff= 5.77 0.34 Mrt=-1.60 0.30
 Mrf=-5.36 0.30 Mtf=-2.29 0.26
 Principal Axes:
 T Vol= 8.11 Plg=18 Azm= 76
 N 1.34 16 171
 P -9.45 66 301
 Best Double Couple: Mo=8.8*10**17
 NP1: Strike=142 Dip=31 Slip=-123
 NP2: 359 64 -72

KRO 4.32 325 eP 30 09.40 0.7
 SVA 4.33 309 ePc 30 10.00 1.3
 OVA 4.40 316 eP 30 11.00 1.7
 VUN 4.40 310 ePc 30 10.00 0.7
 NDE 4.97 329 eP 30 14.90 0.3
 MBU 4.98 321 ePc 30 15.90 1.3
 SGE 5.06 310 ePc 30 16.30 0.9
 YSA 5.91 314 iPc 30 24.30 0.8
 PVC 13.30 281 iPc 31 42.50 1.2
 DZM 14.54 262 iPc 31 55.10 0.9
 iS 34 30.40
 ScP 39 22.90
 HBZ 16.98 190 eP 32 19.80 1.5
 RAR 17.01 94 P 32 20.00 1.2
 S 36 04.00
 PUZ 17.45 190 eP 32 23.70 0.7
 WLZ 17.80 197 P 32 29.60 3.2X
 TAZ 17.94 194 P 32 30.50 2.7
 NOZ 18.01 190 P 32 30.40 1.9
 e 34 41.90
 CNZ 19.09 196 P 32 40.20 1.1
 TTH 19.13 192 eP 32 40.80 1.5
 PGZ 20.28 193 P 32 50.30 0.0
 KIW 20.82 195 P 32 54.90 -0.5
 MTW 20.96 194 P 32 55.90 -0.8
 CAW 21.02 195 P 32 55.80 -1.4
 BLW 21.17 194 P 32 58.50 -0.1
 WDW 21.19 195 P 32 58.20 -0.5
 MRW 21.22 195 P 32 58.20 -0.8
 eS 36 17.20
 WEL 21.26 195 P 32 59.50 0.1
 MOW 21.27 194 eP 32 59.50 -0.1
 TCW 21.31 196 P 32 59.20 -0.7
 THZ 22.20 198 P 33 08.30 0.1
 eS 36 32.40

KHZ 22.63 196 P 33 11.10 -0.9
 LTZ 23.33 198 P 33 16.40 -1.9
 eS 36 50.00
 MQZ 24.07 197 eP 33 23.70 -1.3
 MMCZ 26.31 201 P 33 43.20 -1.9
 MHZ 26.32 201 P 33 43.20 -1.9
 MSZ 26.45 203 eP 33 45.80 -0.3
 TLC 26.50 201 eP 33 47.40 0.6
 TBI 26.53 101 iP 33 48.20 1.2
 1.0s 130.00nm 5.4mb
 AFR 26.83 88 iP 33 49.20 -0.6
 PAE 26.99 88 iP 33 50.90 -0.3
 iP 35 08.00
 PPT 27.01 88 iP 33 51.20 -0.2
 1.1s 740.00nm 6.1mb
 iP 35 08.40
 iScP 39 53.00
 PPN 27.15 88 iP 33 52.40 -0.2
 iP 35 10.00
 iScP 39 53.40
 TVO 27.27 88 iP 33 53.50 -0.3
 1.1s 275.00nm 5.7mb
 iP 35 11.30
 BRS 27.42 251 iPc 33 55.50 0.5
 1.0s 40.00nm 4.9mb
 e 35 17.00
 iS 38 02.50
 e 39 55.00
 COO 28.73 244 eP 34 07.60 1.2
 PMO 29.19 83 P 34 09.00 -0.6
 1.1s 515.00nm 5.9mb
 VAH 29.37 84 iP 34 11.00 -1.0
 1.1s 445.00nm 5.9mb
 TPT 29.45 84 iP 34 12.10 -0.6
 1.1s 770.00nm 6.1mb
 RUV 29.61 84 iP 34 13.30 -0.8
 1.1s 960.00nm 6.2mb
 RIV 30.17 238 iPc 34 20.40 1.7
 eS 38 45.00
 RMO 30.91 253 iPc 34 26.20 1.0
 1.0s 480.00nm 6.0mb
 e 34 41.00 60kmX
 e 35 53.00
 e 40 06.00
 CNB 32.03 236 iPc 34 35.80 1.1
 ePcP 36 08.00
 eS 39 15.30
 eScP 40 10.80
 CAN 32.31 236 eP 34 37.80 0.7
 e 36 04.00 488kmX
 e 39 18.90
 BWA 32.51 238 eP 34 38.20 -0.6
 e 36 06.30 503kmX
 e 39 17.20
 RAB 33.41 296 e(P) 34 43.00 -3.4X
 CTA 33.47 265 iPd- 34 47.00 0.1
 e 35 10.00 101kmX
 iPcP 37 14.50
 iS 39 27.00
 iScP 40 13.30
 i 42 24.00
 CTAO 33.47 265 iPd 34 47.39 0.5
 CMS 34.01 244 iPc 34 52.20 0.9
 1.1s 443.00nm 5.9mb
 QLP 34.96 253 iPd 34 59.70 0.4
 PMG 35.44 283 iPc 35 03.10 -0.3
 1.0s 880.00nm 6.2mb
 TOO 35.69 234 iPd 35 06.20 0.9
 0.6s 207.00nm 5.8mb
 LAT 36.72 288 iPc 35 14.70 0.7
 BFD 37.84 236 iPd 35 24.20 1.3
 OIS 39.58 263 iPc 35 37.00 -0.4
 1.3s 170.00nm 5.4mb
 iPcP 37 33.30
 eScP 40 37.10
 eS 41 05.00
 RKT 39.84 101 iP 35 40.80 1.4
 1.6s 610.00nm 5.9mb
 ADE 40.45 240 eP 35 44.50 0.2
 1.0s 350.00nm 5.8mb
 WB5 44.55 263 iPd 36 15.90 -1.1
 i 37 50.00 503kmX
 iS 42 14.80
 WRA 44.56 262 Pc 36 16.30 -0.8
 0.3s 18.70nm 5.1mb
 FORR 49.12 247 iPd 36 41.10 -10.7X
 MTN 49.18 271 iPc 36 51.20 -1.2

28d 11h

GUD 159.61 14 ePKP 47 52.40 1.4
 EPLA 159.66 18 ePKP 47 52.30 1.4
 ETOR 159.82 9 e(PKP) 47 52.80 1.7
 TOL 160.36 14 ePKP 47 53.00 1.4
 ePPS 02 15.00
 EVAL 161.70 23 ePKP 47 54.60 1.6
 EBAN 162.05 15 ePKP 47 54.80 1.4
 AAPN 162.78 17 iPKPc 47 54.60 0.3
 ASMO 162.83 16 iPKPc 47 54.50 0.2
 EJIF 163.16 21 ePKP 47 56.80 2.3X
 ATEJ 163.18 17 iPKPc 47 54.60 -0.1
 APHE 163.23 16 iPKPc 47 55.00 0.3
 MAL 163.24 18 ePKP 47 55.50 1.0
 LIC 163.92 154 PKPd 47 55.78 -0.1
 1.0s 49.50nm
 KIC 164.16 155 PKPd 47 56.04 -0.1
 1.0s 42.50nm
 TIC 164.30 153 PKP 47 56.14 -0.1
 LKO 166.56 146 PKP 47 57.84 -0.2
 1.1s 66.50nm
 S.D. = 0.9 on 320 of 380 obs.

? MAY 28, 1990 11h 54m 14.31±2.76s
 44.455 N ±17.8km 6.918 E ±26.6km
 DEPTH = 10.0km (geophysicist)
 FRANCE (538)
 ML 1.7 (GEN).

PZZ 0.14 69 P 54 17.76 0.0
 S 54 19.61
 STV 0.36 126 P 54 21.74 0.0
 S 54 27.40
 ENR 0.43 122 P 54 23.07 0.0
 S 54 29.53
 RRL 0.47 349 P 54 24.02 0.0
 S 54 30.92
 S.D. = 0.0 on 4 of 4 obs.

? MAY 28, 1990 12h 00m 15.73±2.02s
 36.942 N ±23.5km 28.613 E ±11.6km
 DEPTH = 10.0km (geophysicist)
 DODECANESE ISLANDS (369)

YER 0.33 306 iPg 00 22.60 0.1
 iSg 00 28.60
 ELL 1.06 100 iPn 00 35.20 -0.5
 KHL 1.56 27 ePn 00 43.00 -0.6
 BCK 1.66 71 iPn 00 46.10 1.0
 ALT 2.42 29 ePn 00 59.00 3.0X
 S.D. = 1.3 on 4 of 5 obs.

? MAY 28, 1990 13h 34m 03.13±2.44s
 51.400 N ±131.km 157.033 E ±144.km
 DEPTH = 33.0km (normal)
 4.8mb (2 obs.)

NEAR EAST COAST OF KAMCHATKA (218)

NIIJ 19.08 229 P 38 25.40 0.0
 MAT 20.02 229 eP 38 36.00 0.2
 0.8s 17.16nm 4.4mb
 CHJJ 20.05 227 P 38 35.60 -0.5
 MTMJ 20.17 230 P 38 37.40 -0.1
 IIDJ 21.02 228 P 38 45.90 -0.3
 TSRJ 21.90 232 P 38 56.10 1.2
 INK 36.36 36 eP 41 06.00 0.7
 CHG 55.70 257 iPc 43 47.00 8.4X
 1.0s 20.00nm 5.1mb
 TIC 120.16 339 PKP 52 52.10 -0.1
 LIC 120.57 339 PKP 52 52.00 -1.0
 S.D. = 0.7 on 9 of 10 obs.

* MAY 28, 1990 14h 18m 42.82±0.67s
 48.825 N ±12.8km 156.242 E ±11.5km
 DEPTH = 33.0km (normal)
 4.5mb (13 obs.)

KURIL ISLANDS REGION (222)

MAT 18.01 234 (P) 22 53.00 0.9
 1.1s 10.13nm 3.9mb
 MDJ 18.71 267 eP 22 58.80 -1.8
 CN2 21.77 268 Pc 23 29.20 -4.1X
 SNY 23.87 265 eP 23 56.00 2.1
 FBA 33.22 40 eP 25 18.00 -0.3
 0.8s 2.76nm 4.2mb
 INK 38.76 34 eP 26 06.00 0.8
 GTA 40.74 278 eP 26 21.80 -0.3
 MBC 41.92 21 eP 26 32.00 0.8

0.9s 3.00nm 4.0mb
 GYA 44.22 258 P 26 51.00 0.4
 KMI 47.69 260 Pd 27 18.50 0.2
 CHG 54.64 258 eP 28 10.80 0.2
 CHTO 54.64 258 eP 28 11.00 0.4
 1.1s 9.13nm 4.7mb
 GUN 56.91 276 P 28 26.40 -1.0
 PKI 57.44 276 P 28 30.80 -0.3
 1.0s 22.00nm 5.2mb
 DMN 57.62 276 P 28 31.80 -0.4
 0.8s 34.00nm 5.4mb
 GKN 57.66 277 P 28 31.70 -0.7
 FFC 57.79 42 iPd 28 32.70 -0.1
 0.7s 6.00nm 4.8mb
 NB2 66.92 342 P 29 31.20 -2.4
 0.9s 3.60nm 4.5mb
 WB5 71.13 202 eP 29 59.00 -0.8
 WRA 71.19 202 Pd 29 59.10 -1.1
 0.8s 2.40nm 4.3mb
 G8A 72.53 271 P 30 11.00 2.6
 0.7s 1.50nm 4.1mb
 KRA 74.59 332 eP 30 18.50 -1.3
 EKA 74.79 348 Pd 30 21.20 0.3
 0.5s 2.30nm 4.4mb
 KSP 74.95 335 iP 30 21.80 -0.2
 CLL 75.41 337 iPc 30 24.10 -0.4
 1.3s 15.00nm 4.8mb
 BRG 75.56 336 eP 30 25.90 0.5
 1.0s 10.00nm 4.8mb
 PRU 76.21 336 P 30 29.50 0.4
 SRO 77.07 332 eP 30 22.20 -11.7X
 ZST 77.09 333 eP 30 35.20 1.1
 KHC 77.25 336 iP 30 35.50 0.5
 CDF 79.49 340 eP 30 59.60 12.3X
 FLN 80.74 345 eP 31 06.20 12.4X
 0.9s 9.85nm
 LDF 80.83 344 eP 31 06.90 12.6X
 0.9s 6.55nm
 GRR 81.16 345 eP 31 08.90 12.8X
 0.8s 13.45nm
 LOR 81.33 341 eP 31 09.50 12.5X
 LPF 81.54 345 eP 31 11.20 13.2X
 0.9s 9.85nm
 SSF 81.60 342 eP 31 11.00 12.6X
 MAF 82.60 342 eP 31 17.20 13.6X
 0.8s 5.35nm
 LSF 82.78 343 eP 31 18.50 14.0X
 S.D. = 1.1 on 28 of 39 obs.

MAY 28, 1990 14h 50m 25.91±0.32s
 18.168 N ±4.9km 147.202 E ±6.8km
 DEPTH = 32.5km (4 depth phases)
 4.4mb (8 obs.)

MARIANA ISLANDS REGION (215)

GUMO 5.08 207 eP 51 42.80 1.0
 GUA 5.10 206 eP 51 43.20 1.0
 0.5s 191.55nm 5.8mb X
 eS 52 40.20
 IIDJ 19.11 336 P 54 49.90 1.0
 CHJJ 19.23 339 P 54 49.90 -0.4
 KAGJ 19.66 314 eP 54 55.00 -0.1
 MAT 19.95 338 eP 54 58.00 -0.1
 0.6s 13.33nm 4.4mb
 eS 58 43.00
 TSRJ 19.96 332 P 54 57.00 -1.2
 MTMJ 20.13 338 P 54 59.70 -0.5
 NIIJ 20.32 341 P 55 03.30 1.3
 KUMJ 20.54 317 P 55 05.30 1.0
 SHNJ 21.43 321 eP 55 12.50 -0.8
 PMG 27.40 180 eP 56 09.00 -1.6
 BJI 34.51 316 eP 57 12.00 -1.1
 WB5 39.85 199 eP 57 57.30 -1.0
 WRA 39.92 199 Pd 57 58.50 -0.4
 1.1s 6.80nm 4.3mb
 PSI 49.72 258 ePd 59 18.50 1.1
 GUN 56.77 292 P 00 10.20 0.3
 PKI 57.21 291 P 00 12.90 -0.1
 GKN 57.85 292 P 00 16.40 -0.9
 FBA 63.15 26 eP 00 54.50 1.9
 1.0s 3.50nm 4.4mb
 MBC 73.31 14 eP 01 55.00 -0.6
 0.9s 3.00nm 4.3mb
 MIN 79.36 51 e(P) 02 30.80 0.3
 ORV 79.63 52 eP 02 31.50 -0.3
 NEW 80.34 42 eP 02 35.00 -0.5

1.0s 4.50nm 4.4mb
 ipP 02 46.50 38km
 PRS 80.58 55 eP 02 36.90 -0.1
 e 02 46.30 30km
 CMB 80.88 53 ePc 02 38.40 -0.1
 e 02 48.10 31km
 FRI 81.68 54 ePc 02 42.60 -0.1
 KVN 82.31 52 eP 02 46.10 -0.1
 epP 02 56.20 32km
 TNP 83.26 52 iP 02 51.00 -0.1
 0.8s 1.32nm 4.1mb
 SES 83.45 39 eP 02 51.00 -0.6
 FFC 86.77 33 iPd 03 08.00 0.0
 0.8s 11.00nm 5.1mb
 GOL 91.29 47 eP 03 32.00 2.0
 0.9s 3.79nm 4.8mb
 S.D. = 0.9 on 32 of 32 obs.

MAY 28, 1990 15h 12m 00.17±0.70s
 7.139 S ±4.0km 127.309 E ±6.8km
 DEPTH = 329.0 ±8.9 km
 4.8mb (15 obs.)

BANDA SEA (280)

CENTROID, MOMENT TENSOR (HRV)

Date Used: GDSN

L.P.B.: 11S, 22C

Centroid Location:

Origin Time 15:12: 6.5 1.0

Lot 6.56S 0.09 Lon 127.67E 0.10

Dep 327.1 3.0 Half-duration 1.8

Moment Tensor: Scale 10**16 Nm

Mrr= 2.33 0.53 Mtt=-0.21 0.72

Mff=-2.12 0.85 Mrt=-9.14 0.89

Mrf= 8.90 0.83 Mtf= 1.38 0.76

Principal Axes:

T Val= 12.92 Plg=50 Azm=220

N 0.20 4 315

P -13.12 39 49

Best Double Couple: Mo=1.3*10**17

NP1: Strike=174 Dip= 7 Slip= 129

NP2: 315 85 86

AAI 3.54 14 ePc 13 04.00 0.3
 e(S) 13 56.00
 MTN 6.81 147 iPd 13 39.10 -1.4
 MNI 8.87 344 e(P) 14 07.50 2.1
 DAV 14.24 353 eP- 15 10.00 -0.2
 WB5 14.40 152 iPc 15 10.30 -1.7
 WRA 14.44 152 Pc 15 10.80 -1.7
 0.8s 169.80nm 5.5mb
 TRT 14.56 267 ePd 15 10.50 -3.3X
 0.6s 179.60nm 5.6mb
 MBL 15.70 207 iPc 15 25.10 -0.9
 0.4s 27.00nm 5.0mb
 e 16 33.00
 MNDI 16.27 88 eP 15 33.00 0.7
 KKM 17.15 320 ePc 15 42.00 0.7
 QIS 17.88 139 iPc 15 48.30 -0.4
 eS 16 51.00
 WARB 18.95 182 iPc 16 01.00 1.6
 NANU 19.08 215 iPd 16 00.70 0.1
 PMG 19.77 98 eP 16 08.00 0.5
 1.2s 250.00nm 5.4mb
 MEKA 21.09 202 eP 16 20.50 0.2
 CTA 22.43 127 iP 16 33.80 0.6
 1.0s 50.00nm 4.8mb
 e 17 16.00
 e(S) 20 25.00
 FORR 23.60 178 iPc 16 43.50 -0.5
 COOL 24.32 193 eP 16 49.70 -0.9
 e 17 46.00
 BAG 24.33 344 eP 16 52.00 1.0
 MRWA 24.41 205 eP 16 51.70 0.2
 0.3s 6.00nm 4.4mb
 e 17 38.00
 e 18 28.00
 OLP 25.16 142 eP 16 59.00 0.7
 e 17 54.10
 BAL 25.37 202 eP 17 00.00 -0.2
 e 17 49.00
 KL8 25.91 199 eP 17 04.00 -1.0
 e 17 54.00
 MUN 26.79 201 eP 17 12.00 -1.0
 e 18 10.00
 e 19 00.00
 GUMO 26.98 40 eP 17 13.80 -1.0
 ADE 29.62 161 iPd 17 39.40 1.5

HFS	42.85	322	eP	18	11.00	-0.7
	0.5s		3.50nm			4.3mb
Z	20s		0.13um			3.8msz
			LR	31	37.00	
NB2	44.16	323	P	18	21.10	-1.3
	0.6s		3.30nm			4.2mb
	S.D. = 0.9	on	9 of	9	obs.	

MAY	28,	1990	16h 11m 59.56± 0.23s			
	43.919	N ± 5.8km	147.378	E ± 3.5km		
DEPTH =	34.2km	(11 depth phases)				
	5.3mb	(61 obs.)	4.4Msz	(5 obs.)		
KURIL ISLANDS					(221)	
	Felt (IV) on Shikotan and ot					
	Yuzhno-Kurilsk and Kurilsk.					
	CENTROID, MOMENT TENSOR (HRV)					
	Data Used: GDSN					
	L.P.B.: 13S, 26C					
	Centroid Location:					
	Origin Time 16:12: 6.7 0.4					
	Lat 43.89N 0.05 Lon 147.22E 0.06					
	Dep 96.1 3.4 Half-duration 1.8					
	Moment Tensor; Scale 10**16 Nm					
	Mrr=-8.74 0.50 Mtt= 5.85 0.83					
	Mff= 2.89 0.63 Mrt= 5.39 0.50					
	Mrf= 5.87 0.61 Mtf= 5.36 0.82					
	Principal Axes:					
	T Vol= 12.80 Plg=20 Azm=321					
	N -1.04 6 228					
	P -11.76 69 123					
	Best Double Couple:Mo=1.2*10**17					
	NP1:Strike= 61 Dip=25 Slip= -76					
	NP2: 226 65 -97					
KUSJ	2.11	248	iPd	12	38.70	5.6X
			S	13	02.50	
HOOJ	3.36	244	eP	12	57.20	6.2X
			S	13	34.00	
ASAJ	3.42	275	iP+	12	59.80	7.9X
MAT	10.16	227	eP	14	27.00	0.8
	0.7s	30.82nm				5.7mb
			eS	16	18.00	
MDJ	12.77	279	Pd	15	04.30	2.9
	Z 22s	2.90um				
	E 12s	1.10um				
			S	17	23.00	
CN2	15.82	277	iPd	15	41.00	-0.2
	Z 20s	1.90um				
	N 10s	0.40um				
	E 10s	0.50um				
			pP	15	47.00	
SNY	17.56	271	P	16	03.00	-0.2
	0.8s	100.00nm				5.0mb
	Z 34s	2.10um				5.3mszX
			S	19	16.00	
DL2	19.92	264	eP	16	28.00	-3.1X
	5.0s	900.00nm				5.3mb X
	Z 16s	0.60um				3.8Msz
			S	20	06.00	
BJ1	23.44	271	ePc	17	06.50	0.0
	3.0s	410.00nm				5.4mb
	Z 36s	1.25um				4.1mszX
SSE	24.29	247	Pc	17	16.80	2.1
	0.8s	30.00nm				4.9mb
			pP	17	26.50	35km
			sP	17	28.00	
			S	21	29.00	
			sS	21	43.00	
TIA	24.30	262	eP	17	15.50	0.6
	0.8s	100.00nm				5.4mb
			ePp	17	21.50	21kmX
NJ2	25.28	252	Pd	17	38.80	14.6X
	1.0s	100.00nm				
	Z 13s	1.80um				4.8mszX
	N 12s	0.30um				
	E 13s	0.90um				
			sP	17	48.00	
			S	22	04.00	
TIY	27.02	269	eP	17	43.00	2.6
			S	22	18.00	
BTO	27.70	276	P	17	49.00	2.5
	N 12s	0.50um				
	E 12s	0.60um				
			ePp	17	57.00	28km
			S	22	23.00	
			sS	22	37.00	
WHN	29.28	254	eP	18	00.80	0.1

GUM	30.30	185	eP	18	08.00	-1.9
XAN	31.24	265	P	18	17.60	-0.5
			S	23	19.00	
LZH	33.93	272	Pc	18	42.00	0.3
	1.5s	35.00nm				5.1mb
Z	20s	0.60um				4.3Msz
E	10s	0.20um				
			pP	18	50.00	27km
			S	23	59.50	
			PcS	25	06.00	
GTA	35.43	279	eP	18	54.60	0.1
Z	24s	0.60um				4.3Msz
			S	24	22.00	
CD2	36.59	264	eP	19	03.80	-0.4
GVA	37.12	256	P	19	09.00	0.2
			pP	19	19.00	34km
TTA	37.20	39	eP	19	10.90	1.9
SVW	37.31	42	ePd	19	12.20	2.3
IMA	38.45	34	ePd	19	20.90	1.4
	1.1s	110.90nm				5.6mb
			e	25	11.70	
KDC	39.07	48	eP	19	25.40	0.8
PMR	40.42	41	eP	19	36.70	1.0
	1.2s	39.10nm				5.0mb
KMI	40.71	258	Pd	19	39.50	0.7
	2.0s	90.00nm				5.2mb
Z	20s	0.40um				4.3Msz
			S	25	42.00	
FBA	40.86	36	ePd	19	41.00	1.7
TOA	41.77	40	eP	19	49.00	2.1
WMQ	42.19	291	P	19	51.00	0.4
Z	16s	1.25um				4.9Msz
E	10s	0.49um				
			iS	26	04.90	
INK	46.18	30	iPd	20	24.00	1.8
LSA	46.35	272	P	20	25.00	0.3
CHG	47.49	254	iPd	20	34.00	0.8
	1.0s	31.25nm				5.3mb
MBC	48.60	19	eP	20	41.00	-0.2
	1.4s	32.00nm				5.2mb
GUN	51.17	273	P	21	01.60	-0.3
PKI	51.71	273	P	21	05.50	-0.4
DMN	51.90	273	P	21	07.10	-0.2
KSH	51.98	291	P	21	10.00	2.4
E	14s	1.30um				
			S	28	26.00	
GKN	52.01	274	P	21	07.70	-0.3
NDI	56.94	280	eP	21	43.00	-0.8
KEV	58.61	339	eP	21	53.00	-2.0
PSI	59.27	240	ePc	22	01.50	1.3
PNT	60.14	49	eP	22	06.00	0.1
SOD	60.37	338	iP	22	05.40	-1.7
NEW	62.10	49	P	22	19.00	-0.2
	1.0s	2.50nm				4.3mb
			pP	22	28.50	31km
FHC	62.42	59	eP	22	22.30	0.9
HYB	62.95	268	iPd	22	23.50	-1.6
	1.0s	30.00nm				5.4mb
QUE	63.27	287	eP	22	26.50	-0.8
			e(S)	30	47.50	
WDC	63.44	58	ePd	22	28.30	0.2
SUF	63.84	334	eP	22	29.30	-1.1
	0.5s	30.50nm				5.7mb
SES	64.01	44	eP	22	32.00	0.3
			pP	22	41.00	29km
MIN	64.16	58	eP	22	32.40	-0.6
WB5	64.60	194	eP	22	33.90	-1.8
WRA	64.66	194	Pc	22	35.40	-0.7
	0.4s	7.50nm				5.1mb
ORV	64.69	59	eP	22	35.60	-0.7
FFC	65.47	37	iPd	22	41.00	0.0
	0.4s	12.00nm				5.3mb
GCC	65.91	61	eP	22	43.90	-0.2
NUR	65.96	333	iP	22	42.80	-1.2
	0.5s	29.50nm				5.6mb

28d 16h

[illegible]

[illegible]

[illegible]

29d 01h

VLI 2.02 306 ePn 43 44.20 0.7
 ITM 2.94 305 ePn 43 56.00 -0.7
 KHC 15.95 332 eP 46 56.70 2.1X
 HFS 25.67 347 eP 48 38.20 -1.2
 0.7s 3.30nm 4.0mb
 NB2 26.99 345 P 48 52.80 1.2
 0.5s 0.50nm 3.4mb
 S.D. = 1.4 on 5 of 6 obs.

& MAY 29, 1990 02h 43m 20.50s
 37.150 N 121.897 W
 DEPTH = 7.0km
 CENTRAL CALIFORNIA (39)
 <BRK>. ML 2.1 (BRK).

GCC 0.14 214 iPc 43 23.40 -0.2
 i 43 25.60
 PCC 0.52 312 iPd 43 30.30 -0.7
 SAO 0.53 137 iPc 43 30.50 -0.6
 BKS 0.77 340 iPc 43 35.30 -0.5
 BRK 0.78 338 eP 43 35.30 -0.6
 eS 43 45.60
 ZSP 0.84 340 ePd 43 37.10 0.1
 e(S) 43 49.70
 PRS 0.92 152 ePd 43 37.60 -0.8
 eS 43 50.30
 LLA 0.93 125 eP 43 38.00 -0.6
 CMB 1.49 53 e(P) 43 47.40 -0.4
 9 obs. associated

& MAY 29, 1990 02h 53m 06.52s
 59.926 N 152.888 W
 DEPTH = 105.8km
 SOUTHERN ALASKA (2)
 <AGS-P>.

RED 0.50 7 iP 53 22.68 -0.6
 iS 53 35.05
 AUL 0.61 207 eP 53 23.24 -0.7
 eS 53 37.10
 AUE 0.62 204 eP 53 23.24 -0.8
 PDB 0.67 259 iP 53 23.70 -0.8
 iS 53 36.87
 RDT 0.69 20 iP 53 24.10 -0.7
 XLV 0.76 128 eP 53 24.07 -1.2
 eS 53 38.20
 >NNL 0.81 81 iP 53 26.03 0.3
 CNPM 0.93 115 iP 53 26.05 -0.9
 iS 53 41.46
 CDD 1.07 201 eP 53 27.03 -1.4
 NKA 1.16 44 eP 53 30.69 1.3
 SPU 1.33 18 iP 53 30.80 -0.6
 iS 53 49.75
 CRP 1.39 15 iP 53 31.95 -0.4
 eS 53 52.27
 CGLM 1.45 17 eP 53 32.59 -0.4
 SLKM 1.45 65 eP 53 31.97 -1.0
 NCG 1.53 13 eP 53 33.46 -0.4
 SEW 1.74 83 eP 53 35.10 -1.3
 iS 53 56.90
 SUA 1.87 33 iP 53 37.86 -0.4
 eS 54 02.04
 PMS 2.11 50 eP 53 40.35 -0.9
 eS 54 05.83
 SKT 2.17 17 iP 53 41.11 -0.9
 PWA 2.27 39 eP 53 42.49 -0.9
 PLRM 2.49 46 eP 53 44.19 -2.0
 GHO 2.68 45 eP 53 47.00 -1.9
 CUT 2.79 26 eP 53 49.21 -1.1
 SML 2.92 48 eP 53 50.01 -2.1
 GLI 3.03 69 eP 53 51.04 -2.5
 VZW 3.33 67 eP 53 55.90 -1.8
 VLZ 3.46 67 eP 53 57.87 -1.5
 NCA 3.61 52 eP 53 59.28 -2.2
 KTH 3.76 14 eP 54 02.39 -1.2
 KLU 3.77 62 eP 54 01.12 -2.6
 TOA 3.93 53 eP 54 04.18 -1.7
 RND 3.99 27 eP 54 05.12 -1.5
 WRH 5.08 24 eP 54 19.42 -2.2
 BALM 5.33 73 eP 54 23.51 -1.7
 PCA 6.34 83 eP 54 37.77 -1.2
 35 obs. associated

MAY 29, 1990 03h 23m 14.83±1.45s
 44.849 N ± 4.9km 6.659 E ± 14.4km
 DEPTH = 10.7 ± 6.5 km
 FRANCE (538)

ML 2.3 (GEN).

RRL 0.11 52 P 23 18.22 0.2
 S 23 19.56
 BNI 0.20 3 P 23 19.10 -0.3
 eSg 23 22.60
 PZZ 0.47 137 P 23 24.17 -0.2
 S 23 30.16
 RSP 0.52 54 P 23 25.40 0.0
 S 23 31.86
 DOI 0.54 129 P 23 23.90 -1.9
 eSg 23 30.00
 LPG 0.65 6 Pg 23 27.50 -0.5
 Sg 23 35.90
 LPL 0.67 4 Pg 23 27.90 -0.3
 Sg 23 36.80
 LSD 0.70 30 P 23 29.09 0.3
 S 23 37.81
 STV 0.77 142 P 23 30.43 0.6
 S 23 39.55
 ENR 0.83 139 P 23 31.04 0.2
 S 23 40.63
 FIN 1.28 119 P 23 38.83 0.3
 S 23 53.40
 IMI 1.29 136 P 23 39.04 0.3
 S 23 54.17
 PCP 1.38 102 P 23 40.58 0.5
 S 23 56.79
 S.D. = 0.8 on 13 of 13 obs.

MAY 29, 1990 04h 37m 29.80±0.44s
 5.467 N ± 7.1km 32.568 E ± 7.1km
 DEPTH = 10.0km (geophysicist)
 4.7mb (15 obs.) 3.8msz (1 obs.)
 SUDAN (557)

AAE 7.09 60 eP 39 16.50 0.0
 NAI 7.92 148 iP 39 28.00 0.0
 iS 41 30.00
 BCAA 14.02 266 ePc 40 46.10 -4.7X
 0.3s 5.00nm 4.8mb
 id 42 24.30
 ic 44 02.70
 KRI 22.34 187 iP 42 22.40 -7.3X
 iSn 46 20.20
 BUL 25.74 189 iP 42 51.70 -10.8X
 iSn 48 00.10
 KIC 37.12 273 P 44 43.00 0.3
 LKO 38.03 278 (P) 44 50.52 0.1
 0.8s 10.50nm 4.7mb
 SRO 43.92 346 eP 45 40.30 1.9
 SRO 43.92 346 eP 45 46.30 7.9X
 ZST 44.58 345 e(P) 45 44.80 1.1
 KRA 45.69 349 eP 45 53.30 0.7
 LPG 45.77 335 eP 45 53.10 -0.5
 0.9s 5.75nm 4.6mb
 LPL 45.79 335 eP 45 53.10 -0.6
 1.2s 8.95nm 4.6mb
 CAF 47.47 331 eP 46 07.30 0.5
 1.1s 11.00nm 4.9mb
 GRF 47.61 341 ePd 46 08.20 0.4
 0.8s 10.00nm 5.0mb
 Z 19s 0.10um 3.8msz
 e 46 11.50
 BSF 47.63 337 eP 46 07.60 -0.5
 LPO 47.73 330 eP 46 09.20 0.4
 BRG 47.86 344 eP 46 09.60 -0.1
 CDF 47.91 337 eP 46 09.60 -0.7
 SMF 47.93 334 eP 46 10.10 -0.2
 HAU 47.94 336 eP 46 10.10 -0.3
 RJF 48.02 331 eP 46 11.20 0.2
 LBF 48.13 334 eP 46 11.50 -0.4
 0.9s 4.90nm 4.6mb
 LFF 48.14 330 eP 46 12.30 0.4
 MAF 48.19 332 eP 46 12.90 0.5
 1.1s 13.45nm 4.9mb
 AVF 48.26 333 eP 46 12.50 -0.3
 1.1s 8.55nm 4.7mb
 BGF 48.31 333 eP 46 13.10 -0.2
 LOR 48.40 334 eP 46 13.40 -0.6
 0.9s 5.75nm 4.6mb
 TCF 48.40 332 eP 46 14.50 0.5
 0.9s 9.85nm 4.9mb
 CLL 48.51 344 eP 46 15.00 0.3
 1.2s 10.00nm 4.8mb
 LSF 48.70 332 eP 46 16.30 0.0
 LDF 51.17 333 eP 46 34.50 -0.6

0.9s 9.85nm 4.7mb
 LPF 51.20 332 eP 46 35.10 -0.2
 0.9s 9.85nm 4.7mb
 GRR 51.36 332 eP 46 36.00 -0.6
 NB2 57.73 348 P 47 21.80 -1.2
 1.0s 4.80nm 4.5mb
 S.D. = 0.6 on 31 of 35 obs.

? MAY 29, 1990 06h 11m 23.29±2.12s
 45.081 N ± 7.4km 7.367 E ± 20.4km
 DEPTH = 10.0km (geophysicist)
 NORTHERN ITALY (545)

RSP 0.11 312 P 11 26.83 0.6
 S 11 28.98
 LSD 0.41 338 P 11 31.24 -0.4
 S 11 35.85
 RRL 0.44 249 P 11 32.16 -0.2
 S 11 37.70
 PZZ 0.61 198 P 11 35.65 0.0
 S 11 44.57
 S.D. = 0.8 on 4 of 4 obs.

MAY 29, 1990 06h 14m 26.78±0.47s
 50.142 N ± 4.9km 8.513 E ± 3.7km
 DEPTH = 31.6 ± 3.9 km
 GERMANY (543)
 ML 3.5 (GRF), 3.3 (FUR). Felt in the Frankfurt area.

TNS 0.09 333 iPgc 14 30.80 -1.6
 iSg 14 33.10
 BNS 1.19 314 iPnd 14 49.00 1.8
 0.2s 515.00nm
 Sg 15 06.50
 GWF 1.30 207 Pg 14 50.25 1.3
 Sg 15 08.12
 WLF 1.60 254 iP 14 55.22 2.1
 JCK 1.60 305 ePnd 14 55.60 2.4
 eS 15 16.10
 eS 15 16.90
 MEM 1.67 287 iP 14 56.70 2.5
 ENN 1.77 292 ePg 14 59.00 3.4X
 0.4s 14.00nm
 e 15 04.00
 eSg 15 24.00
 GRF 1.81 103 iPnd 14 57.50 1.3
 e(Pg) 14 59.00
 eSg 15 19.90
 WLS 1.89 204 Pn 14 57.87 0.4
 Sg 15 28.05
 CDF 1.91 206 Pn 14 58.07 0.2
 Sg 15 28.77
 MOX 2.05 75 ePn 14 58.00 -1.7
 ePg 15 02.00
 eSg 15 27.00
 ECH 2.12 205 Pn 15 00.72 -0.1
 Sg 15 35.25
 WTS 2.14 331 ePg 15 07.00 6.0X
 0.8s 46.00nm
 i 15 09.80
 eSg 15 35.00
 FEL 2.29 188 Pn 15 03.07 -0.2
 Sg 15 40.47
 SLE 2.38 180 ePc 15 04.30 -0.1
 MOF 2.47 202 Pn 15 05.65 -0.1
 Sg 15 46.30
 DOU 2.52 270 iP 15 09.00 2.6
 i 15 15.80
 VITF 2.54 222 Pn 15 07.06 0.4
 Sg 15 47.99
 HAU 2.57 214 Pn 15 06.80 -0.3
 Sg 15 48.40
 BSF 2.57 207 Pn 15 07.00 -0.3
 Sn 15 37.80
 Sg 15 49.60
 ZLA 2.66 182 ePd 15 08.60 0.1
 FUR 2.68 136 iPc 15 16.70 8.0X
 UCC 2.73 286 eP 15 54.00 44.6X
 SAX 2.95 169 ePc 15 12.90 0.2
 LOMF 3.01 202 Pn 15 11.79 -1.6
 WET 3.01 108 iPnd 15 13.90 0.5
 CLL 3.08 66 iPn 15 12.30 -2.1
 iPg 15 22.30
 iSg 16 01.00
 KHC 3.44 105 iPn 15 19.50 -0.1
 e 15 46.40

29d 06h

		Sn	16 03.00	
		Sg	16 09.90	
BRG	3.54	76 ePn	15 19.30	-1.6
		iPg	15 29.40	
		iSg	16 13.50	
OSS	3.62	162 ePc	15 23.10	0.9
OGA	3.68	152 iPnc	15 23.40	0.4
VDL	3.71	170 ePc	15 24.60	1.1
SCE	3.76	144 iPnd	15 24.00	-0.1
PRU	3.89	90 ePn	15 27.00	1.2
		ePg	15 37.00	
		Sg	16 23.80	
TMA	4.05	176 ePd	15 29.30	1.0
MMK	4.11	185 ePc	15 30.10	0.9
DIX	4.13	191 ePd	15 29.90	0.4
LOR	4.21	229 Pn	15 29.20	-1.2
		Sn	16 18.30	
		Sg	16 42.00	
VAI	4.28	178 P	15 40.50	9.1X
		eSn	16 43.00	
LBF	4.36	225 Pn	15 31.40	-1.2
		Sn	16 22.20	
		Sg	16 47.50	
SSF	4.53	229 Pn	15 33.60	-1.4
		Sn	16 25.80	
		Sg	16 51.80	
FVI	4.55	140 Pd	15 36.00	0.8
		eSn	16 11.00	
CTI	4.60	152 P	15 36.50	0.4
		eSn	16 11.50	
SAL	4.73	163 P	15 40.00	2.2
LPL	4.78	195 Pn	15 39.30	0.6
LPG	4.80	195 Pn	15 39.60	0.7
KSP	5.02	79 eP	15 39.00	-2.8X
		iS	16 59.50	
BGF	5.21	229 Pn	15 43.30	-1.2
		Sn	16 42.30	
		Sg	17 11.80	
BNI	5.24	194 P	16 14.00	28.9X
		eSn	17 17.00	
MAF	5.59	228 Pn	15 47.80	-2.0
		Sg	17 24.20	
TCF	5.71	230 Pn	15 50.40	-1.2
		Sn	16 53.80	
		Sg	17 27.30	
CKI	5.72	182 P	15 54.00	2.2
LDF	5.85	258 Pn	15 53.80	0.2
FLN	6.03	260 Pn	15 56.10	0.1
SBF	6.32	187 Pn	15 58.80	-1.5
GRR	6.38	258 Pn	16 00.20	-0.8
LPF	6.62	255 Pn	16 04.60	0.2
MFF	6.77	242 Pn	16 05.00	-1.4
CAF	6.80	222 Pn	16 04.40	-2.5X
LFF	7.40	228 Pn	16 13.40	-1.8

S.D. = 1.3 on 52 of 60 obs.

MAY 29, 1990 07h 14m 11.21 ± 1.27s
 43.333 N ± 9.6km 144.404 E ± 6.6km
 DEPTH = 105.9 ± 11.9 km
 4.9mb (24 obs.)

HOKKAIDO, JAPAN REGION (224)

MAT	8.28	217 (P)	16 09.00	-1.2
		0.9s	20.17nm	4.8mb
		eS	17 38.00	
MDJ	10.76	282 eP	16 43.50	0.1
CN2	13.76	278 iPc	17 23.40	0.6
		sP	17 52.50	
SNY	15.42	272 Pc	17 43.60	-0.3
BJI	21.29	271 eP	18 50.00	-0.5
		1.0s	30.00nm	4.6mb
		eS	22 40.00	
TIA	22.08	260 Pd	18 57.40	-0.9
NJ2	23.05	249 Pc	19 08.40	0.6
HHC	24.41	275 eP	19 22.00	1.0
TIY	24.85	268 Pc	19 27.00	1.9
BTO	25.61	276 eP	19 35.00	2.8X
		eS	23 53.00	
WHN	27.05	252 eP	19 46.00	0.8
XAN	29.03	263 P	20 07.60	4.4X
CD2	34.37	263 eP	20 50.00	0.1
IMA	40.14	34 iPc	21 38.30	0.4
		0.5s	11.00nm	4.9mb
WMO	40.39	291 eP	21 40.00	0.0
FBA	42.60	36 eP	21 58.70	0.8
		0.7s	26.40nm	5.2mb
TOA	43.61	40 eP	22 08.00	1.9

CHG	45.25	252 eP	22 28.00	8.3X
MBC	49.84	18 eP	22 54.00	-0.7
		0.9s	2.00nm	4.1mb
KEV	58.39	339 eP	23 56.00	-1.2
		0.7s	17.40nm	5.2mb
SOD	60.07	337 iP	24 08.00	-0.8
PNT	62.14	47 eP	24 23.00	0.0
NUR	65.48	332 iP	24 43.80	-0.7
FFC	67.21	35 iPd	24 55.50	-0.1
		0.9s	13.00nm	4.8mb
LRM	68.12	47 eP	25 02.30	0.5
UPP	68.29	334 iP	25 01.60	-0.6
NB2	69.25	338 P	25 07.40	-0.8
		0.8s	20.40nm	5.0mb
HFS	69.28	336 eP	25 07.60	-0.7
		0.6s	27.40nm	5.3mb
FRB	70.12	15 eP	25 12.00	-1.3
KRA	75.13	327 iPd	25 43.70	0.7
		0.5s	49.00nm	5.6mb
KSP	75.92	329 eP	25 48.00	0.5
CLL	76.74	331 iPd	25 52.10	0.1
		0.9s	19.00nm	4.9mb
PRU	77.27	329 ePc	25 55.70	0.7
		e	25 58.40	
EKA	77.92	342 P	25 59.00	0.5
		0.6s	3.70nm	4.4mb
KHC	78.33	330 P	26 01.40	0.5
GRF	78.72	331 iPd	26 04.30	1.4
		1.1s	20.00nm	4.8mb
CDF	81.16	333 eP	26 15.50	-0.6
		0.7s	6.60nm	4.6mb
HAU	81.83	333 eP	26 18.70	-0.8
FLN	83.24	337 eP	26 26.00	-0.7
LOR	83.28	334 eP	26 26.30	-0.7
		0.7s	7.70nm	4.7mb
LBF	83.49	334 eP	26 27.40	-0.7
SSF	83.58	334 eP	26 28.00	-0.5
GRR	83.68	338 eP	26 29.40	0.4
SMF	83.84	334 eP	26 29.30	-0.5
		0.8s	12.10nm	4.9mb
LPL	83.86	332 eP	26 31.10	0.9
AVF	83.87	334 eP	26 29.40	-0.5
		0.7s	6.60nm	4.7mb
LPG	83.87	332 eP	26 30.40	0.0
MAF	84.62	334 eP	26 34.00	0.3
		0.8s	13.45nm	4.9mb
TCF	84.67	335 eP	26 33.60	-0.4
LSF	84.92	335 eP	26 35.00	-0.2
MFF	85.10	336 eP	26 36.30	0.2
		0.9s	8.20nm	4.7mb
RJF	85.77	335 eP	26 39.60	0.1
LRG	85.79	331 eP	26 39.10	-0.4
		0.7s	13.25nm	5.0mb
LMR	85.84	331 eP	26 39.30	-0.5
		0.7s	11.00nm	5.0mb
CAF	85.94	334 eP	26 41.00	0.7
		0.8s	8.75nm	4.8mb
LFF	86.34	335 eP	26 42.80	0.6
		0.7s	11.00nm	5.0mb
LPO	86.43	335 eP	26 43.20	0.5
		0.7s	6.60nm	4.8mb
ITR	145.47	5 e(PKP)33	38.00	-0.6

S.D. = 0.8 on 55 of 58 obs.

? MAY 29, 1990 09h 27m 02.41 ± 1.27s
 39.051 N ± 8.9km 27.742 E ± 14.5km
 DEPTH = 10.0km (geophysicist)
 TURKEY (366)

IZM	0.75	210 iPg	27 17.20	0.0
		eSg	27 27.20	
KCT	1.29	21 ePn	27 26.00	-0.3
EDC	1.30	4 ePn	27 26.80	0.4
EZN	1.34	306 iPn	27 27.00	-0.1

S.D. = 0.5 on 4 of 4 obs.

* MAY 29, 1990 09h 42m 28.20 ± 1.89s
 1.376 N ± 12.1km 124.154 E ± 13.7km
 DEPTH = 41.5 ± 21.9 km
 4.8mb (5 obs.)
 MINAHASSA PENINSULA (265)

MNI	0.69	84 iPd	42 41.50	-0.1
		eS	42 54.00	
AAI	6.45	141 iP	44 09.00	5.8X
WB5	23.38	155 eP	47 33.50	-0.7
WRA	23.43	155 Pd	47 34.40	-0.3

GUMO	0.9s	49.10nm	5.0mb	
SNG	23.82	58 eP	48 20.50	42.0X
PSI	24.16	284 eP	47 42.60	0.8
PSI	25.25	273 ePd	47 52.60	0.4
QIS	25.25	273 ePd	47 52.70	0.5
	26.54	146 iPd	48 04.00	-0.2
	0.7s	17.00nm	4.0mb	
CD2	35.16	329 eP	49 20.10	-0.2
XAN	35.48	338 eP	49 22.70	-0.3
LZH	39.34	334 P	49 56.60	1.1
	1.8s	34.00nm	4.0mb	
TOO	43.50	155 eP	50 30.80	1.4
	0.9s	17.00nm	4.0mb	
HYB	47.56	292 eP	51 01.50	-0.5
GBA	47.78	287 Pc	51 01.80	-2.0
	0.9s	8.00nm	4.7mb	
BCAO	105.46	275 ePKPd	00 46.20	-3.3X

S.D. = 1.0 on 13 of 16 obs.

& MAY 29, 1990 09h 46m 06.94s
 63.884 N 148.944 W
 DEPTH = 0.3km
 CENTRAL ALASKA (1)
 <AGS-P>.

MCK	0.15	178 iP	46 10.20	0.2
		eS	46 12.69	
RND	0.48	175 iP	46 16.27	-0.3
		eS	46 22.85	
WRH	0.70	32 iP	46 20.24	-0.6
		eS	46 30.63	
NEA	0.70	355 iP	46 20.41	-0.5
CCB	0.91	32 eP	46 23.95	-1.2
		eS	46 36.54	
KTH	0.94	250 eP	46 24.43	-1.2
		eS	46 38.80	
HUR	0.96	199 eP	46 25.15	-1.0
HDA	1.02	58 eP	46 26.11	-1.0
		eS	46 39.69	
FBA	1.14	26 eP	46 28.28	-0.8
		eS	46 43.01	
DDM	1.37	93 eP	46 32.66	-0.5
DMW	1.43	82 eP	46 33.42	-0.6
CUT	1.60	203 eP	46 36.20	-0.3
PAX	1.81	119 eP	46 40.27	0.6
SML	2.10	172 eP	46 43.39	-0.5
GHO	2.12	180 eP	46 43.52	-0.6
DOT	2.18	94 eP	46 46.64	1.6
TOA	2.19	143 eP	46 46.44	1.3
SKT	2.25	213 eP	46 44.75	-1.2
PWA	2.28	191 eP	46 46.41	0.0
PLRM	2.30	182 eP	46 45.81	-0.9
SUA	2.57	200 eP	46 51.08	0.5
PMS	2.66	186 eP	46 52.66	0.8
KLU	2.78	148 eP	46 54.35	0.8
NCG	2.90	212 eP	46 52.50	-2.8

24 obs. associated

* MAY 29, 1990 10h 39m 19.55 ± 2.34s
 37.640 N ± 17.6km 20.782 E ± 26.1km
 DEPTH = 10.0km (geophysicist)
 IONIAN SEA (399)
 MD 3.5 (ATH).

VLS	0.56	344 iPg	39 30.40	-0.5
ITM	1.02	116 ePg	39 37.20	-1.7
VLJ	1.95	117 ePg	39 55.00	2.0
KEK	2.21	340 ePg	40 04.00	7.2X
NEO	2.54	48 ePn	40 01.60	0.1
OHR	3.47	0 e(Pn)	40 15.00	0.3
VAM	3.54	128 ePn	40 15.40	-0.3
VAY	3.93	20 ePn	40 23.30	2.1X

S.D. = 1.5 on 6 of 8 obs.

% MAY 29, 1990 11h 01m 56.12 ± 0.77s
 44.818 N ± 6.1km 9.851 E ± 6.7km
 DEPTH = 10.0km (geophysicist)
 NORTHERN ITALY (545)

BOB	0.29	260 Pd	02 01.50	-0.8
		eSg	02 07.00	
SAL	0.92	31 P	02 14.50	0.8
		eSn	02 29.00	
MDI	0.96	354 P	02 13.50	-0.9
		eSg	02 27.50	
CKI	1.19	251 P	02 19.00	0.7
		eSg	02 34.00	

29d 11h

PII 1.20 156 P 02 18.00 -0.4
eSn 02 35.50
VAI 1.30 324 P 02 20.30 0.2
eSg 02 36.00
ORO 1.55 302 P 02 23.50 -0.4
eSn 02 42.00
DOI 1.89 261 P 02 29.50 0.7
eSn 02 52.00
S.D. = 0.8 on 8 of 8 obs.

% MAY 29, 1990 11h 23m 42.88 ± 0.75s
44.878 N ± 6.3km 9.873 E ± 7.1km
DEPTH = 10.0km (geophysicist)

NORTHERN ITALY (545)

BOB 0.32 250 Pd 23 49.00 -0.6
iSg 23 54.10
SAL 0.86 32 P 24 01.00 1.5
eSg 24 14.00
MDI 0.91 353 P 23 58.00 -2.2
eSg 24 15.70
BDI 0.97 147 P 24 01.50 0.2
eSn 24 16.00
CKI 1.22 249 Pd 24 06.50 0.8
eSg 24 20.00
PII 1.25 158 P 24 05.20 -0.8
eSn 24 22.50
VAI 1.26 322 P 24 07.00 0.8
eSg 24 22.00
ORO 1.53 300 P 24 10.00 -0.4
eSg 24 29.50
DOI 1.91 260 P 24 16.50 0.6
eSg 24 39.50
S.D. = 1.3 on 9 of 9 obs.

% MAY 29, 1990 11h 38m 12.50 ± 0.50s
44.853 N ± 4.6km 9.850 E ± 4.7km
DEPTH = 10.0km (geophysicist)

NORTHERN ITALY (545)

BOB 0.30 253 Pd 38 19.10 0.3
iSg 38 24.30
SAL 0.89 32 P 38 30.00 0.4
eSn 38 44.50
MDI 0.93 354 P 38 30.50 0.3
eSg 38 42.70
BDI 0.95 146 P 38 31.00 0.3
eSn 38 46.00
CKI 1.20 250 P 38 35.00 0.1
eSn 38 51.00
PII 1.23 157 P 38 35.50 0.1
iSn 38 53.00
VAI 1.27 324 P 38 36.00 0.0
eSn 38 51.50
ORO 1.53 301 P 38 40.50 0.5
eSg 38 58.00
CTI 1.74 46 P 38 42.20 -0.9
eSn 39 03.50
DOI 1.89 260 P 38 44.00 -1.2
eSg 39 08.00
S.D. = 0.6 on 10 of 10 obs.

MAY 29, 1990 11h 55m 33.26 ± 0.90s
31.747 S ± 5.4km 68.335 W ± 9.2km
DEPTH = 10.6 ± 4.4 km

SAN JUAN PROVINCE, ARGENTINA (137)

CFA 0.16 30 iPd 55 37.00 -0.1
RTCV 0.21 236 iPc 55 37.00 -0.8
RTLL 0.43 345 iPc 55 42.00 -0.1
RTCB 0.47 303 iPd 55 43.10 0.2
RTBS 0.96 275 iPd 55 51.00 -0.4
MDZ 1.21 201 eP 55 56.20 0.3
iS 56 08.20
JACH 2.13 243 iPc 56 11.10 1.7
FCH 2.28 226 iPc 56 12.50 0.7
iS 56 43.00
PEL 2.43 234 iPc 56 14.10 0.5
iS 56 47.60
SAN 2.60 228 eP 56 15.00 -1.0
eS 56 51.70
PCH 2.62 224 eP 56 16.50 0.1
iS 56 53.10
TACH 2.90 228 iPc 56 20.00 -0.3
iS 57 01.90
LCCH 3.23 237 iPd 56 25.80 0.9
iS 57 14.00

LNW 3.40 229 iPc 56 25.50 -1.8
iS 57 15.20
S.D. = 1.0 on 14 of 14 obs.

& MAY 29, 1990 12h 15m 38.66s
61.267 N 149.405 W

DEPTH = 40.8km

SOUTHERN ALASKA (2)

<AGS-P>. ML 3.1 (PMR).

PMS 0.08 254 iP 15 45.06 -0.3
PLRM 0.35 22 iP 15 46.96 -0.6
iS 15 53.49
PMR 0.35 22 iPd 15 46.90 -0.7
PWA 0.45 330 iP 15 48.49 -0.2
iS 15 56.87
GHO 0.56 24 iP 15 49.70 -0.6
iS 15 58.83
SUA 0.67 288 iP 15 51.45 -0.5
iS 16 02.08
SML 0.75 43 iP 15 52.10 -0.8
iS 16 02.72
SLKM 0.86 208 iP 15 53.68 -0.8
iS 16 05.54
NKA 1.04 240 eP 15 58.32 1.4
SEW 1.17 181 eP 15 57.63 -1.1
eS 16 12.95
GLI 1.19 108 iP 15 57.66 -1.4
iS 16 13.58
CUT 1.21 341 eP 15 59.59 0.2
iS 16 16.18
SKT 1.24 306 iP 16 00.08 0.2
CGLM 1.26 273 iP 16 00.24 0.1
SPU 1.28 267 iP 16 00.07 -0.4
eS 16 17.43
CRP 1.33 271 eP 16 01.40 0.2
NCG 1.33 277 iP 16 01.63 0.4
eS 16 20.24
VZW 1.40 97 iP 16 01.29 -0.8
eS 16 19.28
NCA 1.43 58 eP 16 02.23 -0.3
VLZ 1.49 94 iP 16 02.63 -0.7
iS 16 22.56
RDT 1.62 246 iP 16 05.21 -0.1
KLU 1.69 81 iP 16 05.57 -0.7
eS 16 25.55
HUR 1.72 356 eP 16 07.57 0.9
TOA 1.76 60 eP 16 07.60 0.4
RED 1.86 244 iP 16 08.47 -0.2
eS 16 31.85
CNPM 1.97 208 eP 16 09.55 -0.7
RND 2.16 7 eP 16 13.73 0.6
SDG 2.22 54 eP 16 14.59 0.7
KTH 2.40 344 eP 16 16.87 0.4
MCK 2.48 5 eP 16 18.77 1.2
PAX 2.52 46 eP 16 18.91 0.8
PDB 2.79 240 eP 16 20.95 -0.9
SVW 3.01 270 ePd 16 24.40 -0.7
DDM 3.02 31 eP 16 28.01 2.8
CDD 3.16 224 eP 16 26.64 -0.6
TGL 3.24 96 eP 16 26.69 -1.7
HDA 3.35 19 eP 16 29.79 0.0
BALM 3.43 91 eP 16 29.08 -2.0
CCB 3.47 11 eP 16 31.36 -0.2
TTA 3.53 301 eP 16 31.10 -1.3
FBA 3.72 11 eP 16 35.00 -0.1
IMA 5.18 340 eP 16 55.60 -0.2

42 obs. associated

MAY 29, 1990 12h 35m 28.92 ± 0.61s
15.970 N ± 2.9km 120.237 E ± 3.5km
DEPTH = 45.9 ± 5.5 km
5.3mb (46 obs.) 4.5msz (6 obs.)

LUZON, PHILIPPINE ISLANDS (249)

Felt (II RF) at Baguio and

Santa.

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 10S, 18C

Centroid Location:

Origin Time 12:35:25.5 0.8

Lat 16.23N 0.10 Lon 120.54E 0.11

Dep 16.9 4.9 Half-duration 1.5

Moment Tensor: Scale 10¹⁶ Nm

Mrr=-6.84 0.90 Mtt=7.64 0.64

Mff=-0.79 1.19 Mrt=1.81 3.38

Mrrf=-1.43 1.77 Mtf=0.27 0.71

Principal Axes:
T Val= 7.86 P1g= 7 Azm= 0
N -0.47 12 92
P -7.38 76 241
Best Double Couple: Mo=7.6*10¹⁶
NP1: Strike= 76 Dip=39 Slip=-110
NP2: 281 53 -75

BAG 0.55 37 iPc+ 35 41.10 0.3
QCP 1.55 148 iPd 35 54.00 -0.5
MCO 8.79 315 eP 37 31.10 -5.3X
GZH 9.61 319 P 37 44.00 -3.6X
Z 20s 2.80um
N 14s 2.30um
E 12s 2.90um
DAV 10.26 140 eP 38 03.00 6.5X
QIZ 10.37 289 eP 37 54.00 -4.1X
N 15s 1.60um
E 15s 2.90um
KKM 10.62 202 eP 38 00.40 -1.2
TSM 11.87 191 ePc 38 18.90 0.6
SSE 15.08 3 P 39 00.80 0.2
8.0s 600.00nm 4.9mb X
Z 20s 1.80um 4.1msz X
N 13s 1.00um
pP 39 11.00
sP 39 17.50
MNI 15.13 162 ePd 39 04.00 2.6
WHN 15.48 341 eP 39 05.00 -0.7
Z 15s 2.40um
N 14s 1.16um
E 14s 1.70um
pP 39 12.00
NJ2 16.06 356 Pc 39 12.00 -1.1
4.5s 400.00nm 4.8mb X
Z 18s 1.10um 4.1msz X
N 15s 1.30um
E 17s 1.60um
sP 39 29.00
GYA 16.39 312 P 39 19.60 2.1
N 16s 1.60um
E 16s 2.30um
LOE 17.79 277 eP 39 36.00 1.1
KMI 18.73 302 Pd 39 47.50 0.8
4.0s 600.00nm 5.1mb X
Z 15s 2.60um 3.8msz
pP 39 53.50
sP 39 56.50
PP 40 07.50
NST 19.35 272 eP 39 56.00 2.4
NNT 20.15 263 eP 40 03.70 1.5
TIA 20.35 353 Pd 40 04.50 0.4
Z 17s 1.60um 4.4msz X
N 14s 1.10um
eS 43 46.00
BDT 20.39 277 eP 40 05.70 1.1
1.0s 62.10nm 4.9mb
CHG 20.51 281 ePd 40 05.20 -0.8
0.9s 25.21nm 4.6mb
XAN 20.68 333 P 40 06.00 -1.6
N 12s 1.80um
E 10s 0.40um
S 43 53.00
AAI 21.06 157 eP 40 15.40 3.9X
SNG 21.10 248 eP 39 56.00 -15.9X
eS 43 51.00
CD2 21.17 318 P 40 12.10 -0.5
Z 18s 1.50um 4.4msz
N 12s 1.80um
eS 44 04.00
KGM 21.68 232 eP 40 22.00 4.2X
IPM 22.01 241 ePd 40 22.00 0.9
0.7s 28.00nm 4.8mb
TIY 22.73 344 Pd 40 29.40 1.3
1.2s 130.00nm 5.2mb
Z 17s 2.16um 4.7msz X
N 15s 2.20um
pP 40 40.00 41kmX
S 44 30.00
sS 44 43.00
DL2 22.88 3 eP 40 29.00 -0.5
Z 18s 0.60um 4.1msz
N 13s 0.90um
E 10s 0.30um
sP 40 41.00
S 44 32.00
GUMO 23.93 92 eP 40 41.00 1.2

29d 12h

	1.2s	183.33nm	5.5mb	QLP	48.30	151 eP	44 06.80	-1.0	Z	20s	0.20um	4.5msz		
PJG	23.93	92 eP	40 41.00	1.2	QUE	50.60	296 eP	44 24.50	-1.2		e	48 33.20		
TSRJ	24.04	33 P	40 40.60	-0.1			e	45 43.40			e	48 36.70		
BJI	24.24	352 eP	40 43.00	0.4	BRS	53.42	143 eP	44 54.00	7.4X	FUR	90.35	321 iPc	48 27.70	1.1
	1.2s	200.00nm	5.5mb	BWA	56.84	152 eP	45 11.90	0.6	OGA	91.05	320 eP	48 30.00	-0.1	
Z	20s	1.50um	4.5msz	MAIO	57.25	303 iPd	45 14.00	-0.4		0.9s	27.00nm	5.7mb		
		PcP	44 22.50			0.8s	23.79nm	5.3mb	WTS	91.24	325 eP	48 30.50	0.0	
		eS	45 00.00				eS	53 24.00		0.8s	8.00nm	5.2mb		
TSI	24.66	242 ePd	40 49.00	2.1	CAN	57.85	152 eP	45 18.40	0.0	OSS	91.67	320 ePd	48 33.40	0.5
PSI	24.78	240 ePd	40 48.00	-0.1	CNB	58.01	152 eP	45 19.10	-0.4	SAX	91.92	320 ePd	48 34.30	0.1
	0.7s	25.80nm	4.9mb	TOO	58.32	157 eP	45 22.10	0.5	VDL	92.18	320 ePd	48 35.70	0.4	
LZH	24.80	327 iPd	40 49.50	1.3	ADK	61.02	39 eP	45 38.60	-1.4	SLE	92.21	321 ePd	48 34.90	-0.3
	4.0s	480.00nm	5.4mb X			1.0s	96.40nm	5.9mb	LLS	92.30	320 ePd	48 36.20	0.3	
Z	20s	1.70um	4.5msz	TAB	67.77	305 eP	46 24.00	-0.5	ENN	92.31	325 eP	48 35.50	0.0	
N	14s	1.80um		ANM	69.00	26 ePd	46 32.60	1.2		0.8s	9.00nm	5.3mb		
E	12s	0.70um		TTA	73.08	28 ePd	46 57.00	0.9	ZLA	92.40	321 ePd	48 36.00	-0.1	
		pP	40 55.50	21kmX		1.1s	86.10nm	5.6mb	CDP	92.64	322 eP	48 36.70	-0.5	
		sP	40 59.40		SVW	73.34	30 ePd	46 58.80	1.3		1.1s	31.75nm	5.7mb	
		eS	45 08.00		IMA	73.95	25 iPd	47 02.00	0.9	TMA	92.72	320 ePd	48 37.30	-0.4
		sS	45 18.00			0.7s	40.40nm	5.5mb	MAW	93.08	199 iP	48 39.90	1.4	
IIDJ	25.04	36 P	40 49.80	-0.7	KDC	75.21	34 ePd	47 08.40	0.1	BSF	93.20	322 eP	48 39.10	-0.7
MTMJ	25.79	34 eP	40 56.60	-0.9	KVT	75.37	309 iP	47 08.80	-0.9		1.1s	19.55nm	5.4mb	
HHC	25.91	345 P	40 59.00	0.4	KEV	76.26	339 eP	47 12.00	-2.1	MMK	93.31	320 ePd	48 41.10	0.6
Z	16s	2.10um	4.8mszX	PMR	76.40	29 ePd	47 14.70	-0.3	DOU	93.38	324 Pc	48 41.00	0.6	
N	13s	1.60um			1.0s	78.00nm	5.6mb			1.0s	25.00nm	5.6mb		
E	13s	0.30um		FBA	76.51	26 ePd	47 15.70	0.1	DIX	93.64	320 ePd	48 42.50	0.4	
		S	45 26.00			1.1s	48.80nm	5.4mb	EMS	93.94	320 ePd	48 43.90	0.5	
SNY	25.93	6 Pd	40 57.70	-0.9	SOD	76.78	337 iP	47 16.70	-0.3	LPG	94.32	320 eP	48 45.00	-0.3
	1.0s	60.00nm	5.1mb	HRI	76.91	301 eP	47 19.00	0.4		0.7s	13.25nm	5.5mb		
Z	14s	1.18um	4.6mszX	KAS	77.02	310 iPd	47 19.30	0.3	LPL	94.32	320 eP	48 44.80	-0.4	
N	19s	2.26um		DSI	77.52	299 eP	47 22.00	0.2		0.7s	11.00nm	5.4mb		
E	15s	1.03um		TOA	77.70	29 ePd	47 23.70	1.4	LOR	95.21	322 eP	48 48.00	-1.0	
		pP	41 06.20	30kmX	SUF	77.81	332 iP	47 22.70	-0.1		1.2s	14.90nm	5.3mb	
		eS	45 25.00			0.6s	22.90nm	5.4mb	LBF	95.28	322 eP	48 48.70	-0.7	
MAT	25.98	35 eP	40 57.00	-2.2	PRNI	78.09	298 iPd	47 25.00	0.0		0.9s	9.85nm	5.3mb	
	0.8s	8.21nm	4.3mb X	MBH	78.30	298 eP	47 27.00	0.9	SSF	95.52	322 eP	48 49.60	-0.8	
		eS	45 34.00		LFK	78.32	303 eP	47 26.30	0.0	AVF	95.75	322 eP	48 50.60	-0.9
CHJJ	26.06	36 P	40 58.20	-1.7	NUR	78.97	330 iP	47 29.00	-0.2		1.1s	9.75nm	5.2mb	
BTO	26.10	342 P	41 00.50	0.2		0.9s	47.30nm	5.4mb	PNT	96.28	35 eP	48 55.00	1.2	
	N	15s	1.50um		ALT	80.22	308 eP	47 35.00	-1.5	MAF	96.51	322 eP	48 54.60	-0.3
	E	13s	0.80um		YLV	80.44	309 iP	47 36.70	-0.9		0.7s	3.30nm	5.0mb	
		sP	41 11.00		ELL	80.88	306 eP	47 38.10	-2.0	TCF	96.69	322 eP	48 55.20	-0.6
CN2	28.09	8 eP	41 17.00	-1.3	VRI	81.12	315 ePd	47 41.50	0.5		1.0s	6.00nm	5.1mb	
	Z	24s	1.10um	4.4mszX	MBC	81.43	12 iPd	47 42.40	0.3	LDF	96.79	325 eP	48 55.60	-0.5
	N	14s	1.10um			0.9s	61.00nm	5.6mb			0.9s	9.85nm	5.3mb	
	E	14s	0.40um		JMB	82.04	312 iPd	47 46.00	0.2	BUL	96.85	251 iPd	48 44.10	-12.9X
		PP	42 08.00		CMP	82.41	315 ePc	47 47.00	-0.8	FHC	98.02	44 ePKP	49 04.20	2.3
		eS	46 04.00		PVL	82.74	313 eP	47 50.00	0.6	NEW	98.24	35 P	49 04.00	1.3
YAMJ	28.16	34 P	41 18.90	-0.1	KDZ	83.08	311 eP	47 52.00	0.7		0.8s	6.67nm	5.2mb	
GTA	29.40	327 Pd	41 30.10	-0.2	RZN	83.58	311 iPd	47 53.00	-1.0	WDC	99.09	43 ePKPc	49 08.20	1.5
	Z	20s	2.00um	4.7msz	PGB	83.74	312 eP	47 56.00	1.3	MIN	99.82	43 ePKPc	49 11.00	0.8
	E	12s	0.90um		HFS	84.28	331 ePKP	47 55.70	-1.2	FRB	100.25	4 ePdiff	49 11.00	-0.2
		S	46 21.00			0.7s	20.10nm	5.3mb	ORV	100.29	44 ePdiff	49 13.20	1.1	
MDJ	29.63	14 eP	41 31.50	-0.7	MMB	84.32	311 eP	47 57.00	-0.6	CMB	101.82	45 ePdiff	49 20.50	1.5
OFUJ	29.71	35 P	41 31.80	-1.1	DAG	84.33	351 iPd	47 56.00	-0.9	PRI	102.60	46 e(Pdiff)	49 23.60	1.0
LSA	29.99	302 P	41 34.20	-1.9		0.6s	88.67nm	6.0mb	KVN	102.80	43 Pdiff	49 24.90	1.4	
MTN	30.59	159 eP	41 39.00	-1.9	KRA	84.36	320 ePd	47 57.50	0.0	FRI	102.82	45 e(Pdiff)	49 25.00	1.6
		e	44 38.00				e	48 03.50		TNP	103.91	43 Pdiff	49 29.40	0.9
ASAJ	33.88	29 eP	42 08.60	-0.8	SIT	84.38	32 eP	47 59.30	1.9		1.0s	5.00nm	5.3mb	
KUSJ	34.17	33 eP	42 12.10	0.3	VTS	84.41	313 iPc	47 58.00	-0.2	ALO	112.71	40 ePKP	54 03.80	1.0
PMG	36.69	132 eP	42 29.00	-4.5X	NB2	85.05	332 P	47 59.80	-1.0		0.9s	2.73nm		
MBL	36.90	181 eP	42 33.70	-1.5		1.1s	70.20nm	5.7mb	LKO	120.68	292 PKP	54 17.80	-0.6	
WB5	38.24	158 eP	42 45.00	-1.5	VAY	85.23	311 iP	48 01.20	-0.9		0.9s	12.00nm		
		i	42 51.50		BUD	85.75	318 iP	48 04.50	-0.1	KIC	121.20	288 PKP	54 19.12	-0.3
		eS	48 31.20		SKO	85.84	312 iP	48 04.50	-0.6		0.8s	20.50nm		
WRA	38.29	158 Pd	42 44.90	-2.0			i	48 18.60		TIC	121.34	288 PKP	54 19.42	-0.2
	0.2s	3.70nm	4.9mb		SRO	86.10	319 iP	47 58.70	-7.5X		0.8s	14.00nm		
WMQ	39.14	322 P	42 54.00	0.1			e	55 25.20		LIC	121.51	288 PKP	54 19.66	-0.3
	Z	16s	1.39um	4.9mszX	KSP	86.30	322 ePd	48 07.50	0.3		0.8s	18.50nm		
	N	12s	0.78um			1.0s	55.00nm	5.7mb	UPA	148.41	40 ePKP	55 12.80	3.5X	
	E	11s	0.58um				i	48 08.20		ITR	157.97	286 ePKP	55 32.50	9.8X
		S	48 50.50		ZST	86.73	319 iP	48 09.50	0.1	PEL	160.25	152 iPKPc	55 26.50	1.7
		ScS	53 00.00				e	55 24.40		ZOBO	171.96	93 PKP	55 36.80	1.9
HYB	39.90	278 eP	43 00.00	-0.4	PRU	87.66	322 Pd	48 14.00	0.2		1.1s	12.47nm		
	1.0s	40.00nm	5.2mb			1.5s	33.50nm	5.4mb	LPB	171.97	95 PKP	55 34.00	-0.7	
QIS	40.98	152 iPc	43 08.20	-1.0	BRG	87.67	323 iPd	48 13.90	0.1		S.D. = 1.0 on 164 of 177 obs.			
GBA	41.40	273 Pd	43 12.10	-0.6		1.5s	44.00nm	5.5mb						
	1.1s	63.70nm	5.3mb				e	48 22.00						
KOD	41.99	268 iPc	43 18.80	0.8	CLL	88.05	323 iPd	48 15.40	-0.2					
	1.2s	12.50nm	4.5mb			1.2s	22.00nm	5.3mb						
MEKA	42.36	182 eP	43 20.50	0.1			e	48 23.00						
CTA	44.02	144 iPc	43 34.00	0.0	KHC	88.57	321 iP	48 18.90	0.7					
	1.5s	63.89nm	5.1mb		WET	88.98	321 eP	48 20.50	0.3					
POO	44.28	280 iPc	43 35.00	-1.3	MOX	89.12								

& MAY 29, 1990 13h 15m 11.91s
62.904 N 151.574 W
DEPTH = 1.9km
CENTRAL ALASKA
<AGS-P> (1)

SKT	0.93	179	iP	15	29.34	-1.1
RND	1.33	67	eP	15	36.57	-0.8
			eS	15	54.09	
MCK	1.45	54	eP	15	38.91	-0.3
PWA	1.49	147	eP	15	38.74	-0.9
			eS	16	01.80	
NCG	1.53	191	eP	15	40.00	-0.4
CGLM	1.62	187	eP	15	41.37	-0.2
CRP	1.67	190	eP	15	42.39	0.0
			eS	16	04.13	
GHO	1.68	131	iP	15	41.90	-0.6
			iS	16	04.50	
PLRM	1.74	138	eP	15	43.02	-0.3
SPU	1.74	188	eP	15	43.36	-0.1
SML	1.87	125	iP	15	44.84	-0.4
			iS	16	09.31	
PMS	1.92	149	eP	15	46.15	0.2
RDT	2.37	190	eP	15	53.83	1.3
SLKM	2.49	164	eP	15	54.66	0.5
TOA	2.63	105	eP	15	57.91	1.7
GLI	2.94	132	eP	16	01.24	0.7
KLU	3.00	116	eP	16	01.97	0.5

20 obs. associated

? MAY 29, 1990 13h 43m 37.72± 8.74s
 16.337 S ±88.3km 75.471 W ±71.7km
 DEPTH = 33.0km (normal)
 OFF COAST OF PERU (114)

PT03	2.35	352	iPd	44	15.40	0.5
PT06	2.63	341	iP	44	19.50	0.7
			iS	44	48.50	
PT02	3.50	344	eP	44	31.00	-0.2
			e(S)	45	17.80	
ARE	3.82	92	eP	44	36.00	0.0
			iS	45	22.00	
PT08	4.48	346	iPc	44	44.40	-1.0
			eS	45	39.40	
PT10	4.48	341	e(P)	44	53.00	7.9x
			eS	45	52.00	
ZOBO	7.06	90	eP	45	22.00	0.1
			i	45	24.20	
			S	47	28.00	
LPB	7.08	93	P	45	22.00	-0.1
CCH	8.99	98	P	45	59.70	11.1x

S.D. = 0.7 on 7 of 9 obs.

? MAY 29, 1990 14h 04m 56.49± 7.96s
 16.239 S ±78.3km 75.656 W ±66.5km
 DEPTH = 33.0km (normal)
 OFF COAST OF PERU (114)

PT03	2.24	357	iPc	05	32.70	0.7
PT06	2.48	345	iP	05	34.20	-1.3
PT02	3.36	347	eP	05	48.50	0.5
			eS	06	34.70	
ARE	4.00	94	eP	05	58.00	0.6
			iS	06	39.50	
PT10	4.33	343	e(P)	06	03.00	1.2
			eS	07	08.50	
PT08	4.34	348	iPc	06	01.20	-1.0
			eS	06	56.50	
ZOBO	7.23	91	P	06	42.00	-1.2
LPB	7.26	93	P	06	44.00	0.6

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

* MAY 29, 1990 14h 23m 12.13± 1.63s
 36.367 N ±10.0km 140.975 E ±17.2km
 DEPTH = 22.0 ± 11.4 km
 4.3mb (2 obs.)
 NEAR EAST COAST OF HONSHU, JAPAN(228)

KAKJ	0.67	256	P	23	27.90	2.9
			S	23	35.30	
CHJJ	1.63	259	P	23	39.50	-0.3
			S	23	55.70	
NIJJ	1.81	299	P	23	41.30	-1.0
			S	24	01.20	
YAMJ	1.95	338	iP+	23	44.90	0.5
			S	24	06.20	
MAT	2.24	275	iPd	23	47.30	-1.3
			(S)	24	10.00	
MTMJ	2.56	276	P	23	52.80	-0.5
IIDJ	2.64	251	P	23	55.60	1.3
			S	24	24.40	
OFUJ	2.76	11	iP+	23	57.50	1.5

TSRJ	4.13	260	P	24	27.30	
AOMJ	4.21	354	P	24	15.40	-0.1
MRRJ	6.05	1	eP	24	41.50	-1.0
			eS	25	48.40	
HOOJ	6.27	16	P	24	46.50	0.9
			S	25	52.50	
KUSJ	7.31	22	P	24	59.10	-1.1
			eS	26	15.40	
WB5	56.29	187	eP	32	52.50	-0.9
WRA	56.35	188	P	32	54.00	0.1
	0.6s	1.20nm			4.1mb	
GBA	60.81	266	Pd	33	33.70	8.6x
	0.7s	3.10nm			4.5mb	

S.D. = 1.4 on 15 of 16 obs.

% MAY 29, 1990 15h 42m 54.54± 1.61s
 36.613 N ±16.1km 23.728 E ±19.9km
 DEPTH = 10.0km (geophysicist)
 SOUTHERN GREECE (368)
 MD 3.5 (ATH).

VLI	0.64	280	iPnc	43	07.50	0.1
VAM	1.26	162	ePn	43	18.00	0.0
ITM	1.55	292	ePn	43	22.00	-0.2
VLS	2.95	303	ePn	43	42.50	0.2
KEK	4.38	316	ePn	44	02.50	-0.1

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

* MAY 29, 1990 16h 12m 08.56± 2.63s
 31.849 S ±20.6km 70.012 W ±16.7km
 DEPTH = 135.4 ± 26.5 km
 CHILE-ARGENTINA BORDER REGION (127)

RTBS	0.51	69	iPc	12	28.50	0.0
JACH	0.97	210	iPd	12	31.70	-0.3
			iS	12	47.50	
RTCB	1.09	71	iPc	12	33.10	-0.1
ZON	1.18	75	iPc	12	34.00	0.0
			eS	12	51.00	
RTCV	1.26	91	ePd	12	34.70	-0.1
PEL	1.41	204	iPd	12	36.50	0.1
			iS	12	55.00	
RTLL	1.41	69	iPd	12	36.80	0.3
MDZ	1.43	137	eP	12	57.20	20.6x
FCH	1.49	189	iPd	12	38.00	0.3
			iS	12	58.50	
CFA	1.53	81	iPc	12	37.60	-0.2
			S	12	57.80	
PCH	1.82	193	iP	12	41.50	0.4
			iS	13	04.70	
TACH	1.96	203	iPd	12	42.50	-0.3
			iS	13	07.00	
LCCH	2.09	219	iP	12	45.00	0.7
			iS	13	08.00	
LNJ	2.41	209	iPc	12	47.50	-0.8
			iS	13	15.10	

S.D. = 0.4 on 13 of 14 obs.

? MAY 29, 1990 16h 49m 37.91± 4.08s
 37.576 N ±27.1km 20.703 E ±33.5km
 DEPTH = 10.0km (geophysicist)
 IONIAN SEA (399)
 MD 3.5 (ATH).

VLS	0.61	352	iPg	49	48.70	-1.5
			eSg	49	57.60	
ITM	1.05	112	ePg	49	57.50	-0.3
VLI	1.98	115	ePg	50	15.40	3.6x
KEK	2.25	342	ePg	50	21.70	6.0x
NEO	2.63	48	ePn	50	20.50	-0.6
OHR	3.53	1	ePn	50	35.00	1.1
VAY	4.01	21	ePn	50	41.00	0.4
SKO	4.43	7	ePn	50	42.00	-4.6x

S.D. = 1.4 on 5 of 8 obs.

MAY 29, 1990 18h 31m 12.29± 0.11s
 56.956 N ± 2.2km 153.569 W ± 2.0km
 DEPTH = 24.7km (geophysicist)
 5.9mb (80 obs.) 5.8Msz (33 obs.)
 KODIAK ISLAND REGION (13)
 ML 5.7 (PMR). Ms 5.9 (BRK), 5.5
 (PAS). Felt (V) at Old Harbor;
 (IV) at Kodiak and Port Lions;
 (III) at Chiniak. Depth from
 broadband displacement
 seismograms.

FAULT PLANE SOLUTION: P-Waves
 NP1: Strike= 50 Dip=77 Slip= 90
 NP2: 230 13 90
 Principal Axes:
 T P1g=58 Azm=320
 P 32 140
 Comment: The focal mechanism is
 poorly controlled and
 corresponds to reverse
 faulting. The preferred fault
 plane is NP2.
 RADIATED ENERGY
 Na. of sta: 8 Focal mech. F
 Energy 2.6±0.6*10**12 Nm
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 15S, 36C
 Centroid Location:
 Origin Time 18:31:15.6 0.2
 Lat 56.89N 0.04 Lon 153.09W 0.05
 Dep 15.0 BDY Half-duration 4.0
 Moment Tensor: Scale 10**18 Nm
 Mrr= 0.38 0.02 Mtt=-0.25 0.03
 Mff=-0.12 0.02 Mrt= 1.32 0.06
 Mrf= 0.71 0.06 Mtf=-0.32 0.02
 Principal Axes:
 T Val= 1.51 P1g=53 Azm=337
 N 0.12 4 241
 P -1.63 37 148
 Best Double Couple: Ma=1.6*10**18
 NP1: Strike=212 Dip= 9 Slip= 61
 NP2: 62 82 94

KDC	0.99	36	iPc	31	30.30	-0.1
CDD	1.98	359	iP	31	46.62	1.8
MCNL	2.27	350	iP	31	50.80	1.8
AUE	2.41	2	eP	31	52.56	1.6
AUL	2.43	2	eP	31	53.03	1.8
XLV	2.69	21	eP	31	55.35	0.5
CNPM	2.86	25	iP	31	57.16	-0.1
PDB	2.86	354	iP	31	58.55	1.3
BRLK	3.15	26	eP	32	00.99	-0.5
			eS	32	57.70	
NNL	3.32	20	iP	32	03.93	0.2
RED	3.50	6	iP	32	06.62	0.1
RDT	3.68	9	iP	32	08.89	-0.1
SEW	3.82	33	iP	32	08.31	-2.6x
SLKM	3.97	25	iP	32	11.31	-1.7x
NKA	3.99	17	eP	32	13.52	0.3
SDN	4.20	250	eP	32	17.00	0.7
SVW	4.30	347	iPc	32	18.50	0.8
SPU	4.31	10	iP	32	17.31	-0.6
MTU	4.35	43	eP	32	16.04	-2.3x
CRP	4.38	9	eP	32	18.68	-0.4
CGLM	4.44	10	eP	32	19.12	-0.7
NCG	4.52	9	eP	32	20.30	-0.7
MID	4.56	54	eP	32	17.30	-4.1x
SUA	4.75	17	eP	32	22.17	-2.0x
W77	4.77	24	iP	32	22.37	-2.1x
HIN	5.05	44	eP	32	24.66	-3.7x
PWA	5.07	20	eP	32	26.73	-1.9x
SKT	5.15	11	eP	32	28.25	-1.5x
GLI	5.17	38	eP	32	25.94	-4.1x
PLRM	5.18	24	eP	32	26.99	-3.1x
PMR	5.18	24	ePc	32	27.30	-2.8x
GHO	5.38	24	eP	32	30.65	-2.5x
CVA	5.43	45	eP	32	30.00	-3.7x
VZW	5.48	38	iP	32	30.83	-3.7x
SML	5.55	27	eP	32	32.55	-2.9x
VLZ	5.61	39	eP	32	32.81	-3.4x
			eS	33	32.13	
SGAM	5.62	47	eP	32	32.95	-3.5x
CUT	5.71	16	eP	32	37.03	-0.7
RAGM	5.77	50	eP	32	34.57	-4.0x
KLU	6.01	38	eP	32	38.25	-3.7x
NCA	6.11	31	eP	32	40.50	-2.8x
TTA	6.12	349	ePc	32	43.30	-0.2
HUR	6.35	16	eP	32	45.22	-1.5x
TOA	6.39	33	ePc	32	44.70	-2.6x
WAX	6.59	53	eP	32	45.77	-4.4x
CYK	6.60	57	eP	32	47.31	-2.8x
TGL	6.75	51	eP	32	47.78	-4.6x
KTH	6.75	10	eP	32	51.01	-1.3x
RND	6.88	18	eP	32	51.22	-3.0x
SDG	6.90	33	eP	32	52.76	-1.7x
BALM	7.09	50	iP	32	52.95	-4.3x
MCK	7.17	17	eP	32	56.00	-2.3x

PAX	7.27	31	eP	32	56.70	-3.0X	CLC	32.03	116	eP	37	38.00	-0.8				e	41	24.00	
PCA	7.64	60	eP	33	00.79	-4.1X				e	40	30.00					ePP	41	53.80	
YKU	7.75	65	e(P)	33	02.20	-4.0X	SBB	32.82	117	eP	37	45.00	-0.7	IIDJ	49.67	275	P	40	03.80	0.0
DDM	7.84	26	eP	33	08.23	0.6	GSC	32.83	115	eP	37	45.00	-0.8	CN2	50.27	292	iPc	40	07.00	-1.2
BCPM	7.90	62	eP	33	03.64	-4.8X	MWC	33.08	118	eP	37	49.00	0.8		6.0s	1300.00nm			6.1mb X	
WRH	8.00	17	eP	33	06.59	-3.2X	PAS	33.09	118	iPd	37	47.29	-0.7	Z	19s	8.20um			5.0Msz	
HDA	8.14	21	eP	33	09.03	-2.8X				ipPd	37	54.57	25kmX	N	17s	8.40um				
HQN	8.15	66	eP	33	06.84	-5.1X				ePP	38	45.00		E	17s	1.90um				
CCB	8.21	18	eP	33	08.97	-3.7X				ePcP	39	34.00					pP	40	15.00	27kmX
FBA	8.45	17	eP	33	12.30	-3.7X				eS	43	08.00					PP	42	03.00	
IMA	9.15	360	ePc	33	23.50	-2.3X				ePcS	43	50.00					S	47	20.00	
HYT	9.17	58	P	33	22.00	-4.1X				eLg	45	30.00		NAV	50.63	80	eP	40	09.00	-2.1
ANM	9.55	328	eP	33	31.70	0.4				eLR	46	43.00		TSRJ	50.68	277	P	40	11.00	-0.4
SIT	9.95	82	eP	33	30.50	-6.2X				eScS	48	19.00		BLA	50.91	80	eP	40	11.50	-1.7
ADK	14.35	259	eP	34	35.20	-0.4	RVR	33.60	118	eP	37	52.00	-0.4		1.0s	55.00nm			5.4mb	
SMY	18.98	271	eP	35	34.50	0.4	TPC	34.16	116	eP	37	58.00	0.7	PNJ	51.54	72	iP	40	21.60	3.8X
	Z	20s	28.00um				PLM	34.37	118	eP	37	59.00	-0.3	HRV	51.72	69	ePc	40	18.26	-1.0
PGC	19.88	102	eP	35	44.00	-0.2	CPE	34.64	118	eP	38	04.10	2.7X				ipPd	40	25.21	23kmX
YKA	20.16	58	eP	35	44.40	-2.8X	BAR	35.01	118	eP	38	05.00	0.4	WKYJ	51.88	276	eP	40	20.70	0.1
	1.1s	145.00nm			5.2mb		IKP	35.31	117	eP	38	09.50	2.3	YONJ	52.31	278	eP	40	23.60	-0.2
MCW	20.19	101	eP	35	47.00	-0.7	GOL	35.51	98	eP	38	09.00	-0.1	JSC	52.64	83	eP	40	24.20	-2.0
GMW	20.90	104	eP	35	54.50	-0.4		Z	18s	10.40um		5.6Msz	SNY	52.64	291	iPc	40	25.00	-1.2	
BMW	21.35	106	eP	35	58.50	-1.0	GLD	35.56	98	eP	38	09.40	0.0		1.2s	300.00nm			6.1mb	
PNT	21.57	96	ePd	36	01.00	-0.7		1.4s	114.86nm		5.6mb		Z	18s	11.40um			6.0Msz		
	1.0s	574.00nm			6.0mb			Z	18s	18.40um		5.9Msz	N	20s	7.60um					
LON	21.92	104	iPd	36	05.05	-0.2	GLA	35.61	115	eP	38	10.00	0.3		E	14s	7.80um			
SHW	22.05	106	eP	36	08.00	1.3	HON	35.74	187	P	38	20.00	9.2X							

SUF	60.66	0 iP	41 22.10	-0.8	ETA	67.48	21 eP	42 07.00	-0.6			e	42 43.00		
	0.8s	57.10nm		5.8mb	YRH	67.65	20 eP	42 07.60	-1.1			S	52 07.00		
TIY	61.36	296 Pc	41 27.40	-0.8		1.1s	171.00nm		6.1mb	GRF	72.97	10 iPc	42 41.10	0.0	
	1.0s	90.00nm		5.9mb	ECP	67.94	21 eP	42 09.80	-0.7		1.0s	135.00nm		5.9mb	
Z	14s	13.80um		6.3MszX		1.1s	257.00nm		6.3mb	Z	20s	2.00um		5.4Msz	
N	14s	11.00um			QZH	68.31	283 Pc	42 12.50	-0.7			e	42 46.70		
ASK	61.71	12 iP	41 30.30	0.2		Z	19s	2.20um				e	42 53.80		
NB2	61.74	8 P	41 29.00	-1.4		N	14s	1.80um		RAC	73.11	6 eP	42 42.00	0.2	
	0.8s	85.20nm		5.9mb		E	14s	1.80um		KRA	73.22	4 ePc	42 41.60	-0.8	
BER	61.82	12 iP	41 30.80	-0.1			pP	42 23.00	34kmX		1.0s	155.00nm		6.0mb	
SSE	62.04	285 Pc	41 32.00	-0.7			S	51 10.00		Z	20s	4.00um		5.7Msz	
	8.0s	1200.00nm		6.1mb X			sS	51 31.50		E	20s	5.00um			
Z	20s	3.20um		5.5Msz	WIT	69.40	13 eP	42 20.00	0.5			e	42 53.90		
N	14s	2.60um			DBN	69.91	14 eP+	42 24.00	1.4			eS	52 10.00		
E	14s	1.80um				Z	19s	4.50um	5.7Msz	GW	73.28	13 eP	42 42.59	-0.3	
	S	49 58.00					ePP	45 00.00		GYA	73.30	293 P	42 43.00	-0.4	
	sS	50 12.00			BRN	70.45	9 eP	42 47.00	21.1X		N	18s	4.10um		
NJ2	62.52	287 Pc	41 34.00	-1.9			eS	51 35.00		E	18s	7.50um			
	7.0s	900.00nm		6.0mb X	UCC	71.08	15 P	42 31.00	1.3	WET	73.67	9 iPc	42 45.00	-0.1	
Z	16s	4.20um		5.7MszX			eS	51 45.00			1.2s	172.00nm		6.0mb	
N	16s	5.60um			CD2	71.08	298 eP	42 29.60	-0.5	Z	17s	2.00um		5.5MszX	
E	18s	5.50um				8.0s	1100.00nm		6.0mb X	KHC	73.74	9 iPc	42 46.00	0.4	
HFS	62.82	7 eP	41 36.20	-1.3		Z	17s	6.90um	6.0MszX		1.0s	132.00nm		5.9mb	
	0.8s	107.90nm		6.0mb		N	16s	9.40um		Z	18s	2.10um		5.5Msz	
Z	16s	2.96um		5.6MszX			S	51 45.00		N	20s	1.96um			
	LR	09 09.00			ENN	71.31	14 ePc	42 30.50	-0.7	E	20s	1.60um			
NUR	62.87	1 iP	41 37.00	-0.8			iS	52 02.50				e	42 57.80		
	0.8s	167.20nm		6.2mb	SNF	71.34	15 P	42 30.80	-0.5			S	52 18.00		
Z	20s	8.90um		5.9Msz	MEM	71.48	14 Pc	42 31.70	-0.4	CDF	73.80	13 eP	42 45.62	-0.3	
	e	50 04.00			CLL	71.53	9 iP	42 31.80	-0.7	WLS	73.81	13 eP	42 45.69	-0.3	
	LR	13 24.00				1.3s	145.00nm		5.9mb	UPA	73.82	99 eP	42 44.10	-2.3	
KONO	62.98	10 ePc	41 37.62	-0.9		Z	17s	2.50um	5.5MszX	VITF	73.82	14 eP	42 45.73	-0.2	
	iSPd	41 47.56					i	42 43.10		ECH	73.98	13 eP	42 46.76	-0.2	
UPP	63.32	5 eP	41 36.00	-4.8X			eS	51 48.00		HAU	74.08	14 iPc	42 47.10	-0.4	
	i	49 50.00			DOU	71.79	15 P+	42 33.70	-0.4		0.8s	91.35nm		5.9mb	
GUMO	63.32	253 eP	41 38.00	-3.3X			eS	51 48.00		BAG	74.16	276 eP	42 47.00	-1.6	
	0.8s	125.92nm		6.1mb		0.9s	175.00nm		6.1mb			eS	52 20.00		
PJG	63.32	253 eP	41 39.00	-2.3			PP	45 15.00		PPN	74.28	176 eP	42 52.00	3.2X	
ELO	64.34	18 eP	41 46.40	-1.2			S	51 53.00			1.2s	95.00nm		5.7mb	
EDU	64.39	18 iPd	41 46.50	-1.3			SP	52 15.00		BSF	74.31	14 eP	42 48.46	-0.5	
	0.8s	114.00nm		6.1mb			SS	56 25.00		MOF	74.33	13 eP	42 48.74	-0.3	
EAB	64.50	18 iPd	41 47.60	-1.0	TPT	71.84	174 iP	42 36.10	1.5	FEL	74.42	13 eP	42 48.88	-0.7	
EBH	64.59	18 iPd	41 47.60	-1.6		1.2s	145.00nm		5.9mb	MF	74.45	19 iPc	42 49.50	-0.1	
EBL	65.12	18 iPd	41 52.00	-0.6	PMO	71.84	174 iP	42 36.50	1.9	LOR	74.45	16 iPc	42 49.20	-0.5	
	0.9s	122.00nm		6.0mb		1.2s	90.00nm		5.7mb		0.9s	127.95nm		6.0mb	
EKA	65.52	18 Pd	41 54.60	-0.6	BRG	72.04	8 iPc	42 34.60	-0.9	FUR	74.49	10 eP	42 50.00	0.1	
	1.0s	94.90nm		5.9mb		1.3s	180.00nm		5.9mb		0.8s	120.00nm		6.0mb	
GTA	65.95	306 Pc	41 57.40	-0.9		Z	18s	2.50um	5.5Msz	SLE	74.58	12 ePd	42 50.40	0.0	
	5.0s	1300.00nm		6.3mb X		N	18s	2.50um		SSF	74.60	16 iPc	42 50.20	-0.3	
N	16s	13.60um				E	18s	2.00um		LBF	74.75	16 iPc	42 51.00	-0.4	
E	17s	13.50um					e	42 46.00		BBS	74.76	13 eP	42 51.01	-0.5	
	S	50 44.50					eS	51 57.00		LOMF	74.78	14 eP	42 51.47	-0.2	
	sS	50 53.00			RUV	72.06	174 iP	42 37.40	1.5	VKA	74.81	7 eP	42 46.00	-5.7X	
XAN	66.01	296 P	41 58.00	-0.6			i	43 03.40			5.0s	672.00nm		5.9mb X	
	8.0s	1100.00nm		6.0mb X	MOX	72.07	10 ePc+	42 35.50	-0.2	Z	16s	1.80um		5.5MszX	
N	14s	5.50um				1.2s	100.00nm		5.7mb			i	22 27.00		
E	14s	5.60um				Z	22s	2.90um	5.5Msz	AVF	74.84	16 iPc	42 51.40	-0.5	
WHN	66.06	289 Pc	41 58.20	-0.7		N	22s	2.50um		ZLA	74.85	13 ePd	42 52.20	0.2	
	1.0s	100.00nm		5.9mb		E	21s	1.80um		KMR	74.86	9 iP-	42 50.70	-1.3	
Z	20s	5.00um		5.7Msz	BST	72.09	21 eP	42 33.68	-2.2			ePP	45 38.00		
N	18s	6.80um			VAH	72.09	174 iP	42 37.60	1.5	ZST	74.93	6 iP	42 51.80	-0.6	
E	18s	5.20um				1.2s	145.00nm		5.9mb			e	56 35.00		
	pP	42 08.00		31kmX	TNS	72.16	12 ePc	42 31.20	-5.1X	BGF	74.99	17 iPc	42 52.40	-0.4	
DCN	66.66	21 iPd	42 01.80	-0.6	KSP	72.24	7 iPc	42 36.00	-0.7	SMF	75.06	16 iPc	42 52.60	-0.6	
	0.8s	237.00nm		6.4mb		0.8s	400.00nm		6.5mb	LSF	75.08	18 iPc	42 52.60	-0.7	
LZH	66.80	301 iPc	42 02.86	-1.0	FLN	72.30	18 iPc	42 36.40	-0.7	BHG	75.08	9 iPc	42 53.30	0.0	
	7.0s	1480.00nm		6.2mb X		1.1s	131.85nm		5.9mb		1.2s	310.00nm		6.2mb	
Z	18s	17.30um		6.3Msz	HOF	72.42	10 iPc	42 37.30	-0.5	TCF	75.15	17 iPc	42 53.20	-0.5	
N	15s	10.30um				0.8s	56.00nm		5.6mb	SAX	75.19	12 ePd	42 54.40	0.1	
E	16s	7.90um			LDF	72.53	18 iPc	42 37.70	-0.7	KSH	75.27	322 P	42 56.00	1.4	
	pP	42 12.50		31kmX		1.1s	92.80nm		5.7mb		Z	19s	18.50um		6.4Msz
	iSPd	42 14.12			GRR	72.60	19 iPc	42 38.50	-0.3	E	16s	1.27um			
	PcP	42 35.00				1.0s	112.00nm		5.9mb	MAF	75.27	17 iPc	42 54.20	-0.2	
	ePP	44 33.65			GZH	72.60	286 P	42 38.00	-1.2	QCP	75.34	274 eP	42 56.00	0.8	
	S	50 56.00				Z	15s	4.30um	5.8MszX	PSZ	75.35	5 iP	42 55.40	0.5	
	ScS	51 55.00				N	20s	3.10um		SRO	75.38	6 iP	42 55.50	0.6	
	SS	55 15.00				E	21s	5.40um		SOP	75.41	7 iPd	42 56.70	1.6	
WMQ	67.26	317 iPc	42 06.44	-0.1			S	52 03.50		LLS	75.52	12 ePd	42 56.60	0.5	
	6.0s	1950.00nm		6.4mb X	HKC	72.80	284 iP	42 45.00	4.6X	BUD	75.75	5 eP	42 57.00	0.0	
N	13s	3.71um					iS	52 10.00		OGA	75.75	11 iPc	42 57.90	0.5	
E	16s	15.30um			LPF	72.91	19 iPc	42 40.50	-0.2		1.0s	134.00nm		5.9mb	
	iSPd	42 17.53				1.1s	190.45nm		6.0mb	OSS	75.83	11 ePd	42 58.40	0.6	
	ePP	44 32.82			PRU	72.97	8 Pc	42 40.90	-0.1	VDL	75.96	12 ePd	42 59.50	1.0	
VAL	67.36	24 iP	42 06.20	-0.6		Z	18s	3.20um	5.6Msz	RJF	75.99	18 iPc	42 58.00	-0.5	
	S	51 03.00				N	18s	3.60um			1.2s	136.85nm		5.9mb	
						E	19s	2.20um		EMON	76.03	25 iPd	42 58.70	-0.1	

29d 18h

	76.06	14	ePd	42	59.70	0.6		1.1s	87.90nm	5.7mb	LCI	82.81	7Pd	43	35.90	0.6				
DIX	76.11	14	ePd	43	00.40	0.9	LRG	78.55	15	eP	43	13.00	0.4	YLV	82.81	358	iP	43	35.00	0.4
FVI	76.19	10	Pd	42	59.30	-0.2		1.1s	102.55nm	5.8mb	MGR	82.84	8	Pd	43	35.00	-0.4			
MMK	76.21	13	ePd	43	01.10	1.1	LMR	78.68	15	eP	43	13.60	0.2	ACHM	82.87	24	iPc	43	37.01	1.3
LFF	76.22	18	iPc	42	59.60	-0.1		1.1s	92.80nm	5.7mb	ORI	82.98	8	Pd	43	37.20	1.0			
TMA	76.26	12	ePd	43	00.80	0.6	SFI	78.75	11	Pd	43	16.00	2.3	MAIO	82.98	334	iPc+	43	37.30	0.9
STS	76.27	26	iPc	43	01.70	1.6	SDV	78.76	91	eP	43	14.80	0.3		0.8s	38.43nm			5.6mb	
HNR	76.35	227	eP	43	06.00	5.2X	PGD	78.78	11	Pd	43	15.50	1.3	ATEJ	83.01	24	iPc	43	37.62	1.1
KMI	76.37	295	iPc	43	00.35	-0.9	RSM	78.80	10	Pc	43	15.60	1.6	APHE	83.04	24	iPc	43	37.34	0.6
	5.0s	1000.00nm			6.1mb	X	PII	78.81	12	P	43	13.30	-0.7	EDC	83.06	359	eP	43	36.50	-0.1
Z	17s	9.00um			6.1Msz	X	CRE	79.05	11	P	43	16.90	1.4	GPA	83.07	357	eP	43	38.00	1.3
N	12s	1.00um					BUCL	79.07	0	ePc	43	16.00	0.6	MAL	83.10	25	iPc	43	38.00	1.2
E	12s	0.80um					DAV	79.11	266	eP	43	17.00	0.9							
							ETER	79.14	18	eP	43	16.10	0.2							
							ARV	79.27	10	P	43	17.30	0.7							
							GUD	79.40	23	iPd	43	18.30	0.8	EJIF	83.12	25	iPc	43	38.20	1.3
CAF	76.45	18	iPc	43	00.80	-0.3	CAR	79.45	87	iP	43	24.00	5.9X	LOE	83.34	292	eP	43	39.00	0.7
VAI	76.49	13	Pc	43	01.20	0.0	EPLA	79.53	25	iPc	43	18.30	0.2	ENIJ	83.34	23	eP	43	38.00	0.5
LPO	76.54	18	iPc	43	01.40	-0.2	LLAV	79.54	87	eP	43	19.00	0.4	TDS	83.37	8	P	43	38.70	0.5
	1.0s	152.00nm			6.0mb		ASS	79.67	10	P	43	19.20	0.4	KEK	83.53	5	eP	43	39.00	0.0
LPL	76.57	14	iPc	43	02.80	0.8	ETOR	79.67	22	eP	43	19.10	0.2	CHG	83.56	295	ePc	43	39.00	-0.5
	1.1s	73.25nm			5.6mb		PSN	79.72	359	iPc	43	21.00	2.0		1.0s	42.25nm			5.6mb	
LPG	76.59	14	iPc	43	02.90	0.7	PGF	79.78	13	eP	43	19.60	0.1							
	1.2s	110.10nm			5.8mb			1.0s	124.00nm	5.9mb				CHTO	83.56	295	iPc	43	38.18	-1.3
ORX	76.62	13	P	43	04.18	2.0	HVAR	79.88	7	iP	43	20.90	1.0							
CTI	76.62	11	Pd	43	01.50	-0.7	OLLA	79.92	87	eP	43	21.00	0.4	TAB	83.85	344	eP+	43	42.00	1.1
ORO	76.63	13	P	43	03.30	1.1	LIS	80.07	28	iPd	43	22.50	1.6	NE						

	e	44	45.00		TOA	6.44	29	eP	48	09.90	0.0	KHC	4.49	22	ePn	54	50.40	-7.3X		
MBH	93.32	353	eP	44	25.00	-1.0	TTA	6.51	347	ePc	48	08.70	-2.1		Pg	54	55.00			
HLW	93.43	356	eP+	44	28.00	1.5	FBA	8.64	14	eP	48	39.50	-0.9		eSg	55	40.00			
			ePP	45	05.00		IMA	9.47	358	eP	48	49.80	-2.2	GRF	4.71	1	ePg	55	18.60	17.8X
			ePPP	50	24.00		ANM	10.04	327	eP	49	02.50	2.8X		e(Sn)	55	59.10			
			eS	55	00.50		MBC	23.13	20	eP	51	41.00	2.7X	SMF	5.32	291	Pn	55	08.30	-1.2
HYB	94.14	311	eP	44	28.50	-1.5	NB2	61.99	9	P	56	54.00	0.6	LBF	5.34	295	Pn	55	08.40	-1.3
	1.0s		50.00nm			5.9mb								LOR	5.51	297	Pn	55	10.20	-1.9
IPM	94.52	285	ePd	44	35.40	3.7X	HFS	63.08	8	eP	57	01.20	0.7	AVF	5.69	291	Pn	55	13.00	-1.5
POO	95.01	315	iPd	44	34.20	0.2		0.4s		0.50nm		4.0mb		S.D. = 1.1 on 39 of 46 obs.						
BRS	95.40	226	eP	44	38.00	2.6	S.D. = 1.1 on 33 of 35 obs.					* MAY 29, 1990 19h 46m 13.41± 1.15s 30.234 S ± 6.9km 71.792 W ± 12.8km DEPTH = 33.0km (normal) NEAR COAST OF CENTRAL CHILE (135) Felt (III) at Coquimbo, La Higuera, Vicuna, La Serena and Ovalle.								
			e	56	02.00		MAY 29, 1990 18h 53m 50.21± 0.33s 44.985 N ± 3.5km 11.077 E ± 3.5km DEPTH = 33.0km (normal) NORTHERN ITALY (545) ML 3.2 (LDG).					JACH	2.65	158	iPd	46	56.00	1.2		
			e	02	00.00		SAL	0.73	328	P	54	03.80	-0.3		iS	47	28.00			
RMO	96.23	230	eP	44	41.00	1.8	BDI	0.98	201	Pd	54	08.30	0.5	IHA	2.79	177	eP	47	01.50	4.9X
WB5	97.12	244	eP	44	43.70	0.4				eSn	54	23.00			i(S)	47	38.00			
			e	48	30.00		CTI	1.14	21	Pc	54	09.60	-0.4	RTCB	2.86	117	iP	46	58.20	0.4
WRA	97.19	244	Pc	44	44.40	0.8				iSn	54	26.40		ZON	2.98	117	eP	46	59.00	-0.5
	1.1s		4.90nm			5.0mb	BOB	1.18	260	P	54	12.10	1.6	PEL	3.05	162	eP	47	01.00	0.5
GBA	98.03	310	Pc	44	45.90	-1.7				eSn	54	29.50			i	47	04.50			
	0.7s		16.20nm			5.7mb	SFI	1.20	152	Pc	54	11.00	0.3		i(S)	47	40.00			
AFIF	98.03	345	ePc	44	49.70	1.9	PGD	1.20	157	P	54	11.40	0.5	RTL	3.06	112	ePd	47	00.10	-0.5
ZOBO	101.02	103	Pdiff	45	01.00	-0.8				eSn	54	27.90		RTC	3.23	121	e(P)	47	03.50	0.5
	Z 20s		0.41um			4.9MsZ	MDI	1.25	310	P	54	12.50	1.1	LCC	3.24	177	eP	47	02.50	-0.6
			i	49	16.00					eSn	54	30.80			iS	47	45.50			
KOD	101.04	309	ePdiff	45	02.00	0.4	PII	1.32	198	P	54	12.50	0.0	FCH	3.34	158	iP	47	06.50	1.6
LPB	101.25	103	Pdiff	45	12.00	9.4X				eSn	54	31.60			iS	47	47.10			
CCH	103.00	102	(Pdiff)	45	24.00	13.8X	CRE	1.50	155	P	54	16.10	1.0	CFA	3.35	115	ePc	47	04.60	-0.1
BUL	143.20	357	iPKPc	50	29.00	-16.8X	OSS	1.82	339	ePc	54	22.20	2.3	SAN	3.35	164	eP	47	02.50	-2.3
SPA	146.78	180	ePKP	50	48.30	-2.1	VAI	1.85	299	P	54	20.70	0.6		i	47	53.00			
	1.0s		205.00nm							eSn	54	45.00		TACH	3.49	168	iP	47	06.50	-0.2
	Z 20s		1.98um			5.9MsZ	VDL	1.88	324	ePd	54	21.90	1.2	PCH	3.55	162	iPd	47	08.60	1.0
SLR	148.78	357	iPKPc	50	54.00	-0.9	TMA	1.91	307	ePd	54	22.00	0.8		iS	47	59.50			
	1.0s		175.00nm				ARV	2.00	137	P	54	22.50	0.1	MDZ	3.64	137	eP	47	16.40	7.5X
KSR	148.93	359	ePKP	50	53.50	-1.7	FVI	2.00	36	P	54	21.90	-0.4		eS	48	13.80			
	1.0s		40.00nm							eSn	54	47.40		LNV	3.72	175	ePd	47	09.00	-1.0
PRY	149.98	358	ePKP	50	55.00	-1.7	TRI	2.03	68	eP	54	21.70	-1.0		iS	47	57.00			
	0.9s		38.46nm							i	54	25.60		ANT	6.62	11	e(P)	46	50.70	-60.2X
POF	152.06	12	ePKP	51	01.50	2.0X				i	54	45.50		ZOBO	14.30	14	P	49	37.50	1.4
	1.0s		25.00nm							i	54	52.80		SIV	17.25	37	P	50	12.00	-1.5
FRS	152.79	2	ePKP	51	06.50	6.0X				i	55	01.00		S.D. = 1.2 on 15 of 18 obs.						
TUH	155.82	15	ePKP	51	06.00	1.4	CKI	2.07	255	P	54	24.00	0.7	? MAY 29, 1990 19h 56m 55.84± 4.54s 10.019 N ± 16.9km 84.157 W ± 33.0km DEPTH = 39.5 ± 36.6 km 4.7mb (2 obs.) COSTA RICA (78) Felt in northern Costa Rica and at San Jose.						
	1.0s		50.00nm							eSn	54	50.30		DVD	2.30	133	iPd	57	01.40	-30.8X
CRZF	161.16	293	ePKP	51	10.00	-0.2	SCE	2.10	12	iPnd	54	24.70	0.8	UPA	4.67	102	iPd	58	05.40	-0.5
			ePP	55	15.00		ASS	2.23	149	P	54	25.00	-0.6		0.8s		8955.22nm			
			eSKKS	02	00.00		VOY	2.24	61	ePn	54	24.30	-1.5		S	59	58.40			
			e(SP)	06	20.00		ORO	2.28	287	eSg	54	58.70	0.2	UYO	25.82	340	e(P)	02	26.20	0.9
			eSPP	07	55.00					P	54	26.50		ZOBO	30.56	149	eP	03	10.00	1.1
			eSS	14	20.00					eSn	54	56.00		SIV	34.50	138	P	03	42.60	0.0
S.D. = 1.0 on 435 of 509 obs.										eSn	54	31.30	3.4X	FRB	54.78	8	eP	06	23.00	-0.7
* MAY 29, 1990 18h 46m 34.79± 1.27s 56.641 N ± 11.3km 152.817 W ± 8.8km DEPTH = 33.0km (normal) 4.0mb (2 obs.) KODIAK ISLAND REGION (13)										eSn	54	32.60	2.0	MBC	68.87	351	eP	07	58.00	-0.1
KDC	1.12	9	iPc	46	55.70	1.5	LLS	2.38	323	ePd	54	31.30	3.4X	NB2	83.91	29	P	09	23.60	0.8
CDD	2.34	349	eP	47	12.70	1.0	MMK	2.43	297	ePd	54	32.50	3.7X		1.1s		5.90nm			4.6mb
			eS	47	41.13		CEY	2.48	71	e(Pn)	54	34.50	5.3X		0.8s		5.20nm			4.8mb
			eS	47	47.34					e(Sn)	55	08.00		WRA	141.61	251	PKP	16	24.00	-1.7
MCNL	2.68	343	eP	47	16.62	0.1	SAX	2.57	333	ePc	54	32.60	2.0		0.7s		1.20nm			
			eS	47	47.34		LJU	2.65	65	ePn	54	36.90	5.3X	HYB	147.83	32	ePKPc	16	39.50	3.4X
AUE	2.74	354	eP	47	19.19	1.8				eSn	55	12.00			1.0s		25.00nm			
AUL	2.77	353	eP	47	19.23	1.5	DOI	2.77	261	P	54	34.00	0.7	S.D. = 1.1 on 9 of 11 obs.						
XLV	2.88	11	eP	47	20.89	1.5				eSn	55	07.00		* MAY 29, 1990 20h 04m 44.12± 1.52s 36.370 N ± 17.7km 26.959 E ± 8.9km DEPTH = 10.0km (geophysicist) DODECANESE ISLANDS (369)						
CNPM	3.01	16	eP	47	22.51	1.2	DIX	2.80	294	ePd	54	36.50	2.6X	YER	1.31	54	ePn	05	07.00	-1.4
PDB	3.24	348	eP	47	24.20	-0.3	SBF	2.84	248	Pn	54	34.80	0.5	SMG	1.34	356	eP	05	09.20	0.4
NNL	3.50	13	eP	47	29.32	1.0				Sn	55	09.00		KSL	2.14	96	eP	05	16.00	-4.3X
RED	3.79	0	eP	47	32.61	0.3	PGF	2.86	212	Pn	54	33.70	-0.9	ELL	2.40	80	eP	05	24.00	-0.3
SEW	3.90	26	eP	47	32.81	-1.0				Sn	55	06.80		VAM	2.44	248	eP	05	29.50	4.9X
RDT	3.95	3	eP	47	34.51	-0.1	LPG	3.10	281	Pn	54	38.20	0.0							
SLKM	4.11	18	eP	47	36.86	0.0	LPL	3.11	281	Pn	54	38.40	0.0							
SDN	4.50	256	eP	47	42.30	-0.1	BNI	3.12	273	P	54	39.00	0.6							
SPU	4.57	5	eP	47	42.80	-0.7				eSn	55	15.00								
CRP	4.65	4	eP	47	44.74	0.0	SLE	3.31	328	ePd	54	41.10	0.2							
CGLM	4.70	5	eP	47	45.62	0.3	FRF	3.49	247	Pn	54	42.50	-0.9							
SVW	4.71	343	ePc	47	44.20	-1.2				Sn	55	23.40								
NCG	4.79	4	eP	47	46.45	-0.1	ZAG	3.55	75	eP	54	45.20	0.8							
PMS	4.92	19	eP	47	48.91	0.6	LMR	3.68	245	Pn	54	45.00	-1.1							
SUA	4.95	12	eP	47	48.72	-0.2				Sn	55	27.20								
GLI	5.19	33	eP	47	51.39	-0.8	BSF	4.11	315	Pn	54	50.20	-2.2							
PMR	5.32	19	eP	47	54.70	0.8				Sn	55	37.80								
SKT	5.40	6	eP	47	53.88	-1.2	CDF	4.31	324	Pn	54	54.40	-0.8							
VZW	5.49	34	eP	47	55.89	-0.6				Sn	55	43.00								
VLZ	5.62	34	eP	47	58.16	0.0	HAU	4.45	314	Pn	54	56.80	-0.3							
SML	5.67	22	eP	47	57.45	-1.5				Sn	55	45.40								

29d 20h

BCK 3.11 68 eP 05 35.60 1.5
 VLI 3.26 277 eP 05 36.00 -0.3
 S.D. = 1.5 on 5 of 7 obs.

* MAY 29, 1990 20h 25m 27.91 ± 1.23s
 9.858 S ± 13.5km 161.254 E ± 14.4km
 DEPTH = 33.0km (normal)
 4.4mb (3 obs.)

SOLOMON ISLANDS (193)

DZM 13.13 158 iPc 28 35.00 0.2
 PMG 13.91 271 eP 28 46.50 1.5
 CTA 17.69 233 iPc 29 32.80 -0.7
 0.8s 29.10nm 4.5mb
 RMO 20.33 214 eP 30 04.00 -0.2
 QIS 23.41 240 eP 30 35.30 0.3
 0.6s 14.00nm 4.6mb
 CMS 25.85 211 eP 30 57.80 -0.4
 WB5 27.79 246 eP 31 14.90 -1.3
 WRA 27.83 246 Pc 31 19.40 2.9X
 0.4s 2.20nm 4.2mb
 MAT 50.99 336 (P) 34 28.00 -0.7
 MAW 84.14 202 iP 37 58.00 1.3
 S.D. = 1.1 on 9 of 10 obs.

MAY 29, 1990 20h 45m 32.74 ± 0.61s
 37.120 N ± 6.3km 26.629 E ± 4.8km
 DEPTH = 10.0km (geophysicist)
 DODECANESE ISLANDS (369)
 MD 3.8 (ATH).

SMG 0.61 16 iPg 45 44.80 -0.2
 YER 1.32 89 iPn 45 54.50 -2.7
 JZM 1.37 21 iPn 45 57.30 -0.6
 ATH 2.47 291 ePb 46 15.10 1.5
 KSL 2.58 112 ePn 46 16.00 0.8
 KHL 2.59 62 ePn 46 15.00 -0.5
 VAM 2.60 230 ePn 46 14.70 -0.9
 ELL 2.65 97 iPn 46 17.20 0.8
 EZN 2.71 355 iPn 46 17.50 0.4
 VLI 2.99 263 ePn 46 20.80 -0.2
 BCK 3.18 83 ePn 46 25.10 1.3
 ALT 3.36 54 ePn 46 27.00 0.6
 EDC 3.36 16 ePn 46 28.40 2.0
 KGT 3.37 9 iPn 46 25.70 -0.7
 NEO 3.46 310 ePn 46 28.40 0.7
 ITM 3.76 272 ePb 46 35.50 3.5X
 YLV 4.05 31 ePn 46 40.00 3.8X
 KDZ 4.62 349 iPc 46 44.00 -0.2
 RZN 4.80 343 iPc 46 46.00 -0.9
 MMB 5.00 334 ePd 46 49.00 -0.6
 PGB 5.74 342 iP 46 59.00 -1.1
 VTS 6.06 335 iP 47 05.00 0.3
 S.D. = 1.1 on 20 of 22 obs.

% MAY 29, 1990 20h 52m 02.24 ± 0.86s
 41.830 N ± 10.6km 13.212 E ± 5.3km
 DEPTH = 10.0km (geophysicist)
 SOUTHERN ITALY (390)

AZI 0.23 46 P 52 07.80 0.6
 eSg 52 11.00
 RDP 0.38 259 Pd 52 10.20 0.2
 eSg 52 16.10
 RMP 0.38 267 P 52 10.30 0.2
 eSg 52 16.00
 SDI 0.47 105 P 52 11.40 -0.4
 eSg 52 19.60
 MNS 0.68 325 Pd 52 15.10 -0.7
 iSg 52 25.70
 S.D. = 0.7 on 5 of 5 obs.

MAY 29, 1990 22h 52m 03.65 ± 0.58s
 44.139 N ± 3.4km 6.244 E ± 4.9km
 DEPTH = 5.0km (geophysicist)
 FRANCE (538)
 ML 2.5 (LDG). MD 2.3 (STR).

CALN 0.61 129 Pg 52 15.86 0.1
 Sg 52 25.18
 FRF 0.65 153 Pg 52 16.60 0.0
 Sg 52 25.40
 LRG 0.69 173 Pg 52 17.90 0.5
 Sg 52 27.90
 MVIF 0.70 110 Pg 52 17.91 0.3
 PZZ 0.72 59 P 52 17.63 -0.3
 S 52 27.68

STV 0.78 82 P 52 18.97 -0.4
 S 52 29.24
 DOI 0.81 63 P 52 18.00 -1.8
 eSg 52 28.00
 AURF 0.82 107 Pg 52 20.15 0.1
 Sg 52 33.89
 LMR 0.83 166 Pg 52 20.00 -0.1
 Sg 52 32.10
 ENR 0.85 84 P 52 20.00 -0.6
 S 52 30.93
 AUTN 0.86 99 Pg 52 21.11 0.2
 Sg 52 35.32
 RRL 0.87 26 P 52 21.22 0.2
 S 52 32.47
 SBF 0.90 107 Pg 52 20.50 -0.9
 Sg 52 32.60
 REVf 0.90 116 Pg 52 21.78 0.3
 Sg 52 35.65
 IMI 1.21 100 P 52 28.09 1.4
 S 52 43.55
 RSP 1.24 35 P 52 27.78 0.5
 S 52 42.78
 LPG 1.41 15 Pg 52 29.70 -0.5
 Sg 52 48.00
 FIN 1.41 86 P 52 30.55 0.4
 S 52 47.71
 LPL 1.42 14 Pg 52 30.00 -0.4
 Sg 52 48.90
 LSD 1.47 26 P 52 32.40 1.3
 S 52 50.48
 PCP 1.70 75 P 52 35.78 1.6
 S 52 55.40
 PGF 2.56 127 Pn 52 45.10 -1.5
 S 53 14.00
 CAF 3.09 286 Pn 52 53.80 -0.2
 S 53 30.20
 S.D. = 0.9 on 23 of 23 obs.

? MAY 29, 1990 23h 17m 26.90 ± 2.19s
 44.630 N ± 12.5km 6.867 E ± 25.3km
 DEPTH = 10.0km (geophysicist)
 FRANCE (538)
 ML 1.8 (GEN).

PZZ 0.21 127 P 17 31.59 0.0
 S 17 34.84
 RRL 0.30 349 P 17 33.19 0.0
 S 17 37.59
 ENR 0.57 135 P 17 38.41 0.0
 S 17 45.70
 RSP 0.59 28 P 17 38.92 0.0
 S 17 46.54
 S.D. = 0.1 on 4 of 4 obs.

? MAY 29, 1990 23h 33m 46.56 ± 2.46s
 5.207 S ± 40.5km 129.550 E ± 43.0km
 DEPTH = 197.6 ± 37.1 km
 BANDA SEA (280)

AAI 2.03 318 eP 34 25.50 0.0
 MTN 7.75 168 eP 35 37.60 0.0
 eS 37 04.00
 WB5 15.32 163 eP 37 14.00 -0.1
 i 37 17.80
 eS 40 01.00
 WRA 15.37 163 Pc 37 14.90 0.1
 MBL 18.45 210 iPd 37 49.90 0.0
 WARB 21.04 187 eP 38 19.50 3.4X
 S.D. = 0.2 on 5 of 6 obs.

MAY 30, 1990 00h 47m 24.17 ± 0.57s
 43.104 N ± 6.5km 0.568 W ± 4.1km
 DEPTH = 10.0km (geophysicist)
 PYRENEES (378)
 ML 2.3 (LDG).

ESCF 0.03 191 Pg 47 25.90 -0.3
 Sg 47 27.22
 OGE 0.09 47 Pg 47 26.78 -0.1
 Sg 47 28.91
 ATE 0.10 260 Pg 47 26.87 0.0
 Sg 47 28.84
 JAU 0.16 114 Pg 47 28.37 0.4
 Sg 47 30.99
 ISSF 0.18 245 Pg 47 28.65 0.3
 MADF 0.19 283 Pg 47 28.37 0.0
 Sg 47 32.83

LHE 0.19 192 Pg 47 28.45 -0.1
 Sg 47 31.40
 EPF 0.67 96 Pg 47 37.30 -0.2
 Sg 47 46.90
 LPD 2.03 38 Pg 48 02.30 3.6X
 Sg 48 28.70
 LFF 2.06 27 Pg 48 03.50 4.2X
 Sg 48 30.60
 S.D. = 0.3 on 8 of 10 obs.

* MAY 30, 1990 01h 21m 22.20 ± 0.83s
 6.250 S ± 9.2km 130.169 E ± 9.8km
 DEPTH = 218.8 ± 8.9 km
 4.7mb (6 obs.)
 BANDA SEA (280)

MTN 6.62 172 iPd 22 59.20 0.8
 WB5 14.15 164 iPd 24 26.00 -8.5X
 eS 26 57.00
 WRA 14.20 164 Pd 24 26.80 -8.4X
 0.5s 44.20nm 5.1mb
 QIS 16.91 148 iPc 25 02.40 -5.4X
 0.2s 29.00nm 5.4mb
 iS 27 59.20
 PMG 17.12 102 eP 25 08.00 -1.9
 MBL 17.89 213 iPc 25 16.70 -1.4
 0.3s 7.00nm 4.6mb
 iS 28 23.70
 KKM 18.52 311 ePd 25 24.00 -0.9
 WARB 20.11 189 iPd 25 41.00 0.2
 CTA 20.81 133 eP 25 49.00 1.1
 NANU 21.51 220 iPc 25 54.80 0.2
 MRWA 26.48 209 eP 26 40.90 -0.3
 eS 31 38.00
 RMO 26.81 141 eP 26 45.60 1.3
 BAL 27.33 206 eP 26 48.70 -0.2
 KLB 27.76 203 iPd 26 52.50 -0.2
 MUN 28.73 205 eP 27 01.00 -0.4
 eS 32 36.00
 ADE 29.64 166 eP 27 09.10 -0.3
 BRS 30.06 137 iPd 27 12.00 -1.2
 SNG 32.36 294 eP 27 38.40 5.1X
 TOO 34.16 158 eP 27 49.90 1.4
 0.8s 12.00nm 4.6mb
 BDT 38.65 308 eP 28 28.10 1.8
 CHG 39.59 310 iPc 28 35.30 1.2
 0.9s 12.60nm 4.4mb
 GBA 55.94 291 Pc 30 39.00 -1.3
 0.7s 8.70nm 4.5mb
 MAW 75.71 201 iP 32 58.80 14.0X
 KSP 109.80 322 ePKP 39 28.50 -0.2
 e 41 07.50
 S.D. = 1.2 on 19 of 24 obs.

MAY 30, 1990 01h 32m 05.44 ± 0.18s
 36.463 N ± 4.5km 70.396 E ± 3.4km
 DEPTH = 203.9km (3 depth phases)
 4.7mb (55 obs.)
 HINDU KUSH REGION (718)

QUE 6.89 206 eP 33 45.60 0.4
 eS 35 02.70
 MAIO 8.79 272 eP 34 07.00 -3.0
 eS 36 05.00
 NDI 9.66 142 iPd 34 19.70 -1.3
 1.0s 160.00nm 5.3mb
 WMO 15.12 56 P 35 29.00 -1.1
 2.0s 630.00nm 5.7mb
 S 38 11.00
 TEH 15.39 273 eP 35 16.00 -17.5X
 POO 18.12 169 iPd 36 04.30 -0.5
 1.0s 236.00nm 5.6mb
 LSA 18.64 105 P 36 10.80 0.2
 TAB 19.22 282 e(P) 36 19.00 2.8
 DHR 20.01 245 ePc 36 24.70 0.7
 HYB 20.30 157 iPd 36 27.80 0.7
 1.0s 450.00nm 6.0mb X
 e 37 25.50
 eS 40 07.00
 BHD 21.56 269 ePc 36 42.50 3.2X
 eS 40 27.00
 GTA 23.34 74 Pc 36 57.80 1.1
 1.2s 300.00nm 5.8mb X
 sP 38 05.00
 ScP 43 54.80
 ScS 47 39.50
 RYD 23.52 247 ePc 36 59.00 0.6

GBA	23.62 163 Pd	36 59.50 0.2	KBS	48.54 347 iP	40 29.50 0.4	Guayaquil, Ecuador. Three events
	0.8s 101.80nm	5.5mb	LBF	49.30 304 eP	40 34.50 -0.9	about 1.5 and 4.8 seconds apart
AFIF	26.44 250 ePc	37 28.70 3.4X		1.0s 5.00nm	3.9mb	respectively. Depth from
KOD	26.89 164 eP	37 30.50 0.8	LOR	49.32 305 eP	40 34.80 -0.7	broadband displacement
LZH	26.90 81 Pc	37 29.50 0.0		1.0s 4.00nm	3.8mb	seismograms, based on second
	2.0s 38.00nm	4.8mb	SMF	49.47 304 eP	40 36.20 -0.5	event.
	pP	38 15.00 232kmX		1.0s 14.00nm	4.4mb	FAULT PLANE SOLUTION: P-Waves
CD2	28.22 92 eP	37 41.60 0.3	SSF	49.60 304 eP	40 37.00 -0.6	NP1:Strike=355 Dip=72 Slip= 90
KMI	29.86 103 eP	37 56.50 0.4		1.0s 8.00nm	4.2mb	NP2: 175 18 90
CHG	30.63 117 ePd	38 03.10 0.5	AVF	49.76 304 eP	40 38.30 -0.6	Principal Axes:
	1.0s 19.50nm	4.8mb		1.0s 12.00nm	4.3mb	T Plg=63 Azm=265
BTO	31.09 70 eP	38 07.00 0.5	BGF	50.16 304 eP	40 41.20 -0.7	P 27 85
BDT	31.72 120 eP	38 13.00 1.0		1.0s 5.00nm	4.0mb	Comment: The focal mechanism is
	1.1s 84.90nm	5.3mb	MAF	50.43 303 eP	40 44.00 0.0	poorly controlled and
HHC	32.23 69 eP	38 16.00 -0.5		1.0s 12.00nm	4.4mb	corresponds to reverse
GYA	32.34 98 P	38 17.80 0.2	TCF	50.65 304 eP	40 45.40 -0.3	faulting. The preferred fault
	pP	39 05.60 235kmX		1.0s 10.00nm	4.3mb	plane is NP2.
	S	43 14.60	CAF	51.10 302 eP	40 49.00 -0.1	RADIATED ENERGY
	ScP	44 21.80		1.0s 8.00nm	4.2mb	No. of sta: 8 Focal mech. M
	ScS	48 19.00	LSF	51.12 304 eP	40 48.30 -0.9	Energy 1.2±0.3*10**14 Nm
TIY	33.36 75 Pd	38 26.60 0.4		1.0s 8.00nm	4.2mb	MOMENT TENSOR SOLUTION
	N 11s 0.19um		KKM	51.64 115 ePc	40 53.50 0.0	Dep 20 No. of sta: 16
	S	43 32.50		1.0s 67.90nm	5.2mb	Moment Tensor: Scale 10**18 Nm
	SS	45 50.00	LPO	51.77 302 eP	40 53.80 -0.3	Mrr= 5.74 Mtt=-1.28
LOE	33.55 116 eP	38 27.00 -0.9		1.0s 8.00nm	4.3mb	Mff=-4.45 Mrt=-3.73
NST	33.58 120 eP	39 08.80 40.7X	FLN	51.80 307 eP	40 53.30 -0.9	Mrf= 3.54 Mtf= 3.20
VR1	33.83 300 ePd	38 31.00 1.0		0.6s 3.60nm	4.1mb	Principal axes:
MLR	34.37 299 iPd	38 37.00 2.2	EKA	51.98 316 Pd	40 54.70 -0.7	T Val= 7.72 Plg=68 Azm=210
NNT	35.49 125 iPd	38 45.30 1.0		1.5s 34.00nm	4.7mb	N 0.51 8 322
NUR	37.57 324 iP	39 02.00 0.7	LFF	52.00 302 eP	40 55.60 -0.2	P -8.23 20 55
	1.1s 141.60nm	5.5mb		0.8s 6.70nm	4.3mb	Best Double Couple:Mo=8.0*10**18
SUF	37.70 328 iP	39 03.40 1.1	GRR	52.14 307 eP	40 55.80 -0.9	NP1:Strike=160 Dip=26 Slip= 109
	0.8s 96.50nm	5.5mb		0.6s 3.60nm	4.2mb	NP2: 318 65 81
KRA	38.44 307 ePd	39 09.40 0.7	MFF	52.14 305 eP	40 55.80 -0.9	CENTROID, MOMENT TENSOR (HRV)
	1.2s 75.00nm	5.2mb		0.6s 3.60nm	4.2mb	Data Used: GDSN
	e	39 15.90 22kmX	MAT	53.42 68 (P)	41 05.00 -1.3	L.P.B.: 16S, 44C M.W.: 13S, 31C
OIZ	38.68 106 eP	39 10.70 -0.2		0.8s 18.66nm	4.8mb	Centroid Location:
GZH	39.28 98 Pc	39 17.00 2.0	DAG	54.65 344 iPc	41 13.90 -0.8	Origin Time 02:34:12.3 0.2
SRO	39.55 303 iP	39 19.40 1.6		1.0s 106.00nm	5.5mb	Lat 6.22S 0.01 Lon 77.01W 0.02
	e	40 02.80 204km	OFUJ	55.04 64 P	41 17.00 -1.0	Dep 23.2 0.8 Half-duration 6.6
	e	40 51.90	AKU	56.82 330 iP	41 31.10 0.9	Moment Tensor: Scale 10**18 Nm
SOD	39.57 335 iP	39 18.20 0.5		1.2s 50.00nm	5.1mb	Mrr= 5.08 0.07 Mtt=-0.12 0.05
NJ2	39.96 82 Pc	39 21.40 0.0	BCAO	57.19 249 iPd	41 34.50 1.0	Mff=-4.96 0.07 Mrt=-3.32 0.18
SNG	40.13 129 eP	39 23.90 1.1		0.6s 8.00nm	4.6mb	Mrf= 4.71 0.23 Mtf= 0.64 0.05
	1.1s 113.92nm	5.3mb	MBC	67.40 3 ePc	42 40.20 0.1	Principal Axes:
	e	45 14.40		1.0s 69.0		

	0.7s	97.00nm	6.0mb		0.7s	127.00nm	6.2mb		N	20s	16.45um			
TVO	71.09	253 iP	45 26.10	1.3	AKU	83.31	21 iPd	46 32.80	1.1	E	20s	9.93um		
PPN	71.26	254 iP	45 26.90	1.2		1.6s	226.67nm	6.1mb		89.22	39 P	47 00.40	-0.6	
TBI	71.34	247 iP	45 28.30	2.2	Z	23s	18.94um	6.4MsZ	SNF	89.32	39 Pc+	47 02.60	1.1	
	1.1s	590.00nm	6.6mb		ECHE	83.31	49 iPd	46 33.50	1.2	UCC	39 PP	50 33.00		
PPT	71.40	254 iP	45 27.80	1.2	BST	83.41	40 P	46 32.76	0.2		S	57 27.00		
	1.3s	880.00nm	6.7mb		ETA	83.44	35 eP	46 32.70	0.1	DOU	40 Pc+	47 01.60	0.0	
PAE	71.40	253 iP	45 27.90	1.3	ACU	83.49	50 iPd	46 33.50	0.2		e	50 20.00		
AFR	71.59	254 iP	45 29.00	1.3	HON	83.63	292 P	46 40.00	5.8X		SKS	57 31.00		
LKO	73.03	78 Pc	45 35.34	-1.0	Z	22s	18.33um	6.4MsZ	LRG	89.45	46 eP	47 02.20	-0.1	
	0.9s	255.00nm	6.2mb		OPA	83.69	293 P	46 40.00	5.5X		1.0s	100.00nm	6.1mb	
LIC	73.08	82 P	45 35.70	-0.9	INK	83.77	342 eP	46 31.00	-3.0X	SBA	89.47	191 P	47 02.50	0.7
		S	55 04.00			1.2s	383.00nm	6.5mb	LMR	89.54	46 eP	47 02.40	-0.3	
TIC	73.15	81 Pc	45 36.12	-0.9	SPA	84.02	180 iPc	46 35.10	-0.5		1.0s	108.00nm	6.1mb	
KIC	73.38	82 Pc	45 37.62	-0.8		1.3s	545.00nm	6.6mb	FRF	89.68	46 eP	47 03.00	-0.4	
YKA	74.05	343 eP	45 40.00	-1.3	Z	20s	12.84um	6.3MsZ	BNI	89.92	45 Pd	47 05.10	0.5	
	0.7s	53.90nm	5.7mb		BOH	84.11	46 P	46 36.86	0.5	VITF	89.93	42 eP	47 03.67	-0.7
TIO	76.14	56 iP	45 55.00	0.8	ELYP	84.14	46 P	46 36.60	0.1	RRL	89.98	45 P	47 06.56	1.5
		i	46 31.00		ISSF	84.24	46 P	46 37.73	0.7	IMA	90.00	337 P	47 04.00	-0.6
GDH	76.86	8 ePc	45 56.00	-1.2	MADF	84.25	46 P	46 37.03	0.0	LPL	90.03	44 eP	47 04.00	-1.2
	1.0s	16.00nm	5.0mb X		ATE	84.32	46 P	46 37.60	0.2	LPG	1.0s	56.00nm	5.8mb	
LIS	76.96	48 iPc	46 00.00	1.6	LHE	84.34	46 P	46 38.18	0.6		90.04	44 eP	47 05.40	0.0
WEGH	77.63	83 eP	46 02.00	-0.6	YRH	84.39	36 iPc	46 37.80	0.4		1.1s	80.60nm	5.9mb	
		S	55 51.00			1.0s	278.00nm	6.4mb	DBN	90.05	38 eP+	47 06.00	1.2	
KUK	77.66	82 eP	46 00.00	-1.9	ESCF	84.41	46 P	46 38.37	0.6	Z	23s	22.10um	6.5MsZ	
		S	55 50.00		JAU	84.55	46 P	46 39.44	0.8		ePP	50 20.00		
KOGH	77.77	82 eP	46 03.50	0.1	EROQ	84.62	48 iPd	46 39.60	0.8		eS	57 34.00		
LEGH	77.78	83 eP	46 03.00	-0.4	EBR	84.68	48 ePc	46 40.00	0.9		eSPP	58 56.00		
		S	55 53.00				eS	57 04.00			eSS	04 00.00		
SHGH	77.95	83 eP	46 04.50	0.2	EPF	85.05	46 eP	46 41.40	0.4	HAU	90.14	42 eP	47 04.70	-0.7
		S	55 58.00			1.2s	302.15nm	6.4mb	PZZ	1.0s	52.00nm	5.7mb		
TEGH	77.96	83 eP	46 04.00	-0.3	LPF	85.29	41 eP	46 41.80	-0.2		90.14	45 P	47 07.59	1.9
		S	55 00.00		GRR	85.49	41 eP	46 43.0						

VAY	101.30	49	ePdiff47	36.50	-20.0X
			i	47 57.40	
MAW	101.32	165	ePdiff47	56.00	0.1
SUF	101.45	27	iPdiff47	56.50	-0.1
VTS	101.73	48	ePdiff48	02.00	3.5X
MMB	102.16	49	ePdiff48	00.00	-0.3
ATH	102.30	53	Pdiff	48 10.00	9.0X
			e	52 20.00	
			e	58 38.00	
PGB	102.44	48	ePdiff48	06.00	4.4X
BUL	102.68	112	iPdiff47	50.50	-12.8X
DRV	102.71	194	ePdiff48	12.00	9.9X
			PP	48 52.00	
			PPP	48 54.00	
			SKS	48 58.00	
			SP	49 01.00	
			SPP	49 02.00	
			SS	49 06.00	
			SSS	49 10.00	
RZN	102.89	49	iPdiff48	09.00	5.2X
APA	103.31	22	ePdiff48	05.30	0.5
			eS	59 50.00	
KDZ	103.42	49	ePdiff48	06.00	0.1
DIM	103.48	48	ePdiff48	04.00	-2.1X
MLR	103.50	45	ePdiff48	08.50	2.2
IZM	105.07	52	ePKP	52 32.40	4.3X
ITU	106.17	49	ePdiff48	20.00	1.9X
ELL	107.30	54	ePKP	52 13.00	-19.5X
OBN	108.43	34	ePdiff48	28.00	0.2
Z	22s	18.30um			6.6Msz
			iSKS	59 00.00	
HLW	109.07	61	ePdiff48	38.00	6.7X
			e	53 04.00	
			eS	59 12.50	
BBTK	109.16	50	ePdiff48	40.00	8.4X
CRZF	111.01	145	ePdiff48	45.00	5.5X
			ePP	53 20.00	
			eSKKS	00 10.00	
			eSP	03 05.00	
			eSS	08 55.00	
TIK	112.45	351	e(Pdiff48	51.00	5.7X
NAI	113.74	94	ePdiff49	02.00	9.3X
PET	114.84	327	ePdiff49	00.00	3.6X
BHD	119.58	55	ePKPc	53 01.50	5.7X
			e	54 16.50	
TAB	119.86	49	ePKP	53 04.00	7.6X
CNB	119.94	223	ePKP	52 57.30	0.7
	1.1s	71.00nm			
CAN	120.18	223	ePKP	52 56.20	-0.8
ARO	120.61	80	ePKPd	53 00.00	1.6
BWA	121.07	224	ePKP	52 58.20	-0.5
TOO	121.16	219	ePKP	52 58.20	-0.6
	1.3s	111.00nm			
			e	54 27.30	
BRS	121.38	233	e(PKP)	53 01.50	2.0
			e	54 30.00	
			eP'PKS03	15.00	
			e(SSS)	04 36.00	
BFD	123.22	218	ePKP	53 04.70	2.0X
			e	54 39.50	
TEH	124.44	50	ePKP	53 03.00	-2.3X
RMQ	124.97	232	iPKPc	53 06.20	-0.2
	1.0s	260.00nm			
YSS	126.70	327	ePKP	53 10.00	0.9
ADE	127.01	217	ePKP	53 10.00	-0.2
	0.7s	84.93nm			
KUSJ	127.79	322	ePKP	53 09.50	-1.8
QLP	128.39	229	ePKPd	53 13.00	0.0
ASAJ	128.46	324	ePKP	53 11.70	-0.9
RAB	129.64	260	e(PKP)	53 16.00	0.3
CTA	129.99	238	iPKPc	53 15.20	-1.0
	1.2s	609.38nm			
			iPP	55 29.00	
			iSKP	56 38.00	
			iPS	05 42.00	
			iPSS	13 22.00	
CTAO	129.99	238	ePKPc	53 15.69	-0.5
			ec	53 17.01	
			ec	53 19.99	
			ePP	55 29.53	
MAIO</					

1.0s	0.07nm		24.149 S ± 3.9km	66.745 W ± 7.0km	MIN	81.98 321 eP	14 33.20	-0.8
	i(Pb)	53 41.40	DEPTH = 163.1 ± 5.8 km		WDC	82.67 321 ePd	14 36.20	-1.1
	i(Sn)	54 18.80	4.8mb (11 obs.)		KSR	82.86 115 iPc	14 39.00	0.0
	i	54 29.00	SALTA PROVINCE, ARGENTINA	(129)		0.9s	11.54nm	4.7mb
	e	18 07.70			SES	83.92 333 eP	14 43.00	-0.5
GRF	3.58 240 iPnd	53 35.40	0.5	ANT	3.39 277 iPc	03 25.00	0.7	
	ePg	53 48.90			iS	04 02.50		
	eSg	54 33.90		CCH	6.76 5 P	04 13.40	4.3X	
KMR	3.71 200 iPnt	53 37.90	1.1		i	05 38.90		
	iPg	53 50.20		RTLL	7.31 192 iPc	04 15.00	-0.5	
	iSg	54 37.80			eS	05 33.70		
SOP	3.90 175 eP	53 41.00	1.6	CFA	7.55 190 eP	04 19.00	-0.4	
SRO	4.04 157 ePn	53 38.10	-3.2X		S	05 38.50		
	i	53 46.40		ZON	7.56 193 eP	04 19.00	-0.6	
	i(Sn)	54 27.90		LPB	7.68 350 Pc	04 21.00	-0.6	
BHG	4.35 209 ePn	53 46.30	0.5		S	05 46.00		
PSZ	4.43 144 eP	53 46.00	-1.0	RTCV	7.84 191 eP	04 23.20	-0.1	
BUD	4.53 153 e(P)	54 19.00	30.7X	ZOBO	7.95 350 iPc	04 28.00	2.8	
FUR	4.57 224 iPnc	53 49.10	0.1		eS	05 55.00		
TNS	4.97 257 iPnc	53 54.00	-0.6	ARE	8.85 329 eP	04 35.00	-1.9	
	eSn	55 12.40			eS	06 11.00		
FVI	5.40 204 Pc	54 00.80	0.1	PEL	9.61 200 eP	04 46.00	-0.6	
LJU	5.61 191 eP	54 04.00	0.4	FCH	9.66 198 eP	04 49.00	1.4	
	e(S)	55 26.00		SIV	9.71 34 P	04 13.40	-34.6X	
PTJ	5.67 180 eP	54 04.10	-0.4		i	05 38.90		
VOY	5.71 195 eP	54 04.00	-1.1	PCH	10.00 198 eP	04 52.50	0.7	
	eS	55 41.70		TACH	10.16 200 eP	04 53.50	-0.3	
OGA	5.72 217 iPnc	54 06.00	0.6	LNV	10.59 202 eP	04 58.50	-0.9	
WTS	5.73 278 iPc	54 05.50	0.3	BAO	19.55 68 eP	06 49.60	1.2	
	0.5s	10.00nm	4.8mb X	ITR	31.08 65 eP	08 36.30	0.4	
	e	54 38.50		JSC	59.72 346 P	12 19.80	-0.7	
	e	55 48.00		PRM	59.78 345 P	12 20.00	-1.0	
VBV	6.08 185 eP	54 10.40	0.2	LHS	59.82 347 P	12 20.30	-0.9	
CTI	6.22 209 Pd	54 12.90	0.6	TKL	61.63 344 P	12 31.50	-1.9	
MEM	6.37 265 iPn	54 13.52	-0.8	GBTN	61.74 344 P	12 32.70	-1.5	
ENN	6.39 267 eP	54 18.00	3.4X	PWLA	62.18 340 P	12 35.20	-1.9	
	e	54 42.00		FVM	65.69 340 P	12 58.70	-1.1	
CDF	6.45 244 Pn	54 13.50	-2.1	LNO	65.75 334 eP	12 59.50	-0.6	
	Pg	54 44.80		TUL	65.75 334 eP	12 59.30	-0.9	
	Sg	55 59.30			1.0s	17.30nm	4.9mb	
BSF	7.05 242 Pn	54 19.60	-4.3X	SPA	65.99 180 iPc	13 02.10	0.3	
	Sg	56 17.60			0.9s	22.27nm	5.0mb	
MDI	7.13 218 P	54 13.00	-11.9X	KIC	67.58 72 P	13 12.00	-0.2	
HAU	7.19 244 Pn	54 21.80	-4.1X		0.7s	5.50nm	4.5mb	
	Pg	54 54.20		ALQ	69.80 326 ePd	13 25.70	0.0	
	Sg	56 23.40			1.0s	23.25nm	4.9mb	
DOU	7.38 263 iPn	54 29.00	0.6	ANMO	69.80 326 P	13 25.70	0.0	
VAI	7.44 223 P	54 25.00	-4.3X		1.1s	26.50nm	5.0mb	
BOB	8.09 215 Pd	54 38.20	-0.2	GLD	73.01 330 P	13 45.50	0.8	
LPG	8.63 229 Pn	54 48.20	2.0		1.5s	39.06nm	4.9mb	
BNI	9.00 227 P	55 31.00	39.9X	GOL	73.04 330 P	13 44.90	-0.1	
LOR	9.01 246 Pn	54 48.30	-2.8X		1.2s	25.61nm	4.8mb	
	Sg	57 24.20		GLA	73.04 319 eP	13 45.00	0.2	
SSF	9.32 246 Pn	54 52.30	-3.2X	BAR	73.90 318 eP	13 50.00	0.2	
SBF	9.62 220 Pn	54 54.20	-5.4X	PLM	74.48 318 eP	13 47.00	-6.3X	
BGF	9.98 245 Pn	55 01.90	-2.6X	TPC	74.50 319 eP	13 54.00	0.7	
YKA	59.79 336 eP	02 44.70	-0.1	PEC	75.02 318 P	13 56.00	0.5	
	0.7s	1.00nm	4.1mb	RVR	75.22 318 eP	13 48.00	-9.4X	
NOZ	161.94 51 PKP	12 44.30	5.1X	MSU	75.48 325 P	13 59.70	0.7	
	S.D. = 0.9	on 32 of 46 obs.		GSC	75.78 320 eP	14 01.00	0.4	
				MWC	75.80 318 eP	14 01.00	0.2	
& MAY 30, 1990 03h 56m 37.60s				SBB	75.97 319 eP	14 01.00	-0.6	
37.653 N		121.663 W		RSSD	76.04 333 P	14 01.70	-0.3	
DEPTH = 9.0km				DAU	76.43 327 P	14 05.20	0.8	
CENTRAL CALIFORNIA		(39)		CLC	76.60 320 eP	14 05.00	-0.1	
<BRK>. ML 2.7 (BRK).				ABL	76.93 318 P	14 07.00	0.7	
				ISA	77.02 319 eP	14 08.00	0.6	
MHC	0.31 177 iPc	56 43.90	-0.2	DUG	77.06 326 P	14 08.60	0.9	
	iS	56 49.70		BLP	77.46 317 P	14 10.00	0.2	
ARN	0.32 161 iPd	56 44.10	-0.1	BCH	77.68 318 P	14 11.70	0.6	
BKS	0.51 296 iPc	56 47.30	-0.5	TNP	77.94 322 P	14 13.30	0.7	
BRK	0.52 295 iPc	56 47.30	-0.8		0.9s	9.77nm	4.5mb	
ZSP	0.55 302 iPc	56 48.20	-0.6	SCH	78.64 360 eP	14 16.00	0.2	
PCC	0.59 255 iPd	56 48.00	-0.7	FRI	78.65 319 e(P)	14 15.40	-0.8	
	iS	56 57.00		PRI	78.66 318 eP	14 16.90	0.4	
GCC	0.68 203 eP	56 50.50	-0.6	KVN	79.11 322 P	14 19.00	0.0	
SAO	0.90 169 iPc	56 54.20	-0.8	LLA	79.14 318 e(P)	14 20.50	1.5	
CMB	1.08 69 eP	56 56.70	-1.4	PRS	79.22 318 e(P)	14 19.90	0.5	
	eS	57 11.60		CMB	79.74 320 eP	14 22.40	0.2	
LLA	1.18 151 e(P)	56 58.00	-1.8	HPI	79.80 328 P	14 23.70	1.0	
PRS	1.34 170 eP	57 00.30	-2.1	HVD	79.90 119 eP	14 42.00	18.5X	
FRI	1.69 112 e(P)	57 06.30	-1.1	ARN	79.98 319 P	14 24.30	0.8	
	eS	57 28.60		MHC	80.04 319 ePd	14 25.50	1.6	
KVN	3.13 62 eP	57 31.50	3.3	GCC	80.05 318 eP	14 24.00	0.2	
	13 obs. associated			FRS	80.08 118 iPc	14 24.00	-0.2	
				MAW	81.22 163 iP	14 30.40	1.0	
MAY 30, 1990 04h 02m 31.00± 0.59s				ORV	81.40 320 ePd	14 31.30	0.5	

? MAY 30, 1990 08h 32m 35.00±0.90s
37.793 N ± 8.5km 15.223 E ± 7.8km
DEPTH = 10.0km (geophysicist)
SICILY (398)

ATN 0.41 27 P 32 43.50 0.0
MNO 0.44 288 P 32 44.00 0.0
SOI 0.71 67 P 32 49.00 -0.1
MEU 0.73 199 P 32 49.40 0.0
MGR 2.36 6 P 33 11.30 -3.0X
S.D. = 0.1 on 4 of 5 obs.

? MAY 30, 1990 08h 40m 17.47±2.85s
6.036 S ± 15.2km 130.452 E ± 19.8km
DEPTH = 98.2 ± 33.2 km
4.4mb (2 obs.)
BANDA SEA (280)

MTN 6.80 174 iPd 41 57.50 1.1
KNA 9.79 190 eP 42 37.00 -0.2
WB5 14.28 165 eP 43 33.00 -3.3X
WRA 14.33 165 Pc 43 35.80 -1.2
QIS 16.95 149 eP 44 10.00 0.0
MBL 18.22 213 eP 44 25.00 -0.5
KKM 18.60 310 ePd 44 29.50 -0.6
WARB 20.36 190 iPd 44 49.00 0.6
BDT 38.74 307 eP 47 34.90 1.0
CHTO 39.67 309 iP 47 41.50 -0.2
S.D. = 1.0 on 9 of 10 obs.

MAY 30, 1990 09h 22m 23.17±1.21s
8.875 S ± 4.5km 122.561 E ± 5.6km
DEPTH = 93.9 ± 12.5 km
5.2mb (18 obs.)

FLORES ISLAND REGION (286)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 21C
Centroid Location:
Origin Time 09:22:25.3 2.0
Lat 9.13S 0.15 Lon 122.58E 0.13
Dep 136.3 3.8 Half-duration 2.0
Moment Tensor: Scale 10⁻¹⁷ Nm
Mrr=-0.17 0.09 Mtt=-0.41 0.10
Mff=0.57 0.15 Mrt=0.28 0.07
Mrf=-0.08 0.10 Mtf=1.33 0.10
Principal Axes:
T Vol=1.51 Plg=3 Azm=305
N -0.11 77 50
P -1.40 13 215
Best Double Couple: Mo=1.5*10⁻¹⁷
NP1: Strike=351 Dip=79 Slip=-173
NP2: 259 83 -11

KUPT 1.63 141 iPd 23 10.50 19.3X
KNA 9.13 139 iPd 24 32.10 -1.9
MTN 9.29 116 iPd 24 35.50 -0.7
BKB2 9.43 323 iPd 24 48.50 10.4X
TRT 9.89 276 iPd 24 46.10 1.8
MBL 12.49 192 eP 25 19.20 0.3
TSM 13.76 341 ePc 25 43.80 8.3X
NANU 15.19 206 eP 25 52.50 -1.4
WB5 15.81 135 iPd 25 58.30 -3.5X
WRA 15.84 135 Pc 25 59.00 -3.1X
KKM 16.11 337 ePc 26 10.80 5.2X
WARB 17.65 168 iPd 26 24.80 0.3
MEKA 18.05 192 iPd 26 30.70 1.3
QIS 20.14 127 iPd 26 51.30 -0.9

MNDI 21.09 84 eS 30 26.00
MRWA 21.16 196 iPd 27 02.30 -0.2
COOL 21.94 183 iPd 27 09.40 -0.8
KGM 22.02 299 ePc 27 13.10 2.0
BAL 22.30 193 iPd 27 14.00 0.2
KLB 23.04 191 eS 31 18.00
PPI 23.60 290 eP 27 25.00 -1.5
MUN 23.73 194 eP 27 27.40 -0.3
PMG 24.29 93 eP 27 34.00 0.9
LAT 24.31 87 eP 27 49.00 15.6X
IPM 25.29 301 ePd 27 45.50 2.9X
RKG 25.59 191 eP 27 50.10 4.9X
TSI 26.90 296 eP 27 50.00 -7.4X
QLP 27.06 133 ePc 27 59.00 0.3
SNG 27.07 305 eP 27 59.60 0.7
RMQ 30.38 129 eP 28 28.40 -0.1
QIZ 30.43 336 eP 28 29.00 0.0
CMS 31.21 139 iPd 28 35.20 -0.6
LOE 33.25 322 eP 28 54.00 0.3
BFD 33.49 150 eP 28 55.00 -0.5
QZH 33.83 354 eP 28 58.50 0.0
BRS 33.96 127 iPd 29 00.00 0.2
BWA 34.78 141 iPd 29 06.70 2.0
COO 34.86 132 eP 29 09.00 1.6
BDT 34.87 318 eP 29 08.40 0.9
TOO 35.29 148 iPd 29 11.80 0.8
CAN 35.73 141 eP 29 14.90 0.2
CNB 35.95 141 eP 29 17.10 0.5
CHG 36.05 320 iPd 29 18.20 0.7
GYA 38.37 337 iPd 29 37.60 0.6
KMI 38.92 331 Pc 29 43.50 1.7
SSE 39.76 358 P 29 52.40 4.1X
WHN 39.98 349 Pc 29 51.50 1.4
NJ2 40.85 355 Pc 29 57.70 0.5
CD2 43.48 336 iPd 30 15.80 -3.0X
DZM 44.12 113 iPd 30 24.00 -0.2
TSRJ 45.95 15 eP 30 39.50 1.1
IIDJ 46.43 17 eP 30 44.50 2.2
CHJJ 47.29 18 P 30 49.70 0.7
TIY 47.30 349 eP 30 48.00 -1.2
Z 16s 0.50um 4.6MsZ
E 15s 0.50um
MTMJ 47.43 17 P 30 49.70 -0.6
MAT 47.51 17 (P) 30 51.00 0.2
LZH 48.07 340 iPd 30 55.60 0.3
Z 20s 0.40um 4.4MsZ
NIIJ 48.39 18 eP 30 55.10 -2.4X
KOD 48.73 292 eP 30 59.00 -1.9
LSA 48.84 323 P 31 01.10 -0.5
BJI 49.02 354 eP 31 01.00 -1.3
SNY 50.46 1 eP 31 11.00 -2.2
HHC 50.50 349 eP 31 13.00 -0.8

BTO 50.57 348 eP 31 14.50 0.2
HYB 50.73 301 eP 31 13.50 -2.3
GTA 52.48 338 Pc 31 28.60 -0.1
MDJ 53.62 6 eP 31 35.60 -1.2
NDI 57.52 312 eP 32 02.00 -3.2X
WMQ 61.24 332 P 32 29.80 -0.9
QUE 66.01 309 eP 33 01.00 -1.3
MAW 70.57 201 iP 33 29.80 0.1
MAIO 74.26 312 eP 33 51.00 -1.1
SPA 81.18 180 iPd 34 29.90 0.2
YKA 112.61 25 ePKP 40 47.00 -2.8X
ALO 128.30 52 e(PKP) 41 20.00 -1.1
LKO 128.85 275 (PKP) 41 22.14 -0.3
ARE 151.24 151 ePKP 42 10.00 7.8X
CCH 152.53 162 PKP 42 12.80 8.7X
LPB 152.64 157 PKP 42 10.00 5.6X
ZOB0 152.87 157 PKP 42 07.80 2.9X
BAO 153.91 201 ePKP 42 07.80 2.0
ITR 154.20 228 ePKP 42 16.00 9.9X
S.D. = 1.1 on 61 of 82 obs.

& MAY 30, 1990 09h 25m 57.60s
40.248 N 124.627 W
DEPTH = 5.0km
NEAR COAST OF NORTHERN CALIF. (35)
<BRK>. ML 2.5 (BRK).

FHC 0.74 41 iPd 26 11.90 -0.5
WDC 1.63 78 eP 26 24.80 -2.2
MIN 2.31 87 eP 26 34.80 -2.3
PCC 3.26 147 e(P) 26 48.10 -2.2
ARN 3.77 139 eP 26 56.00 -1.7
GCC 3.82 147 eP 26 54.10 -1.2
SAO 4.28 143 eP 27 02.10 -2.8
7 obs. associated

MAY 30, 1990 09h 53m 15.16±1.35s
6.019 S ± 4.1km 77.147 W ± 10.1km
DEPTH = 30.8 ± 10.6 km
4.8mb (12 obs.)
NORTHERN PERU (111)

TUNG 4.75 344 P 54 27.50 0.7
VC1 5.49 347 eP 54 37.10 -0.4
PT08 5.93 174 eP 54 45.70 2.1
NNA 5.94 177 iPd 54 44.00 0.6
OTO 5.94 347 eP 54 46.80 3.0X
GGP 5.98 346 eP 54 46.00 1.5
PT10 6.02 178 iPd 54 45.00 0.5
CAYA 6.12 352 eP 54 45.50 -0.8
COTA 6.42 349 eP 54 54.00 3.4X
PT02 6.92 174 eP 54 56.20 -0.9
PSO 7.17 359 eP 55 14.00 13.1X
PT03 8.03 171 eP 55 10.80 -1.9
HOQC 9.44 3 eP 55 32.68 0.3
ANCC 9.47 2 eP 55 33.13 0.4
CLMC 9.85 3 eP 55 38.24 0.2
HOBC 10.35 6 eP 55 45.80 0.9
BOG 11.01 16 eP 56 00.00 6.0X
ARE 11.76 152 eP 56 18.00 13.7X
ZOB0 13.49 140 P 56 26.00 -1.5
Z 20s 0.74um 5.5MsZ
S 59 55.00
LR 02 20.00
BMG 13.62 17 eP 56 28.00 -0.8
LPB 13.70 140 P 56 23.00 -7.2X
Z 16s 1.35um 5.5MsZ
S 00 05.00
LR 02 18.00

ETA	22.38	300	iPd	44	58.40	0.9				S	52	40.00				iS	57	30.00	
ECP	22.44	298	iPd	44	58.60	0.5	CFTV	36.39	256	iPd	47	03.70	0.2			sS	58	12.00	
DLE	22.63	301	iPd	45	01.00	1.1	OBO	36.58	152	iP+	47	07.46	2.4			iPc	63	54.00	0.1
AKRL	22.67	165	iPc	45	03.50	3.0X	TDD	36.63	153	iP+	47	07.79	2.3			nm			7.4mb X
EVIA	22.68	262	iPc	45	02.20	1.5	HLD	36.68	154	iP+	47	07.84	2.0			31.10um			
AKSR	22.74	165	eP	45	04.00	2.8X	DAF	36.70	153	iP+	47	07.99	1.9			38.30um			
AGMR	22.76	166	eP	45	05.00	3.7X	KSU	36.75	154	iP+	47	08.44	1.9			pP	50	15.00	83kmX
AWKL	22.85	166	eP	45	05.50	3.2X	MKL	36.79	152	iP+	47	09.06	2.2			PP	52	07.00	
AGAL	22.91	165	eP	45	06.00	3.1X	ARO	36.87	153	iP+	47	09.72	2.1			iS	57	52.00	
GUD	22.96	268	iPc	45	03.70	0.2	SGH	36.89	153	iP+	47	10.06	2.3			iPc	49	58.33	0.2
DCN	23.08	301	iPd	45	05.30	1.1	ATA	37.05	152	iP+	47	11.59	2.6			iPd	50	20.51	88kmX
TOL	23.20	266	iPd	45	06.50	0.9	GBR	37.10	154	iP+	47	12.23	2.7			iPc	49	59.00	-0.6
			iS	49	59.00		GGC	37.63	257	iPd	47	13.90	0.0			nm			7.4mb X
KTK1	23.30	357	iPd	45	07.00	0.7	CTFE	37.83	258	iPd	47	16.20	0.7			nm			6.9Msz X
ENIJ	23.31	258	iPd	45	07.80	1.1	AAE	38.13	160	iP	47	20.50	2.1			166.00um			
LOF	23.36	348	iPd	45	07.00	0.2	TBT	38.84	260	iPd	47	24.20	0.2			58.50um			
EBAN	23.79	262	iPc	45	11.80	0.4	PDA	39.24	277	iPd	47	28.00	0.9			89.00um			
QASM	23.88	140	iPc	45	14.50	2.1	CHIE	39.47	258	iPc	47	30.40	1.2						
KEV	23.98	0	iPd	45	13.77	0.9	BCAO	41.85	192	iPd	47	49.00	0.2			nm			7.6mb X
			e	45	50.00			1.6s	325.00nm				5.9mb			PP	52	16.00	
			iS	49	29.94		WMO	42.40	70	iPc	47	54.39	1.3			iS	58	05.50	
AFC	24.07	260	iPd	45	14.50	0.3		N	10s	206.00um						iPc	50	12.60	-1.3
CRT	24.14	260	eP	45	15.45	0.6				esPd	48	26.01				iPc	50	15.50	-0.4
ASMO	24.16	260	iPc	45	15.03	0.0				PP	54	08.00				nm			7.4mb X
TRO	24.17	353	iPd	45	15.00	0.3	NDI	42.97	96	iPc	47	59.00	1.2			37.50um			
EMON	24.21	277	iPd	45	15.00	-0.4		0.5s	401.41nm				6.5mb			34.30um			
APHE	24.32	259	iPc	45	16.71	0.0				ePP	49	40.00				PP	52	32.00	
ACHM	24.34	260	iPc	45	16.56	-0.2				e	50	01.00				S	58	30.00	
ERUA	24.41	274	iPd	45	17.00	-0.3													

30.

KSR

BTM
SLE
CDM

OR

TNP	90.37	332	P	52	58.60	-0.1			ePP	56	29.00				e	59	08.50				
			pP	53	23.60	93kmX			ePP	57	23.15			LCCH	118.44	250	iPKPd	58	44.00	-0.5	
BAO	90.76	248	eP	52	56.80	-3.7X			eSPP	57	26.00			LNV	118.63	250	iPKPc	58	43.60	-1.2	
BKB2	91.06	91	iPd	53	06.00	4.2X			ePPP	58	57.00			QIS	120.33	89	iPKPc	58	47.40	-1.0	
DAV	91.13	79	iPc+	53	01.50	-0.7			ePPPP	59	32.00					e	00	12.00			
	1.9s	1347.37nm				6.9mb			eS	03	41.00			HNR	126.11	63	ePKP	58	58.00	-1.8	
CMB	91.40	335	ePc	53	03.74	0.5			ePS	04	49.00					eS	11	52.00			
			epP	53	26.58	84kmX			e	05	47.00			QLP	127.44	91	ePKP	58	56.00	-6.0X	
			esPc	53	37.18				eSS	09	37.00					i	59	02.00			
			ePP	56	27.00				ePKKP	10	06.00					i	59	30.00			
			ePKKP	10	22.30				esSS	10	42.00			ADE	128.57	103	iPKPc+59	03.00	-1.0		
			e	10	48.10				eSSS	14	03.00				0.8s	171.64nm					
BMG	91.72	282	iPd	53	03.00	-2.0			eLO	17	41.00			RMO	130.54	88	ePdiff	56	06.60	8.2X	
NWRM	91.74	337	P	53	05.30	0.7			eLR	22	30.00					e	57	20.20			
			pP	53	31.00	95kmX		SYP	94.51	333	eP	53	19.00	1.3	RMO	130.54	88	iPKP	59	08.00	0.1
ZSP	92.04	336	eP	53	06.90	0.9			e	53	44.00					i	59	36.80			
BKS	92.09	336	ePc	53	07.40	1.1		CRZF	94.52	163	iPc	53	17.00	0.1			ePP	01	24.80		
	0.9s	171.00nm				6.4mb			ePP	57	07.00					e	01	51.60			
			epP	53	32.00	91kmX			eS	05	15.00					iSKP	02	23.20			
			ePP	57	10.00				eSP	06	55.00			AIA	130.80	214	ePKP	59	06.00	-1.1	
			e	03	32.00				eSS	11	05.00			CMS	131.50	95	ePKP	58	54.80	-14.8X	
			e	03	34.00				eSSS	15	40.00					i	59	09.00			
			eS	04	10.00			PLM	94.54	330	iPc	53	18.00	0.1			i	59	37.80		
			eSS	10	00.00				ipP	53	43.00	92kmX		BFD	132.37	103	ePKP	58	56.30	-14.7X	
			e	17	00.00				iSP	53	57.30					e	59	19.40			
BRK	92.10	336	ePc	53	07.30	0.9		UPA	94.69	288	iP+	53	19.60	1.1			e	59	37.00		
Z	20s	72.00um				7.1msz		Z	20s	24.47um			6.7msz		BRS	133.91	86	ePdiff	56	29.00	15.7X
			ipP	53	32.00	91kmX		BAR	95.09	330	eP	53	21.00	0.8			e	57	19.00		
			ePP	56	50.00				e	53	44.00					iPP	58	58.70			
			eS	04	10.00			MEX	98.71	309	eP	53	38.13	1.0							

Best Double Couple: Mo=3.4*10**17
NP1: Strike=169 Dip=29 Slip= 130
NP2: 305 68 70

	Best Double Couple: Mo=3.4 10**17							OLY	43.45	343 P	57	27.70	-2.4			0.8s	30.90nm	02	04.50	5.6mb
	NP1:Strike=169 Dip=29 Slip= 130							NAZ	43.92	359 P	57	33.00	-0.8		MBC	85.69	351 eP	02	04.50	-0.4
	NP2: 305 68 70							TUL	45.24	339 eP	57	44.20	-0.4			0.9s	75.00nm			5.9mb
								1.2s	70.40nm			5.5mb		FLN	85.76	40 eP	02	06.00	0.2	
TUNG	4.76	344 P	50	39.60	0.1		LNO	45.24	339 eP	57	44.80	0.3			0.8s	18.80nm			5.4mb	
		iS	51	39.00			FVM	45.49	345 P	57	45.00	-1.5		EKA	85.90	33 Pd	02	06.00	-0.3	
VC1	5.49	347 iPd	50	50.00	-0.1		ALQ	49.24	328 eP	58	15.00	-1.1			0.7s	10.50nm			5.2mb	
PT08	5.93	175 P	50	55.20	-0.9			0.9s	53.57nm			5.6mb		LPO	85.94	44 eP	02	07.00	0.2	
NNA	5.94	177 iPc	50	54.50	-1.4		Z	18s	0.60um			4.6Msz			0.9s	22.95nm			5.4mb	
	0.7s	321.92nm			6.2mb X			e		58	27.00	43kmX		LDF	85.95	40 eP	02	06.70	0.0	
		eS	52	00.00			ANMO	49.24	328 P	58	15.70	-0.4			0.8s	13.45nm			5.2mb	
QTO	5.95	346 iPd	50	57.80	1.5		GOL	52.43	333 P	58	41.00	0.5		RJF	86.31	44 eP	02	08.70	0.1	
GGP	5.99	346 eP	50	57.30	0.2			0.9s	37.88nm			5.3mb			0.8s	8.05nm			5.0mb	
PT10	6.02	179 iPd	50	56.60	-0.4		GLA	52.82	320 eP	58	45.00	1.8		LSF	86.52	43 eP	02	09.10	-0.5	
		eS	52	04.00			SYP	57.10	318 eP	59	16.00	1.6			0.8s	8.75nm			5.0mb	
CAYA	6.12	352 eP	50	57.50	-1.3		TNP	57.56	323 P	59	19.00	1.3		CAF	86.61	44 eP	02	10.20	0.1	
COTA	6.43	349 eP	51	07.00	3.8X			0.8s	12.25nm			5.0mb			0.8s	8.75nm			5.0mb	
PT02	6.91	174 iPd	51	08.30	-1.3		KVN	58.71	323 iP	59	26.80	1.1		TCF	86.99	43 eP	02	11.30	-0.6	
		e(S)	52	16.20				epP	59	35.00	27km			0.8s	4.05nm			4.7mb		
PSO	7.16	358 eP	51	12.00	-1.5		ORV	61.08	322 e(P)	59	21.50	-20.2X		MAF	87.21	43 eP	02	12.50	-0.5	
PT06	7.80	174 iP	51	22.20	0.2			epP	59	43.60	87kmX			0.8s	10.05nm			5.1mb		
PT03	8.03	171 iPc	51	22.50	-2.8X		SCH	61.23	7 eP	59	41.00	-1.5		FBA	87.35	336 P	02	12.00	-1.2	
PURC	8.32	5 P	51	30.00	0.3		MBO	63.02	71 iP	59	56.00	1.0		BGF	87.47	43 eP	02	13.70	-0.5	
SILC	8.68	5 eP	51	35.33	0.6		SES	63.37	336 eP	59	56.00	-0.9			0.6s	10.80nm			5.3mb	
SALC	8.94	3 P	51	38.00	0.0			0.9s	101.00nm			6.0mb		AVF	87.86	43 eP	02	15.00	-1.0	
DIAC	9.29	6 P	51	43.60	0.7			pP	00	03.00	23km			0.8s	13.45nm			5.3mb		
HQQC	9.44	3 P	51	44.80	-0.1		FFC	63.98	344 iPd	59	59.00	-1.8		SSF	88.01	42 eP	02	15.80	-1.0	
ANCC	9.47	2 P	51	45.00	-0.3			1.0s	33.00											

	0.5s	12.00nm	5.6mb X
	eS	47 48.00	
S.D. = 1.5	on	7 of 10 obs.	
* MAY 30, 1990 20h 19m 37.40± 1.08s			
46.523 N ± 9.1km		26.775 E ± 26.2km	
DEPTH = 90.0km (geophysicist)			
ROMANIA			(358)
PSN 3.01 160 iPd	20 25.00	1.1	
PVL 3.46 198 iPd	20 31.00	0.9	
DMK 4.75 171 iPn	20 46.50	-1.5	
KDZ 4.97 192 eP	20 51.00	0.0	
RZN 5.06 198 iP	20 52.00	-0.4	
SUF 16.24 359 eP	23 21.00	0.0	
S.D. = 1.2	on	6 of 6 obs.	
? MAY 30, 1990 22h 27m 41.66± 1.34s			
38.356 N ± 10.4km		22.017 E ± 16.2km	
DEPTH = 33.0km (normal)			
GREECE			(364)
ML 3.2 (ATH).			
NEO 1.34 44 eP	28 04.60	0.4	
	eS	28 25.00	
ATH 1.39 105 eP	28 04.50	-0.5	
VLI 1.79 156 eP	28 11.00	0.3	
OHR 2.91 342 ePn	28 26.50	-0.2	
S.D. = 0.7	on	4 of 4 obs.	
% MAY 30, 1990 23h 00m 15.26± 0.78s			
40.671 N ± 7.3km		15.738 E ± 6.2km	
DEPTH = 10.0km (geophysicist)			
SOUTHERN ITALY			(390)
SGO 0.35 251 Pc	00 22.00	-0.4	
	eSg	00 29.00	
MGR 0.55 195 P	00 26.00	-0.5	
	eSg	00 30.00	
ORI 0.81 138 P	00 31.50	0.4	
	eSg	00 41.00	
BAI 0.97 62 P	00 33.00	-0.6	
	eSg	00 46.50	
TDS 1.11 155 P	00 36.50	0.4	
	eSg	00 47.50	
SDI 1.78 306 P	00 47.00	0.7	
S.D. = 0.7	on	6 of 6 obs.	
MAY 31, 1990 00h 06m 12.94± 0.37s			
46.245 N ± 3.5km		2.630 E ± 3.3km	
DEPTH = 9.4 ± 4.4 km			
FRANCE			(538)
ML 2.6 (LDG).			
MAF 0.05 242 Pg	06 14.70	-0.4	
	Sg	06 15.80	
TCF 0.29 279 Pg	06 19.00	-0.1	
	Sg	06 22.90	
BGF 0.35 25 Pg	06 20.00	-0.1	
	Sg	06 24.70	
AGO 0.40 119 Pg	06 20.89	-0.2	
	Sg	06 26.62	
PYM 0.56 152 Pg	06 24.06	-0.2	
	Sg	06 32.01	
AVF 0.74 42 Pg	06 27.00	-0.5	
	Sg	06 36.60	
	Sn	06 40.00	
PLDF 0.74 111 Pg	06 27.87	0.3	
	Sg	06 38.39	
LSF 0.76 271 Pg	06 27.70	-0.2	
	Sg	06 37.50	
SMF 0.93 64 Pg	06 30.30	-0.4	
	Sg	06 42.60	
	Sn	06 44.90	
SSF 1.02 36 Pg	06 32.10	-0.1	
	Sg	06 45.30	
LBF 1.19 51 Pg	06 35.40	0.2	
	Sg	06 50.60	
RJF 1.22 220 Pg	06 36.40	0.7	
	Sg	06 53.00	
LOR 1.33 39 Pg	06 38.00	0.5	
	Sg	06 54.60	
CAF 1.38 197 Pn	06 38.20	-0.1	
	Pg	06 39.40	
	Sg	06 57.30	
LFF 1.86 226 Pg	06 48.60	3.4 X	
	Sg	07 13.10	

LPO	1.86	214	Pg	06 48.50	3.3X	BAC	0.76	7	iPd	18 00.00	-5.0X		e	21 01.00			
			Sg	07 12.30		CLI	0.82	26	iPd	18 05.50	-0.2		e	51 58.00			
MFF	1.95	282	Pg	06 49.90	3.4X	CMP	1.33	247	iPc	18 16.00	4.2X	RAC	7.17	310	eP	19 31.00	-0.9
			Sg	07 14.40		IAS	1.49	21	iPd	18 10.50	-3.2X		e	19 34.00			
S.D. = 0.4 on 14 of 17 obs.						TLB	1.51	143	iPd	18 14.00	-0.1		e	19 41.00			
MAY 31, 1990 00h 15m 33.13±0.73s						BUC1	1.55	200	iPc	18 15.50	0.9		iS	20 54.00			
43.280 N ± 6.1km 19.825 E ± 6.7km						PSN	2.35	154	iPd	18 26.00	0.7	ALT	7.19	159	iP	19 31.00	-1.2
DEPTH = 10.0km (geophysicist)						DEV	2.70	273	iPd	18 32.00	1.9	TPE	7.41	224	ePn	19 36.00	0.9
YUGOSLAVIA (383)						PVL	2.79	202	iPd	18 32.00	0.7	IZM	7.42	177	iP	19 33.60	-1.8
ML 2.7 (TTG).						GZR	2.83	263	iPc	18 34.50	2.5	ZAG	7.54	274	eP	19 37.00	0.1
						JMB	3.35	182	iPc	18 39.00	0.0		i	19 38.50			
						CEI	3.51	304	iPc	18 44.00	2.9		iS	21 04.00			
PLE	0.32	279	iPgc	15 39.40	-0.4	PGB	3.76	211	iPd	18 45.00	0.3	PTJ	7.55	275	eP	19 37.30	0.1
			eSg	15 44.20		TIM	3.88	271	iPd	18 47.50	1.2		e(S)	20 59.00			
IVA	0.41	173	iPg	15 40.30	-1.3	DMK	4.05	169	iPn	18 48.00	-0.7	VKA	7.55	293	eP	19 37.00	-0.1
			eSg	15 46.50		VTS	4.11	220	iP	18 49.00	-0.7		ic	19 38.20			
PVY	0.69	171	ePg	15 45.40	-1.5	UZH	4.15	314	iP	18 51.00	0.9		i	20 02.00			
			eSg	15 56.50		KDZ	4.27	194	iPd	18 52.00	0.2		i	20 08.00			
NKY	0.77	233	ePg	15 47.60	-0.6				iS	19 28.00			i	20 42.70			
			eSg	15 59.00		BEO	4.56	260	iPn	18 55.40	-0.4		i	22 17.30			
TTG	0.95	206	ePg	15 50.50	-0.6				iSn	19 33.50		KHL	7.76	164	iP	19 39.00	-1.0
			eSg	16 05.00		RDO	4.75	191	iPnd	18 57.40	-1.0	HVAR	7.83	254	iP	19 41.70	0.7
BRY	1.01	248	ePg	15 52.00	-0.4	CTT	4.82	165	iP	18 57.30	-2.0		iS	21 03.70			
			eSg	16 07.00		ITU	4.98	160	iPc	19 58.00	56.4X	KEK	7.96	223	ePn	19 44.30	1.6
BDV	1.24	217	ePg	15 57.20	1.1	ISK	5.03	160	iP	19 00.70	-1.6	VBY	8.07	272	iPnc	19 45.50	1.2
			eSg	16 17.00		SRS	5.23	207	ePn	19 04.10	-1.0	SMG	8.10	180	iPnd	19 43.10	-1.5
HCY	1.28	230	ePg	15 58.50	1.6	SIM	5.25	97	iP	19 04.00	-1.3	ATH	8.16	197	iPnd	19 44.00	-1.4
			eSg	16 18.00					iS	20 00.00		KVT	8.24	122	iP	19 42.70	-3.9X
BEO	1.61	16	ePn	16 02.50	0.9	KGT	5.37	176	P	19 05.61	-1.5	CIN	8.26	173	eP	19 45.00	-1.9
			eSg	16 24.00		GBZT	5.39	158	iPd	19 05.50	-1.8	LCI	8.46	233	P	19 49.60	0.1
SKO	1.77	137	ePn	16 05.00	1.0	HRT	5.42	156	iP	19 07.20	-0.6	BRT	8.54	238	P	19 51.00	0.4
OHR	2.28	161	ePn	16 13.00	1.5	VAY	5.43	216	iPn	19 07.30	-0.5	LJU	8.54	276	ePc	19 52.00	1.4
HVAR	2.47	269	i(Pn)	16 18.70	4.6X	KNT	5.43	213	ePn	19 06.80	-1.1		e(S)	21 35.10			
			iSn	16 50.70		SKO	5.44	227	iPnd	19 07.00	-1.0	BAI	8.59	240	P	19 51.00	-0.3
BZS	2.67	28	ePc	16 15.50	-1.3				iPb	19 17.50		KSP	8.60	310	eP	19 48.50	-3.0
S.D. = 1.3 on 12 of 13 obs.									iPg	19 25.50			i	19 52.50			
MAY 31, 1990 00h 17m 47.85±0.09s									iSn	20 05.00		CEY	8.63	274	ePc	19 52.40	0.5
45.811 N ± 1.4km 26.769 E ± 1.2km									iSb	20 20.00		YER	8.74	172	iP	19 55.00	1.5
DEPTH = 88.2km (geophysicist)									iSg	20 31.00		BCK	8.82	160	iP	19 53.70	-0.8
6.1mb (73 obs.)						EDC	5.52	171	iP	19 08.30	-0.9	VLS	8.90	213	iPnc	19 55.50	-0.1
ROMANIA (358)						YLV	5.58	159	P	19 08.29	-1.7	KMR	8.94	289	iP+	19 55.90	-0.2
mb 6.5 (PAS), 6.2 (BRK).						KCT	5.68	168	iP	19 09.70	-1.7		iS	21 33.80			
Additional damage in Romania.						IVA	5.74	242	ePn	19 13.00	0.8	VOY	8.98	276	iPc	19 58.00	1.2
Felt (V) in northern Bulgaria									eSn	20 06.50		TRI	9.10	274	iPnd	20 00.20	2.0
and at Kishinev, USSR. Felt						IZI	5.82	159	iP	19 11.70	-1.7		iSn	21 46.50			
throughout Bulgaria and in parts						PLE	5.82	247	ePn	19 12.50	-0.9		i	22 47.00			
of Yugoslavia. Also felt at									eSn	20 07.50		RBL	9.19	279	P	20 17.60	18.0X
Lvov, USSR and Istanbul, Turkey.						PVY	5.85	239	ePn	19 14.00	0.2	PRU	9.21	301	ePnd	20 00.00	0.2
Two events about 2.3 seconds									eSn	20 10.50			Z	13s	54.00um		
apart. Depth from broadband						THE	5.87	210	ePn	19 13.00	-1.0	E	13s	57.00um			
displacement seismograms, based						KKS	5.92	233	ePn	19 15.00	0.4		e	20 07.00			
on first event.						EZN	5.99	183	iP	19 15.00	-0.6		eSn	21 44.00			
FAULT PLANE SOLUTION: P-Waves						GPA	6.10	154	iP	19 15.90	-1.3	ELL	9.36	164	iP	20 03.30	1.4
NP1:Strike=310 Dip=70 Slip= 90						SRO	6.14	292	eP	19 16.40	-1.3	KBA	9.36	283	eP	20 03.00	1.0
NP2: 130 20 90							2.0s	14.00nm		3.9mb X			1.7s	1930.00nm		6.7mb	
Principal Axes:								e	19 34.00				i	20 16.70			
T P1g=65 Azm=220						PHP	6.16	230	iPnd	19 16.30	-1.7	ORI	9.50	236	P	20 04.40	0.7
P 25 40						KRA	6.25	315	iPd	19 18.10	-1.1	VLI	9.53	199	ePn	20 03.50	-0.6
Comment: The focal mechanism is							1.4s	7208.00nm		6.8mb		KHC	9.53	295	P	20 04.00	-0.2
well controlled and								i	19 20.60				1.2s	740.00nm		6.5mb	
corresponds to reverse								iS	20 06.00			Z	10s	66.50um			
faulting. The preferred fault								iS	20 28.00			E	11s	55.00um			
plane is NP2.						NKY	6.33	244	iPnd	19 20.30	-0.1		e	20 27.00			
CENTROID, MOMENT TENSOR (HRV)						TTG	6.37	241	iPnd	19 20.70	-0.2	BHG	9.72	286	iPc	20 08.60	1.8
Data Used: GDSN								eSn	20 20.00			2.2s	1658.00nm		6.6mb		
L.P.B.: 15S, 41C M.W.: 13S, 24C						OHR	6.40	225	iPnd	19 21.00	-0.3	FVI	9.73	280	P	20 08.80	1.9
Centroid Location:						SDA	6.48	237	ePn	19 23.80	1.5	DUI	9.83	249	Pc	20 08.90	0.7
Origin Time 00:17:44.7 0.3						LIT	6.51	210	ePn	19 21.00	-1.9	TDS	9.83	235	P	20 08.00	-0.2
Lat 45.67N 0.03 Lon 26.00E 0.02						BRY	6.57	247	ePn	19 24.00	0.2	SGO	9.88	242	P	20 09.00	0.2
Dep 87.3 1.3 Half-duration 5.5								eSn	20 26.00		KSL	9.91	167	ePn	20 19.50	10.2X	
Moment Tensor: Scale 10**18 Nm						LACI	6.60	233	iPnd	19 25.30	1.3	BRG	9.92	305	iPc	20 07.80	-1.6
Mrr= 2.02 0.04 Mtt=-2.09 0.07						ULC	6.66	237	ePn	19 26.40	1.6		1.8s	520.00nm		6.2mb	
Mff= 0.07 0.06 Mrt=-1.63 0.04								eSn	20 30.50		N	17s	35.00um				
Mrr= 1.65 0.04 Mtf= 0.93 0.05						TIR	6.71	231	ePn	19 26.00	0.5	E	17s	62.00um			
Principal Axes:								iS	20 36.00				i	20 10.40			
T Vol= 3.16 P1g=63 Azm=244						BDV	6.72	241	ePn	19 27.30	1.6		eS	22 00.00			
N 0.15 15 123								eSn	20 32.00		WET	9.98	295	iPc	20 11.20	1.0	
P -3.31 22 27						KAS	6.74	129	iPd	19 23.90	-2.2	ARV	10.12	262	P	20 12.50	0.3
Best Double Couple:Mo=3.2*10**18						KBN	6.77	222	iPnc	19 26.50	0.2	AQU	10.22	255	P	20 14.00	0.5
NP1:Strike= 90 Dip=26 Slip= 54						HCY	6.83	243	ePn	19 28.20	0.9	SDI	10.23	251	Pc	20 13.40	-0.2
NP2: 309 69 106								eSn	20 33.00		RFI	10.31	249	P	20 16.02	1.3	
VR1	0.07	332	iPc	18 00.90	1.1	NEO	7.01	203	iPnc	19 28.90	-0.8	RSM	10.34	265	P	20 15.77	0.8
MLR	0.66	241	iPc	18 05.20	1.0	ZST	7.03	293	eP	19 28.50	-1.4	AZI	10.35	253	Pd	20 16.40	1.2
ISR	0.69	193	iPc	18 06.00	1.6				i	19 41.80		GRI	10.37	231	P	20 14.90	-0.5
PPE	0.72	55	iPc	18 06.00	1.4				i	19 48.70		ASS	10.46	260	Pc	20 17.50	0.8
									e	20 47.00		CTI	10.54	277	P	20 18.20	0.3

31d 00h

VAM	10.57	192	ePn	20	17.50	-0.7	RSP	13.71	274	P	20	58.68	-1.0	MDSJ	15.96	149	Pc	21	29.30	0.9
WATA	10.57	284	iPc	20	18.40	0.0	LSD	13.73	276	P	21	00.11	0.0	SSF	16.08	283	iPc	21	28.50	-1.3
	1.4s	2693.00nm			7.0mb		ENR	13.78	270	P	21	00.52	0.0		1.7s	3446.35nm			6.3mb	
			ic	20	19.80		LOMF	13.80	284	P	21	00.55	-0.5	PLDF	16.11	279	P	21	29.62	-0.7
			i	20	32.60		EMS	13.81	278	ePc	21	00.90	-0.1	AVF	16.20	282	iPc	21	30.00	-1.3
CLL	10.65	306	ePd	20	17.00	-2.2	BSF	13.83	286	P	21	01.20	0.0		1.5s	2897.20nm			6.2mb	
	2.0s	710.00nm			6.2mb		AUTN	13.83	269	P	21	02.31	1.0	MKT	16.21	153	eP	21	33.40	1.8
			i	20	24.70		DOI	13.84	272	P	21	00.10	-1.2	RUWJ	16.25	141	Pc	21	31.90	-0.1
			iS	22	16.00		STV	13.84	270	Pc	21	01.55	0.2	HFS	16.32	336	eP	21	28.30	-4.3X
MNS	10.70	256	Pc	20	20.10	0.2	SBF	13.86	269	iPc	21	01.20	-0.3		0.8s	790.60nm			6.0mb	
SFI	10.76	265	Pc	20	21.50	0.9	AURF	13.93	269	P	21	04.54	2.1	Z	16s	15.01um			5.7msz	
CRE	10.77	264	P	20	22.70	1.8	REVF	13.94	268	P	21	05.06	2.5				LR	24	53.00	
SOTA	10.82	283	iPc	20	21.80	0.2	PZZ	13.94	272	P	21	03.08	0.4	HLW	16.32	166	eP	21	32.00	-0.9
	1.2s	1545.00nm			6.8mb		TOUF	13.95	270	P	21	05.71	2.8X				eS	24	36.00	
			ic	20	22.80		LPG	14.01	276	iPc	21	04.90	1.2	KOT	16.34	164	ePc	21	32.00	-1.1
			i	20	36.20		LPL	14.02	276	iPc	21	04.70	0.9	AGO	16.44	279	P	21	35.55	1.2
			i	22	24.10		MVIF	14.05	269	P	21	06.73	2.6X	TAB	16.45	111	iPd-	21	37.00	2.3
FUR	10.84	288	eP	20	22.80	0.9	RRL	14.08	274	Pc	21	04.42	-0.2	PYM	16.57	278	P	21	35.54	-0.4
PGD	10.86	265	Pc	20	23.50	1.3	HAU	14.13	286	iPc	21	04.50	-0.5	BGF	16.57	281	iPc	21	34.80	-1.2
RMP	10.92	254	Pd	20	22.90	0.0		1.1s	1221.00nm			6.1mb		PRNI	16.73	155	eP	21	38.50	0.5
HOF	10.93	300	eP	20	23.50	0.5	BNI	14.13	274	P	21	05.20	0.0	MAF	16.81	280	iPc	21	38.10	-0.8
RDP	10.94	253	P	20	23.00	-0.1	PUL	14.14	7	ePd	20	58.00	-7.0X		1.5s	2448.35nm			6.2mb	
OGA	10.94	281	iPc	20	24.90	1.6			eS	23	23.00		SUF	16.95	359	iP	21	33.80	-6.6X	
BRN	11.07	312	eP	20	24.00	-0.8	PLH	14.22	299	ePd	21	07.30	1.3	TCF	17.04	280	iPc	21	41.10	-0.7
SOI	11.10	230	P	20	24.00	-1.2	CALN	14.27	269	P	21	08.18	1.2	KONO	17.25	330	eP	21	37.49	-6.6X
GRF	11.16	296	iPc	20	25.40	-0.7	PTS	14.27	236	P	21	08.10	1.2	CAF	17.37	276	iPc	21	46.40	0.6
			eS	22	36.00		HRI	14.30	148	eP	21	07.70	0.4	SLY	17.44	119	iPc	21	48.50	1.8
MOX	11.20	301	eP	20	28.00	1.4	VITF	14.38	287	P	21	09.04	0.9				iPP	21	59.00	
			i	20	30.00		WLF	14.39	293	iPd	21	14.86	6.6X				iPPP	22	12.00	
OBN	11.20	30	iPd	20	21.00	-5.5X	JCK	14.46	299	ePd	21	10.30	1.1				iS	22	52.50	
			iS	22	14.00		WTS	14.49	302	eP	21	09.50	-0.1				iS	25	00.00	
MSI	11.28	232	P	20	27.30	-0.3		1.0s	577.00nm			5.8mb					iS	25	17.50	
ATN	11.36	232	Pc	20	27.00	-1.7			e	21	16.10						i	25	30.50	
SAL	11.36	275	P	20	29.80	1.1	FRF	14.49	268	iPc	21	09.70	0.0				iPcP	26	29.50	
MME	11.49	268	Pd	20	32.10	1.4	ATZ	14.53	150	eP	21	12.70	2.4				iLR	28	21.50	
OSS	11.55	280	ePc	20	32.70	1.3	MEM	14.64	297	iPc	21	12.41	1.0	LSF	17.52	281	iPc	21	47.20	-0.4
BDI	11.60	267	P	20	32.10	0.2			i	21	27.21		ETER	17.53	267	iPc	21	49.00	1.3	
LFK	11.70	152	eP	20	33.60	0.3	LMR	14.65	268	iPc	21	11.80	0.1	RJF	17.68	277	iPc	21	50.40	0.8
MAO	11.73	259	Pc	20	33.40	-0.1	LRG	14.72	268	iPc	21	13.20	0.6	HOL	17.75	156	ePc	21	51.70	1.2
PII	11.74	266	Pc	20	33.70	0.1		1.4s	*****nm			6.9mb		NB2	17.77	335	P	21	46.20	-4.4X
MDI	11.91	276	P	20	36.40	0.5	ENN	14.72	297	ePc	21	13.00	0.5	LPO	18.03	276	iPc	21	54.50	0.6
MNO	11.95	233	Pc	20	36.50	-0.2		1.6s	1146.00nm			5.9mb		BLS1	18.11	326	eP	21	52.06	-2.7
BSD	11.97	325	iPd	20	31.00	-5.7X			e	21	19.50		LFF	18.29	277	iPc	21	57.20	0.2	
	0.5s	2880.00nm			7.4mb		NUR	14.78	356	iPd	21	06.80	-6.4X	AYN	18.41	154	ePc	21	58.70	0.1
VDL	12.02	279	ePd	20	38.90	1.3			e	23	32.00		BHD	18.42	127	iPd	22	00.80	2.1	
SAX	12.09	283	ePc	20	38.50	-0.1	SHMJ	14.79	149	Pc	21	16.00	2.4				iPP	22	18.00	
BOB	12.25	271	P	20	41.30	0.8	WIT	14.84	305	eP	21	14.00	0.0				iS	25	26.50	
GIB	12.29	235	P	20	40.60	-0.4			e	21	20.00		BADA	18.44	157	eP	21	59.00	0.0	
STU	12.29	290	iPc+	20	40.50	-0.5	ZNT	14.98	152	eP	21	16.90	0.9	LDF	18.45	288	iPc	21	57.00	-1.9
	1.0s	520.00nm			6.3mb		UPP	15.09	342	iPd	21	11.30	-5.9X	ESEL	18.50	259	iPc	21	59.50	-0.1
			iS	23	00.00				i	21	12.90		ODD1	18.52	327	eP	21	59.08	-0.6	
USI	12.31	240	P	20	41.80	0.6	BERF	15.23	268	P	21	20.63	1.5	MFF	18.62	282	iPc	21	59.00	-1.9
LLS	12.33	281	ePc	20	41.70	0.0	DHLJ	15.23	168	Pc	21	35.00	15.8X	KMY	18.63	324	iPd	21	59.50	-1.4
MEU	12.42	230	P	20	41.20	-1.6	BURJ	15.24	150	P	21	21.90	2.5	FLN	18.68	289	iPc	21	59.40	-2.2
TMA	12.46	278	ePc	20	44.00	0.6	TREF	15.36	269	P	21	21.91	1.2		0.9s	2303.35nm			6.4mb	
VAI	12.56	277	P	20	44.40	0.0	GELF	15.39	269	P	21	22.51	1.3	GRR	18.95	288	iPc	22	02.00	-2.4
SLE	12.68	285	ePc	20	45.80	-0.3	SALJ	15.41	150	Pd	21	22.80	1.3	EPF	19.05	271	iPc	22	03.80	-1.9
ZLA	12.74	284	ePd	20	46.50	-0.4	DOU	15.45	294	iPc-	21	22.70	0.9	LPF	19.09	287	iPc	22	03.40	-2.6
MCT	12.76	235	P	20	49.60	2.3			i	21	39.00		BER	19.32	327	iPd	22	06.80	-1.5	
BKR	12.77	103	iPd	20	46.00	-1.4			i	23	46.50		ASK	19.44	327	eP	22	09.22	-0.3	
			iS	23	02.00				S	24	16.00		HYA	19.52	329	iPd	22	09.24	-1.1	
PCP	12.92	271	Pc	20	49.45	0.1	PRAF	15.46	270	P	21	23.49	1.4	JAU	19.55	272	P	22	10.38	-0.7
FAI	12.98	234	P	20	51.60	1.6	DBN	15.49	302	iP+	21	21.00	-1.3	OGE	19.58	272	P	22	10.84	-0.4
TNS	13.03	296	ePc	20	50.30	-0.4			i	21	26.00		RGS	19.58	337	eP	22	09.50	-1.5	
			eS	23	44.10				i	21	49.00		ESCF	19.68	272	P	22	11.77	-0.5	
ERC	13.10	239	P	20	52.50	0.9			iS	24	18.00		EBR	19.72	265	iPc	22	12.00	-0.6	
MMK	13.10	278	ePc	20	52.40	0.6	MSL	15.50	122	ePc	21	24.50	1.9				iS	25	49.00	
ORX	13.13	276	P	20	51.29	-0.8			ePP	21	38.50		LHE	19.76	271	P	22	13.59	0.4	
CKI	13.13	271	P	20	54.00	2.0			ePP	21	48.00		ATE	19.77	272	P	22	12.38	-0.8	
ORO	13.13	276	P	20	51.30	-0.8			eS	24	22.50		EROQ	19.78	265	eP	22	12.00	-1.3	
PGF	13.16	262	P	20	53.66	1.1			eSS	24	41.00		MADF	19.83	272	P	22	13.03	-0.8	
CVT	13.21	237	P	20	54.90	1.9			eSSS	25	04.00		ISSF	19.85	272	P	22	13.66	-0.5	
STR	13.22	289	P	20	54.00	1.0			eLR	27	13.00		ELYF	19.94	272	P	22	14.15	-0.9	
FIN	13.23	270	Pc	20	52.63	-0.7			e	28	55.50		SUE	19.97	328	ePd	22	14.00	-1.0	
LVI	13.28	239	P	20	55.40	1.5	KFNJ	15.55	151	Pc	21	24.00	0.9	BOH	19.98	272	P	22	14.76	-0.7
BBS	13.34	284	P	20	54.49	-0.2	UCC	15.70	297	P	21	27.60	2.6	MOL	20.07	334	ePd	22	15.22	-0.8
GWf	13.35	291	P	20	56.34	1.5			iS	24	28.00		FOO	20.22	329	iPc	22	16.37	-1.2	
COP	1																			

EDR	21.23	312	eP	22	27.00	-1.0				i	24	34.80	102kmX			0.9s	72.00nm		5.7mb	
ECHE	21.25	263	iPc	22	28.60	0.3	FRU	33.96	77	iPd	24	25.60	1.1			pP	27	43.00	102kmX	
EDI	21.28	309	eP	22	27.80	-0.6				iS	29	44.00		MBC	56.30	351	ePd	27	20.70	-0.2
ACU	21.36	260	iPc	22	30.00	0.6	QUE	34.89	102	iPd-	24	34.50	1.7			0.8s	244.00nm		6.3mb	
EDU	21.37	311	iPc	22	28.70	-0.6				eS	30	02.20				pP	27	45.00	99kmX	
	1.1s	1026.00nm			6.1mb		TLG	35.68	75	iPc	24	40.20	1.0	LZH	56.92	70	iPd	27	26.83	0.7
EAU	21.40	309	eP	22	29.50	-0.1				eS	30	08.20				ipPd	27	49.18	89kmX	
ETOR	21.50	267	iPc	22	29.80	-1.0	DAG	36.07	344	iPd-	24	41.40	-0.6	BTO	58.27	63	iPd	27	35.00	-0.4
YRH	21.51	300	iPc	22	31.20	0.4		1.0s	384.00nm			6.3mb			4.0s	2400.00nm		6.6mb X		
EBH	21.54	310	ePc	22	30.30	-0.7	KSH	36.28	82	iPc	24	46.00	1.6			pP	27	58.00	92kmX	
	1.2s	1781.00nm			6.3mb		Z	15s	20.20um			6.0MszX		HIA	58.92	50	iPd	27	40.35	0.6
SOD	21.62	360	iP	22	30.90	-0.8	E	10s	20.00um						PP	29	48.00			
ELO	21.71	310	eP	22	32.30	-0.4				pP	25	03.00	68kmX		iS	35	30.00			
	1.1s	999.00nm			6.1mb				PP	26	09.00			epPd	28	01.05	81kmX			
EAB	21.97	309	ePc	22	35.30	0.0			S	30	20.00			esPd	28	11.64				
APA	22.07	7	iPd	22	36.30	0.2			sS	30	47.00				27	41.00	-0.1			
		iS	26	21.30			OBO	36.52	152	iP+	24	46.01	-0.4	HHC	59.08	62	iPd			
ASW	22.24	165	iPc	22	40.00	1.8	TDD	36.57	153	iP+	24	46.74	-0.1	Z	5.0s	4400.00nm		6.8mb X		
		eS	46	40.00			KSU	36.70	154	iP+	24	47.18	-0.7	N	21s	20.30um		6.2Msz		
EALH	22.37	259	iPc	22	40.70	1.3	MKL	36.73	152	iP+	24	47.74	-0.4	E	10s	9.70um				
ETA	22.45	300	iPc	22	41.20	1.2	ARO	36.81	153	ePd	24	50.60	1.7			pP	28	04.00	92kmX	
ECP	22.52	298	iPc	22	41.30	0.7	SGH	36.83	153	iP+	24	48.91	-0.2			S	35	44.00		
AKRL	22.62	166	eP	22	45.00	3.2X	ATA	36.99	153	iP+	24	50.30	0.0	CD2	59.96	75	P	27	47.10	0.0
AKSR	22.70	165	eP	22	47.00	4.4X	GBR	37.05	154	ePd	24	50.57	-0.3		0.7s	400.00nm		6.7mb		
DLE	22.71	301	eP	22	43.70	1.2	CTFE	37.90	258	iP	24	58.00	0.1	N	10s	4.00um				
EVIA	22.75	262	iPc	22	43.60	0.5	AAE	38.07	161	eP	25	01.50	1.7			pP	28	08.80	86kmX	
AWKL	22.80	166	iPc	22	46.50	2.9X	PDA	39.31	277	iPd	25	10.00	0.4			sP	28	20.10		
GUD	23.03	268	iPc	22	45.20	-0.														

31d 00h

			pP	28	43.50	81kmX			Z	20s	2.50um	5.5Msz				i	32	45.20					
			PP	30	46.00		PET		73.30	28	eP	29	10.00	-1.0		e	33	04.40					
			iS	37	00.00						eS	38	32.00		PORP	79.59	285	iP	29	46.00	-0.8		
			sS	37	36.00		SVW		73.42	1	P	29	12.10	0.5	CCM	79.67	315	iPc	29	46.00	-0.8		
			SS	41	16.00		SNG		73.63	97	iPc	29	13.00	0.3				ec	29	48.23			
SNY	65.62	55	iPd	28	23.50	-0.7			1.6s	833.33nm		6.4mb			PWLA	80.41	311	P	29	49.20	-1.7		
	7.0s	5300.00nm			6.6mb	X					eS	38	34.00		RSSD	80.41	326	iPc	29	50.70	-0.3		
	Z	32s	15.00um		6.0Msz	X			73.77	71	eP	29	13.60	-0.5				e	38	46.50			
	N	10s	4.40um						0.7s	100.00nm		5.8mb						e	39	56.80			
HBVT	65.65	309	P	28	23.40	-1.1			Z	27s	4.80um	5.7Msz						e	40	24.00			
DL2	66.37	58	iPd	28	29.00	-0.1			E	11s	2.70um							ePPP	56	30.50			
	4.0s	1400.00nm			6.2mb	X					pP	29	36.00	85kmX									
	Z	30s	9.60um		5.8Msz	X					S	38	37.50		PNT	80.84	338	eP	29	53.00	0.1		
											sS	39	12.50					192.00nm		6.0mb			
			S	37	10.00		BLA		74.61	308	eP	29	17.50	-1.5				80.94	333	eP	29	53.10	-0.5
MDJ	67.08	49	iPd	28	33.50	-0.1			1.2s	109.38nm		5.6mb			HRY	81.02	76	eP	29	54.00	-0.6		
	1.2s	100.00nm			5.6mb						eP	29	43.00	98kmX	BAG	81.13	337	P	29	54.40	-0.1		
	Z	25s	16.50um		6.2Msz	X	NAV		74.74	308	P	29	18.40	-1.3	NEW	0.8s	104.17nm		5.8mb				
			pP	28	56.00	87kmX					pP	29	44.00	99kmX				pP	30	20.00	97kmX		
			iS	37	20.00		MID		74.97	356	ePc	29	22.60	2.1	TRN	81.19	276	eP	29	56.26	1.0		
WHN	67.24	69	P	28	34.50	-0.2	POF		75.09	186	iPc	29	21.50	0.0				0.8s	68.90nm		5.6mb		
	N	14s	2.70um				FRS		75.21	181	iPc	29	21.00	-1.1	TPP	81.46	276	eP	29	58.48	1.8		
	E	12s	3.90um						0.7s	126.71nm		5.9mb		OLY	81.77	313	P	29	57.50	-0.5			
			pP	28	56.00	83kmX	EDM		75.62	337	eP	29	23.50	-1.0	DPW	81.79	337	P	29	58.00	0.0		
LOE	67.31	88	eP	28	33.50	-1.8	PSI		75.67	101	ePd	29	25.00	-0.2	MCW	82.22	340	P	30	00.50	0.3		
NST	67.37	91	eP	28	36.00	0.3			0.9s	181.20nm		6.0mb		PGC	82.40	341	eP	30	02.00	1.0			
			e	29	02.00	103kmX	IPM		75.77	98	ePd	29	26.20	0.4				0.7s	225.00nm		6.2mb		
YKA	67.71	342	eP	28	37.20	0.0			1.3s	611.60nm		6.3mb		QCP	82.61	77	eP	29	56.00	-6.6X			
	0.8s	307.40nm			6.3mb						e	29	51.00	99kmX	RMW	83.11	339	P	30	05.00	0.1		
TBR	68.43	307	P	28	41.20	-0.8	SHK		75.82	55	iP	29	25.00	0.0	IMW	83.12	331	P	30	06.00	0.8		
			pP	29	06.40	99kmX			0.9s	87.39nm		5.6mb		CUM	83.24	278	iP	30	06.00	0.1			
IMA	68.46	0	iPc	28	42.20	0.3	HVD		76.06	181	iPc	29	44.50	17.3X				i	33	08.00			
PNJ	68.55	307	iP	28	43.00	0.3			1.7s	1115.39nm				GMW	83.27	340	P	30	06.20	0.6			
GMTN	68.58	307	iP	28	43.60	0.7	SIT		76.41	350	ePc	29	29.90	1.2	LNO	83.58	316	iPc	30	07.30	0.1		
NJ2	69.16	65	iPd	28	47.00	0.4	LHS		76.81	306	P	29	30.00	-0.5	TUL	83.59	316	iP	30	07.40	0.0		
	4.0s	1200.00nm			6.1mb	X					pP	29	56.00	97kmX				1.5s	18.30nm		4.8mb		
	Z	22s	2.40um		5.4Msz		BPA		77.04	281	eP	29	32.43	-0.4	BW06	83.62	329	P	30	07.00	-0.7		
	N	12s	4.30um				SFG		77.14	280	eP	29	33.30	0.0	LON	83.77	339	P	30	08.50	0.3		
	E	12s	2.40um				JSC		77.21	306	P	29	33.00	-0.5	HPI	84.01	332	P	30	11.00	1.2		
			pP	29	08.00	80kmX					pP	29	58.00	96kmX	UYO	84.33	315	iPd	30	11.00	-0.1		
			sP	29	22.00		SEG		77.24	280	eP	29	34.06	0.1	BMW	84.38	340	P	30	12.00	0.7		
			S	37	46.00		MAJO		77.42	50	ePd	29	34.26	-0.4	SHW	84.40	339	P	30	12.00	0.5		
			sS	38	25.00						iPc	29	56.28	83kmX	GLD	84.58	325	ePc	30	13.00	0.5		
NNT	69.22	93	eP	28	47.80	0.7	MAT		77.42	50	eP	29	34.00	-0.7				1.8s	615.38nm		6.3mb		
FBA	69.55	358	iPd	28	49.10	0.7			1.3s	165.38nm		5.8mb		GUAN	84.62	279	eP	30	39.30	100kmX			
ANM	69.55	6	P	28	49.00	0.5			Z	20s	2.84um	5.6Msz		GOL	84.68	325	P	30	12.00	-1.0			
SCP	70.67	309	iPc	28	54.47	-1.2					eS	39	17.00					Z	18s	4.77um		5.9Msz	
			ic	28	56.45	6kmX	SES		77.44	334	ePc	29	33.80	-0.8									
ELF	70.81	313	P	28	56.10	-0.4			0.7s	333.00nm		6.3mb		LLAV	85.06	280	iPd	30	39.00	97kmX			
FFC	70.84	331	iPc	28	55.80	-0.7					pP	30	00.00	101kmX	CAR	85.12	280	eP	30	15.50	0.4		
	1.1s	250.00nm			6.0mb		MGG		77.45	280	eP	29	34.71	-0.4									
LDN	70.86	312	P	28	56.20	-0.6	NEV		77.47	282	eP	29	35.44	0.3				iS	41	36.00			
DLA	71.19	312	P	28	57.60	-1.1	MGH		77.51	281	eP	29	37.87	2.4X	KKM	85.33	86	ePc	30	16.50	0.0		
SSE	71.27	65	Pd	28	59.00	-0.4	SGS		77.57	305	P	29	35.00	-0.5				1.3s	296.40nm		6.1mb		
	4.0s	1200.00nm			6.1mb	X					pP	30	00.00	96kmX				e	30	42.00	96kmX		
	N	11s	2.80um				TKL		77.59	309	P	29	35.00	-0.6	OLLA	85.38	280	iPc	30	17.00	0.3		
	E	11s	0.90um								pP	30	00.00	96kmX	MORO	85.81	281	eP	30	19.20	0.3		
			iP	29	18.00	71kmX	PAG		77.62	280	eP	29	36.33	0.2	MEO	85.83	318	iPc	30	18.40	-0.2		
			PP	31	38.00		HBF		77.69	305	P	29	35.60	-0.6	PLAV	85.96	280	eP	30	20.00	0.2		
			eS	38	04.00		GBTN		77.82	309	P	29	36.60	-0.3	DAU	86.30	329	P	30	21.70	0.4		
			sS	38	50.00		BBL		77.84	280	eP	29	37.15	-0.1	TSM	87.91	86	ePc	30	29.00	0.1		
			SS	42	50.00		SMY		77.92	20	P	29	37.90	0.8	MSU	88.31	329	P	30	31.00	0.1		
KSR	71.33	180	iPc	28	57.00	-2.9X			1.3s	628.93nm		6.3mb		SDV	88.82	281	iPc	30	33.00	-0.5			
	1.0s	910.00nm			6.6mb						pP	30	01.00	87kmX	ANMO	89.20	323	ePc	30	35.11	0.0		
GZH	71.51	76	P	29	02.00	1.1	PRM		77.97	307	P	29	37.00	-0.8				1.0s	47.50nm		5.6mb		
	Z	30s	9.70um		5.9Msz	X					pP	30	02.00	96kmX				ec	30	37.26			
	N	11s	1.90um				CRM		77.98	279	eP	29	38.15	0.1				iPc	30	58.28	85kmX		
	E	10s	5.50um				MVM		78.11	279	eP	29	39.12	0.4	ALQ	89.20	323	iPc+	30	35.10	0.0		
			pP	29	24.00	84kmX	FDF		78.16	279	eP	29	39.32	0.3				1.2s	85.16nm		5.8mb		
			sP	29	33.00		BIM		78.26	279	eP	29	40.24	0.7				Z	20s	4.96um		5.9Msz	
			S	38	16.00		SLW		78.51	278	eP	29	36.75	-4.2X									
TTA	71.59	1	iPd	29	01.50	0.6	SLB		78.72	278	eP	29	42.14	0.0				eP	31	00.00	92kmX		
YSS	71.83	40	iPd	29	04.00	1.5	PPI		78.96	102	ePd	29	44.00	0.6	MIN	89.68	336	e(P)	30	37.70	0.5		
			iS	38	18.00				1.0s	83.20nm		5.6mb		WDC	89.71	337	ePc	30	36.60	-0.6			
QIZ	71.86	81	P	29	03.20	0.1					ePc	29	41.80	-1.3				eP	31	01.80	94kmX		
	E	14s	5.50um				SDN		79.03	4	ePc	29	43.00	-0.3				ePKKP	48	06.90			
			pP	29	27.00	92kmX	TUH		79.04	186	iPc	29	43.00	-0.3	KVN	89.83	333	iPc	30	37.50	-0.5		
			eS	38	19.00				1.0s	500.00nm		6.3mb						eP	31	03.00	95kmX		
CBN	72.21	307	iPd	29	04.80	-0.1	SVB		79.25	278	eP	29	44.62	-0.4				ePKKP	48	08.50			
			i																				

				ipPd 31 09.76 88kmX ePKKP 48 04.50 ePKP 30 50.20 1.8 1.0s 100.00nm 6.1mb		ROCH 117.82 250 iPKPd 36 25.10 -0.4 SAN 117.89 250 ePKP 36 24.50 -0.8 PCH 117.90 249 ePKPd 36 25.30 -0.1 TACH 118.19 250 iPKPd 36 25.00 -0.9 LCCH 118.50 250 ePKPd 36 25.30 -1.1 LNV 118.69 250 iPKPd 36 27.00 0.2 QIS 120.26 89 ePKP 36 29.80 -0.4 CTA 124.58 84 iPKPc 36 34.30 -0.2 0.8s 122.39nm i 37 02.00 iPP 38 48.00 i 41 44.00 e 45 13.00 iPS 48 21.00 iSSP 55 24.00 ADE 128.49 103 ePKP 36 45.00 -0.7 RMQ 130.47 88 ePKP 36 50.30 0.7 0.8s 60.00nm e 40 06.00 BFD 132.29 103 ePKP 36 52.10 -0.6 e 40 11.60 TOO 134.51 102 ePKP 36 46.00 -11.0X e 36 57.40 BWA 134.88 97 ePKP 36 57.90 0.1 e 37 26.00 ePP 39 46.10 iSKP 40 21.00 COO 135.14 90 ePKP 36 59.00 0.6 e 40 23.00 SPA 135.62 180 ePKP 36 51.00 -7.3X 0.9s 17.73nm Z 18s 3.41um 6.1msz i 39 38.20 CAN 135.76 97 ePKP 36 51.50 -8.0X e 36 59.70 e 37 27.20 ePP 39 43.20 iSKP 40 22.80 DZM 139.61 68 iPKPc 36 59.70 -7.3X iS 40 35.20 DRV 139.95 145 PKP 36 58.60 -7.5X SBA 144.29 167 PKP 37 11.30 -2.2X TPT 148.91 349 iPKP 37 28.80 6.1X 1.6s 1215.00nm ipP 37 55.00 PMO 148.96 350 iPKP 37 29.00 6.2X 1.6s 810.00nm ipP 37 55.00 RUV 149.08 349 iPKP 37 29.20 6.2X 1.6s 810.00nm ipP 37 55.30 VAH 149.16 349 iPKP 37 29.40 6.3X 1.6s 810.00nm ipP 37 55.30 MSZ 152.80 102 PKP 37 35.50 7.8X e 38 01.00 RKT 152.94 321 iPKP 37 37.40 8.9X S.D. = 1.0 on 572 of 624 obs.	VLI 2.87 318 ePn 30 07.60 -0.2 SMG 3.34 21 ePn 30 12.50 -1.9 YER 3.49 43 iPn 30 16.00 -0.7 ATH 3.61 339 ePb 30 20.00 1.8 KSL 3.80 65 ePn 30 22.10 1.0 IZM 4.10 22 ePn 30 24.60 -0.7 ELL 4.31 59 iP 30 29.80 1.4 NEO 4.99 341 ePn 30 38.50 0.6 KHL 5.03 41 eP 30 39.00 0.5 BCK 5.14 55 eP 30 40.60 0.5 ALT 5.88 39 eP 30 50.00 -0.5 LFK 6.78 82 ePn 31 04.00 0.7 KOT 7.22 128 ePn 31 10.50 1.2 eSn 32 33.00 OHR 7.42 333 ePn 31 08.20 -3.9 SKO 7.97 339 ePn 31 20.90 1.1 HRI 8.76 96 eP 31 30.00 -1.0 DSI 8.97 107 eP 31 31.00 -2.7 MBH 9.42 118 eP 31 41.00 1.0 KHC 16.92 333 P 33 22.80 3.3X LPG 17.86 313 eP 33 34.50 2.9X LPL 17.88 313 eP 33 34.30 2.6X CLL 18.93 336 eP 33 49.00 4.6X BSF 19.14 319 eP 33 47.20 0.1 CDF 19.25 321 eP 33 47.00 -1.3 HAU 19.49 319 eP 33 51.40 0.2 SMF 20.19 313 eP 33 57.20 -1.5 0.7s 3.30nm 3.8mb LBF 20.27 314 eP 33 57.90 -1.7 0.9s 4.90nm 3.8mb LOR 20.49 315 eP 34 00.70 -1.1 0.9s 5.75nm 3.9mb AVF 20.55 313 eP 34 01.80 -0.6 SSF 20.59 314 eP 34 01.20 -1.6 0.7s 3.30nm 3.8mb BGF 20.75 312 eP 34 05.20 0.7 0.7s 3.85nm 3.9mb MEM 21.30 325 P 34 10.30 0.3 LSF 21.44 310 eP 34 12.20 0.7 ENN 21.45 325 eP 34 13.00 1.5 DOU 21.67 322 Pc 34 12.80 -1.0 MFF 22.64 310 eP 34 25.50 2.0 LDF 23.47 314 eP 34 31.80 0.2 0.7s 4.40nm 4.1mb FLN 23.76 314 eP 34 34.70 0.3 LPF 23.78 312 eP 34 35.40 0.9 GRR 23.82 313 eP 34 35.40 0.5 EKA 28.57 325 Pc 35 19.30 0.2 1.0s 3.70nm 4.1mb MBC 67.19 351 eP 40 16.00 -1.0 YKA 78.02 342 eP 41 20.10 -1.0 0.6s 1.30nm 4.2mb FFC 80.19 332 eP 41 33.50 0.5 0.8s 8.00nm 4.7mb S.D. = 1.1 on 40 of 45 obs.
BKS	92.15	336				% MAY 31, 1990 01h 39m 58.87±0.69s 43.454 N ±5.8km 12.398 E ±7.6km DEPTH = 10.0km (geophysicist) CENTRAL ITALY (381)	
						ARV 0.40 83 P 40 06.50 -0.5 eSg 40 12.90 ASS 0.43 153 P 40 07.70 0.1 eSg 40 14.40 RSM 0.47 5 P 40 09.30 0.8 eSg 40 17.50 SFI 0.61 320 P 40 10.90 -0.3 eSg 40 20.70 PGD 0.65 311 P 40 11.60 -0.3 eSg 40 22.80 MNS 1.09 169 P 40 19.70 0.3 eSg 40 35.20 S.D. = 0.6 on 6 of 6 obs.	
BRK	92.16	336			1.1	MAY 31, 1990 02h 29m 21.07±0.87s 34.599 N ±7.9km 25.317 E ±4.4km DEPTH = 9.0 ± 4.4 km 4.0mb (9 obs.) CRETE (370) MD 4.2 (ATH), 4.3 (HLW).	
FRI	92.22	334			0.8 92kmX	VAM 1.22 312 ePb 29 43.80 -0.1	
ARN	92.44	335					
MHC	92.48	335					
PCC	92.54	336					
CLC	92.62	332					
GSC	92.82	331					
GCC	92.87	335					
LLA	92.94	335					
SAO	92.95	335					
ISA	93.04	332					
PRI	93.30	334					
PRS	93.33	335					
TPC	93.64	330					
SBB	93.72	331					
ABL	94.03	333					
GLA	94.15	328					
RVR	94.20	331					
MWC	94.22	331					
PAS	94.33	331					
CRZF	94.47	163					
SYP	94.57	333					
PLM	94.61	330					
BAR	95.15	330					
PSO	98.95	281					
SIV	99.81	257					
ZOBO	104.85	262					
LPB	105.01	262					
ARE	107.32	264					
MTN	109.09	89					
WARB	114.92	103					
RTLL	115.11	250					
WB5	116.14	92					
MAW	116.33	165					
MAW	116.33	165					
MDZ	116.35	249					
JACH	117.36	250					
FCH	117.57	250					
PEL	117.71	250					
PMG	117.72	74					

31d 03h

1.0s 11.30nm
KIC 152.24 169 PKP 06 08.50 13.7X
S.D. = 0.6 on 11 of 18 obs.

* MAY 31, 1990 03h 03m 12.21 ± 0.99s
6.159 S ± 13.5km 133.654 E ± 11.3km
DEPTH = 33.0km (normal)
4.8mb (3 obs.)

AROE ISLANDS REGION (204)

MTN 7.10 200 iPc 04 56.30 -0.1
eS 06 10.50
KNA 10.67 206 eP 05 43.00 -2.9X
eS 07 38.00
WB5 13.66 177 eP 06 21.80 -4.2X
eS 08 45.30
WRA 13.72 177 Pc 06 22.50 -4.3X
0.2s 3.70nm 4.9mb
PMG 13.76 104 eP 06 26.50 -0.8
QIS 15.43 159 eP 06 47.00 -2.3
eS 09 23.00
e 11 30.00
MBL 20.04 221 eP 07 45.00 -0.5
WARB 21.01 198 iPc 07 56.00 0.5
0.6s 6.00nm 4.2mb
KKM 21.21 305 ePc 07 57.00 -0.7
0.8s 69.80nm 5.1mb
RMO 24.82 146 iPc 08 44.30 11.4X
0.7s 36.00nm
BWA 31.27 156 eP 09 33.40 2.0
CAN 32.28 156 eP 09 41.20 1.0
DZM 35.40 120 iPc 10 07.70 0.3
LPB 148.83 137 PKP 22 56.00 0.5
ZOBO 149.00 136 PKP 23 02.00 6.0X
CCH 149.51 140 ePKP 23 04.00 7.6X
S.D. = 1.3 on 10 of 16 obs.

MAY 31, 1990 03h 45m 13.61 ± 0.58s
39.269 N ± 5.3km 27.766 E ± 6.2km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZM 0.95 205 iPg 45 30.60 -1.2
iSg 45 44.60
EDC 1.08 4 iPn 45 34.20 0.3
KCT 1.08 25 iPn 45 34.00 0.1
EZN 1.25 297 iPn 45 37.50 0.8
KHL 1.67 124 ePn 45 44.50 1.4
SMG 1.72 205 ePn 45 44.30 0.6
YLV 1.79 43 iPn 45 44.00 -0.8
ALT 1.83 96 ePn 45 45.30 -0.2
GBZT 1.99 40 eP 45 50.00 2.3
ISK 2.05 28 ePn 45 51.50 3.0X
HRT 2.13 43 ePn 45 48.00 -1.7
YER 2.17 169 ePn 45 56.00 5.7X
GPA 2.21 62 ePn 45 51.00 0.1
RDO 2.54 318 ePn 45 55.50 0.1
eSn 46 33.50
DMK 2.55 360 iPn 45 54.50 -1.2
BCK 2.86 128 ePn 45 59.70 -0.5
ELL 3.03 145 eP 46 08.00 5.4X
S.D. = 1.2 on 14 of 17 obs.

MAY 31, 1990 03h 49m 06.32 ± 0.77s
39.271 N ± 7.1km 27.802 E ± 7.5km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZM 0.97 206 iPg 49 23.60 -1.2
eSg 49 37.60
KCT 1.07 23 iPn 49 27.00 0.6
EDC 1.08 3 iPn 49 27.20 0.6
EZN 1.27 296 iPn 49 30.50 0.6
KHL 1.64 125 ePn 49 37.00 1.6
YLV 1.77 43 iPn 49 36.50 -0.8
ALT 1.81 96 ePn 49 38.30 0.5
HRT 2.11 42 ePn 49 40.00 -2.1
GPA 2.18 61 ePn 49 46.00 2.8X
RDO 2.55 318 ePn 49 48.50 0.1
eSn 50 27.30
S.D. = 1.3 on 9 of 10 obs.

% MAY 31, 1990 03h 58m 16.45 ± 0.76s
39.242 N ± 6.9km 27.734 E ± 8.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZM 0.92 204 iPg 58 33.60 -0.5
eSg 58 46.60
EDC 1.11 5 iPn 58 37.20 0.0
EZN 1.24 299 iPn 58 40.00 0.6
CIN 1.66 170 eP 58 45.00 -0.7
KHL 1.67 123 ePn 58 48.00 2.0
YLV 1.83 43 ePn 58 47.50 -0.7
ALT 1.86 95 ePn 58 48.00 -0.7
S.D. = 1.2 on 7 of 7 obs.

? MAY 31, 1990 04h 46m 35.57 ± 9.09s
31.233 S ± 51.4km 68.262 W ± 38.1km
DEPTH = 75.0 ± 52.5 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL 0.20 242 iPc 46 47.00 0.0
CFA 0.37 177 iPd 46 48.00 0.0
iS 47 00.00
ZON 0.47 229 iPd 46 48.80 0.0
eS 47 01.00
RTCB 0.52 241 iPd 46 49.50 0.1
S 47 01.50
RTCV 0.67 201 ePd 46 50.70 -0.1
RTBS 1.10 247 ePd 46 55.00 -0.1
S 47 13.80
MDZ 1.72 197 eP 47 04.20 0.1
i(S) 47 27.20
S.D. = 0.1 on 7 of 7 obs.

MAY 31, 1990 04h 48m 40.67 ± 0.80s
45.975 N ± 6.5km 26.858 E ± 8.2km
DEPTH = 85.7 ± 13.6 km
3.9mb (5 obs.)
ROMANIA (358)

MLR 0.80 233 iPc 49 00.00 1.8
PSN 2.48 157 iPd 49 22.00 2.2
PVL 2.97 202 iPd 49 28.00 1.6
JMB 3.51 183 iPd 49 34.00 -0.1
PGB 3.93 210 iPd 49 40.00 0.1
DIM 4.04 194 iP 49 42.00 0.6
PLD 4.17 203 iPd 49 42.00 -1.2
DMK 4.20 171 iPn 49 44.00 0.3
VTS 4.28 219 iP 49 44.00 -0.9
KDZ 4.45 194 iPd 49 48.00 0.9
RZN 4.56 201 iPd 49 48.00 -0.8
BEO 4.66 258 ePn 49 49.50 -0.4
MMB 4.94 208 iPc 49 55.00 1.1
CTT 4.96 166 ePn 49 52.00 -2.2X
ISK 5.16 161 ePn 49 56.40 -0.6
HRT 5.54 157 ePn 50 00.00 -2.4
SKO 5.59 226 ePn 50 02.50 -0.5
eSn 50 59.00
VAY 5.60 215 iPn 50 02.50 -0.5
EDC 5.67 172 iPn 50 04.10 0.0
YLV 5.71 160 iPn 50 03.90 -0.8
SRO 6.14 291 eP 50 04.60 -5.9X
e 50 38.50
OHR 6.56 224 ePn 50 16.00 -0.4
ALT 7.32 160 eP 50 26.80 -0.1
KHL 7.90 165 eP 50 34.00 -0.8
KSP 8.55 309 eP 50 21.00 -22.6X
KHC 9.52 294 eP 51 22.40 25.5X
NUR 14.62 356 eP 52 01.00 -3.1X
e 52 05.00
UPP 14.96 342 iP 52 07.70 -0.7
i 54 45.20
HFS 16.19 336 eP 52 23.60 -0.4
0.3s 3.50nm 4.0mb
SUF 16.78 359 eP 52 30.00 -1.4
NB2 17.65 334 P 52 41.00 -0.3
0.5s 2.10nm 3.6mb
EKA 21.06 307 Pd 53 21.70 2.5X
0.6s 1.80nm 3.6mb
MBC 56.14 351 eP 58 15.00 2.1
0.6s 2.00nm 4.3mb
CHG 64.35 89 eP 59 10.50 1.0
YKA 67.58 342 eP 59 30.20 0.7
0.7s 1.60nm 4.1mb
S.D. = 1.1 on 29 of 35 obs.

MAY 31, 1990 05h 10m 30.54 ± 0.58s
42.723 N ± 4.9km 12.880 E ± 10.5km
DEPTH = 13.4 ± 5.7 km
4.3mb (1 obs.)
CENTRAL ITALY (381)

MNS 0.37 204 Pd 10 38.00 -0.3
eSg 10 43.90
ASS 0.38 335 P 10 37.10 -1.5
eSg 10 43.20
AQU 0.53 134 Pc 10 39.80 -1.5
eSg 10 48.10
ARV 0.78 3 Pc 10 43.60 -1.8
eSg 10 56.30
AZI 0.84 151 P 10 47.00 0.6
eSg 10 58.40
RMP 0.92 188 P 10 47.50 -0.3
eSn 11 04.50
RDP 0.97 187 P 10 49.80 1.1
eSg 11 04.90
SDI 1.23 145 P 10 53.20 0.0
eSn 11 10.20
RSM 1.24 346 P 10 53.70 0.4
eSn 11 09.00
SFI 1.41 328 P 10 55.50 -0.3
eSn 11 14.50
PGD 1.43 324 P 10 55.80 -0.4
DUI 1.58 132 P 10 59.00 0.7
TRI 3.05 12 iP 12 02.70 43.5X
i 12 14.70
CEY 3.21 20 eP 11 29.00 7.4X
e(Sn) 12 03.50
VBY 3.26 31 eP 11 33.50 11.2X
e(Sn) 12 04.30
VOY 3.39 12 e(Pn) 11 24.70 0.6
eSn 12 23.10
SOTA 4.65 346 iPnd 11 44.70 2.6
iPg 12 06.90
eSn 12 39.50
i 12 45.00
KHC 6.43 4 eP 12 05.50 -1.6
e 13 19.90
BCAO 38.46 171 ePd 17 51.00 -2.7
0.9s 5.00nm 4.3mb
S.D. = 1.5 on 16 of 19 obs.

* MAY 31, 1990 05h 28m 51.86 ± 1.27s
21.989 S ± 12.4km 68.315 W ± 14.8km
DEPTH = 123.7 ± 11.0 km
4.4mb (2 obs.)

CHILE-BOLIVIA BORDER REGION (124)

ANT 2.58 228 iPc 29 33.50 0.1
i(S) 30 00.30
CCH 5.02 24 P 30 08.30 1.8
LPB 5.43 2 P 30 10.00 -2.2
ZOBO 5.69 2 P 30 17.00 1.1
ARE 6.26 331 eP 30 23.00 -0.5
eS 31 26.00
SIV 9.08 50 P 30 57.80 -3.6X
BAO 20.24 75 e(P) 33 18.50 -1.0
ALO 67.21 327 eP 39 34.00 -1.0
1.0s 4.25nm 4.3mb
PRI 76.10 319 e(P) 40 28.10 0.4
ORV 78.82 321 e(P) 40 43.60 1.1
WDC 80.09 321 e(P) 40 49.20 -0.1
YKA 91.83 340 eP 41 46.90 0.5
0.6s 2.00nm 4.5mb
S.D. = 1.4 on 11 of 12 obs.

? MAY 31, 1990 05h 29m 40.69 ± 7.07s
16.894 N ± 31.0km 61.553 W ± 30.5km
DEPTH = 121.0 ± 57.4 km
LEEWARD ISLANDS (92)

BPA 0.33 298 ePd 29 58.97 -0.1
S 30 09.70
SEG 0.49 175 eP 29 59.32 0.4
S 30 10.30
MGH 0.66 255 ePd 29 59.65 -0.4
S 30 10.80
SFG 0.72 152 eP 30 00.30 -0.2
S 30 13.40
PAG 0.87 188 eP 30 02.10 0.2
S 30 15.40
NEV 1.00 284 eP 30 03.39 0.3
S 30 18.20
BBL 1.37 177 eP 30 06.90 -0.1
S 30 24.10
S.D. = 0.4 on 7 of 7 obs.

MAY 31, 1990 06h 15m 28.21 ± 0.26s
44.495 N ± 1.8km 7.092 E ± 2.9km

DEPTH = 9.3 ± 3.0 km
NORTHERN ITALY (545)
ML 2.8 (GEN), 2.9 (LDG).

PZZ	0.01	34	P	15	30.10	0.0
			S	15	32.27	
DOI	0.11	85	Pc	15	31.60	0.5
			eSg	15	33.70	
STV	0.30	146	P	15	34.41	-0.1
			S	15	39.22	
ENR	0.36	139	P	15	35.50	-0.1
			S	15	40.57	
RRL	0.48	333	P	15	37.58	-0.4
			S	15	43.80	
TOUF	0.49	167	Pg	15	38.11	-0.2
			Sg	15	45.45	
AUTN	0.55	154	Pg	15	39.54	0.1
			Sg	15	47.51	
MVIF	0.60	176	Pg	15	40.10	-0.2
AURF	0.63	164	Pg	15	40.64	-0.2
BNI	0.63	332	Pc	15	40.30	-0.6
			eSg	15	48.60	
RSP	0.67	10	P	15	41.48	-0.1
			S	15	50.71	
SBF	0.68	159	Pg	15	41.30	-0.5
			Sg	15	50.60	
CALN	0.76	191	Pg	15	43.05	-0.1
IMI	0.82	135	P	15	44.25	0.1
			S	15	54.88	
FIN	0.85	109	P	15	44.86	0.2
			S	15	55.92	
CKI	0.85	94	P	15	45.00	0.3
			eSg	15	57.00	
LSD	0.96	3	P	15	46.71	-0.1
			S	15	58.69	
FRF	0.99	199	Pg	15	46.70	-0.3
			Sg	15	59.10	
LPG	1.03	347	Pg	15	48.10	0.1
			Sg	16	02.90	
PCP	1.04	87	P	15	48.66	0.7
			S	16	01.34	
LPL	1.05	346	Pg	15	48.30	0.0
			Sg	16	03.30	
LRG	1.17	207	Pg	15	50.90	0.9
			Sg	16	05.80	
LMR	1.23	200	Pn	15	51.10	-0.1
			Pg	15	51.90	
			Sg	16	07.00	
ORX	1.30	29	P	15	51.53	-0.9
			S	16	06.07	
PGF	2.39	144	Pn	16	07.80	-0.4
			Sn	16	36.80	
BGF	3.63	306	Pn	16	27.00	1.3

S.D. = 0.5 on 26 of 26 obs.

? MAY 31, 1990 07h 30m 12.47 ± 3.46s
1.240 S ± 16.6km 78.636 W ± 39.9km
DEPTH = 10.0km (geophysicist)
ECUADOR (107)

TUNG	0.26	133	iP	30	18.00	-0.1
			S	30	21.60	
VC1	0.64	22	P	30	25.30	-0.4
			S	30	34.20	
GGP	1.06	2	iP+	30	32.90	0.1
			eS	30	45.00	
OUR	1.07	6	eP	30	32.30	-0.5
			S	30	46.60	
CAYA	1.46	26	P	30	40.00	0.6
COTA	1.59	11	eP	30	41.60	0.4

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

MAY 31, 1990 07h 35m 27.01 ± 0.18s
17.260 N ± 3.4km 100.707 W ± 2.8km
DEPTH = 22.6km (geophysicist)
5.8mb (67 obs.) 5.9msz (26 obs.)
GUERRERO, MEXICO (59)
Ms 6.0 (BRK), 5.3 (PAS). Felt
(IV) at Mexico City. Also felt
at Acapulco. Depth from
broodbond displacement
seismograms.
FAULT PLANE SOLUTION: P-Waves
NP1: Strike=135 Dip=40 Slip= 90
NP2: 315 50 90
Principal Axes:
T P1g=85 Azm=225

P 5 45
Comment: The focal mechanism is
poorly controlled and
corresponds to reverse
faulting. The preferred fault
plane is not determined.
MOMENT TENSOR SOLUTION
Dep 18 No. of sta: 13
Moment Tensor; Scale 10**18 Nm
Mrr= 0.86 Mtt=-0.85
Mff=-0.01 Mrt= 0.13
Mrf= 0.55 Mtf= 0.61
Principal axes:
T Vol= 1.20 P1g=58 Azm=292
N -0.02 31 122
P -1.18 4 29
Best Double Couple: Mo=1.2*10**18
NP1: Strike= 90 Dip=49 Slip= 47
NP2: 325 57 128
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 31C
Centroid Location:
Origin Time 07:35:23.7 0.9
Lat 16.77N Lon 100.12W 0.05
Dep 26.0 FIX Half-duration 3.0
Moment Tensor; Scale 10**17 Nm
Mrr= 5.05 0.30 Mtt=-8.47 0.39
Mff= 3.42 0.44 Mrt= 2.78 1.08
Mrf=-0.80 0.71 Mtf= 1.68 0.35
Principal Axes:
T Vol= 5.70 P1g=74 Azm= 53
N 3.58 11 280
P -9.28 11 188
Best Double Couple: Mo=7.5*10**17
NP1: Strike=265 Dip=35 Slip= 71
NP2: 108 57 103

ACX	0.90	115	iP	35	44.91	1.1
			iS	35	56.58	
III	1.62	47	iP	35	57.55	2.9X
			iS	36	20.00	
CRX	2.35	24	iP	36	08.96	3.7X
MRX	2.47	349	iP	36	09.05	2.3
			iS	36	36.34	
UNM	2.52	35	(P)	36	10.00	2.3
			(S)	36	50.00	
IIJ	2.63	20	iP	36	11.53	2.1
IIIC	2.85	29	iP	36	11.13	-1.2
IIIT	2.88	52	iP	36	12.60	-0.1
SRP	3.23	59	(P)	36	11.50	-5.9X
			(S)	36	43.00	
OXX	3.81	92	iP	36	28.50	2.5
			(S)	37	08.00	
LVVM	4.73	58	eP	36	39.48	0.6
			iS	37	36.00	
AGX	4.83	342	(P)	36	46.00	5.8X
			(S)	37	43.95	
PSM	5.45	95	iP	36	50.25	1.2
			iS	37	52.00	
CR6	7.16	91	iP	37	12.50	-0.8
CR5	7.27	92	iP	37	16.20	1.4
CR3	7.43	92	iP	37	17.90	0.9
SCX	7.74	93	eP	37	23.00	1.8
			iS	38	48.70	
TPX	8.45	105	eP	37	31.33	0.2
			(S)	38	06.44	
MEO	17.55	6	iPd	39	33.30	1.4
UYO	17.74	17	iPd	39	32.40	-1.9
ALQ	18.34	345	iPc+	39	43.00	1.1
			iS	43	08.00	
ANMO	18.35	345	iPc	39	43.42	1.5
			eS	43	13.87	
TUL	19.08	12	iPc	39	49.40	-1.3
			iS	357	10nm	
LNO	19.09	12	iPc	39	49.40	-1.2
OLY	19.94	23	iP	39	58.60	-1.8
			eP	40	06.00	28kmx
GLA	20.23	324	iP+	40	04.00	0.6
IKP	20.69	321	eP	40	10.40	2.1
PWLA	20.95	30	P	40	08.40	-2.4
BAR	21.06	320	eP	40	12.00	0.0
HAY	21.17	324	eP	40	17.40	4.3X
CPE	21.46	320	eP	40	19.10	3.1X
PLM	21.63	321	iP+	40	18.00	0.0
TPC	21.69	324	iP+	40	19.00	0.6

UPA	22.18	109	iPc+	40	24.00	0.6
			1.2s 281.25nm			5.6mb
Z	20s		11.35um			5.3msz
			i	44	50.00	
PEC	22.19	321	ePc	40	24.00	0.7
			eP	40	32.00	29kmx
			eScP	47	51.50	
CCM	22.32	20	eS	40	23.74	-0.8
			eS	44	28.11	
RVR	22.38	321	iP+	40	26.00	0.8
FVM	22.53	22	P	40	25.40	-1.3
			1.0s 470.00nm			5.9mb
GOL	22.72	351	P	40	28.60	-0.3
GLD	22.75	351	ePc	40	28.80	-0.2
			1.8s 974.36nm			6.0mb
Z	20s		98.00um			6.2msz
			eP	40	36.00	26kmx
			e	41	40.70	
MWC	22.95	321	eP	40	31.00	-0.1
PAS	22.97	320	iPc	40	32.09	1.1
			eLg	44	12.00	
			ePcP	44	46.00	
			eS	44	51.52	
			eLR	44	57.00	
			ePcS	48	21.00	
GSC	22.99	325	iP+	40	32.00	0.7
SBB	23.13	322	iP+	40	33.00	0.3
PRM	23.47	41	P	40	35.00	-0.9
TKL	23.72	36	P	40	37.00	-1.2
CLC	23.81	324	eP	40	40.00	0.8
ABL	24.08	320	P	40	43.00	0.9
SGS	24.13	45	P	40	42.60	0.4
ISA	24.19	323	iP+	40	45.00	2.0
JSC	24.30	42	P	40	43.60	-0.3
SYN	24.34	319	eP	40	45.00	0.5
BLP	24.63	318	P	40	47.00	-0.1
BCH	24.84	320	P	40	50.00	0.8
TNP	25.30	328	P	40	54.80	1.1
			1.0s 135.00nm			5.5mb
PHAM	25.46	320	P	40	55.50	0.5
PRI	25.82	321	ePc	40	59.40	0.9
FRI	25.84	323	iPc	40	58.50	0.0
LLA	26.30	321	iPc	41	03.10	0.2
PRS	26.38	320	ePc	41	04.00	0.5
KVN	26.49	329	P	41	05.40	0.7
NAV	26.59	37	P	41	05.00	-0.5
SAO	26.70	321	eP	41	06.40	-0.1
BLA	26.73	38	P	41	06.00	-0.8
			1.0s 510.00nm			6.1mb
CMB	26.95	324	iPc	41	08.91	0.1
ARN	27.14	322	P	41	11.00	0.4
MHC	27.20	321	ePc	41	11.90	0.7
GCC	27.21	321	ePc	41	11.50	0.4
BKS	27.91	322	ePc	41	16.00	-1.5
			0.8s 94.00nm			5.6mb
Z	20s		36.00um			6.0msz
N	20s		25.00um			
E	20s		25.00um			
			eS	46	28.00	
			eLR	49	28.00	
BRK	27.92	322	ePc	41	18.00	0.4
			33.00um			5.9msz
			e	44	30.00	
			eS	46	20.00	
			eLR	49	50.00	
PSO	28.00	122	eP	41	21.00	2.1
ORV	28.64	325	ePc	41	25.00	1.0
BMG	28.81	107	iPd	41	24.50	-1.4
FUO	28.87	111	eP	41	29.00	2.3
BOG	28.96	113	iPc	41	31.00	3.4X
			iS	46	26.00	
CBN	29.21	40	iPd	41	29.00	-0.2
MIN	29.26	326	ePc	41	30.00	0.2
WDC	29.93	325	iPc	41	33.90	-1.7
DLA	30.27	29	P	41	36.40	-2.2
SDV	30.42	102	eP	41	41.00	0.6
LDN	30.59	29	P	41	38.30	-3.1X
SCP	30.63	35	iPc	41	40.23	-1.6
			iPd	41	47.68	26kmx
ELF	30.65	28	P	41	39.10	-2.8
HRV	30.78	345	ePc	41	42.00	-0.4
FHC	30.87	324	ePc	41	44.80	0.8
WVLY	31.43	32	P	41	46.80	-2.1
LVNJ	32.41	38	P	41	56.80	-0.6
GMTN	32.80	39	iP	41	59.70	-1.1
PNJ	32.84	39	iP	42	00.60	-0.5
TBR	32.94	38	P	42	01.20	-0.8

		e	59 04.00	OBN	99.34	23 iPc	49 08.00	-0.7		0.6s	16.00nm	e	56 05.40
		e	00 44.00	Z	22s	7.70um		6.2Msz	BLF	130.14	114 ePKP	54 38.00	0.3
		LR	28 02.00	CMP	100.68	36 ePdfff	49 14.00	-0.9	KSR	130.79	109 ePKP	54 37.00	-2.0
OSS	91.16	40 ePc	48 32.20	MAT	102.86	315 ePdfff	49 23.00	-1.8	QUE	131.35	14 ePKP	54 40.00	0.0
FUR	91.17	38 eP	48 32.00		1.0s	9.00nm		5.4mb			eS	58 08.60	
	Z	20s	3.00um		Z	20s	1.42um	5.5Msz	KMI	132.08	331 PKPc	54 40.50	-1.0
MDI	91.30	41 P	48 31.00			eS	01 14.00		Z	18s	4.90um		6.3Msz
BRG	91.40	35 iPc	48 32.70	MDJ	103.27	326 Pdfff	49 25.00	-1.4			PP	57 02.00	
	2.0s	85.00nm		N	14s	6.00um					PKS	58 08.00	
	Z	18s	5.00um			ePP	53 40.00		QIZ	133.07	319 PKP	54 43.00	-0.3
	N	18s	2.00um			SKS	00 02.00		N	17s	3.00um		
E	18s	3.50um				S	01 04.00		E	16s	2.90um		
		i	48 41.30	CN2	106.01	327 Pdfff	49 36.00	-2.6X			PP	57 04.00	
		eS	59 17.00	Z	18s	8.10um		6.3Msz	NDI	134.28	3 ePKP	54 44.00	-1.3
SQTA	91.57	39 iPc	48 33.50		N	17s	4.30um				ePP	57 16.00	
	1.4s	54.20nm		E	17s	1.10um					ePKS	58 16.00	
BOB	91.58	42 P	48 38.00			PP	53 58.00				ePPP	00 12.00	
OGA	91.62	40 iPc	48 34.50			SS	09 06.00				ePPS	09 18.00	
WET	91.64	37 iPc	48 34.20	SNY	108.38	327 Pdfff	49 51.00	1.8	NAI	135.31	74 iPKPd	54 50.00	2.0X
	Z	17s	4.00um		Z	17s	8.00um	6.4MszX			1.0s	15.00nm	
LKO	92.03	79 Pc	48 35.58		N	16s	4.00um		LOE	139.08	326 ePKP	54 54.00	-0.6
	1.1s	37.00nm		E	14s	2.10um			CHG	139.28	331 ePKP	54 50.30	-4.7X
KHC	92.05	37 iP	48 36.00			PP	54 17.00		CHTO	139.28	331 ePKP	54 50.10	-4.8X
	Z	17s	4.10um	DL2	111.51	326 ePKP	54 00.00	-1.4			1.2s	12.15nm	
	N	17s	1.50um		Z	16s	2.60um	5.9MszX	CRZF	143.09	148 ePKP	54 50.00	-10.9X
E	17s	1.30um			N	15s	2.70um				ePP	58 10.00	
		i	49 07.30		E	14s	2.70um				ePP	00 20.00	
		S	52 15.90	BJI	113.44	330 Pdfff	50 12.00	0.3			eSKS	05 30.00	
PRU	92.17	36 Pc	48 36.00		Z	15s	6.10um	6.3MszX			eSP	10 05.00	
	2.2s	97.10nm			N	16s	3.62um				eSSS	21 44.00	
	Z	18s	4.00um	HHC	114.88	333 ePKP	54 05.00	-2.3X	POO	144.03	9 iPKPd	54 59.00	-4.3X
N	18s	0.80um		BTO	115.74	334 ePKP	54 11.00	1.3	NNT	144.12	324 iPKPd	55 01.20	-2.3X
E	18s	2.90um			N	15s	4.00um		HYB	145.53	1 iPKPd	55 04.00	-1.9
		e	48 42.00		E	15s	2.50um				1.0s	390.00nm	
		PP	52 17.50	TIA	115.91	327 ePKP	54 10.00	0.0	TRT	146.14	282 ePKPd	55 03.70	-3.3X
		S	59 13.00		Z	12s	4.60um	6.3MszX			0.7s	67.30nm	
PGF	92.26	44 eP											

31d 12h

EZN 0.90 257 ePg 46 02.50 -0.2
 YLV 1.55 69 iPn 46 13.40 0.2
 IZM 1.64 186 ePn 46 14.70 0.3
 S.D. = 0.6 on 5 of 5 obs.

MAY 31, 1990 15h 29m 26.83±0.67s
 44.456 N ± 6.4km 20.868 E ± 7.0km
 DEPTH = 10.6 ± 5.0 km

YUGOSLAVIA (383)
 ML 3.0 (TTG).

BEO 0.47 321 iPg 29 36.80 0.4
 iSg 29 43.50
 BZS 1.28 24 ePc 29 51.00 0.6
 PLE 1.55 224 ePg 29 53.40 -1.1
 eSg 30 12.00
 GZR 1.65 55 ePd 30 02.00 6.1X
 IVA 1.73 204 ePg 29 58.00 0.8
 eSg 30 20.00
 PVY 1.97 200 ePn 30 03.00 2.4
 eSn 30 27.00
 NKY 2.13 220 ePn 30 03.80 0.9
 eSn 30 30.00
 BRY 2.29 228 ePn 30 05.00 -0.3
 eSn 30 32.00
 TTG 2.34 211 ePn 30 06.40 0.6
 eSn 30 34.50
 DRA 2.43 84 eP 30 22.00 14.9X
 SKO 2.52 170 ePn 30 12.00 3.6X
 i 30 15.50
 i 30 46.00

VTS 2.52 137 iP 30 08.00 -0.6
 PGB 3.06 127 iPd 30 17.00 0.9
 CMP 3.07 73 ePc 30 10.00 -6.3X
 OHR 3.34 181 iPn 30 19.00 -1.2
 VAY 3.37 158 ePn 30 28.70 8.2X
 PVL 3.46 109 eP 30 30.00 8.3X
 PLD 3.66 129 eP 30 37.00 12.5X
 PTJ 3.76 294 eP 30 24.80 -1.3
 RZN 3.95 133 eP 30 28.00 -0.9
 KDZ 4.36 129 eP 30 49.00 14.5X
 S.D. = 1.2 on 13 of 21 obs.

* MAY 31, 1990 15h 54m 26.79±1.86s
 46.258 N ± 8.4km 16.041 E ± 16.0km
 DEPTH = 10.0km (geophysicist)

YUGOSLAVIA (383)
 MD 2.5 (LJU).

PTJ 0.36 189 ePg 54 34.20 -0.1
 eSg 54 39.60
 LJU 1.07 259 ePg 54 46.40 -0.5
 eSg 55 02.00
 CEY 1.24 246 ePg 54 50.40 0.5
 eSg 55 07.00
 VOY 1.51 262 ePn 54 54.00 0.0
 eSn 55 17.50
 KHC 3.32 331 eP 55 19.90 0.0
 e 56 04.80
 S.D. = 0.5 on 5 of 5 obs.

& MAY 31, 1990 17h 34m 41.46s
 63.349 N 151.342 W
 DEPTH = 8.4km
 CENTRAL ALASKA (1)
 <AGS-P>.

KTH 0.28 42 iP 34 46.95 -0.3
 eS 34 51.83
 CUT 1.07 152 iP 35 01.69 0.0
 RND 1.12 86 eP 35 02.11 -0.6
 eS 35 17.52
 MCK 1.14 69 eP 35 02.59 -0.5
 SKT 1.38 184 iP 35 06.76 -0.1
 WRH 1.83 50 eP 35 14.24 0.9
 NCG 1.99 191 eP 35 15.19 -0.6
 FBA 2.20 43 eP 35 21.81 3.0
 HDA 2.21 59 eP 35 21.71 2.8
 9 obs. associated

& MAY 31, 1990 17h 39m 19.60s
 34.430 N 116.970 W
 DEPTH = 4.0km
 SOUTHERN CALIFORNIA (43)
 <PAS-P>. ML 3.4 (PAS).

RVR 0.55 218 iPc 39 30.10 -0.5

PEC 0.56 196 iPc 39 30.40 -0.4
 SBB 0.75 290 iPd 39 33.80 -0.8
 PCF 0.78 241 iP 39 34.33 -0.8
 S 39 45.41
 PEM 0.79 251 iPc 39 34.54 -0.8
 TPC 0.83 113 iPd 39 35.30 -0.8
 GSC 0.88 9 iPc 39 36.40 -0.7
 VPD 0.90 227 iP 39 36.69 -0.7
 S 39 49.46
 MWC 0.92 257 iPc 39 37.10 -0.8
 PAS 1.03 255 iPc 39 38.90 -0.8
 PLM 1.08 175 iPd 39 39.70 -0.9
 SCY 1.27 256 eP 39 42.86 -0.9
 S 40 00.33
 PVPS 1.35 242 eP 39 44.28 -0.8
 S 40 02.46
 CLC 1.48 340 iPd 39 46.00 -1.0
 CIS 1.57 230 eP 39 47.75 -0.6
 ABL 1.90 283 eP 39 51.60 -1.7
 GLA 2.25 127 eP 39 56.40 -1.9
 BCH 2.67 287 eP 40 02.90 -1.4
 TNP 3.65 357 e(P) 40 20.00 1.7
 CMB 4.53 323 eP 40 30.00 -0.6
 KVN 4.70 349 eP 40 33.00 -0.2
 MSU 5.62 42 eP 40 45.20 -1.0
 22 obs. associated

& MAY 31, 1990 22h 00m 26.11s
 60.395 N 152.391 W
 DEPTH = 100.3km
 SOUTHERN ALASKA (2)
 <AGS-P>.

RED 0.19 277 iP 00 39.83 0.8
 >NNL 0.65 122 iP 00 43.97 0.6
 NKA 0.67 58 iP 00 44.74 1.3
 SPU 0.81 12 iP 00 43.91 -1.0
 eS 00 58.27
 CRP 0.88 7 iP 00 44.92 -0.9
 eS 01 00.68
 CGLM 0.94 11 iP 00 45.27 -1.0
 eS 01 01.26
 NCG 1.02 6 iP 00 46.11 -1.1
 SLKM 1.08 83 iP 00 47.07 -0.7
 AUL 1.14 208 eP 00 47.65 -0.8
 AUE 1.15 206 iP 00 47.52 -1.0
 SUA 1.34 36 iP 00 50.33 -0.6
 eS 01 09.87
 SEW 1.50 100 eP 00 51.25 -1.4
 eS 01 11.84
 CDD 1.60 204 eP 00 52.71 -1.4
 PMS 1.63 57 iP 00 53.67 -0.8
 eS 01 15.12
 SKT 1.64 14 iP 00 53.10 -1.5
 PWA 1.76 43 eP 00 55.65 -0.3
 GHO 2.18 49 iP 00 59.84 -1.8
 CUT 2.26 26 eP 01 01.11 -1.5
 SML 2.43 53 iP 01 02.79 -2.1
 GLI 2.65 77 eP 01 06.05 -1.9
 VZW 2.94 74 eP 01 08.73 -3.2
 KLU 3.34 68 eP 01 14.67 -2.7
 22 obs. associated

? MAY 31, 1990 22h 04m 24.07±2.36s
 24.182 N ± 28.1km 125.913 E ± 20.2km
 DEPTH = 33.0km (normol)
 3.9mb (1 obs.)
 SOUTHWESTERN RYUKYU ISLANDS (246)

TWC 3.73 277 eP 05 20.60 -0.1
 eS 06 05.30
 TWD 3.95 269 eP 05 23.80 0.0
 TWZ 4.05 284 eP 05 25.40 0.1
 TWF1 4.31 260 ePc 05 29.00 0.0
 TWG 4.65 254 iPc 05 33.80 0.0
 NB2 80.21 333 P 16 32.50 0.0
 0.7s 1.00nm 3.9mb
 S.D. = 0.1 on 6 of 6 obs.

* MAY 31, 1990 23h 02m 54.64±0.63s
 33.517 S ± 11.5km 178.254 W ± 11.7km
 DEPTH = 33.0km (normol)
 5.0mb (4 obs.)
 SOUTH OF KERMADEC ISLANDS (179)

PUZ 5.36 211 eP 04 13.50 -0.9
 eS 05 18.60

NOZ 5.91 209 P 04 23.20 1.0
 DZM 17.68 306 iPc 07 00.60 0.6
 RMO 29.33 275 iPc 08 58.00 1.4
 1.0s 47.00nm 5.2mb
 CTA 34.21 284 iPc 09 39.00 -0.4
 0.8s 20.15nm 5.1mb
 WRA 44.09 275 Pc 11 00.60 -0.9
 0.3s 5.30nm 4.8mb
 WB5 44.09 276 eP 11 00.20 -1.4
 WARB 47.88 263 eP 11 42.50 10.9X
 FRI 88.87 43 e(P) 15 47.50 0.9
 CMB 89.22 42 eP 15 49.20 0.8
 WDC 89.87 39 e(P) 15 48.90 -2.4
 TNP 91.05 44 eP 15 58.00 0.9
 0.9s 2.93nm 4.6mb
 KVN 91.21 42 eP 15 57.00 -0.8
 AKU 145.65 14 ePKP 22 30.00 -0.2
 0.9s 13.45nm
 SUF 146.96 340 iPKP 22 33.60 1.1
 0.5s 11.80nm
 NUR 149.13 338 iPKP 22 39.00 3.0X
 1.0s 34.00nm
 UPP 151.64 343 iPKP 22 52.30 12.6X
 DSI 151.65 275 ePKP 22 49.00 8.3X
 PRNI 151.67 273 ePKP 22 48.00 7.2X
 HRI 151.69 279 e(PKP) 22 50.00 9.1X
 NB2 151.78 350 PKP 22 45.80 5.8X
 1.0s 13.00nm
 HFS 152.24 347 ePKP 22 45.70 5.1X
 0.6s 4.20nm
 S.D. = 1.2 on 14 of 22 obs.

& MAY 31, 1990 23h 07m 36.55s
 60.969 N 146.619 W
 DEPTH = 18.9km
 SOUTHERN ALASKA (2)
 <AGS-P>.

KLU 0.63 32 iP 07 47.95 -0.8
 iS 07 56.63
 NCA 1.03 355 eP 07 54.15 -1.5
 TOA 1.16 10 eP 07 56.00 -1.8
 SML 1.18 316 iP 07 56.06 -2.0
 iS 08 11.85
 PLRM 1.36 298 eP 07 59.58 -1.0
 eS 08 15.28
 GHO 1.37 307 eP 07 58.99 -1.8
 PMS 1.46 282 eP 08 00.44 -1.5
 eS 08 19.67
 SEW 1.65 239 iP 08 02.64 -2.0
 eS 08 22.70
 PWA 1.72 295 eP 08 04.68 -1.0
 SLKM 1.83 257 eP 08 05.66 -1.7
 eS 08 28.71
 TGL 1.87 95 eP 08 07.72 -0.3
 eS 08 32.36
 SUA 2.06 286 eP 08 09.30 -1.5
 BALM 2.08 86 eP 08 10.20 -0.9
 eS 08 37.74
 CUT 2.26 311 eP 08 12.04 -1.5
 >NNL 2.49 250 eP 08 15.44 -1.4
 SKT 2.57 295 eP 08 16.05 -1.9
 SPU 2.65 277 eP 08 17.27 -1.9
 NCG 2.72 282 eP 08 18.28 -1.9
 RDT 2.87 265 eP 08 19.74 -2.5
 RED 3.08 262 eP 08 22.47 -2.7
 20 obs. associated

[illegible]

[illegible]

[illegible]

DATE	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	
RUV	X	XX			XXX	X	X	XX	X	X	XX	X	X	X	X	XXXX				X					XX		X	X	XXX	X		
RUWJ	X		X		X						X	X	X		X				X						XX					XXX	X	
RVR	XXX	X	X			X	X	X	XXX	X	XXX		XXX	XXX	X	XXXX			XX	XX	X		XX	XX	XX	X	X	XX	XXX	XXXX	XXX	
RYD	X	XXX	X	X	X		X			X	XXX		X	XXX	X	XX			XX	XX			XXX	XX		X	X	X	X	XX	X	
RZN	XX	X	XXX	XXXXXX		XX	X	X			XXXXXX		XXX		XXX			X	XX	X			XXX	XX		XXX	X	XXX	XXXXXXXX	X		
SAL	XX	X	XXX	X	XX	XX	XX	X	X		X	X	X	X	XXXX	X		X	XX	X		X	XX	XX	X	X	X	X	X	XXX	XX	
SALJ	X	X	X	X	X				X		XXXX	X	X	XX	XXX	X	XX	X	XX				X	X	X	X	XX	XXX	X		X	
SAN	XXX	X	X	X		X		XXXX	X		XXX	X	X	XX	XXXX	XXX		X	XX	XX		X	X	X	X	X	XXX	X		X	XXXX	X
SAO	XX				X	X	XX	X	XXX		X	X	X	X	XXX	XXXX	X	XX	X	XXXX	X		XX	X	XXX	X	X		X	X	XX	XX
SAP	X										X	X			XX	X			XX						X			X				
SAX	X	X	X	X	XXX		X	X	XX		X	XX	X	XX	XX	X	XXXX	X	X	X	X		XX	XX	XX	XX	X	X	XXXX	XXXX	XXXX	XXXX
SBA	X	X	X			X	XXXX	X	XXXX	X	XX		XX	XXXX	XXX	X		X	X	X	XX	X	XX	X	XX	X	X	X	XXXX	XXXX	XXXX	XXXX
SBB	XXX	X	X		X	X	XXX	XXX	X	X	XXX		XXX	XXX	X	XXXX		XX	XX	XX	XXXX	XXX	XX	X	X	XX	XXX		XXXX	XXXX	XXXX	XXXX
SBF	XXXXX	X	X		XXXX	XXXX	XX	XX	X	XX	XX	X	XXXX	XXXX	XXX	XXX	XX	XX	XXXX	XXXX	XXX	XXX	XXX	XXXX	XX	XXX	X	X	XXXX	XXXX	XXXX	XXXX
SCE					X			X						X	X	X						X				X		X		X		
SCH	XXXX	X	X		X	X	XX	X	X	X	X	XX	XXX		XXXXXXXX	XXXXXXXX	X		X	XX	X		X	XX	XX	XX	X	XX		XXXX	XX	
SCP	X						X					X	X		X	X										X				XX	XX	
SCX	XXXXX				X	X	X	X	XX	X	X	X				X	X		X	X		X	X	X	X	XX	X			XX	XX	
SDA	X	X	XX	X	XX	X	X																								X	X
SDG	X									X	X	X	X					X			X	X				X					XX	
SDI	XXX	XXXXXX	XXX	XXXXXXXXXXXX	XX	XX	XX	X	XXX		XX	XX	XXX	XXXXXX	X	X	XX	X	XXX	XX	XX	XXXX	XXXX	XXXX	XXXX	XXXX	XX	X	X	XXXXXXXX	XXXX	XXXX
SDN	XXX	X	X			X	X	X		X	X		XXX	XX	X			XX	XX					XXX	XXX	XX	X		X	X	X	XX
SDV	X	X			X	X	XX	X		X	X	X		X	X	X								XX		X				XX	X</	

DATE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
VC1	X	X	X	X	X	X	X	XX			XX	X	X	XX	X	X	X	X		X	X		X	X	X	X	X	X	X	X	X	
VDL	X	X	X		XX	X	X	XX			XX	X		X	X	X	X	X		X			X	X	X	XX	X	X	XXXX	XXX		
VGB	X	X			X		X			X	X	X		X	X	XX	X	X				X		X	X	X	X	X				
VITF	X	X	X		X		X	X	X		X			X	X	X	XX			X	XX	X		X	X		XX		X	X	XXX	X
VKA	XX		XX	X	XX	X	X	X	XXX	XX	X	X		XX	XX	X	XXXX			X	XX			X	X		XX		X	X	XXX	XXX
VLI	XXX	XX	XX	X	XXX	X	XX	XXXXXXXX	XXXX	XXXXXXXXXXXX	XX	XX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX		X	XXXXXXXXXX	XX	XXXX	XXXX	XXXX	XXXX	XXXX	XX	
VLS										XX	XXXX	XX	X	X	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX		X	XXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	X
VLZ	XXX	X	X		X	XX	X	X	XX	XX	X	X	X	X	X	X	X	X		X			X	X	X	XX					XX	X
VOY	XX	XXXXX	X	XXXXXXXX		XXX	X	XXXXXXXX	XX	XXX	XX		XXXX	XXXX	XXXX				X	XX	X		XXXX	XXX	XXXX	XX	XX	X	X	XXXXXXXX		
VRI	XXX	X	XXX	X	X	XXX	X	X	XX	X	XXXX	XX	X	XXXX	XXXX		XXXX	XX	X	X	X	X	X	XXXXXXXXXX	XX	XXXXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
VTS	X		XX	X	XXXXXX		XX	X	X		XXXXXX				XXX		XXX		X	XX	X	XX		XX	XXXX	XX	X	XXX	XXXX	X	X	
VUN					XX			X	X	X		X		X			X			X			X	X				X				
VZW	XXX	X	X		X	XX	X	X	XX	XXX	X	X	X	X	X	X	XX	X		X	X		X	X	X	XX			X	XX	X	X
WAJH	X		XX		X						XX	X			X		X	XX		XX			XXX	X	X						X	X
WARB	X	XXXXXX			XX		XXXX	XX	XXXX	X		XXX	XXX	X	XXX	XX	X	XXXXXXXXXX		X	X	X	X	XXX	X	XX	X	XX	XX	XXX	XXXXXX	X
WATA															X	X				XX			X		X						X	XX
WB5	XX	XX																														
WDC	XXX	X	X		XXXX	XXX	X	XXXX	XX	XXX	X	XXX	XXX	XXX	XXXX	XXXX			XX	XX		X	XX	X	XX	X	X	XX	XXX	XXXX	XX	X
WDW	X	X			X			X	XX		X	XX										X		XX	XXX	X		X	X		X	
WEGH		X					X	X			X	XX		X	X		X		X	XX			X		XX	X		X	X		XXX	X
WEL			X			X	X			X	XX		X	X		X	X			X		X		X	XX			X			XX	
WET	XX	XX	X	X	X	X		X	XX	X	XX	XXX		XXX	X	XXXX	XX		XX		X		XX	XX	XX		X	XX	XX	XXXX	XX</	

The following stations each reported less than 10 readings:

[illegible]