UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

EARTHQUAKE DATA REPORT

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by

U.S. Geological Survey

NATIONAL EARTHQUAKE INFORMATION CENTER[1]

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U. S. DEPARTMENT OF THE INTERIOR

Geological Survey

EARTHQUAKE DATA REPORT

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

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

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

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

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

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

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

Hypocenter Symbols

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

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

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

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

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

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

References

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

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

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

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

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

FEB 01, 1990 00h 11m 08.27± 1.15s
36.282 N ± 7.6km 70.660 E ± 7.1km
DEPTH = 137.2 ± 13.1 km
4.5mb (10 obs.)
HINDU KUSH REGION (718)

KSH	5.27	51	Pd	12	28.50	2.4
			S	13	27.50	
QUE	6.83	208	eP	12	48.50	1.2
			eS	14	02.60	
MAIO	9.02	273	iPd	13	15.80	-0.9
	0.6s	6.73nm			4.5mb	
			eS	14	53.00	
NDI	9.38	142	iPc	13	21.30	-0.1
	0.5s	95.07nm			5.7mb X	
			iS	14	57.30	
GKN	14.42	121	P	14	25.00	-2.2
DMN	14.99	121	P	14	32.60	-1.9
KKN	15.00	120	P	14	32.60	-2.0
WMQ	15.05	55	eP	14	34.80	-0.2
PKI	15.23	121	P	14	35.60	-1.9
GUN	15.35	119	P	14	37.20	-1.9
BOM	17.42	173	eP	15	06.50	2.2
			eS	18	35.50	
POO	17.90	170	eP	15	11.50	1.4
TAB	19.46	283	eP	15	32.00	5.3X
HYB	20.05	158	iPc	15	34.00	1.3
	0.8s	53.80nm			5.0mb	
			eS	19	07.00	
GTA	23.19	73	eP	16	06.00	2.4
GBA	23.39	163	Pc	16	06.50	1.0
	0.8s	18.90nm			4.6mb	
KOD	26.66	165	eP	16	37.80	1.4
CHTO	30.36	117	eP	17	09.70	0.5
	0.5s	1.66nm			4.0mb	
XAN	31.23	83	P	17	17.50	0.8
TIY	33.20	75	eP	17	34.40	0.6
MLR	34.65	299	ePc	17	50.00	3.7X
NUR	37.84	325	eP	18	12.50	-0.2
SUF	37.96	328	eP	18	14.10	0.4
	0.5s	3.50nm			4.4mb	
SOD	39.82	335	eP	18	23.00	-6.0X
KEV	40.90	338	eP	18	23.00	-14.8X
HFS	43.07	322	eP	18	55.30	-0.4
	0.3s	5.20nm			4.7mb	
NB2	44.39	323	P	19	05.80	-0.6
	0.5s	3.10nm			4.2mb	
BCAO	57.33	249	iPc	20	43.70	-0.5
	0.6s	6.00nm			4.7mb	
			ic	21	25.10	
MBC	67.57	3	eP	21	51.50	0.3
	0.4s	2.00nm			4.3mb	
INK	74.16	9	eP	22	31.00	0.2
KIC	74.50	267	P	22	32.00	-1.6
LIC	74.81	267	P	22	33.70	-1.7
WB5	82.09	122	eP	23	13.70	-1.0
WRA	82.11	122	P	23	16.00	1.2
	0.8s	1.90nm			3.9mb	
S.D. = 1.5 on 30 of 34 obs.						

FEB 01, 1990 01h 25m 32.61± 1.12s
9.857 S ± 6.9km 160.136 E ±10.0km
DEPTH = 51.7 ± 9.6 km
4.9mb (12 obs.)
SOLOMON ISLANDS (193)
Felt at Honiara.

HNR	0.46	336	iPc	25	43.60	0.0
			e(S)	26	12.00	
CTA	16.82	231	iPc	29	26.30	0.1
	0.9s	121.85nm			5.0mb	
BRS	18.77	201	iPc	29	49.50	-0.8
RMQ	19.74	212	iPd	30	01.70	0.7
	1.0s	206.00nm			5.4mb	
COO	22.00	199	iPc	30	24.20	0.1
OLP	22.43	220	eP	30	28.60	0.3
QIS	22.46	239	iPd	30	29.90	1.2
	0.2s	25.00nm			5.3mb	
CMS	25.29	210	iPc	30	55.90	0.0
BWA	26.71	202	eP	31	09.60	0.6
WB5	26.79	245	iP	31	09.80	-0.1
WRA	26.83	245	Pd	31	09.70	-0.6
	1.1s	37.80nm			4.9mb	
CAN	27.31	200	eP	31	14.20	-0.3
ASPA	28.56	238	ePc	31	24.40	-1.5
	0.6s	7.00nm			4.5mb	
	Z 22s	0.25um			3.8MszX	
			LR	41	34.70	
KNA	31.12	256	eP	31	49.00	0.3
WARB	35.60	238	iPc	32	27.50	0.0
	0.4s	4.00nm			4.7mb	
CN2	62.00	332	iPd	35	49.70	-0.1
XAN	65.30	315	eP	36	14.50	2.8
CHTO	66.72	295	e(P)	36	21.10	0.2
	1.0s	2.50nm			4.2mb	
CD2	67.54	309	eP	36	23.30	-2.7
TTA	79.99	19	P	37	38.20	0.5
	1.1s	15.63nm			4.9mb	
PMR	81.44	22	P	37	45.00	-0.2
	1.2s	22.73nm			5.0mb	
IMA	82.93	17	P	37	53.00	-0.1
	0.8s	3.88nm			4.5mb	
FBA	84.00	20	P	37	57.40	-1.0
	0.7s	13.08nm			5.1mb	
WDC	86.88	48	e(P)	38	13.40	0.2
LBFM	87.55	47	P	38	17.00	0.3
CMB	87.84	51	e(P)	38	17.70	-0.2
KVN	89.82	50	P	38	27.40	-0.1
TNP	90.28	52	P	38	29.80	0.1
	0.8s	5.88nm			5.0mb	
DAU	95.25	50	P	38	48.50	-4.2X
8W06	96.83	48	P	39	00.00	0.3
8CAO	141.54	265	ePKPd	45	10.00	9.0X
	0.2s	4.00nm				
S.D. = 1.0 on 29 of 31 obs.						

? FEB 01, 1990 02h 12m 15.82±11.19s
16.597 N ±91.8km 100.228 W ±31.7km
DEPTH = 33.0km (normal)
NEAR COAST OF GUERRERO, MEXICO (58)

ACX	0.45	53	iP	12	24.90	-0.7
			iS	12	32.00	
III	1.91	22	eP	12	43.50	-3.4X
			iS	13	05.00	
PPM	2.89	32	(P)	13	01.00	-0.1
IIT	3.03	37	(P)	13	04.00	1.2
IIJ	3.15	8	eP	13	04.00	-0.8
			(S)	13	40.00	
MRX	3.22	344	eP	13	05.50	0.2
			(S)	13	40.00	
S.D. = 1.2 on 5 of 6 obs.						

? FEB 01, 1990 03h 27m 32.62± 0.92s
35.653 N ±12.3km 26.659 E ± 7.0km
DEPTH = 10.0km (geophysicist)
CRETE (370)
MD 3.4 (ATH).

KAP	0.43	103	eP	27	41.70	0.3
			eS	27	50.00	
NPS	0.94	246	eP	27	50.40	-0.1
			eS	28	18.30	
APE	1.68	328	eP	28	02.50	0.3
ELL	2.85	66	ePn	28	13.00	-6.1X
BCK	3.64	59	ePn	28	29.90	-0.4
S.D. = 0.6 on 4 of 5 obs.						

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* FEB 01, 1990 03h 33m 29.66± 1.05s
24.296 N ±14.2km 123.775 E ±11.6km
DEPTH = 10.0km (geophysicist)
4.6mb (3 obs.)
SOUTHWESTERN RYUKYU ISLANDS (246)

TWC	1.78	280	ePc	33	59.50	-1.2
TWD	2.00	264	ePc	34	04.70	0.8
TWZ	2.15	292	iPd	34	05.80	-0.3
ANP	2.24	294	eP	35	05.50	58.1X
TWQ	2.68	270	eP	34	15.30	1.6
SSE	7.15	342	eP	35	18.00	1.2
			eLg	37	33.50	
GUN	34.13	284	P	40	16.40	-1.0
GKN	35.22	285	P	40	25.00	-1.5
ASPA	48.68	168	eP	42	16.60	0.5
	0.4s	8.00nm			5.1mb	
INK	72.23	22	eP	44	56.00	-0.5
SLL	78.61	332	eP	45	31.50	-1.4
	0.4s	2.00nm			4.5mb	
NB2	79.22	333	P	45	38.00	1.7
	0.7s	1.70nm			4.2mb	
S.D. = 1.4 on 11 of 12 obs.						

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* FEB 01, 1990 03h 38m 48.02± 1.42s
1.580 S ± 9.7km 123.446 E ±12.5km
DEPTH = 43.8 ± 19.9 km
4.4mb (3 obs.)
SULAWESI (268)

MNI	3.31	25	ePd	39	38.70	0.0
MKS	5.37	228	iPc	40	07.70	0.0
			i(S)	41	09.70	
WB5	21.09	150	eP	43	30.80	-0.4
WRA	21.13	150	Pc	43	31.10	-0.5
	0.7s	13.20nm			4.4mb	
ASPA	24.18	156	iPc	44	02.50	0.9
	0.5s	16.00nm			4.8mb	
CHG	31.48	311	eP	45	18.10	10.0X
CHTO	31.48	311	eP	45	08.00	-0.1
	1.0s	2.25nm			3.9mb	
			pP	45	17.90	35kmX
S.D. = 0.8 on 6 of 7 obs.						

FEB 01, 1990 05h 06m 23.20± 1.46s
2.667 S ± 5.5km 134.959 E ± 7.0km
DEPTH = 45.8 ± 13.8 km
5.1mb (22 obs.) 4.4Msz (2 obs.)
WEST IRIAN REGION (196)

SLKI	6.42	214	iPc	07	59.10	1.5
			IS	09	10.00	
AAI	6.83	261	eP	08	05.90	2.5
			eS	09	22.00	
MTN	10.80	200	iPc	08	57.00	-1.2
			eS	10	54.00	
MNI	10.91	292	eP	09	00.50	0.8
PMG	13.85	119	eP	09	37.00	-1.9
KNA	14.36	205	eP	09	43.00	-2.6
	0.5s	189.00nm			5.9mb	
			eS	12	16.00	
WB5	17.12	182	eP	10	17.00	-3.9X
WRA	17.18	182	Pd	10	17.10	-4.6X
	0.6s	22.30nm			4.5mb	
TSM	18.21	292	ePc	10	38.20	3.8X
QIS	18.35	166	iPc	10	34.90	-1.3
			e	13	52.00	
CTA	20.53	148	iPc	11	00.50	0.1
	1.1s	225.32nm			5.4mb	
			iS	14	54.00	
KKM	20.62	295	ePd	11	01.50	0.0
	0.8s	49.00nm			4.9mb	
ASPA	20.90	183	iPd	11	03.90	-0.4
	0.6s	144.00nm			5.5mb	
	Z 18s	1.81um			4.5Msz	
			i	11	11.80	
			iS	14	47.00	
			LR	19	28.90	
TRT	22.78	256	ePc	11	26.50	3.5X
BAG	23.69	324	eP	11	32.00	0.0
WARB	24.71	198	eP	11	43.00	1.3
	0.6s	32.00nm			5.0mb	
OLP	25.39	160	eP	11	48.00	-0.1
			e	12	01.00	
			e	12	19.00	
			e	16	22.00	
RMQ	27.14	152	eP	12	06.00	1.9
			e	19	38.00	
NANU	27.32	222	eP	12	06.00	0.1
	0.5s	12.00nm			4.8mb	
FORR	28.77	192	iPc	12	18.20	-0.6
	0.3s	13.00nm			5.1mb	
BRS	29.92	147	iPc	12	29.20	0.0
	0.9s	11.00nm			4.6mb	
			i	12	55.00	
MRWA	31.97	212	iPc	12	47.30	0.0
	0.6s	10.00nm			4.8mb	
ADE	32.33	174	eP	12	51.00	0.7
BWA	34.00	160	eP	13	06.20	1.4
IPM	34.66	282	ePd	13	12.10	1.3
CAN	35.01	160	eP	13	14.50	1.0
BFD	35.04	169	eP	13	13.00	-8.7
SSE	36.05	340	P	13	28.00	5.8X
	Z 20s	0.50um			4.3Msz	
	E 16s	1.10um				
NJ2	37.76	337	Pd	13	37.00	0.4
NNT	38.13	294	eP	13	39.40	-0.6
LOE	38.37	303	eP	13	42.00	0.0
WHN	38.44	331	Pc	13	43.50	1.2
NST	38.97	299	eP	13	46.80	-0.2
GYA	39.82	318	P	13	54.00	-0.1
BDT	40.62	300	eP	14	00.00	-0.6

01d 05h

CHG	41.36	303	ePc	14	06.30	-0.4	
	0.9s	10.92nm			4.6mb		
CHTO	41.36	303	iPc	14	06.30	-0.4	
	0.8s	9.15nm			4.6mb		
KMI	41.71	313	Pc	14	10.00	0.3	
XAN	43.98	328	Pc	14	27.30	-0.6	
CD2	44.70	321	eP	14	32.80	-1.0	
TIY	45.28	335	eP	14	36.50	-1.8	
E	16s	0.60um					
SNY	45.48	348	eP	14	43.40	3.7X	
BJI	45.86	340	eP	14	42.50	-0.2	
	1.5s	26.00nm			4.9mb		
CN2	47.04	351	eP	14	50.00	-2.0	
MDJ	47.32	355	eP	14	55.50	1.3	
LZH	48.27	326	Pc	15	02.00	0.0	
	1.0s	82.00nm			5.7mb		
HHC	48.29	336	eP	15	01.80	-0.2	
GTA	52.87	326	P	15	37.00	0.1	
GUN	56.11	306	P	16	00.60	-0.5	
	0.8s	45.00nm			5.6mb		
PKI	56.36	306	P	16	01.80	-1.0	
	0.8s	17.00nm			5.1mb		
KKN	56.55	306	P	16	03.20	-0.8	
	0.8s	30.00nm			5.4mb		
DMN	56.62	306	P	16	04.00	-0.6	
	0.8s	41.00nm			5.5mb		
GKN	57.16	306	P	16	07.60	-0.7	
	0.6s	16.00nm			5.2mb		
GBA	59.29	287	Pc	16	21.20	-1.9	
	0.4s	1.10nm			4.3mb		
WMO	62.69	323	Pc	16	46.00	0.2	
KSH	68.33	314	eP	17	23.50	1.3	
MAIO	79.90	307	eP	18	26.00	-3.2X	
SVW	82.52	27	eP	18	44.60	2.3	
TTA	82.96	25	eP	18	45.80	1.2	
IMA	84.95	23	eP	18	55.70	1.0	
	1.2s	25.20nm			5.2mb		
PMR	85.66	28	eP	18	58.20	0.1	
FBA	87.00	25	eP	19	04.80	0.1	
INK	93.02	22	eP	19	33.00	0.3	
MBC	96.29	13	eP	19	53.00	5.4X	
	0.7s	3.00nm			4.9mb		
UPA	145.14	78	ePKPc	25	58.20	-0.2	
	0.9s	50.42nm					
NNA	145.20	115	ePKP	26	04.70	6.1X	
	1.1s	25.32nm					
ARE	147.69	127	ePKP	26	07.00	4.1X	
LPB	150.29	131	PKP	26	11.00	3.9X	
	1.0s	64.00nm					
			i	26	15.50		
ZOBO	150.43	130	PKP	26	10.00	2.5X	
	1.1s	52.20nm					
			i	26	15.10		
CCH	151.19	134	PKP	26	16.40	8.1X	
S.D. = 1.1 on 57 of 70 obs.							

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* FEB 01, 1990 05h 43m 02.55± 1.60s
37.901 N ± 8.8km 16.039 E ±11.7km
DEPTH = 10.0km (geophysicist)
IONIAN SEA (399)

SOI	0.17	4	Pc	43	06.50	0.1	
			eSg	43	10.40		
MSI	0.49	309	P	43	12.40	0.0	
ATN	0.52	300	Pc	43	13.20	0.0	
			eSg	43	22.50		
MEU	1.19	228	P	43	24.80	0.0	
			eSg	43	41.00		
CZI	1.32	3	P	43	26.80	-0.1	
S.D. = 0.1 on 5 of 5 obs.							

& FEB 01, 1990 05h 51m 15.19s
59.939 N 152.266 W
DEPTH = 81.2km
SOUTHERN ALASKA (2)
<AGS-P>.

NNL	0.50	78	iP	51	29.69	0.5	
			eS	51	42.32		
RED	0.54	333	iP	51	29.21	-0.5	
			eS	51	40.84		
XLV	0.56	150	iP	51	28.97	-0.8	
			eS	51	40.57		
RDT	0.64	354	iP	51	29.97	-0.7	
			eS	51	41.86		
CNPM	0.67	128	iP	51	30.29	-0.6	
			eS	51	42.52		
BRLK	0.72	104	iP	51	30.69	-0.7	
			eS	51	43.37		
AUE	0.81	224	iP	51	31.70	-0.6	
NKA	0.96	32	iP	51	35.17	1.2	
			eS	51	51.32		
PDB	0.98	262	iP	51	33.22	-1.1	
			iS	51	47.64		
SLKM	1.17	60	eP	51	35.28	-1.4	
			eS	51	51.85		
SPU	1.25	5	iP	51	37.23	-0.5	
			eS	51	54.78		
CKL	1.26	358	iP	51	37.43	-0.5	
BGL	1.33	357	iP	51	38.34	-0.5	
			eS	51	55.38		
CRP	1.33	2	iP	51	38.53	-0.4	
			eS	51	56.54		
SEW	1.42	82	eP	51	38.69	-1.2	
NCG	1.47	2	iP	51	40.17	-0.5	
SUA	1.70	25	iP	51	43.18	-0.6	
PMS	1.87	44	iP	51	45.00	-1.0	
			S	52	07.68		
PWA	2.08	33	eP	51	47.59	-1.1	
SKT	2.08	10	iP	51	47.72	-1.1	
PLRM	2.26	41	iP	51	49.27	-1.9	
GHO	2.46	40	eP	51	52.12	-1.9	
CUT	2.66	20	eP	51	55.34	-1.3	
GLI	2.73	68	eP	51	55.15	-2.6	
VZW	3.04	66	eP	51	59.09	-2.9	
HUR	3.30	21	eP	52	05.03	-0.6	
NCA	3.36	50	iP	52	04.19	-2.3	
TOA	3.68	51	eP	52	08.66	-2.2	
KTH	3.68	9	eP	52	08.69	-2.3	
RND	3.84	24	eP	52	11.44	-1.7	
MCK	4.12	21	eP	52	15.20	-1.9	
GLB	4.42	66	eP	52	17.57	-3.7	
PAX	4.46	44	eP	52	19.34	-2.5	
DDM	4.91	35	eP	52	27.14	-0.9	
WRH	4.95	21	eP	52	25.45	-3.1	
BALM	5.03	73	eP	52	27.01	-2.8	
HDA	5.13	27	eP	52	27.46	-3.6	
CCB	5.16	22	eP	52	28.80	-2.7	
FBA	5.39	21	eP	52	32.15	-2.6	
GLM	5.55	22	eP	52	34.15	-2.8	
PCA	6.03	83	eP	52	40.97	-2.7	
41 obs. associated							

FEB 01, 1990 06h 24m 14.81± 0.23s
42.204 N ± 3.1km 15.566 E ± 2.3km
DEPTH = 10.0km (geophysicist)
ADRIATIC SEA (382)
ML 4.8 (ZAG), 4.7 (KBA), 4.4
(LDG), 4.3 (TTG). MD 4.7 (TRI).

DUI	0.99	237	P	24	34.50	0.9	
			eSg	24	52.20		
HVAR	1.17	33	iPgc	24	38.10	1.4	
			iSg	24	56.10		
SDI	1.40	250	P	24	40.80	0.4	
			eSg	25	04.00		
BAI	1.46	138	P	24	41.00	-0.1	
			eSg	25	02.00		
AZI	1.60	263	P	24	45.00	1.8	
			eSn	25	07.50		
AQU	1.61	276	P	24	45.70	2.3	
SGO	1.66	187	P	24	43.50	-0.5	
BRT	1.81	137	P	24	44.50	-1.7	
MGR	2.06	180	Pd	24	49.00	-0.9	
MNS	2.15	276	P	24	52.80	1.6	
RMP	2.17	261	P	24	52.80	1.3	
RDP	2.17	259	P	24	53.70	2.2	
HCY	2.19	83	ePn	24	52.20	0.5	
			eSn	25	22.40		
BRY	2.31	71	ePn	24	54.40	0.8	
			eSn	25	24.20		
ASS	2.31	293	P	24	56.30	2.7X	
			eSn	25	23.50		
ARV	2.32	305	P	24	55.10	1.4	
MMN	2.33	172	P	24	55.50	1.7	
BDV	2.42	87	eP	24	56.50	1.4	
			eSn	25	28.20		
CSI	2.49	167	P	24	56.40	0.4	
LCI	2.59	135	Pc	24	57.90	0.4	
TDS	2.61	167	P	24	58.30	0.6	
NKY	2.61	75	ePn	24	59.40	1.6	
			eSn	25	32.50		
ROI	2.74	164	P	24	59.60	0.0	
TTG	2.75	84	ePn	25	00.50	0.8	
			eSn	25	35.50		
ULC	2.75	94	ePn	25	00.50	0.7	
			eSn	25	36.00		
BLY	2.80	24	Pn	25	03.40	2.9X	
			Sn	25	36.90		
RSM	2.86	308	Pc	25	03.20	2.0	
CRE	3.01	299	P	25	05.00	1.5	
CZI	3.01	172	P	25	02.50	-0.9	
PLE	3.03	67	ePn	25	06.00	2.1	
			eSn	25	42.60		
SFI	3.22	303	P	25	08.70	2.4	
RIY	3.25	345	iPnc	25	07.90	1.1	
			iSn	25	47.80		
PGD	3.28	302	P	25	09.40	2.0	
MAO	3.28	275	P	25	08.60	1.3	
PVY	3.29	82	ePn	25	09.50	2.0	
			eSn	25	49.50		
ZAG	3.62	5	iPn	25	14.00	1.9	
			iSn	25	56.40		
			iSg	26	13.00		
PTJ	3.71	4	ePn	25	14.60	1.2	
			eSn	25	58.10		
TRI	3.74	340	iPnc	25	14.00	0.3	
			iPg	25	27.10		
			iSn	26	00.10		
			iSg	26	20.60		
LJU	3.91	349	ePn	25	16.90	0.7	
			i	25	25.90		
			eSn	26	04.00		
PII	4.00	294	P	25	18.90	1.5	
			eSn	26	05.60		
ATN	4.04	181	P	25	17.30	-0.7	
KEK	4.06	126	ePb	25	17.00	-1.3	
OHR	4.07	104	iPn	25	18.30	-0.2	
MME	4.08	301	P	25	20.00	1.3	
BDI	4.08	299	P	25	19.90	1.2	
			eSn	26	07.20		
SOI	4.14	175	P	25	18.80	-0.7	
GIB	4.37	196	P	25	23.00	0.1	
SKO	4.38	91	ePn	25	23.50	0.7	
Z	10s	2.48um					
N	10s	1.86um					
E	10s	2.48um					
			iPb	25	35.40		
			iPg	25	42.00		
			i	26	14.80		
			i	26	26.20		
			i	26	32.00		
			i	26	41.70		
			i	26	47.20		
			LR	26	55.00		
BEO	4.41	52	ePn	25	40.30	17.0X	
			i(Sn)	26	28.20		
CTI	4.76	325	Pd	25	27.70	-0.8	
			eSn	26	21.40		
FVI	4.82	336	P	25	28.80	-0.3	
PGF	4.88	276	Pn	25	32.40	2.4	
SAL	4.98	315	P	25	31.20	-0.2	
KZN	5.05	110	ePb	25	32.50	0.1	
KBA	5.12	343	iPnc	25	32.00	-1.6	
			iPgc	25	51.10		
			iSn	26	29.20		
			iSg	26	56.60		
BOB	5.14	302	P	25	34.90	1.3	
VAY	5.31	97	iPn	25	34.00	-2.1	
MDI	5.53	312	Pd	25	38.20	-0.9	
BZS	5.54	50	ePc	25	38.00	-1.3	
VLS	5.56	135	ePn	25	37.60	-2.1	
KKB	5.61	91	iPc	25	41.00	0.7	
PCP	5.63	297	P	25	40.43	-0.1	
VTS	5.67	84	iPd	25	42.00	0.7	
FIN	5.74	293	P	25	42.28	0.1	
CKI	5.76	295	P	25	41.50	-0.9	
BUD	5.82	24	ePn	26	12.00	28.8X	
BHG	5.84	342	eP	25	44.20	0.8	
IMI	5.88	289	P	25	44.13	0.0	
OSS	5.93	321	ePd	25	45.30	0.4	
SRO	5.94	18	e(P)	25	54.40	9.6X	
			i	26	15.30		
			i	26	46.40		
			e	27	06.10		
KMR	5.94	351	iP+	25	44.60	-0.3	
			i	27	15.70		
			i	27	54.50		
ROB	6.00	293	P	25	45.56	-0.2	
ZST	6.09	10	e(P)	25	46.30	-0.7	
			i	26	17.60		

		i	26	55.90	
VAI	6.11	309 P	25	46.30	-1.0
VDL	6.12	316 ePd	25	47.30	-0.3
MMB	6.12	93 eP	25	47.00	-0.5
SBF	6.19	288 Pn	25	49.20	0.8
		Sn	26	58.80	
TMA	6.20	311 ePd	25	47.20	-1.5
PLG	6.21	104 ePn	25	47.00	-1.8
ENR	6.29	292 P	25	50.28	0.4
STV	6.36	291 P	25	50.90	0.0
PGB	6.38	84 eP	25	52.00	0.8
ORO	6.46	305 P	25	50.30	-2.1
ORX	6.46	305 P	25	49.67	-2.7
PSZ	6.48	27 ePn	26	18.20	25.5X
DOI	6.49	294 P	25	53.00	0.2
NEO	6.49	114 ePc	25	52.20	-0.6
PZZ	6.58	293 P	25	52.78	-1.4
LLS	6.62	317 ePd	25	54.70	0.0
FRF	6.69	285 Pn	25	57.00	1.5
RSP	6.71	299 P	25	52.95	-2.9
SAX	6.71	321 ePd	25	56.10	0.0
LMR	6.76	283 Pn	25	57.80	1.3
PLD	6.79	88 eP	25	48.00	-8.9X
RZN	6.84	91 iPd	25	58.00	0.2
LRG	6.88	284 Pn	25	59.20	1.0
LSD	6.90	301 P	25	55.14	-3.5X
RRL	6.93	296 P	25	57.71	-1.4
ITM	7.02	134 ePb	25	57.50	-2.6
DIX	7.03	306 ePd	26	00.40	-0.1
BNI	7.05	297 P	26	01.80	1.1
KHC	7.07	349 eP	26	00.00	-0.8
		e	26	10.00	
LPG	7.17	300 Pn	26	00.00	-2.5
		Sg	27	18.20	
LPL	7.19	300 Pn	26	00.20	-2.6
PVL	7.27	79 eP	26	02.00	-1.5
EMS	7.31	305 ePd	26	03.60	-0.8
KDZ	7.37	91 iPc	26	04.00	-1.0
DIM	7.41	88 eP	26	06.00	0.4
SLE	7.49	320 ePd	26	04.80	-1.8
CMP	7.51	63 ePc	26	12.00	4.9X
PRU	7.82	355 eP	26	10.00	-1.3
		e	26	20.00	
VLI	7.90	131 ePn	26	06.00	-6.5X
GRF	8.08	340 eP	26	20.00	5.1X
		e(S)	27	42.00	
MLR	8.19	63 ePc	26	18.50	1.9
BSF	8.38	315 Pn	26	16.20	-3.1X
		Sn	27	46.40	
KRA	8.42	20 eP	26	18.60	-1.0
		e	28	15.60	
CDF	8.52	320 Pn	26	17.60	-3.6X
		Sg	27	46.50	
KSP	8.66	3 eP	26	31.00	8.1X
		e	28	59.50	
HAU	8.72	315 Pn	26	20.60	-3.3X
		Sn	27	53.20	
VRI	8.83	62 ePc	26	27.50	2.1
CLL	9.28	350 ePn	26	31.00	-0.5
		eSg	29	17.00	
SMF	9.49	302 Pn	26	31.60	-2.9
		Sg	28	13.20	
LBF	9.55	304 Pn	26	32.00	-3.3X
		Sn	28	16.40	
LOR	9.74	305 Pn	26	35.80	-2.2
		Sn	28	19.00	
AVF	9.86	302 Pn	26	36.90	-2.6
SSF	9.87	304 Pn	26	36.80	-2.9X
		Sn	28	22.00	
BGF	10.09	300 Pn	26	40.00	-2.8
		Sn	28	28.00	
TCF	10.41	298 Pn	26	46.80	-0.4
DOU	10.95	320 eP	26	58.20	3.7X
		e	28	54.60	
NB2	19.05	354 P	28	38.00	-1.3
	0.7s	71.70nm			5.0mb X
	S.D. = 1.4	on 112 of 130 obs.			

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* FEB 01, 1990 06h 55m 20.95± 0.82s
42.200 N ± 8.9km 15.554 E ± 8.5km
DEPTH = 10.0km (geophysicist)
ADRIATIC SEA (382)

DUI	0.98	237 P	55	40.00	0.4
		eSg	55	51.50	
HVAR	1.18	34 iPg	55	43.00	0.1
		iSg	56	00.90	
SDI	1.39	250 P	55	46.00	-0.4
SGO	1.65	187 P	55	50.00	0.0
BRT	1.81	136 P	55	52.40	0.0
		eSn	56	16.00	
	S.D. = 0.4	on 5 of 5 obs.			

FEB 01, 1990 07h 10m 27.87± 0.80s
38.179 N ± 6.2km 26.587 E ± 9.0km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
MD 3.3 (ATH).

SMG	0.51	157 ePb	10	39.30	1.1
IZM	0.57	68 ePg	10	39.00	-0.6
PRK	1.09	347 ePb	10	48.20	-0.2
APE	1.39	217 ePb	10	52.30	-1.0
EZN	1.66	353 iPn	10	57.00	0.0
DST	2.14	48 ePn	11	02.50	-1.6
KHL	2.32	86 ePn	11	06.80	0.1
EDC	2.38	24 ePn	11	08.00	0.5
YLV	3.22	41 iPn	11	28.80	9.3X
CFR	7.10	9 iPc	12	16.00	1.8
	S.D. = 1.2	on 9 of 10 obs.			

? FEB 01, 1990 07h 11m 54.56± 1.15s
31.716 S ±12.6km 117.097 E ± 9.7km
DEPTH = 33.0km (normal)
WESTERN AUSTRALIA (590)

KLB	0.58	78 iPd	12	06.30	0.0
		iS	12	14.10	
MUN	0.80	251 iPd	12	09.40	0.0
		iS	12	19.40	
BAL	1.16	343 iPd	12	14.60	0.1
		iS	12	28.30	
NWAO	1.21	175 iP	12	19.00	3.7X
MRWA	2.67	339 eP	12	36.00	-0.1
	S.D. = 0.2	on 4 of 5 obs.			

FEB 01, 1990 11h 16m 24.04± 1.32s
7.912 N ± 5.1km 126.909 E ± 7.5km
DEPTH = 63.3 ± 12.7 km
4.9mb (15 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)
CENTROID, MOMENT TENSOR (HRV)
Doto Used: GDSN
L.P.B.: 8S, 16C
Centroid Locotion:
Origin Time 11:16:21.4 1.3
Lat 7.57N 0.16 Lon 126.94E 0.22
Dep 27.414.3 Half-duration 1.3
Moment Tensor; Scale 10**16 Nm
Mrr= 2.27 0.77 Mtt=-1.12 0.57
Mff=-1.15 1.07 Mrt=-0.08 1.63
Mrf= 3.21 1.97 Mtf=-0.91 0.63
Principol Axes:

T	Vol= 4.25	Plg=58	Azm=259
N	-0.92	14	13
P	-3.33	28	111

Best Double Couple:Mo=3.8*10**16
NP1:Strike=234 Dip=21 Slip= 133
NP2: 9 74 75

DAV	1.56	238 ePc+	16	52.00	2.0
	1.3s	4923.0Bnm			
MNI	6.75	198 eP	18	03.00	0.2
BAG	10.47	324 eP	18	55.00	0.9
KKM	10.78	261 eP	19	02.00	3.8X
GUMO	18.52	71 eP	20	36.00	-1.9
QIZ	19.92	305 Pd	20	52.40	-1.0
	N 16s	2.40um			
		eS	24	28.50	
MTN	21.04	168 eP	21	03.00	-2.0
		e	21	15.00	
TRT	21.05	223 ePd	21	05.00	0.0
KNA	23.58	176 eP	21	30.00	0.1
SSE	23.68	348 eP	21	30.00	-0.7
LOE	26.29	293 eP	21	55.00	-0.6
NNT	27.13	282 eP	22	06.50	3.2X
WB5	28.58	165 eP	22	16.60	0.3
WRA	28.63	165 Pd	22	14.50	-2.3
	0.6s	2.30nm			4.0mb
BDT	28.74	292 eP	22	17.20	-0.6
CHG	29.24	295 eP	22	22.10	-0.3
CHTO	29.24	295 eP	22	22.10	-0.3
	1.0s	2.50nm			3.8mb X
XAN	30.84	330 Pd	22	33.90	-2.5
QIS	30.92	156 eP	22	36.00	-1.2
CD2	31.49	320 eP	22	40.20	-1.9
ASPA	32.12	168 iPd	22	47.40	-0.3
	0.6s	7.00nm			4.7mb
	Z 18s	0.38um			4.1Msz
		eS	27	50.90	
		LR	38	44.10	
TIY	32.44	33B eP	22	48.20	-2.2
	N 20s	1.60um			
BJI	33.40	345 eP	22	57.00	-1.6
CTA	33.71	146 iPd	23	00.80	-0.8
	1.0s	25.00nm			5.1mb
		iS	28	21.00	
WARB	33.89	180 eP	23	02.50	-0.5
	0.6s	15.00nm			5.1mb
SNY	33.90	356 iPc	23	03.30	0.4
	Z 18s	0.50um			4.3Msz
	N 18s	0.50um			
		eS	28	22.00	
LZH	35.07	326 P	23	12.00	-1.2
	Z 16s	0.60um			4.4MszX
HHC	35.53	340 eP	23	17.00	0.0
CN2	35.77	358 eP	23	19.00	0.2
	Z 18s	1.10um			4.7Msz
		PcP	25	46.40	
MDJ	36.64	3 eP	23	26.70	0.6
		epP	23	38.80	44kmX
MRWA	38.38	195 eP	23	41.00	0.0
GTA	39.67	326 eP	23	50.80	-1.0
LSA	39.93	308 P	23	56.60	2.2
NWAO	41.64	192 iPd	24	08.20	0.4
RKG	42.79	192 eP	24	22.30	5.1X
BRS	43.12	145 iPc	24	19.00	-1.0
		i	24	21.80	
		i	24	31.00	
GUN	43.53	302 P	24	24.60	0.8
	0.8s	25.00nm			5.0mb
PKI	43.82	302 P	24	26.80	0.7
	0.6s	8.00nm			4.7mb
KKN	43.99	302 P	24	28.20	0.8
	0.8s	16.00nm			4.9mb
ADE	44.08	166 eP	24	29.60	1.9
DMN	44.08	302 P	24	29.00	0.8
GKN	44.60	302 P	24	32.60	0.4
	0.8s	13.00nm			4.8mb
BWA	46.77	155 eP	24	50.30	1.2
CAN	47.79	155 eP	24	58.00	0.9
GBA	48.86	281 Pc	25	04.90	-0.7
	0.8s	9.70nm			4.9mb
WMQ	49.47	323 P	25	10.00	0.0
	Z 16s	0.50um			4.6MszX
		eS	32	07.50	
MSZ	64.05	149 P	27	08.00	14.6X
MAIO	67.17	306 eP	27	14.00	0.1
SVW	77.06	29 eP	28	13.90	2.0
TTA	77.12	27 eP	28	13.90	1.7
IMA	78.52	24 ePc	28	21.60	1.7
	0.8s	7.10nm			4.7mb
PMR	80.22	29 eP	28	30.10	1.2
	0.8s	22.30nm			5.1mb
FBA	80.89	26 ePc	28	32.80	0.3
TOA	81.62	28 eP	28	38.60	2.2
INK	86.23	22 eP	29	01.00	1.4
SOD	86.69	338 iP	29	01.40	-0.5
MBC	87.86	13 eP	29	09.00	1.6
	1.0s	9.00nm			4.9mb
SUF	87.93	333 iP	29	07.80	-0.1
	0.7s	13.40nm			5.2mb
NUR	89.15	331 iP	29	02.20	-11.5X
		i	29	19.90	
SLL	94.45	333 eP	29	36.70	-1.6
	0.5s	3.20nm			5.0mb
NB2	95.14	334 P	29	41.00	-0.5
	1.1s	4.40nm			4.8mb
ZOBO	163.13	121 PKP	36	23.90	2.2X
	1.1s	11.60nm			
		i	37	15.00	
	S.D. = 1.3	on 56 of 62 obs.			

FEB 01, 1990 11h 49m 43.96± 0.78s
46.956 N ±11.1km 10.583 E ± 5.4km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.4 (KBA).

OSS	0.40	228 iPc	49	51.50	-0.8
SCE	0.78	83 iPgc	49	57.80	-1.4

01d 11h

VDL	0.90	239	iPd	50	00.20	-1.1
CTI	1.17	141	P	50	06.10	0.2
			eSg	50	20.60	
TMA	1.45	235	ePc	50	10.50	0.1
FVI	1.55	103	P	50	12.70	1.1
			eSg	50	32.70	
SLE	1.64	300	ePd	50	12.90	0.0
KBA	1.89	85	iPnd	50	17.00	0.2
			iPgc	50	19.40	
			iSn	50	41.80	
			iSg	50	45.10	
MMK	2.02	244	ePd	50	20.50	1.8

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

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* FEB 01, 1990 13h 45m 16.16± 0.78s
42.489 N ±10.6km 24.155 E ± 9.3km
DEPTH = 10.0km (geophysicist)
BULGARIA (359)

VAY	1.66	226	iPn	45	46.00	0.6
SKO	2.08	257	ePn	45	51.00	-0.6
			i	45	57.20	
			iSg	46	22.00	
DMK	2.76	103	ePn	46	01.00	-0.3
OHR	2.86	242	ePn	46	08.00	5.3X
MLR	3.27	23	ePd	46	08.50	0.0
			e	59	30.00	
VRI	3.85	28	iPc	46	17.00	0.3

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

& FEB 01, 1990 14h 18m 40.00s
60.847 N 131.269 W
DEPTH = 18.0km (geophysicist)
SOUTHERN YUKON TERRITORY, CANADA(18)
<PGC-P>. ML 3.8 (PGC).

WHC	1.88	268	Pn	19	11.50	-0.2
HYT	3.05	272	Pc	19	28.30	-0.1
MUB	3.36	122	Pn	19	30.80	-2.0
DWY	4.97	314	P	19	54.00	-1.5
INK	7.55	354	eP	20	29.00	-2.8

5 obs. associated

? FEB 01, 1990 16h 05m 47.45± 1.78s
33.216 N ±16.7km 141.182 E ±31.3km
DEPTH = 33.0km (normal)
4.5mb (3 obs.)
OFF EAST COAST OF HONSHU, JAPAN (229)

MAT	4.12	324	iPc	06	50.00	0.3
			eS	07	36.00	
CHG	40.30	260	eP	13	24.00	0.6
CHTO	40.30	260	eP	13	23.70	0.3
	0.8s		3.11nm			4.1mb
MTN	46.80	194	iPd	14	16.40	0.6
WB5	53.20	188	eP	15	04.20	-0.5
ASPA	56.99	188	eP	15	32.50	0.3
	0.5s		6.00nm			4.9mb
HYB	57.98	271	eP	15	39.00	-0.5
GBA	60.79	267	Pc	15	57.80	-1.0
	0.8s		3.50nm			4.5mb

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

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* FEB 01, 1990 17h 00m 53.67± 1.15s
2.970 S ±13.5km 130.155 E ±15.8km
DEPTH = 33.0km (normal)
4.6mb (2 obs.)
CERAM (272)

AAI	2.08	250	ePd	01	27.30	0.3
			eS	02	07.80	
MTN	9.86	174	eP	03	16.00	-0.3
			i	04	13.30	
			eS	05	09.00	
WB5	17.30	167	eP	04	53.20	-1.3
QIS	19.76	153	eP	05	25.00	1.0
ASPA	20.89	170	iPc	05	36.40	0.6
	0.6s		46.00nm			5.0mb
CHG	37.57	306	eP	08	07.00	-0.1
CHTO	37.57	306	eP	08	06.80	-0.3
	0.8s		2.20nm			4.1mb

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

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* FEB 01, 1990 17h 06m 02.89± 1.50s
5.816 S ±14.5km 154.569 E ±19.6km
DEPTH = 413.4 ± 9.7 km
SOLOMON ISLANDS (193)

RAB	2.88	304	eP	07	06.00	-0.7
			iS	07	57.70	
LAT	7.57	263	eP	07	55.00	0.9
PMG	8.17	244	eP	08	01.50	0.6
MNDI	10.86	268	eP	08	32.00	-0.1
QIS	20.63	223	eP	10	13.00	-0.1
WB5	24.11	233	eP	10	44.20	-1.2
MAT	44.84	341	eP	13	39.00	-0.8
GUN	74.15	301	P	16	58.20	0.3
KKN	74.63	301	P	17	00.40	-0.1
DMN	74.73	301	P	17	01.40	0.3
GKN	75.23	301	P	17	03.60	-0.2
IMA	80.83	19	eP	17	34.00	1.0
FBA	82.18	21	eP	17	39.70	-0.1

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

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* FEB 01, 1990 17h 37m 55.15± 2.21s
35.330 N ±37.0km 26.860 E ±11.9km
DEPTH = 10.0km (geophysicist)
CRETE (370)
MD 3.7 (ATH).

KAP	0.34	49	ePg	38	01.30	-0.9
NPS	1.02	267	ePg	38	14.00	-0.5
VAM	2.18	273	ePb	38	34.50	2.6X
ELL	2.85	59	ePn	38	41.80	0.2
VLI	3.47	295	ePn	38	50.70	0.5
BCK	3.68	54	ePn	38	54.10	0.7

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

FEB 01, 1990 18h 33m 53.86± 0.21s
8.247 N ± 3.7km 126.712 E ± 4.9km
DEPTH = 61.0km (3 depth phases)
5.3mb (31 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 22C
Centroid Location:
Origin Time 18:33:53.5 0.4
Lat 8.06N 0.07 Lon 127.18E 0.08
Dep 16.7 3.4 Half-duration 2.1
Moment Tensor; Scale 10**17 Nm
Mrr= 1.60 0.14 Mtt=-0.03 0.11
Mff=-1.57 0.18 Mrt=-0.36 0.29
Mrf= 0.75 0.34 Mtf=-0.38 0.11
Principal Axes:
T Val= 1.87 Plg=71 Azm=226
N -0.08 15 7
P -1.79 11 100
Best Double Couple:Mo=1.8*10**17
NP1:Strike=208 Dip=36 Slip= 116
NP2: 357 58 72

DAV	1.61	224	ePd-	34	21.10	0.7
QCP	8.41	319	eP	36	02.00	6.4X
TSM	9.47	246	ePc	36	13.90	3.7X
BAG	10.08	324	eP	36	16.00	-2.7
KKM	10.64	259	eP	36	27.00	0.8
	1.0s		121.90nm			5.9mb
			sS	41	46.00	
HKC	18.46	321	e(P)	38	08.00	0.9
KUPT	18.54	190	eP	38	18.00	10.0X
			eS	41	45.50	
GUMO	18.59	72	eP	38	08.00	-0.7
			eS	41	39.00	
GUA	18.62	72	eP	38	07.30	-1.8
GZH	19.55	320	Pc	38	17.30	-2.2
Z	26s		4.00um			
N	14s		1.70um			
E	15s		2.40um			
QIZ	19.56	305	eP	38	18.00	-1.7
N	17s		5.30um			
E	16s		4.70um			
			pP	38	31.00	63km
KHKI	19.87	214	eP	38	25.20	2.4
			e	41	23.00	
TRT	21.17	222	iPc	38	38.00	1.8
	0.8s		84.40nm			5.1mb
MTN	21.41	168	eP	38	38.00	-0.6
			e	42	27.00	
			e	46	13.00	
SSE	23.31	348	P	38	57.00	-0.2
	6.0s		800.00nm			5.3mb X
Z	20s		1.90um			4.5Msz
N	16s		1.30um			
			pP	39	07.00	37kmX
			sS	43	24.00	
KNA	23.93	175	eP	39	02.70	-0.6
	0.6s		126.00nm			5.6mb
KGM	24.10	256	ePd	39	08.50	3.5X
NJ2	24.79	344	Pd	39	14.00	2.5
Z	20s		1.80um			4.6Msz
WHN	25.02	334	eP	39	11.50	-2.1
Z	20s		2.80um			4.8Msz
N	18s		2.10um			
E	18s		1.30um			
IPM	25.78	263	ePd	39	23.00	2.0
	0.8s		67.20nm			5.2mb
			e	42	51.50	
SNG	25.88	269	eP	39	22.10	0.2
			eS	44	16.50	
LOE	25.98	293	eP	39	23.50	0.8
GYA	26.27	316	P	39	27.40	1.8
Z	22s		2.50um			4.7Msz
N	18s		2.80um			
E	18s		3.40um			
SHK	26.73	11	eP	39	30.00	0.5
NNT	26.87	282	eP	39	31.80	0.8
			e	42	52.00	
PMG	26.87	130	eP	39	30.00	-1.0
NST	27.01	288	eP	39	32.50	0.3
PPI	27.62	253	eP	39	38.00	0.3
RAB	28.24	115	e(P)	39	56.00	12.6X
			eS	44	32.00	
KMI	28.36	309	Pc	39	44.50	-0.1
Z	20s		4.30um			5.0Msz
E	17s		2.70um			
			pP	39	59.00	60km
BDT	28.43	291	eP	39	45.00	-0.1
	0.5s		34.30nm			5.2mb
CHG	28.92	294	ePc	39	49.70	0.2
	1.0s		41.25nm			5.0mb
CHTO	28.92	294	iPc	39	49.80	0.3
	1.3s		66.58nm			5.1mb
			pP	40	01.20	43kmX
			PcP	42	57.90	
WB5	28.95	165	eP	39	47.00	-2.7
TIA	29.18	344	eP	39	50.10	-1.5
Z	23s		1.10um			4.4MszX
E	17s		1.20um			
			eS	44	29.50	
MAT	30.05	19	eP	39	58.00	-1.4
	1.0s		28.00nm			4.9mb
Z	19s		1.74um			4.7Msz
			eS	44	42.00	
XAN	30.46	330	P	40	04.00	1.0
			S	44	57.00	
DL2	30.87	352	P	40	06.00	-0.5
	1.0s		100.00nm			5.5mb
Z	26s		1.00um			4.4MszX
N	16s		1.30um			
E	14s		1.00um			
CD2	31.11	320	eP	40	06.40	-2.4
Z	22s		2.50um			4.8Msz
QIS	31.31	156	iPc	40	09.00	-1.6
TIY	32.06	338	eP	40	14.80	-2.3
N	22s		2.80um			
			PP	40	33.00	
ASPA	32.49	168	eP	40	18.80	-2.1
	0.7s		20.00nm			5.1mb
Z	21s		1.19um			4.5Msz
			eS	45	26.10	
			e	46	45.30	
			LR	53	51.60	
NANU	32.52	199	eP	40	20.40	-0.7
BJI	33.03	345	eP	40	24.50	-0.9
	1.3s		77.00nm			5.4mb
Z	20s		1.20um			4.6Msz
			ePcP	43	08.50	
			eS	45	42.00	
			eScP	46	49.00	
SNY	33.56	356	iPc	40	30.00	0.1
Z	24s		1.70um			4.7MszX
			pP	40	45.00	60km
			S	45	50.00	
CTA	34.10	146	iPc	40	36.70	1.8
	1.1s		41.77nm			5.3mb
			iS	45	57.00	
WARB	34.22	180	iPc	40	35.40	-0.5

0.4s 25.00nm 5.5mb
LZH 34.68 326 Pc 40 38.00 -2.0
1.2s 62.00nm 5.4mb
Z 18s 3.40um 5.1Msz
N 18s 1.90um
E 18s 1.80um
PcP 43 12.00
eS 46 08.00
PcS 47 00.00
HHC 35.15 340 eP 40 43.00 -0.8
Z 20s 1.90um 4.8Msz
N 15s 0.60um
E 15s 0.90um
CN2 35.43 358 Pc 40 46.20 0.2
Z 17s 1.50um 4.8MszX
N 16s 1.00um
PP 42 08.00
iPcP 43 15.00
ScP 46 57.60
BTO 35.48 338 eP 40 46.00 -0.6
N 18s 1.30um
MEKA 35.55 193 iPd 40 46.80 -0.4
MDJ 36.32 3 Pc 40 54.70 1.2
Z 25s 1.40um 4.6MszX
ePP 41 08.00
ePP 42 20.00
MRWA 38.65 195 iPc 41 12.90 -0.3
0.4s 19.00nm 5.3mb
FORR 38.90 178 iPc 41 14.10 -1.1
0.5s 139.00nm 6.1mb
COOL 39.27 188 iPc 41 17.00 -1.4
0.5s 18.00nm 5.2mb
GTA 39.29 326 iPc 41 18.00 -0.6
Z 20s 1.80um 4.9Msz
E 15s 1.30um
LSA 39.57 307 P 41 23.80 2.3
KLB 40.53 192 iPc 41 28.20 -0.5
0.4s 11.00nm 5.0mb
MUN 41.24 194 iPc 41 34.20 -0.3
NWAO 41.93 192 iPc 41 39.80 -0.4
0.5s 58.00nm 5.6mb
RKG 43.08 192 eP 41 54.00 4.4X
0.4s 33.00nm 5.5mb
GUN 43.19 302 Pc 41 51.40 0.4
PKI 43.47 302 Pc 41 53.20 -0.1
BRS 43.50 145 iPc 41 52.20 -0.9
i 41 58.50
KKN 43.65 302 Pc 41 54.40 -0.2
DMN 43.74 302 Pc 41 55.20 -0.2
GKN 44.26 302 Pc 41 59.00 -0.5
ADE 44.45 166 iPd 42 00.00 -0.7
1.0s 94.00nm 5.5mb
BWA 47.16 155 eP 42 21.00 -1.2
BFD 47.56 163 eP 42 27.00 1.8
HYB 47.72 286 ePc 42 26.50 -0.4
CAN 48.17 155 eP 42 30.50 0.4
CNB 48.32 155 iPc 42 39.00 7.8X
GBA 48.61 281 Pd 42 33.50 -0.2
1.0s 54.30nm 5.5mb
WMO 49.08 323 Pc 42 36.50 -0.6
Z 19s 1.80um 5.1Msz
ScP 47 50.50
eS 49 41.00
DZM 49.24 128 iPc 42 38.10 -0.5
POO 52.27 287 eP 43 01.00 -0.6
KSH 54.88 313 P 43 25.10 4.4X
Z 18s 2.50um 5.3Msz
eS 50 52.00
MSZ 64.44 149 eP 44 27.00 1.0
KRP 64.65 139 P 44 36.00 8.5X
SNZO 66.09 142 eP 44 36.00 -0.6
eS 53 12.00
(SS) 57 44.00
MAIO 66.82 306 iPc 44 41.00 -0.7
0.7s 9.53nm 4.9mb
eS 54 40.00
IR4 73.71 304 iPc 45 19.50 -4.0X
IR1 73.89 304 iPc 45 23.50 -1.1
IR7 73.96 305 iPc 45 23.50 -1.5
IR5 73.97 304 iPc 45 24.50 -0.6
SVW 76.87 29 eP 45 43.00 2.2
TTA 76.91 27 eP 45 43.20 2.1
TAB 77.41 307 eP 45 45.00 0.5
KDC 78.16 33 eP 45 50.00 2.1
IMA 78.29 24 ePc 45 50.90 2.1
0.7s 13.20nm 5.0mb
MSL 80.00 305 eP 46 03.00 4.6X

PMR 80.02 29 eP 45 58.50 0.6
FBA 80.67 26 eP 46 02.20 0.8
TOA 81.42 28 eP 46 08.00 2.6
KVT 85.15 311 iP 46 25.40 0.5
KEV 85.67 340 iP 46 28.00 1.1
0.7s 16.00nm 5.3mb
INK 85.99 22 eP 46 29.50 1.0
SOD 86.31 338 iP 46 30.00 -0.1
KAS 86.82 311 iPd 46 34.10 1.0
SUF 87.54 333 eP 46 35.30 -0.8
0.5s 9.40nm 5.2mb
MBC 87.58 13 ePc 46 37.70 1.6
1.0s 57.00nm 5.7mb
NUR 88.77 331 iP 46 41.60 -0.4
0.8s 38.10nm 5.7mb
VRI 91.03 317 eP 46 52.50 -0.4
MLR 91.65 316 eP 46 55.00 -0.9
HFS 94.03 332 eP 47 05.20 -1.2
0.4s 2.50nm 5.0mb
Z 19s 0.52um 5.0Msz
LR 26 02.00
N82 94.75 334 P 47 08.60 -1.2
1.0s 9.60nm 5.2mb
VAY 95.07 313 eP 47 10.40 -1.1
KSP 96.24 323 eP 47 16.50 -0.2
OHR 96.41 313 eP 47 13.50 -4.3X
PRU 97.60 323 eP 47 23.50 0.7
BRG 97.61 324 iP 47 23.40 0.5
1.5s 25.00nm 5.5mb
e 47 41.00
CLL 97.98 325 eP 47 25.00 0.5
KHC 98.51 322 Pc 47 26.50 -0.5
GRF 99.69 324 eP 47 32.70 0.3
Z 22s 0.60um 5.1Msz
BCAO 107.27 277 iPKPc 52 17.60 1.6
0.6s 6.00nm
ALQ 113.97 46 ePKP 52 30.50 2.1X
1.0s 7.50nm
SIO 120.38 40 ePKP 52 41.60 1.3
TUL 120.61 40 ePKP 52 41.80 1.1
1.2s 17.30nm
Z 21s 0.87um 5.4Msz
LR 33 00.00
KIC 129.46 285 PKP 52 59.26 0.9
1.0s 25.50nm
TIC 129.65 286 PKP 52 59.60 0.9
1.1s 17.50nm
LIC 129.77 285 PKP 52 59.82 0.9
1.0s 30.00nm
LNV 149.44 149 ePKP 53 39.00 5.6X
TACH 149.92 150 ePKP 53 40.00 5.8X
PCH 150.16 150 ePKP 53 41.00 6.3X
SAN 150.22 150 ePKP 53 40.50 5.8X
ROCH 150.43 149 ePKP 53 42.50 7.2X
LPB 163.36 121 PKP 53 53.00 1.2
ZOBO 163.46 120 PKPc 53 53.90 1.8
1.2s 23.65nm
Z 22s 0.28um
LR 51 40.00
CCH 164.53 127 (PKP) 53 55.00 2.2X
S.D. = 1.2 on 113 of 134 obs.

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* FEB 01, 1990 19h 28m 19.33± 0.84s
8.046 N ±11.2km 126.928 E ±18.0km
DEPTH = 38.0km (2 depth phases)
4.4mb (6 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

MNI 6.88 198 eP 30 02.00 1.6
MTN 21.17 169 eP 33 02.00 -1.8
NNT 27.12 282 eP 34 12.30 11.3X
WB5 28.70 165 eP 34 19.00 3.8X
BDT 28.70 291 eP 34 14.80 -0.5
CHG 29.20 294 eP 34 32.00 12.2X
CHTO 29.20 294 eP 34 20.80 1.0
1.0s 1.00nm 3.5mb
pP 34 31.90 41km
8JI 33.28 345 eP 34 55.00 -0.4
HYB 47.98 286 eP 36 56.50 -0.4
G8A 48.86 281 Pd 37 03.10 -0.5
0.8s 5.40nm 4.6mb
MAIO 67.11 306 eP 39 12.00 0.4
FBA 80.76 26 eP 40 30.70 0.6
0.9s 0.70nm 3.6mb
INK 86.10 22 eP 41 11.00 13.7X
MBC 87.73 13 eP 41 07.50 2.5
0.9s 4.00nm 4.7mb

pP 41 18.50 35km
SLL 94.34 333 eP 41 34.50 -1.6
0.6s 1.50nm 4.6mb
NB2 95.03 334 P 41 38.50 -0.8
0.8s 1.80nm 4.6mb
S.D. = 1.4 on 12 of 16 obs.

% FEB 01, 1990 19h 33m 44.86± 1.00s
38.008 N ± 9.6km 24.398 E ± 8.3km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
ML 2.5 (ATH).

ATH 0.54 266 ePb 33 56.00 0.2
APE 1.30 136 ePn 34 09.20 0.2
NEO 1.59 325 ePb 34 16.00 2.9X
VLI 1.74 223 ePn 34 14.40 -0.8
ITM 2.13 248 ePb 34 21.50 0.5
PLG 2.48 343 ePn 34 25.70 -0.2
S.D. = 0.7 on 5 of 6 obs.

% FEB 01, 1990 20h 19m 42.68± 1.28s
28.864 S ±12.8km 67.362 W ± 9.0km
DEPTH = 10.0km (geophysicist)
LA RIOJA PROVINCE, ARGENTINA (138)

CYA 1.44 73 iP 20 09.00 0.2
RTRS 2.24 234 iPc 20 20.20 -0.2
RTLL 2.64 201 iPd 20 26.20 0.1
S 21 00.80
CFA 2.84 195 ePd 20 29.00 0.1
(S) 21 00.00
RTCB 2.89 205 iPc 20 24.80 -5.0X
RTCV 3.15 198 ePc 20 33.40 0.0
S 21 11.70
TCA 3.44 136 ePc 20 37.00 -0.5
MRA 3.81 158 ePd 20 43.00 0.3
S.D. = 0.3 on 7 of 8 obs.

? FEB 01, 1990 20h 27m 40.27± 5.71s
31.197 S ±23.5km 68.419 W ±40.6km
DEPTH = 97.3 ± 53.9 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL 0.14 198 iPd 27 54.10 -0.4
RTCB 0.43 228 i(P) 27 56.00 0.4
CFA 0.44 159 iPc 27 56.00 0.4
S 28 06.50
RTCV 0.67 189 iPd 27 57.10 -0.4
RTRS 1.36 319 iP 28 05.00 0.0
S 28 24.00
S.D. = 0.8 on 5 of 5 obs.

& FEB 01, 1990 21h 47m 43.54s
61.720 N 150.927 W
DEPTH = 61.6km
SOUTHERN ALASKA (2)
<AGS-P>.

SUA 0.27 161 iP 47 53.95 0.1
eS 48 02.27
SKT 0.39 313 iP 47 53.84 -0.8
PWA 0.50 97 iPc 47 55.50 -0.3
CGLM 0.66 232 eP 47 57.23 -0.4
NCG 0.67 242 iP 47 57.03 -0.7
CRP 0.74 233 iP 47 58.33 -0.4
eS 48 09.74
CUT 0.75 24 iP 47 58.03 -0.6
eS 48 09.41
SPU 0.76 226 iP 47 58.39 -0.4
eS 48 10.11
PMS 0.81 125 iPc 47 58.80 -0.6
BGL 0.84 238 eP 47 59.42 -0.4
eS 48 13.17
CKL 0.86 233 iP 47 59.49 -0.6
eS 48 12.63
PLRM 0.87 98 iP 47 59.13 -0.9
eS 48 12.45
PMR 0.87 98 iPc 47 59.30 -0.7
GHO 0.95 86 eP 48 00.69 -0.6
NKA 0.99 189 eP 48 03.14 1.5
KNK 1.22 104 iP 48 04.12 -0.7
eS 48 20.73
SLKM 1.26 164 iP 48 04.54 -0.8
RDT 1.36 213 eP 48 06.16 -0.5
eS 48 24.50
HUR 1.40 25 iP 48 06.84 -0.4

01d 21h

		eS	48	24.03	
RED	1.58	215 iP	48	09.55	-0.3
		eS	48	30.45	
NNL	1.69	186 iP	48	11.97	0.7
SEW	1.78	155 eP	48	13.23	0.9
KTH	1.84	0 iP	48	12.59	-0.8
NCA	1.96	80 eP	48	14.36	-0.7
GLI	2.03	113 iP	48	13.64	-2.4
CNPM	2.21	184 eP	48	18.46	0.0
MCK	2.22	24 eP	48	18.44	-0.2
TOA	2.28	78 eP	48	19.00	-0.6
SVW	2.34	257 eP	48	18.50	-1.8
TTA	2.67	299 eP	48	22.30	-2.6
WRH	3.05	24 eP	48	28.36	-2.0
CCB	3.26	24 eP	48	31.22	-2.1
FBA	3.49	23 eP	48	34.60	-1.9
IMA	4.53	346 eP	48	48.70	-2.5

34 obs. associated

FEB 01, 1990 22h 25m 07.18± 0.60s
43.987 N ± 4.8km 8.604 E ± 4.4km
DEPTH = 10.0km (geophysicist)
CORSICA (380)
ML 2.8 (GEN), 2.7 (LDG). MD 2.3 (STR).

FIN	0.36	308 P	25	14.24	-0.4
		S	25	18.84	
CKI	0.50	332 Pc	25	16.30	-0.9
		eSg	25	21.50	
IMI	0.52	262 Pc	25	17.92	0.2
		S	25	25.19	
PCP	0.56	356 Pc	25	17.16	-1.4
		S	25	24.18	
ROB	0.61	300 Pc	25	18.67	-0.9
		S	25	26.10	
SAOF	0.76	270 Pg	25	22.30	0.3
AUTN	0.85	271 Pg	25	24.29	0.6
		Sg	25	36.42	
SBF	0.85	262 Pg	25	24.40	0.7
		Sg	25	36.40	
ENR	0.89	286 P	25	23.94	-0.3
		S	25	35.48	
AURF	0.93	264 Pg	25	25.66	0.7
		Sg	25	39.19	
REVF	0.93	255 Pg	25	25.92	1.0
STV	0.96	286 P	25	25.54	0.1
		S	25	37.60	
TOUF	0.98	272 Pg	25	26.41	0.5
		Sg	25	40.11	
BOB	0.99	38 P	25	26.50	0.5
		eSg	25	38.40	
MVIF	1.05	266 Pg	25	27.84	0.7
DOI	1.10	298 Pd	25	27.80	-0.2
		eSg	25	41.50	
PZZ	1.20	296 P	25	29.03	-0.6
		S	25	43.80	
CALN	1.26	260 Pg	25	31.94	1.2
BDI	1.44	86 P	25	34.50	1.1
		eSg	25	53.00	
PGF	1.47	169 Pn	25	32.70	-1.1
		Sn	25	51.00	
FRF	1.48	254 Pn	25	32.40	-1.5
		Pg	25	35.80	
		Sg	25	55.00	
RSP	1.51	321 P	25	33.71	-0.7
RRL	1.60	306 P	25	36.27	0.4
LMR	1.65	247 Pn	25	34.60	-1.8
		Sg	26	01.60	
LRG	1.71	253 Pn	25	36.00	-1.2
		Pg	25	40.20	
		Sg	26	03.00	
LSD	1.80	325 P	25	39.43	0.8
LPL	2.03	320 Pg	25	44.00	2.0
		Sg	26	07.80	

S.D. = 1.0 on 27 of 27 obs.

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* FEB 01, 1990 22h 28m 42.71± 3.20s
23.280 N ±16.3km 120.105 E ±22.6km
DEPTH = 10.0km (geophysicist)
TAIWAN (244)

TWK	0.35	92 iPc	28	50.50	0.5
		eS	28	52.90	
TWG	1.00	117 ePd	29	02.30	0.6
TWF1	1.10	86 ePd	29	01.70	-1.6
TWQ	1.20	34 eP	29	05.80	0.8
TWD	1.58	59 ePc	29	10.70	-0.1
TWZ	2.25	36 ePc	29	21.00	0.4
SSE	7.84	7 eP	30	39.00	-0.6
		eLg	33	08.00	

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

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* FEB 01, 1990 23h 07m 50.48± 1.92s
24.116 N ±14.3km 121.661 E ±17.6km
DEPTH = 10.0km (geophysicist)
3.5mb (1 obs.)
TAIWAN (244)

TWD	0.07	239 iPd	07	52.50	-0.3
		eS	07	56.30	
TWC	0.52	19 iPc	08	00.90	-0.1
		eS	08	11.50	
TWQ	0.77	282 ePd	08	05.30	-0.2
TWF1	0.83	204 ePc	08	00.40	-6.1X
TWZ	0.98	356 ePc	08	09.10	0.0
		eS	08	25.80	
TWK	1.37	232 ePc	08	11.70	-3.9X
QZH	2.91	287 Pg	08	33.50	-4.2X
		Sn	09	07.50	
SSE	6.97	357 eP	09	12.80	-22.2X
	Z 18s	0.40um			
		Lg	11	32.00	
NJ2	8.28	343 Pc	09	47.50	-6.0X
WHN	9.12	316 eP	09	53.80	-11.3X
		eS	11	40.00	
GYA	13.77	283 P	11	04.80	-3.4X
		S	13	36.20	
BJI	16.54	345 eP	11	54.00	10.0X
CD2	17.25	297 eP	11	47.60	-5.6X
CHTO	21.78	260 eP	12	45.00	0.5
	0.6s	1.12nm		3.5mb	

S.D. = 0.5 on 5 of 14 obs.

? FEB 01, 1990 23h 25m 53.84± 3.35s
13.641 N ±29.1km 91.861 W ±24.3km
DEPTH = 10.0km (geophysicist)
4.2mb (1 obs.)
NEAR COAST OF GUATEMALA (71)

TPX	1.31	343 iP	26	18.50	0.4
		iS	26	52.00	
SCX	3.17	346 iP	26	50.50	5.9X
		iS	27	28.00	
OXX	5.80	307 iP	27	21.50	-0.8
		(S)	28	27.00	
LVVM	7.49	325 (P)	27	44.00	-1.7
PPM	8.44	311 iP	28	01.50	1.9
III	8.70	304 (P)	28	02.00	-0.9
MRX	10.78	305 (P)	28	32.00	0.7
ALQ	24.97	331 eP	31	20.50	1.2
	1.0s	5.00nm		4.2mb	
INK	60.82	344 eP	36	07.50	-0.7

S.D. = 1.5 on 8 of 9 obs.

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* FEB 02, 1990 01h 28m 21.65± 0.64s
25.368 S ±14.9km 70.138 E ± 9.3km
DEPTH = 10.0km (geophysicist)
5.1mb (3 obs.) 4.6Msz (1 obs.)
MID-INDIAN RISE (429)

HYB	43.31	12 eP	36	25.50	0.0
CHG	52.10	35 eP	37	35.00	0.8
CHTO	52.10	35 e(P)	37	36.00	1.8
	1.0s	6.75nm		4.5mb	
ASPA	57.54	103 eP	38	13.70	-0.2
BCAO	58.16	293 iPd	38	18.60	0.2
	1.5s	38.00nm		5.2mb	
		id	38	24.20	
WRA	59.01	99 Pd	38	23.70	-0.6
	1.2s	24.00nm		5.2mb	
WB5	59.06	99 eP	38	25.60	1.0
CD2	64.55	32 eP	38	59.60	-1.6
XAN	69.62	34 eP	39	32.20	-1.0
GTA	70.15	24 eP	39	35.60	-0.9
WMQ	70.71	13 P	39	39.50	-0.2
TIY	74.27	34 eP	40	00.50	-0.3
	Z 30s	0.60um		4.7MszX	
		S	49	28.00	
BJI	77.93	34 eP	40	22.00	0.7
	Z 24s	0.38um		4.6MszX	
LIC	79.38	282 P	40	29.50	-0.3
	Z 20s	0.28um		4.6Msz	
OHR	80.43	324 eP	40	35.00	0.0
VRI	81.12	331 ePc	40	38.50	0.0
MLR	81.18	330 ePc	40	39.00	0.1
SRO	86.44	328 eP	41	05.80	0.4
SPC	86.51	330 eP	41	06.20	0.2
ZST	87.29	328 eP	41	09.60	0.1
FFC	150.10	351 ePKP	48	13.00	4.5X
	1.0s	11.00nm			

S.D. = 0.8 on 20 of 21 obs.

FEB 02, 1990 01h 56m 38.74± 0.65s
32.176 S ± 5.7km 69.437 W ± 6.2km
DEPTH = 138.2 ± 9.6 km
MENDOZA PROVINCE, ARGENTINA (139)

RTCV	0.83	68 iPc	57	00.60	-0.6
RTCB	0.88	38 e(P)	57	02.00	0.3
ZON	0.90	46 iPd	57	01.50	-0.4
		eS	57	16.00	
CFA	1.17	61 iPc	57	04.00	-0.3
		(S)	57	16.00	
RTLL	1.18	45 iPc	57	04.00	-0.4
FCH	1.36	212 iPd	57	07.20	0.6
		iS	57	27.80	
ROCH	1.55	239 iPd	57	08.00	-0.6
		iS	57	28.80	
SAN	1.64	219 iP	57	09.40	0.0
		iS	57	31.50	
PCH	1.70	212 iPd	57	10.70	0.5
		iS	57	34.60	
TACH	1.94	220 iPd	57	12.70	-0.2
		iS	57	38.10	
RTRS	2.00	359 iPd	57	14.90	1.4
		(S)	57	39.80	
CHCH	2.03	210 iPd	57	14.50	0.5
		iS	57	40.50	
LNV	2.43	223 iPc	57	17.70	-1.2
		iS	57	46.70	
RFA	2.71	163 ePc	57	22.80	0.2
		S	57	55.00	
MRA	3.17	95 ePc	57	28.80	0.4
		S	58	05.00	
TCA	4.21	80 ePd	57	42.30	-0.1
ZOBO	15.88	5 eP	00	16.00	-0.4
		LR	55	48.00	

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

FEB 02, 1990 02h 03m 06.79± 0.63s
48.011 N ± 6.3km 9.341 E ± 5.3km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
ML 2.9 (LDG), 2.3 (GRF). MD 2.1 (STR).

SLE	0.62	247 iPc	03	18.00	-1.3
SAX	0.76	180 iPd	03	21.70	-0.2
ZLA	0.83	231 iPd	03	22.80	-0.1
FEL	0.90	262 Pg	03	22.50	-1.7
		Sg	03	35.00	
LLS	1.17	192 ePd	03	29.60	0.9
FUR	1.31	82 ePg	03	30.40	-0.6
WLS	1.39	288 Pg	03	31.70	-0.5
		Sg	03	48.50	
OSS	1.43	157 ePc	03	32.80	-0.2
CDF	1.44	287 Pg	03	33.00	0.0
		Sg	03	51.20	
GWF	1.50	311 Pg	03	34.50	0.8
		Sg	03	51.50	
VDL	1.53	177 ePd	03	35.60	1.3
BSF	1.72	265 Pn	03	36.00	-1.1
		Sg	04	01.00	
GRC1	1.75	55 ePg	03	37.40	0.0
		eSg	03	58.70	
LOMF	1.82	250 Pg	03	40.00	1.5
TMA	1.93	190 ePd	03	39.10	-1.1
HAU	2.01	271 Pg	03	43.60	2.4
		Sg	04	09.20	
LPG	3.08	216 Pg	04	05.00	8.4X
DOU	3.76	306 eP	04	57.50	51.5X

S.D. = 1.2 on 16 of 18 obs.

FEB 02, 1990 02h 52m 46.75± 0.65s
37.798 N ± 7.0km 15.036 E ± 5.6km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO	0.30	296 Pc	52	53.60	0.5
		eSg	52	58.40	

ATN 0.49 43 P 52 57.70 0.9
eSg 53 06.50
MEU 0.70 187 P 53 00.00 -0.7
eSg 53 09.60
GIB 0.82 284 P 53 02.50 -0.2
eSg 53 15.50
SOI 0.85 71 P 53 04.20 1.1
eSg 53 16.80
FAI 1.20 245 P 53 09.80 0.7
CZI 1.66 31 P 53 15.10 -0.9
TDS 2.12 28 P 53 22.30 -0.4
CSI 2.21 26 P 53 22.90 -1.0
S.D. = 0.9 on 9 of 9 obs.

FEB 02, 1990 03h 24m 05.27± 0.72s
37.814 N ± 7.8km 15.000 E ± 5.9km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO 0.27 296 Pc 24 12.00 1.0
eSg 24 16.60
ATN 0.50 46 Pc 24 16.10 0.6
eSg 24 24.70
MSI 0.59 48 P 24 17.90 0.8
eSg 24 27.10
MEU 0.71 185 P 24 18.30 -1.1
eSg 24 27.90
GIB 0.79 283 P 24 21.50 0.8
eSg 24 32.50
SOI 0.87 73 P 24 22.80 0.8
eSg 24 35.50
MCT 1.10 261 P 24 26.60 0.6
FAI 1.18 243 P 24 27.80 0.5
CZI 1.66 32 P 24 33.40 -1.1
eSg 24 54.80
USI 1.69 302 P 24 33.50 -1.4
TDS 2.12 29 P 24 39.60 -1.6
ROI 2.14 34 P 24 44.20 2.6
CSI 2.20 27 P 24 43.80 1.4
MGR 2.36 10 P 24 43.50 -1.1
eSn 25 12.00
SGO 2.75 5 P 24 49.00 -1.2
BRT 3.50 28 P 24 59.40 -1.5
S.D. = 1.4 on 16 of 16 obs.

FEB 02, 1990 03h 26m 44.18± 0.65s
37.779 N ± 6.8km 15.016 E ± 5.5km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO 0.30 301 Pc 26 50.50 0.0
eSg 26 56.40
ATN 0.52 43 P 26 55.50 0.8
eSg 27 04.20
MEU 0.68 186 P 26 57.30 -0.4
eSg 27 06.70
GIB 0.81 285 P 27 00.00 0.0
eSg 27 13.50
SOI 0.87 70 P 27 01.50 0.6
eSg 27 15.00
FAI 1.18 245 P 27 06.70 0.5
CZI 1.68 31 P 27 12.40 -1.3
eSg 27 32.00
CSI 2.23 26 P 27 21.50 -0.2
S.D. = 0.8 on 8 of 8 obs.

FEB 02, 1990 03h 36m 17.69± 0.72s
37.786 N ± 7.5km 15.033 E ± 5.9km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO 0.30 299 P 36 24.20 0.1
eSn 36 28.90
ATN 0.51 42 P 36 28.50 0.6
eSg 36 37.80
MEU 0.69 187 P 36 30.80 -0.6
eSg 36 40.40
GIB 0.82 285 P 36 33.50 -0.2
eSg 36 46.50
SOI 0.86 70 P 36 34.90 0.7
eSg 36 49.40
FAI 1.19 245 Pc 36 40.70 0.8
CZI 1.67 31 P 36 45.70 -1.4
S.D. = 1.0 on 7 of 7 obs.

FEB 02, 1990 04h 18m 03.99± 0.56s
44.588 N ± 3.5km 8.317 E ± 5.2km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.6 (GEN), 2.5 (LDG).

CKI 0.17 189 Pc 18 07.80 0.0
eSg 18 10.90
PCP 0.17 106 P 18 07.51 -0.4
S 18 10.29
FIN 0.39 192 P 18 11.44 -0.5
S 18 16.90
ROB 0.43 228 P 18 12.08 -0.8
S 18 17.92
ENR 0.74 241 P 18 18.15 -0.4
S 18 26.95
IMI 0.74 205 P 18 18.21 -0.4
S 18 27.36
DOI 0.77 264 P 18 18.70 -0.4
eSg 18 28.60
STV 0.79 245 P 18 19.28 -0.1
S 18 28.28
PZZ 0.87 265 P 18 20.20 -0.7
S 18 29.51
RSP 0.94 307 P 18 20.94 -1.1
SBF 0.96 221 Pg 18 21.90 -0.4
Sg 18 34.40
ORO 1.06 347 P 18 24.50 0.4
eSg 18 42.00
ORX 1.07 347 P 18 23.96 -0.3
LSD 1.20 317 P 18 25.76 -0.7
LPG 1.44 310 Pg 18 31.20 0.9
Sg 18 48.80
LPL 1.46 310 Pg 18 31.40 0.8
FRF 1.58 230 Pg 18 33.20 1.1
Sg 18 53.50
LMR 1.81 227 Pg 18 36.20 0.8
Sg 18 59.90
LRG 1.81 232 Pg 18 37.50 2.1
Sg 19 02.00
S.D. = 0.9 on 19 of 19 obs.

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* FEB 02, 1990 04h 41m 03.07± 0.74s
12.692 N ± 7.4km 145.064 E ±30.5km
DEPTH = 33.0km (normal)
4.5mb (2 obs.)
SOUTH OF MARIANA ISLANDS (210)
Felt (III) in central Guom.

GUA 0.85 350 iPd 41 19.20 0.5
eS 41 30.80
GUMO 0.91 348 iPd 41 19.30 -0.2
PJG 0.91 348 iPd 41 19.20 -0.3
WRA 34.10 198 Pc 47 47.00 0.0
0.5s 3.80nm 4.6mb
ASPA 37.75 197 iPc 48 17.90 0.0
0.6s 4.00nm 4.5mb
DZM 40.41 149 iPc 48 40.10 0.0
FORR 46.26 200 eP 49 36.00 8.8X
S.D. = 0.4 on 6 of 7 obs.

FEB 02, 1990 05h 19m 02.45± 0.58s
37.788 N ± 6.4km 14.982 E ± 4.9km
DEPTH = 19.1 ± 6.7 km
SICILY (398)

MNO 0.27 302 Pc 19 08.70 -0.1
eSg 19 12.50
ATN 0.53 45 Pc 19 12.90 -0.1
eSg 19 22.20
MSI 0.61 47 P 19 14.50 0.1
eSg 19 24.10
MEU 0.69 183 P 19 14.90 -0.8
eSg 19 24.90
GIB 0.78 285 P 19 17.50 0.2
eSg 19 30.00
SOI 0.89 71 P 19 19.40 0.3
eSg 19 34.10
MCT 1.08 262 P 19 23.00 0.5
FAI 1.16 244 P 19 24.30 0.8
CZI 1.69 32 P 19 29.80 -1.4
eSg 19 49.50
USI 1.69 303 P 19 30.20 -1.0
TDS 2.15 29 P 19 38.80 1.0
ROI 2.17 34 P 19 40.20 2.0
CSI 2.23 27 P 19 39.30 0.2
MGR 2.39 11 P 19 41.00 -0.2
SGO 2.78 5 P 19 46.50 -0.2
BRT 3.53 28 P 19 56.20 -1.3
eSn 20 38.70
S.D. = 1.0 on 16 of 16 obs.

? FEB 02, 1990 05h 35m 09.86± 9.12s
51.226 N ±70.0km 15.985 E ±35.4km
DEPTH = 10.0km (geophysicist)
POLAND (548)
ML 2.8 (KBA).

KSP 0.43 153 iP 35 18.80 0.2
0.6s 60.00nm
iS 35 28.00
BRG 1.33 255 iPg 35 34.20 -0.3
iSg 35 54.00
PRU 1.54 217 ePn 35 38.00 0.6
Sn 35 55.70
Sg 36 02.80
CLL 1.88 274 iPn 35 38.90 -3.3X
iPg 35 42.80
iSg 36 07.70
KHC 2.61 217 ePn 35 54.00 1.2
ePg 36 00.00
Sg 36 28.60
MOX 2.82 260 ePg 36 02.00 6.1X
iSg 36 41.00
KBA 4.50 204 ePnc 36 18.00 -1.7
i 37 39.00
S.D. = 1.6 on 5 of 7 obs.

FEB 02, 1990 06h 02m 10.55± 0.75s
40.335 N ± 6.8km 29.266 E ± 7.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

YLV 0.25 19 iPg 02 16.50 0.7
GBZT 0.47 17 ePg 02 20.20 0.0
iSg 02 28.30
HRT 0.57 32 ePg 02 22.10 -0.1
KCT 0.70 263 iPg 02 24.00 -0.4
ISK 0.75 348 ePg 02 25.60 0.4
eSg 02 36.60
GPA 0.80 93 ePg 02 24.30 -1.8
DST 0.88 214 iPg 02 26.00 -1.5
BNT 1.03 272 iPn 02 30.00 0.0
EDC 1.07 271 iPn 02 30.50 -0.2
KHL 2.02 174 ePn 02 48.00 2.9
S.D. = 1.4 on 10 of 10 obs.

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* FEB 02, 1990 06h 24m 08.02± 0.96s
17.645 S ±12.7km 168.027 E ±11.2km
DEPTH = 72.2 ± 7.5 km
4.8mb (7 obs.)
VANUATU ISLANDS (186)

PVC 0.29 109 iPd 24 19.40 -0.1
iS 24 28.00
DZM 4.65 198 iPc 25 17.20 -0.2
iS 26 09.00
CTA 20.75 260 iPc 28 46.80 1.7
1.0s 30.00nm 4.6mb
KRP 21.25 163 P 28 51.70 1.7
MNG 23.78 166 P 29 15.00 0.1
0.6s 38.00nm 5.0mb
PGZ 23.98 164 P 29 16.70 0.0
0.6s 59.00nm 5.2mb
CAW 24.16 167 P 29 18.40 -0.1
MRW 24.20 168 eP 29 19.30 0.4
WDW 24.29 167 eP 29 19.50 -0.3
MTW 24.30 166 P 29 19.30 -0.6
MOW 24.50 167 eP 29 21.20 -0.6
WB5 31.92 261 eP 30 28.20 -0.8
WRA 31.94 260 Pc 30 28.60 -0.7
0.8s 4.80nm 4.4mb
ASPA 32.44 254 ePd 30 33.20 -0.3
0.6s 36.00nm 5.4mb
SPA 72.47 180 eP 35 28.00 -0.6
1.0s 10.00nm 4.7mb
CHTO 76.94 295 iP 35 55.10 0.3
0.8s 2.38nm 4.2mb
BCAO 147.38 250 ePKPc 43 48.60 5.1X
0.3s 3.00nm
S.D. = 0.8 on 16 of 17 obs.

& FEB 02, 1990 06h 52m 09.42s
61.478 N 151.013 W
DEPTH = 68.2km
SOUTHERN ALASKA (2)

02d 06h

<AGS-P>.

SUA	0.13	96	iP	52	20.04	1.9
			eS	52	28.45	
CGLM	0.51	251	eP	52	22.11	-0.3
NCG	0.55	263	iP	52	22.28	-0.7
SKT	0.56	334	iP	52	22.03	-0.9
PWA	0.57	72	iP	52	22.56	-0.4
SPU	0.58	240	iP	52	22.62	-0.6
			eS	52	33.38	
CRP	0.59	249	iP	52	22.89	-0.5
BGL	0.70	253	iP	52	23.70	-0.8
CKL	0.70	247	iP	52	23.82	-0.7
PMS	0.74	108	iP	52	24.48	-0.4
NKA	0.75	189	iP	52	26.30	1.4
PLRM	0.91	82	iP	52	25.87	-1.0
			iS	52	39.24	
CUT	0.99	20	iP	52	27.09	-0.9
			eS	52	41.30	
GHO	1.04	73	iP	52	27.68	-1.0
SLKM	1.05	158	eP	52	27.93	-0.8
RDT	1.13	217	iP	52	29.09	-0.8
			eS	52	45.16	
RED	1.37	220	iP	52	32.32	-0.7
			eS	52	50.81	
NNL	1.45	186	iP	52	34.08	0.1
SEW	1.58	150	eP	52	35.24	-0.5
HUR	1.64	23	eP	52	36.68	0.0
CNPM	1.96	183	iP	52	39.76	-1.3
GLI	1.99	106	iP	52	38.81	-2.7
			eS	53	03.71	
NCA	2.06	74	iP	52	41.07	-1.4
			eS	53	06.57	
KTH	2.08	1	eP	52	41.25	-1.6
RND	2.18	26	eP	52	42.63	-1.6
VZW	2.19	99	eP	52	42.02	-2.3
SVW	2.26	263	eP	52	42.75	-2.5
PDB	2.31	224	iP	52	44.24	-1.6
TOA	2.38	73	eP	52	46.00	-1.0
MCK	2.46	22	eP	52	46.64	-1.4
TTA	2.76	304	eP	52	49.89	-2.4
PAX	3.00	58	eP	52	54.08	-1.5
WRH	3.29	23	eP	52	57.22	-2.4
DDM	3.32	43	eP	52	59.54	-0.6
HDA	3.47	30	eP	53	00.27	-2.0
CCB	3.50	23	eP	53	00.09	-2.4
RDS	3.60	20	eP	53	01.58	-2.5
FBA	3.73	22	eP	53	03.83	-2.0

38 obs. associated

& FEB 02, 1990 07h 02m 32.09s
62.715 N 149.688 W
DEPTH = 69.1km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.26	5	eP	02	43.01	-0.1
			eS	02	51.23	
CUT	0.41	221	eP	02	43.88	-0.3
			eS	02	53.30	
RND	0.79	28	eP	02	47.90	-0.4
KTH	1.01	327	eP	02	51.12	0.1
			eS	03	05.71	
GHO	1.01	159	eP	02	50.70	-0.3
			eS	03	05.60	
PWA	1.07	185	eP	02	51.98	0.3
MCK	1.08	18	eP	02	51.28	-0.5
SKT	1.13	230	eP	02	52.01	-0.5
PLRM	1.16	167	eP	02	52.38	-0.4
			eS	03	09.28	
SUA	1.35	202	eP	02	55.36	-0.2
			eS	03	14.87	
PMS	1.48	178	eP	02	57.11	-0.1
			eS	03	17.01	
NCA	1.52	117	eP	02	57.61	-0.1
			eS	03	19.13	
TOA	1.75	109	eP	03	01.41	0.5
NCG	1.76	223	eP	03	01.02	0.0
NEA	1.89	8	eP	03	01.87	-0.9
WRH	1.90	21	eP	03	02.19	-0.7
SDG	1.93	94	eP	03	03.82	0.5
PAX	1.95	81	eP	03	03.81	0.1
DDM	2.04	56	eP	03	05.83	0.9
HDA	2.09	35	eP	03	04.84	-0.7
CCB	2.11	23	eP	03	04.90	-0.9
GLI	2.22	145	eP	03	06.07	-1.2
RDS	2.23	17	eP	03	06.70	-0.8
SLKM	2.23	187	eP	03	06.67	-0.9
FBA	2.35	20	eP	03	08.33	-0.8
GLM	2.50	23	eP	03	10.39	-0.9
RDT	2.51	212	eP	03	11.10	-0.4
GLB	3.05	112	eP	03	18.18	-0.8

28 obs. associated

& FEB 02, 1990 07h 49m 08.60s
44.390 N 112.737 W
DEPTH = 0.2km
EASTERN IDAHO (457)
<BUT>. ML 3.9 (BUT).

JGI	0.30	172	P	49	14.80	0.2
MCMT	0.44	350	iPc	49	17.50	0.0
LTMT	0.47	73	ePd	49	18.20	0.2
GBI	0.63	129	P	49	20.80	-0.4
HPI	0.73	201	eP	49	22.00	-1.1
BGMT	0.98	30	iPc	49	26.90	-1.3
LRM	1.45	8	eP	49	35.40	-0.8
PTI	1.54	170	eP	49	35.20	-2.4
LCCM	1.57	22	P	49	37.30	-0.6
BUT	1.63	4	ePn	49	38.10	-0.7
			ePg	49	39.60	
			eSn	50	01.20	
MEMT	1.75	45	iPnd	49	40.30	-0.2
SXM	2.06	31	iPnc	49	44.50	-0.6
HRY	2.41	15	ePn	49	48.60	-1.4
BW06	2.82	124	e(P)	49	55.50	-0.5
EBI	3.41	317	Pn	50	03.70	-0.6
DPW	5.15	314	eP	50	23.30	-5.6
SES	6.12	10	eP	50	39.00	-3.5
KVN	6.67	219	eP	50	51.00	0.5
TNP	7.15	210	e(P)	51	08.80	11.6
EDM	8.85	358	eP	51	49.50	28.8

20 obs. associated

? FEB 02, 1990 08h 53m 15.44± 2.15s
31.339 S ±19.6km 69.165 W ±24.9km
DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB	0.35	115	iPc	53	27.00	3.1X
			(S)	53	38.00	
RTLL	0.60	89	iPd	53	28.00	0.5
RTCV	0.75	134	iPd	53	29.90	0.3
CFA	0.84	109	iPd	53	30.00	-0.8
			S	53	44.20	
RTRS	1.19	348	ePd	53	35.80	0.0

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

& FEB 02, 1990 09h 27m 17.90s
36.818 N 121.597 W
DEPTH = 3.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.0 (BRK).

SAO	0.13	113	iPd	27	20.50	-0.1
GCC	0.38	304	iPc	27	25.40	-0.2
PRS	0.52	159	iPd	27	28.10	-0.2
MHC	0.52	356	iPd	27	28.60	0.2
			iS	27	36.80	
ARN	0.53	6	iPd	27	28.50	-0.1
LLA	0.56	111	iPd	27	29.00	-0.1
PCC	0.93	318	eP	27	35.20	-1.0
PRI	1.01	132	eP	27	37.40	-0.4
BKS	1.17	334	iPc	27	39.00	-1.4
			iS	27	57.00	
BRK	1.18	334	e(P)	27	38.60	-1.9
			iS	27	57.00	
PKEM	1.42	122	eP	27	44.50	-0.1
FRI	1.52	83	eP	27	44.90	-1.2
			eS	28	05.30	
CMB	1.55	38	eP	27	44.50	-2.0
KVN	3.55	50	eP	28	22.00	6.7

14 obs. associated

? FEB 02, 1990 09h 39m 19.84± 1.17s
11.967 N ±21.7km 87.353 W ±22.0km
DEPTH = 33.0km (normal)
4.2mb (3 obs.)
NEAR COAST OF NICARAGUA (74)

TUL	25.03	344	eP	44	43.00	0.6
	0.8s		5.20nm			4.2mb
GLA	32.76	314	eP	45	52.10	0.1
BW06	36.25	332	eP	46	22.00	-0.1
	0.7s		1.90nm			4.1mb
LRM	39.92	332	eP	46	53.70	0.9
FFC	44.19	348	eP	47	27.50	0.2
	0.6s		6.00nm			4.6mb
SCH	45.71	17	eP	47	40.00	0.5
PNT	45.79	331	eP	47	39.00	-1.2
BAO	47.64	124	eP	47	55.50	0.2
FRB	53.38	10	eP	48	37.00	-1.1

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

FEB 02, 1990 10h 05m 10.03± 0.88s
40.282 N ± 8.5km 29.269 E ± 7.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

YLV	0.30	16	iPg	05	16.90	0.7
GBZT	0.52	15	ePg	05	20.50	-0.1
			iSg	05	28.60	
KCT	0.70	268	iPg	05	21.90	-2.0
GPA	0.80	89	ePg	05	25.00	-0.5
DST	0.84	216	iPn	05	27.10	0.9
BNT	1.03	275	iPn	05	30.40	0.8
EDC	1.08	274	ePn	05	30.50	0.2

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

FEB 02, 1990 10h 30m 50.48± 0.64s
0.468 S ± 8.1km 79.057 W ± 7.4km
DEPTH = 10.0km (geophysicist)
ECUADOR (107)

GGP	0.55	58	P	31	01.80	0.1
QUR	0.60	61	P	31	02.70	-0.3
			S	31	11.50	
VC1	0.68	105	P	31	05.20	0.9
COTA	1.07	42	P	31	10.60	-0.4
			S	31	26.60	
CAYA	1.20	63	P	31	13.50	0.2
			S	31	32.00	
ZOBO	19.05	146	P	35	15.00	-1.0
LPB	19.27	146	P	35	00.00	-18.7X
GKN	148.48	28	PKP	50	36.60	0.3
KKN	148.96	28	PKP	50	37.20	0.1
DMN	149.03	28	PKP	50	37.40	0.1
GUN	149.13	27	PKP	50	38.00	0.4
PKI	149.20	28	PKP	50	37.60	-0.1

S.D. = 0.6 on 11 of 12 obs.

• FEB 02, 1990 11h 27m 40.25± 1.22s
17.402 N ±13.5km 94.792 W ±16.4km
DEPTH = 103.5 ± 13.1 km
3.9mb (3 obs.)
CHIAPAS, MEXICO (61)

PSM	0.73	199	iP	27	59.67	1.1
			iS	28	08.33	
OXX	1.87	260	iP	28	10.36	-1.7
			iS	28	32.29	
SCX	2.17	107	iP	28	22.53	6.9X
			iS	28	52.44	
LVVM	2.80	326	iP	28	23.46	-0.7
			iS	28	54.45	
TPX	3.48	135	(P)	29	08.14	34.8X
IIT	3.71	296	iP	28	37.74	0.9
			(S)	29	27.05	
PPM	4.00	295	iP	28	41.68	0.6
			(S)	29	16.03	
III	4.56	283	eP	28	46.66	-1.7
UNM	4.59	295	eP	28	49.00	0.1
CRX	5.05	294	(P)	29	33.20	37.9X
IIJ	5.23	297	iP	28	59.23	1.3
			(S)	29	45.33	
MRX	6.49	292	iP	28	23.46	-51.3X
TUL	18.46	357	eP	31	50.10	-0.6
	0.5s		8.50nm			4.3mb
ALQ	20.34	331	eP	32	09.50	-1.1
	1.0s		3.75nm			3.7mb
GLA	23.84	315	e(P)	32	46.80	1.9
BW06	28.25	337	e(P)	33	27.00	1.2
	1.0s		3.00nm			3.9mb
KVN	29.62	321	e(P)	33	38.00	-0.1
ZOBO	42.55	140	P	35	27.50	-0.6
INK	56.44	344	eP	37	11.50	-1.5
GBA	148.25	14	PKPd	47	13.90	0.9
	0.5s		1.50nm			

S.D. = 1.3 on 16 of 20 obs.

• FEB 02, 1990 11h 54m 24.01± 0.98s

34.654 N ± 9.8km 86.872 E ±14.3km
DEPTH = 33.0km (normal)
3.6mb (2 obs.)
TIBET (306)

GUN	6.78	187	P	56 04.40	0.3
GKN	6.90	197	P	56 06.40	0.8
	0.4s	18.00nm			5.3mb X
KKN	6.98	192	P	56 07.00	0.3
	0.6s	27.00nm			5.4mb X
PKI	7.17	190	P	56 10.00	0.4
	0.4s	14.00nm			5.3mb X
DMN	7.18	193	P	56 10.00	0.3
	0.4s	28.00nm			5.6mb X
WMQ	9.18	4	eP	56 38.00	0.8
HYB	18.71	206	eP	58 39.50	-2.6
GYA	18.88	110	P	58 42.40	-1.8
CHTO	19.08	143	eP	58 48.70	2.1
	1.0s	1.75nm			3.3mb
HHC	20.45	65	eP	59 05.50	4.2X
TIY	20.84	74	eP	59 05.00	-0.4
GBA	22.63	204	Pc	59 23.00	-0.3
	0.6s	2.90nm			3.9mb
S.D. = 1.4 on 11 of 12 obs.					

• FEB 02, 1990 12h 47m 17.42± 1.70s
51.196 N ±18.1km 15.783 E ± 8.3km
DEPTH = 10.0km (geophysicist)
POLAND (548)
ML 2.7 (KRA).

KSP	0.48	137	iPd	47 25.70	-1.4
	0.5s	66.00nm			
			iS	47 35.00	
BRG	1.20	255	iPg	47 41.00	1.2
			iSg	48 00.50	
PRU	1.44	214	Pn	47 44.30	0.7
			Pg	47 46.00	
			Sn	48 02.60	
			Sg	48 10.00	
CLL	1.75	275	ePn	47 46.00	-2.0
			iPg	47 48.80	
			eSg	48 15.00	
KHC	2.51	215	ePn	47 59.00	0.1
			Pg	48 05.30	
			eSn	48 30.00	
			Sg	48 42.50	
KRA	2.88	112	eP	48 05.70	1.5
			eS	48 42.60	
GRF	3.28	244	ePn	48 10.40	0.5
			ePg	48 25.00	
			e(Sg)	49 07.00	
KBA	4.42	202	iP	48 25.70	-0.5
	0.3s	0.90nm			
			i	48 34.30	
			i	48 44.30	
S.D. = 1.5 on 8 of 8 obs.					

FEB 02, 1990 13h 21m 53.50± 0.48s
38.258 N ± 4.8km 28.829 E ± 5.1km
DEPTH = 5.0km (geophysicist)
TURKEY (366)

KHL	0.55	83	iPg	22 03.20	-1.3
IZM	1.24	277	ePn	22 17.50	0.5
DST	1.35	353	iPn	22 19.10	0.1
BCK	1.60	119	iPn	22 21.90	-0.7
SMG	1.67	251	ePn	22 22.10	-1.3
ELL	1.73	150	ePn	22 24.00	-0.6
KCT	2.02	350	iPn	22 29.30	0.7
ARG	2.11	196	ePn	22 30.20	0.2
BNT	2.21	342	iPn	22 31.30	-0.1
EDC	2.22	341	ePn	22 32.00	0.6
KSL	2.22	164	ePn	22 33.00	1.5
PRK	2.23	297	ePn	22 31.90	0.3
GPA	2.33	29	iPn	22 38.10	5.0X
YLV	2.34	10	iPn	22 33.80	0.4
EZN	2.50	310	iPn	22 36.20	0.7
GBZT	2.57	10	ePn	22 42.00	5.5X
			iSg	23 19.00	
HRT	2.64	14	ePn	22 37.30	-0.2
MFT	2.79	335	ePn	22 37.00	-2.8
ISK	2.81	4	ePn	22 44.00	4.1X
ITU	2.85	3	iPnc	22 49.00	8.6X
			iSg	23 30.00	
BBTK	3.45	61	eP	22 51.00	2.0
			e	23 00.00	
DMK	3.65	347	iPn	22 51.90	0.0
RDO	3.84	320	ePn	22 54.70	0.1
KAS	4.91	49	eP	23 28.00	18.2X
MLR	7.54	344	eP	23 38.00	-8.8X
S.D. = 1.1 on 19 of 25 obs.					

? FEB 02, 1990 13h 42m 20.06± 9.99s
8.206 S ±94.0km 127.804 E ±28.0km
DEPTH = 174.1 ± 42.1 km
TIMOR (289)

MTN	5.65	145	iPd	43 44.00	0.8
			eS	44 48.00	
KNA	7.56	173	eP	44 08.80	0.3
	0.3s	20.00nm			5.1mb X
			eS	45 36.00	
WB5	13.23	152	eP	45 21.70	-0.8
WRA	13.28	152	Pd	45 22.00	-1.0
	0.4s	13.10nm			4.7mb X
OIS	16.76	138	eP	46 17.00	10.7X
			eS	49 12.00	
NANU	18.52	218	eP	46 25.20	-0.7
FORR	22.53	179	iPd	47 07.30	1.4
S.D. = 1.5 on 6 of 7 obs.					

• FEB 02, 1990 14h 04m 25.55± 0.78s
42.219 N ±12.0km 76.270 E ±13.8km
DEPTH = 33.0km (normal)
4.4mb (4 obs.)
ALMA-ATA REGION (330)
Felt (III) at Almo-Ato.

MAIO	14.27	251	eP	07 46.00	-1.3
GKN	15.74	152	P	08 11.10	4.6X
KKN	16.16	150	P	08 10.20	-1.8
DMN	16.26	151	P	08 15.60	2.3
GUN	16.28	148	P	08 13.20	-0.5
PKI	16.41	150	P	08 14.80	-0.4
HYB	24.80	175	eP	09 48.00	2.1
CHTO	30.25	134	eP	10 34.40	-1.2
	0.8s	1.10nm			3.7mb
NB2	42.50	319	P	12 19.80	0.8
	0.9s	3.30nm			4.1mb
MBC	61.39	4	eP	14 40.00	-0.1
	0.6s	4.00nm			4.7mb
BCAO	63.46	250	iPd	14 55.00	0.4
	0.5s	4.00nm			4.8mb
INK	67.55	12	eP	15 20.00	-0.2
S.D. = 1.5 on 11 of 12 obs.					

FEB 02, 1990 14h 49m 09.48± 0.17s
18.407 S ± 4.4km 176.924 E ± 3.8km
DEPTH = 10.0km (geophysicist)
5.6mb (31 obs.) 5.7Msz (18 obs.)
FIJI ISLANDS REGION (181)
Felt (V) at Singatoka and Navua; (IV) at Nadi, Viti Levu. Felt throughout Viti Levu.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 38C
Centroid Location:
Origin Time 14:49:17.6 0.5
Lat 18.46S 0.03 Lon 176.70E 0.04
Dep 15.0 FIX Half-duration 4.0
Moment Tensor; Scale 10**18 Nm
Mrr=-0.03 0.02 Mtt=-1.26 0.03
Mff= 1.30 0.03 Mrt=-0.16 0.06
Mrf= 0.04 0.08 Mtf= 0.32 0.02
Principal Axes:

T	Val= 1.34	Plg= 1	Azm=277
N	-0.01	83	181
P	-1.32	7	7

Best Double Couple:Mo=1.3*10**18
NP1:Strike= 52 Dip=85 Slip= -4
NP2: 142 86 -174

NDF	0.82	38	iP	49 23.40	-1.9
BQA	1.15	89	eP	49 29.90	-1.1
SGE	1.25	50	iP	49 32.40	-0.4
SVA	1.49	79	iP	49 34.50	-1.7
VUN	1.52	75	iP	49 34.70	-2.0
YSA	1.81	20	iP	49 38.40	-2.5
OVA	1.91	68	iP	49 41.30	-1.1
MBU	2.23	51	eP	49 45.40	-1.7
KRO	2.59	66	iP	49 50.70	-1.5
NDE	2.91	52	eP	49 55.40	-1.5
PVC	8.22	273	iPc	51 11.50	-0.2
DZM	10.49	248	iPd	51 43.50	0.4
HNR	18.72	296	eP	53 30.00	-0.5
			eS	57 04.00	
KRP	19.48	183	Pd	53 41.00	1.4
PGZ	22.14	181	eP	54 06.00	-1.0
	1.0s	490.00nm			5.9mb
MNG	22.17	183	eP	54 05.40	-1.9
KIW	22.45	184	P	54 10.30	0.3
CAW	22.68	184	eP	54 11.30	-1.0
MTW	22.71	183	eP	54 11.00	-1.6
TCW	22.84	185	eP	54 14.80	0.9
WDW	22.85	184	eP	54 13.00	-0.9
WEL	22.88	184	P-	54 14.60	0.4
	1.0s	******nm			8.2mb X
			pP	54 30.00	67kmX
			S	58 26.00	
BLW	22.92	183	P	54 14.50	-0.2
MOW	22.98	183	eP	54 15.00	-0.3
BRS	23.94	244	iPd	54 25.00	0.2
	1.6s	41.00nm			4.8mb
			i	54 42.50	
KHZ	24.11	186	P	54 25.80	-0.3
	0.8s	284.00nm			5.9mb
COO	25.74	237	eP	54 42.00	0.0
RMO	27.21	248	iPd	54 56.10	0.6
MSZ	27.25	194	P	54 57.00	1.4
MHZ	27.33	192	P	54 55.20	-1.3
CTA	28.99	262	iPd	55 11.00	-0.6
	1.1s	92.41nm			5.5mb
			iS	00 03.00	
CNB	29.66	230	eP	55 20.00	2.4
CAN	29.93	230	eP	55 22.10	2.1
BWA	29.96	232	eP	55 18.70	-1.7
PMG	30.21	283	eP	55 21.00	-1.6
CMS	30.94	239	eP	55 28.00	-0.9
OLP	31.21	249	eP	55 30.00	-1.3
AFR	31.66	94	iP	55 39.00	3.7X
	1.3s	205.00nm			5.9mb
PAE	31.83	94	iP	55 40.60	3.7X
	1.3s	205.00nm			5.9mb
PPT	31.85	94	iP	55 40.80	3.8X
	1.3s	290.00nm			6.0mb
PMO	33.83	90	iP	55 54.90	0.6
	1.3s	125.00nm			5.7mb
VAH	34.04	90	iP	55 56.40	0.3
	1.3s	90.00nm			5.5mb
TPT	34.10	90	iP	55 57.30	0.7
	1.3s	60.00nm			5.4mb
RUV	34.28	90	iP	55 58.50	0.3
	1.3s	70.00nm			5.4mb
BFD	35.44	231	eP	56 10.00	2.1
ADE	37.65	236	iPd-	56 26.50	-0.1
	1.5s	194.44nm			5.7mb
WB5	40.15	261	iPd	56 45.80	-1.8
WRA	40.17	261	Pd	56 46.00	-1.8
	0.5s	15.90nm			5.0mb
MTN	44.36	270	eP	57 20.00	-2.0
GUA	44.76	313	eP	57 17.50	-7.8X
	0.7s	175.34nm			6.1mb
			e	57 33.50	
GUMO	44.83	313	eP	57 17.30	-8.5X
Z	23s	6.67um			5.5MszX
			eS	04 03.00	
PJG	44.83	313	eP	57 17.70	-8.1X
			e	57 30.30	
FORR	45.75	245	eP	57 32.00	-1.0
AAI	49.83	281	eP	58 10.00	5.0X
COOL	51.73	245	eP	58 17.00	-2.4
KUPT	52.17	271	eP	58 31.00	8.2X
	0.8s	125.20nm			5.9mb
KLB	54.62	244	eP	58 39.00	-1.8
MNI	54.87	285	e(P)	58 40.50	-2.3
NWAO	55.06	242	eP	58 42.00	-2.0
BAL	55.55	245	eP	58 47.00	-0.6
MUN	55.94	243	eP	58 40.00	-10.3X
DAV	56.63	292	eP	58 48.10	-7.3X
MKS	57.52	276	iPc	59 15.00	13.2X
VNDA	59.61	184	e(P)	59 12.70	-2.8
TSM	62.17	285	eP	59 42.90	9.1X
TRT	63.25	271	ePd	59 39.80	-1.2
OCP	64.08	297	eP	59 58.00	11.7X
KKM	64.59	286	eP	59 48.00	-1.8
BAG	65.36	298	eP	59 52.00	-2.8
			eS	08 40.00	
MAT	65.76	326	eP	59 55.00	-1.8
	1.6s	130.00nm			5.9mb

02d 14h

Z 20s 2.13um 5.3Msz
eS 08 47.00
SMY 70.88 358 P 00 40.00 11.7X
Z 20s 8.00um 6.0Msz
QZH 71.28 305 eP 00 31.00 -0.4
Z 24s 2.70um 5.4MszX
SPA 71.71 180 iPd 00 33.10 -0.5
1.1s 238.10nm 6.2mb
Z 20s 6.31um 5.9Msz
SSE 72.71 312 eP 00 41.00 1.3
1.2s 20.00nm 5.1mb
Z 20s 1.50um 5.3Msz
N 14s 0.90um
E 16s 0.50um
SSE 72.71 312 P 00 48.20 8.5X
1.2s 24.00nm 5.2mb
Z 20s 1.50um 5.3Msz
N 14s 0.90um
E 16s 0.50um
sP 02 06.00
S 10 07.00
SKS 10 22.00
PS 11 00.00
SS 15 24.00
NJ2 74.89 312 Pc 00 52.00 -0.4
Z 20s 0.70um 5.0Msz
KGM 75.12 277 eP 00 57.00 2.9X
MDJ 76.12 327 eP 00 58.00 -1.2
Z 25s 3.30um 5.5MszX
DL2 76.97 319 P 01 05.00 1.0
5.0s 700.00nm 6.0mb X
Z 25s 1.30um 5.1MszX
N 16s 0.90um
WHN 77.37 308 eP 01 04.00 -2.5
Z 24s 3.50um 5.6MszX
SNY 77.58 322 eP 01 05.00 -2.3
CN2 77.78 325 P 01 09.00 0.6
Z 40s 3.80um 5.4MszX
E 19s 3.30um
IPM 78.13 279 ePd 01 11.10 0.1
TIA 78.37 314 eP 01 12.80 1.0
Z 33s 2.30um 5.3MszX
E 23s 3.80um
SNG 79.39 281 eP 01 14.10 -3.8X
eS 11 22.60
PRS 79.73 46 eP 01 20.00 0.7
BKS 79.97 45 e(P) 01 20.10 -0.4
BCH 80.03 48 P 01 22.50 1.4
PRI 80.12 47 e(P) 01 22.60 1.1
ARN 80.16 45 P 01 22.50 0.9
BJI 81.08 317 eP 01 28.50 2.2
Z 22s 0.62um 4.9Msz
N 16s 1.20um
FRI 81.21 46 eP 01 27.50 0.4
WDC 81.24 42 e(P) 01 27.70 0.5
CMB 81.29 45 eP 01 27.70 0.1
ORV 81.35 43 e(P) 01 27.90 0.1
RVR 81.38 50 eP 01 28.00 0.0
SBB 81.39 49 eP 01 28.00 -0.2
ISA 81.41 48 eP 01 29.00 0.7
GYA 81.47 301 P 01 30.60 1.8
N 20s 1.50um
E 20s 2.10um
S 11 42.00
PEC 81.48 50 P 01 30.00 1.3
MIN 81.71 43 eP 01 29.90 0.1
MAW 81.86 201 eP 01 33.00 3.0X
LOE 82.05 291 eP 01 33.00 1.2
LBFM 82.07 42 P 01 31.00 -0.8
NNT 82.09 286 eP 01 24.00 -8.1X
CLC 82.10 48 eP 01 33.00 1.2
TIY 82.35 314 eP 01 33.50 0.4
N 21s 3.00um
GSC 82.42 49 eP 01 35.00 1.5
GLA 82.81 52 eP 01 36.00 0.4
NST 82.83 289 eP 01 37.50 1.6
XAN 83.08 309 P 01 38.40 1.4
KVN 83.35 45 P 01 38.40 0.0
TNP 83.47 46 P 01 40.00 0.9
TTA 83.81 12 P 01 40.00 -0.1
1.2s 64.39nm 5.7mb
KMI 84.14 299 Pc 01 46.00 3.2X
Z 20s 2.20um 5.5Msz
E 18s 2.30um
PMR 84.20 16 P 01 40.60 -1.3
1.3s 160.38nm 6.1mb
Z 20s 7.00um 6.0Msz

HHC 84.50 316 P 01 46.50 2.4
Z 27s 3.20um 5.6MszX
N 20s 2.90um
SKS 12 08.00
AIA 84.72 158 e(P) 01 47.00 2.4
CHG 85.03 292 ePd 01 48.00 1.0
1.2s 27.34nm 5.4mb
eS 12 20.00
CHTO 85.03 292 eP 01 47.20 0.2
0.8s 22.14nm 5.4mb
BTO 85.40 315 P 01 52.00 3.4X
N 15s 0.60um
E 15s 1.00um
CD2 85.65 304 eP 01 51.10 1.2
Z 12s 1.80um 5.7MszX
eS 12 19.50
IMA 87.08 12 P 01 56.00 -0.4
1.2s 15.15nm 5.1mb
MSU 87.19 48 P 01 59.20 1.6
FBA 87.32 14 P 01 55.60 -1.7
1.0s 27.50nm 5.5mb
DUG 87.49 46 P 02 00.00 1.1
1.8s 46.54nm 5.5mb
PNT 87.69 36 eP 02 00.00 0.6
LZH 87.72 309 P 02 01.00 0.9
LZH 87.72 309 P 02 03.00 2.9X
6.0s 680.00nm 6.1mb X
Z 25s 4.80um 5.8MszX
E 20s 2.70um
pP 02 12.00 28kmX
sP 02 20.00
i 02 32.00
i 02 39.00
i 03 20.00
ePP 05 20.00
eS 12 18.00
sS 12 36.00
PS 12 54.00
SS 18 02.00
DAU 88.65 47 P 02 11.00 6.3X
PTI 88.97 44 P 02 08.00 2.0
ALQ 89.91 53 iPc 02 10.70 0.1
1.5s 48.61nm 5.5mb
ANMO 89.91 53 P 02 11.70 1.1
1.5s 41.67nm 5.4mb
LRM 90.23 41 eP 02 14.80 2.9X
BW06 90.81 45 P 02 13.80 -0.8
2.0s 69.87nm 5.6mb
GTA 91.97 311 eP 02 20.00 0.1
Z 20s 1.50um 5.4Msz
E 12s 0.50um
SKS 12 56.00
SS 19 28.00
GOL 92.50 49 P 02 23.30 0.8
1.0s 43.75nm 5.8mb
Z 20s 2.50um 5.7Msz
EDM 93.03 34 eP 02 24.00 -0.3
SES 93.08 38 eP 02 25.00 0.4
INK 93.57 16 eP 02 26.00 -0.4
RSSD 95.03 45 P 02 34.00 0.0
LSA 95.38 299 P 02 39.20 3.0X
E 11s 0.50um
SIO 97.99 55 eP 02 48.40 1.1
TUL 98.44 55 eP 02 55.80 6.5X
1.4s 9.10nm 5.2mb
GUN 99.29 296 PKP 02 56.00 2.2
PKI 99.60 296 PKP 02 57.60 2.4
KKN 99.77 296 PKP 02 55.20 -0.6
DMN 99.87 296 PKP 02 56.60 0.3
GKN 100.37 296 Pdiff 02 57.70 -0.9
WMQ 101.96 312 ePdiff03 05.50 0.3
Z 23s 1.90um 5.6MszX
HYB 103.02 284 ePdiff03 28.00 17.6X
RSON 103.66 41 Pdiff 03 20.00 7.6X
Z 20s 6.78um 6.2Msz
RSCP 106.42 57 Pdiff 03 40.00 14.8X
Z 20s 5.08um 6.1Msz
QUE 115.97 295 ePKP 08 00.00 4.9X
QUE 115.97 295 ePKP 08 03.05 8.0X
FRB 117.16 27 ePKP 07 56.00 0.1
MAIO 122.57 302 ePKP 08 10.00 2.7X
BAO 124.32 125 e(PKP)08 13.00 1.7
BLF 124.96 211 ePKP 08 16.00 3.8X
KIM 125.94 210 iPKPc 08 21.50 7.3X
PRY 126.06 214 ePKP 08 14.00 -0.5
1.0s 17.00nm
BFS 126.45 214 ePKP 08 09.50 -5.7X

SLR 126.57 216 iPKPc+08 20.50 5.0X
1.0s 20.00nm
Z 18s 5.84um 6.3Msz
KSR 127.22 214 ePKP 08 19.00 2.3X
BUL 130.67 221 ePKP 08 23.10 -0.3
1.3s 17.31nm
NUR 133.52 341 iPKP 08 36.60 9.3X
0.7s 9.30nm
SLY 133.93 302 ePKP 08 36.00 7.1X
e 11 39.00
e 12 04.50
e 13 46.00
WIN 134.75 207 ePKP 08 40.00 8.9X
Z 20s 5.67um 6.3Msz
BHD 135.17 299 ePKP 08 40.00 8.7X
e 12 07.00
NB2 136.22 350 PKP 08 32.80 0.2
1.4s 15.90nm
LWI 142.51 240 e(PKP)08 44.20 -1.5
KRA 143.44 335 ePKP 08 50.50 4.6X
GPA 143.96 314 ePKP 08 46.00 -1.1
SPC 143.99 334 ePKP 08 47.80 0.7
KSP 144.16 339 ePKP 08 45.30 -1.8
1.2s 77.00nm
i 08 49.00
BUC 144.39 323 ePKPd 08 49.00 1.4
ISK 144.42 316 ePKP 08 44.20 -3.6X
ITU 144.43 316 iPKPd 08 52.00 4.2X
CMP 144.45 325 iPKPc 08 28.00 -19.8X
BUC1 144.47 323 ePKPc 08 56.00 8.2X
CLL 144.78 342 iPKP 08 46.40 -1.7
1.3s 160.00nm
e 10 28.00
BRG 144.89 341 iPKP 08 46.90 -1.4
i 08 51.20
i 08 56.00
BCK 144.98 310 ePKP 08 46.90 -2.1
DCN 144.98 4 ePKP 08 57.30 9.0X
PSZ 145.11 333 ePKP 08 52.30 3.4X
JMB 145.25 320 ePKP 08 50.00 0.8
KHL 145.38 312 ePKP 08 49.00 -0.7
DST 145.42 314 iPKP 08 50.20 0.5
PRU 145.47 340 ePKP 08 42.90 -6.4X
Z 20s 2.40um 6.0Msz
e 08 53.00
PVL 145.56 322 ePKP 08 49.00 -0.7
EDC 145.57 316 ePKP 08 53.50 3.7X
ELL 145.76 309 ePKP 08 50.00 -0.4
MOX 145.77 343 ePKP 08 50.00 0.2
Z 24s 2.60um 5.9MszX
e 08 58.00
BUD 145.82 333 ePKP 08 49.00 -1.0
SRO 145.87 334 ePKP 08 54.60 4.6X
e 09 09.10
e 10 21.00
ECB 145.99 4 ePKP 08 50.70 0.6
1.1s 183.00nm
ZST 146.05 336 ePKP 08 52.20 1.8
i 08 59.50
TIM 146.11 329 ePKP 08 55.00 4.5X
DIM 146.12 320 ePKP 08 53.00 2.3X
AGRW 146.16 285 ePKP 08 54.00 2.8X
ECP 146.20 4 ePKP 08 51.90 1.5
KSL 146.24 308 ePKP 08 50.60 -0.4
KOT 146.28 297 ePKP 08 53.00 1.7
VKA 146.30 336 e(PKP)08 54.00 3.2X
5.0s 1679.00nm
i 09 33.00
KHC 146.53 340 PKP 08 52.00 0.8
1.0s 28.50nm
Z 24s 2.70um 5.9MszX
N 22s 1.70um
e 09 15.40
RDO 146.64 319 ePKP 08 52.00 0.5
PGB 146.64 322 ePKP 08 53.00 1.4
SOP 146.68 336 ePKP 08 54.30 2.9X
HLW 146.71 297 ePKP 08 58.00 6.0X
GRF 146.74 343 ePKP 08 53.00 1.6
Z 21s 1.20um 5.7Msz
RZN 146.83 320 ePKP 08 55.00 2.9X
IZM 146.93 313 ePKP 08 53.00 0.8
MEM 147.06 349 PKPc 08 59.00 7.2X
BEO 147.14 328 e(PKP)08 58.40 6.2X
UCC 147.14 351 PKP 09 01.00 9.0X
VTS 147.17 323 ePKP 08 58.00 5.4X
PRK 147.18 315 ePKP 08 55.40 3.0X
KMR 147.27 338 iPKP- 08 56.30 4.0X

ARG	147.29	309	ePKP	08	59.60	6.9X
SNF	147.43	351	PKP	09	02.30	9.8X
ABH	147.46	347	ePKP	08	54.22	1.6
MMB	147.49	321	ePKPd	08	56.00	3.1X
KKB	147.70	322	ePKP	08	55.00	1.8
RUP	147.73	348	ePKP	08	54.54	1.5
DOU	147.79	351	PKP	08	55.10	2.0
WLF	147.94	349	ePKP	09	09.00	15.7X
BHG	147.98	340	iPKPc	08	59.90	6.4X
FUR	148.10	342	iPKPc	08	58.70	5.0X
VAY	148.34	322	ePKP	08	57.00	2.8X
KBA	148.38	338	ePKP	08	56.00	1.6
	0.9s		30.80nm			
			i	09	06.40	
ZAG	148.43	334	ePKP	09	02.00	7.8X
SKO	148.57	324	iPKP	08	57.00	2.4X
	Z 18s		0.97um			5.6Msz
	N 19s		1.00um			
	E 19s		1.06um			
			i	09	04.00	
			i	09	17.40	
LJU	148.82	336	ePKP	08	57.50	2.6X
CDF	148.91	347	ePKP	08	57.60	2.5X
VBY	148.98	335	ePKPc	09	00.90	5.8X
FVI	149.00	339	PKP	09	01.60	6.5X
VOY	149.07	337	ePKP	08	59.60	4.2X
CEY	149.11	336	ePKP	09	00.80	5.4X
FEL	149.24	345	ePKP	08	59.80	4.1X
OGA	149.33	341	ePKP	09	01.10	5.2X
TRI	149.39	337	ePKP	08	38.30	-17.4X
KZN	149.44	321	ePKP	09	02.00	5.9X
HAU	149.49	347	ePKP	08	59.20	3.3X
OHR	149.50	323	ePKP	08	51.30	-4.9X
	1.2s		0.12nm			
			i	09	01.60	
BSF	149.56	347	ePKP	08	59.20	3.1X
FLN	149.65	357	ePKP	08	59.50	3.5X
LDF	149.79	356	ePKP	08	59.80	3.5X
CTI	149.86	339	PKP	09	03.00	6.4X
GRR	150.04	357	ePKP	09	00.20	3.6X
LPF	150.40	357	ePKP	09	01.50	4.3X
VAM	150.51	311	ePKP	09	01.20	3.4X
SAL	150.61	340	PKP	09	05.00	7.5X
LOR	150.66	350	ePKP	09	02.00	4.4X
VAI	150.91	343	PKP	09	03.00	5.0X
LBF	150.91	350	ePKP	09	02.50	4.4X
SSF	150.91	351	ePKP	09	02.70	4.7X
ITM	151.18	316	ePKP	09	04.90	6.2X
AVF	151.20	351	ePKP	09	02.80	4.4X
SMF	151.27	350	ePKP	09	02.90	4.3X
ORO	151.34	344	PKP	09	05.50	6.7X
BGF	151.50	351	ePKP	09	03.80	4.9X
ARV	151.57	335	PKP	09	04.20	5.1X
LCI	151.62	325	PKP	09	04.00	4.8X
SFI	151.63	337	PKP	09	07.50	8.4X
BRT	151.64	326	PKP	09	05.50	6.2X
BOB	151.71	341	PKP	09	06.00	6.6X
PGD	151.72	337	PKP	09	07.50	8.0X
LPG	151.78	345	ePKP	09	05.10	5.3X
MFF	151.78	356	ePKP	09	04.10	4.8X
CRE	151.84	336	PKP	09	07.00	7.3X
TCF	151.85	352	ePKP	09	04.50	5.0X
LSF	151.97	353	ePKP	09	04.70	5.1X
BNI	152.21	345	PKP	09	08.80	8.6X
DUI	152.40	331	PKP	09	06.50	6.0X
MNS	152.60	334	PKP	09	06.00	5.3X
AZI	152.60	333	PKP	09	08.50	7.9X
SGO	152.84	328	PKP	09	08.00	7.0X
TDS	152.97	326	PKP	09	06.50	5.3X
RDP	153.10	333	PKP	09	08.50	7.1X
SOI	154.25	323	PKP	09	06.50	3.5X
BCAO	154.72	239	iPKPc	09	05.60	1.2
	1.0s		20.00nm			
			id	09	27.30	
			id	10	36.70	
			ic	13	03.30	
IFR	164.84	7	iPKP	09	20.00	4.7X
LIC	167.74	171	PKP	09	23.00	5.2X
	Z 22s		2.50um			
KIC	167.92	172	PKP	09	23.00	5.1X
TIC	168.16	171	PKP	09	23.40	5.3X
	S.D. = 1.3		on 160 of 285 obs.			

& FEB 02, 1990 14h 53m 14.70s
36.825 N 121.592 W
DEPTH = 1.0km
CENTRAL CALIFORNIA (39)

<BRK>. ML 2.8 (BRK).

SAO	0.13	117	iP	53	17.20	-0.1
GCC	0.38	302	eP	53	22.20	-0.2
MHC	0.52	356	iPd	53	25.30	0.3
			iS	53	33.40	
PRS	0.52	160	iPd	53	25.10	-0.1
ARN	0.53	5	eP	53	25.00	-0.2
LLA	0.56	112	iPd	53	25.90	0.0
PCC	0.92	317	eP	53	32.00	-1.1
PRI	1.01	132	eP	53	34.10	-0.7
BKS	1.17	334	ePc	53	37.20	-0.1
			eS	53	54.40	
BRK	1.17	333	e(P)	53	36.80	-0.6
FRI	1.52	83	eP	53	41.50	-1.6
CMB	1.54	38	eP	53	41.50	-2.0
KVN	3.54	50	eP	54	19.70	7.5
	13 obs. associated					

• FEB 02, 1990 15h 20m 21.31± 2.78s
31.079 S ±16.4km 71.672 W ±21.1km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

ROCH	1.97	164	iPc	20	53.90	0.7
RTRS	2.11	65	iPd	20	54.90	-0.1
RTCB	2.49	100	i(P)	21	02.00	1.5
			S	21	14.00	
SAN	2.52	160	iPd	21	01.20	0.4
ZON	2.60	101	eP	21	02.00	-0.1
TACH	2.64	167	iPd	21	02.60	0.1
			eS	21	33.50	
PCH	2.72	159	iPc	21	03.70	0.0
RTLL	2.76	96	iPc	21	03.50	-0.7
			S	21	23.30	
RTCV	2.79	107	ePc	21	05.10	0.5
LNV	2.88	176	iPc	21	05.30	-0.5
			eS	21	37.50	
CHCH	2.97	163	iPc	21	07.40	0.1
			iS	21	41.00	
CFA	2.98	101	iPd	21	08.00	0.5
			S	21	18.50	
RFA	4.56	145	ePc	21	29.10	-0.8
MRA	5.25	106	ePc	21	38.00	-1.5
	S.D. = 0.8		on 14 of 14 obs.			

% FEB 02, 1990 15h 29m 34.71± 1.03s
35.736 N ±26.5km 52.103 E ± 8.3km
DEPTH = 10.0km (geophysicist)
IRAN (348)

TEH	0.58	270	eP	29	46.00	-0.6
IR4	1.10	243	eP	29	56.00	0.6
IR1	1.20	255	eP	29	57.50	0.4
IR7	1.22	269	eP	29	58.00	0.6
IR5	1.35	248	eP	29	58.50	-1.1
MAIO	6.02	82	eP	31	06.00	0.0
	S.D. = 0.9		on 6 of 6 obs.			

• FEB 02, 1990 15h 56m 56.11± 1.20s
18.723 S ±10.5km 71.337 W ±10.9km
DEPTH = 46.9 ± 13.3 km
4.7mb (2 obs.)
OFF COAST OF NORTHERN CHILE (121)

ARE	2.25	356	iPc	57	31.80	-0.2
			iS	58	00.80	
LPB	3.78	55	Pc	57	55.00	1.2
	1.0s	1104.00nm				
ZOBO	3.92	52	iPc	57	55.90	0.0
ANT	5.03	170	iP	58	10.80	-0.2
CCH	5.12	76	iPc	58	11.80	-0.8
YJA	6.46	123	ePd	58	32.20	0.7
PT02	7.56	319	iPc	58	44.60	-1.9
PT08	8.39	322	iPc	58	59.60	1.2
			eS	00	30.70	
NNA	8.54	321	eP	58	55.30	-4.9X
	0.5s	6.34nm				4.8mb X
			eS	59	13.40	
			eS	00	31.30	
BAO	22.51	86	e(P)	01	49.00	-4.2X
TUL	59.07	337	eP	06	52.20	-1.7
	1.2s	13.20nm				4.9mb
SIO	59.11	336	e(P)	06	54.00	-0.2
KIC	70.18	76	Pc	08	04.00	-2.5
	0.6s	3.00nm				4.4mb
KVN	72.22	323	eP	08	20.90	2.3
EDM	80.30	336	iP	09	04.50	1.0
FRB	82.23	1	eP	09	14.00	0.9
KBA	99.95	44	eP	10	54.50	16.9X
	0.5s	0.90nm				
			i	10	58.40	
			e(Sg)	11	15.00	
MAT	148.55	310	ePKP	16	42.00	6.0X
	1.3s	40.38nm				
GBA	149.60	95	PKPd	16	44.10	6.0X
	0.7s	8.90nm				
HYB	151.36	88	ePKP	16	48.70	8.0X
	S.D. = 1.5		on 14 of 20 obs.			

• FEB 02, 1990 16h 48m 46.14± 0.82s
24.199 S ± 7.5km 69.681 W ±17.7km
DEPTH = 33.0km (normal)
NORTHERN CHILE (123)

ANT	0.83	306	iPc	49	01.30	-0.1
			iS	49	11.60	
RTRS	5.95	178	e(P)	50	15.00	0.8
RTLL	7.18	172	ePc	50	31.00	-0.6
RTCB	7.30	174	eP	50	34.00	0.7
CFA	7.49	171	eP	50	35.00	-0.9
LPB	7.77	11	eP	51	02.00	21.8X
ZOBO	8.02	11	P	50	44.00	0.1
	S.D. = 0.9		on 6 of 7 obs.			

? FEB 02, 1990 16h 55m 45.99± 1.21s
13.707 S ±12.2km 166.893 E ±26.8km
DEPTH = 33.0km (normal)
4.4mb (3 obs.)
VANUATU ISLANDS (186)

DZM	8.33	183	iPd	57	47.00	-0.5
			iS	59	18.30	
CTA	20.73	249	eP	00	26.00	-0.4
RMQ	21.22	230	iPc	00	32.20	0.8
WB5	31.70	254	eP	02	17.70	8.6X
WRA	31.73	254	P	02	16.00	6.6X
	0.9s	2.90nm				4.1mb
MAT	56.83	332	(P)	05	30.00	0.2
	1.2s	20.31nm				5.0mb
BJI	71.24	321	eP	07	02.00	-2.0
CHTO	74.33	294	eP	07	20.50	-2.0
	1.7s	6.10nm				4.3mb
GUN	88.58	299	P	08	39.00	1.3
PKI	88.89	299	P	08	40.20	1.0
KKN	89.06	299	P	08	40.80	1.0
GKN	89.67	299	P	08	43.00	0.4
SOD	120.42	343	ePKP	14	53.00	18.0X
SUF	123.76	339	ePKP	14	41.80	0.2
	0.5s	1.20nm				
BCAO	147.46	257	iPKPc	15	30.30	3.7X
	0.9s	14.00nm				
			ic	15	40.20	
	S.D. = 1.3		on 11 of 15 obs.			

• FEB 02, 1990 17h 58m 19.05± 1.09s
18.683 S ±11.3km 71.409 W ±11.6km
DEPTH = 33.0km (normal)
OFF COAST OF NORTHERN CHILE (121)

LPB	3.81	56	P	59	18.00	0.7
	0.9s	176.47nm				
			i	59	25.00	
ZOBO	3.95	53	P	59	18.60	-0.8
	1.0s	97.50nm				
ANT	5.08	170	eP	59	34.80	-0.1
CCH	5.17	76	eP	59	52.00	15.4X
PT02	7.48	319	iPc	00	07.20	-1.5
NNA	8.47	321	eP	00	24.00	1.5
	0.7s	6.85nm				4.9mb X
			e	02	24.00	
	S.D. = 1.7		on 5 of 6 obs.			

FEB 02, 1990 18h 34m 46.20± 0.12s
18.073 S ± 4.0km 178.307 W ± 3.4km
DEPTH = 576.1km (9 depth phases)
5.3mb (41 obs.)
FIJI ISLANDS REGION (181)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 17S, 33C
Centroid Location:
Origin Time 18:34:57.0 0.5
Lat 17.64S 0.04 Lon 178.91W 0.04

02d 18h

Dep 589.9 2.3 Half-duration 2.8
Moment Tensor; Scale 10**17 Nm
Mrr=-4.26 0.14 Mtt= 4.37 0.26
Mff=-0.11 0.24 Mrt= 0.75 0.24
Mrf=-2.49 0.22 Mtf=-0.90 0.20
Principal Axes:
T Val= 4.73 Plg= 9 Azm= 15
N 0.71 23 109
P -5.43 65 266
Best Double Couple:Mo=5.1*10**17
NP1:Strike= 80 Dip=42 Slip=-126
NP2: 304 58 -62

MBU	3.04	291	iPd	36	06.80	2.6
	0.2s	12.00nm			5.2mb	
			eS	42	37.00	
MTW	23.61	192	eP	39	13.90	-1.0
CAW	23.65	193	eP	39	13.90	-1.4
BLW	23.82	192	eP	39	16.20	-0.6
WDW	23.82	193	P	39	15.40	-1.4
MRW	23.85	193	eP	39	16.30	-0.7
WEL	23.89	193	eP	39	17.20	-0.1
SNZO	23.92	193	P	39	17.00	-0.6
TCW	23.93	194	P	39	17.80	0.1
			e	39	29.00	
KHZ	25.24	194	P	39	28.40	-0.8
AFR	27.16	93	iP	39	46.10	-0.2
	0.4s	30.00nm			5.3mb	
PAE	27.33	94	iP	39	47.60	-0.2
	0.4s	20.00nm			5.1mb	
PPT	27.35	93	iP	39	47.90	0.0
	0.4s	30.00nm			5.3mb	
PPN	27.49	93	iP	39	49.00	-0.1
	0.4s	10.00nm			4.8mb	
TVO	27.64	94	iP	39	51.10	0.6
	0.4s	20.00nm			5.1mb	
BRS	28.18	246	iPc	39	55.50	0.3
	1.1s	22.00nm			4.7mb	
			i	40	10.00	
			i	41	27.00	
MHZ	28.84	198	P	40	00.20	-0.6
MSZ	28.92	201	P	40	02.10	0.8
			e(sP)	41	37.00	
			S	44	12.50	
PMO	29.29	89	iP	40	05.30	0.5
	0.4s	10.00nm			4.8mb	
VAH	29.51	89	iP	40	06.20	-0.4
	0.4s	10.00nm			4.8mb	
TPT	29.56	89	iP	40	07.40	0.3
	0.4s	5.00nm			4.5mb	
RUV	29.75	89	iP	40	08.40	-0.3
	0.4s	20.00nm			5.1mb	
COO	29.77	240	iPc	40	10.70	1.8
			e	40	22.00	
RMO	31.54	249	eP	40	25.00	1.2
	0.7s	222.00nm			5.9mb	
			e	40	39.00	
			e	42	02.00	
CNB	33.40	233	iPc	40	41.60	2.2
	0.3s	120.00nm			6.0mb	
CTA	33.51	261	iPd-	40	40.20	-0.2
	1.2s	427.34nm			6.0mb	
			iS	45	18.00	
CAN	33.68	233	iPd	40	43.30	1.6
BWA	33.80	235	iPd	40	42.30	-0.5
PMG	34.59	280	iPd	40	49.50	0.1
CMS	35.03	241	iPd	40	54.30	1.4
			e	43	09.00	
QLP	35.57	249	iPd	40	58.20	0.8
			e	45	50.00	
LAT	35.66	284	eP	40	59.00	0.7
BFD	39.22	233	iPc	41	30.70	3.6X
QIS	39.72	259	iPd	41	30.70	-0.6
	0.2s	19.00nm			5.3mb	
ADE	41.63	237	iPd	41	47.60	1.2
	1.2s	278.13nm			5.7mb	
WB5	44.68	260	iPd	42	09.20	-1.2
WRA	44.70	260	Pc	42	10.20	-0.3
	0.4s	64.50nm			5.5mb	
GUA	47.99	308	eP	42	34.50	-1.1
	0.7s	246.58nm			5.8mb	
GUMO	48.05	308	eP	42	35.20	-0.9
	1.2s	644.44nm			6.0mb	
			eS	48	53.00	
PJG	48.05	308	eP	42	35.20	-0.9
MTN	48.89	269	iPd	42	41.10	-1.3
			e	49	03.00	
FORR	49.99	245	iPd	42	49.90	-0.4
KNA	50.55	264	eP	42	53.30	-1.3
	0.4s	76.00nm			5.5mb	
WARB	51.32	251	iPd	43	00.00	-0.2
KUPT	56.70	270	ePc	43	48.30	10.2X
	1.0s	138.70nm				
MEKA	58.54	249	eP	43	49.60	-0.9
	0.3s	27.00nm			5.0mb	
KLB	58.84	244	iPd	43	51.20	-1.2
MNI	59.19	283	ePd	43	53.70	-1.1
NWAO	59.22	242	iPc	43	54.80	-0.1
MUN	60.13	243	iPc	44	00.80	-0.1
MRWA	60.53	246	iPd	44	02.90	-0.7
	0.9s	94.00nm			5.1mb	
DAV	60.76	289	eP	44	02.00	-3.2X
NANU	61.77	254	eP	44	11.50	-0.2
MKS	62.01	274	ePd	44	12.30	-1.0
PCI	63.03	278	iPc	44	21.50	1.6
TSM	66.49	283	ePc	44	43.20	1.7
QCP	68.01	295	eP	44	54.00	3.3X
MAT	68.10	323	iPd	44	49.10	-1.8
	1.6s	190.00nm			5.4mb	
			eS	53	02.00	
KKM	68.88	284	ePd	44	55.00	-1.1
	1.2s	202.90nm			5.5mb	
BAG	69.24	296	eP	44	56.00	-2.3
ADK	69.67	1	eP	44	58.00	-1.9
SPA	72.04	180	iPd	45	15.40	1.5
	1.1s	83.33nm			5.2mb	
			e	45	50.20	
QZH	74.85	303	eP	45	30.00	-0.1
			S	54	24.00	
PRS	76.28	44	eP	45	38.40	0.6
BCH	76.50	46	eP	45	40.00	0.9
RVR	77.74	48	eP	45	46.00	0.3
FRI	77.75	44	e(P)	45	46.40	0.7
PLM	77.77	49	eP	45	47.00	0.9
SBB	77.79	47	eP	45	45.00	-1.0
			e	47	46.00	
ISA	77.86	46	eP	45	47.00	0.6
			e	47	47.00	
CMB	77.89	43	eP	45	47.20	0.7
WDC	78.01	40	eP	45	47.80	0.9
ORV	78.05	41	e(P)	45	47.80	0.6
NJ2	78.12	309	Pc	45	47.00	-0.7
MDJ	78.38	325	Pd	45	49.10	0.3
			esP	48	47.00	
			eS	55	01.00	
			ScS	55	17.00	
CLC	78.54	46	eP	45	51.00	1.0
			e	47	51.00	
GSC	78.82	47	eP	45	53.00	1.5
			e	47	53.00	
GLA	79.09	50	eP	45	55.00	2.2
			e	47	55.00	
QIZ	79.61	294	eP	45	54.70	-1.0
DL2	79.77	317	Pd	45	56.00	-0.2
	4.0s	700.00nm			5.4mb X	
			sP	48	53.50	
			S	55	14.00	
KVN	79.95	43	eP	45	57.50	0.1
			epP	47	59.00	569km
TNP	80.01	45	eP	45	57.90	0.2
	0.7s	5.00nm			4.1mb X	
			epP	47	59.60	570km
SNY	80.17	320	iPd	45	57.00	-1.2
	4.0s	800.00nm			5.5mb X	
			S	55	17.00	
CN2	80.21	322	iPd	45	58.20	-0.1
	1.8s	400.00nm			5.6mb	
			pP	48	02.00	582km
			iS	55	20.50	
WHN	80.78	306	Pd	46	01.80	0.2
	1.5s	300.00nm			5.6mb	
			S	55	24.00	
TIA	81.43	312	P	46	04.50	-0.3
IPM	82.57	277	ePd	46	12.20	1.2
	1.0s	138.50nm			5.4mb	
TTA	82.62	10	ePc	46	10.40	0.1
PMR	82.74	14	eP	46	09.50	-1.2
SNG	83.79	280	eP	46	18.40	1.4
	1.4s	297.67nm			5.7mb	
			eS	01	12.00	
TOA	83.87	15	eP	46	16.50	0.0
BJI	83.97	315	eP	46	17.00	-0.3
	1.7s	270.00nm			5.6mb	
			eS	55	52.00	
PNT	84.82	34	iPc	46	21.70	0.4
	0.6s	15.00nm			4.8mb	
GYA	85.20	300	iPd	46	24.20	0.4
TIY	85.45	312	iPd	46	24.00	-0.7
	1.2s	100.00nm			5.4mb	
			S	56	12.00	
NEW	85.59	36	eP	46	24.90	-0.2
PV09	85.74	47	eP	46	26.80	0.4
			epP	48	32.60	583km
IMA	85.92	10	eP	46	25.90	-0.5
	0.8s	7.70nm			4.5mb	
FBA	85.95	13	eP	46	24.50	-1.9
ALQ	86.12	51	eP	46	23.20	-5.0X
	1.0s	7.50nm			4.4mb	
Z	22s	1.76um			5.4Msz	
			pP	48	32.90	605kmX
ANMO	86.12	51	P	46	29.20	1.0
			pP	48	32.50	567km
LOE	86.18	290	eP	46	30.00	1.5
NNT	86.38	284	iPd	46	31.00	1.5
XAN	86.44	307	Pd	46	30.00	0.5
	1.6s	400.00nm			5.9mb	
NST	87.04	287	iPd	46	33.50	1.0
LRM	87.04	40	eP	46	32.20	-0.1
BW06	87.41	43	eP	46	34.80	0.6
	0.5s	7.86nm			4.7mb	
			epP	48	38.50	567km
HHC	87.46	314	Pd	46	34.60	0.4
KMI	87.99	297	iPc	46	38.50	1.3
BDT	88.58	289	eP	46	40.00	0.3
	1.0s	62.10nm			5.5mb	
GOL	88.90	48	eP	46	41.50	0.4
	0.7s	5.58nm			4.6mb	
			epP	48	48.00	581km
GLD	89.03	48	eP	46	42.80	1.2
			epP	48	50.00	585km
CHG	89.15	290	iPd	46	43.20	0.9
	1.0s	49.50nm			5.4mb	
CHTO	89.15	290	iPd	46	43.30	1.0
	1.7s	200.46nm			5.8mb	
			pP	48	52.00	593kmX
CD2	89.24	303	eP	46	43.10	0.5
			eSP	49	39.00	
SES	90.09	36	eP	46	45.00	-1.1
LZH	91.07	308	Pd	46	51.00	0.0
	1.8s	130.00nm			5.7mb	
RSSD	91.62	44	eP	46	53.20	-0.3
			epP	49	00.20	581km
INK	92.02	15	eP	46	53.00	-1.5
GTA	95.21	310	eP	47	09.40	-0.5
WMQ	105.11	312	ePdiff	47	49.50	-4.6X
HY8	107.35	283	ePKP	52	09.00	-0.9
GBA	107.45	279	PKP	52	10.00	-0.1
	0.5s	1.50nm				
KSH	113.24	306	ePKP	52	22.00	1.3
QUE	119.93	295	ePKP	52	34.06	0.3
KEV	126.04	349	ePKP	52	44.00	-0.1
MAIO	126.24	302	iPKPd	52	45.20	-0.5
			i	54	48.00	
SOD	128.18	348	iPKP	52	48.00	-0.2
SUF	132.27	345	ePKP	52	38.70	-17.4X
BUL	133.74	216	iPKPd	53	00.00	-0.4
			iPP	55	43.20	
KRI	135.75	220	iPKPd	52	53.50	-10.8X
			i	53	03.50	
			iPP	55	24.00	
TAB	136.36	307	ePKP	52	53.00	-11.9X
NB2	136.55	353	PKP	52	54.00	-10.4X
	0.9s	7.30nm				
HFS	137.11	351	ePKP	52	53.40	-12.0X
	0.4s	5.60nm				
SLY	137.58	303	ePKPd	53	06.00	-1.0
			e	55	47.00	
BHD	138.95	300	ePKPd	53	02.00	-7.5X
MSL	139.24	305	ePKP	53	06.50	-3.5X
			e	53	14.50	
			e	55	58.50	
			e	57	32.00	
AAE	142.92	261	ePKP	53	16.00	-1.5
DMU	143.63	9	ePKP	53	14.70	-2.4X

KAS	144.07	317	iPKPd	53	18.20	-0.2
DCN	144.11	9	ePKP	53	16.30	-1.6
	0.8s	119.00nm				
DLE	144.28	8	ePKP	53	17.30	-0.9
	0.9s	125.00nm				
KRA	144.89	339	ePKP	53	19.20	-0.2
	0.5s	68.00nm				
			e	55	37.20	
ECB	145.14	9	ePKP	53	19.70	0.0
KSP	145.29	344	iPKPc	53	20.20	0.2
	0.8s	120.00nm				
			ic	53	21.90	
			ic	55	34.40	
VRI	145.37	329	ePKPd	53	21.00	0.7
ECP	145.38	9	ePKP	53	19.40	-0.7
BBTK	145.50	315	iPKP	53	20.00	-0.9
BMR	145.51	334	ePKPc	53	23.00	2.5X
SPC	145.53	338	ePKP	53	20.50	-0.2
			e	55	38.70	
			e	12	30.80	
			e	13	31.60	
CLL	145.64	347	iPKPc	53	20.40	-0.2
	1.4s	130.00nm				
			e	53	51.00	
			e	55	39.00	
BRG	145.85	346	iPKP	53	21.00	0.1
			e	55	35.00	
MLR	146.02	329	ePKPc	53	21.00	-0.6
SHMJ	146.11	302	PKPc	53	24.00	2.1
BURJ	146.22	301	PKP	53	24.30	2.0
SALJ	146.38	301	PKPd	53	25.00	2.5X
MASJ	146.43	300	PKP	53	23.90	1.3
PRU	146.53	345	ePKP	53	22.00	0.0
Z	22s	1.40um			5.7Msz	
E	20s	0.90um				
			e	53	24.20	
LWI	146.53	236	ePKPd	53	23.70	0.3
MOX	146.55	349	ePKP	53	22.00	-0.1
Z	30s	1.60um			5.6MszX	
			i	53	25.00	
			e	55	38.00	
CMP	146.63	329	ePKPc	53	25.00	2.6X
PSZ	146.72	337	ePKP	53	24.60	2.1
HOF	146.82	348	ePKP	53	22.00	-0.5
GPA	146.86	318	ePKP	53	25.10	2.2X
YLV	147.30	319	iPKP	53	26.10	2.4X
MEM	147.36	355	PKP	53	25.20	1.9
SRO	147.37	339	ePKP	53	23.20	-0.2
			e	54	46.40	
			e	55	40.80	
			e	13	12.60	
			e	13	57.00	
ZST	147.43	341	ePKP	53	23.70	0.2
			i	53	27.50	
			e	55	40.10	
			e	12	36.90	
GRF	147.54	348	ePKPc	53	23.60	-0.1
Z	19s	1.00um			5.6Msz	
			id	53	27.20	
			epPKPc	55	40.60	
KHC	147.56	345	iPKP	53	23.50	-0.3
Z	22s	1.50um			5.7Msz	
N	22s	1.10um				
			i	53	27.30	
SNF	147.57	357	PKP	53	26.90	3.2X
VKA	147.61	342	(PKP)	53	23.00	-0.9
	3.0s	1007.00nm				
			i	53	25.50	
			ePP	55	38.50	
WET	147.71	346	iPKPc	53	24.00	0.0
BADA	147.78	295	ePKP	53	24.70	0.0
ABH	147.92	353	ePKP	53	24.75	0.4
PVL	147.94	326	iPKPc	53	26.00	1.5
DOU	147.97	356	PKP	53	27.70	3.4X
			e	55	37.10	
SOP	148.06	341	ePKP	53	20.00	-4.5X
BCK	148.15	313	ePKP	53	28.00	2.9X
WLF	148.28	354	PKP	53	26.00	1.2
			e	53	30.00	
DST	148.32	318	iPKP	53	28.20	2.9X
KHL	148.44	315	ePKP	53	25.00	-0.6
DIM	148.63	325	iPKP	53	30.00	4.4X
GWF	148.80	352	PKP	53	25.46	-0.2
KDZ	148.96	324	iPKPd	53	30.00	3.8X
ELL	148.98	313	ePKP	53	30.00	3.5X
PGB	149.02	327	iPKPd	53	31.00	4.7X
BHG	149.04	345	iPKPc	53	26.00	-0.1
RZN	149.32	325	iPKPd	53	31.00	4.1X
FLN	149.34	3	iPKPc	53	30.20	3.7X
WLS	149.39	353	PKP	53	26.58	-0.1
CDF	149.40	353	PKP	53	26.68	0.0
VTS	149.48	328	ePKP	53	32.00	4.9X
LDF	149.52	2	iPKPc	53	30.70	4.0X
KBA	149.52	344	ePKP	53	24.70	-2.4X
	1.2s	24.30nm				
			i	53	30.00	
			i	53	31.20	
			i	53	40.30	
			ePP	55	44.00	
			i	55	52.00	
GRR	149.69	3	iPKPc	53	31.30	4.3X
VITF	149.73	354	PKP	53	25.92	-1.1
FEL	149.83	352	PKP	53	27.48	0.1
PTJ	149.83	340	ePKP	53	27.40	0.0
IZM	149.88	317	ePKP	53	28.00	0.3
ZAG	149.89	340	ePKPc	53	28.00	0.6
HAU	149.90	354	ePKP	53	31.90	4.5X
MMB	149.92	326	ePKPd	53	32.00	4.4X
MOF	149.97	353	PKP	53	27.28	-0.3
BSF	150.03	353	PKP	53	27.71	0.0
LPF	150.04	4	iPKPc	53	32.40	4.9X
KKB	150.07	327	iPKP	53	24.00	-3.8X
FVI	150.12	345	PKP	53	27.20	-0.5
KOT	150.14	299	ePKP	53	34.50	6.3X
LJU	150.14	342	e(PKP)	53	26.00	-1.8
			i	53	33.00	
			epPKP	55	47.00	
AKSR	150.24	286	ePKP	53	40.10	11.5X
OGA	150.27	347	iPKPc	53	28.50	0.3
BBS	150.30	352	PKP	53	27.90	-0.1
VOY	150.34	343	ePKP	53	27.90	-0.3
			i	53	33.00	
			e	53	41.30	
			epP	55	47.40	
VBY	150.41	340	ePKP	53	27.60	-0.6
			e	53	34.00	
			e	53	42.00	
			epPKP	55	49.00	
AGRW	150.44	286	ePKP	53	35.50	6.7X
AKUR	150.44	287	ePKP	53	35.50	6.7X
CEY	150.45	342	ePKP	53	28.00	-0.3
			e	53	33.50	
			e	53	45.50	
ANAL	150.58	286	iPKPc	53	36.00	6.9X
TRI	150.67	343	ePKP	53	28.30	-0.2
			e	53	34.00	
AGMR	150.69	286	iPKPc	53	36.00	6.8X
VAY	150.73	327	ePKP	53	27.40	-1.4
			i	53	33.40	
			i	53	44.30	
SKO	150.82	329	iPKP	53	27.50	-1.4
	1.3s	130.00nm				
			i	53	35.00	
			i	53	45.00	
			i	53	55.00	
			i	55	50.00	
LOR	150.83	357	iPKPc	53	34.20	5.4X
GRC	150.83	358	PKP	53	26.50	-2.2X
CTI	150.91	346	PKP	53	28.70	-0.4
			e	53	34.80	
SSF	151.05	357	ePKP	53	34.70	5.6X
LBF	151.11	357	iPKPc	53	34.80	5.5X
AVF	151.33	358	ePKP	53	34.90	5.4X
SMF	151.45	357	iPKPc	53	35.10	5.4X
MFF	151.51	3	iPKPc	53	35.40	5.6X
SAL	151.58	347	PKP	53	31.00	1.1
BGF	151.58	358	ePKP	53	35.70	5.8X
VAI	151.67	350	PKP	53	30.00	0.0
			e	53	36.00	
			e	55	51.50	
OHR	151.78	328	ePKP	53	29.00	-1.4
	1.4s	0.08nm				
			i	53	36.90	
			i	55	52.00	
TCF	151.86	359	ePKP	53	36.20	5.9X
LSF	151.90	0	iPKPc	53	36.20	5.8X
MAF	151.92	359	ePKP	53	36.50	6.1X
ORX	152.03	351	PKP	53	37.57	6.9X
HVAR	152.03	337	ePKP	53	36.70	6.1X
ORO	152.03	351	PKP	53	38.50	7.8X
AGO	152.07	358	PKP	53	29.28	-1.4
PLDF	152.14	357	PKP	53	30.84	0.0
LSD	152.32	352	PKP	53	39.00	7.7X
LPG	152.33	352	ePKP	53	38.30	6.9X
PYM	152.38	358	PKP	53	28.68	-2.5X
RSP	152.60	351	PKP	53	38.39	6.8X
BOB	152.60	348	PKP	53	39.00	7.5X
RSM	152.68	343	PKP	53	32.00	0.5
BNI	152.78	352	PKP	53	32.70	0.9
RJF	152.85	0	ePKP	53	39.10	7.4X
MME	152.88	346	PKP	53	39.90	7.8X
LBL	152.89	358	PKP	53	32.18	0.5
RRL	152.90	352	PKP	53	40.34	8.2X
PGD	152.92	344	PKP	53	31.00	-1.1
ARV	152.93	342	PKP	53	31.50	-0.4
PCP	152.99	349	PKP	53	40.54	8.5X
BDI	153.03	346	PKP	53	38.00	5.9X
CRE	153.09	343	PKP	53	42.00	9.8X
CKI	153.15	350	PKP	53	39.50	7.3X
LFF	153.20	2	ePKP	53	39.40	7.2X
CAF	153.23	359	ePKP	53	39.70	7.4X
PZZ	153.26	351	PKP	53	39.31	6.8X
ROB	153.35	350	PKP	53	40.13	7.6X
FIN	153.37	350	PKP	53	39.52	7.0X
LPO	153.47	1	ePKP	53	40.30	7.7X
STV	153.48	351	PKP	53	39.82	7.1X
ENR	153.48	351	PKP	53	40.34	7.6X
IMI	153.72	350	PKP	53	40.54	7.5X
MNS	154.02	341	PKP	53	32.50	-0.9
AZI	154.14	340	PKP	53	33.50	0.0
BCAO	158.66	233	iPKPd	53	40.60	0.6
	0.8s	24.00nm				
			id	54	21.00	
			ic	56	02.20	
LIC	166.52	150	PKP	53	46.50	-0.9
KIC	166.77	151	PKPd	53	46.66	-1.0
TIC	166.89	149	PKP	53	46.80	-1.0

S.D. = 1.0 on 201 of 282 obs.

FEB 02, 1990 18h 53m 40.35± 0.92s
5.294 S ± 3.3km 151.099 E ± 3.8km
DEPTH = 43.9 ± 8.3 km
5.7mb (31 obs.) 5.5Msz (10 obs.)
NEW BRITAIN REGION (192)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 33C
Centroid Location:
Origin Time 18:53:43.3 0.4
Lat 5.18S 0.03 Lon 151.06E 0.04
Dep 42.9 4.3 Half-duration 3.0
Moment Tensor; Scale 10**17 Nm
Mrr= 0.80 0.18 Mtt= 2.45 0.25
Mff=-3.25 0.33 Mrt=-0.75 0.36
Mrf= 0.33 0.34 Mtf= 5.41 0.20
Principal Axes:
T Val= 5.76 Plg= 6 Azm=149
N 0.82 82 286
P -6.58 5 59
Best Double Couple:Mo=6.2*10**17
NP1:Strike=194 Dip=82 Slip= 180
NP2: 284 90 8

RAB	1.53	44	iPd	54	06.50	0.9
LAT	4.29	251	eP	54	49.00	4.1X
PMG	5.66	224	iPd	55	04.00	-0.2
			eS	56	15.00	
HNR	9.69	116	eP	55	59.00	-1.2
CTA	15.44	197	iPd	57	18.60	1.7
	1.4s	353.49nm			5.4mb	
			i	58	39.00	
			iS	00	13.00	
QIS	18.84	215	iPd	57	58.60	-0.8
GUA	19.69	342	eP	58	09.00	-0.1
	0.8s	901.49nm			6.1mb	
			eS	01	52.00	
GUMO	19.75	342	eP	58	09.50	-0.2
	1.3s	1281.05nm			6.1mb	
PJG	19.75	342	eP	58	10.00	0.3
PVC	20.89	128	iPd	58	21.00	-0.4
MTN	21.09	248	eP	58	22.00	-1.4
RMO	21.19	186	iPc	58	25.70	1.2
	1.5s	995.00nm			6.0mb	
WB5	21.80	227	iPd	58	29.70	-0.9
WRA	21.86	227	P	58	31.00	-0.2
	0.7s	24.40nm			4.7mb	
BRS	22.03	176	iPd-	58	33.20	0.3
			i	58	43.00	
			i	02	25.00	
			iS	02	36.00	
OLP	22.16	196	eP	58	35.00	0.8

02d 18h

DZM 22.33 140 iPc 58 34.90 -1.1
AAI 22.89 273 eP 58 52.00 10.6X
KNA 24.26 243 eP 58 54.50 -0.2
COO 25.16 178 eP 59 04.00 0.7
CMS 26.52 190 eP 59 15.00 -0.8
KUPT 27.66 258 eP 59 39.00 12.7X
1.0s 388.30nm
DAV 28.29 296 eP 59 31.00 -1.0
BWA 29.09 185 eP 59 39.10 0.0
CAN 29.94 183 eP 59 49.00 2.3
WARB 31.27 226 eP 59 58.50 0.0
0.6s 42.00nm 5.4mb
PCI 31.51 277 ePd 00 05.00 4.3X
ADE 31.67 200 eP 00 01.40 -0.6
1.0s 92.00nm 5.6mb
FORR 33.37 218 iPd 00 16.00 -0.7
TSM 34.32 285 eP 00 27.10 2.0
BAG 37.10 306 eP 00 48.00 -0.9
eS 06 20.00
MEKA 37.61 232 eP 00 52.00 -0.9
COOL 37.95 224 eP 00 55.00 -0.7
KRP 39.37 149 P 01 08.60 1.2
KLB 40.74 226 eP 01 17.00 -1.8
MRWA 40.83 230 iPc 01 17.60 -2.0
0.6s 27.00nm 5.2mb
BAL 40.98 228 eP 01 20.00 -0.8
TCW 41.34 153 P 01 23.80 0.2
MNG 41.42 152 eP 01 24.10 -0.2
1.1s 46.00nm 5.1mb
MRW 41.55 153 eP 01 26.00 0.8
SNZO 41.61 153 P 01 24.00 -1.8
S 07 48.00
CAW 41.62 152 eP 01 25.70 -0.2
WEL 41.62 153 eP 01 25.50 -0.4
WDW 41.71 153 P 01 26.30 -0.3
CCW 41.75 154 eP 01 28.00 1.1
NWAO 41.84 225 eP 01 30.00 2.2
MTW 41.86 152 P 01 27.30 -0.5
MOW 41.95 153 eP 01 27.80 -0.8
BLW 42.01 152 P 01 28.80 -0.3
MUN 42.06 227 eP 01 28.00 -1.6
MHZ 42.68 161 P 01 33.70 -1.0
SHK 43.26 338 eP 01 39.00 -0.3
MAT 43.33 345 iPd 01 38.10 -1.8
1.7s 411.54nm 5.9mb
Z 20s 3.19um 5.2Msz
eS 07 59.00
QZH 43.62 315 eP 01 43.00 0.6
Z 32s 5.00um 5.2MszX
E 19s 4.20um
SSE 46.10 324 Pc 02 02.00 -0.2
4.0s 1300.00nm 6.2mb X
Z 22s 4.90um 5.4Msz
E 14s 1.40um
sP 02 26.00
SS 12 02.00
GZH 46.43 309 Pc 02 06.60 1.8
Z 27s 3.30um 5.2MszX
E 14s 2.00um
QIZ 47.27 302 P 02 15.10 3.5X
N 16s 3.20um
S 08 56.00
SS 12 17.00
NJ2 48.18 323 Pc 02 19.00 0.5
2.5s 600.00nm 6.2mb
Z 24s 2.00um 5.0MszX
N 13s 1.30um
E 14s 0.70um
WHN 50.06 318 iPc 02 34.00 1.1
1.5s 400.00nm 6.2mb
Z 20s 1.90um 5.1Msz
N 14s 1.10um
DL2 51.75 331 P 02 45.00 -0.7
1.6s 500.00nm 6.3mb
Z 25s 2.60um 5.2MszX
E 17s 2.00um
TIA 52.12 325 P 02 48.50 -0.1
Z 25s 3.20um 5.3MszX
E 18s 1.80um
S 10 11.00
SNY 53.19 334 Pc 02 55.80 -0.6
Z 20s 4.00um 5.5Msz
N 20s 2.40um
E 22s 2.00um
PP 03 15.00
S 10 18.00
SS 14 04.00

MDJ 53.31 341 eP 02 56.50 -0.7
Z 30s 4.20um 5.3MszX
esP 03 18.00
ePP 05 00.00
eS 10 28.00
GYA 53.36 309 P 02 59.40 1.4
N 20s 2.00um
E 20s 2.10um
LOE 53.71 296 eP 03 02.80 2.2
CN2 54.07 337 Pc 03 03.20 0.4
1.6s 100.00nm 5.6mb
BJI 55.38 328 eP 03 12.00 -0.4
1.8s 190.00nm 5.8mb
Z 28s 3.80um 5.3MszX
E 14s 0.89um
XAN 55.82 318 P 03 15.00 -0.8
1.5s 400.00nm 6.2mb
N 12s 0.70um
E 15s 1.20um
pP 03 35.80 83kmX
KMI 55.87 305 iPc 03 18.00 1.5
Z 20s 3.80um 5.5Msz
N 16s 1.50um
E 19s 2.20um
pP 03 27.00 29kmX
sP 03 34.00
sS 11 26.00
TIY 55.89 323 Pd 03 15.50 -0.8
1.4s 100.00nm 5.7mb
N 15s 1.60um
BDT 56.11 295 eP 03 18.10 0.1
HON 56.46 60 P 03 30.00 9.5X
Z 20s 3.72um 5.5Msz
OPA 56.60 60 P 03 19.50 -2.0
CHG 56.68 296 ePc 03 23.90 1.7
1.2s 31.64nm 5.2mb
eS 11 24.00
CHTO 56.68 296 eP 03 23.30 1.1
1.5s 46.17nm 5.3mb
CD2 57.78 312 eP 03 30.40 0.6
Z 23s 2.00um 5.2MszX
N 16s 2.00um
HHC 58.47 325 Pd 03 34.40 -0.1
Z 26s 4.90um 5.5MszX
N 15s 1.50um
ScS 13 12.00
AFR 59.00 107 eP 03 40.00 1.6
1.6s 150.00nm 5.9mb
BTO 59.19 324 P 03 39.00 -0.5
N 19s 1.70um
E 19s 2.40um
TVO 59.52 107 eP 03 44.00 1.9
1.6s 330.00nm 6.2mb
LZH 60.41 317 Pd 03 48.00 -0.1
1.4s 220.00nm 6.1mb
Z 38s 4.60um 5.3MszX
SS 15 52.00
PMO 60.66 104 iP 03 51.60 1.8
1.6s 205.00nm 6.0mb
VAH 60.92 104 iP 03 53.00 1.4
1.6s 125.00nm 5.8mb
TPT 60.92 104 iP 03 53.20 1.6
1.6s 175.00nm 5.9mb
RUV 61.16 104 iP 03 55.00 1.8
1.6s 165.00nm 5.9mb
GTA 64.88 318 eP 04 18.00 0.4
Z 18s 1.50um 5.2Msz
E 15s 0.80um
sS 13 16.00
SS 17 06.00
LSA 67.13 305 P 04 34.80 2.2
E 11s 0.70um
eS 13 24.00
GUN 70.93 302 P 04 56.40 0.4
PKI 71.23 301 P 04 58.40 0.6
KKN 71.41 301 P 04 58.80 0.1
DMN 71.50 301 P 04 59.80 0.5
GKN 72.01 302 P 05 02.20 0.0
VNDA 72.40 178 e(P) 05 02.30 -1.1
WMQ 74.96 318 P 05 19.00 0.0
Z 36s 2.50um 5.3MszX
PP 08 05.50
eS 14 56.00
HYB 75.05 289 eP 05 19.50 -0.4
GBA 75.47 285 P 05 27.00 4.7X
0.9s 6.20nm 4.6mb X
TTA 78.85 22 P 05 39.40 -0.9

1.8s 69.44nm 5.3mb
PMR 80.84 25 P 05 49.10 -1.7
1.7s 57.69nm 5.3mb
IMA 81.49 20 P 05 54.60 0.2
1.6s 24.59nm 4.9mb
KSH 81.95 311 eP 05 57.00 -0.3
FBA 82.97 22 P 05 59.40 -2.5
SPA 84.74 180 iPc 06 09.90 -1.2
1.2s 62.68nm 5.6mb
QUE 87.59 300 eP 06 26.05 0.2
INK 89.52 21 eP 06 33.00 -1.0
CMB 92.06 52 P 06 45.20 -1.2
FRI 92.50 53 eP 06 47.40 -1.0
ISA 93.40 55 eP 06 52.00 -0.6
PNT 93.51 41 eP 06 53.00 0.2
PAS 93.54 56 eP 06 53.00 -0.2
MWC 93.64 56 eP 06 54.00 0.1
SBB 93.86 56 eP 06 55.00 0.2
KVN 93.92 51 P 06 54.40 -0.7
CLC 94.12 55 eP 06 56.00 0.1
RVR 94.19 56 eP 06 56.00 -0.2
TNP 94.55 52 P 06 57.80 -0.3
GSC 94.73 55 eP 06 59.00 0.2
MBC 95.00 14 eP 06 58.00 -1.1
1.0s 7.00nm 5.0mb
GLA 96.27 57 eP 07 05.00 -0.8
EDM 97.54 37 ePc 07 10.40 -0.7
SES 99.07 40 eP 07 18.00 -0.1
GOL 103.77 51 Pdiff 07 50.00 10.3X
Z 18s 1.73um 5.6Msz
SLY 105.74 305 iPKPd 12 09.00 7.9X
BHD 106.85 303 ePKP 12 20.00 16.7X
MSL 107.57 306 ePKP 12 22.00 17.4X
RSON 109.85 38 Pdiff 08 20.00 13.9X
Z 20s 4.52um 6.0Msz
HFS 116.50 338 ePKP 12 20.40 -0.5
0.5s 1.00nm
NB2 116.79 339 PKP 12 23.40 1.9
0.9s 4.10nm
BUL 118.11 244 iPKPc 12 25.80 0.5
RSCP 119.92 52 PKP 12 40.00 11.8X
Z 20s 5.65um 6.2Msz
KSP 121.05 328 ePKP 12 29.00 -0.8
VAY 121.84 316 ePKP 12 31.00 -0.6
BRG 122.24 329 ePKP 12 32.20 0.1
1.2s 11.00nm
e 13 02.00
SKO 122.34 317 iPKP 12 31.00 -1.6
i 12 39.00
i 12 52.00
OHR 123.14 317 ePKP 12 33.00 -1.2
KHC 123.47 328 iPKP 12 36.00 1.4
PTJ 123.95 324 ePKP 12 35.10 -0.6
GRF 124.35 330 ePKP 12 38.00 1.8
e 12 44.00
VBY 124.58 323 e(PKP) 12 45.00 8.2X
LJU 124.71 324 e(PKP)12 36.50 -0.5
KBA 124.80 326 ePKP 12 42.00 4.6X
1.0s 4.50nm
VOY 125.09 325 e(PKP)12 43.20 5.3X
OGA 126.20 327 ePKP 12 40.00 -0.2
MEM 126.23 333 PKP 12 45.50 5.7X
PNJ 126.24 42 iPKPd 12 43.00 2.9X
CTI 126.35 326 PKP 12 46.00 5.6X
ARV 127.06 323 PKP 12 41.00 -0.7
CDF 127.15 330 ePKP 12 46.70 4.9X
SDI 127.49 320 PKP 12 42.50 -0.1
CRE 127.59 323 PKP 12 37.00 -5.8X
BSF 127.78 330 ePKP 12 48.00 5.0X
1.0s 20.00nm
MNS 127.84 321 PKP 12 43.00 -0.2
HAU 127.88 331 ePKP 12 48.30 5.2X
1.1s 19.50nm
VAI 128.05 327 PKP 12 39.00 -4.4X
BOB 128.36 326 PKP 12 49.00 4.8X
NNA 129.33 110 ePKP 12 48.50 1.6
1.0s 10.00nm
LOR 129.60 331 ePKP 12 52.00 5.6X
1.1s 15.60nm
LBF 129.74 331 ePKP 12 53.00 6.3X
SSF 129.92 331 ePKP 12 53.70 6.7X
0.9s 8.80nm
PGF 129.97 324 ePKP 12 54.00 6.6X
1.1s 26.30nm
SMF 130.05 331 ePKP 12 53.10 5.8X
1.1s 18.00nm
SBF 130.05 326 ePKP 12 54.70 7.3X

0.9s 20.90nm

LMR 130.91 326 ePKP 12 56.60 7.6X
TCF 131.09 332 ePKP 12 55.80 6.5X
1.0s 14.80nm
LPF 131.21 335 ePKP 12 56.30 6.9X
1.0s 28.00nm
MFF 131.94 334 ePKP 12 57.40 6.6X
1.2s 38.00nm
BCAO 132.73 271 iPKPc 13 02.90 9.6X
0.5s 16.00nm
ic 16 21.10
LPB 135.59 120 PKP 13 01.00 1.9
Z 16s 1.35um 5.8MszX
PKS 16 56.00
LR 57 44.00
ZOBO 135.68 120 PKP 12 52.00 -7.5X
0.9s 15.14nm
i 13 00.90
LR 58 12.00
ASMO 140.68 328 iPKPc 13 16.20 8.6X
APHE 140.95 327 ePKP 13 14.00 5.8X
IFR 144.26 325 iPKP 13 15.00 1.0
AVE 145.70 327 ePKP 13 09.00 -7.3X
i 13 37.50
i 14 11.50
SVB 147.14 74 ePKP 13 20.51 1.4
SSV 147.18 74 ePKP 13 21.97 2.7X
TIO 147.38 324 iPKP 13 22.00 2.8X
i 13 58.50
TRN 147.39 79 ePKP 13 22.82 3.4X
TBH 147.74 79 ePKP 13 23.20 3.2X
TEGH 151.23 272 ePKP 13 34.00 8.6X
SHGH 151.27 273 ePKP 13 36.00 10.5X
LEGH 151.41 272 ePKP 13 32.00 6.3X
KOGH 151.47 273 ePKP 13 35.00 9.1X
WEGH 151.55 272 ePKP 13 33.00 7.1X
KUK 151.60 273 ePKP 13 31.00 5.0X
WIGH 151.84 271 ePKP 13 33.00 6.7X
BAO 151.90 138 ePKP 13 26.80 0.3
KIC 155.94 274 (PKP) 13 38.20 6.2X
S.D. = 1.1 on 134 of 186 obs.

FEB 02, 1990 19h 25m 37.36± 0.92s
33.880 S ± 9.6km 70.071 W ± 5.5km
DEPTH = 10.0km (geophysicist)
CHILE-ARGENTINA BORDER REGION (127)

PCH 0.45 305 iPc 25 46.70 0.1
iS 25 53.90
CHCH 0.49 264 iPc 25 48.70 1.5
iS 25 58.00
FCH 0.58 342 iPc 25 47.10 -2.2
iS 25 55.00
SAN 0.65 311 iPc 25 49.70 -0.7
iS 25 59.90
TACH 0.76 287 iPc 25 52.50 0.3
iS 26 05.00
LNV 1.12 266 iPc 25 58.90 0.6
iS 26 15.60
ROCH 1.20 319 iPc 25 59.00 -0.9
iS 26 15.50
LCCH 1.31 287 iP 26 00.50 -1.1
iS 26 19.50
RFA 1.60 124 iPc 26 05.00 -0.8
S 26 25.00
RTCV 2.39 33 ePd 26 12.90 -4.3X
ZON 2.61 27 eP 26 21.00 0.7
eS 26 59.00
RTCB 2.62 25 eP 26 22.50 2.0
S 26 59.00
CFA 2.74 35 eP 26 23.00 0.7
RTLL 2.88 28 ePd 26 25.90 1.7
S 27 04.40
RTRS 3.73 8 iPd 26 41.80 5.5X
MRA 3.94 69 ePd 26 37.20 -2.0
S.D. = 1.4 on 14 of 16 obs.

? FEB 02, 1990 19h 26m 58.96±10.22s
32.538 N ±116.km 49.150 E ±61.8km
DEPTH = 33.0km (normal)
4.0mb (1 obs.)
WESTERN IRAN (347)

IR5 2.92 24 eP 27 45.00 0.7
IR4 3.06 28 eP 27 46.00 -0.3
IR1 3.14 24 eP 27 48.00 0.6
IR7 3.38 21 eP 27 50.00 -0.8

TEH 3.69 30 eP 27 55.00 -0.2
SLY 4.30 316 ePd 28 51.00 47.3X
e 29 05.00
HFS 36.12 330 eP 33 59.50 0.0
0.4s 0.90nm 4.0mb
S.D. = 0.7 on 6 of 7 obs.

& FEB 02, 1990 19h 32m 31.49s
61.360 N 151.516 W
DEPTH = 76.5km
SOUTHERN ALASKA (2)
<AGS-P>.

CGLM 0.24 258 iP 32 42.75 -0.6
NCG 0.31 278 iP 32 43.12 -0.6
eS 32 52.48
SPU 0.32 236 iP 32 43.14 -0.6
CRP 0.32 253 iP 32 43.38 -0.5
SUA 0.39 74 iP 32 43.97 -0.3
eS 32 54.59
CKL 0.43 248 iP 32 44.00 -0.6
BGL 0.43 257 iP 32 43.88 -0.8
SKT 0.62 359 iP 32 45.44 -0.9
NKA 0.63 168 iP 32 47.58 1.2
PWA 0.84 69 iPc 32 48.50 -0.1
RDT 0.90 209 iP 32 48.76 -0.7
PMS 0.95 96 iPc 32 49.60 -0.4
SLKM 1.06 143 iP 32 50.44 -1.0
eS 33 05.64
RED 1.13 214 iP 32 51.58 -0.7
eS 33 08.21
PLRM 1.17 77 iP 32 51.57 -1.1
PMR 1.17 77 iPd 32 51.70 -1.0
CUT 1.20 29 iP 32 52.64 -0.5
GHO 1.31 70 iP 32 53.42 -1.2
eS 33 10.89
NNL 1.33 175 iP 32 55.66 0.9
eS 33 13.81
SEW 1.62 140 eP 32 58.08 -0.5
CNPM 1.85 176 eP 33 00.96 -0.8
HUR 1.85 28 eP 33 00.60 -1.2
XLV 1.91 183 eP 33 01.90 -0.8
SVW 2.00 265 iPd 33 02.70 -1.2
PDB 2.06 221 iP 33 03.40 -1.2
GLI 2.20 101 eP 33 03.66 -2.9
AUE 2.21 205 eP 33 06.24 -0.5
KTH 2.22 7 eP 33 05.90 -1.0
NCA 2.33 72 iP 33 06.69 -1.7
eS 33 34.88
RND 2.40 30 eP 33 07.77 -1.7
TTA 2.63 309 eP 33 11.50 -1.2
TOA 2.65 71 iPd 33 11.60 -1.3
MCK 2.66 26 eP 33 11.89 -1.2
SDG 3.06 65 eP 33 17.09 -1.4
PAX 3.26 58 eP 33 19.69 -1.8
NEA 3.42 18 eP 33 20.77 -2.7
WRH 3.49 25 iP 33 22.25 -2.3
DDM 3.57 45 eP 33 25.47 -0.3
KDC 3.66 188 eP 33 25.50 -1.3
HDA 3.70 32 eP 33 25.12 -2.3
GLB 3.71 85 eP 33 24.15 -3.4
CCB 3.71 26 iP 33 24.98 -2.5
RDS 3.80 22 eP 33 26.24 -2.6
FBA 3.93 24 eP 33 28.40 -2.3
GLM 4.09 25 eP 33 30.39 -2.6
BALM 4.45 90 eP 33 34.31 -3.8
IMA 4.82 349 eP 33 41.10 -2.2
INK 10.32 40 eP 34 54.50 -4.2
48 obs. ossocioted

FEB 02, 1990 19h 58m 59.72± 0.78s
33.773 S ± 7.1km 69.967 W ± 6.3km
DEPTH = 10.0km (geophysicist)
CHILE-ARGENTINA BORDER REGION (127)

PCH 0.48 288 iPc 59 09.70 0.2
iS 59 16.00
FCH 0.52 329 iPc 59 10.10 -0.2
iS 59 18.00
CHCH 0.59 254 iPc 59 11.60 -0.1
iS 59 20.70
SAN 0.66 299 iPc 59 13.00 0.1
iS 59 23.10
TACH 0.82 278 iPc 59 15.50 -0.1
iS 59 27.20
ROCH 1.18 312 iP 59 22.00 0.0
iS 59 39.30

LNV 1.21 261 iPc 59 22.10 -0.2
iS 59 37.80
LCCH 1.37 282 iP 59 25.10 0.3
iS 59 44.00
RFA 1.59 129 iPc 59 28.10 0.0
S.D. = 0.2 on 9 of 9 obs.

FEB 02, 1990 19h 59m 23.08± 0.78s
44.049 N ± 5.0km 8.620 E ± 5.7km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.5 (LDG), 2.4 (GEN).

FIN 0.34 299 P 59 29.73 -0.3
S 59 34.13
CKI 0.45 327 P 59 31.60 -0.6
eSg 59 37.00
PCP 0.50 354 P 59 32.68 -0.5
S 59 39.57
IMI 0.55 256 P 59 33.41 -0.7
S 59 40.80
ROB 0.59 295 P 59 34.15 -1.0
S 59 40.98
SAOF 0.77 266 Pg 59 37.74 -0.4
Sg 59 48.10
AUTN 0.86 267 Pg 59 39.83 0.0
Sg 59 52.44
SBF 0.88 258 Pg 59 40.20 0.3
Sg 59 52.40
ENR 0.88 282 P 59 39.56 -0.5
S 59 50.95
BOB 0.93 39 P 59 42.10 1.2
AURF 0.95 261 Pg 59 41.17 0.0
Sg 59 55.64
STV 0.95 282 P 59 41.05 -0.2
S 59 52.48
REVF 0.96 252 Pg 59 41.62 0.3
Sg 59 55.38
TOUF 0.99 268 Pg 59 42.21 0.2
Sg 59 55.60
DOI 1.09 295 P 59 43.40 -0.2
eSg 59 56.50
PZZ 1.18 293 P 59 44.60 -0.6
S 59 59.40
RSP 1.47 319 P 59 49.63 -0.1
FRF 1.51 252 Pg 59 51.60 1.4
Sg 00 11.20
PGF 1.53 169 Pn 59 48.40 -2.1
Sn 00 05.80
RRL 1.58 304 P 59 52.05 0.7
ORX 1.65 344 P 59 51.98 -0.3
LRG 1.74 251 Pg 59 56.20 2.7
Sg 00 18.60
LSD 1.75 324 P 59 54.74 0.8
LPL 1.99 318 Pg 00 01.80 4.5X
S.D. = 1.0 on 23 of 24 obs.

FEB 02, 1990 21h 04m 14.55± 0.83s
41.415 N ±11.1km 22.703 E ± 9.1km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.5 (SKO).

VAY 0.14 227 iPg 04 17.40 -0.4
iSg 04 19.70
KKB 0.53 32 iPgc 04 24.00 -1.4
iSg 04 31.00
MMB 0.79 77 ePgd 04 29.00 -0.9
Sg 04 40.00
VTS 1.23 18 iPg 04 38.00 0.4
OHR 1.47 259 ePn 04 41.20 0.1
RZN 1.54 79 eP 04 43.00 0.8
Sg 05 05.00
PGB 1.57 43 iPc 04 44.00 1.4
S.D. = 1.2 on 7 of 7 obs.

% FEB 02, 1990 22h 17m 17.00± 0.57s
46.964 N ± 6.1km 5.750 E ± 5.3km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.3 (LDG).

HAU 1.12 21 Pg 17 38.10 0.1
Sg 17 53.30
BSF 1.12 39 Pg 17 37.80 -0.3
Sg 17 52.90
LBF 1.21 272 Pg 17 39.30 -0.3

02d 22h

		Sg	17 55.20		
SMF	1.35 257	Pg	17 41.00	-0.8	
		Sg	17 59.00		
SSF	1.54 274	Pg	17 45.20	0.7	
		Sg	18 05.00		
LPL	1.60 154	Pg	17 45.50	-0.1	
		Sg	18 04.80		
LPG	1.62 154	Pg	17 46.20	0.2	
AVF	1.65 265	Pg	17 46.60	0.4	
	S.D. = 0.6	on	8 of 8 obs.		

? FEB 02, 1990 23h 58m 00.34± 3.43s
15.144 N ± 9.0km 60.266 W ±31.6km
DEPTH = 28.1 ± 7.9 km
LEEWARD ISLANDS (92)
ML 2.5 (LDG).

CRM	0.74 238	iPd	58 14.52	0.0	
		S	58 24.30		
MVM	0.84 226	iPd	58 16.43	0.2	
		S	58 27.80		
FDF	0.95 245	iPd	58 17.48	-0.2	
		S	58 29.40		
BIM	1.00 231	iPd	58 18.48	0.0	
		S	58 31.00		
DTMT	1.05 275	eP	58 19.26	0.0	
		eS	58 32.14		
BBL	1.23 288	eP	58 21.90	0.2	
		S	58 33.50		
DEG	1.39 327	eP	58 24.00	-0.1	
	S.D. = 0.2	on	7 of 7 obs.		

FEB 03, 1990 00h 01m 54.35± 0.44s
47.037 N ± 5.0km 10.598 E ± 3.9km
DEPTH = 5.0km (geophysicist)
AUSTRIA (546)
ML 3.4 (FUR), 3.0 (LDG), 2.9 (KBA). Felt (V) at Pfunds.

OGA	0.34 120	iPgd	02 00.60	-0.6	
SCE	0.76 89	iPgc	02 08.40	-1.3	
FUR	1.22 22	iPgd	02 20.00	2.5	
CTI	1.23 143	P	02 16.50	-1.2	
		eSg	02 30.70		
MDI	1.40 206	P	02 20.20	-0.3	
		eSg	02 36.10		
SAL	1.43 182	P	02 20.50	-0.5	
		eSg	02 37.50		
FVI	1.56 106	P	02 22.70	-0.1	
		eSg	02 42.90		
BHG	1.69 65	iPc	02 27.40	2.7X	
VAI	1.72 228	Pd	02 25.00	-0.1	
		eSn	02 47.20		
KBA	1.88 88	iPnc	02 27.30	-0.3	
		iPg	02 30.00		
		iSn	02 51.20		
		iSg	02 55.30		
FEL	1.94 297	ePn	02 27.92	-0.6	
ORO	2.30 233	P	02 33.30	-0.3	
VOY	2.49 113	ePn	02 38.00	1.8	
		eSn	03 14.50		
TRI	2.56 120	eP	03 15.00	37.8X	
CDF	2.63 303	Pn	02 38.70	0.4	
		Pg	02 44.70		
		Sg	03 19.00		
GRF	2.69 9	e(Pn)	02 37.90	-1.2	
		ePg	02 48.80		
		eSn	03 11.00		
		eSg	03 21.40		
BSF	2.70 289	Pn	02 40.40	1.0	
		Sg	03 21.20		
LSD	2.86 238	P	02 43.40	1.6	
PCP	2.88 211	P	02 44.02	2.2	
KHC	2.90 43	Pn	02 42.20	0.2	
		Pg	02 48.90		
		Sn	03 17.60		
		Sg	03 27.00		
RSP	2.99 232	P	02 42.38	-1.1	
HAU	3.04 290	Pn	02 44.20	0.2	
		Sg	03 31.00		
LPG	3.08 241	Pn	02 46.80	2.0	
LPL	3.08 242	Pn	02 46.80	2.0	
FIN	3.29 212	P	02 49.76	2.2	
ROB	3.34 216	P	02 49.25	0.9	
RRL	3.40 233	P	02 49.04	-0.3	
PZZ	3.52 225	P	02 48.73	-2.2	
ENR	3.59 220	P	02 51.81	0.0	
STV	3.62 221	P	02 52.43	0.2	
IMI	3.66 212	P	02 50.89	-2.0	
SBF	3.88 216	Pn	02 57.20	1.2	
LBF	4.53 272	Pn	03 04.00	-1.2	
		Sg	04 19.00		
SMF	4.65 268	Pn	03 06.30	-0.6	
AVF	4.97 270	Pn	03 10.40	-1.0	
DOU	5.03 310	eP	04 06.80	54.6X	
BGF	5.34 268	Pn	03 15.20	-1.5	
		Sn	04 15.60		
TCF	5.82 266	Pn	03 21.60	-1.8	
	S.D. = 1.3	on	35 of 38 obs.		

& FEB 03, 1990 00h 18m 51.40s
36.875 N 122.152 W
DEPTH = 7.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.1 (BRK).

GCC	0.20 39	iPd	18 55.70	0.1	
SAO	0.58 101	iPc	19 02.50	-0.5	
MHC	0.62 41	iPd	19 04.10	0.3	
PCC	0.65 344	eP	19 03.70	-0.8	
ARN	0.69 46	iPd	19 05.00	-0.1	
PRS	0.83 131	ePc	19 07.00	-0.8	
BRK	1.00 355	eP	19 10.00	-0.6	
		iS	19 23.90		
BKS	1.00 356	iPc	19 10.00	-0.7	
		eS	19 24.00		
LLA	1.00 105	ePc	19 10.20	-0.5	
PRI	1.40 121	eP	19 16.40	-1.1	
CMB	1.82 50	eP	19 22.30	-1.1	
FRI	1.96 86	eP	19 23.80	-1.6	
KVN	3.87 55	eP	19 51.70	-1.1	
	13 obs. associated				

FEB 03, 1990 01h 07m 09.72± 1.38s
36.419 N ±11.5km 1.727 E ± 9.0km
DEPTH = 10.0km (geophysicist)
ALGERIA (396)
mbLg 3.4 (MDD).

ACU	2.69 321	ePn	07 54.00	0.1	
		eSn	08 24.80		
ENIJ	3.22 281	ePn	07 59.40	-1.9	
		eSn	08 36.00		
ESEL	3.47 15	ePn	08 04.80	0.0	
		eSn	08 45.20		
ECHE	3.82 327	ePn	08 10.20	0.4	
		eSn	08 51.00		
EVIA	4.03 305	ePn	08 12.40	-0.4	
		eSn	08 58.00		
AFC	4.31 283	ePn	08 17.80	0.8	
EBR	4.50 348	ePn	08 24.00	4.6X	
		e	09 20.00		
EROQ	4.52 347	ePn	08 20.00	0.3	
		eSn	09 08.70		
EBAN	4.73 293	ePn	08 23.00	0.2	
		eSn	09 15.50		
GUD	6.25 314	ePn	08 45.00	0.7	
		eSn	09 52.00		
IFR	6.33 245	eP	08 46.00	0.5	
		i	10 41.00		
		i	10 50.00		
EPF	6.69 351	Pn	08 50.80	0.3	
		Sn	10 03.00		
LMR	7.82 27	Pn	09 05.60	-0.6	
CAF	8.50 2	Pn	09 15.50	-0.3	
MAF	9.81 3	Pn	09 33.00	-0.9	
LPG	9.83 21	Pn	09 35.50	1.1	
BGF	10.16 4	Pn	09 38.40	-0.3	
	S.D. = 0.8	on	16 of 17 obs.		

? FEB 03, 1990 01h 53m 55.38± 7.21s
43.314 N ±22.5km 1.635 W ±55.6km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)

ELYF	0.49 107	Pg	54 05.62	0.2	
		Sg	54 11.37		
BOH	0.50 115	Pg	54 05.56	0.0	
		Sg	54 11.26		
MADF	0.62 106	Pg	54 07.86	0.0	
		Sg	54 15.57		
ISSF	0.68 115	Pg	54 08.42	-0.5	
		Sg	54 15.20		
ATE	0.72 108	Pg	54 09.12	-0.4	
		Sg	54 17.74		
EPF	1.47 100	Pn	54 23.00	1.0	
		Sn	54 42.40		
LFF	2.36 46	Pn	54 34.00	-0.7	
LPO	2.45 55	Pn	54 35.00	-1.1	
		Sn	55 08.00		
RJF	3.01 48	Pn	54 45.00	1.0	
CAF	3.11 58	Pn	54 46.00	0.5	
		Sn	55 23.00		
	S.D. = 0.8	on	10 of 10 obs.		

• FEB 03, 1990 02h 23m 43.87± 2.41s
7.910 N ±10.9km 126.859 E ±18.5km
DEPTH = 81.1 ± 18.8 km
4.4mb (4 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV	1.51 237	eP	24 10.00	0.2	
MNI	6.73 197	e(P)	25 17.00	-5.1X	
MTN	21.05 168	eP	28 22.00	-1.3	
		e	28 32.00		
KNA	23.58 175	eP	28 48.70	0.6	
LOE	26.24 294	eP	29 13.00	-0.3	
WB5	28.59 165	eP	29 38.60	4.1X	
CHTO	29.19 295	iP	29 39.80	-0.2	
	0.7s	1.27nm		3.7mb	
QIS	30.94 156	eP	29 54.00	-1.4	
ASPA	32.13 168	eP	30 06.00	0.2	
	0.6s	3.00nm		4.3mb	
NANU	32.25 200	eP	30 06.00	-0.8	
MRWA	38.37 195	iPc	30 59.40	0.6	
BAL	39.52 194	eP	31 09.00	0.6	
KLB	40.23 192	eP	31 15.00	0.8	
MUN	40.95 194	eP	31 21.00	0.9	
RKG	42.78 192	eP	31 41.00	5.9X	
GUN	43.49 303	P	31 41.00	-0.4	
PKI	43.77 302	P	31 43.80	0.1	
KKN	43.95 302	P	31 45.20	0.2	
GKN	44.56 302	P	31 45.00	-4.9X	
SOD	86.68 338	iP	36 29.60	10.1X	
MBC	87.87 13	eP	36 27.50	2.4	
	0.7s	5.00nm		4.7mb	
		pP	36 36.50	28kmX	
SUF	87.91 333	ePKP	36 25.40	-0.1	
NUR	89.13 331	ePKP	36 30.80	-0.5	
HFS	94.40 333	eP	36 54.30	-1.4	
	0.4s	0.70nm		4.4mb	
LPB	163.07 122	PKP	43 54.00	15.0X	
	S.D. = 1.0	on	19 of 25 obs.		

• FEB 03, 1990 02h 31m 45.74± 1.39s
4.724 S ± 9.4km 153.515 E ±11.2km
DEPTH = 90.8 ± 10.6 km
4.6mb (4 obs.)
NEW IRELAND REGION (190)

RAB	1.44 291	e(P)	32 11.00	-0.2	
		iS	32 29.00		
LAT	6.76 253	eP	33 24.00	-0.2	
PMG	7.84 233	eP	33 32.00	-7.0X	
QIS	20.75 219	eP	36 20.00	-1.3	
DZM	21.31 145	iPd	36 27.30	0.3	
BRS	22.55 182	iPc	36 40.50	1.3	
MTN	23.53 248	eP	36 49.00	0.3	
		e	37 51.00		
WB5	23.97 229	eP	36 53.90	0.9	
ASPA	26.69 223	eP	37 17.90	-0.4	
	0.3s	4.00nm		4.4mb	
MNG	40.83 154	P	39 20.00	0.0	
KHZ	41.55 158	P	39 25.40	-0.4	
CHTO	58.60 295	iP	41 36.90	1.1	
	0.5s	0.89nm		4.1mb	
GUN	72.69 301	P	43 06.80	0.3	
	0.6s	16.00nm		5.1mb	
PKI	73.01 301	P	43 08.20	-0.1	
KKN	73.17 301	P	43 09.20	0.1	
	0.6s	9.00nm		4.8mb	
DMN	73.28 301	P	43 10.20	0.4	
GKN	73.78 301	P	43 12.40	-0.1	
BUL	120.52 243	iPKPc	50 28.90	-0.5	
KRI	120.59 247	iPKPd	50 27.90	-1.7	
	S.D. = 0.8	on	18 of 19 obs.		

• FEB 03, 1990 03h 15m 29.84± 0.49s
0.397 S ±10.0km 124.578 E ±13.9km
DEPTH = 33.0km (normal)
4.5mb (5 obs.)

MOLUCCA SEA (269)

MNI	1.85	8	iPd	15	59.90	0.2
			eS	16	21.20	
AAI	4.87	132	ePc	16	42.40	-0.3
MTN	13.97	153	eP	18	49.00	1.2
WB5	21.61	154	eP	20	17.90	-1.3
WRA	21.65	154	Pc	20	18.80	-0.8
	0.5s	3.80nm			4.1mb	
ASPA	24.84	159	iPc	20	51.80	1.0
	1.0s	12.00nm			4.4mb	
QIS	24.85	145	iPc	20	50.90	0.0
	1.2s	96.00nm			5.3mb	
CHTO	31.59	309	eP	21	50.30	-1.7
	0.8s	1.65nm			3.9mb	
GUN	46.57	310	P	23	56.40	-0.7
	0.6s	13.00nm			5.1mb	
PKI	46.76	310	P	23	59.00	0.4
KKN	46.97	310	P	24	00.80	0.7
DMN	47.01	310	P	24	01.20	0.7
GKN	47.57	310	P	24	05.20	0.5

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

? FEB 03, 1990 03h 39m 16.47± 5.32s
33.558 S ± 8.8km 71.815 W ±38.0km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF CENTRAL CHILE (135)

LNV	0.52	140	iPc	39	27.10	0.1
			iS	39	35.00	
ROCH	0.89	49	ePd	39	33.70	0.0
			iS	39	47.50	
SAN	0.97	84	eP	39	35.00	0.1
			iS	39	49.50	
CHCH	1.04	111	eP	39	35.80	-0.3
			iS	39	51.00	
			i	39	53.00	
PCH	1.09	94	iPc	39	37.10	0.1
			iS	39	52.60	
FCH	1.29	80	iPd	39	40.70	0.0
			iS	39	58.50	

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

FEB 03, 1990 04h 43m 42.95± 1.27s
3.065 S ± 5.6km 126.361 E ± 8.2km
DEPTH = 84.5 ± 13.8 km
5.1mb (11 obs.)
BURU (271)
CENTROID, MOMENT TENSOR (HRV)
Doto Used: GDSN
L.P.B.: 12S, 21C
Centroid Locotion:
Origin Time 04:43:39.7 1.1
Lot 2.36S 0.10 Lon 126.03E 0.16
Dep 34.6 9.5 Half-durotion 1.6
Moment Tensor; Scole 10**16 Nm
Mrr= 2.38 0.66 Mtt=-5.84 0.65
Mff= 3.46 1.09 Mrt= 0.26 1.49
Mrf= 3.09 1.06 Mtf= 1.46 0.57
Principol Axes:

T Val=	6.19	Plg=40	Azm=278
N	-0.12	50	101
P	-6.07	2	9

Best Double Couple:Mo=6.1*10**16
NP1:Strike= 61 Dip=62 Slip= 29
NP2: 316 64 148

AAI	1.93	109	ePd	44	14.50	-0.1
			eS	44	38.50	
MNI	4.73	341	ePd	44	46.00	-7.3X
DAV	10.12	356	eP	46	00.00	-7.4X
MTN	10.80	154	eP	46	18.00	1.4
			e	48	44.00	
KNA	12.83	170	eP	46	41.20	-2.2
KKM	13.58	312	eP	46	55.00	1.5
TRT	14.42	251	iPd	47	09.20	5.0X
QCP	18.35	344	eP	47	45.00	-8.5X
WB5	18.45	156	iPd	47	53.90	-0.8
WRA	18.50	156	Pd	47	54.40	-0.8
	0.9s	52.30nm			4.8mb	
BAG	20.18	344	eP	47	53.00	-20.4X
PMG	21 60	108	eP	48	21.00	-6.6X
QIS	21.66	144	iPd	48	28.10	0.0
ASPA	21.74	161	iPc	48	28.00	-1.0
	0.7s	85.00nm			5.2mb	
Z	21s	1.21um			4.3Msz	
		iS		52	28.90	
		LR		57	03.30	
NANU	22.05	208	eP	48	31.00	-0.9
GUMO	24.72	48	eP	48	51.70	-6.2X
			e	49	00.50	
			eS	53	20.00	
CTA	25.75	133	iPc	49	09.60	2.1
	1.3s	57.69nm			4.9mb	
			iS	54	00.00	
IPM	26.43	287	ePd	49	14.90	1.1
QIZ	27.32	324	eP	49	23.00	1.2
N	11s	0.50um				
E	11s	0.60um				
			eS	53	58.00	
FORR	27.68	177	iPd	49	24.10	-0.9
	0.4s	82.00nm			5.7mb	
QZH	28.84	345	eP	49	39.00	3.5X
			S	54	22.00	
NWAO	30.91	195	eP	49	53.00	-0.8
RKG	32.06	195	eP	50	09.00	5.2X
SSE	34.33	352	eP	50	20.00	-3.4X
E	14s	0.30um				
			eS	55	43.00	
			esS	55	59.00	
CHG	34.65	310	eP	50	26.80	0.3
CHTO	34.65	310	eP	50	26.90	0.5
	1.0s	5.75nm			4.4mb	
BRS	34.97	136	iP	50	30.30	1.2
WHN	35.33	342	eP	50	34.20	2.2
N	20s	2.30um				
			PP	50	43.00	
NJ2	35.64	349	Pc	50	35.40	0.8
			S	56	06.00	
CAN	38.35	150	eP	51	00.00	2.6
TSRJ	39.44	12	P	51	05.90	-0.5
TIA	40.01	348	eP	51	05.00	-6.2X
Z	16s	0.30um			4.2MszX	
N	12s	0.20um				
			S	57	13.60	
CD2	40.07	329	eP	51	12.10	0.3
			eS	57	05.80	
XAN	40.40	337	P	51	13.50	-0.9
CHJJ	40.66	16	P	51	15.00	-1.5
MTMJ	40.86	14	P	51	17.20	-1.0
KAKJ	41.14	17	P	51	18.80	-1.6
NIIJ	41.79	15	P	51	24.80	-0.9
DL2	41.99	354	eP	51	28.00	0.7
			eS	57	42.00	
TIY	42.58	344	eP	51	30.40	-1.9
			S	57	52.00	
DZM	43.23	119	iPc	51	39.90	2.0
SHL	43.89	312	eP	51	42.00	-1.2
BJI	43.90	349	eP	51	42.00	-0.8
			eS	58	10.00	
LZH	44.27	334	Pc	51	47.50	1.4
	1.5s	37.00nm			5.0mb	
			pP	51	57.50	34kmX
SNY	44.75	357	Pc	51	49.00	-0.6
N	15s	0.70um				
			S	58	20.00	
HHC	45.75	344	eP	52	01.40	3.7X
BTO	45.95	343	eP	52	00.00	0.7
			eS	58	39.00	
CN2	46.66	359	Pc	52	04.00	-0.7
	6.0s	1100.00nm			5.9mb X	
LSA	46.87	317	P	52	09.00	1.8
MDJ	47.56	3	eP	52	11.10	-0.6
GTA	48.82	333	eP	52	22.80	1.0
GUN	49.65	311	P	52	28.20	-0.4
	0.6s	29.00nm			5.5mb	
PKI	49.83	310	P	52	29.30	-0.7
	0.6s	11.00nm			5.1mb	
KKN	50.04	311	P	52	31.00	-0.4
	0.6s	15.00nm			5.2mb	
DMN	50.08	310	P	52	31.50	-0.3
	0.6s	14.00nm			5.2mb	
GKN	50.64	310	P	52	35.40	-0.5
	0.6s	23.00nm			5.4mb	
HYB	51.35	295	eP	52	40.50	-0.8
NDI	56.73	307	eP	53	17.00	-3.5X
WMQ	58.15	328	P	53	29.70	-0.6
QUE	65.58	305	eP	54	21.00	0.6
ALQ	121.74	50	ePKP	02	33.20	3.8X
NNA	152.51	123	ePKP	03	36.00	11.2X
	0.8s	7.46nm				
LPB	155.85	144	PKP	03	49.00	19.2X
ZOBO	156.04	144	PKP	03	27.00	-3.2X
	1.0s	16.25nm				
			i	03	33.00	
			i	04	01.00	
CCH	156.23	149	PKP	03	27.90	-2.2X

S.D. = 1.2 on 47 of 65 obs.

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* FEB 03, 1990 05h 10m 42.45± 2.15s
32.151 S ±10.0km 71.098 W ±19.1km
DEPTH = 79.7 ± 33.8 km
NEAR COAST OF CENTRAL CHILE (135)

ROCH	0.82	175	iPd	10	58.60	-1.3
			iS	11	11.00	
SAN	1.35	164	iPc	11	06.50	0.3
			iS	11	25.00	
FCH	1.36	150	iPd	11	06.60	0.0
			iS	11	25.20	
TACH	1.50	175	iPd	11	08.10	-0.1
			iS	11	25.70	
PCH	1.55	162	iPc	11	09.10	0.2
			iS	11	29.00	
CHCH	1.82	168	iP	11	12.80	0.3
			iS	11	35.00	
LNV	1.82	188	eP	11	12.50	0.1
			eS	11	33.70	
MDZ	2.04	112	eP	11	29.70	14.3X
			eS	12	38.10	
RTCB	2.07	72	iPd	11	17.00	1.1
RTLL	2.38	71	ePc	11	20.20	0.0
RTRS	2.42	36	ePc	11	21.00	0.3
CFA	2.49	78	iPc	11	22.00	0.3
RFA	3.42	141	ePd	11	35.40	0.9
TCA	5.60	83	ePd	12	02.90	-2.2

S.D. = 1.0 on 13 of 14 obs.

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* FEB 03, 1990 05h 37m 21.90± 0.74s
24.228 S ± 7.0km 68.490 W ±12.3km
DEPTH = 33.0km (normal)
CHILE-ARGENTINA BORDER REGION (127)

ANT	1.84	286	iPc	37	51.20	-0.4
			iS	38	11.10	
RTRS	5.98	188	eP	38	54.40	4.0X
RTLL	7.08	180	ePc	39	06.10	0.3
CCH	7.16	18	P	39	07.90	0.7
			e	39	41.00	
CFA	7.35	178	iPc	39	10.00	0.3
LPB	7.66	3	eP	39	16.00	1.5
ZOBO	7.92	3	P	39	17.00	-1.3
			S	40	00.00	
BAO	21.06	70	eP	42	04.80	-1.0

S.D. = 1.2 on 7 of 8 obs.

FEB 03, 1990 05h 55m 39.64± 0.66s
31.388 S ± 7.0km 67.923 W ± 5.5km
DEPTH = 10.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

CFA	0.35	231	iPd	55	47.20	0.4
RTLL	0.47	277	iPc	55	48.80	-0.4
ZON	0.66	256	iPd	55	51.50	-1.4
RTCB	0.76	262	iPd	55	54.00	-0.5
RTRS	1.80	312	iP	56	11.30	0.5
MRA	2.14	119	iPd	56	16.30	0.4
FCH	2.78	225	iPd	56	29.00	3.6X
			eS	57	06.00	
TCA	2.85	90	iPd	56	25.50	-0.6
ROCH	3.06	238	eP	56	29.00	-0.1
SAN	3.10	228	eP	56	31.00	1.5
			i	57	14.00	
			iS	57	15.50	
PCH	3.12	224	eP	56	32.80	2.9X
			iS	57	16.50	
RFA	3.40	188	eP	56	32.20	-1.7
TACH	3.40	228	iPd	56	34.70	0.8
CHCH	3.43	221	eP	56	36.00	1.8
LNV	3.90	228	iPd	56	39.90	-0.9
			eS	57	35.00	
CCH	14.04	7	P	59	06.90	5.8X
ZOBO	15.05	359	eP	59	15.00	0.3
Z	18s	0.19um				
			i	59	18.00	
			LR	03	44.00	

S.D. = 1.1 on 14 of 17 obs.

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* FEB 03, 1990 06h 33m 10.26± 0.93s
39.751 N ± 9.4km 20.565 E ±11.4km
DEPTH = 10.0km (geophysicist)

03d 06h

GREECE-ALBANIA BORDER REGION (392)
MD 3.1 (ATH).

KEK	0.59	267	ePb	33 21.80	-0.4
KZN	1.08	59	ePb	33 27.80	-2.8X
OHR	1.37	7	iPn	33 35.70	0.3
VLS	1.57	179	ePb	33 38.60	0.4
VAY	2.19	44	ePn	33 46.00	-1.2
SKO	2.32	16	ePn	33 50.00	1.0

S.D. = 1.2 on 5 of 6 obs.

% FEB 03, 1990 07h 26m 29.49± 0.44s
44.561 N ± 3.9km 7.294 E ± 4.8km
DEPTH = 10.0km (geophysicist)

NORTHERN ITALY (545)
ML 2.2 (GEN).

PZZ	0.15	248	P	26 33.11	0.0
			S	26 34.85	
STV	0.32	176	P	26 36.08	0.0
			S	26 40.08	
ENR	0.35	165	P	26 36.59	-0.1
			S	26 41.31	
ROB	0.49	123	P	26 39.47	0.0
			S	26 46.44	
RRL	0.51	315	P	26 40.29	0.4
			S	26 46.54	
RSP	0.59	358	P	26 41.11	-0.4
FIN	0.74	118	P	26 44.18	0.1
			S	26 53.82	
IMI	0.78	146	P	26 44.39	-0.3
			S	26 54.54	
PCP	0.90	91	P	26 47.16	0.5
			S	26 58.95	
LSD	0.90	354	P	26 46.75	-0.2

S.D. = 0.3 on 10 of 10 obs.

FEB 03, 1990 07h 30m 54.25± 0.43s
18.672 N ± 3.6km 64.647 W ± 2.2km
DEPTH = 61.5 ± 4.9 km
5.0mb (39 obs.)

VIRGIN ISLANDS (91)
Felt in U.S. and British Virgin Islands. Also felt on Culebra, Vieques and eastern Puerto Rico.

LPR	1.22	253	iP	31 15.00	-0.4
CPD	1.36	243	iP	31 17.60	0.2
SJG	1.53	249	iP	31 19.50	-0.3
PORP	1.99	252	iP	31 26.00	-0.1
LRS	2.12	260	iP	31 27.20	-0.8
ANG	3.08	119	eP	31 41.76	0.3
BPA	3.11	121	eP	31 42.17	0.2
SEG	3.75	127	eP	31 51.65	0.7
			S	32 35.70	
PAG	3.86	132	ePc	31 53.06	0.5
			S	32 38.20	
SFG	4.08	126	eP	31 55.90	0.4
DEG	4.15	124	ePc	31 55.97	-0.6
BBL	4.36	135	ePc	31 59.62	0.1
			S	32 48.60	
DPMT	4.61	137	eP	32 04.24	1.2
			eS	32 56.43	
DTMT	4.65	137	eP	32 04.02	0.4
FDF	5.15	139	eP	32 10.54	-0.2
CRM	5.29	137	eP	32 12.72	0.2
BIM	5.37	140	eP	32 13.20	-0.5
MVM	5.45	138	eP	32 15.07	0.2
SLB	5.93	144	eP	32 22.08	0.4
			eS	33 28.11	
			eTT	35 37.00	
SVV	6.26	148	eP	32 26.11	-0.1
SSV	6.27	148	eP	32 26.08	-0.2
SVB	6.28	148	eP	32 26.49	0.0
			eS	33 34.46	
			eTT	35 32.00	
PIG	8.32	153	eP	32 59.33	4.6X
LLAV	8.41	195	iP	32 55.00	-1.1
			iS	34 35.00	
MORO	8.53	205	eP	32 57.00	-0.7
			eS	34 29.00	
TRN	8.57	158	eP	32 58.98	0.8
			eS	34 28.88	
FISA	8.64	212	eP	32 57.00	-2.2
			eS	34 30.00	
GUAC	8.80	197	eP	33 02.00	0.5
			eS	34 30.00	

TBH	8.85	156	eP	33 04.65	2.7
OLLA	8.85	194	iP	33 02.00	-0.2
			iS	34 35.00	
PLAV	9.17	198	eP	33 07.00	0.3
			eS	34 40.00	
TOV	10.14	210	ePn	33 19.50	-0.3
			iSn	35 05.40	
CEOS	10.23	201	eP	33 20.00	-1.0
			eS	35 08.00	
UPA	17.36	238	ePc	34 52.50	-1.4
	0.5s		28.17nm		4.7mb
HBF	20.02	318	P	35 22.30	-2.3
SGS	20.28	319	P	35 24.40	-2.9X
LHS	21.32	321	P	35 37.50	-0.5
JSC	21.46	320	P	35 38.90	-0.4
PRM	22.03	318	P	35 45.10	0.1
BLA	23.08	326	P	35 56.90	1.6
	0.8s		22.15nm		4.6mb
TBR	23.85	342	P	36 05.40	2.7X
TKL	23.92	319	P	36 05.70	2.2
GBTN	24.20	318	P	36 07.20	1.0
RSCP	25.04	317	P	36 15.10	0.8
	1.5s		316.82nm		5.6mb
HBVT	26.57	346	P	36 24.50	-3.7X
RSNY	27.09	344	P	36 23.20	-9.9X
TUL	32.38	308	eP	37 22.00	1.8
	1.0s		20.00nm		4.9mb
Z	20s		0.40um		4.1Msz
			e	37 44.20	
			LR	46 00.00	
PT08	32.62	202	iPc	37 22.90	0.1
SIO	32.70	308	eP	37 22.60	-0.4
NNA	32.75	202	iPd	37 22.50	-1.1
	0.5s		28.87nm		5.4mb
			i	37 24.00	
ZOBO	34.89	186	P	37 39.00	-3.6X
Z	22s		0.24um		3.9Msz
			S	43 08.00	
			LR	49 26.00	
LPB	35.15	186	P	37 44.00	-0.6
CCH	35.86	182	P	37 50.30	-0.2
SCH	36.12	358	eP	37 52.00	0.0
BAO	37.83	153	eP	38 08.50	1.6
RSON	39.52	331	P	38 20.10	-0.4
	1.0s		41.21nm		5.3mb
ANMO	40.36	302	P	38 28.90	1.0
	1.1s		17.56nm		4.8mb
GOL	40.82	310	P	38 31.90	0.2
	0.9s		24.62nm		5.0mb
RSSD	41.54	316	P	38 38.00	0.5
BW06	44.79	312	P	39 04.00	0.0
	0.9s		16.69nm		4.9mb
FRB	45.12	358	eP	39 06.00	0.1
FFC	45.85	331	iPc	39 10.70	-1.2
	0.8s		31.00nm		5.3mb
PTI	46.80	312	P	39 20.60	0.8
GLA	46.95	298	eP	39 21.00	0.0
LRM	47.72	316	ePc	39 27.80	0.7
SES	48.47	322	ePc	39 32.30	-0.3
	1.1s		127.00nm		5.8mb
BAR	48.47	297	eP	39 34.00	1.2
PLM	48.68	298	eP	39 35.00	0.4
GSC	48.79	301	eP	39 36.00	0.7
RVR	49.15	299	eP	39 39.00	1.1
TNP	49.45	304	P	39 41.00	0.5
	0.9s		7.94nm		4.7mb
SBB	49.57	300	eP	39 42.00	0.7
MWC	49.73	299	eP	39 33.00	-9.7X
PAS	49.82	299	eP	39 43.00	-0.1
ISA	50.18	301	eP	39 46.00	0.1
KVN	50.26	306	P	39 47.30	0.6
EDM	50.91	324	ePc	39 50.20	-1.0
FRI	51.29	303	eP	39 53.70	-0.5
			epP	40 09.20	59kmX
BCH	51.46	300	P	39 57.20	1.5
CMB	51.93	304	eP	39 59.40	0.3
			epP	40 15.30	61kmX
LLA	52.25	302	eP	40 01.70	0.2
PRS	52.57	302	eP	40 03.80	-0.1
MHC	52.86	303	eP	40 07.00	0.8
			epP	40 23.00	61kmX
ORV	52.94	306	eP	40 06.70	0.1
			epP	40 23.90	67kmX
MIN	53.11	307	eP	40 08.00	0.0
PNT	53.36	318	eP	40 10.00	0.4
PCC	53.46	303	eP	40 11.00	0.6
WDC	53.84	307	eP	40 11.20	-2.0

ECB	55.90	39	eP	40 27.70	-0.3
ETA	56.32	39	eP	40 30.70	-0.3
LPF	58.75	45	eP	40 47.60	-0.5
GRR	58.91	44	eP	40 48.60	-0.7
	1.1s		39.00nm		5.4mb
TIC	59.15	93	P	40 50.24	-1.2
FLN	59.21	44	eP	40 50.60	-0.7
	0.8s		17.10nm		5.2mb
LIC	59.27	94	P	40 51.22	-1.0
	0.7s		6.00nm		4.9mb
Z	20s		0.20um		4.2Msz
EPF	59.32	51	eP	40 52.20	0.0
	0.9s		15.30nm		5.1mb
LDF	59.42	44	eP	40 52.30	-0.5
	1.0s		28.00nm		5.3mb
KIC	59.50	94	P	40 52.98	-0.9
LFF	59.71	48	eP	40 54.40	-0.4
LPO	60.01	49	eP	40 56.50	-0.4
	0.7s		7.40nm		4.9mb
RJF	60.27	48	eP	40 58.30	-0.4
	0.7s		15.40nm		5.2mb
CAF	60.64	48	eP	41 00.90	-0.4
	0.9s		13.10nm		5.1mb
TCF	60.81	47	eP	41 01.70	-0.7
	0.7s		10.30nm		5.1mb
AVF	61.63	46	eP	41 07.00	-0.8
	0.7s		6.60nm		4.9mb
SSF	61.74	46	eP	41 07.90	-0.7
	1.1s		18.00nm		5.1mb
SMF	61.96	47	eP	41 09.10	-1.0
	0.9s		13.10nm		5.1mb
LOR	61.99	46	eP	41 09.40	-0.9
	0.8s		12.00nm		5.1mb
DOU	62.62	43	Pc	41 16.20	1.8
MEM	63.55	42	Pc	41 20.50	0.0
KUK	63.69	92	eP	41 25.50	3.5X
HAU	63.70	45	eP	41 20.80	-0.8
WIGH	63.71	93	eP	41 22.00	-0.1
LRG	63.72	50	eP	41 21.60	-0.1
	0.9s		13.10nm		4.9mb
LMR	63.83	50	eP	41 21.70	-0.8
KOGH	63.84	92	eP	41 23.00	-0.1
MBC	63.89	347	eP	41 22.00	-0.4
	0.8s		24.00nm		5.2mb
WEGH	63.92	93	eP	41 23.00	-0.5
FRF	63.92	50	eP	41 22.50	-0.6
LPG	63.97	48	eP	41 23.80	0.1
	0.8s		8.00nm		4.8mb
BSF	63.99	45	eP	41 22.30	-1.3
LEGH	64.04	93	eP	41 24.00	-0.2
SHGH	64.08	92	eP	41 25.00	0.4
CDF	64.32	45	eP	41 24.80	-0.9
INK	65.01	338	eP	41 29.00	-0.7
	0.8s		28.00nm		5.3mb
PGF	65.69	51	eP	41 33.90	-0.8
	0.7s		9.70nm		4.9mb
GRF	66.90	43	eP	41 42.50	0.4
			e	41 57.50	
NB2	67.00	31	P	41 43.40	0.8
	0.9s		7.50nm		4.7mb
CLL	67.98	41	iPc	41 49.00	0.2
KBA	68.46	46	eP	41 51.50	-0.7
	0.8s		4.50nm		4.5mb
KHC	68.47	44	P	41 52.50	0.5
BRG	68.59	42	iP	41 52.80	0.2
	0.8s		12.00nm		4.9mb
			e	42 08.50	
PRU	69.03	43	P	41 56.00	0.6
			e	42 09.50	
FBA	70.36	333	P	42 03.10	-0.1
	0.9s		13.96nm		4.9mb
ZST	70.88	44	eP	42 05.70	-1.0
			e	42 33.00	
PMR	71.15	330	P	42 07.60	-0.4
	1.0s		9.75nm		4.7mb
SRO	71.74	45	eP	42 12.10	0.3
IMA	72.72	335	P	42 17.20	-0.2
	0.9s		14.69nm		4.9mb
KEV	73.21	21	eP	42 18.00	-2.1
SOD	73.43	24	iP	42 22.40	1.1
NUR	73.60	31	eP	42 36.00	13.6X
SUF	73.96	29	eP	42 24.90	0.4
	0.6s		7.70nm		4.8mb
TTA	74.18	332	P	42 25.10	-0.8
	0.8s		3.62nm		4.4mb
OHR	74.61	51	eP	42 30.00	1.2
SKO	74.91	50	eP	42 45.00	14.5X

```
MLR     77.33   46 ePc    42 46.00    1.9
BCAO    82.15   88 iPc    43 12.60    2.2
         0.6s     22.00nm              5.3mb
                  ic       43 26.20
VUN    120.38  260 iPdiff46 17.90   12.6X
NDF    121.28  260 iPdiff46 06.10   -3.2X
GKN    124.89   33 PKP    49 49.90    0.3
KKN    125.40   33 PKP    49 51.00    0.3
GUN    125.61   32 PKP    49 51.60    0.3
PKI    125.64   33 PKP    49 51.20   -0.1
BRS    144.59  249 iPKPc  50 25.20   -0.9
                  i       51 07.00
NNT    145.33   28 ePKP   50 28.60    1.1
CNB    145.67  234 iPKPc  50 29.10    1.4
RMO    148.26  250 iPKPd  50 37.20    5.1X
         0.8s     96.00nm
CMS    149.70  239 ePKP   50 39.00    4.9X
CTA    150.83  262 iPKPc  50 42.00    5.9X
                  i       50 56.00
WRA    162.03  263 PKPd   50 50.50    0.4
         0.9s      3.80nm
       S.D. = 0.9   on 144 of 159 obs.
-------------------------------------------
    FEB  03, 1990  08h 23m 56.29± 0.74s
    39.208 N ± 5.8km    23.757 E ± 8.8km
    DEPTH =   5.0km  (geophysicist)
 AEGEAN SEA                          (365)
       ML 3.3 (ATH).

NEO      0.43  284 ePg    24 03.00   -1.8
PLG      1.19  348 ePb    24 19.50    0.6
ATH      1.23  181 ePb    24 19.50   -0.2
                  eSb     24 34.00
KZN      1.88  306 ePn    24 28.80   -0.7
PRK      1.95   88 ePd    24 35.70    5.3X
VAY      2.30  337 ePn    24 35.80    0.4
RDO      2.37   35 ePn    24 36.20   -0.2
MMB      2.38  359 ePd    24 37.00    0.4
ITM      2.49  216 ePn    24 37.00   -1.1
APE      2.55  146 ePb    24 45.40    6.3X
VLI      2.57  195 ePb    24 40.90    1.7
RZN      2.58   16 iP     24 40.00    0.4
KKB      2.71  349 iP     24 42.00    0.8
KDZ      2.75   27 iP     24 41.00   -0.9
OHR      2.96  311 ePn    24 46.20    1.3
SKO      3.28  328 ePn    24 52.00    2.7
VTS      3.41  353 eP     24 49.00   -2.3
PVL      4.18   16 eP     25 01.00   -1.0
       S.D. = 1.4   on  16 of  18 obs.
-------------------------------------------
    FEB  03, 1990  09h 54m 55.63± 0.24s
    51.125 N ± 3.6km  130.238 W ± 3.8km
    DEPTH =  10.0km  (geophysicist)
    5.2mb ( 22 obs.)  5.4Msz ( 15 obs.)
 QUEEN CHARLOTTE ISLANDS REGION  ( 22)
       ML 5.0 (PGC).
       CENTROID, MOMENT TENSOR     (HRV)
       Dotо Used: GDSN
       L.P.B.: 14S, 32C
       Centroid Locotion:
       Origin Time        09:54:58.8 0.3
       Lot 50.99N  FIX;Lon 130.69W  FIX
       Dep  15.0 FIX Half-duration  2.1
       Moment Tensor;    Scole 10**17 Nm
         Mrr=-0.56 0.10   Mtt=-1.09 0.12
         Mff= 1.65 0.09   Mrt= 0.00 0.00
         Mrf= 0.00 0.00   Mtf= 1.46 0.09
        Principal Axes:
         T  Val=  2.29  Plg= 0   Azm=113
         N        -0.56       90       180
         P        -1.73        0        23
       Best Double Couple:Mo=2.0*10**17
        NP1:Strike=158 Dip=90 Slip=-180
        NP2:       248      90         0

SJB      0.95  329 Pg     55 11.80   -1.8
BBB      1.70   50 Pn     55 26.20    0.8
                  Sg      55 56.00
BNB      1.73  328 Pn     55 23.20   -2.8
PHC      1.83  102 Pnc    55 26.70   -0.6
CWB      2.31  333 Pn     55 31.50   -2.8
EDB      2.35  121 Pn     55 33.39   -1.5
SKB      2.39  334 Pn     55 31.50   -3.8X
ETB      2.95  125 Pn     55 41.44   -1.9
CBB      3.29  107 Pn     55 47.22   -1.0
BTB      3.45  117 Pn     55 48.76   -1.8
OZB      3.75  123 Pn     55 52.95   -1.8

                   Lg     57 06.90
ALB      3.94  116 Pn     55 56.54   -0.8
MGB      4.16  119 Pn     55 58.92   -1.7
SHB      4.35  108 Pn     56 02.50   -0.9
OTR      4.89  126 eP     56 10.81   -0.2
FSB      4.91   45 Pn     56 11.70    0.4
PGC      5.04  117 eP     56 12.50   -0.4
OBC      5.06  125 eP     56 13.29   -0.1
MCW      5.37  114 eP     56 17.94    0.1
OSD      5.39  125 eP     56 17.51   -0.7
BLN      5.66  121 eP     56 22.41    0.5
OHW      5.73  116 eP     56 23.03    0.3
HDW      5.84  124 eP     56 23.75   -0.6
MBW      5.87  110 eP     56 24.67   -0.2
SMW      5.91  127 eP     56 25.82    0.5
CMW      5.91  114 eP     56 25.71    0.3
ONR      6.01  132 eP     56 26.56   -0.1
GMW      6.04  123 eP     56 26.99   -0.2
JCW      6.14  115 eP     56 28.03   -0.5
BMW      6.56  132 eP     56 33.60   -1.0
SIT      6.65  335 eP     56 36.00    0.3
PNT      7.05  101 eP     56 42.00    0.6
DPW      8.48  108 eP     57 00.70   -0.7
HYT     10.53  340 P      57 28.00   -1.7
EDM     10.58   72 eP     57 32.20    1.9
LBFM    11.35  146 eP     57 41.00    0.0
WDC     11.82  150 eP     57 48.40    1.2
SES     12.18   86 ePc    57 51.00   -1.0
         1.4s   147.00nm          6.1mb
MIN     12.34  148 ePc    57 55.00    0.7
LRM     12.93  107 eP     58 01.50   -0.7
ORV     13.09  149 eP     58 03.90   -0.2
BKS     14.41  154 ePc    58 23.30    1.8
         1.1s    46.00nm          5.0mb
                   eS     01 06.00
PMR     14.75  323 eP     58 24.00   -1.8
         1.6s   927.87nm          6.1mb
KVN     14.78  140 eP     58 27.20    0.6
CMB     14.83  148 eP     58 28.00    0.9
         1.3s    94.26nm          5.1mb
MHC     15.08  153 eP     58 30.00   -0.4
ARN     15.10  152 eP     58 31.00    0.4
GCC     15.27  154 eP     58 38.00    5.3X
SAO     15.67  153 e(P)   58 42.10    4.1X
LLA     15.96  152 e(P)   58 41.30   -0.3
TNP     15.97  140 eP     58 43.00    1.0
FRI     16.00  148 eP     58 46.90    4.7X
DUG     16.32  125 eP     58 46.50    0.1
BW06    16.36  113 eP     58 48.50    1.4
         1.5s   675.06nm          5.6mb
PRI     16.48  152 e(P)   58 49.50    1.1
FBA     16.55  333 eP     58 51.00    1.9
         1.6s   352.46nm          5.2mb
DAU     16.98  122 eP     58 55.50    0.5
INK     17.31  356 eP     59 01.00    2.5
         1.5s   335.00nm          5.2mb
FFC     17.36   67 eP     58 56.00   -3.3X
         0.6s    11.00nm          4.2mb X
ISA     17.63  147 eP     59 05.00    2.2X
CLC     17.80  144 eP     59 08.00    3.1X
MSU     17.92  128 eP     59 07.00    0.4
TTA     18.19  320 eP     59 10.00    0.5
SDN     18.52  295 e(P)   59 12.20   -1.3
GSC     18.55  143 eP     59 15.00    0.8
SBB     18.73  147 eP     59 16.00   -0.4
RSSD    18.93  101 eP     59 18.00   -1.0
MWC     19.07  148 eP     59 21.00    0.3
PAS     19.10  148 eP     59 21.00    0.1
IMA     19.13  330 eP     59 21.30    0.2
         3.0s  3478.30nm          6.1mb
RVR     19.52  146 eP     59 25.00   -0.9
PEC     19.68  146 eP     59 27.00   -0.8
PLM     20.28  146 eP     59 33.00   -1.1
GOL     20.75  114 eP     59 39.00   -0.2
         1.1s   116.67nm          5.2mb
       Z  18s    16.42um          5.4Msz
GLD     20.81  113 eP     59 40.00    0.3
         1.4s   516.22nm          5.7mb
       Z  18s    20.79um          5.6Msz
BAR     20.95  146 eP     59 41.00    0.0
GLA     21.30  142 eP     59 45.00    0.5
RSON    22.85   76 eP     00 00.00    0.2
         1.4s   200.39nm          5.4mb
ANMO    23.58  124 eP     00 08.20    0.9
ALQ     23.59  124 iPc    00 08.50    1.2
         1.5s   107.64nm          5.2mb
       Z  22s     4.44um          4.9Msz

MBC     25.58    6 eP     00 29.00    3.2X
         1.5s   269.00nm          5.7mb
                  pP      00 40.00   42kmX
TUL     28.92  108 ePc+   00 56.00   -0.7
         1.2s    21.80nm          4.8mb
       Z  20s     8.50um          5.4Msz
                  eS      06 00.00
                  LR      09 00.00
FVM     30.87  100 eP     01 12.80   -1.2
FRB     34.07   44 eP     01 44.00    2.3
HON     36.82  226 P      02 05.70    0.3
       Z  20s     1.38um          4.7Msz
RSNY    37.19   78 eP     02 08.00   -0.3
BLA     37.61   92 eP     02 12.00    0.0
         1.0s    36.00nm          5.1mb
HBVT    38.18   77 eP     02 17.40    0.7
CBN     38.93   88 e(P)   02 25.00    2.0
JSC     38.94   96 eP     02 22.60   -0.6
CBM     39.88   71 eP     02 31.80    1.0
SOD     60.55   10 iP     05 11.00    3.2X
                  e       05 33.00
MDJ     62.35  307 eP     05 17.00   -3.3X
       Z  24s     3.30um          5.4MszX
       N  14s     1.20um
SUF     64.98   12 eP     05 43.10    5.9X
         0.9s     4.90nm          4.7mb
CN2     64.99  309 P      05 38.00    0.4
         3.0s   400.00nm          6.1mb
       Z  20s     2.20um          5.4Msz
       N  13s     1.00um
                  pP      05 44.00   19kmX
                  eS      14 18.00
HFS     65.34   19 eP     05 39.60    0.0
         0.6s     2.20nm          4.5mb
NUR     66.90   13 iP     05 43.10   -6.4X
                  e       06 05.00
SNY     67.38  309 Pd     05 53.20    0.3
       Z  30s     2.60um          5.3MszX
       N  30s     2.00um
       E  29s     1.20um
                  S       14 48.50
                  SS      19 02.00
BJI     72.31  312 eP     06 22.00   -0.9
       Z  20s     1.50um          5.3Msz
       N  15s     1.17um
                  eS      15 48.00
CLL     73.29   23 eP     06 42.00   13.5X
         2.3s    70.00nm
HHC     73.74  316 eP     06 31.00   -0.5
       Z  18s     3.40um          5.7Msz
       N  14s     1.40um
       E  14s     0.70um
                  S       16 00.00
BRG     73.92   23 eP     06 36.00    3.8X
       Z  17s     2.50um          5.6MszX
       N  17s     3.00um
       E  17s     1.00um
                  e       06 47.00
KSP     74.51   21 eP     06 38.50    2.9X
BTO     74.62  317 eP     06 36.00   -0.6
       N  16s     2.40um
       E  16s     1.50um
                  esP     06 47.50
                  eS      16 10.00
TIA     74.90  309 eP     06 38.80    0.7
       Z  20s     1.80um          5.4Msz
       N  16s     0.50um
       E  16s     1.30um
KHC     75.44   24 Pd     06 45.80    4.7X
         1.3s    13.00nm          4.8mb
       Z  16s     1.50um          5.4MszX
       N  17s     1.00um
       E  15s     1.00um
TIY     75.91  313 eP     06 46.00    2.0
       N  15s     1.40um
KRA     76.04   19 eP     06 47.80    3.4X
                  e       06 53.30
SPC     76.93   19 eP     06 54.00    4.4X
ZST     77.17   22 eP     07 07.50   16.8X
NJ2     77.34  306 Pd     06 51.00   -0.9
       Z  16s     0.60um          5.0MszX
SRO     77.81   21 eP     07 10.60   16.4X
NNA     78.03  127 eP     06 57.30    1.4
         1.1s    20.25nm          5.1mb
GTA     79.78  323 eP     07 05.40    0.1
       Z  18s     1.80um          5.5Msz
       E  15s     1.30um
```

03d 10h

		S	17	06.00		
		SS	22	20.00		
WMQ	79.87	333	P	07	08.00	2.4
Z	19s		2.80um			5.6Msz
AAPN	80.07	41	iPc	07	13.00	6.1X
ASMO	80.18	41	eP	07	09.00	1.5
ALOJ	80.25	41	iPd	07	12.00	4.1X
ATEJ	80.45	41	iPd	07	08.50	-0.5
XAN	80.54	314	P	07	09.40	0.0
N	13s		0.90um			
APHE	80.56	41	eP	07	10.50	1.0
LZH	81.03	318	eP	07	12.50	0.4
	1.5s		19.00nm			4.9mb
Z	18s		2.00um			5.5Msz
E	18s		1.70um			
BEO	81.12	21	eP	07	28.50	16.4X
VRI	81.36	16	ePc	07	18.50	5.1X
MLR	81.58	17	eP	07	30.00	15.2X
		e		36	48.00	
CMP	81.63	17	ePc	07	06.00	-8.9X
SKO	84.05	21	eP	07	31.00	3.6X
Z	18s		1.18um			5.3Msz
E	16s		0.95um			
		LR		46	55.00	
OHR	84.72	22	eP	07	34.00	3.2X
CD2	85.50	316	eP	07	35.60	0.7
Z	16s		0.90um			5.3MszX
N	15s		1.20um			
ZOBO	86.16	122	P	07	35.00	-3.9X
	1.3s		20.50nm			5.1mb
		i		07	38.00	
		SKS		18	18.00	
		LR		38	16.00	
LPB	86.39	122	eP	07	33.00	-6.8X
Z	20s		1.42um			5.4Msz
		LR		38	16.00	
CCH	88.15	121	P	07	47.70	-0.4
BBTK	88.20	13	eP	07	51.00	3.0X
KRI	142.19	33	ePKP	14	24.00	-6.1X
BUL	144.89	36	iPKPc	14	34.90	0.3
	1.2s		23.44nm			
KSR	149.32	43	ePKP	14	35.00	-6.7X
SLR	149.79	41	iPKPd	14	45.00	2.7X
	1.0s		15.00nm			
Z	18s		2.75um			6.1Msz
S.D. = 1.1		on 103		of 137		obs.

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* FEB 03, 1990 10h 00m 42.75± 1.40s
32.111 S ±10.2km 71.671 W ±15.0km
DEPTH = 96.9 ± 24.6 km
3.7mb (1 obs.)
NEAR COAST OF CENTRAL CHILE (135)

ROCH	1.02	147	iPc	01	01.60	-2.1
SAN	1.59	148	iPc	01	00.00	-10.3X
		i		01	30.60	
		iS		01	31.70	
TACH	1.66	158	iPc	01	11.40	0.1
FCH	1.68	137	iPc	01	11.60	-0.3
		iS		01	33.30	
PCH	1.79	147	iPc	01	13.10	0.0
LNV	1.85	173	iPd	01	14.20	0.5
		iS		01	39.00	
CHCH	2.01	155	iPc	01	16.60	0.7
		iS		01	43.80	
MDZ	2.50	109	eP	01	26.10	3.5X
RTCB	2.52	76	iPc	01	24.00	1.2
ZON	2.61	78	eP	01	25.00	1.1
RTRS	2.71	45	ePd	01	25.40	0.2
RTLL	2.84	75	ePc	01	27.10	0.0
CFA	2.96	81	iPd	01	29.50	0.7
RFA	3.77	136	ePd	01	41.20	1.3
MRA	5.06	95	ePc	01	56.20	-1.4
TCA	6.08	85	eP	02	10.00	-1.8
ANT	8.45	8	eP	02	56.00	11.9X
LPB	15.84	13	P	04	27.00	5.1X
ZOBO	16.10	12	P	04	25.00	-0.2
	1.0s		5.00nm			3.7mb
S.D. = 1.2		on 15		of 19		obs.

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* FEB 03, 1990 10h 59m 21.03± 0.42s
58.948 S ±11.5km 25.531 W ± 9.0km
DEPTH = 33.0km (normal)
4.8mb (5 obs.)
SOUTH SANDWICH ISLANDS REGION (153)

SPA	31.22	180	iPc	05	39.70	0.4
	1.1s		15.48nm			4.7mb
PCH	38.99	290	eP	06	46.50	0.7
FCH	39.12	291	eP	06	48.00	0.8
LNV	39.16	289	iPd	06	47.10	0.1
TACH	39.17	290	eP	06	46.50	-0.7
ZOBO	52.80	305	P	08	35.00	-0.8
LIC	67.01	22	Pd	10	12.40	-0.2
	0.8s		8.00nm			4.9mb
KIC	67.20	23	Pd	10	13.70	-0.1
	0.8s		6.00nm			4.7mb
TIC	67.42	22	Pd	10	15.00	-0.2
	0.8s		8.50nm			4.9mb
BCAO	72.20	47	iPc	10	46.00	1.6
	0.6s		12.00nm			5.1mb
PVL	110.14	37	ePdiff	13	39.00	-9.5X
GKN	123.88	91	PKP	18	16.00	-0.9
PKI	123.93	92	PKP	18	16.60	-0.6
KKN	124.04	92	PKP	18	17.20	-0.1
GUN	124.45	92	PKP	18	18.00	-0.2
FRB	126.68	338	ePKP	18	21.00	0.1
SOD	131.72	24	iPKP	18	30.50	0.1
MBC	146.99	334	ePKPc	19	00.20	2.5X
	0.7s		17.00nm			
S.D. = 0.7		on 16		of 18		obs.

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* FEB 03, 1990 11h 12m 33.86± 1.16s
41.447 N ± 9.6km 22.389 E ± 8.7km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.3 (SKO).

VAY	0.19	133	iPg	12	38.50	0.5
			iSg	12	40.80	
KKB	0.67	51	iPg	12	46.00	-1.2
			Sg	12	53.00	
SKO	0.88	307	ePn	12	50.50	-0.3
MMB	1.02	82	ePg	12	50.00	-3.1X
VTS	1.30	28	ePg	12	59.00	1.0
PGB	1.72	50	iP	13	05.00	0.9
			Sg	13	25.00	
RZN	1.76	81	iP	13	04.00	-0.8
			Sg	13	25.00	
KDZ	2.28	84	iP	13	12.00	-0.2
S.D. = 1.0		on 7		of 8		obs.

FEB 03, 1990 11h 57m 30.50± 0.64s
36.040 N ± 6.9km 27.126 E ± 5.7km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)

KAP	0.49	175	ePg	57	40.50	0.0
ARG	0.83	77	ePg	57	45.30	-1.2
APE	1.64	309	ePb	57	58.50	-1.1
SMG	1.68	352	ePb	58	01.00	1.0
KSL	1.99	87	ePn	58	05.10	0.5
ELL	2.35	72	ePn	58	10.90	1.0
IZM	2.36	3	ePn	58	10.00	0.1
VAM	2.46	256	ePn	58	14.10	2.8X
KHL	2.98	39	ePn	58	18.00	-0.7
BCK	3.12	62	ePn	58	24.20	3.5X
VLI	3.45	283	ePn	58	24.40	-0.9
ITM	4.33	287	ePn	58	39.20	1.2
S.D. = 1.0		on 10		of 12		obs.

FEB 03, 1990 12h 04m 50.81± 0.87s
7.050 S ± 5.0km 129.191 E ± 7.1km
DEPTH = 172.0 ± 10.2 km
5.1mb (20 obs.)
BANDA SEA (280)

AAI	3.48	343	eP	05	47.50	1.8
MTN	6.07	162	iPd	06	18.50	-1.0
KNA	8.66	183	eP	06	51.60	-2.2
	0.3s		287.00nm			6.2mb X
			eS	08	19.00	
MNI	9.49	333	ePd	07	07.00	2.2
	0.8s		1626.90nm			6.6mb X
JAY	12.32	69	ePd	07	39.00	-2.7
WB5	13.71	159	iPd	07	55.60	-3.7X
WRA	13.76	159	Pd	07	56.40	-3.6X
	0.6s		133.60nm			5.5mb
MNDI	14.40	87	eP	08	10.00	1.8
TRT	16.43	267	ePc	08	31.40	-1.7
	0.8s		124.80nm			5.3mb
MBL	16.69	212	eP	08	35.60	-0.7
	0.3s		20.00nm			5.0mb
			eS	11	22.00	
QIS	16.80	144	iPc	08	36.80	-0.8
	0.5s		115.00nm			5.5mb
			eS	11	32.00	
LAT	17.69	90	eP	08	56.00	8.0X
PMG	17.93	99	eP	08	42.00	-8.6X
KKM	18.35	315	iPc	08	55.10	-0.1
	1.0s		65.10nm			5.0mb
NANU	20.28	219	iPd	09	15.00	0.2
	0.4s		39.00nm			5.2mb
			eS	12	54.00	
CTA	21.02	130	eP	09	25.00	2.7
	0.9s		10.92nm			4.3mb
			i	09	33.80	
			e(sP)	10	18.00	
			e(PP)	11	17.30	
			iS	13	10.00	
			e	13	28.00	
			e	13	39.00	
MEKA	21.94	206	eP	09	32.20	1.0
	0.3s		11.00nm			4.8mb
			eS	13	35.00	
FORR	23.70	182	eP	09	38.50	-9.7X
	0.4s		54.00nm			5.5mb
QLP	24.13	145	eP	09	54.70	2.4
			e	09	56.00	
			e	14	30.00	
COOL	24.88	197	eP	10	01.00	1.7
			eS	14	35.00	
MRWA	25.32	208	eP	10	04.00	0.7
			eS	14	51.00	
BAL	26.20	205	eP	10	15.00	3.7X
			eS	15	10.00	
KLB	26.65	202	eP	10	15.00	-0.4
			eS	15	23.00	
RMO	26.84	138	e(P)	10	27.00	9.8X
			e	10	52.00	
			e	15	10.00	
CMS	28.86	150	eP	10	36.00	0.7
			e	11	09.00	
ADE	29.13	164	eP	10	36.20	-1.6
BRS	30.16	135	eP	10	52.00	5.1X
			i	11	27.00	
BFD	32.36	160	iPc	11	09.70	3.8X
			e	11	47.00	
CAN	33.51	150	eP	11	19.10	3.2X
			e	11	53.80	
BDT	38.38	309	eP	11	57.00	-0.1
	0.5s		26.90nm			5.2mb
SSE	38.69	349	P	12	00.00	0.5
	1.2s		40.00nm			5.0mb
CHG	39.37	311	ePd	12	06.00	0.7
	0.9s		31.72nm			5.0mb
CHTO	39.37	311	iPd	12	06.20	0.9
	0.9s		32.18nm			5.0mb
			pP	12	42.00	164kmX
			sP	12	54.00	
GYA	39.84	328	P	12	09.00	-0.2
WHN	40.00	340	Pc	12	11.20	1.0
	1.2s		50.00nm			5.0mb
KMI	41.06	322	eP	12	21.00	1.7
TSRJ	42.84	8	P	12	33.50	0.1
CHJJ	43.85	11	P	12	40.20	-1.4
MTMJ	44.15	10	P	12	43.60	-0.5
KAKJ	44.24	13	P	12	43.80	-0.9
NIIJ	45.00	11	P	12	50.30	-0.4
XAN	45.15	336	P	12	50.50	-1.5
TIY	47.20	342	eP	13	06.70	-1.4
BJI	48.37	347	eP	13	16.50	-0.5
SHL	48.65	313	iP	13	19.00	-0.6
SNY	48.91	354	eP	13	20.20	-0.9
LZH	49.07	333	eP	13	21.50	-1.2
	1.4s		44.00nm			4.9mb
HHC	50.35	343	P	13	32.30	0.1
CN2	50.72	356	eP	13	34.20	-0.7
MDJ	51.43	0	Pc	13	40.60	0.4
LSA	51.68	317	iP	13	44.60	1.7
GTA	53.63	332	Pd	13	56.20	-0.5
GUN	54.38	312	P	14	02.30	-0.4
PKI	54.55	311	P	14	03.20	-0.7
	0.6s		26.00nm			5.2mb
KKN	54.76	311	P	14	04.80	-0.5
	0.6s		29.00nm			5.2mb
DMN	54.80	311	P	14	05.20	-0.4
	0.8s		66.00nm			5.5mb
GBA	55.33	292	Pc	14	07.70	-1.5
	0.8s		3.70nm			4.2mb
GKN	55.36	311	P	14	08.80	-0.7

```
        0.4s    14.00nm          5.1mb
HYB    55.62 297 eP     14 12.50   1.2
WMQ    63.00 327 eP     15 01.00  -0.5
MAIO   78.09 309 eP     16 35.00   2.6
ZOBO  151.18 144 PKP    24 29.00   8.5X
       1.2s    14.19nm
                 i      25 16.00
      S.D. = 1.3  on  51 of  62 obs.
-----------------------------------------
?  FEB  03, 1990  12h 17m 26.09±13.32s
   50.976 N ±29.1km  130.507 W ±116.km
   DEPTH =  10.0km  (geophysicist)
 VANCOUVER ISLAND REGION          ( 25)
      ML 3.7 (PGC).

BBB     1.92  50 Pn     17 59.10   0.0
                Sn     18 29.00
PHC     1.97  97 Pn     17 59.70  -0.1
CBB     3.42 104 Pn     18 20.58   0.1
BTB     3.54 113 Pn     18 22.28  -0.1
FSB     5.14  45 Pn     18 44.90   0.0
      S.D. = 0.1  on   5 of   5 obs.
-----------------------------------------
%  FEB  03, 1990  12h 27m 45.37± 3.03s
   10.524 N ±17.0km   61.957 W ±20.4km
   DEPTH =  10.0km  (geophysicist)
 TRINIDAD                         ( 98)
      MD 3.0 (TRN).

TCE     0.26  49 eP     27 51.13   0.2
                eS     27 59.60
TPP     0.54 112 eP     27 56.30   0.0
                eS     28 10.70
TRN     0.56  77 eP     27 55.97  -0.7
                eS     28 09.88
TBH     0.88  93 eP     28 02.58   0.4
                eS     28 25.98
GRW     1.65  10 eP     28 13.29  -1.3
                eS     28 41.17
SVB     2.82  14 eP     28 31.14  -0.2
                eS     29 07.39
SSV     2.88  15 eP     28 33.87   1.6
                eS     29 09.42
      S.D. = 1.1  on   7 of   7 obs.
-----------------------------------------
*  FEB  03, 1990  13h 00m 54.69± 1.73s
   17.063 S ±18.2km  121.707 E ±14.5km
   DEPTH =  10.0km  (geophysicist)
 WESTERN AUSTRALIA                (590)

MBL     4.44 203 iPd    02 06.40   2.7
                iS     02 55.30
KNA     6.90  80 eP     02 39.30   0.9
                eS     03 53.00
NANU    7.98 226 eP     02 53.90   0.4
       0.3s     8.00nm          5.5mb X
                eS     04 17.00
MEKA    9.95 197 iPd    03 21.90   1.1
       0.3s    14.00nm          5.9mb X
                eS     05 06.00
MTN    10.02  67 iPc    03 21.20  -0.6
                eS     05 07.00
WARB   10.17 154 iPd    03 26.00   2.2
       0.3s    15.00nm          5.9mb X
                eS     05 15.00
WB5    12.34 105 eP     03 53.30  -0.1
MRWA   13.19 202 iPd    04 03.60  -1.0
       0.3s     6.00nm          5.2mb X
                eS     06 20.00
COOL   13.77 182 eP     04 12.00  -0.3
BAL    14.23 198 eP     04 17.00  -1.4
KLB    14.90 193 eP     04 27.00  -0.2
FORR   14.91 158 eP     04 25.00  -2.3
MUN    15.66 198 eP     04 36.00  -1.1
NWAO   16.30 194 eP     04 45.00  -0.3
      S.D. = 1.5  on  14 of  14 obs.
-----------------------------------------
?  FEB  03, 1990  13h 03m 03.80±13.03s
   44.999 N ±65.6km   14.464 E ±93.1km
   DEPTH =  10.0km  (geophysicist)
 ADRIATIC SEA                     (382)
      ML 2.1 (KBA).

RIY     0.35 351 iPgc   03 10.70  -0.3
                iSg    03 15.20
CEY     0.74 358 e(Pg)  03 28.60  10.3X
                e      03 34.30
VBY     0.75  48 eP     03 38.00  19.5X
TRI     0.86 325 eP     03 27.80   7.4X
VOY     1.11 339 ePg    03 25.10   0.4
                e      03 35.30
FVI     1.98 324 P      03 37.40  -0.3
                eSn    04 01.40
KBA     2.22 340 ePg    03 41.50   0.1
                iSg    04 08.60
      S.D. = 0.6  on   4 of   7 obs.
-----------------------------------------
   FEB  03, 1990  13h 18m 07.75± 0.44s
   44.410 N ± 3.4km    6.925 E ± 3.7km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                           (538)
      ML 2.2 (GEN), 2.1 (LDG).

FOUF    0.16 319 ePgc   18 11.03  -0.3
                e(Sg)  18 11.94
PZZ     0.16  53 P      18 12.19   0.7
                S      18 15.27
STV     0.33 120 P      18 14.55  -0.1
                S      18 19.16
ENR     0.40 117 P      18 15.78  -0.2
                S      18 21.32
RRL     0.52 349 P      18 18.14  -0.2
                S      18 26.34
SBF     0.66 146 Pg     18 20.20  -0.7
                Sg     18 29.20
ROB     0.69  99 P      18 21.52   0.1
                S      18 31.57
IMI     0.86 125 P      18 24.08  -0.2
FRF     0.87 193 Pg     18 25.30   0.8
                Sg     18 36.40
FIN     0.94 102 P      18 25.83   0.1
                S      18 39.10
LRG     1.04 203 Pg     18 27.60   0.3
                Sg     18 42.00
LMR     1.12 196 Pg     18 28.50  -0.2
                Sg     18 43.30
PCP     1.17  83 P      18 29.62   0.0
      S.D. = 0.4  on  13 of  13 obs.
-----------------------------------------
?  FEB  03, 1990  16h 35m 20.11± 4.32s
   15.117 N ±10.6km   60.273 W ±41.3km
   DEPTH =  28.1 ±  9.4 km
 LEEWARD ISLANDS                  ( 92)
      ML 2.5 (LDG).

CRM     0.72 240 iPd    35 33.96  -0.1
                S      35 43.00
MVM     0.82 227 iPd    35 35.88   0.2
FDF     0.93 246 iPd    35 36.84  -0.4
                S      35 48.90
BIM     0.98 232 iPd    35 38.05   0.1
                S      35 50.90
BBL     1.23 289 eP     35 41.80   0.3
DEG     1.41 328 eP     35 44.00  -0.1
                S      36 00.00
      S.D. = 0.4  on   6 of   6 obs.
-----------------------------------------
&  FEB  03, 1990  16h 37m 24.16s
   62.455 N          151.788 W
   DEPTH =  98.4km
 CENTRAL ALASKA                   (  1)
      <AGS-P>.

SKT     0.49 166 iP     37 39.18  -0.8
CUT     0.71  93 iP     37 41.07  -0.6
                eS     37 53.93
NCG     1.07 190 iP     37 44.65  -1.0
                eS     38 01.20
SUA     1.11 153 iP     37 45.23  -0.9
                eS     38 03.23
HUR     1.12  61 iP     37 45.24  -0.9
                eS     38 01.44
CGLM    1.16 185 eP     37 45.46  -1.2
KTH     1.17  19 iP     37 45.76  -1.0
CRP     1.21 188 iP     37 46.45  -0.8
                eS     38 04.02
PWA     1.21 131 iP     37 46.45  -0.7
BGL     1.23 194 iP     37 46.96  -0.5
SPU     1.28 186 iP     37 46.84  -1.3
CKL     1.29 192 eP     37 47.42  -0.8
                eS     38 05.98
GHO     1.51 116 eP     37 49.83  -1.1
                eS     38 10.75
PLRM    1.52 123 eP     37 49.75  -1.2
PMS     1.61 138 iP     37 50.98  -1.2
                eS     38 12.67
RND     1.65  53 iP     37 51.63  -1.0
                eS     38 13.47
NKA     1.74 171 iP     37 54.50   0.8
MCK     1.82  44 eP     37 54.14  -0.8
RDT     1.91 189 iP     37 54.94  -1.1
TTA     2.01 286 iP     37 56.11  -1.2
SLKM    2.09 158 eP     37 57.79  -0.7
RED     2.10 193 eP     37 57.83  -0.7
SVW     2.27 235 iP     37 59.69  -1.1
NCA     2.37  99 eP     38 00.36  -1.8
NNL     2.43 174 iP     38 02.77  -0.2
NEA     2.45  28 eP     38 01.79  -1.4
SEW     2.62 153 eP     38 03.94  -1.4
WRH     2.62  38 iP     38 03.94  -1.5
TOA     2.65  95 iP     38 04.47  -1.5
GLI     2.74 123 eP     38 04.46  -2.7
CCB     2.83  37 iP     38 06.60  -1.7
VZW     2.86 117 eP     38 06.63  -2.1
RDS     2.88  33 eP     38 07.53  -1.5
SDG     2.90  86 eP     38 07.80  -1.5
PDB     2.92 205 eP     38 08.67  -0.9
HDA     2.92  46 iP     38 08.07  -1.6
CNPM    2.95 175 eP     38 09.52  -0.5
PAX     2.96  77 eP     38 08.70  -1.5
DDM     3.01  61 eP     38 10.59  -0.2
FBA     3.03  34 eP     38 09.36  -1.7
GLM     3.21  36 eP     38 11.72  -1.8
IMA     3.72 348 eP     38 19.14  -1.5
GLB     3.90 102 eP     38 20.13  -2.9
BALM    4.71 103 eP     38 30.82  -3.4
      44 obs. associated
-----------------------------------------
?  FEB  03, 1990  17h 56m 58.36± 4.77s
   37.498 N ±49.8km   73.116 E ±12.8km
   DEPTH =  33.0km  (normal)
 TAJIK SSR                        (715)

QUE     8.91 217 eP     59 08.00   0.0
                eS     00 27.30
NDI     9.44 157 eP     59 15.00  -0.1
GKN    13.54 131 P      00 11.20   0.5
       0.6s    26.00nm          5.3mb X
KKN    14.08 130 P      00 18.00   0.1
       0.4s    10.00nm          4.9mb X
DMN    14.11 131 P      00 18.20   0.0
       0.4s    21.00nm          5.2mb X
PKI    14.32 130 P      00 20.80  -0.3
       0.4s     9.00nm          4.7mb X
GUN    14.37 128 P      00 21.40  -0.3
       0.4s    12.00nm          4.8mb X
      S.D. = 0.4  on   7 of   7 obs.
-----------------------------------------
*  FEB  03, 1990  18h 49m 00.35± 1.51s
   39.933 N ±15.2km   24.056 E ± 6.5km
   DEPTH =  10.0km  (geophysicist)
 AEGEAN SEA                       (365)
      MD 3.2 (ATH).

RDO     1.66  42 ePb    49 30.00   0.5
MMB     1.67 352 iPc    49 29.00  -0.8
EZN     1.75  93 iPn    49 36.30   5.4X
VAY     1.79 321 iPn    49 34.00   2.5X
KZN     1.79 283 ePb    49 30.60  -1.0
RZN     1.82  16 iP     49 33.00   0.8
KDZ     2.00  31 iP     49 34.00  -0.6
                iS     50 02.00
KKB     2.07 339 iP     49 35.00  -0.5
                Sg     50 04.00
PLD     2.22  12 eP     49 45.00   7.2X
MFT     2.61  70 ePn    49 43.00  -0.3
PGB     2.62   2 eP     49 49.00   5.6X
VTS     2.73 347 iP     49 45.00  -0.2
OHR     2.75 296 ePn    49 46.50   1.2
SKO     2.84 317 ePn    49 47.00   0.4
JMB     3.17  36 eP     50 03.00  11.8X
      S.D. = 0.8  on  10 of  15 obs.
-----------------------------------------
&  FEB  03, 1990  18h 56m 49.59s
   61.623 N          151.335 W
   DEPTH =  68.2km
 SOUTHERN ALASKA                  (  2)
      <AGS-P>.

SUA     0.33 119 iP     57 01.09   0.0
                eS     57 10.09
```

03d 18h

SKT	0.37	346	iP	57	00.59	-0.7
			eS	57	09.80	
NCG	0.45	241	iP	57	01.43	-0.7
			eS	57	11.17	
CGLM	0.45	226	iP	57	01.48	-0.6
CRP	0.53	228	iP	57	02.36	-0.6
			eS	57	12.67	
SPU	0.56	218	iP	57	02.40	-0.7
			eS	57	12.92	
BGL	0.62	235	iP	57	03.10	-0.7
CKL	0.64	229	iP	57	03.28	-0.8
PWA	0.70	87	iP	57	04.20	-0.3
			eS	57	16.23	
NKA	0.88	177	eP	57	08.10	1.3
			eS	57	22.99	
CUT	0.93	32	eP	57	06.82	-0.5
			eS	57	19.86	
PMS	0.93	113	iP	57	06.92	-0.5
			eS	57	21.56	
PLRM	1.05	91	iP	57	07.83	-1.1
GHO	1.16	82	eP	57	09.39	-1.0
			eS	57	26.51	
RDT	1.17	207	eP	57	09.85	-0.8
			eS	57	26.02	
SLKM	1.24	154	eP	57	10.37	-1.1
RED	1.40	211	eP	57	13.38	-0.2
HUR	1.57	30	eP	57	15.26	-0.7
NNL	1.59	179	eP	57	16.64	0.6
SEW	1.78	148	eP	57	18.79	0.1
KTH	1.95	5	eP	57	20.16	-1.0
			eS	57	43.86	
CNPM	2.11	179	eP	57	22.73	-0.5
NCA	2.17	78	eP	57	22.64	-1.6
GLI	2.18	108	eP	57	21.39	-2.9
TOA	2.49	77	eP	57	26.99	-1.7

25 obs. associated

FEB 03, 1990 18h 57m 57.44± 0.41s
39.985 N ± 4.1km 23.900 E ± 4.0km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
ML 3.5 (ATH).

PLG	0.52	318	ePb	58	07.30	-0.7
MMB	1.61	355	iPc	58	26.00	0.0
			iS	58	51.00	
KZN	1.66	282	ePb	58	26.90	0.1
VAY	1.67	323	iPn	58	27.60	0.7
RDO	1.70	47	ePn	58	26.60	-0.7
RZN	1.81	20	iP	58	30.00	0.9
EZN	1.87	94	iPn	58	30.30	0.5
PRK	1.97	111	ePn	58	32.60	1.3
KKB	1.98	342	iP	58	31.00	-0.3
ATH	2.02	184	ePn	58	30.30	-1.5
KDZ	2.02	34	iP	58	31.00	-1.0
			iS	58	55.00	
PLD	2.20	16	iPc	58	36.00	1.4
DIM	2.40	30	eP	58	38.00	0.6
PGB	2.57	4	eP	58	41.00	1.2
OHR	2.62	296	ePn	58	42.00	1.5
MFT	2.70	72	ePn	58	40.20	-1.6
SKO	2.72	318	ePn	58	41.50	-0.5
BNT	3.10	82	ePn	58	47.00	-0.3
ITM	3.20	210	ePn	58	48.40	-0.4
JMB	3.20	38	eP	58	57.00	8.3X
VLI	3.35	193	ePn	58	51.60	0.7
PVL	3.40	18	iPc	58	50.00	-1.6
DMK	3.45	57	eP	59	01.00	8.7X
CTT	3.64	70	eP	58	59.00	4.0X
DST	3.66	94	ePn	58	56.00	0.6
CMP	5.35	9	ePc	59	16.00	-3.2X
MLR	5.70	15	ePc	59	24.00	-0.4
BZS	5.87	344	ePc	59	25.00	-1.5
CZI	6.05	265	P	59	29.10	0.1
VRI	6.24	18	ePc	59	32.50	0.8

S.D. = 1.0 on 26 of 30 obs.

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* FEB 03, 1990 19h 44m 25.29± 2.50s
39.997 N ±22.6km 24.013 E ± 9.4km
DEPTH = 5.0km (geophysicist)
AEGEAN SEA (365)

PLG	0.57	311	ePb	44	35.20	-1.6
MMB	1.61	352	iPc	44	54.00	-0.4
			iS	45	19.00	
RDO	1.63	45	ePb	44	54.80	0.1
VAY	1.72	321	ePn	44	58.00	2.0
KZN	1.75	281	ePb	44	55.10	-1.4
RZN	1.77	17	iP	44	58.00	1.0
KDZ	1.96	32	iP	44	59.00	-0.6
KKB	2.00	340	iP	45	00.00	-0.1
			Sg	45	29.00	
DIM	2.35	29	eP	45	13.00	7.8X
PGB	2.55	3	eP	45	01.00	-7.1X
VTS	2.66	347	iP	45	10.00	0.3
OHR	2.69	295	ePn	45	11.70	1.6
PVL	3.37	17	eP	45	18.00	-1.5

S.D. = 1.4 on 11 of 13 obs.

& FEB 03, 1990 20h 06m 24.60s
40.055 N 123.050 W
DEPTH = 23.0km
NORTHERN CALIFORNIA (36)
<BRK>. ML 3.1 (BRK).

WDC	0.65	36	iPd	06	36.40	-0.9
			eS	06	48.30	
LTCM	0.73	78	eP	06	37.90	-0.6
FHC	1.03	317	eP	06	40.90	-2.8
			e	06	47.20	
			eS	06	53.90	
MIN	1.14	75	iPc	06	43.40	-2.0
ORV	1.29	112	iPc	06	45.20	-2.1
			iS	07	01.80	
LBFM	1.56	34	eP	06	50.10	-1.3
ZSP	2.20	163	iPc	07	00.70	0.4
CMB	2.89	133	e(P)	07	08.30	-2.0
MHC	2.92	157	eP	07	09.40	-1.4
ARN	2.95	156	eP	07	09.80	-1.3
GCC	3.13	164	eP	07	11.10	-2.5
SAO	3.52	158	eP	07	16.20	-3.0
KVN	3.96	103	eP	07	23.10	-2.4

13 obs. associated

FEB 03, 1990 22h 27m 30.81± 1.17s
2.282 S ± 7.0km 125.086 E ± 8.8km
OEPTH = 37.3 ± 12.0 km
5.2mb (10 obs.) 4.3Msz (2 obs.)
CERAM SEA (270)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 22C
Centroid Location:
Origin Time 22:27:32.4 0.8
Lat 2.06S 0.13 Lon 125.17E 0.16
Dep 31.710.1 Half-duration 1.5
Moment Tensor; Scale 10**16 Nm
Mrr=-1.38 0.63 Mtt=-1.50 0.49
Mff= 2.88 0.94 Mrt=-2.52 1.05
Mrf= 2.32 1.36 Mtf= 4.21 0.57
Principal Axes:

	Val=	Plg=	Azm=
T	5.52	7	299
N	0.82	55	199
P	-6.34	34	33

Best Double Couple:Mo=5.9**16
NP1:Strike= 71 Dip=62 Slip= -21
NP2: 171 72 -150

AAI	3.40	114	ePd	28	23.50	0.7
			eS	29	04.00	
MNI	3.71	356	ePc	28	27.00	-0.2
	0.7s	1001.50nm				
TSM	9.53	313	ePc	29	49.00	0.2
MTN	12.08	151	eP	30	24.00	0.5
			e	30	29.00	
KKM	12.12	313	ePc	30	24.50	0.4
	0.9s	83.90nm			5.9mb	
			e	32	37.00	
MBL	19.45	195	eP	31	58.00	0.6
WB5	19.70	153	eP	31	57.80	-2.4
WRA	19.75	153	Pd	31	59.00	-1.7
	0.7s	49.80nm			4.9mb	
ASPA	22.91	159	iPc	32	32.90	0.3
	1.2s	162.00nm			5.4mb	
Z	20s	0.80um			4.1Msz	
			LR	41	13.60	
QIS	23.04	143	eP	32	33.00	-0.9
PMG	23.05	109	eP	32	27.00	-7.0X
IPM	24.99	286	ePd	32	55.20	2.4
	1.0s	50.50nm			5.1mb	
QIZ	25.95	325	eP	33	00.60	-1.1
SNG	26.16	291	eP	33	07.40	3.6X
CTA	27.21	132	iPc	33	14.10	0.7
	1.1s	54.43nm			5.1mb	
			iS	38	00.00	
NNT	29.19	301	eP	33	31.00	-0.3
LOE	30.22	311	eP	33	40.00	-0.4
NST	30.45	307	eP	33	42.20	-0.3
BDT	32.22	308	eP	33	57.10	-0.9
	0.5s	17.90nm			5.2mb	
RMQ	33.10	139	iPd	34	05.00	-0.6
			e	35	21.00	
CHG	33.18	310	ePc	34	05.90	-0.4
	1.0s	35.75nm			5.2mb	
CHTO	33.18	310	iPc	34	06.00	-0.3
	1.1s	39.75nm			5.2mb	
GYA	33.66	329	P	34	10.00	-0.6
BRS	36.41	136	iPd	34	34.00	0.1
			e	35	55.50	
CD2	38.76	330	eP	34	52.50	-1.1
XAN	39.20	339	P	34	55.20	-2.1
CAN	39.67	149	eP	35	03.20	2.0
TIY	41.49	345	eP	35	16.10	0.0
Z	24s	0.40um			4.2MszX	
SHL	42.42	313	eP	35	23.50	-0.6
BJI	42.90	350	eP	35	27.50	0.0
LZH	43.01	335	eP	35	30.50	1.8
Z	18s	0.50um			4.5Msz	
SNY	43.92	358	Pc	35	35.20	-0.5
HHC	44.66	345	P	35	42.20	0.2
DZM	44.73	119	iPc	35	42.90	0.2
LSA	45.43	317	P	35	50.40	1.8
CN2	45.88	0	eP	35	53.40	2.1
MDJ	46.86	4	eP	35	58.00	-1.1
GTA	47.55	333	eP	36	04.70	-0.1
KOD	49.01	286	eP	36	16.20	-0.5
GBA	49.82	290	Pc	36	20.60	-1.9
	0.7s	9.30nm			4.9mb	
HYB	49.87	295	iPd	36	22.50	-0.5
	1.0s	40.00nm			5.4mb	
			e	36	32.00	
NDI	55.25	308	iPc	37	01.00	-1.9
WMQ	56.81	328	P	37	13.50	-0.5
KSH	61.22	318	P	37	46.10	1.4
QUE	64.09	305	eP	38	04.10	0.1
MAIO	71.93	309	eP	38	55.00	2.3
			eS	48	16.00	
IR4	78.45	306	eP	39	30.00	0.0
IR1	78.66	307	eP	39	32.00	0.8
IR7	78.77	307	eP	39	34.00	2.2
TAB	82.56	309	eP	39	56.00	4.2X
NAI	88.23	269	eP	40	29.00	8.4X
KRI	94.58	253	iPc	40	58.00	8.3X
SLR	95.15	244	iPd	41	02.00	9.8X
BUL	95.30	250	iPd	41	02.30	9.3X
KSR	96.38	244	eP	41	07.20	9.3X
WIN	105.67	246	ePdiff	41	44.00	4.3X
ZOBO	157.41	145	PKP	47	35.50	9.7X
	1.0s	8.00nm				
			i	48	09.00	

S.D. = 1.2 on 47 of 57 obs.

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* FEB 03, 1990 22h 50m 20.23± 1.27s
41.438 N ±10.6km 22.647 E ±13.3km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.0 (SKO).

VAY	0.13	206	iPg	50	23.00	-0.4
			iSg	50	25.00	
KKB	0.54	37	iPg	50	30.00	-1.1
			Sg	50	37.00	
MMB	0.83	79	ePgc	50	35.00	-1.2
			Sg	50	45.00	
VTS	1.23	20	ePg	50	44.00	0.9
			eSg	50	54.00	
RZN	1.57	80	eP	50	49.00	0.6
			Sg	51	10.00	
PGB	1.59	45	eP	50	50.00	1.5X
KDZ	2.09	83	eP	50	57.00	1.3

S.D. = 1.4 on 6 of 7 obs.

FEB 03, 1990 23h 22m 45.01± 0.81s
37.890 N ± 9.7km 20.012 E ± 5.0km
DEPTH = 15.6 ± 5.8 km
4.0mb (1 obs.)
IONIAN SEA (399)
MD 3.8 (ATH).

VLS	0.54	58	ePg	22	54.50	-1.1
ITM	1.68	114	ePb	23	15.00	1.1

KEK	1.83	355	ePb	23	20.80	4.8X
VLI	2.61	116	ePb	23	32.20	4.9X
KZN	2.77	29	ePn	23	32.80	3.1X
LCI	2.92	327	P	23	31.00	-0.6
			eSn	24	05.00	
SOI	3.13	275	P	23	34.90	0.3
			eSn	24	11.00	
ROI	3.17	303	P	23	36.50	1.2
OHR	3.27	10	iPn	23	38.70	2.0
CZI	3.32	295	P	23	35.50	-1.8
			eSn	24	20.20	
TDS	3.37	303	P	23	37.50	-0.6
			eSn	24	16.50	
CSI	3.46	304	P	23	42.60	3.2X
ATN	3.60	276	P	23	42.50	1.1
			eSn	24	22.20	
PLG	3.64	46	ePn	23	41.20	-0.8
BRT	3.69	325	P	23	42.90	0.2
			eSn	24	25.50	
MMN	3.72	304	P	23	43.60	0.6
VAY	3.95	29	ePn	23	47.30	1.0
MEU	4.12	261	P	23	47.40	-1.3
			eSn	24	33.90	
MGR	4.13	304	P	23	49.50	0.6
SKO	4.22	15	ePn	23	50.00	-0.1
SGO	4.52	308	P	23	55.50	1.2
HVAR	5.94	334	i(Pn)	24	13.20	-1.1
			iSn	25	18.40	
HFS	22.62	352	eP	27	45.50	-0.6
	0.6s		3.30nm			4.0mb
SUF	25.14	7	eP	28	09.70	-0.8
S.D. = 1.1 on 20 of 24 obs.						

FEB 03, 1990 23h 52m 31.41± 0.53s
24.255 S ± 5.5km 67.110 W ±10.3km
DEPTH = 180.0 ± 6.4 km
4.7mb (12 obs.)
CHILE-ARGENTINA BORDER REGION (127)

SLA	1.55	108	iPd	53	06.80	2.5
			(S)	53	32.00	
ANT	3.07	280	iPc	53	21.00	-0.4
RTRS	6.25	199	eP	54	02.80	0.4
			e	54	03.10	
CCH	6.90	8	P	54	10.50	-0.9
RTLL	7.15	189	eP	54	13.40	-1.0
			e	54	13.90	
RTCB	7.36	191	e(P)	54	17.00	-0.2
CFA	7.39	188	eP	54	17.50	-0.2
LPB	7.74	353	P	54	24.00	1.3
	0.8s		52.24nm			5.0mb
			S	55	47.00	
ZOBO	8.00	353	P	54	25.20	-1.1
	1.0s		44.50nm			4.8mb
			S	55	56.00	
MRA	8.22	172	eP	54	26.90	-1.6
BAO	19.90	68	eP	56	50.70	-0.3
SGS	58.54	347	P	02	10.80	-0.3
JSC	59.74	346	P	02	18.30	-1.0
LHS	59.84	347	P	02	19.70	-0.3
TKL	61.64	345	P	02	30.20	-1.9
GBTN	61.75	344	P	02	31.30	-1.6
RSCP	62.04	343	eP	02	33.10	-1.7
	1.0s		19.52nm			4.9mb
BLA	62.41	348	P	02	36.80	-0.4
	0.5s		6.56nm			4.8mb
NAV	62.58	348	P	02	37.80	-0.6
POW	64.24	338	P	02	47.80	-1.4
FVM	65.67	340	eP	02	56.90	-1.4
	1.0s		27.00nm			5.0mb
TUL	65.70	335	eP	02	58.30	-0.2
	1.0s		6.70nm			4.4mb
SIO	65.76	334	eP	02	58.20	-0.7
ALQ	69.70	326	iPd	03	24.10	0.4
	0.6s		15.83nm			5.0mb
ANMO	69.70	326	iP	03	24.90	1.2
GLA	72.90	319	P	03	43.80	1.2
GLD	72.93	330	P	03	42.90	0.1
	1.1s		19.29nm			4.7mb
GOL	72.96	330	P	03	43.50	0.4
	1.0s		6.25nm			4.3mb
PLM	74.33	318	P	03	52.50	1.4
PEC	74.88	319	P	03	55.30	1.3
MSU	75.38	325	P	03	58.00	1.0
RSSD	75.99	334	eP	04	01.10	0.8
DAU	76.33	327	P	04	03.50	1.1
ABL	76.78	318	P	04	06.00	1.1

BW06	77.32	329	P	04	08.00	0.3
	0.9s		2.54nm			4.0mb
TNP	77.82	322	P	04	12.00	1.5
	0.7s		2.59nm			4.1mb
RSON	78.39	343	P	04	12.50	-0.5
	1.0s		12.20nm			4.6mb
KVN	78.99	322	iP	04	17.80	1.0
WRA	131.35	207	PKPc	11	25.00	0.6
	0.4s		0.90nm			
GBA	144.92	101	PKPd	11	46.80	-2.4X
	0.2s		0.80nm			
S.D. = 1.1 on 39 of 40 obs.						

% FEB 04, 1990 01h 05m 35.90± 1.01s
43.567 N ±13.2km 11.793 E ± 9.2km
DEPTH = 33.0km (normal)
CENTRAL ITALY (381)

CRE	0.13	62	P	05	44.50	2.5
			eSg	05	51.80	
PGD	0.31	350	P	05	45.00	1.0
			eSg	05	53.00	
SFI	0.36	7	P	05	44.70	0.3
			eSg	05	52.00	
RSM	0.60	53	P	05	46.20	-1.7
ASS	0.80	128	P	05	50.80	-0.1
			eSg	06	03.90	
ARV	0.84	94	P	05	50.70	-0.6
			eSg	06	01.90	
PII	0.93	280	P	05	52.70	0.1
			eSg	06	05.30	
BDI	1.00	300	P	05	52.20	-1.5
			eSg	06	05.00	
CTI	2.48	358	P	06	08.50	-6.5X
			eSn	06	33.50	
S.D. = 1.6 on 8 of 9 obs.						

& FEB 04, 1990 01h 06m 05.50s
49.289 N 119.536 W
DEPTH = 10.0km (geophysicist)
BRITISH COLUMBIA (23)
<PGC>. ML 2.3 (PGC). Felt mildly from Penticton to Oliver with most reports from Okanagan Falls and Kaladen.

PNT	0.06	298	Pg	06	07.10	-0.7
DHW2	1.31	187	eP	06	29.07	-0.8
NLW	1.32	204	eP	06	29.36	-0.7
RPW	1.55	238	eP	06	33.14	-0.1
SAW	1.59	177	eP	06	33.62	-0.2
WTV	1.62	190	eP	06	33.75	-0.4
			eS	06	55.95	
MBW	1.64	253	eP	06	34.94	0.4
DPW	1.67	148	eP	06	35.41	0.4
VDB	1.71	262	Pn	06	35.46	0.0
ETW	1.77	198	eP	06	35.91	-0.6
CMW	1.91	244	eP	06	38.28	-0.3
11 obs. associated						

FEB 04, 1990 02h 02m 23.17± 0.35s
28.064 N ± 5.3km 130.076 E ± 5.7km
DEPTH = 24.9km (5 depth phases)
5.1mb (21 obs.)
RYUKYU ISLANDS (238)

KAGJ	3.19	13	P	03	12.30	-0.6
			S	03	49.70	
ANP	8.18	251	eP	05	09.00	45.7X
SSE	8.31	293	P	04	25.50	0.5
N	12s		2.60um			
E	12s		3.50um			
			PP	04	33.00	
NJ2	10.50	295	Pc	04	56.50	1.3
Z	12s		3.90um			
N	11s		3.30um			
E	11s		4.60um			
MAT	10.89	37	(P)	04	59.00	-1.6
	0.7s		3.42nm			4.7mb
DL2	12.90	329	eP	05	27.00	-0.6
Z	12s		3.80um			
N	14s		4.60um			
E	12s		3.10um			
TIA	13.64	310	eP	05	38.60	1.2
Z	14s		2.60um			
N	13s		1.60um			
E	13s		2.20um			

WHN	13.94	284	eP	05	43.70	2.3
Z	16s		3.60um			
N	14s		2.10um			
E	14s		5.20um			
			PP	05	49.50	
BAG	14.54	219	eP	05	48.00	-1.5
			eS	08	50.00	
SNY	14.72	341	iPc	05	52.00	0.5
Z	14s		3.90um			
N	13s		2.10um			
E	12s		1.10um			
CN2	16.14	348	P	06	14.00	4.1X
Z	14s		3.20um			
N	12s		2.10um			
			PP	06	17.40	
			PP	06	29.00	
BJI	16.57	320	eP	06	16.00	0.7
	1.5s		55.00nm			4.5mb
Z	12s		3.02um			
N	13s		1.84um			
E	13s		1.28um			
			eS	09	24.00	
TIY	17.64	308	eP	06	29.60	0.7
N	12s		1.90um			
E	12s		2.50um			
XAN	19.06	293	iPc	06	45.00	-1.4
	0.8s		100.00nm			5.1mb
N	11s		1.40um			
E	11s		1.90um			
HHC	19.84	315	eP	06	55.00	-0.2
Z	14s		1.90um			
N	12s		0.80um			
E	12s		1.10um			
			S	10	38.00	
GUMO	19.93	133	eP	07	00.00	3.8X
			eS	10	49.00	
QIZ	20.59	248	eP	07	04.00	1.0
N	19s		3.10um			
BTO	20.70	312	eP	07	03.00	-1.1
N	13s		2.20um			
GYA	20.87	271	iPd	07	05.80	-0.2
Z	16s		1.40um			4.4MszX
N	15s		1.50um			
E	15s		2.80um			
CD2	23.07	283	eP	07	26.00	-1.8
Z	13s		2.80um			4.9MszX
N	12s		2.30um			
LZH	23.57	296	Pd	07	31.50	-1.3
	1.5s		120.00nm			5.2mb
Z	13s		2.00um			4.8MszX
N	11s		1.70um			
E	11s		1.20um			
			pP	07	39.50	29km
			eS	11	50.00	
			sS	12	00.00	
KMI	24.60	269	Pc	07	43.00	0.0
Z	16s		2.10um			4.7MszX
N	15s		1.70um			
E	15s		1.50um			
			pP	07	49.00	21km
GTA	27.47	302	P	08	07.20	-2.2
Z	12s		360.00um			7.2MszX
E	12s		2.40um			
CHG	29.94	259	ePc	08	31.40	-0.3
	1.0s		29.75nm			5.1mb
			e	13	19.00	
CHTO	29.94	259	iP	08	31.60	-0.1
	1.0s		34.25nm			5.1mb
			pP	08	39.20	26km
LSA	34.02	282	Pd	09	08.80	1.0
WMQ	37.31	306	P	09	33.50	-1.6
Z	17s		1.50um			4.9MszX
			pP	09	41.00	25km
GUN	38.86	281	P	09	48.60	-0.1
PKI	39.34	280	P	09	52.00	-0.7
KKN	39.41	280	P	09	52.40	-0.7
DMN	39.60	280	P	09	54.40	-0.3
GKN	39.93	281	P	09	56.10	-1.2
NDI	46.19	284	iPc	10	47.00	-0.9
WB5	47.84	175	eP	11	00.60	-0.3
WRA	47.90	175	Pc	11	01.50	0.1
	0.6s		4.40nm			4.7mb
CTA	50.36	160	iPc	11	20.50	0.2
			e	11	27.50	23km
GBA	50.89	265	Pd	11	23.90	-0.6
	0.7s		4.60nm			4.5mb
ASPA	51.56	176	eP	11	29.50	0.1

04d 02h

	0.4s	7.00nm		4.9mb		
Z	22s	0.14um		3.9MszX		
		LR	31	12.70		
POO	52.12	272 eP	11	30.00	-3.9X	
KOD	52.35	261 eP	11	36.00	0.1	
QUE	54.55	289 eP	11	51.80	0.0	
MAIO	59.12	297 eP	12	24.00	-0.1	
MBC	67.66	14 eP	13	19.50	-0.3	
	1.0s	8.00nm		4.8mb		
KEV	68.34	339 eP	13	22.00	-2.0	
	0.5s	8.40nm		5.1mb		
SOD	69.39	336 iP	13	29.40	-1.2	
SUF	71.50	332 iP	13	42.10	-1.3	
	0.4s	5.30nm		5.0mb		
NUR	73.12	330 iP	13	52.00	-1.0	
	0.5s	22.50nm		5.5mb		
UPP	76.48	331 iP	14	10.80	-1.5	
HFS	77.96	333 eP	14	19.30	-1.2	
	0.6s	10.70nm		5.1mb		
Z	16s	0.00um		1.7MszX		
		LR	50	25.00		
VRI	78.92	316 ePd	14	27.00	0.9	
MLR	79.58	316 ePd	14	30.00	0.2	
KRA	80.69	322 eP	14	36.00	0.5	
	0.6s	41.00nm		5.6mb		
		e	14	39.70	12kmX	
SPC	81.00	321 eP	14	37.90	0.6	
KSP	82.19	324 eP	14	42.80	-0.4	
		id	14	44.30	5kmX	
SRO	82.83	321 eP	14	43.80	-2.8	
		e	33	09.40		
ZST	83.28	322 eP	14	49.80	0.8	
		e	33	08.50		
BRG	83.37	325 iP	14	50.00	0.6	
	1.1s	16.00nm		5.1mb		
CLL	83.58	326 iPc	14	51.20	0.8	
	1.3s	34.00nm		5.4mb		
PRU	83.60	324 P	14	51.50	1.0	
	1.2s	18.20nm		5.1mb		
VAY	83.82	314 eP	14	52.00	0.1	
SKO	84.19	315 iP	14	54.40	0.7	
KHC	84.61	324 iPc	14	56.50	0.8	
	1.4s	22.00nm		5.2mb		
		e	15	16.30	72kmX	
MOX	84.68	326 e(P)	14	58.00	2.0	
OHR	85.06	314 eP	14	57.80	-0.4	
VBY	85.88	320 e(P)	15	03.40	1.3	
LJU	85.96	321 e(P)	15	03.00	0.5	
KBA	85.99	322 eP	15	01.50	-1.4	
	0.6s	8.30nm		5.1mb		
		i	15	03.40		
		i(pP)	15	53.00	210kmX	
CEY	86.21	321 eP	15	04.50	0.7	
FFC	86.22	27 eP	15	05.00	1.4	
	0.7s	6.00nm		4.9mb		
VOY	86.33	321 iPd	15	04.70	0.3	
FVI	86.59	322 P	15	06.50	1.0	
TRI	86.59	321 eP	15	05.40	-0.2	
CTI	87.55	322 P	15	10.50	0.1	
ARV	88.41	320 P	15	15.50	1.0	
DUI	88.65	317 P	15	17.50	1.8	
CSI	88.65	315 P	15	16.40	0.7	
TDS	88.69	315 P	15	17.00	1.2	
MMN	88.77	315 P	15	15.50	-0.7	
SGO	88.79	316 P	15	17.00	0.7	
ASS	88.84	319 P	15	17.50	0.9	
PGD	88.87	320 P	15	18.50	1.6	
CRE	88.90	320 P	15	20.00	3.1X	
SDI	89.00	318 P	15	17.50	0.1	
AZI	89.05	318 P	15	17.70	0.2	
CZI	89.08	315 P	15	17.20	-0.4	
VAI	89.20	323 P	15	17.00	-1.1	
MNS	89.25	319 P	15	20.00	1.5	
BDI	89.38	321 P	15	18.00	-1.1	
RDP	89.62	318 P	15	22.00	1.7	
SOI	89.80	314 P	15	22.00	0.9	
KIC	124.58	301 (PKP)	21	22.60	-0.2	

S.D. = 1.1 on 86 of 91 obs.

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* FEB 04, 1990 02h 04m 20.86± 5.09s
50.116 N ±23.8km 153.338 E ±14.4km
DEPTH = 208.6 ± 55.7 km
4.5mb (14 obs.)
KURIL ISLANDS (221)

MAT	17.42	225 iPc	08	12.90	0.6	
	0.8s	20.15nm		4.6mb		
FBA	33.48	41 e(P)	10	42.10	0.4	
	0.6s	0.30nm		3.1mb X		
CHTO	53.11	254 iPd	13	19.00	0.1	
	0.7s	4.61nm		4.2mb		
		pP	13	46.10	114kmX	
GUN	54.92	273 P	13	31.80	-0.7	
KKN	55.39	273 P	13	35.40	-0.3	
	0.3s	14.00nm		5.1mb		
PKI	55.46	273 P	13	36.00	-0.3	
	0.4s	5.00nm		4.6mb		
GKN	55.66	274 P	13	37.20	-0.3	
	0.3s	16.00nm		5.2mb		
KVN	60.48	63 eP	14	10.70	-0.2	
FRB	61.82	20 eP	14	17.00	-2.2	
GBA	70.65	268 P	15	15.00	-0.5	
	0.6s	2.60nm		4.1mb		
PRU	74.23	334 eP	15	36.00	0.0	
CDF	77.60	338 eP	15	54.80	-0.1	
FLN	78.96	343 eP	16	02.00	-0.2	
	0.9s	22.90nm		4.9mb		
GRR	79.39	343 eP	16	04.60	0.1	
	0.7s	7.40nm		4.5mb		
LOR	79.48	339 eP	16	05.10	0.1	
	0.7s	7.00nm		4.5mb		
LBF	79.72	339 eP	16	06.60	0.2	
	0.6s	1.80nm		4.0mb		
SSF	79.75	340 eP	16	06.70	0.2	
LPF	79.77	343 eP	16	07.20	0.7	
AVF	80.04	340 eP	16	08.30	0.3	
	0.7s	4.80nm		4.3mb		
BGF	80.38	340 eP	16	10.20	0.4	
MAF	80.76	340 eP	16	12.50	0.7	
	0.7s	5.50nm		4.4mb		
TCF	80.77	340 eP	16	12.40	0.5	
MFF	80.97	342 eP	16	12.40	-0.4	
CAF	82.10	340 eP	16	19.30	0.5	
	0.8s	5.90nm		4.4mb		
LFF	82.37	341 eP	16	20.30	0.1	
	0.7s	7.40nm		4.5mb		
LPO	82.52	340 eP	16	21.30	0.4	
EPF	84.28	340 eP	16	29.70	-0.2	

S.D. = 0.6 on 27 of 27 obs.

FEB 04, 1990 02h 15m 21.25± 0.87s
51.152 N ± 9.4km 130.452 W ±10.8km
DEPTH = 10.0km (geophysicist)
3.8mb (6 obs.)
QUEEN CHARLOTTE ISLANDS REGION (22)
ML 4.1 (PGC).

SJB	0.86	336 Pg	15	38.20	0.4	
BNB	1.64	331 Pn	15	50.00	-0.2	
BBB	1.79	54 Pn	15	52.80	0.5	
		Sg	16	23.00		
PHC	1.96	102 Pn	15	54.20	-0.7	
CWB	2.22	335 Pn	15	59.00	0.3	
		Sn	16	25.70		
SKB	2.30	336 Pn	15	59.00	-0.8	
EDB	2.48	120 Pn	16	00.58	-1.7	
CBB	3.43	107 Pn	16	14.98	-0.8	
BTB	3.58	116 Pn	16	16.67	-1.4	
SHB	4.49	108 Pn	16	30.15	-0.7	
FSB	4.99	46 Pn	16	38.90	1.0	
MCW	5.51	114 eP	16	45.20	-0.1	
GMW	6.17	123 eP	17	03.00	8.4X	
SIT	6.57	336 e(P)	17	14.00	13.8X	
BMW	6.68	132 eP	17	02.00	0.1	
LON	7.19	124 eP	17	09.00	0.0	
SHW	7.36	129 eP	17	11.70	0.3	
EDM	10.70	72 eP	18	10.50	12.9X	
SES	12.31	86 eP	18	17.00	-2.4	
PMR	14.65	323 eP	18	57.40	7.3X	
	1.0s	2.00nm		3.6mb		
KVN	14.89	140 eP	18	55.50	1.9	
FBA	16.47	333 eP	19	19.00	5.4X	
	1.1s	1.70nm		3.1mb		
BW06	16.50	112 eP	19	17.00	2.6	
	1.1s	12.20nm		3.9mb		
INK	17.28	356 eP	19	22.00	-1.7	
FFC	17.47	67 eP	19	28.00	1.7	
	0.7s	6.00nm		3.8mb		
TTA	18.08	320 eP	19	37.50	3.7X	
IMA	19.04	330 eP	19	46.00	0.3	
GOL	20.89	113 eP	20	07.50	1.3	
RSON	22.98	76 eP	20	28.30	1.6	
ANMO	23.71	124 eP	20	35.50	1.4	
ALQ	23.71	124 eP	20	31.50	-2.7	
	1.0s	3.75nm		3.9mb		
MBC	25.57	6 eP	20	55.00	3.7X	
	1.0s	7.00nm		4.3mb		

S.D. = 1.4 on 25 of 32 obs.

FEB 04, 1990 02h 30m 41.16± 0.39s
37.474 N ± 3.6km 20.968 E ± 2.4km
DEPTH = 55.5 ± 5.4 km
5.0mb (10 obs.)
IONIAN SEA (399)
MD 4.5 (ATH).

VLS	0.76	337 ePb	30	54.80	-1.3	
ITM	0.82	111 ePb	30	54.20	-2.6	
VLI	1.75	115 ePn	31	10.50	1.0	
AGG	1.88	34 iPn	31	14.00	2.5	
ATH	2.24	76 ePn	31	17.00	0.6	
KEK	2.42	338 ePn	31	20.20	1.2	
LIT	2.88	24 iPn	31	26.50	0.9	
KZN	2.90	12 ePn	31	27.50	1.6	
FNA	3.32	5 iPn	31	32.90	1.0	
VAM	3.32	127 ePn	31	31.10	-0.8	
PLG	3.48	33 ePn	31	34.20	0.1	
THE	3.52	26 iPn	31	34.50	0.0	
		iSn	32	18.40		
OHR	3.63	358 iPnc	31	37.70	1.4	
APE	3.66	95 ePn	31	36.40	-0.3	
LCI	3.70	321 P	31	36.90	-0.2	
SOI	3.94	280 P	31	39.50	-1.0	
KNT	3.98	22 iPn	31	41.50	0.5	
ROI	4.04	303 P	31	46.10	4.2X	
VAY	4.04	17 iPnc	31	42.40	0.5	
SRS	4.17	28 iPn	31	44.20	0.5	
CZI	4.18	296 P	31	43.60	-0.3	
TDS	4.23	302 P	31	47.20	2.5X	
CSI	4.33	304 P	31	50.30	4.3X	
ATN	4.41	281 P	31	46.40	-0.8	
BRT	4.48	320 P	31	48.10	-0.1	
SKO	4.51	4 iPnc	31	48.60	0.1	
		iPg	32	02.50		
		iSn	32	37.60		
		i	32	48.50		
		iSg	32	59.90		
PRK	4.53	65 ePn	31	48.10	-0.7	
MMN	4.58	303 P	31	51.20	1.7	
MMB	4.63	27 ePc	31	51.00	0.8	
SMG	4.67	85 ePn	31	52.00	1.3	
ULC	4.68	344 ePn	31	50.00	-0.9	
		eSn	32	43.00		
KKB	4.68	20 iP	31	51.00	0.1	
EZN	4.81	59 iP	31	52.60	-0.1	
MEU	4.83	267 Pc	31	51.20	-2.0	
		eSn	32	43.90		
BAI	4.83	320 P	31	52.60	-0.5	
MNO	5.00	277 P	31	56.40	0.8	
IZM	5.06	78 ePn	31	49.00	-7.4X	
BDV	5.08	342 ePn	31	56.00	-0.6	
		eSn	32	52.20		
RDO	5.10	43 ePn	31	56.40	-0.5	
RZN	5.11	33 iP	31	57.00	-0.2	
PVY	5.17	352 ePn	31	58.50	0.5	
		eSn	32	54.50		
ALN	5.22	48 iPn	31	58.50	0.0	
HCY	5.32	340 ePn	31	59.10	-0.8	
		eSn	32	58.20		
KAP	5.35	109 ePn	32	00.90	0.4	
SGO	5.38	307 P	32	01.50	0.8	
VTS	5.39	18 iPc	32	01.00	-0.1	
KDZ	5.40	38 iPc	32	00.00	-1.1	
PLD	5.45	31 eP	32	02.00	0.3	
IVA	5.45	352 ePn	32	02.50	0.6	
		eSn	33	02.00		
PGB	5.63	25 eP	32	04.00	-0.4	
BRY	5.73	342 ePn	32	05.00	-0.8	
		eSn	33	08.00		
DIM	5.77	36 iP	32	07.00	0.8	
FAI	5.81	270 P	32	06.20	-0.6	
ARG	5.88	100 ePn	32	07.10	-0.6	
MFT	5.92	54 iP	32	07.80	-0.6	
EDC	6.09	60 eP	32	11.50	0.7	
BNT	6.14	60 iP	32	11.30	-0.1	
DST	6.37	68 eP	32	15.00	0.3	
JMB	6.59	39 eP	32	17.00	-0.7	
PVL	6.63	29 iPd	32	17.00	-1.3	
HVAR	6.66	330 i(Pn)	32	22.10	3.4X	
		iSn	32	38.60		
DMK	6.80	48 eP	32	19.90	-0.8	

KHL	6.82	80	eP	32	22.00	1.0	MBU	2.50	286	iPc	48	30.30	-1.1	FVI	149.62	344	PKP	06	02.60	4.6X
CTT	6.85	55	eP	32	19.00	-2.4				eS	49	33.00		LJU	149.63	342	e(PKP)	06	03.40	5.3X
SDI	6.95	310	P	32	23.80	0.9	SVA	2.68	260	eP	48	34.20	1.9	LPF	149.67	3	ePKP	06	02.60	4.5X
KSL	7.04	98	ePn	32	23.90	-0.1	BRS	27.95	245	iPc	52	33.00	9.0X	VOY	149.83	342	ePKP	06	03.90	5.3X
ELL	7.18	93	eP	32	28.00	1.9		0.8s		6.00nm			4.3mb	VBY	149.88	340	iPKP	06	04.50	6.0X
BEO	7.35	357	e(P)	32	25.50	-2.8	RMQ	31.28	248	iPd	52	52.50	0.0	CEY	149.94	341	ePKP	06	04.00	5.4X
HRT	7.54	61	eP	32	30.80	-0.2		0.8s		45.00nm			5.2mb	VAY	150.15	327	ePKP	06	04.00	5.0X
BCK	7.65	87	eP	32	36.40	3.8X				e	54	26.00		TRI	150.16	342	ePKP	06	04.30	5.4X
BLY	7.81	340	eP	32	33.00	-1.6	CTA	33.15	260	iPd	53	07.30	-1.0	SKO	150.25	329	iPKPc	06	04.50	5.3X
			eS	33	48.00			1.1s		50.63nm			5.1mb		0.8s		28.00nm			
GPA	7.81	66	eP	32	35.00	0.3	WB5	44.32	259	eP	54	27.20	-11.4X	LOR	150.41	356	ePKP	06	04.70	5.4X
MNS	8.04	310	P	32	39.10	1.3	WRA	44.34	259	Pc	54	37.30	-1.4	CTI	150.41	345	PKP	06	04.90	5.5X
BZS	8.15	3	eP	32	36.50	-2.8X		0.6s		5.10nm			4.2mb	SSF	150.63	357	ePKP	06	05.40	5.8X
CMP	8.37	20	ePd	32	44.00	1.7	ASPA	44.53	254	iPd	54	39.20	-1.0	LBF	150.68	356	ePKP	06	05.10	5.4X
ARV	8.58	317	P	32	46.90	1.6		0.6s		79.00nm			5.4mb	AVF	150.91	357	ePKP	06	05.50	5.5X
MLR	8.84	23	ePd	32	50.00	1.1				iS	00	32.80		SMF	151.03	356	ePKP	06	05.50	5.3X
VBY	9.09	334	e(Pn)	32	50.90	-1.4	NANU	61.46	254	eP	56	39.80	-0.9	MFF	151.13	2	ePKP	06	05.80	5.5X
			eSn	34	32.00		MAT	67.51	324	iPc	57	18.10	-0.3	BGF	151.17	358	ePKP	06	06.20	5.8X
ZAG	9.13	337	e(P)	33	06.00	13.2X		0.8s		22.39nm			4.7mb	VAI	151.20	349	PKP	06	06.70	6.3X
PTJ	9.21	338	e(Pg)	33	02.20	8.1X	PAS	77.32	48	eP	58	14.00	-0.5	OHR	151.22	328	iPKP	06	07.00	6.3X
VRI	9.43	25	ePd	32	57.00	0.1	MWC	77.44	48	eP	58	15.00	-0.3		0.6s		0.10nm			
BBTK	9.52	72	eP	33	05.00	6.6X	FRI	77.78	45	eP	58	16.50	-0.3				e	06	18.50	
CEY	9.60	331	e(P)	33	02.00	2.7	PLM	77.84	49	eP	58	18.00	0.5	TCF	151.46	359	ePKP	06	06.80	5.9X
			eS	34	50.50		SBB	77.84	47	eP	58	17.00	-0.3	MAF	151.51	358	ePKP	06	07.30	6.4X
LJU	9.82	333	e(P)	33	00.50	-1.7	ISA	77.90	46	eP	58	18.00	0.3	BOB	152.12	347	PKP	06	15.50	13.6X
			e(S)	34	46.00		CMB	77.91	43	eP	58	17.10	-0.5	BNI	152.33	352	PKP	06	10.00	7.7X
TRI	9.83	329	eP	33	02.70	0.2	ORV	78.05	42	e(P)	58	17.80	-0.4	ARV	152.41	341	PKP	06	10.00	7.7X
			e	35	44.70		GSC	78.88	47	eP	58	22.00	-0.8	RJF	152.45	360	ePKP	06	09.10	6.8X
VOY	10.05	331	eP	33	02.90	-2.6	GLA	79.17	50	eP	58	25.00	0.7	LFF	152.81	1	ePKP	06	09.80	7.0X
			eS	34	51.80		KVN	79.96	44	eP	58	28.70	0.2	CAF	152.82	359	ePKP	06	10.00	7.1X
FVI	10.95	329	P	33	18.00	0.4	BJI	83.38	316	eP	58	46.00	0.5	ASS	152.89	341	PKP	06	10.50	7.5X
KBA	11.13	332	e(P)	33	16.50	-3.7X		1.0s		12.00nm			4.4mb	LPO	153.07	0	ePKP	06	10.40	7.2X
	1.0s		12.50nm			4.9mb	FBA	85.66	13	iP	58	55.20	-0.9	BCAO	158.55	234	ePKPd	06	11.40	0.4
			i	33	47.80			0.5s		6.10nm			4.6mb		0.6s		6.00nm			
			i	35	07.60		ALQ	86.22	52	iPc	58	59.50	-0.2		S.D. = 1.0		on 41 of 93 obs.			
			e	35	19.50			1.0s		6.25nm			4.3mb							
KOT	11.76	127	ePn	33	21.50	-7.1X	CHG	88.60	290	eP	59	12.80	1.9	& FEB 04, 1990 03h 12m 59.44s						
KRA	12.60	357	eP	33	52.60	12.9X	CHTO	88.60	290	iP	59	12.40	1.5	61.507 N 146.404 W						
KHC	12.83	338	eP	33	42.60	-0.1		0.8s		4.94nm			4.5mb	DEPTH = 21.7km						
			e	33	54.80		SES	90.03	36	ePc	59	16.20	-0.7	SOUTHERN ALASKA						(2)
PRU	13.34	342	P	33	48.00	-1.4	RSSD	91.64	44	eP	59	24.20	-0.4	<AGS-P>.						
KSP	13.78	347	eP	34	04.00	8.9X	KEV	125.57	349	ePKP	05	08.00	-6.3X							
BRG	14.30	342	e(P)	34	10.80	8.8X	SUF	131.78	345	ePKP	05	24.60	-1.7	VZW	0.46	189	iP	13	07.79	-1.0
CLL	14.94	340	eP	34	15.00	4.7X		0.6s		3.80nm							eS	13	15.03	
	1.3s		22.00nm			4.3mb	NUR	134.04	344	ePKP	05	29.60	-1.0	NCA	0.53	338	eP	13	09.24	-0.8
ATEJ	19.90	276	iPc	35	11.50	0.6	KAS	143.48	317	iPKPc	05	48.30	-0.2				eS	13	17.77	
ALOJ	19.94	277	iPc	35	11.50	0.2	KRA	144.37	339	iPKPc	05	49.40	-0.2	TOA	0.61	10	iP	13	10.71	-0.7
NKM	21.29	273	iP	35	25.50	0.5	WIT	144.68	354	ePKP	05	51.50	1.5				eS	13	19.68	
			i	35	26.00		KSP	144.79	343	ePKPd	05	50.20	-0.1	GLI	0.71	208	eP	13	11.67	-1.4
			i	35	30.00			0.8s		50.00nm							eS	13	22.03	
IFR	21.59	267	iP	35	19.50	-8.7X				ic	05	51.20		CVA	1.02	161	eP	13	16.43	-1.7
			i	35	26.00		VRI	144.80	329	ePKPd	05	51.00	0.5				eS	13	31.32	
UPP	22.51	356	iP	35	37.00	0.2	BBTK	144.91	316	ePKP	05	50.00	-1.0	HIN	1.12	182	iP	13	18.32	-1.5
HFS	23.15	351	eP	35	42.50	-0.6	SPC	145.00	338	ePKP	05	50.90	-0.1				eS	13	34.67	
	0.7s		6.20nm			4.2mb	CLL	145.16	347	iPKPc	05	51.90	1.0	SGAM	1.17	149	eP	13	18.61	-1.9
NUR	23.17	5	iP	35	43.00	-0.3		0.8s		55.00nm							S	13	34.15	
			e	35	51.00		BRG	145.36	346	iPKPc	05	52.30	1.1	GHO	1.23	284	iP	13	19.63	-1.9
IR7	23.82	85	eP	35	51.00	1.0		1.0s		36.00nm							S	13	37.19	
IR1	23.95	86	eP	35	52.00	0.7	WTS	145.47	354	ePKP	05	52.50	1.2	GLB	1.25	92	iP	13	18.99	-2.7
IR4	24.17	86	eP	35	53.00	-0.4		1.0s		52.00nm							eS	13	35.71	
SUF	25.47	6	iP	36	05.80	0.5	PRU	146.03	345	PKPc	05	54.80	2.4X	PLRM	1.31	275	iP	13	21.17	-1.3
	0.8s		9.50nm			4.4mb		1.0s		21.70nm							eS	13	38.36	
SOD	30.12	4	iP	36	47.50	0.2				e	05	56.90		RAGM	1.41	142	eP	13	22.73	-1.2
BCAO	32.96	184	iPd	37	14.10	1.4	MOX	146.07	348	ePKP	05	54.00	1.6				S	13	42.35	
	0.3s		18.00nm			5.4mb	LWI	146.39	237	iPKPc	05	56.90	2.6X	PAX	1.53	16	iP	13	23.84	-2.0
			id	37	21.00		ENN	146.77	355	ePKP	05	56.00	2.5X				eS	13	43.23	
TIC	38.73	224	Pc	38	02.60	0.9		0.8s		19.00nm				PMS	1.54	262	iP	13	25.07	-0.8
	0.8s		15.00nm			4.9mb	SRO	146.84	339	iPKP	05	56.80	3.1X				eS	13	44.80	
KIC	38.82	223	Pc	38	03.00	0.6	ZST	146.91	340	iPKP	05	56.90	3.1X	PWA	1.67	276	eP	13	26.62	-1.0
	0.8s		24.00nm			5.1mb	MEM	146.92	354	iPKPc	05	56.50	2.8X	TGL	1.89	112	eP	13	29.05	-2.0
LIC	39.09	224	Pc	38	05.50	0.9	KHC	147.06	345	ePKP	05	54.40	0.3	BALM	2.02	102	eP	13	30.52	-2.3
GKN	53.49	80	P	39	56.80	-1.5				i	05	57.80					eS	13	55.67	
	0.7s		15.00nm			5.1mb	SNF	147.15	356	PKP	05	57.10	3.0X	WAX	2.03	120	eP	13	30.87	-2.1
DMN	54.04	81	P	40	01.40	-1.1	BZS	147.37	333	ePKP	05	50.00	-4.6X	CUT	2.04	298	eP	13	32.44	-0.5
	0.6s		26.00nm			5.4mb	ABH	147.47	352	ePKPc	05	58.30	3.6X	SEW	2.05	228	eP	13	31.89	-1.3
KKN	54.09	80	P	40	01.20	-1.6	DOU	147.54	356	iPKPc	05	58.20	3.4X	SUA	2.08	271	eP	13	32.71	-1.1
	0.7s		15.00nm			5.1mb	TOD	147.57	351	ePKP	05	58.41	3.5X	SLKM	2.11	243	eP	13	33.23	-0.9
PKI	54.29	80	P	40	04.00	-0.4	RUP	147.71	353	ePKPc	05	59.12	4.0X	HUR	2.11	316	eP	13	33.07	-1.1
GUN	54.50	80	P	40	04.80	-1.2	CDF	148.95	352	ePKP	06	01.20	4.1X	RND	2.22	330	eP	13	34.61	-1.1
DZM	146.55	72	iPKPd	50	20.00	3.3X	FLN	148.96	2	ePKP	06	00.70	3.7X	NKA	2.47	254	eP	13	40.45	1.3
	S.D. = 1.1		on 99 of 117 obs.				KBA	149.02	344	iPKPc	06	00.30	2.9X	SKT	2.48	283	eP	13	37.71	-1.7
								0.3s		7.20nm				MCK	2.52	333	eP	13	39.50	-0.5
* FEB 04, 1990 02h 47m 16.85± 0.80s							LDF	149.14	2	ePKP	06	01.00	3.7X	SPU	2.74	266	eP	13	41.47	-1.6
17.675 S ±24.8km 178.769 W ±13.2km							GRR	149.32	3	ePKP	06	01.60	4.0X	NCG	2.76	270	eP	13	41.81	-1.6
DEPTH = 571.4 ± 7.2 km							FEL	149.37	351	ePKPc	06	02.72	4.9X	CKL	2.88	266	eP	13	43.70	-1.3
4.6mb (10 obs.)							HAU	149.46	353	ePKP	06	02.40	4.6X	BGL	2.89	268	eP	13	43.20	-2.0
FIJI ISLANDS REGION (181)							BSF	149.58	353	ePKP	06	02.50	4.4X	KTH	2.93	316	eP	13	44.99	-0.8

04d 03h

RDT	3.07	255	eP	13 45.28	-2.4
WRH	3.07	346	eP	13 47.70	0.0
RDS	3.42	347	eP	13 51.97	-0.8
GLM	3.52	353	eP	13 53.66	-0.5

35 obs. associated

& FEB 04, 1990 04h 02m 47.40s
36.860 N 121.612 W
DEPTH = 5.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.8 (BRK).

SAO	0.16	125	iP	02 50.50	-0.3
GCC	0.35	299	ePd	02 54.20	-0.3
MHC	0.48	357	iPd	02 57.20	0.1
ARN	0.49	7	eP	02 57.00	-0.3
PRS	0.56	160	iPd	02 58.10	-0.6
LLA	0.59	114	iPc	02 59.00	-0.2
PCC	0.89	316	eP	03 03.80	-1.1
BKS	1.13	334	ePc	03 08.90	-0.1
			eS	03 26.00	
BRK	1.14	333	eP	03 08.60	-0.5
CMB	1.53	39	e(P)	03 14.20	-1.2
FRI	1.53	85	eP	03 14.40	-1.0
			iS	03 32.90	
KVN	3.53	51	eP	03 43.00	-1.3

12 obs. associated

FEB 04, 1990 04h 52m 48.77± 0.72s
36.034 N ± 7.7km 27.108 E ± 6.5km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)

KAP	0.49	174	ePb	52 59.00	0.4
ARG	0.84	77	ePn	53 03.70	-1.3
			eSn	53 17.50	
APE	1.64	310	ePn	53 18.10	0.4
CIN	1.75	26	eP	53 20.00	0.7
KSL	2.01	87	ePn	53 23.20	0.1
ELL	2.37	72	ePn	53 29.00	0.6
BCK	3.14	62	ePn	53 43.90	4.7X
VLI	3.43	283	ePn	53 42.60	-0.8

S.D. = 0.9 on 7 of 8 obs.

& FEB 04, 1990 05h 08m 24.20s
62.330 N 151.391 W
DEPTH = 90.0km
CENTRAL ALASKA (1)
<AGS-P>.

SKT	0.36	191	iP	08 37.39	-0.8
CUT	0.53	81	iP	08 38.83	-0.5
			eS	08 49.97	
SUA	0.92	160	iP	08 43.06	-0.4
			eS	08 57.74	
PWA	0.99	133	iP	08 43.69	-0.3
NCG	1.00	202	iP	08 43.33	-1.0
			eS	08 58.66	
HUR	1.04	50	iP	08 43.71	-0.9
			eS	08 58.66	
CGLM	1.07	196	eP	08 44.10	-1.0
CRP	1.13	199	iP	08 45.11	-0.8
			eS	09 01.21	
BGL	1.17	204	eP	08 45.77	-0.6
SPU	1.20	196	iP	08 45.52	-1.1
			eS	09 02.93	
CKL	1.22	202	iP	08 46.22	-0.8
			eS	09 04.30	
KTH	1.25	10	iP	08 45.85	-1.4
GHO	1.29	115	iP	08 47.72	-0.1
			eS	09 06.48	
PLRM	1.30	124	eP	08 47.12	-0.6
PMS	1.39	141	eP	08 48.49	-0.5
			eS	09 08.60	
RND	1.59	46	eP	08 50.37	-1.2
			eS	09 09.96	
NKA	1.59	177	eP	08 53.00	1.5
MCK	1.80	37	eP	08 53.12	-1.2
			eS	09 15.75	
RDT	1.83	196	eP	08 53.66	-1.1
SLKM	1.91	162	eP	08 55.45	-0.4
RED	2.03	200	eP	08 56.77	-0.7
NCA	2.17	97	eP	08 58.13	-1.1
NNL	2.30	179	eP	09 01.76	0.8
SEW	2.42	156	eP	09 02.27	-0.3
TOA	2.46	93	eP	09 02.46	-0.7
NEA	2.48	24	eP	09 01.18	-2.3
GLI	2.52	123	eP	09 02.01	-1.9
WRH	2.61	33	iP	09 03.35	-1.9
VZW	2.63	117	eP	09 04.21	-1.4
PAX	2.81	74	eP	09 07.27	-0.7
CNPM	2.82	178	eP	09 07.57	-0.5
CCB	2.83	33	iP	09 06.13	-2.0
HDA	2.89	42	iP	09 07.27	-1.7
RDS	2.90	29	iP	09 07.22	-1.9
DDM	2.91	57	eP	09 09.17	-0.2
FBA	3.04	30	iP	09 09.27	-1.8
GLM	3.21	32	iP	09 11.66	-1.8
GLB	3.70	101	iP	09 18.04	-2.2
TGL	4.39	107	eP	09 27.83	-2.0
DWY	5.68	67	P	09 45.30	-2.4

40 obs. associated

FEB 04, 1990 06h 07m 01.66± 0.91s
22.377 S ± 6.1km 70.141 W ±11.0km
DEPTH = 59.8 ± 10.8 km
4.7mb (5 obs.)
NEAR COAST OF NORTHERN CHILE (122)

ANT	1.35	191	iPd	07 25.40	0.9
			iS	07 44.50	
YJA	4.30	88	ePc	08 11.00	4.5X
SLA	4.86	120	ePd	08 18.90	4.7X
LPB	6.12	19	P	08 34.00	1.9
	1.0s		520.00nm		5.9mb X
			S	09 50.00	
			Lg	16 23.00	
CCH	6.23	38	P	08 35.00	1.5
ZOBO	6.37	18	P	08 35.50	-0.1
	Z 22s		0.71um		
			eS	09 56.00	
CYA	7.21	148	ePc	08 47.50	0.7
RTRS	7.78	176	eP	08 56.10	1.4
RTLL	9.04	171	eP	09 09.90	-2.2
RTCB	9.15	173	e(P)	09 17.50	3.9X
CFA	9.35	170	iPd	09 11.20	-5.1X
TCA	10.21	152	ePc	09 27.10	-0.9
MRA	10.74	159	e(P)	09 33.20	-2.0
FCH	10.91	181	eP	09 44.50	6.7X
PT02	11.13	326	eP	09 38.10	-2.5
PCH	11.21	182	eP	09 53.00	11.4X
TACH	11.26	183	eP	09 50.50	8.3X
LNV	11.59	185	eP	10 00.30	13.7X
			e	12 21.00	
PT10	12.14	326	e(P)	10 07.00	12.9X
NNA	12.15	327	eP	09 53.00	-1.3
	0.8s		10.45nm		4.9mb
			e	10 04.20	
RFA	12.44	174	e(P)	09 59.60	1.6
BAO	21.97	76	eP	11 51.90	-0.4
TOV	31.97	1	eP	13 41.30	17.0X
LLAV	32.81	6	eP	13 29.00	-2.7
TUL	62.85	337	eP	17 23.80	0.3
	1.2s		9.10nm		4.7mb
			e	17 32.70	
FVM	63.00	342	eP	17 23.50	-0.9
ALQ	66.62	328	iPc	17 48.70	0.5
	1.0s		3.75nm		4.3mb
ANMO	66.62	328	eP	17 49.10	0.9
GLA	69.68	321	eP	18 08.00	0.9
LIC	69.73	74	P	18 07.10	-0.6
TIC	69.92	74	P	18 08.30	-0.6
KIC	70.04	74	Pc	18 09.00	-0.6
	0.8s		18.00nm		5.1mb
BAR	70.51	320	eP	18 24.00	11.8X
RVR	71.85	320	eP	18 32.00	11.9X
GSC	72.43	321	eP	18 35.00	11.3X
SBB	72.60	320	eP	18 26.00	1.3
BW06	74.31	331	e(P)	18 33.10	-1.6
	1.4s		5.92nm		4.3mb
KVN	75.81	323	eP	18 44.70	1.4
			pP	18 55.00	33kmX
ORV	78.07	322	eP	18 57.20	1.6
EDM	84.08	336	eP	19 28.00	1.1
POO	146.10	90	ePKP	26 39.50	3.1X
GBA	148.01	100	PKPc	26 43.20	3.8X
	0.7s		5.60nm		
NDI	149.94	71	iPKP	26 49.00	6.9X
HYB	150.18	94	ePKP	26 49.70	6.9X
			e	27 06.50	

S.D. = 1.5 on 27 of 44 obs.

? FEB 04, 1990 06h 15m 37.46± 2.73s
24.426 N ±14.6km 122.446 E ±24.0km
DEPTH = 10.0km (geophysicist)
TAIWAN REGION (243)

TWC	0.57	289	iPd	15 49.90	0.8
			eS	15 55.20	
TWD	0.85	246	iPc	15 52.50	-1.3
			eS	15 58.80	
TWZ	1.03	310	iPd	16 00.20	3.2X
			eS	16 12.80	
TWQ	1.48	264	ePc	16 03.80	-0.3
TWM1	2.44	230	eP	16 19.20	1.1
SSE	6.74	351	eP	17 18.50	-0.3
			eLg	19 25.00	

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

? FEB 04, 1990 06h 22m 58.37± 5.45s
46.479 N ±32.2km 152.083 E ±53.1km
DEPTH = 123.7 ± 27.7 km
4.4mb (3 obs.)
KURIL ISLANDS (221)

KUSJ	6.24	240	eP	24 28.80	-0.5
			S	25 27.50	
ASAJ	7.06	254	P	24 42.60	2.1
HOOJ	7.51	240	P	24 46.40	-0.1
			eS	25 59.40	
MRRJ	8.86	247	P	25 03.00	-1.7
			S	26 29.00	
MAT	14.35	231	eP	26 17.00	0.2
	0.6s		4.67nm		3.9mb
BJI	26.76	269	eP	28 51.00	23.0X
CHG	51.36	256	eP	31 53.20	1.0
CHTO	51.36	256	iPd	31 53.50	1.3
	0.6s		3.93nm		4.5mb
			pP	32 07.70	53kmX
GUN	54.32	274	P	32 14.10	-0.3
KKN	54.80	275	P	32 17.60	-0.2
PKI	54.85	274	P	32 18.00	-0.3
DMN	55.04	275	P	32 18.80	-0.7
GKN	55.11	275	P	32 19.20	-0.8
HFS	68.46	339	eP	33 48.60	0.2
	0.5s		4.20nm		4.6mb

S.D. = 1.1 on 13 of 14 obs.

? FEB 04, 1990 06h 23m 45.47± 2.36s
2.956 N ±13.3km 98.105 E ±24.9km
DEPTH = 116.8 ± 13.9 km
4.3mb (1 obs.)
NORTHERN SUMATERA (706)

PSI	0.86	108	ePd	24 06.00	-0.1
			eS	24 18.50	
IPM	3.33	61	ePc	24 37.00	0.2
	0.4s		82.80nm		
			e	25 14.90	
KLM	3.54	88	eP	24 39.00	-0.6
SNG	4.88	31	eP	24 57.10	-0.8
	0.8s		105.97nm		
			e	25 08.50	
			e	25 47.20	
KGM	5.29	100	eP	25 04.50	1.0
NNT	9.71	9	eP	26 04.20	0.7
WRA	42.23	124	Pd	31 28.50	-0.3
	0.2s		1.10nm		4.3mb

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

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* FEB 04, 1990 07h 10m 43.42± 0.96s
44.200 N ±10.3km 10.257 E ± 8.9km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)

BDI	0.28	119	P	10 49.10	-0.3
			eSg	10 53.60	
MME	0.32	91	P	10 49.60	-0.5
			eSg	10 56.40	
PII	0.52	158	P	10 53.80	-0.1
			eSg	11 01.10	
BOB	0.81	315	P	10 59.20	0.0
			eSg	11 11.00	
PGD	1.10	107	P	11 05.50	1.2
CRE	1.35	114	P	11 08.00	-0.4
			eSn	11 27.00	

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

? FEB 04, 1990 07h 27m 04.94± 1.01s
35.890 N ±60.5km 53.232 E ±12.0km
DEPTH = 33.0km (normal)

IRAN (348)
Felt in the Firuz Kuh oreo.

TEH	1.51	265	eP	27 29.00	-1.1
IR4	2.01	252	iPd	27 37.50	0.2
IR1	2.12	258	iPd	27 39.50	0.5
IR7	2.14	266	iPd	27 40.00	0.8
IR5	2.26	253	iP	27 40.50	-0.4
MAIO	5.09	84	ePn	28 21.00	0.0
			eSn	29 48.00	
KER	5.25	255	eP	28 39.00	15.7X
TAB	5.94	294	eP	29 24.00	50.9X

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

FEB 04, 1990 07h 50m 21.20± 0.31s
39.688 N ± 3.2km 24.117 E ± 2.7km
DEPTH = 36.5 ± 14.2 km
3.8mb (2 obs.)

AEGEAN SEA (365)
ML 3.6 (ATH).

OUR	0.65	351	eP	50 33.00	-1.0
SOH	1.27	333	eP	50 43.70	0.8
THE	1.29	317	eP	50 43.70	0.7
			eS	51 00.50	
LIT	1.32	289	eP	50 43.20	-0.3
			eS	51 05.80	
SRS	1.48	344	eP	50 46.00	0.2
			iS	51 08.80	
AGG	1.54	245	eP	50 46.30	-0.4
			eS	51 08.80	
EZN	1.71	85	iPn	50 48.90	-0.2
PRK	1.73	104	ePb	50 51.00	1.6
ATH	1.74	190	iPnd	50 49.20	-0.4
KNT	1.74	328	eP	50 50.20	0.6
			iS	51 15.50	
RDO	1.82	36	ePn	50 50.50	-0.1
KZN	1.91	290	iPnd	50 52.00	0.0
ALN	1.91	50	iP	50 51.50	-0.4
			eS	51 16.70	
MMB	1.92	351	iPc	50 52.00	-0.2
RZN	2.05	13	iPc	50 54.00	-0.1
			Sg	51 32.00	
KDZ	2.20	26	iPc	50 55.00	-1.0
KKB	2.31	340	iPc	50 58.00	0.3
PLD	2.46	10	eP	51 01.00	1.3
DIM	2.59	24	Pg	51 02.00	0.4
IZM	2.77	117	ePn	50 58.00	-6.2X
APE	2.84	157	ePn	51 04.30	-1.0
PGB	2.86	1	eP	51 17.00	11.5X
SMG	2.90	132	ePn	51 06.10	0.0
OHR	2.91	300	iPn	51 07.10	0.9
IGT	2.93	268	eP	51 08.60	2.1
			eS	51 44.10	
EDC	2.95	76	ePn	51 08.00	1.2
VTS	2.98	347	iP	51 08.00	0.6
BNT	3.00	76	iPn	51 06.70	-0.7
ITM	3.04	215	ePn	51 07.80	-0.3
SKO	3.06	319	iPn	51 08.90	0.6
E	10s		2.09um		
			iPb	51 12.70	
			iSn	51 45.30	
			iSb	51 52.20	
			iSg	51 56.40	
VLI	3.11	198	ePn	51 08.20	-0.8
KEK	3.33	272	ePn	51 13.50	1.3
JMB	3.34	33	eP	51 13.00	0.7
DST	3.48	90	ePn	51 15.00	0.6
DMK	3.49	51	ePn	51 15.00	0.6
CTT	3.60	65	ePn	51 11.00	-5.0X
PVL	3.64	14	iPc	51 14.00	-2.5
YLV	4.12	76	ePn	51 23.00	-0.5
PSN	5.02	36	eP	51 35.00	-1.1
BRT	5.42	285	P	51 40.50	-1.2
			eSn	52 41.00	
CMP	5.62	7	ePc	51 33.00	-11.5X
BEO	5.80	333	e(Pn)	52 12.20	25.1X
ROI	5.83	271	P	51 48.60	1.0
MLR	5.95	12	ePc	51 50.00	0.6
TDS	6.00	272	P	51 51.00	1.0
CSI	6.04	273	P	51 50.20	-0.3
CZI	6.20	268	P	51 52.40	-0.3
BZS	6.20	344	ePc	51 52.00	-0.8
			e	11 39.00	
			e	14 49.50	
MMN	6.26	274	P	51 54.40	0.8
VRI	6.47	16	ePc	51 57.50	1.0
SOI	6.49	258	P	51 57.00	0.2
MGR	6.60	277	P	51 58.50	0.2
			eSn	53 10.50	
BBTK	6.66	86	eP	52 25.00	25.7X
			eS	53 53.00	
SGO	6.81	280	P	52 00.50	-0.7
			eSn	53 13.50	
DUI	7.60	288	P	52 11.50	-1.0
SDI	8.08	288	P	52 18.00	-1.2
			eSn	53 39.00	
VOY	9.82	314	e(P)	52 40.50	-2.6
			eS	54 39.00	
KBA	10.76	317	eP	52 55.00	-1.1
	0.5s		1.10nm		4.3mb
			e	53 06.50	
KHC	12.07	325	eP	53 32.50	18.9X
HFS	21.49	346	ePKP	55 09.70	1.2
	0.5s		0.70nm		3.3mb

S.D. = 1.0 on 53 of 60 obs.

FEB 04, 1990 07h 58m 14.07± 0.14s
10.233 S ± 3.7km 110.290 E ± 4.1km
DEPTH = 45.8km (11 depth phases)
5.7mb (37 obs.) 5.4Msz (16 obs.)

SOUTH OF JAVA (282)
CENTROID, MOMENT TENSOR (HRV)
Dato Used: GDSN
L.P.8.: 16S, 38C
Centroid Locotion:
Origin Time 07:58:14.3 0.6
Lot 10.73S 0.05 Lon 110.75E 0.05
Dep 45.0 3.1 Holf-durotion 3.1
Moment Tensor; Scole 10**17 Nm
Mrr=-3.90 0.19 Mtt= 7.19 0.23
Mff=-3.29 0.33 Mrt= 1.86 0.40
Mrf= 0.10 0.30 Mtf= 0.57 0.21
Principol Axes:

	Vol=	Plg=	Azm=
T	7.53	9	357
N	-3.32	0	267
P	-4.21	81	175

Best Double Couple:Mo=5.9*10**17
NP1:Strike= 87 Dip=36 Slip= -89
NP2: 267 54 -90

NANU	13.25	158	iPd	01 12.40	-9.4X
			eS	03 21.00	
KGM	14.01	330	eP	01 31.00	-0.8
MBL	14.22	141	eP	01 26.30	-8.3X
			eS	03 50.00	
TSM	16.32	29	ePd	02 07.00	5.3X
PSI	17.12	318	eP	02 06.50	-5.2X
KKM	17.21	20	ePc	02 12.50	-0.5
IPM	17.37	327	ePd	02 12.80	-2.1
	0.5s		15.00nm		4.4mb X
			e	03 15.60	
MEKA	18.06	156	eP	02 17.40	-6.0X
MNI	18.55	52	ePc	02 29.00	-0.5
	1.2s		846.20nm		5.8mb
KNA	18.81	109	eP	02 31.50	-1.2
	0.5s		127.00nm		5.4mb
			eS	05 28.00	
MRWA	19.63	165	eP	02 36.00	-5.8X
			eS	05 59.00	
SNG	19.80	331	iPc	02 42.80	-0.9
	1.2s		131.25nm		5.1mb
			eS	06 29.50	
MTN	20.58	99	eP	02 51.00	-0.8
			e	02 55.00	15kmX
			eS	06 31.00	
MUN	22.32	167	eP	03 07.20	-2.0
	0.7s		270.00nm		5.8mb
			e	03 13.00	21kmX
			eS	07 12.00	
KLB	22.35	163	eP	03 07.50	-2.0
	0.4s		23.00nm		5.0mb
COOL	22.89	155	eP	03 13.60	-1.3
	0.4s		104.00nm		5.6mb
			i	03 19.90	23kmX
			eS	07 15.00	
DAV	22.97	42	eP	03 17.00	1.3
NWAO	23.47	165	eP	03 19.00	-1.5
	0.6s		63.00nm		5.3mb
			eS	07 40.00	
RKG	24.51	166	eP	03 34.30	3.8X
			eS	08 08.00	
WRA	25.12	115	Pd	03 35.40	-1.1
	0.8s		222.90nm		5.8mb
W85	25.12	115	iPd	03 35.40	-1.1
ASPA	26.18	124	iPd	03 45.10	-1.3
	0.6s		375.00nm		6.1mb
Z	18s		13.79um		5.5Msz
			iPP	04 15.70	
			iS	08 41.30	
			LR	15 45.40	
FORR	26.36	144	eP	03 46.00	-1.8
			i	04 06.50	92kmX
			iS	08 35.00	
QCP	26.92	24	eP	03 44.00	-9.1X
NST	27.63	339	eP	03 58.00	-1.6
BAG	28.36	21	eP	04 06.00	-0.4
			eS	08 48.00	
LOE	28.74	343	eP	04 09.00	-0.5
QIZ	29.08	359	P	04 14.50	1.9
N	14s		8.00um		
			S	09 02.00	
BDT	29.49	338	eP	04 14.80	-1.5
	0.8s		218.00nm		5.9mb
QIS	30.02	113	eP	04 20.00	-1.1
			e	04 33.00	51km
			e	10 15.00	
CHG	30.96	339	ePc	04 29.10	-0.2
	1.0s		82.50nm		5.4mb
			e	07 26.20	
			eS	09 36.00	
CHTO	30.96	339	iPc	04 29.00	-0.3
	1.1s		67.73nm		5.3mb
			pP	04 41.60	49km
			PcP	07 25.70	
JAY	31.16	78	ePd	04 31.00	-0.2
HKC	32.56	7	ePd	04 47.00	3.8X
			S	09 57.00	
GZH	33.25	5	Pc	04 50.80	1.6
Z	38s		7.40um		5.1MszX
N	14s		3.40um		
			S	10 06.00	
ADE	35.74	138	ePd	05 09.80	-0.8
	1.0s		164.00nm		5.9mb
QZH	35.89	13	eP	05 10.00	-1.8
Z	22s		4.20um		5.2Msz
N	20s		5.10um		
			S	10 45.00	
KMI	35.90	348	Pd	05 14.50	2.2
Z	16s		14.10um		5.8MszX
E	18s		17.30um		
			pP	05 22.00	25kmX
			sP	05 27.00	
			S	10 50.00	
			sS	11 02.00	
QLP	35.93	122	eP	05 12.70	0.5
			e	05 26.00	50km
			e	12 33.00	
CTA	36.00	110	iPd-	05 13.40	0.5
	1.0s		156.00nm		5.9mb
			i	05 25.00	42km
			i	05 33.40	
			eS	10 53.00	
			e	13 09.00	
PMG	36.32	92	eP	05 17.00	1.3
GYA	36.64	355	iPc	05 19.00	0.7
Z	24s		1.80um		4.8MszX
N	17s		6.50um		
E	17s		3.10um		
			S	11 02.00	
ANP	36.86	17	eP	05 22.00	1.9
KOD	38.46	301	iP	05 34.30	0.3
CMS	39.10	128	eP	05 39.00	0.2
			e	13 43.00	
BFD	39.55	138	eP	05 44.00	1.5
			e	13 40.00	
RMQ	39.73	119	e(P)	05 44.00	-0.2
			e	14 09.00	
WHN	40.73	5	Pd	05 53.00	0.9
	1.5s		200.00nm		5.6mb
Z	18s		3.70um		5.3Msz
N	19s		4.10um		
E	19s		6.10um		
			pP	06 06.50	51km
			iS	12 02.00	
			sS	12 22.00	
CD2	41.38	351	eP	05 57.40	-0.2
Z	16s		4.10um		5.4MszX
N	14s		5.80um		
			S	12 08.80	
GUMO	41.68	56	eP	05 56.40	-3.8X

04d 08h

0.8s 134.70nm 5.7mb
pP 06 12.50 64kmX
eS 12 22.00
PJG 41.68 56 eP 05 56.30 -3.9X
GUA 41.69 56 eP 05 56.70 -3.6X
HYB 41.69 311 iPc 05 59.50 -0.8
1.0s 165.00nm 5.7mb
i 06 12.00 46km
iS 12 14.00
RAB 41.95 85 e(P) 05 44.00 -18.5X
SSE 42.40 14 Pc 06 06.50 0.7
6.0s 800.00nm 5.6mb X
Z 22s 2.90um 5.1Msz
E 16s 1.50um
ePP 07 46.00
S 12 22.00
sS 12 46.00
NJ2 42.84 11 Pc 06 10.00 0.6
Z 22s 3.60um 5.2Msz
N 15s 2.30um
E 14s 1.30um
S 12 35.00
CAN 43.14 132 eP 06 12.20 0.2
BRS 43.43 119 iPc 06 14.50 0.0
e 06 26.00 41km
ePP 07 02.00
i 07 09.00
i 07 45.50
eS 12 44.00
e(ScP)13 46.00
e 16 08.00
e(ScS)16 18.00
COO 43.60 124 eP 06 17.00 1.2
LSA 43.78 336 P 06 20.00 2.4
E 11s 0.70um
XAN 44.05 358 P 06 18.40 -0.8
1.1s 100.00nm 5.5mb
N 17s 3.40um
E 17s 5.20um
S 12 47.00
PKI 44.65 328 Pd 06 23.50 -1.1
GUN 44.68 329 Pd 06 24.20 -0.7
DMN 44.84 328 Pd 06 25.20 -0.8
GKN 45.40 327 Pd 06 29.30 -1.1
POO 45.93 308 iPd 06 34.00 -0.5
1.0s 340.00nm 6.2mb
iS 13 16.00
LZH 46.47 353 P 06 38.00 -0.7
1.4s 250.00nm 6.0mb
Z 22s 5.60um 5.5Msz
E 16s 8.00um
ScP 12 00.00
eS 13 26.00
sS 13 38.00
TIA 46.64 8 eP 06 38.10 -1.7
Z 42s 4.80um 5.1MszX
N 15s 1.80um
E 15s 3.20um
S 13 20.00
BOM 46.94 308 iPc 06 41.30 -1.1
iS 13 33.80
TIY 47.73 2 Pd 06 46.80 -1.7
1.0s 100.00nm 5.8mb
N 16s 3.80um
S 13 37.00
HNR 48.90 94 eP 06 58.00 0.2
DL2 50.01 12 eP 07 05.00 -0.9
7.0s 900.00nm 5.9mb X
Z 20s 3.00um 5.3Msz
N 14s 2.30um
E 14s 1.50um
eS 14 11.00
NDI 50.18 321 iPd 07 05.00 -2.4
1.0s 115.00nm 5.9mb
eS 14 12.50
BJI 50.31 6 P 07 07.00 -1.2
1.2s 160.00nm 5.9mb
Z 23s 3.13um 5.3MszX
E 16s 2.23um
eS 14 12.00
GTA 50.34 349 iPc 07 09.00 0.4
Z 20s 3.90um 5.4Msz
E 19s 7.30um
S 14 20.00
BTO 50.57 360 P 07 10.00 -0.3
N 16s 5.30um
E 16s 2.80um

S 14 16.00
SS 17 47.00
HHC 50.84 1 Pd 07 11.80 -0.5
Z 34s 6.60um 5.4MszX
N 12s 2.60um
E 12s 0.80um
sP 07 30.00
S 14 26.00
SNY 53.22 12 iPd 07 28.00 -2.1
Z 20s 5.00um 5.6Msz
N 19s 2.50um
S 14 52.00
MAT 53.43 28 eP 07 29.00 -2.7
1.4s 255.81nm 6.1mb
Z 20s 2.13um 5.2Msz
eS 14 56.00
DZM 54.94 110 iPc 07 43.90 0.7
CN2 55.52 13 Pc 07 44.40 -2.4
1.0s 100.00nm 5.8mb
Z 20s 4.00um 5.5Msz
E 18s 2.50um
PcP 08 47.60
PP 09 52.00
S 15 24.00
ScS 17 31.00
iSS 19 10.00
MDJ 57.32 16 Pd 07 58.30 -1.4
Z 30s 1.80um 5.0MszX
N 18s 2.80um
WMQ 57.59 341 iPd 08 01.50 -0.2
8.0s 1100.00nm 6.0mb X
Z 30s 8.50um 5.7MszX
pP 08 13.50 42km
S 15 56.00
QUE 57.89 315 iPd 08 04.00 -0.2
eS 16 03.00
KSH 58.82 329 P 08 10.00 -0.4
N 15s 5.60um
eS 16 11.00
TCW 63.80 131 P 08 42.50 -1.4
MRW 64.12 131 P 08 44.60 -1.4
WEL 64.18 131 P 08 45.20 -1.2
KRP 64.28 127 P 08 44.60 -2.5
S 17 24.00
CAW 64.37 131 P 08 45.80 -1.9
MNG 64.61 130 eP 08 47.50 -1.7
BLW 64.71 131 P 08 49.20 -0.7
PGZ 65.20 130 P 08 53.00 0.0
MAIO 66.51 317 eP 09 00.00 -1.6
0.8s 20.13nm 5.2mb
eS 17 48.00
RYD 71.13 301 eP 09 29.00 -1.3
KMSA 71.48 296 eP 09 30.50 -2.0
IR4 72.01 312 iPd 09 35.50 0.0
IR2 72.20 313 iPd 09 36.50 -0.1
VNDA 72.22 170 iPd 09 35.40 -0.4
IR5 72.23 312 iP 09 36.50 -0.3
IR7 72.43 313 iPd 09 38.00 0.0
SBA 73.28 169 (P) 09 42.40 0.3
NAI 73.52 272 iPd 09 45.00 0.1
1.0s 30.00nm 5.2mb
AAE 73.70 283 eP 09 48.00 2.0
QASM 74.21 301 eP 09 47.50 -0.9
KER 74.44 310 ePd 09 48.00 -1.7
BHD 76.10 308 ePc 10 02.00 3.0X
ePcP 10 12.50
eS 19 38.00
TAB 76.55 313 eP 10 02.00 0.3
KRI 78.26 255 iPd 10 10.00 -1.5
ipP 10 23.90 48km
SLR 78.48 246 iPd 10 12.50 -0.1
0.9s 252.10nm 6.2mb
Z 18s 2.61um 5.6Msz
BUL 78.80 251 iPc 10 14.00 -0.4
1.1s 215.19nm 6.0mb
ipP 10 26.50 42km
PRY 79.08 244 iPc 10 16.20 0.3
0.8s 81.25nm 5.7mb
KSR 79.71 245 iPd 10 19.30 0.0
1.0s 75.00nm 5.6mb
SPA 79.83 180 iPd 10 19.30 0.2
0.9s 79.55nm 5.7mb
Z 19s 2.66um 5.6Msz
SPA 79.83 180 iPd 10 20.00 0.9
BLF 79.98 242 iPc 10 21.50 0.8
LWI 81.23 269 iPd 10 28.30 0.6
BADA 82.18 301 eP 10 32.50 0.6

AGRW 82.80 296 iPd 10 37.00 1.7
ASW 82.84 296 eP 10 34.00 -1.5
eS 20 56.00
ANAL 82.86 295 iPd 10 37.00 1.4
AKUR 82.89 296 iPd 10 38.00 2.3
AGMR 83.02 295 iPd 10 38.00 1.6
KVT 85.04 313 iP 10 47.00 0.7
KOT 85.22 301 eP 10 48.00 0.6
CSS 85.31 307 eP 10 48.30 0.5
PPCY 86.07 306 eP 10 50.00 -1.5
KAS 86.76 313 iPd 10 56.20 1.3
BBTK 87.08 311 iP 11 04.00 7.5X
ADK 87.73 36 P 10 59.80 0.7
1.5s 472.97nm 6.5mb
BCK 88.10 308 iP 11 01.50 0.1
ELL 88.46 308 eP 11 03.00 -0.2
GPA 89.01 311 eP 11 06.00 0.4
HRT 89.61 312 eP 11 05.60 -2.9
ISK 90.12 312 eP 11 11.00 0.3
ITU 90.16 312 iPd 11 11.00 0.1
IZM 90.88 309 eP 11 14.00 -0.4
BCAO 92.50 274 iPd 11 23.10 0.8
0.8s 82.00nm 6.2mb
id 11 36.10 43km
ic 12 07.20
VRI 92.82 316 ePd 11 33.50 10.4X
PVL 93.28 313 iPd 11 26.00 0.8
MLR 93.28 315 ePd 11 26.00 0.6
RZN 93.44 312 iPd 11 27.00 0.7
PGB 94.00 312 eP 11 29.00 0.3
KKB 94.68 312 iP 11 32.00 0.3
VTS 94.70 312 iP 11 31.00 -1.0
VAY 94.97 311 eP 11 52.40 19.4X
SKO 95.90 311 eP 11 36.20 -1.2
e 14 56.80
OHR 96.26 311 eP 11 38.20 -0.8
e 15 15.80
SUF 96.33 333 iP 11 39.30 0.5
0.7s 11.10nm 5.5mb
NUR 96.68 330 iP 11 40.90 0.5
0.6s 11.70nm 5.6mb
SOD 96.93 337 iP 11 41.30 -0.1
KEV 97.20 340 eP 11 42.00 -0.6
SPC 97.68 319 eP 11 42.70 -2.7
e 14 52.20
i 15 21.60
KRA 97.98 319 eP 11 46.70 0.2
SRO 98.82 317 e(P) 11 50.20 -0.1
e 15 49.50
ZST 99.66 317 eP 11 53.90 -0.3
e 15 24.60
e 15 56.40
UPP 100.11 329 iPdiff11 58.50 2.6X
KSP 100.37 320 ePdiff11 57.50 0.1
e 15 32.00
HFS 102.09 329 ePdiff12 04.30 -0.5
0.6s 5.30nm 5.4mb
FBA 104.26 26 Pdiff 12 15.00 0.6
VAI 105.28 315 PKP 16 34.00 0.6
BNI 106.78 314 PKP 16 39.00 2.5X
LBF 108.54 316 ePKP 16 39.50 -0.1
LOR 108.59 316 ePKP 16 38.90 -0.8
SSF 108.85 316 ePKP 16 40.40 0.3
0.6s 5.70nm
BGF 109.35 316 ePKP 16 41.30 0.2
0.7s 11.40nm
MAF 109.58 315 ePKP 16 41.70 0.2
APHE 115.22 306 iPKPc 16 52.50 -0.3
AAPN 115.52 306 iPKPc 16 52.50 -0.8
KIC 115.68 272 PKP 16 53.50 -0.6
0.6s 6.00nm
LIC 115.94 272 PKP 16 53.78 -0.8
0.5s 7.50nm
Z 19s 1.00um 5.4Msz
GMW 122.03 40 ePKP 17 06.50 1.3
epPKP 17 19.80
BMW 122.14 41 ePKP 17 06.60 1.0
epPKP 17 19.90
SHW 122.89 41 PKP 17 09.80 2.7X
LON 122.95 40 ePKP 17 08.20 1.1
epPKP 17 19.20
WDC 124.56 47 ePKP 17 11.30 1.0
EDM 124.71 30 ePKPc 17 10.50 0.2
0.8s 34.00nm
DPW 124.73 38 ePKP 17 11.30 0.8
epPKP 17 24.30
LBFM 124.79 46 PKP 17 12.00 1.0

ORV	125.64	48	ePKP	17	13.10	0.6
ARN	126.26	51	PKP	17	15.50	1.7
FRB	126.57	359	ePKP	17	13.00	-0.5
PRS	126.67	52	ePKP	17	16.00	1.4
LLA	126.92	52	ePKP	17	16.80	1.7
CMB	126.93	50	ePKP	17	16.10	1.0
PRI	127.27	52	ePKP	17	17.90	2.0X
SES	127.49	32	ePKP	17	16.00	0.2
FRI	127.76	51	ePKP	17	17.90	1.3
KVN	128.29	48	ePKP	17	19.50	1.6
			epPKP	17	33.40	
FFC	128.80	23	ePKP	17	19.00	1.0
	0.8s		18.00nm			
LRM	129.18	38	ePKP	17	20.30	0.9
TNP	129.28	49	e(PKP)	17	20.00	0.2
			epPKP	17	35.00	
CLC	129.74	52	ePKP	17	22.00	1.5
PAS	129.79	54	ePKP	17	23.00	2.4X
MWC	129.86	54	ePKP	17	23.00	2.0X
SBB	129.91	53	ePKP	17	23.00	2.1X
RVR	130.46	54	ePKP	17	24.00	2.1X
GSC	130.52	52	ePKP	17	24.00	1.9
PEC	130.66	54	ePKP	17	23.80	1.5
			epPKP	17	38.50	
PTI	130.68	41	PKP	17	24.70	2.5X
PLM	131.06	54	ePKP	17	25.00	1.7
BAR	131.41	55	ePKP	17	27.00	3.3X
DUG	131.60	44	ePKP	17	25.70	1.7
BW06	132.52	40	ePKP	17	20.90	-4.9X
	0.9s		14.19nm			
BW06	132.52	40	PKP	17	26.00	0.2
GLA	132.78	54	ePKP	17	29.00	2.6X
RSON	134.95	21	ePKP	17	20.40	-9.4X
			i	17	31.30	
			i	17	42.20	
RSON	134.95	21	PKP	17	29.70	-0.1
RSSD	135.06	35	ePKP	17	21.30	-9.3X
			i	17	30.20	
			i	17	46.10	
SCH	135.47	358	ePKP	17	31.00	0.3
GOL	136.83	41	ePKP	17	22.90	-11.2X
			i	17	35.20	
			i	17	48.90	
GOL	136.83	41	ePKP	17	34.60	0.5
			epPKP	17	48.70	
GLD	136.90	41	ePKP	17	31.10	-3.1X
ANMO	138.47	48	ePKP	17	28.30	-9.0X
ALQ	138.47	48	ePKP	17	28.00	-9.3X
	1.5s		54.17nm			
	Z 20s		3.90um			6.1Msz
CBM	143.40	358	e(PKP)	17	42.60	-2.7X
CAI	143.54	244	ePKP	17	43.90	-2.6X
SIO	144.95	39	ePKPc	17	48.60	0.3
			e	18	00.70	
MIM	145.11	359	ePKP	17	48.30	0.0
			epPKP	18	01.50	
TUL	145.16	39	ePKP+	17	48.80	0.1
	0.8s		47.80nm			
	Z 22s		1.35um			5.7Msz
			LR	08	35.00	
RSNY	145.56	6	ePKP	17	49.20	0.1
			epPKP	18	05.00	
EMM	145.57	357	ePKP	17	49.70	0.6
			epPKP	18	02.50	
ELF	145.64	15	PKP	17	50.00	0.7
BNH	145.74	2	ePKP	17	50.40	1.0
			epPKP	18	03.00	
WNY	145.78	5	PKP	17	49.50	0.0
LDN	145.82	15	PKP	17	50.30	0.7
HBVT	145.87	4	PKP	17	50.20	0.6
DLA	145.89	16	PKP	17	50.90	1.2
ANT	146.26	179	iPKP	17	53.00	2.1X
BAO	146.49	220	ePKP	17	52.30	0.7
FVM	146.69	31	ePKP	17	51.90	0.7
	1.1s		292.68nm			
POW	147.67	34	PKP	17	55.00	2.2X
OLY	147.99	35	PKP	17	53.00	-0.3
PNJ	149.20	7	iPKP	17	58.60	3.6X
GMTN	149.22	7	iPKP	17	58.00	2.9X
LVNJ	149.22	8	e(PKP)	18	00.00	4.9X
			epPKP	18	12.80	
PWLA	150.21	31	PKP	17	57.00	0.3
RSCP	150.91	27	ePKP	17	58.60	0.8
			i	18	06.50	
			i	18	18.00	
RSCP	150.91	27	PKP	18	03.50	5.7X
NAV	151.24	19	PKP	17	59.20	0.9
CVL	151.27	14	PKP	17	59.40	1.2
NA2	151.30	13	PKP	17	59.20	1.0
CBN	151.31	13	ePKP	18	02.00	3.7X
BLA	151.45	18	ePKP	18	00.00	1.4
GBTN	151.45	25	PKP	17	59.00	0.4
TKL	151.64	25	PKP	17	59.60	0.7
CCH	152.34	187	PKP	18	01.00	0.2
LPB	153.36	183	PKP	18	04.80	2.5X
	1.0s		70.00nm			
			LR	10	20.00	
PRM	153.58	24	PKP	18	03.30	1.6
ZOBO	153.62	183	PKP	18	04.00	1.1
	1.5s		87.10nm			
			LR	10	32.00	
LHS	153.82	21	PKP	18	04.50	2.5X
JSC	153.83	22	PKP	18	03.50	1.5
SGS	155.08	22	PKP	18	06.00	2.3X
NNA	156.81	162	ePKP	18	07.50	0.9
	1.0s		12.00nm			
UPA	170.23	96	iPKP-	18	20.00	1.3
CEOS	178.19	229	ePKP	18	20.00	-1.2
TOV	179.55	170	ePKP	18	21.70	0.4
	S.D. = 1.1		on 210 of 257 obs.			

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* FEB 04, 1990 08h 05m 59.03± 1.43s
31.940 S ±10.2km 71.051 W ±16.6km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF CENTRAL CHILE (135)

ROCH	1.03	178	iP	06	19.00	0.4
			iS	06	34.30	
FCH	1.53	155	iPd	06	27.50	0.8
			iS	06	46.10	
LCCH	1.59	196	iP	06	28.50	1.2
			i	06	50.00	
TACH	1.71	177	iP	06	28.00	-1.1
			iS	06	50.00	
PCH	1.74	165	eP	06	29.50	0.0
			iS	06	51.50	
RTCB	1.97	77	iP	06	33.00	0.1
			S	06	59.50	
CHCH	2.02	171	eP	06	33.40	-0.1
			i	06	58.70	
LNV	2.03	188	iP	06	32.50	-1.2
			iS	06	58.60	
RTRS	2.23	38	ePc	06	36.70	0.1
RTLL	2.28	75	ePd	06	37.10	-0.3
	S.D. = 0.8		on 10 of 10 obs.			

FEB 04, 1990 08h 13m 13.64± 0.58s
46.174 N ± 6.0km 13.593 E ± 6.1km
DEPTH = 10.0km (geophysicist)
AUSTRIA (546)
MD 3.1 (LJU), 2.6 (TRI). ML 2.4 (KBA).

VOY	0.25	124	iPgc	13	18.80	-0.3
			eSg	13	21.60	
RBL	0.27	356	P	13	19.50	0.2
			iSg	13	22.50	
TRI	0.48	166	ePg	13	22.90	-0.5
			eSg	13	30.30	
LJU	0.67	101	ePg	13	25.90	-1.0
			eSg	13	35.00	
FVI	0.70	307	P	13	27.00	-0.5
			eSg	13	38.20	
CEY	0.73	126	e(Pg)	13	27.50	-0.4
			e	13	29.90	
			eSg	13	37.40	
KBA	0.92	349	iPgd	13	30.70	-0.7
			iSg	13	43.80	
VBY	1.34	119	e(Pg)	13	34.00	-4.3X
			eSg	13	57.50	
CTI	1.36	265	P	13	39.50	0.8
			eSg	13	58.50	
PTJ	1.67	99	ePn	13	44.20	1.1
			eSn	14	05.40	
ZAG	1.70	101	iPn	13	44.80	1.3
			iSn	14	08.00	
OGA	1.90	292	eP	13	51.20	4.6X
KHC	2.96	360	eP	14	14.80	13.3X
			e	14	51.40	
	S.D. = 0.9		on 10 of 13 obs.			

? FEB 04, 1990 08h 46m 15.71± 7.26s
34.915 S ±46.8km 71.937 W ±37.1km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF CENTRAL CHILE (135)

LNV	1.05	25	iPd	46	35.70	0.2
			iS	46	47.50	
CHCH	1.44	48	iPd	46	42.10	0.2
			iS	46	58.70	
LCCH	1.47	12	eP	46	42.50	0.3
TACH	1.51	34	iPc	46	43.00	0.2
			iS	47	01.50	
PCH	1.75	43	iPc	46	46.30	0.0
			iS	47	06.50	
SAN	1.80	36	eP	46	47.00	-0.1
			iS	47	07.80	
ROCH	2.09	22	iPd	46	51.00	-0.4
			iS	47	15.10	
FCH	2.09	41	iP	46	51.60	0.1
			iS	47	16.00	
	S.D. = 0.3		on 8 of 8 obs.			

% FEB 04, 1990 09h 06m 38.03± 0.88s
39.128 N ± 7.2km 27.611 E ± 9.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZM	0.78	201	ePg	06	53.00	-0.2
			eSg	07	04.00	
DST	0.92	59	ePn	06	56.00	0.3
EZN	1.21	305	ePn	07	01.00	0.4
EDC	1.23	9	ePn	07	00.50	-0.4
BNT	1.25	11	iPn	07	01.10	-0.1
	S.D. = 0.5		on 5 of 5 obs.			

FEB 04, 1990 09h 22m 15.25± 0.62s
46.182 N ± 6.3km 13.604 E ± 6.7km
DEPTH = 10.0km (geophysicist)
AUSTRIA (546)
ML 2.6 (KBA). MD 2.9 LJU), 2.7 (TRI). Felt (IV) in the Tolmin areo, Yugoslavia.

VOY	0.25	127	iPgc	22	20.20	-0.4
			eSg	22	23.10	
RBL	0.26	355	P	22	20.50	-0.3
			iSg	22	24.50	
TRI	0.49	167	ePg	22	24.40	-0.7
			eSg	22	31.80	
LJU	0.66	102	ePg	22	27.20	-1.2
			eSg	22	36.30	
FVI	0.70	306	P	22	29.00	-0.1
			eSg	22	41.00	
CEY	0.73	127	ePg	22	28.50	-1.0
			e	22	31.40	
			eSg	22	38.90	
KBA	0.91	349	iPgd	22	32.00	-0.9
			iSg	22	45.30	
RIY	1.00	147	ePg	22	44.00	9.8X
			iSg	22	47.80	
VBY	1.34	120	ePg	22	40.20	0.3
			iSg	22	57.70	
CTI	1.37	265	Pc	22	41.30	0.9
			eSg	23	00.50	
PTJ	1.66	99	ePn	22	45.70	1.0
			eSn	23	06.90	
ZAG	1.70	102	ePn	22	47.50	2.4
			eSn	23	10.00	
KHC	2.95	360	ePg	23	03.00	0.0
			eSg	23	50.50	
	S.D. = 1.2		on 12 of 13 obs.			

FEB 04, 1990 10h 32m 18.78± 1.12s
44.604 N ± 5.0km 6.762 E ±11.2km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.0 (GEN).

FOUF	0.08	169	ePgc	32	21.27	0.1
			e(Sg)	32	22.34	
PZZ	0.26	112	P	32	24.77	0.4
			S	32	28.46	
RRL	0.32	3	P	32	25.39	-0.1
			S	32	29.89	
STV	0.54	132	P	32	29.59	-0.2
			S	32	37.49	
ENR	0.60	128	P	32	30.82	-0.2
			S	32	39.13	
RSP	0.65	33	P	32	31.53	-0.3
			S	32	39.74	

04d 10h

ROB 0.85 111 P 32 35.23 0.0
LSD 0.90 18 P 32 36.46 0.3
S.D. = 0.3 on 8 of 8 obs.

? FEB 04, 1990 10h 57m 40.98± 2.44s
19.587 S ±14.5km 169.264 E ±23.4km
DEPTH = 56.6 ± 16.3 km
4.8mb (4 obs.)
VANUATU ISLANDS (186)

PVC 2.05 334 iP 58 13.50 -0.1
DZM 3.61 226 iPc 58 36.20 0.3
iS 59 24.00
BRS 16.99 240 eP 01 44.00 7.6X
CTA 21.65 265 iPc 02 34.00 5.5X
e 02 45.00
CAN 23.78 225 eP 02 55.10 5.7X
WB5 32.81 263 eP 04 10.40 -0.9
WRA 32.83 263 P 04 12.00 0.5
0.7s 1.30nm 3.9mb
ASPA 33.07 257 iPd 04 12.90 -0.7
0.4s 15.00nm 5.2mb
Z 23s 0.36um 4.0MszX
LR 16 41.00
MAT 63.07 332 (P) 08 04.00 -0.7
1.1s 17.72nm 5.1mb
BJI 77.22 321 eP 09 33.00 2.4
CHTO 78.82 295 eP 09 39.00 -0.8
1.2s 6.25nm 4.4mb
LZH 82.98 312 eP 10 01.50 -0.2
pP 10 05.00 11kmX
KVN 89.43 48 e(P) 10 32.20 -1.1
VAY 144.36 315 ePKP 17 07.40 -5.1X
KHC 144.65 332 ePKP 17 14.00 1.2
SKO 144.80 316 ePKP 17 08.70 -4.6X
1.2s 38.00nm
i 17 09.50
i 17 14.60
i 17 20.20
OHR 145.64 316 ePKP 17 11.50 -3.3X
1.1s 0.04nm
BCAO 147.74 246 ePKPc 17 22.40 3.5X
0.4s 5.00nm
S.D. = 1.3 on 11 of 18 obs.

? FEB 04, 1990 11h 34m 33.70± 3.45s
19.311 S ±88.6km 175.025 W ±65.7km
DEPTH = 210.0km (geophysicist)
4.3mb (5 obs.)
TONGA ISLANDS (173)

DZM 17.55 258 iPd 38 28.70 1.9
BRS 30.57 249 iPd 40 31.00 1.1
0.5s 4.50nm 4.4mb
CTA 36.41 262 iPd 41 19.20 -0.7
ASPA 47.52 255 iPd 42 49.60 -0.3
0.6s 40.00nm 5.0mb
iPcP 44 17.90
WB5 47.53 260 iPc 42 49.10 -0.9
WRA 47.55 260 Pc 42 48.60 -1.5
0.4s 4.30nm 4.2mb
KNA 53.53 264 eP 43 33.80 -1.4
NANU 64.41 254 iPc 44 50.00 0.2
FBA 86.51 11 iP 46 53.50 0.1
0.7s 3.20nm 4.3mb
CHTO 92.49 289 eP 47 23.90 1.5
0.6s 0.84nm 4.0mb
S.D. = 1.4 on 10 of 10 obs.

• FEB 04, 1990 12h 17m 55.32± 1.31s
31.355 S ±10.5km 68.649 W ±11.2km
DEPTH = 105.2 ± 13.3 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL 0.16 81 iPc 18 10.30 -0.2
RTCB 0.18 224 iP 18 11.00 0.3
ZON 0.19 188 eP 18 10.00 -0.6
eS 18 21.00
CFA 0.43 126 iP 18 12.00 0.5
RTRS 1.37 329 iPc 18 20.80 0.2
MRA 2.71 114 ePc 18 38.50 0.5
S 19 06.00
RFA 3.41 177 ePc 18 47.50 -0.1
TCA 3.47 91 ePc 18 48.00 -0.4
S.D. = 0.6 on 8 of 8 obs.

FEB 04, 1990 12h 50m 57.42± 0.79s
4.846 S ± 3.9km 153.320 E ± 4.6km
DEPTH = 64.5 ± 6.8 km
5.0mb (14 obs.)
NEW IRELAND REGION (190)

RAB 1.32 299 iPd- 51 20.00 -0.2
LAT 6.54 254 eP 52 33.00 -0.2
PMG 7.61 233 eP 52 48.00 -0.1
eS 54 18.00
HNR 8.00 125 eP 52 54.00 0.6
eS 54 26.00
CTA 16.64 204 iPc 54 48.80 0.8
1.2s 79.69nm 4.8mb
e 55 05.50
iS 57 54.00
GUA 20.08 336 eP 55 43.60 15.2X
1.2s 225.00nm
GUMO 20.14 335 eP 55 42.80 13.8X
QIS 20.54 219 eP 55 32.00 -1.1
DZM 21.33 145 iPd 55 40.20 -0.9
RMQ 21.96 191 eP 55 48.00 0.6
BRS 22.43 181 iPc 55 52.00 0.0
1.2s 19.00nm 4.4mb
e 56 03.00
QLP 23.30 201 eP 56 01.50 1.1
MTN 23.31 249 eP 56 01.00 0.4
WB5 23.75 229 eP 56 06.10 1.2
WRA 23.80 229 Pc 56 05.50 0.1
0.8s 24.70nm 4.7mb
COO 25.63 183 eP 56 24.00 1.3
KNA 26.44 244 eP 56 29.00 -1.3
0.3s 49.00nm 5.5mb
ASPA 26.47 223 iPc 56 29.70 -0.8
0.6s 11.00nm 4.6mb
Z 22s 0.88um 4.2MszX
eS 01 06.70
LR 05 45.60
CMS 27.42 194 eP 56 38.80 -0.3
FORR 35.10 220 iPd 57 46.00 -0.6
MBL 36.31 240 eP 57 57.00 0.1
MEKA 39.64 233 eP 58 28.60 3.8X
COOL 39.83 226 eP 58 23.00 -3.3X
NANU 40.54 241 eP 58 32.10 -0.1
0.4s 10.00nm 5.0mb
KIW 40.76 155 P 58 34.50 0.7
TCW 40.79 156 P 58 34.50 0.5
e 58 55.20
MNG 40.81 154 P 58 33.60 -0.6
0.4s 27.00nm 5.4mb
MRW 40.98 155 eP 58 35.40 -0.1
CAW 41.03 155 P 58 35.50 -0.5
WDW 41.13 155 P 58 36.50 -0.3
PGZ 41.16 153 P 58 36.30 -0.7
MTW 41.26 154 P 58 37.00 -0.8
BLW 41.42 155 P 58 38.40 -0.8
KHZ 41.51 157 P 58 39.20 -0.7
MSZ 41.68 164 P 58 43.00 1.8
0.5s 66.00nm 5.7mb
MRWA 42.82 231 eP 58 50.00 -0.9
MAT 43.53 342 eP 59 21.00 24.5X
1.0s 13.00nm
MUN 43.98 228 eP 58 59.00 -1.2
CN2 54.55 335 eP 00 20.40 -0.8
BJI 56.22 326 eP 00 34.00 0.7
TIY 56.88 322 eP 00 37.50 -0.7
Z 22s 0.50um 4.6Msz
XAN 57.01 316 P 00 38.60 -0.5
CHTO 58.47 295 e(P) 00 49.90 0.3
1.3s 6.54nm 4.6mb
CD2 59.16 310 eP 00 53.80 -0.4
BTO 60.15 323 eP 01 01.40 0.6
LZH 61.62 316 Pd 01 11.50 0.4
1.5s 40.00nm 5.3mb
GTA 66.04 317 P 01 40.80 1.0
GUN 72.59 301 P 02 21.20 0.6
0.6s 13.00nm 5.0mb
VNDA 72.76 178 P 02 21.00 0.8
PKI 72.90 301 P 02 23.00 0.6
KKN 73.07 301 P 02 23.60 0.4
DMN 73.17 301 P 02 24.40 0.5
0.4s 6.00nm 4.9mb
GKN 73.67 301 P 02 27.00 0.4
WMQ 76.13 317 P 02 40.50 0.2
GBA 77.49 285 Pc 02 47.60 -0.6
1.2s 17.00nm 4.9mb
FBA 81.74 22 eP 03 09.10 -1.0
0.9s 1.00nm 3.8mb X
SPA 85.19 180 iPc 03 28.70 0.8
1.0s 91.00nm 5.8mb
INK 88.31 21 eP 03 43.00 0.2
HFS 116.91 339 ePKP 09 34.80 -1.3
0.4s 1.10nm
BUL 120.29 243 iPKPc 09 43.90 0.0
BRG 122.96 331 i(PKP) 09 48.70 0.8
CLL 123.14 331 iPKP 09 49.10 0.9
KHC 124.25 329 PKP 09 51.00 0.4
KBA 125.65 327 ePKP 09 52.30 -1.3
1.0s 1.00nm
ZOBO 133.95 118 PKP 10 10.00 -0.7
Z 20s 0.13um 4.6Msz
LR 55 12.00
BCAO 134.94 271 ePKPd 10 06.10 -5.9X
0.5s 8.00nm
ic 10 12.50
id 13 40.30
IFR 145.12 328 iPKPd 10 30.50 0.5
AVE 146.48 330 iPKP 10 34.50 2.5X
i 10 46.50
TIO 148.27 327 iPKPc 10 39.00 3.9X
BAO 150.69 134 ePKP 10 43.30 4.2X
S.D. = 0.8 on 61 of 70 obs.

? FEB 04, 1990 14h 47m 41.02± 1.34s
0.389 S ±14.2km 132.771 E ±20.3km
DEPTH = 33.0km (normal)
4.5mb (2 obs.) 3.7Msz (1 obs.)
WEST IRIAN REGION (196)

AAI 5.63 234 eP 49 05.50 0.9
eS 50 08.50
MTN 12.48 187 eP 50 36.00 -3.3X
eS 52 52.00
KNA 15.77 194 eP 51 20.40 -2.0
WB5 19.43 175 eP 52 07.40 -0.4
WRA 19.50 176 Pc 52 07.80 -0.7
0.6s 9.50nm 4.2mb
QIS 21.13 162 iPc 52 26.70 1.2
ASPA 23.16 177 iPc 52 47.20 1.4
1.0s 24.00nm 4.7mb
Z 20s 0.25um 3.7Msz
iS 56 55.00
LR 02 56.10
BJI 43.00 341 eP 55 38.50 -0.4
S.D. = 1.5 on 7 of 8 obs.

• FEB 04, 1990 14h 50m 27.19± 0.90s
32.496 N ±15.1km 98.133 E ± 9.3km
DEPTH = 33.0km (normal)
3.7mb (1 obs.)
SICHUAN PROVINCE, CHINA (307)

LZH 5.93 51 P 51 56.00 0.8
i 52 17.00
i 53 00.00
GUN 11.54 250 P 53 13.20 0.2
PKI 12.07 249 P 53 20.60 0.5
KKN 12.07 250 P 53 20.00 0.0
DMN 12.29 250 P 53 23.00 0.0
GKN 12.50 253 P 53 25.00 -0.7
CHG 13.64 177 eP 53 48.20 7.4X
CHTO 13.64 177 eP 53 42.10 1.4
HYB 23.19 234 eP 55 36.00 4.0X
GBA 26.67 230 P 56 09.00 4.0X
0.5s 1.00nm 3.7mb
WB5 62.56 141 eP 00 48.10 -2.2
S.D. = 1.3 on 8 of 11 obs.

• FEB 04, 1990 15h 04m 53.65± 1.56s
6.864 S ± 6.6km 153.707 E ±11.6km
DEPTH = 35.0 ± 13.4 km
4.7mb (3 obs.) 3.6Msz (1 obs.)
NEW BRITAIN REGION (192)

RAB 3.06 330 eP 05 40.00 -0.9
iS 06 08.40
LAT 6.66 271 eP 06 33.00 1.2
QIS 19.29 224 eP 09 18.00 -0.6
DZM 19.49 142 iPc 09 21.00 0.1
RMQ 20.08 193 iPd 09 28.60 1.5
BRS 20.43 182 iPc 09 31.50 0.7
WB5 22.80 234 eP 09 54.00 -0.6
WRA 22.85 233 Pd 09 54.30 -0.9
0.6s 5.60nm 4.2mb
ASPA 25.32 227 iPd 10 18.40 -0.6

0.6s 18.00nm 4.8mb
Z 20s 0.17um 3.6Msz
LR 19 23.10
CMS 25.58 196 eP 10 20.00 -1.3
CN2 56.54 336 eP 14 35.00 0.0
LOE 56.72 296 iPd 14 37.80 1.0
XAN 58.73 317 P 14 50.00 -0.7
CHG 59.70 296 eP 14 58.00 0.5
CHTO 59.70 296 eP 14 58.00 0.5
1.2s 12.50nm 4.9mb
CD2 60.76 311 eP 15 04.60 -0.1
GTA 67.78 317 eP 15 51.00 0.6
HYB 78.02 289 eP 16 50.50 -0.4
S.D. = 0.9 on 18 of 18 obs.

& FEB 04, 1990 16h 36m 15.86s
59.583 N 152.974 W
DEPTH = 98.5km
SOUTHERN ALASKA (2)
<AGS-P>.

AUE 0.30 222 iP 36 29.71 -0.8
PDB 0.65 289 iP 36 31.83 -1.1
iS 36 44.82
XLV 0.65 101 eP 36 32.34 -0.6
eS 36 45.50
RED 0.84 7 iP 36 34.06 -0.8
eS 36 49.21
CNPM 0.89 93 iP 36 34.52 -0.7
eS 36 49.15
NNL 0.96 61 eP 36 36.19 0.1
RDT 1.03 16 iP 36 36.03 -0.9
NKA 1.45 36 iP 36 42.96 1.2
CKL 1.65 11 iP 36 43.83 -0.6
SLKM 1.66 55 eP 36 43.60 -0.9
SPU 1.67 15 iP 36 43.85 -0.8
BGL 1.71 9 iP 36 44.71 -0.5
CRP 1.74 13 iP 36 45.06 -0.6
CGLM 1.80 15 iP 36 45.69 -0.6
SEW 1.85 72 eP 36 45.89 -1.0
eS 37 08.13
NCG 1.87 12 iP 36 46.74 -0.6
SUA 2.19 29 iP 36 50.94 -0.5
eS 37 18.18
PMS 2.38 44 iP 36 53.08 -0.9
SKT 2.51 16 iP 36 54.64 -1.0
PWA 2.58 35 eP 36 55.84 -0.7
PLRM 2.77 42 eP 36 57.30 -1.8
GHO 2.97 40 eP 37 00.16 -1.8
CUT 3.12 24 eP 37 02.98 -1.0
GLB 4.90 64 eP 37 25.86 -2.6
PAX 4.96 44 eP 37 27.69 -1.8
25 obs. ossocioted

FEB 04, 1990 16h 55m 03.99± 0.94s
7.452 S ± 4.0km 128.617 E ± 5.5km
DEPTH = 117.8 ± 9.6 km
5.0mb (18 obs.)
BANDA SEA (280)

AAI 3.76 354 ePd 56 07.20 6.0X
MTN 5.90 155 eP 56 30.00 -0.5
KNA 8.25 179 eP 57 01.50 -0.9
eS 58 26.00
MNI 9.61 337 ePc 57 28.00 7.3X
JAY 13.00 68 ePd 58 06.20 0.7
WB5 13.55 156 iP 58 09.00 -3.7X
WRA 13.60 156 Pc 58 09.70 -3.6X
0.5s 21.70nm 4.8mb
MNDI 14.99 86 eP 58 32.00 0.8
MBL 16.06 211 eP 58 44.00 -0.3
0.3s 10.00nm 4.6mb
eS 01 24.00
QIS 16.82 142 iPc 58 52.20 -1.6
eS 01 44.00
ASPA 16.90 163 iPd 58 53.20 -1.7
0.8s 36.00nm 4.7mb
eS 01 45.50
PMG 18.44 97 eP 59 15.00 1.8
WARB 18.72 186 eP 59 17.00 0.7
0.4s 10.00nm 4.5mb
NANU 19.61 219 iPd 59 26.40 0.9
0.4s 14.00nm 4.7mb
eS 00 58.00
CTA 21.21 128 eP 59 43.00 1.1
1.0s 69.00nm 5.0mb
i 59 48.30
i 00 07.90
iS 03 32.00
MEKA 21.33 206 eP 59 43.00 0.0
FORR 23.28 181 iPd 00 03.10 1.1
0.3s 12.00nm 4.8mb
QLP 24.14 144 eP 00 13.00 2.7X
e 00 47.00
e 04 38.00
COOL 24.34 196 eP 00 12.70 0.5
0.4s 10.00nm 4.6mb
MRWA 24.70 207 iPd 00 16.20 0.6
eS 04 54.00
BAL 25.60 204 eP 00 24.00 0.1
KLB 26.07 201 eP 00 29.00 0.8
RMQ 26.93 137 eP 00 41.50 5.3X
e 01 02.50
MUN 27.00 204 eP 00 37.00 0.2
NWAO 27.46 201 iPc 00 41.10 0.2
RKG 28.57 200 eP 00 56.50 5.6X
CMS 28.81 148 eP 00 52.00 -1.1
e 01 23.00
BRS 30.29 134 iP 01 06.50 0.2
i 01 51.00
QIZ 32.17 325 Pd 01 23.40 0.7
NNT 34.94 305 eP 01 47.00 0.4
LOE 36.28 313 eP 01 59.30 1.4
BDT 38.20 310 eP 02 14.00 0.0
0.7s 30.90nm 5.3mb
SSE 38.98 350 P 02 20.40 0.1
CHG 39.21 312 ePc 02 24.00 1.6
1.0s 34.50nm 5.1mb
CHTO 39.21 312 eP 02 23.90 1.5
1.1s 49.76nm 5.2mb
pP 02 55.20 141kmX
GYA 39.88 328 iPc 02 28.80 0.8
WHN 40.18 341 eP 02 30.50 0.3
1.0s 100.00nm 5.6mb
pP 02 56.80 115kmX
NJ2 40.37 347 Pc 02 32.00 0.2
KMI 41.03 323 Pc 02 40.00 2.5
MAT 44.68 11 iPc 03 05.00 -1.8
0.9s 27.73nm 5.0mb
CD2 44.97 329 iPc 03 09.20 0.0
XAN 45.29 337 iPc 03 11.00 -0.7
TIY 47.40 343 Pc 03 26.80 -1.6
BJI 48.63 347 eP 03 37.00 -0.7
1.0s 36.00nm 5.2mb
LZH 49.17 333 Pc 03 41.50 -0.6
1.0s 120.00nm 5.7mb
HHC 50.56 343 P 03 52.40 -0.2
CN2 51.09 357 eP 03 55.40 -1.0
LSA 51.59 318 iP 04 03.00 2.0
MDJ 51.83 1 eP 04 01.50 -0.4
GTA 53.72 332 iPc 04 16.60 0.5
0.8s 100.00nm 5.8mb
GUN 54.23 312 Pc 04 20.10 -0.3
PKI 54.39 312 Pc 04 21.00 -0.5
KKN 54.60 312 Pc 04 22.50 -0.5
DMN 54.63 311 Pc 04 22.80 -0.4
0.6s 39.00nm 5.5mb
GBA 54.95 292 Pd 04 23.10 -2.2
1.1s 7.50nm 4.6mb
GKN 55.19 312 Pc 04 26.00 -1.1
HYB 55.29 297 eP 04 26.00 -1.8
NDI 61.18 308 iPc 05 06.50 -2.1
WMQ 63.03 328 iPc 05 20.80 0.0
KSH 67.39 318 P 05 50.00 1.0
MAIO 77.90 309 iPc 06 51.30 0.6
BSF 116.59 320 ePKP 13 35.10 -0.8
HAU 116.81 320 ePKP 13 36.00 -0.2
LPG 117.37 318 ePKP 13 37.50 -0.2
LOR 118.64 320 ePKP 13 39.40 -0.3
L8F 118.67 320 ePKP 13 39.30 -0.5
SSF 118.95 320 ePKP 13 40.20 -0.1
AVF 119.14 320 ePKP 13 40.10 -0.5
BGF 119.55 320 ePKP 13 41.30 -0.2
MAF 119.86 320 ePKP 13 41.70 -0.4
TCF 120.06 320 ePKP 13 42.40 -0.1
LSF 120.51 320 ePKP 13 43.10 -0.2
CAF 120.68 318 ePKP 13 44.00 0.3
LPO 121.35 318 ePKP 13 45.30 0.4
MFF 121.43 321 ePKP 13 44.60 -0.4
FRB 122.47 9 ePKP 13 45.00 -1.4
EPF 122.55 317 ePKP 13 47.30 0.0
ALQ 122.68 53 iPKPd 13 48.90 0.9
1.0s 5.75nm
KIC 133.70 272 PKP 14 10.40 0.9
LIC 133.97 271 PKP 14 10.80 0.8
TIC 134.00 272 PKP 14 10.90 0.8
NNA 148.16 127 iPKPc 14 39.20 4.1X
1.0s 39.00nm
LPB 150.99 145 PKPc 14 47.50 7.7X
0.9s 92.44nm
ZOBO 151.19 145 PKPc 14 41.50 1.2X
1.0s 10.00nm
i 14 47.00
CCH 151.34 150 PKP 14 47.90 7.7X
S.D. = 1.0 on 74 of 85 obs.

FEB 04, 1990 16h 55m 36.27± 1.36s
36.106 N ±12.0km 1.940 E ± 8.5km
DEPTH = 10.0km (geophysicist)
ALGERIA (396)
ML 3.8 (LDG). mbLg 3.4 (MDD).

ACU 3.05 323 ePn 56 25.20 -0.2
eSn 57 00.20
ENIJ 3.46 286 ePn 56 30.60 -0.6
eSn 57 08.50
ESEL 3.73 11 ePn 56 35.00 -0.2
eSn 57 16.20
ECHE 4.17 327 ePn 56 41.20 -0.2
eSn 57 27.00
AFC 4.55 286 ePn 56 46.80 -0.2
EBR 4.84 347 eP 56 52.00 1.1
EROQ 4.86 346 ePn 56 50.40 -0.8
eSn 57 41.00
EBAN 5.01 296 ePn 56 53.50 0.1
eSn 57 50.00
TOL 6.05 310 ePn 57 12.00 4.1X
eSn 58 27.50
IFR 6.36 248 iP 57 13.00 0.5
i 58 25.00
i 59 13.00
EPF 7.03 350 Pn 57 23.00 1.3
LMR 8.03 25 Pn 57 35.00 -0.7
LRG 8.09 24 Pn 57 36.60 0.1
FRF 8.28 24 Pn 57 39.00 -0.2
Sn 59 05.00
CAF 8.81 1 Pn 57 46.80 0.2
SBF 8.82 27 Pn 57 45.50 -1.2
LFF 8.87 354 Pn 57 46.20 -1.2
LPG 10.06 20 Pn 58 06.00 1.9
BGF 10.46 3 Pn 58 09.50 0.2
S.D. = 0.9 on 18 of 19 obs.

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* FEB 04, 1990 18h 15m 52.78± 1.97s
9.715 N ± 7.4km 126.353 E ±13.0km
DEPTH = 55.1 ± 18.7 km
4.6mb (6 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV 2.72 196 eP 16 35.10 0.2
SSE 21.81 348 eP 20 41.50 -0.5
WHN 23.55 333 P 21 01.00 2.0
sP 21 13.50
IPM 25.63 260 ePc 21 23.40 4.3X
CHTO 28.03 292 eP 21 41.20 0.3
1.2s 2.43nm 3.7mb
XAN 29.02 329 P 21 47.00 -2.8
WB5 30.45 165 eP 22 03.80 1.2
TIY 30.57 338 eP 22 02.00 -1.5
BJI 31.53 345 eP 22 14.00 2.2
QIS 32.79 157 eP 22 23.00 0.0
HHC 33.66 340 Pd 22 30.60 0.0
NANU 33.79 198 eP 22 31.10 -0.5
8TO 34.00 337 eP 22 34.00 0.5
MDJ 34.88 4 eP 22 40.00 -0.9
WARB 35.68 180 eP 22 47.00 -0.9
0.4s 2.00nm 4.4mb
GTA 37.88 326 eP 23 06.00 -0.4
GUN 42.12 301 P 23 41.70 -0.2
0.6s 9.00nm 4.7mb
PKI 42.42 300 P 23 44.20 -0.1
KKN 42.59 301 P 23 45.20 -0.4
GKN 43.20 301 P 23 50.40 0.0
BRS 44.91 146 iP 24 03.50 -0.5
HYB 46.99 285 eP 24 21.00 0.3
e 24 32.50
GBA 48.00 280 Pc 24 29.00 0.4
0.6s 4.20nm 4.6mb
KEV 84.18 340 eP 28 20.00 1.0
SOD 84.83 337 eP 28 23.00 0.7
SUF 86.08 333 iP 28 29.10 0.5

04d 18h

```
        0.6s      8.30nm            5.1mb
NUR    87.32 331 eP      28 35.00    0.3
HFS    92.58 332 eP      28 58.20   -1.1
        0.5s      2.10nm            4.8mb
      S.D. = 1.1  on  27 of  28 obs.
-------------------------------------------
*  FEB 04, 1990  19h 05m 38.88± 1.00s
   14.573 N ±11.0km  146.932 E ±14.8km
   DEPTH =  33.0km  (normol)
   5.0mb (  5 obs.)
 MARIANA ISLANDS                    (216)

GUA     2.21 243 eP      06 13.40   -0.6
                 eS      06 42.50
GUMO    2.23 244 eP      06 14.20   -0.1
PJG     2.23 244 eP      06 14.00   -0.3
WB5    36.40 200 eP      12 43.00    0.7
BJI    36.97 319 eP      12 46.00   -0.9
TIY    38.27 314 eP      12 55.80   -2.2
GYA    39.37 294 P       13 08.60    1.2
HHC    40.37 317 eP      13 15.80    0.3
BTO    41.28 316 eP      13 24.00    1.1
BRS    42.10 172 e(P)    13 17.00  -12.6X
                 e       19 27.00
LZH    44.00 307 P       13 50.00    4.8X
        1.0s     11.00nm            4.6mb
CHTO   46.05 282 e(P)    14 02.70    1.0
        0.9s      0.85nm            3.7mb X
GTA    48.05 310 eP      14 17.60    0.3
LSA    53.35 296 P       15 00.80    2.7
GUN    57.92 294 P       15 30.80   -0.1
        0.6s     12.00nm            5.1mb
WMQ    57.93 313 P       15 30.80    0.4
PKI    58.34 294 P       15 33.20   -0.7
KKN    58.45 294 P       15 33.80   -0.7
        0.8s      8.00nm            4.9mb
DMN    58.60 294 P       15 35.00   -0.6
        0.7s     10.00nm            5.0mb
GKN    59.02 294 P       15 37.80   -0.6
        0.6s     11.00nm            5.2mb
KIC   145.05 305 PKPc    25 15.06   -0.4
        0.8s      9.00nm
TIC   145.10 305 PKP     25 15.08   -0.5
LIC   145.35 305 PKPc    25 15.98    0.0
        0.7s     13.50nm
ZOBO  146.19  98 PKP     25 21.00    2.9X
      S.D. = 1.1  on  21 of  24 obs.
-------------------------------------------
%  FEB 04, 1990  19h 34m 42.16± 3.83s
   22.874 N ±26.1km  121.618 E ±21.0km
   DEPTH =  10.0km  (geophysicist)
 TAIWAN REGION                      (243)

TWG     0.51 264 iPc     34 53.10    0.7
TWF1    0.56 328 iPc     34 54.00    0.5
                 eS      35 00.50
TWK     1.11 291 ePc     35 01.90   -1.1
                 eS      35 14.10
TWD     1.20 359 ePc     35 04.90    0.4
TWC     1.74   7 eP      35 12.70    0.1
TWZ     2.21 359 eP      35 18.80   -0.7
      S.D. = 0.9  on   6 of   6 obs.
-------------------------------------------
   FEB 04, 1990  19h 35m 13.46± 1.45s
   32.872 S ± 7.9km   71.477 W ±10.5km
   DEPTH =  13.2 ±  5.2 km
 NEAR COAST OF CENTRAL CHILE        (135)

ROCH    0.40 104 iPd     35 22.50    0.5
                 iS      35 30.80
LCCH    0.61 187 iPc     35 25.70    0.3
                 iS      35 35.30
SAN     0.90 131 iPc     35 30.60    0.2
                 iS      35 44.90
TACH    0.90 150 iPc     35 30.60    0.2
                 iS      35 46.00
LNV     1.08 177 iPc     35 33.00   -0.5
                 iS      35 49.00
FCH     1.09 115 iPd     35 33.10   -0.9
                 iS      35 50.00
PCH     1.10 133 iPc     35 33.70   -0.2
                 iS      35 50.00
CHCH    1.26 147 iP      35 36.90    0.2
                 iS      35 55.20
RTCB    2.66  59 i(P)    35 56.60   -0.2
                 S       36 34.00
CFA     3.02  66 iP      36 02.00    0.2
      S.D. = 0.5  on  10 of  10 obs.
-------------------------------------------
?  FEB 04, 1990  20h 07m 57.78± 1.34s
   18.581 N ±19.2km   65.638 W ±28.7km
   DEPTH = 121.6 ± 10.1 km
 PUERTO RICO REGION                 ( 90)

LPR     0.35 219 P       08 14.00   -1.4
CPD     0.60 206 P       08 17.80    1.0
SJG     0.67 226 iP      08 17.90    0.5
                 S       08 30.00
PORP    1.08 241 P       08 21.90    0.8
LRS     1.18 256 P       08 21.10   -1.0
NNA    32.32 201 eP      14 17.00   -0.5
        1.0s     41.00nm            5.2mb
                 i       14 24.50
FRB    45.17 358 eP      16 04.00    0.4
      S.D. = 1.3  on   7 of   7 obs.
-------------------------------------------
   FEB 04, 1990  20h 26m 13.13± 0.78s
   22.374 S ± 5.3km   68.423 W ± 8.0km
   DEPTH = 101.4 ±  8.0 km
   5.3mb ( 16 obs.)
 NORTHERN CHILE                     (123)
      Felt (III) ot Antofogasta.

ANT     2.26 234 iPc     26 50.50    0.8
                 iS      27 14.00
YJA     2.71  86 iPc     27 02.20    6.0X
SLA     3.57 132 iPc     27 13.00    5.4X
CCH     5.41  24 P       27 35.80    2.6
LPB     5.82   3 eP      27 20.00  -18.9X
        1.0s    240.00nm
                 i       27 42.00
ZOBO    6.08   3 P       27 44.00    1.4
                 S       28 47.00
                 LR      29 12.00
CYA     6.49 159 ePc     27 49.00    1.2
RTRS    7.82 187 ePd     28 05.50   -0.4
RTLL    8.92 180 ePd     28 18.80   -2.1
RTCB    9.08 182 i(P)    28 21.00   -2.2
                 S       28 53.00
ZON     9.14 181 eP      28 24.00    0.1
CFA     9.20 179 iP      28 22.50   -2.2
TCA     9.56 160 ePc     28 28.30   -1.3
MRA    10.28 167 e(P)    28 35.20   -4.0X
ROCH   10.80 192 ePd     28 55.60    9.2X
FCH    11.04 188 eP      28 51.50    1.9
SAN    11.21 190 eP      28 58.00    6.4X
                 iS      31 16.00
PCH    11.36 189 ePc     28 55.10    1.5
LCCH   11.40 193 eP      29 03.50    9.4X
TACH   11.45 191 eP      28 51.20   -3.6X
LNV    11.83 192 eP      28 50.00   -9.8X
                 iS      31 54.50
RFA    12.35 180 e(P)    29 03.20   -3.5X
PT10   13.09 320 e(P)    29 21.00    4.6X
                 e(S)    29 48.00
BAO    20.44  74 eP      30 43.50   -1.2
CAI    34.04  67 iPd     32 48.10   -1.5
JSC    57.65 347 P       35 54.10   -0.8
TKL    59.52 346 P       36 06.50   -1.5
GBTN   59.63 345 P       36 06.90   -1.8
RSCP   59.91 344 P       36 08.20   -2.4
        1.0s    178.96nm            6.1mb
BLA    60.33 349 P       36 13.50    0.0
        0.9s     30.99nm            5.4mb
NAV    60.50 349 P       36 13.50   -1.2
CVL    60.77 351 P       36 16.00   -0.4
NA2    60.81 352 P       36 13.90   -2.8
OLY    61.57 339 P       36 20.30   -1.6
POW    62.06 339 P       36 23.80   -1.3
TUL    63.49 335 ePc     36 33.80   -0.8
        1.0s     46.70nm            5.4mb
                 e       47 00.90
FVM    63.50 341 P       36 33.20   -1.4
                 pP      36 54.00   81kmX
SIO    63.55 335 eP      36 34.00   -1.0
                 e       37 02.00
ALQ    67.47 327 iPd     37 00.90    0.5
        1.0s     41.25nm            5.3mb
ANMO   67.47 327 P       37 01.10    0.7
        1.2s     48.83nm            5.3mb
LIC    68.20  73 P       37 04.54   -0.6
TIC    68.40  73 P       37 05.84   -0.5
KIC    68.52  73 Pc      37 06.78   -0.3
        0.5s     18.00nm            5.2mb
GLA    70.69 320 eP      37 21.00    1.0
GLD    70.71 331 P       37 20.70    0.5
        1.2s     58.08nm            5.3mb
GOL    70.74 331 P       37 20.60    0.2
        1.1s     61.22nm            5.3mb
BAR    71.55 318 eP      37 26.00    0.8
PLM    72.13 319 P       37 30.20    1.4
RVR    72.88 319 eP      37 33.00    0.1
GSC    73.43 320 eP      37 37.00    0.8
SBB    73.62 319 eP      37 38.00    0.7
ABL    74.58 319 P       37 41.90   -1.2
ISA    74.67 320 eP      37 44.00    0.6
TNP    75.60 322 P       37 49.60    0.8
        1.0s     10.92nm            4.6mb
                 pP      38 09.40   74kmX
RSON   76.25 344 P       37 51.70   -0.2
        1.1s     56.52nm            5.3mb
KVN    76.77 322 P       37 56.00    0.7
                 pP      38 15.40   72kmX
LLA    76.80 319 ePd     37 56.00    0.7
SCH    76.89   1 eP      37 55.00   -0.3
LRM    78.76 330 eP      38 06.80    0.6
ORV    79.06 321 ePd     38 08.50    0.9
WDC    80.33 321 iPd     38 13.40   -1.0
LBFM   80.46 322 P       38 16.00    0.7
                 pP      38 41.40   97kmX
SES    81.65 334 ePd     38 21.00   -0.2
FFC    82.00 341 iPd     38 22.70   -0.1
        1.3s     40.00nm            5.1mb
BLF    83.22 119 iPc     38 31.20    1.2
                 i       39 02.20
PNT    84.64 329 eP      38 37.00    0.6
        0.7s      6.00nm            4.6mb
EDM    84.74 335 eP      38 35.50   -1.3
KSR    85.02 116 iPc     38 39.80    0.7
        0.8s      6.25nm            4.6mb
                 i       39 09.20
TOL    86.20  44 iPc     38 47.50    3.2X
        1.2s     78.13nm            5.6mb
SLR    86.22 116 iPc     38 46.00    1.0
        1.0s     25.00nm            5.2mb
                 i       39 16.00
BCAO   88.86  85 ePc     39 00.00    2.3
        0.5s      5.00nm            4.9mb
                 ic      42 50.50
KDZ   107.28  52 ePdiff40 42.00   21.4X
CTT   109.36  53 iPdiff40 23.40   -6.4X
DZM   110.65 234 iPKPc    44 30.30   -5.9X
ASPA  129.35 207 iPKPc    45 11.30   -0.6
        0.9s     13.00nm
                 iPP     45 42.10
WRA   132.42 210 PKPd     45 19.20    1.4
        0.7s      5.30nm
WB5   132.47 210 ePKP     45 19.10    1.2
KOD   145.20 105 ePKP     45 42.60    1.0
KSH   145.31  52 PKP      45 42.50    1.6
KUSJ  145.63 315 ePKP     45 41.20    0.1
GBA   146.44  99 PKPc     45 44.20    1.0
        0.5s      4.30nm
ASAJ  146.47 318 ePKP     45 44.40    2.0X
HYB   148.60  93 ePKP     45 47.50    0.9
                 e       46 21.00
MAT   152.96 307 ePKP     46 00.00    7.4X
        1.0s     16.00nm
MDJ   153.32 331 ePKP     45 51.00   -1.8
HHC   161.58   0 PKP      46 05.60    2.6X
XAN   168.15  11 PKP      46 10.50    1.7
      S.D. = 1.3  on  69 of  87 obs.
-------------------------------------------
   FEB 04, 1990  20h 29m 03.11± 0.74s
   37.515 N ±  8.4km   21.598 E ±  7.8km
   DEPTH =  10.0km  (geophysicist)
   3.9mb (  1 obs.)
 SOUTHERN GREECE                    (368)
      ML 3.3 (ATH).

ITM     0.42 142 iPgc     29 12.10    0.3
VLS     1.04 310 ePg      29 20.90   -1.8
VLI     1.33 126 ePb      29 27.80    0.1
ATH     1.74  74 ePb      29 33.50    0.0
KEK     2.61 328 ePn      29 45.00   -1.0
KZN     2.79   3 ePn      29 47.60   -1.1
APE     3.17  97 ePn      29 53.00   -1.0
OHR     3.64 350 ePn      30 01.20    0.4
VAY     3.87  11 ePn      30 04.50    0.5
SKO     4.45 358 eP       30 14.00    1.8
                 i       30 22.40
```

CZI 4.62 293 P 30 14.30 -0.2
CSI 4.73 300 P 30 18.20 2.0
HFS 23.19 350 eP 34 06.70 -4.0X
0.4s 1.60nm 3.9mb
S.D. = 1.3 on 12 of 13 obs.

FEB 04, 1990 20h 34m 42.26± 0.93s
28.078 N ± 7.0km 57.619 E ± 3.8km
DEPTH = 38.7 ± 9.0 km
4.8mb (24 obs.) 4.5Msz (1 obs.)
SOUTHERN IRAN (353)

BBU 6.65 255 iPn 36 20.30 0.3
eSn 37 34.40
MAIO 8.35 10 eP 36 45.00 1.1
0.8s 10.98nm 5.0mb
eS 38 34.00
QUE 8.43 73 eP 36 45.00 0.0
IR4 9.15 323 eP 36 56.00 1.1
TEH 9.29 327 eP 36 57.00 0.1
IR5 9.30 322 eP 36 58.00 0.9
IR1 9.40 323 eP 37 00.00 1.7
IR7 9.66 324 eP 37 03.00 1.1
RYD 10.42 254 eP 37 11.00 -1.3
iS 39 04.50
KER 10.96 307 e(P) 37 17.00 -2.7
BHD 12.51 298 ePd 37 39.50 -1.0
eS 39 55.50
e 41 46.00
QASM 12.71 264 eP 37 41.30 -1.9
TAB 13.73 319 eP 37 46.00 -10.7X
KMSA 14 21 240 eP 38 01.00 -2.0
BOM 16.65 120 eP 38 32.50 -1.9
eS 43 17.00
NDI 17.26 83 eP 38 38.00 -4.0X
POO 17.66 119 iPc 38 49.70 2.6
KSH 18.98 49 eP 39 01.00 -2.3
BADA 19.92 277 eP 39 16.30 2.7
HYB 22.00 114 eP 39 34.00 -0.9
1.0s 35.00nm 4.7mb
e 39 41.00
KOT 22.62 281 eP 39 44.50 3.6X
AGMR 23.01 264 eP 39 50.60 5.8X
GBA 23.41 124 Pc 39 48.80 0.1
0.9s 6.50nm 4.1mb
KAS 23.58 310 eP 39 53.50 3.3X
BBTK 23.64 306 iP 39 52.50 1.6
GKN 23.83 84 P 39 52.60 -0.3
0.7s 25.00nm 4.8mb
DMN 24.29 85 P 39 59.80 2.2
KKN 24.42 84 P 39 57.80 -1.0
BCK 24.51 299 iP 40 01.70 2.4
PKI 24.56 85 P 39 59.80 -0.5
ELL 24.87 297 eP 40 05.40 2.5
GUN 24.93 84 P 39 59.60 -4.2X
KHL 25.55 301 eP 40 10.20 1.0
GPA 25.56 306 eP 40 09.00 -0.2
KOD 25.75 130 eP 40 13.20 1.8
WMQ 28.77 49 P 40 41.00 2.4
pP 40 48.00 24kmX
LSA 29.35 79 P 40 45.60 1.3
RZN 30.02 306 eP 40 50.00 0.2
PGB 30.66 307 eP 40 55.00 -0.3
KKB 31.24 305 iPc 41 00.00 -0.4
VTS 31.35 307 eP 41 02.00 0.5
VAY 31.48 304 eP 41 02.50 0.0
SKO 32.45 305 eP 41 11.60 0.6
OHR 32.74 303 eP 41 13.80 0.3
1.2s 0.07nm 2.4mb X
SPC 35.51 317 eP 41 42.20 4.7X
TDS 35.88 300 P 41 42.70 2.2
SOI 35.97 297 P 41 41.50 0.2
CZI 36.00 299 P 41 43.50 2.0
KRA 36.03 318 iPd 41 40.70 -0.9
0.8s 61.00nm 5.6mb
e 41 49.10
MMN 36.17 300 P 41 45.00 2.1
SRO 36.22 314 eP 41 42.90 -0.4
MGR 36.53 300 Pd 41 47.50 1.5
GTA 36.56 61 P 41 45.00 -1.4
SGO 36.76 301 P 41 49.10 1.2
ZST 37.12 314 eP 41 50.80 0.0
DUI 37.53 303 P 41 57.00 2.5
VBY 37.63 309 e(P) 41 56.00 0.9
SDI 38 01 303 P 41 58.80 0.3
CEY 38.24 309 e(P) 42 00.00 -0.3
KSP 38 48 318 ePd 42 01.50 -0.8

TRI 38.69 309 P 42 03.50 -0.5
CHG 38.86 95 eP 42 08.70 2.9X
CHTO 38.86 95 eP 42 06.20 0.4
1.0s 3.00nm 4.0mb
ARV 38.89 305 P 42 06.00 0.2
MNS 38.93 304 P 42 06.10 -0.1
ASS 39.03 305 P 42 07.50 0.5
KBA 39.27 311 ePd 42 08.50 -0.6
1.1s 10.50nm 4.5mb
i 42 12.20
NUR 39.31 335 iP 42 08.40 -0.6
e 42 23.00
FVI 39.54 310 P 42 10.50 -0.6
CRE 39.62 305 P 42 12.50 0.6
KHC 39.62 314 iP 42 11.00 -0.8
1.2s 25.00nm 4.9mb
LZH 39.67 66 eP 42 10.50 -2.0
SFI 39.73 306 P 42 15.00 2.3
PGD 39.82 306 P 42 15.00 1.3
BRG 39.90 317 eP 42 13.30 -0.7
1.5s 28.00nm 4.8mb
CD2 40.04 74 eP 42 14.00 -1.5
CTI 40.21 309 P 42 16.50 -0.2
SUF 40.29 338 eP 42 16.70 -0.3
MME 40.59 306 P 42 19.70 -0.4
CLL 40.60 317 iPd 42 19.10 -0.6
1.4s 43.00nm 5.0mb
BDI 40.65 306 P 42 20.00 -0.3
GRF 41.25 315 eP 42 24.80 -0.4
1.5s 56.00nm 5.1mb
e 42 46.10
BO8 41.55 307 P 42 28.20 0.5
UPP 41.77 331 iP 42 27.60 -1.5
VAI 42.16 308 P 42 23.00 -9.6X
S8F 42.90 305 eP 42 37.70 -1.1
0.8s 11.80nm 4.7mb
GYA 43.39 80 P 42 43.60 0.5
LPG 43.53 308 eP 42 42.70 -1.4
0.9s 13.10nm 4.7mb
BNI 43.54 307 P 42 43.20 -0.9
SOD 43.54 343 iP 42 43.30 -0.3
HFS 43.62 330 eP 42 43.90 -0.4
0.4s 3.70nm 4.5mb
BSF 43.78 311 eP 42 43.20 -2.7
XAN 43.98 69 P 42 45.60 -2.0
BTO 44.44 60 eP 42 53.60 2.2
KEV 45.28 346 eP 43 02.00 4.5X
DOU 45.54 314 P 43 00.00 0.2
e 06 56.10
LBF 45.58 309 eP 42 58.80 -1.5
1.2s 27.90nm 5.0mb
HHC 45.61 59 eP 43 00.60 -0.1
SMF 45.65 309 eP 42 59.40 -1.4
1.0s 26.80nm 5.1mb
LOR 45.69 310 eP 42 59.50 -1.6
SSF 45.91 310 eP 43 01.60 -1.2
1.0s 14.00nm 4.8mb
AVF 45.99 309 eP 43 02.10 -1.4
BGF 46.32 309 eP 43 04.90 -1.2
1.0s 12.00nm 4.8mb
TIY 46.45 63 eP 43 04.40 -2.9
Z 18s 0.50um 4.5Msz
MAF 46.50 308 eP 43 06.60 -0.9
TCF 46.75 308 eP 43 08.50 -1.0
0.8s 5.90nm 4.6mb
CAF 46.80 307 eP 43 09.20 -0.7
0.9s 9.80nm 4.8mb
RJF 47.20 307 eP 43 12.60 -0.4
0.8s 9.10nm 4.8mb
LPO 47.42 306 eP 43 14.20 -0.6
LFF 47.74 307 eP 43 16.60 -0.7
0.8s 9.10nm 4.8mb
BJI 49.16 60 eP 43 30.50 2.2
ASMO 51.66 297 iPc 43 48.50 0.9
ATEJ 51.94 296 iPc 43 50.50 0.7
ALOJ 51.98 297 iPc 43 50.00 -0.1
KRI 52.23 215 iPc 43 47.60 -4.5X
MBC 75.91 359 eP 46 26.00 -0.1
1.0s 6.00nm 4.5mb
FRB 79.20 339 eP 46 40.00 -4.4X
WB5 88.15 114 eP 47 31.70 1.1
WRA 88.16 114 Pd 47 31.70 1.0
1.0s 4.60nm 4.7mb
S.D. = 1.3 on 107 of 119 obs.

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* FEB 04, 1990 21h 05m 15.91± 0.82s
47.928 N ±12.3km 9.399 E ± 6.3km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
ML 2.9 (LDG), 2.4 (KBA), 2.0 (GRF). MD 2.6 (KRW).

FEL 0.93 267 Pg 05 33.26 -0.6
Sg 05 45.82
BBS 1.36 251 Pg 05 42.10 1.2
Sg 06 00.48
WLS 1.45 290 Pg 05 42.26 0.0
Sg 06 00.36
CDF 1.50 290 Pg 05 42.76 -0.2
Sg 06 01.49
MOF 1.53 268 Pg 05 44.49 1.2
ECH 1.53 282 Pg 05 43.97 0.7
Sg 06 03.04
TOD 1.73 347 ePg 05 45.50 -0.6
BSF 1.76 268 Pn 05 44.80 -1.9
Sg 06 11.20
GRC1 1.77 52 ePg 05 47.90 1.1
eSg 06 09.30
LOMF 1.83 253 Pg 05 50.82 3.1X
HAU 2.05 273 Pg 05 54.00 3.1X
Sg 06 18.80
ABH 2.31 329 ePg 05 56.85 2.3X
KBA 2.81 106 ePn 06 01.00 -0.8
ePg 06 09.00
iSg 06 45.40
KHC 3.03 65 ePg 06 12.00 7.2X
Sg 06 52.00
LPL 3.03 218 Pg 06 13.60 8.6X
LOR 3.81 262 Pg 06 27.00 11.1X
Sg 07 15.60
S.D. = 1.2 on 10 of 16 obs.

% FEB 04, 1990 21h 15m 57.20± 2.79s
47.993 N ±35.8km 4.704 E ±18.4km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.3 (LDG).

LOR 0.92 219 Pg 16 15.20 0.4
Sg 16 26.30
HAU 1.10 89 Pg 16 18.00 0.0
Sg 16 32.10
LBF 1.12 206 Pg 16 18.00 -0.3
Sg 16 30.20
SSF 1.24 222 Pg 16 20.00 -0.2
Sg 16 35.80
BSF 1.41 96 Pg 16 23.00 -0.1
Sg 16 39.80
SMF 1.47 204 Pg 16 24.00 0.3
Sg 16 41.00
BGF 1.91 222 Pn 16 30.00 -0.1
Sg 16 55.80
S.D. = 0.3 on 7 of 7 obs.

% FEB 04, 1990 21h 21m 14.20± 0.82s
44.059 N ± 6.3km 7.923 E ± 6.1km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.7 (GEN).

IMI 0.15 189 P 21 17.84 0.0
S 21 20.51
ROB 0.24 351 P 21 19.59 0.3
S 21 23.17
FIN 0.25 54 P 21 19.38 -0.2
S 21 22.56
ENR 0.40 295 P 21 22.25 -0.1
S 21 28.30
STV 0.47 293 P 21 23.38 -0.4
S 21 30.05
PZZ 0.74 307 P 21 29.12 0.3
S 21 38.56
S.D. = 0.4 on 6 of 6 obs.

FEB 04, 1990 21h 33m 55.43± 0.67s
18.951 N ± 6.0km 65.844 W ± 5.5km
DEPTH = 60.2 ± 8.3 km
4.6mb (8 obs.)
PUERTO RICO REGION (90)

LPR 0.64 182 P 34 08.00 -1.1
SJG 0.88 199 iP 34 12.20 0.1
CPD 0.91 184 P 34 11.50 -0.9
LRS 1.15 236 P 34 15.50 -0.2

04d 21h

PORP	1.17	220	P	34	16.00	0.1
SEG	4.85	121	eP	35	10.20	2.6
PAG	4.92	126	eP	35	08.00	-0.7
			S	36	02.00	
DEG	5.26	119	eP	35	13.20	-0.3
MGG	5.27	124	eP	35	13.50	0.0
BBL	5.39	129	eP	35	14.00	-1.2
MORO	8.38	197	eP	35	50.00	-6.8X
LLAV	8.48	186	eP	35	58.00	-0.2
			eS	37	29.00	
GUAC	8.82	189	eP	35	58.00	-4.9X
			eS	37	38.00	
OLLA	8.93	186	iPc	36	04.00	-0.4
			eS	37	40.00	
TRN	9.30	152	eP	36	10.73	1.3
			eS	36	23.95	
TBH	9.60	151	eP	36	17.47	3.9X
			eS	36	32.24	
CEOS	10.15	194	eP	36	23.00	1.9
			eS	38	11.00	
HBF	19.07	320	P	38	16.90	1.1
JSC	20.52	321	P	38	31.20	0.0
PRM	21.06	319	P	38	37.60	0.9
NA2	21.74	334	P	38	43.20	-0.2
CVL	21.92	332	P	38	45.80	0.6
BLA	22.23	328	P	38	48.00	-0.3
TKL	22.98	320	P	38	56.60	1.0
GMTN	23.00	344	iP	39	09.90	14.2X
PNJ	23.01	344	iP	39	10.40	14.5X
GBTN	23.25	319	P	39	00.20	2.0
RSCP	24.07	318	P	39	07.00	0.8
	1.0s	27.66nm			4.7mb	
TUL	31.32	309	eP	40	10.70	-1.5
	1.0s	10.00nm			4.5mb	
	Z 21s	0.15um			3.6Msz	
			e	40	27.00	
ZOBO	35.07	184	P	40	44.00	-1.5
	1.0s	8.75nm			4.6mb	
	Z 18s	0.21um			3.9Msz	
			S	46	54.00	
			LR	49	04.00	
LPB	35.33	184	Pd	40	48.20	0.7
SCH	35.81	359	eP	40	50.00	-0.7
CCH	36.11	180	P	40	53.80	-0.1
BAO	38.60	152	eP	41	15.00	0.3
RSON	38.74	332	P	41	13.90	-1.4
	0.9s	6.51nm			4.5mb	
GOL	39.77	310	P	41	23.90	-0.5
	0.9s	8.52nm			4.6mb	
FRB	44.80	358	eP	42	03.00	-1.7
FFC	45.06	331	eP	42	06.00	-0.9
	0.8s	6.00nm			4.5mb	
LRM	46.73	316	eP	42	22.20	1.6
SES	47.55	322	eP	42	26.50	-0.3
KVN	49.18	306	P	42	38.40	-1.3
TIC	60.30	93	P	44	00.20	-0.4
LIC	60.42	94	P	44	01.00	-0.4
KIC	60.65	93	P	44	02.50	-0.5
	0.7s	6.50nm			4.9mb	
KHC	69.05	44	P	45	01.30	4.4X
KBA	69.09	46	eP	44	57.00	-0.3
			e	45	04.50	
8CAO	83.27	88	iPd	46	19.70	2.2
	0.5s	5.00nm			4.8mb	
			ic	46	34.40	
CTA	149.75	262	iPKPc	53	41.50	5.7X
WRA	160.94	264	PKPd	54	08.00	17.7X
	0.8s	2.60nm				
	S.D. = 1.1	an	41 of	49	abs.	

FEB 04, 1990 21h 54m 58.50± 0.62s
53.104 N ±12.9km 172.675 E ± 8.0km
DEPTH = 33.0km (normal)
4.8mb (7 obs.)
NEAR ISLANDS, ALEUTIAN ISLANDS (5)

SMY	0.94	113	iPd	55	17.00	1.6
TTA	19.08	47	eP	59	22.00	1.3
IMA	21.07	39	eP	59	42.00	0.1
PMR	21.99	52	eP	59	52.00	1.0
FBA	23.09	44	eP	00	02.50	0.8
MBC	34.03	23	eP	01	41.50	0.6
	0.6s	3.00nm			4.4mb	
BW06	50.66	68	e(P)	03	54.00	-2.6
RSON	53.63	52	eP	04	17.00	-1.5
FRB	54.17	29	eP	04	20.00	-2.1
GOL	55.06	69	eP	04	28.20	-1.3
ANMO	57.76	74	e(P)	04	51.00	2.4X
SUF	61.56	343	iP	05	14.20	0.0
	0.6s	12.90nm			5.2mb	
NUR	63.88	343	iP	05	29.40	-0.2
	0.6s	11.70nm			5.2mb	
UPP	65.62	346	iP	05	40.30	-0.4
HFS	65.86	349	eP	05	41.20	-1.1
	0.4s	3.60nm			4.8mb	
GUN	66.34	285	P	05	46.80	0.5
KKN	66.78	286	P	05	49.00	0.0
PKI	66.87	285	P	05	49.80	0.1
	0.6s	6.00nm			4.9mb	
GKN	66.99	286	P	05	50.20	0.0
DMN	67.02	286	P	05	50.80	0.3
KHC	76.61	346	eP	06	48.20	1.2
ZST	76.96	343	eP	06	50.60	1.7
KBA	78.65	346	iPc	06	59.10	0.6
	0.8s	8.30nm			4.8mb	
WRA	79.95	216	P	07	05.00	-0.6
	0.6s	0.80nm			3.9mb	
	S.D. = 1.2	an	23 of	24	obs.	

• FEB 04, 1990 21h 55m 11.37± 1.86s
18.761 N ±19.3km 65.896 W ± 6.6km
DEPTH = 33.0km (normal)
PUERTO RICO REGION (90)

LPR	0.45	177	P	55	20.80	-0.5
SJG	0.69	201	iP	55	25.40	0.7
			S	55	39.00	
CPD	0.72	181	P	55	24.80	-0.3
			S	55	38.00	
PORP	0.99	225	P	55	29.60	0.6
LRS	1.01	243	P	55	28.70	-0.6
SEG	4.80	119	eP	56	24.00	0.8
PAG	4.86	123	eP	56	23.00	-1.1
MGG	5.21	122	eP	56	29.00	0.0
BBL	5.31	127	eP	56	31.00	0.5
	S.D. = 0.8	an	9 of	9	abs.	

• FEB 04, 1990 23h 27m 25.67± 0.92s
8.141 N ±13.8km 127.086 E ±15.8km
DEPTH = 33.0km (normal)
4.4mb (7 obs.)
PHILIPPINE ISLANDS REGION (248)

DAV	1.83	235	ePd	27	55.90	0.6
WB5	28.75	166	eP	33	22.40	-0.1
WRA	28.81	166	Pc	33	27.80	4.8X
	0.7s	1.80nm			3.9mb	
CHTO	29.30	294	eP	33	26.00	-1.6
	1.3s	5.31nm			4.1mb	
QIS	31.06	157	eP	33	44.00	0.9
ASPA	32.31	168	eP	33	54.20	0.2
	0.3s	6.00nm			5.0mb	
WARB	34.12	181	eP	34	10.00	0.3
	0.4s	4.00nm			4.7mb	
FORR	38.78	179	iPd	34	48.00	-1.0
BRS	43.20	146	eP	35	25.00	-0.5
GUN	43.56	302	P	35	28.80	0.0
	0.3s	2.00nm			4.4mb	
PKI	43.85	302	P	35	33.20	2.1
KKN	44.02	302	P	35	32.40	0.0
DMN	44.11	301	P	35	34.40	1.2
GBA	48.99	281	Pc	36	09.40	-2.1
	1.0s	2.90nm			4.3mb	
MBC	87.60	13	eP	40	16.00	4.6X
	0.4s	2.00nm			4.7mb	
	S.D. = 1.2	an	13 of	15	abs.	

? FEB 04, 1990 23h 59m 56.36±17.19s
62.058 N ±39.7km 2.402 E ±144.km
DEPTH = 10.0km (geophysicist)
NORWEGIAN SEA (642)
MD 2.2 (BER).

SUE	1.51	131	eP	00	23.00	-0.4
			eS	00	41.80	
HYA	2.02	115	eP	00	31.00	0.2
			eS	00	54.40	
MOL	2.46	76	P	00	37.13	0.1
			eS	01	02.56	
ODD1	2.98	134	eP	00	45.00	0.5
			eS	01	18.00	
	S.D. = 0.7	on	4 of	4	obs.	

& FEB 05, 1990 00h 51m 01.90s
33.500 N 116.450 W
DEPTH = 9.0km
SOUTHERN CALIFORNIA (43)
<PAS-P>. ML 3.4 (PAS). Felt (III) at North Palm Springs and Warner Springs. Also felt at Anza, Indio and Palm Desert.

PLM	0.37	247	iPc	51	09.30	-0.3
HAY	0.71	73	iPd	51	15.30	-0.7
CPE	0.82	222	iPc	51	16.70	-1.2
BAR	0.84	193	ePd	51	17.20	-1.0
GLA	1.43	108	eP	51	26.00	-2.1
MWC	1.52	299	iPd	51	29.00	-0.4
			iS	51	48.00	
CIS	1.64	267	eP	51	30.20	-0.8
OSM	2.48	352	P	51	41.80	-1.4
NOP	2.63	5	P	51	43.60	-1.8
EMN	2.79	30	eP	51	46.50	-1.1
MCA	3.21	348	P	51	51.70	-1.8
LSM	3.24	3	P	51	52.40	-1.5
YMT2	3.28	359	P	51	53.70	-0.9
YMT3	3.28	1	P	51	53.00	-1.6
YMT4	3.34	360	P	51	55.20	-0.3
YMT1	3.35	359	P	51	54.30	-1.2
YMT5	3.39	360	P	51	56.50	0.3
BCH	3.44	300	eP	51	58.00	1.1
PRN	4.06	16	P	52	05.00	-0.7
TNP	4.61	352	eP	52	13.00	-0.6
KVN	5.70	347	eP	52	28.00	-0.9
	21 obs. associated					

• FEB 05, 1990 01h 12m 37.59± 0.86s
38.125 N ± 9.4km 29.325 E ± 8.3km
DEPTH = 33.0km (normal)
TURKEY (366)

KHL	0.25	38	iPg	12	45.10	0.2
BCK	1.20	123	iPn	12	58.70	0.5
ELL	1.45	161	ePn	13	00.00	-1.9
DST	1.58	340	iPn	13	08.40	4.8X
IZM	1.65	280	ePn	13	04.00	-0.6
SMG	2.01	259	ePn	13	10.00	0.2
KSL	2.01	174	ePn	13	10.50	0.6
ARG	2.13	207	ePn	13	12.60	1.0
			eSn	13	40.80	
GPA	2.29	19	ePn	13	23.00	9.1X
YLV	2.44	1	iPn	13	27.40	11.4X
BNT	2.48	334	ePn	13	23.40	6.8X
EDC	2.49	333	ePn	13	25.00	8.3X
ISK	2.94	356	ePn	13	35.00	11.9X
CTT	3.10	347	ePn	13	37.00	11.7X
	S.D. = 1.2	an	7 of	14	obs.	

• FEB 05, 1990 01h 21m 11.22± 0.92s
35.190 N ± 9.1km 28.389 E ± 8.1km
DEPTH = 10.0km (geophysicist)
EASTERN MEDITERRANEAN SEA (371)
MD 2.8 (ATH).

ARG	1.05	348	ePb	21	30.00	-0.9
KAP	1.06	290	ePb	21	31.00	-0.1
KSL	1.34	46	ePb	21	36.70	0.8
NPS	2.27	273	ePn	21	50.00	0.6
KOT	6.00	150	ePn	22	41.50	-0.6
			eSn	23	47.00	
	S.D. = 1.0	on	5 of	5	obs.	

• FEB 05, 1990 02h 06m 47.76± 0.83s
24.877 N ±11.7km 92.425 E ± 8.2km
DEPTH = 33.0km (normal)
4.1mb (3 obs.)
INDIA-BANGLADESH BORDER REGION (315)

GUN	6.60	299	P	08	25.20	-0.2
PKI	6.85	295	P	08	28.40	-0.4
KKN	7.04	296	P	08	32.00	0.7
DMN	7.11	294	P	08	31.90	-0.6
GKN	7.64	296	P	08	38.80	-1.0
CHTO	8.55	134	eP	08	51.30	-0.9
LZH	14.88	39	Pd	10	18.50	0.9
	1.0s	1.10nm			3.2mb	
HYB	14.91	243	eP	10	19.50	1.5
SUF	57.34	330	eP	16	38.70	4.0X
	0.4s	1.70nm			4.4mb	
NUR	57.76	327	eP	16	24.00	-13.6X
WRA	60.40	134	Pd	17	01.70	5.3X

0.5s 1.20nm 4.3mb
S.D. = 1.1 on 8 of 11 obs.

FEB 05, 1990 02h 09m 04.92± 0.47s
24.062 S ± 5.5km 66.989 W ± 9.5km
DEPTH = 195.6 ± 6.4 km
4.6mb (1 obs.)
SALTA PROVINCE, ARGENTINA (129)

SLA	1.52	116	iPd	09	40.20	1.3
YJA	2.33	36	iPd	09	48.00	0.5
ANT	3.16	276	iPc	09	56.30	-0.3
			iS	10	34.00	
RTRS	6.47	199	ePc	10	39.40	0.5
CCH	6.69	7	P	10	42.00	-0.2
RTLL	7.36	190	ePc	10	49.50	-1.2
LPB	7.56	352	P	10	54.50	0.6
RTCB	7.57	192	iPc	10	53.00	-0.6
CFA	7.60	188	ePc	10	54.00	0.1
ZOBO	7.83	352	P	10	56.20	-1.4
	0.8s	27.28nm			4.6mb	
BAO	19.72	68	eP	13	20.30	-1.3
KIC	67.76	72	(P)	19	43.00	-0.8
PNT	86.76	329	eP	21	29.00	1.3
ASPA	128.41	205	ePKP	27	51.00	0.6
	0.6s	6.00nm				
WRA	131.57	207	PKPc	27	57.50	1.1
	0.5s	2.60nm				
GBA	144.85	101	PKPd	28	20.50	-0.2
	0.5s	3.50nm				
HYB	147.16	95	ePKP	28	28.00	3.5X

S.D. = 1.0 on 16 of 17 obs.

& FEB 05, 1990 03h 24m 50.82s
59.930 N 153.223 W
DEPTH = 128.8km
SOUTHERN ALASKA (2)
<AGS-P>

PDB	0.51	254	iP	25	09.08	-1.0
			eS	25	23.67	
RED	0.54	24	iP	25	09.56	-0.8
			eS	25	24.77	
RDT	0.76	32	iP	25	11.09	-0.8
NNL	0.98	83	iP	25	13.97	0.3
CDD	1.03	192	iP	25	13.17	-1.0
			eS	25	30.42	
CNPM	1.09	111	iP	25	14.06	-0.7
			eS	25	31.76	
NKA	1.28	50	iP	25	17.59	0.9
CKL	1.34	19	iP	25	16.84	-0.7
			iS	25	37.98	
SPU	1.38	24	iP	25	16.94	-1.0
			eS	25	37.52	
BGL	1.40	17	iP	25	17.58	-0.6
CRP	1.44	21	iP	25	18.02	-0.7
			eS	25	39.29	
CGLM	1.51	23	iP	25	18.51	-0.9
NCG	1.57	19	eP	25	19.17	-0.9
SLKM	1.61	68	eP	25	19.27	-1.2
SEW	1.90	83	iP	25	22.83	-1.1
			iS	25	47.06	
SUA	1.96	37	eP	25	23.58	-1.3
			eS	25	49.08	
SKT	2.22	21	iP	25	26.42	-1.5
PMS	2.24	52	eP	25	26.52	-1.7
			eS	25	54.40	
GHO	2.80	47	iP	25	32.83	-2.6
CUT	2.87	29	eP	25	34.45	-1.8
RND	4.06	29	eP	25	49.82	-2.4
NEA	5.05	21	eP	26	02.54	-3.0
CCB	5.37	26	iP	26	06.40	-3.4
RDS	5.45	23	eP	26	07.97	-3.0
BALM	5.49	74	eP	26	09.71	-1.9
GLM	5.75	26	eP	26	11.78	-3.3

26 obs. associated

& FEB 05, 1990 03h 30m 36.60s
36.248 N 120.385 W
DEPTH = 7.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.5 (BRK).

PRI	0.25	245	iPd	30	41.50	-0.3
			iS	30	47.40	
PKEM	0.29	130	eP	30	42.30	-0.2
PHAM	0.41	182	eP	30	44.50	-0.4
LLA	0.58	309	iPd	30	47.20	-1.1
PRS	0.80	276	ePd	30	50.80	-1.6
FRI	0.92	36	iPc	30	51.90	-2.5
			iS	31	02.50	
SAO	1.00	301	iPc	30	54.20	-1.6
BCH	1.09	167	eP	30	55.10	-2.3
ARN	1.43	320	eP	31	00.50	-2.6
MHC	1.49	318	e(P)	31	03.80	-0.1
GCC	1.51	302	e(P)	31	03.30	-0.8
CMB	1.78	360	iPd	31	06.30	-1.8
			eS	31	29.70	
TNP	3.12	53	eP	31	22.00	-5.4
KVN	3.33	32	eP	31	34.00	3.6

14 obs. associated

FEB 05, 1990 03h 33m 00.81± 1.05s
50.426 N ± 5.1km 6.079 E ±12.4km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
ML 2.7 (LDG). MD 2.1 (UCC).

MEM	0.19	346	iP	33	04.80	-0.2
ENN	0.36	344	ePg	33	08.10	0.0
	0.4s	55.00nm				
			eSg	33	10.90	
			e	33	12.30	
WLF	0.76	176	iP	33	17.70	2.0
			e	43	14.00	
DOU	1.01	251	iP	33	20.60	0.7
			iS	33	33.50	
			e	43	12.10	
SNF	1.15	275	iP	33	23.00	0.7
CDF	2.16	158	Pg	33	42.50	5.0X
			Sn	34	03.00	
HAU	2.43	176	Pg	33	48.00	6.8X
			Sg	34	19.00	
LOR	3.48	206	Pn	33	55.80	-0.3
			Sn	34	36.40	
SSF	3.77	208	Pn	33	59.80	-0.5
AVF	4.06	207	Pn	34	04.00	-0.3
SMF	4.07	202	Pn	34	03.40	-1.0
			Sg	35	11.60	
BGF	4.43	210	Pn	34	08.40	-1.1
			Sg	35	24.50	

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

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* FEB 05, 1990 03h 41m 16.25± 1.10s
47.945 N ±17.0km 9.307 E ± 6.8km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
ML 2.9 (LDG), 2.2 (GRF).

FEL	0.87	266	ePn	41	33.39	0.3
FUR	1.34	80	ePg	41	40.90	0.0
CDF	1.44	290	Pg	41	43.60	1.2
			Sg	42	01.60	
TOD	1.70	349	ePg	41	45.45	-0.6
BSF	1.70	267	Pn	41	45.00	-1.2
			Sg	42	11.20	
GRC1	1.81	54	iPgd	41	48.00	0.3
			eSg	42	09.20	
HAU	1.99	273	Pg	41	54.10	3.8X
			Sg	42	19.30	
ABH	2.26	330	ePg	41	56.33	2.1X
LPL	3.01	217	Pg	42	14.40	9.4X
KHC	3.08	66	ePg	42	11.60	5.8X
			Sg	42	52.50	
LOR	3.75	262	Pg	42	27.00	11.6X
			Sg	43	15.50	

S.D. = 1.0 on 6 of 11 obs.

FEB 05, 1990 04h 04m 54.24± 0.34s
42.176 N ± 3.3km 15.540 E ± 4.7km
DEPTH = 10.0km (geophysicist)
ADRIATIC SEA (382)
ML 3.0 (KBA).

DUI	0.96	238	P	05	12.60	0.1
			eSg	05	26.40	
HVAR	1.20	33	iPg	05	16.80	0.1
			iSg	05	35.30	
SDI	1.37	251	P	05	19.00	-0.4
			eSg	05	37.40	
BAI	1.45	136	P	05	20.50	0.0
			eSg	05	41.00	
AQU	1.60	277	P	05	24.20	1.6
SGO	1.63	186	P	05	22.00	-1.0
			eSg	05	45.50	
BRT	1.80	136	P	05	25.80	0.2
			eSg	05	48.50	
MGR	2.04	180	P	05	27.60	-1.4
			eSn	05	55.50	
MNS	2.13	277	P	05	31.20	0.8
RDP	2.15	260	P	05	31.50	0.9
ASS	2.31	294	P	05	32.50	-0.4
MMN	2.31	171	P	05	34.20	1.3
ARV	2.32	306	Pc	05	33.30	0.2
			eSn	06	01.00	
CSI	2.46	166	P	05	34.40	-0.7
TDS	2.59	166	P	05	36.60	-0.2
LCI	2.59	135	P	05	39.10	2.3
ROI	2.72	163	P	05	38.70	-0.1
CZI	2.99	171	P	05	43.10	0.6
PGD	3.27	303	P	05	47.90	1.1
RIY	3.28	346	ePn	05	45.70	-0.9
VBY	3.33	357	ePn	05	49.50	2.1
			iSn	06	27.80	
CEY	3.65	348	e(Pn)	05	54.50	2.5
			eSn	06	35.50	
ZAG	3.65	5	ePn	05	53.00	1.0
			iSn	06	37.00	
PTJ	3.74	4	ePn	05	52.80	-0.4
			eSn	06	37.70	
TRI	3.76	341	eP	05	52.10	-1.3
			e	06	37.30	
LJU	3.93	350	e(Pn)	05	56.50	0.6
			e	06	03.50	
			eSn	06	43.00	
ATN	4.01	181	P	05	56.60	-0.5
VOY	4.03	343	ePn	05	56.70	-0.7
			eSn	06	39.00	
MME	4.07	301	P	05	58.10	0.0
OHR	4.08	103	ePn	05	56.80	-1.3
SOI	4.12	174	P	05	58.00	-0.5
SKO	4.40	91	ePn	06	13.70	11.2X
CTI	4.78	325	Pc	06	06.10	-2.0
			eSn	07	02.00	
FVI	4.84	337	P	06	09.00	0.2
SAL	4.99	315	P	06	09.50	-1.4
BOB	5.13	302	Pc	06	13.10	0.0
KBA	5.15	343	iPnc	06	11.00	-2.3
			iPg	06	21.90	
			iSn	06	49.20	
			iSg	07	05.70	
KHC	7.09	350	eP	06	49.70	9.2X
			e	08	06.30	

S.D. = 1.2 on 36 of 38 obs.

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* FEB 05, 1990 04h 55m 20.27± 0.82s
1.004 S ± 4.9km 78.445 W ±22.7km
DEPTH = 10.0km (geophysicist)
ECUADOR (107)

VC1	0.37	7	iP+	55	28.20	0.3
TUNG	0.41	180	iPd	55	28.10	-0.7
			S	55	33.20	
OUR	0.83	354	Pd	55	36.80	0.2
			S	55	48.50	
GGP	0.84	350	Pd	55	37.30	0.4
			eS	55	52.50	
CAYA	1.17	23	P	55	41.00	-1.5
COTA	1.33	5	P	55	45.50	0.3
			eS	56	07.50	
NNA	11.03	172	eP	58	00.50	-0.7
	0.7s	5.48nm			5.0mb	X
ZOBO	18.26	147	P	59	38.00	1.8

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

FEB 05, 1990 05h 16m 46.15± 0.10s
37.047 N ± 2.5km 71.250 E ± 1.6km
DEPTH = 109.9km (geophysicist)
6.1mb (102 obs.)
AFGHANISTAN-USSR BORDER REGION (717)
Slight domage (VI) ot Khorog.
Felt (V) ot Ishkoshim, Kulyob, Garm, Nurek, Dushonbe and Obigarm; (IV) at Pyondzh; (III) ot Andizhon, Fergono, Toshkent, Namangon and Leninobod, USSR.
Felt (IV) at Kobul, Afghoniston.
Also felt ot Islomobod, Peshowor and Rawalpindi, Pokiston and in the Srinagor orea, Kashmir.
Depth from broadband

05d 05h

displacement seismograms.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=235 Dip=55 Slip= 70
NP2: 87 40 116
Principal Axes:
T Plg=72 Azm= 94
P 8 339
Comment: The focal mechanism is moderately well controlled and corresponds to reverse faulting with a moderate strike-slip component. The preferred fault plane is NP1.
RADIATED ENERGY
No. of sta: 5 Focal mech. M
Energy 5.9±2.5*10**13 Nm
MOMENT TENSOR SOLUTION
Dep 120 No. of sta: 12
Moment Tensor; Scale 10**18 Nm
Mrr= 2.25 Mtt=-3.05
Mff= 0.79 Mrt=-0.48
Mrf=-0.65 Mtf= 0.21
Principal axes:
T Val= 2.55 Plg=68 Azm=105
N 0.54 21 270
P -3.09 5 2
Best Double Couple:Mo=2.8*10**18
NP1:Strike=114 Dip=44 Slip= 121
NP2: 254 53 64
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 32C M.W.: 12S, 18C
Centroid Location:
Origin Time 05:16:53.5 0.2
Lat 36.56N 0.02 Lon 70.84E 0.03
Dep 113.5 1.1 Half-duration 4.9
Moment Tensor; Scale 10**18 Nm
Mrr= 1.75 0.05 Mtt=-2.94 0.07
Mff= 1.19 0.08 Mrt=-0.70 0.04
Mrf=-1.09 0.05 Mtf=-0.05 0.08
Principal Axes:
T Val= 2.65 Plg=53 Azm= 99
N 0.41 36 260
P -3.05 9 357
Best Double Couple:Mo=2.8*10**18
NP1:Strike=121 Dip=48 Slip= 142
NP2: 239 63 49

DSH	2.47	308	iPd	17	22.00	-3.9X
			iS	17	48.50	
KSH	4.43	56	P	17	54.00	1.5
FRU	6.33	23	iPd	18	17.80	-0.7
			iS	19	24.00	
QUE	7.72	209	iPd-	18	36.00	-1.6
			eS	19	56.00	
TLG	7.79	35	iPd	18	35.50	-2.9
			iS	19	54.60	
MHI	9.47	269	iPnc	18	55.00	-6.3X
			eSn	20	19.00	
WMO	14.22	57	ePc	20	02.47	-1.2
	8.0s	7400.00nm			6.0mb X	
			i	20	08.42	
			i	20	33.92	
			S	22	32.00	
GKN	14.44	125	P	20	02.00	-4.6X
KKN	15.00	124	P	20	09.00	-4.8X
DMN	15.01	125	P	20	10.00	-3.9X
PKI	15.23	124	P	20	12.60	-4.2X
GUN	15.33	122	P	20	13.00	-5.0X
TEH	16.05	271	eP	20	28.00	1.1
IR4	16.54	270	eP	20	31.00	-1.9
IR7	16.68	272	eP	20	33.00	-1.6
IR5	16.80	270	eP	20	33.50	-2.6
BOM	18.14	175	iP	20	51.40	-0.9
			eS	24	03.50	
LSA	18.15	108	iP	20	54.00	1.1
	2.0s	3800.00nm			6.3mb	
			ScS	32	27.50	
POO	18.58	172	iPd	20	57.40	-0.2
	0.8s	574.63nm			5.9mb	
			iS	24	28.00	
TAB	19.77	281	eP-	21	11.00	1.0
KER	19.78	269	ePc	21	10.50	0.4
HYB	20.59	160	iPc	21	18.60	0.3
	1.0s	1040.00nm			6.1mb	
			ipP	21	44.00	137kmX
			isP	21	54.00	

			iS	25	00.50	
SLY	20.78	274	iPd	21	21.00	0.9
			iPP	21	44.00	
			iPPP	21	52.00	
			iS	24	58.50	
			i	25	13.50	
			iSS	25	40.00	
			iSSS	25	53.00	
			iLQ	27	59.00	
SVE	21.01	344	iPd	21	21.00	-1.2
			iS	25	08.00	
BKR	21.89	291	iPd	21	30.00	-1.3
			iS	25	28.00	
BHD	22.25	268	ePd	21	37.00	2.3
			i	21	48.00	
			iPP	22	09.00	
			iPPP	22	19.00	
			iS	25	21.00	
			iSSS	26	15.00	
GTA	22.53	75	iPc	21	38.40	0.9
	5.0s	********nm			6.7mb X	
Z	11s	12.60um			5.6MszX	
			PP	22	15.00	
GBA	23.99	165	Pc	21	52.10	0.5
	0.7s	506.30nm			6.1mb	
RYD	24.38	247	iPc	21	54.50	-0.9
			iS	26	07.00	
OASM	25.93	253	eP	22	09.70	-0.1
LZH	26.13	82	iPc	22	12.88	1.2
	1.2s	********nm			7.3mb X	
Z	22s	16.40um			5.5Msz	
N	10s	8.60um				
E	12s	6.80um				
			i	22	16.53	
			sP	22	48.00	
			PP	22	57.00	
			eS	26	39.57	
KOD	27.28	167	iP	22	23.30	0.9
			iS	26	56.00	
KVT	27.51	289	iP	22	23.90	-0.2
CD2	27.56	93	iPc	22	25.20	0.6
Z	20s	6.80um			5.2Msz	
			sP	22	59.00	
			iS	27	00.20	
IRK	27.71	46	iPc	22	26.00	0.3
			eS	26	58.00	
KMSA	28.61	242	iPc	22	32.50	-1.7
SIM	28.92	298	eP	22	36.00	-0.6
			iS	27	18.00	
KAS	29.21	290	iPc	22	40.60	1.2
KMI	29.34	105	iPc	22	40.62	-0.2
Z	36s	25.60um			5.6MszX	
N	11s	6.20um				
E	11s	6.30um				
			e	22	46.91	
			isPd	23	17.70	
			eS	27	29.09	
			esS	28	11.63	
OBN	29.64	319	iPd	22	42.20	-0.7
	1.2s	1680.00nm			6.6mb	
Z	18s	16.00um			5.7Msz	
			iS	27	28.00	
ADI	29.64	273	iPc	22	44.50	1.3
DSI	30.01	270	iPc	22	47.00	0.6
ANTO	30.09	287	iPc	22	48.02	0.8
			e	22	52.16	
			ipPd	23	10.86	102kmX
BTO	30.25	71	iPc	22	49.10	0.5
			S	27	44.00	
CHG	30.31	119	iPc	22	48.60	-0.6
	1.3s	282.69nm			5.8mb	
			eS	27	44.00	
CHTO	30.31	119	iPc	22	48.40	-0.8
CSS	30.62	278	eP	22	50.20	-1.6
XAN	30.67	84	iPc	22	52.00	-0.3
	0.9s	400.00nm			6.1mb	
N	10s	8.90um				
			pP	23	16.00	108kmX
			sP	23	28.00	
			S	27	49.80	
MBH	31.08	267	iPc	22	56.00	0.2
WAJH	31.31	260	eP	22	58.50	0.6
HHC	31.39	70	Pc	22	59.00	0.4
	5.0s	700.00nm			5.7mb X	
Z	16s	11.20um			5.6MszX	
N	10s	9.20um				
			S	27	55.00	

BDT	31.42	121	iPc	22	58.90	0.0
	0.7s	455.60nm			6.3mb	
BADA	31.49	265	eP	22	59.50	0.1
GYA	31.75	99	iPc	23	02.00	0.1
	1.2s	200.00nm			5.7mb	
Z	32s	11.60um			5.4MszX	
N	12s	8.20um				
E	12s	5.30um				
			sP	23	40.00	
			S	28	06.00	
			sS	28	48.00	
GPA	31.93	289	eP	23	03.20	0.0
BCK	32.19	283	iP	23	05.80	0.2
TIY	32.55	76	iPc	23	07.50	-1.2
	1.1s	1300.00nm			6.6mb	
N	12s	10.70um				
			sP	23	46.00	
			S	28	17.00	
YLV	32.60	289	iP	23	08.70	-0.4
ISK	32.77	290	eP	23	09.00	-1.5
ITU	32.80	290	iPc	23	11.00	0.3
KHL	32.85	285	iP	23	11.50	0.2
ELL	32.88	282	eP	23	11.90	0.3
CFR	33.15	298	eP	23	13.00	-0.6
PSN	33.18	295	iP	23	16.00	2.0
LOE	33.21	118	iPc	23	15.00	0.5
KSL	33.28	281	eP	23	14.00	-0.9
NST	33.29	122	iPc	23	16.50	1.3
DST	33.31	288	iP	23	15.50	0.3
KOT	33.45	269	eP	23	16.50	0.0
BIR	33.50	300	eP	23	18.00	1.2
DMK	33.66	292	iP	23	18.40	0.2
BNT	33.73	289	iP	23	18.70	-0.1
EDC	33.77	289	iP	23	18.50	-0.7
HLW	33.87	270	ePc	23	21.00	0.9
			e	23	45.00	
			eS	28	40.00	
			e	33	00.00	
			e	34	23.00	
BRD	33.92	299	eP	23	22.00	1.7
KBR	34.08	125	iPd	23	28.00	6.0X
VRI	34.14	299	ePd	23	23.00	0.8
ARG	34.40	282	eP	23	24.50	-0.1
JMB	34.45	293	iPd	23	26.00	1.0
IZM	34.58	286	iP	23	26.50	0.4
PUL	34.59	324	iPd	23	25.00	-0.9
			eS	28	45.00	
BUC	34.64	297	iPd	23	28.00	1.5
MLR	34.69	299	iPd	23	28.50	1.3
BJI	34.99	71	iPc	23	30.08	0.6
	1.0s	440.00nm			6.3mb	
Z	22s	10.80um			5.6Msz	
N	10s	6.31um				
			sP	24	06.00	
			isPd	24	07.49	
			iS	28	57.12	
			eScP	29	38.00	
			eScS	33	39.50	
EZN	35.02	289	iP	23	29.80	0.0
SMG	35.05	285	iPc	23	30.80	0.7
PRK	35.17	288	eP	23	31.80	0.7
ASW	35.24	259	iPd	23	34.00	2.2
			eS	29	00.00	
NNT	35.27	126	ePc	23	33.00	0.9
DIM	35.28	293	eP	23	33.00	1.0
PVL	35.29	295	iPd	23	33.00	1.0
KAP	35.32	281	eP	23	32.50	0.1
MTUR	35.33	298	ePc	23	33.50	1.0
OBO	35.38	232	iP+	23	33.98	0.9
RDO	35.40	291	eP	23	24.50	-8.5X
AKUR	35.42	259	iPd	23	34.50	1.2
KDZ	35.42	292	iP	23	34.00	0.8
AGRW	35.52	259	iPd	23	40.50	6.3X
ANAL	35.74	259	iPd	23	38.00	1.9
TDD	35.77	233	iP+	23	37.41	1.1
AGMR	35.79	259	iPd	23	38.60	2.2
ATA	35.84	232	iP+	23	38.02	1.1
TNR	35.86	299	ePc	23	35.00	-1.9
RZN	35.93	292	iPd	23	38.00	0.3
DRA	35.93	297	ePd	23	39.00	1.5
ARO	36.01	232	iP+	23	38.50	0.0
DAF	36.16	233	iP+	23	40.31	0.7
WHN	36.16	87	Pc	23	40.20	0.7
	1.0s	1100.00nm			6.7mb	
Z	22s	5.20um			5.3Msz	
N	10s	2.40um				
E	10s	6.80um				

pP 24 06.50 114kmX
sP 24 18.00
S 29 10.00
PcS 29 50.00
APE 36.21 284 iPd 23 40.30 0.4
SGH 36.22 233 iP+ 23 41.32 1.1
PGB 36.22 294 iP 23 41.00 1.0
HLD 36.23 233 iP+ 23 41.14 1.0
KSU 36.28 233 iP+ 23 41.62 1.0
BMR 36.32 302 iPc 23 44.00 3.3X
GBR 36.54 233 iPc 23 44.07 1.2
TIA 36.55 77 Pc 23 43.30 0.6
7.0s 5000.00nm 6.5mb X
pP 24 10.00 116kmX
sP 24 20.00
S 29 18.00
NPS 36.62 281 eP 23 43.20 -0.2
MMB 36.68 292 iP 23 44.00 0.2
OUR 36.70 290 eP 23 44.40 0.5
DEV 36.80 299 eP 23 46.00 1.3
HIA 36.81 55 iPc 23 45.57 0.7
ipPd 24 12.22 116kmX
isPd 24 22.65
eHPP 25 14.35
ePP 25 14.90
iS 29 23.45
e 31 45.81
eSS 32 13.62
SRS 36.86 291 eP 23 45.70 0.4
VTS 36.92 294 iP 23 47.00 1.1
CEI 37.02 302 eP 24 06.00 19.4X
SOH 37.08 291 eP 23 54.50 7.3X
PLG 37.10 290 eP 23 47.50 0.2
KKB 37.11 293 iPd 23 48.00 0.6
UZH 37.11 304 iPc 23 49.00 1.7
APA 37.22 337 iPc 23 48.00 0.0
iS 29 26.00
KNT 37.37 292 iPc 23 49.90 0.4
ATH 37.40 286 eP 23 50.50 0.7
THE 37.41 291 eP 23 50.50 0.6
i 29 31.20
i 35 24.00
NUR 37.50 324 iPd 23 50.10 -0.3
0.5s 303.10nm 6.4mb
i 24 12.80
i 24 26.00
i 25 06.00
eS 29 24.00
SUF 37.57 328 iP 23 50.80 -0.1
VAY 37.58 292 iP 23 52.00 0.7
1.2s 0.33nm 3.1mb X
VAM 37.69 282 eP 23 52.50 0.2
BZS 37.72 299 eP 23 53.00 0.6
LIT 37.87 290 iPc 23 53.70 -0.1
TIM 37.99 299 eP 23 58.00 3.3X
OIZ 38.19 107 iPc 23 56.50 -0.1
6.5s 3900.00nm 6.4mb X
N 10s 6.30um
pP 24 22.50 114kmX
sP 24 34.00
PP 25 27.00
S 29 38.00
sS 30 26.50
AGG 38.21 288 eP 23 57.50 0.8
SKO 38.31 293 iPc 23 57.90 0.5
3.2s 310.00nm 5.6mb X
Z 13s 3.56um 5.4MszX
N 18s 5.35um
E 18s 4.31um
i 24 20.00
iPP 25 32.00
iPP 25 54.00
iS 29 44.00
i 30 55.00
iSS 32 45.00
iSSS 33 10.00
iPSP 33 24.00
i 33 58.00
i 34 24.00
LR 42 27.00
VLI 38.31 285 iPd 23 55.80 -1.7
BSI 38.33 139 ePc 23 56.50 -1.3
1.0s 665.50nm 6.5mb
SPC 38.46 305 iPd 23 59.20 0.3
i 24 22.20
i 25 32.20
FNA 38.57 291 eP 23 59.60 -0.1

BEO 38.62 298 eP 24 01.00 1.0
KRA 38.65 306 iPd 23 59.70 -0.5
0.8s 259.00nm 6.1mb
Z 18s 7.00um 5.5Msz
E 18s 8.20um
i 24 03.30
i 25 27.00
iS 29 48.00
GZH 38.68 99 iPc 24 01.00 0.3
5.0s 7200.00nm 6.8mb X
Z 40s 14.90um 5.5MszX
N 12s 5.70um
E 10s 3.60um
pP 24 29.00 124kmX
sP 24 39.00
PSZ 38.74 303 iP 24 02.60 1.5
OHR 38.93 292 iP 24 00.30 -2.4
0.7s 0.04nm 2.3mb X
ITM 38.97 286 iPc 24 01.60 -1.4
NJ2 39.20 83 iPc 24 05.50 0.5
5.5s 4200.00nm 6.5mb X
Z 12s 4.90um 5.6MszX
N 10s 4.30um
pP 24 32.00 116kmX
sP 24 43.00
PP 25 42.00
iS 30 00.00
sS 30 45.00
PVY 39.28 294 eP 24 07.30 1.7
IVA 39.29 295 eP 24 07.00 1.3
SOD 39.33 335 iP 24 05.30 -0.3
DL2 39.35 71 iPc 24 08.00 1.9
1.0s 1900.00nm 6.9mb
Z 22s 6.20um 5.4Msz
N 10s 4.30um
E 12s 4.70um
pP 24 31.00 98kmX
sP 24 45.00
PP 25 44.00
S 30 01.00
sS 30 45.00
MCO 39.35 100 iP 24 07.20 0.9
BUD 39.36 302 iPd 24 06.80 0.7
PLE 39.58 296 eP 24 09.00 0.9
IGT 39.61 290 iPc 24 09.50 1.2
VLS 39.74 288 eP 24 08.00 -1.3
HKC 39.74 99 iPc 24 10.80 1.3
SRO 39.81 303 iPd 24 10.80 1.0
TTG 39.82 294 eP 24 10.00 0.1
e 29 36.00
ULC 39.92 294 eP 24 10.00 -0.8
NKY 39.95 295 eP 24 11.20 0.1
KEK 39.97 290 eP 24 10.00 -1.2
SNG 39.97 131 ePc 24 12.20 0.8
1.0s 1606.00nm 6.8mb
eS 30 13.00
BDV 40.17 294 eP 24 12.00 -0.8
SNY 40.18 66 iPc 24 12.60 -0.3
1.0s 700.00nm 6.4mb
Z 20s 14.60um 5.8Msz
N 10s 2.90um
E 11s 6.20um
pP 24 39.50 118kmX
sP 24 50.00
PcP 26 15.00
SS 33 04.00
BRY 40.26 295 eP 24 13.80 0.1
KEV 40.37 338 iP 24 13.00 -1.1
0.8s 237.60nm 6.0mb
i 24 19.90
i 24 39.20
i 25 49.20
eS 30 12.00
HCY 40.38 295 eP 24 14.40 -0.1
AAE 40.52 235 eP 24 18.50 2.2
ZST 40.59 304 iP 24 16.70 0.5
i 25 14.60
i 26 40.10
UPP 40.77 322 iPd 24 16.40 -1.0
0.9s 400.00nm 6.2mb
i 24 22.70
iPP 25 52.50
iS 30 06.00
BLY 40.94 298 eP 24 19.40 0.4
KSP 40.96 308 iPd 24 19.00 -0.2
1.2s 151.00nm 5.7mb
i 24 41.60

i 25 53.00
SOP 41.00 303 iPd 24 21.30 1.7
VKA 41.11 304 eP 24 20.00 -0.4
3.5s 2037.00nm 6.3mb X
i 24 42.50
i 24 46.00
e(PP) 25 57.00
iPcP 26 35.50
esS 30 26.00
LR 35 40.00
CN2 41.18 63 iPc 24 21.00 -0.1
1.0s 400.00nm 6.2mb
Z 16s 8.90um 5.7MszX
pP 24 47.00 113kmX
sP 25 00.00
iPcP 26 18.80
KTK1 41.20 336 iP 24 20.31 -0.6
LCI 41.21 292 P 24 19.60 -1.7
SSE 41.41 83 iPc 24 22.50 -0.5
1.0s 1130.00nm 6.6mb
Z 24s 5.00um 5.3MszX
N 10s 3.20um
pP 24 48.00 110kmX
sP 24 59.50
PP 26 05.00
S 30 32.00
sS 31 15.00
ZAG 41.62 300 iPc 24 25.50 0.9
BRT 41.64 293 P 24 25.20 0.3
HVAR 41.72 296 iPc 24 24.50 -1.0
QZH 41.95 93 iPc 24 28.00 0.4
0.9s 300.00nm 6.1mb
Z 16s 6.10um 5.6MszX
N 12s 4.10um
pP 24 54.00 113kmX
sP 25 06.00
PP 26 14.00
PcP 26 17.50
ScP 30 01.30
S 30 40.00
sS 31 25.00
PRU 42.13 306 P 24 29.00 0.2
1.5s 116.70nm 5.5mb
Z 16s 7.20um 5.6MszX
N 11s 5.50um
E 16s 4.80um
e 24 40.10
pP 26 13.50 598kmX
S 30 36.00
SS 34 00.00
VBY 42.17 300 iPc 24 30.50 1.3
IPM 42.28 133 ePc 24 32.80 2.4
e 25 01.10
ROI 42.43 291 P 24 33.50 2.1
BRG 42.44 308 iP 24 30.50 -0.8
1.4s 300.00nm 5.9mb
i 24 32.00
i 24 43.60
eS 30 44.00
TDS 42.58 291 P 24 33.40 0.8
CSI 42.58 291 P 24 33.60 0.9
LJU 42.59 301 eP 24 33.10 0.5
e 26 40.00
eS 30 49.00
PSI 42.62 137 ePc 24 33.50 0.4
0.9s 238.60nm 6.0mb
CEY 42.71 300 eP 24 34.40 0.8
BRL 42.76 310 eP 24 34.50 0.7
HFS 42.76 322 eP 24 33.00 -0.8
0.6s 298.30nm 6.3mb
Z 16s 0.01um 2.8MszX
LR 40 04.00
MMN 42.78 291 P 24 35.40 1.3
RIY 42.80 300 iPc 24 34.10 -0.2
KHC 42.83 305 iP 24 35.50 0.9
1.0s 67.50nm 5.4mb
Z 16s 7.80um 5.7MszX
N 14s 3.50um
E 16s 4.70um
e 25 13.30
S 30 52.00
CZI 42.84 290 P 24 35.80 1.1
TRO 42.85 336 iP 24 34.12 -0.2
CLL 43.01 309 iPd 24 34.90 -1.0
1.8s 480.00nm 6.0mb
i 25 01.30
VOY 43.03 301 iPd 24 36.30 0.0

05d 05h

MGR		43.04	292	Pc	24	37.00	0.7	PTS		46.68	289	P	25	05.70	0.4	SSF		49.84	304	eP	25	28.10	-1.6
SGO		43.12	293	Pc	24	38.00	1.1	STR		46.71	305	P	25	05.78	0.4	AVF		50.01	304	eP	25	29.70	-1.2
TRI		43.17	300	iPc	24	37.80	0.5	GWF		46.73	306	P	25	06.26	0.6	PLDF		50.04	303	P	25	31.26	0.0
				e	29	56.00		WIT		46.75	311	ePc	25	06.50	0.8	GRC		50.07	305	P	25	31.40	0.0
				e	34	04.00						e	25	17.00		AGO		50.35	303	P	25	33.79	0.2
RBL		43.19	301	P	24	37.50	0.0	WTS		46.77	310	eP	25	06.00	0.1	TKSJ		50.38	74	iP+	25	33.70	-0.2
SOI		43.21	289	Pc	24	37.70	0.0			1.0s		152.00nm		5.7mb		BGF		50.40	304	eP	25	32.40	-1.6
KBA		43.24	302	iPd	24	37.70	-0.4	BER		46.94	322	eP	25	07.00	0.0	LBL		50.49	302	P	25	35.11	0.5
		2.1s	792	.00nm		6.1mb		RUP		46.97	307	eP	25	08.12	0.6	PYM		50.51	303	P	25	35.01	0.1
				i	24	57.30		ASK		47.00	322	eP	25	07.60	0.0	MAF		50.68	303	eP	25	35.10	-1.0
				i	25	16.30		WLS		47.01	305	P	25	07.65	-0.3	TCF		50.90	303	eP	25	36.40	-1.4
				e(S)	30	31.00		PCP		47.02	300	Pc	25	07.45	-0.6	KKM		51.26	116	iPc	25	42.30	1.4
DUI		43.48	294	P	24	40.50	0.5	CDF		47.06	305	P	25	08.06	-0.3	TSRJ		51.27	71	P	25	39.80	-0.9
ATN		43.64	289	P	24	41.30	0.1	BBS		47.09	304	P	25	07.74	-0.8	LSF		51.36	304	eP	25	39.30	-2.0
FVI		43.70	302	P	24	41.20	-0.3	ORX		47.16	301	Pc	25	07.45	-1.8	CAF		51.38	302	eP	25	40.50	-0.9
MOX		43.94	308	ePc	24	44.00	0.5	ORO		47.16	301	P	25	07.70	-1.5	WKYJ		51.48	73	P	25	42.30	0.0
		1.7s	226	.00nm		5.7mb		ECH		47.17	305	P	25	08.79	-0.4	ETER		51.63	298	iPc	25	43.20	-0.1
	Z	16s		8.60um		5.8MszX		PGF		47.20	297	eP	25	08.20	-1.3	RJF		51.64	302	eP	25	42.50	-0.9
	N	16s		9.10um				SUE		47.20	323	eP	25	10.10	1.0	LDF		51.81	307	eP	25	42.70	-1.9
				i	24	57.00						e	26	57.00		FLN		52.00	307	eP	25	44.00	-2.0
SDI		43.94	295	P	24	43.70	0.0	CKI		47.24	300	P	25	09.10	-0.6			0.7s	120	.50nm		6.0mb	
MDJ		43.96	61	iPc	24	44.50	0.8	MOF		47.26	304	P	25	09.69	-0.3	LPO		52.05	302	eP	25	44.90	-1.5
	Z	15s		9.20um		5.8MszX		FIN		47.34	299	Pc	25	09.40	-1.1			0.8s	88	.60nm		5.8mb	
	N	10s		8.30um				MEM		47.48	308	iPc	25	11.50	0.0	MTMJ		52.25	69	iP+	25	47.30	-0.9
				epP	25	11.00	115kmX	BSF		47.49	304	P	25	11.45	-0.3	LFF		52.27	302	eP	25	47.20	-0.9
				esP	25	22.00		ENN		47.51	309	eP	25	12.00	0.3	YSS		52.30	55	iPc	25	50.00	1.7
				ePP	26	27.50				0.9s		75.00nm		5.5mb						iS	33	06.00	
				PcS	30	20.00						e	25	14.50		GRR		52.34	307	eP	25	46.30	-2.2
				S	31	09.00						e	25	24.00		MFF		52.38	304	eP	25	46.50	-2.3
AQU		44.09	296	Pc	24	45.70	0.9	ROB		47.55	300	Pc	25	11.25	-1.0	ESEL		52.44	295	eP	25	49.20	-0.2
NSS		44.14	328	iP	24	43.88	-1.0	WLF		47.55	307	P	25	18.00	6.0X	LPF		52.55	306	eP	25	47.80	-2.3
ARV		44.17	297	Pc	24	46.30	0.9	LOMF		47.57	304	P	25	11.86	-0.5			0.9s	79	.90nm		5.7mb	
LOF		44.25	333	iPc	24	44.37	-1.3	IMI		47.63	299	Pc	25	12.89	0.0	SAP		52.56	60	eP	25	49.00	-1.2
MNO		44.28	289	P	24	48.00	1.3	HAU		47.75	305	eP	25	12.40	-1.2	MAJO		52.57	69	iPc	25	48.81	-1.6
GRF		44.30	306	iPd	24	47.50	1.1			0.8s		104.90nm		5.7mb						e	25	51.13	
		1.6s	413	.00nm		6.0mb		LSD		47.77	301	Pc	25	13.81	-0.3					epP	26	15.63	112kmX
	Z	18s		8.00um		5.7Msz		RSP		47.77	301	Pc	25	11.55	-2.4					isPd	26	26.88	
				e	24	59.80		SAOF		47.85	299	P	25	15.05	0.6	MAT		52.57	69	iPc	25	48.90	-1.5
				e	25	09.20		ENR		47.88	300	Pc	25	14.12	-0.7		Z	20s		3.55um		5.4Msz	
				e	25	23.00		DOI		47.93	300	Pc	25	13.60	-1.6					eS	33	07.00	
MEU		44.35	288	Pc	24	47.90	0.8	AUTN		47.94	299	P	25	16.03	0.6	MRRJ		52.59	61	P	25	49.20	-1.2
RSM		44.42	298	Pc	24	48.40	1.0	VITF		47.94	305	P	25	14.88	-0.2	AOMJ		52.72	63	eP	25	51.20	-0.2
ASS		44.46	297	P	24	48.60	0.8	STV		47.94	300	Pc	25	14.22	-1.1	IIDJ		52.75	70	eP	25	50.60	-1.2
FUR		44.47	304	iPc	24	48.50	0.7	SBF		47.96	299	P	25	15.88	0.5	NIIJ		52.90	68	iP+	25	51.30	-1.5
		1.4s	405	.00nm		6.0mb		BAG		48.02	102	ePc+	25	16.90	0.7	ASAJ		53.13	59	P	25	53.20	-1.2
CTI		44.57	301	P	24	48.50	-0.2			1.0s		1102.00nm		6.6mb		EPF		53.15	300	eP	25	52.30	-2.3
MNS		44.60	296	P	24	49.10	0.2	AURF		48.03	299	P	25	16.40	0.4			0.7s	68	.90nm		5.8mb	
RGS		44.62	325	iP	24	47.70	-1.0	LPG		48.03	301	eP	25	15.30	-0.9	YAMJ		53.32	66	P	25	55.40	-0.4
RMP		44.72	295	P	24	49.90	0.0			0.8s		188.90nm		6.0mb		CHJJ		53.34	69	iP+	25	54.70	-1.3
RDP		44.72	295	P	24	50.20	0.2	PZZ		48.03	300	Pc	25	14.53	-1.5	JAU		53.64	300	P	25	57.98	-0.3
GIB		44.77	289	Pc	24	49.50	-0.9	REVF		48.04	299	P	25	16.20	0.2	OGE		53.66	300	P	25	57.46	-0.9
CRE		44.84	298	P	24	51.50	0.6	TOUF		48.06	299	P	25	16.98	0.7	ESCF		53.76	300	P	25	58.19	-0.9
OGA		44.85	302	iPc	24	50.40	-0.6	SHNJ		48.07	75	eP	25	15.70	-0.5	EBR		53.79	297	iP	25	59.00	-0.2
				i	24	53.50		KBS		48.12	347	iPd	25	16.50	0.4					eS	33	25.00	
SFI		44.85	298	P	24	52.50	1.7	RRL		48.15	301	Pc	25	16.89	-0.1	EROQ		53.85	297	eP	25	59.20	-0.5
PGD		44.95	298	P	24	53.50	1.7	MVIF		48.15	299	P	25	17.37	0.4	TSM		53.85	116	ePd	25	59.60	-0.4
MCT		45.18	289	P	24	54.70	1.0	BNI		48.19	301	Pc	25	17.20	0.0			1.0s	2196	.90nm		7.1mb	
TIK		45.19	22	iPc	24	52.50	-0.6	FOUF		48.25	300	ePc	25	17.50	0.0	ATE		53.85	300	P	25	58.82	-0.9
				iS	31	24.00						i	25	17.95		LHE		53.85	300	P	25	59.62	-0.2
FAI		45.25	289	P	24	55.90	1.8	CALN		48.37	299	P	25	18.84	0.2	MADF		53.91	300	P	25	58.08	-2.1
SAL		45.42	301	P	24	56.10	0.8	KUMJ		48.45	77	eP	25	19.10	-0.1	ISSF		53.93	300	P	26	00.23	-0.2
MME		45.60	299	P	24	58.50	1.5	DOU		48.46	308	iPc	25	19.60	0.5	ELYF		54.02	301	P	25	59.41	-1.6
KGM		45.69	132	ePc	24	58.80	1.1			1.0s		16.70nm		4.8mb	X	BOH		54.06	300	P	26	00.45	-0.9
		0.7s	1173	.90nm		6.8mb						e	25	45.70		HOOJ		54.15	60	P	26	00.60	-1.3
				e	25	06.00						iPcP	26	44.00		KAKJ		54.16	69	iP+	26	00.20	-1.9
MAO		45.69	296	Pc	24	57.40	-0.1					S	32	13.00		OFUJ		54.17	65	P	26	00.90	-1.2
BDI		45.70	299	P	24	57.60	0.0	UCC		48.48	309	P	25	21.00	1.9	BST		54.41	307	P	26	03.17	-0.6
PII		45.83	298	Pc	24	58.30	-0.2					e	25	46.00		DLE		54.46	314	eP	26	03.40	-0.6
TOD		45.86	307	ePc	24	59.02	0.2					S	32	14.00		DMU		54.50	315	eP	26	03.60	-0.7
MOL		45.91	325	eP	24	58.80	-0.1	SNF		48.58	308	Pc	25	20.40	0.5	ECP		54.67	313	iPc	26	04.70	-0.9
SAX		45.91	303	ePc	24	59.00	-0.5	FRF		48.59	299	eP	25	18.80	-1.4			0.7s	171	.00nm		6.1mb	
MDI		45.95	301	P	24	59.30	-0.1	LMR		48.75	299	eP	25	19.80	-1.6	ECB		54.86	313	iPc	26	06.40	-0.5
TNS		46.00	307	eP	25	00.80	0.9			1.1s		114.20nm		5.7mb				1.2s	459	.00nm		6.3mb	
LVI		46.04	290	P	25	01.00	0.7	LRG		48.82	299	eP	25	20.90	-1.0	DCN		54.86	314	iPd	26	06.40	-0.6
BLS2		46.15	320	eP	25	01.80	0.8			0.7s		93.00nm		5.8mb				0.8s	205	.00nm		6.2mb	
BLS1		46.20	320	eP	25	01.90	0.5	KAGJ		49.03	78	P	25	23.20	-0.5	KUSJ		54.88	59	P	26	05.10	-2.1
ODD1		46.30	321	eP	25	02.30	0.2	SHK		49.12	74	iPc	25	24.00	-0.4	ECHE		55.28	296	eP	26	10.40	0.2
				e	26	57.00				1.0s		1128.00nm		6.7mb		ACU		55.29	295	eP	26	10.00	-0.3
BOB		46.34	300	Pc	25	03.90	1.2	OCP		49.44	103	eP	25	28.00	1.1	LWI		55.48	235	iPc	26	11.00	-1.1
BLS3		46.36	320	eP	25	03.10	0.4	YONJ		49.49	72	eP	25	25.70	-1.4	LWI		55.48	235	iPd	26	12.50	0.4
SLE		46.38	304	ePc	25	02.50	-0.4	LBF		49.54	304	eP	25	25.50	-2.0	ETOR		55.59	298	iP	26	11.80	-0.7
ZLA		46.50	304	ePc	25	03.20	-0.7	LOR		49.55	304	eP	25	25.80	-1.7	EALH		56.27	295	eP	26	17.20	-0.1
HYA		46.51	323	eP	25	03.60	-0.1			0.8s		62.90nm		5.6mb		AKU		56.65	330	iP	26	20.80	1.2
				e	26	54.00		SSB		49.60	302	P	25	27.75	-0.1			1.0s	180	.00nm		6.0mb	
VAI		46.57	301	P	25	03.40	-0.9	SMF		49.72	304	eP	25	27.40	-1.4	BKB2		56.90	121	ePc	26	29.00	7.0X
ABH		46.63	307	ePc	25	05.45	0.6	NAI		49.73	228	iPc	25	30.00	0.6			1.0s	1109	.00nm		6.8mb	
FEL		46.68	304	ePc	25	04.82	-0.5			0.7s		17.12nm		5.1mb	X	VAL		57.02	313	eP	26	20.00	-2.4

GUD 57.14 299 iPc 26 22.80 -0.8
ENIJ 57.21 294 eP 26 23.80 -0.2
TOL 57.36 298 iPc 26 26.79 1.8
1.3s 1153.85nm 6.7mb
ipPd 26 51.62 101kmX
eS 34 15.28
DAV 57.55 107 eP+ 26 27.00 0.5
1.9s 3326.32nm 7.0mb
EBAN 57.86 296 iP 26 28.00 -0.5
BCAO 58.04 249 iPc 26 28.04 -2.0
0.7s 436.00nm 6.6mb
ipPd 26 54.03 106kmX
esPd 27 05.95
ePPP 30 16.19
AFC 58.06 295 eP 26 29.00 -1.1
ASMO 58.16 295 iPd 26 29.00 -1.7
EMON 58.24 303 eP 26 31.00 -0.1
APHE 58.29 295 iPd 26 30.60 -1.1
ACHM 58.33 295 iPd 26 30.50 -1.4
AAPN 58.46 295 iPd 26 30.50 -2.3
ERUA 58.52 302 iPc 26 33.20 0.2
ALOJ 58.53 295 iPc 26 31.50 -1.8
ATEJ 58.54 295 iPc 26 31.50 -2.0
REY 58.68 329 iP 26 35.80 2.0
EPLA 58.72 299 eP 26 34.50 0.0
TRT 59.00 130 iPc 26 34.50 -2.1
0.8s 307.40nm 6.4mb
EHOR 59.05 296 iP 26 36.50 -0.2
STS 59.28 303 eP 26 38.20 0.0
EPRU 59.40 295 eP 26 38.00 -1.2
EJIF 59.80 295 eP 26 40.40 -1.5
NKM 60.19 294 iP 26 43.50 -1.1
i 26 46.00
i 26 50.00
i 27 55.80
EVAL 60.23 296 iPc 26 44.60 -0.2
IFR 60.85 292 iPc 26 48.50 -0.8
LIS 61.44 299 iPc 26 53.30 0.3
MKS 61.53 122 iPd 26 54.30 0.4
CLK 62.60 220 iPd 27 01.50 0.6
AVE 62.65 292 iPd 27 00.50 -0.6
i 27 17.50
i 27 39.00
i 28 09.50
i 29 45.50
ILT 63.16 23 iPc 27 03.40 -0.6
iS 35 27.00
KRI 66.42 224 iPc 27 23.30 -2.5
iP'P' 55 54.60
AAI 66.60 114 eP 27 27.50 0.7
BRW 66.72 15 ePc 27 26.80 -0.1
MBC 66.78 3 ePc 27 27.10 -0.1
1.0s 354.00nm 6.2mb
KUPT 67.91 123 ePd 27 43.00 8.0X
0.5s 518.60nm 6.7mb
SMY 68.41 40 ePc 27 37.20 -0.5
GUMO 68.93 89 iPc 27 38.89 -2.5
1.2s 777.78nm 6.4mb
ipPd 28 06.70 111kmX
eS 36 24.00
PJG 68.93 89 eP 27 38.50 -2.9
GUA 69.00 89 eP 27 38.40 -3.4X
1.1s 313.92nm 6.1mb
BUL 69.65 223 iPd 27 44.40 -1.4
iS 36 43.50
iP'P' 55 48.30
CFTV 70.04 291 iPc 27 48.00 -0.1
i(PP) 28 37.50
i(PPP)28 49.30
TLE 71.25 113 ePd 27 40.00 -15.5X
GGC 71.36 291 iPc 27 57.00 0.9
i(PP) 28 47.00
SHGH 71.53 263 eP 27 55.50 -1.7
IMA 71.54 18 iPc 27 56.10 -0.6
KOGH 71.60 264 eP 27 57.00 -0.6
CTFE 71.63 292 iP 27 58.30 0.7
i(PP) 28 48.00
TEGH 71.67 263 eP 27 57.00 -1.0
LEGH 71.81 263 eP 27 58.00 -0.8
WEGH 71.96 263 eP 27 58.00 -1.7
WIGH 72.33 263 eP 28 01.00 -0.9
NANU 72.50 137 iPc 28 02.20 -0.5
TBT 72.74 293 iPc 28 04.60 0.4
i(PPP)29 15.50
CHIE 73.30 292 iP 28 08.50 1.1
INK 73.34 9 iPc 28 07.20 0.3
0.4s 304.00nm 6.5mb

pP 28 35.00 109kmX
TTA 73.44 21 iPc 28 08.10 0.3
ADK 73.47 37 P 28 06.80 -1.2
MBL 73.81 133 iPc 28 10.00 -0.3
COL 73.89 16 iPc 28 10.24 0.0
ipPd 28 37.89 108kmX
esPd 28 48.98
iS 37 34.29
e 38 07.90
FBA 73.89 16 iPc 28 10.30 0.1
SLR 74.39 220 iPc+ 28 13.00 -0.8
1.3s 369.23nm 6.0mb
Z 18s 4.12um 5.8Msz
e 37 42.50
FRB 74.60 343 eP 28 14.00 -0.3
0.8s 280.00nm 6.1mb
MTN 74.99 119 eP 28 16.70 -0.5
SVW 75.00 22 ePc 28 17.70 0.9
KIC 75.02 267 Pc 28 16.20 -1.3
0.6s 55.50nm 5.6mb
TIC 75.07 267 P 28 16.48 -1.4
KSR 75.22 221 iPc 28 17.20 -1.4
0.7s 127.50nm 5.8mb
LIC 75.33 267 Pc 28 17.84 -1.5
0.5s 42.50nm 5.5mb
S 37 47.00
KNA 75.41 123 eP 28 19.00 -0.6
0.9s 589.00nm 6.4mb
PRY 75.78 220 iPd 28 21.00 -0.7
0.7s 75.00nm 5.6mb
DWY 76.35 13 Pc 28 24.10 -0.2
PMR 76.39 19 ePc 28 24.10 -0.4
1.1s 1250.00nm 6.6mb
Z 18s 3.30um 5.7Msz
TOA 76.67 17 iPc 28 27.00 0.8
SEK 76.85 219 iPc 28 27.00 -0.7
0.2s 966.67nm 7.3mb X
e 38 06.00
MEKA 77.37 138 eP 28 30.00 -0.4
0.3s 17.00nm 5.3mb
SDN 77.92 27 eP 28 32.70 -0.3
MRWA 78.15 141 iPc 28 33.70 -0.9
WIN 78.21 230 iPc 28 35.00 -0.3
0.9s 58.82nm 5.4mb
Z 22s 3.70um 5.7Msz
BLF 78.22 219 iPc 28 35.00 -0.1
0.5s 221.62nm 6.2mb
KDC 78.67 22 iPc 28 37.40 0.3
MID 78.96 19 eP 28 40.20 1.6
1.2s 2083.30nm 6.8mb
BAL 79.63 141 iPc 28 41.10 -1.5
0.7s 48.00nm 5.4mb
HYT 79.68 14 Pc 28 43.40 0.7
MBO 80.07 280 iPc 28 46.60 1.3
iS 38 43.60
YKU 80.39 15 ePc 28 48.70 2.4
1.2s 3255.20nm 7.0mb
MUN 80.50 142 eP 28 45.40 -1.8
1.0s 940.00nm 6.6mb
KLB 80.96 141 iP 28 48.10 -1.5
0.8s 264.00nm 6.1mb
WARB 81.66 132 iPd 28 53.20 -0.2
0.7s 57.00nm 5.5mb
SCH 81.67 337 ePc 28 53.20 0.1
0.8s 108.00nm 5.7mb
pP 29 19.00 98kmX
NWAO 81.78 142 iPc 28 52.30 -1.5
0.7s 208.00nm 6.1mb
Z 20s 0.90um 5.1Msz
WB5 82.09 122 eP 28 54.50 -1.2
WRA 82.11 122 Pc 28 55.70 -0.2
0.8s 121.80nm 5.8mb
COOL 82.14 138 iPc 28 54.50 -1.3
0.8s 264.00nm 6.1mb
RKG 82.60 143 eP 28 59.50 1.5
0.7s 912.00nm 6.8mb
SIT 83.60 14 ePc 29 04.40 1.5
ASPA 84.40 125 iPc 29 06.40 -1.1
1.1s 231.00nm 6.0mb
Z 22s 1.21um 5.2MszX
eS 39 02.90
LR 45 04.60
PMG 84.56 106 eP 29 08.00 -0.3
RAB 85.27 99 eP 29 02.00 -10.0X
e(S) 39 52.00
FORR 85.97 134 iPd 29 14.70 -0.3
0.4s 99.00nm 6.2mb

QIS 86.15 119 eP 29 14.50 -1.7
1.0s 142.00nm 5.9mb
e 29 23.00
FFC 88.41 356 iPc 29 27.00 0.4
0.7s 282.00nm 6.4mb
CBM 88.81 333 P 29 29.70 1.0
EDM 90.01 3 iPc 29 35.00 0.7
0.7s 525.00nm 6.8mb
pP 30 00.50 95kmX
CTA 90.59 115 iPc+ 29 36.00 -1.2
1.2s 203.13nm 6.2mb
i 29 45.00
i 29 54.50
i 33 10.00
i 40 47.00
CTAO 90.59 115 iPc 29 36.45 -0.8
epPd 30 04.42 105kmX
esPd 30 16.01
ePP 33 02.02
eHPP 33 02.85
RSON 91.47 351 ePd 29 40.70 -0.3
1.4s 424.90nm 6.5mb
Z 19s 6.71um 6.1Msz
HBVT 92.76 335 P 29 48.60 1.6
pP 30 13.80 93kmX
WNY 93.00 336 P 29 48.80 0.6
RSNY 93.08 336 iPc 29 50.00 1.5
1.1s 81.99nm 6.0mb
pP 30 15.60 95kmX
QLP 93.29 121 eP 29 50.00 0.5
PNT 93.47 7 iPc 29 51.30 1.0
0.9s 425.00nm 6.8mb
pP 30 17.00 95kmX
PGC 93.68 10 eP 29 52.00 0.8
1.4s 467.00nm 6.7mb
MCW 93.74 9 P 29 53.10 1.6
HRV 93.87 333 iPc 29 56.01 3.9X
eSKS 40 17.28
e 41 06.66
ePS 42 04.88
NEW 94.74 6 ePd 29 56.20 0.0
0.8s 126.80nm 6.4mb
GMW 94.85 9 P 29 58.50 1.8
DPW 95.04 6 P 29 58.50 0.9
ADE 95.18 130 eP 29 58.30 0.2
1.0s 70.00nm 6.0mb
LON 95.76 9 ePc 30 01.70 0.8
TBR 96.01 335 P 30 02.20 0.2
SHW 96.26 9 P 30 05.30 2.1
ELF 96.33 340 P 30 04.30 0.9
LDN 96.43 340 P 30 04.60 0.7
LVNJ 96.49 335 P 30 04.80 0.6
DLA 96.71 340 P 30 05.70 0.6
LRM 97.44 3 ePc 30 09.50 0.8
CLE 97.97 340 iP 30 11.90 1.0
RSSD 99.10 357 ePc 30 16.40 0.2
CVL 100.27 336 Pdiff 30 22.20 1.1
BW06 100.55 1 iPdiff30 23.60 1.0
0.7s 5.73nm 5.3mb
BWA 100.99 125 ePdiff30 26.00 1.5
e 34 37.70
LBFM 101.06 10 Pdiff 30 26.60 1.7
WDC 101.72 11 ePdiff30 28.20 0.7
epP 30 56.50
ePP 34 31.50
ePKKP 46 32.90
MIN 102.09 10 ePdiff30 29.40 0.0
ORV 102.88 10 ePdiff30 32.20 -0.5
DAU 102.88 2 Pdiff 30 36.10 2.9X
GLD 103.51 357 Pdiff 30 47.00 11.2X
Z 20s 9.50um 6.3Msz
CCM 103.54 346 ePdiff30 39.87 4.2X
iSKS 41 06.46
isSKS 41 43.54
eSDIF 42 15.49
ePS 43 47.36
GOL 103.57 357 ePdiff30 37.40 1.3
1.4s 49.61nm 6.2mb
Z 20s 8.00um 6.2Msz
KVN 103.79 7 Pdiff 30 38.40 1.3
CMB 104.52 9 ePdiff30 41.50 1.4
epP 31 09.80
e 31 33.20
ePP 35 06.00
ePKKP 46 25.10
RSCP 104.59 341 Pdiff 30 52.00 11.5X
Z 20s 4.52um 6.0Msz

05d 05h

MSU	104.75	3	Pdiff	30	44.10	2.7X
TNP	104.84	7	iPdiff	30	43.70	1.9
	0.9s	11.39nm			5.9mb	
			pP	31	13.50	
GCC	105.28	11	ePdiff	30	43.60	0.2
FRI	105.64	9	ePdiff	30	45.50	0.5
			ePP	34	59.00	
			ePKKP	46	21.60	
LLA	105.84	10	ePdiff	30	47.00	1.0
PRS	106.06	11	ePdiff	30	47.80	0.8
TUL	106.42	349	ePdiff	30	49.80	1.2
	1.3s	16.80nm			6.0mb	
	Z 18s	0.91um			5.4Msz	
			e	35	00.00	
			e	36	20.50	
			e	44	26.00	
SIO	106.66	349	ePdiff	30	50.80	1.2
CLC	107.04	8	ePdiff	30	53.00	1.6
			e	35	21.00	
ISA	107.10	8	ePKP	35	12.00	11.3X
BCH	107.37	10	Pdiff	30	57.90	4.9X
GSC	107.63	7	ePdiff	31	00.00	5.9X
			e	35	03.00	
GSC	107.63	7	ePKP	35	03.00	1.3
SBB	108.13	8	ePdiff	30	58.00	1.7
			e	35	04.00	
ANMO	108.34	358	ePdiff	30	59.26	1.9X
			iSKS	41	32.08	
			iHSKKS	42	24.72	
			iSDIF	43	01.08	
			iPS	44	38.14	
ALQ	108.35	358	iPdiff	31	00.40	3.0X
	1.3s	14.42nm			6.0mb	
	Z 22s	6.11um			6.1Msz	
PAS	108.63	8	ePdiff	31	02.68	4.2X
			eSKS	41	33.76	
			ePS	44	44.46	
RVR	108.87	8	ePKP	35	05.00	1.0
GLA	110.03	5	ePKP	35	08.00	1.7
BAR	110.24	7	ePKP	35	09.00	2.4X
LLAV	118.49	312	ePKP	35	23.00	0.0
OLLA	118.85	311	iPKP	35	24.00	0.4
FISA	119.34	314	ePKP	35	25.00	0.5
CEOS	120.54	312	ePKP	35	27.00	0.1
BAO	122.49	275	ePKP	35	20.30	-10.2X
UPA	126.64	323	iPKPc	35	38.50	0.0
SPA	126.86	180	ePKP	35	37.10	-0.5
	1.3s	227.50nm				
PSO	132.08	315	ePKP	35	39.00	-10.4X
CCH	137.77	286	ePKP	35	49.00	-11.0X
ZOBO	138.61	289	PKP	35	51.00	-10.9X
	1.0s	44.00nm				
			i	35	57.50	
			LR	23	22.00	
LPB	138.75	289	PKP	35	58.00	-3.9X
	1.1s	81.01nm				
			i	36	03.60	
TPT	139.13	68	ePKP	36	02.00	0.0
	1.2s	70.00nm				
PPT	139.25	73	ePKP	36	03.00	0.8
	1.2s	215.00nm				
TVO	139.62	73	ePKP	36	05.00	2.0
	1.2s	125.00nm				
AIA	141.67	208	ePKP	36	04.50	-0.6
NNA	142.03	303	iPKP	36	02.30	-5.1X
	0.8s	37.31nm				
PT10	142.18	303	ePKP	36	05.00	-2.6X
PT02	142.44	301	iPKPc	36	05.00	-3.1X
TCA	143.28	266	e(PKP)	36	05.80	-3.3X
MRA	144.55	264	ePKPd	36	10.10	-1.0
ANT	144.59	281	iPKP	36	11.50	0.1
CFA	146.29	267	iPKPd	36	15.50	1.3
RTLL	146.38	268	ePKPd	36	15.00	0.7
RTCB	146.70	268	iPKPd	36	17.00	2.1
RTRS	146.74	270	ePKP	36	16.90	2.1X
RFA	147.46	262	ePKP	36	17.20	1.2
FCH	148.49	265	ePKPd	36	19.80	1.8
PCH	148.76	265	ePKP	36	21.00	2.9X
			i	36	23.00	
SAN	148.83	265	ePKP	36	19.50	1.4
ROCH	148.96	266	ePKP	36	19.40	0.8
			i	36	23.50	
CHCH	148.96	264	ePKP	36	23.00	4.6X
TACH	149.11	265	ePKPc	36	19.30	0.8
LCCH	149.56	265	ePKP	36	24.50	5.3X
LNV	149.57	265	ePKP	36	19.00	-0.1
	S.D. = 1.0	on 552 of 598 obs.				

FEB 05, 1990 07h 03m 13.38± 0.46s
14.044 N ± 3.3km 61.160 W ±23.1km
DEPTH = 179.5 ± 4.9 km
4.4mb (1 obs.)
WINDWARD ISLANDS (95)

SLB	0.25	152	eP	03	37.65	-1.0
			eS	03	55.82	
BIM	0.48	10	iPd	03	38.53	-0.8
MVM	0.57	27	iPd	03	39.33	0.7
SOA	0.67	179	eP	03	38.89	-0.2
			eS	03	56.77	
FDF	0.69	1	iPd	03	39.60	0.3
			S	03	58.40	
SSV	0.71	183	eP	03	39.35	-0.2
			eS	03	57.80	
SVV	0.72	184	eP	03	39.32	-0.2
			eS	03	57.37	
CRM	0.74	19	iPd	03	40.21	0.6
			S	04	00.50	
SVB	0.77	187	eP	03	39.56	-0.2
			eS	03	57.45	
BBL	1.50	348	ePc	03	45.77	0.1
			S	04	09.50	
GRW	1.93	195	eP	03	49.67	-0.5
			eS	04	18.03	
DOG	2.03	347	ePc	03	51.55	0.5
PAG	2.04	346	ePc	03	51.67	0.4
			S	04	20.50	
SFG	2.20	359	ePc	03	52.92	0.0
DEG	2.26	2	ePc	03	53.15	-0.6
SEG	2.37	352	eP	03	55.04	0.1
BOT	2.89	171	eP	04	01.18	0.0
			eS	04	36.90	
TCE	3.38	190	eP	04	07.23	0.1
			eS	04	46.83	
TRN	3.38	184	eP	04	07.08	-0.1
			eS	04	45.60	
TBH	3.54	179	eP	04	09.20	0.0
			eS	04	49.43	
TPP	3.71	184	eP	04	12.93	1.5
			eS	04	54.37	
MBC	69.11	347	eP	14	02.00	0.6
	0.6s	4.00nm			4.4mb	
INK	70.54	338	eP	14	09.00	-1.2
	S.D. = 0.6	on 23 of 23 obs.				

FEB 05, 1990 07h 17m 44.53± 1.02s
36.749 N ±10.0km 2.534 E ± 5.7km
DEPTH = 10.0km (geophysicist)
4.3mb (1 obs.)
ALGERIA (396)
mbLg 3.7 (MDD).

ACU	2.93	308	iPnd	18	31.40	-0.6
			eSn	19	02.70	
ESEL	3.03	5	iPn	18	33.80	0.5
			eSn	19	07.60	
EALH	3.34	291	ePn	18	37.00	-0.9
ENIJ	3.82	275	ePn	18	43.80	-0.8
			eSn	19	25.00	
ECHE	3.96	317	ePn	18	46.20	-0.4
			eSn	19	27.00	
EBR	4.37	339	ePn	18	46.00	-6.4X
			ePg	18	57.00	
			eS	19	40.00	
			eSg	19	48.00	
EROO	4.39	338	iPnc	18	53.00	0.2
			eSn	19	39.00	
AFC	4.89	278	ePn	19	00.20	0.2
EBAN	5.22	288	ePn	19	03.20	-1.4
ETER	5.55	2	ePn	19	09.40	0.2
			eSn	20	09.00	
TOL	6.05	303	ePn	19	16.00	-0.2
			ePg	19	37.00	
			eSn	20	18.00	
			eSg	20	41.00	
EPF	6.50	346	Pn	19	23.00	0.4
			Sn	20	31.50	
GUD	6.52	309	ePn	19	22.10	-0.8
			eSn	20	31.00	
IFR	7.06	245	iP	19	33.00	2.5
			i	20	26.50	
			i	21	40.50	
			i	21	46.50	
LMR	7.25	24	Pn	19	32.20	-0.8
			Sn	20	46.50	
LRG	7.31	22	Pn	19	34.00	0.1
			Sn	20	49.00	
FRF	7.50	24	Pn	19	36.20	-0.3
			Sn	20	53.60	
PGF	7.64	39	Pn	19	37.50	-1.1
			Sn	20	57.80	
LPO	7.99	353	Pn	19	43.50	0.1
SBF	8.03	26	Pn	19	43.80	-0.2
			Sn	21	05.80	
CAF	8.18	358	Pn	19	47.00	1.0
IMI	8.24	28	P	19	45.42	-1.5
STV	8.33	24	P	19	47.47	-0.7
ENR	8.34	25	P	19	47.47	-1.0
FOUF	8.41	21	ePnd	19	50.32	1.0
PZZ	8.49	23	P	19	51.17	0.7
DOI	8.53	23	P	19	51.70	0.6
			eSg	19	54.30	
ROB	8.56	27	P	19	50.86	-0.6
RJF	8.58	355	Pn	19	51.50	-0.2
FIN	8.61	28	P	19	50.34	-1.8
RRL	8.77	20	P	19	55.68	1.2
CKI	8.82	28	P	19	53.60	-1.4
			eSg	19	57.80	
PCP	9.02	29	P	19	55.98	-1.8
RSP	9.12	22	P	20	00.19	1.0
LPL	9.31	19	Pn	20	03.70	1.8
LSD	9.37	20	P	20	04.91	2.1
MAF	9.46	0	Pn	20	04.00	0.2
TCF	9.53	359	Pn	20	05.20	0.4
ORX	9.78	23	P	20	08.29	0.1
HAU	11.59	13	Pn	20	32.00	-1.0
DOU	13.42	6	P	20	58.50	1.1
KHC	14.76	30	eP	21	17.30	2.3
CLL	16.36	24	e(P)	21	39.00	3.3X
VRI	20.27	56	ePc	22	21.50	-1.3
HFS	24.48	14	eP	23	05.50	1.0
	0.6s	4.50nm			4.3mb	
	Z 16s	0.00um			0.9MszX	
			LR	42	02.00	
	S.D. = 1.1	on 43 of 45 obs.				

FEB 05, 1990 08h 11m 26.33± 0.62s
43.969 N ± 3.9km 8.682 E ± 4.5km
DEPTH = 9.3 ± 3.1 km
CORSICA (380)
ML 3.2 (LDG), 3.0 (GEN). MD 2.4 (STR).

FIN	0.42	305	Pd	11	34.82	0.0
			S	11	39.15	
CKI	0.54	328	P	11	36.70	-0.5
			eSg	11	43.00	
IMI	0.58	264	P	11	38.44	0.5
			S	11	46.10	
PCP	0.58	350	P	11	37.74	-0.3
			S	11	44.54	
ROB	0.67	299	P	11	39.25	-0.5
			S	11	46.61	
SAOF	0.81	272	Pg	11	42.20	0.0
			Sg	11	53.02	
AUTN	0.91	272	Pg	11	44.13	0.2
			Sg	11	57.33	
SBF	0.91	264	Pn	11	44.50	0.7
			Pg	11	45.30	
ENR	0.95	286	P	11	44.50	0.0
			S	11	56.15	
BOB	0.97	34	P	11	46.10	1.2
			eSg	11	58.90	
REVF	0.98	257	Pg	11	45.75	0.7
			Sg	11	59.78	
AURF	0.98	266	Pg	11	45.76	0.6
			Sg	12	00.53	
STV	1.02	286	P	11	45.72	0.0
			S	11	57.64	
TOUF	1.04	273	Pg	11	46.65	0.5
			Sg	12	00.71	
MVIF	1.11	267	Pg	11	48.06	0.8
			Sg	12	03.33	
DOI	1.16	298	P	11	48.20	0.0
			eSg	12	02.80	
PZZ	1.26	296	P	11	49.79	-0.1
			S	12	04.36	
CALN	1.31	261	Pg	11	51.92	1.1
BDI	1.38	85	P	11	55.10	3.3X
			eSg	12	13.90	
PGF	1.44	171	Pn	11	52.45	-0.2

MME	1.47	81	P	11	56.70	3.5X
			eSg	12	16.00	
FRF	1.53	255	Pn	11	53.10	-0.7
			Pg	11	56.40	
			Sg	12	15.00	
RSP	1.56	320	P	11	53.81	-0.5
			S	12	12.95	
RRL	1.66	306	P	11	56.30	0.4
			S	12	16.53	
LMR	1.70	249	Pn	11	54.80	-1.5
			Sn	12	15.50	
ORX	1.74	344	P	11	56.53	-0.4
LRG	1.76	254	Pn	11	56.40	-0.7
			Pg	12	00.80	
			Sg	12	23.00	
BNI	1.80	308	P	11	58.10	0.3
LSD	1.84	324	P	11	59.60	1.0
LPG	2.06	319	Pn	12	04.40	2.7X
LPL	2.08	319	Pn	12	04.60	2.6X

S.D. = 0.7 on 27 of 31 obs.

FEB 05, 1990 09h 20m 04.41± 0.37s
32.081 N ± 6.1km 98.323 E ± 4.6km
DEPTH = 10.0km (geophysicist)
5.0mb (9 obs.)
SICHUAN PROVINCE, CHINA (307)

LZH	6.08	47	Pc	21	37.00	0.4
	1.0s		43.00nm		5.2mb	
Z	10s		1.20um			
LSA	6.61	251	P	21	51.80	7.4X
KMI	7.94	150	eP	22	09.50	6.6X
XAN	9.11	75	P	22	18.80	-0.1
GYA	9.19	125	P	22	22.00	2.0
GUN	11.56	252	P	22	53.10	0.3
	0.5s		6.00nm		5.2mb	
PKI	12.08	251	P	23	00.70	0.9
	0.4s		5.00nm		5.1mb	
KKN	12.09	253	P	22	59.40	-0.5
	0.6s		6.00nm		5.1mb	
DMN	12.31	252	P	23	02.60	-0.2
	0.5s		5.00nm		5.0mb	
GKN	12.53	255	P	23	05.10	-0.7
	0.5s		5.00nm		5.0mb	
TIY	12.87	60	eP	23	10.20	0.0
CHG	13.22	177	eP	23	13.60	-1.2
CHTO	13.22	177	iP	23	13.80	-1.0
HHC	13.78	47	eP	23	20.00	-2.1
WHN	13.79	92	eP	23	20.50	-1.7
WMQ	14.39	328	eP	23	30.00	-0.2
BDT	14.78	177	eP	23	42.00	6.7X
BJI	16.46	56	eP	24	02.00	5.1X
SNY	22.34	57	Pc	25	04.50	0.8
HYB	23.08	235	eP	25	12.00	0.7
CN2	24.27	53	Pd	25	23.80	1.2
			pP	25	33.00	33kmX
GBA	26.53	231	P	25	49.00	4.9X
	0.7s		2.10nm		3.9mb X	
WB5	62.14	141	eP	30	28.40	0.2
WRA	62.18	141	Pc	30	28.70	0.3
	0.5s		2.10nm		4.6mb	
ASPA	65.03	144	iPc	30	47.70	0.6
	0.4s		3.00nm		4.8mb	
MBC	69.37	9	eP	31	13.50	-0.3
	1.0s		4.00nm		4.5mb	
INK	72.80	18	eP	31	35.00	0.5
DRV	103.43	164	ePdiff	34	11.80	6.1X

S.D. = 1.0 on 22 of 28 obs.

FEB 05, 1990 09h 28m 46.29± 0.72s
36.450 N ± 5.3km 70.462 E ± 4.9km
DEPTH = 205.7 ± 8.7 km
4.6mb (21 obs.)
HINDU KUSH REGION (718)

KSH	5.29	54	P	30	06.00	0.7
			S	31	06.00	
QUE	6.90	206	iPd	30	28.00	1.8
			eS	31	44.70	
MAIO	8.85	272	iPd	30	49.80	-1.7
	0.8s		7.32nm		4.0mb	
			eS	32	22.00	
NDI	9.61	142	iP	31	01.00	-0.3
			iS	32	41.30	
GKN	14.65	121	P	32	04.10	-1.1
WMQ	15.08	56	P	32	10.50	0.0
			sP	33	07.00	
DMN	15.22	121	P	32	12.20	-0.1
KKN	15.22	120	P	32	10.80	-1.6
PKI	15.45	121	P	32	15.00	-0.3
GUN	15.57	119	P	32	15.70	-1.1
POO	18.10	170	iPc	32	47.00	1.7
	0.9s		28.57nm		4.7mb	
			iS	36	33.00	
LSA	18.58	105	P	32	54.00	3.3X
HYB	20.27	157	iPc	33	09.20	1.7
	0.6s		46.70nm		5.2mb	
			eS	36	55.00	
RYD	23.56	247	eP	33	40.50	1.0
GBA	23.59	163	Pd	33	40.30	0.6
	0.6s		17.10nm		4.8mb	
KMSA	27.77	242	iPc	34	17.70	-0.4
MLR	34.43	299	eP	35	17.00	1.0
NUR	37.62	324	iP	35	43.20	0.9
	0.6s		35.20nm		5.2mb	
SUF	37.74	328	iP	35	44.30	1.0
	0.5s		24.90nm		5.1mb	
KRA	38.49	307	eP	35	50.60	0.8
	0.5s		36.00nm		5.2mb	
SOD	39.60	335	iP	35	59.40	0.8
KEV	40.69	338	iP	36	08.80	1.3
	0.6s		17.00nm		4.7mb	
UPP	40.84	322	iP	36	09.70	0.8
HFS	42.84	322	eP	36	25.20	0.0
	0.4s		34.30nm		5.2mb	
BSF	47.31	305	eP	37	00.20	-0.7
	0.6s		6.10nm		4.2mb	
HAU	47.57	305	eP	37	02.50	-0.3
LPG	47.80	302	eP	37	04.90	-0.1
LBF	49.35	304	eP	37	15.30	-1.2
SMF	49.52	304	eP	37	16.90	-0.8
	0.9s		13.10nm		4.4mb	
AVF	49.81	304	eP	37	19.20	-0.7
	0.8s		9.90nm		4.4mb	
TCF	50.70	304	eP	37	26.30	-0.4
	0.9s		8.10nm		4.2mb	
LSF	51.17	304	eP	37	29.30	-0.9
EKA	52.02	316	P	37	36.00	-0.4
	0.8s		12.90nm		4.6mb	
BCAO	57.24	249	iPd	38	14.80	0.3
	0.4s		13.00nm		5.0mb	
MBC	67.41	3	eP	39	22.00	1.2
	0.6s		13.00nm		4.8mb	
BUL	68.79	222	iPd	39	29.80	-0.4
	0.9s		8.40nm		4.5mb	
INK	74.02	9	eP	40	01.50	1.1
KIC	74.35	266	Pc	40	02.30	-0.9
	0.6s		6.00nm		4.5mb	
TIC	74.41	267	P	40	02.44	-1.1
LIC	74.66	266	P	40	03.92	-1.1
	0.7s		5.50nm		4.4mb	
FRB	74.98	342	eP	40	05.00	-1.0
WB5	82.31	121	eP	40	46.20	0.0
WRA	82.33	122	Pd	40	46.20	-0.1
	0.7s		2.20nm		4.0mb	
ASPA	84.58	125	eP	40	57.60	0.0
	0.6s		4.00nm		4.3mb	

S.D. = 1.0 on 43 of 44 obs.

? FEB 05, 1990 09h 29m 34.85± 4.82s
5.914 S ±44.1km 131.371 E ±45.2km
DEPTH = 140.9 ± 24.4 km
4.1mb (2 obs.)
BANDA SEA (280)

TLE	1.40	79	iPc	30	03.00	0.1
			iS	30	23.90	
SLKI	2.06	182	iPc	30	10.20	-0.3
			iS	30	27.80	
MTN	6.89	182	iPc	31	15.40	0.7
			eS	32	21.00	
KNA	10.10	194	eP	31	57.40	-0.1
			eS	33	34.00	
WB5	14.19	168	eP	32	50.80	0.1
WRA	14.24	169	Pc	32	50.90	-0.5
	0.5s		3.60nm		3.9mb	
QIS	16.61	152	eP	33	26.00	5.2X
			eS	36	14.00	
ASPA	17.82	172	eP	33	39.30	3.8X
	0.4s		6.00nm		4.3mb	
			eS	36	40.50	

S.D. = 0.7 on 6 of 8 obs.

? FEB 05, 1990 09h 48m 45.86± 8.24s
34.349 S ±70.9km 71.078 W ±10.2km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

LNV	0.48	325	iPc	48	56.10	-0.1
			iS	49	06.10	
CHCH	0.54	41	iPd	48	57.50	0.3
			iS	49	08.70	
TACH	0.70	10	iPc	48	59.20	-0.2
			iS	49	12.10	
PCH	0.86	33	iPc	49	01.50	-0.2
			iS	49	16.30	
LCCH	0.96	335	iPd	49	03.20	0.2
			iS	49	17.30	
FCH	1.21	33	iPd	49	06.90	0.0
			iS	49	25.50	
ROCH	1.38	2	iPd	49	09.50	0.4
			iS	49	29.20	

S.D. = 0.3 on 7 of 7 obs.

FEB 05, 1990 10h 17m 36.90± 0.62s
43.575 N ± 6.0km 7.973 E ± 4.7km
DEPTH = 11.3 ± 5.2 km
NEAR SOUTH COAST OF FRANCE (379)
ML 2.2 (GEN). MD 1.7 (STR).

IMI	0.34	350	P	17	44.00	0.0
			S	17	47.35	
REVF	0.47	291	Pg	17	46.93	0.4
			Sg	17	54.16	
SAOF	0.51	324	Pg	17	46.74	-0.5
AURF	0.56	304	Pg	17	48.34	0.0
AUTN	0.58	317	Pg	17	48.27	-0.4
			Sg	17	56.27	
FIN	0.66	15	P	17	49.64	-0.2
			S	17	56.79	
MVIF	0.68	299	Pg	17	50.19	-0.1
TOUF	0.68	310	Pg	17	50.60	0.1
ROB	0.72	354	P	17	51.14	0.1
			S	17	58.52	
ENR	0.76	329	P	17	51.72	0.0
			S	18	00.81	
STV	0.82	325	P	17	52.67	0.0
			S	18	02.36	
PCP	1.05	23	P	17	57.04	0.4
			S	18	08.91	
PZZ	1.12	326	P	17	58.25	0.3
			S	18	11.68	
PGF	1.27	143	Pn	18	00.38	-0.1

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

& FEB 05, 1990 10h 23m 25.23s
39.504 N 111.517 W
DEPTH = 10.2km
UTAH (478)
<SLC-P>. ML 3.1 (SLC). Felt (III) at Moroni ond Wales. Also felt ot Mt. Pleasant.

SNO	0.19	185	P	23	29.70	0.1
LVU	0.24	267	P	23	30.60	0.1
EMUT	0.62	60	P	23	37.20	-0.8
DCU	0.91	360	P	23	42.80	0.1
DAU	0.93	12	eP	23	42.70	-0.5
MSU	1.11	208	eP	23	45.90	-0.4
DUG	1.21	305	eP	23	47.60	-0.3
BW06	3.59	24	eP	24	21.60	-0.7
TNP	4.67	254	eP	24	39.00	1.3
GOL	4.75	86	eP	24	39.70	0.9
KVN	5.13	267	eP	24	44.80	0.7
ANMO	6.08	137	eP	25	00.00	2.5
ALQ	6.08	137	eP	24	57.50	0.0
RSSD	7.24	48	eP	25	13.00	-0.9

14 obs. associoted

& FEB 05, 1990 10h 26m 08.10s
38.803 N 122.805 W
DEPTH = 4.0km
NORTHERN CALIFORNIA (36)
<BRK>. ML 3.1 (BRK).

NWRM	0.35	191	eP	26	15.30	0.1
ZSP	0.96	153	ePd	26	26.30	-0.6
BRK	1.02	155	eP	26	27.40	-0.6
BKS	1.03	154	iPc	26	27.40	-0.7
			eS	26	41.60	
ORV	1.26	53	eP	26	31.20	-0.9

05d 10h

PCC	1.34	165	eP	26 31.30	-2.1
			eS	26 48.10	
MHC	1.72	147	eP	26 36.30	-2.9
ARN	1.76	145	eP	26 38.00	-1.7
WDC	1.79	6	e(P)	26 39.60	-0.3
MIN	1.80	31	eP	26 39.20	-1.0
GCC	1.88	160	eP	26 38.90	-2.4
CMB	2.05	111	eP	26 42.40	-1.4
FHC	2.19	336	e(P)	26 49.50	3.6
LBFM	2.64	15	eP	26 54.20	1.9
KVN	3.68	85	eP	27 06.00	-1.2
TNP	4.45	98	eP	27 14.00	-4.1
	16 obs. ossocioted				

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* FEB 05, 1990 10h 53m 07.38± 1.39s
14.317 N ± 7.6km 61.170 W ±23.6km
DEPTH = 33.0km (normol)
WINDWARD ISLANDS (95)
ML 2.0 (FDF).

BIM	0.22	26	iPc	53 14.03	-0.2
			S	53 18.60	
MVM	0.36	48	eP	53 15.86	0.0
			S	53 21.80	
FDF	0.41	3	eP	53 16.80	0.0
			S	53 23.00	
CRM	0.50	30	eP	53 18.12	0.1
			S	53 25.00	
SLB	0.50	166	eP	53 18.15	0.0
			eS	53 22.80	
	S.D. = 0.2		on	5 of 5 obs.	

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* FEB 05, 1990 13h 13m 07.28± 1.45s
39.439 N ± 9.1km 16.407 E ±11.7km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

ROI	0.18	43	P	13 11.40	0.0
TDS	0.23	346	P	13 12.20	0.1
			eSg	13 15.90	
CZI	0.31	224	P	13 13.60	0.0
CSI	0.35	345	P	13 14.70	0.2
MMN	0.55	325	P	13 16.60	-1.9
MGR	0.96	317	P	13 27.10	1.6
			eSg	13 38.90	
	S.D. = 1.4		on	6 of 6 obs.	

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* FEB 05, 1990 16h 13m 19.76± 2.30s
44.215 N ± 6.5km 113.591 W ±21.0km
DEPTH = 5.0km (geophysicist)
EASTERN IDAHO (457)
ML 3.3 (BUT).

HPI	0.62	145	iP	13 32.00	-0.1
MCMT	0.81	41	iPd	13 35.70	-0.4
LTMT	1.11	73	eP	13 41.00	-0.2
BGMT	1.50	47	ePn	13 47.40	-0.2
LRM	1.80	26	ePn	13 51.40	-0.5
IMW	1.94	99	eP	13 54.20	0.2
BUT	1.94	22	ePg	13 56.20	2.3X
			eSn	14 19.10	
			eSg	14 21.70	
LCCM	2.03	36	ePn	13 55.70	0.6
MEMT	2.32	52	ePn	13 59.90	0.4
SXM	2.57	40	ePn	14 03.20	0.3
KVN	6.17	215	e(P)	15 02.50	8.6X
	S.D. = 0.5		on	9 of 11 obs.	

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* FEB 05, 1990 16h 18m 11.25± 2.13s
37.222 N ±19.2km 28.278 E ±16.2km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

CIN	0.41	338	iPgd	18 20.00	0.4
			iSg	18 26.00	
ELL	1.39	109	ePn	18 36.00	-0.8
IZM	1.42	326	ePn	18 37.10	-0.1
KHL	1.48	42	ePn	18 36.90	-1.1
BCK	1.86	82	iPn	18 45.10	1.6
DST	2.40	6	ePn	18 51.00	-0.2
	S.D. = 1.2		on	6 of 6 obs.	

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* FEB 05, 1990 17h 19m 13.73± 0.96s
20.347 S ±16.7km 167.912 E ±20.7km
DEPTH = 33.0km (normol)
4.2mb (3 obs.)
LOYALTY ISLANDS (188)

DZM	2.19	218	iPc	19 47.50	-1.2
			iS	20 18.70	
PVC	2.62	8	iPc	19 54.80	0.1
			iS	20 23.50	
BRS	15.51	240	eP	22 54.00	2.2
			e	23 10.00	
RMQ	18.60	247	eP	23 34.00	3.4X
CTA	20.33	267	iPc	23 57.00	7.1X
	1.1s		32.91nm	4.6mb	
CMS	22.71	236	eP	24 15.00	1.1
WB5	31.47	265	eP	25 33.80	-1.0
WRA	31.49	265	Pc	25 33.80	-1.1
	0.9s		3.20nm	4.2mb	
MTN	35.97	276	iPd	26 13.70	0.1
			e	26 24.00	
CHG	77.98	295	eP	31 21.00	10.2X
CHTO	77.98	295	eP	31 10.00	-0.8
	1.2s		2.43nm	4.1mb	
			pP	31 20.90	35kmX
BRG	143.29	332	ePKP	38 39.20	-6.9X
	1.3s		11.00nm		
MOX	144.45	334	ePKPd	38 53.50	5.4X
SKO	144.45	315	iPKP	38 43.00	-5.4X
KHC	144.70	331	iPKP	38 43.50	-5.2X
OHR	145.27	314	ePKP	38 45.30	-4.6X
GRF	145.34	333	e(PKP)	38 46.50	-3.2X
			e	38 57.00	
KBA	146.25	328	ePKP	38 47.00	-4.5X
	0.4s		1.40nm		
			i(Sg)	38 54.20	
BCAO	146.27	246	iPKPd	38 50.10	-2.2
	0.7s		39.00nm		
			id	39 02.20	
MEM	146.59	339	PKPc	38 49.90	-1.7
DOU	147.49	340	PKPd	38 50.20	-3.0X
CDF	147.95	335	ePKP	38 55.60	1.5
	0.4s		2.20nm		
LOR	150.18	338	ePKP	38 57.80	0.3
	0.5s		2.90nm		
SSF	150.48	338	ePKP	38 58.70	0.8
LPG	150.50	333	ePKP	38 59.60	1.2
LPF	150.97	345	ePKP	38 59.20	0.6
	0.4s		3.40nm		
	S.D. = 1.4		on	15 of 26 obs.	

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* FEB 05, 1990 19h 01m 47.78± 0.99s
33.313 S ± 8.8km 67.854 W ± 9.4km
DEPTH = 10.0km (geophysicist)
MENDOZA PROVINCE, ARGENTINA (139)

RFA	1.54	199	iPc	02 14.90	-0.5
CFA	1.73	349	iPd	02 17.00	-1.1
RTLL	2.04	345	iPd	02 21.50	-1.2
PCH	2.24	261	iPc	02 24.90	-0.7
			iS	02 52.00	
SAN	2.35	266	eP	02 27.00	-0.1
			iS	02 55.20	
CHCH	2.42	254	iPd	02 28.20	0.2
			iS	02 57.70	
TACH	2.60	262	iP	02 31.00	0.4
			iS	03 02.00	
ROCH	2.67	276	iPc	02 32.40	0.6
			iS	03 03.60	
LNV	3.04	257	eP	02 35.00	-1.7
			eS	03 11.70	
LCCH	3.11	266	ePc	02 40.00	2.2
TCA	3.39	55	ePc	02 42.70	0.8
RTRS	3.42	336	ePc	02 43.30	1.1
			S	03 28.20	
	S.D. = 1.2		on	12 of 12 obs.	

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* FEB 05, 1990 19h 36m 46.19± 1.58s
37.066 N ±10.2km 71.851 E ±12.4km
DEPTH = 135.4 ± 20.1 km
4.0mb (2 obs.)
AFGHANISTAN-USSR BORDER REGION (717)

KSH	4.03	52	P	37 49.30	1.9
			S	38 37.50	
QUE	7.98	212	eP	38 40.50	-0.4
			eS	40 07.50	
NDI	9.50	150	iPd	39 02.00	1.1
	0.6s		36.67nm	5.3mb X	
			eS	40 41.70	
MAIO	9.96	269	eP	39 02.00	-5.1X
			eS	40 42.00	
WMQ	13.81	56	eP	39 55.90	-1.5
			S	42 28.50	
GKN	14.06	126	P	39 59.60	-1.0
KKN	14.62	125	P	40 06.40	-1.4
DMN	14.63	126	P	40 08.60	0.6
PKI	14.85	126	P	40 09.80	-1.0
GUN	14.93	124	P	40 10.60	-1.3
LSA	17.70	109	P	40 48.60	2.6X
HYB	20.45	161	eP	41 16.50	1.7
			eS	44 44.50	
GTA	22.06	75	P	41 35.00	4.3X
GBA	23.89	166	Pc	41 49.00	0.5
	0.7s		2.50nm	3.8mb	
XAN	30.19	85	P	42 47.50	1.8
HFS	43.05	321	e(P)	44 32.50	-1.1
	0.3s		1.90nm	4.3mb	
	S.D. = 1.5		on	13 of 16 obs.	

? FEB 05, 1990 21h 14m 30.05± 2.17s
4.718 S ±15.5km 147.928 E ±22.0km
DEPTH = 155.8 ± 15.6 km
4.8mb (2 obs.)
BISMARCK SEA (203)

LAT	2.13	206	iPc	15 08.00	0.5
			eS	15 28.00	
PMG	4.72	189	iPd	15 37.00	-3.7X
			eS	16 20.00	
CTA	15.36	186	iPc	17 58.00	-2.0
QIS	17.70	206	eP	18 25.00	-3.4X
			e	21 31.00	
MTN	18.45	243	eP	18 37.00	0.5
WB5	20.04	220	iP	18 51.70	-1.3
RMQ	21.66	178	eP	19 10.00	0.9
			i	19 12.00	
BRS	23.02	169	eP	19 23.00	0.7
ASPA	23.19	214	iPd	19 24.80	0.8
	0.4s		54.00nm	5.4mb	
			iS	23 19.10	
WARB	29.50	221	iPd	20 22.60	0.8
	0.3s		2.00nm	4.3mb	
FORR	32.00	213	iPc	20 43.20	-0.4
SNY	51.37	337	Pc	23 20.20	-0.5
LZH	57.86	318	P	24 41.50	33.5X
	1.0s		20.00nm		
	S.D. = 1.2		on	10 of 13 obs.	

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* FEB 05, 1990 21h 19m 55.17± 1.80s
36.932 N ± 9.9km 141.377 E ±10.6km
DEPTH = 55.6 ± 15.8 km
4.6mb (7 obs.)
NEAR EAST COAST OF HONSHU, JAPAN(228)

KAKJ	1.21	234	P	20 15.90	-0.2
			S	20 30.90	
MAT	2.57	262	iPd	20 35.80	0.6
			(S)	21 11.00	
MDJ	11.77	314	eP	22 43.00	0.3
CN2	13.94	304	eP	23 10.20	-1.1
TIA	19.49	275	eP	24 22.00	1.6
BJI	19.95	287	eP	24 23.00	-2.2
WHN	23.32	262	eP	25 01.00	2.1
LZH	30.06	280	P	26 02.50	1.2
GTA	32.57	287	eP	26 21.00	-2.3
WMQ	40.86	297	P	27 33.50	0.4
CHTO	41.24	256	e(P)	27 36.00	-0.4
	0.7s		0.48nm	3.4mb X	
KSH	50.44	294	eP	28 51.50	2.3
INK	54.49	27	eP	29 18.00	-0.9
MBC	56.63	16	eP	29 34.00	-0.3
	1.0s		7.00nm	4.7mb	
			pP	29 46.00	42kmX
WB5	56.89	188	eP	29 36.00	-0.7
WRA	56.96	188	Pd	29 36.20	-1.0
	0.9s		6.10nm	4.7mb	
ASPA	60.68	188	eP	30 02.70	-0.2
	0.9s		5.00nm	4.6mb	
GBA	61.18	266	Pc	30 05.70	-0.8
	0.9s		2.90nm	4.4mb	
FFC	73.81	33	iPc	31 25.10	-0.1
	0.8s		8.00nm	4.7mb	
CMB	73.95	54	eP	31 26.80	0.4
LRM	74.24	44	eP	31 28.00	-0.2
NB2	74.27	337	P	31 26.80	-1.0
	0.8s		3.90nm	4.4mb	
FRI	74.99	55	eP	31 33.60	1.3
FRB	76.88	13	eP	31 42.00	-0.5
ALQ	84.68	50	iPd	32 26.20	1.7

1.0s 5.00nm 4.6mb
S.D. = 1.3 on 25 of 25 obs.

FEB 05, 1990 23h 04m 03.89± 0.70s
45.893 N ± 5.8km 13.860 E ± 6.1km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
MD 2.9 (TRI), 2.8 (LJU). ML 1.6 (KBA).

VOY	0.14	10	iPg	04 06.30	-1.0
			eSg	04 08.20	
TRI	0.20	200	iPg	04 08.30	0.1
			iSg	04 12.90	
CEY	0.43	111	e(P)	04 12.40	-0.2
			eSg	04 20.20	
LJU	0.49	72	e(Pg)	04 14.30	0.4
			eSg	04 21.20	
RBL	0.58	340	P	04 16.50	0.7
			eSg	04 24.00	
FVI	1.03	313	P	04 22.90	-0.3
			eSg	04 38.70	
KBA	1.24	343	iPgd	04 27.30	0.3
			iSg	04 45.20	

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

FEB 05, 1990 23h 23m 18.26± 0.36s
44.009 N ± 3.5km 7.445 E ± 3.4km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.0 (LDG), 1.9 (GEN).

AUTN	0.02	223	Pg	23 19.54	-0.9
SAOF	0.08	106	Pg	23 19.54	-1.3
TOUF	0.14	272	Pg	23 21.45	-0.3
SBF	0.15	183	Pg	23 21.60	-0.1
			Sg	23 24.80	
AURF	0.15	215	Pg	23 21.90	0.1
			Sg	23 24.57	
ENR	0.22	355	P	23 23.18	0.1
			S	23 26.05	
MVIF	0.24	242	Pg	23 23.87	0.4
			Sg	23 27.41	
STV	0.25	340	P	23 23.59	0.0
			S	23 26.67	
IMI	0.34	107	P	23 25.88	0.6
			S	23 31.05	
ROB	0.42	47	P	23 27.38	0.5
			S	23 33.13	
PZZ	0.55	334	P	23 29.25	-0.4
			S	23 36.42	
FIN	0.59	70	P	23 30.25	0.1
			S	23 38.22	
FRF	0.73	232	Pg	23 33.00	0.4
			Sg	23 41.80	
LMR	0.96	225	Pg	23 36.40	-0.1
			Sg	23 49.00	
LRG	0.96	235	Pg	23 37.20	0.7
			Sg	23 49.80	

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

FEB 05, 1990 23h 37m 16.02± 0.64s
39.654 N ± 7.4km 20.717 E ± 5.9km
DEPTH = 5.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)
MD 3.3 (ATH).

KEK	0.71	275	ePg	37 30.00	-0.2
KZN	1.04	51	ePb	37 35.00	-1.2
			eSg	37 47.00	
OHR	1.46	2	iPn	37 43.20	0.1
VLS	1.48	184	ePb	37 43.50	0.2
			eSb	38 06.00	
NEO	1.97	99	ePg	37 55.50	5.1X
VAY	2.18	40	ePn	37 54.00	0.5
PLG	2.22	70	ePn	37 54.20	0.2
SKO	2.38	13	ePn	37 56.80	0.5
			iSn	38 26.50	
			iSg	38 31.20	
			i	38 35.20	
ITM	2.65	159	ePb	38 05.00	4.9X
CZI	3.58	264	P	38 13.10	-0.1

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

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* FEB 05, 1990 23h 49m 25.86± 1.47s
36.574 N ± 9.6km 73.248 E ±10.4km
DEPTH = 75.0 ± 18.4 km
4.0mb (5 obs.)
NORTHWESTERN KASHMIR (720)

KSH	3.60	36	P	50 20.50	0.0
			S	51 06.50	
QUE	8.26	221	eP	51 25.00	-0.4
			eS	53 04.20	
NDI	8.55	156	eP	51 31.80	2.7
	0.5s		14.08nm		5.0mb X
			eS	53 06.80	
MAIO	11.09	273	iPd	51 56.30	-7.4X
			eS	53 56.00	
GKN	12.87	128	P	52 26.80	-0.6
	0.4s		18.00nm		5.2mb X
WMQ	13.19	52	eP	52 27.50	-4.0X
KKN	13.43	127	P	52 33.50	-1.2
	0.6s		17.00nm		4.8mb X
PKI	13.66	128	P	52 36.80	-1.1
GUN	13.73	125	P	52 37.60	-1.3
LSA	16.48	109	eP	53 14.80	0.7
HYB	19.65	165	eP	53 55.00	3.7X
GTA	21.10	74	eP	54 07.60	1.4
GBA	23.18	170	Pd	54 31.40	4.8X
	0.7s		4.90nm		4.0mb
CHTO	28.68	121	e(P)	55 18.00	0.2
	1.0s		2.00nm		3.7mb
NB2	45.41	323	P	57 38.20	-0.2
	0.9s		2.80nm		4.1mb
MBC	67.17	3	eP	00 13.00	-0.3
	0.8s		2.00nm		4.1mb
WRA	80.51	123	Pc	01 39.70	8.4X
	0.6s		0.80nm		3.8mb

S.D. = 1.3 on 12 of 17 obs.

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* FEB 05, 1990 23h 57m 04.24± 0.86s
6.371 N ±15.4km 126.007 E ±25.7km
DEPTH = 33.0km (normol)
5.0mb (2 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

WB5	27.35	163	eP	02 48.50	0.0
ASPA	30.83	166	eP	03 18.80	-0.8
	0.4s		3.00nm		4.4mb
BJI	34.67	347	eP	03 53.00	0.2
FORR	37.06	177	iPd	04 14.00	0.9
	0.3s		21.00nm		5.5mb
GUN	43.63	304	P	05 08.20	0.3
PKI	43.89	304	P	05 10.00	-0.1
KKN	44.08	304	P	05 11.40	0.0
DMN	44.15	303	P	05 12.20	0.1
GKN	44.68	304	P	05 15.80	-0.5

S.D. = 0.6 on 9 of 9 obs.

FEB 06, 1990 01h 11m 30.29± 0.49s
38.546 N ± 5.3km 25.746 E ± 5.0km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
ML 3.3 (ATH).

PRK	0.81	30	iPnc	11 46.60	0.6
IZM	1.20	97	ePn	11 51.30	-1.4
SMG	1.20	134	ePb	11 53.00	0.4
EZN	1.36	19	iPn	11 55.20	0.0
APE	1.48	187	ePn	11 57.20	0.1
ATH	1.70	251	ePb	12 02.50	2.4
CIN	2.07	116	eP	12 06.00	0.4
NEO	2.11	292	ePb	12 10.00	3.9X
EDC	2.43	42	ePn	12 06.50	-4.2X
BNT	2.47	42	iPn	12 05.40	-5.8X
DST	2.48	64	ePn	12 11.50	0.1
PLG	2.55	316	ePn	12 12.80	0.4
RDO	2.60	357	ePn	12 12.50	-0.6
VLI	2.88	232	ePn	12 15.30	-1.8
KHL	2.97	93	ePn	12 22.00	3.5X
ITM	3.32	247	ePn	12 23.00	-0.3
KZN	3.54	301	ePn	12 25.60	-1.0
ISK	3.58	44	ePn	12 23.00	-4.0X
DMK	3.62	25	iPn	12 26.90	-0.6
VAY	3.69	320	ePn	12 42.70	14.1X
HRT	3.78	52	ePn	12 31.00	1.0

S.D. = 1.1 on 15 of 21 obs.

% FEB 06, 1990 02h 15m 38.12± 1.76s
44.755 N ± 7.1km 6.804 E ±19.6km
DEPTH = 10.0km (geophysicist)
FRANCE (538)

RRL	0.17	355	P	15 41.84	-0.2
			S	15 45.77	
PZZ	0.33	140	P	15 45.15	0.2
			S	15 51.15	
RSP	0.51	39	P	15 48.23	-0.3
			S	15 56.15	
ENR	0.69	140	P	15 51.61	-0.2
			S	16 00.84	
LSD	0.75	19	P	15 53.38	0.5
			S	16 03.07	

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

FEB 06, 1990 02h 49m 58.01± 0.35s
43.677 N ± 3.8km 12.075 E ± 3.4km
DEPTH = 33.0km (normol)
CENTRAL ITALY (381)
MD 2.9 (TRI). ML 3.1 (LDG), 2.5 (KBA).

CRE	0.10	241	P	50 05.60	1.6
			iSg	50 11.50	
SFI	0.29	327	Pc	50 07.70	2.1
			eSg	50 14.40	
PGD	0.32	308	Pd	50 08.30	2.0
			eSg	50 15.40	
RSM	0.37	47	Pd	50 08.10	1.4
			eSg	50 15.50	
ARV	0.66	106	Pd	50 11.00	0.2
			eSg	50 21.50	
ASS	0.74	145	P	50 11.00	-1.1
			eSg	50 22.00	
MME	1.12	298	P	50 18.10	0.5
			eSg	50 31.10	
PII	1.13	273	P	50 18.00	0.5
			eSg	50 33.40	
BDI	1.14	290	P	50 19.00	1.3
			eSg	50 32.60	
MNS	1.37	161	P	50 20.10	-0.9
			eSg	50 36.80	
MAO	1.43	209	P	50 21.00	-0.9
			eSg	50 38.10	
AQU	1.64	143	P	50 25.50	0.5
BOB	2.18	301	P	50 32.50	-0.2
SAL	2.22	331	P	50 33.50	0.3
			eSn	50 58.00	
RIY	2.35	44	ePn	50 39.60	4.6X
			iSn	50 59.10	
SDI	2.35	146	P	50 35.60	0.4
TRI	2.36	30	e(Pn)	50 32.60	-2.6X
			eSg	50 59.60	
CTI	2.39	353	Pc	50 34.50	-1.3
			eSn	51 01.50	
PGF	2.52	244	Pn	50 37.80	0.2
			Sn	51 06.80	
VOY	2.69	28	e(Pn)	50 41.10	1.2
			eSn	51 04.40	
MDI	2.69	322	P	50 39.70	-0.2
FIN	2.84	282	Pg	50 41.12	-1.0
			Sg	51 10.75	
LJU	2.94	36	e(Pn)	50 54.30	10.8X
			eSg	51 14.80	
FVI	2.96	9	P	50 42.30	-1.4
IMI	3.04	276	Pg	50 44.92	0.0
			Sg	51 15.00	
ROB	3.10	283	P	50 45.53	-0.2
			S	51 17.71	
VAI	3.21	314	P	50 47.00	-0.3
SBF	3.37	275	Pn	50 50.00	0.4
			Sn	51 27.20	
SCE	3.37	356	iPnd	50 49.60	-0.2
ENR	3.41	281	P	50 50.22	0.0
STV	3.48	281	P	50 51.82	0.6
ORX	3.51	305	Pg	50 48.99	-2.8X
			Sg	51 22.96	
KBA	3.52	14	iPnc	50 50.30	-1.5
			i(Sn)	51 17.30	
			iSg	51 22.20	
			i	51 25.70	
PZZ	3.68	285	P	50 53.33	-0.7
RSP	3.75	295	P	50 53.84	-1.3
LSD	3.94	299	P	50 56.77	-1.1
FRF	3.94	270	Pn	50 58.00	0.3
			Sn	51 41.80	
RRL	4.00	290	P	50 58.76	0.1
LMR	4.06	267	Pn	51 00.00	0.6
			Sn	51 43.00	
LRG	4.16	269	Pn	51 00.70	0.0

06d 02h

		Sn	51 46.40		
LPG	4.22	297 Pn	51 01.00	-0.8	
LPL	4.24	298 Pn	51 01.30	-0.8	
BSF	5.56	320 Pn	51 18.70	-2.0X	
		Sn	52 18.40		
CDF	5.79	326 Pn	51 21.60	-2.4X	
HAU	5.89	319 Pn	51 23.10	-2.2X	
		Sn	52 25.80		
SMF	6.53	300 Pn	51 32.50	-1.8X	
BGF	7.14	297 Pn	51 39.80	-2.9X	

S.D. = 1.0 on 38 of 47 obs.

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* FEB 06, 1990 05h 13m 32.31± 1.52s
34.979 N ± 9.5km 121.163 W ±12.1km
DEPTH = 10.0km (geophysicist)
OFF COAST OF CALIFORNIA (38)
ML 2.7 (BRK).

BLP	0.75	123 eP	13 47.40	0.4	
BCH	0.91	77 eP	13 49.90	0.1	
PHAM	1.06	36 eP	13 52.50	0.2	
PRI	1.23	19 eP	13 55.50	0.3	
PRS	1.36	353 eP	13 57.50	0.2	
		eS	14 14.90		
ABL	1.60	94 eP	14 00.40	-0.5	
LLA	1.64	6 eP	14 01.80	0.4	
		e(S)	14 23.50		
SAO	1.80	353 eP	14 03.10	-0.5	
GCC	2.16	342 eP	14 14.10	5.4X	
FRI	2.33	30 eP	14 10.60	-0.6	
		e(S)	14 38.80		
KVN	4.75	30 e(P)	14 48.50	2.7X	

S.D. = 0.5 on 9 of 11 obs.

& FEB 06, 1990 06h 56m 03.90s
36.852 N 121.620 W
DEPTH = 3.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.8 (BRK).

SAO	0.17	122 iPd	56 07.30	0.0	
GCC	0.35	301 iPc	56 10.70	-0.2	
MHC	0.49	358 iPd	56 13.90	0.2	
ARN	0.50	8 iPd	56 13.80	-0.1	
PRS	0.56	159 iPd	56 14.80	-0.2	
LLA	0.59	113 iPc	56 15.60	-0.1	
PCC	0.89	317 eP	56 20.40	-1.2	
PRI	1.05	132 eP	56 24.00	-0.4	
BKS	1.13	335 ePc	56 25.70	-0.1	
		eS	56 41.20		
BRK	1.14	334 eP	56 24.80	-1.1	
		eS	56 41.00		
PHAM	1.41	135 eP	56 29.00	-1.6	
CMB	1.54	39 e(P)	56 32.70	0.4	
FRI	1.54	84 eP	56 30.40	-1.9	
		eS	56 49.70		
KVN	3.54	51 e(P)	56 58.00	-3.2	

14 obs. assaciated

FEB 06, 1990 07h 34m 29.30± 0.38s
10.117 N ± 2.6km 72.593 W ± 2.0km
DEPTH = 44.2 ± 3.7 km
5.3mb (76 obs.) 4.5Msz (4 obs.)
VENEZUELA (101)
Felt (IV) at Valledupar, Colombia. Felt in much of northern Colombia. Also felt at Maracaibo and Merida.

UAV	2.07	136 iPnd	35 04.80	2.4	
		iSn	35 32.00		
SDV	2.29	122 P	35 07.50	1.9	
		iSn	35 37.60		
TOV	2.78	97 ePn	35 14.20	1.8	
BMG	3.06	189 eP	35 46.00	29.5X	
FISA	3.40	70 iP	35 21.00	-0.3	
		eS	36 01.00		
MORO	4.27	80 iP	35 33.00	-0.7	
CEOS	4.34	104 eP	35 34.90	0.3	
FUQ	4.75	194 eP	35 42.00	1.3	
PLAV	5.02	92 iP	35 45.20	0.9	
GUAC	5.24	89 iP	35 48.20	0.8	
		iS	36 43.20		
CAR	5.59	86 eP	35 52.00	-0.3	
		iS	36 52.00		
BOG	5.65	195 eP	35 55.50	2.2	
		iS	37 05.00		
OLLA	5.70	90 iP	35 53.90	0.0	
LLAV	5.70	86 iP	35 52.50	-1.4	
		iS	36 53.70		
HOBC	6.72	212 ePc	36 07.39	-0.7	
UPA	6.94	261 iPc	36 09.80	-1.2	
	0.9s	134.45nm	5.7mb		
Z	18s	6.19um			
		pP	36 12.00		
		S	37 23.00		
CLMC	7.34	213 ePc	36 16.74	-0.1	
HOQC	7.73	212 eP	36 21.50	-0.9	
ANCC	7.81	213 ePc	36 22.30	-1.0	
PURC	8.60	206 ePc	36 25.40	-9.3X	
PORP	9.78	36 P	36 45.00	-5.4X	
LRS	9.85	34 P	36 46.50	-5.0X	
PSO	10.04	208 eP	36 54.00	-0.3	
SJG	10.11	37 iP	36 49.00	-5.9X	
CPD	10.19	39 P	36 49.30	-6.8X	
GRW	10.92	78 eP	37 03.51	-2.6	
		eS	39 04.78		
TRN	11.02	86 eP	37 04.78	-2.6	
		eS	39 10.79		
COTA	11.27	211 eP	37 10.00	-1.3	
CAYA	11.32	209 eP	37 13.20	1.2	
TBH	11.35	87 eP	37 02.76	-9.1X	
		eS	39 09.22		
SVB	11.54	73 eP	37 08.30	-6.1X	
		eS	39 14.56		
SVV	11.59	73 eP	37 08.76	-6.3X	
		eS	39 19.12		
SSV	11.61	73 eP	37 09.35	-6.1X	
		eS	39 18.34		
SOA	11.66	73 eP	37 12.01	-4.0X	
SLB	11.89	71 eP	37 11.80	-7.3X	
B8L	12.10	62 eP	37 13.50	-8.4X	
VC1	12.15	209 eP	37 23.00	-0.1	
BPA	12.50	55 eP	37 20.90	-6.4X	
ANG	12.58	55 eP	37 21.67	-6.6X	
PT0B	22.28	190 iPd	39 25.30	0.6	
NNA	22.36	191 iPc	39 24.50	-0.7	
	1.0s	68.00nm	5.0mb		
Z	18s	1.37um	4.4Msz		
		i	39 26.50		
		e(S)	43 21.00		
PT10	22.47	191 eP	39 26.00	-0.2	
JSC	25.33	343 P	39 54.30	0.7	
LHS	25.39	344 P	39 54.00	-0.2	
PRM	25.48	341 P	39 55.70	0.6	
ZOBO	26.59	170 P	40 04.00	-2.1	
	0.8s	47.03nm	5.1mb		
Z	20s	1.31um	4.5Msz		
		i	40 06.00		
		S	44 36.00		
		LR	49 12.00		
LPB	26.85	170 P	40 09.00	0.7	
	1.0s	80.00nm	5.3mb		
		S	45 26.00		
		i	49 00.00		
BLA	27.89	347 P	40 17.90	0.8	
	0.9s	12.40nm	4.6mb		
RSCP	27.99	337 P	40 18.40	0.3	
	0.9s	51.12nm	5.2mb		
Z	21s	1.30um	4.5Msz		
CCH	28.06	167 P	40 19.30	0.2	
PWLA	28.49	333 P	40 23.20	0.6	
POW	30.93	330 P	40 44.20	0.0	
FVM	32.04	333 P	40 53.90	-0.1	
CLE	32.23	347 iP	40 56.20	0.6	
TUL	33.22	324 eP	41 02.80	-1.5	
	1.3s	43.60nm	5.2mb		
		e	41 13.00		
SIO	33.40	324 eP	41 04.90	-1.0	
		e	41 15.10		
HBVT	34.12	359 P	41 12.20	0.2	
BAO	35.33	136 eP	41 22.50	-0.3	
CAI	38.99	114 iPd	41 52.80	-0.7	
ALQ	39.54	314 iPc	41 59.00	0.9	
	1.5s	50.00nm	5.1mb		
ANMO	39.54	314 P	41 59.00	0.9	
	0.6s	7.58nm	4.7mb		
GOL	41.43	321 P	42 13.90	0.3	
	0.9s	17.42nm	4.8mb		
FCH	43.26	177 iPd	42 28.00	-0.6	
LCCH	43.36	179 iPc	42 28.50	-0.5	
SAN	43.37	178 eP	42 27.50	-1.6	
RSSD	43.44	327 P	42 29.40	-0.5	
PCH	43.54	177 eP	42 29.00	-1.6	
TACH	43.55	178 iPd	42 29.50	-1.1	
CHCH	43.84	178 iPd	42 32.00	-1.0	
RSON	44.18	341 P	42 34.50	-1.0	
	0.6s	17.36nm	5.0mb		
		pP	42 42.20	26kmX	
SCH	44.82	5 ePc	42 40.40	-0.3	
	0.5s	34.00nm	5.4mb		
GLA	45.01	307 eP	42 43.00	0.5	
DAU	45.59	318 P	42 48.30	0.9	
BW06	45.78	322 P	42 48.70	-0.1	
	1.1s	20.83nm	5.0mb		
BAR	46.34	306 eP	42 38.00	-15.1X	
PLM	46.71	307 eP	42 57.00	0.8	
PEC	47.13	307 P	42 59.80	0.5	
RVR	47.33	307 eP	43 01.00	0.2	
GSC	47.34	309 eP	43 01.00	0.0	
SBB	47.91	308 eP	43 05.00	-0.5	
MWC	47.94	307 eP	43 06.00	0.2	
PAS	48.00	307 eP	43 06.00	-0.1	
CLC	48.12	309 eP	43 06.00	-1.1	
TNP	48.68	312 P	43 12.20	0.7	
	0.7s	12.26nm	5.0mb		
ISA	48.74	309 eP	43 13.00	1.2	
LRM	49.21	324 eP	43 15.90	0.4	
KVN	49.70	313 P	43 19.60	0.3	
		pP	43 27.30	26kmX	
FRI	50.13	310 eP	43 21.30	-1.1	
		epP	43 29.10	26kmX	
FFC	50.22	338 iPc	43 22.00	-0.8	
	0.6s	23.00nm	5.4mb		
PRI	50.58	309 e(P)	43 25.30	-0.7	
		epP	43 33.30	27kmX	
LLA	50.94	309 eP	43 27.90	-0.7	
		epP	43 35.70	26kmX	
CMB	50.99	311 eP	43 28.40	-0.6	
SES	51.12	329 iPc	43 29.20	-0.6	
	1.3s	96.00nm	5.6mb		
PRS	51.18	309 eP	43 29.50	-0.9	
MHC	51.70	310 eP	43 34.90	0.4	
GCC	51.87	309 eP	43 33.70	-1.9	
		epP	43 44.90	39kmX	
BKS	52.32	310 e(P)	43 39.00	0.0	
	1.0s	52.00nm	5.5mb		
ORV	52.33	313 eP	43 39.10	0.0	
		epP	43 46.70	25kmX	
BRK	52.34	310 eP	43 39.20	0.1	
MIN	52.69	313 e(P)	43 40.90	-1.0	
		epP	43 49.00	27kmX	
FRB	53.62	2 ePc	43 46.30	-1.8	
EDM	53.99	331 iPc	43 49.40	-1.7	
	0.9s	57.00nm	5.6mb		
PNT	55.16	324 ePd	44 00.00	0.2	
TIO	63.74	61 iP	44 59.50	0.1	
AVE	63.80	58 iP	45 00.00	0.5	
		i	45 08.00		
NKM	65.64	56 eP	45 11.00	-0.3	
EJIF	65.68	55 eP	45 12.20	0.6	
IFR	65.72	58 iPc	45 12.50	0.3	
ALOJ	66.83	54 iPc	45 19.50	0.4	
AAPN	66.83	54 iPc	45 19.00	-0.1	
TIC	66.85	87 Pc	45 17.66	-1.8	
	0.8s	19.00nm	5.2mb		
ATEJ	66.88	54 iPc	45 19.80	0.3	
LIC	66.90	88 Pc	45 18.34	-1.4	
	0.5s	31.00nm	5.6mb		
ACHM	67.05	54 iPc	45 21.30	0.8	
TOL	67.13	51 iPd	45 05.00	-15.9X	
	1.1s	101.27nm			
GUD	67.13	50 e(P)	45 20.80	-0.2	
ASMO	67.14	54 iPc	45 21.40	0.3	
APHE	67.15	54 iPc	45 21.50	0.3	
KIC	67.16	87 Pc	45 20.08	-1.4	
	0.6s	47.00nm	5.7mb		
DCN	67.28	36 eP	45 21.20	-0.3	
	0.5s	61.00nm	5.9mb		
AFC	67.29	54 eP	45 22.80	0.7	
DMU	67.63	36 eP	45 23.30	-0.4	
EVIA	68.21	52 eP	45 27.40	-0.4	
ENIJ	68.32	54 eP	45 27.90	-0.5	
ECRI	68.57	48 eP	45 30.00	0.1	
ETOR	68.74	50 e(P)	45 31.30	0.3	
ECHE	69.47	52 eP	45 35.40	0.0	
EKA	70.07	35 P	45 38.00	-0.7	
	0.9s	20.40nm	5.1mb		
INK	70.13	340 ePc	45 37.90	-0.9	
	0.9s	27.00nm	5.2mb		
LPF	70.21	43 iPc	45 39.50	-0.2	

1.0s 48.00nm 5.4mb
GRR 70.38 42 iPc 45 40.40 -0.3
0.9s 85.10nm 5.7mb
EROQ 70.60 50 eP 45 42.40 0.2
MFF 70.66 44 iPc 45 42.40 -0.1
FLN 70.67 42 iPc 45 42.40 -0.1
0.9s 95.00nm 5.8mb
MBC 70.68 349 ePc 45 41.60 -0.4
0.5s 19.00nm 5.3mb
EPF 70.70 48 iPc 45 42.90 0.1
0.6s 56.30nm 5.7mb
LDF 70.89 42 iPc 45 43.60 -0.2
0.9s 78.60nm 5.7mb
LFF 71.13 46 iPc 45 45.30 0.0
0.7s 26.40nm 5.3mb
LPO 71.43 46 iPc 45 47.00 -0.1
0.8s 40.20nm 5.4mb
KUK 71.48 87 eP 45 43.50 -4.5X
RJF 71.71 46 iPc 45 48.50 -0.3
0.7s 26.40nm 5.3mb
LSF 71.78 45 eP 45 48.90 -0.4
CAF 72.07 46 iPc 45 50.80 -0.2
0.8s 26.80nm 5.2mb
TCF 72.26 45 iPc 45 51.70 -0.4
1.0s 30.00nm 5.2mb
MAF 72.50 45 iPc 45 53.30 -0.2
1.3s 72.20nm 5.5mb
BGF 72.72 44 iPc 45 54.30 -0.5
0.7s 18.70nm 5.1mb
AVF 73.08 44 iPc 45 56.40 -0.4
1.0s 36.80nm 5.3mb
SSF 73.20 44 iPc 45 57.00 -0.5
0.8s 14.70nm 5.0mb
SMF 73.40 44 iPc 45 58.20 -0.6
1.0s 54.00nm 5.5mb
TOA 73.45 332 iPc 45 59.70 0.9
LOR 73.45 44 iPc 45 58.60 -0.4
0.8s 41.90nm 5.4mb
LBF 73.51 44 iPc 45 58.70 -0.8
0.9s 18.60nm 5.0mb
FBA 74.63 335 iPc 46 05.20 -0.3
PMR 74.76 331 ePc 46 06.70 0.4
0.8s 15.40nm 5.0mb
VITF 74.92 43 P 46 07.17 -0.3
ENN 74.97 40 ePc 46 07.80 0.1
0.8s 45.00nm 5.5mb
e 46 11.00
e 46 15.00
LRG 75.11 48 iPc 46 09.00 0.3
0.8s 18.80nm 5.1mb
HAU 75.16 43 eP 46 08.50 -0.4
0.7s 8.80nm 4.8mb
LMR 75.22 48 iPc 46 09.20 -0.1
0.9s 24.20nm 5.2mb
FRF 75.32 48 eP 46 09.60 -0.3
0.8s 18.80nm 5.1mb
BNI 75.34 46 P 46 11.50 1.3
LPG 75.40 46 iPc 46 11.40 0.7
0.9s 21.90nm 5.1mb
RRL 75.42 46 P 46 11.45 0.7
BSF 75.45 43 P 46 09.70 -1.0
LOMF 75 47 44 P 46 10.23 -0.6
WIT 75.52 38 e(P) 46 12.00 1.2
EMS 75.53 45 ePc 46 11.60 0.3
WTS 75.57 39 eP 46 11.50 0.4
1.0s 77.00nm 5.6mb
e 46 19.50
PZZ 75.64 47 P 46 12.47 0.6
RUP 75.67 41 eP 46 12.39 0.6
LSD 75.68 46 P 46 12.99 0.7
MVIF 75.68 47 P 46 11.22 -0.9
MOF 75.68 43 P 46 10.55 -1.5
ECH 75.71 43 P 46 11.44 -0.6
DOI 75.75 47 P 46 13.00 0.6
TOUF 75.75 47 P 46 12.67 0.1
RSP 75.75 46 P 46 13.19 0.7
CDF 75.79 43 P 46 11.59 -1.0
STV 75.80 47 P 46 12.99 0.2
AURF 75.81 47 P 46 12.46 -0.3
WLS 75.84 43 P 46 11.87 -0.9
REVF 75.84 47 P 46 12.44 -0.5
DIX 75.86 45 ePc 46 14.20 0.9
ENR 75.87 47 P 46 12.58 -0.6
AUTN 75.88 47 P 46 12.76 -0.6
SBF 75.89 47 P 46 12.76 -0.4
BBS 75.93 44 P 46 12.57 -0.8
SAOF 75.97 47 P 46 12.98 -0.7

ABH 75.99 41 ePc 46 13.95 0.4
GWF 76.02 42 P 46 13.23 -0.6
ROB 76.20 47 P 46 14.52 -0.4
IMI 76.21 47 P 46 14.73 -0.3
MMK 76.25 45 ePc 46 16.40 1.0
ORO 76.26 45 P 46 15.00 -0.3
ORX 76.26 45 P 46 15.34 0.0
FEL 76.28 43 P 46 14.49 -0.9
FIN 76.44 47 P 46 15.75 -0.5
CKI 76.49 47 P 46 16.50 0.0
ZLA 76.53 44 ePc 46 16.90 0.2
SLE 76.60 43 ePc 46 17.00 -0.1
TOD 76.80 41 eP 46 18.00 -0.1
VAI 76.81 45 Pd 46 18.50 0.3
TMA 76.88 45 ePc 46 19.30 0.4
LLS 76.95 44 ePc 46 20.00 0.7
PGF 77.06 49 iPc 46 19.70 -0.1
0.9s 36.00nm 5.4mb
SAX 77.18 44 ePc 46 21.40 0.8
IMA 77.20 336 iPc 46 20.50 0.3
0.9s 37.50nm 5.4mb
VDL 77.29 45 ePc 46 21.80 0.7
BOB 77.31 46 P 46 22.00 0.8
OSS 77.74 44 ePc 46 24.40 0.8
SVW 77.84 330 iPc 46 23.50 -0.2
SAL 78.05 45 P 46 24.00 -1.0
TTA 78.06 332 ePc 46 24.80 -0.1
PII 78.13 47 P 46 23.50 -2.0
BDI 78.16 47 P 46 25.00 -0.8
NB2 78.22 30 P 46 26.70 1.0
1.0s 48.10nm 5.5mb
RUV 78.23 252 iP 46 27.90 1.4
OGA 78.34 44 eP 46 27.50 0.6
0.8s 24.00nm 5.3mb
GRF 78.37 41 ePc 46 27.50 0.7
1.4s 55.00nm 5.4mb
Z 22s 0.20um 4.4Msz
ed 46 35.00
TPT 78.40 252 iP 46 28.80 1.3
1.2s 45.00nm 5.3mb
FUR 78.46 43 iPd 46 28.40 1.1
VAH 78.47 252 iP 46 29.20 1.4
1.2s 45.00nm 5.3mb
MOX 78.59 40 eP 46 28.00 0.0
1.4s 31.00nm 5.1mb
BRW 78.61 341 ePc 46 27.70 0.1
PMO 78.67 252 iP 46 30.40 1.5
1.2s 55.00nm 5.4mb
CTI 78.81 45 Pd 46 29.50 0.1
PGD 78.98 47 P 46 29.50 -1.0
SFI 79.08 47 P 46 30.50 -0.2
CRE 79.17 47 P 46 30.50 -0.9
CLL 79.44 40 iPc 46 33.10 0.6
1.5s 45.00nm 5.2mb
i 46 40.90
HFS 79.46 31 eP 46 32.10 -0.3
0.6s 13.60nm 5.1mb
epP 46 36.10 13kmX
e 46 39.70
e 46 44.30
WET 79.48 42 iPc 46 33.50 0.7
1.2s 57.00nm 5.4mb
FVI 79.56 44 P 46 33.80 0.5
ASS 79.72 48 Pd 46 34.00 -0.3
MNS 79.79 49 Pd 46 35.00 0.3
RDP 79.86 49 P 46 32.00 -3.1X
ARV 79.89 47 P 46 34.00 -1.2
KBA 79.92 44 iPc 46 35.50 0.1
1.0s 33.90nm 5.3mb
KHC 79.93 42 P 46 36.00 0.7
1.0s 28.50nm 5.2mb
e 46 43.00
BRG 80.06 40 iPc 46 36.30 0.4
1.6s 42.00nm 5.1mb
i 46 44.00
RBL 80.12 44 P 46 36.50 0.1
TRI 80.31 45 eP 46 34.80 -2.5
TRI 80.31 45 P 46 38.00 0.7
VOY 80.37 45 eP 46 38.40 0.6
AZI 80.38 49 P 46 38.50 0.8
PRU 80.50 41 Pc 46 39.00 0.8
1.0s 28.90nm 5.2mb
e 46 46.80
SDI 80.69 49 P 46 39.90 0.4
CEY 80.77 45 ePc 46 40.50 0.7
LJU 80.82 45 eP 46 41.00 1.0
PAE 80.86 250 eP 46 42.00 1.3

1.0s 40.00nm 5.3mb
DUI 81.17 49 P 46 41.50 -0.5
VBY 81.37 45 eP 46 44.00 1.1
UPP 81.45 31 iP 46 43.10 0.2
i 46 46.30
KSP 81.54 40 iP 46 44.50 0.8
1.0s 25.00nm 5.2mb
SGO 81.92 50 P 46 46.50 0.7
MGR 82.16 51 Pd 46 47.80 0.7
ZST 82.35 42 iP 46 48.90 1.0
0.8s 27.00nm 5.3mb
e 46 56.40
SOI 82.79 53 P 46 51.00 0.6
TDS 82.81 51 P 46 49.00 -1.5
ORI 82.85 51 P 46 50.00 -0.7
SRO 83.20 43 eP 46 52.50 0.2
KEV 83.89 20 eP 46 56.00 0.6
KRA 83.95 40 ePd 46 57.60 1.5
0.9s 54.00nm 5.6mb
e 47 05.20
SOD 84.27 23 iP 46 57.60 0.2
NUR 84.82 30 iP 47 00.80 0.6
0.7s 21.40nm 5.4mb
SUF 85.07 27 eP 47 01.80 0.4
0.6s 6.80nm 5.0mb
BZS 85.78 45 eP 47 06.50 1.2
OHR 85.97 49 iPc 47 08.50 2.0
1.6s 0.22nm 3.1mb X
i 47 16.00
i 47 24.00
SKO 86.29 48 iP 47 09.00 1.0
1.0s 48.00nm 5.7mb
i 47 17.00
VAY 87.25 49 eP 47 13.80 1.2
VRI 89.23 44 ePd 47 23.00 1.0
BCAO 90.34 85 iPc 47 29.00 1.2
0.7s 75.00nm 6.1mb
ic 48 10.00
ADK 90.67 323 eP 47 29.00 0.5
1.2s 132.80nm 6.2mb
SPA 100.05 180 iPdiff48 13.70 2.5X
1.1s 17.26nm 5.5mb
HHC 129.15 356 PKP 53 35.50 0.8
BJI 129.44 351 ePKP 53 34.50 -0.6
GTA 130.22 8 iPKPc 53 36.80 -0.1
LZH 133.92 4 ePKP 53 45.00 1.0
XAN 136.07 358 PKP 53 48.10 0.1
GKN 136.16 30 PKP 53 36.80 -11.7X
KKN 136.65 29 PKP 53 37.80 -11.7X
DMN 136.72 29 PKP 53 38.00 -11.7X
GUN 136.83 28 PKP 53 38.80 -11.2X
PKI 136.90 29 PKP 53 38.30 -11.9X
CD2 139.06 5 ePKP 53 52.60 -1.1
CTA 141.29 251 iPKP 53 52.70 -5.2X
i 53 58.80
GYA 143.64 1 PKP 53 59.20 -2.8X
KMI 144.68 7 PKPc 54 02.00 -1.9
QIS 147.32 248 ePKP 54 08.00 -0.1
i 54 10.20
CHG 150.07 16 ePKPc 54 16.90 4.5X
0.9s 103.99nm
ASPA 151.36 239 iPKPc 54 15.00 0.7
0.8s 24.00nm
i 54 20.50
BDT 151.57 17 ePKP 54 14.00 -0.7
0.9s 96.90nm
FORR 151.79 220 ePKP 54 20.00 5.4X
LOE 152.08 12 ePKP 54 22.50 7.1X
WB5 152.25 246 ePKP 54 16.20 0.6
e 54 22.80
WRA 152.25 246 PKPd 54 16.70 1.0
0.9s 14.70nm
MTN 156.60 261 ePKP 54 32.00 10.3X
e 54 51.00
S.D. = 0.8 on 266 of 297 obs.

FEB 06, 1990 07h 41m 27.47± 0.35s
36.553 N ± 3.0km 4.498 W ± 3.8km
DEPTH = 90.1 ± 7.1 km
STRAIT OF GIBRALTAR (385)
MD 3.0 (RBA).

MAL 0.19 22 iPgc 41 39.30 -1.2
iSg 41 45.80
EPRU 0.72 305 ePg 41 44.80 0.3
eSg 41 54.80
EJIF 0.79 263 ePg 41 45.80 0.7

06d 07h

			eSg	41	59.00	
AFC	1.04	47	iPg	41	48.80	0.7
			eSg	42	00.00	
NKM	1.33	214	iPgd	41	52.00	0.6
			i	41	52.50	
			iSg	42	05.00	
			i	42	08.00	
			i	42	11.50	
EHOR	1.40	335	iPnd	41	52.10	-0.2
			eSn	42	08.00	
EBAN	1.71	19	iPnd	41	56.10	-0.2
			eSn	42	15.20	
EMEL	1.77	135	ePn	41	57.20	0.1
ENIJ	1.88	76	ePn	41	59.00	0.4
			eSn	42	20.50	
EVAL	2.07	300	iPnd	42	01.00	-0.2
			eSn	42	27.50	
EVIA	2.61	37	iPnd	42	08.20	-0.4
			eSn	42	35.30	
IFR	3.07	190	iPn	42	15.00	0.0
			iSn	42	48.00	
TOL	3.34	6	ePn	42	19.00	0.4
			eSn	42	55.00	
			eSg	43	22.50	
EPLA	3.72	341	ePn	42	23.60	-0.2
			eSn	43	04.00	
ACU	3.79	58	ePn	42	24.80	0.0
			eSn	43	06.00	
AVE	4.03	217	ePn	42	28.00	-0.1
			iSn	43	12.00	
GUD	4.09	4	iPnd	42	28.80	-0.3
			eSn	43	13.20	
ECHE	4.12	41	ePn	42	28.90	-0.4
			eSn	43	12.50	
ETOR	4.67	23	iPnd	42	37.00	0.0
			eSn	43	26.00	
EROQ	5.74	40	ePn	42	51.90	0.2
TIO	6.06	203	iPn	42	55.80	-0.6
			i	43	50.00	
			iSn	43	59.90	
ERUA	6.18	341	ePn	42	58.00	0.1
			eSn	44	05.00	
ECRI	6.24	14	ePn	42	59.20	0.4
			eSn	44	05.50	
DOU	15.05	23	Pc	45	02.40	6.1X
DCN	16.90	354	iPd	45	28.70	9.2X
	0.7s		140.00nm			5.3mb X
	S.D. = 0.5		on 23 of 25 obs.			

FEB 06, 1990 08h 08m 45.38± 0.81s
32.136 N ± 6.8km 131.124 E ± 5.5km
DEPTH = 129.9 ± 8.6 km
4.7mb (15 obs.)
KYUSHU, JAPAN (235)

SHK	2.72	28	eP	09	28.40	-0.6
MAT	7.32	51	(P)	10	32.00	0.9
	0.7s		13.01nm			4.6mb
			iS	11	51.30	
SSE	8.54	266	P	10	46.50	-0.9
	1.0s		10.00nm			4.4mb
SNY	11.39	330	eP	11	29.20	4.0X
BJI	14.42	307	eP	12	09.50	5.1X
WHN	14.43	268	eP	12	08.50	4.0X
TIY	16.30	295	eP	12	28.30	0.3
Z	20s		0.50um			
HHC	17.94	304	eP	12	49.00	0.9
XAN	18.70	282	P	12	55.30	-1.0
GYA	22.05	261	P	13	31.00	0.6
LZH	22.90	287	eP	13	39.50	0.9
	1.3s		53.00nm			4.8mb
CD2	23.34	274	eP	13	43.00	0.1
CHTO	31.80	253	eP	15	00.20	0.6
	1.0s		5.00nm			4.2mb
WMQ	35.78	302	P	15	33.30	-0.4
GUN	39.18	276	P	16	03.00	0.4
PKI	39.68	276	P	16	06.60	-0.1
	0.8s		23.00nm			5.0mb
KKN	39.73	276	P	16	06.80	-0.1
	0.8s		20.00nm			4.9mb
DMN	39.93	276	P	16	08.50	-0.1
	0.5s		10.00nm			4.8mb
GKN	40.20	277	P	16	10.40	-0.4
WB5	51.81	176	eP	17	41.70	-0.3
WRA	51.87	176	Pc	17	41.90	-0.6
	0.5s		5.80nm			4.7mb
GBA	52.25	262	Pc	17	46.10	0.7
	0.7s		4.90nm			4.5mb
ASPA	55.55	177	iPc	18	09.30	0.0
	0.6s		13.00nm			5.0mb
WARB	58.15	185	iPc	18	28.20	0.6
	0.4s		5.00nm			4.8mb
KEV	64.90	338	eP	19	12.00	-0.3
SOD	66.05	336	eP	19	24.00	4.3X
SUF	68.36	331	eP	19	33.60	-0.7
	0.5s		3.70nm			4.5mb
NUR	70.06	330	iP	19	44.30	-0.4
	0.6s		11.70nm			4.9mb
HFS	74.77	333	eP	20	11.10	-1.3
	0.5s		3.40nm			4.4mb
			e	20	14.60	
			ePcP	20	25.60	
CLL	80.73	326	iPd	20	46.40	1.2
	1.1s		14.00nm			4.6mb
	S.D. = 0.7		on 26 of 30 obs.			

FEB 06, 1990 11h 06m 55.69± 1.03s
36.186 N ± 7.2km 71.349 E ± 6.2km
DEPTH = 117.6 ± 11.3 km
5.0mb (9 obs.)
AFGHANISTAN-USSR BORDER REGION (717)
Felt (III) at Ishkoshim, Khorog and Dushonbe, USSR.

KSH	4.91	47	P	08	11.00	2.4
			S	09	04.50	
QUE	7.03	213	iPd	08	39.70	2.1
			eS	09	55.50	
NDI	8.97	145	iPc	09	03.60	-0.2
	0.7s		30.14nm			5.2mb
			eS	10	38.50	
MAIO	9.58	274	eP	09	11.00	-1.0
	0.8s		7.32nm			4.5mb
			eS	10	45.00	
GKN	13.90	122	P	10	07.50	-1.3
DMN	14.47	122	P	10	15.00	-1.2
KKN	14.47	121	P	10	14.50	-1.7
WMQ	14.65	54	P	10	17.00	-1.3
PKI	14.70	122	P	10	17.90	-1.3
GUN	14.82	120	P	10	19.00	-1.7
POO	17.72	172	eP	11	01.50	5.0X
			iS	14	29.80	
LSA	17.82	106	P	10	59.30	1.2
HYB	19.76	159	ePc	11	20.80	2.1
			eS	14	50.50	
SHL	20.52	115	eP	11	28.50	1.9
			eS	15	04.00	
GTA	22.68	73	eP	11	51.20	3.3X
GBA	23.14	165	Pd	11	55.70	3.4X
	0.5s		4.50nm			4.1mb
LZH	26.18	81	P	12	39.00	18.0X
KOD	26.43	166	eP	12	26.80	3.3X
CHTO	29.82	118	e(P)	12	57.40	3.7X
TIY	32.69	75	eP	13	20.00	1.3
MLR	35.18	300	eP	13	43.00	2.9X
NUR	38.25	324	iP	14	05.00	-0.4
	0.5s		25.30nm			5.3mb
SOD	40.14	335	iP	14	21.60	0.6
UPP	41.49	322	iP	14	32.20	0.0
HFS	43.49	322	eP	14	47.80	-0.6
	0.7s		26.10nm			5.1mb
Z	17s		0.00um			1.3MszX
			e	14	50.70	
			e	15	17.20	
			LR	32	46.00	
MAT	52.81	68	eP	16	01.00	0.1
DAG	55.14	344	iPc	16	16.80	-0.6
	0.3s		19.48nm			5.5mb
BCAO	57.82	250	iPd	16	37.20	0.0
	0.5s		9.00nm			5.0mb
			ic	17	09.10	
KRI	65.86	224	iPc	17	30.90	0.0
MBC	67.64	3	ePc	17	41.80	0.6
	0.5s		7.00nm			4.8mb
BUL	69.08	223	iPc	17	51.90	0.9
INK	74.17	9	eP	18	20.50	0.1
KIC	75.05	267	P	18	25.00	-1.4
LIC	75.36	267	P	18	26.90	-1.3
FRB	75.45	343	eP	18	27.00	-0.8
W85	81.56	122	eP	19	02.10	0.4
WRA	81.59	122	Pd	19	02.50	0.7
	0.6s		1.10nm			3.8mb X
FFC	89.27	356	eP	19	40.00	0.6
	1.0s		18.00nm			5.1mb
	S.D. = 1.3		on 31 of 38 obs.			

? FEB 06, 1990 11h 26m 01.22± 7.62s
17.932 N ±53.0km 62.091 W ±40.6km
DEPTH = 10.0km (geophysicist)
LEEWARD ISLANDS (92)
ML 3.5 (FDF).

BPA	0.91	166	eP	26	18.64	0.0
			eS	26	26.82	
SEG	1.62	160	eP	26	29.77	-0.1
			S	26	44.90	
SFG	1.88	153	eP	26	33.67	0.1
DEG	1.89	148	ePd	26	33.86	0.0
			S	26	52.50	
PAG	1.93	168	eP	26	34.63	0.1
			S	26	53.50	
DOG	1.94	166	eP	26	34.67	0.0
			S	26	53.30	
BBL	2.47	166	eP	26	41.95	-0.2
DPMT	2.74	166	eP	26	46.38	0.3
			eS	27	16.44	
DTMT	2.78	165	eP	26	46.34	-0.3
			eS	27	16.35	
	S.D. = 0.2		on 9 of 9 obs.			

& FEB 06, 1990 12h 16m 33.77s
62.249 N 148.434 W
DEPTH = 31.3km
CENTRAL ALASKA (1)
<AGS-P>. ML 3.1 (PMR).

GHO	0.53	206	iP	16	44.04	-0.8
			eS	16	52.54	
PLRM	0.74	207	iP	16	46.44	-1.4
			eS	16	56.91	
PMR	0.74	207	iPc	16	46.50	-1.3
NCA	0.80	108	iP	16	47.61	-1.2
			S	16	59.71	
CUT	0.87	281	iP	16	48.93	-0.8
			eS	17	00.65	
PWA	0.91	229	ePd	16	49.80	-0.5
HUR	0.92	323	iP	16	49.31	-1.2
			eS	17	01.78	
TOA	1.07	97	iPc	16	51.90	-0.8
PMS	1.14	209	eP	16	52.70	-1.0
RND	1.18	351	iP	16	52.92	-1.3
			eS	17	08.58	
SUA	1.35	235	eP	16	56.24	-0.5
			eS	17	14.45	
SDG	1.38	77	eP	16	55.92	-1.1
			eS	17	13.99	
SKT	1.48	261	eP	16	57.51	-1.0
VZW	1.49	142	eP	16	57.19	-1.6
MCK	1.51	351	iP	16	58.02	-0.9
GLI	1.52	154	iP	16	57.63	-1.4
PAX	1.55	61	eP	16	58.65	-1.0
			eS	17	18.10	
KTH	1.74	320	eP	17	01.06	-1.2
			eS	17	22.90	
SLKM	1.95	207	eP	17	04.24	-1.1
NCG	1.96	246	eP	17	04.51	-1.1
SPU	2.03	240	eP	17	05.49	-1.0
HIN	2.08	153	eP	17	05.43	-1.8
			S	17	30.85	
BGL	2.13	244	eP	17	07.10	-0.8
CKL	2.14	242	eP	17	07.08	-1.0
CVA	2.14	142	eP	17	06.63	-1.4
SEW	2.21	193	eP	17	08.34	-0.6
WRH	2.24	4	eP	17	07.39	-2.0
HDA	2.27	16	eP	17	08.90	-0.9
GLB	2.34	108	iP	17	09.01	-1.9
SGAM	2.34	137	eP	17	08.89	-2.0
NEA	2.36	353	eP	17	09.24	-1.8
RDT	2.54	230	eP	17	12.45	-1.4
RDS	2.59	3	eP	17	12.33	-2.1
RAGM	2.60	134	eP	17	12.68	-2.0
FBA	2.68	6	ePd	17	13.60	-2.0
GLM	2.79	9	eP	17	15.43	-1.8
WAX	3.24	121	eP	17	22.15	-1.5
SNH	3.41	125	eP	17	28.45	2.3
TTA	3.57	284	ePc	17	26.10	-2.3
SVW	3.61	255	eP	17	26.40	-2.5
IMA	4.47	331	iPd	17	39.30	-1.9
	41 obs. associated					

? FEB 06, 1990 12h 25m 49.06± 9.34s

19.994 N ±82.7km 62.146 W ±43.0km
DEPTH = 33.0km (normal)
LEEWARD ISLANDS (92)
ML 4.3 (FDF).

SEG	3.62	170	eP	26 44.67	0.4
DEG	3.80	164	eP	26 47.69	0.9
LPR	3.90	245	P	26 47.50	-0.7
PAG	3.97	174	eP	26 49.80	0.6
			S	27 24.30	
DOG	3.97	173	ePc	26 49.49	0.2
CPD	4.06	242	P	26 51.00	0.5
MGG	4.13	169	eP	26 52.19	0.8
SJG	4.22	244	iP	26 52.80	0.0
BBL	4.49	172	eP	26 56.37	-0.3
PORP	4.67	246	P	26 59.00	-0.1
LRS	4.75	250	P	27 00.60	0.3
FDF	5.32	170	eP	27 07.56	-0.8
CRM	5.34	167	eP	27 07.70	-0.9
MVM	5.54	167	eP	27 11.50	0.1
BIM	5.54	169	eP	27 11.34	-0.1
SLB	6.22	170	eP	27 20.25	-0.9
			eS	28 32.51	

S.D. = 0.6 on 16 of 16 obs.

& FEB 06, 1990 12h 32m 20.09s
59.258 N 152.512 W
DEPTH = 65.5km
SOUTHERN ALASKA (2)
<AGS-P>.

AUE	0.45	283	iP	32 31.73	-0.5
			eS	32 40.15	
AUL	0.49	285	iP	32 32.10	-0.5
CDD	0.67	241	eP	32 33.75	-0.8
			eS	32 44.51	
CNPM	0.71	67	iP	32 34.36	-0.6
			eS	32 46.41	
NNL	1.00	38	eP	32 38.92	0.3
PDB	1.01	303	iP	32 37.68	-1.0
			eS	32 51.35	
RED	1.17	354	iP	32 40.09	-0.9
			eS	32 56.01	
RDT	1.32	2	eP	32 42.09	-0.9
SLKM	1.70	42	eP	32 48.16	0.0
SEW	1.77	60	eP	32 47.69	-1.3
SPU	1.94	7	eP	32 51.00	-0.5
CKL	1.95	2	eP	32 51.38	-0.2
BGL	2.01	2	eP	32 52.23	-0.3
CRP	2.02	5	eP	32 52.71	0.0
CGLM	2.07	7	eP	32 53.07	-0.3
NCG	2.16	5	eP	32 54.21	-0.4

16 obs. ossociated

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* FEB 06, 1990 14h 29m 11.25± 1.39s
8.845 S ±15.1km 119.360 E ±12.1km
DEPTH = 141.0 ± 17.0 km
4.3mb (3 obs.)
FLORES ISLAND REGION (286)

KHKI	3.74	277	eP	30 08.90	0.3
			eS	30 50.40	
			e	32 19.00	
MTN	12.22	110	iPd	32 01.70	-0.1
			eS	34 06.00	
MBL	12.25	178	eP	32 01.50	-0.6
			eS	34 06.00	
WB5	18.19	129	eP	33 15.80	-0.3
WRA	18.21	129	Pd	33 15.60	-0.7
	0.7s		2.10nm	3.6mb	
ASPA	20.27	138	eP	33 39.60	1.9
	0.4s		6.00nm	4.4mb	
GUN	48.83	320	P	37 45.10	0.4
	0.6s		8.00nm	4.7mb	
PKI	48.90	319	P	37 45.30	0.1
DMN	49.12	319	P	37 46.90	0.0
KKN	49.13	319	P	37 46.20	-0.7
GKN	49.69	319	P	37 50.80	-0.3

S.D. = 0.9 on 11 of 11 obs.

? FEB 06, 1990 14h 54m 35.60± 3.80s
20.728 S ±111.km 172.767 E ±65.3km
DEPTH = 33.0km (normal)
4.8mb (3 obs.)
VANUATU ISLANDS REGION (185)

DZM	6.04	256	iPd	56 04.00	-1.1
			iS	57 14.50	
RMQ	22.72	251	eP	59 36.09	0.2
WB5	35.97	264	eP	01 36.70	1.2
WRA	35.98	264	Pd	01 36.60	1.0
	0.8s		2.50nm	4.2mb	
ASPA	36.03	258	iPc	01 35.30	-0.7
	1.2s		15.00nm	4.8mb	
			i	01 55.80	
PMR	87.52	17	ePc	07 20.30	-0.6
	1.3s		37.70nm	5.5mb	
BCAO	150.17	241	iPKPd	14 30.20	9.9X
	0.6s		11.00nm		

S.D. = 1.2 on 6 of 7 obs.

FEB 06, 1990 15h 03m 24.64± 0.54s
49.421 N ± 5.4km 129.697 W ± 6.8km
DEPTH = 10.0km (geophysicist)
4.2mb (10 obs.)
VANCOUVER ISLAND REGION (25)

EDB	1.74	74	Pn	03 54.43	-0.5
			Sn	04 18.34	
PHC	1.95	48	Pn	03 58.20	0.2
			Sn	04 23.80	
BTB	2.73	87	Pn	04 08.02	-1.4
CBB	2.88	76	Pn	04 11.79	0.4
BBB	2.94	19	Pn	04 13.00	0.8
			Sn	04 47.50	
ALB	3.19	91	Pn	04 15.28	-0.4
MGB	3.31	95	Pn	04 16.10	-1.5
			Sn	04 54.69	
PNT	6.59	87	iP	05 03.00	-0.9
	0.3s		20.00nm	5.6mb X	
WDC	10.18	148	eP	05 53.70	-0.1
MIN	10.73	145	eP	06 01.80	0.3
ORV	11.46	146	eP	06 10.50	-0.8
CMB	13.21	146	eP	06 34.50	-0.3
KVN	13.27	137	eP	06 39.00	3.2X
FRI	14.38	146	eP	06 48.80	-1.3
TNP	14.46	137	eP	06 53.45	2.0
	1.3s		11.05nm	4.3mb	
BW06	15.45	108	eP	07 05.50	1.2
	1.2s		4.79nm	3.7mb	
CLC	16.22	142	eP	07 15.00	0.9
PMR	16.34	326	eP	07 14.10	-1.2
	1.3s		42.45nm	4.4mb	
GSC	16.99	141	eP	07 23.00	-0.9
MWC	17.45	146	eP	07 31.00	1.2
PAS	17.48	147	eP	07 32.00	2.1
FFC	17.78	62	eP	07 33.50	0.0
	0.6s		11.00nm	4.2mb	
FBA	18.24	335	eP	07 40.00	0.9
	1.2s		17.05nm	4.1mb	
RSSD	18.32	97	eP	07 42.30	1.8
PLM	18.68	145	eP	07 42.00	-2.9
SVW	18.69	319	eP	07 44.40	-0.3
INK	19.04	356	eP	07 50.00	1.2
TTA	19.74	323	eP	07 57.00	-0.2
	1.3s		54.25nm	4.7mb	
GOL	19.79	110	eP	08 00.50	2.3
IMA	20.80	332	eP	08 07.80	-0.4
	1.2s		20.83nm	4.4mb	
ANMO	22.37	122	eP	08 27.50	3.1X
	1.2s		7.81nm	4.1mb	
ALQ	22.37	122	eP	08 23.50	-1.0
	1.0s		4.25nm	3.9mb	
RSON	22.98	73	eP	08 29.00	-1.0
	1.0s		31.18nm	4.8mb	

S.D. = 1.3 on 31 of 33 obs.

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* FEB 06, 1990 17h 25m 40.76± 4.36s
31.771 S ±26.7km 70.337 W ±23.8km
DEPTH = 138.3 ± 50.7 km
CHILE-ARGENTINA BORDER REGION (127)

ROCH	1.33	205	iPd	26 08.40	0.2
			iS	26 26.40	
RTCB	1.34	78	iPc	26 08.00	-0.2
			eS	26 27.00	
RTCV	1.54	94	iPc	26 09.80	-0.4
			S	26 29.00	
FCH	1.55	179	iPd	26 10.70	0.0
			iS	26 31.50	
RTLL	1.65	75	iPd	26 11.40	-0.2
			(S)	26 32.20	
CFA	1.80	85	iPd	26 14.00	0.8
			S	26 36.00	
PCH	1.85	185	iPd	26 14.00	0.1
			iS	26 36.50	
TACH	1.94	195	iPd	26 15.10	0.1
			iS	26 39.40	
CHCH	2.17	187	eP	26 17.70	-0.1
			iS	26 43.50	
LNV	2.36	202	iPd	26 19.70	-0.3
			iS	26 46.70	

S.D. = 0.4 on 10 of 10 obs.

& FEB 06, 1990 18h 14m 08.00s
34.977 N 121.077 W
DEPTH = 11.0km
OFF COAST OF CALIFORNIA (38)
<BRK>. ML 3.9 (BRK), 3.6 (PAS).
Felt at the Diablo Canyon
Nuclear Power Plant.

BLP	0.69	127	ePc	14 20.60	-1.0
BCH	0.84	75	iPc	14 23.30	-0.9
PHAM	1.02	33	eP	14 25.90	-1.3
PRI	1.21	16	iPc	14 29.10	-1.4
			eS	14 50.60	
PKEM	1.34	36	eP	14 31.00	-1.6
PRS	1.37	350	iPc	14 30.90	-2.1
ABL	1.53	94	eP	14 33.00	-2.5
LLA	1.64	4	iPc	14 35.20	-1.7
SAO	1.81	351	ePc	14 36.83	-2.5
			e	14 52.60	
			e	14 59.60	
			e	15 02.50	
GCC	2.18	340	eP	14 41.70	-3.0
FRI	2.30	29	eP	14 44.20	-2.1
ARN	2.40	351	eP	14 45.30	-2.5
MHC	2.40	349	iPc	14 45.75	-2.2
PCC	2.73	338	e(P)	14 50.60	-1.9
BKS	3.04	342	ePd	14 58.30	1.4
			eS	15 39.10	
CMB	3.10	10	eP	14 56.10	-1.7
PEC	3.41	107	eP	14 59.00	-3.3
PLM	3.85	114	eP	15 05.30	-3.3
TNP	4.39	44	eP	15 14.70	-1.6
ORV	4.58	356	eP	15 17.10	-1.7
KVN	4.71	29	eP	15 18.70	-2.2

21 obs. ossociated

% FEB 06, 1990 18h 19m 32.66± 2.15s
1.006 S ± 9.7km 77.978 W ±19.4km
DEPTH = 10.0km (geophysicist)
ECUADOR (107)

VC1	0.56	311	iP+	19 43.80	-0.6
TUNG	0.62	229	iPd	19 45.40	0.0
			S	19 54.50	
QUR	1.00	326	Pd	19 52.10	0.3
			S	20 05.00	
GGP	1.03	323	eP	19 52.80	0.2
			S	20 06.20	
CAYA	1.08	360	iPd	19 52.60	-0.7
			eS	20 07.70	
COTA	1.38	345	iPd	19 59.20	0.8
			S	20 20.70	

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

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* FEB 06, 1990 18h 28m 42.34± 1.54s
34.976 N ±10.0km 121.122 W ±12.6km
DEPTH = 10.0km (geophysicist)
OFF COAST OF CALIFORNIA (38)
ML 2.6 (BRK).

BLP	0.72	125	eP	28 57.10	0.5
BCH	0.88	76	eP	28 59.50	0.2
PHAM	1.04	34	eP	29 02.00	0.0
PRI	1.22	18	eP	29 05.40	0.2
PKEM	1.36	37	eP	29 11.00	3.7X
PRS	1.37	352	eP	29 07.30	-0.1
ABL	1.57	94	eP	29 09.50	-1.0
LLA	1.64	5	eP	29 11.70	0.3
SAO	1.80	352	eP	29 13.50	-0.2
KVN	4.73	30	eP	29 57.50	1.9X

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

FEB 06, 1990 19h 08m 09.24± 0.80s
47.976 N ± 7.2km 9.139 E ± 6.1km
DEPTH = 12.4 ± 4.7 km
GERMANY (543)
MD 2.7 (KRW). ML 2.5 (FUR), 2.6

06d 19h

(KBA).

SLE	0.48	244	iPc	08 18.70	-0.4
ZLA	0.71	226	iPc	08 23.50	0.5
SAX	0.74	169	iPd	08 22.40	-1.3
FEL	0.76	263	Pg	08 23.86	-0.2
LLS	1.11	185	ePc	08 30.30	0.3
BBS	1.21	246	Pg	08 32.53	0.9
			Sg	08 50.55	
WLS	1.27	291	Pg	08 32.55	-0.1
			Sg	08 50.66	
CDF	1.32	290	Pg	08 33.44	0.0
			Sg	08 51.58	
ECH	1.35	281	Pg	08 34.18	0.4
			Sg	08 53.15	
MOF	1.36	265	Pg	08 35.06	1.1
GWF	1.42	315	Pg	08 34.22	-0.6
			Sg	08 52.87	
FUR	1.45	82	ePg	08 30.90	-4.3X
OSS	1.46	152	iPc	08 33.50	-2.0
VDL	1.51	171	iPc	08 36.70	0.5
BSF	1.59	266	Pn	08 35.20	-2.0
			Sg	09 01.60	
BSF	1.59	266	Pg	08 38.99	1.8
LOMF	1.68	249	Pg	08 41.01	2.4
HAU	1.87	272	Pn	08 40.40	-0.9
			Pg	08 44.30	
			Sg	09 09.20	
TMA	1.88	186	ePc	08 43.70	2.1
GRC1	1.89	56	iPgd	08 38.30	-3.2X
			iSgc	08 59.40	
MMK	2.09	203	ePc	08 46.30	1.7
WET	2.75	63	eP	08 55.00	1.1
LPG	2.97	214	Pn	08 56.00	-1.3
			Pg	09 06.20	
KBA	2.99	106	e(Pn)	08 58.00	0.6
			iPg	09 02.50	
			i	09 33.00	
			iSg	09 36.00	
LOR	3.64	261	Pg	09 17.20	10.7X
			Sg	10 06.00	
PRU	4.09	58	eP	09 48.00	35.2X
			e	09 53.00	
			Sg	10 09.00	

S.D. = 1.3 on 22 of 26 obs.

FEB 06, 1990 20h 06m 23.68± 0.42s
44.306 N ± 5.9km 9.774 E ± 3.5km
DEPTH = 5.0km (geophysicist)
NORTHERN ITALY (545)

BOB	0.52	333	P	06 33.30	-0.7
			eSg	06 41.80	
BDI	0.64	112	P	06 36.30	-0.2
			eSg	06 47.00	
MME	0.68	99	P	06 37.50	0.3
			eSg	06 46.40	
PII	0.80	137	P	06 39.50	-0.1
			eSg	06 50.30	
PCP	0.91	285	P	06 42.77	1.1
			S	06 55.23	
CKI	1.08	277	P	06 45.30	0.9
			eSg	07 00.70	
FIN	1.13	266	P	06 45.95	0.6
			S	07 00.92	
ROB	1.37	270	P	06 49.44	0.0
			S	07 07.38	
IMI	1.41	254	P	06 50.46	0.3
			S	07 09.22	
MDI	1.47	358	P	06 51.50	0.7
ENR	1.69	268	P	06 53.53	-0.6
			S	07 13.53	
STV	1.76	269	P	06 54.30	-0.8
DOI	1.82	277	P	06 55.50	-0.5
ORX	1.84	317	P	06 56.15	-0.1
PZZ	1.93	277	P	06 56.61	-0.9

S.D. = 0.7 on 15 of 15 obs.

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* FEB 06, 1990 20h 19m 08.15± 2.50s
38.753 N ±17.7km 14.356 E ±17.6km
DEPTH = 10.0km (geophysicist)
SICILY (398)

GIB	0.81	199	P	19 30.00	6.2X
			iSg	19 35.50	
MNO	0.86	162	P	19 24.20	-0.7
			eSg	19 34.00	
ATN	1.05	124	P	19 29.50	1.5
			eSg	19 39.00	
CZI	1.46	71	P	19 34.60	0.1
SOI	1.50	116	P	19 33.70	-1.3
			eSg	19 46.00	
FAI	1.57	200	P	19 36.50	0.4
			eSn	19 46.00	

S.D. = 1.5 on 5 of 6 obs.

FEB 06, 1990 22h 43m 24.04± 0.56s
10.489 S ± 8.8km 110.178 E ± 8.7km
DEPTH = 33.0km (normol)
4.6mb (4 obs.)
SOUTH OF JAVA (282)

TRT	3.68	41	iPc	44 20.30	0.3
			iS	44 57.80	
KHKI	5.76	69	ePd	44 48.70	-0.8
			eS	45 49.00	
			e	48 42.10	
MBL	14.09	140	eP	46 38.00	-5.6X
	0.3s		5.00nm	4.8mb	
			iS	49 02.70	
MEKA	17.88	155	eP	47 30.00	-1.9
			eS	50 24.00	
MRWA	19.41	165	eP	48 11.00	20.5X
			eS	51 33.00	
BAL	20.92	164	eP	48 10.00	3.7X
WARB	22.05	137	eP	48 25.00	7.2X
			eS	52 14.00	
MUN	22.10	166	eP	48 28.00	9.8X
COOL	22.71	155	eP	48 32.00	7.8X
WRA	25.11	115	Pc	48 48.60	1.0
	0.6s		6.70nm	4.4mb	
WB5	25.11	115	eP	48 48.50	0.9
ASPA	26.14	123	eP	48 57.40	0.2
	0.7s		9.00nm	4.5mb	
	Z 22s		0.21um	3.6MszX	
			iS	53 54.10	
			LR	11 44.70	
FORR	26.22	143	eP	49 18.50	20.7X
PKI	44.81	328	P	51 36.60	-0.6
GUN	44.84	329	P	51 37.50	0.0
	0.8s		25.00nm	5.1mb	
DMN	45.00	328	P	51 38.20	-0.4
KKN	45.05	328	P	51 38.60	-0.4
GKN	45.56	328	P	51 42.60	-0.3
BJI	50.58	6	eP	52 22.00	0.4
SLR	78.28	246	iPc	55 24.60	1.6

S.D. = 1.0 on 13 of 20 obs.

FEB 06, 1990 22h 52m 23.81± 0.45s
6.590 N ± 6.4km 73.263 W ± 4.9km
DEPTH = 200.2 ± 6.8 km
4.9mb (16 obs.)
NORTHERN COLOMBIA (99)

BOG	2.11	202	iPc	53 03.00	-1.2
			iS	54 32.00	
HOBC	3.62	232	iPc	53 20.30	-1.3
CLMC	4.25	231	eP	53 28.35	-1.1
DIAC	4.39	222	iPc	53 30.86	-0.4
			eS	54 19.60	
HOQC	4.57	227	eP	53 32.42	-1.2
ANCC	4.71	230	eP	53 34.92	-0.3
SALC	4.96	224	ePd	53 37.99	-0.6
PURC	5.25	216	eP	53 43.38	0.8
UPA	6.65	291	iPc	53 55.00	-5.3X
PSO	6.72	217	eP	54 03.50	1.9
CAYA	8.00	216	eP	54 20.00	1.3
COTA	8.02	219	eP	54 19.70	0.8
VC1	8.82	216	eP	54 32.50	3.3X
TRN	12.40	70	eP	55 15.90	1.1
TBH	12.66	71	eP	55 20.53	2.3
GRW	12.71	63	eP	55 20.10	1.2
PIG	13.08	69	eP	55 25.80	2.3
BOT	13.20	69	eP	55 23.74	-1.2
SVB	13.56	60	eP	55 28.96	-0.5
SVV	13.61	60	eP	55 29.74	-0.4
SSV	13.64	60	eP	55 30.16	-0.4
SLB	14.01	58	eP	55 34.90	-0.2
ZOBO	23.27	167	P	57 17.00	1.5
	1.0s		13.00nm	4.5mb	
			i	57 50.00	
LPB	23.53	168	eP	57 13.00	-4.8X
			e	57 21.00	
JSC	28.53	346	P	58 02.50	-0.3
LHS	28.62	347	P	58 03.40	-0.2
GBTN	30.64	342	P	58 21.40	0.0
RSCP	31.01	340	P	58 25.20	0.5
	0.6s		27.17nm	5.2mb	
PWLA	31.37	336	P	58 28.00	0.2
OLY	33.29	332	P	58 44.20	-0.1
BAO	33.38	132	eP	58 45.00	-0.5
LVNJ	34.10	358	P	58 51.00	-0.2
FVM	34.92	336	P	58 58.00	-0.2
HBVT	37.62	0	P	59 20.40	-0.4
RSNY	37.83	359	P	59 23.20	0.7
	0.7s		6.92nm	4.4mb	
CBM	40.44	5	P	59 43.90	-0.1
ANMO	41.59	317	P	59 54.90	1.1
			pP	00 29.60	157kmX
GOL	43.80	324	P	00 12.70	0.9
	0.7s		10.92nm	4.5mb	
RSON	47.30	342	P	00 38.00	-0.9
	0.5s		28.38nm	5.0mb	
BW06	48.19	324	P	00 46.20	0.1
	1.0s		4.00nm	3.8mb	X
SCH	48.37	5	ePc	00 46.10	-1.0
	0.6s		58.00nm	5.2mb	
KVN	51.68	316	P	01 13.50	0.8
FFC	53.25	340	iPc	01 22.70	-1.0
	0.5s		11.00nm	4.7mb	
TIC	67.73	86	P	02 59.84	-2.4
	0.7s		10.50nm	4.7mb	
LIC	67.76	86	P	03 00.30	-2.1
	0.6s		23.00nm	5.1mb	
KIC	68.03	86	Pc	03 02.00	-2.1
	0.6s		24.00nm	5.1mb	
INK	73.20	340	eP	03 34.00	0.0
MBC	74.00	350	ePc	03 39.50	0.9
	0.7s		32.00nm	5.2mb	
DAG	75.89	11	iPc	03 48.20	-1.1
	0.5s		19.72nm	5.1mb	
PMR	77.52	332	P	03 59.50	1.0
	0.7s		10.17nm	4.7mb	
IMA	80.12	336	P	04 13.30	0.6
	0.8s		3.45nm	4.1mb	
HFS	82.81	30	eP	04 25.50	-1.1
	0.5s		2.10nm	4.1mb	
			e	04 30.20	
BCAO	91.28	85	iPc	05 08.70	0.4
	0.5s		13.00nm	5.2mb	
GBA	144.66	55	PKPc	11 37.40	-1.6
	0.6s		2.50nm		
QIS	145.26	243	iPKPc	11 41.70	1.7
			e	12 22.00	
ASPA	148.86	234	iPKPc	11 51.40	5.7X
	0.6s		19.00nm		
WRA	150.10	241	PKPd	11 49.30	1.7
	0.7s		1.60nm		
CHG	153.61	17	ePKP	12 02.00	9.2X

S.D. = 1.2 on 53 of 58 obs.

FEB 06, 1990 23h 50m 24.35± 0.81s
17.278 N ± 5.8km 61.004 W ± 7.6km
DEPTH = 27.3 ± 4.0 km
4.5mb (3 obs.)
LEEWARD ISLANDS (92)
ML 4.0 (FDF).

ANG	0.80	261	eP	50 40.26	0.7
			eS	50 54.74	
BPA	0.85	254	eP	50 40.39	0.0
			eS	50 55.04	
DEG	0.96	183	ePd	50 40.81	-1.2
SEG	0.99	209	ePd	50 41.95	-0.5
			S	50 53.40	
SFG	1.04	190	ePd	50 42.37	-0.7
DOG	1.37	206	ePd	50 47.65	-0.2
			S	51 03.30	
MGG	1.39	193	ePd	50 47.61	-0.4
PAG	1.40	208	iPd	50 48.00	-0.3
			S	51 04.30	
SKI	1.66	272	eP	50 40.17	-11.8X
			eS	51 20.43	
BBL	1.80	195	ePd	50 54.31	0.2
DPMT	2.04	190	eP	50 58.76	1.2
			eS	51 29.13	
DTMT	2.06	189	eP	50 59.11	1.2
DSVT	2.07	190	eP	50 58.98	1.1
CRM	2.51	178	iPc	51 03.76	-0.5
FDF	2.53	183	eP	51 03.94	-0.7
			S	51 32.50	

MVM	2.71	178	iPc	51	06.59	-0.5
			S	51	37.80	
BIM	2.75	181	iPc	51	07.22	-0.4
SLB	3.43	181	eP	51	17.01	-0.4
			eS	52	02.56	
SSV	3.93	183	eP	51	25.35	0.9
			eS	52	23.52	
SVV	3.94	183	eP	51	24.08	-0.5
			eS	52	12.95	
SVB	3.99	183	eP	51	24.95	-0.3
			eS	52	20.91	
GRW	5.13	187	eP	51	43.05	1.6
PORP	5.43	279	P	51	45.30	-0.3
LRS	5.66	281	P	51	48.00	-0.9
TUL	35.97	308	eP	57	24.80	0.0
	1.0s		6.30nm			4.5mb
SIO	36.30	307	eP	57	27.70	0.1
ALQ	44.03	303	iPc	58	32.00	0.2
	1.0s		6.25nm			4.4mb
MBC	66.01	347	eP	01	10.50	0.3
	0.8s		5.00nm			4.7mb
INK	67.62	337	eP	01	20.50	0.0
S.D. = 0.7 on 28 of 29 obs.						

FEB 06, 1990 23h 51m 01.58± 0.58s
39.012 N ± 6.2km 20.220 E ± 4.4km
DEPTH = 33.0km (normal)
GREECE-ALBANIA BORDER REGION (392)
ML 3.7 (ATH), 3.7 (TTG).

KZN	1.76	42	ePn	51	32.10	1.8
ITM	2.27	143	ePn	51	39.30	1.7
NEO	2.35	82	ePn	51	39.00	0.2
PLG	2.84	60	ePn	51	45.50	-0.1
ROI	2.89	282	P	51	47.50	1.2
ATH	2.93	110	ePn	51	45.80	-1.1
BRT	2.97	310	P	51	49.00	1.5
ULC	3.04	346	ePn	51	48.00	-0.5
			eSn	52	26.50	
TDS	3.08	283	P	51	48.50	-0.5
ORI	3.10	291	P	51	49.90	0.6
CSI	3.14	285	P	51	50.80	0.9
VLI	3.14	136	ePb	52	03.40	13.5X
CZI	3.19	275	P	51	50.40	-0.1
BAI	3.32	310	P	51	53.00	0.5
MMN	3.39	286	P	51	55.40	2.0
SOI	3.40	255	Pd	51	51.50	-2.0
BDV	3.44	342	ePn	51	54.00	-0.1
			eSn	52	32.50	
TTG	3.49	348	ePn	51	54.90	0.1
			eSn	52	34.50	
PVY	3.58	357	ePn	51	59.00	2.7
			eSn	52	41.50	
HCY	3.67	340	ePn	51	56.50	-0.9
			eSn	52	39.00	
MGR	3.78	289	P	51	59.70	0.8
			eSn	52	44.50	
ATN	3.82	259	P	51	57.90	-1.7
NKY	3.91	347	ePn	52	02.00	1.1
			eSn	52	47.00	
BRY	4.09	342	ePn	52	02.50	-0.9
			eSn	52	48.00	
SGO	4.09	294	P	52	04.90	1.6
MEU	4.59	247	Pc	52	06.20	-4.4X
			eSn	52	56.40	
RDO	4.60	61	ePn	52	09.00	-1.6
GIB	4.96	260	P	52	14.00	-1.9
HVAR	5.04	327	iPn	52	15.80	-1.1
			iSn	53	11.10	
DUI	5.14	303	Pc	52	19.00	0.7
SDI	5.58	301	P	52	26.00	1.5
BEO	5.81	2	eP	52	58.00	30.4X
AQU	6.16	305	P	52	33.20	0.5
MNS	6.65	303	P	52	40.50	1.0
ASS	7.00	308	P	52	44.80	0.3
ARV	7.08	312	Pc	52	44.20	-1.3
			eSn	54	04.50	
VBY	7.46	332	ePn	52	44.60	-6.2X
			eSn	54	13.40	
PTJ	7.57	337	eP	52	50.50	-1.9
RSM	7.62	313	P	52	52.40	-0.7
RIY	7.67	327	e(Pn)	52	52.20	-1.5
			iSn	54	17.70	
CEY	7.97	329	ePn	53	00.00	2.0
			eSn	54	26.00	
PGD	8.02	310	P	52	59.00	0.2
LJU	8.18	331	e(Pn)	52	59.00	-1.9
			e(Sn)	54	31.00	
TRI	8.22	327	e(Pn)	52	59.70	-1.7
			e(Sn)	54	29.00	
VOY	8.43	328	ePn	53	02.50	-1.8
			eSn	54	33.40	
RBL	8.89	329	P	53	11.50	0.8
FVI	9.34	327	P	53	16.50	-0.3
CTI	9.45	321	Pc	53	17.50	-1.1
S.D. = 1.3 on 44 of 48 obs.						

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* FEB 07, 1990 01h 52m 29.52± 1.01s
7.030 S ± 8.2km 129.328 E ±14.7km
DEPTH = 171.8 ± 12.3 km
4.6mb (7 obs.)
BANDA SEA (280)

AAI	3.51	341	ePd	53	25.50	0.8
TLE	3.67	68	iPd	53	08.00	-18.8X
			iS	53	42.50	
MTN	6.05	163	iPd	53	58.20	0.3
			eS	54	58.00	
KNA	8.68	184	iPd	54	32.40	-0.5
	0.2s		110.00nm			6.0mb X
			eS	56	03.00	
WB5	13.68	160	eP	55	35.00	-2.7X
			i	55	37.80	
			i	55	40.90	
			eS	58	01.20	
WRA	13.73	160	Pc	55	36.10	-2.2
	0.6s		10.80nm			4.4mb
QIS	16.73	144	eP	56	15.00	-0.5
			i	56	16.70	
			eS	59	13.00	
MBL	16.78	212	iPc	56	16.10	0.0
ASPA	17.12	166	iPc	56	20.60	0.5
	0.7s		113.00nm			5.4mb
Z	18s		0.19um			3.6Msz
			iS	59	15.10	
			LR	03	29.30	
PMG	17.80	99	eP	56	31.00	3.1X
WARB	19.22	187	eP	56	44.40	1.6
	0.2s		4.00nm			4.5mb
			eS	00	07.00	
NANU	20.38	219	eP	56	55.00	0.5
CTA	20.93	130	eP	57	03.50	3.4X
	0.9s		8.40nm			4.2mb
BRS	30.08	135	eP	58	26.00	1.1
BDT	38.47	309	eP	59	35.90	-0.7
CHG	39.46	311	ePc	59	45.00	0.3
	1.0s		18.75nm			4.7mb
CHTO	39.46	311	iP	59	45.00	0.3
	0.8s		11.90nm			4.6mb
GUN	54.47	312	P	01	41.40	-0.7
	0.4s		17.00nm			5.2mb
PKI	54.64	311	P	01	42.00	-1.3
KKN	54.85	311	P	01	43.80	-0.9
GKN	55.45	311	P	01	47.80	-1.1
MAIO	78.18	309	eP	04	14.00	2.3
ZOBO	151.12	143	ePKP	12	08.00	8.9X
S.D. = 1.2 on 18 of 23 obs.						

FEB 07, 1990 02h 07m 09.80± 0.46s
40.490 N ± 5.2km 21.314 E ± 3.8km
DEPTH = 5.0km (geophysicist)
GREECE (364)
MD 3.6 (ATH). ML 3.1 (SKO).

KZN	0.39	118	iPgc	07	17.30	-0.4
LSK	0.64	238	ePg	07	20.50	-2.2
OHR	0.73	328	iPgc	07	23.40	-1.1
			iSg	07	35.60	
TPE	1.01	259	ePn	07	30.00	0.6
SRN	1.18	239	ePn	07	33.00	0.8
VAY	1.26	49	iPn	07	33.00	-0.7
TIR	1.39	308	ePn	07	35.70	-0.1
KEK	1.40	237	ePb	07	40.00	4.0X
SKO	1.48	4	iPn	07	37.10	-0.1
	0.6s		152.00nm			
			i	07	38.50	
			i	07	39.00	
			e	07	56.00	
			iSg	07	58.00	
PLG	1.63	93	ePb	07	39.50	0.2
LACI	1.67	314	ePn	07	40.80	1.0
NEO	1.89	128	ePn	07	44.20	1.2
KKB	1.92	44	iPd	07	43.00	-0.4
SDA	2.05	319	ePn	07	48.50	3.2X

BCI	2.10	334	ePn	07	47.60	1.6
VTS	2.54	33	iPc	07	52.00	-0.4
ORI	3.75	265	P	08	20.50	11.0X
MGR	4.42	267	Pc	08	18.70	-0.3
SGO	4.58	273	P	08	22.00	0.7
			eSn	09	18.00	
SDI	5.79	285	Pd	08	38.10	-0.4
			eSn	09	44.70	
S.D. = 1.0 on 17 of 20 obs.						

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* FEB 07, 1990 02h 12m 41.74± 1.78s
22.043 S ±25.0km 170.281 E ±12.9km
DEPTH = 42.7 ± 14.1 km
4.6mb (6 obs.)
LOYALTY ISLANDS REGION (189)

DZM	3.56	269	iPd	13	35.40	-0.6
			iS	14	17.00	
SVA	8.62	65	iPd	14	47.00	0.1
BRS	16.77	248	eP	16	35.00	-0.2
RMQ	20.11	253	eP	17	16.70	1.9
CTA	22.50	271	iPd	17	40.90	1.9
	1.0s		14.00nm			4.4mb
			iS	21	52.00	
BWA	22.82	233	eP	17	42.20	0.1
CAN	22.82	230	eP	17	48.00	5.9X
CMS	23.73	241	eP	17	51.80	0.9
ASPA	33.51	260	eP	19	17.80	-1.7
	0.8s		8.00nm			4.7mb
Z	22s		0.34um			4.0MszX
			LR	32	10.10	
WB5	33.56	267	eP	19	18.10	-1.9
			i	19	25.90	
WRA	33.57	267	Pd	19	18.40	-1.7
	0.7s		2.70nm			4.3mb
BJI	79.72	321	eP	24	47.00	0.4
CHG	80.70	295	ePc	24	53.80	1.5
	1.0s		17.75nm			5.0mb
CHTO	80.70	295	iPc	24	53.70	1.4
	1.1s		17.37nm			4.9mb
SHL	89.52	298	iP	25	35.00	-1.4
			eS	27	34.00	
KVN	90.36	48	eP	25	40.10	0.1
			e	26	00.10	
FBA	92.47	17	eP	25	46.00	-2.9
	1.0s		1.90nm			4.5mb
			e	26	08.90	
PKI	95.63	297	P	26	00.00	-4.7X
FR8	123.21	27	ePKP	31	31.00	-3.8X
DAG	125.04	3	ePKP	31	34.50	-3.5X
HFS	138.52	343	ePKP	31	52.10	-12.0X
	0.5s		0.70nm			
KSP	144.80	331	iPKPc	32	13.50	-2.0
	0.9s		96.00nm			
BUD	145.68	325	ePKP	32	17.00	-0.1
8RG	145.80	333	iPKPc	32	16.10	-1.1
	1.6s		54.00nm			
			i	32	29.70	
CLL	145.85	334	iPKPc	32	16.30	-0.9
SRO	145.85	326	ePKP	32	16.70	-0.6
PRU	146.20	332	PKPc	32	17.60	-0.2
	1.0s		18.80nm			
			e	32	58.20	
ZST	146.23	327	ePKP	32	17.60	-0.3
EKA	146.40	353	PKPd	32	17.50	-0.5
	0.8s		17.80nm			
MOX	146.92	335	ePKP	32	20.00	1.0
KHC	147.25	331	iPKPc	32	21.10	1.5
	1.0s		10.50nm			
BCAO	147.51	241	iPKPc	32	20.80	-0.2
	0.4s		18.00nm			
			id	32	23.20	
WET	147.55	332	iPKPc	32	21.80	1.7
GRF	147.83	334	ePKP	32	22.50	2.0
			e	32	26.20	
DMU	148.12	357	ePKP	32	22.30	1.5
DCN	148.69	357	ePKP	32	23.70	2.0
	1.0s		116.00nm			
DLE	148.71	356	ePKP	32	23.00	1.3
	1.0s		46.00nm			
MEM	148.94	340	PKPc	32	24.50	2.4X
VBY	148.95	325	ePKPd	32	26.30	3.9X
LJU	148.97	326	ePKP	32	25.50	3.1X
FUR	148.99	332	ePKP	32	30.70	8.3X
	0.8s		23.00nm			
ABH	149.06	338	ePKP	32	25.52	3.1X
CEY	149.23	326	ePKP	32	25.40	2.5X

07d 02h

VOY	149.31	327	e(PKP)	32	23.90	0.8
RUP	149.38	338	ePKP	32	26.30	3.3X
FVI	149.46	329	PKPc	32	26.80	3.7X
SNF	149.53	342	PKP	32	26.30	3.2X
TRI	149.59	327	ePKP	32	25.90	2.6X
DOU	149.82	342	PKP	32	27.10	3.6X
CDF	150.39	337	ePKP	32	28.50	3.9X
	0.8s		8.05nm			
CTI	150.40	329	PKP	32	30.00	5.3X
FEL	150.56	335	ePKP	32	29.25	4.3X
BSF	151.05	337	ePKP	32	29.90	4.3X
	0.8s		10.75nm			
HAU	151.07	337	ePKP	32	30.10	4.6X
	0.8s		10.75nm			
SAL	151.26	330	PKP	32	31.00	5.2X
ARV	151.52	324	PKPd	32	32.00	5.7X
TDS	151.71	314	PKP	32	35.50	8.8X
SFI	151.81	326	PKP	32	32.00	5.3X
VAI	151.85	332	PKPd	32	31.70	5.0X
SGO	151.91	317	PKP	32	33.00	6.1X
PGD	151.91	326	PKP	32	33.50	6.4X
ASS	151.95	324	PKP	32	33.00	5.9X
CRE	151.96	325	PKP	32	34.00	6.9X
SDI	152.16	320	PKP	32	32.00	4.6X
BDI	152.35	327	PKP	32	30.00	2.4X
ORO	152.38	333	PKP	32	33.00	5.3X
MNS	152.39	322	PKP	32	34.00	6.3X
BOB	152.39	330	PKP	32	37.00	9.3X
LOR	152.55	340	ePKP	32	33.40	5.7X
	1.0s		6.00nm			
SOI	152.69	312	PKP	32	34.50	6.4X
SSF	152.85	340	ePKP	32	34.10	6.0X
	1.0s		12.00nm			
LPL	152.99	334	ePKP	32	35.00	6.3X
	1.0s		5.00nm			
LPG	153.00	334	ePKP	32	35.30	6.5X
	0.8s		7.40nm			
BNI	153.39	333	PKP	32	32.00	2.9X
BGF	153.50	340	ePKP	32	36.30	7.2X
	0.8s		5.35nm			
KIC	163.68	198	PKP	32	40.40	-1.4
TIC	164.03	197	PKP	32	40.00	-2.1

S.D. = 1.4 on 35 of 77 obs.

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* FEB 07, 1990 02h 20m 04.45± 1.47s
45.689 N ±10.5km 26.701 E ± 7.8km
DEPTH = 141.8 ± 14.2 km
ROMANIA (358)

VRI	0.18	5	iPc	20	23.00	-0.3
BRD	0.30	125	iPc	20	24.50	0.9
ISR	0.56	191	iPd	20	25.50	0.0
MLR	0.57	250	iPd	20	25.00	-0.7
BIR	0.87	48	iP	20	28.00	0.4
CFR	1.14	116	iPd	20	29.00	-1.0
CMP	1.24	251	iPc	20	31.00	-0.1
PSN	2.27	152	iP	20	43.00	0.3
PVL	2.66	202	iPd	20	49.00	1.4
BZS	3.57	271	eP	20	59.50	0.1
PGB	3.63	211	eP	21	00.00	-0.4
VTS	3.99	220	eP	21	05.00	-0.2
KDZ	4.14	193	iP	21	07.00	-0.1
RZN	4.25	200	eP	21	08.00	-0.7
KKB	4.63	216	iP	21	14.00	0.3
VAY	5.30	216	ePn	21	18.50	-4.1X
OHR	6.28	225	ePn	21	36.00	0.1

S.D. = 0.7 on 16 of 17 obs.

FEB 07, 1990 02h 43m 37.74± 0.43s
50.417 N ± 3.8km 5.962 E ± 4.7km
DEPTH = 11.8 ± 3.3 km
BELGIUM (541)
ML 3.0 (LDG). MD 2.4 (UCC).

MEM	0.19	8	iPc	43	41.50	-0.7
ENN	0.35	356	iPgc	43	44.80	-0.3
	0.4s		91.00nm			
			iSg	43	47.30	
			i	43	50.30	
WLF	0.76	171	iPd	43	53.87	1.4
			iS	44	03.40	
DOU	0.93	250	iPd	43	57.00	1.6
			iS	44	09.70	
RUP	1.01	135	ePg	43	57.72	1.0
SNF	1.08	276	iPd	43	58.91	1.1
UCC	1.09	291	iP	44	15.30	17.3X
ABH	1.15	117	ePg	43	59.49	0.4
WTS	1.67	18	ePn	44	08.00	1.1
	0.6s		8.00nm			
			e	44	16.00	
			eSn	44	29.00	
CDF	2.18	156	Pg	44	20.20	5.7X
			Sn	44	39.20	
HAU	2.43	174	Pn	44	18.40	0.5
			Pg	44	24.20	
			Sn	44	46.10	
			Sg	44	54.60	
BSF	2.64	168	Pn	44	21.90	0.8
			Sn	44	51.20	
FEL	2.88	151	ePn	44	24.39	0.0
LOR	3.44	205	Pn	44	32.40	0.1
			Pg	44	43.00	
			Sn	45	10.60	
LBF	3.68	202	Pn	44	36.20	0.5
			Pg	44	48.60	
			Sn	45	16.50	
SSF	3.73	207	Pn	44	36.30	-0.1
			Pg	44	49.80	
			Sn	45	18.40	
			Sg	45	35.60	
AVF	4.02	206	Pn	44	40.40	0.0
SMF	4.03	201	Pn	44	39.80	-0.8
			Sg	45	45.60	
BGF	4.38	209	Pn	44	44.90	-0.7
			Sn	45	32.60	
MAF	4.77	210	Pn	44	50.40	-0.7
TCF	4.83	213	Pn	44	51.40	-0.6
LPL	4.93	174	Pn	44	54.00	0.4

S.D. = 0.8 on 20 of 22 obs.

FEB 07, 1990 03h 34m 04.18± 0.43s
39.350 N ± 8.2km 73.154 E ± 7.5km
DEPTH = 10.0km (geophysicist)
4.7mb (11 obs.)
TAJIK-XINJIANG BORDER REGION (719)

KSH	2.19	86	Pnd	34	38.50	-2.8
			Sg	35	21.00	
NDI	11.16	161	eP	36	51.50	4.7X
	0.7s		13.70nm		5.4mb	
			eS	38	50.00	
WMQ	11.77	63	P	36	56.50	1.4
GKN	14.80	136	P	37	34.40	-1.0
	0.6s		25.00nm		4.9mb	
KKN	15.31	135	P	37	41.40	-0.8
	0.6s		21.00nm		4.7mb	
DMN	15.36	136	P	37	42.80	-0.1
GUN	15.55	133	P	37	45.40	-0.1
PKI	15.56	135	P	37	45.00	-0.5
	0.8s		34.00nm		4.7mb	
GTA	20.59	81	iPc	38	48.40	2.4
SHL	20.89	126	iP	38	49.50	0.3
			eS	42	37.00	
LZH	24.44	88	P	39	26.50	2.3
GBA	25.92	170	P	39	40.00	1.8
	1.2s		10.30nm		4.4mb	
CD2	26.31	99	P	39	45.30	3.5X
MLR	34.98	296	eP	41	00.00	1.4
SUF	36.48	325	eP	41	10.20	-0.6
	0.5s		3.00nm		4.4mb	
NUR	36.58	322	eP	41	11.50	-0.3
SOD	37.93	333	eP	41	18.00	-5.0X
HFS	41.93	320	eP	41	55.10	-1.1
	0.5s		7.10nm		4.7mb	
PRU	42.01	305	eP	41	57.00	0.0
KHC	42.77	303	eP	42	04.00	0.7
TRI	43.35	299	eP	42	07.90	0.0
BCAO	60.26	249	ePc	44	15.00	-0.2
	0.5s		5.00nm		4.9mb	
MBC	64.41	3	ePc	44	42.00	-0.1
	0.5s		4.00nm		4.9mb	
IMA	68.89	19	eP	45	09.30	-1.6
	0.7s		3.90nm		4.7mb	
INK	70.81	10	eP	45	23.00	0.7
FBA	71.25	17	eP	45	24.70	-0.4
FRB	72.84	343	eP	45	33.00	-1.5
PMR	73.72	20	eP	45	39.60	0.0
TOA	74.03	18	eP	45	42.30	0.8
WB5	82.07	124	eP	46	36.80	10.6X
WRA	82.10	124	Pc	46	25.70	-0.7
	0.7s		2.90nm		4.5mb	

S.D. = 1.2 on 27 of 31 obs.

? FEB 07, 1990 04h 16m 03.12±11.88s
9.897 S ±89.8km 124.442 E ±60.3km
DEPTH = 33.0km (normal)
4.1mb (2 obs.)
TIMOR (289)

MTN	7.18	115	iPc	17	49.70	1.1
			eS	19	10.00	
KNA	7.18	145	eP	17	50.10	1.5
			eS	19	13.00	
WB5	13.80	137	eP	19	16.80	-1.9
			eS	21	48.00	
WRA	13.82	137	P	19	18.00	-1.1
	0.2s		0.70nm		4.1mb	
WARB	16.33	173	eP	19	52.00	0.3
			eS	23	50.00	
ASPA	16.40	148	iPc	19	52.90	0.3
	0.3s		5.00nm		4.1mb	
			eS	22	50.80	
QIS	18.05	128	eP	20	13.00	-0.2

S.D. = 1.5 on 7 of 7 obs.

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* FEB 07, 1990 05h 28m 35.04± 0.83s
26.080 N ± 9.5km 103.107 E ± 9.3km
DEPTH = 10.0km (geophysicist)
YUNNAN PROVINCE, CHINA (318)
ML 3.7 (BJI).

KMI	1.01	199	Pgc	28	54.00	-0.3
			Sg	29	08.00	
GYA	3.22	82	iPgc	29	27.40	0.7
			Sg	30	05.20	
CD2	4.85	7	Pn	29	50.40	0.6
			Pg	30	04.60	
			Sn	30	52.80	
			Sg	31	14.00	
XAN	9.39	31	P	30	52.20	-1.3
GUN	15.47	281	P	32	20.80	5.6X
PKI	15.87	279	P	32	21.60	1.1
KKN	15.99	280	P	32	24.80	2.9X
DMN	16.14	279	P	32	23.00	-0.9
GKN	16.57	281	P	32	33.00	3.8X

S.D. = 1.2 on 6 of 9 obs.

FEB 07, 1990 06h 02m 55.68± 1.27s
9.783 N ± 5.2km 124.715 E ± 7.6km
DEPTH = 61.4 ± 12.4 km
4.9mb (10 obs.) 3.9Msz (3 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV	2.81	162	eP	03	40.00	0.9
QCP	5.99	324	eP	04	44.00	20.2X
BAG	7.72	329	eP	04	47.20	-0.9
QZH	16.16	340	eP	06	45.60	5.3X
QIZ	17.07	304	eP	06	56.70	4.8X
E	15s		1.60um			
GUMO	20.09	77	eP	07	28.50	1.5
SSE	21.46	352	eP	07	40.50	-0.3
Z	20s		0.50um		3.9Msz	
E	12s		0.30um			
KGM	22.62	251	eP	07	53.00	0.5
NJ2	22.81	347	Pd	07	55.20	1.0
IPM	24.06	259	ePd	08	08.00	1.6
	0.8s		108.90nm		5.4mb	
BDT	26.05	289	eP	08	25.00	-0.2
CHG	26.51	293	eP	08	29.40	0.0
CHTO	26.51	293	eP	08	29.30	-0.1
	1.2s		7.29nm		4.1mb	
XAN	28.16	331	P	08	43.40	-0.9
CD2	28.67	320	eP	08	48.00	-0.9
TIY	29.93	340	eP	08	58.80	-1.4
Z	18s		0.50um		4.2Msz	
WB5	30.97	162	eP	09	07.60	-1.8
WRA	31.02	162	Pc	09	06.90	-3.0
	0.7s		1.80nm		3.9mb	
BJI	31.08	347	eP	09	09.50	-0.6
	1.1s		0.01nm		1.6mb X	
SNY	31.93	358	eP	09	17.20	-0.4
LZH	32.33	327	P	09	22.00	0.6
	1.5s		0.05nm		2.1mb X	
Z	16s		0.40um		4.2MszX	
HHC	33.06	342	P	09	27.60	0.0
QIS	33.52	154	eP	09	30.00	-1.7
CN2	33.90	1	eP	09	34.00	-0.6
ASPA	34.44	165	iPd	09	38.60	-1.0
	0.5s		6.00nm		4.8mb	
Z	18s		0.14um		3.7Msz	
			LR	28	04.60	

MDJ 34.96 6 eP 09 43.60 -0.2
WARB 35.80 177 eP 09 51.00 -0.1
CTA 36.48 145 iPd 09 57.00 0.1
1.0s 11.00nm 4.7mb
e 12 20.50
GTA 36.93 327 P 10 01.80 1.1
LSA 37.08 307 P 10 03.80 1.4
HYB 45.41 285 eP 11 10.50 0.1
GBA 46.40 279 Pd 11 18.00 -0.2
0.5s 8.80nm 4.9mb
ADE 46.44 164 iPc 11 18.30 0.1
1.0s 44.00nm 5.3mb
WMQ 46.68 323 P 11 21.00 0.9
BWA 49.38 154 eP 11 43.00 1.8
BFD 49.62 161 ePd 11 44.00 1.1
CAN 50.39 154 eP 11 49.80 0.9
MAIO 64.33 306 iPc 13 27.40 0.0
MSL 77.51 305 ePd 14 46.00 -0.6
SOD 84.15 337 iP 15 21.30 0.3
SUF 85.29 333 iP 15 26.60 -0.2
0.7s 25.90nm 5.4mb
INK 85.30 21 eP 15 28.00 1.2
MBC 86.52 12 eP 15 33.50 0.8
1.0s 11.00nm 5.0mb
HFS 91.77 332 eP 15 56.10 -1.6
0.7s 3.20nm 4.8mb
LKO 126.94 290 PKP 21 56.86 1.5
ZOBO 165.93 119 PKP 22 56.00 -0.1
S.D. = 1.1 on 43 of 46 obs.

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* FEB 07, 1990 06h 24m 00.64± 0.64s
17.702 S ±13.0km 179.052 W ± 9.2km
DEPTH = 557.7 ± 6.9 km
5.0mb (13 obs.)
FIJI ISLANDS REGION (181)

SVA 2.41 260 eP 25 12.40 -1.1
SGE 2.89 272 iP 25 17.00 0.7
DZM 14.32 250 iPd 27 03.00 0.1
COO 29.35 239 iPd 29 21.20 0.5
RMQ 31.01 248 iPd 29 35.90 1.1
0.7s 278.00nm 6.0mb X
i 29 50.00
CTA 32.88 260 iPd 29 50.30 -0.2
0.8s 77.61nm 5.4mb
iPP 31 25.00
iScP 35 14.00
CNB 33.07 232 iPc 29 53.00 0.9
0.8s 167.00nm 5.7mb
PMG 33.82 280 eP 29 59.00 0.5
CMS 34.59 240 iPd 30 05.20 0.4
0.7s 124.00nm 5.6mb
LAT 34.89 284 eP 30 09.00 1.6
OLP 35.04 249 iPd 30 09.20 0.7
TOO 36.83 230 iPd 30 24.20 1.1
0.2s 98.00nm 6.1mb X
BFD 38.88 232 ePd 30 42.50 2.7
OIS 39.09 259 ePd 30 40.80 -1.0
ADE 41.23 237 ePd 30 59.60 0.7
0.6s 56.00nm 5.3mb
WB5 44.05 259 iPd 31 20.10 -1.1
WRA 44.06 259 Pd 31 20.00 -1.3
0.7s 26.10nm 4.9mb
ASPA 44.26 254 eP 31 22.10 -0.7
0.6s 392.00nm 6.1mb X
iS 37 14.70
MTN 48.19 268 iPd 31 52.00 -0.9
KNA 49.88 264 iPd 32 04.70 -0.6
0.4s 53.00nm 5.4mb
WARB 50.77 250 iPd 32 11.30 -0.6
0.6s 109.00nm 5.5mb
COOL 55.49 244 iPd 32 44.00 -1.4
0.4s 17.00nm 4.7mb
MBL 57.44 256 iPd 32 58.00 -0.8
0.3s 7.00nm 4.5mb
KLB 58.37 243 eP 33 04.00 -1.1
0.6s 23.00nm 4.7mb
NWAO 58.77 242 eP 33 07.00 -0.7
RKG 58.92 241 eP 33 08.00 -0.8
BAL 59.32 245 iPd 33 10.30 -1.1
MUN 59.67 243 eP 33 13.20 -0.5
NANU 61.19 254 iPd 33 23.80 0.0
0.4s 25.00nm 5.0mb
MWC 77.65 48 eP 35 01.00 -0.5
MDJ 77.67 325 eP 35 02.00 1.0
FRI 77.99 45 eP 35 02.80 -0.1
SBB 78.06 48 eP 35 03.00 -0.4
PLM 78.06 49 eP 35 03.00 -0.6
CMB 78.11 44 eP 35 03.50 -0.1
ISA 78.12 46 eP 35 04.00 0.3
CLC 78.81 47 eP 35 07.00 -0.3
GSC 79.09 47 eP 35 09.00 0.1
GLA 79.39 50 eP 35 11.00 0.6
CN2 79.48 323 Pc 35 11.00 0.4
KVN 80.17 44 iPd 35 14.80 0.3
PNT 84.91 34 eP 35 38.00 0.2
0.6s 9.00nm 4.6mb
FBA 85.74 13 iP 35 40.20 -1.3
0.5s 4.20nm 4.4mb
ALQ 86.45 52 iPd 35 46.30 0.5
1.0s 2.75nm 3.9mb X
LRM 87.21 40 eP 35 40.70 -8.5X
CHTO 88.35 290 eP 35 56.60 1.9
1.0s 2.25nm 4.0mb X
INK 91.85 15 eP 36 10.00 0.2
KRA 144.30 339 ePKP 42 34.30 -0.3
KSP 144.74 343 iPKPc 42 35.60 0.2
CLL 145.12 347 iPKP 42 36.20 0.2
BRG 145.32 345 i(PKP) 42 41.80 5.5X
0.9s 14.00nm
PRU 145.98 344 ePKP 42 38.00 0.6
KHC 147.02 345 PKP 42 42.50 3.3X
GRF 147.03 348 e(PKP) 42 43.00 3.9X
KBA 148.97 343 i(PKP) 42 46.80 4.3X
0.5s 3.90nm
i 42 54.20
S.D. = 0.9 on 50 of 55 obs.

& FEB 07, 1990 07h 41m 39.92s
32.908 N 80.163 W
DEPTH = 9.3km
SOUTH CAROLINA (511)
<GLD>. MD 2.7 (GLD). mbLg 2.9
(NEIS). Felt at Middleton
Gardens and Summerville.

MGS 0.02 120 P 41 41.06 -0.7
SVS 0.09 310 iPd 41 42.58 0.1
S 41 43.76
WSS 0.11 237 iPd 41 42.74 0.1
S 41 44.15
BCS 0.11 50 iPd 41 42.89 0.2
S 41 44.56
HBF 0.18 278 P 41 43.43 -0.5
HWD 0.20 211 ePc 41 44.35 0.2
S 41 47.64
TWB 0.21 14 iPc 41 44.68 0.2
S 41 47.44
DRC 0.27 317 iPd 41 45.84 0.2
S 41 50.45
SGS 0.41 314 iPd 41 48.13 -0.1
S 41 53.32
COW 0.66 317 ePd 41 52.42 -0.6
S 42 01.95
VRN 0.67 281 ePd 41 52.42 -0.8
S 42 01.66
MTT 1.49 305 ePc 42 06.24 -0.6
S 42 26.65
JSC 1.64 327 ePc 42 08.09 -0.9
S 42 29.21
LHS 1.66 341 ePc 42 07.94 -1.3
PRM 2.18 303 ePc 42 15.56 -1.3
S 42 41.48
TKL 4.06 314 e(P) 42 42.00 -1.5
BLA 4.30 357 e(P) 42 48.00 1.0
GBTN 4.34 311 e(P) 42 49.50 2.0
18 obs. associated

? FEB 07, 1990 07h 58m 01.66± 6.66s
17.736 N ±28.4km 65.485 W ±39.8km
DEPTH = 10.0km (geophysicist)
PUERTO RICO REGION (90)
Felt at San Juan and Naranjito.

CPD 0.51 306 P 58 12.00 0.0
S 58 17.30
LPR 0.68 327 P 58 15.20 0.1
S 58 21.80
SJG 0.74 301 iP 58 15.90 -0.2
PORP 1.14 286 P 58 23.20 0.2
LRS 1.41 293 P 58 27.30 -0.1
S 58 46.40
S.D. = 0.2 on 5 of 5 obs.

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* FEB 07, 1990 08h 19m 56.21± 1.37s
15.276 N ± 5.1km 61.329 W ±20.0km
DEPTH = 154.5 ± 15.4 km
LEEWARD ISLANDS (92)

BBL 0.28 330 iPd 20 17.76 -0.7
S 20 35.70
FDF 0.57 162 eP 20 18.93 0.2
S 20 35.50
CRM 0.65 142 iPc 20 19.07 -0.1
BIM 0.79 162 iPc 20 20.21 0.1
S 20 37.80
DOG 0.80 340 iPd 20 20.46 0.3
PAG 0.82 336 iPd 20 20.74 0.4
S 20 39.00
MVM 0.83 150 iPc 20 20.34 0.0
S 20 38.20
SFG 0.98 7 ePd 20 21.84 0.4
DEG 1.06 14 iPd 20 22.22 -0.1
S 20 41.00
SEG 1.13 351 eP 20 23.14 0.3
S 20 42.20
SLB 1.47 169 iP 20 25.91 -0.3
eS 20 47.99
BPA 1.83 344 eP 20 29.78 -0.3
eS 20 54.04
ANG 1.93 346 eP 20 30.78 -0.4
eS 20 55.06
SSV 1.94 176 iP 20 31.21 -0.2
SVV 1.95 177 iP 20 31.37 0.0
eS 20 52.83
SVB 1.99 178 iP 20 31.87 -0.1
eS 20 53.43
GRW 3.11 186 eP 20 46.26 0.4
eS 21 06.82
S.D. = 0.4 on 17 of 17 obs.

% FEB 07, 1990 08h 33m 52.74± 0.60s
44.238 N ± 8.2km 7.505 E ± 4.2km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.2 (GEN).

ENR 0.06 259 P 33 54.87 -0.2
S 33 56.53
STV 0.13 273 P 33 56.00 0.0
S 33 58.46
ROB 0.27 78 P 33 58.36 -0.1
S 34 03.00
PZZ 0.39 313 P 34 00.93 0.1
S 34 07.16
IMI 0.43 140 P 34 01.89 0.4
S 34 08.43
FIN 0.51 93 P 34 02.38 -0.6
S 34 09.89
PCP 0.81 67 P 34 08.90 0.5
S 34 18.75
S.D. = 0.5 on 7 of 7 obs.

FEB 07, 1990 09h 29m 41.75± 1.37s
8.202 N ± 5.2km 126.683 E ±10.6km
DEPTH = 86.0 ± 13.1 km
4.6mb (10 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV 1.56 225 eP 30 08.80 0.3
MNI 6.96 195 eP 31 25.00 2.0
BAG 10.10 324 eP 32 04.90 -1.3
GUMO 18.64 72 eP 34 02.00 6.5X
PJG 18.64 72 eP 34 02.50 7.0X
QIZ 19.57 305 eP 34 06.00 0.5
N 16s 1.70um
MTN 21.37 168 eP 34 23.00 -1.0
e 38 18.00
SSE 23.35 348 P 34 44.00 0.8
Z 20s 0.50um 4.0Msz
KNA 23.89 175 eP 34 48.70 0.2
IPM 25.75 264 ePd 35 11.30 5.1X
LOE 25.97 293 eP 35 11.00 2.8
NST 26.99 288 eP 35 21.00 3.4X
WB5 28.91 165 eP 35 35.00 0.1
CHG 28.91 294 eP 35 35.00 0.0
CHTO 28.91 294 eP 35 35.20 0.3
1.0s 7.00nm 4.2mb
WRA 28.97 165 Pd 35 35.20 -0.2
0.6s 2.60nm 4.0mb
XAN 30.48 330 eP 35 45.20 -3.5X

07d 09h

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QIS     31.28 156 eP     35 54.00  -1.8
TIY     32.09 338 eP     36 00.70  -2.1
      Z  20s      0.40um          4.1Msz
ASPA    32.45 168 eP     36 04.90  -1.1
        0.5s      7.00nm          4.7mb
      Z  19s      0.24um          3.9Msz
                  iS     41 12.00
                  LR     50 01.80
BJI     33.07 345 eP     36 09.50  -1.6
SNY     33.60 356 iPc    36 15.00  -0.7
CTA     34.08 146 iP     36 19.00  -1.1
WARB    34.18 180 eP     36 21.00   0.1
        0.4s      6.00nm          4.8mb
HHC     35.18 340 eP     36 28.00  -1.5
CN2     35.48 358 eP     36 31.00  -0.8
MDJ     36.36   4 Pc     36 39.20   0.0
SHL     37.34 302 iP     36 47.50  -0.5
COOL    39.22 188 eP     37 03.00  -0.4
GTA     39.31 326 eP     37 03.00  -1.2
BAL     39.76 194 eP     37 07.00  -0.7
KLB     40.48 192 eP     37 13.50  -0.2
MUN     41.19 194 eP     37 20.10   0.6
NWAO    41.88 192 eP     37 25.00  -0.1
RKG     43.03 192 eP     37 40.00   5.5X
BRS     43.48 145 iP     37 34.00  -4.3X
                  i      37 37.30
GBA     48.59 281 Pd     38 18.80   0.0
        0.6s      2.20nm          4.3mb
SVW     76.92  29 eP     41 27.80   1.7
TTA     76.96  27 eP     41 27.70   1.3
BRW     77.98  19 eP     41 33.20   1.5
KDC     78.21  33 P      41 34.60   1.4
        0.3s      8.96nm          5.1mb
IMA     78.34  24 eP     41 35.20   1.2
        0.7s      4.60nm          4.5mb
PMR     80.07  29 eP     41 43.60   0.4
        0.8s     13.70nm          4.9mb
FBA     80.73  26 eP     41 47.10   0.4
INK     86.05  22 eP     42 07.00  -6.7X
SOD     86.34 338 eP     42 32.00  16.8X
SUF     87.57 333 eP     42 21.00  -0.2
        0.4s      1.90nm          4.5mb
MBC     87.63  13 eP     42 23.00   1.8
        1.0s     11.00nm          4.9mb
NUR     88.79 331 eP     42 14.60 -12.4X
SLL     94.09 333 eP     42 50.70  -0.9
        1.3s     44.20nm          5.7mb X
      S.D. = 1.2  on  40 of  50 obs.
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?  FEB  07, 1990  10h 20m 58.46± 1.05s
   23.711 S ±42.6km  174.929 W ±19.0km
   DEPTH =  45.2km  ( 14 depth phases)
   4.8mb ( 11 obs.)  4.7Msz (  1 obs.)
 TONGA ISLANDS REGION              (174)

DZM     17.24 272 iPc    25 00.90   3.2X
CTA     36.12 268 iPd    27 59.90   1.6
        1.0s     32.00nm          5.2mb
ASPA    46.64 259 iPd    29 24.80   0.3
        0.7s     14.00nm          5.0mb
      Z  21s      0.96um          4.7Msz
                  eS     36 13.90
                  LR     47 39.20
WB5     47.04 264 eP     29 26.50  -1.2
WRA     47.05 264 Pc     29 24.70  -3.1X
        0.7s      8.70nm          4.8mb
MAT     74.47 322 eP     32 30.00  -4.0X
PLM     79.22  46 P      33 00.70  -0.1
                  pP     33 13.90  45km
FRI     79.68  42 e(P)   33 03.00   0.1
                  epP    33 16.30  45km
CMB     79.95  41 eP     33 04.30  -0.1
                  epP    33 17.80  46km
WDC     80.39  38 e(P)   33 06.70   0.1
                  epP    33 19.80  44km
GLA     80.41  48 P      33 08.00   1.0
                  pP     33 20.80  43km
TNP     81.91  42 P      33 15.00   0.1
        0.9s      6.02nm          4.6mb
                  pP     33 28.50  46km
KVN     81.97  41 P      33 14.90  -0.3
                  pP     33 28.00  44km
RMW     85.44  33 P      33 31.60  -0.9
                  pP     33 45.70  48km
ALQ     87.23  50 eP     33 42.70   1.0
        1.0s      5.00nm          4.7mb
ANMO    87.23  50 P      33 43.10   1.4
        1.1s      6.72nm          4.8mb
                  pP     33 56.20  44km
TTA     87.64   9 P      33 43.00   0.1
        1.2s     18.94nm          5.2mb
                  pP     33 55.80  42km
BW06    89.39  42 P      33 51.70  -0.2
        0.5s      1.25nm          4.5mb
FBA     90.79  11 P      33 56.50  -1.0
        0.9s     10.42nm          5.2mb
                  pP     34 10.00  45km
IMA     90.95   9 P      33 59.10   0.6
        0.9s      3.65nm          4.8mb
                  pP     34 11.00  38km
RSSD    93.51  43 P      34 10.00  -0.8
                  pP     34 24.00  47km
CHTO    93.99 289 e(P)   34 13.60   0.4
        0.6s      1.26nm          4.5mb
                  pP     34 29.20  54km
GUN    108.41 293 PKP    39 17.20  -7.4X
PKI    108.70 292 PKP    39 19.60  -5.5X
KKN    108.88 293 PKP    39 21.00  -4.3X
DMN    108.97 292 PKP    39 22.00  -3.5X
GKN    109.48 293 PKP    39 25.60  -0.8
KSP    151.55 345 ePKP   40 49.50   7.0X
                  i      41 02.80
CLL    151.77 349 ePKP   40 51.00   8.2X
        1.3s     10.00nm
                  i      41 03.30
BRG    152.02 348 ePKP   40 41.90  -1.3
        1.2s     17.00nm
                  i      41 03.60
MLR    152.45 327 ePKP   40 52.00   7.8X
      S.D. = 0.9  on  21 of  31 obs.
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   FEB  07, 1990  10h 32m 39.75± 0.89s
   18.912 N ± 4.5km  120.559 E ± 5.8km
   DEPTH =  12.2 ±  5.7 km
   4.8mb ( 12 obs.)  4.3Msz (  3 obs.)
 LUZON, PHILIPPINE ISLANDS         (249)

BAG      2.49 180 eP     33 23.00   2.2
        1.3s  1307.69nm
                  eS     33 55.00
QCP      4.28 173 eP     33 50.50   4.3X
ANP      6.30   8 eP     34 45.20  30.4X
                  eS     36 29.20
HKC      6.87 301 iPd    34 18.30  -4.4X
MCO      7.30 297 eP     34 24.40  -4.3X
GZH      7.92 303 Pc     34 32.70  -4.7X
      N  12s      5.70um
      E  12s      4.30um
QIZ     10.14 272 eP     35 03.20  -5.0X
      N  12s      3.50um
      E  13s      2.90um
                  S      36 51.40
SSE     12.14   3 eP     35 35.00  -0.4
      Z  18s      1.40um          4.0Msz
      N  12s      1.40um
      E  12s      0.81um
                  sP     35 47.00
WHN     12.88 335 eP     35 48.50   3.3X
      N  14s      3.20um
      E  14s      1.60um
NJ2     13.17 354 eP     35 48.60  -0.6
      Z  14s      1.80um
      N  11s      2.00um
      E  13s      1.20um
GYA     14.85 303 iPd    36 07.80  -3.7X
      Z  14s      1.90um
      N  12s      2.50um
      E  12s      3.50um
TIA     17.50 351 eP     36 45.70   0.6
      Z  18s      1.80um
      N  15s      1.30um
      E  15s      1.60um
KMI     17.63 294 Pc     36 47.00  -0.1
      N  12s      2.00um
      E  13s      3.30um
                  sP     36 59.50
XAN     18.29 328 Pc     36 53.00  -2.0
        2.0s    200.00nm          4.9mb
      N  13s      2.40um
CD2     19.33 311 eP     37 06.00  -1.9
      Z  14s      3.10um
      E  10s      3.00um
DL2     19.94   2 eP     37 15.50   1.1
      Z  16s      1.20um
      N  14s      0.90um
      E  14s      1.80um
TIY     20.03 341 Pc     37 14.40  -1.1
      Z  16s      3.00um          4.7MszX
CHG     20.46 273 ePd    37 19.50  -0.4
        1.2s     30.08nm          4.5mb
CHTO    20.46 273 iP     37 19.30  -0.6
BDT     20.56 269 eP     37 20.00  -1.0
        0.7s     21.50nm          4.6mb
NNT     21.00 256 eP     37 26.40   0.9
BJI     21.39 351 eP     37 29.50   0.1
      Z  18s      1.47um          4.4Msz
      E  16s      2.09um
                  eS     41 24.00
LZH     22.58 323 eP     37 42.00   0.5
        1.7s    150.00nm          5.2mb
SNY     22.99   6 iPd    37 45.20   0.0
      Z  12s      1.90um          4.8MszX
      N  13s      1.00um
      E  12s      0.90um
                  pP     37 54.50  34kmX
                  PP     38 15.00
                  iS     41 54.00
HHC     23.19 342 P      37 48.60   1.3
      Z  16s      3.00um          4.8MszX
      N  13s      2.30um
      E  14s      0.80um
                  sS     42 08.00
MTMJ    23.23  37 P      37 48.30   0.5
BTO     23.43 339 eP     37 51.00   1.3
      N  12s      0.70um
      E  12s      1.50um
                  epP    37 59.00  29kmX
MAT     23.44  38 (P)    37 46.00  -3.7X
      Z  20s      0.35um          3.8Msz
                  eS     42 04.00
CHJJ    23.57  40 P      37 50.90  -0.1
GUMO    23.92  99 eP     38 00.50   6.0X
      Z  19s      1.02um          4.3Msz
GUA     23.97  99 eP     38 00.50   5.5X
MDJ     26.72  14 Pd     38 21.00   0.3
      Z  17s      1.20um          4.5MszX
                  eS     42 56.00
GTA     27.18 323 eP     38 25.00  -0.2
      Z  10s      1.90um          5.0MszX
      E  10s      1.00um
WMQ     37.07 319 eP     39 51.00  -0.6
      Z  14s      0.90um          4.7MszX
      E  11s      1.10um
WB5     40.86 160 eP     40 22.00  -1.3
                  e      42 24.70
WRA     40.91 160 Pc     40 22.90  -0.8
        0.7s      3.60nm          4.2mb
QIS     43.44 154 eP     40 43.00  -1.4
KSH     43.45 308 eP     40 47.00   2.5
      E  13s      1.50um
ASPA    44.28 162 eP     40 50.20  -0.9
        0.3s      2.00nm          4.5mb
WARB    45.21 172 eP     40 59.00   0.4
MAIO    55.95 301 iPc    42 21.20   0.8
ADE     56.29 162 ePc    42 22.70   0.1
BRW     69.89  20 eP     43 59.70   7.6X
TTA     70.36  29 eP     43 55.60   0.4
SVW     70.66  31 eP     43 56.70  -0.3
PMR     73.71  30 eP     44 14.20  -0.8
        0.7s      7.10nm          4.8mb
FBA     73.75  26 eP     44 15.30   0.1
SOD     74.22 336 eP     44 23.00   5.1X
TOA     74.99  29 eP     44 23.10   0.5
SUF     75.38 332 eP     44 24.30  -0.3
NUR     76.60 330 eP     44 31.00  -0.5
INK     78.32  21 eP     44 41.00   0.1
MBC     78.51  12 eP     44 42.00   0.1
        1.0s      6.00nm          4.6mb
VRI     79.27 315 ePd    44 48.00   1.4
DAG     81.48 351 eP     44 56.80  -1.0
SLL     81.90 331 eP     44 59.70  -0.5
        0.6s      5.10nm          4.8mb
SKO     84.10 312 eP     44 53.00 -18.9X
KSP     84.19 322 eP     45 12.20   0.0
                  e      45 18.00
PRU     85.56 322 eP     45 19.50   0.5
                  e      45 29.00
CLL     85.90 323 e(P)   45 21.00   0.3
KHC     86.48 321 P      45 23.00  -0.7
LPG     92.28 320 eP     45 51.80   0.4
        0.8s      5.35nm          5.0mb
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LPL 92.28 320 eP 45 51.70 0.3
1.0s 10.00nm 5.2mb
PGF 92.29 317 eP 45 52.60 1.3
0.8s 5.35nm 5.0mb
FRB 97.31 4 eP 46 13.00 -0.7
ZOBO 171.31 74 PKP 52 53.00 2.7X
S.D. = 0.9 on 51 of 66 obs.

& FEB 07, 1990 10h 58m 33.10s
36.850 N 121.628 W
DEPTH = 7.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.0 (BRK).

SAO 0.17 120 iPd 58 36.20 -0.5
GCC 0.35 301 iPc 58 39.70 -0.4
MHC 0.49 359 iPd 58 42.90 -0.1
ARN 0.50 9 iPd 58 42.90 -0.3
PRS 0.56 158 iPd 58 43.70 -0.6
LLA 0.60 113 iPc 58 44.70 -0.4
PCC 0.89 317 eP 58 49.00 -1.3
PRI 1.05 132 eP 58 52.60 -0.7
BKS 1.13 335 ePc 58 53.20 -1.4
e(S) 59 14.40
BRK 1.14 334 eP 58 53.00 -1.7
PHAM 1.42 135 eP 58 58.00 -1.3
CMB 1.54 40 eP 58 59.50 -1.6
iS 59 18.50
FRI 1.54 84 eP 58 59.20 -1.9
KVN 3.55 51 eP 59 39.20 9.3
14 obs. associated

% FEB 07, 1990 11h 03m 43.37± 1.13s
35.506 N ±13.7km 24.096 E ±10.6km
DEPTH = 33.0km (normal)
CRETE (370)
MD 3.6 (ATH).

VAM 0.13 140 iPbd 03 50.00 0.6
NPS 1.26 101 ePn 04 04.60 -0.2
APE 1.94 36 ePn 04 14.80 0.1
ITM 2.42 314 ePn 04 20.60 -0.9
KAP 2.51 88 ePn 04 22.40 -0.4
KZN 5.13 340 ePn 05 00.80 0.8
S.D. = 0.8 on 6 of 6 obs.

FEB 07, 1990 11h 44m 58.79± 0.45s
47.475 N ± 5.4km 115.980 W ± 3.6km
DEPTH = 0.0km (geophysicist)
MONTANA (456)
ML 2.9 (BUT). Possible rockburst.

EBI 0.64 188 P 45 12.20 0.5
NEW 1.10 316 eP 45 20.70 0.3
DPW 1.55 286 eP 45 28.54 0.7
WRD 2.21 258 eP 45 36.92 -0.4
SAW 2.33 277 eP 45 38.87 -0.1
CRF 2.42 256 eP 45 40.12 -0.1
WIW 2.49 246 eP 45 41.28 0.0
GBL 2.54 251 eP 45 41.74 -0.2
WAH2 2.55 255 eP 45 42.05 0.0
DHW2 2.61 283 eP 45 43.05 0.0
RSW 2.70 248 eP 45 44.13 -0.2
WTV 2 70 276 eP 45 44.09 -0.2
BUT 2.77 121 (P) 45 45.00 -0.4
eSg 14 19.10
eSg 14 27.80
LRM 2.94 123 ePn 45 47.90 0.0
PNT 3.04 309 eP 45 55.00 5.8X
MCMT 3 43 139 ePn 45 55.00 0.2
BGMT 3 53 128 ePn 45 56.30 0.0
S.D. = 0.3 on 16 of 17 obs.

& FEB 07, 1990 12h 02m 14.10s
35.629 N 98.827 W
DEPTH = 5.0km (geophysicist)
OKLAHOMA (499)
<TUL>. MD 2.5 (TUL).

RRO 0.42 114 ePg 02 21.80 -0.7
eSg 02 27.40
MEO 0.87 167 iPg+ 02 29.60 -1.7
(Sg) 02 42.30
OCO 1.11 95 ePg 02 35.00 -0.4
eSg 02 51.00
FKO 1.23 107 iPgc 02 35.60 -1.9
(Sg) 02 52.70
PCO 1.83 54 ePnd 02 45.80 -0.7
eSn 03 10.30
SIO 2.05 86 ePn 02 32.70 -17.0
TUL 2.48 83 ePn 02 57.40 1.5
eSn 03 27.60
eSg 03 32.00
UYO 3.88 111 ePn 03 14.20 -1.4
eSn 03 59.40
GOL 6.59 310 e(P) 03 54.00 -0.3
9 obs. associated

? FEB 07, 1990 13h 37m 00.57±10.45s
51.320 N ±57.0km 16.279 E ±73.4km
DEPTH = 10.0km (geophysicist)
POLAND (548)
ML 2.9 (KBA).

KSP 0.48 179 iP 37 09.70 -0.6
0.5s 47.00nm
iS 37 17.70
iLR 37 23.00
BRG 1.54 254 ePg 37 26.80 -1.2
eSg 37 47.90
PRU 1.73 220 Pg 37 31.50 0.6
Sg 37 54.00
CLL 2.06 271 ePg 37 36.00 0.5
eSg 38 03.00
KHC 2.79 219 ePg 37 50.20 4.0X
Sg 38 27.80
KBA 4.66 206 eP 38 13.50 0.7
iSg 39 29.30
i 39 33.40
S.D. = 1.2 on 5 of 6 obs.

& FEB 07, 1990 14h 12m 14.90s
36.928 N 121.702 W
DEPTH = 8.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 4.0 (BRK). Felt (V) at Aromos, Gilroy and Watsonville; (IV) at Aptos, Ben Lomond, Castroville, Hollister, La Selva Beach, San Juan Boutista and Soquel; (III) at Chualar and Monterey.

GCC 0.26 293 iPc 12 20.20 0.0
SAO 0.26 128 iPd 12 20.00 -0.3
iS 12 26.30
MHC 0.42 7 iPd 12 23.40 0.0
eS 12 30.15
ARN 0.44 18 iPd 12 23.70 -0.1
PRS 0.65 156 iPd 12 27.20 -0.8
LLA 0.68 117 iPd 12 28.00 -0.6
PCC 0.79 317 iPc 12 29.40 -1.0
BKS 1.04 336 ePc 12 32.90 -1.8
i 12 34.10
BKS 1.04 336 iPd 12 34.30 -0.4
iS 12 48.25
i 12 49.70
BRK 1.04 335 eP 12 33.10 -1.6
PRI 1.15 133 iPd 12 35.90 -0.7
PHAM 1.51 136 eP 12 40.70 -1.6
CMB 1.52 43 eP 12 41.40 -1.1
eS 12 59.90
PKEM 1.55 123 eP 12 41.70 -1.1
FRI 1.60 87 iPc 12 41.90 -1.6
NWRM 1.79 329 eP 12 44.00 -2.3
BCH 2.18 143 eP 12 49.70 -2.3
BLP 2.59 155 eP 12 55.80 -2.0
ORV 2.63 3 eP 12 58.00 -0.3
ABL 2.89 135 eP 12 59.80 -2.5
ISA 2.90 115 eP 13 01.00 -1.2
CLC 3.49 107 eP 13 10.00 -0.7
KVN 3.55 52 eP 13 10.00 -1.6
TNP 3.75 71 eP 13 14.00 -0.5
SBB 3.86 124 eP 13 13.00 -3.0
PAS 4.00 133 eP 13 15.00 -2.8
MWC 4.01 131 eP 13 15.00 -3.2
GSC 4.28 111 eP 13 20.00 -2.0
RVR 4.59 128 eP 13 25.00 -1.2
PLM 5.33 131 eP 13 33.00 -3.9
BAR 5.92 134 eP 13 38.00 -7.0
GLA 6.84 122 eP 13 56.00 -2.0
ALQ 12.52 95 eP 15 14.50 -1.8
33 obs. associated

• FEB 07, 1990 14h 16m 54.67± 1.08s
25.000 N ±10.4km 123.511 E ±14.8km
DEPTH = 33.0km (normal)
3.9mb (2 obs.)
NORTHEAST OF TAIWAN (245)

SSE 6.41 342 eP 18 08.00 -21.2X
Z 14s 0.90um
Lg 20 18.00
BJI 16.21 339 eP 20 43.50 2.0
Z 14s 0.47um
SNY 16.78 0 eP 20 53.80 5.1X
Z 16s 0.60um
N 14s 0.50um
HHC 18.69 331 eP 21 13.30 0.8
CN2 18.82 4 eP 21 14.20 0.2
Z 11s 0.60um
N 10s 0.50um
E 10s 0.70um
epP 21 22.00
eS 24 42.00
BTO 19.21 327 eP 21 18.00 -0.8
MDJ 20.19 13 eP 21 27.50 -1.7
CHG 23.59 260 eP 22 05.50 2.0
CHTO 23.59 260 eP 22 01.70 -1.7
1.2s 3.47nm 3.7mb
GUN 33.73 283 P 23 35.40 -0.3
PKI 34.17 283 P 23 39.20 -0.3
KKN 34.27 283 P 23 39.60 -0.6
DMN 34.44 283 P 23 41.40 -0.3
WMQ 34.66 312 P 23 43.00 -0.2
GKN 34.82 284 P 23 44.80 -0.1
WB5 45.84 166 eP 25 21.90 6.3X
WRA 45.90 166 Pc 25 16.80 0.8
0.8s 2.00nm 4.1mb
S.D. = 1.2 on 14 of 17 obs.

• FEB 07, 1990 14h 36m 26.99± 0.81s
36.023 N ± 8.9km 27.292 E ± 9.2km
DEPTH = 33.0km (normal)
DODECANESE ISLANDS (369)
MD 3.6 (ATH).

KAP 0.48 191 eP 36 38.00 0.7
eS 36 47.00
ARG 0.70 74 eP 36 40.00 -0.4
eS 36 52.50
NPS 1.56 241 eP 36 52.00 -0.8
CIN 1.70 22 eP 36 55.00 0.3
APE 1.76 307 eP 36 56.00 0.3
S.D. = 0.9 on 5 of 5 obs.

• FEB 07, 1990 14h 51m 09.74± 1.33s
11.283 S ±12.0km 162.906 E ±15.3km
DEPTH = 33.0km (normal)
3.9mb (2 obs.)
SOLOMON ISLANDS (193)

HNR 3.44 302 eP 52 02.00 -0.4
eS 52 46.00
DZM 11.25 163 iP 53 51.40 0.0
iS 54 51.30
PMG 15.61 275 eP 54 51.50 2.5X
CTA 18.25 239 iPc 55 23.10 0.8
1.2s 28.13nm 4.3mb
BRS 18.64 209 iPd 55 27.00 0.0
RMQ 20.17 219 eP 55 44.00 -0.3
e 56 00.00
CMS 25.56 216 iPc 56 36.70 -0.7
e 56 48.00
WB5 28.75 249 eP 57 02.70 -3.9X
WRA 28.79 249 Pd 57 07.20 0.2
0.4s 0.50nm 3.6mb
BCAO 144.08 262 ePKPd 10 45.30 0.5
0.5s 3.00nm
ic 11 40.80
S.D. = 0.6 on 8 of 10 obs.

• FEB 07, 1990 15h 32m 30.87± 0.95s
32.633 N ± 8.4km 142.095 E ±18.9km
DEPTH = 33.0km (normal)
4.3mb (1 obs.)
SOUTH OF HONSHU, JAPAN (211)

CHJJ 4.26 324 P 33 34.50 -0.6
IIDJ 4.49 310 eP 33 38.90 0.5

07d 15h

MAT	5.05	322	(P)	33 46.00	-0.3
			eS	34 43.00	
YAMJ	5.78	344	eP	33 57.00	0.5
OFUJ	6.44	357	eP	34 05.80	-0.1
W85	52.74	189	eP	41 44.90	0.1
WRA	52.80	189	Pd	41 45.10	-0.2
	0.3s		1.20nm		4.3mb
	S.D. = 0.5		on 7 of 7 obs.		

FEB 07, 1990 16h 22m 57.77± 0.70s
38.700 N ± 5.8km 20.866 E ±10.0km
DEPTH = 5.0km (geophysicist)
GREECE (364)
MD 3.4 (ATH).

VLS	0.57	203	ePc	23 08.00	-1.1
			eSg	23 19.00	
KEK	1.31	321	ePg	23 22.30	-0.1
LSK	1.46	352	ePn	23 23.00	-1.9
TPE	1.72	338	ePn	23 28.50	-0.1
ITM	1.73	151	ePn	23 29.00	0.3
			eSg	23 57.50	
KZN	1.75	23	ePb	23 26.40	-2.6
KBN	1.92	359	ePn	23 31.60	0.2
BERA	2.12	341	ePn	23 36.70	2.4
OHR	2.41	359	ePn	23 38.20	-0.3
VLI	2.57	140	ePb	23 42.00	1.2
TIR	2.75	344	ePn	23 43.50	0.1
VAY	2.93	26	ePn	23 46.00	0.2
PHP	3.00	354	ePn	23 48.70	1.9
SKO	3.30	7	ePn	23 44.00	-7.1X
			eSn	24 29.50	
CZI	3.73	279	P	23 57.10	-0.1
			eSn	24 45.40	
	S.D. = 1.4		on 14 of 15 obs.		

& FEB 07, 1990 17h 08m 03.58s
61.884 N 150.401 W
DEPTH = 47.0km
SOUTHERN ALASKA (2)
<AGS-P>.

PWA	0.34	133	iP	08 12.57	-0.3
SUA	0.45	201	iP	08 14.17	-0.1
			eS	08 22.69	
CUT	0.53	7	iP	08 14.23	-0.8
SKT	0.54	281	iP	08 14.58	-0.7
			eS	08 23.57	
PLRM	0.67	115	iP	08 15.81	-1.1
			eS	08 26.69	
GHO	0.71	98	iP	08 16.72	-0.8
			eS	08 27.88	
PMS	0.76	148	iP	08 17.33	-0.8
			eS	08 29.24	
CGLM	0.96	234	iP	08 20.35	-0.6
NCG	0.97	241	iP	08 20.13	-1.0
CRP	1.04	234	eP	08 21.54	-0.7
SPU	1.06	229	iP	08 21.71	-0.6
			eS	08 36.10	
BGL	1.14	238	eP	08 22.82	-0.6
HUR	1.15	18	iP	08 23.04	-0.6
			eS	08 38.42	
CKL	1.16	234	eP	08 23.07	-0.7
NKA	1.21	200	eP	08 26.13	1.7
SLKM	1.38	176	eP	08 25.98	-0.9
RND	1.69	24	eP	08 30.17	-1.0
KTH	1.69	352	eP	08 30.68	-0.6
NCA	1.69	85	iP	08 30.75	-0.5
SEW	1.85	165	eP	08 34.40	1.1
RED	1.87	219	iP	08 33.66	-0.1
GLI	1.88	121	eP	08 32.32	-1.6
NNL	1.90	194	eP	08 34.33	0.2
MCK	1.97	19	iP	08 34.69	-0.5
TOA	2.01	82	eP	08 35.37	-0.3
VZW	2.02	112	eP	08 34.53	-1.4
SDG	2.37	72	eP	08 40.70	0.0
CNPM	2.40	190	eP	08 42.08	0.8
PAX	2.54	62	eP	08 42.57	-0.8
SVW	2.62	255	iP	08 43.07	-1.4
NEA	2.77	12	eP	08 45.08	-1.5
WRH	2.80	21	iP	08 45.50	-1.5
TTA	2.81	294	eP	08 45.45	-1.8
HDA	2.98	30	iP	08 48.05	-1.4
CCB	3.01	22	iP	08 48.17	-1.7
RDS	3.12	18	eP	08 49.86	-1.7
GLB	3.17	95	iP	08 50.41	-1.9
FBA	3.25	20	iP	08 51.78	-1.5
CDD	3.37	210	eP	08 54.95	-0.1
GLM	3.40	22	iP	08 53.77	-1.6
8ALM	3.96	99	eP	09 00.67	-2.8
	41 obs. assaciated				

* FEB 07, 1990 19h 15m 46.85± 1.27s
34.166 N ±11.7km 33.432 E ±13.6km
DEPTH = 10.0km (geophysicist)
CYPRUS (372)
ML 3.5 (CSS).

CSS	0.80	354	ePd	16 01.70	-0.7
			eSg	16 06.20	
FAM	0.95	29	ePgd	16 05.00	0.0
			eSg	16 11.00	
PPCY	1.15	309	ePg	16 12.70	4.4X
			eSg	16 26.00	
SHMJ	2.42	126	Pd	16 42.10	15.0X
MDSJ	3.47	136	Pd	16 42.00	0.0
BCK	4.02	326	ePn	16 51.60	1.8
CIN	5.53	310	eP	17 10.00	-1.2
	S.D. = 1.6		on 5 of 7 obs.		

FEB 07, 1990 20h 14m 05.40± 0.72s
40.465 N ± 7.1km 21.278 E ± 5.3km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 3.3 (ATH). ML 2.8 (SKO).

KBN	0.39	294	iPgd	14 13.10	-0.2
KZN	0.41	113	iPbc	14 13.40	-0.4
			eSb	14 20.00	
LSK	0.61	239	iPgd	14 18.00	0.3
OHR	0.74	331	iPgc	14 19.40	-0.6
			iSg	14 31.60	
BERA	1.04	284	ePg	14 28.10	3.1X
VAY	1.30	48	ePn	14 30.00	0.5
KEK	1.36	237	ePn	14 35.20	4.8X
PHP	1.38	333	iPgd	14 31.20	0.6
SKO	1.51	5	ePn	14 32.20	-0.3
			i	14 35.00	
			eSn	14 53.80	
			iSg	14 54.80	
PLG	1.66	92	ePn	14 25.20	-9.5X
LACI	1.67	315	ePn	14 40.30	5.6X
8CI	2.11	335	ePn	14 45.90	4.8X
	S.D. = 0.6		on 7 of 12 obs.		

* FEB 07, 1990 22h 00m 52.29± 1.34s
34.365 N ± 7.2km 76.647 E ±11.1km
DEPTH = 83.5 ± 17.3 km
4.6mb (7 obs.)
EASTERN KASHMIR (302)

KSH	5.11	354	ePn	02 09.00	1.0
			Sn	03 10.50	
NDI	5.68	175	eP	02 16.00	0.1
			eS	03 21.00	
GKN	9.33	131	P	03 06.20	0.1
KKN	9.88	129	P	03 12.80	-0.9
DMN	9.90	131	P	03 14.00	0.0
PKI	10.12	130	P	03 16.80	-0.2
GUN	10.19	127	P	03 17.40	-0.7
WMQ	12.75	39	eP	03 50.50	-1.2
			eS	06 09.50	
LSA	13.15	107	eP	03 58.00	0.6
BOM	15.78	193	eP	04 43.20	12.3X
			eS	06 49.20	
SHL	15.84	120	eP	04 30.00	-1.7X
HYB	16.96	174	eP	04 47.50	1.7
			eS	08 07.50	
GTA	19.19	68	eP	05 16.40	4.2X
CD2	23.06	91	eP	05 57.20	6.0X
CHG	25.16	122	eP	06 17.10	5.7X
CHTO	25.16	122	eP	06 17.30	6.0X
	1.0s		2.25nm		3.6mb X
HFS	47.57	323	eP	09 20.70	-0.3
	0.4s		3.60nm		4.6mb
NB2	48.84	324	P	09 30.60	-0.2
	0.8s		3.50nm		4.4mb
SBF	53.11	302	eP	10 02.60	-0.7
	0.8s		8.05nm		4.8mb
LPG	53.17	304	eP	10 03.50	-0.6
	0.6s		3.15nm		4.5mb
LPL	53.18	304	eP	10 03.60	-0.4
	0.6s		5.40nm		4.8mb
BCAO	61.39	255	iPd	11 01.10	-1.0
	0.5s		7.00nm		5.0mb
MBC	69.19	4	eP	11 54.00	2.7
	0.6s		3.00nm		4.4mb
	S.D. = 1.1		on 17 of 23 obs.		

* FEB 07, 1990 22h 29m 35.00± 0.59s
36.811 N ±17.9km 71.498 E ±11.2km
DEPTH = 33.0km (normal)
4.3mb (4 obs.)
AFGHANISTAN-USSR BORDER REGION (717)

MAIO	9.67	271	eP	31 55.00	0.0
			eS	33 35.00	
GKN	14.14	125	P	32 55.60	0.4
	0.6s		14.00nm		4.8mb
KKN	14.71	124	P	33 02.40	-0.3
DMN	14.71	125	P	33 03.40	0.6
PKI	14.94	124	P	33 05.60	-0.2
	0.4s		11.00nm		4.5mb
GUN	15.03	122	P	33 06.40	-0.6
HFS	43.07	322	eP	37 33.00	-0.1
	0.5s		1.10nm		3.8mb
N82	44.37	323	P	37 43.90	0.2
	0.5s		1.80nm		4.2mb
	S.D. = 0.5		on 8 of 8 obs.		

FEB 07, 1990 23h 00m 04.60± 0.50s
6.776 S ± 7.6km 129.274 E ± 9.0km
DEPTH = 33.0km (normal)
4.8mb (6 obs.)
BANDA SEA (280)

AAI	3.25	341	iPd	01 17.00	22.5X
TLE	3.64	72	ePc	00 59.60	-0.3
			eS	01 39.00	
MTN	6.30	163	iPd	01 44.70	7.0X
			eS	02 35.00	
KNA	8.93	183	iPd	02 17.80	3.4X
	0.2s		83.00nm		6.5mb X
			eS	03 47.00	
W85	13.93	160	eP	03 21.60	-0.4
			i	03 25.00	
			eS	05 48.20	
MBL	16.97	212	eP	04 02.20	1.0
QIS	16.97	145	iPd	04 22.50	21.3X
	0.4s		56.00nm		
			eS	06 58.00	
ASPA	17.37	166	iPd	04 06.00	-0.3
	0.5s		234.00nm		5.6mb X
			iS	07 05.80	
PMG	17.89	100	eP	04 16.00	3.3X
WARB	19.46	187	iPc	04 30.30	-1.4
	0.3s		10.00nm		4.6mb
			eS	07 56.00	
CTA	21.13	130	iPd	04 50.20	1.1
	1.0s		26.00nm		4.6mb
CHTO	39.25	311	iPc	07 33.70	1.6
	0.9s		9.38nm		4.5mb
GUN	54.26	311	P	09 30.20	-0.2
PKI	54.43	311	P	09 31.00	-0.6
	0.4s		5.00nm		4.9mb
KKN	54.65	311	P	09 32.60	-0.5
	0.6s		13.00nm		5.1mb
DMN	54.68	311	P	09 32.80	-0.6
GKN	55.24	311	P	09 36.80	-0.5
	0.4s		21.00nm		5.5mb
ZOBO	151.35	143	ePKP	19 53.00	1.1
	S.D. = 1.0		on 13 of 18 obs.		

FEB 08, 1990 01h 43m 16.67± 0.55s
40.556 N ± 5.5km 21.375 E ± 4.5km
DEPTH = 5.0km (geophysicist)
GREECE (364)
MD 3.3 (ATH). ML 3.3 (SKO).

KZN	0.39	129	iPgc	43 23.70	-0.9
			eSg	43 28.00	
KBN	0.43	279	iPgc	43 23.10	-2.3
OHR	0.71	322	iPgc	43 29.70	-1.1
			iSg	43 41.80	
LSK	0.72	236	iPg	43 27.80	-3.2X
TPE	1.07	256	ePn	43 37.00	-0.3
BERA	1.10	278	ePn	43 38.20	0.5
VAY	1.18	49	ePn	43 39.00	-0.2
SRN	1.25	238	ePn	43 41.10	0.8
PHP	1.33	328	iPnc	43 40.80	-0.9
TIR	1.39	305	ePn	43 24.70	-18.0X

SKO	1.42	2	iPn	43	43.50	0.4
			i	43	45.60	
			i	44	03.60	
			iSg	44	05.00	
VLO	1.44	267	ePn	43	43.50	0.1
KEK	1.47	236	ePb	43	44.70	0.8
PLG	1.59	96	ePb	43	45.60	0.0
			eSb	44	08.00	
LACI	1.66	311	ePn	43	47.50	1.0
PUK	1.86	324	ePn	43	50.00	0.6
BCI	2.06	332	ePn	43	53.60	1.3
VLS	2.45	195	ePg	44	02.00	4.0X

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

FEB 08, 1990 01h 53m 22.65± 0.65s
53.138 N ± 7.5km 1.159 W ± 5.8km
DEPTH = 10.0km (geophysicist)
UNITED KINGDOM (533)
ML 3.5 (LDG). MD 3.6 (UCC).

EKA	2.49	333	Pc	54	05.90	2.0
	0.5s	16.40nm				
OLE	3.24	275	eP	54	13.20	-1.3
			eS	54	49.40	
ECP	3.31	255	eP	54	17.80	2.3
			e	54	58.00	
ECB	3.50	259	eP	54	17.90	-0.3
			eS	54	58.70	
DMU	3.52	285	eP	54	16.30	-2.1
			eS	54	55.10	
OCN	3.68	276	eP	54	20.10	-0.7
			eS	55	11.20	
SNF	4.28	126	iPc	54	30.20	1.0
			iS	55	20.40	
FLN	4.40	174	Pn	54	32.60	1.6
			Sn	55	22.60	
LDF	4.60	171	Pn	54	35.50	1.7
			Sn	55	27.80	
DOU	4.70	128	iP	54	36.00	0.7
			iS	55	30.00	
GRR	4.76	178	Pn	54	38.00	1.9
			Sn	55	30.80	
MEM	5.11	117	iP	54	40.70	-0.3
			iS	55	36.70	
LPF	5.11	179	Pn	54	42.80	1.7
LOR	6.70	149	Pn	55	03.60	0.1
			Sn	56	16.60	
SSF	6.78	152	Pn	55	04.60	0.0
AVF	6.99	154	Pn	55	07.40	-0.1
LBF	6.99	150	Pn	55	07.20	-0.3
			Sn	56	23.60	
HAU	7.02	134	Pn	55	07.40	-0.5
			Sn	56	23.20	
BGF	7.08	157	Pn	55	09.00	0.3
			Sn	56	26.00	
LSF	7.11	165	Pn	55	09.40	0.2
			Sn	56	25.90	
CDF	7.14	128	Pn	55	09.50	-0.2
TCF	7.20	161	Pn	55	10.20	-0.2
SMF	7.26	152	Pn	55	10.30	-0.9
MAF	7.33	159	Pn	55	12.00	-0.3
BSF	7.34	133	Pn	55	11.80	-0.7
RJF	8.03	166	Pn	55	21.20	-0.9
LFF	8.30	171	Pn	55	25.40	-0.5
CAF	8.49	164	Pn	55	27.50	-1.0
			Sn	57	00.00	
LPO	8.60	169	Pn	55	29.20	-0.9
LPL	9.20	143	Pn	55	38.20	-0.3
LPG	9.22	143	Pn	55	38.60	-0.3
EPF	10.16	174	Pn	55	50.00	-1.6

S.D. = 1.1 on 32 of 32 obs.

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* FEB 08, 1990 02h 06m 22.51± 1.71s
37.270 N ±11.7km 15.171 E ±14.9km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MEU	0.26	229	P	06	27.80	-0.2
			eSg	06	31.10	
MNO	0.76	330	P	06	36.00	-1.5
			eSg	06	43.40	
ATN	0.92	15	P	06	40.40	0.3
SOI	1.06	41	P	06	46.70	4.2X
			eSg	07	01.60	
GIB	1.16	309	P	06	45.50	1.3
			eSg	06	56.50	
CZI	2.09	21	P	06	58.00	0.1

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

FEB 08, 1990 02h 45m 25.46± 0.94s
13.551 N ± 5.6km 90.035 W ± 5.4km
DEPTH = 97.9 ± 7.9 km
4.8mb (29 obs.)
NEAR COAST OF GUATEMALA (71)
Felt (III) at San Salvador, El Salvador.

SSS	0.82	81	iPc	45	43.10	-1.1
			eS	45	59.30	
UPA	11.25	113	iPd	48	04.50	-0.2
	1.0s	180.00nm			5.8mb	X
TOV	20.17	99	eP	49	54.30	-0.3
HBF	21.21	23	P	50	07.20	2.3
SGS	21.39	22	P	50	08.70	2.0
PWLA	21.41	4	P	50	09.30	2.4
PRM	21.60	18	P	50	09.80	1.1
CEOS	21.74	100	eP	50	09.00	-1.4
JSC	22.12	20	P	50	15.60	1.7
RSCP	22.32	10	P	50	17.00	1.1
LHS	22.45	20	P	50	19.00	1.9
POW	22.53	358	P	50	17.50	-0.4
GBTN	22.64	12	P	50	20.80	1.9
TKL	22.72	13	P	50	21.80	2.0
SIO	22.81	347	eP	50	18.00	-2.6
TUL	22.86	348	iPc+	50	20.00	-1.1
	0.8s	36.70nm			4.8mb	
Z	20s	0.45um			3.9Msz	
			eS	54	42.00	
			LR	56	36.00	
LLAV	22.92	95	eP	50	09.00	-12.9X
FVM	24.34	359	P	50	35.00	-0.4
NAV	25.07	18	P	50	42.80	0.5
BLA	25.08	18	P	50	42.90	0.5
	1.0s	50.00nm			4.9mb	
ANMO	25.96	328	P	50	51.40	0.6
	1.2s	5.86nm			4.0mb	
CVL	26.42	21	P	50	54.80	0.1
NA2	26.80	22	P	50	58.50	0.3
CBN	27.01	22	eP	51	01.00	0.9
CLE	28.80	13	iP	51	16.30	0.0
GOL	29.34	335	eP	51	20.60	-0.8
	1.1s	32.05nm			4.9mb	
			e	54	26.10	
			e	54	41.00	
GLA	29.79	315	eP	51	25.00	-0.2
LVNJ	30.26	23	P	51	29.30	0.1
TBR	30.76	24	P	51	33.30	-0.3
PLM	31.37	313	eP	51	40.00	0.7
MSU	31.67	326	P	51	42.20	0.3
GSC	32.42	317	eP	51	49.00	0.7
DAU	32.59	329	P	51	50.00	0.1
MWC	32.68	314	eP	51	51.00	0.3
RSSD	32.74	341	eP	51	51.40	0.3
			e	54	34.00	
SBB	32.77	315	eP	51	51.00	-0.3
RSNY	33.61	20	P	51	58.20	-0.2
	0.8s	26.71nm			5.1mb	
BW06	33.65	334	P	51	58.00	-1.1
WNY	33.70	21	P	51	58.70	-0.5
ISA	33.75	316	eP	52	02.00	2.2
HBVT	33.96	22	P	52	00.60	-0.8
TNP	34.34	320	eP	52	05.40	0.4
	1.3s	81.63nm			5.4mb	
			epP	52	18.50	50kmX
			e	54	39.90	
ARE	35.00	148	eP	52	12.00	1.1
PHAM	35.16	314	P	52	13.20	1.4
FRI	35.31	317	eP	52	11.50	-1.5
			ePcP	54	42.50	
KVN	35.48	321	eP	52	15.10	0.4
			e	54	43.50	
LLA	35.94	315	eP	52	18.60	0.2
			ePcP	54	55.40	
CMB	36.34	318	eP	52	21.60	-0.1
			ePcP	54	46.00	
ZOBO	36.70	143	Pd	52	25.10	-0.4
Z	22s	0.37um			4.1Msz	
			LR	04	08.00	
ARN	36.73	316	P	52	26.20	1.2
MHC	36.80	316	eP	52	26.50	0.8
LPB	36.92	143	P	52	28.00	0.8
RSON	37.33	356	P	52	29.60	-0.1
ORV	37.91	319	eP	52	35.20	0.4
			ePcP	54	52.10	

MIN	38.42	320	eP	52	39.00	-0.3
			ePcP	54	52.70	
CCH	38.74	142	P	52	43.00	0.6
WDC	39.14	320	e(P)	52	42.70	-2.4
			ePcP	54	53.60	
LBFM	39.18	321	P	52	45.80	0.1
SES	40.54	339	eP	52	55.00	-1.5
FFC	42.13	350	eP	53	09.00	-0.5
	0.9s	23.00nm			5.0mb	
PNT	43.15	332	eP	53	12.00	-5.9X
	0.5s	6.00nm			4.7mb	
EDM	43.69	340	ePc	53	20.50	-1.7
BAO	50.69	123	eP	54	17.70	0.2
FRB	52.34	12	eP	54	27.00	-2.1
INK	61.41	343	ePc	55	32.20	-1.1
PMR	63.68	333	P	55	47.10	-1.2
	1.2s	22.73nm			5.0mb	
FBA	64.41	336	P	55	50.90	-2.2
	1.0s	11.25nm			4.8mb	
MBC	64.60	353	ePc	55	52.50	-1.6
	0.8s	8.00nm			4.7mb	
TTA	67.16	333	P	56	08.40	-2.3
	1.0s	7.50nm			4.6mb	
DAG	72.63	13	iPc	56	42.10	-1.6
	0.9s	19.33nm			4.9mb	
EKA	77.21	36	P	57	09.00	-1.1
	1.8s	57.00nm			5.1mb	
AAPN	78.71	54	iPc	57	20.00	1.1
ALOJ	78.75	54	eP	57	19.50	0.3
ATEJ	78.85	55	iPc	57	19.00	-0.7
ACHM	78.97	54	iPc	57	20.00	-0.3
ASMO	79.00	54	iPc	57	20.50	0.0
APHE	79.11	55	iPd	57	20.50	-0.6
LKO	82.46	B2	Pc	57	39.94	1.0
	0.5s	10.50nm			5.0mb	
LOR	82.79	43	eP	57	39.50	-0.6
	0.8s	8.05nm			4.7mb	
NB2	83.62	29	P	57	44.00	-0.1
	0.8s	5.50nm			4.5mb	
TIC	83.64	85	P	57	44.36	-0.7
LIC	83.73	85	Pc	57	44.90	-0.5
KIC	83.98	85	Pc	57	46.12	-0.6
	0.9s	31.50nm			5.3mb	
HAU	84.27	42	eP	57	46.60	-0.9
	0.8s	6.70nm			4.6mb	
HFS	85.06	29	eP	57	50.50	-0.7
	0.7s	5.20nm			4.6mb	
Z	19s	0.00um			1.5MszX	
		LR	28	42.00		
LPL	85.13	44	eP	57	51.70	-0.5
	1.0s	6.00nm			4.5mb	
LPG	85.14	45	eP	57	52.00	-0.3
	0.8s	6.70nm			4.6mb	
LRG	85.37	47	eP	57	52.60	-0.5
	1.0s	10.00nm			4.7mb	
LMR	85.51	47	eP	57	52.90	-0.9
	0.8s	5.35nm			4.6mb	
FRF	85.55	46	eP	57	53.00	-1.0
	0.8s	8.05nm			4.8mb	
SBF	86.03	46	eP	57	55.30	-1.2
	0.8s	10.75nm			4.9mb	
MOX	86.88	39	eP	58	01.00	0.6
PGF	87.48	47	eP	58	02.60	-1.0
	0.6s	2.70nm			4.5mb	
CLL	87.51	38	iP	58	03.30	-0.1
	1.5s	20.00nm			4.9mb	
BRG	88.21	38	eP	58	06.20	-0.6
KUK	88.25	84	eP	58	03.50	-4.1X
KHC	88.56	40	P	58	08.50	0.0
KBA	89.07	42	eP	58	10.00	-1.2
	1.2s	12.10nm			4.9mb	
ZST	91.07	40	eP	58	20.50	0.3
KIM	118.02	115	ePKP	04	11.20	8.0X
PRY	120.39	113	ePKP	04	09.00	1.3
SEK	120.52	115	ePKP	04	10.00	2.0X
SLR	121.11	112	iPKPc	04	10.90	1.8
BUL	121.18	105	ePKP	04	09.60	0.2
KRI	121.85	102	iPKPd	04	10.50	-0.2
HHC	122.29	341	PKPd	04	12.20	1.3
WMQ	122.87	2	PKPd	04	12.50	0.7
TIA	124.25	333	ePKP	04	15.30	0.6
TIY	124.81	338	ePKP	04	15.80	0.0
KSH	125.68	13	PKP	04	20.00	2.4X
CTA	125.93	255	iPKP	04	22.00	3.6X
GTA	126.52	351	PKP	04	20.00	0.8
XAN	129.35	340	PKP	04	25.30	0.7
NDI	136.24	16	iPKPd	04	38.80	1.0

08d 03h

	0.5s	17.61nm				
WB5	137.11	255	ePKP	04	34.70	-5.0X
WB5	137.11	255	iPKP	04	43.60	3.9X
WRA	137.13	255	PKPd	04	43.50	3.8X
	0.6s	5.10nm				
GKN	138.37	7	PKP	04	38.40	-3.6X
	0.8s	21.00nm				
GUN	138.60	5	PKP	04	35.70	-7.0X
	0.6s	21.00nm				
KKN	138.66	6	PKP	04	37.60	-5.0X
	0.8s	21.00nm				
DMN	138.82	7	PKP	04	40.80	-2.2
PKI	138.89	6	PKP	04	39.60	-3.6X
	0.6s	14.00nm				
SHL	141.08	357	iPKP	04	47.80	0.8
CHG	146.65	344	ePKP	04	57.50	1.1
LOE	147.12	339	ePKP	04	59.00	1.8
HYB	147.23	20	ePKP	04	57.50	0.1
	1.0s	45.00nm				
BDT	148.13	343	ePKP	04	59.20	0.5
	0.9s	58.10nm				
NWAO	148.54	228	ePKP	05	02.00	3.0X
	0.8s	14.00nm				
NST	149.27	341	iPKPd	05	06.80	6.2X
MUN	149.77	228	ePKP	05	05.00	4.1X
	0.8s	28.00nm				
BAL	150.08	231	ePKP	05	06.00	4.5X
	0.6s	10.00nm				
NNT	152.28	339	ePKP	05	12.80	7.7X
	S.D. = 1.1	on 113 of 132 obs.				

FEB 08, 1990 03h 27m 27.11± 0.71s
31.467 S ±14.2km 67.955 W ± 5.1km
DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)

CFA	0.28	240	i(P)	27	34.50	-0.2
RTLL	0.46	287	iP	27	37.10	-0.1
ZON	0.62	263	iPd	27	39.70	0.2
RTCV	0.63	232	iPc	27	39.70	0.0
RTCB	0.72	268	e(P)	27	41.00	0.1
MRA	2.13	117	e(P)	28	01.00	0.0
			S	28	30.00	
TCA	2.88	88	eP	28	11.80	0.0
	S.D. = 0.1	on 7 of 7 obs.				

FEB 08, 1990 03h 45m 00.11± 0.70s
38.734 N ± 6.6km 20.310 E ± 5.9km
DEPTH = 17.6 ± 5.8 km
GREECE (364)
MD 3.6 (ATH).

VLS	0.60	158	ePg	45	12.20	0.5
			eSg	45	23.00	
KEK	1.06	338	ePb	45	19.00	-0.5
			eSg	45	32.00	
SRN	1.17	348	ePg	45	21.70	0.2
LSK	1.43	9	iPnc	45	26.20	0.9
TPE	1.58	352	ePn	45	30.50	3.2X
KBN	1.93	11	ePn	45	35.10	2.7
KZN	1.93	35	ePn	45	33.60	1.0
BERA	1.99	352	ePn	45	39.50	6.3X
ITM	2.01	140	ePg	45	40.90	7.3X
NEO	2.34	75	ePg	45	44.50	6.1X
OHR	2.40	9	ePn	45	39.90	0.6
LCI	2.42	312	P	45	49.20	9.7X
TIR	2.63	353	ePn	45	46.00	3.5X
PLG	2.93	55	ePn	45	46.40	-0.3
PHP	2.95	2	ePn	45	46.30	-0.7
VAY	3.11	33	ePn	45	48.70	-0.6
BRT	3.21	313	P	45	58.50	7.8X
			eSn	46	23.50	
TDS	3.22	288	P	45	51.50	0.6
ORI	3.27	295	P	45	52.00	0.4
CZI	3.29	280	P	45	52.30	0.5
PUK	3.32	355	ePn	45	50.70	-1.5
SKO	3.35	15	ePn	45	51.50	-1.2
			i	46	28.60	
SOI	3.41	260	P	45	52.00	-1.5
BCI	3.63	357	ePn	46	00.00	3.3X
MGR	3.94	292	P	46	01.20	0.1
SGO	4.27	297	P	46	06.50	0.8
	S.D. = 1.1	on 18 of 26 obs.				

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* FEB 08, 1990 04h 33m 43.25± 1.76s
47.467 N ±16.9km 152.621 E ±13.0km
DEPTH = 96.1 ± 16.1 km
4.6mb (4 obs.)
KURIL ISLANDS (221)

KUSJ	7.09	235	P	35	25.50	-0.5
			S	36	41.20	
ASAJ	7.74	248	P	35	39.40	4.5X
HOOJ	8.35	236	P	35	43.20	0.0
			S	37	14.00	
MRRJ	9.61	243	eP	36	01.20	0.8
CN2	19.31	269	eP	38	01.80	-1.3
CD2	40.61	264	P	41	15.20	0.2
INK	41.23	33	eP	41	20.50	1.0
GYA	41.55	256	P	41	23.00	0.2
CHG	51.96	256	eP	42	44.80	0.3
CHTO	51.96	256	iP	42	44.90	0.4
	0.8s	4.21nm			4.5mb	
			pP	43	13.00	119kmX
GUN	54.61	274	P	43	05.40	1.0
KKN	55.09	274	P	43	07.70	0.0
PKI	55.15	274	P	43	07.30	-0.9
DMN	55.33	274	P	43	09.20	-0.2
GKN	55.39	275	P	43	09.40	-0.3
FFC	60.41	40	iPd	43	42.80	-1.5
	0.7s	8.00nm			4.9mb	
NB2	67.44	341	P	44	30.80	0.7
	0.8s	1.30nm			3.9mb	
ASPA	72.79	198	iPc	45	02.80	0.0
	0.8s	8.00nm			4.6mb	
	S.D. = 0.8	on 17 of 18 obs.				

FEB 08, 1990 04h 34m 21.67± 0.83s
38.963 N ± 5.1km 16.233 E ±13.5km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

CZI	0.27	343	P	34	28.00	0.7
ACI	0.39	357	P	34	28.60	-1.0
ROI	0.66	23	P	34	34.20	-0.7
TDS	0.70	7	P	34	34.90	-0.6
			eSg	34	45.10	
CSI	0.81	3	P	34	37.70	0.2
			eSg	34	49.40	
SOI	0.90	189	P	34	38.90	0.0
			eSg	34	52.50	
MMN	0.94	349	P	34	39.60	0.0
			eSg	34	53.20	
ATN	1.00	217	P	34	40.60	-0.1
			eSg	34	57.10	
ORI	1.11	9	P	34	44.20	1.7
			eSn	34	59.40	
MGR	1.29	336	P	34	44.30	-1.2
			eSg	35	03.90	
SGO	1.75	336	P	34	53.00	0.9
	S.D. = 1.0	on 11 of 11 obs.				

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* FEB 08, 1990 04h 56m 59.81± 1.83s
24.542 N ±19.3km 123.604 E ±15.3km
DEPTH = 33.0km (normal)
4.0mb (1 obs.)
SOUTHWESTERN RYUKYU ISLANDS (246)

TWC	1.60	273	iPc	57	26.90	0.8
			eS	57	40.70	
TWD	1.89	256	iPc	57	30.50	0.2
TWZ	1.92	287	ePd	57	30.70	-0.1
ANP	2.00	289	eP	57	32.00	0.0
			eS	57	51.50	
TWQ	2.54	265	iPc	57	38.70	-0.9
			eS	58	01.90	
TWK	3.12	247	eP	57	48.00	0.1
WRA	45.44	166	Pc	05	17.50	0.0
	0.7s	1.50nm			4.0mb	
	S.D. = 0.6	on 7 of 7 obs.				

FEB 08, 1990 05h 05m 17.52± 0.84s
37.056 N ± 8.3km 3.568 W ± 6.3km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
mbLg 2.9 (MDD).

AFC	0.20	5	ePg	05	21.30	-0.7
			eSg	05	25.40	
MAL	0.75	244	ePg	05	27.00	-5.2X
			iSg	05	34.00	
ENIJ	1.08	94	ePg	05	38.00	0.1
			eSg	05	54.00	
EBAN	1.12	351	ePg	05	38.20	-0.3
			eSg	05	54.00	
EPRU	1.33	267	ePn	05	42.20	0.0
EHOR	1.54	300	ePn	05	46.00	1.0
			eSn	06	04.00	
EJIF	1.64	249	ePn	05	45.80	-0.7
			eSn	06	05.00	
EVIA	1.79	28	ePn	05	49.20	0.4
			eSn	06	13.50	
TOL	2.85	353	ePg	06	07.00	3.2X
			eSg	06	48.00	
	S.D. = 0.8	on 7 of 9 obs.				

FEB 08, 1990 07h 15m 32.23± 0.16s
9.755 N ± 3.4km 124.694 E ± 4.1km
DEPTH = 25.9km (geophysicist)
6.2mb (82 obs.) 6.6Msz (32 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)
Ms 6.5 (BRK), 6.3 (PAS).
Mo=3.0*10**19 Nm (PPT). Felt (VII RF) on Bohol; (VI) at Cebu; (V) at Cagayan de Oro and on Camiguin; (IV) at Cotabato and (III) at Palo. Also felt on Negros. Two events about 2 seconds apart. Depth from broadband displacement seismograms, based on second event.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike= 32 Dip=62 Slip= 55
NP2: 268 44 137
Principal Axes:
T Plg=58 Azm=253
P 10 146
Comment: The focal mechanism is moderately well controlled and corresponds to reverse faulting with a large strike-slip component. The preferred fault plane is not determined.
RADIATED ENERGY
No. of sta: 6 Focal mech. M
Energy 1.8±0.7*10**14 Nm
MOMENT TENSOR SOLUTION
Dep 21 No. of sta: 14
Moment Tensor; Scale 10**19 Nm
Mrr= 1.07 Mtt=-1.39
Mff= 0.32 Mrt= 0.41
Mrf= 0.37 Mtf=-0.30
Principal axes:
T Val= 1.25 Plg=69 Azm=287
N 0.27 18 75
P -1.53 10 169
Best Double Couple:Mo=1.4*10**19
NP1:Strike=280 Dip=38 Slip= 120
NP2: 63 58 69
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 43C M.W.: 14S, 34C
Centroid Locotion:
Origin Time 07:15:35.9 0.2
Lat 9.79N 0.02 Lon 124.85E 0.02
Dep 16.2 0.9 Half-duration 9.6
Moment Tensor; Scale 10**19 Nm
Mrr= 1.54 0.03 Mtt=-1.07 0.02
Mff=-0.47 0.02 Mrt= 0.43 0.12
Mrf= 0.19 0.12 Mtf=-0.56 0.02
Principal Axes:
T Val= 1.61 Plg=81 Azm=340
N -0.14 2 240
P -1.48 9 149
Best Double Couple:Mo=1.5*10**19
NP1:Strike=237 Dip=36 Slip= 87
NP2: 61 54 92

MAP	0.90	309	iP	15	48.00	-1.1
PLP	1.43	11	eP	15	54.00	-2.6
DAV	2.79	162	eP-	16	17.00	0.9
PGP	5.22	316	iPd	16	52.00	1.3
PPR	5.88	271	iPc	16	58.00	-1.9
QCP	6.00	324	iPc+	17	10.00	8.3X
MAN	6.02	324	eP	17	04.00	2.0
BAG	7.73	329	ePd-	17	27.00	0.8
CVP	8.38	341	ePc	17	38.00	3.0X
TSM	8.57	231	ePd	17	38.00	0.4
	0.6s	945.80nm			7.2mb	X
SZP	8.78	332	iPd	17	43.00	2.5

KKM 9.17 247 ePd 17 45.70 -0.4
0.7s 220.00nm 6.5mb
PIP 9.39 336 iPc 17 54.00 5.0X
PCI 11.64 205 ePd 18 19.50 -0.3
eS 19 08.50
ANP 15.64 349 iPd 19 08.00 -4.7X
iS 22 14.00
HKC 16.05 322 eP 19 20.00 2.1
eS 22 22.00
QZH 16.18 340 eP 19 19.80 0.2
4.0s ********nm 6.9mb X
Z 28s 268.00um
N 17s 203.00um
E 17s 93.10um
MCO 16.29 320 eP 19 24.40 3.4X
QIZ 17.07 304 iPc 19 31.50 0.6
E 13s 169.00um
GZH 17.14 322 Pc 19 33.00 1.4
1.8s 3800.00nm 6.2mb
Z 16s 121.00um 3.9Msz
N 12s 70.70um
E 14s 132.00um
TLE 17.27 152 ePc 19 19.00 -14.3X
1.0s 18.00nm
SLKI 18.81 159 iPc 19 53.20 0.8
KUPT 19.80 183 ePd 20 14.00 10.1X
1.5s 2252.60nm
eS 22 47.00
JAY 20.07 127 ePd 20 07.00 0.3
0.7s 64.70nm 5.1mb X
GUMO 20.12 77 eP- 20 10.50 3.3X
1.7s 3780.49nm 6.5mb
TT 39 29.70
PJG 20.12 77 eP 20 10.50 3.3X
GUA 20.15 77 eP- 20 11.00 3.4X
1.7s 4338.46nm 6.5mb
Z 18s 115.71um 6.3Msz
e 20 24.30
eS 23 54.00
TRT 21.10 215 ePd 20 17.00 -0.3
1.2s 1088.70nm 6.2mb
SSE 21.48 352 Pc 20 18.00 -3.1X
8.0s ********nm 6.5mb X
E 18s 280.00um
pP 20 24.50 24kmX
S 24 17.00
sS 24 24.00
KGM 22.59 251 eP 20 31.50 -0.8
WHN 22.82 336 P 20 34.50 0.1
Z 20s 77.80um 6.1Msz
NJ2 22.84 347 iPc 20 34.80 0.3
N 14s 45.40um
E 12s 80.70um
MTN 23.35 164 eP 20 38.00 -1.6
i 20 40.40
LOE 23.56 291 eP 20 41.00 -0.7
GYA 23.81 317 iPc 20 45.00 0.8
5.0s 6200.00nm 6.4mb X
N 15s 81.90um
E 15s 89.50um
KLM 23.83 255 eP 20 45.00 0.7
SNG 23.95 266 iPc 20 44.80 -0.7
2.0s 4929.41nm 6.7mb
eS 25 10.20
IPM 24.03 259 ePc 20 46.80 0.5
1.1s 467.70nm 5.9mb
e 21 15.10
e 21 49.00
NNT 24.65 279 ePd 20 50.50 -1.7
e 27 17.50
e 45 11.00
NST 24.66 286 iPc 20 53.00 0.7
SHNJ 24.96 13 eP 20 55.20 0.1
KBR 24.98 282 eP 21 02.00 6.6X
TKSJ 25.60 18 eP 21 00.80 -0.3
KNA 25.66 171 eP 21 02.00 0.2
0.8s 439.00nm 6.1mb
SHK 25.72 15 ePc 21 02.50 0.2
KMI 25.86 309 ePc 21 04.20 0.2
Z 35s 161.00um 6.3MszX
E 14s 67.70um
sP 21 18.50
iS 25 37.01
BDT 26.04 289 eP 21 04.00 -1.4
WKYJ 26.32 21 eP 21 06.00 -1.9
CHG 26.50 293 eP 21 08.50 -1.1
1.3s 257.21nm 5.7mb

eS 26 00.00
CHTO 26.50 293 eP 21 07.70 -1.9
PSI 26.54 256 iPd 21 08.50 -1.5
1.0s 282.90nm 5.8mb
YONJ 26.55 16 eP 21 08.00 -1.9
TIA 27.22 347 Pd 21 14.30 -1.7
E 12s 52.00um
S 25 50.00
LAT 27.56 125 eP 21 22.00 2.7X
XAN 28.17 331 P 21 23.00 -1.8
1.5s 700.00nm 6.2mb
E 15s 73.80um
S 26 06.00
CD2 28.68 320 iPc 21 28.50 -0.8
Z 16s 82.10um 6.4MszX
N 13s 4.20um
PP 22 19.00
S 26 16.00
DL2 29.16 355 P 21 32.00 -1.5
N 16s 64.30um
E 16s 95.00um
MAJO 29.35 23 ePc 21 33.01 -2.3
MAT 29.35 23 P 21 34.00 -1.3
PMG 29.36 130 iPc- 21 37.10 1.5
1.6s 700.00nm 6.2mb
TIY 29.95 340 iPc 21 40.00 -0.7
Z 20s 76.30um 6.3Msz
RAB 30.68 116 iP- 21 50.00 2.7X
iS 25 54.00
WB5 30.95 162 eP 21 47.50 -2.1
WRA 31.00 162 Pd 21 47.80 -2.3
1.2s 89.90nm 5.5mb
MBL 31.09 189 eP 21 44.00 -6.8X
eS 53 14.00
BJI 31.10 347 ePc 21 48.36 -2.3
1.5s 630.00nm 6.2mb
N 14s 44.70um
E 12s 36.50um
ec 21 50.18
ed 21 58.46
ed 22 01.77
eS 26 56.00
SNY 31.96 358 eP 21 56.00 -2.2
1.5s 1700.00nm 6.7mb
Z 20s 103.00um 6.5Msz
N 15s 37.70um
E 14s 65.10um
sP 22 13.00
PP 23 07.00
iS 27 06.00
LZH 32.34 327 ePc 22 00.96 -0.9
1.5s 2260.00nm 6.9mb
N 15s 131.00um
E 15s 76.40um
ic 22 02.62
ed 22 09.57
ePP 23 08.01
eHPP 23 09.33
S 27 12.00
HHC 33.08 342 P 22 06.80 -1.4
6.0s 8200.00nm 6.8mb X
Z 22s 168.00um 6.7Msz
N 12s 39.70um
E 12s 25.50um
pP 22 12.00 18kmX
S 27 27.00
BTO 33.36 339 iPc 22 09.00 -1.6
N 16s 65.20um
E 16s 80.50um
QIS 33.50 154 eP 22 09.00 -2.9X
e 22 13.00
CN2 33.92 1 Pd 22 13.40 -1.9
1.6s 700.00nm 6.3mb
Z 20s 61.70um 6.3Msz
E 17s 61.80um
PP 23 31.00
S 27 38.00
SHL 34.86 301 iP 22 22.00 -1.9
eS 27 59.00
MDJ 34.99 6 eP 22 23.00 -1.5
1.2s 700.00nm 6.5mb
E 15s 58.00um
epP 22 28.00 17kmX
S 27 48.00
PcS 28 45.00
WARB 35.77 177 eP 22 30.00 -1.3
0.6s 113.00nm 6.0mb

SAP 36.22 21 eP 22 36.00 1.1
eS 28 11.00
CTA 36.47 144 iPd 22 36.00 -1.2
1.3s 701.92nm 6.4mb
iS 27 38.00
CTAO 36.47 144 ePd 22 41.23 4.0X
e 22 49.34
ePP 24 00.41
MEKA 36.64 189 eP 22 36.50 -2.1
GTA 36.94 327 iPc 22 40.40 -0.8
9.0s ********nm 6.7mb X
Z 24s 83.30um 6.4MszX
E 15s 71.80um
sP 22 57.00
LSA 37.08 307 iPc 22 42.10 -0.8
pP 22 53.00 38kmX
S 28 30.00
HIA 39.60 355 ePc 23 01.34 -1.9
ec 23 03.16
e 23 10.94
e 23 14.42
ePP 24 39.12
eS 29 13.72
eHSS 32 13.82
MRWA 39.64 192 eP 23 00.00 -3.7X
YSS 40.17 19 iPc 23 08.00 0.1
iS 29 03.00
COOL 40.55 185 eP 23 09.00 -2.2
1.0s 153.00nm 5.7mb
GUN 40.70 302 P 23 12.20 -0.8
QLP 40.80 153 eP 23 13.00 -0.3
e 23 17.00
e 24 51.00
BAL 40.86 191 eP 23 10.00 -3.7X
1.0s 158.00nm 5.7mb
PKI 40.99 301 P 23 13.80 -1.5
KKN 41.17 301 P 23 15.20 -1.4
DMN 41.26 301 P 23 16.00 -1.4
KLB 41.64 189 eP 23 18.00 -2.1
2.0s 95.00nm 5.2mb X
GKN 41.78 301 P 23 19.80 -1.7
MUN 42.28 191 eP 23 23.00 -2.4
0.8s 194.00nm 5.9mb
N 20s 45.60um
E 20s 57.40um
RMQ 42.95 148 eP 23 30.00 -0.9
e 23 34.00
e 25 15.00
NWAO 43.03 189 ePc 23 31.03 -0.5
1.0s 250.00nm 5.9mb
ePP 25 05.00
RKG 44.19 189 eP 23 45.00 4.2X
HYB 45.40 285 iPc 23 50.00 -0.9
1.0s 260.00nm 6.1mb
eS 30 38.00
IRK 45.53 343 ePc 23 50.00 -1.4
eS 30 26.00
CMS 45.73 155 eP 23 52.00 -1.2
e 23 56.00
BRS 45.87 144 iPc 23 52.00 -2.4
1.0s 49.00nm 5.4mb
i 23 55.00
i 24 04.00
i(PP) 25 41.00
i 29 29.00
eS 30 00.00
eLR 33 40.00
GBA 46.38 279 Pc 23 56.40 -2.2
0.7s 50.80nm 5.6mb
ADE 46.41 164 iPc- 23 57.50 -1.1
0.9s 554.62nm 6.5mb
WMQ 46.69 323 ePc 23 59.89 -0.9
N 16s 98.00um
E 16s 73.50um
ec 24 01.55
e 24 12.14
eHPP 25 47.37
ePP 25 47.93
ePPP 27 06.00
eS 30 51.10
eHSS 34 32.42
iSS 34 33.96
COO 47.86 148 e(P) 24 15.00 4.9X
NDI 48.26 300 iPc 24 12.00 -1.3
iS 31 26.00
BWA 49.36 154 eP 24 22.00 0.3
POO 49.93 286 iPc 24 25.60 -0.7

08d 07h

	1.1s	212.66nm			6.1mb
			iS	31 47.00	
RIV	50.11	151	eP+	24 33.00	5.7X
			e	24 41.00	
			e	25 17.00	
			e	26 24.00	
			eS	31 44.00	
CAN	50.37	154	eP	24 28.90	-0.5
CNB	50.53	154	iPc	24 30.00	-0.6
			e	24 34.00	
			e	25 21.70	
			e	31 57.00	
BOM	50.93	286	iP	24 32.00	-1.8
			iS	31 45.00	
PVC	51.01	122	iPc	24 41.00	6.6X
PET	51.09	26	iPc	24 34.00	-0.5
			eS	31 50.00	
DZM	51.74	128	iPc	24 41.00	1.0
KSH	52.40	313	iPd	24 46.00	1.1
	7.0s	7000.00nm			6.7mb X
Z	20s	87.50um			6.8Msz
E	17s	98.00um			
			PP	26 46.00	
			S	32 10.00	
			sS	32 28.00	
TLG	52.90	318	eP	24 49.00	0.5
			eS	32 17.00	
FRU	54.59	316	iPc	25 00.00	-0.9
			iS	32 40.00	
QUE	57.34	300	eP	25 21.00	0.0
			eS	33 30.50	
DSH	57.48	310	eP	25 21.00	-0.8
			eS	33 19.00	
SMY	58.42	33	P	25 26.00	-1.9
Z	20s	26.00um			6.3Msz
SVA	59.86	117	eP	25 57.90	19.5X
TIK	61.88	1	iPd	25 49.00	-2.3
			eS	34 13.00	
ADK	63.24	36	P	25 59.80	-0.9
	1.5s	1513.51nm			6.9mb
MAIO	64.33	306	iPc	26 06.30	-2.0
	1.2s	162.50nm			6.0mb
			eS	34 58.00	
MSZ	66.76	148	P	26 26.00	2.5X
SVE	67.81	328	iPc	26 27.50	-2.5
			iS	35 41.00	
SNZO	68.50	142	eP	26 35.22	0.7
			e	26 37.38	
			e	26 44.00	
			e	26 47.47	
WEL	68.52	142	Pd	26 33.00	-1.6
			S	35 32.00	
			ScS	36 28.00	
			SS	39 54.00	
ILT	68.83	20	iPc	26 34.00	-2.1
			iS	35 37.00	
MCQ	70.21	160	eP	26 48.00	3.3X
TEH	70.84	304	eP	26 52.00	2.8X
IR4	71.22	304	eP	26 50.00	-1.6
IR1	71.40	304	eP	26 51.50	-1.1
IR7	71.47	304	eP	26 52.00	-1.0
IR5	71.48	304	eP	26 51.50	-1.6
BJA	71.54	294	(P)	26 51.90	-1.5
	1.0s	417.00nm			6.5mb
BEE	71.62	294	iP	26 53.90	0.1
	0.5s	168.00nm			6.4mb
BBU	71.67	294	iP	26 54.70	0.5
DHR	71.95	294	eP	26 55.00	-0.8
SDN	73.40	35	eP	27 05.20	1.4
KER	74.35	303	eP	27 11.50	1.6
OPA	74.72	70	P	27 17.00	4.9X
TAB	74.92	307	iPc+	27 14.00	0.8
RYD	75.22	293	eP	27 14.30	-0.7
SLY	75.63	304	ePc	27 16.00	-1.1
			iPcP	27 19.50	
			isP	27 47.00	
			iPP	30 17.50	
			e	30 45.00	
			iPPP	31 54.00	
			eS	36 54.00	
			iPS	37 44.00	
			iPPS	38 09.50	
			e	38 43.50	
TTA	76.50	28	eP	27 21.20	-0.4
SVW	76.53	29	eP	27 22.00	0.3
BHD	76.65	302	ePd	27 24.00	1.1
			eS	37 10.00	

			iScS	37 40.00	
BKR	77.01	311	iPc	27 26.00	1.1
			iS	37 12.00	
DRV	77.04	174	iPd	27 26.00	1.8
			e	52 01.00	
BRW	77.15	19	eP	27 24.90	0.0
MSL	77.51	305	ePc	27 25.00	-2.6X
			iPcP	27 33.50	
			isP	28 07.50	
			eS	37 14.00	
			ePS	37 56.50	
KMSA	77.54	289	eP	27 27.30	-0.8
IMA	77.75	24	eP	27 28.30	-0.2
QASM	77.89	295	eP	27 29.30	-0.6
KDC	77.98	33	eP	27 29.20	-0.5
PMR	79.67	29	eP	27 37.20	-1.6
Z	20s	14.00um			6.3Msz
COL	80.18	26	ePc	27 41.15	-0.4
			ec	27 49.42	
			e	27 54.22	
			eS	37 44.10	
			eSKS	38 06.52	
FBA	80.18	26	ePc	27 40.60	-1.0
ARO	80.19	280	iP+	27 43.00	0.4
OBN	80.99	324	iPc	27 45.20	-0.8
	1.8s	1490.00nm			6.7mb
Z	20s	52.00um			6.9Msz
			iS	37 50.00	
TOA	81.05	28	eP	27 46.40	0.1
APA	81.58	337	ePc	27 47.00	-1.9
			iS	37 52.00	
SHBJ	82.45	301	Pd	27 57.05	2.8X
KVT	82.66	310	iP	27 53.00	-2.1
KEV	83.58	340	iP	27 58.20	-0.9
			e	38 20.00	
SIM	83.60	314	iPd	27 59.50	-0.3
			iS	38 20.00	
MDSJ	83.64	301	Pc	27 56.90	-3.5X
PUL	83.85	330	eP	27 59.00	-1.7
			eS	38 20.00	
HRI	83.86	303	eP	28 03.00	1.5
QUTJ	83.89	301	Pd	28 08.00	6.3X
SHMJ	83.91	302	Pd	28 07.90	6.3X
BURJ	83.94	302	Pc	28 00.80	-1.1
SALJ	84.07	301	P	28 08.50	6.0X
KFNJ	84.10	301	P	28 08.80	6.3X
WAJH	84.10	295	eP	28 02.70	0.1
SOD	84.16	337	iP	27 59.80	-2.4
KAS	84.33	311	eP	28 03.50	-0.1
DSI	84.39	301	eP	28 05.00	1.0
AAE	84.53	278	eP	28 06.80	1.4
KBS	84.76	350	eP	28 04.00	-1.0
AQBJ	84.93	299	P	28 12.10	5.3X
MBH	85.07	299	eP	28 07.00	-0.4
BADA	85.15	298	eP	28 08.00	0.2
ANTO	85.28	309	ePc	28 08.28	-0.1
			e	28 16.39	
			e	28 19.37	
			ePP	31 38.17	
			eHPP	31 38.99	
SUF	85.30	333	iP	28 05.90	-2.0
BBTK	85.31	309	eP	28 07.00	-1.6
INK	85.33	21	eP	28 07.00	-1.0
	1.2s	467.00nm			6.6mb
CSS	85.60	305	eP	28 08.50	-1.5
PPCY	86.41	305	e(P)	28 15.00	1.0
NUR	86.49	331	iP	28 13.30	-0.5
	1.3s	250.50nm			6.3mb
Z	18s	29.60um			6.7Msz
			i	28 20.80	
			e	31 40.00	
			e	38 44.00	
			e	39 52.00	
			LR	10 12.00	
MBC	86.55	12	ePd	28 14.60	0.7
	1.0s	138.00nm			6.1mb
GPA	87.09	310	eP	28 16.00	-1.3
BCK	87.38	307	eP	28 19.30	0.5
HRT	87.47	311	eP	28 19.00	-0.1
GBZT	87.65	311	eP	28 19.00	-0.9
KOT	87.66	300	eP	28 19.50	-0.6
IAS	87.73	317	eP	28 21.00	0.9
CFR	87.73	315	ePc	28 20.00	-0.1
YLV	87.74	311	iP	28 18.50	-2.0
AGRW	87.86	293	eP	28 15.00	-6.1X
BIR	87.87	316	eP	28 23.00	2.2
ISK	87.88	311	eP	28 15.60	-5.4X

PSN	88.01	314	iPd	28 13.00	-8.5X
ELL	88.04	307	eP	28 22.00	0.0
CLI	88.05	317	ePc	28 21.00	-0.7
KHL	88.05	308	eP	28 20.00	-2.0
HLW	88.09	300	iPKPc	28 22.00	-0.2
			eS	39 00.00	
NAI	88.13	268	iPd	28 26.00	3.0X
	1.0s	15.00nm			5.3mb
NPA	88.16	254	iP	28 29.50	6.8X
	1.0s	440.00nm			6.7mb
			e	39 03.30	
BRD	88.42	316	eP	28 28.00	4.5X
DST	88.49	310	eP	28 25.00	1.0
PTT	88.57	317	eP	28 11.00	-13.2X
VRI	88.57	316	ePc	28 24.50	0.3
AFR	88.69	108	iP	28 34.10	8.9X
	1.6s	355.00nm			6.4mb
ISR	88.85	316	eP	28 28.00	2.3
PPT	88.88	108	iP	28 35.20	9.1X
	1.6s	395.00nm			6.5mb
PAE	88.89	108	iP	28 35.20	9.0X
	1.6s	255.00nm			6.3mb
EDC	88.91	311	eP	28 24.50	-1.5
PPN	89.01	108	iP	28 35.80	9.1X
	1.6s	265.00nm			6.3mb
MLR	89.19	316	ePd	28 26.50	-0.9
TVO	89.22	108	iP	28 37.10	9.3X
	1.6s	660.00nm			6.7mb
MFT	89.26	311	eP	28 25.00	-2.7X
BUC	89.32	315	iPd	28 30.00	2.2
BUC1	89.39	315	ePc	28 28.00	-0.1
JMB	89.41	313	eP	28 28.00	-0.3
VNDA	89.62	172	P	28 29.20	0.7
IZM	89.77	309	eP	28 21.00	-9.1X
CMP	89.86	316	ePd	28 33.00	2.6X
PMO	90.01	105	iP	28 40.40	8.9X
	1.4s	245.00nm			6.2mb
TBI	90.04	114	iP	28 41.00	9.5X
	1.3s	260.00nm			6.3mb
UPP	90.04	331	iP	28 29.30	-1.5
MDB	90.10	317	eP	28 35.00	3.6X
PVL	90.14	314	iPd	28 35.00	3.4X
SMG	90.25	308	eP	28 34.20	2.0
DIM	90.26	313	eP	28 32.00	-0.2
			e	59 59.00	
TPT	90.27	105	iP	28 41.60	8.9X
	1.4s	225.00nm			6.2mb
BMR	90.30	318	ePd	28 35.00	2.7X
VAH	90.31	105	iP	28 41.60	8.8X
	1.4s	170.00nm			6.1mb
KDZ	90.44	312	eP	28 35.00	1.9
KAP	90.44	306	eP	28 35.50	2.3
RDO	90.47	312	eP	28 34.60	1.4
RUV	90.53	105	iP	28 42.40	8.6X
	1.4s	260.00nm			6.3mb
DRA	90.54	315	eP	28 36.00	2.5X
UZH	90.83	320	iPc	28 36.00	1.3
			iS	38 30.00	
PLD	90.85	313	eP	28 36.00	1.1
RZN	90.94	312	eP	28 35.00	-0.6
DAG	91.07	352	iPc	28 32.00	-3.3X
	0.8s	110.45nm			6.3mb
Z	21s	22.80um			6.6Msz
N	20s	17.59um			
PGB	91.13	313	eP	28 36.00	-0.3
MMB	91.68	313	iPc	28 37.00	-1.9
HFS	91.78	332	eP	28 36.00	-2.9X
	1.6s	223.20nm			6.3mb
Z	17s	0.03um			3.8MszX
			LR	05 03.00	
VTS	91.80	314	iP	28 40.00	0.5
KRA	91.90	321	eP	28 38.90	-0.7
	1.5s	221.00nm			6.4mb
Z	20s	26.30um			6.7Msz
E	24s	27.20um			
			i	28 41.90	
			e	32 27.00	
			eS	39 21.00	
SPC	91.97	321	eP	28 39.30	-0.9
			e(PP)	32 23.10	
RGS	92.00	335	eP	28 38.00	-1.8
BZS	92.10	317	eP	28 43.00	2.4
PLG	92.19	311	eP	28 42.00	0.8
TIM	92.33	317	iPd	28 43.00	1.3
NB2	92.53	333	P	28 40.00	-2.4
	0.9s	68.80nm			6.1mb
PSZ	92.57	319	iP	28 44.60	1.7

08d 07h

ATH 92.59 309 eP 28 44.00 1.0
ePP 32 36.00
eS 39 20.00
VAY 92.59 313 iP 28 41.00 -2.0
1.3s 0.29nm 3.5mb X
BEO 93.11 316 eP 28 47.00 1.7
SKO 93.23 313 eP 28 44.00 -1.9
1.6s ********nm 8.4mb X
Z 21s 19.82um 6.5Msz
N 22s 13.13um
E 22s 27.03um
i(PcP) 28 47.60
i 29 13.10
i 30 17.00
iPP 32 26.00
iPP 34 38.00
i 35 00.00
iSKS 39 20.00
iSKKS 39 28.00
iPS 41 16.00
i 44 36.00
iSS 46 20.00
LR 15 24.00
BUD 93.26 319 eP 28 46.00 0.1
KZN 93.45 312 eP 28 47.50 0.4
JNW 93.51 346 iP 28 48.70 2.0
SRO 93.61 320 iP 28 49.70 2.2
i 32 39.80
KSP 93.85 323 ePd 28 46.70 -1.9
1.7s 290.00nm 6.4mb
i 28 51.00
id 29 18.00
e 31 46.50
e 32 38.00
OHR 93.93 313 iP 28 45.40 -3.9X
1.3s 0.11nm 3.1mb X
e 45 56.80
PHP 94.03 313 eP 28 47.10 -2.4
ITM 94.17 309 eP 28 50.00 -0.4
COP 94.17 328 iP+ 28 50.00 0.1
Z 19s 27.78um 6.7Msz
ZST 94.26 320 iPc 28 53.50 3.0X
e 28 57.70
e 31 54.30
e 32 17.90
LSK 94.35 312 eP 28 50.50 -0.7
TIR 94.54 313 eP 28 51.00 -0.9
LACI 94.57 313 eP 28 49.30 -2.7X
SDA 94.61 314 eP 28 52.10 -0.1
TTG 94.65 314 eP 28 52.00 -0.4
e(S) 39 20.00
BERA 94.67 312 eP 28 51.50 -1.0
VKA 94.73 320 ePd 28 56.00 3.3X
3.5s 914.00nm 6.6mb X
Z 17s 16.70um 6.6MszX
ePP 32 44.00
iSKKS 39 38.00
e 41 28.00
e 46 43.00
LR 16 23.00
SOP 94.78 320 eP 28 52.20 -0.7
SRN 94.87 312 eP 28 54.20 0.7
VLS 94.92 310 eP 28 55.00 1.2
MEK 95.07 312 eP 28 55.50 1.1
PRU 95.20 323 eP 28 54.00 -0.8
2.0s 195.30nm 6.2mb
Z 17s 24.20um 6.7MszX
N 14s 8.00um
E 17s 20.70um
i 28 57.30
PP 32 38.00
SKS 39 06.00
BRG 95.22 323 iPc 28 54.40 -0.5
1.8s 210.00nm 6.3mb
Z 18s 24.00um 6.7Msz
N 18s 18.00um
E 18s 17.00um
i 28 57.60
i 29 24.70
i 30 21.60
i 32 52.00
iSKS 39 36.00
iS 40 08.00
CLL 95.60 324 eP 28 58.00 1.4
3.0s 1000.00nm 6.7mb
Z 18s 25.00um 6.7Msz
eSKS 39 39.00
eS 40 13.00
PTJ 95.78 318 eP 29 04.70 7.0X
e 31 49.00
ZAG 95.79 318 iP 29 01.00 3.4X
KHC 96.10 322 iP 28 59.10 0.0
Z 22s 25.60um 6.7Msz
N 23s 19.60um
E 22s 22.40um
S 39 44.00
KMR 96.17 321 iP- 29 02.40 3.1X
i 33 00.10
LWI 96.18 269 iPd 29 02.30 2.0
LCI 96.23 313 P 29 03.50 3.8X
VBY 96.37 318 iPd 29 03.10 2.8X
WET 96.52 322 iPc 29 00.70 -0.2
BRT 96.60 313 P 29 03.50 2.1
LJU 96.65 319 e(P) 28 57.00 -4.5X
e 29 03.50
e 32 57.50
eS 39 42.00
MOX 96.67 324 iPc+ 29 04.00 2.5X
2.3s 355.00nm 6.5mb
Z 18s 30.20um 6.8Msz
N 22s 34.40um
E 18s 15.90um
CEY 96.83 319 e(P) 28 58.50 -3.9X
RIY 97.00 318 eP 29 04.70 1.6
KBA 97.03 320 iPd 29 05.30 1.9
1.5s 60.00nm 5.9mb
i 29 10.80
i 29 15.90
i 32 22.80
epPP 33 09.00
eSKS 39 28.50
eS 40 05.50
VOY 97.07 319 eP 29 04.80 1.3
RBL 97.13 319 P 29 08.50 4.7X
TRI 97.28 319 eP 29 06.00 1.7
ePP 33 04.20
ePPP 35 34.00
e(SP) 41 43.00
e(SS) 47 30.00
ORI 97.41 313 P 29 07.50 2.4X
FVI 97.57 320 P 29 07.60 2.0
KRI 97.59 254 eP 29 04.00 -2.3
CSI 97.62 312 P 28 58.00 -8.0X
TDS 97.62 312 P 29 06.30 0.3
GRI 97.84 312 P 29 09.69 2.7
0.1s 5.80nm 6.1mb
CZI 97.92 312 P 29 08.00 0.7
MGR 98.03 313 P 29 09.00 1.2
SGO 98.06 313 P 29 09.50 1.6
DUI 98.28 315 P 29 12.00 3.0X
SOI 98.35 311 P 29 11.50 2.2
e 33 05.90
CTI 98.51 320 P 29 11.80 1.8
e 33 21.50
ARV 98.65 317 P 29 13.40 2.8X
e 33 18.50
TNS 98.68 324 ePc 29 13.20 2.5X
ed 33 11.20
SDI 98.71 315 P 29 12.50 1.5
e 33 14.00
AQU 98.76 316 P 29 13.90 2.7X
PNT 98.76 37 eP 29 13.00 2.0
1.0s 29.00nm 5.8mb
ATN 98.76 311 P 29 21.00 9.8X
WTS 98.79 326 eP 29 13.00 2.1
3.0s 1347.00nm 7.0mb
RSM 98.81 317 P 29 14.60 3.4X
AZI 98.87 315 P 29 12.50 1.0
e 33 20.00
BUL 98.96 251 iPd 29 13.00 0.5
ASS 99.00 317 P 29 15.30 3.1X
e 33 18.00
SFI 99.22 318 P 29 17.70 4.6X
e 33 21.00
MNS 99.25 316 P 29 15.30 1.9
CRE 99.26 317 P 29 16.50 3.0X
PGD 99.32 318 P 29 16.20 2.4
e 33 21.40
ABH 99.36 324 eP 29 15.02 1.3
SAL 99.41 320 P 29 17.50 3.6X
RDP 99.46 315 P 29 16.50 2.1
DBN 99.62 327 eP 29 16.00 1.2
Z 20s 20.50um 6.6Msz
ePP 33 23.00
e 35 16.00
ePPP 35 32.00
eSP 42 21.00
eSS 48 16.00
e 48 48.00
SPA 99.69 180 eP 29 16.50 1.6
2.1s 144.44nm 6.1mb
Z 18s 11.65um 6.4Msz
RUP 99.72 324 eP 29 17.00 1.6
GWF 99.73 323 P 29 16.57 1.1
ENN 99.86 326 eP 29 18.00 2.1
2.5s 917.00nm 6.9mb
MME 99.87 318 P 29 19.70 3.2X
MEM 99.89 325 P 29 22.00 6.0X
AKU 99.90 345 eP 29 19.20 3.4X
2.0s 494.12nm 6.7mb
Z 22s 29.63um 6.7Msz
SLR 99.90 245 iPc+ 29 17.00 0.3
1.4s 139.53nm 6.3mb
Z 22s 44.81um 6.9Msz
i 33 17.50
BDI 99.99 318 P 29 26.00 9.2X
FEL 99.99 322 P 29 17.58 0.8
WLS 100.14 323 Pdiff 29 18.22 0.9
CDF 100.19 323 Pdiff 29 18.32 0.8
EDM 100.32 31 ePdiff29 19.50 1.5
ECH 100.35 323 Pdiff 29 19.82 1.6
VAI 100.41 320 Pdiff 29 20.60 2.2
BOB 100.45 319 Pdiff 29 23.50 4.7X
e 33 26.00
WDC 100.46 46 e(Pdif29 18.50 -0.3
BBS 100.48 322 Pdiff 29 20.25 1.4
MOF 100.53 323 Pdiff 29 19.46 0.4
UCC 100.71 326 iPdiff29 26.00 6.4X
SKS 40 05.00
SEK 100.74 243 ePdiff29 15.00 -5.6X
1.0s 10.00nm 5.3mb
e 33 27.00
BSF 100.74 323 Pdiff 29 20.98 0.9
PRY 100.75 244 ePdiff29 16.00 -4.6X
i 33 26.00
SNF 100.90 326 Pdiffc29 24.70 4.2X
HAU 100.93 323 ePdiff29 22.70 1.9
2.0s 116.60nm 6.1mb
DOU 100.93 325 Pdiff 29 28.40 7.7X
SKS 40 07.00
ORO 101.01 320 Pdiff 29 23.50 2.2
MIN 101.20 46 e(Pdif29 27.80 5.5X
CKI 101.35 319 Pdiff 29 26.00 3.3X
e 33 21.00
ORV 101.59 46 e(Pdif29 30.80 6.9X
PGF 101.68 317 ePdiff29 26.70 2.4X
1.4s 43.55nm 5.9mb
BRK 101.68 48 ePdiff29 32.00 7.7X
Z 20s 28.00um 6.8Msz
e 37 44.00
e 41 22.00
e 42 32.00
e 48 40.00
eLR 01 22.00
LPG 101.84 321 ePdiff29 27.90 2.7X
1.3s 27.10nm 5.7mb
LPL 101.85 321 ePdiff29 27.70 2.5X
1.2s 28.25nm 5.8mb
EKA 101.98 333 Pdiff 29 32.00 6.8X
2.6s 652.50nm 6.8mb
DOI 101.98 320 Pdiff 29 20.00 -5.6X
BNI 102.09 320 Pdiff 29 22.50 -3.7X
e 33 38.00
LOR 102.76 323 ePdiff29 31.00 2.1
2.0s 104.95nm 6.2mb
FRF 102.79 319 ePdiff29 31.00 1.9
1.6s 37.30nm 5.8mb
LMR 102.98 319 ePdiff29 31.80 1.8
1.6s 24.90nm 5.7mb
CMB 102.99 47 ePdiff29 32.70 2.5X
LRG 103.02 319 ePdiff29 32.70 2.6X
1.0s 20.00nm 5.8mb
SES 103.05 33 ePdiff29 31.00 0.8
SMF 103.08 323 ePdiff29 32.50 2.2
1.8s 73.35nm 6.1mb
KIM 103.27 243 ePdiff29 31.00 -0.8
i 33 45.00
AVF 103.30 323 ePdiff29 33.60 2.3
1.4s 23.95nm 5.8mb
PRI 103.52 49 e(Pdif29 33.00 0.3
e 01 03.30

08d 07h

BGF	103.72	323	ePdiff	29	35.40	2.2
	1.2s	32.75nm			6.0mb	
FRI	103.90	48	e(Pdif	29	36.70	2.5X
MAF	104.05	323	ePdiff	29	37.10	2.4X
	1.4s	30.50nm			5.9mb	
KVN	104.20	46	Pdiff	29	34.00	-1.8
LRM	104.69	37	ePdiff	29	29.50	-8.4X
FFC	104.79	26	ePdiff	29	39.00	1.3
BCAO	105.11	277	iPdiff	29	42.20	2.1
	0.6s	8.00nm			5.8mb	
		id	32	47.20		
		id	33	14.20		
BCAO	105.11	277	ePdiff	29	38.45	-1.7X
	0.6s	8.00nm			5.8mb	
		id	32	47.20		
		i	33	14.20		
PAS	106.19	50	ePdiff	29	55.00	10.5X
		ePP	34	40.00		
		ePPP	36	40.00		
		eSKS	40	30.00		
		eSKKS	41	40.00		
		ePS	43	24.00		
		ePPS	44	20.00		
		ePKKP	45	12.00		
		eSS	49	00.00		
		eSKKP	49	20.00		
		eSSS	52	30.00		
		e	53	00.00		
		eP'P'	53	20.00		
		eLg	59	36.00		
		eLR	03	24.00		
SBB	106.23	50	ePdiff	29	55.00	10.3X
		ePP	34	26.00		
		ePKKP	45	11.00		
MWC	106.24	50	ePKP	34	11.00	14.3X
GSC	106.73	49	ePdiff	29	50.00	3.0X
		ePP	34	11.00		
		ePKKP	45	35.00		
GSC	106.73	49	ePKP	34	11.00	13.5X
		ePKKP	45	35.00		
RVR	106.85	50	ePKP	34	16.00	18.4X
EBR	108.11	319	ePdiff	29	54.00	1.2
		ePP	34	18.00		
GLA	109.18	50	ePKP	34	12.00	9.9X
		ePKKP	45	21.00		
RSON	111.07	25	PKP	34	05.60	0.5
	Z 22s	20.11um			6.7Msz	
GOL	112.40	40	PKP	34	09.00	0.7
	Z 20s	15.00um			6.6Msz	
ASMO	112.74	317	ePKP	34	08.00	-0.8
APHE	112.93	317	ePKP	34	05.00	-4.2X
AAPN	113.02	318	ePKP	34	06.50	-2.9X
ALOJ	113.12	317	ePKP	34	08.00	-1.6
ANMO	114.33	45	ePKP	34	11.81	-0.3
		eSKS	41	02.13		
		eSDIF	42	53.68		
		ePS	44	42.71		
ALQ	114.33	45	ePdiff	30	38.00	17.0X
ALQ	114.33	45	iPKPd	34	08.50	-3.7X
	1.0s	17.50nm				
	Z 19s	20.64um			6.8Msz	
IFR	115.78	315	ePKP	34	16.00	1.1
		i	35	00.00		
TIO	118.70	313	iPKP	34	22.50	2.0
		i	35	44.40		
TUL	120.69	38	ePKP	34	24.80	0.9
	0.8s	7.70nm				
	Z 19s	21.57um			6.8Msz	
		e	34	30.00		
		e	34	34.80		
		i	35	58.90		
CCM	121.78	33	ePdiff	30	57.87	4.1X
		eSKS	41	23.33		
		ePS	45	46.52		
FVM	122.27	33	PKP	34	24.60	-2.3
SHGH	122.78	284	ePKP	34	30.00	1.5
		e	36	05.00		
TEGH	122.82	283	ePKP	34	29.00	0.4
KOGH	122.93	284	ePKP	34	26.00	-2.9X
		e	36	03.00		
LEGH	122.99	283	ePKP	34	31.00	2.1
		e	36	04.00		
KUK	123.02	284	ePKP	34	26.00	-3.0X
POW	123.20	35	PKP	34	27.60	-1.1
RSNY	123.22	16	PKP	34	29.60	1.1
	Z 20s	10.73um			6.5Msz	
HRV	125.91	15	ePdiff	31	06.13	-5.9X
		eSKS	41	44.05		
RSCP	126.60	31	PKP	34	32.80	-2.6X
	Z 22s	15.87um			6.6Msz	
LKO	126.93	290	PKP	34	35.66	-1.0
KIC	127.14	286	PKP	34	34.12	-2.9X
LIC	127.46	286	PKP	34	34.64	-2.9X
BLA	127.68	25	PKP	34	36.00	-1.4
CBN	128.03	22	ePKP	34	39.00	1.0
MBO	135.03	302	iPKPd	34	55.70	3.8X
UPA	149.53	53	ePKPd	35	24.00	6.8X
	Z 20s	8.51um			6.5Msz	
LRS	149.89	22	e(PKP)	35	19.00	1.4
PORP	150.19	22	e(PKP)	35	14.00	-4.1X
LNV	151.74	151	ePKPd	35	22.50	2.6X
LCCH	152.05	150	ePKP	35	22.00	1.6
CHCH	152.11	152	ePKP	35	20.00	-0.6
TACH	152.21	151	ePKPc	35	22.00	1.3
RFA	152.34	156	e(PKP)	35	23.20	2.3
PCH	152.44	152	ePKP	35	24.50	3.4X
ANG	152.50	14	ePKP	35	22.49	1.0
SAN	152.50	151	ePKPc	35	23.00	1.9
BPA	152.60	14	ePKP	35	22.54	0.9
ROCH	152.73	150	ePKP	35	22.50	0.8
DEG	153.48	12	ePKP	35	21.00	-1.9
PAG	153.62	14	ePKP	35	24.00	0.8
MDZ	153.81	153	i(PKP)	35	25.70	2.7X
BBL	154.15	14	ePKP	35	20.00	-3.8X
CFA	155.16	153	iPKPd	35	27.00	2.2
RTLL	155.29	152	e(PKP)	35	27.20	2.2
MRA	155.49	158	e(PKP)	35	25.00	-0.1
BMG	155.65	47	iPKPd	35	17.00	-9.1X
TOV	155.82	37	ePKP	35	26.70	0.5
BOG	156.48	53	iPKPc	35	28.00	0.5
TCA	156.86	159	e(PKP)	35	30.50	3.3X
OLLA	157.27	31	ePKP	35	29.00	0.9
GRW	157.33	16	ePKP	35	32.52	4.4X
TPR	158.50	15	ePKP	35	33.43	4.0X
PIG	158.51	15	ePKP	35	33.82	4.4X
BOT	158.53	15	ePKP	35	33.38	4.0X
PT10	158.61	98	ePKP	35	32.00	2.5X
NNA	158.73	98	ePKP	35	30.24	0.5
	1.0s	134.38nm				
	Z 22s	2.78um			6.1Msz	
ANT	159.98	136	ePKP	35	31.50	0.7
CAI	161.73	279	iPKPc	35	34.90	2.1
SLA	162.23	148	ePKPd	35	36.50	3.2X
ARE	162.89	115	ePKPc	35	35.50	1.2
YJA	164.25	143	e(PKP)	35	36.00	0.3
LPB	165.84	120	ePKP	35	38.00	0.9
	1.6s	533.33nm				
		i	35	42.00		
ZOBO	165.94	119	iPKPc	35	37.50	0.1
		ePKPpb	36	40.52		
		iHPP	40	25.03		
		iPP	40	25.51		
BAO	170.78	230	ePKP	35	37.50	-2.5
	S.D. = 1.4	on 322 of 468 obs.				

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* FEB 08, 1990 07h 21m 58.50± 0.55s
9.788 N ± 9.2km 124.619 E ±16.6km
DEPTH = 33.0km (normal)
5.2mb (6 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

TRT	21.08	215	ePc	26	43.40	0.9
	1.0s	145.40nm			5.3mb	
SSE	21.44	352	P	26	47.00	1.0
	1.2s	67.00nm			4.9mb	
OFUJ	32.91	25	eP	28	31.50	-0.4
MDJ	34.97	6	eP	28	48.00	-1.6
HOOJ	36.36	24	eP	29	02.10	0.7
KUSJ	37.53	24	eP	29	12.10	0.9
ASAJ	37.61	21	eP	29	12.40	0.5
BRS	45.94	144	iPc	30	19.20	-1.1
		i	30	36.00		
		i	31	57.00		
BWA	49.43	154	eP	30	49.80	2.4
DZM	51.82	128	iPc	31	13.00	7.1X
MAIO	64.25	306	iPc	32	33.20	0.2
MSZ	66.83	148	eP	32	47.00	-2.2
SOD	84.10	337	iP	34	15.00	-12.1X
		i	34	27.80		
SUF	85.24	333	iP	34	32.50	-0.3
	0.7s	29.60nm			5.6mb	
INK	85.33	21	eP	34	34.00	0.8
NUR	86.43	331	eP	34	38.60	-0.1
MBC	86.53	12	ePd	34	39.70	0.6
	1.1s	42.00nm			5.6mb	
HFS	91.72	332	eP	35	02.70	-1.1
	0.7s	5.40nm			5.1mb	
NB2	92.47	333	P	35	06.10	-1.2
	0.9s	6.10nm			5.0mb	
	S.D. = 1.2	on 17 of 19 obs.				

FEB 08, 1990 07h 39m 51.13± 0.34s
9.674 N ± 6.0km 124.858 E ± 7.9km
DEPTH = 33.0km (normal)
5.2mb (17 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

BAG	7.89	329	eP	41	47.10	0.5
	1.6s	606.67nm			6.4mb	X
TSM	8.64	232	ePd	41	56.90	0.0
HKC	16.21	322	eP	43	43.00	4.9X
QZH	16.31	339	eP	43	42.00	2.6
QIZ	17.25	304	Pd	43	52.40	1.1
GZH	17.30	322	eP	43	52.60	0.8
TRT	21.12	216	ePc	44	35.10	-0.5
	0.9s	66.80nm			5.0mb	
SSE	21.59	351	P	44	41.00	0.9
KGM	22.72	252	eP	44	58.00	6.5X
NJ2	22.95	347	Pd	44	54.40	0.8
MTN	23.22	164	eP	44	57.00	0.6
GYA	23.98	316	P	45	06.60	2.7
IPM	24.18	260	ePd	45	06.60	0.9
	1.1s	86.00nm			5.2mb	
BDT	26.22	289	eP	45	23.20	-1.8
	1.0s	62.80nm			5.2mb	
PMG	29.19	130	eP	45	52.00	0.0
DL2	29.25	355	eP	45	54.50	2.2
TIY	30.08	340	eP	45	56.10	-3.7X
WB5	30.82	162	eP	46	07.00	0.5
WRA	30.88	162	Pc	46	10.90	4.0X
	1.2s	10.90nm			4.5mb	
BJI	31.21	347	eP	46	09.00	-0.6
	1.5s	100.00nm			5.4mb	
LZH	32.50	327	P	46	22.00	0.8
	2.0s	160.00nm			5.6mb	
QIS	33.36	154	eP	46	26.00	-2.6
BTO	33.49	339	eP	46	30.40	0.7
CN2	34.00	1	eP	46	33.50	-0.4
SHL	35.04	301	iP	46	42.50	-0.9
MDJ	35.05	6	eP	46	40.20	-2.8
CTA	36.31	145	iPc	46	55.00	1.1
MRWA	39.60	192	eP	47	20.00	-1.3
GUN	40.88	302	P	47	36.10	3.7X
PKI	41.17	301	P	47	34.00	-0.8
KKN	41.35	301	P	47	35.90	-0.2
	0.8s	20.00nm			4.9mb	
DMN	41.44	301	P	47	35.70	-1.2
GKN	41.96	301	P	47	39.70	-1.3
	0.8s	15.00nm			4.8mb	
HYB	45.58	285	ePc	48	09.00	-1.2
	1.0s	40.00nm			5.3mb	
BRS	45.71	144	eP	48	10.00	-1.1
		e	48	17.00		
		e(PP)	49	50.00		
GBA	46.56	280	Pd	48	17.10	-0.8
	1.4s	59.20nm			5.4mb	
WMQ	46.85	323	P	48	21.00	1.0
NDI	48.44	300	eP	48	31.00	-1.6
BWA	49.22	154	eP	48	42.40	3.9X
CAN	50.23	154	eP	48	49.00	2.8
CNB	50.38	154	eP	48	49.00	1.6
DZM	51.56	128	iPc	48	58.00	1.4
MAIO	64.51	306	iPd	50	27.30	0.0
	1.0s	22.50nm			5.2mb	
MSZ	66.61	148	eP	50	42.00	1.6
TAB	75.09	307	eP	51	33.00	0.9
TTA	76.50	28	e(P)	51	37.40	-2.0
BRW	77.17	19	e(P)	51	41.10	-1.8
MSL	77.68	305	eP	51	45.50	-0.9
IMA	77.75	24	e(P)	51	44.30	-2.1
PMR	79.66	29	e(P)	51	53.10	-3.6X
FBA	80.19	26	eP	52	00.30	0.9
TOA	81.04	28	e(P)	52	01.50	-2.6
KEV	83.71	340	eP	52	19.00	1.3
SOD	84.30	337	iP	52	21.30	0.6
PRNI	85.07	300	eP	52	20.00	-5.3X
MBH	85.25	299	eP	52	26.00	-0.2
INK	85.35	21	eP	52	24.00	-1.9
	1.4s	70.00nm			5.7mb	
SUF	85.45	333	iP	52	26.30	-0.2
	0.5s	6.20nm			5.1mb	

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MBC    86.59  12 eP    52 33.50   1.5
       1.0s    14.00nm          5.1mb
NUR    86.64 331 eP    52 32.80   0.4
DAG    91.17 352 iPd   52 53.00  -0.6
       1.1s    18.99nm          5.4mb
HFS    91.93 332 eP    52 57.10  -0.3
       0.8s     3.70nm          4.9mb
NB2    92.67 333 P     53 00.30  -0.6
       1.2s    11.10nm          5.2mb
LKO   127.11 290 PKP   58 56.14   1.4
       1.1s    16.50nm
KIC   127.32 286 PKP   58 55.60   0.4
LIC   127.63 286 PKP   58 56.00   0.3
     S.D. = 1.4  on  58 of  66 obs.
-------------------------------------
   FEB  08, 1990  07h 46m 59.78± 0.15s
    9.725 N ± 3.0km  124.625 E ± 3.8km
   DEPTH =  30.3km  (  5 depth phases)
   6.0mb ( 66 obs.) 6.5Msz (  9 obs.)
 MINDANAO, PHILIPPINE ISLANDS     (259)
      Felt (V RF) on Macton.
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.:  6S, 18C  M.W.:  9S, 20C
      Centroid Locotion:
      Origin Time        07:47: 5.2 0.4
      Lat  9.71N 0.03 Lon 124.86E 0.04
      Dep  15.0 FIX Holf-duration  7.4
      Moment Tensor;    Scole 10**18 Nm
        Mrr= 7.99 0.19   Mtt=-5.53 0.14
        Mff=-2.46 0.21   Mrt= 2.51 1.18
        Mrf= 2.19 1.20   Mtf=-3.96 0.15
        Principal Axes:
         T  Val=  8.66  Plg=79  Azm=312
         N        0.24       2       55
         P       -8.89      11      145
      Best Double Couple:Mo=8.8*10**18
       NP1:Strike=238 Dip=34 Slip=  94
       NP2:        53     56       87
MAP     0.87 313 eP    47 15.00  -0.8
PGP     5.20 317 iPd   48 18.50   1.0
PPR     5.81 271 iPc   48 45.00  18.8X
BAG     7.73 330 eP    48 54.30   1.1
CVP     8.39 341 ePc   49 16.00  13.7X
TSM     8.49 230 ePc   49 04.10   0.3
       0.5s   207.10nm          6.6mb
SZP     8.77 333 iPd   49 16.00   8.4X
KKM     9.10 247 eP    49 11.70  -0.5
PIP     9 39 336 iPc   49 20.20   4.1X
PCI    11.59 205 ePc   49 52.50   6.3X
ANP    15 66 350 eP    50 48.50   8.5X
                iS     50 55.50
HKC    16.03 323 eP    50 45.40   0.7
QZH    16.19 340 eP    50 49.00   2.3
       1.5s  *******nm          6.8mb
     Z  28s   223.00um          4.5Msz
     N  18s   226.00um
     E  18s   120.00um
MCO    16.27 321 eP    50 49 60   1.8
QIZ    17.03 305 Pd    50 59.00   1.5
     E  15s   202.00um
                sP     51 07.50
GZH    17.12 322 P     51 00.00   1.5
       1.8s  3800.00nm          6.2mb
     Z  20s   175.00um          3.9Msz
     N  14s    80.40um
     E  13s    84.50um
TLE    17.28 152 ePc   50 42.00 -18.5X
       1.0s    10.00nm
SLKI   18.80 159 ePc   51 21.30   1.9
KUPT   19.77 183 eP    51 43.50  13.0X
       1.5s  2252.60nm
JAY    20.11 126 ePd   51 35.00   0.8
       0.7s    60.40nm          5.0mb
GUMO   20.19  77 eP    51 41.10   6.2X
       2.0s  3609.30nm          6.4mb
PJG    20.19  77 eP    51 41.00   6.1X
                TT     11 00.00
GUA    20.23  77 eP    51 41.60   6.3X
       1.0s   464.00nm          5.8mb
                eS     55 25.00
TRT    21.03 215 ePd   51 44.00   0.4
       1.4s  1781.00nm          6.3mb
SSE    21.50 352 Pc    51 48.60   0.3
     N  15s    53.70um
     E  16s   180.00um

KAGJ   22.13  14 eP    51 57.20   2.6
KGM    22.52 251 eP    51 59.00   0.5
                e      52 15.70  74kmX
WHN    22.82 337 P     52 03.00   1.7
     Z  20s    89.10um          6.2Msz
                pP     52 12.00  32km
NJ2    22.85 347 Pc    52 02.20   0.6
     Z  20s    48.80um          5.9Msz
     N  10s    12.20um
     E  13s    31.50um
MTN    23.34 164 eP    52 05.00  -1.5
                e      52 10.00  18kmX
KUMJ   23.41  13 eP    52 07.70   0.6
KLM    23.75 255 eP    52 11.00   0.5
GYA    23.79 317 P     52 10.40  -0.6
     N  15s    44.80um
     E  15s    95.10um
IPM    23.96 259 ePc   52 13.20   0.6
       0.7s    77.20nm          5.3mb
NNT    24.58 279 eP    52 18.00  -0.6
SHNJ   25.00  13 eP    52 24.50   2.0
KNA    25.64 171 eP    52 28.70   0.1
       0.9s   343.00nm          6.0mb
TKSJ   25.65  18 eP    52 28.10  -0.4
SHK    25.77  15 eP    52 27.80  -1.9
BDT    25.99 289 eP    52 31.00  -0.9
       1.1s   531.30nm          6.1mb
WKYJ   26.37  21 P     52 34.80  -0.5
CHTO   26.45 293 e(P)   52 35.20  -0.9
PSI    26.47 256 eP    52 34.70  -1.6
YONJ   26.60  16 P     52 36.90  -0.5
LAT    27.60 125 eP    52 50.00   3.4X
TSRJ   27.70  20 P     52 46.90  -0.5
XAN    28.17 332 P     52 50.00  -1.7
       1.0s   400.00nm          6.1mb
     N  26s   255.00um
     E  19s   112.00um
                S      57 28.00
CD2    28.66 320 eP    52 55.50  -0.6
     Z  22s    92.40um          6.3Msz
                S      57 40.00
DL2    29.18 355 eP    53 00.50  -0.1
     E  14s    85.50um
CHJJ   29.28  24 P     52 59.40  -2.2
MTMJ   29.29  22 P     53 00.20  -1.6
PMG    29.40 130 eP    53 02.50  -0.4
KAKJ   29.91  26 P     53 06.10  -1.1
TIY    29.95 340 eP    53 06.40  -1.3
NIIJ   30.32  23 eP    53 06.60  -4.2X
WB5    30.94 162 eP    53 15.50  -1.0
WRA    31.00 162 Pd    53 15.90  -1.1
       1.3s    92.90nm          5.4mb
BJI    31.11 347 eP    53 17.00  -0.8
     E  16s    44.60um
                eS     58 20.00
YAMJ   31.53  24 eP    53 21.40  -0.1
SNY    31.99 359 Pc    53 24.50  -0.9
       1.4s   400.00nm          6.1mb
     N  18s    73.00um
     E  14s    53.50um
                S      58 35.00
LZH    32.33 327 eP    53 36.00   7.3X
     N  14s   150.00um
     E  20s   130.70um
                eS     58 56.00
LZH    32.33 327 eP    53 30.00   1.3
     E  20s   131.00um
OFUJ   32.97  25 eP    53 32.70  -1.3
HHC    33.09 342 Pc    53 35.00  -0.2
     Z  32s   229.00um          6.7MszX
     N  15s    64.30um
     E  14s    45.80um
BTO    33.37 340 P     53 40.00   2.4
     N  17s    86.90um
     E  17s    71.90um
QIS    33.51 154 iPc   53 38.10  -0.8
AOMJ   33.74  22 eP    53 47.60   6.9X
CN2    33.95   1 eP    53 41.50  -1.0
SHL    34.82 301 eP    53 48.00  -2.4
MDJ    35.03   6 Pc    53 51.00  -0.7
MRRJ   35.62  21 P     53 58.00   1.2
WARB   35.75 177 eP    53 57.00  -1.1
       0.5s    74.00nm          5.9mb
SAP    36.27  21 eP    54 04.00   1.7
                eS     59 41.00
HOOJ   36.42  24 P     54 03.90   0.4
CTA    36.48 144 iPc   54 04.10  -0.2

       1.0s   598.00nm          6.4mb
                iS     59 37.00
GTA    36.93 327 iPc   54 08.00  -0.1
     Z  20s    90.10um          6.6Msz
     E  17s   103.00um
LSA    37.04 307 P     54 09.70   0.2
     Z  15s    27.00um          6.2MszX
     N  15s    14.00um
     E  14s    11.00um
                pP     54 20.00  35km
KUSJ   37.59  24 eP    54 13.70   0.4
ASAJ   37.66  21 eP    54 14.30   0.3
                S      00 09.20
MRWA   39.60 192 eP    54 28.50  -1.8
COOL   40.51 185 eP    54 38.00   0.2
       1.0s    97.00nm          5.5mb
GUN    40.66 302 P     54 39.80   0.2
QLP    40.81 153 eP    54 41.00   0.7
                e      54 49.00  27km
                i      56 25.70
BAL    40.81 190 eP    54 40.00  -0.3
       0.7s    41.00nm          5.3mb
PKI    40.95 301 P     54 41.30  -0.6
KKN    41.13 301 P     54 42.90  -0.3
DMN    41.22 301 P     54 43.80  -0.2
KLB    41.60 189 eP    54 45.00  -1.8
       1.0s    68.00nm          5.3mb
GKN    41.73 301 P     54 47.30  -0.8
MUN    42.24 191 eP    54 52.00   0.0
       0.8s    90.00nm          5.6mb
RMQ    42.96 147 eP    55 00.00   2.1
                e      56 48.00 627kmX
NWAO   42.99 189 eP    54 58.00  -0.1
       1.0s   170.00nm          5.7mb
RKG    44.15 189 eP    55 12.00   4.5X
HYB    45.34 285 ePc   55 17.00  -0.4
       1.0s   160.00nm          5.9mb
                eS     02 04.00
CMS    45.74 154 eP    55 20.00  -0.2
                e      55 23.00  10kmX
BRS    45.89 144 iPd   55 21.00  -0.5
       1.0s    31.50nm          5.2mb
                i      55 30.00  30km
                e(PP)  57 08.00
ADE    46.40 164 iPc   55 25.40  -0.1
       1.0s   430.00nm          6.4mb
WMQ    46.67 323 P     55 27.50  -0.1
     N  18s    88.00um
     E  18s    91.90um
COO    47.87 148 e(P)  55 42.00   4.8X
NDI    48.21 300 iP    55 38.00  -1.9
                eS     02 45.00
BWA    49.37 154 eP    55 50.20   1.6
RIV    50.12 151 e(P)  56 00.00   5.7X
                e      56 15.00  57kmX
CAN    50.38 154 eP    55 55.90  -0.5
CNB    50.53 154 ePc   55 57.80   0.2
                i      56 06.00  27km
BOM    50.87 286 eP    56 02.50   2.2
                iS     02 25.00
PVC    51.06 122 iPc   56 06.00   4.3X
PET    51.14  26 eP    56 01.00  -0.9
                eS     03 32.00
DZM    51.77 128 iPc   56 09.00   1.8
KSH    52.37 313 P     56 13.00   1.4
TLG    52.88 318 eP    56 20.80   5.6X
                eS     03 48.00
QUE    57.29 300 eP    56 51.00   3.4X
                eS     04 52.00
DSH    57.45 310 eP    56 49.00   0.6
                eS     04 41.00
TIK    61.91   2 eP    57 16.00  -2.5
                eS     05 42.00
ADK    63.31  36 P     57 25.50  -2.5
       1.2s   318.18nm          6.3mb
MAIO   64.29 306 iPc   57 34.30  -0.6
       1.2s   120.14nm          5.9mb
MSZ    66.77 148 P     57 52.00   1.5
WEL    68.54 142 P     58 02.00   0.3
MCQ    70.21 160 eP    58 15.00   3.4X
TEH    70.80 304 eP    58 20.00   4.1X
IR4    71.18 304 eP    58 18.00  -0.2
IR1    71.36 304 eP    58 19.00  -0.3
IR7    71.43 304 eP    58 18.50  -1.2
IR5    71.44 304 eP    58 19.50  -0.3
BJA    71.49 294 (P)   58 19.40  -0.6
       1.0s   333.00nm          6.3mb
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08d 07h

BEE	71.57	294	iP	58 21.40	0.9
	1.2s	426.00nm			6.4mb
BBU	71.62	294	iP	58 21.90	1.1
DHR	71.90	295	eP	58 22.50	0.0
KER	74.30	303	ePc	58 36.00	-0.6
TAB	74.88	307	eP	58 40.00	0.1
RYD	75.17	293	eP	58 41.30	-0.3
SLY	75.59	304	iPd	58 43.50	-0.3
TTA	76.56	28	eP	58 49.20	0.4
SVW	76.59	29	eP	58 49.40	0.4
BHD	76.61	302	ePc	58 51.00	1.5
			iS	09 10.00	
DRV	77.01	174	eP	58 53.00	2.0
BRW	77.20	19	eP	58 52.30	0.2
MSL	77.47	305	eP	58 49.00	-5.3X
KMSA	77.49	289	eP	58 54.00	-0.7
IMA	77.80	24	eP	58 54.80	-0.9
OASM	77.84	295	eP	58 57.30	0.8
KDC	78.05	33	eP	58 59.00	2.1
PMR	79.73	29	eP	59 05.00	-1.1
	1.1s	125.00nm			5.8mb
FBA	80.24	26	eP	59 07.70	-1.1
OBN	80.98	324	iPc	59 12.40	-0.4
	1.9s	1400.00nm			6.6mb
Z	23s	56.00um			6.9MszX
TOA	81.11	28	eP	59 14.10	0.6
SIM	83.57	314	eP	59 26.00	-0.5
KEV	83.58	340	eP	59 26.00	-0.1
	1.0s	136.00nm			6.1mb
			i	59 40.10	48kmX
MDSJ	83.60	301	Pc	59 37.60	10.5X
BURJ	83.90	302	P	59 34.00	5.4X
SALJ	84.03	301	P	59 36.00	6.8X
WAJH	84.06	295	eP	59 30.00	0.7
SOD	84.16	337	iP	59 28.20	-0.9
KAS	84.30	311	eP	59 30.50	0.2
AAE	84.46	278	eP	59 34.50	2.5
KBS	84.78	350	eP	59 34.80	2.8X
PRNI	84.84	300	eP	59 29.00	-4.3X
MBH	85.02	299	eP	59 34.00	-0.1
BADA	85.10	298	eP	59 35.30	0.8
BBTK	85.27	309	iP	59 35.00	-0.3
SUF	85.30	333	iP	59 33.70	-1.1
INK	85.38	21	eP	59 35.00	-0.1
	1.1s	303.00nm			6.4mb
CSS	85.56	305	eP	59 36.50	-0.2
PPCY	86.37	305	e(P)	59 38.50	-2.2
NUR	86.48	331	iP	59 40.00	-0.7
	1.3s	358.30nm			6.4mb
			i	59 54.20	48kmX
MBC	86.59	12	eP	59 41.00	0.0
	1.0s	125.00nm			6.1mb
GPA	87.06	310	eP	59 43.00	-1.0
BCK	87.34	307	eP	59 43.80	-1.7
YLV	87.71	311	iP	59 45.50	-1.7
AGRW	87.81	293	eP	59 49.00	1.2
BIR	87.85	316	eP	59 48.00	0.4
PSN	87.98	314	iPd	59 48.00	-0.3
ELL	88.00	307	eP	59 49.00	0.3
KHL	88.01	308	eP	59 47.00	-1.7
NAI	88.06	268	iPd	59 52.00	2.4
	1.0s	20.00nm			5.4mb
CTT	88.30	311	eP	59 47.00	-2.9X
DST	88.45	310	eP	59 52.00	1.2
VRI	88.55	316	ePd	59 51.00	0.0
AFR	88.74	108	eP	00 01.00	8.7X
	1.2s	90.00nm			6.0mb
PPT	88.94	108	eP	00 02.00	8.7X
	1.2s	100.00nm			6.0mb
PAE	88.95	108	eP	00 02.00	8.7X
	1.2s	85.00nm			5.9mb
PPN	89.07	108	eP	00 04.00	10.1X
	1.2s	70.00nm			5.8mb
MFT	89.23	311	iP	59 55.50	1.1
TVO	89.28	108	eP	00 06.00	11.0X
	1.2s	135.00nm			6.1mb
JMB	89.38	313	eP	59 55.00	0.0
VNDA	89.60	172	P	59 56.10	0.8
CMP	89.83	316	iPd	00 02.00	4.9X
UPP	90.03	331	iP	59 57.70	0.1
PMO	90.07	105	eP	00 05.00	6.4X
	1.2s	60.00nm			5.7mb
PVL	90.11	314	iPc	00 00.00	1.6
SMG	90.21	308	eP	00 01.00	2.0
BMR	90.28	318	ePd	00 02.00	2.9X
TPT	90.33	105	eP	00 07.00	7.2X
	1.2s	60.00nm			5.8mb

VAH	90.37	105	eP	00 07.00	7.0X
	1.2s	40.00nm			5.6mb
KAP	90.41	306	eP	00 05.50	5.6X
KDZ	90.41	312	eP	00 00.00	0.2
RDO	90.43	312	eP	59 58.30	-1.6
RUV	90.59	105	eP	00 08.00	7.0X
	1.2s	70.00nm			5.8mb
UZH	90.80	320	iPc	00 03.00	1.5
RZN	90.91	312	iP	00 02.00	-0.4
DAG	91.09	352	eP	00 00.90	-1.4
	0.8s	50.00nm			5.9mb
PGB	91.10	313	eP	00 02.00	-1.1
MMB	91.65	313	eP	00 03.00	-2.6
VTS	91.77	314	iP	00 07.00	0.7
HFS	91.77	332	eP	00 04.20	-1.5
	1.8s	398.00nm			6.5mb
Z	20s	0.03um			3.7MszX
			LR	38 25.00	
KRA	91.88	321	eP	00 06.40	0.0
	0.9s	80.00nm			6.1mb
Z	20s	19.50um			6.5MszX
E	20s	21.10um			
			i	00 09.90	11kmX
			i	00 13.00	
SPC	91.95	321	eP	00 06.80	-0.2
			e(PP)	03 54.70	
RGS	92.00	335	eP	00 08.00	1.3
BZS	92.07	317	eP	00 07.00	-0.4
PLG	92.16	311	eP	00 08.50	0.5
NB2	92.52	333	P	00 07.40	-1.8
	1.2s	110.10nm			6.2mb
PSZ	92.55	319	eP	00 09.20	-0.4
VAY	92.56	312	iP	00 08.30	-1.4
	1.2s	0.26nm			3.5mb X
BEO	93.09	316	eP	00 15.50	3.4X
SKO	93.20	313	eP	00 11.70	-1.0
	1.5s	126.00nm			6.1mb
			i	00 15.50	12kmX
KZN	93.42	312	eP	00 13.60	-0.2
JNW	93.53	346	iPc	00 20.50	6.9X
SRO	93.59	320	eP	00 15.60	1.3
KSP	93.83	323	eP	00 15.00	-0.4
	1.4s	140.00nm			6.2mb
			e	03 12.50	
			e	03 48.00	
OHR	93.90	313	eP	00 14.20	-1.8
	1.2s	0.10nm			3.1mb X
PHP	94.00	313	eP	00 13.40	-2.9X
KBN	94.03	312	eP	00 14.50	-2.0
BCI	94.07	314	eP	00 16.70	0.1
ITM	94.13	309	eP	00 15.00	-2.1
ZST	94.24	320	eP	00 16.90	-0.4
			e	04 08.90	
LSK	94.32	312	eP	00 13.50	-4.5X
TIR	94.51	313	eP	00 19.20	0.5
LACI	94.54	313	eP	00 16.60	-2.2
SDA	94.58	314	eP	00 18.10	-0.9
BERA	94.64	312	eP	00 18.20	-1.1
VKA	94.71	320	iPd	00 21.50	2.0
	4.0s	1343.00nm			6.7mb X
Z	17s	13.80um			6.5MszX
			i(PP)	04 13.60	
			LR	47 30.00	
SOP	94.75	320	eP	00 22.60	2.9X
SRN	94.84	312	eP	00 20.20	0 0
VLS	94.88	310	eP	00 23.00	2.5
KEK	95.04	312	eP	00 25.00	3.8X
PRU	95.18	323	ePd	00 21.00	-0.6
	1.0s	50.60nm			5.9mb
Z	18s	21.60um			6.7Msz
N	16s	10.70um			
E	18s	21.30um			
			e	00 25.20	13kmX
			ePP	04 18.00	
BRG	95.21	323	iPc	00 22.10	0.4
	1.6s	140.00nm			6.1mb
Z	22s	46.00um			6.9Msz
N	22s	24.00um			
E	22s	45.00um			
CLL	95.59	324	eP	00 22.00	-1.5
	1.9s	160.00nm			6.1mb
Z	21s	32.00um			6.8MszX
PTJ	95.75	318	eP	00 27.50	3.0X
			e	03 28.90	
ZAG	95.76	318	iP	00 27.20	2.8X
KHC	96.09	322	iPc	00 26.90	1.0
	1.2s	59.00nm			5.9mb

			e	03 31.60	
LWI	96.11	269	ePd	00 25.30	-1.6
KMR	96.15	321	iP-	00 26.70	0.6
			i	04 15.70	
LCI	96.20	313	P	00 28.00	1.6
VBY	96.35	318	eP	00 28.50	1.4
WET	96.50	322	iPc	00 28.30	0.6
Z	18s	23.00um			6.7Msz
BRT	96.57	313	P	00 32.00	3.9X
LJU	96.63	319	eP	00 28.00	-0.3
MOX	96.66	324	eP	00 28.00	-0.4
	2.4s	128.00nm			6.0mb
Z	20s	30.70um			6.8Msz
N	19s	18.30um			
E	18s	21.20um			
CEY	96.81	319	eP	00 29.40	0.2
RIY	96.98	318	eP	00 28.80	-1.1
KBA	97.01	320	iPd	00 30.30	0.1
	1.4s	41.70nm			5.8mb
			i	00 50.70	
			e	03 44.00	
			ipPP	04 38.20	73kmX
VOY	97.05	319	eP	00 30.00	-0.3
RBL	97.11	319	P	00 35.50	5.0X
ORI	97.38	313	P	00 33.00	1.2
KRI	97.51	254	eP	00 31.00	-1.9
			iPP	04 23.00	
FVI	97.55	320	P	00 32.00	-0.4
CSI	97.59	312	P	00 33.20	0.4
TDS	97.59	312	P	00 33.50	0.7
MMN	97.77	313	P	00 32.60	-0.9
GRI	97.81	311	P	00 35.11	1.3
	0.2s	15.90nm			6.2mb
CZI	97.89	312	P	00 32.50	-1.5
MGR	98.00	313	P	00 35.50	0.9
SGO	98.03	313	P	00 36.00	1.3
DUI	98.25	315	P	00 38.00	2.2
SOI	98.32	311	P	00 36.50	0.5
CTI	98.49	320	P	00 36.00	-0.8
			e	04 42.00	
ARV	98.62	317	P	00 39.00	1.6
TNS	98.67	324	ePc	00 40.80	3.3X
SDI	98.69	315	P	00 37.50	-0.2
			e	05 42.50	
ATN	98.73	311	P	00 43.00	5.1X
RSM	98.79	317	P	00 42.25	4.2X
	1.4s	50.50nm			5.9mb
PNT	98.83	37	eP	00 45.00	6.8X
	1.0s	14.00nm			5.4mb
AZI	98.85	315	P	00 41.50	3.2X
BUL	98.88	251	eP	00 38.20	-0.8
ASS	98.98	317	P	00 38.50	-0.5
SFI	99.19	318	P	00 46.00	6.1X
MNS	99.22	316	P	00 42.50	2.4
CRE	99.24	317	P	00 43.50	3.2X
PGD	99.30	318	P	00 42.50	1.9
ABH	99.34	324	eP	00 44.52	4.0X
SAL	99.38	319	P	00 46.00	5.3X
RDP	99.43	315	P	00 45.00	3.9X
RUP	99.70	324	eP	00 46.22	4.0X
SLR	99.83	245	iPc	00 43.50	0.2
	1.6s	150.00nm			6.3mb
			i	04 44.00	
MEM	99.88	325	Pd	00 46.50	3.6X
FEL	99.97	322	eP	00 46.70	3.1X
CDF	100.17	323	ePdiff	00 44.70	0.3
	1.4s	69.70nm			6.0mb
EDM	100.38	31	ePdiff	00 47.00	1.9
VAI	100.39	320	Pdiff	00 49.30	4.1X
BOB	100.43	319	Pdiff	00 48.50	2.9X
			e	05 04.00	
SEK	100.67	243	ePdiff	00 42.00	-5.1X
	0.9s	10.08nm			5.4mb
			e	05 01.00	
PRY	100.67	244	ePdiff	00 39.50	-7.7X
BSF	100.73	323	ePdiff	00 47.00	0.1
	1.4s	43.55nm			5.8mb
HAU	100.91	323	ePdiff	00 48.60	1.0
	1.4s	52.30nm			5.9mb
DOU	100.92	325	Pdiff	00 51.60	4.1X
ORO	100.99	320	Pdiff	00 51.00	2.9X
CKI	101.33	319	Pdiff	00 52.00	2.5X
PGF	101.65	317	ePdiff	00 53.70	2.6X
	1.4s	34.85nm			5.8mb
EKA	101.97	333	Pdiff	01 04.00	12.0X
	1.4s	88.70nm			
BNI	102.07	320	Pdiff	00 44.50	-8.5X

		e	05	10.00		
LOR	102.74	323	ePdiff	01	00.40	4.7X
	0.8s	12.10nm			5.7mb	
FRF	102.77	319	ePdiff	01	00.30	4.4X
	1.2s	17.85nm			5.6mb	
SMF	103.06	323	ePdiff	01	02.90	5.7X
	1.3s	25.25nm			5.8mb	
SES	103.12	33	ePdiff	01	03.00	5.6X
KIM	103.20	243	ePdiff	01	15.00	16.6X
BCAO	105.04	277	iPdiff	01	08.80	2.1
	0.6s	6.00nm			5.7mb	
BCAO	105.04	277	iPKPd	05	24.40	2.7X
	0.6s	9.00nm				
ALQ	114.40	45	iPKPd	05	46.30	7.1X
	1.0s	12.50nm				
TIO	118.67	313	iPKP	05	50.00	2.7X
			i	07	09.50	
SIO	120.55	38	ePKP	05	49.00	-1.5
TUL	120.75	38	ePKP	05	51.70	0.8
	1.0s	13.30nm				
FVM	122.33	32	PKP	05	53.00	-0.9
KOGH	122.87	284	ePKP	05	57.00	1.4
LEGH	122.93	283	ePKP	05	56.00	0.3
KUK	122.97	284	ePKP	05	53.00	-2.7X
WEGH	123.08	283	ePKP	05	55.00	-1.0
POW	123.26	34	PKP	05	54.40	-1.3
WIGH	123.42	283	ePKP	05	55.00	-1.6
LKO	126.88	290	PKP	06	03.88	0.5
KIC	127.09	286	PKP	06	02.62	-1.1
TIC	127.27	286	PKP	06	02.96	-1.2
LIC	127.40	286	PKP	06	03.14	-1.2
CBN	128.08	22	e(PKP)	05	58.00	-6.9X
LNV	151.74	151	ePKP	06	45.00	-1.8
CHCH	152.12	152	ePKP	06	49.00	1.5
TACH	152.22	151	ePKPc	06	49.00	1.4
PCH	152.44	152	ePKP	06	57.00	9.0X
SAN	152.51	151	ePKP	06	51.00	3.0X
ANG	152.54	13	ePKP	06	56.34	8.0X
BPA	152.64	14	ePKP	06	56.20	7.6X
PAG	153.66	14	ePKP	06	52.00	1.9
TOV	155.88	37	ePKP	06	53.90	0.7
OLLA	157.33	30	ePKP	06	56.00	0.9
CEOS	157.34	35	ePKP	06	53.00	-2.1X
PT10	158.67	98	e(PKP)	07	02.00	5.5X
NNA	158.80	98	ePKP	06	57.00	0.3
	1.3s	86.54nm				
	Z 22s	3.15um			6.1Msz	
			i	07	06.00	
TRN	158.89	17	ePKP	06	49.82	-6.9X
TBH	159.14	16	ePKP	06	49.95	-7.0X
ARE	162.94	115	ePKPd	07	03.70	2.5X
LPB	165.89	120	PKP	07	05.00	1.0
	1.3s	161.54nm				
ZOBO	165.98	119	PKP	07	05.00	0.7
BAO	170.71	230	ePKP	07	07.50	0.7
	S.D. = 1.2	on 248 of 342 obs.				

FEB 08, 1990 07h 47m 28.96± 0.39s
39.153 N ± 3.9km 23.736 E ± 3.3km
DEPTH = 7.6 ± 2.4 km
4.7mb (1 obs.)
AEGEAN SEA (365)
ML 4.0 (ATH).

NEO	0.43	291	iPgd	47	37.00	-0.6
AGG	1.10	264	iPd	47	48.40	-1.5
			eS	48	03.50	
ATH	1.18	181	ePb	47	51.80	0.6
PLG	1.24	350	iPbc	47	52.60	0.4
			eSb	48	09.50	
LIT	1.35	315	iPc	47	53.70	-0.4
			iS	48	12.50	
THE	1.59	338	iPd	47	57.50	0.0
			eS	48	17.20	
SOH	1.69	350	iPc	47	59.60	0.6
			iS	48	24.00	
KZN	1.90	308	iPbc	48	02.10	0.0
SRS	1.96	357	ePc	48	03.00	0.1
			iS	48	26.60	
PRK	1.97	87	ePg	48	09.00	6.0X
GRG	2.07	331	ePc	48	04.30	-0.2
			iS	48	30.10	
KNT	2.11	343	eP	48	05.60	0.6
			iS	48	32.20	
EZN	2.11	71	ePn	48	06.00	0.9
VAY	2.34	338	iPn	48	09.30	0.9
RDO	2.42	34	ePn	48	09.30	-0.2
ITM	2.43	216	iPnd	48	10.00	0.3
FNA	2.44	313	ePd	48	09.80	0.0
			eS	48	39.20	
ALN	2.49	45	ePc	48	10.00	-0.4
			eS	48	42.40	
APE	2.52	145	ePg	48	18.00	7.1X
			eSn	48	48.30	
LSK	2.62	293	ePn	48	13.90	1.5
VLS	2.65	249	ePn	48	13.20	0.4
IGT	2.67	279	eP	48	13.50	0.5
			eS	48	46.80	
KBN	2.69	304	iPnc	48	14.10	0.8
SMG	2.83	120	ePn	48	15.80	0.5
SRN	2.98	285	ePn	48	13.20	-4.2X
OHR	2.98	312	iPn	48	18.30	0.8
KEK	3.10	282	ePn	48	21.50	2.4
MFT	3.18	58	ePn	48	12.50	-7.8X
BERA	3.30	299	ePn	48	24.40	2.5
SKO	3.32	329	ePn	48	21.00	-1.2
EDC	3.40	68	ePn	48	31.00	7.6X
BNT	3.44	68	ePn	48	28.00	4.0X
TIR	3.68	308	ePn	48	28.00	0.5
DST	3.82	82	ePn	48	30.00	0.6
LACI	3.95	310	ePn	48	34.20	3.0X
SDA	4.31	313	ePn	48	44.00	7.7X
YLV	4.56	70	eP	48	48.00	8.0X
LCI	4.61	287	P	48	38.50	-2.1
			eSn	49	30.50	
BRT	5.30	291	P	48	50.40	0.0
			eSn	49	49.00	
ORI	5.70	281	P	48	57.00	0.9
			eSn	50	01.50	
TDS	5.75	277	P	48	56.50	-0.2
			eSn	50	00.50	
CZI	5.91	273	P	48	58.30	-0.6
SOI	6.11	262	P	49	01.50	-0.3
MGR	6.39	281	P	49	05.90	0.1
			eSn	50	19.30	
MLR	6.54	14	ePd	49	07.00	-1.0
ATN	6.55	264	P	49	06.50	-1.5
SGO	6.63	285	P	49	08.60	-0.6
			eSn	50	20.60	
BZS	6.65	347	eP	49	08.00	-1.3
VRI	7.07	17	ePd	49	16.00	0.8
DUI	7.51	292	P	49	20.50	-1.0
			eSn	50	41.50	
SDI	7.99	292	P	49	28.10	-0.1
MAIO	28.31	84	eP	53	23.00	-2.2
BCAO	34.88	189	ePc	54	23.20	0.2
	0.4s	5.00nm			4.7mb	
	S.D. = 1.0	on 44 of 53 obs.				

& FEB 08, 1990 08h 00m 36.70s
64.479 N 152.085 W
DEPTH = 5.9km
CENTRAL ALASKA (1)
<AGS-P>. ML 3.7 (PMR).

KTH	1.06	151	iP	00	56.71	-0.4
			eS	01	10.13	
NEA	1.30	84	eP	01	00.71	-0.5
			eS	01	19.46	
MCK	1.57	117	iP	01	04.56	-0.7
			eS	01	24.37	
IMA	1.73	338	iPc	01	07.40	-0.2
RDS	1.73	77	eP	01	06.68	-0.8
			eS	01	31.75	
WRH	1.73	88	iP	01	06.44	-1.0
			eS	01	31.31	
RND	1.79	126	eP	01	07.68	-0.7
			eS	01	32.57	
CCB	1.86	83	eP	01	08.10	-1.2
HUR	1.86	143	eP	01	09.21	-0.2
			eS	01	34.14	
FBA	1.89	75	eP	01	08.80	-1.0
GLM	2.08	74	eP	01	11.43	-1.2
HDA	2.23	90	eP	01	13.33	-1.4
			eS	01	46.18	
CUT	2.24	158	iP	01	14.50	-0.3
TTA	2.34	230	eP	01	14.30	-2.1
SKT	2.52	174	iP	01	17.96	-0.9
DMW	2.80	96	eP	01	27.48	4.6
PWA	3.01	160	eP	01	25.41	-0.4
GHO	3.07	151	eP	01	25.72	-1.0
NCG	3.09	181	eP	01	25.81	-1.2
SUA	3.09	168	eP	01	25.88	-1.1
CGLM	3.18	179	eP	01	26.95	-1.4
PLRM	3.20	154	iP	01	27.36	-1.0
PMR	3.20	154	eP	01	27.50	-0.9
CRP	3.22	181	iP	01	27.92	-1.1
BGL	3.23	183	eP	01	27.52	-1.5
CKL	3.30	182	eP	01	29.10	-0.9
PAX	3.31	114	eP	01	29.81	-0.4
SPU	3.31	180	iP	01	28.90	-1.2
NCA	3.45	134	eP	01	31.12	-0.9
PMS	3.45	159	iP	01	31.50	-0.6
SDG	3.53	121	eP	01	32.98	-0.2
TOA	3.58	129	eP	01	33.70	-0.2
DOT	3.62	100	eP	01	33.96	-0.6
SVW	3.75	207	eP	01	33.70	-2.7
NKA	3.77	174	eP	01	37.21	0.6
RDT	3.92	182	eP	01	37.17	-1.7
SLKM	4.08	167	eP	01	40.15	-0.8
RED	4.09	185	eP	01	44.44	3.3
VZW	4.27	141	eP	01	43.57	-0.2
GLI	4.28	145	eP	01	43.01	-0.9
NNL	4.47	175	eP	01	46.90	0.4
SEW	4.56	163	eP	01	48.70	0.9
PDB	4.81	193	eP	01	48.56	-2.8
GLB	4.85	125	eP	01	52.20	0.2
CNPM	4.99	175	eP	01	53.10	-0.8
DWY	5.53	89	P	01	51.60	-10.0
CDD	5.62	188	eP	02	01.62	-1.2
	47 obs. associated					

? FEB 08, 1990 08h 21m 41.84± 2.20s
16.646 N ±31.5km 95.574 W ±13.6km
DEPTH = 33.0km (normal)
OAXACA, MEXICO (60)

PSM	0.51	83	iP	21	52.23	-0.5
			eS	22	07.27	
OXX	1.18	292	iP	21	56.86	-5.5X
			iS	22	13.29	
SCX	2.82	88	eP	22	26.00	0.5
			eS	23	04.82	
LVVM	3.19	345	eP	22	30.76	0.0
			(S)	23	22.84	
IIT	3.52	313	eP	22	36.00	0.2
			(S)	23	40.50	
PPM	3.77	310	eP	22	39.36	-0.2
			(S)	23	37.18	
III	4.09	295	(P)	22	48.16	4.2X
			(S)	23	35.50	
IIJ	5.01	308	(P)	23	10.73	13.6X
			(S)	24	15.88	
	S.D. = 0.5	on 5 of 8 obs.				

FEB 08, 1990 08h 23m 30.32± 0.58s
27.971 S ± 8.2km 137.274 E ± 5.8km
DEPTH = 10.0km (geophysicist)
4.5mb (7 obs.)
SOUTH AUSTRALIA (592)

QLP	6.35	79	e(P)	25	08.00	1.8
			eS	26	14.00	
QIS	7.68	17	iPd	25	25.80	0.9
			eS	26	49.00	
CMS	8.22	117	eP	25	31.00	-1.5
			eS	26	55.00	
WRA	8.43	341	Pc	25	35.60	0.2
	0.4s	21.60nm			5.8mb	X
WB5	8.48	341	eP	25	36.80	0.7
WARB	9.64	278	eP	25	53.20	1.0
	0.2s	18.00nm			6.1mb	X
			eS	27	35.00	
RMO	10.33	84	e(P)	26	04.00	2.4X
			e	26	10.00	
			e	28	34.00	
			e	36	21.00	
CTA	11.35	48	iPd	26	14.70	-0.9
	1.3s	26.92nm			5.4mb	
			i	26	22.00	
BWA	11.50	127	eP	26	20.80	3.1X
			eS	28	21.10	
CAN	12.38	129	eP	26	28.80	-0.7
			eS	28	38.80	
CNB	12.63	128	e(P)	26	32.50	-0.4
			eS	28	55.00	
BRS	13.75	91	iPc	26	49.00	1.3
BRS	13.75	91	i(P)	26	56.00	8.3X
COOL	14.35	254	eP	26	54.00	-1.6
	0.3s	8.00nm			4.9mb	
			eS	29	22.00	

08d 08h

KNA 14.49 325 eP 26 54.50 -2.9X
eS 29 27.00
MTN 16.11 338 eP 27 16.00 -2.4
e 30 05.00
MEKA 16.72 270 eP 27 27.00 0.8
0.3s 23.00nm 4.8mb
MBL 17.24 289 eP 27 31.00 -1.8
eS 30 26.00
KLB 17.32 253 eP 27 35.00 1.3
0.3s 3.00nm 3.9mb
eS 30 33.00
NWAO 17.96 249 eP 27 44.00 2.2X
0.5s 11.00nm 4.2mb
eS 30 55.00
BAL 18.13 257 eP 27 51.00 7.1X
eS 30 50.00
MUN 18.68 253 eP 27 52.00 1.4
0.8s 28.00nm 4.5mb
eS 31 03.00
MRWA 18.73 261 eP 27 48.00 -3.2X
0.3s 5.00nm 4.3mb
eS 31 04.00
S.D. = 1.4 on 16 of 23 obs.

FEB 08, 1990 08h 26m 42.22± 0.30s
9.707 N ± 4.6km 124.489 E ± 5.9km
DEPTH = 33.0km (normol)
5.3mb (19 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV 2.82 157 eP 27 27.80 1.9
BAG 7.67 331 eP 28 36.00 1.3
TSM 8.38 230 eP 28 44.00 -0.4
KKM 8.97 247 eP 28 53.00 0.4
HKC 15.96 323 eP 30 27.50 1.5
QZH 16.16 340 eP 30 29.00 0.5
N 10s 3.20um
E 10s 2.50um
QIZ 16.93 305 Pd 30 40.30 1.9
GZH 17.05 323 P 30 41.60 1.8
SLKI 18.83 159 eP 31 04.60 2.7
KUPT 19.75 183 eP 31 21.50 9.1X
1.5s 482.70nm 5.6mb
TRT 20.94 215 iPd 31 25.20 0.4
1.4s 497.40nm 5.7mb
SSE 21.50 352 P 31 31.00 0.6
1.6s 120.00nm 5.1mb
KGM 22.39 251 eP 31 43.00 3.7X
WHN 22.79 337 Pd 31 45.00 1.9
NJ2 22.84 348 Pc 31 45.00 1.4
GYA 23.71 317 P 31 54.00 1.7
IPM 23.82 259 ePd 31 55.00 1.6
1.5s 287.30nm 5.6mb
BDT 25.87 290 eP 32 11.90 -0.9
1.1s 81.40nm 5.2mb
CHG 26.33 293 ePc 32 16.00 -1.2
1.4s 58.14nm 5.0mb
CHTO 26.33 293 eP 32 16.20 -0.9
1.6s 64.96nm 5.0mb
TIA 27.22 347 P 32 25.00 -0.1
XAN 28.12 332 P 32 32.20 -1.1
CD2 28.59 321 eP 32 36.90 -0.7
PMG 29.49 129 eP 32 44.00 -1.8
TIY 29.93 341 eP 32 48.50 -1.1
BJI 31.10 348 eP 32 58.50 -1.3
1.5s 52.00nm 5.1mb
SNY 32.00 359 Pd 33 07.50 -0.1
LZH 32.27 328 P 33 10.50 0.2
1.5s 150.00nm 5.7mb
HHC 33.06 342 P 33 17.20 0.1
BTO 33.34 340 eP 33 20.00 0.5
CN2 33.98 1 eP 33 27.00 2.2
SHL 34.71 301 iP 33 31.00 -0.6
MDJ 35.06 6 Pc 33 33.00 -1.1
HOOJ 36.49 24 eP 33 46.40 0.2
CTA 36.55 144 iPd 33 46.80 -0.2
1.2s 66.41nm 5.4mb
GTA 36.88 327 iPc 33 50.20 0.5
Z 16s 5.00um 5.4MszX
E 12s 3.50um
LSA 36.95 307 P 33 51.30 0.5
KUSJ 37.66 24 eP 33 56.50 0.5
ASAJ 37.73 22 eP 33 56.50 -0.1
GUN 40.56 302 P 34 20.90 0.1
PKI 40.84 301 P 34 22.60 -0.6
0.8s 23.00nm 5.0mb
KKN 41.02 301 P 34 24.00 -0.5
1.0s 52.00nm 5.2mb
DMN 41.11 301 P 34 24.60 -0.7
0.8s 38.00nm 5.2mb
GKN 41.63 301 P 34 28.60 -0.8
HYB 45.22 285 eP 34 57.00 -1.5
BRS 45.95 144 iPc 35 03.00 -1.1
0.8s 6.00nm 4.6mb
e 36 51.00
WMQ 46.60 323 P 35 10.10 1.0
NDI 48.11 300 eP 35 19.00 -2.1
BWA 49.41 154 eP 35 32.10 1.1
CAN 50.42 154 eP 35 38.90 0.2
DZM 51.87 128 iPc 35 49.40 -0.6
MAIO 64.19 306 iPc 37 16.00 -0.4
SOD 84.13 337 iP 39 10.70 -0.2
SUF 85.25 333 eP 39 16.10 -0.5
0.8s 13.10nm 5.2mb
INK 85.45 21 eP 39 18.00 0.5
NUR 86.43 331 eP 39 07.30 -15.2X
MBC 86.64 12 eP 39 23.00 -0.3
1.4s 29.00nm 5.3mb
DAG 91.09 352 eP 39 42.60 -1.7
HFS 91.73 332 eP 39 46.20 -1.3
1.2s 35.30nm 5.7mb
NB2 92.48 333 P 39 49.40 -1.7
1.3s 11.70nm 5.2mb
PRU 95.12 322 eP 40 03.00 -0.4
BRG 95.14 323 iP 40 03.60 0.1
1.5s 32.00nm 5.5mb
CLL 95.52 324 eP 40 04.00 -1.2
KHC 96.02 322 P 40 07.50 -0.1
S.D. = 1.1 on 61 of 64 obs.

? FEB 08, 1990 09h 06m 14.90± 9.27s
46.023 N ±11.2km 16.247 E ±75.1km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.8 (ZAG), 2.7 (KBA).

PTJ 0.24 239 ePg 06 20.00 0.0
eSg 06 33.00
ZAG 0.28 222 iPn 06 20.70 0.0
iSg 06 33.60
VBY 0.87 234 ePn 06 35.60 4.0X
iSn 06 54.90
LJU 1.19 272 e(Pn) 06 32.00 -5.2X
e 06 37.00
eSn 06 58.00
CEY 1.30 258 eP 06 30.00 -9.0X
e(Sn) 07 09.00
VOY 1.64 271 ePn 06 43.90 -0.1
eSn 07 14.50
TRI 1.76 261 eP 06 45.70 0.1
ZST 2.25 15 eP 07 05.40 12.7X
KBA 2.26 299 ePgc 06 53.10 0.0
iSg 07 30.20
S.D. = 0.1 on 5 of 9 obs.

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* FEB 08, 1990 09h 09m 38.01± 1.26s
33.048 N ±15.4km 47.196 E ± 7.3km
DEPTH = 89.0 ± 11.3 km
4.7mb (3 obs.)
WESTERN IRAN (347)

KER 1.30 357 ePd 10 02.50 0.8
BHD 2.37 276 ePnc 10 16.00 0.3
iSn 10 44.00
e 12 02.00
SLY 2.91 332 iPnd 10 21.50 -1.5
iSn 11 01.00
IR5 3.54 52 eP 10 37.00 5.0X
IR1 3.74 50 eP 10 35.50 0.9
IR4 3.77 54 eP 10 35.00 -0.1
IR7 3.87 46 eP 10 36.00 -0.5
GKN 32.53 89 P 16 02.80 0.2
SUF 32.55 342 eP 16 03.20 1.0
0.6s 7.40nm 4.7mb
DMN 33.04 89 P 16 07.60 0.3
KKN 33.13 89 P 16 08.00 0.0
0.6s 9.00nm 4.8mb
PKI 33.31 89 P 16 07.80 -1.9
GUN 33.60 88 P 16 13.00 0.8
HFS 34.87 331 eP 16 22.20 -0.1
0.5s 3.10nm 4.5mb
S.D. = 1.0 on 13 of 14 obs.

? FEB 08, 1990 09h 18m 16.70±10.09s
45.374 N ±28.4km 2.525 E ±65.4km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
MD 2.3 (STR).

PYM 0.51 42 Pg 18 26.73 -0.3
Sg 18 34.10
LBL 0.53 105 Pg 18 27.30 -0.1
AGO 0.80 32 Pg 18 32.16 -0.1
Sg 18 44.02
PLDF 0.97 52 Pg 18 35.73 0.5
S.D. = 0.6 on 4 of 4 obs.

& FEB 08, 1990 09h 47m 32.30s
36.675 N 121.345 W
DEPTH = 3.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.4 (BRK). Felt (IV)
at Freedom and (III) at Aromos
and Marina.

SAO 0.12 318 iP 47 34.70 -0.1
LLA 0.33 100 iPd 47 39.00 0.1
PRS 0.34 183 iPd 47 39.20 0.0
GCC 0.63 304 iPc 47 44.00 -0.9
ARN 0.69 347 iPd 47 46.00 -0.1
MHC 0.71 340 iPd 47 46.30 -0.1
PRI 0.76 134 iPd 47 47.20 -0.4
PHAM 1.13 137 eP 47 53.00 -1.2
PCC 1.17 315 iPd 47 53.20 -1.6
PKEM 1.17 121 eP 47 54.80 0.0
FRI 1.35 76 iPc 47 56.40 -1.5
BKS 1.39 330 ePc 47 56.70 -1.9
eS 48 05.80
e 48 08.30
CMB 1.56 29 iPd 47 59.50 -1.5
iS 48 19.20
BCH 1.80 145 eP 48 03.00 -1.6
BLP 2.25 160 eP 48 08.60 -2.3
ABL 2.51 136 eP 48 13.00 -1.9
ORV 2.88 358 eP 48 18.70 -1.2
KVN 3.50 46 eP 48 28.80 -0.1
TNP 3.57 66 eP 48 29.00 -1.0
19 obs. associated

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* FEB 08, 1990 09h 48m 23.59± 0.51s
9.589 N ± 8.5km 124.546 E ±13.4km
DEPTH = 33.0km (normol)
4.9mb (7 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV 2.69 158 eP 49 07.80 2.4
BAG 7.80 331 eP 50 19.00 1.1
QZH 16.29 340 eP 52 14.00 2.5
QIZ 17.05 305 eP 52 23.40 2.2
N 14s 1.60um
TRT 20.88 215 ePd 53 05.70 0.2
1.1s 233.00nm 5.5mb
SSE 21.63 352 P 53 15.00 2.0
1.0s 28.00nm 4.6mb
WHN 22.91 337 eP 53 26.00 0.3
MTN 23.23 164 eP 53 31.00 2.1
LOE 23.49 292 eP 53 30.00 -1.5
GYA 23.83 317 P 53 37.80 2.9X
KMI 25.86 309 eP 53 56.00 1.7
CHG 26.43 293 eP 53 58.00 -1.4
CHTO 26.43 293 eP 53 58.20 -1.2
1.0s 10.00nm 4.4mb
XAN 28.25 332 P 54 14.00 -1.9
CD2 28.71 321 eP 54 19.60 -0.5
TIY 30.06 341 eP 54 30.30 -1.8
WB5 30.84 162 eP 54 36.80 -2.3
WRA 30.89 162 Pc 54 37.70 -1.8
1.1s 7.00nm 4.4mb
BJI 31.23 348 eP 54 40.50 -1.7
LZH 32.40 328 eP 54 52.00 -0.8
1.5s 56.00nm 5.2mb
HHC 33.19 342 P 54 59.00 -0.6
OIS 33.42 154 eP 55 00.00 -1.6
i 55 03.20
SHL 34.82 301 iP 55 11.00 -2.9X
MDJ 35.17 6 eP 55 15.50 -0.9
CTA 36.42 144 iPc 55 28.00 0.8
1.4s 72.09nm 5.4mb
GTA 37.00 327 eP 55 31.60 -0.5
GUN 40.67 302 P 56 02.00 -1.1
PKI 40.95 301 P 56 06.40 1.0

KKN	41.13	302	P	56	06.20	-0.5
DMN	41.22	301	P	56	08.40	0.9
GKN	41.74	302	P	56	12.40	0.8
WMQ	46.73	323	eP	56	54.00	2.5
BWA	49.28	154	eP	57	15.30	3.9X
CAN	50.29	154	eP	57	20.30	1.2
MAIO	64.30	306	eP	58	53.00	-5.5X
SOD	64.26	337	eP	00	52.00	-1.0
SUF	85.38	333	eP	00	57.50	-1.1
	0.7s		6.50nm			4.9mb
INK	85.54	21	eP	01	00.00	0.7
NUR	86.56	331	eP	01	11.00	6.5X

S.D. = 1.5 on 34 of 39 obs.

? FEB 08, 1990 10h 10m 34.62± 0.83s
9.345 N ±24.3km 124.483 E ±21.4km
DEPTH = 33.0km (normal)
4.8mb (3 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

LZH	32.57	328	eP	17	05.50	0.2
	1.5s		19.00nm			4.8mb
SHL	34.90	302	iP	17	24.80	-0.8
CTA	36.26	144	eP	17	37.00	0.1
GUN	40.74	302	P	18	14.80	0.1
	0.8s		17.00nm			4.8mb
PKI	41.03	302	P	18	16.40	-0.6
KKN	41.20	302	P	18	20.30	1.9
DMN	41.29	301	P	18	19.00	-0.1
INK	85.79	21	eP	23	12.00	0.4
SLL	92.08	332	eP	23	40.60	-1.0
	0.7s		3.20nm			4.9mb

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

• FEB 08, 1990 10h 36m 04.20± 1.74s
25.180 N ±10.9km 123.716 E ±15.4km
DEPTH = 138.9 ± 15.4 km
3.6mb (2 obs.)
NORTHEAST OF TAIWAN (245)

ANP	1.99	271	eP	36	39.00	-0.1
			iS	36	51.50	
SSE	6.30	340	ePn	37	23.50	-12.4X
Z	14s		0.90um			
N	14s		1.00um			
E	14s		0.50um			
GYA	15.41	278	eP	39	36.00	0.5
XAN	15.59	308	eP	39	37.50	-0.2
CD2	18.51	292	eP	40	09.40	-3.1X
HHC	18.62	330	eP	40	12.80	-0.9
CN2	18.63	4	eP	40	14.00	0.4
LZH	20.22	307	P	40	31.00	0.6
CHTO	23.81	260	eP	41	05.10	-0.4
	1.0s		2.00nm			3.6mb
WB5	45.97	166	eP	44	15.10	0.0
			e	44	35.00	
WRA	46.03	166	P	44	22.00	6.5X
	0.3s		0.40nm			3.6mb

S.D. = 0.7 on 8 of 11 obs.

FEB 08, 1990 11h 23m 44.85± 0.47s
46.188 N ± 5.0km 13.643 E ± 5.3km
DEPTH = 10.0km (geophysicist)
AUSTRIA (546)
ML 2.7 (KBA). MD 3.1 (LJU), 2.9 (TRI).

VOY	0.23	132	iPgc	23	49.90	0.0
			eSg	23	53.50	
RBL	0.26	348	P	23	50.20	-0.2
			iSg	23	54.30	
TRI	0.49	170	iPgd	23	54.10	-0.6
			iSg	24	01.40	
LJU	0.64	103	iPgc	23	56.50	-1.1
			iSg	24	06.10	
CEY	0.71	129	ePg	23	58.50	-0.3
			eSg	24	08.50	
FVI	0.72	305	P	23	58.60	-0.4
			eSg	24	09.00	
KBA	0.91	347	iPgc	24	02.40	-0.1
			ic	24	03.00	
			iSg	24	15.90	
RIY	0.99	148	iPg	24	03.70	0.1
			iSg	24	17.10	
VBY	1.32	121	iPgd	24	09.80	0.6
			iSg	24	27.50	
CTI	1.39	265	Pd	24	11.10	0.7
			eSg	24	29.90	
PTJ	1.64	99	ePn	24	14.00	0.1
			eSn	24	36.50	
ZAG	1.67	102	iPn	24	15.50	1.2
			iSn	24	40.00	
OGA	1.93	292	iPnd	24	21.20	2.9X
KHC	2.95	359	ePg	24	25.00	-7.6X
			Sg	25	02.00	

S.D. = 0.7 on 12 of 14 obs.

FEB 08, 1990 12h 07m 29.75± 1.60s
25.170 N ± 7.2km 123.688 E ±10.4km
DEPTH = 37.0 ± 13.6 km
4.4mb (6 obs.)
NORTHEAST OF TAIWAN (245)

ANP	1.97	271	eP	08	04.00	2.6
			iS	08	20.00	
QZH	4.63	268	ePn	08	38.00	-1.1
SSE	6.30	340	Pn	09	00.00	-2.7
	0.6s		0.02nm			2.0mb X
Z	14s		4.40um			4.7Msz
NJ2	8.06	329	eP	09	25.00	-2.3
E	10s		2.80um			
BAG	9.19	199	eP	09	43.00	-0.1
WHN	9.84	305	eP	09	51.50	-0.4
			eS	11	44.50	
QIZ	14.21	247	P	10	50.20	-0.3
N	12s		1.30um			
GYA	15.39	278	iPc	11	06.60	0.6
TIY	15.75	325	eP	11	10.00	-0.5
Z	1Bs		2.00um			
BJI	16.11	339	eP	11	16.00	1.0
Z	14s		2.30um			
E	12s		0.89um			
SNY	16.61	360	eP	11	22.60	1.2
Z	14s		2.80um			
N	10s		1.80um			
CD2	18.49	293	eP	11	43.20	-1.7
N	12s		3.80um			
HHC	18.62	330	P	11	49.10	2.7
Z	16s		2.40um			
N	12s		1.20um			
E	12s		0.80um			
			pP	11	54.00	
CN2	18.64	4	Pd	11	48.70	2.1
	5.0s		0.70nm			2.1mb X
Z	14s		2.80um			4.3Msz
N	11s		1.60um			
			sP	11	58.00	
KMI	18.97	274	eP	11	51.00	0.1
Z	10s		1.90um			
			pP	11	58.50	
BTO	19.16	327	eP	11	54.00	1.1
N	12s		1.80um			
E	12s		1.40um			
			sP	12	04.00	
MDJ	19.98	12	eP	12	01.20	-0.6
Z	16s		2.60um			
E	12s		0.90um			
			epP	12	06.50	20kmX
LZH	20.21	307	eP	12	04.00	-0.4
	1.5s		0.04nm			1.5mb X
Z	16s		1.50um			4.4MszX
LOE	21.85	254	eP	12	21.50	0.4
CHG	23.78	260	eP	12	40.00	0.0
	1.0s		12.50nm			4.4mb
CHTO	23.78	260	iP	12	39.90	-0.1
	0.8s		8.97nm			4.3mb
NST	23.98	251	eP	12	43.00	1.1
GTA	24.58	311	P	12	47.80	0.1
Z	12s		0.60um			4.3MszX
N	11s		0.70um			
PCI	26.19	189	ePc	13	07.00	4.2X
SHL	28.71	278	iP	13	24.50	-1.4
WMQ	34.66	312	P	14	17.50	-0.4
KSH	42.29	302	P	15	23.50	1.9
GBA	44.92	264	Pc	15	42.60	-0.4
	0.8s		3.80nm			4.3mb
WB5	45.97	166	eP	15	50.80	-0.4
INK	71.45	22	eP	18	47.00	-1.0
SLL	77.81	332	eP	19	24.10	-0.5
	0.8s		4.30nm			4.5mb
NB2	78.41	333	P	19	27.20	-0.8
	1.0s		5.10nm			4.5mb
EDM	87.62	30	ePc	20	16.50	1.1
FFC	91.31	25	eP	20	32.00	-0.7
	1.0s		12.00nm			5.2mb
ZOBO	165.85	54	PKP	27	35.00	2.1X

S.D. = 1.3 on 33 of 35 obs.

• FEB 08, 1990 12h 19m 53.36± 1.75s
25.654 N ±12.2km 123.337 E ±14.2km
DEPTH = 151.2 ± 14.1 km
4.3mb (6 obs.)
NORTHEAST OF TAIWAN (245)

ANP	1.71	255	iPc	20	24.20	-1.5
QZH	4.35	262	ePg	21	05.10	6.1X
N	10s		1.50um			
E	10s		1.60um			
SSE	5.74	341	Pn	21	07.60	-9.9X
	0.5s		22.00nm			4.6mb
Z	16s		2.20um			4.7Msz
N	10s		2.10um			
NJ2	7.49	329	Pc	21	32.40	-8.6X
Z	14s		1.20um			
E	11s		1.70um			
			S	23	06.00	
WHN	9.31	304	eP	22	07.50	2.2
N	10s		1.30um			
GYA	15.01	277	P	23	20.60	1.5
TIY	15.17	325	eP	23	23.40	2.4
Z	20s		1.00um			
BJI	15.55	339	eP	23	23.50	-2.1
CD2	18.02	291	eP	23	52.00	-3.5X
HHC	18.04	330	P	23	52.20	-3.6X
CN2	18.19	5	Pd	23	57.00	-0.2
Z	14s		1.70um			
N	11s		1.30um			
			epP	23	59.20	
BTO	18.58	327	eP	24	06.00	4.5X
N	12s		1.00um			
E	12s		0.80um			
MDJ	19.59	13	Pc	24	11.50	-0.3
LZH	19.67	307	eP	24	15.50	2.6X
	1.5s		19.00nm			4.3mb
CHTO	23.56	258	eP	24	49.00	-2.2
	1.2s		7.64nm			4.1mb
GTA	24.02	311	eP	24	56.00	0.3
PCI	26.62	188	ePd	25	22.00	2.4
GUN	33.43	282	P	26	19.90	-0.3
PKI	33.88	282	P	26	23.20	-0.8
KKN	33.97	282	P	26	23.80	-0.8
WMQ	34.11	311	Pc	26	26.00	0.6
DMN	34.14	282	P	26	25.20	-1.0
GKN	34.52	283	P	26	28.60	-0.6
WB5	46.51	166	eP	27	59.60	-7.7X
WRA	46.57	166	Pc	27	59.00	-8.7X
	0.7s		5.00nm			4.2mb
SOD	69.13	336	eP	30	45.00	0.4
INK	71.13	22	eP	30	55.00	-1.7
SLL	77.23	331	eP	31	32.60	0.8
	0.8s		4.30nm			4.2mb
EDM	87.37	30	ePc	32	25.00	0.7
FFC	91.00	24	iPc	32	41.40	0.1
	0.9s		17.00nm			5.2mb

S.D. = 1.5 on 21 of 30 obs.

? FEB 08, 1990 13h 14m 07.88± 1.51s
9.189 N ±13.6km 125.564 E ±23.0km
DEPTH = 175.3 ± 18.2 km
4.0mb (3 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV	2.09	180	eP	14	45.90	-0.1
NJ2	23.59	346	Pd	19	03.80	-0.1
IPM	24.78	261	ePd	19	16.00	0.7
XAN	29.08	331	P	19	52.60	-1.5
CD2	29.66	320	eP	19	57.00	-2.2
WB5	30.16	163	eP	20	05.20	1.6
WRA	30.21	163	Pd	20	09.10	5.0X
	0.5s		1.00nm			3.8mb
BJI	31.84	346	eP	20	18.50	0.4
SNY	32.55	357	eP	20	25.40	1.1
LZH	33.28	327	eP	20	31.00	0.1
	1.2s		17.00nm			4.6mb
HHC	33.89	341	Pc	20	37.40	1.4
GTA	37.88	327	Pd	21	10.00	0.3
BRS	44.92	145	e(P)	22	05.00	-1.9
GBA	47.32	280	Pc	22	31.30	5.3X
	0.9s		3.70nm			3.9mb

S.D. = 1.5 on 12 of 14 obs.

08d 13h

* FEB 08, 1990 13h 18m 25.72± 0.96s
20.864 N ± 8.1km 100.919 E ±13.0km
DEPTH = 33.0km (normal)
SOUTHEAST ASIA (299)

CHG	2.76	223	iPn	19 08.00	-0.6
			iSg	19 29.50	
CHTO	2.76	223	iPd	19 08.10	-0.5
LOE	3.52	167	ePn	19 19.00	-0.5
			ePg	19 45.00	
			eSg	20 41.00	
BDT	4.03	207	ePn	19 28.30	1.6
			ePg	19 55.00	
KMI	4.56	21	eP	19 34.50	0.1
NST	5.22	188	ePn	19 53.00	9.5X
			ePg	20 20.00	
			eSg	21 15.00	
NNT	8.31	188	eP	20 33.00	6.1X
SHL	9.54	301	eP	20 44.00	0.0

S.D. = 1.1 on 6 of 8 obs.

? FEB 08, 1990 13h 24m 15.26± 1.59s
24.895 N ±16.6km 123.670 E ±17.8km
DEPTH = 33.0km (normal)
SOUTHWESTERN RYUKYU ISLANDS (246)

ANP	1.97	279	eP	24 20.20	-26.9X
SSE	6.55	341	eP	25 13.00	-38.8X
Z	16s	0.90um			
N	10s	0.80um			
E	10s	0.80um			
			Lg	27 13.50	
BJI	16.36	339	P	28 04.00	0.0
HHC	18.85	330	P	28 35.20	0.1
CN2	18.92	4	eP	28 35.00	-0.7
BTO	19.38	327	eP	28 42.00	0.7
N	12s	0.50um			
E	12s	0.40um			
LZH	20.36	308	P	28 24.00	-27.9X
GUN	33.90	283	P	31 03.20	5.5X
PKI	34.34	283	P	31 01.40	-0.1
GKN	34.99	284	P	31 06.40	-0.5
EDM	87.87	30	eP	37 03.00	0.4

S.D. = 0.6 on 7 of 11 obs.

FEB 08, 1990 14h 13m 59.39± 1.30s
25.176 N ± 5.6km 123.630 E ± 6.1km
DEPTH = 51.6 ± 12.5 km
4.7mb (7 obs.) 4.4Msz (1 obs.)
NORTHEAST OF TAIWAN (245)

ANP	1.91	271	eP	14 30.00	-0.2
			iS	14 52.50	
OZH	4.58	268	ePg	15 21.00	13.3X
N	10s	2.40um			
E	10s	2.30um			
SSE	6.28	340	Pn	15 27.00	-4.7X
	0.7s	18.00nm			4.7mb
Z	13s	5.30um			4.7Msz
N	10s	4.30um			
E	10s	3.60um			
NJ2	8.03	330	eP	15 51.50	-4.6X
Z	16s	2.40um			
N	12s	3.60um			
E	12s	4.80um			
BAG	9.17	199	eP	16 15.50	3.4X
WHN	9.80	305	eP	16 16.00	-4.4X
Z	16s	1.80um			
OCP	10.76	193	eP	16 46.00	12.5X
GYA	15.33	278	P	17 39.80	5.6X
N	10s	1.70um			
E	10s	1.90um			
XAN	15.53	308	P	17 35.20	-1.4
E	10s	0.70um			
TIY	15.71	325	eP	17 38.60	-0.3
BJI	16.09	339	eP	17 44.50	1.0
Z	14s	2.93um			
N	10s	1.36um			
SNY	16.61	360	eP	17 48.20	-1.9
Z	14s	4.10um			
N	12s	2.50um			
CD2	18.44	293	eP	18 12.20	-0.7
Z	10s	1.40um			
N	12s	4.10um			
HHC	18.59	330	P	18 15.80	1.1
Z	16s	2.40um			
N	12s	1.40um			
E	11s	0.80um			
			sP	18 26.00	
CN2	18.64	4	Pd	18 16.40	1.2
Z	14s	3.90um			
N	12s	2.70um			
			sP	18 23.00	
KMI	18.91	274	eP	18 19.50	0.6
Z	10s	1.80um			
BTO	19.12	327	P	18 22.50	1.4
N	12s	2.00um			
E	12s	1.60um			
			sP	18 32.00	
MDJ	19.99	13	eP	18 29.50	-0.7
Z	16s	3.90um			
E	12s	0.90um			
LZH	20.16	307	eP	18 32.50	0.2
	1.5s	38.00nm			4.5mb
Z	18s	1.50um			4.4Msz
N	11s	0.80um			
E	14s	0.70um			
LOE	21.80	254	eP	18 50.00	1.1
GUMO	23.07	116	eP	19 02.00	0.6
GUA	23.14	116	eP	19 01.40	-0.6
CHG	23.73	259	eP	19 08.00	0.2
CHTO	23.73	259	eP	19 06.60	-1.1
	1.3s	11.85nm			4.2mb
NST	23.93	251	eP	19 13.00	3.3X
GTA	24.54	311	eP	19 16.00	0.4
Z	10s	0.80um			4.5MszX
N	10s	0.70um			
PCI	26.19	189	ePc	19 33.00	2.0
GUN	33.80	283	P	20 39.10	0.0
PKI	34.24	283	P	20 42.20	-0.7
KKN	34.33	283	P	20 43.00	-0.6
DMN	34.50	283	P	20 44.40	-0.7
WMO	34.62	312	Pc	20 45.50	-0.2
Z	16s	0.80um			4.6MszX
GKN	34.88	283	P	20 47.60	-0.6
KSH	42.24	302	eP	21 51.50	2.2
WB5	45.99	166	eP	22 18.50	-0.9
WRA	46.04	166	Pd	22 18.90	-1.0
	0.8s	8.80nm			4.7mb
CTA	50.08	152	eP	23 05.00	13.7X
WARB	51.14	177	eP	22 59.40	0.1
SOD	69.67	336	iP	25 05.20	0.0
INK	71.47	22	eP	25 16.00	-0.1
SLL	77.78	332	eP	25 51.50	-0.8
	1.0s	7.60nm			4.7mb
NB2	78.38	333	P	25 55.10	-0.6
	1.3s	12.40nm			4.7mb
EDM	87.64	30	iPc	26 44.30	0.9
FFC	91.32	24	iPc	27 00.70	0.1
	0.9s	15.00nm			5.4mb

S.D. = 1.0 on 35 of 44 obs.

? FEB 08, 1990 14h 34m 55.42± 9.73s
16.156 S ±160.km 73.623 W ±91.4km
DEPTH = 33.0km (normal)
NEAR COAST OF PERU (115)

ARE	2.07	99	eP	35 28.00	-0.8
			iS	35 50.80	
PT08	5.05	325	eP	36 10.40	-0.8
			eS	37 17.50	
NNA	5.19	323	eP	36 13.50	0.6
	0.7s	63.70nm			5.2mb X
			e	36 14.80	
			eS	37 21.50	
PT10	5.20	321	eP	36 17.00	4.1X
			eS	37 25.50	
ZOBO	5.28	92	P	36 14.30	-0.4
LPB	5.32	95	P	36 16.00	1.0

S.D. = 1.2 on 5 of 6 obs.

FEB 08, 1990 14h 49m 44.78± 1.24s
9.753 N ± 6.8km 124.816 E ±10.6km
DEPTH = 53.0 ± 13.1 km
4.7mb (3 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV	2.75	164	eP	50 28.50	1.1
BAG	7.80	328	eP	51 39.20	0.7
MNI	8.26	180	e(P)	51 42.50	-2.1
NJ2	22.87	347	eP	54 42.40	-2.2
WHN	22.87	336	eP	54 45.60	1.0
IPM	24.15	259	ePd	54 58.00	0.8
CHTO	26.61	293	e(P)	55 20.80	0.5
	0.4s	0.61nm			3.5mb X
			pP	55 39.90	84kmX
XAN	28.23	331	P	55 34.40	-0.5
CD2	28.76	320	eP	55 39.40	-0.3
BJI	31.13	347	eP	56 00.00	-0.5
	1.2s	16.00nm			4.6mb
SNY	31.97	358	eP	56 06.60	-1.2
LZH	32.41	327	eP	56 13.00	1.0
	1.0s	16.00nm			4.8mb
Z	12s	0.20um			4.0MszX
HHC	33.12	341	Pd	56 18.80	0.7
QIS	33.45	154	eP	56 20.00	-1.0
CN2	33.92	1	eP	56 24.50	-0.3
SHL	34.97	301	eP	56 33.00	-1.3
MDJ	34.98	6	eP	56 35.00	1.1
GTA	37.01	327	eP	56 51.40	0.1
GUN	40.81	302	P	57 23.80	0.5
PKI	41.10	301	P	57 25.00	-0.7
KKN	41.27	301	P	57 27.00	0.0
DMN	41.36	301	P	57 27.60	-0.2
GKN	41.88	301	P	57 32.20	0.3
BRS	45.80	144	iP	58 05.00	1.7
WMO	46.76	323	P	58 12.00	1.2
BWA	49.31	154	eP	58 31.40	0.8
CAN	50.32	154	eP	58 41.70	3.3X
MAIO	64.43	306	eP	00 18.00	-0.1
SOD	84.21	337	eP	02 11.00	-0.5
INK	85.29	21	eP	02 13.50	-3.3X
SUF	85.36	333	eP	02 16.90	-0.4
	0.7s	4.30nm			4.7mb

S.D. = 1.0 on 29 of 31 obs.

? FEB 08, 1990 15h 14m 04.92±10.15s
19.304 N ±49.6km 65.084 W ±69.7km
DEPTH = 10.0km (geophysicist)
PUERTO RICO REGION (90)

LPR	1.24	217	iP	14 28.00	0.0
CPD	1.48	212	iP	14 31.70	0.0
SJG	1.56	221	iP	14 32.80	0.1
PORP	1.93	230	iP	14 37.90	-0.2
LRS	1.95	239	iP	14 38.50	0.1

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

FEB 08, 1990 15h 47m 31.44± 0.36s
36.259 N ± 3.4km 12.100 W ± 4.5km
DEPTH = 10.0km (geophysicist)
5.0mb (18 obs.)
NORTH ATLANTIC OCEAN (402)
mbLg 5.0 (MDD). MD 4.7 (RBA).
Felt (III) ot Lisbon ond
Coimbro, Portugol.

FAR	3.41	76	P	48 27.50	1.9
			S	49 05.20	
MTH	3.50	40	iPd	48 27.50	0.5
			iS	49 03.50	
FIG	3.53	75	P	48 28.70	1.2
			S	49 06.50	
MOE	3.74	52	iPd	48 30.70	0.2
			iS	49 10.00	
EVAL	4.49	71	iPn	48 41.50	0.4
			eSn	49 28.00	
AVE	4.86	126	iPnc	48 46.20	-0.1
			iSn	49 30.00	
			i	49 32.00	
RBA	4.86	116	iPn	48 45.50	-0.8
			iSn	49 26.50	
			i	49 27.00	
COI	4.89	35	iP	48 46.40	-0.3
			iS	49 36.70	
EJIF	5.36	86	iPnc	48 53.80	0.4
			eSn	49 52.30	
NKM	5.49	97	iPnc	48 55.50	0.2
			iSn	49 48.50	
			i	49 49.00	
EPRU	5.57	81	iPnc	48 56.70	0.3
			eSn	49 56.00	
EHOR	5.70	72	iPn	48 58.20	0.0
			eSn	49 57.70	
EPLA	6.08	49	iPnd	49 02.80	-0.7
			eSn	50 04.40	
IFR	6.35	113	iPnc	49 06.00	-1.5
			iS	50 08.50	
			i	50 10.00	
TIO	6.68	141	iPnc	49 11.00	-1.1
			iSn	50 12.00	

			i	50	15.00					Sn	53	52.00											
EBAN	6.90	72	iPn	49	14.20	-1.0	SMF	15.80	44	Pn	51	14.20	-1.2	VBY	22.56	57	ePd	52	34.30	1.4			
			eSn	50	27.00		SSF	15.86	42	Pn	51	15.40	-0.8	CSI	22.60	72	P	52	34.00	0.6			
AFC	6.94	79	ePn	49	15.50	-0.3	LRG	15.88	57	Pn	51	17.60	1.2	TDS	22.64	73	P	52	34.00	0.3			
			eSn	50	30.00		LMR	15.94	58	Pn	51	17.00	-0.2	KHC	22.71	47	iPc	52	36.30	1.9			
STS	7.16	21	ePn	49	17.80	-0.9	LBF	16.07	43	Pn	51	18.00	-1.0		1.3s	138.50nm				5.3mb			
			eSn	50	30.50		FRF	16.11	57	Pn	51	20.40	0.9				e	52	44.40				
ERUA	7.23	31	iPnc	49	18.20	-1.5	LOR	16.18	42	Pn	51	20.00	-0.3	ORI	22.72	72	P	52	36.50	1.9			
			eSn	50	33.00		ECP	16.43	13	eP	51	24.10	0.7	ROI	22.82	73	P	52	38.60	3.0X			
TOL	7.31	58	iPn	49	20.00	-0.8	ECB	16.54	12	eP	51	25.20	0.4	PTJ	23.14	57	eP	52	40.00	1.3			
			iSn	50	37.00		BNI	16.71	53	P	51	31.60	4.4X	BRT	23.32	70	P	52	37.00	-3.4X			
			iSb	50	52.50		RRL	16.72	53	P	51	32.91	5.4X	CLL	23.39	42	iP	52	42.30	1.3			
			eSg	51	13.00		SBF	16.75	57	Pn	51	29.80	2.1	PRU	23.64	46	P	52	44.70	1.3			
EMEL	7.49	95	ePn	49	22.00	-1.4	PZZ	16.76	55	P	51	32.70	4.8X		1.7s	89.40nm				5.1mb			
			eSn	50	42.00		STV	16.81	56	P	51	30.65	2.2				e	52	54.50				
GUD	7.62	53	ePn	49	24.00	-1.3	DOI	16.86	55	P	51	32.60	3.6X	BRG	23.70	44	iP	52	55.70	11.7X			
			eSn	50	42.00		ENR	16.87	56	P	51	30.86	1.7		1.8s	38.00nm							
ENIJ	7.98	82	ePn	49	29.50	-0.7	LPL	16.95	51	Pn	51	31.80	1.5				i	53	08.60				
			eSn	50	55.00		LPG	16.95	51	Pn	51	31.80	1.4	SOP	24.03	53	iPc	52	49.00	1.8			
EVIA	7.99	70	iPn	49	28.30	-2.2	IMI	17.07	57	P	51	34.24	2.5	ZST	24.54	52	iP	52	52.40	0.2			
			eSn	50	53.00		RSP	17.12	53	P	51	36.09	3.7X	KSP	25.02	45	eP	52	57.00	0.2			
CFTV	8.00	193	iP	49	26.00	-4.5X	LSD	17.19	52	P	51	37.32	4.0X	SRO	25.20	53	eP	52	54.00	-4.5X			
			eS	50	48.50		ROB	17.20	56	P	51	34.86	1.6	OHR	26.04	69	eP	53	04.00	-2.5			
TAF	8.03	98	iPnc	49	31.00	0.1	EMS	17.32	50	ePc	51	39.50	4.5X		1.5s	0.09nm				2.2mb X			
			iSn	50	50.00		DCN	17.42	10	eP	51	48.00	12.2X	SKO	26.53	67	eP	53	10.90	0.0			
EMON	8.05	26	ePn	49	29.30	-1.9	PGF	17.45	62	Pn	51	38.50	1.9	KRA	26.90	49	iPd	53	14.70	0.5			
			eSn	50	51.00		DLE	17.47	11	eP	51	40.20	3.7X		0.9s	43.00nm				5.1mb			
CTFE	8.52	206	iP	49	33.50	-4.2X	CKI	17.52	56	P	51	41.00	3.8X	LKO	27.24	166	P	53	19.20	1.5			
			eS	51	00.70		DIX	17.62	50	ePc	51	42.60	3.8X	VAY	27.38	69	eP	53	18.50	-0.1			
GGC	8.65	201	iP	49	34.60	-5.0X	PCP	17.74	56	P	51	43.98	4.0X	NB2	28.88	24	P	53	32.20	0.1			
			eS	51	04.50		ORO	17.78	52	P	51	43.50	2.9		1.0s	7.50nm				4.4mb			
EALH	8.69	76	ePn	49	38.50	-1.6	ORX	17.79	52	P	51	42.24	1.5	HFS	29.07	27	eP	53	33.50	-0.3			
			eSn	51	13.00		MMK	17.96	51	ePc	51	46.70	3.8X		0.8s	17.40nm				4.9mb			
TBT	9.01	215	iP	49	38.40	-6.1X	HAU	17.97	44	Pn	51	45.20	2.3	Z	19s	0.00um				0.8MszX			
			eS	51	12.50		DMU	18.01	10	eP	51	46.80	3.6X				LR	02	28.00				
ETOR	9.09	57	ePn	49	44.50	-1.2	BSF	18.13	45	Pn	51	46.10	1.2	MLR	29.97	60	ePc	53	43.00	0.8			
			eSn	51	20.00		DOU	18.37	36	P	51	48.80	1.1	TIC	30.18	166	P	53	43.48	-0.6			
ECHE	9.40	66	iPn	49	49.30	-0.7		0.6s	57.30nm			4.9mb			1.0s	22.50nm				5.0mb			
			eSn	51	29.00					S	54	55.80		KIC	30.51	165	P	53	46.42	-0.6			
ACU	9.57	73	iPn	49	50.80	-1.5	VAI	18.39	52	Pc	51	50.50	2.6		0.9s	13.00nm				4.8mb			
			eSn	51	30.00		BOB	18.42	56	P	51	52.50	4.0X	LIC	30.59	166	P	53	46.98	-0.7			
ECRI	9.75	47	ePn	49	53.00	-1.8	SNF	18.51	35	P	51	56.70	7.3X	KUK	31.80	157	eP	53	57.50	-0.9			
			eSn	51	33.20					S	55	07.20		KOGH	31.94	157	eP	53	59.00	-0.6			
EROO	10.80	61	ePn	50	08.00	-1.2	TMA	18.55	52	ePc	51	52.50	2.3	SHGH	32.15	157	eP	54	01.00	-0.4			
			eSn	52	00.50		CDF	18.72	44	Pn	51	51.80	-0.3	LEGH	32.37	157	eP	54	04.00	0.7			
EBR	10.86	61	ePn	50	09.00	-0.9	WLF	18.85	39	P	51	55.00	1.4	WEGH	32.38	158	eP	54	02.00	-1.4			
			e	51	53.00		LLS	18.96	49	ePc	51	57.30	2.1	TEGH	32.44	157	eP	54	05.00	1.1			
			eSg	52	02.00		SLE	19.08	47	ePc	51	58.30	1.9	WIGH	32.51	158	eP	54	03.00	-1.5			
BOH	10.94	48	P	50	10.11	-1.0	VDL	19.09	51	ePc	51	58.50	1.7	NUR	33.68	32	eP	54	14.10	-0.2			
ELYF	10.99	48	P	50	11.02	-0.7	RUP	19.34	40	ePc	51	59.60	-0.1	SUF	35.40	29	eP	54	29.20	0.1			
ISSF	11.02	49	P	50	10.79	-1.5	MEM	19.38	37	P	52	01.60	1.5		0.7s	23.00nm				5.2mb			
LHE	11.07	50	P	50	12.78	-0.1				S	55	23.30		SOD	38.10	23	iP	54	52.00	0.3			
MADF	11.08	48	P	50	11.85	-1.1	SAL	19.43	54	P	52	01.50	0.8	KEV	39.62	20	iP	55	05.00	0.7			
ATE	11.11	49	P	50	12.56	-0.8	OSS	19.59	51	ePc	52	03.80	1.0	DAG	40.72	358	eP	55	14.40	1.1			
ESCF	11.19	49	P	50	13.30	-1.1	ABH	19.70	40	ePc	52	03.20	-0.6	FRB	43.44	327	eP	55	43.00	7.3X			
JAU	11.29	50	P	50	15.27	-0.7	PGD	19.71	60	P	52	05.50	1.4	MAIO	56.41	67	eP	57	15.00	-0.5			
OGE	11.30	49	P	50	15.23	-0.7	CRE	19.81	61	P	52	06.00	1.0	MBC	59.05	345	eP	57	32.50	-0.9			
EPF	11.73	51	Pn	50	20.40	-1.4	SFI	19.81	60	P	52	06.40	1.5		1.0s	4.00nm				4.5mb			
			Sn	52	21.00		RDP	20.02	67	P	52	07.00	-0.2	FFC	61.27	319	eP	57	48.00	-0.9			
ESEL	12.33	69	ePn	50	28.80	-1.1	MNS	20.09	65	P	52	07.60	-0.3		0.8s	9.00nm				5.0mb			
LFF	13.04	44	Pn	50	37.00	-2.3	ASS	20.20	63	Pd	52	09.90	0.8	BAO	61.76	220	eP	57	52.00	-0.8			
			Sn	52	51.00		OGA	20.22	51	eP	52	10.40	1.0	TUL	65.42	297	eP	58	15.70	-0.8			
ETER	13.06	58	ePn	50	38.60	-1.0		0.9s	25.00nm			4.6mb			1.1s	11.40nm				5.0mb			
			eSn	52	54.80		RSM	20.24	60	P	52	11.00	1.7				e	58	30.80				
LPO	13.14	46	Pn	50	38.00	-2.7	CTI	20.32	54	P	52	10.90	0.6	INK	67.05	340	eP	58	27.00	0.6			
			Sn	52	54.00		TNS	20.37	40	ePd	52	15.20	4.4X	EDM	67.93	320	eP	58	31.50	-0.8			
MFF	13.67	37	Pn	50	45.00	-2.6	ARV	20.49	62	Pd	52	12.80	0.8	BUL	68.03	139	iPc	58	33.30	-0.1			
			Sn	53	05.60		AZI	20.58	66	P	52	14.00	1.0	ZOBO	74.34	236	P	59	11.70	-0.2			
RJF	13.70	45	Pn	50	45.50	-2.5	SDI	20.83	67	P	52	15.50	-0.1	GKN	78.98	63	P	59	37.20	-0.1			
			Sn	53	06.00		GIB	20.89	77	P	52	15.50	-0.8	DMN	79.54	64	P	59	40.80	0.2			
CAF	13.80	47	Pn	50	46.90	-2.4	FVI	21.24	53	P	52	20.20	0.5	KKN	79.57	63	P	59	40.60	0.0			
			Sn	53	09.00		DUI	21.30	67	P	52	21.00	0.5	PKI	79.79	63	P	59	41.80	-0.1			
LSF	14.29	41	Pn	50	54.00	-1.8	RBL	21.70	54	P	52	24.00	-0.5	GUN	79.93	63	P	59	43.20	0.5			
			Sn	53	20.00		KBA	21.77	52	iPd	52	25.70	0.4	HYB	80.42	76	iPd	59	44.50	-0.6			
LPF	14.32	31	Pn	50	54.20	-1.9		1.2s	34.30nm			4.6mb			1.0s	25.00nm				5.2mb			
GRR	14.68	31	Pn	50	59.00	-1.8	VOY	21.79	55	eP	52	24.70	-0.7	GBA	81.72	79	Pd	59	52.30	0.5			
TCF	14.68	43	Pn	50	59.50	-1.4	SGO	21.86	70	P	52	25.90	-0.1		0.9s	11.80nm				5.0mb			
			Sn	53	29.30		MGR	22.04	71	Pd	52	28.10	0.3	SHL	85.62	62	iP	00	11.80	-0.1			
MAF	14.84	43	Pn	51	00.80	-2.1	CEY	22.06	56	eP	52	29.00	1.0	LZH	86.62	47	eP	00	18.00	1.4			
			Sn	53	33.20		LJU	22.22	56	ePc	52	30.20	0.7		1.5s	19.00nm				5.1mb			
FLN	15.13	31	Pn	51	05.00	-1.7	MOX	22.30	42	eP	52	32.00	1.7	WB5	146.42	70	ePKP	07	14.00	0.7			
LDF	15.15	32	Pn	51	05.20	-1.7		1.3s	63.00nm			4.9mb		WRA	146.44	70	PKPd	07	14.60	1.3			
BGF	15.19	43	Pn	51	06.80	-0.8	WET	22.30	47	iPc	52	31.60	1.2		0.7s	8.60nm							
			Sn	53	43.00					i	52	33.40		S.D. = 1.2 on 175 of 201 obs.									
HYF	15.53	40	Pn	51	11.40	-0.5	MMN	22.37	72	P	52	31.00	0.0	FEB 08, 1990 17h 13m 33.41± 0.35s									
			Sn	53	50.00		SOI	22.48	77	P	52	30.60	-1.5	45.954 N ± 3.0km 2.825 E ± 3.2km									
AVF	15.61	43	Pn	51	12.00	-1.0	CZI	22.49	74	P	52	32.50	0.3	DEPTH = 10.0km (geophysicist)									

08d 17h

FRANCE (538)
ML 2.6 (LDG). MD 2.1 (STR).

AGO	0.24	65	Pg	13	38.17	-0.3
			Sg	13	41.35	
PYM	0.24	148	Pg	13	38.22	-0.4
			Sg	13	41.53	
MAF	0.32	326	Pg	13	39.90	-0.2
			Sg	13	44.20	
TCF	0.54	308	Pg	13	44.00	-0.4
			Sg	13	51.20	
PLDF	0.56	88	Pg	13	44.68	-0.1
			Sg	13	51.45	
BGF	0.60	1	Pg	13	45.00	-0.6
			Sg	13	53.20	
LBL	0.78	158	Pg	13	48.44	-0.1
			Sg	13	58.32	
AVF	0.91	23	Pg	13	50.70	-0.2
			Sg	14	02.40	
LSF	0.95	289	Pg	13	51.50	0.0
			Sg	14	04.00	
SMF	0.99	45	Pg	13	52.00	-0.2
			Sg	14	05.60	
RJF	1.12	235	Pg	13	55.00	0.5
			Sg	14	09.20	
CAF	1.16	208	Pg	13	55.20	0.1
			Sg	14	10.40	
SSF	1.20	23	Pg	13	56.10	0.3
			Sg	14	11.90	
LBF	1.30	37	Pg	13	58.00	0.4
			Sg	14	15.10	
LOR	1.50	28	Pg	14	01.40	1.1
			Sg	14	20.40	

S.D. = 0.5 on 15 of 15 obs.

FEB 08, 1990 17h 50m 15.77± 0.53s
38.988 N ± 4.2km 16.198 E ± 8.4km
DEPTH = 19.9 ± 6.8 km
SOUTHERN ITALY (390)

CZI	0.24	348	P	50	21.60	0.2
ACI	0.36	1	P	50	23.70	0.2
ROI	0.65	26	P	50	27.80	-0.5
			eSg	50	38.20	
TDS	0.68	9	P	50	28.00	-0.8
			eSg	50	38.70	
CSI	0.79	5	P	50	31.30	0.6
			eSg	50	44.50	
MMN	0.92	350	P	50	32.80	0.0
			eSg	50	46.80	
SOI	0.92	187	P	50	32.20	-0.7
			eSg	50	45.90	
MSI	0.93	213	P	50	33.80	0.7
			eSg	50	47.50	
ATN	1.01	215	P	50	33.40	-1.0
			eSg	50	50.20	
ORI	1.09	10	P	50	36.50	0.7
			eSg	50	50.50	
MGR	1.25	337	P	50	37.30	-0.9
			eSg	50	56.60	
MNO	1.58	229	P	50	44.50	1.4
SGO	1.71	337	P	50	44.50	-0.2
			eSn	51	06.50	
LCI	1.91	45	P	50	48.30	0.7
GIB	1.97	240	P	50	48.50	-0.2
			eSn	51	13.50	
BRT	2.04	22	P	50	49.30	-0.2
			eSn	51	12.50	

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

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* FEB 08, 1990 18h 17m 17.79± 2.87s
36 690 N ±30.0km 29.033 E ±12.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

ELL	0.71	85	ePn	17	31.50	-0.3
CIN	1.18	321	ePg	17	40.00	0.2
			iSg	17	56.00	
BCK	1.46	58	iPn	17	44.90	0.6
KHL	1.68	13	ePn	17	47.00	-0.4
IZM	2.21	321	ePn	17	55.00	-0.1

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

% FEB 08, 1990 18h 18m 33.26± 0.59s
43.087 N ± 7.1km 0.831 W ± 5.7km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)

MD 1.0 (STR).

MADF	0.06	8	Pg	18	35.69	0.1
			Sg	18	37.80	
ISSF	0.06	156	Pg	18	36.00	0.3
			Sg	18	38.78	
ATE	0.09	90	Pg	18	36.05	0.1
			Sg	18	38.44	
BOH	0.13	277	Pg	18	36.51	0.0
			Sg	18	39.25	
ELYF	0.14	305	Pg	18	36.58	-0.1
			Sg	18	39.10	
ESCF	0.19	92	Pg	18	37.30	-0.2
			Sg	18	40.56	
LHE	0.23	138	Pg	18	38.04	-0.2

S.D. = 0.2 on 7 of 7 obs.

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* FEB 08, 1990 18h 27m 23.23± 1.40s
0.855 N ±12.7km 120.272 E ±12.9km
DEPTH = 61.1 ± 14.8 km
4.7mb (3 obs.)
MINAHASSA PENINSULA (265)

TSM	4.00	327	iPd	28	23.90	0.5
	0.5s	1881.20nm				
			i	29	09.00	
MNI	4.60	83	ePd	28	33.50	1.6
KKM	6.55	322	ePd	28	57.20	-2.1
MTN	17.36	142	eP	31	23.00	0.0
WB5	24.81	147	eP	32	40.20	-1.0
WRA	24.85	147	Pd	32	41.10	-0.5
	0.9s	27.10nm			4.7mb	
CHTO	27.50	312	eP	33	05.00	-1.0
	1.0s	1.75nm			3.6mb	X
QIS	28.48	139	eP	33	13.70	-1.2
CTA	32.89	131	iP	33	54.00	0.2
CD2	33.74	334	P	34	01.50	0.4
BRS	42.01	134	eP	35	10.00	-0.4
GUN	42.52	312	P	35	15.80	0.9
GTA	42.68	336	Pd	35	17.60	1.8
PKI	42.68	312	P	35	16.60	0.3
KKN	42.90	312	P	35	18.40	0.5
DMN	42.93	311	P	35	18.40	0.2
GKN	43.49	312	P	35	22.80	0.2
BWA	43.91	146	eP	35	25.90	0.2
HYB	44.20	294	iPd	35	29.00	0.7
	1.0s	25.00nm			5.0mb	
GBA	44.24	289	Pc	35	29.30	0.7
	0.8s	7.50nm			4.5mb	
MDJ	44.35	10	eP	35	26.20	-2.9
CAN	44.89	146	eP	35	34.60	1.0

S.D. = 1.2 on 22 of 22 obs.

? FEB 08, 1990 18h 31m 01.82± 1.47s
8.191 N ±10.0km 126.047 E ±33.0km
DEPTH = 33.0km (normal)
4.9mb (1 obs.) 4.0Msz (2 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV	1.19	203	eP	32	00.60	38.4X
MNI	6.81	190	iPd	32	42.00	-0.1
BAG	9.76	327	eP	33	14.00	-9.2X
SSE	23.24	349	P	36	07.50	0.4
	Z 20s	0.50um			4.0Msz	
WHN	24.79	335	eP	36	30.00	7.9X
TIY	31.87	339	eP	37	25.00	-1.3
	N 15s	0.40um				
BJI	32.92	346	eP	37	35.00	-0.2
LZH	34.37	327	eP	37	48.50	0.4
	1.2s	17.00nm			4.9mb	
	Z 18s	0.30um			4.1Msz	
SHL	36.81	302	iP	38	07.30	-1.7
GTA	38.97	327	eP	38	26.80	-0.1
PKI	42.94	302	P	39	10.60	10.6X
KKN	43.12	302	P	39	01.40	0.1
DMN	43.21	302	P	39	03.20	1.1
WMO	48.73	323	P	39	46.70	1.3
MAIO	66.32	306	eP	41	53.00	3.3X
INK	86.29	21	eP	43	58.50	17.2X

S.D. = 1.1 on 10 of 16 obs.

FEB 08, 1990 20h 17m 52.27± 0.25s
36.642 N ± 3.9km 27.045 E ± 2.8km
DEPTH = 158.3 ± 3.5 km
4.5mb (33 obs.)
DODECANESE ISLANDS (369)

ARG	0.97	116	iPd	18	18.00	0.2
SMG	1.08	351	iPd	18	18.10	-0.6
KAP	1.09	174	iPd	18	19.50	0.6
CIN	1.27	41	iPd	18	20.00	-0.4
APE	1.29	290	iPc	18	21.30	0.6
IZM	1.76	6	iPn	18	24.90	-0.7
NPS	1.80	221	iPd	18	26.90	0.9
KSL	2.11	104	iPd	18	30.00	0.4
			eS	18	55.00	
ELL	2.30	87	iPn	18	32.50	0.5
KHL	2.59	49	iPn	18	35.40	0.0
PRK	2.67	347	iPd	18	36.20	-0.1
BCK	2.95	73	iPn	18	40.50	0.6
ATH	2.97	298	eP	18	41.00	1.0
DST	3.21	22	iPn	18	43.30	0.1
EZN	3.23	350	iPn	18	43.50	0.2
VLI	3.30	273	eP	18	45.30	1.0
			eS	19	23.00	
EDC	3.75	10	iPn	18	49.50	-0.7
BNT	3.77	10	iPn	18	50.10	-0.3
NEO	4.02	313	eP	18	54.90	1.2
ITM	4.14	279	iPc	18	56.70	1.5
RDO	4.65	346	iPd	19	02.00	0.1
PPCY	4.65	111	eP	19	00.70	-1.3
PLG	4.67	324	eP	19	00.70	-1.6
VLS	5.36	289	eP	19	12.00	0.6
CSS	5.38	106	ePn	19	10.20	-1.4
			eSn	20	10.00	
BBTK	5.52	53	iP	19	15.00	1.4
KZN	5.52	313	iPd	19	15.50	1.9
VAY	5.83	325	eP	19	18.00	0.4
KEK	6.48	300	eP	19	28.00	1.6
OHR	6.61	314	iPn	19	29.70	1.6
KOT	7.80	148	ePn	19	43.50	-0.5
			eSn	21	01.00	
HRI	7.89	113	ePc	19	44.00	-1.4
LCI	8.03	300	P	19	44.80	-2.2
			eSn	21	02.80	
SHMJ	8.17	116	Pc	19	53.00	4.0X
BURJ	8.46	119	Pd	19	57.20	4.3X
DSI	8.56	124	iP	19	53.50	-0.6
GRI	8.69	288	P	19	54.43	-1.5
MASJ	8.70	122	P	20	00.10	4.1X
ROI	8.76	293	P	19	56.00	-0.8
BRT	8.77	302	P	19	56.00	-1.0
			eSn	21	22.90	
SOI	8.87	283	Pc	19	56.30	-1.9
			eSn	21	25.00	
TDS	8.96	293	P	19	59.10	-0.3
			eSn	21	26.00	
CZI	9.00	290	P	19	59.10	-0.8
			eSn	21	25.80	
ORI	9.00	296	Pc	19	59.10	-0.8
CSI	9.03	294	P	19	59.90	-0.4
			eSn	21	33.00	
GMB	9.03	283	P	19	58.93	-1.5
BAI	9.11	302	P	20	00.00	-1.3
OUTJ	9.15	123	P	20	07.00	4.9X
MMN	9.28	294	P	20	03.50	-0.1
			eSn	21	28.20	
ATN	9.34	283	Pc	20	03.10	-1.4
			eSn	21	35.50	
MBH	9.49	134	eP	20	06.00	-0.3
AQBJ	9.62	134	Pd	20	13.00	4.9X
MGR	9.67	295	P	20	07.60	-1.2
			eSn	21	43.00	
MEU	9.72	276	P	20	09.10	-0.4
			eSn	21	46.60	
PZI	9.73	276	P	20	07.86	-1.8
MNO	9.93	281	P	20	12.10	-0.3
			eSn	21	50.50	
HQL	9.96	135	eP	20	12.70	0.1
SGO	9.98	297	P	20	11.90	-1.0
			eSn	21	51.00	
HVAR	10.43	312	iPn	20	17.20	-1.5
GIB	10.46	281	P	20	18.50	-0.7
			eSn	22	04.50	
BADA	10.51	138	iPc	20	19.30	-0.5
FAI	10.72	277	P	20	24.60	2.1
AYN	10.81	133	iPc	20	24.70	1.0
DUI	10.98	301	P	20	25.50	-0.5
SDI	11.44	300	P	20	31.50	-0.5
MNS	12.48	302	P	20	47.00	1.5
ASS	12.77	305	P	20	50.00	0.7
ARV	12.78	307	P	20	50.70	1.4
TRI	13.48	316	eP	20	58.20	0.0
CRE	13.48	306	P	21	01.00	2.6

FVI 14.56 317 P 21 14.50 2.7
KBA 14.57 320 eP 21 14.00 1.9
1.0s 23.70nm 4.5mb
i 21 15.70
CTI 14.88 314 P 21 19.50 3.6X
PGF 15.10 299 eP 21 19.80 1.1
0.8s 13.45nm 4.3mb
BOB 15.60 307 P 21 27.00 2.2
KHC 15.88 326 iPd 21 29.30 1.1
MDI 15.89 310 P 21 31.30 3.0X
PCP 16.09 305 P 21 30.72 -0.2
OSS 16.10 314 ePc 21 33.80 2.7
PRU 16.12 330 eP 21 33.00 1.9
FIN 16.19 304 P 21 32.15 0.0
IMI 16.30 302 P 21 33.90 0.4
ROB 16.45 304 P 21 35.33 0.0
VAI 16.51 310 Pd 21 36.80 0.8
TMA 16.56 310 ePd 21 38.00 1.2
SBF 16.60 302 eP 21 36.10 -1.0
0.7s 35.30nm 4.8mb
ENR 16.73 303 P 21 39.74 1.0
STV 16.80 303 P 21 39.64 0.1
SAX 16.86 314 ePd 21 40.60 0.1
LLS 16.87 313 ePd 21 40.90 0.4
ORX 16.91 308 P 21 39.74 -1.1
PZZ 17.04 304 P 21 42.20 -0.3
MMK 17.10 309 ePc 21 43.30 -0.1
RSP 17.18 306 P 21 41.28 -2.9
LSD 17.36 307 P 21 44.25 -2.3
RRL 17.40 305 P 21 46.10 -0.9
DIX 17.46 309 ePc 21 47.40 -0.3
SLE 17.63 315 ePc 21 47.80 -1.6
LPG 17.64 306 eP 21 49.40 -0.4
0.5s 14.60nm 4.6mb
LPL 17.66 306 eP 21 49.40 -0.6
0.5s 12.40nm 4.5mb
EMS 17.76 308 ePd 21 49.90 -1.1
BSF 18.65 313 eP 21 59.20 -1.2
0.6s 7.20nm 4.2mb
CDF 18.66 315 eP 22 00.30 -0.3
0.7s 23.15nm 4.6mb
HAU 18.99 313 eP 22 03.40 -0.5
0.6s 28.85nm 4.8mb
SMF 19.95 307 eP 22 12.70 -1.1
0.6s 12.65nm 4.5mb
LBF 19.99 308 eP 22 13.20 -1.0
0.6s 9.90nm 4.4mb
LOR 20.18 309 eP 22 15.60 -0.5
0.8s 22.15nm 4.7mb
AVF 20.32 307 eP 22 17.10 -0.3
0.5s 9.35nm 4.5mb
SSF 20.32 308 eP 22 17.10 -0.4
BGF 20.56 306 eP 22 19.40 -0.5
0.8s 9.40nm 4.3mb
CAF 20.59 301 eP 22 20.60 0.4
0.8s 8.75nm 4.3mb
MAF 20.63 305 eP 22 22.50 1.9
0.6s 4.50nm 4.1mb
DOU 21.04 317 iPd 22 24.80 0.2
0.6s 11.80nm 4.5mb
LPO 21.13 300 eP 22 26.40 0.8
0.7s 7.70nm 4.3mb
LFF 21.50 301 eP 22 30.20 1.0
0.7s 8.80nm 4.3mb
MFF 22.53 305 eP 22 40.30 1.1
0.4s 9.15nm 4.6mb
LDF 23.16 310 eP 22 45.20 -0.1
0.6s 25.25nm 4.9mb
FLN 23.44 310 eP 22 47.70 -0.3
0.4s 34.35nm 5.2mb
LPF 23.54 308 eP 22 49.00 0.0
0.4s 24.05nm 5.1mb
GRR 23.54 309 eP 22 48.60 -0.4
HFS 25.03 344 eP 23 02.00 -0.8
0.3s 5.00nm 4.5mb
NB2 26.40 343 P 23 14.20 -1.3
0.7s 3.20nm 4.1mb
BCAO 32.99 196 ePd 24 17.60 3.4X
0.6s 5.00nm 4.4mb
LKO 40.01 236 Pc 25 16.28 3.2X
0.5s 6.50nm 4.6mb
TIC 41.81 232 Pc 25 29.04 1.2
0.5s 3.00nm 4.2mb
KIC 41.85 232 Pc 25 29.52 1.3
0.4s 5.00nm 4.5mb
LIC 42.13 232 Pc 25 31.84 1.4
0.4s 3.50nm 4.3mb

DAG 44.98 346 eP 25 51.50 -1.2
GKN 48.80 83 P 26 23.80 0.5
0.6s 22.00nm 5.0mb
DMN 49.34 83 P 26 28.20 0.6
0.6s 26.00nm 5.1mb
KKN 49.40 83 P 26 28.20 0.2
0.6s 16.00nm 4.9mb
PKI 49.60 83 P 26 30.20 0.5
GUN 49.83 82 P 26 31.80 0.4
0.6s 13.00nm 4.8mb
S.D. = 1.1 on 124 of 133 obs.

? FEB 08, 1990 20h 28m 12.89±17.96s
29.817 N ±171.km 90.453 E ±81.7km
DEPTH = 33.0km (normal)
TIBET (306)

SHL 4.42 163 eP 29 19.50 -0.1
eS 30 12.00
GUN 4.44 246 P 29 20.60 0.6
0.4s 6.00nm
PKI 4.96 244 P 29 27.00 -0.4
KKN 4.97 247 P 29 28.00 0.6
0.4s 7.00nm
DMN 5.19 246 P 29 29.60 -0.9
GKN 5.41 252 P 29 33.30 -0.2
S.D. = 0.8 on 6 of 6 obs.

? FEB 08, 1990 22h 55m 14.89± 2.93s
3.494 S ±22.4km 129.886 E ±27.9km
DEPTH = 108.9 ± 30.3 km
4.1mb (4 obs.)
CERAM (272)

TLE 3.56 127 ePd 55 41.00 -28.2X
SLKI 4.67 163 ePd 56 25.50 1.1
MTN 9.37 173 eP 57 25.00 -3.7X
e 57 27.00
e 59 12.00
PCI 10.37 284 ePd 57 40.60 -1.3
WB5 16.86 165 eP 59 05.70 -0.1
eS 02 10.60
WRA 16.92 165 Pc 59 06.60 0.2
0.6s 4.00nm 3.8mb
QIS 19.42 152 eP 59 34.00 -1.3
e 02 59.00
ASPA 20.43 169 eP 59 45.40 -0.2
0.9s 44.00nm 4.8mb
Z 20s 0.66um 4.0Msz
iS 03 32.60
LR 08 59.70
CTA 22.95 137 iPd 00 17.90 7.3X
1.0s 17.00nm 4.3mb
CHG 37.67 307 eP 02 23.10 1.7
CHTO 37.67 307 eP 02 22.90 1.5
0.9s 1.71nm 3.9mb
BJI 45.12 345 eP 03 22.00 0.0
LZH 46.30 331 P 03 30.00 -1.6
S.D. = 1.4 on 10 of 13 obs.

FEB 08, 1990 23h 13m 38.45± 0.64s
43.826 N ± 6.1km 18.695 E ± 6.0km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.7 (TTG).

PLE 0.71 134 iPgd 13 50.70 -1.8
iSn 14 02.50
BRY 0.93 187 iPgd 13 54.10 -2.2
iSg 14 10.00
NKY 1.04 168 ePg 13 56.50 -1.6
eSg 14 13.00
IVA 1.30 137 ePg 14 00.80 -1.7
eSg 14 21.50
HCY 1.38 186 ePg 14 03.00 -0.8
eSg 14 26.50
BLY 1.42 311 eP 14 04.20 -0.1
eS 14 21.20
TTG 1.46 163 ePg 14 03.80 -0.9
eSg 14 25.00
BDV 1.54 176 ePg 14 06.50 0.4
eSg 14 30.00
PVY 1.54 142 ePg 14 05.90 -0.3
eSn 14 28.00
BEO 1.61 51 ePn 14 09.00 2.1
e(Sg) 14 30.50
HVAR 1.76 249 iPn 14 10.20 1.1

BCI 1.77 145 ePn 14 10.50 1.2
SDA 1.90 162 ePn 14 14.30 3.1X
ULC 1.91 167 ePn 14 13.00 1.7
eSn 14 40.00
LACI 2.31 161 ePn 14 20.50 3.4X
PHP 2.49 148 ePn 14 21.80 2.1
TIR 2.62 160 ePn 14 26.70 5.1X
SKO 2.74 132 ePn 14 24.00 0.8
BZS 2.75 48 eP 14 21.50 -1.8
PTJ 2.84 318 ePn 14 23.50 -1.3
eSn 14 58.10
VBY 2.97 306 ePn 14 36.80 10.3X
eSn 15 18.60
OHR 3.13 149 ePn 14 31.00 2.3
BRT 3.15 201 P 14 28.60 -0.4
eSn 15 08.00
SGO 4.12 219 P 14 43.00 0.2
SDI 4.17 241 P 14 44.40 0.8
eSn 15 33.20
ARV 4.19 268 P 14 43.50 -0.3
MGR 4.37 213 P 14 46.80 0.5
S.D. = 1.4 on 23 of 27 obs.

& FEB 08, 1990 23h 53m 34.26s
64.470 N 146.918 W
DEPTH = 12.4km
CENTRAL ALASKA (1)
<AGS-P>.

HDA 0.07 194 iP 53 36.66 -0.3
CCB 0.42 295 iP 53 42.51 -0.5
WRH 0.51 271 iP 53 44.26 -0.3
GLM 0.56 339 iP 53 45.05 -0.4
eS 53 52.93
FBA 0.57 319 iP 53 45.40 -0.3
eS 53 55.04
RDS 0.64 305 iP 53 46.59 -0.2
eS 53 55.53
DMW 0.66 128 iP 53 46.95 -0.3
DDM 0.83 145 eP 53 50.43 0.3
NEA 0.94 278 iP 53 51.96 0.0
eS 54 05.89
MCK 1.15 231 eP 53 56.01 0.4
eS 54 10.70
RND 1.37 220 iP 53 59.52 0.4
eS 54 17.55
DOT 1.50 122 eP 54 01.80 0.8
PAX 1.64 156 eP 54 03.76 0.8
eS 54 24.47
HUR 1.93 220 eP 54 09.67 2.6
S 54 34.46
KTH 1.99 244 eP 54 07.48 -0.6
eS 54 33.27
SDG 2.05 162 eP 54 11.42 2.6
NCA 2.49 179 eP 54 16.80 1.6
CUT 2.56 218 eP 54 16.26 0.1
GHO 2.86 200 eP 54 22.72 2.2
PLRM 3.06 200 eP 54 26.00 2.8
SKT 3.26 222 iP 54 25.93 -0.1
DWY 3.29 94 P 54 27.00 0.4
GLB 3.35 154 eP 54 31.17 3.7
SUA 3.49 212 iP 54 30.62 1.2
NCG 3.90 220 eP 54 35.20 -0.1
25 obs. associated

FEB 09, 1990 01h 22m 18.65± 0.96s
9.742 N ± 4.4km 124.843 E ± 6.0km
DEPTH = 56.1 ± 8.7 km
5.1mb (24 obs.) 4.3Msz (3 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV 2.73 165 eP- 23 02.00 1.0
QCP 6.10 323 eP 23 51.00 2.6
BAG 7.82 328 eP 24 12.10 -0.5
MNI 8.24 180 eP 24 11.50 -6.7X
TSM 8.67 231 ePc 24 23.40 -0.7
KKM 9.30 247 ePd 24 30.80 -2.1
MKS 15.80 200 ePd 26 05.00 6.0X
e 27 50.00
HKC 16.15 322 eP 26 08.40 4.9X
QZH 16.25 339 Pc 26 10.00 5.3X
4.0s 1600.00nm 5.5mb X
N 20s 2.20um
S 29 07.50
QIZ 17.20 304 eP 26 16.20 -0.5
N 12s 1.20um
E 13s 1.60um

09d 01h

GZH		17.24	322	eP	26	21.00	3.9X
	N	12s		0.70um			
	E	13s		0.80um			
SSE		21.52	351	P	27	04.50	-0.3
	Z	20s		0.90um			4.2Msz
	E	11s		0.60um			
				sS	31	16.00	
KGM		22.73	252	eP	27	18.00	1.0
NJ2		22.88	347	Pd	27	17.50	-0.8
WHN		22.89	336	eP	27	19.40	1.0
	Z	16s		1.20um			4.4MszX
	N	16s		2.00um			
				eS	31	26.00	
LOE		23.71	291	eP	27	27.00	0.6
GYA		23.92	316	P	27	30.00	1.3
	N	13s		0.90um			
	E	13s		0.80um			
				sS	32	04.00	
SNG		24.10	266	eP	27	30.00	-0.2
IPM		24.17	259	ePd	27	32.40	1.4
		0.7s		163.90nm			5.6mb
NST		24.80	286	eP	27	38.00	1.0
KMI		25.99	309	eP	27	49.00	0.7
	N	15s		1.00um			
	E	15s		1.10um			
BDT		26.19	289	eP	27	48.90	-1.0
		0.6s		17.90nm			4.8mb
PPI		26.36	249	eP	27	51.50	0.0
CHG		26.64	293	eP	27	53.90	-0.2
CHTO		26.64	293	eP	27	52.90	-1.2
		1.0s		5.50nm			4.1mb
TIA		27.27	346	eP	27	59.30	-0.4
	N	12s		1.70um			
CD2		28.78	320	eP	28	13.00	-0.5
TIY		30.01	340	eP	28	22.20	-2.2
	N	17s		1.20um			
WB5		30.89	162	eP	28	29.60	-2.6
				e	31	28.90	
WRA		30.95	162	Pc	28	30.60	-2.1
		0.7s		5.50nm			4.4mb
BJI		31.14	347	eP	28	33.50	-0.7
		1.5s		52.00nm			5.1mb
	Z	34s		0.40um			3.8MszX
	E	10s		0.31um			
				eS	33	36.00	
SNY		31.98	358	eP	28	41.20	-0.3
	Z	18s		0.80um			4.4Msz
	N	18s		0.70um			
	E	15s		0.90um			
LZH		32.43	327	eP	28	46.50	0.7
		1.2s		71.00nm			5.4mb
	Z	35s		1.00um			4.3MszX
	N	14s		0.50um			
HHC		33.14	341	eP	28	50.80	-1.0
	Z	28s		1.20um			4.5MszX
BTO		33.43	339	eP	28	54.50	0.2
	N	11s		0.20um			
	E	11s		0.40um			
OIS		33.43	154	eP	28	53.50	-0.9
		0.8s		67.00nm			5.6mb
				e	31	35.00	
CN2		33.93	1	Pd	28	57.70	-0.8
	Z	14s		0.90um			4.6MszX
	E	13s		0.50um			
				pP	29	10.50	49kmX
ASPA		34.36	165	eP	29	01.80	-0.7
		0.6s		13.00nm			5.0mb
	Z	18s		0.48um			4.3Msz
				i	31	30.30	
				LR	45	31.30	
MDJ		34.99	6	eP	29	07.50	0.0
CTA		36.37	145	iPd	29	19.80	0.3
		0.9s		11.76nm			4.8mb
				i	29	27.20	
				e	29	38.00	
GTA		37.03	327	iPc	29	25.60	0.6
	Z	15s		0.60um			4.5MszX
GUN		40.84	302	P	29	57.40	0.3
PKI		41.13	301	P	29	59.20	-0.2
		0.8s		35.00nm			5.2mb
KKN		41.30	301	P	30	00.60	-0.1
		0.6s		23.00nm			5.1mb
DMN		41.39	301	P	30	01.20	-0.4
		0.6s		23.00nm			5.1mb
GKN		41.91	301	P	30	05.20	-0.5
		0.8s		36.00nm			5.2mb
HYB		45.55	285	iPc	30	36.00	1.0
		1.0s		25.00nm			5.1mb
BRS		45.78	144	iPc	30	36.60	-0.1
		0.8s		3.00nm			4.3mb
				e	30	42.00	
ADE		46.36	164	eP	30	41.50	0.3
		0.9s		67.23nm			5.6mb
GBA		46.53	279	Pd	30	42.00	-0.7
		0.5s		11.50nm			5.1mb
WMQ		46.79	323	P	30	45.50	1.0
				eS	37	35.50	
BWA		49.29	154	eP	31	06.60	2.6
POO		50.07	286	eP	31	10.00	-0.3
CAN		50.30	154	eP	31	12.90	1.2
CNB		50.45	154	iPc	31	14.40	1.5
DZM		51.61	128	iPc	31	22.00	0.0
KSH		52.52	313	eP	31	28.00	-0.7
				eS	38	47.00	
MAIO		64.45	306	iPc	32	51.40	-0.4
				eS	41	42.00	
BHD		76.78	302	ePc	34	06.50	0.3
MSL		77.63	305	ePd	34	10.50	-0.4
KEV		83.64	340	eP	34	33.00	-9.1X
		1.0s		34.00nm			5.3mb
SOD		84.23	337	iP	34	45.30	0.2
PRNI		85.02	300	eP	34	51.00	1.2
MBH		85.20	299	eP	34	52.00	1.3
INK		85.29	21	eP	34	50.50	0.2
SUF		85.38	333	eP	34	50.40	-0.5
		0.6s		17.20nm			5.4mb
MBC		86.53	12	eP	34	53.00	-3.4X
		1.0s		14.00nm			5.1mb
NUR		86.57	331	eP	34	56.50	-0.3
NAI		88.28	268	iPd	35	10.50	4.2X
		1.0s		9.00nm			5.0mb
VRI		88.68	316	ePd	35	08.50	1.2
MLR		89.30	316	eP	35	13.50	3.1X
DAG		91.10	352	iPc	35	17.20	-0.8
		0.7s		7.53nm			5.2mb
HFS		91.86	332	eP	35	20.20	-1.6
		0.7s		3.10nm			4.8mb
	Z	17s		0.00um			1.6MszX
				LR	14	08.00	
KRA		92.00	321	eP	35	22.40	-0.2
N82		92.60	333	P	35	24.20	-1.1
		0.7s		4.00nm			5.0mb
VAY		92.71	313	eP	35	11.00	-15.1X
PRU		95.30	323	eP	35	38.00	0.2
KHC		96.20	322	iP	35	43.30	1.3
DOU		101.02	325	Pdiff	36	04.80	1.2
LKO		127.08	290	PKP	41	20.80	1.5
		0.9s		11.00nm			
KIC		127.29	286	PKP	41	19.40	-0.3
TIC		127.47	286	PKP	41	19.80	-0.2
LIC		127.60	286	PKP	41	20.10	-0.1
LPB		165.71	120	ePKP	42	18.00	-1.4
ZOBO		165.80	119	PKP	42	20.80	1.2
		1.0s		8.25nm			
	Z	24s		0.08um			
				LR	40	04.00	

S.D. = 1.0 on 75 of 85 obs.

FEB 09, 1990 02h 01m 12.12± 1.09s
9.651 N ± 7.7km 124.489 E ±10.1km
DEPTH = 63.0 ± 11.8 km
4.6mb (6 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV		2.76	157	eP	01	55.10	0.1
BAG		7.72	331	eP	03	04.00	-0.5
QIZ		16.96	305	eP	05	06.80	-0.1
SSE		21.56	352	P	05	58.50	0.4
WHN		22.84	337	eP	06	11.50	0.8
NJ2		22.89	348	Pc	06	12.00	0.7
LOE		23.41	292	eP	06	16.50	0.0
GYA		23.75	317	P	06	22.00	2.2
CHG		26.35	293	eP	06	44.00	-0.3
CHTO		26.35	293	eP	06	43.20	-1.1
		1.2s		5.90nm			4.0mb
TIA		27.27	347	eP	06	51.70	-0.8
XAN		28.17	332	P	07	00.20	-0.5
CD2		28.63	321	P	07	05.10	0.2
BJI		31.15	348	eP	07	26.50	-0.6
		1.0s		12.00nm			4.6mb
SNY		32.06	359	eP	07	34.00	-1.0
HHC		33.11	342	eP	07	45.00	0.6
ASPA		34.37	165	eP	07	55.30	0.0
		0.6s		4.00nm			4.5mb
	Z	18s		0.14um			3.7Msz
				LR	26	54.10	
MDJ		35.11	6	eP	08	00.70	-0.7
GTA		36.92	327	Pd	08	17.60	0.7
SOD		84.18	337	eP	13	47.00	9.5X
SUF		85.30	333	eP	13	42.80	-0.4
		0.7s		5.10nm			4.7mb
INK		85.50	21	eP	13	44.50	0.4
MBC		86.69	12	eP	13	50.50	0.7
		1.0s		6.00nm			4.7mb
SLL		91.82	332	eP	14	13.10	-1.1
		1.4s		33.90nm			5.6mb

S.D. = 0.8 on 23 of 24 obs.

FEB 09, 1990 02h 41m 11.59± 0.44s
39.445 N ± 5.2km 23.915 E ± 4.6km
DEPTH = 18.2 ± 5.6 km
AEGEAN SEA (365)
ML 3.3 (ATH).

NEO		0.55	256	iPnd	41	23.00	0.5
PLG		1.00	339	iPnc	41	30.30	0.3
ATH		1.48	186	ePn	41	36.50	-0.8
PRK		1.84	95	ePb	41	45.10	2.5
KZN		1.86	298	iPnd	41	43.10	0.1
EZN		1.90	78	ePn	41	43.40	0.0
RDO		2.10	36	ePn	41	45.00	-1.4
VAY		2.14	332	iPn	41	48.00	1.1
MMB		2.15	356	iPd	41	46.00	-1.1
RZN		2.32	15	iPc	41	50.00	0.3
KDZ		2.48	27	iPc	41	40.00	-11.8X
				iSg	42	32.00	
KKB		2.50	346	iP	41	52.00	-0.1
APE		2.69	151	ePn	41	52.60	-2.3
PLD		2.72	12	iP	42	05.00	9.8X
ITM		2.75	215	ePn	41	55.50	-0.1
IZM		2.81	111	ePn	41	57.00	0.4
VLI		2.83	196	ePn	41	58.00	1.3
DIM		2.88	25	iP	41	57.00	-0.4
VLS		2.89	245	ePn	41	58.00	0.4
OHR		2.91	306	iPn	41	58.50	0.6
MFT		2.91	61	iPn	41	56.40	-1.5
SKO		3.15	324	ePn	42	02.00	0.7
EDC		3.17	72	ePn	42	05.50	3.9X
VTS		3.19	351	iP	42	03.00	1.0
KEK		3.19	276	ePb	42	05.00	3.1X
BNT		3.21	72	ePn	42	04.90	2.7
DST		3.65	86	ePn	42	13.00	4.5X
DMK		3.77	50	eP	42	23.00	13.0X
PVL		3.92	15	iPd	42	10.00	-2.1
YLV		4.34	73	ePn	42	22.00	3.8X
LCI		4.67	283	Pc	42	20.80	-2.1
TDS		5.86	274	P	42	41.00	1.3
MLR		6.23	13	eP	42	45.50	0.6
MGR		6.48	279	Pc	42	48.10	-0.3
SGO		6.70	282	P	42	51.00	-0.5
VRI		6.75	17	eP	42	52.00	-0.1

S.D. = 1.3 on 29 of 36 obs.

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* FEB 09, 1990 02h 42m 08.33± 1.30s
66.245 N ±13.1km 149.560 W ± 7.8km
DEPTH = 33.0km (normal)
ALASKA (676)

FBA		1.54	151	eP	42	33.94	0.2
				eS	42	51.73	
RDS		1.54	157	eP	42	33.96	0.1
				S	42	52.93	
GLM		1.55	143	iP	42	34.31	0.3
IMA		1.68	266	eP	42	36.00	0.0
NEA		1.69	173	eP	42	37.07	1.2
				S	42	57.88	
CCB		1.76	155	eP	42	36.98	0.0
WRH		1.89	160	eP	42	39.14	0.4
HDA		2.15	148	eP	42	42.08	-0.4
MCK		2.54	174	eP	42	47.83	-0.3
RND		2.87	174	eP	42	51.72	-1.1
DDM		2.92	146	eP	42	53.28	-0.3
DWY		4.81	113	P	43	20.20	0.0
INK		6.54	64	eP	43	22.00	-22.7X

S.D. = 0.6 on 12 of 13 obs.

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* FEB 09, 1990 03h 53m 19.49± 0.60s
18.863 N ± 8.4km 145.777 E ±14.6km
DEPTH = 33.0km (normal)
4.8mb (5 obs.)
MARIANA ISLANDS (216)

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SSE     25.34 303 P      58 49.50   4.5X
OIS     39.64 189 eP     00 49.60  -0.5
WB5     40.10 197 eP     00 53.90   0.1
WRA     40.16 197 Pc     00 54.10  -0.3
        0.5s      7.70nm          4.7mb
ASPA    43.83 196 eP     01 24.90   0.5
        0.5s      9.00nm          4.8mb
CHTO    44.22 278 e(P)   01 26.50  -1.1
        0.8s      0.55nm          3.4mb X
MBL     47.20 214 eP     01 51.00  -0.1
WARB    48.48 203 eP     02 01.40   0.2
        0.4s      8.00nm          5.1mb
GUN     55.25 291 P      02 54.00   1.5
PKI     55.70 291 PKP    02 56.20   0.5
KKN     55.79 291 P      02 56.40   0.1
GKN     56.34 292 P      03 00.60   0.5
INK     69.19  23 eP     04 25.00   0.4
SOO     83.23 340 eP     05 43.00  -0.6
SUF     86.01 336 eP     05 55.80  -1.9
        0.5s      3.30nm          4.8mb
FFC     86.92  33 eP     06 03.00   0.8
        0.8s      6.00nm          4.9mb
NUR     87.88 335 eP     06 12.00   5.3X
     S.D. = 0.9  on  15 of  17 obs.
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*  FEB 09, 1990  03h 57m 04.66± 0.86s
   33.957 N ± 8.3km  138.813 E ±14.4km
   DEPTH =  33.0km  (normal)
   4.2mb (  1 obs.)
 SOUTH OF HONSHU, JAPAN            (211)

CHJJ     2.09   4 P      57 39.00   0.9
KAKJ     2.50  26 eP     57 43.00  -0.9
MTMJ     2.75 343 P      57 47.80   0.3
TSRJ     2.81 305 eP     57 47.70  -0.6
NIIJ     3.28   3 P      57 50.80  -4.1X
WB5     53.70 185 eP     06 25.60   0.0
WRA     53.77 185 Pc     06 26.30   0.2
        0.8s      2.30nm          4.2mb
     S.D. = 0.9  on   6 of   7 obs.
-------------------------------------
   FEB 09, 1990  04h 04m 34.52± 0.33s
   26.066 N ± 5.1km   98.900 E ± 4.6km
   DEPTH =  10.0km  (geophysicist)
   4.7mb ( 16 obs.)
 BURMA-CHINA BORDER REGION         (297)

KMI      3.59 104 Pnc     05 33.50   1.9
                  Pgc     05 41.00
                  Sg      06 26.00
SHL      6.34 267 iP      06 09.50  -1.1
                  eS      07 32.50
CD2      6.45  40 Pn      06 12.40   0.5
GYA      6.98  85 iPnc    06 19.00  -0.5
                  Sn      07 36.00
CHG      7.22 180 iPn     06 23.10   0.4
CHTO     7.22 180 ePn     06 21.10  -1.6
                  ePg     06 49.30
LSA      7.75 300 Pn      06 30.60   0.0
BDT      8.78 179 eP      06 44.80   0.4
        0.9s     90.80nm          6.1mb X
LOE      9.01 162 ePg     07 16.60  29.0X
                  eSg     09 21.50
LZH     10.85  22 eP      07 13.50   0.5
        1.0s     23.00nm          5.5mb
GUN     11.76 282 P      07 22.80  -2.9
XAN     11.76  45 P      07 21.60  -3.8X
     N  12s      2.10um
PKI     12.14 280 P      07 27.20  -3.6X
KKN     12.27 281 P      07 28.00  -4.5X
DMN     12.41 280 P      07 28.20  -6.2X
GKN     12.86 282 P      07 35.80  -4.5X
GTA     13.33   3 eP     07 46.60   0.2
     Z  12s      0.60um
     E  12s      1.30um
WHN     14.32  68 eP     07 55.50  -3.8X
                  pP      08 05.50
TIY     16.32  41 eP     08 21.00  -4.3X
     Z  14s      1.07um
     E  12s      0.80um
BTO     17.19  30 eP     08 35.00  -1.4
     N  10s      0.90um
HHC     18.11  32 eP     08 46.50  -1.3
TIA     18.56  53 Pc     08 52.50  -0.9
NDI     19.43 283 iPc    09 03.50  -0.5
                  eS      12 43.00
WMQ     19.92 336 P      09 09.50   0.2

                  eS      12 46.50
BJI     20.05  42 eP     09 09.50  -1.0
        1.5s     52.00nm          4.6mb
SSE     20.19  70 P      09 13.50   1.4
HYB     20.75 250 eP     09 18.00   0.0
KSH     23.37 311 eP     09 47.50   3.3X
GBA     23.65 242 Pd     09 47.20   0.3
        6.1s      4.10nm          3.2mb X
SNY     25.69  46 eP     10 05.20  -1.0
     N  20s      0.90um
     E  23s      0.60um
CN2     27.87  44 eP     10 30.50   4.2X
     Z  15s      0.50um          4.2MszX
MAID    35.01 297 eP     11 31.00   1.6
WRA     57.23 140 Pd     14 23.40  -1.2
        0.9s      7.20nm          4.7mb
SUF     59.29 329 iP     14 39.30   0.9
        0.8s     17.00nm          5.2mb
SOD     59.41 335 iP     14 39.30   0.1
VRI     59.67 310 ePc    14 42.00   0.7
NUR     59.96 327 eP     14 44.00   0.9
MLR     60.26 309 ePc    14 46.00   0.5
UPP     63.50 326 iP     15 08.00   1.2
HFS     65.42 327 eP     15 17.80  -1.5
        0.8s      8.40nm          5.0mb
NB2     66.46 328 P      15 25.80  -0.2
        0.8s      7.10nm          4.9mb
LPG     73.33 313 eP     16 09.90   1.3
        0.8s      5.35nm          4.7mb
LPL     73.33 313 eP     16 09.80   1.3
        0.8s      4.05nm          4.5mb
LOR     74.56 315 eP     16 16.40   1.0
        0.6s      2.70nm          4.5mb
LBF     74.59 315 eP     16 16.50   0.9
        1.0s      8.00nm          4.7mb
SMF     74.81 315 eP     16 17.60   0.8
        0.6s      4.50nm          4.7mb
SSF     74.86 315 eP     16 18.30   1.2
        0.8s      5.35nm          4.6mb
AVF     75.06 315 eP     16 19.30   1.1
        0.6s      3.85nm          4.6mb
MBC     75.21   9 eP     16 17.50  -1.1
        0.7s      3.00nm          4.4mb
TCF     75.98 315 eP     16 22.00  -1.5
        1.0s      8.00nm          4.8mb
LSF     76.43 315 eP     16 25.30  -0.7
        1.1s     12.20nm          4.9mb
INK     78.36  18 eP     16 35.00  -1.2
     S.D. = 1.1  on  42 of  52 obs.
-------------------------------------
?  FEB 09, 1990  04h 22m 20.48± 4.36s
   31.172 S ±20.9km   68.567 W ±33.3km
   DEPTH =  85.5 ± 45.7 km
 SAN JUAN PROVINCE, ARGENTINA      (137)

RTLL     0.18 152 iPc    22 33.00  -0.3
RTCB     0.37 212 e(P)   22 34.40   0.3
CFA      0.52 147 iPd    22 35.50   0.4
RTCV     0.69 178 ePc    22 36.40  -0.3
RTRS     1.26 322 iPd    22 43.30   0.0
     S.D. = 0.7  on   5 of   5 obs.
-------------------------------------
*  FEB 09, 1990  04h 41m 34.42± 0.54s
   27.127 N ±10.4km   44.462 W ±11.5km
   DEPTH =  10.0km  (geophysicist)
   4.7mb ( 10 obs.)  4.1Msz (  2 obs.)
 NORTH ATLANTIC RIDGE              (403)

FRB     39.82 344 eP     49 09.00  -0.1
RSON    43.98 316 P      49 42.60  -0.8
        0.6s      3.77nm          4.4mb
TUL     44.20 295 eP     49 46.20   0.8
        1.2s     13.60nm          4.7mb
     Z  20s      0.50um          4.4Msz
                  LR      02 00.00
ZOBO    48.87 211 P      50 22.00  -1.0
        1.2s     10.81nm          4.8mb
     Z  20s      0.12um          3.9Msz
                  LR      06 40.00
LPB     49.09 211 P      50 25.00   0.5
FFC     49.68 320 iPc    50 28.30   0.1
        0.8s      8.00nm          4.8mb
ANMO    52.96 295 P      50 54.10   0.5
        1.5s     15.63nm          4.7mb
BW06    54.32 305 P      51 02.70  -0.8
        1.2s      8.90nm          4.7mb
DAU     55.87 302 P      51 15.00   0.1

EDM     56.26 318 eP     51 17.00  -0.2
MSU     56.88 300 P      51 23.00   0.9
MBC     60.27 345 eP     51 45.50   0.6
        1.0s      7.00nm          4.7mb
KVN     61.31 302 eP     51 52.70   0.0
BCAO    64.01  99 iPc    52 10.20  -0.6
        0.5s      4.00nm          4.9mb
INK     64.76 336 eP     52 13.00  -1.8
FBA     71.18 334 P      52 54.70  -0.3
        1.0s      8.75nm          4.8mb
IMA     72.88 336 P      53 06.60   1.3
        1.2s      6.63nm          4.6mb
LWI     76.18 100 iPd    53 26.20   1.0
     S.D. = 0.9  on  18 of  18 obs.
-------------------------------------
%  FEB 09, 1990  04h 58m 13.27± 2.64s
   44.177 N ± 9.7km   10.008 E ±26.1km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                    (545)

PGF      1.79 205 Pn      58 45.10   0.6
                  Sn      59 03.30
SBF      1.88 261 Pn      58 45.10  -0.7
                  Sn      59 03.30
FRF      2.51 257 Pn      58 53.50  -1.2
                  Sn      59 18.20
LPG      2.67 301 Pn      58 59.00   1.7
LPL      2.69 301 Pn      58 59.10   1.5
BSF      4.29 330 Pn      59 19.50  -0.6
HAU      4.60 328 Pn      59 23.50  -0.9
BGF      5.58 298 Pn      59 38.00  -0.3
     S.D. = 1.3  on   8 of   8 obs.
-------------------------------------
   FEB 09, 1990  06h 16m 02.44± 0.39s
   45.148 N ± 3.1km    7.074 E ± 4.0km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                    (545)
     ML 2.5 (LDG), 2.3 (GEN).

RSP      0.13  88 P       16 05.73   0.0
                  S       16 07.79
BNI      0.30 252 P       16 09.10   0.4
                  eSg     16 13.10
RRL      0.31 222 P       16 09.22   0.3
                  S       16 13.76
LSD      0.32  10 P       16 09.02  -0.1
                  S       16 13.22
LPG      0.42 327 Pg      16 11.10   0.0
                  Sg      16 16.70
LPL      0.44 327 Pg      16 11.40  -0.1
                  Sg      16 16.70
PZZ      0.64 178 P       16 15.07  -0.4
                  S       16 25.22
DOI      0.66 169 P       16 15.50  -0.1
ORO      0.80  53 P       16 18.00   0.0
                  eSg     16 27.50
ORX      0.80  53 P       16 17.76  -0.3
                  S       16 27.92
STV      0.92 169 P       16 19.48  -0.6
                  S       16 33.45
ENR      0.95 165 P       16 19.99  -0.7
                  S       16 34.38
CKI      1.12 130 P       16 25.00   1.5
SBF      1.31 169 Pg      16 33.10   6.4X
                  Sg      16 54.00
FRF      1.62 191 Pg      16 34.80   3.7X
                  Sg      16 58.00
     S.D. = 0.6  on  13 of  15 obs.
-------------------------------------
   FEB 09, 1990  09h 16m 40.85± 0.43s
   44.348 N ± 3.1km    7.281 E ± 4.4km
   DEPTH =  14.0 ±  4.3 km
 NORTHERN ITALY                    (545)
     ML 2.4 (GEN).

STV      0.11 163 P       16 44.53   0.2
                  S       16 46.79
ENR      0.16 140 P       16 45.05   0.1
                  S       16 47.71
DOI      0.16 351 P       16 45.60   0.6
                  eSg     16 48.70
PZZ      0.20 321 P       16 46.17   0.4
                  S       16 49.56
TOUF     0.34 184 Pg      16 48.06   0.0
AUTN     0.37 163 Pg      16 48.71  -0.1
                  Sg      16 53.69
FOUF     0.40 297 ePgc    16 49.24   0.1
```

09d 09h

			e(Sg)	16	52.22		JAU	6.63	342	P	33	27.16	-0.1	PZI	9.97	85	P	34	13.90	0.2
SAOF	0.41	151	Pg	16	49.34	-0.1	BTH	6.67	343	iPd	33	28.00	0.3	PGD	10.00	42	P	34	13.50	-0.7
			Sg	16	54.86					i	33	32.50		DIX	10.01	20	ePc	34	15.90	1.6
ROB	0.43	97	P	16	50.07	0.4				S	34	41.60		MFF	10.01	350	Pn	34	13.00	-1.2
			S	16	55.92		ESCF	6.72	341	P	33	28.31	-0.1				Sn	35	57.60	
MVIF	0.46	192	Pg	16	50.01	-0.3	ISSF	6.73	339	P	33	28.87	0.2	AVF	10.03	3	Pn	34	14.00	-0.4
			Sg	16	56.79		ATE	6.76	340	P	33	28.92	-0.1	ASS	10.03	48	P	34	12.50	-2.0
AURF	0.46	176	Pg	16	50.23	-0.1	OGE	6.78	341	P	33	29.35	0.1	SDI	10.08	57	P	34	12.90	-2.3
IMI	0.62	135	P	16	52.84	-0.1	MADF	6.85	339	P	33	30.69	0.5	AQU	10.11	53	P	34	15.50	0.0
			S	17	01.15		BOH	6.86	338	P	33	30.82	0.3	MMK	10.14	22	ePc	34	17.60	1.4
RRL	0.67	328	P	16	54.38	0.4	ELYF	6.92	338	P	33	31.34	0.1	VAI	10.24	26	P	34	17.40	0.2
			S	17	04.02		GELF	6.98	18	P	33	31.71	-0.3	LBF	10.26	6	Pn	34	17.50	-0.2
FIN	0.68	101	P	16	53.97	0.0	BERF	6.98	20	P	33	31.54	-0.6	SSF	10.31	4	Pn	34	18.20	0.0
			S	17	02.99		ECRI	6.98	328	ePn	33	33.00	0.9	ATN	10.42	78	P	34	22.00	2.2
RSP	0.80	359	P	16	53.97	-2.2	PUYF	7.19	19	P	33	34.54	-0.4	ATN	10.42	78	P	34	18.00	-1.8
			S	17	03.20		TREF	7.19	17	P	33	35.57	0.5	STS	10.44	309	ePn	34	19.00	-1.1
PCP	0.93	77	P	16	58.58	0.4	LMR	7.24	24	Pn	33	35.00	-0.7	ARV	10.45	47	Pc	34	20.50	0.3
			S	17	11.53					Sn	34	50.50		TMA	10.48	25	ePc	34	20.30	-0.5
LSD	1.11	355	P	17	02.17	0.6	LRG	7.30	23	Pn	33	36.20	-0.4	DUI	10.50	59	P	34	20.00	-0.9
S.D. = 0.7			on	17	of 17 obs.					Sn	34	52.80		MDI	10.51	29	P	34	20.00	-0.9
							PRAF	7.32	15	P	33	36.62	-0.2	LOR	10.54	5	Pn	34	21.00	-0.4
FEB 09, 1990 09h 31m 47.63± 0.16s							TAVF	7.36	21	P	33	36.92	-0.5	SGO	10.72	65	P	34	23.50	-0.4
36.775 N ± 2.0km 2.477 E ± 1.8km							EPLA	7.48	299	ePn	33	38.00	-1.1	MGR	10.79	68	Pc	34	21.90	-3.0X
DEPTH = 12.4km (27 depth phases)										eSn	34	59.50		SOI	10.88	79	P	34	27.00	1.0
5.0mb (44 obs.) 4.4Msz (2 obs.)							VILF	7.49	18	P	33	39.32	0.1	VDL	11.02	26	ePc	34	28.20	0.1
ALGERIA (396)							FRF	7.49	24	Pn	33	38.50	-0.7	LOMF	11.05	16	P	34	27.80	-0.6
mbLg 4.9 (MDD). Felt in the										Sn	34	57.70		LLS	11.19	24	ePc	34	32.30	1.8
Algiers area. Also felt (III) at							PGF	7.65	39	Pn	33	39.50	-2.1	TDS	11.28	71	P	34	33.90	2.4
Santa Pola, Spain.										Sn	35	00.60		TDS	11.28	71	P	34	29.00	-2.5
CENTROID, MOMENT TENSOR (HRV)							CALN	7.74	24	P	33	42.08	-0.8	B8S	11.31	18	P	34	30.96	-1.0
Data Used: GDSN							MVIF	7.96	25	P	33	44.42	-1.5	OSS	11.43	28	ePc	34	34.60	0.8
L.P.B.: 12S, 27C							LPO	7.96	353	Pn	33	44.80	-1.0	BSF	11.50	15	P	34	33.72	-0.9
Centroid Location:							AURF	8.01	26	P	33	45.22	-1.4	CTI	11.54	34	P	34	34.90	-0.2
Origin Time 09:31:53.9 0.8							SBF	8.03	27	P	33	45.11	-1.7	LPF	11.54	348	Pn	34	34.40	-0.7
Lat 36.26N 0.17 Lon 2.83E 0.19							TOUF	8.09	25	P	33	46.85	-1.0	ZLA	11.56	20	ePc	34	34.90	-0.5
Dep 15.0 FIX Half-duration 1.5							AUTN	8.14	26	P	33	47.11	-1.4	HAU	11.58	13	Pn	34	34.20	-1.4
Moment Tensor; Scale 10**16 Nm							CAF	8.15	358	Pn	33	47.60	-0.9	MOF	11.59	16	P	34	34.51	-1.3
Mrr= 4.02 0.50 Mtt=-2.19 0.98							SAOF	8.18	27	P	33	47.48	-1.4	SAX	11.64	24	ePc	34	39.00	2.3
Mff=-1.83 0.76 Mrt=-4.62 1.44							IMI	8.24	28	P	33	47.40	-2.3	VITF	11.72	12	P	34	36.96	-0.5
Mrf=-4.76 1.29 Mtf=-3.62 0.42							LFF	8.26	351	Pn	33	49.00	-1.0	FEL	11.82	18	P	34	37.85	-1.1
Principal Axes:							STV	8.32	25	P	33	50.27	-0.7	SLE	11.85	20	ePc	34	38.20	-1.0
T Val= 7.40 Plg=63 Azm=132							ENR	8.34	25	P	33	50.58	-0.6	GRR	11.86	349	Pn	34	38.00	-1.4
N 1.60 1 225							FOUF	8.41	22	e(Pn)c	33	52.69	0.7	OGA	11.92	30	eP	34	42.00	1.6
P -9.00 27 316										e(Sn)	35	18.08		ECH	11.94	15	P	34	38.83	-1.7
Best Double Couple:Mo=8.2*10**16							L8L	8.47	4	P	33	53.03	0.2	LDF	11.96	352	Pn	34	40.00	-0.8
NP1:Strike= 49 Dip=18 Slip= 95							PZZ	8.48	23	P	33	53.45	0.2	CDF	12.15	15	P	34	42.19	-1.2
NP2: 225 72 88							DOI	8.53	24	P	33	53.40	-0.4	WLS	12.17	16	P	34	42.23	-1.4
										eSn	35	23.50		FLN	12.18	351	Pn	34	42.50	-1.1
ACU	2.87	308	iPnd	32	33.80	-0.2	RJF	8.55	355	Pn	33	53.20	-0.8	BRT	12.19	66	P	34	44.00	0.1
			eSn	33	05.50		ROB	8.56	27	P	33	53.35	-0.8	FVI	12.46	35	P	34	47.70	0.3
ESEL	3.01	6	iPnd	32	35.90	0.1	FIN	8.61	29	P	33	52.63	-2.3	LCI	12.63	69	P	34	51.50	1.8
EALH	3.29	290	ePn	32	39.70	-0.2	MAO	8.75	47	P	33	55.00	-1.8	KBA	13.08	35	iPd	34	56.00	0.1
			eSn	33	17.00		RRL	8.77	20	P	33	57.97	0.8		0.8s		19.20nm			5.3mb
ENIJ	3.77	274	ePn	32	46.20	-0.6	CKI	8.82	28	P	33	55.60	-2.2				i	35	01.50	
			eSn	33	28.50					eSn	35	32.00					i	35	09.10	
ECHE	3.91	317	ePn	32	48.80	0.1	BNI	8.86	20	P	33	59.60	1.2				e	37	14.00	
			eSn	33	32.00					eSn	35	33.90					i	37	22.30	
EBR	4.33	340	iPnc	32	54.00	-0.6	MCT	8.94	81	P	34	05.00	5.4X	WLF	13.16	11	eP	35	15.00	18.3X
			i	32	58.00		FAI	8.97	83	P	34	00.00	0.2	RUP	13.34	13	ePn	34	57.56	-1.6
			iSg	33	53.00		PYM	8.98	2	P	34	00.26	0.3	DOU	13.40	6	iP	35	01.50	1.6
EROQ	4.35	339	ePn	32	54.80	-0.2	PCP	9.02	29	P	33	57.97	-2.6		0.4s		24.30nm			5.6mb
			eSn	33	43.00		RSP	9.11	22	P	34	02.89	1.0	Z	13s		2.70um			5.5Msz
EVIA	4.37	297	iPnd	32	54.50	-0.8	PLDF	9.23	5	P	34	02.69	-0.7				e	35	12.90	
			eSn	33	44.00		PII	9.27	39	P	34	02.30	-1.6				S	37	25.10	
EMEL	4.64	253	ePn	33	00.00	0.9	GIB	9.27	79	P	34	03.00	-1.1	ABH	13.61	14	ePn	35	01.73	-0.9
			eSn	33	50.00		AGO	9.28	3	P	34	04.99	0.9	SNF	13.79	5	P	35	06.70	1.6
AFC	4.84	277	ePn	33	02.70	0.6	LPG	9.29	19	Pn	34	06.00	1.5	MEM	14.06	9	P	35	10.30	1.8
E8AN	5.17	287	iPnd	33	05.50	-1.1	ERUA	9.30	310	ePn	34	03.60	-0.8	UCC	14.08	5	eP	35	27.00	18.1X
			eSn	34	02.50					eSn	35	41.80		TNS	14.12	16	eP	35	09.40	0.0
ETOR	5.37	320	ePn	33	10.30	0.8	LPL	9.30	19	Pn	34	06.20	1.6	SDA	14.16	63	eP	35	10.30	0.4
			eSn	34	09.00		LSD	9.36	21	P	34	06.89	1.4	ENN	14.21	9	iPnc	35	12.50	2.0
ETER	5.53	3	ePn	33	11.50	-0.1	MAF	9.44	0	Pn	34	06.40	0.1		0.5s		42.00nm			5.4mb
			eSn	34	11.50		MTH	9.47	286	P	34	05.00	-1.8				e	35	25.00	
TOL	5.99	303	iPnc	33	17.50	-0.7	LSF	9.49	356	Pn	34	05.90	-1.1				e	35	35.00	
			eSn	34	26.50		TCF	9.51	359	Pn	34	06.70	-0.5	LACI	14.21	65	eP	35	03.60	-7.0X
			eSg	34	54.00		8DI	9.55	38	Pc	34	06.80	-1.1	TIR	14.26	66	eP	35	13.20	1.9
EHOR	6.24	282	ePn	33	20.30	-1.4	BOB	9.57	31	Pc	34	08.20	0.0	PHP	14.76	65	iPc	35	17.60	-0.1
			eSn	34	30.00					eSn	35	50.10		KHC	14.76	30	iPd	35	19.00	1.2
MLS	6.27	351	P	33	22.30	0.2	MNS	9.66	51	P	34	07.50	-1.9		1.0s		17.50nm			4.5mb
			S	34	32.20		MME	9.70	38	P	34	09.00	-1.1	Z	11s		3.20um			
EJIF	6.40	269	ePn	33	26.00	2.1	ORO	9.76	23	P	34	11.40	0.6	N	11s		1.00um			
			eSn	34	35.30		ORX	9.77	23	P	34	10.27	-0.7	E	11s		2.20um			
EPF	6.46	346	Pn	33	24.60	-0.2	BGF	9.78	2	Pn	34	11.00	0.0	OHR	14.90	68	iPd	35	20.80	1.1
			Sn	34	34.60		MNO	9.80	80	P	34	11.00	-0.5		1.8s		200.00nm			5.3mb
GUD	6.46	309	iPnc	33	24.70	-0.3	EMS	9.87	18	ePc	34	13.20	0.8				iPP	35	44.80	
			eSn	34	35.00		SMF	9.92	5	Pn	34	12.60	-0.2	SOP	15.06	39	eP	35	24.60	2.9
LHE	6.58	340	P	33	26.53	0.0	AZI	9.95	55	P	34	12.00	-1.3	VKA	15.33	37	eP	35	27.00	1.7

09d 09h

MOX		15.34	22	eP	35	28.00	2.6	SUF		29.79	22	eP	37	55.90	-0.1	BLF		69.22	158	iPc	42	56.00	-0.3
		1.4s	80.00nm			4.9mb				0.4s	4.00nm			4.6mb				1.0s	40.00nm			5.5mb	
	N	13s	2.50um					KOGH		30.65	185	eP	38	04.00	0.0	GBA		70.01	88	Pd	43	00.70	-0.6
	E	13s	3.40um									e	45	52.00				0.6s	4.30nm			4.8mb	
KZN		15.50	71	eP	35	28.00	0.4	TIC		30.76	195	Pc	38	03.28	-1.7	INK		70.21	344	eP	43	01.00	-0.7
WTS		15.53	10	ePn	35	31.50	3.8X			0.8s	6.00nm			4.5mb		HVD		70.42	159	iPc	42	57.00	-6.6X
		0.6s	13.00nm			4.4mb		SHGH		30.79	185	eP	38	05.00	-0.2	PWLA		70.49	299	P	43	03.00	-1.0
				e	35	36.00						e	45	50.00						pP	43	06.60	12km
				e	35	39.00		KIC		30.98	194	Pc	38	05.32	-1.6	FVM		70.54	303	P	43	03.10	-1.2
				e	35	42.00				0.9s	14.50nm			4.9mb						pP	43	06.90	12km
SKO		15.55	65	eP	35	28.00	-0.1	LEGH		31.07	185	eP	38	07.00	-0.7	8AO		70.56	232	eP	43	05.50	0.7
	Z	13s	2056.00um									e	45	51.00		8RW		71.21	353	eP	43	08.50	0.8
	N	12s	863.00um					WEGH		31.14	185	eP	38	08.00	-0.3	KOD		71.95	91	eP	43	13.20	-0.3
	E	13s	2060.00um									e	45	54.00		OLY		72.57	301	P	43	15.50	-1.0
				iPP	35	45.00		LIC		31.17	195	Pc	38	06.96	-1.6					pP	43	19.90	14km
				iS	38	32.00				0.6s	7.50nm			4.7mb		GTA		72.69	54	P	43	17.40	0.1
				iSS	38	55.00		WIGH		31.39	186	eP	38	09.00	-1.5	EDM		74.58	326	iPc	43	28.00	0.1
				i	39	07.00						e	45	54.00		TUL		75.27	304	ePd	43	31.90	-0.2
				LR	42	21.00		SOD		33.58	17	iP	38	27.30	-1.8			1.3s	48.00nm			5.4mb	
ITM		15.55	83	eP	35	28.00	-0.2	BHD		34.30	83	ePd	38	38.00	2.2		Z	21s	0.26um			4.5Msz	
ZST		15.67	39	iP	35	35.10	5.4X	BCAO		35.40	152	iPc	38	46.10	0.7					LR	07	00.00	
BEO		15.79	54	e(P)	35	32.50	1.3			0.7s	18.00nm			5.1mb		SES		75.35	323	ePc	43	32.00	-0.4
PRU		15.83	30	eP	35	32.00	0.4					id	41	16.50		RSSD		75.57	315	P	43	34.00	0.0
	Z	10s	1.50um					KEV		35.60	14	iP	38	47.00	0.5					pP	43	38.00	13km
	N	11s	3.30um							1.1s	60.00nm			5.4mb		SIO		75.70	304	eP	43	34.00	-0.6
	E	12s	2.00um					DAG		41.20	353	iPc	39	32.50	-0.6	IMA		75.84	350	eP	43	36.70	1.7
				e	35	35.70				0.8s	8.96nm			4.5mb				0.8s	12.90nm			5.0mb	
SRO		16.06	42	eP	35	36.20	1.6	AAE		42.93	121	eP	39	50.30	2.0	FBA		76.01	347	P	43	37.00	1.2
VAY		16.25	68	iP	35	36.70	-0.4	MAIO		45.22	73	eP	40	05.00	-1.4			0.7s	4.36nm			4.6mb	
BRG		16.31	27	eP	35	39.30	1.5	LWI		45.89	142	iPc	40	12.70	0.7	LZH		77.21	55	eP	43	43.50	0.2
CLL		16.36	24	ePc	35	41.00	2.6	SCH		49.41	315	eP	40	38.00	-0.9			1.5s	23.00nm			5.0mb	
		1.2s	51.00nm			4.5mb		FR8		49.46	326	eP	40	41.00	2.0	BTO		78.34	48	eP	43	49.80	0.5
VLI		16.40	84	eP	35	40.00	0.9	CBM		51.91	305	P	40	57.50	-0.5	GLD		78.96	312	P	43	53.90	1.0
NEO		16.54	75	eP	35	41.00	0.2					pP	41	01.00	12km	LRM		79.08	320	eP	43	54.70	1.2
ECP		16.62	341	iPc	35	42.40	0.7	H8VT		56.00	303	P	41	28.30	0.2	GOL		79.08	312	P	43	53.40	-0.2
		0.6s	67.00nm			4.9mb						pP	41	31.50	10km			0.7s	17.29nm			5.2mb	
KK8		16.73	66	eP	35	43.00	-0.2	WNY		56.53	303	P	41	30.50	-1.4					pP	43	57.30	12km
PLG		16.78	71	eP	35	43.00	-0.9					pP	41	34.50	13km	TTA		79.15	350	P	43	54.80	1.5
BZS		16.87	52	eP	35	45.00	0.1	CAI		56.82	229	eP	41	35.40	1.1			1.2s	26.52nm			5.1mb	
ECB		16.90	340	iPc	35	46.50	1.2	RSNY		56.92	304	P	41	34.40	-0.3					pP	43	58.40	11km
		0.6s	63.00nm			4.9mb				0.7s	12.69nm			5.1mb		BW06		79.54	316	P	43	55.80	-0.2
VTS		16.97	64	ePc	35	47.00	0.6					pP	41	38.20	12km			1.4s	21.70nm			5.0mb	
PSZ		16.98	44	iP	35	48.90	2.5	T8R		57.98	300	P	41	40.80	-1.4	PNT		80.12	326	ePd	44	00.00	1.3
KSP		17.20	31	eP	35	50.00	1.0	KRI		59.15	149	iPc	41	49.70	-1.0			0.8s	32.00nm			5.4mb	
				i	36	03.00		MBC		61.49	347	eP	42	06.50	0.6	CD2		80.23	59	P	44	00.40	0.7
				e	37	12.00				0.9s	5.00nm			4.7mb		DPW		80.51	324	P	44	01.20	0.3
DLE		17.67	342	iPc	35	57.00	2.1	BUL		61.76	152	iPd	42	08.40	0.0					pP	44	05.30	13km
		0.6s	44.00nm			4.8mb				1.0s	20.00nm			5.2mb		HPI		80.84	319	P	44	05.10	2.1
DCN		17.91	341	iPc	36	00.20	2.3	CVL		62.27	298	P	42	11.80	0.2					pP	44	08.70	11km
		0.5s	61.00nm			5.0mb						pP	42	15.50	12km	PTI		81.02	318	P	44	08.80	5.0X
SPC		17.92	41	eP	36	01.00	2.8	WMQ		62.63	54	Pc	42	14.00	-0.1	TIY		81.62	49	eP	44	05.80	-1.1
KRA		18.30	38	ePd	36	04.20	1.5		Z	12s	0.50um			4.9MszX		XAN		81.76	54	P	44	08.50	0.9
	Z	14s	1.70um					CLE		62.85	303	iP	42	19.00	3.6X	DAU		82.06	315	P	44	10.00	0.6
	E	14s	1.00um					8LA		64.01	298	P	42	22.20	-1.0	BJI		82.29	45	eP	44	11.00	0.8
				e	36	19.60				0.8s	14.26nm			5.2mb				1.5s	39.00nm			5.3mb	
DMU		18.32	342	eP	36	05.30	2.3					pP	42	26.00	12km	ALQ		82.77	308	iPc	44	14.40	1.3
KDZ		18.41	68	eP	36	04.00	-0.2	LHS		65.58	296	P	42	33.80	0.5			1.0s	12.50nm			5.0mb	
RDO		18.44	69	eP	36	04.00	-0.5	SGS		65.99	294	P	42	36.80	0.9	LON		83.01	325	P	44	14.50	0.6
PVL		18.63	63	eP	36	05.00	-1.8	JSC		66.00	296	P	42	36.10	0.1					pP	44	19.00	14km
NPS		18.77	88	eP	36	10.00	1.3					pP	42	39.70	12km	DUG		83.08	316	P	44	15.60	1.1
BMR		18.94	48	ePd	36	13.00	2.5	HBF		66.01	294	P	42	36.80	0.7	VG8		83.44	324	P	44	17.80	1.7
BUC		19.45	60	ePd	36	18.00	1.2	RSON		66.03	316	P	42	34.50	-1.4					pP	44	21.50	12km
MLR		19.65	56	ePc	36	19.00	-0.2			0.6s	30.95nm			5.7mb		KDC		83.51	347	P	44	17.40	1.3
IZM		19.70	78	eP	36	03.00	-16.7X					pP	42	38.60	13km			0.7s	20.35nm			5.4mb	
EDC		20.15	72	eP	36	22.50	-1.8	KSR		66.42	156	iPd	42	38.20	-0.6					pP	44	22.30	15km
BNT		20.19	72	iP	36	23.20	-1.6			1.1s	20.27nm			5.2mb		BMW		83.86	326	P	44	19.20	0.9
VRI		20.29	56	ePd	36	26.00	0.2	SLR		66.76	155	iPc	42	41.20	0.2					pP	44	23.50	14km
CTT		20.62	70	eP	36	28.10	-1.1	PRM		66.89	296	P	42	42.10	0.3	MSU		83.86	314	P	44	19.80	1.1
CFR		21.06	59	ePc	36	33.00	-0.7					pP	42	45.50	11km	CHG		83.95	71	eP	44	22.00	2.9
YLV		21.31	72	iP	36	34.70	-1.6	TKL		67.13	298	P	42	43.10	-0.1	CCH		84.11	243	P	44	20.10	-0.1
KHL		21.48	78	eP	36	37.90	-0.2					pP	42	46.50	11km	CN2		84.56	38	Pc	44	21.80	0.0
KSL		21.79	84	eP	36	42.00	0.8	GBTN		67.43	298	P	42	44.80	-0.4	ZOBO		84.83	245	P	44	24.40	0.3
ELL		21.95	82	eP	36	44.10	1.2					pP	42	48.50	12km			1.0s	10.00nm			5.0mb	
BCk		22.40	80	eP	36	48.10	0.8	GKN		67.96	71	P	42	47.80	-1.0		Z	22s	0.16um			4.4Msz	
BBTK		23.91	73	eP	37	00.00	-2.0	FFC		68.33	323	iPc	42	49.90	-0.5					LR	12	12.00	
HFS		24.46	14	eP	37	07.70	0.6			1.0s	32.00nm			5.5mb		LPB		84.98	245	P	44	24.00	-0.6
		0.6s	15.10nm			4.8mb		RSCP		68.43	299	P	42	50.30	-1.2	SNY		85.06	40	eP	44	24.40	0.1
	Z	17s	0.85um			4.3MszX				0.7s	72.66nm			6.0mb			N	20s	0.50um				
				LR	45	42.00						pP	42	54.80	14km		E	18s	0.60um				
KAS		24.65	70	eP	37	10.50	1.3	KIM		68.47	159	iPc	42	51.00	-0.7	KVN		86.79	318	P	44	34.50	1.3
HLW		25.03	98	eP	37	16.00	3.2X	DMN		68.52	71	P	42	51.80	-0.6					pP	44	38.30	12km
				eS	41	48.00		KKN		68.56	71	P	42	51.80	-0.8	TNP		87.01	317	P	44	35.00	0.7
KOT		25.39	97	eP	37	17.00	0.8	PKI		68.77	71	P	42	53.40	-0.6			0.7s	4.35nm			4.8mb	
PRNI		27.76	94	eP	37	35.00	-3.1X	HYB		68.79	84	ePc	42	53.00	-0.9					pP	44	39.50	14km
MBH		27.89	95	eP	37	40.00	0.8	SEK		68.93	156	eP	42	54.80	0.2	LBFM		87.08	322	P	44	40.00	5.4X
LKO		28.08	197	P	37	41.06	0.0			0.5s	8.45nm			5.2mb		MIN		87.68	321	eP	44	38.20	0.8
MBO		28.24	223	eP	37	40.10	-2.4	GUN		68.95	70	P	42	54.60	-0.6	ORV		88.21	320	P	44	40.00	0.2

09d 09h

		pP	44	43.80	12km	
CMB	88.76	318 eP	44	44.00	1.5	
GSC	88.76	314 eP	44	48.00	5.4X	
CLC	88.84	315 eP	44	44.00	1.1	
GLA	89.18	312 eP	44	39.00	-5.6X	
ISA	89.44	316 eP	44	47.00	1.2	
SBB	89.78	315 eP	44	49.00	1.6	
ARN	89.87	319 P	44	53.00	5.2X	
PEC	89.97	314 P	44	47.50	-0.7	
RVR	90.02	314 eP	44	50.00	1.6	
MWC	90.25	314 eP	44	50.00	0.3	
SPA	126.59	180 ePKP	50	51.40	0.0	
	1.3s	26.67nm				
WB5	134.92	82 ePKP	51	08.50	0.0	
WRA	134.93	82 PKPd	51	08.00	-0.5	
	1.0s	3.70nm				
CTA	144.33	72 iPKPc	51	23.50	-2.0	
	1.2s	78.13nm				
ADE	144.71	100 iPKPc	51	25.30	-0.5	
	0.6s	64.00nm				
RMQ	149.65	80 ePKP	51	40.00	6.0X	
BWA	152.29	95 ePKP	51	46.10	8.4X	
CAN	152.97	97 ePKP	51	47.00	8.4X	
	S.D. = 1.1	on 318 of 338 obs.				

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* FEB 09, 1990 11h 16m 54.54± 1.70s
36.699 N ±15.4km 2.500 E ± 8.1km
DEPTH = 10.0km (geophysicist)
4.3mb (1 obs.)
ALGERIA (396)
mbLg 4.0 (MDD). Felt at Algiers.

ACU	2.94	309 ePn	17	41.90	-0.2	
		eSn	18	14.80		
ESEL	3.08	6 ePn	17	44.20	0.1	
		eSn	18	18.00		
EALH	3.33	291 ePn	17	47.50	-0.3	
		eSn	18	26.00		
ENIJ	3.79	276 ePn	17	54.40	0.1	
EBR	4.40	340 ePn	18	01.50	-1.4	
		eSg	18	59.00		
EVIA	4.42	297 ePn	18	02.80	-0.4	
		eSn	18	51.50		
EROQ	4.43	339 ePn	18	03.20	-0.1	
		eSn	18	53.00		
AFC	4.87	278 ePn	18	10.80	1.1	
EBAN	5.21	288 ePn	18	13.80	-0.6	
		eSn	19	12.00		
ETOR	5.44	321 ePn	18	19.30	1.6	
		eSn	19	17.30		
ETER	5.60	3 ePn	18	20.50	0.6	
		eSn	19	21.60		
TOL	6.05	304 ePn	18	25.50	-0.7	
		eSn	19	37.00		
GUD	6.53	309 ePn	18	32.70	-0.4	
		eSn	19	43.80		
EPF	6.54	346 Pn	18	33.60	0.4	
		Sn	19	42.00		
LMR	7.31	24 Pn	18	42.90	-0.9	
LRG	7.37	22 Pn	18	44.40	-0.3	
FRF	7.55	24 Pn	18	46.40	-0.9	
		Sn	20	05.80		
PGF	7.70	39 Pn	18	47.60	-1.8	
CAF	8.23	358 Pn	18	57.20	0.5	
LFF	8.34	351 Pn	18	57.40	-0.9	
LPG	9.36	19 Pn	19	14.10	1.5	
LPL	9.37	19 Pn	19	14.30	1.6	
MAF	9.51	0 Pn	19	14.50	0.0	
VRI	20.32	56 ePd	22	01.50	28.2X	
NB2	24.98	10 P	22	21.10	1.6	
	1.0s	7.50nm			4.3mb	
	S.D. = 1.0	on 24 of 25 obs.				

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* FEB 09, 1990 11h 19m 56.46± 2.35s
36.640 N ±21.4km 2.581 E ± 6.9km
DEPTH = 10.0km (geophysicist)
ALGERIA (396)
mbLg 3.9 (MDD). Felt at Algiers.

ACU	3.02	309 ePn	20	45.10	-0.2	
		eSn	21	17.50		
ESEL	3.13	4 ePn	20	47.50	0.7	
		eS	21	22.00		
EBR	4.48	339 ePn	21	03.50	-2.4	
EROQ	4.51	339 ePn	21	06.00	-0.3	
		eSn	21	52.00		
EBAN	5.29	289 ePn	21	18.50	1.0	
		eSn	22	15.50		
ETOR	5.53	320 ePn	21	22.00	1.1	
ETER	5.66	2 ePn	21	22.90	0.3	
		eSn	22	23.00		
TOL	6.14	304 ePn	21	29.00	-0.4	
		eSn	22	47.00		
EPF	6.61	346 Pn	21	36.80	0.7	
		Sn	22	44.60		
GUD	6.61	309 ePn	21	35.40	-0.9	
		eSn	22	47.60		
LMR	7.33	23 Pn	21	45.80	-0.3	
LRG	7.40	22 Pn	21	47.20	0.2	
FRF	7.58	23 Pn	21	49.00	-0.6	
		Sn	23	07.80		
PGF	7.70	38 Pn	21	51.00	-0.4	
SBF	8.11	26 Pn	21	56.20	-0.9	
		Sn	23	20.00		
CAF	8.29	357 Pn	22	00.00	0.5	
IMI	8.32	28 P	21	59.03	-0.9	
LFF	8.41	351 Pn	22	00.60	-0.6	
STV	8.41	24 P	22	01.19	-0.1	
ENR	8.43	24 P	22	01.08	-0.5	
PZZ	8.57	22 P	22	04.16	0.5	
ROB	8.64	26 P	22	03.96	-0.5	
FIN	8.69	28 P	22	03.96	-1.2	
RJF	8.69	355 Pn	22	05.00	-0.1	
RRL	8.86	20 P	22	09.39	1.7	
PCP	9.10	28 P	22	09.39	-1.4	
RSP	9.21	21 P	22	13.19	0.8	
LPG	9.39	18 Pn	22	16.60	1.6	
LPL	9.40	18 Pn	22	16.80	1.7	
LSD	9.46	20 P	22	17.60	1.6	
MAF	9.57	360 Pn	22	16.40	-0.9	
	S.D. = 1.0	on 31 of 31 obs.				

FEB 09, 1990 12h 57m 29.50± 0.27s
31.551 S ± 4.3km 69.144 W ± 5.6km
DEPTH = 120.3km (8 depth phases)
4.7mb (8 obs.)
SAN JUAN PROVINCE, ARGENTINA (137)
Felt (II) at Mendozo.

RTCB	0.30	78 eP	57	47.50	0.4	
		(S)	58	34.40		
RTCV	0.60	121 iPc	57	49.00	0.5	
RTLL	0.62	69 iPc	57	48.80	0.2	
CFA	0.77	94 i(P)c	57	50.50	0.7	
MDZ	1.35	169 iP	57	56.90	1.2	
		eS	58	16.00		
RTRS	1.40	349 iPc	57	57.70	1.5	
JACH	1.67	227 iPc	58	00.80	1.4	
		iS	58	24.00		
ROCH	2.12	228 iPd	58	05.60	0.4	
		iS	58	32.20		
SAN	2.29	214 iPd	58	08.20	1.0	
		iS	58	37.00		
IHA	2.58	235 eP	58	10.50	-0.3	
		iS	58	40.30		
TACH	2.59	215 iPd	58	09.40	-1.6	
		iS	58	38.50		
CHCH	2.69	208 iP	58	13.30	0.8	
		iS	58	45.20		
LCCH	2.81	226 eP	58	12.00	-1.9	
		iS	58	44.00		
MRA	3.04	107 iPc	58	17.20	0.2	
LNV	3.07	218 iPd	58	16.10	-1.2	
		iS	58	49.00		
RFA	3.26	170 iPc	58	19.90	-0.1	
TCA	3.90	88 eP	58	28.70	0.1	
SLA	7.52	26 e(P)	59	16.50	-1.6	
ANT	7.90	351 eP	59	17.00	-6.0X	
CCH	14.37	12 eP	00	53.00	4.3X	
LPB	14.98	4 eP	00	59.00	2.4	
ARE	15.17	351 iPd	00	59.60	0.7	
ZOBO	15.24	4 eP	00	58.00	-2.1	
	1.1s	36.25nm			4.6mb	
		i	01	01.00		
PRM	66.46	348 P	08	07.10	-0.8	
JSC	66.47	349 P	08	07.00	-0.9	
		pP	08	36.30	119km	
LHS	66.59	350 P	08	07.80	-0.8	
TKL	68.25	347 P	08	16.80	-2.3	
GBTN	68.34	347 P	08	18.70	-0.9	
RSCP	68.56	346 P	08	19.70	-1.3	
	0.7s	7.50nm			4.7mb	
		pP	08	50.20	123km	
NAV	69.37	350 P	08	25.40	-0.5	
CVL	69.72	352 P	08	28.00	0.1	
POW	70.45	341 P	08	32.00	-0.5	
		pP	09	01.50	118km	
TUL	71.61	337 eP	08	39.10	-0.4	
	1.0s	9.70nm			4.6mb	
		e	09	09.70		
SIO	71.64	337 eP	08	39.10	-0.5	
LIC	71.67	70 P	08	39.50	-0.8	
TIC	71.92	70 P	08	41.00	-0.8	
FVM	71.97	342 P	08	41.00	-0.6	
		pP	09	11.50	122km	
KIC	71.98	70 P	08	41.50	-0.6	
	0.8s	8.50nm			4.6mb	
LKO	73.19	67 P	08	50.66	1.5	
	0.9s	17.50nm			4.8mb	
ALQ	74.87	329 eP	08	59.70	1.0	
ANMO	74.88	329 P	09	00.40	1.7	
WNY	75.70	357 P	09	02.80	-0.2	
GLD	78.44	332 P	09	20.00	1.5	
	0.9s	18.42nm			4.9mb	
MSU	80.40	327 P	09	30.00	0.9	
DAU	81.53	329 P	09	36.00	1.0	
RSSD	81.77	335 P	09	36.60	0.5	
DUG	82.05	328 P	09	38.50	1.0	
TNP	82.51	324 P	09	41.30	1.2	
	0.7s	3.15nm			4.3mb	
		pP	10	11.80	119km	
BW06	82.75	331 P	09	40.00	-1.2	
KVN	83.70	324 P	09	46.70	0.6	
		pP	10	18.70	125km	
RSON	84.87	345 P	09	51.00	-0.4	
	0.7s	14.71nm			5.0mb	
		pP	10	22.10	121km	
HPI	85.00	330 P	09	53.80	1.2	
LBFM	87.34	323 P	10	05.00	1.0	
		pP	10	35.60	118km	
WRA	124.06	207 PKPd	16	14.50	-1.1	
	0.8s	1.60nm				
GBA	144.54	113 PKPc	16	52.60	-1.1	
	0.7s	6.90nm				
HYB	147.55	108 ePKPd	17	01.50	2.8X	
	S.D. = 1.1	on 53 of 56 obs.				

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* FEB 09, 1990 13h 09m 53.88± 1.92s
36.713 N ±17.5km 2.477 E ± 8.6km
DEPTH = 10.0km (geophysicist)
4.1mb (2 obs.)
ALGERIA (396)
mbLg 3.9 (MDD).

ACU	2.91	309 ePn	10	41.50	0.4	
		eSn	11	15.00		
ESEL	3.07	6 ePn	10	43.80	0.6	
		eSn	11	18.00		
EALH	3.31	291 ePn	10	47.00	0.2	
		eSn	11	26.50		
ENIJ	3.77	275 ePn	10	53.00	-0.4	
EBR	4.38	340 ePn	10	59.00	-3.0	
		eSg	11	59.00		
EVIA	4.39	297 ePn	11	02.60	0.3	
		eSn	11	52.00		
EROQ	4.41	339 ePn	11	02.40	0.0	
		eSn	11	50.00		
EBAN	5.19	288 ePn	11	13.40	-0.1	
		eSn	12	10.20		
ETOR	5.42	321 ePn	11	19.00	2.3X	
ETER	5.59	3 ePn	11	20.00	1.0	
		eSn	12	21.00		
TOL	6.03	304 ePn	11	25.00	-0.3	
		eSn	12	35.00		
GUD	6.50	309 ePn	11	32.00	-0.1	
		eSn	12	43.50		
EPF	6.52	346 Pn	11	34.00	1.8	
		Sn	12	41.60		
LMR	7.30	24 Pn	11	42.50	-0.6	
LRG	7.36	23 Pn	11	42.80	-1.1	
FRF	7.55	24 Pn	11	45.80	-0.7	
		Sn	13	04.20		
PGF	7.70	39 Pn	11	47.40	-1.4	
LPO	8.02	353 Pn	11	53.40	0.2	
SBF	8.08	26 Pn	11	53.80	-0.3	
		Sn	13	16.60		
CAF	8.21	358 Pn	11	56.20	0.3	
RJF	8.61	355 Pn	12	00.80	-0.7	
LPG	9.35	19 Pn	12	13.60	1.7	
LPL	9.36	19 Pn	12	13.60	1.6	
MAF	9.50	0 Pn	12	13.20	-0.5	

```
BGF      9.84    1 Pn     12 17.60   -0.8
KHC     14.82   30 eP     13 31.40    6.3X
MLR     19.68   56 ePc    14 31.00    4.8X
HFS     24.52   14 e(P)   15 15.90    1.6
        0.5s     1.70nm             3.9mb
NB2     24.97   10 P      15 15.60   -3.1X
        0.9s     5.50nm             4.2mb
      S.D. = 1.1   on  25 of  29 obs.
-------------------------------------------
*  FEB 09, 1990  13h 19m 30.21± 1.86s
   36.794 N ±16.3km    2.500 E ± 9.1km
   DEPTH =  10.0km  (geophysicist)
   4.2mb (  2 obs.)
 ALGERIA                              (396)
      mbLg 3.8 (MDD).

ACU      2.88 307 ePn     20 16.60   -0.4
                  eSn     20 49.00
ESEL     2.99   6 ePn     20 19.00    0.6
                  eSn     20 52.50
EALH     3.30 290 ePn     20 23.20    0.2
                  eSn     21 00.50
ENIJ     3.79 274 ePn     20 31.00    1.1
                  eSn     21 12.00
EBR      4.32 339 ePn     20 37.00   -0.3
EROO     4.34 339 ePn     20 37.50   -0.2
                  eSn     21 25.50
EVIA     4.37 296 ePn     20 37.50   -0.8
                  eSn     21 26.00
AFC      4.86 277 ePn     20 46.50    1.3
                  eSn     21 40.00
EBAN     5.18 287 ePn     20 48.00   -1.7
ETOR     5.37 320 ePn     20 54.50    2.1
ETER     5.51   3 ePn     20 55.00    0.8
                  eSn     21 55.00
TOL      6.00 303 ePn     21 00.00   -1.2
                  eSn     22 20.00
EPF      6.45 346 Pn      21 08.10    0.6
                  Sn      22 18.00
GUD      6.47 308 ePn     21 07.50   -0.4
                  eSn     22 18.50
LMR      7.22  24 Pn      21 18.00   -0.3
LRG      7.28  23 Pn      21 18.40   -0.7
FRF      7.47  24 Pn      21 21.40   -0.3
                  Sn      22 39.80
PGF      7.62  39 Pn      21 22.20   -1.9
LPO      7.94 353 Pn      21 28.00   -0.4
CAF      8.13 358 Pn      21 31.00   -0.1
LFF      8.25 351 Pn      21 31.80   -0.8
RJF      8.53 355 Pn      21 36.00   -0.7
LPG      9.27  19 Pn      21 49.20    2.1
LPL      9.28  19 Pn      21 49.20    2.0
MAF      9.42   0 Pn      21 49.00    0.1
BGF      9.76   1 Pn      21 52.90   -0.7
HFS     24.44  14 eP      24 53.70    3.9X
        0.4s     1.60nm             4.0mb
NB2     24.89  10 P       24 57.40    3.2X
        0.8s     6.20nm             4.3mb
      S.D. = 1.1   on  26 of  28 obs.
-------------------------------------------
   FEB 09, 1990  14h 10m 49.68± 0.66s
   41.972 N ± 6.0km   20.419 E ± 6.3km
   DEPTH =  10.0km  (geophysicist)
 ALBANIA                              (391)
      ML 3.2 (SKO), 2.7 (TTG).

KKS      0.10 357 iPg     10 53.40    1.0
PHP      0.28 177 ePg     10 53.30   -2.3
LACI     0.63 238 ePg     11 02.70    0.4
SDA      0.69 274 ePg     11 03.20   -0.1
PVY      0.71 332 ePg     11 03.50   -0.2
                  eSg     11 15.50
TIR      0.75 214 ePg     11 07.20    2.9
SKO      0.76  90 ePg     11 04.50   -0.1
                  iSg     11 16.00
ULC      0.87 270 ePg     11 05.10   -1.4
                  eSg     11 17.50
OHR      0.91 162 iPg     11 05.00   -2.1
                  iSg     11 18.40
TTG      0.97 298 ePg     11 07.30   -0.9
                  eSg     11 22.00
IVA      0.98 337 ePg     11 08.70    0.4
                  eSg     11 24.00
BDV      1.22 285 ePg     11 12.00   -0.5
                  eSg     11 31.60
HCY      1.50 289 ePn     11 16.00   -0.7
                  eSn     11 40.50

BRY      1.67 304 ePn     11 19.30    0.1
                  eSn     11 45.00
VAY      1.74 111 ePn     11 20.00   -0.1
LSK      1.83 176 ePn     11 24.00    2.6
      S.D. = 1.5   on  16 of  16 obs.
-------------------------------------------
%  FEB 09, 1990  15h 23m 26.93± 1.30s
   38.916 N ± 8.9km   26.959 E ±13.9km
   DEPTH =  10.0km  (geophysicist)
 AEGEAN SEA                           (365)

IZM      0.57 155 ePg     23 38.30   -0.2
                  eSg     23 47.60
EZN      1.03 332 iPg     23 46.90    0.5
DST      1.47  61 ePn     23 54.70    1.2
EDC      1.59  26 ePn     23 53.50   -1.7
BNT      1.62  27 iPn     23 55.90    0.3
YLV      2.49  48 ePn     24 08.00   -0.2
      S.D. = 1.3   on   6 of   6 obs.
-------------------------------------------
%  FEB 09, 1990  15h 47m 46.41± 0.65s
   40.262 N ± 5.8km   29.188 E ± 4.9km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                               (366)

YLV      0.34  25 iPg     47 53.40    0.0
KCT      0.64 269 iPg     47 58.90   -0.3
DST      0.78 213 iPn     48 01.70    0.0
ISK      0.81 353 ePn     48 02.00   -0.1
GPA      0.86  88 ePn     48 03.00    0.0
BNT      0.97 276 iPn     48 05.40    0.5
EDC      1.02 275 iPn     48 05.50   -0.1
CTT      1.06 327 iPn     48 06.30    0.0
      S.D. = 0.3   on   8 of   8 obs.
-------------------------------------------
   FEB 09, 1990  15h 51m 23.02± 0.31s
   29.925 N ± 6.2km   80.730 E ± 4.5km
   DEPTH =  33.0km  (normal)
   4.6mb ( 15 obs.)
 NEPAL-INDIA BORDER REGION            (309)

NDI      3.31 249 iPn     52 14.20    0.5
                  iPg     52 24.50
                  iSn     52 48.50
                  iSg     52 59.00
LSA      9.06  89 P       53 36.40    1.5
KSH     10.28 339 eP      53 51.50    0.1
SHL     10.79 111 eP      53 35.50  -23.0X
                  iS      55 51.00
HYB     12.61 190 iPc     54 16.90   -6.0X
        0.8s    46.20nm            5.6mb
                  iS      56 28.00
POO     12.96 210 iPc     54 22.00   -5.5X
        0.7s    26.03nm            5.4mb
                  iS      56 39.00
WMQ     14.94  20 eP      54 52.50   -1.0
GBA     16.53 191 Pd      55 07.30   -6.6X
        0.6s     8.50nm            4.1mb
GTA     18.30  54 eP      55 34.80   -1.3
MAIO    18.87 295 eP      55 42.00   -1.1
KOD     19.83 190 eP      55 54.20   -0.1
CD2     19.88  81 eP      55 53.60   -0.9
CHG     19.91 120 eP      55 54.00   -0.8
CHTO    19.91 120 eP      55 54.20   -0.6
LZH     20.31  66 P       55 57.00   -2.1
BDT     20.93 123 eP      56 05.00   -0.3
LOE     22.87 118 eP      56 28.50    3.8X
GYA     23.10  92 P       56 28.80    1.7
XAN     24.23  73 eP      56 38.00    0.1
BTO     26.07  58 eP      56 56.90    1.6
TIY     27.37  65 eP      57 12.70    5.5X
     Z  10s     0.40um            4.3MszX
BJI     30.57  61 eP      57 37.00    1.2
SNY     36.35  59 eP      58 25.80    0.1
CN2     37.91  56 eP      58 39.00    0.2
MLR     45.18 306 ePd     59 40.00    1.4
                  e       17 24.00
SUF     47.75 330 iP      59 59.30    0.8
        0.4s     3.40nm            4.7mb
NUR     47.85 326 eP      59 55.00   -4.3X
SOD     49.11 336 eP      00 09.00    0.1
KEV     49.90 338 iP      00 15.00    0.0
        0.6s     9.10nm            5.0mb
HFS     53.19 325 eP      00 38.50   -1.4
        0.5s     1.90nm            4.3mb
NB2     54.45 326 P       00 49.50    0.3
        0.8s     3.30nm            4.4mb

BSF     58.09 310 eP      01 14.30   -1.2
        0.6s     3.60nm            4.6mb
LPG     58.58 308 eP      01 18.60   -0.5
        0.8s     6.70nm            4.8mb
LPL     58.59 308 eP      01 18.60   -0.5
        0.6s     6.30nm            4.9mb
BCAO    63.78 259 iPc     01 53.00   -1.4
        0.5s    14.00nm            5.3mb
WB5     71.54 127 eP      02 42.00   -1.0
WRA     71.57 127 Pd      02 42.30   -0.8
        0.7s     1.50nm            4.1mb
MBC     73.34   5 eP      02 53.00    0.3
        0.6s     3.00nm            4.5mb
ASPA    73.80 130 eP      02 55.30   -0.9
        0.3s     2.00nm            4.6mb
FBA     78.25  19 iPd     03 21.40    0.7
        0.7s     1.40nm            4.1mb
INK     78.82  12 eP      03 24.00    0.3
CTA     80.29 120 iP      03 34.00    1.5
LKO     82.14 276 P       03 44.08    1.8
KIC     82.95 273 P       03 47.00    0.5
TIC     83.05 274 P       03 47.40    0.4
LIC     83.26 273 P       03 48.50    0.4
      S.D. = 1.0   on  39 of  46 obs.
-------------------------------------------
   FEB 09, 1990  16h 12m 05.47± 0.72s
   30.346 N ± 5.6km   50.551 E ± 9.4km
   DEPTH =  58.6 ± 12.5 km
   4.5mb (  1 obs.)
 IRAN                                 (348)

BEE      4.31 180 iPn     13 11.40    1.4
                  (Sn)    14 02.20
IR5      4.85   0 eP      13 19.00    1.2
IR4      4.89   3 eP      13 18.00   -0.3
KER      4.94 325 eP      13 46.00   26.9X
IR1      5.06   1 eP      13 21.00    0.3
IR7      5.34   1 eP      13 24.50   -0.2
TEH      5.42   7 eP      13 26.00    0.2
BHD      6.00 301 ePnc     14 12.00   38.2X
                  eSn     15 30.00
RYD      6.61 213 eP      13 42.00   -0.2
QASM     7.50 237 eP      13 53.30   -1.4
MSL      8.63 316 ePn     14 15.50    5.3X
                  eSn     15 43.50
MAIO     9.55  49 iPd     14 21.30   -1.6
GKN     29.79  86 P       18 08.60   -0.5
DMN     30.29  86 P       18 13.60    0.0
KKN     30.39  86 P       18 14.40   -0.1
PKI     30.56  86 P       18 16.20    0.1
GUN     30.88  86 P       18 19.60    0.6
HFS     38.61 331 eP      19 24.90    0.6
        0.4s     2.60nm            4.5mb
      S.D. = 0.9   on  15 of  18 obs.
-------------------------------------------
*  FEB 09, 1990  16h 24m 55.14± 1.42s
   39.990 N ± 9.9km  143.848 E ±10.2km
   DEPTH =  23.0 ±  8.0 km
   4.6mb (  6 obs.)  4.1Msz (  1 obs.)
 OFF EAST COAST OF HONSHU, JAPAN (229)

OFUJ     1.91 242 iP+      25 27.60    0.8
                  eS      25 52.40
HOOJ     2.43 350 P        25 33.70   -0.4
                  eS      26 01.60
AOMJ     2.72 283 P        25 39.90    1.6
MDJ     11.52 298 eP       27 42.00    0.7
     Z  15s     4.80um
     N  14s     2.50um
                  ePP     27 54.00
                  S       29 57.00
CN2     14.22 292 eP       28 16.80   -0.3
     Z  13s     2.60um
     N  11s     1.00um
     E  11s     1.20um
                  iPP     28 30.00
SNY     15.44 283 iPc      28 32.00   -1.0
     Z  15s     1.50um
     N  14s     1.40um
     E  16s     1.50um
DL2     17.19 274 eP       28 52.00   -3.4X
     Z  14s     0.90um
     N  13s     2.00um
     E  13s     1.50um
SSE     20.42 251 eP       29 29.50   -3.8X
     Z  18s     0.70um            4.1Msz
     N  14s     1.90um
```

09d 16h

	E	14s	0.90um			
			sP	29	42.50	
BJI		21.17	279 eP	29	38.50	-2.4
		1.5s	0.03nm			1.4mb X
	Z	13s	1.48um			4.6MszX
	N	14s	0.86um			
			epP	29	47.50	33kmX
TIA		21.34	268 eP	29	39.80	-2.9
	Z	14s	2.00um			4.7MszX
	E	12s	1.70um			
			S	33	35.00	
NJ2		21.66	256 Pc	29	44.40	-1.6
	Z	14s	0.90um			4.3MszX
TIY		24.51	275 eP	30	12.60	-1.3
	N	16s	1.80um			
HHC		24.52	283 eP	30	13.30	-0.8
	Z	15s	1.30um			4.5MszX
	N	14s	0.80um			
	E	15s	0.80um			
BTO		25.72	282 eP	30	26.00	0.5
	N	15s	1.00um			
	E	15s	0.90um			
WHN		25.76	258 Pc	30	26.50	0.7
	Z	12s	1.20um			4.6MszX
	N	15s	2.50um			
	E	14s	1.00um			
			sP	30	36.00	
XAN		28.39	269 eP	30	48.50	-1.3
LZH		31.56	276 eP	31	19.00	0.9
		1.5s	0.04nm			2.1mb X
	Z	13s	1.20um			4.8MszX
	N	12s	0.40um			
	E	12s	0.70um			
GTA		33.63	284 iPc	31	36.50	0.4
	Z	16s	0.90um			4.6MszX
	N	11s	0.70um			
			S	37	00.00	
GYA		33.66	258 P	31	35.80	-0.6
	E	15s	0.80um			
KMI		37.34	259 Pd	32	09.00	1.1
	Z	14s	1.40um			4.9MszX
	N	14s	1.20um			
	E	14s	0.80um			
			sP	32	20.00	
WMQ		41.29	294 P	32	41.00	0.7
	Z	12s	1.10um			4.9MszX
	N	14s	0.80um			
LOE		42.74	251 eP	32	54.00	1.6
CHG		43.89	255 eP	33	03.00	1.3
CHTO		43.89	255 iP	33	02.70	1.0
		1.0s	3.50nm			4.1mb
			e	33	12.50	
			e	33	21.00	
INK		50.89	28 eP	33	55.50	-0.3
MBC		53.15	17 eP	34	15.00	2.2
NOI		55.01	280 eP	34	21.40	-5.7X
HYB		60.20	268 eP	35	13.00	9.2X
WB5		60.21	190 eP	35	01.90	-1.8
SOD		62.98	337 eP	35	06.00	-15.8X
GBA		63.35	266 Pd	35	25.00	0.1
		0.7s	3.30nm			4.6mb
ASPA		64.00	190 eP	35	30.20	1.2
		1.0s	5.00nm			4.6mb
MAIO		64.00	297 eP	35	31.00	1.9
SUF		66.20	334 eP	35	42.30	-0.4
HFS		72.17	336 eP	36	19.00	-0.5
		0.5s	3.30nm			4.6mb
NB2		72.19	338 P	36	19.20	-0.5
		0.9s	6.10nm			4.6mb
FRB		73.45	14 eP	36	26.00	-1.0
KRA		77.69	327 ePd	37	01.60	10.3X
KSP		78.57	329 eP	36	57.00	0.9
CLL		79.46	331 eP	37	00.00	-0.9
			i	37	10.90	
PRU		79.94	330 P	37	14.30	10.8X
KHC		81.00	330 eP	37	10.30	1.1
			e	37	20.50	
ALQ		81.24	51 eP	37	08.50	-2.5
KBA		82.75	328 eP	37	28.00	9.4X
		1.1s	8.70nm			4.8mb
VAY		83.07	320 eP	37	21.30	1.2
SKO		83.14	321 iP	37	22.00	1.5
			i	37	31.90	
OHR		84.11	320 eP	37	26.00	0.6
	S.D. = 1.3		on	39	of 47	obs.

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* FEB 09, 1990 16h 49m 33.00± 0.95s
45.849 N ±12.1km 15.903 E ± 7.8km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
MD 2.5 (TRI). ML 2.4 (KBA). Felt ot Zogreb.

PTJ	0.06	37	iPgc	49	35.10	-0.3
			eSg	49	36.50	
ZAG	0.06	120	iPgd	49	35.20	-0.1
			iSg	49	36.80	
VBY	0.57	233	ePg	49	45.30	0.8
			iSg	49	51.10	
LJU	0.98	282	ePg	49	50.00	-1.5
			iSg	50	05.10	
VOY	1.41	278	ePgd	49	57.80	-1.0
			eSg	50	17.70	
TRI	1.50	265	ePg	50	00.00	0.0
			iSg	50	19.10	
KBA	2.15	306	iPnd	50	11.80	2.2
			iPg	50	14.30	
			iSg	50	40.20	
	S.D. = 1.5		on	7	of 7	obs.

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* FEB 09, 1990 17h 01m 22.21± 0.66s
9.873 N ± 9.5km 124.799 E ±16.2km
DEPTH = 34.0 ± 7.0 km
4.8mb (3 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV	2.87	164	eP	02	06.50	-0.2
NJ2	22.75	347	Pd	06	23.80	1.2
LOE	23.62	291	eP	06	32.00	0.7
IPM	24.16	259	ePd	06	35.90	-0.6
	0.9s	30.40nm				4.8mb
CD2	28.65	320	eP	07	15.80	-2.3
TIY	29.87	340	eP	07	27.60	-1.4
BJI	31.01	347	eP	07	38.00	-0.8
	1.0s	12.00nm				4.6mb
SNY	31.85	358	eP	07	44.40	-1.8
LZH	32.30	327	eP	07	51.00	0.6
	1.2s	17.00nm				4.8mb
HHC	33.00	341	Pd	07	56.50	0.1
CN2	33.80	1	Pd	08	02.10	-1.1
GTA	36.90	327	P	08	29.40	-0.4
WMQ	46.66	323	P	09	49.50	0.1
MSZ	66.80	148	eP	12	11.00	-1.6
KEV	83.50	340	eP	13	55.00	7.4X
SUF	85.24	333	eP	13	55.90	-0.5
ISA	105.19	49	ePKP	20	00.00	16.7X
CLC	105.77	48	ePKP	19	56.00	11.6X
PAS	106.03	50	ePKP	19	46.00	1.1
SBB	106.07	50	ePKP	19	52.00	7.0X
MWC	106.09	50	ePKP	19	51.00	5.8X
GSC	106.58	49	ePKP	19	51.00	5.0X
RVR	106.70	50	ePKP	19	47.00	0.9
BAR	107.78	51	ePKP	19	39.00	-9.2X
	S.D. = 1.2		on	17	of 24	obs.

FEB 09, 1990 17h 03m 41.68± 0.64s
38.752 N ± 6.4km 20.341 E ± 4.7km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 3.5 (ATH).

VLS	0.61	161	ePc	03	55.00	1.1
KEK	1.05	336	ePb	04	00.70	-0.7
LSK	1.41	8	iPgd	04	08.40	1.0
TPE	1.56	351	ePn	04	11.00	1.5
VLO	1.83	339	ePn	04	13.30	-0.1
KZN	1.91	35	ePb	04	15.50	0.9
ITM	2.01	141	ePg	04	22.50	6.5X
NEO	2.31	75	ePb	04	25.00	4.6X
OHR	2.38	8	iPn	04	21.90	0.5
LCI	2.43	311	P	04	20.50	-1.5
			eSn	04	55.40	
TIR	2.62	352	ePn	04	28.00	3.3X
PLG	2.90	55	ePn	04	28.00	-0.7
LACI	2.92	351	ePn	04	31.20	2.2
PHP	2.93	1	iPnc	04	28.40	-0.7
ROI	3.04	287	P	04	32.20	1.4
VAY	3.08	33	ePn	04	30.50	-0.8
BRT	3.22	312	P	04	32.80	-0.4
			eSn	05	19.00	
TDS	3.24	287	P	04	35.50	2.0
ORI	3.29	295	P	04	33.00	-1.3
			eSn	05	21.50	
CZI	3.31	279	P	04	34.60	0.0
SKO	3.32	14	ePn	04	31.50	-3.3X
			i	05	11.80	
SOI	3.43	260	P	04	34.60	-1.7
			eSn	05	23.90	
MMN	3.56	290	P	04	39.60	1.5
KKB	3.75	33	iP	04	40.00	-0.8
MMB	3.84	41	ePd	04	41.00	-1.2
ATN	3.87	263	P	04	41.50	-1.1
MGR	3.95	292	P	04	42.70	-1.0
SGO	4.28	296	P	04	48.50	0.2
VTS	4.41	29	eP	04	50.00	-0.3
RZN	4.45	47	iPd	04	51.00	0.1
	S.D. = 1.2		on	26	of 30	obs.

FEB 09, 1990 17h 09m 18.31± 0.70s
14.984 S ± 4.7km 75.667 W ± 5.1km
DEPTH = 9.1 ± 3.9 km
5.4mb (34 obs.)
NEAR COAST OF PERU (115)
Felt (III) ot Ico.

PT10	3.16	336	iPd	10	09.50	0.4
			e(S)	10	54.00	
			i	11	03.00	
NNA	3.19	339	iPc	10	10.00	0.3
			eS	10	56.50	
ARE	4.28	111	iPd	10	24.20	-1.2
			iS	11	16.50	
LPB	7.45	103	P	11	13.00	2.8
	1.1s	551.90nm				6.7mb X
			S	12	40.00	
CCH	9.46	106	P	11	37.60	-0.4
PSO	16.16	354	eP	13	11.50	3.8X
RTRS	16.16	160	ePd	13	07.40	0.2
RTLL	17.55	159	ePc	13	23.80	-1.1
RTCB	17.59	160	iPd	13	24.50	-0.9
CFA	17.89	159	iPc	13	28.50	-0.5
BOG	19.54	5	eP	13	52.00	2.2
			iS	17	46.00	
BMG	22.06	7	eP	14	14.50	-1.0
UPA	24.12	351	ePc+	14	38.00	2.6
	1.0s	70.00nm				5.2mb
CEOS	24.94	17	eP	14	44.00	0.5
TOV	25.29	14	eP	14	46.50	-0.3
PLAV	25.99	19	eP	14	44.00	-9.6X
BAO	26.69	95	eP	14	58.50	-1.5
LLAV	26.77	20	eP	15	01.00	0.4
TKL	50.95	351	P	18	20.40	-1.8
GBTN	51.02	351	P	18	21.30	-1.4
PWLA	51.06	347	P	18	21.20	-1.9
RSCP	51.18	350	P	18	24.40	0.4
	1.1s	242.24nm				6.0mb
BLA	52.11	355	P	18	30.00	-1.0
	1.2s	48.48nm				5.3mb
NAV	52.24	355	P	18	30.80	-1.2
OLY	52.40	344	P	18	31.40	-1.8
NA2	52.86	358	P	18	36.00	-0.5
POW	52.93	344	P	18	35.80	-1.3
TUL	54.08	340	iPc	18	45.30	-0.3
	1.0s	165.00nm				6.0mb
			LR	39	00.00	
SIO	54.11	339	e(P)	18	45.50	-0.3
FVM	54.48	346	P	18	46.50	-2.0
TBR	55.85	1	P	18	58.00	-0.4
ALQ	57.62	330	iPc	19	11.70	0.3
	1.2s	70.31nm				5.6mb
ANMO	57.62	330	P	19	11.20	-0.2
	1.2s	64.45nm				5.5mb
HBVT	59.10	2	P	19	20.80	-0.5
WNY	59.11	2	P	19	20.80	-0.6
RSNY	59.25	1	P	19	21.30	-1.0
	0.8s	20.83nm				5.3mb
GLA	60.67	323	eP	19	32.00	-0.3
GLD	61.02	334	P	19	34.50	-0.3
	1.4s	93.24nm				5.7mb
GOL	61.04	334	P	19	34.00	-1.0
	1.4s	117.49nm				5.8mb
CBM	62.00	6	P	19	40.80	-0.2
PLM	62.09	321	eP	19	43.00	0.8
MSU	63.25	328	P	19	49.90	0.1
RSSD	64.27	338	P	19	55.20	-1.2
DAU	64.27	330	P	19	56.40	-0.2
ABL	64.54	321	P	19	59.40	1.1
DUG	64.86	329	P	20	00.00	-0.2
	1.0s	42.50nm				5.6mb
BLP	65.07	320	P	20	02.00	0.6
BW06	65.37	333	P	20	02.30	-1.2

1.2s 17.81nm 5.1mb
TNP 65.61 325 P 20 05.40 0.3
0.8s 23.04nm 5.4mb
PHAM 65.91 321 P 20 07.20 0.3
PRI 66.28 321 eP 20 09.50 0.2
PTI 66.70 331 P 20 11.80 -0.2
LLA 66.76 322 eP 20 12.50 0.2
KVN 66.78 325 P 20 12.20 -0.4
PRS 66.83 321 eP 20 13.30 0.6
IMW 66.87 333 P 20 12.80 -0.4
CMB 67.38 323 eP 20 16.40 0.2
RSON 67.44 348 P 20 14.40 -1.9
1.1s 62.11nm 5.7mb
ARN 67.60 322 P 20 18.10 0.5
MHC 67.66 322 e(P) 20 18.50 0.4
GCC 67.67 321 eP 20 18.50 0.5
HPI 67.69 332 P 20 18.70 0.3
PCC 68.21 321 eP 20 07.80 -13.5X
BKS 68.37 322 ePc 20 23.30 1.0
0.9s 65.00nm 5.8mb
BRK 68.38 322 eP 20 22.80 0.4
ORV 69.05 324 P 20 27.40 0.9
LRM 69.05 333 eP 20 26.80 0.1
SCH 69.93 5 eP 20 31.00 -0.6
LBFM 70.47 325 P 20 35.70 0.2
SES 72.13 337 ePc 20 44.00 -1.1
1.3s 123.00nm 5.8mb
FFC 72.95 344 iPc 20 49.10 -0.6
0.6s 7.00nm 4.9mb
LIC 73.09 79 P 20 49.66 -1.7
1.0s 14.50nm 5.0mb
DPW 73.17 332 P 20 36.10 -15.2X
TIC 73.23 78 P 20 50.38 -1.8
KIC 73.40 79 Pc 20 51.62 -1.6
0.9s 16.00nm 5.1mb
LKO 73.59 75 Pc 20 54.78 0.5
LON 74.10 329 P 20 57.00 0.3
PNT 74.87 332 iPd 21 02.50 1.5
SPA 75.11 180 eP 21 02.70 0.3
1.1s 36.31nm 5.3mb
EDM 75.25 338 iPc 21 02.50 -0.7
1.1s 117.00nm 5.8mb
WIGH 77.03 81 eP 21 14.00 0.1
WEGH 77.38 81 eP 21 15.00 -0.9
KUK 77.51 80 eP 21 16.00 -0.6
LEGH 77.53 81 eP 21 16.00 -0.7
KOGH 77.59 80 eP 21 16.00 -1.1
TEGH 77.70 81 eP 21 18.00 0.4
SHGH 77.74 80 eP 21 17.00 -0.9
FRB 78.67 3 eP 21 21.00 -0.9
EVAL 83.10 48 eP 21 47.80 1.8
EJIF 83.57 50 eP 21 50.20 1.8
EPRU 83.95 49 eP 21 52.20 1.8
ATEJ 84.83 50 iPc 21 55.50 0.6
ALOJ 84.84 50 iPd 21 56.50 1.6
AAPN 84.90 49 iPd 21 56.00 0.8
APHE 85.08 50 iPc 21 57.50 1.4
ASMO 85.20 49 eP 21 58.00 1.3
EPF 90.19 45 eP 22 20.80 0.3
1.2s 17.85nm 5.2mb
LFF 91.12 44 eP 22 24.70 0.0
1.2s 26.80nm 5.5mb
LPO 91.33 44 eP 22 25.60 -0.1
1.2s 23.80nm 5.4mb
RJF 91.76 44 eP 22 27.60 -0.1
0.8s 5.35nm 5.0mb
CAF 92.00 44 eP 22 28.80 0.0
1.2s 11.90nm 5.1mb
INK 92.71 342 ePc 22 31.40 -0.1
AVF 93.45 43 eP 22 35.20 -0.2
1.2s 14.90nm 5.3mb
SMF 93.73 43 eP 22 36.40 -0.3
1.2s 17.85nm 5.3mb
MBC 94.72 350 eP 22 41.50 0.9
1.5s 52.00nm 5.7mb
BCAO 95.18 87 iPd 22 45.40 1.3
0.5s 8.00nm 5.4mb
LPL 95.33 44 eP 22 45.10 0.7
1.2s 13.40nm 5.3mb
LPG 95.33 44 eP 22 45.30 0.8
1.0s 7.00nm 5.1mb
HAU 95.75 42 eP 22 45.90 -0.1
1.2s 14.90nm 5.3mb
BSF 95.99 42 eP 22 46.70 -0.5
1.2s 11.90nm 5.3mb
FBA 96.08 336 P 22 46.50 -0.6
1.0s 18.00nm 5.5mb

IMA 98.78 336 P 22 58.60 -0.8
KHC 100.68 42 ePdiff 23 09.50 1.2
CTA 126.03 231 ePKP 28 23.00 -0.4
WB5 134.47 221 ePKP 28 38.80 -0.7
MDJ 143.52 329 ePKP 28 51.00 -4.2X
KSH 145.19 40 PKP 28 59.50 1.1
CN2 146.10 332 PKPc 28 58.50 -1.1
WMQ 147.94 23 PKP 29 03.00 0.3
SNY 148.50 332 ePKP 29 04.70 1.2
POO 150.62 79 ePKP 29 12.00 4.5X
NDI 151.46 57 iPKPc 29 14.50 6.1X
DL2 151.72 331 ePKP 29 09.20 0.7
BJI 152.97 340 ePKP 29 11.00 0.8
epPKP 29 17.00
HHC 153.47 348 PKPd 29 12.50 1.4
BTO 154.00 350 ePKP 29 12.80 1.0
GTA 155.34 8 ePKP 29 14.40 0.7
GKN 157.60 51 PKP 29 16.90 -0.1
DMN 158.16 52 PKP 29 17.90 0.1
KKN 158.20 51 PKP 29 17.80 0.0
PKI 158.41 51 PKP 29 18.10 -0.1
GUN 158.58 50 PKP 29 18.70 0.3
LZH 158.98 1 PKP 29 20.00 1.7
XAN 160.58 348 PKP 29 20.50 0.6
WHN 161.99 331 PKPd 29 23.00 1.6
S.D. = 1.0 on 128 of 135 obs.

% FEB 09, 1990 17h 10m 46.35± 0.63s
44.358 N ± 6.8km 7.340 E ± 6.7km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.2 (GEN).

STV 0.11 186 P 10 49.70 0.4
S 10 51.65
ENR 0.14 156 P 10 49.81 0.0
S 10 51.96
PZZ 0.23 311 P 10 51.65 0.4
S 10 55.34
IMI 0.60 138 P 10 58.11 -0.4
S 11 06.93
FIN 0.64 103 P 10 58.73 -0.5
S 11 07.96
RRL 0.69 325 P 10 59.55 -0.6
S 11 10.21
PCP 0.88 78 P 11 04.06 0.7
S.D. = 0.6 on 7 of 7 obs.

* FEB 09, 1990 17h 39m 02.01± 0.92s
33.571 N ± 9.9km 116.375 W ± 7.6km
DEPTH = 10.0km (geophysicist)
SOUTHERN CALIFORNIA (43)
ML 2.9 (NEIS).

PLM 0.46 242 iPc 39 11.10 -0.3
PEC 0.73 296 eP 39 16.30 -0.1
GLA 1.40 111 eP 39 27.70 0.1
ABL 2.68 299 e(P) 39 47.00 0.8
TNP 4.55 352 eP 40 12.20 -0.5
S.D. = 0.7 on 5 of 5 obs.

FEB 09, 1990 17h 57m 26.46± 0.31s
31.677 N ± 4.9km 121.032 E ± 4.2km
DEPTH = 10.0km (geophysicist)
5.0mb (25 obs.) 4.3Msz (1 obs.)
EASTERN CHINA (664)
One person injured slightly and minor domage in the Chongshu area. Felt ot Jiaxing, Nanjing, Nontang, Shonghai ond Wuxi.

SSE 0.59 167 iPgd 57 37.70 -0.8
Sg 57 45.00
NJ2 1.89 282 Pnc 57 59.50 0.5
iPgd 58 02.00
Sn 58 23.00
Sg 58 26.00
TIA 5.57 325 Pnc 58 50.80 -0.6
WHN 5.84 261 Pn 58 53.00 -2.1
Z 12s 6.00um
Pg 59 12.50
Sg 00 27.00
ANP 6.48 176 eP 59 07.20 2.8X
iS 00 55.50
QZH 7.04 198 ePn 59 08.50 -3.6X
Sn 00 27.50
DL2 7.23 4 Pn 59 14.50 -0.2

Pg 59 40.30
eSg 01 17.50
KUMJ 8.35 82 eP 59 31.10 0.6
KAGJ 8.44 91 eP 59 30.80 -0.8
SHNJ 8.82 71 eP 59 37.10 0.3
BJI 9.23 336 eP 59 41.50 -1.0
1.0s 60.00nm 5.9mb
Z 14s 2.34um
N 10s 1.63um
TIY 9.29 313 eP 59 42.30 -1.2
Z 11s 3.92um
N 11s 3.90um
SNY 10.33 11 eP 59 56.80 -0.9
Z 10s 2.00um
E 15s 6.10um
XAN 10.46 286 P 59 57.30 -2.2
N 10s 6.00um
HKC 11.16 215 eP 00 06.50 -2.5
HHC 11.92 323 eP 00 21.90 2.5
Z 10s 3.90um
N 10s 4.30um
E 10s 1.20um
BTO 12.58 318 eP 00 30.50 2.2
N 10s 2.30um
E 11s 0.90um
CN2 12.59 15 Pc 00 31.20 2.8
1.2s 100.00nm 5.9mb
Z 12s 2.10um 4.4MszX
N 12s 3.50um
E 12s 4.00um
sP 00 34.00
GYA 13.60 251 P 00 42.60 0.7
MDJ 14.56 25 eP 00 58.00 3.7X
Z 15s 2.20um 4.9MszX
N 12s 2.40um
CD2 14.79 272 eP 00 56.20 -1.3
LZH 14.94 292 Pc 01 07.00 7.5X
1.5s 188.00nm 5.3mb
Z 10s 1.60um 5.5Msz
N 10s 3.10um
E 10s 1.20um
Lg 05 08.00
LZH 14.94 292 Pc 01 01.00 1.5
1.5s 190.00nm 5.3mb
Z 10s 1.60um
N 10s 3.10um
E 10s 1.20um
QIZ 16.14 221 eP 01 20.40 5.5X
N 11s 3.10um
E 11s 4.20um
eS 04 12.00
KMI 17.36 252 eP 01 31.00 0.4
GTA 18.89 300 Pc 01 49.20 -0.1
3.5s 400.00nm 5.0mb X
Z 10s 1.40um
N 13s 2.70um
sS 05 22.00
LOE 22.53 235 eP 02 30.00 2.1
e 08 01.00
e 13 42.50
CHG 23.67 243 eP 02 40.40 1.4
CHTO 23.67 243 iP 02 40.60 1.6
0.8s 8.97nm 4.4mb
BDT 24.60 239 eP 02 49.00 1.0
LSA 25.74 273 P 03 01.60 2.3
SHL 26.25 264 eP 03 03.00 -0.8
eS 07 48.00
GUA 28.38 124 eP 03 22.70 -0.3
0.8s 119.40nm 5.7mb
WMQ 28.82 304 iPc 03 27.40 0.6
Z 22s 0.80um 4.3Msz
N 15s 1.10um
GUN 30.66 272 P 03 44.20 0.5
PKI 31.15 272 P 03 48.20 0.1
KKN 31.20 272 P 03 48.60 0.2
1.0s 54.00nm 5.4mb
DMN 31.40 272 P 03 50.40 0.2
GKN 31.69 273 P 03 52.20 -0.4
PCI 32.42 182 ePd 04 04.30 5.5X
KSH 37.15 295 P 04 42.00 2.7
E 10s 1.00um
eS 10 26.00
NDI 37.81 277 iPc 04 45.00 0.2
MAIO 50.49 293 iPc 06 27.60 0.8
WB5 52.83 164 eP 06 44.50 0.1
ASPA 56.39 166 iPc 07 11.20 0.8
0.9s 5.00nm 4.5mb

09d 18h

TTA 59.17 32 P 07 29.20 -0.4
2.9s 318.63nm 5.9mb
IMA 59.62 28 P 07 31.70 -1.1
1.0s 6.50nm 4.7mb
FBA 62.28 29 P 07 50.60 0.0
0.7s 21.80nm 5.5mb
PMR 62.61 33 P 07 51.90 -0.9
SOD 62.84 334 iP 07 53.40 -0.9
SUF 64.51 329 eP 08 04.20 -1.1
0.7s 8.70nm 5.1mb
NUR 65.97 327 eP 08 13.60 -1.1
MBC 66.01 13 ePc 08 13.90 -0.9
0.7s 5.00nm 4.8mb
INK 66.38 23 eP 08 17.00 -0.2
DAG 68.99 351 iPc 08 31.80 -1.7
0.5s 7.75nm 5.2mb
HFS 71.02 330 e(P) 08 43.50 -2.6
0.4s 0.90nm 4.3mb
MLR 71.44 312 ePd 08 49.00 -0.1
NB2 71.59 331 P 08 47.80 -1.8
0.9s 7.10nm 4.8mb
ELL 72.67 303 eP 08 55.00 -1.6
KRA 72.92 319 eP 08 57.00 -0.6
e 09 01.40
SPC 73.16 318 e(P) 08 58.90 -0.4
ZST 75.46 318 eP 09 12.30 0.0
VAY 75.57 310 eP 09 12.40 -0.7
PRU 75.94 320 eP 09 14.50 -0.5
SKO 75.98 311 iP 09 15.00 -0.4
1.0s *******nm 8.4mb X
i 09 18.30
CLL 76.04 322 eP 09 15.00 -0.6
OHR 76.83 310 eP 09 19.70 -0.6
KHC 76.94 320 eP 09 08.80 -11.9X
KBA 78.20 318 iPc 09 27.50 -0.4
0.8s 2.60nm 4.4mb
CDF 80.74 322 eP 09 41.70 0.3
1.0s 6.00nm 4.6mb
BSF 81.36 322 eP 09 44.30 -0.4
1.0s 10.00nm 4.8mb
LPL 82.82 320 eP 09 52.90 0.4
0.8s 5.35nm 4.8mb
LPG 82.83 320 eP 09 53.20 0.6
0.8s 4.05nm 4.6mb
NAI 85.75 266 iP 10 13.50 5.8X
1.0s 15.00nm 5.1mb
SES 86.21 30 eP 10 10.00 0.7
FFC 86.33 23 eP 10 10.00 0.3
0.8s 7.00nm 4.9mb
CMB 90.08 44 P 10 30.00 1.9
1.8s 41.82nm 5.4mb
KVN 90.73 42 P 10 32.90 1.7
TNP 91.90 42 P 10 38.30 1.7
0.8s 6.37nm 5.0mb
RSSD 94.08 31 P 10 47.40 0.8
S.D. = 1.2 on 72 of 80 obs.

FEB 09, 1990 18h 08m 35.63± 1.07s
9.734 N ± 5.4km 124.820 E ± 8.2km
DEPTH = 68.6 ± 10.4 km
4.8mb (14 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV 2.73 164 eP 09 17.10 -1.0
QCP 6.09 323 eP 10 08.00 2.8
BAG 7.82 329 eP 10 27.50 -1.7
MNI 8.24 180 eP 10 30.00 -4.8X
KKM 9.28 247 ePd 10 50.00 0.8
SSE 21.52 351 P 13 20.50 -0.2
1.4s 42.00nm 4.6mb
NJ2 22.89 347 Pd 13 35.00 0.8
WHN 22.89 336 Pd 13 35.00 0.8
MTN 23.29 164 eP 13 38.00 -0.2
SNG 24.07 266 eP 13 38.90 -6.9X
IPM 24.15 259 ePd 13 47.90 1.3
0.8s 49.00nm 5.0mb
NST 24.78 286 eP 13 35.00 -17.7X
TIA 27.27 346 eP 14 14.40 -1.1
XAN 28.25 331 P 14 24.00 -0.4
PMG 29.25 130 eP 14 32.50 -1.1
TIY 30.01 340 Pd 14 38.80 -1.4
WB5 30.89 162 eP 14 48.00 0.0
SNY 31.99 358 eP 14 56.40 -0.9
LZH 32.43 327 eP 15 02.00 0.5
1.2s 52.00nm 5.2mb
HHC 33.14 341 Pd 15 07.60 0.0
Z 25s 0.70um 4.3MszX

QIS 33.43 154 eP 15 09.00 -1.1
CN2 33.94 1 Pd 15 13.40 -0.9
ASPA 34.36 165 iPd 15 16.70 -1.5
0.5s 6.00nm 4.8mb
Z 18s 0.22um 3.9Msz
eS 20 46.80
LR 33 17.70
MDJ 35.00 6 Pd 15 23.80 0.4
WARB 35.74 177 eP 15 30.00 0.1
CTA 36.38 145 eP 15 36.00 0.7
1.1s 20.25nm 5.0mb
GTA 37.03 327 P 15 41.00 0.3
Z 16s 0.60um 4.5MszX
LSA 37.19 307 P 15 42.30 -0.3
GUN 40.82 302 P 16 12.40 -0.3
0.4s 15.00nm 5.2mb
PKI 41.11 301 P 16 14.20 -0.8
0.4s 6.00nm 4.8mb
KKN 41.29 301 P 16 15.60 -0.7
0.5s 6.00nm 4.7mb
DMN 41.38 301 P 16 16.20 -0.9
GKN 41.89 301 P 16 20.20 -1.0
0.6s 10.00nm 4.8mb
HYB 45.53 285 eP 16 49.50 -1.0
GBA 46.51 280 Pd 16 57.60 -0.7
0.6s 5.60nm 4.7mb
WMQ 46.78 323 eP 17 00.00 -0.1
BWA 49.29 154 eP 17 22.30 2.6
KSH 52.51 313 P 17 46.20 2.0
MAIO 64.44 306 iPc 19 07.00 -0.3
MSZ 66.68 148 eP 19 22.00 0.7
SOD 84.23 337 iP 21 01.40 0.8
INK 85.31 21 eP 21 07.00 1.1
SUF 85.38 333 eP 21 06.40 0.0
0.6s 14.60nm 5.2mb
MBC 86.54 12 eP 21 13.50 1.5
1.0s 6.00nm 4.7mb
HFS 91.86 332 eP 21 36.90 -0.3
0.4s 1.00nm 4.6mb
NB2 92.60 333 P 21 40.00 -0.7
0.7s 2.10nm 4.7mb
ZOBO 165.82 119 PKP 28 36.00 1.0
S.D. = 1.1 on 44 of 47 obs.

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* FEB 09, 1990 18h 20m 00.22± 1.02s
41.088 N ±16.0km 31.853 E ± 7.5km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

GPA 1.42 236 ePn 20 26.00 -0.1
BBTK 1.42 151 ePg 20 26.00 -0.2
eSg 20 47.00
KAS 1.47 78 ePn 20 27.00 0.2
iSg 20 47.00
YLV 1.95 255 ePn 20 34.80 1.0
CTT 2.59 272 ePn 20 42.00 -0.8
S.D. = 0.9 on 5 of 5 obs.

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* FEB 09, 1990 19h 53m 23.06± 1.80s
10.547 S ± 9.3km 120.293 E ±14.5km
DEPTH = 57.9 ± 22.7 km
4.0mb (2 obs.)
SUMBA ISLAND REGION (287)

MKS 5.36 351 e(P)c 54 43.30 0.9
e 58 53.00
MBL 10.56 182 eP 55 52.20 -2.2
eS 57 41.00
MTN 10.86 103 eP 55 57.00 -1.4
eS 57 53.00
WB5 16.44 126 eP 57 11.80 0.3
eS 00 00.00
WARB 16.67 160 eP 57 15.00 0.6
ASPA 18.40 137 eP 57 37.50 1.7
0.8s 5.00nm 3.8mb
eS 00 55.30
MRWA 19.01 192 eP 57 44.00 1.0
GBA 48.82 299 P 02 07.00 2.2
0.2s 0.50nm 4.2mb
GUN 50.71 320 P 02 18.80 -0.7
PKI 50.78 319 P 02 19.40 -0.6
DMN 51.00 319 P 02 21.00 -0.6
KKN 51.01 319 P 02 21.20 -0.5
GKN 51.57 319 P 02 25.20 -0.7
S.D. = 1.4 on 13 of 13 obs.

? FEB 09, 1990 20h 11m 41.66±16.72s
30.097 N ±160.km 90.227 E ±67.3km
DEPTH = 33.0km (normal)
TIBET (306)

GUN 4.39 241 P 12 48.60 0.6
SHL 4.75 162 eP 12 52.80 -0.1
iS 13 39.50
KKN 4.91 243 P 12 55.40 0.1
PKI 4.92 240 P 12 54.80 -0.7
DMN 5.13 242 P 12 58.00 -0.5
GKN 5.32 248 P 13 00.80 -0.2
S.D. = 0.6 on 6 of 6 obs.

FEB 09, 1990 20h 12m 39.31± 0.36s
45.852 N ± 4.1km 11.008 E ± 4.1km
DEPTH = 15.4 ± 5.1 km
NORTHERN ITALY (545)
ML 3.4 (KBA), 3.0 (LDG). MD 3.3 (TRI).

SAL 0.42 234 Pc 12 46.60 -1.2
eSg 12 54.00
CTI 0.49 66 Pc 12 48.20 -1.0
eSg 12 58.00
MDI 0.91 266 Pd 12 55.70 -0.5
OGA 1.02 1 iPgd 12 58.30 0.1
OSS 1.03 325 iPd 12 58.20 -0.2
VDL 1.24 301 ePc 13 01.80 -0.2
SCE 1.28 22 iPgc 13 02.70 0.0
FVI 1.44 58 P 13 05.70 1.0
eSg 13 24.00
TMA 1.51 280 ePd 13 06.70 0.8
BOB 1.55 226 P 13 08.10 1.8
eSn 13 28.40
VAI 1.56 271 P 13 06.80 0.3
eSg 13 26.50
MME 1.67 188 P 13 10.50 2.2
LLS 1.72 307 ePc 13 10.30 1.2
SAX 1.81 321 ePc 13 13.40 3.0X
BDI 1.81 189 P 13 12.00 1.8
eSn 13 35.00
RBL 1.88 71 P 13 12.50 1.4
TRI 1.93 93 ePn 13 10.90 -1.0
i 13 15.50
i(Sn) 13 35.90
iSg 13 39.50
SFI 2.02 162 P 13 12.50 -0.6
eSn 13 39.00
VOY 2.02 84 ePn 13 12.40 -0.9
eSn 13 42.20
KBA 2.03 52 iPnd 13 14.70 1.3
iPgd 13 16.70
iSg 13 42.90
MMK 2.13 276 ePc 13 15.80 0.8
ORO 2.13 265 P 13 17.60 2.7
eSn 13 43.80
PII 2.16 189 P 13 15.00 -0.1
eSn 13 44.00
CRE 2.32 163 P 13 17.50 -0.1
eSn 13 46.00
CEY 2.39 91 e(Pn) 13 25.30 6.8X
e(Sn) 13 49.50
e 13 53.00
CKI 2.40 235 P 13 17.00 -1.6
RIY 2.43 101 ePn 13 23.20 4.3X
SLE 2.58 319 iP 13 27.60 6.4X
ARV 2.73 149 P 13 24.00 0.7
EMS 2.85 276 ePc 13 26.90 1.7
FEL 2.88 316 ePn 13 26.41 0.8
VBY 3.00 95 ePn 13 39.40 12.4X
eSn 14 17.00
LPL 3.02 265 Pn 13 28.00 0.5
SBF 3.23 233 Pn 13 30.00 -0.4
Sn 14 06.80
PTJ 3.46 87 eP 13 42.00 8.3X
BSF 3.51 306 Pn 13 34.30 -0.1
Sn 14 15.60
WET 3.53 20 eP 13 48.00 13.3X
PGF 3.60 204 Pn 13 34.00 -1.8
CDF 3.61 317 Pn 13 36.60 0.7
KHC 3.71 27 ePn 13 36.60 -0.7
Pg 13 48.00
Sn 14 20.20
Sg 14 36.10
HAU 3.85 306 Pn 13 39.20 0.0
Sn 14 22.40
LBF 4.99 286 Pn 13 55.20 -0.2

SMF	5.03	282	Pn	13 54.00	-2.0
			Sn	14 51.00	
LOR	5.13	289	Pn	13 56.20	-1.1
			Sn	14 53.80	
AVF	5.39	283	Pn	13 59.50	-1.4
BGF	5.71	280	Pn	14 03.60	-1.9

S.D. = 1.2 on 39 of 46 obs.

FEB 09, 1990 21h 33m 40.39± 0.94s
9.886 S ± 4.9km 119.050 E ± 6.4km
DEPTH = 41.7 ± 10.2 km
4.6mb (6 obs.)
SUMBA ISLAND REGION (287)

KHKI	3.72	294	ePc	34 38.70	1.8
			eS	35 21.40	
			e	40 08.00	
MKS	4.66	5	iPd	34 56.00	5.9X
			eS	35 48.50	
			e	38 11.00	
TRT	6.70	288	eP	35 18.00	-0.9
			iS	36 30.00	
KNA	11.12	123	eP	36 19.70	-0.2
			eS	38 15.00	
MBL	11.23	176	eP	36 19.00	-2.5
	0.3s	8.00nm			5.3mb
			iS	38 11.40	
MTN	12.20	105	eP	36 34.00	-0.5
			eS	38 41.00	
MEKA	16.65	182	eP	37 32.60	0.2
	0.3s	5.00nm			4.1mb
			eS	40 20.00	
WARB	17.73	157	eP	37 46.30	0.3
	0.3s	4.00nm			4.1mb
			eS	40 50.00	
WB5	17.81	126	eP	37 47.10	0.1
			eS	40 50.00	
MRWA	19.44	188	eP	38 07.00	0.5
			eS	41 23.00	
ASPA	19.72	136	iPd	38 10.00	0.4
	0.5s	23.00nm			4.7mb
Z	18s	0.17um			
			eS	41 37.80	
			LR	51 41.90	
BAL	20.73	186	eP	38 20.00	0.0
			eS	41 54.00	
COOL	20.98	175	eP	38 22.00	-0.6
			eS	42 02.00	
KLB	21.63	183	eP	38 29.50	0.4
			eS	42 15.00	
MUN	22.14	186	eP	38 34.50	0.4
			eS	42 25.00	
OIS	22.46	121	iPd	38 39.10	1.6
			e	42 36.00	
NWAO	22.99	184	eP	38 43.00	0.5
			eS	42 49.00	
RKG	24.14	184	eP	39 00.00	6.3X
			eS	43 21.00	
OIZ	30.13	342	eP	39 49.20	0.5
LOE	32.07	328	eP	40 06.00	0.2
BDT	33.46	324	eP	40 16.50	-1.3
CHG	34.73	325	eP	40 28.90	0.0
CHTO	34.73	325	eP	40 28.10	-0.8
	0.8s	6.59nm			4.6mb
GYA	38.08	342	P	40 58.20	1.1
WHN	40.45	354	eP	41 18.00	1.4
CD2	43.14	341	iPc	41 38.30	-0.4
XAN	44.73	348	P	41 50.90	-0.7
GBA	47.44	299	Pc	42 09.40	-3.8X
	0.5s	6.60nm			4.9mb
LSA	47.66	327	Pc	42 15.30	0.0
TIY	47.75	353	Pc	42 14.20	-1.2
LZH	47.92	343	eP	42 17.00	0.1
	1.3s	0.02nm			1.9mb X
BJI	49.74	357	eP	42 30.00	-0.6
WMQ	60.57	334	P	43 48.40	-0.7
KSH	63.30	324	P	44 07.50	-0.1
MAIO	72.37	313	iPc	45 04.00	-0.4
TAB	82.75	311	eP	46 03.00	1.2
CLL	107.68	321	e(PKP)	52 15.00	10.4X

S.D. = 0.9 on 33 of 37 obs.

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* FEB 09, 1990 22h 29m 06.38± 0.55s
3.499 N ±10.5km 82.992 W ±15.8km
DEPTH = 33.0km (normal)
4.9mb (7 obs.)
SOUTH OF PANAMA (83)

UPA	6.44	32	iPc	30 41.00	-0.4
	0.8s	74.63nm			5.5mb X
NNA	16.56	158	eP	32 57.20	-0.6
	0.8s	14.93nm			4.2mb
LPB	24.76	144	P	34 26.00	-1.0
CCH	26.59	142	(P)	34 50.00	6.0X
ALQ	38.11	328	iPd	36 25.50	1.1
	1.5s	20.83nm			4.8mb
ANMO	38.12	328	eP	36 25.00	0.6
	1.2s	13.67nm			4.7mb
GOL	41.35	334	eP	36 52.00	0.8
PLM	43.38	317	eP	37 07.50	-0.3
RSSD	44.52	338	eP	37 17.60	0.7
BW06	45.70	333	eP	37 25.20	-1.2
	1.5s	25.17nm			4.9mb
KVN	47.63	323	eP	37 41.50	-0.2
RSON	48.05	351	eP	37 42.00	-2.5
	1.0s	11.93nm			4.9mb
SES	52.38	338	eP	38 17.00	-0.6
FFC	53.35	346	iPc	38 24.20	-0.4
	1.3s	25.00nm			5.0mb
PNT	55.24	332	ePc	38 39.00	0.3
EDM	55.50	338	eP	38 38.50	-2.0
MBC	75.45	352	eP	40 29.00	-19.4X
	0.5s	9.00nm			
NB2	89.01	29	P	42 01.80	2.7
	0.6s	14.80nm			5.5mb
GKN	146.49	20	PKP	48 45.40	0.0
	1.0s	39.00nm			
KKN	146.90	19	PKP	48 46.60	0.5
GUN	146.98	18	PKP	48 47.40	1.0
	1.2s	74.00nm			
DMN	147.01	20	PKP	48 47.20	0.9
PKI	147.15	19	PKP	48 47.40	0.8
	1.2s	28.00nm			

S.D. = 1.2 on 21 of 23 obs.

FEB 09, 1990 22h 30m 23.52± 0.82s
26.972 N ± 4.4km 140.315 E ± 3.6km
DEPTH = 436.4 ± 9.3 km
4.7mb (24 obs.)
BONIN ISLANDS REGION (212)
CENTROID, MOMENT TENSOR (HRV)
Doto Used: GDSN
L.P.B.: 10S, 23C
Centroid Location:
Origin Time 22:30:26.6 0.8
Lat 26.87N 0.08 Lon 139.92E 0.08
Dep 435.6 4.8 Half-duration 1.5
Moment Tensor; Scale 10**16 Nm
Mrr=-6.37 0.53 Mtt=-0.46 0.90
Mff= 6.83 0.88 Mrt=-2.23 0.98
Mrf=-3.42 0.90 Mtf= 3.13 0.87
Principal Axes:

	Val=	Plg=	Azm=
T	9.03	15	112
N	-1.50	8	204
P	-7.53	73	321

Best Double Couple:Mo=8.3*10**16
NP1:Strike=190 Dip=31 Slip=-105
NP2: 28 60 -81

SHK	9.99	321	eP	32 43.00	0.6
GUMO	13.98	161	eP	33 26.30	0.5
	0.9s	300.09nm			5.8mb X
PJG	13.98	161	eP	33 26.30	0.5
GUA	14.04	161	eP	33 25.30	-1.1
	0.6s	197.33nm			5.8mb X
NJ2	19.34	290	Pc	34 19.00	-0.7
			S	37 33.00	
MDJ	19.61	337	eP	34 23.80	1.7
SNY	20.20	321	iPc	34 28.40	0.5
	1.2s	100.00nm			5.2mb
			sP	36 22.00	
			iS	37 47.00	
CN2	20.65	328	eP	34 32.00	-0.3
			PcP	38 23.00	
			ScP	41 17.50	
TIA	21.75	301	eP	34 42.50	-0.2
			esP	36 41.50	
WHN	23.02	285	eP	34 54.50	0.2
BJI	23.89	309	eP	35 01.00	-1.2
TIY	25.79	302	eP	35 18.20	-1.2
HHC	27.44	308	P	35 33.60	-0.5
BTO	28.46	306	eP	35 43.00	0.0
OIZ	29.09	261	eP	35 50.80	2.3
GYA	30.01	277	P	35 57.00	0.3
CD2	32.14	286	eP	36 14.20	-0.6

LZH	32.23	295	eP	36 15.00	-0.7
	1.5s	56.00nm			4.7mb
KMI	33.73	275	Pc	36 29.50	1.0
GTA	35.81	301	eP	36 45.20	-0.4
PMG	36.77	169	eP	36 53.00	-0.5
LOE	36.85	263	eP	36 55.80	1.5
CHG	38.83	267	ePc	37 11.50	0.9
	1.2s	46.88nm			4.8mb
CHTO	38.83	267	iPd	37 11.00	0.4
	1.3s	25.74nm			4.5mb
BDT	39.33	264	eP	37 14.10	-0.5
ADK	40.66	40	P	37 24.80	-0.3
	0.9s	75.00nm			5.1mb
LSA	43.10	286	P	37 46.60	1.1
SHL	43.24	279	iP	37 45.80	-0.5
			eS	43 40.00	
WMQ	45.30	306	Pd	38 01.50	-0.6
WB5	46.93	188	eP	38 13.10	-1.6
			e	39 39.50	
			e	42 48.90	
CTA	47.13	172	iPd	38 15.60	-0.7
	1.0s	30.00nm			4.6mb
GUN	47.98	284	P	38 24.20	1.0
PKI	48.46	284	P	38 27.40	0.6
KKN	48.52	284	P	38 27.70	0.5
DMN	48.71	284	P	38 29.00	0.3
GKN	49.03	285	P	38 31.20	0.3
ASPA	50.72	188	iPd	38 41.90	-1.4
	0.9s	9.00nm			4.1mb
			iPP	40 12.50	
			ePcS	43 47.30	
			eS	45 15.90	
KSH	54.21	301	eP	39 10.50	1.8
TTA	54.39	30	P	39 08.60	-1.0
	1.1s	31.25nm			4.6mb
DZM	54.92	150	iPc	39 12.90	-0.8
NDI	55.24	287	iPd	39 15.00	-0.9
IMA	55.95	27	P	39 19.60	-0.9
	0.9s	9.38nm			4.1mb
BRW	56.08	20	P	39 21.20	0.0
PMR	57.43	32	P	39 29.30	-1.4
	1.0s	50.00nm			4.9mb
HYB	57.50	274	ePc	39 31.70	-0.1
	1.4s	62.50nm			4.8mb
FBA	58.24	28	P	39 35.10	-1.1
	0.9s	14.58nm			4.4mb
GBA	59.93	271	Pc	39 47.80	-0.5
	0.9s	13.70nm			4.4mb
MAIO	67.61	300	eP	40 38.00	0.8
SOD	73.90	338	iP	41 11.20	-2.4
PNT	76.17	42	eP	41 26.00	-0.6
SUF	76.58	334	eP	41 28.00	-0.5
	0.5s	41.50nm			5.3mb
WDC	78.01	51	eP	41 37.20	0.5
LBFM	78.13	50	P	41 38.40	0.7
NUR	78.42	333	iP	41 37.80	-0.7
	0.8s	26.40nm			4.9mb
MIN	78.75	50	eP	41 40.50	-0.4
ORV	79.17	51	eP	41 42.70	-0.2
MHC	80.04	53	eP	41 48.00	0.3
ARN	80.12	53	P	41 48.50	0.5
SES	80.56	38	eP	41 50.00	0.0
CMB	80.62	52	ePd	41 50.90	0.3
PRS	80.68	54	eP	41 51.40	0.5
LLA	80.86	54	eP	41 52.20	0.4
PRI	81.28	54	e(P)	41 55.00	0.9
FRI	81.58	53	eP	41 55.50	0.0
PHAM	81.61	54	P	41 56.60	0.9
KVN	81.75	50	P	41 57.20	0.6
FFC	82.72	31	iPd	42 00.80	-0.1
	0.9s	30.00nm			5.0mb
TNP	82.82	51	P	42 02.40	0.4
	1.1s	25.97nm			4.9mb
ISA	83.08	54	eP	42 03.00	-0.2
CLC	83.63	53	eP	42 06.00	0.1
SBB	84.01	54	eP	42 08.00	0.1
PAS	84.01	55	eP	42 08.00	0.2
MWC	84.06	55	eP	42 09.00	0.7
GSC	84.45	53	eP	42 11.00	0.9
RVR	84.67	55	eP	42 11.00	0.0
DUG	84.74	47	P	42 12.00	0.5
PEC	84.87	55	P	42 12.70	0.6
PLM	85.35	55	eP	42 13.00	-1.6
BW06	85.46	44	P	42 15.50	0.4
	1.0s	5.00nm			4.2mb
DAU	85.65	47	P	42 16.80	0.7
BAR	85.82	55	eP	42 17.00	0.3

09d 22h

MSU	86.04	49	P	42	19.20	1.3
FRB	86.76	12	eP	42	20.00	-0.6
KRA	86.90	326	eP	42	20.90	-0.6
GLA	86.98	54	eP	42	23.00	0.7
RSSD	88.01	41	P	42	26.90	-0.3
KSP	88.15	328	iP	42	27.00	-0.4
BRG	89.21	329	iP	42	31.60	-0.7
	1.2s	22.00nm				4.9mb
CLL	89.33	330	iPc	42	32.10	-0.8
	1.2s	17.00nm				4.8mb
ZST	89.53	326	eP	42	33.40	-0.4
PRU	89.55	328	P	42	34.00	0.1
GOL	89.80	45	P	42	36.60	1.0
	1.0s	12.50nm				4.8mb
MOX	90.42	330	eP	42	37.00	-0.9
KHC	90.60	328	iPc	42	38.90	0.1
	1.1s	11.00nm				4.7mb
WET	90.92	329	iPc	42	40.10	-0.2
VAY	90.93	318	eP	42	40.00	-0.4
ANMO	91.83	49	P	42	46.20	1.2
	1.0s	13.75nm				4.9mb
KBA	92.15	327	eP	42	46.00	-0.2
	0.5s	3.10nm				4.6mb
FVI	92.77	327	P	42	47.70	-1.0
CTI	93.71	327	P	42	51.00	-2.3
VAI	95.21	328	P	42	59.00	-0.9
ORI	95.31	320	P	43	01.50	1.0
TDS	95.64	320	P	43	02.50	0.5
BDI	95.65	326	P	43	01.50	-0.6
BOB	95.70	327	P	43	02.00	-0.3
SOI	96.86	319	P	43	07.90	0.4
TIC	132.63	310	PKP	48	50.30	0.7
KIC	132.65	309	PKP	48	50.40	0.8
LIC	132.94	309	PKP	48	51.00	0.8
ZOBO	151.56	74	PKP	49	24.00	1.1
	0.9s	16.22nm				
			i	49	30.80	
LPB	151.70	74	ePKP	49	14.00	-8.9X
			i	49	31.00	
	S.D. = 0.8	on 110 of 111 obs.				

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* FEB 09, 1990 23h 17m 33.93± 2.50s
31.813 S ± 9.8km 70.019 W ±11.8km
DEPTH = 106.7 ± 49.1 km
CHILE-ARGENTINA BORDER REGION (127)

RTCB	1.09	73	eP	17	56.00	-0.2
			eS	18	14.00	
ZON	1.17	77	eP	17	57.00	-0.1
			eS	18	15.00	
RTCV	1.26	93	iPd	17	58.20	0.1
			S	18	17.50	
RTLL	1.41	70	iPc	17	59.10	-0.8
ROCH	1.43	216	iPd	18	00.60	0.3
			iS	18	21.50	
CFA	1.53	83	iPd	18	02.00	0.6
			S	18	22.50	
RTRS	1.71	16	iPc	18	03.80	0.3
TACH	1.99	203	iP	18	07.30	0.1
			iS	18	33.00	
			i	18	34.00	
LCCH	2.11	218	iPc	18	08.50	-0.2
			eS	18	34.50	
CHCH	2.18	194	iPc	18	10.40	0.7
			iS	18	39.10	
LNV	2.44	208	iPd	18	12.10	-0.9
			iS	18	41.70	
	S.D. = 0.6	on 11 of 11 obs.				

% FEB 09, 1990 23h 19m 39.66± 1.36s
38.897 N ± 9.1km 26.951 E ±14.4km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)

IZM	0.55	154	iPg	19	50.90	-0.1
			iSg	20	00.40	
EZN	1.05	333	iPn	19	59.70	0.3
DST	1.48	61	iPn	20	05.90	-0.5
EDC	1.61	26	iPn	20	07.50	-0.7
BNT	1.64	27	iPn	20	07.70	-0.9
YLV	2.50	47	ePn	20	23.00	1.9
CTT	2.52	26	ePn	20	29.00	7.7X
	S.D. = 1.3	on 6 of 7 obs.				

? FEB 10, 1990 00h 41m 54.57± 3.82s
33.303 N ±44.4km 49.215 E ±21.1km
DEPTH = 33.0km (normal)

WESTERN IRAN (347)

KER	2.04	301	eP	42	27.00	-0.5
IR5	2.22	30	eP	42	36.00	6.1X
IR4	2.38	35	eP	42	31.00	-1.3
IR1	2.43	30	eP	42	33.50	0.5
IR7	2.66	25	eP	42	37.00	0.9
TEH	3.02	36	eP	42	52.00	10.7X
BHD	4.04	271	ePnc	42	56.00	0.3
			eSn	43	54.50	
			e	44	03.50	
TAB	5.30	335	eP	43	39.00	25.3X
	S.D. = 1.2	on 5 of 8 obs.				

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* FEB 10, 1990 00h 58m 48.62± 0.50s
9.580 N ± 8.2km 124.499 E ±12.2km
DEPTH = 33.0km (normal)
4.4mb (6 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV	2.70	157	eP	59	32.00	1.4
QIZ	17.01	305	eP	02	49.50	3.7X
	E 14s	0.69um				
SSE	21.63	352	eP	03	37.60	-0.4
	1.0s	28.00nm				4.6mb
	E 10s	0.20um				
WHN	22.90	337	eP	03	51.00	0.3
NJ2	22.97	348	Pd	03	52.00	0.7
MTN	23.23	163	eP	03	54.00	0.0
IPM	23.81	260	ePd	04	01.00	1.4
BDT	25.92	290	eP	04	19.00	-0.7
CHTO	26.39	293	eP	04	23.00	-1.1
	1.0s	3.00nm				3.9mb
XAN	28.24	332	P	04	38.50	-2.3
WB5	30.84	162	eP	05	02.00	-2.1
WRA	30.90	162	Pc	05	10.40	5.8X
	0.5s	0.80nm				3.8mb
BJI	31.23	348	eP	05	08.50	1.2
LZH	32.38	328	eP	05	17.50	-0.2
	1.5s	26.00nm				4.9mb
MDJ	35.18	6	eP	05	43.00	1.4
WAR8	35.61	177	eP	05	45.00	-0.4
CTA	36.44	144	iPd	05	52.20	-0.2
	1.2s	50.00nm				5.3mb
GTA	36.99	327	eP	05	56.20	-0.8
	Z 14s	0.40um				4.4MszX
LSA	37.03	307	P	06	02.60	4.7X
GUN	40.63	302	P	06	27.00	-0.8
PKI	40.92	301	P	06	30.60	0.4
GBA	46.22	280	Pd	07	14.90	2.1
	0.6s	1.60nm				4.1mb
DZM	51.78	128	iPc	07	55.70	-0.1
	S.D. = 1.2	on 20 of 23 obs.				

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* FEB 10, 1990 01h 24m 50.85± 0.62s
10.080 N ±10.4km 125.245 E ±17.6km
DEPTH = 52.2km (9 depth phases)
4.5mb (4 obs.)
LEYTE, PHILIPPINE ISLANDS (256)

DAV	2.99	174	eP	25	36.00	-0.9
QCP	6.09	318	eP	26	37.00	16.4X
BAG	7.76	325	eP	26	36 00	-8.0X
GZH	17.23	320	eP	28	55.00	5.6X
QIZ	17.35	303	eP	28	53.50	2.5
	N 15s	1.10um				
	E 15s	1.40um				
			eS	32	08.00	
GUMO	19.52	78	eP	29	34.30	17.4X
			eS	33	11.00	
SSE	21.25	350	eP	29	45.00	10.3X
	1.2s	24.00nm				
	Z 16s	0.90um				4.3MszX
	N 12s	0.50um				
	E 12s	0.40um				
			PP	30	17.00	
			eS	33	45.00	
			sS	33	59.00	
MTN	23.51	165	eP	29	57.00	-0.1
			e	30	07.00	37kmX
LOE	23.96	290	eP	30	14.00	12.5X
SNG	24.52	265	eP	30	20.80	13.9X
			eS	34	49.50	
IPM	24.63	259	ePd	30	04.50	-3.5X
			e	30	17.20	51km
CHG	26.88	292	eP	30	31.00	2.1
CHTO	26.88	292	eP	30	30.90	2.0
	1.2s	4.17nm				3.9mb
XAN	28.16	330	P	30	39.00	-1.4
CD2	28.78	319	eP	30	49.40	3.3X
	Z 16s	0.50um				4.2MszX
BJI	30.91	346	eP	31	04.00	-0.7
	Z 14s	0.29um				4.1MszX
			epP	31	18.50	59km
SNY	31.66	358	eP	31	12.60	1.3
	Z 16s	0.50um				4.3MszX
	N 16s	0.50um				
			eS	36	28.00	
			esS	36	48.00	
LZH	32.37	326	eP	31	17.50	-0.3
			pP	31	31.50	56km
HHC	32.95	341	Pd	31	23.40	0.6
BTO	33.25	339	eP	31	32.00	6.6X
	N 13s	0.30um				
	E 13s	0.30um				
QIS	33.56	155	eP	31	25.00	-3.1X
			i	31	38.80	54km
CN2	33.59	0	Pd	31	32.40	4.2X
	Z 16s	0.60um				4.4MszX
ASPA	34.59	166	eP	31	38.70	1.7
MDJ	34.61	5	eP	31	38.00	1.1
			epP	31	52.50	58km
GTA	36.97	326	eP	31	57.00	-0.1
GUN	41.00	301	P	32	28.90	-2.1
	0.7s	13.00nm				4.8mb
PKI	41.29	300	P	32	31.20	-2.3
HYB	45.84	284	eP	33	19.50	9.5X
			e	33	42.00	94kmX
ADE	46.58	165	e(P)	33	15.10	-0.4
WMQ	46.76	323	eP	33	13.50	-3.4X
	Z 16s	0.60um				4.6MszX
			pP	33	30.00	65kmX
GBA	46.87	279	P	33	28.00	10.0X
	0.6s	2.50nm				4.3mb
BWA	49.42	155	eP	33	38.20	0.5
			e	33	51.60	50km
CAN	50.43	155	eP	33	45.80	0.4
			e	33	58.10	44km
DZM	51.51	129	iPc	34	12.10	18.3X
MAIO	64.58	305	eP	35	23.00	-2.3
			e	35	37.00	50km
TAB	75.16	307	eP	36	29.00	-0.9
			e	36	43.00	49km
SOD	84.07	337	iP	37	29.30	12.3X
SUF	85.26	333	eP	37	22.40	-0.6
MBC	86.12	13	eP	37	35.00	8.0X
	1.0s	8.00nm				4.9mb
ZOBO	165.61	117	ePKP	44	53.00	0.8X
	S.D. = 1.5	on 21 of 40 obs.				

? FEB 10, 1990 01h 32m 04.29± 3.91s
41.533 N ±22.7km 12.350 E ±18.3km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

RDP	0.36	51	P	32	11.40	-0.2
			eSg	32	13.50	
RMP	0.38	43	P	32	12.00	-0.2
			eSg	32	15.50	
MNS	0.89	16	P	32	22.10	0.8
			eSg	32	32.60	
SDI	1.11	81	P	32	25.40	0.2
			eSg	32	38.20	
AQU	1.14	43	P	32	25.60	0.0
ASS	1.55	8	P	32	31.50	-0.6
	S.D. = 0.6	on 6 of 6 obs.				

FEB 10, 1990 01h 32m 15.02± 0.60s
9.817 N ± 9.2km 125.004 E ±11.6km
DEPTH = 33.0km (normal)
4.8mb (11 obs.) 4.4Msz (2 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

NJ2	22.85	346	Pc	37	18.20	1.7
GYA	23.98	316	P	37	30.00	2.3
IPM	24.34	259	ePd	37	31.50	0.3
	0.8s	52.10nm				5.1mb
CHTO	26.76	292	eP	37	56.80	2.9
XAN	28.27	331	P	38	06.50	-1.0
TIY	30.00	340	eP	38	21.80	-1.2
BJI	31.11	347	eP	38	32.00	-0.6
	1 0s	18.00nm				4.8mb
SNY	31.91	358	eP	38	39.80	0.2
LZH	32.45	327	eP	38	46.00	1.3

	1.0s	16.00nm		4.9mb	
	Z 20s	0.60um		4.3Msz	
HHC	33.12	341 Pd	38 51.00	0.6	
	Z 18s	1.10um		4.6Msz	
QIS	33.43	155 iPd	38 53.20	0.1	
CN2	33.86	1 Pc	38 56.80	0.2	
		pP	39 03.80	24kmX	
ASPA	34.40	165 eP	39 02.90	1.4	
	0.6s	4.00nm		4.5mb	
MDJ	34.90	6 eP	39 06.00	0.5	
GTA	37.06	327 P	39 24.60	0.6	
	Z 16s	0.60um		4.5MszX	
GUN	40.93	302 P	39 56.40	-0.3	
	0.7s	31.00nm		5.1mb	
PKI	41.22	301 P	39 58.60	-0.5	
	0.6s	9.00nm		4.7mb	
KKN	41.40	301 P	39 59.50	-0.9	
GKN	42.01	301 P	40 04.20	-1.1	
HYB	45.68	285 eP	40 34.00	-0.9	
		e	40 56.50		
GBA	46.67	279 Pc	40 41.70	-1.0	
	0.6s	2.90nm		4.4mb	
WMQ	46.82	323 Pd	40 44.50	0.8	
MAIO	64.54	305 iPc	42 51.00	-0.4	
TAB	75.12	307 eP	43 56.00	-0.1	
KEV	83.62	340 eP	44 40.00	-1.1	
SOD	84.22	337 iP	44 44.20	0.0	
SUF	85.39	333 eP	44 49.30	-0.8	
	0.7s	18.80nm		5.4mb	
MBC	86.42	12 eP	44 56.00	1.0	
	0.9s	6.00nm		4.8mb	
DAG	91.05	352 eP	45 15.90	-1.0	
SLL	91.90	333 eP	45 19.70	-1.5	
	0.6s	2.10nm		4.7mb	
NB2	92.61	334 P	45 23.00	-1.5	
	0.7s	2.30nm		4.7mb	
	S.D. = 1.2	on 31 of 31 obs.			

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* FEB 10, 1990 02h 09m 28.68± 0.77s
10.148 N ±10.1km 124.816 E ±16.4km
DEPTH = 33.0km (normal)
4.6mb (1 obs.)
LEYTE, PHILIPPINE ISLANDS (256)

DAV	3.13	166 eP	10 17.00	0.1	
IPM	24.22	259 ePc	14 44.00	0.3	
BJI	30.74	347 eP	15 44.00	0.9	
	1.0s	12.00nm		4.6mb	
GUN	40.60	301 P	17 07.60	0.0	
PKI	40.90	301 P	17 10.30	0.3	
KKN	41.07	301 P	17 11.80	0.5	
GKN	41.68	301 P	17 15.90	-0.3	
MAIO	64.20	305 eP	20 02.00	-0.9	
KEV	83.25	340 eP	21 47.00	-5.9X	
SOD	83.85	337 eP	21 56.00	0.0	
SUF	85.01	333 eP	22 01.00	-0.9	
NUR	86.21	331 eP	22 16.00	8.2X	
	S.D. = 0.6	on 10 of 12 obs.			

FEB 10, 1990 02h 46m 13.21± 0.85s
18.784 S ± 6.9km 71.271 W ± 7.5km
DEPTH = 51.2 ± 7.9 km
5.0mb (7 obs.)
OFF COAST OF NORTHERN CHILE (121)

ARE	2.32	355 iPc	46 48.60	-1.4	
		i(S)	47 16.00		
LPB	3.76	54 iPc	47 12.00	1.4	
	1.0s	1660.00nm			
		eLR	58 00.00		
ZOBO	3.91	51 iPc	47 13.30	0.5	
ANT	4.96	171 iP	47 27.50	0.4	
		iS	48 24.00		
CCH	5.07	75 P	47 29.60	0.6	
YJA	6.37	123 ePd	47 48.50	1.2	
SLA	7.99	139 ePd	48 09.20	-0.3	
PT08	8.48	322 iPc	48 15.80	-0.8	
		eS	49 47.10		
NNA	8.63	321 eP	48 18.20	-0.1	
	0.7s	23.97nm		5.3mb	
PT10	8.64	320 eP	48 25.00	6.6X	
		e(S)	50 15.00		
MRA	14.46	161 e(P)	49 35.00	-1.5	
BAO	22.45	86 eP	51 08.80	-0.6	
CAI	35.38	74 iPd	53 04.10	-2.2	
CVL	56.86	353 P	55 54.60	-0.4	
NA2	56.93	354 P	55 54.80	-0.7	
TUL	59.15	337 eP	56 09.90	-1.1	
	1.2s	17.30nm		5.1mb	
		e	56 19.30		
SIO	59.19	336 eP	56 10.50	-0.9	
ALO	63.02	328 eP	56 37.80	0.3	
ANMO	63.03	328 P	56 37.40	-0.1	
RSNY	63.09	357 P	56 37.00	-0.5	
	1.0s	14.46nm		5.0mb	
GOL	66.32	332 P	57 00.00	1.1	
	1.2s	20.49nm		5.0mb	
MSU	68.70	327 P	57 15.60	1.8	
RSSD	69.41	335 P	57 18.00	-0.1	
LIC	69.82	76 P	57 19.30	-1.6	
TIC	69.99	75 P	57 20.50	-1.4	
KIC	70.13	76 Pc	57 21.20	-1.6	
	0.8s	10.50nm		4.8mb	
BW06	70.67	331 P	57 25.90	0.1	
TNP	71.14	323 P	57 31.10	2.4	
RSON	72.09	345 P	57 33.00	-0.9	
	1.0s	13.56nm		4.8mb	
SCH	73.40	3 eP	57 41.00	-0.4	
KUK	74.10	78 eP	57 45.50	-0.9	
SES	77.28	335 eP	58 05.00	1.3	
EDM	80.38	336 iPc	58 20.80	0.3	
FRB	82.29	1 eP	58 30.00	0.0	
ALOJ	84.17	48 iPd	58 41.50	1.0	
AAPN	84.25	48 iPd	58 42.00	1.1	
TOL	85.54	45 eP	58 48.50	1.3	
BCAO	91.22	86 iPd	59 17.20	2.4	
	1.0s	13.00nm		5.3mb	
WRA	134.04	214 PKPd	05 29.90	2.5X	
	0.6s	1.00nm			
POO	146.98	85 ePKP	05 54.00	3.5X	
MAT	148.64	310 (PKP)	05 59.00	6.3X	
GBA	149.54	95 PKPc	06 00.70	6.2X	
	0.8s	21.40nm			
HYB	151.30	88 iPKPd	06 05.20	8.0X	
	S.D. = 1.2	on 37 of 43 obs.			

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* FEB 10, 1990 02h 54m 00.97± 1.09s
15.015 S ±18.4km 75.747 W ±15.3km
DEPTH = 33.0km (normal)
4.7mb (3 obs.)
NEAR COAST OF PERU (115)

PT08	3.14	346 iPc	54 50.50	0.9	
		eS	55 30.00		
PT10	3.15	338 eP	54 49.00	-0.5	
		e(S)	55 40.00		
NNA	3.19	340 iPd	54 49.30	-0.8	
	0.7s	13.01nm			
		eS	55 48.00		
ARE	4.34	110 eP	55 06.00	-0.7	
ZOBO	7.45	101 P	55 51.60	0.9	
	1.0s	25.00nm		5.2mb X	
LPB	7.52	103 P	55 56.00	4.5X	
CCH	9.52	106 P	56 18.90	-0.3	
TUL	54.08	340 eP	03 25.40	0.6	
	1.3s	43.60nm		5.3mb	
		e	03 31.50		
SIO	54.11	339 e(P)	03 23.90	-1.1	
ALO	57.61	330 iPc	03 50.50	0.1	
	1.0s	6.25nm		4.6mb	
BW06	65.36	333 eP	04 42.70	0.1	
	1.2s	5.82nm		4.6mb	
KVN	66.76	325 eP	04 52.30	0.7	
SES	72.12	337 eP	05 24.00	-0.1	
	S.D. = 0.8	on 12 of 13 obs.			

FEB 10, 1990 03h 27m 41.28± 0.42s
42.343 S ± 5.9km 172.798 E ± 5.0km
DEPTH = 9.8 ± 2.8 km
6.0mb (12 obs.) 6.0Msz (19 obs.)
SOUTH ISLAND, NEW ZEALAND (162)

ML 6.0 (WEL). Slight damage in Canterbury Province where seiches were observed on some lakes. Felt at Blenheim, Christchurch, Greymouth and Nelson. Also felt at Wellington and Wanganui, North Island.

FAULT PLANE SOLUTION: P-Waves
NP1:Strike=175 Dip=83 Slip= 7
NP2: 84 83 173
Principal Axes:
T Plg=10 Azm= 40
P 0 130

Comment: The focal mechanism is poorly controlled and corresponds to strike-slip faulting with a small reverse component. The preferred fault plane is not determined.
MOMENT TENSOR SOLUTION
Dep 14 No. of sta: 7
Moment Tensor; Scale 10**18 Nm
Mrr= 0.00 Mtt= 1.00
Mff=-1.00 Mrt= 0.11
Mrf=-0.24 Mtf=-0.72
Principal axes:
T Val= 1.26 Plg= 8 Azm= 19
N 0.01 78 151
P -1.27 9 287
Best Double Couple:Mo=1.3*10**18
NP1:Strike= 63 Dip=78 Slip=-180
NP2: 333 90 -12
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 30C
Centroid Location:
Origin Time 03:27:43.6 0.6
Lat 42.41S 0.05 Lon 172.78E 0.06
Dep 15.0 FIX Half-duration 3.4
Moment Tensor; Scale 10**17 Nm
Mrr= 0.18 0.29 Mtt= 6.94 0.41
Mff=-7.12 0.28 Mrt= 0.69 0.70
Mrf=-6.60 0.93 Mtf=-5.23 0.29
Principal Axes:
T Val= 9.66 Plg=20 Azm= 25
N 2.29 55 147
P -11.95 27 284
Best Double Couple:Mo=1.1*10**18
NP1:Strike= 67 Dip=56 Slip=-174
NP2: 333 85 -34

LTZ	0.59	221 P*	27 53.80	0.6	
CCW	1.21	61 eP*	28 05.50	1.7	
CMZ	1.25	185 Pn	28 03.80	-0.7	
TCW	1.58	45 ePn	28 09.00	-0.4	
MRW	1.81	53 ePn	28 12.80	0.1	
BHW	1.81	60 ePn	28 12.80	0.1	
WEL	1.81	55 P	28 13.00	0.2	
		S	28 36.00		
WDW	1.96	58 ePn	28 14.60	-0.3	
MOW	2.05	64 ePn	28 15.80	-0.5	
CAW	2.10	55 iPn	28 16.70	-0.3	
KIW	2.17	48 ePn	28 18.10	0.2	
BLW	2.22	65 ePn	28 17.90	-0.9	
MTW	2.34	61 Pn	28 19.20	-1.3	
TMP	2.78	224 Pn	28 27.00	0.3	
MSZ	4.24	235 Pd	28 45.50	-1.9	
MCQ	15.21	212 eP	31 23.00	5.5X	
RIV	19.00	289 eP-	32 08.00	2.6	
	Z 18s	36.29um			
		eS	35 44.00		
CNB	19.52	283 eP-	32 11.00	-0.8	
		eS	36 00.00		
CAN	19.79	283 eP	32 14.50	-0.1	
		eTT	47 41.00		
BWA	20.63	284 eP	32 21.20	-2.3	
		eTT	48 16.00		
DZM	20.90	343 iPd	32 26.00	-0.4	
BRS	22.11	306 iP+	32 40.00	1.5	
		eS	36 48.00		
BFD	23.75	272 eP	32 56.00	1.6	
CMS	24.04	288 eP	33 00.00	2.8X	
SVA	24.63	13 eP	33 01.10	-1.9	
PVC	24.82	350 iPc	33 06.30	1.4	
RMQ	25.24	301 eP	33 12.00	3.1X	
ADE	27.49	274 iPc	33 30.00	0.4	
	1.5s	666.67nm		6.2mb	
QLP	28.14	295 eP	33 38.00	2.4	
CTA	31.51	307 iP	34 06.00	0.3	
	1.7s	253.85nm		5.9mb	
		iPP	35 06.00		
		iS	39 08.00		
		i	41 04.00		
QIS	35.35	298 eP	34 38.70	-0.2	
VNDA	35.57	184 eP	34 43.40	3.2X	
ASPA	37.16	288 eP	34 52.40	-1.8	
	1.3s	135.00nm		5.6mb	
	Z 23s	30.89um		6.0MszX	
		iS	40 35.10		
		eScS	45 02.80		

10d 03h

		LR	48 46.70			
WRA	39.31	293	P	35 12.00	-0.2	
	1 0s	41.20nm		5.1mb		
WB5	39.34	293	eP	35 11.30	-1.1	
		e	36 50.70			
		i	37 21.30			
PMG	39.78	318	iPc	35 16.30	0.2	
	1.5s	694.44nm		6.1mb		
WARB	40.89	278	eP	35 24.50	-0.7	
RAB	42.21	328	iP-	35 38.00	2.0	
		eS	41 00.00			
COOL	42.42	268	iPc	35 39.20	1.5	
NWAO	44.30	263	eP	35 52.00	-1.0	
		eS	42 34.00			
KLB	44.57	265	eP	35 54.00	-1.2	
MUN	45.52	264	iPc	36 02.50	-0.3	
Z	20s	15.40um		5.9Msz		
N	20s	6.60um				
E	20s	10.30um				
BAL	45.85	266	eP	36 05.00	-0.3	
KNA	46.03	292	eP	36 06.80	0.0	
MTN	46.50	297	eP	36 10.00	-0.5	
		e	37 45.00			
MEKA	46.63	272	eP	36 10.70	-0.9	
SPA	47.85	180	P	36 23.00	2.1	
	1.1s	90.48nm		5.8mb		
Z	21s	18.97um		6.0Msz		
MBL	48.88	278	eP	36 27.00	-2.2	
SLKI	50.02	301	ePd	36 39.90	1.9	
DAV	65.33	307	eP	38 24.10	-1.8	
TSM	67.80	298	ePd	38 45.90	4.3X	
KKM	70.37	298	ePd	38 56.30	-1.3	
	1.1s	217.10nm		6.2mb		
QCP	73.97	308	eP	39 16.00	-2.8	
BAG	75.67	308	eP	39 28.00	-0.8	
KGM	76.33	286	ePc	39 35.00	2.6X	
IPM	79.75	286	ePd	39 53.60	2.4	
	1.6s	283.40nm		6.0mb		
TSI	80.77	283	ePc	39 58.00	1.4	
SNG	81.85	287	iPc	40 05.20	3.0X	
	1.5s	377.78nm		6.3mb		
		eS	43 10.30			
QZH	83.56	312	Pd	40 13.00	2.2	
N	18s	3.30um				
		S	50 32.00			
CHJJ	83.91	333	P	40 11.30	-1.0	
HKC	84.02	307	eP	40 16.00	2.8X	
		eS	50 36.00			
QIZ	84.18	302	eP	40 12.50	-1.6	
N	17s	2.30um				
E	16s	1.50um				
		PP	43 29.50			
		eSKS	50 28.00			
		S	50 37.00			
		SS	56 10.00			
TSRJ	84.50	331	P	40 15.10	-0.2	
MAT	84.62	333	eP	40 14.00	-1.9	
	2.3s	300.00nm		6.1mb		
Z	20s	3.55um		5.7Msz		
		eS	50 36.00			
MTMJ	84.80	332	P	40 16.20	-0.7	
GZH	85.11	307	eP	40 19.30	0.7	
	4.0s	1600.00nm		6.6mb X		
Z	30s	3.20um		5.5MszX		
NNT	86.24	291	eP	40 25.00	0.6	
SSE	87.13	318	P	40 28.00	-0.4	
	5.0s	800.00nm		6.2mb X		
Z	20s	1.40um		5.4Msz		
E	17s	1.50um				
		PP	43 52.00			
		S	51 04.00			
RTCB	87.28	131	e(P)	40 32.50	3.0X	
CFA	87.50	132	eP	40 32.20	1.7	
RTLL	87.58	131	ePc	40 32.80	1.9	
LOE	88.27	295	eP	40 37.50	3.3X	
NJ2	89.07	317	Pd	40 37.50	-0.2	
Z	22s	2.30um		5.6Msz		
		S	51 23.00			
BDT	90.00	293	eP	40 42.00	-0.3	
WHN	90.27	313	eP	40 43.00	-0.3	
Z	28s	3.00um		5.6MszX		
E	16s	1.90um				
		sP	40 54.00			
		eSKS	51 14.00			
		S	51 36.00			
CHG	91.14	294	ePd	40 48.00	0.4	
	1.0s	32.50nm		5.6mb		
CHTO	91.14	294	eP	40 48.00	0.4	
	2.0s	151.16nm		6.0mb		
GYA	91.63	305	P	40 53.20	3.3X	
Z	30s	3.10um		5.6MszX		
		S	51 49.00			
KMI	93.10	301	Pc	41 01.00	4.2X	
Z	24s	6.60um		6.0MszX		
		pP	41 14.00	43kmX		
		S	52 10.00			
		sS	52 28.00			
KMI	93.10	301	eP	40 57.50	0.7	
Z	24s	6.60um		6.0MszX		
TIA	93.24	318	eP	40 56.40	-0.5	
Z	26s	2.80um		5.6MszX		
E	25s	5.00um				
		S	52 04.00			
DL2	93.27	322	eP	40 56.60	-0.3	
Z	22s	2.10um		5.5Msz		
N	16s	13.00um				
E	16s	1.90um				
		S	52 00.00			
MDJ	94.81	331	eP	41 05.30	1.4	
Z	25s	3.80um		5.8MszX		
N	20s	3.90um				
SNY	94.82	325	eP	41 03.40	-0.6	
Z	22s	3.70um		5.8Msz		
N	14s	0.80um				
E	18s	1.60um				
		PP	44 51.00			
CN2	95.69	328	eP	41 06.50	-1.5	
Z	22s	3.80um		5.8Msz		
E	18s	2.00um				
		epP	41 11.50	16kmX		
		eSKS	51 40.00			
		eS	52 22.00			
		eSS	58 50.00			
XAN	95.90	311	P	41 09.00	-0.3	
N	17s	1.70um				
E	14s	1.00um				
		S	52 28.00			
BJI	96.71	320	eP	41 14.50	1.8	
Z	22s	4.62um		5.9Msz		
N	16s	1.80um				
		eSKS	51 44.00			
		eS	52 28.00			
TIY	96.78	316	eP	41 13.40	0.2	
N	17s	2.50um				
		SKS	51 51.50			
		S	52 34.00			
HHC	99.59	318	P	41 27.00	1.2	
Z	22s	9.20um		6.2Msz		
BTO	100.18	317	ePdiff	41 30.00	1.3	
N	20s	2.40um				
E	20s	3.30um				
LZH	100.25	310	ePdiff	41 35.50	6.3X	
Z	30s	3.80um		5.7MszX		
GUN	106.09	293	PKP	46 00.00	-7.7X	
ALQ	106.54	58	ePKP	46 22.10	14.0X	
	1.3s	14.42nm				
Z	18s	3.44um		5.9Msz		
ANMO	106.54	58	PKP	46 24.00	15.9X	
Z	20s	14.89um		6.5Msz		
PMR	108.07	18	PKP	46 20.00	10.1X	
Z	22s	4.30um		6.0Msz		
SIT	108.18	27	PKP	46 20.00	9.8X	
Z	20s	15.00um		6.6Msz		
BUL	109.58	216	ePKP	46 14.80	0.6	
GOL	110.22	54	PKP	46 20.00	5.0X	
Z	18s	5.20um		6.2Msz		
GLD	110.35	55	PKP	46 20.00	4.8X	
Z	18s	9.20um		6.4Msz		
KRI	112.04	218	ePKP	46 17.00	-1.9	
SES	113.71	43	ePKP	46 24.00	2.9X	
EDM	114.34	39	iPKPc	46 40.20	18.0X	
KSH	119.53	298	ePKP	46 36.00	3.4X	
Z	28s	4.50um		6.0MszX		
RSCP	120.70	68	PKP	46 40.00	5.2X	
Z	20s	5.08um		6.2Msz		
FFC	120.72	42	ePKP	46 23.00	-11.2X	
NAI	121.22	234	ePKP	46 44.00	7.3X	
RSON	123.21	49	PKP	46 50.00	10.9X	
Z	20s	5.65um		6.2Msz		
LWI	124.98	226	iPKPd	46 45.10	1.2	
MBC	125.78	16	ePKP	46 42.00	-1.4	
	1.0s	8.00nm				
MAIO	129.23	287	ePKP	46 50.00	-1.3	
RSNY	132.34	63	PKP	47 00.00	3.2X	
Z	20s	7.34um		6.4Msz		
BCAO	135.84	218	ePKPc	46 58.30	-6.1X	
	1.6s	65.00nm				
		id	47 03.80			
		ic	49 44.20			
		id	50 33.95			
BHD	138.79	275	ePKPd	47 10.00	0.7	
		eS	50 49.50			
FRB	139.39	37	ePKP	47 03.00	-6.4X	
TAB	139.45	282	ePKP	47 07.00	-3.6X	
MSL	141.09	278	ePKPd	47 11.50	-1.9	
		eS	50 50.00			
WIGH	142.71	191	ePKP	47 14.00	-2.9X	
TEGH	142.89	192	ePKP	47 18.00	0.8	
WEGH	142.90	191	ePKP	47 14.00	-3.2X	
LEGH	142.93	192	ePKP	47 16.00	-1.2	
SHGH	143.18	192	ePKP	47 17.00	-0.7	
KOGH	143.37	192	ePKP	47 17.00	-1.0	
KUK	143.49	191	ePKP	47 16.50	-1.7	
LIC	143.98	184	PKP	47 17.86	-1.2	
MBH	144.09	263	ePKP	47 15.00	-3.7X	
KIC	144.10	184	PKP	47 17.42	-1.8	
PRNI	144.30	264	e(PKP)	47 15.00	-4.2X	
TIC	144.40	184	PKP	47 18.46	-1.3	
MASJ	144.47	267	PKP	47 23.90	4.4X	
SALJ	144.63	267	PKP	47 24.20	4.5X	
DSI	144.64	266	ePKP	47 20.00	0.4	
SHMJ	144.92	269	PKPd	47 25.50	5.4X	
DAG	145.12	5	iPKPc	47 15.40	-3.7X	
	0.5s	21.13nm				
KOT	146.41	261	ePKP	47 24.50	1.8	
HLW	146.73	261	ePKP	47 25.20	2.0	
KEV	147.41	339	ePKP	47 22.00	-1.0	
		e	47 29.00			
KVT	147.94	283	iPKP	47 26.60	1.7	
SOD	148.99	335	iPKP	47 27.30	1.7	
KAS	149.68	282	iPKPc	47 32.20	4.6X	
BBTK	149.97	279	ePKP	47 30.00	1.9	
BCK	150.77	273	ePKP	47 33.40	4.0X	
MBO	150.90	160	iPKPc	47 35.10	5.1X	
ELL	151.00	271	ePKP	47 34.00	4.2X	
SUF	151.76	328	ePKP	47 34.20	4.3X	
	0.6s	20.50nm				
KHL	151.86	274	ePKP	47 35.00	4.0X	
GPA	151.90	279	ePKP	47 35.00	4.1X	
YLV	152.66	279	ePKP	47 37.00	5.0X	
ISK	153.02	280	ePKP	47 39.00	6.6X	
NUR	153.48	324	iPKP	47 38.50	6.1X	
	0.8s	29.30nm				
		i	47 50.20			
CTT	153.50	280	ePKP	47 40.00	6.9X	
IZM	153.56	273	ePKP	47 40.00	6.7X	
CFR	154.43	289	ePKP	47 45.00	10.8X	
MLR	156.01	289	ePKP	47 37.30	0.8	
		e	14 53.00			
VAY	157.84	277	ePKP	47 44.00	5.2X	
		i	48 11.60			
SKO	158.80	279	ePKP	47 51.00	11.2X	
Z	18s	2813.00um		9.1MszX		
N	19s	2291.00um				
E	19s	2544.00um				
		i	48 05.50			
		i	48 17.50			
		LR	18 02.50			
OHR	159.10	276	ePKP	47 50.00	9.7X	
		i	48 16.00			
PTJ	163.01	290	ePKP	47 45.60	1.4	
KHC	164.01	302	ePKP	48 03.10	18.1X	
Z	20s	4.00um				
N	21s	1.60um				
E	21s	1.50um				
		i	48 41.80			
TOL	176.58	225	ePKP	47 32.50	-19.5X	
S.D. = 1.3 on 102 of 159 obs.						

FEB 10, 1990 03h 34m 31.94± 0.89s
18.756 S ± 7.9km 71.456 W ± 7.1km
DEPTH = 34.4 ± 7.9 km
4.8mb (9 obs.) 5.9Msz (3 obs.)
OFF COAST OF NORTHERN CHILE (121)

ARE	2.28	359	iPc	35 07.80	-0.6	
			i(S)	35 30.60		
LPB	3.89	56	Pc	35 32.00	0.7	
			eLR	52 08.00		
ZOBO	4.03	53	Pc	35 33.00	-0.4	
Z	20s	0.35um				

		LR	53 32.00			
ANT	5.02	169 eP	35 46.50	-0.4		
CCH	5.24	76 P	35 50.40	0.1		
PT08	8.35	323 eP	36 34.70	0.7		
		eS	38 25.10			
NNA	8.50	322 eP	36 35.50	-0.3		
	0.8s	17.91nm		5.2mb		
	Z 20s	1.95um		3.7Msz		
PT10	8.51	321 eP	36 36.00	0.2		
		e(S)	38 42.00			
BAO	22.63	86 e(P)	39 22.00	-9.4X		
TUL	59.05	337 eP	44 29.90	-1.1		
	1.2s	18.20nm		5.1mb		
SIO	59.10	337 eP	44 30.30	-1.0		
ALQ	62.91	328 iPc	44 56.80	-0.6		
	1.0s	2.50nm		4.3mb		
	Z 18s	11.86um		6.1Msz		
ANMO	62.91	328 P	44 57.80	0.4		
	1.0s	3.13nm		4.4mb		
GOL	66.21	332 P	45 19.40	0.5		
	0.9s	9.47nm		4.9mb		
MSU	68.58	327 P	45 34.80	1.0		
RSSD	69.31	336 P	45 37.80	-0.3		
DAU	69.54	329 P	45 39.80	0.0		
BW06	70.56	331 eP	45 44.80	-1.1		
	1.0s	3.50nm		4.4mb		
TNP	71.01	323 P	45 50.40	1.8		
RSON	72.02	345 P	45 52.50	-1.7		
	0.9s	11.62nm		4.9mb		
PNT	80.10	330 eP	46 41.00	1.2		
	0.6s	4.00nm		4.6mb		
CLL	101.03	40 iPdiff	48 36.00	16.6X		
	Z 18s	3.00um		5.8Msz		
		i	48 39.60			
		i	48 44.90			
BRG	101.49	40 ePdiff	48 15.10	-6.4X		
	1.6s	100.00nm		6.2mb X		
		i	48 43.00			
		i	48 55.10			
		i	51 57.00			
		e	52 17.30			
PRU	101.62	41 Pdiff	48 35.20	13.1X		
	Z 20s	3.40um		5.9Msz		
	N 20s	1.80um				
	E 20s	2.60um				
		e	48 37.70			
		PP	52 18.50			
VKA	102.31	43 ePdiff	48 34.00	8.8X		
	1.2s	29.10nm		5.8mb		
ZST	102.80	43 ePdiff	48 27.30	-0.1		
		i	48 30.40			
KSP	102.92	41 ePdiff	48 28.50	0.6		
	1.3s	68.00nm		6.2mb X		
		id	48 32.50			
		id	48 38.00			
		e	52 11.50			
SRO	103.50	44 iPdiff	48 26.80	-3.7X		
		i	52 13.20			
MAT	148.49	310 ePKP	54 18.00	4.7X		
	1.1s	18.99nm				
GBA	149.71	95 PKPd	54 20 50	4.8X		
	0.6s	4.00nm				
	S.D. = 0.9	on 22 of	30 obs.			

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* FEB 10, 1990 03h 54m 47.72± 0.78s
42.347 S ±12.9km 172.595 E ±10.3km
DEPTH = 10.0km (geophysicist)
5.0mb (4 obs.) 5.7Msz (1 obs.)
SOUTH ISLAND, NEW ZEALAND (162)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 22C
Centroid Location:
Origin Time 03:54:49.2 1.4
Lat 42.19S FIX;Lon 172.74E FIX
Dep 15.0 FIX Half-duration 2.6
Moment Tensor; Scale 10**17 Nm
Mrr=-1.01 0.34 Mtt= 3.22 0.50
Mff=-2.21 0.36 Mrt= 0.92 1.07
Mrf=-2.07 1.14 Mtf=-1.89 0.34
Principal Axes:
T Val= 4.28 Plg=17 Azm= 22
N -0.37 52 135
P -3.91 33 280
Best Double Couple:Mo=4.1*10**17
NP1:Strike= 65 Dip=54 Slip=-167
NP2: 328 80 -37

WEL	1.94	58 P	55 20.00	-1.0		
		S	55 43.00			
MSZ	4.12	234 P	55 50.00	-2.0		
CNB	19.38	284 eP	59 17.00	0.4		
		e	01 55.00			
CAN	19.64	283 eP	59 19.70	0.2		
BWA	20.49	285 eP	59 25.90	-2.5		
DZM	20.86	344 iPc	59 31.40	-1.0		
BFD	23.60	273 eP	00 02.00	2.6		
CMS	23.89	288 eP	00 05.00	2.7		
PVC	24.80	350 iPc	00 12.00	0.9		
RMO	25.12	301 eP	00 16.00	1.9		
		e	03 00.00			
ADE	27.34	274 ePd	00 35.50	0.8		
CTA	31.40	307 eP	01 10.00	-1.0		
QIS	35.22	298 eP	01 43.00	-1.2		
		e	04 28.00			
ASPA	37.02	288 iPc	01 57.80	-1.6		
	1.3s	29.00nm		4.9mb		
	Z 18s	10.34um		5.7Msz		
		LR	16 13.70			
WRA	39.17	293 Pc	02 16.10	-1.4		
	0.6s	3.50nm		4.2mb		
WB5	39.20	293 eP	02 16.30	-1.4		
		e	05 00.70			
PMG	39.69	318 iPc	02 22.00	0.3		
MTN	46.36	297 eP	03 14.00	-1.9		
		e	03 20.00			
		e	05 55.00			
SPA	47.85	180 iPc	03 27.90	0.6		
	1.0s	26.00nm		5.3mb		
NJ2	88.97	317 Pd	07 43.80	0.2		
WHN	90.16	313 eP	07 50.00	0.8		
CHG	91.00	295 eP	07 55.00	1.6		
CHTO	91.00	295 eP	07 55.30	1.9		
	2.0s	19.77nm		5.1mb		
GYA	91.51	305 P	07 59.40	3.7X		
TIA	93.15	318 eP	08 07.00	4.1X		
XAN	95.79	312 P	08 19.00	3.8X		
LZH	100.13	310 Pdiff	08 34.00	-1.0X		
GKN	106.86	293 PKP	13 00.00	-15.3X		
MBC	125.82	16 ePKP	13 50.00	0.1		
MAIO	129.09	287 ePKP	14 05.00	7.6X		
BCAO	135.74	219 ePKPc	14 11.10	0.5		
	0.7s	6.00nm				
		ic	17 09.00			
FRB	139.48	37 ePKP	14 07.00	-9.0X		
WIGH	142.68	191 ePKP	14 17.00	-6.2X		
WEGH	142.86	192 ePKP	14 18.00	-5.5X		
KOGH	143.34	192 ePKP	14 22.00	-2.4X		
KUK	143.46	192 ePKP	14 24.00	-0.5		
LIC	143.97	184 PKP	14 23.22	-2.2X		
KIC	144.09	185 PKP	14 23.18	-2.4X		
TIC	144.38	184 PKP	14 23.98	-2.1X		
DAG	145.13	5 ePKP	14 21.00	-4.6X		
	Z 23s	3.33um		6.0MszX		
KOT	146.27	261 ePKP	14 32.50	3.7X		
HLW	146.59	261 ePKP	14 34.00	4.7X		
KEV	147.36	339 ePKP	14 34.00	4.7X		
SOD	148.93	335 iPKP	14 38.20	6.3X		
		i	17 18.20			
KAS	149.53	282 iPKPc	14 41.40	7.6X		
BBTK	149.82	279 ePKP	14 38.00	3.7X		
BCK	150.62	273 ePKP	14 38.90	3.4X		
ELL	150.85	272 ePKP	14 45.00	9.0X		
SUF	151.68	328 ePKP	14 39.70	3.5X		
YLV	152.51	279 ePKP	14 46.00	7.8X		
NUR	153.39	324 ePKP	14 33.70	-5.0X		
NUR	153.39	324 ePKP	14 48.00	9.3X		
	S.D. = 1.5	on 26 of	52 obs.			

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* FEB 10, 1990 03h 57m 29.22± 0.82s
42.163 S ±14.6km 172.483 E ±10.6km
DEPTH = 10.0km (geophysicist)
5.1mb (2 obs.)
SOUTH ISLAND, NEW ZEALAND (162)

WEL	1.92	64 P	58 02.00	-0.3		
		S	58 25.00			
CAN	19.52	283 eP	02 00.00	0.4		
		eTT	10 09.00			
BWA	20.36	284 eP	02 06.80	-1.8		
DZM	20.66	344 iPc	02 12.10	0.3		
BFD	23.51	272 eP	02 42.00	2.0		
PVC	24.60	350 iPc	02 52.00	1.3		
CTA	31.22	307 eP	03 50.30	-0.7		
ASPA	36.89	288 eP	04 38.90	-0.9		

	0.9s	16.00nm		4.8mb		
SPA	48.03	180 iPd	06 11.30	1.1		
	1.0s	30.00nm		5.3mb		
KLI	70.23	282 eP	08 42.00	-2.5X		
KOGH	143.50	192 ePKP	17 16.00	9.8X		
KUK	143.62	192 ePKP	17 04.50	-1.8		
MBH	143.88	264 e(PKP)	17 00.00	-6.3X		
PRNI	144.09	265 ePKP	17 03.00	-3.7X		
KIC	144.26	185 PKP	17 02.36	-5.1X		
KEV	147.16	339 ePKP	17 18.00	7.5X		
ELL	150.76	272 ePKP	17 24.00	6.7X		
SUF	151.48	328 ePKP	17 17.80	0.4		
NUR	153.20	324 ePKP	17 23.00	3.1X		
	S.D. = 1.4	on 11 of	19 obs.			

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* FEB 10, 1990 04h 03m 47.94± 0.99s
19.243 S ±10.2km 71.470 W ±10.1km
DEPTH = 33.0km (normal)
4.9mb (1 obs.)
OFF COAST OF NORTHERN CHILE (121)

ARE	2.77	360 iPd	04 27.00	-4.2X		
		iS	04 58.00			
LPB	4.19	51 Pc	04 51.00	-0.6		
	1.2s	1156.25nm				
		eLR	13 50.00			
ZOBO	4.35	48 iPc	04 52.50	-1.5		
	Z 24s	2.95um				
		LR	13 40.00			
ANT	4.55	168 eP	04 55.50	-0.7		
CCH	5.39	71 P	05 09.40	1.0		
PT08	8.74	325 eP	05 55.00	-0.4		
		eS	07 26.20			
NNA	8.88	324 eP	05 57.80	0.8		
	0.8s	7.46nm		4.9mb		
		eS	07 47.50			
BAO	22.68	85 eP	08 49.50	1.5		
	S.D. = 1.3	on 7 of	8 obs.			

FEB 10, 1990 04h 50m 00.69± 0.39s
50.086 N ± 8.3km 155.916 E ± 7.9km
DEPTH = 114.4km (2 depth phases)
4.8mb (43 obs.)
KURIL ISLANDS (221)

MAT	18.62	230 eP	54 10.00	-1.9		
	0.9s	29.41nm		4.6mb		
PMR	31.94	48 eP	56 15.60	-1.3		
	0.5s	7.02nm		4.7mb		
FBA	32.40	41 iPc	56 21.80	0.8		
	0.5s	47.11nm		5.5mb		
MBC	40.82	21 ePc	57 32.50	0.9		
	0.9s	8.00nm		4.5mb		
PNT	51.76	56 eP	58 59.00	0.9		
EDM	52.69	49 iPc	59 05.40	0.4		
	0.7s	35.00nm		5.4mb		
DAG	53.37	358 eP	59 07.60	-2.0		
CHTO	54.71	257 iP	59 21.30	1.2		
	0.8s	4.03nm		4.4mb		
		pP	59 47.50	109km		
SES	55.54	51 ePc	59 25.60	-0.3		
SOD	56.81	339 eP	59 33.00	-1.6		
FFC	57.00	43 iPc	59 36.30	0.2		
	1.0s	29.00nm		5.2mb		
KVN	59.00	65 eP	59 51.20	0.7		
		pP	00 20.30	120km		
FRB	61.28	21 eP	00 03.00	-2.4		
BW06	61.31	57 eP	00 06.70	0.4		
	1.2s	13.01nm		4.8mb		
NUR	62.97	335 eP	00 08.00	-8.7X		
RSSD	63.28	53 eP	00 18.60	-0.7		
RSON	63.29	42 eP	00 17.20	-1.8		
	0.5s	9.46nm		5.0mb		
NB2	65.65	342 P	00 31.80	-2.3		
	0.7s	3.50nm		4.4mb		
HFS	65.96	340 eP	00 33.30	-2.7		
	0.4s	1.90nm		4.4mb		
WB5	72.22	201 eP	01 14.30	-0.6		
WRA	72.29	201 Pd	01 14.60	-0.7		
	0.7s	4.10nm		4.3mb		
DZM	72.44	170 iPc	01 17.10	0.9		
EKA	73.51	348 P	01 21.00	-0.9		
	0.5s	4.70nm		4.5mb		
DMU	75.39	350 eP	01 32.50	-0.3		
DLE	75.94	349 eP	01 35.80	-0.1		
DCN	75.97	350 eP	01 35.80	-0.3		
ASPA	75.98	201 eP	02 06.30	29.8X		

10d 05h

	0.5s	5.00nm							1.0s	280.00nm		6.1mb X	KKN	146.90	19 PKP	04 54.50	0.8
KHC	76.01	336 eP	01 36.70	0.3	PURC	6.57	100 ePc	46 49.95	0.0					1.0s	66.00nm		
MEM	76.44	341 P	01 50.00	11.3X	DIAC	6.64	91 ePc	46 50.65	0.1	GUN	146.99	19 PKP	04 55.20	1.2
DOU	77.22	342 P	01 43.30	0.2	HOBC	6.76	82 ePd	46 31.64	-20.5X	DMN	147.01	20 PKP	04 55.10	1.2
KBA	77.95	335 iPc	01 48.10	0.7	NNA	16.46	159 iPd	49 05.00	2.0	PKI	147.15	19 PKP	04 55.10	0.9
	0.7s	11.30nm		4.8mb		1.2s	67.19nm		4.6mb		1.0s	40.00nm		
CDF	78.24	339 eP	01 49.00	0.2	ARE	22.75	151 eP	50 12.00	-2.3	GBA	154.12	49 PKPd	05 04.30	-0.1
	1.0s	8.00nm		4.5mb	ZOBO	24.41	144 Pd	50 31.20	0.4		0.9s	4.70nm		
HAU	78.83	340 eP	01 52.20	0.2		1.2s	61.82nm		5.1mb		S.D. = 1.0 on 62 of 67 obs.			
	0.8s	6.70nm		4.5mb		Z 24s	0.78um		4.1MszX	----------				
BSF	78.89	339 eP	01 52.20	-0.2			LR	09 24.00		FEB 10, 1990 06h 56m 13.31± 0.27s				
	0.8s	5.35nm		4.4mb	LPB	24.63	144 Pc	50 34.00	1.2	3.452 N ± 5.1km 82.865 W ± 4.7km				
FLN	79.46	344 iPc	01 55.40	0.1		1.5s	166.67nm		5.5mb	DEPTH = 10.0km (geophysicist)				
	0.6s	16.25nm		5.0mb			eLR	09 52.00		5.2mb (31 obs.)				
LDF	79.56	344 iPc	01 55.90	0.0	RSCP	32.09	356 P	51 38.20	-1.6	SOUTH OF PANAMA				(83)
	0.8s	20.15nm		5.0mb	POW	33.44	348 P	51 50.70	-0.8					
GRR	79.89	345 iPc	01 57.90	0.3	BLA	33.67	3 P	51 53.40	-0.2	GGP	5.58	130 P	57 37.40	-1.6
	0.7s	33.05nm		5.2mb		1.0s	17.50nm		4.9mb	QUR	5.63	130 eP	57 37.60	-2.0
LOR	80.07	341 eP	01 58.90	0.3	NA2	34.83	7 P	52 04.00	0.6	ANCC	5.99	89 ePc	57 43.53	-0.6
	0.6s	9.90nm		4.8mb	ALQ	38.23	328 iPd	52 33.30	0.8	HOQC	6.22	90 eP	57 46.52	-1.2
LPF	80.26	345 iPc	02 00.20	0.6		1.5s	20.83nm		4.7mb	UPA	6.41	31 iPc	57 52.00	1.8
	0.6s	14.45nm		5.0mb	ANMO	38.24	328 P	52 33.60	1.1		0.9s	193.28nm		6.0mb
LBF	80.31	341 iPc	01 59.90	0.0		1.4s	17.44nm		4.6mb	PURC	6.59	100 ePd	57 53.17	0.0
	0.8s	5.35nm		4.4mb	GLD	41.44	334 P	53 00.30	1.3	DIAC	6.66	91 ePc	57 53.38	-0.4
SSF	80.34	341 iPc	02 00.50	0.5		1.2s	25.25nm		4.8mb	HOBC	6.77	82 ePc	57 54.96	-0.4
	0.8s	8.05nm		4.6mb	GOL	41.46	333 P	53 00.20	0.9	NNA	16.47	159 eP	00 07.50	1.3
AVF	80.63	341 iPc	02 02.10	0.6		1.1s	19.23nm		4.7mb		1.2s	73.44nm		4.7mb
	0.8s	16.10nm		4.9mb	GLA	41.96	318 eP	53 04.00	0.8	PT10	16.50	159 e(P)	00 10.00	3.4X
SMF	80.66	341 iPc	02 01.80	0.0	BAR	42.99	316 eP	53 12.00	0.4	ARE	22.76	151 eP	01 18.00	0.6
	1.2s	26.80nm		4.9mb	PLM	43.51	317 eP	53 17.00	1.0	ZOBO	24.42	144 P	01 33.40	-0.5
ORX	80.68	338 P	02 01.15	-0.9	MSU	43.96	326 P	53 20.00	0.3		1.0s	40.50nm		5.0mb
BGF	80.95	342 eP	02 03.60	0.3	RVR	44.23	318 eP	53 22.00	0.4	LPB	24.64	144 P	01 37.00	1.1
	0.6s	7.20nm		4.7mb	RSSD	44.62	338 P	53 26.20	1.3		1.5s	166.67nm		5.5mb
LSD	81.04	338 P	02 04.84	0.8	GSC	44.63	319 eP	53 25.00	0.0	CCH	26.47	142 P	01 54.90	1.9
LPL	81.09	339 iPc	02 05.40	1.1	MWC	44.83	317 eP	53 27.00	0.3	TKL	32.06	359 P	02 42.20	-0.3
	0.5s	13.85nm		5.0mb	DAU	44.85	329 P	53 27.40	0.5	GBTN	32.08	358 P	02 42.70	0.0
LPG	81.10	339 iPc	02 05.50	1.1	SBB	44.94	318 eP	53 26.00	-1.4	RSCP	32.09	356 P	02 41.80	-1.0
	0.6s	21.20nm		5.1mb	CLC	45.46	319 eP	53 31.00	-0.5	OLY	32.87	347 P	02 48.80	-0.8
RSP	81.31	338 P	02 04.74	-0.5	BW06	45.81	333 P	53 34.00	-0.5	POW	33.43	348 P	02 53.80	-0.7
MAF	81.33	342 iPc	02 06.20	0.9		1.4s	9.86nm		4.6mb	BLA	33.67	4 P	02 56.50	-0.1
	0.8s	18.80nm		4.9mb	ISA	45.94	319 eP	53 35.00	-0.3		1.2s	22.73nm		5.0mb
TCF	81.34	342 iPc	02 06.10	0.8	TNP	46.61	322 P	53 40.20	-0.6	TUL	34.44	341 eP	03 02.70	-0.5
	0.6s	7.20nm		4.7mb		1.2s	11.83nm		4.8mb		1.4s	14.00nm		4.7mb
MFF	81.49	344 eP	02 06.70	0.7	KVN	47.76	323 P	53 49.40	-0.5	CVL	34.60	6 P	03 05.20	0.7
	0.6s	12.65nm		4.9mb	RSON	48.12	351 P	53 51.00	-1.2	NA2	34.83	7 P	03 07.00	0.6
LSF	81.51	342 iPc	02 06.90	0.7	LRM	49.48	333 eP	54 02.90	-0.2	FVM	35.06	350 P	03 08.40	-0.1
	0.6s	14.45nm		5.0mb	LBFM	51.46	323 P	54 17.50	-0.7	ALQ	38.22	328 iPd	03 31.80	-3.6X
PCP	81.56	337 P	02 06.07	-0.5	SES	52.48	338 eP	54 25.00	-0.6		1.5s	34.72nm		4.9mb
RRL	81.64	338 P	02 07.92	0.8	FFC	53.43	346 eP	54 31.00	-1.5	ANMO	38.22	328 P	03 33.00	-2.5
PZZ	81.95	338 P	02 07.61	-1.1		1.2s	30.00nm		5.1mb		1.6s	45.83nm		5.0mb
ROB	81.96	337 P	02 08.12	-0.5	PNT	55.36	332 iPc	54 47.00	0.3	GLD	41.43	334 P	04 03.60	1.7
STV	82.14	338 P	02 08.23	-1.4	EDM	55.60	338 eP	54 46.50	-2.0		1.4s	50.68nm		5.1mb
IMI	82.32	337 P	02 10.17	-0.3		1.1s	39.00nm		5.3mb	GOL	41.45	334 P	04 02.90	0.7
RJF	82.42	342 iPc	02 12.10	1.2	FRB	61.07	7 eP	55 23.00	-3.4X		1.4s	58.75nm		5.1mb
	0.6s	7.20nm		4.7mb	MBC	75.52	352 ePc	56 56.50	0.3	GLA	41.95	318 eP	04 07.00	0.9
SBF	82.48	338 iPc	02 11.50	0.2		1.0s	12.00nm		4.9mb	BAR	42.98	317 eP	04 13.00	-1.5
	0.7s	11.00nm		4.8mb	TIC	77.53	84 P	57 07.92	-0.7	PLM	43.50	317 eP	04 19.00	0.1
CAF	82.67	342 iPc	02 13.40	1.1	LIC	77.54	84 Pc	57 08.20	-0.5	MSU	43.95	326 P	04 23.50	0.9
	0.6s	10.80nm		4.9mb		1.1s	17.50nm		5.1mb	RVR	44.22	318 eP	04 24.00	-0.5
LFF	82.92	343 iPc	02 14.50	1.0	KIC	77.82	84 Pc	57 09.60	-0.6	RSSD	44.61	338 P	04 28.40	0.5
	0.6s	16.25nm		5.1mb		1.1s	16.50nm		5.0mb	GSC	44.62	319 eP	04 29.00	1.1
FRF	82.95	338 eP	02 13.80	0.1	IMA	79.15	337 P	57 15.80	-0.9	MWC	44.81	317 eP	04 24.00	-5.6X
	0.7s	11.00nm		4.9mb		1.2s	10.42nm		4.7mb	DAU	44.84	329 P	04 30.50	0.7
LPO	83.08	342 iPc	02 15.40	1.1	TTA	79.31	334 P	57 16.30	-1.3	PAS	44.85	317 eP	04 30.00	0.4
	0.6s	10.80nm		4.9mb		1.2s	18.94nm		5.0mb	SBB	44.93	318 eP	04 30.00	-0.4
LRG	83.12	338 iPc	02 15.30	0.8	EKA	81.31	35 P	57 28.00	-0.2	CBM	45.16	14 P	04 32.80	0.9
	0.6s	17.15nm		5.1mb		1.2s	20.50nm		5.1mb	CLC	45.44	319 eP	04 35.00	0.6
LMR	83.20	338 eP	02 15.40	0.5	EPF	82.68	47 eP	57 45.50	9.8X	BW06	45.80	333 P	04 37.30	-0.1
	0.8s	13.45nm		4.9mb		1.2s	17.85nm		5.1mb	ISA	45.93	319 eP	04 38.00	-0.3
PGF	83.31	336 iPc	02 16.10	0.4	MAF	84.35	44 eP	57 44.40	0.3	TNP	46.60	322 P	04 44.20	0.5
	0.7s	11.00nm		4.9mb		1.2s	19.35nm		5.2mb		1.3s	18.71nm		5.0mb
EPF	84.84	342 iPc	02 24.60	1.3	BGF	84.55	44 eP	57 45.40	0.3	KVN	47.75	323 P	04 52.20	-0.6
	0.6s	4.05nm		4.5mb		1.2s	29.75nm		5.4mb	RSON	48.12	351 P	04 53.40	-1.8
	S.D. = 1.0 on 66 of 69 obs.				AVF	84.90	43 eP	57 47.10	0.3		1.4s	58.94nm		5.5mb
----------						1.2s	14.90nm		5.1mb	HPI	48.20	331 P	04 57.00	0.7
FEB 10, 1990 06h 45m 10.29± 0.30s					SMF	85.24	44 eP	57 48.60	0.1	LRM	49.47	333 eP	05 06.10	0.0
3.449 N ± 6.0km 82.848 W ± 5.1km						1.4s	26.15nm		5.3mb	LBFM	51.45	323 P	05 20.60	-0.5
DEPTH = 10.0km (geophysicist)					ENN	86.57	39 eP	57 55.50	0.5	SES	52.47	338 eP	05 28.00	-0.6
5.0mb (26 obs.)						1.0s	17.00nm		5.2mb	FFC	53.43	346 iPd	05 35.00	-0.5
SOUTH OF PANAMA				(83)	WTS	87.10	38 eP	57 58.00	0.5		1.3s	42.00nm		5.3mb
						1.0s	45.00nm		5.7mb	NEW	53.43	332 P	05 34.50	-1.2
COTA	5.47	124 eP	46 33.50	-0.8	KHC	91.62	41 P	58 19.50	0.5		1.4s	36.93nm		5.2mb
ANCC	5.97	89 ePd	46 40.11	-0.8	SPA	93.43	180 eP	58 27.10	0.1	PNT	55.35	332 ePc	05 50.00	0.3
VC1	6.02	132 P	46 12.50	-29.6X		1.0s	8.50nm		5.1mb	EDM	55.59	338 eP	05 50.00	-1.4
HOQC	6.20	90 eP	46 43.33	-1.1			e	58 45.90			1.4s	103.00nm		5.7mb
CLMC	6.29	86 ePc	46 46.21	0.7	MTN	145.14	252 ePKP	04 48.00	-2.7X	MBC	75.51	352 eP	07 59.00	-0.2
UPA	6.41	31 iPc	46 49.50	2.4	GKN	146.49	20 PKP	04 51.40	-1.5		1.5s	45.00nm		5.3mb

FBA	76.44	337 P	08	04.20	-0.4
	1.2s	22.73nm			5.1mb
IMA	79.14	337 P	08	18.80	-0.9
	1.5s	16.89nm			4.8mb
TTA	79.30	334 P	08	19.70	-0.9
	1.4s	36.93nm			5.2mb
EKA	81.31	35 P	08	32.00	0.8
	1.5s	52.80nm			5.4mb
TCF	84.12	44 eP	08	46.00	0.0
	1.3s	25.25nm			5.3mb
MAF	84.36	44 eP	08	47.70	0.5
	1.4s	32.65nm			5.4mb
BGF	84.56	44 eP	08	48.50	0.4
	1.2s	31.25nm			5.4mb
AVF	84.91	43 eP	08	50.20	0.3
	1.4s	19.60nm			5.1mb
SMF	85.25	44 eP	08	51.50	-0.1
	1.6s	37.30nm			5.4mb
LOR	85.26	43 eP	08	51.80	0.2
	1.2s	20.85nm			5.2mb
LBF	85.34	43 eP	08	52.40	0.3
	1.2s	20.85nm			5.2mb
ENN	86.58	39 eP	08	59.00	0.9
	1.0s	11.00nm			5.0mb
HAU	86.93	42 eP	09	00.30	0.4
	1.4s	26.15nm			5.3mb
WTS	87.11	38 eP	09	01.00	0.4
	1.3s	78.00nm			5.8mb
		e	09	08.00	
BSF	87.24	42 eP	09	01.60	0.1
	1.4s	17.45nm			5.1mb
RUP	87.34	41 eP	09	02.14	0.3
CDF	87.54	42 eP	09	03.00	0.1
ABH	87.65	40 eP	09	04.49	1.2
KHC	91.63	41 P	09	22.30	0.3
LZH	140.17	352 ePKP	15	44.50	-0.3
WB5	140.19	243 ePKP	15	36.00	-9.1X
WRA	140.19	243 PKPc	15	42.90	-2.2X
	1.3s	6.40nm			
MTN	145.12	252 iPKPd	15	52.00	-1.7
GKN	146.49	20 PKP	15	55.00	-0.9
	1.1s	71.00nm			
KKN	146.91	19 PKP	15	57.60	0.9
	1.4s	148.00nm			
GUN	146.99	18 PKP	15	58.50	1.5
DMN	147.01	20 PKP	15	58.00	1.1X
PKI	147.15	19 PKP	15	58.20	1.0
	S.D. = 0.9	on 77 of 83 obs.			

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* FEB 10, 1990 07h 52m 39.45± 0.42s
3.450 N ± 8.4km 82.947 W ±13.1km
DEPTH = 10.0km (geophysicist)
4.2mb (5 obs.)
SOUTH OF PANAMA (83)

UPA	6.46	32 iPd	54	18.00	1.1
	0.5s	98.59nm			6.0mb X
NNA	16.49	158 eP	56	33.70	1.0
	0.9s	7.56nm			3.8mb
ZOBO	24.47	144 P	58	00.00	-0.5
LPB	24.69	144 P	58	02.00	-0.5
POW	33.42	348 P	59	19.50	-1.0
ANMO	38.18	328 P	00	02.80	1.6
	1.4s	5.81nm			4.1mb
PLM	43.44	317 P	00	45.80	1.2
MSU	43.91	326 P	00	49.40	1.0
RSSD	44.58	338 P	00	54.90	1.1
BW06	45.77	333 P	01	02.70	-0.5
TNP	46.55	322 P	01	09.20	-0.3
	0.8s	1.47nm			4.1mb
KVN	47.70	323 P	01	18.30	-0.2
RSON	48.10	351 P	01	20.00	-1.3
	0.8s	9.01nm			4.9mb
PNT	55.31	332 eP	02	15.00	-0.5
EDM	55.57	338 eP	02	15.50	-1.9
MBC	75.50	352 eP	04	25.00	-0.3
	1.0s	5.00nm			4.5mb
GKN	146.52	20 PKP	12	22.00	-0.1
KKN	146.93	19 PKP	12	23.00	0.1
	0.8s	16.00nm			
GUN	147.02	18 PKP	12	23.50	0.3
DMN	147.04	20 PKP	12	23.20	0.1
PKI	147.18	19 PKP	12	23.20	-0.2
	S.D. = 0.9	on 21 of 21 obs.			

FEB 10, 1990 08h 03m 28.96± 0.32s
3.571 N ± 7.1km 82.749 W ± 5.7km
DEPTH = 10.0km (geophysicist)
4.8mb (12 obs.)
SOUTH OF PANAMA (83)

ANCC	5.87	90 ePc	04	58.14	-0.1
PURC	6.50	101 eP	05	08.10	0.6
DIAC	6.55	92 eP	05	08.30	0.4
HOBC	6.64	83 ePc	05	09.52	0.3
NNA	16.53	159 iP	07	23.00	0.3
	1.2s	57.81nm			4.6mb
ARE	22.80	151 eP	08	37.00	3.4X
LPB	24.67	144 P	08	52.00	0.2
		eLR	17	14.00	
CCH	26.50	142 eP	09	08.00	-0.9
GBTN	31.97	358 P	09	57.40	0.1
POW	33.34	348 P	10	08.80	-0.5
ALQ	38.18	328 iPd	10	51.50	0.7
	2.5s	83.33nm			5.0mb
ANMO	38.19	328 P	10	51.50	0.7
	1.6s	20.83nm			4.6mb
GLD	41.37	334 P	11	18.30	1.2
	1.6s	37.04nm			4.9mb
GOL	41.40	333 P	11	18.60	1.2
	1.4s	32.64nm			4.9mb
GLA	41.94	318 eP	11	23.00	1.3
BAR	42.97	316 eP	11	36.00	5.9X
PLM	43.49	317 eP	11	34.00	-0.5
MSU	43.92	326 P	11	38.50	0.5
RSSD	44.54	338 P	11	44.40	1.4
GSC	44.61	319 eP	11	44.00	0.6
MWC	44.80	317 eP	11	45.00	-0.2
SBB	44.92	318 eP	11	34.00	-11.9X
CLC	45.43	319 eP	11	50.00	0.0
BW06	45.75	332 P	11	52.00	-0.6
	1.8s	17.36nm			4.7mb
ISA	45.91	319 eP	11	54.00	0.2
TNP	46.58	322 P	11	59.30	0.1
	1.0s	5.83nm			4.6mb
KVN	47.72	322 P	12	07.50	-0.7
RSON	48.02	351 P	12	09.40	-0.7
	1.6s	39.37nm			5.3mb
LBFM	51.42	323 P	12	35.80	-0.8
SES	52.41	337 eP	12	43.00	-0.7
FFC	53.34	346 iPd	12	50.10	-0.4
	1.3s	21.00nm			4.9mb
PNT	55.30	331 iPc	13	05.00	0.0
EDM	55.53	338 ePd	13	04.90	-1.7
MBC	75.41	352 eP	15	14.00	-0.3
	1.0s	7.00nm			4.7mb
TIC	77.42	84 P	15	26.10	-0.6
LIC	77.43	84 P	15	26.00	-0.7
KIC	77.71	84 P	15	27.40	-0.9
IMA	79.08	337 P	15	33.80	-1.2
TTA	79.25	334 P	15	34.40	-1.5
	1.2s	15.15nm			4.9mb
WTS	86.94	38 eP	16	16.00	0.6
	1.0s	26.00nm			5.4mb
		e	16	21.50	
GKN	146.34	20 PKP	23	11.20	-0.2
	1.0s	46.00nm			
KKN	146.76	20 PKP	23	12.50	0.4
	0.8s	36.00nm			
GUN	146.84	19 PKP	23	13.40	1.0
	1.1s	76.00nm			
DMN	146.86	20 PKP	23	13.00	0.7
PKI	147.00	20 PKP	23	13.30	0.7
POO	148.16	46 ePKP	23	17.00	2.7X
	S.D. = 0.8	on 42 of 46 obs.			

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* FEB 10, 1990 09h 29m 18.14± 2.01s
19.117 S ±20.8km 71.624 W ±11.7km
DEPTH = 33.0km (normal)
OFF COAST OF NORTHERN CHILE (121)

ARE	2.64	3 iP	29	59.50	-0.2
		iS	30	28.50	
LPB	4.23	53 Pc	30	22.50	0.2
	0.9s	389.92nm			
ZOBO	4.38	50 Pc	30	24.00	-0.6
		S	31	22.00	
CCH	5.49	73 P	30	40.80	0.8
NNA	8.69	324 eP	31	25.00	0.4
	0.8s	4.48nm			4.7mb X
		e	33	16.50	
BAO	22.81	85 eP	34	14.50	-5.0X
KIC	70.54	76 P	40	31.80	-0.5
	S.D. = 0.7	on 6 of 7 obs.			

? FEB 10, 1990 09h 42m 07.63± 1.13s
39.164 N ± 9.0km 27.503 E ±17.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZM	0.79	194 ePg	42	23.00	0.0
		eSg	42	35.00	
DST	0.98	63 iPn	42	26.20	0.0
EZN	1.13	306 iPn	42	33.20	4.5X
EDC	1.21	13 ePn	42	29.50	-0.7
BNT	1.23	15 iPn	42	31.30	0.7
CIN	1.63	163 ePg	43	08.00	31.6X
		iSg	43	13.00	
	S.D. = 1.0	on 4 of 6 obs.			

FEB 10, 1990 09h 43m 28.81± 0.40s
51.205 N ± 9.6km 178.964 W ± 4.4km
DEPTH = 33.0km (normal)
4.9mb (31 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS. (7)
ML 4.6 (PMR).

ADK	1.58	64 iPd	43	55.70	0.9
SMY	4.55	292 eP	44	42.50	5.4X
SDN	11.80	62 e(P)	46	18.80	1.2
SVW	16.26	43 eP	47	20.00	4.0X
KDC	16.65	57 eP	47	21.30	0.4
PMS	19.02	47 eP	47	52.60	2.4
IMA	19.65	31 eP	47	56.90	-0.6
	0.8s	21.30nm			4.5mb
TOA	20.82	46 e(P)	48	10.40	0.8
FBA	21.15	38 eP	48	12.00	-0.8
	1.0s	22.50nm			4.5mb
MBC	33.81	22 eP	50	09.00	-0.3
	0.9s	4.00nm			4.3mb
MDJ	34.50	280 eP	50	15.00	-0.6
PNT	37.09	69 eP	50	38.00	0.5
EDM	38.99	61 eP	50	52.00	-1.4
SNY	39.70	280 iPd	51	00.40	1.1
SES	41.53	63 eP	51	14.00	-0.3
KVN	43.43	82 eP	51	30.60	0.4
BJI	45.31	282 eP	51	45.50	0.5
BW06	46.46	72 eP	51	53.80	-0.6
	0.8s	12.50nm			4.9mb
HHC	47.64	286 eP	52	05.00	1.4
TIY	49.04	282 Pd	52	14.10	-0.3
FRB	53.23	31 eP	52	44.00	-1.6
LZH	55.33	286 eP	53	01.50	-0.2
	1.0s	16.00nm			5.0mb
GTA	55.54	292 Pc	53	02.60	-0.5
SIO	58.83	71 eP	53	25.30	-1.0
CD2	58.91	282 eP	53	25.80	-1.1
TUL	59.03	70 eP	53	25.80	-1.8
	1.0s	6.70nm			4.7mb
		e	53	31.20	
WMQ	59.35	303 eP	53	27.00	-2.9X
SUF	64.70	348 eP	54	04.30	-0.9
	0.6s	4.10nm			4.7mb
NUR	67.03	348 eP	54	18.90	-1.2
NB2	67.81	355 P	54	24.00	-1.1
	0.8s	3.00nm			4.4mb
HFS	68.55	353 eP	54	27.70	-1.9
	0.5s	1.50nm			4.3mb
GUN	71.83	292 P	54	51.20	0.7
KKN	72.27	292 P	54	53.50	0.6
	0.6s	24.00nm			5.4mb
PKI	72.36	292 P	54	54.00	0.4
	0.7s	25.00nm			5.3mb
GKN	72.48	293 P	54	54.40	0.3
	0.8s	39.00nm			5.5mb
DMN	72.50	292 P	54	55.10	0.7
KHC	79.47	352 eP	55	33.10	0.0
ZST	80.02	349 eP	55	36.00	0.0
LDF	80.58	1 eP	55	39.00	0.1
	0.8s	13.45nm			5.0mb
GRR	80.77	1 eP	55	40.40	0.5
	0.6s	7.20nm			4.8mb
LPF	81.13	1 eP	55	42.70	0.9
	0.6s	9.90nm			5.0mb
MLR	81.31	343 ePc	55	44.00	1.0
KBA	81.53	352 eP	55	44.00	-0.2
	0.8s	16.00nm			5.1mb
		eSg	26	25.00	
WB5	81.75	224 eP	55	45.20	-0.1
WRA	81.82	224 Pd	55	45.70	0.0
	0.6s	0.90nm			4.0mb

10d 09h

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SSF     82.09 358 eP     55 47.00   0.1
        0.6s     4.50nm          4.7mb
AVF     82.37 358 eP     55 48.60   0.3
        0.8s     6.05nm          4.7mb
SMF     82.50 358 eP     55 48.70  -0.3
        0.8s     8.05nm          4.8mb
TCF     82.88 359 eP     55 50.80  -0.2
        0.8s     6.05nm          4.7mb
LSF     82.93 360 eP     55 51.00  -0.2
        0.7s    11.00nm          5.1mb
MAF     82.95 359 eP     55 51.40   0.1
        1.2s    11.90nm          4.9mb
HYB     84.18 290 eP     55 58.50   0.4
LFF     84.24   0 eP     55 58.10   0.2
        1.0s    28.00nm          5.4mb
CAF     84.25 359 eP     55 58.30   0.3
        1.0s    10.00nm          4.9mb
LPO     84.49 360 eP     55 59.20   0.0
        1.0s    28.00nm          5.4mb
SBF     85.15 355 eP     56 02.90   0.3
        0.8s    13.45nm          5.2mb
FRF     85.49 356 eP     56 04.30   0.1
        0.8s    10.75nm          5.1mb
LRG     85.61 356 eP     56 05.10   0.3
        1.0s    16.00nm          5.2mb
LMR     85.72 356 eP     56 05.70   0.3
        0.8s     5.35nm          4.8mb
POO     86.03 295 eP     56 07.00  -0.3
PGF     86.37 354 eP     56 08.60  -0.1
        0.6s    10.80nm          5.3mb
SLR    147.16 310 iPKPd  03 10.00   2.3X
KSR    147.92 312 ePKP   03 10.50   1.5X
KIM    151.35 312 ePKP   03 18.00   3.9X
     S.D. = 0.8  on  58 of  64 obs.
-----------------------------------------
?  FEB  10, 1990  09h 57m 16.89± 2.73s
    2.847 N ±36.0km   95.994 E ±19.2km
   DEPTH =  33.0km  (normal)
 OFF W COAST OF NORTHERN SUMATERA(705)

BSI      2.72 345 eP     57 59.00  -0.2
PSI      2.93  93 iPd    58 02.00  -0.2
IPM      5.31  71 ePd    58 36.20   0.2
GUN     26.73 340 P      02 55.50  -0.3
DMN     26.73 338 P      02 57.60   1.9
KKN     26.83 339 P      02 55.90  -0.7
GKN     27.26 338 P      02 59.70  -0.7
     S.D. = 1.1   on   7 of   7 obs.
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*  FEB  10, 1990  10h 35m 57.83± 0.73s
   15.327 N ±10.7km  104.360 W ±10.9km
   DEPTH =  33.0km  (normal)
   5.0mb (  5 obs.)
 OFF COAST OF MICHOACAN, MEXICO  ( 64)

ALQ     19.62 355 iPc    40 27.00   0.2
        1.5s    79.86nm          4.8mb
ANMO    19.63 355 eP     40 27.50   0.6
GLA     20.04 334 eP     40 31.00   0.0
BAR     20.58 329 eP     40 37.00   0.4
PLM     21.22 330 eP     40 43.00  -0.3
SIO     21.58  18 eP     40 46.80   0.1
TUL     21.88  19 eP     40 50.30   0.5
        1.4s   105.30nm          5.1mb
                  e      40 55.20
                  e      41 08.80
                  eS     44 43.00
                  LR     46 46.00
RVR     21.99 330 eP     40 51.00   0.2
PAS     22.50 329 eP     40 53.00  -2.9
MWC     22.51 329 eP     40 58.00   1.8
SBB     22.77 330 eP     41 00.00   1.4
GSC     22.81 333 eP     41 01.00   2.0
OLY     23.18  28 eP     41 02.60   0.1
PV09    23.46 351 eP     41 05.10  -0.5
CLC     23.59 332 eP     41 06.00  -0.6
                  e      43 24.00
SYP     23.73 326 eP     41 07.00  -1.1
ISA     23.87 331 eP     41 11.00   1.7
GLD     24.34 358 eP     41 15.10   1.1
TNP     25.35 336 ePc    41 24.10   0.4
FRI     25.53 331 eP     41 24.90  -0.2
FVM     25.71  26 eP     41 25.00  -1.8
PRS     25.84 327 eP     41 28.10   0.1
RSCP    26.27  36 eP     41 33.80   1.7
KVN     26.54 336 eP     41 34.90   0.2
CMB     26.69 331 eP     41 35.50  -0.4

BW06    27.72 352 eP     41 43.80  -1.7
SES     35.39 353 ePd    42 52.10  -0.5
EDM     38.47 351 eP     43 17.50  -0.9
FFC     39.36   2 iPd    43 24.90  -0.8
        1.4s    35.00nm          4.9mb
ZOBO    47.60 130 iPc    44 33.50   0.1
        1.2s    27.03nm          5.1mb
      Z  24s     0.98um          4.7MszX
                  LR     00 48.00
LPB     47.78 130 P      44 35.00   0.3
                  eLR    58 45.00
CCH     49.77 129 P      44 49.80  -0.1
MBC     61.44 356 eP     46 12.00  -0.9
        1.5s    16.00nm          4.9mb
     S.D. = 1.1   on  33 of  33 obs.
-----------------------------------------
%  FEB  10, 1990  11h 00m 15.02± 3.57s
   41.606 N ±21.7km   12.630 E ±17.8km
   DEPTH =  10.0km  (geophysicist)
 SOUTHERN ITALY                  (390)

RDP      0.17  23 Pc     00 18.60  -0.2
                  eSg    00 19.50
RMP      0.21  15 Pc     00 19.50  -0.1
                  eSg    00 21.20
AZI      0.71  57 Pc     00 28.60  -0.4
                  eSg    00 38.30
MNS      0.78   3 Pc     00 30.00  -0.2
                  eSg    00 41.10
SDI      0.89  83 P      00 32.20   0.0
                  eSg    00 45.80
AQU      0.94  37 P      00 34.00   1.0
                  eSg    00 46.60
ASS      1.46   1 P      00 42.40   0.9
                  eSg    01 00.60
ARV      1.91   7 P      00 47.00  -0.9
     S.D. = 0.7   on   8 of   8 obs.
-----------------------------------------
   FEB  10, 1990  12h 40m 59.24± 0.39s
   17.813 N ± 6.0km   94.944 W ± 7.6km
   DEPTH = 132.5km  (  2 depth phases)
   4.6mb ( 24 obs.)
 CHIAPAS, MEXICO                 ( 61)
      Felt on the Isthmus of
      Tehuontepec.

OLY     17.89   9 P      45 01.70   0.6
SIO     17.90 356 iP     45 01.20  -0.1
TUL     18.04 358 eP     45 02.20  -0.7
        1.0s    31.70nm          4.6mb
                  e      45 25.40
                  e      48 35.30
                  e      48 42.00
PWLA    18.16  18 P      45 04.20  -0.1
ALQ     19.91 331 iPd    45 23.00   0.2
        1.0s     8.75nm          4.1mb
ANMO    19.91 331 P      45 23.10   0.3
        0.7s     4.71nm          4.0mb
TKL     20.35  27 P      45 26.40  -0.7
FVM     20.48  10 P      45 28.30  -0.1
BLA     23.17  31 P      45 55.40   0.6
GOL     23.61 340 P      46 00.30   0.9
        0.7s    33.98nm          4.9mb
MSU     25.53 327 P      46 18.00   0.6
SBB     26.43 314 eP     46 44.00  18.5X
TNP     28.06 321 P      46 40.80   0.4
KVN     29.21 321 eP     46 50.90   0.2
                  i      47 18.40 128km
WNY     31.87  29 P      47 13.10  -0.6
RSON    32.98   1 P      47 22.60  -0.7
        0.6s    19.63nm          5.1mb
SES     34.97 342 eP     47 40.00  -0.4
                  pP     48 10.00 137km
PNT     37.21 333 eP     48 00.00   0.8
FFC     37.24 353 iPd    47 59.60   0.3
        0.6s    16.00nm          5.0mb
EDM     38.14 342 iPd    48 06.70  -0.3
SCH     42.77  24 eP     48 44.00  -1.0
ZOBO    42.95 141 Pd     48 46.90  -0.6
        1.0s    15.00nm          4.6mb
      Z  22s     0.16um          3.9Msz
                  LR     00 20.00
LPB     43.17 141 P      48 49.00  -0.1
CCH     45.02 139 (P)    49 03.00  -0.7
FRB     49.32  15 eP     49 35.00  -1.4
FBA     58.64 337 ePd    50 43.30  -1.1
        0.7s     8.72nm          4.9mb

                  i      51 31.80 213kmX
MBC     59.81 353 ePd    50 52.00  -0.3
        0.6s    10.00nm          5.0mb
DAG     69.62  14 iPd    51 54.70  -0.8
        0.3s    49.35nm          5.8mb X
LFF     81.55  46 eP     53 03.70   0.3
        0.8s    13.45nm          4.8mb
LSF     81.70  44 eP     53 04.30   0.1
        0.8s     6.70nm          4.5mb
EPF     81.81  48 eP     53 05.00   0.1
        0.8s     5.35nm          4.4mb
EPF     81.81  48 eP     53 05.60   0.7
        0.8s    12.10nm          4.7mb
TCF     82.14  44 eP     53 06.60   0.1
        0.6s     3.60nm          4.3mb
NB2     82.15  28 P      53 07.70   1.4
        0.8s     5.00nm          4.3mb
MAF     82.39  44 eP     53 07.90   0.1
        0.8s     8.75nm          4.6mb
CAF     82.45  45 eP     53 08.10   0.0
        0.6s     2.70nm          4.2mb
BGF     82.48  44 eP     53 08.20   0.0
        0.8s    10.05nm          4.7mb
AVF     82.74  43 eP     53 09.40  -0.1
        0.8s     8.05nm          4.6mb
SSF     82.75  43 eP     53 09.70   0.1
        0.8s     5.35nm          4.4mb
LOR     82.91  43 eP     53 10.60   0.1
        0.6s     4.05nm          4.5mb
HAU     84.26  41 eP     53 17.80   0.6
        0.8s     8.05nm          4.6mb
SOD     84.99  19 eP     53 21.00   0.5
LKO     86.52  81 Pd     53 31.24   2.2
        0.7s     8.00nm          4.8mb
SUF     87.53  23 eP     53 33.50   0.5
        0.6s     3.00nm          4.5mb
LIC     88.04  84 P      53 36.70   0.4
NUR     88.20  25 eP     53 46.00   9.8X
KIC     88.27  84 P      53 37.80   0.4
GKN    134.45   1 PKP    00 00.00  -4.1X
HYB    144.41  11 iPKPc  00 19.90  -2.2
        1.0s    40.00nm
GBA    147.89  14 PKPc   00 27.50  -0.3
        0.7s     7.40nm
     S.D. = 0.7   on  47 of  50 obs.
-----------------------------------------
*  FEB  10, 1990  12h 51m 10.58± 1.37s
    7.334 S ±11.4km  128.867 E ±17.9km
   DEPTH = 197.1 ± 20.7 km
   4.1mb (  1 obs.)
 BANDA SEA                       (280)

SLKI     2.49 105 iPd    51 55.00   0.4
                  iS     52 25.40
MTN      5.91 158 eP     52 37.50   0.1
                  eS     53 42.00
KNA      8.36 181 eP     53 08.90  -0.6
        0.3s    26.00nm          5.0mb X
                  eS     54 36.00
WB5     13.57 157 eP     54 15.00  -1.4
                  i      54 18.00
                  iS     56 40.00
WRA     13.61 158 Pc     54 15.40  -1.6
        0.5s     3.70nm          4.1mb
MBL     16.29 212 eP     54 51.50   1.6
OIS     16.76 143 eP     54 58.00   2.3
                  eS     57 52.00
CHTO    39.31 312 eP     58 22.20   0.0
GUN     54.33 312 P      00 19.60   0.1
PKI     54.49 311 P      00 20.30  -0.4
KKN     54.71 312 P      00 22.00  -0.1
DMN     54.74 311 P      00 22.10  -0.3
     S.D. = 1.3   on  12 of  12 obs.
-----------------------------------------
   FEB  10, 1990  13h 12m 14.23± 0.35s
    5.263 S ± 5.6km  151.271 E ± 7.6km
   DEPTH =  10.0km  (geophysicist)
   5.3mb ( 11 obs.)  4.6Msz (  1 obs.)
 NEW BRITAIN REGION              (192)
      CENTROID, MOMENT TENSOR    (HRV)
      Dota Used: GDSN
      L.P.B.: 11S, 18C
      Centraid Location:
      Origin Time       13:12:21.8 1.2
      Lot  5.35S 0.09 Lon 150.91E 0.13
      Dep  32.910.9 Half-durotion  1.5
      Moment Tensor;   Scole 10**16 Nm
```

Mrr=-2.74 0.56 Mtt= 5.28 0.59
Mff=-2.55 0.85 Mrt=-0.37 0.91
Mrf= 4.38 1.43 Mtf=-4.38 0.55
Principal Axes:
T Val= 7.74 Plg=13 Azm=208
N -0.05 48 313
P -7.69 39 107
Best Double Couple:Mo=7.7*10**16
NP1:Strike=256 Dip=53 Slip=-159
NP2: 152 73 -39

RAB	1.39	40	iPd-	12	40.00	0.3
LAT	4.47	252	eP	13	28.00	4.5X
PMG	5.80	225	iPc+	13	43.00	0.6
	0.9s	529.41nm			6.2mb	
			eS	14	56.00	
HNR	9.55	116	eP	14	39.00	4.2X
CTA	15.52	198	iPd	15	57.80	2.9X
	1.2s	68.75nm			4.8mb	
			i	16	02.00	
			iS	19	00.00	
QIS	18.96	216	iPc	16	38.20	0.0
GUA	19.72	341	eP	16	51.30	4.2X
	0.9s	255.46nm			5.5mb	
GUMO	19.78	341	eP	16	52.30	4.6X
	1.2s	444.44nm			5.6mb	
			eS	20	37.00	
SLKI	20.02	261	ePd	17	11.10	20.9X
PVC	20.77	128	iPc	17	05.50	7.4X
RMO	21.24	186	iPc	17	04.60	1.7
			e	17	09.00	
MTN	21.26	248	eP	17	02.00	-1.0
WB5	21.95	227	iPc	17	09.10	-0.9
			eS	21	13.70	
WRA	22.01	227	Pc	17	09.60	-1.0
	0.4s	13.60nm			4.7mb	
QLP	22.24	197	eP	17	14.00	1.2
DZM	22.25	140	iPc	17	13.50	0.5
KNA	24.43	243	eP	17	34.90	0.6
CMS	26.58	190	eP	17	54.00	-0.5
ADE	31.76	200	iPc	18	40.60	-0.3
	1.0s	84.00nm			5.6mb	
MBL	34.33	240	eP	19	01.00	-2.4X
MEKA	37.77	232	iPd	19	31.60	-0.8
COOL	38.09	224	iPc	19	34.00	-1.1
KLB	40.88	226	eP	19	57.00	-1.2
BAL	41.13	228	eP	19	59.00	-1.3
MSZ	41.87	162	eP	20	08.00	1.8
NWAO	41.98	225	eP	20	06.00	-1.3
MUN	42.20	227	eP	20	08.50	-0.6
RKG	42.78	223	eP	20	15.70	1.9
MAT	43.35	345	eP	20	17.00	-1.3
	1.7s	76.92nm			5.2mb	
			eS	26	46.00	
QZH	43.72	315	Pd	20	25.50	4.0X
N	14s	1.00um				
GZH	46.54	309	eP	20	46.40	2.3
QIZ	47.40	302	eP	20	52.80	1.8
WHN	50.15	318	eP	21	16.00	4.0X
Z	16s	0.60um			4.7MszX	
			eS	28	24.00	
TIA	52.20	325	eP	21	28.50	1.0
MDJ	53.33	341	eP	21	34.70	-1.1
GYA	53.47	308	P	21	41.20	3.9X
BJI	55.45	328	eP	21	50.50	-0.8
XAN	55.92	318	P	21	56.00	1.1
TIY	55.97	323	eP	21	54.20	-1.0
Z	22s	0.50um			4.6Msz	
KMI	55.99	305	eP	21	59.50	3.7X
CHG	56.82	296	eP	22	05.50	3.9X
CHTO	56.82	296	eP	22	02.80	1.2
	1.2s	11.46nm			4.8mb	
CD2	57.89	312	eP	22	11.50	2.5
HHC	58.55	325	eP	22	15.00	1.5
BTO	59.27	324	eP	22	18.00	-0.5
LZH	60.51	317	eP	22	30.50	3.3X
	1.5s	75.00nm			5.6mb	
GUN	71.06	302	P	23	34.70	-0.7
PKI	71.36	301	P	23	37.20	0.0
KKN	71.53	301	P	23	38.20	0.1
DMN	71.63	301	P	23	39.10	0.4
GKN	72.14	301	P	23	41.90	0.3
WMO	75.05	318	eP	23	55.80	-2.4
KSH	82.06	311	eP	24	41.50	4.9X
FBA	82.88	22	eP	24	38.20	-1.9
	0.5s	5.79nm			5.0mb	
SPA	84.77	180	iPc	24	55.00	5.1X

	1.0s	19.50nm			5.3mb	
WDC	90.49	49	e(P)	25	19.60	1.8
CMB	91.90	52	eP	25	23.50	-0.9
FRI	92.35	53	eP	25	26.60	0.2
KVN	93.77	51	eP	25	32.20	-1.0
TNP	94.40	52	eP	25	35.90	-0.2
PLM	94.42	57	eP	25	35.80	-0.5
EDM	97.41	37	eP	25	49.50	0.2
KEV	106.29	343	ePKP	30	29.00	-11.0X
SUF	110.17	336	ePKP	30	31.60	-16.0X
BUL	118.28	244	ePKP	31	05.00	0.4
BCAO	132.91	271	ePKPc	31	39.40	6.8X
	0.6s	4.00nm				
ZOBO	135.54	120	ePKP	31	29.00	-9.2X
	1.0s	5.00nm				
			i	31	39.00	
KUK	151.77	273	ePKP	32	14.50	9.3X
BAO	151.81	138	ePKP	32	04.00	-1.3
S.D. = 1.2 on 48 of 69 obs.						

% FEB 10, 1990 13h 44m 33.12± 0.78s
18.111 N ±15.3km 66.470 W ± 4.8km
DEPTH = 10.0km (geophysicist)
PUERTO RICO REGION (90)

PORP	0.17	250	iP	44	37.00	0.0
SJG	0.30	90	iP	44	40.00	0.5
			S	44	45.20	
LRS	0.40	297	iP	44	41.30	0.0
CPD	0.53	98	iP	44	43.50	-0.4
			S	44	50.30	
LPR	0.60	71	iP	44	45.20	-0.1
			S	44	54.10	
S.D. = 0.5 on 5 of 5 obs.						

FEB 10, 1990 13h 58m 07.95± 0.41s
10.506 S ± 7.7km 120.304 E ± 7.8km
DEPTH = 33.0km (normal)
4.6mb (5 obs.)
SUMBA ISLAND REGION (287)

KNA	9.75	123	eP	00	29.80	0.8
MBL	10.60	182	eP	00	39.70	-1.0
			eS	02	29.00	
MTN	10.86	103	eP	00	43.00	-1.2
			eS	02	39.00	
SLKI	11.14	78	eP	00	49.10	1.1
MEKA	16.11	186	eP	01	55.00	1.3
			eS	04	41.00	
WB5	16.45	126	eP	01	56.70	-1.4
			eS	04	48.80	
WRA	16.47	126	Pd	01	56.90	-1.3
	0.8s	4.70nm			3.7mb	
BAL	20.28	189	eP	02	49.00	5.4X
			eS	06	19.00	
QIS	21.09	121	iPc	02	54.40	2.3
MUN	21.70	189	eP	03	08.00	9.9X
			eS	06	49.00	
CHG	35.95	324	eP	05	08.90	1.2
CHTO	35.95	324	eP	05	08.30	0.6
	1.0s	4.50nm			4.4mb	
			pP	06	02.00	259kmX
CD2	44.14	339	iPd	06	15.00	-0.3
XAN	45.60	347	P	06	27.20	0.2
GBA	48.81	298	Pc	06	52.80	0.4
	0.7s	4.50nm			4.6mb	
BJI	50.43	356	eP	07	03.50	-0.9
	1.0s	12.00nm			4.8mb	
GUN	50.69	320	P	07	06.60	-0.4
	0.7s	21.00nm			5.2mb	
PKI	50.75	319	P	07	06.80	-0.7
DMN	50.98	319	P	07	08.60	-0.5
KKN	50.99	319	P	07	08.60	-0.5
GKN	51.55	319	P	07	12.40	-0.9
GTA	53.19	340	eP	07	25.00	-0.4
KSH	64.53	323	P	08	45.50	1.3
CTI	110.43	315	PKP	16	26.10	-12.7X
			eSn	16	48.10	
ZOBO	152.12	162	PKP	18	06.00	9.7X
S.D. = 1.1 on 21 of 25 obs.						

% FEB 10, 1990 14h 15m 55.97± 1.62s
44.328 N ±15.0km 11.098 E ± 8.9km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)

MME	0.32	245	P	16	06.70	4.1X
			eSg	16	12.40	
BDI	0.45	234	P	16	06.40	1.3
			eSg	16	13.20	
PGD	0.64	135	P	16	09.50	0.6
			eSg	16	18.60	
PII	0.73	215	Pd	16	09.00	-1.4
			eSg	16	17.50	
CRE	0.93	138	P	16	13.50	-0.3
			eSg	16	26.00	
BOB	1.26	291	P	16	19.20	-0.2
S.D. = 1.4 on 5 of 6 obs.						

% FEB 10, 1990 14h 30m 55.60± 0.71s
44.058 N ± 5.8km 7.925 E ± 5.0km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.3 (GEN).

IMI	0.15	190	P	30	59.24	0.1
			S	31	02.01	
ROB	0.24	351	P	31	00.98	0.2
			S	31	04.16	
FIN	0.25	53	P	31	00.78	-0.2
			S	31	03.96	
ENR	0.40	295	P	31	03.65	-0.2
			S	31	09.70	
STV	0.47	293	P	31	05.29	0.1
			S	31	11.44	
PCP	0.66	42	P	31	08.88	0.1
			S	31	17.80	
PZZ	0.74	307	P	31	10.11	-0.1
			S	31	19.54	
S.D. = 0.2 on 7 of 7 obs.						

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* FEB 10, 1990 14h 32m 09.74± 1.63s
7.704 S ±12.9km 128.368 E ±12.6km
DEPTH = 162.8 ± 18.4 km
4.3mb (3 obs.)
BANDA SEA (280)

SLKI	2.92	96	iPd	32	57.40	0.3
			iS	33	28.30	
MTN	5.79	152	iPc	33	35.10	0.5
			eS	34	35.00	
KNA	8.01	177	eP	34	04.20	0.0
	0.3s	82.00nm			5.7mb X	
			eS	35	17.00	
WB5	13.43	155	eP	35	13.80	-1.3
			i	35	15.80	
			eS	37	33.20	
WRA	13.48	155	Pc	35	14.20	-1.5
	0.3s	6.80nm			4.5mb	
MBL	15.71	211	eP	35	44.50	0.8
			eS	38	27.00	
QIS	16.78	141	iPc	35	57.10	0.4
			eS	38	54.00	
PMG	18.65	97	eP	36	17.00	-0.8
CTA	21.25	127	iPc	36	46.30	2.0
	0.9s	13.45nm			4.4mb	
CHTO	39.19	313	eP	39	23.20	-0.4
	0.8s	1.46nm			3.7mb	
S.D. = 1.3 on 10 of 10 obs.						

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* FEB 10, 1990 14h 37m 53.71± 1.19s
29.736 N ± 9.2km 139.033 E ±11.6km
DEPTH = 437.7 ± 13.7 km
4.4mb (8 obs.)
SOUTH OF HONSHU, JAPAN (211)

MAT	6.82	354	iPc	39	37.10	-0.1
	0.8s	117.16nm			5.1mb	
			eS	40	59.00	
BJI	21.33	305	eP	42	08.00	-0.7
CHG	37.96	263	iPd	44	33.90	0.4
	0.9s	15.76nm			4.4mb	
CHTO	37.96	263	iPd	44	34.00	0.5
	0.8s	14.09nm			4.4mb	
PMG	39.70	167	eP	44	49.00	1.4
GUN	46.26	281	P	45	40.80	0.7
PKI	46.76	281	P	45	43.80	-0.1
KKN	46.81	281	P	45	44.20	0.0
DMN	47.00	281	P	45	45.80	0.1
GKN	47.30	282	P	45	47.80	0.0
WB5	49.53	186	eP	46	04.70	0.2
			e	47	37.50	
WRA	49.60	186	Pc	46	03.60	-1.4
	0.5s	4.00nm			4.0mb	

10d 14h

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GBA     58.83 268 Pc     47 09.60  -1.3
        0.7s     4.50nm          4.0mb
KEV     69.57 340 eP     48 31.00  12.6X
SUF     73.61 334 iP     48 42.50   0.4
        0.6s     6.20nm          4.4mb
NUR     75.45 332 eP     48 53.00   0.6
HFS     79.90 335 eP     49 16.40   0.1
        0.6s     6.80nm          4.5mb
NB2     80.12 337 P      49 17.80   0.3
        0.9s     7.90nm          4.4mb
ALQ     90.86  48 iPd    50 24.30  13.7X
        1.0s     2.50nm
YJA    156.72  77 e(PKP)56 58.50  -1.1
     S.D. = 0.8  on  18 of  20 obs.
-------------------------------------
*  FEB  10, 1990  14h 59m 03.97± 1.21s
   47.859 N ±13.7km    9.059 E ± 8.1km
   DEPTH =  10.0km  (geophysicist)
 GERMANY                          (543)
      ML 2.8 (LDG), 2.1 (KBA).

SLE     0.39 256 iPc     59 12.70   0.7
ZLA     0.59 230 iPd     59 17.50   1.6
SAX     0.64 162 ePd     59 16.60  -0.4
FEL     0.70 272 ePn     59 17.12  -0.9
CDF     1.32 296 Pg      59 27.80  -0.6
                 Sg      59 45.80
OSS     1.39 147 ePc     59 27.50  -2.0
BSF     1.53 270 Pn      59 31.20  -0.2
                 Sg      59 55.60
HAU     1.83 276 Pg      59 38.60   2.9X
                 Sg      00 03.60
KBA     3.01 103 eP      59 54.50   1.8
                 iPgc    59 55.70
                 iSg     00 30.20
     S.D. = 1.5  on   8 of   9 obs.
-------------------------------------
%  FEB  10, 1990  15h 12m 32.45± 0.71s
   44.064 N ± 6.0km    7.911 E ± 5.1km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                   (545)
      ML 2.1 (GEN).

IMI     0.15 186 P       12 36.15   0.0
                 S       12 39.02
ROB     0.23 353 P       12 37.69   0.2
                 S       12 41.17
FIN     0.26  56 P       12 37.58  -0.4
                 S       12 41.07
ENR     0.39 295 P       12 40.46   0.0
                 S       12 45.99
STV     0.46 293 P       12 42.10   0.3
                 S       12 48.35
PCP     0.66  43 P       12 45.99   0.4
                 S       12 55.53
PZZ     0.73 307 P       12 46.30  -0.6
                 S       12 56.35
     S.D. = 0.4  on   7 of   7 obs.
-------------------------------------
   FEB  10, 1990  15h 13m 59.26± 0.71s
   44.065 N ± 5.9km    7.935 E ± 5.1km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                   (545)
      ML 2.0 (GEN).

IMI     0.16 192 P       14 02.99   0.0
                 S       14 05.96
ROB     0.23 349 P       14 04.42   0.1
                 S       14 07.91
FIN     0.24  54 P       14 04.32  -0.2
                 S       14 07.70
ENR     0.40 294 P       14 07.40  -0.2
                 S       14 13.45
STV     0.47 292 P       14 09.24   0.3
                 S       14 15.81
PCP     0.65  42 P       14 12.42   0.2
                 S       14 21.55
PZZ     0.74 307 P       14 13.65  -0.3
                 S       14 23.29
     S.D. = 0.3  on   7 of   7 obs.
-------------------------------------
%  FEB  10, 1990  15h 50m 22.24± 0.91s
   44.066 N ± 6.9km    7.953 E ± 6.9km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                   (545)
      ML 1.8 (GEN).

IMI     0.16 197 P       50 26.14   0.1
                 S       50 29.73
FIN     0.23  52 P       50 27.06  -0.2
                 S       50 30.65
ROB     0.24 345 P       50 27.68   0.4
                 S       50 30.96
ENR     0.42 293 P       50 30.65  -0.1
                 S       50 36.19
STV     0.49 292 P       50 31.99  -0.2
                 S       50 38.14
     S.D. = 0.3  on   5 of   5 obs.
-------------------------------------
   FEB  10, 1990  16h 58m 49.60± 1.07s
   9.839 N ± 5.8km  125.005 E ± 8.7km
   DEPTH =  61.1 ± 10.3 km
   5.0mb ( 11 obs.)
 MINDANAO, PHILIPPINE ISLANDS     (259)

DAV     2.79 16B eP      59 33.00   0.2
QCP     6.12 322 eP      00 20.00   0.4
BAG     7.82 327 eP      00 42.50  -0.9
QIZ    17.28 304 eP      02 52.00   3.6X
     E  13s      1.20um
                 eS      06 05.00
SSE    21.45 351 eP      03 34.50  -0.1
     Z  16s      0.40um          3.9MszX
NJ2    22.83 346 Pd      03 49.40   1.2
WHN    22.87 336 eP      03 49.00   0.4
     Z  16s      1.20um          4.4MszX
MTN    23.34 165 eP      03 53.00  -0.4
GYA    23.97 316 P       04 01.20   1.7
IPM    24.35 259 ePd     04 03.80   0.6
       1.1s     74.30nm          5.1mb
CHTO   26.75 292 eP      04 24.00  -1.6
       0.9s     1.49nm          3.6mb X
CD2    28.81 320 eP      04 43.00  -1.2
PMG    29.18 130 eP      04 47.00  -0.6
TIY    29.98 340 eP      04 52.20  -2.3
     Z  15s      0.70um          4.4MszX
WB5    30.94 163 eP      05 02.20  -0.9
                 e       05 10.30
                 e       08 06.30
WRA    30.99 163 Pc      05 01.80  -1.7
       0.6s     3.60nm          4.3mb
8JI    31.09 347 eP      05 03.50  -0.6
       1.4s    27.00nm          4.8mb
SNY    31.89 358 iPd     05 11.30   0.2
LZH    32.44 327 eP      05 24.00   7.8X
HHC    33.10 341 P       05 22.50   0.6
QIS    33.45 155 iPc     05 24.20  -0.8
       1.0s    52.00nm          5.4mb
                 e       05 32.00
MDJ    34.88   6 eP      05 37.50   0.5
CTA    36.36 145 iPc     05 58.50   8.7X
GTA    37.04 327 eP      05 55.80   0.3
GUN    40.92 302 P       06 28.60   0.4
       0.9s    43.00nm          5.2mb
PKI    41.21 301 P       06 30.40  -0.2
KKN    41.39 301 P       06 31.80  -0.1
DMN    41.48 301 P       06 32.80   0.1
GKN    41.99 301 P       06 36.20  -0.6
HYB    45.68 285 eP      07 06.00  -0.4
ADE    46.41 164 ePc     07 13.10   1.1
       0.9s    82.35nm          5.7mb
GBA    46.67 279 Pd      07 15.10   0.8
       0.7s     5.80nm          4.6mb
WMQ    46.80 323 P       07 15.50   0.4
BWA    49.31 154 eP      07 37.20   2.6
                 i       07 45.60
CAN    50.32 154 eP      07 43.90   1.6
                 e       07 52.00
DZM    51.55 128 iP      07 52.00   0.1
KSH    52.57 313 P       08 00.50   1.0
QUE    57.56 299 iPd     08 36.00   0.2
MAIO   64.53 305 eP      09 23.00   0.3
MSZ    66.67 148 eP      09 35.00  -1.0
SOD    84.20 337 iP      11 15.90   0.6
SUF    85.37 333 eP      11 20.90  -0.3
       0.8s    28.40nm          5.4mb
MBC    86.40  12 eP      11 27.00   0.9
       1.0s     7.00nm          4.8mb
NUR    86.57 331 eP      11 27.70   0.6
SLL    91.88 333 eP      11 51.20  -1.0
       0.7s     7.20nm          5.2mb
NB2    92.59 334 P       11 54.40  -1.1
       0.9s     4.00nm          4.8mb
LNV   151.66 150 ePKP    18 31.20  -1.3
TACH  152.13 151 ePKP    18 37.00   3.7X
RFA   152.29 156 e(PKP)18 41.50   8.0X
SAN   152.43 151 ePKP    18 28.50  -5.2X
ROCH  152.65 150 ePKP    18 37.00   2.7X
CFA   155.10 152 iPKPd   18 20.50 -16.9X
RTLL  155.22 152 ePKPc   18 18.20 -19.4X
TCA   156.82 159 ePKPc   18 32.80  -7.0X
     S.D. = 1.0  on  44 of  54 obs.
-------------------------------------
*  FEB  10, 1990  17h 08m 35.56± 1.83s
   6.293 S ±13.3km  154.754 E ± 8.3km
   DEPTH =  78.5 ± 17.4 km
   5.0mb (  5 obs.)
 SOLOMON ISLANDS                  (193)

HNR     6.02 122 eP      10 05.00   1.1
LAT     7.71 267 eP      10 27.00  -0.3
PMG     8.14 247 iPc     10 32.40  -0.8
        0.8s   738.81nm          6.5mb X
CTA    16.01 210 eP      12 28.00  10.6X
DZM    19.33 145 iPc     12 54.70  -2.8
QIS    20.42 225 eP      13 11.00   2.2
RMQ    20.88 195 eP      13 13.00  -0.5
SLKI   23.33 264 iPd     13 38.30   0.6
WB5    23.97 234 eP      13 44.70   0.8
WRA    24.03 234 Pd      13 45.10   0.7
       0.9s     5.00nm          3.9mb X
MTN    24.17 253 eP      13 46.00   0.1
LOE    57.42 295 eP      18 18.50  -0.3
CHG    60.38 296 iPd     18 38.90  -0.4
       1.0s    17.00nm          5.1mb
CHTO   60.38 296 eP      18 38.90  -0.4
       1.2s    21.88nm          5.2mb
GUN    74.55 301 P       20 08.20  -0.3
       0.6s    17.00nm          5.1mb
PKI    74.86 301 P       20 08.40  -1.9
KKN    75.03 301 P       20 10.50  -0.6
       0.7s     8.00nm          4.7mb
DMN    75.13 301 P       20 11.10  -0.6
GKN    75.64 301 P       20 14.50   0.0
HYB    78.81 289 eP      20 49.00  17.0X
SPA    83.75 180 iPc     20 51.30  -5.9X
       0.9s     9.09nm          4.8mb
LLA    89.16  53 eP      21 33.70   9.7X
PRI    89.31  54 eP      21 26.60   1.7
CM8    89.80  52 e(P)    21 38.70  11.7X
FRI    90.19  53 eP      21 28.00  -0.7
FLN   132.76 338 ePdiff24 46.60   7.5X
       1.2s    71.40nm
LDF   132.76 337 ePdiff24 47.40   8.2X
       1.0s    52.00nm
BGF   133.15 334 ePdiff24 55.20  14.2X
       0.8s    10.75nm
GRR   133.21 338 ePdiff24 44.90   3.8X
       1.2s    83.30nm
MAF   133.54 333 ePdiff24 54.20  11.5X
       1.0s    14.00nm
LPF   133.57 338 ePdiff24 43.80   1.0
       1.1s    63.50nm
TCF   133.64 334 ePdiff24 53.80  10.6X
       1.3s    23.45nm
MFF   134.39 336 ePdiff24 45.60  -0.9
       1.2s    71.40nm
RJF   134.71 333 ePdiff24 50.10   2.1
       1.0s    12.00nm
CAF   134.76 333 ePdiff24 51.60   3.4X
       1.2s     8.95nm
LFF   135.34 334 ePdiff24 47.90  -2.8X
       1.2s    53.55nm
LPO   135.34 333 ePdiff24 48.50  -2.3X
       1.0s    12.00nm
EPF   137.01 332 ePdiff24 45.70 -12.6X
       1.2s    29.75nm
     S.D. = 1.3  on  23 of  38 obs.
-------------------------------------
   FEB  10, 1990  17h 12m 10.49± 0.22s
   3.170 S ± 4.2km   80.829 W ± 4.2km
   DEPTH =  56.9km  (  6 depth phases)
   5.5mb ( 44 obs.)
 PERU-ECUADOR BORDER REGION       (110)
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 15S, 34C
      Centroid Location:
      Origin Time        17:12:14.0 0.5
      Lat  3.54S 0.06 Lon  81.07W 0.09
      Dep  15.0 FIX Half-duration  2.3
```

Moment Tensor; Scale 10**17 Nm
Mrr= 0.61 0.13 Mtt=-2.39 0.11
Mff= 1.78 0.19 Mrt=-0.80 0.46
Mrf=-0.95 0.29 Mtf= 0.42 0.11
Principal Axes:
T Val= 2.43 Plg=31 Azm=101
N 0.16 56 252
P -2.60 13 3
Best Double Couple:Mo=2.5*10**17
NP1:Strike=138 Dip=58 Slip= 167
NP2: 235 79 32

GGP	3.72	37	iPd	13	06.50	-0.8
QUR	3.76	38	iPd	13	07.80	0.0
PURC	7.05	39	eP	13	52.16	-1.8
SALC	7.37	34	iPd	13	54.33	-3.8X
ANCC	7.73	31	eP	13	57.86	-5.2X
HOQC	7.81	32	eP	13	59.38	-5.0X
DIAC	7.91	36	eP	14	01.02	-4.6X
CLMC	8.20	31	eP	14	04.08	-5.5X
HOBC	8.82	32	eP	14	13.26	-4.9X
NNA	9.61	156	iPc	14	24.20	-4.7X
	0.8s	298.51nm			6.4mb	
			eS	15	59.00	
PT10	9.64	157	iPc	14	25.00	-4.2X
			eS	16	12.00	
PT08	9.71	154	iPc	14	26.90	-3.6X
			iS	16	08.00	
BOG	10.28	41	eP	14	40.00	1.7
			iS	16	50.00	
UPA	12.14	6	iPd	15	04.00	1.0
	1.2s	281.25nm			6.1mb	
Z	20s	3.90um			5.7Msz	
ARE	16.09	146	eP	15	54.00	-0.8
TOV	16.93	40	eP	16	03.50	-1.7
CEOS	17.38	46	iP	16	07.50	-3.3X
ZOBO	18.04	137	P	16	16.20	-3.3X
			S	19	20.00	
			eLR	20	50.00	
LPB	18.25	138	iPd	16	22.00	0.2
	1.1s	506.33nm			5.6mb	
			S	19	48.00	
			eLR	21	18.00	
PLAV	18.55	46	iPd	16	23.50	-1.9
GUAC	18.93	45	iPd	16	29.00	-0.9
CAR	19.39	45	eP	16	52.00	17.0X
			iS	20	35.00	
LLAV	19.46	46	iP	16	33.50	-2.1
			iS	20	13.00	
CCH	20.18	135	P	16	42.20	-1.2
TRN	23.71	54	eP	17	19.36	1.1
	0.9s	696.20nm			6.1mb	
PORP	25.31	33	e(P)	17	33.00	-0.5
SJG	25.62	34	eP	17	38.00	1.5
CPD	25.70	34	eP	17	37.80	0.6
SLA	26.04	147	ePd	17	41.00	0.5
BIM	26.31	48	eP	17	43.70	0.8
FDF	26.39	47	eP	17	42.66	-1.0
MVM	26.46	48	eP	17	41.40	-2.9
CRM	26.58	47	eP	17	43.90	-1.4
BBL	26.68	45	eP	17	45.00	-1.2
PAG	26.88	44	eP	17	47.00	-1.1
SEG	27.26	44	eP	17	54.00	2.5
DEG	27.51	45	eP	17	52.00	-1.8
RTRS	28.93	159	iPd	18	07.10	0.6
BAO	34.61	113	eP	18	55.80	-0.8
TKL	38.72	356	P	19	31.00	0.2
GBTN	38.76	356	P	19	31.00	-0.1
RSCP	38.82	354	P	19	30.90	-0.8
	1.0s	92.19nm			5.6mb	
UYO	39.30	342	iPd	19	26.00	-9.6X
OLY	39.74	346	P	19	38.80	-0.5
BLA	40.18	1	P	19	41.60	-1.3
	0.9s	28.93nm			5.1mb	
POW	40.30	347	P	19	43.60	-0.2
CVL	41.00	3	P	19	49.00	-0.5
NA2	41.19	4	P	19	51.30	0.3
FKO	41.26	339	iPc	19	51.80	0.0
TUL	41.32	341	ePd	19	52.80	0.6
	1.2s	178.20nm			5.7mb	
			e	20	08.20	
			eS	25	47.00	
			LR	26	57.00	
SIO	41.34	341	eP	19	51.90	-0.5
FVM	41.90	349	P	19	56.20	-0.8
CAI	43.65	96	iPc	20	10.00	-1.6
TBR	44.51	7	P	20	19.00	0.9

ALQ	44.91	330	iPd	20	22.90	1.3
	0.8s	51.31nm			5.4mb	
ANMO	44.91	330	P	20	22.90	1.2
	1.0s	58.75nm			5.4mb	
HBVT	47.83	8	P	20	31.20	-13.1X
GOL	48.26	335	P	20	48.30	0.2
	0.9s	24.62nm			5.2mb	
GLA	48.29	321	eP	20	49.00	0.9
			e	21	09.00	
BAR	49.22	319	eP	20	57.00	1.7
			e	21	13.00	
PLM	49.78	320	eP	21	00.00	0.3
			e	21	14.00	
RVR	50.51	320	eP	21	03.00	-2.1
			e	21	21.00	
MSU	50.58	328	P	21	06.80	0.9
GSC	51.00	322	eP	21	09.00	0.1
			e	21	27.00	
MWC	51.10	320	eP	21	10.00	0.2
SB8	51.24	321	eP	21	10.00	-0.7
			e	21	28.00	
RSSD	51.48	339	P	21	15.20	2.6X
CLC	51.82	322	eP	21	15.00	-0.1
			e	21	31.00	
TNP	53.09	324	P	21	25.20	0.5
	0.8s	10.78nm			4.9mb	
			pP	21	41.20	61km
KVN	54.25	324	P	21	32.50	-0.7
			pP	21	49.40	65km
LTMT	55.11	333	ePc	21	40.70	1.2
ORV	56.59	323	eP	21	50.10	0.2
WDC	57.85	323	eP	21	55.90	-2.8
LBFM	57.95	324	P	21	59.10	-0.6
			pP	22	15.70	63km
SES	59.33	338	eP	22	09.00	0.0
	1.1s	79.00nm			5.8mb	
			pP	22	23.00	51km
FFC	60.30	346	iPc	22	14.80	-0.6
	0.8s	9.00nm			5.0mb	
LON	61.42	329	P	22	23.40	0.2
PNT	62.11	332	iPc	22	28.50	0.7
	0.8s	67.00nm			5.8mb	
EDM	62.46	339	iPc	22	29.20	-0.9
	0.9s	52.00nm			5.6mb	
			pP	22	43.50	52km
FRB	67.37	6	eP	22	59.00	-2.5
LKO	76.00	79	Pc	23	55.28	1.3
	1.1s	82.00nm			5.6mb	
LIC	76.26	83	Pc	23	54.96	-0.5
	1.1s	89.00nm			5.6mb	
TIC	76.30	82	Pc	23	55.14	-0.5
	1.1s	119.50nm			5.8mb	
KIC	76.55	83	Pc	23	56.76	-0.3
	1.0s	125.00nm			5.8mb	
EJIF	80.16	52	eP	24	18.00	1.6
WIGH	80.56	84	eP	24	19.00	0.0
WEGH	80.87	84	eP	24	20.00	-0.6
KUK	80.87	83	eP	24	20.50	-0.1
KOGH	80.99	83	eP	24	21.00	-0.2
LEGH	81.02	84	eP	24	21.00	-0.3
SHGH	81.18	84	eP	24	23.00	0.8
TEGH	81.20	84	eP	24	22.00	-0.3
ALOJ	81.36	52	iPd	24	24.00	1.2
AAPN	81.38	52	iPd	24	24.00	1.1
ATEJ	81.39	52	iPd	24	24.50	1.4
ACHM	81.57	52	iPc	24	25.20	1.3
APHE	81.66	52	iPd	24	25.60	1.2
ASMO	81.68	52	iPd	24	25.50	1.0
EBAN	81.80	51	eP	24	25.70	0.7
AFC	81.82	52	eP	24	26.00	0.7
TOL	81.92	49	iPd	24	26.50	1.0
	1.1s	101.27nm			5.7mb	
GUD	81.98	48	eP	24	27.00	1.0
MBC	82.32	351	ePc	24	27.40	0.5
	1.0s	48.00nm			5.5mb	
			pP	24	42.00	51km
PMR	82.63	333	P	24	25.70	-3.0X
	1.0s	20.00nm			5.1mb	
DCN	82.79	35	eP	24	30.20	0.5
EVIA	82.87	51	eP	24	32.00	1.4
ECP	83.02	37	eP	24	48.40	17.5X
DLE	83.20	36	eP	24	32.00	0.2
FBA	83.28	337	P	24	31.10	-1.0
	1.0s	25.00nm			5.2mb	
ECRI	83.56	47	eP	24	35.00	1.0
ETOR	83.58	49	eP	24	35.50	1.3
ACU	84.47	51	eP	24	39.50	0.8

EBR	85.49	49	(P)	24	45.00	1.4
EKA	85.60	34	Pc	24	43.80	0.0
	1.4s	69.60nm			5.6mb	
SPA	86.85	180	iPc	24	50.40	0.4
	1.0s	50.00nm			5.7mb	
			i	25	06.30	
DAG	86.89	12	iPc	24	49.50	-0.3
	1.1s	44.30nm			5.6mb	
AVF	88.30	43	eP	24	57.00	-0.2
	1.2s	17.85nm			5.2mb	
SSF	88.44	43	eP	24	57.40	-0.4
	1.2s	11.90nm			5.0mb	
SMF	88.62	43	eP	24	58.40	-0.3
	1.0s	9.00nm			5.0mb	
LOR	88.70	43	eP	24	58.60	-0.5
	1.2s	23.80nm			5.3mb	
LBF	88.75	43	eP	24	58.80	-0.6
	1.4s	21.80nm			5.2mb	
DOU	89.47	40	Pd	25	03.30	0.7
			e	25	20.30	
LRG	90.11	47	eP	25	06.20	0.4
	1.2s	38.70nm			5.6mb	
FRF	90.33	47	eP	25	06.70	-0.1
	1.2s	35.70nm			5.6mb	
MEM	90.41	40	P	25	03.40	-3.6X
			e	25	23.40	
LPL	90.53	45	eP	25	08.70	0.7
	1.0s	12.00nm			5.2mb	
LPG	90.54	45	eP	25	08.90	0.8
	1.2s	23.80nm			5.4mb	
BSF	90.73	42	eP	25	08.50	-0.2
	1.0s	12.00nm			5.2mb	
SBF	90.92	46	eP	25	09.80	0.2
	1.2s	29.75nm			5.6mb	
CDF	91.09	42	eP	25	10.40	0.1
	1.0s	12.00nm			5.3mb	
GRF	93.73	41	eP	25	23.40	1.1
	1.8s	49.00nm			5.6mb	
Z	20s	0.50um			5.0Msz	
			e	25	40.10	
MOX	93.98	40	eP	25	25.00	1.5
	1.4s	26.00nm			5.5mb	
			e	25	39.00	
CLL	94.86	39	iPc	25	28.50	1.1
	1.4s	41.00nm			5.7mb	
			e	25	43.00	
KBA	95.15	43	e(P)	25	29.00	-0.1
	0.9s	6.90nm			5.1mb	
			e	25	50.00	
KHC	95.27	41	eP	25	30.80	1.3
			e	25	51.00	
BRG	95.46	39	iP	25	31.20	1.0
	1.1s	23.00nm			5.6mb	
			i	25	48.00	
			e	29	46.50	
PRU	95.87	40	P	25	33.20	1.1
KSP	96.95	39	iPd	25	38.50	1.5
			ec	25	55.00	
ZST	97.64	42	eP	25	59.20	19.1X
KRA	99.34	40	eP	25	49.80	2.0
Z	20s	1.10um			5.4Msz	
E	20s	1.70um				
BCAO	99.57	86	ePc	25	50.00	0.4
	0.9s	9.00nm			5.3mb	
			id	29	43.00	
CTA	128.34	241	iPKP	31	11.90	-1.4
	1.0s	14.00nm				
			e	31	30.00	
MAIO	130.78	43	ePKP	31	18.00	0.4
MAT	131.08	318	(PKP)	31	31.00	13.0X
KSH	138.19	27	ePKP	31	32.00	0.4
WMQ	138.26	12	ePKP	31	30.00	-1.5
WRA	138.52	235	PKPd	31	31.50	-1.1
	1.0s	12.00nm				
WB5	138.53	235	ePKP	31	31.10	-1.5
BJI	140.20	339	ePKP	31	33.50	-1.4
HHC	140.86	345	ePKP	31	33.00	-3.3X
TIY	143.53	342	ePKP	31	35.00	-6.0X
Z	30s	0.80um			5.3MszX	
GTA	143.92	359	PKP	31	38.80	-2.9X
MTN	144.50	243	iPKPd	31	50.90	7.8X
			e	31	59.00	
KNA	145.21	236	ePKP	31	43.40	-0.9
SSE	145.32	326	PKPd	31	43.00	-1.1
			sPKP	32	00.80	
NJ2	145.83	329	PKPc	31	43.80	-1.2
LZH	146.96	353	ePKP	31	47.00	0.1

10d 17h

		sPKP	32	04.50		
XAN	147.97	345 PKP	31	48.00	-0.4	
WHN	149.22	334 PKP	31	53.70	3.3X	
POO	150.89	57 ePKP	31	58.50	5.2X	
GKN	151.68	28 PKP	31	54.30	-0.1	
	1.2s	68.00nm				
CD2	152.07	352 ePKP	31	54.80	0.0	
KKN	152.16	27 PKP	31	55.10	-0.1	
DMN	152.23	28 PKP	31	55.40	0.0	
GUN	152.32	26 PKP	31	55.70	0.1	
PKI	152.40	27 PKP	31	55.40	-0.3	
HYB	155.31	54 ePKP	31	58.70	-0.8	
GYA	155.75	343 PKP	32	00.00	0.0	
GBA	156.16	63 PKPd	32	00.60	-0.1	
	1.0s	6.50nm				
CHG	164.45	1 ePKP	32	09.30	-0.2	
BDT	166.01	1 ePKP	32	09.50	-1.3	
	S.D. = 1.0	on 145 of 171 obs.				

? FEB 10, 1990 17h 49m 37.51± 3.41s
32.268 S ±17.1km 71.839 W ±27.1km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF CENTRAL CHILE (135)

ROCH	0.99	135 iPd	49	56.10	-0.3	
		iS	50	11.50		
LCCH	1.22	169 iP	50	00.60	0.3	
		iS	50	17.00		
		i	50	20.60		
TACH	1.58	151 eP	50	05.50	-0.1	
		iS	50	27.60		
LNV	1.72	168 eP	50	07.00	-0.6	
		iS	50	30.20		
		i	50	34.50		
PCH	1.75	141 ePc	50	08.20	0.0	
		iS	50	31.50		
		i	50	33.50		
CHCH	1.94	149 iPc	50	11.50	0.7	
		iS	50	38.00		
		i	50	39.70		
ZON	2.78	76 eP	50	23.00	0.0	
	S.D. = 0.5	on 7 of 7 obs.				

? FEB 10, 1990 18h 40m 29.27± 5.95s
3.224 S ±16.6km 81.755 W ±71.1km
DEPTH = 33.0km (normal)
5.1mb (1 obs.)
NEAR COAST OF NORTHERN PERU (109)

TUNG	3.76	62 eP	41	26.70	0.0	
		eS	42	00.60		
VC1	4.22	53 eP	41	33.60	0.2	
		S	42	17.80		
GGP	4.38	46 iPd	41	35.30	-0.4	
		eS	42	22.00		
COTA	4.92	44 eP	41	43.60	0.3	
NNA	9.97	151 iP	42	53.50	0.0	
	0.4s	5.08nm		5.1mb		
		e	44	40.00		
	S.D. = 0 4	on 5 of 5 obs.				

& FEB 10, 1990 18h 52m 30.39s
60.084 N 153.106 W
DEPTH = 123.8km
SOUTHERN ALASKA (2)
<AGS-P>.

RED	0.38	26 eP	52	47.61	-0.9	
		eS	53	01.25		
RDT	0.60	35 iP	52	48.95	-0.8	
PDB	0.62	242 iP	52	48.86	-0.9	
AUL	0.72	193 eP	52	49.87	-0.7	
AUE	0.74	191 eP	52	49.79	-0.9	
		S	53	06.55		
CNPM	1.10	120 iP	52	53.16	-0.9	
NKA	1.14	54 iP	52	55.31	0.9	
CKL	1.18	18 iP	52	54.51	-0.5	
		eS	53	13.22		
CDD	1.19	194 eP	52	53.75	-1.3	
		eS	53	12.54		
SPU	1.22	25 iP	52	54.58	-0.8	
		eS	53	13.32		
BGL	1.23	16 iP	52	55.24	-0.3	
CRP	1.28	21 eP	52	55.66	-0.4	
CGLM	1.34	23 iP	52	56.06	-0.7	
NCG	1.40	19 eP	52	56.89	-0.6	
SLKM	1.50	72 eP	52	57.24	-1.2	
SUA	1.81	39 iP	53	01.51	-0.7	
SKT	2.05	21 iP	53	04.29	-0.9	
PMS	2.10	55 iP	53	04.34	-1.4	
PWA	2.23	44 eP	53	06.82	-0.5	
PLRM	2.47	50 eP	53	08.19	-2.2	
GHO	2.65	49 eP	53	10.64	-2.3	
CUT	2.70	29 iP	53	12.37	-1.1	
RND	3.90	29 eP	53	27.84	-1.7	
TOA	3.93	56 eP	53	27.93	-2.0	
	24 obs. ossociated					

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* FEB 10, 1990 18h 59m 16.83± 1.27s
41.779 N ± 7.4km 20.303 E ±13.9km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)

PHP	0.14	132 iPgd	59	20.70	0.6	
KKS	0.31	15 iPg	59	23.00	-0.2	
BCI	0.61	343 ePg	59	29.30	0.2	
OHR	0.76	151 ePg	59	31.30	-0.5	
		iSg	59	43.50		
SKO	0.87	77 ePg	59	33.50	-0.1	
		iSg	59	38.00		
	S.D. = 0.6	on 5 of 5 obs.				

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* FEB 10, 1990 19h 47m 57.69± 0.86s
39.344 N ± 7.2km 27.766 E ±10.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

DST	0.72	68 iPg	48	11.40	-0.4	
		iSg	48	21.40		
EDC	1.00	4 iPg	48	15.50	-1.2	
		eSg	48	28.50		
BNT	1.02	7 iPn	48	17.60	0.7	
IZM	1.02	203 ePn	48	17.00	-0.1	
MFT	1.49	346 ePn	48	25.00	0.4	
YLV	1.74	45 iPn	48	29.10	1.0	
CIN	1.76	172 iPgd	48	40.00	11.6X	
		iSg	48	48.00		
CTT	1.87	16 ePn	48	29.70	-0.3	
	S.D. = 0.9	on 7 of 8 obs.				

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* FEB 10, 1990 20h 01m 58.88± 0.80s
9.905 N ±14.4km 125.022 E ±16.9km
DEPTH = 33.0km (normal)
4.7mb (3 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

IPM	24.38	259 ePd	07	15.80	0.4	
	1.0s	49.20nm		5.0mb		
BJI	31.03	347 eP	08	16.50	0.8	
	1.0s	10.00nm		4.6mb		
LZH	32.39	327 eP	08	30.50	2.5X	
QIS	33.50	155 iPc	08	37.70	0.1	
GUN	40.90	301 P	09	41.30	1.0	
PKI	41.19	301 P	09	42.10	-0.6	
GKN	41.98	301 P	09	48.10	-0.8	
HYB	45.67	285 eP	10	14.50	-4.2X	
MAIO	64.50	305 eP	12	35.00	-0.1	
SOD	84.15	337 eP	14	28.00	0.3	
SUF	85.32	333 iP	14	34.00	0.4	
SLL	91.83	333 eP	15	03.20	-1.5	
	0.6s	1.90nm		4.7mb		
	S.D. = 0.9	on 10 of 12 obs.				

FEB 10, 1990 20h 45m 39.15± 0.16s
51.623 N ± 4.3km 178.043 E ± 2.2km
DEPTH = 60.9km (16 depth phoses)
5.3mb (73 obs.)
RAT ISLANDS, ALEUTIAN ISLANDS (6)
CENTROID, MOMENT TENSOR (HRV)
Dato Used: GDSN
L.P.B.: 15S, 30C
Centroid Location:
Origin Time 20:45:47.0 0.4
Lot 52.04N 0.09 Lon 177.45E 0.07
Dep 36.5 4.7 Half-durotion 1.9
Moment Tensor; Scale 10**17 Nm
Mrr=-0.30 0.05 Mtt=-0.73 0.09
Mff= 1.02 0.05 Mrt=-0.78 0.12
Mrf=-0.66 0.13 Mtf=-0.10 0.06
Principol Axes:

T	Vol= 1.32	Plg=25	Azm= 97
N	0.09	40	211
P	-1.42	40	345

Best Double Couple:Mo=1.4**10**17

NP1:Strike=138 Dip=42 Slip=-167
NP2: 38 81 -49

SMY	2.67	296 ePc	46	19.40	-1.1	
ADK	3.29	83 ePc	46	30.90	1.6	
SDN	13.30	65 eP	48	46.00	-0.5	
SVW	17.29	46 eP	49	40.90	3.4X	
TTA	17.87	41 ePc	49	46.60	1.8	
KDC	18.01	59 ePc	49	44.90	-1.4	
PMS	20.13	49 eP	50	10.00	-0.3	
IMA	20.31	34 eP	50	12.50	0.3	
PMR	20.41	48 ePc	50	14.20	1.1	
	0.9s	62.50nm		4.9mb		
TOA	21.89	48 eP	50	30.20	2.0	
FBA	21.99	40 eP	50	29.50	0.4	
BRW	22.78	21 eP	50	37.30	0.6	
KUSJ	23.96	262 eP	50	47.60	-0.8	
ASAJ	24.71	266 P	50	56.80	1.1	
HOOJ	25.23	262 eP	50	59.30	-1.2	
MRRJ	26.58	264 eP	51	10.90	-2.1	
KAKJ	30.92	255 P	51	52.00	0.0	
NIIJ	30.96	258 P	51	52.60	0.3	
CHJJ	31.74	256 P	51	59.70	0.5	
MAT	31.89	258 iPd	52	00.60	0.1	
	1.3s	132.69nm		5.6mb		
		eS	57	08.00		
MTMJ	32.11	258 P	52	02.70	0.2	
MDJ	32.58	277 Pd	52	05.00	-1.5	
	Z 20s	1.80um		4.8Msz		
		S	57	08.00		
IIDJ	32.77	256 P	52	08.90	0.6	
MBC	34.12	22 ePd	52	19.70	0.3	
	0.6s	47.00nm		5.6mb		
HON	35.53	139 P	52	35.00	3.1X	
CN2	35.56	279 iPd	52	30.40	-1.7	
	1.2s	100.00nm		5.6mb		
	Z 23s	1.50um		4.7MszX		
	E 17s	0.70um				
		pP	52	42.00	42kmX	
		sP	52	48.00		
GMW	37.67	72 eP	52	50.00	0.3	
SNY	37.79	277 iPd	52	50.00	-0.8	
	Z 28s	1.00um		4.5MszX		
	N 25s	0.90um				
	E 24s	0.60um				
		pP	53	07.00	69km	
		PP	54	19.00		
		S	58	29.00		
BMW	37.93	74 eP	52	52.80	0.8	
LON	38.64	73 eP	52	58.00	0.0	
PNT	38.68	68 eP	52	58.00	-0.3	
	0.7s	44.00nm		5.5mb		
EDM	40.40	60 iP	53	12.00	-0.4	
	0.5s	107.00nm		5.9mb		
FHC	40.54	82 eP	53	15.00	1.3	
	0.8s	35.29nm		5.2mb		
NEW	40.64	68 eP	53	13.50	-0.9	
DL2	40.70	275 P	53	14.20	-0.8	
	1.0s	100.00nm		5.6mb		
	Z 30s	1.80um		4.7MszX		
		S	59	20.00		
LBFM	41.51	80 eP	53	23.00	1.1	
WDC	41.56	81 eP	53	23.60	1.6	
		epP	53	49.30	111kmX	
		eScP	59	02.90		
MIN	42.28	81 eP	53	28.70	0.6	
		epP	53	44.70	63km	
ORV	42.81	82 eP	53	32.70	0.4	
		epP	53	48.60	63km	
		eScP	59	07.50		
SES	43.01	62 ePd	53	32.30	-1.5	
	0.5s	16.00nm		5.0mb		
BRK	43.37	84 eP	53	37.70	0.9	
		epP	53	53.00	60km	
BJI	43.39	280 eP	53	37.00	0.1	
	1.0s	56.00nm		5.3mb		
	Z 28s	1.04um		4.6MszX		
		PcP	55	25.00		
		eS	00	00.00		
GCC	44.06	85 e(P)	53	37.80	-4.6X	
MHC	44.09	84 eP	53	43.80	1.0	
		epP	54	59.60	383kmX	
ARN	44.15	84 eP	53	43.00	-0.2	
CMB	44.43	83 eP	53	46.00	0.5	
	1.0s	35.00nm		5.1mb		
		epP	54	02.00	63km	
LRM	44.64	69 eP	53	46.00	-1.3	

10d 20h

PRS		44.89	85	e(P)	53	42.90	-6.3X			0.7s	30.70nm		5.5mb		QUE	78.64	305	iPd	57	37.90	1.8
LLA		44.98	85	e(P)	53	51.10	1.3				i	55	24.40	21kmX	KHC	78.75	350	iPd	57	36.50	0.3
				epP	54	06.30	59km	WMQ		57.54	301 iPd	55	24.00	-0.4		1.0s	18.00nm			5.0mb	
TIA		45.17	275	P	53	51.30	-0.1		Z	24s	1.60um			5.0MszX	WET	78.81	350	iPc	57	36.90	0.4
KVN		45.21	80	eP	53	52.00	0.1				SP	55	35.90		PSZ	79.08	345	iP	57	38.40	0.3
PRI		45.45	85	eP	53	54.90	1.2				PcP	56	16.50		ZST	79.23	347	iP	57	39.30	0.6
				epP	54	11.20	64km				ScP	00	13.00			0.8s	45.00nm			5.5mb	
FRI		45.50	83	eP	53	54.60	0.7				S	03	16.00		VKA	79.27	348	eP	57	39.00	0.0
				epP	54	10.60	63km				ScS	05	06.00			0.7s	17.10nm			5.1mb	
				eScP	59	18.50		TRO		58.10	352 eP	55	26.30	-1.5	SRO	79.43	346	iP	57	40.60	0.8
FFC		45.59	53	iPd	53	53.30	-1.1	GYA		58.34	274 P	55	29.20	-1.0	GWF	79.45	354	P	57	39.97	0.1
		0.6s	8.00nm				4.8mb	SOD		59.39	348 iPd	55	35.10	-1.8	BUD	79.64	346	iP	57	42.80	1.8
HHC		45.72	284	Pd	53	56.00	0.3	SIO		60.45	69 eP	55	43.00	-1.5	VRI	79.79	340	ePd	57	42.50	0.7
	Z	18s	1.50um				5.0Msz	TUL		60.63	68 eP	55	44.00	-1.8	SOP	79.81	347	iPc	57	42.60	0.8
	N	16s	0.80um							0.8s	20.00nm		5.3mb		FLN	79.99	359	eP	57	42.70	0.0
				pP	54	10.00	53km				LR	15	27.00			1.0s	46.00nm			5.4mb	
				sP	54	17.00		SCH		61.04	37 ePd	55	46.80	-1.6	CDF	80.03	354	P	57	42.98	-0.2
				S	00	32.00				0.6s	32.00nm		5.6mb		CFR	80.13	339	ePd	57	43.50	0.0
				sS	00	58.00		KMI		61.74	275 Pd	55	52.50	-1.2	LDF	80.15	359	eP	57	43.40	-0.2
SSE		46.04	266	Pc	53	58.60	0.4	OIZ		61.81	265 P	55	54.10	0.2		0.8s	29.55nm			5.3mb	
		1.0s	110.00nm				5.7mb	FVM		62.22	63 eP	55	54.00	-2.5	ECH	80.24	354	P	57	43.77	-0.4
	Z	20s	0.60um				4.5Msz	UYO		62.64	69 iPc	55	57.50	-1.7	MLR	80.32	340	iPc	57	46.00	1.2
				pP	54	13.00	55km	POW		63.10	65 eP	55	59.20	-3.0X	GRR	80.36	359	eP	57	45.10	0.3
				esP	54	19.00		OLY		63.40	66 eP	56	01.50	-2.8		0.9s	45.85nm			5.4mb	
				eS	00	40.00		SUF		63.86	346 iP	56	05.30	-1.6	HAU	80.50	354	eP	57	45.40	-0.1
				sS	01	05.00				0.7s	106.60nm		6.0mb			0.6s	16.25nm			5.1mb	
TNP		46.36	80	eP	54	00.50	-0.4	LSA		65.49	287 P	56	18.90	0.4	FEL	80.51	353	P	57	44.45	-1.3
		0.8s	42.65nm				5.4mb	WNY		66.03	48 eP	56	18.40	-2.8	ISR	80.53	340	ePc	57	47.00	1.2
PTI		46.38	72	eP	54	01.20	0.2	NUR		66.19	346 iPd	56	20.10	-1.8	BSF	80.64	354	eP	57	46.70	0.3
BCH		46.43	86	eP	54	02.40	1.0			0.7s	73.40nm		5.8mb			0.8s	13.45nm			4.9mb	
				epP	54	18.00	61km	PMG		66.37	214 eP	56	24.00	0.5	CMP	80.71	341	ePc	57	48.00	1.3
BTO		46.81	284	iPd	54	05.00	0.7	HBVT		66.42	48 eP	56	21.00	-2.6	WB5	80.79	221	eP	57	47.20	-0.1
				pP	54	20.00	58km	CBM		66.62	43 eP	56	23.00	-1.9			i		58	05.00	64km
				PP	55	56.50		RSCP		66.62	62 eP	56	22.60	-2.5	KBA	80.80	349	eP	57	48.50	1.1
				S	00	48.00		KSH		66.80	305 eP	56	25.00	-1.3		0.8s	130.00nm			5.9mb	
				sS	01	16.00		NB2		67.19	353 P	56	26.90	-1.4			i		57	49.40	3kmX
NJ2		46.84	269	iPd	54	04.00	-0.5			0.8s	51.10nm		5.6mb				e		59	37.00	
SYP		46.93	86	eP	54	07.00	1.6	UPP		67.75	349 iP	56	30.20	-1.5	WRA	80.86	221	Pd	57	47.70	0.0
ISA		47.12	84	eP	54	07.00	0.2	HFS		67.88	352 eP	56	30.90	-1.7		0.9s	15.80nm			4.9mb	
TIY		47.12	280	Pd	54	05.50	-1.3			0.6s	52.10nm		5.7mb		BZS	81.03	343	eP	57	48.00	-0.3
		1.1s	100.00nm				5.7mb		Z	18s	0.19um			4.4Msz	LOMF	81.12	354	P	57	48.99	0.1
	Z	28s	0.90um				4.6MszX				LR	20	50.00		TAB	81.22	323	eP	57	50.00	0.4
				sP	54	26.50		LOE		68.08	271 eP	56	33.50	-0.9	OGA	81.26	351	iPc	57	50.40	0.6
				S	00	56.00		CVL		68.64	56 eP	56	36.10	-1.5		0.6s	17.00nm			5.2mb	
				sS	01	20.00		CHG		68.76	274 iPd	56	37.90	-0.7	FVI	81.35	350	P	57	49.80	-0.1
ABL		47.18	85	eP	54	08.00	0.5			1.0s	45.00nm		5.4mb		LOR	81.36	356	eP	57	50.10	0.0
				epP	54	23.50	60km	CHTO		68.76	274 iPd	56	38.00	-0.6		0.8s	18.15nm			5.1mb	
CLC		47.56	83	eP	54	11.00	0.7				pP	56	53.80	57km	GRC	81.37	357	P	57	49.82	-0 2
DUG		47.73	75	eP	54	11.00	-0.7	BDT		69.90	273 iPd	56	40.00	-5.6X	RBL	81.41	349	P	57	51.50	1.1
BW06		48.10	71	eP	54	13.00	-1.6			1.0s	48.30nm		5.4mb		SSF	81.58	356	P	57	51.40	0.2
SBB		48.16	84	eP	54	15.00	0.0	GUN		69.92	290 P	56	45.60	-0.5		0.8s	16.10nm			5.0mb	
PAS		48.30	85	eP	54	15.00	-0.9	KKN		70.37	290 P	56	47.90	-0.7	IR7	81.61	319	iPd	57	52.50	0.8
MWC		48.32	85	eP	54	17.00	0.7	PKI		70.45	290 P	56	48.60	-0.7	PTJ	81.64	347	iPc	57	52.10	0.5
GSC		48.39	83	eP	54	16.00	-0.7	GKN		70.58	291 P	56	48.80	-1.0	LBF	81.64	356	eP	57	51.40	-0.2
DAU		48.53	74	eP	54	18.00	-0.1	NNT		72.98	269 iPd	57	04.00	0.0		0.8s	10.75nm			4.9mb	
RVR		48.89	85	eP	54	21.00	0.5	EKA		73.41	1 P	57	06.00	0.1	LJU	81.68	348	e(P)	57	52.00	0.3
MSU		49.16	77	eP	54	22.20	-0.7			0.8s	13.10nm		4.9mb		VOY	81.77	349	e(P)	57	51.60	-0.7
KBS		49.46	356	iP	54	23.80	-0.5	DZM		74.08	191 iPc	57	12.40	2.2	IR1	81.83	319	iPd	57	54.00	1.2
PLM		49.64	85	eP	54	26.00	-0.5	MTN		75.96	227 iPc	57	21.40	0.4	AVF	81.86	356	eP	57	53.10	0.5
BAR		50.21	86	eP	54	31.00	0.3	CTA		76.64	211 iPc	57	25.40	0.6		1.0s	22.00nm			5.1mb	
RSSD		50.48	66	P	54	31.00	-1.8			1.0s	39.00nm		5.3mb		IR4	81.89	319	iPd	57	54.00	0.8
WHN		50.67	271	iPd	54	33.50	-0.6				i	57	43.10	65km	KVT	81.92	332	iP	57	54.50	1.4
PV09		51 01	75	eP	54	36.00	-1.0	CLL		76.66	350 i(P)	57	24.00	-0.6	RMO	81.93	206	eP	57	55.00	1.9
GLA		51.10	84	eP	54	38.00	0.5	KSP		76.74	348 iPc	57	24.80	-0.3	SMF	81.99	356	eP	57	53.20	-0.1
DAG		51.43	5	iPd	54	37.30	-2.0	BRG		76.99	350 iP	57	25.80	-0.6		0.8s	16.10nm			5.1mb	
		0.9s	24.37nm				5.2mb			0.7s	22.00nm		5.3mb		CEY	81.99	348	e(P)	57	53.50	0.1
XAN		51.67	278	P	54	40.50	-1.3				e	59	11.00	481kmX	BEO	82.00	344	iP	57	53.50	0.1
RSON		51.91	54	eP	54	41.80	-1.5				e	59	53.00		CTI	82.01	350	P	57	53.50	-0.1
GOL		52.48	71	eP	54	47.20	-0.9	KRA		77.00	346 eP	57	26.30	-0.2	TRI	82.10	349	P	57	53.50	-0.4
		0.6s	30.86nm				5.5mb			0.8s	61.00nm		5.6mb		BGF	82.11	357	eP	57	54.20	0.2
LZH		53.41	284	Pd	54	54.50	-0.3				e	57	34.30	26kmX		0.8s	12.10nm			4.9mb	
		1.0s	150.00nm				6.0mb	MAIO		77.28	313 iPd	57	28.60	0.2	VBY	82.12	348	i(P)c	57	54.50	0.5
GTA		53.63	290	P	54	55.00	-1.4			0.8s	16.47nm		5.1mb		MFF	82.14	359	eP	57	54.10	0.0
		0.8s	100.00nm				5.9mb	MOX		77.46	351 iPc	57	29.00	0.0		1.0s	32.00nm			5.3mb	
	Z	22s	0.60um				4.6Msz			1.0s	26.00nm		5.2mb		HYB	82.27	288	iPd	57	55.10	-0.2
				S	02	22.40					e	58	12.00	176kmX		1.0s	120.00nm			5.8mb	
FRB		53.83	30	eP	54	55.50	-1.8	SPC		77.80	345 iPd	57	31.40	0.3	KAS	82.30	334	iPd	57	56.50	1.4
		0.5s	69.00nm				5.9mb	PRU		77.80	349 P	57	30.00	-0.9	RIY	82.39	348	iPc	57	55.30	-0.1
ANMO		54.97	76	eP	55	05.40	-0.9			1.0s	14.50nm		4.9mb		TCF	82.40	357	eP	57	55.60	0.1
		0.9s	3.68nm				4.4mb				e	57	59.00	113kmX		0.6s	6.30nm			4.8mb	
ALQ		54.97	76	eP	55	05.70	-0.6	MEM		77.92	355 Pc	57	31.60	0.1	VAI	82.45	352	P	57	56.00	0.3
		1.0s	8.75nm				4.7mb	SNF		78.10	356 P	57	32.20	-0.3	MAF	82.46	357	eP	57	56.20	0.4
				pP	59	59.30		TNS		78.15	353 eP	57	32.90	0.1		1.2s	28.25nm			5.1mb	
				sP	02	21.90		IPM		78.37	263 ePd	57	35.00	0.5	SAL	82.55	351	P	57	56.50	0.3
GZH		56.62	266	P	55	17.90	-0.1	GRF		78.44	351 eP	57	35.20	0.8	AGO	82.61	356	P	57	57.34	0.8
CD2		56.99	279	iPd	55	19.60	-1.1			1.0s	47.00nm		5.4mb		PVL	82.62	340	iPc	57	57.00	0.4
KEV		57.10	348	eP	55	18.00	-2.9	DOU		78.51	356 P	57	35.00	0.3	PLDF	82.67	356	P	57	57.78	0.8

10d 20h

ORX	82.75	353	P	57	56.85	-0.6	MGR	87.35	347	Pc	58	19.70	-0.6	WDC	47.29	340	ePc	32	06.10	-1.2
ORO	82.75	353	P	58	00.00	2.5	ELL	87.68	335	eP	58	22.00	-0.1	RSSD	47.33	359	P	32	07.70	-0.2
PYM	82.91	356	P	57	58.51	0.3	TDS	87.70	346	P	58	22.50	0.5	LBFM	47.76	341	P	32	10.60	-0.7
LPL	82.95	354	eP	57	59.90	1.3	GRI	88.51	346	P	58	25.73	-0.3	FHC	48.00	339	ePc	32	14.80	1.9
	0.6s	13.55nm			5.1mb			0.6s	48.50nm			5.9mb		LRM	49.74	351	eP	32	25.60	-0.9
LPG	82.97	354	eP	57	59.90	1.1	SOI	89.30	346	P	58	28.00	-1.7	NEW	52.92	348	P	32	47.40	-3.0
	0.8s	22.15nm			5.2mb		LKO	119.00	4	PKP	04	23.44	1.0		1.0s	11.25nm			4.8mb	
LSD	82.98	354	P	57	59.21	0.4	BCAO	121.48	336	iPKPd	04	27.20	0.0	SES	54.05	354	eP	32	57.00	-1.5
JMB	83.06	339	iPd	57	59.00	0.0		0.7s	12.00nm					BAO	55.47	107	eP	33	08.00	-1.6
RSP	83.28	353	P	58	00.75	0.6				ic	05	58.60		EDM	57.10	353	eP	33	19.00	-1.6
RJF	83.41	358	eP	58	01.50	0.8	TIC	121.90	4	PKPd	04	27.30	-0.7	INK	74.64	349	eP	35	12.00	-0.7
	0.6s	7.20nm			4.9mb		KIC	122.20	3	PKPd	04	27.76	-0.8	MBC	80.11	356	eP	35	43.00	0.1
BNI	83.42	354	P	58	02.40	1.5	LIC	122.32	4	PKPd	04	28.06	-0.7		1.5s	19.00nm			4.8mb	
LBL	83.42	356	P	58	01.58	0.9	KOGH	122.50	358	ePKP	04	28.00	-1.2	KMI	147.13	313	ePKP	43	15.50	-0.1
BOB	83.49	352	P	58	01.90	0.7	SHGH	122.65	358	ePKP	04	29.00	-0.4		S.D. = 1.2		on 27 of 28 obs.			
PGB	83.50	341	iPd	58	02.00	0.7	LWI	124.45	322	iPKPd	04	33.60	0.4	---						
RRL	83.54	354	P	58	02.70	1.0	CAI	126.48	45	ePKPd	04	36.30	-0.6	? FEB 10, 1990 22h 41m 55.35± 4.87s						
VTS	83.65	342	iP	58	02.00	-0.2	BAO	128.78	63	ePKP	04	41.00	-0.3	44.005 N ±19.1km 7.573 E ±29.9km						
DIM	83.69	340	eP	58	04.00	1.8	BUL	140.53	311	ePKP	04	57.20	-6.1X	DEPTH = 10.0km (geophysicist)						
SLY	83.71	323	iPc	58	02.50	0.2	SPA	141.44	180	iPKPc	04	58.60	-4.9X	NORTHERN ITALY (545)						
CAF	83.77	357	eP	58	03.40	0.8		0.9s	7.27nm					MD 1.0 (STR).						
	0.8s	9.40nm			4.9mb		SLR	145.43	307	iPKPd	05	11.50	-0.2							
PCP	83.79	352	P	58	01.98	-0.7		1.0s	180.00nm					SAOF	0.02	215	Pg	41	57.30	0.0
LFF	83.79	358	eP	58	03.20	0.6				i	08	45.00					Sg	41	58.07	
	0.5s	1.15nm			4.2mb X		KSR	146.22	309	iPKPd	05	12.80	-0.2	AUTN	0.11	265	Pg	41	58.35	0.0
MSL	83.88	325	ePc	58	04.00	0.8	BLF	149.25	306	iPKPd	05	22.50	4.8X	SBF	0.17	215	Pg	41	59.50	0.2
			eS	08	21.50			0.9s	76.92nm								Sg	42	01.90	
CKI	83.92	353	P	58	02.20	-1.1	KIM	149.66	309	iPKPc	05	19.00	0.7	AURF	0.21	237	Pg	41	59.78	-0.3
DOI	83.92	353	P	58	02.60	-0.8		1.0s	70.00nm					TOUF	0.23	272	Pg	42	00.55	0.1
FOUF	83.93	354	ePc	58	04.42	1.1				i	05	23.00		MVIF	0.32	251	Pg	42	02.17	0.1
PZZ	83.93	353	P	58	02.70	-0.8	HVD	150.82	305	iPKPc	05	14.50	-5.5X		S.D. = 0.2		on 6 of 6 obs.			
MME	83.94	351	P	58	05.00	1.3		0.6s	33.33nm					---						
BBTK	84.01	334	iP	58	04.50	0.6		S.D. = 1.0		on 292 of 302 obs.				? FEB 10, 1990 22h 47m 29.52± 2.30s						
LPO	84.04	358	eP	58	04.40	0.5	---							30.982 S ±13.1km 68.307 W ±25.9km						
	1.0s	28.00nm			5.2mb		? FEB 10, 1990 20h 55m 16.38± 2.41s							DEPTH = 33.0km (normal)						
BDI	84.08	351	P	58	05.50	1.3	9.720 N ±28.6km 124.506 E ±29.5km							SAN JUAN PROVINCE, ARGENTINA (137)						
ROB	84.08	353	P	58	03.41	-0.8	DEPTH = 33.0km (normal)													
SFI	84.09	350	P	58	05.90	1.8	5.1mb (4 obs.)							RTLL	0.37	202	iPd	47	45.20	6.9X
KDZ	84.10	340	iPd	58	05.00	0.7	MINDANAO, PHILIPPINE ISLANDS (259)							CFA	0.63	175	iPd	47	42.20	0.2
FIN	84.14	353	P	58	04.34	-0.1											S	48	05.00	
POO	84.15	292	iPd	58	04.30	-0.5	SSE	21.49	352	eP	00	06.00	1.6	ZON	0.65	209	eP	47	42.00	-0.2
	0.8s	71.64nm			5.8mb		IPM	23.84	259	ePd	00	29.20	1.5	RTCB	0.66	220	eP	47	42.80	0.4
PGD	84.15	350	P	58	06.20	1.5		1.2s	51.80nm			4.9mb		RTCV	0.90	193	iPd	47	45.20	-0.6
STV	84.18	353	P	58	03.21	-1.5	BJI	31.09	348	eP	01	33.00	-0.8				(S)	48	01.60	
ENR	84.19	353	P	58	03.21	-1.5	LZH	32.27	328	eP	01	45.50	1.0	RTRS	1.28	309	ePc	47	51.10	-0.1
KER	84.19	321	eP	58	07.00	2.0		Z 28s		1.10um			4.4MszX		S.D. = 0.6		on 5 of 6 obs.			
YLV	84.21	337	iP	58	07.10	2.2	GUN	40.56	302	P	02	55.00	0.0	---						
RZN	84.21	340	iPd	58	06.00	0.9		0.5s	12.00nm			4.9mb		* FEB 10, 1990 23h 04m 08.37± 0.85s						
GPA	84.24	336	eP	58	05.70	0.7	PKI	40.85	301	P	02	56.80	-0.6	3.846 S ± 9.8km 104.331 E ±12.3km						
HVAR	84.24	347	iPd	58	04.10	-0.8	KKN	41.03	301	P	02	58.40	-0.3	DEPTH = 296.6 ± 9.2 km						
CRE	84.37	350	Pc	58	06.50	0.8	DMN	41.12	301	P	02	58.40	-1.1	4.6mb (9 obs.)						
KKB	84.37	341	iPd	58	07.00	1.4	GKN	41.64	301	P	03	03.10	-0.5	SOUTHERN SUMATERA (274)						
ARV	84.38	349	P	58	06.80	1.1	SOD	84.12	337	iP	07	45.60	0.5							
PII	84.42	351	Pc	58	05.80	0.0	SUF	85.25	333	iP	07	50.70	-0.1	KLI	1.14	153	eP	04	48.50	-0.8
IMI	84.47	353	P	58	06.08	0.0		0.8s	13.50nm			5.2mb					e(S)	05	18.00	
MMB	84.51	341	eP	58	07.00	0.6	SLL	91.76	332	eP	08	20.70	-1.2	IPM	9.00	338	ePd	06	17.10	2.1
SBF	84.55	353	eP	58	07.80	1.3		1.0s	19.60nm			5.5mb		MBL	22.88	140	eP	08	49.00	1.0
	0.8s	26.85nm			5.4mb			S.D. = 1.1		on 12 of 12 obs.				CHTO	23.13	347	iPd	08	50.70	0.3
SKO	84.59	343	iP	58	06.70	0.0	---								0.8s	15.56nm			4.5mb	
ASS	84.84	349	P	58	09.00	1.0	? FEB 10, 1990 22h 23m 31.77± 1.33s							QIZ	23.37	13	eP	08	55.60	3.0
FRF	84.90	354	eP	58	08.80	0.6	3.421 S ±25.0km 103.037 W ±28.0km							GBA	31.83	303	Pd	10	07.10	-1.0
	0.8s	16.10nm			5.2mb		DEPTH = 10.0km (geophysicist)								0.3s	1.40nm			4.0mb	
VAY	85.00	342	eP	58	09.00	0.3	4.5mb (6 obs.) 3.5Msz (1 obs.)							HYB	33.07	310	eP	10	17.00	-1.8
LRG	85.03	354	eP	58	09.70	0.9	NORTHERN EASTER I. CORDILLERA (694)							WB5	33.34	121	eP	10	19.80	-1.3
	1.0s	30.00nm			5.3mb									WRA	33.34	121	Pd	10	21.40	0.3
LMR	85.14	354	eP	58	10.20	0.8	ZOBO	36.61	113	P	30	43.00	2.0		0.3s	1.50nm			4.0mb	
	1.0s	24.00nm			5.2mb			Z 20s		0.09um			3.5Msz	CD2	34.56	359	eP	10	30.80	-0.5
AQU	85.46	349	P	58	12.50	1.4				LR	41	52.00		ASPA	34.69	127	iPc	10	32.30	-0.2
MNS	85.51	349	P	58	12.00	0.6	GLA	37.95	344	P	30	52.30	0.8		0.4s	28.00nm			5.1mb	
OHR	85.54	343	eP	58	10.70	-0.8	ALQ	38.29	355	eP	30	49.50	-5.0X				iPcP	12	59.90	
PGF	85.73	352	eP	58	13.00	0.5		1.0s	5.00nm			4.2mb					iS	15	35.70	
	0.8s	72.55nm			5.9mb		ANMO	38.30	355	P	30	55.40	0.9	PKI	36.18	331	Pd	10	44.70	-0.5
AZI	85.81	349	Pc	58	13.00	0.3		0.9s	4.20nm			4.2mb		GUN	36.24	332	Pd	10	45.50	-0.3
GBA	85.92	287	Pd	58	13.00	-0.6	PLM	38.84	341	P	30	59.50	0.4	DMN	36.36	330	Pd	10	46.10	-0.6
	0.9s	60.70nm			5.7mb		POW	40.90	15	P	31	16.20	0.4	KKN	36.42	331	Pd	10	46.60	-0.6
DUI	86.00	348	P	58	14.00	0.1	MSU	42.57	349	P	31	31.40	1.6	GKN	36.91	330	Pd	10	50.50	-0.7
SDI	86.04	348	P	58	14.10	0.1	PRI	42.67	339	ePc	31	30.70	0.2		0.4s	18.00nm			4.9mb	
RMP	86.07	349	P	58	14.20	0.1	GOL	42.96	357	P	31	33.60	0.6	XAN	37.93	6	P	10	59.50	0.1
RDP	86.13	349	P	58	14.50	0.1		1.0s	30.00nm			5.0mb		TIY	42.03	10	eP	11	32.00	-0.9
BHD	86.19	323	ePc	58	17.00	2.2	FRI	43.10	340	ePc	31	33.20	-0.6	GTA	43.24	355	iPd	11	43.00	0.2
			ePP	01	37.00		TNP	43.34	344	P	31	37.30	1.3	WMQ	49.76	344	P	12	33.00	-0.3
			eSKS	08	38.50			0.7s	2.59nm			4.1mb		CN2	51.10	20	Pd	12	42.40	-0.8
			eS	09	05.00		MHC	44.09	339	ePc	31	42.50	0.4	BUL	75.28	250	iPd	15	23.10	1.7
KHL	86.29	336	eP	58	15.00	-0.3	CMB	44.27	340	ePc	31	43.70	0.3		0.8s	11.94nm			4.7mb	
BCK	86.83	335	iP	58	17.60	-0.3	KVN	44.49	343	P	31	46.40	1.1	MLR	84.61	316	eP	16	11.00	0.9
SGO	86.97	347	P	58	18.50	0.0	ORV	46.02	340	eP	31	58.00	0.7	BCAO	86.11	275	iPd	16	20.00	2.0
ORI	87.29	346	P	58	21.00	0.9	BW06	46.36	353	P	31	59.80	-0.4		0.5s	7.00nm			4.8mb	

```
SUF     87.99 333 eP     16 25.80  -0.1
        0.6s      6.20nm          4.7mb
NUR     88.25 331 eP     16 26.90  -0.3
HFS     93.62 330 eP     16 51.20  -0.8
        0.4s      1.00nm          4.3mb
      S.D. = 1.2  on  27 of  27 obs.
-----------------------------------------
   FEB  10, 1990  23h 51m 00.73± 1.06s
   31.294 S ±10.2km   70.225 W ± 9.7km
   DEPTH =  33.0km  (normal)
 CHILE-ARGENTINA BORDER REGION    (127)

RTCB    1.23  99 eP     51 22.80   1.0
RTRS    1.30  31 iPc    51 23.00   0.3
RTLL    1.50  92 iPc    51 24.70  -1.0
RTCV    1.55 112 ePc    51 26.90   0.6
CFA     1.73 101 e(P)   51 28.00  -0.9
ROCH    1.80 202 iPd    51 31.50   1.3
                iS      51 56.70
SAN     2.18 190 eP     51 36.00   0.5
                iS      52 04.70
PCH     2.33 186 iPd    51 38.50   0.8
                iS      52 09.10
TACH    2.43 194 iPc    51 39.00   0.0
                iS      52 10.70
LCCH    2.45 207 iPc    51 38.50  -0.8
                iS      52 10.20
CHCH    2.66 188 ePd    51 41.80  -0.4
                iS      52 15.00
LNV     2.84 200 iPd    51 43.20  -1.4
                iS      52 17.60
      S.D. = 1.0  on  12 of  12 obs.
-----------------------------------------
*  FEB  11, 1990  00h 19m 37.39± 0.69s
   28.152 S ± 7.6km   67.633 W ±14.6km
   DEPTH = 145.8 ± 11.2 km
 LA RIOJA PROVINCE, ARGENTINA     (138)

RTCB    3.47 197 iP     20 32.50   1.1
                (S)     21 06.00
ZON     3.50 195 eP     20 31.00  -0.7
                eS      21 13.00
RTCV    3.78 192 eP     20 35.80   0.4
                (S)     21 17.50
SLA     3.91  30 iPd    20 38.00   0.8
TCA     4.13 141 ePc    20 39.20  -0.9
ANT     5.09 330 eP     20 52.00  -0.7
LIC    69.31  71 P      30 30.50  -0.6
TIC    69.54  70 P      30 32.20  -0.3
KIC    69.62  71 P      30 32.50  -0.5
LKO    70.67  67 P      30 41.00   1.6
KVN    81.77 323 eP     31 37.00  -4.2X
      S.D. = 1.1  on  10 of  11 obs.
-----------------------------------------
&  FEB  11, 1990  00h 31m 04.40s
   40.403 N          125.358 W
   DEPTH =   6.0km
 OFF COAST OF NORTHERN CALIFORNIA( 34)
      <BRK>. ML 3.5 (BRK).

FHC     1.12  69 iPc    31 24.40  -1.4
                eS      31 38.60
WDC     2.16  84 iPc    31 39.20  -2.2
                eS      32 04.70
LTCM    2.48  93 eP     31 44.20  -1.8
LBFM    2.79  69 eP     31 49.00  -1.7
MIN     2.87  90 ePc    31 48.70  -3.0
ORV     3.08 105 e(P)   31 51.50  -3.0
                eS      32 27.80
KVN     5.76 101 eP     32 30.00  -2.6
        7 obs. associated
-----------------------------------------
   FEB  11, 1990  01h 12m 19.25± 1.59s
    0.903 N ± 5.4km  125.958 E ± 8.7km
   DEPTH =  56.7 ± 15.3 km
   5.1mb (  9 obs.) 4.3Msz (  1 obs.)
 MOLUCCA PASSAGE                  (266)

MNI     1.24 296 ePd    12 42.30   1.7
                eS      12 57.00
TSM     8.54 293 ePc    14 26.90   4.0X
TLE     9.39 134 ePc    14 12.40 -22.2X
        0.7s      5.00nm
KKM    10.98 298 ePd    15 04.30   7.9X
KNA    16.78 171 iPd    16 12.00   0.0
        0.6s     64.00nm          4.9mb
WB5    22.24 159 iPc    17 11.30  -1.4
                eS      21 13.90
WRA    22.29 159 Pc     17 11.90  -1.3
        0.5s     32.80nm          5.0mb
PJG    22.57  55 eP     17 15.80  -0.1
MBL    22.73 195 eP     17 18.00   0.5
PMG    23.46 116 eP     17 22.50  -2.1
QIZ    23.96 320 eP     17 30.90   1.4
QZH    24.94 344 eP     17 39.00   0.2
QIS    25.17 149 eP     17 40.00  -1.0
        1.0s     82.00nm          5.2mb
ASPA   25.61 163 iPc    17 44.60  -0.6
        0.7s     82.00nm          5.4mb
     Z  23s      0.30um           3.8MszX
                iS      22 10.60
                LR      35 36.20
CTA    28.82 137 eP     18 16.50   2.1
BDT    31.10 303 eP     18 42.00   7.4X
MRWA   31.43 197 eP     18 37.70   0.3
WHN    31.47 341 eP     18 37.00  -0.7
CHG    31.92 306 eP     18 42.00   0.1
COOL   31.94 188 eP     18 41.00  -0.9
BAL    32.55 195 eP     18 47.00  -0.2
KMI    32.90 319 eP     18 50.50  -0.1
KLB    33.24 193 eP     18 53.00  -0.2
MUN    33.98 195 eP     18 59.50  -0.1
NWAO   34.64 193 eP     19 05.90   0.7
XAN    36.62 336 P      19 20.00  -2.1
MAT    37.23  16 eP     19 27.00  -0.1
        2.2s    169.23nm          5.6mb
ADE    37.63 163 iPd    19 31.00   0.5
DL2    38.03 355 eP     19 36.20   2.5
TIY    38.69 343 eP     19 37.50  -1.9
     Z  20s      0.50um           4.3Msz
BJI    39.96 348 eP     19 49.00  -0.8
LZH    40.58 332 eP     19 54.00  -1.1
        1.5s     19.00nm          4.7mb
SNY    40.80 357 P      19 56.40  -0.2
BWA    40.97 151 eP     20 00.00   1.8
HHC    41.85 344 eP     20 05.00  -0.4
CAN    41.98 151 eP     20 07.10   0.6
CN2    42.71 359 eP     20 14.00   1.7
MDJ    43.65   4 eP     20 19.50  -0.4
LSA    43.78 314 eP     20 21.60  -0.2
GTA    45.15 331 eP     20 31.60  -0.6
DZM    45.61 123 iPc    20 35.30  -0.8
GUN    46.81 309 P      20 44.90  -1.0
PKI    47.03 308 P      20 47.20  -0.3
KKN    47.23 308 P      20 48.40  -0.6
DMN    47.28 308 P      20 48.80  -0.7
GKN    47.83 308 P      20 52.40  -1.2
HYB    49.40 292 eP     21 04.00  -1.7
        1.0s     40.00nm          5.4mb
GBA    49.64 287 Pd     21 07.30  -0.2
        1.0s     12.60nm          4.9mb
WMQ    54.62 327 P      21 43.50  -1.0
MAIO   70.62 308 eP     23 31.00  -0.1
NAI    89.17 269 eP     25 17.50   6.4X
SOD    92.77 338 eP     25 29.00   2.7
SUF    93.70 333 eP     25 32.80   2.1
        0.4s     0.80nm           4.5mb
NUR    94.78 331 eP     25 38.00   2.3
KIC   130.27 279 PKP    31 27.50   1.6
LKO   130.66 283 PKP    31 29.50   2.9X
ZOBO  159.36 138 PKP    32 16.00   2.0
      S.D. = 1.3  on  51 of  57 obs.
-----------------------------------------
*  FEB  11, 1990  02h 01m 50.80± 4.99s
   30.665 S ±27.5km   71.765 W ±28.1km
   DEPTH = 149.9 ± 42.8 km
 NEAR COAST OF CENTRAL CHILE      (135)

RTRS    2.05  77 iPd    02 27.00   0.1
IHA     2.36 177 eP     02 31.50   0.9
                i(S)    03 02.20
ROCH    2.39 165 iPc    02 30.30  -0.9
                i       02 56.50
                i       30 02.00
RTCB    2.67 109 iP     02 34.50  -0.1
LCCH    2.81 177 iP     02 35.80  -0.4
                i       03 05.20
RTLL    2.91 104 iPc    02 37.00  -0.6
RTCV    3.01 114 ePd    02 39.00   0.1
TACH    3.06 167 iP     02 39.50   0.0
                i       03 12.00
                i       03 23.00
PCH     3.13 161 iPd    02 41.00   0.5
                i       03 17.20
                i       03 27.00
CFA     3.17 108 iPc    02 41.50   0.6
LNV     3.29 175 iPd    02 42.00  -0.5
                i       03 17.20
                i       03 29.50
CHCH    3.39 164 iP     02 44.00   0.2
                i       03 19.80
RFA     4.95 147 ePc    03 04.70   0.3
MRA     5.46 110 ePd    03 10.80  -0.3
      S.D. = 0.6  on  14 of  14 obs.
-----------------------------------------
&  FEB  11, 1990  02h 02m 22.41s
   58.928 N          143.061 W
   DEPTH =  10.0km  (geophysicist)
 GULF OF ALASKA                   ( 15)
      <AGS-P>.

YAH     1.59  24 eP     02 46.24  -4.6
                eS      03 05.01
PCA     1.85  49 eP     02 49.34  -5.1
BCPM    2.03  58 eP     02 52.31  -4.7
                eS      03 15.42
BALM    2.15   9 eP     02 54.00  -4.8
HQN     2.22  75 eP     02 54.43  -5.3
                eS      03 19.70
SLKM    3.96 297 eP     03 22.00  -2.5
                eS      04 04.40
INK    10.31  20 eP     04 47.00  -6.2
        7 obs. associated
-----------------------------------------
&  FEB  11, 1990  02h 10m 46.65s
   61.571 N          150.943 W
   DEPTH =  67.8km
 SOUTHERN ALASKA                  (  2)
      <AGS-P>.

SUA     0.14 138 iP     10 56.97   1.6
                eS      11 05.99
SKT     0.50 326 iP     10 58.63  -0.8
PWA     0.51  81 iP     10 59.35  -0.2
                eS      11 09.98
CGLM    0.58 243 iP     10 59.82  -0.5
                iS      11 10.20
NCG     0.61 254 iP     10 59.99  -0.7
                eS      11 10.97
CRP     0.66 243 iP     11 00.74  -0.6
                eS      11 12.03
SPU     0.66 234 iP     11 00.43  -0.8
                eS      11 11.57
PMS     0.74 116 iP     11 01.57  -0.6
                eS      11 13.97
BGL     0.76 247 eP     11 01.76  -0.7
                eS      11 14.14
CKL     0.77 241 iP     11 01.70  -0.9
                iS      11 14.11
NKA     0.84 190 eP     11 04.63   1.3
PLRM    0.87  88 iP     11 02.62  -1.0
                eS      11 15.89
CUT     0.90  21 iP     11 03.41  -0.5
GHO     0.98  77 iP     11 04.60  -0.6
SLKM    1.12 161 eP     11 05.98  -1.0
RDT     1.23 216 iP     11 07.48  -0.9
                eS      11 24.26
RED     1.46 218 iP     11 10.89  -0.6
NNL     1.54 187 eP     11 12.74   0.2
SEW     1.64 153 eP     11 14.82   0.9
KTH     1.99   0 eP     11 18.27  -0.5
NCA     2.00  76 eP     11 17.85  -1.1
CNPM    2.06 184 eP     11 18.19  -1.5
        22 obs. associated
-----------------------------------------
*  FEB  11, 1990  03h 06m 21.29± 1.19s
    7.542 S ±10.9km  130.037 E ±23.0km
   DEPTH = 173.5 ± 18.9 km
    4.7mb (  3 obs.)
 TANIMBAR ISLANDS REGION          (281)

SLKI    1.32 109 iPd    06 51.20  -0.1
                iS      07 13.60
MTN     5.38 169 eP     07 41.00   0.1
                eS      08 40.00
KNA     8.25 189 eP     08 20.00   1.1
                eS      09 43.00
WB5    12.96 162 eP     09 18.80  -1.5
                eS      11 38.00
WRA    13.02 162 Pd     09 20.10  -0.9
        0.4s     2.40nm          4.0mb X
```

11d 03h

QIS	15.91	145	eP	10	00.00	2.8X
			eS	12	47.00	
ASPA	16.46	167	eP	10	05.90	2.1
	0.3s		6.00nm		4.4mb	
			eS	12	59.50	
MBL	16.75	215	eP	10	06.30	-1.0
			eS	12	53.00	
GUN	55.34	311	P	15	40.20	0.3
	0.4s		8.00nm		4.9mb	
KKN	55.72	311	P	15	42.20	-0.3
GKN	56.31	311	P	15	46.80	0.2
	0.4s		6.00nm		4.8mb	
	S.D. = 1.3		on 10 of 11 obs.			

% FEB 11, 1990 04h 04m 12.00± 0.79s
40.024 N ± 7.9km 27.342 E ± 5.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

EDC	0.51	51	iPg	04	22.50	0.1
			eSg	04	30.50	
BNT	0.55	53	iPg	04	23.40	0.2
MFT	0.76	357	iPg	04	26.40	-0.6
EZN	0.81	256	ePg	04	27.80	0.2
DST	1.08	112	iPg	04	32.00	-0.3
CTT	1.39	36	ePn	04	38.00	0.5
YLV	1.64	70	ePn	04	41.00	-0.1
YER	2.98	165	iPn	05	25.00	24.8X
	S.D. = 0.4		on 7 of 8 obs.			

% FEB 11, 1990 04h 07m 16.11± 0.67s
42.653 N ± 4.9km 13.067 E ± 7.5km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

AQU	0.39	140	P	07	23.80	-0.3
			eSg	07	30.80	
MNS	0.39	227	Pc	07	23.40	-0.8
			eSg	07	29.80	
ASS	0.51	325	P	07	26.60	0.1
			eSg	07	34.70	
AZI	0.72	158	P	07	29.50	-0.7
			eSg	07	41.50	
ARV	0.85	354	P	07	32.50	0.0
			eSg	07	45.90	
RMP	0.88	198	P	07	34.20	1.1
			eSg	07	47.10	
RDP	0.93	196	P	07	34.00	0.1
			eSg	07	48.00	
SDI	1.10	149	P	07	37.30	0.5
			eSg	07	53.90	
	S.D. = 0.7		on 8 of 8 obs.			

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* FEB 11, 1990 05h 01m 25.51± 1.78s
34.185 N ±10.7km 25.035 E ±16.2km
DEPTH = 33.0km (normal)
CRETE (370)
MD 4.0 (ATH).

NPS	1.18	24	ePg	01	46.80	1.1
KAP	2.23	52	ePg	02	03.00	2.2
APE	2.91	8	ePb	02	19.00	8.5X
ARG	3.24	50	ePn	02	16.50	1.3
SMG	3.81	22	ePn	02	28.50	5.3X
IZM	4.57	23	ePn	02	33.00	-1.2
ELL	4.73	56	ePn	02	36.20	-0.3
KHL	5.50	40	ePn	02	45.00	-2.3
BCK	5.57	52	ePn	02	47.70	-0.6
KOT	7.16	124	ePn	03	10.50	0.0
			eSn	04	27.00	
OHR	7.69	335	ePn	03	18.20	0.2
DSI	9.08	104	eP	03	36.00	-1.3
PRNI	9.26	112	eP	03	40.00	0.2
MBH	9.45	115	eP	03	43.00	0.7
KHC	17.18	334	eP	05	48.00	23.5X
	S.D. = 1.4		on 12 of 15 obs.			

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* FEB 11, 1990 06h 23m 36.57± 1.29s
39.169 N ±12.0km 15.203 E ±15.6km
DEPTH = 28.9 ± 11.5 km
SOUTHERN ITALY (390)

CZI	0.72	86	P	23	54.10	3.5X
			eS	24	17.60	
MGR	1.00	16	P	23	55.30	0.6
			eSn	24	25.20	
TDS	1.01	61	P	23	55.70	1.0
			eSn	24	23.20	
ATN	1.03	168	P	23	58.30	3.3X
			eSn	24	27.50	
CSI	1.04	54	P	23	56.00	0.8
			eS	24	23.20	
ROI	1.13	69	P	23	56.30	-0.3
			eS	24	21.50	
SOI	1.28	148	P	23	58.70	0.1
			eSn	24	28.70	
ORI	1.31	47	P	23	57.00	-2.1
			eSn	24	26.10	
GIB	1.50	218	P	24	01.70	-0.1
	S.D. = 1.5		on 7 of 9 obs.			

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* FEB 11, 1990 06h 34m 52.56± 1.05s
8.564 S ± 9.7km 128.106 E ±25.4km
DEPTH = 317.8 ± 21.6 km
4.2mb (2 obs.)
TIMOR SEA (290)

SLKI	3.21	80	iPc	35	52.00	0.0
MTN	5.19	145	iPc	36	08.10	-5.4X
			eS	37	13.00	
KNA	7.17	175	eP	36	37.00	0.0
			eS	38	02.00	
WB5	12.78	152	eP	37	45.60	0.2
			eS	40	10.00	
WRA	12.82	153	Pc	37	45.70	-0.2
	0.2s		0.50nm		3.5mb X	
MBL	14.85	212	eP	38	17.00	7.2X
ASPA	16.01	160	iPb	38	30.70	8.3X
	0.8s		6.00nm		4.0mb	
			eS	41	21.70	
GUN	54.60	313	P	43	51.60	-0.1
PKI	54.75	313	P	43	52.60	-0.2
KKN	54.97	313	P	43	55.00	0.8
DMN	54.99	312	P	43	54.20	-0.2
GKN	55.56	312	P	43	58.00	-0.3
	0.4s		7.00nm		4.4mb	
	S.D. = 0.4		on 9 of 12 obs.			

FEB 11, 1990 07h 00m 35.91± 0.18s
45.008 N ± 1.9km 7.609 E ± 1.9km
DEPTH = 10.0km (geophysicist)
4.3mb (2 obs.)
NORTHERN ITALY (545)
ML 4.9 (GRF), 4.8 (LDG). MD 4.6 (TRI), 4.5 (STR).

RSP	0.29	300	Pc	00	44.30	2.3
LSD	0.55	325	Pc	00	49.07	1.8
DOI	0.57	207	Pd	00	47.40	-0.1
RRL	0.59	262	Pd	00	48.72	0.7
PZZ	0.62	216	Pd	00	47.98	-0.5
BNI	0.66	274	Pd	00	50.20	1.0
			eSg	00	58.50	
ORO	0.67	23	Pc	00	50.90	1.6
			eSg	00	59.90	
ORX	0.68	23	Pd	00	50.91	1.5
ROB	0.74	165	Pc	00	51.52	1.1
CKI	0.75	140	Pc	00	52.50	1.8
FOUF	0.76	231	ePgd	00	50.94	0.2
			e(Sg)	00	59.15	
LPG	0.78	309	Pg	00	52.80	1.5
			Sg	01	03.40	
STV	0.79	195	Pd	00	50.85	-0.5
ENR	0.79	190	Pd	00	51.10	-0.3
LPL	0.80	310	Pg	00	53.20	1.6
PCP	0.81	125	Pc	00	53.84	2.1
FIN	0.91	152	Pc	00	54.78	1.5
AUTN	1.02	187	Pg	00	54.82	-0.6
SAOF	1.02	182	Pg	00	55.10	-0.2
TOUF	1.03	195	Pg	00	54.62	-0.8
MMK	1.07	13	iPc	00	57.30	1.0
DIX	1.08	353	iPd	00	57.70	1.3
IMI	1.12	170	Pd	00	57.43	0.5
AURF	1.14	190	Pg	00	56.56	-0.7
SBF	1.15	186	Pg	00	57.00	-0.5
MVIF	1.16	197	Pg	00	56.83	-0.8
EMS	1.16	336	iPc	00	59.70	1.9
VAI	1.19	43	Pd	00	59.30	1.3
REVF	1.28	188	Pg	00	59.15	-0.5
BOB	1.33	100	P	01	03.50	3.0X
CALN	1.36	203	Pg	01	00.64	-0.3
TMA	1.41	39	iPd	01	02.50	0.7
GANF	1.58	231	Pn	00	05.75	-58.3X
			Sg	01	26.35	
FRF	1.60	206	Pn	01	04.40	0.1
			Sn	01	25.00	
MDI	1.67	62	P	01	05.50	0.2
TAVF	1.78	219	Pn	01	07.93	1.0
			Pg	01	09.50	
			Sg	01	31.35	
VILF	1.78	230	Pn	01	08.44	1.4
			Pg	01	10.32	
			Sg	01	32.03	
LRG	1.79	210	Pn	01	07.40	0.3
			Sn	01	30.00	
LMR	1.85	206	Pn	01	07.60	-0.3
			Sn	01	30.00	
VDL	1.97	41	iPd	01	11.20	1.3
PUYF	2.01	224	Pn	01	10.80	0.5
			Sg	01	41.53	
LLS	2.10	27	iPd	01	12.20	0.5
TREF	2.11	230	Pn	01	12.45	0.7
			Pg	01	15.76	
PRAF	2.12	236	Pn	01	12.57	0.6
			Pg	01	16.96	
SAL	2.14	73	P	01	12.70	0.5
BERF	2.19	220	Pn	01	13.36	0.5
SSB	2.19	278	Pn	01	13.56	0.7
GELF	2.26	225	Pn	01	13.80	-0.1
			Sg	01	49.22	
BDI	2.34	113	P	01	16.60	1.5
			eSn	01	45.00	
MME	2.35	109	P	01	18.00	2.6
LOMF	2.41	347	Pn	01	17.57	1.6
			Sn	01	55.02	
OSS	2.44	46	iPd	01	18.00	1.4
PII	2.45	121	P	01	17.20	0.6
BBS	2.46	358	Pn	01	18.20	1.5
ZLA	2.53	12	iPc	01	19.40	1.6
SAX	2.55	28	iPc	01	20.40	2.2
PGF	2.66	157	Pn	01	18.00	-1.6
			Sn	01	48.00	
SLE	2.83	12	iPd	01	22.80	0.8
MOF	2.86	354	Pn	01	23.22	0.7
BSF	2.88	349	Pn	01	23.53	0.7
FEL	2.88	5	Pn	01	23.42	0.6
PLDF	2.96	290	Pn	01	24.48	0.5
OGA	3.02	51	iPnd	01	26.60	1.7
CTI	3.03	68	P	01	24.80	0.0
LBL	3.10	276	Pn	01	26.46	0.8
SMF	3.10	303	Pn	01	26.60	0.8
			Sn	02	01.60	
HAU	3.12	344	Pn	01	27.20	1.1
			Sn	02	04.00	
LBF	3.21	309	Pn	01	28.00	0.6
			Sn	02	05.80	
ECH	3.22	355	Pn	01	28.04	0.5
			Sn	02	02.80	
SFI	3.23	108	P	01	30.00	2.5
AGO	3.32	290	Pn	01	29.61	0.7
PYM	3.33	285	Pn	01	29.47	0.4
			Sn	02	07.23	
VITF	3.40	341	Pn	01	30.97	1.0
CRE	3.41	112	P	01	31.00	0.7
WLS	3.41	357	Pn	01	30.45	0.2
CDF	3.41	356	Pn	01	30.65	0.3
LOR	3.45	312	Pn	01	31.60	0.8
			Sn	02	11.00	
AVF	3.47	302	Pn	01	32.00	1.1
			Sg	02	27.00	
SCE	3.51	53	iPnd	01	33.20	1.5
SSF	3.52	307	Pn	01	32.30	0.6
STR	3.58	2	Pn	01	33.17	0.6
RSM	3.63	106	P	01	34.20	0.9
MAO	3.65	134	P	01	33.10	-0.5
BGF	3.67	297	Pn	01	34.60	0.6
			Sn	02	15.00	
MAF	3.74	291	Pn	01	35.00	0.1
			Sn	02	16.40	
CAF	3.94	271	Pn	01	37.30	-0.4
			Sn	02	22.00	
FVI	3.95	65	P	01	38.50	0.7
			eSn	02	23.00	
GWF	3.97	0	Pn	01	38.06	-0.1
TCF	4.00	291	Pn	01	39.00	0.5
			Sn	02	23.00	
			Sg	02	44.00	
ARV	4.12	110	P	01	41.30	1.1
ASS	4.13	116	P	01	42.70	2.3
HYF	4.13	305	Pn	01	41.00	0.6
			Sn	02	27.00	

RJF	4.32	276	Pn	01	43.00	-0.1	VKA	6.82	58	ePn	02	16.70	-1.8				eSn	08	12.50				
			Sn	02	31.00			0.5s	344.00nm			6.7mb X		STV	0.73	194	P	08	00.65	-0.6
ETER	4.38	234	iPnc	01	43.80	-0.2				i	02	21.00					S	08	09.06				
			eSn	02	30.00					i	02	36.80		ORX	0.74	23	P	08	00.83	-0.5
TRI	4.40	79	P	01	42.60	-1.6				i	03	31.10					S	08	10.17				
RBL	4.41	69	P	01	44.00	-0.5				iSn	03	32.60		ENR	0.74	188	P	08	00.96	-0.4
LSF	4.44	288	Pn	01	45.00	0.2				i	03	37.10					S	08	09.37				
			Sn	02	33.10		PRU	6.85	41	Pn	02	15.70	-3.0X	LPG	0.79	313	Pg	08	02.80	0.4
KBA	4.50	61	iPnd	01	46.50	0.7				e	02	17.00					Sg	08	12.70				
			iPg	02	04.90					Sn	03	34.00		PCP	0.81	121	P	08	03.73	1.2
			i	02	20.10		WTS	7.01	356	iPnd	02	21.00	-0.1				S	08	13.78				
			iSn	02	35.80			0.7s	31.00nm			5.6mb X		LPL	0.81	314	Pg	08	03.10	0.4
			i	02	43.20					e	02	32.00		FIN	0.88	148	P	08	04.75	1.1
			i	02	46.30		BRG	7.25	34	iPn	02	22.00	-2.4				S	08	15.11				
MNS	4.52	124	P	01	47.00	1.1				e	03	09.00		AUTN	0.97	186	Pg	08	04.80	-0.5
VOY	4.53	75	iPnd	01	44.80	-1.4	CLL	7.26	28	iPn	02	20.60	-4.0X	SAOF	0.97	181	Pg	08	05.04	-0.2
			eSn	02	39.30					eSn	03	40.00		TOUF	0.97	194	Pg	08	04.53	-0.9
LPO	4.58	268	Pn	01	46.40	-0.4				eSg	04	33.00					Sg	08	14.49				
TOD	4.67	10	ePnc	01	46.86	-1.3	ZST	7.27	61	iP	02	23.00	-1.8	IMI	1.07	168	P	08	07.21	0.2
RUP	4.71	356	ePnc	01	48.75	0.0	ECRI	7.70	255	ePn	02	30.60	-0.2				S	08	19.11				
WLF	4.76	349	iP	01	50.00	0.6				eSn	03	50.00		AURF	1.08	189	Pg	08	06.63	-0.6
			iS	02	43.00		WIT	7.84	356	e(Pn)	02	43.50	10.9X	SBF	1.10	185	Pg	08	06.80	-0.7
RIY	4.80	84	iPnd	01	47.60	-2.4	SRO	7.91	65	e(P)	02	24.30	-9.4X	MVIF	1.10	196	Pg	08	06.92	-0.7
			iSn	02	39.30					i	03	19.20		DIX	1.13	354	ePd	08	07.60	-0.5
CEY	4.86	79	ePn	01	49.30	-1.5				e	03	47.80		MMK	1.13	14	ePd	08	07.40	-0.7
			eSn	02	43.00		ETOR	8.23	243	ePn	02	37.80	-0.5	EMS	1.20	338	ePc	08	10.10	0.8
LFF	4.87	272	Pn	01	51.20	0.2				eSn	04	06.00		REVF	1.23	187	Pg	08	09.81	0.2
			Sn	02	45.00		KSP	8.25	42	iP	02	35.00	-3.4X	VAI	1.24	42	P	08	10.00	0.2
ABH	4.88	360	ePnc	01	50.75	-0.3				iS	04	20.50		CALN	1.30	202	Pg	08	11.32	0.4
RMP	4.90	129	P	01	52.20	0.9	BUD	8.29	69	eP	03	05.00	26.0X	TMA	1.47	38	ePc	08	12.50	-1.0
RDP	4.94	129	P	01	53.20	1.2	GUD	9.68	247	ePn	02	56.80	-1.5	FRF	1.55	206	Pn	08	14.30	-0.1
AQU	4.97	120	P	01	54.40	2.0				eSn	04	40.00					Sn	08	33.20				
LJU	4.98	76	iPn	01	51.10	-1.3	KRA	9.75	54	eP	02	55.70	-3.4X	LRG	1.74	211	Pn	08	17.20	0.1
			iSn	02	48.50					e	03	17.40					Sn	08	38.40				
TNS	5.25	6	ePn	01	55.20	-1.1	TOL	10.02	243	eP	03	02.00	-0.9	LMR	1.79	206	Pn	08	17.50	-0.5
			eSn	02	54.90		OHR	10.41	107	ePn	02	54.00	-14.2X				Sn	08	40.00				
GRF	5.29	26	iPnd	01	54.20	-2.7	VAY	11.53	103	ePn	03	20.00	-3.5X	VDL	2.03	40	ePd	08	21.10	-0.5
			e	02	00.80		ECP	11.70	313	eP	03	24.30	-1.4	OSS	2.50	45	ePc	08	28.10	-0.2
VBY	5.42	82	ePn	01	57.40	-1.3	ECB	12.01	313	eP	03	27.10	-2.9	SMF	3.11	304	Pn	08	37.00	0.2
			iSn	02	56.50		DLE	12.41	317	iPd	03	33.40	-1.9	HAU	3.16	345	Pn	08	37.20	-0.4
KMR	5.44	54	(Pn)	01	57.00	-1.9	EKA	12.41	330	P	03	31.00	-4.3X				Sn	09	12.20				
			iSn	03	00.20			0.7s	35.70nm			5.7mb X		LBF	3.22	310	Pn	08	38.70	0.2
DOU	5.48	339	iPc	01	59.50	-0.1	DCN	12.80	316	eP	03	38.80	-1.7	LOR	3.47	313	Pn	08	41.90	0.0
			iS	02	59.50		DMU	12.95	319	eP	03	39.50	-3.1X				Sn	09	20.00				
WET	5.49	39	iPnc	01	58.00	-1.7	NRA0	15.93	7	Pn	04	20.00	-1.4	AVF	3.47	303	Pn	08	41.80	-0.1
SDI	5.60	124	P	02	02.50	1.2				Sn	07	16.50		BGF	3.67	298	Pn	08	44.40	-0.5
EPF	5.60	252	Pn	01	59.00	-2.3	NB2	16.20	6	P	04	25.60	0.6		S.D. = 0.6		on	42	of	42	obs.		
			Sn	03	00.20			0.7s	1.80nm			3.3mb X		----------									
MFF	5.65	289	Pn	02	01.60	-0.4	NUR	18.54	27	eP	04	52.00	-2.2	? FEB 11, 1990 07h 22m 51.93± 3.69s									
			Sn	03	03.00		SUF	20.70	24	eP	05	16.10	-2.3	28.054 S ±18.1km 179.551 W ±25.8km									
MEM	5.71	350	iPc	02	02.50	-0.2		0.4s	2.00nm			3.8mb		DEPTH = 419.2 ± 34.4 km									
KHC	5.80	43	iPn	02	02.50	-1.5	SOD	24.57	18	iP	05	55.60	-1.1	4.0mb (1 obs.)									
			ePg	02	11.40		DMN	62.54	78	P	10	59.40	-3.1	KERMADEC ISLANDS REGION								(177)	
			Sg	03	08.00		KKN	62.54	77	P	10	59.00	-3.5X										
ENN	5.87	349	iPnc	02	05.00	0.0	PKI	62.77	77	P	11	01.10	-3.0	PGZ	13.00	194	P	25	44.80	0.6			
	0.5s	53.00nm				5.5mb X	GUN	62.88	77	P	11	01.80	-3.0	MNG	13.18	197	P	25	45.50	-0.8			
			e	02	09.50		RSSD	72.51	315	eP	12	03.20	-1.6				eS	28	08.00				
BTH	5.94	254	iPn	02	06.00	0.0	TUL	73.85	305	eP	12	10.90	-1.6	KIW	13.57	198	P	25	50.30	-0.1			
			iPb	02	21.00			1.2s	10.00nm			4.7mb		MTW	13.69	196	P	25	51.70	0.0			
			iPg	02	29.00		SIO	74.27	305	e(P)	12	12.60	-2.3	CAW	13.75	197	eP	25	51.90	-0.5			
			i(Sn)	03	20.60			S.D. = 1.3		on 155 of 172 obs.				WDW	13.92	197	eP	25	54.00	-0.1			
			i	03	23.00		----------							MRW	13.97	198	eP	25	54.50	-0.1			
PTJ	5.94	78	ePn	02	04.60	-1.5	FEB 11, 1990 07h 07m 46.80± 0.20s							MOW	14.00	196	eP	25	55.00	0.0			
			i	03	03.00		44.957 N ± 1.5km 7.571 E ± 2.4km							DZM	14.02	292	iPc	25	55.70	0.4			
SNF	5.95	339	iPc	02	05.70	-0.3	DEPTH = 10.0km (geophysicist)							TCW	14.07	199	P	25	55.40	-0.3			
			iS	03	10.40		NORTHERN ITALY (545)							MHZ	19.17	205	P	26	48.90	1.5			
ZAG	5.95	79	ePn	02	04.20	-1.9	ML 2.7 (GEN), 2.7 (LDG).							CTA	32.13	277	iPd	28	34.90	-9.5X			
			iSg	03	43.50									WB5	42.68	271	eP	30	11.10	-0.4			
UCC	6.19	341	eP	02	15.00	5.5X	RSP	0.30	311	P	07	54.19	1.2	WRA	42.69	270	Pc	30	11.20	-0.3			
			e	03	19.00					S	07	58.70			0.8s		6.50nm			4.0mb			
MOX	6.25	24	ePn	02	07.00	-3.4X	DOI	0.51	207	P	07	57.20	0.1	NB2	146.23	351	PKP	41	43.00	0.1			
			iPg	02	42.00					eSg	08	04.30			0.7s		6.60nm						
			iSn	03	16.00		RRL	0.56	267	P	07	58.70	0.4	HFS	146.68	348	ePKP	41	43.50	-0.1			
ESEL	6.29	215	ePn	02	10.50	-0.5				S	08	05.88			0.4s		7.20nm						
			eSn	03	15.00		PZZ	0.56	217	P	07	57.88	-0.4		S.D. = 0.6		on	15	of	16	obs.		
LDF	6.40	307	Pn	02	11.20	-1.4				S	08	04.55		----------									
			Sn	03	22.00		LSD	0.58	330	P	07	58.91	0.2	FEB 11, 1990 09h 05m 10.09± 1.08s									
HVAR	6.62	103	iPn	02	12.50	-3.2X				S	08	06.60		50.309 N ± 9.9km 7.384 E ± 6.8km									
			iSn	03	22.20		BNI	0.64	279	P	08	00.50	0.7	DEPTH = 5.0km (geophysicist)									
LPF	6.69	300	Pn	02	15.60	-1.0				eSg	08	08.10		GERMANY (543)									
EBR	6.69	234	ePn	02	17.00	0.4	ROB	0.70	162	P	08	01.47	0.9	MD 2.6 (UCC).									
			e	03	36.00					S	08	09.57											
			eSg	03	43.00		FOUF	0.71	233	iPgd	08	00.80	0.1	ABH	0.44	166	ePgd	05	19.02	0.1			
FLN	6.70	307	Pn	02	14.80	-1.9				e(Sg)	08	07.35		RUP	0.64	199	ePg	05	22.43	-0.5			
			Sn	03	28.00		ORO	0.73	23	P	08	00.80	-0.4	TNS	0.69	97	iPgc	05	22.80	-1.1			
GRR	6.73	303	Pn	02	16.00	-1.2				eSg	08	09.70					eSg	05	33.40				
			Sn	03	28.00		CKI	0.73	136	P	08	02.80	1.6	MEM	0.93	289	iP	05	27.50	-0.8			

11d 09h

		iS	05 39.60		
WLF	1.02	231 iP	05 28.20	-1.7	
TOD	1.16	127 ePg	05 32.85	0.7	
DOU	1.81	264 iP	05 32.30	-9.8X	
CDF	1.90	182 Pg	05 44.90	1.3	
		Sg	06 07.60		
SNF	1.99	277 P	05 46.60	1.8	
HAU	2.40	197 Pg	05 54.00	3.2X	
		Sg	06 24.60		
BSF	2.51	189 Pn	05 55.00	2.7X	
		Sg	06 27.00		

S.D. = 1.4 on 8 of 11 obs.

% FEB 11, 1990 09h 13m 34.38± 0.68s
40.468 N ± 5.8km 27.884 E ± 6.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

BNT	0.11	166 iPg	13 36.70	-0.6	
EDC	0.12	188 iPg	13 37.50	0.1	
MFT	0.56	305 iPg	13 45.70	-0.1	
CTT	0.80	31 ePn	13 50.20	0.4	
DST	1.03	146 ePn	13 54.70	0.8	
YLV	1.14	85 iPn	13 55.20	-0.6	
HRT	1.40	75 ePn	14 00.00	0.0	

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

% FEB 11, 1990 09h 16m 13.71± 0.95s
39.099 N ± 7.8km 27.584 E ±10.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZM	0.74	200 ePg	16 28.00	-0.3	
		eSg	16 40.00		
DST	0.95	58 iPn	16 32.70	0.8	
EZN	1.21	307 ePn	16 37.00	0.7	
EDC	1.26	10 ePn	16 36.50	-0.7	
BNT	1.28	12 ePn	16 37.00	-0.5	

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

& FEB 11, 1990 09h 27m 08.80s
31.920 N 116.220 W
DEPTH = 6.0km (geophysicist)
BAJA CALIFORNIA (48)
<PAS-P>. ML 3.0 (PAS).

IKP	0.73	7 ePd	27 22.60	-0.9	
		eS	27 32.20		
BAR	0.85	333 iPd	27 24.30	-1.3	
		eS	27 34.90		
CPE	1.21	322 eP	27 30.80	-0.9	
PLM	1.53	339 ePd	27 35.80	-1.0	
GLA	1.63	46 eP	27 36.20	-2.0	
PEC	2.12	338 eP	27 45.00	-0.3	

6 obs. ossociated

? FEB 11, 1990 09h 32m 17.13± 4.71s
31.545 S ±27.0km 68.839 W ±29.1km
DEPTH = 86.7 ± 44.3 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB	0.07	30 iPd	32 30.00	0.1	
RTLL	0.38	56 iPc	32 30.80	-0.1	
		iS	32 43.00		
RTCV	0.41	141 iPc	32 31.00	-0.1	
		S	32 42.50		
CFA	0.52	97 eP	32 32.00	0.1	
		S	32 44.00		
RTRS	1.47	339 ePc	32 42.70	0.0	

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

FEB 11, 1990 09h 56m 40.94± 0.31s
9.849 N ± 5.6km 125.015 E ± 7.0km
DEPTH = 30.7km (2 depth phases)
4.8mb (14 obs.) 4.3Msz (5 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV	2.80	169 eP	57 25.00	0.4	
QCP	6.12	321 eP	58 12.00	0.3	
BAG	7.82	327 eP	58 36.50	0.8	
HKC	16.17	321 e(P)	00 32.00	4.4X	
QZH	16.21	339 eP	00 32.00	3.9X	
	Z 18s	1.00um			
	N 12s	0.70um			
GZH	17.26	321 eP	00 46.00	4.6X	
QIZ	17.28	304 eP	00 42.50	0.8	
	N 12s	0.70um			
	E 15s	1.70um			
GUMO	19.79	77 eP	01 10.80	-1.0	
		eS	05 00.50		
PJG	19.79	77 eP	01 10.80	-1.0	
SSE	21.44	351 P	01 29.70	1.0	
	Z 18s	2.80um		4.7Msz	
	N 13s	0.50um			
	E 12s	0.40um			
		pP	01 38.20	31km	
NJ2	22.82	346 Pc	01 43.50	1.1	
	Z 14s	0.40um		4.0MszX	
WHN	22.86	336 eP	01 44.00	1.1	
	6.0s	700.00nm		5.3mb X	
	Z 16s	1.19um		4.4MszX	
	E 13s	0.80um			
MTN	23.35	165 eP	01 48.00	0.3	
LOE	23.83	291 eP	01 55.00	2.6	
GYA	23.96	316 P	01 56.40	2.6	
	Z 18s	0.70um		4.2Msz	
	N 15s	0.90um			
	E 15s	0.70um			
IPM	24.36	259 ePd	01 57.70	0.1	
	0.8s	89.10nm		5.4mb	
CHTO	26.75	292 e(P)	02 18.00	-2.0	
XAN	28.24	331 P	02 31.50	-2.0	
CD2	28.81	320 P	02 37.40	-1.2	
	Z 14s	0.50um		4.3MszX	
TIY	29.97	340 eP	02 47.30	-1.7	
	N 15s	1.00um			
		sS	07 53.00		
WB5	30.94	163 eP	02 57.00	-0.6	
WRA	31.00	163 Pc	03 01.30	3.2X	
	0.5s	2.00nm		4.2mb	
8JI	31.08	347 eP	02 58.50	-0.1	
	1.3s	29.00nm		4.9mb	
		eS	08 06.00		
SNY	31.88	358 Pd	03 06.30	0.7	
	Z 18s	0.60um		4.3Msz	
	N 18s	0.70um			
LZH	32.43	327 eP	03 10.00	-0.7	
	1.5s	18.00nm		4.8mb	
HHC	33.09	341 P	03 16.60	0.3	
8TO	33.39	339 eP	03 20.00	1.1	
	N 12s	0.50um			
	E 12s	0.30um			
		eS	08 44.00		
		eSS	10 47.00		
QIS	33.45	155 iPd	03 19.20	-0.3	
CN2	33.83	1 eP	03 22.20	-0.3	
	Z 18s	0.50um		4.3Msz	
		epP	03 31.20	31km	
		eS	08 50.00		
ASPA	34.42	165 eP	03 27.90	-0.1	
	0.4s	4.00nm		4.7mb	
	Z 20s	0.31um		4.0Msz	
		LR	20 44.10		
MDJ	34.86	6 eP	03 31.50	0.0	
	Z 15s	0.80um		4.6MszX	
CTA	36.36	145 ePc	03 46.50	2.1	
GTA	37.04	327 eP	03 49.80	-0.3	
	Z 16s	0.60um		4.5MszX	
GUN	40.92	301 P	04 23.00	0.2	
	0.6s	24.00nm		5.1mb	
PKI	41.22	301 P	04 25.20	0.0	
	0.6s	13.00nm		4.8mb	
KKN	41.39	301 P	04 26.40	-0.1	
DMN	41.48	301 P	04 27.30	0.0	
	0.8s	21.00nm		4.9mb	
GKN	42.00	301 P	04 31.40	0.0	
	0.4s	7.00nm		4.7mb	
ADE	46.42	164 eP	05 07.50	0.8	
GBA	46.68	279 Pc	05 06.60	-2.4	
	0.6s	3.10nm		4.5mb	
WMQ	46.80	323 P	05 10.20	0.5	
MAIO	64.53	305 iPc	07 16.00	-1.6	
		eS	16 16.00		
FBA	79.96	26 e(P)	08 48.60	0.2	
KEV	83.60	340 eP	09 07.00	-0.3	
SOD	84.20	337 iP	09 10.80	0.5	
INK	85.13	21 eP	09 16.00	1.0	
SUF	85.36	333 eP	09 15.30	-0.9	
	0.7s	18.50nm		5.4mb	
MBC	86.39	12 eP	09 22.00	0.9	
	1.0s	7.00nm		4.8mb	
NUR	86.56	331 eP	09 21.30	-0.9	
HFS	91.84	332 eP	09 46.60	-0.5	
	0.9s	3.30nm		4.8mb	
	Z 15s	0.20um		4.7MszX	
		LR	53 59.00		
NB2	92.58	334 P	09 49.40	-1.2	
	0.9s	3.60nm		4.8mb	
KIC	127.42	286 PKP	15 44.70	-0.8	
ZOBO	165.70	118 PKP	16 46.00	0.8	

S.D. = 1.1 on 49 of 53 obs.

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* FEB 11, 1990 11h 23m 53.84± 0.40s
3.876 S ±13.7km 81.745 W ±16.8km
DEPTH = 32.6km (2 depth phases)
5.0mb (8 obs.)
NEAR COAST OF NORTHERN PERU (109)

ZOBO	18.19	134 Pd	28 05.00	-1.3	
	1.1s	30.45nm		4.4mb	
		LR	33 24.00		
LPB	18.38	134 P	28 08.00	-0.5	
	1.0s	60.00nm		4.7mb	
		i	28 10.20		
		LR	33 44.00		
CCH	20.35	132 P	28 31.70	0.9	
TUL	41.71	343 iPd	31 42.00	0.7	
	0.9s	21.00nm		4.9mb	
		e	31 52.70	37km	
SIO	41.71	342 eP	31 40.20	-1.2	
FVM	42.42	350 eP	31 46.60	-0.6	
ALQ	45.06	331 iPd	32 10.10	1.2	
	1.0s	20.00nm		5.0mb	
GLA	48.27	322 eP	32 33.00	-1.0	
PLM	49.73	321 eP	32 46.00	0.6	
RVR	50.48	321 eP	32 50.00	-0.8	
GSC	50.99	323 eP	32 55.00	0.1	
MWC	51.05	321 eP	32 56.00	0.5	
SBB	51.21	321 eP	32 56.00	-0.5	
RSSD	51.81	340 eP	33 01.60	0.5	
CLC	51.82	323 eP	33 01.00	-0.1	
ISA	52.25	322 eP	33 05.00	0.6	
TNP	53.13	325 eP	33 11.10	0.0	
KVN	54.30	325 eP	33 18.80	-0.8	
RSON	55.48	351 ePc	33 26.30	-1.5	
SES	59.65	339 eP	33 57.00	-0.2	
PNT	62.31	333 eP	34 16.00	0.7	
	0.8s	19.00nm		5.3mb	
EDM	62.79	339 iPd	34 17.30	-1.1	
	0.7s	20.00nm		5.4mb	
KIC	77.55	83 P	35 49.80	1.0	
INK	80.38	343 eP	36 03.00	-0.1	
MBC	82.88	352 ePd	36 16.60	0.5	
	0.8s	15.00nm		5.1mb	
SPA	86.15	180 iPd	36 33.00	0.1	
	1.0s	10.50nm		5.0mb	
		i	36 41.90	28km	
ASPA	135.77	230 ePKP	43 00.60	-13.2X	
	0.8s	4.00nm			
WRA	137.37	235 PKPc	43 16.10	-0.8	
	0.6s	1.70nm			
TIY	143.91	341 ePKP	43 22.70	-5.4X	
GTA	144.60	358 PKPc	43 27.40	-1.9	
SSE	145.36	324 PKPd	43 30.00	-0.7	
	E 10s	0.20um			
LZH	147.53	352 ePKP	43 37.00	2.7	
XAN	148.39	343 PKP	43 36.50	0.9	
WHN	149.43	332 ePKP	43 37.50	0.3	
GKN	152.72	27 PKP	43 50.00	7.6X	
KKN	153.19	26 PKP	43 51.00	7.9X	
PKI	153.44	26 PKP	43 51.40	7.8X	

S.D. = 1.0 on 32 of 37 obs.

FEB 11, 1990 11h 43m 50.21± 0.55s
44.323 N ±11.0km 149.993 E ± 8.4km
DEPTH = 43.3km (6 depth phases)
4.4mb (8 obs.)
KURIL ISLANDS (221)

KUSJ	4.02	254 eP	44 48.60	-2.3	
		S	45 32.60		
HOOJ	5.26	251 eP	45 09.30	0.9	
		S	46 05.70		
ASAJ	5.29	270 P	45 10.60	1.8	
MRRJ	6.77	257 eP	45 28.70	-0.9	
		eS	46 44.60		
MAT	11.87	233 eP	46 37.00	-2.6	
8JI	25.31	272 eP	49 15.00	0.8	
LZH	35.80	273 eP	50 48.00	0.6	
	1.0s	33.00nm		5.2mb	
		pP	51 00.50	46km	

FBA	39.42	36	eP	51 17.00	-0.2
KMI	42.64	259	Pc	51 45.00	0.7
INK	44.87	31	eP	52 02.00	0.5
MBC	47.61	19	eP	52 23.00	-0.2
	0.9s	3.00nm			4.3mb
			pP	52 35.50	46km
GUN	53.02	275	P	53 05.80	0.4
KKN	53.52	275	P	53 09.40	0.5
PKI	53.56	275	P	53 09.60	0.3
DMN	53.75	275	P	53 11.20	0.6
GKN	53.85	276	P	53 11.60	0.3
FFC	64.00	38	iPc	54 20.30	-0.9
	0.8s	7.00nm			4.8mb
SUF	64.29	335	eP	54 21.20	-1.7
	0.4s	1.00nm			4.2mb
HYB	64.83	270	eP	54 27.00	-0.1
KVN	65.27	59	e(P)	54 31.50	1.6
WB5	65.47	196	eP	54 31.30	0.4
WRA	65.54	196	Pc	54 32.20	0.9
	0.8s	2.00nm			4.2mb
TNP	66.41	59	e(P)	54 36.80	-0.4
NUR	66.44	334	eP	54 35.30	-1.4
FRB	68.04	17	eP	54 45.00	-1.7
NB2	69.79	340	P	54 56.70	-0.9
	0.6s	1.50nm			4.2mb
HFS	69.93	338	eP	54 56.50	-1.9
	0.4s	1.50nm			4.3mb
KRA	76.43	329	eP	55 37.00	0.4
			e	55 49.30	42km
KSP	77.05	332	eP	55 40.50	0.4
			e	55 52.50	40km
CLL	77.72	334	eP	55 43.00	-0.7
			e	55 56.00	44km
BRG	77.80	333	e(P)	55 45.40	1.2
PRU	78.37	332	eP	55 48.00	0.7
SRO	78.89	329	e(P)	55 50.60	0.4
			e	55 58.90	26kmX
			i	56 03.70	
ZST	79.01	330	e(P)	56 04.30	13.5X
KHC	79.43	333	iP	55 54.30	1.2
			i	56 06.80	42km
KBA	81.28	332	eP	56 03.50	0.3
	1.0s	10.70nm			4.8mb
PTJ	81.37	329	eP	56 03.50	-0.1
SKO	82.51	324	e(P)	56 10.50	1.0

S.D. = 1.1 on 37 of 38 obs.

FEB 11, 1990 12h 10m 28.24± 0.36s
5.326 S ± 5.1km 151.391 E ± 6.9km
DEPTH = 33.0km (normal)
5.4mb (13 obs.) 4.5Msz (2 obs.)
NEW BRITAIN REGION (192)

RAB	1.37	35	iPc	10 50.50	-0.7
LAT	4.56	253	iPc	11 39.00	2.2
PMG	5.84	226	iPc	11 55.30	0.4
			eS	13 06.00	
MNDI	7.74	264	eP	12 24.00	2.3
HNR	9.41	116	eP	12 45.00	0.3
CTA	15.50	198	iPc	14 06.90	0.7
	1.0s	108.00nm			5.0mb
			i	14 12.50	
			i	14 18.50	
			i	16 55.00	
			iS	17 06.00	
QIS	18.98	216	iPc	14 49.10	-0.7
	0.8s	64	00nm		4.9mb
GUA	19.81	341	eP	14 58.50	-0.6
	1.0s	360.00nm			5.6mb
GUMO	19.88	341	eP	14 59.30	-0.5
	1.2s	388.89nm			5.6mb
			eS	18 35.00	
PVC	20.64	128	iPc	15 21.00	13.3X
RMO	21.19	187	iPc	15 15.20	1.8
	0.9s	389.00nm			5.8mb
			e	15 33.00	
MTN	21.34	248	eP	15 13.00	-1.9
			e	15 22.00	
WB5	21.99	227	iPc	15 20.20	-1.2
			i	15 23.90	
			eS	19 23.00	
WRA	22.05	227	Pc	15 20.60	-1.4
	0.5s	31.50nm			5.0mb
DZM	22.12	140	iPc	15 24.00	1.2
QLP	22.22	197	eP	15 25.00	1.4
KNA	24.51	243	eP	15 45.50	-0.5
ASPA	24.83	221	ePc	15 49.20	0.1
	0.9s	147.00nm			5.6mb
Z	18s	0.94um			4.3Msz
			eS	20 08.80	
			LR	27 15.40	
CMS	26.54	191	eP	16 05.00	0.0
ADE	31.74	200	iPc	16 51.50	-0.1
	0.8s	41.79nm			5.4mb
MBL	34.41	240	eP	17 13.00	-1.8
MEKA	37.82	232	eP	17 43.00	-0.7
COOL	38.13	225	eP	17 44.00	-2.2
KLB	40.92	226	eP	18 07.30	-2.1
MRWA	41.03	230	iPd	18 09.20	-1.1
	0.4s	7.00nm			4.7mb
BAL	41.18	228	eP	18 10.00	-1.5
MSZ	41.78	162	P	18 18.00	1.9
NWAO	42.02	225	eP	18 17.00	-1.4
MUN	42.25	227	eP	18 19.10	-1.1
RKG	42.81	224	eP	18 26.50	1.7
MAT	43.44	345	eP	18 29.00	-0.8
	1.5s	119.44nm			5.4mb
QZH	43.85	315	eP	18 34.20	0.9
SSE	46.30	323	eP	18 53.50	0.7
			eS	25 40.00	
NJ2	48.38	322	Pc	19 07.50	-1.6
WHN	50.28	317	eP	19 23.50	-0.2
DL2	51.92	331	eP	19 37.30	1.3
	1.2s	100.00nm			5.7mb
TIA	52.32	325	eP	19 39.00	-0.1
MDJ	53.43	341	eP	19 50.00	2.8
GYA	53.61	308	P	19 50.40	1.5
CN2	54.22	337	P	19 59.00	6.0X
BJI	55.57	328	eP	20 03.00	0.2
XAN	56.04	317	P	20 05.30	-1.2
TIY	56.09	323	Pd	20 05.70	-1.1
Z	20s	0.60um			4.7Msz
KMI	56.12	305	eP	20 08.00	0.5
			pP	20 11.50	11kmX
CD2	58.02	312	P	20 20.80	0.2
HHC	58.67	325	P	20 25.00	0.0
BTO	59.39	324	eP	20 30.00	0.0
LZH	60.64	317	eP	20 43.00	4.3X
	1.5s	57.00nm			5.5mb
GTA	65.10	318	eP	21 10.00	1.8
LSA	67.38	305	P	21 24.60	1.2
WMO	75.18	318	eP	22 12.00	2.6
KSH	82.19	311	eP	22 52.90	5.2X
FBA	82.89	22	eP	22 48.30	-2.4
SPA	84.71	180	iPc	23 01.30	1.2
	0.8s	8.75nm			5.0mb
INK	89.45	21	eP	23 22.00	-0.8
CMB	91.85	52	eP	23 34.80	0.2
FRI	92.29	53	e(P)	23 35.50	-1.1
KVN	93.71	51	eP	23 43.00	-0.4
TNP	94.34	52	eP	23 46.00	-0.3
BCAO	133.03	271	ePKPd	29 49.20	6.0X
	0.7s	6.00nm			
			ic	29 52.10	
KUK	151.89	273	ePKP	30 22.00	6.3X

S.D. = 1.3 on 55 of 61 obs.

% FEB 11, 1990 12h 29m 58.28± 0.72s
40.257 N ± 6.4km 29.179 E ± 5.5km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

YLV	0.34	26	iPg	30 05.20	-0.2
GBZT	0.57	21	iPgc	30 10.70	0.9
			iSg	30 18.60	
DST	0.78	213	iPg	30 13.80	0.3
ISK	0.81	354	ePg	30 13.60	-0.4
			eSg	30 24.60	
GPA	0.87	88	ePg	30 14.50	-0.5
BNT	0.97	276	iPg	30 16.70	0.0
EDC	1.01	275	iPg	30 16.50	-0.9
CTT	1.06	328	iPg	30 17.60	-0.6
MFT	1.54	291	ePn	30 27.00	1.1

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

? FEB 11, 1990 12h 38m 41.68± 8.65s
7.740 S ±69.5km 129.184 E ±61.5km
DEPTH = 180.8 ± 35.7 km
4.6mb (1 obs.)
BANDA SEA (280)

SLKI	2.11	97	ePc	39 20.20	-0.1
MTN	5.42	159	eP	40 03.00	1.1
			eS	41 08.00	
KNA	7.97	183	eP	40 35.30	-0.3
			eS	42 06.00	
WB5	13.07	158	eP	41 40.30	-1.5
			i	41 46.20	
			eS	44 07.10	
WRA	13.12	158	Pc	41 41.10	-1.4
	0.4s	2.00nm			3.9mb X
QIS	16.25	143	eP	42 22.00	0.7
			eS	45 25.00	
ASPA	16.47	165	eP	42 25.60	1.6
	0.8s	20.00nm			4.6mb
			eS	45 28.40	

S.D. = 1.7 on 7 of 7 obs.

FEB 11, 1990 13h 37m 07.35± 0.71s
31.141 S ± 6.9km 69.733 W ± 8.0km
DEPTH = 132.8 ± 12.7 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB	0.87	114	iPc	37 30.00	0.3
			(S)	37 41.50	
RTRS	1.00	14	iPd	37 30.80	0.1
RTLL	1.10	100	iPc	37 31.70	-0.1
RTCV	1.25	125	iP	37 34.00	0.7
ROCH	2.12	210	iPd	37 43.30	-0.4
			iS	38 10.00	
SAN	2.44	199	iPc	37 48.50	1.1
			iS	38 17.40	
PCH	2.56	195	iPc	37 49.90	0.8
			iS	38 20.20	
TACH	2.70	202	eP	37 50.20	-0.6
LCCH	2.80	213	iPc	37 51.40	-0.6
CHCH	2.89	195	iPc	37 54.00	0.7
			iS	38 27.50	
LNV	3.14	206	iPd	37 55.00	-1.5
			i	38 27.50	
			iS	38 30.00	
MRA	3.65	111	iPd	38 03.80	0.5
RFA	3.77	164	iPc	38 05.00	0.0
CYA	4.35	53	iPd	38 11.00	-1.7
TCA	4.41	94	iPd	38 13.10	-0.4
ZOBO	14.88	6	P	40 34.00	1.3

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

FEB 11, 1990 13h 54m 08.61± 0.27s
6.376 S ± 3.8km 146.797 E ± 5.4km
DEPTH = 62.7km (7 depth phases)
5.1mb (13 obs.)
EAST PAPUA NEW GUINEA REGION (207)

LAT	0.34	144	iPc	54 20.90	1.5
PMG	3.03	173	iPd	54 55.40	0.1
			eS	55 46.00	
MNDI	3.13	274	eP	55 01.00	4.2X
RAB	5.77	68	iPc	55 34.50	0.7
HNR	13.37	104	eP	57 20.00	2.8
CTA	13.64	182	iPd	57 22.00	1.2
	1.1s	126.58nm			5.5mb
			iS	00 21.00	
			e	04 11.00	
SLKI	15.46	263	iPc	57 47.00	2.6
QIS	15.73	206	eP	57 47.00	-0.8
			eS	00 35.00	
MTN	16.73	246	eP	58 00.00	-0.4
			e	58 23.00	
			e	00 59.00	
WB5	18.06	221	iPc	58 16.00	-0.9
			eS	01 31.70	
			eScP	06 22.10	
WRA	18.12	221	Pc	58 16.50	-1.1
	0.7s	34.90nm			4.7mb
GUA	19.87	355	eP	58 37.30	-0.3
	0.8s	125.37nm			5.3mb
			pP	58 50.50	62km
GUMO	19.93	354	eP	58 37.00	-1.1
			pP	58 51.00	67km
KNA	19.98	241	eP	58 35.00	-3.7X
RMO	20.09	175	eP	58 40.00	0.2
			i	58 42.00	8kmX
QLP	20.24	187	eP	58 41.00	-0.4
ASPA	21.20	214	eP	58 50.10	-1.0
	0.7s	73.00nm			5.1mb
			eS	02 43.70	
			iScS	10 10.80	
MNI	23.26	289	e(P)	59 15.00	3.6X
DZM	24.57	131	iPc	59 23.10	-1.1
CMS	25.00	182	eP	59 28.00	-0.1

11d 13h

BWA	27.95	177	eP	59	55.00	-0.3
CAN	28.88	176	eP	00	02.80	-0.8
ADE	29.41	194	eP	00	08.00	-0.4
MBL	29.95	238	eP	00	12.50	-0.8
BFD	30.90	187	eP	00	22.00	0.5
MEKA	33.61	230	eP	00	45.10	-0.1
COOL	34.25	221	eP	00	49.50	-1.2
MRWA	36.88	228	eP	01	13.10	0.0
KLB	36.96	224	eP	01	13.00	-0.7
BAL	37.12	226	eP	01	14.00	-1.1
NWAO	38.12	222	eP	01	23.00	-0.4
MUN	38.26	224	eP	01	24.00	-0.5
RKG	38.96	221	eP	01	33.40	3.0X
MSZ	42.37	158	eP	01	59.00	0.8
MAT	43.44	350	(P)	02	06.00	-1.1
	0.8s		10.45nm			4.7mb
QIZ	44.31	305	eP	02	15.20	0.9
SSE	44.59	328	Pc	02	16.50	0.1
			pP	02	30.70	54km
NJ2	46.58	327	Pc	02	32.20	0.0
PPI	46.66	275	e(P)	02	35.00	1.8
IPM	46.97	282	ePd	02	37.40	1.8
WHN	48.10	322	eP	02	44.00	-0.1
			pP	03	00.50	65km
LOE	50.40	299	eP	03	03.50	1.5
GYA	50.78	312	eP	03	06.80	1.9
NST	51.14	296	iPd	03	09.40	1.8
SNY	52.46	338	Pc	03	16.20	-1.0
BDT	52.73	297	eP	03	26.00	6.4X
KMI	53.07	308	eP	03	22.50	0.3
			pP	03	40.00	68km
			sP	03	50.00	
CHG	53.39	299	eP	03	26.00	1.6
CHTO	53.39	299	ePd	03	25.80	1.4
			pP	03	43.00	67km
CN2	53.55	341	eP	03	23.80	-1.3
			pP	03	38.80	56km
XAN	53.84	321	Pd	03	26.50	-1.1
BJI	54.13	331	eP	03	28.00	-1.5
TIY	54.30	327	eP	03	35.50	4.6X
CD2	55.39	315	P	03	38.40	-0.5
HHC	57.04	329	eP	03	49.60	-1.1
LZH	58.36	320	eP	04	15.00	14.9X
	1.5s		19.00nm			
GTA	62.90	320	Pc	04	30.00	-0.8
GUN	67.90	303	P	05	03.60	0.1
	0.6s		16.00nm			5.2mb
PKI	68.18	303	P	05	05.40	0.2
	0.8s		12.00nm			4.9mb
KKN	68.36	303	P	05	06.10	-0.1
	0.8s		28.00nm			5.3mb
DMN	68.44	303	P	05	06.90	0.1
	0.8s		28.00nm			5.3mb
GKN	68.97	303	P	05	09.60	-0.3
	0.6s		18.00nm			5.2mb
HYB	71.40	291	eP	05	24.50	-0.1
GBA	71.65	287	Pd	05	26.90	0.8
	0.9s		12.60nm			4.8mb
WMQ	72.94	319	P	05	32.50	-0.9
POO	76.01	291	iPc	05	52.00	0.6
SPA	83.67	180	iPd	06	31.20	-0.5
	0.7s		22.27nm			5.3mb
FBA	85.60	23	eP	06	39.40	-1.7
	0.7s		8.72nm			5.0mb
INK	92.08	21	eP	07	11.00	-0.7
MBC	97.07	14	eP	07	33.00	-1.5
MLR	115.91	318	ePKP	12	56.00	9.7X
TRI	123.64	322	ePKP	13	01.10	0.3
			e	14	43.10	
BCAO	128.47	271	ePKPc	13	13.10	2.0
	0.7s		7.00nm			
			ic	13	37.00	
			ic	17	26.10	
LPB	138.65	124	ePKP	13	37.00	6.2X
ZOBO	138.76	123	PKP	13	22.00	-9.2X
			e	13	29.00	
KUK	147.37	272	ePKP	13	49.50	4.2X
KIC	151.71	272	PKP	13	58.92	6.9X
LIC	152.00	271	PKP	13	59.58	7.2X
TIC	152.00	272	PKP	13	59.54	7.1X
LKO	152.48	278	PKP	14	02.36	9.2X

S.D. = 1.1 on 65 of 80 obs.

FEB 11, 1990 14h 10m 47.24± 0.63s
37.849 N ± 6.1km 20.754 E ± 4.2km
DEPTH = 33.0km (normal)
4.1mb (3 obs.)

IONIAN SEA (399)

ML 3.9 (ATH), 3.5 (TTG).

ITM	1.15	125	iPnd	11	05.60	-1.5
KEK	2.01	338	ePn	11	20.90	1.5
SRN	2.11	344	iPn	11	22.30	1.4
LSK	2.30	357	iPnd	11	24.80	1.1
ATH	2.35	86	ePn	11	25.90	1.6
NEO	2.42	52	ePn	11	26.50	1.1
KZN	2.58	18	ePn	11	29.80	2.2
KBN	2.77	1	ePn	11	31.80	1.6
VLO	2.79	340	ePn	11	31.40	0.9
OHR	3.26	1	iPn	11	38.00	0.8
PLG	3.28	39	ePn	11	37.80	0.3
LCI	3.30	320	P	11	37.80	0.0
			eSn	12	18.00	
TIR	3.56	349	ePn	11	41.80	0.3
VAM	3.69	130	ePn	11	41.00	-2.3
SOI	3.72	275	P	11	44.80	1.1
			eSn	12	27.70	
VAY	3.74	21	iPn	11	49.40	5.4X
PHP	3.84	356	ePn	11	44.60	-0.8
LACI	3.87	348	iPnd	11	45.50	-0.3
CZI	3.87	292	P	11	47.20	1.3
			eSn	12	35.20	
TDS	3.90	299	P	11	49.40	3.1X
CSI	3.98	300	P	11	51.40	3.8X
ORI	4.02	305	Pc	11	48.90	0.9
BRT	4.09	319	P	11	49.50	0.5
SKO	4.15	7	Pn	11	49.00	-0.9
			iPg	12	03.50	
			iSn	12	36.50	
			iSb	12	49.00	
			iSg	12	57.50	
ATN	4.19	276	P	11	51.50	1.0
			eSn	12	40.20	
ULC	4.27	345	ePn	11	50.50	-1.1
			eSn	12	37.50	
MMB	4.38	31	ePd	11	55.00	1.8
			eS	12	52.00	
KKB	4.39	23	ePg	11	53.00	-0.4
BAI	4.44	319	P	11	53.50	-0.5
BCI	4.54	354	ePn	11	55.80	0.4
MGR	4.65	301	P	11	57.60	0.6
BDV	4.67	342	ePn	11	56.00	-1.2
			eSn	12	46.50	
MEU	4.69	263	P	11	57.50	-0.2
			eSn	12	53.70	
TTG	4.72	346	ePn	11	56.50	-1.3
			eSn	12	48.50	
PVY	4.78	353	ePn	12	01.00	2.2
			eSn	12	55.50	
MNO	4.79	273	P	12	00.10	0.9
RZN	4.90	37	eP	12	01.00	0.3
HCY	4.91	340	ePn	11	58.10	-2.5
			eSn	12	51.00	
RDO	4.95	47	ePn	12	05.40	4.1X
SGO	5.02	304	P	12	04.60	2.4
			eSn	13	01.60	
VTS	5.10	21	eP	12	05.00	1.6
NKY	5.14	345	ePn	12	02.30	-1.7
			eSn	12	59.20	
KDZ	5.23	42	eP	12	05.00	-0.1
BRY	5.32	342	ePn	12	04.50	-2.0
			eSn	13	03.20	
GIB	5.32	274	P	12	07.50	1.0
DUI	6.17	310	P	12	19.50	1.0
HVAR	6.25	330	iPn	12	18.00	-1.5
			iSn	13	26.50	
PVL	6.40	32	eP	12	23.00	1.5
SDI	6.59	308	P	12	24.40	0.1
AZI	6.98	309	P	12	30.00	0.3
MNS	7.67	309	Pc	12	39.50	0.1
ASS	8.08	313	P	12	46.50	1.3
ARV	8.19	316	P	12	46.00	-0.7
			eSn	14	16.50	
VBY	8.68	333	ePn	12	57.50	4.0X
			e(Sn)	14	26.50	
PTJ	8.80	338	eP	12	48.90	-6.3X
CRE	8.83	314	P	12	55.50	-0.1
VRI	9.17	27	eP	13	09.00	8.9X
CEY	9.19	331	ePn	12	58.60	-1.9
			eSn	14	38.50	
LJU	9.40	332	e(Pn)	13	01.00	-2.4
			e(Sn)	14	41.00	
VOY	9.64	330	eP	13	04.70	-2.0
			eS	14	48.70	
RBL	10.10	330	P	13	12.00	-1.1
			eSn	14	58.50	
FVI	10.54	328	P	13	18.10	-0.9
CTI	10.63	323	P	13	17.60	-2.7
KHC	12.41	338	P	13	44.80	0.4
HFS	22.75	351	eP	15	47.00	-0.4
	0.5s		3.30nm			4.1mb
EKA	23.80	325	P	16	02.00	4.4X
	1.3s		20.90nm			4.5mb
NB2	23.98	349	P	15	59.50	0.1
	0.8s		3.00nm			3.9mb
SUF	25.12	6	eP	16	07.50	-2.8

S.D. = 1.4 on 60 of 68 obs.

% FEB 11, 1990 14h 43m 59.75± 1.02s
41.741 N ± 6.1km 19.592 E ±11.0km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)

LACI	0.14	140	iPgd	44	03.30	0.3
SDA	0.28	346	iPgc	44	06.00	0.3
PHP	0.64	94	iPgd	44	11.60	-0.9
KKS	0.70	61	ePg	44	14.00	0.5
BCI	0.72	29	iPg	44	13.30	-0.6
VLO	1.27	183	ePn	44	22.10	-1.3
LSK	1.76	154	ePn	44	32.20	1.6

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

FEB 11, 1990 14h 48m 59.29± 0.63s
41.743 N ± 5.7km 19.443 E ± 5.3km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)

ML 3.0 (TTG).

ULC	0.26	327	iPgd	49	04.90	0.0
			eSg	49	10.40	
TTG	0.70	349	iPgd	49	12.40	-0.7
			iSg	49	24.00	
BDV	0.71	320	ePg	49	12.80	-0.5
			eSg	49	25.00	
PVY	0.94	25	iPgc	49	16.00	-1.3
			eSg	49	32.00	
HCY	1.00	315	ePg	49	18.00	-0.1
			eSg	49	36.00	
NKY	1.12	343	ePg	49	20.00	-0.3
			eSg	49	38.50	
IVA	1.18	16	iPgd	49	21.10	-0.2
			eSg	49	41.00	
OHR	1.20	121	iPn	49	20.00	-1.7
BRY	1.34	330	ePg	49	25.00	1.0
			eSg	49	46.00	
SKO	1.51	81	iPn	49	27.00	0.6
			i	49	47.40	
			iSg	49	48.90	
PLE	1.59	359	ePn	49	30.00	2.4
			eSn	49	52.50	
LCI	1.80	219	P	49	31.00	0.4
			eSn	49	52.50	
BRT	1.90	244	P	49	35.70	3.7X
			eSn	50	00.70	
VAY	2.38	99	ePn	49	40.50	1.5
HVAR	2.64	304	e(Pn)	49	42.00	-0.7
BZS	4.18	21	eP	50	04.00	-0.5
SDI	4.21	271	P	50	04.90	-0.1

S.D. = 1.1 on 16 of 17 obs.

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* FEB 11, 1990 15h 48m 18.38± 0.50s
42.815 S ±10.3km 75.838 W ±11.7km
DEPTH = 31.4km (3 depth phases)
5.3mb (14 obs.)
OFF COAST OF SOUTHERN CHILE (143)

RTCB	12.62	29	e(P)	51	17.00	-1.5
CFA	12.71	31	eP	51	18.00	-1.8
RTLL	12.88	30	ePc	51	20.40	-1.5
RTRS	13.62	24	ePd	51	32.30	0.7
CCH	26.66	21	P	53	58.00	1.4
LPB	27.02	17	P	54	06.00	6.0X
ZOBO	27.27	16	P	54	05.50	3.0X
	1.0s		8.75nm			4.4mb
SPA	47.38	180	eP	56	44.10	-7.1X
	1.1s		17.26nm			5.0mb
CAI	49.68	55	ePd	57	10.60	1.3
MSZ	75.98	221	P	00	01.00	-2.8
HVD	77.39	120	iPd	00	06.00	-6.1X
	0.7s		27.40nm			5.4mb
KIM	78.17	118	iPc	00	17.00	0.6

0.9s 33.61nm 5.4mb
i 00 21.50 14kmX
RSCP 78.55 352 P 00 16.50 -1.5
LIC 80.36 72 Pc 00 28.46 0.3
SIO 80.39 343 ePc 00 28.00 0.1
TUL 80.44 344 ePc 00 28.30 0.2
1.2s 37.70nm 5.3mb
e 00 38.00 31km
e 00 51.20
e 01 11.50
LNO 80.44 344 e(P) 00 27.10 -0.9
KIC 80.65 72 P 00 30.08 0.3
TIC 80.66 72 P 00 30.12 0.3
FVM 81.51 348 P 00 33.00 -0.7
1.2s 36.76nm 5.3mb
ALQ 82.29 335 iPd 00 38.50 0.4
1.1s 23.10nm 5.1mb
LKO 82.32 70 P 00 40.90 2.4
0.8s 14.00nm 5.1mb
SLR 82.50 118 iPd 00 40.00 0.5
0.9s 33.61nm 5.4mb
PLM 84.60 327 P 00 50.00 0.1
GOL 86.38 338 P 00 59.00 0.3
1.0s 12.00nm 5.1mb
GLD 86.39 338 P 01 00.00 1.4
1.0s 24.00nm 5.4mb
PV09 86.40 334 P 01 00.10 1.2
BUL 86.60 114 iPc 01 06.90 6.7X
0.8s 25.75nm 5.5mb
BCH 87.52 325 P 01 06.30 2.2
TNP 88.87 329 ePc 01 11.90 1.3
pP 01 22.00 32km
KVN 90.05 328 ePc 01 16.80 0.6
pP 01 27.10 32km
CMB 90.08 326 P 01 17.50 1.4
1.2s 15.97nm 5.2mb
RSSD 90.16 340 P 01 16.20 -0.4
BW06 90.43 336 P 01 17.00 -0.9
1.3s 28.69nm 5.4mb
BCAO 96.20 90 ePc 01 54.90 10.1X
0.6s 5.00nm
id 05 39.00
FBA 121.01 332 PKP 07 06.30 -1.8
0.7s 5.52nm
MBC 121.99 349 ePKP 07 09.00 -0.7
1.0s 9.00nm
MAIO 145.27 86 iPKPc 07 53.60 -0.8
HYB 146.61 131 ePKP 07 57.00 0.0
BDT 154.14 169 ePKP 08 06.50 -1.7
CHG 155.67 168 ePKP 08 06.50 -3.8X
S.D. = 1.3 on 34 of 41 obs.

FEB 11, 1990 17h 46m 06.17± 0.15s
36.331 N ± 3.4km 140.916 E ± 2.6km
DEPTH = 46.4km (21 depth phases)
5.4mb (68 obs.) 5.2Msz (15 obs.)
NEAR EAST COAST OF HONSHU, JAPAN(228)
Felt (IV JMA) at Mito, (III JMA) at Chiba and Onohama and (II JMA) at Tokyo and Yokohama.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 28C
Centroid Location:
Origin Time 17:46: 9.0 0.3
Lat 35.99N 0.04 Lon 140.88E 0.04
Dep 38.9 2.6 Half-duration 2.7
Moment Tensor; Scale 10**17 Nm
Mrr= 2.88 0.09 Mtt=-0.06 0.12
Mff=-2.82 0.13 Mrt= 0.81 0.18
Mrf= 1.67 0.22 Mtf=-1.28 0.11
Principal Axes:
T Val= 3.39 Plg=74 Azm=302
N 0.44 3 203
P -3.83 15 112
Best Double Couple:Mo=3.6*10**17
NP1:Strike=198 Dip=30 Slip= 85
NP2: 24 60 93

KAKJ 0.61 258 iPd 46 19.70 1.0
S 46 28.10
CHJJ 1.58 260 iPd 46 33.50 1.3
NIIJ 1.78 301 iPd 46 36.50 1.4
YAMJ 1.97 339 iPd 46 37.90 0.2
eS 46 59.60
MAT 2.19 276 iPd- 46 42.30 1.4
eS 47 13.00
MTMJ 2.52 277 iPd 46 48.00 2.3
IIDJ 2.58 252 iPd 46 50.00 3.5X
SHK 6.96 257 eP 47 46.00 -2.1
MDJ 11.94 317 eP 48 59.20 2.8X
Z 20s 13.70um
N 15s 6.40um
epP 49 08.00
CN2 13.99 307 eP 49 23.50 0.1
1.0s 170.00nm 5.7mb
Z 20s 9.20um
N 13s 4.70um
E 13s 2.70um
pP 49 30.00
sP 49 34.00
eS 51 55.00
iSS 52 10.00
SNY 14.54 297 iPc 49 31.00 0.4
Z 18s 16.00um
N 14s 6.30um
E 17s 8.30um
pP 49 40.00
S 52 15.00
sS 52 30.00
DL2 15.50 285 Pc 49 45.00 1.9
1.0s 200.00nm 5.3mb
Z 20s 10.30um 4.4MszX
E 14s 7.20um
SSE 17.22 258 Pc 50 05.00 0.2
8.0s 1100.00nm 5.0mb X
Z 20s 6.90um 4.5Msz
N 15s 2.70um
E 14s 2.90um
pP 50 14.00
S 53 18.00
sS 53 30.00
SS 53 40.00
NJ2 18.73 263 Pd 50 22.00 -1.5
Z 17s 4.10um
N 15s 1.90um
E 15s 4.80um
TIA 19.18 277 eP 50 26.70 -2.1
N 15s 3.70um
E 19s 5.20um
sP 50 42.00
S 53 58.00
BJI 19.78 288 eP 50 32.00 -3.2X
1.1s 63.00nm 4.8mb
Z 18s 5.29um 3.9Msz
E 14s 2.48um
esP 50 46.00
eS 54 12.00
eSS 54 37.00
QZH 22.26 246 eP 50 59.00 -1.5
Z 20s 3.70um 4.8Msz
N 14s 2.00um
S 54 55.00
sS 55 13.00
TIY 22.75 282 eP 51 02.50 -2.9
Z 18s 13.90um 5.4Msz
N 15s 4.60um
E 15s 7.80um
sP 51 19.00
WHN 22.87 263 Pd 51 06.00 -0.5
Z 16s 4.80um 5.0MszX
N 12s 13.00um
E 14s 4.60um
PP 51 35.00
eS 55 06.00
GUMO 22.92 170 eP 51 12.30 5.2X
1.3s 849.67nm 6.0mb
Z 22s 4.36um 4.9Msz
pP 51 24.30 48km
eS 55 13.00
PJG 22.92 170 eP 51 12.20 5.1X
GUA 22.98 170 eP 51 11.40 3.7X
1.0s 296.00nm 5.7mb
Z 22s 3.84um 4.8Msz
HHC 23.33 290 eP 51 09.00 -2.0
Z 18s 7.90um 5.2Msz
N 13s 1.10um
E 18s 5.40um
BTO 24.50 289 eP 51 20.00 -2.4
N 15s 1.80um
E 17s 5.50um
XAN 26.19 274 Pd 51 37.50 -0.7
N 13s 1.70um
E 13s 1.50um
pP 51 47.50 37kmX
S 56 00.00
BAG 26.83 228 eP 51 43.00 -1.4
HKC 27.08 246 eP 51 46.00 -0.3
GZH 27.24 249 eP 51 47.00 -0.8
Z 16s 3.40um 5.0MszX
N 14s 2.10um
eS 56 24.00
QCP 27.95 224 eP 51 50.00 -4.3X
LZH 29.80 281 Pd 52 10.00 -1.0
1.5s 57.00nm 5.1mb
Z 18s 11.50um 5.6Msz
N 15s 2.60um
E 16s 4.10um
GYA 30.71 261 iPc 52 18.00 -1.1
Z 22s 2.50um 4.8Msz
N 15s 2.10um
E 15s 2.80um
S 57 16.00
CD2 31.28 271 P 52 22.80 -1.2
Z 20s 4.20um 5.1Msz
N 14s 3.90um
QIZ 32.28 246 eP 52 33.00 0.3
N 16s 1.40um
E 16s 2.20um
S 57 47.00
GTA 32.39 288 P 52 33.00 -0.7
Z 18s 3.80um 5.1Msz
E 17s 3.80um
PP 53 44.00
PcP 55 20.80
S 57 38.00
KMI 34.46 262 P+ 52 51.00 -0.9
Z 15s 6.10um 5.5MszX
N 15s 2.40um
E 15s 3.50um
pP 53 08.00 70kmX
sP 53 18.00
PP 54 18.00
S 58 12.00
sS 58 39.00
LOE 39.38 252 eP 53 34.00 0.9
CHG 40.73 256 ePc 53 45.00 0.8
1.0s 19.00nm 4.8mb
WMQ 40.80 297 Pc 53 45.00 0.4
8.0s 900.00nm 5.6mb X
Z 20s 4.40um 5.3Msz
E 15s 2.10um
sP 54 04.50
S 59 54.00
BDT 41.58 254 ePc 53 45.00 -6.1X
1.0s 52.40nm 5.2mb
NST 41.64 251 iPd 53 58.00 6.4X
LSA 41.88 276 P 53 55.60 1.5
E 12s 0.80um
S 00 09.00
NNT 43.86 248 iPd 54 11.00 1.3
PMG 45.87 171 eP 54 30.00 4.3X
TTA 46.23 34 P 54 27.70 -0.5
1.1s 31.25nm 5.2mb
pP 54 41.80 53km
SVW 46.30 37 eP 54 29.30 0.5
GUN 46.83 276 P 54 34.80 1.0
BRW 47.21 23 eP 54 35.80 0.0
PKI 47.35 276 P 54 38.40 0.5
KKN 47.36 276 P 54 38.40 0.6
IMA 47.50 30 eP 54 37.90 -0.4
1.2s 25.20nm 5.1mb
DMN 47.58 276 P 54 40.00 0.4
GKN 47.79 277 P 54 41.30 0.2
KDC 47.94 42 eP 54 41.40 -0.2
IPM 48.36 239 ePd 54 47.50 2.1
0.9s 85.10nm 5.8mb
e 55 14.00 113kmX
PMR 49.43 36 eP 54 51.60 -1.4
1.0s 40.00nm 5.4mb
MTN 49.78 193 iPd 54 56.30 0.1
FBA 49.91 32 eP 54 56.30 -0.4
KSH 50.34 294 P 55 02.40 1.9
Z 17s 5.40um 5.6MszX
E 18s 4.20um
SP 55 15.00
eS 02 12.00
TOA 50.79 35 eP 55 03.90 0.3
BSI 51.81 245 eP 55 08.00 -3.7X
KNA 53.06 195 eP 55 20.00 -0.9
KLI 53.07 227 ePd 55 20.00 -1.1

11d 17h

INK	55.19	27	eP	55	35.00	-1.1				LR	30	29.00							pP	58	42.30	48km	
	1.0s	58.00nm				5.6mb	CMB	74.60	54	ePc	57	41.90	-0.4	RZN	82.89	317	iPc	58	28.00	0.6	
WB5	56.25	187	iPd	55	43.50	-0.6				epP	57	55.90	49km	KHC	82.93	328	iPd	58	28.50	1.2	
			i	55	55.30	41km	NB2	74.68	337	P	57	41.40	-0.9		1.0s	34.50nm				5.4mb	
WRA	56.31	187	Pc	55	43.10	-1.5		0.9s	37.90nm				5.3mb		Z 16s	2.00um				5.6MszX	
	0.9s	47.90nm				5.5mb	PRS	74.91	56	eP	57	43.10	-0.9	DSI	82.95	304	eP	58	28.00	0.4	
CTA	56.34	174	eP	55	44.00	-0.8				epP	57	56.40	46km	VTS	83.08	319	iPc	58	29.00	0.7	
	1.3s	22.12nm				5.0mb	MSL	74.91	304	ePd	57	44.00	0.0	KMSA	83.14	290	eP	58	29.30	0.4	
			i	55	57.20	47km	LRM	74.93	44	ePc	57	44.40	0.1	ELL	83.17	311	eP	58	29.00	0.1	
			e	56	24.00		BBU	75.32	292	(P)	57	44.80	-1.7	WET	83.22	329	iPc	58	29.30	0.6	
			iS	03	28.00		BJA	75.33	292	(P)	57	46.30	-0.2		1.0s	34.00nm				5.3mb	
OIS	56.59	181	iPd	55	45.70	-0.9		0.3s	22.00nm				5.6mb	GRF	83.48	330	iPc	58	30.50	0.5	
			e	55	58.00	43km	BEE	75.38	292	iP	57	45.60	-1.2		1.2s	93.00nm				5.7mb	
MBC	57.31	16	eP	55	50.00	-1.2		0.6s	40.00nm				5.5mb		Z 19s	1.60um				5.4Msz	
	1.0s	35.00nm				5.4mb	PRI	75.48	56	eP	57	47.40	0.0				e	58	34.10	11kmX	
HYB	57.78	269	ePc	55	54.50	-0.8	KVN	75.50	52	P	57	47.60	0.0				e	58	44.30		
	1.0s	90.00nm				5.8mb	FRI	75.64	55	ePc	57	47.80	-0.3	MMB	83.50	318	ePc	58	31.00	0.7	
ASPA	60.04	187	eP	56	09.50	-1.1				epP	58	01.00	45km	KKB	83.65	318	iPc	58	33.00	1.9	
	1.0s	26.00nm				5.3mb	BHD	75.81	301	ePd	57	50.00	0.9	IZM	83.67	314	eP	58	28.00	-3.3X	
	Z 22s	1.37um				5.0MszX	TNP	76.63	53	P	57	54.00	0.0	PRNI	83.97	303	eP	58	34.00	1.1	
		eS	04	17.30				1.2s	40.32nm				5.3mb	TNS	84.15	332	ePc	58	34.70	1.2	
		LR	20	29.30			KVT	76.73	311	iP	57	54.50	0.2	AYN	84.20	302	eP	58	34.00	0.0	
MBL	60.55	203	eP	56	14.00	-0.1	ABL	77.19	56	P	57	58.00	0.9	MSZ	84.25	161	eP	58	44.00	10.3X	
GBA	60.76	266	Pd	56	16.00	0.2	FRB	77.55	13	eP	57	57.50	-0.7	VAY	84.31	318	iP	58	34.70	0.4	
	1.0s	99.60nm				5.9mb		0.8s	59.00nm				5.7mb		1.0s	139.00nm				6.0mb	
POO	60.99	272	iPc	56	18.00	0.6	IAS	77.70	320	eP	57	57.00	-2.4	PTJ	84.31	325	eP	58	30.70	-3.7X	
	0.9s	38.66nm				5.5mb	CLC	77.71	55	eP	58	12.00	12.2X	MBH	84.41	303	eP	58	35.00	0.0	
KBS	61.29	350	iPd	56	18.10	-0.5	KAS	77.93	313	eP	58	02.00	1.1	SKO	84.45	319	iPc	58	35.60	0.5	
DZM	62.90	153	iPc	56	31.10	1.1	DUG	78.12	49	P	58	02.60	0.5		Z 19s	2332.00um				8.6MszX	
RMO	62.92	172	eP	56	30.00	0.1		1.0s	15.00nm				5.0mb		N 19s	2147.00um					
MAIO	63.58	297	iPc+	56	34.80	0.4	BW06	78.44	45	P	58	03.00	-0.9		E 18s	1738.00um					
		eS	05	10.00				1.2s	10.96nm				4.7mb				i	58	40.20	15kmX	
KEV	63.96	339	iP	56	36.20	-0.1				pP	58	17.00	49km				i	58	49.40		
	0.7s	10.70nm				5.0mb	GSC	78.53	55	eP	58	18.00	13.7X				LR	39	31.00		
		e	56	52.00	58kmX	DAU	78.92	48	P	58	06.70	0.0	KBA	84.60	327	ePd	58	36.00	0.0	
SVA	64.75	140	eP	56	43.80	1.8	VRI	79.00	320	ePc	58	08.00	1.4		1.2s	22.90nm				5.2mb	
		e	56	55.80	41km	RYD	79.04	293	iPc	58	07.00	-0.2				i	58	43.60	24kmX	
SOD	65.46	337	iP	56	45.40	-0.6	KRA	79.45	326	iPd	58	09.30	0.4				e	58	50.00		
DAG	66.45	355	iPc	56	50.00	-2.2		1.0s	81.00nm				5.6mb				ePP	01	48.50		
	1.0s	42.00nm				5.4mb		Z 16s	3.20um				5.8MszX				i	02	11.70		
SUF	68.43	333	eP	57	03.80	-1.1		E 16s	3.60um					HQL	84.60	302	ePc	58	36.60	0.6	
	0.8s	37.40nm				5.4mb				e	58	25.60	58kmX	MEM	84.76	333	P	58	36.00	-0.4	
PNT	68.96	44	eP	57	08.00	-0.4	BBTK	79.47	312	eP	58	10.00	0.6	ABH	84.77	332	ePd	58	36.91	0.3	
LON	69.02	47	P	57	03.50	-5.4X	MSU	79.54	50	P	58	10.50	0.5	VBY	84.93	325	e(P)	58	38.50	1.1	
MRWA	69.28	203	eP	57	11.00	0.5	MLR	79.66	320	ePc	58	10.00	-0.3	RBL	84.99	327	P	58	39.00	1.2	
TEH	69.61	300	eP	56	55.00	-17.8X	SPC	79.93	325	eP	58	10.40	-1.4	BADA	85.10	302	ePc	58	39.30	0.8	
EDM	70.15	38	iP	57	15.00	-0.6				e	58	29.40	70kmX	RUP	85.10	332	ePd	58	37.91	-0.4	
	1.2s	120.00nm				5.7mb	BAR	80.18	57	eP	58	26.00	12.8X	FVI	85.22	327	P	58	37.50	-1.3	
IR7	70.17	300	eP	57	16.00	-0.2	CMP	80.28	320	ePd	58	17.00	3.5X	SCE	85.34	328	ePc	58	34.70	-5.0X	
IR4	70.21	300	eP	57	17.00	0.6	KSP	80.49	328	iPc	58	15.00	0.5	ALQ	85.35	50	iPc	58	40.30	0.3	
IR1	70.26	300	eP	57	17.00	0.2		1.1s	81.00nm				5.6mb		1.0s	38.75nm				5.5mb	
BAL	70.36	202	eP	57	16.50	-0.5				i	58	32.00	61kmX	OHR	85.40	319	iP	58	39.80	-0.1	
NUR	70.38	332	iP	57	15.80	-1.0	OASM	80.52	295	eP	58	15.30	0.1		1.0s	148.00nm				6.1mb	
	1.0s	56.00nm				5.5mb	RSSD	80.62	41	P	58	15.30	-0.3				i	58	53.10	45km	
		i	57	32.30	60kmX					pP	58	29.40	49km				i	59	09.20		
DPW	70.52	45	P	57	19.70	1.7	RSON	80.80	32	P	58	15.20	-0.9	SNF	85.46	334	Pc	58	40.60	0.7	
BWA	70.74	173	eP	57	20.50	1.2		1.2s	61.95nm				5.4mb	WAJH	85.48	299	eP	58	41.30	0.9	
		e	57	27.80	23kmX					pP	58	29.20	48km	DOU	85.69	334	P	58	42.20	1.1	
FHC	70.76	53	eP	57	21.00	1.4	GLA	81.19	55	P	58	18.60	0.0	CDF	86.07	331	eP	58	43.10	-0.1	
		epP	57	32.90	40km	BRG	81.45	329	iP	58	19.00	-0.5		1.0s	40.00nm				5.6mb	
NEW	70.91	44	P	57	19.90	-0.5		1.3s	46.00nm				5.3mb	CTI	86.14	327	P	58	42.00	-1.6	
	1.1s	21.88nm				5.0mb				i	58	32.70	47km	SCH	86.15	16	eP	58	44.00	0.6	
ADE	70.96	182	eP	57	17.50	-3.1X				i	01	23.20		FEL	86.21	330	ePc	58	44.57	0.7	
KL8	70.97	201	eP	57	21.00	0.3	CLL	81.50	330	iPc	58	19.20	-0.5	8SF	86.73	331	eP	58	45.70	-0.7	
CAN	71.68	173	eP	57	27.30	2.3		1.3s	86.00nm				5.6mb		0.8s	6.70nm				4.9mb	
		e	57	35.70	27kmX					e	58	33.00	47km	HAU	86.76	331	eP	58	46.10	-0.4	
WDC	71.81	53	eP	57	25.40	-0.5	BUD	81.72	324	iP	58	21.20	0.3		0.8s	8.05nm				5.0mb	
		epP	57	36.10	35kmX	BZS	81.79	322	eP	58	20.00	-1.3	BRT	87.44	321	P	58	45.00	-4.8X	
LBFM	71.82	52	P	57	25.80	-0.4	SRO	81.81	325	iP	58	22.00	0.6	VAI	87.52	329	P	58	49.50	-0.6	
		pP	57	39.00	46km	PRU	81.87	328	P	58	22.00	0.3	SFI	87.71	326	P	58	52.50	1.5	
TAB	71.87	304	eP+	57	26.00	-0.4		2.0s	46.90nm				5.2mb	PGD	87.80	326	P	58	53.20	1.4	
LTCM	72.28	53	P	57	29.00	0.4		Z 18s	2.40um				5.6Msz	CRE	87.89	326	P	58	52.50	0.4	
NWAO	72.37	201	eP	57	29.00	-0.1				e	58	38.20	57kmX	ASS	88.00	325	P	58	53.70	1.1	
MIN	72.54	53	ePc	57	28.80	-1.6	ZST	82.08	326	eP	58	23.60	0.8	BOB	88.11	328	P	58	50.00	-3.1X	
ORV	73.04	53	eP	57	32.30	-0.8	KHL	82.38	312	eP	58	24.00	-0.7	BDI	88.16	327	P	58	54.00	0.7	
KER	73.33	300	ePc	57	33.50	-1.5	VKA	82.39	326	eP	58	25.00	0.6	AQU	88.20	324	P	58	55.20	1.7	
BRK	73.46	55	e(P)	57	36.10	0.6		1.2s	36.40nm				5.3mb	DUI	88.22	323	P	58	54.20	0.5	
BKS	73.48	55	ePc	57	36.70	1.0	KDZ	82.53	317	eP	58	26.00	0.7	LOR	88.32	332	eP	58	53.70	-0.3	
	1.0s	43.00nm				5.3mb	MOX	82.57	330	eP	58	25.00	-0.4		1.2s	34.20nm				5.5mb	
SLY	73.76	302	iPd	57	37.50	0.2		1.4s	47.00nm				5.3mb	ORI	88.43	321	P	58	55.20	0.6	
MHC	74.16	55	eP	57	41.00	1.2		Z 18s	1.80um				5.5Msz	AZI	88.46	324	P	58	55.00	0.3	
ARN	74.23	55	P	57	40.80	0.7	SOP	82.71	326	iPc	58	27.90	1.8	SDI	88.50	323	P	58	54.00	-1.0	
FFC	74.51	32	iPc	57	40.70	-0.7	GOL	82.83	45	P	58	27.30	0.0	MNS	88.52	324	P	58	54.20	-0.8	
	1.1s	84.00nm				5.6mb		1.0s	25.00nm				5.2mb	SSF	88.62	332	eP	58	55.20	-0.2	
HFS	74.56	336	eP	57	40.90	-0.6				pP	58	42.30	52km		1.2s	41.65nm				5.6mb	
	1.4s	94.30nm				5.5mb	GLD	82.89	45	P	58	28.40	1.0	SGO	88.63	322	P	58	55.50	0.0	
	Z 18s	2.39um				5.5Msz		1.2s	35.35nm				5.3mb	LPL	88.64	330	eP	58	55.20	-0.6	

	1.0s	16.00nm			5.3mb
LPG	88.65	330 eP	58	55.70	-0.3
	0.8s	9.40nm			5.1mb
TDS	88.79	321 P	58	54.20	-2.1
MMN	88.79	321 P	58	56.50	0.2
MGR	88.83	321 P	58	55.60	-0.9
SMF	88.85	332 eP	58	56.50	0.0
	1.0s	14.00nm			5.2mb
AVF	88.91	332 eP	58	56.60	-0.2
	0.9s	24.55nm			5.5mb
BNI	89.04	329 P	59	03.00	5.4X
CZI	89.22	320 P	58	57.50	-0.9
MAF	89.68	333 eP	59	00.60	0.1
	1.0s	28.00nm			5.5mb
SOI	90.12	320 P	59	02.80	0.2
FKO	90.47	44 e(P)	59	01.00	-3.3X
LRG	90.48	329 eP	59	03.00	-1.1
	1.2s	59.50nm			5.8mb
LMR	90.51	329 eP	59	03.70	-0.6
	1.2s	53.55nm			5.8mb
SIO	90.72	43 ePd	59	05.70	0.3
LNO	90.88	43 e(P)	59	06.90	0.9
TUL	90.88	43 ePd	59	05.90	-0.3
	1.1s	30.50nm			5.6mb
		e	59	20.00	47km
		LR	29	00.00	
CAF	90.96	332 eP	59	07.10	0.7
	1.1s	48.85nm			5.8mb
LFF	91.45	333 eP	59	09.00	0.4
	1.0s	16.00nm			5.4mb
FVM	92.13	38 P	59	11.50	-0.4
CBM	93.11	19 P	59	22.10	5.9X
		pP	59	35.40	44km
OLY	93.50	40 P	59	18.20	0.0
CLK	111.84	266 iPKPc	04	52.00	13.9X
BCAO	112.70	294 ePKPd	04	40.50	0.7
	1.0s	15.00nm			
		ic	05	43.00	
		ic	07	09.50	
BUL	119.33	266 iPKPc	04	52.00	-0.5
	0.9s	79.83nm			
SLR	122.34	260 iPKPd	04	58.50	0.4
	1.0s	40.00nm			
KSR	123.51	261 ePKP	04	46.80	-13.6X
LKO	124.54	319 PKP	05	03.72	1.2
	0.9s	17.50nm			
SPA	126.15	180 iPKPd	05	04.20	0.0
	1.0s	19.00nm			
		i	05	18.20	
KIM	126.48	259 ePKP	05	06.00	-0.1
TIC	126.63	316 PKP	05	06.00	-0.6
	1.1s	24.50nm			
KIC	126.71	316 PKP	05	06.16	-0.5
	1.0s	20.50nm			
LIC	126.98	316 PKP	05	06.56	-0.7
	1.1s	22.00nm			
	Z 20s	0.40um			5.1Msz
NNA	138.28	64 ePKP	05	36.60	7.9X
	0.6s	7.33nm			
ARE	145.11	64 ePKP	05	42.00	1.1
ZOBO	147.38	60 PKPc	05	45.40	0.4
	1.0s	20.00nm			
	Z 25s	0.60um			5.3MszX
		i	06	01.30	
		LR	56	12.00	
CCH	149.52	59 PKP	05	52.80	4.8X
CAI	150.28	356 ePKPd	05	53.90	5.0X
	S.D. = 0.9	on 228 of 260 obs.			

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* FEB 11, 1990 18h 10m 59.29± 1.72s
43.226 N ± 9.9km 21.272 E ±20.0km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.5 (SKO).

SKO	1.26	174 ePg	11	22.60	-0.1
		iSg	11	38.10	
VTS	1.56	113 iPg	11	25.00	-2.2
		iSg	11	42.00	
KKB	1.91	135 eP	11	32.00	-0.2
VAY	2.13	153 ePn	11	36.40	1.0
OHR	2.14	190 ePn	11	39.00	3.4X
BZS	2.40	6 ePd	11	39.00	-0.3
MMB	2.45	131 ePc	11	42.00	2.1X
PVL	2.97	89 iPd	11	49.00	1.7
RZN	2.98	120 eP	11	51.00	3.4X
	S.D. = 1.7	on 6 of 9 obs.			

? FEB 11, 1990 18h 45m 23.17± 0.79s
8.442 S ±10.4km 118.394 E ±11.5km
DEPTH = 33.0km (normal)
4.5mb (4 obs.)
SUMBAWA ISLAND REGION (285)

KNA	12.47	127 eP	48	21.00	-0.2
		eS	50	37.00	
MBL	12.72	174 eP	48	26.50	1.9
		eS	50	36.00	
MTN	13.26	110 iPd	48	34.80	3.1X
		eS	50	52.00	
WB5	19.19	128 eP	49	46.60	-0.6
		eS	53	09.00	
WRA	19.21	128 Pd	49	46.80	-0.6
	0.9s	6.70nm			3.9mb
MRWA	20.79	186 eP	50	03.70	-0.5
		eS	53	43.00	
ASPA	21.21	137 iPc	50	08.90	0.4
	0.4s	6.00nm			4.4mb
		eS	53	54.20	
COOL	22.48	174 iPd	50	20.40	-0.7
	0.4s	11.00nm			4.7mb
		eS	54	25.00	
MUN	23.51	185 eP	50	31.00	-0.1
		eS	54	47.00	
QIS	23.77	123 eP	50	34.00	0.2
NWAO	24.39	182 eP	50	39.00	-0.6
		eS	55	09.00	
GUN	47.90	320 P	54	00.00	-0.9
MBC	105.54	12 ePdiff	59	32.00	1.5
	0.4s	2.00nm			5.5mb
	S.D. = 1.0	on 12 of 13 obs.			

FEB 11, 1990 18h 50m 23.73± 0.67s
40.355 N ± 7.8km 140.734 E ± 5.6km
DEPTH = 131.5 ± 6.3 km
4.5mb (11 obs.)
HONSHU, JAPAN (227)

AOMJ	0.34	307 iP+	50	41.50	-0.6
		S	50	54.90	
MAT	4.29	208 iPc	51	28.30	0.0
		eS	52	18.00	
MDJ	9.27	301 iPc	52	36.50	1.0
CN2	11.87	292 P	53	10.80	1.0
BJI	18.75	277 eP	54	31.00	-4.0X
HHC	22.11	281 eP	55	07.00	-2.1
GTA	31.22	282 P	56	30.80	-1.8
LSA	41.49	271 eP	58	02.20	2.4
CHG	41.72	252 eP	58	04.90	3.8X
BDT	42.69	250 eP	58	04.90	-4.1X
PMR	46.32	38 P	58	37.00	-0.5
	0.8s	10.34nm			4.6mb
GUN	46.40	272 P	58	39.20	0.2
FBA	46.61	34 P	58	40.40	0.6
	0.8s	9.31nm			4.5mb
KKN	46.92	272 P	58	43.20	0.2
PKI	46.93	272 P	58	43.20	0.0
	0.6s	15.00nm			4.9mb
DMN	47.14	272 P	58	45.00	0.2
GKN	47.30	273 P	58	46.00	0.1
INK	51.70	28 eP	59	19.00	0.3
KEV	60.16	338 eP	00	09.00	-10.1X
WB5	60.21	187 eP	00	18.10	-1.9
WRA	60.28	187 Pd	00	21.90	1.5
	0.2s	1.00nm			4.5mb
SOD	61.71	336 eP	00	20.00	-9.6X
DAG	62.43	355 eP	00	33.50	-0.8
SUF	64.79	332 iP	00	49.60	-0.2
	0.5s	2.80nm			4.4mb
PNT	66.18	45 eP	00	59.00	0.0
	0.7s	6.00nm			4.6mb
NUR	66.78	331 eP	01	02.50	0.0
WDC	69.53	54 eP	01	20.60	0.7
MIN	70.24	54 e(P)	01	24.30	-0.1
ORV	70.78	54 ePc	01	27.40	-0.1
HFS	70.85	335 eP	01	27.20	-0.4
	0.4s	5.60nm			4.7mb
	Z 16s	0.17um			4.4MszX
		LR	33	09.00	
FFC	71.21	33 iPc	01	29.50	-0.3
	0.8s	14.00nm			4.8mb
CMB	72.39	55 eP	01	37.80	0.6
PRS	72.80	57 e(P)	01	39.90	0.4
KVN	73.17	53 P	01	42.40	0.5
PRI	73.37	57 e(P)	01	47.00	4.0X
FRI	73.45	55 eP	01	43.40	0.2
FRB	73.67	13 eP	01	43.00	-1.0
TNP	74.32	53 P	01	49.00	0.4
	0.8s	7.35nm			4.5mb
BW06	75.72	46 P	01	56.50	0.0
	0.8s	4.11nm			4.2mb
RSSD	77.71	42 P	02	07.00	-0.5
PV09	78.85	49 P	02	14.20	0.3
GOL	80.12	46 P	02	21.00	0.3
	0.5s	3.06nm			4.3mb
GLD	80.17	46 P	02	20.00	-0.8
	S.D. = 0.9	on 37 of 43 obs.			

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* FEB 11, 1990 19h 23m 13.05± 0.52s
9.709 N ± 6.9km 124.888 E ±11.2km
DEPTH = 50.4km (2 depth phases)
4.7mb (4 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV	2.69	165 eP	23	56.00	1.2
QCP	6.15	323 eP	24	52.00	8.3X
BAG	7.87	328 eP	25	06.50	-1.4
KKM	9.33	248 ePd	25	20.70	-7.2X
QIZ	17.26	304 eP	27	12.30	0.1
	E 15s	1.10um			
		sS	30	37.00	
SSE	21.56	351 eP	28	01.00	0.9
	Z 16s	0.40um			3.9MszX
	E 10s	0.30um			
WHN	22.94	336 eP	28	15.00	1.2
LOE	23.76	291 eP	28	21.00	-0.9
IPM	24.21	260 ePd	28	27.00	0.7
KMI	26.04	309 eP	28	47.50	3.7X
BDT	26.24	289 eP	28	56.00	10.6X
CHG	26.69	293 eP	28	56.00	6.4X
CHTO	26.69	293 eP	28	51.00	1.4
		e	29	05.10	58km
XAN	28.31	331 P	29	03.80	-0.3
CD2	28.83	320 P	29	13.80	4.9X
TIY	30.06	340 eP	29	19.00	-0.8
BJI	31.19	347 eP	29	29.00	-0.6
LZH	32.48	327 eP	29	41.00	-0.2
	1.5s	19.00nm			4.7mb
	Z 18s	0.50um			4.3Msz
		pP	29	52.50	43km
HHC	33.18	341 P	29	47.00	-0.2
CN2	33.97	1 eP	29	54.00	0.2
	Z 16s	0.50um			4.3MszX
ASPA	34.32	165 eP	29	54.90	-2.2
MDJ	35.02	6 eP	30	03.70	0.9
CTA	36.32	145 eP	30	21.00	6.9X
	1.3s	25.96nm			5.0mb
GTA	37.09	327 eP	30	20.60	0.1
	Z 18s	0.60um			4.4Msz
GBA	46.58	280 Pd	31	41.90	3.7X
	0.7s	2.40nm			4.2mb
WMQ	46.84	323 eP	31	40.00	0.0
MAIO	64.51	306 eP	33	47.00	-0.3
SOD	84.28	337 iP	35	41.00	0.6
SUF	85.43	333 eP	35	46.00	-0.2
	0.8s	5.30nm			4.8mb
NUR	86.62	331 eP	35	52.00	-0.2
	S.D. = 0.9	on 22 of 30 obs.			

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* FEB 11, 1990 19h 30m 53.66± 4.20s
31.293 S ±19.0km 71.699 W ±28.7km
DEPTH = 118.2 ± 45.3 km
NEAR COAST OF CENTRAL CHILE (135)

ROCH	1.77	161 iPd	31	23.80	-1.1
RTRS	2.23	60 iPd	31	31.00	0.6
SAN	2.33	158 eP	31	32.20	0.5
TACH	2.44	165 iPd	31	33.50	0.3
RTCB	2.49	95 eP	31	34.00	0.1
		eS	32	01.90	
PCH	2.53	157 iPc	31	34.70	0.3
LNV	2.67	175 ePc	31	35.30	-0.8
		iS	32	12.00	
RTCV	2.76	103 iPd	31	37.60	0.2
		S	32	10.80	
RTLL	2.76	92 iPd	31	37.00	-0.5
CHCH	2.78	162 iPd	31	37.90	0.2
CFA	2.97	97 e(P)	31	40.50	0.2
RFA	4.40	143 eP	32	01.00	1.4
MRA	5.22	104 ePd	32	09.20	-1.4
	S.D. = 0.9	on 13 of 13 obs.			

FEB 11, 1990 20h 13m 00.80± 0.46s
43.148 N ± 5.8km 0.192 W ± 4.2km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 3.7 (LDG). Felt (IV) at Arthez d'Asson and in the Bearn area, France.

OGE	0.21	276	Pg	13 06.03	0.7
			Sg	13 09.93	
ESCF	0.29	256	Pg	13 06.49	-0.4
			Sg	13 10.91	
ATE	0.38	261	Pg	13 08.35	-0.2
			Sg	13 14.14	
LHE	0.39	233	Pg	13 07.31	-1.6
EPF	0.41	107	Pg	13 08.00	-1.1
			Sg	13 13.80	
ISSF	0.46	255	Pg	13 09.67	-0.5
			Sg	13 16.15	
MADF	0.46	270	Pg	13 10.39	0.2
			Sg	13 17.65	
BOH	0.60	266	Pg	13 13.01	0.0
			Sg	13 21.22	
ECRI	1.79	253	ePn	13 33.70	1.7
			eSn	13 58.00	
LPO	1.83	33	Pg	13 37.20	4.7X
			Sg	14 02.40	
LFF	1.91	20	Pn	13 34.00	0.3
			Pg	13 39.00	
			Sg	14 05.00	
EBR	2.38	167	ePn	13 43.00	2.5
			eSn	14 14.00	
			eSg	14 21.00	
ETER	2.40	110	ePn	13 46.60	5.9X
			eSn	14 16.50	
CAF	2.41	42	Pn	13 40.40	-0.5
			Pg	13 47.60	
			Sg	14 18.60	
RJF	2.48	29	Pn	13 41.20	-0.7
			Pg	13 48.60	
			Sg	14 21.40	
ETOR	2.71	211	eP	13 44.40	-0.9
			eS	14 15.50	
MFF	3.45	1	Pg	14 07.00	11.3X
			Sg	14 51.60	
TCF	3.58	28	Pg	14 09.00	11.6X
			Sg	14 56.00	
MAF	3.65	32	Pn	13 59.00	0.5
			Sg	14 59.60	
GUD	3.87	231	eP	14 01.50	-0.3
			eS	14 45.00	
BGF	4.04	31	Pg	14 17.40	13.5X
			Sg	15 11.00	
AVF	4.43	33	Pn	14 09.50	0.0
			Sg	15 22.20	
SMF	4.52	38	Pn	14 11.00	0.2
			Sg	15 27.00	
SSF	4.71	32	Pg	14 31.00	17.5X
			Sg	15 31.00	
LBF	4.84	36	Pg	14 32.20	16.8X
			Sn	15 35.60	
LOR	5.02	33	Pg	14 36.40	18.5X
			Sg	15 42.00	

S.D. = 1.0 on 18 of 26 obs.

? FEB 11, 1990 20h 41m 34.41± 1.00s
39.514 N ± 8.4km 28.977 E ±10.2km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

DST	0.28	289	iPg	41 40.00	-0.4
			iSg	41 46.00	
YLV	1.09	16	iPn	41 54.80	-0.2
BNT	1.17	316	iPn	41 56.80	0.6
KHL	1.26	160	ePn	41 58.00	0.1

S.D. = 0.7 on 4 of 4 obs.

FEB 11, 1990 21h 58m 39.45± 0.43s
31.184 S ± 8.2km 177.634 W ± 9.5km
DEPTH = 29.1km (2 depth phases)
5.3mb (8 obs.) 5.0Msz (5 obs.)
KERMADEC ISLANDS REGION (177)
Felt on Raoul Island.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 29C

Centroid Location:
Origin Time 21:58:50.3 0.8
Lat 30.34S 0.06 Lon 177.98W 0.06
Dep 45.0 4.0 Half-duration 2.0
Moment Tensor; Scale 10**17 Nm
Mrr= 1.09 0.09 Mtt= 0.43 0.16
Mff=-1.51 0.10 Mrt= 0.14 0.10
Mrf= 0.75 0.14 Mtf=-0.50 0.09
Principal Axes:
T Val= 1.29 Plg=75 Azm=270
N 0.55 3 12
P -1.83 15 103
Best Double Couple:Mo=1.6*10**17
NP1:Strike=198 Dip=31 Slip= 96
NP2: 10 60 86

RAO	1.94	353	iP	59 00.00	-11.0X
			S	59 15.30	
PGZ	10.63	206	eP	01 13.20	0.4
MNG	10.94	209	eP	01 16.50	-0.6
			eS	03 21.00	
MTW	11.39	207	eP	01 22.00	-1.2
CAW	11.52	209	eP	01 24.10	-0.9
WDW	11.69	209	eP	01 27.20	0.0
MRW	11.78	210	eP	01 28.10	-0.3
			eS	03 41.40	
SVA	13.48	344	eP	01 49.80	-1.4
DZM	16.87	299	iPd	02 37.00	1.9
MHZ	17.23	213	eP	02 42.90	3.3X
MSZ	17.60	216	P	02 48.00	3.9X
CNB	27.83	253	eP	04 31.00	2.6
CAN	28.13	253	eP	04 34.30	3.3X
BWA	28.64	254	eP	04 36.30	0.7
RMO	29.74	271	eP	04 47.00	1.4
CMS	31.12	260	eP	05 00.00	2.3
	1.0s		89.00nm		5.5mb
BFD	33.30	249	eP	05 22.60	5.9X
OLP	33.59	268	eP	05 21.00	1.7
CTA	34.24	280	iPc	05 24.80	-0.2
	1.1s		206.33nm		6.0mb
			e	10 52.00	
			iS	11 08.00	
ADE	36.56	252	iPd	05 48.60	4.0X
	1.0s		70.00nm		5.5mb
QIS	39.69	275	iPd	06 10.50	-0.4
ASPA	43.39	268	eP	06 40.30	-1.0
	0.5s		30.00nm		5.3mb
Z	19s		3.59um		5.3Msz
			eScP	12 27.50	
			eS	13 10.50	
			LR	24 03.60	
WRA	44.44	273	Pd	06 48.40	-1.4
	0.6s		21.70nm		5.2mb
WB5	44.45	273	eP	06 48.00	-1.8
			e	12 27.20	
			e	13 22.50	
MBL	56.37	264	eP	08 18.00	-2.5
GUMO	57.26	315	eP	08 22.00	-4.8X
KLI	76.82	272	eP	10 26.00	-4.6X
SSE	84.86	311	eP	11 21.00	8.4X
Z	20s		0.50um		4.9Msz
IPM	84.96	278	eP	11 13.10	-0.5
BCH	85.35	44	P	11 17.00	1.8
QIZ	85.61	295	eP	11 17.40	0.7
MWC	85.92	46	eP	11 28.00	9.8X
PLM	86.08	47	P	11 19.00	0.0
RVR	86.19	46	eP	11 27.00	7.8X
SB8	86.37	46	eP	11 25.00	4.8X
ISA	86.63	44	eP	11 26.00	4.5X
FRI	86.81	43	eP	11 22.20	0.0
NJ2	86.99	310	eP	11 21.00	-2.2
Z	20s		0.30um		4.7Msz
CM8	87.13	42	ePd	11 23.10	-0.7
GLA	87.18	48	eP	11 26.00	1.9
CLC	87.26	45	eP	11 24.00	-0.5
GSC	87.40	46	eP	11 27.00	1.8
TNP	89.00	43	P	11 31.50	-1.5
	0.9s		8.20nm		5.1mb
WHN	89.07	307	eP	11 40.00	6.8X
KVN	89.14	42	eP	11 32.90	-0.7
			e	11 41.00	25km
MDJ	89.45	325	eP	11 42.50	7.9X
CN2	90.95	323	Pd	11 39.40	-2.2
Z	22s		0.60um		5.0Msz
			ipP	11 50.00	33km
LOE	91.15	290	eP	11 47.50	4.4X
GYA	92.21	300	P	11 49.60	1.6
BDT	93.28	288	eP	12 00.90	8.1X
BJI	93.70	315	eP	11 53.50	-0.8
Z	28s		0.55um		4.9MszX
			eS	23 00.00	
ALQ	93.82	51	eP	11 56.50	1.2
	1.0s		3.00nm		4.7mb
CHG	94.14	289	eP	12 00.90	4.1X
KMI	94.45	297	eP	12 06.50	8.0X
TIY	94.62	312	eP	11 57.20	-1.6
Z	22s		0.80um		5.1Msz
XAN	94.83	307	eP	12 07.50	7.7X
PMR	95.30	13	P	12 09.00	7.8X
	0.5s		4.96nm		5.2mb
RSSD	100.55	45	Pdiff	12 25.50	-0.3X
MBC	113.10	13	ePKP	17 12.50	-2.0
	0.6s		2.00nm		
KSH	120.88	300	PKP	17 31.00	0.4
BUL	123.08	210	iPKPc	17 36.10	0.7
FRB	125.88	31	ePKP	17 37.00	-2.3
MAIO	132.80	292	ePKP	17 54.00	0.5
KEV	138.95	347	ePKP	18 02.00	-1.9
SOD	141.03	345	ePKP	18 02.00	-5.7X
BHD	144.56	285	ePKPd	18 15.00	0.1
SUF	144.95	341	iPKP	18 10.40	-4.2X
	0.7s		17.80nm		
MSL	145.89	290	ePKPd	18 16.50	-0.6
			e	18 28.00	
NUR	147.15	340	iPKP	18 18.00	-0.3
	0.8s		70.40nm		
BCAO	149.35	213	iPKPd	18 26.40	3.1X
	0.6s		36.00nm		
			ic	18 31.30	
			id	19 50.80	
HFS	150.07	349	ePKP	18 25.40	2.5
	0.9s		30.20nm		
SHBJ	150.12	281	PKPc	18 43.20	19.2X
AYN	150.85	274	ePKP	18 30.70	5.7X
MDSJ	151.14	280	PKPc	18 43.80	18.3X
QUTJ	151.30	279	PKPc	18 41.80	16.0X
HSHJ	151.31	276	PKP	18 44.80	18.9X
BURJ	151.60	281	PKPc	18 44.70	18.5X
BADA	151.62	273	ePKPc	18 32.70	6.5X
AQBJ	151.84	276	PKP	18 46.00	19.5X
MBH	151.99	276	e(PKP)	18 29.00	2.3
PRNI	152.00	277	ePKP	18 34.00	7.2X
AGMR	152.20	262	ePKP	18 34.00	6.8X
KAS	152.85	301	ePKP	18 34.00	6.3X
BBTK	153.89	298	ePKP	18 37.00	7.7X
KIC	154.42	163	PKP	18 33.50	2.9X
MLR	156.74	315	ePKP	18 40.00	7.1X
KRA	157.01	330	ePKP	18 35.00	2.1
			e	18 43.90	
KSP	157.80	336	ePKP	18 35.00	1.1
			i	19 05.50	
CLL	158.40	342	ePKP	18 56.00	21.5X
	1.6s		33.00nm		
			i	19 08.00	
KHC	160.17	338	ePKP	18 44.00	7.4X
			i	19 14.80	
KBA	162.02	335	ePKP	18 55.00	16.3X
	0.7s		3.10nm		
			e	19 31.50	

S.D. = 1.5 on 49 of 91 obs.

FEB 11, 1990 22h 03m 55.15± 0.85s
38.012 N ±10.8km 14.466 E ± 6.0km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO	0.20	114	P	03 59.70	0.1
			eSg	04 03.00	
GIB	0.35	266	P	04 01.60	-0.8
			eSg	04 07.00	
MCT	0.76	240	P	04 11.60	1.5
			eSg	04 21.80	
ATN	0.80	79	P	04 11.00	0.3
			eSg	04 24.20	
MEU	0.98	158	P	04 12.60	-1.2
			eSg	04 27.60	
SOI	1.26	87	P	04 19.60	1.1
CZI	1.78	47	P	04 25.10	-1.0

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

• FEB 11, 1990 22h 16m 24.22± 2.78s
33.311 S ± 6.9km 71.951 W ±22.0km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF CENTRAL CHILE (135)

LCCH	0.36	117	iPd	16	33.00	1.4
			iS	16	38.60	
IHA	0.38	43	iPc	16	32.30	0.2
			iS	16	38.70	
LNV	0.79	145	iPd	16	39.70	0.2
			iS	16	51.50	
ROCH	0.86	67	iPd	16	40.10	-0.8
			iS	16	53.00	
TACH	0.91	112	iPd	16	41.60	-0.1
			iS	16	54.50	
SAN	1.09	98	iPd	16	44.50	-0.2
			iS	17	00.50	
PCH	1.24	105	iPd	16	46.80	-0.5
			iS	17	03.50	
CHCH	1.25	120	iPd	16	46.80	-0.6
			iS	17	04.50	
RTCV	3.22	64	ePc	17	16.70	0.8
RTCB	3.23	57	iP	17	16.20	0.2
			(S)	18	05.50	
RTLL	3.55	57	eP	17	21.20	0.7
			eS	18	10.20	
CFA	3.57	63	e(P)	17	22.50	1.7
RTRS	3.78	35	eP	17	22.90	-0.9
MRA	5.33	82	e(P)	17	43.70	-2.0
			S	25	23.80	

S.D. = 1.1 on 14 of 14 abs.

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* FEB 11, 1990 23h 03m 26.97± 0.55s
9.650 N ± 9.4km 124.491 E ±13.0km
DEPTH = 33.0km (normal)
4.8mb (3 abs.) 4.2Msz (1 abs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV	2.76	157	eP	04	10.00	0.1
QIZ	16.97	305	eP	07	22.50	-1.1
	N 13s		0.60um			
SSE	21.56	352	eP	08	15.00	-0.7
WHN	22.84	337	eP	08	30.50	2.1
NJ2	22.90	348	Pc	08	29.00	0.1
BDT	25.89	290	eP	09	04.00	6.2X
CHG	26.35	293	eP	09	04.00	1.9
XAN	28.17	332	P	09	17.90	-0.6
BJI	31.16	348	eP	09	44.50	-0.5
LZH	32.32	328	eP	09	55.50	0.0
	1.5s		19.00nm		4.8mb	
	Z 20s		0.50um		4.2Msz	
HHC	33.12	342	P	10	02.40	0.1
CTA	36.50	144	eP	10	31.00	-0.3
	1.0s		14.00nm		4.8mb	
GTA	36.92	327	eP	10	35.00	0.2
GUN	40.59	302	P	11	05.60	-0.2
KKN	41.05	301	P	11	08.60	-0.9
DMN	41.14	301	P	11	10.80	0.5
GKN	41.66	302	P	11	13.40	-1.0
KSH	52.33	313	eP	12	42.00	3.9X
MBC	86.69	12	eP	16	08.50	0.2
	1.0s		6.00nm		4.8mb	

S.D. = 0.9 on 17 of 19 obs.

& FEB 11, 1990 23h 45m 00.12s
63.005 N 150.382 W
DEPTH = 105.3km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.34	94	iP	45	15.51	-0.3
			eS	45	26.93	
KTH	0.60	336	iP	45	17.36	-0.2
			eS	45	30.37	
CUT	0.60	175	iP	45	17.45	0.0
			eS	45	30.48	
RND	0.80	59	iP	45	18.88	-0.4
			iS	45	32.78	
MCK	0.98	41	iP	45	20.56	-0.5
			eS	45	35.26	
SKT	1.16	208	iP	45	22.68	-0.3
			eS	45	40.13	
PWA	1.38	170	eP	45	25.39	-0.1
GHO	1.41	151	iP	45	25.98	-0.1
			eS	45	45.81	
PLRM	1.53	157	eP	45	26.84	-0.6
SUA	1.56	186	eP	45	27.60	-0.3
			eS	45	49.15	
NEA	1.68	20	iP	45	28.28	-1.0
WRH	1.79	34	iP	45	29.63	-1.1
PMS	1.81	167	eP	45	30.58	-0.4
			eS	45	53.31	
NCG	1.81	208	eP	45	30.39	-0.7
KNK	1.84	150	eP	45	30.57	-0.7
CGLM	1.87	205	eP	45	31.71	-0.1
CRP	1.93	206	eP	45	31.12	-1.6
NCA	1.94	120	iP	45	31.96	-0.7
BGL	1.99	209	eP	45	31.61	-1.7
SPU	1.99	204	eP	45	32.87	-0.5
CCB	2.01	34	iP	45	32.20	-1.2
CKL	2.03	208	eP	45	33.25	-0.7
HDA	2.08	46	iP	45	33.06	-1.3
RDS	2.08	27	iP	45	33.43	-1.0
TOA	2.15	113	eP	45	35.00	-0.4
FBA	2.22	30	iP	45	35.23	-1.0
PAX	2.24	89	iP	45	36.16	-0.5
GLM	2.39	32	eP	45	37.32	-1.2
SLKM	2.51	178	eP	45	39.82	-0.3
RDT	2.62	202	eP	45	40.97	-0.7
GLB	3.45	114	eP	45	51.30	-1.6
CNPM	3.52	187	iP	45	52.92	-0.9
BALM	4.27	114	eP	46	01.97	-2.2

33 obs. associated

& FEB 12, 1990 01h 00m 32.09s
61.565 N 146.239 W
DEPTH = 37.8km
SOUTHERN ALASKA (2)
<AGS-P>.

NCA	0.51	327	iP	00	41.77	-1.2
			eS	00	50.31	
TOA	0.54	3	iP	00	42.69	-0.7
			eS	00	51.03	
GLI	0.80	211	eP	00	45.95	-1.1
SDG	1.02	18	eP	00	49.09	-1.0
KNK	1.07	263	iP	00	50.15	-0.7
			eS	01	04.65	
GLB	1.17	95	iP	00	51.27	-1.0
GHO	1.30	280	eP	00	52.77	-1.4
PLRM	1.38	272	iP	00	54.46	-0.8
			eS	01	12.75	
PAX	1.46	14	eP	00	55.37	-1.0
			eS	01	14.02	
PMS	1.63	260	eP	00	58.33	-0.5
PWA	1.74	274	eP	00	59.77	-0.6
BALM	1.95	104	eP	01	02.53	-1.0
CUT	2.08	296	iP	01	04.83	-0.4
HUR	2.13	313	eP	01	05.26	-0.7
SEW	2.15	228	eP	01	05.53	-0.7
SUA	2.16	269	eP	01	05.82	-0.7
SLKM	2.21	243	eP	01	06.57	-0.6
RND	2.21	328	eP	01	06.39	-0.8
SKT	2.55	282	iP	01	10.55	-1.4

19 obs. associated

FEB 12, 1990 01h 08m 12.79± 0.42s
46.822 N ± 4.4km 9.763 E ± 3.9km
DEPTH = 10.0km (geophysicist)
SWITZERLAND (544)
ML 3.0 (FUR), 3.0 (LDG), 2.8 (KBA).

OSS	0.29	117	iPc	08	17.40	-1.6
VDL	0.39	211	iPc	08	19.10	-1.8
SAX	0.52	326	ePc	08	23.10	-0.2
LLS	0.53	275	ePc	08	22.00	-1.5
OGA	0.87	87	ePg	08	27.70	-1.9
TMA	0.94	221	ePc	08	29.10	-1.8
VAI	1.18	216	P	08	34.00	-0.7
			eSg	08	51.00	
SLE	1.28	318	ePc	08	37.10	0.5
SAL	1.33	156	P	08	37.90	0.7
			eSn	08	53.90	
SCE	1.35	80	ePn	08	37.40	-0.4
MMK	1.46	239	ePd	08	38.50	-1.0
CTI	1.52	120	P	08	42.10	2.0
			eSn	09	01.00	
FEL	1.59	312	ePnc	08	41.37	0.2
FUR	1.69	37	ePn	08	43.40	0.9
ORO	1.72	227	P	08	44.00	0.9
			eSn	09	05.50	
DIX	1.79	246	ePd	08	45.50	1.3
BOB	2.07	186	P	08	47.50	-0.5
			eSn	09	11.00	
FVI	2.09	95	P	08	50.30	2.1
			eSn	09	16.00	
EMS	2.10	250	ePd	08	52.00	3.4X
BSF	2.26	298	Pn	08	50.80	-0.1
			Sn	09	16.00	
CDF	2.32	314	Pn	08	51.60	0.0
			Sn	09	17.20	
KBA	2.47	83	iPgc	08	57.90	4.1X
	0.3s		1.40nm			
			iSg	09	31.90	
			e	17	57.00	
			iSg	18	06.30	
GRC1	2.48	28	ePn	08	52.80	-1.0
			ePg	09	01.40	
			eSn	09	23.90	
			eSg	09	31.10	
LPG	2.48	239	Pn	08	57.20	3.1X
			Sg	09	34.00	
LPL	2.48	239	Pn	08	56.80	2.8
HAU	2.60	298	Pn	08	55.60	-0.1
WET	3.13	41	ePn	09	03.30	0.2
SBF	3.38	210	Pn	09	08.40	1.6
			Sn	09	47.00	
KHC	3.45	47	iPn	09	07.10	-0.6
			Pg	09	18.40	
			Sn	09	48.10	
			eSg	10	00.00	
LOR	4.06	278	Pn	09	16.40	0.1
PRU	4.49	43	eP	10	04.00	41.6X
			eSg	10	34.50	

S.D. = 1.3 on 27 of 31 abs.

FEB 12, 1990 01h 13m 11.71± 0.51s
18.042 S ± 7.9km 178.507 W ± 6.6km
DEPTH = 562.9 ± 6.5 km
5.0mb (22 abs.)
FIJI ISLANDS REGION (181)

MBU	2.85	291	iPd	14	54.60	27.1X
SVA	2.89	268	iPc	14	28.60	1.0
DZM	14.70	252	iPc	16	18.30	0.7
PGZ	22.95	190	eP	17	33.50	-1.5
MNG	23.09	192	P	17	34.50	-1.8
	0.3s		2.00nm		4.2mb	
KHZ	25.22	194	eP	17	54.20	-1.0
BRS	28.02	245	iPc	18	20.80	0.8
	0.8s		14.80nm		4.7mb	
MHZ	28.81	198	P	18	26.10	-0.6
RMQ	31.37	249	iPd	18	50.00	1.4
	0.7s		162.00nm		5.8mb	
CNB	33.27	232	iPc	19	06.50	1.9
	0.2s		52.00nm		5.8mb	
CTA	33.33	261	iPd	19	05.00	-0.1
	1.1s		94.94nm		5.3mb	
CAN	33.55	233	eP	19	07.30	0.4
BWA	33.67	234	eP	19	07.00	-0.9
PMG	34.39	280	iPd	19	14.50	0.5
	0.9s		134.45nm		5.6mb	
CMS	34.88	241	iPd	19	19.30	1.4
QLP	35.40	249	iPd	19	23.10	0.8
TOO	37.01	231	iPd	19	37.40	2.0
	0.7s		138.00nm		5.7mb	
BFD	39.08	233	iPd	19	55.50	3.2X
QIS	39.54	259	ePd	19	55.30	-0.9
ADE	41.49	237	iPd	20	12.70	1.1
	1.0s		128.00nm		5.4mb	
WB5	44.50	260	iPd	20	34.40	-0.9
WRA	44.51	260	Pd	20	34.20	-1.3
	0.6s		32.30nm		5.0mb	
ASPA	44.67	254	iPd	20	36.20	-0.5
	0.6s		619.00nm		6.3mb X	
			iS	26	31.20	
			eScS	29	33.50	
COOL	55.81	245	eP	21	57.00	-1.3
	0.3s		13.00nm		4.7mb	
MBL	57.86	256	iPd	22	11.60	-0.8
	0.3s		14.00nm		4.7mb	
KLB	58.68	244	iPd	22	17.10	-0.7
NWAO	59.07	242	eP	22	19.00	-1.4
	0.6s		17.00nm		4.5mb	
BAL	59.64	245	eP	22	23.00	-1.2
MUN	59.98	243	eP	22	26.00	-0.4
ADK	69.64	1	P	23	24.20	-2.1
	0.6s		59.11nm		5.3mb	
SPA	72.07	180	iPd	23	42.40	1.8
	0.9s		31.82nm		4.8mb	
SYP	76.32	46	eP	24	05.00	0.2
GCC	76.38	43	ePc	24	05.10	0.3
PRS	76.39	44	ePc	24	05.60	0.6
PCC	76.40	43	ePc	24	05.00	0.1
SAO	76.59	44	ePc	24	06.10	0.1

12d 01h

BCH	76.61	46	P	24	06.60	0.3
BRK	76.69	43	e(P)	24	06.60	0.1
PRI	76.75	45	ePc	24	07.70	0.6
MHC	76.79	43	ePc	24	07.70	0.4
LLA	76.83	44	ePc	24	07.70	0.3
ARN	76.86	43	P	24	07.80	0.2
ABL	77.02	47	P	24	08.70	0.0
FHC	77.36	39	ePc	24	10.40	0.2
MWC	77.50	48	eP	24	11.00	-0.2
BAR	77.68	50	eP	24	12.00	-0.1
RVR	77.86	48	eP	24	13.00	0.1
FRI	77.86	44	ePc	24	12.90	0.0
PLM	77.89	49	eP	24	13.00	-0.4
SBB	77.91	47	eP	24	13.00	-0.3
PEC	77.96	48	P	24	13.60	0.1
ISA	77.98	46	eP	24	14.00	0.4
CMB	78.00	43	ePc	24	13.60	-0.1
WDC	78.11	40	ePc	24	14.20	0.1
ORV	78.15	41	ePc	24	14.20	-0.2
MIN	78.54	41	eP	24	16.20	-0.4
CLC	78.66	46	eP	24	17.00	-0.2
GSC	78.94	47	eP	24	19.00	0.3
LBFM	78.95	40	P	24	18.30	-0.5
GLA	79.21	50	eP	24	21.00	0.9
KVN	80.05	43	P	24	24.50	-0.1
TNP	80.12	45	P	24	24.50	-0.4
	0.8s	13.97nm			4.5mb	
BMW	81.25	35	P	24	30.60	0.2
LON	82.20	35	P	24	34.20	-0.9
TTA	82.62	10	P	24	36.50	-0.4
PMR	82.75	14	P	24	35.60	-1.9
	0.7s	22.09nm			4.8mb	
MSU	83.76	46	P	24	44.50	1.2
DPW	84.85	36	P	24	48.40	0.2
PNT	84.90	34	iPc	24	48.50	0.1
	0.8s	29.00nm			5.0mb	
NEW	85.67	36	P	24	50.60	-1.5
PV09	85.86	47	P	24	53.70	0.1
FBA	85.96	13	P	24	51.50	-1.6
	0.7s	26.16nm			5.1mb	
ALQ	86.25	52	iPc	24	56.20	0.8
	1.0s	8.75nm			4.4mb	
LRM	87.13	40	eP	24	59.50	0.0
BW06	87.52	43	P	25	01.20	-0.1
	1.0s	32.00nm			5.1mb	
GOL	89.02	48	P	25	09.00	0.6
	0.9s	13.26nm			4.9mb	
GLD	89.15	48	P	25	09.80	1.0
	1.5s	81.25nm			5.4mb	
EDM	90.32	33	iPc	25	13.00	-0.7
RSSD	91.72	44	P	25	20.00	-0.6
FVM	99.41	53	P	25	54.50	-0.8
SUF	132.19	345	ePKP	31	22.40	-0.4
NUR	134.45	344	ePKP	31	22.80	-4.3X
HFS	137.05	351	ePKP	31	20.40	-11.7X
	0.4s	1.20nm				
KSP	145.21	344	iPKPc	31	47.50	0.8
CLL	145.57	347	iPKPc	31	48.20	1.0
	0.8s	18.00nm				
BRG	145.77	346	iPKP	31	49.20	1.6
	2.0s	60.00nm				
LWI	146.39	236	iPKPd	31	53.50	3.5X
PRU	146.45	345	PKP	31	51.00	2.3
GRF	147.47	348	ePKP	31	54.30	3.9X
			e	31	57.80	
KHC	147.48	345	ePKP	31	54.50	4.0X
DOU	147.93	356	PKPc	31	54.90	3.8X
WLF	148.23	354	PKP	31	47.00	-4.5X
FLN	149.32	3	ePKP	31	58.20	5 0X
	0.4s	6.30nm				
CDF	149.34	352	ePKP	31	58.70	5.3X
	0.4s	4.60nm				
KBA	149.44	344	iPKPc	31	58.00	4.3X
	0.4s	3.80nm				
LDF	149.50	2	iPKPc	31	58.60	5.1X
	0.4s	6.85nm				
GRR	149.67	3	iPKPc	31	59.00	5.2X
	0.4s	11.45nm				
HAU	149.85	354	ePKP	31	59.90	5.8X
	0.4s	5.75nm				
BSF	149.97	353	ePKP	32	00.00	5.6X
	0.6s	5.40nm				
LPF	150.02	3	iPKPc	32	00.10	5.8X
	0.4s	16.05nm				
LOR	150.79	357	ePKP	32	02.00	6.5X
	0.4s	13.75nm				
SSF	151.01	357	ePKP	32	02.60	6.7X
	0.4s	8.60nm				
LBF	151.06	356	ePKP	32	02.60	6.6X
	0.4s	3.45nm				
AVF	151.29	357	ePKP	32	02.90	6.7X
	0.6s	2.70nm				
SMF	151.41	357	ePKP	32	04.10	7.6X
	0.4s	1.70nm				
MFF	151.49	2	iPKPc	32	03.30	6.8X
	0.5s	5.85nm				
BGF	151.54	358	ePKP	32	04.10	7.5X
	0.6s	9.90nm				
MAF	151.89	358	ePKP	32	04.60	7.4X
	0.6s	5.85nm				

S.D. = 0.9 on 83 of 108 obs.

FEB 12, 1990 01h 34m 40.65± 0.77s
5.583 N ± 6.6km 0.326 W ± 6.0km
DEPTH = 10.0km (geophysicist)
NORTHWEST AFRICA (550)
MG 2.7 (KUK).

WEGH	0.01	357	Pg	34	43.50	1.0
LEGH	0.16	66	Pg	34	44.70	0.4
			Sg	34	47.00	
TEGH	0.33	81	Pg	34	48.10	0.7
			Sg	34	52.40	
WIGH	0.36	233	Pg	34	48.60	0.5
			Sg	34	53.60	
SHGH	0.44	40	Pg	34	50.10	0.4
			Sg	34	56.00	
KOGH	0.51	9	ePg	34	51.60	0.7
			Sg	34	58.20	
KUK	0.60	356	Pg	34	53.00	0.2
			Sg	35	02.00	
LIC	4.72	278	Pg	36	09.20	15.6X
			Sn	36	44.42	
			Sg	37	06.20	

S.D. = 0.3 on 7 of 8 obs.

& FEB 12, 1990 01h 48m 17.70s
36.855 N 121.612 W
DEPTH = 5.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.9 (BRK).
Mo=1.2*10**15 Nm (BRK). Felt (III) at Aromos, Gilroy and Moss Landing.

SAO	0.16	124	iPd	48	20.60	-0.5
			iS	48	23.15	
GCC	0.35	300	iPc	48	24.50	-0.3
MHC	0.49	357	iPd	48	27.60	0.1
			eS	48	32.90	
			i	48	35.20	
ARN	0.50	7	iPd	48	27.70	0.0
PRS	0.56	159	iPd	48	28.20	-0.7
LLA	0.59	114	iPc	48	29.10	-0.4
PCC	0.89	317	iPc	48	33.80	-1.4
			i	48	48.70	
PRI	1.04	133	ePd	48	37.00	-0.9
BKS	1.13	334	iPc	48	37.30	-2.1
			e	48	39.60	
			iS	48	55.10	
BRK	1.14	333	ePc	48	37 10	-2.4
ZSP	1.20	335	iPc	48	38.60	-2.0
			i	48	40.90	
			iS	48	58.40	
PHAM	1.41	136	eP	48	42.00	-2.1
PKEM	1.45	123	eP	48	44.30	-0.3
CMB	1.53	39	ePc	48	43.90	-1.9
FRI	1.53	84	ePc	48	43.30	-2.4
NWRM	1.89	328	e(P)	48	47.50	-3.4
BCH	2.08	143	eP	48	51.10	-2.6
ORV	2.70	2	eP	49	00.20	-2.3
KVN	3.54	51	eP	49	12.70	-1.9
TNP	3.70	69	eP	49	16.00	-1.0
PLM	5.23	131	eP	49	34.50	-4.1

21 obs. associated

& FEB 12, 1990 02h 51m 53.40s
36.855 N 121.613 W
DEPTH = 6.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.8 (BRK).

SAO	0.16	124	iPd	51	56.50	-0.3
GCC	0.35	300	iPc	52	00.20	-0.3
MHC	0.49	357	iPd	52	03.30	0.1
			iS	52	09.90	
ARN	0.50	7	iPd	52	03.30	-0.1
PRS	0.56	159	iPd	52	04.00	-0.6
LLA	0.59	114	iPc	52	04.80	-0.4
PCC	0.89	317	ePc	52	09.20	-1.6
PRI	1.04	133	ePc	52	13.00	-0.6
BKS	1.13	334	e(P)	52	12.40	-2.6
			eS	52	31.10	
BRK	1.14	333	e(P)	52	13.40	-1.7
ZSP	1.20	335	ePc	52	14.50	-1.7
			i	52	16.60	
CMB	1.53	39	e(P)	52	21.00	-0.3
			eS	52	38.80	
FRI	1.53	84	ePc	52	20.30	-1.0
			iS	52	40.00	
KVN	3.54	51	eP	52	56.00	5.8

14 obs. associated

? FEB 12, 1990 02h 55m 47.98± 8.26s
48.664 N ±34.1km 3.717 W ±60.4km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 3.2 (LDG).

LPF	1.89	109	Pg	56	26.10	5.5X
			Sg	56	54.50	
GRR	1.92	97	Pg	56	26.20	5.2X
			Sg	56	54.90	
FLN	2.14	86	Pn	56	24.60	0.3
			Pg	56	29.50	
			Sg	57	01.00	
LDF	2.39	90	Pn	56	29.00	1.3
			Pg	56	36.00	
			Sg	57	09.00	
MFF	3.18	129	Pg	56	52.00	13.1X
TCF	4.67	118	Pn	57	00.60	0.4
LFF	4.82	139	Pn	57	03.00	0.7
			Sg	58	26.60	
RJF	4.91	131	Pn	57	04.40	0.8
			Sg	58	30.40	
MAF	4.91	117	Pn	57	04.40	0.8
SSF	5.12	106	Pn	57	05.60	-0.9
			Sg	58	35.00	
AVF	5.13	109	Pn	57	05.50	-1.1
LPO	5.22	138	Pn	57	08.40	0.5
LOR	5.28	103	Pn	57	08.00	-0.8
LBF	5.45	105	Pn	57	10.20	-1.0
CAF	5.45	131	Pn	57	11.20	-0.1
			Sn	58	14.00	
EPF	6.31	152	Pn	57	22.20	-1.1
			Sn	58	35.00	

S.D. = 0.9 on 13 of 16 obs.

& FEB 12, 1990 03h 13m 28.82s
64.814 N 147.766 W
DEPTH = 18.2km
CENTRAL ALASKA (1)
<AGS-P>.

FBA	0.09	352	iP	13	32.28	-0.2
RDS	0.16	275	iP	13	33.28	-0.1
CCB	0.17	186	eP	13	33.23	-0.2
GLM	0.24	43	iP	13	34.39	-0.1
WRH	0.37	202	iP	13	36.64	0.0
HDA	0.54	139	iP	13	39.52	0.1
			eS	13	46.90	
NEA	0.61	248	eP	13	40.77	0.1
			eS	13	49.48	
DMW	1.17	130	eP	13	49.69	-0.4
MCK	1.20	206	eP	13	51.26	0.6
RND	1.49	199	eP	13	54.75	-0.1
PAX	2.11	150	eP	14	03.49	-0.4

11 obs. associated

& FEB 12, 1990 03h 26m 03.56s
61.340 N 150.296 W
DEPTH = 41.8km
SOUTHERN ALASKA (2)
<AGS-P>.

SUA	0.25	300	iP	26	11.43	-0.2
			eS	26	18.68	
PMS	0.37	105	iP	26	12.72	-0.1
PWA	0.37	33	iP	26	12.20	-0.6
PLRM	0.61	65	iP	26	15.09	-0.8
NKA	0.75	218	eP	26	18.80	1.0

GHO	0.79	56	iP	26	17.70	-0.7
CGLM	0.83	268	iP	26	18.33	-0.6
			eS	26	30.15	
SLKM	0.84	177	iP	26	18.26	-0.8
SPU	0.86	260	iP	26	18.65	-0.8
			eS	26	30.80	
SKT	0.87	318	iP	26	18.48	-1.1
NCG	0.90	275	iP	26	19.33	-0.7
			eS	26	32.00	
CRP	0.90	266	eP	26	19.45	-0.6
			eS	26	32.18	
CKL	1.00	263	iP	26	20.55	-0.8
			eS	26	33.56	
BGL	1.01	267	iP	26	20.81	-0.8
CUT	1.07	1	iP	26	21.52	-0.7
RDT	1.28	234	iP	26	24.64	-0.8
			eS	26	41.93	
SEW	1.31	161	eP	26	25.32	-0.3
NNL	1.39	201	iP	26	27.45	0.6
RED	1.52	234	iP	26	28.09	-0.7
			eS	26	47.71	
GLI	1.62	105	iP	26	28.86	-1.3
HUR	1.67	10	eP	26	30.80	-0.1
NCA	1.78	67	eP	26	31.75	-0.7
CNPM	1.88	195	eP	26	33.00	-0.8
HIN	2.08	115	eP	26	35.14	-1.6
TOA	2.11	67	eP	26	36.99	-0.1
RND	2.18	17	eP	26	37.95	-0.2
KTH	2.24	353	iP	26	38.88	-0.2
CVA	2.36	108	eP	26	38.83	-1.8
PDB	2.48	233	eP	26	41.07	-1.2
MCK	2.48	14	eP	26	43.08	0.7
SVW	2.59	267	eP	26	42.45	-1.5
SGAM	2.62	106	eP	26	42.32	-2.1
RAGM	2.91	107	eP	26	50.30	1.7
WAX	3.75	101	eP	27	00.03	-0.4

34 obs. associated

FEB 12, 1990 03h 30m 52.82± 0.24s
5.186 S ± 4.9km 151.777 E ± 5.5km
DEPTH = 48.7km (6 depth phases)
5.1mb (12 abs.) 4.7Msz (3 obs.)
NEW BRITAIN REGION (192)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 29C
Centraid Location:
Origin Time 03:30:58.2 0.4
Lat 5.41S 0.06 Lon 151.96E 0.08
Dep 18.4 3.8 Half-duration 1.9
Moment Tensor; Scale 10**17 Nm
Mrr= 1.14 0.08 Mtt=-1.08 0.09
Mff=-0.06 0.11 Mrt= 0.75 0.30
Mrf=-0.43 0.20 Mtf=-0.51 0.07
Principal Axes:
T Val= 1.57 Plg=63 Azm= 46
N -0.15 23 259
P -1.42 13 163
Best Double Couple:Ma=1.5*10**17
NP1:Strike=225 Dip=38 Slip= 50
NP2: 92 62 117

LAT	4.97	253	eP	32	16.00	9.1X
PMG	6.22	227	iPc	32	28.00	3.6X
			eS	33	40.00	
HNR	9.14	118	eP	33	06.00	1.1
CTA	15.76	199	iPd-	34	34.40	1.2
	1.3s	159.62nm			5.0mb	
			i	34	49.50	
			iS	37	33.00	
QIS	19.32	217	iPc	35	17.50	0.4
			e	35	28.00	43km
GUA	19.81	340	eP	35	24.20	1.9
	1.1s	536.71nm			5.8mb	
GUMO	19.87	340	eP	35	24.80	1.8
	0.8s	204.98nm			5.5mb	
			eS	39	07.00	
PJG	19.87	340	eP	35	24.80	1.8
PVC	20.43	129	iPc	35	39.00	10.3X
SLKI	20.53	261	iPc	35	45.10	15.3X
RMQ	21.38	187	eP	35	39.00	0.6
			e	35	46.00	25kmX
MTN	21.75	248	eP	35	43.00	0.8
			e	35	56.00	55km
			i	39	41.40	
DZM	21.98	141	iPc	35	44.00	-0.6
BRS	22.10	178	iPc	35	45.00	-0.6

			i	35	50.00	18kmX
			eS	39	44.00	
WB5	22.37	228	iPc	35	49.10	0.8
			e	36	01.30	50km
			eS	39	52.00	
			eScP	43	43.30	
WRA	22.43	228	Pd	35	50.00	1.1
	0.7s	43.30nm			5.0mb	
QLP	22.46	198	e(P)	35	54.00	4.8X
			e	36	02.50	30kmX
ASPA	25.19	221	iPc	36	16.10	0.5
	0.6s	54.00nm			5.3mb	
Z	22s	1.53um			4.5MszX	
			iPP	36	29.50	
			iS	40	43.10	
			LR	45	30.10	
CMS	26.75	191	eP	36	31.00	1.1
			e	36	41.00	36kmX
BWA	29.26	186	eP	37	06.30	13.7X
CAN	30.10	185	eP	37	11.30	11.2X
ADE	32.00	201	iPc	37	29.30	12.5X
	1.0s	68.00nm				
BFD	32.94	194	iPc	37	38.50	13.6X
MBL	34.81	240	iPd	37	41.00	-0.3
			e	37	54.00	50km
BAG	37.58	305	eP	38	06.80	1.9
COOL	38.50	225	eP	38	12.00	-0.3
KLB	41.30	226	eP	38	34.40	-1.0
BAL	41.56	228	eP	38	37.00	-0.5
MSZ	41.79	163	eP	38	51.00	11.8X
MUN	42.62	227	eP	38	45.00	-1.2
MAT	43.41	344	(P)	38	50.00	-2.5
	1.1s	21.52nm			4.8mb	
QZH	44.03	314	P	38	59.50	1.9
SSE	46.42	323	eP	39	29.00	12.4X
	1.5s	36.00nm				
Z	20s	0.70um			4.6Msz	
			S	45	46.00	
			sS	46	12.00	
QIZ	47.79	301	eP	39	29.80	2.1
PPI	51.51	274	e(P)	39	53.00	-3.3X
GYA	53.82	308	P	40	14.40	1.0
BJI	55.66	327	eP	40	40.00	13.7X
Z	22s	0.68um			4.7Msz	
			eS	48	26.00	
			eSS	52	12.00	
BJI	55.66	327	eP	40	26.00	-0.3
Z	20s	0.68um			4.7Msz	
XAN	56.20	317	P	40	29.50	-1.0
TIY	56.21	323	eP	40	29.50	-1.0
Z	24s	1.40um			5.0MszX	
KMI	56.36	305	Pc	40	32.00	0.0
CHG	57.24	296	eP	40	38.00	-0.1
CHTO	57.24	296	eP	40	37.90	-0.1
			pP	40	51.50	49km
CD2	58.22	311	P	40	44.60	-0.2
LZH	60.80	316	eP	41	00.50	-2.1
Z	24s	0.60um			4.7MszX	
GTA	65.25	318	eP	41	32.80	0.8
SHL	65.63	301	iP	41	33.80	-0.9
LSA	67.62	305	P	41	46.00	-1.6
GUN	71.45	302	P	42	10.80	-0.2
PKI	71.76	301	P	42	12.20	-0.7
KKN	71.93	301	P	42	13.00	-0.7
	0.8s	36.00nm			5.4mb	
DMN	72.02	301	P	42	13.60	-0.8
	0.6s	31.00nm			5.4mb	
GKN	72.53	301	P	42	16.20	-1.0
WMQ	75.34	318	eP	42	32.50	-0.6
HYB	75.66	289	eP	42	34.30	-1.0
GBA	76.09	285	Pd	42	37.10	-0.6
	0.7s	3.60nm			4.4mb	
SVW	77.57	23	eP	42	46.20	1.0
TTA	78.50	22	eP	42	50.50	0.2
PMR	80.46	25	eP	43	00.70	0.0
	1.3s	23.60nm			5.0mb	
IMA	81.16	20	eP	43	05.20	0.7
KSH	82.39	311	eP	43	13.50	2.0
FBA	82.62	22	eP	43	10.70	-1.3
WDC	90.06	49	ePc	43	49.30	0.4
ORV	90.74	51	eP	43	52.00	-0.1
MIN	90.74	50	ePc	43	52.70	0.4
BCH	91.43	55	P	43	57.00	1.5
CMB	91.46	52	eP	43	55.50	0.0
FRI	91.90	53	eP	43	57.20	-0.2
PNT	92.98	41	eP	44	03.00	0.8
KVN	93.33	51	ePd	44	04.00	-0.3

			pP	44	17.80	46km
PLM	93.95	57	P	44	09.00	1.7
TNP	93.95	52	P	44	07.30	0.1
NEW	94.57	42	P	44	09.30	-0.3
MBC	94.73	14	eP	44	09.00	-0.7
	0.9s	5.00nm			4.9mb	
GLA	95.64	57	P	44	16.50	1.6
EDM	97.04	37	ePd	44	20.70	0.0
SES	98.55	40	eP	44	28.00	0.4
BW06	99.86	48	P	44	32.00	-2.0
	0.7s	3.95nm			5.1mb	
RSSD	103.77	46	Pdiff	44	50.60	-0.8
SLR	117.19	23B	ePKP	49	25.00	-10.3X
BUL	118.76	244	iPKPd	49	36.50	-1.9
	0.7s	10.27nm				
			i	49	51.70	
SKO	122.72	317	ePKP	49	44.20	-0.9
KHC	123.74	328	ePKP	49	46.40	-0.6
BCAO	133.41	271	iPKPd	50	06.60	0.1
	0.8s	26.00nm				
			ic	50	20.50	
ZOBO	135.14	119	ePKP	49	54.00	-16.4X
			i	50	11.30	
PAG	145.45	69	ePKP	50	27.00	-1.2
SEG	145.52	69	ePKP	50	26.00	-2.2
DEG	145.96	68	ePKP	50	27.50	-1.5
TRN	146.71	79	ePKP	50	31.00	0.8
	0.8s	219.10nm				
BAO	151.52	137	ePKP	50	39.00	1.2
SHGH	151.94	273	ePKP	50	44.00	5.6X
LEGH	152.08	272	ePKP	50	45.00	6.4X
KOGH	152.14	273	ePKP	50	46.00	7.3X
KUK	152.27	273	ePKP	50	45.50	6.7X
WIGH	152.51	272	ePKP	50	45.50	6.3X
LKO	157.14	282	PKP	50	57.08	11.6X

S.D. = 1.1 on 75 of 96 obs.

FEB 12, 1990 05h 51m 34.26± 0.37s
49.143 S ± 8.2km 122.328 E ± 7.5km
DEPTH = 10.0km (geophysicist)
5.0mb (8 obs.)
SOUTH OF AUSTRALIA (437)

NWAO	16.64	345	eP	55	29.00	0.0
Z	20s	2.50um				
N	20s	2.10um				
E	20s	0.90um				
ADE	18.61	47	eP	55	53.00	-0.6
BFD	18.92	58	eP	55	58.50	1.2
TOO	20.34	64	eP	56	13.00	-0.3
CAN	23.94	65	eP	56	57.70	8.4X
BWA	24.23	62	eP	57	02.00	10.0X
CMS	24.98	54	eP	57	00.00	0.8
ASPA	27.01	24	iPd	57	17.70	-0.5
	1.1s	15.00nm			4.6mb	
Z	22s	0.68um			4.2MszX	
			LR	06	11.00	
RMQ	30.50	52	eP	57	50.00	0.4
WRA	30.69	23	Pd	57	50.20	-1.0
	0.9s	4.60nm			4.3mb	
WB5	30.75	23	eP	57	51.00	-0.8
QIS	31.69	32	eP	57	59.00	-1.1
			e	58	05.00	
CTA	34.75	42	iPc	58	26.00	-0.6
	1.1s	48.10nm			5.3mb	
SPA	41.05	180	eP	59	19.00	-0.1
	1.0s	25.00nm			4.9mb	
CHTO	70.78	337	eP	02	52.60	0.0
HVD	71.66	244	eP	02	46.00	-12.1X
SLR	73.51	250	eP	03	07.00	-2.1
GBA	73.97	314	Pc	03	11.70	0.2
	1.6s	30.70nm			5.1mb	
KSR	74.26	249	eP	03	06.50	-7.0X
KMI	75.97	342	Pc	03	24.50	1.3
HYB	76.80	317	eP	03	28.00	0.3
BUL	77.40	254	iPc	03	30.80	-0.5
	1.0s	29.50nm			5.3mb	
SSE	79.88	359	P	03	45.50	1.3
	1.0s	14.00nm			4.9mb	
PKI	83.17	328	P	04	01.60	-0.4
DMN	83.32	327	P	04	02.40	-0.2
GUN	83.32	328	P	04	02.80	0.0
KKN	83.42	327	P	04	03.00	-0.1
GKN	83.84	327	P	04	04.70	-0.5
LZH	86.43	345	eP	04	18.00	0.1
	1.5s	19.00nm			5.1mb	
BJI	88.97	355	eP	04	30.50	0.8

12d 06h

```
LKO    121.48 246 PKP    10 30.54    0.9
MBC    143.78  21 ePKP   11 06.00   -3.6X
         1.0s     26.00nm
BW06   143.98  80 PKP    11 08.00   -3.2X
GOL    145.16  87 PKP    11 11.90   -1.5
GLD    145.29  87 PKP    11 12.90   -0.6
EDM    145.61  62 ePKPc  11 12.60   -0.8
         2.0s    185.00nm
SES    146.12  67 ePKP   11 15.00    0.6
EKA    146.80 302 PKP    11 17.00    1.8
FKO    147.87 101 e(PKP) 11 17.00   -0.6
RSSD   148.16  81 PKP    11 18.90    0.8
DAG    148.39 344 iPKPc  11 19.00    1.8
         1.1s     53.16nm
SIO    148.86 101 e(PKP) 11 22.90    3.7X
UYO    149.05 105 ePKP   11 23.00    3.5X
TUL    149.29 101 ePKP   11 24.00    4.2X
         1.2s     50.00nm
                    e     13 10.20
                    LR    03 00.00
LNO    149.29 101 e(PKP) 11 24.00    4.3X
FFC    152.49  61 ePKP   11 30.00    6.1X
         0.8s     9.00nm
      S.D. = 0.9   on  35 of  46 obs.
-------------------------------------
   FEB  12, 1990  06h 24m 19.90± 0.40s
   48.176 N ± 3.3km    7.014 E ± 4.1km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                              (538)
      ML 3.0 (LDG).

ECH      0.10  68 Pg     24 23.10    0.4
                Sg     24 25.03
CDF      0.29  36 Pg     24 25.95   -0.1
                Sg     24 29.86
WLS      0.33  44 Pg     24 26.59   -0.1
                Sg     24 30.71
MOF      0.33 166 Pg     24 27.19    0.3
BSF      0.38 203 Pg     24 27.87    0.2
                Sg     24 33.07
HAU      0.48 249 Pg     24 29.60    0.0
                Sg     24 36.40
VITF     0.69 274 Pg     24 33.53    0.0
FEL      0.73 114 Pg     24 34.23   -0.2
                Sg     24 43.79
BBS      0.79 155 Pg     24 35.65    0.4
                Sg     24 46.79
LOMF     0.84 189 Pg     24 36.35    0.2
                Sg     24 48.15
GWF      0.90  26 Pg     24 36.62   -0.5
                Sg     24 48.67
RUP      1.53   1 ePn    24 47.94    0.7
LOR      2.32 248 Pg     25 03.80    5.1X
                Sg     25 32.80
LBF      2.38 241 Pg     25 04.90    5.3X
                Sg     25 35.00
DOU      2.49 321 iP     25 36.60   35.5X
SSF      2.62 246 Pg     25 09.50    6.5X
                Sg     25 42.80
SMF      2.64 236 Pg     25 10.00    6.7X
                Sg     25 43.20
LPL      2.67 184 Pn     25 02.60   -1.3
AVF      2.84 242 Pg     25 13.90    7.8X
                Sg     25 49.00
BGF      3.26 242 Pg     25 21.20    9.1X
                Sg     26 03.50
MAF      3.61 239 Pg     25 27.50   10.5X
                Sg     26 14.00
TCF      3.78 242 Pg     25 30.90   11.4X
      S.D. = 0.5   on  13 of  22 obs.
-------------------------------------
*  FEB  12, 1990  08h 48m 55.92± 1.45s
   10.330 N ±11.6km  125.602 E ±15.0km
   DEPTH =  97.5 ± 17.7 km
   4.5mb (  1 obs.)
 LEYTE, PHILIPPINE ISLANDS           (256)

DAV      3.22 180 eP     49 45.00   -0.4
BAG      7.77 322 eP     50 49.00    0.7
GUMO    19.12  78 eP     53 13.50   -0.6
SSE     21.07 349 eP     53 49.20   15.3X
      E  10s     17.00um
                eS     57 50.00
                eSS    58 32.00
BJI     30.75 346 eP     55 11.00    7.0X
QIS     33.64 156 eP     55 30.00    0.6
ASPA    34.75 167 iP     55 39.60    0.7
         0.5s     3.00nm          4.5mb
GBA     47.17 279 Pd     57 19.80   -1.0
SUF     85.20 333 eP     01 28.00    5.6X
      S.D. = 1.2   on   6 of   9 obs.
-------------------------------------
?  FEB  12, 1990  09h 14m 16.86± 1.08s
   39.097 N ± 8.7km   27.468 E ±17.9km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                              (366)

IZM      0.72 193 ePg    14 31.00    0.0
                eSg    14 43.00
DST      1.03  60 ePn    14 36.40    0.0
EDC      1.29  14 ePn    14 40.50   -0.2
BNT      1.31  15 iPn    14 41.20    0.2
      S.D. = 0.3   on   4 of   4 obs.
-------------------------------------
*  FEB  12, 1990  10h 57m 31.09± 3.14s
   33.340 S ± 8.1km   71.939 W ±24.8km
   DEPTH =  10.0km  (geophysicist)
 NEAR COAST OF CENTRAL CHILE         (135)

LCCH     0.34 114 iPd    57 39.00    0.9
                iS     57 45.50
IHA      0.40  39 iPc    57 38.30   -1.0
                iS     57 44.70
LNV      0.76 144 iPd    57 45.70   -0.1
                iS     57 57.80
ROCH     0.86  65 iPd    57 46.50   -1.3
                iS     57 58.50
TACH     0.89 111 iPd    57 48.00   -0.2
                iS     58 01.50
SAN      1.07  96 iP     57 50.90   -0.4
                iS     58 07.00
PCH      1.22 104 iPc    57 53.50   -0.4
                iS     58 11.00
CHCH     1.23 119 iPc    57 53.00   -0.9
                iS     58 11.00
RFA      3.22 117 e(P)   58 27.20    4.5X
RTCV     3.23  64 e(P)   58 25.00    2.2
RTCB     3.23  56 e(P)   58 24.00    1.0
                eS     58 41.00
RTLL     3.56  57 ePd    58 29.10    1.6
CFA      3.57  62 eP     58 30.50    2.8X
RTRS     3.80  34 eP     58 29.60   -1.3
      S.D. = 1.3   on  12 of  14 obs.
-------------------------------------
%  FEB  12, 1990  11h 01m 13.54± 1.09s
   39.109 N ± 8.9km   27.573 E ±11.4km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                              (366)

IZM      0.75 199 ePg    01 28.00   -0.3
                eSg    01 40.00
DST      0.96  58 ePn    01 32.40    0.6
EZN      1.20 307 ePn    01 36.50    0.6
EDC      1.26  10 ePn    01 35.00   -1.9
BNT      1.27  12 iPn    01 38.10    0.9
      S.D. = 1.6   on   5 of   5 obs.
-------------------------------------
%  FEB  12, 1990  11h 30m 05.28± 0.72s
   39.242 N ± 5.9km   29.061 E ± 7.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                              (366)

DST      0.49 317 iPg    30 14.90   -0.4
                iSg    30 22.40
KHL      0.99 158 ePg    30 23.60   -0.5
                eSg    30 37.10
YLV      1.34  10 iPn    30 29.10   -1.0
BNT      1.42 322 iPn    30 31.60    0.5
GPA      1.42  42 ePn    30 30.70   -0.5
EDC      1.44 320 iPn    30 30.50   -0.9
GBZT     1.57  11 ePn    30 34.50    1.2
IZM      1.64 240 ePn    30 35.00    0.7
HRT      1.64  16 ePn    30 35.10    0.7
ISK      1.82 360 ePn    30 38.00    1.1
CTT      1.96 346 ePn    30 37.70   -1.2
      S.D. = 1.0   on  11 of  11 obs.
-------------------------------------
   FEB  12, 1990  11h 34m 54.40± 1.17s
   45.618 N ± 9.4km    6.960 E ± 4.8km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                              (538)
      ML 2.1 (GEN).

LPG      0.19 231 Pg     34 58.90    0.1
                Sg     35 01.00
LPL      0.19 238 Pg     34 58.80    0.1
LSD      0.21 139 P      34 59.28    0.1
                S      35 02.08
RSP      0.51 156 P      35 04.85    0.1
                S      35 11.39
RRL      0.71 190 P      35 08.22   -0.3
                S      35 17.77
ORX      0.72  89 P      35 08.58    0.0
                S      35 18.46
PZZ      1.12 175 P      35 15.80    0.3
STV      1.40 169 P      35 19.88   -0.1
ENR      1.43 167 P      35 20.23   -0.2
ROB      1.47 154 P      35 21.11    0.1
      S.D. = 0.2   on  10 of  10 obs.
-------------------------------------
?  FEB  12, 1990  11h 52m 42.99± 6.55s
   41.473 N ±32.4km   12.561 E ±33.1km
   DEPTH =  10.0km  (geophysicist)
 SOUTHERN ITALY                      (390)

RDP      0.31  22 Pd     52 49.40    0.0
                eSg    52 51.80
RMP      0.35  17 P      52 50.30    0.0
                eSg    52 53.10
AZI      0.83  52 Pc     52 58.50   -0.6
                eSg    53 08.80
MNS      0.92   6 P      53 00.40   -0.1
                eSg    53 11.90
SDI      0.97  76 P      53 01.60    0.1
                eSg    53 14.30
AQU      1.08  35 P      53 03.90    0.5
                eSg    53 17.40
      S.D. = 0.5   on   6 of   6 obs.
-------------------------------------
?  FEB  12, 1990  12h 16m 11.91± 2.56s
    4.762 S ±30.8km  151.269 E ±14.7km
   DEPTH =  33.0km  (normal)
   4.5mb (  2 obs.)
 NEW BRITAIN REGION                  (192)

PMG      6.16 221 eP     17 43.00   -0.1
CTA     16.00 197 eP     20 03.00    6.8X
                e      20 21.00
QIS     19.37 215 eP     20 38.60    0.6
MTN     21.45 247 eP     20 59.00   -0.6
RMQ     21.74 186 eP     21 02.00   -0.5
                i      21 06.50
WB5     22.29 226 eP     21 07.80   -0.2
WRA     22.35 226 P      21 09.00    0.4
         0.8s     10.30nm          4.3mb
BRS     22.55 177 iP     21 10.00   -0.6
ASPA    25.17 220 iPc    21 36.50    0.4
         0.9s     21.00nm          4.7mb
                eS     26 03.30
MSZ     42.35 162 P      24 05.00    0.5
      S.D. = 0.6   on   9 of  10 obs.
-------------------------------------
?  FEB  12, 1990  12h 22m 18.79± 2.52s
    4.036 S ±27.3km  150.548 E ±27.1km
   DEPTH = 112.2 ± 18.9 km
   4.7mb (  3 obs.)
 NEW BRITAIN REGION                  (192)

RAB      1.63  95 iPc+   22 48.00    0.4
PMG      6.31 212 eP     23 49.50   -1.4
CTA     16.49 194 iPc    26 06.00    1.1
QIS     19.57 212 eP     26 42.00    1.5
WB5     22.29 224 eP     27 13.50    5.7X
WRA     22.35 224 Pc     27 14.20    5.8X
         0.7s     9.10nm          4.2mb
RMQ     22.39 184 iPd    27 09.20    0.5
BRS     23.32 175 iPc    27 16.00   -1.8
ASPA    25.28 218 iPc    27 42.20    5.8X
         0.9s    32.00nm          4.8mb
PNT     92.92  41 eP     35 20.00   -0.3
         0.5s     4.00nm          5.0mb
      S.D. = 1.7   on   7 of  10 obs.
-------------------------------------
   FEB  12, 1990  12h 25m 33.57± 0.17s
    5.256 S ± 3.3km  151.330 E ± 4.5km
   DEPTH =  14.8km  (  8 depth phases)
   5.5mb ( 30 obs.)  5.2Msz ( 17 obs.)
 NEW BRITAIN REGION                  (192)
      Ms 5.4 (BRK).
      CENTROID, MOMENT TENSOR        (HRV)
      Data Used: GDSN
```

L.P.B.: 14S, 31C
Centroid Location:
Origin Time 12:25:39.7 0.3
Lat 5.25S 0.04 Lon 150.88E 0.04
Dep 21.2 4.1 Half-duration 2.8
Moment Tensor; Scale 10**17 Nm
Mrr=-1.27 0.13 Mtt= 3.95 0.16
Mff=-2.68 0.24 Mrt= 0.07 0.38
Mrf= 2.30 0.51 Mtf=-1.79 0.12
Principal Axes:
T Val= 4.45 Plg= 6 Azm=196
N 0.20 56 294
P -4.65 34 102
Best Double Couple:Mo=4.6*10**17
NP1:Strike=244 Dip=62 Slip=-158
NP2: 144 71 -29

RAB		1.35	38	iPc+	26 00.00 2.2
LAT		4.52	252	eP	26 47.00 3.9X
PMG		5.85	225	iPc+	27 03.00 1.2
				eS	28 12.00
MNDI		7.69	263	eP	27 31.50 3.6X
HNR		9.50	116	eP	27 54.00 1.2
				eS	30 12.00
CTA		15.55	198	iPc+	29 14.90 1.0
		1.2s	360.94nm		5.5mb
				i	29 20.00
				iS	32 04.00
				i(ScS)	41 32.00
TLE		18.50	268	ePd	29 34.90 -16.2X
QIS		19.00	216	iPc	29 56.90 -0.4
		0.8s	167.00nm		5.3mb
GUA		19.73	341	eP	30 06.50 0.7
		0.8s	1283.58nm		6.3mb
				pP	30 09.70 12km
GUMO		19.79	341	eP	30 07.10 0.7
		1.2s	1911.11nm		6.3mb
	Z	19s	3.84um		4.2Msz
				eS	33 42.00
PJG		19.79	341	eP	30 06.60 0.2
SLKI		20.08	261	ePc	30 16.20 6.7X
PVC		20.73	128	iPc	30 17.40 1.2
RMQ		21.26	186	iPc	30 23.00 1.4
		0.6s	248.00nm		5.8mb
				e	33 48.00
				e	38 03.00
MTN		21.31	248	eP	30 19.00 -3.2X
WB5		21.99	227	iPc	30 28.00 -1.1
				eS	34 30.00
				eScP	38 02.80
WRA		22.05	227	Pd	30 29.50 -0.2
		0.6s	115.30nm		5.5mb
BRS		22.06	177	iPd-	30 30.20 0.6
		1.0s	54.00nm		4.9mb
				ePP	31 05.00
				e	33 42.00
				eS	34 33.00
				e(sS)	34 39.00
DZM		22.21	140	iPc	30 31.70 0.4
QLP		22.26	197	eP	30 32.80 1.1
ASPA		24.84	221	iPc	30 56.90 0.0
		0.8s	331.00nm		6.0mb
	Z	17s	11.49um		5.4MszX
				iS	35 22.30
				ScS	42 00.00
				LR	42 33.50
CMS		26.60	191	eP	31 13.00 -0.2
				e	31 15.00 7km
MNI		27.28	283	ePd	31 18.00 -1.6
DAV		28.48	295	eP	31 12.00 -18.4X
BWA		29.15	185	eP	31 36.80 0.5
CAN		29.99	184	eP	31 43.90 0.0
ADE		31.78	200	iPc	31 59.30 -0.4
		1.0s	210.00nm		6.0mb
TOO		32.60	189	eP	32 07.00 0.2
				e	34 53.00
BFD		32.77	193	eP	32 09.00 0.8
				e	32 15.00 21km
MBL		34.39	240	eP	32 20.00 -2.4
TSM		34.53	285	ePd	32 29.50 5.8X
OCP		35.92	304	eP	32 46.00 10.5X
BAG		37.26	306	eP	32 48.00 1.0
				eS	38 34.00
COOL		38.14	224	eP	32 52.30 -1.8
		0.4s	39.00nm		5.5mb
KLB		40.93	226	eP	33 15.20 -2.0
		0.5s	21.00nm		5.1mb
KAGJ		41.16	333	eP	33 20.70 1.6
BAL		41.18	228	eP	33 17.00 -2.3
TCW		41.27	154	P	33 20.40 0.6
MNG		41.35	152	eP	33 21.00 0.5
MRW		41.48	153	eP	33 22.00 0.5
CAW		41.54	153	P	33 22.90 0.8
WDW		41.64	153	P	33 23.10 0.3
PGZ		41.72	151	P	33 23.70 0.2
MTW		41.78	152	P	33 23.90 -0.1
MSZ		41.86	162	Pc	33 26.00 1.4
		0.9s	155.00nm		5.7mb
MOW		41.88	153	P	33 25.20 0.4
BLW		41.94	153	P	33 25.80 0.5
KHZ		41.94	155	P	33 25.50 0.2
WKYJ		41.98	340	eP	33 25.40 -0.4
NWAO		42.03	225	eP	33 24.00 -2.2
		0.7s	21.00nm		5.0mb
	Z	20s	3.10um		5.2Msz
MUN		42.25	227	eP	33 26.50 -1.5
		0.7s	100.00nm		5.7mb
TKSJ		42.31	338	eP	33 29.30 0.9
KUMJ		42.34	334	eP	33 29.80 1.1
IIDJ		42.44	344	eP	33 28.90 -0.6
KAKJ		42.55	347	eP	33 29.20 -1.1
CHJJ		42.68	345	P	33 30.50 -1.0
MAT		43.36	345	eP	33 36.00 -1.0
		1.2s	176.56nm		5.7mb
				eS	40 01.00
MTMJ		43.50	344	P	33 37.20 -1.1
SHNJ		43.58	335	eP	33 39.30 0.5
YONJ		43.60	339	eP	33 39.20 0.2
QZH		43.76	315	eP	33 40.00 -0.3
		1.0s	200.00nm		5.9mb
	Z	24s	2.00um		4.9MszX
	N	14s	2.80um		
	E	14s	2.10um		
				pP	33 47.00 23km
				S	40 12.00
YAMJ		44.46	347	eP	33 45.90 0.0
OFUJ		45.01	349	P	33 50.40 0.1
HKC		45.52	308	eP	33 59.30 4.7X
				eS	40 42.00
SSE		46.21	323	P	34 01.70 1.8
		6.0s	800.00nm		5.9mb X
	Z	20s	2.70um		5.2Msz
	N	16s	1.60um		
	E	16s	0.80um		
				S	40 40.00
				sS	40 56.00
				SS	44 00.00
GZH		46.58	309	P	34 05.00 2.1
		5.0s	1500.00nm		6.3mb X
	Z	20s	2.80um		5.2Msz
	E	18s	2.80um		
AOMJ		46.69	349	eP	34 06.30 2.8
QIZ		47.45	302	eP	34 11.30 1.4
	N	16s	1.30um		
	E	21s	3.20um		
				PP	36 03.00
				S	40 57.00
				SS	41 14.50
NJ2		48.29	322	Pc	34 18.00 1.8
	Z	18s	1.50um		5.0Msz
	N	13s	0.90um		
	E	15s	1.10um		
				pP	34 22.00 13km
				S	41 18.00
MRRJ		48.36	350	eP	34 16.40 -0.2
MCQ		49.48	174	eP	34 27.00 1.9
ASAJ		49.77	352	eP	34 27.60 0.2
WHN		50.18	317	Pc	34 32.50 1.7
		1.5s	100.00nm		5.6mb
	Z	20s	1.90um		5.1Msz
	N	14s	0.70um		
	E	16s	1.00um		
				pP	34 36.50 13km
				eS	41 40.00
IPM		51.18	280	ePd	34 39.50 0.8
DL2		51.83	331	eP	34 44.00 0.8
	Z	23s	13.00um		5.9MszX
	N	16s	1.90um		
				eS	42 04.00
SNG		52.09	283	eP	34 49.00 3.4X
				eS	42 13.00
TIA		52.23	325	Pc	34 46.50 0.2
	Z	20s	1.50um		5.0Msz
	N	16s	13.00um		
	E	16s	1.10um		
				eS	42 06.00
SNY		53.26	334	Pc	34 54.00 0.2
	Z	26s	1.90um		5.0MszX
	N	24s	3.40um		
	E	27s	3.40um		
				S	42 20.00
MDJ		53.35	341	eP	34 53.50 -1.0
	Z	20s	1.80um		5.1Msz
				iS	42 25.00
GYA		53.52	308	P	35 01.60 5.5X
	Z	20s	1.40um		5.0Msz
	N	18s	2.10um		
	E	18s	2.30um		
				S	42 29.00
LOE		53.90	296	eP	35 01.00 2.1
CN2		54.13	337	Pc	35 02.50 2.3
		1.4s	200.00nm		6.0mb
	Z	20s	3.30um		5.4Msz
	N	17s	1.70um		
	E	17s	2.30um		
				PcP	36 02.80
				PP	37 08.00
				S	42 39.00
BJI		55.47	328	eP	35 09.00 -1.1
		2.0s	190.00nm		5.8mb
	Z	22s	2.40um		5.2Msz
	N	13s	0.81um		
				eS	42 52.00
XAN		55.95	317	Pc	35 13.60 -0.1
		6.0s	1100.00nm		6.1mb X
	N	16s	1.40um		
				S	42 53.80
TIY		56.00	323	eP	35 12.30 -1.7
	Z	21s	3.10um		5.4Msz
	N	16s	2.10um		
				S	43 03.00
KMI		56.04	305	Pc	35 15.50 0.8
		4.0s	800.00nm		6.1mb X
	Z	20s	2.10um		5.2Msz
	N	15s	1.40um		
				PP	37 24.50
				S	43 03.00
				sS	43 15.00
CHG		56.87	296	ePc	35 20.60 0.1
		1.0s	10.00nm		4.8mb
				eS	43 38.00
CD2		57.93	312	P	35 28.00 0.2
	Z	20s	1.90um		5.2Msz
				pP	35 33.00 16km
				S	43 29.30
				sS	43 38.00
HHC		58.57	325	Pc	35 33.00 0.8
	Z	22s	2.60um		5.3Msz
	N	20s	2.00um		
				sP	35 50.00
BTO		59.30	324	P	35 38.00 0.7
	N	17s	0.90um		
	E	15s	1.20um		
				eS	43 37.50
				eSS	47 32.00
LZH		60.54	317	eP	35 45.50 -0.5
		1.5s	230.00nm		6.1mb
	Z	24s	1.60um		5.1MszX
	E	13s	0.60um		
				ePP	38 00.00
				ScP	40 28.00
				eS	43 54.00
				eSS	47 50.00
GTA		65.00	318	eP	36 15.80 0.3
	Z	16s	1.20um		5.2MszX
	E	17s	1.20um		
				S	44 58.00
SHL		65.28	301	iP	36 17.20 -0.4
				iS	45 02.00
LSA		67.29	305	P	36 32.00 1.2
GUN		71.11	302	P	36 54.20 0.0
		0.8s	30.00nm		5.5mb
PKI		71.41	301	P	36 55.20 -0.8
KKN		71.58	301	P	36 56.80 -0.1
DMN		71.68	301	P	36 57.40 -0.1
GKN		72.19	301	P	37 00.00 -0.4
WMQ		75.09	318	eP	37 16.00 -0.9
	Z	22s	1.50um		5.2Msz
				eS	46 56.00
HYB		75.26	289	eP	37 19.00 0.7
GBA		75.68	285	Pc	37 22.00 1.4

12d 12h

	0.9s	6.90nm			4.7mb	
SVW	77.81	23	eP	37	31.40	-0.3
NDI	78.69	300	eP	37	39.00	1.8
			eS	47	48.00	
TTA	78.73	22	eP	37	35.90	-0.9
PMR	80.71	25	eP	37	46.10	-1.2
	0.6s	3.70nm			4.6mb	
IMA	81.37	20	eP	37	50.10	-0.9
	0.8s	5.10nm			4.6mb	
KSH	82.10	311	P	37	57.50	2.2
FBA	82.85	22	ePc	37	56.00	-2.5
BRW	83.57	15	eP	38	01.20	-0.8
SPA	84.78	180	iPc	38	09.00	0.6
	1.0s	41.00nm			5.6mb	
			i	38	31.00	81kmX
QUE	87.77	300	eP	38	25.00	1.1
BRK	90.36	52	e(P)	38	34.60	-1.1
WDC	90.45	49	ePc	38	36.40	0.3
MHC	90.79	53	ePc	38	38.00	0.1
Z	20s	2.00um			5.6Msz	
N	20s	0.50um				
E	20s	1.90um				
			iS	49	33.00	
			e	53	32.00	
			eSS	55	08.00	
			eLQ	02	45.00	
			eLR	07	16.00	
ORV	91.13	51	ePc	38	38.50	-0.8
MIN	91.13	50	eP	38	39.00	-0.4
BCH	91.84	55	P	38	43.00	0.2
CMB	91.85	52	ePc	38	42.60	-0.1
FRI	92.30	53	ePc	38	45.10	0.5
ISA	93.19	55	eP	38	47.00	-1.9
PNT	93.33	41	eP	38	48.00	-1.2
MWC	93.43	56	eP	38	50.00	-0.2
SBB	93.65	56	eP	38	50.00	-1.1
KVN	93.72	51	P	38	50.50	-0.9
CLC	93.91	55	eP	38	52.00	-0.2
RVR	93.98	56	eP	38	53.00	0.5
TNP	94.35	52	P	38	53.80	-0.6
	0.9s	12.70nm			5.3mb	
PLM	94.36	57	eP	38	55.00	0.5
BAR	94.48	58	eP	38	57.00	2.1
GSC	94.52	55	eP	38	55.00	-0.1
MBC	94.90	14	eP	38	54.00	-1.9
	0.8s	8.00nm			5.2mb	
NEW	94.92	42	P	38	55.00	-1.6
GLA	96.05	57	eP	39	04.00	1.9
			e	39	07.80	12km
EDM	97.37	37	ePc	39	07.50	-0.1
SES	98.89	40	eP	39	14.00	-0.5
BW06	100.24	48	Pdiff	39	19.00	-2.1
	1.3s	17.62nm			5.4mb	
GOL	103.57	51	Pdiff	39	35.00	-1.1
	0.7s	2.91nm			5.2mb	
RSSD	104.14	46	Pdiff	39	37.00	-1.4
FRB	114.92	18	ePKP	44	12.00	-3.1X
SLR	116.78	238	ePKP	44	16.50	-3.6X
NB2	116.83	340	PKP	44	17.00	-1.9
	1.0s	5.90nm				
PRY	117.02	236	ePKP	44	18.50	-2.0
BUL	118.33	244	iPKPd	44	21.70	-1.4
	1.0s	19.00nm				
			i	44	25.90	
KRI	118.37	248	iPKPd	44	21.50	-1.8
BRG	122.33	329	ePKP	44	27.30	-2.3
	1.0s	10.00nm				
BCAO	132.96	271	ePKPd	44	43.90	-7.3X
	0.7s	9.00nm				
			id	44	52.10	
			ic	45	08.10	
LPB	135.40	120	PKP	44	56.00	-0.2
			i	48	30.00	
ZOBO	135.50	119	ePKP	44	41.00	-15.6X
			i	44	57.00	
			LR	31	00.00	
CCH	136.69	122	PKP	44	54.80	-3.7X
BPA	145.46	67	ePKP	45	11.99	-1.7
TCE	146.81	79	ePKP	45	16.31	0.3
SVB	146.90	74	ePKP	45	16.00	-0.1
SLB	147.00	73	ePKP	45	15.98	-0.3
TPP	147.15	79	ePKP	45	18.52	2.0
TRN	147.16	79	ePKP	45	17.58	1.1
TBH	147.51	79	ePKP	45	20.15	3.1X
TPR	147.70	77	ePKP	45	19.87	2.5
BOT	147.76	77	ePKP	45	19.93	2.5
SHGH	151.50	273	ePKP	45	29.00	5.8X
LEGH	151.64	272	ePKP	45	29.00	5.5X
KOGH	151.70	273	ePKP	45	29.00	5.4X
BAO	151.77	138	ePKP	45	21.20	-2.5
WEGH	151.78	272	ePKP	45	30.00	6.3X
KUK	151.83	273	ePKP	45	30.00	6.3X
WIGH	152.07	272	ePKP	45	31.00	6.9X
KIC	156.17	274	PKP	45	28.80	-0.9
LIC	156.46	273	PKP	45	29.10	-1.0
Z	20s	0.59um			5.4Msz	
LKO	156.72	282	PKP	45	31.10	0.6
CAI	165.56	144	iPKPc	45	39.90	0.4
S.D. = 1.2 on 147 of 170 obs.						

? FEB 12, 1990 12h 38m 29.90± 6.18s
4.584 S ±58.8km 134.925 E ±13.2km
DEPTH = 33.0km (normal)
4.7mb (2 obs.)
WEST IRIAN REGION (196)

SLKI	4.94	227	iPc	39	43.60	-0.1
MTN	9.03	204	iPd	40	41.30	0.3
			eS	42	31.00	
PMG	13.05	112	eP	42	16.00	40.4X
WB5	15.21	182	eP	42	03.30	-0.8
			i	42	09.80	
			eS	44	58.70	
WRA	15.28	182	Pc	42	10.90	6.0X
	0.7s	17.00nm			4.4mb	
QIS	16.52	164	eP	42	21.00	0.2
CTA	18.95	145	eP	42	51.00	-0.1
ASPA	19.00	183	iPd	42	52.10	0.5
	0.7s	74.00nm			5.0mb	
			eS	46	07.70	
S.D. = 0.6 on 6 of 8 obs.						

? FEB 12, 1990 12h 43m 49.36± 1.98s
3.674 S ±19.9km 134.821 E ±19.7km
DEPTH = 33.0km (normal)
4.5mb (4 obs.)
WEST IRIAN REGION (196)

SLKI	5.53	219	iPc	45	13.00	1.4
MTN	9.82	202	eP	46	11.00	-0.4
			eS	47	59.00	
WB5	16.11	182	eP	47	33.00	-2.2
			e	47	39.10	
			eS	50	24.00	
WRA	16.18	182	Pd	47	40.40	4.4X
	0.8s	35.40nm			4.5mb	
QIS	17.42	165	eP	47	51.00	-0.6
CTA	19.76	147	iPc	48	21.10	1.4
	1.0s	15.00nm			4.3mb	
ASPA	19.90	182	iPd	48	22.10	1.0
	0.8s	119.00nm			5.3mb	
			iS	51	56.10	
GBA	59.46	288	Pd	53	51.20	-0.6
	0.6s	1.80nm			4.4mb	
S.D. = 1.6 on 7 of 8 obs.						

FEB 12, 1990 12h 54m 28.92± 0.46s
44.397 N ± 4.4km 7.401 E ± 4.3km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.9 (GEN).

STV	0.16	200	P	54	32.46	-0.3
			S	54	34.61	
ENR	0.17	175	P	54	32.61	-0.3
			S	54	35.17	
PZZ	0.24	297	P	54	34.25	0.1
			S	54	38.04	
ROB	0.35	107	P	54	35.84	-0.4
			S	54	40.84	
IMI	0.60	144	P	54	41.53	0.4
FIN	0.61	108	P	54	41.32	0.1
RRL	0.68	320	P	54	43.00	0.4
RSP	0.76	352	P	54	43.38	-0.5
PCP	0.83	80	P	54	44.84	-0.2
OHR	10.39	104	ePn	57	18.10	17.1X
VAY	11.55	100	ePn	57	17.40	0.6
PLG	12.52	103	ePn	57	23.00	-7.0X
S.D. = 0.4 on 10 of 12 obs.						

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* FEB 12, 1990 13h 04m 38.09± 1.20s
14.252 S ±11.2km 167.283 E ±20.0km
DEPTH = 10.0km (geophysicist)
4.5mb (3 obs.) 4.8Msz (1 obs.)

VANUATU ISLANDS (186)

DZM	7.82	186	iPc	06	33.20	-1.5
HNR	8.63	303	eP	06	45.00	-1.0
			e	08	23.00	
PMG	20.28	282	eP	09	18.00	1.3
CTA	20.90	251	iPc	09	24.80	1.5
	1.2s	28.13nm			4.5mb	
RMQ	21.18	232	iPc	09	28.20	2.2
CMS	26.09	225	eP	10	15.00	1.2
WB5	31.92	255	eP	11	04.80	-1.5
WRA	31.95	255	Pd	11	05.20	-1.4
	0.6s	1.30nm			4.0mb	
ASPA	32.86	248	iPd	11	12.80	-1.7
	1.3s	18.00nm			4.8mb	
CN2	69.25	329	eP	15	47.80	0.5
GYA	71.46	305	P	16	02.20	0.9
TIY	72.92	317	eP	16	09.00	-0.7
Z	22s	0.60um			4.8Msz	
XAN	73.38	312	eP	16	11.00	-1.4
KMI	74.07	302	eP	16	16.00	-0.8
CHTO	74.89	294	eP	16	20.50	-0.9
LZH	78.01	312	eP	16	40.50	1.7
GTA	82.35	314	eP	17	01.80	0.0
BCAO	147.70	255	ePKPd	24	24.20	1.5
	0.5s	8.00nm				
			id	24	27.40	
			ic	24	43.50	
S.D. = 1.4 on 18 of 18 obs.						

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* FEB 12, 1990 13h 28m 08.57± 1.43s
9.617 N ± 9.4km 124.591 E ±13.3km
DEPTH = 64.2 ± 15.5 km
4.7mb (4 obs.) 4.3Msz (1 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV	2.69	159	eP	28	51.50	1.1
BAG	7.80	330	eP	30	01.00	-1.1
	1.4s	232.56nm			5.7mb	
QIZ	17.07	305	eP	32	04.30	-0.2
SSE	21.61	352	eP	32	55.00	0.1
Z	16s	0.40um			3.9MszX	
			sS	37	08.00	
WHN	22.91	337	eP	33	10.50	2.8
NJ2	22.95	347	Pc	33	06.00	-2.1
LOE	23.52	292	eP	33	14.00	0.2
IPM	23.91	260	ePd	33	19.10	1.5
CHG	26.46	293	eP	33	40.80	-0.8
XAN	28.25	332	P	33	57.00	-0.7
CD2	28.72	320	P	34	02.40	0.4
BJI	31.21	347	eP	34	23.50	-0.4
LZH	32.40	328	eP	34	35.00	0.4
	2.0s	47.00nm			5.0mb	
Z	18s	0.50um			4.3Msz	
HHC	33.18	342	eP	34	41.60	0.3
ASPA	34.31	165	eP	34	48.50	-2.6
	0.6s	4.00nm			4.5mb	
SHL	34.85	301	iP	34	55.00	-0.9
GTA	37.00	327	eP	35	14.20	0.3
LSA	37.08	307	eP	35	16.00	0.9
GUN	40.69	302	P	35	45.00	0.0
PKI	40.98	301	P	35	46.60	-0.7
KKN	41.15	301	P	35	48.10	-0.5
DMN	41.24	301	P	35	49.60	0.2
SUF	85.38	333	eP	40	40.70	0.9
MBC	86.70	12	eP	40	47.50	1.3
	1.0s	4.00nm			4.5mb	
S.D. = 1.2 on 24 of 24 obs.						

FEB 12, 1990 13h 44m 29.22± 0.21s
44.130 N ± 2.5km 128.926 W ± 2.4km
DEPTH = 10.0km (geophysicist)
5.1mb (20 obs.) 5.2Msz (4 obs.)
OFF COAST OF OREGON (30)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 28C
Centroid Location:
Origin Time 13:44:31.7 0.6
Lat 44.15N FIX;Lon 128.91W FIX
Dep 15.0 FIX Half-duration 2.0
Moment Tensor; Scale 10**17 Nm
Mrr=-0.45 0.16 Mtt=-1.34 0.23
Mff= 1.79 0.14 Mrt= 0.00 0.00
Mrf= 0.00 0.00 Mtf= 0.93 0.14
Principal Axes:
T Val= 2.04 Plg= 0 Azm=105

N -0.45 90 180
P -1.59 0 15
Best Double Couple:Mo=1.8*10**17
NP1:Strike=150 Dip=90 Slip=-180
NP2: 240 90 0

GROR 3.94 70 eP 45 29.89 -1.3
KMOR 4.15 67 eP 45 34.30 0.3
NLO 4.34 61 eP 45 37.81 1.0
ONR 4.55 51 eP 45 39.74 0.1
BMW 4.65 58 eP 45 41.43 0.2
OBH 4.77 46 eP 45 43.36 0.5
PGO 4.80 72 eP 45 43.29 0.1
eS 46 42.96
RVW 4.82 63 eP 45 43.39 -0.1
OOW 4.89 41 eP 45 44.74 0.2
FHC 4.94 131 eP 45 43.90 -1.4
CPW 4.96 53 eP 45 45.07 -0.5
OFK 4.97 38 eP 45 45.63 0.0
LVP 5.00 65 eP 45 46.39 0.2
SMW 5.05 49 eP 45 47.08 0.3
OTR 5.08 37 eP 45 47.06 -0.1
CZM 5.08 61 eP 45 46.70 -0.6
FL2 5.09 64 eP 45 47.75 0.3
APW 5.09 58 eP 45 47.03 -0.3
VLMM 5.10 72 eP 45 46.93 -0.6
MTMW 5.12 66 eP 45 47.48 -0.4
OSP 5.13 34 eP 45 47.98 0.1
ERK 5.14 63 eP 45 48.08 0.0
OBC 5.16 39 eP 45 48.88 0.5
SHW 5.16 64 eP 45 48.66 0.2
OSD 5.18 43 eP 45 48.38 -0.5
JLK 5.20 65 eP 45 49.27 0.3
TDH 5.22 75 eP 45 48.35 -0.9
ESD 5.22 64 eP 45 49.87 0.5
CDFW 5.26 65 eP 45 49.62 -0.2
TCO 5.28 88 eP 45 49.04 -1.1
VBEM 5.32 77 eP 45 50.49 -0.3
GMW 5.48 49 eP 45 52.00 -1.0
LON 5.65 60 eP 45 55.00 -0.4
LBFM 5.88 116 eP 46 00.00 1.3
WDC 5.91 125 eP 46 00.30 1.4
MIN 6.62 122 ePc 46 09.50 0.4
ORV 7.18 127 ePc 46 17.50 0.7
PNT 8.23 48 eP 46 31.00 -0.5
0.7s 104.00nm 6.2mb X
DPW 8.35 60 eP 46 31.80 -1.4
MHC 8.75 138 e(P) 46 41.40 2.6
ARN 8.79 138 eP 46 38.00 -1.3
CMB 8.87 130 ePc 46 41.20 0.9
NEW 9.17 59 eP 46 43.00 -1.5
KVN 9.56 118 eP 46 51.50 1.4
LLA 9.66 138 e(P) 46 51.10 -0.2
FRI 10.00 132 ePc 46 56.00 0.2
PRI 10.18 139 e(P) 47 03.10 4.6X
TNP 10.70 120 eP 47 06.00 0.3
ISA 11.65 133 eP 47 17.00 -1.6
LRM 11.79 76 eP 47 20.70 0.0
CLC 12.01 130 eP 47 24.00 0.6
PTI 12.09 90 eP 47 26.00 1.4
DUG 12.58 103 eP 47 31.50 0.3
SBB 12.74 134 eP 47 32.00 -1.2
GSC 12.83 129 eP 47 35.00 0.6
MWC 12.99 136 eP 47 37.00 0.4
DAU 13.60 100 eP 47 45.60 0.7
SES 13.65 56 eP 47 44.00 -1.2
1.4s 231.00nm 5.9mb
EDM 13.71 43 ePc 47 45.50 -0.4
BW06 14.14 89 eP 47 52.50 0.7
PLM 14.28 135 eP 47 52.00 -1.6
BAR 14.91 136 eP 48 01.00 -0.8
GLA 15.59 130 eP 48 10.00 -0.6
RSSD 17.86 81 eP 48 40.00 0.6
GOL 18.06 96 eP 48 42.00 0.0
GLD 18.15 96 eP 48 43.00 -0.1
ALQ 19.56 110 iPd 49 00.70 0.5
2.0s 338.24nm 5.3mb
Z 20s 11.17um 6.5Msz
KDC 20.01 321 eP 49 05.00 0.4
0.8s 17.24nm 4.4mb
FFC 20.35 49 iPd 49 08.00 -0.2
1.0s 217.00nm 5.5mb
PMR 21.16 333 eP 49 18.00 1.5
0.8s 31.03nm 4.7mb
SVW 23.22 326 ePc 49 39.20 2.2
FBA 23.33 340 eP 49 39.00 1.0
1.0s 16.25nm 4.5mb

TTA 24.45 330 eP 49 50.00 1.0
0.9s 31.25nm 4.9mb
RSON 24.56 62 eP 49 50.20 0.2
1.0s 81.34nm 5.3mb
FKO 25.71 99 e(P) 50 02.50 1.4
IMA 25.81 337 eP 50 03.00 1.1
1.0s 27.50nm 4.9mb
SIO 26.24 97 eP 50 06.30 0.3
e 50 13.30
TUL 26.53 97 eP 50 10.30 1.6
1.4s 106.70nm 5.3mb
i 50 18.20
i 50 25.50
LR 57 26.00
LNO 26.53 97 e(P) 50 09.90 1.3
UYO 28.34 99 e(P) 50 23.50 -1.7
BRW 30.44 343 eP 50 44.90 1.4
MBC 32.47 4 eP 51 02.00 0.7
0.8s 16.00nm 5.0mb
HON 33.11 236 P 51 13.00 5.6X
Z 20s 5.32um 5.2Msz
RSCP 34.01 89 eP 51 15.00 -0.2
1.0s 113.88nm 5.8mb
BLA 36.99 84 eP 51 41.00 0.5
1.0s 35.00nm 5.1mb
CVL 38.05 81 eP 51 50.00 0.6
RSNY 38.29 70 eP 51 51.00 -0.3
Z 20s 5.65um 5.4Msz
FRB 38.76 38 eP 51 56.00 1.0
WNY 38.80 70 eP 51 55.40 -0.2
HBVT 39.35 69 eP 52 00.00 -0.1
SCH 40.48 52 eP 52 10.00 0.6
DAG 51.83 16 iPd 53 38.20 -0.7
0.6s 9.33nm 4.9mb
SOD 67.29 10 iP 55 25.80 0.2
MAT 67.52 299 eP 55 26.00 -1.6
0.9s 23.53nm 5.4mb
eS 04 12.00
CN2 70.24 312 eP 55 44.60 0.4
Z 34s 2.10um 5.2MszX
epP 55 50.00 17kmX
eS 04 48.00
NB2 70.30 19 P 55 44.00 -0.4
1.0s 8.70nm 4.8mb
SNY 72.59 312 eP 55 52.80 -5.5X
Z 38s 2.00um 5.1MszX
N 40s 13.00um
E 34s 1.20um
eS 05 24.00
NUR 73.51 13 eP 56 03.00 -0.4
DL2 75.70 311 eP 56 16.00 -0.4
Z 32s 13.00um 6.0MszX
eS 05 56.00
BJI 77.77 315 eP 56 26.50 -1.4
Z 24s 0.96um 5.0MszX
eS 06 20.00
CLL 79.38 23 eP 56 37.00 0.5
1.2s 10.00nm 4.7mb
HHC 79.45 318 eP 56 37.00 -0.3
ARE 79.83 125 iPc 56 40.80 1.0
BRG 80.03 23 eP 56 38.00 -2.0
TIA 80.11 311 Pc 56 40.50 -0.2
BTO 80.39 319 eP 56 42.50 0.2
N 16s 1.00um
E 16s 1.40um
KSP 80.70 21 eP 56 43.50 -0.1
PRU 81.00 23 eP 56 45.50 0.3
TIY 81.44 315 eP 56 46.40 -1.4
Z 24s 0.82um 5.0MszX
E 15s 0.60um
KHC 81.49 24 P 56 48.00 0.2
SSE 81.58 305 Pd 56 48.20 -0.3
E 12s 0.20um
pP 56 55.50 23kmX
eS 06 54.00
sS 07 05.00
eSS 12 12.00
ZOBO 81.71 122 iPc 56 48.70 -1.3
1.0s 28.00nm 5.3mb
Z 20s 0.38um 4.8Msz
LR 39 40.00
LPB 81.93 122 P 56 51.00 0.1
NJ2 82.23 307 Pc 56 50.50 -1.4
KRA 82.35 20 eP 56 52.40 0.2
e 57 00.30
KBA 83.27 25 iPc 56 58.30 1.0
1.0s 11.20nm 5.0mb

ZST 83.33 22 eP 56 58.20 0.9
CCH 83.77 121 P 56 58.00 -2.3
WHN 85.90 309 eP 57 09.50 -1.0
GTA 85.94 324 Pd 57 10.60 -0.2
Z 20s 0.70um 5.1Msz
SKS 07 36.00
XAN 86.08 315 P 57 10.80 -0.6
WMQ 86.54 334 P 57 14.00 0.4
PP 00 34.50
LZH 86.90 320 eP 57 16.00 0.4
1.5s 38.00nm 5.4mb
Z 24s 13.00um 6.3MszX
pP 57 19.00 9kmX
CD2 91.18 317 eP 57 35.20 -0.5
GYA 93.29 312 P 57 45.60 0.0
BCAO 123.50 40 ePKPd 03 28.00 -0.7
0.5s 4.00nm
KRI 147.30 40 iPKPd 04 11.80 -0.7
BUL 149.63 45 iPKPc 04 15.90 -0.2
1.0s 16.00nm
SLR 153.95 53 ePKP 04 23.00 0.8
1.0s 10.00nm
PRY 154.38 56 ePKP 04 22.70 -0.1
BLF 155.16 61 ePKP 04 35.00 11.3X
HVD 155.72 65 ePKP 04 39.00 14.5X
S.D. = 0.9 on 127 of 132 obs.

& FEB 12, 1990 14h 30m 10.28s
59.353 N 154.443 W
DEPTH = 161.1km
SOUTHERN ALASKA (2)
<AGS-P>.

PDB 0.45 16 iP 30 31.95 0.6
eS 30 48.97
CDD 0.59 135 iP 30 32.69 -1.0
eS 30 50.26
RED 1.36 38 iP 30 38.74 -1.0
RDT 1.60 39 iP 30 41.05 -1.1
NNL 1.74 65 eP 30 43.91 0.4
SVW 1.86 342 eP 30 43.65 -1.2
CKL 2.13 29 eP 30 47.16 -0.9
NKA 2.13 48 eP 30 49.15 1.2
BGL 2.17 27 eP 30 47.87 -0.7
SPU 2.19 32 eP 30 47.54 -1.2
CRP 2.23 30 eP 30 48.57 -0.8
CGLM 2.31 31 eP 30 50.23 0.1
NCG 2.35 28 eP 30 49.94 -0.8
SLKM 2.42 60 eP 30 50.63 -0.8
eS 31 20.99
SEW 2.64 71 eP 30 53.03 -1.0
SUA 2.80 39 eP 30 55.11 -1.1
SKT 3.00 27 eP 30 57.83 -0.8
PWA 3.23 42 eP 31 00.74 -0.7
PLRM 3.46 47 eP 31 01.32 -3.1
GLI 3.98 64 eP 31 09.99 -1.2
NCA 4.59 51 eP 31 16.69 -2.5
21 obs. assocloted

? FEB 12, 1990 15h 12m 33.65± 3.89s
38.821 S ±36.4km 175.902 E ±21.0km
DEPTH = 33.0km (normal)
NORTH ISLAND, NEW ZEALAND (159)

WHH 0.47 98 eP 12 43.90 0.0
PGZ 1.82 171 eP 13 02.90 -0.2
MNG 1.82 190 eP 13 05.00 1.8
eS 14 24.50
MTW 2.36 187 P 13 09.60 -1.2
WDW 2.54 196 eP 13 12.80 -0.6
MRW 2.58 201 P 13 14.30 0.4
MOW 2.64 191 P 13 15.20 0.3
TCW 2.70 207 P 13 16.20 0.6
KHZ 4.02 206 eP 13 33.30 -1.1
S.D. = 1.1 on 9 of 9 obs.

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* FEB 12, 1990 15h 24m 30.33± 1.14s
31.829 S ±13.5km 68.016 W ± 9.2km
DEPTH = 10.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

CFA 0.29 319 i(P) 24 36.80 0.3
RTCV 0.45 266 iPc 24 39.40 0.0
RTLL 0.63 322 iPc 24 41.50 -1.5
RTCB 0.75 297 iP 24 45.00 -0.1
eS 24 56.00
MRA 2.04 107 ePc 25 05.00 -0.1

12d 15h

			S	25	30.70	
RTRS	2.07	323	iPd	25	06.90	1.4
			S	25	34.30	
RFA	2.96	187	e(P)	25	24.50	6.2X
			S	26	04.70	

S.D. = 1.2 on 6 of 7 obs.

FEB 12, 1990 15h 42m 06.56± 0.47s
36.131 N ± 5.7km 27.153 E ± 5.7km
DEPTH = 10.0km (geophysicist)
4.5mb (5 obs.)
DODECANESE ISLANDS (369)
ML 4.3 (ATH), 4.2 (CSS).

KAP	0.58	178	ePg	42	19.60	1.3
YER	1.35	42	iPn	42	31.00	-0.5
NPS	1.52	236	ePb	42	35.00	1.1
SMG	1.59	351	ePb	42	33.60	-1.2
KSL	1.97	90	ePn	42	41.70	1.4
IZM	2.26	2	ePn	42	42.00	-2.6
ELL	2.31	74	iPn	42	47.00	1.7
VAM	2.51	254	ePn	42	49.50	1.5
KHL	2.89	40	ePn	42	52.00	-1.6
PRK	3.19	348	ePg	43	06.00	8.4X
ATH	3.31	305	ePg	43	09.00	9.6X
DST	3.66	18	ePn	43	06.50	2.0
EZN	3.75	350	iPn	43	02.60	-3.0X
EDC	4.25	7	ePn	43	14.50	1.8
BNT	4.26	8	ePn	43	16.00	3.1X
NEO	4.44	317	ePn	43	14.60	-1.0
YLV	4.76	21	ePn	43	21.00	0.9
GPA	4.84	30	ePn	43	31.00	9.8X
RDO	5.16	346	ePn	43	24.00	-1.7
CSS	5.17	101	eP	43	26.30	0.5
			eSn	44	26.50	
BBTK	5.77	48	iP	43	35.00	0.6
KZN	5.94	316	ePg	43	20.40	-16.4X
VAY	6.30	327	eP	43	42.00	0.3
SKO	7.33	324	eP	43	52.00	-4.2X
MLR	9.40	355	eP	44	27.00	2.0
KBA	15.02	321	ePc	45	45.00	4.4X
	1.3s		32.80nm			4.6mb
KHC	16.35	327	iPc	45	59.10	1.4
KSP	16.66	335	eP	46	03.50	2.0
LPG	18.01	308	eP	46	18.50	-0.3
	1.0s		14.00nm			4.0mb
LPL	18.03	308	eP	46	18.40	-0.6
	0.8s		4.05nm			3.6mb
SSF	20.70	309	eP	46	45.90	-3.4X
	1.0s		33.00nm			4.6mb
MAIO	26.03	80	eP	47	44.00	2.4
BCAO	32.53	196	iPc	48	40.10	0.3
	0.7s		14.00nm			5.0mb
			id	48	44.20	
LKO	39.80	236	P	49	42.18	0.6
TIC	41.57	233	P	49	54.80	-1.3
KIC	41.60	232	P	49	55.00	-1.4
LIC	41.89	232	P	49	57.50	-1.2
GKN	48.78	82	P	50	52.20	-1.7
DMN	49.32	83	P	50	56.80	-1.4
KKN	49.38	82	P	50	56.80	-1.8
PKI	49.58	83	P	50	58.50	-1.8
GUN	49.81	82	P	51	00.40	-1.7

S.D. = 1.5 on 33 of 42 obs.

? FEB 12, 1990 16h 09m 15.48± 1.06s
11.296 N ±10.3km 61.367 W ±12.0km
DEPTH = 33.0km (normal)
WINDWARD ISLANDS (95)
MD 2.7 (TRN).

TPR	0.59	101	eP	09	27.75	0.4
			eS	09	36.60	
TRN	0.65	183	eP	09	28.13	0.0
			eS	09	37.25	
BOT	0.65	101	eP	09	27.81	-0.4
GRW	0.91	341	eP	09	31.91	0.0
			eS	09	45.24	

S.D. = 0.5 on 4 of 4 obs.

& FEB 12, 1990 16h 49m 07.70s
37.053 N 121.887 W
DEPTH = 11.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.7 (BRK).

GCC	0.09	255	iPd	49	10.00	-0.4
			i	49	13.40	
MHC	0.35	34	iPd	49	14.90	-0.1
			iS	49	20.20	
ARN	0.41	44	iPd	49	15.80	-0.3
SAO	0.46	129	iPd	49	15.80	-1.2
PCC	0.60	319	ePc	49	18.70	-0.9
PRS	0.83	150	ePc	49	22.90	-0.8
BKS	0.87	341	eP	49	23.30	-1.0
BRK	0.87	340	eP	49	23.70	-0.6
			eS	49	35.30	
LLA	0.87	120	ePd	49	23.60	-0.8
ZSP	0.94	342	ePc	49	25.10	-0.4
			e(S)	49	38.70	
PRI	1.34	132	e(P)	49	32.00	-0.4
CMB	1.54	50	e(P)	49	34.00	-1.2
KVN	3.59	55	eP	50	11.00	6.3

13 obs. associated

? FEB 12, 1990 17h 18m 00.97± 6.17s
31.262 S ±25.0km 68.476 W ±40.4km
DEPTH = 105.7 ± 57.4 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.07	175	iPc	18	15.90	-0.2
RTCB	0.36	231	eP	18	17.00	0.2
			eS	18	28.00	
CFA	0.40	150	iPd	18	17.20	0.2
RTCV	0.60	185	iPc	18	18.20	-0.2
			S	18	31.00	
RTRS	1.38	322	iPc	18	26.40	0.0

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

? FEB 12, 1990 19h 50m 59.34± 5.23s
36.159 N ±36.6km 141.536 E ±35.7km
DEPTH = 10.0km (geophysicist)
NEAR EAST COAST OF HONSHU, JAPAN(228)

KAKJ	1.10	273	P	51	20.10	0.1
CHJJ	2.06	268	P	51	34.20	-0.2
			eS	52	04.70	
YAMJ	2.34	330	eP	51	38.30	-0.1
MAT	2.71	279	eP	51	44.00	0.2
			eS	52	24.00	
OFUJ	2.92	2	eP	51	46.70	0.1

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

? FEB 12, 1990 19h 53m 43.82± 4.71s
15.317 N ±15.5km 61.229 W ±38.0km
DEPTH = 116.7 ± 47.9 km
LEEWARD ISLANDS (92)

BBL	0.32	311	ePd	54	01.33	-0.4
FDF	0.58	172	iPd	54	02.54	0.3
			S	54	18.90	
MGG	0.60	352	ePd	54	02.63	0.3
CRM	0.64	152	iPd	54	02.44	-0.1
			S	54	19.20	
DOG	0.80	332	ePd	54	04.07	0.1
BIM	0.81	169	eP	54	04.11	0.0
			S	54	21.80	
MVM	0.82	157	iPd	54	04.07	-0.1
PAG	0.83	329	ePd	54	04.42	0.1
			S	54	20.50	
SEG	1.11	346	ePd	54	06.79	-0.2
			S	54	24.90	

S.D. = 0.3 on 9 of 9 obs.

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* FEB 12, 1990 20h 23m 30 19± 0.64s
51.193 N ±15.6km 179.242 W ± 5.6km
DEPTH = 33.0km (normal)
4.8mb (16 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS. (7)
ML 5.0 (PMR).

ADK	1.74	66	ePd	24	00.90	2.4
SMY	4.39	293	eP	24	37.80	1.5
SVW	16.39	44	eP	27	23.00	4.0X
KDC	16.80	57	e(P)	27	23.00	-1.2
TTA	17.13	38	eP	27	30.50	2.1
	0.8s		11.21nm			4.0mb
PMS	19.15	47	eP	27	52.00	-1.2
PMR	19.46	46	eP	27	57.00	0.4
	0.7s		17.08nm			4.4mb
IMA	19.75	31	eP	27	59.70	-0.2
	0.6s		5.23nm			4.0mb
FBA	21.26	38	eP	28	14.80	-0.6
	0.7s		13.44nm			4.5mb
MBC	33.88	22	eP	30	12.00	0.7
	0.7s		7.00nm			4.7mb
LON	37.14	74	eP	30	41.00	1.7
PNT	37.26	69	eP	30	42.00	1.7
	0.5s		8.00nm			4.8mb
CN2	37.31	281	eP	30	39.60	-1.1
EDM	39.15	60	iPd	30	56.30	0.2
	0.6s		17.00nm			5.0mb
NEW	39.21	69	eP	30	57.00	0.3
SNY	39.53	279	Pc	31	00.00	0.7
LBFM	39.91	81	eP	31	07.50	4.8X
SES	41.69	63	eP	31	16.00	-1.0
BJI	45.14	282	eP	31	45.50	0.4
BW06	46.63	72	eP	31	57.70	0.6
RSON	50.79	55	eP	32	27.30	-1.6
GOL	51.00	72	eP	32	31.50	0.5
FRB	53.33	31	eP	32	47.00	-0.7
LZH	55.17	286	eP	33	00.50	-1.4
	1.5s		19.00nm			4.9mb
GTA	55.38	292	iPc	33	03.00	-0.3
WMQ	59.21	303	P	33	30.00	-0.3
SCH	60.35	38	eP	33	36.00	-1.9
PTN	64.35	50	eP	34	07.00	2.4
SUF	64.67	347	eP	34	06.10	-0.3
	0.6s		4.30nm			4.7mb
RSCP	65.31	64	eP	34	10.00	-1.0
HBVT	65.43	49	eP	34	09.50	-2.1
CBM	65.76	45	eP	34	11.50	-2.1
GBTN	66.03	63	eP	34	15.00	-0.6
BLA	66.99	59	eP	34	21.30	-0.4
NUR	67.00	347	eP	34	19.00	-2.3
LSA	67.24	289	P	34	25.00	1.1
NB2	67.81	355	P	34	25.60	-0.8
	0.7s		3.50nm			4.6mb
KSH	68.43	306	P	34	32.00	1.2
HFS	68.54	353	eP	34	29.50	-1.4
	0.5s		6.60nm			5.0mb
JSC	68.69	62	eP	34	32.00	-0.3
SHL	69.83	286	iP	34	38.50	-1.1
GUN	71.67	292	P	34	51.60	0.7
KKN	72.11	292	P	34	53.80	0.4
	0.6s		30.00nm			5.5mb
PKI	72.20	292	P	34	54.60	0.5
	0.6s		16.00nm			5.2mb
GKN	72.32	293	P	34	55.00	0.4
	0.6s		27.00nm			5.4mb
DMN	72.35	292	P	34	55.40	0.6
MEM	78.48	357	Pc	35	29.70	0.8
DOU	79.04	357	P	35	32.00	0.0
GRF	79.10	353	eP	35	33.00	0.6
KHC	79.46	351	eP	35	35.20	0.8
ZST	80.00	349	eP	35	37.70	0.4
MLR	81.27	342	ePd	35	46.00	1.8
KBA	81.51	351	iPc	35	46.20	0.7
	0.7s		21.80nm			5.3mb
HYB	84.02	290	eP	35	58.50	-0.1
GBA	87.67	289	Pc	36	14.00	-2.6
	0.6s		2.50nm			4.7mb
SLR	147.03	310	iPKPd	43	11.60	2.7X
	1.0s		15.00nm			
KSR	147.80	312	ePKP	43	11.00	0.8
PRY	148.42	310	ePKP	43	14.20	3.1X
HVD	152.43	309	ePKP	43	23.00	6.0X

S.D. = 1.2 on 54 of 59 obs.

% FEB 12, 1990 20h 48m 06.37± 1.40s
39.271 N ± 7.4km 16.731 E ±15.0km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

TDS	0.49	322	Pc	48	16.70	0.3
			eSg	48	21.60	
CSI	0.61	326	P	48	18.80	0.1
ORI	0.82	345	P	48	23.90	1.6
MMN	0.84	317	P	48	21.80	-0.8
MGR	1.25	314	P	48	29.00	-0.7
			eSg	48	45.20	
SOI	1.31	204	P	48	30.80	0.2
			eSg	48	50.40	
BRT	1.64	13	P	48	34.50	-0.9

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

% FEB 12, 1990 20h 51m 01.46± 1.76s
39.239 N ± 7.1km 16.519 E ±17.4km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

CZI	0.30	266	P	51 08.20	0.5
TDS	0.44	342	P	51 10.60	0.1
			eSg	51 15.60	
CSI	0.57	342	P	51 13.70	0.7
MGR	1.17	321	P	51 22.00	-1.2
			eSg	51 39.00	
SOI	1.22	197	P	51 24.00	-0.1

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

? FEB 12, 1990 22h 06m 26.97± 3.70s
39.756 N ±27.9km 20.698 E ±11.1km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)

LSK	0.40	349	iPgc	06 34.50	-0.7
TPE	0.75	316	ePg	06 42.00	0.3
KBN	0.87	6	ePg	06 44.60	0.9
BERA	1.11	329	ePg	06 47.30	-0.4
OHR	1.36	3	ePn	06 52.20	0.3
VAY	2.12	42	ePn	07 02.40	-0.4
SKO	2.28	14	ePn	06 57.00	-8.3X

S.D. = 0.8 on 6 of 7 obs.

% FEB 12, 1990 22h 28m 31.41± 0.86s
43.065 N ± 8.8km 0.628 W ± 7.5km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
MD 1.0 (STR).

ESCF	0.04	71	Pg	28 33.40	-0.1
			Sg	28 34.69	
ATE	0.06	291	Pg	28 33.56	-0.1
			Sg	28 34.96	
ISSF	0.13	253	Pg	28 34.06	-0.6
			Sg	28 37.15	
LHE	0.15	178	Pg	28 35.37	0.3
MADF	0.16	300	Pg	28 35.68	0.5

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

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* FEB 12, 1990 23h 31m 00.24± 0.88s
9.899 N ±12.9km 124.613 E ±14.4km
DEPTH = 33.0km (normal)
4.8mb (3 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

SSE	21.33	352	eP	35 47.00	0.4
			pP	35 51.00	15kmX
			sP	35 54.50	
WHN	22.66	336	eP	35 57.50	-2.4
IPM	23.98	259	ePd	36 13.70	0.8
CHTO	26.37	293	eP	36 34.00	-1.5
XAN	28.01	331	P	36 50.70	0.3
BJI	30.94	347	eP	37 16.50	0.1
LZH	32.18	327	eP	37 28.00	0.5
	1.5s		38.00nm		5.1mb
SHL	34.72	301	eP	37 48.50	-1.2
CTA	36.63	144	iPc	38 05.10	-0.6
	1.2s		17.97nm		4.8mb
GTA	36.78	327	P	38 08.00	1.1
GUN	40.56	302	P	38 38.80	-0.1
PKI	40.85	301	P	38 42.80	1.6
KKN	41.03	301	P	38 42.40	-0.1
GKN	41.63	301	P	38 47.80	0.4
MBC	86.43	12	eP	43 41.00	0.7
	0.9s		4.00nm		4.6mb

S.D. = 1.1 on 15 of 15 obs.

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* FEB 12, 1990 23h 39m 14.29± 0.99s
6.107 N ±13.0km 92.218 E ±11.8km
DEPTH = 33.0km (normal)
4.3mb (1 obs.)
NICOBAR ISLANDS REGION (704)

BSI	3.12	101	ePc	40 02.00	-0.3
			eS	40 37.00	
IPM	8.90	99	ePd	41 23.20	-0.5
CHG	14.23	27	eP	42 36.50	0.9
HYB	17.46	311	eP	43 17.00	0.0
SHL	19.35	359	iP	43 39.50	-0.8
			iS	47 05.00	
WB5	48.84	123	eP	47 59.40	0.4
WRA	48.85	123	Pd	47 59.30	0.3
	0.8s		2.80nm		4.3mb

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

FEB 12, 1990 23h 56m 38.06± 0.35s
31.193 S ± 7.7km 48.919 W ± 4.8km
DEPTH = 29.9km (18 depth phases)
5.5mb (39 obs.) 4.4Msz (1 obs.)
SOUTH ATLANTIC OCEAN (409)
Felt (III) at Porto Alegre, Brozil.

ITB7	7.62	321	eP	58 27.40	-2.5
ITB	7.90	322	eP	58 32.70	-1.2
ITB1	8.12	322	eP	58 34.60	-2.2
VAO	8.34	12	eP	58 35.00	-5.0X
			e	58 43.90	
PPD	9.37	346	eP	58 52.00	-2.2
			e	59 01.10	
BMA	9.47	28	eP	58 48.30	-7.2X
			e	58 56.20	
TCA	13.41	265	ePc	59 46.50	-2.4
MRA	14.33	261	e(P)	59 58.00	-2.9X
CYA	14.90	276	e(P)	00 07.50	-0.9
BAO	15.51	3	eP	00 15.00	-1.5
SLA	15.99	290	e(P)	00 22.00	-0.6
CFA	16.50	264	e(P)	00 30.00	1.0
RTLL	16.72	264	e(P)	00 32.30	0.5
			e	00 34.80	
RFA	16.78	253	ePc	00 30.10	-2.4
RTCB	16.99	264	e(P)	00 38.50	3.3X
YJA	17.32	297	ePc	00 41.20	1.6
RTRS	17.70	268	e(P)	00 44.80	0.9
			e	00 46.70	
PCH	18.39	257	ePc	00 54.00	1.4
SAN	18.51	257	eP	00 55.00	1.0
CHCH	18.52	256	ePc	00 55.50	1.4
TACH	18.75	257	eP	00 57.50	0.7
ROCH	18.80	259	eP	00 58.00	0.2
LNV	19.15	256	eP	01 00.50	-1.1
LCCH	19.27	257	eP	01 01.80	-1.3
CCH	20.83	307	P	01 23.00	2.9X
LPB	22.76	305	P	01 41.00	1.4
	1.0s		70.00nm		5.1mb
			S	05 52.00	
			LR	08 24.00	
ZOBO	22.96	306	P	01 42.00	0.3
	Z 19s		1.36um		4.4Msz
			i	01 52.00	37km
			S	05 56.00	
			LR	08 00.00	
ARE	25.25	300	eP	02 05.00	1.5
CAI	26.91	27	eP	02 16.50	-2.0
OLLA	44.42	334	eP	04 49.00	0.8
LLAV	44.84	335	eP	04 52.00	0.4
TOV	45.40	330	eP	04 56.20	0.3
LIC	56.05	56	Pc	06 14.26	-2.5
	0.9s		31.00nm		5.3mb
TIC	56.35	56	P	06 16.40	-2.5
	1.0s		19.00nm		5.1mb
KIC	56.35	56	Pc	06 16.48	-2.4
	0.9s		57.50nm		5.6mb
LKO	58.00	53	Pc	06 30.00	-0.6
	0.9s		24.50nm		5.2mb
SPA	58.98	180	iPc	06 33.90	-3.2X
	1.0s		75.50nm		5.8mb
HVD	62.64	111	iPc	06 47.50	-14.8X
	1.5s		111.11nm		
			e	07 28.00	172kmX
KSR	65.62	106	eP	07 16.20	-5.7X
	1.0s		15.00nm		5.1mb
PRY	65.66	108	iPc	07 17.50	-4.6X
	0.7s		11.00nm		5.1mb
SLR	66.81	107	iPc	07 24.50	-4.9X
	0.9s		29.41nm		5.4mb
BUL	69.50	102	iPd	07 42.20	-4.1X
VNDA	69.95	187	eP	07 44.90	-3.1X
LSZ	71.37	97	iPc	07 55.20	-2.5
	1.6s		20.00nm		4.9mb
KRI	71.85	99	iPc	07 56.30	-4.3X
LHS	71.90	333	P	08 00.20	0.0
			pP	08 09.50	30km
JSC	71.90	332	P	08 00.20	-0.1
			pP	08 09.80	31km
PRM	72.18	331	P	08 02.30	0.4
			pP	08 11.30	29km
BCAO	73.26	74	iPc	08 07.90	-0.8
	0.7s		45.00nm		5.6mb
			ic	08 17.40	31km
CBN	73.97	337	eP	08 13.00	0.7
NA2	74.02	337	P	08 12.90	0.3
			pP	08 21.90	29km
TKL	74.12	331	P	08 12.50	-0.7
CVL	74.14	336	P	08 13.50	0.2
			pP	08 23.00	31km
BLA	74.16	334	P	08 13.50	0.0
	0.7s		22.22nm		5.3mb
NAV	74.39	334	P	08 15.50	0.7
			pP	08 24.50	29km
RSCP	74.84	330	P	08 16.80	-0.6
	1.0s		84.06nm		5.7mb
			pP	08 26.40	31km
CLK	76.93	100	iPc	08 29.60	-0.2
EMM	77.44	347	P	08 32.70	0.9
			pP	08 42.00	30km
UYO	77.90	323	iPd	08 24.80	-9.8X
LWI	78.34	86	ePc	08 36.50	-1.3
LWI	78.34	86	iPc	08 37.20	-0.6
HBVT	78.36	343	P	08 37.80	0.9
FVM	78.97	328	P	08 39.80	-0.6
			pP	08 49.00	29km
PTN	79.06	341	P	08 38.50	-2.2
			pP	08 48.00	30km
CBM	79.67	347	P	08 44.50	0.5
			pP	08 54.00	30km
ALQ	85.18	316	iPd	09 09.80	-3.2X
	1.0s		25.25nm		5.4mb
ANMO	85.18	316	P	09 14.70	1.7
	1.0s		23.13nm		5.3mb
NAI	85.68	89	iP	09 16.00	0.0
	1.0s		15.00nm		5.2mb
SCH	87.03	350	eP	09 21.00	-0.4
GLD	87.80	320	P	09 27.70	2.0
	1.3s		43.10nm		5.6mb
			pP	09 36.80	28km
GOL	87.85	320	P	09 27.30	1.3
	1.0s		26.25nm		5.5mb
			pP	09 36.50	29km
LFF	88.21	33	eP	09 28.70	1.5
	1.2s		124.95nm		6.1mb
LPO	88.23	33	eP	09 28.90	1.6
	1.2s		35.70nm		5.6mb
CAF	88.82	34	eP	09 31.80	1.6
	1.2s		29.75nm		5.5mb
RJF	88.85	33	eP	09 31.50	1.2
	1.2s		38.70nm		5.6mb
MFF	89.08	31	eP	09 32.80	1.5
	0.8s		24.20nm		5.6mb
LSF	89.58	32	eP	09 35.10	1.4
	1.0s		62.00nm		5.8mb
LPF	89.78	30	eP	09 35.70	1.1
	1.0s		52.00nm		5.8mb
TCF	89.91	33	eP	09 36.80	1.5
	1.2s		41.65nm		5.6mb
MAF	90.02	33	eP	09 37.50	1.7
	1.0s		18.00nm		5.3mb
GRR	90.14	30	eP	09 37.30	1.1
	1.0s		28.00nm		5.5mb
RSSD	90.26	324	P	09 37.70	0.5
			pP	09 46.50	27km
FLN	90.59	30	eP	09 39.40	1.1
	0.8s		18.80nm		5.4mb
LDF	90.61	30	eP	09 39.60	1.2
	0.8s		29.55nm		5.6mb
RSON	90.75	333	P	09 37.90	-1.1
	0.8s		20.03nm		5.5mb
			pP	09 47.50	30km
AVF	90.81	33	eP	09 41.00	1.6
	1.0s		32.00nm		5.6mb
SMF	90.93	33	eP	09 41.30	1.3
	1.2s		46.10nm		5.7mb
SSF	91.08	33	eP	09 42.80	2.2
	1.0s		18.00nm		5.4mb
LOR	91.40	33	eP	09 43.60	1.5
	1.0s		18.00nm		5.4mb
LPG	91.52	36	eP	09 44.90	1.8
	1.0s		26.00nm		5.6mb
LPL	91.52	36	eP	09 44.80	1.8
	0.8s		13.45nm		5.4mb
BW06	92.26	320	P	09 46.80	0.3
	1.2s		34.25nm		5.7mb
			pP	09 55.80	28km
FFC	96.95	332	eP	10 07.00	-0.3
	0.8s		8.00nm		5.3mb
TOA	120.38	327	ePKP	15 27.80	0.4
FBA	121.50	330	ePKP	15 27.30	-2.0
PMR	121.69	326	ePKP	15 28.60	-1.1
IMA	124.03	332	ePKP	15 31.10	-3.3X
BRW	124.92	338	ePKP	15 34.80	-0.9
TTA	125.00	328	ePKP	15 35.80	-0.4

13d 00h

GBA 127.91 97 PKPc 15 40.20 -2.9X
0.7s 11.60nm
WRA 129.06 184 PKPc 15 42.90 -2.3
0.8s 10.60nm
WB5 129.12 184 ePKP 15 43.10 -2.3
HYB 130.62 93 ePKP 15 46.70 -1.6
JAY 145.25 197 ePKPd 16 13.50 -1.7
BDT 147.75 108 iPKPc 16 18.80 -0.2
0.7s 49.40nm
CHTO 148.49 105 iPKPc 16 22.20 2.0
pP 16 31.00
KMI 154.33 97 ePKP 16 35.00 6.1X
BJI 165.02 50 ePKP 16 39.50 -0.5
S.D. = 1.4 on 90 of 108 obs.

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* FEB 13, 1990 00h 07m 36.75± 1.07s
31.334 N ± 9.2km 140.377 E ±12.1km
DEPTH = 33.0km (normal)
4.9mb (8 obs.)
SOUTH OF HONSHU, JAPAN (211)

IIDJ 4.62 334 P 08 49.70 3.6X
CHJJ 4.84 347 P 08 48.10 -1.1
MAT 5.50 341 eP 08 59.00 0.5
eS 10 13.00
MTMJ 5.66 338 P 09 01.40 0.6
MDJ 15.73 330 eP 11 16.20 -1.2
SSE 16.42 274 Pc 11 31.80 5.5X
SNY 17.05 313 Pc 11 35.40 1.3
Z 14s 0.60um
N 14s 0.70um
eS 14 40.00
DL2 17.08 301 eP 11 35.80 1.3
CN2 17.14 321 Pd 11 35.60 0.4
NJ2 18.33 278 Pd 11 50.50 0.4
TIA 19.92 290 eP 12 07.00 -1.5
BJI 21.44 301 eP 12 23.00 -1.1
1.2s 87.00nm 5.0mb
Z 14s 0.29um 3.8MszX
WHN 22.33 275 eP 12 33.60 0.6
1.0s 100.00nm 5.2mb
TIY 23.83 293 eP 12 47.00 -0.8
HHC 25.05 300 eP 12 59.30 -0.2
BTO 26.15 299 eP 13 11.00 1.2
XAN 26.56 284 Pd 13 12.50 -1.1
CD2 31.26 279 P 13 54.80 -1.0
LOE 37.63 258 eP 14 51.50 1.0
CHG 39.33 262 eP 15 05.00 0.3
0.9s 26.47nm 5.0mb
e 16 21.20
BDT 40.00 259 eP 15 10.00 -0.2
0.8s 41.50nm 5.2mb
MBC 62.23 15 eP 17 58.00 0.9
0.8s 5.00nm 4.7mb
DAG 71.37 355 iPc 18 55.00 0.2
0.9s 10.08nm 4.9mb
SUF 72.70 334 eP 19 02.00 -0.9
0.6s 3.00nm 4.5mb
NB2 79.10 337 P 19 39.20 0.0
1.1s 6.10nm 4.5mb
S.D. = 0.9 on 23 of 25 obs.

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* FEB 13, 1990 00h 25m 04.62± 0.68s
38.181 N ± 9.6km 72.264 E ± 9.3km
DEPTH = 33.0km (normal)
4.3mb (2 obs.)
TAJIK SSR (715)

QUE 9.10 210 eP 27 16.80 -0.1
GKN 14.50 131 P 28 30.00 0.6
KKN 15.04 130 P 28 36.40 -0.2
DMN 15.07 131 P 28 37.40 0.4
PKI 15.28 130 P 28 39.40 -0.4
GUN 15.32 128 P 28 40.20 -0.2
HFS 42.39 321 eP 32 57.50 0.4
0.4s 1.50nm 4.1mb
MBC 65.61 3 eP 35 46.50 -0.4
0.7s 3.00nm 4.5mb
S.D. = 0.4 on 8 of 8 obs.

? FEB 13, 1990 01h 49m 16.42± 6.33s
43.205 N ±45.3km 0.595 W ±22.2km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
MD 1.0 (STR).

ESCF 0.13 173 Pg 49 19.57 0.0
Sg 49 20.90
ATE 0.14 214 Pg 49 19.73 -0.1
Sg 49 21.14
MADF 0.17 250 Pg 49 20.41 0.0
ISSF 0.23 220 Pg 49 21.46 0.0
Sg 49 23.78
S.D. = 0.1 on 4 of 4 obs.

? FEB 13, 1990 02h 28m 42.65± 1.30s
31.184 S ±16.0km 68.895 W ±21.9km
DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB 0.31 165 iP 28 52.50 1.8
RTLL 0.39 112 iPc 28 52.20 0.5
CFA 0.70 127 e(P) 28 56.00 -0.1
RTCV 0.74 156 iPc 28 54.70 -2.0
S 29 07.70
RTRS 1.12 334 iPd 29 01.90 -0.2
S.D. = 1.9 on 5 of 5 obs.

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* FEB 13, 1990 02h 51m 40.35± 0.69s
13.744 N ±14.7km 90.601 W ±13.1km
DEPTH = 33.0km (normal)
4.8mb (13 obs.)
NEAR COAST OF GUATEMALA (71)

UYO 20.63 351 eP 56 19.30 -0.3
ALQ 25.51 329 iPc 57 08.50 0.8
1.0s 6.25nm 4.2mb
ANMO 25.51 329 P 57 08.30 0.6
1.0s 6.88nm 4.2mb
GOL 28.94 336 P 57 39.80 0.7
0.8s 5.21nm 4.3mb
GLA 29.26 315 P 57 41.80 0.0
RSSD 32.38 342 P 58 09.50 0.1
BW06 33.24 334 P 58 16.80 0.0
0.8s 1.43nm 3.9mb
TNP 33.84 321 P 58 22.00 -0.1
0.7s 3.33nm 4.4mb
KVN 34.99 321 P 58 32.50 0.6
CMB 35.82 318 ePc 58 38.00 -0.9
LRM 36.92 334 eP 58 49.10 0.8
ZOBO 37.19 143 P 58 37.00 -14.1X
LR 10 25.00
LBFM 38.69 321 P 59 03.00 -0.1
SES 40.17 340 eP 59 15.00 -0.1
FFC 41.85 350 iPc 59 28.80 0.1
0.8s 12.00nm 4.7mb
LON 42.02 328 P 59 30.70 0.4
PNT 42.73 332 eP 59 37.00 1.0
0.8s 24.00nm 5.0mb
EDM 43.32 340 eP 59 40.50 -0.4
SCH 45.00 19 eP 59 55.00 0.6
FRB 52.27 12 eP 00 49.00 -1.4
PMR 63.26 333 P 02 06.50 -1.2
FBA 64.02 336 P 02 11.40 -1.3
0.8s 13.79nm 5.1mb
MBC 64.34 353 eP 02 13.00 -1.6
0.9s 11.00nm 5.0mb
DAG 72.57 13 eP 03 02.30 -3.4X
LKO 82.98 82 Pc 04 05.60 1.4
0.9s 20.00nm 5.2mb
TIC 84.17 85 Pc 04 09.96 -0.3
0.8s 8.50nm 5.0mb
LIC 84.26 85 Pc 04 10.40 -0.3
0.8s 10.00nm 5.1mb
KIC 84.51 85 Pc 04 11.76 -0.2
0.7s 10.50nm 5.1mb
WRA 136.65 255 PKPc 10 59.80 -2.1
0.6s 0.70nm
GKN 138.25 6 PKP 11 00.00 -4.9X
CHG 146.31 344 ePKPc 11 19.00 0.0
1.0s 13.00nm
LOE 146.74 338 ePKP 11 22.00 2.3
HYB 147.24 19 ePKP 11 21.50 1.0
GBA 150.36 24 PKPd 11 30.00 4.7X
0.8s 13.20nm
S.D. = 1.0 on 30 of 34 obs.

FEB 13, 1990 04h 40m 26.81± 0.86s
42.212 N ± 7.4km 25.163 E ± 7.6km
DEPTH = 5.0km (geophysicist)
BULGARIA (359)

KDZ 0.59 161 iPd 40 38.00 -0.7
iSg 40 44.00
RZN 0.62 213 iPc 40 38.00 -1.3
PGB 0.81 295 iPgc 40 43.00 -0.1
eSg 40 54.00
PVL 1.01 7 iPd 40 45.00 -1.4
iS 41 01.00
JMB 1.08 76 ePg 40 49.00 1.4
eSg 41 01.00
MMB 1.24 240 ePgd 40 52.00 1.7
Sg 41 08.00
KKB 1.59 258 eP 40 56.00 0.3
eSg 41 18.00
VAY 2.13 246 ePn 41 07.40 3.8X
S.D. = 1.5 on 7 of 8 obs.

% FEB 13, 1990 05h 54m 38.65± 2.01s
43.077 N ±10.2km 0.451 W ±16.1km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
MD 1.0 (STR).

ESCF 0.09 271 Pg 54 41.16 -0.1
Sg 54 42.87
OGE 0.09 350 Pg 54 41.27 0.0
Sg 54 42.96
ATE 0.19 273 Pg 54 43.17 0.4
Sg 54 45.64
LHE 0.21 217 Pg 54 43.30 0.1
ISSF 0.26 259 Pg 54 43.85 -0.3
Sg 54 48.29
S.D. = 0.4 on 5 of 5 obs.

FEB 13, 1990 08h 04m 53.67± 0.38s
36.274 N ± 7.6km 141.148 E ± 4.8km
DEPTH = 40.7km (5 depth phases)
4.9mb (23 obs.)
NEAR EAST COAST OF HONSHU, JAPAN(228)

KAKJ 0.79 265 iPd 05 09.90 1.5
S 05 20.40
CHJJ 1.76 263 iPd 05 23.60 1.4
S 05 44.90
NIIJ 1.97 300 iPd 05 26.20 0.9
S 05 49.20
YAMJ 2.09 335 iPd 05 26.80 -0.2
MAT 2.39 277 iPc 05 33.00 1.8
eS 06 01.00
SHK 7.13 258 eP 06 40.50 2.3
MDJ 12.11 317 eP 07 49.00 2.6
epP 07 58.00
CN2 14.17 307 eP 08 15.20 1.6
Z 20s 0.60um
pP 08 19.50
eS 10 54.00
SNY 14.73 297 iPc 08 20.20 -0.7
Z 20s 1.10um
N 16s 0.60um
E 19s 0.80um
eS 11 09.00
SSE 17.39 258 Pd 08 57.50 2.7
Z 20s 0.60um
NJ2 18.91 264 Pc 09 11.00 -2.6
TIA 19.37 277 Pd 09 16.20 -2.7
BJI 19.97 288 eP 09 23.00 -2.2
1.0s 14.00nm 4.2mb
Z 20s 0.30um 4.3Msz
TIY 22.94 282 Pc 09 53.50 -1.8
E 12s 0.50um
WHN 23.05 263 eP 09 55.00 -1.3
XAN 26.38 275 P 10 27.50 -0.5
GYA 30.89 261 P 11 07.60 -1.1
CD2 31.47 271 P 11 12.60 -1.1
GTA 32.59 288 eP 11 22.00 -1.5
KMI 34.64 262 Pc 11 40.00 -1.5
WMQ 41.00 298 Pd 12 35.00 0.7
GUN 47.02 276 P 13 24.00 0.6
BRW 47.19 23 ePc 13 24.10 0.4
IMA 47.45 30 eP 13 26.30 0.3
1.2s 11.70nm 4.8mb
PKI 47.54 276 P 13 27.40 -0.1
KKN 47.55 276 P 13 27.60 0.2
DMN 47.77 276 P 13 29.20 0.0
GKN 47.98 277 P 13 30.80 0.1
PMR 49.36 36 eP 13 40.20 -0.5
FBA 49.86 32 eP 13 44.70 0.2
KSH 50.54 294 P 13 51.70 1.6
WB5 56.21 188 eP 14 32.10 0.1
WRA 56.28 188 Pc 14 32.50 0.0

	0.7s	8.90nm		4.9mb		
MBC	57.31	16 ePc	14 38.40	-0.9		
	0.6s	6.00nm		4.8mb		
HYB	57.97	269 eP	14 39.60	-5.1X		
ASPA	60.01	188 iPc	14 58.00	-0.6		
	1.1s	9.00nm		4.8mb		
GBA	60.94	266 Pc	15 04.60	-0.5		
	0.9s	23.20nm		5.3mb		
POO	61.18	273 iPc	15 08.20	1.4		
	0.8s	19.40nm		5.3mb		
KEV	64.08	339 eP	15 18.00	-7.3X		
SOD	65.58	337 iP	15 34.00	-1.0		
DAG	66.52	355 iPc	15 39.00	-1.9		
	0.7s	10.96nm		5.0mb		
SUF	68.57	333 iP	15 52.50	-1.4		
	0.6s	15.00nm		5.2mb		
LON	68.93	47 P	16 10.00	13.5X		
EDM	70.07	38 eP	16 03.50	0.1		
NUR	70.52	332 iP	16 04.50	-1.3		
	0.8s	22.00nm		5.2mb		
NEW	70.83	44 P	16 08.00	0.0		
FFC	74.46	32 iPc	16 29.20	0.0		
	0.9s	20.00nm		5.1mb		
CMB	74.49	54 P	16 31.00	1.2		
	1.3s	15.03nm		4.8mb		
HFS	74.69	336 eP	16 28.80	-1.7		
	0.9s	6.40nm		4.6mb		
Z	16s	0.24um		4.6MszX		
		epP	16 33.10	14kmX		
		esP	16 36.50			
		ePcP	16 42.10			
		LR	48 51.00			
NB2	74.80	337 P	16 30.40	-0.8		
	0.7s	11.80nm		5.0mb		
LRM	74.84	44 eP	16 32.60	0.7		
KVN	75.39	52 P	16 35.70	0.6		
TNP	76.51	53 eP	16 42.40	0.9		
		pP	16 54.50	41km		
FRB	77.56	13 ePc	16 46.00	-0.5		
BW06	78.35	45 P	16 51.80	0.2		
	0.6s	1.16nm		4.1mb		
KRA	79.60	326 iPd	16 58.00	0.1		
RSSD	80.54	42 P	17 02.70	-0.6		
KSP	80.63	328 iP	17 04.00	0.6		
		i	17 16.00	40km		
		e	17 35.00			
BRG	81.59	329 iP	17 08.80	0.4		
	1.5s	25.00nm		5.0mb		
		i	17 20.80	40km		
CLL	81.65	330 iP	17 08.20	-0.5		
	0.8s	17.00nm		5.1mb		
		ipP	17 20.70	42km		
PRU	82.02	328 P	17 11.00	0.4		
GRF	83.62	330 iPc	17 19.70	0.7		
	1.2s	42.00nm		5.4mb		
		e	17 32.20	42km		
VAY	84.47	318 eP	17 23.00	-0.4		
ANMO	85.24	50 P	17 29.20	1.6		
	1.1s	5.54nm		4.7mb		
ALQ	85.24	50 iPd	17 29.30	1.7		
	1.0s	5.00nm		4.7mb		
SCH	86.15	16 eP	17 32.00	0.4		
CDF	86.21	331 eP	17 31.80	-0.2		
	0.8s	8.05nm		5.0mb		
LPL	88.78	330 eP	17 44.30	-0.4		
	1.0s	8.00nm		5.0mb		
LPG	88.79	330 eP	17 44.40	-0.4		
	0.6s	4.50nm		5.0mb		
LKO	124.71	319 PKP	23 52.16	1.1		
KIC	126.88	316 PKP	23 55.20	-0.1		
LIC	127.15	316 PKP	23 55.80	0.0		
LPB	147.45	61 PKP	24 37.00	3.9X		
CCH	149.39	59 PKP	24 41.90	5.9X		
S.D. = 1.2 on 69 of 74 obs.						

? FEB 13, 1990 08h 28m 05.21± 1.00s
40.812 N ± 8.3km 28.328 E ±10.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

CTT	0.34	13 ePg	28 12.70	0.4		
		eSg	28 15.70			
BNT	0.55	214 iPg	28 16.50	0.1		
ISK	0.61	65 ePg	28 17.30	-0.2		
		eSg	28 26.30			
DMK	1.10	337 iPg	28 25.50	-0.3		
		iSg	28 38.50			

S.D. = 0.5 on 4 of 4 obs.

FEB 13, 1990 09h 15m 28.77± 0.23s
42.182 N ± 2.8km 15.564 E ± 2.5km
DEPTH = 10.0km (geophysicist)
3.9mb (2 obs.)
ADRIATIC SEA (382)
ML 4.4 (ZAG), 4.0 (VKA), 4.0 (KBA), 3.7 (TTG).

DUI	0.98	238 P	15 47.20	-0.2		
		eSg	16 00.00			
HVAR	1.19	33 iPg	15 51.50	0.6		
		iSg	16 08.50			
SDI	1.39	251 P	15 53.80	-0.4		
BAI	1.44	137 P	15 55.00	0.1		
AZI	1.60	264 Pd	15 58.00	0.9		
		eSn	16 17.50			
AQU	1.61	277 P	15 58.40	1.0		
SGO	1.63	187 P	15 56.80	-0.8		
		eSg	16 18.00			
BRT	1.79	136 P	15 58.40	-1.6		
		eSn	16 23.00			
MGR	2.04	180 P	16 02.80	-0.8		
		eSn	16 28.50			
MNS	2.15	276 P	16 06.20	1.0		
		eSn	16 31.00			
RDP	2.17	260 P	16 06.20	0.8		
RMP	2.17	261 P	16 06.20	0.8		
HCY	2.19	82 ePn	16 06.50	0.7		
		eSn	16 38.50			
ORI	2.22	162 P	16 06.80	0.6		
		eSn	16 30.00			
MMN	2.31	172 P	16 08.50	1.0		
BRY	2.32	71 ePn	16 08.50	0.8		
		eSn	16 44.00			
ASS	2.32	293 P	16 10.00	2.3		
ARV	2.33	305 P	16 08.10	0.3		
		eSn	16 37.00			
CSI	2.47	167 P	16 09.90	0.2		
LCI	2.58	135 P	16 12.50	1.3		
TDS	2.59	167 P	16 11.80	0.4		
TTG	2.75	84 ePn	16 14.10	0.4		
		eSn	16 53.50			
BLY	2.82	24 ePn	16 17.20	2.5		
		Sn	16 51.20			
RSM	2.87	308 P	16 16.50	1.1		
SDA	2.93	92 ePn	16 16.50	0.3		
CZI	2.99	171 P	16 16.10	-1.0		
CRE	3.02	300 P	16 18.50	0.9		
		eSn	16 54.00			
LACI	3.14	99 ePn	16 21.70	2.5		
SFI	3.23	304 P	16 22.00	1.6		
		eSn	16 58.00			
RIY	3.27	345 ePn	16 20.80	-0.3		
		iSn	17 01.60			
IVA	3.28	76 ePn	16 22.00	0.7		
MAO	3.28	276 P	16 21.50	0.2		
PGD	3.29	302 P	16 23.00	1.5		
TIR	3.32	103 ePn	16 20.00	-1.9		
VBY	3.33	356 ePn	16 23.00	1.1		
		iSn	16 59.30			
KKS	3.61	90 ePn	16 28.50	2.7X		
BERA	3.61	113 ePn	16 25.10	-0.8		
ZAG	3.65	5 iPn	16 28.00	1.6		
		iSn	17 11.00			
CEY	3.65	347 ePn	16 27.00	0.5		
		eSn	17 10.00			
PHP	3.67	96 iPnc	16 26.10	-0.7		
PTJ	3.73	4 ePn	16 27.50	-0.2		
		eSn	17 09.70			
TRI	3.76	340 P	16 28.50	0.5		
LJU	3.93	349 ePn	16 30.50	0.1		
		eSn	17 18.00			
PII	4.01	294 P	16 30.50	-1.0		
VOY	4.03	343 iPn	16 31.50	-0.4		
		e	16 47.20			
		eSn	17 25.60			
KEK	4.05	126 eP	16 31.20	-0.9		
OHR	4.07	104 iPn	16 32.50	0.1		
MME	4.09	301 P	16 33.80	1.0		
BDI	4.09	299 P	16 32.60	-0.2		
SOI	4.12	175 P	16 33.20	0.1		
LSK	4.31	116 iPnc	16 35.20	-0.7		
SKO	4.38	91 ePn	16 37.80	1.0		
		iPb	16 48.20			
		iPg	16 54.50			
		iSn	17 27.00			
		iSb	17 42.60			
		iSg	17 50.60			
		i	18 38.00			
BEO	4.43	52 ePn	16 53.70	16.2X		
		i(Sn)	17 57.70			
RBL	4.49	342 P	16 38.50	0.0		
CTI	4.78	325 P	16 41.00	-1.7		
FVI	4.84	337 P	16 43.50	0.2		
PGF	4.88	276 Pn	16 44.40	0.4		
SAL	5.00	315 P	16 44.00	-1.5		
KZN	5.04	110 eP	16 46.80	0.5		
KBA	5.14	343 iPnc	16 46.70	-1.1		
		iPgPg	17 03.80			
		i	17 08.20			
		i	17 12.70			
		iSn	17 39.60			
		i	17 45.70			
		i	17 50.70			
		i	18 09.50			
BOB	5.15	302 P	16 48.10	0.3		
VAY	5.31	97 ePn	16 48.60	-1.4		
MDI	5.54	312 P	16 51.10	-2.2		
SOP	5.55	7 eP	16 51.80	-1.5		
VLS	5.55	134 eP	16 50.90	-2.5		
KKB	5.61	91 eP	16 54.00	-0.3		
OGA	5.70	327 ePn	16 55.70	0.0		
CKI	5.77	295 P	16 55.80	-0.7		
BUD	5.84	24 e(P)	16 59.00	1.6		
SRO	5.96	18 i(P)	17 03.20	4.1X		
		i	17 18.00			
KMR	5.96	351 e(Pn)	16 53.00	-6.1X		
		i	18 40.40			
		i	19 04.70			
VKA	6.11	5 i(Pn)	17 06.20	5.0X		
		iPgPg	17 31.60			
		iSn	18 08.50			
		i	18 24.10			
ZST	6.11	10 e(P)	17 02.80	1.6		
		e	18 16.50			
		e	18 41.20			
MMB	6.12	93 ePc	17 01.00	-0.5		
VAI	6.13	309 P	16 59.40	-2.1		
PGB	6.38	84 eP	17 05.00	-0.2		
ORO	6.47	305 P	17 04.00	-2.5		
DOI	6.49	294 P	17 06.50	-0.3		
KHC	7.09	349 Pd	17 14.20	-0.8		
		e	17 23.00			
LPG	7.18	300 Pn	17 13.00	-3.6X		
		Sn	18 25.00			
PVL	7.27	79 e(P)	17 14.00	-3.6X		
SPC	7.73	23 eP	17 14.70	-9.5X		
		e	17 20.50			
PRU	7.84	355 P	17 23.00	-2.5		
		e	17 41.00			
GRF	8.10	340 eP	17 29.00	-0.1		
		e(S)	18 09.00			
MLR	8.20	63 ePd	17 32.00	1.3		
		e	45 56.00			
KSP	8.68	3 e(P)	17 34.00	-3.2X		
		ic	20 20.50			
MOX	8.89	344 ePn	17 38.00	-2.2		
		(Pg)	18 24.00			
		eSg	20 23.00			
NB2	19.07	354 P	19 51.60	-2.0		
	0.7s	2.10nm		3.5mb		
NUR	19.18	14 eP	20 11.00	16.2X		
SUF	21.50	13 eP	20 19.10	-0.4		
BCAO	37.68	175 iPd	22 47.50	1.5		
	0.7s	5.00nm		4.4mb		
S.D. = 1.2 on 81 of 91 obs.						

% FEB 13, 1990 09h 50m 27.75± 0.95s
38.259 N ±15.4km 14.964 E ± 7.9km
DEPTH = 33.0km (normol)
SICILY (398)

ATN	0.40	104 P	50 36.40	-0.6		
		eSg	50 42.20			
MSI	0.47	97 P	50 38.10	0.2		
		eSg	50 44.20			
GIB	0.79	250 P	50 42.50	0.0		
		eSg	50 54.50			
SOI	0 88	102 P	50 44.10	0.4		
		eSg	50 56.30			
CZI	1.32	43 P	50 50.00	0.0		
S.D. = 0.5 on 5 of 5 obs.						

FEB 13, 1990 11h 27m 00.66± 0.28s
52.120 N ± 7.7km 177.890 E ± 4.3km
DEPTH = 123.4km (5 depth phases)
4.8mb (23 obs.)
RAT ISLANDS, ALEUTIAN ISLANDS (6)

SVW	17.02	48	eP	30	54.70	2.5
TTA	17.56	42	eP	30	56.50	-2.3
	1.3s	122.64nm			5.0mb	
TTA	17.56	42	ePc	31	00.20	1.4
	1.2s	93.80nm			4.9mb	
KDC	17.83	60	eP	30	58.00	-4.1X
	0.6s	54.19nm			5.0mb	
PMS	19.87	50	eP	31	24.40	0.4
IMA	19.95	35	eP	31	24.50	-0.3
	0.7s	13.81nm			4.4mb	
TOA	21.63	48	eP	31	43.20	1.6
FBA	21.67	41	eP	31	41.00	-0.9
	0.6s	20.32nm			4.7mb	
BRW	22.35	21	eP	31	50.10	1.7
MAT	31.91	257	iPd	33	16.30	0.2
	1.0s	25.00nm			4.9mb	
IIDJ	32.80	255	P	33	24.50	0.6
MBC	33.70	23	eP	33	32.00	0.8
	0.6s	6.00nm			4.6mb	
		pP		33	59.00	122km
CN2	35.40	278	eP	33	45.40	-0.6
SNY	37.64	276	eP	34	05.50	0.7
PNT	38.59	69	eP	34	13.00	0.3
	0.6s	8.00nm			4.7mb	
EDM	40.24	60	iPc	34	26.50	0.2
	0.5s	35.00nm			5.4mb	
NEW	40.54	69	eP	34	28.00	-0.8
TIA	45.04	274	eP	35	05.60	0.2
KVN	45.22	80	eP	35	07.50	0.5
FFC	45.37	53	eP	35	08.00	0.3
	0.6s	7.00nm			4.6mb	
SSE	45.98	266	eP	35	12.70	-0.1
TNP	46.37	81	eP	35	16.30	0.2
	0.7s	7.04nm			4.5mb	
BTO	46.59	284	eP	35	19.00	1.3
TIY	46.95	279	eP	35	22.00	1.5
BW06	48.02	71	eP	35	28.20	-0.8
	0.7s	5.26nm			4.4mb	
PLM	49.69	85	eP	35	42.00	0.1
		epP		36	10.00	119km
RSSD	50.36	66	eP	35	45.40	-1.5
WHN	50.57	271	eP	35	46.00	-2.3
GLA	51.15	84	eP	35	52.80	0.1
		epP		36	21.00	120km
XAN	51.51	278	P	35	54.60	-0.9
RSON	51.70	54	eP	35	56.00	-0.6
GOL	52.41	71	eP	36	02.00	-0.4
	0.7s	7.28nm			4.7mb	
LZH	53.20	283	eP	36	08.00	-0.1
	1.0s	29.00nm			5.2mb	
GTA	53.38	289	iPd	36	09.20	-0.1
FRB	53.45	30	eP	36	08.00	-1.3
ALQ	54.94	76	eP	36	20.70	-0.2
	1.0s	2.50nm			4.1mb	
WMQ	57.20	301	P	36	36.30	-0.5
		pP		37	07.50	131km
GYA	58.21	273	P	36	43.60	-0.5
SOD	58.89	347	iP	36	47.40	-0.7
SCH	60.70	37	eP	37	01.00	0.3
SUF	63.36	346	eP	37	17.70	-0.5
	0.6s	9.50nm			4.9mb	
PTN	65.11	49	eP	37	32.00	2.2
NUR	65.69	346	iP	37	32.30	-0.9
	0.7s	17.40nm			5.1mb	
HBVT	66.16	48	eP	37	35.00	-1.5
N82	66.69	353	P	37	39.00	-0.7
	0.8s	9.40nm			4.7mb	
HFS	67.38	352	eP	37	42.60	-1.3
	0.9s	10.40nm			4.7mb	
Z	16s	0.17um			4.4MszX	
		e		37	44.70	7kmX
		e		38	09.80	
		e		38	16.60	
		LR		11	29.00	
BLA	68.02	57	eP	37	48.00	-0.3
CVL	68.44	56	eP	37	50.80	0.0
CHG	68.63	273	eP	37	52.10	-0.2
	0.8s	13.25nm			4.8mb	
GUN	69.67	289	Pd	37	59.40	0.4
JSC	69.80	60	eP	37	58.50	-0.7
KKN	70.11	290	Pd	38	01.70	0.2
PKI	70.20	290	Pd	38	02.50	0.3
GKN	70.32	290	Pd	38	02.70	0.0
DMN	70.35	290	Pd	38	03.20	0.2
MTN	76.23	227	iPd	38	37.00	0.1
CTA	77.02	210	iPd	38	41.00	-0.2
ZST	78.72	347	eP	38	51.20	1.0
KBA	80.30	349	iPc	39	00.50	1.6
	0.5s	7.50nm			4.7mb	
		i		39	32.20	125km
WRA	81.17	221	Pc	39	03.80	0.3
	0.5s	11.40nm			4.9mb	
BRS	82.18	202	eP	39	09.50	0.9
POO	83.87	292	eP	39	21.00	3.4X
ASPA	84.69	220	iPd	39	22.20	0.7
	0.5s	17.00nm			5.2mb	
TIC	121.41	3	PKP	45	40.28	-0.5
	0.3s	4.50nm				
KIC	121.71	3	PKP	45	40.74	-0.6
	0.4s	3.00nm				
LIC	121.83	3	PKP	45	41.00	-0.5
	0.4s	2.50nm				
HVD	150.45	306	iPKPc	46	27.80	-5.3X
S.D. = 1.0 on 64 of 67 obs.						

FEB 13, 1990 12h 09m 09.35± 0.55s
39.134 N ± 4.7km 23.417 E ± 7.6km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
ML 3.2 (ATH).

NEO	0.23	319	iPgc	09	14.80	0.5
ATH	1.18	168	ePn	09	32.10	0.7
			eSn	09	37.00	
PLG	1.24	1	iPnc	09	33.20	0.8
			eSb	09	49.50	
KZN	1.73	313	ePn	09	38.40	-1.3
VAY	2.28	344	iPn	09	47.60	0.0
EZN	2.35	72	ePn	09	56.40	7.8X
VLS	2.41	248	ePb	09	51.10	1.6
VLI	2.44	189	ePn	09	48.70	-1.2
RDO	2.58	38	ePn	09	52.70	0.8
APE	2.65	140	ePn	09	52.50	-0.4
RZN	2.74	21	iPc	09	55.00	0.7
KKB	2.74	355	iPc	09	54.00	-0.2
OHR	2.82	315	ePn	09	58.70	3.4X
KDZ	2.94	31	iPd	09	57.00	0.0
			iS	10	27.00	
PLD	3.12	18	eP	10	11.00	11.5X
SKO	3.21	333	ePn	09	59.00	-1.8
VTS	3.46	357	iPd	10	06.00	1.6
PGB	3.46	9	eP	10	04.00	-0.4
PVL	4.33	19	iPd	10	15.00	-1.6
MLR	6.62	16	eP	10	53.00	3.8X
S.D. = 1.1 on 16 of 20 obs.						

FEB 13, 1990 12h 21m 36.25± 0.46s
2.353 N ± 6.4km 96.819 E ± 6.0km
DEPTH = 40.9km (2 depth phases)
4.7mb (14 obs.) 4.2Msz (2 obs.)
NORTHERN SUMATERA (706)

PSI	2.13	81	iPc	22	11.50	1.4
			e	27	00.00	
BSI	3.47	334	eP	22	29.50	0.3
			iS	23	03.00	
PPI	4.54	128	eP	22	45.60	1.3
IPM	4.75	62	ePc	22	48.10	0.8
	0.6s	68.10nm				
			e	23	18.60	
KLM	4.88	81	eP	23	09.50	20.4X
SNG	6.11	38	ePc	23	06.00	-0.4
	0.9s	186.55nm			5.7mb	
			eS	25	39.20	
KGM	6.50	93	ePd	23	12.50	0.5
BDT	14.95	8	eP	25	10.00	3.4X
LOE	15.72	18	eP	25	17.20	0.7
CHG	16.49	7	eP	25	26.00	-0.4
	0.9s	17.44nm			4.2mb	
QIZ	20.91	37	eP	26	17.10	-0.7
GBA	22.19	301	Pc	26	35.20	4.6X
	0.8s	5.70nm			4.1mb	
KMI	23.35	14	Pd	26	43.50	1.3
Z	18s	0.90um			4.3Msz	
		pP		26	53.00	35km
HYB	23.37	311	eP	26	45.50	3.3X
SHL	23.56	349	iP	26	42.50	-1.8
			eS	30	44.00	
GYA	25.77	21	P	27	05.00	-0.2
PKI	27.35	338	P	27	20.80	0.8
	0.8s	15.00nm			4.7mb	
GUN	27.48	339	P	27	21.60	0.4
	0.8s	38.00nm			5.1mb	
DMN	27.50	337	P	27	21.40	0.1
	0.8s	34.00nm			5.0mb	
KKN	27.60	338	P	27	22.00	-0.1
	0.8s	39.00nm			5.1mb	
LSA	27.73	349	eP	27	24.00	0.5
GKN	28.04	337	P	27	26.80	0.8
	0.8s	39.00nm			5.1mb	
NDI	32.17	326	iPd	28	03.50	1.0
XAN	33.49	18	P	28	11.50	-2.5
GTA	36.99	4	Pc	28	43.00	-0.8
TIY	38.00	20	eP	28	51.80	-0.5
N	14s	0.60um				
HHC	40.57	17	eP	29	13.90	0.2
BJI	41.42	23	eP	29	21.00	0.6
WMQ	42.08	350	P	29	26.60	0.7
WB5	42.97	123	eP	29	33.20	-0.2
WRA	42.97	123	Pc	29	30.80	-2.7
	0.9s	4.30nm			4.2mb	
ASPA	44.39	128	iPc	29	44.70	-0.3
	1.1s	7.00nm			4.4mb	
Z	19s	0.20um			4.1Msz	
		LR		51	48.60	
CN2	48.46	28	eP	30	15.60	-1.1
		epP		30	28.50	47km
MDJ	51.06	30	eP	30	37.00	0.4
MAT	51.11	43	eP	30	37.00	-0.2
	1.2s	15.63nm			4.9mb	
KRI	68.96	251	iPc	32	39.50	-0.6
BUL	70.45	248	iPd	32	50.00	0.8
BCAO	78.15	274	iPd	33	34.40	0.8
	0.5s	6.00nm			4.9mb	
SOD	80.29	338	iP	33	45.00	0.8
KEV	80.89	341	eP	33	45.00	-2.3
HFS	84.54	330	eP	34	12.00	5.8X
	0.4s	1.00nm			4.3mb	
NB2	85.82	331	P	34	13.00	0.4
	1.0s	4.30nm			4.6mb	
S.D. = 1.1 on 37 of 42 obs.						

FEB 13, 1990 13h 30m 58.22± 0.49s
23.077 S ± 4.1km 66.211 W ± 7.2km
DEPTH = 238.5 ± 5.6 km
4.5mb (10 obs.)
JUJUY PROVINCE, ARGENTINA (128)

SLA	1.77	158	iPc	31	41.00	2.8
ANT	3.91	260	iPc+	32	01.00	0.1
			iS	32	44.50	
CYA	5.36	176	iPd	32	20.50	1.8
CCH	5.67	1	iPd	32	23.80	0.9
LPB	6.75	344	iPd	32	38.10	1.4
0.9s	537.82nm				5.6mb	X
			eS	33	52.00	
ZOBO	7.01	345	iPd	32	40.20	0.1
0.5s	80.52nm				5.1mb	X
Z	20s	0.26um				
			iS	33	59.50	
			LR	35	26.00	
RTRS	7.64	202	ePd	32	48.80	1.3
ARE	8.25	322	iPc	32	53.50	-2.2
			iS	34	18.00	
TCA	8.35	170	eP	32	57.00	0.1
RTLL	8.46	193	iPc	32	57.10	-1.1
			eS	34	27.60	
CFA	8.69	192	iPd	33	01.00	-0.1
RTCB	8.69	195	eP	33	02.00	0.8
ZON	8.72	194	iPd	33	00.50	-1.0
			eS	34	35.00	
RTCV	8.99	193	ePd	33	03.80	-1.2
MRA	9.31	177	ePd	33	07.50	-1.5
ROCH	10.73	202	eP	33	26.50	-0.8
			iS	33	33.70	
SAN	11.05	200	iPd	33	31.70	0.5
			i	33	37.80	
TACH	11.33	200	iP	33	33.80	-0.8
			i	33	40.90	
LCCH	11.38	203	eP	33	34.50	-0.8
			i	33	40.70	
LNV	11.76	202	iPd	33	39.00	-1.0
			i	33	45.00	
RFA	11.82	189	ePd	33	39.20	-1.7

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PT08   14.80 317 iPd    34 18.90    0.7
                eS      36 52.80
NNA    14.97 316 iP     34 20.20    0.3
       0.7s     19.18nm          4.6mb
                eS      37 59.00
VAO    17.71  94 iPc    34 50.60   -0.4
                i       34 54.00
CAI    32.46  64 iPc    37 06.90   -1.5
JSC    58.81 345 P      40 32.90   -0.8
PRM    58.88 344 P      40 33.20   -1.1
LHS    58.89 346 P      40 33.40   -0.9
TKL    60.74 344 P      40 45.00   -1.9
GBTN   60.86 343 P      40 46.00   -1.7
RSCP   61.17 342 P      40 48.30   -1.6
       0.7s     76.12nm          5.5mb
NAV    61.62 347 P      40 51.70   -1.1
SCP    64.46 350 P      40 48.30 -22.9X
LIC    66.46  72 Pc     41 22.84   -1.6
TIC    66.67  71 Pc     41 24.18   -1.6
KIC    66.78  72 Pc     41 25.08   -1.4
       0.5s     44.00nm          5.4mb
SPA    67.06 180 iPc    41 29.20    1.5
       0.8s      8.75nm          4.5mb
LKO    67.58  68 Pc     41 31.82    0.3
ALQ    69.19 325 iPc    41 41.50    0.3
       0.8s      5.60nm          4.3mb
ANMO   69.19 325 eP     41 42.00    0.8
                e       42 44.00 268kmX
KUK    70.55  74 eP     41 48.50   -1.1
GOL    72.36 329 P      42 00.20    0.1
MSU    74.90 324 P      42 15.80    1.0
RSSD   75.31 333 P      42 16.90    0.0
DAU    75.81 326 P      42 20.80    0.9
DUG    76.46 325 P      42 24.40    1.1
BW06   76.74 329 P      42 24.90    0.0
       0.5s      1.25nm          3.9mb
TNP    77.41 321 P      42 30.00    1.3
       0.7s      3.98nm          4.3mb
RSON   77.51 343 P      42 27.20   -1.5
       0.7s      5.62nm          4.4mb
SCH    77.57 360 eP     42 29.00    0.1
KVN    78.58 321 ePd    42 35.60    0.6
                e       43 33.80 245kmX
LBFM   82.27 321 P      42 55.30    0.9
KSR    82.87 115 iPd    42 56.20   -1.7
       0.6s      3.57nm          4.3mb
SLR    84.07 115 eP     43 03.00   -0.9
BUL    86.52 110 iPd    43 16.20    0.2
FRB    86.55 359 eP     43 14.00   -0.8
BCAO   86.90  84 iPc    43 18.00    0.3
       0.4s      6.00nm          4.8mb
LSZ    88.06 106 iPc    43 25.70    2.3
KRI    88.70 108 iPd    43 27.70    1.3
ASPA  129.59 204 ePKPd  49 40.90    0.1
       0.4s      6.00nm
WRA   132.77 207 PKPd   49 48.10    1.2
       0.4s      1.70nm
WB5   132.82 207 ePKP   49 47.20    0.2
KSH   144.09  54 ePKP   50 06.50   -0.7
GBA   144.32  99 PKPd   50 04.90   -3.1X
       0.7s     40.00nm
HYB   146.52  93 ePKPd  50 12.90    1.2
       0.8s     92.30nm
NDI   146.71  73 iPKPc  50 14.00    2.3
WMQ   150.18  40 iPKPc  50 23.00    6.3X
GKN   153.28  73 PKP    50 22.80    1.0
DMN   153.72  74 PKP    50 23.80    1.2
KKN   153.86  74 PKP    50 23.60    0.9
PKI   153.99  74 PKP    50 23.80    0.8
GUN   154.38  73 PKP    50 24.60    1.0
GTA   159.85  33 ePKP   50 31.00    1.4
     S.D. = 1.2  on  70 of  73 obs.
-------------------------------------
?  FEB  13, 1990  14h 31m 03.26± 0.68s
   54.752 S ±25.5km  130.611 W ±15.0km
   DEPTH =  10.0km  (geophysicist)
   4.9mb (  5 obs.) 4.7Msz (  2 obs.)
 SOUTH PACIFIC CORDILLERA          (691)

SPA    35.43 180 eP     38 01.50    0.3
       1.0s      9.00nm          4.6mb
     Z 20s       2.25um          4.9Msz
                i       38 13.90
DZM    56.70 279 iPc    40 58.90    9.6X
LPB    60.85  77 Pc     41 19.20    0.7
ZOBO   61.05  77 iPd    41 19.70   -0.4
       1.4s     47.42nm          5.4mb
                S       49 49.00
                LR      59 35.00
CTA    69.92 263 iPd    42 18.40    2.0
       1.1s     27.85nm          5.3mb
ASPA   74.07 252 iPc    42 40.40   -0.7
       1.1s     11.00nm          4.8mb
     Z 21s       0.32um          4.6Msz
                LR      09 48.70
WRA    76.80 254 P      42 57.00    0.3
       0.6s      2.20nm          4.4mb
WB5    76.84 254 eP     42 55.80   -1.1
GUN   142.36 240 PKP    50 37.50   -0.4
GKN   143.05 238 PKP    50 38.20   -0.6
     S.D. = 1.1  on   9 of  10 obs.
-------------------------------------
%  FEB  13, 1990  14h 38m 31.25± 0.72s
   43.265 N ± 6.5km   12.497 E ± 7.9km
   DEPTH =  10.0km  (geophysicist)
 CENTRAL ITALY                     (381)

ASS    0.23 148 P       38 36.10   -0.1
                eSg     38 40.10
ARV    0.40  54 P       38 39.30   -0.1
                eSg     38 45.50
CRE    0.54 313 P       38 41.50   -0.7
                eSg     38 50.50
SFI    0.81 325 P       38 48.00    1.2
                eSg     38 58.50
PGD    0.83 318 P       38 47.00   -0.4
                eSg     38 58.50
MNS    0.89 171 P       38 48.50    0.1
                eSg     39 02.00
     S.D. = 0.8  on   6 of   6 obs.
-------------------------------------
*  FEB  13, 1990  15h 47m 28.04± 0.65s
   16.971 N ± 9.8km  122.080 E ±10.2km
   DEPTH =  33.0km  (normal)
   4.6mb (  5 obs.)
 LUZON, PHILIPPINE ISLANDS         (249)

BAG    1.54 249 iPc+    47 54.10    0.4
       1.0s    564.00nm
QCP    2.51 203 eP      48 14.20    6.7X
DAV   10.40 160 eP      49 58.00    0.0
KMI   19.77 297 eP      52 02.50    3.8X
     Z 15s       0.90um
     N 15s       0.60um
     E 15s       0.80um
                pP      52 09.00   25kmX
                S       56 00.00
BDT   22.06 274 eP      52 22.00    0.2
BJI   23.55 349 eP      52 41.00    4.7X
       1.5s    52.00nm          4.8mb
HYB   41.52 277 eP      55 14.50    0.3
GBA   43.13 272 Pc      55 26.20   -1.1
       0.6s     3.50nm          4.3mb
SUF   77.77 332 eP      59 23.40    0.2
NUR   79.00 330 eP      59 26.00   -3.9X
MBC   80.09  12 eP      59 36.00    0.4
       1.1s     9.00nm          4.7mb
HFS   84.26 331 ePKP    59 57.40   -0.1
       0.5s     1.30nm          4.4mb
                e       00 01.40
                e       00 06.20
NB2   84.98 333 P       00 00.90   -0.3
       1.0s     6.50nm          4.8mb
     S.D. = 0.6  on   9 of  13 obs.
-------------------------------------
&  FEB  13, 1990  16h 17m 00.04s
   59.389 N          153.564 W
   DEPTH = 113.4km
 SOUTHERN ALASKA                   (  2)
      <AGS-P>.

AUL    0.07  96 eP      17 15.04    0.8
AUE    0.10 107 eP      17 15.27    1.0
                S       17 27.26
CDD    0.46 185 eP      17 16.33   -1.0
                eS      17 28.33
PDB    0.51 322 eP      17 16.62   -1.0
                eS      17 28.50
BGM    0.85 271 eP      17 19.44   -1.0
XLV    0.94  85 eP      17 22.94    1.7
                S       17 35.11
RED    1.11  21 eP      17 21.99   -1.1
                eS      17 38.49
CNPM   1.20  82 eP      17 22.73   -1.2
                S       17 39.68
NNL    1.32  59 eP      17 25.77    0.4
RDT    1.32  26 eP      17 24.23   -1.2
                eS      17 42.63
KDC    1.74 161 eP      17 28.70   -1.6
                S       17 50.76
NKA    1.79  40 eP      17 32.23    1.3
CKL    1.91  18 eP      17 31.90   -0.8
SPU    1.95  22 eP      17 32.21   -0.9
SVW    2.01 330 eP      17 33.02   -0.8
CRP    2.01  20 eP      17 33.58   -0.4
SLKM   2.02  55 eP      17 33.65   -0.3
CGLM   2.08  21 eP      17 34.57   -0.1
NCG    2.14  18 eP      17 35.73    0.2
SEW    2.20  69 eP      17 35.11   -1.1
      20 obs. associated
-------------------------------------
?  FEB  13, 1990  17h 07m 38.96± 1.25s
   40.287 N ±13.3km  142.579 E ±22.1km
   DEPTH =  33.0km  (normal)
   4.1mb (  4 obs.)
 NEAR EAST COAST OF HONSHU, JAPAN(228)

MAT    5.08 224 iPc     08 55.60    0.8
                eS      10 09.00
SSE   19.61 249 eP      12 00.50   -6.9X
       1.0s    15.00nm          4.2mb
GUN   47.81 273 P       16 15.80    0.1
KKN   48.33 274 P       16 19.40   -0.1
GKN   48.71 274 P       16 22.00   -0.4
WRA   60.41 189 P       17 47.00   -0.4
       0.5s     0.40nm          3.8mb
GBA   62.41 265 Pd      18 00.10   -1.0
HFS   71.50 336 eP      18 58.20    0.3
       0.4s     0.90nm          4.2mb
NB2   71.54 337 P       18 59.00    0.7
       0.6s     1.10nm          4.1mb
     S.D. = 0.7  on   8 of   9 obs.
-------------------------------------
?  FEB  13, 1990  18h 30m 01.69± 6.79s
   31.758 S ±44.5km   69.672 W ±48.0km
   DEPTH =  33.0km  (normal)
 SAN JUAN PROVINCE, ARGENTINA      (137)

RTCB   0.79  70 e(P)    30 17.50    1.0
                (S)     30 31.00
RTCV   0.97  96 iP      30 19.00   -0.1
                S       30 33.80
RTLL   1.11  68 iPd     30 20.10   -0.9
RTRS   1.59   7 ePd     30 27.90    0.0
     S.D. = 1.4  on   4 of   4 obs.
-------------------------------------
*  FEB  13, 1990  19h 26m 03.82± 1.61s
   37.419 N ±28.0km   71.484 E ±10.4km
   DEPTH =  33.0km  (normal)
 AFGHANISTAN-USSR BORDER REGION    (717)

MAIO   9.67 267 eP      28 24.00    0.1
                eS      30 10.00
NDI    9.95 149 eP      28 28.00    0.5
                eS      30 00.00
GKN   14.50 127 P       29 29.00    0.3
KKN   15.06 126 P       29 36.00   -0.1
DMN   15.07 127 P       29 36.40    0.1
PKI   15.30 126 P       29 39.40    0.1
GUN   15.37 124 P       29 40.00   -0.3
HYB   20.88 161 eP      30 45.00   -0.6
     S.D. = 0.4  on   8 of   8 obs.
-------------------------------------
*  FEB  13, 1990  20h 13m 36.59± 0.93s
   31.477 N ± 9.5km  102.376 E ±12.6km
   DEPTH =  33.0km  (normal)
 SICHUAN PROVINCE, CHINA           (307)

CD2    1.31 115 Pg      13 57.20   -1.6
                Sg      14 15.00
LZH    4.76  14 ePn     14 47.50   -0.5
                Pg      15 00.00
XAN    6.08  63 Pn      15 10.00    3.5X
GYA    6.25 142 ePg     15 10.00    0.9
KMI    6.34 177 ePg     15 11.50    1.1
GTA    8.19 346 P       15 37.60    1.5
     E 11s       0.50um
WHN   10.32  92 eP      16 01.00   -4.4X
GUN   14.77 260 P       17 03.80   -1.4
KKN   15.31 260 P       17 09.20   -3.0X
CN2   21.94  49 eP      18 35.00    6.1X
```

13d 20h

S.D. = 1.7 on 6 of 10 obs.

? FEB 13, 1990 20h 19m 26.35± 4.36s
40.318 N ±36.7km 24.059 E ±12.5km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)

MMB	1.29	349	ePd	19 51.00	0.7
			eS	20 15.00	
RZN	1.46	20	eP	19 53.00	0.1
VAY	1.51	312	ePn	19 54.00	0.6
KDZ	1.68	37	eP	19 56.00	0.1
			iS	20 18.00	
KKB	1.71	335	eP	19 55.00	-1.4
PGB	2.23	2	eP	20 10.00	6.0X
VTS	2.36	345	iP	20 06.00	0.1
			iSg	20 49.00	

S.D. = 1.0 on 6 of 7 obs.

? FEB 13, 1990 20h 25m 47.31± 6.25s
17.329 N ±44.7km 60.975 W ±32.5km
DEPTH = 33.0km (normal)
LEEWARD ISLANDS (92)
ML 3.6 (FDF).

BPA	0.89	252	eP	26 03.50	0.1
			eS	26 21.80	
SEG	1.05	209	ePc	26 05.39	-0.4
			S	26 19.00	
SFG	1.09	191	eP	26 05.90	-0.4
MGG	1.44	193	eP	26 11.30	0.0
			S	26 28.20	
PAG	1.46	208	eP	26 11.46	-0.2
			S	26 29.40	
BBL	1.86	195	eP	26 18.60	1.2
CRM	2.56	179	eP	26 27.29	-0.1
FDF	2.59	184	eP	26 27.56	-0.2
			S	26 57.00	
BIM	2.80	182	eP	26 30.88	0.1

S.D. = 0.5 on 9 of 9 obs.

? FEB 13, 1990 21h 09m 22.15± 0.94s
36.845 N ± 7.8km 27.576 E ±10.2km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)
MD 3.6 (ATH).

YER	0.64	63	iPn	09 35.00	0.0
SMG	1.04	326	iPbc	09 42.10	0.3
			eSb	09 58.50	
KAP	1.33	194	ePb	09 46.70	0.0
ELL	1.87	92	ePn	09 58.80	4.1X
KHL	2.14	46	ePn	10 05.00	6.6X
BCK	2.48	75	ePn	10 07.60	4.2X
PRK	2.61	337	ePn	10 04.70	-0.3
DST	2.88	16	ePn	10 17.30	8.4X

S.D. = 0.4 on 4 of 8 obs.

FEB 13, 1990 21h 13m 07.46± 0.35s
26.011 N ± 5.7km 98.980 E ± 4.0km
DEPTH = 33.0km (normal)
4.8mb (9 obs.) 4.3Msz (1 obs.)
BURMA-CHINA BORDER REGION (297)
ML 5.2 (BJI).

KMI	3.51	104	ePn	14 02.50	1.2
SHL	6.41	268	iP	14 39.90	-2.4
			iS	15 53.90	
CD2	6.44	40	Pn	14 43.20	0.7
			Sg	16 32.00	
GYA	6.91	85	P	14 50.00	0.8
			S	16 08.00	
CHG	7.16	180	ePn	14 54.00	1.4
			ePg	15 19.00	
			eSg	16 51.00	
LSA	7.84	300	eP	15 02.00	-0.6
BDT	8.72	180	eP	15 14.50	0.2
	1.2s	221.10nm			6.2mb X
LOE	8.94	163	ePn	15 23.20	5.9X
			ePg	15 56.20	
			eSg	17 55.00	
LZH	10.87	21	eP	15 44.00	0.0
XAN	11.75	45	Pc	15 52.50	-3.3X
			S	18 02.00	
GUN	11.84	282	P	15 57.80	0.4
QIZ	12.20	122	eP	16 06.20	4.3X
N	10s	1.10um			
E	11s	0.90um			
PKI	12.22	280	P	16 02.20	-0.3
KKN	12.36	281	P	16 04.00	-0.2
DMN	12.49	280	P	16 05.40	-0.7
GKN	12.94	282	P	16 10.80	-1.1
GTA	13.38	3	eP	16 17.60	0.0
E	12s	2.90um			
			PP	16 27.60	
WHN	14.27	68	P	16 27.00	-2.2
Z	14s	1.20um			
			eS	19 06.00	
TIY	16.31	41	eP	16 53.00	-2.6
N	11s	1.50um			
BTO	17.20	30	eP	17 06.00	-0.9
N	10s	1.70um			
E	10s	0.50um			
			eS	20 18.00	
HHC	18.12	32	P	17 19.00	0.8
NJ2	18.38	66	Pd	17 22.00	0.6
TIA	18.54	52	Pc	17 23.20	-0.2
Z	16s	13.00um			
E	11s	1.40um			
NDI	19.51	283	iPc	17 34.00	-1.0
	0.5s	21.13nm			4.7mb
			eS	21 14.00	
WMQ	20.00	336	P	17 40.00	-0.1
Z	10s	1.20um			
N	10s	1.20um			
			S	21 19.50	
			sS	21 24.50	
BJI	20.04	41	eP	17 41.00	0.6
	1.5s	79.00nm			4.8mb
Z	16s	0.87um			4.2MszX
N	14s	1.29um			
SSE	20.14	70	P	17 40.50	-1.1
HYB	20.80	250	eP	17 48.50	0.0
KSH	23.46	311	P	18 17.00	2.1
Z	16s	2.40um			4.8MszX
			eS	22 31.00	
GBA	23.69	243	P	18 23.00	5.9X
	1.1s	12.20nm			4.3mb
POO	24.39	257	eP	18 29.00	5.0X
SNY	25.67	46	iPc	18 36.20	0.3
CN2	27.86	44	Pd	19 00.60	4.6X
Z	14s	0.60um			4.3MszX
N	12s	0.90um			
			sP	19 15.00	
			eS	23 37.00	
QUE	28.51	286	eP	19 00.00	-2.2
			eS	24 10.00	
MDJ	30.86	45	eP	19 27.50	4.7X
Z	10s	1.00um			4.8MszX
			eS	24 17.00	
MAIO	35.10	297	iPd	20 02.00	2.1
			eS	25 40.00	
TAB	45.68	299	eP	21 29.00	1.8
PRNI	55.91	290	eP	22 51.00	6.3X
WB5	57.11	140	eP	22 52.20	-1.1
WRA	57.15	140	Pd	22 52.20	-1.3
	0.7s	6.10nm			4.7mb
SUF	59.37	329	iP	23 08.30	-0.2
	0.7s	12.40nm			5.1mb
SOD	59.49	335	iP	23 09.30	0.0
KEV	59.61	337	eP	23 12.00	1.9
ASPA	59.84	143	iPc	23 11.60	-0.7
	0.8s	6.00nm			4.8mb
NUR	60.05	327	eP	23 13.30	0.1
HFS	65.50	327	eP	23 48.90	-0.5
	0.7s	9.90nm			5.0mb
Z	16s	0.20um			4.4MszX
			e	23 54.20	
			e	24 03.00	
			LR	52 25.00	
KSP	65.80	316	eP	23 53.00	1.5
NB2	66.54	328	P	23 55.40	-0.7
	0.8s	7.00nm			4.8mb
GRF	69.24	316	eP	24 14.50	1.4
Z	22s	0.20um			4.3Msz
FBA	75.93	24	eP	24 53.00	0.7
BCAO	79.49	270	iPd	25 14.20	1.3
	0.6s	5.00nm			4.7mb
FRB	90.01	354	eP	26 05.00	0.4

S.D. = 1.2 on 44 of 52 obs.

• FEB 13, 1990 21h 41m 40.98± 1.64s
36.637 N ±14.4km 71.071 E ± 7.5km
DEPTH = 118.9 ± 21.5 km
4.1mb (3 obs.)
AFGHANISTAN-USSR BORDER REGION (717)

QUE	7.30	209	eP	43 26.10	-0.5
			eS	44 44.00	
MAIO	9.33	271	iPd	43 54.00	0.0
	0.7s	11.12nm			4.7mb
			eS	45 32.00	
NDI	9.47	145	eP	43 57.20	1.5
			eS	45 36.00	
GKN	14.33	123	P	44 59.10	-0.5
DMN	14.90	123	P	45 07.20	0.3
KKN	14.90	122	P	45 06.20	-0.7
PKI	15.13	123	P	45 09.60	-0.3
GUN	15.24	121	P	45 11.20	-0.1
HYB	20.26	159	eP	46 09.00	0.0
HFS	42.99	322	eP	49 29.50	-0.1
	0.4s	1.10nm			4.0mb
NB2	44.31	323	P	49 40.50	0.2
	0.6s	1.30nm			3.9mb
EDM	90.43	3	ePc	54 30.10	0.1

S.D. = 0.6 on 12 of 12 obs.

& FEB 13, 1990 21h 56m 29.90s
59.570 N 137.207 W
DEPTH = 18.0km (geophysicist)
SOUTHEASTERN ALASKA (19)
<PGC>. ML 3.8 (PGC).

HYT	1.27	353	Pd	56 52.60	-0.2
WHC	1.58	41	Pn	56 57.70	0.6
			S	57 19.20	
SIT	2.71	158	eP	57 15.80	2.5
DLB	3.87	104	Pn	57 28.50	-1.4
DWY	4.62	348	P	57 40.30	-0.2

5 obs. associated

& FEB 13, 1990 22h 19m 07.80s
38.830 N 122.760 W
DEPTH = 1.0km
NORTHERN CALIFORNIA (36)
<BRK>. ML 3.3 (BRK).

NWRM	0.39	195	eP	19 15.60	0.1
ZSP	0.97	156	ePc	19 26.50	-0.5
			iS	19 41.60	
BRK	1.03	157	iPc	19 27.90	-0.2
			eS	19 42.10	
BKS	1.04	156	ePc	19 27.50	-0.7
			eS	19 41.50	
ORV	1.22	53	e(P)	19 32.50	1.2
			i	19 36.50	
PCC	1.36	167	ePc	19 33.90	0.1
MHC	1.73	149	eP	19 38.60	-0.7
WDC	1.76	5	e(P)	19 41.40	1.8
ARN	1.77	146	eP	19 36.80	-3.0
CMB	2.03	112	ePc	19 42.00	-1.6
FHC	2.18	335	e(P)	19 43.80	-2.0
KVN	3.64	85	eP	20 04.80	-1.9

12 obs. associated

• FEB 14, 1990 00h 05m 21.81± 0.77s
32.012 N ± 6.8km 141.807 E ±15.4km
DEPTH = 10.0km (geophysicist)
4.3mb (6 obs.)
SOUTH OF HONSHU, JAPAN (211)

KAKJ	4.40	342	P	06 30.10	0.0
CHJJ	4.65	331	P	06 33.70	-0.1
			eS	07 27.60	
MAT	5.41	328	(P)	06 44.00	-0.5
			(S)	07 46.00	
MTMJ	5.64	325	eP	06 48.80	1.0
NIIJ	5.70	337	P	06 48.50	-0.1
GUN	48.18	280	P	14 04.60	-0.2
	0.8s	20.00nm			5.2mb
PKI	48.68	280	P	14 08.00	-0.7
KKN	48.72	280	P	14 08.30	-0.5
DMN	48.92	280	P	14 10.10	-0.3
GKN	49.18	281	P	14 11.70	-0.6
WB5	52.09	189	eP	14 35.20	1.0
WRA	52.15	189	Pc	14 35.10	0.4
	0.5s	2.20nm			4.3mb
ASPA	55.88	189	eP	15 00.40	-1.6
	0.4s	3.00nm			4.7mb
MBC	61.25	16	eP	15 39.00	0.1
	0.5s	1.00nm			4.2mb

GBA 61.28 268 P 15 42.00 2.1
0.9s 1.10nm 4.0mb
NB2 78.94 338 P 17 26.60 -0.2
0.9s 2.30nm 4.2mb
S.D. = 0.9 on 16 of 16 obs.

FEB 14, 1990 00h 31m 21.71± 0.50s
41.227 N ± 4.1km 20.034 E ± 4.7km
DEPTH = 5.0km (geophysicist)
ALBANIA (391)
ML 3.0 (SKO), 2.5 (TTG).

TIR 0.17 314 iPgc 31 25.50 0.2
LACI 0.48 329 iPg 31 30.30 -1.0
BERA 0.53 187 iPgc 31 32.10 -0.2
PHP 0.55 33 iPgc 31 31.70 -1.1
OHR 0.59 101 iPgd 31 32.90 -0.6
iSg 31 42.20
PUK 0.82 353 iPgc 31 34.50 -3.6X
SDA 0.88 333 ePg 31 40.50 1.4
KKS 0.89 18 ePg 31 38.50 -0.8
BCI 1.14 1 ePn 31 43.40 -0.1
LSK 1.16 158 ePn 31 43.30 -0.6
SKO 1.29 54 iPg 31 47.00 0.9
iSg 32 03.60
TTG 1.33 335 ePg 31 46.50 -0.3
eSg 32 07.50
PVY 1.37 358 ePg 31 46.60 -0.9
eSn 32 07.00
BDV 1.39 320 ePg 31 48.00 0.3
eSg 32 10.50
IVA 1.65 357 ePn 31 52.00 0.5
eSn 32 20.00
HCY 1.67 317 ePn 31 51.60 -0.2
eSn 32 18.00
NKY 1.76 334 ePn 31 53.80 0.6
eSn 32 21.00
VAY 1.91 86 ePn 31 57.00 1.7
S.D. = 0.9 on 17 of 18 obs.

FEB 14, 1990 01h 37m 48.05± 1.12s
9.803 N ± 5.7km 124.948 E ± 7.2km
DEPTH = 64.1 ± 11.2 km
4.7mb (10 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV 2.77 167 eP 38 31.00 0.1
OCP 6.11 322 eP 38 56.00 -21.9X
BAG 7.82 328 eP 39 39.90 -2.0
OZH 16.23 339 eP 41 34.50 1.1
QIZ 17.25 304 eP 41 47.20 0.9
N 12s 0.80um
E 12s 0.60um
GUMO 19.86 77 eP 42 17.50 0.7
GUA 19.90 77 eP 42 17.20 0.0
SSE 21.47 351 eP 42 29.70 -3.4X
Z 16s 0.40um 3.9MszX
E 14s 0.40um
sS 46 45.00
NJ2 22.85 347 Pc 42 48.00 1.4
WHN 22.88 336 eP 42 49.00 2.1
Z 12s 0.60um 4.3MszX
GYA 23.95 316 eP 43 04.20 6.6X
IPM 24.29 259 ePd 43 01.50 0.7
1.0s 36.70nm 4.8mb
KMI 26.03 309 eP 43 22.00 4.6X
Z 14s 0.60um 4.3MszX
XAN 28.25 331 P 43 35.80 -1.5
eS 48 25.00
TIY 29.99 340 eP 43 51.80 -1.0
N 11s 0.40um
E 10s 0.30um
WRA 30.97 163 Pc 43 59.20 -2.4
0.9s 3.50nm 4.1mb
8JI 31.11 347 eP 44 02.00 -0.5
1.2s 19.00nm 4.7mb
SNY 31.92 358 eP 44 09.00 -0.6
LZH 32.44 327 eP 44 14.50 0.1
2.0s 28.00nm 4.7mb
HHC 33.11 341 P 44 20.60 0.4
8TO 33.41 339 P 44 22.00 -0.7
QIS 33.44 155 iPc 44 21.90 -1.2
CN2 33.87 1 eP 44 26.50 -0.1
Z 16s 0.50um 4.3MszX
E 11s 0.30um
eS 49 40.00
ASPA 34.40 165 eP 44 31.80 0.4
1.0s 9.00nm 4.7mb
Z 18s 0.26um 4.0Msz
LR 59 50.00
MDJ 34.92 6 eP 44 35.50 0.0
CTA 36.36 145 eP 44 48.00 0.0
GTA 37.04 327 P 44 54.20 0.5
GUN 40.89 302 P 45 26.70 0.6
PKI 41.18 301 P 45 28.60 0.1
KKN 41.36 301 P 45 29.80 0.0
DMN 41.45 301 P 45 30.70 0.1
GKN 41.96 301 P 45 33.60 -1.1
HYB 45.63 285 eP 46 04.00 -0.2
GBA 46.62 279 P 46 12.00 0.0
0.5s 2.50nm 4.4mb
WMO 46.80 323 P 46 14.00 0.8
BWA 49.30 154 eP 46 34.80 2.1
CAN 50.31 154 eP 46 41.20 0.8
KSH 52.55 313 eP 46 59.00 1.5
MAIO 64.50 306 iPc 48 20.60 -0.1
KEV 83.62 340 eP 50 08.00 -2.4
SOD 84.22 337 iP 50 13.70 0.2
SUF 85.37 333 iP 50 19.40 0.1
0.7s 10.30nm 5.0mb
MBC 86.45 12 eP 50 25.00 0.5
1.5s 13.00nm 4.9mb
NUR 86.57 331 eP 50 25.50 0.2
NUR 86.57 331 eP 50 25.60 0.3
SLL 91.89 333 eP 50 49.50 -0.9
0.5s 1.10nm 4.5mb
NB2 92.60 334 P 50 52.60 -1.1
1.1s 5.10nm 4.9mb
S.D. = 1.1 on 43 of 47 obs.

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* FEB 14, 1990 02h 21m 29.23± 3.86s
33.238 S ± 7.9km 71.772 W ±31.4km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF CENTRAL CHILE (135)

IHA 0.24 27 iPc 21 33.60 -0.7
e(S) 21 43.50
LCCH 0.29 144 iPc 21 33.60 -1.7
iS 21 43.50
ROCH 0.69 68 iPd 21 41.80 -1.3
iS 21 54.90
TACH 0.81 121 iPd 21 45.70 0.7
iS 22 00.70
SAN 0.95 103 iPc 21 48.00 0.6
iS 22 05.20
i 22 06.00
PCH 1.12 110 iP 21 50.80 0.5
iS 22 09.00
JACH 1.14 61 iPd 21 48.50 -2.1
iS 22 06.60
CHCH 1.16 127 iPc 21 51.40 0.4
iS 22 11.20
RTCB 3.06 56 e(P) 22 19.50 0.9
RFA 3.14 120 e(P) 22 24.70 4.9X
RTLL 3.38 57 e(P) 22 24.80 1.6
CFA 3.40 62 e(P) 22 24.50 1.1
RTRS 3.64 33 ePd 22 29.40 2.7X
S.D. = 1.4 on 11 of 13 obs.

FEB 14, 1990 02h 46m 09.17± 0.31s
33.652 N ± 6.8km 38.570 W ± 5.3km
DEPTH = 10.0km (geophysicist)
4.8mb (15 obs.) 4.7Msz (4 obs.)
NORTH ATLANTIC RIDGE (403)

TOL 28.23 67 eP 52 05.00 0.8
eS 56 53.00
TCF 33.34 55 eP 52 48.30 -1.1
1.2s 56.55nm 5.4mb
SMF 34.51 55 eP 52 58.50 -0.9
1.2s 35.70nm 5.1mb
FRB 35.38 337 ePc 53 06.00 -0.6
HAU 36.36 53 eP 53 14.20 -0.9
1.0s 16.00nm 4.8mb
BSF 36.64 53 eP 53 16.30 -1.3
CDF 37.02 53 eP 53 19.90 -0.9
1.0s 16.00nm 4.7mb
CLL 40.99 49 e(P) 54 06.00 12.3X
KBA 41.04 55 eP 53 54.50 0.2
1.5s 25.00nm 4.7mb
e 54 03.00
TIC 41.07 123 P 53 54.24 -0.4
KHC 41.23 52 P 53 56.50 0.8
e 54 19.00
LIC 41.36 124 Pc 53 56.96 -0.1
1.0s 28.00nm 5.0mb
Z 20s 0.94um 4.7Msz
KIC 41.46 123 Pc 53 57.76 -0.1
0.9s 18.50nm 4.8mb
BRG 41.55 49 eP 54 00.00 1.7
2.0s 44.00nm 4.8mb
PRU 41.89 51 eP 54 02.50 1.5
Z 22s 0.90um 4.6Msz
e 54 28.00
N82 41.93 34 P 54 02.20 0.9
0.9s 6.20nm 4.3mb
KSP 43.04 49 eP 54 05.50 -5.0X
ZST 43.56 53 eP 54 19.60 4.9X
e 54 24.00
KUK 44.70 119 eP 54 24.00 -0.3
KOGH 44.86 119 eP 54 26.00 0.3
BUD 44.89 54 eP 54 25.50 0.0
WIGH 45.08 120 eP 54 27.00 -0.3
SHGH 45.11 119 eP 54 28.00 0.4
WEGH 45.13 120 eP 54 27.00 -0.8
LEGH 45.20 119 eP 54 28.00 -0.3
SPC 45.60 52 eP 54 28.10 -3.3X
TUL 46.48 290 eP 54 39.00 0.8
1.2s 5.90nm 4.5mb
LR 07 45.00
BAO 49.83 192 e(P) 54 58.00 -6.5X
MLR 49.87 56 eP 55 00.50 -4.2X
BW06 55.02 302 P 55 42.60 -0.7
ANMO 55.08 292 P 55 44.40 0.6
ALQ 55.08 292 eP 55 39.90 -3.9X
1.0s 2.50nm 4.2mb
Z 18s 0.52um 4.6Msz
EDM 55.08 315 ePc 55 41.50 -1.9
MBC 55.43 343 eP 55 46.00 0.5
1.2s 9.00nm 4.7mb
IMW 55.69 303 P 55 48.40 0.2
LRM 56.21 306 eP 55 51.80 0.0
ZOBO 57.09 214 eP 56 00.00 1.2
1.3s 13.80nm 4.8mb
Z 25s 0.90um 4.8MszX
S 04 00.00
LR 12 20.00
CCH 57.16 212 P 56 01.00 2.0
LPB 57.30 214 eP 55 58.00 -2.1
Z 18s 1.37um 5.1Msz
LR 13 10.00
NEW 58.60 310 eP 56 08.00 -0.5
1.1s 14.06nm 5.0mb
PNT 59.87 312 eP 56 17.00 -0.2
8CAO 60.39 106 iPd 56 20.60 -0.6
0.5s 8.00nm 5.1mb
ic 56 31.00
TNP 62.07 299 e(P) 56 50.00 17.4X
0.9s 2.93nm
KVN 62.35 300 eP 56 34.30 0.0
LWI 72.58 105 ePc 57 39.20 0.1
MAIO 76.67 55 eP 58 04.00 1.8
S.D. = 1.0 on 38 of 46 obs.

& FEB 14, 1990 03h 11m 03.30s
37.632 N 118.942 W
DEPTH = 6.0km
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 3.1 (BRK).

FRI 0.88 224 iPc 11 19.50 -1.1
iS 11 31.10
CMB 1.21 290 iPc 11 25.20 -1.1
iS 11 41.20
TNP 1.44 71 iPc 11 29.70 -0.4
KVN 1.56 25 iPc 11 31.50 -0.4
PKEM 1.83 211 eP 11 35.00 -0.5
LLA 1.89 238 iPc 11 36.80 0.3
PRI 2.03 223 ePc 11 38.80 0.3
ARN 2.08 263 eP 11 39.30 0.1
PHAM 2.14 214 e(P) 11 37.00 -3.1
MHC 2.17 263 ePc 11 41.30 0.8
SAO 2.18 247 ePc 11 40.50 -0.1
PRS 2.34 237 ePc 11 42.50 -0.4
GCC 2.51 257 eP 11 45.00 -0.3
BRK 2.64 276 eP 11 47.30 0.1
PCC 2.74 268 eP 11 48.60 0.1
ORV 2.78 315 eP 11 52.80 3.7
ABL 2.78 185 eP 11 50.00 0.5
BLP 3.28 202 e(P) 11 57.00 0.7
PEC 4.00 158 eP 12 07.00 0.5

14d 02h

19 obs. associated

FEB 14, 1990 05h 24m 30.71± 0.61s
23.236 N ± 8.0km 99.361 E ± 7.3km
DEPTH = 33.0km (normal)
4.2mb (1 abs.)
BURMA-CHINA BORDER REGION (297)
ML 4.5 (BJI).

KMI	3.61	58	ePn	25	25.00	-1.0
			Pg	25	34.00	
			Sg	26	20.00	
CHG	4.42	185	iPn	25	38.50	1.3
			iPg	25	55.00	
			iSg	26	50.00	
BDT	5.97	183	ePn	25	58.30	-0.8
			ePg	26	23.00	
			eSg	27	34.50	
LOE	6.21	159	ePn	26	00.00	-2.5
			ePg	26	22.00	
			eSg	27	42.00	
SHL	7.20	290	eP	26	17.00	0.4
			eS	27	47.00	
GYA	7.37	63	P	26	19.40	0.5
			S	27	48.40	
QIZ	10.64	111	eP	27	08.00	4.0X
N	10s		0.37um			
			eS	29	05.90	
GUN	13.03	294	P	27	36.30	-0.2
PKI	13.33	292	P	27	40.00	-0.4
	0.5s		9.00nm			5.0mb X
KKN	13.50	293	P	27	42.00	-0.6
DMN	13.60	292	P	27	43.20	-0.7
GKN	14.10	293	P	27	50.00	-0.5
GTA	16.13	1	eP	28	21.40	4.7X
E	13s		0.60um			
TIY	18.28	35	eP	28	41.80	-1.7
BJI	21.97	36	P	29	27.50	4.1X
WMQ	22.67	338	P	29	33.00	2.5
WB5	54.80	139	eP	34	01.50	1.6
WRA	54.83	139	Pc	34	02.20	2.0
	0.8s		1.90nm			4.2mb
S.D. = 1.5 on 15 of 18 obs.						

? FEB 14, 1990 05h 26m 22.50±16.86s
31.240 S ±68.7km 73.223 W ±126.km
DEPTH = 33.0km (normal)
OFF COAST OF CENTRAL CHILE (134)

IHA	2.23	143	eP	26	57.50	-0.3
			e(S)	27	21.00	
ROCH	2.55	133	iPc	27	01.50	-1.2
			i	27	21.60	
			i	27	40.60	
LCCH	2.63	148	iP	27	03.70	0.1
			i	27	26.00	
			i	27	33.70	
TACH	3.09	142	iP	27	09.90	-0.2
			i	27	32.10	
			i	27	44.00	
SAN	3.09	136	ePc	27	11.20	1.0
			e	27	35.50	
			e	27	38.20	
PCH	3.30	137	eP	27	14.00	0.9
			iS	27	48.20	
CHCH	3.45	142	ePd	27	15.00	-0.3
			iS	27	53.00	
ZON	3.90	96	eP	27	23.00	1.4
MRA	6.50	102	e(P)	27	57.50	-0.8
TCA	7.39	93	e(P)	28	10.20	-0.7
S.D. = 1.0 on 10 of 10 obs.						

FEB 14, 1990 05h 49m 32.40± 0.35s
23.128 N ± 5.6km 99.605 E ± 5.7km
DEPTH = 33.0km (normal)
4.7mb (16 obs.)
BURMA-CHINA BORDER REGION (297)

KMI	3.49	55	Pnd	50	27.50	1.6
Z	14s		20.00um			
			Pg	50	38.00	
			Sg	51	24.00	
CHG	4.34	188	ePn	50	36.80	-1.0
			iPg	50	53.30	
			iSg	51	47.50	
BDT	5.88	186	ePn	50	57.80	-1.8
			eSg	52	16.50	
LOE	6.03	160	ePn	51	04.00	2.3
			ePg	51	23.00	
			eSg	52	40.00	
GYA	7.22	61	P	51	16.00	-2.5
N	10s		19.20um			
E	10s		11.70um			
			S	52	34.00	
SHL	7.45	291	iP	51	17.50	-4.2X
			eS	52	35.00	
CD2	8.59	25	P	51	34.40	-3.0X
LSA	10.01	313	eP	51	56.00	-1.5
QIZ	10.39	111	P	52	00.50	-1.8
N	13s		5.03um			
			PP	52	08.80	
			eS	54	00.50	
GZH	12.64	87	Pc	52	30.00	-2.7X
Z	10s		4.10um			4.3MszX
GUN	13.27	294	P	52	36.40	-5.1X
LZH	13.43	15	eP	52	44.50	1.3
Z	16s		4.00um			
PKI	13.57	292	P	52	40.60	-4.8X
XAN	13.60	35	Pd	52	39.00	-6.3X
			S	55	14.00	
KKN	13.75	293	P	52	42.60	-4.9X
DMN	13.84	292	P	52	43.80	-5.1X
GKN	14.35	293	P	52	49.60	-5.8X
WHN	15.08	58	eP	53	04.50	-0.3
Z	14s		3.00um			
			eS	55	47.00	
GTA	16.23	1	eP	53	20.00	0.3
Z	12s		1.60um			
E	12s		6.20um			
			SS	56	36.00	
TIY	18.24	34	eP	53	43.00	-1.7
N	13s		3.30um			
			sS	57	13.00	
NJ2	19.22	58	Pd	53	55.70	-0.8
Z	24s		2.30um			
BTO	19.51	24	P	53	57.00	-2.9X
N	12s		2.00um			
E	10s		1.90um			
TIA	20.00	45	eP	54	07.50	2.4
Z	13s		2.20um			4.7MszX
N	10s		1.80um			
E	11s		2.60um			
PSI	20.32	182	ePc	54	09.70	1.1
HHC	20.34	27	eP	54	08.70	0.0
Z	10s		2.50um			4.9MszX
HYB	20.54	258	ePc	54	09.50	-1.3
	1.4s		125.00nm			5.1mb
SSE	20.76	63	eP	54	15.50	2.5
Z	16s		1.90um			4.6MszX
			pP	54	23.50	30kmX
BAG	20.83	105	eP	54	15.50	1.6
NDI	20.87	290	eP	54	18.00	3.8X
			eS	58	06.00	
BJI	21.93	36	eP	54	26.00	1.3
	2.0s		120.00nm			5.0mb
Z	16s		5.40um			5.1MszX
N	12s		1.60um			
WMQ	22.86	337	eP	54	33.00	-1.0
Z	11s		1.60um			4.7MszX
			pP	54	37.50	16kmX
GBA	23.05	250	Pd	54	35.70	-0.2
	1.1s		21.60nm			4.6mb
DL2	24.47	45	eP	54	49.80	0.2
	1.0s		100.00nm			5.3mb
Z	14s		1.10um			4.5MszX
N	14s		2.20um			
E	13s		2.50um			
POO	24.49	264	iPc	54	51.00	1.1
			eS	59	16.00	
KOD	24.73	242	eP	54	54.20	1.6
BOM	25.34	265	ePc	54	59.40	1.4
			eS	59	33.40	
KSH	25.82	315	eP	55	06.50	4.0X
N	16s		5.70um			
			eS	59	36.00	
SNY	27.36	41	eP	55	14.00	-2.4
Z	15s		1.80um			4.8MszX
N	18s		2.40um			
E	18s		2.70um			
			S	59	55.00	
CN2	29.63	40	Pd	55	34.60	-2.3
Z	16s		1.40um			4.7MszX
N	12s		1.00um			
E	12s		1.00um			
			pP	55	47.00	48kmX
			sP	55	52.00	
			PcP	58	45.50	
			eS	00	22.00	
			SS	01	56.00	
QUE	29.95	291	eP	55	42.00	1.9
MAIO	36.97	300	eP	56	40.00	-0.6
			eS	02	40.00	
WB5	54.57	139	eP	58	59.20	-0.7
WRA	54.60	139	Pd	58	59.60	-0.6
	0.7s		5.30nm			4.7mb
ASPA	57.22	142	iPc	59	18.90	-0.1
	0.8s		6.00nm			4.7mb
SUF	62.13	330	iP	59	52.90	0.6
	0.5s		3.50nm			4.7mb
SOD	62.33	335	iP	59	54.20	0.7
KEV	62.49	338	iP	59	55.80	1.3
CTA	62.57	130	e(P)	59	52.00	-3.8X
HFS	68.22	327	ePKP	00	31.10	-0.5
	0.4s		1.40nm			4.4mb
NB2	69.28	329	P	00	36.00	-2.2
	0.8s		6.40nm			4.7mb
HAU	75.27	316	eP	01	09.80	-4.1X
IMA	75.61	24	eP	01	16.60	1.0
LPG	75.80	314	eP	01	16.40	-0.9
	0.7s		7.15nm			4.8mb
TTA	75.96	27	e(P)	01	19.30	1.7
LOR	77.10	316	eP	01	23.30	-0.9
SMF	77.33	315	eP	01	35.70	10.3X
	1.2s		22.30nm			
SSF	77.40	316	eP	01	25.70	-0.1
	1.1s		25.65nm			5.2mb
AVF	77.59	316	eP	01	27.20	0.3
MBC	78.00	9	eP	01	30.50	1.9
	1.5s		13.00nm			4.7mb
FBA	78.33	24	eP	01	30.50	-0.1
	1.0s		10.00nm			4.8mb
PMR	79.44	27	eP	01	35.10	-1.5
	0.9s		8.33nm			4.7mb
BCAO	80.07	271	iPc	01	39.80	-1.2
	0.7s		6.00nm			4.7mb
			id	01	43.10	
BUL	81.49	244	iPd	01	48.00	-0.4
	1.0s		8.00nm			4.7mb
S.D. = 1.4 on 48 of 63 obs.						

FEB 14, 1990 06h 49m 48.36± 0.73s
31.362 S ± 9.4km 67.823 W ± 6.2km
DEPTH = 10.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.55	273	ePc	49	58.30	-1.3
ZON	0.75	256	eP	50	02.00	-1.1
			eS	50	13.00	
RTCB	0.84	261	iP	50	04.80	0.1
			eS	50	15.00	
RTRS	1.84	310	ePc	50	21.40	1.1
MRA	2.08	121	ePc	50	23.80	0.1
TCA	2.77	90	ePd	50	33.20	-0.4
ROCH	3.14	238	iPd	50	43.90	4.8X
PCH	3.20	225	iPd	50	44.40	4.6X
			iS	51	29.00	
CYA	3.40	32	iPd	50	42.50	0.0
RFA	3.44	189	ePd	50	42.50	-0.7
			S	51	35.50	
TACH	3.48	228	iPd	50	46.00	2.3
			iS	51	31.20	
CHCH	3.50	222	eP	50	47.20	3.2X
			i	51	38.50	
S.D. = 1.3 on 9 of 12 obs.						

• FEB 14, 1990 07h 58m 10.10± 1.31s
24.092 N ±10.4km 122.612 E ±13.8km
DEPTH = 33.0km (normal)
4.4mb (3 obs.)
TAIWAN REGION (243)

TWC	0.87	307	iPd	58	25.80	-0.1
			eS	58	36.50	
TWD	0.93	269	eP	58	25.50	-1.3
			eS	58	36.80	
TWZ	1.37	317	ePc	58	34.20	1.1
			eS	58	52.90	
ANP	1.47	318	iPd	58	37.20	2.5
	1.0s		435.20nm			
			iS	58	57.50	
TWK	2.11	248	ePc	58	44.40	0.5

SSE 7.09 350 iPd 59 53.70 -0.5
Z 18s 0.60um
N 11s 0.90um
GZH 8.56 265 eP 00 19.60 4.9X
NJ2 8.60 338 Pc 00 13.00 -2.2
Z 14s 0.70um 3.9MszX
S 01 47.00
XAN 15.53 313 Pd 01 53.00 4.7X
TIY 16.13 330 eP 02 02.80 6.8X
N 12s 0.70um
BJI 16.80 343 P 02 06.50 2.1
Z 20s 0.30um
CD2 18.04 296 eP 02 19.30 -0.7
HHC 19.11 334 eP 02 33.00 0.0
CN2 19.80 6 Pc 02 39.70 -0.9
Z 18s 0.70um
SP 02 53.40
eS 06 22.00
LZH 20.12 311 eP 02 43.00 -1.3
1.5s 27.00nm 4.4mb
Z 16s 0.50um 4.0MszX
WRA 45.24 164 Pd 06 26.80 0.6
0.9s 1.90nm 4.0mb
SUF 71.77 331 eP 09 22.10 -8.7X
0.6s 5.30nm 4.7mb
NUR 73.14 329 iP 09 28.20 -10.7X
0.6s 9.10nm
i 09 47.10
S.D. = 1.5 on 13 of 18 obs.

% FEB 14, 1990 08h 18m 33.45± 0.82s
41.870 N ± 6.1km 19.899 E ± 7.5km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)

PUK 0.17 358 iPgc 18 36.70 -0.6
LACI 0.27 211 iPgc 18 39.00 -0.2
SDA 0.33 296 ePg 18 41.00 0.7
PHP 0.44 114 iPgd 18 43.00 0.5
TIR 0.52 183 ePg 18 43.70 -0.3
S.D. = 0.8 on 5 of 5 obs.

FEB 14, 1990 08h 31m 37.81± 0.66s
41.243 N ± 5.3km 20.066 E ± 7.0km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)
ML 1.3 (SKO).

TIR 0.18 305 Pg 31 42.00 0.1
LACI 0.48 326 ePg 31 47.00 -0.5
PHP 0.53 32 ePg 31 48.00 -0.5
BERA 0.55 189 ePg 31 47.90 -1.0
OHR 0.57 103 iPgd 31 49.30 -0.1
iSg 31 58.60
SDA 0.88 331 ePg 31 55.50 0.8
LSK 1.17 159 ePg 32 00.70 1.1
SKO 1.26 54 ePn 31 53.00 -8.3X
eSn 32 19.80
i 32 23.80
S.D. = 0.9 on 7 of 8 obs.

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* FEB 14, 1990 08h 37m 25.53± 1.38s
9.513 N ±12.7km 124.286 E ±25.0km
DEPTH = 58.2 ± 16.1 km
4.2mb (2 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV 2.73 152 eP 38 08.00 0.3
QCP 5.98 329 eP 39 02.60 9.0X
BAG 7.75 333 eP 39 18.00 -0.4
QIZ 16.88 306 eP 41 25.00 5.5X
E 12s 0.38um
SSE 21.67 353 eP 42 13.30 0.3
E 14s 0.40um
eS 46 10.00
XAN 28.20 332 P 43 14.50 -0.3
WB5 30.85 161 eP 43 37.10 -1.4
e 45 51.70
WRA 30.90 161 P 43 39.00 0.0
1.5s 5.10nm 4.0mb
BJI 31.25 348 eP 43 42.00 0.2
ASPA 34.29 164 eP 44 09.40 0.9
0.5s 2.00nm 4.3mb
SHL 34.64 302 iP 44 13.00 1.3
GUN 40.49 302 P 45 00.00 -0.9
S.D. = 1.0 on 10 of 12 obs.

? FEB 14, 1990 09h 25m 44.12± 5.31s
43.801 N ±32.6km 7.346 E ±20.3km
DEPTH = 10.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)

IMI 0.41 74 P 25 52.19 -0.3
S 25 57.38
ENR 0.43 7 P 25 52.68 -0.2
S 25 57.94
STV 0.44 358 P 25 52.78 -0.4
S 25 58.39
ROB 0.62 37 P 25 56.81 0.1
PZZ 0.73 346 P 25 58.73 0.3
FIN 0.74 56 P 25 58.16 -0.6
PCP 1.14 49 P 26 06.42 1.0
S.D. = 0.6 on 7 of 7 obs.

& FEB 14, 1990 09h 32m 04.22s
61.403 N 149.780 W
DEPTH = 28.1km
SOUTHERN ALASKA (2)
<AGS-P>.

PMS 0.19 146 iP 32 10.35 0.1
PWA 0.25 349 iP 32 10.84 0.0
PLRM 0.36 58 iP 32 11.44 -1.0
eS 32 17.99
GHO 0.55 47 eP 32 14.17 -1.3
eS 32 22.88
CUT 1.03 347 eP 32 21.75 -1.0
SPU 1.12 260 eP 32 22.64 -1.5
eS 32 38.43
NCG 1.14 271 eP 32 23.58 -0.9
S 32 38.84
SEW 1.31 173 eP 32 25.50 -1.2
GLI 1.40 111 eP 32 26.59 -1.5
RDT 1.53 238 eP 32 28.46 -1.5
NCA 1.53 66 eP 32 28.89 -1.1
NNL 1.56 209 eP 32 30.62 0.3
HUR 1.58 2 eP 32 30.52 -0.2
VZW 1.60 101 eP 32 29.81 -1.2
TOA 1.85 66 eP 32 34.21 -0.5
CNPM 2.02 202 eP 32 35.51 -1.5
RND 2.06 12 eP 32 37.29 -0.3
KTH 2.22 347 eP 32 39.43 -0.5
SDG 2.30 59 eP 32 40.89 -0.1
PAX 2.56 50 eP 32 44.64 -0.2
PDB 2.71 235 eP 32 45.19 -1.7
SVW 2.84 267 eP 32 47.38 -1.3
GLB 2.87 87 eP 32 46.78 -2.3
DDM 3.00 35 eP 32 52.51 1.5
HDA 3.28 22 eP 32 53.96 -0.9
CCB 3.38 15 eP 32 54.99 -1.3
26 obs. associated

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* FEB 14, 1990 10h 15m 40.39± 1.11s
49.260 S ±13.2km 163.817 E ±20.1km
DEPTH = 33.0km (normal)
5.0mb (2 obs.)
AUCKLAND ISLANDS REGION (166)

MCQ 6.05 208 iPc 17 09.60 -0.2
CNB 17.52 317 eP 19 44.00 0.3
CAN 17.68 316 eP 19 45.90 0.3
eS 22 48.00
eTT 35 29.00
BWA 18.69 317 eP 19 57.80 -0.2
eTT 36 00.00
BFD 19.57 300 eP 20 11.00 2.6
ADE 23.33 298 eP 20 50.00 3.6X
RMQ 25.56 327 eP 21 08.00 0.2
QIS 34.55 317 ePd 22 27.30 -0.5
ASPA 34.69 307 iPd 22 28.40 -0.7
0.6s 22.00nm 5.3mb
Z 17s 1.32um 4.7MszX
LR 37 02.00
WRA 37.56 311 Pd 22 51.70 -1.6
0.7s 7.40nm 4.7mb
WB5 37.60 311 eP 22 52.20 -1.4
EDM 123.68 46 ePKP 34 33.50 -1.7
MBC 134.25 19 ePKP 34 55.00 0.3
0.6s 2.00nm
FRB 148.71 43 ePKP 35 23.00 2.5
MLR 151.50 279 ePKPd 35 31.50 6.0X
S.D. = 1.5 on 13 of 15 obs.

? FEB 14, 1990 10h 30m 03.07± 1.07s
39.132 N ± 8.9km 27.529 E ±17.4km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZM 0.76 196 ePg 30 18.00 0.0
eSg 30 29.00
DST 0.97 61 iPn 30 21.60 0.0
EDC 1.24 12 iPn 30 25.60 -0.5
BNT 1.26 14 ePn 30 27.00 0.5
S.D. = 0.7 on 4 of 4 obs.

& FEB 14, 1990 11h 16m 25.24s
62.221 N 151.422 W
DEPTH = 90.8km
CENTRAL ALASKA (1)
<AGS-P>.

CUT 0.57 71 eP 16 40.00 -0.8
eS 16 51.63
PWA 0.93 127 eP 16 43.94 -0.5
SPU 1.09 196 eP 16 45.58 -0.8
S 17 01.20
HUR 1.12 47 eP 16 45.60 -1.1
PLRM 1.25 119 eP 16 46.83 -1.5
GHO 1.26 110 eP 16 47.58 -0.9
S 17 05.15
KTH 1.36 10 eP 16 48.55 -1.1
NKA 1.49 177 eP 16 52.87 1.7
RND 1.68 44 eP 16 52.43 -1.4
RDT 1.72 196 eP 16 53.53 -0.8
SLKM 1.81 161 eP 16 54.24 -1.3
MCK 1.90 36 eP 16 55.55 -1.1
NCA 2.17 94 eP 16 58.71 -1.7
TOA 2.47 90 eP 17 02.93 -1.4
GLI 2.47 121 eP 17 01.68 -2.7
VZW 2.60 114 eP 17 04.52 -1.6
WRH 2.71 32 eP 17 05.53 -2.1
CCB 2.93 32 eP 17 08.49 -2.1
HDA 2.98 41 eP 17 09.19 -2.1
GLB 3.69 99 eP 17 18.55 -2.7
20 obs. associated

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* FEB 14, 1990 11h 25m 16.29± 2.61s
24.411 S ±18.2km 179.808 W ±20.6km
DEPTH = 566.5 ± 27.1 km
5.0mb (3 obs.)
SOUTH OF FIJI ISLANDS (171)

DZM 12.85 278 iPd 28 03.50 -0.3
PGZ 16.49 191 eP 28 39.90 0.6
MNG 16.64 193 eP 28 39.80 -1.0
MTW 17.16 192 eP 28 45.50 -0.3
CAW 17.19 193 eP 28 45.90 -0.3
WDW 17.36 193 eP 28 48.30 0.5
MRW 17.39 194 eP 28 48.00 0.0
TCW 17.47 195 eP 28 48.40 -0.4
KHZ 18.79 195 eP 29 02.10 0.8
BRS 24.82 257 ePd 29 57.00 0.7
CAN 29.04 241 eP 30 34.20 1.1
BWA 29.32 243 eP 30 34.60 -0.9
CTA 31.66 271 iPd 30 56.00 0.6
0.5s 60.56nm 5.5mb
PMG 34.83 290 eP 31 22.00 0.0
ASPA 42.13 261 iPd 32 21.80 0.7
0.4s 16.00nm 4.9mb
eS 37 58.40
WB5 42.54 267 iPd 32 24.40 0.0
WRA 42.55 267 Pd 32 23.90 -0.5
0.4s 10.10nm 4.7mb
WARB 48.16 256 eP 33 06.00 -1.5
HFS 143.08 349 ePKP 43 47.00 0.2
0.4s 5.30nm
S.D. = 0.8 on 19 of 19 obs.

& FEB 14, 1990 12h 14m 06.70s
36.862 N 121.623 W
DEPTH = 5.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.7 (BRK).

SAO 0.17 124 iP 14 10.00 -0.3
GCC 0.34 299 iPc 14 13.30 -0.3
MHC 0.48 358 iPd 14 16.50 0.2
eS 14 22.60
ARN 0.49 8 ePd 14 16.40 -0.2
PRS 0.57 159 iPd 14 17.60 -0.5
LLA 0.60 114 iPc 14 18.50 -0.2

14d 12h

PCC	0.88	317	eP	14 22.40	-1.6
PRI	1.05	133	ePc	14 26.50	-0.6
BKS	1.12	334	ePc	14 28.30	0.1
BRK	1.13	334	e(P)	14 26.70	-1.6
			eS	14 43.50	
ZSP	1.19	335	ePc	14 29.70	0.3
			eS	14 45.40	
PHAM	1.42	136	eP	14 30.50	-2.8
CMB	1.53	40	e(P)	14 34.30	-0.5
FRI	1.54	85	e(P)	14 32.90	-1.9
			eS	14 53.40	
KVN	3.54	51	eP	15 12.50	8.9

15 obs. associated

% FEB 14, 1990 12h 17m 01.77± 0.63s
40.773 N ± 6.3km 29.153 E ± 5.2km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

GBZT	0.22	86	ePg	17 06.50	-0.1
			iSg	17 10.00	
YLV	0.27	141	iPg	17 06.20	-1.2
ISK	0.30	346	iPg	17 08.70	0.7
			eSg	17 13.70	
HRT	0.39	83	ePg	17 10.20	0.3
CTT	0.66	305	ePg	17 14.70	-0.3
			eSg	17 22.20	
BNT	1.03	247	iPn	17 21.70	0.5
EDC	1.07	247	iPn	17 20.50	-1.4
DST	1.23	199	ePn	17 26.60	1.9
DMK	1.48	315	ePn	17 28.10	-0.4

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

FEB 14, 1990 12h 27m 14.49± 0.58s
26.286 S ± 5.7km 27.507 E ± 7.5km
DEPTH = 5.0km (geophysicist)
4.5mb (1 obs.)
REPUBLIC OF SOUTH AFRICA (584)
mbLg 3.8 (BUL).

KSR	0.69	307	iPd	27 29.00	0.7
			S	27 37.30	
SLR	0.89	52	iPd	27 43.70	11.6X
			S	27 47.50	
BFS	0.89	227	iPd	27 32.00	-0.1
			S	27 38.00	
SEK	2.03	177	iPd	27 51.00	1.1
			S	28 51.00	
KIM	3.45	224	iPc	28 09.50	-0.6
			S	28 48.60	
HVD	4.65	202	eP	28 14.50	-12.7X
			S	29 03.60	
BUL	6.20	10	iPnc	28 49.50	0.5
			iSn	29 57.70	
			iS*	30 12.50	
			iSg	30 30.00	
POF	7.37	244	iPc	29 04.00	-1.3
			S	30 27.00	
KRI	9.61	12	iPn	29 35.50	-1.2
			iSn	31 19.00	
			iSg	32 16.00	
CER	10.03	223	eP	29 38.50	-3.8X
			S	31 52.00	
CLK	12.64	35	iPn	30 17.30	-0.7
			iSn	32 35.00	
KIC	45.07	311	P	35 34.10	0.6
LIC	45.17	311	P	35 34.40	0.2
TIC	45.47	311	P	35 37.30	0.7
GBA	62.68	57	Pd	37 43.10	0.3
	0.8s		2.60nm		4.5mb

S.D. = 0.9 on 12 of 15 obs.

& FEB 14, 1990 13h 12m 56.90s
36.945 N 121.688 W
DEPTH = 6.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.6 (BRK).

GCC	0.26	289	iPc	13 02.10	-0.1
			iS	13 06.00	
SAO	0.27	133	iP	13 02.10	-0.2
MHC	0.40	5	iPd	13 05.20	0.3
ARN	0.42	17	iPd	13 05.50	0.1
PRS	0.66	157	ePd	13 09.40	-0.8
LLA	0.68	119	ePd	13 10.00	-0.6
PCC	0.78	315	ePc	13 11.20	-1.3
BKS	1.03	335	ePd	13 15.80	-0.9
BRK	1.03	334	eP	13 15.10	-1.7
ZSP	1.10	336	e(P)	13 17.70	-0.1
PRI	1.15	134	e(P)	13 16.10	-2.8
CMB	1.50	43	eP	13 23.50	-1.0
PHAM	1.52	136	eP	13 23.30	-1.4
FRI	1.59	88	eP	13 23.50	-2.1
KVN	3.53	52	eP	13 59.00	5.4

15 obs. associated

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* FEB 14, 1990 14h 07m 45.18± 0.72s
9.800 N ±11.8km 124.989 E ±16.6km
DEPTH = 33.0km (normal)
3.8mb (1 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

PSI	26.84	256	ePd	13 24.30	-0.4
WB5	30.90	163	eP	14 01.20	0.0
WRA	30.96	163	Pc	14 01.80	0.1
	0.9s		1.60nm		3.8mb
BJI	31.12	347	eP	14 02.50	-0.4
GUN	40.93	302	P	15 27.50	0.7
PKI	41.22	301	P	15 29.60	0.4
GKN	42.00	301	P	15 35.00	-0.4
SUF	85.39	333	eP	20 20.30	0.0

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

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* FEB 14, 1990 14h 50m 22.39± 0.81s
37.456 N ±12.1km 71.618 E ±10.8km
DEPTH = 33.0km (normal)
4.1mb (2 obs.)
AFGHANISTAN-USSR BORDER REGION (717)

QUE	8.22	210	eP	52 21.70	-0.8
NDI	9.93	150	eP	52 48.00	2.2
			eS	54 31.00	
GKN	14.44	127	P	53 46.80	0.3
KKN	15.00	126	P	53 53.00	-0.8
DMN	15.01	127	P	53 53.20	-0.9
PKI	15.23	126	P	53 56.60	-0.4
GUN	15.31	124	P	53 58.00	0.0
HFS	42.63	321	eP	58 16.90	0.0
	0.4s		2.00nm		4.2mb
NB2	43.92	322	P	58 27.80	0.4
	0.5s		1.20nm		3.9mb

S.D. = 1.1 on 9 of 9 obs.

? FEB 14, 1990 15h 08m 51.73± 3.64s
61.506 N ±14.6km 3.478 E ±29.6km
DEPTH = 10.0km (geophysicist)
NORWEGIAN SEA (642)
MD 1.5 (BER).

SUE	0.77	125	iPd	09 07.36	0.7
			iS	09 16.40	
ASK	1.32	140	eP	09 17.10	1.0
			eS	09 33.80	
HYA	1.35	103	eP	09 16.57	0.0
			eS	09 33.69	
MOL	2.19	59	eP	09 29.00	0.3
			eS	09 54.87	
ODD1	2.23	135	eP	09 27.90	-1.4
			eS	09 52.69	
KMY	2.46	158	eP	09 33.80	1.3
			eS	09 55.22	
BLS1	2.69	141	eP	09 34.10	-1.9
			iS	10 02.80	

S.D. = 1.5 on 7 of 7 obs.

FEB 14, 1990 15h 55m 03.15± 0.73s
26.343 S ± 6.7km 27.384 E ± 9.7km
DEPTH = 5.0km (geophysicist)
REPUBLIC OF SOUTH AFRICA (584)
mbLg 3.9 (BUL).

KSR	0.65	317	iPd	55 17.70	1.6
			S	55 25.60	
BFS	0.77	224	iPc	55 19.00	0.3
			S	55 27.50	
SLR	1.01	53	iPc	55 24.00	1.2
			S	55 36.80	
SEK	1.98	174	iPd	55 39.00	1.1
			S	56 02.20	
BLF	2.95	201	iPc	55 52.30	0.6
			S	56 30.00	
KIM	3.33	223	iPd	55 56.50	-0.6
			S	56 33.60	
HVD	4.56	201	eP	56 01.60	-12.9X
			S	56 51.00	
BUL	6.27	11	iPnc	56 38.40	-0.4
			iSn	57 47.20	
			iS*	58 03.00	
			iSg	58 18.00	
POF	7.24	244	eP	56 52.50	0.3
			S	58 15.50	
KRI	9.69	13	iPn	57 23.90	-2.6
			iSn	59 08.60	
			iSg	00 02.50	
CER	9.91	223	eP	57 27.00	-2.3
			S	59 25.00	
KIC	45.03	312	P	03 22.20	0.4
TIC	45.42	312	P	03 25.40	0.5

S.D. = 1.4 on 12 of 13 obs.

FEB 14, 1990 15h 55m 54.04± 0.18s
46.356 N ± 1.9km 6.665 E ± 2.0km
DEPTH = 10.0km (geophysicist)
SWITZERLAND (544)
ML 4.0 (LDG). MD 3.6 (STR). mbLg 3.5 (UCC).

EMS	0.34	147	iPd	55 59.50	-1.7
DIX	0.59	118	iPd	56 04.40	-1.7
LPL	0.84	177	Pg	56 09.40	-1.0
LPG	0.86	176	Pg	56 09.70	-1.1
MMK	0.95	108	iPd	56 10.80	-1.6
LSD	0.96	159	P	56 10.89	-1.6
			S	56 22.16	
LOMF	1.00	6	Pn	56 15.18	2.1
			Pg	56 15.63	
ORX	1.17	128	P	56 14.28	-1.7
			S	56 27.03	
ORO	1.17	128	P	56 14.40	-1.6
			eSg	56 30.90	
BBS	1.25	27	Pn	56 17.75	0.4
			Pg	56 19.12	
			Sg	56 36.30	
RSP	1.27	161	P	56 16.82	-0.9
			S	56 31.90	
BNI	1.30	180	P	56 18.50	0.2
			eSg	56 36.20	
RRL	1.44	177	P	56 20.02	-0.4
			S	56 36.21	
BSF	1.48	3	Pn	56 21.21	0.4
			Pg	56 23.35	
			Sg	56 43.57	
MOF	1.53	12	Pn	56 21.58	0.1
			Pg	56 24.05	
			Sg	56 45.47	
VAI	1.54	108	P	56 22.20	0.6
			eSg	56 42.10	
TMA	1.55	98	iPd	56 22.40	0.5
ZLA	1.63	46	iPc	56 22.60	-0.4
HAU	1.66	353	Pn	56 24.40	1.0
			Sg	56 49.80	
LLS	1.69	71	iPc	56 24.80	0.9
FEL	1.78	31	Pn	56 24.11	-1.0
			Pg	56 28.34	
			Sg	56 51.53	
PZZ	1.88	170	P	56 27.89	1.3
			S	56 47.63	
SLE	1.88	41	iPc	56 25.50	-1.1
ECH	1.89	10	Pn	56 26.36	-0.3
			Pg	56 30.69	
			Sg	56 56.55	
DOI	1.90	167	P	56 27.60	0.8
			eSg	56 50.00	
VITF	1.92	346	Pn	56 27.86	0.9
VDL	1.94	85	iPc	56 29.40	1.8
LBF	1.95	290	Pn	56 28.50	0.9
			Pg	56 31.60	
			Sg	56 58.00	
SMF	1.97	279	Pn	56 28.20	0.4
			Pg	56 32.20	
			Sg	56 57.80	
SAX	2.05	63	iPd	56 29.70	0.5
CDF	2.10	11	Pn	56 29.22	-0.5
			Pg	56 34.67	
WLS	2.11	13	Pn	56 29.22	-0.7
			Pg	56 34.92	
LOR	2.13	296	Pn	56 31.00	0.8
			Pg	56 35.40	
			Sg	57 03.00	
PLDF	2.15	261	Pn	56 30.50	0.0
			Sg	57 02.00	

STV	2.16	167	P	56	30.56	-0.1
ENR	2.20	166	P	56	30.77	-0.4
			S	56	52.12	
MDI	2.20	104	P	56	32.00	0.9
ROB	2.23	157	P	56	32.30	0.7
			S	56	54.37	
CKI	2.24	149	P	56	32.70	1.0
			eSn	56	59.50	
PCP	2.25	143	P	56	33.12	1.3
			S	56	55.30	
SSF	2.29	289	Pn	56	33.00	0.6
			Pg	56	38.20	
			Sg	57	08.20	
AVF	2.33	282	Pn	56	33.40	0.5
			Pg	56	38.90	
			Sg	57	08.60	
FIN	2.41	153	P	56	34.56	0.4
AUTN	2.42	167	Pn	56	35.98	1.5
OSS	2.42	81	iPd	56	36.00	1.5
SAOF	2.45	165	Pn	56	35.22	0.5
MVIF	2.48	172	Pn	56	36.67	1.4
AURF	2.51	169	Pn	56	36.93	1.3
BOB	2.52	128	P	56	35.90	0.2
SBF	2.55	167	Pn	56	34.60	-1.6
			Pg	56	42.00	
			Sg	57	12.40	
IMI	2.59	160	P	56	37.35	0.5
CALN	2.61	176	Pn	56	37.15	0.0
PYM	2.62	258	Pn	56	37.90	0.7
			Sg	57	19.30	
LBL	2.64	246	Pn	56	36.60	-0.8
			Sg	57	18.50	
BGF	2.65	276	Pn	56	37.80	0.3
			Pg	56	45.00	
			Sg	57	19.40	
REVF	2.66	169	Pn	56	38.99	1.2
			Sn	57	13.35	
GWF	2.70	13	Pn	56	37.07	-1.3
SAL	2.79	104	P	56	41.50	1.9
			eSn	57	12.50	
FRF	2.80	180	Pn	56	39.40	-0.2
			Pg	56	46.00	
			Sg	57	20.40	
MAF	2.85	269	Pn	56	40.40	0.1
			Pg	56	49.00	
			Sg	57	26.40	
LRG	2.91	184	Pn	56	40.80	-0.4
			Pg	56	48.00	
			Sg	57	24.60	
HYF	2.91	290	Pn	56	41.60	0.3
			Sg	57	28.20	
LMR	3.02	182	Pn	56	42.60	-0.2
			Pg	56	50.00	
			Sg	57	27.60	
OGA	3.05	79	ePn	56	46.50	3.1X
TCF	3.09	270	Pn	56	44.00	0.3
			Pg	56	53.50	
			Sn	57	18.80	
			Sg	57	32.40	
WLF	3.33	354	P	56	53.00	5.9X
			iS	57	43.00	
CTI	3.48	93	P	56	52.00	2.7
CAF	3.53	248	Pn	56	49.80	-0.2
			Sg	57	46.00	
SCE	3.54	77	iPnc	56	50.90	0.6
LSF	3.56	270	Pn	56	50.40	-0.1
			Pg	57	01.20	
			Sn	57	29.80	
			Sg	57	48.00	
MME	3.58	126	P	56	52.50	1.6
FUR	3.62	58	ePn	56	50.40	-1.0
RJF	3.75	256	Pn	56	53.00	-0.2
			Sg	57	52.50	
DOU	3.99	340	iPc	56	56.90	0.4
			i	57	15.00	
			iS	57	39.40	
TNS	4.05	16	ePn	56	56.00	-1.4
			eSn	57	04.20	
LPO	4.20	248	Pn	56	58.20	-1.3
			Pg	57	14.00	
			Sg	58	07.40	
FVI	4.23	85	P	57	01.10	1.1
MEM	4.28	354	iP	57	00.50	-0.1
			i	57	08.00	
			iS	57	46.20	
GSH	4.39	358	iPnd	57	01.80	-0.4
			eSg	57	50.80	
LFF	4.39	253	Pg	57	16.40	14.2X
ENN	4.44	354	iPnc	57	03.10	0.2
	0.5s		37.00nm			
			e	57	05.00	
			e	57	21.00	
			e	57	25.00	
SNF	4.45	340	iPd	57	03.80	0.8
			iS	57	53.20	
KBA	4.65	79	iPnd	57	06.00	-0.1
	0.5s		4.70nm			
			iPg	57	23.90	
			iSn	58	01.20	
			i	58	04.50	
			iSg	58	26.50	
			e	17	35.00	
			e(Sg)	18	05.50	
MFF	4.71	275	Pn	57	06.50	-0.3
RBL	4.78	86	P	57	07.70	-0.1
TRI	4.99	95	eP	57	21.60	11.0X
			e	58	05.50	
VOY	5.03	91	ePn	57	10.70	-0.7
			eSn	58	02.80	
WET	5.04	54	iPnd	57	08.70	-2.7
LDF	5.12	298	Pn	57	12.00	-0.5
			Sg	58	37.20	
FLN	5.40	299	Pn	57	16.20	-0.4
MOX	5.41	36	ePn	57	13.00	-3.7X
			ePg	57	40.00	
			iSg	58	46.00	
KHC	5.43	57	iPn	57	15.00	-2.0
			Pg	57	22.00	
			Sn	58	16.50	
			Sg	58	44.90	
GRR	5.50	294	Pn	57	17.00	-1.0
			Sg	58	50.40	
LPF	5.51	290	Pn	57	17.60	-0.5
EPF	5.60	236	Pn	57	18.40	-1.0
WTS	5.65	1	ePn	57	19.50	-0.5
	0.5s		8.00nm			4.7mb
			e	57	22.00	
			e	57	52.00	
PTJ	6.48	91	eP	57	30.80	-1.0

S.D. = 1.0 on 92 of 97 obs.

? FEB 14, 1990 16h 39m 43.72± 1.29s
4.088 S ±16.7km 143.267 E ±15.0km
DEPTH = 83.1 ± 27.5 km
3.3mb (1 obs.)
PAPUA NEW GUINEA (202)

MNDI	2.09	169	eP	40	17.70	0.0
JAY	3.00	301	ePc	40	30.00	0.0
LAT	4.51	125	eP	40	51.00	0.0
PMG	6.54	144	eP	41	16.00	-3.3X
WB5	17.93	208	eP	43	49.20	0.0
WRA	18.00	208	Pc	43	50.10	0.0
	0.6s		1.30nm			3.3mb

S.D. = 0.1 on 5 of 6 obs.

FEB 14, 1990 16h 44m 33.51± 1.07s
6.777 S ± 7.2km 108.023 E ± 9.7km
DEPTH = 265.8 ± 13.4 km
4.3mb (7 obs.)
JAVA (277)

PPI	9.86	309	ePd	46	50.60	-0.6
PSI	13.08	316	ePc	47	29.80	-1.3
	0.7s		21.50nm			4.5mb
IPM	13.27	328	ePc	47	35.20	1.7
	0.8s		71.90nm			5.0mb
SNG	15.71	332	eP	48	03.20	0.2
NNT	20.93	337	eP	48	57.00	0.3
MTN	23.54	107	eP	49	22.00	0.2
			e	53	23.00	
BAL	25.07	162	eP	49	36.00	0.3
MUN	26.21	164	eP	49	47.00	0.9
WARB	26.22	140	eP	49	47.00	0.7
			e	50	08.00	
KL8	26.31	161	eP	49	47.50	0.5
COOL	26.95	154	eP	49	52.80	0.0
CHG	26.96	341	eP	49	53.70	0.8
CHTO	26.96	341	eP	49	53.00	0.1
			pP	50	41.40	249kmX
WB5	28.69	120	eP	50	07.10	-1.4
WRA	28.70	120	P	50	08.00	-0.5
	0.5s		2.90nm			4.1mb
ASPA	30.00	127	iPd	50	19.40	-0.5
	0.5s		26.00nm			5.1mb
			iPP	51	18.30	
			iS	54	56.90	
			ePcS	56	27.60	
FORR	30.46	144	eP	50	24.00	0.2
QIS	33.52	117	iPc	50	49.60	-0.8
SHL	35.78	335	iP	51	09.20	-0.3
GBA	36.50	304	Pc	51	14.30	-1.2
	0.4s		2.60nm			4.1mb
HYB	37.76	310	eP	51	26.00	-0.1
LSA	39.73	337	P	51	44.00	1.4
PKI	40.55	328	P	51	48.80	-0.4
GUN	40.58	329	P	51	49.90	0.4
DMN	40.74	328	P	51	50.20	-0.5
KKN	40.79	328	P	51	50.90	-0.2
GKN	41.30	328	P	51	55.00	-0.2
BFD	43.61	139	eP	52	17.00	3.5X
TIY	44.45	5	eP	52	20.60	0.4
BRS	47.10	121	iPc	52	41.50	0.3
	0.5s		5.00nm			4.1mb
BJI	47.19	9	eP	52	41.00	-0.5
BUL	77.78	251	iPd	56	08.00	4.4X
	1.0s		5.50nm			4.2mb

S.D. = 0.8 on 30 of 32 obs.

FEB 14, 1990 18h 03m 57.31± 1.00s
6.273 N ± 4.2km 126.352 E ± 6.2km
DEPTH = 88.1 ± 9.3 km
5.2mb (21 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV	1.12	316	iPd-	04	17.30	-1.3
TSM	8.49	257	ePc	06	00.11	0.5
QCP	9.80	328	eP	06	34.00	16.7X
KKM	10.08	269	ePd	06	22.80	1.5
	0.7s		75.90nm			5.8mb
BAG	11.55	331	eP	06	43.20	2.2
MTN	19.58	166	eP	08	20.00	-1.0
GUMO	19.62	67	eP	08	29.70	8.2X
PJG	19.62	67	eP	08	28.90	7.4X
HKC	19.81	325	eP	08	24.50	1.1
QZH	20.00	339	eP	08	24.40	-0.9
QIZ	20.47	310	eP	08	27.40	-2.9
SSE	25.16	350	eP	09	15.50	-0.5
IPM	25.27	267	ePd	09	19.00	1.9
	0.5s		14.70nm			4.7mb
SNG	25.57	273	eP	09	21.10	1.2
PMG	25.93	127	eP	09	22.50	-0.7
LOE	26.48	297	eP	09	29.00	0.8
NJ2	26.59	346	Pc	09	29.00	0.0
WHN	26.65	336	eP	09	28.00	-1.6
PPI	26.76	256	eP	09	30.00	-0.8
NNT	26.98	285	eP	09	24.00	-8.9X
WB5	27.16	163	iPd	09	33.00	-1.4
WRA	27.21	163	Pc	09	34.00	-0.9
	0.7s		13.80nm			4.6mb
PSI	27.57	264	eP	09	38.50	0.3
KMI	29.36	312	eP	09	53.50	-1.0
CHG	29.46	298	eP	09	55.00	-0.2
QIS	29.67	154	iPd	09	56.30	-0.7
	0.8s		95.00nm			5.5mb
ASPA	30.66	166	iPc	10	04.70	-1.0
	0.5s		52.00nm			5.5mb
Z	21s		0.06um			3.3Msz
			iS	15	00.20	
			LR	23	28.90	
XAN	32.00	332	P	10	14.90	-2.5
WARB	32.26	180	eP	10	20.00	0.3
CD2	32.40	322	P	10	22.60	1.7
CTA	32.70	144	iPc	10	24.20	0.6
	1.0s		58.00nm			5.3mb
			e	10	38.50	
			i	13	08.50	
DL2	32.77	353	eP	10	24.00	0.1
	1.0s		100.00nm			5.6mb
TIY	33.76	340	eP	10	32.60	-0.1
BJI	34.84	346	eP	10	41.50	-0.3
	1.2s		32.00nm			5.1mb
			ePcP	13	13.00	
			eScP	16	53.00	
LZH	36.14	328	eP	10	54.50	1.4
HHC	36.88	341	eP	10	59.60	0.5
FORR	36.95	177	iPc	10	59.20	-0.4
	0.4s		30.00nm			5.6mb
COOL	37.28	187	eP	11	01.00	-1.5
CN2	37.39	359	Pc	11	03.60	0.4
BAL	37.82	194	eP	11	06.00	-0.9

14d 18h

0.4s 18.00nm 5.4mb
SHL 38.11 304 eP 11 08.20 -1.6
MDJ 38.30 4 eP 11 10.00 -0.8
KLB 38.54 192 eP 11 12.50 -0.5
RMO 39.15 147 eP 11 18.00 -0.1
e 13 28.50
MUN 39.25 194 eP 11 18.00 -0.9
NWAO 39.93 192 eP 11 34.00 9.5X
LSA 40.51 309 eP 11 30.00 0.1
GTA 40.74 328 eP 11 30.00 -1.3
CMS 41.90 155 eP 11 41.00 0.3
BRS 42.11 144 iPc 11 42.00 -0.5
i 11 50.00
ADE 42.64 165 iPd 11 49.10 2.3
0.9s 117.65nm 5.7mb
GUN 43.96 304 P 11 58.80 0.8
0.7s 26.00nm 5.2mb
PKI 44.23 303 P 12 00.80 0.7
KKN 44.41 304 P 12 01.90 0.4
DMN 44.49 303 P 12 03.00 0.8
GKN 45.02 304 P 12 05.40 -0.8
BWA 45.53 154 eP 12 11.90 1.9
BFD 45.80 162 eP 12 14.00 2.0
CAN 46.55 154 eP 12 18.90 0.9
HYB 47.95 288 eP 12 28.50 -0.7
DZM 48.33 127 iPc 12 32.70 0.5
GBA 48.66 283 Pc 12 33.40 -1.3
0.7s 8.80nm 4.8mb
WMQ 50.45 324 P 12 50.50 2.4
KSH 55.97 314 eP 13 30.50 1.4
MSZ 62.96 148 Pd 14 17.50 0.8
0.7s 43.00nm 5.5mb
SVW 78.75 29 eP 15 52.60 1.1
TTA 78.82 27 eP 15 52.50 0.6
BRW 79.90 19 eP 15 58.70 1.2
KDC 80.00 33 P 15 58.50 0.3
0.5s 14.46nm 5.1mb
IMA 80.23 24 eP 16 00.00 0.5
PMR 81.91 29 eP 16 08.10 0.0
0.7s 14.30nm 5.0mb
FBA 82.60 25 eP 16 11.20 -0.5
TOA 83.32 28 eP 16 16.90 1.4
SOD 87.99 338 iP 16 37.70 -0.7
SUF 89.13 333 eP 16 43.20 -0.7
0.6s 3.00nm 4.6mb
MBC 89.57 13 eP 16 45.50 -0.3
0.7s 3.00nm 4.6mb
NUR 90.31 331 iP 16 49.80 0.4
DAG 94.72 352 iPd 17 08.30 -1.2
0.8s 23.88nm 5.7mb
HFS 95.61 332 eP 17 12.40 -1.5
0.6s 1.40nm 4.6mb
NB2 96.36 334 P 17 15.80 -1.5
0.8s 2.90nm 4.9mb
KIC 129.60 284 PKP 22 58.60 -0.1
TIC 129.81 284 PKP 22 59.00 -0.1
LIC 129.91 283 PKP 22 59.20 -0.1
CHCH 148.29 152 ePKP 23 32.00 0.2
TACH 148.39 152 iPKPd 23 36.20 4.2X
PCH 148.61 152 iPKP 23 37.30 4.9X
ROCH 148.91 151 iPKP 23 38.20 5.1X
S.D. = 1.1 on 79 of 87 obs.

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* FEB 14, 1990 20h 33m 34.57± 0.64s
17.038 S ±12.3km 69.674 W ± 7.7km
DEPTH = 184.3 ± 8.6 km
PERU-BOLIVIA BORDER REGION (118)

LPB 1.59 72 iPd 34 09.00 0.4
ZOBO 1.67 63 iPd 34 09.00 -0.5
S 34 36.00
ARE 1.83 288 iPc 34 11.50 0.6
iS 34 38.50
CCH 3.39 96 iP 34 29.90 0.8
ANT 6.67 186 eP 35 11.00 -0.1
PT08 8.35 306 iPd 35 34.00 0.2
iS 37 02.50
NNA 8.57 305 iPd 35 35.40 -0.9
0.5s 50.70nm 5.2mb X
e(S) 36 53.50
i 37 06.00
PT10 8.61 304 eP 35 36.00 -0.9
eS 37 10.50
BAO 20.85 89 eP 38 02.00 -1.5
KIC 68.23 76 P 44 17.40 -0.3
SES 76.36 334 eP 45 07.00 2.2
S.D. = 1.2 on 11 of 11 obs.

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* FEB 14, 1990 20h 51m 53.39± 1.22s
29.258 S ± 7.5km 71.637 W ±12.4km
DEPTH = 33.0km (normal)
4.4mb (1 obs.)
NEAR COAST OF CENTRAL CHILE (135)

RTRS 2.10 116 iPd 52 28.10 1.2
RTCB 3.31 133 iPd 52 45.00 0.8
eS 53 22.00
ZON 3.43 132 eP 52 48.00 2.2
RTLL 3.43 128 ePc 52 45.60 -0.3
RTCV 3.73 135 i(P) 52 49.80 -0.2
S 53 34.50
ROCH 3.74 172 eP 52 50.50 0.1
iS 53 35.00
CFA 3.75 129 iP 52 50.80 0.4
IHA 3.76 180 eP 52 54.50 4.1X
iS 53 39.40
LCCH 4.20 179 iP 52 56.00 -0.8
iS 53 44.00
FCH 4.22 164 iPc 52 58.70 1.4
iS 53 43.00
SAN 4.26 169 eP 52 58.00 0.3
iS 53 44.50
TACH 4.42 172 iP 52 50.50 -9.5X
iS 53 29.50
i 53 35.00
PCH 4.45 168 eP 53 00.50 0.0
i 53 46.00
i 53 50.50
CHCH 4.74 170 eP 53 04.00 -0.4
iS 53 52.50
CYA 5.19 82 iPd 53 12.00 1.2
ANT 5.64 11 eP 53 17.00 -0.1
MRA 5.99 123 ePd 53 19.90 -2.1
S 54 27.20
RFA 6.12 155 eP 53 23.00 -1.0
TCA 6.44 111 ePd 53 25.70 -2.7
LPB 13.08 15 P 55 10.00 10.1X
ZOBO 13.33 15 Pd 55 10.80 7.5X
0.8s 3.76nm 4.4mb
Z 20s 0.06um 5.4MszX
LR 59 54.00
BAO 25.65 63 e(P) 57 22.00 0.0
S.D. = 1.3 on 18 of 22 obs.

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* FEB 14, 1990 23h 01m 52.51± 0.91s
3.284 N ±13.5km 73.998 W ±20.9km
DEPTH = 33.0km (normal)
COLOMBIA (103)

CEOS 8.02 44 eP 03 49.50 -0.2
iS 05 20.00
MORO 9.41 36 eP 04 09.50 0.5
OLLA 9.79 47 iPd 04 14.50 0.3
LLAV 10.10 45 eP 04 18.00 -0.5
eS 06 14.00
ZOBO 20.28 164 eP 06 29.00 0.1
WRA 147.78 237 PKPc 21 33.70 0.2
0.7s 1.50nm
WB5 147.78 237 ePKP 21 33.30 -0.3
S.D. = 0.4 on 7 of 7 obs.

FEB 15, 1990 00h 13m 38.12± 0.58s
44.325 N ± 4.7km 112.780 W ± 6.3km
DEPTH = 5.0km (geophysicist)
EASTERN IDAHO (457)
ML 3.6 (BUT).

MCMT 0.51 354 iPc 13 48.50 0.2
LTMT 0.52 67 ePd 13 49.20 0.6
BGMT 1.05 30 iPc 13 57.70 -0.8
IMW 1.39 107 eP 14 03.00 -1.5
PTI 1.48 168 eP 14 06.40 0.7
LRM 1.52 9 ePd 14 05.90 -0.3
LCCM 1.64 23 iPc 14 08.30 0.4
BUT 1.70 5 ePn 14 08.80 0.1
ePg 14 10.80
eSn 14 32.20
eSg 14 33.50
MEMT 1.81 44 ePd 14 11.20 0.8
SXM 2.14 31 iPnc 14 15.30 0.2
BW06 2.81 122 eP 14 28.50 3.7X
NEW 4.96 324 e(P) 14 54.50 -0.5
SES 6.19 10 eP 15 10.00 -2.4X
KVN 6.60 219 e(P) 15 18.50 0.1

S.D. = 0.8 on 12 of 14 obs.

FEB 15, 1990 00h 26m 50.10± 1.24s
0.212 S ± 6.5km 125.171 E ± 7.8km
DEPTH = 63.2 ± 12.2 km
5.0mb (16 obs.)
MOLUCCA SEA (269)

AAI 4.59 139 ePc 27 58.00 -0.6
e(S) 29 23.10
MKS 7.56 229 iPd 28 41.30 1.2
e(S) 30 08.50
TSM 8.35 302 ePd 28 52.90 1.9
KKM 10.89 305 ePd 29 28.00 2.2
MTN 13.87 155 eP 30 04.00 -1.3
WB5 21.52 156 iPd 31 33.80 -2.1
i 31 38.50
WRA 21.57 156 Pd 31 34.20 -2.1
0.8s 20.10nm 4.6mb
GUMO 23.85 54 eP 32 19.50 20.9X
GUA 23.86 54 eP 32 19.60 20.9X
NANU 24.12 202 iPd 32 01.90 0.7
0.5s 32.00nm 5.1mb
QIZ 24.33 323 eP 32 03.20 -0.1
IPM 24.59 281 ePd 32 06.60 0.8
1.0s 49.90nm 4.9mb
QIS 24.66 146 iPd 32 06.90 0.4
PPI 24.77 269 eP 32 08.00 0.4
ASPA 24.81 161 iPc 32 07.80 -0.1
1.1s 45.00nm 4.9mb
Z 22s 0.17um 3.5MszX
iS 36 27.30
LR 43 26.10
SNG 25.57 287 eP 32 11.60 -3.4X
QZH 25.80 346 eP 32 17.50 0.4
PSI 26.40 276 ePd 32 22.80 0.1
BDT 31.07 305 eP 33 01.20 -3.3X
0.5s 14.90nm 5.0mb
SSE 31.36 353 eP 33 06.20 -0.8
CHG 31.95 308 ePc 33 11.90 -0.4
1.0s 37.75nm 5.2mb
GYA 31.96 327 P 33 12.40 0.0
WHN 32.27 342 eP 33 15.50 0.6
NJ2 32.64 350 Pc 33 18.00 -0.1
KMI 33.24 321 eP 33 24.00 0.2
XAN 37.33 337 Pd 33 56.00 -2.2
BRS 37.85 138 iPc 34 02.50 -0.2
MAT 38.52 17 (P) 34 07.00 -1.1
0.6s 20.00nm 5.2mb
DL2 39.06 356 eP 34 12.30 -0.3
TIY 39.53 344 P 34 15.20 -1.4
BWA 40.40 150 eP 34 26.80 3.1X
BJI 40.89 349 eP 34 27.00 -0.6
LZH 41.20 333 eP 34 31.00 0.5
1.5s 38.00nm 5.0mb
Z 20s 0.30um 4.2Msz
CAN 41.40 150 eP 34 34.20 2.3
HHC 42.70 345 eP 34 43.30 0.7
CN2 43.82 0 Pc 34 50.70 -0.8
PcP 36 37.80
LSA 44.00 316 eP 34 53.00 -0.8
MDJ 44.81 4 Pc 34 59.50 0.1
GTA 45.75 332 P 35 06.20 -1.0
GUN 46.91 310 P 35 15.50 -1.3
PKI 47.10 309 P 35 16.60 -1.7
0.6s 26.00nm 5.3mb
KKN 47.31 309 P 35 18.20 -1.6
DMN 47.36 309 P 35 18.60 -1.6
GKN 47.91 309 P 35 22.60 -1.8
HYB 49.11 293 eP 35 31.70 -1.9
1.0s 40.00nm 5.4mb
GBA 49.23 288 Pc 35 30.30 -4.2X
0.6s 3.90nm 4.6mb
NDI 54.08 306 iPd 36 08.70 -2.1
0.5s 31.69nm 5.6mb
WMQ 55.12 328 eP 36 17.50 -0.8
KSH 59.76 317 eP 36 53.00 1.9
MAIO 70.70 309 eP 38 03.00 1.4
SVW 84.97 29 eP 39 21.90 2.3
TTA 85.10 27 eP 39 22.00 1.8
BRW 86.38 18 ePc 39 28.40 2.1
IMA 86.59 24 ePc 39 29.20 1.5
0.6s 5.90nm 4.9mb
PMR 88.13 28 eP 39 35.20 0.3
NAI 88.36 269 iP 39 33.60 -3.8X
1.2s 34.38nm 5.4mb
TOA 89.55 28 eP 39 43.60 1.8

BUL	96.09	250	iPc	40 13.00	0.2
MBC	96.11	13	eP	40 12.50	0.8
	0.7s	2.00nm		4.8mb	
MLR	96.63	316	ePd	40 14.50	-0.2
KRA	99.91	321	eP	40 29.40	0.1
NB2	101.59	333	Pdiff	40 35.00	-1.6
	1.0s	2.70nm		4.9mb	
KIC	129.65	278	PKP	45 56.10	1.3
TIC	129.90	278	PKP	45 56.40	1.2
	0.4s	2.50nm			
LIC	129.95	278	PKP	45 56.50	1.2
	0.4s	3.50nm			

S.D. = 1.3 on 58 of 65 obs.

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* FEB 15, 1990 01h 15m 14.77± 0.79s
26.226 S ± 9.5km 27.375 E ±11.9km
DEPTH = 5.0km (geophysicist)
REPUBLIC OF SOUTH AFRICA (584)
mbLg 3.7 (BUL).

BFS	0.85	218	iPc	15 31.00	-0.8
			S	15 40.00	
SLR	0.95	59	iPc	15 35.00	1.5
			S	15 47.00	
SEK	2.10	174	iPd	15 51.50	0.3
			S	16 15.00	
BUL	6.16	11	iPnc	16 49.30	0.5
			iSn	17 56.00	
			iSg	18 28.00	
POF	7.29	243	eP	17 04.00	-0.5
			S	18 28.00	
KRI	9.58	13	iPn	17 35.40	-1.1
			iSn	19 20.00	
			iSg	20 14.50	
CLK	12.66	36	iPn	18 16.00	-2.5
			iSn	20 30.80	
KIC	44.94	312	P	23 33.90	1.1
TIC	45.34	312	P	23 37.30	1.4

S.D. = 1.6 on 9 of 9 obs.

& FEB 15, 1990 02h 09m 53.69s
63.112 N 150.832 W
DEPTH = 124.8km
CENTRAL ALASKA (1)
<AGS-P>.

KTH	0.44	355	eP	10 11.94	-0.3
			eS	10 25.12	
CUT	0.76	160	eP	10 13.86	-0.3
RND	0.94	71	eP	10 15.41	-0.6
			eS	10 32.71	
MCK	1.06	53	eP	10 16.67	-0.3
SKT	1.18	196	eP	10 17.69	-0.6
			eS	10 36.59	
PWA	1.53	163	eP	10 21.98	-0.2
GHO	1.61	146	eP	10 22.71	-0.5
SUA	1.65	179	eP	10 23.95	0.2
NCG	1.82	200	eP	10 25.15	-0.6
PMS	1.97	162	eP	10 26.70	-0.8
CCB	2.04	40	eP	10 27.26	-1.1
TOA	2.38	113	eP	10 32.19	-0.5

12 obs. associated

FEB 15, 1990 02h 20m 18.74± 0.73s
36.123 N ± 7.7km 27.196 E ± 7.9km
DEPTH = 10.0km (geophysicist)
3.2mb (1 obs.)
DODECANESE ISLANDS (369)
MD 3.3 (ATH).

KAP	0.57	182	ePn	20 30.30	0.0
			eSn	20 39.50	
NPS	1.55	237	ePn	20 46.50	0.1
SMG	1.61	350	ePn	20 48.40	1.2
APE	1.64	306	ePn	20 48.40	0.7
KSL	1.93	89	ePn	20 52.00	0.0
ELL	2.27	73	ePn	20 57.00	-0.1
SPC	14.01	341	iPn	23 35.00	-4.6X
	0.6s	0.27nm		3.2mb	
			i	23 41.80	
			i(Sg)	23 55.30	
			Lg	24 00.30	
ZST	14.18	331	e(Pn)	23 39.70	-1.9
			e	23 46.10	
			e(Sn)	24 19.10	

S.D. = 1.2 on 7 of 8 obs.

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* FEB 15, 1990 02h 23m 09.47± 1.01s
50.733 N ± 8.5km 18.519 E ±11.7km
DEPTH = 10.0km (geophysicist)
POLAND (548)
ML 3.7 (KBA), 3.4 (VKA).

KSP	1.42	275	ePn	23 37.00	1.7
			iPg	23 40.00	
			iS	24 02.50	
PRU	2.65	255	Pn	23 52.50	-0.5
			Pg	24 00.00	
			Sn	24 26.60	
			Sg	24 35.20	
VKA	2.86	211	iPgc	23 59.30	3.4X
			i	24 01.50	
			iSn	24 23.90	
			iSg	24 32.60	
BRG	2.90	275	ePg	24 06.00	9.4X
			iSg	24 48.00	
SRO	2.93	183	e(Pn)	23 58.30	1.4
			i	24 27.60	
			e	24 36.30	
PSZ	2.96	162	eP	23 57.50	0.1
BUD	3.27	174	e(P)	24 18.00	16.2X
SOP	3.31	204	eP	24 15.10	12.7X
CLL	3.53	282	ePg	24 20.00	14.6X
			eSg	25 14.00	
KHC	3.57	245	Pn	24 05.00	-1.1
			Pg	24 10.40	
			Sg	25 01.00	
WET	3.97	249	iPnc	24 24.30	12.5X
MOX	4.39	272	ePn	24 29.00	11.3X
			iSg	25 39.00	
KBA	5.00	225	ePn	24 25.00	-1.5
			iSg	25 45.70	
NUR	10.39	17	eP	25 40.00	-1.4
NB2	11.10	341	P	25 52.40	1.1
	0.9s	1.10nm		4.2mb X	

S.D. = 1.5 on 8 of 15 obs.

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* FEB 15, 1990 02h 24m 33.76± 0.39s
20.819 N ±10.3km 143.807 E ± 8.7km
DEPTH = 33.0km (normal)
4.8mb (9 obs.)
MARIANA ISLANDS REGION (215)

CTA	40.73	176	eP	32 13.00	-0.2
			e	32 19.50	
CHTO	42.15	275	e(P)	32 26.00	0.9
ASPA	45.26	193	eP	32 54.80	4.7X
	0.9s	7.00nm		4.6mb	
GUN	52.83	290	P	33 50.00	1.0
	1.1s	37.00nm		5.3mb	
PKI	53.28	289	P	33 52.60	0.3
KKN	53.37	290	P	33 53.20	0.4
	0.8s	16.00nm		5.1mb	
DMN	53.55	289	P	33 54.60	0.4
GKN	53.92	290	P	33 57.10	0.4
	0.9s	34.00nm		5.4mb	
BWA	55.11	175	eP	34 04.90	-0.2
CAN	56.05	175	eP	34 11.30	-0.5
GBA	63.44	275	Pd	35 02.90	-0.1
	1.0s	4.80nm		4.6mb	
MBC	71.55	15	ePc	35 53.00	-0.1
	0.9s	12.00nm		4.9mb	
WDC	79.42	51	e(P)	36 38.40	0.0
MIN	80.17	51	e(P)	36 42.80	0.1
ORV	80.51	51	e(P)	36 44.70	0.4
CMB	81.83	53	ePc	36 52.10	0.8
FRI	82.70	53	ePc	36 56.50	0.8
KVN	83.16	51	eP	36 58.80	0.5
SES	83.40	38	eP	37 00.00	0.9
SUF	83.48	336	eP	36 58.20	-1.0
	0.8s	7.10nm		4.8mb	
NUR	85.32	334	eP	36 54.00	-14.5X
HFS	89.76	337	eP	37 27.10	-2.9
	0.5s	0.90nm		4.3mb	
NB2	89.97	339	P	37 29.20	-1.8
	0.9s	2.40nm		4.5mb	
ZOBO	149.42	87	PKP	44 18.00	0.0
	1.0s	10.00nm			
LPB	149.50	87	ePKP	44 21.00	3.1X
CCH	151.51	88	ePKP	44 27.00	6.3X

S.D. = 1.0 on 22 of 26 obs.

% FEB 15, 1990 03h 43m 41.30± 0.80s
37.442 N ± 7.6km 22.342 E ± 8.2km
DEPTH = 10.0km (geophysicist)
SOUTHERN GREECE (368)
ML 3.0 (ATH).

ITM	0.42	232	iPgd	43 48.20	-1.7
VLI	0.87	146	ePb	43 58.50	0.6
ATH	1.21	64	ePb	44 02.70	-1.2
VLS	1.57	298	ePg	44 10.90	1.6
NEO	1.99	20	ePn	44 15.00	-0.3
VAM	2.52	143	ePn	44 24.00	1.0
KZN	2.89	351	ePb	44 33.40	5.1X
PLG	3.05	16	ePn	44 30.50	0.0

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

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* FEB 15, 1990 04h 39m 01.59± 0.67s
41.294 N ±13.0km 142.248 E ± 9.6km
DEPTH = 33.0km (normal)
4.6mb (11 obs.)
HOKKAIDO, JAPAN REGION (224)

MAT	5.69	215	(P)	40 31.00	4.9X
	0.6s	15.33nm		4.8mb	
			(S)	42 01.00	
MDJ	9.85	294	eP	41 26.50	2.5
CN2	12.64	287	eP	42 03.00	1.2
Z	16s	0.40um			
BJI	19.80	275	eP	43 29.50	-2.5
	0.8s	15.00nm		4.4mb	
NJ2	20.86	251	Pc	43 43.50	0.5
WMQ	39.65	292	P	46 32.50	0.5
IMA	42.73	33	eP	46 57.30	0.4
	0.8s	3.45nm		4.1mb	
FBA	45.19	34	eP	47 17.70	1.0
	0.8s	10.34nm		4.8mb	
MBC	52.27	17	eP	48 11.00	-0.3
	1.0s	5.00nm		4.4mb	
WB5	61.30	188	eP	49 16.10	0.0
WRA	61.36	188	Pd	49 16.70	0.2
	0.4s	1.80nm		4.6mb	
GBA	62.26	264	Pd	49 22.40	-0.3
	0.8s	4.10nm		4.6mb	
SUF	64.49	333	iP	49 35.10	-1.7
	0.5s	3.40nm		4.7mb	
HFS	70.48	335	eP	50 12.60	-1.8
	0.4s	2.90nm		4.7mb	
Z	15s	0.06um		4.0MszX	
			LR	16 26.00	
NB2	70.52	337	P	50 13.40	-1.3
	0.8s	4.80nm		4.6mb	
KVN	71.69	54	eP	50 23.40	1.1
TNP	72.84	54	e(P)	50 30.00	0.8
	0.8s	3.19nm		4.4mb	
KRA	75.94	326	iPd	50 46.60	0.1
KSP	76.83	328	eP	50 51.00	-0.5

S.D. = 1.3 on 18 of 19 obs.

FEB 15, 1990 04h 56m 13.87± 0.29s
38.691 N ± 3.7km 15.253 E ± 3.1km
DEPTH = 260.5 ± 3.1 km
4.4mb (30 obs.)
SICILY (398)

MSI	0.54	154	P	56 46.60	-1.5
			eSg	57 12.50	
ATN	0.55	163	P	56 46.80	-1.4
			eSg	57 11.30	
GMB	0.71	137	P	56 47.90	-1.0
CZI	0.87	52	P	56 44.80	-4.8X
MNO	0.88	210	Pd	56 50.00	0.1
SOI	0.88	134	Pd	56 48.80	-0.8
			eSg	57 14.00	
GRI	0.92	82	P	56 49.40	-0.5
GIB	1.19	234	Pc	56 50.50	-1.0
TDS	1.28	41	Pd	56 51.60	-0.4
			eSn	57 18.00	
MMN	1.33	25	P	56 51.60	-0.6
			eS	57 20.60	
CSI	1.35	36	P	56 53.00	0.6
ROI	1.35	49	P	56 52.20	-0.3
MGR	1.46	9	Pc	56 52.70	-0.5
			eSn	57 22.00	
MEU	1.61	189	P	56 54.10	-0.3
ORI	1.65	34	Pd	56 54.60	0.0
			eSn	57 23.00	
MCT	1.66	231	P	56 55.50	0.6
SGO	1.87	1	P	56 56.50	0.2
			eSn	57 26.50	

15d 04h

FAI	1.88	222	P	56	57.50	1.0
CVT	2.19	243	P	56	58.80	-0.4
ERC	2.19	253	P	56	58.10	-1.3
BRT	2.65	34	Pc	57	02.00	-1.7
			eSn	57	37.50	
LCI	2.66	51	Pc	57	03.50	-0.3
			eSn	57	39.10	
BAI	2.73	27	Pc	57	03.00	-1.4
DUI	3.03	349	P	57	08.20	0.4
SDI	3.21	340	Pc	57	10.00	0.3
AZI	3.57	338	P	57	14.50	0.9
RDP	3.63	328	Pd	57	14.70	0.4
KEK	3.68	72	eP	57	14.90	0.0
RMP	3.68	329	Pc	57	15.40	0.5
AQU	3.92	340	P	57	19.00	1.3
TPE	4.01	65	iPnc	57	18.00	-0.8
BERA	4.14	60	iPnc	57	19.80	-0.4
MNS	4.18	333	Pc	57	21.10	0.4
VLS	4.22	95	eP	57	21.50	0.3
LSK	4.39	69	iPnc	57	23.40	0.1
TIR	4.42	52	iPnc	57	23.20	-0.4
LACI	4.51	48	ePn	57	25.20	0.7
HVAR	4.57	11	iPc	57	24.50	-0.8
SDA	4.64	43	iPnc	57	26.40	0.3
ASS	4.80	337	Pc	57	29.00	0.9
PUK	4.87	45	ePn	57	28.50	-0.4
OHR	4.90	59	ePn	57	30.00	0.6
	0.9s		67.00nm			
PHP	4.97	51	iPnc	57	30.20	0.1
ARV	5.11	341	Pc	57	32.10	0.3
KZN	5.29	70	eP	57	35.50	1.3
ITM	5.49	104	eP	57	38.00	1.5
CRE	5.53	334	P	57	36.50	-0.5
SKO	5.75	53	iPn	57	39.80	0.1
			i	58	44.00	
SFI	5.82	335	P	57	41.50	1.0
VAY	6.20	63	ePn	57	45.50	0.2
VLI	6.40	106	eP	57	50.20	2.4
BDI	6.41	328	P	57	48.50	0.6
MME	6.47	330	P	57	49.80	0.9
PLG	6.55	73	eP	57	50.20	0.5
VBY	6.81	0	ePc	57	53.00	0.2
TRI	7.10	352	P	57	55.50	-1.0
PTJ	7.22	4	eP	57	57.10	-1.0
LJU	7.37	356	iPc	58	00.00	0.1
			eS	59	24.00	
VOY	7.40	353	eP	57	59.50	-0.9
BOB	7.46	326	P	58	03.00	1.9
SAL	7.75	335	P	58	07.50	2.9
CTI	7.82	341	Pd	58	06.60	0.9
SBF	7.83	314	eP	58	12.10	6.3X
	0.8s		32.25nm			4.4mb
LMR	8.07	308	eP	58	17.60	8.8X
	0.4s		19.50nm			4.5mb
FVI	8.10	348	P	58	09.00	-0.1
FRF	8.11	310	eP	58	17.30	8.0X
	0.3s		12.80nm			4.4mb
LRG	8.23	308	eP	58	19.30	8.6X
	0.3s		4.25nm			4.0mb X
DOI	8.35	317	P	58	16.00	3.7X
BZS	8.38	32	eP	58	13.00	0.4
KBA	8.50	351	ePc	58	14.70	0.4
	1.2s		20.00nm			4.0mb X
			i	58	16.70	
VAI	8.63	328	P	58	17.00	1.3
OGA	8.74	341	iPc	58	20.30	2.9
	0.7s		9.00nm			3.9mb X
ORO	8.78	324	P	58	19.30	1.4
BNI	9.02	318	P	58	24.00	3.1X
LPG	9.28	320	eP	58	25.40	1.0
	0.4s		11.45nm			4.3mb
ZST	9.60	7	eP	58	44.30	16.2X
MLR	10.45	46	ePc	58	45.00	6.0X
KHC	10.51	354	eP	58	40.00	0.4
WET	10.59	351	iPd	58	40.80	0.2
	0.8s		11.00nm			4.1mb X
BSF	11.02	329	eP	58	44.10	-1.9
	0.5s		11.65nm			4.3mb
SPC	11.09	17	e(P)	58	51.90	4.9X
CDF	11.30	332	eP	58	45.70	-3.9X
	0.6s		9.90nm			4.2mb
PRU	11.31	358	P	58	52.50	3.0X
HAU	11.34	328	eP	58	48.80	-1.1
	0.3s		6.80nm			4.3mb
SMF	11.56	317	eP	58	51.10	-1.6
	0.8s		18.80nm			4.3mb
CAF	11.64	307	eP	58	57.50	3.7X
	0.7s		7.70nm			4.0mb X
LBF	11.70	319	eP	58	54.30	-0.2
AVF	11.91	317	eP	58	56.30	-0.7
	0.5s		6.90nm			4.1mb X
LOR	11.95	319	eP	58	56.10	-1.5
	0.4s		6.30nm			4.2mb
SSF	12.00	318	eP	58	57.70	-0.4
	0.5s		16.75nm			4.5mb
MAF	12.01	313	eP	58	57.80	-0.5
	0.7s		16.55nm			4.4mb
BGF	12.04	315	eP	58	59.00	0.3
	0.5s		12.40nm			4.4mb
LPO	12.09	304	eP	59	02.10	2.7
	0.6s		32.45nm			4.7mb
RJF	12.16	307	eP	59	01.50	1.3
	0.8s		16.10nm			4.3mb
8RG	12.22	356	i(P)	59	01.00	0.2
LFF	12.49	305	eP	59	06.50	2.3
	0.8s		25.50nm			4.5mb
CLL	12.72	354	i(P)	59	07.50	0.5
	1.0s		18.00nm			4.3mb X
MEM	13.60	334	Pc	59	19.30	1.6
DOU	13.70	330	P	59	19.50	0.5
ENN	13.76	334	eP	59	19.50	-0.2
	0.6s		11.00nm			4.3mb
MFF	13.80	310	eP	59	21.20	0.9
WTS	14.55	339	iPc	59	27.70	-1.7
	0.6s		11.00nm			4.4mb
LDF	14.87	317	eP	59	30.70	-2.6
	0.5s		16.05nm			4.7mb
LPF	15.06	314	eP	59	34.00	-1.6
	0.4s		10.90nm			4.6mb
GRR	15.15	315	eP	59	33.70	-3.0X
	0.4s		8.00nm			4.5mb
FLN	15.16	317	eP	59	34.30	-2.5
	0.3s		5.55nm			4.4mb
ECP	20.20	319	eP	00	34.00	4.2X
ECB	20.51	319	eP	00	32.00	-1.0
EKA	20.74	329	P	00	33.00	-2.2
	0.6s		9.40nm			4.5mb
DLE	20.91	321	eP	00	36.80	0.0
DCN	21.31	321	eP	00	39.90	-0.8
DMU	21.45	322	eP	00	42.00	-0.1
NB2	22.52	355	P	00	50.20	-2.2
	0.7s		4.40nm			4.1mb
NUR	22.63	12	iP	00	52.00	-1.4
	0.5s		19.60nm			4.9mb
SUF	24.96	12	eP	01	13.40	-1.6
	0.5s		4.20nm			4.2mb
8CAO	34.23	174	iPc	02	38.10	1.1
	0.6s		11.00nm			4.6mb
KIC	36.92	214	Pc	03	00.00	0.4
LIC	37.17	215	Pc	03	02.20	0.5
GKN	57.70	78	P	05	39.70	-0.1
DMN	58.25	78	P	05	44.10	0.3
	0.6s		26.00nm			5.0mb
KKN	58.29	78	P	05	44.00	-0.1
	0.6s		22.00nm			4.9mb
PKI	58.50	78	P	05	45.80	0.2
	0.6s		15.00nm			4.8mb
GUN	58.69	78	P	05	47.20	0.2
	0.7s		36.00nm			5.1mb
S.D. = 1.1 on 108 of 123 obs.						

FEB 15, 1990 05h 11m 58.76± 0.66s
22.718 N ± 6.7km 122.778 E ± 9.0km
DEPTH = 33.0km (normal)
4.2mb (3 obs.)
TAIWAN REGION (243)
ML 4.4 (BJI).

TWF1	1.50	295	iPd	12	22.70	-1.0
TWG	1.58	274	iPd	12	23.60	-1.2
TWC	2.07	336	ePc	12	32.30	0.5
TWZ	2.61	335	ePc	12	40.20	0.7
ANP	2.71	335	eP	12	41.70	0.7
			iS	13	09.00	
QZH	4.43	301	iPnd	13	03.80	-1.6
			Sn	13	51.50	
SSE	8.46	351	eP	14	00.00	-2.0
	Z 12s		0.50um			
	E 16s		1.00um			
			eS	15	32.50	
MCO	8.55	268	eP	14	14.30	11.0X
NJ2	9.93	340	Pc	14	19.80	-2.4
WHN	10.84	318	Pc	14	30.60	-4.1X
			eS	16	29.20	
QIZ	12.63	255	eP	15	07.50	8.5X
	N 13s		0.40um			
GYA	15.12	288	eP	15	32.00	0.2
XAN	16.59	316	P	15	51.60	1.1
TIY	17.39	332	Pc	16	03.90	3.3X
	Z 14s		0.50um			
KKM	17.75	202	ePc	16	05.50	0.4
BJI	18.15	344	eP	16	11.00	1.1
CD2	18.82	300	P	16	18.20	0.0
MAT	19.19	41	(P)	16	23.00	0.4
	1.0s		15.00nm			4.2mb
HHC	20.40	335	P	16	37.00	1.3
8TO	20.83	332	eP	16	42.00	1.9
	N 11s		0.30um			
	E 11s		0.20um			
			sP	16	52.00	
CN2	21.14	5	eP	16	42.30	-0.9
	Z 12s		0.40um			4.0MszX
			pP	16	52.60	40kmX
LZH	21.15	313	eP	16	44.50	1.0
CHG	22.61	265	eP	17	00.00	2.0
NNT	24.13	249	eP	17	10.00	-2.7X
GTA	25.65	316	eP	17	28.80	1.5
WMQ	35.72	315	eP	18	54.00	-2.4
WB5	43.82	164	eP	20	03.00	-0.5
WRA	43.88	164	Pc	20	03.60	-0.4
	0.7s		2.90nm			4.2mb
QIS	46.04	158	eP	20	21.00	-0.2
SUF	73.04	331	eP	23	41.50	14.5X
	0.4s		1.10nm			
NB2	80.20	333	P	24	11.00	3.8X
	0.7s		1.90nm			4.2mb
S.D. = 1.3 on 24 of 31 obs.						

FEB 15, 1990 06h 23m 20.57± 0.79s
36.142 N ± 8.4km 27.266 E ± 8.2km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)
MD 3.6 (ATH).

KAP	0.59	187	ePb	23	32.00	-0.6
YER	1.28	39	ePn	23	42.50	-1.9
SMG	1.60	348	ePb	23	50.00	1.1
NPS	1.61	237	ePb	23	49.00	-0.1
APE	1.67	304	ePn	23	50.10	0.0
KSL	1.88	90	ePn	23	54.50	1.5
ELL	2.21	73	ePn	23	58.00	0.0
BCK	2.97	63	ePn	24	13.00	4.3X
S.D. = 1.4 on 7 of 8 obs.						

FEB 15, 1990 06h 26m 43.80± 0.68s
36.149 N ± 7.2km 27.242 E ± 7.2km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)
MD 3.7 (ATH).

KAP	0.60	185	ePb	26	55.70	-0.2
YER	1.29	40	ePn	27	06.50	-1.3
SMG	1.59	348	ePn	27	11.90	-0.1
NPS	1.59	237	ePb	27	11.50	-0.6
APE	1.65	304	ePb	27	14.00	1.0
KSL	1.90	90	ePn	27	17.20	0.7
ELL	2.23	74	ePn	27	22.00	0.5
BCK	2.99	63	ePn	27	39.00	6.8X
S.D. = 1.0 on 7 of 8 obs.						

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* FEB 15, 1990 07h 41m 44.97± 1.18s
37.437 N ±11.5km 22.470 E ±21.3km
DEPTH = 10.0km (geophysicist)
SOUTHERN GREECE (368)
MD 3.5 (ATH).

VLI	0.81	152	ePg	42	00.80	0.2
NEO	1.96	17	ePn	42	17.60	-1.0
KZN	2.92	349	ePb	42	33.20	0.9
KEK	3.09	318	ePn	42	33.20	-1.5
VAY	3.88	1	ePn	42	45.50	-0.4
OHR	3.89	341	ePn	42	48.00	1.9
S.D. = 1.6 on 6 of 6 obs.						

? FEB 15, 1990 07h 56m 08.79± 8.09s
30.150 S ±64.7km 68.504 W ±58.2km
DEPTH = 28.1 ± 12.1 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTRS	0.83	268	iPd	56	24.00	-0.4
RTLL	1.18	179	iPd	56	29.50	0.0

		eS	56	46.50	
RTCB	1.36	191 iP	56	31.70	-0.4
		eS	56	50.00	
CFA	1.47	171 iPd	56	33.20	-0.5
RTCV	1.71	181 ePd	56	36.30	-0.8
		S	57	00.00	

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

FEB 15, 1990 08h 31m 06.90± 1.14s
46.814 N ± 8.0km 146.187 E ± 5.5km
DEPTH = 341.5 ± 13.2 km
4.5mb (16 obs.)
NORTHWEST OF KURIL ISLANDS (220)

MDJ	11.81	265 eP	33	48.50	1.0	
MAT	11.86	213 eP	33	48.00	-0.2	
	1.0s	28.00nm			4.6mb	X
CN2	14.90	266 Pd	34	21.60	-1.6	
SNY	16.91	261 eP	34	44.80	0.4	
TIY	26.41	262 eP	36	18.50	3.4	X
TTA	35.54	42 eP	37	33.50	-0.2	
SVW	35.79	45 eP	37	37.10	1.3	
BRW	36.06	27 eP	37	37.30	-0.5	
IMA	36.57	36 eP	37	42.20	-0.2	
	0.7s	11.70nm			4.3mb	
PMR	38.85	44 eP	38	01.50	0.5	
FBA	39.06	38 ePc	38	02.80	0.1	
MBC	46.14	19 eP	38	58.00	-1.2	
	0.7s	1.00nm			3.2mb	X
GUN	50.24	270 P	39	32.40	0.8	
PKI	50.78	270 P	39	36.40	0.8	
GKN	51.04	271 P	39	37.90	0.6	
	0.4s	5.00nm			4.2mb	
SOD	57.38	336 iP	40	21.00	-1.0	
NEW	60.84	49 P	40	45.20	-0.6	
	1.0s	13.13nm			4.4mb	
SUF	60.88	333 eP	40	44.80	-1.0	
	0.6s	15.60nm			4.7mb	
SES	62.53	45 eP	40	56.00	-0.9	
WDC	62.65	59 ePc	40	57.80	0.0	
NUR	63.01	332 iP	40	58.90	-0.9	
	0.5s	18.20nm			5.0mb	
MIN	63.35	59 ePc	41	02.20	-0.3	
LRM	64.85	49 eP	41	12.50	0.3	
CMB	65.57	60 ePc	41	16.70	0.1	
KVN	66.25	58 P	41	21.10	0.1	
NB2	66.50	338 P	41	21.20	-0.9	
	0.7s	9.30nm			4.6mb	
HFS	66.61	336 eP	41	21.50	-1.2	
	0.5s	12.70nm			4.9mb	
IMW	66.95	50 P	41	26.00	0.5	
WB5	67.23	192 eP	41	26.00	-0.9	
WRA	67.30	192 Pd	41	26.50	-0.9	
	0.5s	1.30nm			3.9mb	
TNP	67.41	58 P	41	28.30	0.0	
	0.7s	4.07nm			4.3mb	
BW06	68.45	50 P	41	34.40	-0.2	
	0.7s	4.68nm			4.3mb	
DUG	68.48	54 P	41	35.10	0.4	
	0.6s	2.88nm			4.2mb	
RSON	69.89	36 eP	41	41.50	-1.3	
MSU	70.00	55 P	41	44.50	0.5	
RSSD	70.31	46 P	41	45.50	-0.3	
GOL	72.85	50 P	42	01.40	0.6	
	0.8s	5.21nm			4.3mb	
KSP	73.57	330 eP	42	05.00	0.6	
CLL	74.29	332 iP	42	08.40	0.0	
	0.7s	13.00nm			4.8mb	
PRU	74.90	330 eP	42	12.30	0.4	
ANMO	75.75	54 P	42	18.00	0.8	
	0.7s	2.14nm			4.0mb	
KHC	75.96	330 iP	42	19.30	1.4	
K8A	77.80	329 iPd	42	29.50	1.3	
	0.8s	10.90nm			4.7mb	
TUL	80.65	47 iP	42	43.90	0.7	
	0.7s	9.00nm			4.7mb	
H8VT	82.82	27 P	42	54.60	0.3	
BNH	83.17	26 P	42	56.80	0.7	
BAO	146.74	25 ePKP	50	11.00	2.8	X

S.D. = 0.8 on 45 of 47 obs.

& FEB 15, 1990 09h 54m 39.50s
36.868 N 121.628 W
DEPTH = 6.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.5 (BRK).

SAO	0.18	125 iPd	54	42.90	-0.4	
GCC	0.34	299 iPc	54	46.00	-0.3	
MHC	0.47	359 iPd	54	49.30	0.3	
		e(S)	54	56.30		
ARN	0.49	9 iPd	54	49.70	0.4	
PRS	0.57	159 iPd	54	50.40	-0.6	
LLA	0.60	114 iPc	54	51.20	-0.4	
PCC	0.87	317 iPc	54	55.70	-0.9	
PRI	1.06	133 iPc	54	59.80	-0.2	
BKS	1.12	335 ePc	55	00.90	0.1	
		eS	55	17.30		
BRK	1.12	334 eP	55	00.80	-0.1	
		eS	55	15.20		
ZSP	1.19	335 ePc	55	02.40	0.4	
		e(S)	55	18.90		
PHAM	1.43	136 eP	55	04.00	-2.0	
CMB	1.53	40 e(P)	55	06.80	-0.6	
FRI	1.54	85 eP	55	06.70	-0.9	
		eS	55	26.40		
KVN	3.54	51 eP	55	53.50	17.2	

15 obs. associated

FEB 15, 1990 10h 18m 35.40± 0.78s
45.135 N ± 7.7km 23.035 E ± 8.1km
DEPTH = 10.0km (geophysicist)
ROMANIA (358)

DEV	0.75	353 iPd	18	49.00	-1.1	
BZS	1.11	296 iPd	18	56.00	-0.2	
MDB	1.38	43 iPd	18	59.00	-1.7	
CMP	1.42	84 iPc	19	02.00	0.7	
BEO	1.86	261 ePn	19	11.70	4.2	X
		i	19	38.70		
MLR	2.08	79 iPc	19	11.00	0.1	
BMR	2.56	7 iPc	19	20.00	2.4	
VRI	2.70	73 ePd	19	19.50	-0.1	
SKO	3.37	201 ePn	19	30.00	0.9	
		i	19	40.00		
VAY	3.83	185 ePn	19	34.60	-1.0	
		i	19	48.00		

S.D. = 1.4 on 9 of 10 obs.

? FEB 15, 1990 11h 13m 39.48± 4.49s
33.905 N ±44.6km 26.202 E ± 9.0km
DEPTH = 33.0km (normal)
EASTERN MEDITERRANEAN SEA (371)

NPS	1.44	340 ePn	14	03.50	0.0	
		eSn	14	21.45		
KAP	1.83	26 ePn	14	09.20	0.1	
VAM	2.23	313 ePn	14	14.80	0.0	
KSL	3.55	51 ePn	14	34.00	0.5	
ELL	4.15	46 ePn	14	41.80	-0.4	
BCK	5.03	44 ePn	14	54.60	-0.1	

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

FEB 15, 1990 14h 39m 27.30± 0.62s
44.547 N ± 3.2km 6.851 E ± 5.4km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.5 (GEN).

PZZ	0.18	103 P	39	31.57	0.1	
		S	39	34.55		
DOI	0.29	99 P	39	33.20	-0.1	
		eSg	39	37.60		
RRL	0.38	353 P	39	35.06	0.0	
		S	39	40.79		
STV	0.45	132 P	39	36.29	-0.3	
		S	39	42.24		
ENR	0.52	128 P	39	38.14	0.3	
		S	39	44.60		
TOUF	0.60	152 Pg	39	39.14	-0.5	
		Sg	39	47.81		
RSP	0.67	25 P	39	40.70	0.0	
		S	39	49.00		
MVIF	0.69	161 Pg	39	40.81	-0.2	
		Sg	39	50.63		
AUTN	0.69	143 Pg	39	40.75	-0.4	
		Sg	39	50.78		
AURF	0.74	152 Pg	39	41.81	-0.1	
SAOF	0.75	138 Pg	39	42.05	0.0	
		Sg	39	52.12		
ROB	0.77	109 P	39	43.06	0.6	
		S	39	52.38		
CALN	0.79	178 Pg	39	43.45	0.6	
IMI	0.98	130 P	39	46.13	0.2	

FIN	1.03	109 P	39	47.06	0.3	
PCP	1.21	90 P	39	49.52	-0.4	

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

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* FEB 15, 1990 15h 40m 57.65± 3.29s
44.535 N ±18.0km 6.800 E ±29.9km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.2 (GEN).

PZZ	0.22	98 P	41	01.99	-0.5	
		S	41	04.75		
RRL	0.38	358 P	41	05.58	0.0	
		S	41	11.22		
STV	0.48	128 P	41	07.22	-0.1	
		S	41	12.86		
ENR	0.54	125 P	41	08.45	-0.2	
		S	41	14.80		
ROB	0.80	107 P	41	14.09	0.8	

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

% FEB 15, 1990 17h 17m 16.33± 2.08s
38.525 N ±13.4km 26.812 E ±19.5km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)

IZM	0.38	110 iPg	17	22.90	-1.2	
		iSg	17	29.40		
EZN	1.35	344 iPn	17	40.10	-1.1	
DST	1.78	52 iPn	17	45.30	-2.1	
YER	1.81	140 ePn	17	48.00	0.1	
EDC	1.99	24 iPn	17	52.00	1.6	
BNT	2.02	25 ePn	17	51.00	0.2	
KHL	2.14	95 ePn	17	54.60	2.0	
MFT	2.29	9 iPn	17	55.20	0.4	
YLV	2.84	43 iPn	18	07.70	5.1	X

S.D. = 1.6 on 8 of 9 obs.

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* FEB 15, 1990 18h 29m 06.70± 0.68s
5.269 S ± 9.5km 151.354 E ± 9.2km
DEPTH = 33.0km (normal)
4.7mb (4 obs.)
NEW BRITAIN REGION (192)

RAB	1.34	37 iPc+	29	29.00	-0.3	
LAT	4.54	252 eP	30	17.50	2.5	
PMG	5.85	225 iPd	30	33.60	0.1	
		eS	31	45.00		
HNR	9.47	116 eP	31	24.00	0.0	
CTA	15.54	198 iPc	32	50.40	5.2	X
	1.0s	33.00nm			4.5mb	
QIS	19.01	216 eP	33	27.00	-1.5	
RMO	21.25	186 iPc	33	53.50	1.1	
W85	22.00	227 eP	33	58.40	-1.6	
		eS	38	02.60		
BRS	22.04	177 iPc	34	01.00	0.6	
		e	34	06.50		
WRA	22.06	227 Pd	33	59.20	-1.4	
	0.6s	10.60nm			4.5mb	
DZM	22.19	140 iPc	34	05.00	3.1	X
ASPA	24.85	221 iPc	34	27.10	-0.6	
	1.1s	50.00nm			5.0mb	
Z	17s	0.30um			3.9Msz	X
		eS	38	50.60		
		LR	46	01.90		
MSZ	41.84	162 P	36	56.00	0.9	
MAT	43.37	345 (P)	37	03.00	-4.8	X
XAN	55.98	317 eP	38	45.00	0.5	
TIY	56.02	323 eP	38	44.40	-0.4	
KMI	56.06	305 Pd	38	49.50	4.0	X
HHC	58.60	325 Pd	39	07.00	4.0	X
LZH	60.57	317 eP	39	21.00	4.3	X
	1.5s	19.00nm			5.0mb	
GUN	71.13	302 P	40	28.60	3.7	X
KKN	71.61	301 P	40	30.80	3.3	X
TAB	105.06	308 ePKP	47	31.00	3.2	X

S.D. = 1.3 on 13 of 22 obs.

& FEB 15, 1990 18h 34m 59.15s
47.922 N 121.923 W
DEPTH = 16.3km
WASHINGTON (29)
<SEA>. CL 3.4 (SEA). ML 3.2 (NEIS). Felt (IV) at Gold Bor and Startup. Felt (III) at Darrington, Granite Falls, Snohomish and Sulton.

15d 18h

BLH	0.11	221	iPc	35 02.57	-0.2
HTW	0.16	139	iPd	35 03.05	-0.4
JCW	0.27	359	iPc	35 04.52	-0.7
SPW	0.43	211	iPc	35 08.07	0.2
			eS	35 13.92	
PGW	0.47	258	iPc	35 08.10	-0.4
RMW	0.47	170	iPd	35 07.90	-0.8
CMW	0.52	345	iPd	35 08.91	-0.6
OHW	0.57	315	iPd	35 09.44	-0.9
			eS	35 17.43	
RPW	0.59	27	iPc	35 10.04	-0.7
			eS	35 17.91	
GMW	0.69	238	iPc	35 11.40	-1.0
BLN	0.71	277	eP	35 11.42	-1.3
GSM	0.72	173	iPd	35 11.98	-1.0
HDW	0.81	251	iPc	35 13.10	-1.4
MBW	0.86	1	eP	35 14.81	-0.6
MEW	0.87	214	eP	35 15.27	-0.1
GHW	0.91	195	iPd	35 15.05	-1.1
RVC	0.98	182	iPd	35 16.19	-1.2
TWW	1.06	137	iPd	35 18.62	-0.1
NLW	1.08	81	eP	35 18.56	-0.5
SMW	1.13	238	iPc	35 18.70	-1.3
TBM	1.17	130	eP	35 20.03	-0.6
LON	1.18	176	eP	35 19.30	-1.4
STW	1.19	282	eP	35 19.14	-1.8
OSD	1.20	266	eP	35 20.17	-1.1
WPW	1.25	168	iPd	35 20.68	-1.3
CPW	1.26	221	iPc	35 20.63	-1.3
LMW	1.28	191	eP	35 21.17	-1.2
WTV	1.35	99	iPd	35 22.83	-0.4
APW	1.36	201	eP	35 22.25	-1.2
EBG	1.37	137	iPd	35 23.92	0.4
GLK	1.38	171	eP	35 23.11	-0.6
NAC	1.40	147	eP	35 24.15	0.1
OBH	1.44	246	eP	35 23.80	-0.8
DHW2	1.45	87	eP	35 24.22	-0.5
BMW	1.70	212	eP	35 27.80	-0.5
SHW	1.74	187	eP	35 29.00	-0.1
DPW	2.50	90	eP	35 38.30	-1.6
VGB	2.53	161	eP	35 40.00	-0.3
NEW	3.24	82	eP	35 48.20	-2.1

39 obs. associated

& FEB 15, 1990 19h 23m 03.97s
61.395 N 145.997 W
DEPTH = 30.6km
3.8mb (2 obs.)
SOUTHERN ALASKA (2)
<AGS-P>. ML 4.5 (PMR). Felt (IV) at Glennallen and Voldez and (III) at Anchorage, Copper Center, Gakona, Girdwood, Moose Pass, Polmer and Seward.

VZW	0.43	219	eP	23 12.28	-1.2
TOA	0.72	353	iP	23 16.80	-1.1
NCA	0.72	327	iP	23 16.61	-1.3
GLI	0.74	226	iP	23 16.63	-1.6
CVA	0.86	172	iP	23 18.94	-0.9
			S	23 32.48	
SGAM	0.98	156	iP	23 20.22	-1.3
HIN	1.03	194	iP	23 21.52	-0.9
GLB	1.05	86	iP	23 20.66	-2.0
			eS	23 35.43	
SDG	1.16	10	iP	23 22.88	-1.3
			eS	23 36.49	
KNK	1.18	272	iP	23 23.81	-0.7
			eS	23 40.26	
RAGM	1.20	147	iP	23 23.87	-0.9
HMT	1.36	141	eP	23 26.47	-0.6
			eS	23 45.60	
GHO	1.45	286	iP	23 27.51	-0.9
PLRM	1.52	279	iP	23 28.45	-0.8
PMR	1.52	279	iPc	23 28.50	-0.7
PAX	1.60	9	iP	23 29.47	-1.1
PMS	1.73	267	iP	23 31.93	-0.4
BALM	1.80	100	iP	23 31.78	-1.8
			eS	23 55.68	
WAX	1.81	120	iP	23 31.79	-1.7
PWA	1.88	280	iP	23 33.70	-0.8
MID	1.98	185	iPd	23 34.70	-1.3
SEW	2.13	234	eP	23 36.51	-1.6
			S	24 02.21	
CYK	2.17	126	eP	23 37.06	-1.6
			S	24 07.95	
SLKM	2.25	248	iP	23 38.64	-1.1
CUT	2.26	298	iP	23 39.40	-0.6
SUA	2.28	274	iP	23 38.82	-1.6
			eS	24 07.74	
HUR	2.33	315	iP	23 39.99	-1.0
TMW	2.39	35	eP	23 41.40	-0.4
DDM	2.40	1	iP	23 41.96	-0.1
RND	2.42	328	eP	23 41.25	-1.1
DOT	2.43	21	eP	23 41.80	-0.7
NKA	2.63	258	iP	23 45.23	0.0
DMW	2.67	3	eP	23 44.81	-1.0
SKT	2.70	285	iP	23 44.60	-1.6
MCK	2.71	331	eP	23 45.71	-0.7
CGLM	2.90	271	iP	23 47.18	-1.9
BRLK	2.91	238	eP	23 47.54	-1.7
			eS	24 21.22	
SPU	2.93	268	iP	23 47.42	-2.1
NNL	2.94	245	iP	23 48.46	-1.1
NCG	2.96	273	iP	23 48.08	-2.0
CRP	2.97	270	iP	23 48.33	-1.9
HDA	3.05	352	eP	23 49.57	-1.7
CKL	3.07	269	iP	23 49.22	-2.3
BGL	3.08	270	iP	23 49.55	-2.2
KTH	3.15	316	eP	23 51.50	-1.2
CNPM	3.20	236	iP	23 51.35	-2.0
			eS	24 28.62	
RDT	3.23	258	iP	23 51.50	-2.3
WRH	3.23	344	eP	23 52.03	-1.7
CCB	3.37	347	iP	23 53.54	-2.1
XLV	3.44	238	eP	23 54.41	-2.4
RED	3.45	256	iP	23 54.64	-2.4
NEA	3.49	338	eP	23 55.07	-2.4
RDS	3.58	345	eP	23 56.58	-2.2
YKU	3.61	118	eP	24 00.01	0.9
FBA	3.61	348	eP	23 57.00	-2.2
GLM	3.66	351	eP	23 57.46	-2.4
DWY	4.03	46	Pc	24 03.50	-1.6
HYT	4.16	94	P	24 03.70	-3.4
AUE	4.19	244	eP	24 04.83	-2.5
AUL	4.21	245	eP	24 05.53	-2.0
PDB	4.35	252	iP	24 06.25	-3.4
SVW	4.66	271	iPc	24 10.20	-3.8
KDC	4.93	225	iPd	24 14.90	-2.8
TTA	4.94	293	eP	24 13.70	-4.4
IMA	5.80	327	eP	24 27.40	-2.8
SIT	6.99	124	eP	24 43.00	-3.8
SDN	9.72	238	eP	25 20.00	-4.7
MBC	17.43	21	eP	27 03.00	-3.0
	0.8s		5.00nm		3.7mb
EDM	19.25	100	eP	27 25.00	-3.4
SES	22.18	104	eP	27 57.00	-1.8
KVN	28.21	130	eP	28 51.50	-4.4
BW06	28.57	114	eP	28 56.00	-3.2
	0.9s		2.65nm		3.9mb

72 obs. associated

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* FEB 15, 1990 19h 45m 49.24± 0.68s
14.388 N ±10.3km 119.107 E ±16.0km
DEPTH = 33.0km (normal)
4.6mb (5 obs.)
LUZON, PHILIPPINE ISLANDS (249)

OCP	1.92	82	eP	46 34.00	13.7X
BAG	2.46	35	eP	46 27.00	-1.1
SSE	16.74	6	eP	49 47.00	4.2X
			pP	49 54.50	
			sS	57 16.00	
PSI	23.06	242	ePc	50 57.60	4.6X
LZH	25.57	330	eP	51 18.00	0.9
	Z 12s		0.30um		4.0MszX
	N 12s		0.40um		
BJI	25.68	355	eP	51 19.00	1.1
SHL	27.84	298	eP	51 36.00	-2.1
WB5	37.21	156	eP	53 00.20	0.7
			i	53 07.20	
WRA	37.26	156	Pd	52 59.10	-0.8
	0.3s		1.50nm		4.3mb
ASPA	40.49	159	iPd	53 27.10	0.2
	0.8s		12.00nm		4.7mb
CTA	43.43	141	iPc	54 00.00	9.0X
	1.0s		16.00nm		4.7mb
SLL	85.19	331	eP	58 23.90	0.5
	0.6s		3.60nm		4.8mb
N82	85.94	332	P	58 27.80	0.6
	0.8s		2.10nm		4.4mb

S.D. = 1.3 on 9 of 13 obs.

FEB 15, 1990 19h 53m 06.13± 1.03s
0.106 S ± 8.7km 123.086 E ± 9.8km
DEPTH = 99.2 ± 11.5 km
4.5mb (6 obs.)
MINAHASSA PENINSULA (265)

AAI	6.22	125	ePc	54 37.20	0.1
MKS	6.23	215	ePd	54 36.00	-1.2
TSM	6.60	311	ePd	54 43.10	0.8
			e	55 58.30	
KKM	9.19	312	ePc	55 17.70	0.0
			e	57 04.00	
WB5	22.55	151	eP	57 59.50	0.7
WRA	22.59	151	Pd	57 59.40	0.2
	0.7s		2.10nm		3.6mb
ASPA	25.67	157	iPc	58 30.10	1.6
	0.6s		3.00nm		4.0mb
PMG	25.68	112	eP	58 33.50	4.8X
QIS	25.97	143	eP	58 30.00	-1.3
NNT	26.38	299	eP	58 54.00	18.9X
			e	24 20.30	
CHG	30.25	310	eP	59 10.80	0.8
	1.0s		10.75nm		4.5mb
			e	04 13.50	
CHTO	30.25	310	eP	59 10.80	0.9
MAT	39.07	19	eP	00 24.00	-1.1
	0.8s		11.19nm		4.7mb
SHL	39.49	313	eP	00 28.00	-0.9
LZH	40.21	336	eP	00 16.50	-18.2X
	Z 14s		0.50um		4.5MszX
GUN	45.25	311	P	01 16.10	0.1
	0.6s		23.00nm		5.2mb
PKI	45.43	310	P	01 17.20	-0.2
KKN	45.64	311	P	01 18.70	-0.2
DMN	45.68	310	P	01 19.10	-0.2
GKN	46.24	310	P	01 23.20	-0.3
	0.7s		10.00nm		4.8mb
HYB	47.15	294	eP	01 50.00	19.3X
TAB	79.65	309	eP	05 13.00	8.4X

S.D. = 0.9 on 17 of 22 obs.

FEB 15, 1990 19h 59m 37.04± 0.42s
14.399 N ± 6.3km 119.389 E ± 8.9km
DEPTH = 33.5km (2 depth phases)
4.8mb (10 obs.)
LUZON, PHILIPPINE ISLANDS (249)

OCP	1.65	82	eP	00 20.00	15.9X
BAG	2.31	30	eP	00 13.80	0.1
	1.0s		176.00nm		
SSE	16.70	5	P	03 32.80	2.7
	Z 12s		0.50um		
			sP	03 42.00	
			sS	06 48.00	
WHN	16.72	345	eP	03 33.50	3.1X
NJ2	17.58	358	Pd	03 41.80	0.7
KMI	18.93	307	Pc	03 58.50	0.4
CHTO	20.07	285	eP	04 13.00	2.4
			e	04 23.00	41km
TIA	21.82	355	eP	04 27.70	-0.6
CD2	21.82	321	P	04 28.20	-0.2
PSI	23.31	242	ePd	04 44.00	0.9
TIY	24.03	346	eP	04 49.40	-0.6
BJI	25.70	354	eP	05 05.50	-0.3
	1.2s		13.00nm		4.4mb
LZH	25.70	330	eP	05 04.00	-2.1
	1.5s		38.00nm		4.8mb
GTA	30.28	329	eP	05 47.00	-0.5
MDJ	31.34	14	eP	05 56.00	-0.6
WB5	37.11	156	eP	06 46.00	-0.4
WRA	37.16	156	Pd	06 46.10	-0.7
	1.0s		7.40nm		4.5mb
QIS	40.02	150	eP	07 11.00	0.3
ASPA	40.41	159	iPd	07 14.20	0.3
	0.9s		22.00nm		4.9mb
GBA	40.67	274	Pc	07 14.70	-1.5
	1.1s		6.30nm		4.3mb
CTA	43.27	142	iPc	07 38.40	1.0
	1.2s		35.94nm		5.0mb
			i	07 46.20	26km
MAIO	57.43	304	eP	09 26.00	0.8
VRI	81.64	315	ePc	11 54.00	0.7
MBC	83.13	12	ePc	12 01.10	0.6
	0.8s		4.00nm		4.6mb
HFS	85.25	331	eP	12 10.20	-1.2
	1.0s		11.20nm		5.0mb
VAY	85.65	311	eP	12 12.70	-1.1
DAG	85.75	351	iPc	12 13.10	-0.5

0.8s 6.72nm 4.9mb
NB2 86.06 332 P 12 14.40 -1.1
1.1s 11.50nm 5.0mb
KSP 87.03 322 eP 12 21.00 0.6
e 20 53.00
S.D. = 1.1 on 27 of 29 obs.

? FEB 15, 1990 20h 23m 14.07± 7.96s
24.046 N ±17.6km 122.666 E ±66.0km
DEPTH = 10.0km (geophysicist)
TAIWAN REGION (243)

TWC 0.93 307 iPc 23 31.50 -0.4
eS 23 44.90
TWZ 1.44 317 eP 23 40.30 0.1
eS 24 00.50
ANP 1.54 317 eP 23 45.00 3.3X
eS 24 08.00
TWQ 1.69 278 eP 23 44.30 0.5
TWK 2.14 249 ePc 23 50.10 -0.3
S.D. = 0.7 on 4 of 5 obs.

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* FEB 15, 1990 21h 09m 51.94± 0.89s
5.163 S ±17.1km 151.209 E ±18.1km
DEPTH = 33.0km (normol)
3.9mb (1 obs.)
NEW BRITAIN REGION (192)

RAB 1.36 45 iPc+ 10 15.00 0.2
PMG 5.83 223 eP 11 20.00 1.6
CTA 15.60 198 eP 13 27.00 -4.1X
OIS 19.01 215 eP 14 13.00 -0.8
RMO 21.34 186 eP 14 39.00 0.5
WB5 21.97 227 eP 14 44.80 -0.1
WRA 22.03 227 Pd 14 45.10 -0.4
0.4s 1.80nm 3.9mb
BRS 22.16 176 eP 14 46.50 -0.2
ASPA 24.83 221 iPd 15 12.00 -0.8
S.D. = 0.9 on 8 of 9 obs.

FEB 15, 1990 21h 31m 39.87± 0.54s
53.273 N ± 9.3km 167.241 W ± 7.7km
DEPTH = 33.0km (normol)
4.5mb (5 obs.)
FOX ISLANDS, ALEUTIAN ISLANDS (9)

SDN 4.46 60 eP 32 49.90 3.0X
ADK 5.92 260 eP 33 08.40 0.9
SVW 10.06 34 eP 34 05.50 0.4
TTA 11.34 27 eP 34 22.70 0.2
PMS 12.43 43 eP 34 38.00 0.8
TOA 14.26 43 eP 35 00.70 -0.6
IMA 14.49 22 eP 35 06.30 1.9
1.0s 10.80nm 4.3mb
FBA 15.26 33 eP 35 13.30 -0.9
NEW 31.55 79 eP 38 01.00 0.0
0.9s 8.40nm 4.6mb
KVN 36.14 93 eP 38 43.00 2.2
IMW 37.50 81 eP 38 52.80 0.4
BW06 38.97 82 eP 39 04.40 -0.3
0.8s 2.71nm 4.1mb
DAU 39.39 86 eP 39 08.50 0.3
MSU 40.04 89 eP 39 13.00 -0.5
RSSD 41.44 76 eP 39 25.00 0.1
GOL 43.35 82 eP 39 40.00 -0.7
0.7s 8.50nm 4.6mb
RSON 43.42 62 eP 39 40.00 -0.7
FRB 47.49 37 eP 40 12.00 -0.9
DAG 48.69 9 eP 40 21.00 -1.1
WRA 88.58 233 Pc 44 30.50 0.1
1.0s 3.20nm 4.6mb
HYB 89.84 299 eP 44 37.00 0.3
BUL 144.74 334 iPKPd 51 13.00 -1.9
BFS 151.66 333 ePKP 51 30.50 4.9X
BLF 153.92 332 ePKP 51 25.00 -3.8X
S.D. = 1.0 on 21 of 24 obs.

? FEB 15, 1990 21h 51m 23.59± 0.96s
37.182 N ±11.2km 28.948 E ± 6.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

YER 0.53 265 iPg 51 34.50 0.1
eSg 51 44.00
ELL 0.88 119 ePg 51 40.30 -0.3
KHL 1.23 22 ePn 51 46.20 -0.3
BCK 1.34 77 iPn 51 48.80 0.5

S.D. = 0.7 on 4 of 4 obs.

FEB 15, 1990 21h 55m 27.46± 0.48s
53.359 N ± 6.5km 167.218 W ± 6.2km
DEPTH = 33.0km (normol)
4.5mb (8 obs.)
FOX ISLANDS, ALEUTIAN ISLANDS (9)

ADK 5.95 259 eP 56 55.70 0.2
KDC 9.43 56 e(P) 57 45.00 1.1
TTA 11.25 27 eP 58 09.30 0.3
PMR 12.72 42 eP 58 28.00 -0.5
IMA 14.41 23 eP 58 51.80 0.9
FBA 15.18 33 eP 59 00.20 -0.6
INK 21.80 34 eP 00 17.00 -1.0
MBC 29.14 21 eP 01 27.00 0.1
0.5s 2.00nm 4.1mb
NEW 31.52 79 eP 01 48.70 0.3
0.9s 15.23nm 4.8mb
EDM 31.56 68 eP 01 48.00 -0.6
KVN 36.13 93 eP 02 28.50 0.2
FFC 37.09 61 eP 02 36.00 0.0
0.7s 7.00nm 4.6mb
TNP 37.28 94 eP 02 38.00 0.0
0.6s 1.85nm 4.1mb
DUG 38.57 87 eP 02 49.00 0.2
1.2s 12.60nm 4.6mb
BW06 38.95 82 eP 02 52.00 0.0
0.5s 1.96nm 4.1mb
DAU 39.37 86 eP 02 56.00 0.3
MSU 40.02 89 eP 03 01.50 0.5
PLM 40.70 99 eP 03 07.00 0.5
RSSD 41.40 76 eP 03 11.80 -0.4
GOL 43.33 82 eP 03 28.00 0.0
0.7s 10.68nm 4.7mb
RSON 43.37 62 eP 03 27.50 -0.4
ANMO 45.82 88 eP 03 47.00 -1.0
1.2s 7.42nm 4.5mb
S.D. = 0.6 on 22 of 22 obs.

FEB 15, 1990 22h 08m 01.55± 0.16s
5.225 S ± 3.1km 151.355 E ± 4.1km
DEPTH = 15.5km (11 depth phases)
5.7mb (24 obs.) 4.9Msz (12 obs.)
NEW BRITAIN REGION (192)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 21C
Centroid Location:
Origin Time 22:08:10.2 0.4
Lat 4.97S 0.04 Lon 150.79E 0.04
Dep 21.7 3.5 Half-durotion 2.3
Moment Tensor; Scale 10**17 Nm
Mrr=-1.20 0.07 Mtt= 2.10 0.09
Mff=-0.90 0.11 Mrt= 0.34 0.18
Mrf= 0.95 0.23 Mtf=-1.28 0.07
Principal Axes:
T Val= 2.57 Plg= 0 Azm=200
N -0.27 47 290
P -2.30 43 110
Best Double Couple:Mo=2.4*10**17
NP1:Strike=254 Dip=61 Slip=-147
NP2: 147 61 -33

RAB 1.31 38 iPc+ 08 28.00 2.8
LAT 4.56 252 eP 09 15.00 3.5X
PMG 5.89 225 iPc+ 09 31.10 0.9
eS 10 41.00
MNDI 7.71 263 eP 10 04.00 7.8X
HNR 9.49 117 eP 10 22.00 1.4
eS 12 12.00
JAY 10.96 284 ePc 10 43.30 2.4
e 12 31.00
CTA 15.58 198 iPc+ 11 42.80 0.5
1.0s 283.00nm 5.5mb
i 11 48.50
iS 14 30.00
OIS 19.04 216 iPc 12 25.40 -0.3
GUA 19.71 341 eP 12 34.80 1.3
1.0s 1424.00nm 6.2mb
eS 16 20.00
GUMO 19.77 341 eP 12 35.60 1.5
1.2s 1366.67nm 6.1mb
PJG 19.77 341 eP 12 35.70 1.6
PVC 20.73 128 iPc 12 45.50 1.4
RMO 21.29 186 iPc 12 51.60 1.8
0.9s 492.00nm 5.9mb

e 13 10.00 86kmX
MTN 21.35 248 eP 12 48.00 -2.4
WB5 22.03 227 iPc 12 56.80 -0.5
iS 16 58.90
BRS 22.09 177 iPc 12 58.50 0.7
0.9s 75.00nm 5.1mb
e 13 08.00 35kmX
e 13 18.00
ePP 13 28.00
eS 17 00.00
WRA 22.09 227 Pd 12 57.30 -0.6
0.6s 64.60nm 5.2mb
DZM 22.22 140 iPd 13 00.00 0.7
i 20 35.70
QLP 22.30 197 iPc 13 01.10 1.2
e 13 13.00 48kmX
ASPA 24.88 221 iPc 13 25.40 0.3
0.8s 308.00nm 6.0mb
Z 17s 5.20um 5.1MszX
iS 17 44.50
iScS 24 27.80
LR 25 01.30
COO 25.22 179 eP 13 29.70 1.4
CMS 26.63 191 eP 13 41.50 0.1
e 13 43.50 7km
DAV 28.49 295 eP 14 02.00 3.6X
BWA 29.18 185 eP 14 04.20 -0.3
CNB 30.00 183 eP 14 12.50 0.6
CAN 30.03 184 eP 14 12.20 0.1
MKS 31.75 269 eP 14 33.00 5.5X
ADE 31.82 200 iPc 14 28.50 0.6
0.9s 104.20nm 5.8mb
TOO 32.64 189 eP 14 35.80 0.8
BFD 32.81 193 eP 14 38.00 1.6
FORR 33.58 218 iPc 14 41.70 -1.5
0.5s 83.00nm 5.9mb
TSM 34.54 285 ePd 14 57.00 5.3X
QCP 35.93 304 eP 15 21.00 17.6X
KKM 36.83 287 ePd 15 14.00 2.8
BAG 37.27 306 eP 15 15.50 0.6
eS 21 03.00
COOL 38.18 224 eP 15 21.00 -1.3
0.9s 145.00nm 5.8mb
NANU 38.66 240 iPd 15 25.40 -1.0
0.5s 35.00nm 5.3mb
BAL 41.22 228 eP 15 46.00 -1.5
TCW 41.29 154 P 15 48.60 0.8
KIW 41.29 153 P 15 48.20 0.3
MRW 41.49 153 P 15 50.00 0.5
CAW 41.56 153 P 15 50.60 0.5
WEL 41.57 153 P 15 50.60 0.5
WDW 41.65 153 P 15 50.80 0.0
PGZ 41.74 151 P 15 50.90 -0.6
MTW 41.80 152 P 15 51.90 -0.2
MSZ 41.88 162 Pd 15 33.20 -19.5X
0.8s 168.00nm
MOW 41.89 153 P 15 52.40 -0.4
BLW 41.95 153 P 15 53.30 0.0
KHZ 41.96 155 P 15 52.80 -0.5
MUN 42.29 227 eP 15 55.00 -1.2
0.7s 96.00nm 5.6mb
KAKJ 42.52 347 eP 15 57.20 -0.8
CHJJ 42.66 345 eP 15 58.10 -1.1
TSRJ 43.04 342 eP 16 02.90 0.6
MAT 43.33 345 eP 16 04.00 -0.7
1.8s 240.91nm 5.7mb
Z 20s 1.77um 5.0Msz
eS 22 29.00
MTMJ 43.48 344 eP 16 04.40 -1.6
OZH 43.75 315 P 16 09.70 1.5
1.0s 200.00nm 5.9mb
Z 20s 1.10um 4.8Msz
E 16s 0.90um
S 22 42.00
NIIJ 43.79 346 eP 16 08.10 -0.2
YAMJ 44.44 347 eP 16 14.00 0.4
OFUJ 44.98 349 P 16 18.10 0.2
HKC 45.52 308 eP 16 24.30 1.9
SSE 46.20 323 P 16 29.70 2.0
3.0s 900.00nm 6.2mb
Z 20s 1.40um 4.9Msz
N 18s 2.50um
S 23 16.00
sS 23 23.00
GZH 46.58 309 Pc 16 32.60 1.8
E 18s 2.80um
pP 16 36.70 14km

15d 22h

		eS	23 24.50			
AOMJ	46.66	348	eP	16 32.10	0.9	
QIZ	47.45	302	P	16 39.40	1.6	
N	15s	0.55um				
E	20s	1.52um				
		PP	18 33.00			
		eS	23 34.00			
		SS	26 56.00			
NJ2	48.28	322	Pc	16 45.80	1.8	
Z	20s	1.00um			4.8Msz	
		pP	16 51.00	17km		
MRRJ	48.34	350	eP	16 49.00	4.7X	
KUSJ	48.47	353	eP	16 46.70	1.4	
MCQ	49.51	174	eP	16 54.00	0.8	
ASAJ	49.74	352	eP	16 55.50	0.4	
WHN	50.18	317	eP	17 00.00	1.3	
Z	20s	1.30um			4.9Msz	
N	12s	0.50um				
E	16s	1.00um				
		eS	24 10.00			
DL2	51.81	331	P	17 10.80	-0.2	
	1.4s	300.00nm			6.0mb	
Z	25s	1.00um			4.7MszX	
		eS	24 35.00			
SNG	52.11	283	eP	17 14.90	1.3	
TIA	52.21	325	eP	17 13.30	-0.8	
Z	25s	0.90um			4.7MszX	
E	16s	0.80um				
		S	24 37.00			
SNY	53.24	334	Pc	17 21.60	0.0	
Z	26s	1.30um			4.9MszX	
N	25s	2.20um				
E	26s	1.50um				
		PP	17 25.70			
MDJ	53.33	341	Pc	17 22.00	-0.2	
Z	20s	1.30um			5.0Msz	
GYA	53.52	308	P	17 25.20	1.2	
Z	20s	0.90um			4.8Msz	
N	18s	0.80um				
E	18s	0.90um				
		pP	17 29.00	13km		
		S	24 53.00			
CN2	54.11	337	Pc	17 27.80	-0.1	
	3.0s	400.00nm			5.9mb	
Z	20s	1.80um			5.1Msz	
E	18s	1.50um				
		PcP	18 27.50			
		iPP	19 33.40			
		PcS	22 27.50			
		S	25 05.00			
BJI	55.46	328	eP	17 37.00	-0.9	
	1.6s	150.00nm			5.8mb	
Z	24s	1.27um			4.9MszX	
N	18s	1.18um				
		pP	17 42.50	18km		
		eS	25 22.00			
XAN	55.95	317	Pd	17 41.00	-0.6	
	1.1s	100.00nm			5.8mb	
		sP	17 57.00			
TIY	55.99	323	eP	17 41.30	-0.5	
N	18s	1.80um				
E	19s	2.10um				
		S	25 33.50			
KMI	56.04	305	Pc	17 43.50	0.9	
Z	20s	1.20um			5.0Msz	
		pP	17 48.00	15km		
		PP	19 46.00			
		S	25 33.00			
		SS	25 42.50			
CHG	56.88	296	eP	17 48.70	0.2	
	1.1s	15.82nm			5.0mb	
CHTO	56.88	296	eP	17 48.00	-0.4	
		pP	17 52.80	16km		
CD2	57.93	311	P	17 55.60	-0.1	
Z	20s	1.10um			5.0Msz	
		pP	18 03.00	24km		
		eS	25 59.00			
HHC	58.56	325	Pc	18 00.80	0.8	
Z	24s	1.90um			5.1MszX	
N	22s	3.10um				
E	20s	1.40um				
BTO	59.29	324	P	18 05.50	0.4	
N	19s	0.90um				
E	19s	1.40um				
		pP	18 10.00	15km		
		eS	26 11.50			
LZH	60.54	317	eP	18 14.00	0.2	

	1.5s	76.00nm			5.6mb	
Z	22s	1.00um			4.9Msz	
		pP	18	18.00	13km	
		eS	26	27.00		
		ScS	28	00.00		
		SS	30	30.00		
GTA	65.00	318	eP	18 44.00	0.6	
Z	16s	0.80um			5.0MszX	
		S	27	28.00		
SHL	65.29	301	iP	18 44.00	-1.5	
		eS	27	36.00		
LSA	67.30	305	eP	18 59.20	0.5	
GUN	71.11	302	P	19 21.60	-0.5	
PKI	71.42	301	P	19 22.90	-1.0	
KKN	71.59	301	P	19 23.80	-1.0	
DMN	71.68	301	P	19 22.80	-2.6	
GKN	72.19	301	P	19 27.20	-1.1	
WMQ	75.08	318	eP	19 44.50	-0.2	
Z	20s	0.70um			5.0Msz	
		pP	19	50.50	19km	
		S	29	18.50		
HYB	75.27	289	eP	19 47.00	0.8	
GBA	75.70	285	Pc	19 47.20	-1.4	
	0.9s	2.90nm			4.3mb X	
SVW	77.77	23	eP	19 59.20	-0.2	
TTA	78.69	22	eP	20 03.70	-0.8	
NDI	78.70	300	eP	20 05.00	-0.1	
POO	79.87	290	eP	20 16.50	4.8X	
PMR	80.67	25	eP	20 13.60	-1.4	
IMA	81.34	20	ePd	20 17.70	-0.9	
	0.7s	4.80nm			4.6mb X	
KSH	82.10	311	P	20 24.40	1.3	
TOA	82.15	25	eP	20 22.50	-0.3	
FBA	82.81	22	ePd	20 24.30	-1.9	
SPA	84.81	180	iPd	20 36.20	-0.3	
	0.9s	45.91nm			5.7mb	
		i	20	48.10	39kmX	
INK	89.37	21	ePd	20 56.10	-2.2	
WDC	90.41	49	eP	21 03.40	-0.4	
ARN	90.84	53	P	21 04.60	-1.3	
GMW	91.02	43	P	21 05.80	-0.7	
ORV	91.09	51	eP	21 06.40	-0.5	
LLA	91.24	54	eP	21 10.70	3.0X	
RMW	91.67	43	P	21 08.50	-1.1	
BCH	91.80	55	P	21 11.00	0.5	
CMB	91.81	52	eP	21 10.80	0.4	
FRI	92.26	53	eP	21 12.60	0.3	
A8L	92.48	55	P	21 14.50	0.8	
PNT	93.29	41	eP	21 17.00	0.1	
PAS	93.29	56	eP	21 18.00	0.8	
MWC	93.39	56	eP	21 18.00	0.1	
SBB	93.61	56	eP	21 19.00	0.2	
KVN	93.68	51	P	21 18.90	-0.2	
CLC	93.87	55	eP	21 20.00	0.1	
RVR	93.94	56	eP	21 20.00	-0.2	
PEC	94.11	56	P	21 21.00	0.0	
TNP	94.31	52	P	21 21.20	-0.9	
	1.0s	14.17nm			5.3mb	
PLM	94.33	57	eP	21 23.00	0.8	
BAR	94.45	58	eP	21 24.00	1.4	
GSC	94.49	55	eP	21 23.00	0.2	
MBC	94.87	14	ePc	21 22.50	-1.1	
	0.9s	10.00nm			5.2mb	
NEW	94.88	42	P	21 22.00	-2.2	
GLA	96.02	57	eP	21 31.00	1.2	
EDM	97.33	37	ePc	21 34.90	-0.4	
BW06	100.20	48	Pdiff	21 46.00	-2.8X	
TAB	105.03	308	ePKP	26 33.00	7.8X	
SLY	105.91	305	ePKPd	26 44.00	17.3X	
BHD	107.03	303	ePKPc	26 42.00	13.1X	
MSL	107.73	306	ePKPd	26 46.00	15.8X	
FRB	114.89	18	ePKP	26 41.00	-1.9	
NB2	116.81	340	PKP	26 44.00	-2.8X	
	0.9s	3.10nm				
BLF	117.27	234	ePKP	26 47.00	-1.8	
BFS	117.64	236	ePKP	26 45.00	-4.5X	
BUL	118.37	244	iPKPd	26 48.60	-2.5	
ZST	122.16	326	ePKP	26 54.90	-2.3	
BRG	122.31	330	ePKP	26 56.80	-0.7	
	2.2s	56.00nm				
		e	27	24.00		
		e	28	40.00		
CLL	122.51	330	ePKP	26 57.00	-0.8	
PRU	122.53	328	ePKP	26 56.50	-1.4	
		e	28	41.50		
KHC	123.55	328	PKP	26 57.50	-2.5	
BSF	127.85	330	ePKP	27 06.90	-1.5	

	1.0s	16.00nm				
HAU	127.95	331	ePKP	27	07.20	-1.3
	0.9s	8.20nm				
LOR	129.66	332	ePKP	27	11.80	0.0
	1.1s	12.20nm				
SSF	129.98	332	ePKP	27	12.50	0.1
	1.1s	12.20nm				
SMF	130.12	331	ePKP	27	12.60	-0.1
	1.1s	12.20nm				
BCAO	132.99	271	ePKPc	27	16.20	-2.9X
	0.6s	8.00nm				
		i	27	23.00		
		i	27	30.70		
		i	30	44.10		
LPB	135.40	120	ePKP	27	16.00	-8.1X
	0.9s	30.25nm				
		i	27	24.20		
		LR	13	30.00		
TOV	138.98	81	ePKP	27	24.60	-5.8X
OLLA	141.90	80	ePKP	27	29.00	-6.7X
IFR	144.35	325	iPKPc	27	39.00	-0.5
ANG	145.42	67	ePKP	27	40.71	-0.7
AVE	145.78	327	iPKP	27	42.00	0.3
		i	28	03.00		
		i	28	18.50		
PAG	145.86	69	ePKP	27	41.00	-1.3
GRW	146.67	76	ePKP	27	45.31	1.6
SVB	146.87	74	ePKP	27	43.87	0.0
TRN	147.13	79	ePKP	27	45.31	1.0
TBH	147.48	79	ePKP	27	47.71	2.8X
TIO	147.48	324	iPKP	27	51.50	6.8X
		i	28	22.90		
TPR	147.67	77	ePKP	27	47.41	2.2
SHGH	151.52	273	ePKP	27	57.00	5.8X
LEGH	151.66	272	ePKP	27	56.00	4.6X
KOGH	151.73	273	ePKP	27	57.00	5.5X
BAO	151.78	138	ePKP	27	51.50	-0.1
WEGH	151.81	272	ePKP	27	55.00	3.4X
KUK	151.85	273	ePKP	27	57.00	5.3X
WIGH	152.09	272	ePKP	27	56.00	4.0X
KIC	156.19	274	(PKP)	27	56.40	-1.2
S.D. = 1.1 on 149 of 178 obs.						

FEB 16, 1990 00h 15m 18.55± 0.34s
14.392 N ± 5.3km 119.229 E ± 5.7km
DEPTH = 29.9km (6 depth phoses)
5.1mb (10 obs.)
LUZON, PHILIPPINE ISLANDS (249)

QCP	1.81	82	eP	15	48.50	0.4
BAG	2.39	33	eP	15	56.00	-0.7
QIZ	10.10	298	eP	17	41.90	-2.9
N	13s	1.60um				
QZH	10.51	357	eP	17	47.90	-2.4
WHN	16.69	345	eP	19	16.00	4.2X
SSE	16.72	6	P	19	13.00	0.8
N	14s	0.40um				
GYA	16.80	318	P	19	18.00	4.6X
N	12s	0.80um				
E	12s	0.90um				
NJ2	17.58	359	eP	19	23.00	0.0
Z	13s	0.60um				
KMI	18.81	307	eP	19	41.00	2.4
N	12s	1.10um				
E	12s	0.40um				
		pP	19	48.50		
NNT	19.04	267	eP	19	39.20	-1.9
SNG	19.63	251	eP	19	42.10	-5.7X
CHG	19.93	286	eP	19	53.00	2.0
XAN	21.67	336	eP	20	08.40	-0.4
CD2	21.73	322	eP	20	10.20	0.8
N	13s	0.60um				
TIA	21.81	355	P	20	10.20	0.1
TIY	24.00	347	eP	20	32.00	0.3
N	15s	0.60um				
LZH	25.63	330	eP	20	47.50	0.1
	2.0s	71.00nm				4.9mb
Z	14s	1.00um				4.5MszX
BJI	25.69	355	eP	20	48.00	0.3
	1.1s	14.00nm				4.5mb
Z	14s	0.29um				4.0MszX
HHC	27.19	347	eP	21	01.60	-0.1
BTO	27.32	345	eP	21	03.00	0.2
N	12s	0.50um				
E	12s	0.60um				
SNY	27.60	7	eP	21	04.00	-1.1
Z	14s	0.60um				4.3MszX

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CN2     29.79    9 eP     21 27.00    2.1
      Z  14s      0.60um            4.4MszX
      N  13s      0.40um
      E  13s      0.30um
                  epP      21 35.00' 28km
GTA     30.21 329 eP      21 28.80   -0.1
      Z  12s      1.20um            4.8MszX
      E  12s      0.80um
MDJ     31.39   14 eP      21 38.40   -0.6
                  epP      21 47.00   30km
GUN     33.76 299 P       22 00.40    0.1
PKI     34.07 298 P       22 02.60   -0.4
KKN     34.24 298 P       22 03.90   -0.4
DMN     34.34 298 P       22 04.80   -0.4
GKN     34.84 299 P       22 08.20   -1.2
WB5     37.17 156 eP      22 27.50   -1.4
                  i        22 37.00   32km
WRA     37.22 156 Pc      22 28.40   -0.9
        0.8s     12.10nm            4.8mb
HYB     39.18 280 iPc     22 47.10    1.2
WMQ     39.80 324 P       22 49.50   -1.3
QIS     40.09 150 ePd     22 52.60   -0.7
GBA     40.52 274 Pd      22 57.80    0.9
        0.8s      9.70nm            4.6mb
CTA     43.36 142 iPd     23 20.00   -0.1
        1.1s     48.10nm            5.2mb
                  i        23 29.10   30km
ADE     52.46 160 eP      24 31.60    0.7
BWA     55.92 151 eP      24 56.80    0.5
                  e        25 06.00   30km
CAN     56.93 151 eP      25 03.70    0.2
                  e        25 12.90   30km
MAIO    57.31 304 iPd     25 07.00    0.7
SOD     77.83 337 iP      27 14.60    0.1
FBA     78.35  26 P       27 14.00   -3.4X
NUR     79.84 330 eP      27 17.00   -8.5X
VRI     81.54 315 ePc     27 36.50    1.7
INK     82.97  21 eP      27 42.00    0.2
MBC     83.17  12 ePd     27 43.10    0.4
        1.0s     22.00nm            5.2mb
KRA     84.95 320 eP      27 52.90    0.8
                  e        28 11.00   65kmX
HFS     85.18 331 eP      27 52.10   -1.0
        0.7s     12.10nm            5.2mb
      Z  16s      0.11um            4.3MszX
                  LR       07 52.00
VAY     85.54 311 eP      27 54.60   -0.6
DAG     85.73 351 iPc     27 55.00   -0.6
        0.6s     12.00nm            5.3mb
NB2     85.99 332 P       27 56.50   -0.7
        0.9s     15.90nm            5.2mb
KSP     86.93 322 iPc     28 03.20    1.2
BRG     88.32 322 eP      28 09.80    1.2
        1.1s     14.00nm            5.2mb
CLL     88.72 323 eP      28 11.00    0.5
     S.D. = 1.1   on  49 of  54 obs.
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   FEB  16, 1990  00h 30m 37.87± 0.44s
   14.414 N ± 6.6km  119.390 E ± 6.3km
   DEPTH =  32.7km  (  3 depth phases)
   4.8mb (  9 obs.)  4.1Msz (  1 obs.)
 LUZON, PHILIPPINE ISLANDS          (249)

QCP      1.65   82 eP      31 04.00   -0.9
BAG      2.29   30 eP      31 15.00    0.7
QZH     10.50 356 eP      33 07.00   -2.2
SSE     16.69    5 Pc      34 32.60    1.8
      Z  16s      0.40um
WHN     16.71 345 eP      34 35.50    4.4X
GYA     16.89 317 P       34 37.00    3.4X
      N  10s      0.50um
      E  10s      0.40um
SNG     19.78 251 eP      35 10.90    2.5
CHG     20.07 285 eP      35 11.90    0.4
CHTO    20.07 285 eP      35 11.90    0.4
                  e        35 21.50   38km
XAN     21.72 336 eP      35 28.00   -0.3
TIA     21.80 355 eP      35 29.50    0.5
CD2     21.81 321 eP      35 28.80   -0.4
TIY     24.01 346 eP      35 52.00    1.2
      Z  18s      0.60um            4.1Msz
BJI     25.68 354 eP      36 05.50   -1.1
        1.5s     24.00nm            4.6mb
      Z  16s      0.29um            3.9MszX
LZH     25.69 330 eP      36 07.50    0.6
        1.6s     51.00nm            4.9mb
      Z  12s      0.80um            4.5MszX
      N  12s      0.60um
      E  11s      0.40um
BTO     27.34 344 eP      36 23.80    1.8
SNY     27.56   7 eP      36 22.40   -1.3
CN2     29.74   9 eP      36 44.60    1.2
GTA     30.27 329 eP      36 47.60   -0.7
      Z  12s      0.90um            4.6MszX
      E  12s      0.60um
MDJ     31.33   14 eP      36 57.00   -0.4
                  epP      37 05.50   30km
GUN     33.89 299 P       37 19.60   -0.8
PKI     34.20 298 P       37 22.20   -0.8
KKN     34.37 298 P       37 23.40   -0.9
DMN     34.47 298 P       37 24.20   -1.1
GKN     34.97 298 P       37 28.20   -1.3
WB5     37.13 156 eP      37 35.50  -12.0X
WRA     37.17 156 Pc      37 47.20   -0.7
        1.1s      6.30nm            4.4mb
HYB     39.33 280 eP      38 06.00   -0.1
QIS     40.03 150 eP      38 11.00   -0.7
GBA     40.67 274 Pc      38 17.00   -0.1
        0.7s      3.20nm            4.2mb
CTA     43.28 142 iPc     38 39.00    0.6
        1.3s     30.77nm            4.9mb
                  i        38 48.00   30km
MAIO    57.43 304 iPc     40 26.30    0.2
INK     82.89  21 eP      43 02.00    1.7
MBC     83.12  12 ePc     43 02.30    1.0
        1.0s     15.00nm            5.1mb
KRA     85.03 320 eP      43 12.70    1.2
HFS     85.24 331 eP      43 11.70   -0.6
        0.5s      2.40nm            4.7mb
DAG     85.73 351 eP      43 14.00   -0.5
NB2     86.04 332 P       43 15.80   -0.6
        0.9s      8.90nm            5.0mb
KSP     87.01 322 eP      43 21.00   -0.3
BRG     88.40 322 eP      43 36.50    8.6X
        1.4s     24.00nm            5.3mb
CLL     88.80 323 e(P)    43 38.00    8.2X
     S.D. = 1.1   on  36 of  41 obs.
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&  FEB  16, 1990  02h 54m 02.21s
   60.770 N          150.955 W
   DEPTH =  47.5km
  KENAI PENINSULA, ALASKA            ( 14)
       <AGS-P>.

NKA      0.14 259 iP       54 11.64    3.3
SLKM     0.45 126 iP       54 12.58   -0.2
SPU      0.68 308 iP       54 15.01   -0.7
                  eS       54 25.23
SUA      0.70   8 iP       54 15.25   -0.9
RDT      0.74 255 iP       54 15.90   -0.7
                  eS       54 26.92
CGLM     0.74 317 iP       54 15.96   -0.7
                  iS       54 27.69
NNL      0.75 193 eP       54 17.38    0.7
CRP      0.77 311 eP       54 16.48   -0.6
                  eS       54 27.84
CKL      0.80 303 iP       54 16.56   -0.9
PMS      0.83  54 iP       54 17.03   -0.7
                  S        54 29.01
BGL      0.86 306 iP       54 17.53   -0.7
                  eS       54 29.63
NCG      0.86 318 iP       54 17.59   -0.7
                  eS       54 29.96
RED      0.96 249 iP       54 19.02   -0.6
                  eS       54 32.35
SEW      1.00 131 eP       54 19.36   -0.7
                  eS       54 33.24
PWA      1.03  30 eP       54 20.05   -0.4
                  eS       54 35.15
PLRM     1.21  46 iP       54 22.18   -0.8
                  eS       54 38.26
SKT      1.25 347 iP       54 22.71   -0.8
                  eS       54 39.39
CNPM     1.26 187 iP       54 23.49   -0.2
                  S        54 40.42
GHO      1.41  43 iP       54 24.97   -0.9
CUT      1.67  11 eP       54 29.25   -0.3
AUE      1.86 222 eP       54 32.56    0.4
AUL      1.87 223 eP       54 32.89    0.6
PDB      1.89 240 iP       54 31.83   -0.8
GLI      1.89  85 eP       54 30.25   -2.4
NCA      2.34  57 eP       54 37.52   -1.5
     25 obs. associated
-------------------------------------
   FEB  16, 1990  04h 25m 59.24± 0.69s
   23.852 N ± 5.6km  121.835 E ±10.1km
   DEPTH =  33.0km  (normal)
   4.0mb (  1 obs.)
 TAIWAN                             (244)

TWF1     0.70 225 iPc      26 12.20   -0.5
                  eS       26 22.60
TWC      0.75   1 ePc      26 13.50    0.1
                  eS       26 23.70
TWQ      1.01 295 ePc      26 16.40   -0.7
                  eS       26 28.50
TWZ      1.26 349 ePc      26 20.90    0.3
                  eS       26 38.20
ANP      1.36 348 eP       26 22.90    0.8
                  eS       26 27.50
TWK      1.37 245 eP       26 23.10    0.9
                  eS       26 40.70
SSE      7.24 356 Pn       27 44.50   -0.9
                  Lg       29 56.50
WB5     45.15 163 eP       34 14.60   -0.1
WRA     45.20 163 Pd       34 15.20    0.1
        0.7s      1.40nm            4.0mb
EBR     95.72 319 eP       39 19.00   -4.2X
     S.D. = 0.7   on   9 of  10 obs.
-------------------------------------
*  FEB  16, 1990  05h 13m 21.00± 1.70s
    8.826 S ±14.5km  117.612 E ±11.5km
   DEPTH = 110.2 ± 20.3 km
   4.1mb (  4 obs.)
 SUMBAWA ISLAND REGION              (285)

TRT      5.05 282 iPc      14 36.60    0.9
                  eS       15 25.20
NANU    13.80 188 eP       16 32.00   -1.2
        0.4s      5.00nm            4.2mb X
                  eS       18 47.00
MTN     13.86 108 eP       16 33.00   -1.0
                  eS       18 58.00
WB5     19.58 126 eP       17 43.40    0.4
WRA     19.59 126 Pc       17 43.30    0.2
        0.6s      1.50nm            3.5mb
ASPA    21.47 135 eP       18 03.70    1.6
        0.7s      3.00nm            3.8mb
                  eS       21 54.40
GUN     47.71 321 P        21 49.20    0.2
PKI     47.76 320 P        21 48.80   -0.6
        0.6s      5.00nm            4.5mb
DMN     47.98 320 P        21 50.90   -0.1
KKN     48.00 320 P        21 50.80   -0.3
GKN     48.55 320 P        21 55.00   -0.3
        0.4s      5.00nm            4.7mb
     S.D. = 1.0   on  11 of  11 obs.
-------------------------------------
   FEB  16, 1990  05h 55m 03.21± 0.20s
   35.918 N ± 5.3km   54.405 E ± 2.9km
   DEPTH =  23.3km  (  5 depth phases)
   4.8mb ( 24 obs.)  4.3Msz (  3 obs.)
 IRAN                               (348)
      ML 5.0 (MHI). Felt in the
      Emamshahr area.

TEH      2.46 267 eP       54 55.00  -47.8X
MAIO     4.14  83 iPnc     56 07.80    1.2
        0.8s      9.15nm
                  eSn      56 59.00
KER      6.18 257 eP       56 42.00    6.5X
TAB      6.81 291 eP       56 52.00    7.6X
SLY      7.25 270 ePc      56 54.50    4.2X
                  i        57 24.00
                  iS       58 47.00
                  i        59 14.00
BHD      8.67 255 eP       57 19.00    8.8X
                  eS       59 26.00
MSL      9.12 276 eP       57 08.00   -8.4X
                  e        58 45.00
                  e        59 50.00
QUE     11.97 115 eP       57 57.80    2.2
                  eS       07 21.00
RYD     13.03 213 eP       58 06.00   -3.6X
QASM    13.51 227 eP       58 12.70   -3.3X
DSI     16.40 260 e(P)     59 02.00    8.5X
PRNI    17.17 257 eP       59 04.00    0.8
KSH     17.43  72 P        59 05.50   -1.0
     E  12s      3.00um
                  eS       02 22.00
MBH     17.50 255 eP       59 09.00    1.7
```

16d 05h

KMSA 17.76 212 iPc 59 08.30 -2.4
BADA 17.98 251 iPd 59 15.00 1.8
WAJH 18.09 242 eP 59 16.70 2.1
ELL 19.74 280 eP 59 35.00 0.5
KHL 19.97 284 eP 59 37.00 0.2
HLW 20.27 259 eP 59 50.20 10.4X
NDI 20.56 104 iPc 59 42.00 -0.9
0.5s 169.01nm 5.7mb
VRI 23.06 304 ePc 00 16.00 8.2X
MLR 23.50 303 ePc 00 15.00 2.8X
CMP 24.07 302 ePc 00 24.00 6.4X
POO 24.39 130 iPc 00 22.50 1.6
1.0s 20.00nm 4.6mb
BZS 26.50 302 eP 00 41.00 0.5
WMQ 26.61 63 P 00 47.00 5.4X
Z 12s 0.80um 4.5MszX
E 11s 0.80um
GKN 26.76 99 P 00 43.20 -0.1
DMN 27.30 99 P 00 48.60 0.3
KKN 27.36 98 P 00 48.80 -0.1
PKI 27.56 99 P 00 51.00 0.2
GUN 27.80 98 P 00 53.00 0.1
HYB 28.25 124 iPc 00 56.40 -0.3
1.0s 45.00nm 5.2mb
KRA 28.61 310 eP 01 04.80 5.2X
e 01 14.80 36kmX
GBA 30.36 131 Pc 01 15.20 -0.4
0.7s 9.60nm 4.7mb
KSP 31.07 311 eP 01 21.00 -0.5
NUR 31.10 332 iP 01 18.50 -3.2X
e 02 22.00 332kmX
SUF 32.03 336 eP 01 29.50 -0.3
0.7s 6.10nm 4.6mb
KBA 32.36 303 eP 01 38.00 4.9X
0.8s 4.50nm 4.5mb
KHC 32.45 307 P 01 36.00 2.3
BRG 32.52 310 eP 01 45.00 10.8X
1.6s 22.00nm
KOD 33.05 135 eP 01 39.90 0.4
CLL 33.19 311 iP 01 40.60 0.6
1.4s 22.00nm 4.9mb
SHL 33.64 97 iP 01 44.20 -0.3
OGA 33.93 302 iPc 01 51.60 4.8X
0.8s 17.00nm 5.0mb
SOD 35.27 342 iP 01 58.00 0.3
i 03 13.00 385kmX
HFS 35.55 326 eP 01 59.30 -0.9
0.5s 2.60nm 4.4mb
Z 18s 0.17um 3.8Msz
LR 16 32.00
GTA 35.83 70 iPc 02 04.20 1.2
LPG 36.89 300 eP 02 13.40 1.3
0.7s 7.15nm 4.6mb
KEV 37.03 345 eP 02 12.00 -0.5
NB2 37.04 326 P 02 11.70 -1.1
0.9s 10.30nm 4.7mb
HAU 37.15 304 eP 02 12.90 -1.0
DOU 38.36 308 Pd 02 31.00 7.0X
LOR 38.84 303 eP 02 27.50 -0.5
SMF 38.87 302 eP 02 28.20 -0.1
0.9s 11.45nm 4.6mb
AVF 39.20 302 eP 02 30.80 -0.2
0.7s 8.80nm 4.6mb
LZH 39.64 75 Pc 02 36.00 0.9
2.0s 70.00nm 5.0mb
Z 25s 1.00um 4.6MszX
N 10s 0.40um
E 11s 0.50um
pP 02 43.50 25km
TCF 40.02 302 eP 02 38.00 0.1
0.6s 4.50nm 4.4mb
CD2 41.15 82 eP 02 48.00 0.6
KMI 42.63 91 Pc 02 59.50 -0.3
pP 03 07.50 27km
CHG 42.67 101 iPc 03 00.00 0.1
1.0s 37.25nm 5.1mb
EKA 43.27 315 Pc 03 04.40 0.0
0.6s 5.10nm 4.5mb
BTO 43.31 66 P 03 06.50 1.5
Z 12s 0.60um 4.7MszX
N 12s 0.30um
epP 03 12.00 18km
eS 09 33.00
BDT 43.58 103 eP 03 06.00 -1.2
1.0s 55.20nm 5.3mb
XAN 44.22 76 iPc 03 13.00 0.6
HHC 44.40 66 P 03 15.00 1.2

Z 14s 0.80um 4.8MszX
GYA 45.23 87 P 03 20.60 -0.1
BCAO 45.52 235 iPc 03 22.20 -0.7
0.6s 44.00nm 5.6mb
i 03 27.50 18km
TOL 45.59 293 eP 03 23.00 -0.2
TIY 45.84 70 eP 03 26.00 0.7
N 15s 0.70um
NNT 46.87 108 eP 03 34.20 0.7
BJI 48.01 66 eP 03 42.50 0.3
Z 22s 0.37um 4.3Msz
N 13s 0.37um
WHN 49.76 78 eP 03 56.00 0.2
TIA 49.88 70 eP 03 57.20 0.5
AVE 50.19 286 iP 04 04.00 4.8X
i 04 20.00 62kmX
DL2 52.37 65 eP 04 15.30 -0.3
NJ2 52.72 74 Pc 04 18.00 -0.2
SNY 52.86 61 eP 04 18.00 -1.2
CN2 53.58 58 Pc 04 24.00 -0.4
Z 12s 1.10um 5.1MszX
N 12s 0.60um
E 12s 0.50um
pP 04 32.60 28km
SSE 54.92 74 Pd 04 34.00 -0.5
BUL 60.87 208 eP 05 20.00 3.6X
KIC 61.44 256 P 05 19.28 -1.1
TIC 61.49 257 P 05 19.58 -1.1
LIC 61.75 256 P 05 21.24 -1.2
Z 20s 0.35um 4.5Msz
KKM 63.74 102 ePc 05 35.00 -0.7
0.9s 58.30nm 5.7mb
MBC 68.04 358 eP 06 02.00 -0.3
1.0s 6.00nm 4.7mb
FRB 70.93 337 eP 06 20.00 -0.1
INK 75.92 3 eP 06 48.00 -1.2
FBA 78.01 9 eP 07 01.10 0.2
PMR 80.97 11 e(P) 07 17.20 0.4
FFC 87.46 347 iPd 07 49.70 -0.1
1.0s 12.00nm 5.1mb
EDM 90.59 353 eP 08 05.00 0.3
WB5 93.69 112 eP 08 17.80 -1.5
WRA 93.70 112 Pd 08 18.10 -1.2
0.9s 3.30nm 4.8mb
ASPA 95.59 115 eP 08 26.50 -1.5
0.7s 6.00nm 5.1mb
SPA 125.73 180 ePkP 14 02.00 -1.7
1.2s 12.68nm
S.D. = 1.0 on 74 of 96 obs.

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* FEB 16, 1990 06h 22m 09.81± 0.68s
22.295 S ±18.1km 174.329 W ± 7.9km
DEPTH = 33.0km (normol)
5.1mb (9 obs.) 5.0Msz (5 obs.)
TONGA ISLANDS REGION (174)
CENTROID, MOMENT TENSOR (HRV)
Doto Used: GDSN
L.P.B.: 12S, 21C
Centroid Location:
Origin Time 06:22:19.1 1.8
Lat 21.61S 0.10 Lon 174.25W 0.13
Dep 15.0 FIX Half-duration 1.8
Moment Tensor; Scale 10**16 Nm
Mrr= 7.47 0.56 Mtt=-1.45 1.10
Mff=-6.02 0.78 Mrt= 3.88 2.12
Mrf= 6.24 2.22 Mtf=-4.74 0.52
Principol Axes:
T Val= 10.27 Plg=69 Azm=302
N 1.53 0 32
P -11.80 21 122
Best Double Couple:Mo=1.1*10**17
NP1:Strike=212 Dip=24 Slip= 90
NP2: 32 66 90

SVA 7.95 300 iPd 24 07.40 1.5
VUN 8.00 301 iPd 24 07.00 0.3
SGE 8.66 301 eP 24 17.00 1.0
e 24 24.00
DZM 17.81 267 iPd 26 21.40 4.5X
MSZ 26.67 209 eP 27 58.00 10.5X
CTA 36.75 266 iPc 29 16.20 0.0
1.0s 28.00nm 5.1mb
i 30 50.00
iS 35 02.00
PMG 39.08 283 eP 29 33.00 -2.8
ASPA 47.47 258 iPc 30 44.30 0.6
1.0s 28.00nm 5.2mb

Z 17s 3.02um 5.3MszX
iS 37 35.80
LR 51 02.70
WB5 47.74 263 eP 30 45.50 -0.4
WRA 47.76 263 Pd 30 45.90 -0.1
0.9s 19.10nm 5.1mb
MTN 52.60 271 eP 31 22.00 -1.1
GUA 53.52 308 eP 31 24.50 -5.2X
GUMO 53.59 308 eP 31 25.50 -4.7X
PJG 53.59 308 eP 31 25.00 -5.2X
MAT 73.70 322 eP 33 40.00 -2.3
1.0s 27.00nm 5.2mb
eS 42 15.00
FRI 78.27 42 eP 34 07.80 -0.2
CMB 78.52 41 eP 34 09.20 -0.3
TNP 80.49 42 P 34 20.40 0.0
1.3s 11.90nm 4.7mb
KVN 80.55 41 P 34 20.00 -0.6
SSE 81.47 308 P 34 24.00 -1.3
Z 20s 0.50um 4.9Msz
S 44 36.00
MSU 83.95 44 P 34 39.70 1.4
MDJ 83.97 323 eP 34 38.00 0.1
SNY 85.79 319 eP 34 47.00 -0.1
S 45 16.00
CN2 85.82 321 Pc 34 46.80 -0.4
4.0s 600.00nm 6.2mb X
Z 20s 0.60um 5.0Msz
sP 35 05.00
eSKS 45 10.00
ALQ 85.90 50 eP 34 49.50 1.5
1.3s 18.75nm 5.2mb
Z 20s 0.89um 5.2Msz
ANMO 85.90 50 P 34 48.40 0.4
1.2s 14.65nm 5.1mb
PMR 86.01 12 P 34 46.70 -1.0
TTA 86.17 8 P 34 46.00 -2.6
1.6s 45.08nm 5.4mb
WHN 86.26 305 eP 34 50.50 0.9
PNT 86.28 32 eP 34 51.00 1.7
0.9s 10.00nm 5.0mb
TIA 87.01 311 eP 34 53.40 0.2
SNG 88.14 278 eP 34 46.20 -12.9X
F8A 89.30 11 P 35 01.80 -1.7
8JI 89.58 314 eP 35 05.50 0.2
Z 18s 0.29um 4.7Msz
esP 35 23.00
eSKS 45 32.00
eS 46 00.00
TIY 91.03 311 Pc 35 13.50 1.3
Z 20s 0.60um 5.0Msz
XAN 91.94 306 eP 35 17.00 0.5
HHC 93.06 313 P 35 22.00 0.5
BDT 93.42 287 eP 35 25.00 1.5
CHG 94.06 289 eP 35 29.50 3.0X
INK 95.14 14 eP 35 30.00 -0.3
EKA 146.35 9 PKP 41 49.00 1.8
1.1s 14.50nm
LWI 146.76 226 ePKPd 41 55.20 5.8X
KSP 150.32 346 ePKPc 41 59.80 6.2X
CLL 150.48 351 ePKP 41 59.00 5.2X
1.7s 32.00nm
BRG 150.75 349 ePKP 42 00.10 5.9X
1.4s 24.00nm
MOX 151.32 352 ePKP 42 02.00 6.9X
PRU 151.49 348 PKP 42 02.80 7.4X
e 42 07.80
KHC 152.49 349 PKPd 42 05.30 8.4X
1.0s 4.00nm
S.D. = 1.2 on 34 of 48 obs.

? FEB 16, 1990 07h 14m 28.38± 4.91s
6.355 S ±48.6km 147.360 E ±29.2km
DEPTH = 69.1 ± 13.7 km
3.8mb (3 obs.)
EAST PAPUA NEW GUINEA REGION (207)

LAT 0.46 230 iPd 14 40.90 0.0
PMG 3.04 184 eP 15 15.50 0.4
0.7s 89.04nm
WB5 18.44 222 eP 18 41.30 0.4
WRA 18.50 222 Pd 18 40.00 -1.7
0.5s 1.30nm 3.4mb
ASPA 21.54 216 eP 19 15 30 1.6
0 4s 6.00nm 4.3mb
BRS 21.55 167 iPd 19 13.20 -0.6
0.8s 3.00nm 3.7mb

S.D. = 1.7 on 6 of 6 obs.

& FEB 16, 1990 07h 14m 45.79s
60.014 N 153.215 W
DEPTH = 134.7km
SOUTHERN ALASKA (2)
<AGS-P>.

RED	0.46	28	iP	15	04.72	-0.8
			eS	15	19.98	
PDB	0.54	246	iP	15	04.76	-1.1
			iS	15	19.55	
AUL	0.64	190	iP	15	05.89	-0.6
			eS	15	21.42	
AUE	0.66	187	iP	15	05.74	-0.9
			eS	15	20.58	
RDT	0.69	35	iP	15	06.14	-0.8
XLV	0.94	126	eP	15	07.88	-1.0
			eS	15	25.44	
NNL	0.96	87	iP	15	09.29	0.2
CDD	1.11	192	iP	15	09.34	-1.1
CNPM	1.11	115	iP	15	09.84	-0.7
			eS	15	28.05	
NKA	1.22	52	eP	15	12.61	1.1
CKL	1.26	20	iP	15	11.52	-0.6
SPU	1.30	26	iP	15	11.64	-0.8
BGL	1.32	18	iP	15	12.25	-0.4
CRP	1.36	22	iP	15	12.67	-0.6
			eS	15	33.79	
CGLM	1.43	24	iP	15	13.06	-0.8
NCG	1.49	20	eP	15	13.88	-0.7
SLKM	1.57	70	eP	15	14.31	-1.1
SEW	1.89	86	eP	15	17.78	-1.3
SUA	1.89	39	iP	15	18.31	-1.0
			eS	15	43.82	
SKT	2.14	22	iP	15	20.92	-1.2
PMS	2.18	54	eP	15	21.19	-1.6
			eS	15	48.99	
KDC	2.30	170	iP	15	21.49	-2.7
PWA	2.32	43	eP	15	22.69	-1.6
PLRM	2.55	50	eP	15	24.34	-3.0
GHO	2.74	48	eP	15	27.49	-2.4
CUT	2.79	29	eP	15	28.98	-1.4
GLI	3.15	71	eP	15	33.38	-1.8
TTA	3.22	337	eP	15	34.17	-2.0
VZW	3.45	69	eP	15	37.99	-1.2
RND	3.99	29	eP	15	44.26	-2.1
NEA	4.97	21	iP	15	56.92	-2.5
CCB	5.29	26	eP	16	00.82	-2.9
FBA	5.51	25	iP	16	04.08	-2.6

33 obs. assocloted

% FEB 16, 1990 07h 43m 16.47± 0.78s
37.771 N ± 8.3km 29.181 E ± 6.5km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

KHL	0.61	26	iPg	43	28.00	-0.9
			eSg	43	38.00	
CIN	0.88	259	ePg	43	34.00	0.6
			iSg	43	45.00	
YER	0.96	229	iPn	43	34.00	-0.7
BCK	1.16	105	ePn	43	39.40	1.2
ELL	1.17	150	ePn	43	37.80	-0.7
IZM	1.64	293	ePn	43	46.00	0.5

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

% FEB 16, 1990 07h 46m 35.29± 0.86s
33.029 S ± 7.0km 70.559 W ± 9.2km
DEPTH = 33.0km (normol)
CHILE-ARGENTINA BORDER REGION (127)

JACH	0.35	355	iPd	46	43.20	-0.6
			iS	46	54.50	
FCH	0.37	143	iPd	46	45.00	0.6
			iS	46	57.80	
ROCH	0.38	278	iPd	46	45.50	1.1
			iS	46	58.40	
SAN	0.43	191	iPd	46	45.00	0.1
			iS	46	59.40	
PCH	0.59	176	eP	46	47.60	0.3
			iS	47	01.70	
TACH	0.70	207	iPd	46	49.00	0.3
			iS	47	04.50	
CHCH	0.91	185	iPd	46	51.10	-0.6
			iS	47	08.20	
LCCH	0.96	242	eP	46	52.40	0.0
LNV	1.17	217	iPc	46	54.10	-1.2
			iS	47	13.00	

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

FEB 16, 1990 07h 49m 30.85± 0.28s
8.770 N ± 6.3km 83.095 W ± 4.4km
DEPTH = 33.0km (normol)
5.2mb (37 obs.)
COSTA RICA (78)

UPA	3.53	86	iPd	50	25.00	0.3
	1.5s		777.78nm			
TOV	13.17	85	eP	52	38.30	0.0
FISA	13.78	78	eP	52	53.50	7.2X
CEOS	14.59	88	eP	52	57.00	0.1
MORO	14.71	81	eP	53	01.00	2.4
CAR	16.03	83	eP	53	08.00	-7.7X
			eS	56	16.00	
OLLA	16.12	84	eP	53	16.80	-0.1
LLAV	16.15	83	eP	53	17.50	0.3
NNA	21.54	163	iPd	54	18.00	-1.5
	1.0s		25.00nm		4.6mb	
PT10	21.58	164	e(P)	54	20.00	0.0
PRM	25.20	1	P	54	48.50	-6.6X
RSCP	26.80	355	P	55	10.00	0.0
UYO	27.35	339	iPd	55	15.50	0.6
ARE	27.57	155	eP	55	18.00	0.6
OLY	27.69	345	P	55	16.90	-1.1
BLA	28.42	4	P	55	25.00	0.4
	0.8s		57.05nm		5.3mb	
RLO	29.36	340	eP	55	31.70	-1.3
TUL	29.39	339	eP	55	32.00	-1.4
	0.8s		9.20nm		4.6mb	
			e	55	53.40	
FKO	29.43	336	e(P)	55	32.30	-1.4
SIO	29.44	338	eP	55	31.90	-1.9
FVM	29.83	348	P	55	35.60	-1.6
	1.2s		54.41nm		5.2mb	
CCH	30.92	147	P	55	46.50	-0.9
ALO	33.71	324	iPd	56	21.70	10.2X
	1.0s		12.50nm			
ANMO	33.71	324	P	56	11.30	-0.2
	1.0s		5.88nm		4.5mb	
RSNY	36.41	10	P	56	35.00	0.8
	1.0s		23.86nm		5.0mb	
GLD	36.64	331	P	56	36.40	0.0
	1.3s		66.09nm		5.4mb	
GOL	36.67	331	P	56	35.70	-1.1
	1.2s		75.82nm		5.5mb	
GLA	37.97	314	eP	56	48.00	0.5
BAR	39.11	312	eP	56	58.00	0.9
PLM	39.59	313	eP	57	03.00	1.8
RSSD	39.65	336	P	57	00.80	-0.8
PEC	40.08	314	P	57	06.40	1.4
RVR	40.28	314	eP	57	07.00	0.3
GSC	40.56	316	eP	57	10.00	0.9
			e	59	12.00	
MWC	40.89	313	eP	57	13.00	1.1
PAS	40.93	313	eP	57	13.00	1.0
SBB	40.95	314	eP	57	13.00	0.7
BW06	41.06	330	P	57	11.90	-1.3
	1.1s		5.95nm		4.2mb	
CLC	41.38	316	eP	57	17.00	1.3
ISA	41.91	315	eP	57	21.00	0.9
			e	59	09.00	
ABL	42.03	314	P	57	22.50	1.2
TNP	42.37	319	P	57	24.80	0.8
	0.9s		18.88nm		4.8mb	
BAO	42.39	125	eP	57	23.00	-1.3
SYP	42.42	313	eP	57	25.00	0.6
BCH	42.81	314	P	57	29.10	1.6
FRI	43.45	316	eP	57	32.30	-0.2
KVN	43.49	320	P	57	33.70	0.6
LLA	44.12	315	eP	57	38.40	0.4
PRS	44.28	314	eP	57	40.00	0.7
CMB	44.45	317	eP	57	41.20	0.5
LRM	44.70	331	eP	57	42.70	-0.2
ARN	44.89	315	P	57	45.50	1.3
MHC	44.96	315	eP	57	46.00	1.1
GCC	45.06	315	eP	57	46.30	0.8
BKS	45.63	316	ePd	57	51.90	1.8
	1.0s		91.00nm		5.6mb	
BRK	45.65	316	eP	57	51.20	1.0
ORV	45.98	318	eP	57	54.00	1.2
SCH	47.73	13	eP	58	06.00	-0.4
FFC	48.25	345	iPc	58	09.80	-0.6
	0.9s		33.00nm		5.4mb	
NEW	48.69	330	P	58	12.40	-1.6
	1.1s		12.81nm		4.9mb	
VGB	48.87	325	P	58	15.50	0.1
LON	50.18	326	P	58	25.00	-0.5
RMW	50.61	327	P	58	27.20	-1.5
EDM	50.62	337	iPc	58	27.20	-1.5
	1.1s		63.00nm		5.5mb	
PNT	50.63	330	eP	58	28.00	-0.8
	1.0s		38.00nm		5.3mb	
FRB	55.86	8	eP	59	05.00	-2.3
	1.1s		73.00nm		5.6mb	
INK	67.99	342	iPc	00	28.20	-0.3
	1.1s		67.00nm		5.7mb	
MBC	70.26	351	ePc	00	42.00	-0.3
	1.0s		34.00nm		5.4mb	
PMR	71.03	332	eP	00	47.00	-0.3
	1.0s		12.00nm		4.9mb	
FBA	71.51	336	ePc	00	49.50	-0.6
KDC	71.68	328	eP	00	51.20	0.0
SVW	73.95	331	eP	01	03.80	-0.7
IMA	74.20	336	eP	01	05.90	-0.1
	1.0s		12.20nm		4.9mb	
TTA	74.48	333	P	01	05.40	-2.3
	0.8s		14.66nm		5.0mb	
IFR	75.20	58	iPd	01	13.00	0.4
DAG	75.76	12	iPc	01	12.90	-1.8
	1.2s		51.56nm		5.4mb	
MAL	75.76	54	iPd	01	17.30	1.9
AAPN	75.99	54	iPd	01	18.50	1.7
ALOJ	76.00	54	iPd	01	18.20	1.2
TOL	76.04	51	eP	01	17.00	0.0
ATEJ	76.08	54	iPd	01	18.50	1.1
ACHM	76.22	54	eP	01	18.60	0.5
ASMO	76.29	54	iPd	01	19.50	1.0
APHE	76.34	54	iPc	01	19.60	0.7
EKA	77.11	35	P	01	22.00	-0.6
	1.2s		19.20nm		5.0mb	
TIC	77.27	85	Pc	01	24.02	-0.3
	1.2s		83.50nm		5.6mb	
LIC	77.32	86	Pc	01	24.46	-0.1
	1.2s		94.50nm		5.7mb	
KIC	77.58	85	Pc	01	25.94	-0.1
	1.2s		89.50nm		5.7mb	
GRR	78.35	42	eP	01	28.90	-0.6
	1.1s		39.05nm		5.3mb	
LDF	78.84	42	eP	01	31.70	-0.5
	1.1s		24.40nm		5.1mb	
MFF	78.85	44	eP	01	31.80	-0.5
EPF	79.29	48	eP	01	35.00	0.1
	1.1s		17.10nm		5.0mb	
RJF	80.05	46	eP	01	38.50	-0.3
WIGH	81.78	86	eP	01	49.00	0.5
KUK	81.91	85	eP	01	49.00	-0.2
WEGH	82.04	86	eP	01	50.00	0.1
KOGH	82.05	85	eP	01	50.00	0.0
LEGH	82.17	85	eP	01	51.00	0.4
SHGH	82.27	85	eP	01	52.00	0.9
HAU	83.18	43	eP	01	57.60	2.4
	0.8s		6.70nm		4.8mb	
NB2	84.48	29	P	02	01.50	0.0
	1.3s		28.50nm		5.3mb	
HFS	85.84	30	eP	02	06.80	-1.4
	1.1s		12.30nm		5.0mb	
MOX	86.27	39	eP	02	10.00	-0.6
CLL	87.02	39	iPc	02	13.90	-0.3
	1.5s		29.00nm		5.3mb	
BRG	87.68	39	iP	02	18.00	0.6
	1.4s		26.00nm		5.3mb	
			i	02	42.20	
KHC	87.78	41	iP	02	18.50	0.5
	1.4s		14.00nm		5.1mb	
KBA	88.01	43	eP	02	19.50	0.2
	1.3s		25.90nm		5.4mb	
PRU	88.23	40	eP	02	20.50	0.4
SUF	90.90	26	iP	02	32.40	0.1
	0.9s		10.00nm		5.2mb	
NUR	91.00	28	eP	02	33.00	0.2
KRA	91.60	39	eP	02	35.90	0.1
HHC	128.81	346	ePKP	08	36.00	-1.1
GKN	141.57	18	PKP	08	55.40	-6.0X
ASPA	141.66	243	ePKP	08	56.00	-5.5X
	1.0s		11.00nm			
KKN	141.95	17	PKP	08	56.10	-6.1X
GUN	142.01	16	PKP	08	55.60	-6.9X
DMN	142.08	17	PKP	08	56.40	-6.1X
WB5	142.15	249	ePKP	08	56.20	-6.3X
WRA	142.16	249	PKPd	08	55.80	-6.7X

16d 07h

16d 08h

	1.0s	12.00nm				
PKI	142.20	17	PKP	08	56.80	-6.0X
GYA	143.72	345	PKP	09	02.20	-2.9
POO	144.60	40	iPKPd	09	04.70	-2.0
SHL	145.52	8	iPKP	09	06.00	-2.3
KMI	145.84	351	PKPc	09	08.00	-0.9
MTN	146.16	260	iPKPc	09	09.20	-0.1
HYB	148.28	35	ePKPd	09	14.60	1.9
QIZ	149.57	335	ePKP	09	18.20	3.5X
GBA	150.54	41	PKPc	09	15.60	-0.6
	1.1s	7.40nm				
CHG	152.52	356	ePKP	09	19.00	0.0
KOD	152.97	46	ePKP	09	27.80	7.6X
S.D. = 1.1 on 116 of 130 obs.						

? FEB 16, 1990 08h 14m 23.62± 7.31s
17.658 N ±57.8km 65.972 W ±28.3km
DEPTH = 33.0km (normal)
PUERTO RICO REGION (90)

CPD	0.38	8	P	14	32.80	0.3
			S	14	38.00	
SJG	0.48	339	iP	14	34.00	0.0
			S	14	41.50	
LPR	0.65	9	P	14	36.20	-0.3
			S	14	44.30	
PORP	0.75	302	P	14	37.70	0.0
LRS	1.04	307	P	14	42.00	0.0
			S	14	55.20	
S.D. = 0.3 on 5 of 5 obs.						

FEB 16, 1990 09h 37m 56.57± 0.52s
45.007 N ± 3.7km 111.774 W ± 6.0km
DEPTH = 5.0km (geophysicist)
MONTANA (456)
ML 3.3 (BUT).

BGMT	0.29	320	iPc	38	03.00	0.4
LTMT	0.54	207	iPc	38	07.40	0.0
MCMT	0.78	257	ePc	38	11.40	-1.1
MEMT	0.82	43	iPc	38	12.80	-0.3
LCCM	0.83	355	iPc	38	13.00	-0.3
LRM	0.94	330	ePc	38	14.70	-0.5
BUT	1.15	331	eP	38	19.50	0.8
			eS	38	34.30	
SXM	1.21	19	ePc	38	19.80	0.1
IMW	1.26	151	eP	38	20.20	-0.4
HRY	1.71	359	ePn	38	27.40	0.2
PTI	2.18	192	eP	38	35.30	1.1
KVN	7.59	221	e(P)	40	10.00	19.4X
S.D. = 0.7 on 11 of 12 obs.						

% FEB 16, 1990 10h 18m 29.69± 0.74s
33.758 S ± 8.2km 71.293 W ± 6.8km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

LNV	0.22	207	iPc	18	36.70	0.2
			iS	18	43.50	
TACH	0.31	71	iPc	18	38.40	0.7
			iS	18	46.60	
LCCH	0.36	321	iPc	18	38.00	-0.3
			iS	18	45.70	
CHCH	0.56	108	iPc	18	40.80	-0.4
			iS	18	50.30	
SAN	0.61	60	eP	18	42.00	0.1
			iS	18	52.30	
PCH	0.66	78	iPc	18	42.50	-0.2
			iS	18	53.10	
ROCH	0.82	17	iPd	18	45.20	0.2
			iS	18	57.60	
			i	18	58.40	
FCH	0.94	63	iPd	18	46.50	-0.4
			iS	19	00.20	
S.D. = 0.5 on 8 of 8 obs.						

% FEB 16, 1990 10h 44m 21.63± 2.71s
44.501 N ±11.2km 6.759 E ±20.7km
DEPTH = 5.0km (geophysicist)
FRANCE (538)
ML 2.3 (GEN).

PZZ	0.25	89	P	44	26.85	0.2
			S	44	29.42	
RRL	0.42	2	P	44	30.14	0.0
			S	44	36.49	
STV	0.48	122	P	44	31.16	-0.1
			S	44	37.93	
ENR	0.55	120	P	44	32.60	0.0
			S	44	39.78	
RSP	0.74	28	P	44	36.19	-0.3
			S	44	45.62	
LSD	1.00	16	P	44	41.31	0.1
			S	44	53.00	
S.D. = 0.2 on 6 of 6 obs.						

& FEB 16, 1990 10h 48m 33.60s
36.873 N 121.628 W
DEPTH = 7.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.3 (BRK). Felt at
Prunedale, Salinas and San Jose.

SAO	0.18	126	iP	48	37.00	-0.5
GCC	0.33	298	iPc	48	40.10	-0.3
ARN	0.48	9	iPd	48	43.40	0.1
PRS	0.58	159	iPd	48	44.50	-0.7
LLA	0.61	115	iPc	48	45.30	-0.5
PCC	0.87	316	iPc	48	49.40	-1.2
BKS	1.11	334	eP	48	53.30	-1.4
			e(S)	49	11.10	
BRK	1.12	333	eP	48	53.10	-1.7
			eS	49	10.40	
PHAM	1.43	136	eP	48	58.00	-2.1
CMB	1.52	40	eP	49	00.30	-1.0
FRI	1.54	85	eP	48	59.40	-2.1
NWRM	1.87	328	eP	49	07.50	1.2
BCH	2.10	143	eP	49	07.50	-2.2
KVN	3.54	51	eP	49	30.00	-0.2
14 obs. associated						

? FEB 16, 1990 10h 55m 17.66±10.08s
44.559 N ±43.4km 128.544 W ±68.5km
DEPTH = 10.0km (geophysicist)
OFF COAST OF OREGON (30)

ONR	4.07	54	eP	56	21.77	0.5
RVW	4.39	67	eP	56	25.55	-0.3
OOW	4.39	42	eP	56	25.27	-0.6
OFK	4.46	39	eP	56	26.89	0.0
CPW	4.49	56	eP	56	27.19	-0.1
SMW	4.56	51	eP	56	28.13	-0.2
OTR	4.57	38	eP	56	28.76	0.3
APW	4.64	61	eP	56	29.51	0.1
CZM	4.64	64	eP	56	29.05	-0.4
OSD	4.68	44	eP	56	30.02	-0.3
ERK	4.70	66	eP	56	30.42	0.0
MTMW	4.70	70	eP	56	30.12	-0.3
TDH	4.85	79	eP	56	32.52	-0.1
HDW	4.91	49	eP	56	33.58	0.2
GMW	5.00	51	eP	56	34.15	-0.3
VFP	5.08	79	eP	56	36.06	0.2
RVC	5.18	60	eP	56	37.23	0.1
LON	5.20	63	eP	56	37.70	0.2
PGW	5.26	50	eP	56	38.83	0.7
WPW	5.35	64	eP	56	39.96	0.3
FMW	5.36	61	eP	56	39.45	-0.4
GSM	5.40	58	eP	56	41.00	0.6
RMW	5.52	56	eP	56	41.30	-0.6
S.D. = 0.4 on 23 of 23 obs.						

% FEB 16, 1990 11h 08m 34.62± 0.74s
43.066 N ± 7.3km 0.766 W ± 7.8km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
MD 1.0 (STR).

ISSF	0.04	209	Pg	08	36.56	-0.3
			Sg	08	37.83	
ATE	0.05	67	Pg	08	36.67	-0.2
			Sg	08	37.92	
MADF	0.09	334	Pg	08	37.21	0.0
			Sg	08	38.79	
LHE	0.19	145	Pg	08	39.12	0.3
			Sg	08	42.32	
ELYF	0.19	302	Pg	08	39.14	0.2
			Sg	08	41.80	
S.D. = 0.3 on 5 of 5 obs.						

FEB 16, 1990 11h 58m 17.59± 0.38s
9.884 N ± 6.2km 124.996 E ± 9.7km
DEPTH = 20.6km (3 depth phases)
4.8mb (8 obs.) 3.6Msz (1 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV	2.84	168	eP	59	05.00	2.4
BAG	7.78	327	eP	00	14.90	2.2
QIZ	17.25	303	eP	02	21.50	2.5
SSE	21.40	351	Pc	03	07.10	0.9
Z	17s	0.20um				3.6MszX
			pP	03	12.00	18km
NJ2	22.78	346	Pd	03	19.00	-1.0
WHN	22.82	336	eP	03	21.50	1.1
SNG	24.26	266	eP	03	34.40	-0.1
IPM	24.35	259	ePd	03	36.00	0.6
	1.0s	60.30nm				5.1mb
CHTO	26.72	292	eP	03	57.00	-0.7
TIA	27.17	346	eP	04	01.80	0.2
XAN	28.21	331	P	04	10.20	-0.9
TIY	29.93	340	eP	04	26.40	-0.2
WB5	30.98	163	eP	04	34.80	-1.1
WRA	31.04	163	Pd	04	34.80	-1.6
	0.7s	2.70nm				4.2mb
BJI	31.04	347	eP	04	35.00	-1.2
	1.4s	44.00nm				5.1mb
SNY	31.84	358	iPd	04	43.60	0.4
LZH	32.39	327	eP	04	48.00	-0.4
	1.4s	18.00nm				4.8mb
			pP	04	54.50	23km
HHC	33.05	341	P	04	54.40	0.4
QIS	33.49	155	iPc	04	56.70	-1.2
			e	05	03.00	22km
ASPA	34.46	165	iPc	05	04.00	-2.3
	0.8s	7.00nm				4.6mb
Z	22s	0.12um				3.6Msz
			LR	18	08.30	
MDJ	34.83	6	eP	05	09.50	0.3
SHL	35.05	301	iP	05	10.20	-1.3
GTA	37.00	327	eP	05	28.00	0.3
GUN	40.89	301	P	06	01.00	0.4
PKI	41.18	301	P	06	02.00	-1.0
KKN	41.36	301	P	06	03.80	-0.5
DMN	41.45	301	P	06	04.70	-0.4
GKN	41.96	301	P	06	08.40	-0.8
ADE	46.46	164	e(P)	06	47.00	2.0
GBA	46.66	279	Pd	06	46.10	-0.8
	0.5s	2.50nm				4.5mb
WMO	46.76	323	P	06	48.20	0.7
BWA	49.35	154	eP	07	09.70	2.1
CAN	50.36	154	eP	07	16.10	0.7
CNB	50.51	154	eP	07	17.00	0.4
MAIO	64.49	305	iPc	08	55.00	-0.5
INK	85.10	21	eP	10	53.00	0.0
MBC	86.36	12	eP	10	59.00	-0.1
	1.0s	6.00nm				4.8mb
UPP	90.07	331	iP	11	07.20	-9.9X
NB2	92.55	334	P	11	27.00	-1.6
	1.0s	5.90nm				5.0mb
S.D. = 1.2 on 38 of 39 obs.						

* FEB 16, 1990 12h 42m 10.05± 0.68s
14.612 N ±13.7km 120.192 E ±24.3km
DEPTH = 33.0km (normal)
4.5mb (5 obs.)
LUZON, PHILIPPINE ISLANDS (249)

BJI	25.58	353	eP	47	37.00	-0.7
SHL	28.67	297	iP	48	06.50	0.1
WB5	37.00	157	eP	49	18.20	-0.4
WRA	37.05	158	Pd	49	19.00	0.0
	0.7s	2.80nm				4.2mb
ASPA	40.34	160	iPc	49	46.50	0.1
	0.7s	12.00nm				4.8mb
MBC	82.76	12	eP	54	32.50	0.8
	1.0s	6.00nm				4.6mb
HFS	85.44	331	eP	54	42.00	-3.4X
	0.5s	1.40nm				4.4mb
NB2	86.23	333	P	54	46.00	-3.4X
	0.8s	2.30nm				4.5mb
S.D. = 0.7 on 6 of 8 obs.						

* FEB 16, 1990 12h 45m 48.99± 2.27s
31.990 S ±21.5km 69.674 W ±14.1km
DEPTH = 150.4 ± 22.6 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB	0.90	56	iP	46	13.80	0.4
			eS	46	27.00	
RTCV	0.98	83	iPd	46	13.20	-0.7
			(S)	46	29.20	
JACH	1.04	228	iPd	46	14.70	0.2
			iS	46	32.50	

EDR No. 2-90
Part 2 of 2
P. 133-266

U. S. DEPARTMENT OF THE INTERIOR

Geological Survey

EARTHQUAKE DATA REPORT

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

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

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

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

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

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

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

Hypocenter Symbols

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

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

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

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

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

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

References

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16d 12h

CFA	1.28	73	iPd	46	16.80	0.1	NEW	7.07	93	eP	30	26.70	-2.1	DAG	46.80	17	iPc	37	13.20	-0.5
			S	46	35.50		FHC	8.73	161	e(P)	30	52.00	0.0		0.9s	15.97nm			5.1mb	
ROCH	1.50	229	iPd	46	18.70	-0.4	LBFM	8.79	150	eP	30	54.00	1.0	SOD	62.22	11	iP	39	06.00	-0.4
			iS	46	39.50		SIT	9.17	333	eP	30	54.80	-3.2X	MDJ	64.88	310	eP	39	21.50	-2.6
SAN	1.68	209	eP	46	21.00	0.1	WDC	9.29	155	iPd	31	00.80	1.0	Z	25s	1.00um			4.9MszX	
			iS	46	43.60		MIN	9.79	151	iPd	31	08.20	1.5			S		48	06.00	
PCH	1.77	203	iPd	46	22.40	0.4	EDM	9.91	60	eP	31	07.20	-1.1	NB2	65.32	21	P	39	26.20	-0.6
			iS	46	46.60		ORV	10.54	153	ePd	31	17.80	0.8		1.0s	20.90nm			5.3mb	
TACH	1.97	212	iPd	46	24.00	-0.2	LRM	10.85	102	eP	31	19.00	-2.3	DCN	66.18	34	eP	39	31.70	-0.6
			iS	46	49.00		NWRM	11.21	160	eP	31	26.00	-0.1	DLE	66.50	34	eP	39	34.00	-0.3
CHCH	2.11	203	iPd	46	26.10	0.3	BRK	11.92	159	eP	31	35.50	-0.1	SUF	66.59	13	eP	39	34.00	-0.8
			iS	46	53.30		BKS	11.92	159	ePd	31	35.70	0.0	HFS	66.69	20	eP	39	35.00	-0.5
LCCH	2.18	227	ePd	46	27.30	0.7	KVN	12.20	142	iPd	31	41.10	1.4		1.0s	33.10nm			5.5mb	
			iS	46	53.70		CMB	12.28	152	ePd	31	40.20	-0.4	Z	19s	0.76um			4.9Msz	
LNV	2.44	216	iPd	46	29.00	-0.9	ARN	12.59	157	eP	31	45.50	0.7			LR		04	34.00	
			iS	46	59.00		IMW	12.67	108	eP	31	46.50	0.4	CN2	67.53	311	Pc	39	38.40	-2.6
MRA	3.39	98	iPc	46	42.20	0.3	SAO	13.17	157	e(P)	31	51.80	-0.6	Z	24s	0.40um			4.6MszX	
TCA	4.38	83	ePc	46	54.90	-0.2	TNP	13.39	142	iPd	31	57.00	1.5	N	13s	0.40um				
			S	47	40.00		LLA	13.44	156	iPd	31	56.20	0.2	E	13s	0.40um				
S.D. = 0.5 on 13 of 13 obs.							FRI	13.45	151	ePd	31	55.70	-0.4			eS		48	34.00	
							PRS	13.60	158	iPd	31	57.50	-0.6	UPP	67.78	18	iP	39	41.60	-0.7
FEB 16, 1990 13h 28m 42.83± 0.19s							DUG	13.84	125	eP	32	02.50	1.1	NUR	68.46	14	iP	39	46.00	-0.5
49.121 N ± 2.3km 127.714 W ± 2.8km							BW06	14.12	110	eP	32	05.70	0.5		1.0s	30.00nm			5.4mb	
DEPTH = 10.0km (geophysicist)							ISA	15.06	150	eP	32	17.00	-0.4	SNY	69.92	311	eP	39	54.20	-1.5
5.2mb (41 obs.) 4.9Msz (7 obs.)							CLC	15.23	147	eP	32	20.00	0.5	Z	18s	0.60um			4.9Msz	
VANCOUVER ISLAND REGION (25)							MSU	15.40	128	eP	32	21.30	-0.6	E	16s	0.70um				
Felt at Port Alice and on Nootka							SYP	15.67	156	eP	32	26.00	0.7			S		49	00.00	
Island. Felt mildly at Holberg,							GSC	15.98	146	eP	32	30.00	0.8	WTS	72.08	28	eP	40	09.00	0.4
Port Hardy and Sointula.							SBB	16.17	149	eP	32	32.00	0.3		0.9s	19.00nm			5.2mb	
CENTROID, MOMENT TENSOR (HRV)							DWY	16.25	341	Pd	32	33.30	0.8			e		40	15.00	
Data Used: GDSN							MWC	16.52	151	eP	32	36.00	-0.2	SNF	72.57	30	P	40	22.30	10.8X
L.P.B.: 11S, 20C							PAS	16.55	151	eP	32	36.00	-0.4	GRR	72.58	34	eP	40	11.90	0.2
Centroid Location:							TOA	16.58	329	ePd	32	37.50	0.8	LDF	72.68	33	eP	40	12.40	0.1
Origin Time 13:28:52.3 0.6							FFC	16.78	61	iPc	32	35.00	-4.2X		1.0s	16.00nm			5.1mb	
Lat 49.16N 0.08 Lon 128.79W 0.08								0.7s	36.00nm			4.6mb		LPF	72.81	34	eP	40	13.50	0.5
Dep 15.0 FIX Half-duration 1.7							RVR	16.95	149	eP	32	42.00	0.5		1.1s	36.65nm			5.4mb	
Moment Tensor; Scale 10**17 Nm							RSSD	16.99	98	eP	32	42.20	0.0	ENN	72.87	29	eP	40	13.50	0.2
Mrr= 0.05 0.06 Mtt=-1.15 0.10							KDC	17.02	310	eP	32	41.40	-0.7		1.0s	37.00nm			5.4mb	
Mff= 1.10 0.08 Mrt=-0.03 0.25							PMR	17.33	324	eP	32	46.00	0.0			e		40	22.50	
Mrf=-0.32 0.18 Mtf=-0.79 0.06								1.6s	314.50nm			5.2mb		DOU	73.03	30	P	40	23.80	9.5X
Principal Axes:							PLM	17.71	149	eP	32	52.00	0.8	MEM	73.04	29	P	40	15.30	1.0
T Val= 1.41 Plg=12 Azm= 73							BAR	18.39	149	eP	33	00.00	0.6			e		40	24.70	
N -0.01 77 229							GOL	18.47	112	eP	33	01.00	0.3	CLL	74.47	24	iPd	40	22.60	0.0
P -1.41 5 342							GLD	18.54	112	eP	33	02.50	1.1		1.3s	30.00nm			5.2mb	
Best Double Couple:Mo=1.4*10**17							GLA	18.72	144	eP	33	04.00	0.5			e		40	37.00	
NP1:Strike=117 Dip=78 Slip= 175							FBA	19.08	333	eP	33	07.00	-0.5	MOX	74.69	25	iPd	40	25.00	1.1
NP2: 208 85 12								1.0s	50.00nm			4.7mb			1.1s	38.00nm			5.3mb	
							INK	19.46	354	iPd	33	11.10	-1.1	BJI	74.86	314	eP	40	22.50	-2.6
ETB	0.81	71	iPg	29	00.83	2.3		0.8s	48.00nm			4.8mb		Z	20s	0.36um			4.7Msz	
EDB	0.85	27	Pgc	29	00.51	1.4	SVW	19.78	318	eP	33	14.20	-1.6			eS		50	00.00	
			Sg	29	13.20		TTA	20.77	322	eP	33	24.80	-1.3	LOR	75.22	32	eP	40	27.40	0.4
OZB	1.47	95	Pgc	29	08.89	-0.5		1.0s	67.50nm			5.0mb			1.1s	24.40nm			5.2mb	
BTB	1.48	76	Pgc	29	10.09	0.5	ANMO	21.11	124	eP	33	30.00	0.0	LSF	75.26	34	eP	40	27.50	0.2
			Sg	29	28.08			1.5s	76.39nm			4.9mb		SSF	75.27	32	eP	40	27.70	0.4
PHC	1.60	6	Pg	29	10.80	-0.3	ALQ	21.12	124	iPd	33	30.40	0.3		1.1s	19.55nm			5.1mb	
CBB	1.78	58	P	29	14.76	0.9		1.5s	70.14nm			4.8mb		CDF	75.36	29	eP	40	28.10	0.2
ALB	1.90	84	Pc	29	15.54	0.0	Z	20s	2.13um			4.5Msz			1.1s	22.00nm			5.1mb	
MGB	1.99	92	Pc	29	16.21	-0.8	IMA	21.68	331	iPd	33	35.60	0.2	AVF	75.45	32	eP	40	28.30	0.0
OSP	2.23	111	eP	29	19.44	-0.9		1.2s	203.10nm			5.4mb			1.0s	14.00nm			5.0mb	
PFB	2.23	103	Pc	29	18.74	-1.7	RSON	21.83	72	eP	33	36.00	-0.9	BGF	75.47	33	eP	40	28.60	0.1
NAB	2.44	86	Pc	29	23.37	0.1		1.0s	596.53nm			6.0mb		TCF	75.48	33	eP	40	28.70	0.2
OTR	2.47	114	eP	29	23.00	-0.7	BRW	25.99	339	eP	34	17.80	0.9		1.3s	39.70nm			5.3mb	
OFK	2.52	116	eP	29	23.40	-1.0	SIO	26.54	108	iPd	34	23.90	1.5	LBF	75.50	32	eP	40	28.70	0.0
SHB	2.55	78	Pc	29	25.35	0.3	TUL	26.76	108	ePd	34	25.50	1.2		1.1s	13.45nm			4.9mb	
OBC	2.65	113	eP	29	25.62	-0.8		0.8s	40.10nm			5.2mb		BSF	75.71	30	eP	40	30.10	0.1
OOW	2.73	119	eP	29	26.80	-0.7			e		34	35.90			1.1s	14.65nm			5.0mb	
PGC	2.85	98	eP	29	28.00	-1.2			eS		39	48.00		SMF	75.75	32	eP	40	29.90	-0.2
STW	2.85	108	eP	29	28.43	-0.8			LR		41	51.00		KSP	75.76	23	iPd	40	30.50	0.5
OSD	2.97	114	eP	29	30.37	-0.7	RLO	27.08	106	ePd	34	28.70	1.4		1.2s	40.00nm			5.4mb	
VGZ	2.99	102	Pc	29	29.27	-1.8	MBC	27.43	4	eP	34	30.50	0.4			i		40	45.50	
SNB	3.01	95	P	29	31.05	-0.4		1.0s	45.00nm			5.2mb				e		41	30.50	
BBB	3.08	355	Pd	29	31.00	-1.3	UYO	28.72	109	iPd	34	42.80	0.7			e		43	29.00	
OBH	3.14	123	eP	29	32.01	-1.2	FVM	28.95	98	eP	34	44.00	-0.1	RJF	76.06	34	eP	40	32.10	0.3
WHB	3.25	70	Pc	29	35.76	0.8		1.0s	130.00nm			5.7mb			1.0s	32.00nm			5.4mb	
BLN	3.34	108	eP	29	33.26	-2.9	DLA	32.26	83	P	35	15.10	1.7	LFF	76.08	35	eP	40	32.40	0.5
HNB	3.37	85	Pc	29	36.27	-0.3	ELF	32.27	83	P	35	14.60	1.1		1.1s	34.20nm			5.4mb	
SMW	3.43	120	eP	29	37.31	-0.2	LDN	32.43	83	P	35	15.60	0.7	PRU	76.09	24	eP	40	32.50	0.6
HDW	3.44	114	eP	29	36.94	-0.6	FRB	34.41	43	ePc	35	32.00	0.2		1.0s	14.50nm			5.0mb	
OHW	3.52	101	eP	29	38.28	-0.4	RSNY	36.04	77	eP	35	45.20	-0.8	Z	20s	1.10um			5.2Msz	
GMW	3.64	114	eP	29	40.00	-0.5	SCH	36.91	57	ePc	35	53.40	0.2	N	20s	0.60um				
VDB	3.69	89	Pc	29	40.58	-0.5		1.2s	185.00nm			5.7mb		E	18s	0.50um				
BMW	4.02	130	eP	29	44.20	-1.6	TBR	37.88	81	eP	36	01.00	-0.4			e		40	47.00	
RMW	4.28	111	eP	29	49.30	-0.3	CBM	39.02	70	eP	36	11.40	0.5	HHC	76.31	318	P	40	32.00	-1.5
LON	4.62	119	eP	29	54.80	0.4	GDH	39.80	32	iPd	36	19.00	1.9	Z	20s	0.60um			4.9Msz	
SHW	4.72	126	eP	29	55.00	-0.9		1.0s	96.00nm			5.4mb		WET	76.39	25	iPc	40	33.90	0.2
PNT	5.31	85	eP	30	03.00	-1.1			e		46	20.00			1.0s	13.00nm			5.0mb	
VGB	5.94	125	eP	30	12.90	0.0			i		50	10.00		CAF	76.59	34	eP	40	35.00	0.2

16d 13h

	0.9s	11.45nm			5.0mb	
KHC	76.60	25 iPd	40	36.00	1.1	
	1.1s	13.00nm			4.9mb	
	Z 20s	1.10um			5.2Msz	
	N 20s	0.80um				
	E 20s	0.90um				
		e	40	43.90		
BTO	77.20	319 eP	40	39.00	0.6	
	N 16s	1.00um				
	E 16s	1.00um				
		eS	50	30.50		
KRA	77.37	21 eP	40	39.20	0.2	
	1.4s	100.00nm			5.7mb	
		e	40	45.60		
TOL	78.39	41 eP	40	46.00	1.1	
KBA	78.40	26 ePc	40	45.00	0.0	
	1.2s	28.60nm			5.2mb	
		i	41	14.00		
SRO	79.07	23 eP	40	49.60	1.2	
PSZ	79.36	22 eP	40	50.80	0.7	
VOY	79.51	26 e(P)	40	51.00	0.1	
		e	41	22.00		
CEY	79.93	26 e(P)	40	50.00	-3.1X	
RIY	80.28	26 ePd	40	55.10	0.2	
VBY	80.38	25 e(P)	40	56.30	0.8	
ASMO	80.62	42 iPd	40	59.00	1.9	
ALOJ	80.67	42 iPd	40	59.40	2.1	
ATEJ	80.87	42 iPd	40	59.40	1.0	
APHE	80.98	42 eP	41	00.00	1.0	
GTA	82.35	325 eP	41	08.00	1.9	
	Z 16s	0.60um			5.1MszX	
WMQ	82.38	335 eP	41	05.50	-0.6	
	Z 24s	0.40um			4.7MszX	
BEO	82.39	22 eP	41	06.00	0.0	
VRI	82.81	18 ePd	41	09.00	0.8	
XAN	83.11	316 eP	41	09.40	-0.6	
LZH	83.61	320 Pc	41	18.00	5.3X	
	1.4s	22.00nm			5.2mb	
	Z 28s	0.90um			5.0MszX	
SKO	85.31	23 iP	41	21.50	0.6	
CCH	85.71	123 eP	41	23.00	-0.5	
OHR	85.96	23 eP	41	24.20	-0.1	
	1.3s	0.07nm			2.7mb X	
VAY	86.21	22 eP	41	24.30	-1.1	
GYA	90.51	313 P	41	51.80	5.4X	
GUN	97.66	330 P	42	00.00	-19.4X	
BUL	145.43	42 iPKPd	48	21.30	-1.5	
	1.1s	110.76nm				
SLR	150.10	47 iPKPc	48	34.00	3.9X	
	0.9s	37.82nm				
CER	150.90	70 ePKP	48	35.00	4.1X	
HVD	152.57	58 ePKP	48	37.00	3.4X	
	S.D. = 1.0	on 164 of 175 obs.				

% FEB 16, 1990 15h 02m 18.30± 0.95s
39.273 N ± 7.4km 28.241 E ±10.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

DST	0.45	42 iPg	02	26.80	-0.6	
		eSg	02	36.00		
KCT	0.98	5 iPn	02	39.40	2.5	
BNT	1.11	347 iPn	02	37.90	-1.2	
EDC	1.11	345 iPn	02	39.00	-0.1	
IZM	1.16	221 ePn	02	39.90	-0.1	
KHL	1.38	133 ePn	02	44.00	0.4	
YLV	1.56	34 iPn	02	45.40	-0.8	
	S.D. = 1.5	on 7 of 7 obs.				

FEB 16, 1990 15h 12m 46.48± 0.50s
3.121 S ± 7.8km 80.683 W ± 7.3km
DEPTH = 76.4km (2 depth phases)
5.0mb (10 obs.)
PERU-ECUADOR BORDER REGION (110)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 16C
Centroid Location:
Origin Time 15:12:45.0 0.7
Lat 3.93S 0.07 Lon 81.18W 0.12
Dep 76.0 FIX Half-duration 1.5
Moment Tensor; Scale 10**16 Nm
Mrr=-0.27 0.62 Mtt=-6.29 0.65
Mff= 6.56 1.02 Mrt=-5.78 0.69
Mrf=-1.41 0.74 Mtf= 4.11 0.96
Principal Axes:
T Val= 8.93 Plg=21 Azm=113

	N	1.35	53		235	
	P	-10.28	28		11	
	Best Double Couple:Mo=9.6*10**16					
	NP1:Strike=154 Dip=54 Slip=-174					
	NP2:	61	85		-36	
UPA	12.08	5 iPd	15	37.50	0.1	
	0.9s	50.42nm			5.4mb	
	Z 20s	2.13um			4.9Msz	
ARE	16.04	146 e(P)	16	28.00	-1.2	
TOV	16.80	40 eP	16	37.70	-0.7	
CEOS	17.24	45 eP	16	43.00	-1.0	
LPB	18.18	138 P	16	55.00	-0.9	
	1.0s	70.00nm			4.8mb	
	Z 18s	4.81um				
		S	20	22.00		
		LR	23	00.00		
FISA	18.21	38 iP	16	55.50	-0.4	
PLAV	18.41	45 iPc	16	58.00	-0.5	
MORO	18.57	41 eP	17	00.00	-0.2	
GUAC	18.80	45 iP	17	04.00	1.1	
OLLA	19.01	46 iPd	17	03.00	-2.3	
LLAV	19.32	45 eP	17	09.00	0.4	
BAO	34.50	113 e(P)	19	26.00	-3.7X	
TUL	41.32	341 eP	20	21.50	-4.7X	
	1.2s	52.30nm			5.2mb	
		e	20	45.10	101kmX	
		LR	29	00.00		
SIO	41.34	341 eP	20	26.40	0.0	
ALQ	44.94	330 iPd	20	56.70	0.8	
	1.0s	23.75nm			5.0mb	
ANMO	44.94	330 P	20	57.30	1.4	
	0.8s	16.79nm			4.9mb	
GOL	48.27	334 P	21	22.30	0.2	
	0.7s	9.71nm			4.9mb	
PLM	49.83	320 P	21	34.00	-0.1	
RSSD	51.48	339 P	21	46.50	0.0	
		pP	22	07.00	83km	
BW06	52.61	333 P	21	54.00	-1.1	
TNP	53.13	324 P	21	59.00	0.1	
IMW	54.11	333 P	22	05.00	-1.1	
		pP	22	23.00	70km	
KVN	54.30	324 P	22	07.00	-0.4	
SCH	58.87	9 eP	22	38.00	-1.5	
NEW	60.23	333 P	22	48.30	-0.6	
LON	61.45	329 P	22	57.70	0.4	
PNT	62.13	332 eP	23	02.00	0.2	
	0.6s	15.00nm			5.3mb	
EDM	62.47	339 eP	23	02.50	-1.5	
FRB	67.31	6 eP	23	34.00	-0.9	
LIC	76.11	83 P	24	29.00	0.7	
TIC	76.15	82 P	24	29.40	0.8	
	0.8s	13.50nm			4.9mb	
KIC	76.40	83 P	24	30.80	0.8	
	0.8s	15.50nm			5.0mb	
INK	79.98	342 eP	24	49.00	0.6	
ALOJ	81.21	52 eP	24	58.20	2.4	
ATEJ	81.25	52 eP	24	58.50	2.5	
APHE	81.51	52 eP	24	59.50	2.1	
MBC	82.29	351 eP	25	01.00	0.5	
	1.0s	24.00nm			5.1mb	
WRA	138.67	235 PKP	32	09.00	2.6X	
	0.8s	0.90nm				
WB5	138.68	235 ePKP	32	16.40	10.0X	
MTN	144.65	243 ePKP	32	15.00	-1.9	
		e	32	32.00		
SSE	145.36	326 PKP	32	25.50	7.8X	
LZH	146.93	353 ePKP	32	21.50	1.1	
		sP	32	37.50		
	S.D. = 1.2	on 37 of 42 obs.				

FEB 16, 1990 15h 15m 31.57± 0.75s
36.146 N ± 7.9km 27.212 E ± 7.8km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)
MD 3.6 (ATH).

KAP	0.59	183 ePb	15	43.00	-0.6	
		eSb	15	52.50		
YER	1.31	41 ePn	15	54.00	-1.8	
NPS	1.57	236 ePb	15	59.50	-0.1	
SMG	1.59	349 ePb	16	00.00	0.3	
APE	1.64	305 ePb	16	01.00	0.5	
KSL	1.92	90 ePn	16	05.00	0.4	
ELL	2.26	74 ePn	16	11.00	1.4	
VAM	2.56	254 ePb	16	17.70	3.9X	
BCK	3.01	63 ePn	16	25.20	5.0X	
	S.D. = 1.2	on 7 of 9 obs.				

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* FEB 16, 1990 17h 25m 35.31± 1.17s
40.207 N ±10.6km 23.951 E ± 9.6km
DEPTH = 5.0km (geophysicist)
GREECE (364)

PLG	0.42	293 ePg	25	42.50	-1.3	
NEO	1.06	212 ePb	25	55.50	-0.3	
RDO	1.53	52 ePb	26	03.00	-0.3	
VAY	1.53	317 ePn	26	04.00	0.7	
KZN	1.67	274 ePg	26	06.50	1.1	
	S.D. = 1.3	on 5 of 5 obs.				

FEB 16, 1990 17h 38m 04.45± 1.08s
42.997 N ±11.3km 0.414 W ± 5.6km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 3.0 (LDG). Felt (III) in the Beorn oreo, Fronce.

ESCF	0.14	305 Pg	38	07.38	-0.5	
		Sg	38	09.64		
LHE	0.17	241 Pg	38	09.31	0.9	
		Sg	38	12.71		
OGE	0.18	346 Pg	38	07.06	-1.4	
		Sg	38	08.87		
BTH	0.20	50 iPgc	38	07.50	-1.3	
		i	38	08.00		
ATE	0.23	293 Pg	38	08.95	-0.5	
		Sg	38	12.63		
ISSF	0.28	276 Pg	38	10.59	0.2	
		Sg	38	15.27		
MADF	0.33	297 Pg	38	10.94	-0.4	
		Sg	38	16.37		
BOH	0.45	284 Pg	38	13.45	-0.2	
		Sg	38	19.75		
ELYF	0.46	292 Pg	38	13.80	0.0	
		Sg	38	20.16		
EPF	0.55	86 Pg	38	14.20	-1.5	
		Sg	38	20.80		
LPO	2.05	34 Pg	38	41.40	2.1	
		Sg	39	07.20		
LFF	2.11	23 Pg	38	42.90	2.6	
		Sg	39	09.20		
CAF	2.63	42 Pg	38	52.40	4.7X	
		Sg	39	24.80		
RJF	2.69	30 Pg	38	52.00	3.4X	
		Sg	39	26.20		
TCF	3.79	29 Pg	39	12.40	8.3X	
		Sg	40	06.00		
BGF	4.25	32 Pg	39	22.40	11.7X	
		Sg	40	16.00		
	S.D. = 1.4	on 12 of 16 obs.				

FEB 16, 1990 18h 06m 41.84± 0.36s
3.424 S ± 7.1km 129.046 E ±12.0km
DEPTH = 33.0km (normal)
4.7mb (6 obs.) 3.5Msz (1 obs.)
CERAM (272)

MTN	9.59	168 e(P)	09	02.00	1.3	
		eS	10	55.00		
WB5	17.16	163 eP	10	40.00	-0.9	
QIS	19.90	150 eP	11	13.00	-0.6	
ASPA	20.66	167 iPc	11	21.10	-0.5	
	0.6s	61.00nm			5.2mb	
	Z 21s	0.23um			3.5Msz	
		iS	15	11.30		
		LR	21	57.40		
CTA	23.58	136 iPc	11	51.40	0.8	
	1.0s	20.00nm			4.6mb	
WHN	36.58	338 eP	13	48.00	1.3	
CAN	36.73	152 eP	13	53.30	5.3X	
CHG	36.96	308 eP	13	51.50	1.4	
KMI	38.17	319 Pc	14	02.00	1.5	
MAT	40.67	11 eP	14	20.00	-0.8	
	1.0s	17.00nm			4.7mb	
CD2	41.80	327 eP	14	30.00	-0.2	
XAN	41.82	335 P	14	30.00	-0.3	
TIY	43.74	341 eP	14	46.30	0.4	
BJI	44.84	346 eP	14	54.00	-0.7	
	1.2s	11.00nm			4.6mb	
SNY	45.31	354 iPc	15	02.40	4.0X	
LZH	45.83	331 eP	15	02.50	-0.3	
	2.5s	40.00nm			4.9mb	
SHL	46.13	311 iP	15	05.00	-0.3	

```
HHC     46.87 342 eP     15 11.00   0.1
CN2     47.12 356 eP     15 12.30  -0.4
GTA     50.40 331 eP     15 38.00  -0.3
GUN     51.92 310 P      15 50.40   0.1
PKI     52.12 309 P      15 51.40  -0.4
KKN     52.33 309 P      15 52.80  -0.4
DMN     52.37 309 P      15 53.30  -0.3
GKN     52.93 309 P      15 57.00  -0.6
GBA     53.92 289 Pc     16 03.30  -1.5
        0.5s      1.40nm          4.2mb
HYB     53.94 294 eP     16 04.20  -0.8
WMO     59.90 326 P      16 46.90  -0.2
KSH     64.73 317 eP     17 20.40   1.0
MAIO    75.71 309 eP     18 28.00   1.7
     S.D. = 0.9  on  28 of  30 obs.
-------------------------------------
*  FEB  16, 1990  18h 58m 38.89± 0.92s
   29.855 S ± 7.7km   65.690 W ±11.1km
   DEPTH =  33.0km  (normal)
 SANTIAGO DEL ESTERO PROV., ARG.  (132)

CYA      1.41 356 iPd    59 02.00  -0.5
TCA      1.76 148 ePc    59 08.80   1.2
MRA      2.55 180 ePc    59 18.00  -0.8
CFA      2.81 231 e(P)   59 28.00   5.6X
RTLL     2.81 238 ePc    59 21.90  -0.6
RTCB     3.13 238 eP     59 28.70   1.5
RTCV     3.16 230 e(P)   59 28.80   1.3
                 S      00 14.50
RTRS     3.29 264 e(P)   59 28.70  -0.5
SLA      5.11   2 e(P)   59 55.50   0.2
FCH      5.23 227 eP     00 04.00   6.8X
RFA      5.44 205 ePd    59 57.20  -2.6
                 S      01 30.00
PCH      5.57 226 eP     00 02.50   0.9
LNV      6.35 228 eP     00 09.50  -3.1X
     S.D. = 1.4  on  10 of  13 obs.
-------------------------------------
%  FEB  16, 1990  18h 59m 02.68± 1.30s
   40.711 N ±12.7km   29.880 E ±10.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)

GBZT     0.34 283 iPgc   59 10.70   1.0
                 iSg    59 15.80
YLV      0.41 250 iPg    59 10.70  -0.4
GPA      0.53 142 iPg    59 13.40  -0.1
                 eSg    59 21.40
ISK      0.72 300 ePg    59 15.60  -1.2
CTT      1.18 292 iPn    59 23.80  -0.9
BNT      1.54 257 iPn    59 30.70   0.6
DMK      1.95 305 ePn    59 37.20   1.1
     S.D. = 1.1  on   7 of   7 obs.
-------------------------------------
%  FEB  16, 1990  19h 18m 54.21± 3.06s
   62.238 N ± 7.6km    1.157 E ±28.7km
   DEPTH =  33.0km  (normal)
 NORWEGIAN SEA                   (642)
     MD 2.9 (BER).

SUE      2.09 123 iPc    19 27.50   0.0
                 eS     19 45.90
ASK      2.62 130 eP     19 35.60   0.5
                 eS     19 58.40
HYA      2.63 112 iPc    19 35.00  -0.2
                 eS     19 56.60
BER      2.74 131 eP     19 37.10   0.3
                 eS     20 01.40
MOL      2.99  81 eP     19 40.80   0.4
                 eS     20 06.40
ODD1     3.54 129 iPc    19 48.10  -0.1
                 eS     20 22.70
KMY      3.64 145 iP     19 49.70   0.2
                 eS     20 25.60
BLS2     4.09 134 iP     19 56.00  -0.1
                 eS     20 32.40
RGS      4.36  76 eP     20 01.50   1.8
                 eS     20 38.00
NRA0     5.20 102 Pn     20 09.60  -2.1
                 Sn     21 01.40
NSS      5.38  60 iP     20 13.80  -0.3
                 eS     21 07.90
LOF      7.87  36 eP     20 48.70  -0.4
                 eS     22 06.90
     S.D. = 1.0  on  12 of  12 obs.
-------------------------------------
*  FEB  16, 1990  20h 29m 36.86± 0.85s
   22.572 N ±25.9km   93.820 E ±20.8km
   DEPTH =  33.0km  (normal)
 BURMA-INDIA BORDER REGION       (294)

SHL      3.47 330 iP     30 30.00   0.0
                 eS     31 04.00
CHG      6.08 127 eP     31 06.90   0.0
GUN      8.94 308 P      31 47.20   0.1
PKI      9.10 305 P      31 49.20  -0.1
         0.4s      7.00nm          5.2mb X
KKN      9.32 306 P      31 52.40   0.2
DMN      9.35 304 P      31 53.40   0.7
         0.4s      7.00nm          5.2mb X
GKN      9.91 305 P      31 59.40  -0.9
         0.4s     15.00nm          5.6mb X
     S.D. = 0.6  on   7 of   7 obs.
-------------------------------------
   FEB  16, 1990  21h 00m 01.62± 0.80s
   40.579 N ± 7.6km   25.768 E ± 7.6km
   DEPTH =   5.0km  (geophysicist)
 AEGEAN SEA                      (365)
     MD 3.0 (ATH).

RDO      0.59 343 ePg    00 12.70  -0.8
EZN      0.87 150 ePg    00 17.70  -1.0
                 iSg    00 29.70
MFT      1.17  79 ePn    00 23.00  -1.0
PRK      1.39 164 ePb    00 27.50  -0.1
                 eSb    00 46.00
BNT      1.66  97 iPn    00 32.50   1.0
PLG      1.78 264 ePb    00 34.00   0.7
CTT      2.10  73 ePn    00 39.00   1.2
     S.D. = 1.2  on   7 of   7 obs.
-------------------------------------
   FEB  16, 1990  21h 02m 53.73± 0.13s
    3.564 S ± 2.4km  140.272 E ± 3.4km
   DEPTH =  46.8km  (  7 depth phases)
   5.3mb ( 23 obs.)  4.8Msz (  4 obs.)
 WEST IRIAN                      (201)
      CENTROID, MOMENT TENSOR    (HRV)
      Data Used: GDSN
      L.P.B.: 10S, 19C
      Centroid Locotion:
      Origin Time       21:03: 0.1 0.6
      Lat  3.38S 0.05 Lon 139.89E 0.07
      Dep  31.0 4.6 Half-duration  1.7
      Moment Tensor;   Scale 10**16 Nm
        Mrr= 7.70 0.42  Mtt=-8.67 0.57
        Mff= 0.97 0.67  Mrt=-0.07 1.58
        Mrf= 2.16 1.12  Mtf= 4.27 0.48
       Principal Axes:
        T  Val=  8.42  Plg=71  Azm=283
        N        1.90       19      112
        P      -10.33        3       21
      Best Double Couple:Mo=9.4*10**16
       NP1:Strike= 92 Dip=45 Slip=  63
       NP2:       308      51.      115

JAY      1.13  23 iPd    03 10.90  -2.5
                 iS     03 24.50
MNDI     4.24 127 eP     04 02.00   4.2X
LAT      7.37 115 eP     04 43.00   1.5
PMG      8.97 131 iPd    05 04.80   1.2
         0.8s   298.51nm          6.4mb X
RAB     11.89  93 e(P)   05 43.50   0.1
AAI     12.05 269 eP     05 46.50   0.9
MTN     12.91 224 iPc    05 56.60  -0.4
QIS     16.90 182 eP     06 47.00  -1.7
                 eS     09 49.00
WB5     17.21 199 eP     06 51.00  -1.5
                 eS     09 57.00
WRA     17.28 199 Pc     06 52.00  -1.4
         0.5s     36.30nm          4.8mb
CTA     17.43 161 iPc    06 55.10  -0.1
         1.0s    163.00nm          5.1mb
                 iS     10 16.00
GUMO    17.64  15 eP     06 57.00  -0.8
         1.3s    431.37nm          5.4mb
                 eS     10 20.00
MKS     20.81 265 iPd    07 37.00   3.3X
ASPA    20.91 197 iPc    07 34.80   0.0
         0.8s    991.00nm          6.2mb
      Z  21s      5.33um          4.9Msz
                 iS     11 23.20
                 LR     15 48.50
QLP     23.20 171 eP     08 01.00   3.6X
                 e      12 56.00
BKB2    23.47 275 iPd    08 09.30   9.2X
         1.0s    554.50nm          6.0mb
TSM     23.49 289 ePc    08 05.10   4.8X
RMQ     24.20 161 eP     08 08.00   0.8
                 e      17 47.00
KKM     25.85 292 ePc    08 24.00   1.0
         1.3s    133.50nm          5.3mb
BRS     26.54 154 iPd    08 28.50  -0.6
         0.9s     30.00nm          4.9mb
                 i      08 33.50  18kmX
                 i      08 41.00
                 eS     12 46.00
                 e      13 52.00
TRT     27.80 260 ePd    08 45.50   4.8X
CMS     28.26 170 eP     08 46.00   1.3
                 e      08 55.00  32kmX
                 e      14 28.00
                 e      18 30.00
COO     29.03 159 eP     08 52.00   0.3
FORR    29.47 202 iPc    08 55.00  -0.6
         0.4s     16.00nm          5.1mb
                 e      09 34.00 191kmX
ADE     31.28 182 eP     09 13.50   1.9
         0.6s     24.00nm          5.1mb
DZM     31.35 128 iPd    09 11.50  -1.0
BWA     31.63 167 eP     09 15.70   1.1
CAN     32.62 167 eP     09 23.50   0.2
COOL    32.62 212 eP     09 23.00  -0.3
         0.6s     32.00nm          5.3mb
CNB     32.70 166 eP     09 23.00  -1.0
BFD     33.52 177 eP     09 34.00   3.0X
                 e      10 28.00 270kmX
TOO     34.18 173 eP     09 38.00   1.2
                 e      10 51.00 384kmX
BAL     34.91 217 eP     09 43.00  -0.1
KLB     35.01 215 eP     09 44.00   0.0
MUN     36.19 216 eP     09 54.00   0.1
NWAO    36.30 214 eP     09 56.00   1.1
         0.8s     22.00nm          5.1mb
QIZ     37.42 308 P      10 04.30  -0.1
IIDJ    38.90 357 eP     10 16.40  -0.3
SSE     38.98 334 Pd     10 18.00   0.7
      Z  20s      0.50um          4.3Msz
TSRJ    39.10 354 eP     10 19.90   1.6
CHJJ    39.42 358 P      10 21.10   0.2
KAKJ    39.56 360 eP     10 26.50   4.5X
MAT     39.94 357 eP     10 25.00  -0.2
         1.7s     57.69nm          5.1mb
                 eS     16 25.00
MTMJ    40.01 357 P      10 25.30  -0.6
NIIJ    40.61 358 P      10 30.70   0.0
NJ2     40.85 332 Pc     10 33.50   0.8
SNG     40.99 285 eP     10 35.10   1.0
WHN     41.99 326 eP     10 44.00   1.9
NNT     43.35 292 eP     10 48.60  -4.8X
                 e      38 17.40
LOE     43.36 300 iPc    10 53.00  -0.5
TIA     45.10 333 eP     11 06.30  -0.9
      E  14s      1.10um
DL2     45.63 340 eP     11 12.00   0.6
         1.0s     60.00nm          5.4mb
      Z  15s      1.50um          5.1MszX
      N  14s      1.50um
                 PcP    12 50.00
                 eS     17 46.00
BDT     45.68 298 eP     11 07.00  -5.1X
KMI     46.26 310 Pd     11 17.50   0.6
      Z  24s      1.20um          4.8MszX
                 pP     11 30.00  46km
CHG     46.36 300 iPc    11 17.20  -0.3
         1.2s     19.53nm          4.9mb
CHTO    46.36 300 iPc    11 17.30  -0.2
                 pP     11 30.60  49km
MSZ     47.61 153 P      11 29.00   2.0
SNY     47.66 343 iPd    11 28.00   0.6
      Z  26s      0.60um          4.4MszX
      N  26s      0.50um
      E  26s      0.40um
                 S      18 20.00
                 sS     18 50.00
XAN     47.67 324 P      11 27.70   0.0
TCW     48.33 146 P      11 32.80   0.2
KIW     48.47 145 P      11 33.40  -0.3
TIY     48.52 330 eP     11 33.90  -0.3
MHZ     48.53 153 P      11 34.40   0.1
MRW     48.59 145 P      11 34.10  -0.5
WEL     48.66 145 P      11 34.40  -0.7
```

16d 21h

BJI	48.71	335	eP	11	35.00	-0.5	TCF	124.01	326	ePKP	21	48.60	-0.1	ASAJ	28.48	353	P	35	48.70	1.2
	1.7s	89.00nm			5.5mb			0.9s	13.10nm					MDJ	32.37	336	eP	36	22.50	0.5
	Z 24s	0.76um			4.6MszX		GRR	124.33	330	ePKP	21	49.10	-0.1		Z 15s	2.60um			5.0MszX	
		eS	18	28.00			LSF	124.41	326	ePKP	21	49.30	-0.2		N 12s	1.10um				
CAW	48.72	145	P	11	35.20	-0.4		0.7s	4.95nm								S	41	36.00	
KHZ	48.74	147	P	11	35.10	-0.6	LPF	124.66	329	ePKP	21	49.80	0.0	GZH	32.75	288	eP	36	26.00	0.5
	0.5s	14.00nm			5.2mb			0.7s	7.70nm								S	41	43.00	
WDW	48.78	145	P	11	35.50	-0.5	MFF	125.11	328	ePKP	21	50.50	-0.3	SNY	32.99	327	eP	36	27.50	0.1
MDJ	48.91	350	Pd	11	37.50	0.5		0.8s	12.10nm						Z 20s	3.30um			5.0Msz	
MTW	49.00	145	P	11	37.10	-0.7	LPO	125.54	325	ePKP	21	52.10	0.4		N 12s	1.00um				
CN2	49.00	346	Pc	11	37.20	-0.5		0.6s	7.20nm						E 15s	1.30um				
	1.0s	50.00nm			5.5mb		KIC	145.04	276	PKP	22	27.78	-0.9			eS		41	46.00	
	Z 22s	1.00um			4.8Msz			1.2s	67.00nm					WHN	33.48	302	eP	36	33.20	1.4
		ipP	11	49.80	46km		CFTV	145.27	318	iPKPd	22	28.90	0.2		Z 24s	1.40um			4.6MszX	
		iPcP	13	01.00						i	22	40.50			N 10s	0.40um				
		eS	18	38.00			TIC	145.30	276	PKP	22	28.64	-0.5		E 12s	1.00um				
MOW	49.02	145	P	11	37.30	-0.7	LIC	145.33	276	PKP	22	28.66	-0.5	CN2	33.50	331	eP	36	31.60	-0.2
PGZ	49.10	144	P	11	38.20	-0.4		1.3s	68.00nm						Z 20s	3.70um			5.1Msz	
	0.8s	80.00nm			5.8mb		LPB	145.58	126	PKPc	22	31.80	1.8		N 13s	1.60um				
BLW	49.12	145	P	11	38.00	-0.7		1.3s	192.31nm						E 13s	1.10um				
HHC	51.40	332	Pc	11	56.00	-0.2				i	22	52.70				eScP	42	56.00		
	Z 25s	0.80um			4.6MszX		LKO	145.59	282	PKP	22	29.40	-0.2	CTA	35.69	182	iPc	36	50.60	-0.2
BTO	51.94	331	eP	12	01.00	0.7	CCH	146.64	129	PKP	22	34.50	2.9X		1.5s	138.89nm			5.7mb	
SHL	55.10	305	iP	12	23.00	-1.0	TBT	147.53	323	ePKP	22	35.80	3.4X			iS		42	26.00	
GTA	56.68	323	Pc	12	35.20	0.1	BAO	159.25	157	ePKP	23	02.00	13.0X	QIZ	35.82	281	P	36	52.00	0.0
LSA	57.46	309	eP	12	40.60	-0.5		S.D. = 0.8		on 120 of 134 obs.					E 16s	1.48um				
GUN	60.95	305	P	13	05.20	0.0										PP		38	14.00	
PKI	61.22	304	P	13	06.60	-0.4		FEB 16, 1990 21h 29m 53.35± 0.20s								S		42	28.50	
KKN	61.40	304	P	13	07.80	-0.3		15.816 N ± 3.6km 147.277 E ± 4.1km								SS		44	44.00	
DMN	61.48	304	P	13	08.60	-0.1		DEPTH = 33.0km (normal)						BJI	36.26	318	eP	36	56.50	1.1
GKN	62.01	304	P	13	12.00	-0.1		5.2mb (25 obs.) 4.9Msz (12 obs.)							1.5s	39.00nm			5.1mb	
KOD	64.02	283	eP	13	27.80	2.1		MARIANA ISLANDS REGION (215)							Z 22s	2.40um			4.9Msz	
HYB	64.33	291	eP	13	26.50	-0.9		CENTROID, MOMENT TENSOR (HRV)							N 13s	0.88um				
GBA	64.62	287	Pc	13	27.90	-1.3		Data Used: GDSN								ePP		38	18.00	
	1.3s	10.20nm			4.7mb			L.P.B.: 9S, 17C								eS		42	32.00	
ADK	66.19	28	eP	13	38.90	0.2		Centroid Location:								eScS		47	10.00	
WMQ	66.64	321	Pc	13	41.50	-0.4		Origin Time 21:29:58.0 0.7						QIS	36.92	192	eP	37	00.00	-1.2
NDI	68.41	303	eP	13	52.50	-0.7		Lat 15.68N 0.10 Lon 147.33E 0.08						TIY	37.67	312	eP	37	07.50	0.1
POO	68.94	291	eP	13	53.00	-3.6X		Dep 15.0 FIX Half-duration 1.5							Z 18s	1.60um			4.9Msz	
SDN	76.05	30	ePc	14	38.00	0.2		Moment Tensor; Scale 10**16 Nm							N 13s	1.40um				
QUE	77.46	302	eP	14	47.50	1.0		Mrr= 6.35 0.41 Mtt=-0.24 0.60								S		42	58.00	
KDC	81.08	30	eP	15	05.90	0.7		Mff=-6.11 0.61 Mrt= 2.28 2.01						WB5	37.67	200	eP	37	17.90	10.4X
		i	15	19.70	47km			Mrf= 3.91 2.00 Mtf= 0.06 0.47						WRA	37.74	200	Pc	37	08.20	0.1
TTA	81.53	25	eP	15	08.40	0.8		Principal Axes:							2.3s	136.70nm			5.4mb	
IMA	83.75	22	eP	15	19.70	0.6		T Val= 8.06 Plg=69 Azm=315						XAN	38.95	305	P	37	17.50	-0.7
	1.2s	52.10nm			5.5mb			N -0.78 13 189							N 12s	0.80um				
		e	15	33.20	46km			P -7.28 17 95							E 14s	0.70um				
PMR	84.01	27	eP	15	20.00	-0.2		Best Double Couple:Mo=7.7*10**16								S		43	11.00	
	0.9s	85.40nm			5.8mb			NP1:Strike=166 Dip=30 Slip= 64						HHC	39.70	316	P	37	26.20	1.8
		i	15	34.00	48km			NP2: 16 63 104							Z 22s	2.10um			4.9Msz	
MAIO	84.67	307	iPc	15	25.20	0.9									N 15s	1.00um				
		eS	26	08.00			GUMO	3.22	227	eP	30	43.10	0.4		E 12s	0.60um				
BRW	84.96	17	eP	15	26.10	1.3				eS	31	21.80				S		43	27.00	
TOA	85.50	27	ePc	15	28.90	1.1	PJG	3.22	227	eP	30	43.50	0.8	BTO	40.63	315	P	37	33.00	1.0
		i	15	42.50	46km		GUA	3.22	226	eP	30	42.50	-0.3		Z 15s	1.50um			5.0MszX	
FBA	85.63	24	ePc	15	27.70	-0.6				eS	31	19.80			N 17s	1.70um				
SPA	86.46	180	iPc	15	33.90	1.3	RAB	20.46	166	e(P)	34	29.50	-1.5			sP		37	48.00	
	0.9s	126.36nm			6.1mb		KAKJ	21.27	344	P	34	38.30	-0.8	ASPA	41.36	199	iPd	37	38.90	0.8
	Z 20s	1.08um			5.2Msz		IIDJ	21.30	339	eP	34	38.60	-0.9		1.7s	26.00nm			4.7mb	
INK	91.88	22	eP	15	57.00	-0.9	CHJJ	21.46	341	P	34	40.20	-0.9		Z 21s	1.55um			4.8Msz	
MBC	95.91	14	eP	16	15.50	-0.8	MAT	22.16	340	(P)	34	46.00	-2.1			LR		53	53.40	
	1.0s	19.00nm			5.6mb			0.8s	16.42nm				4.5mb	RMO	42.08	178	eP	37	44.00	0.2
CLL	115.30	326	ePKP	21	31.00	-0.9				eS	38	50.00		DZM	42.08	153	iPc	37	43.80	-0.2
BSF	120.56	325	ePKP	21	41.50	-0.6	MTMJ	22.34	340	eP	34	47.40	-2.5	CD2	42.40	299	eP	37	46.00	-0.7
	0.7s	6.60nm					NIIJ	22.57	343	eP	34	52.10	0.1		Z 16s	0.90um			4.8MszX	
HAU	120.71	326	ePKP	21	42.00	-0.3	DAV	22.95	250	eP	34	56.00	0.0			eS		44	06.00	
	0.6s	6.30nm					YAMJ	23.17	345	P	34	59.40	1.5	KMI	42.58	290	Pd	37	50.00	1.6
LPG	121.82	323	ePKP	21	44.70	-0.2	OFUJ	23.69	349	eP	35	05.00	2.0		Z 20s	1.10um			4.7Msz	
	0.6s	3.60nm					AOMJ	25.38	348	eP	35	24.30	5.2X		E 11s	0.60um				
BCAO	121.88	273	iPKPd	21	45.30	-0.2	BAG	25.65	275	eP	35	21.00	-1.1			sP		38	02.50	
	0.7s	9.00nm								eS	39	51.00				S		44	10.00	
		ic	22	07.30			ANP	25.83	295	eP	35	22.00	-1.6	BRS	43.28	173	iPd	37	54.00	0.3
LOR	122.52	326	ePKP	21	45.70	-0.1	HOOJ	26.70	353	eP	35	32.00	0.7			eS		44	22.00	
	0.6s	3.15nm					MRRJ	27.05	350	eP	35	36.00	1.5	LZH	43.53	306	Pc	37	55.00	-0.9
LBF	122.62	326	ePKP	21	45.80	-0.2	KUSJ	27.28	356	P	35	36.80	0.2		3.5s	530.00nm			5.7mb X	
	0.7s	3.85nm					HNR	28.05	153	e(P)	36	03.00	19.2X		Z 18s	1.60um			5.0Msz	
SSF	122.83	326	ePKP	21	46.60	0.3	SSE	28.26	307	Pc	35	46.50	0.9		N 13s	1.00um				
	0.7s	4.95nm						4.0s	500.00nm				5.6mb X		E 14s	0.90um				
SMF	122.89	326	ePKP	21	46.20	-0.3		Z 20s	2.30um				4.8Msz			sP		38	10.00	
	0.7s	4.95nm						N 12s	1.80um							ePP		39	38.00	
AVF	123.08	326	ePKP	21	46.30	-0.5		E 12s	0.80um							S		44	26.00	
BGF	123.50	326	ePKP	21	47.70	0.0			S		40	28.00				sS		44	43.00	
	0.6s	5.85nm							sS		40	42.00				SS		47	32.00	
LDF	123.83	329	ePKP	21	48.00	-0.3	QZH	28.33	293	eP	35	45.50	-0.9	LOE	43.60	279	eP	37	56.50	0.0
MAF	123.85	326	ePKP	21	48.40	0.0		Z 20s	1.30um				4.5Msz	CHG	46.13	281	ePc	38	16.50	-0.3
FLN	123.90	330	ePKP	21	48.10	-0.3		E 14s	1.40um						0.9s	18.70nm			5.0mb	
	0.5s	4.35nm							S		40	34.00		BDT	46.21	279	eP	38	16.20	-1.1

1.0s 55.90nm 5.5mb
IPM 46.76 261 ePc 38 23.50 1.7
GTA 47.51 309 P 38 27.60 0.0
Z 18s 1.80um 5.1Msz
E 15s 1.40um
S 45 20.00
ScS 48 20.40
FORR 49.93 202 eP 38 46.00 0.0
BWA 49.97 179 eP 38 47.10 0.7
CAN 50.88 178 eP 38 53.20 -0.1
SHL 52.41 290 iP 39 03.80 -1.5
BFD 52.89 185 eP 39 11.00 2.6
LSA 53.11 295 iPd 39 11.80 1.0
4.0s 540.00nm 5.9mb X
eS 46 38.00
WMQ 57.34 312 P 39 40.70 -0.1
Z 18s 1.30um 5.1Msz
E 15s 0.90um
S 47 37.00
GUN 57.73 293 P 39 44.00 -0.1
PKI 58.16 293 P 39 48.60 1.6
0.6s 21.00nm 5.4mb
KKN 58.26 293 P 39 47.40 -0.3
0.8s 24.00nm 5.3mb
DMN 58.42 293 P 39 48.40 -0.4
0.6s 33.00nm 5.6mb
GKN 58.82 293 P 39 51.00 -0.5
0.4s 19.00nm 5.6mb
SVW 60.61 28 eP 40 03.10 0.0
KDC 60.99 32 e(P) 40 05.20 -0.4
TTA 61.15 26 P 40 06.00 -0.8
1.0s 20.00nm 5.2mb
MSZ 63.06 164 P 40 17.00 -2.6
IMA 63.30 23 eP 40 21.00 -0.2
1.5s 30.90nm 5.2mb
PMR 63.73 29 eP 40 21.90 -1.9
1.5s 48.60nm 5.4mb
FBA 65.23 25 eP 40 32.30 -1.3
NDI 65.31 295 eP 40 35.00 0.3
eS 49 20.00
HYB 65.54 282 ePd 40 36.20 -0.1
KSH 65.77 306 P 40 38.00 0.4
Z 16s 1.80um 5.4MszX
eS 49 25.00
GBA 67.30 278 Pc 40 45.80 -1.8
1.6s 40.20nm 5.3mb
POO 69.75 284 eP 41 02.00 -0.8
INK 71.43 23 iPd 41 11.60 -0.4
QUE 74.00 297 eP 41 28.00 -0.2
MBC 75.55 14 eP 41 36.00 0.0
0.7s 10.00nm 4.9mb
MAIO 79.06 305 eP 41 57.00 0.7
RMW 79.14 44 P 41 56.00 -0.5
LON 79.27 44 P 41 57.00 -0.2
WDC 80.03 51 e(P) 42 04.60 3.3X
PNT 80.17 42 eP 42 02.00 0.1
0.6s 8.00nm 4.9mb
NEW 82.03 42 P 42 11.00 -0.7
0.9s 17.86nm 5.1mb
CMB 82.23 53 P 42 10.00 -3.0X
1.2s 20.83nm 5.1mb
EDM 82.98 37 ePc 42 17.50 0.9
FRI 83.01 54 eP 42 15.20 -1.7
KVN 83.71 51 P 42 21.00 0.2
TNP 84.64 52 P 42 26.00 0.5
MWC 85.02 56 eP 42 28.00 0.6
SBB 85.08 55 eP 42 27.00 -0.6
KEV 85.12 342 iP 42 27.80 0.8
0.8s 29.30nm 5.5mb
SES 85.22 39 ePd 42 28.30 0.4
1.4s 139.00nm 6.0mb
RVR 85.63 56 eP 42 30.00 -0.2
GSC 85.72 55 eP 42 32.00 1.2
LRM 85.78 44 eP 42 31.40 0.3
PLM 86.22 57 eP 42 34.00 0.6
BAR 86.56 57 eP 42 35.00 0.1
SOD 86.57 341 iP 42 34.50 0.3
DAG 87.23 357 eP 42 37.00 -0.2
IMW 87.42 45 P 42 39.50 0.3
GLA 87.94 56 eP 42 41.00 -0.6
FFC 88.69 33 eP 42 45.00 0.4
1.4s 68.00nm 5.8mb
SUF 89.37 337 eP 42 47.00 -0.7
NUR 91.23 335 eP 42 56.00 -0.3
RSSD 91.96 43 P 43 00.00 -0.4
GOL 92.82 48 P 43 05.00 0.5
ALQ 93.85 52 eP 43 10.70 1.5

1.0s 3.75nm 4.8mb
ANMO 93.85 52 P 43 10.00 0.8
HFS 95.60 339 ePKP 43 15.50 -1.1
0.7s 5.90nm 5.1mb
NB2 95.78 340 P 43 16.40 -1.0
0.7s 3.70nm 4.9mb
FRB 96.00 15 eP 43 21.00 2.7
BCAO 125.44 287 ePKPc 48 55.70 2.0
0.5s 5.00nm
ic 49 06.40
LKO 143.16 311 (PKP) 49 22.84 -3.9X
KIC 144.60 306 (PKP) 49 27.62 -1.6
0.6s 15.50nm
TIC 144.64 307 (PKP) 49 27.54 -1.7
0.6s 15.00nm
LIC 144.91 307 (PKP) 49 28.62 -1.1
0.5s 20.00nm
LPB 146.04 96 PKPc 49 34.00 1.9
2.0s 294.12nm
Z 23s 0.38um 5.1MszX
LR 37 34.00
MBO 146.18 332 iPKPd 49 35.70 4.0X
CCH 147.96 98 PKP 49 39.50 4.5X
S.D. = 1.0 on 111 of 119 obs.

% FEB 16, 1990 21h 37m 37.16± 3.14s
44.523 N ±14.4km 6.794 E ±26.8km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 1.7 (GEN).

PZZ 0.22 95 P 37 41.97 0.0
S 37 44.91
RRL 0.40 359 P 37 45.41 0.0
S 37 51.39
STV 0.47 126 P 37 46.15 -0.6
ENR 0.54 123 P 37 48.74 0.7
S 37 55.23
RSP 0.71 27 P 37 51.17 -0.1
S.D. = 0.6 on 5 of 5 obs.

FEB 16, 1990 21h 46m 25.10± 0.84s
49.200 N ± 7.0km 7.051 E ± 7.8km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
MD 2.2 (UCC).

RUP 0.50 1 ePg 46 34.90 -0.4
ABH 0.76 25 ePg 46 40.12 0.2
TOD 1.21 70 ePg 46 47.75 0.0
FEL 1.47 154 ePn 46 51.70 -0.1
MEM 1.56 335 iPc 46 53.20 0.3
DOU 1.83 300 iP 46 56.80 0.0
S.D. = 0.3 on 6 of 6 obs.

? FEB 16, 1990 21h 54m 14.57± 4.05s
31.417 S ±22.7km 68.779 W ±27.9km
DEPTH = 82.4 ± 41.0 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB 0.07 195 eP 54 27.00 0.2
RTLL 0.28 72 iPc 54 27.00 -0.2
S 54 39.00
RTCV 0.49 155 iPc 54 28.50 -0.2
S 54 40.80
CFA 0.50 112 e(P) 54 29.00 0.2
RTRS 1.37 335 iPc 54 38.70 0.0
S.D. = 0.4 on 5 of 5 obs.

FEB 16, 1990 22h 16m 46.24± 0.43s
40.732 N ± 4.3km 27.480 E ± 3.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 3.5 (ATH).

MFT 0.16 290 iPg 16 49.50 -0.5
EDC 0.48 143 iPg 16 56.50 0.4
iSg 17 03.00
BNT 0.50 138 iPg 16 56.00 -0.5
KCT 0.82 126 iPg 17 02.00 -0.2
iSg 17 14.00
CTT 0.83 60 iPg 17 01.50 -0.8
eSg 17 12.80
DMK 1.11 11 iPg 17 07.90 0.9
iSg 17 21.40
ITU 1.22 72 iPgd 17 10.00 1.1
iSg 17 27.00

ISK 1.24 74 iPn 17 08.80 -0.5
EZN 1.27 225 iPn 17 09.20 -0.5
DST 1.43 142 iPn 17 13.00 0.8
YLV 1.45 96 iPn 17 12.00 -0.6
GBZT 1.49 87 ePn 17 12.80 -0.3
RDO 1.53 286 ePn 17 13.60 0.0
PRK 1.75 212 ePn 17 17.50 0.7
eSn 17 43.00
IZM 2.34 184 ePn 17 30.00 4.6X
KHL 2.88 146 ePn 17 44.00 10.9X
S.D. = 0.7 on 14 of 16 obs.

% FEB 16, 1990 22h 22m 12.51± 0.77s
38.796 N ± 7.1km 27.609 E ± 8.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZM 0.48 214 ePg 22 22.00 -0.3
DST 1.13 44 iPn 22 33.50 -0.2
EZN 1.43 316 ePn 22 39.00 0.5
EDC 1.56 7 iPn 22 41.00 0.7
KHL 1.57 107 ePn 22 41.00 0.4
BNT 1.58 9 iPn 22 39.50 -1.1
YLV 2.23 37 iPn 22 56.00 5.9X
S.D. = 0.8 on 6 of 7 obs.

* FEB 16, 1990 22h 50m 51.94± 0.54s
9.690 N ± 7.7km 124.421 E ±10.9km
DEPTH = 33.0km (normal)
4.9mb (3 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV 2.83 156 eP 51 36.80 1.1
TRT 20.89 215 ePc 55 32.60 -1.4
SSE 21.51 352 P 55 41.00 0.8
LOE 23.34 292 eP 55 58.00 -0.4
IPM 23.76 259 ePd 56 07.00 4.6X
CHG 26.28 293 eP 56 26.40 0.0
XAN 28.10 332 P 56 41.50 -1.4
CD2 28.56 321 eP 56 48.00 1.0
BJI 31.10 348 eP 57 08.50 -1.0
1.0s 12.00nm 4.7mb
LZH 32.25 328 Pc 57 19.50 -0.4
1.5s 31.00nm 5.0mb
Z 15s 0.30um 4.1MszX
pP 57 27.00 26kmX
HHC 33.06 342 P 57 27.00 0.3
SHL 34.67 301 iP 57 40.20 -0.7
GTA 36.85 327 P 57 59.80 0.6
GUN 40.51 302 P 58 30.20 0.1
PKI 40.80 301 P 58 32.40 -0.1
KKN 40.97 301 P 58 35.20 1.4
DMN 41.06 301 P 58 34.60 0.0
GKN 41.58 302 P 58 40.10 1.4
WMQ 46.58 323 eP 59 19.50 0.8
SUF 85.24 333 eP 03 25.20 -1.1
INK 85.49 21 eP 03 27.00 -0.4
NUR 86.42 331 eP 03 32.00 -0.1
MBC 86.67 12 ePc 03 32.70 -0.5
1.0s 12.00nm 5.1mb
S.D. = 0.9 on 22 of 23 obs.

? FEB 16, 1990 22h 51m 32.66± 1.76s
19.623 S ±30.8km 179.514 W ±24.8km
DEPTH = 617.3 ± 13.4 km
4.6mb (4 obs.)
FIJI ISLANDS REGION (181)

SGE 3.16 309 eP 52 54.20 -0.5
DZM 13.35 257 iPc 54 26.80 2.2
BRS 26.52 248 iPc 56 25.20 -0.1
CTA 32.17 263 iPd 57 14.50 1.0
0.6s 45.33nm 5.3mb
i 57 56.00
CMS 33.29 242 eP 57 21.50 -1.3
WB5 43.30 262 eP 58 43.00 -0.7
WRA 43.32 261 Pd 58 42.90 -0.9
0.4s 7.00nm 4.5mb
ASPA 43.34 256 iPd 58 43.30 -0.8
1.0s 33.00nm 4.8mb
iS 04 32.60
MAT 68.67 324 eP 01 37.00 -0.6
0.7s 7.53nm 4.3mb
BJI 84.27 316 eP 03 01.50 -0.3
CHG 88.61 290 eP 03 23.50 0.8
EKA 144.24 4 PKP 09 55.00 -5.6X
1.0s 8.40nm

16d 23h

CLL	146.87	346	iPKP	10	03.60	-1.4
	0.8s	13.00nm				
CLL	146.87	346	ePKP	10	07.00	2.0X
BRG	147.05	344	iPKP	10	04.80	-0.5
	0.7s	10.00nm				
			i	10	09.00	
WTS	147.31	353	ePKP	10	05.00	-0.6
	0.6s	13.00nm				
			e	10	09.00	
PRU	147.69	343	iPKP	10	06.00	-0.4
ENN	148.63	353	ePKP	10	08.00	0.3
KHC	148.74	343	PKP	10	09.10	1.0
DOU	149.42	355	PKP	10	09.80	0.8
KBA	150.67	342	ePKP	10	13.00	1.8
	0.5s	1.60nm				
S.D. = 1.1 on 19 of 21 obs.						

FEB 16, 1990 23h 32m 39.01± 1.32s
33.626 S ± 6.5km 71.666 W ±11.4km
DEPTH = 30.8 ± 4.5 km
NEAR COAST OF CENTRAL CHILE (135)

LCCH	0.17	28	iPc	32	44.90	-0.2
LNV	0.39	147	iPc	32	47.90	0.1
IHA	0.60	2	eP	32	50.50	-0.5
			iS	32	58.40	
TACH	0.61	93	iPc	32	50.70	-0.5
ROCH	0.85	40	iPc	32	54.70	-0.3
			iS	33	06.00	
SAN	0.86	79	iPc	32	54.60	-0.3
			iS	33	06.50	
CHCH	0.90	110	iPd	32	55.20	-0.3
PCH	0.96	90	iPd	32	56.40	-0.1
FCH	1.19	76	iPc	32	59.70	-0.2
			iS	33	14.80	
JACH	1.30	44	iPc	33	01.60	0.3
			iS	33	18.40	
RFA	2.89	114	ePd	33	24.80	0.8
			S	34	10.00	
RTCB	3.23	49	iP	33	29.50	0.7
CFA	3.52	56	e(P)	33	33.00	0.0
RTLL	3.54	51	iPc	33	34.20	0.9
			S	34	23.00	
RTRS	3.92	29	ePc	33	38.80	0.2
MRA	5.15	78	ePd	33	55.20	-0.8
TCA	6.40	71	e(P)	34	10.40	-3.3X
S.D. = 0.6 on 16 of 17 obs.						

% FEB 16, 1990 23h 34m 52.52± 0.84s
36.920 N ± 8.9km 4.808 W ± 6.6km
DEPTH = 10.0km (geophysicist)
STRAIT OF GIBRALTAR (385)
mbLg 2.8 (MDD).

EPRU	0.34	278	ePg	34	58.60	-1.0
			eSg	35	03.00	
MAL	0.37	121	iPgd	34	59.00	-1.2
			iSg	35	04.60	
EJIF	0.71	229	ePg	35	06.70	0.2
			eSg	35	17.00	
EHOR	0.96	339	ePg	35	10.00	-0.8
			eSg	35	22.60	
AFC	1.06	71	ePg	35	14.50	1.8
			eSg	35	30.00	
EBAN	1.48	33	ePn	35	19.00	-0.3
			eSn	35	39.20	
EVAL	1.68	294	ePg	35	24.20	2.1
			eSg	35	46.00	
EVIA	2.50	46	ePg	35	42.20	8.2X
			eSg	36	12.20	
TOL	3.02	11	ePg	35	49.00	7.8X
			eSg	36	31.00	
GUD	3.75	8	ePn	35	51.00	-0.8
S.D. = 1.5 on 8 of 10 obs.						

& FEB 16, 1990 23h 58m 06.70s
36.962 N 121.743 W
DEPTH = 13.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.5 (BRK).

SAO	0.31	129	iPd	58	12.70	-0.6
MHC	0.39	12	iPd	58	14.50	-0.3
ARN	0.42	23	iPd	58	15.00	-0.4
PRS	0.70	154	ePd	58	19.60	-0.6
			eS	58	28.80	
PCC	0.74	317	iPd	58	20.10	-0.8
			eS	58	32.30	

5 obs. associated

& FEB 17, 1990 00h 44m 04.81s
61.620 N 146.787 W
DEPTH = 2.7km
SOUTHERN ALASKA (2)
<AGS-P>.

TOA	0.57	31	iP	44	16.53	0.4
			eS	44	25.60	
GHO	1.03	279	iP	44	23.44	-1.6
			eS	44	38.23	
PLRM	1.12	270	eP	44	25.13	-1.3
			S	44	39.92	
CVA	1.19	154	iP	44	25.47	-2.2
			eS	44	43.62	
HIN	1.24	173	eP	44	27.25	-1.2
			eS	44	44.84	
SGAM	1.36	145	eP	44	28.43	-2.2
			eS	44	47.74	
PMS	1.39	255	iP	44	29.76	-1.3
			eS	44	48.41	
PWA	1.48	273	iP	44	30.86	-1.5
			eS	44	50.53	
RAGM	1.61	139	eP	44	32.77	-1.5
			eS	44	54.77	
CUT	1.82	297	iP	44	36.26	-1.0
			S	45	00.11	
SUA	1.90	267	eP	44	37.72	-0.9
			eS	45	03.27	
HUR	1.91	317	eP	44	37.24	-1.3
SEW	2.00	222	eP	44	37.78	-2.1
SLKM	2.01	238	eP	44	38.64	-1.4
RND	2.03	333	eP	44	39.13	-1.3
			S	45	05.95	
DDM	2.22	11	eP	44	42.89	-0.2
WAX	2.25	120	eP	44	40.88	-2.7
			eS	45	10.54	
SKT	2.28	281	eP	44	42.53	-1.5
NKA	2.33	250	eP	44	44.64	0.0
MCK	2.34	336	eP	44	44.06	-0.8
CGLM	2.53	265	eP	44	45.87	-1.7
SPU	2.57	262	eP	44	46.04	-2.1
			eS	45	18.49	
NCG	2.58	268	eP	44	46.64	-1.7
CRP	2.60	265	eP	44	47.24	-1.5
CYK	2.61	124	eP	44	49.30	0.7
			S	45	22.52	
CKL	2.70	263	eP	44	47.96	-2.1
BGL	2.72	265	eP	44	48.29	-2.0
NNL	2.72	236	eP	44	49.31	-0.9
KTH	2.72	317	eP	44	48.81	-1.6
HDA	2.80	359	eP	44	50.55	-0.8
WRH	2.92	349	eP	44	50.63	-2.5
RDT	2.92	251	eP	44	50.42	-2.8
CNPM	3.04	228	eP	44	52.55	-2.2
CCB	3.07	352	eP	44	52.39	-2.8
RDS	3.28	350	eP	44	55.48	-2.7
FBA	3.32	353	eP	44	56.90	-1.9
PDB	4.08	246	eP	45	06.11	-3.3
37 obs. associated						

FEB 17, 1990 00h 59m 03.05± 0.27s
68.598 N ± 3.7km 148.444 W ± 4.9km
DEPTH = 10.0km (geophysicist)
4.6mb (13 obs.) 4.3Msz (2 obs.)
ALASKA (676)

IMA	3.25	221	iPc	59	55.30	0.1
FBA	3.72	176	iPd	00	01.50	-0.3
BRW	3.94	317	iPd	00	05.70	0.9
INK	5.51	86	eP	00	26.00	-1.0
DWY	5.83	137	Pd	00	30.30	-1.2
TTA	6.48	212	eP	00	40.50	-0.4
TOA	6.59	171	iP	00	43.60	1.2
PWA	7.00	186	eP	00	47.20	-0.9
PMR	7.04	183	ePc	00	48.00	-0.6
PMS	7.40	184	eP	00	54.40	0.7
SVW	8.11	205	eP	01	02.20	-1.4
HYT	9.08	144	P	01	15.70	-1.4
MBC	11.50	36	P	01	46.00	-4.0X
SIT	12.99	147	e(P)	02	15.90	5.8X
EDM	22.51	115	eP	04	05.00	1.3
PNT	23.96	129	eP	04	25.00	7.1X
	0.6s	6.00nm			4.4mb	
FFC	25.26	100	eP	04	31.00	0.7
	0.9s	20.00nm			4.8mb	
NEW	25.64	127	eP	04	43.50	9.5X
	0.8s	3.96nm			4.2mb	
SES	25.66	116	eP	04	35.00	0.8
LON	25.71	135	eP	04	36.50	1.8
FRB	30.48	60	eP	05	16.00	-1.6
RSON	31.37	96	eP	05	26.00	0.4
IMW	31.44	122	eP	05	28.00	1.4
DAG	31.66	20	eP	05	27.20	-0.6
BW06	32.88	122	eP	05	40.00	0.9
RSSD	33.47	114	eP	05	44.50	0.3
GOL	37.00	119	eP	06	15.80	1.4
	0.7s	3.64nm			4.3mb	
SCH	37.87	69	eP	06	21.00	-0.3
ANMO	41.01	123	eP	06	47.00	-0.7
TUL	43.62	111	eP	07	09.20	0.4
	1.2s	10.90nm			4.5mb	
SOD	44.26	3	iP	07	14.00	0.4
MDJ	46.55	283	eP	07	29.50	-2.6
CN2	48.73	286	P	07	52.00	2.9
SUF	48.92	3	iP	07	50.90	0.6
	0.5s	6.50nm			4.9mb	
NB2	49.83	13	P	07	56.60	-0.8
	0.7s	1.90nm			4.2mb	
JSC	50.26	97	eP	07	59.50	-1.5
HFS	50.92	11	eP	08	04.50	-1.2
	0.9s	5.90nm			4.5mb	
Z	18s	0.16um			4.1Msz	
		LR		47	24.00	
NUR	51.09	4	iP	08	06.90	-0.1
	0.6s	14.30nm			5.1mb	
EKA	53.77	24	P	08	27.00	-0.1
	0.8s	8.10nm			4.8mb	
BJI	55.28	292	eP	08	47.50	9.2X
CLL	59.62	13	eP	09	13.00	4.1X
WMO	60.41	316	eP	09	13.60	-0.9
PRU	61.06	12	eP	09	20.00	1.3
GTA	61.13	305	eP	09	19.60	0.1
KHC	61.83	13	P	09	24.70	0.6
CDF	61.92	18	eP	09	24.40	-0.3
HAU	62.21	19	eP	09	26.30	-0.3
MFF	62.72	24	eP	09	29.50	-0.4
LZH	62.93	300	P	09	31.50	-0.2
Z	20s	0.40um			4.6Msz	
ZST	63.03	11	eP	09	31.00	-0.9
			e	42	08.50	
XAN	63.15	295	eP	09	36.20	3.2X
SMF	63.23	21	eP	09	32.60	-0.7
	0.8s	3.35nm			4.6mb	
LSF	63.30	23	eP	09	33.40	-0.4
	0.8s	8.75nm			5.0mb	
KBA	63.85	14	e(P)	09	38.50	0.9
	0.8s	4.20nm			4.7mb	
			e	09	46.00	
			e	41	37.00	
GUN	75.90	312	P	10	52.40	0.8
GKN	76.14	313	P	10	53.40	0.7
S.D. = 1.1 on 49 of 56 obs.						

FEB 17, 1990 01h 04m 10.02± 0.46s
33.507 N ± 6.7km 141.085 E ± 9.6km
DEPTH = 33.0km (normal)
5.0mb (11 obs.) 4.2Msz (2 obs.)
OFF EAST COAST OF HONSHU, JAPAN (229)

KAKJ	2.79	345	P	04	53.80	0.5
CHJJ	3.06	326	P	04	57.70	0.5
			S	05	32.10	
IIDJ	3.28	308	P	05	02.90	2.6
MAT	3.84	323	iPc	05	09.30	1.1
			(S)	05	51.00	
SHNJ	8.33	277	P	06	17.50	6.2X
SSE	17.00	267	P	08	09.10	2.3
Z	20s	0.50um				
GUMO	20.13	169	eP	08	45.80	1.7
	1.1s	282.69nm			5.5mb	
PJG	20.13	169	eP	08	45.30	1.2
GUA	20.18	169	eP	08	45.20	0.5
	0.7s	191.78nm			5.6mb	
HHC	24.56	296	eP	09	27.60	-0.5
CHG	40.27	259	eP	11	46.00	0.2
WMO	42.29	300	P	12	02.50	0.4
GUN	47.33	279	P	12	42.60	-0.5
	0.6s	10.00nm			5.0mb	
PKI	47.84	279	P	12	46.00	-1.1
KKN	47.87	279	P	12	46.00	-1.1
	0.5s	7.00nm			4.9mb	

DMN 48.08 279 P 12 46.70 -2.1
GKN 48.32 279 P 12 49.60 -1.0
0.6s 8.00nm 4.9mb
WB5 53.47 188 eP 13 29.10 -0.2
CTA 53.52 174 eP 13 30.00 0.4
WRA 53.54 188 Pc 13 28.10 -1.7
0.5s 38.50nm 5.7mb
QIS 53.78 182 eP 13 31.00 -0.5
ASPA 57.26 188 iPc 13 56.60 -0.1
0.6s 54.00nm 5.8mb
Z 21s 0.11um 3.9Msz
LR 35 37.60
INK 57.66 26 eP 13 58.00 -1.0
HYB 57.90 270 eP 14 00.00 -1.5
MBC 59.98 16 eP 14 14.00 -1.1
1.0s 8.00nm 4.8mb
RMO 60.11 172 iPd 14 18.20 1.8
GBA 60.72 267 Pd 14 19.60 -1.3
0.5s 1.10nm 4.2mb
POO 61.29 274 eP 14 23.00 -1.8
BRS 61.57 168 eP 14 26.50 0.1
FORR 65.17 192 eP 14 50.00 0.0
KEV 66.64 340 eP 15 08.00 9.0X
SOD 68.11 338 eP 15 20.00 11.7X
SUF 71.01 334 eP 15 28.00 1.9
EOM 72.29 37 eP 15 33.00 -1.0
NUR 72.94 332 eP 15 40.00 2.5
LRM 76.87 44 eP 16 01.50 0.8
HFS 77.19 336 eP 16 00.20 -1.6
0.6s 2.10nm 4.3mb
Z 18s 0.16um 4.4Msz
LR 47 32.00
NB2 77.33 337 P 16 01.40 -1.3
0.8s 4.90nm 4.6mb
KHC 85.40 328 eP 16 46.00 0.7
RTCB 154.75 94 iPKPd 23 48.80 -11.7X
CFA 155.24 94 e(PKP) 23 50.50 -10.6X
S.D. = 1.3 on 36 of 41 obs.

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* FEB 17, 1990 01h 22m 06.80± 0.58s
4.567 S ±11.6km 105.583 W ±15.7km
DEPTH = 10.0km (geophysicist)
5.5mb (5 obs.) 5.8Msz (2 obs.)
NORTHERN EASTER I. CORDILLERA (694)
CENTROID, MOMENT TENSOR (HRV)
Doto Used: GDSN
L.P.B.: 15S, 33C
Centroid Locotion:
Origin Time 01:22:16.5 0.6
Lat 4.50S 0.05 Lon 106.03W 0.06
Dep 15.0 FIX Half-duration 2.3
Moment Tensor; Scole 10**17 Nm
Mrr= 0.21 0.22 Mtt= 2.30 0.27
Mff=-2.51 0.34 Mrt= 0.36 0.88
Mrf= 0.01 0.81 Mtf= 6.40 0.22
Principal Axes:
T Val= 6.74 Plg= 3 Azm=325
N 0.20 87 114
P -6.94 2 235
Best Double Couple:Mo=6.8*10**17
NP1:Strike= 10 Dip=87 Slip= 179
NP2: 100 89 3

PSO 28.81 79 eP 28 09.50 1.6
UPA 29.25 63 eP- 28 10.00 -1.4
pP 29 00.00 254kmX
BOG 32.78 74 eP 28 44.00 1.0
iS 34 08.00
BMG 34.44 71 eP 28 55.00 -2.1
ARE 35.47 112 eP 29 08.00 1.9
GLA 38.43 347 eP 29 30.00 -0.5
BAR 38.51 345 eP 29 29.00 -2.1
LPB 38.64 111 eP 29 28.00 -4.9X
Z 18s 9.62um 5.7Msz
e 29 37.00
S 35 35.00
PLM 39.20 345 eP 29 39.00 1.9
PEC 39.79 345 P 29 42.70 0.9
RVR 39.94 345 eP 29 44.00 1.0
MWC 40.34 344 eP 29 49.00 2.5
CCH 40.66 111 P 29 54.00 4.5X
SBB 40.71 344 eP 29 50.00 0.6
GSC 41.04 346 eP 29 52.00 -0.1
CLC 41.72 345 eP 30 03.00 5.3X
ISA 41.81 344 eP 29 59.00 0.6
RTRS 42.53 131 ePc 30 04.50 0.1
LCCH 42.77 136 eP 30 08.00 1.7
LNV 43.15 137 iPc 30 07.50 -1.9
TACH 43.31 136 eP 30 11.00 0.3
SAN 43.38 136 eP 30 11.00 -0.3
SLA 43.41 122 e(P) 30 11.50 -0.3
FCH 43.57 135 eP 30 13.00 -0.2
PCH 43.58 136 eP 30 14.00 1.0
CHCH 43.66 136 eP 30 13.00 -0.6
RTCB 43.68 132 e(P) 30 13.10 -0.7
RTLL 43.85 132 ePc 30 15.00 -0.1
CFA 44.15 132 e(P) 30 16.50 -1.1
ARN 44.27 342 P 30 20.70 2.3
ORV 46.29 343 P 30 34.00 -0.5
WDC 47.55 342 eP 30 45.20 0.9
LBFM 48.06 343 P 30 47.00 -1.7
LON 53.08 346 P 31 26.00 -0.6
BMW 53.18 345 P 31 30.00 2.7X
PNT 55.04 349 eP 31 41.00 0.1
RSON 56.15 9 P 31 48.50 -0.3
1.0s 62.36nm 5.6mb
BAO 57.59 106 eP 31 54.50 -5.3X
PMR 73.97 340 eP 33 42.50 -1.5
1.0s 45.00nm 5.5mb
INK 75.29 350 eP 33 49.00 -2.4
1.0s 54.00nm 5.5mb
FBA 75.91 343 P 33 54.00 -1.1
1.2s 39.77nm 5.4mb
TTA 77.28 339 P 34 00.30 -2.6
IMA 78.50 342 eP 34 09.00 -0.6
MBC 81.09 357 eP 34 23.50 0.4
1.0s 60.00nm 5.6mb
KSP 113.26 36 ePKP 40 59.50 13.1X
BJI 128.43 319 PKP 41 08.50 -7.3X
Z 22s 3.39um 6.0Msz
eSKS 48 10.00
eS 53 16.00
eSS 01 00.00
BBTK 128.60 41 ePdiff 38 08.00 6.6X
LZH 138.56 323 ePKP 41 36.50 1.1
Z 30s 2.80um 5.8MszX
esP 41 51.00
i 43 03.50
S 02 40.50
MAIO 145.56 22 ePKP 41 48.00 0.4
KMI 145.98 310 ePKP 41 52.50 3.7X
pP 42 00.00
RYD 146.59 50 ePKP 41 52.00 2.5
KLI 148.18 253 ePKP 41 58.50 6.2X
CHG 152.18 303 ePKP 42 01.50 3.3X
GUN 154.35 336 PKP 42 05.70 4.2X
KKN 154.69 337 PKP 42 05.60 3.9X
GKN 154.74 338 PKP 42 05.60 3.9X
PKI 154.84 337 PKP 42 05.80 3.7X
DMN 154.92 337 PKP 42 05.80 3.7X
S.D. = 1.4 on 42 of 58 obs.

? FEB 17, 1990 01h 22m 42.19± 3.77s
19.600 S ±20.9km 175.618 W ±29.8km
DEPTH = 207.6 ± 25.1 km
4.9mb (3 obs.)
TONGA ISLANDS (173)

SVA 5.80 284 iP 24 07.50 -0.2
SGE 6.44 287 eP 24 16.00 -0.1
DZM 16.95 259 iPc 26 30.90 1.9
BRS 29.94 249 e(P) 28 21.00 -12.1X
RMQ 33.42 251 eP 29 04.00 0.7
CTA 35.82 263 iPd 29 23.70 0.1
0.8s 59.70nm 5.3mb
i 29 28.00
i 29 35.00
WB5 46.93 261 eP 30 53.00 -1.1
WRA 46.95 261 Pc 30 52.60 -1.6
0.6s 6.10nm 4.2mb
MTN 51.41 269 eP 31 27.00 -1.3
SPA 70.52 180 iPc 33 36.10 0.0
0.8s 23.75nm 5.0mb
Z 20s 3.51um 5.6Msz
e 34 47.60
MAT 70.85 322 (PKP) 33 36.00 -2.3
Z 20s 1.77um 5.3Msz
CN2 82.98 321 eP 34 45.00 -0.1
BJI 86.84 314 eP 35 05.00 0.7
TIY 88.36 311 eP 35 13.40 1.6
XAN 89.38 307 P 35 17.50 0.9
HHC 90.34 314 Pd 35 22.70 1.8
KSH 116.20 305 ePKP 41 01.50 -1.1
S.D. = 1.4 on 16 of 17 obs.

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* FEB 17, 1990 01h 24m 27.65± 0.69s
15.942 N ±10.2km 98.105 W ± 8.1km
DEPTH = 33.0km (normal)
5.0mb (14 obs.) 4.9Msz (1 obs.)
OFF COAST OF GUERRERO, MEXICO (65)
Felt slightly at Mexico City.

OXX 1.74 49 iP 24 56.64 0.4
iS 25 22.00
ACX 1.92 299 iP 24 57.27 -1.4
(S) 25 35.64
III 2.75 332 ePd 25 11.57 1.0
PSM 3.04 75 (P) 25 23.00 8.4X
(S) 26 06.00
IIT 3.07 356 iP 25 21.92 6.7X
(S) 26 17.13
PPM 3.15 351 iP 25 17.64 1.1
UNM 3.52 343 (P) 25 29.50 7.8X
(S) 26 12.50
CRX 3.76 337 (P) 25 42.14 17.1X
(S) 26 35.90
IIC 3.96 344 eP 25 37.28 9.4X
(S) 26 36.79
IIJ 4.08 338 (P) 25 25.36 -4.4X
(S) 26 40.77
MRX 4.76 322 eP 25 41.00 2.1
(S) 27 00.05
TPX 5.73 100 (P) 25 26.00 -26.7X
AGX 7.12 327 (P) 26 49.30 37.2X
FKO 19.25 2 e(P) 28 45.00 -7.2X
SIO 19.79 4 ePc 28 56.90 -1.2
TUL 19.99 5 eP 28 58.00 -2.3
1.2s 95.40nm 5.0mb
eS 32 48.00
LR 34 23.00
RLO 20.33 7 eP 29 03.40 -0.4
ALQ 20.35 340 iPc 29 09.90 5.6X
1.0s 29.00nm 4.6mb
Z 22s 5.93um 4.9Msz
ANMO 20.35 340 P 29 04.50 0.2
0.9s 29.41nm 4.6mb
RSCP 22.55 27 P 29 26.00 -0.2
FVM 22.98 16 P 29 29.50 -0.9
GOL 24.51 346 P 29 46.30 0.8
0.9s 94.70nm 5.4mb
BLA 26.35 33 P 30 02.00 -0.6
BW06 28.49 342 P 30 22.00 -0.2
ORV 31.16 324 eP 30 37.30 -8.4X
MIN 31.75 325 eP 30 42.30 -8.8X
LRM 32.13 341 eP 30 55.40 0.9
RSNY 34.79 30 P 31 17.00 -0.2
1.0s 39.77nm 5.3mb
RSON 35.01 5 P 31 17.50 -1.5
SES 35.92 346 eP 31 27.00 0.2
FFC 38.82 356 eP 31 51.00 0.0
0.9s 25.00nm 5.0mb
EDM 39.08 345 ePc 31 53.20 -0.2
FRB 51.93 16 eP 33 34.00 -1.2
AAPN 83.60 53 iPc 36 55.40 1.0
ALOJ 83.67 53 iPd 36 55.50 0.7
ATEJ 83.79 54 iPd 36 56.40 1.0
ACHM 83.88 53 iPc 36 56.80 1.0
ASMO 83.88 53 iPd 36 56.50 0.7
APHE 84.03 53 iPc 36 58.00 1.4
NB2 85.21 27 P 37 03.20 1.3
1.2s 7.70nm 4.8mb
EPF 85.30 47 eP 37 03.10 0.4
1.1s 9.75nm 4.9mb
RJF 85.42 44 eP 37 03.50 0.3
1.2s 20.85nm 5.2mb
TCF 85.57 43 eP 37 04.00 0.0
1.2s 23.75nm 5.3mb
MAF 85.83 43 eP 37 05.30 0.0
BGF 85.90 43 eP 37 05.50 -0.1
1.0s 9.00nm 5.0mb
SSF 86.17 42 eP 37 06.80 -0.1
1.1s 11.00nm 5.0mb
LOR 86.33 42 eP 37 07.90 0.2
1.1s 19.55nm 5.2mb
LBF 86.50 42 eP 37 08.40 -0.2
1.0s 8.00nm 4.9mb
SOD 87.73 19 eP 37 11.00 -3.1X
LKO 89.81 80 (P) 37 29.20 4.2X
NUR 91.17 25 eP 37 30.00 -0.4
GUMO 111.19 292 ePKP 43 09.00 8.5X
POO 144.84 13 ePKP 44 02.50 -1.3

17d 01h

HYB 146.69 6 ePKP 44 04.80 -2.1
GBA 150.31 9 PKPc 44 16.90 4.4X
0.9s 7.80nm
S.D. = 1.0 on 39 of 55 obs.

FEB 17, 1990 01h 38m 06.00± 0.39s
16.089 N ± 6.6km 97.934 W ± 5.2km
DEPTH = 33.0km (normal)
5.2mb (33 obs.)
OAXACA, MEXICO (60)
Felt slightly ot Mexico City.

OXX 1.52 49 P 38 33.47 2.0
iS 38 58.00
ACX 2.00 293 P 38 33.05 -5.1X
III 2.71 327 P 38 47.63 -0.7
PSM 2.84 77 (P) 38 50.50 0.4
(S) 39 38.00
IIT 2.94 353 P 38 59.13 7.4X
PPM 3.03 348 P 38 54.59 1.3
UNM 3.44 340 (P) 39 05.50 6.7X
CRX 3.70 333 eP 39 04.30 1.8
(S) 40 09.47
IIC 3.87 341 (P) 39 14.03 9.1X
IIJ 4.01 335 (P) 39 02.43 -4.7X
SCX 5.13 82 (P) 39 22.00 -0.5
(S) 40 20.00
TPX 5.59 101 (P) 39 30.94 1.8
(S) 43 16.57
AGX 7.09 325 (P) 40 09.30 19.2X
UYO 18.27 9 e(P) 42 16.80 -1.9
FKO 19.10 1 eP 42 27.50 -1.3
SIO 19.63 4 eP 42 33.30 -1.6
TUL 19.83 5 eP 42 34.70 -2.3
1.0s 150.00nm 5.3mb
RLO 20.16 7 e(P) 42 41.70 1.3
ALQ 20.27 339 iPc 42 42.10 0.3
1.0s 102.50nm 5.1mb
pP 49 08.30
sP 55 28.30
ANMO 20.27 339 P 42 42.40 0.6
1.0s 81.25nm 5.0mb
GLA 22.78 321 eP 43 08.00 1.1
BAR 23.69 318 eP 43 17.00 1.3
PLM 24.24 319 eP 43 22.00 0.7
GOL 24.40 346 P 43 25.00 2.1
GLD 24.42 346 P 43 26.00 3.1X
PEC 24.78 319 P 43 28.00 1.7
RVR 24.98 319 eP 43 28.00 -0.2
GSC 25.51 322 eP 43 24.00 -9.3X
SBB 25.72 320 eP 43 34.00 -1.2
CLC 26.33 322 eP 43 41.00 0.2
ISA 26.76 321 eP 43 45.00 0.2
DUG 27.29 335 P 43 51.00 1.4
1.0s 20.00nm 4.7mb
BW06 28.40 342 P 43 59.90 0.1
LRM 32.04 341 ePc 44 32.80 0.7
LBFM 32.57 325 P 44 36.00 -0.7
RSNY 34.58 30 P 44 52.00 -1.8
1.0s 56.04nm 5.4mb
WNY 34.79 31 P 44 55.00 -0.6
HBVT 35.16 32 P 44 57.70 -1.1
SES 35.82 346 ePc 45 04.50 0.2
LON 36.44 332 P 45 10.00 0.3
PNT 37.55 337 ePc 45 19.00 0.2
1.0s 58.00nm 5.4mb
FFC 38.68 356 iPc 45 28.40 0.1
0.9s 54.00nm 5.3mb
CBM 39.45 32 P 45 34.80 0.1
LPB 43.78 136 eP 46 11.00 0.0
SCH 45.51 25 eP 46 24.00 0.0
CCH 45.69 135 P 46 25.00 -1.2
FRB 51.74 16 eP 47 11.00 -1.1
INK 56.88 345 iPc 47 48.30 -1.4
1.1s 47.00nm 5.4mb
PMR 58.00 334 P 47 56.50 -1.1
1.0s 19.50nm 5.1mb
BAO 58.51 120 eP 47 56.50 -5.5X
FBA 59.11 338 P 48 03.80 -1.5
1.0s 18.75nm 5.2mb
MBC 61.21 354 ePc 48 19.30 -0.2
1.0s 71.00nm 5.8mb
TTA 61.48 334 P 48 19.50 -2.2
1.0s 12.50nm 5.0mb
IMA 61.82 338 P 48 20.00 -4.1X
DAG 71.96 14 iPc 49 26.90 -0.9
0.7s 15.07nm 5.1mb

GUD 82.50 50 eP 50 27.50 0.4
EJIF 82.55 54 eP 50 28.20 0.9
LPF 82.72 42 eP 50 27.80 -0.1
GRR 82.74 42 iPc 50 28.10 0.1
1.1s 26.85nm 5.2mb
TOL 82.78 51 eP 50 29.00 0.6
FLN 82.88 41 iPc 50 29.00 0.3
0.9s 16.40nm 5.1mb
LDF 83.15 41 iPc 50 30.30 0.2
0.9s 13.10nm 5.0mb
MAL 83.31 54 iPc 50 31.60 0.5
i 54 52.00
AAPN 83.38 53 eP 50 31.80 0.1
ALOJ 83.45 53 iPd 50 33.50 1.5
ATEJ 83.57 54 iPd 50 33.50 0.8
ASMO 83.66 53 iPd 50 33.50 0.4
APHE 83.81 53 iPc 50 34.60 0.7
AFC 83.84 53 eP 50 34.30 0.2
EVIA 84.26 52 e(P) 50 36.20 0.1
LFF 84.78 45 eP 50 38.60 0.2
LSF 84.92 43 eP 50 39.30 0.2
1.1s 14.65nm 5.1mb
N82 85.00 27 P 50 39.20 0.0
1.4s 28.70nm 5.3mb
EPF 85.08 47 eP 50 40.60 0.6
1.1s 19.55nm 5.2mb
LPO 85.16 45 eP 50 40.50 0.2
RJF 85.20 44 eP 50 40.80 0.3
1.1s 26.85nm 5.4mb
TCF 85.35 43 eP 50 41.30 0.0
1.0s 34.00nm 5.5mb
MAF 85.61 43 iPc 50 42.60 0.1
1.1s 36.65nm 5.5mb
DOU 85.62 39 P 50 42.90 -0.4
CAF 85.68 45 eP 50 43.00 0.0
BGF 85.68 43 iPc 50 42.80 -0.1
1.1s 30.50nm 5.4mb
AVF 85.94 42 iPc 50 43.80 -0.3
1.1s 11.00nm 5.0mb
SSF 85.95 42 iPc 50 44.20 0.0
1.1s 24.40nm 5.3mb
LOR 86.11 42 iPc 50 45.10 0.1
1.1s 47.60nm 5.6mb
ENN 86.18 38 iPd 50 46.00 0.8
1.0s 28.00nm 5.4mb
e 50 51.50
e 51 50.00
WTS 86.26 37 eP 50 47.00 1.4
0.7s 8.00nm 5.1mb
LBF 86.28 42 iPc 50 45.60 -0.3
MEM 86.29 38 Pc 50 46.90 1.2
SMF 86.30 43 eP 50 45.50 -0.5
HFS 86.50 28 ePKP 50 45.20 -1.4
0.9s 7.40nm 4.9mb
HAU 87.43 41 iPc 50 51.30 -0.1
0.7s 8.80nm 5.1mb
SOD 87.54 19 eP 51 03.00 11.4X
BSF 87.77 41 eP 50 52.60 -0.6
CDF 87.86 40 eP 50 53.10 -0.5
UPP 88.37 27 iP 50 54.80 -0.8
LKO 89.62 80 (P) 51 01.20 -1.3
SUF 90.22 22 eP 51 04.00 -0.3
0.7s 5.60nm 5.0mb
BRG 90.80 36 eP 51 07.20 0.0
1.2s 13.00nm 5.1mb
e 51 12.20
KIC 91.31 83 (P) 51 14.40 4.2X
KHC 91.37 38 eP 51 10.30 0.4
PRU 91.54 37 eP 51 10.50 -0.1
KBA 92.14 40 e(P) 51 13.00 -0.7
1.0s 4.50nm 4.9mb
ZST 93.87 37 eP 51 21.80 0.4
PTJ 94.29 40 eP 51 22.00 -1.5
WRA 130.30 257 PKPd 57 16.20 0.8
1.0s 3.30nm
POO 144.66 14 iPKPd 57 39.90 -1.9
HYB 146.53 6 iPKPc 57 44.60 -0.4
1.0s 40.00nm
GBA 150.14 9 PKPc 57 54.20 3.6X
0.9s 24.00nm
S.D. = 1.0 on 95 of 108 obs.

? FEB 17, 1990 01h 50m 48.33± 2.67s
15.589 N ±31.1km 97.947 W ±12.3km
DEPTH = 33.0km (normal)
4.6mb (5 obs.)
NEAR COAST OF OAXACA, MEXICO (66)

OXX 1.89 38 iP 51 19.00 -0.1
iS 51 42.00
ACX 2.23 305 iP 51 22.00 -1.8
iS 51 57.00
PPM 3.52 349 iP 51 44.00 1.5
iS 52 34.30
CRX 4.14 337 iP 51 59.00 7.9X
MRX 5.13 323 iP 52 13.50 8.6X
SIO 20.13 4 eP 55 20.80 -1.6
TUL 20.33 5 eP 55 23.00 -1.5
1.0s 22.70nm 4.5mb
e 55 28.20
RLO 20.66 7 eP 55 27.90 0.0
ANMO 20.74 340 P 55 28.40 -0.5
1.0s 12.50nm 4.2mb
RSCP 22.79 27 P 55 50.00 0.7
GLA 23.16 322 P 55 54.00 1.1
FVM 23.28 15 P 55 53.50 -0.5
PLM 24.61 319 P 56 08.50 1.3
GOL 24.88 346 P 56 10.90 1.1
0.8s 20.09nm 4.8mb
FFC 39.18 356 iPd 58 15.10 0.4
0.8s 11.00nm 4.7mb
INK 57.36 345 eP 00 35.00 -0.4
M8C 61.70 354 eP 01 05.50 0.3
1.0s 9.00nm 4.9mb
GBA 150.64 9 PKPd 10 40.80 7.1X
0.8s 2.50nm
S.D. = 1.1 on 15 of 18 obs.

& FEB 17, 1990 02h 11m 31.53s
63.547 N 150.077 W
DEPTH = 11.1km
4.3mb (5 obs.)
CENTRAL ALASKA (1)
<AGS-P>. ML 4.8 (PMR). Felt (III) ot Contwell and McKinley Pork.

KTH 0.38 271 iP 11 38.95 -0.4
MCK 0.54 69 iP 11 41.89 -0.6
RND 0.57 104 iP 11 42.16 -0.9
HUR 0.61 161 iP 11 43.13 -0.5
NEA 1.12 23 iP 11 52.25 -0.2
CUT 1.15 184 iP 11 53.40 0.5
WRH 1.28 42 iP 11 54.44 -0.7
CCB 1.49 41 iP 11 57.34 -0.8
RDS 1.54 32 iP 11 58.25 -0.7
HDA 1.63 57 eP 11 59.54 -0.6
FBA 1.69 35 iPc 12 00.40 -0.6
SKT 1.71 204 iP 12 01.83 0.4
GHO 1.86 163 iP 12 03.53 -0.1
GLM 1.86 38 eP 12 02.87 -0.8
DDM 1.90 81 eP 12 04.50 0.4
PWA 1.91 177 iPd 12 04.30 0.1
DMW 2.00 73 eP 12 06.95 1.4
PLRM 2.01 167 iP 12 05.97 0.3
eS 12 33.47
PMR 2.01 167 iPd 12 06.00 0.3
1.0s 77.50nm
SUA 2.11 189 eP 12 07.58 0.2
S 12 37.17
TOA 2.30 127 iPd 12 10.90 0.8
PMS 2.32 174 eP 12 10.50 0.2
NCG 2.36 205 iP 12 10.94 0.1
CGLM 2.42 203 eP 12 11.69 0.0
CRP 2.48 204 eP 12 12.80 0.1
BGL 2.53 206 eP 12 13.75 0.5
SPU 2.55 202 eP 12 13.39 -0.1
CKL 2.58 205 iP 12 14.29 0.2
DOT 2.69 85 eP 12 14.89 -0.6
TTA 2.76 260 eP 12 14.30 -2.2
NKA 2.87 191 eP 12 21.08 3.2
IMA 2.96 330 iPd 12 18.50 -0.9
SLKM 3.05 181 eP 12 21.68 1.1
RDT 3.18 201 eP 12 22.44 0.0
TMW 3.19 91 eP 12 22.31 -0.2
SEW 3.47 175 eP 12 28.42 2.0
SVW 3.56 229 eP 12 26.70 -1.1
NNL 3.57 190 iP 12 30.29 2.4
HIN 3.58 150 iP 12 28.80 0.6
CVA 3.64 144 eP 12 29.62 0.8
SGAM 3.82 141 eP 12 31.46 -0.1
RAGM 4.07 139 eP 12 35.95 0.9
CNPM 4.07 188 eP 12 36.09 1.0
XLV 4.18 192 eP 12 38.31 1.7
PDB 4.25 209 iP 12 37.22 -0.4

MID	4.50	155	eP	12	43.12	2.0				S	30	33.50					S	36	14.00	
WAX	4.61	129	eP	12	42.85	0.1	WKYJ	6.24	40	eP	29	30.50	-2.9X				sS	36	29.00	
DWY	4.75	79	P	12	42.90	-1.8				S	30	38.90					SS	36	46.00	
CYK	5.00	131	eP	12	48.68	0.5	TSRJ	7.45	35	P	29	48.20	-1.9	GUMO	20.57	137	ePc	32	36.86	-0.7
KDC	5.94	193	eP	12	59.70	-1.7				eS	31	08.00			1.2s	2477.78nm				6.4mb
HYT	6.49	109	P	13	09.40	0.1	SSE	8.40	283	Pc	30	02.00	-1.2				i	32	40.20	12kmX
INK	8.26	47	eP	13	31.00	-3.0		1.5s	2620.00nm				6.8mb	GUA	20.64	137	eP	32	36.20	-2.1
SIT	9.78	125	eP	13	53.20	-1.7	Z	20s	105.00um				5.3MszX		0.9s	1163.03nm				6.2mb
SDN	9.78	217	e(P)	13	57.30	2.4	N	10s	32.20um								eS	36	31.00	
MBC	16.21	26	eP	15	18.00	-2.3	E	10s	36.70um					HIA	21.42	340	iPd	32	43.54	-2.4
	0.5s	5.00nm				3.9mb				pP	30	07.50					eS	36	36.64	
EDM	21.53	101	eP	16	21.50	-0.8	ANP	9.27	244	iPd	30	15.60	0.4	GYA	21.46	268	P	32	51.00	4.3X
	0.5s	22.00nm				4.8mb				iS	32	32.40			Z	24s	24.20um			5.5MszX
NEW	23.61	115	eP	16	44.00	1.1	MAJO	9.39	40	eP	30	15.63	-1.2		N	12s	13.90um			
	0.8s	4.40nm				4.1mb	MAT	9.39	40	eP	30	15.00	-1.9		E	12s	17.80um			
SES	24.54	104	eP	16	53.00	1.1		0.8s	112.69nm				5.9mb X				S	36	38.00	
BW06	31.16	112	eP	17	52.50	0.0				(S)	32	08.00		QIZ	21.69	246	Pd	32	48.50	-0.3
RSON	31.92	86	eP	17	58.00	-0.8	NJ2	10.52	287	iPd	30	31.00	-1.2		N	11s	7.50um			
RSSD	32.42	105	eP	18	02.50	-0.9	Z	20s	42.70um						E	13s	11.60um			
FRB	33.89	52	eP	18	14.00	-1.7	E	10s	26.10um								pP	32	59.00	41kmX
GOL	35.47	111	eP	18	30.00	0.2				S	32	25.40					PP	33	15.00	
ANMO	39.09	116	e(P)	19	00.00	-0.2	QZH	11.73	250	Pc	30	47.00	-1.4	DAV	22.85	193	eP	33	00.00	-0.3
BLA	48.49	88	eP	20	14.50	-1.3	Z	27s	47.80um					CD2	23.33	280	eP	33	02.20	-2.7
JSC	50.56	91	eP	20	30.00	-1.6				S	32	58.00			Z	20s	29.90um			5.7Msz
SUF	54.01	2	eP	20	55.00	-2.1	DL2	12.00	324	iPd	30	52.00	0.0		N	10s	21.00um			
HFS	56.03	10	eP	21	10.10	-1.7	N	10s	14.30um								S	37	12.00	
	0.4s	0.90nm				4.2mb	E	12s	32.20um					LZH	23.48	293	iPd	33	05.65	-0.8
Z	20s	1.36um				5.0MszX				S	33	03.00			6.0s	5710.00nm				6.2mb X
		LR		48	48.00					sS	33	17.00			Z	25s	75.50um			6.1MszX
KBA	68.94	12	iPd	22	36.80	-1.5	TIA	13.23	304	Pd	31	08.20	-0.1		N	14s	15.10um			
	0.7s	5.70nm				4.9mb	N	11s	29.80um						E	18s	39.30um			
GUN	78.79	312	P	23	36.00	0.1	SNY	13.57	337	iPd	31	12.80	0.1				pP	33	19.00	55kmX
GKN	79.12	313	P	23	36.30	-1.1		2.2s	2200.00nm				6.4mb				PP	33	31.50	
DMN	79.33	312	P	23	38.60	-0.1	Z	21s	95.00um				3.9Msz				eS	37	17.60	
	72 obs. associoted						N	14s	28.80um					KMI	25.22	267	ePd	33	21.65	-1.7
----------							E	11s	22.70um						Z	14s	34.30um			6.0MszX
FEB 17, 1990 02h 28m 01.82± 0.12s										pP	31	21.00			N	11s	7.80um			
29.533 N ± 2.5km 130.732 E ± 2.7km										sP	31	26.50			E	11s	16.20um			
DEPTH = 65.9km (geophysicist)							WHN	14.23	278	Pd	31	20.00	-1.4				pP	33	35.00	55kmX
5.9mb (80 obs.)								8.0s	********nm				6.5mb X				eS	37	47.15	
RYUKYU ISLANDS (238)								Z	28s	42.20um			4.5MszX	KKM	27.08	213	ePd	33	42.20	1.8
Felt (III JMA) on Yoku. Depth								N	10s	28.20um					1.3s	243.00nm				5.6mb
from broadbond displacement								E	10s	17.40um				GTA	27.21	299	P	33	38.80	-2.6
seismograms.										S	34	00.00			Z	20s	35.40um			5.9Msz
FAULT PLANE SOLUTION: P-Woves							CN2	14.85	345	Pd	31	29.80	0.4		E	13s	17.90um			
NP1:Strike=217 Dip=70 Slip= 70								N	14s	37.90um							pP	33	54.00	63kmX
NP2: 84 28 133								E	14s	31.30um							PP	34	25.00	
Principal Axes:										pP	31	35.50					S	38	10.00	
T Plg=60 Azm= 98										isP	31	39.00					sS	38	41.00	
P 22 322										iS	34	18.50		TSM	27.88	208	ePc	33	47.50	0.0
Comment: The focal mechonism is							MDJ	15.08	357	iPd	31	32.40	0.0	LOE	29.13	252	eP	33	58.00	-0.7
poorly controlled and								N	15s	14.50um				CHG	30.81	257	ePd	34	12.20	-1.4
corresponds to reverse										esP	31	48.00			1.4s	424.42nm				6.0mb
foulting with o moderate										iS	34	20.00					eS	39	18.00	
strike-slip component. The										SS	34	36.00		BDT	31.48	254	eP	34	17.20	-2.3
preferred fault plane is not										ScS	43	45.00			0.7s	43.00nm				5.3mb
determined.							BJI	15.88	315	iPd	31	42.85	0.3	JAY	33.27	162	ePd	34	34.50	-0.6
RADIATED ENERGY								N	10s	18.00um							e	36	55.00	
No. of sto: 6 Focal mech. F								E	10s	22.90um				NNT	33.33	246	iPd	34	37.00	1.4
Energy 2.0±0.5*10**13 Nm							HKC	16.54	248	eP	31	51.90	1.0				e	59	20.50	
CENTRDID, MOMENT TENSOR (HRV)										eS	34	52.00		BKB2	33.35	206	iPd	34	53.00	17.2X
Doto Used: GDSN							GZH	16.85	252	eP	31	52.00	-2.8	LSA	34.30	280	iPd	34	45.00	0.5
L.P.B.: 9S, 25C								Z	26s	35.90um					4.0s	1710.00nm				6.3mb X
Centroid Locotion:								N	20s	58.70um					Z	14s	4.35um			5.3MszX
Origin Time 02:28: 5.0 0.3								E	20s	32.30um					N	11s	3.79um			
Lot 29.28N 0.03 Lon 130.45E 0.04										S	35	03.00					pP	34	58.00	50kmX
Dep 44.3 3.6 Half-duration 4.0							MCO	17.12	248	iP	32	00.00	1.8				PP	35	55.00	
Moment Tensor; Scale 10**18 Nm							TIY	17.27	303	iPd	31	59.50	-0.5				eS	40	09.00	
Mrr= 0.85 0.04 Mtt=-1.06 0.05								1.8s	1800.00nm				6.0mb	SHL	34.56	273	iP	34	45.00	-1.4
Mff= 0.22 0.06 Mrt=-0.86 0.09								N	10s	14.80um							iS	40	06.00	
Mrf=-1.15 0.09 Mtf=-0.42 0.05										pP	32	09.50		SNG	36.01	238	ePd	34	59.70	1.1
Principal Axes:							MAN	17.28	213	P	32	01.00	0.8		1.0s	260.00nm				6.1mb
T Val= 1.79 Plg=55 Azm=107							QCP	17.30	213	P	32	01.00	0.6				eS	40	38.00	
N -0.02 21 231							XAN	19.07	289	Pd	32	18.90	-2.9X	MKS	36.20	199	iPc	35	00.00	-0.1
P -1.77 26 332								2.0s	2100.00nm				6.0mb	WMQ	36.92	305	ePd	35	03.91	-2.2
Best Double Couple:Mo=1.8*10**18								N	12s	21.80um					5.0s	1600.00nm				6.2mb X
NP1:Strike=102 Dip=27 Slip= 144								E	11s	13.60um					Z	20s	32.40um			6.1Msz
NP2: 224 75 68							HHC	19.27	311	Pd	32	22.00	-1.9		E	17s	15.60um			
								8.0s	********nm				6.2mb X				pP	36	30.00	454kmX
KAGJ	1.65	5	iPd	28	28.20	-1.0	Z	20s	62.30um								ePP	36	32.05	
		S		28	48.80		N	14s	23.90um								eS	40	43.17	
KUMJ	2.99	2	iPd	28	47.00	-0.9	E	16s	38.20um								ScS	45	10.00	
		S		29	20.70					S	35	58.00		IPM	37.49	234	ePd	35	13.40	2.4
SHK	5.25	18	iPd	29	17.00	-2.6	BTO	20.18	309	iPd	32	31.00	-2.6		1.1s	326.60nm				6.2mb
0.9s	773.11nm				6.0mb X		Z	15s	29.00um				5.8MszX				e	35	38.50	108kmX
TKSJ	5.26	32	P	29	17.80	-1.9	N	14s	22.20um					MNDI	37.59	159	eP	35	13.00	0.9
YONJ	6.09	22	P	29	28.90	-2.5				pP	32	43.00	53kmX	KGM	37.79	229	ePd	35	15.00	1.5

17d 02h

GUN		39.19	279	P	35	24.60	-0.9			1.0s	130.00nm		6.0mb		BBTK	77.30	309	iP	39	50.50	-0.5
LAT		39.23	154	eP	35	25.00	-0.5	MUN		62.71	194	eP	38 21.00	-1.0	NB2	77.33	334	P	39	48.90	-1.7
SMY		39.23	41	eP	35	26.20	1.0	COO		63.08	160	iPc	38 24.60	0.0		0.7s	47.00nm			5.6mb	
PKI		39.67	279	P	35	28.20	-1.3	NWAO		63.42	193	iPc	38 25.61	-1.1	BIR	77.52	316	eP	39	54.00	2.1
KKN		39.73	279	P	35	28.50	-1.4			1.0s	222.00nm		6.1mb		MOL	77.66	337	iPc	39	52.83	0.5
DMN		39.92	279	P	35	30.00	-1.5					ePPd	38 42.83	64kmX	PGC	77.91	41	eP	39	55.00	1.1
GKN		40.23	279	P	35	32.20	-1.7	ADE		64.59	173	iPc	38 34.00	-0.4	TLB	78.10	315	ePc	39	56.00	0.9
PMG		41.82	155	iPc	35	46.70	-0.1			1.0s	168.00nm		6.0mb		VRI	78.26	316	iPc	39	57.00	1.0
		1.5s	611.11nm				6.2mb	INK		64.99	24	eP	38 36.00	-0.5	HLBJ	78.34	300	Pd	39	56.50	-0.3
MTN		42.13	179	iPd	35	48.20	-1.1			0.5s	27.00nm		5.5mb		SHMJ	78.45	301	Pc	39	59.20	1.9
				e	36	00.00	43kmX					pP	38 46.00	32kmX	MDSJ	78.59	300	Pc	39	58.00	-0.2
KLI		42.27	220	ePc	35	52.00	1.6	TEH		65.40	298	eP	38 42.00	2.2	BURJ	78.64	301	Pc	39	58.30	-0.2
ADK		44.52	45	eP	36	07.40	-0.9	BWA		65.77	164	eP	38 43.00	1.1	ADI	78.69	302	eP	39	59.00	0.4
				i	36	24.40	68kmX	IR2		65.80	299	eP	38 42.00	-0.4	GPA	78.74	310	eP	39	58.70	-0.1
KSH		45.59	298	Pc	36	15.00	-2.2	IR4		65.94	298	eP	38 43.00	-0.3	ISR	78.74	316	ePc	40	00.00	1.3
	Z	20s	37.50um				6.3Msz	IR7		66.01	299	eP	38 43.50	-0.2	SALJ	78.84	300	P	40	00.20	0.7
	E	16s	24.20um					IR1		66.05	298	eP	38 43.50	-0.5	MLR	78.93	316	ePd	40	00.00	0.2
				pP	36	29.00	53kmX	SVA		66.05	130	eP	38 42.40	-1.5	QUTJ	78.92	300	Pc	40	00.20	0.2
NDI		46.41	283	iPc	36	23.00	-0.7	MBC		66.10	14	ePd	38 43.00	-0.6	MASJ	78.95	300	P	40	00.10	0.0
		1.2s	531.25nm				6.3mb			0.8s	71.00nm		5.7mb		ISK	79.19	311	eP	40	02.00	0.9
				eS	43	06.00		KBS		66.43	349	eP	38 45.10	-0.5	CSS	79.19	304	eP	40	02.00	0.7
HYB		49.00	268	iPc	36	43.50	-0.5	CAN		66.76	164	eP	38 48.60	0.3	ITU	79.20	311	iPc	40	02.00	0.8
		1.4s	375.00nm				6.2mb					e	39 07.20	70kmX	BMR	79.23	319	ePc	40	03.00	1.8
WB5		49.25	175	iPc	36	44.90	-0.8					e	41 18.90		DSI	79.27	300	eP	40	02.00	0.2
				e	43	54.00		CNB		66.85	163	eP	38 49.00	0.1	BUC1	79.46	315	iPd	40	04.00	1.5
WRA		49.31	176	Pd	36	46.00	-0.2	KEV		67.19	338	iP	38 49.80	-0.7	MDB	79.52	317	eP	40	04.00	1.1
		1.3s	262.90nm				6.1mb		Z	20s	26.70um		6.5Msz		CTT	79.56	311	eP	40	00.50	-2.7
QIS		50.53	169	iPc	36	54.20	-1.3					eS	47 36.00		PNT	79.69	39	ePc	40	04.00	0.3
		1.0s	216.00nm				6.1mb					eScS	48 38.00			1.4s	142.00nm			5.7mb	
				e	36	59.00	16kmX					LR	18 06.00		CEI	79.81	319	eP	40	07.00	2.7
MBL		51.48	193	iPc	37	01.80	-0.9	BFD		67.28	170	ePc	38 52.90	1.5	LON	79.85	42	iPc	40	04.64	0.0
		1.2s	24.00nm				5.1mb			1.2s	220.00nm		6.0mb					epPd	40	22.19	63kmX
CTA		51.55	161	iPc+	37	03.10	-0.2	SIT		67.79	36	ePd	38 55.60	1.1	KRA	79.89	322	ePd	40	04.80	0.1
		1.3s	811.54nm				6.6mb	TOO		68.17	167	iPd	38 57.70	0.6		0.9s	242.00nm			6.1mb	
				i	37	21.00	70kmX			0.4s	88.00nm		6.1mb			Z	20s	15.50um			6.3Msz	
				i(PcP)	38	17.50		SOD		68.28	336	iP	38 56.00	-1.4		E	20s	17.30um				
				iS	44	22.00		TAB		68.40	302	iP-	38 59.00	0.2				i	40	05.80	3kmX
CTAO		51.55	161	iPc	37	03.26	0.0	KTK1		68.71	338	iPc	38 59.33	-0.7				e	40	12.80	
		1.3s	811.54nm				6.6mb	KER		69.18	298	ePd	39 03.00	-0.6				eS	50	00.00	
				epP	37	21.30	71kmX	TRO		69.76	340	iP	39 05.10	-1.3	BCK	79.93	307	iP	40	04.70	-0.6
				i(PcP)	38	17.50		DHR		69.88	289	eP	39 08.00	0.2	BER	79.93	336	eP	40	05.20	0.5
				e	39	22.96		SLY		69.93	300	iPc	39 07.00	-1.0	HSHJ	79.93	298	P	40	08.20	2.7
				iS	44	22.00						iPcP	39 22.00		PPCY	79.94	304	eP	40	05.50	0.2
GBA		51.61	264	P	37	04.00	0.1					ePP	41 41.50		AYN	80.07	297	eP	40	06.70	0.6
		0.9s	176.40nm				6.1mb					ePPP	43 30.00		DST	80.20	310	iP	40	07.10	0.4
POO		52.65	272	iP	37	11.50	-0.3					eS	48 12.50		SPC	80.21	321	eP	40	06.60	-0.1
ASPA		52.98	176	iPc	37	13.20	-0.7					iScS	49 02.00					e	43	08.70	
		1.1s	131.00nm				5.9mb	SUF		70.48	332	iP	39 09.80	-1.1	KHL	80.24	308	eP	40	06.00	-0.9
	Z	21s	0.01um				2.8MszX			0.5s	22.50nm		5.4mb		BNT	80.29	311	iP	40	08.00	0.9
				LR	57	04.10		MSL		71.38	302	iPc	39 17.00	0.2	EDC	80.33	311	iP	40	08.00	0.7
KOD		53.16	260	iP	37	15.90	0.1					ePcP	39 25.50		AOBJ	80.39	299	P	40	08.40	0.6
				eS	44	42.00						eS	48 30.00		MBH	80.50	299	eP	40	08.00	-0.4
BOM		53.41	272	iP	37	15.00	-2.2					eScS	49 08.50		EDM	80.63	33	iPc	40	09.30	0.6
				iS	44	40.00		BHD		71.68	298	iPc	39 19.00	0.4	ELL	80.75	307	eP	40	09.40	-0.4
SDN		54.35	41	eP	37	22.10	-1.6					iS	48 33.00		WAJH	80.90	295	iPd	40	11.70	1.2
TTA		56.57	32	P	37	38.80	-0.9					iScS	49 15.00		BADA	81.00	298	iPd	40	11.70	0.7
		1.0s	37.50nm				5.4mb	NUR		72.14	330	iP	39 19.70	-1.2	TCW	81.10	148	P	40	10.10	-1.0
SVW		56.78	34	eP	37	41.70	0.5			1.1s	163.10nm		5.9mb		KIW	81.12	148	P	40	10.40	-0.8
OLP		57.28	166	eP	37	44.00	-1.0		Z	24s	19.60um		6.3MszX		PSZ	81.12	320	iP	40	11.50	0.1
IMA		57.57	28	iPc	37	46.80	0.0					ePP	42 08.00		KSL	81.29	307	eP	40	12.50	0.1
		1.5s	89.60nm				5.7mb					ePPP	43 44.00		MRW	81.31	148	P	40	11.10	-1.1
RMO		58.32	161	iPc	37	52.10	-0.2					eS	48 36.00		KSP	81.34	324	ePd	40	12.00	-0.3
		1.5s	550.00nm				6.5mb					eScS	49 16.00					ic	40	13.00	3kmX
				e	38	11.00	73kmX					LR	18 24.00					i	40	28.00	
KDC		58.61	38	iPc	37	53.30	-0.6	LOF		72.21	340	iPc	39 20.73	-0.5	CAW	81.38	148	P	40	11.80	-0.8
MAIO		58.97	297	eP	37	56.00	-0.8	DAG		72.29	353	iPc	39 20.60	-0.9	WEL	81.38	148	P	40	11.60	-0.9
				eS	45	56.00				0.8s	77.61nm		5.7mb		BZS	81.43	318	eP	40	12.50	-0.4
PVC		59.35	138	iPc	37	59.00	-0.6	RYD		73.43	289	iPd	39 29.00	-0.2	RDO	81.43	313	eP	40	13.50	0.5
PMR		59.86	33	P	38	00.80	-1.7	TAU		73.68	167	iPc	39 30.27	0.3	PLD	81.46	314	eP	40	18.00	4.9X
COL		60.09	29	iPc	38	03.74	-0.3					epPd	39 48.15	66kmX	GDH	81.46	2	ePc	40	14.00	1.4
				ePP	40	14.89						e	42 32.29		WDW	81.47	148	P	40	12.00	-1.0
				iS	46	15.80		KVT		74.50	309	iP	39 33.60	-1.5	PGZ	81.57	147	P	40	12.90	-0.6
FBA		60.09	29	iPc	38	03.80	-0.3	NSS		74.88	337	iPc	39 36.13	-0.6		1.2s	217.00nm			6.0mb	
FORR		60.10	183	eP	38	03.00	-1.4	QASM		75.36	292	eP	39 40.70	0.4	TIM	81.59	318	iPd	40	12.00	-1.7
BRS		60.41	157	iPd-	38	06.00	-0.7	UPP		75.48	331	iP	39 38.50	-1.7	EZN	81.61	311	iP	40	13.90	-0.1
		0.5s	23.50nm				5.6mb			1.2s	400.00nm		6.2mb		MTW	81.63	147	P	40	12.80	-1.0
				i	38	16.00	33kmX					i	39 39.80	4kmX	NEW	81.64	39	P	40	15.00	0.9
				e(PP)	40	14.00						iS	49 12.00		FHC	81.67	48	P	40	16.30	1.9
				e(S)	45	56.00		KAS		75.92	310	iPd	39 43.80	0.6	MOW	81.71	148	P	40	13.60	-0.7
COOL		60.77	189	iPc	38	07.50	-1.6	RUWJ		76.26	300	Pd	39 48.60	3.3X	IZM	81.73	309	eP	40	15.00	0.3
		0.5s	59.00nm				6.0mb	RGS		76.36	336	eP	39 46.10	1.0	BLW	81.78	148	P	40	13.90	-0.7
TOA		61.18	32	eP	38	11.80	0.2	HFS		76.92	333	eP	39 47.60	-0.7	BRL	81.82	327	eP	40	16.00	1.2
BAL		61.28	194	eP	38	11.00	-1.5			0.5s	43.90nm		5.7mb		BUD	81.85	320	iPd	40	15.50	0.4
		0.9s	231.00nm				6.3mb		Z	20s	12.53um		6.2Msz		BRN	81.90	327	eP	40	16.50	1.3
DZM		61.76	142	iPc	38	15.60	-0.4					LR	08 14.00		PRK	81.95	311	eP	40	16.00	0.3
KLB		62.03	193	eP	38	16.00	-1.5	KMSA		77.09	286	iPd	39 49.70	-0.4	SRO	82.05	321	iP	40	17.20	1.1
CMS		62.36	165	iPc	38	19.90	0.2	SHBJ		77.28	300	Pd	39 51.30	0.3				e(S)	50	36.00	

AKU	82.09	348	e(P)	40 21.20	5.3X
	1.3s	61.54nm			5.4mb
MHZ	82.12	154	P	40 16.50	0.0
SMG	82.37	309	eP	40 19.00	1.0
ZST	82.49	322	eP	40 19.60	1.2
			e	43 28.20	
BRG	82.50	325	iPd	40 18.20	-0.2
	2.4s	700.00nm			6.2mb
Z	22s	17.50um			6.4Msz
N	22s	14.50um			
E	22s	13.50um			
			i	40 32.40	49kmX
			i	40 46.50	
			eS	50 33.00	
BEO	82.56	318	eP	40 19.00	0.2
ARO	82.59	279	iPd	40 21.30	1.7
CLL	82.69	326	iPd	40 19.20	-0.1
	2.3s	600.00nm			6.2mb
Z	19s	15.50um			6.4Msz
			ipP	40 33.00	47kmX
			eS	50 34.00	
WDC	82.72	47	iPc	40 20.60	0.8
KOT	82.74	300	eP	40 20.00	0.0
PRU	82.75	324	ePd	40 19.80	0.1
	2.3s	563.30nm			6.1mb
Z	17s	17.10um			6.5MszX
N	19s	8.20um			
E	16s	12.50um			
			e	40 33.50	47kmX
			eS	51 34.00	
VKA	82.87	322	ePd	40 21.00	0.6
	3.0s	2328.00nm			6.6mb
Z	21s	6.90um			6.0Msz
			i	40 37.20	57kmX
			ePP	43 27.50	
			e(S)	50 35.50	
			LR	21 48.00	
SOP	83.09	322	iPd	40 23.60	2.1
HLW	83.14	300	eP+	40 21.70	-0.4
			ePP	43 50.00	
			ePPP	45 39.00	
			eS	50 34.00	
VAY	83.23	314	iP	40 21.50	-0.8
	1.4s	0.36nm			3.2mb X
KAP	83.27	307	eP	40 24.00	1.3
MIN	83.45	47	eP	40 23.80	0.1
SES	83.51	35	iPc	40 23.80	0.1
			pP	40 42.00	66kmX
SKO	83.57	315	iPd	40 24.40	0.3
	2.1s	1089.00nm			6.5mb
Z	20s	8.99um			6.1Msz
N	20s	2.77um			
E	21s	11.23um			
			e	40 25.00	
			i(pP)	40 37.80	45kmX
			i	40 51.80	
			i	41 27.10	
			eSKS	50 41.50	
			i	50 42.00	
			i	50 42.80	
			e	50 43.50	
			eSKKS	50 59.00	
			iS	51 10.00	
			i	55 17.00	
			eSS	56 58.00	
			eSSS	01 22.00	
KHC	83.77	324	iPd	40 25.20	0.2
	1.2s	34.00nm			5.2mb
Z	19s	14.70um			6.4Msz
N	20s	6.50um			
E	18s	9.00um			
			S	51 44.00	
MOX	83.79	326	ePd	40 25.00	0.0
	2.4s	721.00nm			6.3mb
Z	19s	16.90um			6.4Msz
N	17s	11.20um			
E	17s	7.40um			
			e	40 40.00	52kmX
HOF	83.87	326	iPc	40 26.40	0.9
			eS	50 45.00	
ORV	83.95	48	iPc	40 26.40	0.4
IVA	84.00	316	eP	40 28.20	1.9
PLE	84.04	317	eP	40 28.00	1.4
PVY	84.11	316	eP	40 28.00	1.0
WET	84.12	324	eP	40 27.50	0.8
	2.4s	968.00nm			6.4mb
Z	18s	15.00um			6.4Msz
			eS	50 45.80	
KMR	84.15	323	iP-	40 27.90	1.0
			i	40 43.10	53kmX
			i	40 55.80	
			iPP	43 42.80	
			i	43 55.80	
			eS	50 42.00	
			i	50 54.10	
KZN	84.29	313	eP	40 28.00	0.1
ATH	84.32	311	eP	40 26.80	-1.1
			eS	50 44.00	
PHP	84.34	315	iPc	40 27.30	-0.6
BRK	84.37	50	eP	40 28.70	0.5
OHR	84.45	314	iPc	40 29.20	0.6
	1.4s	0.17nm			2.9mb X
			e	40 54.20	94kmX
			eSKS	50 45.30	
PTJ	84.49	320	eP	40 28.70	0.0
NPS	84.50	307	eP	40 30.00	1.1
ZAG	84.53	320	iPd	40 29.00	0.2
			iS	50 48.00	
TTG	84.64	316	eP	40 30.30	0.9
			e(S)	50 48.00	
WIT	84.64	330	eP	40 30.00	0.8
	1.0s	336.00nm			6.3mb
FFC	84.65	28	iPc	40 29.70	0.4
	0.9s	50.00nm			5.6mb
KBN	84.72	314	iPc	40 30.60	0.8
SDA	84.73	316	iPd	40 31.00	1.1
LACI	84.82	315	iPc	40 31.00	0.7
TIR	84.89	315	eP	40 31.50	0.8
ULC	84.91	316	eP	40 31.50	0.6
AKSR	84.94	294	iPd	40 33.40	2.2
BDV	84.98	316	eP	40 31.30	0.1
AKUR	85.00	295	eP	40 33.00	1.5
HCY	85.08	317	eP	40 31.00	-0.7
AGRW	85.10	294	iPd	40 33.50	1.5
LSK	85.12	314	iPc	40 32.50	0.5
VBY	85.12	320	ePd	40 32.60	0.8
ARN	85.14	50	P	40 33.20	1.1
KBA	85.18	322	eP	40 31.50	-0.8
	1.3s	121.00nm			5.8mb
			iPcP	40 36.30	
			ePP	43 45.50	
			i	43 51.30	
			e(S)	50 44.50	
			e	51 10.00	
			e	09 05.00	
			e	09 22.00	
LJU	85.19	321	ePd	40 32.00	-0.1
			eS	50 49.00	
			e(sS)	51 44.00	
AGAL	85.19	294	iPd	40 34.50	2.0
BERA	85.21	314	eP	40 32.60	0.3
VAM	85.40	308	eP	40 35.00	1.6
TPE	85.41	314	iPd	40 32.70	-0.6
CEY	85.44	321	ePd	40 33.50	0.1
RBL	85.46	322	P	40 35.50	1.9
SAO	85.52	50	eP	40 34.40	0.4
VLI	85.53	310	eP	40 33.00	-1.0
VOY	85.54	321	ePd	40 33.30	-0.7
			i	40 35.00	5kmX
TNS	85.59	327	ePc	40 35.00	0.9
LRM	85.66	39	iPc	40 36.00	1.2
RIY	85.70	321	iPc	40 35.60	0.9
FVI	85.79	322	P	40 35.30	0.3
DBN	85.79	330	eP	40 36.00	1.1
Z	20s	10.50um			6.2Msz
			eS	50 56.00	
			eSP	51 44.00	
FRB	85.79	8	eP	40 35.00	0.2
	0.8s	109.00nm			6.0mb
PRS	85.81	50	ePc	40 36.40	0.9
TRI	85.82	321	P	40 36.60	1.4
TOD	85.84	326	eP	40 36.95	1.6
HVAR	85.86	318	iPc	40 35.50	0.0
ABH	86.25	327	eP	40 37.45	0.1
ENN	86.39	329	ePc	40 38.50	0.5
	1.1s	91.00nm			5.8mb
KVN	86.41	47	P	40 39.50	0.9
MEM	86.47	328	iP	40 38.70	0.4
			e	43 31.80	
			e	44 15.20	
OGA	86.54	323	eP	40 39.50	0.4
FRI	86.55	49	ePc	40 39.70	0.7
RUP	86.60	327	eP	40 39.79	0.7
LCI	86.66	315	P	40 39.50	0.0
EKA	86.72	336	P	40 40.00	0.5
	1.2s	40.50nm			5.4mb
CTI	86.74	322	P	40 40.30	0.4
BRT	86.80	316	Pc	40 41.30	1.1
UCC	87.08	329	P	40 43.00	1.7
			iS	51 06.00	
AAE	87.31	279	eP	40 45.80	2.4
SNF	87.31	329	P	40 42.40	0.0
CDF	87.39	326	eP	40 41.90	-1.1
	1.1s	41.50nm			5.5mb
FEL	87.39	325	eP	40 42.95	-0.1
DOU	87.47	329	P	40 41.00	-2.2
Z	20s	163.80um			7.4MszX
			S	51 06.00	
TNP	87.53	47	P	40 45.30	1.2
SAL	87.62	323	P	40 46.50	2.5
ORI	87.75	316	P	40 45.00	0.2
DUI	87.95	318	P	40 47.50	1.7
ROI	87.97	315	P	40 46.50	0.6
SFI	88.00	321	P	40 48.10	2.2
BSF	88.02	326	eP	40 44.40	-1.7
	0.8s	12.10nm			5.1mb
TDS	88.06	315	P	40 47.60	1.3
ASS	88.10	320	P	40 48.50	2.0
PGD	88.11	321	P	40 48.20	1.6
HAU	88.12	326	eP	40 45.00	-1.4
	0.8s	16.10nm			5.3mb
ISA	88.13	50	eP	40 46.00	-0.8
AQU	88.13	319	P	40 48.40	1.8
SGO	88.13	316	Pc	40 48.00	1.4
CRE	88.14	320	P	40 48.50	1.8
MGR	88.24	316	P	40 47.50	0.4
SDI	88.30	318	Pc	40 48.50	1.0
AZI	88.34	318	P	40 49.50	2.0
VAI	88.37	324	P	40 47.20	-0.4
CZI	88.45	315	P	40 45.20	-2.9X
MME	88.46	321	P	40 49.90	1.5
GRI	88.52	315	P	40 50.31	1.8
	1.4s	103.10nm			5.9mb
MNS	88.53	319	P	40 48.00	-0.5
BDI	88.60	321	P	40 48.00	-0.9
CLC	88.62	49	eP	40 50.00	0.9
BOB	88.75	322	Pc	40 49.80	0.2
PII	88.86	321	P	40 51.00	1.0
RDP	88.91	319	P	40 52.00	1.6
ORX	88.93	324	P	40 50.31	-0.2
ORO	88.94	324	P	40 50.50	0.0
DUG	88.98	43	P	40 52.70	1.8
SBB	89.12	50	eP	40 52.00	0.4
			e	44 20.00	
DMU	89.19	336	eP	40 52.90	1.5
SOI	89.20	314	Pc	40 53.40	1.7
PAS	89.21	51	iPc	40 51.62	-0.2
			epPd	41 09.66	64kmX
MWC	89.24	51	eP	40 52.00	-0.3
PCP	89.38	323	P	40 53.00	0.5
GSC	89.44	49	eP	40 52.00	-1.1
			e	44 15.00	
LSD	89.48	324	P	40 53.38	0.1
DLE	89.55	336	eP	40 56.20	3.1X
RSP	89.64	324	P	40 55.33	1.5
LPG	89.66	324	eP	40 52.90	-1.2
	0.8s	20.15nm			5.4mb
DCN	89.77	336	eP	40 56.30	2.2
FIN	89.78	323	P	40 53.54	-0.9
LOR	89.83	327	eP	40 53.20	-1.4
	0.5s	7.30nm			5.2mb
RVR	89.83	50	eP	40 55.00	0.2
ROB	89.90	323	P	40 53.92	-1.1
LBF	89.98	327	eP	40 53.60	-1.7
	0.8s	14.80nm			5.3mb
BNI	90.00	324	P	40 55.90	0.4
RRL	90.04	324	P	40 55.54	-0.3
SSF	90.15	327	eP	40 54.80	-1.2
	0.8s	14.80nm			5.3mb
IMI	90.15	323	P	40 54.30	-1.9
PZZ	90.16	323	P	40 54.05	-2.2
ENR	90.18	323	P	40 55.07	-1.3
STV	90.22	323	P	40 54.46	-2.1
SMF	90.29	327	eP	40 55.10	-1.6
	1.1s	39.05nm			5.6mb
ECB	90.38	336	eP	41 01.40	4.4X
ECP	90.38	335	eP	41 02.20	5.3X
AVF	90.41	327	eP	40 55.70	-1.5
	1.1s	45.20nm			5.7mb
SBF	90.43	323	eP	40 55.70	-1.7
	0.8s	21.50nm			5.5mb

17d 02h

PLM		90.55	51	eP	40 58.00	-0.4
				e	44 29.00	
LDF		90.67	330	eP	40 56.80	-1.6
		0.7s	20.95nm			5.6mb
FLN		90.70	330	eP	40 57.10	-1.4
BGF		90.82	327	eP	40 57.80	-1.3
		0.7s	7.70nm			5.2mb
RSON		90.86	26	P	40 59.00	-0.2
	Z	21s	8.70um			6.2Msz
PLDF		90.88	326	P	40 59.39	-0.1
FRF		91.05	323	eP	40 58.60	-1.6
AGO		91.05	327	P	41 00.04	-0.2
BAR		91.08	51	eP	41 00.00	-0.6
				e	44 38.00	
GRR		91.15	330	eP	40 59.50	-1.0
		0.8s	38.95nm			5.8mb
MAF		91.20	327	eP	40 59.80	-1.1
TCF		91.32	327	eP	41 00.50	-1.0
		0.7s	9.90nm			5.3mb
PYM		91.33	326	P	40 59.96	-1.6
LPF		91.50	330	eP	41 01.50	-0.7
		0.9s	49.15nm			5.9mb
LBL		91.59	326	P	41 02.98	0.4
LSF		91.67	327	eP	41 02.10	-0.9
		0.7s	12.70nm			5.4mb
GLA		92.10	50	eP	41 06.00	0.7
MFF		92.18	329	eP	41 04.50	-0.8
		1.0s	54.00nm			5.9mb
RJF		92.37	327	eP	41 05.30	-1.0
		1.0s	20.00nm			5.5mb
CAF		92.39	326	eP	41 05.70	-0.7
		0.9s	16.40nm			5.5mb
LPO		92.99	327	eP	41 08.30	-0.8
LFF		93.01	327	eP	41 08.50	-0.7
		0.8s	20.15nm			5.6mb
GOL		93.61	40	P	41 14.00	1.6
	Z	20s	3.75um			5.8Msz
GLD		93.66	40	P	41 14.80	2.2
NAI		94.04	271	eP	41 18.00	3.3X
SCH		94.65	10	eP	41 17.00	0.4
ANMO		96.22	44	iPDIFc	41 25.56	1.2
				epPd	41 43.44	63kmX
				eSS	59 04.99	
ALQ		96.22	44	iPc	41 25.30	0.9
		2.0s	139.71nm			6.1mb
	Z	19s	2.95um			5.8Msz
TOL		99.16	326	eP	41 38.00	0.7
				iPP	45 34.00	
				iSKS	52 15.00	
				eS	52 38.00	
				ePS	54 33.00	
				eSS	59 53.00	
AVE		106.00	324	ePKP	46 28.00	8.0X
BCAO		106.89	285	ePdiff	42 23.00	10.7X
		0.9s	7.00nm			
				ic	46 20.70	
KRI		107.58	260	ePKP	46 29.30	5.7X
BUL		109.86	258	iPKPc	46 27.90	0.1
		1.0s	90.00nm			
SLR		112.41	252	ePKP	46 32.00	-0.5
BLF		115.39	250	ePKP	46 38.00	-0.2
HVD		116.48	248	iPKPc	46 29.50	-10.7X
SPA		119.37	180	iPKPc	46 44.20	-0.3
		0.9s	32.73nm			
	Z	20s	3.24um			6.0Msz
SHGH		121.05	298	ePKP	46 52.00	2.9X
KOGH		121.11	299	ePKP	46 50.00	0.7
KUK		121.14	299	ePKP	46 50.00	0.7
WEGH		121.48	298	ePKP	46 50.50	0.5
WIGH		121.85	298	ePKP	46 51.00	0.3
CER		122.34	247	iPKPd	46 51.00	-0.1
LKO		122.74	306	PKP	46 52.30	-0.1
KIC		124.30	302	PKP	46 55.28	-0.1
		1.1s	50.00nm			
TIC		124.32	303	PKP	46 55.02	-0.4
		1.3s	49.50nm			
LIC		124.60	303	PKPc	46 55.74	-0.2
		1.3s	76.00nm			
	Z	20s	2.25um			5.8Msz
TOV		136.19	30	ePKP	47 18.50	0.3
NNA		148.99	62	ePKPd	47 40.63	0.3
ARE		155.81	62	iPKPd	47 53.20	2.9X
LPB		158.41	57	PKP	47 56.40	2.7
		2.0s	270.59nm			
				LR	44 20.00	
CCH		160.38	56	PKP	47 58.00	2.3
				i	48 38.00	

BAO 166.12 355 ePKP 48 05.00 4.2X
S.D. = 1.1 on 402 of 421 obs.

FEB 17, 1990 02h 50m 56.55± 0.17s
15.835 N ± 3.3km 147.197 E ± 4.1km
DEPTH = 31.9km (2 depth phases)
5.6mb (29 obs.) 5.6Msz (3 obs.)
MARIANA ISLANDS REGION (215)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 20C
Centroid Location:
Origin Time 02:50:54.5 1.8
Lat 15.94N 0.15 Lon 147.43E 0.22
Dep 15.0 FIX Half-duration 2.3
Moment Tensor; Scale 10**17 Nm
Mrr=-2.01 0.28 Mtt= 1.28 0.37
Mff= 0.73 0.45 Mrt=-0.99 1.12
Mrf=-1.19 1.27 Mtf= 1.57 0.30
Principal Axes:
T Val= 3.06 Plg=17 Azm=139
N -0.55 7 46
P -2.51 72 294
Best Double Couple:Mo=2.8**17
NP1:Strike=240 Dip=29 Slip= -75
NP2: 43 62 -98

GUMO		3.17	226	e(P)	51 46.50	1.1
PJG		3.17	226	eP	51 46.00	0.6
GUA		3.18	224	eP	51 45.30	-0.2
				eS	52 22.50	
JAY		19.33	200	ePc	55 24.30	2.0
				e	56 14.00	
RAB		20.50	166	e(P)	55 33.50	-1.2
KAKJ		21.23	344	eP	55 40.00	-2.0
IIDJ		21.25	339	P	55 41.90	-0.5
KAGJ		21.34	319	P	55 44.30	1.1
CHJJ		21.42	342	P	55 41.90	-2.1
TSRJ		22.04	335	eP	55 51.20	1.1
MAT		22.12	340	eP	55 50.00	-1.0
		0.7s	76.71nm			5.2mb
				(S)	59 46.00	
MTMJ		22.29	340	P	55 51.00	-1.8
KUMJ		22.30	321	eP	55 55.10	2.4
NIIJ		22.52	343	P	55 54.90	0.0
DAV		22.88	250	eP	56 00.10	1.4
YAMJ		23.13	346	P	56 01.70	0.8
OFUJ		23.66	349	P	56 07.60	1.6
PMG		25.08	180	eP	56 19.00	-0.9
		0.7s	130.14nm			5.6mb
QCP		25.23	271	eP	56 22.10	0.8
AOMJ		25.34	348	eP	56 25.50	3.4X
BAG		25.57	275	eP	56 24.90	0.2
SSE		28.18	307	Pd	56 46.00	-2.3
MDJ		32.32	336	eP	57 24.50	-0.4
MTN		32.63	210	eP	57 27.00	-0.8
WHN		33.41	302	eP	57 34.00	-0.5
CN2		33.45	331	Pc	57 34.50	-0.2
TIA		33.58	313	eP	57 38.80	2.9
CTA		35.71	182	iPc	57 54.00	-0.3
		1.9s	331.58nm			5.9mb
QIZ		35.74	281	eP	57 57.10	2.5
BJI		36.19	318	eP	57 58.00	-0.2
		1.5s	79.00nm			5.4mb
QIS		36.93	192	eP	58 04.00	-0.5
TIY		37.60	312	eP	58 10.60	0.4
WB5		37.67	200	eP	58 09.60	-1.2
WRA		37.73	200	Pc	58 13.70	2.3
		1.7s	101.10nm			5.4mb
XAN		38.87	305	P	58 20.20	-0.7
HHC		39.63	316	P	58 28.00	0.8
BTO		40.56	315	eP	58 34.10	-0.7
ASPA		41.35	199	iPc	58 41.30	-0.1
		1.3s	33.00nm			4.9mb
	Z	22s	0.00um			2.1MszX
				iS	04 53.80	
				LR	15 32.40	
DZM		42.13	153	iPc	58 47.80	0.0
QLP		42.26	184	eP	58 47.00	-1.7
CD2		42.33	299	eP	58 49.00	-0.4
KMI		42.50	290	Pc	58 52.00	0.9
BRS		43.31	173	iP	58 57.50	0.2
LZH		43.45	306	Pd	58 59.50	0.9
		2.0s	140.00nm			5.4mb
				pP	59 10.00	36km
LOE		43.52	279	eP	58 59.00	-0.2
MBL		45.53	217	eP	59 14.00	-1.2

		0.5s	11.00nm			5.0mb
ADK		45.99	31	eP	59 18.50	0.0
CHG		46.05	281	ePd	59 20.00	0.5
		0.9s	49.58nm			5.4mb
BDT		46.13	279	eP	59 18.00	-2.0
		0.7s	47.30nm			5.5mb
SNG		46.36	265	eP	59 23.10	1.2
COO		46.36	174	eP	59 22.00	0.3
IPM		46.69	261	ePc	59 26.70	2.1
CMS		47.07	182	eP	59 27.00	-0.2
GTA		47.44	309	P	59 30.60	0.2
	Z	18s	5.00um			5.5Msz
	E	14s	2.80um			
BWA		49.99	179	eP	59 50.00	0.1
CAN		50.90	178	eP	59 57.00	0.2
CNB		50.91	178	eP	59 57.90	1.0
ADE		51.16	189	eP	59 59.50	0.7
		1.2s	128.13nm			5.8mb
COOL		52.78	208	eP	00 10.00	-1.0
BFD		52.91	185	eP	00 14.00	2.2
LSA		53.03	295	P	00 14.50	0.9
TOO		53.14	182	eP	00 14.00	0.4
BAL		54.71	212	eP	00 24.00	-1.2
KLB		54.97	211	eP	00 27.00	-0.1
MUN		56.06	212	eP	00 34.00	-0.9
NWAO		56.32	210	eP	00 36.00	-0.8
WMQ		57.27	312	iPc	00 43.50	-0.2
	Z	15s	2.20um			5.4MszX
				pP	00 52.00	28km
GUN		57.65	293	P	00 46.40	-0.5
PKI		58.08	293	P	00 49.00	-0.9
KKN		58.18	293	P	00 49.80	-0.7
DMN		58.34	293	P	00 51.00	-0.6
GKN		58.74	293	P	00 53.20	-1.1
SVW		60.63	28	eP	01 06.50	-0.1
KDC		61.02	32	eP	01 08.10	-1.1
TTA		61.16	26	P	01 09.50	-0.7
		1.2s	60.61nm			5.6mb
WEL		62.30	157	P	01 16.00	-2.0
MSZ		63.10	164	P	01 22.00	-1.2
IMA		63.32	23	eP	01 24.40	-0.2
		1.3s	69.60nm			5.6mb
PMR		63.75	29	eP	01 26.00	-1.3
		1.3s	141.50nm			5.9mb
NDI		65.23	295	iPc	01 37.00	-0.5
TOA		65.24	28	eP	01 37.30	0.2
FBA		65.25	25	eP	01 36.30	-0.7
HYB		65.46	282	iPc	01 38.70	-0.5
GBA		67.22	278	Pd	01 47.60	-2.8
		1.0s	13.70nm			5.0mb
KOD		67.91	275	eP	01 55.00	-0.2
POO		69.67	284	eP	02 05.00	-0.6
SIT		70.05	35	P	02 07.20	0.0
		1.0s	40.00nm			5.4mb
INK		71.44	23	eP	02 15.00	-0.5
		1.2s	112.00nm			5.8mb
MBC		75.55	14	eP	02 39.50	0.1
		1.0s	46.00nm			5.4mb
GMW		78.51	44	P	02 57.30	1.0
LON		79.31	44	P	03 01.60	0.8
WDC		80.08	51	e(P)	03 05.40	0.5
PNT		80.21	42	ePd	03 06.00	0.5
		1.2s	126.00nm			5.8mb
LBFM		80.39	50	P	03 06.60	-0.3
MIN		80.82	51	eP	03 09.00	-0.1
ORV		81.08	51	eP	03 09.90	-0.4
ARN		81.56	54	P	03 12.40	-0.4
				pP	03 49.00	146kmX
PRS		81.92	55	eP	03 15.10	0.4
NEW		82.06	42	P	03 15.80	0.5
KBS		82.31	352	iPc	03 17.70	1.7
EDM		83.01	37	eP	03 20.50	0.4
		1.2s	139.00nm			5.9mb
FRI		83.06	54	eP	03 20.50	-0.1
KVN		83.76	51	eP	03 24.20	-0.2
TNP		84.69	52	P	03 29.50	0.4
		0.8s	18.14nm			5.3mb
PAS		85.01	56	eP	03 31.00	0.5
MWC		85.08	56	eP	03 32.00	0.9
KEV		85.08	342	iP	03 31.20	1.1
SBB		85.14	55	eP	03 31.00	-0.2
SES		85.25	39	ePc	03 31.50	0.1
		1.3s	368.00nm			6.4mb
RVR		85.68	56	eP	03 34.00	0.1
GSC		85.77	55	eP	03 35.00	0.6
LRM		85.82	44	eP	03 34.90	0.3
PEC		85.88	56	P	03 35.20	0.3

IR2	85.91	306	eP	03	35.50	0.4
IR4	86.02	305	eP	03	37.50	1.8
IR7	86.12	306	eP	03	45.00	8.8X
IR1	86.14	306	eP	03	37.00	0.7
PLM	86.27	57	eP	03	37.00	0.0
SOD	86.52	340	iP	03	37.00	-0.4
BAR	86.62	57	eP	03	39.00	0.5
DAG	87.20	357	eP	03	40.50	0.0
	0.7s	29.45nm				5.6mb
DUG	87.34	49	P	03	42.60	0.6
GLA	87.99	56	eP	03	46.00	0.8
FFC	88.72	33	eP	03	48.00	-0.1
	1.3s	129.00nm				6.1mb
SUF	89.32	337	eP	03	49.00	-1.8
NUR	91.18	335	eP	04	00.00	0.5
RSSD	92.00	43	ePd	04	03.50	-0.4
GOL	92.86	47	P	04	09.60	1.6
	1.0s	45.00nm				5.9mb
GLD	92.95	47	P	04	10.60	2.3
	1.0s	65.00nm				6.0mb
ALQ	93.90	52	eP	04	13.70	0.9
	1.0s	20.00nm				5.5mb
UPP	94.32	337	iP	04	14.20	0.2
HFS	95.56	339	eP	04	17.90	-1.8
	2.1s	148.60nm				6.1mb
NB2	95.74	340	P	04	18.80	-1.8
	0.7s	3.90nm				5.0mb
FRB	96.00	15	eP	04	21.00	-0.6
SKO	103.81	321	ePdiff	04	57.50	0.4X
OHR	104.71	321	ePdiff	05	01.10	-0.1X
MEM	105.60	336	PKPc	09	26.70	8.7X
BUL	121.70	256	iPKPc	09	50.20	0.4
	1.0s	65.00nm				
IFR	124.27	332	iPKP	09	56.00	1.5
BCAO	125.36	287	iPKPc	09	57.50	0.6
	1.0s	15.00nm				
		id		10	15.90	
		ic		11	46.00	
ARE	142.87	96	ePKP	10	28.00	-1.9
LKO	143.09	311	PKP	10	25.30	-4.7X
RTCB	143.73	122	ePKPc	10	29.50	-1.2
CFA	144.15	122	e(PKP)	10	29.00	-2.4
KIC	144.53	306	PKPc	10	30.52	-1.9
	1.0s	79.00nm				
TIC	144.56	307	PKP	10	30.44	-2.1
	1.0s	75.00nm				
LIC	144.83	306	PKP	10	31.52	-1.4
	0.9s	90.00nm				
	Z 20s	0.75um				5.5Msz
LPB	146.12	96	PKPd	10	37.80	2.2
	1.2s	125.00nm				
	Z 22s	3.70um				6.1Msz
		LR		49	30.00	
MBO	146.13	332	iPKPc	10	38.20	3.2X
CYA	147.08	118	e(PKP)	10	38.00	1.7
CCH	148.04	98	PKP	10	41.00	2.5
S.D. = 1.1 on 144 of 151 obs.						

% FEB 17, 1990 03h 02m 21.92± 1.60s
11.023 N ± 9.3km 61.849 W ±17.2km
DEPTH = 33.0km (normal)
WINDWARD ISLANDS (95)
MD 2.7 (TRN).

TCE	0.34	164	eP	02	30.29	0.1
			eS	02	41.20	
TRN	0.58	130	eP	02	33.37	-0.2
			eS	02	46.08	
TPR	1.06	81	eP	02	39.82	-0.7
			eS	02	56.65	
BOT	1.12	83	eP	02	42.20	0.9
GRW	1.15	9	eP	02	41.72	0.0
			eS	02	56.20	
S.D. = 0.8 on 5 of 5 obs.						

FEB 17, 1990 03h 18m 36.26± 0.50s
15.920 N ± 8.0km 97.943 W ± 6.0km
DEPTH = 16.1km (3 depth phases)
4.8mb (22 obs.)
NEAR COAST OF OAXACA, MEXICO (66)

OXX	1.64	45	iP	19	05.50	0.7
ACX	2.07	297	iP	19	08.00	-2.8
			iS	19	41.00	
III	2.84	329	iP	19	22.50	0.5
			iS	20	05.00	
PSM	2.89	74	iP	19	22.00	-0.6
			(S)	20	03.00	
IIT	3.10	354	iP	19	27.50	1.8
			(S)	20	17.50	
PPM	3.20	348	iP	19	27.50	0.2
UNM	3.59	341	(P)	19	40.30	7.6X
			(S)	20	31.00	
CRX	3.84	335	(P)	19	45.00	8.7X
IIJ	4.16	336	iP	19	40.50	-0.4
			(S)	20	50.50	
MRX	4.87	321	eP	19	52.00	1.4
			(S)	20	35.00	
SCX	5.16	80	(P)	19	59.00	4.3X
TPX	5.57	100	(P)	20	00.00	-0.5
AGX	7.22	326	(P)	20	50.50	26.8X
UYO	18.44	9	e(P)	22	51.50	-1.3
FKO	19.27	1	eP	23	02.80	-0.2
SIO	19.80	4	e(P)	23	08.00	-0.9
TUL	20.00	5	eP	23	10.50	-0.5
	0.8s	18.20nm				4.5mb
			e	23	14.00	13km
			e	23	29.00	
			e	25	39.80	
RLO	20.33	7	e(P)	23	09.50	-5.0X
ALQ	20.43	340	iPd	23	10.30	-5.4X
	1.0s	28.25nm				4.6mb
			pP	25	45.40	
			sP	29	39.40	
ANMO	20.43	340	P	23	15.00	-0.7
	0.8s	18.66nm				4.5mb
GLA	22.90	321	eP	23	42.50	2.0
			e	23	47.90	19km
PLM	24.36	319	P	23	56.60	1.8
GOL	24.57	346	P	23	57.00	0.2
	0.8s	61.76nm				5.3mb
PEC	24.90	319	P	24	01.00	1.1
TNP	27.86	326	P	24	28.30	1.0
	0.8s	2.94nm				4.1mb
BW06	28.56	342	P	24	33.00	-0.7
KVN	29.04	326	P	24	38.40	0.5
LRM	32.20	341	eP	25	06.90	1.0
			e	27	37.20	
NEW	35.90	338	P	25	46.50	8.9X
	0.8s	6.16nm				4.6mb
SES	35.98	346	eP	25	38.00	-0.2
LON	36.59	332	P	25	43.20	-0.2
PNT	37.70	337	eP	25	53.00	0.4
FFC	38.85	356	eP	26	02.00	-0.2
	0.7s	21.00nm				5.0mb
EDM	39.15	345	eP	26	04.00	-0.7
SCH	45.67	25	eP	26	57.00	-0.8
FRB	51.91	16	eP	27	45.00	-0.9
INK	57.04	345	eP	28	22.00	-1.5
PMR	58.14	334	P	28	28.80	-2.4
	0.7s	5.09nm				4.7mb
BAO	58.44	120	eP	28	29.00	-5.1X
FBA	59.26	338	P	28	37.50	-1.5
	0.8s	4.31nm				4.6mb
MBC	61.38	354	eP	28	52.50	-0.8
	0.7s	20.00nm				5.4mb
FLN	83.01	41	eP	31	01.90	-0.2
	1.0s	14.00nm				5.1mb
LDF	83.29	41	eP	31	03.40	-0.1
	1.0s	14.00nm				5.1mb
MAL	83.41	54	iPc	31	06.00	1.6
ALOJ	83.55	53	iPc	31	06.20	0.9
ATEJ	83.67	54	iPc	31	06.60	0.6
ACHM	83.77	53	iPc	31	07.30	1.0
ASMO	83.77	53	iPc	31	07.00	0.6
APHE	83.92	53	iPc	31	08.00	0.8
LFF	84.91	45	eP	31	12.10	0.3
NB2	85.16	27	P	31	14.00	1.3
	0.9s	2.60nm				4.5mb
EPF	85.20	47	eP	31	13.70	0.4
RJF	85.32	44	eP	31	13.90	0.0
TCF	85.48	43	eP	31	14.40	-0.3
	1.0s	12.00nm				5.1mb
MAF	85.74	43	eP	31	15.60	-0.3
	0.8s	9.40nm				5.0mb
BGF	85.81	43	eP	31	15.70	-0.6
	1.1s	12.20nm				5.0mb
AVF	86.07	42	eP	31	16.80	-0.7
	1.0s	6.00nm				4.7mb
SSF	86.08	42	eP	31	17.20	-0.4
LOR	86.24	42	eP	31	18.20	-0.2
	0.9s	10.65nm				5.0mb
ENN	86.32	38	eP	31	20.00	1.3
	0.8s	9.00nm				5.0mb
			e	31	25.00	16km
SLL	86.33	28	ePKP	31	19.30	0.7
	0.5s	1.00nm				4.3mb
WTS	86.40	37	eP	31	20.00	1.0
	0.9s	5.00nm				4.7mb
LBF	86.41	42	eP	31	18.60	-0.7
HAU	87.56	41	eP	31	23.90	-0.9
	0.7s	5.50nm				5.0mb
SOD	87.70	19	eP	31	15.00	-10.1X
BSF	87.91	41	eP	31	25.50	-1.1
UPP	88.52	27	iP	31	29.30	0.2
SUF	90.38	22	eP	31	30.00	-7.8X
NUR	91.12	25	eP	31	35.00	-6.3X
WRA	130.25	257	PKP	37	48.00	-0.2
	0.8s	1.40nm				
HYB	146.70	6	ePKPd	38	18.00	-0.1
NNT	146.71	327	ePKP	38	19.50	1.4
GBA	150.31	9	PKPd	38	22.80	-0.9
	0.4s	0.40nm				
S.D. = 1.0 on 62 of 73 obs.						

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* FEB 17, 1990 03h 21m 07.94± 0.81s
15.944 N ±13.4km 98.064 W ± 8.6km
DEPTH = 19.6km (2 depth phases)
4.8mb (9 obs.)
OFF COAST OF GUERRERO, MEXICO (65)

OXX	1.71	48	iP	21	37.00	-0.2
ACX	1.95	298	iP	21	45.00	4.5X
			iS	22	14.00	
III	2.77	331	iP	22	02.50	10.2X
			iS	22	39.00	
PSM	3.00	75	eP	21	57.00	1.6
UNM	3.53	343	(P)	22	17.00	13.7X
			(S)	22	50.00	
IIJ	4.09	337	(P)	22	25.00	13.6X
SCX	5.27	81	(P)	23	02.50	34.9X
ANMO	20.37	340	P	25	46.20	-0.1
	1.0s	40.00nm				4.7mb
GLA	22.81	321	eP	26	12.40	1.6
			pP	26	17.90	20km
PLM	24.27	319	eP	26	26.90	1.7
			e	26	32.40	20km
GOL	24.51	346	P	26	29.20	1.6
	1.0s	120.00nm				5.5mb
PEC	24.81	320	P	26	29.50	-0.7
TNP	27.77	326	P	26	58.50	0.7
	0.8s	2.21nm				3.9mb
KVN	28.95	327	P	27	08.70	0.3
NEW	35.84	338	P	28	07.80	-0.4
	0.8s	5.50nm				4.5mb
PNT	37.63	337	eP	28	24.00	0.7
	1.0s	22.00nm				4.9mb
FFC	38.82	356	iPc	28	32.20	-0.9
	1.0s	37.00nm				5.1mb
EDM	39.09	345	iPd	28	35.50	0.0
CCH	45.68	135	eP	29	30.00	0.1
SCH	45.69	25	eP	29	28.00	-1.2
INK	56.99	345	eP	30	53.00	-1.3
PMR	58.07	334	P	31	01.40	-0.5
	0.8s	6.90nm				4.7mb
FBA	59.19	338	P	31	08.00	-1.8
	0.9s	6.25nm				4.7mb
MBC	61.34	354	eP	31	23.50	-0.8
	1.0s	33.00nm				5.4mb
ALOJ	83.63	53	iPd	33	36.80	-0.1
ATEJ	83.75	54	iPd	33	37.50	0.0
ASMO	83.85	53	iPd	33	38.00	0.1
HYB	146.68	6	ePKP	40	49.00	-0.2
GBA	150.31	9	PKPd	40	58.80	4.0X
	0.4s	2.70nm				
S.D. = 1.0 on 23 of 29 obs.						

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* FEB 17, 1990 03h 42m 59.67± 0.94s
16.329 N ±13.4km 97.881 W ± 7.9km
DEPTH = 33.0km (normal)
4.8mb (11 obs.)
OAXACA, MEXICO (60)

OXX	1.34	56	iP	43	24.53	2.1
			(S)	43	39.68	
ACX	1.97	286	iP	43	33.68	2.3
			iS	44	03.25	
III	2.54	324	eP	43	46.00	6.4X
			(S)	44	29.00	
IIT	2.71	351	iP	43	50.96	8.9X
			iS	44	32.29	

17d 03h

PSM	2.75	82	(P)	43 41.00	-1.5
			(S)	44 36.00	
PPM	2.81	345	(P)	43 45.80	2.0
			iS	44 36.50	
UNM	3.23	338	(P)	43 58.00	8.4X
			(S)	44 51.00	
CRX	3.51	331	eP	43 57.00	3.5X
			(S)	44 14.00	
IIC	3.66	339	(P)	44 05.25	9.6X
			(S)	45 05.96	
IIJ	3.82	333	(P)	44 06.00	8.0X
			(S)	45 08.00	
MRX	4.60	317	(P)	44 19.74	11.0X
			(S)	45 20.00	
SCX	5.05	85	(P)	44 17.00	1.9
			(S)	45 48.00	
TPX	5.60	104	(P)	44 23.00	0.2
AGX	6.92	324	(P)	45 03.50	22.1X
UYO	18.03	9	e(P)	47 05.00	-4.3X
FKO	18.86	1	e(P)	47 18.80	-0.8
SIO	19.39	4	eP	47 25.50	-0.3
TUL	19.59	5	eP	47 28.40	0.3
	1.0s		74.30nm	4.9mb	
			e	47 33.40	
RLO	19.92	7	e(P)	47 30.70	-0.8
ALQ	20.07	339	iPc	47 33.80	0.5
	1.0s		36.25nm	4.7mb	
ANMO	20.07	339	P	47 34.00	0.7
	0.9s		26.26nm	4.6mb	
GOL	24.19	346	P	48 15.50	1.1
	0.9s		81.44nm	5.3mb	
BW06	28.19	342	P	48 51.30	-0.2
RSSD	28.19	351	e(P)	48 52.20	0.7
LRM	31.83	341	eP	49 24.10	0.2
NEW	35.55	338	P	49 55.20	-0.5
	0.8s		5.72nm	4.6mb	
SES	35.60	346	eP	49 56.00	-0.2
LON	36.26	332	P	50 01.50	-0.3
PNT	37.35	336	eP	50 11.00	0.2
	0.9s		18.00nm	4.9mb	
FFC	38.45	356	iPc	50 20.00	0.0
	0.8s		25.00nm	5.1mb	
EDM	38.77	345	ePc	50 22.10	-0.6
SCH	45.27	25	eP	51 15.00	-0.8
INK	56.67	345	eP	52 41.00	-0.8
PMR	57.81	334	P	52 47.50	-2.4
	0.7s		5.45nm	4.7mb	
FBA	58.91	338	P	52 55.40	-2.2
	0.8s		4.31nm	4.6mb	
MBC	60.98	354	ePc	53 10.50	-1.1
	1.0s		41.00nm	5.5mb	
MAL	83.13	54	eP	55 23.30	-0.6
NB2	84.77	28	P	55 31.20	-0.5
	1.1s		4.10nm	4.5mb	
GKN	135.86	357	PKP	02 00.00	-19.7X
HYB	146.28	6	ePKP	02 41.50	3.2X
GBA	149.90	9	PKPc	02 45.50	1.6
	0.8s		7.50nm		

S.D. = 1.2 on 30 of 41 obs.

& FEB 17, 1990 03h 46m 03.50s
34.350 N 117.210 W
DEPTH = 5.0km
SOUTHERN CALIFORNIA (43)
<PAS-P>. ML 3.2 (PAS). Felt (III) at Crestline, Lake Arrowhead, San Bernardino and Victorville.

RVR	0.38	201	iPc	46 10.80	-0.4
PEC	0.46	175	iPc	46 12.30	-0.4
SBB	0.61	304	iPd	46 14.80	-0.9
MWC	0.71	260	iPc	46 16.80	-1.0
PAS	0.82	256	iPc	46 18.70	-1.2
GSC	1.01	19	iPc	46 22.30	-0.8
PLM	1.04	164	iPd	46 22.60	-1.0
CIS	1.37	227	iP	46 27.80	-1.4
GLA	2.37	122	eP	46 41.60	-2.1
BCH	2.51	290	e(P)	46 44.50	-1.2
BLP	2.64	275	eP	46 46.40	-1.1
TNP	3.72	360	e(P)	47 00.70	-2.4
ARN	4.61	312	eP	47 13.30	-2.2
KVN	4.75	352	eP	47 16.30	-1.3

14 obs. associated

• FEB 17, 1990 04h 44m 37.37± 0.41s
8.333 N ± 7.8km 126.707 E ±11.9km
DEPTH = 33.0km (normal)
4.5mb (6 obs.) 4.0Msz (1 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

QIZ	19.51	305	eP	49 04.70	-0.3
MTN	21.50	168	iPd	49 25.50	-0.1
SSE	23.23	348	P	49 44.10	1.6
	Z 20s		0.50um	4.0Msz	
LOE	25.94	293	eP	50 11.00	2.3
CHG	28.88	294	eP	50 36.00	0.5
WB5	29.03	165	eP	50 37.80	1.0
			eS	54 50.00	
WRA	29.09	165	Pc	50 36.10	-1.2
	0.5s		1.80nm	4.0mb	
XAN	30.38	330	eP	50 46.50	-2.2
QIS	31.39	156	iPc	50 56.90	-0.8
ASPA	32.57	168	eP	51 08.70	0.7
	0.6s		7.00nm	4.7mb	
			eS	56 13.10	
BJI	32.95	345	eP	51 10.00	-1.0
SNY	33.47	356	Pc	51 15.70	0.1
CN2	35.35	358	eP	51 31.00	-0.7
MDJ	36.23	3	Pd	51 40.00	0.8
GTA	39.22	326	Pc	52 03.80	-0.7
GUN	43.14	302	P	52 37.70	0.6
PKI	43.43	302	P	52 39.50	0.1
BRS	43.57	145	iP	52 40.00	-0.2
KKN	43.60	302	P	52 40.80	0.1
DMN	43.69	301	P	52 41.20	-0.3
GKN	44.21	302	P	52 45.40	-0.2
GBA	48.59	281	Pd	53 23.80	3.7X
	0.6s		1.70nm	4.3mb	
KEV	85.59	340	eP	57 14.00	0.6
INK	85.92	22	eP	57 17.00	2.0
SUF	87.46	333	eP	57 22.00	-0.6
MBC	87.49	13	eP	57 24.00	1.4
	1.0s		6.00nm	4.8mb	
NUR	88.69	331	eP	57 28.00	-0.5
HFS	93.95	332	eP	57 51.50	-1.5
	0.7s		1.30nm	4.5mb	
NB2	94.68	334	P	57 54.70	-1.7
	0.8s		2.00nm	4.6mb	

S.D. = 1.1 on 28 of 29 obs.

& FEB 17, 1990 05h 39m 19.00s
63.515 N 150.038 W
DEPTH = 10.1km
CENTRAL ALASKA (1)
<AGS-P>. ML 3.4 (PMR).

KTH	0.40	276	iP	39 26.33	-0.8
MCK	0.54	66	eP	39 29.36	-0.5
RND	0.54	101	iP	39 29.55	-0.5
			eS	39 37.15	
HUR	0.57	161	iP	39 30.47	-0.1
CUT	1.12	186	iP	39 40.69	0.7
			eS	39 55.35	
NEA	1.15	21	eP	39 39.80	-0.6
			eS	39 54.44	
WRH	1.29	41	eP	39 42.13	-0.7
CCB	1.50	40	eP	39 45.17	-0.8
			eS	40 06.29	
RDS	1.56	31	eP	39 46.14	-0.6
			eS	40 07.05	
HDA	1.63	55	eP	39 47.89	0.1
SKT	1.69	205	eP	39 49.25	0.6
FBA	1.70	34	eP	39 48.00	-0.9
GHO	1.82	163	eP	39 50.91	0.2
PWA	1.87	178	iPc	39 51.90	0.6
GLM	1.88	37	eP	39 50.53	-0.9
DDM	1.88	80	eP	39 52.39	0.8
PLRM	1.98	167	eP	39 53.33	0.5
PMR	1.98	167	iPd	39 53.30	0.5
DMW	1.99	72	eP	39 55.12	2.1
SUA	2.08	189	eP	39 55.31	0.8
TOA	2.27	127	iPc	39 58.60	1.4
PMS	2.29	174	eP	39 58.20	0.8
NCG	2.34	206	eP	39 58.59	0.4
CGLM	2.40	203	eP	39 59.48	0.6
CRP	2.46	205	eP	40 00.64	0.7
			eS	40 34.28	
BGL	2.51	207	eP	40 01.78	1.2
SPU	2.52	203	eP	40 01.04	0.3
CKL	2.56	206	eP	40 02.36	1.0
			eS	40 37.95	
TTA	2.77	260	eP	40 10.72	6.5
			eS	40 45.02	
NKA	2.84	192	eP	40 08.55	3.4
IMA	3.00	330	eP	40 06.20	-1.3
SLKM	3.02	182	eP	40 09.27	1.5
RDT	3.16	202	eP	40 10.50	0.8
RED	3.36	204	eP	40 13.59	0.9
SEW	3.44	175	eP	40 16.42	2.8
NNL	3.54	190	eP	40 18.06	3.0
SVW	3.55	230	eP	40 18.56	3.2
CNPM	4.04	189	eP	40 24.79	2.5
PDB	4.23	210	eP	40 24.50	-0.4
DWY	4.74	79	P	40 31.00	-1.1
CDD	4.92	202	eP	40 36.88	2.2
PCA	5.77	122	eP	40 47.50	0.8
KDC	5.91	193	e(P)	40 48.00	-0.6

43 obs. associated

• FEB 17, 1990 05h 52m 04.57± 0.74s
50.626 N ±14.1km 175.116 E ± 9.0km
DEPTH = 33.0km (normal)
4.3mb (4 obs.)
RAT ISLANDS, ALEUTIAN ISLANDS (6)

SMY	2.20	344	eP	52 38.00	-1.5
ADK	5.30	73	eP	53 21.30	-2.1
PWA	22.11	47	eP	56 58.20	-0.1
IMA	22.17	34	eP	57 00.70	1.7
	0.9s		4.80nm	3.9mb	
TOA	23.92	46	eP	57 17.50	1.4
INK	30.29	35	eP	58 14.00	-0.3
MBC	35.74	22	eP	59 02.50	0.9
	0.7s		8.00nm	4.8mb	
EDM	42.50	58	iPc	59 58.20	0.2
	0.5s		12.00nm	4.9mb	
GUN	68.50	288	P	03 06.20	0.1
KKN	68.95	288	P	03 08.60	-0.1
PKI	69.03	288	P	03 09.20	-0.1
GKN	69.19	289	P	03 09.80	-0.2
DMN	69.19	288	P	03 10.20	0.0
WRA	78.91	219	P	04 06.00	0.0
	0.6s		0.50nm	3.7mb	

S.D. = 1.1 on 14 of 14 obs.

• FEB 17, 1990 06h 37m 03.30± 0.90s
38.781 N ± 7.4km 26.584 E ±13.2km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
MD 3.0 (ATH).

PRK	0.52	332	ePg	37 13.50	-0.4
			eSb	37 21.30	
IZM	0.65	125	ePn	37 16.00	-0.4
EZN	1.06	349	ePn	37 23.60	0.3
SMG	1.09	169	ePb	37 24.00	0.3
BNT	1.88	33	ePn	37 36.00	0.2

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

• FEB 17, 1990 06h 37m 55.95± 0.56s
14.422 N ±11.7km 119.392 E ±13.4km
DEPTH = 33.0km (normal)
4.6mb (6 obs.)
LUZON, PHILIPPINE ISLANDS (249)

CHG	20.07	285	eP	42 30.00	0.4
BJI	25.68	354	eP	43 24.00	-0.5
LZH	25.68	330	Pc	43 24.50	-0.4
	Z 14s		0.30um	4.0MszX	
			i	43 40.00	
GUN	33.89	299	P	44 37.20	-1.2
WB5	37.13	156	eP	45 05.10	-0.5
WRA	37.18	156	Pd	45 05.40	-0.6
	0.6s		2.70nm	4.3mb	
GBA	40.68	274	Pd	45 35.30	0.1
	0.9s		3.80nm	4.1mb	
CTA	43.29	142	iPd	45 57.20	0.7
	1.1s		17.72nm	4.7mb	
MAIO	57.42	304	eP	47 46.00	1.9
SOD	77.87	337	eP	49 56.00	4.4X
SUF	78.79	332	eP	49 53.00	-3.7X
NUR	79.90	330	eP	49 56.00	-6.7X
INK	82.88	21	eP	50 19.00	0.7
MBC	83.11	12	eP	50 20.00	0.7
	1.0s		6.00nm	4.7mb	
HFS	85.24	331	eP	50 38.50	8.2X
	0.7s		7.10nm	5.0mb	
NB2	86.04	332	P	50 33.00	-1.4
	1.0s		6.20nm	4.8mb	

S.D. = 1.0 on 12 of 16 obs.

FEB 17, 1990 07h 03m 09.03± 0.55s
38.718 N ± 4.8km 26.472 E ± 5.8km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
ML 3.7 (ATH).

PRK	0.55	344	iPgc	03	20.20	0.0
IZM	0.70	117	iPg	03	23.00	0.2
			iSg	03	32.70	
SMG	1.05	164	ePg	03	28.80	0.0
EZN	1.11	354	iPn	03	29.60	-0.3
APE	1.81	205	ePn	03	40.10	-0.4
DST	1.90	61	iPn	03	41.70	-0.1
EDC	1.95	33	iPn	03	42.00	-0.5
BNT	1.98	34	iPn	03	41.60	-1.4
ATH	2.29	252	ePg	04	01.50	14.1X
KHL	2.43	98	ePn	03	50.10	0.7
CTT	2.86	31	ePn	03	55.10	-0.3
PLG	2.87	306	ePb	04	06.00	10.4X
YLV	2.90	50	iPn	03	57.10	0.9
KDZ	3.04	345	iPd	03	58.00	0.0
			iS	04	30.00	
GBZT	3.09	47	ePn	04	15.80	17.1X
DMK	3.25	17	iPn	04	00.50	-0.6
RZN	3.26	336	iP	04	02.00	0.7
GPA	3.36	61	ePn	04	16.00	13.4X
DIM	3.40	348	eP	04	04.00	0.8
MMB	3.56	325	eP	04	05.00	-0.4
			eS	04	44.00	
PLD	3.64	339	eP	04	06.00	-0.6
			iSg	05	07.00	
VAY	3.97	312	ePn	04	15.00	3.8X
KKB	4.07	322	eP	04	11.00	-1.7
PGB	4.21	336	eP	04	17.00	2.3
PVL	4.58	350	eP	04	20.00	0.2
VTS	4.60	328	eP	04	20.00	-0.3
			iSg	05	37.00	
BBTK	5.01	75	eP	04	52.00	25.9X
PSN	5.12	14	eP	04	26.00	-1.6
MLR	6.78	357	ePc	04	53.50	2.4

S.D. = 1.1 an 23 of 29 obs.

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* FEB 17, 1990 07h 04m 15.82± 1.50s
36.819 N ±11.8km 71.513 E ± 9.8km
DEPTH = 104.6 ± 18.2 km
4.7mb (5 obs.)
AFGHANISTAN-USSR BORDER REGION (717)

KSH	4.40	52	ePn	05	23.50	1.9
			Sn	06	12.00	
NDI	9.42	148	eP	06	33.20	2.9
			eS	08	11.00	
MAIO	9.68	271	eP	06	34.00	0.1
			eS	08	13.00	
GKN	14.14	125	P	07	31.10	-1.5
WMQ	14.18	55	eP	07	30.50	-2.5
			eS	10	00.00	
KKN	14.70	124	P	07	37.90	-2.0
DMN	14.71	125	P	07	39.00	-1.0
	0.4s		24.00nm			4.8mb
PKI	14.93	124	P	07	42.10	-0.8
GUN	15.03	122	P	07	43.00	-1.2
HYB	20.30	160	eP	08	49.00	3.5X
SHL	20.68	117	iP	08	51.20	1.8
			eS	12	27.00	
GTA	22.38	75	iPc	09	08.20	2.0
GBA	23.72	166	Pc	09	28.10	9.0X
	0.4s		2.50nm			4.0mb
XAN	30.48	84	P	10	20.90	0.1
TIY	32.40	76	eP	10	38.40	0.8
SUF	37.87	328	eP	11	24.00	0.3
SSE	41.22	83	eP	11	53.00	1.2
HFS	43.07	322	eP	12	06.10	-0.4
	0.5s		11.50nm			4.9mb
Z	16s		0.04um			3.4MszX
			LR	31	48.00	
NB2	44.38	323	P	12	16.50	-0.6
	0.6s		4.00nm			4.4mb
MBC	67.00	3	ePc	14	58.00	-0.8
	0.5s		8.00nm			4.9mb
INK	73.53	9	eP	15	38.00	-0.3

S.D. = 1.6 on 19 of 21 obs.

& FEB 17, 1990 09h 01m 52.80s
59.343 N 152.857 W
DEPTH = 82.9km

SOUTHERN ALASKA (2)
<AGS-P>.

AUE	0.26	274	iP	02	04.98	-0.4
			eS	02	13.66	
AUL	0.30	278	iP	02	05.20	-0.4
			eS	02	15.08	
CDD	0.58	225	iP	02	06.78	-1.0
			eS	02	17.26	
XLV	0.59	79	iP	02	07.31	-0.5
			eS	02	19.25	
PDB	0.81	304	iP	02	09.23	-0.9
			eS	02	22.08	
CNPM	0.85	77	iP	02	09.89	-0.7
NNL	1.06	48	iP	02	13.42	0.4
			eS	02	28.62	
RED	1.08	2	iP	02	12.58	-0.8
			eS	02	28.25	
RDT	1.26	10	iP	02	14.69	-0.8
KDC	1.61	173	iP	02	18.26	-1.8
NKA	1.62	29	iP	02	21.12	0.9
SLKM	1.77	48	eP	02	21.12	-1.1
CKL	1.88	8	iP	02	23.09	-0.7
SEW	1.89	65	eP	02	22.47	-1.3
SPU	1.89	12	iP	02	23.07	-0.8
BGL	1.94	7	iP	02	23.99	-0.6
CRP	1.96	10	iP	02	24.36	-0.6
CGLM	2.02	12	iP	02	24.96	-0.7
NCG	2.10	9	iP	02	26.08	-0.7
SUA	2.37	25	iP	02	29.87	-0.7
PMS	2.52	39	iP	02	31.41	-1.0
			eS	03	00.85	
SKT	2.73	13	iP	02	33.97	-1.3
PWA	2.74	31	eP	02	34.90	-0.6
PLRM	2.91	38	iP	02	35.74	-2.1
GHO	3.12	37	eP	02	38.79	-1.9
			eS	03	13.79	
CUT	3.32	21	eP	02	42.12	-1.4
TOA	4.29	47	eP	02	55.15	-2.0
RND	4.51	24	eP	02	57.88	-2.3

28 obs. assaciated

? FEB 17, 1990 10h 00m 49.14± 0.94s
42.319 N ± 8.5km 19.109 E ± 7.1km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.2 (TTG).

TTG	0.16	45	iPgc	00	52.90	0.1
			iSg	00	56.50	
BDV	0.21	261	ePg	00	54.30	0.6
			eSg	00	59.10	
ULC	0.37	163	ePg	00	56.60	-0.2
			eSg	01	03.00	
HCY	0.47	286	ePg	00	58.20	-0.5

S.D. = 0.8 an 4 of 4 obs.

FEB 17, 1990 12h 00m 19.73± 0.63s
40.767 N ± 6.2km 27.478 E ± 5.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

MFT	0.15	277	iPg	00	23.80	0.5
EDC	0.51	145	iPg	00	30.00	-0.1
			iSg	00	38.80	
BNT	0.53	140	iPg	00	30.80	0.3
			iSg	00	38.80	
CTT	0.81	62	ePg	00	35.80	0.3
DMK	1.07	11	iPg	00	39.60	-0.3
			iSg	00	53.60	
ISK	1.23	76	ePn	00	42.00	-0.7
EZN	1.29	224	ePn	00	41.80	-1.8
YLV	1.46	97	iPn	00	45.30	-0.8
DST	1.46	142	ePn	00	48.00	1.9
RZN	2.28	295	eP	00	59.00	0.9

S.D. = 1.1 an 10 of 10 obs.

FEB 17, 1990 12h 31m 37.15± 0.42s
41.635 N ± 7.8km 144.090 E ± 6.0km
DEPTH = 30.9km (2 depth phases)
5.0mb (39 obs.) 4.3Msz (3 obs.)
HOKKAIDO, JAPAN REGION (224)

MAT	6.84	224	iPc	33	18.10	0.2
	0.7s		33.56nm			5.4mb
			(S)	34	28.00	
MDJ	11.01	291	eP	34	17.00	1.5
	Z	15s		0.50um		
CN2		13.88	285	Pd	34	53.00	-0.8
	Z	16s		2.10um			4.0MszX
	E	15s		3.00um			
SNY		15.32	278	Pc	35	12.10	-0.6
	Z	16s		1.30um			
	E	16s		1.10um			
DL2		17.35	268	eP	35	38.00	-0.5
		0.8s		100.00nm			5.0mb
BJI		21.15	275	eP	36	19.00	-2.7
		1.0s		40.00nm			4.8mb
	Z	14s		1.47um			4.5MszX
	E	14s		1.00um			
SSE		21.17	248	eP	36	27.00	5.0X
	Z	20s		0.50um			3.9Msz
	N	16s		0.60um			
TIA		21.62	264	eP	36	24.10	-2.5
NJ2		22.28	253	Pd	36	33.50	0.4
	Z	15s		0.60um			4.1MszX
HHC		24.40	279	eP	36	52.50	-1.4
	Z	18s		0.90um			4.3Msz
BTO		25.60	279	eP	37	05.00	-0.3
	N	14s		0.30um			
	E	14s		0.70um			
WHN		26.33	255	Pc	37	12.50	0.5
	Z	16s		0.60um			4.2MszX
XAN		28.64	266	P	37	33.30	0.3
LZH		31.61	273	Pd	38	00.00	0.5
	Z	15s		0.60um			4.4MszX
	E	14s		0.60um			
GTA		33.46	281	iPc	38	16.00	0.5
	Z	15s		0.90um			4.6MszX
	E	15s		0.80um			
CD2		33.96	265	eP	38	19.20	-0.6
GYA		34.21	256	P	38	22.20	0.0
KMI		37.86	257	Pc	38	53.50	0.4
WMQ		40.80	293	P	39	17.50	0.3
	Z	18s		0.80um			4.6Msz
IMA		41.69	33	eP	39	23.70	-0.6
		0.9s		12.50nm			4.6mb
PMS		43.55	40	eP	39	38.30	-1.1
FBA		44.13	35	eP	39	45.70	1.7
				e	39	54.20	28km
CHG		44.52	253	iPc	39	48.30	0.6
		0.9s		14.08nm			4.8mb
GUN		48.88	273	P	40	23.20	0.8
INK		49.36	29	eP	40	24.00	-1.1
				pP	40	34.00	34km
KKN		49.39	273	P	40	26.90	0.7
PKI		49.41	273	P	40	27.10	0.6
		0.8s		36.00nm			5.5mb
DMN		49.62	273	P	40	28.60	0.6
GKN		49.76	274	P	40	29.20	0.3
MBC		51.53	18	eP	40	40.50	-1.0
		0.5s		2.00nm			4.3mb
NDI		54.92	279	iPc	41	07.00	-0.3
KEV		59.89	339	eP	41	41.00	-0.9
HYB		60.44	267	eP	41	46.00	-0.4
DAG		61.37	356	iPd	41	49.80	-2.1
		0.8s		8.21nm			4.9mb
SOD		61.54	337	iP	41	52.00	-1.1
WB5		61.86	190	eP	41	54.90	-0.8
WRA		61.93	190	Pd	41	55.20	-1.0
		0.9s		5.30nm			4.7mb
EDM		64.48	41	eP	42	11.50	-1.3
SUF		64.81	333	iP	42	13.60	-1.1
		0.5s		8.30nm			5.1mb
NUR		66.87	332	iP	42	26.30	-1.6
		0.6s		13.00nm			5.2mb
FFC		68.73	35	eP	42	39.00	-0.7
		0.8s		12.00nm			5.0mb
NB2		70.73	338	P	42	50.70	-1.1
		0.9s		9.20nm			4.9mb
HFS		70.74	336	eP	42	50.10	-1.7
		0.5s		7.90nm			5.1mb
	Z	17s		0.17um			4.4MszX
				LR	15	00.00	
FRB		71.82	15	eP	42	56.00	-2.2
MLR		77.19	321	eP	43	30.00	0.4
KSP		77.26	329	iPd	43	30.00	0.3
				i	43	44.50	51kmX
CLL		78.11	331	iPc	43	34.20	-0.2
		1.0s		27.00nm			5.2mb
BRG		78.12	330	iP	43	34.40	0.0
		0.9s		12.00nm			4.9mb
PRU		78.61	329	Pd	43	37.80	0.6
HOF		79.34	331	eP	43	41.10	0.0

17d 12h

0.9s 13.00nm 4.9mb
KHC 79.68 329 iPc 43 43.80 0.8
1.0s 10.50nm 4.8mb
WET 79.93 330 eP 43 45.10 0.8
0.8s 15.00nm 5.0mb
ALO 80.08 52 eP 43 47.50 1.9
BHG 81.10 329 eP 43 51.60 1.1
0.9s 20.00nm 5.1mb
KBA 81.44 328 eP 43 52.50 -0.1
0.7s 5.20nm 4.7mb
e 51 12.00
VAY 81.94 320 eP 43 55.40 0.4
SKO 81.99 321 iP 43 56.30 1.0
CDF 82.57 333 eP 43 58.60 0.3
0.8s 6.70nm 4.8mb
BSF 83.23 333 eP 44 01.70 0.0
HAU 83.23 333 iPc 44 01.90 0.2
0.8s 6.70nm 4.8mb
LOR 84.71 334 eP 44 09.40 0.3
0.8s 9.40nm 5.0mb
LBF 84.92 334 iPc 44 10.40 0.2
0.9s 6.55nm 4.8mb
SSF 85.00 334 eP 44 10.90 0.3
0.9s 5.75nm 4.8mb
LPG 85.25 331 iPc 44 13.10 0.9
0.9s 19.65nm 5.3mb
SMF 85.26 334 iPc 44 12.10 0.2
0.9s 13.10nm 5.1mb
AVF 85.29 334 iPc 44 12.40 0.4
0.9s 15.55nm 5.2mb
TUL 85.35 45 e(P) 44 23.30 10.8X
1.0s 5.00nm
LR 19 38.00
LPF 85.54 337 eP 44 14.10 0.9
0.9s 14.75nm 5.2mb
BGF 85.66 334 iPc 44 14.80 0.9
0.8s 5.35nm 4.8mb
MAF 86.05 334 iPc 44 16.80 1.0
0.9s 21.30nm 5.4mb
TCF 86.11 335 eP 44 16.80 0.7
0.9s 8.20nm 5.0mb
LSF 86.36 335 iPc 44 18.20 0.9
0.9s 25.40nm 5.5mb
MFF 86.56 336 iPc 44 19.10 0.8
0.8s 10.75nm 5.1mb
RJF 87.20 335 iPc 44 22.40 0.9
0.9s 11.45nm 5.1mb
CAF 87.36 334 iPc 44 23.50 1.2
0.9s 16.40nm 5.3mb
LFF 87.78 335 iPc 44 25.30 1.1
0.9s 11.45nm 5.2mb
LPO 87.86 334 eP 44 25.70 1.1
1.0s 12.00nm 5.1mb
S.D. = 1.0 on 75 of 77 obs.

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* FEB 17, 1990 12h 38m 56.92± 0.89s
41.728 N ±14.4km 144.033 E ±11.7km
DEPTH = 29.7km (3 depth phases)
4.8mb (11 obs.)
HOKKAIDO, JAPAN REGION (224)

MAT 6.88 223 (P) 40 38.00 -0.3
(S) 41 46.00
MDJ 10.94 290 eP 41 37.00 2.6
CN2 13.81 285 Pd 42 11.80 -1.1
Z 16s 2.10um 4.0MszX
E 15s 1.70um
SNY 15.26 277 eP 42 31.30 -0.5
Z 16s 1.50um
E 16s 1.20um
BJI 21.10 275 eP 43 38.50 -2.7
1.3s 29.00nm 4.5mb
Z 15s 1.52um 4.5MszX
E 14s 1.09um
TIA 21.59 264 eP 43 43.80 -2.4
NJ2 22.27 252 Pc 43 55.50 2.6
WHN 26.32 254 eP 44 31.50 -0.3
1.0s 20.00nm 4.7mb
Z 16s 0.60um 4.2MszX
pP 44 40.00 30km
XAN 28.61 266 P 44 53.00 0.4
LZH 31.57 273 P 45 19.50 0.4
2.0s 33.00nm 4.9mb
Z 15s 0.80um 4.5MszX
E 15s 0.80um
GTA 33.40 281 eP 45 35.00 0.1
Z 15s 0.90um 4.6MszX

E 15s 0.80um
FBA 44.07 35 eP 47 04.40 0.9
e 47 13.50 30km
CHG 44.51 253 eP 47 08.00 0.4
GUN 48.83 273 P 47 42.50 0.5
INK 49.30 29 eP 47 43.00 -1.5
KKN 49.34 273 P 47 46.00 0.3
0.9s 51.00nm 5.6mb
PKI 49.36 273 P 47 46.00 0.0
DMN 49.57 273 P 47 47.60 0.1
GKN 49.71 274 P 47 48.40 -0.1
MBC 51.45 18 eP 48 00.50 -0.4
0.5s 2.00nm 4.3mb
SOD 61.44 337 eP 49 15.00 2.6
SUF 64.71 333 iP 49 32.50 -1.5
NUR 66.76 332 iP 49 46.00 -1.2
NB2 70.63 338 P 50 10.00 -1.2
0.9s 4.50nm 4.6mb
HFS 70.64 336 eP 50 10.00 -1.1
0.4s 4.80nm 4.9mb
KRA 76.32 327 eP 50 44.20 -0.2
CLL 78.01 331 eP 50 53.00 -0.7
1.3s 15.00nm 4.9mb
PRU 78.51 329 eP 50 56.50 -0.1
KHC 79.57 329 Pd 51 03.40 1.0
e 51 12.40 29km
LOR 84.60 334 eP 51 29.60 1.1
0.8s 5.35nm 4.8mb
LBF 84.81 334 eP 51 29.70 0.1
SSF 84.90 334 eP 51 30.40 0.4
LPG 85.15 331 eP 51 32.30 0.7
1.0s 10.00nm 5.0mb
AVF 85.19 334 eP 51 31.70 0.3
0.8s 3.35nm 4.6mb
LMR 87.10 330 eP 51 42.10 1.2
S.D. = 1.2 on 35 of 35 obs.

% FEB 17, 1990 13h 05m 24.09± 2.95s
10.936 N ±14.2km 62.057 W ±17.9km
DEPTH = 87.5 ± 30.4 km
NEAR COAST OF VENEZUELA (97)
MD 3.6 (TRN).

TCE 0.38 128 eP 05 37.99 0.1
eS 05 48.33
TRN 0.70 114 eP 05 40.52 -0.1
eS 05 52.74
TPP 0.86 136 eP 05 42.52 0.3
T8H 1.07 115 eP 05 44.12 -0.6
eS 06 01.00
PIG 1.21 79 eP 05 46.97 0.5
GRW 1.28 18 eP 05 47.08 -0.3
eS 06 09.00
TPR 1.28 79 eP 05 47.39 0.1
BOT 1.33 80 eP 05 47.78 -0.2
SVB 2.45 19 eP 06 03.00 0.1
eS 06 34.00
SVV 2.51 19 eP 06 03.30 -0.3
SLB 3.04 19 eP 06 11.40 0.4
eS 06 48.70
S.D. = 0.4 on 11 of 11 obs.

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* FEB 17, 1990 14h 01m 02.96± 0.91s
36.077 N ±15.2km 31.907 E ±19.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
ML 3.4 (CSS).

PPCY 1.24 163 eP 01 26.50 0.5
CSS 1.61 133 eP 01 31.00 -0.5
eS 01 52.50
BCK 1.74 323 ePn 01 33.70 0.2
ELL 1.75 293 ePn 01 33.00 -0.6
FAM 2.02 122 eP 01 46.50 9.1X
KHL 2.94 320 ePn 01 51.00 0.3
S.D. = 0.7 on 5 of 6 obs.

? FEB 17, 1990 15h 06m 36.46± 2.06s
31.520 S ±16.9km 69.043 W ±19.5km
DEPTH = 33.0km (normol)
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB 0.21 81 eP 06 47.50 4.2X
(S) 06 58.20
RTLL 0.53 69 iPd 06 48.00 0.5
eS 07 00.90
RTCV 0.55 128 eP 06 48.20 0.4
(S) 06 59.70
CFA 0.69 97 iPc 06 49.00 -0.8
S 07 02.00
RTRS 1.39 345 iPd 06 59.70 0.0
S.D. = 1.0 on 4 of 5 obs.

? FEB 17, 1990 15h 23m 20.65± 9.52s
36.739 N ±72.3km 2.528 E ±41.5km
DEPTH = 10.0km (geophysicist)
4.1mb (1 obs.)
ALGERIA (396)
mbLg 3.4 (MDD).

ACU 2.93 308 ePn 24 08.20 0.1
eSn 24 41.00
ESEL 3.04 5 ePn 24 09.80 0.2
eSn 24 44.00
ECHE 3.96 317 ePn 24 23.60 0.8
eSn 25 07.50
EBR 4.37 339 ePn 24 28.00 -0.6
e 25 33.00
e 25 40.00
EVIA 4.42 297 ePn 24 29.30 -0.1
eSn 25 18.80
TOL 6.05 303 ePn 24 52.00 -0.3
eSn 26 13.00
HFS 24.49 14 eP 28 44.50 3.8X
3.1s 741.90nm 5.8mb X
NB2 24.94 10 P 28.48.70 3.5X
0.7s 2.90nm 4.1mb
S.D. = 0.6 on 6 of 8 obs.

? FEB 17, 1990 16h 17m 50.28± 5.73s
31.180 S ±24.0km 68.588 W ±38.1km
DEPTH = 103.4 ± 56.8 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL 0.18 146 iPd 18 05.20 -0.2
eS 18 16.00
RTCB 0.36 211 eP 18 06.00 0.1
CFA 0.52 145 iPc 18 07.00 0.2
S 18 20.00
RTCV 0.68 176 ePc 18 08.00 -0.1
S 18 21.60
RTRS 1.26 323 iPc 18 14.10 0.0
eS 18 32.00
S.D. = 0.3 on 5 of 5 obs.

FEB 17, 1990 16h 30m 51.15± 0.87s
16.790 N ± 8.3km 61.807 W ±23.3km
DEPTH = 33.0km (normol)
LEEWARD ISLANDS (92)
ML 3.3 (FDF).

BPA 0.26 349 eP 30 58.75 0.3
eS 31 06.44
ANG 0.36 357 eP 30 59.34 -0.4
eS 31 07.13
SEG 0.48 143 eP 31 02.87 1.4
S 31 13.20
PAG 0.77 171 ePd 31 07.22 1.7
S 31 21.10
DOG 0.78 166 ePd 31 06.64 1.0
SFG 0.79 132 ePd 31 05.89 0.0
MGG 0.99 151 ePd 31 09.17 0.5
S 31 24.80
BBL 1.30 166 ePd 31 13.26 0.1
S 31 32.40
FDF 2.14 163 iPd 31 24.19 -1.1
S 31 51.30
CRM 2.20 157 iPd 31 24.48 -1.6
S 31 51.80
BIM 2.37 162 iPc 31 27.84 -0.7
S 31 58.10
MVM 2.39 158 iPc 31 27.60 -1.3
S 31 57.60
S.D. = 1.2 on 12 of 12 obs.

FEB 17, 1990 16h 46m 19.45± 0.54s
42.176 N ± 5.3km 15.551 E ± 5.6km
DEPTH = 10.0km (geophysicist)
ADRIATIC SEA (382)

DUI 0.96 238 P 46 37.70 -0.1
eSg 46 50.10
HVAR 1.20 33 iPg 46 42.10 0.3
iSg 47 00.10

SDI 1.38 251 P 46 44.50 -0.2
eSn 47 05.00
BAI 1.44 136 P 46 46.00 0.4
AZI 1.59 264 P 46 48.50 0.9
SGO 1.63 187 P 46 47.90 -0.3
eSn 47 09.30
BRT 1.79 136 P 46 50.50 -0.2
eSn 47 15.00
MGR 2.04 180 P 46 53.90 -0.3
VBY 3.33 356 e(Pn) 47 34.00 21.3X
e(Sn) 48 13.80
CEY 3.65 348 eP 48 02.50 45.3X
e 48 17.00
TRI 3.76 341 eP 48 06.00 47.3X
LJU 3.94 350 eP 47 33.00 11.8X
e(Sn) 48 08.00
VOY 4.04 343 e(Pn) 47 21.90 -0.8
eSn 48 11.90
S.D. = 0.6 on 9 of 13 obs.

? FEB 17, 1990 17h 37m 58.68±13.13s
14.448 N ±106.km 97.525 W ±30.7km
DEPTH = 33.0km (normal)
OFF COAST OF OAXACA, MEXICO (67)

OXX 2.73 16 iP 38 41.08 -0.2
iS 39 07.26
PSM 3.28 47 (P) 38 15.58 -33.5X
(S) 39 29.83
ACX 3.29 317 eP 38 49.09 -0.1
iS 39 17.93
III 4.33 335 iP 39 02.84 -1.2
iS 39 45.70
IIT 4.61 351 (P) 39 09.00 0.9
iS 39 51.78
PPM 4.71 347 iP 39 09.50 -0.3
iS 39 59.38
CRX 5.34 338 (P) 39 35.92 17.4X
iS 40 18.22
IIC 5.54 343 (P) 38 30.92 -50.4X
iS 40 24.55
IIJ 5.66 338 eP 39 28.72 5.5X
iS 40 22.00
MRX 6.29 327 (P) 39 32.50 0.9
(S) 40 44.00
S.D. = 1.0 on 6 of 10 obs.

FEB 17, 1990 18h 15m 54.54± 0.44s
36.457 N ± 6.5km 137.661 E ± 4.5km
DEPTH = 10.0km (geophysicist)
4.4mb (2 obs.) 4.2Msz (1 obs.)
HONSHU, JAPAN (227)

MTMJ 0.17 42 iP+ 15 58.00 -0.5
MAT 0.45 79 iPd 16 03.50 -0.2
iS 16 10.10
IIDJ 1.00 168 iP+ 16 13.50 0.1
S 16 27.10
CHJJ 1.15 110 iPd 16 15.70 -0.4
eS 16 33.50
TSRJ 1.64 236 iP+ 16 23.80 0.3
S 16 46.60
SHK 4.50 246 eP 17 05.00 0.8
MDJ 10.20 326 eP 18 25.00 1.0
Z 15s 1.70um
eS 20 18.00
CN2 11.87 312 Pc 18 47.00 0.2
Z 20s 0.70um
N 12s 0.50um
E 12s 0.40um
SNY 12.17 300 eP 18 51.40 0.5
Z 20s 1.00um 4.1MszX
N 14s 0.90um
E 18s 0.90um
SSE 14.70 253 P 19 27.00 2.7X
Z 14s 0.90um
N 12s 0.30um
E 12s 2.30um
TIA 16.55 275 eP 19 49.20 0.9
N 12s 0.50um
E 12s 0.50um
BJI 17.25 288 eP 19 56.50 -0.4
1.5s 26.00nm 4.1mb
TIY 20.15 281 eP 20 31.40 -0.3
N 14s 0.90um
WHN 20.29 260 eP 20 33.50 0.4
N 17s 1.77um

BTO 21.98 289 eP 20 47.60 -2.8
Z 12s 0.50um 4.1MszX
N 12s 0.30um
XAN 23.56 273 P 21 06.50 0.6
LZH 27.19 279 eP 21 38.50 -1.8
Z 20s 0.70um 4.2Msz
pP 21 42.00 12kmX
GTA 29.85 287 eP 22 03.60 -0.7
INK 56.26 27 eP 25 38.00 1.0
MBC 57.92 16 eP 25 48.50 -0.1
1.0s 7.00nm 4.6mb
KVN 77.48 51 eP 27 53.60 1.5
S.D. = 1.1 on 20 of 21 obs.

• FEB 17, 1990 18h 27m 31.98± 1.71s
16.744 N ±17.8km 98.529 W ±11.4km
DEPTH = 72.3 ± 12.4 km
3.7mb (2 obs.)
NEAR COAST OF GUERRERO, MEXICO (58)

ACX 1.28 276 iP 27 53.40 -1.1
iS 28 12.93
OXX 1.76 79 iP 28 01.84 0.7
iS 28 23.58
III 1.85 331 iP 28 01.79 -0.7
iS 28 25.21
IIT 2.27 5 eP 28 09.00 0.7
iS 28 37.84
PPM 2.31 358 iP 28 07.93 -1.1
iS 28 37.00
UNM 2.65 346 iP 28 13.30 -0.2
(S) 28 52.40
CRX 2.87 338 iP 28 18.00 1.4
iS 28 54.00
IIC 3.09 347 (P) 28 25.24 5.6X
(S) 28 58.30
IIJ 3.19 339 iP 28 24.95 3.7X
(S) 29 03.00
PSM 3.34 90 (P) 28 32.00 9.0X
(S) 29 14.05
MRX 3.88 320 (P) 28 31.60 1.1
(S) 29 19.65
SIO 19.03 6 eP 31 49.30 -1.8
TUL 19.24 7 eP 31 51.50 -1.9
1.0s 10.70nm 4.1mb
ALQ 19.46 340 eP 31 57.50 1.6
1.0s 2.50nm 3.4mb
INK 56.11 345 eP 37 07.00 1.2
S.D. = 1.5 on 12 of 15 obs.

% FEB 17, 1990 18h 31m 14.17± 1.20s
44.313 N ±12.2km 7.236 E ±13.3km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.8 (GEN).

STV 0.09 137 P 31 16.76 -0.1
S 31 18.30
ENR 0.16 123 P 31 17.89 0.0
S 31 20.35
PZZ 0.22 333 P 31 18.92 0.0
S 31 22.20
ROB 0.46 92 P 31 23.43 0.0
S 31 29.99
IMI 0.62 130 P 31 26.81 0.1
S 31 34.40
S.D. = 0.1 on 5 of 5 obs.

FEB 17, 1990 18h 36m 22.75± 0.50s
42.614 N ± 5.4km 16.551 E ± 5.8km
DEPTH = 10.0km (geophysicist)
ADRIATIC SEA (382)
ML 2.5 (TTG).

HVAR 0.57 352 iPgd 36 34.90 0.6
iSg 36 43.60
HCY 1.45 96 ePg 36 48.50 -0.5
eSg 37 08.40
eSg 01 06.00
BRY 1.50 78 ePg 36 49.20 -0.6
eSg 37 10.00
BAI 1.51 171 P 36 51.00 1.2
BDV 1.72 100 ePn 36 54.50 1.6
eSn 37 15.00
BRT 1.80 164 P 36 51.90 -2.2
eSn 37 14.30
TTG 2.01 94 ePn 36 57.70 0.6
eSn 37 23.50
SDI 2.23 247 P 37 00.80 0.5
MGR 2.59 197 P 37 04.90 -0.4
ASS 2.90 280 P 37 11.00 1.2
VBY 3.04 343 e(Pn) 37 35.80 24.1X
iSn 38 05.80
PTJ 3.31 353 e(Pn) 37 15.10 -0.6
e(Sn) 37 55.40
TRI 3.69 328 eP 38 02.70 41.7X
e 38 18.00
VOY 3.91 332 ePn 37 23.60 -0.6
eSn 38 06.70
FVI 4.80 327 P 37 35.90 -0.9
eSn 38 30.00
KBA 5.01 334 eP 37 40.00 0.1
0.5s 2.30nm 4.0mb
e 37 53.00
i(Sn) 38 36.50
i 39 13.00
S.D. = 1.1 on 14 of 16 obs.

• FEB 17, 1990 18h 42m 12.35± 1.14s
20.159 S ±11.5km 169.147 E ±18.6km
DEPTH = 33.0km (normal)
4.9mb (2 obs.)
VANUATU ISLANDS (186)

PVC 2.53 342 iPd 42 53.50 1.5
iS 43 22.50
DZM 3.16 233 iPd 43 00.20 -0.8
iS 43 35.00
HNR 13.88 319 eP 45 28.00 -1.1
RMQ 19.75 248 eP 46 45.00 2.5
CTA 21.50 266 eP 47 00.80 0.3
BWA 23.20 228 eP 47 17.90 0.6
eTT 05 35.00
ASPA 32.84 257 iPc 48 43.30 -2.0
0.7s 13.00nm 4.9mb
Z 22s 0.17um 3.7MszX
e 51 55.30
LR 01 10.50
SPA 69.97 180 iPc 53 22.40 0.0
1.1s 11.31nm 4.8mb
BJI 77.59 321 eP 54 06.00 -0.8
SKO 145.13 316 iPKP 01 46.60 -1.6
OHR 145.97 315 ePKP 01 49.80 0.1
BCAO 147.40 245 iPKPc 01 54.20 1.4
0.7s 16.00nm
LPG 150.85 334 iPKPc 02 02.90 5.4X
0.7s 9.90nm
PGF 152.10 328 iPKPc 02 05.10 5.9X
0.7s 14.35nm
S.D. = 1.5 on 12 of 14 obs.

& FEB 17, 1990 18h 48m 36.70s
36.815 N 121.557 W
DEPTH = 3.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.6 (BRK).

SAO 0.10 119 iPd 48 38.60 -0.2
PRS 0.51 163 iPd 48 46.20 -0.6
MHC 0.53 353 iPd 48 47.60 0.3
eS 48 54.10
ARN 0.53 2 iPd 48 47.30 -0.1
PCC 0.95 316 ePc 48 54.20 -1.2
eS 49 07.60
BKS 1.19 333 eP 48 58.40 -1.1
BRK 1.20 332 e(P) 48 57.60 -2.0
eS 49 16.30
FRI 1.49 83 ePc 49 03.00 -1.4
eS 49 22.50
KVN 3.53 50 eP 49 40.50 6.8
9 obs. associated

? FEB 17, 1990 18h 54m 06.34± 0.93s
40.839 N ± 8.6km 27.559 E ± 8.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

MFT 0.22 256 iPg 54 10.80 -0.3
iSg 54 13.30
BNT 0.56 150 ePg 54 18.00 0.4
CTT 0.73 65 ePg 54 20.00 -0.6
DMK 0.99 9 iPg 54 25.70 0.5
iSg 54 39.70
S.D. = 1.0 on 4 of 4 obs.

FEB 17, 1990 18h 58m 07.73± 0.38s
51.987 N ± 8.7km 169.549 W ± 4.5km
DEPTH = 33.0km (normal)
4.9mb (27 obs.)
FOX ISLANDS, ALEUTIAN ISLANDS (9)

ADK	4.42	271	eP	59	14.00	-0.1
KDC	11.38	53	eP	00	50.00	-0.9
TTA	13.13	28	eP	01	14.40	0.1
PMR	14.69	41	eP	01	35.00	0.4
IMA	16.23	24	eP	01	54.00	-0.7
FBA	17.10	33	eP	02	02.00	-3.5X
INK	23.73	33	eP	03	15.00	-2.1
MBC	30.93	21	eP	04	22.00	-1.1
	0.5s	2.00nm			4.2mb	
NEW	33.22	75	eP	04	42.00	-1.4
	0.8s	7.04nm			4.6mb	
EDM	33.41	65	iPc	04	44.80	-0.2
SES	35.85	69	eP	05	05.00	-1.0
KVN	37.52	89	eP	05	21.00	0.7
BW06	40.58	79	eP	05	46.00	0.2
CN2	43.01	286	Pc	06	04.00	-1.4
GOL	44.94	79	eP	06	20.80	-0.6
	0.8s	10.42nm			4.8mb	
RSON	45.28	60	eP	06	22.50	-1.1
	0.8s	8.01nm			4.7mb	
SNY	45.28	285	eP	06	23.30	-0.4
ANMO	47.31	85	eP	06	40.50	0.4
BJI	50.79	287	eP	07	06.50	0.0
TIA	52.72	283	eP	07	20.00	-1.2
HHC	52.96	291	eP	07	22.80	-0.2
SSE	53.72	276	P	07	29.00	0.4
BTO	54.01	292	eP	07	30.00	-0.7
NJ2	54.49	278	Pc	07	33.00	-1.2
TIY	54.51	288	Pd	07	34.80	0.3
KEV	57.97	353	eP	07	57.00	-1.7
WHN	58.30	280	eP	08	01.00	-0.4
XAN	59.10	287	P	08	06.50	-0.6
RSCP	59.44	70	eP	08	08.50	-0.9
SOD	60.34	353	iP	08	13.40	-1.7
GTA	60.56	297	Pc	08	15.40	-1.7
LZH	60.63	292	P	08	16.00	-1.7
CVL	61.82	64	eP	08	24.50	-1.0
WMQ	63.68	308	P	08	37.00	-0.9
CD2	64.38	288	eP	08	42.60	0.0
SUF	64.97	352	iP	08	45.10	-0.7
	0.4s	6.60nm			5.1mb	
GYA	65.91	283	P	08	52.80	0.3
NUR	67.28	352	iP	08	59.00	-1.6
NB2	67.32	360	P	08	59.50	-1.4
	0.7s	6.80nm			4.9mb	
HFS	68.20	358	eP	09	04.20	-2.2
	0.6s	12.40nm			5.2mb	
Z	17s	0.07um			4.0MszX	
		LR		36	10.00	
KMI	69.26	284	Pd	09	14.00	0.3
LSA	72.52	296	eP	09	35.00	1.4
CHG	76.32	283	eP	09	55.60	0.5
GUN	76.81	298	P	09	58.40	0.3
	0.4s	10.00nm			5.2mb	
CLL	77.06	358	iP	09	58.70	0.1
KKN	77.23	299	P	10	00.50	0.2
	0.5s	10.00nm			5.1mb	
PKI	77.33	299	P	10	01.00	0.0
GKN	77.41	299	P	10	01.10	-0.1
	0.7s	23.00nm			5.3mb	
DMN	77.47	299	P	10	02.00	0.4
BRG	77.47	358	e(P)	10	01.10	0.2
MOX	77.74	359	eP	10	03.00	0.6
PRU	78.34	357	P	10	05.80	0.1
KHC	79.23	358	iP	10	11.80	1.2
ZST	80.04	355	eP	10	15.00	0.1
HAU	80.33	3	eP	10	17.20	0.7
	1.1s	12.20nm			4.8mb	
BSF	80.51	2	eP	10	18.00	0.4
	1.0s	10.00nm			4.8mb	
NDI	80.74	305	eP	10	18.50	-0.5
LOR	80.96	5	eP	10	20.50	0.6
	1.0s	7.00nm			4.6mb	
SSF	81.15	5	eP	10	21.50	0.6
	1.0s	12.00nm			4.9mb	
LBF	81.25	4	eP	10	21.70	0.2
KBA	81.28	358	iPc	10	23.80	2.0
	0.9s	20.40nm			5.1mb	
		i		10	37.10	
MFF	81.37	7	eP	10	22.40	0.4
	1.1s	22.00nm			5.1mb	
AVF	81.41	5	eP	10	22.60	0.4
	1.1s	14.65nm			4.9mb	
SMF	81.58	5	eP	10	24.50	1.3
	1.1s	13.45nm			4.9mb	
BGF	81.62	5	eP	10	24.00	0.7
	0.8s	8.75nm			4.8mb	
FVI	81.78	358	P	10	25.50	1.4
LSF	81.84	6	eP	10	25.00	0.5
	1.1s	18.30nm			5.0mb	
TCF	81.85	6	eP	10	24.90	0.3
RBL	81.92	358	P	10	26.00	1.0
MAF	81.94	6	eP	10	24.70	-0.3
CTI	82.34	359	P	10	28.00	0.8
VAI	82.52	1	P	10	29.00	1.1
SAL	82.79	360	P	10	30.00	0.6
LPG	82.84	3	eP	10	32.00	1.9
	0.8s	4.70nm			4.6mb	
LFF	83.09	7	eP	10	31.60	0.6
CAF	83.20	6	eP	10	31.30	-0.3
	0.8s	4.05nm			4.6mb	
BNI	83.29	3	P	10	34.50	2.3
LPO	83.38	7	eP	10	32.90	0.4
BOB	83.62	1	P	10	35.50	1.7
BDI	84.33	360	P	10	37.00	-0.4
SBF	84.50	2	eP	10	39.10	0.9
	1.0s	22.00nm			5.3mb	
PGD	84.51	359	P	10	40.50	2.1
FRF	84.78	3	eP	10	40.50	1.0
	0.9s	13.10nm			5.1mb	
EPF	84.96	7	eP	10	39.70	-0.8
	0.9s	9.85nm			5.0mb	
LMR	85.00	3	eP	10	40.80	0.2
	0.9s	9.85nm			5.0mb	
ASS	85.30	358	Pd	10	44.00	1.7
W85	86.61	231	eP	10	48.80	0.0
HYB	89.22	298	ePc	11	01.50	-0.1
ASPA	90.06	230	iPc	11	05.80	0.5
	0.7s	9.00nm			5.1mb	
BUL	145.20	329	iPKPd	17	42.50	-1.0
	1.0s	180.00nm				
S.D. = 1.0 on 89 of 90 obs.						

? FEB 17, 1990 19h 40m 53.05± 4.92s
31.377 S ±23.8km 68.663 W ±31.6km
DEPTH = 94.0 ± 47.8 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB	0.16	227	eP	41	07.00	0.0
RTLL	0.17	74	iPc	41	06.90	0.0
			eS	41	17.80	
CFA	0.43	122	iPc	41	08.00	0.0
RTCV	0.49	168	ePd	41	08.40	0.0
			S	41	21.20	
RTRS	1.39	330	iPd	41	17.90	0.0
S.D. = 0.1 on 5 of 5 obs.						

FEB 17, 1990 19h 55m 09.08± 0.41s
40.120 N ± 4.3km 19.846 E ± 3.8km
DEPTH = 10.0km (geophysicist)
3.4mb (1 obs.)
ALBANIA (391)
MD 3.2 (ATH).

TPE	0.22	36	iPgc	55	11.50	-2.3
SRN	0.27	154	iPg	55	14.50	-0.2
KEK	0.41	185	ePb	55	16.60	-0.8
VLO	0.44	323	iPg	55	19.20	1.2
LSK	0.58	87	iPgd	55	18.50	-2.4
BERA	0.59	8	iPgc	55	20.70	-0.2
KBN	0.89	55	iPgc	55	25.80	-0.4
TIR	1.23	1	ePn	55	31.50	-0.4
OHR	1.23	36	iPn	55	32.10	0.2
LCI	1.46	279	Pd	55	34.80	-0.7
			eSn	55	56.20	
KZN	1.49	82	ePb	55	36.50	0.6
			eSb	55	58.00	
LACI	1.52	356	iPn	55	38.40	2.1
PHP	1.63	16	iPnd	55	39.20	1.3
KKS	2.00	12	ePn	55	45.70	2.5
BRT	2.15	291	P	55	47.40	1.9
			eSn	56	17.50	
SKO	2.21	33	iPn	55	47.00	0.7
			i	55	48.50	
			i	56	16.30	
			iSg	56	18.00	
VAY	2.39	59	iPn	55	49.40	0.5
BAI	2.48	295	P	55	50.00	-0.1
ROI	2.58	259	P	55	56.50	4.9X
ORI	2.61	270	P	55	53.00	1.0
TDS	2.74	261	P	55	58.50	4.6X
CSI	2.76	264	P	56	02.50	8.4X
PLG	2.77	84	ePn	55	54.50	0.2
CZI	3.00	254	P	55	58.90	1.4
KKB	3.01	53	iPd	55	59.00	1.3
MGR	3.29	272	P	56	03.00	1.3
MMB	3.29	62	eP	56	02.00	0.3
ITM	3.36	150	ePn	56	03.00	0.4
SGO	3.50	279	P	56	05.30	0.8
SOI	3.59	236	Pd	56	04.70	-1.2
			eSn	56	46.70	
ATN	3.93	242	P	56	09.50	-1.3
			eSn	56	53.80	
HVAR	3.98	321	i(Pn)	56	08.70	-2.7
RZN	4.01	65	eP	56	13.00	1.0
PGB	4.06	52	eP	56	13.00	0.4
VLI	4.17	143	ePn	56	14.00	-0.2
DUI	4.36	292	P	56	18.50	1.5
KDZ	4.49	68	eP	56	22.00	3.3X
SDI	4.84	291	P	56	24.20	0.5
MEU	4.89	234	P	56	20.50	-4.0X
			eSn	57	15.90	
PVL	5.14	51	e(P)	56	24.00	-3.9X
VAM	5.83	142	ePn	56	38.50	0.8
VOY	7.34	326	ePn	56	56.00	-2.9
			eSn	58	17.60	
FVI	8.27	324	P	57	10.40	-1.4
			eSn	58	38.90	
KBA	8.40	328	eP	57	11.50	-2.4
CTI	8.43	317	P	57	11.00	-3.2X
HFS	20.40	351	eP	59	46.20	-2.4
	0.4s	0.70nm			3.4mb	
S.D. = 1.4 on 39 of 46 obs.						

* FEB 17, 1990 20h 14m 59.08± 1.98s
36.416 N ±18.5km 137.787 E ±20.7km
DEPTH = 10.0km (geophysicist)
4.1mb (1 obs.) 4.1Msz (1 obs.)
HONSHU, JAPAN (227)

MTMJ	0.17	5	iP+	15	03.20	0.2
SHK	4.57	247	eP	16	09.80	-0.1
SSE	14.79	254	eP	18	33.50	3.5X
Z	12s	0.50um			4.0MszX	
N	16s	1.80um				
E	16s	1.00um				
BJI	17.36	289	eP	19	02.00	-0.8
	1.5s	26.00nm			4.1mb	
			eS	22	16.00	
LZH	27.30	280	P	20	47.00	1.2
Z	20s	0.50um			4.1Msz	
			i	21	02.00	
INK	56.25	27	eP	24	41.00	-0.4
S.D. = 1.1 on 5 of 6 obs.						

FEB 17, 1990 20h 16m 33.95± 0.61s
40.491 N ± 6.6km 21.546 E ± 5.3km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 2.9 (SKO). MD 3.1 (ATH).

KZN	0.25	137	iPgc	16	39.40	0.1
KBN	0.57	284	iPgc	16	45.10	-0.4
LSK	0.80	245	iPgc	16	49.60	0.1
OHR	0.84	318	iPgd	16	49.40	-0.8
			iSg	17	02.90	
VAY	1.14	43	ePn	16	54.70	-0.5
PLG	1.45	94	ePb	17	00.00	-0.3
SKO	1.48	357	ePn	17	02.20	1.6
			eSn	17	22.00	
TIR	1.53	304	ePn	16	05.00	-56.4X
KEK	1.55	240	ePb	17	02.00	0.4
S.D. = 0.9 on 8 of 9 obs.						

& FEB 17, 1990 20h 31m 08.70s
36.808 N 121.555 W
DEPTH = 3.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.0 (BRK).

SAO	0.10	116	iPd	31	10.60	-0.2
GCC	0.42	302	ePc	31	16.30	-0.8
			eS	31	23.70	
PRS	0.50	163	iPd	31	18.40	-0.3

MHC	0.54	353	iPd	31	19.70	0.3
			eS	31	27.50	
ARN	0.54	2	iPd	31	19.40	-0.1
PCC	0.96	317	ePc	31	26.30	-1.2
			eS	31	39.50	
BKS	1.20	333	eP	31	31.40	-0.2
BRK	1.20	332	ePc	31	30.60	-1.1
			eS	31	48.50	
ZSP	1.27	334	e(P)	31	30.80	-2.0
			i	31	32.90	
PKEM	1.38	122	eP	31	34.50	-0.4
FRI	1.49	82	ePc	31	35.00	-1.4
			eS	31	53.30	
BCH	2.01	143	eP	31	41.80	-2.2
KVN	3.53	50	eP	32	10.00	4.2

13 obs. associated

? FEB 17, 1990 21h 10m 48.37± 1.23s
18.907 S ±19.8km 177.655 W ±17.5km
DEPTH = 579.7 ± 11.9 km
4.8mb (4 obs.)
FIJI ISLANDS REGION (181)

SVA	3.77	281	eP	12	11.10	-0.1
SGE	4.40	287	iP	12	16.40	0.4
CTA	34.00	262	iP	16	46.80	0.3
WB5	45.14	260	eP	18	15.00	-0.9
ASPA	45.22	255	iPc	18	15.30	-1.2
	0.4s		18.00nm			5.0mb
ADK	70.49	1	P	21	05.50	-1.0
SPA	71.21	180	iPc	21	11.40	0.5
	0.7s		7.03nm			4.3mb
MDJ	79.41	325	eP	21	57.00	1.0
KVN	80.13	43	P	22	00.50	0.3
TNP	80.17	44	P	22	00.00	-0.4
	0.6s		1.23nm			3.5mb X
CN2	81.24	322	Pd	22	06.40	0.9
RMW	82.87	34	P	22	14.40	0.7
TTA	83.33	10	P	22	15.40	-0.3
PMR	83.40	13	P	22	15.30	-0.6
	0.5s		9.30nm			4.6mb
FBA	86.62	12	P	22	30.50	-1.0
	0.5s		12.40nm			4.9mb
IMA	86.63	10	P	22	31.00	-0.7
IMW	87.25	42	P	22	36.00	0.7
XAN	87.43	307	P	22	37.50	1.5
EKA	143.40	5	PKP	29	16.00	-2.5
	0.9s		12.10nm			
KSP	146.26	344	iPKPd	29	25.80	2.4
CLL	146.59	348	iPKP	29	27.00	3.1X
	0.7s		17.00nm			
WTS	146.79	355	ePKP	29	27.00	2.8X
	0.9s		20.00nm			
			e	29	30.00	
BRG	146.80	347	iPKP	29	27.50	3.3X
			i	29	30.10	
PRU	147.49	345	PKP	29	29.30	3.9X
ENN	148.08	356	ePKP	29	35.00	8.7X
	0.5s		12.00nm			
KHC	148.52	346	iPKPc	29	32.50	5.4X
DOU	148.83	357	PKP	29	32.50	5.0X
FLN	150.13	4	ePKP	29	34.90	5.5X
	0.7s		13.25nm			
CDF	150.30	353	ePKP	29	35.90	6.0X
	0.5s		2.90nm			
LDF	150.32	3	ePKP	29	35.50	5.8X
GRR	150.48	4	ePKP	29	36.00	6.0X
	0.4s		5.15nm			
KBA	150.49	345	iPKPd	29	36.00	5.7X
	0.6s		7.90nm			
			i	29	39.80	
HAU	150.79	354	ePKP	29	37.10	6.6X
	0.5s		5.85nm			
LPF	150.82	5	ePKP	29	36.90	6.4X
	0.5s		11.65nm			
BSF	150.92	354	ePKP	29	37.20	6.4X
	0.5s		2.90nm			
LJU	151.12	342	e(PKP)	29	37.50	6.4X
VOY	151.31	343	ePKP	29	38.00	6.5X
VBY	151.39	341	e(PKP)	29	38.90	7.5X
CEY	151.43	342	e(PKP)	29	38.50	7.0X
LOR	151.69	358	ePKP	29	39.10	7.3X
	0.7s		6.60nm			
SSF	151.90	358	ePKP	29	39.70	7.6X
	0.7s		4.40nm			
LBF	151.97	358	ePKP	29	39.60	7.3X
	0.7s		4.40nm			
MFF	152.30	4	ePKP	29	40.00	7.3X
BGF	152.42	359	ePKP	29	40.60	7.7X
	0.8s		8.05nm			
TCF	152.69	0	ePKP	29	41.10	7.8X
	0.5s		1.80nm			
LSF	152.72	1	ePKP	29	41.10	7.8X
	0.7s		4.40nm			

S.D. = 1.2 on 20 of 46 obs.

& FEB 17, 1990 22h 24m 48.10s
36.802 N 121.548 W
DEPTH = 5.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.5 (BRK).

SAO	0.09	114	iPc	24	50.00	-0.2
PRS	0.49	163	iPd	24	57.20	-0.7
			iS	25	05.00	
MHC	0.54	352	iPd	24	59.20	0.2
			eS	25	06.80	
ARN	0.55	1	iPd	24	59.00	0.0
PCC	0.96	317	ePc	25	05.80	-1.1
BKS	1.20	333	e(P)	25	10.80	-0.2
BRK	1.21	332	e(P)	25	10.90	-0.2
ZSP	1.27	334	ePc	25	12.50	0.3
			eS	25	30.60	
FRI	1.49	82	eP	25	14.70	-0.8
			eS	25	32.80	
KVN	3.53	49	eP	25	52.50	7.6

10 obs. associated

& FEB 17, 1990 22h 28m 12.00s
36.943 N 121.595 W
DEPTH = 3.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.6 (BRK).

SAO	0.21	146	iPd	28	16.80	0.5
MHC	0.40	355	iPd	28	20.30	0.3
			e	28	25.40	
ARN	0.41	7	iPd	28	20.30	0.1
PRS	0.64	163	iPd	28	24.40	-0.3
			eS	28	35.30	
PCC	0.84	312	ePc	28	28.00	-0.7
			eS	28	39.40	
BKS	1.06	332	eP	28	32.03	-0.6
BRK	1.07	331	ePc	28	32.10	-0.7
			eS	28	47.40	
ZSP	1.13	332	ePc	28	33.60	-0.2
			eS	28	49.80	
FRI	1.51	88	eP	28	38.30	-1.7
			eS	28	58.20	
KVN	3.47	52	eP	29	13.50	5.3

10 obs. associated

? FEB 17, 1990 22h 40m 16.79± 2.01s
46.813 S ±52.1km 10.907 W ±12.8km
DEPTH = 10.0km (geophysicist)
4.7mb (1 obs.)
SOUTH ATLANTIC RIDGE (410)

CER	26.54	70	eP	46	16.50	20.1X
BLF	33.78	72	eP	47	01.00	0.0
BUL	41.70	64	iPc	48	07.90	0.5
	1.0s		80.00nm			5.4mb X
BAO	43.73	303	eP	48	22.50	-1.5
KRI	44.83	62	eP	48	31.50	-1.5
CAI	46.04	322	eP	48	42.80	0.5
BCAO	57.28	36	ePc	50	08.00	1.1
	0.7s		5.00nm			4.7mb
ARE	58.10	280	e(P)	50	14.00	0.9
INK	144.33	328	ePKP	00	00.00	6.7X

S.D. = 1.3 on 7 of 9 obs.

% FEB 17, 1990 23h 43m 31.20± 0.67s
39.234 N ± 5.9km 29.108 E ± 7.9km
DEPTH = 5.0km (geophysicist)
TURKEY (366)

DST	0.53	315	iPg	43	40.60	-1.1
			iSg	43	48.60	
KHL	0.97	160	iPg	43	49.50	-0.6
			eSg	44	02.00	
YLV	1.35	9	iPn	43	55.60	-1.0
GPA	1.40	41	ePn	43	55.80	-1.7
BNT	1.45	321	iPn	43	58.10	0.0
EDC	1.47	320	iPn	43	58.00	-0.3
GBZT	1.57	9	ePn	44	02.50	2.7
IZM	1.67	241	ePn	44	01.00	-0.2
ISK	1.83	359	ePn	44	04.00	0.5
CTT	1.98	345	ePn	44	06.00	0.3
BCK	2.12	146	ePn	44	08.50	0.7
EZN	2.23	286	ePn	44	10.10	0.7
BBTK	2.89	77	eP	44	25.00	6.1X
			iS	45	06.00	

S.D. = 1.2 on 12 of 13 obs.

FEB 18, 1990 00h 28m 45.88± 0.37s
38.183 N ± 4.4km 15.094 E ± 3.6km
DEPTH = 10.0km (geophysicist)
SICILY (398)

ATN	0.29	94	Pc	28	52.40	0.4
			eSg	28	56.20	
MSI	0.36	87	Pd	28	53.90	0.5
			eSg	28	59.40	
MNO	0.40	232	Pd	28	54.70	0.5
			eSg	29	01.30	
SOI	0.77	98	Pc	29	00.00	-0.8
			eSg	29	09.30	
GIB	0.86	257	P	29	03.00	0.4
			eSn	29	15.50	
MEU	1.09	187	Pc	29	05.30	-1.1
			eSg	29	20.30	
MCT	1.28	245	P	29	10.10	0.4
CZI	1.32	38	P	29	09.80	-0.4
FAI	1.44	232	P	29	12.70	0.7
USI	1.59	290	P	29	12.80	-1.3
TDS	1.76	33	P	29	16.00	-0.7
			eSn	29	38.70	
ROI	1.80	39	P	29	17.80	0.6
CSI	1.84	30	P	29	18.40	0.6
MGR	1.98	10	Pd	29	19.40	-0.4
			eSn	29	44.20	
ORI	2.15	29	Pd	29	22.70	0.4
SGO	2.38	4	Pd	29	25.70	0.2

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

FEB 18, 1990 03h 57m 46.39± 1.77s
2.351 N ± 6.4km 127.007 E ±10.4km
DEPTH = 70.0 ± 16.9 km
4.8mb (7 obs.)
MOLUCCA PASSAGE (266)

MNI	2.35	247	ePc	58	25.00	1.6
			eS	58	34.00	
PCI	7.86	246	ePd	59	45.50	5.1X
	1.0s		5.50nm			4.2mb X
MTN	15.64	165	eP	01	22.00	-2.1
			e	01	27.00	
KNA	18.07	175	eP	01	53.30	-1.0
WB5	23.24	162	iPc	02	48.30	-0.1
WRA	23.30	162	Pd	02	49.30	0.4
	0.4s		17.00nm			4.8mb
QIS	25.90	152	iPd	03	13.70	0.0
ASPA	26.72	166	iPc	03	20.40	-0.8
	0.5s		18.00nm			4.9mb
Z	21s		0.19um			3.6Msz
			eS	07	52.70	
			iScS	13	44.50	
			LR	16	04.00	
WARB	28.37	181	eP	03	26.00	-10.1X
CTA	29.22	141	eP	03	39.00	-4.9X
WHN	30.49	338	eP	04	00.00	5.0X
CHTO	31.98	303	eP	04	08.20	0.0
COOL	33.52	189	eP	04	21.00	-0.5
	0.4s		6.00nm			4.8mb
BAL	34.21	196	eP	04	28.30	0.9
KLB	34.88	194	eP	04	33.10	0.0
MAT	35.56	16	iPd	04	36.90	-2.0
	1.2s		23.44nm			5.0mb
MUN	35.65	196	eP	04	39.00	-0.6
XAN	35.76	334	eP	04	39.10	-1.6
CD2	35.92	325	eP	04	41.00	-1.0
NWAO	36.28	194	eP	04	45.00	0.0
TIY	37.65	341	eP	04	56.60	0.1
Z	26s		1.00um			4.5MszX
BRS	38.61	142	iP	05	05.00	0.4
BJI	38.78	347	eP	05	06.00	0.2
	1.0s		12.00nm			4.8mb
SNY	39.42	356	eP	05	11.80	0.7
LZH	39.83	330	eP	04	55.00	-19.8X
Z	30s		0.60um			4.3MszX
			i	05	49.50	

18d 04h

HHC	40.79	342	eP	05	26.60	4.1X
SHL	40.92	307	iP	05	24.10	0.2
CN2	41.30	358	eP	05	31.00	4.5X
BWA	41.75	153	eP	05	32.60	2.2
MDJ	42.15	3	eP	05	34.20	0.7
CAN	42.76	153	eP	05	39.90	1.2
GUN	46.76	307	P	06	11.20	0.0
	0.6s	13.00nm			5.0mb	
PKI	46.99	306	P	06	12.60	-0.4
KKN	47.19	307	P	06	14.10	-0.3
DMN	47.25	306	P	06	14.80	-0.2
GKN	47.80	306	P	06	18.60	-0.5
GBA	50.24	286	Pd	06	36.90	-0.9
	0.9s	5.30nm			4.6mb	
WMQ	54.01	325	eP	07	07.50	1.8
INK	91.34	22	eP	10	47.00	1.7
S.D. = 1.1		on	32 of	39	obs.	

% FEB 18, 1990 04h 47m 12.84± 2.47s
42.363 N ±10.0km 13.824 E ±17.3km
DEPTH = 5.0km (geophysicist)
CENTRAL ITALY (381)

AQU	0.31	268	Pd	47	18.60	-0.6
			eSg	47	22.70	
AZI	0.47	218	P	47	21.30	-1.0
			eSg	47	29.60	
SDI	0.66	181	Pd	47	25.90	-0.1
			eSg	47	34.90	
RMP	1.00	237	P	47	32.70	0.4
			eSg	47	47.40	
RDP	1.02	234	Pd	47	34.00	1.3
			eSg	47	48.00	
ASS	1.11	310	Pc	47	34.10	-0.1
			eSg	47	50.70	
S.D. = 1.0		on	6 of	6	obs.	

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* FEB 18, 1990 05h 00m 23.99± 0.63s
14.129 S ±10.9km 166.418 E ±14.7km
DEPTH = 33.0km (normal)
4.6mb (4 obs.) 3.8Msz (1 obs.)
VANUATU ISLANDS (186)

DZM	7.90	180	iPc	02	18.80	-0.8
			iS	03	52.40	
BRS	18.33	222	iP	04	38.00	0.5
CTA	20.15	250	iPc	04	58.90	0.4
	0.9s	19.33nm			4.4mb	
RMQ	20.60	231	iPd	05	05.60	2.6
COO	21.14	217	eP	05	09.00	0.5
WB5	31.15	255	eP	06	40.30	-1.9
WRA	31.18	255	Pc	06	40.90	-1.6
	0.7s	4.70nm			4.4mb	
ASPA	32.13	248	iPd	06	49.00	-1.8
	0.6s	9.00nm			4.8mb	
Z	19s	0.20um			3.8Msz	
		LR		19	30.20	
GUN	88.38	299	P	13	15.50	0.7
PKI	88.69	299	P	13	16.80	0.6
KKN	88.86	299	P	13	17.40	0.5
DMN	88.96	299	P	13	18.10	0.7
	0.7s	12.00nm			5.3mb	
GKN	89.46	299	P	13	19.70	0.1
LPG	144.32	335	ePKP	19	57.30	-1.6
BGF	144.85	340	ePKP	19	58.30	-1.0
	0.7s	7.15nm				
MAF	145.24	340	ePKP	20	00.00	0.0
	0.9s	5.75nm				
TCF	145.30	341	ePKP	19	59.90	-0.2
	0.9s	6.55nm				
SBF	145.34	333	ePKP	19	59.90	-0.4
	0.9s	16.40nm				
LSF	145.55	341	ePKP	20	00.60	0.1
	1.1s	13.45nm				
FRF	145.93	333	ePKP	20	01.50	0.2
	0.7s	5.50nm				
LMR	146.17	333	ePKP	20	02.50	0.9
BCAO	146.92	256	ePKPd	20	05.20	1.5
	0.6s	25.00nm				
		id		20	07.90	
S.D. = 1.2		on	22 of	22	obs.	

FEB 18, 1990 05h 16m 27.32± 0.51s
39.521 N ± 4.8km 28.696 E ± 5.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 3.8 (ATH).

DST	0.10	328	iPg	16	29.70	-0.4
BNT	1.03	325	iPn	16	46.50	-0.2
EDC	1.04	322	iPn	16	47.00	0.0
			iSg	17	00.00	
YLV	1.17	26	iPn	16	49.00	-0.2
KHL	1.36	151	iPn	16	52.30	-0.1
GBZT	1.39	24	ePn	16	54.00	1.3
			iSg	17	15.80	
GPA	1.46	58	ePn	16	53.00	-0.7
ISK	1.57	10	ePn	16	54.10	-1.1
IZM	1.58	225	ePn	16	53.80	-1.7
ITU	1.60	9	ePn	16	56.00	0.3
			iSg	17	18.00	
CTT	1.64	353	iPn	16	57.00	0.8
EZN	1.85	280	ePn	16	58.40	-1.0
PRK	1.90	262	ePb	17	00.00	0.0
SMG	2.32	219	ePn	17	10.50	4.3X
DMK	2.41	343	iPn	17	06.00	-1.3
BCK	2.54	144	iPn	17	09.60	0.3
RDO	2.91	305	ePn	17	16.20	1.7
ELL	2.93	161	ePn	17	16.00	1.1
BBTK	3.15	83	eP	17	27.00	8.9X
			eS	18	09.00	
KDZ	3.28	311	iPd	17	22.00	2.2
			iS	18	11.00	
APE	3.49	226	ePg	17	35.30	12.5X
RZN	3.72	307	eP	17	26.00	-0.3
PLD	3.98	312	eP	17	31.00	1.3
			iSg	18	35.00	
PLG	4.12	284	ePn	17	30.50	-1.3
MMB	4.31	300	eP	17	26.00	-8.5X
			eS	18	44.00	
PVL	4.48	327	eP	17	35.00	-1.7
PGB	4.57	313	e(P)	17	37.00	-1.1
			iS	18	49.00	
KKB	4.87	301	eP	17	44.00	1.7
			iS	19	00.00	
VAY	5.01	293	ePn	17	51.30	7.0X
VTS	5.16	308	e(P)	17	48.00	1.4
			i	17	53.00	
			i	18	09.00	
SKO	6.03	296	ePn	18	23.50	24.8X
MLR	6.30	342	eP	18	01.50	-1.2
S.D. = 1.2		on	26 of	32	obs.	

FEB 18, 1990 08h 21m 30.13± 0.88s
40.137 N ± 5.8km 19.918 E ± 8.0km
DEPTH = 5.0km (geophysicist)
ALBANIA (391)

TPE	0.17	24	iPgc	21	32.00	-1.7
SRN	0.26	166	iPg	21	35.10	-0.4
VLO	0.46	316	ePg	21	39.60	0.2
BERA	0.57	2	iPgc	21	41.00	-0.4
KBN	0.84	54	iPgc	21	47.10	0.3
OHR	1.18	34	iPnd	21	52.90	0.2
TIR	1.21	358	ePn	21	53.50	0.4
SKO	2.16	32	ePn	22	08.50	1.2
			eSn	22	42.00	
VAY	2.34	59	ePn	22	10.00	0.2
S.D. = 0.9		on	9 of	9	obs.	

? FEB 18, 1990 08h 39m 52.29± 2.50s
42.714 N ±21.0km 8.956 E ±32.7km
DEPTH = 10.0km (geophysicist)
CORSICA (380)
ML 2.4 (LDG).

PGF	0.17	169	Pg	39	56.20	0.0
			Sg	40	01.00	
SBF	1.60	316	Pn	40	20.90	0.2
			Sn	40	43.00	
FRF	1.89	297	Pn	40	24.50	-0.4
LMR	1.90	290	Pn	40	25.10	0.1
			Sn	40	51.00	
LRG	2.04	292	Pn	40	27.80	0.7
CAF	5.45	296	Pn	41	15.00	-0.6
S.D. = 0.6		on	6 of	6	obs.	

? FEB 18, 1990 08h 44m 14.12± 6.22s
32.144 S ±27.7km 71.571 W ±51.4km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

ROCH	0.95	150	iPd	44	33.50	2.1
			iS	44	45.00	
JACH	0.99	123	iPd	44	32.30	0.6
			iS	44	43.40	
SAN	1.51	150	eP	44	38.70	-0.5
			iS	44	55.40	
TACH	1.60	161	iPd	44	40.50	0.1
			iS	44	57.00	
FCH	1.60	138	iPc	44	39.80	-0.9
			iS	44	56.10	
PCH	1.72	149	iPc	44	41.80	-0.5
			iS	44	59.50	
LNV	1.81	176	iPd	44	32.30	-11.2X
			iS	45	04.00	
CHCH	1.94	157	ePd	44	44.80	-0.7
			iS	45	06.00	
RTCB	2.45	75	iPc	44	53.00	0.3
			eS	45	20.00	
RTCV	2.59	85	ePc	44	54.30	-0.4
			S	45	22.50	
RTRS	2.67	43	iPc	45	00.00	4.3X
RTLL	2.76	74	ePd	44	51.70	-5.4X
			eS	45	26.30	
S.D. = 1.1		on	9 of	12	obs.	

FEB 18, 1990 08h 48m 48.13± 0.45s
50.272 N ± 5.0km 129.889 W ± 5.8km
DEPTH = 10.0km (geophysicist)
4.6mb (13 obs.)
VANCOUVER ISLAND REGION (25)

PHC	1.63	74	Pnc	49	17.90	1.0
			Sn	49	40.00	
SJB	1.81	337	Pn	49	17.00	-2.6
EDB	1.83	102	Pn	49	18.58	-1.2
BBB	2.22	30	Pn	49	27.30	1.9
			Sn	49	55.00	
ETB	2.35	111	Pn	49	25.75	-1.6
BNB	2.59	334	Pn	49	28.30	-2.4
CBB	2.92	93	Pn	49	35.62	0.2
BTB	2.94	104	Pn	49	34.35	-1.5
OZB	3.15	113	Pn	49	38.38	-0.3
CWB	3.17	336	Pn	49	37.00	-2.1
SHB	3.94	98	Pn	49	49.13	-0.9
OSP	4.00	118	eP	49	50.81	0.1
OTR	4.25	119	eP	49	54.39	0.1
OFK	4.31	120	eP	49	54.63	-0.6
PGC	4.50	109	eP	49	58.00	0.2
OOW	4.53	122	eP	49	57.80	-0.5
STW	4.60	115	eP	49	59.25	0.0
BLN	5.07	114	eP	50	05.82	-0.2
HDW	5.21	118	eP	50	07.92	-0.1
ONR	5.29	128	eP	50	10.79	1.7
GMW	5.42	117	eP	50	10.00	-0.9
BMW	5.84	128	eP	50	16.80	-0.1
RMW	6.03	115	eP	50	19.30	-0.2
LON	6.42	120	eP	50	25.00	-0.1
PNT	6.72	94	eP	50	29.00	-0.2
	0.8s	78.00nm			5.8mb	X
NEW	8.59	99	eP	50	54.30	-1.1
EDM	10.67	68	eP	51	24.80	0.8
WDC	10.98	149	iPc	51	29.40	1.3
MIN	11.50	146	ePc	51	35.90	0.4
SES	12.05	82	eP	51	42.00	-0.7
ORV	12.24	148	ePc	51	45.30	0.0
LRM	12.48	104	eP	51	47.80	-1.0
KVN	13.99	139	eP	52	10.00	1.3
CMB	13.99	147	eP	52	10.00	1.4
	1.4s	21.20nm			4.7mb	
FRI	15.16	147	eP	52	23.20	-0.6
TNP	15.18	139	eP	52	24.00	-0.2
	0.8s	23.28nm			4.6mb	
PRS	15.24	153	ePc	52	20.90	-3.9X
PMR	15.57	324	eP	52	29.70	0.7
	1.0s	43.75nm			4.7mb	
DUG	15.65	124	eP	52	35.00	4.6X
BW06	15.84	110	eP	52	34.00	1.1
ISA	16.79	146	eP	52	48.00	3.2X
MSU	17.22	126	eP	52	50.30	-0.2
FBA	17.42	334	eP	52	54.00	1.6
FFC	17.51	64	iPc	52	55.10	1.5
	0.8s	29.00nm			4.5mb	
INK	18.18	356	eP	53	04.00	2.2
RVR	18.68	146	eP	53	08.00	-0.3
TTA	18.99	322	eP	53	11.60	-0.3
	0.9s	25.00nm			4.4mb	
IMA	19.99	331	eP	53	22.00	-1.3
	1.3s	36.56nm			4.5mb	
BAR	20.12	146	eP	53	21.00	-3.8X
GOL	20.22	112	eP	53	25.20	-0.9

	0.7s	16.99nm		4.5mb		
GLA	20.49	141 eP	53 33.00	4.3X		
RSON	22.85	74 eP	53 52.20	-0.1		
ANMO	22.93	123 eP	53 53.80	0.4		
	1.0s	18.75nm		4.6mb		
ALQ	22.93	123 iPc	53 54.60	1.1		
	1.0s	22.50nm		4.6mb		
MBC	26.41	6 eP	54 28.50	2.5		
	1.1s	22.00nm		4.8mb		
FKO	27.91	110 eP	54 40.10	-0.1		
SIO	28.24	108 eP	54 43.70	0.6		
TUL	28.45	107 eP	54 45.60	0.6		
	0.9s	33.00nm		5.1mb		
		e	54 48.10			
		e	54 50.20			
		LR	03 00.00			
RLO	28.76	106 eP	54 48.10	0.3		
UYO	30.43	108 iPd	55 03.00	0.3		
POW	31.16	102 eP	55 08.00	-1.1		
FRB	34.53	44 eP	55 40.00	1.9		
BLA	37.37	91 eP	56 01.00	-1.5		
CVL	38.17	89 eP	56 08.00	-1.2		
JSC	38.63	96 eP	56 13.00	-0.1		
LOR	74.96	31 eP	00 34.50	3.6X		
	0.8s	4.05nm		4.5mb		
SSF	75.03	31 eP	00 34.90	3.7X		
	1.1s	7.35nm		4.6mb		
LBF	75.25	31 eP	00 34.90	2.4X		
TCF	75.27	32 eP	00 35.90	3.3X		
KHC	76.14	24 eP	00 45.60	8.1X		
BUL	145.44	37 iPKPd	08 29.00	0.9		
	1.0s	100.00nm				
	S.D. = 1.1	on 61 of 71 obs.				

? FEB 18, 1990 12h 02m 09.03± 4.23s
33.195 S ± 9.8km 72.124 W ±37.2km
DEPTH = 33.0km (normal)
OFF COAST OF CENTRAL CHILE (134)

IHA	0.44	68 iPc	02 16.80	-1.9		
		iS	02 25.10			
LCCH	0.54	121 iPd	02 19.20	-1.0		
		iS	02 28.90			
ROCH	0.96	77 iPd	02 25.50	-0.9		
		iS	02 39.50			
LNV	0.96	142 iPc	02 26.00	-0.2		
		iS	02 40.20			
TACH	1.09	115 iPc	02 28.10	0.0		
		iS	02 44.00			
SAN	1.25	102 iPc	02 30.60	0.3		
		iS	02 49.00			
JACH	1.39	69 iP	02 31.70	-0.6		
		iS	02 50.50			
PCH	1.41	108 iPc	02 33.50	0.8		
		iS	02 54.60			
CHCH	1.43	121 iPd	02 33.50	0.5		
		iS	02 54.90			
FCH	1.54	95 iPc	02 35.50	0.7		
		iS	02 56.50			
RTCB	3.29	60 eP	03 03.80	4.3X		
RTCV	3.31	67 eP	03 04.20	4.4X		
RFA	3.42	118 e(P)	03 09.50	8.1X		
RTLL	3.61	60 ePd	03 07.00	2.9		
CFA	3.65	65 iPd	03 08.00	3.4X		
RTRS	3.77	38 ePc	03 05.80	-0.5		
	S.D. = 1.3	on 12 of 16 obs.				

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* FEB 18, 1990 12h 05m 30.89± 1.04s
36.148 N ± 9.5km 27.258 E ±11.4km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)

KAP	0.60	186 eP	05 42.50	-0.5		
		eS	05 53.50			
YER	1.28	40 ePn	05 53.00	-1.7		
CIN	1.59	24 eP	06 17.00	17.8X		
SMG	1.59	348 eP	05 59.60	0.5		
APE	1.67	304 eP	06 00.50	0.2		
ELL	2.22	74 ePn	06 10.00	1.6		
BCK	2.98	63 ePn	06 23.20	4.1X		
	S.D. = 1.7	on 5 of 7 obs.				

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* FEB 18, 1990 12h 05m 39.78± 0.85s
38.048 N ± 7.5km 22.247 E ±10.9km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 2.9 (ATH).

ITM	0.90	196 ePg	05 55.50	-1.6		
ATH	1.16	93 ePg	06 02.00	0.5		
VLI	1.44	157 ePn	06 07.30	1.4		
NEO	1.47	31 ePb	06 04.50	-1.8		
KZN	2.29	351 ePn	06 16.90	-1.3		
KEK	2.53	312 ePb	06 22.50	0.9		
OHR	3.26	340 ePn	06 33.00	1.0		
VAY	3.28	4 ePn	06 33.00	0.8		
	S.D. = 1.6	on 8 of 8 obs.				

FEB 18, 1990 12h 21m 58.09± 0.10s
5.516 S ± 2.5km 149.432 E ± 3.1km
DEPTH = 142.3km (geophysicist)
5.9mb (50 obs.)
NEW BRITAIN REGION (192)
Depth from broadband
displacement seismograms.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike= 55 Dip=54 Slip=-100
NP2: 252 37 -77
Principal Axes:
T Plg= 8 Azm=152
P 78 288
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 146 No. of sta: 11
Moment Tensor; Scale 10**17 Nm
Mrr=-4.87 Mtt= 6.31
Mff=-1.43 Mrt=-0.52
Mrf=-2.99 Mtf= 0.15
Principal axes:
T Val= 6.34 Plg= 3 Azm=178
N 0.27 30 86
P -6.62 60 273
Best Double Couple:Mo=6.5*10**17
NP1:Strike=295 Dip=49 Slip= -49
NP2: 62 55 -127
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 27C
Centroid Location:
Origin Time 12:22: 5.9 0.6
Lat 5.57S 0.05 Lon 149.07E 0.04
Dep 152.6 1.0 Half-duration 3.3
Moment Tensor; Scale 10**17 Nm
Mrr=-7.28 0.25 Mtt= 7.86 0.32
Mff=-0.59 0.34 Mrt=-0.14 0.25
Mrf=-1.83 0.26 Mtf= 1.26 0.35
Principal Axes:
T Val= 8.06 Plg= 2 Azm=171
N -0.31 14 81
P -7.75 76 267
Best Double Couple:Mo=7.9*10**17
NP1:Strike=276 Dip=45 Slip= -70
NP2: 68 48 -109

LAT	2.67	245 eP	22 43.30	1.8		
RAB	3.03	64 iPc	22 47.50	1.4		
PMG	4.48	210 iPc+	23 06.40	1.1		
		eS	24 00.00			
MNDI	5.78	263 eP	23 26.00	3.0X		
JAY	9.20	289 iPc	24 11.00	2.1		
		e	28 37.00			
HNR	11.13	111 eP	24 33.00	-1.2		
CTA	14.81	192 iPc+	25 22.90	1.2		
	1.2s	812.50nm		5.9mb		
		iS	28 06.00			
CTAO	14.81	192 iPc	25 22.11	0.4		
	1.2s	812.50nm		5.9mb		
		e	25 25.58			
		iS	28 06.00			
QIS	17.74	212 iPd	25 57.50	-0.2		
		eS	29 10.00			
GUA	19.45	347 ePd	26 18.30	2.2		
	0.8s	1116.42nm		6.3mb		
		e	26 47.20			
		eS	29 54.00			
MTN	19.47	247 eP	26 15.00	-1.3		
GUMO	19.51	347 ePd	26 18.80	2.1		
	0.8s	761.35nm		6.1mb		
PJG	19.51	347 ePd	26 18.80	2.1		
	0.8s	13.00nm		4.4mb X		

WB5	20.46	224 iPd	26 26.50	0.1		
		iS	30 06.00			
WRA	20.52	224 Pc	26 27.80	0.8		
	1.0s	464.00nm		5.9mb		
RMQ	20.87	182 iPc	26 32.60	2.2		
	0.5s	162.00nm		5.7mb		
		e	26 44.00	47kmX		
		e	27 11.00			
QLP	21.53	193 eP	26 38.00	1.0		
BRS	21.99	172 iPc+	26 42.20	0.7		
	1.0s	85.00nm		5.1mb		
		i(PP)	27 06.00			
		i	27 42.00			
		e	29 42.00			
		i	30 32.00			
		iS	30 36.00			
PVC	22.09	125 iPc	26 43.00	0.5		
KNA	22.69	242 iPd	26 48.50	0.2		
	0.4s	367.00nm		6.1mb		
		eS	30 47.00			
DZM	23.27	137 iPc	26 54.40	0.3		
		iS	31 00.10			
		ScP	34 05.00			
ASPA	23.44	218 iPd	26 56.80	1.2		
	1.0s	993.00nm		6.2mb		
Z	17s	7.90um		5.2MszX		
		eS	30 55.20			
		LR	36 50.80			
COO	25.04	175 iPd	27 11.70	1.0		
		e	27 43.00	154kmX		
		e	31 29.00			
		e	34 10.00			
MNI	25.52	285 ePd	27 13.00	-2.2		
CMS	26.06	187 iPc	27 20.00	0.0		
	1.1s	115.00nm		5.4mb		
		e	27 51.00	150kmX		
DAV	26.90	297 eP	27 24.00	-3.8X		
BWA	28.78	182 eP	27 44.40	-0.2		
		iPP	28 15.00			
		iPcP	30 51.30			
		eScP	34 21.00			
CNB	29.65	180 iPc	27 52.90	0.5		
		e	28 22.00	136kmX		
CAN	29.66	181 eP	27 52.40	0.0		
		epP	28 22.90	144kmX		
		ePP	28 52.50			
		iPcP	30 53.10			
		eScP	34 23.20			
PCI	29.89	278 ePc	27 55.00	0.4		
WARB	29.94	224 iPd	27 55.00	0.0		
ADE	30.94	197 iPd	28 03.00	-0.7		
	1.2s	328.13nm		5.9mb		
TOO	32.11	186 iPd	28 14.60	0.8		
	1.1s	263.00nm		6.0mb		
		e	28 44.00	136kmX		
		e	31 00.00			
		e	31 36.00			
BFD	32.13	190 iPd	28 15.90	1.9		
	1.2s	510.00nm		6.2mb		
		e	28 39.00	102kmX		
		e	29 23.00			
FORR	32.20	216 iPd	28 13.80	-0.8		
	0.5s	162.00nm		6.1mb		
MBL	32.63	239 iPd	28 18.00	-0.5		
		eS	33 15.00			
QCP	34.52	306 eP	28 51.00	16.2X		
KKM	35.09	289 ePc	28 30.00	-9.8X		
BAG	35.91	308 eP-	28 46.00	-0.7		
	2.0s	2458.82nm		6.6mb		
		eS	34 11.00			
COOL	36.64	223 iPd	28 52.00	-0.6		
	0.3s	28.00nm		5.5mb		
NANU	36.86	239 iPd	28 54.30	-0.1		
KLB	39.40	225 iPd	29 15.00	-0.6		
	0.4s	38.00nm		5.5mb		
BAL	39.61	227 eP	29 16.70	-0.6		
NWAO	40.53	224 iPd	29 24.37	-0.4		
	0.6s	98.00nm		5.6mb		
Z	20s	2.60um		5.1Msz		
N	20s	1.50um				
E	20s	2.00um				
		isPc	30 09.40			
		eS	35 28.00			
MUN	40.71	226 iPd	29 26.10	-0.2		
	1.1s	21.00nm		4.7mb X		
		e	30 57.00	491kmX		
ANP	40.84	320 ePd	29 28.00	0.5		

18d 12h

eS 35 32.00
TCW 41.91 152 P 29 36.90 0.9
e 30 07.70 137kmX
e 31 30.80
MRW 42.13 151 P 29 37.90 0.2
WEL 42.20 151 P 29 39.30 0.9
CAW 42.21 151 P 29 38.80 0.3
WDW 42.30 151 P 29 39.10 0.0
e 30 09.70 136kmX
e 31 29.20
PGZ 42.44 149 P 29 40.40 0.1
0.4s 49.00nm 5.5mb
MTW 42.46 151 P 29 40.30 -0.2
e 30 11.70 140kmX
KHZ 42.52 153 P 29 41.30 0.4
MOW 42.54 151 P 29 41.10 0.0
e 30 11.80 136kmX
BLW 42.61 151 P 29 41.70 0.0
OZH 42.62 317 iPd 29 44.00 2.0
0.8s 1500.00nm 6.7mb
pP 30 14.00 133kmX
S 35 55.00
sS 36 52.00
SHK 42.86 340 iPd 29 45.40 1.6
0.8s 447.76nm 6.2mb
MHZ 43.03 159 P 29 44.90 -0.3
MAJO 43.14 347 iPd 29 46.80 0.8
MAT 43.14 347 eP 29 47.00 1.0
1.0s 570.00nm 6.2mb
Z 20s 2.48um 5.1Msz
eS 35 58.00
HKC 44.22 310 eP 29 56.50 1.6
eS 36 24.00
KLI 44.39 269 eP 29 59.80 3.3X
e 30 35.00 158kmX
GZH 45.29 310 iPd 30 05.00 1.6
6.0s 2300.00nm 6.0mb X
Z 42s 3.70um 5.0MszX
pP 30 39.70 155kmX
sP 30 52.00
PP 31 52.00
SSE 45.32 325 iPd 30 05.00 1.5
1.5s 1790.00nm 6.5mb
Z 21s 4.20um 5.4Msz
N 16s 3.00um
E 16s 2.10um
pP 30 37.00 142kmX
S 36 33.20
sS 37 32.00
QIZ 45.99 303 P 30 09.00 0.0
E 14s 1.69um
pP 30 45.00 161kmX
PP 31 57.00
sS 37 36.00
KGM 46.66 278 eP 30 14.50 0.1
NJ2 47.37 324 iPd 30 21.50 1.9
4.0s 3000.00nm 6.3mb X
pP 30 57.00 158kmX
sP 31 10.00
S 37 08.00
WHN 49.12 319 Pd 30 35.00 1.8
1.5s 1010.00nm 6.4mb
Z 32s 2.51um 5.0MszX
N 10s 0.55um
pP 31 08.00 144kmX
eS 37 26.00
IPM 49.37 281 ePc 30 35.00 -0.4
0.7s 22.90nm 5.1mb
e 31 26.30 236kmX
DL2 51.15 332 Pd 30 49.40 0.9
1.0s 1300.00nm 6.7mb
Z 38s 2.20um 4.9MszX
pP 31 21.00 136kmX
sP 31 36.00
S 38 00.00
TIA 51.37 326 Pd 30 50.10 -0.1
N 16s 1.40um
E 14s 1.10um
pP 31 26.80 161kmX
S 38 00.00
GYA 52.21 310 P 30 57.80 1.0
N 15s 1.10um
E 15s 0.60um
SNY 52.69 336 iPd 31 01.00 1.1
1.2s 400.00nm 6.1mb
Z 32s 3.80um 5.2MszX
N 34s 4.00um
E 30s 1.90um
pP 31 35.00 147kmX
sP 31 53.50
S 38 17.00
SS 41 55.00
MDJ 52.99 342 iPd 31 03.60 1.5
Z 28s 2.10um 5.0MszX
E 16s 1.20um
epP 31 38.00 149kmX
ePcP 32 09.50
ePP 33 06.00
iS 38 26.00
CN2 53.65 339 iPd 31 07.80 0.8
1.5s 800.00nm 6.4mb
ipP 31 42.00 148kmX
sP 31 58.00
PcP 32 10.30
eS 38 23.00
sS 39 24.00
KMI 54.65 306 iPd 31 15.15 0.3
1.5s 500.00nm 6.2mb
Z 18s 1.10um 5.0Msz
N 15s 1.10um
E 15s 0.70um
epPc 31 49.09 146kmX
eHPP 33 13.40
iPP 33 13.67
iS 38 50.63
esS 39 41.39
BJI 54.70 329 iPd 31 14.92 0.3
2.0s 1630.00nm 6.5mb
Z 40s 3.70um 5.2MszX
E 14s 0.60um
epPc 31 49.68 T50kmX
epP 33 22.00
iS 38 45.94
esS 39 44.43
XAN 54.88 319 Pd 31 16.00 -0.2
2.0s 2400.00nm 6.7mb
N 14s 1.00um
E 12s 0.50um
pP 31 51.50 153kmX
sP 32 08.00
sS 39 46.00
TIY 55.09 324 iPd 31 18.00 0.4
1.4s 400.00nm 6.1mb
N 14s 1.40um
pP 31 52.00 146kmX
sP 32 07.50
S 38 49.00
CHTO 55.30 297 ePd 31 18.10 -1.3
pP 31 53.40 152kmX
PcP 32 18.30
CD2 56.70 313 eP 31 28.50 -0.8
pP 32 05.00 157kmX
PP 33 33.00
S 39 12.00
HHC 57.73 327 iPc 31 37.00 0.6
5.0s 1300.00nm 6.1mb X
Z 18s 3.70um 5.5Msz
E 15s 1.10um
pP 32 11.00 144kmX
BTO 58.42 325 iPd 31 41.00 -0.2
5.0s 1900.00nm 6.3mb X
N 16s 1.50um
E 16s 1.40um
pP 32 16.50 151kmX
PP 33 51.50
S 39 26.00
sS 40 29.00
LZH 59.45 318 iPd 31 49.24 0.8
5.0s 2330.00nm 6.4mb X
Z 40s 5.20um 5.4MszX
epPc 32 25.17 152kmX
eS 39 52.36
sS 40 45.00
SS 43 46.00
HIA 60.38 338 iPd 31 55.40 1.1
ipPc 32 31.16 151kmX
PPN 60.85 107 iP 31 58.90 0.9
0.8s 60.00nm 5.6mb
SMY 61.69 17 eP 32 03.50 0.5
PMO 62.21 104 iP 32 07.80 0.7
0.8s 100.00nm 5.8mb
TPT 62.48 104 iP 32 09.00 0.1
0.8s 80.00nm 5.7mb
RUV 62.71 104 iP 32 11.00 0.6
0.8s 90.00nm 5.8mb
SHL 63.80 302 iP 32 16.40 -1.4
eS 40 30.00
GTA 63.94 319 iPd 32 18.60 0.2
5.0s 1700.00nm 6.2mb X
Z 20s 0.90um 5.0Msz
pP 32 54.00 148kmX
sP 33 10.00
S 40 47.00
sS 41 48.00
ADK 64.07 23 eP 32 18.70 0.0
e 32 54.70 151kmX
LSA 65.90 306 P 32 32.20 0.7
E 15s 1.11um
pP 33 08.00 149kmX
PP 34 55.00
GUN 69.64 302 P 32 53.70 -1.0
PKI 69.93 302 P 32 55.10 -1.4
KKN 70.11 302 P 32 56.25 -1.2
DMN 70.20 302 P 32 56.80 -1.2
VNDA 72.26 177 iPd 33 09.10 0.0
SDN 73.34 27 eP 33 15.20 -0.5
HYB 73.57 290 eP 33 16.00 -1.8
GBA 73.93 286 Pc 33 18.50 -1.3
0.7s 5.50nm 4.4mb X
WMQ 74.02 318 iPd 33 20.44 0.4
5.0s 1800.00nm 6.1mb X
epPc 33 55.53 142kmX
sP 34 14.00
ePP 36 04.32
eHPP 36 07.07
iS 42 42.96
iSKS 43 16.89
NDI 77.20 301 iPc 33 36.00 -2.2
0.6s 46.67nm 5.4mb
ePP 37 07.00
eSKS 44 10.00
POO 78.17 290 iPd 33 46.20 2.5
e 45 04.00
KDC 78.37 28 eP 33 44.00 0.1
BOM 79.20 290 eP 33 47.00 -2.2
eS 43 04.00
TTA 79.68 22 ePd 33 51.50 0.4
KSH 80.85 311 iPc 33 59.00 1.2
pP 34 32.00 130kmX
PMR 81.74 25 iPd 34 01.30 -0.4
0.9s 135.40nm 5.7mb
IMA 82.26 20 iPd 34 04.80 0.2
1.1s 118.80nm 5.6mb
TOA 83.22 25 eP 34 10.10 0.6
MAW 83.62 203 iPc 34 13.00 1.6
1.0s 173.00nm 5.9mb
COL 83.81 22 iPd 34 11.51 -0.8
0.3s 15.00nm 5.3mb
ipPc 34 45.61 134kmX
esP 35 01.00
FBA 83.81 22 eP 34 11.00 -1.3
BRW 84.31 15 eP 34 15.00 0.3
SPA 84.52 180 iPd 34 11.20 -4.9X
1.0s 259.00nm 6.0mb
Z 19s 1.18um 5.3Msz
i 34 51.00 159kmX
SPA 84.52 180 P 34 16.00 -0.1
INK 90.33 21 iPd 34 42.30 -1.4
1.0s 112.00nm 5.9mb
pP 35 20.00 148kmX
FHC 90.98 49 e(P) 34 51.90 4.5X
BRK 92.01 52 eP 34 52.30 0.2
BKS 92.03 52 eP 34 53.20 1.0
1.0s 35.00nm 5.5mb
WDC 92.05 50 ePc 34 52.60 0.4
e 35 30.70 149kmX
e 36 12.40
MHC 92.45 53 ePc 34 55.50 1.2
ARN 92.54 53 P 34 55.00 0.4
PRS 92.58 54 ePc 34 55.60 0.8
L8FM 92.61 49 P 34 55.50 0.4
MIN 92.74 50 ePc 34 55.20 -0.4
ORV 92.75 51 ePc 34 55.80 0.3
e 35 35.70 157kmX
MAIO 93.18 306 eP 34 58.00 0.4
0.8s 10.98nm 5.2mb
e 37 50.00
eS 46 04.00
RMW 93.18 43 P 34 57.00 -0.4
CMB 93.50 52 ePc 34 59.30 0.2
e 36 16.00 323kmX

FRI	93.97	53	ePc	35	01.40	0.3	FVI	124.63	325	PKP	40	41.20	-1.0	LSF	130.84	331	ePKP	40	54.00	-0.2
PNT	94.76	41	eP	35	04.00	-0.6	BLA	124.74	48	PKP	40	41.00	-1.9		0.7s		4.95nm			
	0.9s		23.00nm			5.5mb	LNV	124.95	138	ePKPc	40	43.00	-0.3	BCAO	131.08	271	ePKPd	40	48.90	-6.7X
ISA	94.88	55	eP	35	05.00	-0.5	TOD	124.97	330	ePKP	40	42.24	-0.6		0.3s		15.00nm			
KVN	95.35	51	P	35	07.00	-0.8	JSC	125.15	52	PKP	40	43.00	-0.7				id	40	56.00	
SBB	95.36	56	eP	35	08.00	0.3	ABH	125.41	331	ePKP	40	43.69	-0.1				id	41	52.80	
MBC	95.61	14	eP	35	07.50	-0.4	TACH	125.45	138	ePKPd	40	43.50	-0.8				id	44	05.80	
	0.9s		48.00nm			5.9mb	OGA	125.47	326	iPKPd	40	44.50	0.3	MFF	131.38	332	ePKP	40	54.90	-0.3
RVR	95.69	56	eP	35	09.00	-0.1		0.7s		30.00nm					0.8s		14.80nm			
PEC	95.87	57	P	35	10.30	0.3	CTI	125.59	325	PKP	40	45.00	0.6	CAF	131.51	329	ePKP	40	55.90	0.3
TNP	96.00	52	P	35	10.00	-0.7	ENN	125.59	332	ePKP	40	44.50	0.5		0.8s		7.40nm			
	0.7s		6.76nm			5.2mb		1.0s		28.00nm				RJF	131.52	330	ePKP	40	55.70	0.2
BAR	96.22	58	eP	35	13.00	1.4				e	41	22.00			0.7s		7.70nm			
NEW	96.38	42	P	35	11.00	-1.0				e	42	31.50		LPO	132.12	330	ePKP	40	57.10	0.4
	0.7s		13.47nm			5.5mb	MEM	125.66	332	iPKPc	40	44.50	0.4		0.7s		22.05nm			
GLA	97.79	58	eP	35	21.00	2.4				e	42	39.80		LFF	132.16	330	ePKP	40	57.10	0.4
EDM	98.71	37	eP	35	22.00	-0.4	PCH	125.74	139	ePKP	40	44.50	-0.5	EPF	133.72	329	ePKP	41	00.00	0.1
SES	100.30	40	ePdiff	35	29.00	-0.7	SAN	125.75	138	ePKPc	40	44.50	-0.5		0.8s		6.05nm			
BW06	101.81	48	Pdiff	35	35.80	-1.0	ROCH	125.81	138	ePKP	40	45.50	0.1	LP8	136.90	121	ePKP	40	55.00	-12.1X
FFC	105.18	35	ePdiff	35	53.00	1.8	TDS	125.85	316	PKP	40	45.50	0.6				i	41	08.70	
	1.3s		25.00nm			6.1mb	FCH	126.07	139	ePKPc	40	46.50	0.5				LR	44	44.00	
GOL	105.19	50	Pdiff	35	52.00	0.0	SGO	126.15	317	PKPd	40	45.00	-0.4	TOL	138.28	329	ePKP	41	09.00	0.5
KEV	105.98	342	iPdiff	35	54.00	-0.4	FEL	126.48	329	ePKP	40	45.05	-1.0				ePP	43	53.00	
SOD	107.26	340	iPdiff	35	59.40	-0.7	CDF	126.51	329	ePKP	40	45.00	-1.0				eSS	01	54.00	
SUF	109.66	336	iPdiff	36	10.00	-0.9		0.7s		8.80nm				ASMO	139.95	326	iPKPc	41	02.60	-9.1X
	0.6s		15.20nm				SNF	126.52	333	PKP	40	46.50	0.7	AAPN	140.20	326	iPKPc	41	03.00	-9.2X
NUR	111.34	334	ePKP	40	16.00	-0.4	ASS	126.62	321	PKP	40	45.00	-1.4	APHE	140.21	326	iPKPc	41	03.20	-9.1X
			e	40	51.00		DOU	126.67	332	PKP	40	46.20	0.1	ALOJ	140.33	326	iPKPc	41	04.00	-8.5X
SLR	115.04	238	iPKPc	40	24.50	-0.3				e	42	42.40		ATEJ	140.42	326	iPKPc	41	04.00	-8.7X
	0.9s		21.01nm				AZI	126.69	320	PKP	40	46.00	-0.4	FISA	141.25	79	ePKP	41	08.00	-6.6X
HVD	115.52	232	ePKP	40	36.00	10.4X	SOI	126.74	314	PKP	40	46.30	-0.3	NKM	142.26	325	iPKPc	41	11.00	-4.8X
BLF	115.55	234	ePKP	40	27.50	1.8	CRE	126.76	322	PKP	40	48.50	1.8				i	41	20.50	
			e	41	29.00		PGD	126.76	323	PKP	40	48.00	1.2	MORO	142.28	79	iPKP	41	11.00	-5.5X
FRB	115.75	18	ePKP	40	23.00	-1.7	BSF	127.13	329	ePKP	40	46.40	-0.9	CEOS	142.39	82	ePKP	41	10.00	-6.7X
HFS	116.07	337	ePdiff	36	38.70	-0.7		0.7s		23.15nm				PLAV	143.16	81	ePKP	41	14.00	-4.1X
	0.5s		1.10nm				HAU	127.24	330	ePKP	40	46.70	-0.7	IFR	143.46	323	iPKP	41	15.00	-3.1X
VRI	116.37	319	ePKPc	40	45.00	18.5X		0.7s		28.65nm							i	41	33.50	
NB2	116.40	339	Pdiff	36	39.00	-1.9	VAI	127.32	326	PKP	40	46.20	-1.3	LLAV	143.79	80	iPKPd	41	15.50	-3.6X
	0.8s		2.70nm				BDI	127.33	323	PKP	40	46.50	-1.2	OLLA	143.84	81	iPKPd	41	16.00	-3.1X
BUL	116.52	244	iPKPc	40	27.10	-0.6	BOB	127.60	325	PKP	40	48.00	-0.2	AVE	144.96	325	iPKP	41	19.50	-0.9
	0.8s		156.72nm				ORX	127.90	326	PKP	40	47.52	-1.3				i	41	37.50	
			i	41	32.80		PCP	128.25	325	PKP	40	48.24	-1.2				i	41	56.00	
KRI	116.52	248	iPKPd	40	26.80	-1.0	LSD	128.46	327	PKP	40	49.98	-0.1				i	42	11.50	
			ipP	41	34.20		CKI	128.47	325	PKP	40	50.00	0.2	TIO	146.56	322	iPKPd	41	24.40	1.1
MLR	117.01	319	ePdiff	36	40.00	-4.1X	RSP	128.60	326	PKP	40	49.57	-0.6				i	41	31.50	
SPC	118.99	324	ePKP	40	24.80	-6.9X	FIN	128.64	325	PKP	40	48.95	-1.2				i	42	05.00	
			e	41	13.80		LPG	128.66	327	ePKP	40	50.10	-0.4	PAG	147.75	69	ePKP	41	26.00	0.5
CER	119.00	227	ePKP	40	31.30	-0.6		0.7s		14.35nm				SLB	148.88	72	ePKP	41	30.17	2.9X
			e	41	49.50		ROB	128.78	325	PKP	40	49.16	-1.3	TRN	149.06	79	ePKP	41	31.78	4.3X
VAY	120.84	315	iPKP	40	33.00	-2.1	BNI	128.98	327	PKPd	40	51.40	0.5	SHGH	149.62	272	ePKP	41	34.50	6.1X
ZST	121.30	325	iPKP	40	35.30	-0.5	LOR	128.98	330	ePKP	40	50.40	-0.3	LEGH	149.76	272	ePKP	41	34.00	5.4X
			e	41	18.60			1.0s		17.00nm				KOGH	149.83	273	ePKP	41	35.00	6.2X
			e	41	38.50		IMI	129.00	325	PKP	40	49.67	-1.2	WEGH	149.90	272	ePKP	41	34.00	5.2X
			e	42	12.10		RRL	129.00	326	PKP	40	51.00	-0.1	KUK	149.95	273	ePKP	41	35.00	6.1X
SKO	121.37	317	ePKP	40	34.00	-2.2	ENR	129.08	325	PKP	40	50.08	-1.0	WIGH	150.19	271	ePKP	41	34.00	4.7X
			i	41	39.00		PZZ	129.09	326	PKP	40	50.49	-0.6	BAO	152.81	141	ePKP	41	31.70	-1.5
BRG	121.57	329	iPKPd	40	36.60	0.4	LBF	129.12	330	ePKP	40	50.60	-0.4	KIC	154.30	273	PKPc	41	35.42	0.3
	1.2s		36.00nm					0.7s		9.90nm					0.9s		13.00nm			
			i	41	49.40		STV	129.12	325	PKP	40	49.26	-1.9	TIC	154.57	274	PKP	41	35.66	0.1
			i	42	04.00		PGF	129.15	323	ePKP	40	50.70	-0.6	LIC	154.58	273	PKP	41	35.72	0.2
			i	42	12.00			0.7s		19.85nm				CAI	166.36	151	iPKPc	41	48.80	0.7
			i	42	47.80		SBF	129.29	325	ePKP	40	50.70	-0.7		S.D. = 1.0		on 252 of 286 obs.			
CLL	121.80	329	iPKP	40	37.10	0.5		0.7s		22.05nm										
	0.8s		26.00nm				SSF	129.30	330	ePKP	40	51.30	0.0	?	FEB 18, 1990 12h 23m 28.88± 9.88s					
			e	41	38.00			0.8s		12.75nm					44.064 N ±50.5km			7.026 E ±42.0km		
			PKKP	50	36.70		SMF	129.42	330	ePKP	40	51.10	-0.4		DEPTH = 10.0km (geophysicist)					
SOP	121.87	324	ePKP	40	37.90	1.0	AVF	129.56	330	ePKP	40	51.10	-0.6		NORTHERN ITALY					(545)
OHR	122.15	316	iPKP	40	35.80	-1.9		0.7s		5.50nm					ML 1.8 (GEN).					
MOX	122.90	329	ePKP	40	40.00	1.2	LDF	129.88	334	ePKP	40	52.10	-0.2							
	Z 64s		4.00um			5.6MszX		0.9s		16.40nm				STV	0.28	50	P	23	34.88	0.1
			e	42	14.00		FLN	129.91	334	ePKP	40	52.10	-0.2				S	23	37.85	
HOF	122.97	329	ePKP	40	39.00	0.0		0.9s		26.20nm				ENR	0.33	60	P	23	35.60	-0.1
WET	123.13	327	ePKP	40	39.40	0.1	FRF	129.93	325	ePKP	40	52.00	-0.6				S	23	38.98	
VBY	123.76	323	ePKP	40	39.90	-0.7		0.8s		18.80nm				PZZ	0.44	7	P	23	37.96	0.0
			i	40	41.10		BGF	129.98	330	ePKP	40	52.50	-0.1				S	23	42.67	
WIT	123.84	334	ePKP	40	41.50	1.0		0.7s		14.35nm				ROB	0.65	69	P	23	41.96	0.0
			e	42	30.00		LMR	130.15	325	ePKP	40	52.70	-0.3				S	23	49.24	
LJU	123.91	324	ePKP	40	41.00	0.0		0.7s		12.15nm					S.D. = 0.1		on 4 of 4 obs.			
BHG	123.95	326	ePKP	40	40.80	-0.2	LRG	130.16	325	ePKP	40	52.90	-0.1							
CEY	124.14	323	ePKP	40	40.50	-0.9		0.8s		33.60nm				*	FEB 18, 1990 12h 28m 50.20± 1.33s					
RBL	124.26	324	PKP	40	41.00	-0.7	MAF	130.35	330	ePKP	40	53.20	-0.1		50.561 N ± 9.6km 130.311 W ±13.6km					
VOY	124.30	324	ePKP	40	40.60	-1.2	GRR	130.35	334	ePKP	40	52.90	-0.3		DEPTH = 10.0km (geophysicist)					
WTS	124.34	333	ePKP	40	41.50	0.0		0.8s		24.20nm					VANCOUVER ISLAND REGION					(25)
	0.6s		16.00nm				TCF	130.48	330	ePKP	40	53.50	-0.1		ML 3.4 (PGC).					
			e	40	57.00			0.7s		20.40nm										
			e	42	09.00		LPF	130.70	334	ePKP	40	53.90	0.0	SJB	1.45	342	Pn	29	16.00	-0.4
TRI	124.55	324	PKP	40	41.50	-0.6		0.9s		37.65nm				PHC	1.84	84	Pnc	29	22.00	0.0

18d 12h

		Sn	29	43.00	
BBB	2.13 39	Pn	29	27.00	0.7
		Sn	29	53.00	
EDB	2.16 107	Pn	29	25.73	-1.0
ETB	2.71 115	Pn	29	33.37	-1.2
CBB	3.22 98	Pn	29	41.56	-0.1
BTB	3.28 108	Pn	29	41.89	-0.9
OZB	3.51 115	Pn	29	44.61	-1.3
SHB	4.26 101	Pn	29	56.18	-0.4
OOW	4.91 123	eP	30	06.62	0.8
STW	4.97 117	eP	30	07.13	0.6
BLN	5.44 115	eP	30	13.98	0.7
HDW	5.59 119	eP	30	15.77	0.4
MBW	5.74 105	eP	30	18.27	0.6
CMW	5.75 109	P	30	18.27	0.6
CPW	5.95 124	eP	30	21.00	0.6
JCW	5.96 110	eP	30	20.92	0.3
RPW	6.11 107	eP	30	22.53	-0.2
HTW	6.24 113	eP	30	24.83	0.2
S.D. = 0.7 on 19 of 19 obs.					

FEB 18, 1990 12h 34m 25.58± 0.57s
36.232 N ± 6.8km 27.022 E ± 5.2km
DEPTH = 10.0km (geophysicist)
3.9mb (5 obs.)
DODECANESE ISLANDS (369)
ML 4.2 (CSS), 4.1 (ATH).

KAP	0.69 170	ePg	34	38.70	-0.5
YER	1.36 48	iPn	34	50.00	-0.6
APE	1.46 305	ePb	34	54.00	2.0
SMG	1.48 354	ePb	34	52.50	0.3
NPS	1.50 230	ePb	34	53.70	1.2
CIN	1.61 32	ePn	35	09.00	14.9X
		iSg	35	29.00	
KSL	2.08 92	ePb	35	01.00	0.1
IZM	2.17 5	ePn	35	00.00	-2.3
ELL	2.38 77	ePn	35	06.30	0.9
VAM	2.44 251	ePg	35	14.00	8.0X
KHL	2.89 43	ePn	35	13.30	0.8
BCK	3.11 66	ePn	35	18.20	2.5
ATH	3.16 304	ePg	35	25.00	8.7X
VLI	3.33 280	ePn	35	20.50	1.8
EZN	3.63 351	ePn	35	28.00	5.0X
BNT	4.18 9	ePn	35	35.00	4.2X
ITM	4.20 285	ePn	35	35.50	4.4X
YLV	4.71 22	iPn	35	39.00	0.6
CSS	5.29 102	eP	35	44.30	-2.3
		eSn	36	47.00	
BBTK	5.79 50	eP	35	54.00	0.3
BBTK	5.79 50	eP	36	00.00	6.3X
VAY	6.16 327	eP	36	02.00	3.3X
OHR	6.89 317	eP	36	13.00	3.9X
SKO	7.19 325	eP	36	13.00	-0.3
KHC	16.21 327	iPc	38	18.50	3.6X
	1.0s 5.00nm			3.6mb	
		e	40	38.60	
KSP	16.52 335	eP	38	22.50	3.7X
		i	40	34.50	
		e	41	21.50	
		e	41	57.00	
CLL	18.11 331	e(P)	38	39.00	0.4
CDF	18.94 316	eP	38	48.90	-0.1
LBF	20.23 309	eP	39	02.20	-1.3
	1.0s 6.00nm			3.9mb	
LOR	20.42 310	eP	39	04.70	-0.8
	0.8s 4.05nm			3.8mb	
SSF	20.56 309	eP	39	05.20	-1.7
	0.9s 9.00nm			4.1mb	
BGF	20.79 307	eP	39	07.50	-1.7
	0.8s 10.05nm			4.2mb	
MEM	20.86 320	P	39	10.80	0.9
DOU	21.33 318	P	39	14.20	-0.5
SUF	26.52 359	eP	40	05.00	0.3
S.D. = 1.3 on 24 of 35 obs.					

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* FEB 18, 1990 13h 49m 36.04± 1.24s
28.827 S ±10.6km 67.324 W ±15.4km
DEPTH = 213.4 ± 23.1 km
LA RIOJA PROVINCE, ARGENTINA (138)

RTRS	2.29 234	iPc	50	19.10	0.2
RTLL	2.68 201	iPd	50	22.30	-1.0
CFA	2.88 196	iP	50	26.50	1.0
RTCB	2.94 205	iPc	50	26.50	0.2
ZON	2.95 203	iPc	50	25.50	-0.8
		eS	51	02.00	
RTCV	3.20 199	iPd	50	29.20	0.0
		S	51	06.40	
MRA	3.83 159	eP	50	36.40	-0.3
		S	51	16.30	
SLA	4.40 22	iPc	50	44.00	0.1
		(S)	51	22.00	
FCH	5.16 209	iPd	50	55.60	1.9
ROCH	5.21 217	iP	50	54.00	-0.2
SAN	5.43 211	eP	50	57.50	0.7
PCH	5.50 209	iPd	50	59.10	1.2
TACH	5.72 212	eP	50	58.50	-2.1
CHCH	5.83 208	iPc	51	02.70	0.7
LCCH	5.89 217	eP	51	02.50	-0.2
RFA	6.00 189	ePc	51	04.40	0.1
LNV	6.19 213	iPc	51	05.20	-1.4
S.D. = 1.1 on 17 of 17 obs.					

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* FEB 18, 1990 14h 51m 53.75± 0.83s
35.976 N ± 8.3km 27.160 E ± 8.8km
DEPTH = 5.0km (geophysicist)
DODECANESE ISLANDS (369)
MD 3.4 (ATH).

KAP	0.42 178	ePg	52	01.00	-1.3
NPS	1.45 241	ePn	52	22.00	1.3
APE	1.71 310	ePn	52	24.50	0.2
SMG	1.75 352	ePb	52	23.50	-1.4
KSL	1.97 85	ePg	52	29.00	0.9
ELL	2.35 70	ePn	52	34.00	0.3
BCK	3.13 61	ePn	52	49.70	5.0X
S.D. = 1.4 on 6 of 7 obs.					

? FEB 18, 1990 15h 34m 19.72± 1.94s
50.483 N ±26.6km 173.660 W ±11.2km
DEPTH = 33.0km (normol)
4.0mb (1 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS. (7)

ADK	2.36 308	iPc	34	57.30	0.3
SDN	9.32 53	iPc	36	33.50	-1.1
KDC	14.34 51	eP	37	38.30	-3.8X
SVW	14.64 37	ePd	37	47.40	1.3
TTA	15.72 31	eP	38	00.90	0.8
PMS	17.18 42	eP	38	17.00	-1.5
PMR	17.52 41	eP	38	22.00	-0.7
IMA	18.68 26	eP	38	37.50	0.4
	0.9s 9.60nm			4.0mb	
FBA	19.77 33	eP	38	48.10	-1.4
INK	26.39 33	eP	39	55.00	0.6
EDM	36.39 62	iPc	41	24.60	2.1
MAT	36.92 267	eP	41	39.00	11.9X
FRB	52.05 33	eP	43	28.00	0.2
GUN	75.19 296	P	46	00.00	-1.0
S.D. = 1.3 on 12 of 14 obs.					

& FEB 18, 1990 15h 52m 59.90s
33.510 N 116.450 W
DEPTH = 9.0km
SOUTHERN CALIFORNIA (43)
<PAS-P>. ML 4.1 (PAS). Felt (V) at Anzo and La Quinta; (IV) at Alpine, Coachella, Idyllwild, Santa Ysabel and Warner Springs; (III) at Carlsbad, Cathedral City, Hemet, Indio, Mecca, North Palm Springs, Palo, Ramona, Santee and Thermal.

PLM	0.38 246	iPc	53	07.40	-0.3
PEC	0.70 303	iPd	53	12.70	-1.2
HAY	0.71 73	ePd	53	13.30	-0.6
CPE	0.83 221	iPc	53	14.90	-1.2
BAR	0.85 193	iPd	53	15.40	-1.0
IKP	0.91 161	iPd	53	16.90	-0.5
RVR	0.91 302	ePd	53	16.20	-1.2
GLA	1.43 108	eP	53	24.10	-2.0
MWC	1.52 298	ePd	53	26.80	-0.6
CIS	1.64 267	ePd	53	27.60	-1.4
SCI	1.83 254	ePc	53	30.80	-1.0
ABL	2.66 301	eP	53	42.70	-1.2
BCH	3.44 300	eP	53	53.70	-1.1
BLP	3.44 289	eP	53	53.00	-1.8
PKEM	3.94 311	eP	54	03.00	1.1
FRI	4.38 323	ePnc	54	07.00	-1.1
		ePbc	54	10.50	
		ePgc	54	17.60	
		iSg	55	15.50	
TNP	4.60 352	eP	54	10.50	-1.0
PRS	4.93 306	ePbc	54	15.00	-0.8
SAO	5.22 310	e(Pb)	54	20.20	0.1
CMB	5.53 326	ePn	54	23.40	-1.1
		ePgc	54	38.90	
		iSg	55	52.50	
ARN	5.65 314	eP	54	25.00	-1.1
KVN	5.69 347	eP	54	25.50	-1.3
MHC	5.71 314	ePb	54	27.70	0.7
MSU	6.08 34	eP	54	32.50	0.2
ALQ	8.40 77	eP	55	12.80	7.9
	1.0s 7.50nm			4.9mb X	
ANMO	8.40 77	eP	55	03.00	-1.9
GOL	10.83 52	e(P)	55	40.00	1.6
27 obs. associated					

& FEB 18, 1990 15h 54m 55.50s
33.510 N 116.450 W
DEPTH = 9.0km
SOUTHERN CALIFORNIA (43)
<PAS-P>. ML 3.3 (PAS).

PLM	0.38 246	iPc	55	03.00	-0.3
CPE	0.83 221	iPc	55	10.50	-1.2
BAR	0.85 193	ePc	55	11.10	-0.9
3 obs. associated					

FEB 18, 1990 16h 00m 56.46± 0.74s
42.084 N ± 6.8km 15.689 E ± 6.6km
DEPTH = 10.0km (geophysicist)
ADRIATIC SEA (382)

DUI	1.01 246	P	01	16.20	0.5
		eSn	01	27.90	
HVAR	1.23 27	i(Pg)	01	19.00	-0.3
		iSg	01	37.00	
BAI	1.31 137	P	01	20.50	-0.1
SDI	1.45 256	P	01	22.90	0.1
		eSn	01	41.30	
SGO	1.55 191	P	01	23.00	-1.1
BRT	1.66 136	P	01	26.60	0.9
		eSn	01	50.00	
MGR	1.95 183	P	01	29.40	-0.5
ORI	2.10 164	P	01	32.50	0.4
S.D. = 0.8 on 8 of 8 obs.					

? FEB 18, 1990 16h 23m 13.47± 7.53s
36.609 N ±57.6km 2.576 E ±35.8km
DEPTH = 10.0km (geophysicist)
ALGERIA (396)
mbLg 3.4 (MDD).

ACU	3.04 310	ePn	24	02.20	-0.3
		eSn	24	35.00	
ESEL	3.16 4	ePn	24	04.20	0.0
		eSn	24	37.80	
ECHE	4.08 318	ePn	24	18.00	0.7
		eSn	25	02.00	
EBR	4.51 339	ePn	24	29.00	5.7X
EVIA	4.51 298	ePn	24	23.50	0.0
		eSn	25	13.00	
EBAN	5.30 289	ePn	24	34.80	0.2
		eSn	25	32.00	
GUD	6.63 309	ePn	24	53.00	-0.5
		eSn	26	04.40	
S.D. = 0.5 on 6 of 7 obs.					

% FEB 18, 1990 17h 08m 31.95± 3.17s
31.177 S ± 9.6km 67.947 W ±24.6km
DEPTH = 10.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.47 251	iPc	08	41.20	-0.4
CFA	0.50 210	iPc	08	42.00	0.0
		S	08	48.00	
RTCB	0.79 247	eP	08	48.00	0.6
		eS	09	00.00	
RTCV	0.85 216	iPd	08	48.23	-0.1
		S	09	01.50	
RTRS	1.65 307	iPd	09	00.90	-0.1
		eS	09	22.10	
S.D. = 0.5 on 5 of 5 obs.					

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* FEB 18, 1990 18h 12m 47.27± 0.74s
29.078 N ±15.3km 90.031 E ± 7.9km
DEPTH = 10.0km (geophysicist)
4.5mb (2 obs.)

18d 18h

TIBET (306)

LSA	1.16	57	iPgc	13 07.00	-2.2
			Sg	13 20.60	
SHL	3.87	154	eP	13 52.20	4.0X
			iS	14 44.50	
NDI	11.24	271	eP	15 31.00	0.0
			eS	17 31.00	
WMQ	14.83	353	eP	16 25.00	6.2X
GYA	14.95	96	P	16 21.40	0.9
HYB	15.67	225	eP	16 29.00	-0.8
XAN	16.84	68	eP	16 45.50	0.8
TIY	20.56	59	eP	17 30.20	1.5
WHN	21.15	80	eP	17 34.00	-0.7
SUF	52.65	329	iP	22 04.20	0.8
	0.4s		2.90nm	4.6mb	
HFS	58.53	325	eP	22 46.70	0.8
NB2	59.67	326	P	22 52.80	-1.0
	0.7s		2.40nm	4.4mb	

S.D. = 1.3 on 10 of 12 obs.

FEB 18, 1990 19h 03m 36.34± 0.69s
39.155 N ± 4.5km 8.991 W ± 7.5km
DEPTH = 10.0km (geophysicist)
PORTUGAL (376)
mbLg 3.6 (MDD).

MTH	0.30	211	iPc	03 43.20	0.6
			iS	03 48.00	
MOE	0.81	141	iPc	03 52.60	0.6
			iS	04 07.00	
COI	1.14	23	iPd	03 58.90	1.3
			iS	04 15.30	
PTO	2.00	8	i(Pn)d	04 10.00	-0.6
			S*	04 33.80	
			iSn	04 38.30	
EVAL	2.36	131	ePn	04 17.50	1.7
			eSn	04 46.80	
EPLA	2.43	67	ePn	04 17.30	0.6
			eSn	04 46.50	
EZAM	3.00	4	ePn	04 24.60	-0.2
			eSn	04 59.00	
EHOR	3.23	113	ePn	04 29.40	1.4
			eSn	05 06.50	
ERUA	3.53	23	ePn	04 32.60	0.4
STS	3.74	5	ePn	04 35.40	0.0
			eSn	05 15.80	
TOL	3.89	78	ePn	04 37.00	-0.5
			ePg	04 50.00	
			eSn	05 20.00	
			eSg	05 39.50	
GUD	4.01	67	ePn	04 38.80	-0.4
			eSn	05 25.70	
EBAN*	4.19	102	ePn	04 42.00	0.2
			eSn	05 28.80	
MAL	4.36	122	ePn	05 33.00	48.9X
			iSg	06 04.30	
NKM	4.67	141	eP	04 48.00	-0.6
			i	05 09.50	
			i	05 41.50	
EVIA	5.09	94	eP	04 53.60	-0.9
			eS	05 51.70	
ETOR	5.58	70	ePn	05 00.00	-1.5
AVE	5.98	167	eP	05 05.00	-2.0
			i	06 07.00	

S.D. = 1.1 on 17 of 18 obs.

% FEB 18, 1990 19h 14m 55.53± 2.01s
10.925 N ±10.6km 62.145 W ±22.6km
DEPTH = 85.0km (geophysicist)
NEAR COAST OF VENEZUELA (97)
MD 2.9 (TRN).

TCE	0.45	120	eP	15 09.24	-0.3
			eS	15 21.39	
TRN	0.78	111	eP	15 12.51	-0.1
			eS	15 25.88	
TPP	0.91	131	eP	15 14.44	0.4
			eS	15 29.99	
TBH	1.15	112	eP	15 16.88	-0.1
			eS	15 34.21	
GRW	1.32	21	eP	15 19.22	0.1
			eS	15 38.43	
TPR	1.37	79	eP	15 19.80	0.1
			eS	15 37.51	
BOT	1.42	80	eP	15 20.36	0.0
			eS	15 40.69	

S.D. = 0.2 on 7 of 7 obs.

FEB 18, 1990 20h 10m 48.79± 0.22s
42.177 N ± 2.8km 16.445 E ± 2.3km
DEPTH = 10.0km (geophysicist)
3.9mb (5 obs.)
ADRIATIC SEA (382)
ML 4.7 (ZAG), 4.4 (KBA), 4.4 (TTG), 4.2 (ROM).

HVAR	1.00	0	iPgc	11 09.80	2.1
			i(Sg)	11 22.30	
			i	11 25.30	
BAI	1.10	163	Pd	11 09.80	0.3
BRT	1.42	156	Pd	11 14.00	-0.6
HCY	1.55	79	iPgd	11 16.80	0.4
			eSg	11 38.00	
DUI	1.57	252	P	11 19.10	2.3
			eSn	11 40.80	
BRY	1.71	64	ePn	11 19.50	0.6
			eSn	11 43.00	
BDV	1.77	86	ePn	11 20.10	0.4
			eSn	11 44.20	
SGO	1.83	208	P	11 20.70	0.2
NKY	1.99	71	iPnd	11 23.50	0.5
			eSn	11 50.60	
SDI	2.02	257	P	11 25.40	2.1
ULC	2.10	95	ePn	11 24.20	-0.3
			eSn	11 52.50	
TTG	2.10	82	iPnd	11 25.10	0.6
			eSn	11 52.20	
ORI	2.11	180	P	11 25.00	0.4
LCI	2.16	148	Pd	11 25.60	0.3
AZI	2.25	266	P	11 29.90	3.3X
AQU	2.26	276	P	11 29.00	2.1
SDA	2.28	93	iPnd	11 28.00	1.0
MMN	2.31	189	P	11 28.80	1.4
CSI	2.40	183	P	11 28.70	-0.1
PLE	2.46	61	ePn	11 31.50	1.8
			eSn	12 01.20	
LACI	2.50	101	iPnd	11 30.00	-0.1
TDS	2.52	182	Pd	11 30.30	-0.1
PUK	2.57	92	iPnd	11 32.00	0.9
ROI	2.60	178	P	11 31.90	0.2
BLY	2.63	12	Pn	11 36.80	4.9X
			Sn	12 09.00	
IVA	2.65	74	ePn	11 34.20	1.9
			eSn	12 06.00	
PVY	2.65	80	iPnd	11 33.60	1.2
			eSn	12 04.20	
TIR	2.69	107	iPnd	11 32.70	-0.2
BCI	2.70	85	iPnd	11 43.70	10.8X
RDP	2.81	263	P	11 37.40	2.7
RMP	2.81	264	P	11 37.50	2.9
ASS	2.93	289	Pd	11 38.80	2.5
KKS	2.95	91	ePn	11 38.20	1.7
CZI	2.96	185	P	11 36.20	-0.5
BERA	3.02	118	iPnc	11 36.50	-1.0
TPE	3.28	124	iPnc	11 39.00	-2.3
GRI	3.36	180	P	11 42.41	0.1
RSM	3.41	302	P	11 44.80	1.8
OHR	3.43	107	iPnd	11 43.60	0.2
VBY	3.44	346	iPnc	11 45.80	2.4
			iPb	11 54.10	
			iSn	12 26.20	
			iSg	12 40.30	
RIY	3.50	335	ePn	11 45.50	1.2
			iSn	12 23.90	
			iSg	12 37.50	
SRN	3.54	129	iPn	11 44.80	0.0
CRE	3.61	295	Pd	11 47.70	1.7
KBN	3.63	114	iPnd	11 46.10	-0.1
ZAG	3.65	355	iPn	11 47.70	1.2
			iSn	12 30.00	
SKO	3.72	91	iPnd	11 47.90	0.3
Z	10s		1.12um		
E	10s		1.41um		
			iPgd	11 59.00	
			iSn	12 31.00	
			iSb	12 42.00	
			iSg	12 46.00	
PTJ	3.74	355	iPnc	11 48.50	0.7
			eSn	12 31.50	
SFI	3.79	299	Pd	11 50.80	2.3
CEY	3.85	338	iPnc	11 50.90	1.6
			e	11 59.50	
			eSn	12 36.00	

PGD	3.86	298	P	11 51.60	2.0
MAO	3.93	275	P	11 51.60	1.1
BEO	3.94	46	ePn	11 57.00	6.5X
			ePg	12 09.30	
			iSg	13 03.00	
TRI	4.03	332	P	11 52.40	0.6
GMB	4.03	187	P	11 49.63	-2.4
ATN	4.08	191	Pd	11 50.90	-1.7
LJU	4.10	341	iPnc	11 54.40	1.5
			iSn	12 42.50	
SOI	4.11	184	P	11 52.20	-0.8
VOY	4.27	335	iPn	11 56.00	0.6
			eSn	12 45.80	
MNO	4.45	198	P	11 58.20	0.2
PII	4.61	292	P	12 01.70	1.6
MME	4.66	298	P	12 02.10	1.0
VAY	4.66	99	iPn	12 00.40	-0.5
BDI	4.68	296	P	12 03.20	2.0
RBL	4.74	335	P	12 03.50	1.5
KKB	4.96	91	iPd	12 15.00	10.0X
VTS	5.03	83	iPc	12 06.00	-0.2
			iSg	12 25.00	
			iS	13 01.00	
			iSg	13 25.00	
BZS	5.08	46	ePc	12 04.00	-2.7
FVI	5.14	331	P	12 07.40	-0.1
CTI	5.19	320	Pc	12 07.90	-0.4
KBA	5.38	337	iPnc	12 11.40	0.3
			i	12 26.90	
			iSn	13 15.90	
			i	13 28.20	
			iSg	13 48.70	
SAL	5.48	311	P	12 12.50	0.1
SOP	5.51	1	ePn	12 14.00	1.2
PGF	5.53	276	Pn	12 14.40	1.2
BUD	5.61	18	e(P)	12 22.00	7.7X
BOB	5.71	299	P	12 16.70	0.9
PGB	5.73	84	iPd	12 16.00	-0.1
			iS	13 18.00	
SRO	5.79	13	eP	12 16.70	0.0
Z	14s		0.18um		
			i	12 24.70	
			i	12 40.80	
			i	13 14.40	
			e	13 31.20	
SCE	5.92	327	iPnc	12 18.70	0.0
ZST	6.04	4	e(Pn)	12 25.50	5.3X
			e	12 36.10	
			i	12 52.90	
			i	13 12.70	
			i	13 40.50	
MDI	6.05	309	P	12 20.20	-0.1
OGA	6.08	322	ePn	12 20.90	-0.2
VKA	6.09	359	ePnd	12 20.50	-0.5
			isP	12 29.40	
			iPgPg	12 48.60	
			iSn	13 25.00	
			i	13 50.70	
			i	14 07.40	
BHG	6.09	337	iPc	12 21.80	0.8
KMR	6.10	345	iPn+	12 21.30	0.2
			iSn	13 30.60	
RZN	6.19	92	iPd	12 24.00	1.4
PCP	6.22	295	P	12 21.92	-1.0
PSZ	6.24	22	eP	12 29.00	5.8X
FIN	6.35	291	P	12 24.10	-0.7
CKI	6.37	293	Pc	12 23.90	-1.1
OSS	6.38	317	eP	12 25.40	0.2
IMI	6.50	288	P	12 30.64	3.7X
VDL	6.60	313	eP	12 29.70	1.3
ROB	6.61	292	P	12 27.15	-1.3
PVL	6.63	78	eP	12 22.00	-6.7X
VAI	6.65	306	Pc	12 27.90	-1.0
KDZ	6.71	91	iP	12 28.00	-1.9
TMA	6.71	308	eP	12 28.10	-1.9
DIM	6.76	88	eP	12 32.00	1.5
SBF	6.82	287	Pn	12 30.80	-0.5
ENR	6.91	290	P	12 32.16	-0.4
STV	6.98	290	P	12 32.60	-1.0
ORO	7.02	302	P	12 32.20	-2.0
ORX	7.02	302	P	12 30.85	-3.4X
LLS	7.09	314	eP	12 36.50	1.2
DOI	7.10	292	P	12 35.00	-0.3
SAX	7.16	318	eP	12 36.20	-0.1
PZZ	7.20	292	P	12 35.65	-1.1
MMK	7.23	305	eP	12 36.10	-1.1
KHC	7.24	345	iP	12 36.40	-0.8

18d 20h

			e	12	53.70	
RSP	7.30	297	P	12	39.79	1.7
FRF	7.33	284	Pn	12	37.60	-0.9
WET	7.40	342	iPnd	12	38.70	-0.7
LMR	7.40	282	Pn	12	38.20	-1.3
LSD	7.48	299	P	12	36.74	-4.0X
SPC	7.50	19	eP	12	57.00	16.0X
LRG	7.52	283	Pn	12	41.20	0.0
RRL	7.53	295	P	12	38.70	-2.9
DIX	7.58	304	eP	12	42.60	0.4
MLR	7.62	61	ePc	12	44.50	1.8
BNI	7.65	295	P	12	42.20	-0.9
LPG	7.75	299	Pn	12	42.20	-2.5
			Sn	14	07.20	
LPL	7.77	299	Pn	12	43.00	-1.9
ZLA	7.80	316	eP	12	44.60	-0.5
EMS	7.87	303	eP	12	45.70	-0.5
PRU	7.92	351	Pnd	12	45.50	-1.2
			e	12	54.50	
			Sn	14	25.50	
SLE	7.94	317	eP	12	45.60	-1.3
FEL	8.25	317	ePn	12	49.30	-2.2
MFT	8.25	96	iP	12	50.00	-1.5
VRI	8.28	60	ePc	13	01.50	9.8X
KSP	8.67	359	eP	12	56.00	-1.1
			e	15	42.00	
			id	16	05.00	
HOF	8.73	340	iPc	12	56.60	-1.4
BNT	8.83	98	iP	12	57.50	-1.9
BRG	8.87	350	ePn	13	04.00	4.2X
			e	13	44.00	
			i	14	46.00	
			iSg	15	39.00	
BSF	8.87	313	Pn	12	57.50	-2.5
			Sn	14	34.00	
CDF	8.98	317	Pn	12	59.00	-2.4
CTT	9.03	93	iP	13	00.50	-1.7
MOX	9.10	340	iPc	13	01.50	-1.6
	1.2s		51.00nm			5.8mb X
			i	13	07.00	
			e	14	53.00	
			e	15	49.00	
HAU	9.21	313	Pn	13	02.30	-2.4
			Sn	14	40.00	
CLL	9.44	347	ePn	13	15.00	7.4X
			e	14	41.00	
			i	16	05.70	
TNS	9.77	328	eP	13	13.60	1.3
ABH	9.88	324	ePn	13	12.60	-1.2
SMF	10.06	301	Pn	13	13.50	-2.9
			Sn	15	00.20	
LBF	10.11	303	Pn	13	13.50	-3.5X
			Sn	15	02.50	
LOR	10.30	304	Pn	13	16.20	-3.4X
BGF	10.67	299	Pn	13	21.50	-3.2X
			Sn	15	15.90	
MEM	11.08	323	P	13	30.40	0.2
DOU	11.40	318	P	13	40.30	5.7X
	0.5s		3.80nm			5.0mb
			S	15	33.50	
HFS	18.06	356	eP	15	00.00	-1.2
	0.6s		3.20nm			3.6mb
	Z 17s		0.11um			5.5Msz
			LR	21	04.00	
EKA	18.36	323	P	15	06.00	1.1
	0.9s		7.40nm			3.9mb
NB2	19.16	352	P	15	12.40	-2.2
	0.7s		4.60nm			3.8mb
SUF	21.36	12	iP	15	36.50	-1.6
	0.6s		4.70nm			4.1mb
	S.D. = 1.4		on 131 of 151 obs.			

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* FEB 18, 1990 20h 19m 44.20± 0.93s
33.507 N ±10.7km 116.371 W ± 7.5km
DEPTH = 10.0km (geophysicist)
SOUTHERN CALIFORNIA (43)
ML 3.0 (PAS).

PLM	0.44	250	iPc	19	53.50	0.3
PEC	0.76	300	eP	19	58.40	-0.7
GLA	1.37	109	eP	20	09.20	-0.2
ABL	2.72	300	eP	20	29.00	0.1
TNP	4.62	352	e(P)	20	56.30	0.5
KVN	5.71	346	eP	21	13.50	2.3X
	S.D. = 0.7		on 5 of 6 obs.			

FEB 18, 1990 21h 43m 36.42± 0.63s
39.378 N ± 5.8km 28.238 E ± 5.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 3.2 (ATH).

DST	0.38	53	iPg	43	44.60	0.4
			iSg	43	50.10	
BNT	1.01	346	iPn	43	56.50	1.0
EDC	1.01	344	iPn	43	56.00	0.5
IZM	1.24	218	ePn	43	58.60	-0.9
KHL	1.45	136	iPn	44	03.10	0.3
YLV	1.47	36	iPn	44	03.00	-0.1
PRK	1.53	266	ePb	44	06.00	2.2
EZN	1.54	287	ePn	44	03.00	-1.0
MFT	1.59	333	ePn	44	03.40	-1.3
GBZT	1.69	33	ePn	44	10.60	4.6X
CTT	1.77	5	iPn	44	06.40	-0.9
CIN	1.78	184	eP	44	21.00	13.6X
ISK	1.80	20	ePn	44	08.00	0.3
GPA	1.84	60	ePn	44	08.00	-0.3
SMG	2.00	214	ePn	44	14.50	4.0X
DMK	2.47	352	ePn	44	17.00	-0.3
RDO	2.72	311	ePn	44	26.50	5.6X
BBTK	3.52	81	eP	44	45.00	12.6X
			eS	45	34.00	
	S.D. = 1.0		on 13 of 18 obs.			

& FEB 18, 1990 21h 47m 27.40s
33.520 N 116.450 W
DEPTH = 11.0km
SOUTHERN CALIFORNIA (43)
<PAS-P>. ML 3.1 (PAS).

PLM	0.38	244	iPc	47	35.10	-0.3
PEC	0.70	302	eP	47	40.00	-1.2
HAY	0.70	74	ePd	47	40.60	-0.6
CPE	0.84	221	iPc	47	42.50	-1.0
BAR	0.86	193	iPd	47	43.10	-0.8
GLA	1.44	108	eP	47	51.00	-2.4
ABL	2.65	301	eP	48	10.60	-0.5
BLP	3.44	289	eP	48	23.00	1.0
TNP	4.59	352	eP	48	37.70	-0.9
KVN	5.68	347	eP	48	53.70	-0.2
	10 obs. associated					

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* FEB 18, 1990 21h 58m 47.16± 0.91s
38.265 N ± 7.1km 22.253 E ±13.0km
DEPTH = 33.0km (normal)
GREECE (364)
ML 2.8 (ATH).

ITM	1.11	194	ePb	59	07.00	0.5
ATH	1.19	104	ePn	59	07.50	0.0
			eSn	59	24.50	
NEO	1.29	36	ePn	59	09.40	0.4
VLI	1.64	160	ePn	59	13.50	-0.5
KZN	2.07	350	ePn	59	20.00	-0.4
OHR	3.06	339	e(Pn)	59	38.50	4.2X
	S.D. = 0.7		on 5 of 6 obs.			

FEB 18, 1990 22h 45m 20.61± 0.54s
26.695 S ± 5.7km 64.830 W ±10.6km
DEPTH = 33.0km (normal)
TUCUMAN PROVINCE, ARGENTINA (131)
Felt in the San Miguel de Tucumon area.

CYA	1.94	206	iPc	45	54.00	2.1
SLA	2.05	343	iPc	45	53.50	-0.1
YJA	4.55	352	iPd	46	29.00	-0.3
RTRS	5.35	229	ePc	46	41.30	1.1
RTLL	5.61	214	ePc	46	44.40	0.4
CFA	5.73	211	iPd	46	41.50	-4.1X
MRA	5.75	187	iPc	46	47.00	1.2
ZON	5.89	214	eP	46	48.00	0.1
RTCV	6.08	211	e(P)	46	50.70	0.1
FCH	8.13	214	eP	47	18.70	-0.9
ROCH	8.24	219	eP	47	20.00	-1.0
SAN	8.42	215	eP	47	21.00	-2.8
PCH	8.47	214	eP	47	25.00	0.9
RFA	8.63	200	ePc	47	24.60	-1.7
TACH	8.72	216	eP	47	24.00	-3.4X
CHCH	8.79	213	eP	47	26.50	-2.0
LCCH	8.93	219	eP	47	33.00	2.7X
LNV	9.20	217	eP	47	27.50	-6.5X
CCH	9.35	352	P	47	41.00	4.6X
LPB	10.56	343	P	47	54.50	1.4
	0.9s		50.42nm			5.7mb X
			LR	51	55.00	
ZOBO	10.82	343	ePd	47	56.00	-0.8
	0.9s		23.79nm			5.4mb X
	Z 20s		0.55um			4.8Msz
			LR	51	48.00	
BAO	19.15	58	eP	49	41.40	-2.8
KIC	66.78	70	(P)	56	12.00	0.6
CER	71.26	118	eP	56	40.00	1.1
HVD	77.18	118	eP	57	04.20	-9.1X
SLR	81.42	114	iPd	57	37.00	0.8
KVN	82.17	321	eP	57	40.00	0.2
LRM	84.13	329	eP	57	49.90	0.2
WRA	130.05	204	PKP	04	31.00	1.7
	0.9s		1.60nm			
	S.D. = 1.4		on 23 of 29 obs.			

? FEB 18, 1990 22h 47m 26.82± 2.46s
18.064 S ±18.4km 117.876 E ±20.2km
DEPTH = 33.0km (normal)
4.3mb (2 obs.)
NORTHWEST OF AUSTRALIA (588)

MBL	3.59	149	iPc	48	24.10	2.6
KNA	10.67	79	eP	50	01.40	0.8
			eS	51	51.00	
WARB	11.45	136	eP	50	11.00	-0.2
			eS	52	03.00	
BAL	12.53	185	eP	50	26.40	0.8
	0.4s		59.00nm			6.1mb X
			eS	52	30.00	
COOL	13.10	168	eP	50	31.60	-1.7
	0.3s		16.00nm			5.5mb X
			eS	52	40.00	
KLB	13.47	180	eP	50	38.00	-0.1
	0.3s		10.00nm			5.2mb X
			eS	52	52.00	
MTN	13.79	70	eP	50	42.00	-0.3
			eS	53	05.00	
MUN	13.94	186	eP	50	44.40	0.2
	0.6s		74.00nm			5.6mb X
			eS	53	04.00	
NWAO	14.81	182	eP	50	55.50	-0.2
	0.4s		31.00nm			5.0mb X
			eS	53	24.00	
WRA	15.68	99	Pd	51	07.10	0.0
	0.4s		2.70nm			3.8mb
WB5	15.70	99	eP	51	08.00	0.6
			eS	53	47.20	
FORR	15.76	146	eP	51	07.00	-0.9
			eS	53	40.00	
ASPA	15.98	113	iPd	51	09.20	-1.7
	0.8s		74.00nm			4.9mb
			iS	53	53.90	
QIS	20.66	100	eP	52	10.00	3.6X
			eS	55	45.00	
	S.D. = 1.2		on 13 of 14 obs.			

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* FEB 18, 1990 22h 51m 18.32± 0.75s
51.535 S ± 8.5km 159.765 E ±12.2km
DEPTH = 10.0km (geophysicist)
NORTH OF MACQUARIE ISLAND (165)

MCQ	3.01	189	iPd	52	06.00	-0.8
			iS	52	39.80	
MHZ	9.06	48	P	53	31.20	-0.9
TOO	17.23	319	eP	55	21.00	0.5
CNB	17.86	331	eP	55	28.00	-0.3
CAN	17.96	330	eP	55	29.10	-0.5
			eTT	10	43.00	
BWA	18.97	330	eP	55	40.10	-1.9
			eTT	11	23.00	
COO	21.74	341	eP	56	12.00	0.4
RMQ	26.37	337	eP	56	57.00	0.7
DZM	29.87	13	iPc	57	29.00	0.9
HYB	98.12	288	ePd	04	57.20	0.9
INK	129.28	26	ePKP	10	28.00	1.1
MBC	137.27	20	ePKP	10	45.00	3.1X
	1.0s		2.00nm			
OHR	150.17	266	ePKP	11	11.00	6.0X
SKO	150.25	268	ePKP	11	10.50	5.5X
SUF	153.08	313	ePKP	11	17.00	8.5X
NUR	153.85	308	ePKP	11	30.00	20.4X
	S.D. = 1.1		on 11 of 16 obs.			

& FEB 18, 1990 23h 12m 12.70s
40.645 N 127.543 W

DEPTH = 5.0km
3.5mb (1 obs.)
OFF COAST OF NORTHERN CALIFORNIA(34)
<BRK>. ML 3.9 (BRK).

FHC	2.71	86	eP	12	54.70	-3.0
			e	13	02.70	
			e(S)	13	25.60	
WDC	3.81	89	eP	13	11.30	-2.0
			e(S)	13	52.00	
LTCM	4.16	94	eP	13	09.00	-9.2
LBFM	4.34	79	eP	13	20.00	-1.0
MIN	4.54	92	e(P)	13	20.50	-3.3
			e(S)	14	11.20	
ORV	4.76	101	e(P)	13	25.00	-1.8
BRK	4.95	122	e(P)	13	26.70	-2.7
PCC	5.10	126	ePc	13	28.20	-3.4
GCC	5.64	128	e(P)	13	33.50	-5.7
MHC	5.66	124	ePc	13	37.20	-2.4
ARN	5.72	123	eP	13	37.30	-3.2
CMB	6.13	113	eP	13	47.30	1.1
SAO	6.14	127	eP	13	42.70	-3.6
KVN	7.44	99	eP	14	07.50	2.8
ALO	17.60	102	eP	16	26.50	6.1
	1.0s		3.75nm			3.5mb
	15 obs. associated					

? FEB 18, 1990 23h 45m 57.47± 5.69s
31.645 S ±13.5km 68.175 W ±43.4km
DEPTH = 10.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTCV	0.38	235	ePc	46	05.00	-0.2
			S	46	13.20	
RTLL	0.40	321	iPc	46	05.00	-0.7
			eS	46	12.60	
RTCB	0.56	286	iP	46	09.00	0.2
			(S)	46	18.50	
RTRS	1.84	323	iPd	46	29.90	0.6
S.D. = 1.0		on	4 of	4	obs.	

? FEB 18, 1990 23h 46m 52.33± 2.10s
15.258 N ±30.3km 61.316 W ±31.9km
DEPTH = 33.0km (normal)
LEEWARD ISLANDS (92)
ML 2.3 (FDF).

DPMT	0.07	271	eP	46	57.91	0.0
FDF	0.55	163	iPd	47	03.12	-0.5
			S	47	09.70	
CRM	0.63	142	eP	47	04.62	-0.2
			S	47	11.80	
BIM	0.77	162	eP	47	07.22	0.4
			S	47	17.30	
MVM	0.81	150	eP	47	07.46	0.2
S.D. = 0.5		on	5 of	5	obs.	

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* FEB 19, 1990 00h 51m 12.98± 1.88s
7.265 S ±16.0km 128.976 E ±15.8km
DEPTH = 201.1 ± 19.0 km
4.9mb (4 obs.)
BANDA SEA (280)

MTN	5.94	159	iPd	52	40.70	0.5
			eS	53	43.00	
KUPT	6.03	241	ePd	52	41.40	0.0
			eS	53	28.00	
KNA	8.44	181	eP	53	08.10	-4.7X
	0.2s	62.00nm				5.5mb X
			eS	54	34.00	
JAY	12.60	69	eP	54	26.40	19.9X
WB5	13.59	158	eP	54	18.10	-0.8
			eS	56	41.90	
WRA	13.64	158	Pd	54	19.10	-0.4
	0.5s	6.60nm				4.3mb
QIS	16.75	143	eP	55	02.00	4.2X
			eS	58	01.00	
ASPA	16.98	164	iPc	55	01.50	1.0
	0.6s	118.00nm				5.5mb
			eS	57	55.40	
WARB	18.95	186	eP	55	21.00	-0.2
GUN	54.37	312	P	00	22.20	0.4
	0.4s	11.00nm				4.9mb
PKI	54.53	311	P	00	22.80	-0.1
KKN	54.74	311	P	00	24.20	-0.1
DMN	54.78	311	P	00	24.40	-0.2
GKN	55.34	311	P	00	28.60	0.1
	0.4s	9.00nm				4.8mb
S.D. = 0.6		on	11 of	14	obs.	

FEB 19, 1990 01h 27m 24.79± 0.80s
39.180 N ± 8.1km 23.430 E ± 9.2km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
ML 2.9 (ATH).

NEO	0.20	308	ePb	27	29.50	0.2
PLG	1.19	1	ePn	27	42.30	-4.7X
			eSn	27	56.70	
ATH	1.23	169	ePn	27	48.70	1.1
KZN	1.70	312	ePb	27	53.00	-1.8
PRK	2.21	87	ePn	28	01.50	-0.5
VAY	2.24	343	ePn	28	08.00	5.6X
VLI	2.49	189	ePn	28	05.00	-1.0
RDO	2.54	39	ePb	28	07.00	0.3
OHR	2.79	315	ePn	28	12.00	1.6
S.D. = 1.4		on	7 of	9	obs.	

FEB 19, 1990 01h 58m 56.63± 0.54s
43.030 N ± 6.6km 17.832 E ± 4.5km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 3.0 (TTG), 2.8 (KBA).

BRY	0.54	104	ePg	59	06.00	-1.6
			eSg	59	15.10	
HCY	0.76	140	iPgc	59	10.00	-1.5
			eSg	59	22.60	
NKY	0.88	104	ePg	59	12.80	-0.9
			eSg	59	27.60	
HVAR	1.02	279	iPgd	59	13.80	-2.2
			iSg	59	28.20	
BDV	1.05	135	iPgd	59	15.10	-1.3
			eSg	59	32.00	
PLE	1.18	75	ePg	59	18.20	-0.6
			eSg	59	36.50	
TTG	1.21	119	ePg	59	19.50	0.3
			eSg	59	37.40	
ULC	1.50	135	ePg	59	23.30	-0.2
			eSg	59	45.10	
IVA	1.53	95	ePn	59	25.00	1.0
			eSn	59	47.00	
SDA	1.60	129	ePn	59	25.00	0.1
PVY	1.63	105	ePn	59	27.10	1.5
			eSn	59	51.50	
BCI	1.78	111	ePn	59	29.30	1.7
BLY	1.78	345	eP	59	50.80	23.2X
LACI	1.97	134	ePn	59	33.70	3.3X
BAI	2.04	201	P	59	33.00	1.6
KKS	2.13	116	ePn	59	37.00	4.3X
BRT	2.20	192	P	59	36.40	2.6
			eSg	59	58.10	
TIR	2.26	137	ePn	59	38.00	3.4X
PHP	2.35	124	iPnd	59	43.80	7.9X
BEO	2.61	46	ePn	59	44.00	4.5X
LCI	2.70	178	P	59	45.00	4.2X
DUI	2.85	242	P	59	42.50	-0.6
SKO	2.87	110	ePn	59	58.00	14.7X
			i	00	02.10	
			i	00	27.00	
			i	00	36.00	
OHR	2.92	130	ePn	59	45.20	1.1
SGO	3.11	218	P	59	46.90	0.3
ORI	3.14	200	P	59	47.50	0.4
PTJ	3.17	336	eP	00	23.90	36.4X
SDI	3.26	247	P	59	46.80	-2.0
MGR	3.36	211	P	59	48.70	-1.5
RIY	3.39	314	e(Pn)	59	52.80	2.2
AZI	3.41	254	P	59	50.50	-0.4
CEY	3.65	319	eP	00	04.50	10.2X
			e(Sn)	00	35.50	
			e	00	42.50	
BZS	3.75	45	ePc	59	54.00	-1.8
LJU	3.83	323	eP	00	06.00	9.2X
			e(Sn)	00	37.50	
VAY	3.91	114	ePn	00	12.40	14.3X
TRI	3.96	314	eP	00	11.60	12.9X
			i	00	47.00	
			i	01	06.70	
VOY	4.11	318	ePn	00	00.20	-0.8
			eSn	00	48.70	
KBA	5.15	323	ePn	00	18.00	2.3
			iSn	01	13.50	
			eSg	01	41.00	
			i	01	44.30	
S.D. = 1.5		on	25 of	38	obs.	

% FEB 19, 1990 02h 12m 48.59± 1.70s
32.120 S ± 9.7km 69.601 W ±18.3km
DEPTH = 33.0km (normal)
MENDOZA PROVINCE, ARGENTINA (139)

RTCB	0.93	47	iP	13	06.50	1.1
			(S)	13	19.90	
RTCV	0.94	74	iPc	13	06.40	0.9
			S	13	19.70	
RTLL	1.25	51	iPd	13	09.00	-0.8
CFA	1.27	67	iPd	13	09.00	-1.1
			S	13	23.00	
RTRS	1.95	4	iPc	13	19.90	0.0
RFA	2.81	161	ePd	13	32.20	0.0
S.D. = 1.1		on	6 of	6	obs.	

? FEB 19, 1990 04h 18m 17.67±19.17s
43.205 N ±73.9km 129.266 W ±134.km
DEPTH = 10.0km (geophysicist)
OFF COAST OF OREGON (30)

NLO	5.05	53	eP	19	35.04	-0.3
BMW	5.40	51	eP	19	39.59	-0.6
RVW	5.50	55	eP	19	41.32	-0.4
TCO	5.63	78	eP	19	43.72	0.0
LVP	5.67	57	eP	19	44.17	0.1
VLMW	5.68	63	eP	19	43.90	-0.4
CPW	5.75	47	eP	19	45.40	0.3
TDH	5.76	66	eP	19	45.43	0.0
FL2	5.77	56	eP	19	45.49	0.0
MTMW	5.77	58	eP	19	45.40	-0.1
CZM	5.79	54	eP	19	45.05	-0.7
ERK	5.82	55	eP	19	45.92	-0.3
VBEM	5.83	69	eP	19	46.31	-0.1
SHW	5.83	57	eP	19	46.98	0.6
STD	5.86	56	eP	19	47.12	0.3
YEL	5.87	57	eP	19	47.16	0.2
VLL	5.89	65	eP	19	47.29	0.1
SOSW	5.91	57	eP	19	47.89	0.4
TDL	5.92	55	eP	19	47.51	-0.1
VFP	5.99	67	eP	19	48.54	-0.1
KOSW	5.99	55	eP	19	49.25	0.7
LMW	6.04	53	eP	19	49.42	0.1
GULW	6.12	61	eP	19	50.42	0.1
ASR	6.21	59	eP	19	51.81	0.1
LON	6.37	54	eP	19	57.00	3.1X
GLK	6.39	56	eP	19	54.39	0.1
RMW	6.76	48	eP	19	59.50	0.0
S.D. = 0.3		on	26 of	27	obs.	

FEB 19, 1990 04h 25m 22.52± 0.70s
43.714 N ± 2.8km 127.800 W ± 6.7km
DEPTH = 10.0km (geophysicist)
4.5mb (2 obs.)
OFF COAST OF OREGON (30)

NLD	3.90	51	eP	26	23.84	0.0
FHC	4.06	134	e(P)	26	25.00	-1.0
PGO	4.20	64	eP	26	28.61	0.6
ONR	4.25	41	eP	26	28.56	-0.2
BMW	4.25	48	eP	26	28.23	-0.6
			eS	27	20.59	
RVW	4.34	54	eP	26	30.08	0.1
LVP	4.50	57	P	26	32.86	0.5
TCO	4.50	83	eP	26	31.82	-0.6
VLMW	4.50	64	eP	26	32.74	0.4
OBH	4.55	36	P	26	33.11	0.2
			S	27	26.95	
TDH	4.58	68	eP	26	33.71	0.2
FL2	4.60	55	eP	26	34.33	0.6
			eS	27	30.63	
MTMW	4.60	58	eP	26	33.99	0.2
CPW	4.63	44	eP	26	33.47	-0.7
CZM	4.63	52	eP	26	33.88	-0.3
VBEM	4.65	71	eP	26	34.61	0.0
ERK	4.66	54	eP	26	34.44	-0.2
SHW	4.66	56	eP	26	35.42	0.7
APW	4.68	49	eP	26	34.59	-0.3
STD	4.69	56	eP	26	35.48	0.3
YEL	4.70	56	eP	26	35.78	0.4
VLL	4.71	66	eP	26	35.86	0.5
SOSW	4.74	56	eP	26	36.18	0.3
OOW	4.75	31	eP	26	35.79	-0.1
TDL	4.76	54	eP	26	36.12	0.0

19d 04h

SMW	4.78	39	eP	26	35.71	-0.6
			eS	27	32.32	
VFP	4.81	68	eP	26	36.92	0.1
APM	4.81	63	eP	26	37.20	0.5
KOSW	4.83	53	eP	26	37.40	0.4
LMW	4.89	51	eP	26	37.89	0.0
GULW	4.94	61	eP	26	39.15	0.6
LBFM	4.97	116	eP	26	44.00	4.9X
OSD	5.01	33	eP	26	39.52	-0.1
WDC	5.01	127	eP	26	41.80	2.3
ASR	5.04	59	eP	26	40.24	0.3
GHW	5.12	48	eP	26	41.25	0.2
HDW	5.15	39	eP	26	41.35	-0.2
GMW	5.20	41	eP	26	41.63	-0.6
			eS	27	43.22	
LON	5.21	52	ePc	26	42.50	0.1
GLK	5.23	55	eP	26	43.22	0.5
RVC	5.23	50	eP	26	42.99	0.3
VGB	5.33	68	eP	26	43.40	-0.7
RMW	5.63	46	ePc	26	48.50	0.1
ORV	6.29	129	ePc	26	58.10	0.6
ARN	7.95	141	eP	27	20.50	-0.4
PNT	7.95	42	iPc	27	21.10	0.2
	0.4s	13.00nm			5.5mb X	
CMB	7.98	133	eP	27	21.00	-0.3
KVN	8.65	119	eP	27	31.00	0.2
NEW	8.72	55	eP	27	29.70	-1.9
FRI	9.12	135	eP	27	37.00	-0.1
LRM	11.12	74	eP	28	03.80	-1.0
SES	13.22	54	eP	28	40.00	7.2X
BW06	13.34	88	eP	28	34.50	-0.1
GOL	17.21	96	e(P)	29	23.00	-1.7
ALQ	18.65	111	eP	29	42.30	-0.3
FFC	20.02	48	iPd	29	58.30	0.2
	1.1s	44.00nm			4.7mb	
INK	24.84	355	eP	30	46.00	0.2
MBC	32.83	4	eP	31	58.00	0.3
	1.0s	4.00nm			4.3mb	
	S.D. = 0.6	on	56 of 58 obs.			

FEB 19, 1990 04h 56m 46.65± 0.56s
15.198 N ± 4.7km 61.178 W ± 8.5km
DEPTH = 10.0km (geophysicist)
LEEWARD ISLANDS (92)
ML 2.6 (FDF).

DPMT	0.21	287	eP	56	50.86	-0.3
			eS	56	52.65	
BBL	0.43	318	eP	56	56.00	0.5
FDF	0.46	177	iPd	56	55.97	-0.1
			S	57	02.30	
CRM	0.51	150	eP	56	57.52	0.5
BIM	0.69	171	iPc	57	00.10	-0.1
			S	57	09.70	
MVM	0.70	157	eP	57	00.21	-0.2
			S	57	10.10	
DEG	1.11	6	eP	57	07.00	-0.6
			S	57	22.00	
SEG	1.24	345	eP	57	10.00	0.3
	S.D. = 0.5	on	8 of 8 obs.			

FEB 19, 1990 05h 34m 37.04± 0.11s
40.347 S ± 3.2km 176.102 E ± 3.0km
DEPTH = 24.3km (geophysicist)
5.9mb (36 obs.) 6.3Msz (18 obs.)
NORTH ISLAND, NEW ZEALAND (159)
Ms 6.3 (BRK), 6.0 (PAS). ML 6.0 (WEL). Mo=1.8*10**18 Nm (PPT). Estimated 440,000 U.S. dollars damage in the Dannevirke-Palmerston North area. Maximum intensity VII. Some cracks in roads reported in the area. Felt from Hamilton to Wellington, North Island and at Blenheim, South Island. Depth from broadband displacement seismograms.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=242 Dip=79 Slip= -90
NP2: 62 11 -90
Principal Axes:
T Plg=34 Azm=332
P 56 152
Comment: The focal mechanism is poorly controlled and corresponds to normal faulting. The preferred fault plane is NP1.
MOMENT TENSOR SOLUTION
Dep 20 No. of sta: 10
Moment Tensor; Scale 10**18 Nm
Mrr=-1.42 Mtt= 1.35
Mff= 0.06 Mrt= 2.10
Mrf= 1.93 Mtf= 0.41
Principal axes:
T Val= 3.11 Plg=32 Azm=329
N 0.18 10 233
P -3.29 56 128
Best Double Couple:Mo=3.2*10**18
NP1:Strike= 91 Dip=16 Slip= -51
NP2: 231 77 -100
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 35C
Centroid Location:
Origin Time 05:34:38.4 0.3
Lat 40.76S 0.04 Lon 176.09E 0.06
Dep 32.1 2.1 Half-duration 5.2
Moment Tensor; Scale 10**18 Nm
Mrr=-1.28 0.05 Mtt= 0.95 0.09
Mff= 0.33 0.09 Mrt= 0.92 0.13
Mrf= 1.73 0.16 Mtf= 1.44 0.06
Principal Axes:
T Val= 2.92 Plg=24 Azm=316
N -0.54 21 216
P -2.38 57 90
Best Double Couple:Mo=2.7*10**18
NP1:Strike= 81 Dip=28 Slip= -41
NP2: 209 72 -112

PGZ	0.30	154	iPd	34	44.60	0.6
MNG	0.55	240	Pd	34	51.50	3.6X
MTW	0.93	209	iPd	34	55.30	0.9
TTH	0.98	35	iPc	34	55.10	0.0
KIW	1.04	240	Pc	34	58.70	2.6
CAW	1.09	226	Pd	34	58.40	1.6
BLW	1.13	205	Pd	34	57.80	0.5
WDW	1.25	222	Pc	34	59.90	0.9
MOW	1.25	211	iPd	34	59.20	0.1
WEL	1.38	227	Pd	35	02.00	1.2
MRW	1.38	230	P	35	02.20	1.4
HATZ	1.45	360	P	35	03.40	1.4
MOH	1.46	34	Pc	35	01.10	-0.9
RATZ	1.50	350	Pd	35	04.70	2.1
TCW	1.63	237	P	35	05.80	1.2
TUTZ	1.64	357	P	35	06.00	1.4
HITZ	1.66	351	iPc	35	06.40	1.5
CCW	2.00	225	P	35	10.30	0.4
WTZ	2.46	17	P	35	14.60	-1.8
KHZ	2.83	222	Pd	35	20.10	-1.5
HBZ	3.24	33	P	35	23.80	-3.6X
TMP	5.95	226	P	36	04.10	-1.7
MHZ	6.89	225	P	36	15.20	-3.9X
MCQ	18.23	213	eP	38	54.00	4.2X
DZM	19.98	333	iPc	39	09.00	-1.6
			iS	43	07.20	
			ScP	47	00.50	
RIV	20.90	280	eP+	39	21.90	2.0
	Z 20s	78.72um			6.1Msz	
			eS	43	20.00	
TAU	21.62	254	ePc	39	27.11	-0.1
CNB	21.67	275	ePd	39	30.10	2.2
			eS	43	29.00	
			eScP	47	02.50	
COO	21.94	289	ePd	39	33.70	3.2X
			e	47	03.00	
CAN	21.95	275	iPc	39	32.60	2.0
			eS	43	38.60	
			eScP	47	02.80	
			eTT	56	44.00	
SVA	22.25	6	eP	39	34.90	1.3
BWA	22.73	276	iPc	39	37.90	-0.4
			eS	43	49.50	
			iScP	47	05.10	
			eTT	57	00.00	
SGE	22.73	4	eP	39	38.00	-0.6
			e	40	20.50	
BRS	23.20	297	iPd-	39	46.60	3.6X
	1.5s	83.00nm			5.0mb	
			i	39	53.60	25kmX
			i	39	59.50	
			i(PP)	40	28.50	
			iS	43	59.00	
			iPcS	47	06.20	
PVC	23.51	341	iPc	39	46.30	0.3
TOO	23.91	267	ePc	39	51.60	1.8
			eS	43	32.00	
			eScP	47	10.00	
			e	51	00.00	
CMS	25.96	280	ePd	40	11.00	1.6
			e	44	45.00	
			e	47	14.00	
BFD	26.27	266	eP	40	15.00	2.9X
			e	40	22.00	25kmX
			e	47	17.00	
RMQ	26.56	293	eP	40	17.00	2.1
			e	47	16.00	
QLP	29.74	288	eP	40	44.50	0.8
			e	47	27.00	
ADE	29.93	268	iPc+	40	46.80	1.4
	1.1s	303.80nm			6.0mb	
CTA	32.52	300	iPc+	41	08.00	-0.1
	1.8s	1763.64nm			6.7mb	
			iPP	42	15.00	
			iS	46	18.00	
			iScP	47	33.00	
			iScS	51	32.00	
CTAO	32.52	300	iPc	41	07.60	-0.5
	1.8s	1763.64nm			6.7mb	
			ipPc	41	15.38	27kmX
			esPd	41	18.19	
			iPP	42	13.92	
			iHPP	42	14.20	
			iS	46	18.00	
			iScP	47	33.00	
			iScS	51	32.00	
HNR	33.97	331	eP	41	10.00	-10.8X
			eS	46	42.00	
QIS	36.79	291	iPc	41	44.50	-0.2
			e	41	52.00	25kmX
			e	47	26.00	
AFR	37.17	62	iP	41	48.80	0.9
	0.9s	190.00nm			5.9mb	
PAE	37.22	63	iP	41	48.90	0.6
	0.9s	145.00nm			5.8mb	
PPT	37.29	63	iP	41	50.00	1.1
	0.9s	230.00nm			6.0mb	
TVO	37.36	63	iP	41	50.60	1.0
	0.9s	140.00nm			5.8mb	
PPN	37.41	63	iP	41	51.00	1.0
	0.9s	125.00nm			5.7mb	
VNDA	37.76	185	P	41	53.80	1.6
SBA	37.81	183	(P)-	41	55.60	2.9X
ASPA	39.06	282	iPc	42	03.30	-0.5
	1.3s	486.00nm			6.1mb	
	Z 19s	116.59um			6.7Msz	
			iS	47	58.40	
			LR	58	17.00	
FORR	39.75	268	eP	42	10.00	0.6
	0.6s	98.00nm			5.7mb	
PMG	40.12	312	iPc+	42	13.30	0.7
PMO	40.23	62	iP	42	14.40	0.9
	1.2s	225.00nm			5.8mb	
VAH	40.25	62	iP	42	14.20	0.6
	1.2s	215.00nm			5.8mb	
TPT	40.44	62	iP	42	16.20	1.1
	1.2s	235.00nm			5.8mb	
RUV	40.45	62	iP	42	16.40	1.1
	1.2s	250.00nm			5.8mb	
WRA	40.98	287	Pc	42	19.00	-0.6
	0.7s	113.00nm			5.7mb	
WB5	41.00	287	iPc	42	19.30	-0.5
			eScP	48	05.10	
			iS	48	28.30	
WARB	43.16	273	eP	42	37.00	-0.5
COOL	45.04	264	eP	42	52.00	-0.6
RKG	46.73	258	eP	43	05.00	-0.9
NWAO	47.06	260	iPc	43	07.30	-1.2
			ipPc	43	13.26	20kmX
			esPd	43	17.23	
			iHPP	44	58.12	
			ePP	44	58.48	
			ePPP	46	15.73	
KLB	47.27	261	iPd	43	09.50	-0.7
KNA	47.72	287	eP	43	13.50	-0.4
MTN	47.95	292	iPc	43	15.00	-0.6
			e	48	32.00	
MUN	48.27	260	iPd	43	17.80	-0.2
BAL	48.53	262	eP	43	19.00	-1.1
MEKA	49.13	268	eP	43	24.00	-0.8

0.3s 10.00nm 5.3mb
MRWA 49.75 263 eP 43 29.20 -0.2
0.5s 23.00nm 5.5mb
SPA 49.84 180 iPd 43 30.20 0.3
1.0s 160.00nm 6.0mb
Z 19s 16.79um 6.1Msz
i 44 48.40 385kmX
SPA 49.84 180 iPd 43 31.00 1.1
MBL 51.13 274 eP 43 38.00 -2.0
0.6s 28.00nm 5.4mb
NANU 53.62 270 eP 43 57.50 -1.1
0.6s 29.00nm 5.4mb
GUA 60.93 325 eP 44 46.50 -3.8X
1.3s 461.54nm 6.5mb
Z 23s 202.49um 7.2MszX
eS 53 00.60
e 55 13.80
e 56 36.20
eS 01 00.00
GUMO 60.99 325 eP 44 46.50 -4.2X
MKS 61.52 289 iPd 44 55.00 0.6
PCI 64.25 293 ePc 45 12.50 0.0
1.3s 10.00nm 4.8mb X
AIA 64.79 156 eP 45 16.50 1.1
TRT 64.90 282 ePd 45 17.00 0.3
1.1s 679.80nm 6.7mb
HON 65.92 26 P 45 29.00 6.0X
KIP 66.01 26 eP 45 32.35 8.7X
iS 54 12.62
DAV 66.22 303 eP+ 45 24.00 -1.2
TSM 69.12 295 ePc 45 45.90 2.5
KKM 71.71 295 ePc 45 58.40 -0.8
1.0s 207.80nm 6.1mb
QCP 74.80 305 eP 46 20.00 2.9X
BAG 76.46 306 eP+ 46 24.00 -2.8
eS 56 04.00
KGM 78.26 283 ePc 46 36.20 -0.4
KLM 80.22 283 eP 46 46.50 -0.8
IPM 81.66 283 ePc 46 55.30 0.5
1.2s 322.30nm 6.2mb
PSI 81.99 280 iPd 46 55.70 -0.8
1.0s 241.50nm 6.2mb
ANP 82.62 312 iP 47 10.00 10.3X
KAKJ 83.03 331 P 47 02.20 0.8
CHJJ 83.33 331 P 47 02.50 -0.4
LCCH 83.61 129 eP 47 05.00 0.3
SNG 83.68 285 iPc 47 05.20 0.0
1.2s 346.88nm 6.4mb
e 50 12.80
CHCH 83.83 130 eP 47 05.50 -0.4
TACH 83.86 129 eP 47 05.40 -0.6
i 47 07.00 5kmX
TSRJ 84.06 328 P 47 06.80 0.2
MAT 84.06 330 eP 47 06.00 -0.7
1.5s 336.11nm 6.4mb
Z 20s 5.32um 5.9Msz
eS 57 24.00
PCH 84.13 130 ePc 47 09.00 1.6
QZH 84.13 310 P 47 06.00 -1.2
1.5s 540.00nm 6.6mb
Z 26s 9.90um 6.1MszX
N 21s 9.05um
PP 50 20.00
S 57 26.00
SAN 84.16 129 eP 47 07.50 0.0
MTMJ 84.26 330 P 47 07.50 -0.2
ROCH 84.29 129 eP 47 10.00 1.6
NIIJ 84.38 331 P 47 08.80 0.6
FCH 84.47 130 ePd 47 09.50 0.1
i 47 11.20 5kmX
SHK 84.58 325 eP 47 10.40 1.1
HKC 84.85 305 eP 47 12.20 1.3
eS 57 34.00
QIZ 85.29 300 Pc 47 12.50 -0.7
N 18s 5.90um
E 17s 3.40um
pP 47 23.00 33kmX
S 57 33.50
GZH 85.94 305 Pc 47 16.00 -0.3
6.0s 1100.00nm 6.3mb X
Z 20s 8.20um 6.1Msz
N 20s 3.30um
E 18s 2.80um
S 57 38.00
RTCB 86.66 129 eP 47 20.90 0.8
CFA 86.91 130 ePc 47 20.20 -1.0
RTLL 86.97 129 ePc 47 21.00 -0.5

RTRS 87.21 128 ePd 47 23.10 0.5
SSE 87.40 315 Pc 47 21.00 -2.2
4.0s 1000.00nm 6.4mb X
Z 20s 13.00um 6.3Msz
N 24s 9.80um
E 24s 18.60um
sP 47 32.00
PP 50 44.00
SKS 57 44.00
S 57 56.00
NNT 87.93 288 iPd 47 21.80 -4.3X
e 50 51.20
NJ2 89.40 314 Pc 47 34.00 1.2
PP 51 08.00
LOE 89.72 293 eP 47 35.00 0.4
WHN 90.80 311 Pd 47 40.00 0.7
N 20s 5.70um
E 20s 10.40um
sP 47 48.00
PP 51 16.00
BDT 91.54 291 eP 47 42.00 -0.9
1.0s 60.70nm 5.9mb
YSS 91.93 338 iPc 47 45.00 0.9
iS 58 11.00
GYA 92.59 303 P 47 48.00 0.2
Z 40s 4.90um 5.7MszX
N 18s 5.30um
E 18s 3.40um
PP 51 30.00
S 58 50.00
CHG 92.63 292 ePc 47 49.00 1.0
1.3s 149.04nm 6.3mb
eS 58 20.00
CHTO 92.63 292 ePc 47 47.80 -0.2
pP 47 55.70 25kmX
DL2 93.26 321 Pc 47 50.00 -0.4
Z 30s 12.20um 6.2MszX
N 19s 4.20um
E 19s 4.20um
SKS 58 19.50
TIA 93.48 316 Pd 47 52.40 0.9
Z 22s 12.70um 6.3Msz
N 23s 7.70um
E 21s 13.60um
SKS 58 20.00
S 58 57.50
PET 94.21 350 eP 47 56.00 1.6
eS 58 24.00
KMI 94.24 299 ePc 47 56.27 0.7
Z 23s 10.80um 6.2MszX
N 16s 12.70um
e 48 00.91
epP 48 03.72 23kmX
esPd 48 08.36
ePP 51 38.30
MDJ 94.34 329 Pd 47 58.00 2.7
Z 35s 6.50um 5.8MszX
SKS 58 25.00
sS 59 13.00
SNY 94.64 323 iPc 47 56.00 -0.7
Z 26s 17.40um 6.4MszX
N 22s 9.80um
E 22s 9.10um
PP 51 42.00
NNA 94.95 110 iPDIFc47 58.43 -0.5
eS 59 16.77
BCH 95.37 48 P 48 00.00 -0.4
CN2 95.39 326 eP 47 58.00 -2.1
5.0s 700.00nm 6.3mb X
Z 24s 11.60um 6.3MszX
N 21s 6.90um
E 21s 2.70um
sP 48 11.00
PP 51 46.00
SKS 58 28.00
S 59 14.00
PRS 95.49 46 ePc 48 03.00 2.2
ARE 95.62 117 ePd 48 03.00 0.7
PAS 95.72 49 ePDIFd48 03.24 1.3
iS 59 27.43
esS 59 42.32
eSSS 10 06.00
MWC 95.84 49 eP 47 56.00 -6.7X
PLM 95.93 51 P 48 04.00 0.9
RVR 96.08 50 eP 48 04.00 0.5
MHC 96.08 45 ePc 48 05.20 1.6
Z 20s 10.00um 6.3Msz

N 20s 6.00um
E 20s 8.00um
ePP 52 12.00
iS 59 32.00
e 01 10.00
eSS 06 09.00
eLQ 14 18.00
eLR 18 26.00
PEC 96.13 50 P 48 04.80 1.0
BRK 96.14 44 ePc 48 04.00 0.3
Z 20s 9.00um 6.2Msz
ePP 52 04.00
eS 59 19.00
e 02 21.00
eSS 06 14.00
eLR 19 00.00
ARN 96.15 45 P 48 02.00 -1.8
BKS 96.15 44 eP 48 08.00 4.2X
Z 20s 11.00um 6.3Msz
N 20s 11.00um
E 20s 1.00um
iS 59 32.00
iPS 01 09.00
eSS 06 02.00
e 11 47.00
eLQ 13 52.00
eLR 18 13.00
SBB 96.31 49 eP 48 05.00 0.4
PFO 96.35 51 iPDIFc48 05.81 0.9
iS 59 33.95
XAN 96.50 310 P 48 07.10 1.6
N 20s 3.70um
E 22s 5.00um
SKS 58 37.50
ISA 96.63 48 eP 48 07.00 0.9
BJI 96.85 318 eP 48 05.00 -1.8
2.0s 66.00nm 5.8mb
Z 26s 18.90um 6.5MszX
N 24s 7.98um
E 24s 9.25um
ePP 52 00.00
eSKS 58 36.00
FRI 96.89 47 ePc 48 08.00 0.9
GLA 96.94 52 eP 48 10.00 2.5
TIY 97.12 314 Pc 48 08.50 0.3
N 21s 12.00um
sP 48 17.00
PP 52 02.00
SKS 58 42.50
CMB 97.27 45 ePc 48 09.40 0.5
ePP 52 06.00
CD2 97.49 304 eP 48 11.40 1.4
Z 20s 4.63um 6.0Msz
N 18s 3.48um
PP 52 04.00
SKS 58 43.00
S 59 30.00
ORV 97.77 44 eP 48 12.00 1.0
e(PP) 52 10.00
LPB 97.86 119 Pd 48 13.70 1.1
2.5s 222.22nm 6.3mb
Z 24s 16.28um 6.4MszX
PP 51 13.00
SKS 58 54.00
LR 20 17.00
WDC 97.98 42 ePc 48 12.90 1.0
ePP 52 11.90
ZOBO 98.03 119 P 48 13.00 -0.6
2.4s 102.61nm 5.9mb
SKS 58 53.00
LR 20 08.00
MIN 98.29 43 ePc 48 13.70 0.2
CCH 98.53 121 P 48 19.30 3.8X
TNP 99.05 47 P 48 17.00 -0.1
1.4s 16.67nm 5.4mb
KVN 99.25 46 eP 48 18.89 0.9
e 48 24.40 17kmX
HHC 99.84 316 eP 48 21.20 0.7
Z 28s 25.90um 6.6MszX
N 20s 7.70um
E 20s 4.80um
PP 52 23.00
SKS 58 58.00
COR 100.54 39 ePdiff48 27.36 3.8X
eS 59 00.77
ePS 00 06.43
eHPS 00 08.08

19d 05h

LZH	100.92	308	ePdiff	48	24.00	-1.7			0.9s	23.00nm					DIM	157.83	284	ePKP	54	32.00	-0.2
	Z 28s		13.70um			6.3MszX				ic	54	02.60			KDZ	157.88	283	ePKP	54	30.00	-2.3
	N 17s		2.30um							ePP	56	47.83			PVL	158.06	287	ePKP	54	32.00	-0.4
	E 20s		7.00um							iHPP	56	51.42			CMP	158.27	293	ePKPc	54	28.00	-4.7X
			SKS	58	55.00					id	56	52.10			RZN	158.41	283	iPKPc	54	31.00	-2.1
ALQ	103.36	56	ePdiff	48	35.90	-0.7				iSKP	57	33.91			PLD	158.45	284	ePKP	54	32.00	-0.9
	2.1s		33.33nm			5.7mb	KER	139.48	278	ePKP	54	04.00	-0.2		PGB	158.88	285	ePKP	54	31.00	-2.5
	Z 20s		17.69um			6.6Msz	KBS	140.80	355	iPKP	54	06.10	1.0		VTS	159.59	285	iPKPc	54	34.00	-0.4
			pP	52	49.70		BHD	141.10	275	ePKPd	54	04.50	-2.4		UZH	159.63	303	ePKP	54	50.00	16.0X
ANMO	103.37	56	ePdiff	48	38.22	1.6X				iSKP	57	43.00			ITM	159.64	269	ePKP	54	34.00	-0.4
			iSKS	59	18.04					eSKKS	03	19.00			KKB	159.64	283	iPKPc	54	33.00	-1.3
			iSDIF	00	32.61		GDH	141.16	26	ePKP	53	57.00	-8.9X		VAY	159.97	281	ePKP	54	32.70	-1.9
			ePS	02	06.89					e	57	04.00				1.4s		0.20nm			
			eHPS	02	09.37		SLY	141.18	279	iPKPd	54	06.50	-0.5					i	54	41.40	
GBA	105.23	275	PKP	52	43.00	-16.3X				e	57	05.50						i	55	14.00	
	0.6s		1.90nm				TAB	141.44	283	ePKP	54	02.00	-5.6X		KZN	160.44	278	ePKP	54	34.30	-0.9
BLF	105.46	207	ePKP	53	03.00	3.3X				i	57	42.80			BZS	160.64	294	ePKP	54	34.00	-1.1
GTA	105.51	309	ePdiff	48	47.20	1.2	DAG	142.91	6	ePKP	54	05.00	-3.8X		KRA	160.67	308	ePKP	54	33.20	-1.8
PNT	105.70	38	ePdiff	48	55.00	8.6X	MSL	143.24	279	ePKPc	54	04.50	-6.1X			1.6s		134.00nm			
BW06	106.53	48	PKP	53	16.50	15.1X				eSKP	57	42.50						e	54	43.20	
UPA	106.70	92	ePdiff	48	50.00	-1.6				eSKKS	03	37.00						i	55	18.50	
	Z 19s		18.75um			6.7Msz	WAJH	143.66	260	ePKP	54	10.70	-0.9		SPC	160.78	305	ePKP	54	34.80	-0.6
HYB	106.72	279	ePdiff	49	00.00	8.3X	AGRW	144.99	253	iPKPd	54	14.00	0.1					e	55	10.90	
LRM	106.91	44	ePKP	53	02.10	0.1	RUWJ	145.00	271	PKPc	54	15.40	1.5		SKO	160.87	283	iPKPc	54	34.30	-1.2
GOL	107.04	52	PKP	53	20.00	17.5X	WIGH	145.05	186	ePKPd	54	13.00	-1.3			1.6s		109.00nm			
	Z 20s		7.50um			6.2Msz	AKUR	145.17	253	ePKP	54	14.50	0.3			Z 20s		3.42um			
GLD	107.16	52	PKP	53	20.00	17.4X	TEGH	145.26	187	ePKP	54	15.00	0.3			N 19s		2.86um			
	Z 20s		11.00um			6.4Msz	LEGH	145.29	187	ePKP	54	14.00	-0.7			E 20s		3.58um			
GUN	107.63	292	Pdiff	49	10.40	14.4X	AYN	145.49	263	iPKPd	54	15.30	0.7					i	54	42.80	
SLR	107.76	210	iPKPd	53	17.50	13.4X	SHGH	145.56	187	ePKPd	54	14.00	-1.2					i	55	18.50	
PKI	107.76	291	Pdiff	49	10.40	13.9X	KOGH	145.73	186	ePKPd	54	15.00	-0.5					i	55	25.00	
KKN	107.99	291	Pdiff	49	06.50	9.1X	KUK	145.84	186	ePKP	54	17.00	1.3					iPP	59	07.50	
DMN	108.00	291	Pdiff	49	09.20	11.7X				e	09	07.00						iSKKS	05	46.00	
GKN	108.57	291	Pdiff	49	01.20	1.3				e	12	55.50						i	10	08.00	
IMA	108.63	13	PKP	53	03.40	-1.1	SHBJ	145.89	270	PKPc	54	17.00	1.6					iSS	12	57.00	
FBA	108.66	15	PKP	53	02.00	-2.4	LIC	146.01	178	PKP	54	15.32	-0.6		OHR	161.28	280	iPKP	54	34.10	-1.9
SES	110.57	41	ePKP	53	08.00	-0.5		Z 20s		5.50um			6.3Msz			1.5s		0.14nm			
BUL	112.63	213	iPKPc	53	12.40	-1.0	BADA	146.07	262	iPKPd	54	16.70	1.1					i	54	43.20	
	1.0s		5.50nm				KIC	146.15	178	PKP	54	15.84	-0.3		PSZ	161.37	302	ePKP	54	35.00	-0.9
INK	114.67	18	ePKP	53	14.00	-1.7	KEV	146.39	341	iPKP	54	15.20	0.3		KEK	161.85	276	ePKP	54	36.50	0.0
KRI	115.13	216	ePKP	53	22.20	3.8X		1.3s		368.80nm					SRO	162.42	302	iPKP	54	35.90	-0.9
FFC	117.58	40	ePKP	53	21.00	-0.7				i	54	24.60						i	55	26.60	
	0.8s		14.00nm				HQL	146.41	263	ePKP	54	17.30	1.1					e	59	15.70	
RSCP	117.63	66	PKP	53	21.00	-1.5	TIC	146.43	178	PKP	54	17.22	0.6		KSP	162.46	313	ePKP	54	35.00	-1.8
TKL	118.92	66	PKP	53	24.50	-0.4	HLBJ	146.76	269	PKPc	54	18.90	2.1			1.3s		52.00nm			
JSC	120.00	69	PKP	53	26.20	-0.7	MBH	146.78	264	ePKP	54	15.00	-1.7					ic	54	36.00	
RSON	120.03	47	PKP	53	27.00	0.5	MASJ	147.05	268	PKPc	54	19.90	2.7					ic	55	26.00	
	Z 20s		10.17um			6.5Msz	SALJ	147.20	268	PKPc	54	20.00	2.5					e	59	15.00	
BLA	122.04	66	PKP	53	30.00	-0.8	BURJ	147.21	268	PKPc	54	19.80	2.3		ZST	163.07	305	ePKP	54	36.40	-1.1
MBC	123.20	15	ePKP	53	30.00	-1.8	DSI	147.24	267	ePKP	54	17.00	-0.4					e	54	44.70	
	1.0s		119.00nm				SOD	148.15	338	iPKP	54	19.60	1.9					e	55	25.00	
			pP	53	39.50		TRO	148.29	345	iPKP	54	20.10	2.2		LCI	163.34	277	PKP	54	37.90	-0.1
CLE	123.27	61	iPKP	53	32.80	-0.2	JNW	149.16	3	iPKP	54	25.90	6.6X		SOP	163.59	303	ePKP	54	37.30	-0.7
CVL	123.78	66	PKP	53	34.00	-0.1	KOT	149.17	262	ePKP	54	19.50	-1.0		BRG	163.71	316	iPKPc	54	37.40	-0.6
DLA	123.85	60	PKP	53	33.75	-0.3	OBN	149.51	313	iPKPd	54	20.30	0.1					i	54	45.50	
ELF	124.17	60	PKP	53	34.30	-0.4		1.7s		760.00nm								i	55	31.40	
LDN	124.19	60	PKP	53	34.20	-0.5		Z 27s		18.00um			6.7MszX		PRU	163.85	313	ePKP	54	37.50	-0.7
CBN	124.64	67	ePKP	53	36.00	0.3	CSS	150.19	272	ePKP	54	26.80	4.8X			2.0s		58.60nm			
GMTN	128.02	65	iPKP	53	41.80	-0.4	PPCY	150.92	271	ePKP	54	28.70	5.7X					e	54	44.50	
PNJ	128.05	65	iPKPd	53	41.40	-0.8	SUF	151.30	331	iPKP	54	27.00	4.3X					i	55	32.50	
LWI	128.15	223	ePKPc	53	43.60	0.1		0.6s		63.40nm								ePP	59	07.50	
RSNY	129.20	61	PKP	53	43.00	-1.3	KAS	151.64	285	ePKP	54	24.50	0.5					i	06	40.00	
	Z 20s		13.56um			6.6Msz	MBO	151.73	152	iPKP	54	25.80	1.1		CLL	163.95	319	ePKP	54	37.00	-1.2
WNY	129.59	61	PKP	53	44.00	-1.1	SIM	151.84	292	ePKP	54	30.00	5.9X		BRT	163.97	279	PKP	54	38.30	-0.3
HBVT	130.11	61	PKP	53	45.00	-1.1	BBTK	152.08	281	ePKP	54	24.00	-0.8		ROI	164.28	274	PKP	54	40.20	1.2
HRV	130.46	64	ePKPd	53	46.10	-0.7	BCK	153.11	275	ePKP	54	25.50	-0.7		TDS	164.47	274	PKPc	54	39.50	0.4
			ePP	55	59.46		NUR	153.20	328	iPKP	54	30.20	4.7X		PTJ	164.49	298	e(PKP)	54	39.50	0.4
			iHPP	56	00.29			1.0s		94.00nm					ZAG	164.49	297	iPKP	54	38.50	-0.4
			iSKP	57	09.53					i	54	40.00			CSI	164.53	274	PKP	54	35.50	-3.7X
			eSKS	00	59.25		AKU	153.35	13	iPKP	54	33.20	7.7X		CZI	164.56	272	PKP	54	34.90	-4.3X
			eSKKS	03	09.61			1.0s		156.00nm					KHC	164.82	311	PKPc	54	38.50	-0.7
			e	04	21.10		ELL	153.41	273	ePKP	54	28.00	1.3			1.6s		43.00nm			
MAIO	131.04	287	iPKPc	53	48.30	0.1	KSL	153.46	272	ePKP	54	34.50	7.9X			Z 23s		9.60um			
	1.3s		28.59nm				REY	153.94	18	iPKP	54	37.30	10.9X			N 23s		6.50um			
CBM	134.22	59	PKP	53	53.00	-0.8	GPA	154.01	281	ePKP	54	26.00	-1.3			E 23s		4.40um			
KMSA	134.37	259	ePKP	53	55.30	0.4	KHL	154.15	276	ePKP	54	27.00	-0.7					i	55	37.20	
SVE	136.00	314	ePKP	53	47.00	-9.8X	CTT	155.57	282	iPKP	54	27.40	-2.0		ATN	164.84	268	PKP	54	38.70	-0.8
FRB	136.31	36	ePKP	53	42.50	-14.7X	BNT	155.82	280	ePKP	54	28.00	-1.7		KMR	164.97	307	iPKP+	54	38.80	-0.5
IR4	136.97	281	ePKP	53	57.00	-2.6	CFR	156.07	292	ePKP	54	29.00	-0.9					i	55	36.90	
IR2	137.15	282	ePKP	53	55.00	-4.9X	UPP	156.28	333	iPKP	54	31.90	2.2					iPP	59	24.00	
IR1	137.20	282	ePKP	54	00.00	0.0	CLI	156.63	296	ePKPc	54	30.00	-0.6		MOX	165.05	319	ePKP	54	38.00	-1.3
IR7	137.38	282	ePKP	54	02.00	1.7	VRI	157.06	294	ePKPc	54	33.50	2.3			2.4s		168.00nm			
BCAO	138.93	215	ePKPd	53	57.00	-6.6X	JMB	157.10	285	ePKP	54	30.00	-1.3					e	55	37.00	
	0.9s		23.00nm				NB2	157.29	341	PKP	54	28.40	-2.6					e	59	30.00	
			ic	54	02.60			1.8s		123.30nm					VBY	165.06	296	ePKP	54	40.00	0.6
			id	56	52.10		MLR	157.62	293	ePKPc	54	31.00	-1.0					i	55	38.90	
BCAO	138.93	215	ePKPd	54	01.04	-2.6	RDO	157.73	282	ePKP	54	31.20	-0.9		MGR	165.14	275	PKP	54	38.90	-0.8

WET	165.21	312	iPKPc	54	39.00	-0.5	TIO	170.21	163	iPKP	54	44.50	0.8				iPP	04	58.00				
SGO	165.37	277	PKP	54	38.50	-1.3				i	56	02.10					iSKKS	07	15.00				
LJU	165.41	299	ePKP	54	38.50	-1.2				i	59	42.00					iPPS	14	55.00				
			e	55	38.50		FIN	170.23	297	PKP	54	41.39	-1.7				iSS	21	30.00				
CEY	165.57	298	ePKP	54	38.50	-1.4	EMS	170.25	309	ePKPd	54	44.00	0.7	GUD	179.65	33	e(PKP)	54	48.30	2.4			
WIT	165.59	333	ePKP	54	40.50	0.9	LSD	170.42	306	PKP	54	42.72	-0.7		S.D. = 1.1		on 376 of 433 obs.						
			e	55	40.00		ROB	170.43	298	PKP	54	42.52	-0.7	----------									
GRF	165.82	316	ePKPc	54	39.50	-0.4	RSP	170.50	304	PKP	54	41.70	-1.6		FEB 19, 1990 05h 43m 44.40± 0.41s								
	Z 22s		10.50um				IMI	170.55	296	PKP	54	42.62	-0.7		36.105 N ± 4.8km 27.176 E ± 4.2km								
			e	54	48.70		LPG	170.65	307	iPKPc	54	44.00	0.4		DEPTH = 10.0km (geophysicist)								
			e(PP)	59	26.00			1.6s		55.95nm					4.3mb (10 obs.)								
VOY	165.84	300	ePKP	54	38.90	-1.3	ENR	170.76	299	PKP	54	42.00	-1.5		DODECANESE ISLANDS (369)								
			e	55	40.20		DOI	170.77	300	PKP	54	43.00	-0.4		ML 4.5 (CSS), 4.2 (ATH). MD 4.1								
KBA	165.84	304	ePKPc	54	34.80	-5.5X	STV	170.82	299	PKP	54	43.13	-0.3		(HLW).								
	1.2s		20.70nm				PZZ	170.87	301	PKP	54	44.16	0.6										
			ic	54	38.30		SBF	170.87	296	ePKP	54	43.40	-0.1	KAP	0.55	180	ePg	43	57.40	1.8			
			i	55	40.20			1.8s		250.30nm				YER	1.36	41	iPn	44	09.00	-0.4			
			i	55	52.70		RRL	170.90	304	PKP	54	43.34	-0.3	NPS	1.53	237	ePb	44	12.50	0.8			
BHG	165.88	307	ePKP	54	39.90	-0.2	BNI	170.91	305	PKP	54	43.30	-0.3	SMG	1.62	350	ePb	44	11.80	-1.3			
RBL	165.93	301	PKP	54	41.00	0.8	LOR	171.10	324	iPKPc	54	43.60	0.2	APE	1.64	306	ePb	44	12.20	-1.2			
TRI	166.02	298	ePKPc	54	39.00	-1.2		1.8s		94.95nm				KSL	1.95	89	ePn	44	19.40	1.5			
			ePKKP	55	41.10		FLN	171.24	345	ePKP	54	43.60	0.2	IZM	2.29	2	ePn	44	19.30	-3.5X			
			iPP	59	28.00			1.3s		57.75nm				ELL	2.30	73	ePn	44	24.80	1.8			
			iSKKS	05	56.00		LBF	171.25	322	iPKPc	54	43.60	0.1	VAM	2.52	255	ePn	44	27.50	1.5			
			iSKSP	09	36.00			1.6s		124.40nm				KHL	2.90	40	ePn	44	31.00	-0.5			
			iSPP	12	40.00		LDF	171.33	343	ePKP	54	43.60	0.2	BCK	3.06	63	ePn	44	37.50	3.8X			
			e	17	24.00			1.4s		56.65nm				PRK	3.22	347	ePn	44	33.70	-2.2			
			eSS	19	12.00		SSF	171.41	324	iPKPc	54	43.80	0.3	ATH	3.34	305	ePb	44	39.00	1.4			
			eSSS	25	52.00			1.8s		79.45nm				VLI	3.47	281	ePn	44	39.20	-0.4			
DUI	166.07	281	PKP	54	40.50	0.0	SMF	171.56	321	ePKP	54	43.50	-0.1	DST	3.68	18	ePn	44	44.30	1.7			
WTS	166.21	331	ePKP	54	40.00	-0.1		1.8s		77.70nm				EZN	3.78	350	ePn	44	42.50	-1.4			
	1.5s		82.00nm				GRR	171.67	346	ePKP	54	44.00	0.5	EDC	4.27	7	ePn	44	51.00	0.1			
			e	54	49.00			1.3s		50.55nm				BNT	4.28	8	ePn	44	51.00	-0.1			
			e	55	42.00		LMR	171.68	294	ePKP	54	44.10	0.4	ITM	4.36	286	ePn	44	54.60	2.5			
			e	55	50.00			1.8s		164.00nm				PPCY	4.39	105	eP	44	53.00	0.4			
SDI	166.55	282	PKP	54	39.30	-1.6	AVF	171.69	323	ePKP	54	43.60	0.0	NEO	4.48	317	ePn	44	53.00	-0.8			
AZI	166.83	283	PKP	54	40.00	-0.9		1.6s		49.75nm				GPA	4.85	30	ePn	45	12.00	12.8X			
TNS	166.86	323	ePKPc	54	40.40	-0.4	LRG	171.74	295	ePKP	54	44.20	0.5	CTT	5.13	11	ePn	44	58.00	-5.1X			
			ec	54	43.30			1.8s		172.65nm				CSS	5.15	101	eP	45	03.00	-0.4			
SCE	166.88	306	PKPc	54	40.40	-0.7	LPF	172.05	346	ePKP	54	44.00	0.3				eSn	46	05.00				
			ec	54	43.30			1.7s		73.50nm				ISK	5.17	16	ePn	45	10.00	6.4X			
CTI	167.31	302	PKP	54	41.10	-0.3	BGF	172.09	324	iPKPc	54	44.20	0.4	PLG	5.18	327	ePn	45	06.00	2.3			
ASS	167.33	288	PKP	54	40.60	-0.8		1.6s		124.40nm				RDO	5.19	346	ePn	45	01.50	-2.5			
RSM	167.35	292	PKP	54	41.20	0.0	AVE	172.42	157	iPKP	54	45.50	1.2	ITU	5.20	16	eP	45	24.00	20.0X			
OGA	167.38	306	ePKP	54	40.60	-0.9				i	56	08.00		BBTK	5.78	48	eP	45	13.00	0.7			
ABH	167.52	324	ePKP	54	39.58	-1.7				i	59	59.00		KZN	5.97	316	ePn	45	15.70	0.6			
ENN	167.53	330	ePKP	54	40.00	-1.2	MAF	172.47	323	iPKPc	54	44.30	0.3	VAY	6.33	327	eP	45	19.00	-1.0			
	2.0s		167.00nm					1.6s		43.55nm							i	45	42.00				
			e	55	47.00		TCF	172.58	325	iPKPc	54	44.50	0.5	LSK	6.57	310	eP	45	25.30	1.8			
			e	55	55.50			1.8s		99.25nm				KBN	6.73	314	eP	45	25.80	0.1			
MEM	167.62	329	PKP	54	41.50	0.3	LSF	172.90	328	iPKPc	54	44.80	0.7	SRN	6.80	306	eP	45	26.70	0.0			
			i	55	48.50			1.8s		94.95nm				KEK	6.85	304	ePn	45	28.50	1.1			
CRE	167.76	291	PKP	54	40.70	-1.0	IFR	173.11	171	iPKPc	54	46.00	1.1	OHR	7.06	317	eP	45	31.20	0.8			
SFI	167.77	292	PKP	54	41.50	0.0	MFF	173.18	338	ePKP	54	44.80	0.6	HLW	7.14	150	eP	45	31.50	0.0			
RUP	167.86	324	ePKP	54	40.63	-0.9		1.6s		93.30nm							eS	46	48.50				
PGD	167.88	292	PKP	54	41.50	-0.4	RJF	173.65	323	iPKPc	54	45.30	0.8	BERA	7.30	311	eP	45	35.60	2.0			
OSS	168.01	307	ePKPd	54	42.00	0.1		1.7s		110.30nm				SKO	7.36	324	eP	45	33.00	-1.5			
SAL	168.20	301	PKP	54	41.00	-0.8	CAF	173.66	318	iPKPc	54	45.50	1.0				e	47	50.00				
SAX	168.21	310	ePKPd	54	42.20	0.0		1.6s		68.40nm				VLO	7.45	308	eP	45	37.60	2.0			
SNF	168.33	333	PKP	54	41.50	-0.2	LPO	174.27	321	iPKPc	54	45.80	1.1	HRI	7.60	109	e(P)	45	51.00	13.0X			
			e	55	51.70			1.8s		172.65nm				PHP	7.66	319	eP	45	38.00	-0.6			
SLE	168.41	314	ePKPd	54	41.50	-0.4	LFF	174.28	325	iPKPc	54	45.60	0.9	TIR	7.75	315	eP	45	43.50	3.6X			
VDL	168.51	307	ePKPd	54	42.20	0.0		1.7s		102.95nm				LACI	8.02	316	eP	45	46.00	2.3			
DOU	168.57	331	PKP	54	45.20	3.3X	NKM	174.96	166	iPKPc	54	47.00	1.8	DSI	8.19	121	eP	45	46.00	0.0			
			e	55	49.80					i	54	52.50					e(S)	47	16.00				
FEL	168.61	315	ePKP	54	39.62	-2.5	EPF	175.85	312	iPKPc	54	46.20	1.0	BCI	8.33	321	eP	45	50.30	2.2			
LLS	168.61	309	ePKPd	54	42.50	0.2		1.8s		172.65nm				SDA	8.39	317	eP	45	53.30	4.4X			
BDI	168.63	294	PKP	54	40.70	-1.5	EJIF	175.92	162	e(PKP)	54	47.80	2.4	LCI	8.40	303	P	45	47.00	-2.0			
ZLA	168.63	313	ePKPd	54	41.90	-0.2	MAL	176.36	173	iPKP	54	46.00	0.6	PRNI	8.71	129	eP	45	50.00	-3.4X			
CDF	168.65	319	ePKP	54	41.40	-0.7				i	00	24.50		MBH	9.04	132	eP	45	55.00	-2.9			
	1.6s		43.55nm				ENIJ	176.38	202	e(PKP)	54	47.00	1.5	ROI	9.08	296	P	46	02.20	3.8X			
PII	168.76	292	PKP	54	40.80	-1.4	ATEJ	176.57	178	iPKPd	54	46.50	0.8	SOI	9.10	286	P	45	57.50	-1.2			
TMA	169.05	306	ePKPd	54	42.50	0.0	APHE	176.61	183	iPKPd	54	47.50	1.8	BRT	9.15	304	P	45	56.80	-2.7			
BOB	169.21	299	PKP	54	41.10	-1.5	EBR	176.62	279	ePKP	54	47.00	1.7	TDS	9.27	296	P	46	01.50	0.4			
VAI	169.22	305	PKP	54	41.30	-1.1				e	56	29.00		CZI	9.29	293	P	45	59.30	-2.0			
BSF	169.28	318	ePKP	54	42.00	-0.5				e	00	48.00		ORI	9.33	298	P	46	02.50	0.6			
	1.4s		61.00nm				ALOJ	176.76	177	iPKPd	54	46.50	0.8	CSI	9.35	296	P	46	03.90	1.7			
HAU	169.39	320	ePKP	54	42.30	-0.2	AFC	176.90	185	e(PKP)	54	46.00	0.2	ATN	9.58	286	P	46	03.40	-1.9			
	1.6s		80.85nm				AAPN	176.96	177	ePKP	54	47.00	1.3	MMN	9.60	297	P	46	04.50	-1.1			
MMK	169.64	307	ePKPd	54	43.90	0.9	ASMO	177.01	182	iPKPd	54	46.50	0.8	MGR	10.00	297	P	46	09.20	-1.9			
ORX	169.82	305	PKP	54	42.31	-0.6	ECHE	177.63	252	e(PKP)	54	48.00	2.4	KBA	15.05	321	e(P)	47	24.00	5.1X			
ORO	169.83	305	PKP	54	42.50	-0.4	EBAN	177.82	182	e(PKP)	54	47.30	1.7		1.1s		26.20nm			4.6mb			
PCP	169.89	299	PKP	54	41.80	-1.1	EVIA	177.98	213	e(PKP)	54	47.80	2.0	CTI	15.33	315	P	47	26.00	3.6X			
DIX	169.96	308	ePKPd	54	44.20	1.0	TOL	179.52	166	iPKPc	54	47.50	1.8	KHC	16.38	327	P	47	37.00	1.1			
PGF	170.07	287	ePKP	54	43.30	0.1		1.8s		272.73nm					1.2s		14.00nm			4.0mb			
	1.8s		18.13nm							iPKKP	56	40.00		PRU	16.63	330	eP	47	40.00	1.0			
CKI	170.11	298	PKP	54	42.70	-0.3				ePP	00	25.00		KSP	16.69	335	ePd	47	41.50	1.8			

19d 05h

SBF 16.97 303 eP 48 00.00 16.6X
1.1s 19.55nm
GRF 17.86 324 eP 47 54.00 -0.5
LPG 18.05 308 eP 48 00.00 3.0X
1.4s 28.30nm 4.2mb
CLL 18.28 331 eP 48 00.00 0.5
MOX 18.36 327 eP 48 03.00 2.4
1.5s 34.00nm 4.3mb
LBF 20.41 309 eP 48 20.60 -3.6X
1.0s 15.00nm 4.3mb
LOR 20.60 310 eP 48 21.30 -4.8X
AVF 20.73 308 eP 48 23.90 -3.5X
0.6s 4.05nm 4.0mb
SSF 20.74 309 eP 48 24.20 -3.3X
1.1s 34.20nm 4.6mb
BGF 20.96 307 eP 48 26.60 -3.3X
1.3s 25.25nm 4.4mb
MEM 21.04 320 Pc 48 28.60 -1.9
DOU 21.51 318 P 48 34.20 -1.1
HFS 25.57 344 eP 49 12.50 -2.3
0.9s 4.50nm 4.2mb
MAIO 26.02 80 eP 49 23.00 3.6X
IFR 26.58 274 iP 49 24.00 -0.7
BCAO 32.51 196 iPc 50 17.20 -0.3
0.5s 12.00nm 5.1mb
TIC 41.57 233 P 51 33.00 -0.9
KIC 41.60 232 P 51 33.40 -0.8
LIC 41.89 233 P 51 36.40 -0.2
WB5 115.06 97 ePdiff 58 48.00 9.5X
WRA 115.07 97 Pdiffd 58 47.80 9.3X
1.0s 1.20nm
S.D. = 1.5 on 63 of 86 obs.

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* FEB 19, 1990 06h 05m 11.83± 0.84s
36.034 N ± 9.7km 27.216 E ± 8.2km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)
MD 3.6 (ATH).

KAP 0.48 184 ePb 05 20.50 -1.1
YER 1.39 38 ePn 05 35.00 -2.4
NPS 1.52 240 ePn 05 39.50 0.5
SMG 1.70 350 ePn 05 44.70 3.1X
APE 1.71 308 ePn 05 42.10 0.3
CIN 1.71 24 eP 05 55.00 13.2X
KSL 1.92 87 ePn 05 46.50 1.7
ELL 2.29 71 ePn 05 51.00 0.7
IZM 2.36 1 ePn 05 46.00 -5.3X
VLI 3.52 282 ePn 06 08.00 0.3
S.D. = 1.6 on 7 of 10 obs.

FEB 19, 1990 06h 48m 10.12± 0.11s
15.465 S ± 3.5km 166.385 E ± 3.3km
DEPTH = 12.1km (geophysicist)
6.4mb (42 obs.) 6.7Msz (33 obs.)
VANUATU ISLANDS (186)
Ms 6.8 (BRK), 6.5 (PAS).
Mo=2.0*10**19 Nm (PPT). Two events about 2 seconds apart. Depth from broadband displacement seismograms, based on second event.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=109 Dip=70 Slip= 11
NP2: 15 80 160
Principal Axes:
T Plg=22 Azm=331
P 7 63
Comment: The focal mechonism is moderately well controlled and carresponds to strike-slip faulting with a moderote reverse component. The preferred fault plane is not determined.
RADIATED ENERGY
No. of sto: 6 Focal mech. C
Energy 1.9±0.8*10**14 Nm
MOMENT TENSOR SOLUTION
Dep 32 No. of sta: 8
Moment Tensor; Scale 10**19 Nm
Mrr= 0.14 Mtt= 0.89
Mff=-1.03 Mrt= 0.38
Mrf= 0.50 Mtf= 1.84
Principal axes:
T Val= 2.18 Plg=16 Azm=328
N 0.00 73 169
P -2.17 6 60
Best Double Couple:Mo=2.2*10**19
NP1:Strike=105 Dip=74 Slip= 7
NP2: 13 83 164
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 35C M.W.: 10S, 23C
Centroid Locotion:
Origin Time 06:48:17.9 0.2
Lot 15.54S 0.02 Lon 166.19E 0.02
Dep 15.0 FIX Half-durotion 9.0
Moment Tensor; Scale 10**19 Nm
Mrr=-0.20 0.01 Mtt=-0.24 0.01
Mff= 0.44 0.01 Mrt= 0.92 0.06
Mrf=-1.14 0.05 Mtf= 0.87 0.01
Principal Axes:
T Val= 1.33 Plg=32 Azm=100
N 0.65 35 345
P -1.98 39 221
Best Double Couple:Mo=1.7*10**19
NP1:Strike=246 Dip=35 Slip= -7
NP2: 342 86 -125

PVC 2.92 141 iPc 48 56.30 -0.9
iS 49 30.00
DZM 6.57 180 iPd 49 45.90 -3.1X
NDF 10.85 104 iP 50 52.00 3.7X
SGE 11.26 102 eP 50 58.00 3.9X
eS 52 00.00
VUN 11.84 104 ePc 51 05.00 3.2X
SVA 11.86 105 iPd 51 05.90 3.9X
MBU 11.94 99 eP 51 06.80 3.5X
OVA 12.09 102 eP 51 09.00 3.8X
NDE 12.48 97 eP 51 14.00 3.4X
KRO 12.62 100 eP 51 14.50 2.2
BRS 17.34 225 iPc 52 12.10 -1.5
2.0s 67.00nm 4.4mb X
i 53 55.00
e(S) 55 14.50
RAB 17.92 307 iPc+ 52 22.00 1.1
iS 56 48.00
CTA 19.71 254 iPd- 52 41.60 -1.0
iS 56 00.00
CTAO 19.71 254 ePd 52 42.58 0.0
ed 52 44.56 8kmX
iS 56 00.00
PMG 19.71 286 iPd 52 42.40 -0.2
RMQ 19.76 233 iPd 52 43.70 0.7
COO 20.07 219 ePd 52 46.10 -0.2
RIV 22.88 214 iPc 53 16.10 1.5
eS 57 40.00
QLP 23.41 238 iPd 53 20.00 0.1
MNDI 24.14 290 eP 53 30.00 2.7
HBZ 24.44 157 P 53 31.10 1.3
1.6s 4790.00nm 6.9mb
HITZ 24.58 162 P 53 33.90 2.7
CMS 24.63 226 ePd 53 31.00 -0.6
TUTZ 24.65 162 P 53 34.60 2.7
RATZ 24.73 162 P 53 35.20 2.6
HATZ 24.85 162 P 53 36.00 2.2
BWA 24.86 217 iPd 53 32.50 -1.4
CNB 24.97 215 iPc 53 35.20 0.2
eS 58 26.00
CAN 25.17 215 iPd 53 37.00 0.1
OIS 25.95 255 iPd 53 43.10 -1.2
KIW 26.37 165 P 53 48.20 0.3
TCW 26.55 167 P 53 50.20 0.6
CAW 26.64 165 P 53 50.10 -0.3
MRW 26.67 166 P 53 50.50 -0.2
WEL 26.73 166 P 53 53.00 1.7
S 58 28.00
WDW 26.77 165 P 53 51.00 -0.6
MTW 26.80 165 P 53 51.30 -0.6
MOW 26.98 165 P 53 52.80 -0.8
BLW 26.99 165 P 53 53.20 -0.4
TOO 28.76 216 ePd 54 09.20 -0.5
0.9s 415.00nm 6.2mb
e 54 21.00 45kmX
MHZ 29.60 176 P 54 17.30 0.6
BFD 30.24 220 ePd 54 24.40 1.4
1.1s 703.00nm 6.4mb
WB5 30.79 257 iPd 54 25.10 -2.9
eS 59 37.00
WRA 30.82 257 Pc 54 26.10 -2.2
1.3s 698.80nm 6.4mb
ADE 31.52 227 iPd 54 34.00 -0.3
2.0s 2705.88nm 6.8mb

ASPA 31.62 250 iPd 54 32.70 -2.6
1.7s 2069.00nm 6.8mb
Z 18s 430.73um 7.2Msz
LR 06 31.60
TAU 31.86 207 ePd 54 36.61 -0.5
ed 54 38.43 6kmX
MTN 34.26 270 iPc 54 56.70 -1.6
GUA 35.80 323 eP 55 13.80 2.4
1.3s 461.54nm 6.2mb
Z 23s 202.49um 6.8MszX
e 56 36.20 431kmX
eS 01 00.00
GUMO 35.87 322 eP 55 14.70 2.7X
KNA 36.20 264 iPd 55 12.70 -2.2
0.8s 561.00nm 6.5mb
FORR 38.17 240 iPd 55 30.50 -0.8
0.5s 215.00nm 6.2mb
WARB 38.51 247 iPd 55 33.00 -1.2
AAI 39.35 283 eP 55 42.50 1.1
MCO 39.38 187 eP 55 42.00 1.0
KUPT 42.00 272 ePc 56 13.10 10.0X
1.0s 637.90nm
AFR 42.02 99 iP 56 02.20 -1.0
PAE 42.20 99 iP 56 04.00 -0.7
PPT 42.21 99 iP 56 04.30 -0.5
1.1s 405.00nm 6.1mb
PPN 42.34 99 iP 56 05.40 -0.5
TVO 42.50 100 iP 56 06.80 -0.5
COOL 44.02 241 iPd 56 18.20 -1.3
PMO 44.05 96 iP 56 19.10 -0.7
1.4s 1750.00nm 6.7mb
VAH 44.28 96 iP 56 20.30 -1.3
1.4s 1210.00nm 6.6mb
TPT 44.32 96 iP 56 21.20 -0.8
1.4s 1750.00nm 6.7mb
RUV 44.52 96 iP 56 22.70 -0.9
1.4s 1750.00nm 6.7mb
MEKA 45.79 248 iPc 56 33.20 -0.4
0.3s 44.00nm 5.9mb
DAV 46.22 296 eP 56 38.00 0.8
KLB 47.00 241 iPd 56 41.40 -1.7
MKS 47.16 277 iPc 56 45.00 0.4
NWAO 47.64 239 iPd 56 46.80 -1.4
RKG 48.02 238 eP 56 51.10 -0.1
0.7s 510.00nm 6.7mb
MRWA 48.23 245 iPd 56 51.90 -1.0
0.8s 243.00nm 6.3mb
MUN 48.36 241 iPd 56 52.50 -1.3
NANU 48.41 253 eP 56 53.30 -1.0
TSM 51.67 288 ePd 57 23.20 3.9X
TRT 53.10 272 iPd 57 29.00 -1.1
1.1s 948.10nm 6.6mb
QCP 53.85 302 eP 57 36.00 0.5
DRV 54.04 193 eP 57 37.00 0.8
KKM 54.09 289 ePc 57 31.20 -6.2X
1.5s 2109.50nm 6.9mb
BAG 55.20 303 eP 57 44.50 -1.1
eS 05 28.00
RKT 55.57 108 iP 57 45.40 -2.6X
1.6s 445.00nm 6.2mb
MAJO 58.17 333 eP 58 05.47 -0.8
ed 58 07.95 8kmX
ec 58 10.93
ec 58 13.41
MAT 58.17 333 (P) 58 05.00 -1.2
1.2s 143.75nm 5.9mb
Z 20s 33.69um 6.5Msz
eS 05 26.00
SHK 59.16 328 eP 58 11.20 -1.9
ANP 59.53 312 iP 58 18.00 2.0
eS 06 22.00
QZH 61.51 310 iPd 58 30.00 0.6
1.2s 500.00nm 6.5mb
Z 22s 42.80um 6.6Msz
N 18s 25.90um
sP 58 48.00
VNDA 62.11 181 iPd 58 32.20 -0.6
SBA 62.40 180 iPd 58 36.60 1.9
SAP 62.61 340 eP 58 40.00 3.5X
HKC 63.44 305 eP 58 44.50 2.2
eS 07 16.00
SSE 63.47 317 iPc 58 42.00 -0.3
8.0s 5000.00nm 6.7mb X
Z 20s 54.30um 6.7Msz
N 18s 44.80um
E 18s 34.30um
MCO 63.83 305 eP 58 47.00 2.1

GZH 64.50 305 P 58 50.70 1.5
9.0s 6700.00nm 6.8mb X
Z 24s 54.50um 6.7MszX
N 19s 22.10um
E 20s 49.50um
QIZ 65.35 300 P 58 55.00 0.1
N 21s 39.50um
S 07 38.00
NJ2 65.61 317 Pc 58 56.00 -0.2
Z 22s 29.30um 6.4Msz
PP 01 28.00
YSS 65.73 342 iPd 59 00.00 3.3X
iS 07 50.00
KLM 66.63 280 eP 59 02.00 -1.2
IPM 67.68 282 ePd 59 10.00 0.2
1.3s 428.60nm 6.5mb
WHN 67.80 313 P 59 10.50 0.3
9.0s 6200.00nm 6.8mb X
Z 20s 35.80um 6.6Msz
E 19s 32.90um
iS 08 10.00
SMY 68.24 5 eP 59 16.70 4.2X
Z 18s 19.00um 6.4Msz
DL2 68.38 324 Pc 59 13.00 -0.6
1.2s 1410.00nm 7.0mb
Z 34s 51.70um 6.5MszX
N 15s 27.70um
E 15s 12.80um
PET 68.52 355 eP 59 16.00 1.8
eS 08 20.00
MDJ 68.53 333 Pd 59 15.20 0.7
Z 20s 45.10um 6.7Msz
N 20s 41.60um
ADK 68.66 11 eP 59 16.20 1.0
Z 21s 23.00um 6.4Msz
SNG 68.91 284 iPc 59 17.60 0.2
1.3s 584.62nm 6.6mb
eS 08 20.80
PSI 69.09 279 ePd 59 17.50 -1.1
TIA 69.32 319 Pd 59 19.70 0.1
Z 25s 34.30um 6.5MszX
N 16s 28.90um
E 16s 18.50um
S 08 26.00
SNY 69.35 327 iPd 59 19.60 0.0
8.0s 4500.00nm 6.7mb X
Z 22s 48.50um 6.7Msz
N 14s 15.40um
E 15s 15.20um
PcP 59 37.00
CN2 69.84 330 iPd 59 23.00 0.5
1.2s 1200.00nm 6.9mb
Z 20s 37.00um 6.6Msz
N 18s 33.30um
E 18s 19.60um
ipP 59 30.00 22kmX
iPP 02 00.00
iS 08 33.00
GYA 71.43 305 P 59 33.00 0.2
Z 40s 35.60um 6.3MszX
N 20s 16.10um
E 20s 29.80um
NNT 71.60 289 iPc 59 34.00 0.2
LOE 71.62 295 eP 59 34.00 0.1
BJI 72.30 322 ePc 59 37.92 0.4
2.0s 1410.00nm 6.7mb
N 20s 44.90um
ed 59 39.90 6kmX
ec 59 46.85
eS 09 04.14
TIY 73.23 318 iPd 59 44.40 1.3
6.0s 6500.00nm 6.9mb X
N 18s 33.40um
pP 59 54.00 31kmX
XAN 73.56 313 P 59 45.40 0.3
1.0s 200.00nm 6.1mb
E 20s 43.70um
S 09 16.00
BDT 73.96 293 eP 59 46.90 -0.7
1.1s 119.00nm 5.8mb
KMI 73.97 302 eP 59 48.50 0.6
CHG 74.61 295 ePd 59 52.00 0.6
1.0s 225.00nm 6.2mb
eS 09 32.00
SPA 74.63 180 iPd 59 51.00 0.0
1.1s 291.07nm 6.2mb
Z 21s 29.12um 6.6Msz

HHC 75.59 320 Pd 59 58.20 1.4
6.0s 3700.00nm 6.6mb X
Z 22s 50.40um 6.8Msz
N 18s 40.60um
PP 02 48.00
CD2 75.78 308 eP 59 58.40 0.4
Z 24s 32.60um 6.6MszX
N 17s 44.40um
iS 09 42.00
SDN 75.88 19 P 00 00.00 2.1
Z 20s 50.00um 6.8Msz
BTO 76.41 319 P 00 02.00 0.6
Z 17s 21.40um 6.5MszX
N 16s 28.10um
sP 00 19.00
PP 02 58.00
HIA 76.50 331 eP 00 01.47 -0.1
ed 00 03.13 5kmX
ec 00 10.25
LZH 78.18 313 ePc 00 13.34 2.0
1.8s 120.00nm 5.7mb
Z 22s 14.70um 6.3Msz
N 20s 40.90um
E 21s 31.80um
ed 00 15.33
ec 00 22.28
pP 00 22.50 29kmX
sP 00 27.00
PP 03 12.00
eS 10 09.07
SS 15 07.00
KDC 80.45 21 eP 00 22.80 -0.1
MAW 80.89 202 eP 00 28.00 2.8X
SVW 82.10 18 eP 00 31.20 -0.4
GTA 82.56 314 iPc 00 36.20 1.6
6.0s 4100.00nm 6.7mb X
Z 18s 38.80um 6.8Msz
E 20s 43.40um
PP 03 48.00
TTA 83.46 16 ePc 00 38.70 0.0
ILT 83.84 6 iPc 00 41.00 0.7
iS 11 00.00
PMR 84.48 20 eP 00 42.60 -1.0
2.0s 2031.30nm 7.0mb
Z 18s 24.00um 6.6Msz
PCC 85.06 49 e(P) 00 46.20 -0.9
LSA 85.23 302 iPd 00 50.00 1.3
N 17s 6.53um
iS 11 23.00
FHC 85.28 46 eP 00 47.60 -0.6
BRK 85.30 49 eP 00 47.20 -1.1
Z 20s 59.00um 7.0Msz
eS 11 14.00
eSSP 12 14.00
eSS 16 18.00
eSSS 20 20.00
eLR 26 40.00
BKS 85.32 49 e(P) 00 47.00 -1.4
1.0s 139.00nm 6.1mb
Z 20s 45.00um 6.9Msz
N 20s 41.00um
E 20s 5.00um
ePP 04 12.00
iS 11 13.00
ePS 12 09.00
i 12 17.00
i 14 02.00
e 16 15.00
iSS 16 53.00
eSSS 20 27.00
eLQ 22 48.00
eLR 26 07.00
ZSP 85.33 49 eP 00 47.00 -1.4
PRS 85.35 50 ePc 00 48.00 -0.6
SAO 85.46 50 eP 00 46.80 -2.3
MHC 85.54 49 ePc 00 48.00 -1.7
Z 20s 42.00um 6.8Msz
N 20s 23.00um
E 20s 38.00um
eS 11 28.00
iPPS 12 39.00
e 13 00.00
e 14 19.00
eSS 17 05.00
eSSS 20 32.00
eLQ 23 08.00
e 24 00.00

eLR 26 42.00
ARN 85.62 50 P 00 50.00 0.0
SYP 85.71 53 eP 00 51.00 0.4
TOA 85.82 20 eP 00 50.90 0.4
IRK 86.08 327 ePd 00 52.00 0.2
eS 11 24.00
WDC 86.19 46 iPc 00 51.50 -1.2
ePP' 26 58.40
ORV 86.51 47 e(P) 00 52.80 -1.5
IMA 86.58 15 ePc 00 54.20 0.0
CMB 86.73 49 eP 00 55.38 -0.1
ec 00 57.20 6kmX
ec 01 00.35
eP'P' 26 56.10
MIN 86.75 47 ePc 00 53.80 -1.8
LBFM 86.95 46 P 00 57.00 0.4
PAS 86.97 53 eP 00 57.40 0.8
ePP 04 20.00
eSKS 11 23.00
eS 11 35.08
ePS 12 43.35
eSS 16 52.00
eLg 23 42.00
MWC 87.08 53 eP 00 56.00 -1.4
ISA 87.27 52 eP 00 58.00 -0.2
COL 87.31 18 ePc 00 56.54 -1.1
ec 00 59.19 8kmX
FBA 87.31 18 eP 00 56.00 -1.6
SBB 87.42 53 eP 00 57.00 -1.9
RVR 87.53 54 eP 00 58.00 -1.3
BAR 87.63 55 eP 01 00.00 0.1
PEC 87.66 54 P 00 59.80 -0.2
PLM 87.71 55 eP 01 00.00 -0.5
KVN 88.77 49 ePd 01 04.30 -1.1
e 01 15.20 34kmX
GMW 88.88 40 P 01 06.00 0.5
PGC 88.93 39 eP 01 06.00 0.4
1.7s 500.00nm 6.5mb
GUN 89.00 299 P 01 07.40 0.4
TNP 89.07 50 P 01 06.30 -0.6
LON 89.16 41 P 01 07.00 0.1
GLA 89.22 55 eP 01 07.00 -0.5
PKI 89.30 299 P 01 08.60 0.2
VGB 89.33 42 P 01 08.00 0.2
KKN 89.47 299 P 01 09.20 0.2
DMN 89.57 299 P 01 10.00 0.5
GKN 90.08 299 P 01 11.20 -0.6
BRW 90.12 11 ePc 01 13.30 2.5
TIK 90.51 349 eP 01 12.00 -0.6
eS 12 09.00
AIA 90.98 161 eP 01 17.40 2.4
PNT 91.51 39 ePc 01 17.00 -0.7
1.1s 420.00nm 6.7mb
KOD 91.65 280 eP 01 22.00 2.6X
eS 12 00.00
HYB 92.52 287 eP 01 22.80 -0.2
1.4s 187.50nm 6.3mb
G8A 92.56 283 Pd 01 22.80 -0.4
1.2s 107.60nm 6.1mb
WMQ 92.63 315 ePc 01 24.10 1.0
ed 01 26.08 6kmX
ec 01 28.73
ec 01 30.72
MSU 92.97 51 P 01 25.50 0.6
INK 93.86 19 eP 01 26.00 -2.1
1.5s 91.00nm 5.9mb
DAU 94.20 49 P 01 31.60 0.9
LRM 94.92 44 eP 01 33.40 -0.4
ALQ 96.42 56 eP 01 40.40 -0.4
2.0s 70.59nm 5.8mb
pP 04 48.30
ANMO 96.42 56 P 01 39.40 -1.4
NDI 96.56 298 eP 01 42.50 1.2
eSKS 12 20.00
eS 13 00.00
ePPS 14 34.00
eSS 19 36.00
SES 97.11 40 eP 01 43.00 -0.4
POO 97.13 287 iPc 01 55.20 11.1X
iS 12 34.00
BOM 98.17 287 eP 01 45.40 -3.3X
eS 11 28.90
GOL 98.38 51 P 01 49.90 0.3
Z 20s 25.00um 6.7Msz
GLD 98.51 51 P 01 50.00 -0.1
Z 20s 33.00um 6.8Msz
MBC 101.22 14 ePdiff02 02.50 1.2

19d 07h

	0.5s	7.00nm		5.5mb			
FFC	103.40	37	iPdiff	02 11.80	0.3		
	1.4s	71.00nm		6.2mb			
UYO	105.98	58	e(PKP)	06 48.50	12.5X		
MAIO	112.49	303	ePKP	06 48.00	-0.4		
ARE	114.67	117	e(PKP)	07 01.00	7.6X		
KBS	115.36	355	ePKP	06 55.20	2.6		
CLE	116.57	51	iPKP	06 56.90	1.0		
LPB	117.54	118	ePKP	06 50.00	-9.0X		
			e	06 59.00			
			LR	08 55.00			
			SKS	18 00.00			
ZOBO	117.64	118	PKP	06 52.00	-7.4X		
	1.3s	39.43nm					
			i	07 10.20			
			LR	39 00.00			
DAG	118.62	1	iPKPd	06 56.80	-2.0		
	0.6s	12.00nm					
CCH	118.78	120	PKP	07 00.80	-0.4		
IR2	119.45	302	ePKP	07 01.50	-0.2		
IR4	119.46	302	ePKP	07 02.00	0.2		
IR1	119.63	302	ePKP	07 01.00	-1.1		
APA	119.83	341	iPKPc	07 04.30	3.0X		
KEV	120.21	345	ePKP	06 59.00	-2.9X		
	0.7s	30.70nm					
	Z 22s	20.90um		6.7Msz			
			i	07 08.80			
			iSKP	10 25.80			
			LR	02 10.00			
HVD	120.72	219	ePKP	07 04.00	-0.3		
GDH	120.74	15	ePKP	06 52.00	-10.9X		
			e	08 30.00			
			i	25 02.00			
			i	33 10.00			
			i	38 50.00			
BLF	121.33	221	ePKP	07 03.00	-2.6		
SOD	121.95	343	iPKP	07 07.20	1.9		
			e	07 17.00			
PRY	121.97	224	iPKPc	07 07.80	1.0		
	0.7s	10.00nm					
			i	07 31.70			
GMTN	122.14	51	iPKP	07 07.40	0.9		
PNJ	122.16	51	iPKPd	07 09.10	2.6		
SLR	122.20	225	iPKPc	07 06.00	-1.3		
	1.0s	30.00nm					
	Z 18s	70.79um		7.4Msz			
			i	07 41.00			
SLR	122.20	225	ePKPd	06 57.71	-9.6X		
KIM	122.47	220	iPKPc	07 07.30	-0.4		
	1.0s	45.00nm					
KER	122.62	301	ePKP	07 07.00	-0.8		
TAB	122.95	306	ePKP	07 10.00	1.6		
RYD	123.07	290	ePKPd	07 09.20	0.4		
SCH	123.41	34	ePKP	07 09.00	0.5		
SLY	123.84	303	iPKPd	07 08.80	-1.2		
			i	07 21.30			
			iPP	09 01.50			
			eSKKS	16 57.50			
BKR	124.57	310	iPKPd	07 12.00	0.6		
KMSA	124.72	284	ePKPd	07 12.20	0.0		
OBN	124.85	327	iPKPc	07 12.00	0.7		
	1.1s	160.00nm					
	Z 21s	22.00um		6.8Msz			
BHD	124.94	300	iPKPc	07 15.00	2.9X		
			e	08 56.00			
SUF	125.22	339	iPKP	07 11.70	-0.1		
PUL	125.45	334	ePKP	07 13.00	0.7		
BUL	125.46	231	iPKPc	07 09.90	-3.8X		
	1.0s	37.50nm					
			iPP	09 01.00			
MSL	125.66	304	ePKP	07 14.00	0.5		
			i	07 27.00			
			ePP	09 08.00			
			ePP	11 48.00			
			eSKKKS	16 29.00			
FISA	125.75	87	ePKP	07 13.50	-0.9		
OASM	125.89	291	ePKP	07 16.30	1.9		
CEOS	126.26	90	ePKP	07 13.00	-2.4		
KRI	126.63	235	iPKPd	07 14.90	-1.2		
			ipP	09 08.90			
MORO	126.65	88	ePKP	07 16.00	-0.2		
NUR	127.22	337	iPKP	07 15.00	-0.7		
	1.0s	156.00nm					
	Z 22s	26.10um		6.9Msz			
			eSKP	10 41.00			
			LR	59 16.00			
NAI	127.47	256	iPKPc	07 21.00	3.1X		
	1.0s	8.00nm					
GUAC	127.53	89	ePKP	07 21.00	3.1X		
OLLA	127.94	89	iPKPc	07 17.50	-1.1		
LLAV	128.03	89	ePKP	07 18.00	-0.8		
AAE	128.51	269	ePKP	07 23.00	3.0X		
RGS	129.60	346	ePKP	07 21.50	1.3		
NB2	131.10	344	PKP	07 21.20	-2.0		
	1.7s	159.10nm					
HFS	131.16	342	ePKP	07 23.20	0.0		
	0.9s	27.00nm					
	Z 20s	13.91um		6.7Msz			
			LR	50 20.00			
KAS	131.75	312	ePKP	07 26.00	0.9		
AYN	132.47	295	ePKP	07 28.00	1.3		
BBTK	132.95	310	ePKP	07 20.00	-7.4X		
			i	07 27.00			
PRNI	133.18	297	e(PKP)	07 30.00	1.9		
TRN	133.27	90	ePKP	07 31.00	2.4		
MBH	133.35	296	ePKP	07 29.00	0.7		
PAG	133.82	82	ePKP	07 28.00	-1.6		
SVB	133.87	86	ePKP	07 27.56	-2.2		
CLI	134.01	321	iPKPc	07 32.50	3.4X		
BAO	134.09	131	ePKP	07 26.90	-3.4X		
CFR	134.10	319	ePKP	07 30.00	0.7		
SLB	134.16	86	ePKP	07 32.85	2.5		
LWI	134.51	251	iPKPc	07 32.60	1.3		
GPA	134.58	312	ePKP	07 29.00	-1.4		
VRI	134.68	321	ePKPd	07 33.00	2.6		
ITU	135.21	313	ePKP	07 32.00	0.5		
MLR	135.34	320	ePKP	07 22.00	-9.8X		
CTT	135.60	314	iPKP	07 22.60	-9.7X		
BMR	135.64	324	ePKPd	07 34.00	1.9		
UZH	135.75	326	ePKP	07 35.00	2.7		
DMK	135.80	315	ePKP	07 22.00	-10.6X		
KHL	135.81	310	ePKP	07 29.00	-3.9X		
BUC1	135.83	319	ePKPc	07 36.00	3.4X		
KOT	135.96	297	ePKP	07 34.00	0.7		
CMP	136.00	321	ePKPc	07 36.00	3.0X		
ELL	136.01	307	ePKP	07 34.00	0.6		
KRA	136.10	329	ePKP	07 32.00	-0.9		
	1.3s	115.00nm					
			i	07 36.10			
			i	07 45.10			
EDC	136.30	313	ePKP	07 34.00	0.4		
HLW	136.39	297	ePKP	07 35.50	1.4		
KSL	136.44	306	ePKP	07 37.50	3.5X		
SPC	136.50	328	ePKP	07 34.80	0.8		
			e	10 19.60			
			e	19 33.30			
DRA	136.78	320	ePKP	07 34.00	-0.4		
KSP	137.29	332	ePKP	07 25.00	-10.2X		
	1.3s	118.00nm					
			id	07 37.50			
			i	07 47.00			
			e	10 23.00			
IZM	137.46	310	ePKP	07 32.00	-4.0X		
KDZ	137.46	316	ePKP	07 28.00	-7.8X		
PSZ	137.47	327	ePKP	07 35.00	-0.7		
EZN	137.59	313	ePKP	07 34.00	-2.1		
RDO	137.60	315	ePKP	07 37.00	1.0		
BZS	137.86	323	ePKP	07 30.00	-6.4X		
TIM	138.03	323	ePKP	07 35.00	-1.7		
BRG	138.30	334	iPKP	07 29.60	-7.5X		
	1.3s	34.00nm					
			i	07 36.10			
			i	07 39.20			
			i	07 49.40			
SRO	138.36	328	ePKP	07 36.50	-0.7		
			i	07 39.20			
			e	07 47.40			
			ePP	10 32.20			
CLL	138.36	335	ePKP	07 34.00	-3.1X		
	1.7s	160.00nm					
	Z 22s	23.50um		6.9Msz			
			i	07 39.20			
			i	07 49.10			
PRU	138.69	333	iPKP	07 32.00	-5.8X		
	Z 21s	24.70um		6.9Msz			
	N 20s	14.70um					
	E 20s	9.00um					
			e	07 39.20			
ZST	138.73	329	ePKP	07 37.90	0.0		
			i	07 49.90			
			i	08 14.60			
			e(PP)	10 34.10			
			e	19 29.60			
BEO	138.99	323	ePKP	07 38.80	0.3		
	1.0s	8.00nm					
PLG	139.36	315	ePKP	07 30.00	-9.4X		
WIT	139.43	341	ePKP	07 35.00	-4.0X		
			e	07 42.00			
			e	07 52.00			
			e	10 42.00			
MOX	139.44	335	ePKP	07 36.00	-3.1X		
	1.4s	75.00nm					
			i	07 41.50			
			e	10 41.00			
KHC	139.74	332	iPKPc	07 36.40	-3.4X		
			i	07 42.80			
SKO	139.92	318	iPKP	07 42.80	2.5		
	1.1s	195.00nm					
	Z 21s	11.75um		6.6Msz			
	N 21s	10.44um					
	E 21s	16.13um					
			iPP	10 44.00			
			iSKKS	16 48.00			
			i	19 27.00			
			i	23 30.00			
			i	26 02.00			
			iSS	28 40.00			
			iSSS	34 46.00			
WET	140.04	333	iPKPc	07 37.00	-3.3X		
	Z 19s	25.00um		7.0Msz			
WTS	140.08	340	ePKP	07 34.00	-6.2X		
	1.1s	87.00nm					
			e	07 40.00			
			e	07 43.50			
			e	10 35.00			
			e	11 25.00			
KMR	140.27	331	ePKP	07 37.00	-3.7X		
			i+	07 40.30			
			i	07 44.50			
			iPP	10 39.70			
GRF	140.34	335	ePKP	07 36.50	-4.3X		
	Z 22s	25.00um		6.9Msz			
			e(PP)	10 40.00			
KZN	140.53	316	ePKP	07 35.50	-6.0X		
BCI	140.58	320	ePKP	07 36.30	-5.1X		
PHP	140.71	319	ePKP	07 38.50	-3.1X		
OHR	140.77	318	iPKP	07 45.10	3.2X		
	1.1s	0.15nm					
			i	07 53.00			
VAM	140.82	308	ePKP	07 35.60	-6.5X		
PTJ	140.83	327	ePKP	07 43.40	1.5		
ZAG	140.88	327	iPKP	07 44.80	3.0X		
TNS	141.00	337	ePKPc	07 38.30	-3.7X		
			ec	08 08.70			
KBN	141.01	317	iPKPc	07 38.00	-4.2X		
BHG	141.09	331	ePKP	07 39.10	-3.1X		
SDA	141.13	320	ePKP	07 38.20	-4.2X		
LACI	141.20	319	ePKP	07 42.20	-0.3		
TIR	141.25	318	ePKP	07 38.50	-4.2X		
VLI	141.27	310	ePKP	07 37.00	-5.9X		
KBA	141.34	330	iPKPc	07 38.40	-4.5X		
	2.0s	298.50nm					
			i	07 52.30			
			iPP	10 48.10			
			e	18 25.00			
TOD	141.37	337	ePKP	07 37.60	-5.1X		
LSK	141.39	316	ePKP	07 37.30	-5.8X		
ENN	141.42	340	ePKP	07 37.00	-5.6X		
	1.5s	74.00nm					
			ic	07 46.30			
			e	07 55.00			
VBY	141.46	327	ePKP	07 41.00	-1.9		
			i	07 45.00			
			e	07 54.00			
LJU	141.48	328	ePKP	07 37.00	-5.9X		
			e	07 42.40			
			i	07 52.00			
			e	08 05.00			
FUR	141.48	333	iPKPc	07 39.80	-3.1X		
	Z 18s	17.00um		6.8Msz			
MEM	141.53	340	PKP	07 40.40	-2.4		
BERA	141.54	317	ePKP	07 39.30	-3.9X		
ABH	141.61	338	ePKP	07 39.00	-4.1X		
RBL	141.68	329	PKP	07 41.50	-1.9		
CEY	141.74	328	e(PKP)	07 40.00	-3.5X		
VOY	141.81	329	ePKP	07 37.30	-6.4X		
			e	07 44.90			
			i	07 54.50			
			i	08 03.20			
ITM	141.82	311	ePKP	07 40.00	-3.9X		
DLE	141.85	353	ePKP	07 47.20	3.9X		
	1.0s	104.00nm					

SRN	141.92	316	iPKP	07	40.00	-3.9X	RSP	145.57	334	PKP	07	49.72	-0.4	ENIJ	156.31	337	e(PKP)	08	07.50	1.3
RUP	141.93	338	ePKP	07	40.28	-3.4X	SMF	145.67	339	ePKP	07	50.40	0.3	ASMO	156.50	340	iPKPc	08	06.50	-0.1
FVI	141.96	330	PKPd	07	40.60	-3.1X	CKI	145.68	332	PKP	07	49.60	-0.6	AFC	156.53	339	e(PKP)	08	06.00	-0.7
RIY	142.03	327	ePKP	07	40.70	-3.2X	AVF	145.71	339	ePKP	07	50.40	0.2	AAPN	156.67	341	iPKPc	08	07.00	0.2
TRI	142.10	328	ePKP	07	40.40	-3.6X	MSI	145.74	317	PKP	07	53.10	2.6	ACHM	156.76	340	iPKPd	08	09.50	2.6
SCE	142.13	332	ePKPc	07	38.30	-6.0X	ATN	145.83	317	PKPd	07	50.20	-0.5	ALOJ	156.85	340	iPKPc	08	07.00	-0.1
			ec	08	08.70		FIN	145.88	332	PKP	07	50.13	-0.5	APHE	156.85	339	iPKPc	08	07.00	-0.1
KEK	142.14	316	ePKP	07	40.80	-3.5X	BNI	145.89	334	PKPd	07	50.90	0.2	ATEJ	156.99	340	iPKPc	08	07.00	-0.3
SNF	142.17	341	PKP	07	44.40	0.4	LPF	145.91	345	ePKP	07	50.10	-0.3	EVAL	157.14	346	ePKP	08	10.90	3.7X
HVAR	142.29	323	iPKP	07	44.50	0.0	RRL	145.95	334	PKP	07	50.85	-0.1	MAL	157.29	341	iPKPd	08	10.00	2.6
GWF	142.33	337	PKP	07	40.32	-4.1X	ROB	145.97	332	PKP	07	50.23	-0.5	TAF	158.26	334	iPKPd	08	11.00	2.3
DOU	142.43	341	PKP	07	40.90	-3.6X	LPI	145.99	318	PKP	07	50.41	-0.5	NKM	158.79	341	iPKPd	08	12.50	3.3X
OGA	142.57	332	iPKPd	07	41.50	-3.6X	DOI	146.08	333	PKP	07	50.00	-1.0				i	08	21.80	
ECB	142.79	353	ePKP	07	44.50	-0.5	BGF	146.09	339	ePKP	07	51.40	0.6				i	08	57.00	
	1.3s	275.00nm					PZZ	146.15	333	PKP	07	49.62	-1.5	IFR	160.46	338	iPKPd	08	12.50	1.2
CTI	142.89	330	PKPd	07	44.20	-1.3	ENR	146.22	332	PKP	07	50.74	-0.5				i	08	15.00	
WLS	142.89	337	PKP	07	41.91	-3.5X	STV	146.25	332	PKP	07	50.03	-1.2				i	08	42.00	
ECP	142.92	353	ePKP	07	46.00	0.8	IMI	146.26	332	PKP	07	51.87	0.6				i	09	01.50	
	1.1s	209.00nm					FOUF	146.27	333	ePKP	07	51.60	0.5	AVE	161.38	344	iPKPd	08	13.00	1.0
CDF	142.92	337	PKP	07	41.60	-3.9X	PLDF	146.33	338	PKP	07	52.70	1.4				i	08	25.00	
SAX	143.02	334	ePKPd	07	42.10	-3.9X	SAOF	146.35	332	PKP	07	52.72	1.4				i	09	03.00	
LCI	143.02	318	PKP	07	43.30	-2.5	AUTN	146.40	332	PKP	07	52.72	1.0	TEGH	163.44	235	ePKP	08	10.00	-4.5X
FEL	143.07	336	ePKP	07	42.11	-3.7X	AGO	146.43	339	PKP	07	52.98	1.6				e	09	07.00	
OSS	143.11	332	ePKPd	07	43.20	-2.8X	MNO	146.46	317	PKP	07	53.40	1.4				e	12	53.00	
ECH	143.13	337	PKP	07	41.91	-3.9X	TOUF	146.47	332	PKP	07	52.96	1.2	TID	163.55	340	iPKPd	08	15.00	0.6
BRT	143.20	320	PKP	07	44.30	-1.8	MAF	146.48	339	ePKP	07	51.40	-0.1	LEGH	163.59	235	ePKP	08	16.00	1.3
MOF	143.44	336	PKP	07	43.44	-3.0X	SBF	146.50	332	PKP	07	52.12	0.5				e	09	07.00	
LLS	143.47	334	ePKPd	07	44.20	-2.4	AURF	146.53	332	PKP	07	53.72	2.0				e	12	53.00	
VDL	143.56	333	ePKPd	07	44.50	-2.3	TCF	146.54	340	ePKP	07	51.50	-0.1	WEGH	163.68	234	ePKP	08	18.00	3.2X
VITF	143.57	338	PKP	07	43.70	-2.7	BCAO	146.55	254	iPKPd	07	51.40	-1.1				e	09	08.00	
BSF	143.58	337	PKP	07	42.44	-4.2X		1.3s	1377.00nm								e	12	53.00	
BBS	143.61	336	PKP	07	43.50	-3.1X				ic	09	25.70		WIGH	163.76	233	ePKP	08	19.00	4.1X
HAU	143.61	337	ePKP	07	43.50	-3.1X				ic	11	02.50					e	09	09.00	
	0.9s	13.10nm					SSB	146.57	336	PKP	07	53.40	-1.7	KOGH	163.91	236	ePKP	08	17.00	1.9
SAL	143.75	331	PKPd	07	44.40	-2.4	MVIF	146.60	332	PKP	07	53.05	1.1				e	09	08.00	
FG2	143.88	322	PKP	07	47.54	0.3	REVF	146.63	332	PKP	07	52.14	0.3				e	12	55.00	
MDI	143.99	332	PKP	07	47.30	0.1	PYM	146.73	339	PKP	07	54.23	2.3	CFTV	167.11	2	iPKP	08	18.00	0.6
RSM	144.00	327	PKP	07	46.20	-1.1	PGF	146.75	329	PKP	07	52.10	0.0	KIC	167.44	225	PKP	08	20.00	2.1
ARV	144.04	326	PKP	07	50.59	3.1X	MEU	146.76	316	PKP	07	54.80	2.5		1.5s	160.50nm				
TMA	144.12	333	ePKPd	07	45.80	-1.9	LSF	146.79	341	ePKP	07	51.60	-0.4	LIC	167.54	223	PKP	08	19.80	1.8
ORI	144.13	319	PKP	07	46.70	-1.0	CALN	146.83	332	PKP	07	53.96	1.7		1.7s	209.00nm				
SFI	144.32	328	PKPd	07	47.60	-0.2	GIB	146.86	318	PKP	07	54.50	2.1		Z 20s	26.00um				
ROI	144.33	318	PKP	07	47.70	-0.4	USI	146.98	320	PKP	07	56.60	4.2X	TIC	167.84	225	PKP	08	21.04	2.8X
VAI	144.35	333	PKPd	07	46.20	-1.6	MFF	146.98	343	ePKP	07	53.10	0.9		1.8s	265.50nm				
DUI	144.39	323	PKPd	07	46.60	-1.6	FRF	147.09	332	ePKP	07	52.10	-0.4	MBO	176.60	108	iPKP	08	23.80	2.1
CSI	144.39	319	PKP	07	47.10	-1.1	LBL	147.09	338	PKP	07	55.17	2.8X		S.D. = 1.2		on 375 of 512 obs.			
PGD	144.42	328	PKPd	07	47.70	-0.6	MCT	147.32	318	PKP	07	57.10	3.8X							
TDS	144.43	319	PKPd	07	47.40	-0.8	LMR	147.33	332	ePKP	07	52.50	-0.4							
CRE	144.47	327	PKPd	07	47.00	-1.3	RJF	147.63	340	ePKP	07	52.70	-0.6	%	FEB 19, 1990 07h 02m 09.26± 0.90s					
ASS	144.48	326	PKPd	07	46.70	-1.6		1.5s	161.90nm						38.969 N ± 6.6km 27.096 E ± 9.9km					
MMN	144.52	319	PKP	07	47.60	-0.7	ERC	147.75	319	PKP	07	59.20	5.4X		DEPTH = 10.0km (geophysicist)					
AQU	144.55	325	PKPd	07	47.60	-0.8	CAF	147.78	339	ePKP	07	53.60	0.0		TURKEY					(366)
MMK	144.55	334	ePKPd	07	47.90	-0.6	CVT	147.84	318	PKP	07	58.70	4.9X							
SGO	144.55	321	PKP	07	39.34	-9.0X	LVI	147.94	319	PKPd	07	59.50	5.5X	IZM	0.58	167	iPg	02	21.10	0.0
	1.4s	1185.10nm					CAI	148.05	131	iPKPc	07	54.60	-0.3				iSg	02	28.80	
SGO	144.55	321	PKP	07	47.00	-1.3	LPO	148.29	340	ePKP	07	54.10	-0.3	EZN	1.04	325	ePg	02	29.10	0.2
MGR	144.65	320	PKP	07	46.70	-1.9		1.2s	71.40nm								iSg	02	42.70	
MME	144.70	329	PKPd	07	48.30	-0.6	PTS	148.87	318	PKP	08	00.12	4.6X	DST	1.35	61	iPn	02	34.40	0.3
SDI	144.73	323	PKP	07	47.10	-1.6		0.5s	219.40nm					EDC	1.50	23	iPn	02	36.00	-0.2
DIX	144.76	334	ePKPd	07	48.70	-0.2	ETER	149.73	335	e(PKP)	08	04.60	7.9X	BNT	1.52	24	iPn	02	36.00	-0.6
AZI	144.77	324	PKPd	07	47.80	-0.9	EPF	150.04	339	ePKP	07	57.00	-0.2	CTT	2.40	25	ePn	02	49.60	0.3
CZI	144.81	318	PKP	07	46.00	-2.8X		1.4s	104.55nm						S.D. = 0.4		on 6 of 6 obs.			
GRI	144.84	317	PKP	07	48.45	-0.5	OGE	150.19	340	PKP	08	02.70	5.3X							
	1.2s	1727.50nm					JAU	150.27	340	PKP	08	02.17	4.5X	%	FEB 19, 1990 07h 15m 23.45± 0.99s					
BDI	144.85	329	PKP	07	47.00	-1.9	MADF	150.32	341	PKP	08	02.94	5.4X		38.939 N ± 7.2km 27.060 E ±11.5km					
ORX	144.87	333	PKP	07	47.16	-1.8	ATE	150.33	341	PKP	08	00.69	3.1X		DEPTH = 10.0km (geophysicist)					
BOB	144.88	331	PKPd	07	48.40	-0.5	ELYF	150.35	341	PKP	08	05.78	8.1X		TURKEY					(366)
ORO	144.88	333	PKP	07	47.50	-1.4	ISSF	150.42	341	PKP	08	00.99	3.1X							
EMS	144.97	335	ePKPd	07	49.00	-0.2	BOH	150.42	341	PKP	08	03.09	5.2X	IZM	0.56	164	ePg	15	34.80	-0.1
FLN	145.09	345	ePKP	07	48.10	-0.9	LHE	150.46	340	PKP	08	02.48	4.6X				eSg	15	44.30	
	0.9s	153.55nm					ECRI	151.32	343	e(PKP)	08	03.00	3.9X	EZN	1.05	327	ePg	15	43.60	0.3
LOR	145.13	339	ePKP	07	49.10	-0.1	EMON	151.61	350	e(PKP)	08	06.30	6.8X				iSg	15	57.60	
	0.9s	153.55nm					ESEL	151.81	332	e(PKP)	08	03.20	3.3X	DST	1.39	61	iPn	15	49.40	0.5
PII	145.13	329	PKP	07	47.70	-1.5	EBR	151.92	337	ePKP	08	03.00	3.0X	EDC	1.54	24	iPn	15	50.00	-0.9
LDF	145.15	344	ePKP	07	48.50	-0.6	STS	152.33	352	e(PKP)	08	04.40	3.9X	BNT	1.56	25	iPn	15	51.00	-0.3
RMP	145.30	324	PKP	07	49.30	-0.3	ERUA	152.59	350	e(PKP)	08	04.20	3.3X	KCT	1.65	37	iPn	15	53.00	0.5
RDP	145.33	324	PKP	07	49.80	0.0	ETOR	152.81	341	e(PKP)	08	05.00	3.6X		S.D. = 0.7		on 6 of 6 obs.			
LBF	145.33	339	ePKP	07	49.60	0.0	EZAM	153.07	352	e(PKP)	08	04.00	2.4							
LSD	145.37	334	PKP	07	50.44	0.5	ECHE	153.54	338	e(PKP)	08	06.00	3.6X	*	FEB 19, 1990 07h 28m 12.11± 0.45s					
GRC	145.37	340	PKP	07	50.65	1.1	GUD	153.60	344	ePKP	08	04.00	1.4		15.748 S ±10.7km 166.280 E ±11.3km					
SSF	145.43	339	ePKP	07	49.70	0.0	PTO	154.05	351	ePKP	08	06.00	3.0X		DEPTH = 33.0km (normol)					
PCP	145.47	332	PKP	07	49.41	-0.5	TOL	154.28	343	ePKP	08	04.00	0.6		4.6mb (2 obs.)					
SOI	145.49	316	PKP	07	50.30	0.3				iPKKP	08	33.00			VANUATU ISLANDS					(186)
LPG	145.50	334	ePKP	07	50.20	-0.1				iPP	12	08.00								
	0.9s	64.00nm					EPLA	154.62	346	ePKP	08	07.80	4.0X	PVC	2.78	136	iPc	28	55.30	0.1
GRR	145.53	345	ePKP	07	49.90	0.1	EVIA	154.93	339	e(PKP)	08	05.00	0.6				iS	29	28.50	
GMB	145.56	317	PKP	07	52.09	1.7	EBAN	155.78	341	ePKP	08	06.00	0.5	DZM	6.29	179	iPc	29	43.30	-1.8
																	iS	30	56.90	

19d 07h

RMO	19.51	234	e(P)	32 43.00	3.3X
			e	32 50.00	
CTA	19.53	254	iPc	32 40.50	0.5
CMS	24.36	226	eP	33 30.00	1.7
BWA	24.58	218	eP	33 31.00	0.6
CAN	24.89	215	eP	33 35.30	1.9
QIS	25.78	255	eP	33 41.00	-0.9
WB5	30.63	258	eP	34 23.90	-1.9
WRA	30.66	257	P	34 25.00	-1.0
	0.9s		4.50nm	4.3mb	
GUN	89.05	299	P	41 00.00	-6.1X
PNT	91.80	39	eP	41 17.00	-0.8
	0.6s		4.00nm	5.0mb	
ROI	144.47	318	PKP	47 45.60	-1.5
CZI	144.95	318	PKP	47 45.10	-2.7
FLN	145.33	345	ePKP	47 46.70	-1.4
	0.9s		19.65nm		
LOR	145.35	339	iPKPd	47 47.60	-0.7
	0.8s		18.80nm		
LDF	145.39	344	ePKP	47 47.20	-1.1
	0.9s		19.65nm		
LBF	145.56	338	ePKP	47 48.00	-0.7
	1.0s		22.00nm		
SSF	145.65	339	iPKPd	47 48.70	-0.1
	1.0s		50.00nm		
LPG	145.71	334	ePKP	47 49.40	0.1
	0.8s		9.40nm		
GRR	145.77	345	ePKP	47 48.20	-0.7
	0.9s		47.50nm		
SMF	145.89	338	ePKP	47 49.30	0.1
	1.3s		36.10nm		
AVF	145.94	339	ePKP	47 49.40	0.2
	1.3s		36.10nm		
LPF	146.15	345	ePKP	47 49.80	0.3
	0.9s		39.30nm		
BGF	146.32	339	ePKP	47 50.50	0.6
BCAO	146.37	254	iPKPd	47 51.40	0.4
	0.9s		42.00nm		
			id	48 01.50	
SBF	146.70	332	ePKP	47 53.10	2.4
MAF	146.71	339	ePKP	47 52.80	2.3
	0.9s		8.20nm		
TCF	146.77	340	ePKP	47 51.60	0.9
	0.8s		8.05nm		
PGF	146.94	328	ePKP	47 52.50	1.3
	0.9s		6.55nm		
LSF	147.02	340	ePKP	47 54.00	3.0X
LMR	147.54	332	ePKP	47 53.80	1.9
	0.9s		6.55nm		

S.D. = 1.4 on 29 of 32 obs.

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* FEB 19, 1990 08h 41m 19.38± 1.21s
50.354 N ±13.6km 129.997 W ±14.9km
DEPTH = 10.0km (geophysicist)
4.0mb (2 obs.)
VANCOUVER ISLAND REGION (25)

PHC	1.67	77	Pn	41 48.60	-0.2
			Sn	42 11.50	
SJB	1.71	338	Pn	41 48.00	-1.3
EDB	1.91	103	Pn	41 49.12	-3.2X
BBB	2.18	32	Pn	41 58.00	1.8
			Sn	42 26.00	
BNB	2.48	334	Pn	41 58.80	-1.7
BTB	3.03	105	Pn	42 02.70	-5.6X
CWB	3.07	337	Pn	42 08.00	-0.8
LON	6.52	120	eP	42 57.00	-0.7
PNT	6.80	95	eP	43 00.00	-1.5
NEW	8.67	99	eP	43 25.00	-2.8
KVN	14.10	139	eP	44 43.00	1.7
IMW	14.47	109	eP	44 47.00	0.6
BW06	15.94	111	eP	45 06.00	0.6
INK	18.09	356	eP	45 35.00	3.0
IMA	19.88	331	eP	45 53.50	0.1
GOL	20.31	112	e(P)	45 56.50	-1.9
RSON	22.90	75	eP	46 25.00	1.0
	0.8s		6.81nm	4.2mb	
ANMO	23.03	123	eP	46 26.00	0.3
ALQ	23.03	123	eP	46 27.50	1.8
	1.0s		3.25nm	3.8mb	

S.D. = 1.7 on 17 of 19 obs.

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* FEB 19, 1990 08h 45m 42.52± 2.43s
32.516 S ± 8.7km 71.919 W ±22.8km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF CENTRAL CHILE (135)

ROCH	0.89	121	iPd	45 59.20	-0.6
			iS	46 14.50	
TACH	1.40	144	iPc	46 08.40	0.3
			iS	46 27.50	
LNV	1.50	164	eP	46 09.00	-0.4
			eS	46 31.70	
FCH	1.59	121	iPc	46 10.30	-0.8
			iS	46 32.60	
PCH	1.61	133	iPc	46 11.50	0.3
			iS	46 36.00	
CHCH	1.77	143	iPd	46 14.20	0.8
			iS	46 41.00	
RTRS	3.14	43	ePd	46 32.30	-0.7
			(S)	47 12.60	
RTLL	3.16	69	ePd	46 35.00	1.7
CFA	3.25	75	ePc	46 34.00	-0.6
			S	47 14.00	

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

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* FEB 19, 1990 08h 56m 39.46± 0.42s
15.677 S ± 8.1km 166.295 E ± 9.3km
DEPTH = 29.5km (2 depth phases)
4.6mb (4 obs.)
VANUATU ISLANDS (186)

PVC	2.82	137	iP	57 23.20	-0.3
			iS	57 58.50	
DZM	6.36	179	iPc	58 11.70	-2.1
			iS	59 25.70	
BRS	17.13	225	eP	00 47.00	8.6X
RMO	19.56	234	eP	01 10.00	1.9
CTA	19.57	254	iPc	01 08.40	0.3
	1.1s		28.48nm	4.5mb	
			i	01 16.20	-31km
COO	19.85	219	eP	01 12.60	1.5
CMS	24.42	226	eP	01 58.00	1.3
			e	02 06.00	28km
BWA	24.64	217	eP	01 59.10	0.2
CAN	24.95	215	eP	02 03.60	1.8
QIS	25.81	255	iPc	02 09.80	-0.2
WB5	30.66	257	eP	02 51.20	-2.7
WRA	30.69	257	Pc	02 52.00	-2.1
	0.9s		3.50nm	4.2mb	
ASPA	31.47	250	iPd	02 59.40	-1.5
	0.6s		8.00nm	4.8mb	
TIY	73.32	318	eP	08 10.70	0.3
XAN	73.64	313	P	08 12.20	-0.1
CHTO	74.62	295	e(P)	08 18.40	0.2
CD2	75.84	308	eP	08 25.10	0.0
LZH	78.26	313	Pc	08 38.00	-0.5
	1.0s		20.00nm	5.1mb	
GTA	82.64	314	Pd	09 02.40	0.7
CZI	144.90	318	PKP	16 14.10	-1.5
FLN	145.27	345	ePKP	16 15.00	-0.9
LOR	145.29	339	iPKPd	16 15.60	-0.5
	0.8s		17.45nm		
LDF	145.33	344	ePKP	16 15.30	-0.7
	0.9s		19.65nm		
LBF	145.49	338	ePKP	16 16.10	-0.4
	0.9s		16.40nm		
SSF	145.59	339	iPKPd	16 16.70	0.1
	0.9s		34.40nm		
LPG	145.66	334	ePKP	16 17.40	0.3
	0.8s		8.05nm		
GRR	145.71	345	ePKP	16 16.80	0.1
	0.9s		32.75nm		
SMF	145.83	338	ePKP	16 16.90	-0.1
	1.0s		22.00nm		
LPF	146.09	345	ePKP	16 18.20	0.9
	0.9s		29.50nm		
BGF	146.26	339	ePKP	16 17.40	-0.3
BCAO	146.40	254	iPKPd	16 19.40	0.5
	0.9s		38.00nm		
			ic	16 27.40	
SBF	146.65	332	ePKP	16 19.40	0.9
TCF	146.71	340	ePKP	16 19.80	1.4
	0.9s		8.20nm		
PGF	146.89	329	ePKP	16 20.40	1.4
	0.7s		5.50nm		

S.D. = 1.2 on 33 of 34 obs.

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* FEB 19, 1990 09h 11m 45.72± 1.27s
50.331 N ±13.5km 129.949 W ±13.8km
DEPTH = 10.0km (geophysicist)
4.3mb (1 obs.)
VANCOUVER ISLAND REGION (25)

PHC	1.65	76	Pn	12 15.00	0.2
			Sn	12 37.50	
EDB	1.88	103	Pn	12 16.26	-1.9
BBB	2.19	31	Pn	12 24.50	1.9
			Sn	12 52.50	
BNB	2.51	334	Pn	12 25.30	-2.0
CBB	2.96	94	Pn	12 32.98	-0.6
BTB	2.99	105	Pn	12 30.89	-3.3X
CWB	3.10	337	Pn	12 34.50	-1.1
LON	6.48	120	eP	13 23.30	-0.2
PNT	6.76	95	eP	13 28.00	0.6
NEW	8.64	99	eP	13 52.00	-1.7
KVN	14.06	139	eP	15 09.00	1.8
IMW	14.44	109	eP	15 11.20	-1.0
INK	18.12	356	eP	16 01.00	2.4
IMA	19.92	331	eP	16 20.00	-0.1
RSON	22.88	75	eP	16 50.00	-0.1
	0.8s		8.01nm	4.3mb	
ANMO	22.99	123	eP	16 53.50	1.9

S.D. = 1.6 on 15 of 16 obs.

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* FEB 19, 1990 10h 04m 36.14± 1.68s
16.903 S ±21.9km 166.037 E ± 9.7km
DEPTH = 33.0km (normal)
4.6mb (1 obs.)
VANUATU ISLANDS (186)

PVC	2.33	111	iP	05 12.90	0.0
			iS	05 42.00	
DZM	5.16	176	iPc	05 53.10	0.0
			iS	06 48.10	
BRS	16.11	227	eP	08 32.00	10.2X
RMO	18.66	236	eP	09 00.00	6.3X
CTA	19.03	257	iPc	08 58.10	0.0
	1.2s		45.31nm	4.6mb	
BWA	23.53	219	eP	09 44.00	-0.3
CAN	23.82	216	eP	09 47.50	0.4

S.D. = 0.4 on 5 of 7 obs.

FEB 19, 1990 11h 02m 06.55± 0.33s
17.983 N ± 7.5km 65.356 W ± 5.8km
DEPTH = 10.0km (geophysicist)
4.5mb (6 obs.)
PUERTO RICO REGION (90)
ML 4.7 (FDF). MD 4.5 (MPR). Felt on Vieques. Also felt on St. Thomas and St. Croix, Virgin Islands.

CPD	0.54	276	eP	02 18.60	1.2
LPR	0.59	304	eP	02 19.80	1.3
SJG	0.77	280	iP	02 22.30	0.8
PORP	1.22	274	P	02 30.00	0.7
LRS	1.45	283	P	02 33.30	0.5
BPA	3.47	105	eP	03 03.51	1.8
			eS	03 46.23	
			e	03 46.40	
SEG	4.00	113	eP	03 11.07	1.8
PAG	4.02	118	eP	03 10.90	1.4
			S	03 57.00	
SFG	4.33	113	eP	03 13.80	-0.2
BBL	4.45	123	eP	03 16.28	0.6
			eTT	07 06.00	
DPMT	4.67	125	eP	03 19.68	0.9
			eS	04 13.00	
SLB	5.86	134	eP	03 34.72	-0.9
			eS	04 45.33	
SV8	6.13	139	eP	03 38.06	-1.3
GRW	6.80	148	eP	03 47.00	-1.9
TPR	8.08	146	eP	04 08.40	1.6
TRN	8.24	152	eP	04 09.18	0.2
			eS	04 57.99	
TBH	8.53	150	eP	04 12.19	-1.0
HBF	20.10	321	P	06 51.10	7.8X
SGS	20.36	321	P	06 45.70	-0.3
JSC	21.57	322	P	06 59.00	0.7
PRM	22.10	320	P	07 03.80	0.1
CVL	22.99	333	P	07 13.30	0.9
BLA	23.29	328	P	07 17.00	1.6
NAV	23.56	328	P	07 36.60	18.6X
TKL	24.01	321	P	07 24.00	1.6
GBTN	24.28	320	P	07 25.50	0.5
RSON	39.80	332	P	09 41.40	0.0
	0.7s		12.98nm	4.7mb	
ANMO	40.17	303	P	09 41.50	-3.4X
	0.8s		1.87nm	3.8mb	
RSSD	41.58	317	P	09 56.00	-0.4

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BW06    44.76 313 P      10 22.00   -0.4
MSU     45.47 307 P      10 26.00   -2.1
FRB     45.78 358 eP     10 29.00   -0.7
TNP     49.28 305 P      10 56.30   -1.6
        0.7s      1.30nm          4.1mb
KVN     50.12 306 P      11 03.00   -1.3
NEW     51.55 318 P      11 13.00   -1.8
        0.8s      3.74nm          4.4mb
MBC     64.42 348 eP     12 44.50   -0.3
        0.7s      4.00nm          4.7mb
INK     65.39 338 ePd    12 49.50   -1.6
BCAO    82.85  88 ePc    14 33.70    0.5
        0.5s      4.00nm          4.8mb
KKN    126.34  33 PKP    21 11.20   -1.0
DMN    126.40  33 PKP    21 10.20   -2.1
     S.D. = 1.2  on  37 of  40 obs.
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*  FEB  19, 1990  11h 27m 15.55± 0.51s
   15.651 S ±10.3km  166.277 E ±11.0km
   DEPTH =  33.0km  (normal)
   4.5mb (  3 obs.)
 VANUATU ISLANDS                  (186)

PVC      2.85 137 iPd    27 59.50   -0.2
                 iS      28 32.50
DZM      6.39 179 iPc    28 47.20   -2.7
                 iS      29 59.00
HNR      8.74 314 eP     29 17.00   -5.7X
                 eS      31 05.00
CTA     19.56 254 iPc    31 44.00    0.3
        1.0s     28.00nm          4.5mb
RMQ     19.56 234 eP     31 46.00    2.3
COO     19.86 219 eP     31 49.00    2.1
CMS     24.42 226 eP     32 34.00    1.6
BWA     24.65 217 eP     32 34.90    0.3
CAN     24.96 215 eP     32 38.70    1.1
QIS     25.80 255 iPc    32 45.20   -0.3
WB5     30.65 257 eP     33 27.20   -2.2
WRA     30.68 257 Pd     33 26.80   -2.8
        1.0s      3.80nm          4.1mb
ASPA    31.46 250 iPc    33 35.00   -1.5
        0.8s      9.00nm          4.7mb
      Z 22s       0.37um          4.0MszX
                 LR      44 48.00
BJI     72.38 322 eP     38 39.50   -0.8
CZI    144.87 318 PKP    46 47.20   -3.9X
LOR    145.26 339 ePKP   46 50.50   -1.1
        0.8s      8.05nm
LDF    145.30 344 ePKP   46 50.20   -1.3
LBF    145.46 338 ePKP   46 51.10   -0.9
        1.4s     34.85nm
SSF    145.56 339 ePKP   46 51.70   -0.4
        0.8s     18.80nm
LPG    145.63 334 ePKP   46 52.50   -0.1
        0.9s      6.55nm
GRR    145.68 345 ePKP   46 51.70   -0.5
SMF    145.80 338 ePKP   46 52.30   -0.2
        1.0s     16.00nm
AVF    145.85 339 ePKP   46 52.40   -0.1
LPF    146.06 345 ePKP   46 53.00    0.2
        0.9s     22.95nm
BGF    146.23 339 ePKP   46 53.70    0.5
BCAO   146.39 254 iPKPc  46 55.10    0.6
        0.7s     18.00nm
                 ic      47 03.30
MAF    146.61 339 ePKP   46 54.90    1.1
SBF    146.62 332 ePKP   46 55.50    1.5
        0.7s     11.00nm
TCF    146.68 340 ePKP   46 54.90    0.9
PGF    146.86 329 ePKP   46 55.00    0.5
        0.7s      6.60nm
LSF    146.93 340 ePKP   46 56.40    2.1
     S.D. = 1.4  on  29 of  31 obs.
-------------------------------------------
   FEB  19, 1990  11h 28m 29.38± 0.63s
   39.001 N ± 3.5km  122.916 W ± 9.1km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN CALIFORNIA              ( 36)
     ML 2.5 (BRK).

NWRM     0.54 178 eP     28 41.50    1.1
ORV      1.23  63 eP     28 52.70    0.4
BRK      1.24 155 eP     28 52.60    0.2
                 eS      29 14.40
LTCM     1.35  27 eP     28 53.70   -0.5
PCC      1.56 164 eP     28 56.20   -0.9
WDC      1.60  10 eP     28 57.10   -0.7
MIN      1.68  37 eP     28 59.40    0.3
MHC      1.94 148 e(P)   29 02.30   -0.5
ARN      1.98 146 eP     29 03.00   -0.3
FHC      1.98 336 eP     29 04.00    0.7
GCC      2.10 159 eP     29 04.30   -0.7
CMB      2.21 115 eP     29 07.50    0.8
LBFM     2.47  18 eP     29 10.50    0.0
KVN      3.75  88 eP     29 30.90    2.1X
     S.D. = 0.7  on  13 of  14 obs.
-------------------------------------------
*  FEB  19, 1990  13h 22m 07.19± 1.03s
   16.648 N ±17.4km   96.283 W ± 9.7km
   DEPTH =  76.8 ± 11.9 km
   4.2mb (  1 obs.)
 OAXACA, MEXICO                   ( 60)
      Felt at Oaxaca.

OXX      0.60 316 iP     22 21.10   -0.9
                 iS      22 29.38
PSM      1.19  87 iP     22 27.70   -1.1
                 iS      22 41.00
IIT      3.05 321 iP     22 59.00    4.7X
                 (S)     23 47.33
PPM      3.28 317 iP     23 00.06    2.3
                 (S)     23 46.70
ACX      3.43 274 iP     22 58.06   -1.4
                 (S)     23 51.50
III      3.49 300 iP     23 01.50    1.0
                 (S)     23 56.01
UNM      3.84 314 (P)    23 24.00   18.6X
SMMM     3.86 323 iP     23 10.58    5.2X
                 (S)     24 19.89
CRX      4.24 311 (P)    23 18.50    7.4X
TPX      4.24 114 (P)    23 12.30    1.5
IIJ      4.49 314 (P)    23 28.21   13.4X
                 (S)     24 17.00
MRX      5.57 304 (P)    23 56.50   27.2X
                 (S)     24 45.50
UYO     17.52   5 iPc    26 07.80   -0.1
FKO     18.56 357 e(P)   26 20.50   -0.1
ALQ     20.37 335 eP     26 39.00   -1.1
        1.0s     13.00nm          4.2mb
SCH     44.35  24 eP     30 11.00   -0.4
INK     56.77 344 eP     31 45.50    0.3
                 pP      32 01.00   58kmX
MBC     60.82 354 eP     32 29.50   16.3X
        0.8s      3.00nm
HYB    145.77   9 ePKP   41 56.50   17.1X
GBA    149.31  12 PKPd   41 49.80    4.8X
        0.7s      2.60nm
     S.D. = 1.4  on  11 of  20 obs.
-------------------------------------------
*  FEB  19, 1990  13h 43m 01.69± 1.19s
   15.696 S ±12.6km   166.352 E ±14.7km
   DEPTH =  30.7km  (  3 depth phases)
   4.5mb (  3 obs.)
 VANUATU ISLANDS                  (186)

PVC      2.77 138 iPc    43 44.80   -0.1
                 iS      44 17.50
DZM      6.34 179 iPc    44 33.00   -2.6
                 iS      45 46.60
HNR      8.82 314 eP     45 10.00   -0.2
RMQ     19.59 234 eP     47 32.00    1.5
CTA     19.61 254 iPd    47 32.00    1.3
        1.0s     29.00nm          4.5mb
                 i       47 39.90   31km
PMG     19.74 286 eP     47 30.00   -2.1
COO     19.87 219 eP     47 33.00   -0.4
CMS     24.44 226 eP     48 20.00    1.0
BWA     24.66 218 eP     48 21.20    0.1
                 e       48 30.00   31km
CNB     24.76 215 eP     48 24.00    1.9
CAN     24.97 215 eP     48 25.30    1.2
                 e       48 33.80   30km
QIS     25.86 255 eP     48 33.00    0.5
WB5     30.71 257 eP     49 14.70   -1.7
WRA     30.74 257 Pc     49 15.10   -1.5
        0.9s      5.20nm          4.3mb
ASPA    31.51 250 iPc    49 22.40   -1.0
        0.8s     13.00nm          4.8mb
      Z 22s       0.56um          4.2MszX
                 LR      00 36.60
BJI     72.46 322 eP     54 38.00   10.8X
LZH     78.32 313 eP     55 02.00    1.1
BCAO   146.45 254 ePKPd  02 42.00    1.0
        0.9s     18.00nm
                 id      02 50.40
     S.D. = 1.5  on  17 of  18 obs.
-------------------------------------------
?  FEB  19, 1990  14h 24m 30.67± 1.00s
   37.956 N ±13.1km     4.418 W ± 7.6km
   DEPTH =  10.0km  (geophysicist)
 SPAIN                            (377)
     mbLg 2.8 (MDD).

EBAN     0.54  67 iPgc    24 41.20   -0.4
                 eSg     24 48.20
EHOR     0.67 258 ePg     24 43.90   -0.1
                 eSg     24 52.80
AFC      0.99 135 ePg     24 49.50    0.0
                 eSg     25 02.80
EVIA     1.65  65 ePn     25 00.40    0.5
                 eSn     25 20.70
     S.D. = 0.6  on   4 of   4 obs.
-------------------------------------------
   FEB  19, 1990  16h 39m 56.51± 0.78s
    6.652 S ± 4.7km   129.322 E ± 6.4km
   DEPTH = 215.4 ±  8.5 km
   5.3mb ( 12 obs.)
 BANDA SEA                        (280)

AAI      3.15 339 iPd    40 52.00    2.8
MTN      6.41 164 iPd    41 29.70   -0.2
KUPT     6.64 238 iPd    41 44.30   11.4X
                 eS      42 57.50
KNA      9.06 183 iPd    42 03.40   -1.0
        0.2s     209.00nm          6.0mb X
                 eS      43 38.00
WB5     14.03 160 iPd    43 04.90   -2.6
                 eS      45 37.00
WRA     14.08 160 Pd     43 05.30   -2.8
        0.5s     47.50nm          5.1mb X
MNDI    14.26  89 eP     43 11.50    1.0
TRT     16.59 265 ePc    43 39.40    0.7
        0.6s     114.00nm          5.5mb
                 eS      46 09.90
QIS     17.04 145 iPd    43 42.50   -1.2
                 eS      46 42.00
MBL     17.10 212 iPd    43 43.90   -0.4
        0.7s     130.00nm          5.5mb
                 eS      46 47.00
ASPA    17.48 166 iPd    43 47.70   -0.7
        0.6s    1912.00nm          6.7mb X
      Z 18s       0.15um
                 eS      47 06.60
                 LR      51 21.50
PMG     17.87 100 eP     43 48.50   -4.0X
        0.5s     429.58nm          6.2mb
WARB    19.59 187 iPd    44 11.30    1.1
NANU    20.67 219 eP     44 22.00    1.1
                 eS      48 16.00
CTA     21.18 131 iPd    44 26.80    0.8
        1.0s      80.00nm          5.2mb
                 i       44 45.00
                 iS      48 09.80
MEKA    22.35 206 eP     44 38.30    0.9
        0.3s     15.00nm          5.0mb
FORR    24.10 183 iPd    44 53.60   -0.3
QLP     24.38 146 iPc    44 57.10    0.4
                 e       49 48.00
COOL    25.30 197 iPd    45 04.50   -0.6
MRWA    25.73 208 iPd    45 09.00    0.0
        0.4s     27.00nm          5.3mb
                 eS      50 03.00
BAL     26.61 205 iPd    45 16.90   -0.1
RMQ     27.05 139 iPd    45 21.70    0.7
                 i       53 36.00
KLB     27.07 202 iPd    45 21.00   -0.1
NWAO    28.46 202 iPd    45 33.60    0.0
CMS     29.13 150 iPd    45 38.80   -0.7
                 e       46 15.00
                 i       54 04.00
ADE     29.48 164 iPd    45 44.00    1.4
        0.8s     82.09nm          5.5mb
RKG     29.57 201 iPd    45 48.30    5.0X
BRS     30.35 136 iPc    45 49.00   -1.4
                 i       45 51.00
                 e       46 34.00
PSI     31.73 286 ePc    46 02.70    0.2
COO     31.86 141 eP     46 03.00   -0.5
                 e       46 07.00
BFD     32.69 160 ePd    46 12.60    2.1
        1.1s    162.00nm          5.6mb
```

19d 16h

		e	46	52.00		
BWA	32.78	150 iPd	46	13.00	1.6	
CAN	33.79	150 iPd	46	20.30	0.3	
CNB	33.96	150 iPc	46	22.10	0.6	
TOO	34.11	157 iPd	46	24.30	1.6	
	0.6s	45.00nm			5.3mb	
		e	54	20.00		
BDT	38.23	309 eP	46	56.30	-1.2	
	0.9s	41.80nm			5.0mb	
DZM	38.95	117 iPc	47	04.60	1.1	
CHG	39.21	311 ePc	47	06.00	0.5	
	1.0s	19.75nm			4.6mb	
CHTO	39.21	311 ePc	47	06.00	0.5	
		pP	47	50.90	212kmX	
WHN	39.67	340 eP	47	09.50	0.4	
NJ2	39.76	346 eP	47	08.00	-1.9	
MAT	43.77	10 eP	47	41.00	-1.5	
CD2	44.65	328 eP	47	48.60	-1.0	
XAN	44.84	336 Pc	47	49.90	-1.2	
TIY	46.86	342 iPd	48	06.40	-0.6	
BJI	48.02	346 eP	48	14.50	-1.2	
LZH	48.78	332 P	48	21.00	-0.9	
		pP	49	14.00	246kmX	
LSA	51.48	317 P	48	42.50	-0.3	
KHZ	52.81	140 eP	48	50.70	-1.1	
GTA	53.35	332 Pc	48	56.80	0.8	
HBZ	54.00	132 P	49	00.40	-0.3	
GBA	55.30	291 Pd	49	09.70	-0.6	
	0.4s	1.60nm			4.0mb X	
HYB	55.56	296 eP	49	11.70	-0.5	
WMQ	62.74	327 eP	50	00.00	-1.0	
		pP	50	57.50	252kmX	
SPA	83.39	180 eP	52	00.00	-0.6	
	0.8s	12.50nm			4.7mb	
KVN	111.66	51 e(PKP)	58	09.00	1.5	
		e	58	59.30		
KIC	134.37	272 PKP	58	52.40	1.0	
LIC	134.65	272 PKP	58	52.80	0.8	
TIC	134.66	273 PKP	58	53.00	1.0	
LPB	151.23	143 ePKP	59	24.00	3.2X	
ZOBO	151.42	143 PKP	59	22.50	1.2	
	1.4s	16.11nm				
	S.D. = 1.2	on 57 of 61 obs.				

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* FEB 19, 1990 16h 46m 54.46± 0.28s
16.534 S ± 8.9km 174.926 W ± 9.9km
DEPTH = 167.6km (2 depth phases)
5.1mb (6 obs.)
TONGA ISLANDS (173)

DZM	18.42	250 iPd	51	01.20	1.4	
HBZ	21.82	195 eP	51	34.20	0.3	
MNG	25.40	197 P	52	09.10	1.1	
KIW	25.79	198 P	52	12.60	1.1	
CAW	25.97	197 P	52	14.80	1.6	
WDW	26.14	197 P	52	15.60	0.9	
TCW	26.30	199 P	52	14.80	-1.4	
KHZ	27.63	199 P	52	25.80	-2.3	
BRS	31.75	245 iPd	53	05.20	0.3	
		e	55	20.00		
COO	33.33	239 eP	53	20.00	1.4	
CAN	37.18	233 eP	53	52.10	1.1	
BWA	37.32	234 eP	53	51.10	-1.1	
PMG	37.58	276 eP	53	56.00	1.5	
WB5	48.14	258 eP	55	19.40	-0.2	
WRA	48.16	258 Pd	55	19.50	-0.3	
	0.5s	12.20nm			4.8mb	
ASPA	48.37	253 iPc	55	21.40	0.0	
	0.4s	48.00nm			5.5mb	
MTN	52.19	266 eP	55	50.00	-0.4	
FORR	53.57	244 iPd	55	59.30	-1.0	
KNA	53.94	262 eP	56	02.50	-0.7	
WARB	54.88	249 iPc	56	05.50	-4.5X	
	0.6s	19.00nm			5.1mb	
COOL	59.55	244 eP	56	41.00	-1.7	
MBL	61.55	255 iPc	56	55.80	-0.5	
	0.4s	17.00nm			5.3mb	
BAL	63.37	244 eP	57	08.00	-0.3	
MUN	63.71	242 eP	57	10.00	-0.4	
NANU	65.31	252 eP	57	20.70	-0.1	
PCI	66.04	276 ePd	57	27.50	1.9	
TRT	71.07	267 ePc	57	56.60	-0.1	
SPA	73.57	180 iPc	58	08.00	-2.7	
	0.9s	22.27nm			4.9mb	
KVN	76.63	42 e(P)	58	18.80	-9.7X	
		epP	58	59.30	165km	
PV09	82.34	46 e(P)	58	50.70	-8.5X	
FBA	83.78	11 eP	58	57.20	-8.3X	
	0.9s	29.17nm			5.1mb	
		e	59	39.50	170km	
BJI	85.19	314 eP	59	09.50	-3.5X	
TIY	86.86	311 Pd	59	19.70	-1.7	
XAN	88.11	306 P	59	25.50	-1.9	
INK	89.72	14 eP	59	26.00	-8.2X	
CHG	91.68	289 eP	59	43.80	-0.5	
KEV	125.09	351 ePKP	05	27.00	-8.6X	
SOD	127.30	350 iPKP	05	33.00	-7.0X	
SUF	131.56	347 ePKP	05	42.00	-6.2X	
NUR	133.86	347 iPKP	05	47.80	-4.8X	
	0.6s	13.00nm				
NB2	135.33	356 PKP	05	50.00	-5.5X	
	0.7s	2.60nm				
NAI	144.03	244 iPKPd	06	12.00	-0.8	
	1.0s	23.00nm				
KRA	144.47	343 iPKPc	06	05.10	-7.1X	
KSP	144.61	348 iPKPc	06	05.60	-6.8X	
	1.0s	41.00nm				
CLL	144.73	351 iPKPc	06	05.40	-7.2X	
	0.8s	19.00nm				
BRG	145.01	350 iPKP	06	06.80	-6.3X	
	0.8s	12.00nm				
KAS	145.03	321 iPKPd	06	10.20	-3.3X	
SPC	145.17	343 ePKP	06	08.00	-5.6X	
MOX	145.57	353 iPKPd	06	09.00	-5.0X	
	1.0s	35.00nm				
VRI	145.61	333 ePKPd	06	10.00	-4.3X	
PRU	145.76	349 PKP	06	09.30	-5.1X	
	0.8s	34.50nm				
MEM	146.00	359 PKPc	06	09.40	-5.3X	
DOU	146.52	1 PKPc	06	11.00	-4.6X	
GRF	146.55	353 iPKPc	06	12.10	-3.6X	
		e(pPKP	06	55.80		
KHC	146.76	350 PKPc	06	11.50	-4.6X	
	1.0s	10.00nm				
		e	06	56.70		
ZST	146.91	345 iPKP	06	13.30	-3.0X	
SRO	146.96	344 ePKP	06	14.40	-1.9	
FLN	147.54	7 iPKPc	06	13.60	-3.7X	
	0.7s	35.30nm				
LDF	147.74	6 iPKPc	06	14.20	-3.4X	
	0.7s	18.75nm				
GRR	147.86	7 iPKPc	06	14.60	-3.2X	
	0.5s	23.30nm				
BZS	147.87	338 ePKP	06	16.50	-1.4	
CDF	148.16	357 ePKP	06	16.20	-2.2	
	0.7s	18.75nm				
HAU	148.60	358 ePKP	06	17.40	-1.6	
	0.7s	19.85nm				
BSF	148.76	358 ePKP	06	17.50	-1.9	
	0.6s	6.30nm				
KBA	148.78	349 iPKPc	06	17.20	-2.4	
	0.5s	5.20nm				
GRC	149.28	3 PKP	06	19.18	-0.9	
LOR	149.34	2 iPKPc	06	19.30	-0.9	
	0.8s	22.85nm				
RBL	149.35	348 PKP	06	20.00	-0.3	
OGA	149.35	352 iPKPd	06	20.00	-0.5	
SSF	149.53	2 iPKPc	06	19.80	-0.6	
	0.9s	38.50nm				
LBF	149.62	1 iPKPc	06	19.80	-0.9	
	0.9s	22.95nm				
VOY	149.68	348 e(PKP)	06	19.00	-1.8	
MBH	149.70	301 ePKP	06	23.00	1.8	
MFF	149.71	7 iPKPc	06	19.50	-1.2	
	0.7s	8.80nm				
AVF	149.80	2 ePKP	06	19.90	-0.9	
	1.0s	21.00nm				
CEY	149.85	347 e(PKP)	06	20.50	-0.5	
VBY	149.88	346 e(PKP)	06	21.40	0.4	
BGF	150.01	3 iPKPc	06	20.60	-0.6	
	0.9s	21.30nm				
TRI	150.02	348 ePKP	06	20.40	-0.8	
CTI	150.07	351 PKPd	06	21.00	-0.4	
LSF	150.22	5 iPKPc	06	21.00	-0.5	
	0.8s	22.85nm				
TCF	150.24	4 iPKPc	06	21.10	-0.5	
	1.0s	20.00nm				
MAF	150.33	4 iPKPc	06	21.50	-0.2	
	0.9s	22.95nm				
AGO	150.52	3 PKP	06	21.87	-0.1	
VAI	150.59	355 PKP	06	21.80	-0.2	
PLDF	150.63	2 PKP	06	22.34	0.1	
PYM	150.82	3 PKP	06	22.77	0.2	
ORX	150.89	356 PKP	06	22.25	-0.4	
ORO	150.89	356 PKP	06	22.50	-0.2	
VAY	151.05	332 ePKP	06	21.60	-1.3	
LPG	151.09	358 iPKPc	06	24.60	1.4	
	0.7s	16.55nm				
RJF	151.16	5 ePKP	06	23.30	0.3	
	0.9s	9.85nm				
LBL	151.35	3 PKP	06	24.45	1.3	
LFF	151.45	6 ePKP	06	24.00	0.6	
	0.9s	24.55nm				
BNI	151.54	358 PKP	06	25.50	1.8	
CAF	151.58	4 ePKP	06	24.50	0.9	
	0.7s	9.35nm				
BOB	151.61	353 PKP	06	25.00	1.2	
RRL	151.66	357 PKP	06	25.63	1.6	
HVAR	151.73	342 iPKPc	06	25.00	1.1	
LPO	151.75	6 ePKP	06	24.50	0.7	
	0.6s	7.20nm				
PCP	151.93	355 PKP	06	25.84	1.6	
OHR	151.99	334 ePKP	06	20.80	-3.6X	
DOI	152.06	357 PKP	06	24.00	-0.4	
PZZ	152.06	357 PKP	06	24.91	0.4	
BDI	152.16	351 PKP	06	24.80	0.2	
PGD	152.17	350 PKP	06	27.00	2.3	
ROB	152.23	356 PKP	06	25.12	0.5	
FIN	152.29	355 PKP	06	25.02	0.3	
STV	152.31	357 PKP	06	24.81	0.0	
ENR	152.32	356 PKP	06	25.02	0.2	
IMI	152.61	356 PKP	06	26.35	1.2	
SBF	152.68	356 ePKP	06	26.80	1.5	
	0.7s	11.00nm				
FRF	153.03	357 ePKP	06	27.60	1.9	
LRG	153.14	358 ePKP	06	28.30	2.5	
LMR	153.26	358 ePKP	06	28.30	2.3	
PGF	153.86	353 ePKP	06	29.60	2.6	
	0.7s	5.50nm				
BCAO	162.14	229 ePKPd	06	33.60	-3.8X	
	0.6s	6.00nm				
	S.D. = 1.3	on 87 of 117 obs.				

? FEB 19, 1990 17h 24m 30.86± 5.55s
31.537 S ±27.0km 68.555 W ±32.3km
DEPTH = 92.8 ± 49.0 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB	0.21	284 iP	24	45.00	0.2	
		eS	24	56.10		
RTLL	0.22	20 iPc	24	44.50	-0.3	
		eS	24	55.70		
CFA	0.28	105 iPd	24	45.00	0.3	
		S	24	51.00		
RTCV	0.32	177 iPc	24	44.80	-0.2	
		S	24	56.90		
RTRS	1.57	330 iPc	24	58.00	0.0	
	S.D. = 0.5	on 5 of 5 obs.				

? FEB 19, 1990 17h 43m 51.70± 3.31s
44.501 N ±16.1km 6.750 E ±27.1km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 1.6 (GEN).

PZZ	0.25	89 P	43	57.01	-0.1	
		S	43	59.88		
RRL	0.42	3 P	44	00.29	0.0	
		S	44	06.10		
STV	0.49	122 P	44	01.18	-0.4	
		S	44	07.79		
ENR	0.55	120 P	44	03.27	0.3	
		S	44	09.89		
	S.D. = 0.5	on 4 of 4 obs.				

FEB 19, 1990 18h 59m 16.43± 0.35s
31.105 N ± 7.7km 41.339 W ± 4.7km
DEPTH = 10.0km (geophysicist)
4.8mb (18 obs.)
NORTH ATLANTIC RIDGE (403)

LFF	35.51	55 eP	06	15.90	0.7	
	1.4s	61.00nm			5.3mb	
LPO	35.79	56 eP	06	17.30	-0.3	
LSF	36.25	53 eP	06	21.80	0.2	
	1.1s	14.65nm			4.7mb	
CAF	36.44	55 eP	06	22.80	-0.3	
	1.0s	6.00nm			4.4mb	
TCF	36.73	53 eP	06	25.50	-0.1	
	1.0s	11.00nm			4.6mb	
FRB	36.90	340 eP	06	26.00	-0.7	

AVF 37.58 52 eP 06 32.60 -0.1
SSF 37.73 52 eP 06 33.90 0.0
1.2s 19.35nm 4.7mb
SMF 37.89 53 eP 06 35.20 -0.1
1.2s 32.75nm 5.0mb
LOR 38.00 52 eP 06 36.10 -0.1
1.0s 11.00nm 4.6mb
LBF 38.03 52 eP 06 36.30 -0.2
1.1s 12.20nm 4.6mb
HAU 39.77 51 eP 06 50.80 -0.2
1.0s 16.00nm 4.6mb
LPG 39.79 55 eP 06 52.20 0.7
BSF 40.04 51 eP 06 52.90 -0.4
CDF 40.43 50 eP 06 56.30 -0.2
GRF 43.15 49 eP 07 19.30 0.6
MOX 43.50 48 eP 07 22.00 0.5
HOF 43.63 48 eP 07 23.00 0.4
1.2s 23.00nm 4.8mb
CLL 44.44 47 iP 07 29.10 0.1
1.6s 24.00nm 4.8mb
KHC 44.65 50 P 07 31.00 0.1
BRG 44.99 47 eP 07 34.10 0.6
1.4s 24.00nm 4.9mb
PRU 45.32 49 P 07 36.50 0.4
ZST 46.97 51 eP 07 48.80 -0.4
SRO 47.79 52 e(P) 07 54.90 -0.8
FFC 48.49 318 iPd 08 01.30 0.2
0.9s 20.00nm 5.2mb
KRA 48.80 49 eP 08 04.30 0.8
SPC 49.02 50 eP 08 01.00 -4.5X
ZOBO 53.68 212 eP 08 41.00 -0.3
eLR 15 10.00
ALO 53.87 293 eP 08 32.50 -9.7X
2.5s 69.44nm 5.2mb
LPB 53.90 212 P 08 44.00 1.3
1.5s 55.56nm 5.4mb
MBC 57.20 344 eP 09 05.50 0.0
1.0s 5.00nm 4.5mb
KVN 61.61 301 eP 09 35.80 -0.8
BCAO 62.05 103 iPc 09 38.10 -1.7
0.7s 8.00nm 5.0mb
INK 62.29 335 ePd 09 40.20 -0.4
FRI 63.48 299 eP 09 48.80 -0.1
CMB 63.63 300 eP 09 50.20 0.3
FBA 68.82 334 eP 10 23.00 0.4
0.9s 11.25nm 5.1mb
S.D. = 0.6 on 35 of 37 obs.

? FEB 19, 1990 20h 03m 36.27± 4.52s
31.283 S ±21.7km 68.596 W ±31.9km
DEPTH = 88.2 ± 45.6 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL 0.12 113 iPc 03 49.00 -0.3
RTCB 0.27 221 iPd 03 49.90 0.3
(S) 04 00.20
CFA 0.44 137 iPc 03 51.00 0.3
S 04 03.00
RTCV 0.58 175 ePd 03 51.50 -0.3
S 04 04.10
RTRS 1.34 326 ePc 04 00.20 0.0
eS 04 19.20
S.D. = 0.6 on 5 of 5 obs.

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* FEB 19, 1990 20h 35m 27.17± 0.69s
15.922 N ± 7.9km 147.334 E ±12.6km
DEPTH = 33.0km (normal)
4.3mb (2 obs.)
MARIANA ISLANDS REGION (215)

GUMO 3.33 226 eP 36 17.70 -0.5
PJG 3.33 226 eP 36 17.80 -0.4
GUA 3.33 225 eP 36 18.30 0.1
eS 36 53.90
MAT 22.08 340 (P) 40 25.00 3.9X
PMG 25.17 180 eP 40 50.00 -1.2
WB5 37.79 200 eP 42 42.90 0.6
WRA 37.86 200 P 42 45.00 2.1
0.3s 1.40nm 4.3mb
LZH 43.51 306 eP 43 30.00 0.4
CHG 46.17 281 eP 43 51.00 0.2
GTA 47.49 309 eP 44 01.80 0.6
PSI 49.41 260 ePd 44 16.50 0.3
WMQ 57.31 312 P 45 15.50 1.1
GUN 57.74 293 P 45 18.20 0.2
PKI 58.16 293 P 45 20.30 -0.6
KKN 58.27 293 P 45 21.10 -0.4
DMN 58.43 293 P 45 22.00 -0.7
GKN 58.83 293 P 45 25.00 -0.4
INK 71.31 23 eP 46 47.00 1.9
MBC 75.44 14 eP 47 07.00 -2.2
1.0s 4.00nm 4.4mb
TIC 144.62 307 PKP 55 02.20 -0.8
LIC 144.89 307 PKP 55 03.30 -0.2
ZOBO 145.96 96 PKPc 55 09.00 3.1X
1.2s 5.07nm
S.D. = 1.0 on 20 of 22 obs.

FEB 19, 1990 20h 56m 37.31± 0.33s
36.124 N ± 4.4km 27.164 E ± 3.5km
DEPTH = 10.0km (geophysicist)
4.4mb (19 obs.)
DODECANESE ISLANDS (369)
ML 4.6 (CSS), 4.2 (ATH). MD 4.4 (HLW).

KAP 0.57 179 ePg 56 51.50 2.6
YER 1.35 41 iPn 57 02.00 -0.2
NPS 1.53 236 ePb 57 06.50 1.8
SMG 1.60 351 ePb 57 05.00 -0.7
APE 1.62 306 ePb 57 05.50 -0.5
CIN 1.65 26 eP 57 22.00 15.6X
KSL 1.96 89 ePn 57 13.00 2.1
IZM 2.27 2 ePn 57 13.70 -1.8
ELL 2.30 73 ePn 57 18.60 2.6
VAM 2.51 254 ePn 57 21.00 2.1
KHL 2.89 40 ePn 57 24.90 0.6
BCK 3.06 63 ePn 57 29.20 2.6
PRK 3.20 347 ePn 57 27.50 -1.0
ATH 3.32 305 ePn 57 32.00 1.7
VLI 3.46 281 ePn 57 32.50 0.2
DST 3.66 18 ePn 57 34.70 -0.6
ALT 3.75 38 ePn 57 39.00 2.5
EZN 3.75 350 iPn 57 34.60 -1.9
EDC 4.25 7 ePn 57 44.00 0.5
BNT 4.27 8 ePn 57 44.30 0.5
ITM 4.34 286 ePn 57 48.00 3.1X
PPCY 4.40 105 ePn 57 46.00 0.3
eSn 58 38.00
NEO 4.46 317 ePn 57 47.50 1.1
YLV 4.76 21 ePn 57 49.00 -1.9
GPA 4.84 30 ePn 57 58.00 6.1X
GBZT 4.99 20 ePn 58 12.00 18.0X
CTT 5.11 11 ePn 58 04.00 8.3X
ISK 5.15 16 ePn 58 07.00 10.7X
PLG 5.15 327 ePn 57 54.60 -1.8
CSS 5.16 101 eP 57 56.80 0.3
eSn 58 58.00
RDO 5.17 346 ePn 57 55.00 -1.6
VLS 5.64 293 ePn 58 06.00 2.8
BBTK 5.77 48 iP 58 07.00 1.8
KZN 5.95 316 ePn 58 09.30 1.6
VAY 6.31 327 ePn 58 12.60 0.0
LSK 6.55 310 eP 58 17.80 1.7
KBN 6.71 314 eP 58 21.70 3.4X
KEK 6.83 304 ePn 58 23.00 3.0X
OHR 7.04 317 ePn 58 24.50 1.5
HLW 7.17 150 ePn 58 24.50 -0.2
ePb 58 41.50
eSn 59 42.00
KOT 7.31 146 ePn 58 25.50 -1.2
eSn 59 42.00
SKO 7.34 324 ePn 58 27.40 0.3
e 00 23.00
HRI 7.62 109 eP 58 30.00 -1.1
TIR 7.73 315 eP 58 36.00 3.5X
LACI 8.00 316 eP 58 38.60 2.2
BURJ 8.14 116 Pc 58 38.30 -0.1
DSI 8.20 121 eP 58 39.00 -0.2
SDA 8.37 317 eP 58 44.70 3.2X
LCI 8.38 303 P 58 42.50 0.9
MBH 9.06 132 eP 58 49.00 -2.1
SOI 9.09 286 P 58 51.50 0.1
BRT 9.13 304 P 58 51.00 -1.1
CZI 9.27 293 P 58 52.20 -1.8
ORI 9.32 298 P 58 56.00 1.4
CSI 9.33 296 P 58 57.40 2.6
MLR 9.40 355 eP 58 57.00 1.1
e 10 10.00
ATN 9.56 286 P 58 56.00 -2.0
MMN 9.58 296 P 58 58.20 -0.1
VRI 9.74 358 ePc 59 12.00 11.6X
MGR 9.98 297 P 59 01.50 -2.3
SGO 10.31 299 P 59 08.50 0.3
SDI 11.79 302 P 59 29.50 0.9
PTJ 12.91 323 eP 59 40.50 -3.0X
LJU 13.73 320 eP 59 59.00 4.7X
VOY 14.06 319 e(P) 59 59.80 1.1
KRA 14.88 342 eP 00 18.50 9.2X
KBA 15.03 321 eP 00 12.00 0.5
1.0s 32.20nm 4.7mb
i 00 16.30
i 00 21.70
KHC 16.36 327 iP 00 30.40 1.8
1.1s 8.00nm 3.8mb
PRU 16.61 330 eP 00 36.50 4.9X
KSP 16.67 335 eP 00 29.00 -3.3X
GRF 17.84 324 eP 00 48.00 0.9
LPG 18.03 308 eP 00 50.00 0.3
0.7s 6.60nm 3.9mb
MOX 18.34 327 eP 00 55.00 1.8
CDF 19.10 316 eP 01 02.30 -0.3
0.8s 6.70nm 3.9mb
HAU 19.42 314 eP 01 05.40 -1.1
0.8s 5.35nm 3.9mb
SMF 20.34 308 eP 01 13.80 -2.5
LBF 20.39 309 eP 01 14.50 -2.4
1.0s 12.00nm 4.2mb
LOR 20.58 310 eP 01 16.90 -1.9
1.0s 8.00nm 4.0mb
AVF 20.71 308 eP 01 17.10 -3.0X
0.9s 11.45nm 4.2mb
SSF 20.72 309 eP 01 17.60 -2.6
0.9s 19.65nm 4.5mb
BGF 20.94 307 eP 01 20.90 -1.7
0.9s 16.40nm 4.4mb
MEM 21.02 320 P 01 22.60 -0.6
DOU 21.49 318 Pc 01 27.10 -0.9
1.0s 36.10nm 4.7mb
SNF 21.88 318 P 01 33.20 1.3
GRR 23.94 309 eP 01 50.20 -2.0
1.1s 26.85nm 4.7mb
HFS 25.55 344 eP 02 05.70 -1.8
0.8s 13.30nm 4.7mb
Z 16s 0.39um 4.0MszX
LR 11 19.00
MAIO 26.03 80 eP 02 13.00 0.7
NB2 26.92 343 P 02 20.80 0.5
0.9s 5.30nm 4.2mb
BCAO 32.52 196 iPd 03 10.70 0.1
0.6s 13.00nm 5.0mb
id 03 14.80
TIC 41.57 233 P 04 26.18 -0.7
KIC 41.61 232 P 04 26.54 -0.6
0.7s 8.50nm 4.6mb
LIC 41.89 232 P 04 28.72 -0.8
GKN 48.77 82 P 05 23.70 -0.9
0.6s 14.00nm 5.2mb
DMN 49.31 83 P 05 28.20 -0.7
0.7s 17.00nm 5.2mb
KKN 49.38 82 P 05 28.20 -1.1
PKI 49.57 83 P 05 30.20 -0.8
GUN 49.81 82 P 05 31.80 -1.0
GBA 50.19 103 Pd 05 34.10 -1.2
0.6s 2.90nm 4.4mb
S.D. = 1.5 on 81 of 98 obs.

FEB 19, 1990 21h 07m 43.06± 0.27s
36.168 N ± 3.8km 27.146 E ± 2.9km
DEPTH = 10.0km (geophysicist)
4.6mb (32 obs.)
DODECANESE ISLANDS (369)
ML 4.6 (CSS), 4.6 (ATH). MD 4.4 (HLW).

KAP 0.62 178 ePg 07 57.50 2.0
YER 1.33 43 iPn 08 08.50 0.9
NPS 1.54 235 ePb 08 12.50 1.9
SMG 1.56 351 ePb 08 10.50 -0.3
APE 1.58 305 ePb 08 11.50 0.3
CIN 1.62 28 eP 08 28.00 16.3X
KSL 1.97 91 ePn 08 19.00 2.1
IZM 2.23 2 ePn 08 20.20 -0.4
ELL 2.30 75 iPn 08 24.60 2.9
VAM 2.51 253 ePn 08 27.00 2.4
KHL 2.87 41 ePn 08 31.20 1.5
BCK 3.05 64 iPn 08 35.70 3.4X
PRK 3.15 348 ePn 08 32.90 -0.7
ATH- 3.28 304 ePn 08 36.40 0.9
VLI 3.44 280 ePn 08 38.70 1.0
DST 3.63 18 ePn 08 41.70 1.2

19d 21h

EZN	3.71	350	iPn	08	40.20	-1.4	FRF	17.36	301	eP	11	47.50	0.6	DODECANESE ISLANDS					(369)
ALT	3.72	38	ePn	08	43.00	1.1		0.9s	11.45nm			4.0mb		MD 3.7 (ATH).					
EDC	4.21	7	ePn	08	50.00	1.3	BRG	17.50	331	iP	11	51.80	3.3X						
BNT	4.23	8	iPn	08	48.80	-0.1		1.2s	17.00nm			4.1mb		KAP	0.62	180	ePn	24	08.10 -0.5
ITM	4.32	285	ePn	08	53.00	2.8	GRF	17.80	324	eP	11	53.70	1.4	NPS	1.56	235	ePb	24	25.00 1.0
NEO	4.41	316	ePn	08	52.00	0.4	LPG	17.99	307	eP	11	55.40	0.4	SMG	1.56	350	ePn	24	24.50 0.6
PPCY	4.43	105	ePn	08	54.00	2.2		0.8s	12.10nm			4.1mb		APE	1.60	305	ePn	24	23.70 -0.8
			eSn	09	45.00		MOX	18.29	327	eP	12	02.00	3.6X	KSL	1.95	91	ePn	24	29.20 -0.5
YLV	4.73	21	iPn	08	56.10	-0.1		1.4s	23.00nm			4.1mb		ELL	2.28	75	ePn	24	35.00 0.4
GPA	4.81	30	ePn	09	05.00	7.7X	BSF	19.03	314	eP	12	05.60	-2.0	VAM	2.53	253	ePn	24	38.30 0.3
GBZT	4.95	21	ePn	09	11.50	12.3X	CDF	19.06	316	eP	12	07.50	-0.4	BCK	3.03	64	ePn	24	39.00 -6.1X
CTT	5.07	11	ePn	09	08.00	7.1X		0.9s	16.40nm			4.3mb		PRK	3.15	347	ePb	24	53.80 7.1X
PLG	5.11	326	ePn	09	02.80	1.3	HAU	19.38	314	eP	12	09.90	-1.9	VLI	3.46	280	ePn	24	50.50 -0.6
ISK	5.11	16	ePn	09	00.00	-1.5		0.6s	6.30nm			4.1mb		S.D. = 0.8 on 8 of 10 obs.					
RDO	5.13	346	ePn	09	00.90	-0.8	ABH	19.75	320	eP	12	14.69	-1.2						
ITU	5.14	16	eP	09	25.00	23.1X	RUP	19.90	319	eP	12	16.45	-1.0	? FEB 19, 1990 21h 33m 29.85± 1.56s					
CSS	5.18	102	eP	09	03.50	1.0	L8F	20.35	309	eP	12	19.90	-2.3	16.491 S ±17.9km 178.224 W ±19.0km					
			eSn	10	03.00			1.1s	19.55nm			4.4mb		DEPTH = 457.1 ± 10.6 km					
VLS	5.61	293	ePn	09	10.70	2.2	LOR	20.54	310	eP	12	22.20	-2.0	4.8mb (6 obs.)					
DMK	5.67	5	ePn	09	07.70	-1.6		1.0s	13.00nm			4.2mb		FIJI ISLANDS REGION					(181)
FAM	5.71	100	eP	09	16.00	6.1X	AVF	20.67	308	eP	12	23.40	-2.1						
BBTK	5.75	49	iP	09	13.00	2.4		1.1s	25.65nm			4.5mb		VUN	3.51	244	iPd	34	41.90 -0.1
KZN	5.91	316	ePn	09	13.50	0.7	BGF	20.91	307	eP	12	26.30	-1.6	SVA	3.56	242	iPd	34	42.20 -0.2
VAY	6.27	327	eP	09	18.50	0.8		1.1s	35.40nm			4.6mb		DZM	15.50	247	iPc	36	49.70 2.5
LSK	6.51	310	eP	09	23.30	2.0	CAF	20.91	302	eP	12	26.20	-1.8	KHZ	26.79	194	eP	38	33.10 0.0
KBN	6.67	314	eP	09	25.50	2.0		1.0s	8.00nm			4.0mb			0.5s	14.00nm			4.7mb
SRN	6.75	305	eP	09	26.40	1.8	MAF	20.97	306	eP	12	26.50	-2.1	MHZ	30.36	198	P -	39	03.30 -1.2
KEK	6.80	304	ePn	09	26.50	1.2	MEM	20.98	320	iPc	12	28.20	-0.3	RMQ	32.21	246	iPc	39	21.90 1.5
OHR	7.00	317	ePn	09	30.20	2.0	RJF	21.39	303	eP	12	31.30	-1.5		0.4s	32.00nm			5.1mb
HLW	7.21	150	ePn	09	31.50	0.5		0.9s	14.75nm			4.4mb		CTA	33.88	258	iPc	39	34.00 -0.4
			eSn	10	48.00		DOU	21.44	317	Pc	12	32.40	-0.9	PMG	34.43	277	eP	39	39.00 -0.1
SKO	7.30	324	iPn	09	33.30	1.0		1.0s	52.80nm			4.9mb		CAN	34.71	231	eP	39	42.10 0.7
			e	11	41.00				e		18	26.60		BWA	34.80	233	eP	39	41.00 -1.1
KAS	7.33	43	eP	09	38.00	5.2X	LPO	21.45	301	eP	12	31.90	-1.5	CMS	35.89	239	iPc	39	51.80 0.6
KOT	7.36	146	ePn	09	31.50	-1.6	SNF	21.83	318	P	12	39.30	2.1	TOO	38.21	229	eP	40	11.00 0.8
			eSn	10	48.00		MFF	22.87	306	eP	12	46.30	-1.3	WB5	45.06	258	iPc	41	04.10 -1.1
PHP	7.59	319	iPd	09	37.40	1.0		1.1s	34.20nm			4.8mb		WRA	45.08	258	Pc	41	04.20 -1.2
HRI	7.64	110	eP	09	37.00	-0.2	LDF	23.52	310	eP	12	52.50	-1.4		0.7s	21.90nm			4.7mb
TIR	7.68	314	eP	09	41.70	4.0X		1.1s	24.40nm			4.7mb		ASPA	45.36	253	iPc	41	06.90 -0.7
LACI	7.96	316	eP	09	43.30	1.8	FLN	23.81	311	eP	12	55.20	-1.4		0.6s	102.00nm			5.4mb
BURJ	8.17	116	Pd	09	44.00	-0.6		0.9s	19.65nm			4.7mb					iS	47	13.60
DSI	8.24	121	eP	09	45.00	-0.4	LPF	23.90	309	eP	12	55.10	-2.4	MTN	49.03	267	iPd	41	34.70 -1.0
SDA	8.33	317	eP	09	49.70	3.0X		1.1s	34.20nm			4.8mb		FORR	50.75	243	iPc	41	47.50 -0.7
LCI	8.34	303	P	09	45.00	-1.9	GRR	23.91	309	eP	12	54.40	-3.2X		0.3s	20.00nm			4.9mb
ISR	8.97	357	eP	10	07.00	11.4X		1.1s	53.70nm			5.0mb		WARB	51.93	249	iPc	41	57.00 0.0
ROI	9.03	295	P	09	56.80	0.4	NUR	24.41	357	iP	13	03.20	0.8		0.4s	13.00nm			4.6mb
SOI	9.06	285	P	09	54.40	-2.4		1.0s	36.00nm			5.0mb		KSP	143.80	344	iPKPd	52	12.00 -1.2
BRT	9.10	304	Pc	09	56.40	-1.0	TOL	24.79	288	eP	13	06.00	-0.3	PRU	145.03	346	PKP	52	15.50 0.2
MBH	9.10	132	eP	09	55.00	-2.4	HFS	25.50	344	eP	13	11.50	-1.3	KHC	146.05	346	Pdiff	49	43.50 -6.9X
TDS	9.22	295	P	09	58.40	-0.7		0.9s	24.90nm			4.9mb		FLN	147.76	3	ePKP	52	23.30 3.5X
CMP	9.23	351	ePc	10	04.00	4.8X	MAIO	26.03	80	eP	13	18.00	-0.1		0.5s	5.85nm			
CZI	9.24	293	P	09	58.90	-0.4	NB2	26.88	343	P	13	23.80	-1.8	CDF	147.85	353	ePKP	52	23.90 3.8X
			eS	11	38.40			0.9s	5.80nm			4.3mb		GRR	148.12	3	ePKP	52	24.30 3.9X
ORI	9.28	298	Pd	09	59.50	-0.4	BCAO	32.56	196	iPc	14	17.10	0.5	HAU	148.35	354	ePKP	52	25.30 4.5X
CSI	9.30	296	P	10	01.40	1.3		0.7s	24.00nm			5.2mb		LPF	148.46	4	ePKP	52	25.40 4.5X
ATN	9.54	286	P	10	03.00	-0.4			ic		14	21.30			0.5s	7.30nm			
MMN	9.55	296	P	10	03.80	0.2	TIC	41.58	233	Pc	15	32.46	-0.3	LOR	149.26	357	ePKP	52	27.70 5.5X
VRI	9.70	358	ePd	10	07.50	1.9		1.0s	18.00nm			4.7mb			0.5s	1.80nm			
MGR	9.95	297	Pd	10	08.00	-1.1	KIC	41.62	232	Pc	15	32.90	-0.1	SSF	149.48	358	ePKP	52	28.30 5.8X
SGO	10.27	299	P	10	12.80	-0.7		0.9s	14.50nm			4.7mb			0.6s	3.15nm			
BZS	10.32	338	eP	10	00.00	-14.1X	LIC	41.91	232	Pc	15	35.22	-0.2	LBF	149.54	357	ePKP	52	28.10 5.4X
GIB	10.64	284	P	10	20.00	1.3		1.0s	21.50nm			4.9mb			0.6s	4.05nm			
DUI	11.30	303	P	10	27.50	-0.1	WMQ	46.10	61	P	16	07.50	-1.6	AVF	149.76	358	ePKP	52	28.30 5.4X
SDI	11.76	302	P	10	34.50	0.7	GKN	48.78	82	P	16	30.00	-0.4		0.5s	2.90nm			
PTJ	12.87	323	eP	10	46.50	-2.2		0.8s	28.00nm			5.4mb		BGF	150.01	359	ePKP	52	29.30 6.0X
ASS	13.11	306	P	10	51.00	-1.0	DMN	49.32	83	P	16	34.40	-0.3		0.6s	5.85nm			
CEY	13.54	319	e(P)	11	01.50	3.9X		0.8s	32.00nm			5.4mb		TCF	150.29	359	ePKP	52	29.90 6.1X
LJU	13.69	320	e(P)	11	09.50	10.0X	KKN	49.39	82	P	16	34.50	-0.6		0.7s	3.30nm			
TRI	13.88	317	eP	11	10.40	8.4X		0.7s	14.00nm			5.1mb		LSF	150.33	0	ePKP	52	30.00 6.2X
SPC	13.96	341	e(P)	11	12.30	9.1X	PKI	49.58	83	P	16	36.20	-0.6		0.7s	4.40nm			
VOY	14.02	319	e(P)	11	04.10	0.2	GUN	49.81	82	P	16	38.20	-0.4	MAF	150.35	359	ePKP	52	30.30 6.4X
PGD	14.09	308	P	11	05.90	0.9	GBA	50.21	103	Pc	16	41.00	-0.2		0.6s	3.60nm			
ZST	14.12	331	eP	11	11.00	5.9X		0.9s	3.90nm			4.4mb		OHR	150.47	330	e(PKP)	52	26.80 2.5
KBA	14.99	321	ePd	11	16.70	0.0	GTA	56.06	63	eP	17	23.20	-1.4	LPG	150.78	353	ePKP	52	32.20 7.3X
	1.2s	76.40nm				5.0mb	SLR	61.58	179	eP	18	03.50	0.5	CAF	151.65	360	ePKP	52	33.40 7.5X
			i	11	22.20		CD2	62.52	70	eP	18	08.20	-1.1	S.D. = 1.2 on 21 of 37 obs.					
CTI	15.27	315	Pd	11	26.40	6.1X	PRY	62.76	180	eP	18	10.70	-0.1						
PGF	15.40	300	eP	11	23.60	1.5	SCH	63.45	320	eP	18	12.00	-3.0X	% FEB 19, 1990 21h 34m 00.92± 0.89s					
SAL	15.69	312	P	11	26.50	0.9	HHC	63.73	57	Pc	18	16.60	-0.7	36.182 N ± 8.9km 27.182 E ± 9.3km					
KHC	16.32	327	iPc	11	37.00	3.3X	TIY	65.76	60	Pc	18	29.80	-0.6	DEPTH = 10.0km (geophysicist)					
	1.1s	33.00nm				4.4mb	BJI	67.23	56	eP	18	39.00	-0.6	DODECANESE ISLANDS					(369)
PRU	16.57	330	P	11	41.10	4.3X	BAO	87.56	249	eP	20	32.50	-0.3	MD 3.2 (ATH).					
KSP	16.62	335	ePd	11	41.00	3.5X	S.D. = 1.4 on 117 of 144 obs.												
WET	16.64	326	eP	11	40.20	2.3								KAP	0.63	181	ePn	34	13.50 -0.1
VAI	16.88	311	P	11	44.40	3.6X	FEB 19, 1990 21h 23m 56.16± 0.61s							SMG	1.55	350	ePn	34	29.00 0.5
SBF	16.92	303	eP	11	43.40	2.0	36.169 N ± 7.1km 27.172 E ± 5.9km							NPS	1.57	235	ePb	34	30.00 1.1
	0.8s	20.15nm				4.3mb	DEPTH = 10.0km (geophysicist)							APE	1.60	304	ePn	34	30.00 0.7

KSL	1.94	91	ePn	34 34.00	-0.3
VAM	2.54	253	ePb	34 47.50	4.6X
VLI	3.46	280	ePn	34 54.10	-1.9

S.D. = 1.3 on 6 of 7 obs.

FEB 19, 1990 21h 45m 49.42± 0.54s
36.111 N ± 6.8km 27.202 E ± 5.4km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)
ML 4.1 (CSS), 4.0 (ATH).

KAP	0.56	182	ePb	46 02.50	1.7
YER	1.34	40	iPn	46 14.00	-0.2
NPS	1.55	237	ePb	46 18.00	0.9
SMG	1.62	350	ePn	46 18.50	0.4
APE	1.65	306	ePb	46 19.50	0.9
KSL	1.93	89	ePn	46 24.40	1.8
ELL	2.27	73	iPn	46 29.60	1.9
IZM	2.28	1	ePn	46 30.00	2.2
VAM	2.54	255	ePn	46 32.30	0.9
KHL	2.88	39	ePn	46 36.00	-0.3
BCK	3.03	63	ePn	46 40.90	2.5
PRK	3.22	347	ePn	46 41.50	0.6
ATH	3.35	305	ePn	46 42.60	-0.3
VLI	3.49	281	ePn	46 44.40	-0.5
DST	3.67	17	ePn	46 51.00	3.6X
ALT	3.74	37	ePn	46 52.00	3.5X
ITM	4.37	286	ePn	46 59.60	2.2
YLV	4.76	20	ePn	47 01.00	-2.0
CSS	5.13	101	eP	47 09.00	0.9
			eSn	48 08.50	
BBTK	5.76	48	iP	47 18.00	0.9
OHR	7.07	317	eP	47 33.00	-2.5
PRNI	8.70	129	e(P)	47 58.00	-0.2
MBH	9.03	132	e(P)	48 00.00	-2.8
CZI	9.31	293	P	48 04.40	-2.2
GKN	48.74	82	P	54 35.10	-1.4
DMN	49.28	83	P	54 39.70	-1.1
KKN	49.35	82	P	54 39.70	-1.5
PKI	49.54	83	P	54 41.40	-1.4
GUN	49.78	82	P	54 43.00	-1.7

S.D. = 1.6 on 27 of 29 obs.

FEB 19, 1990 22h 04m 03.67± 0.56s
36.216 N ± 6.3km 27.116 E ± 5.1km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)
ML 3.9 (ATH), 3.8 (CSS).

KAP	0.67	176	ePg	04 16.30	-0.6
YER	1.31	45	iPn	04 26.50	-1.5
SMG	1.51	352	ePb	04 30.00	-0.7
APE	1.53	304	ePb	04 30.50	-0.6
NPS	1.55	233	ePb	04 31.30	0.0
CIN	1.59	29	eP	04 46.00	14.2X
KSL	2.00	92	ePn	04 37.80	0.0
IZM	2.18	3	ePn	04 42.00	1.5
ELL	2.31	76	ePn	04 43.30	0.8
VAM	2.50	252	ePn	04 45.50	0.4
KHL	2.85	42	ePn	04 48.00	-2.1
BCK	3.05	65	iPn	04 54.70	1.8
PRK	3.10	348	ePn	04 53.00	-0.5
ATH	3.23	304	ePg	05 04.50	9.1X
VLI	3.41	280	ePn	04 57.50	-0.4
DST	3.59	19	ePn	05 02.00	1.5
ALT	3.70	39	ePn	05 03.00	0.8
ITM	4.28	285	ePn	05 13.00	2.7
YLV	4.69	22	ePn	05 11.00	-5.2X
RDO	5.08	346	ePn	05 20.50	-1.0
CSS	5.22	102	eP	05 23.00	-0.6
			eSn	06 22.50	
CZI	9.20	292	P	06 17.90	-1.5

S.D. = 1.3 on 19 of 22 obs.

FEB 19, 1990 22h 24m 12.46± 0.75s
36.304 N ± 7.6km 21.799 E ± 4.4km
DEPTH = 69.8 ± 8.1 km
4.0mb (3 obs.)
SOUTHERN GREECE (368)

ITM	0.88	7	iPbc	24 30.40	0.7
VLI	1.01	65	ePn	24 31.00	-0.3
VLS	2.10	333	ePn	24 47.50	1.4
VAM	2.15	114	ePn	24 45.60	-1.1
ATH	2.26	42	ePb	24 52.00	3.7X
APE	3.09	75	ePn	24 58.70	-1.3
NEO	3.20	20	ePn	25 01.60	0.1
NPS	3.27	107	ePb	25 12.00	9.6X
KEK	3.75	336	ePn	25 10.00	0.9
SRN	3.84	339	iPn	25 11.60	1.3
LSK	3.95	347	iPnd	25 13.80	1.7
KZN	4.00	360	ePn	25 14.30	1.7
PLG	4.26	17	ePn	25 14.00	-2.4
SMG	4.27	69	ePb	25 26.00	9.6X
KBN	4.38	350	ePn	25 19.40	1.4
KAP	4.43	98	ePb	25 26.50	7.8X
PRK	4.60	49	ePb	25 28.50	7.4X
BERA	4.63	342	ePn	25 22.00	0.6
OHR	4.86	351	iPn	25 25.80	1.0
SOI	4.91	293	P	25 25.10	-0.4
LCI	5.03	324	Pd	25 26.20	-0.9
VAY	5.05	7	ePn	25 27.40	0.1
TIR	5.26	344	ePn	25 31.70	1.5
ROI	5.27	310	P	25 30.60	0.2
CZI	5.35	305	P	25 31.60	0.1
ATN	5.38	292	Pc	25 31.90	-0.2
TDS	5.46	309	Pc	25 33.90	0.8
PHP	5.48	349	iPnd	25 32.40	-0.9
CSI	5.56	310	P	25 37.20	2.6
LACI	5.57	344	ePn	25 34.00	-0.6
MEU	5.58	280	P	25 34.20	-0.6
			eSn	26 34.20	
ORI	5.64	313	P	25 36.20	0.5
RDO	5.65	30	ePn	25 36.30	0.6
SKO	5.67	357	iPn	25 35.70	-0.3
MMN	5.81	310	P	25 39.40	1.4
BRT	5.81	323	Pc	25 37.30	-0.7
			eSn	26 39.30	
SDA	5.98	343	ePn	25 41.10	0.8
ULC	5.99	341	ePn	25 39.00	-1.5
			eSn	26 43.00	
BAI	6.16	323	P	25 41.50	-1.4
MGR	6.23	310	P	25 43.70	-0.1
KSL	6.30	89	ePb	25 41.30	-3.4X
BDV	6.40	340	ePn	25 44.50	-1.7
			eSn	26 53.00	
TTG	6.43	343	ePn	25 45.00	-1.5
			eSn	26 55.00	
GIB	6.43	287	P	25 47.50	0.8
PVY	6.44	348	ePn	25 47.00	0.2
			eSn	26 57.50	
SGO	6.63	312	P	25 50.40	1.0
HCY	6.65	338	ePn	25 47.50	-2.1
			eSn	26 59.00	
BCK	7.14	78	ePn	25 58.20	1.7
DUI	7.83	315	P	26 03.50	-2.5
HVAR	8.01	331	iPn	26 07.10	-1.2
SDI	8.23	313	P	26 10.70	-0.8
PTJ	10.55	337	eP	26 40.50	-2.6
CEY	10.94	332	e(P)	26 49.00	0.6
			eS	28 43.00	
VOY	11.39	331	eP	26 53.20	-1.3
			eS	28 53.00	
NUR	24.29	3	eP	29 47.00	22.9X
HFS	24.41	350	eP	29 26.00	0.7
	0.4s		1.20nm	3.7mb	
NB2	25.66	348	P	29 38.20	1.1
	0.9s		4.10nm	3.9mb	
SUF	26.58	4	eP	29 54.00	8.6X
GKN	53.03	80	P	33 24.70	0.0
	0.6s		7.00nm	4.9mb	
DMN	53.58	80	P	33 29.20	0.4
KKN	53.64	80	P	33 29.30	0.1
PKI	53.83	80	P	33 30.90	0.1
GUN	54.06	79	P	33 32.80	0.3

S.D. = 1.2 on 55 of 63 obs.

FEB 19, 1990 22h 51m 44.61± 0.68s
43.415 N ± 4.5km 5.436 E ± 5.3km
DEPTH = 10.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)
MD 2.5 (STR).

GELF	0.03	191	Pg	51 46.26	-0.4
BERF	0.21	119	Pg	51 49.80	0.5
TREF	0.21	350	Pg	51 48.97	-0.3
PUYF	0.23	58	Pg	51 48.83	-0.7
PRAF	0.44	334	Pg	51 54.15	0.7
VILF	0.48	25	Pg	51 53.49	-0.9
TAVF	0.50	66	Pg	51 54.42	-0.3
GANF	0.68	30	Pg	51 58.17	0.1
MVIF	1.34	68	Pn	52 09.82	0.5
			Sg	52 27.98	
REVF	1.44	76	Pn	52 11.64	0.8
			Sg	52 31.88	
TOUF	1.44	65	Pn	52 11.64	0.7
AURF	1.45	70	Pn	52 10.80	-0.2
			Sg	52 31.14	
AUTN	1.56	67	Pn	52 12.99	0.4
			Sg	52 34.81	
SAOF	1.64	69	Pn	52 13.72	0.1
			Sg	52 37.62	
PGF	2.75	107	Pn	52 28.59	-1.1

S.D. = 0.7 on 15 of 15 obs.

? FEB 19, 1990 23h 04m 50.40± 5.55s
31.203 S ±22.7km 68.347 W ±41.1km
DEPTH = 93.6 ± 51.2 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.16	220	iPc	05 03.90	-0.3
			iS	05 14.70	
CFA	0.41	167	iPc	05 05.50	0.3
			S	05 17.20	
RTCB	0.48	234	eP	05 06.00	0.3
			(S)	05 17.90	
RTCV	0.68	194	eP	05 07.00	-0.3
			S	05 21.10	
RTRS	1.41	317	eP	05 15.50	0.0

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

FEB 19, 1990 23h 18m 14.95± 0.75s
34.517 N ± 8.0km 24.873 E ± 4.8km
DEPTH = 64.6 ± 11.1 km
4.1mb (3 obs.)
CRETE (370)

NPS	0.96	39	eP	18 34.00	1.1
VAM	1.05	328	eP	18 34.50	0.5
KAP	2.15	61	eP	18 51.70	2.5
APE	2.60	12	eP	18 54.50	-1.0
VLI	2.70	325	eP	18 57.00	0.1
SMG	3.56	26	eP	19 19.00	10.1X
ATH	3.57	345	eP	19 08.50	-0.6
ITM	3.58	319	eP	19 09.50	0.3
CIN	4.03	39	iPc	19 23.00	7.5X
KSL	4.17	66	eP	19 16.30	-1.2
IZM	4.32	26	ePn	19 19.00	-0.8
ELL	4.67	60	ePn	19 25.30	0.6
PRK	4.85	13	eP	19 27.40	0.3
NEO	4.96	345	eP	19 27.50	-1.2
VLS	5.03	318	eP	19 31.00	1.4
KHL	5.34	43	ePn	19 33.30	-0.7
BCK	5.49	56	ePn	19 36.20	0.1
PLG	5.96	349	eP	19 35.50	-7.1X
KZN	6.28	338	eP	19 48.50	1.3
KEK	6.58	323	eP	19 48.70	-2.6
CSS	6.98	84	eP	19 57.00	0.2
			eSn	21 13.50	
VAY	7.03	346	eP	19 58.60	1.1
OHR	7.33	335	eP	20 01.30	-0.4
KOT	7.46	126	ePn	20 03.50	0.1
			eSn	21 19.50	
SKO	7.92	341	eP	20 15.00	5.3X
SOI	7.95	299	P	20 10.50	0.3
LCI	8.00	319	P	20 08.10	-2.7
BBTK	8.24	48	iP	20 14.00	-0.3
ATN	8.42	298	P	20 17.80	1.1
CZI	8.43	306	P	20 16.20	-0.6
MEU	8.48	291	P	20 17.20	-0.4
			eSn	21 42.00	
ORI	8.70	312	P	20 21.00	0.5
DSI	9.30	106	eP	20 27.00	-1.7
			eS	22 05.00	
MGR	9.30	310	P	20 27.90	-0.9
BURJ	9.42	101	Pc	20 30.00	-0.5
PRNI	9.51	113	eP	20 32.00	0.3
SGO	9.69	311	P	20 33.70	-0.4
MBH	9.71	116	eP	20 35.00	0.6
KHC	16.82	334	P	22 10.40	2.8
MEM	21.16	325	P	22 58.30	1.9
DOU	21.51	323	P	23 01.10	1.1
HFS	26.65	348	eP	23 48.40	-0.7
	0.5s		2.60nm	4.0mb	
NB2	27.96	346	P	23 59.60	-1.5
	0.6s		1.60nm	3.8mb	
BCAO	30.51	193	ePd	24 29.90	5.7X
	0.6s		7.00nm	4.6mb	
KIC	39.14	231	P	25 43.00	5.0X

S.D. = 1.2 on 39 of 45 obs.

19d 23h

? FEB 19, 1990 23h 29m 53.22± 6.27s
16.284 N ±50.5km 99.556 W ±29.9km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF GUERRERO, MEXICO (58)

ACX	0.65	334	iP	30	05.45	-0.8
			iS	30	13.78	
III	2.08	2	iP	30	27.39	-1.4
			iS	30	55.49	
OXX	2.83	73	iP	30	39.50	0.0
			iS	31	15.01	
PPM	2.91	18	iP	30	35.57	-5.3X
			iS	31	16.47	
IIT	2.97	23	(P)	30	40.90	-0.6
			iS	31	19.10	
UNM	3.05	7	iP	30	42.50	-0.1
			(S)	31	23.00	
CRX	3.11	358	(P)	30	44.80	1.3
			(S)	31	32.02	
IIJ	3.44	357	iP	30	50.00	1.7
			(S)	31	35.00	
IIC	3.48	5	(P)	30	51.46	2.7X
			(S)	31	36.33	
MRX	3.74	336	(P)	30	56.50	4.3X
			(S)	31	40.00	

S.D. = 1.4 on 7 of 10 obs.

FEB 19, 1990 23h 48m 45.86± 0.63s
33.897 N ± 7.3km 46.590 E ± 4.2km
DEPTH = 49.9 ± 7.5 km
4.9mb (5 obs.)
IRAN-IRAQ BORDER REGION (346)
Felt at Islamabad, Iran.

SLY	1.92	332	iPnd	49	16.00	-0.7
			iP*	49	18.50	
			iPg	49	21.50	
			iSn	49	42.00	
			iS*	49	44.00	
BHD	1.94	252	iPnd	49	18.00	1.0
			iSn	49	43.50	
MSL	3.75	312	ePnd	49	46.50	3.8X
			ePg	49	54.50	
			eSn	50	26.50	
			iSg	50	41.00	
IR7	3.77	60	eP	49	42.00	-1.0
IR4	3.80	68	eP	49	44.00	0.5
IR2	3.96	62	eP	49	46.00	0.3
TAB	4.17	357	eP	49	56.70	8.0X
TEH	4.35	64	eP	49	52.00	0.7
QASM	8.22	200	eP	50	44.00	-1.3
OHR	21.64	297	eP	53	34.50	0.7
CZI	24.97	291	P	54	07.10	1.0
SBF	31.80	300	eP	55	07.00	-0.8
	0.9s		22.95nm			5.0mb
FRF	32.35	299	eP	55	11.50	-1.0
LPG	32.45	303	eP	55	13.50	-0.2
GKN	33.02	90	P	55	18.70	0.0
DMN	33.55	90	P	55	23.60	0.2
	0.8s		23.00nm			5.1mb
KKN	33.63	90	P	55	24.10	0.0
PKI	33.81	90	P	55	26.00	0.2
HFS	33.89	331	eP	55	23.00	-2.6X
	0.6s		5.00nm			4.6mb
GUN	34.09	89	P	55	28.40	0.2
	1.0s		40.00nm			5.3mb
BCAO	39.24	228	ePd	56	12.00	0.7
	0.4s		4.00nm			4.6mb
CHG	48.76	94	eP	57	27.30	-0.6

S.D. = 0.8 on 19 of 22 obs.

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* FEB 20, 1990 00h 47m 09.61± 0.66s
29.288 N ± 7.6km 142.434 E ±12.2km
DEPTH = 33.0km (normal)
4.6mb (1 obs.)
SOUTH OF HONSHU, JAPAN (211)

CHJJ	7.34	338	P	48	56.00	-1.2
			S	50	16.00	
MAT	8.06	335	(P)	49	07.00	-0.3
	1.4s		58.14nm			5.5mb X
			eS	50	35.00	
MTMJ	8.25	333	P	49	11.70	1.7
CHG	40.86	265	eP	54	50.80	0.6
WB5	49.50	190	eP	55	59.10	0.1
			e	56	11.20	
WRA	49.56	190	Pd	55	59.40	-0.1
	0.8s		4.70nm			4.6mb
PKI	49.75	283	P	56	00.60	-0.8
KKN	49.80	283	P	56	01.40	-0.2
DMN	50.00	283	P	56	03.20	0.0
GKN	50.29	283	P	56	05.40	0.1
INK	60.95	25	eP	57	21.00	-0.4
CMB	77.74	53	e(P)	59	05.50	0.5
SPC	86.45	326	eP	59	41.90	-8.4X

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

? FEB 20, 1990 01h 34m 07.95± 6.40s
31.601 S ±41.0km 69.665 W ±50.5km
DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB	0.75	81	iPd	34	24.00	1.9
			eS	34	37.00	
RTCV	1.00	105	eP	34	25.70	0.0
			(S)	34	41.70	
RTLL	1.06	75	iPc	34	25.40	-1.1
			eS	34	40.10	
CFA	1.22	91	iPc	34	28.00	-0.8
			S	34	43.50	
RTRS	1.44	7	eP	34	31.90	0.0

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

? FEB 20, 1990 03h 20m 51.06± 3.98s
31.292 S ±20.8km 68.688 W ±29.2km
DEPTH = 83.6 ± 41.9 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.19	101	iPd	21	03.60	-0.1
RTCB	0.22	206	iP	21	04.00	0.1
			eS	21	16.50	
CFA	0.50	129	iPc	21	05.50	0.1
			S	21	16.00	
RTCV	0.58	167	ePd	21	06.00	-0.1
			S	21	19.00	
RTRS	1.30	329	iPc	21	14.30	0.0
			eS	21	33.80	

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

FEB 20, 1990 04h 37m 35.54± 0.89s
45.885 N ± 9.4km 11.107 E ± 5.9km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.5 (KBA).

CTI	0.41	67	P	37	43.00	-1.0
			eSg	37	50.10	
SAL	0.49	236	P	37	44.20	-1.3
			eSg	37	50.50	
MDI	0.98	264	P	37	55.90	1.8
			eSg	38	08.80	
OGA	0.98	357	iPgc	37	54.50	0.1
OSS	1.04	321	iPc	37	54.70	-0.7
SCE	1.23	20	iPgc	37	58.00	-0.5
VDL	1.29	298	ePd	37	58.80	-0.7
FVI	1.36	58	P	38	00.80	0.3
			eSg	38	20.60	
TMA	1.57	279	ePc	38	04.30	0.6
KBA	1.95	52	iPgc	38	10.60	1.4
			iSg	38	36.80	

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

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* FEB 20, 1990 05h 15m 48.06± 1.03s
37.068 N ± 9.5km 112.104 E ±13.7km
DEPTH = 10.0km (geophysicist)
NORTHEASTERN CHINA (658)
ML 3.6 (BJI).

TIY	0.70	22	iPgc	16	00.40	-1.5
			Sg	16	09.30	
HHC	3.80	354	Pn	16	50.40	2.4
			Pg	16	56.00	
			Sg	17	43.20	
BTO	3.88	336	Pg	16	57.00	7.8X
			Sn	17	41.10	
XAN	3.98	222	Pn	16	50.70	0.2
			Pg	17	01.40	
			Sn	17	36.60	
			Sg	17	51.00	
TIA	4.13	100	ePg	17	00.00	7.5X
BJI	4.36	46	Pg	17	05.50	9.7X
			Sg	17	59.50	
LZH	6.72	264	Pgd	17	50.50	21.2X
WHN	6.77	163	Pn	17	29.50	-0.4
			eSn	18	47.50	
NJ2	7.48	130	ePg	18	07.00	27.1X
GTA	9.95	287	P	18	11.80	-2.4
GUN	23.87	255	P	21	03.60	0.8
KKN	24.39	255	P	21	08.80	1.0
DMN	24.61	255	P	21	10.20	0.2
GKN	24.79	257	P	21	11.20	-0.4

S.D. = 1.6 on 9 of 14 obs.

FEB 20, 1990 05h 55m 03.72± 0.46s
32.592 N ± 4.4km 44.204 E ± 2.7km
DEPTH = 37.6 ± 5.3 km
4.6mb (12 obs.)
IRAQ (375)
Felt at Boghdad.

BHD	0.70	13	iPgc	55	18.50	1.4
			iSg	55	28.00	
KER	2.99	53	ePc	55	52.00	2.0
SLY	3.19	19	iPnd	55	53.00	0.4
			iP*	55	57.00	
			iPg	56	04.50	
			iSn	56	27.50	
			iS*	56	32.00	
			iSg	56	38.50	
MSL	3.88	347	iPnc	56	04.80	2.3
			iPg	56	20.50	
			iSn	56	46.80	
			iSg	57	01.50	
RUWJ	4.54	270	Pc	56	18.20	6.3X
SHBJ	5.61	269	Pd	56	26.90	-0.1
TAB	5.73	17	e(P)	56	45.00	16.2X
IR1	6.08	61	eP	56	33.00	-0.7
IR7	6.15	58	eP	56	33.00	-1.7
IR2	6.34	59	eP	56	35.50	-1.8
QASM	6.51	185	iPd	56	39.00	-0.6
TEH	6.73	60	eP	56	41.00	-1.8
QUTJ	7.08	262	Pd	56	46.10	-1.6
BURJ	7.11	269	Pc	56	47.30	-0.8
MASJ	7.25	265	Pc	56	51.10	1.1
JVI	7.53	267	eP	56	53.60	-0.2
DSI	7.56	265	e(P)	56	55.00	0.8
ZNT	7.76	270	P	56	57.60	0.5
			e	59	04.40	
RYD	8.12	164	iPc	57	02.00	-0.2
			iS	58	29.00	
DOR	8.15	265	eP	57	03.30	0.7
PRNI	8.18	257	eP	57	04.00	1.1
MBH	8.47	253	e(P)	57	06.00	-0.9
HQL	8.53	250	eP	57	08.70	1.0
BADA	8.91	245	iPc	57	12.00	-0.9
WAJH	9.23	228	eP	57	17.30	-0.1
CSS	9.35	288	e(P)	56	48.00	-31.1X
BBTK	11.73	311	eP	57	55.00	3.4X
KAS	12.09	319	eP	58	13.00	16.6X
KMSA	12.17	179	eP	57	54.50	-3.1X
ELL	12.48	293	eP	58	14.00	12.3X
MAIO	13.15	69	eP	58	09.00	-1.6
	0.7s		11.12nm			5.0mb
			i	58	21.00	
KHL	13.26	300	iP	58	22.70	10.7X
VLI	17.97	289	ePn	59	12.70	0.5
NEO	18.24	297	ePb	59	18.80	3.2X
ITM	18.83	290	ePb	59	23.00	0.1
QUE	19.56	91	eP	59	31.50	-0.1
KZN	19.59	299	ePn	59	32.00	0.4
VLS	20.02	293	ePn	59	35.00	-1.1
SKO	20.34	304	eP	59	39.50	0.1
OHR	20.52	301	eP	59	40.80	-0.6
	1.1s		0.05nm			1.8mb X
			e	00	00.30	
KEK	20.91	297	ePn	59	44.50	-0.8
CZI	23.62	294	P	00	13.90	1.8
SPC	24.40	320	eP	00	20.80	1.0
KRA	25.05	321	eP	00	26.60	0.8
ZST	25.68	315	eP	00	31.20	-0.6
KSH	26.50	66	eP	00	41.00	1.4
KSP	27.44	320	eP	00	47.00	-0.8
			e	01	12.50	
KBA	27.55	311	e(P)	00	49.00	-0.1
	0.6s		3.60nm			4.2mb
			i	01	11.10	
NUR	30.74	341	eP	01	37.00	19.7X
LPG	31.52	305	eP	01	24.00	-0.7
	0.7s		4.40nm			4.4mb
BSF	32.02	309	eP	01	26.80	-2.0
SUF	32.26	344	iP	01	30.50	-0.1

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LOR     33.83 308 eP     01 43.10  -1.3
SSF     34.03 307 eP     01 45.00  -1.1
        0.5s      2.90nm          4.5mb
HFS     34.09 333 eP     01 44.80  -1.7
        0.4s      6.00nm          4.9mb
                  e      01 51.50
                  e      01 54.10
                  e      01 59.30
HYB     34.42 108 iPc    01 50.50   0.6
        0.8s     19.20nm          5.1mb
GKN     35.06  87 Pc     01 55.80   0.4
DMN     35.58  87 Pc     02 00.60   0.7
WMQ     35.59  59 Pc     02 00.50   0.8
NB2     35.62 333 P      01 58.50  -1.1
        0.7s      4.20nm          4.5mb
KKN     35.67  87 Pc     02 01.20   0.5
GBA     35.72 114 Pc     02 01.20   0.3
        0.7s      4.40nm          4.5mb
PKI     35.84  87 Pc     02 03.00   0.7
GUN     36.14  86 Pc     02 05.80   1.0
BCAO    36.89 226 ePd    02 12.00   1.3
        0.6s      8.00nm          4.8mb
                  ic     02 16.30
GTA     44.90  65 iPc    03 17.40   0.7
CD2     50.08  75 eP     03 56.80  -0.3
CHG     50.69  92 eP     04 01.20  -0.7
KIC     52.41 251 P      04 15.14   0.3
        0.7s      4.50nm          4.6mb
LIC     52.72 251 P      04 17.44   0.3
        0.7s      6.00nm          4.7mb
XAN     53.27  70 Pc     04 20.60  -0.4
HHC     53.43  61 P      04 23.00   0.8
GYA     54.02  79 P      04 25.60  -1.2
BUL     54.52 198 eP     04 34.20   3.8X
TIY     54.91  64 Pd     04 33.60   0.5
DL2     61.40  60 P      05 18.50   0.2
NJ2     61.78  68 Pc     05 20.60  -0.4
FRB     70.43 334 eP     06 15.00  -0.7
MBC     70.93 356 eP     06 19.00   0.4
        0.5s      1.00nm          4.1mb
INK     79.40 359 eP     07 07.00   0.1
FBA     82.38   5 eP     07 24.50   1.8
     S.D. = 1.0  on  70 of  81 obs.
-------------------------------------
*  FEB  20, 1990  06h 47m 40.55± 1.06s
   38.806 N ±10.3km   29.076 E ±11.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)

KHL      0.60 144 iPg    47 53.20   0.5
ALT      0.84  73 ePg    47 55.90  -1.0
                 eSg    48 05.90
DST      0.87 337 ePg    47 56.90  -0.4
                 eSg    48 09.90
YLV      1.77   7 iPn    48 13.00   1.5
EBR     22.01 284 eP     52 36.00  -0.6
     S.D. = 1.4  on   5 of   5 obs.
-------------------------------------
   FEB  20, 1990  06h 53m 39.89± 0.15s
   34.706 N ± 3.1km  139.252 E ± 2.8km
   DEPTH =  14.2km  (geophysicist)
   6.1mb ( 97 obs.) 6.4Msz ( 29 obs.)
 NEAR S. COAST OF HONSHU, JAPAN  (230)
      Ms 6.4 (BRK), 6.4 (PAS).
      Mo=7.0*10**18 Nm (PPT). Felt (IV
      JMA) at Tokyo and Yokohama; (III
      JMA) at Chiba and Kumagaya; (II
      JMA) at Kofu and Nagoya. Depth
      from broadband displacement
      seismograms.
      FAULT PLANE SOLUTION: P-Waves
       NP1:Strike= 70 Dip=82 Slip= 173
       NP2:       161     83        8
       Principal Axes:
        T                Plg=11  Azm= 26
        P                    1       295
       Comment: The focal mechanism is
        moderately well controlled and
        corresponds to strike-slip
        faulting with a small reverse
        component. The preferred fault
        plane is not determined.
      RADIATED ENERGY
       No. of sta:   6  Focal mech.  F
       Energy        5.3±2.1*10**14 Nm
      MOMENT TENSOR SOLUTION
      Dep  37           No. of sta: 15
      Moment Tensor;   Scale 10**18 Nm
        Mrr=-0.01        Mtt= 1.37
        Mff=-1.36        Mrt=-0.58
        Mrf=-0.63        Mtf=-1.87
       Principal axes:
        T  Val=  2.34  Plg= 6  Azm=206
        N        0.23      71       98
        P       -2.58      18      298
      Best Double Couple:Mo=2.5*10**18
       NP1:Strike=341 Dip=73 Slip=  -9
       NP2:         73     82     -163
      CENTROID, MOMENT TENSOR    (HRV)
      Data Used: GDSN
      L.P.B.: 10S, 28C  M.W.: 10S, 20C
      Centroid Location:
      Origin Time        06:53:45.3 0.2
      Lat 34.62N 0.02 Lon 139.05E 0.02
      Dep  32.2 1.7 Half-duration  5.6
      Moment Tensor;   Scale 10**18 Nm
        Mrr= 0.60 0.05  Mtt= 0.59 0.06
        Mff=-1.19 0.06  Mrt=-0.78 0.13
        Mrf= 0.55 0.14  Mtf=-4.10 0.06
       Principal Axes:
        T  Val=  4.16  Plg=15  Azm=219
        N        0.35      75       41
        P       -4.50       1      309
      Best Double Couple:Mo=4.3*10**18
       NP1:Strike=355 Dip=79 Slip=  10
       NP2:         263     80      169

TOK      1.06  23 P      53 59.00  -0.5
IIDJ     1.34 305 iPd    54 03.40  -0.8
                 eS     54 20.00
KAKJ     1.67  26 iP+    54 07.00  -1.8
MAJO     2.02 335 eP     54 15.11   1.2
MAT      2.02 335 iPd    54 13.90   0.0
                 eS     54 42.00
MTMJ     2.21 328 P      54 17.00   0.2
TSRJ     2.80 288 P      54 24.60  -0.5
YAMJ     3.52  10 eP     54 34.40  -0.8
OFUJ     4.78  23 P      54 51.30  -1.7
                 S      55 48.80
SHK      5.42 270 iPd    55 00.70  -1.5
        0.8s   895.52nm          6.5mb
AOMJ     5.91   8 eP     55 08.60  -0.4
SHNJ     6.76 267 iP+    55 18.70  -2.3
                 S      56 35.90
KUMJ     7.35 255 P      55 27.90  -1.4
MRRJ     7.84  10 eP     55 34.30  -1.8
KAGJ     7.86 246 eP     55 34.50  -1.9
                 S      57 05.70
HOOJ     8.29  21 eP     55 36.30  -6.1X
                 eS     57 13.00
SAP      8.50  10 eP     55 45.00  -0.3
                 eS     57 23.00
KUSJ     9.40  25 eP     55 51.30  -6.4X
                 eS     57 32.90
ASAJ     9.76  15 eP     55 58.40  -4.3X
                 eS     57 51.00
MDJ     12.37 326 eP     56 40.00   1.7
      N  15s   400.00um
YSS     12.57  11 iPc    56 35.00  -5.9X
                 eS     58 48.00
CN2     14.02 314 Pd     57 01.00   0.9
        1.9s  4200.00nm          6.9mb
      E  12s   165.00um
                 esP    57 05.00
                 S      59 40.00
SNY     14.21 305 iPd    57 03.00   0.4
        1.5s  2600.00nm          6.7mb
      N  13s   200.00um
      E  13s   123.00um
DL2     14.73 292 iPd    57 10.00   0.6
        1.5s  3600.00nm          6.7mb
      E  12s   206.00um
                 S      59 50.00
SSE     15.60 262 Pc     57 21.60   0.9
        5.0s  1300.00nm          5.4mb X
      E  17s   245.00um
                 sP     57 28.00
                 sS     00 16.00
NJ2     17.24 267 Pd     57 41.50  -0.2
        6.0s  *******nm          6.3mb X
                 S      00 54.00
ANP     18.04 243 iP     57 52.80   1.0
                 iS     01 28.00
TIA     18.09 281 Pd     57 53.50   1.3
        7.0s  9100.00nm          6.0mb X
                 sP     58 02.00
BJI     19.08 293 ePd    58 03.32  -1.0
        4.0s  6460.00nm          6.2mb X
      N  11s   122.00um
                 eS     01 44.08
QZH     20.36 247 Pc     58 18.00  -0.6
      Z  22s    86.80um          6.1Msz
      E  17s   181.00um
                 sP     58 29.50
                 iS     02 06.00
HIA     20.46 321 eP     58 16.20  -3.3X
WHN     21.36 266 Pd     58 29.00   0.2
        1.5s  1600.00nm          6.2mb
      N  12s   267.00um
PJG     21.63 165 eP     58 31.20  -0.5
GUMO    21.63 165 eP     58 31.00  -0.7
        1.4s  3507.69nm          6.6mb
GUA     21.69 165 eP     58 31.80  -0.5
        1.3s  3323.08nm          6.6mb
      Z  18s   126.12um          6.4Msz
                 eS     02 30.00
TIY     21.82 286 iPd    58 32.00  -1.5
      N  14s    96.70um
                 pP     58 39.50  27kmX
                 sP     58 45.00
HHC     22.68 294 Pd     58 40.00  -2.0
      Z  16s   128.00um          6.5MszX
      N  12s    43.40um
      E  10s    43.20um
PET     22.91  31 iPc    58 45.00   1.0
                 eS     02 56.00
BTO     23.82 293 P      58 51.00  -2.2
      N  15s   102.00um
      E  15s    82.00um
                 PP     59 29.00
                 S      03 06.00
BAG     24.74 227 eP     59 00.00  -2.3
                 eS     03 20.00
XAN     25.00 277 P      59 04.00  -0.6
        7.0s  7700.00nm          6.5mb X
      E  20s   180.00um
                 S      03 31.00
HKC     25.19 247 ePc    59 08.00   1.6
                 eS     03 24.00
GZH     25.39 250 Pc     59 13.00   4.7X
      Z  17s   124.00um          6.5MszX
      N  18s   187.00um
QCP     25.84 224 eP     59 12.00  -0.5
LZH     28.80 283 ePd    59 38.53  -1.1
        2.0s   470.00nm          5.9mb
      Z  26s   124.00um          6.4MszX
      N  10s    56.70um
      E  15s    42.80um
                 sP     59 48.50
                 PcP    02 46.00
                 S      04 26.00
                 iS     04 29.67
GYA     29.14 263 P      59 42.00  -0.7
      N  18s   109.00um
CD2     29.98 273 eP     59 47.60  -2.5
                 S      04 45.00
DAV     30.24 208 eP     59 50.00  -2.4
QIZ     30.38 247 eP     59 55.20   1.5
      E  18s   158.00um
                 PP     00 56.00
                 S      04 50.00
IRK     30.44 316 ePd    59 52.00  -1.9
                 eS     04 56.00
SMY     30.56  43 e(P)   59 57.10   2.2
      Z  20s    75.00um          6.3Msz
GTA     31.64 290 P      00 03.20  -1.6
      Z  15s    62.40um          6.4MszX
      N  11s    74.90um
                 pP     00 08.00  17kmX
                 sP     00 12.00
                 PP     01 11.00
                 S      05 08.00
KMI     32.91 263 ePd    00 15.34  -0.7
        2.2s  1300.00nm          6.5mb
                 epP    00 19.48  14kmX
                 isP    00 21.96
                 eS     05 35.77
KKM     35.58 222 ePc    00 39.50   0.5
ADK     35.74  48 eP     00 40.40   0.6
      Z  21s    89.00um          6.5Msz
TSM     36.14 218 ePd    00 45.50   2.0
```

20d 07h

JAY		37.05	178	ePd	00	51.50	0.3	HON		56.17	86	P	03	22.00	0.4				i	05	00.00	17kmX
				e	01	44.00	251kmX		Z	20s		13.30um			6.0Msz	CNB		70.30	171	eP	04	55.00	0.3
				e	12	07.00		HYB		56.39	269	iPc	03	23.00	-0.3					e	05	02.00	22kmX
LOE		37.59	252	eP	00	54.00	-1.8			1.0s		50.00nm			5.5mb	NWAO		70.38	200	eP	04	57.19	2.0
CHG		39.03	257	ePd	01	08.00	0.1	INK		57.25	26	eP	03	26.50	-2.2					epP	05	01.99	15kmX
		1.5s		537.50nm			6.0mb			0.8s		98.00nm			5.9mb	RMW		70.77	45	P	04	57.00	-0.6
				eS	07	08.00		ASPA		58.27	186	eP	03	33.50	-2.8X	PNT		71.07	43	eP	04	59.00	-0.3
CHTO		39.03	257	ePd	01	08.10	0.2			0.7s		123.00nm			6.1mb			1.0s		108.00nm			5.9mb
				e	01	12.10	14kmX		Z	22s		43.97um			6.5MszX	LON		71.13	46	ePc	05	00.47	0.7
PCI		39.82	211	ePd	01	17.50	3.1X					iS	11	37.40						ePPc	05	04.44	13kmX
		1.3s		12.00nm			4.4mb X					LR	27	20.50		NUR		71.17	332	eP	04	57.00	-2.6
BDT		39.84	255	eP	01	13.00	-1.5	MBL		58.54	201	eP	03	39.00	0.8			1.1s		350.30nm			6.4mb
		1.2s		252.70nm			5.8mb	MBC		59.25	16	eP	03	40.50	-2.1		Z	20s		30.70um			6.6Msz
WMQ		40.37	299	iPd	01	19.78	0.9			1.0s		123.00nm			6.0mb					i	05	04.20	23kmX
		4.0s		4200.00nm			6.5mb X	GBA		59.28	265	Pd	03	44.10	0.5					i	08	37.60	
	Z	10s		39.70um			6.6MszX			1.5s		167.60nm			5.9mb					e	14	16.00	
	N	11s		22.50um				SIT		59.30	39	e(P)	03	44.30	1.2					e	15	06.00	
				epPd	01	23.58	13kmX		Z	20s		20.00um			6.2Msz					e	17	02.00	
				S	07	23.00		POO		59.71	272	iPc	03	48.60	2.0					e	18	36.00	
				eS	07	36.08				1.2s		296.88nm			6.3mb					LR	36	20.00	
RAB		40.56	160	e(P)	01	16.00	-4.4X					iS	12	00.00		BFD		71.58	177	eP	05	04.00	1.7
				iS	07	24.00		QUE		59.97	288	eP-	03	47.00	-1.4					e	05	07.00	10kmX
LSA		40.70	277	iPd	01	24.00	1.8					eS	12	20.00		TAB		71.65	304	eP	05	04.00	0.8
	Z	14s		32.00um			6.3MszX	BOM		60.38	273	eP	03	47.50	-3.5X	BKR		71.69	308	iPd	05	05.00	1.7
	N	14s		25.80um								eS	12	12.00						iS	14	26.00	
	E	15s		20.90um				KOD		61.09	262	eP	03	55.40	-0.9	TOO		72.14	175	eP	05	06.00	0.3
				S	07	37.00						eS	12	20.00						e	05	13.00	22kmX
ILT		40.88	23	iPc	01	20.50	-2.0	RMQ		61.52	170	eP	03	59.00	0.4	EDM		72.26	37	eP	05	05.50	-0.9
				eS	07	31.00		WARB		61.72	193	eP	03	59.00	-1.0			1.2s		160.00nm			6.0mb
SHL		41.65	271	iP	01	29.50	-0.1			0.7s		54.00nm			5.8mb	FHC		72.83	52	e(P)	05	10.80	0.8
				iS	07	40.00		DZM		62.09	151	iPc	04	03.10	0.5	KER		72.97	300	eP	05	11.00	-0.1
NNT		41.99	248	eP	01	32.00	-0.3	KBS		62.65	350	iPd	04	06.90	1.3	SLY		73.47	302	ePd	05	10.50	-3.2X
PMG		44.51	169	eP	01	51.00	-1.6	BRS		63.07	167	eP	04	05.80	-3.1X					iPcP	05	18.50	
SNG		44.85	241	iPd	01	54.50	-1.0					i	04	09.10	11kmX					iS	14	45.00	
		1.5s		594.44nm			6.3mb					i	04	15.50						iScS	14	52.50	
				eS	08	29.50						i	04	27.00						iPS	15	11.00	
GUN		45.66	277	P	02	01.40	-0.9					e	07	00.00		WDC		73.88	52	eP	05	15.90	-0.1
SDN		45.68	44	eP	02	01.60	0.0					eS	12	36.00		UPP		74.26	333	iP	05	17.40	-0.4
	Z	21s		42.00um			6.4Msz	MAIO		63.10	297	eP	04	10.00	0.8			1.5s		1300.00nm			6.7mb
PKI		46.18	277	P	02	04.80	-1.5			2.0s		137.21nm			5.8mb	RGS		74.40	338	eP	05	23.60	5.0X
KKN		46.20	277	P	02	04.80	-1.6					eS	12	48.00		MIN		74.61	52	eP	05	19.30	-1.2
IPM		46.36	238	ePd	02	08.50	1.0	APA		64.12	336	iPc	04	16.90	1.5	MSL		74.69	304	ePc	05	22.50	1.7
		0.9s		108.80nm			5.9mb					iS	12	46.70						ePcP	05	24.50	240kmX
DMN		46.41	277	P	02	07.20	-0.9	SVA		64.41	138	eP	04	20.60	2.8X					e	06	19.00	
GKN		46.64	277	P	02	08.20	-1.6	KEV		64.99	339	eP	04	20.00	-1.0					ePP	08	16.50	
KGM		46.65	234	ePd	02	10.10	0.4			1.3s		354.90nm			6.4mb					eS	15	05.50	
MTN		47.91	191	e(P)	02	17.00	-2.6		Z	18s		58.40um			6.8Msz					eScS	15	22.00	
				e	02	51.00	150kmX					i	04	27.40	24kmX					ePS	15	44.50	
HNR		48.07	152	eP	02	20.00	-0.9					e	13	00.00		SES		75.07	39	eP	05	22.00	-0.8
				eS	04	14.00						e	14	18.00		ORV		75.10	52	eP	05	22.50	-0.6
TTA		48.33	34	eP	02	21.80	-0.7					e	17	12.00		BHD		75.47	300	ePc	05	27.00	1.7
SVW		48.41	36	eP	02	23.40	0.2					LR	00	37.00						ePP	08	17.00	
BRW		49.23	23	eP	02	28.50	-0.7	KEV		64.99	339	ePc	04	26.89	5.9X					eS	15	14.00	
IMA		49.58	30	eP	02	31.40	-0.7			1.3s		354.90nm			6.4mb	HFS		75.47	335	eP	05	23.00	-1.8
		1.3s		245.30nm			6.1mb		Z	18s		58.40um			6.8Msz			1.2s		90.10nm			5.7mb
KSH		49.79	295	Pc	02	34.00	-0.1					i	04	27.40	2kmX		Z	19s		33.61um			6.7Msz
	Z	10s		62.40um			6.9MszX					e	13	00.00						e	05	25.70	9kmX
	N	14s		55.60um								iS	13	00.12						e	05	28.80	
FRU		49.94	300	iP	02	36.00	0.8					eScS	14	11.80						e	05	33.20	
				iS	09	38.00						e	14	18.00						e	05	37.70	
KDC		50.05	41	eP	02	34.90	-0.8					e	17	12.00						LR	34	49.00	
KNA		51.16	193	eP	02	42.60	-1.8					LR	00	37.00		BRK		75.51	54	e(P)	05	25.20	-0.2
PMR		51.54	35	eP	02	45.30	-1.6	COO		66.02	168	eP	04	31.00	3.0X		Z	20s		25.00um			6.5Msz
		1.2s		390.60nm			6.2mb	TRO		67.34	341	eP	04	38.00	2.0					e	09	20.00	
	Z	22s		42.00um			6.4Msz	DAG		67.94	355	iPd	04	36.80	-2.9X					eS	15	13.00	
COL		52.00	31	iPc	02	50.45	0.0			1.0s		220.00nm			6.3mb					e	25	52.00	
				ipPc	02	54.42	13kmX		Z	20s		22.69um			6.4Msz					eLR	28	02.00	
				iS	10	15.44			N	20s		18.44um				BKS		75.52	54	ePd	05	25.90	0.4
FBA		52.00	31	eP	02	48.50	-1.9		E	20s		18.44um						1.2s		419.00nm			6.4mb
NDI		52.41	282	eP	02	53.50	-0.5					e	28	51.00			Z	20s		17.00um			6.3Msz
				eS	10	18.00		OBN		68.89	323	iPc	04	50.00	4.1X		N	20s		9.00um			
TOA		52.90	35	eP	02	56.60	-0.7			1.8s		990.00nm			6.7mb		E	20s		17.00um			
WB5		54.48	186	eP	03	06.00	-3.2X		Z	16s		84.00um			7.1MszX					i	05	31.50	18kmX
				i	03	10.10	13kmX	RIV		69.08	169	eP	04	56.00	8.8X					e	06	10.00	
WRA		54.55	186	Pc	03	05.50	-4.2X					eS	13	56.00						iPP	08	16.50	
		1.0s		40.90nm			5.4mb	PGC		69.22	45	eP	04	48.00	0.0					i	09	15.00	
CTA		54.89	172	iPd	03	11.20	-1.1			0.9s		68.00nm			5.8mb					e	11	55.00	
		1.3s		163.46nm			5.9mb	SUF		69.26	333	iP	04	46.50	-1.5					iS	15	12.00	
				i	03	35.00	97kmX	PUL		69.30	329	ePd	04	53.00	4.8X					i	15	54.00	
				iS	10	51.00						eS	13	50.00						i	16	28.00	
QIS		54.96	180	iPd	03	10.90	-1.8	ADE		69.31	180	Pd	04	48.50	-0.1					iSS	20	12.00	
				e	03	14.00	10kmX			1.3s		365.38nm			6.4mb					e	24	00.00	
DSH		55.41	296	eP	03	15.00	-1.0	IR7		69.81	300	eP	04	52.00	0.0					eLQ	24	43.00	
				eS	11	02.00		IR4		69.82	299	eP	04	52.50	0.4					e	25	57.00	
SVE		55.75	319	iPd	03	18.00	-0.1	IR1		69.89	300	eP	04	52.50	0.0					e	27	12.00	
				eS	11	00.00		GMW		70.15	46	P	04	54.00	0.3					eLR	27	57.00	
OPA		55.99	86	P	03	22.70	2.4	CAN		70.26	172	eP	04	54.80	0.4	PCC		75.63	54	eP	05	25.70	-0.4

NB2		75.64	337	P	05	23.60	-2.3					ePP	08	58.40		KHC		83.58	328	iPc	06	08.00	-0.8
		1.3s		339.10nm			6.2mb	BW06		80.55	44	iPd	05	52.00	-1.4			1.3s		181.00nm			6.1mb
SIM		75.74	315	e(P)	05	28.00	1.3	BUC		80.61	318	ePd	05	57.50	4.2X		Z	18s		36.00um			6.8Msz
				e(S)	15	08.00		BUC1		80.69	318	ePc	05	56.00	2.2		N	16s		17.50um			
GDH		75.92	5	iPd	05	28.20	1.0	GPA		80.77	313	eP	05	57.00	2.7X		E	18s		43.00um			
		1.0s		76.00nm			5.7mb	SHBJ		80.78	303	Pd	06	00.80	6.2X					i	09	28.80	
	Z	19s		19.62um			6.4Msz	RVR		80.96	55	eP	05	55.00	-0.4					S	16	36.00	
				i	15	10.00		GBZT		80.98	314	eP	05	56.00	0.7	MMB		83.77	317	ePc	06	10.00	0.1
GCC		76.14	55	eP	05	30.00	1.0	ISK		81.03	314	eP	05	57.00	1.4	IZM		83.79	313	eP	06	09.00	-1.0
MHC		76.21	54	e(P)	05	29.50	-0.1	KSP		81.13	327	eP	05	55.20	-0.8	KSL		83.79	310	eP	06	11.50	1.5
	Z	20s		15.00um			6.3Msz			1.4s		281.00nm			6.1mb	PRK		83.84	314	eP	06	12.30	2.1
	N	20s		5.00um								i	06	00.60	17kmX	WET		83.88	328	eP	06	10.70	0.4
	E	20s		17.00um								iPP	09	04.50			Z	17s		43.00um			6.9MszX
				eS	15	18.00		YLV		81.16	314	eP	05	55.90	-0.5	AYN		83.88	301	eP	06	11.30	0.7
				eSKS	15	52.00		DMK		81.32	315	eP	05	56.90	-0.2	KKB		83.95	318	iP	06	11.00	0.3
				eLQ	24	00.00		CTT		81.35	314	eP	05	58.00	0.7	KMR		84.13	327	eP	06	12.00	0.5
				eLR	27	59.00		HRI		81.48	305	e(P)	06	01.00	2.7X					i+	06	15.80	12kmX
ARN		76.28	54	P	05	29.50	-0.4	PSZ		81.51	324	eP	06	02.10	4.0X	MBH		84.14	302	eP	06	11.00	-0.8
FFC		76.61	32	eP	05	30.00	-1.3	MSU		81.63	49	P	05	58.20	-0.9	WTS		84.16	333	eP	06	12.00	0.5
		1.0s		89.00nm			5.8mb	ALT		81.65	312	eP	05	58.00	-1.0			1.4s		179.00nm			6.1mb
CMB		76.66	53	iPc	05	33.04	1.0	PLM		81.68	55	eP	06	00.00	0.6					e	06	18.00	19kmX
				e	05	35.52		PFO		81.81	55	ePd	06	00.96	1.0					e	09	26.00	
				epPc	05	37.34	14kmX					ePPd	06	04.93	13kmX	GRF		84.18	329	eP	06	11.70	-0.1
				esP	05	40.49		PVL		81.81	318	iPd	06	03.00	3.4X			1.2s		557.00nm			6.7mb
				eSKS	16	17.20		BURJ		82.04	304	Pd	06	02.80	1.6		Z	18s		36.00um			6.8Msz
KVT		76.78	311	iP	05	31.90	-0.7	BRG		82.14	329	iP	06	01.40	0.2	SMG		84.49	313	eP	06	16.00	2.5
PRS		76.94	55	eP	05	33.60	0.0			2.0s		350.00nm			6.1mb	VAY		84.60	317	iP	06	13.40	-0.6
				eSKS	16	18.80			Z	18s		47.00um			6.9Msz					iPcP	06	19.50	43kmX
LRM		77.04	43	eP	05	34.10	-0.2					iS	16	14.00						i	06	26.20	
PRI		77.52	55	eP	05	37.20	0.3	BNT		82.15	314	eP	06	01.00	-0.5					iPP	09	32.40	
KVN		77.58	51	ePd	05	36.00	-1.3	EDC		82.19	314	iP	06	02.00	0.3	EKA		84.72	340	P	06	17.00	2.7X
FRI		77.69	54	eP	05	37.30	-0.3	DST		82.20	313	iP	06	04.00	2.2			1.4s		53.50nm			5.6mb
				eSKS	16	22.80		BAR		82.21	56	eP	06	02.00	0.0	PLG		84.74	316	eP	06	13.90	-0.9
KAS		78.02	312	eP	05	40.50	1.0	BZS		82.21	321	eP	06	01.00	-0.7	SKO		84.78	319	eP	06	14.90	0.0
RYD		78.40	292	eP	05	43.00	1.2	CLL		82.22	329	iP	06	00.90	-0.7			1.4s		306.00nm			6.3mb
AKU		78.40	351	iPd	05	44.30	3.3X			1.4s		310.00nm			6.2mb		Z	14s		25.15um			6.8MszX
		1.0s		56.00nm			5.6mb					eS	16	14.00			N	14s		26.59um			
PPE		78.64	319	ePd	05	43.00	0.3	BUD		82.23	324	eP	06	01.00	-0.7		E	15s		22.57um			
TNP		78.70	51	ePd	05	42.80	-0.7	MFT		82.26	315	iP	06	01.40	-0.7					i	06	16.20	4kmX
		0.8s		80.88nm			5.8mb	TIM		82.33	321	iP	06	04.00	1.7					iPcP	06	21.20	
PTT		78.85	320	eP	05	46.00	2.1	WEL		82.37	154	P	06	05.20	2.9X					i	06	33.50	
SYP		78.89	56	eP	05	45.00	0.5					S	16	18.00						i	06	46.80	
CFR		78.99	318	eP	05	47.00	2.4	KMSA		82.41	289	eP	06	04.50	1.3					i	08	24.00	
IMW		79.06	44	P	05	45.60	0.1	OUTJ		82.45	303	Pc	06	05.10	1.8					iPP	09	38.00	
COP		79.19	333	iPc	05	46.00	0.5	DIM		82.45	317	eP	06	05.00	2.0					i	10	42.00	
		0.8s		268.66nm			6.3mb	KHL		82.46	312	eP	06	03.00	-0.2					i	12	00.00	
	Z	16s		33.67um			6.8MszX	PRU		82.53	328	eP	06	03.00	-0.2					iS	16	48.00	
				i	15	44.00				1.7s		259.80nm			6.1mb					iSP	17	38.00	
ISA		79.26	54	eP	05	46.00	-0.4		Z	16s		44.40um			6.9MszX					iPS	18	00.00	
VRI		79.34	319	ePc	05	47.50	0.9		N	13s		42.50um								i	18	22.00	
BRD		79.39	319	eP	05	55.00	8.2X		E	13s		47.50um								iSS	22	24.00	
FRB		79.43	12	eP	05	45.00	-1.6					PP	09	20.70						iSSS	26	40.00	
TLB		79.43	317	ePd	05	52.50	5.5X					S	16	20.00		PTJ		84.84	324	eP	06	13.50	-1.7
BBTK		79.54	311	eP	05	48.00	0.1	ZST		82.65	325	eP	06	05.00	1.1					e	09	34.00	
UZH		79.84	323	eP	05	52.00	2.9X		Z	15s		61.40um			7.1MszX	ZAG		84.89	324	iP	06	15.80	0.5
				iS	15	57.00						ePP	09	16.70						i	09	37.50	
PSN		79.91	317	ePc	05	53.00	3.4X					e	17	32.50		PMO		84.90	112	eP	06	16.00	0.3
QASM		79.98	295	eP	05	52.00	1.6	DSI		82.72	303	eP	06	05.00	0.4			1.2s		95.00nm			5.9mb
MLR		80.01	319	eP	05	51.00	0.7	KDZ		82.78	316	eP	06	06.00	1.3	TNS		84.92	331	ePc	06	16.20	0.7
KRA		80.02	325	eP	05	49.40	-0.7	PLD		82.88	317	eP	06	07.00	1.8	GOL		84.94	44	ePd	06	15.60	-0.5
		1.1s		430.00nm			6.3mb	RSON		82.89	31	ePd	06	03.60	-1.5		Z	20s		12.50um			6.3Msz
	Z	18s		30.00um			6.7Msz			1.2s		151.20nm			6.0mb	BHG		84.94	327	eP	06	14.00	-1.6
	E	18s		41.00um					Z	20s		16.95um			6.4Msz					i	06	17.00	9kmX
				e	05	54.10	15kmX	PGB		82.89	318	eP	06	06.00	0.6	GLD		84.99	44	P	06	16.00	-0.2
				e	15	54.00		VKA		82.97	326	ePc	06	07.00	1.4		Z	20s		12.00um			6.3Msz
SBB		80.26	55	eP	05	52.00	0.2			3.0s		1343.00nm			6.6mb	AFR		85.03	115	eP	06	22.00	5.7X
PAS		80.33	55	iPc	05	52.59	0.5		Z	13s		26.40um			6.8MszX			1.2s		170.00nm			6.1mb
				e	05	55.08						iPcP	06	13.30		TPT		85.10	112	eP	06	17.00	0.3
				epPc	05	57.06	14kmX					ePP	09	17.50				1.2s		85.00nm			5.8mb
				ePcP	06	00.00						e	09	25.00		PPT		85.20	115	eP	06	23.00	5.8X
				esPd	06	00.37						LR	50	45.00				1.2s		135.00nm			6.0mb
				ePP	08	40.00		RDO		83.04	316	eP	06	06.50	0.5	KBA		85.21	326	iPc	06	16.30	-0.9
				iSKS	16	00.00		ELL		83.20	310	eP	06	07.00	-0.1			0.7s		34.50nm			5.7mb
				iS	16	00.61		GLA		83.23	54	eP	06	07.00	-0.3					i	06	20.10	12kmX
				ePS	16	41.72		SOP		83.28	325	iP	06	09.90	2.7X					i	06	24.50	
				eHPS	16	43.92		MOX		83.30	329	ePc	06	08.00	0.8					iPP	09	39.00	
				ePPS	16	54.00				1.7s		319.00nm			6.2mb					i	09	43.30	
				e	18	31.00			Z	16s		35.30um			6.8MszX	VAH		85.24	112	eP	06	18.00	0.6
				eSS	21	16.00			N	18s		41.30um						1.2s		85.00nm			5.8mb
				eSSS	25	02.00			E	18s		45.00um				TOD		85.26	330	eP	06	17.11	0.0
				iLg	27	00.00						i	16	26.00		PAE		85.26	115	eP	06	23.00	5.5X
				eLR	30	02.00		BEO		83.36	321	e(P)	06	08.00	0.4			1.2s		135.00nm			6.0mb
REY		80.36	352	e(P)	05	55.50	3.9X					i	06	13.00	16kmX	PPN		85.29	115	eP	06	24.00	6.4X
MWC		80.37	55	eP	05	51.00	-1.5	VTS		83.39	318	iP	06	10.00	1.9			1.2s		80.00nm			5.8mb
SPC		80.47	324	eP	05	52.50	-0.2	EZN		83.43	314	iP	06	07.50	-0.6	FUR		85.32	328	iPc	06	19.00	1.5
				i	06	00.40	25kmX	HOF		83.44	329	eP	06	07.30	-0.7	RUV		85.40	112	eP	06	19.00	0.8
				i	06	26.70		WIT		83.57	333	eP	06	11.00	2.5	LJU		85.42	325	eP	06	18.50	0.5

20d 07h

			ePP	09	44.00		DUI	88.68	322	P	06	35.20	1.1	UYO	95.02	42	e(P)	07	04.00	0.6
VBY	85.47	324	eP	06	19.00	0.8	AQU	88.70	323	P	06	36.90	2.8X	HBVT	96.00	23	P	07	07.60	-0.2
ENN	85.48	332	eP	06	18.50	0.3	ORX	88.71	328	P	06	35.31	1.1	TOL	98.41	332	eP	07	25.00	6.3X
	1.5s	367.00nm			6.4mb		ORO	88.72	328	P	06	36.30	2.1				iPP	11	29.00	
			e	06	20.50	6kmX	BOB	88.74	327	P	06	34.50	0.2	ASMO	100.48	331	iPdiff	07	30.00	1.9
			e	06	24.50		BDI	88.75	326	P	06	35.70	1.3	AAPN	100.67	331	ePdiff	07	31.00	2.0
			e	06	25.00		AZI	88.95	323	P	06	35.50	0.3	APHE	100.80	331	iPdiff	07	31.00	1.4
			e	09	43.00		SDI	88.97	322	Pc	06	35.10	-0.3	ALOJ	100.84	331	iPdiff	07	31.00	1.3
ABH	85.55	331	eP	06	18.72	0.1	PII	89.05	326	P	06	34.50	-1.1	AVE	105.47	331	ePKP	12	11.00	7.0X
MEM	85.57	332	P	06	19.00	0.4	SGO	89.05	321	P	06	35.30	-0.4				i	12	43.50	
TVO	85.58	115	eP	06	25.00	5.8X	ROI	89.10	319	P	06	33.50	-2.6	BCAO	112.09	292	ePKPd	12	23.70	6.7X
	1.2s	160.00nm			6.1mb		CSI	89.10	320	P	06	38.10	2.1		0.8s		7.00nm			
NEO	85.58	316	eP	06	18.00	-1.0	LOR	89.11	331	eP	06	34.30	-1.6				id	12	45.10	
KAP	85.67	311	eP	06	22.00	2.6		1.2s	83.30nm			5.9mb					ic	13	03.40	
APE	85.70	313	eP	06	21.00	1.4	TDS	89.16	320	P	06	38.60	2.3				ic	14	09.70	
CEY	85.70	325	ePd	06	19.50	0.1	MMN	89.18	320	P	06	38.50	2.2	KRI	115.36	267	ePKP	12	25.00	1.6
OHR	85.72	318	iP	06	18.50	-1.2	MGR	89.23	320	P	06	37.30	0.7				ipPKP	13	24.00	
	1.2s	0.27nm			3.3mb	X	LBF	89.29	331	eP	06	35.00	-1.8	LSZ	115.73	269	iPKP	12	26.50	2.4
			i	07	14.20	229kmX		1.2s	47.60nm			5.6mb		BUL	117.83	264	iPKPc	12	27.30	-0.7
			iPP	09	42.90		PCP	89.32	327	P	06	37.25	0.2				ipPKP	13	44.30	
			i	30	40.50		LPG	89.35	329	eP	06	35.90	-1.6	SLR	120.71	258	iPKPd	12	32.30	-1.1
KZN	85.73	317	eP	06	20.00	0.2		0.7s	43.05nm			5.8mb			0.9s		33.61nm			
VOY	85.73	325	eP	06	18.30	-1.4	RSP	89.40	328	P	06	39.31	1.8	PRY	121.88	258	ePKP	12	36.20	0.6
SDA	85.80	320	eP	06	21.20	1.3	SSF	89.42	332	eP	06	35.70	-1.7		0.6s		7.14nm			
FVI	85.83	326	P	06	18.90	-1.1		1.2s	63.95nm			5.8mb		KSR	121.89	259	ePKP	12	23.70	-11.9X
RUP	85.88	331	eP	06	19.71	-0.6	RDP	89.48	323	P	06	39.70	1.9		0.9s		11.54nm			
SCE	85.98	327	ePc	06	16.20	-4.8X	FLN	89.49	335	eP	06	35.90	-1.8	BFS	122.43	258	ePKP	12	31.00	-5.6X
RIY	86.01	325	eP	06	20.20	-0.7		1.1s	56.15nm			5.7mb			0.7s		34.25nm			
TRI	86.03	325	iPd	06	20.40	-0.6	LDF	89.50	334	eP	06	36.20	-1.5	BLF	123.83	256	ePKP	12	42.50	3.2X
			i	09	48.30			1.1s	58.60nm			5.8mb		SHGH	124.27	308	ePKP	12	47.00	6.7X
KBN	86.05	318	iPc	06	21.50	0.3	CKI	89.53	327	P	06	38.70	0.8	KOGH	124.28	309	ePKP	12	44.00	3.6X
TIR	86.07	319	eP	06	23.00	1.7	CZI	89.59	319	P	06	37.60	-0.7	KUK	124.28	309	ePKP	12	47.00	6.6X
KOT	86.15	304	eP	06	24.00	2.1	SMF	89.62	331	eP	06	36.50	-1.9	SPA	124.53	180	iPKPc	12	39.70	0.3
BERA	86.47	318	eP	06	23.70	0.4		1.2s	80.35nm			5.8mb			0.9s		36.82nm			
LSK	86.49	318	eP	06	24.00	0.5	AVF	89.70	331	eP	06	37.00	-1.7		Z 20s		10.63um			6.5Msz
HLW	86.52	304	eP	06	23.50	-0.2	GRI	89.72	319	P	06	40.93	1.9				e	14	30.20	
			epP	06	35.20	38kmX		0.1s	5.50nm			5.8mb		WEGH	124.71	308	ePKP	12	43.00	1.8
			ePP	09	56.00		FIN	89.73	327	P	06	36.02	-2.9X	TIC	126.82	314	PKP	12	45.96	0.7
			ePPP	12	06.00		BNI	89.73	329	P	06	39.50	0.4	KIC	126.87	313	PKP	12	46.18	0.8
			eS	17	00.00		MAO	89.75	324	P	06	40.50	1.5	LIC	127.15	313	PKP	12	46.52	0.6
			e	19	00.00		RRL	89.79	328	P	06	38.38	-1.1		Z 20s		6.50um			6.3Msz
DOU	86.53	333	Pc	06	25.20	1.8	ROB	89.81	327	P	06	37.36	-2.0	AIA	146.32	162	e(PKP)	13	32.00	12.5X
	1.0s	50.00nm			5.7mb		DOI	89.92	328	P	06	39.80	-0.1	ARE	147.04	64	ePKP	13	24.00	1.5
			SKS	16	58.00		GRR	89.94	335	eP	06	38.30	-1.5	ZOBO	149.37	60	PKP	13	26.30	-0.2
HVAR	86.57	322	eP	06	24.10	0.4		1.1s	127.00nm			6.1mb			1.0s		132.50nm			
TPE	86.72	318	eP	06	25.40	0.9	PZZ	89.98	328	P	06	38.59	-1.7				SKS	20	32.00	
CTI	86.76	326	P	06	23.50	-1.3	ENR	90.06	328	P	06	39.92	-0.6				LR	05	00.00	
CDF	86.82	330	eP	06	23.50	-1.5	BGF	90.09	332	eP	06	38.80	-1.7	LPB	149.56	60	PKPd	13	29.50	2.9X
	1.3s	198.55nm			6.2mb			1.5s	88.80nm			5.8mb			Z 20s		13.48um			6.7Msz
NPS	86.83	311	eP	06	28.00	2.8X	STV	90.09	328	P	06	39.31	-1.4				LR	04	45.00	
FEL	86.94	330	eP	06	24.92	-0.7	IMI	90.10	327	P	06	39.92	-0.8	CCH	151.52	59	PKP	13	32.70	3.3X
SRN	87.01	318	eP	06	27.80	1.9	LPF	90.30	335	eP	06	40.20	-1.3	LCCH	154.49	96	ePKP	13	35.00	2.3
DMU	87.03	341	eP	06	28.40	2.6		0.9s	85.15nm			6.0mb		LNV	154.71	97	ePKP	13	33.00	0.1
KEK	87.24	318	eP	06	30.00	2.9X	SBF	90.34	327	eP	06	39.10	-2.7	TACH	155.04	96	ePKP	13	34.00	0.5
ANMO	87.43	49	ePc	06	29.44	1.1	SOI	90.46	319	P	06	42.50	0.2	SAN	155.23	96	ePKP	13	35.00	1.3
	Z 20s	11.70um			6.3Msz		MAF	90.48	332	eP	06	40.90	-1.4	CHCH	155.33	97	ePKP	13	35.00	1.1
			epPc	06	33.91	14kmX		1.5s	167.15nm			6.1mb		BAO	159.92	21	ePKP	13	38.50	-1.5
			esPd	06	36.39		TCF	90.56	332	eP	06	41.30	-1.4				e	14	18.40	
ALQ	87.44	49	eP	06	26.60	-1.8		1.5s	120.15nm			6.0mb			S.D. = 1.3		on 380 of 442 obs.			
	1.5s	83.33nm			5.8mb		PGF	90.66	326	eP	06	40.90	-2.5	---						
	Z 22s	13.80um			6.3Msz			1.2s	56.55nm			5.7mb		*	FEB 20, 1990 07h 16m 30.02± 1.52s					
			pP	09	51.50		LSF	90.86	332	eP	06	42.30	-1.8		5.492 S ±10.7km 152.376 E ±25.6km					
DLE	87.47	340	eP	06	29.20	1.3	FRF	90.93	328	eP	06	41.60	-2.8X		DEPTH = 33.0km (normal)					
	1.0s	174.00nm			6.3mb			1.3s	122.75nm			6.1mb			4.4mb (2 obs.)					
BSF	87.48	330	eP	06	26.20	-2.0	LMR	91.17	328	eP	06	43.20	-2.3		NEW BRITAIN REGION					(192)
	1.5s	104.45nm			5.9mb			1.3s	191.35nm			6.3mb								
VLI	87.48	314	eP	06	32.50	4.2X	MFF	91.19	333	eP	06	44.20	-1.4	RAB	1.31	351	iPd	16	52.00	-0.1
HAU	87.52	331	eP	06	26.70	-1.6		1.0s	116.00nm			6.2mb		PMG	6.48	233	eP	18	05.50	-0.1
	1.5s	104.45nm			5.9mb		RJF	91.65	332	eP	06	46.60	-1.1	CTA	15.68	202	eP	20	18.00	7.7X
VAM	87.60	312	eP	06	29.50	0.6		1.1s	114.75nm			6.2mb					e	20	55.00	
SAL	87.60	327	P	06	30.80	2.1	CAF	91.75	331	eP	06	47.30	-0.9	QIS	19.45	218	eP	20	55.00	-1.9
DCN	87.62	341	eP	06	29.10	0.5	PZI	91.84	319	P	06	51.31	2.5	RMO	21.16	189	eP	21	15.00	0.2
	1.2s	272.00nm			6.4mb			1.0s	80.00nm			6.1mb		MTN	22.20	249	eP	21	25.00	-0.2
ITM	87.77	315	eP	06	28.00	-1.7	LFF	92.25	332	eP	06	49.60	-0.9	WB5	22.61	229	eP	21	30.00	0.6
MDI	87.84	327	P	06	31.00	1.2		1.2s	148.75nm			6.3mb		WRA	22.67	229	Pc	21	30.90	1.0
VLS	87.86	316	eP	06	32.50	2.4	LPO	92.29	332	eP	06	49.60	-1.1		0.5s		5.60nm			4.3mb
RSM	87.98	325	P	06	31.80	1.3		1.3s	115.55nm			6.1mb		ASPA	25.36	223	iPd	21	56.50	0.6
SCH	88.07	15	eP	06	32.00	1.2	FKO	92.58	43	iPd	06	52.50	0.3		0.6s		8.00nm			4.5mb
	1.1s	132.00nm			6.2mb		AAE	93.43	283	eP	07	04.50	7.8X		S.D. = 1.1		on 8 of 9 obs.			
VAI	88.18	328	P	06	31.20	-0.2	CCM	93.77	38	eP	06	59.10	1.5	---						
SFI	88.27	325	P	06	32.90	1.0				epPd	07	03.08	12kmX		FEB 20, 1990 07h 17m 51.81± 0.35s					
PGD	88.37	325	P	06	32.40	-0.2				esP	07	05.56			34.595 N ± 7.0km 139.243 E ± 5.2km					
ECP	88.40	340	eP	06	34.20	1.8				eHPP	10	42.45			DEPTH = 11.4km (4 depth phases)					
	1.1s	348.00nm			6.6mb					iPP	10	45.21			5.0mb (18 obs.)					
CRE	88.45	325	P	06	33.30	0.4	EPF	94.01	331	eP	06	56.90	-1.8		NEAR S. COAST OF HONSHU, JAPAN					(230)
ASS	88.52	324	P	06	34.90	1.6		1.1s	45.20nm			5.8mb								
MME	88.60	326	P	06	33.50	-0.4	FVM	94.24	37	P	06	59.00	-0.8	IIDJ	1.40	309	P	18	16.70	-0.6

CHJJ	1.46	352	P	18	17.40	-0.7
KAKJ	1.78	25	P	18	21.80	-0.8
MAT	2.12	337	iPc	18	28.50	1.0
			iS	18	55.90	
YAMJ	3.63	10	eP	18	49.30	0.3
OFUJ	4.88	23	P	19	06.60	-0.2
			S	20	03.10	
SHK	5.42	271	eP	19	13.00	-1.4
SHNJ	6.74	268	eP	19	32.90	-0.2
			S	20	50.60	
KUMJ	7.32	256	eP	19	41.00	-0.1
			S	21	03.70	
KAGJ	7.80	246	P	19	47.60	-0.3
			S	21	15.80	
CN2	14.09	315	Pd	21	18.00	4.7X
SNY	14.26	305	eP	21	20.40	4.8X
SSE	15.57	262	P	21	44.40	11.6X
	1.4s		60.00nm		5.4mb	
			PcS	22	27.50	
BJI	19.12	293	eP	22	19.00	1.9
WHN	21.35	266	P	22	42.00	1.0
TIY	21.84	286	eP	22	45.30	-0.8
LZH	28.82	283	P	24	06.00	13.9X
GYA	29.12	263	P	23	54.40	-0.4
CD2	29.97	273	eP	24	01.30	-1.1
WMQ	40.42	299	P	25	36.50	4.9X
GUN	45.67	277	P	26	15.20	0.5
	0.8s		33.00nm		5.4mb	
PKI	46.18	277	P	26	18.60	-0.2
	0.6s		10.00nm		5.0mb	
KKN	46.20	277	P	26	18.80	0.0
	0.8s		26.00nm		5.3mb	
DMN	46.42	277	P	26	20.40	-0.1
GKN	46.65	278	P	26	22.00	-0.2
	0.8s		28.00nm		5.4mb	
WB5	54.37	186	eP	27	19.20	-1.6
WRA	54.44	186	Pc	27	23.80	2.6
	0.7s		7.00nm		4.8mb	
HYB	56.38	269	eP	27	37.50	1.9
ASPA	58.16	186	iPc	27	47.10	-0.8
	0.6s		7.00nm		4.9mb	
GBA	59.27	266	Pc	27	54.70	-1.1
	1.0s		10.50nm		4.9mb	
MBC	59.35	16	eP	27	54.50	-1.2
	1.0s		12.00nm		5.0mb	
KOD	61.07	262	eP	28	11.00	2.4
MAIO	63.15	297	eP	28	25.00	3.1X
SUF	69.36	333	eP	29	03.00	2.0
NEW	73.11	43	P	29	26.00	2.1
WDC	73.95	52	eP	29	28.80	0.0
BKS	75.59	54	e(P)	29	38.50	0.1
	1.2s		50.00nm		5.5mb	
NB2	75.74	337	P	29	37.80	-1.0
	1.4s		37.60nm		5.3mb	
FFC	76.70	31	eP	29	44.00	-0.3
	1.3s		32.00nm		5.2mb	
CMB	76.73	53	eP	29	44.60	-0.2
			e	29	48.20	12km
PRS	77.01	55	eP	29	46.20	-0.2
LRM	77.13	43	eP	29	47.40	0.3
KVN	77.65	51	eP	29	50.00	-0.1
			e	29	54.00	13km
TNP	78.77	51	P	29	56.60	0.3
	0.8s		5.88nm		4.7mb	
ISA	79.33	54	eP	30	01.00	1.8
FRB	79.54	12	eP	29	59.00	-0.6
SBB	80.33	55	eP	30	04.00	-0.5
PAS	80.40	55	eP	30	05.00	0.1
BW06	80.63	44	P	30	04.00	-2.2
	1.0s		10.00nm		4.8mb	
KSP	81.22	327	eP	30	12.50	3.7X
PLM	81.75	55	eP	30	14.00	1.8
BAR	82.28	56	eP	30	14.00	-0.7
CLL	82.31	329	iPd	30	18.00	3.5X
RSSD	82.82	40	P	30	16.00	-1.6
GLA	83.30	54	eP	30	20.00	-0.1
PV09	83.58	47	eP	30	21.50	-0.2
			pP	30	25.10	11km
KHC	83.67	328	iP	30	23.00	1.4
	1.0s		7.00nm		4.8mb	
GRF	84.27	329	eP	30	26.00	1.4
			e	30	29.20	10km
			e	30	34.50	
GOL	85.03	44	P	30	28.00	-0.9
	0.9s		6.44nm		4.9mb	
KBA	85.30	326	eP	30	35.00	5.0X
	0.8s		6.10nm		4.9mb	
ANMO	87.51	49	P	30	42.00	0.9
	1.0s		5.00nm		4.8mb	
ALQ	87.52	49	eP	30	43.10	1.9
	1.3s		10.58nm		5.0mb	
TIC	126.89	313	PKP	36	55.70	-2.1
KIC	126.94	313	PKP	36	54.60	-3.3X
LIC	127.22	313	PKP	36	55.80	-2.7
ARE	147.09	65	ePKP	37	38.00	3.0X
LPB	149.62	61	PKP	37	44.80	5.7X
CCH	151.58	59	PKP	37	51.70	9.8X
	S.D. = 1.2		on 55 of 68 obs.			

FEB 20, 1990 08h 43m 11.19± 0.43s
36.189 N ± 5.0km 27.063 E ± 4.5km
DEPTH = 10.0km (geophysicist)
4.3mb (10 obs.)
DODECANESE ISLANDS (369)
ML 4.3 (ATH), 4.3 (CSS).

KAP	0.64	172	ePg	43	25.00	0.9
YER	1.36	46	iPn	43	35.50	-0.7
NPS	1.50	232	ePb	43	40.00	1.9
APE	1.51	306	ePb	43	40.00	1.6
SMG	1.53	353	ePb	43	38.50	0.0
CIN	1.63	30	eP	43	44.00	4.0X
KSL	2.04	91	ePb	43	46.70	0.7
IZM	2.21	4	ePn	43	46.90	-1.6
ELL	2.36	75	iPn	43	52.10	1.4
VAM	2.46	252	ePb	43	55.50	3.6X
KHL	2.90	42	ePn	43	59.00	0.7
BCK	3.10	65	ePn	44	02.90	1.8
PRK	3.12	349	ePn	44	00.50	-0.7
ATH	3.21	305	ePg	44	13.00	10.3X
VLI	3.37	280	ePn	44	06.00	1.1
DST	3.63	19	ePn	44	12.00	3.4X
EDC	4.20	8	ePn	44	16.00	-0.7
BNT	4.21	9	ePn	44	17.00	0.1
ITM	4.25	285	ePn	44	21.50	4.1X
NEO	4.35	317	ePn	44	19.20	0.3
PPCY	4.50	105	e(P)	44	20.50	-0.4
MFT	4.59	2	ePn	44	25.00	2.6
GPA	4.83	31	ePn	44	30.00	4.4X
RDO	5.09	347	ePn	44	28.00	-1.3
CSS	5.25	102	ePn	44	30.50	-1.2
			eSn	45	29.50	
VLS	5.54	293	ePn	44	41.00	5.3X
BBTK	5.79	49	eP	44	40.00	0.7
KZN	5.85	316	ePn	44	40.00	-0.1
VAY	6.21	327	eP	44	46.40	1.3
KEK	6.73	304	ePn	44	47.50	-5.0X
OHR	6.94	317	eP	44	56.30	0.9
	1.3s		0.05nm		2.5mb X	
CZI	9.17	293	P	45	23.80	-2.7X
KBA	14.93	321	iPd	46	51.30	7.3X
	1.0s		23.20nm		4.6mb	
KHC	16.26	327	Pc	47	03.70	2.5
LPG	17.92	307	eP	47	23.40	1.1
CDF	19.00	316	eP	47	35.10	-0.2
SMF	20.24	308	eP	47	49.20	0.1
LBF	20.29	309	eP	47	47.50	-2.2
LOR	20.48	310	eP	47	49.80	-1.8
	1.2s		17.85nm		4.3mb	
AVF	20.60	308	eP	47	51.10	-1.8
SSF	20.61	309	eP	47	51.30	-1.7
	1.0s		19.00nm		4.4mb	
BGF	20.84	307	eP	47	52.70	-2.7X
	0.9s		11.45nm		4.2mb	
MEM	20.92	320	Pc	47	56.00	-0.1
TCF	21.16	306	eP	47	58.60	-0.1
	1.1s		9.75nm		4.1mb	
DOU	21.38	318	Pc	48	01.80	1.0
	0.4s		7.80nm		4.5mb	
HFS	25.47	344	eP	48	38.60	-2.0
	0.5s		2.40nm		4.1mb	
			e	48	45.00	
BCAO	32.56	196	Pc	49	44.50	-0.3
	0.6s		10.00nm		4.9mb	
TIC	41.54	233	P	50	59.90	-0.7
KIC	41.58	232	P	51	00.00	-0.8
	0.8s		4.50nm		4.3mb	
LIC	41.87	232	P	51	02.80	-0.4
	0.9s		7.50nm		4.4mb	
GKN	48.84	82	P	51	57.00	-2.0
	S.D. = 1.3		on 40 of 51 obs.			

? FEB 20, 1990 08h 44m 11.68± 6.63s
31.334 S ±25.1km 68.262 W ±45.8km
DEPTH = 101.4 ± 55.7 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.18	271	iP	44	26.30	-0.2
CFA	0.27	176	iP	44	27.00	0.2
RTCB	0.48	252	iPd	44	28.00	0.2
			eS	44	39.00	
RTCV	0.58	204	iPc	44	28.30	-0.2
			(S)	44	40.20	
RTRS	1.55	318	iPc	44	39.00	0.0
	S.D. = 0.4		on 5 of 5 obs.			

FEB 20, 1990 09h 15m 22.84± 0.19s
46.922 N ± 4.4km 153.996 E ± 2.7km
DEPTH = 34.1km (6 depth phases)
5.6mb (69 obs.) 5.4Msz (2 obs.)
KURIL ISLANDS (221)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 17C
Centroid Location:
Origin Time 09:15:23.4 0.9
Lat 46.85N 0.12 Lon 154.74E 0.12
Dep 34.5 7.9 Half-duration 2.0
Moment Tensor; Scale 10**17 Nm
Mrr= 2.30 0.18 Mtt=-0.49 0.23
Mff=-1.81 0.22 Mrt=-0.10 0.45
Mrf=-1.68 0.50 Mtf=-1.35 0.26
Principal Axes:
T Val= 2.94 Plg=68 Azm= 72
N 0.13 15 204
P -3.08 16 298
Best Double Couple:Mo=3.0*10**17
NP1:Strike= 50 Dip=32 Slip= 120
NP2: 196 63 73

SAP	9.77	251	eP	17	55.00	11.0X
MAT	15.67	234	eP	18	59.00	-3.6X
MDJ	17.17	271	eP	19	20.50	-1.0
CN2	20.25	272	eP	19	53.40	-4.4X
	1.0s		100.00nm		5.1mb	
	Z 18s		11.40um		5.3Msz	
	E 14s		6.80um			
			pP	20	03.00	38km
			eS	23	35.00	
SHK	20.28	240	eP	19	57.50	-0.6
SNY	22.25	268	iPd	20	16.70	-1.3
	1.0s		100.00nm		5.2mb	
	Z 15s		12.30um		5.5MszX	
	N 14s		3.70um			
	E 14s		5.40um			
DL2	24.89	263	P	20	43.50	-0.2
	1.5s		500.00nm		5.9mb	
	Z 16s		1.80um		4.7MszX	
	E 13s		2.70um			
BJI	28.08	270	eP	21	12.50	-0.6
	2.0s		170.00nm		5.4mb	
	Z 15s		9.91um		5.5MszX	
	N 16s		5.40um			
			eS	25	48.00	
TIA	29.34	262	Pc	21	24.10	-0.4
	E 15s		2.70um			
SSE	29.73	250	P	21	27.50	-0.5
	1.0s		56.00nm		5.3mb	
NJ2	30.63	254	Pc	21	35.00	-0.9
	Z 15s		2.70um		5.0MszX	
	N 13s		2.80um			
	E 12s		2.10um			
HHC	30.89	274	Pd	21	38.00	-0.3
	Z 18s		8.20um		5.4Msz	
	N 14s		3.30um			
	E 14s		5.00um			
TIY	31.76	268	iPc	21	45.50	-0.4
	Z 16s		6.44um		5.4MszX	
	E 15s		3.70um			
			pP	21	50.50	17kmX
TTA	31.89	42	ePc	21	46.60	-0.2
SVW	31.92	45	ePc	21	47.40	0.3
BTO	32.05	275	eP	21	47.00	-1.5
	N 16s		4.30um			
	E 16s		2.40um			
			eS	26	51.00	
IMA	33.31	36	ePc	21	58.70	-0.5
	1.4s		52.30nm		5.2mb	
BRW	33.54	26	ePc	22	01.10	0.2
KDC	33.58	51	eP	22	00.00	-1.4
WHN	34.56	256	Pc	22	10.00	-0.2

20d 09h

		0.8s		50.00nm			5.5mb
	N	14s		1.80um			
	E	15s		6.00um			
				eS	27	40.00	
PMR		35.05	44	eP	22	14.00	-0.1
		1.6s		32.30nm			5.0mb
FBA		35.65	38	ePc	22	19.30	0.2
QZH		35.65	244	iPc	22	20.50	1.0
		4.0s		1100.00nm			6.1mb X
XAN		36.13	266	Pc	22	23.30	-0.3
	N	14s		4.00um			
	E	14s		3.50um			
TOA		36.43	43	eP	22	26.50	0.7
LZH		38.49	272	Pc	22	43.50	0.0
		1.2s		220.00nm			5.9mb
	Z	16s		3.70um			5.3MszX
	N	16s		2.10um			
	E	15s		3.90um			
				pP	22	50.00	22kmX
GTA		39.54	279	Pc	22	51.60	-0.6
	Z	14s		4.70um			5.5MszX
	E	13s		3.30um			
GZH		40.29	248	eP	22	59.40	1.1
INK		41.18	33	ePc	23	06.00	0.9
		1.0s		23.00nm			4.9mb
CD2		41.50	266	iPc	23	08.40	0.1
	Z	16s		2.20um			5.1MszX
	N	17s		3.70um			
				S	29	23.00	
GYA		42.34	258	P	23	15.80	0.5
				S	29	34.00	
MBC		44.23	20	ePc	23	30.50	0.6
		0.9s		16.00nm			4.8mb
WMQ		45.43	292	P	23	39.50	-0.5
				ScS	33	34.50	
QIZ		45.47	248	P	23	41.50	1.0
	N	20s		2.40um			
	E	20s		2.50um			
LSA		50.87	274	iPc	24	20.50	-2.4
LOE		51.90	254	eP	24	30.00	-0.3
CHG		52.75	257	ePc	24	37.20	0.5
		1.0s		48.25nm			5.4mb
SHL		52.98	269	iP	24	38.00	-0.5
				eS	32	05.50	
PNT		54.63	53	eP	24	51.00	0.8
		0.8s		18.00nm			5.2mb
KSH		55.18	293	P	24	54.50	0.1
GUN		55.59	275	P	24	58.00	0.2
EDM		55.76	47	ePc	24	57.20	-1.1
KKN		56.07	276	P	25	01.40	0.3
PKI		56.13	276	P	25	01.80	0.1
DMN		56.31	276	P	25	03.20	0.3
GKN		56.38	276	P	25	03.20	-0.1
DAG		56.50	358	iPc	25	01.60	-1.7
		1.0s		95.00nm			5.8mb
NEW		56.59	53	P	24	55.10	-9.3X
NNT		56.73	251	eP	25	16.30	10.6X
WDC		57.91	63	eP	25	14.20	0.5
MIN		58.62	63	eP	25	18.80	-0.1
ORV		59.16	64	eP	25	22.30	-0.2
BKS		59.73	66	e(P)	25	26.50	0.1
FFC		60.22	40	iPc	25	29.10	-0.4
		1.1s		34.00nm			5.4mb
SNG		60.26	247	eP	25	31.30	1.1
LRM		60.61	53	eP	25	32.20	-0.4
CMB		60.78	64	eP	25	34.10	0.4
NDI		60.96	282	iP	25	34.50	-0.4
PRS		61.23	67	eP	25	36.80	0.1
KVN		61.55	62	P	25	39.40	0.3
FRI		61.86	65	eP	25	40.70	-0.2
GDH		62.37	11	iPc	25	43.20	-0.6
		1.2s		46.88nm			5.5mb
IMW		62.66	54	P	25	46.80	0.3
TNP		62.70	63	P	25	46.80	0.1
		0.9s		11.07nm			5.0mb
ISA		63.47	65	eP	25	51.00	-0.7
DUG		63.97	58	P	25	54.70	-0.3
		1.0s		10.00nm			4.9mb
BW06		64.15	54	P	25	55.50	-0.7
		1.0s		10.00nm			4.9mb
SBB		64.50	66	eP	25	58.00	-0.4
PAS		64.64	67	eP	25	59.00	-0.2
MWC		64.66	66	eP	25	42.00	-17.6X
FRB		64.69	19	eP	25	57.00	-2.1
RVR		65.24	66	eP	26	01.00	-2.1
NUR		65.31	335	iP	26	02.00	-1.1
		0.7s		70.70nm			5.9mb
PEC		65.44	66	P	26	03.70	-0.7
MSU		65.44	59	P	26	05.30	0.7
PLM		65.98	66	eP	26	04.00	-4.1X
RSSD		66.25	50	P	26	08.90	-0.8
RSON		66.53	40	P	26	10.00	-1.1
		1.2s		72.89nm			5.6mb
BAR		66.55	67	eP	26	11.00	-0.5
QUE		66.74	290	iPc	26	12.80	-0.2
CTA		67.06	188	iPc	26	16.00	1.3
				e	26	24.50	27km
MAIO		67.31	299	eP	26	16.00	-0.4
GLA		67.45	65	ePd	26	17.90	0.6
				e	26	28.10	33km
AKU		67.56	356	eP	26	16.60	-0.7
		0.9s		63.87nm			5.7mb
HYB		67.60	272	iPc	26	17.50	-0.9
		1.0s		60.00nm			5.6mb
UPP		67.78	338	iPc	26	17.30	-1.5
		1.0s		300.00nm			6.3mb
NB2		68.26	342	P	26	21.00	-0.9
		1.3s		241.90nm			6.1mb
HFS		68.51	340	eP	26	21.60	-1.7
		1.1s		217.80nm			6.1mb
GOL		68.55	55	P	26	24.10	-0.2
		0.9s		19.70nm			5.2mb
WRA		68.88	200	Pd	26	25.60	-0.5
		1.2s		10.80nm			4.8mb
POO		70.04	276	iPc	26	36.80	3.4X
		0.9s		45.38nm			5.5mb
BOM		70.50	277	eP	26	34.50	-1.6
				eS	34	42.50	
GBA		71.03	270	Pd	26	39.20	-0.2
		1.0s		22.30nm			5.2mb
ALQ		71.23	59	iPc	26	41.10	0.4
		1.0s		12.50nm			4.9mb
ASPA		72.57	199	iPd	26	48.00	-0.3
		0.8s		13.00nm			5.0mb
IR7		72.91	304	iPc	26	51.50	1.0
SCH		72.94	23	eP	26	50.00	-0.2
IR1		73.07	304	eP	26	52.50	1.0
IR4		73.08	304	iPc	26	52.00	0.5
RMQ		73.22	185	eP	26	54.00	2.0
				e	27	05.00	36km
KOD		73.40	267	eP	26	53.50	-0.3
TAB		73.57	308	eP	26	55.00	0.7
KRA		75.56	331	eP	27	04.30	-1.0
SLY		75.83	307	iPd	27	07.00	-0.1
KER		75.87	305	eP	27	03.00	-4.6X
BIR		75.97	325	eP	27	08.00	0.3
KSP		76.02	334	iPc	27	07.50	-0.5
		1.0s		77.00nm			5.7mb
FKO		76.15	53	e(P)	27	08.60	-0.4
SPC		76.20	331	eP	27	09.30	0.0
EKA		76.31	347	P	27	09.30	-0.5
		1.5s		105.60nm			5.6mb
KVT		76.48	317	iP	27	11.50	0.7
MSL		76.52	309	iPd	27	13.50	2.5
				e	27	18.00	14kmX
CLL		76.56	336	iPc	27	10.20	-0.7
		1.3s		230.00nm			6.0mb
VRI		76.65	325	ePd	27	12.50	0.9
BRG		76.68	335	iPc	27	11.00	-0.7
		1.6s		110.00nm			5.6mb
				i	27	21.40	33km
TLB		77.19	324	ePc	27	15.50	1.0
MLR		77.27	325	iPd	27	15.00	-0.2
PRU		77.30	335	iPc	27	14.80	-0.3
		1.1s		91.80nm			5.7mb
KAS		77.31	318	iPc	27	16.30	0.9
ISR		77.33	325	ePc	27	16.50	1.1
PSZ		77.41	330	iP	27	15.90	0.0
MOX		77.54	337	iPc	27	16.50	0.1
		1.6s		179.00nm			5.8mb
				e	27	28.00	38km
HOF		77.77	336	iPc	27	17.60	-0.1
		1.4s		174.00nm			5.9mb
CMP		77.81	326	ePc	27	20.00	2.0
PSN		77.87	323	iPd	27	18.00	-0.3
BUD		78.09	331	eP	27	19.80	0.4
ZST		78.09	332	iP	27	19.80	0.3
				i	27	21.60	6kmX
				i	27	33.70	
				i	41	23.10	
BHD		78.18	306	iPd	27	22.50	2.3
DMU		78.25	349	eP	27	20.70	0.4
VKA		78.28	333	e(P)	27	21.00	0.5
KHC		78.35	335	iPc	27	21.30	0.4
		1.0s		57.00nm			5.5mb
GRF		78.51	336	iPc	27	22.50	0.7
		1.3s		325.00nm			6.2mb
WET		78.54	335	iPc	27	22.40	0.4
		1.4s		217.00nm			6.0mb
UYO		78.56	52	e(P)	27	22.00	-0.3
TNS		78.76	338	ePd	27	24.60	1.4
BZS		78.79	328	eP	27	19.00	-4.3X
DLE		78.80	348	eP	27	23.20	-0.1
		1.0s		81.00nm			5.7mb
DCN		78.84	349	eP	27	23.70	0.2
		0.9s		48.00nm			5.5mb
BBTK		78.99	318	iP	27	25.00	0.3
MEM		79.00	340	Pc	27	24.40	0.0
TOD		79.23	338	eP	27	25.74	0.0
ABH		79.30	339	eP	27	26.05	-0.1
PVL		79.41	324	iPd	27	27.00	0.3
SNF		79.49	341	P	27	27.00	0.0
RUP		79.59	339	eP	27	27.63	-0.1
GPA		79.74	320	eP	27	29.00	0.4
DOU		79.80	341	P	27	29.00	0.2
BHG		79.82	334	eP	27	28.70	-0.2
		1.3s		115.00nm			5.7mb
CTT		79.85	321	eP	27	28.60	-0.6
BEO		79.89	328	e(P)	27	29.30	0.0
YLV		79.92	320	iP	27	28.10	-1.6
GWF		80.11	338	P	27	30.19	-0.3
KBA		80.26	334	iPc	27	31.30	-0.2
		0.9s		162.00nm			6.0mb
DIM		80.31	324	iP	27	32.00	0.4
PGB		80.44	325	eP	27	34.00	1.7
PTJ		80.49	332	eP	27	32.10	-0.5
ZAG		80.55	332	iP	27	33.00	0.2
PLD		80.60	324	eP	27	33.00	-0.1
MFT		80.64	322	iP	27	33.80	0.3
KDZ		80.69	324	iPc	27	35.00	1.3
WLS		80.71	338	P	27	33.74	0.1
BNT		80.72	321	iP	27	33.80	0.0
CDF		80.73	338	P	27	33.89	0.1
EDC		80.76	321	iP	27	34.00	0.0
SCE		80.78	335	ePd	27	24.60	-9.6X
VTS		80.78	325	iPc	27	34.00	-0.3
LJU		80.82	333	eP	27	33.50	-0.7
FVI		80.86	334	P	27	34.20	-0.2
ECH		80.94	338	P	27	34.78	-0.1
SLE		81.01	337	ePc	27	35.20	0.0
VOY		81.03	333	eP	27	33.90	-1.5
FEL		81.03	338	eP	27	35.40	-0.1
RDO		81.07	323	eP	27	35.80	0.2
VBY		81.07	332	eP	27	35.90	0.4
CEY		81.12	333	eP	27	35.30	-0.6
OGA		81.13	335	iPc	27	36.80	0.7
		1.5s		95.00nm			5.6mb
VITF		81.23	339	P	27	36.41	0.1
SAX		81.25	336	ePc	27	37.20	0.4
MOF		81.28	338	P	27	36.79	0.0
ZLA		81.29	337	ePc	27	36.90	0.1
HAU		81.34	339	iPc	27	37.30	0.4
		1.2s		83.30nm			5.6mb
TRI		81.36	333	iPd	27	36.00	-1.0
BSF		81.39	338	P	27	36.97	-0.3
MMB		81.42	325	ePc	27	38.00	0.5
KKB		81.44	325	iP	27	37.00	-0.6
RIY		81.49	332	eP	27	36.70	-1.0
BBS		81.54	338	P	27	38.18	0.1
OSS		81.54	336	ePc	27	38.80	0.6
CTI		81.69	335	P	27	38.20	-0.7
KHL		81.69	319	eP	27	38.60	-0.4
LLS		81.69	337	ePc	27	39.60	0.5
LOMF		81.82	338	P	27	39.99	0.4
EZN		81.84	322	iP	27	38.60	-1.0
VDL		81.92	336	ePc	27	41.10	0.9
SKO		81.99	326	iPc	27	40.80	0.4
		1.2s		1140.00nm			6.8mb X
				i	28	18.00	148kmX
VAY		82.11	325	iPc	27	40.80	-0.2
		1.4s		0.19nm			2.9mb X
FLN		82.15	343	iPc	27	41.40	0.3
		1.2s		56.55nm			5.5mb
LDF		82.24	343	iPc	27	41.90	0.3
		1.2s		41.65nm			5.4mb
TMA		82.43	336	ePc	27	42.90	0.0
PLG		82.57	324	eP	27	43.00	-0.5
GRR		82.58	343	iPc	27	43.80	0.4
		1.3s		115.55nm			5.8mb
SHBJ		82.59	310	Pd	27	44.00	0.2
LOR		82.63	340	iPc	27	44.00	0.3

	0.8s	52.45nm		5.7mb	
VAI	82.68	336 Pc	27 43.90	0.0	
MMK	82.73	337 ePc	27 45.40	0.9	
HVAR	82.73	330 eP	27 42.80	-1.4	
ELL	82.81	318 eP	27 44.60	-0.3	
DIX	82.85	337 ePc	27 46.10	0.9	
LBF	82.87	340 iPc	27 45.20	0.2	
	1.3s	57.75nm		5.5mb	
SSF	82.90	340 iPc	27 45.70	0.6	
	0.9s	36.05nm		5.5mb	
LPF	82.96	343 iPc	27 45.90	0.6	
	1.4s	113.25nm		5.8mb	
OHR	82.97	326 eP	27 44.00	-1.6	
	1.0s	0.12nm		2.9mb X	
EMS	82.98	338 ePc	27 46.40	0.6	
ORX	83.11	337 P	27 46.17	-0.2	
AVF	83.19	340 iPc	27 47.10	0.5	
SMF	83.22	340 iPc	27 47.20	0.5	
KZN	83.29	325 eP	27 45.00	-2.3	
RYD	83.31	299 iPc	27 47.50	-0.1	
RSM	83.37	333 Pc	27 48.40	1.0	
KSL	83.47	318 eP	27 47.90	-0.3	
BOB	83.50	335 P	27 48.90	0.6	
BGF	83.53	340 iPc	27 48.90	0.6	
	1.0s	29.00nm		5.4mb	
SFI	83.56	333 Pc	27 49.60	1.2	
BURJ	83.56	311 Pc	27 48.90	0.1	
LPG	83.56	337 iPc	27 50.20	1.3	
	1.1s	75.70nm		5.7mb	
MME	83.66	334 Pc	27 50.70	1.4	
RSP	83.75	337 P	27 49.97	0.4	
CRE	83.79	333 P	27 50.00	0.2	
BDI	83.81	334 P	27 51.50	1.7	
MDSJ	83.81	311 Pc	27 50.20	0.1	
MAF	83.91	340 iPc	27 51.30	1.0	
	1.2s	110.10nm		5.9mb	
TCF	83.93	341 iPc	27 51.50	1.1	
	1.2s	53.55nm		5.6mb	
PCP	83.96	336 P	27 50.17	-0.4	
BNI	83.99	337 Pc	27 51.80	0.9	
ASS	84.07	333 P	27 56.60	5.4X	
RRL	84.09	337 P	27 52.02	0.5	
OASM	84.09	302 eP	27 52.00	0.5	
LSF	84.12	341 iPc	27 52.00	0.7	
	1.3s	97.50nm		5.8mb	
CKI	84.14	336 P	27 51.00	-0.4	
MFF	84.14	342 iPc	27 52.10	0.7	
	1.0s	28.00nm		5.4mb	
OUTJ	84.20	311 Pc	27 52.30	0.2	
DOI	84.35	337 P	27 55.80	3.2X	
FIN	84.36	336 P	27 51.61	-1.0	
ROB	84.37	336 P	27 52.02	-0.7	
PZZ	84.39	337 P	27 51.91	-0.9	
AQU	84.48	332 Pc	27 56.20	3.0X	
ENR	84.56	337 P	27 49.97	-3.7X	
KEK	84.56	326 eP	27 53.00	-0.6	
STV	84.57	337 P	27 51.71	-2.0	
IMI	84.72	336 P	27 54.17	-0.3	
DUI	84.76	331 P	27 55.20	0.6	
AZI	84.80	332 P	27 55.60	0.9	
SBF	84.89	336 iPc	27 55.70	0.4	
	1.0s	82.00nm		5.9mb	
SDI	84.93	331 P	27 54.60	-0.9	
RJF	85.02	341 eP	27 56.90	1.1	
	1.2s	68.45nm		5.7mb	
CAF	85.25	340 eP	27 58.40	1.4	
	1.2s	53.55nm		5.6mb	
FRF	85.39	337 eP	27 58.00	0.3	
SGO	85.45	330 P	27 57.50	-0.5	
ORI	85.49	329 P	27 59.30	1.0	
LFF	85.54	341 eP	27 59.70	1.3	
	1.5s	156.70nm		6.0mb	
VLS	85.59	325 eP	27 58.00	-0.8	
LMR	85.63	337 iPc	27 59.80	0.9	
	1.1s	87.90nm		5.9mb	
PGF	85.66	335 iPc	27 59.50	0.3	
	1.3s	54.15nm		5.6mb	
LPO	85.68	341 eP	28 00.10	1.0	
	1.1s	41.50nm		5.6mb	
MGR	85.74	329 P	27 58.50	-1.0	
CSI	85.80	329 P	27 59.60	-0.2	
MMN	85.81	329 P	27 59.20	-0.6	
TDS	85.89	329 P	28 00.70	0.5	
VLI	85.89	323 eP	27 58.50	-1.8	
ITM	85.91	324 eP	27 59.50	-0.9	
AYN	86.13	309 eP	28 02.50	0.9	
CZI	86.35	329 P	28 00.50	-2.0	
SOI	87.39	328 P	28 07.60	0.0	
KMSA	87.86	298 iPc	28 10.30	0.1	
GIB	88.19	329 P	28 14.10	2.5	
TOL	91.39	343 iPc	28 26.50	0.1	
	1.2s	62.50nm		5.9mb	
KIC	123.70	334 (PKP)	34 18.00	-0.7	
SLR	132.48	277 ePKP	34 33.00	-2.4	
ZOBO	133.71	63 PKPd	34 39.10	0.6	
	2.0s	33.48nm			
LPB	133.93	63 PKP	34 40.00	1.3	
	1.0s	14.00nm			
BAO	143.84	38 ePKP	34 52.00	-4.4X	
	S.D. = 0.8	on 265 of 281 obs.			
*	FEB 20, 1990	09h 48m 29.56± 0.74s			
	34.546 N ± 8.6km	139.212 E ± 9.7km			
	DEPTH = 10.0km	(geophysicist)			
	4.2mb (2 obs.)				
NEAR S. COAST OF HONSHU, JAPAN			(230)		
IIDJ	1.42	312 iPd	48 55.00	-0.4	
CHJJ	1.51	353 iPd	48 55.40	-1.2	
KAKJ	1.83	25 P	48 59.40	-1.9	
MAT	2.15	338 eP	49 06.00	0.0	
		eS	49 33.00		
MTMJ	2.34	331 P	49 09.90	1.2	
NIIJ	2.69	356 P	49 13.70	0.0	
		S	49 47.10		
SHK	5.39	272 eP	49 51.50	-0.5	
BJI	19.11	293 eP	52 56.00	1.0	
WB5	54.32	186 eP	57 58.00	-0.4	
WRA	54.38	186 Pd	57 57.30	-1.5	
	1.1s	2.70nm		4.2mb	
INK	57.41	26 eP	58 20.00	-0.2	
KVN	77.70	51 eP	00 30.00	1.6	
TNP	78.82	51 eP	00 36.80	2.3	
	0.7s	1.78nm		4.2mb	
PV09	83.63	47 e(P)	01 00.00	0.0	
ZOBO	149.48	60 ePKP	08 24.00	6.9X	
	S.D. = 1.3	on 14 of 15 obs.			
	FEB 20, 1990	10h 39m 57.25± 0.32s			
	18.175 N ± 6.4km	94.705 E ± 4.6km			
	DEPTH = 44.4km	(3 depth phases)			
	4.9mb (19 obs.)	4.8Msz (1 obs.)			
BURMA			(296)		
CHG	4.07	80 ePg	40 57.10	-1.7	
		eSg	41 52.00		
BDT	4.20	102 ePg	40 56.00	-4.5X	
LOE	6.74	95 ePn	41 36.00	-0.2	
		eSg	42 56.00		
NNT	7.37	138 ePg	41 41.20	-3.9X	
		e	43 02.70		
SHL	7.81	341 iP	41 47.50	-3.8X	
		eS	43 15.00		
KMI	10.18	46 Pc+	42 29.00	5.0X	
	2.5s	0.90nm		3.5mb X	
Z	14s	3.90um		5.5MszX	
N	10s	8.00um			
E	10s	4.70um			
		sP	42 38.00		
		S	44 28.00		
LSA	11.92	345 P	42 44.20	-3.7X	
SNG	12.36	151 eP	42 53.80	0.5	
		eS	45 34.00		
GUN	12.64	322 Pc	42 53.40	-3.9X	
PKI	12.68	319 Pc	42 53.20	-4.6X	
DMN	12.89	318 Pc	42 56.80	-3.8X	
KKN	12.91	320 Pc	42 56.80	-4.0X	
GKN	13.46	318 Pc	43 03.60	-4.4X	
GYA	13.79	51 P	43 15.00	2.7	
N	11s	7.60um			
E	11s	7.10um			
IPM	14.86	155 ePc	43 29.50	3.3X	
CD2	15.11	31 eP	43 29.40	0.0	
		S	46 20.00		
HYB	15.40	270 eP	43 31.00	-2.3	
GBA	17.22	257 Pd	43 58.80	2.6	
	1.5s	54.40nm		4.5mb	
GZH	18.11	71 eP	44 09.60	2.3	
KOD	18.47	247 eP	44 11.80	-0.3	
NDI	19.13	306 eP	44 16.00	-3.6X	
		eS	47 38.00		
LZH	19.59	23 Pd	44 23.50	-1.3	
	1.6s	97.00nm		4.8mb	
Z	24s	3.40um		5.2MszX	
N	10s	1.35um			
E	10s	2.20um			
		pP	44 34.00	47km	
		S	48 01.00		
		sS	48 10.50		
POO	19.80	274 eP	44 30.70	3.7X	
		iS	47 54.60		
XAN	20.27	36 P	44 29.80	-2.1	
N	10s	2.50um			
E	10s	2.00um			
BOM	20.77	275 eP	44 15.00	-21.9X	
		eS	47 16.60		
GTA	21.62	11 P	44 44.20	-1.4	
Z	12s	1.80um		4.7MszX	
N	12s	1.30um			
WHN	21.68	52 eP	44 48.50	2.3	
N	11s	3.70um			
E	10s	1.64um			
TIY	24.90	35 P	45 17.20	-0.4	
N	13s	2.20um			
		S	49 39.00		
NJ2	25.79	53 eP	45 24.40	-1.5	
Z	13s	1.00um		4.5MszX	
N	11s	2.60um			
E	11s	1.50um			
BTO	25.95	27 eP	45 26.00	-1.4	
N	10s	2.40um			
E	10s	1.50um			
		epP	45 37.00	42km	
WMQ	26.24	348 Pc	45 30.00	-0.1	
Z	15s	8.60um		5.4MszX	
		pP	45 41.50	45km	
		PP	46 10.50		
		sS	50 11.00		
		ScS	56 25.00		
KSH	26.70	326 eP	45 37.00	2.6	
TIA	26.73	43 eP	45 35.00	0.5	
E	22s	11.20um			
HHC	26.85	29 eP	45 35.80	0.2	
Z	14s	1.80um		4.8MszX	
N	12s	2.00um			
E	12s	2.10um			
QUE	27.92	301 eP	45 46.00	0.3	
		eS	51 03.00		
BJI	28.61	36 eP	45 51.50	0.0	
	1.0s	36.00nm		5.0mb	
Z	12s	1.63um		4.9MszX	
E	10s	0.94um			
MAIO	35.88	307 eP	46 55.00	-0.2	
CN2	36.34	39 eP	47 00.50	1.7	
Z	20s	1.50um		4.8Msz	
IR4	42.29	303 eP	47 52.00	3.5X	
IR7	42.62	303 eP	47 50.00	-1.2	
WB5	54.27	132 eP	49 20.10	-1.3	
WRA	54.29	132 Pc	49 20.80	-0.8	
	1.1s	27.30nm		5.2mb	
ASPA	56.51	136 iPd	49 36.70	-0.9	
	0.8s	15.00nm		5.1mb	
Z	22s	0.62um		4.7MszX	
		LR	17 57.80		
KAS	56.52	308 iPd	49 37.30	-0.3	
BBTK	57.17	306 eP	49 41.00	-1.4	
QIS	58.48	129 eP	49 50.00	-1.5	
PMG	58.57	114 eP	49 50.00	-2.2	
ELL	59.35	302 eP	49 56.00	-1.6	
MLR	62.44	312 eP	50 19.00	0.6	
CTA	63.27	124 e(P)	50 24.00	0.0	
SUF	64.19	332 iP	50 29.00	-0.4	
KEV	65.40	339 eP	50 47.00	9.8X	
UPP	67.98	328 iP	50 54.30	0.7	
ZST	68.47	315 eP	51 03.60	6.7X	
RMO	68.73	129 eP	51 01.00	2.1	
KSP	68.85	318 eP	50 59.00	-0.2	
VBY	69.95	313 e(P)	51 07.00	0.9	
HFS	69.95	328 eP	51 04.70	-1.1	
	0.7s	12.10nm		5.0mb	
		e	51 09.00	14kmX	
PRU	70.02	317 eP	51 10.30	3.9X	
CZI	70.03	306 P	51 03.60	-3.0X	
BRG	70.33	318 iP	51 08.60	0.3	
	1.2s	22.00nm		5.0mb	
LJU	70.40	313 eP	51 09.00	0.2	
CEY	70.50	313 eP	51 09.50	0.0	
KHC	70.73	317 Pd	51 11.00	0.2	
VOY	70.84	313 eP	51 11.20	-0.4	
CLL	70.88	319 e(P)	51 12.00	0.4	
TRI	70.97	313 iPd	51 12.00	-0.2	

20d 10h

KBA	71.10	314	e(P)	51	12.50	-0.8
NB2	71.14	329	P	51	12.10	-0.9
	0.9s	12.60nm			4.9mb	
LSZ	73.47	247	iP	51	30.00	2.4
CAN	74.02	136	eP	51	37.00	6.6X
CDF	74.95	316	eP	51	35.10	-0.6
BCAO	75.50	270	ePd	51	42.00	2.6
	0.6s	5.00nm			4.6mb	
HAU	75.64	316	eP	51	38.90	-0.7
LPG	75.86	314	eP	51	40.90	-0.3
	0.8s	5.35nm			4.5mb	
FRF	76.33	312	eP	51	43.00	-0.5
	1.0s	16.00nm			5.0mb	
LMR	76.48	311	eP	51	44.90	0.6
	0.9s	9.85nm			4.8mb	
LBF	77.43	315	eP	51	48.80	-0.8
	0.9s	11.45nm			4.9mb	
LOR	77.44	316	eP	51	49.10	-0.5
	0.9s	4.90nm			4.5mb	
DAG	77.62	348	iPc	51	49.20	-0.8
	0.7s	12.33nm			5.0mb	
SSF	77.72	316	eP	51	50.80	-0.3
	1.0s	10.00nm			4.8mb	
MAF	78.55	315	eP	51	55.80	0.1
BRW	78.70	18	ePc	51	57.00	1.0
EKA	79.62	325	P	52	02.00	0.7
	0.8s	13.20nm			4.9mb	
LDF	79.70	318	eP	52	01.90	0.0
IMA	81.94	23	eP	52	14.20	0.7
MBC	83.54	8	eP	52	22.00	0.6
	1.0s	13.00nm			4.9mb	
FBA	84.66	22	eP	52	28.70	1.4
PMR	85.88	25	eP	52	34.50	1.1
	0.8s	6.80nm			4.9mb	
BAO	144.26	268	e(PKP)	59	23.00	-8.1X
S.D. = 1.2 on 69 of 90 obs.						

FEB 20, 1990 11h 07m 54.18± 0.33s
0.832 N ± 5.4km 127.250 E ± 8.0km
DEPTH = 212.4km (3 depth phases)
5.1mb (12 obs.)
HALMAHERA (267)

AAI	4.59	168	ePd	09	03.50	-0.8
			eS	09	56.00	
PCI	7.61	257	ePc	09	42.00	-1.3
			e(S)	10	27.50	
TSM	9.77	290	ePc	10	11.80	0.6
	1.0s	778.10nm			5.9mb X	
KKM	12.17	295	ePd	10	40.00	-2.0
	1.0s	263.20nm			5.6mb X	
MTN	14.12	164	iPc	11	04.10	-2.3
			e	13	38.00	
BAG	16.82	337	eP	11	36.90	-2.4
WB5	21.73	162	iPc	12	29.50	0.1
			eS	16	16.00	
PMG	22.28	118	eP	12	34.50	-0.1
MBL	23.03	198	iPc	12	42.40	0.5
	0.3s	8.00nm			4.8mb	
QIS	24.46	151	iPc	12	55.20	-0.2
	0.9s	203.00nm			5.7mb	
			e	17	01.00	
QIZ	24.87	318	eP	13	01.50	2.4
ASPA	25.20	166	iPc	13	01.80	-0.3
	0.6s	51.00nm			5.3mb	
			ePP	14	02.60	
			eS	17	13.00	
			iPcP	17	28.80	
NANU	25.91	205	eP	13	09.00	0.4
IPM	26.45	279	ePc	13	16.20	2.5
WARB	26.86	181	eP	13	17.00	-0.2
CTA	27.91	139	iPd	13	32.10	5.3X
	0.9s	20.17nm			4.8mb	
			e	14	15.00	214km
MEKA	28.55	196	eP	13	32.20	-0.2
	0.3s	18.00nm			5.3mb	
LOE	30.02	305	eP	13	45.00	-0.5
FORR	31.52	179	iPc	13	57.40	-0.9
	0.3s	61.00nm			5.7mb	
MRWA	31.76	199	eP	13	59.50	-1.0
	0.4s	29.00nm			5.3mb	
WHN	31.99	339	Pd	14	03.00	0.6
			pP	14	39.00	172kmX
NJ2	32.05	346	Pc	14	03.20	0.3
GYA	32.27	324	P	14	05.80	0.7
CHG	33.02	304	eP	14	12.00	0.5
RKG	36.03	195	eP	14	42.30	5.5X
ADE	37.19	164	iPc	14	47.50	0.8
	0.8s	77.61nm			5.4mb	
XAN	37.23	334	P	14	46.00	-1.0
BRS	37.28	141	iPc	14	47.10	-0.4
CD2	37.29	326	eP	14	47.50	0.0
TIY	39.16	341	Pd	15	02.60	-0.4
BWA	40.30	153	iPc	15	14.70	2.4
BJI	40.31	347	eP	15	11.00	-1.2
	1.0s	18.00nm			4.5mb	
			pP	15	56.50	214km
BFD	40.39	161	eP	15	16.00	3.1X
LZH	41.26	331	P	15	20.00	-0.3
	1.2s	69.00nm			5.0mb	
			pP	16	04.50	208km
			sP	16	21.50	
CAN	41.31	153	iPc	15	21.80	1.2
TOO	41.77	158	eP	15	26.00	1.7
LSA	44.76	313	P	15	50.10	1.1
GTA	45.84	330	eP	15	57.00	0.0
GUN	47.87	308	P	16	14.00	0.7
PKI	48.09	307	P	16	15.20	0.3
KKN	48.29	307	P	16	16.60	0.3
DMN	48.35	307	P	16	17.20	0.3
GKN	48.90	307	P	16	21.00	0.1
KOD	50.36	283	eP	16	32.50	0.2
HYB	50.63	292	ePc	16	34.00	0.0
	0.8s	46.20nm			5.0mb	
			e	17	16.00	188kmX
GBA	50.90	287	Pc	16	35.40	-0.6
	0.7s	12.60nm			4.5mb	
POO	55.24	292	eP	17	11.00	3.1X
WMQ	55.39	326	P	17	08.00	-0.7
			pP	17	47.50	172kmX
QUE	64.14	303	eP	18	08.50	0.0
MAIO	71.68	308	iPc	18	55.00	0.0
KIC	131.55	279	(PKP)	26	45.00	0.9
ZOBO	158.44	136	PKPc	27	27.00	-1.6
S.D. = 1.1 on 48 of 52 obs.						

FEB 20, 1990 11h 27m 04.80± 0.72s
42.502 N ± 7.5km 20.035 E ± 6.2km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.9 (TTG).

PVY	0.10	334	iPgc	27	07.40	-0.3
			iSg	27	10.00	
IVA	0.38	345	iPgd	27	12.50	-0.2
			eSg	27	18.50	
TTG	0.58	263	ePg	27	15.10	-1.4
			eSg	27	25.00	
ULC	0.79	228	ePg	27	19.70	-0.5
			eSg	27	32.20	
BDV	0.92	257	ePg	27	22.30	-0.1
			eSg	27	38.00	
HCY	1.14	268	ePg	27	26.30	0.2
			eSg	27	46.00	
BRY	1.17	290	ePg	27	26.70	0.0
			eSg	27	46.00	
SKO	1.17	116	iPn	27	24.50	-2.1
			iSn	27	42.50	
OHR	1.50	157	iPn	27	32.80	1.0
VAY	2.23	121	ePn	27	44.00	1.7
HVAR	2.72	286	i(Pn)	27	51.20	1.8
			iSn	28	27.20	
S.D. = 1.3 on 11 of 11 obs.						

FEB 20, 1990 11h 44m 20.92± 0.39s
44.024 N ± 4.1km 16.749 E ± 4.5km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
MD 3.8 (TRI). ML 3.7 (TTG), 3.6 (ZAG), 3.6 (KBA), 3.5 (VKA).

BLY	0.79	23	Pg	44	33.80	-2.5
			Sg	44	43.30	
HVAR	0.87	195	iPg	44	35.30	-2.4
			iSg	44	49.50	
BRY	1.72	130	ePn	44	51.10	-0.1
			eS	45	18.80	
VBY	1.82	325	ePn	44	53.90	1.4
			iSn	45	15.80	
ZAG	1.87	343	iPn	44	52.50	-0.7
			iSg	45	19.20	
PTJ	1.96	344	iPnd	44	52.70	-1.9
			eSn	45	20.20	
HCY	2.03	140	ePn	44	56.00	0.5
			eSn	45	25.80	
NKY	2.04	126	ePn	44	57.00	1.2
			eSn	45	24.00	
PLE	2.04	109	ePn	44	54.50	-1.3
			eSn	45	22.00	
RIY	2.14	309	ePn	44	57.10	0.0
			iSn	45	22.90	
BDV	2.31	138	ePn	45	00.00	0.4
			eSn	45	32.50	
CEY	2.38	317	ePn	45	02.40	1.8
			eSn	45	32.00	
TTG	2.43	130	ePn	45	02.30	1.0
			eSn	45	36.00	
LJU	2.56	323	e(Pn)	45	05.30	2.2
			ePg	45	09.40	
			iSn	45	37.60	
			iSg	45	49.60	
TRI	2.71	309	ePn	45	05.30	0.0
			iPb	45	09.40	
			iSn	45	39.30	
			iSb	45	48.70	
			iSg	45	52.20	
ULC	2.76	137	ePn	45	06.20	0.2
			eSn	45	45.00	
BEO	2.77	72	ePn	45	36.50	30.3X
VOY	2.85	316	ePn	45	07.60	0.2
			eSn	45	48.20	
			eSg	45	57.00	
DUI	2.90	216	P	45	10.70	2.6
AQU	2.96	237	P	45	10.10	1.2
			eSn	45	45.90	
ASS	3.12	254	Pc	45	12.60	1.5
BRT	3.16	174	P	45	10.10	-1.6
			eSn	45	48.30	
SDI	3.17	224	P	45	12.50	0.7
			eSn	45	51.70	
CRE	3.49	265	P	45	17.30	0.8
			eSn	45	59.30	
SFI	3.54	270	P	45	17.50	0.5
SGO	3.62	198	P	45	17.50	-0.7
PGD	3.63	269	P	45	18.80	0.2
SOP	3.66	358	eP	45	22.00	3.2X
FVI	3.80	314	P	45	20.40	-0.3
BZS	3.81	64	ePc	45	22.00	1.1
KBA	3.88	323	iPn	45	21.70	-0.3
			iSn	46	05.20	
			i	46	18.70	
			iSg	46	27.50	
MGR	3.98	193	P	45	22.70	-0.6
SKO	4.01	119	ePn	45	30.00	6.4X
			i	45	33.80	
			i	46	09.60	
			i	46	18.00	
			i	46	28.50	
CTI	4.14	301	Pc	45	24.60	-1.1
			eSn	46	12.50	
MMN	4.17	188	P	45	25.40	-0.5
OHR	4.17	133	iPn	45	26.70	0.6
ZST	4.18	3	e(Pn)	45	09.50	-16.6X
			e	45	22.60	
			e	45	44.30	
			i	46	11.50	
VKA	4.25	356	e(Pg)	45	29.50	2.3
			i	45	42.20	
			iSg	46	16.20	
CSI	4.26	185	P	45	26.30	-1.0
BDI	4.44	273	P	45	30.50	0.7
PSZ	4.47	28	eP	45	41.30	11.0X
SAL	4.70	292	P	45	31.00	-2.6
CZI	4.82	186	P	45	22.50	-12.8X
OGA	4.93	307	iPnd	45	36.60	-0.4
BOB	5.28	281	P	45	41.10	-0.8
VAI	5.95	291	Pc	45	48.60	-2.6
PRU	6.15	347	eP	46	03.50	9.5X
			e	47	05.00	
GRF	6.82	328	e(Pn)	45	38.00	-25.4X
			e(Pg)	46	10.00	
			e(Sn)	47	22.00	
			e(Sg)	47	55.00	
S.D. = 1.4 on 40 of 48 obs.						

? FEB 20, 1990 11h 55m 00.52± 1.00s
39.149 N ± 8.7km 27.600 E ±16.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZM	0.80	199	ePg	55	16.00	0.0

		eSg	55 27.00			
DST	0.92	60 iPn	55 18.10	0.0		
EDC	1.21	10 ePn	55 23.00	-0.1		
BNT	1.23	11 iPn	55 23.50	0.1		
S.D. = 0.1		on	4 of 4 obs.			

* FEB 20, 1990 12h 59m 43.96± 1.07s
41.381 N ±16.2km 19.624 E ± 7.2km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)
MD 2.8 (ATH).

OHR	0.93	107 ePg	00 00.20	-1.5		
		iSg	00 16.20			
SKO	1.48	66 ePn	00 10.50	-0.2		
		i	00 13.60			
		iSg	00 34.00			
KEK	1.67	175 ePb	00 14.00	0.6		
KZN	1.95	123 ePn	00 23.00	5.5X		
VAY	2.22	91 ePn	00 24.60	3.3X		
PLG	3.07	108 ePn	00 35.00	1.6		
MGR	3.33	249 P	00 37.40	0.3		
		eSn	02 01.30			
SGO	3.37	257 P	00 38.30	0.7		
		eSn	02 03.30			
CZI	3.43	232 P	00 37.10	-1.4		
		eS	02 03.30			
S.D. = 1.4		on	7 of 9 obs.			

FEB 20, 1990 13h 01m 11.88± 0.46s
41.274 N ± 3.6km 19.778 E ± 5.4km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)
MD 3.4 (ATH). ML 3.0 (TTG).

TIR	0.10	43 iPgd	01 15.00	0.4		
LACI	0.37	352 ePg	01 18.10	-1.3		
BERA	0.59	167 ePg	01 21.70	-2.0		
PHP	0.65	50 iPgd	01 23.30	-1.5		
SDA	0.77	344 ePg	01 30.60	3.7X		
PUK	0.77	6 ePg	01 27.40	0.5		
OHR	0.79	102 iPgd	01 26.00	-1.2		
		iSg	01 42.60			
ULC	0.79	330 ePg	01 26.70	-0.6		
		eSg	01 39.50			
VLO	0.83	195 ePg	01 29.60	1.6		
KKS	0.93	30 ePg	01 28.00	-1.6		
TPE	0.99	170 ePg	01 31.50	0.8		
KBN	1.02	129 iPgc	01 30.50	-0.6		
BCI	1.11	11 ePn	01 34.60	1.9		
TTG	1.22	342 ePg	01 35.00	0.5		
		eSg	01 53.00			
BDV	1.23	325 ePg	01 34.10	-0.7		
		eSg	01 53.00			
LSK	1.29	151 iPn	01 36.10	0.3		
PVY	1.33	6 ePg	01 36.50	0.0		
		eSg	01 58.20			
SRN	1.40	173 ePn	01 46.30	8.9X		
SKO	1.43	60 iPnd	01 38.70	0.9		
		iSn	01 59.00			
		i	01 59.80			
HCY	1.51	321 ePg	01 38.20	-0.8		
		eSg	01 58.50			
KEK	1.56	179 ePn	01 38.50	-1.2		
IVA	1.60	3 ePn	01 42.30	2.0		
		eSn	02 05.00			
NKY	1.64	340 ePn	01 41.00	0.0		
		eSn	02 03.00			
KZN	1.80	122 ePn	01 44.50	1.3		
BRY	1.87	331 ePn	01 44.60	0.3		
		eSn	02 10.60			
VAY	2.10	88 ePn	01 47.00	-0.6		
PLG	2.92	107 ePn	02 00.50	1.2		
VLS	3.16	168 ePn	01 59.10	-3.5X		
RDO	4.35	90 ePn	02 20.00	0.5		
S.D. = 1.2		on	26 of 29 obs.			

% FEB 20, 1990 13h 05m 39.51± 0.88s
34.884 N ± 8.8km 110.473 E ±10.3km
DEPTH = 33.0km (normal)
EASTERN CHINA (664)
ML 3.3 (BJI).

XAN	1.53	237 Pg	06 06.60	1.7		
TIY	3.24	29 iPgd	06 30.00	0.8		
		Sn	07 08.70			
WHN	5.42	142 Pn	06 59.50	-0.6		
		Pg	07 11.50			
		Sg	08 19.50			
LZH	5.54	284 ePg	07 23.00	21.0X		
		Sg	08 35.00			
TIA	5.58	74 ePg	07 13.10	10.7X		
BTO	5.72	357 ePn	07 04.30	-0.1		
HHC	6.02	8 Pg	07 22.20	13.5X		
		Sg	08 39.00			
BJI	6.86	40 ePg	07 39.00	18.7X		
CD2	6.90	237 ePn	07 20.30	-0.7		
GTA	9.63	301 eP	07 58.00	-1.0		
SSE	9.76	110 ePn	07 23.00	-37.6X		
		Sg	08 35.00			
S.D. = 1.3		on	6 of 11 obs.			

FEB 20, 1990 13h 06m 52.33± 1.00s
41.286 N ± 5.4km 19.804 E ±12.1km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)
MD 3.1 (ATH).

TIR	0.08	38 iPgd	06 52.20	-2.6		
LACI	0.36	349 iPgd	07 00.00	0.3		
BERA	0.59	169 ePg	07 02.00	-2.3		
PHP	0.62	50 iPgd	07 03.80	-1.1		
PUK	0.76	5 ePg	07 08.00	0.9		
SDA	0.76	343 ePg	07 10.00	2.8X		
OHR	0.77	103 ePg	07 06.80	-0.6		
		iSg	07 23.10			
KKS	0.91	30 ePg	07 10.50	0.8		
TPE	1.00	171 ePg	07 15.50	4.2X		
KBN	1.01	131 ePg	07 13.50	2.1		
LSK	1.29	152 ePn	07 16.50	0.3		
SKO	1.40	60 ePn	07 19.30	1.3		
		eSn	07 41.00			
SRN	1.41	174 ePn	07 18.30	0.3		
KEK	1.57	180 ePn	07 20.90	0.6		
KZN	1.78	123 ePb	07 26.50	3.0X		
VAY	2.08	88 ePn	07 32.00	4.3X		
CZI	3.49	235 P	07 43.80	-3.9X		
CTT	6.51	88 ePg	08 47.00	16.5X		
S.D. = 1.5		on	12 of 18 obs.			

FEB 20, 1990 13h 12m 28.08± 0.36s
41.192 N ± 3.0km 19.689 E ± 4.3km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)
MD 3.2 (ATH). ML 2.7 (TTG).

TIR	0.20	41 Pgd	12 32.60	0.1		
LACI	0.44	2 iPgd	12 36.00	-1.1		
BERA	0.53	158 iPgc	12 38.90	0.1		
PHP	0.75	49 iPnd	12 40.30	-2.5		
SDA	0.84	350 ePg	12 46.00	1.8		
ULC	0.84	337 ePg	12 44.20	-0.1		
		eSg	12 54.00			
OHR	0.84	95 iPg	12 43.20	-1.2		
		iSg	12 59.70			
PUK	0.86	10 ePg	12 44.00	-0.7		
TPE	0.93	165 ePg	12 46.50	0.7		
KBN	1.02	123 iPgc	12 47.50	0.1		
KKS	1.04	31 ePg	12 46.00	-1.6		
BCI	1.21	13 ePn	12 51.50	1.0		
LSK	1.25	146 ePn	12 51.50	0.1		
BDV	1.27	330 ePg	12 51.50	-0.1		
		eSg	13 09.50			
TTG	1.28	346 ePg	12 52.50	0.8		
		eSg	13 10.00			
SRN	1.33	170 ePn	12 53.80	1.2		
PVY	1.42	9 ePg	12 54.00	0.0		
		eSg	13 15.00			
KEK	1.48	177 ePn	12 54.70	-0.1		
SKO	1.53	59 iPn	12 55.70	0.3		
		iSn	13 16.60			
		iSg	13 17.30			
HCY	1.54	325 ePg	12 55.00	-0.6		
		eSg	13 16.50			
LCI	1.57	238 P	12 56.00	0.0		
		eSn	13 14.00			
IVA	1.69	5 ePn	13 00.00	2.2		
		eSn	13 22.80			
NKY	1.70	343 ePg	12 59.00	1.0		
		eSg	13 21.80			
KZN	1.81	119 ePb	13 02.50	2.9X		
BRT	1.91	261 P	13 04.30	3.4X		
		eSn	13 29.20			
PLG	2:97	105 ePn	13 17.90	1.8		
VLS	3.09	167 ePn	13 17.00	-0.8		
MGR	3.32	253 P	13 20.30	-0.8		
CZI	3.36	235 P	13 20.40	-1.3		
SGO	3.38	261 P	13 21.40	-0.5		
S.D. = 1.1		on	28 of 30 obs.			

* FEB 20, 1990 14h 09m 22.04± 0.38s
14.373 N ± 6.0km 119.217 E ± 6.9km
DEPTH = 10.0km (geophysicist)
4.8mb (10 obs.)
LUZON, PHILIPPINE ISLANDS (249)

QCP	1.82	81 eP	09 48.00	-5.6X		
BAG	2.41	33 eP	10 02.00	-0.4		
QZH	10.53	357 eP	11 54.00	-2.1		
WHN	16.71	345 eP	13 17.00	-0.8		
SSE	16.74	6 P	13 20.50	2.3		
GYA	16.81	318 P	13 24.40	5.2X		
N	10s	0.80um				
E	10s	1.10um				
LOE	17.09	282 eP	13 27.00	4.3X		
NJ2	17.60	359 eP	13 25.20	-3.8X		
KMI	18.82	307 eP	13 46.50	2.1		
Z	14s	0.90um				
		eS	17 20.00			
NNT	19.03	267 eP	13 43.70	-3.0X		
SNG	19.61	251 eP	14 04.50	10.8X		
CHG	19.92	286 eP	14 01.00	4.0X		
XAN	21.69	336 eP	14 15.00	-0.1		
CD2	21.74	322 eP	14 16.40	0.8		
TIA	21.83	355 eP	14 16.40	0.0		
TIY	24.01	347 eP	14 38.70	0.7		
N	12s	0.40um				
LZH	25.64	330 Pc	14 53.50	-0.2		
	2.0s	42.00nm		4.8mb		
Z	16s	1.20um		4.5MszX		
N	12s	0.90um				
BJI	25.71	355 eP	14 53.50	-0.5		
	1.0s	12.00nm		4.5mb		
SHL	27.94	298 iP	15 14.60	-0.3		
GTA	30.22	329 eP	15 35.20	0.0		
Z	12s	1.30um		4.8MszX		
E	11s	1.00um				
GUN	33.76	299 P	16 06.60	0.0		
PKI	34.07	298 P	16 08.40	-0.8		
KKN	34.24	298 P	16 09.90	-0.7		
DMN	34.34	298 P	16 10.60	-0.9		
GKN	34.84	299 P	16 14.00	-1.7		
WB5	37.16	156 eP	16 34.20	-0.9		
WRA	37.21	156 Pc	16 35.10	-0.4		
	1.2s	9.00nm		4.4mb		
HYB	39.18	280 eP	16 53.50	1.3		
ASPA	40.44	159 iPd	17 02.40	-0.1		
	1.0s	28.00nm		4.9mb		
		iPP	17 45.10			
GBA	40.51	274 Pc	17 04.50	1.4		
	1.2s	9.70nm		4.4mb		
CTA	43.36	142 ePc	17 27.20	0.8		
		e	17 35.90	29kmX		
MAIO	57.31	304 eP	19 12.00	-0.8		
BRW	74.58	19 eP	21 03.50	0.9		
TTA	74.94	28 eP	21 05.80	0.8		
IMA	75.81	25 eP	21 10.80	0.9		
PMR	78.27	29 eP	21 23.40	0.0		
	1.4s	23.30nm		5.1mb		
FBA	78.37	26 eP	21 24.10	0.1		
INK	82.99	21 eP	21 48.00	-0.4		
		pP	22 32.00	178kmX		
MBC	83.19	12 eP	21 49.00	-0.4		
	1.0s	6.00nm		4.7mb		
HFS	85.20	331 eP	21 58.20	-1.5		
	0.6s	4.50nm		4.9mb		
Z	17s	0.57um		5.0MszX		
		e	22 08.00	31kmX		
		e	22 42.20			
		e	22 52.20			
		LR	04 42.00			
VAY	85.54	311 eP	22 01.50	-0.3		
DAG	85.75	351 iPd	22 02.00	-0.2		
	0.7s	8.22nm		5.0mb		
NB2	86.00	332 P	22 03.20	-0.6		
	1.2s	13.90nm		5.0mb		
KSP	86.94	322 eP	22 09.70	1.1		
		e	22 52.50	171kmX		
BRG	88.33	322 e(P)	22 16.20	1.0		
S.D. = 1.0		on	38 of 45 obs.			

20d 14h

% FEB 20, 1990 14h 18m 56.64± 0.79s
16.714 S ± 7.1km 128.531 E ± 9.4km
DEPTH = 10.0km (geophysicist)
WESTERN AUSTRALIA (590)

KNA	0.98	13	iPc	19	15.70	0.4
			eS	19	27.00	
MTN	4.59	34	iPc	20	07.70	-0.1
			eS	20	53.50	
			e	21	19.00	
WB5	6.38	120	eP	20	32.00	-1.0
			eS	21	42.10	
ASPA	8.56	145	eP	21	05.20	1.6
	0.3s		9.00nm			5.5mb
			iS	22	34.60	
MBL	9.34	240	eP	21	14.00	-0.4
			eS	22	54.00	
WARB	9.59	190	iPc	21	17.70	0.0
			eS	23	03.00	
QIS	11.17	112	eP	21	39.00	-0.5
			eS	23	33.00	

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

FEB 20, 1990 14h 56m 59.73± 0.66s
47.870 N ± 6.7km 16.030 E ± 6.4km
DEPTH = 10.0km (geophysicist)
AUSTRIA (546)
ML 3.5 (KBA), 3.0 (FUR), 2.9 (VKA). Felt (V) at Puchberg.

SOP	0.40	118	ePn	57	08.80	0.8
VKA	0.44	26	iPgd	57	08.90	0.2
			iSg	57	17.60	
ZST	0.79	65	iPg	57	14.60	-0.5
			i	57	20.70	
			i	57	25.20	
			iSg	57	28.10	
PTJ	1.97	181	ePn	57	27.00	-6.6X
			eSn	57	54.80	
KBA	1.99	247	iPnc	57	32.30	-1.6
			i(Pg)	57	34.80	
			iSn	57	56.00	
			iSg	57	59.60	
BUD	2.06	100	eP	57	38.50	3.7X
KHC	2.06	309	iPg	57	34.50	-0.4
LJU	2.10	210	e(Pn)	57	36.90	1.6
			e(Sn)	57	58.00	
PRU	2.34	336	Pn	57	38.60	-0.2
			Pg	57	41.90	
			eSn	58	07.80	
			Sg	58	10.30	
VOY	2.35	219	e(Pn)	57	36.20	-2.9
			e	57	41.30	
			e(Sn)	58	12.50	
CEY	2.40	208	ePn	57	41.00	1.3
			i	57	44.00	
			e(Sn)	58	04.50	
VBY	2.43	193	eP	58	00.20	20.2X
			e(Sn)	58	20.50	
WET	2.45	303	ePn	57	40.00	-0.4
PSZ	2.60	87	eP	57	51.60	9.0X
TRI	2.66	217	eP	58	22.10	38.7X
KSP	2.98	3	ePn	57	47.10	-0.8
	0.7s		79.00nm			
			iPg	57	54.00	
			i	58	14.50	
			iS	58	32.50	
			iSg	58	35.30	
SPC	3.10	63	eP	57	49.20	-0.5
FUR	3.20	277	iPnd	57	58.30	7.2X
BRG	3.30	336	iPg	58	00.00	7.5X
			i	58	31.00	
			iSg	58	41.00	
HOF	3.66	313	iPnd	58	01.10	3.4X
GRF	3.66	302	ePn	58	00.50	2.8
			ePg	58	06.00	
			e(Sn)	58	38.00	
			eSg	58	52.00	
CLL	3.97	331	ePg	58	14.00	12.1X
			eSg	59	02.00	
MOX	4.01	316	ePn	58	03.00	0.5
			ePg	58	13.00	
			iSg	59	02.00	

S.D. = 1.5 on 14 of 23 obs.

• FEB 20, 1990 15h 24m 37.11± 2.01s
4.362 S ±13.0km 151.139 E ±14.5km
DEPTH = 315.0 ± 18.3 km
4.2mb (2 obs.)
NEW BRITAIN REGION (192)

PMG	6.39	218	eP	26	12.00	-0.1
CTA	16.34	197	iPc	28	11.00	0.4
WB5	22.47	225	iPd	29	11.30	-0.3
WRA	22.53	225	Pd	29	12.60	0.4
	0.3s		5.10nm			4.4mb
DZM	23.02	141	iPc	29	16.70	-0.1
ASPA	25.40	219	iPd	29	38.00	-0.5
	0.5s		3.00nm			3.9mb
GUN	70.48	301	P	35	21.00	0.4
PKI	70.79	301	P	35	22.20	-0.2
KKN	70.96	301	P	35	23.20	-0.1
DMN	71.06	301	P	35	24.20	0.3
GKN	71.56	301	P	35	26.40	-0.3

S.D. = 0.4 on 11 of 11 obs.

FEB 20, 1990 15h 40m 02.98± 0.67s
36.412 N ± 7.6km 137.717 E ± 7.4km
DEPTH = 10.0km (geophysicist)
4.1mb (1 obs.)
HONSHU, JAPAN (227)

MTMJ	0.19	22	P	40	05.50	-1.7
			S	40	07.10	
MAT	0.42	72	iPc	40	11.40	-0.1
			iS	40	18.10	
IIDJ	0.94	170	P	40	21.80	0.8
CHJJ	1.09	109	P	40	23.80	0.3
			S	40	39.80	
TSRJ	1.66	239	P	40	31.40	-0.8
			S	40	53.80	
KAKJ	1.99	95	P	40	41.00	3.9X
			eS	41	04.20	
YAMJ	2.55	46	P	40	45.20	0.1
OFUJ	4.11	48	eP	41	13.60	6.4X
AOMJ	4.64	26	eP	41	16.30	1.7
BJI	17.30	289	eP	44	09.50	3.4X
TIY	20.21	281	eP	44	42.50	1.8
WHN	20.33	260	eP	44	41.50	-0.5
WRA	56.14	184	Pc	49	43.40	-1.6
	1.0s		1.80nm			4.1mb

S.D. = 1.3 on 10 of 13 obs.

FEB 20, 1990 15h 52m 26.12± 0.97s
36.475 N ± 9.3km 137.680 E ± 8.0km
DEPTH = 5.0km (geophysicist)
4.2mb (1 obs.)
HONSHU, JAPAN (227)

MTMJ	0.15	43	P	52	29.00	-0.2
MAT	0.43	81	iPd	52	34.80	0.0
			iS	52	41.50	
IIDJ	1.01	169	P	52	45.50	-0.3
CHJJ	1.15	111	P	52	47.40	-0.6
			S	53	03.70	
TSRJ	1.66	236	P	52	55.40	-0.6
			S	53	18.40	
KAKJ	2.03	97	P	53	01.80	0.4
WRA	56.20	184	Pd	02	10.70	1.3
	1.2s		2.70nm			4.2mb

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

? FEB 20, 1990 15h 56m 44.61± 1.31s
14.220 N ±14.7km 143.346 E ±20.7km
DEPTH = 169.8 ± 10.6 km
3.9mb (1 obs.)
MARIANA ISLANDS REGION (215)

GUMO	1.60	113	ePc	57	17.30	0.2
PJG	1.60	113	eP	57	17.30	0.2
GUA	1.66	114	iPc	57	17.30	-0.4
			eS	57	36.20	
PMG	23.78	171	eP	01	44.00	1.0
WB5	35.02	195	eP	03	27.80	5.0X
WRA	35.09	195	Pd	03	28.10	4.7X
	0.8s		2.20nm			3.9mb
BRS	42.36	168	iP	04	24.00	0.3
DZM	42.59	147	iPd	04	24.00	-1.6
GUN	54.89	294	P	06	00.00	-0.4
PRS	85.88	54	e(P)	09	07.10	0.5
CMB	86.21	52	eP	09	08.50	0.2
ZOBO	149.58	98	ePKP	16	18.00	5.9X
Z	24s		0.08um			4.4MszX
			eLR	49	20.00	

S.D. = 0.9 on 9 of 12 obs.

& FEB 20, 1990 16h 12m 15.62s
63.147 N 150.655 W
DEPTH = 122.5km
CENTRAL ALASKA (1)
<AGS-P>.

KTH	0.43	344	iP	12	33.38	-0.4
			eS	12	46.66	
HUR	0.49	110	eP	12	33.63	-0.4
			eS	12	47.74	
CUT	0.77	166	iP	12	35.73	-0.3
RND	0.86	71	iP	12	36.30	-0.6
			S	12	52.52	
MCK	0.97	52	iP	12	37.46	-0.5
			eS	12	54.06	
SKT	1.24	199	iP	12	40.08	-0.6
PWA	1.54	166	iPc	12	44.10	0.0
GHO	1.60	149	iP	12	44.58	-0.2
			eS	13	06.47	
NEA	1.60	25	iP	12	43.49	-1.2
			eS	13	04.38	
SUA	1.69	181	eP	12	45.61	-0.4
			eS	13	10.62	
PLRM	1.71	155	eP	12	45.30	-0.8
			eS	13	09.03	
PMR	1.71	155	ePd	12	45.40	-0.7
WRH	1.75	39	eP	12	45.57	-1.0
			eS	13	08.98	
NCG	1.89	203	iP	12	47.57	-0.8
CGLM	1.95	200	iP	12	48.34	-0.8
CCB	1.96	39	eP	12	48.12	-1.0
PMS	1.98	164	iPc	12	49.00	-0.4
CRP	2.01	201	eP	12	49.43	-0.6
			eS	13	15.90	
BGL	2.06	204	eP	12	50.20	-0.3
HDA	2.07	51	eP	12	49.55	-1.0
SPU	2.08	199	eP	12	49.83	-0.9
CKL	2.11	203	eP	12	50.57	-0.6
FBA	2.16	34	iPd	12	50.80	-0.9
DDM	2.25	71	eP	12	52.67	-0.2
			S	13	20.77	
TOA	2.32	115	ePd	12	53.50	-0.3
GLM	2.34	36	eP	12	53.04	-1.0
DMW	2.38	65	eP	12	53.78	-0.7
NKA	2.43	187	eP	12	57.31	2.2
TTA	2.45	267	iPc	12	54.20	-1.3
SLKM	2.66	175	eP	12	57.46	-0.7
RDT	2.71	199	eP	12	58.07	-0.8
RED	2.92	201	eP	13	00.59	-1.0
SVW	3.10	231	ePc	13	02.70	-1.4
SEW	3.11	169	eP	13	02.95	-1.1
			S	13	38.93	
NNL	3.13	186	eP	13	05.23	0.8
IMA	3.21	337	iPd	13	04.00	-1.6
CNPM	3.65	185	eP	13	10.49	-0.8
PDB	3.77	208	iP	13	12.45	-0.5
AUL	4.01	201	eP	13	17.50	1.3
FYU	4.14	32	eP	13	16.41	-1.4
DWY	5.09	75	P	13	29.00	-1.9
KDC	5.49	190	eP	13	34.20	-2.1
INK	8.73	46	eP	14	18.00	-2.2

43 obs. associated

FEB 20, 1990 16h 15m 42.15± 0.86s
36.465 N ± 7.2km 137.692 E ± 7.8km
DEPTH = 10.0km (geophysicist)
HONSHU, JAPAN (227)

MTMJ	0.15	37	iP+	15	44.80	-0.9
			eS	15	47.10	
MAT	0.42	79	iPd	15	50.50	-0.3
			iS	15	57.10	
IIDJ	1.00	170	P	16	01.00	-0.1
CHJJ	1.13	111	iPd	16	03.00	-0.4
			S	16	18.40	
NIIJ	1.30	53	P	16	06.20	-0.1
			eS	16	24.00	
TSRJ	1.67	237	P	16	11.40	-0.1
			S	16	34.20	
KAKJ	2.02	97	P	16	17.30	0.7
			S	16	44.70	
YAMJ	2.53	47	P	16	25.10	1.2
			S	17	02.10	

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

* FEB 20, 1990 16h 29m 52.17± 0.84s
15.371 N ± 9.5km 92.099 W ±18.4km
DEPTH = 33.0km (normal)
4.8mb (2 obs.)
MEXICO-GUATEMALA BORDER REGION (62)

TPX	0.49	199	iP	30	03.00	0.4
			iS	30	16.00	
SCX	1.45	339	(P)	30	11.70	-4.6X
PSM	3.12	296	eP	31	12.70	32.4X
IIT	6.96	302	(P)	31	40.70	6.0X
			(S)	33	06.50	
PPM	7.24	301	iP	31	38.50	-0.4
			(S)	33	10.00	
III	7.66	294	(P)	31	39.50	-5.0X
			(S)	33	25.00	
LRM	34.84	335	eP	36	43.40	0.9
FFC	40.02	351	iPd	37	26.80	1.3
	0.5s		6.00nm			4.6mb
PNT	40.62	332	eP	37	31.00	0.4
INK	59.10	343	eP	39	50.00	-1.4
MBC	62.55	353	ePd	40	14.40	-0.3
	0.8s		8.00nm			4.9mb
CHG	144.33	342	ePKP	49	20.90	-6.5X
LOE	144.69	337	ePKP	49	22.00	-6.0X
BDT	145.79	341	ePKP	49	24.00	-5.9X
HYB	146.14	16	ePKPc	49	23.50	-7.0X
GBA	149.41	20	PKPd	49	35.60	-0.1
	1.0s		6.90nm			
NNT	149.85	337	ePKP	49	35.60	-0.8

S.D. = 1.0 on 9 of 17 obs.

FEB 20, 1990 16h 31m 32.14± 0.50s
41.202 N ± 3.8km 19.710 E ± 6.1km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)
MD 3.5 (ATH). ML 3.0 (TTG).

TIR	0.19	39	iPgd	31	35.70	-0.6
LACI	0.43	360	iPgc	31	39.80	-1.2
BERA	0.53	160	iPgc	31	42.10	-0.8
PHP	0.73	48	iPgd	31	44.10	-2.4
OHR	0.83	96	iPg	31	47.00	-1.2
			iSg	32	03.40	
SDA	0.83	349	ePg	31	49.00	0.9
ULC	0.84	336	ePg	31	48.00	-0.3
			eSg	32	01.20	
PUK	0.85	9	ePg	31	47.60	-0.9
TPE	0.93	166	ePg	31	49.00	-1.0
KBN	1.02	124	ePg	31	53.00	1.6
KKS	1.02	31	ePg	31	49.60	-1.8
BCI	1.19	13	ePn	31	55.50	1.1
LSK	1.25	147	ePn	31	56.70	1.3
BDV	1.27	329	ePg	31	55.00	-0.6
			eSg	32	14.50	
TTG	1.27	345	ePg	31	55.50	-0.2
			eSg	32	13.50	
SRN	1.34	170	ePn	31	56.00	-0.8
PVY	1.41	8	ePg	31	58.70	0.8
			eSg	32	19.50	
KEK	1.49	177	ePn	32	00.00	1.1
SKO	1.51	59	iPnd	31	59.50	0.3
			iSn	32	20.50	
HCY	1.54	324	ePg	31	59.50	-0.1
			eSg	32	21.50	
IVA	1.67	5	ePn	32	03.40	1.7
			eSn	32	27.00	
NKY	1.69	342	ePn	32	02.50	0.5
			eSn	32	26.00	
KZN	1.80	119	ePn	32	06.10	2.5
VAY	2.16	86	iPn	32	07.60	-1.0
PLG	2.95	105	ePn	32	21.50	1.5
CSI	2.97	242	P	32	27.40	7.2X
VLS	3.10	167	ePn	32	20.50	-1.5
MMN	3.12	246	P	32	29.20	6.9X
CZI	3.38	235	P	32	24.30	-1.7
KBA	7.45	324	e(Pg)	33	35.30	11.7X
	0.3s		1.60nm			
			e(Sg)	34	37.50	
			i	34	41.30	
KHC	9.03	333	Pn	33	48.10	2.6
			Pg	33	55.00	
			Sg	34	21.70	

S.D. = 1.4 on 28 of 31 obs.

FEB 20, 1990 16h 36m 25.23± 0.89s
40.709 N ± 7.0km 20.774 E ± 9.0km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)
MD 2.9 (ATH).

OHR	0.40	3	iPg	36	32.50	-1.0
			iSg	36	39.40	
KZN	0.86	118	ePb	36	41.00	-0.8
KEK	1.24	217	ePb	36	48.50	0.1
SKO	1.36	21	ePn	36	51.00	0.8
			eSn	37	09.50	
VAY	1.49	65	ePn	36	52.60	0.6
PLG	2.06	98	ePb	37	00.60	0.2

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

FEB 20, 1990 17h 25m 27.77± 0.50s
14.736 N ± 5.3km 147.098 E ± 8.3km
DEPTH = 33.0km (normal)
4.8mb (4 obs.)
MARIANA ISLANDS REGION (215)

GUA	2.43	241	eP	26	06.30	0.2
			eS	26	36.80	
GUMO	2.45	242	eP	26	06.60	0.3
PJG	2.45	242	eP	26	06.50	0.2
PMG	23.99	180	eP	30	40.50	0.1
WB5	36.61	200	eP	32	32.80	-0.2
WRA	36.68	200	Pd	32	33.40	-0.1
	0.8s		1.90nm			4.0mb
BJI	36.95	319	eP	32	35.50	-0.1
TIY	38.27	313	eP	32	48.00	1.1
XAN	39.43	306	P	32	55.60	-1.0
HHC	40.36	317	eP	33	04.20	-0.1
BTO	41.27	316	eP	33	12.00	0.3
LZH	44.03	307	Pd	33	35.00	0.6
			pP	33	41.50	22kmX
			sP	33	45.50	
CHG	46.18	282	eP	33	52.00	0.5
GTA	48.06	310	eP	34	06.60	0.3
WMQ	57.94	313	P	35	20.00	0.6
GUN	58.00	294	P	35	20.40	0.0
	0.8s		32.00nm			5.4mb
PKI	58.42	293	P	35	22.90	-0.4
KKN	58.53	294	P	35	23.40	-0.6
DMN	58.69	294	P	35	24.40	-0.7
GKN	59.10	294	P	35	27.40	-0.4
	0.6s		12.00nm			5.2mb
HYB	65.60	283	iPd	36	10.70	-0.5
GBA	67.29	279	Pc	36	20.90	-1.0
	0.5s		1.70nm			4.4mb
KIC	145.08	305	(PKP)c	45	04.50	0.1
TIC	145.13	306	(PKP)	45	04.70	0.2
LIC	145.39	305	(PKP)c	45	05.70	0.7

S.D. = 0.5 on 25 of 25 obs.

% FEB 20, 1990 17h 47m 33.81± 1.07s
31.629 S ±19.9km 67.595 W ± 8.0km
DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)

CFA	0.55	272	iPc	47	45.50	0.3
RTLL	0.80	292	iPc	47	47.30	-1.5
RTCV	0.84	254	iP	47	49.60	0.4
			(S)	48	02.80	
RTCB	1.04	278	eP	47	52.00	-0.2
			eS	48	06.50	
RTRS	2.16	312	eP	48	09.20	1.0
			eS	48	36.20	
TCA	2.58	84	ePc	48	14.20	-0.1

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

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* FEB 20, 1990 18h 14m 01.82± 0.85s
36.132 N ±10.0km 27.170 E ± 7.9km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)
MD 3.3 (ATH).

KAP	0.58	180	ePg	14	13.00	-0.6
			eSb	14	23.50	
NPS	1.54	236	ePb	14	30.20	0.9
APE	1.62	306	ePb	14	29.90	-0.6
KSL	1.95	90	ePn	14	35.00	-0.3
ELL	2.29	74	ePn	14	41.00	0.6
BCK	3.05	63	ePn	14	55.00	4.0X

S.D. = 1.0 on 5 of 6 obs.

FEB 20, 1990 18h 17m 56.29± 0.96s
21.559 S ± 7.1km 170.437 E ± 6.9km
DEPTH = 160.8 ± 7.5 km
5.3mb (18 obs.)
LOYALTY ISLANDS REGION (189)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 23C
Centroid Location:
Origin Time 18:18: 4.8 0.8
Lat 21.53S 0.07 Lon 169.80E 0.06
Dep 157.3 2.0 Half-duration 2.3
Moment Tensor; Scale 10**17 Nm
Mrr=-0.35 0.10 Mtt= 0.77 0.15
Mff=-0.42 0.14 Mrt= 0.97 0.10
Mrf= 0.83 0.10 Mtf= 2.80 0.14
Principal Axes:

	Val=	Plg=	Azm=
T	3.46	18	321
N	-0.77	71	144
P	-2.69	1	51

Best Double Couple:Mo=3.1*10**17
NP1:Strike= 98 Dip=76 Slip= 13
NP2: 5 78 166

DZM	3.74	261	iPc	18	54.40	0.1
			iS	19	38.30	
PVC	4.29	332	iP	19	02.00	0.6
			iS	19	50.30	
SVA	8.29	67	ePc	19	53.80	-0.8
HNR	15.72	318	eP	21	30.00	-0.4
			eS	24	32.00	
BRS	17.09	247	iPc+	21	48.00	0.9
	0.8s		12.00nm			4.3mb
			eS	25	00.00	
			i	25	13.00	
COO	18.91	238	eP	22	08.00	0.9
			e	22	22.00	
			e	23	16.00	
RMQ	20.40	252	iPc	22	25.40	3.1X
	0.5s		84.00nm			5.4mb
CTA	22.65	269	iPc+	22	45.60	1.1
	1.8s		304.55nm			5.5mb
			i	23	16.80	
			iS	26	43.60	
			i	31	29.00	
CNB	22.98	229	iPc	22	49.20	1.5
	0.9s		176.00nm			5.5mb
CAN	23.24	229	eP	22	50.00	-0.2
CMS	24.09	241	iPc	22	59.50	1.2
	0.4s		46.00nm			5.4mb
PMG	25.44	295	eP	23	11.20	0.3
TOO	26.82	228	eP	23	23.00	-0.4
BFD	28.72	231	eP	23	42.00	1.5
QIS	28.77	266	iPd	23	40.40	-0.7
			e	28	16.00	
WB5	33.73	266	eP	24	22.20	-2.3
			eS	29	32.80	
			i	29	41.80	
ASPA	33.74	259	iPd	24	22.90	-1.6
	1.1s		41.00nm			5.0mb
Z	21s		0.92um			4.5Msz
			iPP	24	59.10	
			iS	29	33.60	
			eScP	30	27.30	
			LR	36	55.50	
WRA	33.75	266	Pc	24	22.50	-2.1
	0.9s		14.40nm			4.7mb
MTN	38.45	276	eP	25	03.00	-1.2
FORR	38.90	247	iPc	25	07.30	-0.5
	0.4s		44.00nm			5.5mb
WARB	40.17	255	iPd	25	18.00	-0.3
MBL	46.96	261	eP	26	12.00	-0.9
RKG	48.38	243	eP	26	23.30	-0.5
MRWA	49.41	249	eP	26	30.00	-1.8
PCI	53.38	286	ePd	27	04.00	2.4
	1.0s		7.00nm			4.4mb
KKM	59.80	291	ePd	27	47.50	0.4
MAT	65.32	332	eP	28	22.00	-1.1
	1.5s		97.22nm			5.5mb
SPA	68.57	180	eP	28	42.40	-1.0
	1.2s		35.92nm			5.1mb
SSE	70.52	316	eP	28	54.60	-0.9
QIZ	71.70	300	eP	28	58.60	-4.2X
NJ2	72.65	316	Pd	29	07.80	-0.3
IPM	72.70	282	ePd	29	09.60	0.8
	0.9s		43.10nm			5.2mb
SNG	74.14	284	eP	29	17.80	0.7
WHN	74.73	312	Pd	29	20.00	-0.2
DL2	75.53	323	P	29	25.00	0.4

20d 18h

	1.0s	100.00nm		5.5mb		
TIA	76.41	318	Pd	29	29.40	-0.2
CN2	77.01	328	Pc	29	32.00	-0.7
NNT	77.22	289	eP	29	35.00	0.6
LOE	77.64	294	eP	29	37.00	0.3
GYA	78.06	305	P	29	39.20	0.2
BJI	79.44	321	eP	29	45.50	-0.5
	1.0s	18.00nm		4.8mb		
BDT	79.89	293	eP	29	48.20	-0.6
TIY	80.29	317	eP	29	50.10	-0.6
E	22s	1.30um				
KMI	80.45	302	Pd	29	53.00	1.0
XAN	80.50	312	P	29	52.20	0.3
CHG	80.63	294	ePc	29	53.60	0.8
	1.0s	29.75nm		5.0mb		
CD2	82.53	307	eP	30	02.80	0.3
BTO	83.51	318	eP	30	08.30	1.0
LZH	85.11	312	P	30	15.50	0.0
	1.4s	73.00nm		5.3mb		
SHL	89.42	298	iP	30	36.70	0.2
			eS	40	51.00	
GTA	89.53	313	iPd	30	37.00	0.3
KVN	89.93	48	e(P)	30	31.00	-7.6X
LSA	91.69	301	eP	30	47.00	-0.3
GUN	95.28	298	P	31	03.80	0.1
PKI	95.54	297	P	31	04.80	-0.1
KKN	95.73	297	P	31	05.50	-0.1
DMN	95.81	297	P	31	06.20	0.2
	0.8s	25.00nm		5.7mb		
GKN	96.34	297	P	31	07.60	-0.6
	0.8s	13.00nm		5.4mb		
WMQ	99.61	313	P	31	22.80	0.2
SUF	132.26	339	ePKP	36	52.00	-0.1
NUR	134.30	337	ePKP	36	56.00	0.0
SPC	143.67	327	ePKP	37	12.50	-1.2
			e	37	26.70	
KDZ	144.44	312	iPKPd	37	14.00	-1.0
KSP	144.45	332	iPKPd	37	13.20	-1.5
	1.0s	105.00nm				
			ePP	40	38.30	
			e	07	29.00	
RDO	144.55	312	ePKP	37	13.00	-2.1
PSZ	144.64	325	iPKP	37	13.80	-1.4
PRK	144.71	308	ePKP	37	14.70	-0.8
PLD	144.74	313	iPKPd	37	14.00	-1.4
PGB	144.91	314	ePKP	37	15.00	-0.8
BZS	145.00	321	ePKP	37	15.00	-0.8
BRG	145.44	334	iPKPd	37	15.80	-0.5
	1.5s	150.00nm				
			i	37	22.00	
			i	38	08.10	
CLL	145.48	335	iPKP	37	16.20	-0.2
	1.3s	120.00nm				
VTS	145.52	315	iPKPd	37	17.00	0.0
MMB	145.62	313	ePKPd	37	16.00	-1.0
PRU	145.84	332	iPKPd	37	17.30	0.2
	1.2s	49.50nm				
ZST	145.90	328	ePKP	37	17.50	0.3
KKB	145.93	314	iPKPd	37	18.00	0.5
EKA	145.93	353	PKP	37	17.00	0.0
	1.2s	35.70nm				
PLG	146.32	311	ePKP	37	18.00	-0.2
VAY	146.52	313	ePKP	37	19.30	0.9
MOX	146.55	335	iPKPd	37	20.00	1.8
	1.1s	35.00nm				
KHC	146.90	332	iPKP	37	21.00	2.1
	1.0s	32.00nm				
			e	38	06.50	
SKO	146.97	315	iPKPd	37	20.70	1.5
	0.9s	121.00nm				
			i	37	23.60	
WET	147.19	332	iPKPd	37	21.90	2.6X
GRF	147.46	335	iPKPd	37	22.70	3.0X
Z	21s	0.90um		5.5Msz		
			e	37	25.80	
KZN	147.51	312	ePKP	37	21.50	1.3
OHR	147.80	314	ePKP	37	21.00	0.4
	1.0s	0.10nm				
BCAO	147.86	242	ePKPd	37	20.50	-0.9
	0.9s	47.00nm				
			id	37	24.00	
PTJ	148.01	325	ePKP	37	22.50	1.7
VLI	148.03	305	ePKP	37	24.20	3.2X
ZAG	148.05	325	iPKP	37	24.00	3.3X
TNS	148.06	338	ePKPd	37	25.10	4.4X
BHG	148.26	331	iPKPd	37	24.20	3.2X
ENN	148.42	341	ePKP	37	23.00	1.9
	0.8s	20.00nm				
			e	37	24.80	
KBA	148.51	329	iPKPd	37	23.50	1.8
	0.8s	16.00nm				
MEM	148.53	341	iPKP	37	24.70	3.4X
ITM	148.63	307	ePKP	37	25.00	3.0X
VBY	148.64	325	iPKPd	37	25.70	4.0X
LJU	148.65	327	ePKP	37	26.50	4.8X
ABH	148.66	339	ePKP	37	25.10	3.5X
CEY	148.91	327	ePKP	37	26.00	3.8X
RUP	148.98	339	ePKP	37	25.88	3.7X
VOY	148.98	327	ePKP	37	25.50	3.1X
			e	37	30.30	
SNF	149.12	343	PKP	37	31.90	9.7X
FVI	149.13	329	PKP	37	25.10	2.7X
RIY	149.20	326	ePKP	37	26.10	3.6X
TRI	149.27	327	iPKPd	37	26.50	3.9X
SCE	149.30	331	ePKPd	37	25.10	2.2
GWF	149.40	338	PKP	37	27.07	4.3X
DOU	149.41	342	PKP	37	26.80	4.1X
WLS	149.97	337	PKP	37	28.02	4.3X
CDF	150.00	337	PKP	37	28.15	4.4X
CTI	150.06	330	PKPd	37	28.40	4.4X
FEL	150.18	336	PKP	37	28.47	4.3X
MOF	150.53	337	PKP	37	29.16	4.6X
VITF	150.62	339	PKP	37	29.41	4.9X
BSF	150.67	337	PKP	37	29.69	4.9X
HAU	150.68	338	ePKP	37	29.50	4.8X
	0.8s	34.90nm				
SAL	150.91	330	PKP	37	30.50	5.4X
LOMF	151.06	337	PKP	37	30.73	5.3X
TDS	151.48	315	PKP	37	32.50	6.3X
SFI	151.49	326	PKP	37	32.00	6.0X
VAI	151.50	333	PKPd	37	31.50	5.6X
PGD	151.59	327	PKP	37	33.50	7.1X
ASS	151.65	324	PKP	37	33.30	6.9X
SGO	151.65	318	PKPd	37	32.00	5.7X
CZI	151.84	314	PKP	37	31.10	4.4X
SDI	151.88	321	PKP	37	32.20	5.4X
FLN	151.90	347	ePKP	37	31.80	5.3X
	0.7s	11.00nm				
LDF	151.99	347	ePKP	37	32.10	5.5X
BDI	152.03	328	PKP	37	32.50	5.6X
BO8	152.05	330	PKP	37	33.00	6.1X
LOR	152.15	340	ePKP	37	32.80	5.9X
	0.8s	15.45nm				
PII	152.31	328	PKP	37	32.00	4.8X
GRR	152.34	347	ePKP	37	32.80	5.7X
	0.9s	16.40nm				
LBF	152.36	340	ePKP	37	33.20	5.9X
SSF	152.44	340	ePKP	37	33.50	6.2X
	1.0s	14.00nm				
SOI	152.48	312	PKP	37	34.00	6.4X
LPG	152.63	335	ePKP	37	34.50	6.5X
	0.6s	6.30nm				
SMF	152.70	340	ePKP	37	34.00	6.3X
LPF	152.71	347	ePKP	37	34.00	6.4X
	0.7s	6.60nm				
CKI	152.84	331	PKP	37	34.00	6.0X
BNI	153.03	334	PKP	37	35.00	6.6X
SBF	153.66	332	ePKP	37	36.00	6.8X
PGF	153.93	328	ePKP	37	36.90	7.2X
	0.8s	8.05nm				
FRF	154.25	332	ePKP	37	37.20	7.3X
LRG	154.46	332	ePKP	37	38.10	7.9X
LMR	154.49	332	ePKP	37	37.80	7.6X

S.D. = 1.0 on 87 of 148 obs.

FEB 20, 1990 18h 41m 39.42± 0.28s
41.221 N ± 2.8km 19.627 E ± 2.9km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)
ML 4.1 (SKO). MD 3.8 (ATH). Felt (III) at Tirano.

TIR	0.22	55	iPgc	41	44.50	0.3
LACI	0.42	8	iPgd	41	47.20	-0.8
BERA	0.57	155	iPgd	41	50.50	-0.5
VLO	0.76	188	iPgd	41	55.90	1.2
PHP	0.77	52	iPgd	41	52.20	-2.2
ULC	0.79	339	ePg	41	55.00	0.1
			eSg	42	07.00	
SDA	0.80	353	iPgc	41	57.90	3.0X
PUK	0.84	14	ePg	41	55.20	-0.5
OHR	0.89	97	iPgd	41	55.10	-1.5
			iSg	42	09.40	
TPE	0.97	162	iPgd	41	57.50	-0.3
KKS	1.04	34	iPgd	41	58.00	-1.0
KBN	1.08	123	iPgc	42	00.00	0.3
BCI	1.19	16	ePn	42	01.50	-0.1
BDV	1.22	331	ePg	42	03.00	0.9
			eSg	42	22.20	
TTG	1.24	347	ePg	42	03.30	0.9
			eSg	42	21.50	
LSK	1.30	145	iPnc	42	02.90	-0.7
SRN	1.37	168	iPn	42	05.90	1.4
PVY	1.40	11	ePg	42	05.50	0.5
			eSg	42	27.20	
HCY	1.49	326	ePg	42	06.90	0.7
			eSg	42	28.70	
KEK	1.51	175	ePn	42	07.00	0.5
LCI	1.55	236	P	42	06.50	-0.5
			eSn	42	28.10	
NKY	1.66	344	ePn	42	10.70	1.9
			eSn	42	34.20	
IVA	1.66	7	ePn	42	11.20	2.4
			eSn	42	36.00	
BRT	1.86	260	Pd	42	12.80	1.1
			eSn	42	41.00	
KZN	1.87	119	ePn	42	13.10	1.3
BAI	2.09	268	P	42	13.50	-1.3
PLE	2.11	355	ePn	42	17.50	2.1
			eSn	42	45.00	
ORI	2.68	245	P	42	24.90	1.5
ROI	2.86	236	P	42	25.30	-0.6
CSI	2.93	242	P	42	26.30	-0.6
TDS	2.96	239	P	42	26.60	-0.6
VTS	3.00	62	iPc	42	29.00	0.9
PLG	3.02	105	ePn	42	28.50	0.3
HVAR	3.07	311	i(Pn)	42	27.60	-1.2
MMN	3.07	246	P	42	29.60	0.7
MMB	3.11	82	ePc	42	29.00	-0.4
MGR	3.28	252	Pd	42	31.70	-0.2
CZI	3.34	234	P	42	32.40	-0.3
SGO	3.34	260	P	42	32.90	0.2
NEO	3.35	124	ePn	42	35.30	2.4
PGB	3.64	67	eP	42	38.00	0.9
DUI	3.91	278	P	42	41.00	0.1
SOI	4.18	222	P	42	42.80	-1.8
KDZ	4.37	82	eP	42	46.00	-1.4
SDI	4.39	278	P	42	47.40	-0.3
ITM	4.41	155	ePn	42	47.00	-1.0
RDO	4.46	89	ePn	42	47.60	-1.0
BZS	4.63	18	ePc	42	49.50	-1.4
PVL	4.68	63	eP	42	52.00	0.2
PTJ	5.38	332	eP	42	55.40	-6.4X
CEY	5.89	322	e(Pn)	43	09.60	0.8
			eSn	44	14.50	
VOY	6.36	321	ePn	43	13.70	-1.8
			eSn	44	24.80	
FVI	7.30	320	P	43	26.40	-2.2
GKN	53.96	82	P	51	00.00	-5.7X

S.D. = 1.2 on 51 of 54 obs.

FEB 20, 1990 18h 48m 04.03± 0.32s
25.413 S ± 7.3km 116.169 W ± 8.1km
DEPTH = 10.0km (geophysicist)
5.3mb (17 obs.) 5.5Msz (4 obs.)
EASTER ISLAND CORDILLERA (684)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 31C
Centroid Location:
Origin Time 18:48:15.8 0.7
Lat 25.84S 0.04 Lon 116.44W 0.06
Dep 15.0 FIX Half-duration 2.7
Moment Tensor; Scale 10**17 Nm
Mrr=-0.35 0.10 Mtt=-2.15 0.12
Mff= 2.50 0.12 Mrt= 0.00 0.00
Mrf= 0.00 0.00 Mtf=-2.68 0.11
Principal Axes:
T Val= 3.73 Plg= 0 Azm=245
N -0.35 90 180
P -3.38 0 155
Best Double Couple:Mo=3.5*10**17
NP1:Strike=290 Dip=90 Slip=-180
NP2: 20 90 0

ARE	42.50	87	eP	56	02.00	0.2
LPB	45.55	89	P	56	27.00	0.5
	1.2s	93.75nm		5.6mb		
Z	24s	4.65um		5.3MszX		
			S	03	16.00	
			LR	09	55.00	

ZOBO	45.61	88	Pd	56	26.50	-0.7
	1.3s		98.58nm			5.6mb
Z	21s		4.90um			5.4Msz
			S	03	22.00	
			LR	09	52.00	
PSO	45.94	61	eP	56	31.00	1.4
CCH	47.04	91	P	56	38.70	0.5
BOG	50.61	60	eP	57	07.50	1.7
			iS	04	30.00	
BMG	52.90	58	iPd	57	20.00	-2.9
TOV	57.12	58	eP	57	50.80	-2.7
BAR	57.77	359	eP	57	58.00	0.4
CEOS	57.78	60	eP	57	55.00	-3.2X
GLA	58.15	1	eP	58	01.00	0.7
PLM	58.44	359	eP	58	03.00	0.5
RVR	59.09	359	eP	58	08.00	1.2
PAS	59.26	358	eP	58	08.00	0.0
MWC	59.33	358	eP	58	07.00	-1.7
OLLA	59.58	60	eP	58	07.50	-3.2X
CAR	59.78	60	eP	58	08.00	-4.1X
SBB	59.79	358	eP	58	11.00	-0.7
LLAV	59.85	60	eP	58	08.00	-4.6X
GSC	60.39	359	eP	58	16.00	0.2
ALQ	60.73	9	iPd	58	18.10	-0.2
	1.0s		12.50nm			5.0mb
ANMO	60.73	9	P	58	18.60	0.3
	1.2s		22.46nm			5.2mb
ISA	60.78	358	eP	58	17.00	-1.4
PRI	61.37	356	eP	58	23.30	0.8
FRI	62.16	357	eP	58	27.20	-0.4
ARN	62.63	355	P	58	31.20	0.4
MHC	62.63	355	eP	58	32.00	1.0
UYO	62.74	20	e(P)	58	30.60	-1.0
FKO	62.91	17	e(P)	58	52.20	19.5X
TNP	63.17	359	P	58	35.70	1.1
	1.1s		9.74nm			4.9mb
BKS	63.21	355	e(P)	58	44.00	9.4X
Z	20s		5.00um			5.7Msz
N	20s		3.60um			
E	20s		0.70um			
			eS	07	38.00	
			eLQ	14	50.00	
			eLR	17	40.00	
CMB	63.23	356	eP	58	35.70	0.9
MSU	63.70	3	P	58	39.20	1.1
KVN	64.15	358	P	58	41.80	0.8
SPA	64.74	180	eP	58	45.30	0.7
	2.2s		246.88nm			6.0mb
OLY	64.93	22	P	58	45.20	-0.8
DUG	65.34	3	P	58	49.70	1.0
	1.1s		16.45nm			5.1mb
GOL	65.55	9	P	58	49.60	-0.6
	1.0s		25.00nm			5.4mb
Z	19s		1.46um			5.2Msz
WDC	65.92	355	eP	58	52.40	0.2
LBFM	66.63	355	P	58	57.60	0.6
GBTN	67.85	28	P	59	03.80	-0.8
JSC	67.99	31	P	59	05.20	-0.2
BW06	68.12	5	P	59	05.50	-0.9
	1.5s		21.74nm			5.1mb
IMW	69.13	4	P	59	12.40	-0.3
DZM	69.96	254	iPc	59	16.70	-1.4
BLA	70.79	30	P	59	22.20	-0.5
	1.0s		23.00nm			5.3mb
LRM	70.97	3	eP	59	24.10	0.3
NA2	72.76	31	P	59	33.80	-0.5
PNT	74.45	358	eP	59	44.00	0.0
CAI	77.34	91	eP	00	00.80	-0.3
EDM	78.34	2	ePc	00	05.40	-0.3
	1.2s		54.00nm			5.5mb
RSON	78.49	14	P	00	06.00	-0.6
	1.1s		40.37nm			5.4mb
RSNY	79.34	29	P	00	12.10	0.7
	1.5s		65.28nm			5.4mb
CAN	79.44	236	eP	00	10.70	-1.7
WNY	79.52	29	P	00	13.30	0.9
HBVT	79.85	30	P	00	14.30	0.2
FFC	80.74	8	eP	00	13.00	-5.6X
	1.5s		56.00nm			5.4mb
TOO	81.09	233	eP	00	20.00	-1.1
BFD	83.37	232	eP	00	34.00	1.1
CTA	88.07	249	iPc	00	56.00	-0.4
	2.0s		117.65nm			5.9mb
PMR	90.68	345	eP	01	07.10	-0.6
FBA	93.30	347	eP	01	19.00	-0.7
	1.2s		11.70nm			5.2mb
QIS	93.40	245	eP	01	20.50	-0.7
INK	94.32	354	eP	01	23.00	-1.2
IMA	95.57	346	eP	01	28.10	-2.2
WRA	98.00	244	P	01	43.00	0.8
	0.7s		4.70nm			5.2mb
WB5	98.01	244	eP	01	41.00	-1.2
8CAO	131.84	108	iPKPd	07	18.70	-1.3
	0.4s		5.00nm			
MLR	143.65	47	iPKPc	07	38.00	-3.0X
LZH	144.23	297	PKPc	07	38.50	-3.8X
CD2	144.51	288	ePKP	07	45.40	2.6
KMI	144.90	278	PKPc	07	42.50	-1.3
BDT	146.32	263	ePKP	07	45.40	-0.6
GTA	146.80	304	iPKPc	07	47.80	1.4
Z	20s		0.90um			5.5Msz
CHG	146.88	266	iPKPc	07	48.70	1.7
	1.1s		35.13nm			
KHL	148.33	58	ePKP	07	51.00	2.2
ALT	148.59	56	ePKP	07	52.00	2.7X
ELL	148.98	60	ePKP	07	54.00	4.0X
BBTK	150.31	53	ePKP	07	57.00	5.1X
WMQ	153.27	319	PKP	08	03.00	7.0X
LSA	155.43	286	PKP	08	01.70	1.8
GKN	161.23	282	PKP	08	00.00	-6.3X
MAIO	168.53	18	ePKP	08	13.00	0.8
			e	13	09.00	
QUE	174.50	331	ePKP	08	16.50	1.2
S.D. = 1.1		on	70 of	84	obs.	

FEB 20, 1990 18h 53m 05.17± 0.78s
31.229 S ± 7.7km 68.620 W ± 6.5km
DEPTH = 114.0 ± 9.7 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.16	128	iPc	53	21.00	-0.5
RTCB	0.30	211	eP	53	22.00	0.0
ZON	0.32	189	iPd	53	21.00	-0.8
			eS	53	32.00	
CFA	0.50	139	iPd	53	23.00	0.3
RTCV	0.63	174	iPc	53	23.70	0.0
RTRS	1.28	325	iPc	53	30.80	0.8
JACH	2.22	229	eP	53	43.00	1.3
FCH	2.53	214	iPc	53	47.50	1.5
			iS	54	19.50	
ROCH	2.67	229	iPd	53	47.40	-0.4
			iS	54	19.00	
MRA	2.74	116	iPc	53	49.30	0.8
			S	54	13.20	
SAN	2.81	217	eP	53	50.00	0.5
			eS	54	24.00	
PCH	2.87	213	iPd	53	51.40	1.0
			iS	54	25.00	
TACH	3.11	218	iPc	53	53.10	-0.4
CHCH	3.20	212	iPd	53	54.90	0.2
			iS	54	33.00	
LCCH	3.35	227	iPc	53	55.50	-1.2
TCA	3.45	93	ePc	53	58.20	0.0
RFA	3.53	178	iPc	53	58.80	-0.5
LNV	3.60	220	iPd	53	58.10	-1.9
CYA	3.71	42	e(P)	54	01.00	-0.6
S.D. = 0.9		on	19 of	19	obs.	

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* FEB 20, 1990 19h 25m 08.12± 0.79s
37.213 N ± 6.4km 29.996 E ± 8.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

ELL	0.47	189	ePn	25	17.70	0.0
BCK	0.53	62	iPn	25	19.00	0.1
KHL	1.17	341	iPn	25	30.30	0.3
CIN	1.57	285	eP	25	36.00	0.0
ALT	1.84	3	iPn	25	39.80	-0.3
S.D. = 0.3		on	5 of	5	obs.	

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* FEB 20, 1990 19h 25m 35.94± 1.05s
5.454 S ±12.9km 129.564 E ±21.3km
DEPTH = 195.9 ± 12.7 km
4.8mb (2 obs.)
BANDA SEA (280)

AAI	2.22	322	ePc	26	17.00	0.1
MTN	7.51	168	iPd	27	23.10	-0.6
			eS	28	31.00	
KNA	10.26	184	eP	27	59.30	-0.3
			eS	29	48.00	
WB5	15.08	162	eP	29	00.30	-0.4
			eS	31	38.00	
WRA	15.13	163	P	29	03.00	1.7
	0.6s		4.00nm			4.0mb
QIS	17.90	148	eP	29	33.00	-0.7
MBL	18.24	210	eP	29	37.30	0.0
ASPA	18.58	167	iPd	29	41.10	0.2
	0.3s		53.00nm			5.5mb
Z	22s		2.86um			5.5MszX
			iS	32	59.80	
			LR	37	56.80	
CHG	38.62	309	eP	32	41.90	-0.1
S.D. = 0.9		on	9 of	9	obs.	

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* FEB 20, 1990 19h 33m 44.37± 0.80s
38.328 N ± 6.4km 20.655 E ±14.0km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 3.0 (ATH).

VLS	0.16	199	ePg	33	47.80	-0.3
ITM	1.53	138	ePb	34	12.00	0.3
KEK	1.54	335	ePb	34	12.50	0.7
KZN	2.16	23	ePn	34	21.00	0.1
OHR	2.78	2	ePn	34	29.00	-0.8
S.D. = 0.8		on	5 of	5	obs.	

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* FEB 20, 1990 19h 46m 41.87± 0.72s
3.856 N ±14.9km 97.279 E ± 8.6km
DEPTH = 33.0km (normal)
4.5mb (4 obs.)
NORTHERN SUMATERA (706)

IPM	3.81	79	ePd	47	40.50	0.9
	0.5s		95.90nm			
			e	47	59.90	
			e	48	41.20	
KLM	4.42	100	eP	48	22.80	34.4X
			e	49	02.00	
SNG	4.68	45	eP	47	51.00	-1.1
KGM	6.30	107	eP	48	16.00	1.0
			e	50	07.40	
NNT	9.01	15	eP	48	46.30	-6.5X
CHG	14.95	6	eP	50	16.90	4.2X
GBA	21.85	298	Pc	51	33.30	-0.3
	0.6s		2.20nm			3.8mb
HYB	22.77	308	eP	51	43.00	0.2
GUN	26.27	337	P	52	00.00	-16.6X
WB5	43.41	124	eP	54	42.80	-0.7
WRA	43.42	124	Pc	54	42.30	-1.2
	0.4s		2.00nm			4.2mb
SBF	87.24	314	eP	59	27.90	1.3
	0.7s		4.40nm			4.8mb
LPG	87.65	315	eP	59	28.70	-0.1
	0.7s		3.85nm			4.6mb
S.D. = 1.1		on	9 of	13	obs.	

? FEB 20, 1990 20h 08m 28.60± 5.72s
31.292 S ±24.2km 68.462 W ±38.6km
DEPTH = 98.3 ± 53.2 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.04	190	iPc	08	42.40	-0.4
RTCB	0.35	236	iPd	08	43.90	0.3
			(S)	08	57.00	
CFA	0.37	149	iPd	08	44.00	0.4
			S	08	55.00	
RTCV	0.57	186	iPc	08	44.70	-0.3
			S	08	56.80	
RTRS	1.41	322	iPc	08	54.00	0.0
			eS	09	13.50	
S.D. = 0.7		on	5 of	5	obs.	

? FE8 20, 1990 20h 40m 14.52± 3.63s
33.880 S ±17.0km 72.354 W ±27.4km
DEPTH = 33.0km (normal)
OFF COAST OF CENTRAL CHILE (134)

LCCH	0.77	59	iPd	40	28.90	0.0
			iS	40	41.50	
LNV	0.79	96	iPd	40	28.00	-1.1
			iS	40	39.10	
IHA	1.04	35	eP	40	32.00	-0.8
			eS	40	48.30	
TACH	1.20	80	iPc	40	33.90	-1.2
			iS	40	52.00	
CHCH	1.42	93	iPc	40	37.60	-0.6
			iS	40	57.50	
ROCH	1.44	51	ePc	40	38.30	-0.5
			iS	41	02.00	

20d 20h

			i	41	03.00	
SAN	1.47	74	iPc	40	38.70	-0.4
			iS	41	00.20	
PCH	1.56	81	iPc	40	39.50	-0.8
			iS	41	01.70	
			i	41	04.70	
FCH	1.81	73	ePc	40	43.60	-0.6
			iS	41	10.00	
JACH	1.90	51	ePd	40	46.00	0.7
			iS	41	14.00	
RFA	3.34	107	ePc	41	08.10	2.4
RTCB	3.83	52	eP	41	14.00	1.3
			(S)	42	17.50	
CFA	4.14	58	e(P)	41	18.00	0.9
RTLL	4.15	53	ePd	41	18.00	0.8
RTRS	4.44	34	iPc	41	22.00	0.7
ZOBO	17.95	13	eP	44	23.00	-0.8
			LR	32	00.00	

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

FEB 20, 1990 21h 43m 07.85± 0.38s
42.953 N ± 3.4km 13.935 E ± 4.6km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)
ML 3.0 (KBA).

AQU	0.72	213	P	43	20.90	-1.1
			eSg	43	33.20	
ASS	0.94	278	P	43	25.10	-0.8
			eSg	43	40.30	
AZI	1.03	201	P	43	27.70	0.4
SDI	1.25	184	P	43	30.00	-1.1
			eSg	43	47.40	
DUI	1.35	163	P	43	34.10	1.4
			eSn	43	52.40	
RSM	1.45	313	P	43	35.50	1.4
RMP	1.46	219	P	43	34.70	0.4
			eSg	43	52.30	
RDP	1.50	218	P	43	35.10	0.3
CRE	1.60	296	P	43	37.20	0.9
			eSn	43	58.30	
SFI	1.80	303	P	43	40.90	1.8
HVAR	1.85	82	iP	43	40.00	0.1
PGD	1.86	300	P	43	41.30	1.1
MAO	2.12	256	P	43	42.60	-1.2
RIY	2.41	8	i(Pn)	43	47.50	-0.4
SGO	2.60	156	P	43	51.50	0.8
BDI	2.67	296	P	43	51.00	-0.7
VBY	2.72	20	eP	44	19.50	27.1X
			i(Sn)	44	43.40	
TRI	2.76	358	e(Pn)	43	51.80	-1.1
			e(Sn)	44	25.10	
			e(Sg)	44	39.30	
CEY	2.81	7	eP	44	07.00	13.4X
			eSn	44	28.00	
MGR	3.06	156	P	43	57.20	0.0
VOY	3.08	359	e(Pn)	43	52.90	-4.6X
			eSn	44	33.60	
LJU	3.12	8	eP	43	58.50	0.5
			e	44	07.50	
			e(Sn)	44	30.00	
BRT	3.20	129	P	43	58.20	-1.0
PTJ	3.28	25	ePn	44	01.80	1.4
			eSn	44	36.10	
CTI	3.50	333	P	44	02.30	-1.2
BOB	3.72	301	Pc	44	06.90	0.3
			eSn	44	47.30	
FVI	3.73	348	Pd	44	05.40	-1.3
KBA	4.15	354	iPnd	44	11.90	-0.8
			iSn	45	02.80	
			i	45	35.30	

S.D. = 1.0 on 25 of 28 obs.

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* FEB 20, 1990 21h 54m 04.71± 0.77s
34.491 S ±13.7km 179.208 E ±15.7km
DEPTH = 33.0km (normal)
4.7mb (2 obs.)
SOUTH OF KERMADEC ISLANDS (179)

MRW	7.61	207	P	55	56.00	-0.1
			S	57	17.00	
ASPA	40.74	273	iPc	01	44.50	0.2
	0.6s		12.00nm		4.8mb	
WRA	42.11	278	Pc	01	54.70	-0.8
	0.3s		4.30nm		4.7mb	
WB5	42.12	278	eP	01	56.20	0.6
BCAO	145.13	215	ePKPc	13	34.30	-6.7X
	0.5s		6.00nm			
LIC	151.60	171	PKP	13	50.80	-0.4
KIC	151.77	172	PKP	13	52.00	0.6
NB2	152.33	347	PKP	13	51.00	0.1
	0.8s		3.10nm			
HFS	152.66	344	ePKP	13	50.90	-0.4
	0.4s		1.30nm			
			e	14	03.50	

S.D. = 0.6 on 8 of 9 obs.

? FEB 20, 1990 22h 30m 42.67± 0.89s
41.825 N ±13.4km 12.796 E ± 8.7km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

RMP	0.07	259	Pd	30	44.80	-0.3
			eSg	30	46.30	
RDP	0.09	222	Pc	30	45.60	0.3
			eSg	30	48.10	
AQU	0.70	40	P	30	56.60	0.2
			eSg	31	07.70	
SDI	0.77	99	Pd	30	57.60	-0.2
			eSg	31	09.60	

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

? FEB 20, 1990 22h 34m 58.86± 1.48s
41.908 N ±13.2km 12.767 E ±14.6km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

RMP	0.11	206	Pd	35	01.70	0.0
			eSg	35	03.10	
RDP	0.15	194	Pc	35	02.50	0.0
			eSg	35	04.90	
AQU	0.65	47	P	35	11.90	0.0
SDI	0.81	104	Pd	35	14.60	0.0
			eSg	35	26.90	

S.D. = 0.0 on 4 of 4 obs.

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* FEB 20, 1990 22h 51m 46.93± 0.99s
40.735 N ± 7.4km 20.805 E ± 9.9km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)
MD 2.9 (ATH). ML 2.3 (SKO).

OHR	0.38	359	iPg	51	53.50	-1.2
			iSg	53	00.50	
KZN	0.85	120	ePb	52	02.00	-1.4
KEK	1.28	217	ePb	52	11.00	0.3
SKO	1.33	21	ePn	52	12.00	0.6
			eSn	52	29.00	
			e	52	30.50	
VAY	1.46	66	ePn	52	14.50	1.2
PLG	2.04	99	ePb	52	22.10	0.3

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

? FEB 20, 1990 22h 56m 01.94± 3.76s
29.553 S ±31.2km 70.557 W ±39.9km
DEPTH = 110.4 ± 22.4 km
CENTRAL CHILE (136)

RTRS	1.13	123	iPd	56	25.00	0.2
RTCB	2.45	142	eP	56	41.50	0.1
			(S)	56	59.00	
RTLL	2.53	135	iPc	56	40.80	-1.6
CFA	2.86	136	iPc	56	42.20	-4.7X
RTCV	2.88	143	ePc	56	48.30	1.1
			S	57	11.20	
MRA	5.04	126	ePc	57	16.40	-0.1
			S	58	13.20	
TCA	5.45	111	eP	57	22.70	0.5
TIC	72.42	72	P	07	19.20	0.9
KIC	72.50	72	P	07	17.80	-0.9

S.D. = 1.2 on 8 of 9 obs.

? FEB 20, 1990 23h 02m 10.09± 5.58s
31.544 S ±18.2km 67.776 W ±38.4km
DEPTH = 10.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

CFA	0.40	261	iP	02	19.00	0.7
RTLL	0.63	290	iPc	02	22.00	-0.8
RTCV	0.72	244	iPc	02	24.00	-0.3
			S	02	35.80	
RTCB	0.88	273	iP	02	27.00	0.0
			eS	02	40.50	
RTRS	1.99	313	iPd	02	44.60	0.4
			eS	03	11.10	

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

% FEB 21, 1990 00h 12m 18.74± 2.21s
44.546 N ±11.7km 6.865 E ±20.9km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 1.7 (GEN).

PZZ	0.17	104	P	12	23.26	0.5
			S	12	26.08	
RRL	0.38	351	P	12	26.64	0.1
			S	12	32.54	
STV	0.45	132	P	12	27.93	0.1
			S	12	34.13	
ENR	0.51	129	P	12	29.22	0.1
			S	12	36.13	
RSP	0.67	25	P	12	32.04	0.0
			S	12	41.02	
ROB	0.76	109	P	12	33.03	-0.7

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

FEB 21, 1990 00h 24m 45.88± 0.44s
36.034 N ± 5.1km 27.215 E ± 4.2km
DEPTH = 60.8 ± 8.8 km
3.8mb (11 obs.)
DODECANESE ISLANDS (369)
MD 4.2 (ATH).

KAP	0.48	184	ePg	24	56.60	-1.2
YER	1.39	38	iPn	25	08.50	-1.0
NPS	1.52	240	ePb	25	12.00	0.9
SMG	1.70	350	ePb	25	12.00	-1.6
APE	1.70	308	ePb	25	11.50	-2.3
KSL	1.92	87	ePn	25	18.60	1.9
ELL	2.29	71	iPn	25	24.20	2.2
IZM	2.36	1	ePn	25	22.80	-0.1
VAM	2.53	257	ePn	25	26.00	0.7
KHL	2.94	38	ePn	25	30.00	-1.2
BCK	3.06	61	ePn	25	34.80	1.9
PRK	3.29	347	ePn	25	34.00	-2.1
ATH	3.40	306	ePb	25	40.00	2.4
VLI	3.52	282	ePn	25	39.50	0.2
DST	3.74	17	ePn	25	42.00	-0.4
ALT	3.79	36	ePn	25	43.50	0.3
EZN	3.85	350	ePn	25	45.00	1.1
PPCY	4.34	104	eP	25	52.00	1.2
BNT	4.35	7	ePn	25	47.00	-4.0X
ITM	4.41	287	ePn	25	54.00	2.2
NEO	4.55	317	ePn	25	52.00	-1.8
YLV	4.83	20	ePn	26	03.00	5.2X
CSS	5.10	100	ePn	26	02.00	0.4
			eSn	27	04.50	
PLG	5.25	327	ePb	26	14.20	10.5X
RDO	5.27	346	ePn	26	01.00	-2.9
VLS	5.71	294	ePn	26	12.00	1.9
BBTK	5.80	47	iP	26	12.00	0.6
VAY	6.41	327	eP	26	23.70	4.0X
HLW	7.07	149	ePn	26	29.30	0.3
			eSn	27	45.00	
OHR	7.14	317	eP	26	30.50	0.5
	1.1s		0.03nm		1.9mb X	
KOT	7.22	146	ePn	26	30.50	-0.5
SKO	7.44	325	eP	26	38.50	4.4X
HRI	7.55	109	eP	26	35.00	-0.7
BURJ	8.06	116	P	26	42.10	-0.7
SALJ	8.10	117	P	26	44.20	0.9
DSI	8.12	121	e(P)	26	42.00	-1.5
MASJ	8.27	119	P	26	44.60	-1.1
MBH	8.97	132	eP	26	54.00	-1.2
CZI	9.35	293	P	26	58.50	-1.9
TRI	14.02	318	ePd	28	10.00	7.3X
KBA	15.13	321	ePc	28	23.80	6.4X
	0.9s		19.20nm		4.3mb	
KHC	16.46	327	iP	28	36.50	2.4
	1.1s		7.50nm		3.8mb	
KSP	16.76	335	eP	28	39.50	1.6
GRF	17.94	324	eP	28	55.00	2.5
LPG	18.11	308	eP	28	55.20	0.3
	0.7s		4.40nm		3.7mb	
BSF	19.16	314	eP	29	05.90	-1.3
	0.7s		3.30nm		3.7mb	
CDF	19.19	316	eP	29	07.60	0.1
	0.7s		2.20nm		3.5mb	
HAU	19.51	314	eP	29	10.30	-0.5
	0.7s		4.40nm		3.8mb	
SMF	20.43	308	eP	29	19.40	-1.0

LBF	20.48	309 eP	29	20.30	-0.6
	1.0s	8.00nm			4.0mb
LOR	20.67	310 eP	29	22.20	-0.6
	1.0s	4.00nm			3.7mb
AVF	20.80	308 eP	29	22.20	-1.9
	1.3s	21.65nm			4.3mb
SSF	20.80	309 eP	29	23.50	-0.7
	1.0s	23.00nm			4.5mb
MEM	21.11	320 P	29	28.30	1.1
RJF	21.50	303 eP	29	31.40	0.1
DOU	21.58	318 P	29	32.70	0.7
FLN	23.94	311 eP	29	56.40	1.4
LPF	24.03	309 eP	29	55.30	-0.6
HFS	25.65	344 eP	30	10.80	-0.4
	0.4s	1.20nm			3.8mb
MAIO	26.00	80 eP	30	19.00	4.2X
BCAO	32.45	196 iPc	31	16.20	3.8X
	0.5s	11.00nm			4.9mb X
KIC	41.58	232 P	32	32.00	2.6X
S.D. = 1.4 on 52 of 62 obs.					

& FEB 21, 1990 00h 33m 31.40s
38.365 N 118.913 W
DEPTH = 14.0km
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 3.1 (BRK).

KVN	0.93	43 iPc	33	48.40	-0.6
CMB	1.21	255 iPc	33	53.10	-0.4
		iS	34	08.80	
TNP	1.36	101 eP	33	55.90	-0.3
FRI	1.51	205 eP	33	58.30	0.3
		eS	34	17.80	
ARN	2.31	245 eP	34	10.00	0.4
ORV	2.34	301 eP	34	10.60	0.6
MHC	2.39	246 eP	34	11.70	0.9
PKEM	2.49	203 eP	34	12.50	0.4
PRI	2.62	213 eP	34	17.10	2.9
PRS	2.82	225 eP	34	18.80	2.0
BCH	3.31	197 eP	34	26.00	2.1
LBFM	3.76	323 eP	34	31.00	0.7
12 obs. associated					

FEB 21, 1990 01h 16m 37.10± 0.43s
52.641 N ± 8.9km 168.237 W ± 5.0km
DEPTH = 33.0km (normal)
4.8mb (34 obs.)
FOX ISLANDS, ALEUTIAN ISLANDS (9)

ADK	5.24	265 eP	17	56.00	0.8
SDN	5.31	56 eP	17	57.20	1.2
KDC	10.34	54 eP	19	03.90	-2.2
SVW	10.92	34 eP	19	17.00	3.0
TTA	12.18	27 eP	19	32.00	1.0
	1.0s	16.25nm			5.1mb
PMS	13.30	42 eP	19	45.20	-0.7
PMR	13.66	42 eP	19	51.40	0.8
	0.4s	12.93nm			5.1mb
TOA	15.13	43 eP	20	07.60	-2.3
IMA	15.31	23 eP	20	14.30	2.1
	1.2s	17.99nm			4.2mb
FBA	16.12	32 eP	20	21.00	-1.5
	0.7s	25.44nm			4.5mb
INK	22.74	33 eP	21	34.00	-2.9
	0.6s	22.00nm			4.8mb
MBC	30.03	21 eP	22	43.00	-1.5
	0.5s	2.00nm			4.2mb
NEW	32.28	77 eP	23	04.50	-0.1
LBFM	33.02	91 eP	23	13.00	1.7
ARN	35.71	96 eP	23	34.50	0.2
KVN	36.71	91 eP	23	43.20	0.3
BCH	38.02	98 eP	23	52.50	-1.3
BW06	39.67	80 eP	24	08.00	0.3
	0.9s	2.54nm			4.0mb
CN2	43.60	286 iPd	24	39.00	-0.5
GOL	44.04	81 eP	24	42.00	-1.5
	0.7s	4.25nm			4.4mb
SNY	45.89	285 eP	24	57.80	0.0
ANMO	46.46	87 eP	25	04.50	1.8
FRB	48.35	36 eP	25	15.00	-1.9
BTO	54.51	292 eP	26	03.50	-0.3
TIY	55.08	288 eP	26	07.50	-0.5
WNY	58.71	57 eP	26	31.30	-2.3
XAN	59.68	287 Pc	26	39.70	-0.8
SOD	59.79	353 iP	26	39.50	-1.2
GTA	60.97	298 P	26	48.00	-1.3
SUF	64.43	353 iP	27	11.00	-0.7
	0.4s	6.20nm			5.1mb
CD2	64.94	289 P	27	15.50	-0.1
NB2	66.67	0 P	27	25.00	-1.1
	0.7s	4.50nm			4.7mb
NUR	66.73	353 iP	27	25.20	-1.3
	0.8s	24.90nm			5.4mb
HFS	67.57	359 eP	27	30.00	-1.8
	0.4s	16.30nm			5.5mb
KMI	69.87	285 eP	27	45.50	-1.3
EKA	71.69	9 P	27	56.00	-1.0
	2.5s	184.90nm			5.7mb
CLL	76.42	359 eP	28	24.00	-0.4
KSP	76.82	357 eP	28	26.30	-0.4
BRG	76.84	359 eP	28	27.50	0.7
CHG	76.95	284 eP	28	28.00	0.0
MOX	77.09	0 eP	28	29.00	0.8
GUN	77.20	299 P	28	30.00	0.4
	0.6s	28.00nm			5.5mb
DOU	77.46	5 P	28	35.10	4.9X
KKN	77.61	300 P	28	31.80	0.0
PKI	77.72	299 P	28	32.60	0.1
GKN	77.78	300 P	28	32.60	0.0
	0.6s	21.00nm			5.3mb
DMN	77.85	300 P	28	33.40	0.3
GRF	78.04	0 eP	28	34.30	0.8
	0.9s	12.00nm			4.9mb
		e	28	47.00	
FLN	78.44	8 eP	28	35.80	0.2
KHC	78.59	359 iP	28	38.00	1.4
LDF	78.64	8 eP	28	36.80	0.1
GRR	78.78	9 eP	28	37.60	0.1
ZST	79.44	356 eP	28	41.60	0.5
HAU	79.63	4 eP	28	42.80	0.6
	0.9s	6.55nm			4.6mb
BSF	79.82	3 eP	28	43.60	0.3
	1.0s	8.00nm			4.7mb
LOR	80.24	5 eP	28	45.90	0.4
SSF	80.43	6 eP	28	47.10	0.7
	1.0s	8.00nm			4.7mb
LBF	80.53	5 eP	28	47.20	0.2
	1.0s	8.00nm			4.7mb
MFF	80.61	8 eP	28	48.00	0.6
	0.9s	14.75nm			5.0mb
KBA	80.65	359 ePc	28	48.30	0.5
	0.8s	20.50nm			5.2mb
		i	29	01.50	
AVF	80.69	6 eP	28	48.20	0.4
	1.0s	10.00nm			4.8mb
SMF	80.86	6 eP	28	49.20	0.5
	0.9s	8.20nm			4.7mb
LSF	81.10	7 eP	28	50.70	0.7
	0.9s	11.45nm			4.9mb
MAF	81.20	6 eP	28	51.10	0.6
RJF	82.04	7 eP	28	55.40	0.5
LFF	82.34	8 eP	28	57.20	0.8
	0.8s	21.50nm			5.3mb
CAF	82.46	7 eP	28	58.10	1.0
	0.9s	4.90nm			4.6mb
LPO	82.63	8 eP	28	58.60	0.6
	0.8s	6.70nm			4.8mb
SBF	83.80	3 eP	29	05.20	1.1
	0.9s	9.85nm			5.0mb
FRF	84.08	4 eP	29	06.40	1.0
	0.9s	6.55nm			4.8mb
EPF	84.20	8 eP	29	06.50	0.4
	0.9s	4.90nm			4.7mb
LMR	84.30	4 eP	29	08.00	1.5
	0.9s	6.55nm			4.8mb
PGF	85.16	2 eP	29	12.40	1.4
	0.9s	13.10nm			5.1mb
HYB	89.62	299 eP	29	31.00	-1.9
GBA	93.37	297 Pd	29	49.60	-0.5
	0.7s	2.00nm			4.7mb
BUL	145.03	332 iPKPc	36	10.30	-2.3X
SLR	150.38	329 iPKPc	36	25.50	4.5X
KSR	150.93	331 ePKP.	36	25.20	3.3X
BFS	151.93	331 ePKP	36	24.00	0.7
BLF	154.18	330 ePKP	36	10.50	-15.9X
S.D. = 1.1 on 75 of 80 obs.					

• FEB 21, 1990 03h 19m 50.43± 0.53s
34.383 N ±11.9km 139.454 E ± 8.0km
DEPTH = 33.0km (normal)
4.6mb (9 obs.)
NEAR S. COAST OF HONSHU, JAPAN (230)

MDJ	12.73	326 eP	22	47.50	-4.3X
CN2	14.36	315 eP	23	13.40	0.2
SNY	14.53	305 eP	23	15.90	0.5
Z	16s	0.60um			
N	15s	0.50um			
		eS	25	50.00	
BJI	19.36	294 eP	24	07.00	-9.1X
WHN	21.51	267 eP	24	39.50	1.0
TIY	22.07	286 eP	24	47.20	3.0X
N	13s	0.50um			
XAN	25.21	278 eP	25	12.50	-2.2
GUN	45.87	277 P	28	11.20	-0.7
PKI	46.38	277 P	28	16.40	0.5
KKN	46.40	277 P	28	15.60	-0.4
	0.6s	6.00nm			4.7mb
GKN	46.85	278 P	28	18.20	-1.2
IMA	49.78	29 P	28	42.80	1.2
PMR	51.70	35 P	28	56.00	-0.1
	0.6s	5.54nm			4.7mb
FBA	52.19	31 iP	29	01.50	1.7
	0.8s	6.21nm			4.6mb
WB5	54.18	186 eP	29	14.80	-0.1
WRA	54.24	186 Pc	29	12.80	-2.5X
	0.8s	1.10nm			3.9mb
INK	57.47	26 eP	29	34.00	-4.1X
ASPA	57.97	186 iPc	29	43.70	1.6
	0.6s	5.00nm			4.8mb
GBA	59.42	266 P	29	53.00	0.6
	0.7s	1.90nm			4.3mb
MBC	59.51	16 eP	29	49.00	-3.3X
	1.0s	5.00nm			4.6mb
NEW	73.15	43 P	31	21.00	1.5
CMB	76.72	53 P	31	42.80	2.6X
	0.9s	7.37nm			4.7mb
KVN	77.65	51 P	31	44.30	-1.1
TNP	78.77	52 P	31	50.00	-1.6
	0.8s	5.39nm			4.6mb
IMW	79.18	44 P	31	53.50	-0.4
DUG	80.30	48 P	31	58.70	-1.1
MSU	81.72	49 P	32	06.30	-1.0
PV09	83.59	47 eP	32	16.50	-0.7
KBA	85.57	326 eP	32	28.50	1.8
S.D. = 1.2 on 22 of 29 obs.					

• FEB 21, 1990 03h 51m 39.30± 0.80s
38.355 N ±11.6km 118.900 W ± 8.1km
DEPTH = 10.0km (geophysicist)
CALIFORNIA-NEVADA BORDER REGION (40)
ML 2.5 (NEIS).

KVN	0.94	42 iPc	51	57.00	-0.3
CMB	1.21	255 P	52	01.70	-0.2
TNP	1.35	101 P	52	04.50	0.1
ARN	2.31	245 P	52	18.50	0.4
BCH	3.30	197 P	52	31.50	-0.7
S.D. = 0.6 on 5 of 5 obs.					

FEB 21, 1990 04h 41m 13.21± 0.69s
38.609 N ± 8.1km 119.493 W ± 6.4km
DEPTH = 5.0km (geophysicist)
CALIFORNIA-NEVADA BORDER REGION (40)
ML 2.8 (BRK).

CMB	0.91	231 iPc	41	30.20	-0.9
		iS	41	42.00	
KVN	1.17	67 iPc	41	35.40	-0.3
FRI	1.62	186 iPd	41	43.70	1.2
		iS	42	05.50	
ORV	1.83	302 eP	41	44.70	-0.8
		eS	42	05.20	
TNP	1.86	106 eP	41	46.00	-0.3
ARN	2.04	233 eP	41	49.30	0.6
MHC	2.12	234 eP	41	49.10	-0.8
MIN	2.38	317 eP	41	55.00	1.3
S.D. = 1.1 on 8 of 8 obs.					

• FEB 21, 1990 04h 58m 03.49± 0.85s
45.855 N ±15.2km 151.627 E ±14.9km
DEPTH = 33.0km (normal)
4.6mb (5 obs.)
KURIL ISLANDS (221)

INK	42.96	32 eP	06	01.00	0.6
CHG	50.91	256 eP	07	04.10	0.6
GUN	54.05	275 P	07	27.40	0.1
	0.6s	8.00nm			4.9mb
KKN	54.54	275 P	07	31.00	0.2
PKI	54.59	275 P	07	31.20	-0.1

21d 05h

DMN	54.77	275	P	07	32.60	0.0
GKN	54.86	276	P	07	33.00	-0.1
	0.4s	6.00nm			5.0mb	
WRA	67.34	198	Pd	08	56.90	-0.4
	0.6s	0.90nm			4.0mb	
NB2	68.74	341	P	09	05.40	-0.2
	0.5s	1.00nm			4.1mb	
HFS	68.93	339	eP	09	06.10	-0.6
	0.4s	2.50nm			4.6mb	
S.D. = 0.4 on 10 of 10 obs.						

% FEB 21, 1990 05h 06m 11.68± 0.52s
37.386 N ± 4.7km 2.261 W ± 4.7km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
mbLg 3.3 (MDD). Felt (IV) at Fines and Portoloo; (III) at Albox and Olulo del Rio.

ENIJ	0.42	175	iPgc	06	20.70	0.5
			eSg	06	26.40	
EALH	0.82	55	ePg	06	27.20	-0.3
			eSg	06	39.00	
AFC	1.03	263	ePg	06	31.20	-0.1
			eSg	06	47.00	
EVIA	1.26	351	iPnd	06	35.40	0.2
			eSn	06	52.80	
EBAN	1.44	303	iPnd	06	38.20	0.4
			eSn	06	57.60	
MAL	1.84	250	iPnc	06	47.70	4.1X
			iSg	07	14.00	
ACU	1.84	52	ePn	06	42.70	-1.0
EHOR	2.41	281	ePn	06	51.80	0.0
			eSn	07	22.00	
ECHE	2.42	24	ePn	06	52.50	0.5
			eSn	07	20.80	
TOL	2.86	331	ePn	06	57.50	-0.7
			ePg	07	05.50	
			eSn	07	31.00	
			eSb	07	40.00	
			iSg	07	44.50	
ETOR	3.43	3	ePn	07	06.80	0.4
			eSn	07	46.20	
GUD	3.57	336	ePn	07	08.90	0.5
			eSn	07	48.40	
EVAL	3.57	275	ePn	07	07.30	-1.0
			eSn	07	48.20	
ECRI	5.22	358	ePn	07	32.00	0.3
S.D. = 0.6 on 13 of 14 obs.						

& FEB 21, 1990 05h 20m 19.48s
61.280 N 150.674 W
DEPTH = 48.6km
SOUTHERN ALASKA (2)
<AGS-P>.

SUA	0.19	350	iP	20	27.83	0.0
			eS	20	35.30	
PWA	0.53	45	iP	20	30.40	-0.7
PMS	0.54	93	iP	20	30.91	-0.3
			iS	20	39.64	
NKA	0.60	207	iP	20	33.53	1.5
			iS	20	43.55	
CGLM	0.64	273	iP	20	32.07	-0.6
			eS	20	42.40	
SPU	0.68	262	iP	20	32.48	-0.5
			iS	20	43.14	
CRP	0.72	270	iP	20	33.13	-0.5
NCG	0.73	280	iP	20	33.06	-0.7
PLRM	0.81	66	iP	20	33.57	-1.1
			iS	20	45.32	
SLKM	0.81	164	iP	20	34.15	-0.6
			eS	20	45.44	
CKL	0.81	265	iP	20	34.12	-0.7
SKT	0.81	330	iP	20	33.81	-1.0
BGL	0.83	270	iP	20	34.40	-0.7
GHO	0.97	59	iP	20	36.28	-0.8
			iS	20	49.94	
RDT	1.10	231	iP	20	38.26	-0.6
CUT	1.15	9	eP	20	38.10	-1.3
NNL	1.28	194	eP	20	42.02	0.7
SEW	1.33	152	eP	20	41.50	-0.4
RED	1.34	231	eP	20	41.73	-0.5
CNPM	1.78	189	eP	20	47.46	-0.9
KTH	2.28	357	eP	20	54.75	-0.8
PDB	2.29	231	iP	20	54.60	-1.0
RND	2.30	21	eP	20	54.75	-1.0
TOA	2.30	67	eP	20	54.62	-1.1
24 obs. associated						

? FEB 21, 1990 05h 40m 11.31± 4.32s
11.524 S ±20.6km 112.200 E ±53.7km
DEPTH = 33.0km (normal)
4.3mb (2 obs.)
SOUTH OF JAVA (282)

KHKI	4.60	47	ePd	41	20.00	-0.3
			eS	42	06.00	
			e	45	40.00	
NANU	11.43	164	eP	42	52.00	-3.3X
MBL	12.06	144	eP	42	58.00	-5.8X
	0.3s	19.00nm			5.8mb	X
			eS	44	56.00	
MEKA	16.15	159	iPd	43	55.90	-1.7
	0.3s	18.00nm			4.7mb	X
			eS	46	33.00	
MRWA	17.96	169	eP	44	21.00	0.8
			eS	47	19.00	
WARB	19.96	139	eP	44	44.00	0.3
			eS	48	16.00	
WRA	22.88	114	Pc	45	13.40	0.2
	1.0s	12.80nm			4.4mb	
WB5	22.88	114	eP	45	13.10	-0.2
			eS	49	16.50	
ASPA	23.91	123	iPd	45	24.10	0.8
	1.0s	7.00nm			4.1mb	
FORR	24.22	145	iPd	45	41.00	14.8X
			eS	49	45.00	
S.D. = 1.0 on 7 of 10 obs.						

% FEB 21, 1990 05h 45m 00.89± 0.80s
43.119 N ± 8.4km 0.618 W ± 6.1km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
MD 1.0 (STR).

ESCF	0.05	142	Pg	45	03.19	0.1
			Sg	45	05.49	
ATE	0.07	242	Pg	45	03.43	0.1
			Sg	45	05.44	
OGE	0.12	65	Pg	45	03.88	0.0
			Sg	45	06.61	
MADF	0.15	280	Pg	45	04.18	-0.2
			Sg	45	07.15	
ISSF	0.16	235	Pg	45	04.77	0.1
			Sg	45	07.91	
LHE	0.21	181	Pg	45	05.25	-0.2
			Sg	45	08.61	
S.D. = 0.2 on 6 of 6 obs.						

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* FEB 21, 1990 07h 21m 17.30± 0.66s
28.082 N ±11.6km 82.430 E ± 7.9km
DEPTH = 33.0km (normal)
4.8mb (7 obs.)
NEPAL (310)
Felt in southwestern Nepal.

NDI	4.63	279	ePn	22	27.50	0.7
			iPg	22	50.00	
			iSn	23	18.50	
			iSg	23	57.00	
LSA	7.81	76	Pn	23	12.90	0.9
			Sn	24	35.00	
SHL	8.81	104	eP	23	19.00	-6.5X
			eS	24	58.00	
HYB	11.20	199	iPc	23	44.80	-13.4X
	0.6s	33.30nm				
			iS	25	48.50	
POO	12.34	221	iPd	24	02.80	-10.8X
	0.8s	26.87nm				
			iS	26	07.80	
KSH	12.54	336	eP	24	18.50	2.2
BOM	12.70	226	eP	24	04.80	-13.5X
			eS	25	57.80	
OUE	13.69	283	eP	24	43.00	-11.3X
			eS	26	59.50	
WMQ	16.27	14	eP	25	03.30	-1.6
GTA	18.31	47	eP	25	31.60	1.1
KOD	18.36	196	eP	25	24.80	-7.4X
			eS	28	43.00	
XAN	23.42	69	eP	26	23.20	-1.2
HFS	55.54	326	eP	30	51.10	-0.3
	0.6s	7.80nm			4.9mb	
NB2	56.80	327	P	30	59.20	-1.3
	0.5s	2.30nm			4.5mb	
BSF	60.42	311	eP	31	25.40	-0.4
	0.9s	6.55nm			4.8mb	
HAU	60.68	312	eP	31	27.00	-0.5
	0.9s	8.20nm			4.9mb	
LPG	60.88	309	eP	31	29.20	-0.1
	0.6s	7.20nm			5.0mb	
WB5	69.24	128	eP	32	24.00	0.7
WRA	69.27	128	Pc	32	24.20	0.7
	0.6s	5.00nm			4.8mb	
ASPA	71.47	131	eP	32	36.00	-0.9
	0.7s	6.00nm			4.7mb	
S.D. = 1.2 on 14 of 20 obs.						

? FEB 21, 1990 08h 13m 06.19± 3.83s
43.737 N ±18.6km 127.808 W ±26.7km
DEPTH = 10.0km (geophysicist)
4.3mb (1 obs.)
OFF COAST OF OREGON (30)

NLO	3.89	51	eP	14	07.35	0.0
PGO	4.20	64	eP	14	12.13	0.5
ONR	4.24	41	eP	14	11.99	-0.2
BMW	4.24	48	eP	14	11.91	-0.5
RVW	4.33	54	eP	14	13.74	0.2
LVP	4.49	57	eP	14	16.22	0.3
TCO	4.50	83	eP	14	15.34	-0.8
TDH	4.57	68	eP	14	17.18	0.0
FL2	4.59	56	eP	14	17.72	0.4
CPW	4.62	44	eP	14	17.34	-0.3
CZM	4.62	52	eP	14	17.48	-0.3
ERK	4.65	55	eP	14	17.96	-0.2
VBEM	4.65	71	eP	14	18.29	0.0
SHW	4.65	56	eP	14	18.80	0.5
APW	4.67	50	eP	14	17.97	-0.4
VLL	4.70	66	eP	14	19.32	0.3
VFP	4.80	69	eP	14	20.35	-0.1
LMW	4.88	51	eP	14	21.30	-0.1
GULW	4.93	62	eP	14	22.43	0.3
LON	5.20	52	eP	14	25.80	-0.1
RMW	5.62	46	eP	14	31.90	0.0
FFC	20.01	48	eP	17	42.00	0.4
	1.1s	19.00nm			4.3mb	
S.D. = 0.4 on 22 of 22 obs.						

? FEB 21, 1990 08h 16m 12.26± 2.78s
11.128 N ±22.8km 61.524 W ±18.6km
DEPTH = 33.0km (normal)
WINDWARD ISLANDS (95)
MD 2.4 (TRN).

TCE	0.48	208	eP	16	22.56	-0.1
			eS	16	27.72	
TRN	0.49	166	eP	16	23.14	0.4
			eS	16	28.94	
TPR	0.74	85	eP	16	26.27	0.1
			eS	16	34.55	
TBH	0.78	145	eP	16	26.42	-0.4
			eS	16	33.96	
S.D. = 0.6 on 4 of 4 obs.						

FEB 21, 1990 12h 02m 19.34± 1.24s
34.014 N ±10.3km 106.544 W ± 6.2km
DEPTH = 5.0km (geophysicist)
NEW MEXICO (496)
ML 3.6 (NEIS). Felt.

LPM	0.31	346	iP	02	25.90	0.3
SNM	0.34	280	iP	02	25.50	-0.7
LAZ	0.63	308	iP	02	33.40	1.5
ALQ	0.93	4	iPc	02	37.40	-0.3
	1.0s	266.25nm				
ANMO	0.93	4	iPc	02	37.70	0.0
PV09	4.94	336	ePn	03	35.50	-0.8
			P*	03	44.00	
			ePg	03	52.50	
			eSn	04	52.50	
			eSg	04	58.00	
GOL	5.75	9	e(P)	03	47.20	-0.5
GLD	5.82	10	e(P)	04	07.50	18.9X
MSU	6.39	316	P	03	56.00	-0.7
FKO	7.65	78	eP	03	43.20	-30.9X
DUG	7.94	323	e(P)	04	19.00	0.6
TNP	9.55	298	P	04	48.40	7.7X
UYO	10.02	86	e(P)	04	47.60	0.5
S.D. = 0.8 on 10 of 13 obs.						

FEB 21, 1990 12h 04m 29.10± 0.60s
40.522 N ± 6.5km 29.192 E ± 5.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

YLV	0.14	72	iPg	04	31.40	-1.1
GBZT	0.33	36	ePg	04	36.00	0.1
			iSg	04	42.20	
CTT	0.85	317	ePg	04	46.00	0.5
			eSg	04	58.00	
GPA	0.88	105	ePn	04	47.30	1.2
BNT	0.99	261	iPn	04	47.90	0.1
DST	1.01	205	iPn	04	48.70	0.4
EDC	1.03	261	iPn	04	48.00	-0.5
ALT	1.63	154	iPn	04	57.40	-0.6

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

FEB 21, 1990 12h 33m 34.65± 0.39s
50.433 N ± 3.5km 5.942 E ± 4.3km
DEPTH = 10.0km (geophysicist)
BELGIUM (541)
ML 2.3 (GSH), 2.8 (LDG), 2.3 (UCC).

MEM	0.18	13	iPc	33	38.50	-0.2
			iS	33	41.02	
ENN	0.33	358	iPgc	33	42.00	0.4
	0.4s	76.00nm				
			iSg	33	44.00	
			i	33	46.40	
GSH	0.41	42	iPgc	33	42.50	-0.6
			iSg	33	47.20	
JCK	0.68	27	iPgc	33	47.40	-0.7
			iSg	33	55.90	
DOU	0.93	249	iPd	33	53.60	1.2
			iS	34	06.80	
RUP	1.03	135	ePn	33	55.00	0.9
SNF	1.06	275	iP	33	56.30	1.7
ABH	1.17	118	ePg	33	56.82	0.3
CDF	2.20	156	Pn	34	13.00	1.1
			Sn	34	38.40	
HAU	2.44	174	Pg	34	21.00	5.7X
			Sn	34	43.60	
			Sg	34	52.00	
BSF	2.66	168	Pn	34	19.00	0.5
FEL	2.90	151	ePn	34	21.95	0.2
LOR	3.45	204	Pn	34	29.50	0.0
			Sg	35	26.00	
LBF	3.69	201	Pn	34	32.50	-0.5
SSF	3.74	206	Pn	34	33.30	-0.3
			Sg	35	35.00	
AVF	4.03	206	Pn	34	37.00	-0.7
SMF	4.04	201	Pn	34	36.70	-1.1
			Pg	34	51.60	
BGF	4.39	209	Pn	34	42.20	-0.6
			Sn	35	29.50	
MAF	4.78	209	Pn	34	47.80	-0.6
GRR	4.89	248	Pn	34	48.80	-1.1
			Sn	35	43.00	

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

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* FEB 21, 1990 13h 22m 34.31± 0.83s
26.273 S ± 7.2km 27.268 E ±12.8km
DEPTH = 5.0km (geophysicist)
REPUBLIC OF SOUTH AFRICA (584)
mbLg 3.5 (8UL).

PRY	0.68	164	iPc	22	46.80	-1.1
			S	22	52.70	
SLR	1.06	60	iPd	22	56.00	1.2
			S	23	08.40	
BLF	2.98	198	iPc	23	24.00	0.7
			S	24	02.00	
KIM	3.31	221	iPd	23	28.50	0.5
BUL	6.22	12	iPn	24	09.00	-0.2
			iSn	25	18.00	
			iSg	25	51.00	
KRI	9.65	14	iPn	24	56.00	-1.0
			iSn	26	38.50	
			iSg	27	35.00	

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

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* FEB 21, 1990 13h 22m 35.65± 1.06s
42.598 N ±11.5km 24.007 E ±14.1km
DEPTH = 10.0km (geophysicist)
BULGARIA (359)

VAY	1.67	221	iPn	23	04.70	-0.3
SKO	2.01	253	ePn	23	10.50	0.6
			i	23	12.50	
			i	23	40.50	
OHR	2.82	239	ePn	23	21.50	-0.1
MLR	3.21	25	eP	23	27.00	-0.2
8ZS	3.47	331	ePc	23	30.50	-0.3
VRI	3.81	30	ePc	23	36.00	0.4

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

FEB 21, 1990 13h 46m 21.99± 0.53s
42.188 N ± 5.1km 16.585 E ± 6.1km
DEPTH = 10.0km (geophysicist)
ADRIATIC SEA (382)
ML 3.0 (TTG).

HVAR	1.00	354	iPg	46	41.40	0.6
			iSg	46	56.70	
BAI	1.09	169	P	46	42.00	-0.4
			eSg	46	56.00	
BRT	1.39	160	Pc	46	45.50	-1.9
HCY	1.44	79	ePg	46	48.00	-0.2
			eSg	47	08.50	
BRY	1.61	63	ePn	46	51.00	0.3
			eSn	47	15.00	
BDV	1.67	86	ePn	46	51.00	-0.4
			eSn	47	15.00	
DUI	1.67	252	P	46	55.30	3.8X
SGO	1.89	211	P	46	55.40	0.8
TTG	2.00	82	ePn	46	56.70	0.5
			eSn	47	24.50	
LCI	2.12	150	P	46	59.00	1.1
SDI	2.12	258	P	47	00.10	2.1
MGR	2.19	201	P	46	57.60	-1.4
PVY	2.54	80	ePn	47	05.50	1.4
			eSn	47	36.00	
VBY	3.45	344	eP	48	07.00	50.2X
			e(Sn)	48	15.40	
PTJ	3.74	353	e(Pn)	47	19.50	-1.5
			eSn	48	05.30	
CEY	3.88	337	eP	47	49.50	26.6X
			e(Sg)	48	30.00	
TRI	4.07	331	iP	48	12.10	46.6X
			i	48	34.70	
VOY	4.30	334	ePn	47	28.30	-0.8
			eSn	48	19.70	
K8A	5.41	336	eP	47	44.50	-0.3

S.D. = 1.2 on 15 of 19 obs.

FEB 21, 1990 14h 10m 46.82± 0.31s
29.253 N ± 6.9km 142.220 E ± 5.0km
DEPTH = 42.1km (2 depth phases)
4.7mb (9 obs.) 3.9Msz (1 obs.)
SOUTH OF HONSHU, JAPAN (211)

SSE	18.28	281	eP	15	02.00	3.1X
	N 12s	0.40um				
MDJ	18.32	330	eP	14	59.50	0.1
SNY	19.64	315	eP	15	11.00	-3.7X
	Z 20s	0.40um				
	N 16s	0.50um				
			eS	1B	46.00	
CN2	19.76	322	iPd	15	15.00	-1.0
	Z 16s	0.50um				
			sP	15	30.50	
NJ2	20.29	284	Pd	15	21.40	-0.2
8JI	23.90	304	eP	15	57.00	-0.4
	Z 18s	0.35um			3.9Msz	
WHN	24.17	280	Pc	16	02.50	2.3
TIY	26.15	297	iPd	16	19.50	0.5
HHC	27.50	303	eP	16	29.40	-1.9
BTO	28.57	302	eP	16	41.00	0.0
XAN	28.67	288	P	16	41.50	-0.4
GYA	31.49	274	P	17	06.00	-1.1
CD2	33.22	283	eP	17	21.80	-0.2
GTA	36.17	298	Pd	17	47.00	-0.3
CHG	40.67	265	eP	18	26.10	1.2
	0.9s	10.50nm			4.6mb	
			e	23	51.20	
MTN	43.20	196	iPc	18	45.20	-0.3
WMQ	45.37	304	P	19	03.00	0.1
GUN	49.08	283	P	19	33.40	0.9
	1.0s	30.00nm			5.3mb	
WB5	49.43	190	eP	19	34.20	-0.5
			i	19	46.30	44km
WRA	49.50	190	Pd	19	34.80	-0.4
	0.7s	9.20nm			4.9mb	

PKI	49.57	283	P	19	36.60	0.3
KKN	49.62	283	P	19	37.00	0.5
	0.8s	17.00nm			5.1mb	
DMN	49.82	283	P	19	38.60	0.5
GKN	50.11	283	P	19	40.40	0.2
ASPA	53.22	190	eP	20	02.40	-0.9
	0.7s	5.00nm			4.6mb	
INK	61.07	25	eP	20	56.00	-2.3
MBC	63.81	15	eP	21	16.00	-0.5
	1.0s	5.00nm			4.5mb	
			pP	21	28.00	41km
NEW	75.31	43	eP	22	27.00	-0.4
ARN	77.41	54	P	22	39.60	0.2
SES	77.73	39	eP	22	42.00	1.1
CMB	77.91	53	eP	22	41.70	-0.4
FRI	78.87	54	e(P)	22	46.60	-0.7
KVN	79.01	51	P	22	48.10	-0.2
FFC	79.90	32	eP	22	53.00	0.5
	1.0s	16.00nm			4.9mb	
TNP	80.08	52	P	22	55.00	0.9
	1.2s	10.08nm			4.7mb	
IMW	81.21	44	P	23	01.20	1.2
NB2	81.63	338	P	23	17.00	15.4X
	0.7s	3.80nm				
DUG	81.97	48	P	23	04.90	1.0
BW06	82.86	45	eP	23	08.00	0.4
	1.0s	2.25nm			4.2mb	
MSU	83.28	50	P	23	11.80	1.0
FRB	84.18	13	eP	23	14.00	-0.5
PV09	85.29	48	eP	23	21.00	0.0
ZOBO	149.28	72	PKP	30	35.30	5.9X
	1.0s	5.00nm				

S.D. = 0.9 on 39 of 43 obs.

? FEB 21, 1990 14h 15m 45.77± 2.64s
44.143 N ±43.9km 142.278 E ±33.1km
DEPTH = 33.0km (normal)
5.1mb (3 obs.)
HOKKAIDO, JAPAN REGION (224)

BJI	19.77	267	eP	20	17.00	1.2
GUN	47.49	270	P	24	19.60	-0.3
	0.4s	10.00nm			5.2mb	
INK	47.83	30	eP	24	22.00	0.4
KKN	47.99	270	P	24	23.60	-0.1
PKI	48.02	270	P	24	23.20	-0.9
SUF	61.97	332	eP	26	04.00	-0.4
NUR	64.03	331	eP	26	18.00	0.1
HFS	67.91	335	eP	26	41.70	-1.0
	0.4s	7.30nm			5.1mb	
N82	67.91	337	P	26	43.60	0.8
	0.6s	3.30nm			4.6mb	
CLL	75.27	330	e(P)	27	27.00	0.2

S.D. = 0.8 on 10 of 10 obs.

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* FEB 21, 1990 15h 24m 31.52± 2.01s
36.203 N ± 7.2km 9.380 W ±19.9km
DEPTH = 33.0km (normal)
WEST OF GIBRALTAR (384)
MD 3.1 (RBA).

EJIF	3.17	84	eP	25	21.40	1.2
			eS	25	54.60	
NKM	3.31	102	ePn	25	23.00	0.7
			iSn	25	57.30	
AVE	3.32	150	iPn	25	23.50	1.1
			iSn	25	58.00	
EPRU	3.42	76	eP	25	24.60	0.7
EHOR	3.68	63	eP	25	27.30	-0.2
			eS	26	05.20	
IFR	4.41	126	iPn	25	37.00	-1.0
			iSn	26	22.50	
EPLA	4.65	33	eP	25	42.50	1.2
			eS	26	29.50	
AFC	4.80	76	eP	25	43.60	0.0
EBAN	4.88	65	iP	25	43.60	-0.9
			eS	26	33.00	
TIO	5.55	161	iPn	25	53.30	-0.8
			iSn	26	53.20	
EVIA	5.99	64	eP	25	58.60	-1.7
			eS	27	01.50	
GUD	6.04	41	eP	26	01.00	0.0
			eS	27	03.00	
ETOR	7.36	49	eP	26	19.00	-0.5

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

FEB 21, 1990 18h 20m 14.55± 0.08s

21d 18h

16.903 N ± 1.6km 62.326 W ± 1.6km
DEPTH = 109.9km (geophysicist)
5.9mb (64 obs.)
LEEWARD ISLANDS (92)
Felt (V) on Guadeloupe and (II) on Martinique. Felt on Antiguo, Barbuda, Montserrat, Nevis, St. Kitts and St. Martin. Depth from broodbond displocement seismagrams.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=170 Dip=85 Slip= 90
NP2: 350 5 90
Principol Axes:
T Plg=50 Azm= 80
P 40 260
Comment: The focol mechanism is poorly controlled ond corresponds to reverse faulting. The preferred fault plane is NP2.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 30C
Centraid Locotion:
Origin Time 18:20:20.9 0.2
Lat 16.75N 0.03 Lan 61.85W 0.03
Dep 110.3 1.8 Half-duratian 3.2
Moment Tensor; Scole 10**17 Nm
Mrr=-0.24 0.13 Mtt=-0.72 0.24
Mff= 0.96 0.26 Mrt= 2.35 0.13
Mrf=-6.07 0.15 Mtf= 0.27 0.23
Principol Axes:
T Vol= 6.73 Plg=43 Azm= 75
N -0.32 7 339
P -6.41 46 242
Best Double Couple:Mo=6.6*10**17
NP1:Strike=234 Dip= 7 Slip= -14
NP2: 339 88 -97

BPA	0.47	72	eP	20 32.31	0.9
ANG	0.54	62	eP	20 32.89	1.1
SEG	0.93	122	iP	20 36.01	0.7
PAG	1.07	144	iPc	20 38.08	1.3
			S	21 00.00	
BTG	1.08	147	iPc	20 38.04	1.2
			S	20 59.00	
SFG	1.26	121	ePd	20 39.14	0.3
DEG	1.35	116	iPd	20 39.54	-0.4
MGG	1.38	135	iPc	20 41.22	1.0
BBL	1.60	149	iPc	20 43.94	1.0
DPMT	1.87	151	eP	20 47.33	1.0
DGBT	1.91	150	eP	20 47.53	0.7
FDF	2.44	152	iPc	20 54.04	0.3
			S	21 24.70	
CRM	2.53	147	iPc	20 54.87	-0.1
BIM	2.66	153	iPc	20 57.37	0.6
MVM	2.71	149	iPc	20 57.44	0.0
SLB	3.30	158	eP	21 05.50	0.1
CPD	3.61	289	eP	21 11.90	2.3
LPR	3.66	293	eP	21 13.00	2.7X
SOA	3.69	162	eP	21 11.03	0.4
SSV	3.72	163	eP	21 11.64	0.5
SVV	3.72	163	eP	21 11.71	0.6
SVB	3.76	164	eP	21 12.23	0.7
SJG	3.84	289	iP	21 15.30	2.5
			S	22 02.10	
FCV	3.87	164	eP	21 13.31	0.2
PORP	4.27	286	P	21 20.90	2.3
LRS	4.53	288	P	21 24.30	2.2
GRW	4.76	172	eP	21 25.53	0.2
TPR	5.88	165	eP	21 40.69	0.0
BOT	5.91	164	eP	21 42.40	1.3
TRN	6.28	172	eP	21 48.05	1.8
			eS	22 56.56	
TBH	6.50	169	eP	21 47.61	-1.6
			eS	23 03.65	
TPP	6.60	172	eP	21 56.47	5.9X
LLAV	7.73	215	eP	22 06.50	0.4
CAR	7.77	216	iP	22 06.00	-0.7
OLLA	8.11	213	iP	22 12.50	1.2
GUAC	8.22	216	iP	22 14.50	1.6
MORO	8.35	225	iP	22 16.50	1.9
PLAV	8.61	216	iPc	22 20.00	1.8
FISA	8.81	231	iP	22 21.20	0.5
CEOS	9.77	218	iP	22 34.60	0.9
TOV	10.14	227	eP	22 39.50	0.9

BMG	14.35	228	iPc	23 33.00	-0.9
BOG	16.78	225	iPd	24 06.00	1.4
			iS	27 14.00	
UPA	18.52	247	iPd-	24 24.00	-1.3
	1.0s		840.00nm		6.0mb
			S	28 02.00	
PSO	21.49	225	eP	24 55.00	-1.3
CAYA	22.75	224	P	25 08.50	-0.3
HBF	22.81	318	P	25 10.20	1.6
SGS	23.06	318	P	25 12.60	1.6
JSC	24.24	319	P	25 22.80	0.4
PRM	24.82	317	P	25 28.50	0.6
NA2	25.11	330	P	25 31.10	0.5
CVL	25.34	329	P	25 32.40	-0.3
BLA	25.77	325	ePd	25 37.30	0.5
	0.9s		142.02nm		5.5mb
			epP	26 07.00	143kmX
LVNJ	26.14	338	P	25 42.20	2.2
TKL	26.70	318	P	25 45.40	0.1
HRV	26.71	345	ePc	25 50.57	5.3X
			iS	30 13.26	
GBTN	26.99	318	P	25 48.20	0.3
RSCP	27.84	316	P	25 55.70	0.1
	1.0s		390.46nm		6.0mb
HBVT	28.84	344	P	26 05.10	0.6
WNY	29.08	343	P	26 07.30	0.6
PWLA	29.18	313	P	26 07.70	0.0
RSNY	29.42	342	eP	26 11.00	1.3
	1.2s		43.73nm		5.0mb
			ePP	27 08.50	
CLE	29.55	330	iP	26 11.00	0.1
CBM	30.33	352	eP	26 18.40	0.8
			iScP	32 44.20	
LDN	30.60	332	P	26 20.40	-0.3
DLA	30.63	332	P	26 19.90	-0.4
ELF	30.78	332	P	26 22.00	0.3
OLY	31.86	311	eP	26 30.60	-0.6
			iScP	32 49.80	
POW	31.97	312	P	26 32.00	-0.1
FVM	32.39	316	ePd	26 34.80	-1.0
	0.6s		302.34nm		6.2mb
			iScP	32 52.50	
OXX	32.87	275	iP	26 39.70	-0.7
CCM	32.98	315	iPc	26 40.78	-0.1
			esPd	27 17.36	
ZOBO	33.45	190	iPd	26 43.50	-2.3
	1.3s		169.56nm		5.7mb
Z	25s		1.98um		4.7MszX
			S	31 40.00	
			LR	36 30.00	
UYO	33.52	307	iPc	26 45.60	0.0
LPB	33.71	190	iPd	26 46.20	-1.6
	1.2s		468.75nm		6.2mb
Z	25s		3.21um		4.9MszX
			iS	31 58.00	
			LR	37 10.00	
CCH	34.28	186	P	26 42.50	-10.1X
ARE	34.36	196	eP	26 49.00	-4.3X
PPM	34.56	279	iP	26 54.70	-0.6
BAO	35.29	156	eP	26 59.90	-1.1
III	35.39	278	iP	27 01.80	-0.2
IIJ	35.58	280	eP	27 03.80	-0.1
FKO	36.16	307	iPc	27 07.10	-1.0
SCH	37.99	356	ePc	27 24.30	1.1
	0.9s		102.00nm		5.7mb
YJA	38.96	185	iPd	27 28.50	-3.6X
SLA	41.49	184	e(P)	27 50.00	-2.5
RSON	42.14	331	iPc	27 57.10	-0.3
	0.8s		176.28nm		5.9mb
			i	28 04.50	
			iScP	33 27.80	
			eS	34 09.40	
ALQ	43.18	303	iPd	28 06.70	0.4
	1.0s		157.50nm		5.8mb
			pP	33 30.00	
ANMO	43.18	303	iPd	28 06.93	0.6
	0.8s		111.94nm		5.7mb
			epPd	28 32.58	111kmX
			esPc	28 43.18	
			ScP	33 34.80	
			eS	34 26.11	
			eSS	37 42.51	
			eHSS	37 50.79	
GLD	43.55	310	ePd	28 09.80	0.5
	0.9s		176.32nm		5.9mb
			iScP	33 36.20	
GOL	43.65	310	iPd	28 10.00	-0.2

	1.0s		160.00nm		5.8mb
			iScP	33 36.30	
MBO	43.69	87	iP	28 10.50	0.1
RSSD	44.34	317	ePc	28 15.00	-0.7
			iScP	33 38.60	
			eS	34 49.50	
PV09	46.11	307	ePc	28 29.50	-0.3
			iScP	33 37.00	
FRB	46.99	356	eP	28 36.00	0.0
	0.8s		133.00nm		5.8mb
RTRS	47.30	188	ePd	28 37.30	-1.5
BW06	47.61	313	iPd	28 41.00	-0.5
			iScP	33 52.00	
			iS	35 29.40	
RTLL	48.32	187	ePc	28 43.90	-2.8X
MSU	48.43	307	P	28 48.00	0.1
FFC	48.47	330	iPd	28 46.80	-0.9
	0.5s		25.00nm		5.3mb
RTCB	48.51	187	iP	28 46.00	-2.3
IMW	48.91	314	P	28 50.90	-0.7
DUG	49.28	309	P	28 54.10	-0.2
PTI	49.62	312	P	28 56.40	-0.5
GLA	49.74	299	eP	28 58.00	0.2
ROCH	50.28	189	eP	28 59.60	-2.4
FCH	50.52	189	ePd	29 02.50	-1.4
			i	29 03.30	
LRM	50.52	316	iPd	29 04.10	0.3
SAN	50.70	189	eP	29 02.70	-2.2
			iS	29 03.70	
PCH	50.84	189	ePd	29 04.40	-1.7
LCCH	50.87	190	eP	29 04.00	-2.1
TACH	50.94	189	eP	29 05.00	-1.7
PFO	51.15	300	iPc	29 08.31	-0.3
			iS	36 22.31	
			isS	37 06.59	
			eScS	38 49.63	
			esScS	39 42.19	
CHCH	51.17	189	iPd	29 06.60	-1.9
SES	51.22	322	iPd	29 09.00	0.2
	0.8s		205.00nm		6.1mb
BAR	51.25	299	eP	29 09.00	-0.3
LNV	51.31	190	ePd	29 07.00	-2.4
PLM	51.46	299	eP	29 11.00	0.0
GSC	51.60	302	eP	29 12.00	0.1
RFA	51.72	186	ePd	29 10.30	-2.3
PEC	51.75	300	P	29 13.00	-0.1
TIO	51.76	64	iPc	29 13.90	0.6
AVE	51.77	61	iP	29 12.00	-1.1
			i	29 29.50	
			i	30 17.00	
PTO	51.89	51	eP	29 09.00	-4.9X
RVR	51.94	300	eP	29 14.00	-0.4
EZAM	52.02	49	iPc	29 15.00	0.1
TNP	52.27	305	iPc	29 17.10	0.0
	0.7s		45.56nm		5.6mb
			iScP	34 13.20	
STS	52.28	49	eP	29 16.60	-0.2
SBB	52.37	301	eP	29 17.00	-0.7
MWC	52.52	300	eP	29 19.00	0.0
PAS	52.61	300	eP	29 16.74	-2.7
			iS	36 39.40	
GDH	52.62	4	iPd	29 18.60	-0.2
	1.2s		93.75nm		5.6mb
			i	34 12.00	
			i	36 37.00	
			i	37 26.00	
ISA	52.99	302	eP	29 22.00	-0.2
KVN	53.09	306	iPc	29 22.20	-0.9
			i	29 31.00	
			iScP	34 15.60	
ABL	53.53	301	P	29 26.20	-0.2
NKM	53.59	58	iPc	29 27.80	1.3
EPLA	53.60	52	iPc	29 26.50	-0.1
EDM	53.63	325	iPd	29 25.50	-1.1
	0.5s		165.00nm		6.3mb
EJIF	53.63	57	iPc	29 28.00	1.2
IFR	53.70	61	iPc	29 28.00	0.4
VAL	53.76	37	iP	29 27.10	-0.4
EHOR	53.95	55	iPc	29 29.40	0.3
FRI	54.11	304	ePd	29 28.90	-1.4
			eScP	34 20.00	
SYP	54.13	301	eP	29 30.00	-0.7
BCH	54.26	301	ePd	29 31.80	0.1
			e	29 40.20	
			eScP	34 21.80	
NEW	54.28	318	iPc	29 30.20	-1.3
			eScP	34 19.80	

MAL	54.51	57	iPc	29	34.20	0.9	EPF	58.75	50	iPc	30	03.80	0.5	SLE	64.82	45	ePc	30	43.30	-0.5
REY	54.60	20	iP	29	34.60	1.1		1.0s	281.25nm			6.3mb		TNS	64.92	42	iPc	30	43.80	-0.6
CM8	54.74	305	iPd	29	34.50	-0.6	EKA	58.83	35	Pc	30	02.80	-0.8	VAI	64.95	47	Pc	30	44.10	-0.4
ALOJ	54.78	56	iPc	29	36.00	0.5		1.0s	118.40nm			5.9mb		TMA	65.03	47	ePc	30	45.10	-0.2
AAPN	54.79	56	iPc	29	35.80	0.3	MFF	58.85	45	iPc	30	03.80	-0.1	PGF	65.09	51	iPc	30	45.10	-0.6
PRI	54.80	303	eP	29	34.10	-1.5	LDF	59.17	43	iPc	30	05.80	-0.3	TOD	65.11	43	iPc	30	44.86	-0.7
			eScP	34	24.30		LFF	59.24	47	iPc	30	06.60	0.0	LLS	65.13	46	ePc	30	46.20	0.2
ATEJ	54.84	57	iPc	29	36.60	0.7	LPO	59.53	48	iPc	30	08.40	-0.2	SAX	65.38	45	ePc	30	47.80	0.1
DPW	54.88	317	P	29	34.40	-1.5	RJF	59.83	47	iPc	30	10.30	-0.4	BO8	65.41	48	Pc	30	47.60	-0.1
ACHM	55.00	56	iPd	29	38.00	1.0	LSF	59.95	46	iPc	30	11.40	0.0	VDL	65.45	46	ePc	30	48.10	0.1
ASMO	55.09	56	iPc	29	38.00	0.3	CAF	60.18	48	iPc	30	12.80	-0.3	OSS	65.91	46	ePc	30	50.90	-0.1
APHE	55.10	57	iPc	29	38.80	1.0	TCF	60.42	46	iPc	30	14.60	-0.1	MBC	66.09	347	eP	30	52.00	0.6
TOL	55.12	53	iPc	29	37.51	-0.2	ESEL	60.44	54	iPc	30	15.20	0.3		0.9s	75.00nm			5.6mb	
	1.3s	653.85nm			6.5mb		ETER	60.54	51	iPc	30	16.00	0.5	SAL	66.18	47	P	30	51.50	-0.9
			epPd	30	04.83	114kmX	MAF	60.66	46	iPc	30	16.00	-0.3	PII	66.19	49	Pc	30	51.60	-0.9
GUD	55.13	52	iPc	29	38.00	0.1	BGF	60.89	46	iPc	30	17.40	-0.4	BDI	66.24	49	Pc	30	51.20	-1.8
EBAN	55.13	55	iPc	29	37.80	0.0	PYM	60.92	47	P	30	18.22	0.1	MME	66.31	49	Pc	30	52.30	-1.4
AFC	55.24	56	iPc	29	40.00	1.2	AGO	61.03	46	P	30	18.43	-0.4	OGA	66.52	46	iPc	30	54.80	-0.1
PRS	55.38	303	ePd	29	38.80	-0.8	LBL	61.04	47	P	30	19.21	0.4		1.8s	336.00nm			6.0mb	
			eScP	34	26.70		GRC	61.12	45	P	30	19.29	-0.1	GRF	66.68	43	iPc	30	55.30	-0.3
SAO	55.47	303	eP	29	39.50	-0.8	AVF	61.26	46	iPc	30	19.80	-0.5		1.6s	494.00nm			6.2mb	
ARN	55.59	304	P	29	41.00	-0.1	PLDF	61.37	47	P	30	21.01	-0.2		Z 19s	0.40um			4.7Msz	
MHC	55.67	304	ePd	29	41.90	0.0	SSF	61.39	45	iPc	30	20.60	-0.6	MAO	66.68	51	Pc	30	55.10	-0.7
			eScP	34	28.50		KUK	61.42	92	eP	30	20.50	-1.4	FUR	66.70	44	iPc	30	55.60	-0.2
ORV	55.77	307	iPd	29	41.80	-0.5	KOGH	61.56	92	eP	30	23.00	0.0	MOX	66.96	42	iPc	30	57.00	-0.3
			eScP	34	28.00		SMF	61.58	46	iPc	30	22.00	-0.5		1.9s	211.00nm			5.7mb	
			eP'P'	00	11.40		WEGH	61.62	93	eP	30	22.00	-1.3				e	35	18.00	
ECB	55.92	38	iPc	29	42.70	-0.5	LOR	61.65	45	iPc	30	22.40	-0.6	CTI	66.96	47	Pc	30	56.60	-1.0
	1.0s	232.00nm			6.1mb			0.9s	204.75nm			6.1mb		SCE	66.99	46	iPc	30	43.80	-14.0X
GCC	55.93	304	ePd	29	43.40	-0.2	L8F	61.70	45	iPc	30	22.40	-1.0	PGD	67.05	49	P	30	57.00	-1.3
MIN	55.94	308	eP	29	42.40	-1.3	LEGH	61.74	93	eP	30	23.00	-1.1	HOF	67.12	42	iPc	30	57.60	-0.8
			eScP	34	28.70		SHGH	61.80	92	eP	30	24.00	-0.4	SFI	67.15	49	Pc	30	57.40	-1.2
DCN	55.94	36	iPd	29	43.20	-0.1	TEGH	61.92	93	eP	30	24.00	-1.2	CRE	67.23	49	P	30	58.00	-1.3
	1.0s	313.00nm			6.3mb		SS8	61.95	47	P	30	25.27	0.2	NB2	67.39	30	P	31	00.10	0.2
ECP	56.10	38	iPc	29	44.00	-0.5	SNF	62.29	41	iPc	30	26.70	-0.4		0.9s	106.80nm			5.8mb	
	1.1s	290.00nm			6.2mb		UCC	62.37	41	iP+	30	28.00	0.4	INK	67.48	338	iPd	30	59.20	-1.1
PNT	56.15	318	ePd	29	44.00	-1.0	DOU	62.43	42	iPc	30	27.70	-0.4		0.7s	83.00nm			5.8mb	
	0.6s	32.00nm			5.5mb					e	31	06.90		RSM	67.58	49	Pc	31	00.20	-1.1
EVIA	56.18	55	iPc	29	45.60	0.1	VITF	63.16	44	P	30	32.56	-0.3	FVI	67.73	46	Pc	31	01.30	-0.9
BKS	56.19	305	ePd	29	44.70	-0.7	LRG	63.16	49	iPc	30	33.10	0.1	WET	67.76	43	iPc	31	02.00	-0.4
	1.0s	87.00nm			5.7mb			1.0s	100.00nm			5.7mb			1.5s	329.00nm			6.0mb	
			e	29	53.80		LMR	63.27	50	iPc	30	33.60	-0.1	ASS	67.77	50	Pc	31	01.10	-1.5
			e	34	29.50			1.0s	96.00nm			5.7mb		BHG	67.78	45	iPc	31	01.80	-0.7
			iS	37	36.00		FRF	63.38	49	iPc	30	34.20	-0.2		2.2s	500.00nm			6.0mb	
			e	38	20.00		MEM	63.39	41	iPc	30	34.00	-0.3	CLL	67.84	41	iPc	31	02.60	-0.2
			iScS	39	26.00		HAU	63.39	44	iPc	30	33.90	-0.6		1.9s	410.00nm			6.0mb	
			e	40	06.00			1.0s	108.00nm			5.7mb					P'P'	59	12.00	
			eLQ	43	40.00		8NI	63.45	48	Pc	30	35.60	0.5	RMP	67.86	51	Pc	31	03.10	-0.1
			eLR	47	50.00		FOUF	63.50	48	iPc	30	36.11	0.9	RDP	67.88	51	Pc	31	03.10	-0.2
BRK	56.21	304	eP	29	45.20	-0.3	LPG	63.52	47	iPc	30	36.30	0.6	BRN	67.98	40	ePc	31	04.30	0.7
			eScP	34	30.20			0.9s	102.35nm			5.8mb		BRL	68.03	40	eP	31	04.50	0.6
LBFM	56.27	309	P	29	45.40	-0.8	RRL	63.52	48	Pc	30	36.12	0.5	KBA	68.11	46	iPc	31	03.90	-0.9
PCC	56.27	304	ePd	29	45.80	-0.2	LOMF	63.67	45	P	30	35.99	-0.4		1.3s	226.00nm			5.9mb	
ENIJ	56.28	57	iPc	29	46.20	0.1	EMS	63.67	47	ePc	30	36.50	-0.1				i	31	32.60	
DMU	56.32	36	eP	29	45.80	-0.3	8SF	63.68	45	P	30	35.47	-1.0				ePP	33	32.00	
DLE	56.34	37	eP	29	45.70	-0.5	PZZ	63.73	48	Pc	30	37.46	0.5				e(S)	39	51.00	
ECRI	56.61	50	iPc	29	48.90	0.5	LSD	63.80	47	Pc	30	37.97	0.4	KHC	68.22	43	iPc	31	04.90	-0.4
WDC	56.67	308	iPd	29	46.00	-2.8X	DAG	63.83	10	iPc	30	36.20	-0.7		1.5s	53.00nm			5.2mb	
			eScP	34	30.70			0.9s	93.28nm			5.7mb		RBL	68.28	46	Pc	31	05.20	-0.6
			eP'P'	00	08.10		DOI	63.83	48	Pc	30	37.50	0.0	AQU	68.35	51	Pc	31	06.00	-0.3
ETOR	56.74	52	iPc	29	50.00	0.6	RSP	63.86	48	Pc	30	38.28	0.5	AZI	68.40	51	Pc	31	06.50	0.1
AKU	56.83	20	iP	29	50.30	0.8	STV	63.88	49	Pc	30	37.66	-0.2	BRG	68.44	41	iPc	31	06.40	-0.1
	1.0s	40.00nm			5.4mb		MOF	63.91	45	P	30	36.97	-1.0		1.7s	280.00nm			5.9mb	
TIC	56.85	93	Pc	29	49.30	-1.1	ECH	63.95	44	P	30	37.58	-0.5				eS	40	00.00	
LIC	56.95	94	Pc	29	49.96	-1.1	AUTN	63.95	49	P	30	38.33	-0.2				eP'P'	59	22.80	
EALH	56.97	56	iP	29	51.50	0.6	ENR	63.95	49	Pc	30	37.66	-0.7	USI	68.44	55	Pc	31	06.10	-0.7
LON	57.04	315	ePd	29	49.82	-1.5	S8F	63.95	49	iPc	30	38.20	-0.1	TRI	68.44	47	iPc	31	06.00	-0.7
KIC	57.19	93	Pc	29	51.76	-1.0	DIX	64.01	47	ePc	30	39.20	0.3				i	31	35.20	
			S	37	37.00		WIT	64.03	39	ePc	30	39.00	0.5	VOY	68.52	47	iPc	31	06.70	-0.6
SHW	57.23	314	P	29	52.20	-0.6	WTS	64.03	40	iPc	30	38.40	-0.1	HFS	68.54	31	eP	31	06.50	-0.4
ECHE	57.45	54	iPc	29	54.80	0.5		0.9s	217.00nm			6.1mb			1.5s	325.80nm			6.0mb	
BOH	57.77	49	P	29	56.99	0.4	CDF	64.04	44	P	30	38.12	-0.7		Z 30s	1.38um			5.0MszX	
FHC	57.79	308	ePd	29	56.50	-0.1	WLS	64.09	44	P	30	38.33	-0.7				LR	50	52.00	
			eScP	34	38.10		BBS	64.14	45	P	30	38.67	-0.7	SDI	68.70	51	Pc	31	07.80	-0.6
ELYF	57.79	49	P	29	56.34	-0.3	ROB	64.28	49	Pc	30	39.92	-0.5	PRU	68.83	42	Pc	31	08.80	-0.2
ACU	57.81	55	iPc	29	57.60	0.8	IMI	64.28	49	Pc	30	39.81	-0.6		1.8s	343.80nm			5.9mb	
MADF	57.92	49	P	29	57.44	0.0	GWF	64.30	43	P	30	40.15	-0.3				e	31	14.00	
ISSF	57.92	50	P	29	58.26	0.6	ABH	64.31	42	iPc	30	40.45	0.0				ePP	33	43.50	
BMW	57.95	315	P	29	56.00	-1.8	STR	64.37	44	P	30	40.36	-0.4	MCT	68.89	56	Pc	31	10.80	1.0
ATE	57.99	49	P	29	58.13	0.1	ORO	64.39	47	P	30	41.00	-0.1	RIY	68.90	47	iPc	31	08.90	-0.5
LHE	58.03	50	P	29	58.85	0.4	ORX	64.39	47	Pc	30	40.63	-0.5	CEY	68.91	47	iPc	31	09.50	-0.1
OGE	58.17	49	P	29	59.59	0.3	MMK	64.39	47	ePc	30	41.80	0.5	LJU	68.97	47	iPc	31	09.90	0.0
BTH	58.36	49	iPc	30	00.00	-0.5	FEL	64.50	45	iPc	30	41.10	-0.7				e	32	58.50	
			e	30	07.00		FIN	64.52	49	Pc	30	41.04	-0.9				eS	40	06.00	
LPF	58.47	44	iPc	30	00.90	-0.3	CKI	64.57	48	Pc	30	41.60	-0.6				e	40	56.00	
GRR	58.65	43	iPc	30	02.20	-0.3	ZLA	64.74	45	ePc	30	42.80	-0.5				e	41	50.00	
EBR	58.66	52	iP	30	03.00	0.3	PCP	64.77	48	Pc	30	43.20	-0.3	GIB	69.17	55	P	31	10.50	-0.9

21d 18h

DUI	69.18	51	Pc	31	11.40	0.0
VBY	69.50	47	iPc	31	13.10	0.0
SGO	69.92	52	P	31	15.30	-0.5
KSP	69.93	41	iPc	31	15.50	-0.1
	1.5s	206.00nm			5.7mb	
PTJ	69.97	47	iPc	31	15.70	-0.4
MEU	69.98	56	Pc	31	16.20	-0.2
ZAG	69.99	47	iPc	31	16.50	0.4
			i	33	51.50	
VKA	70.07	44	iPc	31	15.90	-0.7
	2.0s	336.00nm			5.8mb	
MGR	70.15	53	P	31	16.20	-1.0
SOP	70.26	45	iPc	31	18.50	0.8
KBS	70.50	11	iPc	31	19.70	1.0
UPP	70.50	32	iPc	31	17.90	-1.0
	1.5s	400.00nm			6.0mb	
MMN	70.50	53	P	31	19.00	-0.3
ZST	70.59	44	iP	31	19.60	-0.1
	1.4s	192.00nm			5.7mb	
CZI	70.69	54	P	31	18.50	-2.0
CSI	70.74	53	P	31	20.20	-0.7
TDS	70.79	53	P	31	20.30	-0.9
ORI	70.84	53	Pc	31	20.50	-0.9
ROI	70.98	53	P	31	21.40	-0.9
TRO	71.24	21	eP	31	23.60	0.4
BRT	71.32	52	P	31	23.50	-0.8
SRO	71.43	45	iPc	31	24.80	0.0
			e	31	47.00	
			e	34	04.30	
BUD	71.94	45	iPc	31	27.80	0.0
KRA	72.30	42	iPc	31	29.90	0.0
	1.7s	438.00nm			6.0mb	
	Z 16s	1.10um			5.2MszX	
			e	31	38.80	
			eS	40	46.00	
TOA	72.35	331	ePd	31	30.00	0.0
PSZ	72.48	44	iP	31	30.90	-0.2
SPC	72.59	43	iPc	31	33.20	1.4
SDA	72.89	51	iPc	31	34.00	0.5
COL	72.92	334	eP	31	32.46	-0.8
			epPd	32	00.10	108kmX
			iS	40	47.59	
			e	41	33.94	
FBA	72.92	334	ePd	31	32.80	-0.5
LACI	73.10	51	iPc	31	35.70	1.0
BEO	73.23	48	iP	31	35.50	0.1
TIR	73.26	51	iPc	31	36.00	0.4
BCI	73.27	50	eP	31	36.80	1.2
BERA	73.41	52	iPd	31	37.10	0.6
PHP	73.64	51	iPd	31	38.70	0.9
PMR	73.78	330	eP	31	38.10	-0.1
BZS	73.93	47	eP	31	40.00	0.5
NUR	73.97	31	iP	31	39.30	-0.1
	1.3s	219.20nm			5.8mb	
			e	41	04.00	
LSK	73.98	52	iPc	31	40.70	0.7
OHR	73.99	51	iPc	31	41.00	1.0
			i	31	59.30	
			eS	41	05.00	
KEV	74.05	21	iP	31	40.00	0.3
	0.9s	71.00nm			5.5mb	
			e	41	08.00	
SOD	74.14	24	iP	31	41.00	0.7
SKO	74.33	50	iPc	31	42.20	0.3
			i	32	14.20	
			iS	41	06.00	
SUF	74.44	29	iP	31	42.70	0.6
	0.8s	50.30nm			5.4mb	
IMA	75.25	335	eP	31	47.00	0.1
	1.0s	61.10nm			5.4mb	
VAY	75.27	51	iPc	31	47.70	0.4
	1.6s	0.29nm			2.8mb	X
VTS	75.53	49	iPc	31	50.00	1.1
BRW	75.54	341	eP	31	49.30	1.1
KKB	75.56	50	iPc	31	50.00	1.1
DRA	75.92	47	ePd	31	53.00	2.1
KDC	75.97	326	eP	31	51.50	0.7
MMB	76.08	50	ePc	31	53.00	1.1
PGB	76.23	49	iPc	31	53.00	0.2
PLD	76.71	50	iPc	31	56.00	0.7
TTA	76.77	332	eP	31	54.90	-0.5
RZN	76.79	50	iPc	31	57.00	0.9
SVW	76.95	330	ePd	31	55.70	-0.6
PVL	76.95	49	iPc	31	57.00	0.4
PTT	76.99	45	eP	31	58.00	1.2
KDZ	77.32	50	iPc	31	59.00	0.3
VRI	77.42	46	ePc	32	01.00	1.8

CLI	77.67	45	iPc	32	00.50	0.0
JMB	78.00	49	iPc	32	03.00	0.6
EZN	78.36	52	iP	32	05.00	0.6
PSN	78.89	48	iPc	32	08.00	0.8
BCAO	79.99	88	iPc	32	13.90	0.1
	0.6s	151.00nm			6.0mb	
			ic	32	43.10	
			id	34	23.20	
			ic	35	17.00	
SDN	80.83	325	eP	32	18.30	1.0
KHL	81.13	53	eP	32	19.50	0.1
GPA	81.23	51	eP	32	20.10	0.3
ALT	81.39	52	iP	32	21.20	0.4
ELL	81.83	54	iP	32	24.00	0.9
AIA	81.91	181	eP	32	24.20	1.7
BCK	82.17	53	iP	32	25.40	0.6
BBTK	83.16	51	iP	32	31.00	1.1
KAS	83.47	49	eP	32	32.00	0.6
HLW	84.84	61	eP+	32	40.00	1.6
			eSn	42	52.00	
KOT	85.23	60	ePc	32	40.50	0.2
HRI	87.41	56	ePc	32	52.00	0.9
DSI	87.65	58	eP	32	54.00	1.9
ANMR	87.66	66	eP	32	53.00	0.8
AGMR	87.70	66	iPd	32	54.10	1.7
SALJ	87.76	57	Pc	32	53.30	0.6
BURJ	87.78	57	Pc	32	53.20	0.3
MBH	87.80	60	ePc	32	55.00	2.1
MASJ	87.88	58	Pc	32	53.80	0.5
AGRW	87.90	66	iPd	32	55.00	1.6
AGAL	87.98	66	iPd	32	55.40	1.6
AKSR	88.09	66	iPd	32	56.50	2.2
QUTJ	88.25	58	Pc	32	55.70	0.6
MDSJ	88.34	58	Pc	32	56.10	0.5
SHBJ	89.18	57	Pd	33	00.30	0.7
RUV	89.75	254	iP	33	04.20	2.0
	1.4s	235.00nm			6.1mb	
TPT	89.90	254	iP	33	04.80	1.9
	1.4s	210.00nm			6.1mb	
VAH	89.99	254	eP	33	05.00	1.7
	1.4s	185.00nm			6.0mb	
PMO	90.17	254	iP	33	05.80	1.7
	1.4s	145.00nm			5.9mb	
MSL	92.03	51	ePd	33	15.50	3.0X
			ePPc	36	51.50	
			eSKS	43	35.50	
			eS	44	08.00	
TAB	93.68	49	eP	33	21.00	0.7
BHD	94.18	54	ePd	33	25.00	2.6X
			iSKS	43	58.50	
KIM	95.50	118	iPc	33	28.00	-0.7
KER	95.81	52	eP	33	31.00	0.9
BUL	96.53	109	iPc	33	32.40	-1.0
			iPP	37	25.30	
KRI	96.56	106	iPd	33	33.40	-0.2
			iPP	37	27.70	
BFS	96.71	116	iPd	33	34.00	-0.1
	0.7s	20.55nm			5.7mb	
BLF	96.78	118	eP	33	36.50	2.0
SLR	97.70	114	iPc	33	39.00	0.4
MAIO	103.74	45	ePdiff	34	07.00	1.4
			e	34	34.00	
			eS	44	32.00	
QUE	112.34	46	ePKP	38	47.50	7.7X
			eS	45	13.50	
CN2	119.18	354	ePKP	38	51.00	-1.2
	Z 20s	0.60um			5.2Msz	
			ePP	40	14.00	
			SS	56	23.00	
NDI	120.14	41	ePKP	38	54.00	-0.5
SNY	121.31	355	PKPd	38	56.00	-0.3
	E 28s	0.80um				
GTA	121.55	16	PKP	38	57.00	-0.1
	Z 32s	0.80um			5.2MszX	
			PP	40	27.00	
			SKKS	47	13.40	
HHC	122.27	5	ePKP	38	57.40	-0.9
BJI	123.34	1	ePKP	39	00.00	-0.3
	Z 44s	0.62um			4.9Ms±X	
			ePP	40	40.00	
			eSS	57	16.00	
POO	124.33	53	ePKP	39	04.50	1.6
GKN	125.08	36	PKP	39	03.80	-0.5
TIY	125.45	5	iPKPd	39	04.70	0.1
	N 16s	0.80um				
			PP	40	56.00	
			SS	57	45.00	

KKN	125.60	36	PKP	39	04.80	-0.6
DMN	125.64	36	PKP	39	05.20	-0.4
LZH	125.70	14	ePKP	39	05.50	0.2
GUN	125.84	35	PKP	39	05.80	-0.3
PKI	125.84	36	PKP	39	05.20	-0.8
LSA	127.07	29	PKP	39	09.50	1.0
TIA	127.17	1	ePKP	39	07.80	-0.1
HYB	128.54	50	ePKPc	39	10.00	-1.0
XAN	128.66	9	PKPd	39	11.00	0.2
GBA	130.02	55	PKPc	39	12.70	-1.1
	0.9s	24.70nm				
CD2	130.62	16	PKP	39	14.60	0.0
SHL	130.88	31	iPKP	39	14.60	-0.9
			eS	46	12.00	
NJ2	131.31	359	PKPd	39	10.40	-5.4X
WHN	132.72	4	PKPd	39	18.50	0.0
DZM	133.89	255	iPKPc	39	21.70	0.6
GYA	135.59	14	iPKPd	39	23.80	-0.5
KMI	135.77	20	ePKP	39	23.50	-1.3
CHG	140.01	28	ePKP	39	25.00	-7.5X
			e	42	28.30	
			e	51	30.00	
BDT	141.40	29	ePKP	39	26.00	-9.0X
LOE	142.46	25	ePKP	39	31.50	-5.4X
			e	43	00.00	
QIZ	143.47	13	ePKP	39	35.60	-3.0X
NNT	145.75	32	iPKPd	39	43.00	0.5
BRS	145.96	246	iPKP	39	43.00	0.3
			i	40	11.00	
			i	43	11.00	
COO	146.00	240	iPKPd	39	44.10	1.5
			i	43	12.10	
CNB	146.36	231	ePKP	39	44.00	0.9
	0.2s	53.00nm				
			e	39	53.00	
			e	43	12.80	
CAN	146.62	231	iPKPc	39	44.10	0.6
			iPcP	43	12.70	
TOO	148.02	224	iPKPc	39	46.90	1.2
			e	39	49.50	
			e	43	16.00	
BSI	148.62	47	ePKPd	39	46.50	-0.7
RMO	149.66	246	iPKPc	39	51.00	2.5X
			e	39	55.00	
			e	40	26.00	
			e	43	21.00	
CMS	150.61	235	ePKP	39	51.00	1.2
			i	39	55.80	
SNG	150.73	37	iPKPc	39	56.00	5.6X
			e	04	24.30	
TSI	152.30	45	ePKPd	39	58.00	5.3X
CTA	152.73	259	iPKPc	39	54.00	0.8
	1.2s	71.09nm				
			i	40	00.50	
			i	40	12.20	
			iS	43	45.00	
IPM	153.05	39	ePKPd	39	55.50	1.7
			e	40	02.00	
PSI	153.13	45	ePKPc	40	01.50	7.6X
	0.8s	27.00nm				
			e	43	43.50	
			e	45	00.00	
KKM	157.15	4	ePKPd	40	01.00	1.6
QIS	158.92	257	ePKP	40	01.00	-0.1
			i	40	38.10	
ASPA	163.36	244	iPKPc	40	06.20	0.6
	1.2s	40.00nm				
			i	40	57.30	
			iPP	44	41.50	
			iSKKS	51	16.60	
			iScSP	55	33.20	
WB5	163.88	257	iPKPc	40	06.90	0.7
			i	40	59.90	
			e	43	26.30	
WRA	163.90	257	PKPc	40	06.70	0.5
	0.9s	38.20nm				
MTN	166.38	285	iPKPc	40	08.60	0.2
	S.D. = 0.9	on 473 of 495 obs.				

? FEB 21, 1990 18h 29m 52.96± 7.31s
19.940 S ±56.2km 177.512 W ±73.5km
DEPTH = 637.2 ± 44.8 km
4.8mb (4 obs.)
FIJI ISLANDS REGION (181)

DZM	15.13	259	iPc	33	02.00	0.2
MNG	21.47	195	eP	33	59.80	-0.2

KHZ 23.65 197 eP 34 19.60 0.2
CTA 34.00 263 iPd 35 48.00 -0.1
0.8s 44.78nm 5.1mb
PMG 35.67 282 eP 36 02.00 0.2
ASPA 45.10 256 iPc 37 16.80 0.1
0.6s 42.00nm 5.1mb
WB5 45.12 261 eP 37 16.90 0.1
WRA 45.13 261 Pd 37 16.40 -0.6
0.3s 4.80nm 4.4mb
MTN 49.62 270 iPc 37 50.20 -0.4
MBL 58.33 257 iPd 38 52.10 0.6
0.3s 9.00nm 4.5mb
S.D. = 0.4 on 10 of 10 obs.

? FEB 21, 1990 18h 46m 08.62± 9.30s
31.932 S ±59.4km 69.837 W ±60.0km
DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB 0.99 64 eP 46 27.00 0.7
eS 46 43.00
RTCV 1.11 87 ePc 46 27.90 0.0
S 46 45.00
RTLL 1.31 63 iPc 46 30.10 -0.7
RTRS 1.79 11 iPd 46 37.60 0.0
S.D. = 1.0 on 4 of 4 obs.

? FEB 21, 1990 19h 11m 14.84± 5.17s
37.134 N ±29.2km 16.355 E ±31.9km
DEPTH = 10.0km (geophysicist)
IONIAN SEA (399)

SOI 0.97 346 Pc 11 34.00 0.8
MEU 1.14 269 P 11 36.40 0.2
eSn 11 49.40
ATN 1.25 326 Pc 11 37.50 -0.5
MNO 1.54 302 P 11 42.50 -0.1
GIB 2.04 295 P 11 46.10 -3.6X
CZI 2.09 355 P 11 49.80 -0.5
S.D. = 0.8 on 5 of 6 obs.

FEB 21, 1990 19h 29m 26.26± 0.67s
8.320 S ± 8.7km 119.984 E ± 8.1km
DEPTH = 191.8 ± 9.2 km
4.5mb (6 obs.)
FLORES ISLAND REGION (286)

MKS 3.12 351 iPc 30 18.20 0.8
KHKI 4.33 269 ePd 30 32.20 -0.3
eS 31 23.00
e 33 45.00
TRT 7.30 274 ePc 31 11.60 0.3
KNA 11.32 132 eP 32 02.30 -1.4
eS 34 00.00
MTN 11.84 113 iPc 32 09.50 -0.9
eS 34 09.00
MBL 12.77 181 eP 32 22.40 0.2
0.3s 6.00nm 4.6mb
eS 34 35.00
WB5 18.06 131 iPc 33 25.30 -0.6
eS 36 39.00
WRA 18.07 131 P 33 27.00 0.9
0.2s 1.10nm 3.9mb
ASPA 20.26 140 iPc 33 49.80 1.2
0.4s 11.00nm 4.7mb
iS 37 24.90
MRWA 21.12 190 eP 34 18.50 21.5X
eS 37 50.00
QIS 22.53 125 eP 34 12.00 1.2
CHG 34.02 323 eP 35 54.90 0.9
CHTO 34.02 323 iP 35 54.50 0.5
0.8s 1.46nm 3.7mb
GUN 48.83 319 P 37 54.40 -0.3
0.6s 24.00nm 4.9mb
DMN 49.14 318 P 37 56.30 -0.6
KKN 49.15 318 P 37 56.20 -0.7
GKN 49.71 318 P 38 00.20 -0.9
0.6s. 9.00nm 4.5mb
S.D. = 0.9 on 16 of 17 obs.

? FEB 21, 1990 19h 37m 51.82± 5.72s
31.582 S ±37.6km 69.611 W ±45.9km
DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB 0.70 82 iP 38 07.00 1.7
eS 38 20.00

RTCV 0.96 107 ePd 38 09.20 0.2
(S) 38 24.50
RTLL 1.01 76 iPd 38 09.00 -0.7
eS 38 22.80
CFA 1.17 92 iPd 38 10.80 -1.2
S 38 26.50
RTRS 1.41 5 iPd 38 15.40 0.0
S.D. = 1.5 on 5 of 5 obs.

? FEB 21, 1990 20h 13m 34.91± 6.37s
28.440 S ±54.9km 69.871 W ±20.1km
DEPTH = 134.3 ± 26.6 km
CHILE-ARGENTINA BORDER REGION (127)

RTRS 1.76 168 ePd 14 05.50 -1.1
RTLL 3.13 157 e(P) 14 24.50 0.5
eS 15 09.50
RTCB 3.17 163 iP 14 25.00 0.3
(S) 15 10.50
ZON 3.26 162 eP 14 31.00 5.2X
CFA 3.46 156 iPc 14 28.80 0.4
S 15 13.20
RTCV 3.60 162 ePc 14 30.90 0.6
(S) 15 21.00
ROCH 4.62 192 eP 14 44.20 0.1
IHA 4.82 198 eP 14 47.00 0.5
e(S) 15 53.50
FCH 4.89 184 eP 14 48.00 0.2
iS 15 53.00
SAN 5.04 188 eP 14 50.50 0.9
PCH 5.19 186 eP 14 51.30 -0.4
LCCH 5.23 196 iPc 14 45.60 -6.5X
TACH 5.28 190 eP 14 47.00 -5.7X
MRA 5.35 139 ePd 14 54.20 -0.6
S 16 06.00
TCA 5.42 123 ePd 14 54.40 -0.3
CHCH 5.52 187 eP 14 55.70 -0.3
LNV 5.65 193 eP 14 52.50 -5.3X
iS 16 11.00
RFA 6.42 170 ePc 15 06.50 -1.9
S.D. = 0.9 on 14 of 18 obs.

? FEB 21, 1990 20h 34m 48.07± 1.11s
2.956 N ±21.1km 129.375 E ±33.7km
DEPTH = 33.0km (normal)
4.9mb (3 obs.)
HALMAHERA (267)

WB5 23.22 168 eP 39 52.80 -0.5
WRA 23.27 168 Pd 39 53.50 -0.3
0.6s 5.10nm 4.2mb
QIS 25.43 157 eP 40 15.50 0.9
BJI 38.81 344 eP 42 10.50 -1.0
GUN 48.32 305 P 43 29.80 0.8
0.4s 14.00nm 5.3mb
PKI 48.57 305 P 43 31.60 0.6
KKN 48.76 305 P 43 33.00 0.7
0.4s 6.00nm 5.0mb
DMN 48.84 305 P 43 33.80 0.9
GKN 49.37 305 P 43 37.20 0.3
HYB 51.86 290 eP 43 53.50 -2.3
S.D. = 1.2 on 10 of 10 obs.

FEB 21, 1990 20h 39m 53.13± 0.28s
52.102 N ± 6.3km 174.369 E ± 3.7km
DEPTH = 33.0km (normal)
4.9mb (46 obs.) 4.4Msz (2 obs.)
NEAR ISLANDS, ALEUTIAN ISLANDS (5)

SMY 0.65 346 iPd 40 05.90 0.1
ADK 5.53 89 eP 41 16.80 1.5
SVW 18.66 49 eP 44 12.70 2.5
TTA 19.05 44 eP 44 15.50 0.5
KDC 19.72 60 eP 44 20.90 -1.6
IMA 21.23 37 eP 44 37.30 -0.9
0.8s 19.80nm 4.6mb
PMR 21.82 50 eP 44 44.00 0.1
0.5s 8.26nm 4.4mb
FBA 23.12 42 eP 44 57.00 0.3
0.6s 28.33nm 4.9mb
BRW 23.19 23 eP 44 57.70 0.4
TOA 23.28 49 eP 45 00.50 2.1
INK 29.37 37 eP 45 54.50 -0.2
MDJ 30.27 274 eP 46 02.00 -1.0
CN2 33.24 275 iPd 46 28.00 -1.0
Z 20s 0.70um 4.4Msz
pP 46 40.50 48kmX

MBC 34.55 23 eP 46 39.50 -0.5
0.7s 11.00nm 4.9mb
SNY 35.48 274 eP 46 47.80 -0.4
N 18s 0.50um
DL2 38.40 271 eP 47 13.00 0.2
0.9s 100.00nm 5.6mb
BJI 41.07 277 eP 47 36.00 1.1
1.1s 20.00nm 4.8mb
EDM 42.12 59 iPd 47 44.00 0.6
NEW 42.56 67 eP 47 46.30 -0.8
TIA 42.87 272 Pd 47 50.40 0.6
HHC 43.39 281 eP 47 54.20 0.2
LBFM 43.66 78 eP 47 57.00 0.7
SSE 43.81 263 Pc 47 59.00 1.6
Z 20s 0.50um 4.4Msz
BTO 44.48 282 P 48 04.00 1.2
TIY 44.80 277 iPd 48 07.00 1.6
KVN 47.36 78 eP 48 25.50 -0.3
WHN 48.40 268 Pc 48 33.50 -0.2
1.0s 100.00nm 5.8mb
TNP 48.51 78 eP 48 36.00 1.2
0.9s 4.30nm 4.5mb
XAN 49.35 275 P 48 40.50 -0.6
QZH 49.83 259 eP 48 45.50 0.7
BW06 50.07 69 eP 48 45.70 -1.0
0.8s 7.14nm 4.7mb
LZH 51.09 281 eP 48 55.00 0.5
1.5s 56.00nm 5.3mb
pP 49 07.00 43kmX
GTA 51.32 287 iPc 48 55.60 -0.6
PV09 53.06 73 eP 49 09.00 -0.5
GOL 54.46 69 e(P) 49 19.00 -0.7
CD2 54.67 276 eP 49 20.30 -0.7
WMQ 55.32 299 P 49 24.50 -1.2
GYA 56.04 270 iPd 49 30.60 -0.5
KEV 56.15 347 eP 49 40.00 8.8X
ANMO 57.04 74 eP 49 35.50 -2.8
0.7s 5.14nm 4.7mb
ALQ 57.05 74 eP 49 35.50 -2.8
1.0s 7.50nm 4.7mb
SOD 58.41 346 iP 49 45.60 -1.6
KMI 59.43 272 Pc 49 53.50 -1.6
SCH 61.99 35 eP 50 10.00 -1.9
0.7s 42.00nm 5.7mb
SUF 62.81 344 iP 50 16.00 -1.2
0.5s 18.00nm 5.5mb
KSH 64.63 302 eP 50 29.50 -0.1
NUR 65.14 344 iP 50 31.00 -1.4
0.9s 30.40nm 5.4mb
NB2 66.41 351 P 50 39.30 -1.2
0.6s 18.70nm 5.4mb
CHG 66.46 271 ePc 50 41.20 -0.2
0.9s 22.27nm 5.3mb
HFS 67.04 350 eP 50 42.20 -2.3
0.5s 21.60nm 5.5mb
Z 17s 0.19um 4.4MszX
LR 14 39.00
GUN 67.61 287 P 50 48.80 -0.2
HBVT 67.75 46 eP 50 42.50 -6.7X
KKN 68.05 287 P 50 51.00 -0.6
PKI 68.14 287 P 50 51.80 -0.5
GKN 68.27 288 P 50 52.20 -0.7
DMN 68.29 287 P 50 52.80 -0.4
NDI 72.04 294 eP 51 14.50 -1.1
EKA 72.91 359 Pd 51 20.00 -0.3
0.7s 11.70nm 5.0mb
MAIO 75.27 311 iPc 51 34.50 0.1
WTS 75.75 352 eP 51 36.50 -0.2
0.6s 8.00nm 4.9mb
e 51 49.00
KSP 75.77 346 eP 51 35.50 -1.4
CLL 75.77 348 eP 51 36.00 -0.8
KRA 75.93 343 iPd 51 37.80 0.0
e 51 48.50
BRG 76.07 347 eP 51 37.70 -0.9
1.1s 11.00nm 4.8mb
QUE 76.47 302 iPd 51 41.40 0.0
PRU 76.85 347 P 51 42.50 -0.5
ENN 77.04 353 eP 51 43.50 -0.4
1.0s 29.00nm 5.3mb
e 51 51.50
MEM 77.19 352 P 51 44.70 -0.1
DOU 77.81 353 P 51 48.30 0.1
KHC 77.83 347 P 51 48.00 -0.4
1.0s 7.50nm 4.7mb
BUD 78.57 343 eP 51 53.00 0.6
MLR 79.06 338 eP 51 57.00 1.7

21d 20h

CDF	79.26	351	eP	51 56.10	-0.2
	1.0s	8.00nm		4.7mb	
FLN	79.42	357	eP	51 56.70	-0.3
CMP	79.48	339	ePc	52 06.00	8.5X
LDF	79.57	356	eP	51 57.40	-0.5
WB5	79.71	218	eP	51 59.90	1.0
HAU	79.75	352	eP	51 58.60	-0.3
	1.0s	16.00nm		5.0mb	
WRA	79.78	218	Pc	51 59.60	0.3
	0.8s	10.10nm		4.9mb	
GRR	79.81	357	eP	51 58.90	-0.2
	0.7s	11.00nm		5.0mb	
KBA	79.87	347	iPd	52 00.70	1.0
	0.7s	34.00nm		5.5mb	
BZS	79.88	341	eP	52 00.00	0.5
BSF	79.88	352	eP	51 59.00	-0.7
	1.0s	12.00nm		4.8mb	
HYB	79.95	285	iPd	52 00.90	0.5
LPF	80.17	357	eP	52 00.40	-0.6
FVI	80.42	347	P	52 03.50	1.1
RBL	80.46	347	P	52 03.50	0.7
PTJ	80.63	345	eP	52 04.20	0.5
LOR	80.68	353	eP	52 03.60	-0.2
	0.9s	13.10nm		4.9mb	
SSF	80.91	354	eP	52 05.00	0.0
	0.9s	13.10nm		4.9mb	
LBF	80.95	353	eP	52 04.90	-0.4
	0.9s	6.55nm		4.6mb	
CEY	81.02	346	e(P)	52 05.50	-0.2
VBY	81.12	345	eP	52 07.00	0.8
AVF	81.19	354	eP	52 06.50	0.1
	1.0s	12.00nm		4.9mb	
SMF	81.30	353	eP	52 07.10	0.0
	1.0s	14.00nm		4.9mb	
RIY	81.42	346	eP	52 07.20	-0.4
BGF	81.45	354	eP	52 08.10	0.2
MFF	81.56	356	eP	52 08.30	-0.1
VAI	81.63	350	Pd	52 08.90	0.2
SAL	81.68	349	P	52 09.50	0.5
TCF	81.76	355	eP	52 09.70	0.2
	0.9s	9.85nm		4.8mb	
MAF	81.80	354	eP	52 10.00	0.3
LSF	81.84	355	eP	52 10.10	0.2
	0.9s	8.20nm		4.8mb	
POO	81.85	290	eP	52 13.50	3.1X
ORX	81.94	350	P	52 10.20	-0.4
LPG	82.20	351	eP	52 13.10	1.0
LSD	82.20	351	P	52 13.28	1.2
RSP	82.49	351	P	52 14.10	0.6
BOB	82.64	349	Pd	52 15.40	1.2
BNI	82.65	351	Pd	52 16.00	1.7
RRL	82.77	351	P	52 16.56	1.5
PCP	82.96	350	P	52 15.84	0.0
MME	83.05	348	Pd	52 17.90	1.4
RSM	83.08	347	Pd	52 18.00	1.7
CKI	83.11	350	P	52 16.00	-0.5
CAF	83.13	355	eP	52 17.00	0.4
	0.8s	7.40nm		4.8mb	
DOI	83.14	351	P	52 16.00	-0.8
PZZ	83.15	351	P	52 16.66	-0.2
BDI	83.20	348	P	52 17.20	0.1
PGD	83.23	347	P	52 19.00	1.6
ROB	83.28	350	P	52 16.97	-0.5
FIN	83.33	350	P	52 17.38	-0.3
ASPA	83.33	217	iPc	52 18.80	1.0
	1.2s	10.00nm		4.8mb	
STV	83.38	351	P	52 16.66	-1.4
ENR	83.39	351	P	52 16.97	-1.1
SKO	83.41	340	iP	52 18.70	0.6
LPO	83.42	355	eP	52 18.20	0.1
	0.8s	10.75nm		5.0mb	
CRE	83.45	347	P	52 19.50	1.1
PII	83.54	348	P	52 18.50	-0.2
GBA	83.59	284	Pc	52 18.70	-0.6
	0.9s	15.40nm		5.1mb	
IMI	83.66	350	P	52 19.53	0.1
SBF	83.75	351	eP	52 20.10	0.2
	0.8s	12.10nm		5.1mb	
ASS	83.89	347	P	52 21.50	0.9
FRF	84.13	351	eP	52 22.20	0.5
	0.7s	4.40nm		4.7mb	
LRG	84.26	351	eP	52 23.10	0.8
	0.7s	5.50nm		4.8mb	
LMR	84.37	351	eP	52 23.60	0.7
	0.7s	4.40nm		4.7mb	
OHR	84.37	340	eP	52 22.30	-0.7
AZI	84.84	346	P	52 26.50	1.3
PGF	84.88	349	eP	52 26.10	0.5
	1.0s	36.00nm		5.5mb	
SDI	85.06	346	Pd	52 27.00	0.5
EPF	85.11	356	eP	52 26.40	-0.3
	0.7s	4.40nm		4.8mb	
SGO	85.94	344	P	52 33.50	2.7
KOD	86.22	282	eP	52 33.50	0.6
MGR	86.31	344	P	52 32.00	-0.6
BCAO	120.05	332	ePKPd	58 41.20	-0.8
	0.6s	6.00nm			
TIC	121.48	359	PKP	58 44.20	-0.5
KIC	121.76	359	PKP	58 44.80	-0.5
LIC	121.90	359	PKP	58 45.00	-0.5
	S.D. = 1.0	on 144 of 148 obs.			

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* FEB 21, 1990 20h 50m 56.46± 1.89s
16.327 N ±15.6km 99.079 W ±13.2km
DEPTH = 36.9 ± 14.2 km
4.1mb (5 obs.)
NEAR COAST OF GUERRERO, MEXICO (58)

ACX	0.92	306	iP	51 12.40	-0.7
			iS	51 22.31	
III	2.07	350	iP	51 28.50	-1.2
			iS	51 48.16	
OXX	2.38	71	iP	51 34.21	0.1
			(S)	52 10.09	
PPM	2.76	9	iP	51 38.80	-1.0
			iS	52 08.47	
IIT	2.78	15	iP	51 40.52	0.7
			iS	52 11.00	
UNM	2.99	358	iP	51 43.50	0.6
			(S)	52 18.80	
CRX	3.12	349	iP	51 46.06	-1.4
			(S)	52 24.58	
SMMM	3.41	5	iP	51 52.11	3.6X
			(S)	52 35.66	
IIJ	3.45	350	iP	51 51.96	2.5X
			(S)	52 33.64	
MRX	3.91	329	iP	51 43.50	-12.2X
			iS	52 43.50	
TPX	6.72	101	(P)	53 04.00	28.7X
			(S)	54 31.00	
ANMO	19.68	342	eP	55 25.00	-0.8
	1.0s	2.50nm		3.5mb	
GOL	23.93	348	eP	56 10.00	1.7
	0.9s	3.41nm		3.9mb	
BW06	27.84	343	eP	56 46.00	1.2
	1.2s	10.62nm		4.4mb	
ZOBO	44.51	135	Pc	59 09.20	2.0
	1.1s	3.19nm		4.1mb	
SCH	45.77	26	eP	59 15.00	-1.1
INK	56.37	345	eP	00 35.00	-1.1
BAO	59.58	120	eP	00 57.00	-2.5
MBC	60.87	355	eP	01 06.50	-0.7
	0.7s	2.00nm		4.4mb	
WRA	129.28	257	PKPc	10 12.70	9.3X
	0.7s	1.30nm			
HYB	146.39	4	ePKP	10 36.00	1.3
GBA	150.06	7	PKPc	10 44.50	4.1X
	1.0s	3.80nm			
	S.D. = 1.4	on 16 of 22 obs.			

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* FEB 21, 1990 21h 28m 18.32± 1.75s
16.773 N ± 4.6km 61.988 W ±19.5km
DEPTH = 10.0km (geophysical list)
LEEWARD ISLANDS (92)
ML 2.8 (FDF).

BPA	0.30	25	eP	28 24 74	0.2
			eS	28 29 26	
ANG	0.41	22	eP	28 26 58	-0.1
			eS	28 31 51	
SEG	0.59	128	eP	28 30 74	0.5
			S	28 40 20	
PAG	0.80	158	eP	28 33.80	0.0
			S	28 47.40	
DEG	1.00	117	eP	28 36.85	-0.5
			S	28 51.50	
MGG	1.07	143	eP	28 38.54	0.1
			S	28 55.70	
BBL	1.34	158	eP	28 42.80	-0.2
	S.D. = 0.4	on 7 of 7 obs.			

? FEB 21, 1990 21h 33m 32.20± 2.67s
0.179 N ±15.0km 80.204 W ±22.5km
DEPTH = 58.2 ± 19.6 km

4.8mb (2 obs.)
NEAR COAST OF ECUADOR (105)

QUR	1.71	102	iPd	33 59.70	-0.8
			eS	34 20.30	
VC1	1.98	114	iP+	34 04.60	0.2
CAYA	2.22	93	P	34 08.50	0.7
			eS	34 35.00	
ZOBO	20.23	144	Pd	38 06.00	0.1
			i	38 41.00	
			S	42 20.00	
			LR	46 40.00	
LPB	20.45	145	Pc	38 08.50	0.5
Z	18s	0.34um		3.8Msz	
			LR	46 50.00	
CCH	22.28	142	P	38 21.30	-4.9X
BAO	35.48	118	eP	40 24.00	-1.6
EDM	59.61	338	eP	43 31.00	-1.4
LIC	75.24	84	P	45 11.40	0.1
TIC	75.26	83	P	45 11.60	0.2
KIC	75.53	84	Pc	45 13.40	0.5
	0.8s	12.00nm		4.9mb	
INK	77.00	342	eP	45 21.00	0.9
MBC	79.13	351	eP	45 32.00	0.4
	1.0s	9.00nm		4.7mb	
GKN	148.43	26	PKP	53 15.60	4.6X
KKN	148.90	25	PKP	53 16.80	4.9X
DMN	148.98	26	PKP	53 17.40	5.3X
GUN	149.04	24	PKP	53 18.00	5.7X
PKI	149.14	25	PKP	53 17.40	5.0X
GBA	153.96	57	PKPc	53 42.30	23.1X
	0.5s	2.00nm			
	S.D. = 0.9	on 12 of 19 obs.			

& FEB 21, 1990 22h 12m 11.83s
53.790 N 166.568 W
DEPTH = 17.8km
FOX ISLANDS, ALEUTIAN ISLANDS (9)
<PAL>.

SNKA	2.33	71	eP	12 48.43	-1.5
			eS	13 14.89	
BALA	2.62	56	eP	12 52.60	-1.4
DRRA	2.75	64	eP	12 54.26	-1.7
			eS	13 25.43	
DLG	3.08	62	eP	12 58.83	-1.6
			eS	13 33.44	
PVV	3.20	58	eP	13 00.61	-1.7
			eS	13 35.65	
SASA	3.86	64	eP	13 09.48	-2.1
			eS	13 52.03	
TTA	10.69	27	eP	14 43.50	-3.6
IMA	13.86	22	eP	15 28.00	-1.6
	8 obs. associated				

FEB 21, 1990 22h 14m 37.97± 1.15s
19.981 N ± 6.5km 121.810 E ± 7.5km
DEPTH = 42.0 ± 11.2 km
5.0mb (3 obs.)
PHILIPPINE ISLANDS REGION (248)

TWG	2.91	346	ePc	15 23.50	0.6
TWM1	3.11	336	eP	15 27.00	1.2
TWK	3.49	340	ePc	15 31.40	0.1
TWO	4.37	348	ePc	15 44.20	0.6
OZH	5.77	330	P	16 01.30	-2.0
HKC	7.49	289	eP	16 27.60	0.0
MCO	7.99	287	eP	16 32.40	-2.1
OIZ	11.33	267	eP	17 20.00	-0.3
WHN	12.49	329	P	17 34.00	-1.8
GYA	15.34	298	P	18 15.60	2.2
XAN	18.08	323	P	18 48.40	0.6
KMI	18.34	290	eP	18 53.00	1.8
LOE	19.19	266	eP	19 01.00	-0.3
TIY	19.46	337	eP	19 04.30	0.1
CD2	19.57	307	eP	19 04.60	-0.9
BJI	20.57	348	eP	19 15.50	-0.2
CHG	21.60	271	eP	19 27.50	1.2
	1.1s	18.35nm		4.4mb	
LZH	22.50	319	eP	19 36.00	0.6
HHC	22.57	339	eP	19 36.00	0.1
BTO	22.89	336	eP	19 40.00	0.9
GUN	33.68	291	P	21 17.80	0.1
	0.6s	15.00nm		5.1mb	
PKI	34.06	290	P	21 20.60	-0.4
KKN	34.20	290	P	21 21.60	-0.4
DMN	34.34	290	P	21 23.00	-0.2

GKN 34.78 291 P 21 26.20 -0.8
KNA 36.16 169 eP 21 38.00 -0.4
W85 41.48 162 eP 22 22.00 -0.7
WRA 41.53 162 Pd 22 23.00 -0.1
0.7s 29.20nm 5.1mb
QIS 43.89 156 eP 22 42.50 0.1
ASPA 44.96 164 iPc 22 51.60 0.6
0.5s 45.00nm 5.6mb X
iS 29 26.60
BFD 60.12 161 iPc 24 44.50 1.0
INK 76.89 22 eP 26 26.00 -1.1
S.D. = 1.0 on 32 of 32 obs.

FEB 21, 1990 22h 31m 59.67± 0.44s
15.069 N ± 6.8km 119.199 E ± 6.3km
DEPTH = 33.0km (normal)
4.7mb (10 obs.)
LUZON, PHILIPPINE ISLANDS (249)

QCP 1.87 103 eP 32 54.00 24.1X
BAG 1.88 45 iPd- 32 29.50 -0.8
HKC 8.63 327 eP 33 59.00 -6.2X
MCO 8.82 324 eP 34 02.60 -5.3X
QZH 9.84 357 eP 34 18.50 -3.4X
WHN 16.03 345 eP 35 46.50 2.2
SSE 16.06 6 P 35 44.20 -0.4
1.0s 14.00nm 4.0mb
Z 18s 0.40um 4.7MszX
E 14s 0.70um
pP 35 48.30
eS 38 32.00
LOE 16.93 280 eP 35 56.60 0.8
KMI 18.39 306 Pc+ 36 15.00 0.8
2.0s 0.10nm 1.6mb X
Z 20s 0.40um 4.7MszX
N 10s 0.40um
E 10s 0.40um
S 39 55.00
iS 39 58.00
CHG 19.73 284 eP 36 29.80 0.1
1.0s 15.00nm 4.2mb
MKS 20.16 179 e(P)c 36 38.40 4.3X
TIA 21.14 355 eP 36 43.00 -1.1
TIY 23.34 346 P 37 06.60 0.6
N 12s 0.70um
E 12s 0.80um
S 41 16.00
BJI 25.02 355 eP 37 21.00 -1.1
1.1s 49.00nm 5.0mb
LZH 25.03 330 eP 37 24.50 2.0
1.5s 76.00nm 5.1mb
Z 12s 0.50um 4.2MszX
N 15s 0.50um
E 14s 0.50um
HHC 26.53 347 eP 37 35.80 -0.5
BTO 26.66 344 eP 37 39.00 1.5
N 12s 0.60um
E 12s 1.40um
eS 42 10.00
SHL 27.61 297 iP 37 45.70 -0.7
GUN 33.42 298 P 38 37.60 -0.4
0.8s 21.00nm 5.1mb
PKI 33.73 297 P 38 39.20 -1.6
KKN 33.90 298 P 38 40.80 -1.3
DMN 34.00 297 P 38 42.00 -1.0
GKN 34.50 298 P 38 45.80 -1.4
WB5 37.80 156 iPc 39 14.90 0.0
WRA 37.85 156 Pc 39 15.10 -0.2
0.6s 10.30nm 4.9mb
HYB 39.04 279 eP 39 26.50 1.0
GBA 40.45 273 Pd 39 37.00 0.0
0.8s 2.90nm 4.1mb
ASPA 41.09 159 iPc 39 43.30 1.1
0.5s 13.00nm 4.9mb
MAIO 56.91 304 eP 41 45.00 0.8
BRW 73.93 20 eP 43 33.30 0.3
TTA 74.34 28 eP 43 36.00 0.3
SVW 74.62 30 eP 43 38.00 0.8
IMA 75.19 25 eP 43 40.70 0.1
0.8s 5.30nm 4.6mb
SOD 77.21 337 eP 43 50.00 -1.7
PMR 77.68 29 eP 43 53.80 -0.5
SUF 78.13 332 eP 44 07.00 10.2X
TOA 78.97 29 eP 44 02.40 0.9
NUR 79.25 330 eP 44 14.00 11.1X
INK 82.35 21 eP 44 19.00 -0.2
M8C 82.52 12 eP 44 19.50 -0.5

1.0s 6.00nm 4.6mb
KSP 86.39 322 eP 44 51.00 11.0X
S.D. = 1.0 on 33 of 41 obs.

? FEB 22, 1990 00h 40m 23.32± 3.11s
14.865 N ±27.6km 60.813 W ±24.5km
DEPTH = 33.0km (normal)
WINDWARD ISLANDS (95)
ML 2.2 (FDF).

CRM 0.15 222 iPd 40 29.41 0.0
S 40 35.80
MVM 0.32 194 iPd 40 31.39 0.0
S 40 38.00
FDF 0.35 248 iPd 40 31.83 0.0
S 40 39.70
BIM 0.43 216 eP 40 32.82 0.0
S 40 41.80
S.D. = 0.1 on 4 of 4 obs.

• FEB 22, 1990 02h 23m 01.44± 2.82s
31.902 S ±14.2km 67.306 W ±24.3km
DEPTH = 10.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

CFA 0.85 290 iPc 23 17.80 0.0
RTCV 1.05 272 ePc 23 22.20 1.0
RTLL 1.14 300 ePc 23 22.00 -0.9
ZON 1.22 287 eP 23 23.00 -1.2
eS 23 43.00
RTCB 1.34 288 iPd 23 27.00 0.8
eS 23 46.00
RTRS 2.53 312 ePd 23 43.80 0.6
iS 24 18.00
RFA 3.02 198 ePd 23 50.00 -0.3
S 24 39.50
S.D. = 1.0 on 7 of 7 obs.

• FEB 22, 1990 02h 50m 20.40± 3.70s
31.694 S ±13.6km 72.704 W ±30.6km
DEPTH = 10.0km (geophysicist)
OFF COAST OF CENTRAL CHILE (134)

IHA 1.60 146 eP 50 49.00 0.2
i(S) 51 12.50
ROCH 1.92 132 iP 50 52.90 -0.7
iS 51 14.50
LCCH 2.02 152 iPd 50 55.10 0.3
eS 51 20.50
TACH 2.46 143 eP 51 01.00 -0.2
iS 51 31.00
SAN 2.46 136 eP 51 00.50 -0.7
eS 51 29.00
LNV 2.50 155 eP 51 02.20 0.4
iS 51 34.00
i 51 41.60
FCH 2.61 129 ePd 51 02.70 -0.9
iS 51 33.00
PCH 2.67 137 eP 51 04.00 -0.2
eS 51 35.00
CHCH 2.82 143 eP 51 06.50 0.1
e 51 36.50
RTRS 3.17 62 ePc 51 10.90 -0.4
e 51 13.00
RTCB 3.34 87 eP 51 13.00 -0.8
ZON 3.44 89 eP 51 15.00 -0.1
RTCV 3.55 94 eP 51 18.00 1.2
RTLL 3.63 85 ePd 51 18.10 0.1
e 51 19.40
eS 52 01.00
CFA 3.81 90 ePc 51 21.00 0.6
RFA 4.69 132 e(P) 51 34.20 1.2
S.D. = 0.7 on 16 of 16 obs.

FEB 22, 1990 03h 26m 22.36± 1.05s
16.108 N ± 5.3km 122.453 E ± 6.2km
DEPTH = 42.0 ± 10.1 km
4.7mb (8 obs.) 4.3Msz (3 obs.)
LUZON, PHILIPPINE ISLANDS (249)

BAG 1.82 280 iPc+ 26 52.00 0.0
QCP 1.97 222 eP 26 55.00 1.1
DAV 9.47 161 eP 28 46.00 6.7X
QZH 9.50 338 eP 28 38.00 -1.7
Z 14s 1.10um
N 12s 0.80um
QIZ 12.37 285 eP 29 17.90 -0.8

N 13s 1.10um
E 15s 1.50um
WHN 16.17 334 Pd 30 12.80 4.6X
1.0s 100.00nm 4.9mb
Z 12s 1.20um 5.5MszX
N 12s 1.10um
E 14s 0.60um
eS 33 08.00
NJ2 16.21 349 eP 30 03.00 -5.7X
Z 12s 0.50um
N 13s 0.60um
E 12s 0.80um
GYA 17.94 308 P 30 32.00 1.4
Z 16s 1.30um
N 14s 1.30um
E 14s 0.90um
KMI 20.49 299 eP 31 03.50 3.7X
Z 18s 1.60um 4.4Msz
N 13s 1.40um
TIA 20.58 348 P 30 59.00 -1.3
XAN 21.62 328 eP 31 11.00 0.1
N 13s 0.80um
E 13s 0.80um
PJG 21.81 94 eP 31 13.60 0.8
GUA 21.86 94 eP 31 13.70 0.3
BDT 22.49 276 eP 31 21.20 1.6
CD2 22.55 314 eP 31 20.40 0.2
Z 15s 0.90um 4.3MszX
N 12s 1.30um
TIY 23.27 340 eP 31 27.50 0.3
N 12s 0.50um
E 13s 0.60um
sS 35 51.00
BJI 24.46 348 eP 31 39.00 0.4
1.0s 25.00nm 4.7mb
Z 16s 0.41um 4.0MszX
eS 35 56.00
SNY 25.65 2 iPd 31 49.30 -0.5
Z 18s 0.90um 4.3Msz
eS 36 16.00
LZH 25.90 324 eP 31 53.00 0.6
Z 13s 0.80um 4.4MszX
N 13s 0.30um
E 13s 0.60um
HHC 26.40 341 P 31 57.60 0.7
MDJ 29.05 11 eP 32 21.00 0.2
GTA 30.50 324 eP 32 35.00 1.1
Z 12s 0.60um 4.5MszX
E 12s 0.40um
GUN 35.75 296 P 33 18.60 -1.2
DMN 36.37 295 P 33 24.20 -0.7
GKN 36.85 295 P 33 27.20 -1.6
WB5 37.63 161 eP 33 33.90 -1.3
WRA 37.68 162 Pd 33 35.20 -0.4
1.0s 5.30nm 4.4mb
QIS 40.14 155 eP 33 56.00 -0.1
ASPA 41.08 164 eP 34 03.60 -0.3
0.7s 7.00nm 4.5mb
Z 19s 0.14um 3.8Msz
iS 40 12.20
LR 50 31.50
HYB 41.99 278 eP 34 11.70 0.3
GBA 43.52 273 Pc 34 23.80 -0.1
0.8s 4.30nm 4.2mb
MAIO 58.97 303 eP 36 20.00 -0.3
KEV 76.90 339 eP 38 13.00 1.5
SOD 77.50 337 iP 38 15.00 0.1
SUF 78.69 332 iP 38 21.80 0.3
INK 80.25 21 eP 38 30.00 0.2
M8C 80.85 12 eP 38 33.00 0.1
0.9s 25.00nm 5.2mb
HFS 85.18 332 eP 38 55.30 0.0
0.6s 4.30nm 4.8mb
NB2 85.91 333 P 38 58.40 -0.6
0.8s 4.00nm 4.7mb
S.D. = 0.9 on 35 of 39 obs.

? FEB 22, 1990 03h 49m 36.37± 4.02s
29.811 S ±35.2km 68.640 W ±11.9km
DEPTH = 10.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTRS 0.80 243 iPd 49 51.90 0.1
RTLL 1.52 174 iPd 50 04.10 0.4
RTCB 1.68 185 eP 50 05.50 -0.5
eS 50 28.00
CFA 1.82 169 ePc 50 09.00 0.9

22d 03h

RTCV 2.05 178 eP 50 10.50 -0.8
eS 50 38.00
MRA 3.61 137 eP 50 33.30 -0.2
S.D. = 0.8 on 6 of 6 obs.

• FEB 22, 1990 04h 26m 13.73± 0.72s
16.082 N ± 8.9km 122.542 E ±12.2km
DEPTH = 33.0km (normal)
4.4mb (6 obs.)
LUZON, PHILIPPINE ISLANDS (249)

BAG 1.91 280 iPc+ 26 44.50 -0.3
0.8s 798.51nm
QCP 2.02 225 eP 26 48.00 1.9
GYA 18.02 308 P 30 24.40 0.8
LOE 19.97 277 eP 30 44.00 -2.3
e 34 50.50
XAN 21.68 328 P 31 04.00 0.3
CD2 22.63 314 eP 31 12.60 -0.6
TIY 23.32 339 iPd 31 20.70 0.8
BJI 24.51 348 eP 31 32.00 0.8
1.0s 12.00nm 4.4mb
HHC 26.45 341 eP 31 50.40 0.8
WB5 37.58 162 eP 33 24.80 -2.3
WRA 37.63 162 Pc 33 28.20 0.7
1.0s 4.20nm 4.3mb
ASPA 41.04 164 eP 33 56.90 1.1
1.1s 9.00nm 4.4mb
GBA 43.61 273 Pd 34 16.70 -0.2
0.6s 1.80nm 4.0mb
HFS 85.24 332 eP 38 47.30 -0.8
0.8s 2.80nm 4.5mb
NB2 85.97 333 P 38 51.20 -0.6
0.9s 3.70nm 4.6mb
S.D. = 1.3 on 15 of 15 obs.

• FEB 22, 1990 04h 30m 19.22± 0.51s
16.093 N ± 6.3km 122.584 E ± 9.1km
DEPTH = 33.0km (normal)
4.3mb (6 obs.) 4.0Msz (1 obs.)
LUZON, PHILIPPINE ISLANDS (249)

BAG 1.95 280 iPc 30 50.00 -0.8
0.5s 790.14nm
QCP 2.05 225 eP 30 53.00 0.9
GYA 18.05 307 P 34 30.40 1.0
XAN 21.69 328 P 35 09.50 0.2
CD2 22.65 314 eP 35 18.70 -0.2
TIY 23.33 339 Pd 35 26.10 0.7
Z 18s 0.50um 4.0Msz
S 39 25.50
BJI 24.50 348 eP 35 37.00 0.3
SNY 25.66 2 eP 35 47.40 -0.2
HHC 26.45 341 eP 35 55.80 0.6
GUN 35.87 295 P 37 12.00 -6.6X
0.4s 7.00nm 4.9mb
PKI 36.22 295 P 37 09.00 -12.5X
0.4s 8.00nm
WB5 37.58 162 eP 37 32.00 -0.6
WRA 37.63 162 Pc 37 32.80 -0.2
0.7s 2.00nm 4.1mb
ASPA 41.03 164 eP 38 02.20 0.9
0.7s 4.00nm 4.3mb
GBA 43.65 273 Pc 38 21.70 -1.0
0.9s 4.60nm 4.3mb
HFS 85.25 332 eP 42 53.10 -0.6
0.5s 1.20nm 4.4mb
NB2 85.98 333 P 42 56.30 -1.0
0.7s 2.30nm 4.5mb
S.D. = 0.8 on 15 of 17 obs.

FEB 22, 1990 05h 26m 23.42± 0.36s
44.407 N ± 2.7km 7.339 E ± 3.4km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.3 (GEN), 2.4 (STR), 2.4 (LDG).

DOI 0.12 325 Pc 26 26.40 -0.1
eSg 26 28.50
STV 0.16 184 P 26 26.67 -0.5
S 26 28.61
ENR 0.19 162 P 26 27.28 -0.4
S 26 29.64
PZZ 0.20 300 P 26 27.18 -0.7
S 26 29.54
ROB 0.40 106 P 26 31.90 0.3
S 26 37.91
TOUF 0.40 189 Pg 26 31.60 0.0
AUTN 0.42 171 P 26 31.97 0.0
SAOF 0.45 160 Pg 26 32.25 -0.3
Sg 26 38.17
AURF 0.52 181 Pg 26 33.55 -0.4
MVIF 0.53 195 Pg 26 34.16 0.0
Sg 26 40.44
SBF 0.55 173 Pg 26 35.60 1.1
Sg 26 42.00
IMI 0.64 141 P 26 35.69 -0.5
S 26 44.15
RRL 0.65 323 P 26 35.69 -0.9
S 26 44.41
FIN 0.65 107 P 26 36.20 -0.3
S 26 45.74
PCP 0.87 81 P 26 40.51 0.2
S 26 52.21
FRF 0.98 211 Pg 26 42.60 0.5
Sg 26 53.60
LPG 1.17 339 Pg 26 46.60 1.2
Sg 27 01.60
LRG 1.19 217 Pg 26 46.00 0.5
Sg 27 01.60
LMR 1.23 210 Pg 26 46.50 0.2
Sg 27 02.20
S.D. = 0.6 on 19 of 19 obs.

& FEB 22, 1990 05h 32m 50.40s
33.190 N 115.560 W
DEPTH = 1.0km
SOUTHERN CALIFORNIA (43)
<PAS-P>. ML 3.0 (PAS).

GLA 0.63 102 iPc 33 03.10 0.1
BAR 1.06 242 eP 33 09.20 -2.1
PLM 1.10 279 ePc 33 10.10 -2.0
PEC 1.51 298 eP 33 18.00 -0.7
TNP 5.06 345 eP 34 20.00 10.5
KVN 6.20 341 eP 34 44.00 18.5
6 obs. associated

• FEB 22, 1990 06h 08m 01.89± 0.91s
9.597 S ±15.3km 109.906 E ±11.7km
DEPTH = 33.0km (normal)
4.3mb (2 obs.)
SOUTH OF JAVA (282)

TRT 3.29 55 ePc 08 52.30 0.0
NANU 13.97 158 eP 10 56.00 -23.8X
MBL 14.95 141 eP 11 10.50 -22.1X
WRA 25.73 116 Pc 13 31.50 0.2
0.5s 1.20nm 3.7mb
WB5 25.74 116 eP 13 31.10 -0.2
GUN 43.94 329 P 16 08.10 0.0
0.6s 10.00nm 4.8mb
DMN 44.10 328 P 16 09.30 0.0
KKN 44.16 328 P 16 09.60 -0.1
S.D. = 0.2 on 6 of 8 obs.

& FEB 22, 1990 06h 09m 31.54s
62.975 N 151.148 W
DEPTH = 124.7km
CENTRAL ALASKA (1)
<AGS-P>.

KTH 0.59 10 iP 09 50.53 -0.4
eS 10 04.87
HUR 0.69 89 eP 09 51.07 -0.5
CUT 0.70 144 iP 09 51.39 -0.2
eS 10 06.66
SKT 1.01 190 eP 09 53.95 -0.5
RND 1.13 66 iP 09 55.09 -0.5
MCK 1.25 52 eP 09 56.36 -0.6
PWA 1.46 155 iP 09 58.98 -0.1
SUA 1.53 173 eP 10 00.02 -0.1
GHO 1.59 138 eP 10 00.14 -0.7
eS 10 22.70
NCG 1.65 197 eP 10 00.78 -0.7
PLRM 1.68 145 eP 10 00.59 -1.1
CGLM 1.72 194 eP 10 01.59 -0.8
BGL 1.81 199 eP 10 03.78 0.3
SPU 1.85 194 eP 10 03.03 -0.8
CKL 1.87 198 eP 10 03.64 -0.6
PMS 1.89 156 eP 10 03.92 -0.4
eS 10 27.30
NCA 2.24 114 eP 10 07.59 -1.1
CCB 2.24 40 eP 10 07.35 -1.3
TOA 2.47 109 eP 10 10.86 -0.8
SLKM 2.52 169 eP 10 11.55 -0.7
PAX 2.59 88 iP 10 12.50 -0.9
CNPM 3.46 181 iP 10 23.73 -1.1
GLB 3.77 111 iP 10 27.12 -1.8
23 obs. associated

• FEB 22, 1990 06h 33m 50.95± 1.55s
31.842 S ± 7.9km 72.141 W ±14.6km
DEPTH = 20.4 ± 6.2 km
OFF COAST OF CENTRAL CHILE (134)

IHA 1.25 160 eP 34 12.50 -0.8
iS 34 35.90
ROCH 1.48 140 iPd 34 16.40 -0.3
iS 34 38.00
JACH 1.56 123 iP 34 17.60 -0.2
eS 34 37.50
LCCH 1.70 164 iPc 34 19.50 -0.2
iS 34 46.80
SAN 2.03 143 iPd 34 27.00 2.4
eS 34 55.00
TACH 2.07 151 iP 34 25.50 0.3
iS 34 57.50
FCH 2.15 134 iPc 34 26.60 0.0
iS 34 57.60
LNV 2.20 164 iP 34 25.70 -1.2
iS 35 01.00
PCH 2.24 143 iPd 34 27.70 0.0
iS 35 00.00
CHCH 2.43 149 iPd 34 30.50 0.2
iS 35 06.00
RTRS 2.84 55 ePc 34 34.60 -1.4
e 34 35.90
RTCB 2.87 84 eP 34 37.00 0.4
eS 35 17.00
ZON 2.97 85 eP 34 38.00 0.1
RTCV 3.07 91 eP 34 42.00 2.7X
RTLL 3.17 82 e(P) 34 41.70 0.8
CFA 3.33 87 eP 34 45.00 1.9
RFA 4.24 134 e(P) 34 56.60 0.5
MRA 5.49 98 ePd 35 12.70 -0.9
TCA 6.46 88 e(P) 35 25.00 -2.4
ZOBO 15.93 14 eP 37 37.00 0.9
GBA 146.75 116 PKPd 53 39.40 7.6X
0.8s 2.80nm
S.D. = 1.2 on 19 of 21 obs.

? FEB 22, 1990 06h 47m 08.91±10.60s
14.657 N ±86.6km 97.518 W ±25.5km
DEPTH = 33.0km (normal)
OFF COAST OF OAXACA, MEXICO (67)

OXX 2.53 17 iP 47 48.80 0.0
iS 48 16.50
ACX 3.15 315 iP 47 57.30 -0.1
iS 48 26.00
III 4.14 333 (P) 48 11.80 0.1
iS 48 49.50
IIT 4.41 350 (P) 48 20.50 5.0X
PPM 4.51 347 iP 48 16.80 -0.4
iS 49 05.00
UNM 4.91 341 (P) 48 23.00 0.3
CRX 5.16 337 (P) 48 10.80 -15.3X
(S) 49 29.30
IIJ 5.47 338 (P) 48 37.00 6.2X
MRX 6.13 326 (P) 48 52.00 12.5X
(S) 49 52.30
S.D. = 0.4 on 5 of 9 obs.

? FEB 22, 1990 07h 38m 33.80± 6.31s
31.582 S ±27.3km 68.301 W ±39.0km
DEPTH = 86.5 ± 49.3 km
SAN JUAN PROVINCE, ARGENTINA (137)

CFA 0.06 115 iP 38 46.50 0.0
S 38 57.00
RTLL 0.29 330 iPc 38 47.00 0.0
RTCV 0.34 216 iPc 38 47.30 0.0
eS 38 58.80
RTCB 0.44 282 iP 38 48.00 0.0
(S) 39 00.00
RTRS 1.72 324 iPc 39 02.70 0.0
eS 39 26.10
S.D. = 0.0 on 5 of 5 obs.

FEB 22, 1990 07h 47m 33.98± 0.24s
15.514 S ± 6.6km 166.268 E ± 6.4km
DEPTH = 33.0km (normal)
5.0mb (10 obs.) 4.6Msz (1 obs.)
VANUATU ISLANDS (186)

PVC	2.96	139	iPc	48	19.30	-0.4
			iS	48	53.00	
DZM	6.52	179	iPd	49	07.00	-3.3X
			iS	50	17.00	
HNR	8.64	314	eP	49	36.00	-3.7X
BRS	17.23	224	eP	51	29.00	-4.8X
			e	51	35.00	
CTA	19.59	254	iPc	52	02.90	0.4
	1.0s	41.00nm			4.7mb	
			iS	55	44.00	
PMG	19.62	286	eP	52	02.00	-0.8
RMQ	19.64	233	iPd	52	03.50	0.5
COO	19.96	219	eP	52	07.70	1.3
BWA	24.75	217	eP	52	53.80	-0.2
CNB	24.87	214	eP	52	57.00	1.9
			e	53	06.00	
CAN	25.07	215	eP	52	57.80	0.8
QIS	25.83	255	eP	53	04.00	-0.2
WB5	30.67	257	eP	53	46.10	-1.9
WRA	30.70	257	Pd	53	46.10	-2.2
	0.7s	2.80nm			4.2mb	
ASPA	31.50	250	iPd	53	53.90	-1.4
	0.8s	13.00nm			4.8mb	
Z	18s	1.09um			4.6Msz	
			LR	05	48.10	
NWAO	47.52	239	eP	56	07.00	-1.2
MDJ	68.52	333	Pc	58	35.10	-0.1
CN2	69.82	330	iPc	58	43.20	0.0
GYA	71.37	305	P	58	53.40	0.2
BJI	72.27	322	eP	58	58.50	0.4
	1.5s	55.00nm			5.3mb	
TIY	73.18	318	Pc	59	04.20	0.6
XAN	73.51	313	Pc	59	05.50	-0.1
KMI	73.90	302	Pc	59	09.20	1.0
CHG	74.52	295	iPc	59	12.50	0.8
	1.0s	10.75nm			4.8mb	
SPA	74.59	180	eP	59	12.60	1.2
	1.1s	16.67nm			4.9mb	
HHC	75.56	320	eP	59	18.60	1.3
CD2	75.72	308	eP	59	19.00	0.6
LZH	78.13	313	eP	59	33.50	1.7
	1.5s	38.00nm			5.2mb	
SVW	82.18	18	e(P)	59	53.10	0.3
GTA	82.51	314	iPc	59	56.40	1.4
TTA	83.54	16	e(P)	00	00.00	0.2
PMR	84.56	20	eP	00	04.60	-0.2
	1.4s	55.90nm			5.6mb	
WDC	86.30	46	e(P)	00	13.30	-0.6
IMA	86.66	15	eP	00	15.90	0.6
CMB	86.84	49	eP	00	17.80	1.1
FBA	87.39	18	eP	00	18.20	-0.5
KVN	88.88	49	P	00	26.40	-0.3
GUN	88.93	299	P	00	27.20	-0.1
PKI	89.22	299	P	00	28.80	0.1
LON	89.27	41	P	00	27.00	-1.1
KKN	89.40	299	P	00	28.60	-0.8
DMN	89.49	299	P	00	30.40	0.5
GKN	90.00	299	P	00	32.00	-0.1
PNT	91.62	39	eP	00	39.00	0.1
	1.0s	31.00nm			5.7mb	
GBA	92.46	283	Pd	00	43.70	0.3
	1.0s	5.60nm			4.9mb	
WMQ	92.59	315	P	00	44.00	0.4
NEW	92.79	41	P	00	43.40	-0.9
PV09	95.37	52	eP	00	52.00	-4.8X
SUF	125.22	339	iPKP	06	32.00	-0.4
KHC	139.73	332	ePKP	07	01.00	0.7
ROI	144.29	318	PKP	07	08.00	-0.6
VAI	144.34	333	PKPd	07	06.60	-1.8
CSI	144.35	319	PKP	07	07.40	-1.3
DUI	144.36	323	PKP	07	07.00	-1.7
TDS	144.39	318	PKP	07	07.60	-1.1
PGD	144.40	328	PKP	07	08.00	-0.8
ASS	144.46	326	PKP	07	07.00	-1.8
MMN	144.48	319	PKP	07	06.20	-2.6X
SGO	144.52	320	PKP	07	07.50	-1.4
MGR	144.61	320	PKPd	07	07.30	-1.8
MME	144.69	329	PKP	07	08.90	-0.5
SDI	144.71	323	PKP	07	08.00	-1.3
AZI	144.74	324	PKP	07	08.50	-0.7
CZI	144.77	318	PKP	07	08.10	-1.2
BOB	144.87	331	PKPd	07	09.20	-0.3
FLN	145.10	345	iPKPc	07	09.20	-0.4
	0.9s	32.75nm				
PII	145.12	329	PKP	07	09.00	-0.8
LOR	145.13	339	iPKPc	07	09.60	-0.2
	0.8s	36.25nm				
LDF	145.17	344	iPKPc	07	09.40	-0.4
	0.8s	29.55nm				
RDP	145.30	324	PKP	07	09.50	-0.8
LBF	145.33	339	iPKPc	07	10.20	0.0
	0.9s	37.65nm				
SSF	145.43	339	iPKPc	07	10.70	0.4
	0.8s	36.25nm				
SOI	145.44	316	PKP	07	10.50	0.0
LPG	145.50	334	ePKP	07	11.60	0.8
	0.8s	21.50nm				
GRR	145.55	345	iPKPc	07	10.90	0.5
	1.0s	100.00nm				
CKI	145.67	332	PKP	07	10.00	-0.8
SMF	145.67	338	ePKP	07	11.20	0.5
	1.0s	54.00nm				
AVF	145.72	339	ePKP	07	11.40	0.6
	1.4s	69.70nm				
BNI	145.89	334	PKPd	07	11.70	0.4
LPF	145.92	345	iPKPc	07	12.20	1.2
	1.1s	105.00nm				
BCAO	146.42	254	iPKPc	07	13.00	0.1
	1.0s	98.00nm				
			id	07	19.30	
			id	07	31.20	
MAF	146.48	339	ePKP	07	14.10	2.0
	0.8s	8.75nm				
SBF	146.49	332	iPKPc	07	13.60	1.4
	0.7s	16.55nm				
TCF	146.54	340	iPKPc	07	13.80	1.6
	0.9s	16.40nm				
PGF	146.73	329	ePKP	07	14.60	1.9
	0.9s	13.10nm				
LSF	146.80	341	iPKPc	07	14.60	2.0
	0.9s	24.55nm				
MFF	146.99	343	iPKPc	07	15.40	2.6X
	0.7s	19.85nm				
FRF	147.08	332	iPKPc	07	15.20	2.1
	1.0s	18.00nm				
LRG	147.30	332	iPKPc	07	16.20	2.8X
	1.0s	16.00nm				
LMR	147.32	332	iPKPc	07	16.10	2.7X
	0.9s	9.85nm				
RJF	147.64	340	ePKP	07	17.20	3.3X
	0.9s	19.65nm				
CAF	147.78	339	ePKP	07	17.60	3.4X
	0.9s	11.45nm				
CAI	148.11	132	ePKP	07	14.90	-0.7
LFF	148.22	340	ePKP	07	18.60	3.8X
	0.9s	26.20nm				
LPO	148.30	340	ePKP	07	18.90	3.9X
	0.9s	9.85nm				

S.D. = 1.0 on 83 of 95 obs.

? FEB 22, 1990 08h 27m 25.47± 1.52s
2.369 N ±31.5km 89.859 W ±41.8km
DEPTH = 10.0km (geophysicist)
4.5mb (2 obs.) 4.0Msz (2 obs.)
GALAPAGOS ISLANDS REGION (696)

ZOBO	28.36	132	Pc	33	21.20	-1.5
	1.1s	8.70nm			4.5mb	
Z	20s	0.32um			3.9Msz	
			LR	42	10.00	
LPB	28.54	132	eP	33	25.00	0.9
Z	18s	0.34um			4.0Msz	
			LR	43	20.00	
MEO	33.26	347	e(P)	34	05.20	0.0
KVN	44.67	328	eP	35	41.00	0.5
CAI	53.37	100	eP	36	48.80	1.0
FRB	63.21	10	eP	37	55.00	-0.9
MBC	75.64	353	eP	39	12.00	-0.1
	1.1s	6.00nm			4.6mb	

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

• FEB 22, 1990 08h 39m 18.09± 2.23s
45.462 N ±13.7km 26.232 E ±13.4km
DEPTH = 149.8 ± 23.8 km
ROMANIA (358)

MLR	0.21	278	iPc	39	38.00	-0.1
ISR	0.39	146	iPc	39	39.00	0.4
VRI	0.54	40	iPc	39	39.00	-0.8
BRD	0.58	84	ePc	39	40.00	-0.1
PPE	1.23	52	ePd	39	46.50	1.3
CLI	1.31	34	iPc	39	46.00	0.0
CFR	1.38	101	iPc	39	46.00	-0.7
TLB	1.55	124	iPc	39	48.00	-0.4
PVL	2.34	196	iPc	39	59.00	1.4
VTS	3.60	218	iP	40	13.00	-1.0

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

? FEB 22, 1990 08h 57m 51.21±15.07s
14.521 N ±126.km 97.698 W ±29.7km
DEPTH = 33.0km (normal)
OFF COAST OF OAXACA, MEXICO (67)

OXX	2.71	20	iP	58	33.60	0.0
			iS	59	04.50	
ACX	3.13	319	eP	58	38.80	-0.6
			iS	59	07.70	
III	4.19	336	(P)	58	47.00	-7.7X
IIT	4.51	353	(P)	59	05.00	5.7X
PPM	4.61	349	iP	59	01.50	0.7
			(S)	59	59.00	
UNM	4.99	344	(P)	59	18.00	11.9X
CRX	5.22	339	eP	59	07.80	-1.5
			iS	00	10.50	
IIJ	5.54	340	(P)	59	20.00	6.0X
MRX	6.14	328	eP	59	23.50	1.5
			(S)	00	38.50	
CHG	143.04	333	ePKP	16	48.90	-35.4X

S.D. = 1.6 on 5 of 10 obs.

• FEB 22, 1990 09h 40m 03.89± 2.46s
31.790 S ±10.5km 72.244 W ±20.9km
DEPTH = 33.0km (normal)
OFF COAST OF CENTRAL CHILE (134)

IHA	1.33	158	eP	40	26.50	0.2
			e(S)	40	48.50	
ROCH	1.57	139	iPd	40	29.50	-0.5
			iS	40	51.20	
JACH	1.66	123	eP	40	30.80	-0.4
			eS	40	52.70	
LCCH	1.77	161	eP	40	33.70	1.0
			e	41	05.00	
SAN	2.13	142	eP	40	38.50	0.6
			e	41	04.00	
TACH	2.16	150	iPd	40	38.00	-0.3
			iS	41	07.50	
FCH	2.25	133	iPd	40	39.60	-0.3
			iS	41	09.00	
LNV	2.27	162	iPc	40	39.00	-0.8
			iS	41	10.20	
PCH	2.34	142	ePd	40	41.00	0.1
			e	41	12.60	
CHCH	2.52	148	iPd	40	43.50	0.0
			i	41	20.00	
RTRS	2.89	57	ePc	40	48.10	-0.4
			e	40	51.00	
RTCB	2.95	85	iP	40	50.00	0.4
			(S)	41	27.40	
ZON	3.05	86	eP	40	51.00	0.0
RTCV	3.16	92	e(P)	40	55.30	2.8X
RTLL	3.25	83	eP	40	55.00	1.1
			e	40	56.80	
			(S)	41	58.50	
CFA	3.42	88	iPc	40	56.20	0.0
TCA	6.55	88	e(P)	41	39.70	-0.8

S.D. = 0.6 on 16 of 17 obs.

& FEB 22, 1990 10h 58m 11.54s
59.314 N 153.190 W
DEPTH = 92.2km
SOUTHERN ALASKA (2)
<AGS-P>.

AUE	0.10	296	iP	58	23.96	0.8
			eS	58	34.14	
AUL	0.14	299	iP	58	24.18	0.9
CDD	0.45	211	iP	58	25.69	-0.7
PDB	0.70	313	iP	58	27.63	-0.8
			iS	58	39.83	
XLV	0.76	79	eP	58	28.28	-0.8
			eS	58	41.00	
CNPM	1.02	77	eP	58	31.00	-1.0
			iS	58	46.31	
RED	1.13	11	iP	58	32.35	-0.9

22d 10h

NNL	1.21	52	eP	58	34.34	0.2
RDT	1.32	17	iP	58	34.63	-1.0
KDC	1.61	167	iP	58	38.05	-1.1
NKA	1.74	34	eP	58	41.85	1.0
SLKM	1.92	50	eP	58	42.42	-0.8
CKL	1.94	12	iP	58	42.99	-0.6
			eS	59	06.38	
SPU	1.96	16	iP	58	43.06	-0.8
BGL	2.00	11	iP	58	43.93	-0.5
CRP	2.03	14	iP	58	44.29	-0.6
SEW	2.05	66	eP	58	44.02	-1.0
CGLM	2.09	16	eP	58	44.89	-0.7
NCG	2.16	13	iP	58	46.01	-0.6
SVW	2.17	327	eP	58	46.02	-0.7
SUA	2.48	28	eP	58	50.66	-0.2
PMS	2.65	41	eP	58	52.32	-0.8
SKT	2.80	16	iP	58	54.49	-0.7
PWA	2.86	34	eP	58	55.53	-0.4
PLRM	3.04	40	eP	58	56.53	-2.0
GHO	3.24	39	eP	59	00.46	-0.9
CUT	3.41	23	eP	59	02.91	-0.7
KTH	4.39	13	eP	59	17.36	0.2
GLB	5.12	61	eP	59	24.48	-2.8

29 obs. associated

? FEB 22, 1990 11h 05m 04.88± 3.79s
31.107 S ±11.3km 68.106 W ±32.7km
DEPTH = 10.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.38	234	iPc	05	12.00	-0.7
CFA	0.51	193	iPc	05	20.00	4.7X
			S	05	32.00	
RTCB	0.70	237	iPd	05	19.80	1.0
			eS	05	30.00	
RTCV	0.84	206	iPc	05	21.00	-0.1
			S	05	32.20	
RTRS	1.49	308	iPc	05	31.60	-0.1
			eS	05	51.80	

S.D. = 1.2 on 4 of 5 obs.

& FEB 22, 1990 11h 47m 32.90s
40.530 N 127.657 W
DEPTH = 5.0km (geophysicist)
4.2mb (1 obs.)
OFF COAST OF NORTHERN CALIFORNIA(34)
<BRK>. ML 3.9 (BRK).

FHC	2.81	83	ePc	48	16.20	-3.1
			eS	48	48.10	
WDC	3.90	88	eP	48	32.10	-2.7
NWRM	4.23	118	eP	48	37.50	-1.9
LBFM	4.44	78	eP	48	41.20	-1.5
MIN	4.62	90	eP	48	42.00	-3.2
			eS	49	32.80	
BRK	4.96	121	eP	48	47.20	-2.6
BKS	4.98	120	iPd	48	47.60	-2.4
			i	48	53.80	
PCC	5.10	125	eP	48	48.90	-2.9
			eS	49	43.90.	
GCC	5.64	127	eP	48	57.10	-2.3
			eS	49	57.70	
MHC	5.67	122	eP	48	57.10	-2.9
ARN	5.73	122	eP	48	57.80	-3.0
CMB	6.17	111	eP	49	06.30	-0.6
PRS	6.47	128	eP	49	07.80	-3.4
KVN	7.51	98	eP	49	22.00	-3.9
ALQ	17.66	102	eP	51	42.50	1.1
FFC	22.22	42	eP	52	32.00	0.4
	0.9s		8.00nm			4.2mb

16 obs. associated

FEB 22, 1990 12h 51m 43.98± 0.44s
5.659 N ± 6.3km 94.231 E ± 6.1km
DEPTH = 56.5km (3 depth phases)
5.0mb (21 obs.)
NORTHERN SUMATERA (706)

BSI	1.07	99	iPd	52	05.50	2.5
SNG	6.52	76	eP	53	19.80	0.2
	0.8s		159.70nm			5.6mb
IPM	6.85	99	ePd	53	24.90	0.6
	0.4s		27.30nm			5.3mb
			e	54	35.90	
KLM	7.82	109	eP	53	36.50	-1.1
			e	55	24.50	
NNT	8.77	38	ePn	53	51.30	0.5
			eSg	55	16.70	
KGM	9.76	111	ePc	54	04.30	-0.1
			e	57	23.10	
BDT	12.42	22	eP	54	41.50	1.2
	0.9s		73.90nm			5.6mb
LOE	13.79	32	eP	55	01.50	3.2X
CHG	13.86	19	iPc	55	03.00	3.7X
	1.0s		56.75nm			5.2mb
KOD	17.21	286	eP	55	46.50	4.0X
			eS	58	41.80	
GBA	18.33	297	Pc	55	59.00	3.0X
	1.1s		57.80nm			4.7mb
HYB	19.28	309	iPd	56	08.80	1.6
	0.8s		46.20nm			4.8mb
			eS	59	41.50	
QIZ	20.20	48	eP	56	17.00	0.1
KMI	21.00	22	Pc	56	26.00	0.7
			pP	56	39.00	56km
KKM	21.87	88	ePc	56	35.50	1.6
TRT	22.66	126	ePc	56	47.00	5.5X
PKI	23.35	340	P	56	48.20	-0.4
	0.4s		15.00nm			4.8mb
DMN	23.49	339	P	56	49.60	-0.3
	0.4s		17.00nm			4.9mb
GUN	23.51	341	P	56	49.80	-0.3
	0.4s		13.00nm			4.7mb
KKN	23.60	340	P	56	50.20	-0.6
	0.4s		20.00nm			4.9mb
POO	23.64	305	iPd	56	56.00	4.8X
			iS	07	20.00	
GYA	23.85	29	iPd	56	54.00	0.8
	1.0s		100.00nm			5.3mb
GKN	24.02	339	P	56	55.20	0.3
LSA	24.09	353	P	56	57.40	1.5
BOM	24.67	304	eP	57	06.20	5.1X
			eS	01	30.70	
CD2	26.67	18	iPc	57	18.20	-1.4
WHN	31.16	35	Pc	57	59.00	-0.8
	1.0s		100.00nm			5.5mb
XAN	31.35	24	Pc	57	59.50	-2.0
LZH	31.54	15	eP	58	02.00	-1.3
	2.0s		23.00nm			4.6mb
			pP	58	17.50	64km
GTA	33.98	8	P	58	23.60	-0.8
NJ2	34.92	38	iPc	58	32.40	0.0
QUE	35.43	317	eP	58	38.50	1.5
SSE	35.78	42	Pc	58	40.00	0.4
	0.8s		23.00nm			5.2mb
TIY	35.96	25	eP	58	40.70	-0.5
BTO	37.56	20	eP	58	54.00	-0.7
WMQ	38.44	352	eP	59	02.50	0.5
			eS	04	54.00	
BJI	39.52	27	eP	59	11.50	0.6
	1.1s		28.00nm			5.0mb
MTN	41.01	117	iPc	59	22.70	-0.8
SNY	44.49	32	iPd	59	51.00	-0.5
CN2	46.86	31	Pc	00	09.40	-0.8
WB5	46.93	124	iPc	00	11.10	-0.1
WRA	46.94	124	Pc	00	11.40	0.2
	0.3s		6.20nm			5.0mb
ASPA	48.45	129	iPc	00	23.20	0.2
	0.3s		24.00nm			5.7mb
	Z 22s		0.11um			3.8MszX
			iS	07	14.90	
			LR	20	25.00	
MDJ	49.59	33	Pd	00	31.50	0.0
QIS	51.62	122	eP	00	47.00	-0.3
PMG	54.82	106	eP	01	10.00	-1.0
CTA	57.17	118	iPd	01	27.50	-0.4
	1.5s		48.61nm			5.3mb
ADE	58.18	137	eP	01	32.20	-2.5
RMQ	61.69	124	eP	02	01.00	2.1
BRS	65.36	123	eP	02	07.00	-16.0X
VRI	70.36	317	eP	02	54.50	0.6
SUF	75.04	334	eP	03	18.00	-3.1X
BCAO	75.36	273	ePd	03	26.00	2.0
	0.6s		6.00nm			4.7mb
			ic	03	40.30	50km
SOD	76.29	338	eP	03	48.00	19.0X
ZST	77.22	318	eP	03	32.10	-1.6
KBA	79.67	317	eP	03	46.00	-1.4
HFS	80.40	330	eP	03	50.70	0.0
	0.4s		1.30nm			4.2mb
MBC	95.93	8	eP	05	05.50	0.0
	1.0s		4.00nm			4.9mb

S.D. = 1.1 on 48 of 58 obs.

% FEB 22, 1990 12h 56m 29.25± 1.72s
39.071 N ± 6.8km 16.700 E ±17.0km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

CZI	0.46	289	P	56	38.40	-0.3
ROI	0.51	349	P	56	39.00	-0.6
TDS	0.65	335	Pd	56	41.80	-0.4
CSI	0.77	336	P	56	45.00	0.7
MMN	0.98	326	P	56	52.70	4.8X
SOI	1.12	207	P	56	50.10	-0.1
MGR	1.38	321	P	56	55.30	0.7

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

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* FEB 22, 1990 13h 02m 24.67± 0.84s
38.132 N ± 7.5km 21.935 E ±10.1km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 3.1 (ATH).

ITM	0.95	180	ePg	02	41.70	-1.1
VLS	1.06	273	ePb	02	45.00	0.3
NEO	1.55	40	ePb	02	52.00	-0.3
VLI	1.62	150	ePg	02	54.50	1.1
KZN	2.18	357	ePn	03	01.40	-0.1
OHR	3.10	344	ePn	03	08.50	-6.1X

S.D. = 1.2 on 5 of 6 obs.

FEB 22, 1990 13h 11m 57.84± 0.33s
21.872 S ± 3.6km 179.365 W ± 3.1km
DEPTH = 599.7 ± 4.5 km
5.2mb (44 obs.)
FIJI ISLANDS REGION (181)

SVA	4.26	331	iPc	13	26.10	0.6
			eS	14	36.20	
SGE	4.97	329	iPd	13	32.10	1.0
NDF	5.07	323	iP	13	31.90	0.2
MBU	5.20	339	iPd	13	33.60	0.8
PVC	12.30	287	iPc	14	41.50	2.0
DZM	13.17	266	iPc	14	49.20	1.1
			iS	17	07.00	
			ScP	22	09.60	
HBZ	15.80	187	eP	15	14.30	0.8
	0.3s		25.00nm			5.1mb
PGZ	19.05	190	eP	15	44.20	0.0
MNG	19.19	192	eP	15	44.00	-1.5
			eS	18	43.50	
KIW	19.54	193	eP	15	48.60	-0.1
MTW	19.71	192	eP	15	49.30	-1.0
CAW	19.75	193	eP	15	49.80	-0.8
			e	16	01.50	
WDW	19.92	193	eP	15	51.30	-0.8
			e	16	02.30	
BLW	19.92	191	eP	15	51.50	-0.7
			e	16	04.00	
MRW	19.94	193	eP	15	51.80	-0.5
WEL	19.98	193	P	15	53.00	0.3
			S	18	59.00	
MOW	20.01	192	eP	15	53.00	-0.1
TCW	20.02	194	P	15	52.60	-0.5
KHZ	21.33	195	eP	16	04.40	-0.6
HNR	23.41	299	eP	16	22.00	-1.9
MHZ	24.94	199	eP	16	36.50	-0.8
BRS	25.89	252	iPc	16	46.70	1.0
	0.8s		13.00nm			4.6mb
			e	17	16.00	
			e	17	48.00	
COO	27.14	245	iPd	16	58.20	1.5
TBI	27.62	99	iP	17	01.60	0.8
	0.7s		95.00nm			5.5mb
AFR	28.16	86	iP	17	04.80	-0.7
	0.7s		50.00nm			5.3mb
PAE	28.32	87	iP	17	06.20	-0.6
	0.7s		35.00nm			5.1mb
PPT	28.34	87	iP	17	06.40	-0.7
	0.7s		65.00nm			5.4mb
PPN	28.48	87	iP	17	08.20	-0.1
	0.7s		20.00nm			4.9mb
TVO	28.59	87	iP	17	08.70	-0.6
	0.7s		70.00nm			5.4mb
RMQ	29.40	255	iPd	17	17.50	1.4
	0.5s		65.00nm			5.5mb
PMO	30.58	83	iP	17	25.40	-0.7
	0.9s		95.00nm			5.4mb
CAN	30.70	237	eP	17	28.10	1.0
VAH	30.76	83	iP	17	26.60	-1.0

22d 13h

	0.9s	105.00nm		5.5mb		MHC	80.12	43 eP	23 08.60	0.8				id	30 38.60								
TPT	30.84	83 iP	17 27.80	-0.5		AIA	80.21	157 eP	23 10.00	2.4				i	30 44.60								
	0.9s	140.00nm		5.6mb		PAS	80.55	47 eP	23 10.00	0.1				e	32 54.70								
BWA	30.90	239 eP	17 27.90	-0.9		MWC	80.67	47 eP	23 06.00	-4.8X		SPC	148.61	335 iPKPd	30 38.80	3.9X							
RUV	31.00	83 iP	17 29.20	-0.5		BAR	80.77	49 eP	23 12.00	0.8		MLR	148.64	325 ePKP	30 38.00	3.0X							
	0.9s	150.00nm		5.6mb		MDJ	80.92	326 Pd	23 11.80	0.2				e	42 25.00								
CTA	32.11	267 iPd	17 39.20	0.2		RVR	81.01	48 eP	23 13.00	0.7		GPA	148.86	313 iPKP	30 39.20	3.8X							
	0.8s	122.39nm		5.6mb		PLM	81.01	49 eP	23 13.00	0.5		CLL	149.07	345 ePKP	30 35.00	-0.2							
		iPcP	20 10.00			SBB	81.09	47 eP	23 13.00	0.2			1.3s	15.00nm									
		iS	22 10.30			FRI	81.15	44 eP	23 13.30	0.4		TNR	149.41	326 ePKPd	30 41.00	5.0X							
CMS	32.43	245 iPd	17 42.80	1.2		ISA	81.20	46 eP	23 14.00	0.7		ALT	149.55	311 ePKP	30 40.90	4.4X							
	0.5s	73.90nm		5.6mb		CMB	81.33	43 eP	23 14.30	0.4		WTS	149.55	352 ePKP	30 41.00	5.1X							
TOO	34.07	235 iPd	17 56.90	1.6		WDC	81.54	40 eP	23 15.80	1.0			1.0s	109.00nm									
	0.7s	39.00nm		5.1mb		ORV	81.54	41 eP	23 15.40	0.5				e	30 51.00								
PMG	34.45	286 iPd	17 58.10	-0.5		CLC	81.87	46 eP	23 17.00	0.3		PRU	149.87	342 PKPd	30 41.70	5.2X							
	0.8s	171.64nm		5.7mb		MIN	81.96	41 eP	23 17.50	0.4			1.0s	46.30nm									
QIS	38.19	264 iPd	18 28.80	-0.5		TPC	81.99	48 eP	23 18.00	0.7				e	30 49.70								
	0.4s	22.00nm		5.0mb		IPM	82.09	278 ePd	23 19.60	1.4		MOX	150.02	346 iPKPd	30 42.00	5.3X							
ADE	38.84	241 ePd	18 35.00	0.6			0.9s	137.30nm		5.5mb			1.3s	58.00nm									
	0.6s	40.00nm		5.1mb		GSC	82.12	47 eP	23 18.00	0.0				i	30 50.00								
RKT	40.91	100 iP	18 51.60	0.6		WHN	82.24	307 eP	23 19.00	0.5		HOF	150.27	345 iPKPd	30 42.50	5.4X							
	1.0s	70.00nm		5.1mb		SNY	82.45	321 iPd	23 19.00	-0.3		KHL	150.28	310 iPKP	30 42.80	5.2X							
ASPA	42.98	258 iPd	19 07.40	-0.1		CN2	82.62	323 iPd	23 19.80	-0.3		SRO	150.47	335 ePKP	30 43.20	5.8X							
	0.7s	203.00nm		5.8mb		TIA	83.27	313 eP	23 24.50	0.9		ZST	150.61	337 ePKP	30 43.40	5.7X							
		iPcP	20 43.70			KVN	83.38	43 P	23 23.90	-0.4				i	30 53.50								
		iS	24 48.50			TNP	83.40	45 P	23 24.60	0.2				e	33 07.70								
		iScS	28 01.00				0.9s	14.26nm		4.5mb		BZS	150.76	329 ePKP	30 44.00	6.1X							
WB5	43.15	264 iPd	19 08.00	-0.8		SVW	84.88	11 eP	23 29.50	-1.5		ENN	150.86	353 ePKP	30 44.00	6.1X							
		eScP	23 41.00			BJI	85.98	316 eP	23 36.50	-0.1			1.0s	55.00nm									
		eS	24 50.00				1.0s	31.00nm		5.0mb				e	30 53.00								
WRA	43.17	264 Pd	19 07.50	-1.4		GYA	86.23	300 P	23 38.80	0.5		KHC	150.92	342 PKP	30 38.40	0.2							
	0.4s	66.00nm		5.5mb		NNT	86.38	285 iPd	23 41.00	2.0				i	30 45.00								
MTN	47.92	272 iPd	19 43.90	-1.4				e	37 31.50					i	30 55.10								
KNA	49.29	268 iPd	19 55.00	-0.4		TTA	86.51	10 eP	23 37.90	-0.9		GRF	151.00	346 ePKP	30 38.00	-0.2							
	0.4s	132.00nm		5.8mb		PMR	86.64	14 ePd	23 38.00	-1.3				id	30 44.50								
GUMO	49.73	312 eP	19 52.60	-5.9X			0.8s	28.00nm		5.0mb				e	30 55.00								
	0.3s	132.71nm		5.9mb		TIY	87.25	313 Pd	23 43.50	0.7		MEM	151.01	353 PKP	30 44.30	6.2X							
		e	19 57.50			TOA	87.78	15 ePd	23 44.10	-0.7		TNS	151.04	350 ePKPd	30 43.80	5.5X							
COOL	53.52	247 iPd	20 25.00	-0.8		XAN	87.96	308 Pd	23 46.50	0.3		SNF	151.27	355 PKP	30 44.90	6.4X							
MBL	56.23	259 iPd	20 43.80	-0.9		PNT	88.50	34 eP	23 49.00	0.8		KDZ	151.31	319 iPKP	30 45.00	6.1X							
	0.4s	76.00nm		5.4mb			1.0s	43.00nm		5.3mb		ABH	151.52	351 iPKPd	30 45.55	6.6X							
KLB	56.32	246 iPd	20 44.60	-0.7		KMI	88.84	298 Pd	23 51.50	0.9		TOD	151.58	349 ePKPd	30 45.43	6.4X							
MEKA	56.35	252 eP	20 44.00	-1.5		BDT	88.85	289 eP	23 52.00	1.6		DOU	151.66	355 PKPc	30 45.70	6.6X							
NWAO	56.62	244 eP	20 47.00	-0.3		PV09	89.03	48 P	23 51.00	-0.3		RZN	151.71	320 iPKPd	30 46.00	6.3X							
RKG	56.70	243 eP	20 47.40	-0.4		NEW	89.23	36 P	23 51.50	-0.2		RUP	151.77	351 ePKPd	30 46.23	6.9X							
MUN	57.59	245 iPd	20 53.20	-0.7		ALQ	89.25	52 iPd	23 51.70	-0.6		VTS	152.02	323 iPKPd	30 47.00	6.9X							
MRWA	58.15	248 iPd	20 57.20	-0.5			1.0s	8.75nm		4.6mb		KBA	152.83	341 ePKP	30 47.00	5.8X							
	0.5s	25.00nm		4.7mb		ANMO	89.25	52 P	23 52.90	0.6			1.1s	25.00nm									
NANU	59.82	256 eP	21 08.70	-0.1			0.8s	4.85nm		4.5mb				i	31 03.20								
	0.4s	14.00nm		4.5mb		HHC	89.40	315 Pd	23 53.00	0.3		PTJ	152.96	336 ePKP	30 47.00	5.8X							
KHKI	63.80	271 ePd	21 32.40	-2.2		CHG	89.52	290 iPd	23 54.40	0.8		CDF	152.99	350 ePKP	30 48.70	7.5X							
		e	23 14.60				1.0s	56.25nm		5.5mb			1.0s	10.00nm									
SPA	68.26	180 iPc	22 02.80	1.3		IMA	89.81	10 ePd	23 53.00	-1.1		FLN	153.15	2 ePKP	30 48.50	7.2X							
	0.9s	52.73nm		5.1mb			1.2s	27.80nm		5.1mb			0.9s	34.40nm									
KAKJ	69.28	326 P	22 06.40	-1.2		FBA	89.85	13 ePd	23 52.40	-1.7		VAY	153.21	321 ePKP	30 48.00	6.4X							
CHJJ	69.78	325 P	22 09.50	-1.1		BTO	90.31	314 eP	23 57.00	0.1				i	31 04.40								
OFUJ	70.76	329 eP	22 15.60	-0.6		CD2	90.46	303 eP	23 58.60	0.9		RBL	153.33	340 PKP	30 50.50	8.8X							
MTMJ	70.82	325 P	22 15.80	-1.0		BW06	90.83	44 P	23 59.40	0.0		LDF	153.33	1 ePKP	30 48.70	7.2X							
YAMJ	70.86	327 P	22 16.20	-0.6			0.8s	10.71nm		4.9mb			0.9s	13.10nm									
TSRJ	71.06	323 P	22 17.40	-0.6		GOL	92.18	48 P	24 06.30	0.6		SCE	153.34	343 ePKPd	30 43.80	2.0							
KAGJ	71.12	316 P	22 18.10	-0.4			0.8s	7.44nm		4.8mb		SKO	153.42	324 ePKP	30 49.50	7.6X							
KUMJ	72.05	317 P	22 23.10	-0.8		LZH	92.59	308 Pd	24 08.50	0.9				i	31 06.00								
KUSJ	72.61	333 eP	22 25.90	-0.9			1.0s	33.00nm		5.3mb		FVI	153.44	341 PKP	30 50.00	8.3X							
HOOJ	72.64	332 eP	22 27.20	0.2		EDM	93.95	33 eP	24 12.00	-1.2		GRR	153.52	2 ePKP	30 49.20	7.5X							
SHNJ	72.94	319 eP	22 27.70	-1.2		RSSD	95.02	44 P	24 18.20	-0.3			0.9s	16.40nm									
ADK	73.47	2 ePd	22 29.50	-2.0		INK	95.93	16 eP	24 20.00	-1.7		HAU	153.52	351 ePKP	30 49.60	7.8X							
MRRJ	73.66	331 eP	22 32.10	-0.7		MAIO	127.33	300 ePKP	29 57.00	0.0			1.0s	12.00nm									
ASAJ	74.32	333 eP	22 36.90	0.5		SUF	135.64	344 ePKP	30 02.00	-9.8X		BSF	153.63	351 ePKP	30 50.70	8.6X							
QZH	76.11	304 iPd	22 46.40	-0.3		NUR	137.87	343 ePKP	30 10.00	-6.0X			1.0s	12.00nm									
	0.7s	100.00nm		5.4mb				e	32 52.00			LPF	153.86	3 ePKP	30 50.10	7.9X							
SSE	77.60	311 P	22 53.80	-0.8		NB2	140.17	352 PKP	30 11.60	-8.7X			0.9s	26.20nm									
	1.0s	28.00nm		4.6mb	†		0.6s	5.90nm				SSF	154.76	355 ePKP	30 53.80	10.3X							
Z	16s	0.40um		4.8MszX		HFS	140.67	350 ePKP	30 13.00	-8.1X			0.9s	6.55nm									
N	14s	0.40um					1.1s	63.20nm				LBF	154.80	355 ePKP	30 53.80	10.2X							
SSE	77.60	311 iPd	22 50.40	-4.2X		LWI	143.51	232 iPKPd	30 27.30	-0.4		AVF	155.04	356 ePKP	30 54.00	10.1X							
	0.7s	60.00nm		5.1mb		KVT	144.56	311 iPKP	30 27.70	-0.8		SMF	155.15	355 ePKP	30 54.40	10.3X							
SDN	78.57	11 eP	22 57.30	-1.8		KAS	146.03	313 iPKPd	30 33.70	2.8X		MFF	155.32	1 ePKP	30 52.80	8.5X							
KGM	79.00	277 eP	23 02.80	0.5		EKA	146.47	4 PKP	30 32.00	1.0			0.9s	16.40nm									
GZH	79.29	300 Pd	23 04.00	0.4			1.0s	30.60nm				BCAO	155.47	228 iPKPd	30 45.50	0.0							
PRS	79.68	44 eP	23 06.40	1.0		HRI	147.02	298 ePKP	30 35.00	2.2			0.8s	7.00nm									
GCC	79.70	43 eP	23 06.20	0.7		BBTK	147.35	311 iPKP	30 36.00	2.9X				ic	31 15.60								
PCC	79.74	43 eP	23 06.30	0.6		VRI	147.98	325 ePKPd	30 37.00	3.2X				id	33 18.70								
NJ2	79.78	311 iPd	23 06.40	0.4				e	42 20.50			BOB	156.04	344 PKP	30 52.00	6.6X							
	1.2s	100.00nm		5.1mb		TLB	148.04	322 ePKPd	30 37.50	3.6X		LIC	163.51	160 PKP	30 54.78	0.6							
BCH	79.85	46 P	23 07.50	1.1		PRNI	148.11	293 iPKPd	30 39.00	4.5X		KIC	163.73	161 PKP	30 55.00	0.6							
PRI	80.03	45 eP	23 08.30	0.9		KSP	148.59	341 ePKP	30 35.20	0.6		TIC	163.91	159 PKP	30 55.08	0.5							
BRK	80.05	42 e(P)	23 07.90	0.7			1.2s	116.00nm					S.D. = 0.9	on 151 of 206 obs.									

? FEB 22, 1990 13h 31m 12.64± 4.06s
16.022 N ±19.1km 122.407 E ±30.1km
DEPTH = 55.4 ± 36.2 km
4.5mb (3 abs.)
LUZON, PHILIPPINE ISLANDS (249)

BAG	1.80	283	iPc+	31 41.00	-0.9
	0.8s	985.07nm			
OCP	1.88	223	eP	31 44.00	1.1
DAV	9.41	160	eP	33 37.30	9.1X
LOE	19.85	277	eP	35 42.00	0.1
WB5	37.56	161	eP	38 23.90	0.4
			e	38 33.50	
WRA	37.62	161	Pc	38 22.60	-1.4
	1.0s	6.10nm		4.5mb	
ASPA	41.01	164	Pd	38 52.00	-0.1
	1.1s	10.00nm		4.5mb	
MBC	80.94	12	eP	43 23.00	0.9
	1.0s	4.00nm		4.3mb	
	S.D. = 1.3	on	7 of	8 obs.	

FEB 22, 1990 13h 33m 13.38± 1.02s
29.216 N ± 6.5km 90.092 E ± 4.2km
DEPTH = 26.0 ± 8.2 km
5.0mb (15 abs.) 4.2Msz (1 obs.)
TIBET (306)

LSA	1.04	62	Pgd	33 30.70	-2.0
			Sg	33 44.70	
GUN	3.93	252	Pc	34 16.10	2.3
PKI	4.44	249	Pc	34 22.60	1.5
KKN	4.47	253	Pc	34 22.60	1.2
DMN	4.67	251	Pc	34 25.60	1.3
GKN	4.95	257	Pc	34 27.60	-0.4
NDI	11.29	270	iPc	35 52.60	-3.5X
	0.7s	37.67nm		5.7mb X	
			eS	37 54.00	
CD2	11.96	79	eP	36 05.90	0.7
N	11s	1.90um			
			S	38 16.50	
KMI	11.97	107	eP	35 50.00	-15.6X
			pP	36 08.00	
GTA	12.95	36	P	36 17.50	-1.0
Z	10s	1.30um			
E	10s	1.20um			
CHG	13.13	140	iPc	36 18.80	-2.1
	1.0s	70.00nm		5.7mb X	
LZH	13.45	56	eP	36 25.00	-0.2
	2.0s	51.00nm		5.1mb	
Z	10s	1.30um		3.9MszX	
BDT	14.45	144	eP	36 10.50	-27.7X
	1.0s	76.60nm			
WMQ	14.70	353	P	36 47.70	6.2X
GYA	14.92	97	iPd	36 45.20	0.8
N	10s	0.60um			
E	10s	0.90um			
			S	39 25.00	
KSH	15.48	315	P	36 52.00	0.3
HYB	15.80	225	eP	36 52.00	-3.9X
			eS	39 34.00	
POO	18.25	238	eP	37 24.80	-1.7
			eS	40 40.50	
BTO	19.85	50	eP	37 45.00	-0.4
N	11s	0.50um			
E	11s	0.30um			
QUE	20.12	278	eP	37 47.00	-1.4
			eS	41 30.00	
QIZ	20.65	115	eP	37 53.10	-0.6
WHN	21.07	80	Pd	37 58.00	0.1
	1.0s	100.00nm		5.2mb	
Z	12s	0.60um		4.2MszX	
			pP	38 07.00	33kmX
			eS	41 40.00	
KOD	22.28	215	eP	38 11.80	1.3
BJI	23.94	56	eP	38 28.50	2.3
NJ2	24.88	76	Pc	38 37.50	2.1
IPM	26.60	155	ePc	38 52.60	1.0
MAIO	26.61	293	eP	38 53.00	1.4
			eS	43 48.00	
SSE	26.91	78	Pd	38 55.50	1.2
	0.8s	11.00nm		4.5mb	
Z	20s	0.60um		4.2Msz	
N	15s	1.80um			
CN2	31.66	53	eP	39 37.00	0.3
Z	17s	0.60um		4.3MszX	
N	10s	0.60um			
			esP	39 44 00	
SUF	52.56	329	iP	42 27.20	0.7
NUR	53.00	326	iP	42 31.00	1.2
	1.1s	48.00nm		5.3mb	
SOD	53.21	334	iP	42 32.30	1.0
KEV	53.63	337	iP	42 35.80	1.5
	0.7s	12.00nm		5.0mb	
UPP	56.49	325	iP	42 55.00	-0.2
HFS	58.45	325	eP	43 08.50	-0.5
	0.7s	11.50nm		5.1mb	
NB2	59.58	326	P	43 16.20	-0.8
	0.8s	8.20nm		4.9mb	
CLL	59.96	315	eP	43 18.00	-1.6
CDF	64.22	313	eP	43 47.70	-0.6
	0.7s	4.40nm		4.7mb	
BSF	64.69	312	eP	43 50.60	-0.8
PGF	64.71	306	eP	43 49.10	-2.5
	1.5s	31.35nm		5.2mb	
WB5	64.85	133	eP	43 51.70	-0.9
WRA	64.88	134	Pc	43 52.30	-0.5
	1.1s	12.40nm		4.9mb	
SSF	67.05	312	eP	44 06.00	-0.4
	1.2s	17.85nm		5.1mb	
AVF	67.23	312	eP	44 06.90	-0.6
ASPA	67.38	137	eP	43 43.80	-25.0X
TCF	68.14	312	eP	44 13.00	-0.3
	1.2s	20.85nm		5.1mb	
LDF	68.84	315	eP	44 17.10	-0.4
	0.7s	6.60nm		4.9mb	
FLN	69.00	315	eP	44 18.20	-0.3
GRR	69.37	315	eP	44 20.20	-0.6
MFF	69.56	313	eP	44 21.20	-0.8
BCAO	71.76	265	iPc	44 34.40	-1.4
	0.4s	6.00nm		5.0mb	
MBC	73.18	7	eP	44 44.00	0.8
	1.0s	5.00nm		4.5mb	
FBA	76.06	22	eP	45 00.00	0.1
BUL	76.94	238	iPd	45 03.50	-2.2
INK	77.56	15	eP	45 09.00	0.8
PMR	77.73	25	eP	45 09.60	0.4
	S.D. = 1.2	on	50 of	56 obs.	

& FEB 22, 1990 13h 52m 23.40s
37.120 N 121.515 W
DEPTH = 5.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.7 (BRK).

ARN	0.23	356	iPd	52 28.00	-0.1
MHC	0.24	335	iPd	52 28.30	-0.1
			eS	52 32.50	
SAO	0.36	171	iPc	52 30.68	0.1
			iS	52 36.45	
GCC	0.40	257	iPc	52 30.90	-0.4
PCC	0.79	299	eP	52 37.70	-1.5
			eS	52 55.60	
PRS	0.80	172	iPc	52 38.30	-1.0
BKS	0.95	323	ePc	52 41.00	-0.9
BRK	0.96	322	eP	52 41.40	-0.7
			iS	52 55.70	
PRI	1.19	145	eP	52 45.20	-1.0
CMB	1.28	44	eP	52 46.40	-1.2
FRI	1.45	95	eP	52 48.00	-2.3
KVN	3.31	53	eP	53 22.30	5.1
	12 abs. associated				

? FEB 22, 1990 14h 02m 09.77±21.51s
34.377 S ±137.km 69.939 W ±106.km
DEPTH = 33.0km (normal)
CHILE-ARGENTINA BORDER REGION (127)

CHCH	0.74	307	iPc	02 22.00	-1.8
			iS	02 31.50	
PCH	0.89	328	iPc	02 24.40	-1.6
			iS	02 36.50	
FCH	1.09	344	iPc	02 27.80	-1.2
			iS	02 43.00	
SAN	1.10	327	eP	02 27.70	-1.2
			iS	02 42.60	
TACH	1.10	311	iPc	02 28.20	-0.7
			iS	02 42.00	
LCCH	1.63	303	iP	02 35.20	-1.3
			i	02 58.60	
ROCH	1.66	327	iP	02 36.00	-1.2
			iS	02 57.00	
	S.D. = 0.4	on	7 of	7 obs.	

? FEB 22, 1990 14h 17m 52.72± 2.73s
10.507 S ±29.8km 166.108 E ±23.6km
DEPTH = 224.8 ± 15.4 km
4.6mb (3 abs.)
SANTA CRUZ ISLANDS (184)

HNR	6.16	279	eP	19 23.00	-0.1
DZM	11.50	178	iPc	20 31.90	0.1
			iS	22 37.10	
PMG	18.70	272	eP	21 57.00	0.3
MNG	31.12	166	P	23 52.20	0.0
	0.5s	8.00nm		4.6mb	
KIW	31.22	167	P	23 54.20	1.1
PGZ	31.31	165	P	23 53.60	-0.2
	0.4s	11.00nm		4.9mb	
TCW	31.42	168	P	23 56.10	1.3
CAW	31.49	167	eP	23 54.80	-0.6
MRW	31.53	168	eP	23 55.30	-0.4
WDW	31.63	167	eP	23 55.70	-0.9
MTW	31.64	166	P	23 56.50	-0.2
BLW	31.83	167	P	23 58.20	-0.2
MOW	31.83	167	P	23 58.50	0.1
WB5	31.96	249	eP	24 00.00	0.2
ASPA	33.36	243	iPd	24 11.40	-0.4
	0.9s	8.00nm		4.3mb	
	S.D. = 0.7	on	15 of	15 obs.	

? FEB 22, 1990 14h 59m 29.07± 5.17s
30.379 S ±31.5km 71.340 W ±25.2km
DEPTH = 154.6 ± 43.2 km
NEAR COAST OF CENTRAL CHILE (135)

RTRS	1.64	83	iPd	00 01.00	0.3
RTCB	2.45	117	iP	00 10.00	-0.3
ZON	2.56	118	eP	00 11.00	-0.7
ROCH	2.60	174	eP	00 12.20	-0.1
RTCV	2.82	122	eP	00 15.00	0.1
			eS	00 46.50	
CFA	2.93	115	iPc	00 17.00	0.7
			S	00 29.00	
FCH	3.07	163	eP	00 18.50	0.1
			i	00 54.50	
LCCH	3.09	184	eP	00 17.70	-0.6
TACH	3.28	174	iPd	00 20.50	-0.3
			i	00 55.50	
PCH	3.31	168	eP	00 21.50	0.3
CHCH	3.59	171	eP	00 25.70	0.9
MRA	5.22	114	ePc	00 46.00	-0.3
	S.D. = 0.6	on	12 of	12 obs.	

• FEB 22, 1990 15h 19m 51.02± 0.66s
15.738 N ± 7.9km 147.268 E ±14.3km
DEPTH = 33.0km (normal)
MARIANA ISLANDS REGION (215)

GUMO	3.16	228	eP	20 39.50	-0.1
PJG	3.16	228	eP	20 39.60	0.0
			eS	21 20.00	
CHJJ	21.53	341	P	24 38.50	-0.9
MTMJ	22.41	340	P	24 48.70	0.4
PMG	24.98	180	eP	25 12.50	-0.8
WB5	37.60	200	eP	27 05.50	1.0
LZH	43.56	306	eP	27 54.00	0.1
INK	71.50	23	eP	31 10.00	-0.1
MBC	75.63	14	eP	31 35.00	0.9
LIC	144.94	306	PKP	39 26.90	-0.5
	S.D. = 0.7	on	10 of	10 obs.	

FEB 22, 1990 16h 03m 43.82± 1.05s
36.102 N ± 9.4km 27.372 E ±13.5km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)
MD 3.4 (ATH).

KAP	0.57	196	ePg	03 55.60	0.2
YER	1.26	35	ePn	04 05.70	-1.6
CIN	1.60	21	ePn	04 14.00	1.8
			iSg	04 34.00	
NPS	1.66	240	ePb	04 13.00	-0.1
SMG	1.66	345	ePb	04 13.50	0.5
APE	1.77	304	ePb	04 14.00	-0.7
KSL	1.79	89	ePb	04 17.70	2.7X
BCK	2.92	61	ePn	04 39.70	8.5X
	S.D. = 1.5	on	6 of	8 obs.	

? FEB 22, 1990 16h 38m 18.64± 2.05s
30.557 S ±25.4km 68.838 W ±34.4km

DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)

RTRS	0.66	305	iPc	38	31.50	0.0
RTLL	0.83	158	iPc	38	34.40	0.4
			iS	38	49.50	
RTCB	0.93	178	iP	38	35.50	0.1
			(S)	38	50.00	
CFA	1.17	154	iPc	38	38.50	-0.2
			S	38	57.00	
RTCV	1.33	169	eP	38	40.80	-0.2
			eS	39	01.00	

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

FEB 22, 1990 16h 44m 32.19± 0.19s
24.764 S ± 3.7km 68.860 W ± 5.6km
DEPTH = 102.9km (22 depth phases)
5.2mb (22 obs.)
CHILE-ARGENTINA BORDER REGION (127)

ANT	1.77	306	iPc+	45	00.20	-2.2
			iS	45	20.00	
SLA	3.06	90	iPc	45	23.00	3.2X
RTRS	5.41	186	ePd	45	51.90	0.0
RTLL	6.55	177	iPc	46	06.00	-1.6
RTCB	6.70	180	eP	46	08.00	-1.7
ZON	6.76	179	eP	47	08.00	57.5X
RTCV	7.08	178	ePc	46	13.10	-1.7
TCA	7.56	151	ePd	46	20.00	-1.4
JACH	8.03	191	eP	46	32.00	4.0X
MRA	8.11	161	ePd	46	26.50	-2.3
LPB	8.22	5	Pd	46	30.00	-0.8
			i	46	58.00	
			S	48	26.00	
			LR	49	05.00	
ROCH	8.39	192	eP	46	28.00	-5.0X
ZOBO	8.48	5	P	46	31.00	-3.5X
Z	23s		2.07um			
			(S)	48	40.00	
			LR	49	40.00	
IHA	8.58	196	eP	46	36.50	1.2
			i	46	43.20	
			e(S)	48	18.00	
ARE	8.62	343	e(P)	46	33.00	-3.1X
FCH	8.62	188	eP	46	32.50	-3.7X
SAN	8.80	190	eP	46	40.50	2.2
PCH	8.94	189	eP	46	36.00	-4.3X
LCCH	9.00	195	eP	46	40.50	-0.4
TACH	9.04	191	eP	46	36.00	-5.6X
RFA	9.98	178	ePd	46	49.80	-4.4X
CAI	35.38	64	eP	51	18.50	-1.4
JSC	59.89	348	P	54	27.60	-1.7
			pP	54	52.30	99km
PRM	59.91	347	P	54	27.80	-1.7
			pP	54	52.50	99km
TKL	61.73	346	P	54	39.00	-2.8X
RSCP	62.09	345	P	54	44.00	-0.2
	1.6s		485.56nm			6.3mb X
			pP	57	07.00	
BLA	62.60	350	P	54	50.00	2.4
	1.0s		30.00nm			5.2mb
			pP	55	11.20	83kmX
CVL	63.06	351	P	54	50.00	-0.5
			pP	55	14.60	98km
SPA	65.38	180	iPd	55	05.80	0.2
	0.8s		105.83nm			5.8mb
MEO	65.59	333	iPd	55	04.70	-2.3
FVM	65.62	341	P	55	05.30	-1.9
			pP	55	30.00	98km
HBVT	68.89	357	P	55	27.20	-0.4
WNY	68.97	356	P	55	27.60	-0.5
			pP	55	53.30	101km
RSNY	69.17	356	P	55	28.90	-0.4
			pP	55	56.60	110km
ALQ	69.25	328	iPd	55	30.10	-0.1
	0.7s		17.98nm			5.0mb
			pP	55	54.90	97km
LIC	69.29	73	Pd	55	30.34	-0.3
	0.8s		40.00nm			5.3mb
TIC	69.50	72	P	55	32.02	0.1
	1.0s		49.00nm			5.3mb
KIC	69.60	73	Pd	55	32.58	0.0
	0.8s		77.00nm			5.6mb
CBM	71.36	1	P	55	42.50	0.0
			pP	56	08.10	100km
GLA	72.27	321	P	55	48.00	-0.3
GLD	72.60	331	P	55	50.00	-0.2
	1.6s		101.85nm			5.4mb
GOL	72.62	331	P	55	50.00	-0.5
	0.9s		26.52nm			5.1mb
WIGH	72.73	76	eP	55	52.00	0.7
BAR	73.08	319	eP	55	53.00	0.0
			e	56	22.00	115kmX
WEGH	73.09	75	eP	55	54.00	0.6
LEGH	73.25	76	eP	55	55.00	0.7
KUK	73.33	75	eP	55	55.00	0.2
KOGH	73.40	75	eP	55	55.00	-0.2
SHGH	73.50	75	eP	55	56.00	0.2
RUV	73.55	261	eP	55	58.00	1.9
	0.9s		30.00nm			5.1mb
TPC	73.73	321	eP	55	47.00	-9.8X
			e	56	23.00	146kmX
VAH	73.76	260	eP	55	59.00	1.8
	0.9s		40.00nm			5.2mb
TPT	73.84	261	eP	55	59.00	1.3
	0.9s		30.00nm			5.1mb
PMO	74.08	261	eP	56	00.00	0.9
	0.9s		35.00nm			5.2mb
RVR	74.42	320	eP	56	01.00	0.3
			e	56	28.00	105km
MSU	74.89	326	P	56	04.30	0.6
			pP	56	30.00	99km
MWC	74.99	320	eP	56	04.00	-0.2
			e	56	42.00	154kmX
GSC	75.02	321	eP	56	04.00	-0.3
			e	56	32.00	109km
SBB	75.18	320	eP	56	05.00	-0.1
			e	56	43.00	154kmX
RSSD	75.75	335	P	56	08.00	-0.4
			pP	56	33.40	98km
CLC	75.84	321	eP	56	09.00	0.1
			e	56	47.00	154kmX
ISA	76.24	320	eP	56	12.00	0.9
			e	56	40.00	109km
SYP	76.34	319	eP	56	12.00	0.2
			e	56	42.00	118kmX
BCH	76.85	319	P	56	15.00	0.4
BW06	76.96	330	P	56	14.50	-0.7
TNP	77.24	323	P	56	28.00	11.2X
	1.0s		17.50nm			
PRS	78.40	319	eP	56	23.50	0.5
			e	56	52.20	112km
KVN	78.42	323	P	56	23.00	-0.2
RSON	78.42	344	P	56	21.20	-1.6
	1.2s		105.69nm			5.5mb
			pP	56	47.20	100km
IMW	78.46	330	P	56	23.80	0.3
BKS	79.95	320	e(P)	56	31.70	0.4
	0.7s		36.00nm			5.3mb
LRM	80.64	331	ePd	56	35.50	0.4
ORV	80.66	321	eP	56	35.30	0.3
			e	57	04.60	114kmX
MAW	81.21	163	iPc	56	38.80	1.4
			e	57	07.00	109km
WDC	81.94	322	eP	56	40.50	-1.1
			e	57	06.60	99km
LBFM	82.10	323	P	56	42.50	-0.2
AVE	82.17	48	iP	56	55.00	12.0X
			i	57	10.20	53kmX
SES	83.62	334	ePd	56	49.30	-0.8
			pP	57	16.00	102km
BFS	83.82	117	iPd	56	51.00	-0.9
			i	05	03.50	
IFR	83.85	49	iP	56	53.00	1.2
			i	57	03.00	32kmX
FFC	84.12	341	iPd	56	51.60	-0.9
	0.8s		15.00nm			5.0mb
KSR	84.34	116	iPc	56	52.50	-2.1
	0.7s		22.50nm			5.2mb
PRY	84.37	117	eP	56	54.50	-0.2
NEW	84.58	330	P	56	54.20	-0.7
	1.6s		46.30nm			5.2mb
DPW	84.79	329	P	56	56.30	0.3
SLR	85.53	116	iPd	57	00.00	-0.5
SHW	85.58	326	P	57	03.60	3.5X
PNT	86.48	329	eP	57	04.00	-0.3
	0.6s		16.00nm			5.2mb
ATEJ	86.53	47	iPc	57	06.50	1.5
ALOJ	86.58	46	eP	57	04.80	-0.4
AAPN	86.68	46	iPc	57	06.80	1.1
EDM	86.72	335	iPd	57	04.40	-1.1
	0.7s		69.00nm			5.8mb
			pP	57	32.50	107km
APHE	86.76	47	iPc	57	05.50	-0.6
TOL	88.18	44	eP	57	15.00	2.3
BUL	88.20	111	iPc	57	12.80	-0.6
			ipP	57	41.10	107km
			iP'P'	29	03.10	
FRB	88.21	0	eP	57	11.00	-1.2
			pP	57	38.00	102km
BCAO	89.47	85	iPc	57	20.80	1.4
	0.6s		17.00nm			5.3mb
			id	57	48.70	105km
EPF	92.67	43	eP	57	34.50	1.0
	0.8s		6.70nm			5.0mb
MFF	94.25	40	eP	57	40.30	-0.3
LRG	96.70	45	eP	57	52.70	0.9
LMR	96.74	45	eP	57	52.70	0.7
FRF	96.93	45	eP	57	53.40	0.5
LPG	97.89	43	eP	57	58.40	0.8
	0.8s		5.35nm			5.1mb
BEO	106.55	48	ePKP	03	02.80	16.3X
TNR	109.38	48	ePKPd	02	54.00	2.1
RYD	121.92	75	iPdiff	59	34.00	-11.0X
PMG	131.14	230	ePKP	03	31.00	-3.3X
KOD	144.91	108	iPKP	04	00.00	0.1
			iSn	04	28.20	
GBA	146.38	103	PKPc	04	02.80	0.9
	0.8s		51.10nm			
KHKI	146.79	188	ePKPc	04	04.00	1.4
			e	07	14.00	
KUSJ	146.97	312	PKP	04	02.80	0.8
AAI	147.22	213	ePKPc	04	03.10	-0.2
TRT	147.70	183	iPKPd	04	07.00	3.0X
	0.6s		99.70nm			
ASAJ	147.91	315	PKP	04	04.30	0.8
HOOJ	148.22	312	ePKP	04	07.40	3.4X
HYB	148.79	97	ePKP	04	06.20	0.5
	1.0s		70.00nm			
			i	04	10.00	
MKS	149.12	196	e(PKP)	04	09.50	3.2X
MRRJ	149.69	313	ePKP	04	10.30	4.0X
CHJJ	153.56	302	PKP	04	17.80	5.6X
MTMJ	154.30	304	PKP	04	14.90	1.6

S.D. = 1.1 on 97 of 120 obs.

FEB 22, 1990 16h 51m 51.06± 0.18s
11.458 S ± 4.3km 66.380 E ± 2.8km
DEPTH = 12.4km (geophysicist)
5.7mb (58 obs.) 5.6Msz (23 obs.)
MID-INDIAN RISE (429)

Complex event. Depth from broadbond displacement seismograms.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=215 Dip=82 Slip= -8
NP2: 306 82 -172
Principal Axes:
T Plg= 0 Azm= 81
P 11 171
Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting with a small normal component. The preferred fault plane is not determined.
RADIATED ENERGY
No. of sta: 8 Focal mech. M
Energy 1.6±0.5*10**14 Nm
MOMENT TENSOR SOLUTION
Dep 22 No. of sta: 12
Moment Tensor; Scale 10**17 Nm
Mrr= 0.61 Mtt=-8.07
Mff= 7.43 Mrt= 1.06
Mrf=-0.36 Mtf=-1.27
Principal axes:

T	Val= 7.56	Plg= 4	Azm= 85
N	0.73	82	326
P	-8.29	7	176

Best Double Couple:Mo=7.9*10**17
NP1:Strike=220 Dip=83 Slip= -2
NP2: 310 88 -173
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 19S, 45C
Centroid Location:
Origin Time 16:51:56.3 0.4
Lat 11.58S 0.05 Lon 66.39E 0.04
Dep 15.0 FIX Half-duration 3.0
Moment Tensor; Scale 10**17 Nm
Mrr=-3.92 0.17 Mtt= 0.51 0.21

22d 16h

Mff= 3.41 0.20 Mrt=-1.12 0.62
Mrf=-0.78 0.72 Mtf=-4.01 0.19
Principal Axes:
T Val= 6.22 Plg= 0 Azm=235
N -1.52 30 145
P -4.70 60 325
Best Double Couple:Mo=5.5*10**17
NP1:Strike=351 Dip=52 Slip= -51
NP2: 119 52 -129

KOD	24.20	27	eP	57	10.70	1.8
			ePP	57	39.00	
NPA	26.64	259	eP	57	31.40	-0.2
GBA	27.21	24	Pd	57	36.40	-0.3
	1.1s	48.10nm			5.1mb	
POO	30.70	14	iPd	58	07.50	-0.6
			iS	03	10.00	
BOM	30.82	12	iP	58	10.20	1.1
			iS	03	22.20	
NAI	31.05	287	iPd	58	12.00	0.5
HYB	31.11	23	iPd	58	11.40	-0.3
	1.6s	133.30nm			5.6mb	
			iS	03	18.00	
ARO	32.68	314	iPd	58	26.80	1.2
BSI	33.34	61	eP	58	33.00	1.8
AAE	34.18	305	eP	58	40.30	1.4
TSI	35.29	67	eP	58	50.00	1.9
LWI	38.37	281	ePd	59	15.40	1.1
SLR	38.64	243	iPc	59	15.45	-0.9
	1.2s	125.00nm			5.5mb	
			ePPd	59	18.76	11kmX
			i	59	22.07	
SNG	38.77	63	eP	59	15.20	-2.1
			eS	05	16.70	
			e	24	40.20	
PRY	39.65	241	iPc	59	30.60	5.8X
KSR	39.88	243	iPc	59	24.00	-2.8X
NDI	41.26	15	iPd	59	38.00	0.3
			ePP	01	24.00	
			eS	05	52.00	
			eSS	09	02.00	
QUE	41.41	1	Pd-	59	40.50	1.4
			eS	06	07.50	
HVD	42.35	237	iPc	59	36.00	-11.0X
	1.9s	315.79nm				
DMN	42.87	25	P	59	52.20	0.9
PKI	42.96	25	P	59	53.00	0.9
GKN	43.03	24	P	59	53.20	0.8
BDT	43.04	49	eP	59	53.20	0.7
KKN	43.10	25	P	59	53.80	0.7
QASM	43.44	329	iPd	59	56.70	1.0
GUN	43.46	25	P	59	56.80	0.7
CHG	44.00	47	ePd	00	01.00	0.7
	1.2s	54.69nm			5.3mb	
			eS	06	40.00	
LOE	45.19	51	eP	00	10.00	0.1
TRT	45.73	90	iPc	00	15.00	0.8
	0.8s	104.20nm			5.9mb	
LSA	47.38	30	P	00	29.10	1.6
	Z 18s	11.70um			5.9Msz	
	N 17s	5.60um				
			PP	02	21.50	
			S	07	26.00	
AGAL	47.75	317	iPc	00	31.50	1.5
AGRW	47.91	317	iPc	00	32.50	1.3
MAIO	47.94	353	iPd-	00	31.60	0.2
			eS	07	32.00	
AGMR	48.01	317	iPg	00	33.50	1.4
ANMR	48.11	317	eP	00	33.90	1.1
KHKI	48.55	91	eP	00	37.70	1.3
IR4	48.70	343	iPd	00	37.00	-0.4
IR4	48.70	343	iPd	00	39.00	1.6
IR1	48.93	343	iPd	00	38.50	-0.6
TEH	49.03	344	eP	00	40.00	0.1
KER	49.10	339	eP	00	40.00	-0.5
BHD	49.18	336	iPc	00	42.00	1.1
			ePcP	02	08.50	
			ePP	02	36.50	
			eS	07	16.00	
IR7	49.22	343	iPd	00	41.00	-0.4
MRWA	49.38	119	eP	00	44.00	1.4
BADA	50.00	323	iPd	00	48.70	1.4
BCAO	50.15	286	eP	00	46.86	-1.9
	1.2s	94.00nm			5.6mb	
			e	00	53.82	
			ic	02	08.00	
KMI	50.78	44	ePd	00	53.62	0.8

	4.0s	800.00nm			6.0mb X	
	Z 25s	7.40um			5.6MszX	
	N 20s	4.30um				
	E 20s	20.00um				
			ePPd	00	57.92	14kmX
			e	01	00.24	
			ePP	02	58.59	
			iS	08	13.42	
MBH	51.00	324	iPd	00	55.00	0.1
NWAO	51.15	123	ePd	00	54.96	-1.1
			ePPc	00	58.61	12kmX
KLB	51.31	121	eP	00	57.00	-0.4
PRNI	51.37	325	eP	00	58.00	0.2
KSH	51.43	10	iPc	00	58.50	0.3
	Z 24s	7.80um			5.7MszX	
	E 14s	6.50um				
			pP	01	04.00	18kmX
			S	08	22.00	
MBL	52.00	108	eP	01	04.20	1.5
MSL	52.38	336	ePc	01	07.50	2.2
			e	01	40.50	
			ePP	03	02.00	
			eS	08	39.00	
QIZ	52.47	55	Pc	01	07.50	1.3
	N 17s	3.60um				
	E 23s	10.40um				
TAB	52.72	340	iPd-	01	08.00	0.0
MKS	52.83	88	e(P)	01	06.20	-2.9
KOT	52.92	322	eP	01	09.50	0.1
HLW	53.16	321	eP	01	11.50	0.3
			ePP	03	17.00	
			ePPP	04	18.00	
			eS	08	51.00	
HRI	53.21	328	e(P)	01	11.00	-0.6
GYA	54.34	46	P	01	19.00	-1.1
	1.4s	100.00nm			5.7mb	
	Z 22s	2.00um			5.1Msz	
	N 18s	4.30um				
	E 18s	3.90um				
			S	08	58.00	
CD2	55.34	39	eP	01	25.60	-1.6
	2.0s	500.00nm			6.2mb	
	Z 19s	4.00um			5.5Msz	
	N 15s	3.40um				
			sP	01	33.30	
			S	09	12.00	
KUPT	56.15	95	eP	01	44.50	11.3X
	1.5s	482.70nm				
GZH	57.38	53	Pc	01	42.50	0.7
	Z 18s	5.50um			5.7Msz	
	N 13s	2.70um				
	E 13s	3.40um				
HKC	57.63	54	eP	01	44.10	0.5
			eS	09	44.00	
WMQ	58.34	18	iPd	01	48.09	-0.3
	6.0s	2000.00nm			6.4mb X	
	Z 20s	15.30um			6.1Msz	
	N 16s	5.50um				
			epPd	01	52.56	15kmX
			i	01	54.05	
			eHPP	04	04.27	
			ePP	04	04.82	
			eS	09	51.80	
			esS	09	58.42	
LZH	59.03	35	eP	01	52.00	-1.4
	3.0s	210.00nm			5.7mb	
	Z 20s	5.20um			5.7Msz	
	N 20s	3.30um				
	E 20s	5.20um				
			eS	09	55.00	
			SS	13	52.00	
GTA	59.40	30	Pd	01	55.00	-0.9
	5.0s	1300.00nm			6.3mb X	
	Z 20s	5.40um			5.7Msz	
	E 16s	4.00um				
			PP	04	08.00	
			S	10	04.00	
			SS	10	17.00	
BBTK	59.83	330	iP	01	58.00	-0.8
KHL	60.32	327	eP	02	01.00	-1.2
BAG	60.33	64	eP	02	02.00	-0.7
ALT	60.56	328	eP	02	03.00	-0.8
KAS	60.56	332	eP	02	03.50	-0.2
XAN	60.67	40	Pd	02	03.00	-1.6
	1.5s	200.00nm			6.0mb	
	N 14s	2.40um				
	E 13s	1.90um				

			S	10	19.00	
GPA	61.38	329	eP	02	08.00	-1.2
IZM	61.60	326	eP	02	10.00	-0.8
DAV	61.70	75	eP	02	10.80	-1.0
WHN	62.20	46	P	02	14.20	-0.7
	4.0s	700.00nm			6.2mb X	
	Z 18s	6.10um			5.8Msz	
	N 15s	2.10um				
	E 15s	4.60um				
			pP	02	23.00	29kmX
			eS	10	40.00	
QZH	62.45	54	eP	02	15.50	-1.1
	Z 18s	5.00um			5.7Msz	
	E 14s	3.10um				
			S	10	44.00	
ITU	62.64	329	iPd	02	16.00	-1.6
CTT	62.97	329	eP	02	18.60	-1.2
MTN	63.16	99	iPd	02	22.40	0.8
			i	03	36.50	
JMB	64.88	328	iP	02	33.00	0.7
KDZ	64.90	327	iPd	02	32.00	-0.5
ASPA	65.01	111	iPd	02	30.60	-3.0X
	1.2s	58.00nm			5.6mb	
	Z 21s	2.33um			5.3Msz	
			iPcP	03	25.00	
			iS	11	16.10	
			LR	26	40.70	
TIY	65.21	39	Pd	02	33.50	-1.1
	N 16s	2.20um				
			pP	02	46.00	43kmX
RZN	65.31	327	iPd	02	35.00	-0.3
WB5	65.64	107	eP	02	36.80	-0.8
			e	03	32.00	
			e	04	00.20	
BTO	65.65	35	P	02	37.00	-0.4
	N 21s	5.70um				
	E 19s	2.70um				
			S	11	24.00	
TLB	65.71	331	ePd	02	37.50	-0.1
MMB	65.77	326	iP	02	37.00	-1.1
PVL	66.06	328	iPd	02	39.00	-0.8
CFR	66.10	331	eP	02	38.00	-2.1
PGB	66.20	327	iPd	02	40.00	-0.8
VAY	66.23	325	eP	02	39.60	-1.4
NJ2	66.24	47	Pc	02	41.20	0.0
	Z 20s	3.70um			5.6Msz	
	N 20s	3.50um				
	E 18s	4.30um				
			sP	02	49.00	
			S	11	30.00	
KKB	66.32	326	iPd	02	41.00	-0.6
BUC1	66.51	330	iPd	02	42.00	-0.7
BUC	66.53	330	eP	02	43.50	0.7
LSK	66.59	323	eP	02	42.90	-0.5
HHC	66.70	36	P	02	43.80	-0.4
	Z 34s	4.90um			5.5MszX	
	N 10s	0.60um				
			S	11	39.00	
VTS	66.74	327	iPd	02	44.00	-0.4
KBN	66.77	324	iPc	02	44.50	0.1
ISR	66.83	330	iPd	02	46.00	1.1
TPE	67.03	323	eP	02	44.00	-2.1
OHR	67.10	324	iP	02	45.50	-1.1
	1.1s	0.11nm			2.9mb X	
			e	02	54.50	
			e	03	07.50	
VRI	67.28	331	iPd	02	48.00	0.4
SKO	67.30	325	iPd	02	46.10	-1.7
	1.5s	238.00nm			6.2mb	
			i	03	03.50	
			i	03	21.30	
			i	03	34.50	
TIA	67.32	43	eP	02	47.40	-0.7
	Z 22s	2.90um			5.5Msz	
	N 14s	1.30um				
	E 14s	1.90um				
			S	11	44.00	
MLR	67.38	330	iPd	02	48.00	-0.4
			e	32	00.00	
SSE	67.46	49	Pd	02	49.00	0.0
	1.2s	40.00nm			5.5mb	
	Z 20s	3.31um			5.6Msz	
	N 12s	0.95um				
	E 14s	1.87um				
			S	11	48.00	
CLI	67.53	332	ePd	02	50.00	0.8
CMP	67.67	330	ePd	02	52.00	1.9

PHP	67.68	324	iPd	02	48.70	-1.4		N	16s	2.30um				ZLA	78.03	324	ePd	03	51.30	0.2
TIR	67.79	324	iPd	02	49.70	-1.2		E	15s	2.10um				SLE	78.12	324	ePd	03	51.50	0.0
LACI	68.06	324	iPc	02	52.90	0.3				iS	13	07.00		EMS	78.16	322	ePd	03	51.40	-0.6
SOI	68.11	319	P	02	53.50	0.5	PII	74.75	322	Pd	03	30.90	-1.7	FEL	78.45	324	P	03	53.23	-0.2
PUK	68.22	324	eP	02	53.30	-0.2	BDI	74.89	322	Pd	03	31.50	-2.1	BBS	78.53	324	P	03	53.72	-0.1
PZI	68.26	318	P	02	54.80	0.8	KBA	75.00	326	iPd	03	33.60	-0.7	SPA	78.62	180	eP	03	53.70	-0.4
SHGH	68.30	281	eP	02	54.00	-0.6		2.8s	757.00nm				6.2mb		1.8s	227.78nm				5.9mb
GRI	68.32	320	P	02	54.80	0.5				ePP	06	22.00		LOMF	78.87	323	P	03	55.46	-0.3
LEGH	68.36	281	eP	02	55.00	0.0	FVI	75.03	325	Pd	03	34.30	0.1	MOF	78.95	324	P	03	55.33	-0.8
SDA	68.42	324	iP	02	55.40	0.6	PGF	75.08	320	eP	03	34.00	-0.7	STR	78.96	325	P	03	56.36	0.3
WEGH	68.49	281	eP	02	55.00	-0.8		1.1s	17.10nm				5.0mb	NUR	79.02	340	iP	03	56.20	0.1
KOGH	68.53	281	eP	02	56.00	-0.1	KMR	75.15	327	iP-	03	35.10	0.2		0.9s	33.80nm				5.4mb
ATN	68.55	319	P	02	55.70	0.0				iPP	06	18.30		WLS	79.11	324	P	03	56.65	-0.3
KUK	68.68	281	eP	02	57.00	0.0	CTI	75.37	324	Pd	03	35.90	-0.4	ECH	79.12	324	P	03	56.54	-0.5
WIGH	68.71	280	eP	02	58.00	0.9	BHG	75.63	326	eP	03	37.00	-0.7	BSF	79.13	324	P	03	56.74	-0.5
CZI	68.73	320	P	02	56.70	-0.1	KSP	75.75	330	iPd	03	38.20	0.0	CDF	79.15	324	P	03	56.89	-0.4
TDS	68.86	321	Pd	02	58.60	1.0		2.5s	502.00nm				6.1mb	GWF	79.25	325	P	03	57.87	0.2
MNO	68.91	318	P	02	59.80	1.6				e	06	28.00		TNS	79.45	326	ePd	03	59.00	0.2
BJI	68.94	39	ePc	02	55.50	-2.5	SAL	75.78	323	P	03	38.50	0.0	HAU	79.48	324	eP	03	58.40	-0.6
	1.5s	55.00nm				5.5mb	BOB	75.96	322	Pd	03	39.20	-0.5	MDJ	79.78	40	Pd	04	00.50	-0.1
	Z 18s	4.10um				5.7Msz	KHC	76.08	327	iPd	03	39.50	-0.7		Z 20s	5.30um				5.9Msz
	N 12s	3.20um						1.2s	50.00nm				5.5mb			iS	14	04.00		
		e	03	04.11				Z 20s	2.20um				5.5Msz			SS	19	20.00		
		eS	12	04.00				E 20s	1.60um					VITF	79.80	324	P	04	00.38	-0.2
		eSS	16	30.00			PRU	76.10	328	P	03	39.80	-0.4	EBR	79.90	315	eP	04	03.00	1.7
CSI	68.96	321	P	02	59.20	0.9				e	04	16.00		LBL	80.01	320	P	04	02.55	0.7
ORI	69.04	321	Pd	02	59.50	0.8	OGA	76.18	324	iPd	03	41.10	0.1	PLDF	80.12	321	P	04	02.93	0.4
BRT	69.07	322	P	02	59.00	0.1	MDI	76.35	323	P	03	41.00	-0.7	SUF	80.23	342	iP	04	03.00	0.4
ADE	69.08	123	iPd	02	50.50	-8.7X	PCP	76.39	321	P	03	40.92	-1.2		1.0s	72.70nm				5.6mb
MMN	69.22	321	P	03	00.30	0.5	FIN	76.43	321	P	03	41.95	-0.3	SMF	80.30	322	eP	04	03.10	-0.3
FAI	69.22	317	P	03	01.50	1.7	IMI	76.47	321	P	03	42.67	0.1		1.1s	29.30nm				5.2mb
GIB	69.38	318	P	03	01.00	0.0	CKI	76.50	321	Pd	03	42.20	-0.4	LBF	80.38	322	eP	04	03.60	-0.2
MCT	69.44	318	P	03	03.30	1.9	OSS	76.59	324	ePd	03	43.30	0.0		1.2s	62.50nm				5.5mb
MGR	69.63	321	Pd	03	01.30	-1.0	ROB	76.68	321	P	03	43.49	-0.2	PYM	80.40	321	P	04	04.56	0.5
SGO	70.03	321	Pd	03	04.50	-0.2	SBF	76.73	320	eP	03	43.80	-0.2	ECHE	80.42	314	eP	04	05.70	1.5
ERC	70.36	317	P	03	07.40	0.5		1.1s	75.70nm				5.7mb	COO	80.44	119	eP	04	06.00	1.4
QIS	70.49	108	eP	03	07.00	-1.0	CTA	76.74	108	iPd	03	47.00	2.5X	AGO	80.46	321	P	04	04.43	0.2
DUI	71.20	321	P	03	10.40	-1.5		1.3s	134.62nm				5.9mb	LOR	80.59	322	eP	04	05.00	0.1
SDI	71.61	321	P	03	13.50	-0.9				iS	13	40.00			1.1s	35.40nm				5.3mb
DL2	71.79	42	P	03	16.00	0.6	FUR	76.77	326	iPd	03	44.30	0.2	CAF	80.62	320	eP	04	05.70	0.5
	Z 22s	2.50um				5.4Msz	CN2	76.78	40	Pd	03	42.80	-1.4		1.3s	54.15nm				5.4mb
	N 17s	2.40um						1.0s	100.00nm				5.9mb	AVF	80.67	322	eP	04	05.00	-0.3
	E 15s	3.60um						Z 18s	3.30um				5.7Msz		1.1s	195.50nm				6.0mb
AZI	72.01	321	Pd	03	16.20	-0.4		N 12s	1.10um					SSF	80.70	322	eP	04	05.50	0.0
BUD	72.22	328	iPc	03	17.20	-0.6		E 12s	0.80um						1.1s	76.90nm				5.6mb
AQU	72.24	322	Pd	03	17.90	-0.2				ipP	03	48.00	17kmX	BGF	80.87	321	eP	04	06.80	0.4
RDP	72.32	321	Pd	03	18.80	0.2				isP	03	51.00		MAF	80.89	321	eP	04	06.70	0.2
SPC	72.74	330	eP	03	20.50	-0.6				PP	06	40.00			1.3s	43.30nm				5.3mb
		e	06	03.80						S	13	28.00		EPF	80.92	317	eP	04	06.90	0.1
ZAG	72.78	326	iPd	03	21.20	0.0				iSS	18	28.00		MEM	80.99	326	iPc	04	07.90	1.1
SRO	72.80	328	iP	03	20.90	-0.3	AUTN	76.80	321	P	03	45.37	0.8	UPP	81.04	337	iP	04	06.70	-0.2
		e	05	53.80			VDL	76.87	324	ePd	03	44.50	-0.4		1.1s	200.00nm				6.1mb
		e	06	02.60			ENR	76.92	321	P	03	44.92	-0.2	GRC	81.07	322	P	04	08.03	0.6
PTJ	72.85	326	eP	03	20.90	-0.8	VAI	76.95	323	Pd	03	44.60	-0.4	LPO	81.08	319	eP	04	08.30	0.8
KIC	72.93	280	Pd	03	22.18	-0.5	STV	76.99	321	P	03	44.92	-0.6		1.1s	70.80nm				5.6mb
	1.4s	101.50nm				5.7mb	TMA	77.02	323	ePd	03	44.90	-0.8	ENN	81.11	326	eP	04	08.50	1.0
VBY	73.00	325	eP	03	22.50	0.1	LMR	77.05	320	eP	03	45.50	-0.2		2.9s	922.00nm				6.3mb
ASS	73.09	322	P	03	22.50	-0.6		1.1s	46.40nm				5.5mb	RJF	81.14	320	eP	04	08.60	0.8
LIC	73.17	280	Pd	03	23.50	-0.6	FRF	77.07	320	eP	03	45.70	-0.1		1.1s	80.60nm				5.7mb
	1.5s	147.50nm				5.8mb		1.1s	46.40nm				5.5mb	TCF	81.14	321	eP	04	08.20	0.4
TIC	73.27	281	Pd	03	24.14	-0.5	BWA	77.10	123	eP	03	48.00	1.7	EVIA	81.15	312	eP	04	08.80	0.6
RIY	73.39	325	iP	03	24.70	0.0	LRG	77.20	320	eP	03	46.70	0.2	WTS	81.26	327	eP	04	09.00	0.8
KRA	73.47	331	eP	03	23.90	-1.2		1.1s	41.50nm				5.4mb	IFR	81.30	307	iPd	04	10.50	1.4
	1.0s	74.00nm				5.7mb	PZZ	77.26	321	P	03	45.84	-1.2	APHE	81.40	310	iPc	04	11.00	1.5
		i	03	32.30			ORO	77.30	322	P	03	45.50	-1.7	AFC	81.40	311	eP	04	09.90	0.3
		i	03	36.50			ORX	77.30	322	P	03	44.92	-2.3	LFF	81.47	319	eP	04	10.30	0.8
CEY	73.61	325	eP	03	25.40	-0.6	SAX	77.35	324	ePd	03	47.40	-0.3		1.1s	85.45nm				5.7mb
SOP	73.63	327	iPd	03	27.80	1.8	CAN	77.49	124	eP	03	49.10	0.7	DOU	81.52	325	Pc	04	10.40	0.8
MAO	73.66	321	Pd	03	25.50	-0.9	MMK	77.53	323	ePd	03	47.80	-0.8	LHE	81.52	317	P	04	11.04	1.1
ZST	73.67	328	iP	03	25.40	-0.9	GRF	77.66	327	iPd	03	49.10	0.1	LSF	81.55	321	eP	04	10.50	0.6
		e	06	09.70				1.5s	304.00nm				6.2mb		1.3s	88.45nm				5.7mb
RSM	73.70	323	P	03	27.00	0.5		Z 21s	0.50um				4.8Msz	ESCF	81.55	317	P	04	10.83	0.8
LJU	73.73	325	eP	03	26.50	-0.2				e	03	56.80		ASMO	81.58	311	iPc	04	10.50	0.0
CRE	73.83	322	P	03	26.50	-1.0				e	04	09.20		ATEJ	81.63	310	iPc	04	11.50	0.8
TRI	73.96	325	Pd	03	27.50	-0.5				e	04	17.00		ATE	81.64	317	P	04	11.04	0.5
SFI	74.06	322	P	03	27.70	-0.9	RRL	77.67	321	P	03	48.10	-1.3	BRS	81.66	116	e(PKP)	04	08.00	-3.0X
VOY	74.08	325	eP	03	21.20	-7.6X	HOF	77.67	328	eP	03	49.20	0.2				e	14	28.00	
		i	03	28.20			CLL	77.68	329	iPd	03	49.60	0.7				e	19	00.00	
VKA	74.12	328	iPd	03	28.20	-0.7		2.8s	810.00nm				6.3mb	ETOR	81.67	314	eP	04	11.80	1.0
	3.0s	896.00nm				6.3mb	LSD	77.71	322	P	03	49.02	-0.6	ISSF	81.68	317	P	04	11.82	1.0
		e	04	24.00			ESEL	77.79	315	eP	03	51.00	1.2	GUMO	81.71	74	eP	04	03.00	-8.3X
		e	06	03.00			BNI	77.80	321	P	03	50.00	0.0		0.9s	327.37nm				6.4mb
RBL	74.50	325	P	03	30.50	-0.8	DIX	77.87	322	ePd	03	50.40	-0.1				eS	14	26.50	
TOO	74.51	126	eP	03	32.00	0.4	LPG	77.98	322	eP	03	50.20	-0.9	PJG	81.71	74	eP	04	03.20	-8.1X
SNY	74.59	41	iPd	03	30.00	-1.7		1.0s	22.00nm				5.2mb				e	04	30.40	
	4.0s	800.00nm				6.1mb X	MOX	78.00	328	iPd	03	51.50	0.7	GUA	81.74	74	eP	04	03.00	-8.5X
	Z 18s	4.20um				5.8Msz		2.3s	384.00nm				6.1mb		0.8s	238.81nm				6.3mb

22d 17h

MADF	81.75	317	P	04	11.50	0.5
ALOJ	81.76	310	eP	04	10.00	-1.4
AAPN	81.85	311	iPc	04	11.50	-0.3
BOH	81.86	317	P	04	12.65	0.9
MAL	81.86	310	iPd	04	11.50	-0.2
ELYF	81.87	317	P	04	12.17	0.4
SNF	81.89	325	Pc	04	12.70	1.1
UCC	81.99	326	P	04	13.00	0.9
NKM	82.17	308	iPd	04	14.00	0.6
			i	04	21.00	
EPRU	82.56	310	eP	04	16.30	0.9
EJIF	82.56	309	e(P)	04	16.20	0.8
ECRI	82.67	316	eP	04	17.00	1.1
TOL	82.72	313	iPd	04	16.50	0.3
	1.1s		75.95nm		5.8mb	
			ePP	07	31.00	
HFS	82.73	336	eP	04	15.90	0.2
	1.2s		97.10nm		5.8mb	
	Z 17s		0.82um		5.2MszX	
			LR	38	58.00	
MFF	82.74	320	eP	04	16.30	0.2
	1.3s		79.40nm		5.7mb	
EHOR	82.86	311	eP	04	17.20	0.3
AVE	83.03	306	eP	04	07.50	-10.4X
			i	04	18.50	
GUD	83.08	314	eP	04	18.80	0.6
LDF	83.57	322	eP	04	20.70	0.4
	1.2s		71.40nm		5.8mb	
SOD	83.70	346	iP	04	21.10	0.5
FLN	83.86	322	eP	04	22.00	0.2
	1.3s		68.60nm		5.7mb	
LPF	83.90	321	eP	04	22.30	0.4
	1.1s		41.50nm		5.6mb	
GRR	83.93	322	eP	04	22.40	0.3
NB2	84.25	336	P	04	23.40	-0.2
	1.7s		177.90nm		6.0mb	
KEV	85.48	347	iP	04	30.20	0.7
MBO	86.47	285	iPc	04	38.00	2.6X
EKA	88.06	328	Pc	04	43.40	1.1
	1.4s		44.70nm		5.6mb	
HNR	91.61	100	eP	05	02.00	2.2
SMY	109.76	38	PKP	10	30.00	6.6X
	Z 20s		2.00um		5.7Msz	
IMA	119.10	17	PKP	10	39.40	-1.7
INK	121.73	9	ePKP	10	45.00	-0.8
PMR	123.71	20	PKP	10	48.50	-1.3
ZOBO	127.23	239	PKPd	10	58.20	-0.5
	Z 21s		3.19um		6.0Msz	
			LR	51	48.00	
RSNY	133.00	322	PKP	11	30.00	21.8X
	Z 20s		1.13um		5.6Msz	
FFC	135.87	350	ePKP	11	12.00	-1.3
	1.0s		15.00nm			
SES	141.12	357	ePKP	11	16.00	-7.2X
RMW	143.46	9	PKP	11	24.20	-3.2X
PRM	143.67	313	PKP	11	25.30	-2.7X
TKL	143.80	317	PKP	11	27.40	-0.8
GBTN	144.09	317	PKP	11	26.40	-2.3
LON	144.15	10	PKP	11	26.80	-1.7
RSCP	145.04	318	PKP	11	28.60	-1.8
VGB	145.51	9	PKP	11	31.00	0.1
LRM	145.74	359	ePKPd	11	31.40	-0.2
UPA	146.38	269	ePKPd	11	34.50	1.4
FVM	146.41	326	PKP	11	32.80	0.2
RSSD	146.42	347	PKP	11	33.00	0.3
IMW	147.60	356	PKP	11	35.40	0.7
BW06	148.60	354	PKP	11	35.60	-0.6
WDC	149.94	14	ePKP	11	43.00	5.0X
MIN	150.38	12	e(PKP)	11	44.00	5.1X
GOL	150.94	347	PKP	11	40.00	0.1
ORV	151.16	13	e(PKP)	11	45.80	5.9X
DUG	151.37	359	PKP	11	41.20	0.8
UYO	151.42	325	ePKP	11	38.70	-1.7
KVN	152.23	8	PKP	11	41.90	0.1
CMB	152.85	12	e(PKP)	11	42.80	0.4
			e	15	32.60	
MEO	153.05	332	e(PKP)	11	45.20	2.4X
TNP	153.29	6	PKP	11	44.00	0.7
FRI	153.99	11	e(PKP)	11	44.40	0.4
CLC	155.48	8	ePKP	11	43.00	-3.1X
ALQ	155.73	346	ePKP	11	47.40	0.7
	2.0s		154.41nm			
			pP	16	45.60	
GSC	156.09	6	ePKP	11	51.00	4.0X
SBB	156.56	9	ePKP	11	48.00	0.4
			e	12	17.00	
MWC	156.98	9	ePKP	11	50.00	1.7
TPC	157.35	5	ePKP	11	50.00	1.4
PLM	158.00	7	ePKP	11	50.00	0.4

S.D. = 0.9 on 331 of 356 obs.

FEB 22, 1990 17h 19m 36.55± 1.24s
16.183 N ± 5.2km 122.451 E ± 7.4km
DEPTH = 39.1 ± 10.4 km
4.9mb (16 obs.)
LUZON, PHILIPPINE ISLANDS (249)

BAG	1.81	277	ePc+	20	05.00	-1.0
	0.9s		403.36nm			
QCP	2.03	221	eP	20	16.00	7.0X
QZH	9.43	338	eP	21	52.50	-0.5
DAV	9.54	161	eP	21	51.00	-3.6X
HKC	9.91	309	eP	21	57.70	-1.9
GZH	10.99	310	eP	22	15.70	1.4
QIZ	12.35	285	eP	22	31.40	-1.3
TSM	12.64	200	eP	22	39.00	2.4
SSE	14.89	356	P	23	12.50	6.4X
	1.2s		24.00nm		4.4mb	
WHN	16.10	334	P	23	27.00	5.3X
NJ2	16.13	349	eP	23	21.00	-1.1
GYA	17.89	307	P	23	46.40	2.0
LOE	19.88	276	eP	24	07.20	-0.3
KMI	20.46	299	Pd	24	15.50	1.7
	1.5s		50.00nm		4.6mb	
TIA	20.50	348	eP	24	13.90	-0.1
XAN	21.55	328	Pd	24	25.10	0.4
CD2	22.50	314	P	24	33.80	-0.3
CHG	22.57	280	eP	24	35.50	0.6
CHTO	22.57	280	eP	24	35.20	0.4
	1.0s		7.50nm		4.1mb	
TIY	23.20	340	iPd	24	42.00	1.1
IPM	23.99	244	ePd	24	50.10	1.4
	1.1s		60.10nm		5.0mb	
BJI	24.39	348	eP	24	53.00	0.6
	1.1s		91.00nm		5.2mb	
SNY	25.57	2	iPd	25	03.80	0.2
LZH	25.83	324	eP	25	06.50	0.2
	2.0s		47.00nm		4.7mb	
			pP	25	22.00	66kmX
HHC	26.33	341	Pc	25	11.70	1.0
	N 15s		2.10um			
	E 14s		0.80um			
BTO	26.61	339	eP	25	14.00	0.6
CN2	27.65	5	Pd	25	22.40	-0.2
MDJ	28.98	11	eP	25	34.50	-0.1
			epP	25	43.30	31kmX
GTA	30.44	324	eP	25	47.00	-0.8
GUN	35.72	295	P	26	32.80	-1.2
	0.8s		16.00nm		5.0mb	
PKI	36.06	295	P	26	36.00	-0.9
KKN	36.22	295	P	26	37.00	-1.1
DMN	36.33	295	P	26	38.20	-0.9
GKN	36.81	295	P	26	41.60	-1.4
	0.8s		20.00nm		5.1mb	
WB5	37.70	161	eP	26	48.80	-1.5
QIS	40.21	155	eP	27	10.50	-0.7
WMQ	40.31	320	P	27	12.50	0.6
ASPA	41.16	164	iPd	27	18.50	-0.4
	1.3s		28.00nm		4.8mb	
			i	27	27.60	
			iS	33	27.10	
HYB	41.97	278	eP	27	26.00	0.2
	1.0s		25.00nm		4.9mb	
GBA	43.52	273	Pc	27	37.40	-1.0
	1.0s		23.40nm		4.9mb	
KOD	44.12	268	eP	27	44.50	0.8
QUE	52.42	296	eP	28	47.00	-0.9
MAIO	58.92	303	iPc	29	34.20	-0.3
SOD	77.43	337	iP	31	29.60	0.6
INK	80.18	21	eP	31	44.00	0.0
MBC	80.78	12	ePd	31	48.10	1.0
	1.0s		12.00nm		4.8mb	
VRI	82.46	315	eP	31	57.50	1.1
DAG	84.43	352	iPd	32	05.80	-0.1
	0.7s		8.90nm		5.0mb	
HFS	85.11	332	eP	32	09.00	-0.5
	0.5s		2.80nm		4.7mb	
KRA	85.55	321	eP	32	12.40	0.5
NB2	85.84	333	P	32	13.40	0.2
	1.0s		16.80nm		5.2mb	
VAY	86.68	312	eP	32	17.30	-0.4
KSP	87.44	322	eP	32	21.00	-0.2
LPG	95.52	320	eP	32	59.90	0.6
	0.9s		5.75nm		5.0mb	
ZOBO	169.84	92	PKPd	39	41.00	-1.4
	1.5s		6.45nm			

S.D. = 1.0 on 51 of 55 obs.

FEB 22, 1990 17h 48m 19.35± 0.69s
40.714 N ± 6.4km 23.615 E ± 7.7km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 3.0 (ATH).

PLG	0.36	201	iPbc	48	26.60	-0.2
MMB	0.88	6	iPgd	48	34.00	-2.3
VAY	1.00	308	iPg	48	39.00	0.8
			iSg	48	51.80	
KKB	1.22	341	iPc	48	41.00	-1.0
RZN	1.28	40	iPc	48	43.00	-0.2
NEO	1.44	192	ePb	48	45.50	0.0
KZN	1.46	254	ePb	48	46.00	0.1
RDO	1.52	73	ePb	48	44.90	-1.7
PLD	1.61	30	iP	48	50.00	2.1
KDZ	1.65	55	iP	48	48.00	-0.5
PGB	1.88	13	iPd	48	53.00	1.1
VTS	1.90	351	eP	48	52.00	-0.2
DIM	1.97	47	iP	48	55.00	2.0
OHR	2.17	281	ePn	49	00.30	4.2X
MFT	2.79	87	ePn	49	10.00	5.1X

S.D. = 1.4 on 13 of 15 obs.

& FEB 22, 1990 18h 48m 34.79s
59.854 N 152.568 W
DEPTH = 84.0km
SOUTHERN ALASKA (2)
<AGS-P>.

RED	0.58	350	iP	48	49.26	-0.6
XLV	0.59	133	iP	48	49.32	-0.6
			iS	49	00.82	
AUE	0.64	220	iP	48	49.71	-0.7
AUL	0.65	223	iP	48	49.86	-0.6
			eS	49	02.09	
NNL	0.67	73	iP	48	51.12	0.5
			iS	49	02.56	
RDT	0.73	6	iP	48	50.47	-0.9
			iS	49	03.05	
CNPM	0.75	115	iP	48	50.99	-0.6
			iS	49	03.81	
PD8	0.82	266	iP	48	51.33	-1.0
			iS	49	04.42	
CDD	1.08	211	iP	48	54.21	-1.1
NKA	1.11	36	iP	48	56.78	1.1
SLKM	1.34	60	iP	48	57.28	-1.4
			eS	49	15.99	
CKL	1.35	5	iP	48	58.16	-0.7
SPU	1.36	11	iP	48	58.17	-0.7
			iS	49	16.57	
BGL	1.42	3	iP	48	59.09	-0.6
CRP	1.43	8	iP	48	59.40	-0.5
CGLM	1.48	11	iP	48	59.95	-0.6
			eS	49	19.31	
NCG	1.57	7	iP	49	01.07	-0.6
SEW	1.59	80	iP	49	00.59	-1.2
SUA	1.85	28	iP	49	04.89	-0.5
			iS	49	28.85	
SVW	1.97	311	iPd	49	05.40	-1.5
PMS	2.04	46	eP	49	07.20	-0.7
KDC	2.11	179	ePc	49	06.50	-2.3
SKT	2.19	13	iP	49	08.84	-1.2
PWA	2.23	35	eP	49	09.70	-0.8
PLRM	2.43	43	eP	49	11.32	-1.8
			S	49	39.02	
PMR	2.43	43	ePc	49	11.70	-1.4
GHO	2.63	41	eP	49	14.23	-1.7
			iS	49	44.27	
CUT	2.79	23	iP	49	17.22	-0.9
			eS	49	50.00	
TTA	3.50	333	eP	49	25.10	-3.0
NCA	3.53	50	iP	49	26.32	-2.1
KTH	3.79	11	iP	49	31.49	-0.6
TOA	3.85	51	eP	49	31.10	-1.8
RND	3.98	25	iP	49	33.30	-1.4
MCK	4.26	22	iP	49	37.42	-1.1
PAX	4.63	44	iP	49	41.67	-2.1
TGL	4.93	75	eP	49	44.60	-3.4
NEA	5.01	18	iP	49	46.81	-2.2
DDM	5.07	36	iP	49	49.62	-0.2
WRH	5.09	22	eP	49	47.47	-2.6
BALM	5.20	72	eP	49	48.27	-3.5

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HDA      5.27  28 iP     49 50.58  -2.1
CC8      5.30  23 iP     49 50.44  -2.6
FBA      5.53  22 eP     49 54.00  -2.2
GLM      5.68  23 iP     49 55.66  -2.8
PCA      6.19  82 eP     50 02.63  -2.8
IMA      6.26 356 eP     50 05.40  -1.1
       46 obs. assaciated
-------------------------------------------
   FEB  22, 1990  18h 59m 45.19± 0.31s
   11.654 N ± 6.6km    86.622 W ± 4.0km
   DEPTH =  31.9km  (  5 depth phases)
   5.1mb ( 36 abs.)  5.2Msz (  7 abs.)
NEAR COAST OF NICARAGUA            ( 74)
     Felt in Nicaragua and in the
     Liberia area, Costa Rica.
     CENTROID, MOMENT TENSOR     (HRV)
     Data Used: GDSN
     L.P.B.: 11S, 19C
     Centroid Location:
     Origin Time        18:59:46.9 0.5
     Lat 11.36N 0.08 Lon  87.36W 0.08
     Dep  17.8 3.8 Half-duration  2.2
     Moment Tensor;   Scale 10**17 Nm
       Mrr= 1.46 0.08  Mtt=-0.74 0.11
       Mff=-0.72 0.13  Mrt= 1.07 0.39
       Mrf= 0.23 0.27  Mtf= 0.81 0.09
      Principal Axes:
       T  Val=  2.00   Plg=63   Azm=334
       N       -0.32      23       123
       P       -1.68      13       218
     Best Double Couple:Mo=1.8*10**17
      NP1:Strike=336 Dip=38 Slip= 130
      NP2:        109     62       63

QZA      2.97 309 iPc    00 31.10  -0.1
SJAS     3.19 309 eP     00 34.60   0.2
LFU      3.20 311 iPc    00 33.70  -0.8
SSS      3.22 309 eP     00 34.70  -0.1
                eS     01 14.30
VSS      3.29 309 iPc    00 36.70   0.8
TME      3.55 312 iPc    00 38.20  -1.3
YUP      4.00 310 eP     00 44.00  -2.0
QZG      4.00 318 P      00 46.00  -0.1
MYT      4.11 306 P      00 50.00   2.4
CMG2     4.29 314 P      00 49.00  -1.2
REC      4.70 306 P      00 55.00  -0.9
SLP      4.70 311 P      00 56.00   0.0
PCG      4.77 305 P      01 00.00   3.0X
GCG      4.80 308 P      01 01.00   3.7X
MMG      4.88 306 P      00 58.00  -0.6
FUG      4.96 304 P      00 57.00  -2.7
ITG      5.05 306 P      01 01.00   0.0
JAT      5.56 299 P      01 07.00  -0.9
SOG      5.75 303 P      01 10.00  -0.9
SBG      6.31 304 P      01 17.00  -1.9
TPX      6.37 301 eP     01 19.00  -0.3
                iS     02 32.65
UPA      7.46 110 ePc    01 41.00   6.3X
     Z  20s     13.12um
IIT     13.44 304 iP     02 57.30   0.9
PPM     13.72 304 iP     03 02.18   1.8
ACX     13.83 294 eP     03 02.50   1.1
III     14.09 300 iP     03 06.64   1.7
IIC     14.59 305 (P)    03 13.20   1.5
CRX     14.75 303 (P)    03 18.36   4.6X
IIJ     14.96 304 iP     03 19.83   3.2X
MRX     16.14 302 iP     03 32.80   1.4
TOV     16.64  95 eP     03 41.00   3.2X
FISA    16.95  90 eP     03 44.00   2.3
MORO    17.97  91 eP     03 55.00   0.5
CEOS    18.18  97 eP     03 56.00  -1.1
CAR     19.36  91 eP     04 12.00   0.6
LLAV    19.48  92 eP     04 12.00  -0.8
OLLA    19.53  93 eP     04 12.50  -0.8
PRM     22.66   9 P      04 48.00   3.0X
JSC     23.05  11 P      04 52.80   4.1X
PWLA    23.26 357 P      04 52.90   2.1
UYO     23.52 344 iPd    04 54.50   1.1
RSCP    23.86   2 P      04 59.50   2.8
        0.8s   360.58nm          5.9mb
GBTN    24.00   5 P      05 00.60   2.5
TKL     24.04   6 P      05 01.70   3.3X
OLY     24.15 350 P      04 59.90   0.5
MEO     25.47 337 iPd    05 11.60  -0.5
BLA     26.05  11 P      05 20.00   2.5
        1.0s    60.00nm          5.2mb
FVM     26.44 353 eP     05 20.00  -1.0
        1.0s    54.00nm          5.1mb
CVL     27.22  14 P      05 30.00   1.9
ALQ     29.37 325 iPd    05 47.20  -0.7
        1.0s    35.50nm          5.1mb
     Z  18s     3.28um           5.0Msz
                pP     08 54.50
ANMO    29.37 325 eP     05 47.60  -0.3
        1.0s    31.25nm          5.0mb
                e      05 56.50  31km
                ePcP   08 54.90
CLE     30.05   8 iP     05 55.20   1.5
LVNJ    30.86  18 P      06 02.50   1.7
ARE     31.69 152 eP     06 10.00   1.3
DHN     31.91  12 P      06 11.60   1.6
GLD     32.47 333 P      06 16.70   1.5
        1.1s    62.68nm          5.4mb
GOL     32.50 333 eP     06 14.60  -0.9
        0.8s    52.08nm          5.5mb
     Z  20s     2.50um           4.9Msz
                e      06 22.60  28km
                ePcP   09 02.20
ZOBO    33.24 146 P      06 22.00  -0.4
     Z  19s     3.91um           5.1Msz
                i      09 05.00
                LR     16 30.00
PV09    33.43 327 eP     06 23.00  -0.7
                ePcP   09 04.50
LPB     33.47 146 P      06 26.00   1.8
        1.0s    30.00nm          5.2mb
     Z  20s     5.67um           5.3Msz
                LR     17 50.00
GLA     33.49 314 eP     06 25.00   1.1
RSNY    34.39  15 P      06 32.20   0.7
        1.0s    54.23nm          5.4mb
     Z  20s     8.47um           5.5Msz
WNY     34.42  16 P      06 32.50   0.7
BAR     34.61 312 eP     06 34.00   0.4
HBVT    34.62  17 P      06 34.00   0.5
TPC     34.91 315 eP     06 37.00   0.8
PLM     35.09 313 eP     06 38.00   0.1
MSU     35.13 324 P      06 38.20   0.0
RSSD    35.66 338 eP     06 42.80   0.1
                ePcP   09 09.50
RVR     35.79 313 eP     06 46.00   2.4
GSC     36.09 316 eP     06 50.00   3.8X
MWC     36.39 313 eP     06 50.00   1.1
PAS     36.44 313 eP     06 50.00   1.0
SB8     36.47 314 eP     06 49.00  -0.4
BW06    36.86 331 ePc    06 51.90  -0.9
        0.6s    30.00nm          5.3mb
                e      09 13.20
CLC     36.91 316 eP     06 53.00   0.0
ISA     37.43 315 eP     06 49.00  -8.4X
SYP     37.92 312 eP     07 03.00   1.3
TNP     37.93 319 eP     07 01.90   0.1
        0.9s    20.51nm          5.0mb
                e      07 11.70  33km
                ePcP   09 17.20
BCH     38.32 313 eP     07 05.00   0.0
                e      09 19.50
C8M     38.48  20 eP     07 07.30   1.3
FRI     38.97 316 e(P)   07 10.40   0.1
                ePcP   09 20.30
KVN     39.06 320 ePd    07 11.30   0.1
                e      07 20.00  29km
                ePcP   09 20.80
PRI     39.20 314 e(P)   07 13.10   0.7
                ePcP   09 22.10
RSON    39.52 353 eP     07 13.10  -1.5
        1.0s   130.15nm          5.6mb
                e      07 24.00  39km
PRS     39.79 314 e(P)   07 17.70   0.6
                ePcP   09 23.70
CMB     39.98 317 eP     07 19.50   0.8
                ePcP   09 24.00
ARN     40.41 315 P      07 23.10   0.9
MHC     40.48 315 eP     07 24.10   1.2
                ePcP   09 26.10
LRM     40.53 332 eP     07 22.80  -0.5
                e      09 26.40
BKS     41.15 316 eP     07 30.00   1.8
        0.9s    40.00nm          5.1mb
     Z  20s     3.20um           5.2Msz
     N  20s     1.40um
     E  20s     4.30um
                e      19 40.00
                eLR    23 40.00
ORV     41.53 318 eP     07 32.20   0.9
                ePcP   09 29.30
WDC     42.75 319 eP     07 40.00  -1.3
                ePcP   09 32.20
SES     43.52 337 eP     07 47.00  -0.5
        1.0s    38.00nm          5.1mb
NEW     44.49 331 eP     07 53.60  -1.8
        1.1s    23.44nm          5.0mb
                ePcP   09 37.60
FFC     44.64 347 iPc    07 55.70  -0.8
        0.6s    43.00nm          5.5mb
DPW     44.74 330 P      07 56.40  -1.0
SCH     45.81  16 ePc    08 04.60  -1.2
        0.6s    31.00nm          5.4mb
LON     45.87 326 eP     08 05.40  -1.0
                ePcP   09 43.00
PNT     46.41 331 eP     08 10.00  -0.6
EDM     46.65 338 iPc    08 11.00  -1.4
        0.6s    51.00nm          5.7mb
FR8     53.56  10 eP     09 02.00  -3.0
INK     64.20 342 eP     10 16.00  -2.8
        1.1s    60.00nm          5.6mb
PMR     66.89 333 P      10 34.60  -1.6
        1.0s    20.00nm          5.2mb
MBC     66.92 352 eP     10 34.50  -1.7
        0.8s    48.00nm          5.7mb
FBA     67.48 336 P      10 37.70  -2.2
        1.0s    32.50nm          5.4mb
IMA     70.18 336 P      10 55.20  -1.5
        1.0s     8.75nm          4.8mb
DAG     73.72  13 iPd    11 11.00  -6.4X
        0.5s     7.75nm          5.0mb
EKA     76.80  36 P      11 35.00  -0.3
        0.8s     7.40nm          4.8mb
TOL     76.96  52 eP     11 57.00  20.4X
GRR     78.59  43 eP     11 44.30  -1.0
        0.7s    11.00nm          5.0mb
FLN     78.81  42 eP     11 46.30  -0.2
        0.9s    13.10nm          4.9mb
LDF     79.06  42 eP     11 47.20  -0.7
        0.7s     5.50nm          4.7mb
MFF     79.23  44 eP     11 48.00  -0.9
        0.7s     6.60nm          4.7mb
LPO     80.37  46 eP     11 55.10   0.1
        0.8s     6.70nm          4.7mb
TCF     80.88  45 eP     11 57.20  -0.6
        1.0s     8.00nm          4.7mb
ADK     80.98 321 P      11 58.20   0.1
BGF     81.28  44 eP     11 59.10  -0.7
        0.7s     4.40nm          4.6mb
AVF     81.60  44 eP     12 01.40   0.0
SSF     81.66  44 eP     12 01.30  -0.5
LOR     81.87  43 eP     12 02.60  -0.3
SMF     81.95  44 eP     12 02.60  -0.7
        0.7s     3.30nm          4.5mb
HAU     83.42  42 eP     12 10.40  -0.5
NB2     83.67  29 P      12 10.00  -1.9
        0.7s     3.20nm          4.6mb
BSF     83.74  43 eP     12 11.80  -0.9
HFS     85.07  30 eP     12 16.70  -2.2
        0.5s     1.20nm          4.4mb
KHC     87.86  40 P      12 33.00   0.1
SOD     87.97  21 eP     12 33.00   0.0
NUR     90.08  27 iP     12 52.40   9.3X
        0.7s    10.70nm          5.2mb
ZST     90.36  41 eP     12 44.60   0.0
                e      14 07.00 350kmX
SRO     91.26  41 eP     12 34.00 -14.7X
                e      38 56.80
BUL    117.46 107 ePKP   18 27.50  -2.9X
CN2    117.56 334 PKPc   18 30.00   0.3
KRI    118.20 103 iPKPd  18 31.00  -0.9
8JI    124.38 339 ePKP   18 42.50  -0.4
     Z  25s     0.97um          5.4MszX
WMQ    124.55   5 ePKP   18 41.50  -1.7
HHC    125.12 343 PKPc   18 44.60   0.1
KSH    126.64  17 ePKP   18 45.80  -1.7
TIY    127.74 341 ePKP   18 49.80   0.2
     Z  28s     0.90um          5.3MszX
GTA    128.85 354 ePKP   18 50.00  -1.7
     Z  20s     1.00um          5.5Msz
SSE    129.81 329 PKPd   18 54.00   0.4
NJ2    130.17 331 iPKPd  18 54.30   0.1
LZH    131.50 349 ePKP   18 58.00   1.1
                sPKP   19 08.00
XAN    132.22 343 PKPd   18 58.00  -0.2
WHN    133.45 335 ePKP   19 00.50   0.0
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22d 19h

CD2	136.52	347	ePKP	19	06.60	0.2
GKN	139.68	12	PKP	19	07.40	-5.1X
ASPA	139.72	247	iPKPd	19	03.30	-9.2X
	0.9s		4.00nm			
WB5	139.80	253	ePKP	19	03.00	-9.7X
			e	19	13.80	
GUN	140.01	10	PKP	19	04.60	-8.8X
KKN	140.01	11	Pdiff	16	07.00	-20.6X
KKN	140.01	11	PKP	19	06.20	-7.0X
DMN	140.16	11	PKP	19	06.60	-6.9X
PKI	140.25	11	PKP	19	06.20	-7.6X
KMI	142.32	346	ePKP	19	14.00	-3.4X
KNA	145.40	259	ePKP	19	22.00	-0.5
QIZ	145.46	332	PKP	19	22.70	0.2
WARB	145.50	240	ePKP	19	18.00	-4.5X
HYB	147.61	27	ePKPd	19	26.00	-0.1
	0.8s		23.10nm			
COOL	147.97	229	ePKP	19	30.00	3.6X
CHG	149.23	350	iPKPc	19	28.70	0.0
	1.2s		19.92nm			
NWAO	149.55	222	ePKP	19	33.00	4.3X
LOE	149.97	344	ePKP	19	31.00	1.2
KLB	150.00	225	ePKP	19	35.00	5.5X
GBA	150.34	33	PKPd	19	29.60	-0.7
	1.4s		27.40nm			
BDT	150.75	349	ePKP	19	31.80	0.9
	1.1s		249.70nm			
TSM	150.81	301	ePKPc	19	37.70	6.6X
MUN	150.82	223	ePKP	19	31.00	0.3
KKM	151.27	307	ePKP	19	38.70	6.7X
BAL	151.31	225	ePKP	19	37.00	5.5X
KOD	153.11	37	ePKP	19	35.40	0.6
NNT	155.10	345	ePKP	19	38.40	1.3
IPM	162.17	334	ePKPd	19	47.20	1.9
	S.D. = 1.2		on 141 of 173 obs.			

FEB 22, 1990 19h 37m 40.83± 1.23s
51.302 N ± 9.4km 15.751 E ±10.2km
DEPTH = 12.8 ± 3.8 km
POLAND (548)
ML 3.8 (KBA), 4.2 (VKA), 4.1 (GRF).

KSP	0.57	143	iP	37	50.00	-2.2
	0.5s		281.00nm			
			iS	37	58.70	
PRU	1.52	211	ePn	38	08.10	0.3
			Pg	38	10.20	
			Sn	38	27.50	
			Sg	38	34.50	
CLL	1.72	271	iPn	38	09.90	-0.8
	0.6s		48.00nm			
			iPg	38	13.10	
			iSg	38	38.90	
BRL	1.92	308	eP	38	16.00	2.5
BRN	1.94	306	eP	38	16.00	2.3
KHC	2.58	214	iPn	38	23.50	0.4
			eSg	39	10.70	
HOF	2.65	250	iPnc	38	23.90	-0.1
MOX	2.69	257	ePn	38	25.00	0.3
			iPg	38	33.00	
			iSg	39	12.00	
WET	2.84	222	iPnd	38	27.90	1.2
KRA	2.94	113	eP	38	31.50	3.4X
			eS	39	08.40	
VKA	3.06	173	iPnd	38	30.50	0.7
	0.5s		98.60nm			
			iPgd	38	38.40	
			iSg	39	21.70	
ZST	3.23	164	ePn	38	32.20	0.0
	1.2s		0.05nm			
			i	38	40.70	
			e	39	18.10	
			i	39	29.20	
			i	39	48.60	
GRF	3.31	243	ePn	38	33.90	0.5
			ePg	38	46.00	
			e(Sn)	39	26.70	
			eSg	39	34.30	
SPC	3.58	125	ePn	38	45.90	8.6X
			i	39	25.40	
SOP	3.66	171	eP	38	39.00	0.6
BHG	4.04	209	eP	38	46.30	2.6X
FUR	4.28	224	ePn	38	47.80	0.7
KBA	4.51	201	iPnc	38	50.50	-0.1
			i	38	58.90	
			i	40	12.30	
TNS	4.76	260	ePn	38	53.00	-1.0
			eSn	40	19.80	
SCE	5.02	213	ePn	38	53.00	-4.8X
			eSn	40	19.80	
RBL	5.07	197	P	38	58.50	0.1
FVI	5.10	204	P	38	59.50	0.8
ABH	5.42	258	ePn	39	02.15	-1.1
OGA	5.42	217	iPc	39	04.40	1.0
WTS	5.61	281	e(Pn)	39	05.00	-0.9
RUP	5.77	257	ePn	39	07.52	-0.7
CTI	5.92	209	P	39	11.70	1.4
FEL	6.09	239	ePn	39	09.84	-2.9X
MEM	6.20	267	Pc	39	13.20	-0.9
ENN	6.22	269	e(Pn)	39	18.00	3.5X
DOU	7.19	265	P	39	28.20	0.1
PCP	8.31	218	P	39	44.23	0.3
FIN	8.72	218	P	39	49.76	0.2
ROB	8.79	220	P	39	49.66	-0.8
ENR	9.03	222	P	39	52.43	-1.4
	S.D. = 1.1		on 29 of 35 obs.			

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* FEB 22, 1990 22h 00m 57.91± 1.11s
7.522 S ± 8.0km 129.543 E ±11.7km
DEPTH = 104.7 ± 18.5 km
4.8mb (4 obs.)
BANDA SEA (280)

AAI	4.04	341	iPd	01	58.50	-0.2
MTN	5.52	164	iP	02	20.00	0.9
			eS	03	09.00	
KUPT	6.42	246	eP	02	44.00	12.5X
			eS	03	52.50	
KNA	8.21	185	eP	02	55.70	-0.3
	0.3s		56.00nm		5.7mb	
			eS	04	23.00	
WB5	13.15	160	iPd	03	58.80	-3.0X
			eS	06	18.00	
QIS	16.21	144	eP	04	39.50	-1.4
			eS	07	30.00	
MBL	16.49	214	eP	04	44.70	0.4
ASPA	16.59	166	iPc	04	44.60	-1.0
	0.5s		41.00nm		4.9mb	
			eS	07	32.60	
PMG	17.52	97	eP	04	58.00	0.9
WARB	18.76	188	iPc	05	12.60	0.9
CTA	20.45	129	iPd	05	35.00	5.7X
	1.0s		23.50nm		4.5mb	
MEKA	21.68	208	eP	05	46.00	4.5X
CHG	39.94	311	ePc	08	23.50	-0.2
	1.0s		15.00nm		4.8mb	
	S.D. = 1.1		on 9 of 13 obs.			

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* FEB 22, 1990 22h 03m 05.12± 1.73s
15.820 N ±11.5km 147.281 E ±12.4km
DEPTH = 42.8 ± 16.3 km
4.6mb (4 obs.)
MARIANA ISLANDS REGION (215)

GUMO	3.22	227	eP	03	54.50	0.0
PJG	3.22	227	eP	03	54.20	-0.3
GUA	3.22	226	eP	03	55.00	0.4
			eS	04	30.80	
CHJJ	21.46	341	P	07	51.50	-0.4
MTMJ	22.33	340	P	08	00.40	-0.3
PMG	25.07	180	eP	08	16.00	-11.2X
NNT	46.13	272	eP	11	27.20	-0.3
GBA	67.31	278	Pc	13	57.20	-1.0
	0.8s		3.50nm		4.5mb	
INK	71.42	23	eP	14	22.00	-0.6
MBC	75.55	14	eP	14	47.50	0.9
	1.0s		4.00nm		4.3mb	
MAIO	79.06	305	iPd	15	09.00	2.1
EDM	82.98	37	eP	15	27.50	0.4
CLC	84.95	54	eP	15	37.00	-0.5
SBB	85.08	55	eP	15	37.00	-1.1
KEV	85.12	342	eP	15	38.00	0.4
SES	85.21	39	eP	15	39.00	0.5
GSC	85.71	55	eP	15	41.00	-0.3
PLM	86.21	57	eP	15	32.00	-12.0X
SOD	86.57	341	iP	15	45.80	1.0
FFC	88.69	33	iPc	15	55.60	0.4
	1.0s		13.00nm		5.2mb	
NB2	95.78	340	P	16	27.50	-0.5
	0.9s		2.60nm		4.7mb	
KIC	144.60	306	PKP	22	38.88	-0.8
	0.5s		7.50nm			
TIC	144.64	307	PKP	22	38.70	-1.1
LIC	144.91	307	PKP	22	39.86	-0.4
	0.5s		13.00nm			
ZOBO	146.00	96	PKPd	22	44.20	1.5
	1.3s		14.98nm			
LPB	146.04	96	PKP	22	37.00	-5.6X
	S.D. = 0.9		on 23 of 26 obs.			

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* FEB 22, 1990 22h 07m 00.15± 1.40s
24.946 N ±14.1km 93.104 E ± 7.4km
DEPTH = 52.2 ± 12.9 km
5.1mb (7 obs.)
BURMA-INDIA BORDER REGION (294)

LSA	5.04	340	Pnd	08	18.10	2.5
GUN	7.12	296	P	08	45.00	0.4
PKI	7.39	292	P	08	47.80	-0.5
	0.4s		19.00nm		5.2mb	
KKN	7.57	294	P	08	50.00	-0.7
	0.4s		21.00nm		5.3mb	
DMN	7.65	292	P	08	51.00	-0.9
	0.4s		15.00nm		5.1mb	
GKN	8.17	294	P	08	58.20	-0.8
	0.6s		27.00nm		5.3mb	
KMI	8.74	87	eP	09	07.50	0.6
LZH	14.44	37	eP	10	21.50	-1.8
NDI	14.67	288	eP	10	25.00	-1.1
			e	13	03.00	
HYB	15.49	244	eP	10	38.00	1.1
KSH	20.42	319	eP	11	37.90	2.3
BTO	21.06	38	eP	11	41.40	-0.7
QUE	23.74	289	eP	12	04.50	-4.2X
SUF	57.59	330	eP	16	47.00	0.3
NUR	58.03	327	eP	16	30.00	-19.8X
SOD	58.20	335	iP	16	51.40	0.5
HFS	63.47	327	eP	17	25.20	-1.5
	0.4s		4.70nm		4.9mb	
NB2	64.61	328	P	17	33.80	-0.4
	0.6s		2.10nm		4.3mb	
BCAO	74.16	268	iPd	18	33.70	0.2
	0.6s		10.00nm		4.9mb	
INK	80.93	16	eP	19	10.50	0.6
	S.D. = 1.3		on 18 of 20 obs.			

? FEB 22, 1990 22h 20m 45.53± 9.35s
16.576 N ±77.8km 61.103 W ±26.2km
DEPTH = 33.0km (normal)
LEEWARD ISLANDS (92)
ML 2.3 (FDF).

DEG	0.26	171	iPd	20	52.95	0.0
			S	20	56.10	
SFG	0.33	196	ePd	20	53.54	-0.2
			S	20	57.00	
MGG	0.69	197	ePd	20	58.72	0.0
			S	21	05.80	
PAG	0.78	226	eP	21	00.10	0.0
			S	21	08.70	
BBL	1.11	199	eP	21	04.90	0.1
	S.D. = 0.1		on 5 of 5 obs.			

? FEB 22, 1990 22h 37m 11.38± 5.35s
31.330 S ±23.8km 68.533 W ±35.3km
DEPTH = 96.2 ± 50.6 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.05	90	iPc	37	25.00	-0.3
RTCB	0.28	236	eP	37	26.00	0.3
			eS	37	38.00	
CFA	0.37	138	iPc	37	26.50	0.3
			S	37	37.50	
RTCV	0.53	180	iPc	37	27.00	-0.3
RTRS	1.41	325	iPc	37	36.60	0.0
	S.D. = 0.6		on 5 of 5 obs.			

FEB 22, 1990 22h 59m 20.75± 0.41s
35.331 N ± 5.1km 23.142 E ± 3.1km
DEPTH = 5.0km (geophysicist)
4.2mb (9 obs.)
CRETE (370)
ML 3.8 (ATH).

VAM	0.87	85	ePg	59	35.30	-2.6
VLI	1.39	353	ePb	59	47.50	0.7
NPS	2.02	91	iPgd	59	56.80	0.9
ITM	2.09	332	ePb	00	01.70	4.8X
APE	2.60	47	ePn	00	04.60	0.5
			eSn	00	38.90	

ATH	2.68	10	ePn	00	07.00	1.8
KAP	3.30	85	ePn	00	13.60	-0.5
VLS	3.50	325	ePn	00	18.30	1.3
SMG	3.81	50	ePn	00	21.00	-0.3
NEO	3.97	1	ePn	00	26.50	2.9X
IZM	4.50	46	eP	00	34.00	2.8X
PRK	4.64	32	ePn	00	34.00	1.0
PLG	5.04	3	ePn	00	38.50	-0.3
KZN	5.08	348	ePn	00	43.00	3.5X
KEK	5.12	330	ePn	00	43.00	3.1X
KSL	5.30	80	ePn	00	42.00	-0.5
KHL	5.93	58	IP	00	53.00	1.6
VAY	6.00	356	ePn	00	53.00	0.7
OHR	6.06	343	ePn	00	53.20	0.0
RDO	6.10	17	ePn	00	57.80	4.0X
SOI	6.32	298	P	00	57.00	0.2
BCK	6.37	68	eP	00	57.30	-0.4
SKO	6.76	349	ePn	01	02.00	-1.1
ATN	6.78	297	P	01	03.00	-0.4
CZI	6.80	307	P	01	04.00	0.4
TDS	6.92	311	P	01	04.90	-0.4
ORI	7.10	314	P	01	09.00	1.1
MGR	7.69	311	P	01	15.10	-1.0
GIB	7.79	293	P	01	19.00	1.4
SGO	8.09	312	P	01	20.80	-0.9
BBTK	8.86	57	eP	01	33.00	0.5
PRNI	11.14	113	e(P)	01	59.00	-4.8X
MBH	11.35	116	e(P)	02	02.00	-4.5X
SBF	14.79	310	eP	02	58.60	6.2X
	0.7s	9.90nm			4.5mb	
GRF	16.80	332	eP	03	21.00	2.9X
BSF	17.44	321	eP	03	25.60	-0.7
HAU	17.78	321	eP	03	29.50	-1.0
AVF	18.75	314	eP	03	42.00	-0.4
	0.8s	4.05nm			3.7mb	
SSF	18.80	315	eP	03	42.80	-0.3
	0.7s	2.75nm			3.6mb	
BGF	18.94	312	eP	03	43.20	-1.6
	0.7s	4.40nm			3.8mb	
LFF	19.58	306	eP	03	53.10	0.6
MEM	19.68	326	P	03	53.80	0.3
DOU	20.01	323	iPc	03	56.40	-0.5
	0.7s	11.10nm			4.3mb	
LDF	21.68	315	eP	04	13.60	-0.7
	1.1s	17.10nm			4.4mb	
LPF	21.97	313	eP	04	16.30	-0.8
	1.1s	22.00nm			4.5mb	
GRR	22.02	314	eP	04	16.70	-0.9
HFS	25.57	349	eP	04	49.40	-2.5X
	0.7s	2.50nm			4.0mb	
BCAO	31.04	189	ePd	05	41.60	-0.2
	0.4s	6.00nm			4.9mb	
TIC	38.53	229	P	06	46.80	0.8
KIC	38.58	228	P	06	47.20	0.7
LIC	38.87	228	P	06	49.80	1.0

S.D. = 1.0 on 40 of 51 obs.

? FEB 22, 1990 23h 04m 31.10± 0.94s
38.989 N ± 9.8km 112.956 E ±12.7km
DEPTH = 33.0km (normal)
NORTHEASTERN CHINA (658)
ML 3.3 (BJI).

TIY	1.34	198	iPnd	04	54.40	0.7
			iPgd	04	55.20	
			Sg	05	12.60	
HHC	2.14	330	Pn	05	05.50	0.1
			Pg	05	06.80	
			Sg	05	36.20	
BJI	2.70	66	ePn	05	13.00	-0.1
			ePg	05	18.00	
			eSg	05	52.00	
XAN	5.91	215	ePn	05	58.00	-0.7

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

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* FEB 22, 1990 23h 42m 17.84± 0.78s
7.323 N ±11.0km 94.443 E ± 8.3km
DEPTH = 33.0km (normal)
4.6mb (10 obs.)
NICOBAR ISLANDS REGION (704)

SNG	6.13	91	eP	43	46.80	-1.7
			eS	45	56.80	
IPM	7.09	112	ePc	44	02.10	0.1
	0.4s	18.60nm			5.4mb X	
			e	44	09.10	
			e	45	23.90	
NNT	7.38	44	eP	44	05.80	-0.3
CHG	12.23	21	eP	45	14.50	1.8
HYB	18.46	304	eP	46	33.00	-0.1
KMI	19.40	23	eP	46	50.00	5.6X
PKI	21.88	338	P	47	10.00	-0.3
	0.8s	28.00nm			4.7mb	
GUN	22.02	339	P	47	11.20	-0.5
	0.6s	30.00nm			4.9mb	
DMN	22.03	337	P	47	11.80	0.2
	0.6s	14.00nm			4.6mb	
KKN	22.13	338	P	47	12.00	-0.6
	0.6s	14.00nm			4.6mb	
LSA	22.47	352	P	47	19.60	3.4X
GKN	22.57	337	P	47	16.60	-0.2
	0.6s	12.00nm			4.5mb	
CD2	25.03	19	eP	47	45.60	5.0X
XAN	29.76	25	eP	48	24.00	0.3
WRA	47.70	125	Pc	50	55.20	1.5
	0.7s	1.20nm			4.0mb	
ASPA	49.33	130	eP	51	10.10	3.9X
	1.3s	9.00nm			4.6mb	
BCAO	75.49	273	iPd	54	08.90	7.6X
	0.5s	5.00nm			4.8mb	
HFS	79.08	330	eP	54	19.70	-0.6
	0.5s	2.30nm			4.4mb	
NB2	80.36	331	P	54	27.50	0.3
	0.9s	2.90nm			4.3mb	

S.D. = 0.9 on 14 of 19 obs.

& FEB 22, 1990 23h 51m 19.37s
61.621 N 152.025 W
DEPTH = 120.2km
SOUTHERN ALASKA (2)
<AGS-P>.

NCG	0.23	196	iP	51	35.60	0.8
CGLM	0.31	178	iP	51	35.88	0.8
			S	51	49.41	
CRP	0.36	190	iP	51	36.37	-0.7
BGL	0.40	206	iP	51	36.48	-0.7
SKT	0.43	33	iP	51	35.99	-1.2
			eS	51	48.79	
SPU	0.44	182	iP	51	36.43	-0.9
			iS	51	50.02	
CKL	0.45	200	iP	51	36.62	-0.8
			iS	51	51.06	
SUA	0.63	104	iP	51	38.29	-0.4
			iS	51	53.98	
NKA	0.96	156	iP	51	42.59	1.3
			eS	52	00.15	
PWA	1.03	87	iP	51	41.58	-0.3
			iS	51	59.73	
RDT	1.07	190	iP	51	41.98	-0.5
			iS	51	59.44	
CUT	1.14	46	iP	51	42.23	-0.9
			S	51	59.94	
PMS	1.24	107	iP	51	43.82	-0.5
			iS	52	03.11	
RED	1.26	197	iP	51	44.21	-0.3
PLRM	1.38	90	iP	51	44.32	-1.5
SLKM	1.42	141	iP	51	46.73	0.4
GHO	1.49	83	iP	51	45.96	-1.1
KNK	1.72	95	iP	51	48.62	-1.3
HUR	1.76	38	eP	51	49.14	-1.2
SEW	1.98	139	iP	51	52.98	0.0
KTH	2.01	14	iP	51	51.66	-1.8
PDB	2.13	211	iP	51	54.70	-0.2
RND	2.32	38	iP	51	56.13	-1.3

23 obs. associated

FEB 23, 1990 00h 12m 35.59± 0.78s
38.045 N ± 9.5km 29.041 E ± 7.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

KHL	0.47	54	iPg	12	44.30	-0.9
			iSg	12	52.30	
CIN	0.88	240	iPgd	12	51.00	-1.4
			iSg	13	01.00	
YER	1.09	214	iPn	12	54.40	-1.7
ALT	1.31	39	ePn	12	59.90	0.0
BCK	1.36	115	ePn	13	00.80	0.2
IZM	1.44	285	ePn	13	02.40	0.6
DST	1.59	348	ePn	13	06.40	2.5X
SMG	1.78	260	ePb	13	08.10	1.6
KSL	1.97	167	ePb	13	11.00	1.7
PRK	2.48	300	ePn	13	23.50	6.9X

S.D. = 1.5 on 8 of 10 obs.

FEB 23, 1990 01h 27m 42.98± 0.78s
35.262 N ± 8.5km 23.174 E ± 4.9km
DEPTH = 5.0km (geophysicist)
3.8mb (1 obs.)
CRETE (370)
ML 3.7 (ATH).

VAM	0.85	80	ePg	27	57.90	-1.9
VLI	1.47	353	ePb	28	10.50	0.4
NPS	2.00	89	iPnd	28	19.00	1.3
ITM	2.16	333	ePb	28	24.00	3.8X
APE	2.62	46	ePn	28	26.60	-0.2
ATH	2.74	9	ePn	28	28.00	-0.4
KAP	3.28	84	ePn	28	36.00	-0.1
VLS	3.57	325	ePn	28	42.00	1.8
SMG	3.83	49	ePb	28	46.00	2.1
NEO	4.04	1	ePn	28	46.00	-0.8
PRK	4.68	31	ePn	28	55.00	-0.9
PLG	5.11	2	ePn	29	01.50	-0.5
KZN	5.16	348	ePn	29	03.20	0.4
KEK	5.19	330	ePn	29	06.00	2.8X
SRN	5.25	332	ePn	29	04.10	0.1
KSL	5.29	79	ePn	29	03.30	-1.2
LSK	5.29	338	ePn	29	04.70	0.1
KBN	5.67	342	ePn	29	12.00	2.1
BERA	6.00	336	ePn	29	14.10	-0.4
VAY	6.07	356	ePn	29	19.00	3.5X
OHR	6.13	343	ePn	29	13.00	-3.5X
RDO	6.16	17	ePn	29	20.20	3.4X
SOI	6.37	298	P	29	18.60	-1.2
ROI	6.79	311	P	29	24.90	-0.9
ATN	6.84	297	P	29	25.50	-0.9
SKO	6.84	349	ePn	29	25.50	-0.9
CZI	6.86	307	P	29	21.10	-5.6X
TDS	6.99	311	P	29	27.00	-1.5
CSI	7.09	312	P	29	30.80	0.9
ORI	7.17	314	P	29	33.00	2.0
MMN	7.34	311	P	29	34.80	1.4
MGR	7.75	311	P	29	37.50	-1.7
SGO	8.16	313	P	29	44.00	-0.8
KHC	15.56	336	eP	31	35.00	10.4X
HFS	25.64	349	eP	33	11.50	-3.3X
	0.5s	1.00nm			3.8mb	
BCAO	30.97	189	iPd	34	04.20	0.7
	0.6s	10.00nm			4.9mb X	

S.D. = 1.2 on 28 of 36 obs.

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* FEB 23, 1990 01h 28m 53.49± 2.32s
40.694 N ±14.7km 30.176 E ±18.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

GPA	0.42	166	iPg	29	01.40	-0.6
			eSg	29	05.90	
GBZT	0.56	280	ePg	29	05.00	0.1
			iSg	29	14.00	
YLV	0.62	259	iPg	29	05.60	-0.5
ISK	0.92	294	ePg	29	10.80	-0.3
			eSg	29	23.50	
CTT	1.40	289	ePn	29	18.50	-0.5
DST	1.61	228	ePn	29	24.40	2.3
ALT	1.64	182	ePn	29	26.00	3.5X
BNT	1.75	260	ePn	29	24.00	-0.1
EDC	1.80	260	ePn	29	23.10	-1.6
DMK	2.14	303	ePn	29	31.00	1.2

S.D. = 1.3 on 9 of 10 obs.

& FEB 23, 1990 04h 22m 40.97s
64.468 N 146.934 W
DEPTH = 12.5km
CENTRAL ALASKA (1)
<AGS-P>.

HDA	0.06	188	iP	22	43.31	-0.3
CCB	0.42	296	iP	22	49.17	-0.4
WRH	0.50	271	iP	22	50.88	-0.3
GLM	0.56	340	eP	22	51.74	-0.4
FBA	0.57	320	iPc	22	52.10	-0.2
DMW	0.67	128	iP	22	53.63	-0.4
DDM	0.83	145	eP	22	57.06	0.2
			eS	23	07.80	
NEA	0.93	278	iP	22	58.60	0.1
			eS	23	11.47	
MCK	1.15	231	eP	23	02.91	0.7
			S	23	18.60	

23d 04h

RND	1.36	219	iP	23	06.16	0.4
			S	23	24.16	
DOT	1.51	122	eP	23	07.41	-0.3
PAX	1.64	156	eP	23	10.53	0.8
HUR	1.92	220	eP	23	16.83	3.1
KTH	1.98	244	eP	23	14.02	-0.6
			eS	23	43.68	
SDG	2.05	162	eP	23	18.86	3.3
FYU	2.22	18	eP	23	18.67	0.7
TOA	2.40	171	eP	23	24.30	3.7
NCA	2.48	179	eP	23	23.88	2.1
GHO	2.85	199	eP	23	30.78	3.7
PLRM	3.06	200	eP	23	31.14	1.3
PMR	3.06	200	eP	23	32.30	2.5
PWA	3.13	207	eP	23	34.30	3.4
SKT	3.25	222	eP	23	32.50	-0.2
IMA	3.26	303	eP	23	42.00	9.1
DWY	3.30	94	P	23	33.00	-0.4
SUA	3.48	212	eP	23	38.01	2.0
TTA	4.32	253	eP	24	00.30	12.3
INK	6.62	48	eP	24	18.00	-2.2

28 obs. associated

& FEB 23, 1990 04h 41m 30.51s
60.390 N 147.696 W
DEPTH = 4.4km
SOUTHERN ALASKA (2)
<AGS-P>. ML 3.2 (PMR).

HIN	0.59	89	iP	41	42.45	0.1
			eS	41	51.98	
SEW	0.92	253	iP	41	47.32	-1.3
			eS	42	00.28	
CVA	0.98	80	iP	41	48.15	-1.4
			eS	42	02.24	
MID	1.18	144	eP	41	52.10	-1.0
SGAM	1.24	84	iP	41	52.21	-1.8
			eS	42	09.30	
PMS	1.25	314	iPd	41	52.70	-1.6
SLKM	1.26	276	iP	41	52.80	-1.6
			eS	42	09.48	
PLRM	1.39	331	iP	41	54.75	-1.9
			iS	42	13.45	
PMR	1.39	331	iPd	41	54.70	-2.0
RAGM	1.50	89	eP	41	55.67	-2.6
GHO	1.51	337	eP	41	56.80	-1.6
			eS	42	18.15	
PWA	1.65	321	iPd	41	58.30	-2.0
NCA	1.66	14	iP	41	59.43	-1.1
NKA	1.78	283	eP	42	01.85	-0.4
NNL	1.83	261	iP	42	01.39	-1.6
SUA	1.84	307	eP	42	00.98	-2.2
			eS	42	26.24	
TOA	1.87	23	iPd	42	03.20	-0.4
CNPM	1.98	246	eP	42	02.63	-2.5
GLB	2.17	59	iP	42	05.93	-2.0
XLV	2.23	247	eP	42	06.24	-2.6
SPU	2.28	292	iP	42	06.82	-2.7
			eS	42	35.40	
CGLM	2.30	295	iP	42	07.41	-2.5
RDT	2.34	277	eP	42	07.56	-2.8
CRP	2.35	294	iP	42	08.25	-2.4
			eS	42	37.91	
CUT	2.37	330	eP	42	09.22	-1.5
SDG	2.38	25	eP	42	10.02	-0.9
WAX	2.40	86	iP	42	08.01	-3.3
NCG	2.41	297	iP	42	08.70	-2.7
			S	42	39.15	
CKL	2.42	292	iP	42	08.75	-2.8
TGL	2.43	79	iP	42	08.91	-2.8
SKT	2.45	312	iP	42	09.06	-2.8
BGL	2.46	293	eP	42	09.42	-2.7
RED	2.52	273	eP	42	10.05	-2.9
CYK	2.62	94	eP	42	10.67	-3.5
BALM	2.71	74	iP	42	12.84	-2.8
HUR	2.76	341	eP	42	15.23	-1.0
PAX	2.80	21	iP	42	15.73	-1.2
AUE	3.04	253	eP	42	17.98	-2.3
AUL	3.06	253	eP	42	18.37	-2.2
RND	3.08	350	eP	42	19.25	-1.6
PDB	3.31	262	eP	42	21.01	-3.1
CDD	3.35	247	eP	42	22.23	-2.5
MCK	3.41	351	eP	42	24.82	-0.6
DDM	3.52	13	eP	42	25.85	-1.2
KTH	3.52	336	eP	42	25.07	-2.1
KDC	3.63	225	e(P)	42	27.30	-1.2
PCA	3.72	91	eP	42	26.60	-3.4
SVW	3.96	284	eP	42	33.00	-0.3
HDA	4.05	5	eP	42	32.37	-2.1
WRH	4.10	358	eP	42	32.71	-2.5
CCB	4.27	359	eP	42	34.83	-2.9
FBA	4.53	359	eP	42	38.50	-2.8
TTA	4.71	306	eP	42	34.50	-9.6
IMA	6.31	337	e(P)	43	02.70	-3.9

54 obs. associated

FEB 23, 1990 04h 54m 41.18± 1.26s
7.986 N ± 4.7km 126.620 E ± 6.7km
DEPTH = 75.2 ± 11.5 km
5.1mb (19 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV	1.37	229	iPd-	55	05.00	0.1
TSM	9.28	247	ePd	56	55.90	1.3
BAG	10.24	325	eP	57	08.10	0.3
KKM	10.51	260	ePc	57	12.50	1.2
MKS	14.93	209	e(P)	58	14.00	4.5X
QIZ	19.64	306	P	59	06.20	-0.4
MTN	21.18	168	eP	59	22.00	-0.4
KGM	23.95	257	eP	59	52.20	2.6
IPM	25.66	264	ePd	00	08.00	2.1
	0.9s		51.60nm		5.0mb	
SNG	25.79	270	eP	00	04.20	-2.8X
LOE	25.99	294	iPc	00	08.80	-0.1
PMG	26.78	130	eP	00	16.50	0.5
NNT	26.84	282	eP	00	18.50	1.9
BDT	28.44	292	eP	00	32.00	0.9
	0.7s		34.40nm		5.1mb	
KMI	28.45	310	Pd	00	31.00	-0.4
WRA	28.78	165	Pc	00	31.70	-2.4
	0.5s		2.80nm		4.1mb	
CHG	28.95	295	ePc	00	35.90	0.2
	1.0s		22.50nm		4.8mb	
MBL	29.72	193	eP	00	40.60	-1.9
MAT	30.32	19	(P)	00	46.00	-1.7
	0.9s		26.89nm		5.0mb	
XAN	30.64	330	P	00	47.00	-3.6X
QIS	31.11	156	ePc	00	53.50	-1.3
	0.5s		24.00nm		5.2mb	
			i	03	49.00	
CD2	31.25	320	eP	00	53.80	-2.2
ASPA	32.25	167	iPc	01	03.10	-1.7
	0.4s		15.00nm		5.2mb	
			iPcP	03	51.50	
			eS	06	11.00	
			iScP	07	30.50	
			iPcS	07	34.60	
			eScS	11	24.90	
TIY	32.26	339	eP	01	03.20	-1.6
Z	30s		0.60um		4.1MszX	
BJI	33.26	345	eP	01	11.50	-1.8
SNY	33.81	356	eP	01	16.80	-1.3
LZH	34.85	327	eP	01	25.00	-2.3
MEKA	35.28	193	iPd	01	30.30	-0.5
HHC	35.37	340	eP	01	31.00	-0.6
CN2	35.69	359	P	01	33.20	-0.9
MDJ	36.58	4	Pc	01	41.70	0.1
SHL	37.40	302	iP	01	49.00	0.0
			iS	04	06.80	
MRWA	38.38	195	iPd	01	57.10	0.3
COOL	39.00	187	eP	02	01.00	-1.1
GTA	39.46	327	eP	02	05.00	-0.9
BAL	39.53	193	eP	02	06.00	-0.4
LSA	39.66	308	P	02	09.50	1.4
KLB	40.26	192	eP	02	12.00	-0.4
MUN	40.96	194	eP	02	18.00	-0.2
NWAO	41.65	192	eP	02	24.00	0.2
RKG	42.81	192	eP	02	38.30	5.1X
GUN	43.25	303	P	02	37.80	0.4
BRS	43.34	145	iPd	02	37.00	-0.7
			e	02	51.20	
			e	04	24.20	
PKI	43.53	302	P	02	39.40	-0.3
	0.6s		18.00nm		5.1mb	
KKN	43.71	302	P	02	40.60	-0.4
DMN	43.80	302	P	02	41.40	-0.4
	0.8s		30.00nm		5.2mb	
GKN	44.32	302	P	02	45.00	-0.9
BWA	46.96	155	eP	03	07.70	1.2
BFD	47.34	163	eP	03	11.00	1.7
CAN	47.97	155	eP	03	14.80	0.4
GBA	48.57	281	Pc	03	18.40	-0.8
-	0.5s		7.90nm		5.0mb	
DZM	49.15	128	iPd	03	23.80	0.1
POO	52.26	287	iPc	03	45.80	-1.5
MAIO	66.90	306	iPc	05	27.00	-0.9
SVW	77.14	29	eP	06	30.20	2.2
TTA	77.16	27	P	06	29.70	1.4
	0.6s		9.54nm		4.9mb	
BRW	78.20	19	iPc	06	35.50	1.9
KDC	78.43	33	eP	06	36.50	1.4
IMA	78.57	24	iPc	06	37.50	1.6
	0.7s		13.20nm		5.0mb	
PMR	80.29	29	iPc	06	45.70	0.7
	0.7s		24.30nm		5.2mb	
FBA	80.95	26	eP	06	48.80	0.3
TOA	81.69	28	eP	06	54.50	2.0
KEV	85.88	340	eP	07	14.00	0.4
INK	86.27	22	eP	07	16.50	1.0
SOD	86.52	338	eP	07	18.00	1.3
PRNI	87.41	300	eP	07	21.00	-0.9
MBH	87.59	300	eP	07	23.00	0.4
SUF	87.73	333	eP	07	22.00	-0.6
MBC	87.85	13	ePc	07	24.00	1.0
	0.7s		38.00nm		5.6mb	
NUR	88.95	331	iP	07	27.80	-0.7
	0.6s		43.00nm		5.8mb	
DAG	93.06	352	iPc	07	45.80	-1.5
	0.5s		16.20nm		5.7mb	
HFS	94.22	332	eP	07	51.80	-1.1
	0.5s		9.50nm		5.5mb	
NB2	94.95	334	P	07	56.60	0.3
	0.7s		5.00nm		5.1mb	
PNT	99.02	37	eP	08	16.00	1.0
GRF	99.84	323	eP	08	18.80	0.1
			e	08	20.50	
NEW	100.96	38	Pdiff	08	24.50	0.8
	0.8s		4.31nm		5.1mb	
GOL	112.50	41	Pdiff	09	10.00	-5.6X
KIC	129.44	285	PKP	13	44.20	0.3
	0.5s		7.50nm			
TIC	129.63	285	PKP	13	44.42	0.1
LIC	129.75	285	PKP	13	44.70	0.2
	0.5s		8.00nm			
UPA	148.97	58	iPKPd	14	23.50	4.7X
	0.6s		53.33nm			
CCH	164.45	128	PKP	14	41.50	3.2X

S.D. = 1.2 on 75 of 82 obs.

? FEB 23, 1990 04h 54m 49.48± 0.98s
45.140 N ± 7.9km 7.040 E ±10.5km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.1 (GEN).

RSP	0.15	86	P	54	53.42	0.3
			S	54	55.68	
RRL	0.29	220	P	54	55.84	0.3
			S	00	00.08	
LSD	0.33	14	P	54	56.21	-0.2
			S	55	00.50	
PZZ	0.64	176	P	55	01.93	-0.4
			S	55	09.93	

S.D. = 0.6 on 4 of 4 obs.

? FEB 23, 1990 04h 57m 03.97± 1.57s
37.107 N ±17.4km 29.267 E ± 7.5km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

YER	0.79	272	iPn	57	19.30	0.0
CIN	1.06	298	ePg	57	24.00	0.0
			iSg	57	39.00	
BCK	1.11	71	ePn	57	24.90	0.0
KHL	1.23	9	ePn	57	26.90	0.0

S.D. = 0.1 on 4 of 4 obs.

? FEB 23, 1990 04h 58m 14.72±15.61s
27.036 N ±137.km 32.729 E ±49.3km
DEPTH = 10.0km (geophysicist)
ARAB REPUBLIC OF EGYPT (553)
MD 4.0 (HLW).

BADA	2.50	53	eP	58	56.70	0.7
			eS	59	17.30	
KOT	2.99	345	ePn	59	03.00	0.0
			eSn	59	36.50	
HOL	3.03	42	eP	59	03.30	-0.2
AYN	3.42	57	eP	59	08.70	-0.5

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

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* FEB 23, 1990 05h 44m 03.06± 2.71s
11.825 S ±15.3km 166.647 E ±11.5km
DEPTH = 293.8 ± 26.1 km
4.6mb (9 obs.)
SANTA CRUZ ISLANDS (184)

DZM	10.19	181	iP	46	25.00	0.3
			iS	48	18.00	
PMG	19.31	275	eP	48	07.50	-0.8
CTA	21.24	245	iPd	48	28.00	0.8
	0.8s	16.04nm			4.4mb	
RMQ	22.28	227	iPd	48	38.90	1.6
	0.5s	34.00nm			5.0mb	
MNG	29.72	166	eP	49	44.30	-0.2
PGZ	29.91	165	eP	49	44.90	-1.2
	0.6s	36.00nm			5.1mb	
WRA	32.06	251	Pd	50	03.70	-1.3
	0.6s	6.90nm			4.4mb	
ASPA	33.25	245	iPd	50	14.10	-1.2
	0.7s	18.00nm			4.7mb	
MBL	45.70	252	iPd	51	58.10	0.9
	0.3s	7.00nm			4.5mb	
CHTO	73.35	294	iP	55	05.00	-0.1
	1.0s	1.75nm			3.7mb	
TTA	79.92	16	eP	55	41.00	0.4
	0.9s	7.29nm			4.5mb	
PMR	80.98	20	e(P)	55	45.30	-0.7
IMA	83.02	15	eP	55	57.00	0.3
	0.9s	31.25nm			5.1mb	
SBF	143.38	335	ePKP	03	02.60	-1.7
	0.7s	8.80nm				
MFF	143.58	345	ePKP	03	03.60	-0.9
PGF	143.74	332	ePKP	03	04.30	-0.7
	0.7s	4.40nm				
FRF	143.96	335	ePKP	03	04.60	-0.6
	0.7s	8.80nm				
LRG	144.17	335	ePKP	03	05.80	0.2
	0.7s	6.60nm				
LMR	144.20	335	ePKP	03	05.70	0.1
	0.7s	13.25nm				
RJF	144.30	342	ePKP	03	06.50	0.7
CAF	144.47	341	ePKP	03	07.10	1.0
	1.0s	8.00nm				
LFF	144.86	343	ePKP	03	08.10	1.4
LPO	144.96	342	ePKP	03	08.50	1.6
BCAO	147.62	260	iPKPd	03	17.00	4.8X
	0.5s	13.00nm				

S.D. = 1.0 on 23 of 24 obs.

% FEB 23, 1990 05h 53m 45.61± 3.52s
41.716 N ±24.0km 12.703 E ±18.5km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

RDP	0.04	14	Pd	53	47.90	0.1
			eSg	53	49.00	
RMP	0.09	360	P	53	48.30	0.0
			eSg	53	49.50	
AZI	0.61	63	P	53	57.80	-0.1
			eSg	54	09.90	
AQU	0.82	39	P	54	01.60	0.0
			eSg	54	16.00	
SDI	0.83	90	P	54	01.80	0.0
			eSg	54	14.70	
ASS	1.35	359	Pd	54	10.40	-0.1

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

& FEB 23, 1990 07h 00m 49.24s
60.412 N 152.118 W
DEPTH = 77.7km
SOUTHERN ALASKA (2)
<AGS-P>.

RDT	0.22	319	iP	01	00.56	-0.5
			iS	01	09.90	
RED	0.32	272	iP	01	01.27	-0.4
			eS	01	10.92	
NKA	0.55	52	eP	01	04.53	1.2
NNL	0.55	132	iP	01	03.98	0.5
SPU	0.77	2	iP	01	05.05	-0.7
			eS	01	17.63	
CKL	0.79	352	iP	01	05.32	-0.8
CRP	0.86	359	iP	01	06.29	-0.6
			S	01	18.91	
BGL	0.86	351	iP	01	06.23	-0.7
CGLM	0.90	3	iP	01	06.66	-0.7
			eS	01	21.45	
SLKM	0.94	83	iP	01	06.75	-1.0
			eS	01	21.22	
XLV	0.98	168	eP	01	07.41	-0.8
			eS	01	22.13	
CNPM	0.99	153	eP	01	07.69	-0.7
			eS	01	22.44	
NCG	1.00	359	iP	01	07.64	-0.8
			S	01	23.92	
PDB	1.21	240	iP	01	10.05	-1.0
			eS	01	26.37	
AUL	1.23	213	eP	01	10.74	-0.6
AUE	1.23	211	eP	01	10.57	-0.7
SUA	1.25	32	iP	01	11.07	-0.6
			eS	01	27.69	
SEW	1.37	102	iP	01	11.47	-1.6
PMS	1.51	55	eP	01	14.06	-0.9
			eS	01	33.28	
SKT	1.60	10	iP	01	14.92	-1.3
PWA	1.65	40	eP	01	15.79	-1.1
CDD	1.68	208	iP	01	16.38	-0.9
PLRM	1.88	50	eP	01	18.29	-1.6
GHO	2.07	47	iP	01	20.91	-1.7
			eS	01	45.16	
CUT	2.19	23	eP	01	23.00	-1.2
NCA	3.01	56	eP	01	33.38	-2.3
TOA	3.34	57	eP	01	38.57	-1.6
RND	3.38	26	eP	01	39.72	-1.1
PAX	4.08	48	eP	01	48.66	-1.9

29 obs. associated

% FEB 23, 1990 07h 03m 43.06± 1.83s
41.687 N ±17.4km 12.647 E ± 7.5km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

RDP	0.09	36	P	03	46.40	0.7
			eSg	03	49.00	
RMP	0.13	19	P	03	48.10	1.9X
			eSg	03	50.10	
AZI	0.66	63	P	03	55.80	-0.4
			eSg	04	04.70	
AQU	0.87	40	P	04	00.00	0.1
			eSg	04	11.90	
SDI	0.88	88	Pd	03	59.90	0.0
			eSg	04	12.40	
MAO	1.33	304	P	04	07.70	0.1
ASS	1.38	0	P	04	08.10	-0.3

S.D. = 0.5 on 6 of 7 obs.

FEB 23, 1990 07h 11m 54.23± 0.91s
37.101 N ± 8.6km 29.243 E ± 7.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

YER	0.77	273	iPg	12	09.60	0.3
			eSg	12	24.00	
KSL	1.02	164	ePn	12	13.00	-0.5
CIN	1.05	299	ePg	12	14.00	0.0
			iSg	12	28.00	
BCK	1.13	71	ePn	12	15.90	0.4
KHL	1.24	10	ePn	12	15.50	-1.8
SMG	2.01	288	ePn	12	25.00	-3.5X
ALT	2.07	19	ePn	12	31.00	1.5
KAP	2.28	228	ePb	12	46.00	13.6X

S.D. = 1.4 on 6 of 8 obs.

% FEB 23, 1990 07h 20m 35.00± 2.56s
35.480 N ±26.3km 23.499 E ±18.1km
DEPTH = 10.0km (geophysicist)
CRETE (370)
MD 3.7 (ATH).

VAM	0.58	97	ePg	20	46.00	-0.7
			eSg	20	56.50	
VLI	1.32	340	ePb	20	57.80	-1.5
NPS	1.74	97	ePb	21	06.30	0.8
ITM	2.12	324	ePn	21	12.00	1.1
APE	2.28	45	ePg	21	14.70	1.4
KAP	3.00	88	ePn	21	23.00	-0.4
KSL	4.99	81	ePn	21	51.00	-0.6

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

? FEB 23, 1990 08h 01m 59.24± 5.89s
51.581 N ±37.5km 16.165 E ±35.5km
DEPTH = 10.0km (geophysicist)
POLAND (548)
ML 3.6 (KBA).

KSP	0.74	174	iP	02	13.70	-0.1
	0.2s	179.00nm				
			i	02	16.30	
			iS	02	23.00	
			i	02	27.20	
PRU	1.90	213	Pn	02	31.80	-0.2
			Pg	02	34.00	
			iSn	02	50.50	
			Sg	02	57.20	
CLL	2.00	263	iPn	02	32.80	-0.6
			iPg	02	36.00	
			iSg	03	02.00	
KHC	2.96	215	ePg	02	53.00	5.8X
			eSn	03	24.00	
			Sg	03	32.00	
HOF	2.99	247	iPnc	02	47.30	-0.3
MOX	3.02	254	ePn	02	49.00	1.1
			ePg	02	56.00	
			iSg	03	35.00	
WET	3.22	222	ePn	02	50.50	-0.4
ZST	3.44	170	eP	03	52.20	58.2X
GRF	3.67	241	e(Pg)	02	57.30	0.0
			eSg	03	55.20	
KBA	4.87	203	iPnd	03	14.70	0.3
			iSn	04	08.00	
			iSg	04	35.30	
			i	04	39.70	

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

? FEB 23, 1990 09h 00m 43.69± 1.06s
39.144 N ± 9.2km 27.579 E ±17.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZM	0.78	198	ePg	00	59.00	0.0
			eSg	01	11.00	
DST	0.93	60	iPn	01	01.60	0.0
EDC	1.22	10	ePn	01	07.10	0.7
BNT	1.24	12	ePn	01	06.00	-0.7

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

& FEB 23, 1990 09h 10m 37.38s
60.205 N 153.224 W
DEPTH = 144.5km
3.8mb (1 obs.)
SOUTHERN ALASKA (2)
<AGS-P>.

RED	0.31	46	iP	10	56.80	0.8
RDT	0.55	47	iP	10	57.93	-0.8
PDB	0.64	230	iP	10	57.94	-1.2
			eS	11	13.95	
AUL	0.83	187	iP	10	59.83	-0.7
			eS	11	17.28	
AUE	0.85	185	iP	10	59.77	-0.9
NNL	0.98	99	iP	11	01.69	0.0
XLV	1.07	134	iP	11	01.53	-1.0
			eS	11	20.57	
CKL	1.09	23	iP	11	02.25	-0.6
NKA	1.12	60	iP	11	03.66	0.7
SPU	1.14	30	iP	11	02.38	-0.8
			eS	11	21.99	
BGL	1.14	21	iP	11	02.92	-0.4
CRP	1.19	26	iP	11	03.24	-0.6
CNPM	1.21	123	iP	11	03.28	-0.6
			eS	11	23.12	
BRLK	1.26	110	eP	11	03.65	-0.7
			eS	11	24.18	
CGLM	1.26	28	iP	11	03.63	-0.8
CDD	1.30	190	iP	11	03.42	-1.3
NCG	1.31	23	iP	11	04.42	-0.6
SVW	1.49	309	iPc	11	05.10	-1.7
SLKM	1.52	77	iP	11	05.67	-1.5
SUA	1.75	43	iP	11	08.77	-1.0
SEW	1.89	91	eP	11	09.83	-1.4
SKT	1.96	24	iP	11	11.12	-1.0
PMS	2.08	58	iPc	11	11.80	-1.8
PWA	2.18	47	iPc	11	13.00	-1.8
PLRM	2.44	53	iP	11	15.17	-2.7
			eS	11	45.39	
PMR	2.44	53	iPc	11	15.30	-2.6
KDC	2.49	171	iP	11	15.70	-2.9
GHO	2.62	51	iP	11	17.84	-2.5
CUT	2.63	32	eP	11	18.77	-1.5
			eS	11	51.54	
TTA	3.04	335	iPc	11	23.70	-2.0
HUR	3.27	30	eP	11	26.92	-1.7

23d 09h

HIN	3.35	84	eP	11	28.05	-1.6
			S	12	06.88	
KTH	3.53	17	iP	11	30.24	-1.9
MID	3.56	100	ePc	11	30.90	-1.5
NCA	3.59	57	iP	11	30.47	-2.3
CVA	3.73	81	iP	11	32.94	-1.6
RND	3.82	31	iP	11	34.13	-1.8
TOA	3.91	58	eP	11	35.21	-1.9
SGAM	3.99	82	iP	11	36.40	-1.7
MCK	4.08	28	eP	11	37.73	-1.5
			S	12	20.95	
RAGM	4.26	84	eP	11	39.90	-1.8
PAX	4.63	50	iP	11	44.72	-1.9
			eS	12	36.08	
GLB	4.77	71	iP	11	46.28	-2.3
NEA	4.79	22	eP	11	46.46	-2.3
WRH	4.90	27	eP	11	47.82	-2.4
DDM	4.99	41	iP	11	50.88	-0.6
			eS	12	46.53	
CCB	5.12	27	iP	11	50.40	-2.7
			eS	12	47.56	
HDA	5.13	32	iP	11	50.92	-2.3
			eS	12	48.51	
WAX	5.16	83	eP	11	51.95	-1.8
TGL	5.17	79	iP	11	52.39	-1.6
SNH	5.18	86	eP	11	52.86	-1.2
DMW	5.22	39	eP	11	52.70	-1.8
FBA	5.34	26	iPc	11	53.60	-2.5
BALM	5.42	76	iP	11	55.90	-1.4
GLM	5.50	27	eP	11	55.72	-2.6
			eS	12	56.45	
IMA	5.89	358	iPc	12	01.60	-2.0
SDN	6.24	222	eP	12	04.30	-3.8
PCA	6.48	85	iP	12	09.87	-1.7
DWY	7.52	53	P	12	23.50	-2.0
SIT	9.85	101	eP	12	54.50	-1.9
INK	11.74	38	eP	13	19.00	-2.2
MBC	19.88	23	eP	14	58.50	-0.2
	0.5s		2.00nm			3.8mb
	62 obs. associated					

? FEB 23, 1990 09h 44m 28.71±26.56s
36.046 N ±99.9km 51.593 E ±145.km
DEPTH = 10.0km (geophysicist)
IRAN (348)

TEH	0.35	209	eP	44	36.00	0.0
IR2	0.68	236	eP	44	42.50	0.2
IR7	0.87	247	eP	44	45.50	0.0
IR1	0.97	230	eP	44	47.00	-0.2
IR4	0.98	215	eP	44	47.50	0.0
S.D. = 0.2			on	5 of	5 obs.	

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* FEB 23, 1990 10h 43m 48.32± 1.20s
27.959 N ± 8.5km 139.939 E ±13.5km
DEPTH = 505.8 ± 15.7 km
4.0mb (9 obs.)
BONIN ISLANDS REGION (212)

MAT	8.68	351	(P)	45	53.00	-0.1
	0.8s		26.12nm			4.6mb
			(S)	47	35.00	
CHTO	38.56	265	iP	50	28.20	-0.1
	1.0s		4.00nm			3.9mb
GUN	47.42	283	P	51	39.20	0.7
WB5	47.86	187	eP	51	41.30	0.0
PKI	47.90	283	P	51	42.00	-0.1
WRA	47.93	187	Pc	51	42.10	0.3
	0.3s		1.80nm			4.0mb
KKN	47.96	283	P	51	42.60	0.2
	0.8s		14.00nm			4.5mb
DMN	48.15	283	P	51	44.00	0.0
	0.4s		6.00nm			4.4mb
GKN	48.46	284	P	51	46.00	-0.2
ASPA	51.65	187	iPd	52	09.40	-0.1
	0.6s		4.00nm			4.0mb
GBA	59.59	270	Pc	53	04.40	-0.6
	0.7s		2.90nm			3.8mb
SUF	75.55	334	eP	54	42.00	0.7
NUR	77.39	333	eP	54	37.00	-14.4X
HFS	81.84	336	eP	55	14.00	-0.6
	0.4s		1.20nm			3.8mb
NB2	82.06	337	P	55	15.80	0.0
	0.7s		2.10nm			3.8mb
S.D. = 0.4			on	14 of	15 obs.	

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* FEB 23, 1990 10h 50m 59.32± 0.61s
28.303 S ± 9.1km 62.988 W ±12.1km
DEPTH = 598.7 ± 8.1 km
4.6mb (10 obs.)
SANTIAGO DEL ESTERO PROV., ARG. (132)

SLA	4.21	327	iPd	52	26.20	-0.6
MRA	4.72	209	iPd	52	30.10	-0.3
RFA	7.96	215	ePd	52	59.60	0.8
ANT	8.10	303	iP	52	58.80	-1.2
LPB	12.63	337	Pc	53	47.00	2.3
	0.8s		17.91nm			4.4mb
			S	55	56.00	
SPA	61.86	180	iPd	00	23.20	0.0
	1.0s		15.50nm			4.3mb
JSC	64.60	343	P	00	40.00	-0.6
PRM	64.70	342	P	00	40.30	-1.0
LIC	65.53	68	Pd	00	46.62	-0.2
	0.5s		14.00nm			4.6mb
TIC	65.77	67	P	00	48.12	-0.2
	0.3s		10.00nm			4.8mb
KIC	65.84	68	Pd	00	48.75	0.0
	0.4s		21.50nm			4.9mb
GBTN	66.70	341	P	00	52.20	-1.4
ANMO	75.12	324	P	01	43.40	0.7
	0.6s		2.08nm			3.8mb
GLD	78.29	328	P	02	03.00	3.3X
	0.8s		33.82nm			4.8mb
GOL	78.32	328	P	02	00.00	0.0
	1.0s		10.00nm			4.2mb
MSU	80.81	323	P	02	13.60	0.7
BUL	82.05	108	iPc	02	19.00	-0.5
	1.0s		35.00nm			4.8mb
IMW	84.20	327	P	02	30.00	0.2
KVN	84.45	320	P	02	31.20	0.2
BCAO	84.64	82	ePd	02	33.90	1.7
	0.5s		7.00nm			4.5mb
LBFM	88.14	320	P	02	48.90	0.4
TNS	100.44	38	ePdiff	03	28.30	-15.7X
SCE	100.66	42	ePdiff	03	28.30	-16.9X
WRA	129.20	201	PKPc	09	02.50	0.2
	0.3s		1.40nm			
WB5	129.25	201	ePKP	09	02.00	-0.4
GBA	140.45	103	PKPc	09	17.10	-6.3X
	0.5s		1.20nm			
HYB	143.09	99	ePKP	09	27.00	-1.0
S.D. = 0.9			on	23 of	27 obs.	

% FEB 23, 1990 11h 40m 38.88± 1.01s
39.126 N ± 8.4km 27.607 E ±10.4km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZM	0.78	200	ePg	40	54.00	0.0
			eSg	41	05.00	
DST	0.93	58	iPg	40	56.70	0.1
			eSg	41	10.70	
EZN	1.21	306	ePn	41	02.00	0.5
BNT	1.25	11	ePn	41	03.00	0.8
MFT	1.68	352	ePn	41	07.00	-1.5
S.D. = 1.3			on	5 of	5 obs.	

? FEB 23, 1990 11h 56m 08.66± 0.99s
39.322 N ± 8.2km 27.637 E ±12.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

DST	0.82	69	iPg	56	24.70	0.2
			eSg	56	34.70	
IZM	0.97	198	ePg	56	27.00	-0.1
			eSg	56	43.00	
BNT	1.06	12	ePn	56	28.00	-0.6
MFT	1.49	350	ePn	56	36.00	0.5
S.D. = 0.8			on	4 of	4 obs.	

& FEB 23, 1990 12h 08m 47.31s
63.233 N 149.543 W
DEPTH = 90.3km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.26	189	eP	09	00.56	-0.2
			eS	09	10.80	
RND	0.36	61	eP	09	01.17	-0.2
			eS	09	12.12	
MCK	0.57	28	eP	09	02.83	-0.1
KTH	0.70	298	eP	09	03.76	-0.4
			eS	09	15.76	
CUT	0.90	202	eP	09	05.84	-0.3
NEA	1.37	8	eP	09	10.80	-1.0
WRH	1.40	27	eP	09	11.20	-1.0
GHO	1.49	169	eP	09	13.75	0.3
			eS	09	34.61	
SKT	1.56	217	eP	09	13.33	-0.9
PWA	1.60	186	eP	09	14.93	0.2
CCB	1.61	28	eP	09	13.71	-1.2
HDA	1.64	43	eP	09	14.32	-1.0
PLRM	1.66	173	eP	09	15.49	0.0
DDM	1.74	70	eP	09	16.90	0.2
NCA	1.77	133	eP	09	17.18	0.2
FBA	1.84	24	eP	09	16.86	-1.1
SUA	1.86	198	eP	09	18.43	0.1
PAX	1.87	96	eP	09	18.96	0.5
DMW	1.89	62	eP	09	18.36	-0.2
TOA	1.92	125	eP	09	19.37	0.3
PMS	2.00	180	eP	09	20.78	0.7
GLM	2.00	27	eP	09	18.90	-1.2
NCG	2.20	215	eP	09	22.09	-0.8
CGLM	2.25	212	eP	09	23.12	-0.4
CRP	2.32	213	eP	09	24.00	-0.5
SPU	2.37	211	eP	09	24.47	-0.7
BGL	2.38	215	eP	09	25.75	0.4
CKL	2.43	214	eP	09	26.03	0.1
NKA	2.62	199	eP	09	31.34	2.9
SLKM	2.75	187	eP	09	30.38	0.1
RDT	2.99	208	eP	09	34.05	0.4
SEW	3.14	179	eP	09	35.04	-0.5
GLB	3.22	121	eP	09	35.76	-1.0
CNPM	3.81	193	eP	09	43.91	-0.9
BALM	4.03	120	eP	09	46.43	-1.6
35 obs. associated						

? FEB 23, 1990 12h 43m 16.03± 1.13s
32.834 S ±21.9km 150.693 E ±37.5km
DEPTH = 10.0km (geophysicist)
NEW SOUTH WALES, AUSTRALIA (601)
ML 3.0 (CNB), 2.4 (COO). Felt at Newcastle.

COO	2.47	25	e(P)	43	57.00	0.0
			eS	44	27.00	
BWA	2.47	229	eP	43	57.20	0.1
CNB	2.71	204	e(P)	44	01.00	0.5
			iS	44	42.30	
CAN	2.85	209	eP	44	01.80	-0.7
			eS	44	48.80	
S.D. = 0.8			on	4 of	4 obs.	

? FEB 23, 1990 13h 22m 32.41± 6.81s
32.018 S ±41.1km 70.162 W ±42.7km
DEPTH = 10.0km (geophysicist)
CHILE-ARGENTINA BORDER REGION (127)

RTCB	1.28	66	eP	22	56.70	0.5
			eS	23	13.00	
RTCV	1.39	84	eP	22	58.70	0.8
			eS	23	15.50	
RTLL	1.60	65	iP	22	59.80	-1.0
CFA	1.69	76	iPc	23	01.50	-0.6
			S	23	20.00	
RTRS	1.94	18	iPd	23	05.90	0.2
			iS	23	28.40	
S.D. = 1.1			on	5 of	5 obs.	

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* FEB 23, 1990 14h 25m 18.39± 0.87s
29.321 N ± 9.1km 90.114 E ± 9.2km
DEPTH = 10.0km (geophysicist)
4.3mb (2 obs.)
TIBET (306)

GUN	3.98	250	P	26	21.40	0.3
SHL	4.06	157	iP	26	21.40	-0.6
			iS	27	14.00	
PKI	4.49	248	P	26	28.20	-0.2
KKN	4.52	251	P	26	28.20	-0.4
DMN	4.73	250	P	26	31.40	-0.3
GKN	4.99	256	P	26	34.30	-0.9
HYB	15.89	224	eP	29	05.50	1.7
SUF	52.48	329	eP	34	33.00	-0.3
KEV	53.54	337	eP	34	52.00	11.0X
HFS	58.37	325	eP	35	16.20	0.3
	0.7s		2.80nm			4.4mb
NB2	59.51	326	P	35	24.20	0.3
	0.7s		1.60nm			4.3mb
S.D. = 0.8			on	10 of	11 obs.	

? FEB 23, 1990 15h 10m 22.35±13.01s
1.178 S ±85.0km 78.280 W ±26.7km
DEPTH = 10.0km (geophysicist)
ECUADOR (107)

VC1	0.55	347	P	10 33.60	0.0
QUR	1.03	346	iPd	10 42.20	0.1
			e(S)	10 54.00	
GGP	1.05	342	iPd	10 42.40	-0.1
			eS	10 56.50	
CAYA	1.28	13	P	10 46.50	0.0
			eS	11 01.00	

S.D. = 0.1 on 4 of 4 obs.

? FEB 23, 1990 15h 13m 19.36± 4.39s
1.740 N ±35.7km 123.720 E ±52.6km
DEPTH = 33.0km (normol)
4.8mb (2 obs.)
MINAHASSA PENINSULA (265)

MTN	16.25	153	eP	17 07.00	0.1
KNA	18.08	164	iPd	17 30.50	0.7
WB5	23.89	155	eP	18 30.20	-0.9
WRA	23.94	155	P	18 32.00	0.4
	0.3s		8.10nm		4.7mb
PMG	25.84	116	eP	18 50.00	0.3
QIS	27.08	146	iPd	18 59.80	-1.3
ASPA	27.13	159	iPd	19 00.70	-0.8
	0.5s		13.00nm		4.8mb
BWA	42.80	149	eP	21 17.20	1.3
CAN	43.80	150	eP	21 24.20	0.2

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

FEB 23, 1990 15h 22m 23.07± 0.45s
37.191 N ± 4.7km 22.880 E ± 4.6km
DEPTH = 10.0km (geophysicist)
3.8mb (1 obs.)
SOUTHERN GREECE (368)
MD 3.3 (ATH).

VLI	0.47	174	ePg	22 32.00	-0.7
ITM	0.76	269	iPgc	22 37.50	-0.5
ATH	1.02	40	ePn	22 44.00	1.6
VLS	2.07	299	ePg	23 04.00	5.8X
VAM	2.08	149	ePn	22 59.00	0.6
APE	2.12	93	ePn	22 58.20	-0.9
NEO	2.13	7	ePn	22 59.00	-0.2
NPS	2.93	130	ePb	23 12.00	1.4
SMG	3.19	79	ePn	23 14.00	-0.2
PLG	3.21	B	ePn	23 13.80	-0.7
KZN	3.23	345	ePn	23 16.00	1.1
PRK	3.37	51	ePn	23 16.00	-0.8
KEK	3.49	317	ePn	23 20.00	1.5
VAY	4.13	357	ePn	23 27.40	-0.1
OHR	4.24	338	ePn	23 29.10	0.0
SKO	4.90	347	ePn	23 44.00	5.5X
SOI	5.49	281	P	23 46.80	0.0
ATN	5.96	282	P	23 54.00	0.5
MGR	6.44	299	P	24 00.10	-0.2
NUR	23.36	2	eP	27 32.00	-0.2
SLL	24.09	348	eP	27 37.00	-2.3
	0.4s		1.10nm		3.8mb

S.D. = 1.0 on 19 of 21 obs.

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* FEB 23, 1990 15h 23m 05.97± 2.40s
7.613 N ±14.7km 94.393 E ±13.3km
DEPTH = 67.7 ± 21.8 km
4.5mb (10 obs.)
NICOBAR ISLANDS REGION (704)

SNG	6.19	94	eP	24 38.40	1.6
NNT	7.22	46	eP	24 49.00	-2.1
IPM	7.25	114	ePc	24 45.60	-6.0X
			e	26 05.90	
CHG	11.98	21	eP	25 56.80	0.8
CHTO	11.98	21	eP	25 56.30	0.3
	0.9s		1.71nm		4.0mb
SHL	18.01	353	eP	27 20.00	6.5X
HYB	18.26	304	eP	27 16.00	-0.5
PKI	21.60	338	P	27 52.80	0.4
	0.8s		26.00nm		4.7mb
GUN	21.74	339	P	27 53.40	-0.4
	0.6s		29.00nm		4.9mb
DMN	21.75	337	P	27 54.20	0.4
	0.8s		24.00nm		4.7mb
KKN	21.84	338	P	27 54.40	-0.3
	0.7s		16.00nm		4.5mb
GKN	22.28	337	P	27 59.00	0.0
	0.7s		15.00nm		4.5mb
WRA	47.91	126	Pd	31 38.50	-1.2
	0.9s		1.50nm		3.9mb
SUF	73.37	333	iP	34 33.10	0.9
	0.6s		4.70nm		4.6mb
HFS	78.81	330	eP	35 03.00	0.2
	0.4s		1.60nm		4.3mb
NB2	80.08	331	P	35 09.60	-0.1
	0.8s		3.10nm		4.3mb

S.D. = 1.0 on 14 of 16 obs.

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* FEB 23, 1990 15h 40m 16.43± 1.72s
7.376 N ±10.8km 94.513 E ± 9.8km
DEPTH = 44.1 ± 19.2 km
4.6mb (8 obs.)
NICOBAR ISLANDS REGION (704)

SNG	6.06	91	eP	41 46.30	0.4
	0.9s		109.24nm		5.4mb
IPM	7.05	113	ePd	41 59.00	-0.7
	0.8s		51.60nm		5.4mb
			e	43 16.90	
NNT	7.30	44	eP	42 02.50	-0.7
CHG	12.16	20	eP	43 11.00	1.1
CHTO	12.16	20	eP	43 10.00	0.2
	0.9s		3.41nm		4.4mb
GBA	17.89	292	P	44 26.00	2.2
	0.9s		5.00nm		3.6mb
SHL	18.26	352	eP	44 28.00	-0.6
HYB	18.49	304	eP	44 30.00	-1.3
KMI	19.32	23	eP	44 46.00	4.8X
	Z 15s		0.50um		
PKI	21.86	338	P	45 07.60	0.0
GUN	22.00	339	P	45 08.00	-1.0
	0.6s		24.00nm		4.8mb
DMN	22.01	337	P	45 09.10	0.1
KKN	22.11	338	P	45 09.00	-0.9
	0.6s		10.00nm		4.4mb
GKN	22.54	337	P	45 13.20	-1.0
CD2	24.96	19	P	45 39.40	2.0
WRA	47.68	125	Pd	48 50.90	0.1
	0.6s		3.40nm		4.5mb
ZST	76.15	318	eP	52 06.80	5.2X
SLL	79.28	330	eP	52 18.70	0.1
	0.5s		2.80nm		4.5mb

S.D. = 1.2 on 16 of 18 obs.

% FEB 23, 1990 15h 46m 09.94± 2.12s
16.415 N ±20.7km 98.977 W ±10.2km
DEPTH = 33.0km (normol)
NEAR COAST OF GUERRERO, MEXICO (58)

ACX	0.96	298	iP	46 27.00	-0.1
			(S)	46 55.00	
III	2.01	347	iP	46 42.50	0.2
			(S)	47 24.50	
OXX	2.26	73	iP	46 46.00	0.1
			iS	47 17.00	
PPM	2.66	7	iP	46 52.50	0.6
			(S)	47 39.50	
IIT	2.67	14	iP	46 51.00	-0.8
			(S)	47 10.00	
CRX	3.05	347	(P)	47 09.00	11.7X
IIJ	3.38	348	(P)	47 14.00	11.9X
MRX	3.89	328	(P)	47 29.00	20.1X
			(S)	48 36.00	

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

FEB 23, 1990 16h 51m 19.82± 0.49s
37.557 N ± 5.3km 21.252 E ± 4.3km
DEPTH = 33.0km (normol)
4.0mb (1 obs.)
SOUTHERN GREECE (368)
MD 3.6 (ATH).

ITM	0.66	125	ePn	51 33.00	0.3
VLI	1.59	121	ePb	51 48.00	2.4
ATH	2.00	77	ePn	51 53.00	1.1
NEO	2.33	41	ePn	51 57.20	0.5
KEK	2.43	333	ePn	51 59.00	0.9
LSK	2.64	349	iPnc	52 02.10	1.0
KZN	2.78	B	iPnd	52 04.60	1.6
TPE	2.90	341	ePn	52 03.50	-1.2
KBN	3.08	354	ePn	52 08.30	1.1
VAM	3.20	131	ePn	52 09.00	0.0
PLG	3.29	31	ePn	52 10.00	-0.3
BERA	3.30	343	ePn	52 10.70	0.4
APE	3.45	97	ePn	52 10.00	-2.5
OHR	3.57	354	iPn	52 14.20	0.0
LCI	3.78	318	P	52 16.40	-0.7
			eSn	52 56.50	
VAY	3.90	15	iPn	52 19.00	0.2
TIR	3.93	345	ePn	52 19.00	-0.3
SOI	4.15	279	P	52 24.00	1.6
PHP	4.17	352	ePn	52 21.20	-1.5
ROI	4.18	300	P	52 23.50	0.5
CZI	4.35	294	P	52 26.10	0.8
			eSn	53 13.40	
TDS	4.38	300	P	52 25.50	-0.3
SKO	4.41	2	ePn	52 25.00	-1.2
			i	52 39.00	
			eSn	53 12.00	
CSI	4.47	301	P	52 28.50	1.4
			eSn	53 11.00	
ORI	4.51	305	P	52 28.00	0.4
PUK	4.60	347	ePn	52 27.50	-1.3
ATN	4.62	279	P	52 28.70	-0.5
			eSn	53 16.50	
MMN	4.73	301	P	52 32.40	1.8
BCI	4.89	350	ePn	52 32.50	-0.4
MEU	5.06	267	P	52 33.20	-2.3
			eSn	53 29.20	
MGR	5.14	302	P	52 35.60	-0.9
			eSn	53 31.40	
SGO	5.51	305	P	52 41.80	0.1
			eSn	53 37.50	
VOY	10.09	329	eP	53 41.00	-4.5X
			eS	55 31.80	
HFS	23.11	350	eP	56 20.00	-3.4X
	0.4s		2.00nm		4.0mb
SUF	25.37	5	eP	56 44.00	-1.2
LIC	39.30	224	P	58 46.20	-1.3

S.D. = 1.2 on 34 of 36 obs.

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* FEB 23, 1990 16h 59m 37.85± 1.85s
38.463 N ±12.9km 26.760 E ±15.8km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)

IZM	0.40	99	iPg	59 45.70	-0.3
			iSg	59 50.70	
CIN	1.36	129	eP	00 03.00	0.3
EZN	1.40	346	ePn	00 03.00	-0.4
DST	1.85	51	ePn	00 09.80	-0.1
BNT	2.09	25	ePn	00 14.00	0.6

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

FEB 23, 1990 17h 22m 26.81± 0.80s
43.415 N ± 5.3km 5.429 E ± 6.1km
DEPTH = 10.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)
MD 2.6 (STR).

GELF	0.03	182	Pg	22 27.67	-0.4
TREF	0.21	351	Pg	22 30.36	-0.3
BERF	0.22	118	Pg	22 31.24	0.5
PUYF	0.23	59	Pg	22 30.26	-0.7
PRAF	0.43	334	Pg	22 35.54	0.7
VILF	0.48	25	Pg	22 34.62	-1.2
TAVF	0.50	66	Pg	22 35.80	-0.4
CALN	1.11	72	ePg	22 47.68	0.7
MVIF	1.34	68	ePn	22 51.02	0.2
			eSg	23 09.95	
REVF	1.45	76	ePn	22 52.71	0.4
			eSg	23 12.21	
TOUF	1.45	65	ePn	22 53.20	0.8
AUTN	1.56	67	ePn	22 55.15	1.1
			eSg	23 16.22	
SAOF	1.64	69	ePn	22 55.05	0.0
PGF	2.76	107	ePn	23 09.74	-1.5

S.D. = 0.8 on 14 of 14 obs.

FEB 23, 1990 17h 45m 27.60± 1.23s
17.852 S ±10.5km 178.510 W ± 5.1km
DEPTH = 541.7 ± 16.0 km
4.8mb (25 obs.)
FIJI ISLANDS REGION (181)

DZM	14.75	251	iPc	48 40.00	5.4X
HNR	22.53	289	eP	49 48.00	-0.3
BRS	28.10	245	iPc	50 38.30	0.7
	0.9s		4.00nm		4.0mb

23d 17h

PMO 29.48 89 iP 50 49.40 -0.2
1.3s 35.00nm 4.8mb
VAH 29.70 90 iP 50 51.90 0.4
1.3s 40.00nm 4.9mb
COO 29.72 239 iPc 50 53.00 1.3
0.5s 23.00nm 5.0mb
TPT 29.75 89 iP 50 52.20 0.3
1.3s 50.00nm 5.0mb
RUV 29.94 90 iP 50 53.60 0.0
1.3s 30.00nm 4.7mb
RMO 31.44 248 eP 51 07.00 0.7
0.6s 46.00nm 5.3mb
CTA 33.36 260 iPd 51 22.90 0.4
1.0s 61.50nm 5.2mb
i 51 33.00
CAN 33.66 232 eP 51 25.70 0.8
BWA 33.77 234 eP 51 20.70 -5.2X
PMG 34.36 280 iPd 51 32.80 2.0
0.9s 235.29nm 5.8mb
CMS 34.97 240 iPd 51 37.00 1.2
0.8s 40.00nm 5.1mb
TOO 37.13 231 eP 51 54.00 0.5
OIS 39.57 259 eP 52 13.00 -0.6
WB5 44.53 260 eP 52 52.00 -0.9
WRA 44.55 259 Pc 52 37.60 -15.4X
0.4s 1.40nm
ASPA 44.72 254 iPd 52 54.20 -0.1
0.7s 294.00nm 5.9mb X
iPcP 54 23.30
iS 58 46.80
iScS 01 46.70
MTN 48.71 268 iPd 53 23.90 -0.9
e 57 38.00
KNA 50.38 264 iPd 53 36.50 -0.6
0.5s 42.00nm 5.2mb
WARB 51.21 250 iPd 53 42.20 -1.0
0.4s 21.00nm 4.9mb
COOL 55.89 244 iPd 54 14.30 -2.0
MBL 57.90 256 iPd 54 28.90 -1.2
0.4s 12.00nm 4.6mb
KLB 58.76 244 eP 54 34.00 -1.9
NWAO 59.15 242 eP 54 37.00 -1.5
RKG 59.30 241 eP 54 38.00 -1.4
BAL 59.72 245 eP 54 44.00 1.8
MRWA 60.44 246 eP 54 45.50 -1.5
NANU 61.65 254 iPd 54 54.10 -0.8
MAT 67.80 323 eP 55 32.00 -1.3
0.8s 17.16nm 4.6mb
GCC 76.24 43 ePc 56 21.90 0.1
PRS 76.26 44 iPc 56 22.50 0.6
PCC 76.26 43 ePc 56 22.00 0.1
BCH 76.48 46 eP 56 23.80 0.5
BRK 76.56 43 eP 56 23.70 0.2
BKS 76.57 43 iPc 56 23.60 0.0
0.9s 29.00nm 4.7mb
PRI 76.62 45 ePc 56 24.60 0.5
MHC 76.65 43 ePc 56 24.60 0.4
FRI 77.73 44 ePc 56 29.80 -0.1
PLM 77.77 49 eP 56 30.50 0.1
CMB 77.87 43 ePc 56 30.50 -0.1
WDC 77.96 40 ePc 56 31.00 0.0
ORV 78.01 42 ePc 56 31.20 -0.1
MDJ 78.08 325 eP 56 32.00 0.4
MIN 78.40 41 ePc 56 33.00 -0.6
KVN 79.92 43 iP 56 41.80 0.2
TNP 79.99 45 iP 56 42.00 0.0
1.0s 15.25nm 4.4mb
WHN 80.49 306 eP 56 45.50 1.0
IPM 82.35 277 ePd 56 55.20 0.9
1.0s 54.00nm 5.0mb
PMR 82.57 14 eP 56 53.50 -0.8
BJI 83.68 315 eP 57 00.50 0.2
1.5s 31.00nm 4.7mb
PNT 84.74 34 eP 57 05.00 -0.4
0.8s 22.00nm 4.8mb
TIY 85.16 312 Pd 57 08.20 0.5
PV09 85.74 47 eP 57 10.00 -0.8
FBA 85.77 13 iP 57 08.20 -1.8
1.0s 9.00nm 4.4mb
ALO 86.14 52 iPd 57 12.30 -0.4
1.0s 10.50nm 4.5mb
XAN 86.15 307 P 57 13.00 0.5
LRM 86.99 40 eP 57 16.20 -0.4
HHC 87.16 314 P 57 18.20 0.9
BW06 87.38 43 iP 57 18.00 -0.5
1.0s 25.00nm 4.9mb
KMI 87.72 297 Pd 57 21.00 0.6

CHG 88.89 290 iPd 57 26.10 0.5
0.9s 12.40nm 4.8mb
GOL 88.89 48 iP 57 26.60 1.0
1.0s 12.50nm 4.8mb
CD2 88.96 303 eP 57 26.40 0.6
SES 90.03 36 iPc 57 29.70 -0.5
LZH 90.78 308 eP 57 34.50 0.3
1.5s 20.00nm 4.9mb
RSSD 91.59 44 iP 57 37.10 -0.7
INK 91.86 15 eP 57 37.00 -1.2
KAS 143.78 317 ePKP 04 01.50 -1.2
KSP 145.03 344 iPKP 04 04.30 -0.1
CLL 145.39 347 iPKPd 04 04.80 -0.1
1.0s 11.00nm
HRI 145.68 303 ePKP 04 07.00 0.8
PRU 146.27 345 ePKP 04 07.70 1.3
DSI 146.47 300 ePKP 04 08.00 0.7
LWI 146.49 236 ePKPd 04 09.50 1.3
PRNI 147.11 299 iPKPd 04 10.00 1.6
KHC 147.30 345 ePKP 04 10.50 2.3X
KBA 149.26 344 iPKP 04 14.50 3.0X
0.6s 2.10nm
LJU 149.87 342 e(PKP)04 16.50 4.3X
VOY 150.07 343 ePKP 04 16.50 3.9X
VBY 150.13 340 e(PKP)04 17.60 5.0X
OHR 151.50 328 ePKP 04 19.50 4.7X
S.D. = 0.9 on 74 of 83 obs.

? FEB 23, 1990 17h 51m 58.69± 5.28s
28.242 N ±43.8km 84.582 E ±28.3km
DEPTH = 33.0km (normal)
NEPAL (310)

GKN 0.24 169 P 52 05.80 -0.1
0.4s 4.00nm
KKN 0.76 126 P 52 12.90 -0.3
0.4s 4.00nm
DMN 0.78 144 P 52 14.40 0.9
PKI 0.99 132 P 52 15.80 -0.8
0.4s 6.00nm
GUN 1.19 106 P 52 19.80 0.3
S.D. = 0.9 on 5 of 5 obs.

? FEB 23, 1990 18h 24m 14.93± 5.83s
31.171 S ±23.2km 68.336 W ±42.7km
DEPTH = 96.9 ± 53.6 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL 0.19 216 iPc 24 29.00 -0.3
eS 24 39.70
CFA 0.44 169 iPc 24 30.50 0.3
S 24 43.00
RTCB 0.51 232 eP 24 31.00 0.2
eS 24 43.00
RTCV 0.71 194 e(P) 24 32.20 -0.2
S 24 46.50
RTRS 1.39 316 iPc 24 40.00 0.0
S.D. = 0.5 on 5 of 5 obs.

FEB 23, 1990 19h 02m 18.73± 0.56s
48.557 N ± 3.5km 128.442 W ± 6.1km
DEPTH = 10.0km (geophysicist)
4.7mb (7 obs.)
VANCOUVER ISLAND REGION (25)

ETB 1.50 56 Pn 02 47.88 2.3
EDB 1.58 33 Pn 02 47.61 0.8
OZB 1.99 77 Pnc 02 53.16 0.3
BTB 2.13 64 Pn 02 55.69 0.7
Sn 03 27.60
PHC 2.25 17 Pn 02 56.00 -0.5
ALB 2.49 72 Pn 03 00.27 0.4
CBB 2.50 53 Pn 03 01.61 1.6
MGB 2.52 78 Pnc 03 00.16 -0.3
PFB 2.66 88 Pnc 03 01.37 -1.0
OBC 2.96 99 eP 03 07.52 0.8
OOW 2.96 104 eP 03 06.45 -0.3
NAB 3.00 76 Pn 03 07.73 0.5
SHB 3.18 69 Pnc 03 10.74 0.9
STW 3.21 96 eP 03 09.56 -0.6
OSD 3.26 101 eP 03 10.66 -0.4
PGC 3.31 87 ePd 03 11.50 -0.1
VGZ 3.41 90 Pn 03 11.77 -1.2
BBB 3.64 3 Pn 03 15.80 -0.4
Sn 04 01.00
BLN 3.69 97 eP 03 16.82 -0.3
HDW 3.72 102 eP 03 17.11 -0.5

CPW 3.91 112 eP 03 18.82 -1.4
GMW 3.93 103 eP 03 20.00 -0.3
HNB 3.93 77 Pn 03 20.70 0.3
BMW 4.10 119 eP 03 21.48 -1.4
CMW 4.21 89 eP 03 24.46 0.0
RMW 4.59 101 eP 03 31.50 1.7
LON 4.83 109 eP 03 31.50 -1.8
SHW 4.83 117 eP 03 31.30 -2.1
PNT 5.87 79 eP 03 50.00 2.2
NEW 7.54 88 eP 04 09.50 -1.9
FHC 8.38 156 eP 04 20.50 -2.6
LBFM 8.57 145 eP 04 28.50 2.6
WDC 9.02 150 ePc 04 31.80 0.0
MIN 9.55 147 ePc 04 40.50 1.1
ORV 10.29 148 ePc 04 49.30 0.0
EDM 10.61 58 eP 04 53.50 -0.3
CMB 12.04 148 e(P) 05 13.90 0.7
KVN 12.08 138 eP 05 13.70 -0.2
MHC 12.26 154 eP 05 15.10 -1.2
LLA 13.14 152 ePc 05 27.20 -0.7
FRI 13.21 148 e(P) 05 30.70 1.9
TNP 13.26 138 eP 05 29.00 -0.8
PRI 13.66 152 ePc 05 34.50 -0.4
ISA 14.84 147 eP 05 52.00 1.7
CLC 15.04 144 eP 05 53.00 0.1
GSC 15.80 143 eP 06 03.00 0.2
SBB 15.95 146 eP 06 05.00 0.3
RVR 16.73 146 eP 06 16.00 1.4
TPC 17.14 143 eP 06 22.00 2.1
FFC 17.48 59 eP 06 22.00 -1.9
FFC 17.48 59 eP 06 27.00 3.1X
1.0s 94.00nm 4.9mb
PLM 17.49 146 eP 06 21.00 -3.4X
GOL 18.72 110 eP 06 40.00 0.4
INK 19.97 354 eP 06 53.00 -0.5
ANMO 21.21 122 eP 07 06.00 -0.9
ALQ 21.21 122 iPd 07 11.00 4.1X
1.0s 10.00nm 4.2mb
Z 20s 7.78um 5.1Msz
MBC 28.03 5 eP 08 12.50 1.1
1.0s 4.00nm 4.2mb
FRB 35.15 42 eP 09 14.00 -0.1
DAG 47.48 17 iPd 10 54.70 -0.3
0.7s 4.79nm 4.7mb
NB2 66.02 20 P 13 06.30 -0.8
1.0s 8.90nm 4.9mb
HFS 67.39 19 eP 13 13.50 -2.3
0.8s 4.50nm 4.7mb
CLL 75.18 24 eP 14 03.00 0.4
MOX 75.40 25 eP 14 04.50 0.6
KHC 77.32 24 eP 14 15.10 0.4
KBA 79.12 26 eP 14 24.50 -0.3
1.2s 8.60nm 4.6mb
S.D. = 1.2 on 62 of 65 obs.

FEB 23, 1990 19h 51m 52.16± 0.69s
34.034 S ± 6.5km 68.459 W ± 5.7km
DEPTH = 37.7 ± 11.9 km
MENDOZA PROVINCE, ARGENTINA (139)

RFA 0.74 180 iPc 52 05.80 -0.4
FCH 1.68 294 iPd 52 18.70 -1.2
i 52 35.00
SAN 1.92 287 iPd 52 22.90 -0.3
iS 52 46.20
RTCV 2.17 358 ePd 52 26.80 0.1
JACH 2.24 306 iPd 52 29.00 1.3
iS 52 56.00
ROCH 2.38 296 iPd 52 30.40 0.6
iS 52 59.30
CFA 2.43 4 iPd 52 30.00 -0.3
LNV 2.45 271 iPc 52 29.60 -1.0
iS 53 00.60
i 53 02.40
ZON 2.49 356 iPd 52 29.70 -1.5
RTCB 2.56 353 iPc 52 32.10 -0.1
LCCH 2.65 281 iP 52 33.40 0.0
iS 53 07.50
RTLL 2.70 360 iPd 52 33.70 -0.5
MRA 2.82 56 iPd 52 37.20 1.4
IHA 2.84 290 eP 52 38.00 1.8
iS 53 14.20
RTRS 3.94 347 iPc 52 52.70 0.9
TCA 4.23 52 iPd 52 56.30 0.4
CYA 6.02 23 iPc 53 20.80 -1.2
BAO 26.00 58 e(P) 57 40.00 16.5X
LIC 71.98 69 P 03 14.20 0.0

KIC 72.29 69 P 03 16.00 -0.1
S.D. = 1.0 on 19 of 20 obs.

% FEB 23, 1990 20h 20m 23.06± 0.90s
39.544 N ± 7.3km 29.001 E ± 9.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

DST 0.30 282 iPg 20 29.00 -0.3
iSg 20 35.00
KCT 0.86 325 iPn 20 39.90 0.2
YLV 1.06 15 iPn 20 42.90 -0.2
BNT 1.16 315 ePn 20 44.90 0.1
KHL 1.28 161 ePn 20 47.00 0.1
S.D. = 0.3 on 5 of 5 obs.

FEB 23, 1990 20h 40m 23.39± 0.96s
25.357 N ± 5.7km 124.494 E ± 8.6km
DEPTH = 140.4 ± 7.9 km
4.3mb (12 obs.)
NORTHEAST OF TAIWAN (245)

TWC 2.51 253 iPc 41 03.80 -0.9
TWZ 2.65 265 ePd 41 06.40 -0.1
TWQ 3.49 253 iPd 41 17.40 -0.1
QZH 5.36 267 iPd 41 41.50 -0.9
0.6s 100.00nm 5.2mb
SSE 6.42 334 Pc 41 57.00 0.3
TIY 16.02 323 eP 44 04.60 2.5
XAN 16.05 306 eP 44 03.00 0.6
BJI 16.22 337 eP 44 05.00 0.6
1.0s 12.00nm 4.2mb
CN2 18.42 2 iPd 44 30.00 -0.4
HHC 18.83 328 P 44 35.10 0.1
CD2 19.10 292 P 44 37.00 -0.8
0.7s 11.00nm 4.3mb
KMI 19.68 274 Pc 44 44.50 0.5
LZH 20.68 306 eP 44 54.00 -0.1
GTA 25.01 310 eP 45 35.00 -0.9
GUN 34.52 283 P 47 01.50 1.0
0.4s 5.00nm 4.6mb
PKI 34.96 282 P 47 04.10 -0.2
0.4s 2.00nm 4.2mb
KKN 35.06 283 P 47 04.80 -0.1
0.4s 4.00nm 4.5mb
DMN 35.23 283 P 47 06.40 0.0
0.4s 3.00nm 4.4mb
GKN 35.60 283 P 47 10.40 0.9
0.4s 5.00nm 4.6mb
WB5 45.98 167 eP 48 34.80 0.6
WRA 46.04 167 Pc 48 34.90 0.3
0.6s 4.30nm 4.3mb
ASPA 49.58 169 eP 49 03.10 1.0
KEV 69.01 338 eP 51 14.00 -1.1
SOD 69.83 336 iP 51 19.90 -0.2
INK 71.00 23 eP 51 27.00 -0.2
MBC 71.45 13 eP 51 29.00 -0.8
0.5s 1.00nm 3.9mb
pP 51 49.00 75kmX
SUF 71.49 331 eP 51 30.00 -0.2
HFS 78.00 331 eP 52 06.50 -0.8
0.5s 2.10nm 4.1mb
NB2 78.58 333 P 52 09.70 -0.8
0.5s 1.50nm 4.0mb
S.D. = 0.8 on 29 of 29 obs.

FEB 23, 1990 21h 29m 06.19± 1.09s
8.455 S ± 9.7km 158.824 E ± 6.3km
DEPTH = 121.6 ± 10.3 km
4.9mb (15 obs.)
SOLOMON ISLANDS (193)

HNR 1.48 131 ePd 29 33.00 -0.8
eS 29 53.00
PMG 11.57 264 eP 31 50.00 1.2
CTA 16.78 225 iPc 33 00.50 5.1X
0.7s 20.55nm 4.5mb
i 33 06.50
BRS 19.69 196 eP 33 26.00 -2.3
RMQ 20.32 207 eP 33 36.00 1.2
QIS 22.12 235 ePc 33 54.00 1.3
0.8s 32.00nm 4.7mb
COO 22.94 195 eP 34 04.00 3.4X
CMS 25.92 206 eP 34 29.00 0.3
WB5 26.25 242 iPc 34 31.90 0.0
WRA 26.30 242 Pd 34 32.40 0.1
0.9s 27.90nm 4.8mb

ASPA 28.25 235 iPc 34 49.20 -0.8
0.6s 17.00nm 4.9mb
KNA 30.24 253 eP 35 07.30 -0.4
COOL 41.61 232 iPc 36 44.30 0.4
PMO 52.47 102 iP 38 09.80 0.8
1.0s 30.00nm 5.2mb
VAH 52.73 103 iP 38 11.40 0.5
1.0s 25.00nm 5.1mb
TPT 52.74 102 iP 38 11.70 0.8
1.0s 25.00nm 5.1mb
RUV 52.97 103 iP 38 13.40 0.8
1.0s 40.00nm 5.3mb
KMI 63.98 303 Pd 39 29.50 0.2
CHG 64.95 295 eP 39 34.80 -0.6
CHTO 64.95 295 iP 39 34.70 -0.7
1.1s 7.36nm 4.5mb
LZH 68.02 314 eP 39 56.00 1.2
1.0s 49.00nm 5.3mb
GUN 79.12 301 P 40 59.60 0.0
0.5s 11.00nm 4.9mb
PKI 79.43 300 P 41 01.10 -0.2
0.6s 9.00nm 4.7mb
KKN 79.60 300 P 41 01.60 -0.4
0.5s 10.00nm 4.9mb
DMN 79.70 300 P 41 02.60 0.0
0.6s 14.00nm 4.9mb
GKN 80.20 300 P 41 04.80 -0.4
0.6s 15.00nm 5.0mb
HFS 122.19 340 ePKP 47 46.20 -1.5
0.6s 2.00nm
NB2 122.29 342 PKP 47 47.10 -0.9
0.7s 2.80nm
BCAO 140.35 267 ePKPd 48 17.90 -5.7X
0.5s 4.00nm
BAO 144.25 132 ePKP 48 46.20 15.8X
NKM 149.50 334 iPKP 48 43.50 5.2X
IFR 150.99 332 iPKP 48 48.00 7.2X
S.D. = 0.9 on 26 of 32 obs.

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* FEB 23, 1990 21h 35m 24.71± 2.39s
44.417 N ± 7.9km 114.039 W ±21.8km
DEPTH = 5.0km (geophysicist)
WESTERN IDAHO (33)
ML 3.4 (BUT).

MCMT 0.94 64 iPc 35 43.00 -0.4
LTMT 1.39 85 iPc 35 51.10 0.1
BGMT 1.64 59 ePn 35 55.00 0.5
LRM 1.80 38 ePn 35 56.80 -0.1
BUT 1.91 33 ePg 36 01.00 2.7X
eSn 36 23.60
eSg 36 27.00
PTI 1.96 141 e(P) 35 59.00 -0.2
IMW 2.29 102 eP 36 04.30 0.3
MEMT 2.48 60 ePn 36 06.00 -0.6
HRY 2.77 33 ePn 36 10.90 0.2
KVN 6.16 211 eP 37 13.00 14.2X
S.D. = 0.4 on 8 of 10 obs.

& FEB 23, 1990 22h 40m 12.71s
41.199 N 113.179 W
DEPTH = 6.9km
UTAH (478)
<SLC-P>. ML 3.0 (SLC).

DUG 1.04 164 eP 40 32.10 -0.7
DAU 1.66 118 eP 40 41.90 -0.7
PTI 1.78 20 eP 40 43.10 -1.1
MSU 2.79 164 eP 40 57.50 -1.4
BW06 3.13 59 eP 41 08.00 4.4
IMW 3.16 31 eP 41 01.00 -3.1
KVN 4.34 242 eP 41 16.00 -4.8
TNP 4.41 226 eP 41 18.70 -3.0
GOL 6.14 102 eP 42 00.00 13.7
RSSD 7.34 64 eP 42 18.50 15.3
10 obs. associated

FEB 23, 1990 22h 59m 13.32± 0.82s
34.436 N ± 6.4km 25.286 E ± 3.1km
DEPTH = 54.4 ± 7.3 km
4.5mb (38 obs.)
CRETE (370)
MD 4.5 (HLW).

NPS 0.87 18 iPc 59 31.80 2.3
VAM 1.32 318 eP 59 37.10 1.4
KAP 1.91 54 eP 59 46.60 2.6

APE 2.63 4 eP 59 55.30 1.0
VLI 2.98 321 eP 59 59.00 -0.1
SMG 3.50 21 eP 00 07.00 0.5
YER 3.63 41 iPn 00 04.40 -4.0X
ATH 3.75 341 eP 00 10.40 0.4
ITM 3.87 316 eP 00 11.00 -0.7
CIN 3.89 35 iPd 00 14.00 2.0X
KSL 3.90 63 eP 00 12.00 -0.1
IZM 4.26 21 iPn 00 18.00 0.7
PRK 4.87 9 eP 00 26.00 0.3
NEO 5.13 342 eP 00 30.00 0.4
KHL 5.17 40 iPn 00 29.90 -0.2
BCK 5.25 53 iPn 00 31.10 -0.2
VLS 5.32 316 eP 00 30.00 -2.2
EZN 5.44 8 ePn 00 33.30 -0.5
DST 5.81 26 ePn 00 40.00 0.9
PPCY 5.83 84 eP 00 36.00 -3.3
eS 01 38.00
ALT 6.02 39 ePn 00 41.80 -0.2
PLG 6.11 347 eP 00 43.00 -0.2
EDC 6.25 18 ePn 00 44.00 -1.1
BNT 6.27 19 ePn 00 46.00 0.6
KZN 6.49 336 eP 00 48.80 0.2
MFT 6.53 13 ePn 00 48.00 -1.2
CSS 6.65 83 ePn 00 46.50 -4.2X
eSn 01 58.00
RDO 6.70 2 eP 00 51.20 -0.2
LSK 6.82 328 iPnc 00 51.60 -1.5
KEK 6.85 322 eP 00 50.00 -3.6X
HLW 6.87 130 eP 00 48.70 -5.1X
eS 02 00.00
YLV 6.93 27 eP 00 54.00 -0.7
KBN 7.12 331 ePn 00 57.00 -0.3X
KOT 7.14 127 ePn 00 51.00 -6.5X
eSn 02 08.50
TPE 7.20 326 ePn 00 54.00 -4.4X
VAY 7.20 343 ePn 00 57.20 -1.2
OHR 7.55 333 iPn 01 01.70 -1.6
BBTK 8.04 46 eP 01 10.00 -0.2
SKO 8.11 339 ePn 01 08.60 -2.4X
LCI 8.29 317 P 01 08.20 -5.2X
eSn 02 31.70
SOI 8.29 299 P 01 10.70 -2.8X
eSn 02 33.60
GRI 8.36 304 P 01 11.80 -2.7X
ROI 8.65 309 P 01 14.90 -3.6X
CZI 8.75 306 P 01 16.20 -3.6X
eSn 02 37.20
ATN 8.76 298 P 01 16.80 -3.2X
eSn 02 44.00
HRI 8.77 95 eP 01 15.00 -5.3X
PZI 8.82 290 P 01 15.97 -4.9X
MEU 8.83 290 P 01 17.40 -3.6X
eSn 02 48.90
TDS 8.85 309 P 01 18.90 -2.3X
ULC 8.89 329 ePn 01 20.00 -1.7
eSn 02 51.50
SHMJ 8.91 98 Pc 01 17.00 -5.0X
CSI 8.94 309 P 01 21.40 -1.2
eSn 02 47.50
DSI 8.95 106 eP 01 17.00 -5.5X
eS 03 53.00
ORI 9.01 311 P 01 20.80 -2.6X
BURJ 9.07 101 Pc 01 18.60 -5.7X
BRT 9.08 317 P 01 20.20 -4.1X
eSn 02 53.40
KFNJ 9.08 104 Pd 01 19.70 -4.7X
PVY 9.15 335 ePn 01 23.40 -2.0X
eSn 03 01.00
MASJ 9.16 104 Pc 01 20.20 -5.4X
MMN 9.20 309 P 01 19.50 -6.5X
eSn 02 51.30
MNO 9.24 295 P 01 24.40 -2.5X
TTG 9.27 331 ePn 01 23.70 -3.3X
eSn 03 01.00
MBH 9.37 117 eP 01 23.00 -5.4X
IVA 9.42 335 ePn 01 27.50 -1.6X
eSn 03 07.50
BAI 9.43 318 P 01 24.00 -5.1X
HCY 9.60 328 ePn 01 27.00 -4.6X
eSn 03 06.00
MGR 9.61 309 P 01 27.70 -4.0X
MDSJ 9.62 104 Pc 01 26.90 -5.0X
NKY 9.70 331 ePn 01 29.50 -3.5X
eSn 03 11.00
GIB 9.76 295 P 01 31.50 -2.4
HQL 9.77 119 iPd 01 28.30 -5.5X

23d 23h

FAI	9.84	290	P	01	32.00	-2.8	CDF	19.36	322	eP	03	36.70	-0.5	DAG	46.80	347	eP	07	38.60	-0.1
BRY	9.96	330	ePn	01	32.00	-4.5X		0.6s		9.90nm			4.3mb	HYB	50.25	96	eP	08	12.00	5.7X
			eSn	03	17.00		TOD	19.42	326	eP	03	37.12	-0.7	GKN	50.55	80	P	08	08.40	-0.2
SGO	10.01	311	P	01	33.70	-3.3X	HAU	19.59	319	eP	03	38.40	-1.3		0.6s		10.00nm			5.0mb
BADA	10.17	123	eP	01	33.30	-6.0X		0.6s		19.85nm			4.6mb	DMN	51.08	80	P	08	12.80	0.0
AYN	10.68	118	eP	01	40.70	-5.5X	TNS	20.02	327	eP	03	44.50	0.3	KKN	51.15	80	P	08	12.40	-0.8
MLR	11.05	2	eP	01	55.00	3.6X	SMF	20.28	313	eP	03	44.90	-2.0		0.6s		9.00nm			5.0mb
HVAR	11.12	324	iPn	01	46.70	-5.4X		0.5s		6.55nm			4.2mb	PKI	51.34	80	P	08	14.60	-0.2
			iSn	03	42.00		RUP	20.31	324	eP	03	46.72	-0.4	GUN	51.59	80	P	08	16.00	-0.7
DUI	11.17	313	P	01	51.50	-1.4X	LBF	20.37	314	eP	03	46.30	-1.5		0.6s		9.00nm			5.0mb
VRI	11.47	5	eP	02	01.50	4.6X		0.6s		14.90nm			4.5mb	FRB	61.34	330	eP	09	25.00	-0.3
			e	25	36.00		LOR	20.58	315	eP	03	49.10	-0.9	MBC	67.34	351	eP	10	04.00	-0.2
SDI	11.59	312	P	01	58.00	-0.5X		0.4s		8.60nm			4.4mb		0.7s		7.00nm			4.8mb
AZI	11.98	312	P	02	07.50	3.8X	EBR	20.61	295	eP	03	54.00	3.7X		S.D. = 1.2		on 123 of 201 obs.			
ANMR	12.45	148	eP	02	08.00	-2.0X	AVF	20.65	313	eP	03	49.80	-0.8							
AGMR	12.57	148	eP	02	06.60	-5.0X		0.5s		5.10nm			4.1mb							
AGRW	12.60	147	eP	02	08.50	-3.5X	CAF	20.65	307	eP	03	50.20	-0.5							
AGAL	12.79	147	eP	02	09.00	-5.6X		0.8s		8.05nm			4.1mb							
ASS	13.08	315	P	02	20.00	1.7	EROQ	20.67	295	eP	03	51.00	0.1							
VBY	13.45	328	eP	02	20.10	-3.0X	SSF	20.69	314	eP	03	49.90	-1.1							
			eS	04	39.80			0.7s		6.60nm			4.1mb							
PTJ	13.48	331	eP	02	18.00	-5.5X	IR7	20.75	79	eP	03	52.50	0.5							
RIY	13.72	326	eP	02	22.30	-4.3X	IR1	20.84	80	eP	03	53.00	0.2							
CRE	13.83	316	P	02	30.00	1.8	BGF	20.84	312	eP	03	51.90	-0.7							
CEY	14.00	327	eP	02	28.00	-2.4X	MAF	20.86	311	eP	03	51.90	-0.9							
			e	02	37.40			0.9s		11.45nm			4.2mb							
			eS	04	57.00		IR2	20.99	79	eP	03	55.00	0.6							
SFI	14.06	316	P	02	38.00	6.9X	IR4	21.03	80	eP	03	55.50	0.7							
LJU	14.19	328	e(P)	02	27.50	-5.3X	TCF	21.11	311	eP	03	55.00	-0.4							
			e(S)	05	07.00			1.0s		15.00nm			4.3mb							
TRI	14.28	325	eP	02	41.40	7.4X	LPO	21.14	306	eP	03	55.60	-0.1							
SRO	14.35	341	eP	02	24.20	-10.7X		0.8s		18.80nm			4.5mb							
VOY	14.47	327	eP	02	32.60	-3.9X	RJF	21.15	308	eP	03	55.70	-0.1							
			e	02	42.50			0.7s		20.95nm			4.6mb							
			eS	05	05.60		EPF	21.21	301	eP	03	55.40	-1.0							
SOP	14.77	336	eP	02	42.50	2.2	MEM	21.42	325	P	04	01.20	2.9X							
RBL	14.93	327	P	02	39.80	-2.6X	LSF	21.52	310	eP	04	00.00	0.5							
ZST	15.05	338	e(P)	02	48.00	4.1X		0.9s		31.95nm			4.7mb							
PGF	15.09	307	eP	02	44.30	-0.4	LFF	21.53	306	eP	03	59.60	0.1							
	0.6s		19.85nm			4.5mb		0.5s		7.30nm			4.3mb							
SPC	15.21	347	eP	03	02.80	16.6X	ECHE	21.55	291	eP	04	01.00	1.1							
FVI	15.40	326	P	02	45.60	-2.8X	ENN	21.56	325	eP	04	01.00	1.2							
KBA	15.51	328	iPc	02	46.80	-3.3X		0.9s		23.00nm			4.6mb							
	0.7s		2.00nm			3.4mb X	DOU	21.78	322	P	04	02.30	0.3							
			i	02	54.70			0.5s		13.80nm			4.6mb							
			i	02	58.80		WTS	22.01	328	eP	04	05.00	0.8							
			e(S)	05	31.00			0.9s		19.00nm			4.5mb							
CTI	15.56	322	P	02	48.40	-2.3	ENIJ	22.45	284	eP	04	09.80	1.0							
SAL	15.86	319	P	02	57.10	2.8X	ETOR	22.52	294	eP	04	10.00	0.5							
BOB	15.96	315	P	02	58.20	2.5	EVIA	22.68	289	eP	04	12.00	0.9							
BHG	16.21	329	iPd	03	03.00	4.2X	MFF	22.73	310	eP	04	12.10	0.7							
	0.7s		21.00nm			4.4mb		0.5s		10.20nm			4.5mb							
MDI	16.41	318	P	03	01.00	-0.2	AFC	23.50	285	eP	04	21.00	1.8							
SBF	16.71	310	eP	03	04.80	-0.4	LDF	23.57	315	eP	04	20.00	0.5							
	0.7s		19.85nm			4.4mb		0.5s		10.20nm			4.6mb							
OSS	16.76	321	ePd	03	09.70	3.8X	APHE	23.63	284	eP	04	22.20	1.8							
VAI	16.98	317	P	03	10.70	2.2	ASMO	23.66	285	iPc	04	21.50	0.9							
KHC	17.05	333	P	03	11.00	1.6	EBAN	23.68	288	eP	04	22.00	1.3							
			e	03	38.40		FLN	23.86	315	eP	04	22.60	0.3							
LMR	17.08	307	eP	03	10.70	1.0		0.4s		9.15nm			4.6mb							
FRF	17.09	308	eP	03	10.10	0.3	LPF	23.87	313	eP	04	22.70	0.3							
	0.7s		5.50nm			3.8mb		0.5s		7.30nm			4.4mb							
LRG	17.23	307	eP	03	12.70	1.2	ATEJ	23.89	284	eP	04	24.50	1.5							
FUR	17.25	327	iPc	03	13.40	1.6	GRR	23.91	314	eP	04	22.90	0.1							
WET	17.33	332	iPd	03	14.10	1.3		0.5s		8.00nm			4.5mb							
	1.3s		46.00nm			4.5mb	TOL	23.94	292	eP	04	27.00	3.7X							
PRU	17.43	336	eP	03	16.00	2.0	ALOJ	23.95	285	eP	04	23.80	0.2							
			e	03	58.00		AAPN	23.96	285	iPc	04	24.00	0.4							
MMK	17.55	317	ePd	03	18.00	2.2	GUD	24.08	294	eP	04	25.50	0.7							
KSP	17.66	341	eP	03	15.00	-1.8	EJIF	25.09	283	eP	04	40.00	5.7X							
BNI	17.77	312	P	03	21.00	2.6X	NUR	26.09	359	eP	04	54.00	10.7X							
DIX	17.88	316	ePd	03	20.40	0.5				e	05	14.00								
LPG	17.95	314	eP	03	20.30	-0.5	HFS	26.80	347	eP	04	49.90	0.0							
	0.5s		6.55nm			4.0mb		0.5s		3.00nm			4.1mb							
KER	18.01	84	eP	03	22.00	0.6	MAIO	27.88	76	eP	05	09.00	9.0X							
EMS	18.15	315	ePd	03	23.90	0.7	NB2	28.12	345	P	05	00.70	-1.2							
ZLA	18.19	321	ePd	03	23.50	0.1		0.6s		2.40nm			4.0mb							
SLE	18.32	322	ePd	03	24.20	-0.8	SUF	28.31	1	eP	05	02.00	-1.5							
GRF	18.43	330	eP	03	25.70	-0.6	EKA	28.69	325	Pc	05	16.90	9.9X							
			e	03	28.30			2.0s		105.60nm			5.1mb							
FEL	18.64	321	eP	03	27.30	-1.7	BCAO	30.50	193	ePd	05	26.00	2.5							
HOF	18.66	332	eP	03	28.60	-0.5		0.5s		5.00nm			4.5mb							
MOX	19.02	333	e(P)	03	33.00	-0.5				id	05	40.00								
CLL	19.07	336	eP	03	34.00	0.0	TIC	39.33	232	P	06	37.56	-1.4							
			e	03	52.00		KIC	39.36	232	P	06	37.58	-1.7							
BSF	19.25	320	eP	03	34.40	-1.7		0.5s		4.00nm			4.5mb							
	0.7s		19.85nm			4.6mb	LIC	39.65	232	P	06	40.38	-1.2							

FEB 23, 1990 23h 22m 54.47± 0.43s
35.290 N ± 5.2km 23.221 E ± 3.4km
DEPTH = 5.0km (geophysicist)
4.3mb (16 obs.)
CRETE (370)
ML 3.9 (ATH). MD 4.4 (HLW).

VAM	0.81	81	ePg	23	10.00	-0.6																	
VLI	1.44	351	ePb	23	22.60	1.3																	
NPS	1.96	90	iPgd	23	31.40	2.7X																	
ITM	2.16	331	ePn	23	34.20	2.6X																	
APE	2.58	46	ePn	23	39.00	1.4																	
ATH	2.71	8	ePb	23	42.30	2.9X																	
KAP	3.24	84	ePn	23	48.00	1.0																	
VLS	3.57	325	ePn	23	52.00	0.3																	
SMG	3.78	49	eP	23	55.00	0.3																	
NEO	4.01	0	ePn	23	59.00	1.1																	
IZM	4.49	45	ePn	24	04.00	-0.7																	
PRK	4.64	31	ePn	24	07.00	0.2																	
PLG	5.08	2	ePn	24	13.50	0.4																	
KZN	5.14	348	ePn	24	16.80	2.8X																	
EZN	5.16	28	ePn	24	08.00	-6.1X																	
KEK	5.19	329	ePn	24	15.00	0.4																	
KSL	5.24	79	ePn	24	15.80	0.4																	
LSK	5.28	338	ePn	24	16.30	0.3																	
TPE	5.61	334	ePn	24	18.00	-2.5X																	
KBN	5.65	341	ePn	24	23.00	1.8																	
KHL	5.89	57	ePn	24	26.10	1.5																	
VLO	5.95	331	ePn	24	25.90	0.6																	
BERA	5.99	335	ePn	24	25.50	-0.3																	
VAY	6.04	355	ePn	24	27.40	0.8																	
DST	6.09	43	eP	24	29.00	1.7																	
OHR	6.12	343	ePn	24	27.20	-0.5																	
RDO	6.12	17	ePn	24	28.00	0.2																	
EDC	6.24	35	eP	24	28.00	-1.5																	
BCK	6.33	68	eP	24	30.60	-0.2																	
SOI	6.39	298	P	24	29.80	-1.8																	
			eSn	25	38.80																		
LCI	6.54	322	P	24	31.10	-2.5X																	
TIR	6.60	337	ePn	24	36.20	1.7																	
ALT	6.66	54	eP	24	37.00	1.5																	
PHP	6.75	342	ePn	24	34.70	-1.9																	
ROI	6.80	311	P	24	36.90	-0.5																	
SKO	6.82	349	ePn	24	38.50	0.9																	
ATN	6.86	297	P	24	37.20	-1.0																	
CZI	6.88	307	P	24	37.40	-1.0																	
MEU	6.94	287	P	24	38.90	-0.6																	
			eSn	25	54.80																		
TDS	7.00	311	P	24	39.20	-0.9																	
CSI	7.10	311	P	24	43.10	1.6																	
ORI	7.18	314	P	24	41.60	-1.0																	
PUK	7.23	340	ePn	24	42.30	-1.0																	
SDA	7.32	338	ePn	24	44.00	-0.6																	
MMN	7.35	311	P	24	44.20	-0.8																	
MGR	7.77	311	Pc	24	49.60	-1.3																	
SGO	8.17	312	P	24	55.90	-0.6																	
HLW	8.73	126	eP	25	06.00	1.6																	
			eS	26	36.50																		
BBTK	8.83	56	eP	25	07.00	1.2																	
KOT	9.01	124	ePn	25	04.50	-3.7X																	
SDI	9.76	314	P	25	18.00	-0.6																	
HRI	10.55	97	e(P)	25	27.00	-2.5X																	
DSI	10.81	107	e(P)	25	24.00	-9.0X																	
MBH	11.27	116	eP	25	36.00	-3.2X																	
VBY	11.86	332	eP	25	50.60	3.4X																	
			eS	27	54.50																		
PTJ	11.94	335	eP	25	44.50	-3.9X																	
CRE	12.04	317	P	25	52.00	2.3																	
CEY	12.39	330	e(P)	25	57.50	3.2X																	
			eS	28	13.00																		
LJU	12.59	331	eP	25	53.50	-3.6X																	
VOY	12.84	329	eP	25	59.10	-1.4																	

		eS	28	23.20		
RBL	13.31	330 P	26	15.00	8.4X	
FVI	13.76	328 P	26	18.50	6.1X	
KBA	13.91	331 eP	26	15.00	0.3	
	0.8s	4.20nm		4.3mb		
		e(Sg)	26	30.50		
		e	26	48.50		
SBF	14.86	310 eP	26	28.60	1.5	
	0.6s	6.30nm		4.3mb		
FRF	15.22	308 eP	26	34.80	3.1X	
KHC	15.55	336 eP	26	41.20	5.3X	
		e	26	46.40		
PRU	16.00	339 eP	26	46.50	4.8X	
LPG	16.14	314 eP	26	44.50	0.7	
	0.8s	3.35nm		3.5mb		
KSP	16.34	344 eP	26	49.30	3.3X	
GRF	16.86	332 eP	26	55.10	2.4	
		e	27	08.80		
BSF	17.51	321 eP	27	00.30	-0.6	
CLL	17.63	338 e(P)	27	08.00	5.8X	
HAU	17.85	321 eP	27	04.00	-1.1	
	0.8s	6.70nm		3.8mb		
DOU	20.08	323 Pc	27	31.10	-0.3	
	0.6s	11.80nm		4.4mb		
MFF	20.88	310 eP	27	39.10	-0.7	
	0.7s	5.50nm		4.0mb		
LDF	21.76	315 eP	27	47.80	-0.9	
APHE	21.78	282 eP	27	50.00	0.8	
ASMO	21.80	283 iPc	27	56.00	6.6X	
ACHM	21.88	283 iPc	27	52.50	2.3	
ATEJ	22.04	282 iPc	27	53.50	1.7	
LPF	22.04	313 eP	27	50.40	-1.1	
	0.8s	8.05nm		4.2mb		
FLN	22.05	315 eP	27	49.90	-1.7	
	0.7s	8.80nm		4.3mb		
GRR	22.09	314 eP	27	51.30	-0.8	
ALOJ	22.10	283 iPc	27	53.60	1.2	
AAPN	22.10	283 iPc	27	53.00	0.6	
HFS	25.62	349 eP	28	23.70	-2.4	
	0.7s	4.40nm		4.3mb		
NB2	26.89	347 P	28	38.40	0.4	
	0.9s	3.70nm		4.1mb		
EKA	27.03	326 P	28	49.00	9.8X	
	0.7s	3.50nm		4.2mb		
BCAO	31.01	189 iPd	29	16.10	0.8	
	0.6s	23.00nm		5.3mb		
		ic	29	20.10		
TIC	38.55	229 P	30	20.94	1.0	
	0.8s	5.00nm		4.3mb		
KIC	38.60	228 Pc	30	21.48	1.1	
	0.9s	10.00nm		4.5mb		
LIC	38.89	229 P	30	23.84	1.1	
	0.9s	9.50nm		4.4mb		
GKN	52.07	80 P	32	05.20	-2.5	
	0.4s	2.00nm		4.4mb		
DMN	52.61	80 P	32	09.70	-2.2	
KKN	52.68	80 P	32	09.60	-2.8	
PKI	52.87	80 P	32	11.40	-2.6	
GUN	53.11	79 P	32	13.20	-2.6	
S.D. = 1.3 on 73 of 97 obs.						

FEB 23, 1990 23h 55m 27.50± 0.58s
36.101 N ± 5.5km 27.179 E ± 4.4km
DEPTH = 31.8 ± 5.9 km
4.2mb (1 obs.)
DODECANESE ISLANDS (369)
ML 4.0 (ATH), 4.3 (CSS).

KAP	0.55	180 ePg	55	40.00	1.2	
YER	1.36	40 iPn	55	45.40	-5.1X	
NPS	1.52	237 ePb	55	54.20	1.4	
SMG	1.63	350 ePb	55	53.00	-1.3	
APE	1.64	307 ePb	55	54.00	-0.6	
CIN	1.66	26 eP	55	55.00	0.2	
KSL	1.95	89 ePn	56	01.00	2.0	
IZM	2.29	2 ePn	56	02.00	-1.9	
KHL	2.90	39 ePn	56	13.40	0.8	
BCK	3.06	63 ePn	56	17.10	2.3	
PRK	3.22	347 ePn	56	16.00	-1.0	
ATH	3.34	305 ePg	56	28.20	9.5X	
VLI	3.48	281 ePn	56	21.00	0.3	
DST	3.68	18 ePn	56	27.00	3.4X	
ALT	3.76	37 ePn	56	30.00	5.3X	
EZN	3.78	350 ePn	56	27.00	2.1	
EDC	4.27	7 ePn	56	35.00	3.0X	
BNT	4.29	8 ePn	56	37.00	4.8X	
ITM	4.36	286 ePg	56	46.80	13.6X	
PPCY	4.39	105 eP	56	35.50	1.9	
NEO	4.48	317 ePn	56	34.00	-1.0	
YLV	4.78	20 ePn	56	46.00	6.8X	
CSS	5.14	101 eP	56	43.70	-0.7	
		eSn	57	45.50		
RDO	5.20	346 ePn	56	43.20	-1.9	
VLS	5.66	293 ePn	56	53.00	1.4	
BBTK	5.78	48 eP	56	55.00	1.6	
VAY	6.34	327 eP	57	01.30	0.2	
OHR	7.07	317 eP	57	07.00	-4.4X	
HLW	7.14	150 eP	57	17.50	5.1X	
		eS	58	30.20		
KOT	7.29	146 ePn	57	13.00	-1.4	
		eSn	58	31.00		
HRI	7.60	109 eP	57	17.00	-1.9	
SHMJ	7.85	113 P	57	20.30	-2.1	
BURJ	8.12	116 Pd	57	26.00	-0.2	
DSI	8.18	121 eP	57	23.00	-3.9X	
MASJ	8.33	119 Pc	57	28.00	-1.1	
MBH	9.04	132 eP	57	37.00	-1.8	
ACI	9.28	294 P	57	41.40	-0.8	
CZI	9.29	293 P	57	40.70	-1.6	
ORI	9.34	298 P	57	42.50	-0.4	
CSI	9.35	296 P	57	46.00	2.8X	
MGR	10.00	297 P	57	51.10	-1.0	
SGO	10.33	299 P	57	57.00	0.5	
KBA	15.06	321 eP	59	05.00	5.3X	
	1.0s	14.30nm		4.2mb		
		i	59	10.60		
KHC	16.39	327 P	59	19.00	2.3	
LPG	18.05	308 eP	59	37.80	0.1	
MAIO	26.02	80 eP	01	05.00	5.5X	
BCAO	32.50	196 iPd	01	58.60	1.0	
	0.5s	8.00nm		4.9mb	X	
TIC	41.57	233 P	03	14.40	0.4	
KIC	41.60	232 P	03	14.50	0.3	
LIC	41.89	233 P	03	17.30	0.7	
S.D. = 1.4 on 36 of 50 obs.						

FEB 24, 1990 01h 03m 54.80± 0.42s
44.102 N ± 4.8km 11.962 E ± 4.4km
DEPTH = 23.3 ± 5.2 km
NORTHERN ITALY (545)
ML 2.9 (KBA), 2.9 LDG).

SFI	0.20	204 Pc	04	00.00	-0.2	
		eSg	04	02.80		
PGD	0.29	218 Pc	04	01.20	-0.5	
		eSg	04	06.00		
RSM	0.39	116 Pc	04	03.80	0.6	
		eSg	04	11.70		
CRE	0.47	181 P	04	03.50	-1.1	
		eSg	04	09.50		
MME	0.91	276 P	04	13.40	1.4	
		eSg	04	26.00		
BDI	0.98	268 Pc	04	13.00	-0.2	
		eSg	04	28.00		
PII	1.11	250 P	04	14.40	-0.4	
		eSg	04	31.00		
ASS	1.15	154 P	04	15.40	-0.1	
		eSg	04	31.40		
BOB	1.92	291 P	04	27.40	0.8	
CTI	1.96	354 P	04	28.40	1.2	
		eSn	04	53.40		
TRI	2.05	38 eP	04	34.30	5.8X	
		i	04	54.30		
		i	05	06.00		
RIY	2.13	53 eP	04	29.60	0.1	
		iSn	04	56.50		
VOY	2.37	35 ePn	04	40.00	7.0X	
		eSn	05	04.10		
CEY	2.40	46 eP	04	44.50	11.1X	
		e(Sn)	05	02.00		
		e	05	10.50		
FVI	2.56	13 P	04	36.60	1.0	
LJU	2.66	42 e(Pn)	04	35.00	-2.2	
		e	04	46.50		
		eSn	05	10.00		
PGF	2.66	235 Pn	04	39.00	1.7	
SDI	2.75	150 P	04	39.00	0.5	
KBA	3.13	18 iPnd	04	45.20	1.2	
		i	04	57.20		
		iSn	05	23.20		
SBF	3.28	267 Pn	04	45.80	-0.1	
		Sn	05	22.20		
PTJ	3.36	56 eP	05	01.40	14.3X	
FRF	3.88	264 Pn	04	53.60	-0.8	
		Sn	05	37.00		
LPG	3.96	292 Pn	04	57.30	1.5	
LRG	4.11	263 Pn	04	58.80	1.2	
		Sn	05	44.20		
KHC	5.15	12 eP	06	10.60	58.1X	
BSF	5.19	318 Pn	05	12.60	-0.4	
		Sn	06	10.00		
CDF	5.40	325 Pn	05	15.40	-0.6	
HAU	5.52	317 Pn	05	17.00	-0.7	
		Sn	06	17.00		
LBF	6.30	300 Pn	05	27.40	-1.4	
LOR	6.50	302 Pn	05	30.70	-0.8	
BGF	6.88	294 Pn	05	35.00	-1.8	
S.D. = 1.1 on 26 of 31 obs.						

? FEB 24, 1990 01h 06m 13.79± 1.29s
43.946 N ±14.2km 11.986 E ± 6.9km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

SFI	0.10	256 Pc	06	16.80	0.3	
		eSg	06	21.10		
PGD	0.20	250 P	06	18.00	-0.3	
		eSg	06	22.70		
CRE	0.32	184 P	06	20.50	0.1	
		eSg	06	26.50		
RSM	0.34	93 P	06	20.70	-0.1	
		eSg	06	29.30		
S.D. = 0.5 on 4 of 4 obs.						

? FEB 24, 1990 02h 32m 44.02± 8.70s
16.478 N ±33.2km 60.715 W ±49.7km
DEPTH = 10.0km (geophysicist)
LEEWARD ISLANDS (92)
ML 3.2 (FDF).

SFG	0.51	244 eP	32	54.38	0.0	
		S	33	05.70		
SEG	0.76	265 eP	32	58.86	0.0	
		S	33	11.50		
DOG	0.97	243 eP	33	02.80	0.2	
		S	33	18.20		
PAG	1.03	244 eP	33	03.40	-0.1	
		S	33	19.00		
BBL	1.20	218 eP	33	06.36	0.0	
		S	33	23.90		
S.D. = 0.2 on 5 of 5 obs.						

? FEB 24, 1990 05h 06m 07.97± 1.80s
7.035 S ±16.7km 126.624 E ±20.3km
DEPTH = 429.9 ± 25.8 km
4.3mb (5 obs.)
BANDA SEA (280)

MTN	7.28	143 iPc	07	56.60	0.2	
		eS	09	36.00		
WB5	14.82	150 eP	09	18.50	-0.9	
WRA	14.86	150 Pc	09	18.80	-1.0	
	0.3s	2.20nm		4.1mb		
MBL	15.50	204 eP	09	26.40	-0.1	
	0.3s	3.00nm		4.3mb		
ASPA	17.95	158 iPd	09	52.50	1.3	
	0.3s	27.00nm		5.2mb		
		iS	12	57.50		
QIS	18.41	138 eP	09	56.00	0.4	
GUN	52.49	313 P	14	42.00	0.1	
	0.6s	9.00nm		4.3mb		
PKI	52.64	313 P	14	42.80	-0.1	
GKN	53.45	313 P	14	48.50	0.0	
	0.4s	6.00nm		4.3mb		
S.D. = 0.9 on 9 of 9 obs.						

FEB 24, 1990 05h 27m 29.25± 0.27s
43.370 N ± 2.9km 12.363 E ± 2.7km
DEPTH = 47.5 ± 10.4 km
CENTRAL ITALY (381)

ASS	0.37	144 Pd	27	37.30	-1.7	
		eSg	27	42.80		
CRE	0.40	311 P	27	39.00	-0.3	
		eSg	27	46.50		
RSM	0.56	7 Pc	27	42.30	1.2	
		eSg	27	49.00		
SFI	0.66	326 Pc	27	42.80	0.3	
		eSg	27	52.50		
PGD	0.69	318 P	27	43.20	0.2	
		eSg	27	53.90		

24d 05h

AQU	1.27	143	P	27	51.70	0.7
			eSg	28	08.50	
MAO	1.30	223	Pc	27	51.10	-0.3
			eSg	28	07.10	
PII	1.38	285	P	27	52.90	0.4
			eSg	28	09.60	
BDI	1.46	299	P	27	53.20	-0.4
			eSg	28	12.80	
MME	1.46	305	P	27	53.90	0.1
RMP	1.58	171	P	27	57.00	1.7
AZI	1.59	150	P	27	55.50	0.1
RDP	1.63	171	P	27	57.00	0.9
SDI	1.98	147	P	28	00.60	-0.4
DUI	2.31	137	P	28	05.00	-0.6
RIY	2.45	36	ePn	28	07.20	-0.3
			iSn	28	35.80	
BOB	2.52	305	P	28	08.50	-0.2
TRI	2.54	23	iPd	28	08.20	-0.7
			i	28	37.70	
			i	28	54.00	
PGF	2.60	253	Pn	28	10.60	0.7
CTI	2.73	349	P	28	11.50	-0.2
			eSn	28	42.90	
CEY	2.79	31	e(Pn)	28	12.00	-0.5
			eSn	28	45.50	
VOY	2.88	22	ePn	28	13.10	-0.7
			eSn	28	47.80	
VBY	2.97	43	e(Pn)	28	27.00	11.9X
			eSn	28	49.80	
HVAR	2.99	92	iPnc	28	14.00	-1.3
			iSn	28	48.00	
PCP	3.00	294	P	28	14.72	-0.7
			S	28	42.48	
MDI	3.06	323	P	28	18.00	1.7
FIN	3.12	287	P	28	16.89	-0.3
			S	28	46.15	
CKI	3.13	291	P	28	16.80	-0.5
RBL	3.19	15	P	28	17.70	-0.4
			eSn	28	54.10	
FVI	3.24	5	P	28	19.30	0.6
IMI	3.29	281	P	28	18.05	-1.6
			S	28	48.31	
ROB	3.38	287	P	28	20.48	-0.4
			S	28	51.81	
PTJ	3.60	44	e(Pn)	28	24.90	0.8
			eSn	29	07.40	
SBF	3.61	280	Pn	28	24.20	0.0
			Sn	29	04.70	
ENR	3.68	285	P	28	25.48	0.3
			S	28	59.31	
SCE	3.70	353	ePn	28	27.10	1.6
STV	3.75	285	P	28	26.51	0.3
			S	29	02.31	
KBA	3.77	10	iPnd	28	27.20	0.6
			iSn	29	10.50	
			i	29	36.40	
ORX	3.87	307	P	28	27.82	0.0
			S	29	03.97	
DOI	3.87	289	P	28	28.00	0.2
PZZ	3.97	288	P	28	28.56	-0.7
RSP	4.08	298	P	28	30.61	-0.2
FRF	4.17	275	Pn	28	31.80	-0.1
			Sn	29	17.00	
LMR	4.27	272	Pn	28	33.00	-0.4
LSD	4.27	301	P	28	32.15	-1.6
RRL	4.30	293	P	28	33.69	-0.4
LRG	4.37	273	Pn	28	35.40	0.6
			Sn	29	23.50	
LPG	4.55	300	Pn	28	39.10	1.5
LPL	4.57	300	Pn	28	39.30	1.5
BSF	5.93	321	Pn	28	57.00	0.1
			Sn	29	59.00	
CDF	6.17	327	Pn	28	59.60	-0.5
			Sn	30	05.00	
HAU	6.26	320	Pn	29	00.00	-1.4
			Sn	30	07.20	
LBF	6.94	304	Pn	29	10.40	-0.5
BGF	7.46	299	Pn	29	17.40	-0.8

S.D. = 0.9 on 53 of 54 obs.

% FEB 24, 1990 05h 54m 25.66± 0.83s
37.849 N ± 8.5km 1.906 W ± 7.1km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
mbLg 2.6 (MDD).

EALH	0.38	89	eP	54	33.50	0.0
			eS	54	39.80	
ENIJ	0.91	196	ePg	54	43.00	-0.1
EVIA	0.92	329	eP	54	43.60	0.3
			eS	54	56.50	
AFC	1.43	246	ePn	54	52.50	0.7
			eSn	55	11.00	
EBAN	1.52	283	eP	54	52.00	-0.9
			eS	55	12.00	

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

• FEB 24, 1990 06h 18m 37.63± 0.92s
35.328 N ±11.9km 23.205 E ± 6.7km
DEPTH = 10.0km (geophysicist)
4.4mb (2 obs.)
CRETE (370)

VAM	0.82	84	ePg	18	51.50	-1.9
ITM	2.12	331	ePn	19	19.50	6.0X
ATH	2.67	9	ePb	19	32.00	10.6X
KAP	3.25	85	ePn	19	30.40	0.8
SMG	3.77	50	ePn	19	38.00	1.0
KSL	5.25	80	ePn	19	57.50	-0.5
KHL	5.88	58	ePn	20	08.60	1.6
VAY	6.00	355	ePn	20	15.50	6.9X
OHR	6.08	343	ePn	20	10.00	0.3
BCK	6.32	68	ePn	20	13.20	-0.1
CZI	6.84	307	P	20	20.50	0.0
CSI	7.06	311	P	20	23.60	0.0
MMN	7.31	311	P	20	23.20	-3.8X
KHC	15.51	336	eP	22	28.90	11.0X
KSP	16.30	344	eP	22	32.50	4.5X
HFS	25.58	349	eP	24	06.30	-1.8
	0.7s		2.60nm			4.0mb
BCAO	31.04	189	iPc	24	58.50	0.6
	0.5s		8.00nm			4.9mb

S.D. = 1.2 on 11 of 17 obs.

• FEB 24, 1990 06h 34m 51.39± 1.33s
43.981 N ±11.3km 7.348 E ± 8.4km
DEPTH = 10.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)
ML 1.4 (GEN).

AUTN	0.06	76	iPgd	34	53.43	-0.4
TOUF	0.08	294	iPgc	34	54.08	0.0
SAOF	0.15	88	ePg	34	55.29	0.4
			eSg	34	57.20	
ENR	0.25	12	P	34	56.74	0.0
			S	34	59.92	
STV	0.26	356	P	34	57.05	0.1
			S	35	00.43	

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

% FEB 24, 1990 06h 38m 22.89± 0.81s
39.895 N ± 8.8km 15.759 E ± 8.6km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

MMN	0.18	91	P	38	27.00	0.1
			eSg	38	30.60	
MGR	0.29	327	Pc	38	29.30	0.4
			eSg	38	33.90	
CSI	0.42	106	P	38	31.80	0.2
			eSg	38	39.00	
TDS	0.50	118	P	38	33.00	-0.1
			eSg	38	38.10	
ROI	0.70	117	P	38	36.50	-0.3
CZI	0.73	157	P	38	37.40	0.1
			eSg	38	47.40	
SGO	0.75	333	P	38	37.10	-0.4
			eSg	38	49.10	

S.D. = 0.3 on 7 of 7 obs.

? FEB 24, 1990 08h 16m 01.40± 0.65s
29.027 S ±26.2km 178.257 W ±13.6km
DEPTH = 33.0km (normol)
4.3mb (2 obs.)
KERMADEC ISLANDS (178)
Felt on Roouf Island.

RAO	0.37	127	iP	16	10.00	-0.1
			S	16	19.50	
ASPA	42.98	266	eP	23	58.60	-0.8
	0.8s		3.00nm			4.1mb
WB5	43.84	271	eP	24	07.10	0.8
WRA	43.84	271	Pc	24	06.10	-0.2
	0.4s		3.40nm			4.5mb
NUR	144.95	340	iPKP	35	36.00	-0.1
	0.6s		13.00nm			
NB2	147.37	351	PKP	35	40.00	-0.1
	0.7s		4.30nm			
HFS	147.86	349	ePKP	35	40.70	-0.2
	0.6s		4.80nm			
BCAO	150.81	216	ePKPd	35	47.60	0.7
	0.6s		6.00nm			
			id	35	50.60	

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

% FEB 24, 1990 08h 23m 53.99± 2.69s
35.508 N ±27.7km 23.570 E ±17.1km
DEPTH = 10.0km (geophysicist)
CRETE (370)
MD 3.5 (ATH).

VAM	0.52	101	ePg	24	04.00	-0.6
VLI	1.31	337	ePb	24	17.00	-1.2
NPS	1.69	98	ePg	24	26.20	2.5X
ITM	2.13	322	ePn	24	31.00	0.9
APE	2.22	45	ePb	24	32.00	0.5
KSL	4.92	81	ePn	25	10.00	0.2

S.D. = 1.2 on 5 of 6 obs.

• FEB 24, 1990 09h 02m 15.61± 1.47s
20.243 S ±14.4km 69.592 W ±13.9km
DEPTH = 33.0km (normol)
NORTHERN CHILE (123)

LPB	3.95	21	Pc	03	16.30	0.4
	1.0s		100.00nm			
			iS	04	01.00	
ARE	4.17	334	iPd	03	19.50	0.7
			iS	04	07.10	
ZOBO	4.19	20	iPd	03	18.70	-0.7
	0.4s		50.55nm			
			(S)	04	07.00	
YJA	4.27	117	iPc	03	20.50	0.1
CCH	4.33	50	P	03	18.50	-2.7X
			S	03	55.90	
PT08	10.60	320	eP	04	48.30	-0.5
			eS	06	44.60	
NNA	10.76	319	eP	05	01.00	10.4X
	0.7s		8.90nm			
			eS	06	52.50	
BAO	21.05	81	eP	07	06.00	6.6X

S.D. = 0.8 on 5 of 8 obs.

% FEB 24, 1990 09h 39m 58.24± 1.24s
35.764 N ±14.3km 23.746 E ±12.1km
DEPTH = 10.0km (geophysicist)
CRETE (370)
MD 3.5 (ATH).

VAM	0.51	134	ePg	40	07.20	-1.4
VLI	1.16	326	ePg	40	20.00	0.2
NPS	1.60	108	ePg	40	28.00	1.3
APE	1.94	47	ePn	40	30.00	-1.6
ITM	2.04	314	ePn	40	33.00	0.0
KAP	2.80	93	ePn	40	45.00	1.1
KSL	4.75	84	ePn	41	12.00	0.4

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

FEB 24, 1990 09h 40m 43.18± 0.41s
50.413 N ± 3.5km 5.964 E ± 5.2km
DEPTH = 10.0km (geophysicist)
BELGIUM (541)
ML 2.4 (GSH), 3.0 (LDG).

MEM	0.20	8	iP	40	46.99	-0.5
			iS	40	49.11	
ENN	0.36	356	iPgc	40	50.20	-0.3
	0.4s		157.00nm			
			iSg	40	52.50	
			e	40	54.50	
GSH	0.42	39	iPgc	40	50.70	-1.0
			iSg	40	55.40	
JCK	0.69	25	iPg	40	55.60	-1.2
			iSg	41	04.30	
WLF	0.76	171	iP	40	59.44	1.4
DOU	0.93	251	iPd	41	02.60	1.6
			iS	41	15.70	
RUP	1.00	135	ePnd	41	03.13	0.9
SNF	1.08	276	iP	41	04.60	1.2
ABH	1.15	117	ePn	41	04.99	0.3
WTS	1.67	18	iPn	41	14.90	2.3

			iPgc	41	17.00	
			iSg	41	35.50	
CDF	2.18	156	Pn	41	21.40	1.3
			Pg	41	25.60	
			Sg	41	51.00	
HAU	2.42	174	Pn	41	23.80	0.3
			Pg	41	29.20	
			Sg	41	58.60	
BSF	2.64	168	Pn	41	26.40	-0.3
			Sn	41	56.70	
FEL	2.87	151	ePg	41	30.27	0.3
LOR	3.44	205	Pn	41	37.80	-0.1
			Pg	41	48.60	
			Sn	42	16.00	
			Sg	42	31.60	
LBF	3.68	202	Pn	41	41.00	-0.3
			Pg	41	52.50	
			Sn	42	21.50	
SSF	3.73	207	Pn	41	41.80	-0.2
			Pg	41	54.00	
			Sg	42	40.00	
AVF	4.02	207	Pn	41	45.30	-0.7
			Pg	41	59.80	
SMF	4.03	201	Pn	41	45.00	-1.2
			Pg	41	59.40	
			Sg	42	49.00	
BGF	4.38	209	Pn	41	50.40	-0.8
			Sn	42	38.20	
MAF	4.77	210	Pn	41	56.00	-0.8
TCF	4.83	213	Pn	41	56.90	-0.7
LPG	4.95	174	Pn	41	58.00	-1.6

S.D. = 1.1 on 23 of 23 obs.

FEB 24, 1990 09h 41m 55.39± 0.42s
31.764 S ± 4.9km 68.751 W ± 5.0km
DEPTH = 11.9 ± 3.9 km
4.1mb (1 obs.)
SAN JUAN PROVINCE, ARGENTINA (137)

RTCV	0.21	118	iPc	42	00.20	0.1
ZON	0.23	16	iPc	42	00.00	-0.4
CFA	0.46	70	iPd	42	04.50	-0.4
RTLL	0.50	29	iPd	42	04.50	-1.0
RTRS	1.70	339	iPc	42	25.90	0.9
FCH	2.03	219	eP	42	30.50	0.4
ROCH	2.26	237	iPd	42	34.10	0.8
			iS	43	05.80	
SAN	2.33	223	iP	42	36.00	1.8
			iS	43	06.20	
MRA	2.66	105	ePd	42	39.70	0.9
IHA	2.75	242	eP	42	40.20	0.1
			e(S)	43	11.50	
LCCH	2.93	234	iP	42	43.10	0.5
			iS	43	20.00	
			i	43	22.20	
RFA	3.01	176	iPc	42	42.20	-1.6
LNV	3.13	225	iPd	42	45.10	-0.3
			iS	43	24.50	
TCA	3.58	84	iPd	42	52.00	0.1
CYA	4.18	39	e(P)	43	01.50	1.0
SLA	7.57	23	eP	43	48.20	-0.2
LPB	15.18	2	eP	45	26.00	-5.6X
			e	45	40.00	
ZOBO	15.44	2	Pd	45	38.80	3.6X
	0.9s		9.73nm		4.1mb	
	Z 22s		0.13um		3.4MszX	
			LR	52	30.00	

S.D. = 0.9 on 16 of 18 obs.

? FEB 24, 1990 10h 42m 49.87± 1.05s
39.116 N ± 9.5km 27.637 E ±17.2km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZM	0.77	202	ePg	43	05.00	0.0
			eSg	43	17.00	
DST	0.91	57	iPn	43	07.30	0.0
EDC	1.24	8	ePn	43	12.20	-0.7
BNT	1.26	10	iPn	43	14.00	0.8

S.D. = 1.1 on 4 of 4 obs.

• FEB 24, 1990 11h 39m 44.41± 0.90s
35.517 N ±13.1km 25.200 E ± 8.0km
DEPTH = 33.0km (normal)
CRETE (370)
MD 3.9 (ATH).

NPS	0.42	127	ePn	39	53.80	-0.1
VAM	0.82	263	ePn	39	59.00	-0.6
APE	1.57	10	ePn	40	10.00	-0.4
KAP	1.61	88	ePn	40	12.50	1.6
VLI	2.19	304	ePb	40	20.00	0.8
CIN	3.12	47	eP	40	38.00	5.6X
ITM	3.12	303	ePb	40	35.00	2.6X
KSL	3.61	79	ePn	40	38.00	-1.4

S.D. = 1.4 on 6 of 8 obs.

& FEB 24, 1990 11h 39m 48.43s
59.289 N 151.893 W
DEPTH = 57.1km
KENAI PENINSULA, ALASKA (14)
<AGS-P>.

XLV	0.19	28	iP	39	56.87	-0.7
			iS	40	04.02	
CNPM	0.41	54	iP	39	59.09	-0.3
			iS	40	07.78	
AUE	0.76	276	eP	40	02.71	-0.7
			eS	40	13.68	
AUL	0.80	277	eP	40	03.09	-0.7
NNL	0.81	22	iP	40	04.70	0.6
RED	1.22	339	eP	40	08.70	-0.9
			iS	40	25.20	
PDB	1.27	294	eP	40	09.05	-1.2
RDT	1.31	349	eP	40	10.14	-0.8
SEW	1.48	56	eP	40	12.41	-0.7
SLKM	1.49	34	eP	40	13.00	-0.2
			iS	40	33.39	
NKA	1.50	12	eP	40	14.84	1.5
SPU	1.90	358	eP	40	18.73	-0.3
CKL	1.93	354	iP	40	19.39	-0.1
CRP	1.99	356	eP	40	20.49	0.1
BGL	2.00	353	eP	40	20.62	0.2
CGLM	2.03	358	eP	40	20.93	0.1
NCG	2.13	357	eP	40	22.50	0.2
PMS	2.28	30	eP	40	24.42	0.1
PLRM	2.69	29	eP	40	29.03	-1.0
SKT	2.71	4	eP	40	30.44	0.1
GHO	2.89	29	eP	40	32.48	-0.6

21 obs. associated

• FEB 24, 1990 14h 10m 23.68± 1.35s
38.014 N ±13.3km 28.967 E ± 9.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

KHL	0.54	55	iPg	10	34.30	-0.2
			eSg	10	41.30	
CIN	0.81	240	iPgc	10	40.00	0.6
			iSg	10	51.00	
ALT	1.37	40	iPn	10	48.90	0.0
IZM	1.40	286	ePn	10	48.00	-1.2
DST	1.61	351	ePn	10	51.40	-0.9
BNT	2.48	341	ePn	11	07.00	2.3
YLV	2.57	7	ePn	11	06.00	-0.1
EZN	2.74	312	ePn	11	08.00	-0.5

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

FEB 24, 1990 14h 35m 15.40± 0.57s
39.166 N ± 4.8km 27.645 E ± 7.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZM	0.82	201	iPg	35	31.20	-0.2
			iSg	35	44.20	
DST	0.88	60	iPg	35	32.40	0.1
			iSg	35	45.40	
EDC	1.19	8	iPn	35	37.20	-0.4
BNT	1.21	10	iPn	35	38.20	0.3
EZN	1.22	303	iPn	35	38.00	0.0
CIN	1.60	167	ePn	35	44.00	-0.2
			iSg	36	06.00	
KHL	1.69	119	ePn	35	51.00	5.8X
ALT	1.92	93	ePn	35	53.00	4.4X
YLV	1.93	43	iPn	35	48.20	-0.5
CTT	2.07	17	ePn	35	51.00	0.4
ISK	2.19	29	ePn	35	57.00	4.7X

S.D. = 0.4 on 8 of 11 obs.

? FEB 24, 1990 15h 14m 29.16± 5.87s
30.837 S ±26.6km 72.209 W ±44.9km
DEPTH = 33.0km (normal)
OFF COAST OF CENTRAL CHILE (134)

ROCH	2.36	155	iPd	15	06.60	0.0
			iS	15	36.60	
RTRS	2.46	75	ePd	15	07.90	0.0
			S	15	34.80	
RTCB	2.99	103	iPd	15	15.50	0.0
			(S)	15	48.00	
LNV	3.18	168	iPc	15	23.50	5.5X
			i	16	00.20	
RTLL	3.25	100	ePd	15	18.70	-0.3
RTCV	3.30	109	e(P)	15	20.00	0.2
CFA	3.49	104	iPc	15	22.50	0.0
			(S)	16	04.00	

S.D. = 0.2 on 6 of 7 obs.

FEB 24, 1990 15h 19m 36.89± 0.67s
35.310 N ± 7.8km 23.170 E ± 6.2km
DEPTH = 10.0km (geophysicist)
4.5mb (2 obs.)
CRETE (370)
MD 3.9 (ATH).

VAM	0.85	83	ePg	19	50.90	-2.3
VLI	1.42	352	ePb	20	04.00	1.3
NPS	2.00	91	iPgd	20	12.60	1.5
APE	2.59	47	ePn	20	20.00	0.4
ATH	2.69	9	ePg	20	30.00	9.0X
KAP	3.28	85	ePn	20	29.00	-0.3
VLS	3.53	325	ePn	20	34.40	1.5
SMG	3.80	50	ePn	20	37.00	0.3
PLG	5.06	2	ePn	20	56.50	1.9
KZN	5.11	348	ePn	20	53.80	-1.5
KEK	5.15	330	ePn	20	55.20	-0.6
KSL	5.28	79	ePn	20	56.10	-1.6
KHL	5.92	58	ePn	21	07.80	1.1
VAY	6.02	356	ePn	21	10.50	2.4
OHR	6.08	343	ePn	21	08.00	-1.1
SOI	6.35	298	P	21	10.70	-2.0
SKO	6.79	349	ePn	21	10.00	-8.9X
MGR	7.72	311	P	21	30.70	-1.3
KHC	15.51	336	eP	23	22.20	5.0X
HFS	25.59	349	eP	25	05.50	-2.0
	0.5s		2.20nm		4.1mb	
BCAO	31.02	189	iPd	25	57.20	0.2
	0.6s		11.00nm		4.9mb	
TIC	38.54	229	P	27	02.20	0.8
KIC	38.59	228	P	27	02.40	0.6
LIC	38.87	228	P	27	05.10	0.9

S.D. = 1.5 on 21 of 24 obs.

% FEB 24, 1990 15h 52m 19.49± 1.25s
42.299 N ± 9.2km 13.666 E ±10.1km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

AQU	0.20	286	Pc	52	23.60	-0.4
			eSg	52	30.00	
AZI	0.35	209	P	52	26.10	-0.7
			eSg	52	32.00	
SDI	0.60	169	Pd	52	30.70	-1.0
			eSg	52	39.60	
RMP	0.87	236	P	52	38.50	2.3X
			eSg	52	51.70	
DUI	0.87	137	P	52	37.00	0.7
RDP	0.89	233	P	52	38.10	1.5
ASS	1.07	316	P	52	39.50	-0.2
			eSg	52	56.50	

S.D. = 1.2 on 6 of 7 obs.

? FEB 24, 1990 15h 54m 50.28± 4.96s
22.991 S ±23.0km 178.322 W ±24.6km
DEPTH = 421.1 ± 43.7 km
4.7mb (9 obs.)
SOUTH OF FIJI ISLANDS (171)

DZM	14.11	271	iPc	57	56.00	1.4
PGZ	18.16	193	eP	58	36.10	0.4
	0.4s		30.00nm		5.1mb	
MNG	18.34	195	eP	58	33.90	-3.6X
	0.2s		6.00nm		4.7mb	
MTW	18.85	195	eP	58	42.10	-0.4
CAW	18.90	196	P	58	43.10	0.1
WDW	19.07	196	eP	58	43.40	-1.2
MOW	19.15	195	eP	58	44.80	-0.7
TCW	19.21	197	eP	58	45.40	-0.6
KHZ	20.53	197	P	58	59.00	0.3
COO	27.59	248	eP	00	05.00	1.8
RMQ	30.06	257	iPd	00	25.60	0.8

24d 16h

	0.9s	103.00nm			5.2mb	
CAN	30.93	239	iPd	00 33.50	1.2	
BWA	31.18	241	iPd	00 33.30	-1.2	
CMS	32.86	247	iPd	00 49.80	1.0	
	0.7s	48.00nm			5.0mb	
PMG	35.69	287	iPd	01 10.70	-1.9	
	0.7s	109.59nm			5.3mb	
WB5	44.00	265	eP	02 19.10	-1.0	
WRA	44.01	265	Pc	02 19.20	-1.0	
	0.7s	8.20nm			4.2mb	
FORR	48.03	249	iPd	02 51.90	0.8	
MBL	56.96	259	eP	03 54.80	-1.3	
	0.4s	6.00nm			4.4mb	
RKG	57.05	243	eP	03 56.00	-0.6	
SPA	67.15	180	iPd	05 03.90	1.7	
	1.0s	10.00nm			4.5mb	
CHTO	90.81	290	iP	07 09.00	0.5	
	1.1s	3.53nm			4.2mb	
LWI	143.56	230	iPKPd	13 37.90	-0.5	
EKA	147.50	5	PKP	13 44.00	0.7	
	0.9s	6.30nm				
	S.D. = 1.1	on	23 of	24 obs.		

FEB 24, 1990 16h 02m 02.75± 2.65s
12.469 S ±15.1km 166.862 E ±10.7km
DEPTH = 294.5 ± 25.3 km
4.7mb (9 obs.)
SANTA CRUZ ISLANDS (184)

DZM	9.56	182	iPc	04 17.00	0.5	
			iS	05 04.10		
PMG	19.59	277	eP	06 09.50	-1.2	
CTA	21.17	246	iPd	06 26.10	0.0	
	0.9s	21.01nm			4.5mb	
RMQ	22.00	228	iPc	06 35.70	1.5	
			e	07 17.00		
MNG	29.05	166	eP	07 37.50	-0.7	
PGZ	29.24	165	eP	07 38.70	-1.1	
WB5	32.02	252	eP	08 03.10	-1.3	
WRA	32.06	252	P	08 05.00	0.3	
	0.7s	1.40nm			3.6mb X	
ASPA	33.17	246	iPc	08 13.20	-1.0	
	0.4s	4.00nm			4.3mb	
CHTO	73.80	294	iP	13 08.30	1.0	
	1.0s	3.75nm			4.1mb	
SPA	77.61	180	iPc	13 29.70	1.7	
	0.9s	9.09nm			4.5mb	
PMR	81.52	20	P	13 49.50	1.1	
ORV	84.16	48	P	14 02.60	0.3	
FBA	84.33	18	P	14 02.00	-0.7	
	0.6s	21.43nm			5.2mb	
KVN	86.46	49	P	14 13.60	-0.3	
GUN	87.96	299	P	14 22.40	0.9	
PKI	88.28	299	P	14 23.60	0.6	
	0.6s	9.00nm			4.9mb	
KKN	88.44	299	P	14 24.00	0.4	
	0.6s	8.00nm			4.8mb	
DMN	88.55	299	P	14 25.00	0.8	
	0.6s	21.00nm			5.2mb	
NEW	90.11	40	P	14 30.30	-0.4	
	0.7s	8.00nm			4.8mb	
PV09	93.04	51	P	14 45.00	0.3	
SOD	119.23	344	ePKP	20 10.00	-7.8X	
NUR	124.64	338	ePKP	20 26.00	-2.3X	
NB2	128.35	345	PKP	20 36.60	1.0	
	0.7s	2.80nm				
FLN	142.32	346	ePKP	20 59.50	-2.4X	
ORX	142.39	336	PKP	20 58.74	-3.5X	
LDF	142.39	346	ePKP	21 00.30	-1.7	
LOR	142.49	341	ePKP	20 59.40	-2.9X	
	0.7s	3.30nm				
LSD	142.86	336	PKP	21 01.30	-2.0	
LPG	142.99	337	ePKP	21 01.80	-1.7	
	0.5s	1.45nm				
PCP	143.03	334	PKP	21 00.69	-2.6X	
AVF	143.07	341	ePKP	21 01.20	-2.0	
RSP	143.07	336	PKP	21 00.99	-2.5X	
FIN	143.45	334	PKP	21 01.61	-2.4X	
RRL	143.45	336	PKP	21 03.05	-1.2	
ROB	143.52	334	PKP	21 02.02	-2.1	
PZZ	143.67	335	PKP	21 02.02	-2.5X	
STV	143.79	335	PKP	21 01.92	-2.7X	
IMI	143.82	334	PKP	21 03.46	-1.2	
MAF	143.83	341	ePKP	21 04.10	-0.4	
	0.5s	2.20nm				
TCF	143.87	342	ePKP	21 04.20	-0.5	
	0.6s	3.15nm				
SBF	144.05	334	iPKPc	21 04.40	-0.7	
	0.7s	35.30nm				
LSF	144.11	343	iPKPc	21 04.90	-0.1	
	0.7s	13.25nm				
MFF	144.25	345	ePKP	21 05.10	-0.1	
	0.7s	17.65nm				
PGF	144.40	331	iPKPc	21 05.90	0.1	
	0.7s	27.55nm				
FRF	144.63	335	iPKPc	21 06.30	0.3	
	0.7s	28.65nm				
LRG	144.84	335	iPKPc	21 07.40	1.1	
	0.9s	29.50nm				
LMR	144.87	335	iPKPc	21 07.30	0.9	
	0.9s	34.40nm				
RJF	144.97	342	ePKP	21 07.90	1.4	
	0.7s	12.15nm				
CAF	145.14	341	ePKP	21 08.70	1.8	
	0.9s	7.35nm				
LFF	145.53	342	iPKPc	21 09.70	2.3	
	0.6s	11.70nm				
LPO	145.63	342	iPKPc	21 09.70	2.1	
	0.6s	11.70nm				
EPF	147.39	342	ePKP	21 14.60	4.0X	
	0.7s	2.75nm				
BCAO	147.70	258	iPKPc	21 15.80	3.9X	
	0.4s	20.00nm				
	S.D. = 1.2	on	42 of	54 obs.		

& FEB 24, 1990 16h 05m 49.80s
60.652 N 150.357 W
DEPTH = 44.3km
KENAI PENINSULA, ALASKA (14)
<AGS-P>.

SLKM	0.16	155	iP	05 57.22	-0.1	
			iS	06 03.47		
NKA	0.44	282	iP	06 01.04	1.0	
PMS	0.71	33	iP	06 03.15	-0.5	
			iS	06 13.06		
SEW	0.71	140	iP	06 02.86	-0.7	
			eS	06 13.10		
NNL	0.77	218	iP	06 04.61	0.2	
SUA	0.84	347	iP	06 04.67	-0.8	
			iS	06 16.99		
BRLK	0.93	197	eP	06 06.34	-0.3	
SPU	0.98	303	iP	06 06.71	-0.7	
			eS	06 20.07		
RDT	1.01	266	iP	06 07.20	-0.7	
PWA	1.03	13	iP	06 07.59	-0.4	
CGLM	1.04	310	iP	06 07.56	-0.7	
CRP	1.07	306	eP	06 08.34	-0.4	
CKL	1.11	300	iP	06 08.50	-0.8	
			iS	06 23.80		
PLRM	1.12	32	iP	06 08.52	-0.7	
NCG	1.16	312	iP	06 09.32	-0.6	
			eS	06 25.05		
BGL	1.17	303	iP	06 09.44	-0.6	
			iS	06 24.54		
CNPM	1.21	202	eP	06 10.28	-0.3	
			eS	06 26.31		
RED	1.22	260	iP	06 10.10	-0.6	
			eS	06 26.07		
GHO	1.32	31	iP	06 11.63	-0.6	
XLV	1.38	210	eP	06 12.29	-0.7	
SKT	1.45	338	eP	06 13.70	-0.2	
CUT	1.76	1	eP	06 17.90	-0.4	
TOA	2.49	52	eP	06 27.61	-1.2	
RND	2.85	14	eP	06 32.52	-1.5	
	24 obs. associated					

? FEB 24, 1990 16h 24m 59.67± 1.12s
39.113 N ± 8.7km 27.440 E ±18.2km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZM	0.73	191	ePg	25 14.00	0.0	
			eSg	25 27.00		
DST	1.04	62	iPn	25 19.40	0.0	
EDC	1.28	15	ePn	25 23.00	-0.3	
BNT	1.30	16	iPn	25 24.00	0.3	
	S.D. = 0.5	on	4 of	4 obs.		

* FEB 24, 1990 16h 38m 58.70± 1.33s
11.753 N ±25.0km 87.342 W ±14.6km
DEPTH = 10.0km (geophysicist)
4.8mb (2 obs.)
NEAR COAST OF NICARAGUA (74)

QZA	2.39	318	iPc	39 38.70	0.2	
LFU	2.63	319	iPc	39 42.00	0.0	
SSS	2.64	317	eP	39 41.70	-0.4	
			eS	40 02.30		
VSS	2.71	317	iPc	39 43.50	0.3	
TME	2.99	319	iPc	39 46.70	-0.3	
CUSS	3.32	310	iPc	39 52.00	0.1	
			eS	40 19.50		
UPA	8.16	109	ePc	41 00.00	0.0	
	0.5s	49.30nm			6.0mb X	
			e	42 04.50		
LRM	40.11	333	eP	46 36.90	0.4	
FFC	44.40	348	eP	47 11.00	-0.1	
	0.6s	7.00nm			4.7mb	
SCH	45.91	16	eP	47 24.00	0.8	
PNT	45.98	331	iP	47 24.00	0.2	
	0.5s	6.00nm			4.8mb	
FRB	53.59	10	eP	48 21.00	-0.9	
MBC	66.72	352	eP	49 51.50	-0.2	
	S.D. = 0.4	on	13 of	13 obs.		

? FEB 24, 1990 18h 32m 53.40± 7.22s
26.309 S ±45.3km 177.214 W ±31.1km
DEPTH = 177.5 ± 57.0 km
4.7mb (3 obs.)
SOUTH OF FIJI ISLANDS (171)

DZM	15.49	282	iPc	36 23.50	-0.5	
RMQ	30.43	262	eP	38 54.00	2.7X	
			e	39 16.00		
CTA	34.06	273	iPc	39 23.00	0.2	
			i	39 41.00		
QIS	39.89	269	eP	40 12.00	0.4	
ASPA	44.18	262	iPc	40 47.20	0.7	
	0.4s	54.00nm			5.5mb	
WB5	44.79	268	eP	40 51.90	0.6	
WRA	44.80	268	Pd	40 50.90	-0.4	
	0.3s	3.10nm			4.3mb	
COOL	53.72	250	eP	41 59.00	-0.4	
NWAO	56.57	247	eP	42 24.00	4.3X	
MBL	57.37	261	eP	42 25.20	-0.3	
BAL	57.51	249	eP	42 26.00	-0.4	
MRWA	58.45	251	eP	42 33.40	0.5	
	0.4s	4.00nm			4.6mb	
CMB	83.26	42	e(P)	45 01.60	0.4	
WDC	83.70	39	ePd	45 03.80	0.5	
NB2	144.81	353	PKP	52 09.20	-0.8	
	0.7s	2.90nm				
HFS	145.36	350	ePKP	52 10.20	-0.7	
	0.4s	11.40nm				
	S.D. = 0.6	on	14 of	16 obs.		

FEB 24, 1990 18h 43m 51.42± 0.92s
15.047 S ± 6.3km 167.282 E ± 4.4km
DEPTH = 134.5 ± 8.2 km
5.3mb (14 obs.)
VANUATU ISLANDS (186)

PVC	2.85	160	iPc	44 36.50	-0.4	
			iS	45 12.50		
DZM	7.03	186	iPc	45 32.00	-1.2	
			iS	46 53.00		
HNR	9.08	307	eP	46 00.00	-0.7	
			eS	47 14.00		
PMG	20.45	284	eP	48 20.80	0.6	
RMQ	20.70	234	iPc	48 24.20	1.5	
COO	20.94	220	eP	48 27.00	1.9	
CMS	25.54	226	eP	49 10.00	0.7	
			e	49 36.00		
BWA	25.72	218	eP	49 10.20	-0.8	
CAN	26.02	216	eP	49 14.80	1.1	
MNG	26.46	166	P	49 17.00	-0.6	
PGZ	26.66	165	P	49 18.20	-1.2	
QIS	26.89	254	eP	49 21.50	-0.3	
WB5	31.73	257	eP	50 03.50	-1.3	
WRA	31.76	256	Pc	50 02.40	-2.6X	
	0.8s	5.50nm			4.4mb	
AFR	41.23	100	iP	51 25.20	0.4	
	1.0s	70.00nm			5.3mb	
PAE	41.41	100	iP	51 26.70	0.4	
	1.0s	95.00nm			5.4mb	
PPT	41.42	100	iP	51 27.00	0.6	
	1.0s	115.00nm			5.5mb	
PPN	41.56	100	iP	51 28.00	0.5	
	1.0s	35.00nm			5.0mb	
TVO	41.72	100	iP	51 29.50	0.6	
	1.0s	80.00nm			5.4mb	

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PMO   43.23  96 iP     51 42.20   1.1
      1.4s    250.00nm          5.7mb
VAH   43.46  96 iP     51 43.90   0.9
      1.4s    150.00nm          5.5mb
TPT   43.50  96 iP     51 44.10   0.8
      1.4s    225.00nm          5.7mb
RUV   43.70  96 iP     51 45.80   0.8
      1.4s    225.00nm          5.7mb
MDJ   68.56 332 eP     54 41.00  -0.4
CN2   69.92 329 Pd     54 49.60  -0.1
BJI   72.52 321 eP     55 05.50   0.2
      2.0s     55.00nm          5.0mb
TIY   73.50 317 Pc     55 12.00   0.8
XAN   73.91 313 P      55 13.50  -0.2
KMI   74.48 302 Pc     55 20.50   3.1X
CHTO  75.22 294 eP     55 22.00   0.6
      1.1s     17.08nm          4.7mb
                e      55 54.00
HHC   75.83 320 eP     55 24.60   0.0
CD2   76.21 308 eP     55 27.80   1.0
LZH   78.54 312 Pd     55 41.50   1.8
      2.0s     70.00nm          5.1mb
GTA   82.89 314 Pc     56 03.30   0.8
PMR   83.79  19 eP     56 06.00  -0.4
LSA   85.74 302 P      56 19.50   2.1
MWC   86.14  53 eP     56 19.00   0.1
SBB   86.48  53 eP     56 20.00  -0.5
RVR   86.59  54 eP     56 20.00  -0.9
FBA   86.65  18 eP     56 20.00  -0.5
PLM   86.77  54 eP     56 22.00   0.0
CLC   87.06  52 eP     56 23.00  -0.2
GSC   87.48  53 eP     56 25.00  -0.3
TPC   87.66  54 eP     56 26.00  -0.1
KVN   87.84  49 eP     56 27.00  -0.1
TNP   88.14  50 eP     56 28.00  -0.5
      2.0s     17.86nm          4.8mb
GLA   88.27  55 eP     56 29.00  -0.1
GUN   89.56 299 P      56 36.20   0.6
PKI   89.86 299 P      56 37.20   0.2
KKN   90.03 299 P      56 37.60  -0.1
DMN   90.13 298 P      56 38.60   0.4
GKN   90.64 299 P      56 40.20  -0.2
KEV  120.03 345 ePKP   02 36.00   9.1X
NUR  127.17 338 ePKP   02 22.00 -18.9X
DOU  142.32 342 PKP    03 12.50   2.9X
CDF  142.87 338 ePKP   03 06.30  -4.4X
CTI  142.95 332 PKP    03 08.00  -2.9X
BSF  143.54 338 ePKP   03 08.20  -3.7X
HAU  143.55 338 ePKP   03 08.50  -3.3X
SAL  143.79 332 PKPd   03 10.50  -1.7
MDI  144.03 333 PKP    03 10.00  -2.6
RSM  144.11 328 PKP    03 11.80  -1.0
VAI  144.36 334 PKP    03 10.70  -2.4X
ORI  144.38 320 PKP    03 12.50  -0.9
SFI  144.42 329 PKP    03 13.10  -0.2
DUI  144.57 324 PKP    03 12.80  -1.0
CRE  144.58 328 PKP    03 13.00  -0.8
ROI  144.59 319 PKP    03 13.00  -0.8
ASS  144.61 327 PKPd   03 13.00  -0.8
TDS  144.68 320 PKP    03 13.40  -0.5
AQU  144.70 326 PKP    03 13.50  -0.5
MMN  144.76 320 PKP    03 12.40  -1.6
SGO  144.77 322 PKP    03 12.00  -2.0
MME  144.78 330 PKPd   03 14.40   0.1
MGR  144.88 321 PKP    03 12.40  -1.8
ORX  144.88 334 PKP    03 13.10  -1.1
ORO  144.89 334 PKP    03 13.00  -1.2
FLN  144.91 346 ePKP   03 12.70  -1.3
      1.3s    111.90nm
SDI  144.91 324 PKP    03 13.50  -0.8
BDI  144.93 330 PKP    03 13.00  -1.3
BOB  144.93 332 PKP    03 13.90  -0.4
AZI  144.93 325 PKPd   03 14.00  -0.2
LDF  144.98 345 ePKP   03 13.00  -1.1
      1.4s    104.55nm
LOR  145.04 340 ePKP   03 13.80  -0.5
      1.3s    169.25nm
PII  145.22 330 PKP    03 13.50  -1.2
LBF  145.25 340 ePKP   03 14.40  -0.3
GRC  145.27 341 PKP    03 15.20   0.6
SSF  145.34 340 ePKP   03 14.80   0.0
GRR  145.34 346 ePKP   03 14.40  -0.3
      1.4s    248.30nm
LSD  145.36 335 PKP    03 15.66   0.4
RMP  145.46 326 PKPd   03 15.50   0.3
RDP  145.48 325 PKP    03 16.00   0.7
LPG  145.49 336 ePKP   03 16.00   0.5
      1.3s    141.00nm
PCP  145.51 333 PKP    03 14.84  -0.4
RSP  145.57 335 PKP    03 14.84  -0.6
SMF  145.59 340 ePKP   03 15.50   0.2
AVF  145.62 340 ePKP   03 15.30   0.0
CKI  145.72 333 PKPd   03 14.50  -1.0
LPF  145.72 346 ePKP   03 15.90   0.5
      1.5s    292.50nm
SOI  145.77 318 PKP    03 16.20   0.4
BNI  145.89 335 PKP    03 17.00   1.0
FIN  145.92 333 PKP    03 15.35  -0.6
RRL  145.95 335 PKP    03 16.99   0.8
BGF  145.99 341 ePKP   03 16.70   0.8
      1.5s    156.70nm
ROB  146.00 333 PKP    03 15.97  -0.1
DOI  146.10 334 PKP    03 16.00  -0.3
PZZ  146.16 334 PKP    03 15.97  -0.5
ENR  146.25 334 PKP    03 15.76  -0.8
PLDF 146.25 339 PKP    03 18.09   1.6
STV  146.28 334 PKP    03 16.38  -0.2
IMI  146.30 333 PKP    03 17.20   0.6
AGO  146.35 340 PKP    03 18.09   1.5
MAF  146.38 341 ePKP   03 18.00   1.4
      1.5s     67.90nm
SAOF 146.38 333 PKP    03 16.25  -0.4
AUTN 146.43 333 PKP    03 17.13   0.1
TCF  146.43 341 ePKP   03 17.90   1.2
      1.5s     88.80nm
TOUF 146.49 333 PKP    03 17.73   0.6
SBF  146.53 333 PKP    03 16.87  -0.1
AURF 146.56 333 PKP    03 16.50  -0.5
MVIF 146.63 333 PKP    03 17.13  -0.1
PYM  146.65 340 PKP    03 19.20   2.1
LSF  146.68 342 ePKP   03 18.70   1.7
      1.3s     88.45nm
MFF  146.83 344 ePKP   03 19.00   1.8
      1.3s    122.75nm
PGF  146.83 330 PKP    03 18.82   1.3
CALN 146.86 334 PKP    03 17.24  -0.4
LBL  147.03 339 PKP    03 20.66   3.1X
FRF  147.12 334 ePKP   03 19.60   1.8
      1.5s    146.25nm
LRG  147.32 334 ePKP   03 20.80   2.7X
      1.6s    180.35nm
LMR  147.36 334 ePKP   03 20.50   2.3
      1.5s     99.25nm
BCAO 147.49 254 iPKPd  03 19.00  -0.3
      0.5s     35.00nm
                ic     03 21.70
                ic     03 47.60
                ic     04 57.30
RJF  147.53 341 ePKP   03 21.20   2.8X
      1.6s    161.70nm
CAF  147.69 340 ePKP   03 21.90   3.1X
      1.6s     83.95nm
LFF  148.10 342 ePKP   03 22.70   3.4X
      1.2s     62.50nm
LPO  148.19 341 ePKP   03 22.90   3.4X
      1.3s     79.40nm
EPF  149.95 341 ePKP   03 27.10   4.8X
      1.6s     71.50nm
KIC  168.34 223 PKP    03 43.30  -0.4
LIC  168.43 222 PKP    03 43.38  -0.4
TIC  168.74 223 PKP    03 43.70  -0.2
LKO  171.14 233 PKP    03 44.76  -0.5
     S.D. = 0.9  on 122 of 139 obs.
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   FEB 24, 1990  19h 13m 14.87± 0.19s
   15.523 S ± 7.5km  175.236 W ± 4.5km
   DEPTH =  33.0km  (normal)
   5.7mb ( 36 obs.)  6.0Msz ( 26 obs.)
 TONGA ISLANDS                    (173)
     Ms 5.9 (BRK). Mo=1.6*10**18 Nm
     (PPT).
     FAULT PLANE SOLUTION: P-Woves
      NP1:Strike=125 Dip=75 Slip=  -3
      NP2:      216    87     -165
      Principal Axes:
       T                Plg= 8  Azm=349
       P                   13       81
     Comment: The focal mechanism is
       poorly controlled and
       corresponds to strike-slip
       faulting with o moderate
       normal component. The
       preferred fault plane is not
       determined.

     MOMENT TENSOR SOLUTION
     Dep  18            No. of sta:  9
     Moment Tensor;   Scale 10**18 Nm
       Mrr=-0.17        Mtt= 1.84
       Mff=-1.67        Mrt= 0.35
       Mrf= 0.08        Mtf= 0.53
      Principal axes:
       T  Val=  1.98  Plg= 9  Azm=352
       N       -0.23      81      178
       P       -1.74       1       82
     Best Double Couple:Mo=1.9*10**18
      NP1:Strike=127 Dip=83 Slip=   6
      NP2:      36     84      173
     CENTROID, MOMENT TENSOR    (HRV)
     Data Used: GDSN
     L.P.B.: 14S, 40C  M.W.:  9S, 16C
     Centroid Location:
     Origin Time       19:13:19.4 0.2
     Lat 15.38S 0.02 Lon 175.36W 0.02
     Dep  15.0 FIX Half-duration  4.0
     Moment Tensor;   Scale 10**18 Nm
       Mrr=-0.22 0.02  Mtt= 1.23 0.03
       Mff=-1.00 0.02  Mrt= 0.40 0.07
       Mrf=-0.75 0.06  Mtf= 1.02 0.02
      Principal Axes:
       T  Val=  1.63  Plg= 4  Azm=340
       N        0.20      62       76
       P       -1.84      28      248
     Best Double Couple:Mo=1.7*10**18
      NP1:Strike= 27 Dip=68 Slip=-162
      NP2:      291     74       -23
VUN    6.52 247 eP     14 58.00   6.9X
SVA    6.57 246 eP     14 59.10   7.4X
                LQ     16 44.30
                LR     16 51.50
PVC   15.92 260 iPc    17 04.00   5.8X
DZM   18.52 247 iPd    17 31.00   0.2
AFR   24.48  98 iP     18 32.80   0.5
      1.2s     55.00nm          5.0mb
PAE   24.67  99 iP     18 33.80  -0.4
      1.2s    105.00nm          5.3mb
PPT   24.68  98 iP     18 34.00  -0.2
      1.2s    205.00nm          5.6mb
PPN   24.81  98 iP     18 35.30  -0.2
      1.2s    105.00nm          5.3mb
HNR   24.96 281 eP     18 20.00 -17.0X
                eS     23 00.00
TVO   24.99  99 iP     18 36.90  -0.4
      1.2s    170.00nm          5.5mb
TBI   25.49 112 iP     18 45.40   3.5X
      1.6s    560.00nm          5.9mb
PMO   26.37  93 iP     18 49.80  -0.3
      1.4s    335.00nm          5.8mb
VAH   26.61  93 iP     18 51.40  -0.9
      1.4s    260.00nm          5.7mb
TPT   26.64  93 iP     18 52.00  -0.6
      1.4s    405.00nm          5.8mb
RUV   26.85  93 iP     18 53.70  -0.8
      1.4s    380.00nm          5.8mb
SNZO  27.13 197 P      19 00.00   3.2X
                S      23 32.00
BRS   31.93 243 iPd-   19 39.20  -0.7
                i      19 43.20
                iS     23 48.00
RAB   33.97 286 e(P)   20 12.00  14.3X
RMQ   35.23 246 eP     20 07.00  -1.5
RIV   35.34 233 e(P)   20 10.00   0.7
    Z  18s     19.11um          5.9Msz
                e(S)   26 50.00
PMG   37.18 275 eP     20 24.00  -1.0
CNB   37.28 231 eP     20 27.00   1.3
CAN   37.56 232 eP     20 33.20   5.2X
BWA   37.67 233 eP     20 33.20   4.2X
RKT   38.64 108 iP     20 36.90  -0.3
      1.2s    145.00nm          5.6mb
CMS   38.85 239 eP     20 38.00  -0.8
HON   40.33  25 P      20 34.00 -17.1X
    Z  20s      4.26um          5.3Msz
TOO   41.02 230 eP     20 56.70  -0.1
                e      21 03.00
QIS   43.13 256 eP     21 14.00  -0.2
ADE   45.48 236 eP     21 32.50  -0.5
WB5   48.07 257 eP     21 51.00  -2.5
WRA   48.09 257 Pc     21 51.30  -2.4
      1.3s     65.00nm          5.5mb
ASPA  48.39 252 iPd    21 53.60  -2.4
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24d 19h

1.2s 91.00nm 5.7mb
Z 22s 40.40um 6.4MszX
eS 27 19.80
LR 39 47.30
GUMO 48.93 304 eP 22 05.80 5.7X
PJG 48.93 304 eP 22 05.80 5.7X
MTN 51.96 266 eP 22 22.00 -1.3
DAV 62.78 287 eP 23 42.00 2.2
PCI 65.63 276 iPc 24 01.50 3.1X
1.0s 5.00nm 4.6mb X
SMY 68.59 353 P 24 04.00 -12.4X
Z 20s 13.00um 6.2Msz
BAG 70.84 294 eP 24 28.00 -3.1X
eS 33 48.00
SYP 72.33 45 eP 24 39.00 -0.6
GCC 72.41 42 e(P) 24 39.90 0.0
PRS 72.41 43 ePd 24 40.00 0.1
PCC 72.44 42 ePd 24 38.80 -1.2
SAO 72.61 43 eP 24 42.20 1.1
BCH 72.62 45 P 24 40.30 -1.0
BRK 72.74 41 e(P) 24 41.50 -0.3
Z 20s 6.00um 5.9Msz
eS 34 15.00
eLR 46 18.00
BKS 72.75 41 iPd 24 46.20 4.3X
0.9s 80.00nm 5.7mb
Z 20s 9.00um 6.0Msz
N 20s 6.00um
E 20s 5.00um
eS 34 14.00
eLQ 43 04.00
eLR 46 24.00
PRI 72.77 44 ePd 24 44.00 1.8
MHC 72.82 42 ePd 24 42.50 0.0
Z 20s 5.00um 5.8Msz
N 20s 3.40um
E 20s 4.30um
eS 34 19.00
e 34 38.00
eScS 35 03.00
eLQ 42 53.00
eLR 46 06.00
LLA 72.86 43 e(P) 24 42.40 -0.2
ARN 72.90 42 P 24 43.60 0.8
ABL 73.03 45 P 24 44.00 0.1
PAS 73.38 47 eP 24 45.00 -0.6
MWC 73.50 47 eP 24 46.00 -0.6
BAR 73.67 49 eP 24 46.00 -1.4
RVR 73.85 47 eP 24 48.00 -0.4
PLM 73.89 48 eP 24 48.00 -0.8
FRI 73.89 43 ePd 24 48.30 -0.2
SBB 73.91 46 eP 24 47.00 -1.8
ISA 73.98 45 eP 24 50.00 0.8
CMB 74.03 42 ePd 24 48.80 -0.6
WDC 74.18 39 eP 24 50.20 0.1
ORV 74.21 40 ePd 24 51.50 1.2
SPA 74.58 180 iPc 24 53.20 0.9
1.2s 42.96nm 5.3mb
Z 20s 5.86um 5.9Msz
MIN 74.61 40 eP 24 52.00 -0.8
CLC 74.67 45 eP 24 53.00 -0.1
TPC 74.85 48 eP 24 53.00 -1.3
GSC 74.94 46 eP 24 54.00 -0.8
LBFM 75.03 39 P 24 54.20 -1.1
GLA 75.20 49 eP 24 56.00 -0.3
KVN 76.09 42 P 24 58.70 -2.7X
TNP 76.14 44 P 25 01.20 -0.5
1.4s 143.75nm 5.8mb
BMW 77.42 34 P 25 08.00 -0.4
MDJ 78.05 323 eP 25 14.80 3.0X
Z 25s 17.20um 6.3MszX
E 21s 8.70um
LON 78.35 34 P 25 13.50 -0.1
HKC 78.68 297 eP 25 20.00 4.2X
eS 35 24.00
PMR 79.61 12 eP 25 18.80 -1.2
1.5s 159.70nm 5.8mb
Z 20s 3.50um 5.7Msz
TTA 79.63 9 eP 25 19.70 -0.5
GZH 79.68 297 eP 25 24.00 2.8X
Z 36s 4.30um 5.5MszX
E 15s 1.90um
MSU 79.77 45 P 25 23.70 2.0
DL2 80.01 315 eP 25 28.00 5.4X
6.0s 700.00nm 5.8mb X
Z 24s 2.90um 5.5MszX
N 16s 2.60um

E 16s 2.70um
eS 35 27.00
CN2 80.05 321 Pc 25 21.80 -1.0
1.2s 200.00nm 6.0mb
Z 25s 9.20um 6.0MszX
N 22s 5.30um
E 22s 4.80um
esP 25 40.00
eS 35 27.00
SS 40 40.00
DUG 80.16 44 P 25 24.50 0.9
1.5s 38.10nm 5.2mb
SNY 80.18 318 eP 25 21.60 -1.9
1.4s 30.00nm 5.1mb
Z 22s 5.16um 5.8Msz
N 32s 5.44um
E 40s 4.08um
pP 25 36.10 50kmX
S 35 18.00
SKS 35 34.00
SS 40 30.00
PNT 81.08 33 eP 25 28.00 -0.1
1.5s 157.00nm 5.8mb
OIZ 81.31 292 eP 25 34.50 4.6X
WHN 81.70 305 eP 25 35.50 3.8X
Z 36s 4.60um 5.6MszX
N 22s 5.10um
E 18s 2.60um
eS 35 44.00
NEW 81.81 35 P 25 32.00 0.0
1.5s 61.95nm 5.4mb
TIA 81.94 311 eP 25 30.00 -2.9X
Z 20s 4.40um 5.8Msz
N 19s 2.80um
E 18s 4.10um
ALQ 82.24 51 iPc 25 34.40 -0.3
1.3s 65.87nm 5.5mb
ANMO 82.24 51 P 25 34.90 0.2
1.4s 116.28nm 5.7mb
Z 20s 6.38um 6.0Msz
FBA 82.86 11 eP 25 36.00 -1.0
IMA 82.94 9 eP 25 37.50 -0.1
1.7s 115.70nm 5.7mb
IMW 83.19 41 P 25 40.00 0.4
LRM 83.21 39 eP 25 40.50 0.9
LRM 83.21 39 eP 25 40.50 0.9
BW06 83.55 42 P 25 41.50 0.2
1.4s 43.79nm 5.4mb
BJI 84.27 314 eP 25 44.00 -0.7
1.5s 52.00nm 5.5mb
Z 24s 6.37um 5.9MszX
E 16s 1.39um
eS 36 10.00
eSS 41 36.00
GOL 85.02 47 P 25 48.60 -0.2
1.3s 102.08nm 5.9mb
Z 20s 3.50um 5.7Msz
GLD 85.15 47 P 25 52.00 2.7X
1.4s 121.62nm 5.9mb
Z 18s 6.26um 6.0Msz
IPM 85.20 276 ePd 25 50.40 0.5
TIY 85.98 311 Pd 25 53.80 0.4
N 18s 1.60um
E 18s 3.00um
S 36 24.50
SNG 86.30 278 eP 25 57.80 2.5X
eS 36 37.00
SES 86.32 35 eP 25 55.00 0.3
1.5s 345.00nm 6.4mb
EDM 86.52 32 eP 25 55.50 -0.2
1.4s 168.00nm 6.1mb
GYA 86.54 299 P 26 01.00 4.5X
Z 32s 2.00um 5.3MszX
XAN 87.27 306 Pd 25 59.50 -0.2
1.2s 100.00nm 5.9mb
N 16s 1.50um
E 18s 1.80um
RSSD 87.75 43 P 26 02.60 0.6
HHC 87.82 313 eP 26 02.10 -0.2
Z 22s 12.30um 6.3Msz
E 18s 2.30um
LOE 88.13 289 eP 26 05.50 1.4
MEO 88.16 53 e(P) 26 06.80 2.9X
BTO 88.81 313 P 26 07.00 -0.1
N 18s 1.30um
E 19s 2.80um
SKS 36 35.00

INK 88.82 14 eP 26 06.00 -0.3
pP 26 11.00 16kmX
KMI 89.49 296 Pc 26 10.00 -0.7
Z 23s 6.20um 6.0MszX
N 20s 2.70um
E 20s 2.60um
CD2 90.37 302 eP 26 19.00 4.5X
Z 20s 2.32um 5.6Msz
BDT 90.59 288 eP 26 16.00 0.4
CHG 91.07 289 eP 26 19.80 1.9
CHTO 91.07 289 eP 26 19.80 2.0
1.3s 16.34nm 5.2mb
UYO 91.18 55 e(P) 26 22.50 4.4X
LZH 91.88 307 eP 26 22.00 0.5
2.0s 33.00nm 5.4mb
Z 40s 9.30um 5.9MszX
E 17s 1.10um
SS 43 26.00
FFC 93.18 34 eP 26 26.00 -0.8
GTA 95.88 309 eP 26 38.20 -1.6
RSON 96.65 39 P 26 45.90 3.1X
1.6s 52.49nm 5.8mb
Z 20s 3.39um 5.8Msz
MBC 97.40 12 eP 26 50.00 4.3X
1.6s 43.00nm 5.7mb
RSCP 98.59 56 P 26 45.00 -6.9X
Z 20s 4.52um 6.0Msz
RSNY 108.30 48 Pdiff 27 27.50 -7.6X
Z 20s 5.42um 6.1Msz
KSH 114.12 307 ePKP 31 53.00 0.0
Z 17s 3.60um 6.0MszX
DAG 117.54 6 ePKP 32 05.00 6.8X
Z 21s 5.30um 6.1Msz
N 21s 2.87um
E 21s 0.57um
KEV 124.05 351 ePKP 32 15.00 4.2X
SOD 126.26 350 ePKP 32 15.00 -0.2
MAIO 127.33 304 ePKP 32 18.00 -0.3
HVD 129.99 203 ePKP 32 09.50 -14.1X
KIM 131.92 204 ePKP 32 34.00 6.7X
PRY 132.39 208 ePKP 32 30.00 1.7
BFS 132.72 207 ePKP 32 30.50 1.6
NUR 132.82 347 ePKP 32 26.00 -1.8
Z 20s 6.80um 6.4Msz
LR 17 20.00
SLR 133.03 209 iPKPc 32 36.50 7.0X
Z 17s 5.78um 6.4MszX
NB2 134.31 356 PKP 32 37.60 6.9X
1.3s 13.50nm
TAB 137.11 310 e(PKP)32 41.00 4.1X
BUL 137.51 214 ePKP 32 37.90 -0.3
BHD 140.11 304 ePKP 32 47.50 5.2X
e 36 27.00
KRA 143.42 344 ePKP 32 49.60 2.0
e 32 52.60
KSP 143.56 348 ePKP 32 49.30 1.4
WTS 143.58 358 ePKP 32 52.00 4.2X
1.1s 14.00nm
CLL 143.69 351 ePKP 32 51.00 3.0X
2.1s 64.00nm
Z 21s 3.00um 6.0Msz
KAS 144.06 322 ePKP 32 47.00 -2.1
SPC 144.12 343 ePKP 32 51.00 1.9
NAI 144.20 245 iPKPd 32 50.00 -0.3
MOX 144.53 352 ePKP 32 50.00 0.5
1.9s 65.00nm
Z 24s 3.80um 6.1MszX
N 28s 2.70um
e 32 54.00
VRI 144.58 333 ePKP 32 53.00 3.2X
PRU 144.72 349 ePKP 32 48.00 -1.8
Z 20s 5.10um 6.3Msz
N 20s 3.10um
E 20s 0.90um
e 32 53.50
ENN 144.83 359 ePKP 32 53.50 3.5X
1.4s 160.00nm
MEM 144.99 359 PKP 32 48.60 -1.6
i 32 54.40
MLR 145.22 334 ePKP 32 50.00 -1.0
TNS 145.26 356 ePKPc 32 49.40 -1.4
e 32 55.40
DOU 145.52 0 PKP 32 51.30 0.1
GRF 145.52 353 iPKPc 32 50.70 -0.6
1.7s 73.00nm
Z 20s 2.80um 6.0Msz
e 32 55.90

PSN	145.57	329	ePKP	32	50.00	-1.5
BBTK	145.59	320	ePKP	32	51.00	-0.8
ABH	145.66	357	ePKP	32	50.12	-1.4
KHC	145.72	350	PKP	32	51.20	-0.4
	Z 18s		4.10um			6.2Msz
	N 18s		1.40um			
	E 18s		1.40um			
			i	32	57.60	
CMP	145.78	334	ePKPd	32	56.00	4.1X
TNR	145.78	335	ePKPd	32	50.00	-1.8
WET	145.82	351	ePKP	32	52.40	0.6
	Z 20s		5.00um			6.3Msz
SHBJ	145.85	305	PKPc	32	52.20	-0.3
TOD	145.85	355	ePKP	32	50.18	-1.6
RUP	145.86	357	ePKP	32	51.05	-0.8
ZST	145.87	345	ePKP	32	51.80	0.0
SRO	145.91	344	ePKP	32	51.70	-0.2
VKA	145.99	346	ePKP	32	52.00	-0.1
	6.0s	1343.00nm				
	Z 22s		4.30um			6.2Msz
			i	32	58.20	
			e	33	18.00	
BUD	146.01	343	ePKP	32	57.00	4.9X
AAE	146.19	263	ePKP	32	56.80	3.0X
SOP	146.48	346	ePKP	32	51.90	-1.0
FLN	146.57	6	ePKP	32	52.30	-0.7
	1.6s	174.15nm				
KMR	146.65	349	ePKP	32	55.00	1.9
			i	33	00.40	
LDF	146.78	6	ePKP	32	52.80	-0.5
	1.2s	56.55nm				
GPA	146.78	323	ePKP	32	58.00	4.4X
BZS	146.82	338	ePKP	32	56.00	2.6X
HRI	146.89	308	ePKP	32	55.00	0.9
GRR	146.90	7	ePKP	32	53.10	-0.4
	1.2s	65.45nm				
ISK	146.97	325	ePKP	33	00.00	6.2X
SHMJ	147.10	307	PKP	32	58.60	4.3X
CDF	147.14	357	ePKP	32	54.30	0.3
	1.3s	101.10nm				
MDSJ	147.14	305	PKPc	32	55.30	0.7
LPF	147.23	7	ePKP	32	54.10	0.1
	1.5s	271.60nm				
JMB	147.25	329	ePKP	32	58.00	3.7X
CTT	147.26	326	iPKP	32	55.30	1.0
BURJ	147.26	306	PKPc	32	55.70	1.0
PVL	147.27	332	ePKP	32	56.00	1.8
QUTJ	147.46	304	PKPc	32	57.80	2.7X
KFNJ	147.51	306	PKPc	32	57.80	2.9X
HAU	147.58	358	ePKP	32	55.40	0.7
	1.5s	198.50nm				
FEL	147.63	356	ePKP	32	53.09	-1.8
ALT	147.69	321	ePKP	33	00.00	4.8X
KBA	147.74	349	ePKPc	32	56.00	0.9
	1.5s	62.50nm				
			i	33	01.50	
			i	33	15.40	
BSF	147.74	357	ePKP	32	55.70	0.7
	1.2s	59.50nm				
SCE	148.05	351	ePKPc	32	49.40	-6.2X
			e	32	55.40	
BNT	148.09	325	ePKP	32	57.00	1.3
EDC	148.12	325	ePKP	32	56.00	0.3
MFT	148.13	327	ePKP	32	57.00	1.2
PTJ	148.29	345	e(PKP)	32	52.00	-3.9X
FVI	148.31	349	PKP	32	58.00	2.2
RBL	148.31	348	PKP	32	58.00	2.1
PGB	148.33	332	ePKP	33	00.00	3.9X
LOR	148.34	1	ePKP	32	57.70	1.8
	1.5s	94.00nm				
ZAG	148.36	345	ePKP	32	59.00	3.1X
KDZ	148.44	330	ePKP	33	00.00	3.8X
LJU	148.49	347	ePKP	32	59.00	2.9X
KHL	148.51	321	ePKP	32	59.00	2.4X
SSF	148.54	2	ePKP	32	58.30	2.1
PRNI	148.61	303	ePKP	33	01.00	4.1X
LBF	148.62	1	ePKP	32	58.20	1.8
	1.3s	95.65nm				
VOY	148.64	348	ePKP	33	01.60	5.1X
VTS	148.72	333	ePKP	33	00.00	3.2X
MFF	148.74	7	ePKP	32	58.00	1.5
	1.5s	104.45nm				
RZN	148.75	330	ePKP	33	00.00	3.0X
CEY	148.80	347	ePKP	32	59.50	2.8X
			e	33	05.00	
AVF	148.80	2	ePKP	32	58.20	1.6
	1.3s	79.40nm				
VBY	148.83	346	ePKP	33	00.60	3.9X
MBH	148.91	302	e(PKP)	33	02.00	4.7X
SMF	148.96	1	ePKP	32	58.50	1.6
TRI	148.97	348	ePKPd	33	01.00	4.1X
BGF	149.02	3	ePKP	32	59.00	2.0
	1.5s	125.35nm				
CTI	149.03	351	PKP	33	01.50	4.4X
RIY	149.19	347	ePKP	33	01.10	3.9X
LSF	149.25	4	ePKP	32	59.50	2.2
TCF	149.25	3	ePKP	32	59.90	2.5X
	1.6s	90.15nm				
MMB	149.29	331	ePKPd	33	01.00	3.4X
EZN	149.33	326	ePKP	32	59.40	1.8
MAF	149.34	3	ePKP	33	00.00	2.5X
	1.7s	227.90nm				
MDI	149.55	353	PKP	33	04.00	6.3X
VAI	149.56	354	PKP	33	02.80	5.1X
SAL	149.62	352	PKP	33	06.00	8.2X
ORX	149.86	356	PKP	33	05.46	7.0X
ORO	149.87	356	PKP	33	07.50	9.1X
VAY	150.03	333	ePKP	32	56.50	-2.1
			i	33	05.60	
LPG	150.07	357	ePKP	33	02.70	3.7X
	1.1s	43.95nm				
LSD	150.09	357	PKP	33	05.15	6.2X
RJF	150.19	5	ePKP	33	02.00	3.2X
	1.6s	130.60nm				
RSP	150.39	356	PKP	33	06.48	7.2X
LWI	150.39	235	ePKPd	33	05.80	5.5X
STS	150.44	20	ePKP	33	05.80	6.6X
LFF	150.48	6	ePKP	33	02.80	3.6X
	1.4s	191.70nm				
BNI	150.52	357	PKP	33	05.70	6.2X
BOB	150.58	353	PKP	33	03.00	3.5X
CAF	150.60	4	ePKP	33	03.30	3.9X
	1.2s	52.05nm				
RRL	150.65	357	PKP	33	05.66	5.9X
LPO	150.78	5	ePKP	33	03.50	3.8X
	1.3s	61.35nm				
PCP	150.90	354	PKP	33	03.00	3.1X
OHR	150.96	335	iPKP	33	05.00	4.9X
	1.4s		0.15nm			
			i	33	11.50	
			i	33	47.70	
DOI	151.04	356	PKP	33	03.50	3.3X
CKI	151.04	355	PKP	33	04.50	4.4X
PZZ	151.04	357	PKP	33	06.17	5.9X
SFI	151.06	349	PKP	33	10.00	9.9X
BDI	151.12	351	PKP	33	06.00	5.7X
ROB	151.20	355	PKP	33	04.23	3.8X
FIN	151.26	355	PKP	33	03.20	2.8X
STV	151.29	356	PKP	33	04.64	4.1X
ENR	151.30	356	PKP	33	05.87	5.3X
CRE	151.32	349	PKP	33	05.50	4.8X
TOUF	151.52	356	PKP	33	03.15	2.1
AUTN	151.53	356	PKP	33	04.93	3.8X
SAOF	151.53	356	PKP	33	04.45	3.6X
IMI	151.58	355	PKP	33	06.28	5.3X
MVIF	151.65	356	PKP	33	05.02	3.8X
SBF	151.66	356	PKP	33	04.63	3.5X
SBF	151.66	356	PKP	33	04.89	3.8X
ASS	151.72	348	PKP	33	07.50	6.3X
CALN	151.81	357	PKP	33	05.30	3.9X
FRF	152.01	357	ePKP	33	05.50	4.0X
	1.5s	57.45nm				
LRG	152.13	358	ePKP	33	06.30	4.6X
	1.3s	39.70nm				
LMR	152.24	357	ePKP	33	06.00	4.1X
	1.5s	41.80nm				
ECRI	152.29	12	e(PKP)	33	11.00	8.9X
AZI	152.59	346	PKP	33	08.50	6.2X
SDI	152.76	345	PKP	33	08.00	5.3X
PGF	152.82	353	PKP	33	00.18	-2.7X
SGO	153.42	342	PKP	33	12.50	8.9X
MGR	153.73	341	PKP	33	06.40	2.3X
GUD	153.80	15	ePKP	33	12.00	7.7X
TDS	153.91	339	PKP	33	12.00	7.7X
ETOR	154.11	12	ePKP	33	18.00	13.3X
TOL	154.54	16	ePKP	33	12.00	6.8X
			iPKKP	33	33.50	
			eSS	56	40.00	
BCAO	162.54	232	iPKPd	33	18.40	3.2X
	0.6s	53.00nm				
			ic	33	22.00	
			ic	33	32.10	
LIC	166.67	133	PKP	33	17.92	-0.9
	Z 20s		1.50um			
TIC	166.97	132	PKP	33	18.24	-0.8
KIC	166.97	133	PKP	33	18.02	-1.0
LKO	168.28	119	PKP	33	20.14	0.2

S.D. = 1.1 on 161 of 288 obs.

% FEB 24, 1990 19h 30m 57.71± 1.31s
44.386 N ±10.7km 11.099 E ±13.6km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)

MME	0.35	236	Pc	31	04.60	-0.3
			eSg	31	08.50	
BDI	0.48	228	Pc	31	06.60	-1.0
			eSg	31	13.50	
PII	0.78	212	P	31	14.00	1.1
			eSg	31	24.00	
BOB	1.24	288	P	31	21.30	0.5
FVI	2.50	28	P	31	38.80	-0.3

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

? FEB 24, 1990 19h 55m 30.54± 3.29s
13.833 N ±70.8km 90.970 W ±29.2km
DEPTH = 33.0km (normal)
NEAR COAST OF GUATEMALA (71)

CUSS	1.00	86	iPc	55	48.40	0.1
TPX	1.64	311	iPc	55	57.50	0.0
			iS	56	18.00	
VSS	1.68	93	iPc	55	58.40	0.2
SSS	1.73	95	eP	55	58.70	-0.1
			eS	56	20.00	
LFU	1.80	92	iPd	55	59.50	-0.4
QZA	1.94	99	iPd	56	02.00	0.1

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

& FEB 24, 1990 20h 44m 05.59s
58.616 N 153.999 W
DEPTH = 80.6km
KODIAK ISLAND REGION (13)
<AGS-P>.

AUE	0.81	23	iP	44	22.03	-0.7
AUL	0.82	21	iP	44	22.04	-0.8
PDB	1.18	355	iP	44	26.14	-1.0
KDC	1.18	137	eP	44	26.18	-1.0
CNPM	1.69	56	eP	44	32.30	-1.6
NNL	1.99	43	iP	44	37.02	-0.9
RDT	2.12	22	iP	44	38.13	-1.7
SLKM	2.70	44	eP	44	45.83	-1.9
CKL	2.72	17	iP	44	46.68	-1.4
SPU	2.75	20	iP	44	46.90	-1.6
SEW	2.77	55	eP	44	45.58	-3.0
BGL	2.78	16	iP	44	47.91	-0.9
CGLM	2.88	20	iP	44	48.70	-1.5
NCG	2.95	18	iP	44	49.72	-1.5

14 obs. associated

? FEB 24, 1990 21h 29m 41.10± 3.38s
39.600 N ±35.0km 16.160 E ±19.3km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

TDS	0.15	67	Pc	29	44.50	-0.1
			eSg	29	45.70	
MMN	0.32	336	P	29	47.80	0.1
			eSg	29	51.80	
ROI	0.32	95	P	29	47.80	0.1
			eSg	29	52.60	
MGR	0.71	319	Pd	29	55.00	-0.1
			eSg	30	04.60	

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

• FEB 24, 1990 22h 00m 27.51± 0.87s
5.208 S ±10.8km 151.404 E ±11.3km
DEPTH = 125.0 ± 11.5 km
4.3mb (3 obs.)
NEW BRITAIN REGION (192)

RAB	1.27	37	iPd	00	53.50	0.5
	0.4s	1728.81nm				
			iS	01	11.00	
PMG	5.93	225	eP	01	55.00	0.7
			eS	03	05.00	
CTA	15.62	198	iPc	04	06.00	3.9X
QIS	19.09	216	eP	04	42.50	-0.6
RMQ	21.31	187	eP	05	06.00	0.3
MTN	21.40	248	eP	05	06.00	-0.6

24d 22h

			e	08 53.00		
WB5	22.08	227	eP	05 13.60	0.3	
BRS	22.10	177	iPc	05 13.80	0.3	
WRA	22.14	227	Pc	05 13.90	0.0	
	0.7s	14.70nm			4.5mb	
DZM	22.20	140	iPc	05 14.10	-0.5	
KNA	24.57	243	eP	05 38.00	0.6	
ASPA	24.92	221	iPc	05 40.60	-0.1	
			ePP	06 13.40		
			eS	09 49.60		
CHTO	56.91	296	eP	10 03.50	1.4	
	1.1s	3.83nm			4.3mb	
GBA	75.74	285	Pc	11 59.30	-2.3	
	1.0s	5.80nm			4.3mb	

S.D. = 1.0 on 13 of 14 obs.

% FEB 24, 1990 23h 04m 18.52± 0.75s
46.560 N ± 9.1km 0.566 E ± 7.0km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.7 (LDG).

MFF	0.49	275	Pg	04 27.50	-1.0	
			Sg	04 34.60		
LSF	0.74	115	Pg	04 31.40	-1.6	
			Sg	04 41.00		
TCF	1.17	103	Pg	04 38.90	-1.5	
			Sg	04 53.60		
RJF	1.42	152	Pg	04 44.50	0.1	
			Sg	05 03.60		
MAF	1.43	103	Pg	04 43.20	-1.3	
			Sg	05 00.90		
BGF	1.57	89	Pg	04 45.00	-1.5	
			Sg	05 04.00		
LPF	1.83	324	Pg	04 49.20	-1.1	
			Sg	05 13.60		
AVF	1.93	82	Pn	04 48.40	-3.3X	
			Pg	04 52.00		
			Sg	05 14.40		
CAF	1.94	147	Pg	04 54.80	2.9	
			Sg	05 20.40		
GRR	2.07	333	Pg	04 53.80	0.1	
			Sg	05 19.20		
SSF	2.08	75	Pg	04 53.40	-0.5	
			Sg	05 19.00		
LDF	2.09	347	Pg	04 54.20	0.2	
			Sg	05 20.00		
SMF	2.26	87	Pg	04 58.40	1.9	
			Sg	05 25.00		
FLN	2.31	343	Pg	04 58.70	1.4	
			Sg	05 26.00		
LOR	2.37	71	Pg	04 59.20	1.2	
			Sg	05 27.50		
LBF	2.38	79	Pg	04 58.80	0.5	
			Sg	05 28.60		

S.D. = 1.5 on 15 of 16 obs.

? FEB 25, 1990 00h 51m 51.00± 4.5Bs
31.262 S ±21.8km 68.609 W ±32.2km
DEPTH = 89.7 ± 46.6 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.14	119	iPc	52 04.00	-0.3	
			eS	52 14.00		
RTCB	0.28	216	eP	52 04.80	0.2	
CFA	0.47	137	ePc	52 06.00	0.3	
			S	52 18.00		
RTCV	0.60	174	ePd	52 06.60	-0.2	
			S	52 19.90		
RTRS	1.31	326	ePd	52 14.70	0.0	

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

? FEB 25, 1990 01h 04m 49.81± 4.10s
31.461 S ±24.1km 68.879 W ±28.2km
DEPTH = 82.1 ± 41.3 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB	0.07	111	e(P)	05 02.00	0.0	
			(S)	05 14.00		
RTLL	0.37	70	iPc	05 03.10	0.1	
RTCV	0.49	144	ePc	05 04.00	0.0	
			S	05 16.20		
CFA	0.57	105	iPc	05 04.50	-0.1	
			S	05 17.00		
RTRS	1.38	339	iPc	05 14.00	0.0	
			eS	05 34.00		

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

% FEB 25, 1990 01h 30m 46.60± 1.15s
46.359 N ± 7.1km 0.999 W ±11.6km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.9 (LDG).

MFF	0.64	67	Pg	30 59.20	-0.2	
			Sg	31 07.80		
LPF	1.67	359	Pg	31 18.20	2.2	
			Sg	31 39.50		
LSF	1.76	93	Pg	31 20.40	3.1X	
			Sg	31 42.00		
LFF	1.87	139	Pn	31 20.00	1.1	
			Sg	31 46.00		
GRR	2.03	3	Pn	31 20.60	-0.6	
			Pg	31 24.80		
			Sn	31 44.80		
			Sg	31 50.20		
RJF	2.05	120	Pn	31 22.00	0.5	
			Pg	31 24.50		
			Sg	31 51.40		
TCF	2.23	91	Pn	31 24.40	0.3	
			Pg	31 29.00		
			Sg	31 50.80		
LPO	2.27	137	Pg	31 30.60	5.8X	
			Sg	31 58.00		
LDF	2.31	15	Pg	31 30.40	5.1X	
			Sn	31 52.00		
			Sg	31 59.80		
FLN	2.43	8	Pn	31 25.70	-1.2	
			Pg	31 33.00		
			Sg	32 03.00		
MAF	2.48	92	Pn	31 27.60	0.0	
			Sg	32 03.80		
CAF	2.58	123	Pn	31 30.00	0.8	
			Pg	31 36.20		
			Sg	32 08.40		
BGF	2.67	84	Pn	31 30.00	-0.4	
			Pg	31 37.00		
			Sg	32 10.00		
AVF	3.03	80	Pn	31 34.60	-0.9	
			Pg	31 44.00		
			Sg	32 20.40		
SSF	3.18	76	Pg	31 45.20	7.6X	
			Sg	32 26.00		
SMF	3.36	83	Pg	31 50.00	9.9X	
			Sg	32 31.50		
LOR	3.46	73	Pg	31 50.80	9.2X	
			Sg	32 33.60		
EPF	3.46	164	Pn	31 40.20	-1.5	
			Pg	31 52.00		
LBF	3.48	78	Pg	31 51.00	9.1X	
			Sg	32 34.50		

S.D. = 1.1 on 12 of 19 obs.

FEB 25, 1990 01h 41m 41.61± 0.86s
36.232 N ± 7.5km 27.231 E ± 9.1km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)
MD 3.4 (ATH).

KAP	0.68	184	ePg	41 55.40	0.3	
			eSg	42 06.00		
YER	1.24	43	ePn	42 04.00	-0.6	
SMG	1.51	348	ePb	42 10.00	1.4	
APE	1.60	302	ePb	42 09.00	-1.1	
NPS	1.63	234	ePb	42 10.00	-0.5	
IZM	2.16	1	ePn	42 23.00	4.8X	
VAM	2.60	252	ePn	42 25.00	0.6	
BCK	2.96	65	ePn	42 37.90	8.3X	
VLI	3.49	279	ePn	42 37.00	-0.1	

S.D. = 1.0 on 7 of 9 obs.

& FEB 25, 1990 01h 43m 38.86s
58.556 N 142.773 W
DEPTH = 10.0km (geophysicist)
5.1mb (28 obs.)
GULF OF ALASKA (15)
<AGS-P>.

CYK	1.54	5	iP	44 01.77	-4.6	
			eS	44 20.17		
YKU	1.86	56	iPd	44 07.00	-4.0	
YAH	1.89	16	iP	44 06.85	-4.8	
WAX	1.90	359	iP	44 06.55	-5.1	
PCA	2.01	39	iP	44 08.36	-5.0	
PCA	2.01	39	iP	44 08.39	-4.9	
MID	2.04	297	iPc	44 08.70	-4.9	
RAGM	2.08	333	eP	44 09.42	-4.8	
			eS	44 33.52		
BCPM	2.14	48	iP	44 09.80	-5.2	
			eS	44 33.09		
HON	2.21	64	eP	44 10.77	-5.3	
TGL	2.21	359	iP	44 10.83	-5.3	
SGAM	2.31	329	iP	44 13.14	-4.4	
			eS	44 40.26		
BALM	2.50	5	iP	44 15.05	-5.2	
CVA	2.51	324	iP	44 14.67	-5.6	
HIN	2.65	316	iP	44 17.37	-5.1	
			eS	44 48.60		
GLB	2.94	350	iP	44 20.92	-5.6	
			iS	44 54.21		
KLU	3.34	333	iP	44 26.68	-5.6	
HYT	3.51	47	P	44 29.60	-5.0	
SEW	3.76	297	eP	44 31.93	-6.1	
TOA	3.94	336	iPc	44 36.00	-4.7	
NCA	4.00	331	eP	44 35.87	-5.6	
SDG	4.21	342	eP	44 38.37	-6.2	
SLKM	4.27	300	eP	44 38.81	-6.5	
PMS	4.35	311	eP	44 41.30	-5.3	
PLRM	4.41	316	eP	44 41.65	-5.6	
GHO	4.45	319	iP	44 42.33	-5.7	
			iS	45 30.39		
CNPM	4.48	286	eP	44 43.18	-5.1	
			eS	45 31.67		
NNL	4.62	292	eP	44 46.14	-4.1	
PAX	4.62	345	eP	44 44.34	-6.1	
XLV	4.71	285	eP	44 46.08	-5.6	
PWA	4.72	314	eP	44 46.20	-5.5	
TMW	4.79	359	eP	44 47.96	-4.8	
NKA	4.82	301	eP	44 47.85	-5.3	
SUA	4.95	309	eP	44 48.82	-6.3	
RDT	5.30	297	eP	44 53.28	-6.7	
CUT	5.35	319	eP	44 56.63	-4.0	
SPU	5.37	303	eP	44 54.40	-6.5	
CGLM	5.40	305	eP	44 54.53	-6.9	
RED	5.43	294	eP	44 55.23	-6.6	
CRP	5.45	304	eP	44 56.77	-5.4	
DDM	5.46	345	eP	44 57.21	-5.0	
CKL	5.50	303	iP	44 56.10	-6.7	
NCG	5.51	305	eP	44 56.97	-6.0	
AUE	5.55	283	eP	44 58.86	-4.5	
SKT	5.55	312	iP	44 56.74	-6.7	
BGL	5.55	303	eP	44 58.12	-5.4	
HUR	5.57	326	eP	44 59.51	-4.2	
AUL	5.58	283	eP	44 59.41	-4.5	
RND	5.69	331	eP	44 59.65	-5.9	
DMW	5.70	347	eP	44 59.27	-6.3	
DWY	5.75	15	P	45 00.00	-6.2	
MCK	5.99	333	eP	45 04.14	-5.5	
PDB	6.00	287	eP	45 04.02	-5.8	
HDA	6.20	343	eP	45 05.65	-7.0	
KTH	6.38	325	eP	45 09.44	-5.8	
WRH	6.46	339	eP	45 09.78	-6.5	
CCB	6.56	341	eP	45 10.70	-7.1	
NEA	6.75	336	eP	45 12.82	-7.5	
GLM	6.81	343	eP	45 13.96	-7.3	
SVW	6.96	297	eP	45 17.00	-6.4	
MBC	19.62	16	eP	48 04.00	-5.8	
	0.9s	17.00nm			4.3mb	
LBFM	21.69	133	eP	48 28.50	-3.2	
WDC	22.11	136	eP	48 33.60	-2.1	
LRM	22.31	112	eP	48 34.40	-3.5	
MIN	22.66	134	eP	48 39.00	-2.4	
CMB	25.14	135	e(P)	49 02.00	-3.3	
JSC	46.81	93	eP	52 05.00	-5.1	
KEV	51.78	5	eP	52 52.00	4.0	
SOD	54.14	5	iP	52 59.00	-6.5	
NB2	59.03	14	P	53 33.70	-7.0	
	1.0s	9.90nm			4.9mb	
NUR	60.87	7	iP	53 46.80	-6.3	
	0.7s	10.70nm			5.1mb	
EKA	61.92	25	P	53 55.00	-5.4	
	2.8s	504.00nm			6.2mb X	
MEM	68.24	21	P	54 35.80	-5.4	
FLN	68.65	26	eP	54 37.60	-6.2	
	1.0s	20.00nm			5.3mb	
LDF	68.89	26	eP	54 39.00	-6.3	
	0.9s	14.75nm			5.2mb	
GRR	68.91	26	eP	54 39.30	-6.1	
	1.1s	29.30nm			5.4mb	
LPF	69.21	26	eP	54 41.50	-5.7	
	0.9s	16.40nm			5.2mb	

```
CDF     70.59  21 eP     54 50.00   -5.7
MFF     70.76  26 eP     54 50.90   -5.8
        1.0s    14.00nm            5.0mb
HAU     70.80  21 eP     54 51.00   -6.0
        0.8s    10.75nm            5.0mb
LOR     71.01  23 eP     54 52.30   -5.9
        0.8s    13.45nm            5.1mb
BSF     71.05  21 eP     54 52.50   -6.1
        1.0s    12.00nm            5.0mb
SSF     71.13  24 eP     54 53.10   -5.8
        0.9s    24.55nm            5.3mb
LBF     71.30  23 eP     54 53.70   -6.3
        0.7s     6.60nm            4.9mb
AVF     71.36  24 eP     54 54.10   -6.2
        0.8s    18.15nm            5.2mb
BGF     71.47  24 eP     54 54.90   -6.1
        0.8s    19.50nm            5.3mb
LSF     71.47  25 eP     54 55.10   -5.9
        1.1s    30.50nm            5.3mb
TCF     71.59  25 eP     54 55.60   -6.1
        1.0s    30.00nm            5.4mb
SMF     71.60  24 eP     54 55.50   -6.3
        0.8s    12.75nm            5.1mb
SPC     71.72  12 eP     54 57.50   -5.2
MAF     71.73  25 eP     54 56.60   -6.0
        0.8s     9.40nm            4.9mb
RJF     72.37  26 eP     55 00.20   -6.1
        0.7s     4.40nm            4.7mb
LFF     72.53  26 eP     55 01.80   -5.5
        0.7s    16.55nm            5.2mb
CAF     72.85  25 eP     55 03.40   -5.8
        1.0s    11.00nm            4.9mb
LPO     72.88  26 eP     55 03.60   -5.8
        0.8s    14.80nm            5.1mb
FVI     73.29  17 P      55 06.50   -5.1
LPG     73.29  22 eP     55 07.20   -4.9
        1.1s    12.20nm            4.9mb
VAI     73.31  20 P      55 07.00   -4.8
RBL     73.56  17 P      55 07.50   -5.9
CTI     73.64  18 P      55 08.50   -5.4
CKI     74.61  21 P      55 14.50   -4.9
SBF     74.99  22 eP     55 16.30   -5.4
        0.7s    13.25nm            5.1mb
FRF     75.13  22 eP     55 16.80   -5.6
        0.7s     8.80nm            4.9mb
LRG     75.17  23 eP     55 17.60   -5.0
LMR     75.32  23 eP     55 18.30   -5.2
        0.7s     8.80nm            4.9mb
BDI     75.39  20 P      55 19.00   -5.0
PGD     75.76  19 P      55 22.00   -4.2
CRE     76.04  19 P      55 23.00   -4.7
PGF     76.56  21 eP     55 25.30   -5.4
        1.1s    17.10nm            5.1mb
ASS     76.70  18 P      55 26.00   -5.4
AZI     77.88  18 P      55 26.00  -11.8
SDI     78.22  18 P      55 34.50   -5.2
SGO     79.57  17 P      55 42.00   -5.0
VAY     79.74  11 eP     55 43.40   -4.6
OHR     79.76  13 eP     55 42.50   -5.6
MGR     80.02  17 P      55 33.50  -16.0
TDS     80.61  16 P      55 47.80   -4.8
MAIO    83.68 342 eP     56 05.00   -3.8
GUN     84.83 318 P      56 11.20   -3.8
KKN     85.15 319 P      56 12.40   -4.1
GKN     85.18 319 P      56 12.20   -4.3
DMN     85.38 319 P      56 13.60   -4.1
KSR    146.53  17 iPKPd  03 15.70   -4.5
HVD    150.92  21 iPKPc  03 16.00  -10.9
       124 obs. associoted
-------------------------------------------
   FEB  25, 1990  01h 45m 44.09± 0.79s
   39.514 N ± 5.8km   28.311 E ± 9.9km
   DEPTH =  12.8 ±  6.9 km
 TURKEY                              (366)

DST     0.26   69 iPg     45 49.70   -0.1
                iSg     45 53.70
KCT     0.74    3 iPg     45 58.30    0.0
                eSg     46 10.30
BNT     0.89  340 iPn     46 01.30    0.3
EDC     0.90  338 iPg     46 01.20    0.1
YLV     1.33   37 iPn     46 07.80   -0.6
ALT     1.47  108 ePn     46 10.40    0.0
KHL     1.52  141 ePn     46 12.00    0.9
CIN     1.92  185 eP      46 16.00   -0.8
     S.D. = 0.7   on   8 of   8 obs.
-------------------------------------------
•  FEB  25, 1990  02h 49m 51.25± 2.10s
   35.102 N ±22.7km   26.205 E ± 7.2km
   DEPTH =  10.0km  (geophysicist)
 CRETE                               (370)
      MD 3.7 (ATH).

NPS     0.51  288 ePn    50 02.00    0.4
KAP     0.91   60 ePn    50 08.00   -0.7
                eSn     50 22.30
VAM     1.67  281 ePb    50 21.80    1.2
APE     2.04  345 ePn    50 24.90   -1.1
SMG     2.65   11 ePn    50 36.00    1.3
CIN     2.92   31 eP     50 40.00    1.5
VLI     3.10  302 ePn    50 39.50   -1.7
ATH     3.50  326 ePn    50 46.50   -0.2
ITM     4.04  302 ePb    50 59.00    4.6X
BCK     4.25   55 ePn    50 57.00   -0.6
     S.D. = 1.3   on   9 of  10 obs.
-------------------------------------------
?  FEB  25, 1990  02h 54m 41.91± 0.94s
   45.903 N ± 7.8km    3.219 E ±10.4km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                              (538)

LBL     0.67  178 Pg     54 55.24    0.0
                Sg     55 05.64
SMF     0.86   30 Pg     54 58.00   -0.5
                Sg     55 08.10
LBF     1.20   26 Pg     55 04.80    0.5
                Sg     55 19.00
LSF     1.23  287 Pg     55 04.70    0.0
                Sg     55 20.70
     S.D. = 0.7   on   4 of   4 obs.
-------------------------------------------
?  FEB  25, 1990  03h 00m 35.32± 2.45s
   29.523 S ±83.8km  178.250 W ±21.9km
   DEPTH =  75.0 ± 16.2 km
   4.7mb (  3 obs.)
 KERMADEC ISLANDS                    (178)

RAO     0.40   47 iP     00 47.30   -0.6
                S      10 10.00
BRS    25.54  268 iPd    05 59.30    0.6
CTA    33.45  278 iPd    07 10.70    1.4
        1.2s    39.06nm            5.2mb
ASPA   42.95  266 eP     08 27.20   -1.4
        0.5s     5.00nm            4.6mb
WRA    43.85  271 Pd     08 34.80   -1.2
        0.8s     5.40nm            4.4mb
WB5    43.85  271 eP     08 23.50  -12.5X
SUF   143.21  341 ePKP   19 56.00   -5.6X
NUR   145.42  340 iPKP   20 04.20   -1.2
                i      20 25.20
NB2   147.85  351 PKP    20 10.50    1.0
        1.2s     9.60nm
HFS   148.34  349 ePKP   20 11.30    1.1
        0.5s     0.90nm
BCAO  150.41  216 iPKPd  20 15.10    0.3
        1.0s    15.00nm
     S.D. = 1.4   on   9 of  11 obs.
-------------------------------------------
   FEB  25, 1990  03h 08m 15.81± 0.27s
   10.553 S ± 5.3km   165.190 E ± 5.2km
   DEPTH =  24.7km  (  5 depth phases)
   5.4mb ( 10 obs.)  5.1Msz ( 10 obs.)
 SANTA CRUZ ISLANDS                  (184)
      CENTROID, MOMENT TENSOR        (HRV)
      Doto Used: GDSN
      L.P.B.: 15S, 33C
      Centroid Location:
      Origin Time          03:08:20.2 0.5
      Lot 10.57S  FIX;Lon 165.19E  FIX
      Dep  15.0 FIX Half-duration  2.4
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 1.50 0.08   Mtt=-0.53 0.13
        Mff=-0.96 0.12   Mrt= 0.95 0.27
        Mrf= 2.51 0.29   Mtf=-1.25 0.08
       Principal Axes:
        T  Val=  3.07  Plg=59  Azm=225
        N        0.31      12       26
        P       -3.38      28      123
      Best Double Couple:Mo=3.2*10**17
       NP1:Strike=243 Dip=20 Slip= 129
       NP2:        23     74       77

HNR     5.28  282 eP     09 38.00    2.8
                eS     10 43.00

PVC     7.76  157 iPc    10 12.00    1.9
DZM    11.52  174 iPc    10 58.00   -3.9X
                iS     13 10.00
                ScP    16 16.90
SGE    14.19  121 eP     11 43.60    6.1X
RAB    14.37  295 eP     11 22.00  -17.8X
MBU    14.61  117 P      11 43.60    0.7
VUN    14.84  121 eP     11 51.00    5.1X
SVA    14.89  122 eP     11 51.60    5.1X
PMG    17.80  272 eP     12 25.00    1.3
        1.0s    60.00nm            4.7mb
RMQ    22.19  222 eP     13 12.00    0.1
                e      13 28.00   71kmX
COO    23.45  210 eP     13 24.00   -0.3
QLP    25.41  228 eP     13 43.00   -0.1
                e      14 34.00  271kmX
QIS    26.54  245 eP     13 54.00    0.3
CMS    27.49  218 eP     14 01.70   -0.5
CAN    28.72  208 eP     14 14.70    1.3
WB5    31.10  249 eP     14 32.70   -2.1
                e      14 55.90  103kmX
WRA    31.14  249 P      14 34.00   -1.1
        1.0s    10.60nm            4.6mb
WEL    31.75  166 P      14 40.00   -0.2
MTN    33.42  263 eP     14 54.00   -1.0
BFD    33.45  214 eP     14 56.00    0.9
DAV    43.16  292 eP     16 15.00   -1.5
NWAO   49.29  235 eP     17 04.00   -0.9
     Z  20s     5.90um            5.6MszX
     N  20s     1.00um
     E  20s     5.10um
MRWA   49.45  241 eP     17 05.00   -1.2
MUN    49.88  237 eP     17 08.50   -1.0
OCP    50.38  299 eP     17 18.10    4.7X
BAG    51.63  301 eP     17 22.00   -1.1
                eS     24 46.00
QZH    57.52  309 eP     18 06.40    0.7
SSE    59.12  316 P      18 16.80    0.0
        1.0s    80.00nm            5.8mb
     Z  20s     0.92um            4.9Msz
NJ2    61.29  316 Pc     18 31.30   -0.4
     Z  20s     0.90um            4.9Msz
WHN    63.66  312 eP     18 46.50   -1.0
     Z  20s     1.30um            5.1Msz
                pP     18 56.50   32km
MDJ    63.66  332 eP     18 47.50    0.2
     Z  20s     1.30um            5.1Msz
                epP    18 55.00   24km
                SS     31 30.00
DL2    63.76  323 eP     18 49.00    1.0
        1.1s   130.00nm            6.0mb
     Z  20s     0.60um            4.8Msz
SNY    64.62  327 iPc    18 53.00   -0.6
     Z  18s     1.54um            5.2Msz
                S      27 32.00
CN2    65.04  329 Pc     18 56.00   -0.2
        1.0s   130.00nm            6.0mb
     Z  18s     1.20um            5.1Msz
     N  14s     0.70um
                PP     21 19.00
                eS     27 39.00
IPM    65.62  280 ePd    19 02.20    1.6
        1.1s    79.30nm            5.8mb X
GYA    67.69  304 P      19 13.40   -0.3
BJI    67.76  321 eP     19 14.00    0.4
        1.0s    48.00nm            5.6mb
     Z  23s     0.94um            5.0MszX
                ePP    21 44.00
                eS     28 08.00
TIY    68.83  317 Pd     19 21.00    0.5
     N  18s     1.40um
     E  20s     2.00um
                pP     19 28.00   22km
                eS     28 18.00
XAN    69.39  312 P      19 23.50   -0.5
KMI    70.40  301 Pd     19 31.50    1.0
        1.5s     0.20nm            3.8mb X
     Z  20s     1.80um            5.3Msz
     E  16s     0.90um
                i      19 38.50
                pP     19 47.50   58kmX
                sP     19 56.00
                S      28 40.00
                iS     28 48.00
HHC    71.11  320 P      19 34.60    0.2
     Z  24s     2.00um            5.3MszX
CD2    71.87  307 eP     19 39.20    0.1
```

25d 03h

	1.0s	90.00nm			5.8mb	
	Z 20s	0.93um			5.0Msz	
		pP	19	46.00	22km	
BTO	71.96	319 P	19	40.50	1.0	
	N 18s	0.80um				
	E 18s	1.10um				
		sP	19	49.00		
LZH	74.02	312 P	19	52.00	0.3	
	2.0s	140.00nm			5.6mb	
	Z 23s	1.30um			5.2MszX	
GTA	78.32	314 iPc	20	16.80	0.9	
	Z 22s	1.40um			5.2Msz	
		pP	20	24.00	23km	
		sP	20	32.00		
		S	30	12.00		
LSA	81.63	302 P	20	38.00	3.8X	
PRS	83.17	51 eP	20	40.50	-0.9	
PRI	83.65	52 e(P)	20	46.10	2.0	
WDC	83.67	47 ePc	20	43.70	-0.2	
SYP	83.70	53 eP	20	53.00	8.6X	
CMB	84.44	50 e(P)	20	47.40	-0.5	
FRI	84.64	51 e(P)	20	48.00	-0.8	
MWC	85.13	54 eP	20	52.00	0.4	
ISA	85.21	53 eP	20	53.00	1.2	
SBB	85.45	54 eP	20	52.00	-1.0	
GUN	85.60	299 PKP	20	54.80	0.5	
RVR	85.61	54 eP	20	51.00	-2.8X	
BAR	85.83	56 eP	21	01.00	6.0X	
PKI	85.92	299 PKP	20	56.20	0.3	
KKN	86.09	299 PKP	20	56.40	-0.2	
DMN	86.19	299 PKP	20	57.30	0.2	
GKN	86.69	299 PKP	20	59.00	-0.4	
TPC	86.71	55 eP	21	08.00	8.7X	
GLA	87.43	56 eP	21	08.00	5.2X	
WMQ	88.36	315 P	21	08.50	1.5	
	Z 24s	0.90um			5.1MszX	
		S	31	51.00		
GBA	90.29	284 Pd	21	16.10	-0.4	
	0.8s	5.70nm			4.9mb	
LRM	92.21	44 eP	21	24.40	-0.8	
BW06	93.63	47 eP	21	37.00	5.3X	
	1.0s	2.75nm			4.6mb	
MBC	96.75	13 eP	21	50.00	5.0X	
KEV	115.19	345 ePKP	27	08.00	11.8X	
NUR	122.26	338 ePKP	27	08.00	-1.8	
NB2	126.09	345 PKP	27	14.30	-3.1X	
	1.1s	4.40nm				
BUL	127.50	234 iPKPc	27	18.60	-2.8X	
		ipP	27	29.20		
OHR	136.32	320 ePKP	27	31.00	-6.5X	
BCAO	146.41	262 ePKPd	27	45.60	-10.5X	
	0.6s	20.00nm				
		ic	27	55.90		
		ic	29	08.90		
ETOR	147.82	342 ePKP	28	00.60	3.0X	
GUD	148.58	344 ePKP	28	02.00	3.0X	
TOL	149.27	344 ePKP	28	06.00	6.1X	
EVIA	149.94	341 ePKP	28	06.00	5.0X	
EBAN	150.78	342 ePKP	28	07.60	5.4X	
ASMO	151.51	341 iPKPc	28	08.80	5.4X	
AAPN	151.67	342 iPKPc	28	09.20	5.5X	
ACHM	151.77	341 ePKP	28	11.00	7.2X	
ALOJ	151.85	342 ePKP	28	10.60	6.6X	
APHE	151.86	341 iPKPc	28	09.50	5.5X	
ATEJ	152.00	341 iPKPc	28	09.50	5.3X	
CAI	152.03	126 ePKP	28	11.20	6.5X	
KIC	169.21	248 PKP	28	22.10	-0.7	
LIC	169.41	247 PKP	28	22.30	-0.6	
TIC	169.57	249 PKP	28	22.20	-0.8	
	S.D. = 1.0	on 59 of 90 obs.				

? FEB 25, 1990 04h 39m 23.03± 2.44s
11.149 S ±22.9km 163.054 E ±27.3km
DEPTH = 33.0km (normal)
4.5mb (3 obs.) 4.5Msz (1 obs.)
SOLOMON ISLANDS (193)

HNR	3.50	299 eP	39	37.00	-39.5X	
		eS	39	59.00		
PMG	15.74	275 eP	43	06.00	2.0	
CTA	18.45	239 iPc	43	38.20	0.2	
	1.1s	86.71nm			4.8mb	
		iS	47	05.00		
BRS	18.83	209 iPc	43	43.30	0.7	
		i	43	55.30		
		eS	47	20.00		
RMQ	20.36	220 eP	43	59.00	-0.6	
		e	44	11.00		
COO	21.94	207 eP	44	17.00	1.4	
QIS	24.39	245 eP	44	39.00	-0.7	
WB5	28.93	249 eP	45	19.20	-2.4	
		e	45	31.50		
WRA	28.97	249 P	45	21.00	-0.9	
	1.6s	13.60nm			4.4mb	
ASPA	30.40	242 eP	45	29.70	-5.0X	
	1.6s	11.00nm			4.4mb	
	Z 19s	1.06um			4.5Msz	
		LR	56	53.90		
BCAO	144.25	262 iPKPd	58	58.80	0.4	
	0.5s	7.00nm				
		ic	59	08.80		
	S.D. = 1.5	on 9 of 11 obs.				

FEB 25, 1990 05h 05m 24.57± 0.65s
36.125 N ± 6.5km 27.241 E ± 6.3km
DEPTH = 22.2 ± 6.1 km
3.9mb (1 obs.)
DODECANESE ISLANDS (369)
ML 4.0 (CSS).

KAP	0.58	185 ePb	05	36.00	0.1	
		eSb	05	46.00		
YER	1.31	39 iPn	05	46.30	-1.3	
SMG	1.61	349 ePb	05	50.00	-1.9	
CIN	1.62	24 eP	05	50.00	-2.0	
APE	1.67	305 ePn	05	53.00	0.2	
IZM	2.27	0 ePn	06	01.00	-0.4	
VAM	2.58	255 ePb	06	12.00	6.2X	
KHL	2.85	39 ePn	06	09.00	-0.7	
BCK	3.00	63 ePn	06	12.50	0.7	
ATH	3.37	304 ePb	06	24.20	7.2X	
VLI	3.52	281 ePn	06	19.90	0.7	
DST	3.64	17 ePn	06	24.00	3.0X	
ALT	3.71	37 ePn	06	22.00	0.1	
BNT	4.26	7 ePn	06	31.00	1.4	
ITM	4.40	285 ePn	06	31.30	-0.4	
YLV	4.74	20 ePn	06	38.00	1.4	
CSS	5.10	101 eP	06	42.50	0.9	
		eSn	07	41.80		
BBTK	5.72	48 eP	06	50.00	-0.5	
HRI	7.56	110 e(P)	07	07.00	-9.2X	
DSI	8.15	122 eP	07	10.00	-14.4X	
KBA	15.07	321 eP	09	02.00	4.1X	
	1.2s	7.10nm			3.9mb	
BCAO	32.54	196 ePc	11	55.00	-1.2	
	S.D. = 1.2	on 16 of 22 obs.				

? FEB 25, 1990 05h 10m 37.38± 1.58s
9.274 N ±18.3km 123.568 E ±38.6km
DEPTH = 84.0 ± 14.7 km
4.1mb (2 obs.)
NEGROS, PHILIPPINE ISLANDS (257)

DAV	2.94	137 eP	11	22.70	-0.2	
BAG	7.67	338 eP	12	29.10	0.5	
WB5	30.86	160 eP	16	48.00	0.1	
WRA	30.91	160 Pd	16	48.40	0.0	
	0.6s	0.80nm			3.6mb	
BJI	31.34	349 eP	16	50.50	-1.4	
LZH	32.16	329 eP	17	04.00	4.6X	
	1.5s	19.00nm			4.7mb	
INK	86.18	21 eP	23	11.00	0.8	
MBC	87.25	12 eP	23	15.50	0.2	
	S.D. = 1.0	on 7 of 8 obs.				

FEB 25, 1990 05h 21m 39.31± 0.67s
41.954 N ± 8.9km 21.499 E ± 5.9km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 3.4 (SKO), 2.9 (TTG). Felt
(V) at Skopje.

SKO	0.05	292 iPg	21	39.30	-2.2	
		iSg	21	40.30		
		pP	22	39.60		
		e	22	40.70		
OHR	0.99	212 iPgc	21	57.60	-0.6	
		iSg	22	11.70		
		Lg	22	12.20		
VAY	1.02	128 iPg	21	57.60	-1.0	
	0.7s	0.20nm				
		i	22	09.20		
		iSg	22	12.40		
		Lg	22	16.50		
PVY	1.30	300 ePg	22	02.40	-1.1	
		eSg	22	21.50		
VTS	1.42	63 iPd	22	06.00	0.7	
IVA	1.50	308 ePg	22	06.20	-0.1	
		eSg	22	26.00		
ULC	1.68	271 ePn	22	09.50	0.6	
		eSn	22	35.90		
TTG	1.73	287 ePn	22	09.00	-0.6	
		eSn	22	35.50		
BDV	2.01	280 ePn	22	15.00	1.3	
		eSn	22	44.60		
HCY	2.28	283 ePn	22	20.00	2.4	
		eSn	22	51.00		
BRY	2.38	294 ePn	22	19.80	0.6	
		eSn	22	54.00		
KDZ	2.94	95 eP	22	28.00	1.0	
BEO	2.97	345 ePn	22	33.50	6.3X	
		eSg	23	16.50		
BZS	3.66	1 ePc	22	36.00	-1.2	
	S.D. = 1.4	on 13 of 14 obs.				

• FEB 25, 1990 05h 53m 13.36± 0.66s
44.467 N ±11.3km 149.285 E ±10.3km
DEPTH = 33.0km (normal)
4.7mb (8 obs.)
KURIL ISLANDS (221)

MAT	11.56	231 iPd	55	55.90	-3.1X	
	0.7s	10.27nm			5.1mb	
		eS	57	45.00		
CN2	17.12	276 eP	57	12.40	0.9	
BJI	24.80	271 eP	58	33.00	-0.5	
HHC	27.81	276 eP	59	02.00	0.5	
TIY	28.40	269 eP	59	07.50	0.7	
LZH	35.28	272 P	00	07.50	0.3	
INK	45.01	31 eP	01	28.00	1.1	
CHG	48.96	255 eP	01	58.70	0.2	
GUN	52.50	274 P	02	25.50	-0.4	
KKN	53.00	274 P	02	29.00	-0.4	
	0.7s	11.00nm			4.9mb	
PKI	53.04	274 P	02	29.40	-0.4	
DMN	53.23	274 P	02	30.90	-0.3	
GKN	53.34	275 P	02	31.20	-0.6	
	0.8s	16.00nm			5.1mb	
WB5	65.47	195 eP	03	54.80	-0.4	
WRA	65.54	195 P	03	56.00	0.3	
	0.7s	1.40nm			4.2mb	
NB2	69.48	340 P	04	18.60	-1.5	
	0.6s	2.50nm			4.5mb	
HFS	69.61	338 eP	04	19.00	-1.8	
	0.4s	2.90nm			4.7mb	
KSP	76.69	332 eP	05	02.50	0.1	
KHC	79.06	332 iPd	05	16.40	0.8	
GRF	79.34	334 iPc	05	17.90	0.9	
	1.2s	7.00nm			4.5mb	
KBA	80.91	331 eP	05	26.00	0.4	
	0.5s	1.30nm			4.2mb	
SLR	129.35	271 iPKPc	12	33.50	13.3X	
PRY	130.65	270 ePKP	12	32.50	9.8X	
	S.D. = 0.8	on 20 of 23 obs.				

FEB 25, 1990 06h 25m 46.41± 0.54s
38.237 N ± 5.9km 21.886 E ± 7.2km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 3.4 (ATH).

VLS	1.02	267 ePb	26	05.20	-0.6	
ITM	1.06	178 ePb	26	07.00	0.7	
ATH	1.47	100 ePn	26	12.50	-0.4	
NEO	1.49	44 ePb	26	09.00	-4.3X	
VLI	1.73	151 ePb	26	16.00	-0.7	
KZN	2.07	358 ePn	26	19.80	-1.9	
LSK	2.16	333 ePn	26	24.20	1.3	
KEK	2.19	313 ePb	26	23.20	-0.2	
SRN	2.20	319 ePn	26	24.80	1.3	
PLG	2.45	29 ePn	26	22.00	-5.1X	
KBN	2.52	341 ePn	26	29.10	1.1	
BERA	2.88	329 ePn	26	34.90	1.7	
OHR	2.99	344 iPn	26	34.70	-0.1	
VAY	3.12	9 ePn	26	33.00	-3.6X	
VAM	3.38	146 ePn	26	41.00	0.7	
TIR	3.47	334 ePn	26	52.00	10.5X	
PHP	3.62	343 ePn	26	49.30	5.7X	
LCI	3.70	306 P	26	42.00	-2.8X	
SKO	3.75	355 ePn	26	45.00	-0.5	
BRT	4.48	308 P	26	53.90	-1.9	

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MGR     5.27 293 P      27 06.60  -0.5
SGO     5.60 297 P      27 11.70   0.0
      S.D. = 1.2  on  16 of  22 obs.
-------------------------------------
?  FEB  25, 1990  06h 37m 32.30± 9.62s
   15.593 N ±87.3km   97.426 W ±17.0km
   DEPTH =  66.6 ± 36.6 km
   4.6mb (  2 obs.)
 NEAR COAST OF OAXACA, MEXICO     ( 66)

OXX     1.63  24 iPc    37 59.50   0.0
                (S)     38 21.00
ACX     2.66 299 (P)    38 00.50 -13.2X
                (S)     38 37.50
III     3.39 325 iP     38 23.81  -0.3
                iS      39 03.00
IIT     3.51 346 eP     38 26.56   0.7
                iS      39 12.07
PPM     3.64 342 eP     38 27.01  -0.9
                iS      39 19.02
UNM     4.08 336 (P)    38 38.50   4.6X
                (S)     39 23.00
CRX     4.36 331 (P)    38 43.00   5.1X
IIC     4.50 337 (P)    38 50.76  10.8X
                (S)     39 42.19
IIJ     4.67 332 eP     38 43.10   0.7
                (S)     39 45.00
MRX     5.44 319 (P)    39 06.50  13.8X
                (S)     40 12.50
PNT    38.20 336 eP     44 47.00  -0.1
FFC    39.21 356 eP     44 55.00  -0.5
       0.6s      6.00nm          4.7mb
INK    57.49 345 eP     47 22.00   5.5X
MBC    61.75 354 ePc    47 46.20   0.5
       0.7s      3.00nm          4.5mb
GBA   150.55  10 PKPc   57 21.10   7.9X
       0.6s      2.10nm
      S.D. = 0.8  on   8 of  15 obs.
-------------------------------------
   FEB  25, 1990  07h 04m 32.39± 1.45s
   36.069 N ± 8.8km   70.894 E ± 7.5km
   DEPTH =  79.6 ± 15.7 km
   4.6mb ( 12 obs.)
 HINDU KUSH REGION                (718)

KSH     5.26  48 Pn     05 50.50   0.2
                Sn      06 51.00
NDI     9.10 142 iPc    06 45.00   2.0
       0.3s   123.38nm          6.2mb X
                eS      08 20.00
MAIO    9.22 275 iPc    06 46.00   1.2
       0.7s    13.98nm          4.9mb
                eS      08 23.00
GKN    14.15 121 P      07 49.40  -1.0
DMN    14.72 121 P      07 56.50  -1.4
KKN    14.73 120 P      07 56.40  -1.6
PKI    14.95 120 P      07 59.10  -1.9
WMQ    15.02  54 eP     08 00.00  -1.5
GUN    15.08 118 P      08 00.90  -1.8
LSA    18.15 105 P      08 42.60   1.6
HYB    19.78 158 ePd    09 01.50   2.6
       0.8s    30.80nm          4.7mb
                eS      12 31.00
SHL    20.80 114 iP     09 10.50   1.1
                iS      12 48.50
GTA    23.07  73 P      09 33.80   2.1
GBA    23.13 164 Pc     09 36.70   4.5X
       0.5s      3.30nm          4.0mb
KOD    26.40 165 eP     10 07.40   3.8X
CD2    27.81  91 P      10 18.00   2.0
TIY    33.07  75 eP     11 03.00   0.5
NUR    38.13 325 eP     11 46.00   1.1
       0.5s      8.40nm          4.9mb
SUF    38.24 328 iP     11 47.20   1.3
       0.5s      4.50nm          4.6mb
SOD    40.09 335 eP     11 54.00  -7.1X
HFS    43.35 322 eP     12 27.30  -0.6
       0.5s      3.80nm          4.5mb
NB2    44.67 323 P      12 38.20  -0.4
       0.6s      3.80nm          4.4mb
KKM    51.11 115 ePd    13 21.50  -7.7X
       1.0s    106.70nm          5.8mb X
DAG    55.15 344 eP     13 57.50  -0.7
BCAO   57.43 250 iPc    14 15.00  -0.3
       0.4s      8.00nm          5.2mb
                id      14 49.00
MBC    67.77   3 ePc    15 23.00   0.0
       0.5s      4.00nm          4.6mb
                pP      15 51.50 114kmX
BUL    68.74 223 iPd    15 29.10  -0.8
       1.0s      7.50nm          4.6mb
LKO    73.54 270 P      15 57.90  -0.9
INK    74.34   9 eP     16 02.00  -0.5
KIC    74.68 267 P      16 04.72  -0.6
       0.7s      7.50nm          4.7mb
TIC    74.74 267 P      16 04.92  -0.8
LIC    74.99 267 P      16 06.34  -0.7
       0.6s      5.00nm          4.6mb
      S.D. = 1.4  on  28 of  32 obs.
-------------------------------------
   FEB  25, 1990  08h 01m 53.61± 0.47s
   24.057 S ± 5.0km   66.954 W ±10.9km
   DEPTH = 208.9 ±  9.1 km
   4.4mb (  2 obs.)
 SALTA PROVINCE, ARGENTINA        (129)

SLA     1.49 117 iPd    02 29.20   0.7
                (S)     02 56.00
ANT     3.19 276 iPc    02 46.20  -0.1
                iS      03 25.50
RTRS    6.48 200 e(P)   03 29.80   1.9
CCH     6.68   7 P      03 30.40  -0.5
RTLL    7.37 190 ePc    03 38.90  -0.6
TCA     7.55 164 ePd    03 41.00  -1.0
LPB     7.56 352 Pd     03 43.00   0.5
       0.8s     37.31nm          4.6mb
                S       05 08.00
CFA     7.61 188 e(P)   03 43.00   0.3
ZOBO    7.83 352 Pc     03 45.50  -0.7
       0.8s     11.29nm          4.1mb
                S       05 11.00
RTCV    7.90 190 eP     03 46.10  -0.5
MRA     8.39 173 eP     03 52.00  -0.8
BAO    19.69  68 eP     06 25.00  16.1X
LIC    67.42  72 P      12 29.40   0.5
KIC    67.73  72 P      12 30.40  -0.5
LKO    68.57  68 PKP    12 36.90   0.8
      S.D. = 0.9  on  14 of  15 obs.
-------------------------------------
&  FEB  25, 1990  08h 04m 58.00s
   37.090 N          121.865 W
   DEPTH =   6.0km
 CENTRAL CALIFORNIA               ( 39)
      <BRK>. ML 3.1 (BRK). Felt in the
      Santo Cruz Mountains.

GCC     0.12 240 ePd    05 00.30  -0.3
MHC     0.31  35 ePd    05 04.40   0.1
ARN     0.37  46 eP     05 05.40  -0.1
SAO     0.47 134 iP     05 06.90  -0.5
PCC     0.58 315 ePc    05 09.00  -0.6
BKS     0.84 340 iPc    05 14.20  -0.4
                eS      05 27.10
BRK     0.84 338 ePc    05 14.00  -0.6
                eS      05 25.50
PRS     0.86 152 iPd    05 14.00  -0.9
LLA     0.88 122 ePd    05 14.50  -0.7
ZSP     0.91 340 eP     05 15.40  -0.3
                eS      05 27.50
PRI     1.35 134 eP     05 22.90  -0.5
CMB     1.51  51 ePc    05 24.40  -1.2
NWRM    1.59 330 eP     05 24.30  -2.4
PHAM    1.72 136 eP     05 27.30  -1.4
FRI     1.73  93 ePc    05 28.80   0.1
BCH     2.39 142 eP     05 36.00  -2.4
KVN     3.56  55 eP     05 52.70  -2.4
       17 obs. associated
-------------------------------------
&  FEB  25, 1990  08h 11m 26.09s
   62.945 N          150.940 W
   DEPTH = 114.3km
 CENTRAL ALASKA                   (  1)
      <AGS-P>.

HUR     0.60  86 eP     11 43.85  -0.5
                eS      11 57.47
KTH     0.61   1 iP     11 44.21  -0.3
                eS      11 56.93
CUT     0.62 150 iP     11 44.42  -0.1
                iS      11 58.46
SKT     1.01 196 iP     11 47.58  -0.5
RND     1.05  63 iP     11 48.05  -0.5
MCK     1.20  48 eP     11 49.69  -0.4
                eS      12 08.18
PWA     1.39 159 eP     11 52.02  -0.2
                eS      12 12.54
SUA     1.49 176 eP     11 53.05  -0.5
GHO     1.51 140 eP     11 53.40  -0.3
PLRM    1.60 147 iP     11 53.96  -0.7
                eS      12 15.96
NCG     1.65 201 iP     11 54.76  -0.7
CGLM    1.72 197 eP     11 55.49  -0.8
CRP     1.78 199 eP     11 56.83  -0.3
BGL     1.82 203 eP     11 57.33  -0.3
PMS     1.83 159 eP     11 56.84  -0.7
                eS      12 18.04
NEA     1.84  26 eP     11 56.73  -0.9
SPU     1.85 197 eP     11 57.00  -0.9
CKL     1.87 201 eP     11 57.68  -0.6
WRH     1.99  38 iP     11 58.87  -0.7
NCA     2.14 115 eP     12 01.24  -0.3
CCB     2.20  38 eP     12 01.42  -0.9
NKA     2.21 184 eP     12 04.36   1.9
HDA     2.30  49 eP     12 03.18  -0.5
TOA     2.37 109 eP     12 04.20  -0.4
FBA     2.41  34 eP     12 04.10  -0.9
DDM     2.44  67 eP     12 05.91   0.4
SLKM    2.47 172 eP     12 05.02  -0.9
RDT     2.48 197 iP     12 05.33  -0.7
PAX     2.50  87 eP     12 05.76  -0.6
GLM     2.58  36 iP     12 06.52  -0.8
RED     2.68 200 eP     12 08.22  -0.5
KLU     2.77 120 eP     12 08.10  -1.8
SVW     2.88 232 eP     12 10.44  -0.8
NNL     2.92 184 eP     12 12.50   0.7
SEW     2.94 165 eP     12 10.78  -1.3
CNPM    3.43 183 eP     12 17.97  -0.8
PDB     3.53 208 eP     12 19.25  -0.8
AUL     3.77 200 eP     12 25.65   2.3
AUE     3.79 199 eP     12 24.60   1.1
       39 obs. associated
-------------------------------------
*  FEB  25, 1990  08h 47m 53.71± 0.97s
   36.567 N ±21.2km   70.472 E ±17.5km
   DEPTH =  33.0km  (normal)
   3.8mb (  2 obs.)
 HINDU KUSH REGION                (718)

GKN    14.70 121 P      51 21.50   0.3
DMN    15.27 122 P      51 29.50   0.8
KKN    15.28 121 P      51 28.20  -0.6
PKI    15.50 121 P      51 31.80   0.0
GUN    15.62 119 P      51 32.90  -0.5
GBA    23.70 163 Pd     53 03.40  -0.1
       0.4s      1.60nm          3.9mb
N82    44.07 323 P      56 00.00   0.0
       0.6s      1.00nm          3.8mb
      S.D. = 0.6  on   7 of   7 obs.
-------------------------------------
?  FEB  25, 1990  08h 58m 43.09± 1.02s
   39.125 N ± 8.7km   27.554 E ±16.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)

IZM     0.76 197 ePg    58 58.00   0.0
                eSg     59 10.00
DST     0.96  60 iPn    59 01.40   0.0
EDC     1.24  11 ePn    59 06.00  -0.2
BNT     1.26  13 iPn    59 06.70   0.2
      S.D. = 0.3  on   4 of   4 obs.
-------------------------------------
?  FEB  25, 1990  09h 05m 10.74± 3.66s
   17.805 S ±26.9km  178.915 W ±32.6km
   DEPTH = 628.3 ± 38.5 km
   4.9mb (  2 obs.)
 FIJI ISLANDS REGION              (181)

DZM    14.40 250 iPc    08 12.00  -0.7
RMQ    31.10 248 iPc    10 42.60   0.6
CTA    32.99 260 iPc    10 58.00   0.1
PMG    33.97 280 eP     11 07.00   0.9
TOO    36.86 230 eP     11 30.80   1.1
WB5    44.16 260 iPd    12 27.10  -0.7
WRA    44.17 259 Pc     12 27.50  -0.4
       0.4s      4.50nm          4.3mb
ASPA   44.36 254 iPd    12 29.40   0.1
       0.5s     91.00nm          5.5mb
COOL   55.56 244 eP     13 50.20  -0.9
MBL    57.54 256 eP     14 04.60   0.0
KL8    58.44 243 eP     14 10.30  -0.2
INK    91.91  15 eP     17 14.00   0.0
```

25d 09h

HFS 136.75 351 ePKP 23 30.20 5.9X
0.7s 3.60nm
S.D. = 0.7 on 12 of 13 obs.

? FEB 25, 1990 09h 45m 42.82± 0.87s
2.472 N ±16.8km 128.251 E ±31.0km
DEPTH = 33.0km (normal)
4.0mb (2 obs.)
HALMAHERA (267)

WB5 23.01 165 eP 50 46.00 0.0
WRA 23.06 165 Pd 50 46.50 -0.1
0.7s 3.80nm 4.0mb
QIS 25.45 155 eP 51 10.00 0.5
ASPA 26.56 168 eP 51 19.40 -0.4
0.7s 3.00nm 4.0mb
BJI 38.97 345 eP 53 07.50 -0.1
HYB 50.97 290 eP 54 44.00 0.2
S.D. = 0.4 on 6 of 6 obs.

% FEB 25, 1990 10h 00m 23.45± 0.66s
59.662 N ± 5.8km 6.249 E ± 5.8km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 3.0 (BER). Felt (IV) in
Rogoland and Hordoland Counties.

ODD1 0.32 37 iPc 00 31.05 1.0
iS 00 35.78
BLS1 0.40 132 iP 00 32.60 0.9
iS 00 38.30
KMY 0.68 229 iPc 00 36.77 -0.2
iS 00 45.29
BER 0.86 328 eP 00 39.90 0.0
iS 00 49.40
ASK 0.98 328 iP 00 41.69 -0.3
iS 00 54.23
HYA 1.51 359 iP 00 50.56 0.1
iS 01 10.56
SUE 1.58 333 iP 00 52.33 0.8
iS 01 12.22
NRA0 2.85 66 Pn 01 09.00 -0.8
Sg 01 51.10
MOL 2.99 12 iPc 01 10.58 -1.1
eS 01 45.50
HFS 3.78 80 eP 01 21.70 -1.3
0.4s 1.00nm
RGS 3.93 29 eP 01 26.00 1.0
eS 02 09.10
S.D. = 0.9 on 11 of 11 obs.

& FEB 25, 1990 10h 28m 23.86s
62.609 N 149.775 W
DEPTH = 68.2km
CENTRAL ALASKA (1)
<AGS-P>.

CUT 0.31 228 iP 28 35.09 0.1
iS 28 43.32
HUR 0.38 10 eP 28 35.52 -0.1
eS 28 44.23
RND 0.90 27 eP 28 41.00 -0.4
iS 28 54.27
GHO 0.93 154 iP 28 41.69 0.0
eS 28 55.89
PWA 0.96 183 iP 28 42.07 0.0
iS 28 57.54
SKT 1.03 233 iP 28 42.92 -0.1
PLRM 1.06 163 iP 28 43.38 0.1
eS 28 58.38
KTH 1.08 332 eP 28 43.67 0.0
eS 28 58.72
MCK 1.19 18 eP 28 44.87 -0.2
eS 29 01.21
SUA 1.24 202 iP 28 45.90 0.2
eS 29 03.71
PMS 1.37 176 eP 28 47.78 0.3
eS 29 06.05
NCA 1.51 113 eP 28 49.73 0.4
NCG 1.65 224 iP 28 51.55 0.2
CGLM 1.68 220 eP 28 51.92 0.2
CRP 1.76 221 eP 28 53.64 0.8
TOA 1.75 105 iP 28 53.94 1.2
SPU 1.79 218 eP 28 53.69 0.4
BGL 1.83 224 eP 28 54.17 0.4
CKL 1.87 222 iP 28 54.63 0.3
SDG 1.96 91 eP 28 56.47 0.9

NEA 2.00 9 eP 28 55.29 -0.8
PAX 2.01 78 eP 28 56.52 0.2
eS 29 22.58
WRH 2.02 21 iP 28 55.49 -0.8
eS 29 17.56
SLKM 2.12 186 eP 28 58.73 1.0
DDM 2.13 55 eP 28 58.50 0.6
KLU 2.13 120 eP 28 57.61 -0.4
HDA 2.20 34 iP 28 58.16 -0.7
eS 29 23.58
CCB 2.23 22 eP 28 58.22 -1.0
RDT 2.40 213 eP 29 01.80 0.1
FBA 2.46 20 iP 29 01.67 -0.8
eS 29 28.34
SEW 2.52 176 eP 29 03.87 0.6
GLM 2.61 23 iP 29 03.68 -0.9
RED 2.63 214 eP 29 05.56 0.7
NNL 2.68 197 eP 29 07.39 1.9
TTA 2.89 279 eP 29 07.51 -1.0
GLB 3.05 110 eP 29 10.02 -0.7
CNPM 3.17 194 eP 29 12.75 0.3
PDB 3.55 219 eP 29 17.61 0.0
TGL 3.80 116 eP 29 20.77 -0.5
BALM 3.86 111 eP 29 20.63 -1.5
40 obs. ossocioted

• FEB 25, 1990 10h 30m 42.11± 1.19s
42.345 N ±15.2km 142.452 E ±20.7km
DEPTH = 33.0km (normal)
4.6mb (3 obs.)
HOKKAIDO, JAPAN REGION (224)

MAT 6.66 211 eP 32 20.00 -0.2
0.6s 7.33nm 4.7mb
GUN 47.63 271 P 39 17.00 -0.4
KKN 48.14 272 P 39 23.10 1.9
PKI 48.16 271 P 39 21.10 -0.4
DMN 48.37 272 P 39 22.90 -0.1
GKN 48.50 272 P 39 23.70 -0.2
INK 49.33 29 eP 39 30.00 0.5
HFS 69.59 335 eP 41 48.70 -0.8
0.4s 2.60nm 4.6mb
NB2 69.61 337 P 41 49.40 -0.2
0.7s 2.70nm 4.4mb
S.D. = 0.9 on 9 of 9 obs.

• FEB 25, 1990 11h 25m 54.76± 0.49s
18.058 S ± 9.6km 167.624 E ± 8.6km
DEPTH = 10.0km (geophysicist)
4.6mb (3 obs.) 3.8Msz (1 obs.)
VANUATU ISLANDS (186)

PVC 0.73 64 iPd 26 08.20 -0.8
iS 26 16.50
DZM 4.14 195 iPc 26 59.00 -0.5
iS 27 45.00
HNR 11.36 318 eP 28 40.00 -0.2
COO 18.97 226 iPd 30 27.70 9.0X
CTA 20.30 261 iPc 30 45.00 11.4X
WB5 31.48 261 eP 32 19.00 0.0
WRA 31.50 261 Pd 32 18.60 -0.6
0.9s 1.10nm 3.8mb
ASPA 31.95 254 eP 32 22.50 -0.7
0.5s 5.00nm 4.7mb
Z 19s 0.18um 3.8Msz
LR 44 55.30
SPA 72.06 180 iPc 37 21.40 0.5
0.8s 23.75nm 5.3mb
DOU 145.26 341 PKP 45 33.10 -1.1
CDF 145.76 337 iPKPc 45 35.00 -0.3
0.9s 11.45nm
BSF 146.42 336 ePKP 45 36.70 0.3
HAU 146.44 337 ePKP 45 36.90 0.6
BCAO 146.87 250 iPKPd 45 39.20 1.2
0.7s 10.00nm
ic 45 51.00
FLN 147.89 345 iPKPc 45 40.40 1.8
0.7s 9.90nm
LDF 147.95 345 iPKPc 45 40.70 2.0X
LOR 147.96 339 iPKPc 45 41.30 2.5X
0.7s 7.15nm
LBF 148.16 339 ePKP 45 41.70 2.6X
SSF 148.26 339 iPKPc 45 42.10 2.9X
0.8s 14.80nm
GRR 148.33 345 iPKPc 45 41.70 2.4X
LPG 148.34 334 iPKPc 45 42.90 3.1X
0.7s 6.05nm

SMF 148.50 338 ePKP 45 42.30 2.6X
1.0s 8.00nm
AVF 148.55 339 ePKP 45 42.40 2.7X
LPF 148.70 345 iPKPc 45 43.00 3.1X
0.7s 7.70nm
BGF 148.92 339 iPKPc 45 43.60 3.3X
0.6s 4.95nm
MAF 149.31 339 ePKP 45 44.70 3.8X
SBF 149.33 331 ePKP 45 44.70 3.6X
TCF 149.37 340 iPKPc 45 44.70 3.7X
0.9s 8.20nm
PGF 149.57 328 ePKP 45 45.60 4.0X
0.9s 16.40nm
LSF 149.62 341 iPKPc 45 45.10 3.7X
0.8s 12.10nm
MFF 149.79 343 ePKP 45 45.50 3.9X
0.9s 13.10nm
FRF 149.93 332 ePKP 45 45.90 4.0X
LRG 150.14 332 ePKP 45 46.90 4.7X
LMR 150.17 332 ePKP 45 46.80 4.5X
RJF 150.46 340 ePKP 45 47.50 4.8X
CAF 150.61 339 iPKPc 45 48.20 5.2X
LFF 151.04 341 ePKP 45 48.90 5.4X
0.7s 7.70nm
LPO 151.12 340 iPKPc 45 49.10 5.4X
0.5s 5.85nm
S.D. = 0.9 on 13 of 38 obs.

FEB 25, 1990 11h 57m 25.74± 1.80s
0.316 S ± 8.2km 124.490 E ±10.6km
DEPTH = 112.9 ± 18.3 km
4.6mb (11 obs.)
MOLUCCA SEA (269)

MKS 6.99 226 iPc 59 07.50 0.4
KKM 10.40 308 ePc 59 53.00 -0.2
WB5 21.72 154 eP 02 08.00 -1.0
WRA 21.76 154 Pc 02 08.50 -1.0
0.5s 3.70nm 4.0mb
ASPA 24.94 159 iPd 02 40.90 0.7
0.9s 11.00nm 4.3mb
QIS 24.96 145 iPd 02 41.50 1.1
0.8s 68.00nm 5.2mb
LOE 28.50 309 eP 03 13.00 0.3
CHG 31.48 309 eP 03 40.00 1.0
0.9s 10.00nm 4.6mb
XAN 37.17 338 P 04 27.20 -0.3
MAT 38.82 18 eP 04 40.00 -1.3
0.9s 8.40nm 4.6mb
TIY 39.44 345 eP 04 45.90 -0.6
MDJ 44.97 5 Pd 05 31.70 0.5
GTA 45.53 333 P 05 37.00 1.1
GUN 46.45 310 P 05 43.60 0.0
0.6s 27.00nm 5.2mb
PKI 46.64 310 P 05 44.60 -0.5
0.5s 6.00nm 4.6mb
KKN 46.85 310 P 05 47.20 0.6
0.4s 6.00nm 4.7mb
DMN 46.89 310 P 05 46.80 -0.2
0.5s 6.00nm 4.6mb
GKN 47.45 310 P 05 51.00 -0.3
0.6s 15.00nm 5.0mb
HYB 48.52 294 eP 05 58.50 -1.0
GBA 48.61 288 Pc 05 59.20 -1.0
0.4s 1.20nm 4.1mb
WMQ 54.84 328 P 06 47.40 0.9
INK 94.72 21 eP 10 36.00 0.9
S.D. = 0.9 on 22 of 22 obs.

FEB 25, 1990 12h 02m 46.26± 0.78s
38.139 N ± 7.5km 21.990 E ± 8.5km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 3.1 (ATH).

ITM 0.96 183 ePg 03 04.00 -0.5
VLS 1.10 272 ePb 03 06.90 -0.1
ATH 1.37 96 ePg 03 12.00 0.6
eSb 03 28.80
NEO 1.51 39 ePb 03 12.00 -1.4
VLI 1.61 152 ePb 03 15.20 0.5
KZN 2.17 356 ePb 03 24.00 1.0
OHR 3.11 343 ePn 03 42.00 5.7X
VAY 3.21 8 ePn 03 40.70 3.0X
S.D. = 1.1 on 6 of 8 obs.

• FEB 25, 1990 12h 08m 07.78± 2.08s

31.952 S ±18.8km 179.573 W ±11.7km
DEPTH = 316.4 ± 24.8 km
4.1mb (3 obs.)
KERMADEC ISLANDS REGION (177)

HBZ	5.90	197	P	09	39.40	2.5
MOH	7.65	200	eP	10	03.00	5.1X
HITZ	7.74	208	eP	10	02.30	3.2X
HATZ	7.77	206	P	10	01.10	1.6
TTH	8.12	200	eP	10	04.50	0.9
PGZ	9.27	200	P	10	17.40	-0.3
MNG	9.52	203	P	10	20.70	-0.1
			S	12	11.10	
KIW	9.94	205	P	10	25.80	-0.1
MTW	10.00	202	P	10	25.70	-1.0
CAW	10.10	204	P	10	27.10	-0.8
WDW	10.27	204	P	10	28.40	-1.6
MOW	10.32	202	P	10	30.50	-0.1
MRW	10.34	205	P	10	30.20	-0.6
WEL	10.36	204	P	10	30.50	-0.6
TCW	10.48	206	P	10	31.70	-0.8
KHZ	11.80	206	P	10	48.40	-0.1
DZM	15.86	305	iPc	11	33.90	-2.1
CTA	32.77	283	iPc	14	14.20	0.4
	1.0s		22.50nm			4.6mb
ASPA	41.71	269	iPd	15	29.70	1.6
	0.4s		5.00nm			4.1mb
WRA	42.84	275	Pd	15	37.90	0.7
	0.4s		2.00nm			3.7mb
WB5	42.85	275	eP	15	38.20	0.9
PLM	87.82	48	eP	20	23.00	0.1
SBB	88.10	47	eP	20	24.00	0.0
ISA	88.35	45	eP	20	25.00	-0.1
GLA	88.93	49	eP	20	29.00	1.1
CLC	88.98	46	eP	20	28.00	-0.1
GSC	89.13	47	eP	20	28.00	-0.8
SUF	145.11	340	iPKP	27	07.50	-0.7
	0.5s		19.50nm			
NUR	147.27	338	ePKP	27	06.00	-5.8X
	0.7s		13.30nm			
			I	27	14.00	
BCAO	147.78	216	ePKPd	27	21.30	7.2X
	0.5s		3.00nm			
NB2	150.05	349	PKP	27	21.30	5.1X
	0.7s		6.80nm			
HFS	150.46	347	ePKP	27	21.60	4.8X
	0.6s		5.50nm			

S.D. = 1.1 on 26 of 32 obs.

FEB 25, 1990 12h 49m 44.89± 0.83s
38.134 N ± 8.4km 28.902 E ± 9.0km
DEPTH = 20.7 ± 10.4 km
TURKEY (366)

KHL	0.52	69	iPg	49	55.00	-0.4
			iSg	50	01.90	
CIN	0.84	231	ePg	50	01.00	0.4
			iSg	50	11.00	
YER	1.11	206	ePn	50	05.50	0.2
IZM	1.32	282	ePn	50	07.10	-1.1
DST	1.48	352	ePn	50	10.00	-0.6
BNT	2.35	341	ePn	50	24.00	1.1
YLV	2.46	8	ePn	50	25.00	0.4

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

FEB 25, 1990 12h 57m 05.77± 0.98s
23.367 N ± 7.1km 121.785 E ± 8.5km
DEPTH = 48.4 ± 7.1 km
4.1mb (5 obs.)
TAIWAN (244)

TWF1	0.45	268	iPc	57	16.20	-0.2
TWD	0.73	346	iPc	57	19.60	-0.3
			eS	57	30.10	
TWK	1.20	265	ePc	57	27.30	0.8
TWC	1.24	3	ePc	57	27.70	0.8
			eS	57	43.70	
TWO	1.25	316	iPc	57	27.90	0.7
			eS	57	43.00	
TWZ	1.73	354	ePc	57	34.50	0.5
ANP	1.82	352	eP	57	38.50	3.2X
			eS	57	49.00	
OZH	3.31	299	iPnd	57	54.20	-2.2
			Sn	58	28.20	
HKC	7.10	263	iPd	58	48.60	-1.1
SSE	7.72	356	eP	59	03.60	5.4X
			sP	59	11.60	
			S	00	19.00	
			i	00	59.50	
			eLg	01	05.20	
NJ2	9.03	344	eP	59	11.00	-5.4X
			S	00	49.40	
WHN	9.75	319	eP	59	22.50	-3.7X
			eS	01	07.50	
XAN	15.49	316	P	00	41.00	-1.6
TIY	16.40	333	eP	00	55.60	1.5
BJI	17.29	345	eP	01	05.50	0.3
CD2	17.70	299	eP	01	11.00	0.5
HHC	19.44	336	eP	01	31.60	0.4
LZH	20.04	313	P	01	38.00	0.2
	1.5s		41.00nm			4.5mb
CN2	20.60	8	eP	01	41.80	-1.5
CHG	21.78	262	eP	01	57.00	1.6
CHTO	21.78	262	eP	01	56.50	1.2
	1.0s		7.00nm			4.0mb
GTA	24.55	316	P	02	23.80	1.4
GUN	32.61	286	P	03	36.60	1.1
PKI	33.03	285	P	03	38.80	-0.4
KKN	33.14	285	P	03	39.70	-0.3
DMN	33.30	285	P	03	40.80	-0.6
GKN	33.71	286	P	03	44.10	-0.7
WB5	44.70	163	eP	05	15.90	-0.1
WRA	44.76	163	Pd	05	16.50	0.1
	0.6s		1.90nm			4.1mb
INK	73.77	22	eP	08	37.00	0.6
HFS	78.54	331	eP	09	02.50	-0.8
	0.5s		1.10nm			4.1mb
NB2	79.20	332	P	09	05.20	-1.8
	0.6s		1.10nm			4.0mb

S.D. = 1.1 on 28 of 32 obs.

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* FEB 25, 1990 13h 29m 11.01± 1.30s
41.602 N ±20.3km 74.843 E ±15.6km
DEPTH = 33.0km (normal)
4.2mb (1 obs.)
KIRGHIZ SSR (716)

MAIO	13.06	251	eP	32	17.00	0.1
GKN	15.76	146	P	32	51.00	-1.2
KKN	16.21	145	P	32	58.00	-0.1
GUN	16.37	143	P	33	02.00	1.7
PKI	16.46	145	P	33	01.00	-0.4
HFS	41.08	318	eP	36	52.70	-0.1
	0.4s		1.80nm			4.2mb

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

? FEB 25, 1990 13h 37m 32.07± 1.69s
28.697 S ±34.7km 176.536 W ±22.6km
DEPTH = 60.0km (geophysicist)
4.7mb (3 obs.)
KERMADEC ISLANDS REGION (177)

DZM	16.73	289	iPc	41	25.50	1.6
HNR	29.24	306	eP	43	30.00	-0.5
CTA	34.84	276	iPc	44	18.70	-0.8
ASPA	44.51	265	iPd	45	39.90	0.3
	1.2s		9.00nm			4.4mb
WB5	45.34	270	eP	45	45.70	-0.5
			e	46	12.50	
			e	47	28.90	
WRA	45.34	270	Pc	45	45.70	-0.5
	0.6s		6.00nm			4.6mb
MAT	77.59	324	iPd	49	21.50	-1.8
	0.8s		38.81nm			5.4mb
BJI	92.62	315	eP	50	39.00	0.9
SUF	142.89	343	ePKP	56	58.00	-1.7X
NUR	145.13	342	ePKP	57	05.00	1.4
NB2	147.24	353	PKP	57	12.40	5.2X
	0.8s		6.80nm			
UPP	147.38	347	iPKP	57	12.80	5.5X
HFS	147.81	350	ePKP	57	13.00	5.0X
	0.4s		3.70nm			
BCAO	151.94	213	iPKPd	57	30.50	14.7X
	0.4s		20.00nm			
			ic	57	40.90	

S.D. = 1.3 on 9 of 14 obs.

? FEB 25, 1990 13h 41m 33.50± 1.38s
40.672 N ±15.7km 29.854 E ±11.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

YLV	0.38	254	iPg	41	41.20	-0.1
			eSg	41	48.00	
GPA	0.52	138	ePg	41	44.00	0.0
ISK	0.72	303	ePg	41	47.00	-0.6
CTT	1.18	294	iPn	41	56.30	0.8

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

? FEB 25, 1990 14h 12m 01.22± 3.91s
31.410 S ±21.4km 68.698 W ±27.1km
DEPTH = 80.8 ± 39.3 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB	0.12	229	iP	12	13.40	0.0
			eS	12	23.50	
RTLL	0.21	68	iPc	12	13.60	0.0
CFA	0.44	117	iPc	12	14.80	0.0
			S	12	27.00	
RTCV	0.47	163	iPc	12	15.00	0.0
			S	12	27.00	
RTRS	1.40	332	iPc	12	25.60	0.0
			eS	12	44.20	

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

FEB 25, 1990 14h 35m 17.24± 0.72s
39.491 N ± 6.3km 28.269 E ± 8.2km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

DST	0.30	68	iPg	35	23.00	-0.5
			iSg	35	28.00	
BNT	0.90	343	iPg	35	34.60	0.0
			iSg	35	47.10	
EDC	0.91	340	iPg	35	35.20	0.6
			eSg	35	48.20	
IZM	1.34	216	ePn	35	40.70	-1.3
YLV	1.37	38	iPn	35	41.10	-1.3
ALT	1.49	106	iPn	35	48.00	3.8X
KHL	1.52	140	ePn	35	45.90	1.3
EZN	1.54	283	ePn	35	45.40	0.7
CTT	1.66	4	iPn	35	44.70	-1.8
ISK	1.68	21	ePn	35	49.00	2.2
CIN	1.89	184	eP	35	50.00	0.1
DMK	2.36	351	ePn	36	01.60	5.0X

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

FEB 25, 1990 14h 36m 16.48± 0.26s
36.903 N ± 5.7km 71.309 E ± 4.7km
DEPTH = 103.2km (3 depth phases)
4.8mb (19 obs.)
AFGHANISTAN-USSR BORDER REGION (717)
Felt (III) at Khorog, USSR.

KSH	4.48	54	Pc	37	25.00	1.6
			S	38	16.00	
MAIO	9.52	270	eP	38	29.00	-3.4X
			eS	40	09.00	
NDI	9.58	147	iPd	38	32.00	-1.1
	0.5s		59.86nm			5.7mb
			eS	40	10.60	
WMQ	14.26	56	P	39	32.80	-2.0
GKN	14.32	124	P	39	31.60	-4.0X
KKN	14.88	124	P	39	38.60	-4.3X
DMN	14.89	125	P	39	39.20	-3.8X
PKI	15.11	124	P	39	41.80	-4.2X
GUN	15.21	122	P	39	42.60	-4.6X
LSA	18.06	108	P	40	22.90	0.4
HYB	20.44	160	iPc	40	48.20	0.5
	0.8s		30.80nm			4.7mb
			eS	44	24.00	
SHL	20.86	117	iP	40	52.80	0.7
			iS	44	28.00	
GTA	22.52	75	P	41	09.40	1.1
	0.8s		100.00nm			5.2mb
LZH	26.10	82	eP	41	43.00	0.6
	1.5s		38.00nm			4.7mb
KOD	27.13	167	eP	41	53.80	1.8
			eS	47	06.80	
CD2	27.50	93	eP	41	55.80	0.8
CHG	30.19	119	eP	42	19.50	0.3
CHTO	30.19	119	eP	42	19.50	0.4
	1.1s		6.48nm			4.3mb
XAN	30.64	84	P	42	22.00	-1.0
HHC	31.39	70	eP	42	30.40	0.8
GYA	31.68	99	P	42	32.80	0.6
TIY	32.54	76	P	42	40.00	0.5
MLR	34.80	299	eP	43	00.00	0.9
BJI	34.99	71	eP	43	00.50	0.0
NNT	35.14	126	eP	43	03.00	1.0
WHN	36.12	87	eP	43	10.00	-0.2

25d 14h

NUR	37.65	324	iP	43	23.00	0.4	SVA	3.97	298	eP	59	04.10	0.7	PCI	63.76	279	ePc	07	20.00	1.7
SUF	37.71	328	iP	43	23.90	0.7				S	00	12.20		MAT	69.90	323	iPd	07	53.40	-2.0
	0.5s	5.00nm			4.7mb		MBU	4.44	312	iP	59	07.30	0.3		1.0s	40.00nm			4.9mb	
NJ2	39.18	83	eP	43	35.40	-0.3				iS	00	16.40		SPA	70.11	180	eP	07	58.80	2.4
CN2	41.20	63	eP	43	52.80	0.5	SGE	4.68	300	ePd	59	09.40	0.5		0.9s	114.09nm			5.4mb	
IPM	42.15	133	ePc	44	02.60	2.3				(S)	00	25.00		SYP	77.23	46	eP	08	38.00	1.1
	0.9s	30.40nm			5.1mb		NDF	4.99	296	eP	59	12.00	0.7	BCH	77.54	45	P	08	39.80	1.3
HFS	42.90	322	eP	44	05.50	-0.4				e	00	28.00		PAS	78.24	47	eP	08	24.00	-1B.1X
	1.0s	15.10nm			4.8mb		PVC	13.30	277	iPc	00	32.00	0.5	MWC	78.36	47	eP	08	43.00	0.0
KHC	42.95	305	eP	44	10.50	3.9X	DZM	14.81	259	iPc	00	47.40	0.9	BAR	78.49	49	eP	08	45.00	1.5
R8L	43.30	301	P	44	11.50	2.0	HBZ	17.84	190	P	01	15.80	0.2	PLM	78.72	48	eP	08	45.00	0.1
NB2	44.21	323	P	44	16.20	-0.4	HITZ	19.44	195	P	01	31.60	1.0	SBB	78.78	47	eP	08	45.00	0.0
	0.8s	8.20nm			4.6mb		HATZ	19.53	194	P	01	31.30	-0.2	ISA	78.89	46	eP	08	46.00	0.5
CTI	44.68	301	P	44	21.00	0.4	RATZ	19.59	195	P	01	33.20	1.1	CMB	79.00	43	eP	08	46.30	0.2
MEM	47.61	308	P	44	52.70	9.2X	PGZ	21.15	192	P	01	45.60	-0.7	WDC	79.21	40	eP	08	57.40	10.4X
BSF	47.61	305	eP	44	43.40	-0.3	MTW	21.83	194	P	01	51.30	-1.2	ORV	79.21	41	eP	08	47.30	0.2
LPG	48.15	301	eP	44	50.90	2.8	CAW	21.88	194	P	01	52.30	-0.6	CLC	79.57	46	eP	08	49.00	0.0
	0.8s	5.35nm			4.4mb		WDW	22.05	195	P	01	53.60	-0.8	NJ2	79.68	310	Pd	08	49.60	0.0
SMF	49.84	304	eP	45	00.60	-0.1	MRW	22.09	195	P	01	54.30	-0.4	TPC	79.69	48	eP	08	50.00	0.3
	0.8s	6.05nm			4.6mb		WEL	22.12	195	P	01	56.20	1.1	GLA	80.00	49	eP	08	52.00	0.7
AVF	50.13	304	eP	45	02.30	-0.6	MOW	22.14	194	P	01	54.80	-0.5	MDJ	80.20	325	Pd	08	52.00	-0.1
	0.7s	5.50nm			4.7mb		TCW	22.18	196	P	01	54.70	-0.9	CN2	82.00	322	Pd	09	00.80	-0.5
MAT	52.58	69	eP	45	19.00	-2.5	KHZ	23.50	196	P	02	06.60	-0.8	WHN	82.27	306	eP	09	02.00	-0.9
	0.8s	5.97nm			4.7mb		HNR	23.88	293	eP	02	09.00	-2.2	IPM	83.25	277	ePd	09	09.80	1.6
DAG	54.44	344	eP	45	35.00	0.3	TBI	26.56	102	iP	02	36.00	1.3		0.6s	50.20nm			5.2mb	
BCAO	58.03	249	ePc	46	00.50	-0.5		0.7s	20.00nm			4.9mb		PMR	84.51	13	P	09	11.20	-2.1
	0.9s	9.00nm			4.8mb		AFR	26.67	89	iP	02	35.40	-0.3		0.5s	8.26nm			4.6mb	
		ic		46	25.20	100km	PAE	26.84	90	iP	02	36.70	-0.4	PSI	84.56	275	ePd	09	14.50	-0.1
APHE	58.39	295	eP	46	03.50	0.1		0.7s	20.00nm			4.9mb			0.7s	7.20nm			4.4mb	
PCI	58.57	119	ePc	46	06.00	1.3	PPT	26.86	90	iP	02	37.20	-0.1			e		09	58.00	
ATEJ	58.65	295	eP	46	04.50	-0.7		0.7s	20.00nm			4.9mb		BJI	85.65	315	eP	09	19.00	-0.2
MBC	66.92	3	ePc	46	59.10	0.0	PPN	27.00	90	iP	02	37.80	-0.7		1.8s	66.00nm			5.0mb	
	0.9s	61.00nm			5.5mb			0.7s	10.00nm			4.6mb		GYA	86.54	300	P	09	24.00	0.0
		pP		47	25.50	105km	TVO	27.13	90	iP	02	38.80	-0.9	NEW	86.89	36	P	09	25.00	-0.1
BUL	69.58	223	iPd	47	14.30	-2.2		0.7s	15.00nm			4.7mb			0.6s	2.95nm			4.2mb	
	1.0s	20.00nm			4.9mb		MHZ	27.17	200	P	02	39.40	-0.5	TIY	87.06	312	eP	09	26.30	0.1
IMA	71.66	18	eP	47	27.50	-1.0	BRS	27.84	249	iP	02	45.30	-0.6	NNT	87.28	284	eP	09	29.00	1.5
	0.7s	0.50nm			3.4mb	X	PMO	28.97	85	iP	02	55.10	-0.5	FBA	87.73	12	P	09	26.70	-1.9
INK	73.47	9	iPd	47	38.10	-0.7		0.7s	15.00nm			4.7mb			0.5s	11.36nm			4.9mb	
		pP		48	05.00	105km	COO	29.23	243	eP	02	59.00	1.1	XAN	87.95	307	Pd	09	30.50	0.1
MBL	73.68	133	iPc	47	40.20	-0.5	RUV	29.40	86	iP	02	57.80	-1.6	LRM	88.24	40	eP	09	31.60	-0.1
FBA	74.01	16	eP	47	41.60	-0.4		0.7s	15.00nm			4.7mb		BW06	88.51	43	P	09	32.00	-1.0
FRB	74.75	343	eP	47	46.00	-0.3	RMQ	31.30	252	eP	03	16.00	0.6		0.7s	2.63nm			4.2mb	
KIC	75.06	267	P	47	48.40	-0.5	CNB	32.62	235	eP	03	28.00	1.5	HHC	89.12	314	P	09	36.00	0.3
KNA	75.29	123	eP	47	50.00	0.0				e	03	38.00		KMI	89.26	297	Pd	09	37.50	0.7
PMR	76.51	19	eP	47	55.20	-1.0	CAN	32.91	235	eP	03	30.00	1.1	BDT	89.60	288	eP	09	38.00	-0.2
KDC	78.79	22	eP	48	08.30	-0.5	BWA	33.09	237	eP	03	29.90	-0.5	CHG	90.22	290	ePd	09	42.00	1.0
BAL	79.49	141	eP	48	12.00	-1.0	CTA	33.69	264	iPd	03	35.20	-0.3		1.0s	25.00nm			5.1mb	
MUN	80.36	143	eP	48	16.50	-1.0		0.9s	101.68nm			5.5mb		RSSD	92.70	44	P	09	49.00	-3.2X
NWAO	B1.63	142	eP	48	23.00	-1.2				i	03	45.90		INK	93.76	15	eP	09	54.00	-2.3
WB5	81.97	122	eP	48	25.00	-1.2				iS	08	18.00		KEV	128.02	349	ePKP	15	39.00	-2.7X
WRA	81.99	122	Pc	48	25.00	-1.4	CMS	34.51	243	ePd	03	43.40	1.1	SUF	134.25	345	iPKP	15	48.00	-5.7X
	0.6s	5.60nm			4.6mb			1.0s	95.00nm			5.4mb		NUR	136.51	344	ePKP	15	57.00	-1.0
COOL	82.00	138	eP	48	25.20	-1.0	PMG	35.38	282	iPd	03	49.30	-0.3	NB2	138.52	353	PKP	15	50.80	-11.0X
RKG	82.45	143	eP	48	30.00	1.6		1.0s	140.00nm			5.5mb			0.7s	1.80nm				
ASPA	84.28	125	iPc	48	36.90	-1.1	TOO	36.30	233	iPd	03	58.40	1.4	HFS	139.08	351	ePKP	15	51.70	-11.1X
	0.6s	14.00nm			5.1mb			0.6s	48.00nm			5.3mb			0.4s	6.20nm				
FFC	88.56	356	iPc	48	58.50	0.0	BFD	38.44	235	eP	04	18.00	3.6X	LWI	145.76	233	iPKPc	16	18.70	2.7X
	0.8s	15.00nm			5.1mb		QIS	39.83	262	eP	04	25.00	-1.0	KAS	145.76	315	iPKPd	16	17.20	2.2X
EDM	90.16	3	ePc	49	06.50	0.5	ASPA	44.78	256	iPd	05	03.70	-1.2	KRA	146.85	339	ePKP	16	18.20	1.8
NEW	94.88	6	e(P)	49	28.20	0.3		0.9s	68.00nm			5.2mb					e	16	21.30	
S.D. = 1.1 on 61 of 69 obs.								Z 22s	0.19um			4.0MszX		BBTK	147.17	314	ePKP	16	20.00	2.6X
										iPcP	06	34.60		VRI	147.24	328	ePKP	16	20.00	2.9
FEB 25, 1990 14h 57m 39.64± 0.43s										iS	10	58.60		KSP	147.27	343	iPKPd	16	20.20	3.2
20.011 S ± 4.9km 177.843 W ± 4.3km										iScS	14	01.00					ic	18	32.20	
DEPTH = 571.9 ± 5.6 km										LR	15	15.30		HRI	147.36	301	ePKP	16	21.00	3.1X
4.8mb (31 obs.)							WB5	44.80	262	iPd	05	03.90	-1.1	SPC	147.48	338	ePKP	16	19.60	1.9
FIJI ISLANDS REGION (181)										e	11	00.10		CLL	147.62	347	iPKPd	16	20.30	2.8X
CENTROID, MOMENT TENSOR (HRV)							WRA	44.81	262	Pd	05	03.60	-1.6		1.0s	52.00nm				
Data Used: GDSN								0.3s	8.50nm			4.8mb		MLR	147.89	328	ePKP	16	22.00	3.6X
L.P.B.: 10S, 16C							FORR	49.59	246	iPc	05	41.00	0.0	PRU	148.50	345	PKP	16	22.80	3.8X
Centroid Location:								0.4s	36.00nm			5.3mb		MOX	148.53	348	iPKP	16	23.00	4.0X
Origin Time 14:57:47.2 0.8							COOL	55.56	246	eP	06	22.00	-1.9		1.4s	54.00nm				
Lat 19.57S 0.09 Lon 178.31W 0.09								0.3s	6.00nm			4.4mb		PRNI	148.65	296	iPKPd	16	24.00	4.1X
Dep 573.3 4.6 Half-duration 1.8							MBL	58.01	257	iPd	06	39.40	-1.3	MBH	148.86	295	ePKP	16	24.00	3.9X
Moment Tensor; Scale 10**16 Nm								0.3s	13.00nm			4.7mb		MEM	149.32	355	PKP	16	25.00	4.9X
Mrr=-B.44 0.64 Mtt= 7.56 1.37							KLB	58.39	245	eP	06	42.10	-1.1	SRO	149.33	338	iPKP	16	25.10	4.8X
Mff= 0.0B 1.13 Mrt= 2.58 1.01								0.6s	17.00nm			4.5mb		ZST	149.40	340	ePKP	16	25.20	4.8X
Mrf=-7.74 1.07 Mtf=-3.71 0.88							NWAO	58.72	243	eP	06	45.20	-0.4				e	16	32.20	
Principal Axes:								0.7s	13.00nm			4.3mb		TNS	149.44	352	ePKPd	16	25.50	5.0X
T Val= 11.05 Plg=18 Azm= 34							RKG	58.82	242	eP	06	46.00	0.0	GRF	149.51	348	ePKP	16	25.70	5.1X
N 1.77 22 131							BAL	59.39	246	eP	06	49.00	-0.8				e	16	31.10	
P -12.82 61 267								0.4s	14.00nm			4.6mb		SNF	149.52	357	PKP	16	25.60	5.1X
Best Double Couple:Mo=1.2*10**17							MUN	59.67	244	iPc	06	51.20	-0.4	KHC	149.54	345	PKP	16	20.20	-0.4
NP1:Strike= 93 Dip=33 Slip=-133								0.6s	40.00nm			4.9mb					i	16	25.80	
NP2: 321 67 -66							MRWA	60.17	247	eP	06	54.00	-1.0				i	16	33.00	
								0.5s	12.00nm			4.5mb		ABH	149.89	353	ePKP	16	26.31	5.2X

DOU	149.92	357	iPKP	16	26.40	5.3X
RUP	150.12	354	ePKP	16	27.09	5.6X
BHG	151.02	345	iPKPc	16	29.00	6.1X
			i	16	39.60	
FLN	151.24	4	ePKP	16	28.90	5.8X
	0.5s		19.70nm			
CDF	151.37	353	ePKP	16	29.50	6.0X
	0.5s		6.55nm			
LDF	151.43	3	ePKP	16	29.30	5.9X
	0.5s		18.95nm			
KBA	151.50	344	iPKPd	16	29.00	5.2X
	0.5s		6.30nm			
			i	16	37.60	
			i	16	42.30	
GRR	151.59	4	ePKP	16	29.60	6.0X
	0.5s		19.70nm			
FEL	151.80	352	ePKP	16	31.22	7.1X
HAU	151.87	354	ePKP	16	30.50	6.4X
	0.5s		6.55nm			
LPF	151.93	5	ePKP	16	30.80	6.7X
	0.5s		26.95nm			
SCE	151.93	346	ePKPd	16	25.50	1.1
BSF	151.99	353	ePKP	16	30.70	6.3X
	0.5s		2.90nm			
RBL	152.03	343	PKP	16	31.00	6.6X
			eSg	16	42.00	
FVI	152.09	344	PKP	16	31.00	6.6X
			eSg	16	42.00	
LJU	152.11	341	e(PKP)	16	24.00	-0.5
			e	16	31.00	
VOY	152.31	342	ePKP	16	29.20	4.3X
			e	16	31.40	
VBY	152.37	340	ePKP	16	31.80	7.0X
CEY	152.42	341	e(PKP)	16	32.20	7.2X
VAY	152.57	325	ePKP	16	30.50	5.2X
			i	16	45.60	
SKO	152.69	328	ePKP	16	24.30	-1.1
			i	16	32.20	
			i	16	46.30	
LOR	152.78	357	ePKP	16	32.80	7.4X
	0.5s		5.45nm			
CTI	152.88	345	PKP	16	34.00	8.3X
SSF	153.00	358	ePKP	16	33.20	7.5X
	0.9s		8.20nm			
LBF	153.05	357	ePKP	16	33.10	7.3X
MFF	153.41	4	ePKP	16	33.70	7.5X
BGF	153.52	359	ePKP	16	34.10	7.7X
OHR	153.65	327	ePKP	16	26.00	-0.8
	1.5s		0.05nm			
			e	16	34.80	
			e	16	49.70	
TCF	153.79	360	ePKP	16	34.70	7.9X
MAF	153.86	359	ePKP	16	35.10	8.2X
LPG	154.30	353	ePKP	16	37.10	9.2X
BCAO	157.77	228	iPKPd	16	32.40	-0.5
	0.8s		23.00nm			
			ic	17	09.80	
LIC	164.62	152	PKP	16	39.78	0.0
KIC	164.87	153	PKP	16	40.34	0.4
	0.9s		10.50nm			
TIC	165.00	151	PKP	16	40.36	0.3
LKO	167.18	143	PKP	16	42.16	0.4X

S.D. = 1.1 on 102 of 155 obs.

FEB 25, 1990 18h 58m 01.16± 1.01s
43.644 N ± 3.3km 127.508 W ±10.6km
DEPTH = 10.0km (geophysicist)
4.0mb (2 obs.)
OFF COAST OF OREGON (30)

GROR	3.24	57	eP	58	52.91	-0.2
KMOR	3.49	54	eP	58	56.39	-0.3
			eS	59	41.44	
NLO	3.78	48	eP	59	01.15	0.3
			eS	59	49.65	
FHC	3.86	136	eP	59	01.30	-0.6
PGO	4.05	61	eP	59	05.00	0.6
BMW	4.15	45	eP	59	05.76	-0.2
			eS	59	57.10	
ONR	4.17	38	eP	59	06.41	0.2
RVW	4.21	52	eP	59	07.28	0.5
			eS	00	00.29	
TCO	4.30	82	eP	59	07.44	-0.8
LVP	4.36	54	eP	59	09.61	0.5
TDH	4.41	66	eP	59	10.09	0.3
FL2	4.46	53	eP	59	11.17	0.6
			eS	00	06.04	
VBEM	4.48	70	eP	59	10.58	-0.1
OBH	4.49	34	eP	59	10.70	0.0
CZM	4.51	50	eP	59	11.09	0.0
SHW	4.53	54	eP	59	12.28	0.8
ERK	4.53	52	eP	59	11.63	0.2
			eS	00	07.76	
CPW	4.54	41	eP	59	11.13	-0.4
VLL	4.55	64	eP	59	12.22	0.5
JLK	4.55	55	eP	59	12.15	0.4
STD	4.56	54	eP	59	12.48	0.6
APW	4.57	47	eP	59	11.90	0.0
			eS	00	08.43	
LBFM	4.75	117	eP	59	13.40	-1.3
LON	5.09	50	eP	59	19.50	0.2
GMW	5.12	39	eP	59	19.30	-0.4
VGB	5.16	66	eP	59	19.80	-0.5
MIN	5.50	125	eP	59	26.10	0.9
RMW	5.53	44	eP	59	25.70	0.1
MCW	5.99	31	eP	59	32.80	0.8
ORV	6.08	130	eP	59	34.00	0.8
ARN	7.76	142	eP	59	54.20	-2.7
CMB	7.78	134	eP	59	57.00	-0.2
PNT	7.86	41	eP	59	58.00	-0.3
KVN	8.43	120	eP	00	05.50	-0.9
NEW	8.58	54	eP	00	07.00	-1.4
TNP	9.57	122	eP	00	22.00	-0.1
ISA	10.58	136	eP	00	38.00	2.1
CLC	10.92	132	eP	00	42.00	1.5
LRM	10.93	73	eP	00	39.90	-1.0
SBB	11.67	137	eP	00	50.00	-0.8
GSC	11.73	132	eP	00	54.00	2.4
MWC	11.93	139	eP	00	54.00	-0.4
RVR	12.45	137	eP	00	59.00	-2.2
TPC	13.04	133	eP	01	11.00	1.9
SES	13.09	53	eP	01	08.00	-1.8
PLM	13.22	137	eP	01	20.00	8.4X
EDM	13.40	39	eP	01	13.50	-0.3
GLA	14.50	133	eP	01	29.00	0.7
ANMO	18.43	111	eP	02	18.00	-0.4
ALQ	18.43	111	eP	02	17.70	-0.8
	1.0s		5.00nm		3.6mb	
FFC	19.91	47	eP	02	36.00	0.4
	1.0s		19.00nm		4.4mb	
MEO	24.00	102	e(P)	03	17.60	0.9
INK	24.93	355	eP	03	23.00	-2.3
MBC	32.89	4	eP	04	39.00	2.1

S.D. = 1.1 on 53 of 54 obs.

FEB 25, 1990 19h 17m 11.29± 0.76s
35.775 N ± 7.2km 27.289 E ± 7.6km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)
MD 3.4 (ATH).

KAP	0.24	203	ePg	17	16.20	-0.3
			eSg	17	20.00	
NPS	1.46	250	ePb	17	38.00	0.3
KSL	1.89	79	ePn	17	44.00	0.1
APE	1.92	313	ePb	17	43.80	-0.5
CIN	1.93	19	eP	17	49.00	4.5X
SMG	1.96	349	ePn	17	45.00	0.1
VAM	2.54	263	ePg	17	59.00	5.7X
VLI	3.64	286	ePn	18	09.20	0.3

S.D. = 0.4 on 6 of 8 obs.

FEB 25, 1990 20h 52m 11.41± 0.72s
36.179 N ± 7.3km 27.107 E ± 7.8km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)
MD 3.4 (ATH).

KAP	0.63	175	ePn	52	24.00	-0.1
NPS	1.52	234	ePb	52	39.80	1.1
SMG	1.54	352	ePb	52	40.00	1.1
APE	1.55	305	ePn	52	38.80	-0.3
CIN	1.62	29	eP	52	40.00	-0.1
KSL	2.00	91	ePn	52	45.20	-0.5
VLI	3.41	280	ePn	53	04.30	-1.3

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

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* FEB 25, 1990 21h 40m 23.12± 1.10s
5.195 S ± 7.5km 151.175 E ±10.5km
DEPTH = 32.8 ± 10.3 km
4.6mb (5 obs.) 3.5Msz (1 obs.)
NEW BRITAIN REGION (192)

RAB	1.41	45	iPd-	40	46.00	-0.6
PMG	5.78	223	eP	41	50.00	1.1
HNR	9.66	116	eP	42	44.00	1.0
CTA	15.56	197	iPd	44	07.50	5.7X
	1.0s		20.00nm		4.3mb	
QIS	18.96	215	eP	44	43.50	-0.9
RMQ	21.30	186	ePd	45	09.00	-0.3
WB5	21.92	227	eP	45	14.80	-0.8
			eS	45	17.50	
WRA	21.98	227	Pd	45	15.60	-0.6
	0.9s		16.10nm		4.5mb	
BRS	22.13	176	iPc	45	17.30	-0.3
ASPA	24.79	220	iPc	45	43.70	0.1
	0.9s		42.00nm		5.0mb	
Z	20s		0.16um		3.5Msz	
			eS	50	10.80	
			LR	55	05.60	
MAT	43.26	345	(P)	48	22.00	-1.3
	0.9s		8.40nm		4.5mb	
KMI	55.87	305	Pc	50	05.00	4.4X
GUN	70.94	302	PKP	51	41.00	0.8
	0.6s		9.00nm		5.0mb	
PKI	71.25	301	PKP	51	43.20	1.2
KKN	71.42	301	PKP	51	44.00	1.2
DMN	71.52	301	PKP	51	44.00	0.5
GKN	72.02	301	PKP	51	45.40	-1.0

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

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* FEB 25, 1990 21h 53m 10.85± 1.15s
25.332 S ± 6.0km 70.855 W ±23.5km
DEPTH = 74.7 ± 35.3 km
NEAR COAST OF NORTHERN CHILE (122)

ANT	1.67	14	iPc	53	38.70	0.1
			iS	54	05.50	
RTRS	4.97	166	iPc	54	24.80	0.1
CYA	5.48	126	e(P)	54	31.50	-0.3
RTLL	6.33	161	ePc	54	42.60	-1.0
RTCB	6.39	164	eP	54	45.00	0.5
CFA	6.66	160	ePd	54	48.80	0.6
ARE	8.85	356	eP	55	18.00	-0.5
ZOBO	9.37	16	P	55	26.50	0.5
Z	21s		0.14um			
			LR	58	55.00	

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

FEB 25, 1990 22h 05m 42.76± 0.78s
36.209 N ± 8.4km 27.192 E ± 8.1km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)
MD 3.8 (ATH).

KAP	0.66	181	ePg	05	55.20	-0.7
YER	1.27	43	iPn	06	06.50	0.1
SMG	1.52	349	ePb	06	09.00	-1.0
CIN	1.56	27	eP	06	10.00	-0.6
APE	1.59	303	ePg	06	13.00	2.0
NPS	1.59	234	ePb	06	10.30	-0.8
KSL	1.94	92	ePb	06	17.00	1.0
IZM	2.19	1	ePn	06	23.00	3.3X
VAM	2.56	253	ePb	06	26.80	1.8
KHL	2.81	41	ePn	06	37.00	8.3X
BCK	3.00	64	ePn	06	37.30	6.0X
VLI	3.47	280	ePn	06	36.00	-1.8

S.D. = 1.5 on 9 of 12 obs.

? FEB 25, 1990 22h 21m 03.79± 1.28s
47.420 N ± 8.8km 12.366 E ±14.1km
DEPTH = 10.0km (geophysicist)
AUSTRIA (546)
ML 1.9 (KBA).

KBA	0.75	117	iPgc	21	18.30	-0.3
			iSg	21	31.50	
FVI	0.87	161	P	21	21.00	0.4
			eSg	21	32.50	
RBL	1.28	139	P	21	30.50	2.9X
			eSg	21	48.00	
CTI	1.46	200	P	21	30.00	-0.3
			eSg	21	47.00	
KHC	1.89	25	Pg	21	36.60	0.1
			Sg	22	01.60	

S.D. = 0.6 on 4 of 5 obs.

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* FE8 25, 1990 22h 23m 28.97± 3.02s
32.008 S ±24.7km 69.723 W ±16.8km
DEPTH = 137.5 ± 37.4 km
MENDOZA PROVINCE, ARGENTINA (139)

25d 22h

JACH	1.00	227	iPd	23 53.00	0.1
			iS	24 10.00	
ZON	1.00	63	iPd	23 52.50	-0.4
			eS	24 08.00	
RTCV	1.02	82	iPd	23 52.90	-0.2
RTLL	1.27	58	iPd	23 56.10	0.6
CFA	1.33	73	iPd	23 56.00	-0.1
ROCH	1.45	228	iPd	23 57.50	-0.2
			iS	24 17.40	
SAN	1.64	209	iPc	24 00.10	0.5
			iS	24 21.50	
IHA	1.91	237	eP	24 02.60	-0.1
			iS	24 26.00	
LCCH	2.14	226	eP	24 05.50	0.1
			iS	24 30.50	
LNV	2.40	216	iPc	24 08.40	-0.4
			iS	24 35.50	

S.D. = 0.4 on 10 of 10 obs.

? FEB 25, 1990 22h 36m 50.09± 1.06s
44.511 N ± 8.7km 7.282 E ± 9.5km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.7 (GEN).

PZZ	0.13	267	P	36 53.34	0.0
			S	36 56.93	
STV	0.27	173	P	36 55.90	0.1
			S	37 01.33	
ENR	0.30	161	P	36 56.31	-0.1
			S	37 01.64	
CTI	3.45	62	P	37 45.00	0.0
			eSg	38 02.50	

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

FEB 25, 1990 22h 51m 09.19± 0.19s
18.042 S ± 4.8km 69.135 W ± 3.9km
DEPTH = 141.4km (23 depth phases)
5.5mb (67 obs.)
NORTHERN CHILE (123)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 30C
Centroid Location:
Origin Time 22:51:16.3 0.4
Lat 18.35S 0.04 Lon 68.72W 0.05
Dep 141.5 2.0 Half-duration 2.5
Moment Tensor; Scale 10**17 Nm
Mrr=-2.88 0.13 Mtt= 0.09 0.22
Mff= 2.79 0.22 Mrt= 0.29 0.13
Mrf=-1.71 0.14 Mtf=-0.54 0.21
Principal Axes:

	Val=		Plg=16	Azm= 79
T		3.37		
N		-0.02	0	169
P		-3.36	74	261

Best Double Couple:Mo=3.4*10**17
NP1:Strike=169 Dip=29 Slip= -91
NP2: 350 61 -89

LPB	1.80	34	iPd	51 45.00	2.7
			iS	52 11.00	
ZOBO	2.01	29	iPd	51 47.20	2.3
ARE	2.75	305	iPc	51 52.60	-1.2
CCH	2.93	78	iPc	51 57.00	0.8
ANT	5.76	192	iPd	52 25.70	-7.9X
			iS	53 22.00	
SLA	7.47	154	iPc	52 52.40	-4.5X
NNA	9.57	308	iPc	53 20.80	-4.1X
	0.7s		253.42nm		6.0mb X
			eS	55 04.50	
PT10	9.61	307	iPc	53 21.20	-4.2X
			eS	55 09.00	
CYA	10.80	164	e(P)	53 32.50	-8.5X
RTCB	13.39	179	eP	54 07.00	-7.8X
ZON	13.45	178	eP	54 10.00	-5.6X
CFA	13.53	177	eP	54 03.00	-13.6X
TCA	13.86	164	ePc	54 11.70	-9.2X
MRA	14.64	168	e(P)	54 22.00	-8.5X
ROCH	14.96	186	eP	54 29.50	-5.4X
IHA	15.09	188	eP	54 30.50	-5.7X
			e(S)	57 29.00	
SAN	15.41	185	ePc	54 35.30	-5.0X
LCCH	15.52	188	eP	54 36.50	-5.2X
			i	54 39.50	
LNV	15.98	187	ePd	54 41.10	-6.2X
			i	58 27.00	
RFA	16.67	178	eP	54 48.20	-7.7X

VC1	19.54	331	P	55 30.30	1.5
CAYA	20.00	333	P	55 34.80	1.3
QUR	20.02	332	P+	55 34.60	1.1
GGP	20.04	331	Pd	55 34.70	0.7
BAO	20.38	86	Pc	55 52.10	15.3X
CEOS	26.91	2	eP	56 37.50	-1.6
PLAV	27.78	3	eP	56 49.20	2.1
OLLA	27.98	5	iP	56 47.20	-1.5
LLAV	28.43	5	iP	56 51.00	-1.8
MORO	28.74	2	eP	56 53.50	-2.1
UPA	28.75	338	ePc	56 57.50	2.0
	1.1s		189.87nm		5.7mb
FISA	29.12	360	eP	56 56.10	-2.8X
SVB	32.07	15	eP	57 24.95	0.2
SLB	32.66	15	eP	57 28.73	-1.2
CAI	33.23	74	iPd	57 32.90	-2.0
PPM	46.90	320	(P)	59 30.00	2.1
HBF	51.81	348	P	00 04.30	-0.3
SGS	52.09	348	P	00 05.70	-1.0
JSC	53.29	347	P	00 14.40	-1.1
			pP	00 51.40	161kmX
PRM	53.34	346	P	00 14.80	-1.1
			pP	00 51.20	158kmX
TKL	55.18	345	P	00 27.40	-1.9
GBTN	55.29	345	P	00 28.60	-1.5
RSCP	55.58	344	P	00 30.50	-1.7
PWLA	55.71	341	P	00 31.10	-2.0
BLA	55.98	349	eP	00 34.60	-0.5
	1.2s		171.88nm		5.9mb
			epP	01 10.00	152kmX
			e	01 31.90	
NAV	56.15	349	P	00 35.30	-1.0
CVL	56.41	351	P	00 37.30	-0.7
NA2	56.45	352	P	00 37.20	-1.1
UYO	57.25	335	iPc	00 42.50	-1.5
OLY	57.31	338	P	00 42.20	-2.2
POW	57.80	339	P	00 46.20	-1.6
FVM	59.21	340	iPd	00 55.90	-1.7
			epP	01 29.00	139km
			e	01 43.20	
RLO	59.22	336	ePd	00 56.80	-0.9
			e	01 30.70	143km
TUL	59.30	335	ePd	00 57.20	-1.0
	1.2s		197.20nm		6.0mb
SIO	59.37	334	ePd	00 57.90	-0.8
			e	01 31.70	142km
MEO	59.53	332	iP	00 58.90	-0.9
CLE	60.33	349	iP	01 04.10	-1.1
MBO	60.70	61	eP	01 07.00	-1.1
RKT	61.40	253	iP	01 12.40	-0.4
	1.2s		115.00nm		5.7mb
DLA	61.67	350	P	01 12.20	-2.0
LDN	61.78	350	P	01 13.15	-1.8
ELF	61.95	350	P	01 14.20	-1.8
RSNY	62.48	356	eP	01 18.50	-1.0
	0.7s		24.22nm		5.2mb
ALQ	63.51	326	eP	01 26.30	-0.4
	1.6s		208.33nm		5.8mb
ANMO	63.51	326	iPd	01 26.90	0.2
	1.2s		82.03nm		5.5mb
			i	02 01.70	145km
			e	02 11.50	
GLD	66.63	330	ePd	01 46.50	-0.2
	1.2s		217.17nm		5.9mb
			epP	02 22.20	148km
			e	02 33.50	
GOL	66.66	330	ePd	01 46.20	-0.8
	1.0s		171.50nm		5.9mb
			e	02 20.50	142km
GLA	66.98	319	eP	01 49.00	0.2
PV09	67.60	327	eP	01 52.50	-0.5
LIC	67.67	75	P	01 51.52	-1.9
TIC	67.84	75	P	01 52.64	-1.9
	1.0s		119.00nm		5.7mb
BAR	67.90	318	eP	01 55.00	0.4
KIC	67.99	75	Pc	01 53.76	-1.7
	0.8s		274.00nm		6.2mb
			S	10 38.60	
TPC	68.44	319	eP	01 58.00	0.4
PLM	68.45	318	eP	01 58.00	-0.2
PEC	68.99	319	P	02 01.60	0.3
	1.3s		61.40nm		5.3mb
RVR	69.20	318	eP	02 03.00	0.5
MSU	69.23	325	P	02 03.30	0.4
RSSD	69.61	334	ePc	02 04.90	-0.2
			i	02 40.00	144km
GSC	69.70	320	eP	02 06.00	0.4

MWC	69.78	318	eP	02 07.00	0.7
PAS	69.80	318	eP	02 07.00	0.8
SBB	69.93	319	eP	02 07.00	-0.1
CLC	70.52	320	eP	02 10.00	-0.6
DUG	70.78	326	P	02 12.60	0.4
	1.0s		62.50nm		5.4mb
			pP	02 48.00	145km
ABL	70.91	318	P	02 13.60	0.4
ISA	70.96	319	eP	02 14.00	0.7
BW06	71.03	330	iP	02 13.00	-0.8
			i	02 47.70	141km
SYP	71.19	317	eP	02 15.00	0.2
WIGH	71.44	78	eP	02 16.00	-0.4
BCH	71.67	318	ePd	02 18.20	0.6
			e	02 32.20	
			epP	02 53.90	146km
			esP	03 05.20	
TNP	71.79	322	P	02 18.80	0.5
	1.0s		85.00nm		5.5mb
WEGH	71.79	78	eP	02 17.00	-1.5
RSON	71.92	344	iPd	02 17.80	-0.8
	1.1s		190.37nm		5.8mb
			e	02 50.50	132km
			esP	03 06.10	
LEGH	71.94	78	eP	02 18.00	-1.4
KUK	71.96	77	eP	02 04.00	-15.6X
SPA	72.07	180	iPd	02 18.50	-1.1
	1.2s		222.54nm		5.8mb
PTI	72.49	328	P	02 22.50	0.2
FRI	72.58	320	eP	02 20.70	-2.0
SCH	72.59	1	eP	02 22.00	-0.4
PRI	72.64	318	ePd	02 24.00	0.7
KVN	72.95	322	iPc	02 25.40	0.3
			e	02 40.70	55kmX
			e	03 00.00	
			esP	03 12.00	
LLA	73.11	319	iPd	02 26.40	0.5
PRS	73.21	318	eP	02 27.10	0.7
CM8	73.66	320	iPd	02 29.20	0.2
ARN	73.94	319	P	02 31.80	1.1
MHC	74.00	319	eP	02 32.00	0.8
GCC	74.03	318	eP	02 31.90	0.8
TBI	74.44	250	iP	02 34.00	0.2
	1.6s		230.00nm		5.7mb
RUV	74.50	259	iP	02 35.40	1.1
	1.3s		185.00nm		5.7mb
PCC	74.56	319	e(P)	02 35.00	0.8
LRM	74.69	330	eP	02 35.00	-0.1
			e	03 11.50	148km
BKS	74.70	319	iPd	02 35.70	0.7
	0.9s		200.00nm		5.9mb
BRK	74.71	319	eP	02 35.00	-0.1
VAH	74.72	259	iP	02 36.40	0.9
	1.3s		170.00nm		5.6mb
TPT	74.77	259	iP	02 37.00	1.2
	1.3s		255.00nm		5.8mb
PMO	75.03	259	iP	02 38.40	1.1
	1.3s		180.00nm		5.7mb
ORV	75.29	321	iPd	02 39.10	0.7
TVO	75.58	256	iP	02 41.80	1.3
	1.4s		185.00nm		5.6mb
PPN	75.81	256	iP	02 42.90	1.2
	1.4s		50.00nm		5.1mb
MIN	75.85	321	eP	02 40.80	-0.9
PAE	75.91	256	iP	02 43.20	0.9
	1.4s		235.00nm		5.7mb
PPT	75.93	256	iP	02 43.80	1.4
	1.4s		200.00nm		5.7mb
AFR	76.13	256	iP	02 44.40	0.9
	1.4s		100.00nm		5.4mb
WDC	76.55	321	iPd	02 44.30	-1.1
TIO	76.82	51	iP	02 48.50	1.2
			i	03 31.40	176kmX
SES	77.49	334	ePd	02 50.40	0.0
	1.2s		271.00nm		5.9mb
			pP	03 24.00	134km
FHC	77.56	321	eP	02 52.20	1.2
FFC	77.70	341	iPd	02 50.80	-0.6
	1.1s		107.00nm		5.5mb
AVE	77.92	49	iP	02 55.00	1.9
			i	03 18.00	87kmX
NEW	78.67	330	eP	02 56.60	-0.3
	1.3s		88.44nm		5.3mb
			epP	03 31.50	139km
VGB	78.68	326	P	02 58.30	1.2
DPW	78.92	329	P	02 59.30	1.0
IFR	79.68	50	iP	03 04.00	1.1

NKM	80.44	48	iP	03	08.50	1.9	SSF	91.75	41	eP	04	00.80	-1.0	HOOJ	143.30	318	ePKP	10	26.30	-2.0
			i	03	10.00	5kmX		1.5s	44.40nm			5.4mb		MRRJ	144.66	320	ePKP	10	29.00	-1.6
EDM	80.56	335	iPd	03	06.50	-0.4	SMF	91.79	41	eP	04	01.40	-0.5	POO	144.89	83	iPKPc	10	30.40	-1.4
			pP	03	40.50	135km		1.3s	57.75nm			5.6mb		OFUJ	146.03	314	PKP	10	33.90	0.8
PNT	80.59	329	iPd	03	07.80	0.7	EKA	91.79	31	P	04	03.00	1.3	AOMJ	146.12	318	ePKP	10	35.50	2.3X
	0.9s	161.00nm				5.8mb		1.5s	76.60nm			5.6mb		KOD	146.74	99	ePKP	10	35.70	0.4
			pP	03	44.00	145km	L8F	92.01	41	eP	04	02.10	-0.9	GUA	146.96	267	ePKP	10	35.70	0.5
EVAL	80.60	46	eP	03	09.00	1.6	LOR	92.06	41	eP	04	02.50	-0.7	GUMO	147.02	267	ePKP	10	35.70	0.4
EJIF	80.90	47	eP	03	11.00	2.0	LRG	92.14	45	eP	04	03.90	0.3		1.2s	1000.00nm				
EPRU	81.32	47	eP	03	14.00	2.8		1.3s	32.50nm			5.3mb					i	10	37.20	
FR8	81.52	0	eP	03	11.00	-0.5	LMR	92.20	45	eP	04	03.70	-0.2	PJG	147.02	267	ePKP	10	35.60	0.3
EHOR	81.74	46	eP	03	15.00	1.7		1.0s	28.00nm			5.4mb		GBA	147.56	93	PKPd	10	35.70	-0.4
MAL	81.77	47	iPc	03	15.20	1.7	FRF	92.38	45	eP	04	04.60	-0.1		1.3s	135.60nm				
PGC	82.09	327	eP	03	16.00	1.2		1.3s	32.50nm			5.4mb		YAMJ	147.59	314	ePKP	10	36.60	1.0
	0.7s	241.00nm				6.1mb	BNI	92.97	43	P	04	09.50	1.9	WMQ	147.73	32	PKP	10	36.00	0.2
ATEJ	82.14	47	iPc	03	16.60	0.9	SBF	93.02	45	eP	04	07.60	-0.2				e	10	43.00	
ALOJ	82.17	47	iPc	03	17.00	1.2		1.3s	43.30nm			5.5mb		KAKJ	148.44	311	PKP	10	40.70	3.7X
AAPN	82.26	47	iPc	03	17.50	1.3	LPG	93.19	43	eP	04	09.10	0.3	NIIJ	148.77	313	PKP	10	38.10	0.6
EPLA	82.33	44	eP	03	18.40	2.0		1.2s	44.65nm			5.6mb		MDJ	149.20	333	PKPc	10	38.00	0.1
ACHM	82.36	47	iPc	03	17.60	0.9	PGF	93.60	46	eP	04	10.40	-0.1	HYB	149.24	86	iPKP	10	38.20	-0.6
APHE	82.39	47	iPd	03	18.00	1.1		1.0s	10.00nm			5.0mb			1.0s	135.00nm				
ASMO	82.55	47	iPc	03	18.50	0.8	DOU	93.66	38	P	04	11.50	1.1				i	11	19.80	
AFC	82.64	47	eP	03	19.80	1.6				e	04	47.80	141km	CHJJ	149.35	311	PKP	10	39.30	0.8
EBAN	82.91	46	eP	03	21.50	2.1	HAU	93.89	41	eP	04	10.70	-0.9	MAT	149.67	313	iPKPd	10	38.20	-0.7
ENIJ	83.43	48	eP	03	22.50	0.4		0.8s	10.75nm			5.2mb			1.3s	57.69nm				
TOL	83.58	45	iPd	03	24.00	1.2	BSF	94.10	41	eP	04	11.70	-1.0	MTMJ	149.93	313	PKP	10	42.70	3.3X
	1.3s	384.62nm				6.1mb		0.9s	13.10nm			5.2mb		IIDJ	150.40	311	PKP	10	46.00	5.9X
			e(pP)	04	01.50	149km	CDF	94.62	41	eP	04	14.20	-0.9	CN2	151.53	338	PKPc	10	40.60	-0.8
			iS	13	38.00			1.0s	10.00nm			5.1mb		SNY	153.92	338	ePKP	10	41.80	-3.1X
			eSS	20	20.00		PII	95.06	46	P	04	18.00	1.0	GTA	156.65	22	PKPd	10	48.80	0.0
GUD	83.89	44	eP	03	26.00	1.5	BDI	95.22	45	P	04	17.60	-0.3	HHC	157.26	359	PKP	10	50.60	1.1
EVIA	84.02	46	eP	03	25.00	-0.1	MDI	95.22	44	P	04	17.00	-0.7	BTO	157.51	2	ePKP	10	51.00	1.2
HVD	84.85	120	e(P)	03	17.00	-12.7X	SAL	95.70	44	Pd	04	21.00	1.1	BJI	157.60	349	ePKP	10	50.00	0.3
	1.0s	50.00nm					TNS	96.00	39	eP	04	22.50	1.2				epPKP	11	21.50	
			i	03	53.00	142km	CTI	96.59	44	P	04	24.00	-0.1				SS	34	40.00	
ETOR	85.37	45	eP	03	34.00	2.2	SDI	96.70	48	P	04	25.00	0.4	LSA	158.60	54	ePKP	10	54.10	2.3
ECHE	85.52	46	eP	03	34.00	1.5	SCE	96.95	43	eP	04	22.50	-3.3X	TIY	160.35	356	ePKP	10	53.50	0.5
ECRI	85.93	43	eP	03	36.00	1.5	DUI	97.14	49	P	04	27.00	0.4				SS	35	15.00	
EROQ	87.03	45	eP	03	40.00	0.2	SGO	97.42	50	Pd	04	28.80	1.0	SHL	160.86	64	iPKP	10	53.50	-0.5
EBR	87.08	45	eP	03	42.00	2.0	MGR	97.48	50	P	04	27.90	-0.2				eS	15	10.00	
			eS	14	12.00		GRF	97.50	40	eP	04	28.10	0.1	LZH	160.98	18	ePKP	10	55.00	1.2
BFS	87.08	117	eP	03	36.00	-4.6X		1.3s	18.00nm			5.4mb					e	11	38.50	
	1.0s	52.00nm				5.4mb	FVI	97.51	44	P	04	25.40	-2.6X	TIA	161.07	344	PKPd	10	54.20	0.6
			i	04	11.50	139km	INK	97.63	340	eP	04	27.50	-0.6				e	11	37.90	
PRY	87.66	117	iPc	03	42.70	-0.7	RBL	97.98	44	P	04	13.00	-17.3X	XAN	163.97	6	PKPd	10	57.00	0.3
	0.9s	16.92nm				5.0mb	KBA	98.02	43	eP	04	30.00	-0.6	SSE	163.98	326	PKPd	10	57.50	0.9
			i	04	17.90	137km		1.5s	12.50nm			5.2mb					e	11	50.50	
EPF	87.98	43	eP	03	43.20	-1.1	VOY	98.07	44	e(P)	04	30.60	-0.1				PKS	14	32.00	
SLR	88.73	117	iPc	03	46.00	-2.5	ORI	98.11	51	P	04	17.50	-13.4X				SS	35	59.00	
	0.9s	16.81nm				5.1mb	KHC	98.79	41	eP	04	34.30	0.5	NJ2	164.29	334	ePKP	10	56.20	-0.7
			i	04	22.50	143km	MBC	98.81	349	eP	04	35.00	1.7	CD2	165.65	25	ePKP	10	59.00	0.8
LFF	89.09	42	eP	03	49.10	-0.4		0.8s	8.00nm			5.3mb		WHN	167.16	346	PKPc	11	00.20	0.9
	0.6s	36.05nm				5.6mb	DAG	99.19	10	eP	04	35.50	0.4				e	12	03.00	
BCAO	89.14	85	ePc	03	50.00	-0.5	LCI	99.29	51	P	04	38.00	1.7				PP	15	50.00	
	0.9s	45.00nm				5.5mb	PRU	99.64	41	eP	04	37.50	-0.2	CHG	168.66	84	ePKPc	11	01.00	0.4
			id	03	51.00	3kmX	FBA	101.46	335	Pdiff	04	45.70	0.2		1.2s	46.09nm				
			id	04	25.30			1.1s	25.00nm			5.8mb		KMI	169.67	46	PKP-	11	01.00	-0.4
			id	07	17.50		VAY	102.93	51	ePdiff	04	53.00	0.4	GYA	170.77	24	PKP	11	02.00	0.2
			id	07	49.90		RMQ	122.44	221	iPKPc	09	49.50	-0.2	LOE	171.27	93	ePKP	11	02.00	0.0
LPO	89.26	42	eP	03	49.90	-0.4	RKG	127.85	186	ePKP	09	58.00	-2.0		S.D. = 1.1		on 247 of 281 obs.			
	0.9s	29.50nm				5.3mb		0.4s	37.00nm											
MFF	89.30	40	eP	03	49.80	-0.6	CTA	128.60	224	iPKPc	10	01.20	-0.6							
	1.1s	31.75nm				5.3mb		1.2s	82.81nm						FEB 25, 1990 23h 16m 04.75± 0.88s					
LPF	89.42	39	eP	03	49.80	-1.2	NWAO	128.96	187	ePKP	10	00.70	-1.4		20.740 S ± 7.0km 176.296 W ± 6.3km					
	1.1s	39.05nm				5.4mb	MUN	130.00	186	ePKP	10	02.70	-1.4		DEPTH = 238.4 ± 9.8 km					
GRR	89.70	38	eP	03	51.00	-1.2	KLB	130.21	188	ePKP	10	03.00	-1.5		4.9mb (8 obs.)					
	1.1s	68.35nm				5.6mb		0.4s	8.00nm						FIJI ISLANDS REGION					(181)
RJF	89.75	42	eP	03	51.80	-0.8	BAL	131.31	187	ePKP	10	05.00	-1.6							
	1.2s	56.55nm				5.5mb	MAIO	131.40	57	ePKP	10	07.00	0.2	SVA	5.60	297	ePc	17	28.20	0.0
CAF	89.93	42	eP	03	52.90	-0.6	QIS	132.40	218	ePKP	10	08.00	-1.0	VUN	5.64	298	iP	17	28.60	-0.2
	0.7s	18.20nm				5.2mb				eS	13	23.00		MBU	6.02	308	eP	17	33.10	-0.6
FLN	90.09	38	eP	03	53.30	-0.8	MRWA	132.76	186	ePKP	10	08.00	-1.4				(S)	18	46.20	
LSF	90.17	41	eP	03	54.10	-0.4	ASPA	132.84	209	iPKP	10	08.70	-1.1	SGE	6.30	299	ePd	17	38.10	0.9
	1.3s	43.30nm				5.4mb		Z 25s		0.11um			4.5MszX	NDF	6.61	296	eP	17	41.00	0.0
LDF	90.23	38	eP	03	53.70	-1.0				ePP	13	23.70		DZM	16.13	262	iPc	19	42.30	1.8
	0.8s	22.85nm				5.3mb				iPKS	13	34.90		HBZ	17.44	194	eP	19	55.20	0.7
TCF	90.62	41	eP	03	55.90	-0.7				LR	35	44.90		PGZ	20.80	196	eP	20	28.00	-0.6
	1.1s	19.55nm				5.1mb	PMG	134.97	236	ePKP	10	14.50	0.5	WDW	21.76	198	eP	20	37.20	-0.7
MAF	90.81	41	eP	03	56.90	-0.6	WRA	135.78	213	PKPd	09	59.00	-16.4X	TCW	21.92	199	eP	20	38.00	-1.4
	1.3s	32.50nm				5.3mb		0.6s	2.90nm					KHZ	23.25	199	P	20	53.30	1.1
BUL	90.87	111	iPd	03	56.10	-2.4	WB5	135.82	213	ePKP	09	59.80	-15.7X	AFR	25.24	87	iP	21	10.00	-0.9
	1.0s	11.00nm				4.9mb				e	10	14.20			1.2s	50.00nm			5.0mb	
			i	04	31.00	135km				e	10	51.10		PAE	25.40	88	iP	21	12.10	-0.2
BGF	91.13	41	eP	03	58.20	-0.7				e	13	33.80			1.2s	50.00nm			5.0mb	
	1.5s	117.50nm				5.8mb	KUSJ	142.03	318	ePKP	10	19.70	-6.4X	PPT	25.43	87	iP	21	12.20	-0.4
AVF	91.54	41	eP	04	00.10	-0.7	ASAJ	142.76	321	ePKP	10	23.80	-3.6X		1.2s	85.00nm			5.2mb	
	1.1s	18.30nm				5.1mb	KSH	143.04	47	ePKP	10	26.40	-1.8	PPN	25.57	87	iP	21	13.60	-0.2
															1.2s	30.00nm			4.8mb	

25d 23h

TVO	25.69	88	iP	21	14.70	-0.3
	1.2s	50.00nm			5.0mb	
RMQ	32.46	253	eP	22	15.00	0.1
CNB	33.42	237	eP	22	23.70	0.6
CAN	33.71	237	eP	22	25.70	0.2
BWA	33.93	239	eP	22	25.30	-2.2
CTA	35.05	264	iP	22	37.20	0.2
	0.7s	5.48nm			4.2mb	
		i		23	24.00	
CMS	35.50	245	eP	22	41.00	0.4
TOO	37.05	235	iPc	22	53.90	0.3
WB5	46.13	262	eP	24	06.30	-1.2
WRA	46.15	262	Pd	24	05.10	-2.5
	0.5s	6.60nm			4.2mb	
SPA	69.39	180	iPc	26	51.20	2.7
	0.7s	24.22nm			5.0mb	
PAS	77.69	46	eP	27	31.00	-5.6X
PLM	78.13	47	eP	27	39.00	-0.3
RVR	78.14	47	eP	27	37.00	-2.1
ISA	78.37	45	eP	27	41.00	0.6
CMB	78.57	42	eP	27	41.60	0.2
ORV	78.82	40	eP	27	42.70	0.0
WDC	78.85	39	eP	27	43.30	0.5
CLC	79.04	45	eP	27	45.00	1.0
TPC	79.11	47	eP	27	45.00	0.6
GSC	79.27	46	eP	27	46.00	0.7
GLA	79.38	49	eP	27	47.00	1.2
PNT	85.97	33	eP	28	19.00	0.0
INK	94.09	15	eP	28	56.00	-0.5
HFS	140.01	352	ePKP	34	56.50	-9.3X
	0.3s	1.00nm				
HRI	148.98	300	e(PKP)	35	27.00	5.1X
PRNI	150.27	295	ePKP	35	30.00	6.2X
MBH	150.48	294	ePKPc	35	30.00	5.9X
KIC	163.53	149	PKP	35	41.00	0.5
	S.D. = 1.1	on	39 of	44	obs.	

? FEB 25, 1990 23h 51m 36.96± 1.30s
5.315 S ±20.9km 151.518 E ±21.6km
DEPTH = 55.0 ± 22.4 km
4.2mb (2 obs.)
NEW BRITAIN REGION (192)

RAB	1.29	30	iPd-	51	59.00	0.0
PMG	5.94	227	eP	53	04.50	0.0
BRS	21.99	177	iP	56	28.00	0.0
WB5	22.09	228	eP	56	28.50	-0.6
WRA	22.15	227	Pd	56	30.10	0.4
	0.6s	3.90nm			4.0mb	
ASPA	24.92	221	eP	56	56.80	0.2
	1.0s	11.00nm			4.3mb	
	S.D. = 0.5	on	6 of	6	obs.	

• FEB 26, 1990 00h 31m 24.18± 0.49s
25.336 N ±10.6km 142.367 E ±13.0km
DEPTH = 33.0km (normol)
4.9mb (6 obs.)
VOLCANO ISLANDS REGION (213)

WB5	45.61	191	eP	39	43.00	-0.2
WRA	45.68	191	Pd	39	43.60	-0.2
	0.6s	5.70nm			4.7mb	
GUN	50.18	286	P	40	19.80	0.4
	0.4s	5.00nm			4.9mb	
KKN	50.73	286	P	40	24.00	0.7
INK	64.56	24	eP	41	59.00	-0.9
MBC	67.54	15	eP	42	19.00	0.1
SUF	78.84	335	iP	43	25.00	-0.1
	0.6s	11.50nm			5.1mb	
CMB	80.16	53	eP	43	33.30	0.5
FRI	81.08	53	eP	43	38.00	0.4
FFC	83.14	32	eP	43	49.00	1.0
	1.0s	16.00nm			5.1mb	
HFS	85.10	337	eP	43	56.60	-1.2
	0.5s	5.10nm			5.0mb	
NB2	85.30	338	P	43	58.40	-0.4
	0.5s	3.00nm			4.8mb	
	S.D. = 0.7	on	12 of	12	obs.	

• FEB 26, 1990 01h 31m 24.50± 2.03s
25.262 N ±16.5km 94.140 E ±15.3km
DEPTH = 50.3 ± 22.1 km
4.8mb (1 obs.)
BURMA-INDIA BORDER REGION (294)

CHG	7.81	144	eP	33	19.20	0.9
GUN	7.85	291	P	33	19.30	0.2
PKI	8.16	288	P	33	22.80	-0.6
KKN	8.32	290	P	33	25.30	-0.3
DMN	8.43	288	P	33	26.40	-0.6
GKN	8.93	290	P	33	33.20	-0.7
HYB	16.48	245	eP	35	15.50	1.7
SUF	57.79	330	eP	41	13.00	0.4
WB5	59.53	135	eP	41	24.00	-1.2
ASPA	62.04	138	eP	41	40.50	-1.8
	0.6s	5.00nm			4.8mb	
MBC	76.62	8	eP	43	12.00	1.0
INK	80.37	16	eP	43	32.50	1.0
	S.D. = 1.2	on	12 of	12	obs.	

FEB 26, 1990 02h 42m 10.55± 0.78s
39.055 N ± 7.6km 21.843 E ± 7.5km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 3.2 (ATH).

NEO	1.10	76	ePn	42	32.30	1.0
VLS	1.32	229	ePb	42	33.00	-1.9
LSK	1.46	319	ePn	42	41.50	4.6X
SRN	1.65	301	ePn	42	40.60	1.0
KEK	1.71	293	ePb	42	41.00	0.4
			eSb	43	04.20	
KBN	1.76	334	ePn	42	40.60	-0.6
PLG	1.81	43	ePb	42	40.30	-1.7
			eSb	43	03.90	
OHR	2.20	339	iPn	42	49.00	1.2
VAY	2.33	14	ePn	42	48.30	-1.2
VLI	2.49	159	ePb	42	53.00	1.3
TIR	2.74	327	ePn	42	59.00	3.6X
MMB	2.91	29	eP	42	57.00	-0.8
SKO	2.93	354	ePn	42	59.20	1.2
RDO	3.52	52	ePb	43	10.00	3.6X
	S.D. = 1.4	on	11 of	14	obs.	

% FEB 26, 1990 03h 11m 59.84± 0.41s
38.597 N ± 4.4km 14.390 E ± 4.2km
DEPTH = 16.8 ± 5.5 km
SICILY (398)

GIB	0.67	205	P	12	12.30	-0.5
			eSg	12	22.60	
MNO	0.71	160	Pc	12	13.80	0.3
			eSg	12	25.80	
ATN	0.95	117	P	12	17.20	-0.3
			eSg	12	32.70	
USI	0.96	277	P	12	17.20	-0.3
MSI	1.00	113	P	12	17.70	-0.6
			eSg	12	34.80	
MCT	1.13	212	Pc	12	22.90	2.2
SOI	1.41	111	P	12	23.90	-0.8
FAI	1.43	203	Pc	12	25.00	-0.1
ERC	1.52	249	P	12	26.00	-0.4
MEU	1.55	164	P	12	26.50	-0.4
CVT	1.56	234	P	12	26.30	-0.5
GRI	1.60	81	P	12	27.50	-0.1
MGR	1.78	30	P	12	29.10	-1.0
TDS	1.85	54	P	12	31.10	0.0
CSI	1.89	51	P	12	33.20	1.5
ROI	1.96	59	P	12	33.70	1.0
SGO	2.08	20	Pc	12	34.40	0.0
ORI	2.17	47	P	12	36.30	0.6
BRT	3.15	43	P	12	49.00	-0.6
	S.D. = 0.9	on	19 of	19	obs.	

FEB 26, 1990 06h 00m 44.51± 0.51s
37.164 N ± 4.7km 30.211 E ± 5.4km
DEPTH = 111.3 ± 12.8 km
TURKEY (366)
MD 4.3 (HLW).

BCK	0.42	45	iPg	01	00.40	-0.9
KSL	1.16	206	ePg	01	07.40	-0.4
KHL	1.28	335	iPn	01	08.40	-0.8
YER	1.54	269	iPn	01	13.20	0.9
CIN	1.75	285	eP	01	15.00	0.2
ALT	1.89	358	iPn	01	17.10	0.4
IZM	2.64	299	ePn	01	25.00	-1.5
DST	2.74	333	iPn	01	28.00	0.2
SMG	2.74	282	ePn	01	28.00	0.3
PPCY	2.86	142	eP	01	30.80	1.5
KAP	2.93	238	ePn	01	31.20	0.8
GPA	3.12	1	iPn	01	33.80	0.9
BBTK	3.34	36	eP	01	36.00	0.1
CSS	3.35	130	eP	01	37.50	1.5
			eSn	02	19.80	
YLV	3.46	349	iPn	01	37.40	-0.1
NPS	4.17	244	ePn	01	47.30	0.1
DSI	7.03	141	eP	02	25.00	-1.3
KOT	7.34	169	ePn	02	30.00	-0.6
			eSn	03	47.00	
PRNI	7.88	148	eP	02	38.00	0.0
MBH	8.34	151	eP	02	43.00	-1.2
	S.D. = 0.9	on	20 of	20	obs.	

FEB 26, 1990 06h 20m 13.46± 0.69s
23.030 N ±11.6km 94.011 E ± 8.4km
DEPTH = 89.5 ± 10.2 km
5.0mb (8 obs.)
BURMA-INDIA BORDER REGION (294)

CHG	6.23	131	eP	21	44.20	-0.5
BDT	7.42	140	eP	22	01.80	0.8
KMI	8.24	74	eP	22	12.50	0.0
GUN	8.81	305	P	22	20.20	-0.1
	0.4s	19.00nm			5.2mb	
PKI	9.00	302	P	22	22.60	-0.3
	0.4s	16.00nm			5.2mb	
KKN	9.20	303	P	22	26.50	0.9
	0.4s	17.00nm			5.3mb	
DMN	9.26	301	P	22	26.40	0.1
	0.4s	25.00nm			5.4mb	
GKN	9.81	302	P	22	33.00	-0.7
	0.4s	12.00nm			5.2mb	
WB5	58.05	134	eP	29	59.90	0.3
WRA	58.08	134	Pd	29	59.00	-0.8
	0.4s	0.60nm			4.0mb	
HFS	65.52	327	eP	30	49.60	0.5
	0.6s	3.10nm			4.4mb	
NB2	66.67	328	P	30	56.60	0.1
	0.8s	2.50nm			4.2mb	
	S.D. = 0.6	on	12 of	12	obs.	

? FEB 26, 1990 07h 34m 46.84± 1.17s
49.469 S ±28.6km 108.813 E ±15.2km
DEPTH = 10.0km (geophysicist)
4.9mb (4 obs.)
SOUTHEAST INDIAN RISE (435)

ASPA	32.41	47	iPd	41	18.60	-0.3
	0.9s	11.00nm			4.8mb	
	Z 22s	0.41um			4.1MszX	
		LR		52	02.70	
WRA	35.82	44	Pc	41	48.40	0.0
	1.3s	14.60nm			4.7mb	
WB5	35.89	44	eP	41	49.00	0.1
BUL	68.67	264	iPd	45	52.50	-0.1
	1.0s	10.00nm			5.0mb	
DMN	79.59	339	P	46	55.80	0.1
GUN	79.70	339	P	46	56.20	-0.2
KKN	79.72	339	P	46	55.80	-0.5
GKN	80.08	338	P	46	58.40	0.2
LZH	85.29	356	Pd	47	25.40	0.6
	2.0s	47.00nm			5.4mb	
CMB	143.29	89	e(PKP)	54	33.20	10.7X
INK	144.70	35	ePKP	54	24.00	0.1
KVN	145.34	89	ePKP	54	29.80	3.6X
MBC	147.14	19	ePKP	54	31.50	3.8X
	1.0s	6.00nm				
PNT	148.91	71	ePKP	54	39.00	7.6X
	0.7s	4.00nm				
ANMO	150.43	106	ePKP	54	44.40	10.0X
	1.2s	9.77nm				
PV09	150.87	98	ePKP	54	44.10	9.0X
BW06	152.80	90	e(PKP)	54	47.80	10.1X
	S.D. = 0.4	on	10 of	17	obs.	

FEB 26, 1990 08h 07m 10.07± 0.78s
42.140 N ± 3.8km 19.525 E ± 3.8km
DEPTH = 14.5 ± 8.5 km
YUGOSLAVIA (383)
ML 2.5 (TTG).

SDA	0.13	189	iPgc	07	14.10	0.5
ULC	0.27	229	ePg	07	15.40	-0.7
			eSg	07	20.50	
PUK	0.29	109	iPgd	07	16.50	0.1
TTG	0.35	326	ePg	07	17.10	-0.3
			eSg	07	23.50	
BCI	0.46	60	iPgd	07	19.20	-0.2
LACI	0.52	165	iPgc	07	19.50	-0.9
8DV	0.54	286	ePg	07	20.50	-0.2

			eSg	07	30.60	
PVY	0.56	36	ePg	07	20.50	-0.7
			eSg	07	30.40	
IVA	0.78	21	ePg	07	25.00	0.1
			eSg	07	38.20	
PHP	0.82	123	ePg	07	25.30	-0.2
HCY	0.82	292	ePg	07	25.10	-0.5
			eSg	07	38.50	
TIR	0.83	162	ePg	07	26.70	1.0
BRY	1.05	317	ePg	07	30.70	1.1
			eSg	07	47.00	
PLE	1.19	355	ePg	07	32.30	0.3
			eSg	08	51.20	

S.D. = 0.7 on 14 of 14 obs.

FEB 26, 1990 08h 28m 49.95± 0.65s
40.050 N ± 7.1km 21.954 E ± 6.1km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 3.4 (ATH).

KZN	0.29	331	ePg	28	55.50	-0.6
KBN	1.04	304	iPgd	29	09.80	0.2
LSK	1.04	276	ePg	29	06.00	-3.7X
PLG	1.19	74	ePg	29	12.60	0.5
NEO	1.23	127	ePb	29	12.00	-0.8
VAY	1.35	20	iPn	29	10.80	-4.0X
OHR	1.38	321	iPn	29	14.90	-0.3
TPE	1.51	280	ePn	29	15.70	-1.3
BERA	1.66	294	iPnd	29	21.50	2.3X
KEK	1.69	259	ePn	29	20.10	0.4
SKO	1.96	349	iPn	29	26.20	2.7X
			iPg	29	29.00	
			iSn	29	51.50	
			iSg	29	55.50	
			Lg	29	58.00	
PHP	2.00	325	ePn	29	25.30	1.2
TIR	2.05	310	ePn	29	28.10	3.3X
VLS	2.15	210	ePb	29	27.10	0.7
LACI	2.33	314	ePn	29	32.60	3.8X
SDA	2.70	317	ePn	29	38.40	4.2X

S.D. = 0.9 on 9 of 16 obs.

FEB 26, 1990 08h 34m 13.82± 0.47s
14.351 N ± 8.6km 146.939 E ± 8.4km
DEPTH = 49.1km (3 depth phases)
5.1mb (7 obs.)
MARIANA ISLANDS (216)

GUA	2.13	248	eP	34	48.80	1.2
			eS	35	16.30	
GUMO	2.15	250	eP	34	48.00	0.1
PJG	2.15	250	eP	34	48.00	0.1
PMG	23.61	179	eP	39	20.00	-1.3
WB5	36.19	200	eP	41	13.90	0.0
WRA	36.26	200	Pd	41	14.00	-0.5
	0.8s		4.40nm			4.4mb
BJI	37.14	319	eP	41	19.00	-2.6
GUN	58.01	294	P	44	05.00	0.3
	0.6s		27.00nm			5.5mb
PKI	58.43	294	P	44	07.40	-0.3
	0.4s		7.00nm			5.1mb
KKN	58.54	294	P	44	08.20	-0.1
	0.4s		5.00nm			5.0mb
DMN	58.70	294	P	44	09.60	0.2
	0.4s		12.00nm			5.4mb
GKN	59.11	294	P	44	12.20	0.0
	0.4s		14.00nm			5.4mb
INK	72.90	22	eP	45	39.00	-0.3
			pP	45	53.00	49km
MBC	77.05	14	eP	46	03.50	0.6
	1.0s		5.00nm			4.5mb
			pP	46	18.00	51km
SES	86.56	39	eP	46	54.00	0.9
			pP	47	08.00	48km
LRM	87.06	43	eP	46	56.40	0.5
KIC	145.18	304	PKPd	53	48.90	0.3
	0.5s		4.00nm			
TIC	145.23	305	PKP	53	48.92	0.2
LIC	145.49	304	PKP	53	49.82	0.7

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

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* FEB 26, 1990 08h 45m 00.70± 1.27s
3.677 S ±15.9km 140.285 E ±11.6km
DEPTH = 33.0km (normal)
4.0mb (2 obs.) 3.6Msz (1 obs.)
WEST IRIAN (201)

MNDI	4.17	126	eP	45	53.50	-10.3X
PMG	8.89	130	eP	47	11.00	1.1
MTN	12.84	224	iPc	48	03.50	-0.2
			eS	50	21.00	
QIS	16.79	182	iPc	48	54.40	-0.7
			e	54	24.50	
WB5	17.11	199	eP	48	59.00	-0.1
			eS	52	02.20	
WRA	17.18	199	Pd	49	00.30	0.4
	0.4s		6.40nm			4.1mb
CTA	17.32	161	eP	49	06.00	4.3X
	1.0s		12.00nm			4.0mb
			e(S)	53	42.00	
ASPA	20.81	197	iPc	49	41.20	-0.8
	0.6s		95.00nm			5.4mb X
	Z 20s		0.30um			3.6Msz
			iS	53	23.50	
			LR	57	54.90	
MBL	26.41	227	eP	50	38.00	1.7
BRS	26.43	154	iPc	50	35.80	-0.7
KIC	145.06	276	PKP	04	34.50	-3.0X
TIC	145.33	276	PKP	04	35.50	-2.4X
LPB	145.50	126	PKPc	04	38.90	0.3
	1.0s		16.00nm			
ZOBO	145.62	126	ePKP	04	38.00	-1.1

S.D. = 1.0 on 10 of 14 obs.

% FEB 26, 1990 10h 16m 09.90± 1.27s
18.134 N ± 8.2km 65.888 W ±10.3km
DEPTH = 10.0km (geophysicist)
PUERTO RICO REGION (90)

CPD	0.10	196	P	16	12.60	0.0
LPR	0.17	6	P	16	13.90	0.0
SJG	0.25	265	iP	16	15.50	0.3
			S	16	25.50	
PORP	0.72	264	P	16	23.90	-0.1
LRS	0.92	280	P	16	27.40	-0.2

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

& FEB 26, 1990 11h 39m 41.11s
58.485 N 143.399 W
DEPTH = 10.0km (geophysicist)
GULF OF ALASKA (15)
<AGS-P>. ML 4.0 (PMR).

CYK	1.67	16	eP	40	13.51	3.0
			eS	40	25.09	
MID	1.79	303	eP	40	07.60	-4.7
WAX	1.99	8	iP	40	10.09	-5.2
			eS	40	32.70	
RAGM	2.02	342	eP	40	10.92	-4.7
YKU	2.18	59	eP	40	14.60	-3.3
SGAM	2.22	336	eP	40	13.74	-4.8
			eS	40	39.64	
PCA	2.28	44	iP	40	14.75	-4.7
TGL	2.30	7	iP	40	14.37	-5.3
CVA	2.39	331	eP	40	15.33	-5.5
HIN	2.49	322	iP	40	17.52	-4.8
			eS	40	46.88	
BALM	2.61	11	iP	40	18.86	-5.4
GLB	2.97	356	eP	40	23.60	-5.6
KLU	3.27	338	iP	40	27.83	-5.7
HYT	3.80	49	P	40	36.70	-4.4
TOA	3.89	340	ePc	40	37.10	-5.1
NCA	3.91	336	eP	40	36.93	-5.6
SLKM	4.03	303	eP	40	38.43	-5.7
PMS	4.16	314	eP	40	41.10	-5.0
CNPM	4.19	288	eP	40	42.17	-4.2
PLRM	4.24	320	eP	40	41.75	-5.4
GHO	4.30	322	eP	40	42.64	-5.5
PWA	4.54	317	eP	40	46.20	-5.2
SIT	4.55	105	eP	40	45.10	-6.5
PAX	4.61	348	eP	40	46.78	-5.8
SUA	4.75	312	eP	40	48.46	-6.0
KDC	4.88	265	eP	40	52.50	-3.7
RDT	5.04	298	eP	40	52.82	-5.8
SPU	5.13	305	iP	40	53.76	-6.1
CUT	5.20	322	eP	40	55.41	-5.3
CKL	5.26	305	iP	40	55.56	-6.2
NCG	5.29	307	eP	40	57.37	-4.7
BGL	5.32	305	eP	40	56.73	-5.8
SKT	5.36	314	iP	40	57.86	-5.2
PDB	5.71	288	iP	41	03.62	-4.3
KTH	6.26	327	iP	41	10.58	-5.2
SVW	6.70	298	eP	41	16.90	-5.1
FBA	6.77	344	eP	41	15.20	-7.6
TTA	7.62	311	eP	41	28.50	-6.3
IMA	8.98	332	eP	41	46.70	-7.1
INK	10.79	20	eP	42	14.00	-4.5
SES	20.31	99	eP	44	17.00	-2.7

41 obs. associated

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* FE8 26, 1990 12h 10m 55.49± 1.10s
34.487 N ±11.3km 27.049 E ± 9.5km
DEPTH = 10.0km (geophysicist)
EASTERN MEDITERRANEAN SEA (371)
MD 3.8 (ATH).

KAP	1.07	5	eP	11	15.00	-0.6
NPS	1.41	304	eP	11	22.70	1.5
VAM	2.51	292	eP	11	38.30	1.3
KSL	2.64	51	eP	11	39.60	0.8
APE	2.86	335	eP	11	40.10	-1.9
CIN	3.22	15	eP	11	48.00	1.0
VLI	4.02	305	eP	11	57.00	-1.4
KOT	6.09	137	ePn	12	27.00	-0.6
			eSn	13	35.00	

S.D. = 1.5 on 8 of 8 obs.

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* FEB 26, 1990 12h 14m 33.64± 1.48s
4.526 S ± 9.4km 143.671 E ±23.9km
DEPTH = 33.0km (normal)
4.0mb (2 obs.)
PAPUA NEW GUINEA (202)

MNDI	1.62	180	eP	15	00.00	-0.4
PMG	5.96	145	eP	16	16.20	14.3X
MTN	14.89	235	iPd	18	03.50	-0.1
			e	20	29.00	
WB5	17.75	210	eP	18	40.30	0.3
WRA	17.82	210	Pc	18	41.10	0.3
	0.5s		6.20nm			4.0mb
ASPA	21.24	205	iPd	19	19.90	0.7
	0.6s		5.00nm			4.1mb
MBL	28.45	232	eP	20	27.00	-0.8
GUN	64.29	304	PKP	25	09.80	0.9
KKN	64.75	303	PKP	25	10.40	-1.3
DMN	64.83	303	PKP	25	12.80	0.5

S.D. = 0.8 on 9 of 10 obs.

% FEB 26, 1990 12h 44m 16.25± 0.87s
39.126 N ± 7.1km 27.548 E ± 9.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZM	0.76	197	ePg	44	31.00	-0.1
			eSg	44	42.00	
DST	0.96	60	iPn	44	35.00	0.4
EZN	1.18	307	ePn	44	38.50	0.3
EDC	1.24	11	ePn	44	39.00	-0.3
BNT	1.26	13	iPn	44	39.50	-0.2

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

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* FEB 26, 1990 13h 18m 29.10± 1.15s
31.434 S ±10.6km 69.094 W ± 9.5km
DEPTH = 129.9 ± 14.7 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB	0.26	102	iP	18	47.00	-0.7
			eS	20	19.50	
ZON	0.37	108	iPd	18	47.00	-0.8
RTLL	0.54	79	iPc	18	48.30	-0.4
RTCV	0.64	132	ePc	18	50.00	0.7
CFA	0.75	104	i(P)	18	51.00	0.8
RTRS	1.30	346	iPc	18	55.80	0.5
JACH	1.78	225	iPd	19	02.30	1.4
			iS	19	26.00	
ROCH	2.23	226	iPc	19	06.50	-0.2
			i	19	33.50	
			iS	19	34.50	
SAN	2.41	213	iPc	19	06.50	-2.2
			i	19	33.50	
			iS	19	34.50	
IHA	2.68	233	eP	19	14.50	2.4
			e(S)	19	39.00	
LCCH	2.92	225	iP	19	14.60	-0.7
			iS	19	47.10	
LNV	3.18	217	iPc	19	17.50	-1.2
			i	19	49.20	
			iS	19	54.30	
RFA	3.37	171	iPc	19	21.80	0.5
TCA	3.85	90	ePc	19	28.60	0.8
CYA	4.13	45	iPc	19	30.50	-1.0

26d 13h

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

FEB 26, 1990 14h 06m 48.42± 0.93s
47.460 N ± 9.1km 12.002 E ± 8.4km
DEPTH = 10.0km (geophysicist)
AUSTRIA (546)
ML 3.2 (FUR), 2.6 (KBA).

FUR	0.86	326	iPgc	07	05.10	0.1
OGA	0.89	229	iPgc	07	05.00	-0.7
KBA	0.99	112	iPgc	07	06.50	-0.8
			iSg	07	20.40	
FVI	1.02	148	Pc	07	07.10	-0.5
			eSg	07	18.00	
CTI	1.43	190	Pc	07	15.20	0.6
RBL	1.48	133	P	07	18.00	2.8X
			eSg	07	34.50	
WET	1.79	19	iPnc	07	13.90	-5.6X
VOY	1.93	137	ePn	07	23.00	1.3
			eSn	07	49.50	

S.D. = 1.1 on 6 of 8 obs.

? FEB 26, 1990 15h 01m 19.75± 1.17s
44.403 N ± 9.8km 7.427 E ± 7.8km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.5 (GEN).

STV	0.17	205	P	01	23.77	0.0
			S	01	26.00	
ENR	0.18	182	P	01	23.77	0.0
			S	01	25.94	
PZZ	0.25	294	P	01	25.21	0.0
			S	01	29.11	
ROB	0.34	109	P	01	26.72	0.0

S.D. = 0.0 on 4 of 4 obs.

& FEB 26, 1990 15h 16m 41.80s
37.445 N 118.735 W
DEPTH = 15.0km
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 3.8 (BRK). Felt at Friant and Northfork, Califarnia.

FRI	0.90	240	iPc	16	58.10	-0.4
			iS	17	07.30	
TNP	1.36	62	iPc	17	06.40	0.0
CMB	1.43	295	iPc	17	07.10	-0.2
			eS	17	25.30	
KVN	1.68	17	eP	17	10.50	-0.4
PKEM	1.77	219	eP	17	13.30	1.3
LLA	1.95	246	eP	17	15.20	0.5
PRI	2.02	231	eP	17	16.90	1.1
ARN	2.23	268	eP	17	19.50	0.7
SAO	2.27	253	eP	17	20.27	1.0
			eS	17	48.50	
MHC	2.32	268	ePc	17	21.30	1.2
			eS	17	51.80	
PRS	2.39	243	iPc	17	21.70	0.8
BCH	2.50	206	eP	17	23.00	0.3
ABL	2.62	189	eP	17	24.50	0.0
BKS	2.81	280	iPc	17	27.30	0.3
BKS	2.81	280	e(P)	17	27.47	0.5
ORV	3.02	315	e(P)	17	32.80	2.8
PEC	3.77	160	eP	17	40.40	-0.2
PLM	4.36	159	eP	17	49.50	0.4
MSU	5.29	76	eP	18	02.00	-0.4

19 obs. associated

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* FEB 26, 1990 16h 19m 28.48± 1.01s
36.093 N ± 8.9km 122.498 E ±12.5km
DEPTH = 33.0km (normal)
EASTERN CHINA (664)
ML 4.3 (BJI).

DL2	2.89	346	Pn	20	14.00	0.8
			Pg	20	21.50	
			Sn	20	43.80	
			Sg	20	59.00	
TIA	4.35	273	ePn	20	33.70	-0.3
			ePg	20	44.50	
			Sg	21	41.30	
NJ2	5.04	218	ePn	20	46.20	2.5
			Pgc	20	55.00	
			Sg	22	02.00	
SSE	5.10	193	Pn	20	42.50	-2.1
	Z	10s		0.70um		
	N	10s		0.50um		
	E	10s		0.50um		
SNY	5.79	8	iPnc	20	54.00	-0.3
			Sg	22	31.20	
BJI	6.36	310	ePn	21	01.00	-1.3
			eSn	22	10.50	
CN2	8.03	15	eP	21	25.00	-0.6
			S	22	55.00	
MDJ	10.08	30	eP	21	55.00	1.0
XAN	11.31	264	eP	22	11.20	0.3
			S	24	15.00	
GUN	31.96	266	P	25	54.40	0.4

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

FEB 26, 1990 16h 28m 11.59± 0.80s
40.713 N ± 9.3km 34.192 E ± 7.2km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

KAS	0.73	334	iPgd	28	25.80	-0.2
			iSg	28	35.00	
BBTK	1.40	232	iPg	28	37.00	-0.2
			iSg	28	56.00	
KVT	1.45	75	iPn	28	38.00	0.1
GPA	2.99	263	iPn	28	59.50	-0.4
HRT	3.44	273	ePn	29	06.80	0.5
ALT	3.55	244	ePn	29	08.00	0.0
GBZT	3.61	273	eP	29	18.00	9.3X
YLV	3.67	269	ePn	29	10.00	0.3

S.D. = 0.4 on 7 of 8 obs.

FEB 26, 1990 17h 19m 44.91± 0.71s
39.672 N ± 5.0km 16.806 E ± 6.1km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

ROI	0.21	241	P	19	50.20	0.7
TDS	0.36	268	Pd	19	52.10	-0.3
			eSg	19	58.70	
CSI	0.41	285	P	19	52.80	-0.5
ORI	0.48	325	P	19	53.80	-0.8
			eSg	20	01.10	
ACI	0.57	236	P	19	54.70	-1.7
CZI	0.69	229	P	19	58.30	-0.2
MGR	1.07	296	P	20	06.20	1.2
			eSn	20	21.10	
LCI	1.10	53	P	20	06.20	0.6
			eSg	20	22.50	
BRT	1.24	14	Pd	20	06.60	-1.4
			eSn	20	23.30	
BAI	1.45	2	P	20	11.00	-0.1
			eSg	20	32.00	
SGO	1.45	308	P	20	11.80	0.7
SOI	1.70	200	P	20	15.60	0.9
ATN	1.84	215	P	20	16.30	-0.5
BSS	1.90	307	P	20	19.10	1.5
			eSn	20	39.10	
TPE	2.54	75	iPnc	20	32.00	5.2X
TIR	2.87	53	ePn	20	37.00	5.5X
LSK	2.96	79	ePn	20	39.30	6.5X
SDI	3.05	313	P	20	34.00	-0.1
KBN	3.22	72	ePn	20	47.70	11.3X
OHR	3.37	63	ePn	21	36.70	58.0X
SKO	4.20	55	ePn	21	25.00	34.6X

S.D. = 1.0 on 15 of 21 obs.

FEB 26, 1990 17h 46m 58.69± 0.53s
36.172 N ± 5.1km 120.220 W ± 4.6km
DEPTH = 10.0km (geophysicist)
CENTRAL CALIFORNIA (39)
ML 2.6 (BRK).

PKEM	0.14	141	iPd	47	02.90	0.9
PRI	0.36	265	iPd	47	07.10	0.9
LLA	0.73	307	ePc	47	13.70	0.6
FRI	0.92	27	ePd	47	15.70	-0.5
			iS	47	27.80	
PRS	0.94	280	iPc	47	15.90	-0.8
			iS	47	30.40	
BCH	0.99	174	eP	47	16.70	-0.9
SAO	1.15	301	eP	47	19.90	-0.3
ABL	1.55	148	eP	47	24.40	-2.2X
ARN	1.58	318	eP	47	24.50	-2.3X
MHC	1.63	316	e(P)	47	27.20	-0.5
			e	47	30.50	
GCC	1.67	301	eP	47	30.00	2.0X
CMB	1.86	356	eP	47	31.30	0.3
TNP	3.06	51	eP	47	48.00	-0.2
KVN	3.33	30	eP	47	52.50	0.5

S.D. = 0.7 on 11 of 14 obs.

FEB 26, 1990 18h 13m 59.80± 0.37s
9.577 S ± 4.6km 149.798 E ± 7.9km
DEPTH = 33.0km (normal)
5.2mb (6 obs.) 3.9Msz (1 obs.)
EAST PAPUA NEW GUINEA REGION (207)

PMG	2.61	273	iPd	14	40.70	0.1
			eS	15	09.00	
RAB	5.85	24	e(P)	15	25.00	-1.5
CTA	11.00	198	eP	16	34.00	-4.0X
	0.8s		23.13nm			5.4mb
			e	18	32.00	
			iS	19	40.00	
QIS	14.69	221	eP	17	22.50	-4.6X
			i	17	24.90	
RMQ	16.85	183	eP	17	54.00	-0.9
QLP	17.72	197	eP	18	05.50	-0.2
WB5	18.08	234	eP	18	08.90	-1.4
			e	21	21.60	
MTN	18.60	258	iPd	18	16.70	0.1
			i	18	19.00	
DZM	20.24	130	iP	18	35.70	0.4
ASPA	20.66	225	iPc	18	38.10	-1.5
	1.0s		87.00nm			5.1mb
Z	20s		0.60um			3.9Msz
			LR	26	16.40	
CMS	22.11	189	eP	18	52.00	-2.1
			e	18	59.00	
BWA	24.76	183	eP	19	20.00	0.1
CAN	25.64	182	eP	19	30.70	2.5
BFD	28.25	192	eP	19	53.00	1.0
PCI	31.03	284	ePd	20	19.50	2.5
IIDJ	46.20	347	P	22	23.30	-0.2
CHJJ	46.51	348	P	22	26.00	0.1
TSRJ	46.73	344	P	22	28.50	0.9
MAT	47.15	347	eP	22	31.00	0.0
	0.9s		20.17nm			5.1mb
MTMJ	47.28	347	P	22	32.20	0.1
NIIJ	47.66	348	P	22	34.90	0.0
SSE	48.87	327	P	22	43.70	-0.7
NJ2	50.88	326	Pd	23	00.40	0.7
LOE	54.54	299	iPd	23	27.00	-0.4
			e	28	07.00	
TIA	54.96	328	eP	23	29.20	-0.9
MDJ	56.95	343	eP	23	44.00	-0.3
CHG	57.54	299	eP	23	49.00	0.1
CHTO	57.54	299	iP	23	49.00	0.1
	1.0s		7.50nm			4.7mb
CN2	57.55	339	eP	23	49.70	1.2
XAN	58.19	320	Pd	23	52.10	-1.1
BJI	58.36	330	eP	23	53.00	-1.2
TIY	58.60	326	eP	23	55.20	-0.9
CD2	59.74	314	P	24	03.40	-0.7
HHC	61.32	328	P	24	14.30	-0.4
BTO	61.97	326	eP	24	19.00	-0.1
LZH	62.71	319	Pd	24	24.00	-0.2
	1.8s		55.00nm			5.4mb
GTA	67.25	320	P	24	53.40	-0.1
LSA	68.59	307	P	25	03.60	1.1
GUN	72.14	303	P	25	09.40	-14.5X
PKI	72.40	303	P	25	05.00	-20.5X
GBA	75.41	287	Pc	25	43.30	0.7
	0.8s		33.70nm			5.4mb
WMQ	77.29	319	Pd	25	53.00	0.2
INK	93.95	21	eP	27	15.00	-0.1
HVD	113.30	231	e(PKP)	32	42.00	5.3X
PRY	113.35	235	ePKP	32	22.20	-14.7X
SRO	124.23	322	iPdiff	29	15.80	-15.1X
			e	30	15.40	
BRG	125.19	327	iPdiff	29	41.00	5.9X
	1.8s		140.00nm			
SOP	125.34	323	ePdiff	29	26.20	-9.7X
PRU	125.34	326	Pdiff	29	37.30	1.5
			e	29	43.50	
KHC	126.32	326	iPdiff	29	41.80	1.5
	1.3s		42.00nm			
LJU	127.34	322	ePdiff	29	34.50	-10.4X
BHG	127.47	324	iPdiff	29	44.00	-1.4
	1.1s		144.00nm			
CEY	127.56	322	ePdiff	29	35.00	-10.9X
RBL	127.73	323	Pdiffc	29	40.00	-6.7X
VOY	127.74	322	ePdiff	29	37.40	-9.3X

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FVI    128.12 323 Pdiffc29 44.20   -4.0X
FUR    128.13 326 iPdiff29 52.70    4.4X
         0.8s     67.00nm
OGA    128.99 324 iPdiff29 53.70    1.3
         0.9s    110.00nm
CTI    129.07 323 Pdiff 29 50.30   -2.4X
DUI    129.43 317 Pdiff 29 35.00  -19.4X
ARV    129.57 320 Pdiff 29 43.50  -11.4X
OSS    129.60 325 ePdiff29 58.60    3.5X
SAX    129.72 326 ePdiff29 36.60  -19.2X
SDI    129.84 317 Pdiff 29 38.00  -18.2X
SLE    129.89 327 ePdiff29 42.40  -13.8X
AZI    129.96 318 Pdiff 29 41.00  -15.6X
SFI    130.05 321 Pdiff 29 51.50   -5.4X
ZLA    130.12 326 ePdiff29 41.30  -15.9X
CRE    130.13 320 Pdiff 29 49.50   -8.0X
CDF    130.15 328 iPdiff30 12.90   15.5X
         0.9s     26.20nm
MDI    130.35 324 Pdiffc30 01.00    2.8X
BDI    130.75 322 Pdiff 29 56.50   -3.7X
BSF    130.76 328 iPdiff30 15.50   15.3X
         0.7s     45.20nm
VAI    130.84 324 Pdiff 30 04.50    4.1X
HAU    130.88 328 iPdiff30 18.10   17.5X
         1.2s    127.95nm
PII    130.98 321 Pdiff 29 57.00   -4.0X
ORO    131.44 325 Pdiff 30 08.50    5.3X
LPG    132.21 325 iPdiff30 16.90   10.0X
         0.8s     30.90nm
BNI    132.52 325 Pdiffc30 06.00   -2.1X
SBF    132.77 323 ePdiff30 13.70    4.5X
         0.9s     68.80nm
LMR    133.62 323 ePdiff30 19.30    6.4X
         0.9s     18.00nm
      S.D. = 1.0   on  43 of  81 obs.
-------------------------------------------
   FEB  26, 1990  18h 21m 26.27± 1.28s
   29.845 N ± 5.5km   67.526 E ± 3.6km
   DEPTH =  17.0 ±  9.2 km
   5.4mb ( 27 obs.)  5.2Msz (  2 obs.)
 PAKISTAN                              (710)

QUE      0.61 305 iP-     21 38.00   -0.2
KSH     11.84  34 eP     24 16.50   -0.9
      Z  12s      7.60um
      N  10s      9.70um
BOM     11.92 155 eP     24 15.20   -3.1X
                  eS     26 28.70
POO     12.65 151 iPc    24 29.20    1.0
         0.8s     34.33nm          5.6mb
GKN     15.10  93 P      24 55.60   -5.0X
DMN     15.58  94 P      25 01.60   -5.4X
KKN     15.70  93 P      25 03.10   -5.3X
HYB     15.96 138 iPd    25 08.20   -3.4X
         1.0s    350.00nm          5.5mb
                   i     25 21.00
SHL     21.97  95 iP     26 20.00   -1.2
                  iS     30 15.00
KMSA    22.85 251 eP     26 30.50    0.6
HRI     27.24 285 eP     27 12.00    0.5
DSI     27.64 282 eP     27 15.00    0.0
MBH     28.28 278 eP     27 20.00   -0.7
CHG     30.57 104 ePd    27 40.50   -0.9
         1.0s     27.25nm          5.1mb
LZH     30.97  69 eP     27 45.00    0.0
         1.0s     20.00nm          4.9mb
      Z  17s      1.10um          4.6MszX
      E  13s      1.00um
                  pP     27 50.70   20kmX
                  sP     27 53.00
BDT     31.35 106 eP     27 46.30   -1.9
KMI     31.51  90 Pd     27 50.00    0.1
      Z  16s      1.80um          4.8MszX
NNT     34.42 113 eP     28 03.80  -11.2X
VRI     35.54 308 eP     28 24.00   -0.3
                   e     48 46.50
                   e     01 03.00
KDZ     35.82 301 iP     28 27.00    0.3
MLR     36.00 307 ePc    28 30.00    1.7
PVL     36.06 303 iPd    28 30.00    1.3
RZN     36.35 301 iPc    28 31.00   -0.4
CMP     36.58 307 ePc    28 34.00    0.9
PGB     36.83 302 iPc    28 36.00    0.7
VTS     37.54 302 iPc    28 42.00    0.6
KKB     37.58 301 iPc    28 41.00   -0.5
SNG     38.40 119 eP     28 44.00   -4.6X
BZS     39.02 307 eP     28 57.00    3.5X

PSZ     40.52 310 eP     29 06.70    0.7
BJI     40.72  62 eP     29 08.50    0.9
                 ScP     34 59.50
KRA     40.86 313 iPd    29 09.60    0.9
         1.0s     93.00nm          5.5mb
                   e     29 14.20
NUR     41.81 330 iP     29 16.20   -0.1
         1.0s     42.00nm          5.1mb
KLM     41.85 123 eP     29 17.00   -0.1
SUF     42.28 333 iP     29 19.90   -0.2
         0.6s     21.90nm          5.1mb
VKA     42.94 310 iPc    29 26.50    0.8
         1.0s    216.00nm          5.8mb
KSP     43.30 314 iPc    29 29.60    1.0
         1.0s     77.00nm          5.4mb
UPP     44.77 327 iP     29 39.90   -0.5
KBA     44.85 308 iPc    29 41.50    0.0
         1.0s     77.40nm          5.6mb
CLL     45.42 314 iP     29 46.10    0.5
         2.1s     81.00nm          5.3mb
SSE     45.88  74 eP     29 51.00    1.4
      Z  18s      0.90um          4.8Msz
      N  13s      0.70um
      E  12s      0.50um
                  sP     29 58.00
                  eS     36 34.00
                  SS     39 56.00
MOX     46.22 313 iPc    29 53.00    0.9
         1.3s    131.00nm          5.8mb
GRF     46.41 312 iPc    29 54.60    1.1
         0.9s     75.00nm          5.7mb
HFS     46.74 326 eP     29 55.00   -1.0
         1.1s     91.80nm          5.7mb
      Z  15s      0.82um          4.8MszX
                  LR     50 34.00
ABH     48.79 312 eP     30 12.92    0.7
KKM     51.52 107 ePd    30 34.00    0.4
BCAO    52.67 251 iPc    30 42.00   -0.1
         0.8s     53.00nm          5.5mb
                  id     30 58.50
                  id     31 32.40
EKA     55.21 319 Pd     30 59.20   -1.1
         1.5s     75.60nm          5.5mb
ECHE    55.92 300 eP     31 06.00    0.4
ECRI    56.43 304 eP     31 09.00   -0.2
EVIA    57.30 299 eP     31 15.00   -0.5
GUD     58.06 302 eP     31 20.00   -0.8
TOL     58.16 301 iPc    31 21.00   -0.4
         1.1s     75.95nm          5.7mb
MAT     58.33  63 (P)    31 24.00    1.3
EBAN    58.39 299 eP     31 22.00   -1.0
AFC     58.44 298 eP     31 22.00   -1.6
PCI     58.44 112 ePc    31 24.40    0.7
EHOR    59.60 299 eP     31 30.00   -1.3
EPLA    59.63 301 eP     31 31.00   -0.6
EMON    59.70 305 eP     31 32.00   -0.1
ERUA    59.82 304 eP     31 32.50   -0.4
EJIF    60.15 297 eP     31 33.50   -1.7
DAG     60.35 345 iPc    31 34.40   -1.7
         0.9s     31.93nm          5.4mb
EZAM    60.99 304 eP     31 41.00    0.1
BUL     62.25 222 iPc    31 48.00   -1.8
         1.1s     12.03nm          5.0mb
SLR     66.85 218 eP     32 21.50    1.8
KIC     71.49 267 Pc     32 48.12   -0.3
         0.9s     40.00nm          5.5mb
TIC     71.59 267 Pc     32 48.74   -0.3
         0.8s     35.00nm          5.5mb
LIC     71.80 267 Pc     32 49.92   -0.3
         0.9s     32.00nm          5.4mb
BRW     74.45  14 eP     33 04.80    0.0
MTN     74.49 115 eP     32 48.00  -17.9X
                   e     33 06.00
IMA     79.31  16 eP     33 31.70   -0.5
         1.0s     16.30nm          5.0mb
FRB     80.49 342 eP     33 38.00   -0.3
INK     80.90   8 iPc    33 40.70    0.3
         0.7s     24.00nm          5.3mb
TTA     81.25  19 eP     33 42.70    0.2
FBA     81.64  14 eP     33 44.80    0.4
ASPA    83.02 122 iPd    33 52.30    0.1
         1.0s     26.00nm          5.3mb
PMR     84.17  17 eP     33 57.70    0.2
         1.4s     34.90nm          5.4mb
      Z  20s      3.50um          5.7Msz
TOA     84.43  15 eP     33 59.90    1.0
OIS     85.54 117 eP     34 05.00    0.0

FFC     95.29 354 iPc    34 50.30   -0.1
         0.7s      7.00nm          5.2mb
WDC    109.31   8 ePKPd  40 08.10   11.0X
                   e     41 16.20
ORV    110.45   7 ePKPd  40 02.00    2.7X
MHC    112.62   8 ePKPd  39 48.10  -15.5X
      S.D. = 0.9   on  72 of  84 obs.
-------------------------------------------
?  FEB  26, 1990  18h 28m 29.73± 4.48s
   31.186 S ±20.9km   68.519 W ±34.0km
   DEPTH =  87.1 ± 45.5 km
 SAN JUAN PROVINCE, ARGENTINA          (137)

RTLL     0.15 164 iPc    28 42.50   -0.2
                  eS     28 53.90
RTCB     0.38 219 eP     28 43.80    0.2
                 (S)     28 55.00
CFA      0.48 150 iPc    28 44.50    0.2
RTCV     0.67 181 eP     28 45.80   -0.2
                  eS     28 59.80
RTRS     1.30 321 iPc    28 53.10    0.0
      S.D. = 0.4   on   5 of   5 obs.
-------------------------------------------
   FEB  26, 1990  18h 29m 11.34± 0.30s
   26.682 S ± 6.1km  114.763 W ±11.9km
   DEPTH =  10.0km  (geophysicist)
   5.2mb ( 12 obs.)  5.2Msz (  1 obs.)
 EASTER ISLAND REGION                  (685)
      CENTROID, MOMENT TENSOR          (HRV)
      Data Used: GDSN
      L.P.B.: 10S, 20C
      Centroid Location:
      Origin Time        18:29:18.9 0.8
      Lat 27.05S 0.08 Lon 114.72W 0.10
      Dep  15.0 FIX Half-duration  2.0
      Moment Tensor;    Scale 10**17 Nm
        Mrr=-1.04 0.06   Mtt= 0.72 0.08
        Mff= 0.32 0.09   Mrt= 0.00 0.00
        Mrf= 0.00 0.00   Mtf=-0.28 0.06
       Principal Axes:
        T  Val=  0.86  Plg= 0  Azm=207
        N        0.18       0       117
        P       -1.04      90       180
      Best Double Couple:Mo=0.9*10**17
       NP1:Strike=297 Dip=45 Slip= -90
       NP2:        117     45       -90

ZOBO    44.41  86 Pd     37 26.00    1.1
         1.5s     20.43nm          4.8mb
      Z  24s      1.01um          4.7MszX
                   S     44 10.00
                  LR     50 15.00
BAR     59.06 358 eP     39 14.00    0.1
                   e     40 22.00
GLA     59.40 360 eP     39 17.00    0.7
PLM     59.74 358 eP     39 18.00   -0.8
PEC     60.28 358 P      39 22.80    0.5
         0.9s      9.92nm          4.9mb
RVR     60.39 358 eP     39 23.00    0.0
TPC     60.47 359 eP     39 24.00    0.4
MWC     60.65 357 eP     39 25.00    0.0
SBB     61.10 357 eP     39 27.00   -0.9
ABL     61.34 356 P      39 30.20    0.4
GSC     61.68 358 eP     39 31.00   -0.9
BCH     61.74 355 P      39 32.50    0.2
ALQ     61.79   8 eP     39 31.70   -1.1
         1.0s     11.25nm          5.0mb
ANMO    61.79   8 P      39 31.40   -1.4
         1.0s     10.00nm          4.9mb
ISA     62.11 357 eP     39 34.00   -0.7
CLC     62.22 357 eP     39 35.00   -0.5
PRI     62.73 355 ePd    39 39.60    0.7
PRS     62.98 354 eP     39 41.00    0.6
MEO     63.02  15 iPc    39 39.60   -1.2
SPA     63.47 180 eP     39 42.80   -0.9
         1.1s     30.95nm          5.4mb
FRI     63.50 356 ePd    39 43.50   -0.3
ARN     64.01 354 P      39 48.20    1.0
TNP     64.46 358 P      39 51.20    0.8
SIO     64.49  17 e(P)   39 49.50   -0.9
CMB     64.59 355 ePd    39 51.40    0.4
TUL     64.78  17 eP     39 51.70   -0.5
         1.0s     15.00nm          5.1mb
      Z  21s      1.64um          5.2Msz
                   e     40 26.70
                  LR     01 40.00
MSU     64.90   2 P      39 54.00    0.8
```

26d 18h

RLO	65.22	18	eP	39	54.50	-0.6	KCT	2.05	33	iPn	59	43.40	-2.0	RTLL	40.50	108	ePc	14	16.30	-0.3
KVN	65.46	357	P	39	57.50	0.7	KHL	2.09	95	ePn	59	46.00	0.1	CFA	40.67	108	ePc	14	18.50	0.5
			pP	41	20.20	377kmX	MFT	2.26	8	iPn	59	47.90	-0.6	ARE	41.30	85	eP	14	24.00	0.4
OLY	65.65	21	P	39	57.80	0.0	ATH	2.55	258	ePg	00	01.00	8.5X	LPB	44.30	87	Pd	14	49.70	1.5
PWLA	66.33	24	P	40	01.70	-0.5	ALT	2.58	78	iPn	59	52.70	-0.2		2.0s		352.94nm			5.9mb
POW	66.34	21	P	40	02.00	-0.2	YLV	2.79	43	iPn	59	44.90	-11.1X				S	22	12.00	
DUG	66.56	2	P	40	04.40	0.7	RDO	2.80	339	ePn	59	56.10	0.1				e	25	00.00	
	0.9s	13.16nm			5.1mb		CTT	2.86	24	ePn	59	58.00	1.1				LR	27	50.00	
GOL	66.62	8	P	40	03.90	-0.4	GBZT	2.99	41	ePn	00	08.40	9.7X	ZOBO	44.37	86	iPd	14	49.80	0.8
GLD	66.68	8	P	40	05.20	0.6				iSg	00	48.00			1.8s		185.19nm			5.6mb
DAU	66.83	3	P	40	06.00	0.3	KAP	2.99	175	ePn	59	57.60	-1.1				iS	21	33.00	
SGS	67.87	31	P	40	11.70	-0.2	ISK	3.03	33	ePn	00	01.00	1.8				LR	28	20.00	
LBFM	68.00	354	P	40	13.50	0.5	ITU	3.04	32	ePn	00	28.00	28.6X	PSO	45.44	58	eP	15	00.00	2.6X
			pP	41	21.20	297kmX				iSg	00	46.00		CCH	45.75	89	P	15	00.50	0.8
FVM	68.26	21	P	40	13.90	-0.5	BCK	3.12	109	iPn	00	01.00	0.4	CRX	48.05	19	eP	15	20.00	2.3
GBTN	68.40	26	P	40	07.40	-7.9X	HRT	3.13	43	iPn	00	00.40	-0.3	PPM	48.06	21	(P)	15	20.00	2.0
JSC	68.45	29	P	40	15.60	0.0	GPA	3.18	56	ePn	00	02.00	0.6	UPA	49.21	49	eP	15	27.20	0.9
TKL	68.57	27	P	40	15.70	-0.6	PLG	3.23	306	ePn	00	03.00	0.9		Z 20s		28.72um			6.3Msz
IMW	70.32	3	P	40	26.80	-0.4	KSL	3.24	137	ePn	00	04.60	2.4				i	22	36.00	
BLA	71.29	28	P	40	33.20	0.3	KDZ	3.30	341	iPc	00	03.00	-0.1	BOG	50.13	58	eP	15	36.00	2.1
	1.0s	30.00nm			5.4mb		DMK	3.34	11	ePn	00	02.60	-1.1				iS	22	54.00	
LRM	72.19	2	eP	40	38.40	0.0	NPS	3.43	198	ePg	00	13.70	8.8X	BMG	52.47	56	iPc	15	51.50	0.1
NA2	73.21	30	P	40	44.50	0.3	RZN	3.55	333	iPd	00	10.00	3.2X	TOV	56.69	56	eP	16	20.60	-1.5
GMW	74.24	354	P	40	50.50	0.5	VLI	3.62	241	ePn	00	07.20	-0.4	CEOS	57.31	58	iP	16	24.50	-2.0
DPW	74.27	358	P	40	51.00	0.7	ITM	4.15	252	ePn	00	15.80	0.7	FISA	58.00	55	eP	16	29.00	-2.3
PNT	75.78	357	iP	41	00.00	1.2	VAY	4.32	311	eP	00	23.30	5.7X	PLAV	58.47	58	eP	16	32.00	-2.8X
SES	76.80	2	ePd	41	05.80	1.2				i	00	33.00		WEL	58.78	236	eP	16	36.00	-0.3
RSON	79.41	13	P	41	18.50	-0.4	BBTK	4.75	72	eP	00	42.50	18.6X				PPP	20	08.00	
	1.0s	59.65nm			5.6mb					eS	01	51.50					S	24	50.00	
EDM	79.57	1	iPd	41	19.70	0.0	VTS	4.92	327	iPc	00	27.00	0.8	BAR	59.03	358	eP	16	37.00	-1.1
	1.1s	123.00nm			5.8mb		BZS	8.08	333	ePc	01	10.00	-0.4	OLLA	59.09	58	eP	16	36.50	-2.5
FFC	81.82	7	iPd	41	31.60	0.1				e	27	00.00		CAR	59.31	58	iP	16	38.00	-2.5
	1.2s	41.00nm			5.4mb		S.D. = 1.0 on 27 of 35 obs.										iS	24	44.00	
FBA	94.82	347	P	42	33.70	-0.2	----------							GLA	59.37	360	eP	16	41.00	0.5
	1.0s	17.50nm			5.4mb		FEB 26, 1990 19h 06m 36.44± 0.16s							LLAV	59.38	58	eP	16	39.00	-2.0
INK	95.72	353	eP	42	37.00	-0.9	26.651 S ± 4.6km 114.726 W ± 4.5km							PLM	59.71	358	eP	16	43.00	0.0
MDJ	126.10	307	ePKP	48	14.50	-0.9	DEPTH = 14.2km (geophysicist)							PFO	59.95	358	iPc	16	44.64	0.1
BCAO	130.25	108	iPKPc	48	24.20	-0.1	5.6mb (27 obs.) 6.1Msz (18 obs.)										iS	25	04.89	
	0.9s	14.00nm					EASTER ISLAND REGION (685)							PEC	60.25	358	P	16	46.50	0.0
GRF	132.92	46	ePKP	48	29.30	1.0	Ms 6.1 (BRK). Mo=3.0•10••18 Nm								1.1s		23.81nm			5.2mb
KBA	134.70	49	ePKPd	48	41.00	9.0X	(PPT). Depth from broodbond							RVR	60.36	357	eP	16	47.00	-0.2
	1.0s	7.10nm					displocement seismogroms.							TPC	60.44	359	eP	16	48.00	0.2
ZST	137.01	47	e(PKP)	48	35.70	-0.4	CENTROID, MOMENT TENSOR (HRV)							PAS	60.55	357	iPd	16	48.74	0.2
XAN	141.83	292	ePKP	48	40.00	-5.4X	Dota Used: GDSN										epPc	16	52.71	13kmX
GYA	143.06	279	PKP	48	44.20	-3.6X	L.P.B.: 16S, 40C M.W.: 11S, 17C										esPd	16	54.86	
PLD	143.55	54	iPKPc	48	46.00	-2.0	Centroid Location:										iS	25	10.89	
MLR	143.56	49	iPKPc	48	45.50	-2.6X	Origin Time 19:06:44.7 0.2										eSS	29	14.76	
RZN	143.64	55	iPKPc	48	47.00	-1.4	Lat 27.24S 0.03 Lon 114.91W 0.03										eLg	32	36.00	
NNT	144.75	253	ePKP	48	49.00	-1.8	Dep 15.0 FIX Half-durotion 4.5										eLR	33	06.00	
JMB	144.83	53	iPKPc	48	50.00	-0.1	Moment Tensor; Scole 10••18 Nm							MWC	60.62	357	eP	16	49.00	-0.2
CFR	145.14	48	ePKPd	48	50.00	-0.5	Mrr=-1.35 0.02 Mtt= 0.85 0.03							SYP	61.05	355	eP	16	53.00	1.0
EZN	145.19	58	iPKP	48	49.20	-1.6	Mff= 0.50 0.03 Mrt= 0.22 0.09							SBB	61.07	357	eP	16	52.00	-0.1
MFT	145.72	56	iPKP	48	52.90	1.1	Mrf=-0.54 0.08 Mtf=-0.62 0.03							ABL	61.31	356	P	16	53.80	-0.2
NST	145.77	258	iPKPd	48	53.00	0.6	Principol Axes:							GSC	61.65	358	eP	16	56.00	0.0
LZH	145.92	296	PKP	48	52.50	0.1	T Val= 1.41 Plg=10 Azm= 39							ALQ	61.76	8	eP	16	51.70	-5.3X
CD2	146.09	286	ePKP	48	52.40	-0.3	N 0.09 10 131								1.0s		22.50nm			5.3mb
BNT	146.29	57	iPKP	48	53.40	0.7	P -1.50 75 265								Z 20s		15.55um			6.2Msz
KMI	146.30	276	PKPd	48	54.00	0.5	Best Double Couple:Mo=1.5•10••18							ANMO	61.76	8	iPd	16	57.23	0.3
BDT	147.39	260	ePKP	48	57.90	2.9X	NP1:Strike=117 Dip=36 Slip=-108										epPc	17	01.04	12kmX
KHL	147.91	60	ePKP	48	56.00	0.6	NP2: 318 56 -78										esP	17	04.35	
CHG	148.02	263	ePKPd	48	59.20	3.1X											eS	25	25.65	
	1.0s	38.00nm					RUV	32.47	284	eP	13	14.00	5.4X				eSS	29	08.71	
		e	54	07.20			1.2s	75.00nm				5.5mb		ISA	62.08	357	eP	16	59.00	0.1
ALT	148.22	58	ePKP	48	58.80	2.9X	VAH	32.67	284	eP	13	14.00	3.7X	BAO	62.61	95	eP	17	20.40	17.4X
GTA	148.55	303	PKP	49	00.00	3.5X	1.2s	45.00nm				5.3mb		PRI	62.71	355	ePd	17	03.70	0.6
BBTK	150.01	56	ePKP	49	04.00	5.3X	TPT	32.77	284	eP	13	15.00	3.8X	PRS	62.96	354	ePd	17	05.10	0.5
MBH	153.11	76	ePKP	49	05.00	1.7	1.2s	80.00nm				5.5mb		MEO	62.98	15	iPd	17	04.00	-0.9
DSI	153.51	72	ePKP	49	05.00	1.1	TVO	33.07	278	eP	13	13.00	-1.0	LLA	63.20	354	ePd	17	06.50	0.2
HRI	153.67	68	ePKP	49	05.00	0.8	1.2s	80.00nm				5.5mb		SAO	63.39	354	eP	17	17.00	9.5X
HYB	164.60	236	ePKP	49	16.80	-0.1	PPN	33.33	279	eP	13	16.00	-0.1		Z 20s		12.00um			6.1Msz
MAIO	169.24	26	ePKP	49	22.00	2.1	1.2s	60.00nm				5.4mb			N 20s		10.00um			
S.D. = 0.8 on 76 of 86 obs.							PAE	33.41	278	eP	13	17.00	0.2		E 20s		2.50um			
----------							1.2s	125.00nm				5.7mb					eS	25	53.00	
FEB 26, 1990 18h 59m 10.37± 0.35s							PPT	33.44	278	eP	13	17.00	-0.1				eSS	29	54.00	
38.541 N ± 3.4km 26.87B E ± 3.9km							1.2s	100.00nm				5.6mb					eLQ	33	59.00	
DEPTH = 10.0km (geophysicist)							AFR	33.63	278	eP	13	19.00	0.3				eLR	36	28.00	
AEGEAN SEA (365)							1.2s	70.00nm				5.5mb		FRI	63.48	356	ePd	17	07.80	-0.2
MD 3.8 (ATH).							PT10	38.29	75	e(P)	13	52.00	-6.4X	HON	63.50	314	P	17	00.00	-8.5X
							NNA	38.44	75	iPc	13	59.50	-0.2		Z 20s		4.15um			5.6Msz
IZM	0.33	115	iPn	59	17.20	-0.1		1.7s	211.54nm			5.6mb		SPA	63.50	180	eP	17	07.70	-0.6
SMG	0.83	182	ePg	59	26.20	-0.2	Z 22s	8.89um				5.5Msz			1.5s		365.91nm			6.3mb
PRK	0.85	326	iPgd	59	27.30	0.6				eS	20	00.00			Z 20s		14.59um			6.2Msz
DST	1.73	52	iPn	59	40.10	-0.6	SAN	38.52	111	eP	14	00.50	0.4	MHC	63.98	354	ePd	17	12.20	0.6
YER	1.79	141	iPn	59	41.60	0.0	FCH	38.83	111	eP	14	03.00	-0.1		Z 20s		8.00um			5.9Msz
APE	1.82	216	ePb	59	40.70	-1.3	RTRS	39.77	106	ePd	14	11.60	1.1		N 20s		12.00um			
EDC	1.96	23	iPn	59	43.30	-0.6	ANT	40.06	96	eP	14	13.00	0.0		E 20s		3.20um			
BNT	1.98	24	ePn	59	43.90	-0.4	RTCB	40.21	108	ePd	14	15.00	0.7				eS	26	00.00	

		ePS	30	07.00		
		eLQ	33	43.00		
		eLg	34	37.00		
		eLR	36	50.00		
SIO	64.45	17 eP	17	13.50	-1.0	
CMB	64.56	355 ePd	17	15.70	0.5	
BRK	64.57	353 e(P)	17	15.40	0.2	
	Z 20s	15.00um			6.2Msz	
		eS	26	00.00		
		eSS	30	35.00		
		eLR	37	04.00		
BKS	64.57	353 iPd	17	15.60	0.4	
	0.9s	44.00nm			5.6mb	
	Z 20s	19.00um			6.3Msz	
	N 20s	13.00um				
	E 20s	3.20um				
		eS	25	56.00		
		eSS	30	12.00		
		eLR	37	00.00		
TUL	64.74	17 eP-	17	15.80	-0.6	
	1.3s	77.60nm			5.7mb	
	Z 20s	2.70um			5.4Msz	
		eS	26	00.00		
		LR	30	00.00		
MSU	64.87	2 P	17	18.10	0.7	
KVN	65.43	357 P	17	21.70	0.7	
OLY	65.61	21 P	17	21.60	-0.4	
ORV	66.17	354 ePd	17	25.90	0.5	
PWLA	66.29	24 P	17	25.10	-1.2	
POW	66.30	21 P	17	25.80	-0.5	
DUG	66.52	2 P	17	28.50	0.6	
GOL	66.58	8 P	17	28.10	-0.3	
	1.0s	30.00nm			5.4mb	
	Z 21s	18.30um			6.3Msz	
GLD	66.65	8 P	17	29.00	0.2	
	Z 20s	21.70um			6.4Msz	
DAU	66.80	3 P	17	30.00	0.1	
MIN	66.96	354 ePd	17	30.10	-0.6	
WDC	67.28	354 iPd	17	32.40	-0.1	
FHC	67.66	352 ePd	17	37.40	2.4	
LBFM	67.98	354 P	17	37.60	0.4	
FVM	68.22	20 P	17	38.00	-0.5	
GBTN	68.36	26 P	17	38.70	-0.7	
JSC	68.40	29 P	17	38.90	-0.8	
DZM	70.88	254 iPc	17	55.60	0.2	
BLA	71.24	28 P	17	56.80	-0.3	
	1.4s	144.44nm			5.9mb	
LRM	72.16	2 ePd	18	02.30	-0.3	
CVL	72.73	29 P	18	05.80	0.0	
NA2	73.17	30 P	18	08.60	0.2	
LON	73.33	355 iPd	18	08.66	-0.6	
		epPc	18	12.46	12kmX	
		esP	18	16.44		
CBN	73.40	30 eP	18	09.00	-0.7	
CLE	74.44	25 iP	18	16.00	0.3	
NEW	74.60	358 iPc	18	17.00	0.5	
	1.2s	85.23nm			5.7mb	
		i	19	39.40		
PGC	75.36	354 eP	18	21.00	0.2	
PNT	75.75	357 eP	18	23.00	-0.1	
	1.1s	64.00nm			5.6mb	
CAI	76.02	90 iPd	18	25.70	0.2	
SES	76.77	2 ePd	18	29.80	1.0	
	1.5s	197.00nm			6.0mb	
RIV	78.83	238 e(P)	18	44.00	3.4X	
	Z 20s	12.62um			6.2Msz	
EDM	79.54	1 iPd	18	43.70	-0.2	
	0.9s	128.00nm			5.9mb	
CAN	79.82	236 eP	18	44.60	-1.5	
WNY	79.97	28 P	18	46.60	0.1	
HBVT	80.29	29 P	18	42.00	-6.1X	
BWA	80.63	236 eP	18	43.10	-7.3X	
FFC	81.78	7 iPd	18	55.50	-0.2	
	1.4s	127.00nm			5.8mb	
BFD	83.63	232 eP	19	08.00	2.1	
RMO	83.87	244 eP	19	07.50	0.2	
CMS	83.89	238 eP	19	06.00	-1.3	
CTA	88.83	248 iPKPd	19	33.80	2.1	
	1.6s	143.33nm			6.0mb	
		e	20	10.00		
		i(SP)	30	05.00		
		i(PPS)	31	28.00		
		i(SS)	36	14.00		
SCH	90.96	25 eP	19	40.00	-0.8	
PMR	92.22	344 P	19	46.40	0.0	
	1.6s	136.07nm			6.1mb	
COL	94.80	346 iPd	19	57.46	-0.7	

		esP	20	05.08		
FBA	94.80	346 P	19	57.40	-0.8	
	0.8s	18.45nm			5.6mb	
INK	95.69	353 ePd	20	01.00	-1.2	
ASPA	96.95	239 eP	20	07.00	-2.1	
	0.9s	7.00nm			5.2mb	
	Z 20s	27.58um			6.7Msz	
		LR	58	04.20		
WB5	98.61	243 eP	20	18.00	1.4	
		e	24	23.70		
MBC	102.69	359 ePdiff	20	35.00	1.4	
BUL	121.45	139 iPKPc	25	30.40	-1.3	
	1.5s	13.89nm				
TOL	121.88	58 ePKP	25	34.50	2.7X	
		eSS	44	00.00		
EPF	125.55	55 ePKP	25	38.10	-0.8	
	1.1s	29.30nm				
MDJ	126.11	307 ePKP	25	41.00	1.2	
	Z 35s	2.90um			5.7MszX	
		ePP	27	30.00		
		SKKS	34	20.00		
		SS	44	34.00		
LOR	128.19	50 ePKP	25	42.70	-1.0	
LBF	128.28	50 ePKP	25	42.70	-1.2	
DOU	128.58	46 PKP	25	46.90	2.6X	
BCAO	130.22	108 iPKPd	25	47.03	-1.6	
		esP	25	54.97		
LPG	130.23	52 ePKP	25	46.70	-1.3	
	1.6s	93.30nm				
DL2	131.75	299 ePKP	25	52.50	1.8	
HIA	132.67	314 ePKP	25	51.75	-0.4	
		ePP	28	11.73		
		eHPP	28	13.38		
GRF	132.88	46 ePKP	25	52.90	0.3	
	Z 23s	3.30um			6.0MszX	
		e	25	56.50		
MOX	132.98	45 ePKPc	25	56.00	3.3X	
	1.8s	88.00nm				
	Z 24s	3.50um			6.0MszX	
	N 20s	3.00um				
	E 22s	3.30um				
OGA	133.10	50 ePKP	25	53.60	0.3	
NJ2	133.38	290 ePKP	25	49.00	-5.0X	
	Z 23s	1.30um			5.6MszX	
CLL	133.71	43 ePKP	25	54.00	0.0	
	2.2s	125.00nm				
BRG	134.39	44 ePKP	25	55.80	0.5	
	1.8s	62.00nm				
	Z 24s	2.00um			5.8MszX	
	N 24s	2.00um				
	E 24s	2.00um				
KHC	134.49	46 ePKP	25	45.20	-10.5X	
	Z 17s	3.00um			6.1MszX	
	N 16s	1.00um				
	E 16s	2.00um				
		e	25	56.00		
KBA	134.66	49 ePKPd	25	55.00	-1.2	
	1.0s	13.40nm				
PRU	134.94	45 ePKP	25	58.00	1.6	
	Z 22s	4.80um			6.2Msz	
	N 22s	1.50um				
	E 21s	3.90um				
HKC	135.50	275 ePKP	26	02.00	3.7X	
KSP	135.84	43 ePKP	25	58.20	0.1	
BJI	135.99	301 ePKPd	25	58.62	-0.1	
VKA	136.44	47 i(PKP)	25	59.20	-0.1	
PTJ	136.61	50 ePKP	25	59.40	-0.5	
SOP	136.71	48 ePKP	25	49.00	-10.9X	
ZST	136.96	47 ePKP-	25	58.20	-2.1	
WHN	137.00	287 ePKP	26	04.00	3.1X	
	8.0s	1040.00nm				
SRO	137.84	47 ePKP	25	55.40	-6.6X	
		i	26	02.80		
KRA	138.30	44 ePKPc	26	02.60	-0.2	
	1.4s	89.00nm				
TIY	138.97	298 ePKP	26	04.50	0.0	
OHR	140.78	57 ePKP	26	01.00	-6.6X	
	1.5s	0.10nm				
NAI	140.96	131 iPKPd	26	08.00	-0.9	
SKO	141.14	55 ePKP	26	00.70	-7.5X	
		i	26	02.90		
SNG	141.24	246 ePKP	26	04.90	-4.2X	
KZN	141.62	58 ePKP	26	03.10	-6.1X	
XAN	141.84	292 ePKP	26	03.50	-6.3X	
ITM	142.02	63 ePKP	26	02.00	-7.9X	
VAY	142.08	56 ePKP	25	55.60	-14.2X	
		i	26	04.60		

VTS	142.32	54 iPKPd	26	06.00	-4.5X	
PLG	142.88	58 ePKP	26	07.30	-4.0X	
MMB	142.89	56 ePKP	26	07.00	-4.3X	
CMP	142.97	49 iPKPd	26	09.00	-2.3	
GYA	143.09	279 PKP	26	08.00	-4.2X	
ATH	143.38	62 ePKP	26	18.80	6.6X	
PLD	143.51	54 iPKP	26	10.00	-2.2	
MLR	143.52	49 iPKPd	26	09.00	-3.4X	
RZN	143.60	55 iPKPd	26	09.00	-3.7X	
PVL	143.71	52 iPKPc	26	10.00	-2.5X	
BUC1	143.91	50 ePKPd	26	10.00	-2.8X	
VRI	143.92	48 ePKPc	26	10.00	-2.9X	
VAM	143.95	66 ePKP	26	10.00	-3.2X	
KDZ	144.12	55 iPKPd	26	11.00	-2.3X	
RDO	144.31	56 ePKP	26	11.80	-1.8	
BIR	144.38	47 ePKP	26	12.00	-1.6	
PPE	144.39	47 ePKPd	26	15.00	1.4	
JMB	144.78	53 iPKPd	26	13.00	-1.4	
NNT	144.79	253 ePKP	26	12.80	-2.4	
APE	144.90	63 ePKP	26	13.60	-1.3	
LOE	145.08	262 ePKP	26	14.00	-1.6	
CFR	145.09	48 iPKPd	26	14.50	-0.3	
NPS	145.11	66 ePKP	26	15.40	0.2	
EZN	145.15	58 iPKP	26	13.00	-2.1	
PRK	145.20	59 ePKP	26	14.60	-0.6	
PSN	145.59	51 iPKPd	26	15.00	-0.7	
NST	145.81	258 iPKPd	26	17.00	0.1	
SMG	145.86	61 ePKP	26	16.80	0.4	
LZH	145.94	296 iPKPd	26	17.49	0.7	
	Z 22s	2.90um			6.0Msz	
	E 20s	1.70um				
		e	26	25.44		
IZM	146.10	60 ePKP	26	16.00	-0.8	
CD2	146.12	286 PKP	26	17.00	-0.1	
	Z 22s	1.40um			5.7Msz	
EDC	146.20	57 iPKP	26	17.30	0.4	
BNT	146.24	57 iPKP	26	17.80	0.8	
KMI	146.34	276 ePKPd	26	18.35	0.5	
KAP	146.36	65 ePKP	26	18.40	1.1	
ITU	146.88	55 iPKPd	26	19.00	1.1	
ISK	146.92	55 ePKP	26	19.00	1.0	
DST	146.93	58 iPKP	26	19.20	1.1	
GBZT	147.27	55 ePKP	26	19.00	0.4	
BDT	147.43	260 ePKP	26	21.90	2.5X	
	1.1s	12.00nm				
HRT	147.43	55 ePKP	26	20.90	2.0	
KHL	147.86	60 ePKP	26	19.00	-0.7	
GPA	148.04	56 ePKP	26	22.00	2.1	
CHG	148.05	263 ePKP	26	21.00	0.5	
	1.2s	105.47nm				
		e	37	59.80		
ALT	148.17	58 ePKP	26	20.00	-0.2	
KSL	148.25	64 ePKP	26	23.30	3.0X	
GTA	148.56	303 ePKP	26	20.00	-0.9	
	Z 22s	4.00um			6.2Msz	
	E 20s	2.80um				
AAE	149.39	120 ePKP	26	24.60	1.5	
BBTK	149.97	56 ePKP	26	22.00	-1.0	
HLW	150.00	76 ePKP	26	24.00	0.8	
KAS	150.23	52 iPKPc	26	28.60	5.3X	
AGMR	150.24	89 iPKPc	26	24.00	0.3	
KOT	150.43	76 ePKP	26	24.30	0.5	
AGAL	150.47	89 iPKPc	26	25.00	1.0	
AGRW	150.50	89 iPKPc	26	25.00	0.9	
PPCY	150.64	66 ePKP	26	29.00	5.1X	
CSS	151.43	65 ePKP	26	25.70	0.5	
MBH	153.07	76 e(PKP)	26	27.00	-0.6	
DSI	153.47	72 ePKP	26	28.00	-0.1	
HRI	153.63	68 ePKP	26	29.00	0.5	
SALJ	153.70	71 PKPc	26	29.90	1.3	
SHMJ	153.71	70 PKPc	26	30.60	2.1	
MASJ	153.75	72 PKPc	26	30.10	1.4	
BURJ	153.79	71 PKPc	26	29.80	1.0	
OUTJ	154.02	73 PKPc	26	30.20	1.1	
ARO	154.08	121 iPKPd	26	31.50	1.9	
MDSJ	154.21	72 PKPd	26	30.30	1.0	
HLBJ	154.22	71 PKPd	26	30.50	1.2	
WMQ	155.05	319 ePKPd	26	29.56	-0.5	
SHL	156.09	273 ePKP	26	30.40	-1.8	
LSA	157.00	284 PKP	26	31.80	-1.8	
		PP	30	45.50		
MSL	158.83	57 ePKPd	26	39.50	4.6X	
		ePP	27	44.50		
		eSKP	30	28.00		
		eSKKS	34	49.00		
TAB	160.40	50 ePKP-	26	38.00	1.3	
BHD	160.75	65 ePKPc	26	37.00	0.0	

26d 19h

SLY	160.89	57	ePKPc	26	37.50	0.5
			e	27	07.00	
			ePP	27	46.00	
			ePKS	30	13.00	
			eSKKS	34	10.00	
GUN	161.64	279	PKP	26	37.60	-0.9
PKI	162.05	277	PKP	26	38.40	-0.5
KKN	162.17	278	PKP	26	38.80	-0.1
DMN	162.32	278	PKP	26	39.00	-0.1
KER	162.58	59	ePKP	26	40.00	1.0
GBA	162.73	224	PKPd	26	38.40	-1.0
	1.4s		21.20nm			
GKN	162.74	279	PKP	26	38.20	-1.2
KSH	164.41	328	ePKP	26	42.00	1.4
IR7	164.56	51	iPKPd	26	42.50	1.6
HYB	164.65	236	ePKP	26	40.50	-0.8
			e	27	36.00	
IR1	164.76	51	iPKPd	26	42.00	0.9
IR2	164.78	50	iPKPd	26	42.00	0.9
IR4	165.00	52	iPKPd	26	41.00	-0.3
MAIO	169.19	26	iPKPd	26	45.50	1.3
			e	27	57.00	
	S.D. = 1.1		on 197 of 243 obs.			

FEB 26, 1990 19h 31m 00.58± 0.72s
37.106 N ± 7.1km 29.281 E ± 6.2km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

YER	0.80	272	iPn	31	15.60	-0.5
KSL	1.01	166	ePb	31	19.00	-0.8
CIN	1.07	298	ePg	31	20.00	-0.7
			iSg	31	31.00	
BCK	1.10	71	iPn	31	21.40	0.1
KHL	1.23	9	ePn	31	24.00	0.5
SMG	2.04	288	ePn	31	35.80	0.5
ALT	2.05	18	ePn	31	39.00	3.4X
IZM	2.05	309	ePn	31	35.00	-0.6
KAP	2.30	228	ePn	31	42.40	3.2X
NPS	3.49	239	ePn	31	57.60	1.6
	S.D. = 1.0		on 8 of 10 obs.			

& FEB 26, 1990 19h 45m 40.50s
37.255 N 121.668 W
DEPTH = 6.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.1 (BRK). Felt in the San Felipe Valley.

MHC	0.09	14	iPd	45	42.60	-0.1
ARN	0.14	49	iPd	45	43.00	-0.5
GCC	0.35	230	iPd	45	47.80	0.3
SAO	0.52	160	iPd	45	51.00	0.0
PCC	0.62	293	iPc	45	52.30	-0.6
BKS	0.77	324	iPc	45	55.50	-0.3
BRK	0.78	323	eP	45	55.40	-0.6
			iS	46	07.30	
LLA	0.86	137	ePc	45	56.20	-1.3
PRS	0.95	165	iPc	45	58.00	-1.0
CMB	1.28	52	ePd	46	03.40	-1.3
			iS	46	20.00	
PRI	1.37	144	eP	46	05.00	-1.3
FRI	1.59	99	ePc	46	07.30	-1.9
			iS	46	47.00	
BCH	2.43	148	eP	46	19.00	-2.5
KVN	3.34	56	eP	46	35.20	0.8
	14 obs. associated					

FEB 26, 1990 20h 30m 14.42± 0.96s
57.450 N ± 8.8km 7.064 E ± 5.8km
DEPTH = 10.0km (geophysicist)
NORTH SEA (534)
ML 4.0 (NAO). Felt.

BLS1	1.95	356	iP	30	48.30	0.3
			eS	31	12.50	
KMY	2.01	332	iP	30	49.80	1.1
			iS	31	10.50	
ODD1	2.48	355	iPd	30	56.10	0.6
			iS	31	24.70	
BER	3.08	344	iPc	31	03.70	-0.2
			iS	31	37.10	
ASK	3.19	343	iP	31	05.40	-0.2
			eS	31	38.60	
HYA	3.76	353	iPc	31	13.50	-0.1
			eS	31	53.10	
SUE	3.81	343	eP	31	13.70	-0.6
			iS	31	51.40	
NRA0	4.02	33	Pn	31	16.90	-0.5
			Sn	32	01.30	
			Lg	32	19.90	
NB2	4.18	29	P	31	19.50	-0.2
HFS	4.38	49	eP	31	22.40	0.0
	0.2s		7.40nm			
MOL	5.14	2	iPc	31	32.20	-1.0
			iS	32	27.40	
RGS	5.84	15	eP	31	44.50	1.5
			eSn	32	45.50	
UPP	6.02	62	iPn	31	46.30	0.8
			iPg	31	53.20	
			i	32	49.10	
EKA	6.06	254	P	31	46.00	-0.2
	0.3s		5.60nm		4.8mb	
NSS	7.49	16	iP	32	05.20	-1.1
			eS	33	21.90	
NUR	9.58	64	iP	32	34.90	-0.3
			iS	34	14.10	
KTK1	13.63	25	eP	33	26.70	-3.2X
	S.D. = 0.8		on 16 of 17 obs.			

FEB 26, 1990 21h 10m 38.91± 0.74s
44.636 N ± 4.7km 111.062 W ± 7.5km
DEPTH = 5.0km (geophysicist)
HEBGEN LAKE REGION (458)
ML 3.2 (BUT). Largest of 15 events with magnitudes of 2.4 or greater over the past 20 hours (BUT).

IMW	0.74	173	eP	10	53.80	0.0
LTMT	0.76	262	iPc	10	54.10	-0.2
BGMT	0.92	311	iPd	10	56.50	-0.6
MEMT	0.97	4	eP	10	57.40	-0.6
MCMT	1.29	279	ePnc	11	03.70	0.3
LCCM	1.33	335	iPd	11	04.20	0.1
SXM	1.52	356	ePn	11	07.20	0.3
LRM	1.54	321	ePnd	11	07.70	0.4
BUT	1.74	323	ePg	11	12.70	2.6X
			eSn	11	33.00	
			eSg	11	35.40	
HRY	2.14	346	ePn	11	16.20	0.3
	S.D. = 0.4		on 9 of 10 obs.			

? FEB 26, 1990 21h 28m 53.26± 1.05s
42.288 N ± 8.7km 22.652 E ±17.0km
DEPTH = 10.0km (geophysicist)
BULGARIA (359)
ML 2.7 (SKO).

SKO	0.96	251	ePn	29	18.00	6.5X
			eSn	29	37.00	
VAY	0.97	184	iPg	29	12.00	0.3
			i	29	25.50	
			iSg	29	28.80	
PLG	2.00	162	ePn	29	27.00	-0.6
RDO	2.44	117	ePn	29	34.00	0.2
			eSn	30	05.10	
BZS	3.41	348	ePc	29	47.50	0.0
	S.D. = 0.7		on 4 of 5 obs.			

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* FEB 26, 1990 21h 49m 43.59± 1.05s
11.712 S ±13.8km 117.348 E ±24.1km
DEPTH = 33.0km (normal)
4.6mb (2 obs.)
SOUTH OF SUMBAWA ISLAND (291)

KHKI	3.74	333	ePc	50	39.10	-1.3
			eS	51	18.10	
			e	52	48.10	
TRT	6.12	310	ePd	51	15.20	1.1
			eS	52	22.80	
MBL	9.69	166	eP	52	02.00	-1.9
	0.3s		28.00nm		6.0mb	X
			eS	53	41.00	
MEKA	14.87	176	eP	53	13.00	-0.2
	0.3s		13.00nm		4.8mb	
			eS	55	45.00	
MRWA	17.46	184	eP	53	49.00	2.7X
			eS	56	48.00	
BAL	18.81	182	eP	54	04.00	1.0
			eS	57	16.00	
COOL	19.40	170	eP	54	10.00	0.0
			eS	57	29.00	
ASPA	19.72	129	eP	54	14.80	1.2
			eS	57	37.10	
KLB	19.79	179	eP	54	18.30	4.2X
			eS	57	39.00	
MUN	20.20	183	eP	54	23.80	5.4X
			eS	57	51.00	
NWAO	21.12	180	eP	54	34.00	6.2X
	0.4s		6.00nm		4.3mb	
			eS	58	12.00	
	S.D. = 1.5		on 7 of 11 obs.			

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* FEB 26, 1990 21h 54m 26.42± 0.84s
40.319 N ±13.7km 63.747 E ± 9.2km
DEPTH = 33.0km (normal)
4.4mb (5 obs.)
UZBEK SSR (339)
Felt (III) at Gazli.

MAIO	5.22	221	iPnc	55	44.00	-0.4
	0.8s		12.81nm		4.5mb	
			eSn	56	41.00	
GKN	21.15	119	P	59	10.40	-0.6
KKN	21.72	118	P	59	16.40	-0.4
	0.6s		8.00nm		4.3mb	
DMN	21.72	119	P	59	16.80	-0.1
PKI	21.95	119	P	59	19.40	0.1
	0.6s		13.00nm		4.5mb	
GUN	22.04	117	P	59	20.20	-0.1
	0.6s		14.00nm		4.6mb	
HYB	26.17	146	eP	00	01.00	1.3
NB2	37.87	321	P	01	41.80	0.1
	0.8s		3.40nm		4.3mb	
	S.D. = 0.7		on 8 of 8 obs.			

FEB 26, 1990 22h 10m 47.06± 0.74s
44.629 N ± 4.7km 111.070 W ± 7.6km
DEPTH = 5.0km (geophysicist)
HEBGEN LAKE REGION (458)
ML 3.0 (BUT).

IMW	0.74	173	eP	11	01.80	0.0
LTMT	0.75	262	iPc	11	02.20	-0.1
BGMT	0.92	312	eP	11	04.70	-0.5
MEMT	0.98	4	eP	11	05.60	-0.6
MCMT	1.28	280	ePn	11	11.70	0.2
LCCM	1.34	335	iPd	11	12.30	0.0
SXM	1.52	356	ePn	11	15.50	0.3
LRM	1.54	321	iPnd	11	15.90	0.4
BUT	1.74	323	ePg	11	20.90	2.6X
			eSn	11	41.60	
			eSg	11	43.10	
HRY	2.15	346	ePn	11	24.60	0.4
	S.D. = 0.4		on 9 of 10 obs.			

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* FEB 26, 1990 22h 59m 33.76± 0.87s
56.180 N ±19.7km 160.409 E ±16.5km
DEPTH = 33.0km (normal)
4.3mb (4 obs.)
KAMCHATKA (217)

TTA	22.70	55	eP	04	33.40	0.0
IMA	23.70	47	eP	04	43.10	0.0
	0.7s		7.90nm		4.3mb	
MAT	24.71	227	eP	04	53.00	0.0
NB2	60.63	343	P	09	43.60	0.4
	0.8s		2.30nm		4.4mb	
HFS	61.07	342	eP	09	45.70	-0.4
	0.5s		1.40nm		4.3mb	
GBA	74.91	272	P	11	13.00	0.0
	0.4s		1.00nm		4.2mb	
	S.D. = 0.3		on 6 of 6 obs.			

FEB 27, 1990 00h 01m 49.32± 0.54s
38.911 N ± 5.9km 24.819 E ± 5.3km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
ML 3.1 (ATH).

PRK	1.18	73	ePn	02	11.10	-0.2
ATH	1.28	223	ePn	02	13.30	0.3
NEO	1.30	288	ePn	02	14.00	0.5
EZN	1.48	51	iPn	02	14.50	-1.5
PLG	1.81	324	ePn	02	20.20	-0.5
APE	1.92	163	ePn	02	22.80	0.4
IZM	1.98	104	ePn	02	23.00	-0.3
VLI	2.65	215	ePn	02	32.00	-0.8
RZN	2.78	358	iPd	02	40.00	5.2X
BNT	2.80	58	ePn	02	37.00	2.1

VAY 2.96 325 ePn 02 37.40 0.2
DST 3.04 76 ePg 03 12.00 33.7X
eSg 03 24.20
KKB 3.24 336 iPc 02 41.00 -0.1
S.D. = 1.0 on 11 of 13 obs.

? FEB 27, 1990 00h 18m 06.20± 6.16s
31.207 S ±24.2km 68.377 W ±43.0km
DEPTH = 102.4 ± 56.5 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL 0.15 213 ePd 18 20.80 -0.3
CFA 0.42 164 iPd 18 22.20 0.3
S 18 36.00
RTCB 0.46 232 eP 18 22.50 0.2
eS 18 34.00
RTCV 0.67 192 ePd 18 23.60 -0.2
S 18 37.70
RTRS 1.39 318 ePd 18 31.60 0.0
eS 18 51.00
S.D. = 0.5 on 5 of 5 obs.

* FEB 27, 1990 01h 39m 34.07± 1.02s
4.650 S ±11.9km 136.756 E ±15.0km
DEPTH = 33.0km (normal)
4.4mb (2 obs.)
WEST IRIAN REGION (196)

MTN 9.86 214 eP 41 57.00 0.3
e 42 01.00
eS 43 52.00
PMG 11.35 115 eP 42 17.50 0.5
WB5 15.32 189 eP 43 08.90 -0.7
eS 45 58.00
WRA 15.38 189 P 43 17.00 6.5X
1.1s 16.10nm 4.2mb
QIS 16.05 170 eP 43 17.50 -1.6
CTA 17.92 150 eP 43 55.00 12.5X
eS 47 29.50
ASPA 19.11 188 eP 43 58.80 1.7
1.1s 43.00nm 4.6mb
Z 21s 0.16um 4.7MszX
eS 47 23.00
LR 51 12.50
iScS 55 06.40
GUN 58.73 307 P 49 31.60 -0.2
KKN 59.16 306 P 49 36.20 1.6
GKN 59.76 306 P 49 37.00 -1.7
S.D. = 1.5 on 8 of 10 obs.

? FEB 27, 1990 02h 57m 13.71± 0.96s
42.923 N ±10.5km 12.850 E ±17.2km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

ASS 0.20 317 P 57 18.10 -0.1
eSg 57 22.10
ARV 0.58 7 P 57 25.50 0.0
eSg 57 35.50
AQU 0.70 144 P 57 27.10 -0.5
eSg 57 38.40
SDI 1.41 149 P 57 40.00 0.5
S.D. = 0.7 on 4 of 4 obs.

% FEB 27, 1990 03h 11m 59.69± 0.81s
42.924 N ± 9.3km 12.901 E ±15.6km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

ASS 0.23 310 P 12 04.50 -0.1
eSg 12 08.50
ARV 0.58 3 P 12 11.50 0.1
eSg 12 21.50
AQU 0.68 147 P 12 12.30 -0.9
eSg 12 22.40
AZI 1.02 157 P 12 19.50 0.6
SDI 1.39 151 Pc 12 25.50 0.3
eSg 12 43.60
S.D. = 0.8 on 5 of 5 obs.

FEB 27, 1990 03h 26m 10.63± 1.10s
36.457 N ± 6.2km 71.448 E ± 4.6km
DEPTH = 125.8 ± 11.8 km
4.9mb (21 obs.)
AFGHANISTAN-USSR BORDER REGION (717)
Felt (III) at Ishkashim and
Khorog, USSR.

KSH 4.67 49 eP 27 20.00 -0.3
S 28 18.50
MAIO 9.64 273 iPd 28 21.00 -6.6X
0.7s 35.90nm 5.2mb
eS 29 55.00
GKN 13.98 123 P 29 18.60 -5.8X
WMQ 14.43 54 P 29 28.00 -2.0
S 32 09.00
DMN 14.55 123 P 29 26.00 -5.8X
KKN 14.55 123 P 29 25.40 -6.4X
PKI 14.78 123 P 29 28.60 -6.2X
GUN 14.88 121 P 29 29.40 -6.7X
IR2 16.64 273 eP 29 57.00 -0.8
IR4 16.71 272 eP 29 58.00 -0.6
IR1 16.85 273 eP 30 01.00 0.7
IR7 16.87 274 eP 30 01.00 0.4
LSA 17.82 107 P 30 10.60 -1.9
POO 17.98 173 iPd 30 14.50 0.4
iS 33 38.50
KER 19.94 271 eP 30 47.00 12.1X
HYB 19.98 160 iPd 30 34.30 -1.0
0.8s 38.50nm 4.8mb
e 31 00.00
TAB 20.05 282 eP 30 29.00 -7.0X
GTA 22.53 74 iPc 31 03.40 2.8X
GBA 23.38 165 Pd 31 09.10 0.3
0.5s 8.10nm 4.4mb
RYD 24.30 248 eP 31 18.00 0.3
QASM 25.92 254 eP 31 33.30 0.6
LZH 26.06 81 eP 31 35.00 0.9
KOD 26.67 167 eP 31 40.80 0.9
CD2 27.37 92 P 31 47.30 1.4
CHG 29.88 119 eP 32 08.90 0.5
XAN 30.58 83 P 32 15.60 1.2
PRNI 30.91 269 e(P) 32 18.00 0.6
BDT 30.98 121 ePc 32 19.00 1.0
MBH 31.21 268 eP 32 20.00 0.0
TIY 32.54 75 eP 32 33.70 2.1
KHL 33.16 286 eP 32 37.00 0.0
VRI 34.56 300 ePc 32 50.00 1.2
MLR 35.12 299 ePc 32 55.50 1.8
NUR 38.07 324 iP 33 18.60 0.5
0.7s 22.70nm 5.1mb
SUF 38.15 328 iP 33 19.20 0.5
0.6s 19.30nm 5.1mb
KRA 39.13 307 eP 33 28.10 1.1
0.7s 56.00nm 5.5mb
e 33 40.30 45kmX
SOD 39.93 335 eP 33 33.00 -0.4
KEV 40.98 338 eP 33 40.00 -1.9
UPP 41.33 322 iP 33 45.10 0.2
KSP 41.45 308 eP 33 47.00 0.9
e 35 17.70 487kmX
PRU 42.61 307 P 33 57.00 1.4
e 35 38.50 570kmX
BRG 42.93 308 iP 33 59.40 1.2
0.8s 20.00nm 4.9mb
i 34 10.20 38kmX
i 34 33.00
KHC 43.30 306 eP 34 03.50 2.2
CLL 43.50 309 iPc 34 04.20 1.4
RBL 43.63 302 P 34 05.00 1.0
NB2 44.63 323 P 34 11.60 -0.2
0.8s 40.30nm 5.2mb
GRF 44.78 307 ePc 34 14.00 0.9
e 34 15.30 4kmX
e 34 40.60
e 34 47.60
CTI 45.01 302 P 34 15.50 0.4
CRE 45.26 298 P 34 19.00 1.9
CDF 47.53 306 eP 34 34.60 -0.3
BSF 47.96 305 eP 34 37.50 -0.7
0.7s 14.35nm 4.9mb
HAU 48.22 305 eP 34 39.30 -0.8
0.6s 7.20nm 4.6mb
LPG 48.48 302 eP 34 42.20 -0.3
LOR 50.02 305 eP 34 53.10 -0.8
1.1s 19.55nm 4.9mb
SMF 50.18 304 eP 34 54.40 -0.7
0.7s 12.15nm 4.9mb
AVF 50.47 304 eP 34 56.50 -0.8
0.7s 12.15nm 4.9mb
BGF 50.86 304 eP 34 59.30 -1.0
MAF 51.14 304 eP 35 01.90 -0.5
0.9s 14.75nm 4.9mb
TCF 51.36 304 eP 35 03.70 -0.4
0.9s 18.00nm 4.9mb

LPO 52.49 302 eP 35 12.00 -0.6
EKA 52.57 316 P 35 14.00 1.1
1.0s 16.40nm 4.9mb
LFF 52.72 303 eP 35 13.70 -0.5
0.9s 21.30nm 5.1mb
EPF 53.58 300 eP 35 19.60 -1.0
0.7s 5.50nm 4.6mb
BCAO 57.98 250 iPd 35 50.50 -1.9
0.6s 14.00nm 5.1mb
ic 36 25.10
MBC 67.36 3 ePc 36 53.50 0.0
0.6s 8.00nm 4.8mb
INK 73.89 9 eP 37 33.00 0.2
LKO 73.99 270 P 37 32.22 -2.1
KIC 75.14 267 P 37 39.60 -1.3
TIC 75.20 267 P 37 40.00 -1.3
FRB 75.21 343 eP 37 39.00 -1.5
LIC 75.45 267 P 37 41.00 -1.7
FFC 89.01 356 eP 38 50.00 -2.1
1.0s 13.00nm 5.0mb
S.D. = 1.2 on 63 of 72 obs.

& FEB 27, 1990 04h 18m 19.67s
60.205 N 153.044 W
DEPTH = 134.3km
SOUTHERN ALASKA (2)
<AGS-P>.

RED 0.25 32 iP 18 37.74 0.8
RDT 0.49 40 iP 18 38.75 -0.7
PDB 0.71 235 iP 18 39.97 -0.9
eS 18 55.72
AUL 0.85 194 iP 18 41.43 -0.5
AUE 0.86 191 eP 18 41.14 -0.9
NNL 0.89 100 iP 18 42.40 0.1
S 18 58.51
NKA 1.04 58 iP 18 44.44 0.8
CKL 1.05 19 iP 18 43.20 -0.7
eS 19 01.63
SPU 1.09 26 iP 18 43.28 -0.9
iS 19 02.11
BGL 1.11 17 iP 18 43.89 -0.5
CNPM 1.14 126 eP 18 44.30 -0.3
S 19 02.88
CRP 1.15 22 iP 18 44.26 -0.6
S 19 03.52
CGLM 1.22 24 iP 18 44.59 -0.9
NCG 1.28 19 eP 18 45.91 -0.2
SLKM 1.44 77 iP 18 46.47 -1.3
SVW 1.56 307 iP 18 47.42 -1.7
SUA 1.69 41 iP 18 49.76 -1.0
S 19 13.48
SEW 1.80 92 eP 18 49.36 -2.5
SKT 1.93 22 eP 18 52.24 -1.2
PMS 2.00 57 eP 18 52.88 -1.5
eS 19 19.45
PWA 2.12 45 eP 18 54.00 -1.7
PLRM 2.37 52 eP 18 56.32 -2.5
GHO 2.55 50 iP 18 58.89 -2.4
23 obs. associated

? FEB 27, 1990 04h 37m 42.62± 7.06s
31.802 S ±44.9km 69.766 W ±49.1km
DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB 0.88 69 eP 37 59.50 0.8
eS 38 15.10
RTCV 1.05 94 ePc 38 01.20 0.1
RTLL 1.20 67 iPc 38 02.70 -0.5
eS 38 20.10
CFA 1.32 82 iPc 38 04.50 -0.4
S 38 22.80
RTRS 1.65 9 iPc 38 09.60 0.0
eS 38 31.80
S.D. = 0.7 on 5 of 5 obs.

* FEB 27, 1990 05h 20m 18.71± 1.33s
4.373 N ±14.2km 94.741 E ±13.3km
DEPTH = 33.0km (normal)
3.9mb (3 obs.)
OFF W COAST OF NORTHERN SUMATERA(705)

TSI 3.91 103 eP 21 33.00 15.0X
IPM 6.27 88 ePd 21 51.80 0.4
SNG 6.47 64 eP 21 51.10 -3.1X
NNT 9.54 31 eP 22 35.00 -1.9

27d 05h

CHG	14.93	16	eP	23	50.20	1.0
CHTO	14.93	16	iP	23	50.00	0.8
	1.0s		8.75nm			4.0mb
GBA	19.38	299	Pc	24	44.70	-0.2
	0.8s		2.50nm			3.5mb
BJI	40.44	26	eP	27	53.00	-2.7X
WRA	45.80	123	Pd	28	39.40	-0.1
	0.6s		1.20nm			4.0mb
S.D. = 1.4		on	6 of	9 obs.		

? FEB 27, 1990 05h 41m 12.79± 5.83s
3.243 S ±53.6km 141.233 E ±12.8km
DEPTH = 62.4 ± 22.8 km
3.6mb (1 obs.)
PAPUA NEW GUINEA (202)

MNDI	3.77	140	eP	42	10.00	0.1
PMG	8.49	136	eP	43	05.00	-10.6X
MTN	13.82	226	eP	44	27.00	-0.2
OIS	17.28	185	eP	45	11.00	-0.5
WB5	17.84	202	eP	45	18.50	0.1
			eS	48	37.00	
WRA	17.91	202	Pd	45	19.80	-0.5
	0.6s		2.50nm			3.6mb
BWA	31.74	169	eP	47	33.20	0.1
CAN	32.72	168	eP	47	41.50	-0.1
S.D. = 0.5		on	7 of	8 obs.		

? FEB 27, 1990 06h 34m 46.70±14.54s
17.929 N ±65.1km 65.742 W ±68.9km
DEPTH = 10.0km (geophysicist)
PUERTO RICO REGION (90)

CPD	0.20	303	P	34	50.20	-0.9
			S	34	56.80	
LPR	0.40	342	P	34	55.00	0.2
			S	35	02.20	
SJG	0.43	295	iP	34	56.00	0.5
LRS	1.11	289	P	35	07.70	0.2
S.D. = 1.0		on	4 of	4 obs.		

% FEB 27, 1990 08h 00m 53.84± 0.63s
40.706 N ± 5.8km 27.399 E ± 5.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

MFT	0.12	312	iPg	00	57.30	0.4
EDC	0.50	135	iPg	01	03.90	-0.2
			iSg	01	11.40	
BNT	0.53	131	iPg	01	04.80	0.3
KCT	0.86	122	iPg	01	10.30	-0.1
			iSg	01	22.30	
DMK	1.15	13	ePg	01	15.40	0.1
			iSg	01	29.40	
EZN	1.20	223	iPn	01	15.60	-0.6
DST	1.45	139	ePn	01	21.30	1.2
YLV	1.51	95	iPn	01	20.80	-0.2
HRT	1.73	B5	ePn	01	23.30	-0.8
S.D. = 0.7		on	9 of	9 obs.		

• FEB 27, 1990 08h 28m 25.74± 0.90s
4.382 S ±10.7km 153.775 E ± 7.6km
DEPTH = 180.2 ± 8.0 km
4.9mb (2 obs.)
NEW IRELAND REGION (190)

RAB	1.61	277	iPd-	28	58.60	-0.5
HNR	7.92	130	eP	30	19.00	0.1
PMG	8.25	232	iPc	30	24.00	0.6
	0.8s		194.03nm			5.6mb X
CTA	17.24	205	eP	32	18.00	0.6
			e	33	19.00	
OIS	21.18	219	iPd	32	58.10	0.0
DZM	21.45	146	iPd	33	01.30	0.5
			iS	33	53.40	
RMO	22.50	192	eP	33	11.00	0.1
BRS	22.90	182	iPc	33	15.30	0.5
	0.5s		14.00nm			4.8mb
			i	33	33.00	
OLP	23.89	202	eP	33	24.50	0.3
MTN	23.90	248	eP	33	26.00	1.6
WB5	24.39	229	eP	33	29.00	0.0
WRA	24.45	229	Pd	33	29.40	-0.2
	0.5s		20.00nm			5.0mb
COO	26.12	184	eP	33	44.70	-0.1
ASPA	27.12	223	iPd	33	53.20	-0.8
	0.3s		13.00nm			5.1mb X
			iPP	34	33.70	
			iPcP	36	44.10	
			iS	38	15.50	
BWA	30.30	189	eP	34	21.20	-1.0
CAN	31.10	188	eP	34	28.80	-0.4
FORR	35.75	220	iPc	35	07.60	-1.4
INK	87.72	21	eP	40	55.00	0.2
S.D. = 0.8		on	18 of	18 obs.		

FEB 27, 1990 09h 15m 26.20± 0.76s
38.060 N ± 7.3km 21.821 E ± 9.0km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 3.1 (ATH).

ITM	0.88	175	ePn	15	42.90	-0.3
VLS	0.98	277	ePn	15	45.50	0.7
ATH	1.50	93	ePn	15	54.50	1.4
VLI	1.61	146	ePn	15	53.90	-0.8
KZN	2.24	359	ePn	16	03.40	-0.6
VAY	3.31	10	ePn	16	18.60	-0.4
S.D. = 1.1		on	6 of	6 obs.		

& FEB 27, 1990 09h 27m 37.68s
55.857 N 161.526 W
DEPTH = 197.2km
ALASKA PENINSULA (12)
<PAL>.

PVV	0.51	197	ePc	28	04.02	0.6
			eS	28	23.16	
SASA	0.78	131	eP	28	05.25	-0.7
			eS	28	25.52	
DRRA	1.03	205	eP	28	06.94	-0.7
			eS	28	28.64	
IVF	1.13	87	ePd	28	07.67	-0.6
			eS	28	29.56	
4 obs. ossocioted						

FEB 27, 1990 09h 28m 54.16± 0.27s
17.159 S ± 3.2km 64.141 W ± 3.8km
DEPTH = 601.4 ± 3.4 km
5.4mb (66 obs.)
BOLIVIA (120)
CENTROID, MOMENT TENSOR (HRV)
Doto Used: GDSN
L.P.B.: 16S, 33C
Centroid Locotion:
Origin Time 09:29: 3.4 0.4
Lot 17.14S 0.04 Lon 64.09W 0.05
Dep 618.6 2.6 Holf-durotion 3.1
Moment Tensor; Scole 10**17 Nm
Mrr= 0.22 0.18 Mtt= 0.57 0.28
Mff=-0.79 0.32 Mrt= 0.16 0.31
Mrf= 7.62 0.28 Mtf= 2.54 0.26
Principol Axes:

T	Vol= 7.84	Plg=43	Azm=290
N	0.44	19	182
P	-8.28	41	75

Best Double Couple:Mo=8.1*10**17

NP1:Strike=	96	Dip=19	Slip= 4
NP2:	2	89	109

LPB	3.84	279	Pd	30	25.10	5.5X
			S	31	29.00	
ZOBO	3.92	282	iPd	30	20.20	-0.1
Z	20s		2.25um			
			iS	31	35.00	
			LR	31	42.00	
ARE	7.07	275	iPd	30	45.20	-0.6
			iS	32	15.80	
SLA	7.64	189	e(P)	30	50.00	-0.8
ANT	8.77	221	iPc+	31	01.00	-0.4
			iS	32	44.50	
CYA	11.34	187	e(P)	31	25.50	-0.9
NNA	13.32	291	iPc	31	47.00	1.1
	0.6s		366.67nm			5.8mb
			eS	34	07.00	
PT10	13.40	290	eP	31	47.50	0.0
			i	31	48.50	
			e(S)	34	12.00	
RTRS	13.83	200	ePd	31	51.60	0.9
TCA	14.12	182	e(P)	31	50.60	-3.1X
RTLL	14.65	195	ePd	31	58.90	0.2
CFA	14.86	194	iPc	32	01.00	0.2
RTCB	14.88	196	e(P)	32	01.00	0.0
ZON	14.90	195	eP	32	10.00	8.8X
			eS	34	50.00	
RTCV	15.17	194	e(P)	32	04.90	1.1
MRA	15.25	185	e(P)	32	03.00	-1.5
BAO	15.57	87	Pc	32	22.90	15.1X
JACH	16.52	199	ePc	32	17.50	0.6
FCH	17.03	198	eP	32	21.50	-0.5
SAN	17.25	199	eP	32	23.00	-0.8
			iS	35	13.00	
LCCH	17.57	201	iPc	32	25.80	-0.9
			e	35	17.00	
LNV	17.95	200	iPc	32	28.30	-2.0
			i	35	23.20	
RFA	17.96	192	ePd	32	28.80	-1.7
VC1	21.60	318	P	33	06.00	1.5
CAYA	21.89	320	P	33	08.00	0.8
OUR	22.04	319	eP	33	09.10	0.7
GGP	22.08	318	eP	33	09.60	0.7
PSO	22.39	323	eP	33	13.50	2.0
BOG	23.76	335	iPc	33	24.00	0.3
			iS	36	08.00	
BMG	25.64	339	iPd	33	37.50	-2.5
CEOS	26.35	351	eP	33	52.50	6.4X
			eS	37	47.00	
PLAV	27.06	353	iPc	33	52.40	-0.1
			eS	37	45.70	
TOV	27.35	348	eP	33	52.80	-2.0
GUAC	27.35	353	iPd	33	55.40	0.5
LLAV	27.58	354	eP	33	56.00	-0.8
			iS	37	53.70	
TBH	27.63	7	eP	33	59.49	2.3
MORO	28.15	351	iP	34	02.00	0.2
TPR	28.36	7	eP	34	05.01	1.6
CAI	28.42	71	iPd	34	04.40	0.3
GRW	29.23	5	eP	34	12.09	1.0
UPA	30.10	328	eP	34	17.50	-0.8
SVB	30.37	6	eP	34	20.91	0.3
SLB	30.94	6	eP	34	26.05	0.6
BIM	31.62	6	eP	34	31.01	-0.1
MVM	31.67	6	eP	34	31.45	-0.1
FDF	31.83	5	iPd	34	44.09	11.2X
			S	38	59.90	
CRM	31.87	6	eP	34	33.51	0.3
CPD	35.02	357	P	34	58.80	-0.6
PORP	35.08	356	P	34	59.20	-0.7
LRS	35.33	356	P	35	01.00	-1.0
OXX	46.77	315	(P)	36	34.00	1.0
PPM	49.45	315	(P)	36	54.50	1.2
HBF	52.17	343	P	37	11.70	-0.6
SGS	52.45	343	P	37	13.80	-0.5
JSC	53.68	342	P	37	21.90	-1.1
PRM	53.83	341	iP	37	22.80	-1.2
			eS	44	10.00	
TKL	55.73	341	P	37	35.40	-1.8
GBTN	55.87	340	P	37	46.60	8.4X
MBO	56.14	59	eP	37	40.00	-0.3
BLA	56.21	344	P	37	40.20	-0.4
	1.0s		140.00nm			5.2mb
RSCP	56.27	339	P	37	38.60	-2.4
NAV	56.41	344	P	37	41.30	-0.6
NA2	56.46	347	P	37	41.50	-0.6
			pP	38	29.40	212kmX
CVL	56.47	346	P	37	41.80	-0.4
			pP	38	29.30	210kmX
PWLA	56.61	336	P	37	41.10	-2.1
OLY	58.43	334	P	37	52.80	-2.8X
LVNJ	58.51	351	P	37	55.40	-0.6
TBR	58.75	351	P	37	57.00	-0.6
POW	58.87	335	P	37	56.20	-2.2
FVM	60.15	336	iPc	38	04.60	-2.3
			iS	45	27.50	
CLE	60.53	345	iP	38	08.60	-0.7
RLO	60.55	332	iPc	38	09.40	-0.1
			i	38	46.50	
			e	45	37.00	
TUL	60.69	331	iPc	38	09.40	-1.1
	0.8s		135.60nm			5.3mb
Z	23s		0.61um			4.7MszX
			e	45	37.80	
			LR	52	35.00	
SIO	60.80	330	iPc	38	10.10	-1.1
MEO	61.15	328	iPc	38	11.50	-2.0
EMM	61.67	357	P	38	15.90	-0.7
HBVT	61.76	353	P	38	17.40	0.2
BNH	61.79	354	P	38	17.70	0.3
DLA	61.84	346	P	38	16.20	-1.5
WNY	61.89	352	P	38	18.00	-0.1
LDN	61.92	346	P	38	17.00	-1.2

ELF	62.09	346	P	38	18.00	-1.4	EVAL	76.63	43	eP	39	47.00	1.5	PGC	84.02	325	ePc	40	24.10	0.9
RSNY	62.13	352	P	38	19.00	-0.6	POF	76.76	117	iPc	39	46.00	-0.5		0.8s	174.00nm				5.7mb
	0.8s	235.04nm				5.6mb		0.6s	36.67nm				5.0mb	EPF	84.11	42	eP	40	24.40	0.5
MIM	62.26	356	P	38	20.10	-0.2				S	41	13.50			0.8s	34.90nm				5.0mb
KIC	63.16	73	P	38	25.90	-0.9	EJIF	76.86	45	eP	39	48.50	1.7	BCAO	84.32	84	iPd	40	24.90	-0.6
			S	46	09.20		PCC	77.14	316	eP	39	49.20	0.9		0.5s	58.00nm				5.5mb
LKO	63.66	70	P	38	28.22	-1.7	BKS	77.26	316	iPc	39	50.20	1.3				ic	42	14.20	
	0.5s	337.50nm				6.0mb		0.9s	167.00nm				5.5mb				ic	43	48.40	
CBM	63.89	357	iPc	38	30.00	-0.7				e(PP)	42	54.00		SLR	84.83	115	iPd	40	25.50	-2.4
			eS	46	18.70					eS	48	54.00			0.9s	63.03nm				5.2mb
ALQ	65.57	323	iPd	38	41.30	-0.4	BRK	77.27	316	eP	39	49.00	0.1				i	42	39.00	
	1.4s	290.70nm				5.5mb	EPRU	77.30	45	eP	39	49.00	-0.2	LFF	85.31	40	eP	40	28.80	-0.7
			pP	39	32.00	218kmX	ORV	77.72	318	eP	39	52.00	0.7		0.5s	28.45nm				5.2mb
			sP	41	07.20					eS	48	56.10		LPO	85.46	41	eP	40	29.40	-0.9
ANMO	65.57	323	iPc	38	41.30	-0.4	MAL	77.73	45	iPd	39	52.60	1.2		0.6s	9.00nm				4.6mb
	0.7s	82.19nm				5.3mb	EHOR	77.75	44	eP	39	52.50	1.0	MFF	85.60	38	eP	40	29.90	-1.0
			e	39	31.00		NWRM	78.00	317	P	39	53.90	1.1		0.6s	46.90nm				5.4mb
			ePP	41	07.50		EZAM	78.04	39	eP	39	54.00	1.0	LPF	85.81	37	eP	40	30.50	-1.4
			e	46	43.00		ATEJ	78.09	45	iPd	39	54.41	0.8		0.6s	37.90nm				5.3mb
GLD	68.35	327	P	38	58.60	0.0	ALOJ	78.14	45	iPd	39	55.03	1.3	RJF	85.96	40	eP	40	31.70	-1.0
			pP	39	48.30	211kmX	AAPN	78.23	45	iPd	39	55.48	1.3	GRR	86.10	37	eP	40	31.90	-1.4
GOL	68.40	327	P	38	57.00	-2.0	MIN	78.23	319	eP	39	53.60	-0.6		0.6s	48.70nm				5.4mb
GLA	69.54	316	eP	39	05.00	-0.6	ACHM	78.32	45	iPd	39	55.71	1.1	CAF	86.12	41	eP	40	32.60	-0.9
PV09	69.59	324	ePd	39	05.60	-0.5	APHE	78.34	45	iPd	39	55.85	1.0		0.5s	13.85nm				4.9mb
			e	39	14.50		EPLA	78.45	42	eP	39	56.50	1.3	LSF	86.43	39	eP	40	34.00	-0.9
			eS	47	29.50		LTCM	78.48	318	P	39	54.80	-0.5	FLN	86.51	36	eP	40	34.00	-1.2
BAR	70.55	315	eP	39	11.00	-0.5	FFC	78.51	339	iPc	39	54.70	-0.5		1.3s	155.25nm				5.6mb
			e	40	03.00			0.7s	66.00nm				5.2mb	LDF	86.63	37	eP	40	34.70	-1.1
TPC	70.99	316	eP	39	14.00	0.0	ASMO	78.51	45	iPd	39	56.50	0.8		1.1s	148.95nm				5.6mb
			e	40	06.00		AFC	78.59	45	eP	39	57.00	0.8	BUL	86.72	110	iPd	40	33.30	-3.8X
RSSD	71.04	331	P	39	13.40	-0.9	SES	78.88	332	eP	39	57.00	-0.2		0.6s	26.67nm				5.1mb
PLM	71.08	315	eP	39	15.00	0.2		0.8s	122.00nm				5.4mb				iPP	42	46.10	
MSU	71.35	322	P	39	16.50	0.2	EBAN	78.91	44	eP	39	58.50	0.9				iSKS	50	04.20	
PEC	71.60	316	P	39	17.60	0.0	WDC	78.95	319	eP	39	56.50	-1.3	TCF	86.87	40	eP	40	35.70	-1.3
	0.8s	45.45nm				5.1mb				eS	49	03.40		MAF	87.05	40	eP	40	36.70	-1.2
SCH	71.72	358	ePd	39	16.60	-1.2	LBFM	78.98	320	P	39	57.80	-0.4		0.7s	18.75nm				4.9mb
	0.7s	198.00nm				5.8mb	ERUA	79.12	39	eP	40	00.00	1.4	BGF	87.38	39	eP	40	38.30	-1.1
RVR	71.80	316	eP	39	19.00	0.3	TBI	79.21	249	iP	40	02.00	2.5X	AVF	87.80	39	eP	40	39.90	-1.4
			e	40	12.00			0.9s	55.00nm				5.0mb		1.3s	99.30nm				5.5mb
DAU	72.09	324	P	39	20.80	0.1	RUV	79.34	257	iP	40	02.10	1.9	SSF	88.02	39	eP	40	40.90	-1.4
GSC	72.21	317	eP	39	21.00	-0.1		0.8s	20.00nm				4.6mb	SMF	88.03	40	eP	40	41.30	-1.1
MWC	72.40	315	eP	39	23.00	0.6	ENIJ	79.35	46	eP	40	00.00	0.1	LRG	88.20	43	eP	40	41.90	-1.3
PAS	72.43	315	eP	39	23.00	0.7	VAH	79.56	257	iP	40	02.90	1.5		1.5s	219.35nm				5.8mb
SBB	72.51	316	eP	39	23.00	0.1		0.8s	30.00nm				4.8mb	LMR	88.24	44	eP	40	41.70	-1.7
RSON	72.53	341	P	39	21.40	-1.1	EMON	79.61	38	eP	40	02.00	0.8		1.5s	229.80nm				5.8mb
	0.7s	100.35nm				5.5mb	TPT	79.61	257	iP	40	03.40	1.7	LBF	88.27	39	eP	40	42.00	-1.5
TIO	72.60	49	iPd	39	24.50	1.0		0.8s	50.00nm				5.0mb	LOR	88.33	39	eP	40	42.40	-1.4
BW06	72.80	327	eP	39	23.40	-1.1	TOL	79.66	43	iPd	40	03.00	1.5		0.5s	22.80nm				5.3mb
	0.7s	111.11nm				5.5mb		1.8s	1590.91nm				6.1mb	FRF	88.43	43	eP	40	42.70	-1.6
			e	40	12.00		PMO	79.87	257	iP	40	04.80	1.8		1.5s	167.15nm				5.7mb
			iS	48	00.20			0.8s	40.00nm				4.9mb	EKA	88.60	30	P	40	45.00	0.2
DUG	72.84	323	P	39	24.40	-0.3	FHC	79.99	318	eP	40	04.10	0.9		1.4s	97.30nm				5.5mb
SPA	72.95	180	eP	39	24.50	-0.5	GUD	80.00	42	eP	40	04.50	1.1	SBF	89.08	43	eP	40	45.60	-1.8
	0.8s	39.17nm				5.0mb	EVIA	80.02	44	eP	40	04.00	0.5		1.4s	165.55nm				5.8mb
CLC	73.03	317	eP	39	26.00	0.2	NEW	80.41	327	ePd	40	04.60	-0.6	LPG	89.33	42	eP	40	48.60	-0.2
ISA	73.51	316	eP	39	30.00	1.5		0.6s	37.40nm				5.0mb		1.0s	36.00nm				5.3mb
			e	40	21.00					eS	49	20.50		DIX	90.00	41	ePc	40	52.50	0.7
ABL	73.54	315	P	39	29.70	0.8	FR8	80.72	358	eP	40	05.00	-1.3	DOU	90.06	37	P	40	51.80	0.2
AVE	73.80	47	iPd	39	31.50	1.5		0.8s	90.00nm				5.3mb	SNF	90.07	36	P	40	51.80	0.2
			i	40	18.50		VGB	80.72	323	P	40	08.30	1.4	HAU	90.16	39	eP	40	50.80	-1.4
SYP	73.87	315	eP	39	31.00	0.4	HVD	81.16	119	iPd	39	58.50	-11.2X	MMK	90.33	42	ePc	40	54.10	0.8
TNP	74.15	319	P	39	32.40	0.2		0.5s	119.72nm					BSF	90.36	40	eP	40	51.70	-1.5
	0.8s	67.65nm				5.2mb	ETOR	81.44	43	eP	40	12.00	1.3	VAI	90.77	42	P	40	54.50	-0.4
BLP	74.18	314	P	39	33.20	1.1	EDM	81.88	333	eP	40	11.00	-1.5	CDF	90.90	39	eP	40	54.20	-1.4
IMW	74.30	327	P	39	32.40	-0.6		0.5s	189.00nm				5.9mb		1.3s	65.00nm				5.5mb
BCH	74.31	315	ePc	39	33.60	0.6	SHW	81.95	323	P	40	13.80	0.6	TMA	90.93	42	ePc	40	55.80	-0.2
			e	45	00.30		ECRI	82.09	41	eP	40	04.80	-9.1X	MEM	91.10	37	P	40	56.60	0.3
			eS	48	23.00		PNT	82.36	327	ePc	40	09.00	-6.0X	RUP	91.32	38	eP	40	57.79	0.3
PTI	74.37	325	P	39	33.40	0.2		0.7s	126.00nm				5.6mb	SLE	91.37	40	ePc	40	57.90	0.1
FRI	75.10	317	eP	39	36.40	-0.7	BMW	82.67	323	P	40	06.70	-10.0X	VDL	91.47	42	ePc	40	58.60	0.1
PRI	75.24	316	eP	39	38.50	0.4	GMW	83.03	324	P	40	18.00	-0.4	ABH	91.68	38	eP	40	59.20	0.1
			eS	48	32.10		EROO	83.06	44	eP	40	20.00	1.3	OSS	91.97	42	ePc	41	00.90	0.2
KVN	75.28	319	P	39	38.10	-0.3	EBR	83.11	44	eP	40	20.00	1.1	CRE	91.99	45	P	41	01.00	0.2
IFR	75.52	48	iPd	39	41.00	1.2	BFS	83.22	116	iPd	40	19.00	-1.0	TNS	92.35	38	ePd	41	02.30	0.1
			i	40	30.00			0.6s	253.33nm				5.9mb	OGA	92.60	42	iPd	41	04.00	0.3
LLA	75.70	316	eP	39	40.90	0.4				i	42	30.00			1.7s	155.00nm				5.8mb
LIS	75.73	41	iPc	39	42.20	1.6	BOH	83.29	41	P	40	21.71	1.8	CTI	92.69	43	P	41	03.50	-0.5
PRS	75.82	316	ePc	39	41.50	0.3	ELYF	83.34	41	P	40	21.04	1.0	FVI	93.62	42	P	41	08.00	0.0
			eS	48	36.30		ISSF	83.39	41	P	40	22.08	1.7	GRF	93.79	39	iPd	41	09.10	0.3
CMB	76.14	317	eP	39	43.10	0.2	LHE	83.44	41	P	40	22.45	1.8		1.5s	73.00nm				5.6mb
			eS	48	37.20		ATE	83.48	41	P	40	22.32	1.6	R8L	94.08	43	Pc	41	11.00	0.7
NKM	76.36	46	iPd	39	46.00	1.9	ESCF	83.55	41	P	40	22.84	1.7	BHG	94.09	41	iPc	41	10.50	0.3
LRM	76.40	328	ePc	39	44.30	-0.1	KSR	83.59	115	iPd	40	20.70	-1.3		1.9s	142.00nm				5.9mb
ARN	76.50	316	P	39	45.60	0.7		1.1s	97.30nm				5.3mb	KBA	94.16	42	iPKPd	41	10.30	-0.5
MHC	76.57	316	eP	39	45.90	0.5	PRY	83.80	116	iPc	40	22.50	-0.4		0.6s	14.40nm				5.4mb
			eS	48	46.20			0.7s	10.00nm				4.5mb				e	45	01.00	
GCC	76.63	316	eP	39	46.00	0.5				i	42	33.50		MOX	94.38	38	ePc	41	12.00	0.6

27d 09h

	1.2s	48.00nm			5.6mb	
WET	94.60	40 iPc	41	13.00	0.5	
	1.6s	86.00nm			5.7mb	
KHC	95.02	40 P	41	14.10	-0.3	
	1.4s	22.00nm			5.2mb	
CLL	95.44	38 iPc	41	16.80	0.7	
	1.8s	80.00nm			5.6mb	
BRG	95.84	39 iP	41	18.00	0.0	
	1.6s	56.00nm			5.5mb	
PRU	95.90	40 P	41	18.50	0.2	
	1.8s	87.50nm			5.7mb	
ZST	96.92	42 eP	41	22.80	-0.1	
		e	44	36.90		
KSP	97.24	39 eP	41	24.00	-0.3	
OHR	97.37	49 eP	41	08.80	-16.5X	
SKO	98.07	49 eP	41	28.50	0.1	
		e	45	28.50		
		iS	51	06.00		
INK	98.45	339 ePc	41	28.90	-0.6	
VAY	98.72	50 eP	41	38.00	6.8X	
		e	45	36.00		
		iS	51	09.09		
MBC	98.87	349 ePd	41	31.50	0.3	
	0.6s	26.00nm			5.8mb	
KRA	99.24	41 eP	41	33.40	0.1	
	0.6s	25.00nm			5.8mb	
		e	41	44.60		
TOA	101.33	332 ePdiff	41	43.10	0.6	
PMR	102.57	331 ePdiff	41	47.20	-0.7	
FBA	102.72	334 ePdiff	41	50.20	1.7	
IMA	105.34	335 ePdiff	42	00.80	0.5	
	0.7s	2.10nm			5.1mb	
RMQ	126.11	217 iPKPd	46	51.30	0.2	
	0.9s	46.00nm				
MAIO	126.91	57 ePKP	46	52.00	-0.5	
ASPA	135.76	204 iPKP	47	08.60	-1.0	
	0.9s	29.00nm				
WRA	138.90	207 PKP	47	07.00	-8.4X	
	0.4s	1.40nm				
WB5	138.95	207 ePKP	47	05.80	-9.7X	
		i	47	15.20		
		iS	49	52.00		
PMG	139.33	232 ePKP	47	07.50	-8.8X	
POO	140.05	81 ePKP	47	12.00	-5.5X	
MBL	141.72	186 ePKP	47	14.50	-5.9X	
KOD	142.12	95 ePKP	47	13.00	-8.6X	
NDI	142.76	65 ePKPd	47	18.70	-3.3X	
GBA	142.83	90 PKPd	47	17.60	-4.8X	
	0.4s	65.30nm				
WMQ	144.33	36 iPKPd	47	24.50	0.2	
		SKKS	56	36.70		
KUSJ	144.39	323 PKP	47	22.50	-1.7	
HYB	144.41	84 iPKPd	47	24.20	-0.9	
	1.0s	445.00nm				
		e	47	41.50		
		i	50	06.00		
ASAJ	144.90	326 ePKP	47	25.30	0.2	
KNA	144.91	202 iPKPc	47	25.20	-0.7	
HOOJ	145.65	323 ePKP	47	27.00	0.6	
MTN	146.59	208 ePKP	47	28.70	0.1	
MRRJ	146.88	325 ePKP	47	31.10	2.8X	
OFUJ	148.65	319 ePKP	47	31.70	0.5	
GKN	149.30	64 PKP	47	32.80	0.0	
DMN	149.80	64 PKP	47	33.60	-0.1	
KKN	149.91	64 PKP	47	33.80	0.0	
PKI	150.07	64 PKP	47	33.40	-0.8	
YAMJ	150.21	319 ePKP	47	38.00	4.4X	
MDJ	150.29	340 ePKP	47	33.50	0.0	
GUN	150.39	64 PKP	47	34.60	-0.1	
KAKJ	151.29	316 PKP	47	41.80	6.5X	
GUA	151.77	267 ePKP	47	43.20	6.7X	
	0.9s	302.52nm				
GUMO	151.82	267 ePKP	47	42.50	5.9X	
	0.8s	240.12nm				
PJG	151.82	267 ePKP	47	42.60	6.0	
CN2	152.23	345 ePKP	47	36.00	-0.4	
		e	47	56.40		
MAT	152.36	319 ePKP	47	37.00	0.1	
	1.0s	19.00nm				
MTMJ	152.59	319 PKP	47	44.70	7.4X	
GTA	153.79	29 PKPd	47	39.20	0.3	
		SKKS	57	27.40		
SNY	154.54	346 ePKP	47	39.80	0.2	
HHC	156.10	8 PKP	47	43.50	1.6	
BJI	157.20	359 ePKP	47	44.00	0.9	
		e	48	17.50		
DL2	157.75	348 ePKP	47	44.00	0.3	
		e	48	20.90		
TIY	159.30	8 PKPc	47	47.00	1.4	
		e	48	28.00		
TIA	160.99	357 PKPd	47	48.50	1.2	
		e	48	34.40		
XAN	162.07	19 PKP	47	49.00	0.5	
		e	48	39.90		
CHG	163.82	82 ePKPd	47	51.00	0.4	
	1.0s	12.25nm				
NJ2	164.93	350 PKPc	47	52.00	0.9	
		e	48	52.00		
SSE	165.30	342 PKP	47	52.00	0.5	
WHN	166.60	6 PKPd	47	53.50	1.0	
		e	48	59.50		

S.D. = 1.1 on 282 of 312 obs.

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* FEB 27, 1990 10h 04m 33.04± 0.71s
31.357 N ± 9.3km 86.870 E ±11.7km
DEPTH = 33.0km (normal)
4.1mb (4 obs.)
TIBET (306)

GUN	3.54	194 P		05	28.40	1.0
KKN	3.81	202 P		05	32.20	1.1
	0.4s	20.00nm				
GKN	3.87	211 P		05	32.80	1.0
	0.4s	14.00nm				
PKI	3.98	199 P		05	34.20	0.6
	0.4s	18.00nm				
DMN	4.04	203 P		05	35.20	0.8
	0.4s	22.00nm				
NDI	8.78	255 eP		06	40.00	-0.7
		eS		08	15.00	
CHTO	16.58	136 eP		08	23.00	-1.7
	1.0s	3.00nm			3.4mb	
GBA	19.68	208 Pc		09	00.40	-2.0
	0.7s	3.80nm			3.8mb	
BJI	25.24	62 eP		10	00.00	2.6
NB2	56.25	325 P		14	10.40	-1.9
	0.9s	2.90nm			4.3mb	
WB5	68.35	132 eP		15	32.10	-1.4
WRA	68.38	132 Pc		15	32.40	-1.3
	0.6s	1.80nm			4.3mb	
MBC	71.39	6 eP		15	52.50	1.3
INK	76.21	14 eP		16	20.00	0.7
LKO	87.19	279 P		17	17.54	-0.1

S.D. = 1.5 on 15 of 15 obs.

? FEB 27, 1990 10h 14m 50.41± 3.61s
61.121 N ±11.7km 2.484 E ±29.6km
DEPTH = 10.0km (geophysicist)
NORWEGIAN SEA (642)

SUE	1.11	92 iPd		15	11.46	0.3
		iS		15	25.48	
ASK	1.48	115 iPc		15	17.17	0.2
		iS		15	33.82	
HYA	1.80	87 iPd		15	21.24	-0.4
		eS		15	42.03	
KMY	2.36	143 iPd		15	30.03	0.3
		iS		15	53.93	
ODD1	2.38	119 ePc		15	29.99	-0.1
		eS		15	51.47	
BLS1	2.77	127 iPc		15	35.48	-0.3
		iS		16	00.57	
MOL	2.81	57 iPc		15	36.23	0.1
		iS		16	06.26	

S.D. = 0.3 on 7 of 7 obs.

FEB 27, 1990 11h 24m 37.30± 0.77s
38.130 N ± 7.1km 22.080 E ± 8.6km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 3.1 (ATH).

ITM	0.96	187 ePg		24	54.90	-0.6
VLS	1.18	273 ePb		24	57.60	-1.7
ATH	1.30	96 ePb		25	02.00	0.6
NEO	1.48	37 ePb		25	03.10	-0.8
VLI	1.57	154 ePb		25	06.10	0.9
KZN	2.19	354 ePb		25	14.90	0.6
KEK	2.38	312 ePg		25	19.50	2.5
PLG	2.48	25 ePn		25	16.30	-2.1
OHR	3.14	342 ePn		25	34.50	6.8X
VAM	3.21	147 ePb		25	33.60	4.9X
VAY	3.21	7 ePn		25	29.30	0.6
SKO	3.87	353 ePn		25	38.00	-0.1

S.D. = 1.5 on 10 of 12 obs.

FEB 27, 1990 12h 33m 03.14± 0.47s
51.296 N ±12.0km 175.276 W ± 4.6km
DEPTH = 33.0km (normal)
4.9mb (10 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS. (7)

ADK	1.06	304 iPd		33	22.90	1.3
KDC	14.68	55 eP		36	35.30	5.4X
TTA	15.58	34 ePc		36	47.30	5.6X
IMA	18.42	28 eP		37	18.90	1.6
	0.8s	7.70nm			3.9mb	
TOA	19.11	44 eP		37	25.40	-0.3
FBA	19.68	36 eP		37	29.40	-2.7X
INK	26.28	34 eP		38	36.00	-0.7
MBC	32.87	21 eP		39	35.00	-0.4
	0.5s	4.00nm			4.6mb	
PNT	34.88	71 eP		39	53.00	-0.2
MAT	35.97	264 iPc		40	02.60	0.1
	0.9s	11.76nm			4.8mb	
NEW	36.83	71 eP		40	09.50	-0.2
EDM	36.91	62 iPc		40	10.80	0.5
	0.5s	16.00nm			5.1mb	
CN2	39.73	283 Pc		40	33.20	-0.7
KVN	41.12	84 eP		40	46.00	0.4
SNY	41.96	282 eP		40	53.20	1.0
FFC	42.38	56 iPd		40	55.50	0.0
	0.5s	5.00nm			4.5mb	
DL2	44.89	280 eP		41	16.80	0.8
BJI	47.54	284 eP		41	37.00	0.0
	1.0s	12.00nm			4.9mb	
GOL	48.58	75 eP		41	45.50	0.1
RSON	48.67	57 eP		41	44.30	-1.4
ANMO	50.94	81 eP		42	05.00	1.6
TIY	51.28	284 eP		42	06.50	0.7
XAN	55.84	283 P		42	38.00	-1.5
LZH	57.52	289 P		42	51.00	-0.6
	1.5s	42.00nm			5.3mb	
GTA	57.64	294 P		42	51.00	-1.3
WMQ	61.22	305 P		43	16.00	-1.0
		pP		43	28.50	44kmX
CVL	65.29	60 eP		43	43.50	-0.2
NB2	67.90	357 P		43	58.60	-1.3
	0.5s	1.30nm			4.3mb	
GUN	73.92	294 P		44	37.00	-0.1
KKN	74.35	295 P		44	40.00	0.6
	0.8s	45.00nm			5.5mb	
PKI	74.45	295 P		44	40.40	0.3
GKN	74.56	295 P		44	40.80	0.3
DMN	74.59	295 P		44	41.40	0.5
	0.8s	37.00nm			5.4mb	
HYB	86.30	293 eP		45	43.00	0.0
BUL	143.69	320 iPKPc		52	31.20	-5.2X
	0.8s	4.85nm				
SLR	148.78	316 ePKP		52	47.00	2.3X

S.D. = 0.8 on 31 of 36 obs.

% FEB 27, 1990 13h 16m 12.52± 0.83s
40.443 N ±11.8km 15.289 E ±14.9km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

SGO	0.12	7 Pd		16	15.20	-0.2
		eSg		16	19.70	
MGR	0.37	146 Pd		16	19.60	-0.5
		eSg		16	25.80	
BSS	0.51	314 Pd		16	22.20	-0.6
		eSg		16	30.10	
TDS	1.12	134 P		16	34.00	0.4
		eSg		16	50.00	
SDI	1.68	319 P		16	43.00	0.8

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

? FEB 27, 1990 13h 16m 14.39± 8.99s
8.641 S ±86.8km 126.669 E ±20.7km
DEPTH = 188.2 ± 46.4 km
4.5mb (1 obs.)
TIMOR (289)

MTN	6.06	134 eP		17	43.00	0.0
		eS		18	46.00	
KNA	7.36	164 iPc		18	00.20	0.0
		eS		19	20.00	
WB5	13.43	147 iPc		19	18.80	0.0
		eS		21	41.20	
WRA	13.47	147 Pc		19	19.30	0.0

0.3s 5.80nm 4.5mb
MBL 14.08 207 eP 19 27.00 0.0
eS 21 57.00
S.D. = 0.0 on 5 of 5 obs.

& FEB 27, 1990 13h 23m 22.00s
33.953 N 106.588 W
DEPTH = 5.0km (geophysicist)
NEW MEXICO (496)
<SNM>. MD 3.9 (SNM). Felt (IV) ot Socorro ond (III) ot San Antonio.

CRNM 0.12 270 P 23 24.65 0:0
BNM 0.19 350 P 23 25.90 -0.1
SNM 0.32 292 P 23 28.35 -0.1
LENM 0.38 304 P 23 28.75 -1.0
SMNM 0.40 244 P 23 29.90 -0.1
SBM 0.49 273 P 23 31.70 -0.2
LAZ 0.64 315 P 23 34.40 -0.4
BMNM 0.64 300 P 23 34.50 -0.4
ALQ 0.99 6 iPd 23 40.20 -1.2
ANMO 1.00 6 iPc 23 40.50 -1.0
PV09 4.98 336 eP 24 38.00 -1.5
GOL 5.82 9 e(P) 24 50.00 -1.3
e 25 06.50
GLD 5.89 10 e(P) 24 52.00 -0.2
MSU 6.41 317 e(P) 25 00.00 0.4
MEO 6.67 81 eP 25 04.50 1.4
GLA 6.94 265 eP 25 05.00 -1.9
e 25 30.00
e 27 00.00
TPC 7.86 274 eP 25 37.00 17.3
e 27 29.00
GSC 8.53 282 eP 26 00.00 30.8
e 27 54.00
BAR 8.53 264 eP 25 30.00 0.8
e 26 04.00
e 27 51.00
SIO 8.64 75 e(P) 26 02.60 32.0
TUL 9.08 75 eP 26 06.00 29.3
0.9s 9.90nm
eLg 28 06.30
CLC 9.23 285 eP 26 18.00 39.1
e 28 14.00
SBB 9.32 278 eP 25 57.00 16.9
e 28 17.00
TNP 9.54 299 e(P) 25 50.00 6.7
RLO 9.73 74 eP 26 18.00 32.3
eLg 28 27.80
UYO 10.07 85 e(P) 26 01.00 10.7
KVN 10.57 302 e(P) 26 00.00 2.6
27 obs. associated

% FEB 27, 1990 13h 27m 08.56± 1.35s
40.766 N ± 6.8km 27.729 E ±13.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

EDC 0.43 166 iPg 27 17.40 0.0
iSg 27 24.40
KCT 0.70 137 iPg 27 22.40 -0.1
iSg 27 33.90
DMK 1.05 1 ePg 27 28.40 0.0
iSg 27 41.50
YLV 1.27 99 ePn 27 32.00 -0.1
DST 1.35 149 iPn 27 36.30 2.9X
HRT 1.47 87 ePn 27 35.40 0.2
S.D. = 0.2 on 5 of 6 obs.

? FEB 27, 1990 13h 55m 43.85± 9.82s
17.726 N ±42.4km 65.508 W ±52.1km
DEPTH = 10.0km (geophysicist)
PUERTO RICO REGION (90)

CPD 0.50 309 P 55 54.00 0.1
LPR 0.67 329 P 55 57.30 0.0
SJG 0.72 302 iP 55 57.90 -0.2
S 56 03.10
PORP 1.12 287 P 56 05.00 0.1
S.D. = 0.2 on 4 of 4 obs.

• FEB 27, 1990 14h 19m 30.29± 0.46s
10.291 N ± 7.6km 126.970 E ±14.9km
DEPTH = 33.0km (normal)
4.8mb (8 obs.)
PHILIPPINE ISLANDS REGION (248)

SSE 21.39 346 eP 24 19.80 2.5
E 10s 0.20um
NJ2 22.92 342 Pc 24 34.00 1.5
TPI 23.19 237 ePc 24 36.00 0.7
e 25 00.00
WHN 23.33 332 eP 24 37.50 1.1
MTN 23.35 170 eP 24 38.00 1.2
IPM 26.33 259 ePd 25 05.10 -0.2
1.1s 33.40nm 4.9mb
XAN 28.85 328 P 25 26.00 -2.0
TIY 30.28 337 eP 25 40.30 -0.4
WB5 30.85 166 eP 25 44.10 -1.8
WRA 30.91 166 Pc 25 43.80 -2.6
0.8s 5.10nm 4.4mb
BJI 31.14 344 eP 25 47.00 -1.2
SNY 31.55 355 eP 25 50.40 -1.4
QIS 33.08 158 iPd 26 04.80 -0.5
0.9s 34.00nm 5.2mb
LZH 33.16 324 eP 26 06.00 -0.1
1.5s 42.00nm 5.1mb
pP 26 16.00 35kmX
CN2 33.41 358 Pc 26 07.20 -0.8
MDJ 34.28 3 eP 26 15.00 -0.4
epP 26 26.50 42kmX
GTA 37.76 325 P 26 44.60 -0.6
BRS 45.04 147 iPc 27 44.30 -0.7
0.8s 3.00nm 4.2mb
ADE 46.36 167 iPd 27 56.50 1.2
0.8s 40.30nm 5.4mb
WMQ 47.63 322 P 28 05.00 -0.3
sP 28 15.70
GBA 48.51 279 Pc 28 09.60 -2.8X
1.0s 7.00nm 4.6mb
BWA 48.91 156 eP 28 17.20 2.0
CAN 49.92 156 eP 28 23.90 0.9
MBC 85.54 13 eP 32 07.50 1.6
0.7s 4.00nm 4.7mb
pP 32 18.00 33kmX
PRNI 86.56 300 eP 32 12.00 0.1
MBH 86.76 300 iPc 32 13.00 0.2
S.D. = 1.3 on 25 of 26 obs.

% FEB 27, 1990 14h 31m 25.41± 1.67s
33.949 S ±19.7km 71.182 W ±10.7km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

LNV 0.19 268 iPd 31 31.90 0.0
iS 31 39.00
LCCH 0.57 326 iPd 31 37.00 0.0
iS 31 49.20
SAN 0.66 41 eP 31 38.20 -0.1
iS 31 52.30
FCH 0.97 50 iPd 31 43.00 0.0
iS 31 59.00
JACH 1.36 21 ePc 31 48.40 0.1
S.D. = 0.1 on 5 of 5 obs.

? FEB 27, 1990 14h 54m 08.07± 3.26s
8.336 S ±21.6km 130.236 E ±15.0km
DEPTH = 135.5 ± 39.9 km
4.7mb (4 obs.)
TANIMBAR ISLANDS REGION (281)

MTN 4.57 169 eP 55 17.00 0.6
KNA 7.51 191 eP 55 56.00 -0.2
eS 57 22.00
WB5 12.15 161 eP 56 57.20 -0.7
i 57 01.00
eS 59 12.00
WRA 12.21 161 Pc 56 58.00 -0.5
0.7s 10.60nm 4.5mb
PCI 12.72 305 ePc 57 09.50 4.3X
QIS 15.15 144 eP 57 37.50 1.2
eS 00 16.00
MBL 16.23 217 eP 57 49.00 -0.6
eS 00 40.00
PMG 16.75 95 eP 58 00.50 4.4X
CTA 19.41 129 eP 58 38.00 11.8X
e(S) 01 43.00
MRWA 24.71 211 eP 59 36.70 18.5X
CAN 31.88 150 eP 00 36.80 14.3X
CHG 40.99 311 eP 01 40.00 0.6
CHTO 40.99 311 eP 01 40.00 0.6
1.0s 3.25nm 4.0mb
BJI 49.86 346 eP 02 47.00 -2.3
GUN 56.01 312 P 03 35.80 0.4

0.6s 9.00nm 4.9mb
PKI 56.17 311 P 03 36.60 0.0
KKN 56.38 311 P 03 38.20 0.2
DMN 56.42 311 P 03 38.70 0.4
GKN 56.98 311 P 03 42.40 0.3
0.4s 6.00nm 4.9mb
LPB 149.35 144 PKPd 13 38.00 -1.2X
ZOBO 149.54 143 PKPc 13 54.00 14.3X
1.1s 6.38nm
CCH 149.75 148 ePKP 13 55.00 15.3X
S.D. = 1.0 on 14 of 22 obs.

FEB 27, 1990 15h 55m 38.27± 0.33s
9.823 N ± 5.0km 124.803 E ± 7.5km
DEPTH = 33.0km (normal)
5.0mb (7 obs.) 4.3Msz (4 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV 2.82 164 eP 56 22.00 0.0
PGP 5.25 314 ePc 56 58.80 2.3
1.0s 126.00nm 5.4mb X
PPR 5.98 270 iPd 57 06.00 -0.9
QCP 6.01 323 eP 57 05.00 -2.3
BAG 7.73 328 eP 57 31.00 -0.6
MNI 8.33 180 e(P) 57 42.10 2.4
PCI 11.75 205 ePc 58 39.00 12.4X
QIZ 17.12 304 eP 59 33.50 -3.3X
E 15s 1.49um
GUMO 20.00 77 eP 00 18.60 7.5X
Z 19s 0.37um
eS 04 08.00
GUA 20.03 77 eP 00 18.80 7.3X
SSE 21.43 351 Pc 00 26.50 0.8
Z 16s 0.40um 3.9MszX
E 10s 0.50um
eS 04 18.00
sS 04 32.00
NJ2 22.80 347 Pd 00 40.50 1.3
WHN 22.80 336 eP 00 41.50 2.2
Z 20s 1.30um 4.4Msz
N 15s 0.80um
MTN 23.38 164 eP 00 44.00 -1.1
SNG 24.06 266 eP 00 52.00 0.3
IPM 24.15 259 ePd 00 53.90 1.3
1.2s 74.00nm 5.1mb
e 01 03.80
KMI 25.91 309 eP 01 12.00 2.5
CHG 26.57 293 eP 01 13.50 -1.9
CHTO 26.57 293 e(P) 01 14.00 -1.4
1.0s 3.00nm 3.9mb X
TIA 27.18 346 eP 01 20.90 0.1
XAN 28.17 331 P 01 29.50 -0.3
CD2 28.69 320 eP 01 33.60 -1.0
DL2 29.10 355 eP 01 37.80 -0.2
TIY 29.92 340 eP 01 45.40 -0.2
WB5 30.98 162 eP 01 52.70 -2.3
WRA 31.03 162 P 01 56.00 0.5
0.4s 1.80nm 4.2mb
BJI 31.06 347 eP 01 55.50 0.1
1.5s 52.00nm 5.1mb
SNY 31.90 358 iPd 02 03.20 0.4
Z 19s 0.50um 4.2Msz
LZH 32.34 327 iPd 02 08.00 1.0
1.5s 83.00nm 5.4mb
Z 20s 0.60um 4.3Msz
pP 02 15.00 24kmX
QIS 33.52 154 ePc 02 16.00 -1.1
CN2 33.85 1 eP 02 18.60 -1.2
Z 18s 0.50um 4.3Msz
pP 02 28.00 32kmX
MDJ 34.91 6 eP 02 29.00 0.1
GTA 36.95 327 Pd 02 47.40 1.1
GUN 40.76 302 P 03 18.80 0.3
0.4s 13.00nm 5.0mb
PKI 41.05 301 P 03 20.40 -0.5
KKN 41.23 301 P 03 22.20 0.0
DMN 41.32 301 P 03 22.80 -0.2
GKN 41.83 301 P 03 27.00 -0.1
0.4s 4.00nm 4.5mb
HYB 45.49 285 eP 03 56.50 -0.2
BRS 45.87 144 iP 03 55.50 -4.0X
ADE 46.45 164 iPd 04 04.00 0.0
WMQ 46.70 323 P 04 06.00 0.1
BWA 49.38 154 eP 04 28.20 1.4
CAN 50.39 154 eP 04 34.80 0.2
MAIO 64.38 306 iPc 06 12.60 -1.0
IR4 71.27 304 eP 06 56.00 -0.9

27d 16h

IR2	71.29	304	eP	06	57.00	0.1
IR1	71.45	304	eP	06	58.00	0.1
IR7	71.52	304	eP	06	58.00	-0.4
KEV	83.55	340	eP	08	17.00	13.0X
SOD	84.14	337	iP	08	07.40	0.3
PRNI	84.95	300	eP	08	12.00	0.1
MBH	85.13	299	eP	08	13.00	0.3
INK	85.23	21	eP	08	11.00	-1.5
MBC	86.46	12	eP	08	19.00	0.5
	1.5s	23.00nm			5.2mb	
DAG	91.01	352	eP	08	39.00	-1.0
ZOBO	165.87	118	PKPc	15	42.90	0.6
	1.2s	4.39nm				
	S.D. = 1.1	on	51 of	57 obs.		

FEB 27, 1990 16h 17m 09.98± 0.64s
26.872 S ± 7.6km 26.736 E ± 5.9km
DEPTH = 5.0km (geophysicist)
4.6mb (2 obs.)
REPUBLIC OF SOUTH AFRICA (584)

BFS	0.05	121	iPd	17	12.00	0.4
PRY	0.66	95	iPc	17	22.90	-0.3
			S	17	29.50	
KSR	1.01	8	iPd	17	30.60	0.8
			S	17	40.70	
SWZ	1.30	256	iPd	17	35.00	0.5
SLR	1.79	51	iPd	17	42.60	0.7
			S	18	05.20	
KIM	2.55	222	iPc	17	53.00	0.2
HVD	3.87	196	iPd	17	59.00	-12.7X
POF	6.49	246	iPc	18	25.50	-23.1X
	0.7s	143.84nm				
BUL	6.92	15	iPnc	18	51.20	-3.5X
			iSn	20	04.00	
			iSg	20	40.20	
CER	9.13	223	iPd	19	22.00	-3.4X
			S	20	55.50	
KRI	10.34	16	ePn	19	36.50	-5.8X
			eSn	21	22.00	
			iSg	22	21.50	
			iLR	22	46.00	
BCAO	32.12	344	iPd	23	39.20	-1.4
	0.5s	4.00nm			4.6mb	
GBA	63.58	57	Pc	27	43.30	-0.9
	1.0s	3.70nm			4.5mb	
	S.D. = 0.9	on	8 of	13 obs.		

FEB 27, 1990 16h 47m 27.61± 0.86s
36.043 N ± 8.2km 27.092 E ± 9.3km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)

KAP	0.50	172	ePb	47	38.50	0.8
			eSb	47	47.90	
NPS	1.43	238	ePn	47	53.00	-0.7
APE	1.62	310	ePn	47	56.40	0.1
CIN	1.75	27	eP	47	59.00	0.9
KSL	2.02	87	ePn	48	01.00	-1.1
	S.D. = 1.2	on	5 of	5 obs.		

* FEB 27, 1990 18h 13m 06.94± 1.85s
61.703 N ±15.7km 151.636 W ± 6.9km
DEPTH = 100.0 ± 35.9 km
SOUTHERN ALASKA (2)

PWA	0.84	93	iPc	13	26.40	0.5
PMS	1.10	114	iPc	13	28.70	-0.1
PMR	1.20	94	ePd	13	29.40	-0.5
SVW	2.01	254	iPd	13	40.10	-0.1
TTA	2.39	303	iPc	13	45.40	0.2
TOA	2.62	79	ePd	13	48.50	0.2
FBA	3.65	27	eP	14	02.30	0.0
IMA	4.47	349	eP	14	13.60	-0.2
	S.D. = 0.4	on	8 of	8 obs.		

? FEB 27, 1990 19h 51m 05.36± 0.98s
36.097 N ± 9.4km 27.200 E ± 9.1km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)

KAP	0.55	182	ePg	51	16.30	-0.1
			eSg	51	25.30	
NPS	1.54	238	ePb	51	33.20	0.3
APE	1.66	306	ePb	51	34.40	-0.2
KSL	1.93	89	ePn	51	38.60	0.1
	S.D. = 0.4	on	4 of	4 obs.		

FEB 27, 1990 20h 15m 35.66± 0.41s
1.799 S ± 6.3km 129.102 E ± 8.0km
DEPTH = 33.0km (normal)
5.0mb (6 obs.) 4.3Msz (3 obs.)
HALMAHERA (267)

MNI	5.34	307	ePd	16	54.00	-1.2
			eS	17	21.00	
PCI	9.30	275	ePd	17	51.00	0.4
			eS	17	59.00	
DAV	9.50	338	eP	17	52.00	-1.3
MKS	10.19	250	iPc	18	09.00	6.2X
MTN	11.16	170	e(P)	18	13.00	-3.0X
			e	18	23.00	
			e	20	16.00	
TSM	12.54	299	eP	18	35.90	1.2
PGP	17.22	332	ePc	19	35.00	-0.4
WB5	18.69	164	eP	19	52.90	-0.8
			e	20	03.00	
			eS	23	23.30	
WRA	18.75	164	Pd	19	53.50	-0.8
	0.8s	16.20nm			4.3mb	
PMG	19.48	114	eP	20	05.00	2.0
BAG	19.96	335	eP	20	08.00	-0.3
			eS	23	52.00	
MBL	21.26	204	eP	20	20.20	-1.3
QIS	21.28	152	eP	20	22.50	0.8
			eS	24	16.00	
GUA	21.86	45	eP	20	32.80	5.2X
GUMO	21.87	45	eP	20	33.30	5.7X
	Z 20s	0.39um			3.8Msz	
CTA	24.73	138	eP	21	07.00	11.5X
			eS	25	24.00	
IPM	28.76	283	ePd	21	35.00	2.3
LOE	33.05	306	iPc	22	11.00	0.5
NST	33.49	302	iPc	22	15.40	1.1
BDT	35.20	304	eP	22	30.00	1.0
CHG	36.04	306	ePd	22	37.00	0.8
	1.1s	26.27nm			5.1mb	
CHTO	36.04	306	iP	22	36.50	0.3
	1.2s	29.51nm			5.1mb	
KMI	37.00	318	Pc	22	46.00	1.6
BWA	37.13	153	eP	22	49.90	4.7X
CAN	38.14	153	eP	22	57.80	4.1X
MAT	39.08	12	eP	23	01.00	-0.5
	0.5s	6.34nm			4.6mb	
XAN	40.39	334	P	23	12.00	-0.4
CD2	40.50	325	P	23	13.00	-0.3
TIY	42.24	340	eP	23	27.20	-0.3
BJI	43.29	345	eP	23	35.50	-0.4
	1.4s	0.04nm			2.0mb X	
SNY	43.71	354	eP	23	40.20	0.9
	Z 18s	0.40um			4.4Msz	
LZH	44.44	330	Pd	23	46.00	0.4
	1.5s	0.08nm			2.3mb X	
	Z 17s	0.50um			4.5MszX	
		pP		23	53.00	23kmX
CN2	45.51	356	eP	23	53.50	-0.3
	Z 20s	0.60um			4.5Msz	
		PcP		25	33.40	
MDJ	46.21	0	eP	23	59.80	0.5
LSA	47.90	314	P	24	14.70	1.2
GTA	49.03	330	Pd	24	21.40	-0.2
HYB	53.34	293	iPd	24	53.50	-0.9
	1.2s	71.40nm			5.5mb	
GBA	53.45	288	Pd	24	53.50	-1.7
	1.3s	22.40nm			5.0mb	
NDI	58.18	306	eP	25	27.00	-2.1
MAIO	74.75	308	eP	27	14.00	-0.6
INK	94.40	22	eP	28	52.00	-1.1
ZOBO	155.26	137	ePKP	35	32.00	3.6X
	S.D. = 1.1	on	34 of	42 obs.		

FEB 27, 1990 21h 49m 56.06± 0.24s
52.013 N ± 5.5km 166.897 W ± 3.1km
DEPTH = 33.0km (normal)
5.3mb (56 obs.) 4.5Msz (1 obs.)
FOX ISLANDS, ALEUTIAN ISLANDS (9)

SNKA	3.49	44	eP	50	47.43	-1.9
			eS	51	26.48	
DRRA	4.01	42	eP	50	54.96	-1.8
			S	51	37.86	
PVV	4.53	40	eP	51	03.00	-1.1
			eS	51	51.90	
SASA	5.06	46	eP	51	09.76	-1.7
			S	52	03.85	
SDN	5.06	46	ePc	51	09.90	-1.6
IVF	5.83	45	eP	51	20.19	-2.3
			eS	52	22.55	
ADK	6.05	273	eP	51	23.50	-2.1
KDC	10.08	50	eP	52	17.60	-3.9X
SVW	11.02	30	eP	52	35.80	1.5
TTA	12.39	24	eP	52	50.20	-2.6
PMS	13.24	39	eP	52	59.50	-4.6X
PMR	13.62	38	eP	53	05.00	-4.0X
TOA	15.06	40	ePd	53	23.90	-4.1X
IMA	15.59	20	eP	53	37.30	2.4X
FBA	16.23	30	eP	53	41.80	-1.1
INK	22.83	32	eP	54	55.00	-1.7
	0.9s	94.00nm			5.3mb	
PNT	29.68	76	eP	56	01.00	0.3
MBC	30.33	20	eP	56	07.00	0.9
	0.4s	9.00nm			4.9mb	
FHC	31.20	94	eP	56	15.60	1.4
NEW	31.62	77	eP	56	18.10	0.3
	0.8s	33.33nm			5.2mb	
		e		56	29.90	
EDM	31.90	66	iPd	56	20.00	-0.3
	0.9s	85.00nm			5.6mb	
LBFM	32.18	91	eP	56	24.00	1.0
WDC	32.22	93	iPd	56	25.20	2.1
			ePcP	59	10.00	
MIN	32.94	93	ePd	56	29.80	0.3
ORV	33.47	94	ePd	56	33.80	-0.2
BRK	34.04	97	ePd	56	38.90	0.0
BKS	34.05	97	iPd	56	39.70	0.6
	0.9s	29.00nm			5.2mb	
PCC	34.20	97	eP	56	39.70	-0.6
SES	34.30	70	ePd	56	40.70	-0.5
MHC	34.76	97	ePd	56	45.50	0.2
ARN	34.82	97	eP	56	45.70	0.0
CM8	35.09	95	ePd	56	48.80	0.8
			ePcP	59	18.30	
SAO	35.25	97	e(P)	56	52.40	3.1X
PRS	35.57	98	e(P)	56	52.00	-0.1
LRM	35.58	78	eP	56	52.10	-0.3
LLA	35.65	97	ePd	56	53.20	0.4
KVN	35.88	92	eP	56	55.30	0.4
PRI	36.13	98	ePd	56	57.80	0.9
FRI	36.17	96	ePd	56	57.60	0.5
TNP	37.02	92	eP	57	04.80	0.3
BCH	37.12	98	eP	57	06.00	0.8
FFC	37.60	59	iPd	57	08.60	-0.3
	1.0s	24.00nm			5.0mb	
ISA	37.79	96	eP	57	11.00	0.2
CLC	38.23	95	eP	57	15.00	0.5
SBB	38.83	97	eP	57	20.00	0.5
BW06	38.97	80	eP	57	20.40	-0.4
	0.8s	59.82nm			5.4mb	
		e		57	33.00	
MWC	39.00	98	eP	57	21.00	-0.1
GSC	39.05	95	eP	57	22.00	0.6
RVR	39.57	97	eP	57	25.00	-0.6
TPC	40.31	96	eP	57	32.00	0.2
PLM	40.32	97	eP	57	32.00	0.0
BAR	40.89	98	eP	57	36.00	-0.5
RSSD	41.55	75	eP	57	41.40	-0.6
MDJ	41.66	286	eP	57	40.00	-2.6
PV09	41.75	85	eP	57	43.70	-0.2
GLA	41.77	96	eP	57	45.00	1.3
GDL	43.32	81	eP	57	56.90	0.3
	1.0s	100.00nm			5.5mb	
		e		59	44.50	
GLD	43.38	81	eP	57	57.40	0.4
	1.2s	167.68nm			5.7mb	
RSON	43.84	61	eP	58	00.00	-0.3
CN2	44.57	287	iPd	58	05.00	-1.4
	1.0s	100.00nm			5.6mb	
	Z 20s	0.60um			4.5Msz	
		ipP		58	17.00	43kmX
		sP		58	22.80	
ANMO	45.67	87	eP	58	15.00	-0.5
	1.1s	18.35nm			4.9mb	
		e		59	52.80	
ALQ	45.68	87	iPd	58	15.70	0.2
	1.0s	15.00nm			4.9mb	
		pP		59	52.30	518kmX
SNY	46.85	286	iPc	58	24.30	-0.1
FRB	48.38	36	eP	58	35.00	-1.1
	1.0s	77.00nm			5.7mb	
DL2	49.84	285	eP	58	46.50	-1.1
DAG	49.90	9	iPc	58	46.60	-1.0

0.9s 52.10nm 5.6mb
SIO 51.37 79 iP 58 58.10 -1.3
TUL 51.57 79 iP 59 00.10 -0.8
0.8s 30.50nm 5.3mb
RLO 51.87 78 iP 59 02.00 -1.1
BJI 52.33 289 eP 59 06.00 -0.6
1.0s 18.00nm 5.0mb
FVM 53.41 73 eP 59 11.70 -2.9
0.8s 37.88nm 5.4mb
UYO 53.55 79 iPd 59 14.30 -1.4
SCH 54.67 44 eP 59 23.00 -0.7
SSE 55.35 278 eP 59 28.00 -0.8
BTO 55.51 293 P 59 30.00 -0.1
TIY 56.06 289 eP 59 33.80 -0.2
CLE 56.20 64 iP 59 30.50 -4.4X
RSNY 57.90 57 eP 59 44.60 -2.3
0.7s 15.92nm 5.2mb
KEV 58.12 354 iP 59 47.20 -0.8
0.8s 26.40nm 5.4mb
WNY 58.36 57 eP 59 48.00 -2.2
BLA 59.75 67 eP 59 58.00 -1.9
WHN 59.90 282 eP 00 00.00 -0.9
CVL 60.32 65 eP 00 01.50 -2.2
SOD 60.51 354 iP 00 04.10 -0.4
XAN 60.66 289 P 00 04.60 -1.5
JSC 61.34 70 eP 00 08.20 -2.4
GTA 61.99 299 Pd 00 13.20 -2.0
LZH 62.13 294 Pd 00 15.30 -0.9
1.5s 62.00nm 5.5mb
Z 17s 0.60um 4.8MszX
pP 00 27.00 40kmX
sP 00 31.50
WMQ 64.94 310 P 00 33.50 -0.9
SUF 65.15 353 iP 00 35.20 -0.1
0.7s 27.90nm 5.5mb
CD2 65.93 290 P 00 40.40 -0.4
NB2 67.29 1 P 00 48.50 -0.5
1.1s 40.10nm 5.4mb
NUR 67.45 354 iP 00 49.90 -0.1
0.9s 94.60nm 5.9mb
GYA 67.49 284 P 00 50.20 -0.8
KMI 70.83 286 Pc 01 11.00 -0.6
EKA 72.17 10 P 01 20.00 1.1
0.9s 36.60nm 5.4mb
KSH 73.78 314 eP 01 28.50 -0.2
CLL 77.05 0 iPd 01 47.20 0.3
1.5s 29.00nm 5.1mb
KSP 77.48 358 eP 01 50.00 0.7
BRG 77.49 359 iP 01 50.40 1.1
1.6s 30.00nm 5.1mb
MEM 77.58 5 P 01 50.80 1.0
MOX 77.71 1 iPc 01 52.00 1.4
1.6s 43.00nm 5.2mb
CHG 77.91 285 eP 01 51.50 -0.7
CHTO 77.91 285 eP 01 51.00 -1.1
1.2s 10.76nm 4.8mb
DOU 78.01 6 Pc 01 53.00 0.8
KRA 78.14 356 ePd 01 53.90 0.9
1.0s 50.00nm 5.5mb
e 02 04.10
GUN 78.22 300 P 01 54.00 -0.3
PRU 78.37 359 P 01 55.20 1.0
1.5s 40.20nm 5.2mb
GRF 78.66 1 iPd 01 57.50 1.7
0.9s 24.00nm 5.2mb
e 02 02.20
e 02 09.50
PKI 78.74 300 P 01 56.60 -0.5
GKN 78.81 301 P 01 56.90 -0.3
DMN 78.88 301 P 01 57.60 -0.1
FLN 78.94 9 eP 01 57.80 0.5
SPC 78.99 355 eP 02 00.00 2.1
LDF 79.14 9 eP 01 58.90 0.4
1.1s 46.40nm 5.4mb
KHC 79.23 360 iPc 02 01.00 2.0
1.2s 25.00nm 5.1mb
GRR 79.27 9 eP 01 59.70 0.5
1.2s 56.55nm 5.4mb
LPF 79.60 10 eP 02 01.70 0.7
1.2s 53.55nm 5.4mb
CDF 79.83 4 eP 02 02.90 0.6
0.9s 11.45nm 4.9mb
ZST 80.11 357 eP 02 04.80 1.1
HAU 80.19 5 eP 02 04.90 0.7
0.9s 16.40nm 5.0mb
BSF 80.39 4 eP 02 05.90 0.6
0.9s 16.40nm 5.0mb

LOR 80.78 6 eP 02 08.10 0.8
1.1s 41.50nm 5.3mb
SSF 80.96 7 eP 02 09.10 0.9
1.0s 38.00nm 5.3mb
LBF 81.07 6 eP 02 09.30 0.4
0.9s 15.55nm 5.0mb
MFF 81.11 9 eP 02 09.80 0.8
1.1s 56.15nm 5.5mb
AVF 81.22 7 eP 02 10.20 0.6
0.8s 21.50nm 5.2mb
KBA 81.29 360 iPKPd 02 11.70 1.6
0.9s 79.60nm 5.7mb
SMF 81.40 6 eP 02 11.20 0.7
1.1s 67.15nm 5.6mb
BGF 81.41 7 eP 02 11.30 0.7
1.1s 36.65nm 5.3mb
LSF 81.61 8 eP 02 12.60 1.0
1.0s 64.00nm 5.6mb
TCF 81.63 8 eP 02 12.40 0.6
MAF 81.73 7 eP 02 13.10 0.9
0.9s 18.00nm 5.1mb
FVI 81.77 0 P 02 14.00 1.6
RBL 81.93 360 P 02 14.50 1.2
NDI 82.05 307 iPd 02 13.70 -0.5
MLR 82.25 351 eP 02 16.50 1.4
CTI 82.31 1 P 02 16.00 0.6
VAI 82.43 3 P 02 17.50 1.7
PTJ 82.44 358 eP 02 17.20 1.2
BZS 82.47 354 eP 02 16.00 -0.1
RJF 82.55 8 eP 02 17.20 0.7
CMP 82.55 352 ePc 02 15.00 -1.6
ORX 82.64 4 P 02 19.30 2.2
ORO 82.64 4 P 02 19.00 1.9
LFF 82.84 9 eP 02 19.20 1.2
0.8s 34.90nm 5.5mb
CAF 82.97 8 eP 02 19.90 1.1
1.1s 30.50nm 5.3mb
RSP 83.08 4 P 02 21.56 2.1
LPO 83.14 9 eP 02 20.50 0.9
1.1s 53.70nm 5.6mb
8NI 83.16 5 Pc 02 23.00 3.2X
MAIO 83.17 324 iPd 02 20.60 0.6
RRL 83.29 5 P 02 23.51 2.8X
BO8 83.55 3 P 02 24.50 2.7X
RO8 83.97 4 P 02 24.43 0.6
SFI 84.44 1 P 02 29.50 3.4X
PGD 84.48 1 P 02 29.00 2.4X
EPF 84.69 9 eP 02 28.00 0.5
0.8s 13.45nm 5.2mb
ARV 84.87 0 P 02 29.50 1.2
KAS 85.28 345 iPc 02 32.50 2.0
ASS 85.30 0 P 02 26.00 -4.5X
SKO 86.11 354 iPc 02 36.30 1.7
1.0s 78.00nm 5.9mb
VAY 86.68 353 eP 02 38.30 0.9
BBTK 86.93 345 eP 02 40.50 1.7
WB5 87.93 234 eP 02 42.60 -0.9
WRA 88.00 234 Pc 02 43.00 -0.8
1.1s 13.00nm 5.1mb
HYB 90.65 300 ePd 02 56.00 -0.6
1.2s 64.30nm 5.8mb
GBA 94.39 298 Pd 03 11.30 -2.5
0.8s 7.70nm 5.2mb
BUL 145.96 333 iPKPc 09 31.00 -2.2X
1.0s 30.00nm
SLR 151.34 331 iPKPd 09 46.20 4.8X
1.3s 86.54nm
KSR 151.87 333 iPKPc 09 48.20 6.0X
0.7s 7.50nm
PRY 152.70 331 ePKP 09 43.50 0.1
0.8s 6.25nm
BFS 152.88 332 iPKPd 09 50.00 6.4X
0.5s 21.13nm
S.D. = 1.1 on 155 of 172 obs.

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* FEB 27, 1990 23h 15m 19.46± 1.39s
31.949 S ± 9.8km 68.205 W ±12.5km
DEPTH = 111.8 ± 19.3 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTCV 0.30 287 iPc 15 36.30 0.4
ZON 0.57 315 iPd 15 37.00 -0.3
eS 15 49.00
RTLL 0.66 340 iPc 15 38.00 0.0
RTCB 0.69 312 eP 15 38.00 -0.2
RTRS 2.07 328 iPc 15 54.10 0.2
RFA 2.82 184 ePd 16 03.90 0.0

TCA 3.14 80 ePc 16 08.20 0.0
S.D. = 0.3 on 7 of 7 obs.

? FEB 27, 1990 23h 35m 20.04± 0.98s
36.078 N ± 9.0km 27.125 E ±11.1km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)

KAP 0.53 176 ePn 35 30.80 0.1
eSn 35 40.00
YER 1.41 41 ePn 35 50.00 4.2X
NPS 1.48 237 ePn 35 46.60 -0.1
CIN 1.70 27 eP 35 50.00 0.1
KSL 1.99 88 ePn 35 54.00 -0.1
BCK 3.11 63 ePn 36 14.00 4.0X
S.D. = 0.2 on 4 of 6 obs.

? FEB 28, 1990 02h 00m 01.29± 1.10s
31.030 S ±15.4km 68.957 W ±25.0km
DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB 0.47 164 iP 00 10.90 -0.7
eS 00 22.50
RTLL 0.51 126 iPd 00 12.00 -0.2
eS 00 26.00
RTCV 0.90 157 ePc 00 18.60 0.9
eS 00 29.00
RTRS 0.96 333 ePd 00 18.40 0.0
eS 00 36.00
S.D. = 1.2 on 4 of 4 obs.

FEB 28, 1990 02h 01m 45.79± 0.60s
21.257 S ± 5.6km 68.743 W ±11.2km
DEPTH = 137.9 ± 8.4 km
4.9mb (5 obs.)
CHILE-BOLIVIA BORDER REGION (124)

ANT 2.89 212 iPc 02 33.00 1.2
iS 03 01.00
CCH 4.57 33 P 02 54.00 -0.5
SLA 4.57 140 iPc 02 55.50 1.2
LPB 4.74 8 P 02 56.50 -0.3
1.0s 190.00nm
S 04 28.00
ZOBO 5.00 7 Pc 03 00.20 -0.2
0.5s 76.62nm
Z 15s 0.21um
S 04 35.00
LR 05 14.00
ARE 5.43 331 iPc 03 03.00 -3.1X
iS 04 01.60
RTRS 8.90 184 ePc 03 51.60 -0.9
RTLL 10.03 179 ePc 04 04.40 -3.2X
RTCB 10.19 180 e(P) 04 08.00 -1.7
NNA 12.05 319 eP 04 34.50 0.4
0.6s 6.67nm 4.4mb
eS 06 40.50
LIC 68.17 74 P 12 33.54 0.0
0.6s 8.50nm 4.8mb
TIC 68.36 73 Pc 12 34.62 -0.1
1.0s 14.00nm 4.8mb
KIC 68.49 74 Pc 12 35.66 0.2
0.6s 18.50nm 5.1mb
LKO 69.14 70 Pc 12 39.54 0.1
0.6s 16.50nm 5.0mb
WIGH 71.78 77 eP 12 56.00 0.6
WEGH 72.14 76 eP 12 56.00 -1.6
LEGH 72.30 77 eP 12 59.00 0.5
SHGH 72.54 76 eP 13 01.00 1.1
LRM 77.65 330 eP 14 01.60 33.0X
SES 80.52 334 eP 14 17.00 33.2X
EDM 83.61 335 ePc 14 31.80 32.2X
GBA 146.90 98 PKPd 21 16.40 4.4X
0.6s 3.50nm
S.D. = 1.0 on 16 of 22 obs.

FEB 28, 1990 02h 19m 24.07± 0.70s
40.303 N ± 7.9km 22.043 E ± 5.4km
DEPTH = 5.0km (geophysicist)
GREECE (364)
MD 3.5 (ATH).

KZN 0.21 271 iPgc 19 27.90 -0.5
KBN 0.99 289 iPgd 19 43.20 -0.1
PLG 1.07 86 ePb 19 44.40 -0.4
eSb 20 01.00

28d 02h

VAY	1.09	21	iPn	19 44.50	-0.5
			iSn	20 01.60	
OHR	1.24	311	iPn	19 46.40	-1.3
NEO	1.35	137	ePb	19 49.70	0.3
TPE	1.55	270	ePn	19 52.50	0.1
SRN	1.62	256	ePn	19 57.00	3.6X
BERA	1.65	285	ePn	19 57.30	3.6X
SKO	1.73	345	ePn	19 55.50	0.6
			eSn	20 19.50	
KEK	1.82	252	ePg	19 58.80	2.5X
PHP	1.84	319	iPn	19 58.30	1.8
TIR	1.95	303	ePn	20 02.00	3.8X
LACI	2.21	308	ePn	20 07.00	5.1X
S.D. = 1.0			on	9 of 14 obs.	

? FEB 28, 1990 04h 00m 46.24± 1.50s
2.535 S ±28.9km 129.097 E ±49.7km
DEPTH = 33.0km (normal)
3.9mb (1 obs.)
CERAM (272)

MTN	10.44	169	eP	03 17.50	0.7
WB5	17.99	164	eP	04 54.80	-0.8
WRA	18.05	164	P	04 56.00	-0.3
	0.7s		6.30nm		3.9mb
QIS	20.64	151	iPc	05 26.10	0.4
GUN	51.40	309	P	09 51.00	0.2
KKN	51.81	309	P	09 53.50	-0.2
GKN	52.41	309	P	09 58.20	0.0
S.D. = 0.6			on	7 of 7 obs.	

& FEB 28, 1990 04h 21m 53.48s
62.563 N 152.548 W
DEPTH = 138.1km
CENTRAL ALASKA (1)
<AGS-P>.

SKT	0.75	140	iP	22 14.84	-0.6
CUT	1.07	98	eP	22 17.76	-0.3
			eS	22 35.81	
NCG	1.18	171	iP	22 18.82	-0.4
KTH	1.24	36	iP	22 19.46	-0.4
			eS	22 39.12	
CGLM	1.29	168	iP	22 19.71	-0.6
BGL	1.31	177	iP	22 20.35	-0.2
CRP	1.31	172	iP	22 20.37	-0.3
			eS	22 41.71	
CKL	1.38	176	iP	22 20.95	-0.3
SUA	1.39	142	iP	22 20.95	-0.5
HUR	1.40	71	eP	22 20.83	-0.6
			eS	22 41.93	
SPU	1.41	170	iP	22 20.79	-0.7
PWA	1.55	125	iP	22 22.37	-0.7
			eS	22 45.22	
TTA	1.64	285	iP	22 23.58	-0.5
			eS	22 46.05	
GHO	1.88	113	iP	22 25.75	-1.2
PLRM	1.88	120	iP	22 25.05	-1.8
RND	1.89	62	iP	22 26.20	-0.8
			eS	22 50.65	
NKA	1.93	161	eP	22 28.10	0.7
PMS	1.94	132	eP	22 26.14	-1.5
RDT	2.00	178	iP	22 27.68	-0.7
RED	2.15	183	iP	22 29.85	-0.4
SLKM	2.34	151	eP	22 31.38	-1.2
NEA	2.55	36	eP	22 33.96	-1.2
NNL	2.60	166	eP	22 35.77	0.0
NCA	2.74	100	iP	22 35.82	-1.8
SEW	2.88	147	eP	22 37.71	-1.7
PDB	2.90	197	iP	22 39.17	-0.4
CCB	2.98	43	eP	22 39.21	-1.4
TOA	3.01	96	eP	22 39.61	-1.6
CNPM	3.11	168	eP	22 41.14	-1.3
HDA	3.12	51	eP	22 41.18	-1.3
FBA	3.16	40	eP	22 41.89	-1.1
AUE	3.24	187	eP	22 45.33	1.3
SDG	3.25	88	eP	22 43.08	-1.1
DDM	3.27	65	eP	22 43.94	-0.6
PAX	3.28	80	eP	22 43.37	-1.4
GLM	3.34	41	eP	22 44.14	-1.3
DMW	3.42	61	eP	22 46.13	-0.4
IMA	3.55	353	iP	22 47.38	-1.0
GLB	4.27	101	eP	22 55.59	-2.2
BALM	5.08	103	eP	23 06.41	-2.3
40 obs. associated					

? FEB 28, 1990 04h 57m 15.84± 0.96s
31.338 S ±23.4km 68.652 W ±44.2km
DEPTH = 100.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.16	87	iPc	57 30.40	0.0
RTCB	0.19	221	eP	57 30.50	-0.1
			eS	57 41.90	
RTCV	0.53	169	ePc	57 32.20	0.1
RTRS	1.36	329	iPc	57 40.70	0.0
S.D. = 0.1			on	4 of 4 obs.	

? FEB 28, 1990 07h 19m 25.37± 9.31s
30.906 S ±16.2km 67.437 W ±73.6km
DEPTH = 10.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.98	244	ePd	19 43.10	-0.9
RTCB	1.30	243	e(P)	19 50.50	0.9
RTCV	1.34	224	eP	19 50.00	-0.1
			S	20 08.00	
RTRS	1.89	292	ePd	19 58.00	0.0
S.D. = 1.3			on	4 of 4 obs.	

? FEB 28, 1990 07h 49m 13.08± 3.05s
33.111 S ±21.1km 72.395 W ±36.3km
DEPTH = 138.8 ± 15.5 km
OFF COAST OF CENTRAL CHILE (134)

LCCH	0.78	118	iPd	49 33.40	-1.8
			iS	49 45.50	
ROCH	1.17	84	iPd	49 33.20	-5.8X
			iS	49 44.50	
LNV	1.18	136	iPc	49 41.30	2.6
			iS	49 59.00	
SAN	1.49	104	iPd	49 41.00	-1.1
			iS	49 58.70	
JACH	1.57	75	iPc	49 37.50	-5.6X
			iS	49 52.00	
FCH	1.78	98	iPd	49 44.80	-0.9
			iS	50 04.00	
RTCB	3.45	63	eP	50 07.10	0.5
			eS	50 48.00	
RTCV	3.49	70	ePc	50 08.10	1.0
ZON	3.51	65	eP	50 08.00	0.6
RTLL	3.77	63	iPd	50 12.00	1.2
RTRS	3.85	41	iPd	50 11.20	-0.6
TCA	6.84	77	e(P)	50 51.00	-1.3
KIC	75.09	72	P	00 41.40	-0.2
S.D. = 1.6			on	11 of 13 obs.	

FEB 28, 1990 10h 53m 46.18± 0.85s
40.256 N ± 7.5km 29.585 E ± 7.4km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

YLV	0.35	333	iPg	53 53.30	-0.1
GPA	0.56	86	ePg	53 57.00	-0.5
HRT	0.57	6	ePg	53 57.60	-0.1
KCT	0.94	270	iPn	54 04.70	0.6
DST	0.98	229	ePn	54 02.60	-2.2
ALT	1.27	161	ePn	54 11.10	1.3
BNT	1.28	275	ePn	54 11.00	1.1
S.D. = 1.5			on	7 of 7 obs.	

FEB 28, 1990 11h 56m 37.70± 0.74s
43.054 N ± 6.4km 13.783 E ± 8.1km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)
ML 2.7 (KBA).

ALP	0.31	209	P	56 42.90	-1.4
			eSg	56 51.40	
ARV	0.76	306	P	56 51.00	-1.5
ASS	0.82	272	P	56 53.60	-0.1
			eSg	57 05.50	
AZI	1.10	194	P	57 01.00	2.8X
SDI	1.35	179	P	57 03.50	1.8
			eSn	57 22.50	
CRE	1.45	294	P	57 08.20	4.3X
DUI	1.48	160	P	57 05.00	0.6
SFI	1.65	302	P	57 09.00	2.2
HVAR	1.96	85	iPn	57 10.40	-0.8
			iSn	57 32.10	
TRI	2.65	360	eP	57 49.70	28.4X
			i	58 02.70	
VBY	2.67	23	e(Pn)	57 29.20	7.7X
			e(Sn)	57 59.90	
CEY	2.72	10	eP	57 32.50	10.2X
			eSn	58 05.00	
VOY	2.98	1	e(Pn)	57 26.00	0.1
			eSn	58 00.90	
PTJ	3.24	28	e(Pn)	57 34.00	4.3X
			eSn	58 08.20	
KBA	4.04	356	e(Pn)	57 41.00	0.0
			iPgc	57 53.70	
			iSg	58 46.30	
S.D. = 1.4			on	9 of 15 obs.	

FEB 28, 1990 12h 15m 55.64± 0.52s
43.067 N ± 4.4km 13.699 E ± 6.2km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)
ML 3.2 (ROM), 3.4 (KBA). MD 3.8 (TRI).

ALP	0.30	198	P	16 00.20	-1.8
			eSg	16 06.60	
ARV	0.70	308	Pd	16 09.00	-0.5
			eSg	16 20.50	
AQU	0.75	197	P	16 13.70	3.4X
ASS	0.76	271	P	16 11.60	1.0
			iSg	16 23.00	
AZI	1.10	190	P	16 18.50	2.3
			eSg	16 34.00	
RSM	1.25	314	P	16 19.44	0.6
SDI	1.36	176	P	16 21.00	0.3
			eSn	16 41.20	
CRE	1.39	294	Pd	16 21.00	-0.2
DUI	1.51	158	P	16 22.50	-0.4
SFI	1.59	303	P	16 25.00	1.1
PGD	1.65	300	P	16 26.60	1.7
HVAR	2.02	86	iPn	16 23.90	-6.2X
			i	16 44.90	
RIY	2.33	12	ePn	16 33.30	-1.3
			iSn	16 59.80	
MME	2.45	298	P	16 37.36	0.8
BDI	2.46	295	P	16 36.50	-0.1
TRI	2.64	1	e(Pn)	16 40.70	1.7
			e(Pb)	16 46.40	
			i	17 07.00	
			i(Sn)	17 18.30	
VBY	2.68	24	e(Pn)	16 41.70	2.1
			iPg	16 45.70	
			iSn	17 09.10	
			iSg	17 13.50	
CEY	2.72	11	e(Pn)	16 41.60	1.4
			e	16 56.00	
			eSn	17 10.50	
SGO	2.78	154	P	16 39.47	-1.5
VOY	2.97	3	ePn	16 39.80	-3.9X
			eSn	17 15.80	
BLY	3.03	55	eP	16 49.20	4.7X
			eSn	17 21.20	
LJU	3.04	11	e(Pn)	16 45.50	0.9
			e	16 50.00	
			eSn	17 16.00	
MGR	3.24	154	P	16 47.60	0.1
PTJ	3.26	29	ePn	16 48.50	0.6
			eSn	17 23.40	
CTI	3.32	335	P	16 47.00	-1.8
R8L	3.38	358	P	16 49.00	-0.5
BOB	3.51	300	P	16 52.30	0.9
FVI	3.59	350	P	16 51.50	-0.9
MDI	3.94	315	Pd	16 55.50	-1.9
KBA	4.02	357	ePn	16 56.00	-2.7
			iPgd	17 11.00	
			iSg	18 04.10	
CKI	4.15	291	P	17 00.36	-0.1
VAI	4.50	310	P	17 03.35	-2.0
S.D. = 1.4			on	28 of 32 obs.	

FEB 28, 1990 12h 21m 46.90± 0.47s
6.791 N ± 4.6km 123.727 E ± 7.3km
DEPTH = 607.3 ± 8.2 km
4.6mb (17 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

PPR	5.77	301	iPd	23 27.00	0.1
	1.0s		14.00nm		3.9mb
TSM	6.18	246	ePd	23 31.90	1.5
	1.0s		457.70nm		5.4mb
PGP	7.21	338	ePd	23 39.00	-0.5
	1.0s		469.00nm		5.5mb
KKM	7.50	265	ePc	23 41.50	-0.9

	0.8s	65.60nm		4.7mb		
CVP	11.01	350 ePc	24	16.40	0.5	
QZH	18.71	345 eP	25	30.00	0.1	
PSI	25.05	262 ePc	26	26.50	-0.6	
		e	27	00.00		
CHG	26.91	299 eP	26	44.60	1.1	
CHTO	26.91	299 iP	26	44.00	0.5	
	0.8s	10.98nm		4.5mb		
MBL	28.04	188 iPc	26	52.00	-1.1	
WB5	28.50	159 iPd	26	56.20	-0.9	
		eS	30	59.90		
		iScP	32	33.20		
WRA	28.55	159 Pc	26	56.70	-0.9	
	0.2s	3.80nm		4.7mb		
XAN	30.38	335 Pc	27	12.60	-0.5	
QIS	31.34	150 iPd	27	20.90	-0.3	
	0.3s	7.00nm		4.8mb		
ASPA	31.86	162 iPd	27	25.70	0.1	
	0.3s	78.00nm		5.8mb	X	
		iPcP	29	57.20		
		iS	31	52.90		
MEKA	33.59	188 eP	27	39.90	-0.1	
	0.3s	12.00nm		5.0mb		
BJI	33.79	350 eP	27	41.50	0.0	
	1.0s	18.00nm		4.7mb		
SNY	34.89	360 Pc	27	50.20	-0.4	
MRWA	36.57	191 iPd	28	04.80	0.3	
	0.4s	10.00nm		4.8mb		
CN2	36.89	2 Pc	28	06.00	-1.0	
COOL	37.54	184 eP	28	12.00	-0.5	
	0.3s	4.00nm		4.5mb		
FORR	37.66	174 iPd	28	13.10	-0.3	
	0.3s	34.00nm		5.4mb		
KLB	38.59	188 eP	28	20.60	-0.4	
MUN	39.21	190 eP	28	25.60	-0.4	
NWAO	39.98	189 eP	28	32.10	-0.1	
RKG	41.13	188 iPc	28	46.00	4.7X	
GUN	41.52	305 P	28	45.30	0.4	
	0.6s	16.00nm		4.7mb		
PKI	41.78	304 P	28	46.50	-0.4	
KKN	41.97	305 P	28	48.40	0.1	
	0.4s	5.00nm		4.4mb		
DMN	42.04	304 P	28	49.00	0.1	
	0.4s	4.00nm		4.3mb		
GKN	42.57	305 P	28	52.90	-0.1	
	0.4s	5.00nm		4.4mb		
BRS	44.10	142 iPd	29	04.70	0.1	
	0.5s	4.50nm		4.2mb		
KOD	45.85	278 eP	29	18.90	0.3	
BWA	47.18	152 eP	29	30.80	2.7	
CAN	48.18	152 eP	29	36.10	0.5	
POO	49.89	288 eP	29	42.00	-6.4X	
DZM	50.73	126 iPc	29	55.00	0.3	
MSZ	64.80	147 P	31	29.70	0.8	
S.D. = 0.8		on 36 of 38 obs.				

& FEB 28, 1990 13h 07m 00.80s
37.560 N 118.455 W
DEPTH = 5.0km
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 3.1 (BRK).

TNP	1.11	62 iPc	07	21.30	-0.9
FRI	1.15	241 iPc	07	21.60	-1.1
		eS	07	36.40	
KVN	1.51	11 eP	07	28.20	-0.6
CMB	1.60	288 eP	07	29.70	-0.2
		eS	07	52.20	
PKEM	2.00	222 eP	07	36.50	0.9
LLA	2.20	245 e(P)	07	39.50	0.9
		eS	08	06.60	
PRT	2.27	232 eP	07	40.40	0.8
ARN	2.46	266 eP	07	42.90	0.7
SAO	2.52	253 eP	07	43.90	0.9
MHC	2.55	266 ePd	07	44.90	1.3
		eS	08	18.50	
PRS	2.64	243 eP	07	45.90	1.1
BCH	2.71	210 eP	07	46.00	0.1
ABL	2.77	193 eP	07	47.50	0.6
BKS	3.01	277 ePd	07	51.20	1.1
14 obs. associated					

? FEB 28, 1990 13h 21m 05.82±10.62s
40.602 N ±44.8km 27.798 E ±63.4km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

EDC	0.26	169 iPg	21	12.00	0.7
		iSg	21	16.50	
BNT	0.26	159 iPg	21	10.40	-1.0
KCT	0.55	129 iPg	21	17.90	0.8
DST	1.18	147 ePn	21	27.60	-0.3
YLV	1.20	91 ePn	21	28.00	-0.2
S.D. = 1.1		on 5 of 5 obs.			

FEB 28, 1990 13h 22m 27.72± 0.96s
15.638 N ± 4.8km 60.764 W ±11.6km
DEPTH = 31.9 ± 5.7 km
LEEWARD ISLANDS (92)
ML 2.9 (FDF).

MGG	0.60	298 iPd	22	40.58	0.7
		S	22	49.30	
MDN	0.69	242 eP	22	41.62	0.5
		eS	22	52.35	
BBL	0.70	261 ePd	22	41.17	-0.1
		S	22	50.80	
DEG	0.73	337 iPd	22	42.17	0.5
		S	22	53.50	
SFG	0.74	326 ePd	22	42.45	0.7
CRM	0.89	189 eP	22	44.15	0.2
DOG	0.91	296 iPd	22	44.00	-0.3
PAG	0.96	294 iPd	22	44.54	-0.5
		S	22	57.10	
FDF	0.97	203 iPc	22	44.99	-0.2
		S	22	57.60	
SEG	1.04	317 eP	22	46.17	0.1
		S	23	00.80	
MVM	1.09	187 iPd	22	46.92	0.2
		S	23	00.90	
BIM	1.15	195 iPc	22	47.64	-0.1
		S	23	02.40	
BPA	1.75	323 eP	22	55.02	-1.3
		eS	23	15.51	
SLB	1.82	188 eP	22	57.15	-0.3
		eS	23	19.41	
S.D. = 0.6		on 14 of 14 obs.			

FEB 28, 1990 13h 23m 42.17± 0.30s
42.990 N ± 2.7km 1.016 W ± 2.9km
DEPTH = 28.5 ± 2.9 km
PYRENEES (378)
ML 4.2 (LDG). mbLg 3.9 (MDD).
Felt (V) at Ochagavia; (IV) at Novascues and Isaba, Spain. Felt (V) at Lorrau and in the Basque and Bearn districts, France.

ISSF	0.17	77 Pg	23	47.08	-1.0
ELYF	0.18	6 Pg	23	48.23	0.1
MADF	0.21	43 Pg	23	48.69	0.3
		Sg	23	53.46	
ATE	0.25	67 Pg	23	48.69	-0.2
		Sg	23	53.52	
LHE	0.30	105 Pg	23	48.12	-1.5
		Sg	23	52.74	
ESCF	0.34	75 Pg	23	49.77	-0.3
		Sg	23	55.93	
OGE	0.44	66 Pg	23	51.72	0.2
		Sg	23	58.74	
EPF	1.00	87 Pg	24	01.00	0.7
		Sg	24	13.00	
ECRI	1.16	251 iPnc	24	04.00	1.3
ETOR	2.30	200 iPgd	24	19.60	0.6
		eSg	24	46.00	
LFF	2.33	32 Pn	24	20.50	1.3
		Pg	24	25.60	
		Sg	24	55.80	
LPO	2.33	43 Pn	24	20.40	1.1
		Sg	24	55.00	
EROQ	2.41	153 ePg	24	20.00	-0.5
		eSg	24	48.00	
EBR	2.44	152 ePn	24	20.00	-0.9
		ePg	24	26.00	
		eSg	25	00.00	
ETER	2.94	102 ePg	24	31.00	3.4X
		eSg	25	05.00	
RJF	2.95	37 Pn	24	28.50	0.4
		Sn	25	02.40	
CAF	2.95	48 Pn	24	28.70	0.6
		Sn	25	03.70	
GUD	3.32	226 iPgd	24	33.80	0.3
		eSg	25	11.50	
ECHE	3.40	179 ePg	24	34.50	-0.1
		eSg	25	15.00	
MFF	3.66	9 Pn	24	40.00	1.7
		Pg	24	52.40	
		Sn	25	21.00	
		Sg	25	37.40	
LSF	3.73	28 Pn	24	39.20	0.0
		Sn	25	22.00	
LBL	3.80	52 Pn	24	41.32	1.2
		Sg	25	23.23	
TOL	3.85	217 ePg	24	45.00	4.1X
PYM	3.99	45 Pn	24	42.40	-0.6
TCF	4.02	34 Pn	24	42.70	-0.7
		Sn	25	27.80	
MAF	4.12	37 Pn	24	44.00	-0.8
		Sn	25	31.00	
AGO	4.26	43 Pn	24	46.26	-0.5
ESEL	4.36	136 ePg	24	47.50	-0.7
PLDF	4.46	46 Pn	24	49.02	-0.7
EVIA	4.49	195 iPgd	24	49.80	-0.4
		eSg	25	39.00	
BGF	4.50	36 Pn	24	49.60	-0.6
		Sn	25	39.60	
ERUA	4.56	265 ePg	24	51.50	0.5
		eSg	25	44.00	
PRAF	4.58	78 Pn	24	52.66	1.3
EMON	4.64	278 ePg	24	54.20	2.1
		eSg	25	47.00	
TREF	4.71	80 Pn	24	54.71	1.5
GELF	4.73	83 Pn	24	56.62	3.2X
EPLA	4.79	234 ePg	24	53.50	-0.8
		eSg	25	47.00	
AVF	4.91	38 Pn	24	55.30	-0.6
		Sn	25	49.50	
BERF	4.92	84 Pn	24	58.33	2.2
PUYF	4.94	81 Pn	24	58.51	2.2
VILF	4.98	78 Pn	24	56.51	-0.5
HYF	5.00	30 Pn	24	57.00	-0.2
		Sn	25	51.20	
SMF	5.03	42 Pn	24	57.00	-0.7
		Sn	25	51.00	
LPF	5.04	360 Pn	24	58.00	0.2
		Sn	25	54.00	
SSF	5.18	37 Pn	24	58.20	-1.6
		Sn	25	55.50	
GRC	5.19	32 Pn	24	58.22	-1.6
TAVF	5.20	81 Pn	25	01.85	1.7
EBAN	5.26	205 ePg	24	59.00	-1.9
LBF	5.34	40 Pn	25	02.00	0.0
		Sn	26	04.00	
GRR	5.40	1 Pn	25	02.60	-0.2
		Sn	26	02.40	
LRG	5.41	83 Pn	25	03.00	0.0
		Sn	26	03.00	
LOR	5.49	37 Pn	25	03.00	-1.2
		Sn	26	02.00	
LMR	5.52	84 Pn	25	05.00	0.5
STS	5.53	271 ePg	25	04.00	-0.7
		eSg	26	05.60	
FRF	5.62	82 Pn	25	06.70	0.7
LDF	5.64	6 Pn	25	06.20	0.0
		Sn	26	07.80	
EZAM	5.73	264 ePg	25	07.30	-0.3
		eSg	26	10.00	
FLN	5.79	4 Pn	25	08.40	0.1
		Sn	26	12.20	
PTO	5.94	254 iPnc	25	07.60	-2.9X
		iSn	26	32.80	
		iSg	26	43.50	
AFC	6.05	200 ePg	25	12.00	-0.2
ENIJ	6.08	189 ePg	25	11.50	-1.0
LPG	6.12	63 Pn	25	12.60	-0.7
SBF	6.22	79 Pn	25	15.40	0.9
MAL	6.78	204 ePn	25	23.50	1.3
		iSg	26	36.00	
HAU	7.20	43 Pn	25	27.00	-1.3
BSF	7.32	46 Pn	25	28.80	-1.2
PGF	7.38	90 Pn	25	31.20	0.3
		Sn	26	50.00	
CDF	7.94	44 Pn	25	38.00	-0.6
DOU	8.09	27 iP	25	38.30	-2.3
		iS	27	05.10	
MEM	9.01	30 P	25	50.80	-2.5X
ECP	9.88	340 eP	26	05.10	-0.1
ECB	10.15	340 eP	26	08.80	-0.2
DLE	10.94	342 eP	26	21.20	1.4
DCN	11.17	340 eP	26	22.90	0.1
S.D. = 1.0		on 69 of 74 obs.			

FEB 28, 1990 14h 15m 28.76± 0.62s
33.188 S ± 8.0km 69.550 W ± 5.8km
DEPTH = 27.6 ± 6.7 km
3.8mb (1 obs.)
CHILE-ARGENTINA BORDER REGION (127)

FCH	0.64	257	iPd	15	39.00	-2.5
			iS	15	48.50	
SAN	0.97	254	iPd	15	45.20	-1.3
			iS	15	58.70	
JACH	1.01	300	iPd	15	45.10	-2.1
ROCH	1.25	280	iPd	15	49.80	-0.8
			iS	16	04.50	
RTCV	1.58	33	e(P)	15	55.00	-0.2
LCCH	1.71	260	ePd	15	57.20	0.0
			iS	16	21.00	
LNV	1.73	243	iPd	15	57.50	0.1
			iS	16	19.50	
IHA	1.76	275	iP	15	58.80	0.9
			iS	16	23.50	
ZON	1.80	24	eP	16	56.00	57.6X
RTCB	1.81	21	eP	15	58.90	0.2
RFA	1.82	151	iPd	15	59.20	0.5
RTLL	2.07	27	iPc	16	03.00	0.7
MRA	3.33	78	eP	16	19.10	-1.0
TCA	4.59	68	ePd	16	36.20	-2.0
CCH	16.04	12	eP	19	13.00	-1.3
ZOBO	16.89	5	Pd	19	25.20	-0.3
	0.9s		6.49nm			3.8mb
	Z 24s		0.03um			3.9Msz
			LR	26	50.00	

S.D. = 1.2 on 15 of 16 obs.

FEB 28, 1990 15h 18m 33.57± 0.80s
44.057 N ± 8.9km 11.423 E ± 7.1km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.3 (KBA).

PGO	0.28	130	P	18	40.20	0.6
			iSg	18	44.00	
SFI	0.34	114	Pd	18	40.00	-0.6
			eSg	18	47.00	
CRE	0.57	138	P	18	45.60	0.3
			eSg	18	55.80	
BDI	0.60	271	Pc	18	45.40	-0.3
			eSg	18	55.00	
ARV	1.23	116	P	18	55.60	-0.9
ASS	1.34	137	P	18	58.60	0.4
TRI	2.34	44	eP	19	51.80	39.1X
KBA	3.31	23	e(Pn)	19	27.00	0.4
			iPg	19	32.10	
			iSg	20	08.50	

S.D. = 0.7 on 7 of 8 obs.

FEB 28, 1990 15h 21m 55.30± 7.15s
50.680 N ±20.2km 16.650 E ±58.8km
DEPTH = 10.0km (geophysicist)
POLAND (548)
ML 3.4 (KBA), 3.7 (VKA).

KSP	0.28	306	iPd	22	00.80	-0.4
	0.6s	105.00nm				
			iS	22	08.40	
PRU	1.52	244	Pg	22	22.20	-0.3
			Sn	22	39.00	
			eSg	22	45.00	
BRG	1.73	277	iPg	22	17.40	-8.1X
			iSg	22	37.90	
VKA	2.43	185	iPgd	22	46.30	10.7X
			iSg	23	30.20	
			i	23	33.30	
KHC	2.52	233	Pn	22	36.10	-0.9
			Pg	22	41.30	
			Sg	23	18.80	
SPC	2.76	121	eP	23	32.80	52.2X
HOF	3.07	265	iPnd	22	45.50	0.8
MOX	3.20	271	ePg	22	47.00	0.4
			iSg	23	27.00	
GRF	3.63	256	e(Pn)	22	50.00	-2.7X
			e(Pg)	23	00.00	
			eSg	23	46.00	
KBA	4.21	212	ePnc	23	01.50	0.4
			i	24	20.80	
			i	24	23.50	

S.D. = 0.8 on 6 of 10 obs.

% FEB 28, 1990 16h 07m 01.84± 3.82s
44.426 N ±12.6km 6.453 E ±27.2km
DEPTH = 10.0km (geophysicist)
FRANCE (538)

PZZ	0.47	80	P	07	11.58	0.1
			S	07	17.73	
RRL	0.55	26	P	07	13.12	0.1
			S	07	20.71	
STV	0.65	106	P	07	14.35	-0.6
			S	07	22.38	
RO8	1.03	97	P	07	21.35	0.1
LSD	1.15	26	P	07	23.48	0.0
IMI	1.16	116	P	07	23.89	0.4

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

FEB 28, 1990 16h 10m 22.65± 1.32s
8.990 N ± 4.5km 126.636 E ± 6.8km
DEPTH = 57.2 ± 12.1 km
5.2mb (17 obs.) 4.2Msz (8 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV	2.16	209	eP	10	59.00	2.1
OCP	7.82	316	eP	12	52.00	35.7X
PPR	7.84	276	iPd	12	16.00	-0.6
			iS	13	08.00	
BAG	9.45	322	eP	12	37.90	-1.0
			eS	14	48.00	
KKM	10.74	255	ePd	13	00.00	3.5X
HKC	17.85	319	eP	14	36.00	7.4X
GUMO	18.45	74	eP	14	40.00	4.0X
			eS	18	07.00	
QIZ	19.09	303	eP	14	43.10	-0.6
	E 15s		1.26um			
MTN	22.15	168	eP	15	15.50	0.4
SSE	22.57	348	Pd	15	20.00	0.8
	1.0s		100.00nm			5.2mb
	Z 20s		0.46um			3.9Msz
	N 20s		1.13um			
			eS	19	20.00	
NJ2	24.06	344	Pc	15	34.50	0.9
WHN	24.32	334	eP	15	36.50	0.3
	Z 20s		0.60um			4.1Msz
KNA	24.67	175	eP	15	40.00	0.4
LOE	25.63	292	eP	15	48.00	-0.7
IPM	25.80	262	ePc	15	52.20	1.9
	0.9s		37.70nm			4.9mb
			e	16	01.80	
NNT	26.66	280	eP	15	59.20	1.0
NST	26.71	287	eP	15	59.50	0.9
PMG	27.41	131	eP	16	02.50	-2.5
KMI	27.84	308	eP	16	09.00	-0.1
	Z 20s		1.00um			4.4Msz
PSI	28.25	259	iPc	16	14.50	1.8
			e	19	25.50	
			e	20	10.00	
CHG	28.56	293	ePc	16	14.90	-0.5
	1.0s		15.25nm			4.6mb
			e	19	26.70	
WB5	29.68	165	eP	16	23.20	-2.2
WRA	29.74	165	Pd	16	24.00	-1.9
	0.6s		2.90nm			4.2mb X
XAN	29.78	329	eP	16	23.60	-2.7
DL2	30.12	352	P	16	29.60	0.5
	1.0s		100.00nm			5.5mb
	E 12s		0.40um			
CD2	30.50	319	eP	16	37.80	5.2X
TIY	31.34	338	eP	16	38.80	-1.2
	Z 18s		0.50um			4.2Msz
QIS	32.01	157	iPc	16	45.00	-0.9
	0.6s		14.00nm			5.0mb
BJI	32.30	345	eP	16	47.50	-0.7
	1.5s		58.00nm			5.2mb
	Z 20s		0.30um			4.0Msz
SNY	32.82	356	iPc	16	53.00	0.3
	1.0s		100.00nm			5.6mb
	Z 20s		0.60um			4.3Msz
	N 20s		0.50um			
			eS	22	00.00	
ASPA	33.22	168	iPc	16	54.90	-1.6
	0.4s		5.00nm			4.7mb
	Z 22s		0.27um			3.9MszX
			eS	22	03.70	
			eScS	27	16.80	
			LR	30	44.60	
LZH	34.03	326	eP	17	20.50	17.0X
	Z 20s		0.90um			4.5Msz
HHC	34.43	340	P	17	06.60	-0.3
CN2	34.69	358	Pc	17	09.20	0.3
CTA	34.75	146	iPd	17	10.40	0.7
			i	17	21.00	
BTO	34.77	338	eP	17	11.20	1.4
MDJ	35.59	4	Pc	17	18.00	1.5
SHL	36.90	301	iP	17	27.00	-1.0
			iS	23	11.50	
GTA	38.63	326	P	17	41.40	-1.0
	Z 18s		0.60um			4.5Msz
LSA	39.07	307	P	17	47.00	0.5
MRWA	39.35	195	eP	17	48.00	-0.2
FORR	39.64	178	iPd	17	50.00	-0.5
	0.3s		34.00nm			5.7mb
COOL	39.99	187	iPc	17	53.20	-0.3
	0.4s		14.00nm			5.2mb
BAL	40.51	193	eP	17	57.70	0.0
KLB	41.24	192	eP	18	03.50	-0.2
MUN	41.94	193	iPd	18	10.10	0.6
NWAO	42.63	192	eP	18	15.30	0.2
	0.4s		17.00nm			5.2mb
GUN	42.73	302	P	18	16.40	-0.1
PKI	43.03	301	P	18	18.20	-0.7
KKN	43.20	301	P	18	19.80	-0.4
DMN	43.30	301	P	18	20.60	-0.4
RKG	43.79	192	iPd	18	29.80	5.3X
GKN	43.81	301	P	18	24.40	-0.6
	0.6s		27.00nm			5.2mb
BRS	44.15	146	iP	18	26.20	-1.4
			i	18	39.00	
ADE	45.18	166	iPc	18	36.20	0.4
HYB	47.45	285	iPc	18	54.00	0.1
	1.0s		80.00nm			5.6mb
BWA	47.86	156	eP	18	58.40	1.5
GBA	48.40	280	Pc	19	01.30	0.0
	0.6s		19.40nm			5.3mb
WMQ	48.45	323	eP	19	00.00	-1.4
KOD	48.46	276	eP	19	02.50	0.3
CAN	48.87	156	eP	19	05.60	0.9
TOO	49.57	160	eP	19	10.50	0.5
DZM	49.76	129	iPc	19	12.90	1.1
POO	51.98	286	eP	19	28.00	-0.7
KSH	54.33	313	P	19	47.00	1.1
QUE	59.38	300	eP	20	20.50	-1.5
MSZ	65.11	149	P	21	00.00	0.5
			pP	21	12.00	41kmX
MAIO	66.33	306	eP	21	07.00	-0.8
IR4	73.24	304	iPc	21	50.00	0.0
IR2	73.25	304	eP	21	50.00	0.0
IR1	73.41	304	eP	21	51.50	0.5
IR7	73.48	305	eP	21	51.50	0.1
KMSA	79.60	289	iP+	22	25.07	-0.8
INK	85.34	22	eP	22	57.00	2.6
SOD	85.60	338	eP	22	55.00	-0.8
SUF	86.85	333	eP	23	03.00	1.0
MBC	86.87	13	ePc	23	04.40	2.5
	1.0s		57.00nm			5.7mb
HQL	87.04	299	eP	23	04.40	0.8
MBH	87.11	300	iPc	23	05.00	1.1
NUR	88.09	331	eP	23	03.00	-5.0X
DAG	92.08	352	iPc	23	26.10	-0.3
	0.6s		8.67nm			5.4mb
HFS	93.34	333	eP	23	31.20	-1.3
	0.5s		1.10nm			4.5mb

S.D. = 1.1 on 74 of 82 obs.

? FEB 28, 1990 16h 43m 51.19± 4.14s
31.367 S ±22.0km 68.710 W ±28.9km
DEPTH = 85.0 ± 42.1 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB	0.14	213	eP	44	04.00	0.1
			(S)	44	15.00	
RTLL	0.21	80	iPc	44	04.00	-0.1
			eS	44	15.20	
CFA	0.47	121	iPc	44	05.50	0.1
			S	44	18.00	
RTCV	0.51	163	e(P)	44	05.70	-0.1
			S	44	18.00	
RTRS	1.36	331	ePc	44	15.20	0.0
			eS	44	35.00	

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

% FEB 28, 1990 17h 29m 25.46± 3.05s
31.156 S ± 9.3km 67.959 W ±23.9km
DEPTH = 10.0km (geophysicist)

SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.47	248	iPc	29 35.00	0.0
CFA	0.51	208	iPc	29 36.00	0.2
			S	29 43.00	
RTCB	0.79	245	iPc	29 41.00	0.1
			eS	29 53.90	
RTCV	0.86	215	e(P)	29 41.80	-0.2
			eS	29 55.00	
RTRS	1.62	307	iPd	29 54.20	0.0

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

& FEB 28, 1990 17h 41m 09.50s
31.660 N 115.910 W
DEPTH = 6.0km (geophysicist)
BAJA CALIFORNIA (48)
<PAS-P>. ML 3.1 (PAS).

IKP	1.00	350	ePd	41 28.00	-0.9
			eS	41 40.70	
BAR	1.20	328	ePd	41 31.00	-1.3
			eS	41 46.70	
CPE	1.58	321	eP	41 38.00	-0.1
			eS	41 57.70	
GLA	1.66	33	eP	41 38.00	-1.4
PLM	1.87	335	ePd	41 42.40	-0.1

5 obs. assaciated

FEB 28, 1990 18h 01m 22.65± 0.20s
15.482 S ± 6.1km 166.313 E ± 5.2km
DEPTH = 10.0km (geophysicist)
5.1mb (17 obs.) 4.6Msz (3 obs.)
VANUATU ISLANDS (186)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 17C
Centroid Location:
Origin Time 18:01:27.4 0.9
Lat 15.42S 0.13 Lan 166.00E 0.12
Dep 33.8 8.1 Half-duration 1.6
Moment Tensor; Scale 10**16 Nm
Mrr=-4.79 0.41 Mtt= 2.35 0.83
Mff= 2.44 0.85 Mrt=-0.86 1.15
Mrf= 0.35 1.31 Mtf=-1.99 0.46
Principal Axes:

	Val=	Plg=	Azm=
T	4.47	5	226
N	0.43	4	135
P	-4.89	83	8

Best Double Cauple:Mo=4.7*10**16
NP1:Strike=320 Dip=40 Slip= -84
NP2: 132 50 -95

PVC	2.95	140	iPc	02 10.50	0.1
			iS	02 46.00	
DZM	6.56	179	iPc	02 57.70	-3.9X
HNR	8.65	313	eP	03 29.00	-1.8X
SGE	11.33	102	eP	04 27.60	19.8X
VUN	11.91	104	eP	04 27.10	11.6X
SVA	11.92	104	e(P)	04 26.40	10.7X
CTA	19.64	254	iPc	05 54.00	-0.6
	0.9s	42.02nm		4.7mb	
			iS	09 36.00	
PMG	19.65	286	eP	05 49.00	-5.7X
RMO	19.69	233	eP	05 52.00	-3.2X
COO	20.01	219	eP	06 00.00	1.4
CMS	24.56	226	eP	06 43.00	-0.9
BWA	24.81	217	eP	06 44.90	-1.4
CNB	24.92	214	eP	06 48.00	0.6
CAN	25.12	215	eP	06 50.80	1.5
OIS	25.88	255	eP	06 55.00	-1.5
TOO	28.70	216	eP	07 21.00	-1.1
WB5	30.72	257	eP	07 36.50	-3.8X
WRA	30.75	257	Pd	07 36.80	-3.7X
	1.1s	9.10nm		4.6mb	
ASPA	31.55	250	iPd	07 44.50	-3.1X
	1.2s	14.00nm		4.7mb	
	Z 22s	3.69um		5.0MszX	
			iS	12 56.40	
			LR	18 59.10	
GUMO	35.84	323	eP	08 27.50	2.9X
	Z 22s	0.79um		4.4Msz	
PMO	44.12	96	iP	09 32.30	-0.9
	0.9s	25.00nm		5.1mb	
VAH	44.34	96	iP	09 34.90	-0.2
	0.9s	20.00nm		5.0mb	
TPT	44.39	96	iP	09 34.40	-1.0
	0.9s	20.00nm		5.0mb	
RUV	44.59	96	iP	09 36.20	-0.8
	0.9s	20.00nm		5.0mb	
WHN	67.76	313	P	12 23.00	0.1
DL2	68.35	324	P	12 27.00	0.6
	1.0s	100.00nm		6.0mb	
MDJ	68.51	333	eP	12 26.50	-0.8
TIA	69.29	319	eP	12 32.50	0.2
SNY	69.33	327	eP	12 32.80	0.5
	Z 20s	0.60um		4.8Msz	
CN2	69.82	330	Pd	12 35.80	0.5
GYA	71.39	305	P	12 46.60	1.2
LOE	71.56	295	eP	12 41.00	-5.4X
BJI	72.27	322	eP	12 49.00	-1.2
	2.0s	130.00nm		5.7mb	
	Z 20s	0.30um		4.6Msz	
TIY	73.19	318	eP	12 54.30	-1.5
	N 15s	0.30um			
			S	22 24.00	
XAN	73.52	313	P	12 57.10	-0.6
KMI	73.92	302	Pc	13 00.50	0.0
CHG	74.55	295	eP	13 05.90	1.9
CHTO	74.55	295	eP	13 04.00	0.1
	1.0s	10.00nm		4.8mb	
SPA	74.62	180	eP	13 05.70	1.9
	1.0s	13.00nm		4.9mb	
HHC	75.56	320	P	13 10.60	1.1
CD2	75.74	308	P	13 10.20	-0.4
BTO	76.38	319	eP	13 12.00	-2.1
LZH	78.14	313	eP	13 25.00	0.9
	2.0s	94.00nm		5.5mb	
	Z 30s	0.50um		4.7MszX	
GTA	82.52	314	eP	13 47.40	0.1
SHL	83.11	299	eP	13 50.00	-0.7
PMR	84.51	20	eP	13 57.00	0.3
	1.1s	43.75nm		5.6mb	
WDC	86.25	46	eP	14 06.00	0.1
CMB	86.79	49	eP	14 08.60	0.0
FRI	86.90	50	eP	14 10.20	1.1
FBA	87.35	18	iP	14 10.00	-0.7
	1.0s	22.50nm		5.4mb	
S8B	87.49	53	eP	14 11.00	-1.1
RVR	87.60	54	eP	14 14.00	1.5
PLM	87.78	55	eP	14 13.00	-0.7
CLC	88.06	52	eP	14 14.00	-0.8
GSC	88.49	53	eP	14 19.00	2.1
TPC	88.67	54	eP	14 16.00	-1.8
KVN	88.83	49	iP	14 20.00	1.4
GUN	88.95	299	P	14 19.80	0.2
TNP	89.14	50	eP	14 21.00	0.9
	1.5s	15.15nm		5.0mb	
PKI	89.24	299	P	14 21.00	0.0
GLA	89.29	55	eP	14 20.00	-0.7
KKN	89.42	299	P	14 22.10	0.4
DMN	89.51	299	P	14 22.20	0.0
GKN	90.03	299	P	14 24.20	-0.2
PNT	91.57	39	iPc	14 32.90	2.0
	0.8s	25.00nm		5.6mb	
G8A	92.50	283	Pc	14 36.90	1.1
	0.9s	3.80nm		4.8mb	
WMQ	92.60	315	eP	14 35.80	0.0
SOD	121.94	343	ePKP	20 14.00	-4.2X
SUF	125.21	339	ePKP	20 24.10	-0.5
	0.7s	5.80nm			
NUR	127.21	337	ePKP	20 31.00	2.4X
NB2	131.10	344	PKP	20 35.70	-0.4
	1.0s	4.00nm			
ARV	144.01	326	PKP	20 59.00	-1.3
SFI	144.29	328	PKP	21 01.00	0.3
ROI	144.29	318	PKP	21 01.20	0.3
CSI	144.36	319	PKP	21 01.20	0.2
TDS	144.39	318	PKP	21 01.10	0.0
CRE	144.45	327	PKP	21 02.20	1.0
ASS	144.45	326	PKP	20 58.80	-2.3
SDI	144.71	323	PKP	21 01.20	-0.4
CZI	144.77	318	PKP	21 01.40	-0.3
BOB	144.86	331	PKP	21 01.80	0.0
LOR	145.12	339	ePKP	21 01.00	-1.1
	1.2s	86.30nm			
LDF	145.15	344	ePKP	21 00.70	-1.3
	1.0s	60.00nm			
RDP	145.30	324	PKP	21 02.00	-0.6
LBF	145.32	339	ePKP	21 01.80	-0.7
	1.2s	74.40nm			
GRC	145.36	340	PKP	21 00.99	-1.4
SSF	145.42	339	ePKP	21 02.20	-0.4
SOI	145.45	316	PKP	21 03.00	0.1
LPL	145.48	334	ePKP	21 02.70	-0.3
	1.2s	53.55nm			
LPG	145.49	334	ePKP	21 02.80	-0.3
	1.2s	56.55nm			
GRR	145.53	345	ePKP	21 01.20	-1.5
SMF	145.66	338	ePKP	21 02.80	-0.2
AVF	145.70	339	ePKP	21 02.90	-0.1
	1.2s	90.75nm			
LPF	145.90	345	ePKP	21 03.60	0.3
BGF	146.08	339	ePKP	21 04.40	0.7
	1.2s	92.25nm			
PLDF	146.32	338	PKP	21 03.48	-0.7
MAF	146.47	339	ePKP	21 05.10	0.7
	1.0s	32.00nm			
BCAO	146.47	254	iPKPd	21 04.70	-0.6
	1.0s	56.00nm			
			ic	21 37.90	
SBF	146.48	332	ePKP	21 05.20	0.7
	0.6s	34.25nm			
TCF	146.53	340	ePKP	21 05.50	1.0
	1.2s	71.40nm			
LSF	146.79	341	ePKP	21 06.30	1.4
	1.2s	62.50nm			
LBL	147.08	338	PKP	21 07.09	1.8
LRG	147.29	332	ePKP	21 07.50	1.8
	0.8s	24.20nm			
LMR	147.32	332	ePKP	21 07.50	1.7
	1.0s	56.00nm			
CAF	147.77	339	ePKP	21 09.60	3.1X
	1.6s	108.85nm			
CAI	148.10	132	ePKP	21 10.30	2.4X

S.D. = 1.0 on 90 of 106 obs.

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* FEB 28, 1990 18h 55m 09.93± 1.36s
17.039 N ±11.1km 95.886 E ±12.6km
DEPTH = 33.0km (normal)
BURMA (296)

BDT	2.99	86	ePg	55 56.00	-0.1
			eSg	56 05.50	
CHG	3.40	58	ePn	56 02.20	0.1
			ePg	56 58.80	
CHTO	3.40	58	ePn	56 02.00	-0.1
			iPg	56 12.20	
			iSg	56 54.50	
NST	4.30	108	eP	56 20.50	5.8X
LOE	5.60	85	ePn	56 54.00	20.9X
			ePg	58 02.00	
NNT	5.78	139	ePn	56 35.70	0.0
			eSg	57 37.20	
SHL	9.27	337	eP	57 24.50	0.0
			eS	59 02.00	

S.D. = 0.1 on 5 of 7 obs.

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* FEB 28, 1990 19h 33m 48.13± 1.15s
34.788 N ±14.0km 26.028 E ± 7.9km
DEPTH = 5.0km (geophysicist)
CRETE (370)

NPS	0.58	324	ePg	33 59.30	-0.5
KAP	1.21	51	ePb	34 11.50	0.4
			Sb	34 31.60	
VAM	1.62	293	ePg	34 18.00	0.6
VLI	3.17	308	ePn	34 39.50	-0.1
DSI	8.47	110	eP	35 54.00	-0.4
			eS	37 28.00	

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

FEB 28, 1990 20h 05m 31.71± 0.26s
13.969 S ± 4.8km 34.107 E ± 6.5km
DEPTH = 33.0km (normal)
5.1mb (17 obs.) 4.1Msz (1 obs.)
MALAWI (577)

CLK	1.90	154	iPgd	06 08.10	5.7X
SONG	2.07	218	e(P)	06 38.70	33.8X
			e	06 40.00	
			eSg	07 09.00	
NPA	5.11	103	iPn	07 44.40	56.4X
	0.6s	360.00nm			
			iPg	07 58.60	
			iSn	08 42.80	
			iSg	09 06.00	
KRI	5.18	236	iPn	06 48.20	-1.0
			iP*	06 58.00	
BUL	8.08	220	iPn	07 28.50	-1.4
			iSn	08 55.10	
			iS*	09 11.80	

28d 20h

			ISg	09	42.90	
NAI	12.89	12	IPd	08	30.00	-5.6X
	1.0s	6.00nm				4.6mb
SLR	12.92	204	IPc	08	36.20	0.3
	0.9s	25.21nm				5.3mb
			S	10	54.50	
KSR	13.63	209	eP	08	43.70	-1.6
			S	11	06.00	
PRY	14.31	205	IPd	08	54.80	0.7
			S	11	27.00	
SWZ	15.49	211	IPc	09	06.00	-3.6X
			S	11	55.00	
SEK	15.50	202	IPc	09	11.00	1.2
			S	11	56.80	
BLF	16.76	205	IPd	09	25.50	-0.2
	0.9s	189.23nm				5.2mb
HVD	18.36	204	IPd	09	37.00	-8.7X
			S	12	53.50	
POF	20.17	218	IPd	10	07.00	0.7
	1.0s	135.00nm				5.2mb
			S	13	44.50	
AAE	23.31	12	eP	10	40.00	1.8
CER	23.54	212	eP	10	42.00	2.0
	1.0s	340.00nm				5.8mb
			(S)	15	20.00	
BCAO	23.94	319	IPd	10	42.70	-1.2
	0.6s	86.00nm				5.5mb
			id	12	03.20	
			ic	15	14.80	
KIC	43.52	295	P	13	34.38	0.1
	0.7s	29.00nm				5.2mb
LIC	43.71	295	P	13	35.80	0.0
	0.6s	11.00nm				4.8mb
Z	20s	0.25um				4.1Msz
TIC	43.90	295	Pd	13	37.50	0.2
LKO	45.79	298	Pd	13	52.40	-0.1
	0.8s	15.50nm				5.0mb
KOD	49.28	63	eP	14	21.40	1.3
QUE	54.11	35	eP	14	56.50	0.4
MLR	59.64	353	ePc	15	36.00	0.9
VRI	59.93	354	eP	15	37.50	0.6
PTJ	61.80	346	eP	15	48.80	-0.9
SRO	63.10	348	eP	15	57.90	-0.2
SPC	64.06	350	eP	16	04.90	0.1
GKN	64.30	49	P	16	05.40	-1.3
DMN	64.43	50	P	16	06.40	-1.2
PKI	64.64	50	P	16	07.60	-1.5
KKN	64.66	50	P	16	07.80	-1.3
KRA	64.95	350	eP	16	09.30	-0.9
	1.3s	67.00nm				5.6mb X
GUN	65.17	50	P	16	11.60	-0.9
KHC	65.40	345	eP	16	13.10	-0.1
KSH	65.93	34	P	16	17.50	0.6
GRF	66.52	344	IPd	16	21.20	0.9
	0.8s	20.00nm				5.3mb
BRG	66.93	346	iP	16	22.60	-0.3
	1.4s	24.00nm				5.1mb
CLL	67.56	346	eP	16	27.00	0.1
	1.5s	21.00nm				5.0mb
SHL	68.62	55	iP	16	33.00	-1.2
CHG	71.69	65	eP	16	52.90	0.1
CHTO	71.69	65	iP	16	52.30	-0.5
	0.8s	7.69nm				4.8mb
NUR	74.61	355	eP	17	09.30	0.3
WMQ	75.43	37	Pd	17	14.50	0.3
HFS	75.66	350	eP	17	15.00	-0.1
	0.7s	8.60nm				4.9mb
SPA	76.12	180	IPd	17	22.10	4.2X
	0.8s	7.92nm				4.8mb
SUF	76.69	356	eP	17	21.40	0.6
	0.6s	12.00nm				5.1mb
NB2	76.95	349	P	17	23.20	0.8
	0.8s	7.40nm				4.8mb
CD2	80.35	55	eP	17	42.20	0.6
GTA	80.92	46	eP	17	45.00	0.5
XAN	85.55	53	P	18	09.00	0.8
ZOBO	97.51	251	eP	19	08.00	3.0X
Z	25s	0.15um				4.4MszX
			LR	59	25.00	
GLA	145.95	309	ePKP	25	13.00	3.6X
GSC	146.30	314	ePKP	25	13.00	3.0X
TPC	146.36	312	ePKP	25	14.00	3.9X
CLC	146.56	316	ePKP	25	14.00	3.7X
ISA	147.24	316	ePKP	25	16.00	4.6X
PLM	147.32	311	ePKP	25	16.00	4.2X
SBB	147.33	314	ePKP	25	16.00	4.4X
RVR	147.37	313	ePKP	25	16.00	4.4X
BAR	147.50	310	ePKP	25	16.00	4.1X
MWC	147.74	314	ePKP	25	18.00	5.6X

S.D. = 0.9 on 44 of 62 obs.

& FEB 28, 1990 20h 37m 24.10s
34.140 N 117.700 W
DEPTH = 6.0km
SOUTHERN CALIFORNIA (43)
<PAS-P>. ML 3.6 (PAS).
Foreshock.

RVR	0.31	118	IPd	37	30.00	-0.3
MWC	0.31	286	IPc	37	30.10	-0.3
PAS	0.39	271	IPc	37	31.50	-0.5
PEC	0.51	119	iP	37	33.40	-1.0
SBB	0.56	349	IPd	37	34.60	-0.7
CIS	0.94	219	eP	37	41.30	-1.1
PLM	1.05	138	ePd	37	43.10	-1.3
CPE	1.35	158	eP	37	47.80	-1.6
SCI	1.36	212	eP	37	47.80	-1.7
TPC	1.37	91	IPc	37	49.20	-0.6
GSC	1.37	32	IPc	37	49.50	-0.3
ABL	1.44	300	eP	37	49.70	-1.3
CLC	1.67	3	IPd	37	53.60	-0.5
8CH	2.22	299	eP	38	01.20	-1.0
BLP	2.27	281	eP	38	01.00	-1.7
GLA	2.63	114	eP	38	06.00	-1.9
TNP	3.95	6	eP	38	26.40	-0.4
SAO	4.03	312	eP	38	25.90	-1.7
CMB	4.45	332	e(P)	38	32.00	-1.7
KVN	4.91	356	eP	38	39.00	-1.4

20 obs. associated

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* FEB 28, 1990 20h 54m 22.35± 0.73s
13.645 S ± 9.7km 33.934 E ±11.8km
DEPTH = 33.0km (normal)
4.7mb (4 obs.)
MALAWI (577)

SONG	2.25	210	ePg	55	32.30	34.3X
			eSg	56	02.50	
CLK	2.26	154	IPgd	55	00.00	1.8
KRI	5.23	232	IPn	55	40.00	-0.6
			IPg	55	57.00	
			iSn	56	36.00	
			iSg	57	04.00	
NPA	5.35	106	ePn	55	39.40	-2.6
			ePg	55	49.00	
			eSn	56	35.00	
			iSg	56	58.00	
BUL	8.23	218	IPnc	56	20.90	-1.6
			iSn	57	47.10	
			iSg	58	36.50	
NAI	12.61	13	eP	57	22.00	-0.6
SLR	13.15	203	eP	57	29.50	0.0
			S	59	48.00	
KSR	13.84	207	eP	57	36.00	-2.7X
			S	00	13.00	
PRY	14.53	204	eP	57	46.50	-1.2
			S	21	21.00	
SWZ	15.69	210	IPc	57	59.00	-3.8X
			S	00	45.50	
SEK	15.74	201	eP	58	04.00	0.5
	0.7s	47.95nm				4.8mb
			S	00	50.00	
BLF	16.98	204	IPd	58	21.20	2.0
	0.9s	53.85nm				4.7mb
HVD	18.59	203	IPc	58	27.90	-11.2X
POF	20.33	217	eP	59	02.00	3.5X
G8A	50.89	60	Pc	03	22.50	-0.1
	0.7s	5.40nm				4.6mb
GKN	64.22	49	P	04	57.40	0.6
KKN	64.58	50	P	05	00.00	0.8
GUN	65.09	50	P	05	03.80	1.1
NUR	74.28	355	eP	05	49.00	-8.7X
SUF	76.36	356	eP	06	13.40	3.8X
	0.7s	6.40nm				4.7mb

S.D. = 1.5 on 13 of 20 obs.

FEB 28, 1990 21h 13m 32.17± 0.81s
2.710 N ± 6.6km 79.765 W ± 6.6km
DEPTH = 13.1 ± 5.5 km
4.8mb (15 obs.) 3.8Msz (1 obs.)
SOUTH OF PANAMA (83)

PSO	2.87	122	IPc	14	20.00	1.3
GGP	3.09	158	IPd	14	20.70	-1.4
QUR	3.12	157	P+	14	21.00	-1.3
			S	14	55.60	
BOG	6.00	71	eP	15	04.50	1.4
			eS	17	16.00	
BMG	7.95	57	eP	15	32.00	1.7
TOV	12.15	54	ePn	16	27.20	-0.8
CEOS	12.99	61	eP	16	51.00	11.8X
FISA	13.39	50	eP	16	37.00	-7.5X
PLAV	14.11	59	eP	16	51.00	-3.2X
OLLA	14.78	60	eP	17	00.00	-2.8X
NNA	14.89	169	eP	17	01.30	-2.9X
	0.7s	11.64nm				4.5mb
LLAV	15.00	58	eP	17	04.00	-1.7
ARE	20.73	157	IPd	18	16.20	0.8
SVB	21.10	59	eP	18	19.65	0.7
SLB	21.55	58	eP	18	27.91	4.4X
ZOBO	22.09	149	Pc	18	29.30	-0.2
	1.0s	31.25nm				4.7mb
Z	20s	0.38um				3.8Msz
			S	22	26.00	
			LR	24	40.00	
LPB	22.32	149	P	18	33.00	1.3
	1.0s	45.71nm				4.9mb
Z	16s	0.67um				4.2MszX
			eLR	26	20.00	
CCH	24.07	147	P	18	50.50	1.9
PRM	31.31	356	eP	19	55.50	1.2
FVM	36.44	346	iP	20	38.50	0.0
	1.0s	15.00nm				4.8mb
ALQ	40.54	325	IPd	21	15.50	2.4X
	1.0s	15.00nm				4.7mb
CAI	43.53	102	IPc	21	37.20	-0.4
GOL	43.54	331	eP	21	38.50	0.8
	1.0s	7.50nm				4.4mb
RSSD	46.50	336	eP	22	02.00	0.8
BW06	47.93	330	eP	22	12.00	-0.5
	1.1s	4.17nm				4.4mb
TNP	49.11	321	iP	22	22.00	0.3
	0.8s	1.62nm				4.1mb
RSON	49.40	348	eP	22	22.00	-1.4
	1.0s	5.42nm				4.5mb
KVN	50.24	321	eP	22	30.00	-0.3
LRM	51.58	331	eP	22	40.80	0.4
ORV	52.69	320	eP	22	50.00	1.3
SCH	53.01	9	eP	22	50.00	-0.8
SES	54.37	336	eP	23	01.00	0.1
EDM	57.46	337	eP	23	21.50	-1.6
PNT	57.50	330	eP	23	24.00	0.6
LKO	73.96	81	Pd	25	08.98	-0.7
	0.8s	13.50nm				5.0mb
LIC	74.55	84	P	25	12.56	-0.6
	1.0s	21.00nm				5.1mb
TIC	74.55	84	P	25	12.46	-0.7
INK	74.74	342	eP	25	13.00	-0.2
KIC	74.83	84	P	25	14.28	-0.5
	0.9s	21.00nm				5.2mb
MBC	76.71	351	eP	25	24.00	-0.3
	1.0s	15.00nm				5.0mb
DAG	80.95	12	eP	25	46.00	-1.3
NB2	88.13	29	P	26	24.60	0.9
	1.0s	11.50nm				5.2mb
HFS	89.40	30	eP	26	29.20	-0.5
	0.5s	2.50nm				4.7mb
WRA	142.56	240	PKPc	33	00.40	-7.2X
	0.7s	1.70nm				
WB5	142.56	240	ePKP	33	03.90	-3.7X
HYB	150.72	46	ePKP	33	25.00	4.1X
			e	33	33.00	
SHL	150.75	16	iPKP	33	26.00	5.0X
GBA	152.18	54	PKPd	33	28.40	5.3X
	0.8s	6.00nm				
KMI	152.23	355	ePKP	33	30.00	6.8X

S.D. = 1.1 on 36 of 49 obs.

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* FEB 28, 1990 21h 37m 24.72± 2.85s
21.711 N ±12.7km 143.052 E ±17.4km
DEPTH = 302.7 ± 27.7 km
4.1mb (2 obs.)
MARIANA ISLANDS REGION (215)

CHJJ	14.72	347	eP	40	41.20	0.1
MTMJ	15.51	344	eP	40	49.50	-0.4
NIIJ	15.87	348	eP	40	53.70	0.0
WB5	42.20	192	eP	44	50.00	-0.1
GUN	51.88	289	P	46	05.60	0.2
KKN	52.42	289	P	46	09.40	0.2
GKN	52.96	289	P	46	13.40	0.3

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INK    67.61  24 eP    47 51.00   0.3
MBC    70.87  15 eP    48 11.00   0.6
       0.5s      2.00nm          4.1mb
HFS    88.67 337 eP    49 43.70  -1.2
       0.5s      1.40nm          4.1mb
     S.D. = 0.6  on  10 of  10 obs.
-------------------------------------
?  FEB 28, 1990  21h 55m 57.68± 7.63s
   38.934 N ±62.4km   20.393 E ±22.4km
   DEPTH =  10.0km  (geophysicist)
 GREECE                          (364)

KEK     0.90 330 eP    56 15.00   0.0
                 eS    56 29.30
KZN     1.74  37 eP    56 27.40  -0.7
                 eS    56 51.30
OHR     2.20   8 ePn   56 33.70  -1.1
PLG     2.76  58 eP    56 43.00   0.2
VAY     2.91  34 ePn   56 45.00   0.2
SKO     3.14  14 ePn   56 49.50   1.4
                 eSn   57 21.00
     S.D. = 1.1  on   6 of   6 obs.
-------------------------------------
?  FEB 28, 1990  22h 11m 45.33± 1.65s
   15.350 N ±37.0km   94.172 W ±19.8km
   DEPTH =  33.0km  (normal)
 NEAR COAST OF OAXACA, MEXICO    ( 66)

PSM     1.58 328 iP    12 11.25  -0.3
                 iS    12 28.00
TPX     1.90 103 eP    12 16.00   0.0
SCX     2.02  47 iP    12 26.00   8.3X
                 iS    12 55.00
OXX     2.99 305 iPd   12 31.00  -0.8
                 iS    13 01.50
IIT     5.38 313 (P)   13 24.00  18.3X
PPM     5.64 312 eP    13 10.50   1.0
III     5.90 301 eP    13 13.00   0.1
IIJ     6.87 310 (P)   13 01.50 -25.3X
     S.D. = 0.9  on   5 of   8 obs.
-------------------------------------
   FEB 28, 1990  22h 18m 21.62± 0.36s
   13.852 S ± 6.0km   34.063 E ± 8.4km
   DEPTH =  33.0km  (normal)
   4.9mb ( 14 obs.)  3.8Msz (  1 obs.)
 MALAWI                          (577)
      mbLg 4.4 (8UL).

CLK     2.02 154 iPgd  18 57.00   2.9
SONG    2.14 215 ePg   19 29.50  33.7X
                 eSg   20 00.00
KRI     5.21 235 ePn   19 38.00  -1.5
                 ePg   19 56.00
                 iSn   20 35.00
                 iSg   21 00.00
BUL     8.14 219 iPnd  20 18.00  -2.6
                 iSn   21 45.00
                 iSg   22 28.60
NAI    12.79  12 iPd   21 19.00  -5.1X
       1.0s     10.00nm         4.9mb
SLR    13.01 204 iPc   21 27.60   0.6
                 S     23 47.00
KSR    13.72 208 eP    21 35.00  -1.3
                 S     24 01.60
PRY    14.40 204 eP    21 45.00  -0.2
                 S     24 15.00
SWZ    15.57 210 iPc   21 55.00  -5.6X
                 S     24 40.50
SEK    15.60 202 eP    22 01.50   0.6
       0.5s   183.10nm         5.5mb
                 S     24 47.00
BLF    16.85 204 iPd   22 18.50   1.7
       0.6s    35.71nm         4.7mb
                 S     25 15.50
AAE    23.21  12 eP    23 29.50   2.4
CER    23.62 212 eP    23 31.00   0.4
       1.0s   220.00nm         5.6mb X
                 S     27 53.50
BCAO   23.82 319 iPc   23 32.50  -0.2
       1.0s    40.00nm         4.9mb X
                 ic    24 25.10
                 id    27 54.90
                 id    28 42.20
KIC    43.44 295 P     26 04.04 -19.4X
       0.6s    21.00nm
LIC    43.63 295 P     26 25.40   0.4
       0.6s     7.00nm         4.6mb
     Z  20s      0.11um         3.8Msz
TIC    43.81 295 P     26 27.20   0.7
       0.5s    21.00nm         5.1mb
LKO    45.70 298 P     26 41.76   0.1
       0.8s    11.50nm         4.9mb
GBA    50.89  59 Pd    27 20.60  -1.3
       0.8s    12.10nm         4.9mb
KBA    63.43 344 eP    28 51.00   0.5
       1.0s     9.80nm         4.9mb
GKN    64.26  49 P     28 55.00  -1.3
DMN    64.39  50 P     28 56.00  -1.3
PKI    64.59  50 P     28 57.10  -1.6
KKN    64.62  50 P     28 57.40  -1.3
       0.6s     6.00nm         4.9mb
GUN    65.13  50 P     29 01.00  -1.2
KSH    65.86  35 eP    29 06.00  -0.3
GRF    66.39 344 ePc   29 10.80   1.3
       0.8s    18.00nm         5.2mb
CHG    71.68  65 eP    29 42.40  -0.3
CHTO   71.68  65 eP    29 42.50  -0.2
       0.9s     4.69nm         4.5mb
NUR    74.49 355 eP    29 58.40   0.2
WMQ    75.36  37 Pd    30 03.80   0.1
HFS    75.54 350 eP    30 04.70   0.4
       0.5s     4.90nm         4.8mb
SUF    76.57 356 iP    30 10.60   0.6
       0.7s    14.90nm         5.1mb
NB2    76.83 349 P     30 12.00   0.4
       1.0s    10.00nm         4.8mb
GTA    80.87  46 eP    30 34.40   0.2
SOD    81.18 357 eP    30 36.00   1.1
GLA   145.85 309 ePKP  38 02.00   2.8X
GSC   146.18 314 ePKP  38 03.00   3.3X
TPC   146.25 312 ePKP  38 03.00   3.2X
CLC   146.45 316 ePKP  38 04.00   3.9X
ISA   147.13 316 ePKP  38 06.00   4.8X
SBB   147.22 314 ePKP  38 06.00   4.7X
RVR   147.26 313 ePKP  38 05.00   3.7X
BAR   147.40 310 ePKP  38 06.00   4.4X
     S.D. = 1.2  on  32 of  44 obs.
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?  FEB 28, 1990  23h 20m 35.69±10.25s
   15.867 N ±38.1km   60.413 W ±108.km
   DEPTH =  23.8 ±  9.4 km
 LEEWARD ISLANDS                 ( 92)
      ML 2.6 (FDF).

DEG     0.76 306 eP    20 50.00  -0.3
                 S     20 59.00
SEG     1.18 297 eP    20 57.00   0.3
CRM     1.21 204 eP    20 56.92  -0.2
FDF     1.33 212 eP    20 58.86  -0.1
                 S     21 14.70
MVM     1.38 200 eP    20 59.78   0.1
                 S     21 16.30
BIM     1.48 205 eP    21 01.21   0.1
                 S     22 18.70
     S.D. = 0.4  on   6 of   6 obs.
-------------------------------------
*  FEB 28, 1990  23h 38m 52.45± 1.07s
   6.363 S ± 9.0km   153.866 E ± 9.8km
   DEPTH =  62.8 ± 12.3 km
   4.2mb (  2 obs.)
 NEW BRITAIN REGION              (192)

RAB     2.74 322 e(P)  39 35.00   0.0
HNR     6.75 117 eP    40 31.00  -0.2
                 e(S)  42 00.00
PMG     7.30 245 eP    40 30.00  -8.9X
DZM    19.79 143 iPd   43 21.30   0.7
RMQ    20.60 193 eP    43 28.00  -0.9
BRS    20.94 183 e(P)  43 29.00  -3.3X
WB5    23.22 233 eP    43 55.80   0.8
WRA    23.28 233 Pc    43 55.70   0.2
       0.8s     7.00nm         4.2mb
ASPA   25.78 226 eP    44 18.90  -0.5
       0.5s     4.00nm         4.2mb
GUN    73.83 301 P     50 22.90  -0.1
PKI    74.14 301 P     50 24.50  -0.3
KKN    74.31 301 P     50 25.00  -0.6
DMN    74.41 301 P     50 26.00  -0.3
GKN    74.91 301 P     50 30.00   0.9
     S.D. = 0.7  on  12 of  14 obs.
-------------------------------------
&  FEB 28, 1990  23h 43m 36.60s
   34.140 N          117.700 W
   DEPTH =   5.0km
```

5.5mb (58 obs.) 5.5Msz (7 obs.)
SOUTHERN CALIFORNIA (43)

<PAS-P>. ML 5.2 (PAS), 6.2 (BRK). Thirty people received minor injuries and damage was estimated to be at least 12.7 million dollars. Some damage (VII) at Claremont, Covina, La Verne, Montclair, Mount Baldy, Ontario, Pomona, San Dimas, Upland and Walnut. Slight damage (VI) at Arcadia, Azusa, Chino, Colton, Compton, Glendora, Lincoln Heights, Lytle Creek, Pico Rivera and West Covina. Felt from Santa Barbara to Ensenada, Mexico and northeast as far as Las Vegas, Nevada.

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 28C
Centroid Location:
Origin Time 23:43:45.5 0.9
Lat 34.11N 0.06 Lon 118.06W 0.06
Dep 15.0 FIX Half-duration 2.8
Moment Tensor; Scale 10**17 Nm
Mrr= 1.26 0.13 Mtt=-4.33 0.15
Mff= 3.07 0.17 Mrt= 0.38 0.64
Mrf= 0.81 0.42 Mtf=-0.94 0.16
Principal Axes:
T Val= 3.46 Plg=19 Azm=264
N 1.03 70 69
P -4.49 5 172
Best Double Couple:Mo=4.0*10**17
NP1:Strike=307 Dip=73 Slip= 169
NP2: 40 80 17

```
PCF     0.11 221 iP    43 39.10   0.1
TCC     0.30 241 iPc   43 42.90   0.3
MWC     0.31 286 iPc   43 42.60  -0.3
VPD     0.33 189 iPc   43 43.50   0.3
PAS     0.39 271 iPc   43 44.10  -0.4
PEC     0.51 119 iPc   43 46.10  -0.8
SBB     0.56 349 iPd   43 47.10  -0.7
TWL     0.75 281 iPd   43 51.20  -0.5
CIS     0.94 219 ePd   43 53.90  -1.1
PLM     1.05 138 ePd   43 55.60  -1.4
CPE     1.35 158 ePd   44 00.20  -1.8
SCI     1.36 212 ePd   44 00.40  -1.7
TPC     1.37  91 iPc   44 01.70  -0.7
GSC     1.37  32 iPc   44 02.10  -0.4
ABL     1.44 300 eP    44 02.30  -1.3
CLC     1.67   3 iPd   44 06.20  -0.6
BAR     1.69 149 iPd   44 05.80  -1.2
HAY     1.77 104 iPd   44 07.00  -1.1
BCH     2.22 299 iPc   44 13.90  -0.9
BLP     2.27 281 iPc   44 13.80  -1.6
ENX     2.41 159 ePnd  44 15.91  -1.5
                 S     44 51.13
PBX     2.53 161 ePn   44 17.64  -1.4
GLA     2.63 114 ePc   44 18.70  -1.8
CPBX    2.64 130 ePnc  44 20.01  -0.6
RDX     2.65 146 ePn   44 20.19  -0.7
                 S     44 57.40
PKEM    2.75 315 eP    44 21.20  -1.0
EMX     2.98 135 ePnc  44 25.01  -0.3
LMX     3.06 131 ePn   44 26.21  -0.3
                 S     45 08.33
PRI     3.15 310 iPc   44 26.00  -1.8
FRI     3.28 331 eP    44 28.40  -1.3
ECBX    3.47 139 ePn   44 31.76  -0.6
SPX     3.62 148 ePn   44 33.62  -1.2
                 S     45 21.60
LLA     3.62 314 eP    44 32.40  -2.2
PRS     3.72 307 eP    44 32.70  -3.2
TNP     3.95   6 eP    44 39.40   0.0
SAO     4.03 312 eP    44 38.30  -1.9
                 i     44 38.70
                 eS    45 25.30
CMB     4.45 332 ePc   44 45.50  -0.9
ARN     4.47 317 ePc   44 44.00  -2.6
MHC     4.53 316 iPc   44 44.50  -3.0
                 eS    45 36.95
                 e     45 50.80
                 e     46 01.05
                 e     46 06.85
              eLR      46 20.40
```

28d 23h

GCC	4.54	311	eP	44	44.80	-2.7	
KVN	4.91	356	iPd	44	53.10	0.1	
PCC	5.07	313	ePd	44	52.00	-3.1	
BKS	5.24	317	ePc	44	54.80	-2.6	
			eS	45	53.20		
			eLQ	46	16.00		
			eLR	46	49.35		
BRK	5.25	317	eP	44	55.20	-2.4	
NWRM	6.01	317	eP	45	06.00	-2.3	
ORV	6.20	332	eP	45	10.30	-0.8	
MSU	6.24	44	eP	45	11.70	-0.1	
MIN	6.93	334	eP	45	22.60	1.1	
WDC	7.49	330	eP	45	27.50	-1.7	
FHC	8.32	325	eP	45	40.30	-0.4	
ALQ	9.31	82	iPc	45	52.30	-2.4	
	1.8s	928.41nm			6.9mb	X	
			pP	46	30.50		
			sP	48	29.80		
ANMO	9.31	82	eP	45	53.00	-1.7	
LTMT	11.23	21	eP	46	24.40	3.3	
MCMT	11.31	18	eP	46	24.50	2.4	
GLD	11.44	57	eP	46	23.50	-0.4	
BGMT	11.90	20	eP	46	33.30	3.2	
LRM	12.34	17	eP	46	39.40	3.4	
BUT	12.49	17	eP	46	43.20	5.2	
LCCM	12.50	19	eP	46	40.90	2.8	
SXM	12.98	20	eP	46	47.40	2.9	
HRY	13.32	18	eP	46	53.70	4.7	
NEW	14.12	2	eP	47	01.00	1.6	
MZX	14.71	135	(P)	47	11.00	3.8	
PGC	15.12	345	eP	47	15.00	2.6	
	0.9s	74.00nm			5.1mb		
PNT	15.23	355	ePd	47	16.00	2.1	
	1.2s	266.00nm			5.5mb		
MEO	15.78	82	iPc	47	20.60	-0.6	
SES	16.96	15	ePc	47	37.00	0.9	
	1.3s	735.00nm			5.7mb		
SIO	17.61	79	iP	47	45.10	0.8	
TUL	18.03	78	iPc+	47	49.80	0.3	
	1.3s	424.40nm			5.4mb		
Z	20s	35.20um			5.0MszX		
			eS	51	17.00		
			LR	52	48.00		
			eLg	53	07.50		
LNO	18.03	78	P	47	32.80	-16.6	
RLO	18.65	77	iPc	47	57.20	0.0	
UYO	19.23	83	iPc	47	59.80	-4.5	
EDM	19.33	8	eP	48	03.30	-2.1	
IIJ	21.45	127	(P)	48	30.00	1.4	
OLY	21.56	79	P	48	27.50	-1.5	
POW	21.75	77	P	48	29.00	-1.9	
FVM	22.35	72	eP	48	36.50	-0.3	
III	22.61	129	(P)	48	41.00	1.2	
FFC	23.34	23	iPc	48	45.80	-0.6	
	1.0s	196.00nm			5.6mb		
RSON	24.17	39	eP	48	53.20	-1.3	
	2.1s	1283.78nm			6.2mb		
CHI	24.83	63	P	49	00.60	-0.4	
SIT	25.87	338	eP	49	11.00	0.4	
	1.0s	30.00nm			5.0mb		
RSCP	26.33	78	eP	49	13.40	-1.8	
	1.4s	589.39nm			6.1mb		
PRM	29.17	80	eP	49	39.30	-1.6	
CLE	29.34	65	iP	49	40.70	-1.7	
JSC	30.04	79	eP	49	47.00	-1.7	
BLA	30.31	73	eP	49	49.80	-1.4	
CBN	32.63	71	eP	50	10.00	-1.4	
	1.0s	23.00nm			5.1mb		
			e	51	17.00		
PMR	34.00	334	eP	50	23.40	0.4	
	1.2s	121.21nm			5.7mb		
TBR	34.85	65	eP	50	29.50	-1.1	
PNJ	34.91	66	iP	50	27.50	-3.6	
WNY	35.08	60	eP	50	31.30	-1.3	
INK	35.39	350	iPc	50	33.80	-1.0	
	1.2s	91.00nm			5.5mb		
HBVT	35.65	60	eP	50	36.50	-0.9	
FBA	35.77	339	eP	50	37.00	-1.2	
	1.0s	75.00nm			5.5mb		
TTA	37.39	332	eP	50	51.70	-0.2	
	1.1s	56.25nm			5.2mb		
HON	37.66	261	P	51	13.00	18.5	
Z	21s	7.53um			5.5Msz		
IMA	38.39	337	eP	51	00.20	-0.1	
	1.2s	90.91nm			5.4mb		
SCH	40.69	44	ePc	51	17.20	-2.3	
	1.3s	103.00nm			5.4mb		
FRB	42.13	30	ePc	51	29.90	-1.1	
	0.7s	86.00nm			5.6mb		
MBC	42.20	359	ePc	51	32.30	0.9	
	1.0s	77.00nm			5.4mb		
ADK	45.31	312	eP	51	55.80	-1.2	
	0.9s	225.00nm			6.1mb		
GDH	49.40	25	ePd	52	28.00	-0.8	
	1.0s	40.00nm			5.4mb		
			i	03	28.00		
PSO	49.96	122	eP	52	36.00	1.7	
BOG	49.98	116	eP	52	35.00	0.7	
			eS	59	49.00		
TOV	50.03	107	eP	52	33.00	-1.4	
TPT	56.55	215	iP	53	22.60	0.1	
	1.2s	45.00nm			5.4mb		
RUV	56.61	215	iP	53	23.50	0.6	
	1.2s	60.00nm			5.5mb		
PMO	56.70	216	iP	53	22.60	-0.9	
	1.2s	30.00nm			5.2mb		
VAH	56.77	215	iP	53	23.50	-0.6	
	1.2s	45.00nm			5.4mb		
DAG	59.07	15	iPc	53	36.40	-3.2	
	0.7s	17.81nm			5.3mb		
PPN	59.61	216	eP	53	45.00	1.1	
	0.9s	25.00nm			5.3mb		
PPT	59.71	216	eP	53	45.00	0.3	
	0.9s	50.00nm			5.6mb		
PAE	59.80	216	eP	53	46.00	0.8	
	0.9s	35.00nm			5.5mb		
NNA	60.10	132	iP	53	46.00	-1.4	
	1.1s	50.63nm			5.6mb		
Z	20s	0.53um			4.7Msz		
KBS	63.53	10	iPd	54	09.50	-0.2	
ARE	66.83	131	eP	54	32.00	-0.1	
ZOBO	68.84	128	iPc	54	43.10	-1.9	
	1.2s	27.03nm			5.3mb		
Z	21s	1.98um			5.3Msz		
			LR	01	00.00		
LPB	69.05	129	Pc	54	45.00	-1.1	
	1.0s	28.57nm			5.4mb		
Z	21s	2.87um			5.5Msz		
			LR	18	00.00		
			i	55	24.00		
CCH	70.94	128	P	54	56.50	-1.0	
KEV	73.26	12	eP	55	08.00	-2.2	
	1.0s	36.00nm			5.4mb		
SOD	75.26	13	iP	55	20.40	-1.4	
NB2	76.44	23	P	55	28.00	-0.7	
	0.8s	7.00nm			4.8mb		
HFS	77.93	23	eP	55	34.90	-1.9	
	1.0s	19.40nm			5.2mb		
SUF	79.21	16	eP	55	43.20	-0.6	
	1.0s	46.10nm			5.4mb		
UPP	79.36	21	iP	55	43.60	-1.0	
MDJ	80.66	318	eP	55	50.00	-1.9	
Z	25s	1.65um			5.3MszX		
			S	06	00.00		
NUR	80.76	18	iP	55	51.70	-0.4	
	1.0s	42.00nm			5.4mb		
			i	55	56.20		
LSF	83.04	38	eP	56	04.20	-0.1	
	1.4s	52.30nm			5.6mb		
TCF	83.36	37	eP	56	05.50	-0.5	
	1.4s	6.70nm			4.7mb		
CN2	83.45	319	Pd	56	04.80	-1.6	
SSF	83.46	36	eP	56	06.20	-0.2	
	1.2s	41.65nm			5.5mb		
BGF	83.49	37	eP	56	06.00	-0.6	
	1.2s	61.00nm			5.7mb		
LOR	83.49	36	eP	56	06.20	-0.4	
	1.2s	65.45nm			5.7mb		
LFF	83.53	39	eP	56	07.00	0.2	
	1.4s	95.85nm			5.8mb		
AVF	83.58	36	eP	56	06.30	-0.7	
	1.4s	95.85nm			5.8mb		
MAF	83.58	37	eP	56	06.60	-0.5	
	1.2s	49.10nm			5.6mb		
GUD	83.67	45	eP	56	07.30	-0.5	
RJF	83.68	38	eP	56	07.30	-0.3	
	1.4s	104.55nm			5.9mb		
LBF	83.74	36	eP	56	07.20	-0.8	
	1.4s	65.35nm			5.7mb		
SMF	83.92	36	eP	56	08.20	-0.6	
	1.1s	36.65nm			5.5mb		
LPO	83.94	39	eP	56	08.80	-0.1	
	1.4s	104.55nm			5.9mb		
HAU	84.14	34	eP	56	09.30	-0.6	
	1.2s	47.60nm			5.6mb		
CAF	84.22	38	eP	56	09.90	-0.5	
	1.2s	59.50nm			5.7mb		
CDF	84.27	33	eP	56	10.20	-0.4	
	1.2s	20.85nm			5.2mb		
BSF	84.47	34	eP	56	11.20	-0.5	
	1.2s	38.70nm			5.5mb		
MOX	84.48	30	eP	56	11.00	-0.5	
	1.3s	34.00nm			5.4mb		
Z	16s	4.70um			6.0MszX		
N	16s	4.00um					
CLL	84.53	29	iPc	56	10.60	-1.1	
	1.8s	49.00nm			5.4mb		
Z	18s	2.00um			5.5Msz		
EPF	84.61	41	eP	56	12.00	-0.4	
	1.4s	65.35nm			5.7mb		
ETOR	84.76	43	eP	56	13.20	0.0	
GRF	85.04	30	eP	56	14.50	0.1	
	1.5s	51.00nm			5.5mb		
Z	18s	3.60um			5.8Msz		
			e	56	19.00		
			e	56	47.10		
BRG	85.24	28	iPd	56	15.00	-0.3	
	1.4s	52.00nm			5.6mb		
SNY	85.80	319	eP	56	17.90	-0.4	
AAPN	85.84	47	iPc	56	18.60	-0.1	
CAI	85.87	101	iPc	56	18.10	-0.9	
EVIA	85.94	45	e(P)	56	19.00	-0.2	
ALOJ	85.98	47	iPc	56	20.00	0.6	
ASMO	86.03	47	eP	56	20.00	0.3	
MAL	86.03	48	iPd	56	19.50	0.0	
			eS	07	40.00		
LPL	86.13	36	eP	56	20.40	0.2	
	1.0s	12.00nm			5.0mb		
LPG	86.15	36	eP	56	20.10	-0.3	
	1.2s	14.90nm			5.0mb		
ATEJ	86.16	47	iPc	56	20.50	0.1	
KSP	86.17	27	ePd	56	20.00	0.0	
			e	59	39.00		
PRU	86.17	29	eP	56	18.50	-1.5	
Z	15s	3.40um			5.9MszX		
N	16s	2.00um					
E	15s	2.80um					
			e	56	35.00		
AFC	86.22	47	e(P)	56	20.00	-0.7	
AVE	86.31	52	eP	56	20.00	-1.0	
APHE	86.33	47	eP	56	22.00	0.8	
KHC	86.46	30	eP	56	20.30	-1.2	
Z	16s	5.50um			6.1MszX		
N	16s	3.00um					
E	16s	3.80um					
			i	56	53.80		
IFR	87.65	51	iPd	56	27.00	-0.7	
KRA	88.16	26	eP	56	28.80	-0.8	
E	18s	2.00um					
			e	56	42.80		
GUA	88.50	285	e(P)	56	27.20	-4.6	
GUMO	88.51	285	e(P)	56	28.50	-3.3	
SPC	89.00	26	eP	56	33.50	-0.4	
SRO	89.40	28	eP	56	34.80	-0.8	
BJI	91.00	322	eP	56	38.00	-5.1	
DZM	91.19	244	iPc	56	44.20	0.0	
HHC	92.67	325	P	56	50.40	-0.6	
BTO	93.60	326	eP	56	55.40	0.1	
WMQ	99.03	342	eP	57	22.30	2.4	
WRA	115.47	262	PKP	02	22.00	0.3	
	1.1s	3.70nm					
BCAO	123.66	56	iPKPd	02	36.00	-1.6	
	0.6s	8.00nm					
POF	143.87	94	iPKPd	03	11.00	-3.8	
	1.0s	25.00nm					
CER	144.43	101	iPKP	03	12.00	-3.7	
	1.0s	50.00nm					
BUL	147.11	74	iPKPd	03	18.10	-2.6	
SWZ	147.58	88	iPKPd	03	20.00	-1.3	
	1.0s	75.00nm					
KIM	147.67	91	ePKP	03	23.00	1.6	
KSR	148.37	84	iPKPc	03	23.60	1.0	
	1.2s	50.00nm					
HVD	148.82	94	iPKPc	03	14.20	-9.0	
PRY	149.26	86	iPKPc	03	26.70	2.7	
	1.0s	50.00nm					
SLR	149.46	83	iPKPc	03	25.00	0.7	
	1.0s	42.00nm					
Z	22s	3.70um			6.1Msz		
SEK	149.88	88	iPKPd	03	29.00	4.1	
	1.0s	20.00nm					

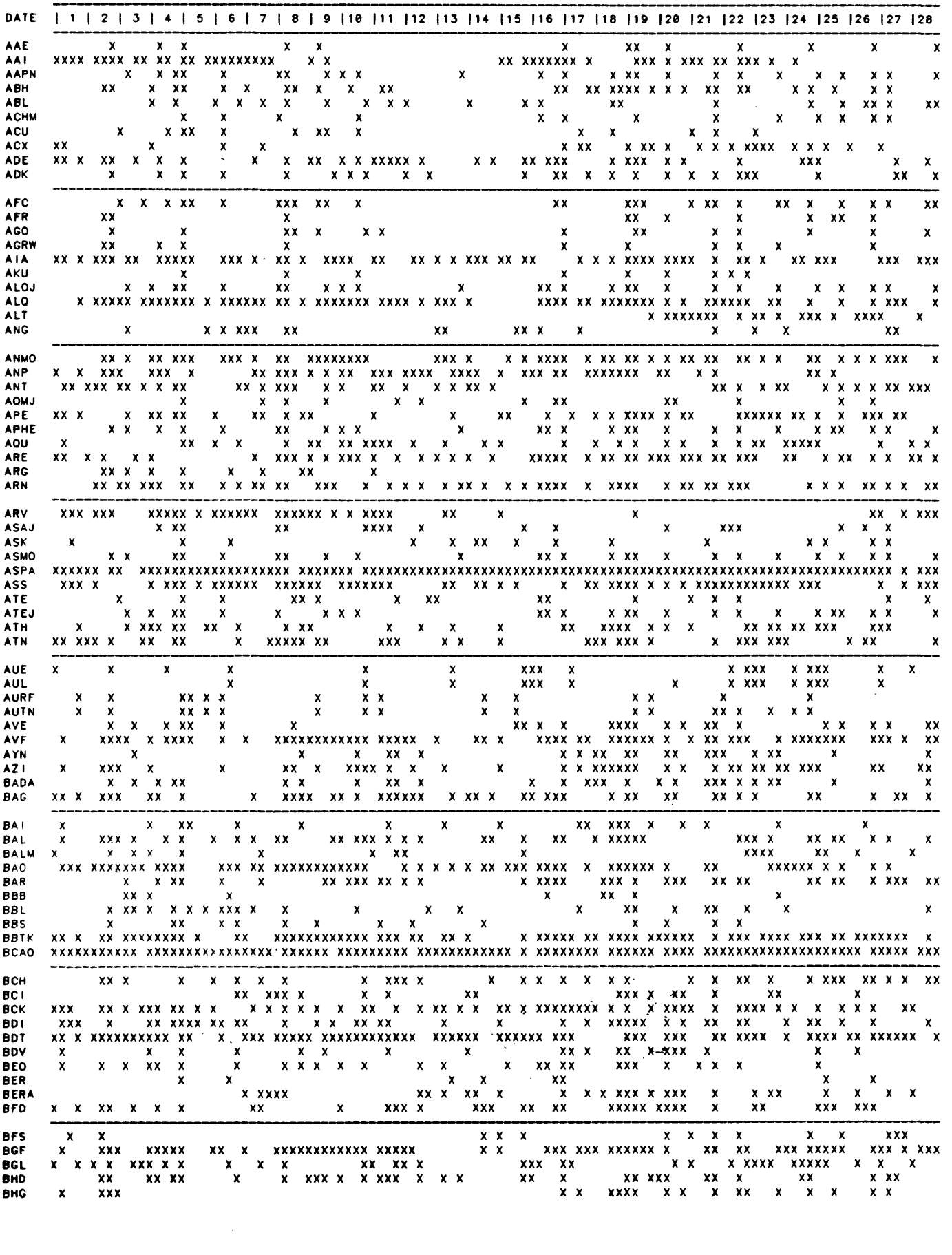
27d 09h

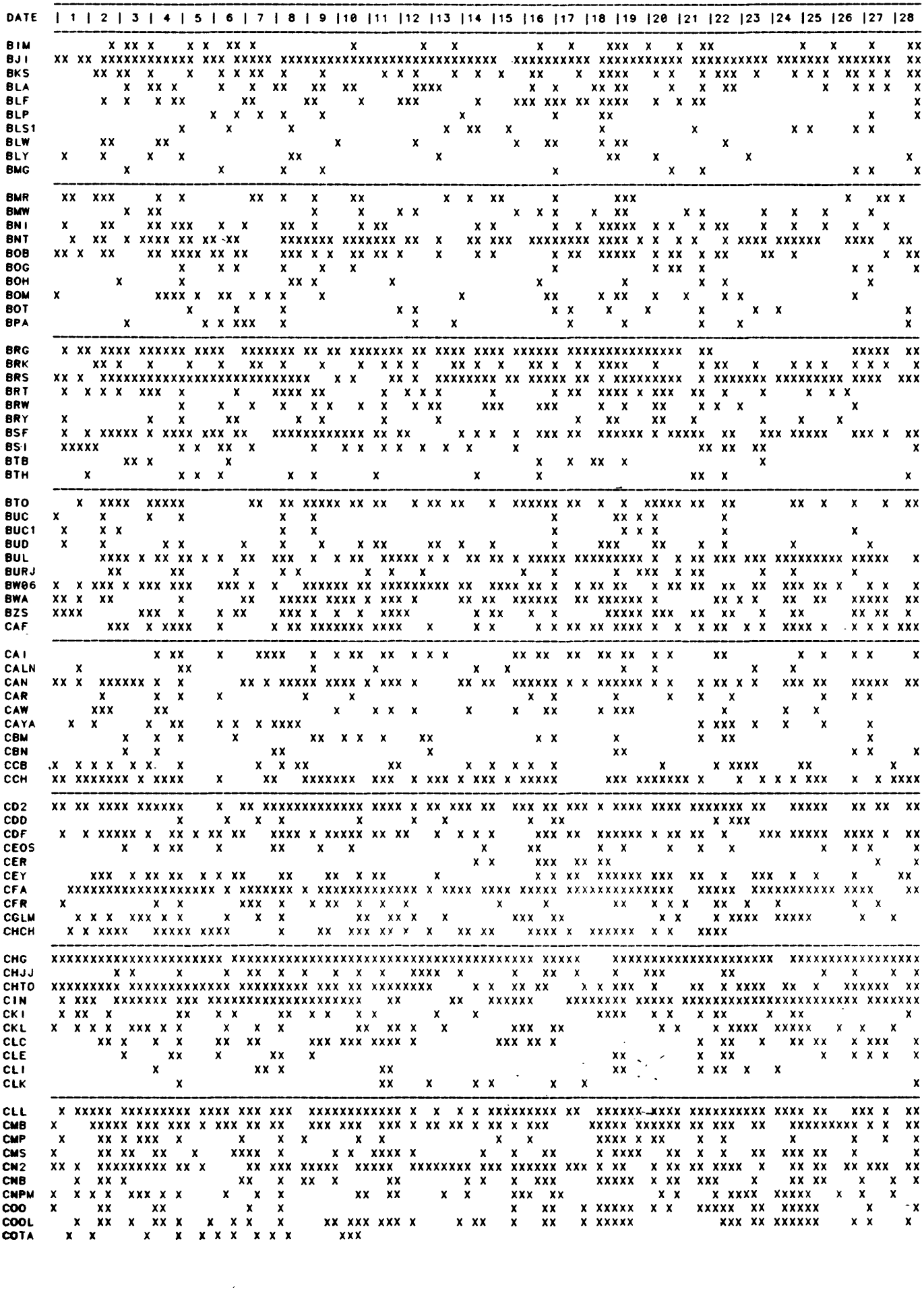
```
      191 obs. associated                |
-----------------------------------------|
&  FEB  28, 1990  23h 46m 54.10s         |
   34.130 N          117.720 W           |
   DEPTH =   6.0km  (geophysicist)       |
 SOUTHERN CALIFORNIA              ( 43)  |
      <PAS-P>. ML 3.1 (PAS).             |
                                         |
RVR      0.32 115 iP    47 00.20  -0.3   |
                  eS    47 04.20         |
        1 obs. associated                |
```

STATION DATA REPORT FOR FEBRUARY, 1990

1287 stations reported 54184 reading arrival groups

X = data received for this 6-haur time period

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BJI
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BLA
BLF
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BMG
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BOM
BOT
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BRT
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BTB
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BUC
BUC1
BUD
BUL
BURJ
BW06
BWA
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CAF
CAI
CALN
CAN
CAR
CAW
CAYA
CBM
CBN
CCB
CCH
CD2
CDD
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CEOS
CER
CEY
CFA
CFR
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CHCH
CHG
CHJJ
CHTO
CIN
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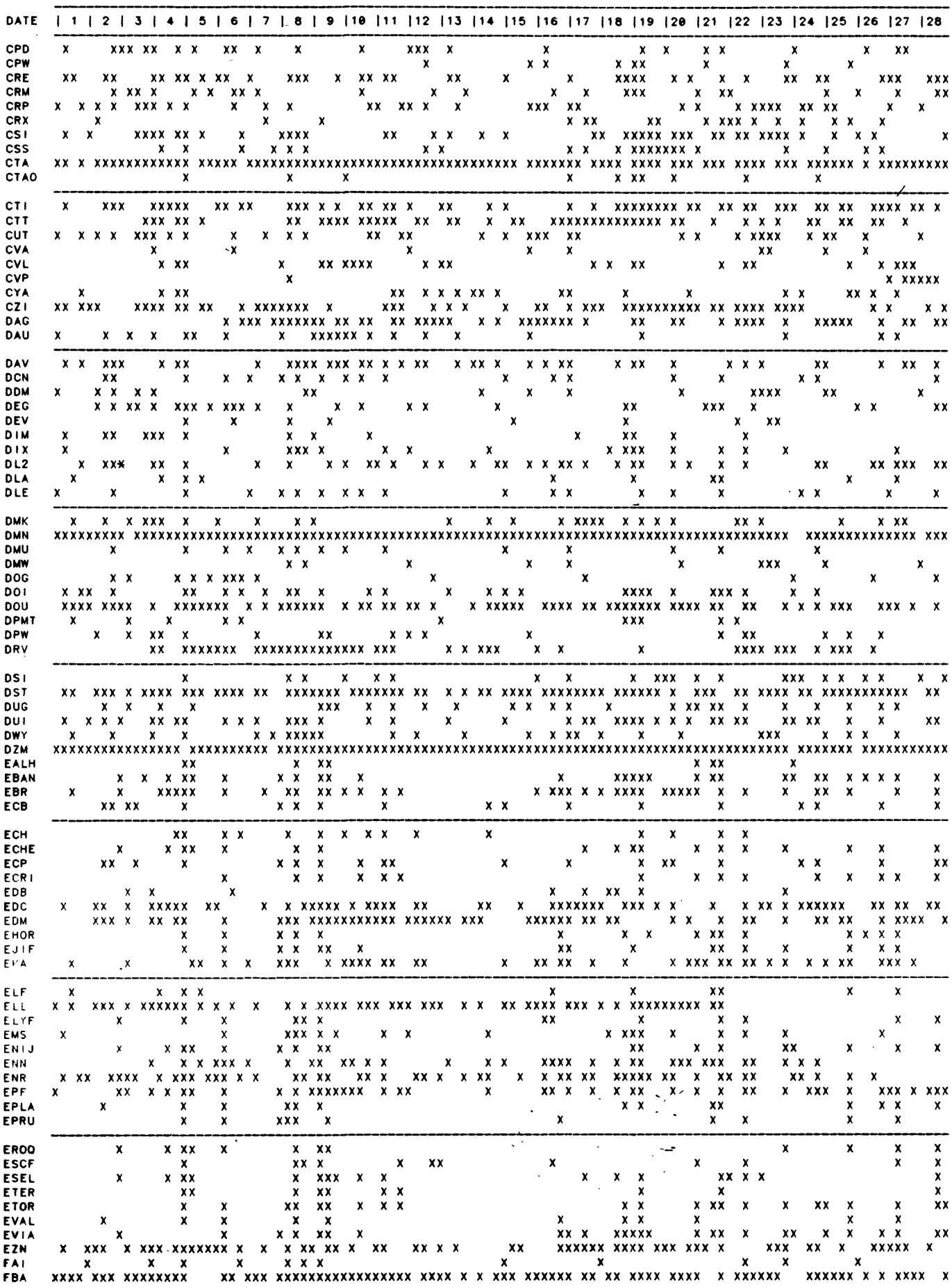
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CPW
CRE
CRM
CRP
CRX
CSI
CSS
CTA
CTAO
CTI
CTT
CUT
CVA
CVL
CVP
CYA
CZI
DAG
DAU
DAV
DCN
DDM
DEG
DEV
DIM
DIX
DL2
DLA
DLE
DMK
DMN
DMU
DMW
DOG
DOI
DOU
DPMT
DPW
DRV
DSI
DST
DUG
DUI
DWY
DZM
EALH
EBAN
EBR
ECB
ECH
ECHE
ECP
ECRI
EDB
EDC
EDM
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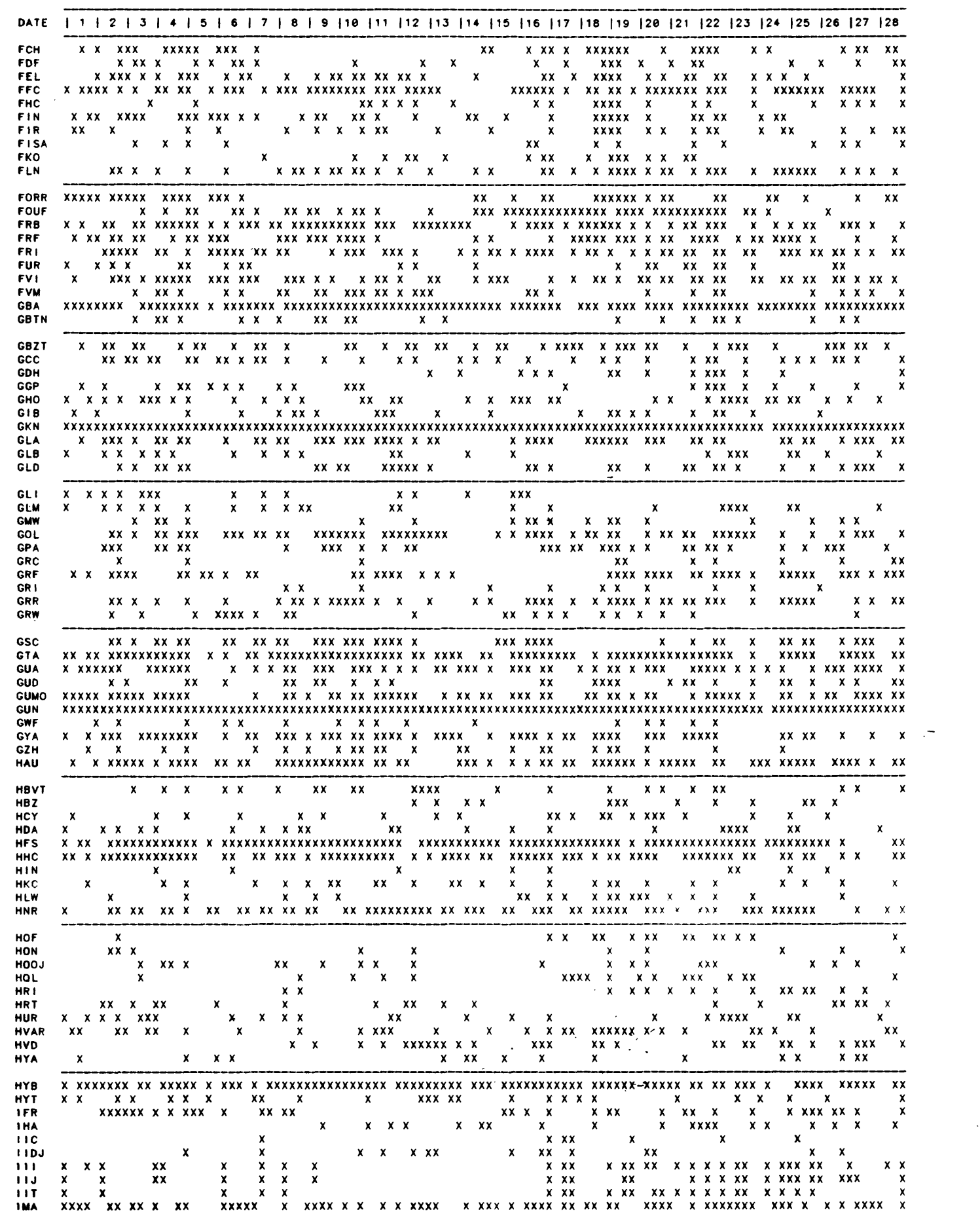
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FDF
FEL
FFC
FHC
FIN
FIR
FISA
FKO
FLN
FORR
FOUF
FRB
FRF
FRI
FUR
FVI
FVM
GBA
GBTN
GBZT
GCC
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GGP
GHO
GIB
GKN
GLA
GLB
GLD
GLI
GLM
GMW
GOL
GPA
GRC
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GRI
GRR
GRW
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GUMO
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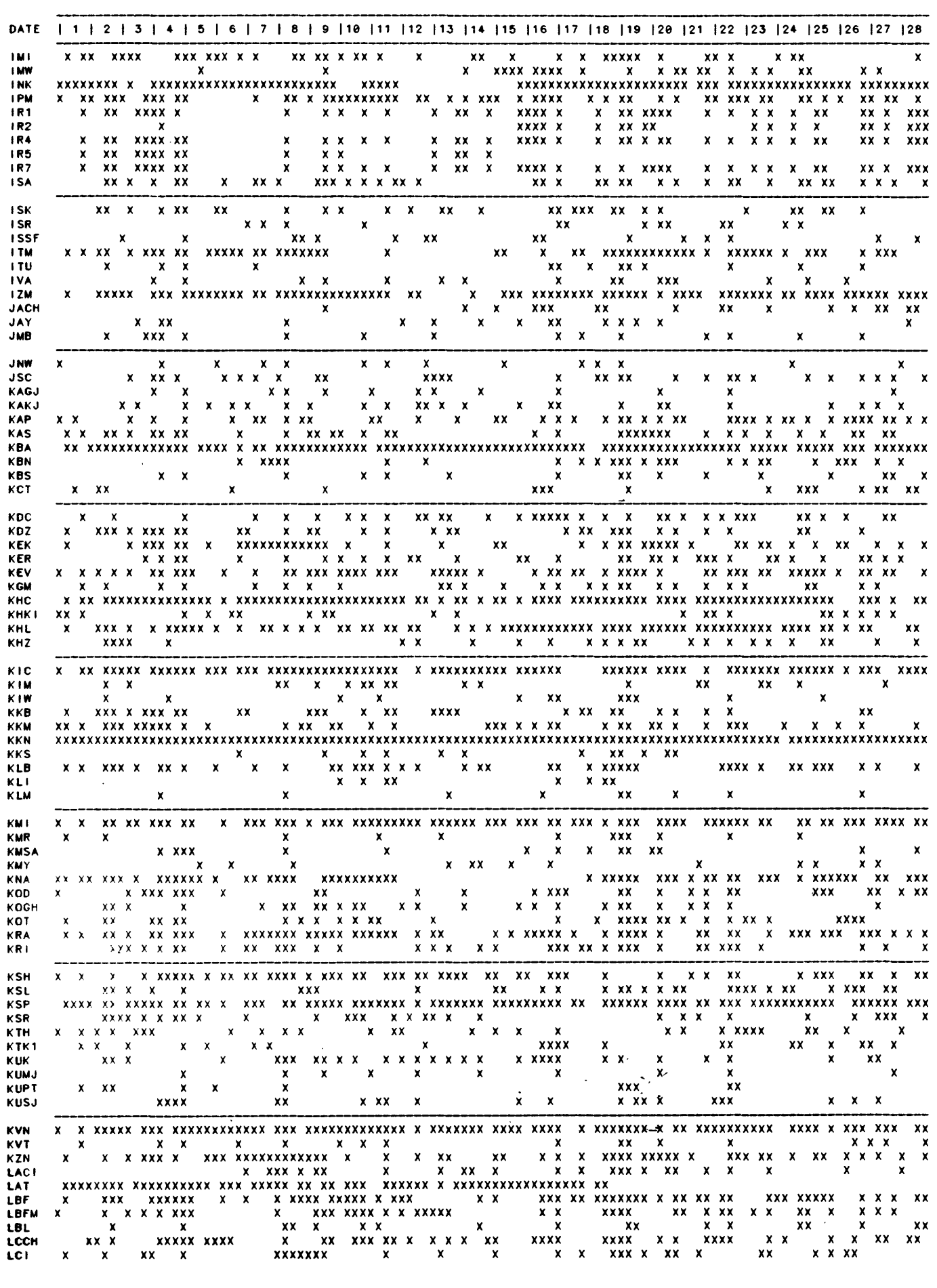
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IMW
INK
IPM
IR1
IR2
IR4
IR5
IR7
ISA
ISK
ISR
ISSF
ITM
ITU
IVA
IZM
JACH
JAY
JMB
JNW
JSC
KAGJ
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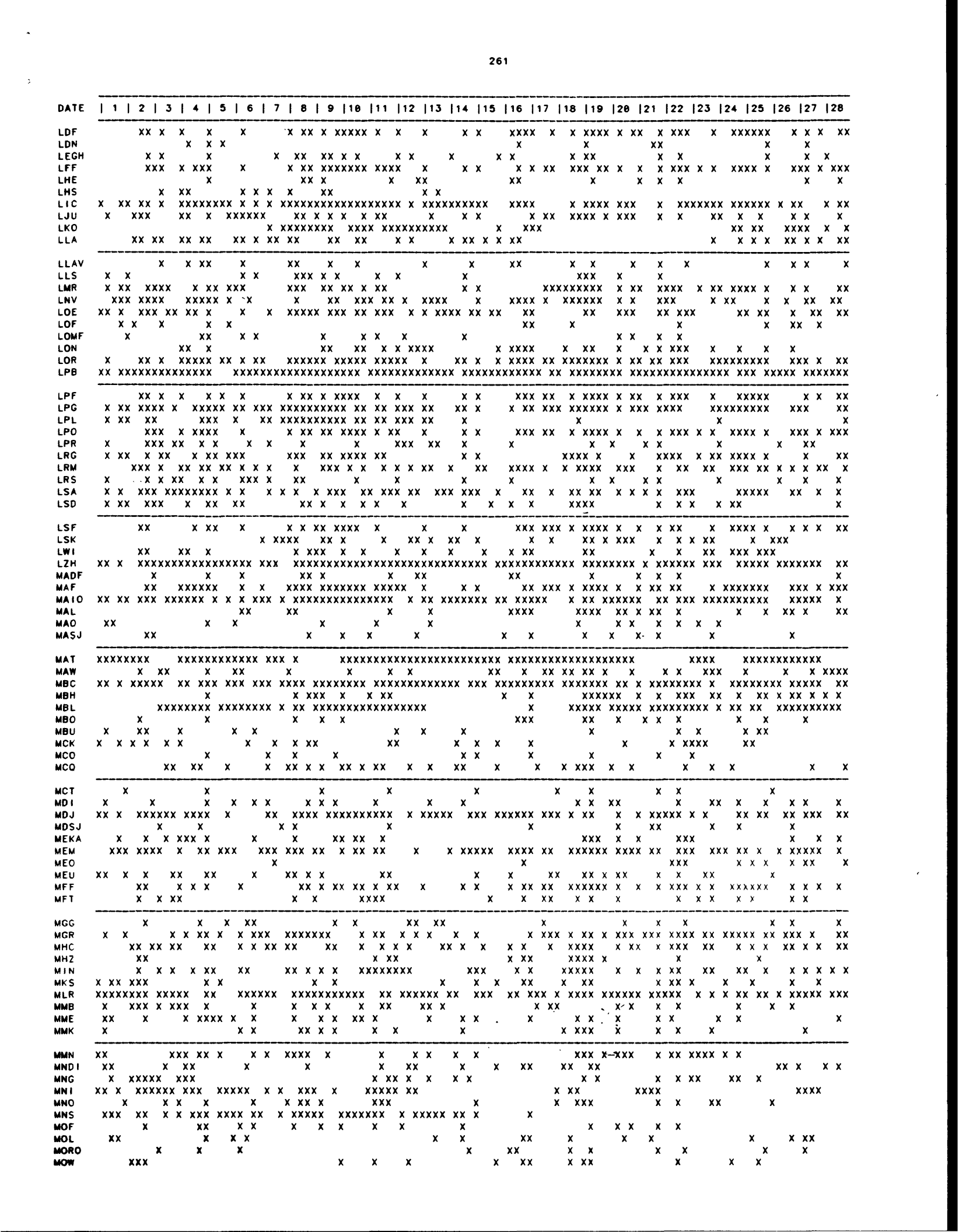

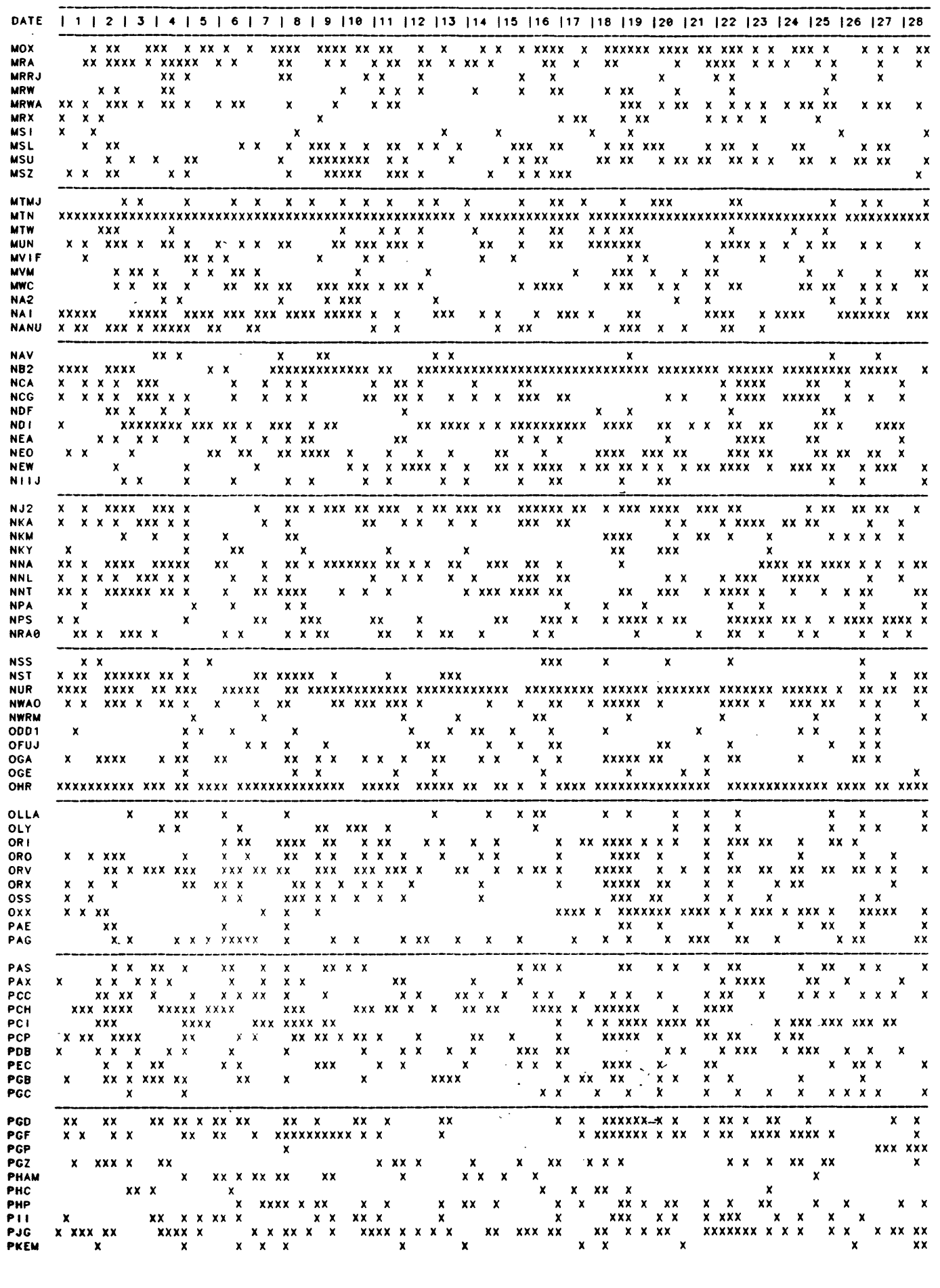
DATE
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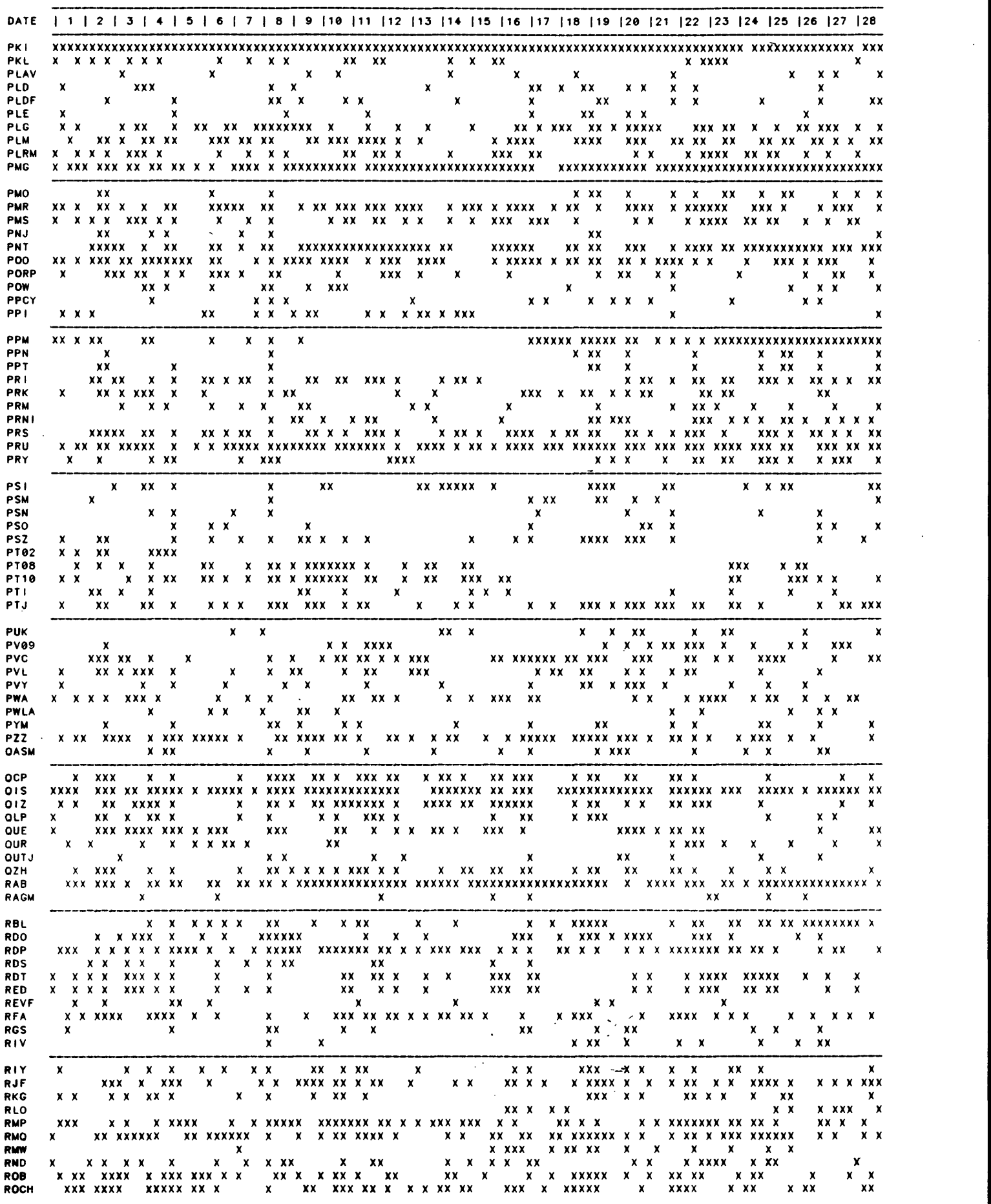
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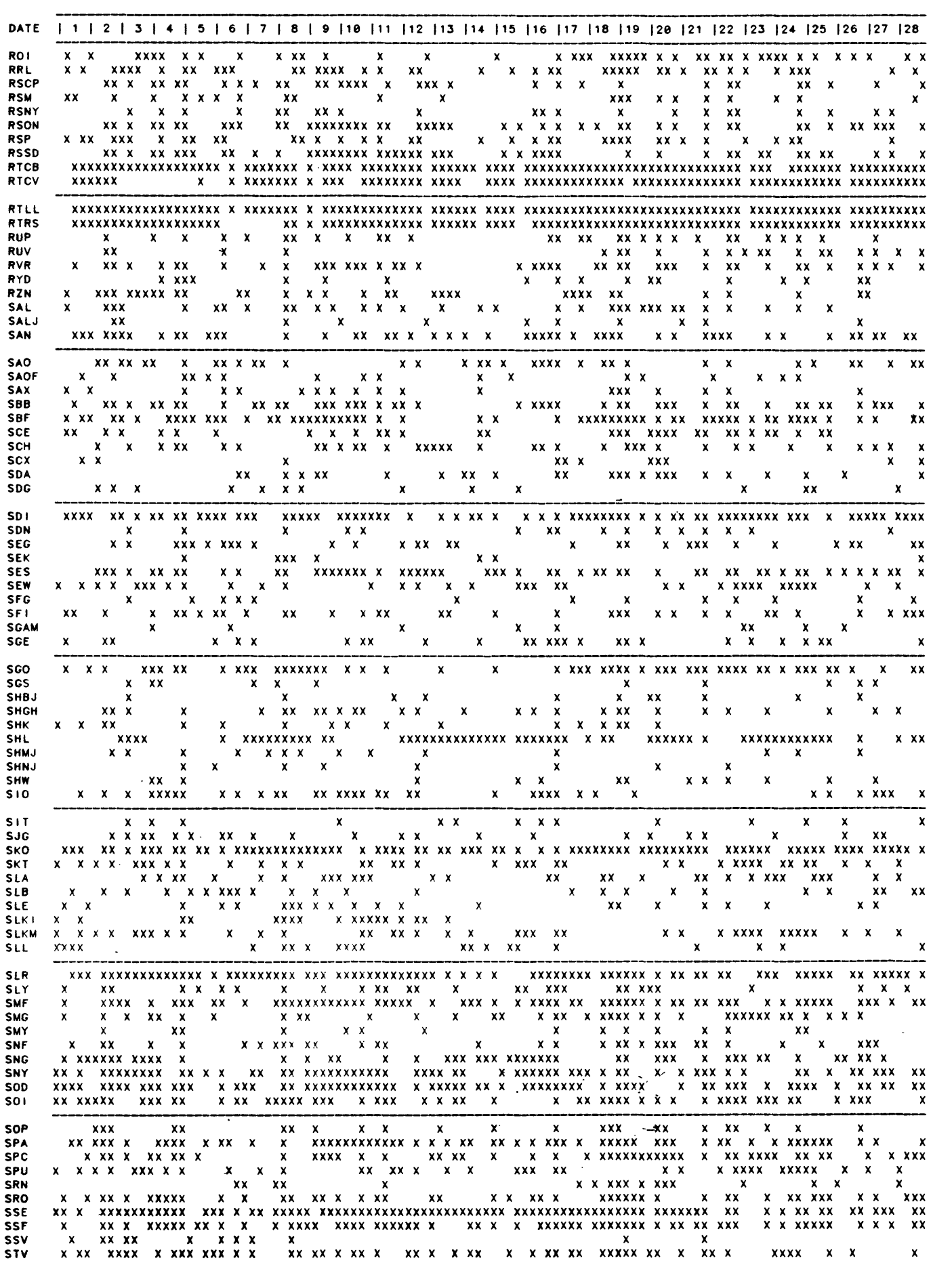
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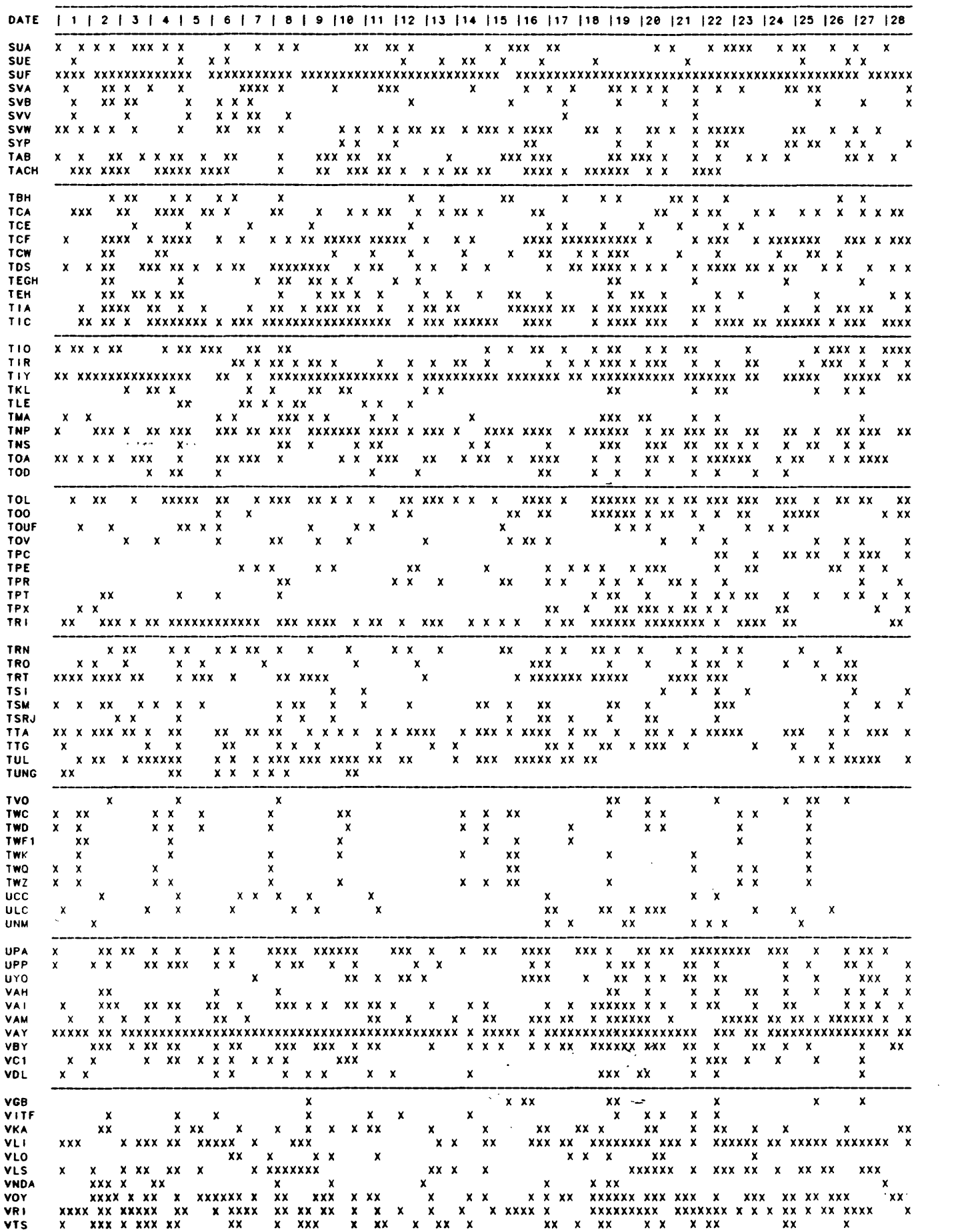
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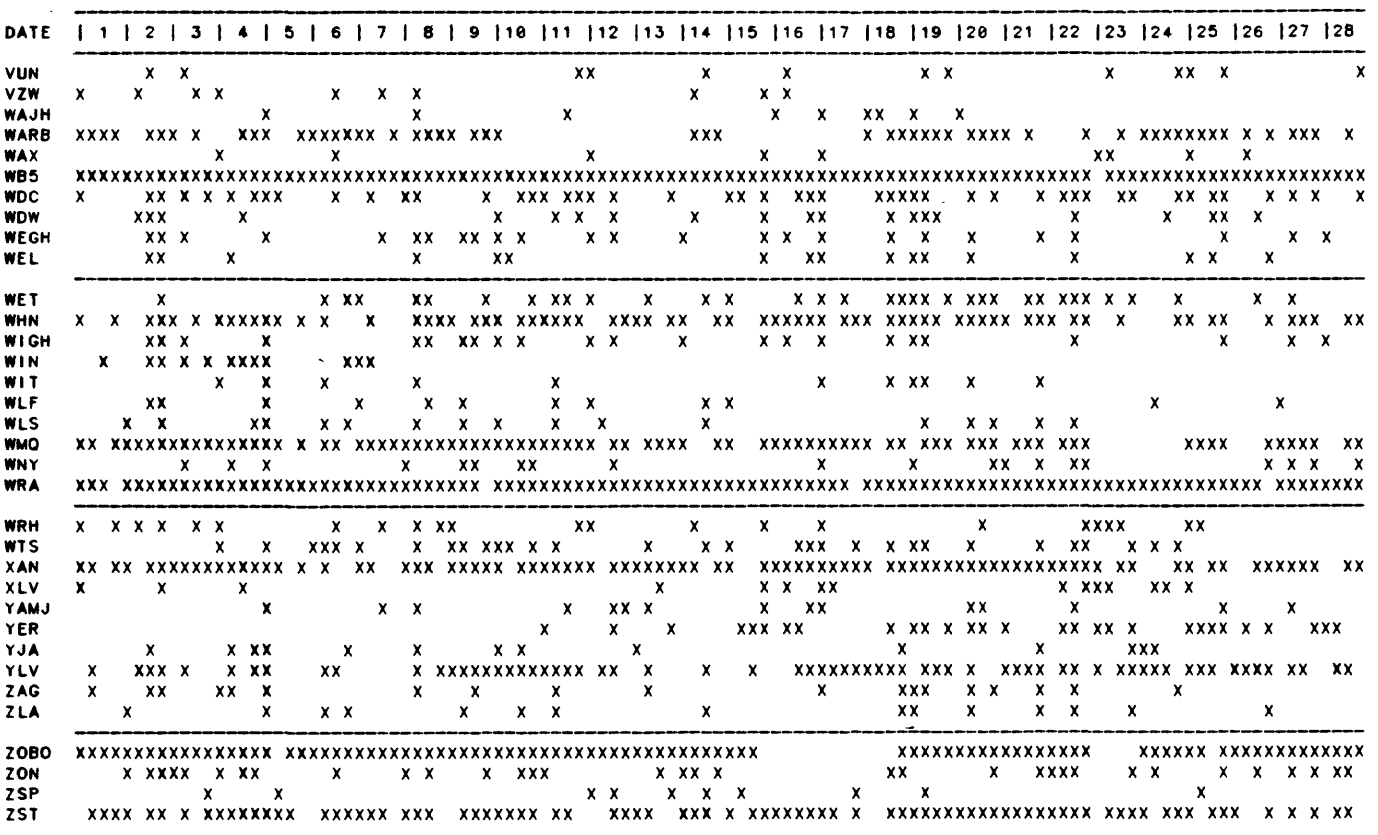

The following stations each reported less than 10 readings:

ACI	ADI	AFI	AGAL	AGG	AGMR	AGX	AKSR	AKUR	ALB	ALN	ALP	ANAL	ANCC	ANMR	ANTO	APA	APM
APW	AQBJ	ARO	ASR	ASW	ATA	BALA	BBU	BCPM	BCS	BEE	BERF	BGM	BGMT	BHW	BIR	BJA	BKB2
BKR	BLH	BLN	BLS2	BLS3	BMA	BMNM	BNB	BNH	BNM	BQA	BRD	BRL	BRLK	BRN	BSS	BST	BTG
BUT	CAL	CALA	CBB	CCM	CCW	CDFW	CEI	CFTV	CHI	CHIE	CIS	CLMC	CMG2	CMW	CMZ	COI	COL
COP	COR	COW	COY	CPBX	CPE	CRF	CRNM	CTFE	CUSS	CVT	CWB	CYK	CZM	DAF	DBCT	DBN	DCU
DGBT	DHN	DHR	DHW2	DIAC	DLB	DLG	DOR	DOT	DRA	DRC	DRRA	DSH	DSVT	DTMT	EBG	EBI	ECBX
EMEL	EMM	EMN	EMON	EMUT	EMX	ENX	ERC	ERK	ERUA	ESD	ETA	ETB	ETW	EZAM	FAM	FAR	FCV
FG2	FIG	FL2	FMW	FNA	FRU	FSB	FUG	FUQ	FYU	GANF	GBI	GBL	GBR	GCG	GELF	GGC	GHW
GIN	GL2	GLK	GMB	GMTN	GRC1	GRFO	GRG	GROR	GSH	GSM	GUAC	GULW	GUM	HATZ	HAY	HBF	HDW
HIA	HITZ	HLBJ	HLD	HMT	HNB	HOBC	HOQC	HOR	HPI	HQN	HRV	HRY	HSHJ	HTW	HWD	HYF	IAS
IGT	IISM	IKP	ILT	IRK	ITB	ITB1	ITB7	ITG	IVF	JARJ	JAT	JAU	JCK	JCW	JGI	JLK	JMI
JNE	JVI	KAF	KBR	KEF	KFNJ	KIP	KJF	KJN	KLU	KMOR	KNK	KNT	KOSW	KRO	KRP	KSU	LAZ
LCCM	LENM	LFU	LIS	LIT	LMW	LMX	LNO	LPI	LPM	LSM	LSZ	LTCM	LTMT	LTZ	LVI	LVNJ	LVP
LVU	LVVM	MAG	MAJO	MAN	MAP	MBW	MCA	MCMT	MCW	MDB	MDN	MDZ	MEMT	MEW	MGB	MGS	MHI
MID	MIM	MLS	MMG	MOE	MOH	MTH	MTMW	MTT	MTUR	MUB	MYT	MZX	NAB	NAC	NDE	NLO	NLW
NOP	OBC	OBH	OBN	OBO	OCO	OFK	OHW	ONR	OOW	OPA	OSD	OSP	OTR	OUR	OVA	OZB	PBX
PCA	PCF	PCG	PCO	PDA	PET	PFB	PFO	PGO	PGW	PICO	PIG	PIP	PLAT	PLP	POF	PPD	PPE
PPR	PRAF	PRN	PSD	PTH	PTN	PTO	PTS	PTT	PUL	PURC	PUYF	PVV	PZI	QSM	QZA	QZG	RAO
RATZ	RBA	RDX	REC	REY	RKT	RPW	RRO	RSW	RUWJ	RVC	RVW	SALC	SAP	SASA	SAW	SBA	SBG
SBM	SCI	SCP	SDV	SGH	SHB	SIM	SJAS	SJB	SKB	SKI	SLP	SMMM	SMNM	SMW	SNB	SNH	SNKA
SNM	SNO	SNZO	SOA	SOG	SOH	SONG	SOSW	SPW	SPX	SRS	SSB	SSS	STD	STR	STS	STU	STW
SVE	SVS	SWZ	SXM	SZP	TAF	TAU	TAVF	TBI	TBM	TBR	TBT	TCC	TCO	TDD	TDH	TDL	TGL
THE	THI	TIK	TIM	TKSJ	TLB	TLG	TME	TMP	TMW	TNR	TOK	TPI	TPP	TREF	TTH	TUTZ	TWB
TWG	TWL	TWM1	TWW	UAV	USI	UZH	VAL	VAO	VBEM	VDB	VFP	VGZ	VILF	VLL	VLMM	VPD	VRN
VSS	WAH2	WHB	WHC	WHH	WIW	WKYJ	WPW	WRD	WSS	WTV	WTZ	YAH	YEL	YKU	YMT1	YMT2	YMT3
YMT4	YMT5	YONJ	YPE	YSA	YSS	YUP	ZNT										